

Planetary Phenomena of Pluto from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -4400 in astronomical counting style is the year 4401 BCE in historical counting style.

retrograde	-4400 Feb 18 j 01:02	13° <u>♁</u> 42'37		conjunction	-4394 Nov 18 j 22:30	24° <u>♁</u> 59'36	0°07'16
min. Earth dist.	-4400 May 06 j 12:36	12° <u>♁</u> 27'48	31.35691 AU	minimum elong	-4394 Nov 18 j 22:31	24° <u>♁</u> 59'36	0°07'11
opposition	-4400 May 08 j 20:34	12° <u>♁</u> 24'16	4°06'18	behind sun begin	-4394 Nov 18 j 16:38	24° <u>♁</u> 59'08	
direct	-4400 Jul 27 j 21:19	11° <u>♁</u> 06'30		behind sun end	-4394 Nov 19 j 04:23	25° <u>♁</u> 00'04	
evening set	-4400 Oct 23 j 08:42	12° <u>♁</u> 52'50		max. Earth dist.	-4394 Nov 21 j 16:32	25° <u>♁</u> 05'09	34.81692 AU
				morning rise	-4394 Dec 04 j 04:56	25° <u>♁</u> 30'09	
conjunction	-4400 Nov 07 j 02:42	13° <u>♁</u> 23'51	3°33'58	desc. node	-4393 Feb 06 j 10:18	27° <u>♁</u> 03'24	
minimum elong	-4400 Nov 07 j 02:51	13° <u>♁</u> 23'52	3°33'56	retrograde	-4393 Mar 03 j 02:28	27° <u>♁</u> 12'14	
max. Earth dist.	-4400 Nov 09 j 10:43	13° <u>♁</u> 28'49	33.46030 AU	min. Earth dist.	-4393 May 20 j 22:49	26° <u>♁</u> 00'11	32.93459 AU
morning rise	-4400 Nov 21 j 22:19	13° <u>♁</u> 55'02		opposition	-4393 May 23 j 17:56	25° <u>♁</u> 56'06	-0°10'12
retrograde	-4399 Feb 19 j 06:45	15° <u>♁</u> 43'19		direct	-4393 Aug 11 j 20:36	24° <u>♁</u> 41'05	
min. Earth dist.	-4399 May 08 j 18:59	14° <u>♁</u> 28'59	31.57164 AU	evening set	-4393 Nov 05 j 18:59	26° <u>♁</u> 19'21	
opposition	-4399 May 11 j 05:15	14° <u>♁</u> 25'19	3°28'36				
direct	-4399 Jul 30 j 04:48	13° <u>♁</u> 08'01		conjunction	-4393 Nov 20 j 23:28	26° <u>♁</u> 49'30	-0°25'55
evening set	-4399 Oct 25 j 10:24	14° <u>♁</u> 53'01		minimum elong	-4393 Nov 20 j 23:27	26° <u>♁</u> 49'30	0°26'00
				max. Earth dist.	-4393 Nov 23 j 18:21	26° <u>♁</u> 55'04	35.05446 AU
conjunction	-4399 Nov 09 j 07:40	15° <u>♁</u> 24'04	2°58'44	morning rise	-4393 Dec 06 j 06:05	27° <u>♁</u> 19'48	
minimum elong	-4399 Nov 09 j 07:47	15° <u>♁</u> 24'05	2°58'41	retrograde	-4392 Mar 04 j 03:37	29° <u>♁</u> 01'02	
max. Earth dist.	-4399 Nov 11 j 18:27	15° <u>♁</u> 29'13	33.67836 AU	min. Earth dist.	-4392 May 22 j 00:27	27° <u>♁</u> 49'22	33.17436 AU
morning rise	-4399 Nov 24 j 06:19	15° <u>♁</u> 55'15		opposition	-4392 May 24 j 21:27	27° <u>♁</u> 45'12	-0°45'03
retrograde	-4398 Feb 21 j 10:21	17° <u>♁</u> 42'24		direct	-4392 Aug 13 j 00:28	26° <u>♁</u> 30'33	
min. Earth dist.	-4398 May 11 j 02:07	16° <u>♁</u> 28'26	31.79043 AU	evening set	-4392 Nov 06 j 19:50	28° <u>♁</u> 07'55	
opposition	-4398 May 13 j 13:12	16° <u>♁</u> 24'45	2°51'10				
direct	-4398 Aug 01 j 12:41	15° <u>♁</u> 07'52		conjunction	-4392 Nov 21 j 23:58	28° <u>♁</u> 37'46	-0°58'31
evening set	-4398 Oct 27 j 12:14	16° <u>♁</u> 51'37		minimum elong	-4392 Nov 21 j 23:56	28° <u>♁</u> 37'46	0°58'36
				max. Earth dist.	-4392 Nov 24 j 21:20	28° <u>♁</u> 43'31	35.29592 AU
conjunction	-4398 Nov 11 j 11:56	17° <u>♁</u> 22'37	2°23'45	morning rise	-4392 Dec 07 j 05:59	29° <u>♁</u> 07'48	
minimum elong	-4398 Nov 11 j 12:02	17° <u>♁</u> 22'37	2°23'42				
max. Earth dist.	-4398 Nov 13 j 23:16	17° <u>♁</u> 27'47	33.90006 AU	retrograde	-4391 Mar 06 j 01:43	0° <u>♁</u> 48'15	
morning rise	-4398 Nov 26 j 13:20	17° <u>♁</u> 53'46			-4391 May 07 j 16:22	30° <u>♁</u> 19'48	
retrograde	-4397 Feb 23 j 16:00	19° <u>♁</u> 39'49		min. Earth dist.	-4391 May 24 j 02:29	29° <u>♁</u> 36'56	33.41798 AU
min. Earth dist.	-4397 May 13 j 06:43	18° <u>♁</u> 26'20	32.01286 AU	opposition	-4391 May 27 j 00:17	29° <u>♁</u> 32'43	-1°19'20
opposition	-4397 May 15 j 20:28	18° <u>♁</u> 22'30	2°14'04	direct	-4391 Aug 15 j 04:48	28° <u>♁</u> 18'28	
direct	-4397 Aug 03 j 19:13	17° <u>♁</u> 06'02		evening set	-4391 Nov 08 j 20:38	29° <u>♁</u> 54'58	
evening set	-4397 Oct 29 j 13:49	18° <u>♁</u> 48'34			-4391 Nov 11 j 11:16	0° <u>♁</u>	
conjunction	-4397 Nov 13 j 15:35	19° <u>♁</u> 19'29	1°49'04	conjunction	-4391 Nov 23 j 23:41	0° <u>♁</u> 24'31	-1°30'37
minimum elong	-4397 Nov 13 j 15:40	19° <u>♁</u> 19'29	1°49'00	minimum elong	-4391 Nov 23 j 23:38	0° <u>♁</u> 24'30	1°30'43
max. Earth dist.	-4397 Nov 16 j 05:13	19° <u>♁</u> 24'48	34.12481 AU	max. Earth dist.	-4391 Nov 26 j 21:28	0° <u>♁</u> 30'15	35.54102 AU
morning rise	-4397 Nov 28 j 19:02	19° <u>♁</u> 50'33		morning rise	-4391 Dec 09 j 04:54	0° <u>♁</u> 54'14	
retrograde	-4396 Feb 25 j 20:11	21° <u>♁</u> 35'33		retrograde	-4390 Mar 08 j 01:44	2° <u>♁</u> 33'58	
min. Earth dist.	-4396 May 14 j 12:56	20° <u>♁</u> 22'22	32.23840 AU	min. Earth dist.	-4390 May 26 j 02:15	1° <u>♁</u> 23'05	33.66532 AU
opposition	-4396 May 17 j 03:05	20° <u>♁</u> 18'32	1°37'20	opposition	-4390 May 29 j 02:27	1° <u>♁</u> 18'46	-1°53'02
direct	-4396 Aug 05 j 01:55	19° <u>♁</u> 02'27		direct	-4390 Aug 17 j 06:06	0° <u>♁</u> 04'53	
evening set	-4396 Oct 30 j 15:23	20° <u>♁</u> 43'50		evening set	-4390 Nov 10 j 21:17	1° <u>♁</u> 40'37	
conjunction	-4396 Nov 14 j 18:39	21° <u>♁</u> 14'37	1°14'43	conjunction	-4390 Nov 25 j 23:02	2° <u>♁</u> 09'49	-2°02'12
minimum elong	-4396 Nov 14 j 18:42	21° <u>♁</u> 14'37	1°14'40	minimum elong	-4390 Nov 25 j 22:58	2° <u>♁</u> 09'49	2°02'18
max. Earth dist.	-4396 Nov 17 j 09:05	21° <u>♁</u> 19'57	34.35248 AU	max. Earth dist.	-4390 Nov 28 j 23:10	2° <u>♁</u> 15'42	35.78939 AU
morning rise	-4396 Nov 29 j 23:37	21° <u>♁</u> 45'33		morning rise	-4390 Dec 11 j 02:52	2° <u>♁</u> 39'12	
retrograde	-4395 Feb 27 j 00:38	23° <u>♁</u> 29'31		retrograde	-4389 Mar 10 j 01:12	4° <u>♁</u> 18'17	
min. Earth dist.	-4395 May 16 j 16:10	22° <u>♁</u> 16'46	32.46697 AU	min. Earth dist.	-4389 May 28 j 03:42	3° <u>♁</u> 07'43	33.91585 AU
opposition	-4395 May 19 j 08:35	22° <u>♁</u> 12'49	1°01'02	opposition	-4389 May 31 j 04:10	3° <u>♁</u> 03'25	-2°26'09
direct	-4395 Aug 07 j 07:49	20° <u>♁</u> 57'05		direct	-4389 Aug 19 j 06:41	1° <u>♁</u> 49'56	
evening set	-4395 Nov 01 j 16:49	22° <u>♁</u> 37'23		evening set	-4389 Nov 12 j 21:46	3° <u>♁</u> 24'57	
conjunction	-4395 Nov 16 j 20:55	23° <u>♁</u> 07'59	0°40'46	conjunction	-4389 Nov 27 j 21:47	3° <u>♁</u> 53'47	-2°33'13
minimum elong	-4395 Nov 16 j 20:57	23° <u>♁</u> 07'59	0°40'41	minimum elong	-4389 Nov 27 j 21:42	3° <u>♁</u> 53'46	2°33'19
max. Earth dist.	-4395 Nov 19 j 12:56	23° <u>♁</u> 13'24	34.58298 AU	max. Earth dist.	-4389 Nov 30 j 22:32	3° <u>♁</u> 59'39	36.04052 AU
morning rise	-4395 Dec 02 j 02:59	23° <u>♁</u> 38'45		morning rise	-4389 Dec 12 j 23:53	4° <u>♁</u> 22'48	
retrograde	-4394 Mar 01 j 02:24	25° <u>♁</u> 21'45		retrograde	-4388 Mar 11 j 01:09	6° <u>♁</u> 01'15	
min. Earth dist.	-4394 May 18 j 20:24	24° <u>♁</u> 09'18	32.69896 AU	min. Earth dist.	-4388 May 29 j 02:37	4° <u>♁</u> 51'08	34.16881 AU
opposition	-4394 May 21 j 13:41	24° <u>♁</u> 05'20	0°25'10	opposition	-4388 Jun 01 j 05:07	4° <u>♁</u> 46'44	-2°58'38
direct	-4394 Aug 09 j 13:14	22° <u>♁</u> 49'58		direct	-4388 Aug 20 j 07:06	3° <u>♁</u> 33'39	
evening set	-4394 Nov 03 j 17:49	24° <u>♁</u> 29'12		evening set	-4388 Nov 13 j 22:22	5° <u>♁</u> 08'00	

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Attention, astronomical year style is used: The year -4388 in astronomical counting style is the year 4389 BCE in historical counting style.

conjunction	-4388 Nov 28 j 20:08	5°M.36'27	-3°03'40	retrograde	-4381 Mar 23 j 03:16	17°M.27'32	
minimum elong	-4388 Nov 28 j 20:01	5°M.36'26	3°03'48	min. Earth dist.	-4381 Jun 10 j 14:23	16°M.19'37	35.95440 AU
max. Earth dist.	-4388 Dec 01 j 21:58	5°M.42'22	36.29342 AU	opposition	-4381 Jun 13 j 20:37	16°M.15'09	-6°27'52
morning rise	-4388 Dec 13 j 20:10	6°M.05'05		direct	-4381 Sep 02 j 01:01	15°M.04'27	
retrograde	-4387 Mar 13 j 00:35	7°M.42'58		evening set	-4381 Nov 26 j 22:37	16°M.35'15	
min. Earth dist.	-4387 May 31 j 02:54	6°M.33'10	34.42349 AU				
opposition	-4387 Jun 03 j 05:30	6°M.28'47	-3°30'29	conjunction	-4381 Dec 10 j 19:31	17°M.00'26	-6°20'16
direct	-4387 Aug 22 j 07:27	5°M.16'06		minimum elong	-4381 Dec 10 j 19:20	17°M.00'25	6°20'24
evening set	-4387 Nov 15 j 22:46	6°M.49'50		max. Earth dist.	-4381 Dec 14 j 01:26	17°M.06'21	38.06936 AU
				morning rise	-4381 Dec 24 j 18:40	17°M.25'46	
conjunction	-4387 Nov 30 j 18:07	7°M.17'53	-3°33'33	retrograde	-4380 Mar 24 j 00:08	19°M.00'38	
minimum elong	-4387 Nov 30 j 17:59	7°M.17'52	3°33'40	min. Earth dist.	-4380 Jun 11 j 10:57	17°M.52'59	36.20997 AU
max. Earth dist.	-4387 Dec 03 j 21:04	7°M.23'50	36.54755 AU	opposition	-4380 Jun 14 j 17:18	17°M.48'32	-6°55'05
morning rise	-4387 Dec 15 j 15:28	7°M.46'06		direct	-4380 Sep 02 j 20:50	16°M.38'08	
retrograde	-4386 Mar 14 j 22:03	9°M.23'27		evening set	-4380 Nov 27 j 22:01	18°M.08'35	
min. Earth dist.	-4386 Jun 02 j 01:55	8°M.14'02	34.67896 AU				
opposition	-4386 Jun 05 j 05:22	8°M.09'37	-4°01'41	conjunction	-4380 Dec 11 j 14:16	18°M.33'14	-6°45'53
direct	-4386 Aug 24 j 09:09	6°M.57'18		minimum elong	-4380 Dec 11 j 14:04	18°M.33'13	6°46'02
evening set	-4386 Nov 17 j 23:07	8°M.30'28		max. Earth dist.	-4380 Dec 14 j 21:21	18°M.39'13	38.32348 AU
				morning rise	-4380 Dec 25 j 08:24	18°M.58'03	
conjunction	-4386 Dec 02 j 15:23	8°M.58'05	-4°02'51	retrograde	-4379 Mar 25 j 17:30	20°M.32'36	
minimum elong	-4386 Dec 02 j 15:15	8°M.58'04	4°02'58	min. Earth dist.	-4379 Jun 13 j 06:20	19°M.25'15	36.46622 AU
max. Earth dist.	-4386 Dec 05 j 18:19	9°M.04'00	36.80195 AU	opposition	-4379 Jun 16 j 13:13	19°M.20'47	-7°21'36
morning rise	-4386 Dec 17 j 10:01	9°M.25'52		direct	-4379 Sep 04 j 18:34	18°M.10'41	
retrograde	-4385 Mar 16 j 20:08	11°M.02'44		evening set	-4379 Nov 29 j 21:23	19°M.40'50	
min. Earth dist.	-4385 Jun 04 j 00:31	9°M.53'40	34.93471 AU				
opposition	-4385 Jun 07 j 04:51	9°M.49'13	-4°32'15	conjunction	-4379 Dec 13 j 08:23	20°M.04'56	-7°10'51
direct	-4385 Aug 26 j 08:13	8°M.37'16		minimum elong	-4379 Dec 13 j 08:11	20°M.04'55	7°11'00
evening set	-4385 Nov 19 j 23:21	10°M.09'54		max. Earth dist.	-4379 Dec 16 j 15:15	20°M.10'52	38.57830 AU
				morning rise	-4379 Dec 26 j 21:33	20°M.29'12	
conjunction	-4385 Dec 04 j 12:33	10°M.37'03	-4°31'33	retrograde	-4378 Mar 27 j 11:05	22°M.03'31	
minimum elong	-4385 Dec 04 j 12:24	10°M.37'02	4°31'40	min. Earth dist.	-4378 Jun 15 j 00:54	20°M.56'29	36.72335 AU
max. Earth dist.	-4385 Dec 07 j 16:55	10°M.43'03	37.05617 AU	opposition	-4378 Jun 18 j 08:55	20°M.51'58	-7°47'26
morning rise	-4385 Dec 19 j 03:48	11°M.04'24		direct	-4378 Sep 06 j 14:22	19°M.42'12	
retrograde	-4384 Mar 17 j 14:18	12°M.40'48		evening set	-4378 Dec 01 j 20:21	21°M.12'04	
min. Earth dist.	-4384 Jun 04 j 23:34	11°M.32'00	35.19003 AU				
opposition	-4384 Jun 08 j 03:35	11°M.27'36	-5°02'09	conjunction	-4378 Dec 15 j 02:09	21°M.35'37	-7°35'12
direct	-4384 Aug 27 j 09:08	10°M.15'59		minimum elong	-4378 Dec 15 j 01:57	21°M.35'36	7°35'22
evening set	-4384 Nov 20 j 23:31	11°M.48'06		max. Earth dist.	-4378 Dec 18 j 10:45	21°M.41'38	38.83372 AU
				morning rise	-4378 Dec 28 j 09:51	21°M.59'20	
conjunction	-4384 Dec 05 j 09:04	12°M.14'47	-4°59'39	retrograde	-4377 Mar 29 j 02:11	23°M.33'25	
minimum elong	-4384 Dec 05 j 08:54	12°M.14'46	4°59'47	min. Earth dist.	-4377 Jun 16 j 20:34	22°M.26'39	36.98083 AU
max. Earth dist.	-4384 Dec 08 j 12:45	12°M.20'41	37.30983 AU	opposition	-4377 Jun 20 j 04:11	22°M.22'10	-8°12'35
morning rise	-4384 Dec 19 j 20:50	12°M.41'39		direct	-4377 Sep 08 j 11:54	21°M.12'44	
retrograde	-4383 Mar 19 j 11:14	14°M.17'38		evening set	-4377 Dec 03 j 19:29	22°M.42'21	
min. Earth dist.	-4383 Jun 06 j 20:26	13°M.09'10	35.44491 AU				
opposition	-4383 Jun 10 j 01:47	13°M.04'42	-5°31'24	conjunction	-4377 Dec 16 j 19:37	23°M.05'20	-7°58'55
direct	-4383 Aug 29 j 06:40	11°M.53'24		minimum elong	-4377 Dec 16 j 19:25	23°M.05'20	7°59'04
evening set	-4383 Nov 22 j 23:20	13°M.25'03		max. Earth dist.	-4377 Dec 20 j 03:40	23°M.11'17	39.08931 AU
				morning rise	-4377 Dec 29 j 21:41	23°M.28'29	
conjunction	-4383 Dec 07 j 05:00	13°M.51'15	-5°27'08	retrograde	-4376 Mar 29 j 20:20	25°M.02'24	
minimum elong	-4383 Dec 07 j 04:50	13°M.51'14	5°27'16	min. Earth dist.	-4376 Jun 17 j 13:52	23°M.55'58	37.23826 AU
max. Earth dist.	-4383 Dec 10 j 10:06	13°M.57'13	37.56291 AU	opposition	-4376 Jun 20 j 22:45	23°M.51'27	-8°37'03
morning rise	-4383 Dec 21 j 12:50	14°M.17'37		direct	-4376 Sep 09 j 05:44	22°M.42'20	
	-4382 Jan 15 j 14:54	15°M.		evening set	-4376 Dec 04 j 18:28	24°M.11'44	
retrograde	-4382 Mar 21 j 07:01	15°M.53'13					
	-4382 May 28 j 16:43	15°M.		conjunction	-4376 Dec 17 j 12:45	24°M.34'09	-8°22'01
min. Earth dist.	-4382 Jun 08 j 18:48	14°M.44'58	35.69953 AU	minimum elong	-4376 Dec 17 j 12:32	24°M.34'09	8°22'11
opposition	-4382 Jun 11 j 23:33	14°M.40'33	-5°59'58	max. Earth dist.	-4376 Dec 20 j 21:39	24°M.40'07	39.34435 AU
direct	-4382 Aug 31 j 03:49	13°M.29'34		morning rise	-4376 Dec 30 j 08:58	24°M.56'44	
evening set	-4382 Nov 24 j 23:03	15°M.00'46		retrograde	-4375 Mar 31 j 14:24	26°M.30'29	
	-4382 Nov 24 j 12:52	15°M.		min. Earth dist.	-4375 Jun 19 j 09:14	25°M.24'17	37.49492 AU
conjunction	-4382 Dec 09 j 00:33	15°M.26'27	-5°54'01	opposition	-4375 Jun 22 j 17:10	25°M.19'50	-9°00'51
minimum elong	-4382 Dec 09 j 00:22	15°M.26'26	5°54'10	direct	-4375 Sep 10 j 23:00	24°M.11'02	
max. Earth dist.	-4382 Dec 12 j 05:51	15°M.32'23	37.81600 AU	evening set	-4375 Dec 06 j 17:19	25°M.40'15	
morning rise	-4382 Dec 23 j 04:06	15°M.52'19		conjunction	-4375 Dec 19 j 05:32	26°M.02'06	-8°44'30

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Attention, astronomical year style is used: The year -4375 in astronomical counting style is the year 4376 BCE in historical counting style.

minimum elong	-4375 Dec 19 j 05:19	26° \mathcal{M} 02'05	8°44'39	morning rise	-4368 Jan 07 j 23:31	4° \mathcal{J} 48'44	
max. Earth dist.	-4375 Dec 22 j 14:31	26° \mathcal{M} 08'01	39.59829 AU	retrograde	-4368 Apr 10 j 04:42	6° \mathcal{J} 21'53	
morning rise	-4375 Dec 31 j 19:24	26° \mathcal{M} 24'05		min. Earth dist.	-4368 Jun 29 j 07:53	5° \mathcal{J} 17'10	39.22854 AU
retrograde	-4374 Apr 02 j 08:26	27° \mathcal{M} 57'41		opposition	-4368 Jul 02 j 14:20	5° \mathcal{J} 12'55	-11°29'47
min. Earth dist.	-4374 Jun 21 j 02:31	26° \mathcal{M} 51'47	37.75001 AU	direct	-4368 Sep 20 j 22:02	4° \mathcal{J} 05'52	
opposition	-4374 Jun 24 j 11:02	26° \mathcal{M} 47'20	-9°24'01	evening set	-4368 Dec 18 j 07:46	5° \mathcal{J} 34'26	
direct	-4374 Sep 12 j 16:29	25° \mathcal{M} 38'49					
evening set	-4374 Dec 08 j 16:17	27° \mathcal{M} 07'54		conjunction	-4368 Dec 28 j 18:22	5° \mathcal{J} 51'57	-11°05'26
				minimum elong	-4368 Dec 28 j 18:08	5° \mathcal{J} 51'56	11°05'37
conjunction	-4374 Dec 20 j 22:00	27° \mathcal{M} 29'09	-9°06'23	max. Earth dist.	-4367 Jan 01 j 02:35	5° \mathcal{J} 57'34	41.30898 AU
minimum elong	-4374 Dec 20 j 21:47	27° \mathcal{M} 29'09	9°06'33	morning rise	-4367 Jan 08 j 06:03	6° \mathcal{J} 09'32	
max. Earth dist.	-4374 Dec 24 j 06:27	27° \mathcal{M} 35'00	39.85026 AU	retrograde	-4367 Apr 11 j 18:40	7° \mathcal{J} 42'41	
morning rise	-4373 Jan 02 j 05:37	27° \mathcal{M} 50'33		min. Earth dist.	-4367 Jun 30 j 22:53	6° \mathcal{J} 38'11	39.46803 AU
retrograde	-4373 Apr 04 j 03:01	29° \mathcal{M} 24'02		opposition	-4367 Jul 04 j 05:26	6° \mathcal{J} 33'57	-11°48'35
min. Earth dist.	-4373 Jun 22 j 20:29	28° \mathcal{M} 18'22	38.00306 AU	direct	-4367 Sep 22 j 13:49	5° \mathcal{J} 27'07	
opposition	-4373 Jun 26 j 04:39	28° \mathcal{M} 13'57	-9°46'32	evening set	-4367 Dec 20 j 05:59	6° \mathcal{J} 55'43	
direct	-4373 Sep 14 j 08:43	27° \mathcal{M} 05'43					
evening set	-4373 Dec 10 j 15:05	28° \mathcal{M} 34'40		conjunction	-4367 Dec 30 j 08:20	7° \mathcal{J} 12'34	-11°23'15
				minimum elong	-4367 Dec 30 j 08:08	7° \mathcal{J} 12'33	11°23'26
conjunction	-4373 Dec 22 j 14:23	28° \mathcal{M} 55'20	-9°27'40	max. Earth dist.	-4366 Jan 02 j 15:45	7° \mathcal{J} 18'06	41.54578 AU
minimum elong	-4373 Dec 22 j 14:10	28° \mathcal{M} 55'19	9°27'50	morning rise	-4366 Jan 09 j 11:58	7° \mathcal{J} 29'30	
max. Earth dist.	-4373 Dec 25 j 23:23	29° \mathcal{M} 01'11	40.09981 AU	retrograde	-4366 Apr 13 j 09:32	9° \mathcal{J} 02'41	
morning rise	-4372 Jan 03 j 15:11	29° \mathcal{M} 16'06		min. Earth dist.	-4366 Jul 02 j 13:20	7° \mathcal{J} 58'26	39.70649 AU
	-4372 Jan 31 j 06:03	0° \mathcal{J}		opposition	-4366 Jul 05 j 20:21	7° \mathcal{J} 54'11	-12°06'45
retrograde	-4372 Apr 04 j 17:04	0° \mathcal{J} 49'30		direct	-4366 Sep 24 j 04:15	6° \mathcal{J} 47'36	
	-4372 Jun 11 j 06:01	30° \mathcal{K} \mathcal{M}		evening set	-4366 Dec 22 j 04:07	8° \mathcal{J} 16'16	
min. Earth dist.	-4372 Jun 23 j 14:25	29° \mathcal{M} 44'01	38.25324 AU				
opposition	-4372 Jun 26 j 21:48	29° \mathcal{M} 39'40	-10°08'25	conjunction	-4366 Dec 31 j 22:18	8° \mathcal{J} 32'27	-11°40'29
direct	-4372 Sep 15 j 04:02	28° \mathcal{M} 31'41		minimum elong	-4366 Dec 31 j 22:05	8° \mathcal{J} 32'26	11°40'40
evening set	-4372 Dec 11 j 13:59	0° \mathcal{J} 00'32		max. Earth dist.	-4365 Jan 04 j 06:44	8° \mathcal{J} 38'02	41.78151 AU
	-4372 Dec 11 j 06:32	0° \mathcal{J}		morning rise	-4365 Jan 10 j 17:30	8° \mathcal{J} 48'42	
conjunction	-4372 Dec 23 j 06:16	0° \mathcal{J} 20'34	-9°48'23	retrograde	-4365 Apr 14 j 20:28	10° \mathcal{J} 21'59	
minimum elong	-4372 Dec 23 j 06:03	0° \mathcal{J} 20'33	9°48'34	min. Earth dist.	-4365 Jul 04 j 04:48	9° \mathcal{J} 17'54	39.94366 AU
max. Earth dist.	-4372 Dec 26 j 13:52	0° \mathcal{J} 26'17	40.34641 AU	opposition	-4365 Jul 07 j 10:50	9° \mathcal{J} 13'43	-12°24'20
morning rise	-4371 Jan 04 j 00:13	0° \mathcal{J} 40'43		direct	-4365 Sep 25 j 21:01	8° \mathcal{J} 07'23	
retrograde	-4371 Apr 06 j 07:25	2° \mathcal{J} 14'01		evening set	-4365 Dec 24 j 02:25	9° \mathcal{J} 36'09	
min. Earth dist.	-4371 Jun 25 j 06:41	1° \mathcal{J} 08'47	38.50056 AU	conjunction	-4364 Jan 02 j 11:56	9° \mathcal{J} 51'39	-11°57'09
opposition	-4371 Jun 28 j 14:28	1° \mathcal{J} 04'25	-10°29'41	minimum elong	-4364 Jan 02 j 11:44	9° \mathcal{J} 51'38	11°57'21
	-4371 Sep 01 j 00:52	30° \mathcal{K} \mathcal{M}		max. Earth dist.	-4364 Jan 05 j 19:23	9° \mathcal{J} 57'08	42.01593 AU
direct	-4371 Sep 16 j 22:03	29° \mathcal{M} 56'41		morning rise	-4364 Jan 11 j 22:25	10° \mathcal{J} 07'14	
	-4371 Oct 02 j 14:43	0° \mathcal{J}		retrograde	-4364 Apr 15 j 10:04	11° \mathcal{J} 40'37	
evening set	-4371 Dec 13 j 12:33	1° \mathcal{J} 25'25		min. Earth dist.	-4364 Jul 04 j 18:13	10° \mathcal{J} 36'49	40.17927 AU
conjunction	-4371 Dec 24 j 21:51	1° \mathcal{J} 44'50	-10°08'31	opposition	-4364 Jul 08 j 00:59	10° \mathcal{J} 32'37	-12°41'18
minimum elong	-4371 Dec 24 j 21:38	1° \mathcal{J} 44'49	10°08'41	direct	-4364 Sep 26 j 11:28	9° \mathcal{J} 26'32	
max. Earth dist.	-4371 Dec 28 j 06:14	1° \mathcal{J} 50'35	40.59016 AU	evening set	-4364 Dec 25 j 00:38	10° \mathcal{J} 55'25	
morning rise	-4370 Jan 05 j 08:38	2° \mathcal{J} 04'22		conjunction	-4363 Jan 03 j 01:17	11° \mathcal{J} 10'14	-12°13'16
retrograde	-4370 Apr 07 j 21:23	3° \mathcal{J} 37'36		minimum elong	-4363 Jan 03 j 01:05	11° \mathcal{J} 10'13	12°13'28
min. Earth dist.	-4370 Jun 27 j 00:24	2° \mathcal{J} 32'29	38.74519 AU	max. Earth dist.	-4363 Jan 06 j 09:03	11° \mathcal{J} 15'43	42.24842 AU
opposition	-4370 Jun 30 j 06:55	2° \mathcal{J} 28'12	-10°50'20	morning rise	-4363 Jan 12 j 02:54	11° \mathcal{J} 25'08	
direct	-4370 Sep 18 j 15:52	1° \mathcal{J} 20'43		retrograde	-4363 Apr 17 j 01:09	12° \mathcal{J} 58'39	
evening set	-4370 Dec 15 j 11:00	2° \mathcal{J} 49'21		min. Earth dist.	-4363 Jul 06 j 09:25	11° \mathcal{J} 55'01	40.41279 AU
conjunction	-4370 Dec 26 j 12:56	3° \mathcal{J} 08'08	-10°28'04	opposition	-4363 Jul 09 j 14:51	11° \mathcal{J} 50'54	-12°57'43
minimum elong	-4370 Dec 26 j 12:43	3° \mathcal{J} 08'07	10°28'15	direct	-4363 Sep 27 j 23:45	10° \mathcal{J} 45'05	
max. Earth dist.	-4370 Dec 29 j 20:37	3° \mathcal{J} 13'48	40.83156 AU	evening set	-4363 Dec 26 j 23:01	12° \mathcal{J} 14'07	
morning rise	-4369 Jan 06 j 16:14	3° \mathcal{J} 27'02		conjunction	-4362 Jan 04 j 14:32	12° \mathcal{J} 28'15	-12°28'51
retrograde	-4369 Apr 09 j 12:51	5° \mathcal{J} 00'12		minimum elong	-4362 Jan 04 j 14:20	12° \mathcal{J} 28'14	12°29'04
min. Earth dist.	-4369 Jun 28 j 15:32	3° \mathcal{J} 55'20	38.98766 AU	max. Earth dist.	-4362 Jan 07 j 22:01	12° \mathcal{J} 33'40	42.47869 AU
opposition	-4369 Jul 01 j 22:49	3° \mathcal{J} 51'02	-11°10'22	morning rise	-4362 Jan 13 j 06:45	12° \mathcal{J} 42'26	
direct	-4369 Sep 20 j 07:28	2° \mathcal{J} 43'45		retrograde	-4362 Apr 18 j 14:38	14° \mathcal{J} 16'07	
evening set	-4369 Dec 17 j 09:27	4° \mathcal{J} 12'20		min. Earth dist.	-4362 Jul 07 j 22:53	13° \mathcal{J} 12'44	40.64359 AU
conjunction	-4369 Dec 28 j 03:45	4° \mathcal{J} 30'29	-10°47'03	opposition	-4362 Jul 11 j 04:23	13° \mathcal{J} 08'38	-13°13'33
minimum elong	-4369 Dec 28 j 03:33	4° \mathcal{J} 30'28	10°47'13	direct	-4362 Sep 29 j 12:49	12° \mathcal{J} 03'03	
max. Earth dist.	-4369 Dec 31 j 11:26	4° \mathcal{J} 36'06	41.07093 AU	evening set	-4362 Dec 28 j 21:26	13° \mathcal{J} 32'15	

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Attention, astronomical year style is used: The year -4361 in astronomical counting style is the year 4362 BCE in historical counting style.

conjunction	-4361 Jan 06 j 03:22	13° \nearrow 45'41	-12°43'55	direct	-4355 Oct 08 j 06:35	20° \nearrow 50'10	
minimum elong	-4361 Jan 06 j 03:10	13° \nearrow 45'40	12°44'06	evening set	-4354 Jan 09 j 18:37	22° \nearrow 21'31	
max. Earth dist.	-4361 Jan 09 j 09:39	13° \nearrow 50'59	42.70587 AU				
morning rise	-4361 Jan 14 j 10:06	13° \nearrow 59'09		conjunction	-4354 Jan 14 j 15:30	22° \nearrow 29'11	-14°15'36
retrograde	-4361 Apr 20 j 05:17	15° \nearrow 33'01		minimum elong	-4354 Jan 14 j 15:20	22° \nearrow 29'11	14°15'48
min. Earth dist.	-4361 Jul 09 j 13:07	14° \nearrow 29'48	40.87114 AU	max. Earth dist.	-4354 Jan 17 j 17:42	22° \nearrow 34'04	44.19715 AU
opposition	-4361 Jul 12 j 17:49	14° \nearrow 25'46	-13°28'52	morning rise	-4354 Jan 19 j 12:31	22° \nearrow 36'52	
direct	-4361 Oct 01 j 01:00	13° \nearrow 20'25		retrograde	-4354 Apr 28 j 12:10	24° \nearrow 12'51	
evening set	-4361 Dec 30 j 20:09	14° \nearrow 49'50		min. Earth dist.	-4354 Jul 18 j 06:00	23° \nearrow 10'37	42.36466 AU
				opposition	-4354 Jul 21 j 06:36	23° \nearrow 06'51	-15°01'36
conjunction	-4360 Jan 07 j 16:19	15° \nearrow 02'31	-12°58'29	direct	-4354 Oct 09 j 18:21	22° \nearrow 02'43	
minimum elong	-4360 Jan 07 j 16:08	15° \nearrow 02'31	12°58'41	evening set	-4353 Jan 11 j 20:54	23° \nearrow 34'39	
max. Earth dist.	-4360 Jan 10 j 22:56	15° \nearrow 07'50	42.92949 AU				
morning rise	-4360 Jan 15 j 13:03	15° \nearrow 15'15		conjunction	-4353 Jan 16 j 02:31	23° \nearrow 41'17	-14°26'44
retrograde	-4360 Apr 20 j 15:52	16° \nearrow 49'20		minimum elong	-4353 Jan 16 j 02:23	23° \nearrow 41'17	14°26'56
min. Earth dist.	-4360 Jul 10 j 03:24	15° \nearrow 46'15	41.09470 AU	max. Earth dist.	-4353 Jan 19 j 05:26	23° \nearrow 46'11	44.39990 AU
opposition	-4360 Jul 13 j 06:43	15° \nearrow 42'17	-13°43'39	morning rise	-4353 Jan 20 j 08:10	23° \nearrow 47'56	
direct	-4360 Oct 01 j 16:16	14° \nearrow 37'08		retrograde	-4353 Apr 29 j 21:02	25° \nearrow 24'28	
evening set	-4360 Dec 31 j 19:07	16° \nearrow 06'48		min. Earth dist.	-4353 Jul 19 j 18:31	24° \nearrow 22'21	42.56808 AU
				opposition	-4353 Jul 22 j 17:44	24° \nearrow 18'40	-15°12'48
conjunction	-4359 Jan 08 j 04:52	16° \nearrow 18'44	-13°12'33	direct	-4353 Oct 11 j 07:26	23° \nearrow 14'43	
minimum elong	-4359 Jan 08 j 04:41	16° \nearrow 18'43	13°12'44	evening set	-4352 Jan 14 j 01:27	24° \nearrow 47'23	
max. Earth dist.	-4359 Jan 11 j 09:37	16° \nearrow 23'54	43.14911 AU				
morning rise	-4359 Jan 15 j 15:11	16° \nearrow 30'42		conjunction	-4352 Jan 17 j 13:27	24° \nearrow 52'50	-14°37'24
retrograde	-4359 Apr 22 j 03:39	18° \nearrow 05'00		minimum elong	-4352 Jan 17 j 13:18	24° \nearrow 52'50	14°37'36
min. Earth dist.	-4359 Jul 11 j 15:59	17° \nearrow 02'07	41.31425 AU	morning rise	-4352 Jan 21 j 01:19	24° \nearrow 58'18	
opposition	-4359 Jul 14 j 19:28	16° \nearrow 58'09	-13°57'55	max. Earth dist.	-4352 Jan 20 j 15:20	24° \nearrow 57'39	44.60072 AU
direct	-4359 Oct 03 j 05:25	15° \nearrow 53'12		retrograde	-4352 Apr 30 j 07:22	26° \nearrow 35'35	
evening set	-4358 Jan 02 j 17:58	17° \nearrow 23'06		min. Earth dist.	-4352 Jul 20 j 04:41	25° \nearrow 33'40	42.76933 AU
				opposition	-4352 Jul 23 j 04:22	25° \nearrow 29'59	-15°23'30
conjunction	-4358 Jan 09 j 17:01	17° \nearrow 34'15	-13°26'08	direct	-4352 Oct 11 j 18:44	24° \nearrow 26'13	
minimum elong	-4358 Jan 09 j 16:50	17° \nearrow 34'14	13°26'20	evening set	-4351 Jan 15 j 09:49	25° \nearrow 59'53	
max. Earth dist.	-4358 Jan 12 j 21:52	17° \nearrow 39'24	43.36470 AU				
morning rise	-4358 Jan 16 j 16:32	17° \nearrow 45'27		conjunction	-4351 Jan 18 j 00:04	26° \nearrow 03'55	-14°47'36
retrograde	-4358 Apr 23 j 13:42	19° \nearrow 20'00		minimum elong	-4351 Jan 17 j 23:57	26° \nearrow 03'54	14°47'48
min. Earth dist.	-4358 Jul 13 j 06:19	18° \nearrow 17'11	41.52991 AU	morning rise	-4351 Jan 20 j 14:14	26° \nearrow 07'56	
opposition	-4358 Jul 16 j 08:00	18° \nearrow 13'19	-14°11'41	max. Earth dist.	-4351 Jan 21 j 01:24	26° \nearrow 08'40	44.79912 AU
direct	-4358 Oct 04 j 20:16	17° \nearrow 08'32		retrograde	-4351 May 01 j 19:52	27° \nearrow 46'14	
evening set	-4357 Jan 04 j 17:25	18° \nearrow 38'42		min. Earth dist.	-4351 Jul 21 j 16:47	26° \nearrow 44'26	42.96801 AU
				opposition	-4351 Jul 24 j 15:04	26° \nearrow 40'50	-15°33'43
conjunction	-4357 Jan 11 j 05:05	18° \nearrow 49'03	-13°39'14	direct	-4351 Oct 13 j 03:59	25° \nearrow 37'16	
minimum elong	-4357 Jan 11 j 04:55	18° \nearrow 49'02	13°39'25	evening set	-4350 Jan 18 j 06:27	27° \nearrow 12'45	
max. Earth dist.	-4357 Jan 14 j 09:04	18° \nearrow 54'07	43.57684 AU				
morning rise	-4357 Jan 17 j 17:04	18° \nearrow 59'26		conjunction	-4350 Jan 19 j 10:32	27° \nearrow 14'34	-14°57'21
retrograde	-4357 Apr 25 j 02:29	20° \nearrow 34'15		minimum elong	-4350 Jan 19 j 10:24	27° \nearrow 14'33	14°57'33
min. Earth dist.	-4357 Jul 14 j 18:07	19° \nearrow 31'36	41.74226 AU	morning rise	-4350 Jan 20 j 14:23	27° \nearrow 16'21	
opposition	-4357 Jul 17 j 19:59	19° \nearrow 27'45	-14°24'56	max. Earth dist.	-4350 Jan 22 j 11:53	27° \nearrow 19'17	44.99479 AU
direct	-4357 Oct 06 j 07:56	18° \nearrow 23'07		retrograde	-4350 May 03 j 07:07	28° \nearrow 56'27	
evening set	-4356 Jan 06 j 17:07	19° \nearrow 53'37		min. Earth dist.	-4350 Jul 23 j 03:47	27° \nearrow 54'50	43.16342 AU
				opposition	-4350 Jul 26 j 01:28	27° \nearrow 51'16	-15°43'29
conjunction	-4356 Jan 12 j 16:46	20° \nearrow 03'08	-13°51'51	direct	-4350 Oct 14 j 13:27	26° \nearrow 47'53	
minimum elong	-4356 Jan 12 j 16:36	20° \nearrow 03'07	13°52'04				
max. Earth dist.	-4356 Jan 15 j 20:00	20° \nearrow 08'06	43.78588 AU	conjunction	-4349 Jan 20 j 20:54	28° \nearrow 24'49	-15°06'40
morning rise	-4356 Jan 18 j 16:44	20° \nearrow 12'39		minimum elong	-4349 Jan 20 j 20:48	28° \nearrow 24'48	15°06'52
retrograde	-4356 Apr 25 j 16:10	21° \nearrow 47'48		max. Earth dist.	-4349 Jan 23 j 20:30	28° \nearrow 29'24	45.18692 AU
min. Earth dist.	-4356 Jul 15 j 07:01	20° \nearrow 45'15	41.95192 AU		-4349 Apr 11 j 03:43	0° \nearrow	
opposition	-4356 Jul 18 j 07:52	20° \nearrow 41'28	-14°37'40	retrograde	-4349 May 04 j 18:42	0° \nearrow 06'18	
direct	-4356 Oct 06 j 17:22	19° \nearrow 36'59			-4349 May 28 j 09:34	30° \nearrow	
evening set	-4355 Jan 07 j 17:29	21° \nearrow 07'52		min. Earth dist.	-4349 Jul 24 j 14:38	29° \nearrow 04'49	43.35511 AU
				opposition	-4349 Jul 27 j 11:39	29° \nearrow 01'19	-15°52'49
conjunction	-4355 Jan 13 j 04:19	21° \nearrow 16'29	-14°03'58	direct	-4349 Oct 15 j 22:33	27° \nearrow 58'07	
minimum elong	-4355 Jan 13 j 04:11	21° \nearrow 16'29	14°04'10				
max. Earth dist.	-4355 Jan 16 j 07:57	21° \nearrow 21'28	43.99253 AU	conjunction	-4348 Jan 22 j 07:19	29° \nearrow 34'39	-15°15'34
morning rise	-4355 Jan 18 j 15:20	21° \nearrow 25'07		minimum elong	-4348 Jan 22 j 07:12	29° \nearrow 34'39	15°15'46
retrograde	-4355 Apr 27 j 01:53	23° \nearrow 00'39		max. Earth dist.	-4348 Jan 25 j 06:50	29° \nearrow 39'14	45.37494 AU
min. Earth dist.	-4355 Jul 16 j 18:53	21° \nearrow 58'14	42.15920 AU		-4348 Feb 07 j 23:32	0° \nearrow	
opposition	-4355 Jul 19 j 19:17	21° \nearrow 54'29	-14°49'53	retrograde	-4348 May 05 j 01:41	1° \nearrow 15'44	

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Attention, astronomical year style is used: The year -4348 in astronomical counting style is the year 4349 BCE in historical counting style.

min. Earth dist.	-4348 Jul 25 j 02:36	0° $\overline{3}$ 14'22	43.54223 AU	opposition	-4340 Aug 05 j 22:09	9° $\overline{3}$ 11'21	-16°58'10
opposition	-4348 Jul 27 j 21:43	0° $\overline{3}$ 10'57	-16°01'43	direct	-4340 Oct 25 j 14:50	8° $\overline{3}$ 09'26	
	-4348 Aug 05 j 21:53	30° $\overline{8}$ 2'					
direct	-4348 Oct 16 j 11:29	29° $\overline{8}$ 07'55		conjunction	-4339 Jan 31 j 19:39	9° $\overline{3}$ 42'49	-16°17'52
	-4348 Dec 23 j 19:47	0° $\overline{3}$		minimum elong	-4339 Jan 31 j 19:36	9° $\overline{3}$ 42'49	16°18'05
				max. Earth dist.	-4339 Feb 03 j 10:44	9° $\overline{3}$ 46'43	46.89165 AU
conjunction	-4347 Jan 22 j 17:27	0° $\overline{3}$ 44'05	-15°24'05	retrograde	-4339 May 15 j 13:37	11° $\overline{3}$ 20'31	
minimum elong	-4347 Jan 22 j 17:21	0° $\overline{3}$ 44'05	15°24'17	min. Earth dist.	-4339 Aug 04 j 18:36	10° $\overline{3}$ 20'06	45.05372 AU
max. Earth dist.	-4347 Jan 25 j 15:04	0° $\overline{3}$ 48'32	45.55836 AU	opposition	-4339 Aug 07 j 06:26	10° $\overline{3}$ 17'08	-17°03'23
retrograde	-4347 May 06 j 10:38	2° $\overline{3}$ 24'46		direct	-4339 Oct 26 j 20:23	9° $\overline{3}$ 15'21	
min. Earth dist.	-4347 Jul 26 j 12:30	1° $\overline{3}$ 23'32	43.72460 AU				
opposition	-4347 Jul 29 j 07:28	1° $\overline{3}$ 20'08	-16°10'13	conjunction	-4338 Feb 02 j 04:23	10° $\overline{3}$ 48'27	-16°22'50
direct	-4347 Oct 17 j 22:36	0° $\overline{3}$ 17'16		minimum elong	-4338 Feb 02 j 04:22	10° $\overline{3}$ 48'27	16°23'02
				max. Earth dist.	-4338 Feb 04 j 19:37	10° $\overline{3}$ 52'20	47.04501 AU
conjunction	-4346 Jan 24 j 03:21	1° $\overline{3}$ 53'03	-15°32'12	retrograde	-4338 May 16 j 20:45	12° $\overline{3}$ 25'50	
minimum elong	-4346 Jan 24 j 03:15	1° $\overline{3}$ 53'03	15°32'24	min. Earth dist.	-4338 Aug 06 j 04:04	11° $\overline{3}$ 25'31	45.20598 AU
max. Earth dist.	-4346 Jan 27 j 00:09	1° $\overline{3}$ 57'25	45.73705 AU	opposition	-4338 Aug 08 j 14:31	11° $\overline{3}$ 22'36	-17°08'13
retrograde	-4346 May 07 j 21:31	3° $\overline{3}$ 33'20		direct	-4338 Oct 28 j 05:43	10° $\overline{3}$ 20'59	
min. Earth dist.	-4346 Jul 28 j 00:10	2° $\overline{3}$ 32'09	43.90241 AU				
opposition	-4346 Jul 30 j 17:11	2° $\overline{3}$ 28'52	-16°18'19	conjunction	-4337 Feb 03 j 12:56	11° $\overline{3}$ 53'48	-16°27'26
direct	-4346 Oct 19 j 07:50	1° $\overline{3}$ 26'08		minimum elong	-4337 Feb 03 j 12:54	11° $\overline{3}$ 53'47	16°27'38
				max. Earth dist.	-4337 Feb 06 j 02:03	11° $\overline{3}$ 57'33	47.19452 AU
conjunction	-4345 Jan 25 j 13:08	3° $\overline{3}$ 01'32	-15°39'55	retrograde	-4337 May 18 j 03:45	13° $\overline{3}$ 30'52	
minimum elong	-4345 Jan 25 j 13:03	3° $\overline{3}$ 01'32	15°40'08	min. Earth dist.	-4337 Aug 07 j 12:28	12° $\overline{3}$ 30'40	45.35406 AU
max. Earth dist.	-4345 Jan 28 j 09:24	3° $\overline{3}$ 05'51	45.91149 AU	opposition	-4337 Aug 09 j 22:29	12° $\overline{3}$ 27'48	-17°12'42
retrograde	-4345 May 09 j 07:03	4° $\overline{3}$ 41'24		direct	-4337 Oct 29 j 14:57	11° $\overline{3}$ 26'18	
min. Earth dist.	-4345 Jul 29 j 09:57	3° $\overline{3}$ 40'21	44.07596 AU				
opposition	-4345 Aug 01 j 02:30	3° $\overline{3}$ 37'05	-16°26'00	conjunction	-4336 Feb 04 j 21:33	12° $\overline{3}$ 58'51	-16°31'42
direct	-4345 Oct 20 j 17:17	2° $\overline{3}$ 34'29		minimum elong	-4336 Feb 04 j 21:33	12° $\overline{3}$ 58'51	16°31'54
				max. Earth dist.	-4336 Feb 07 j 09:58	13° $\overline{3}$ 02'33	47.33937 AU
conjunction	-4344 Jan 26 j 22:39	4° $\overline{3}$ 09'31	-15°47'15	retrograde	-4336 May 18 j 10:28	14° $\overline{3}$ 35'37	
minimum elong	-4344 Jan 26 j 22:34	4° $\overline{3}$ 09'30	15°47'27	min. Earth dist.	-4336 Aug 07 j 22:40	13° $\overline{3}$ 35'27	45.49718 AU
max. Earth dist.	-4344 Jan 29 j 17:05	4° $\overline{3}$ 13'41	46.08199 AU	opposition	-4336 Aug 10 j 06:18	13° $\overline{3}$ 32'41	-17°16'50
retrograde	-4344 May 09 j 18:00	5° $\overline{3}$ 48'59		direct	-4336 Oct 30 j 00:36	12° $\overline{3}$ 31'19	
min. Earth dist.	-4344 Jul 29 j 19:51	4° $\overline{3}$ 48'00	44.24602 AU				
opposition	-4344 Aug 01 j 11:33	4° $\overline{3}$ 44'48	-16°33'16	conjunction	-4335 Feb 05 j 06:04	14° $\overline{3}$ 03'34	-16°35'39
direct	-4344 Oct 21 j 00:33	3° $\overline{3}$ 42'19		minimum elong	-4335 Feb 05 j 06:02	14° $\overline{3}$ 03'34	16°35'50
				max. Earth dist.	-4335 Feb 07 j 17:06	14° $\overline{3}$ 07'11	47.47928 AU
conjunction	-4343 Jan 27 j 08:03	5° $\overline{3}$ 17'00	-15°54'10	retrograde	-4335 May 19 j 18:10	15° $\overline{3}$ 40'01	
minimum elong	-4343 Jan 27 j 07:59	5° $\overline{3}$ 17'00	15°54'23	min. Earth dist.	-4335 Aug 09 j 06:46	14° $\overline{3}$ 39'58	45.63504 AU
max. Earth dist.	-4343 Jan 30 j 02:55	5° $\overline{3}$ 21'11	46.24926 AU	opposition	-4335 Aug 11 j 13:59	14° $\overline{3}$ 37'14	-17°20'38
retrograde	-4343 May 11 j 01:14	6° $\overline{3}$ 56'05		direct	-4335 Oct 31 j 09:18	13° $\overline{3}$ 35'57	
min. Earth dist.	-4343 Jul 31 j 06:11	5° $\overline{3}$ 55'11	44.41293 AU				
opposition	-4343 Aug 02 j 20:30	5° $\overline{3}$ 52'03	-16°40'07	conjunction	-4334 Feb 06 j 14:08	15° $\overline{3}$ 07'55	-16°39'16
direct	-4343 Oct 22 j 11:15	4° $\overline{3}$ 49'42		minimum elong	-4334 Feb 06 j 14:08	15° $\overline{3}$ 07'55	16°39'28
				max. Earth dist.	-4334 Feb 08 j 23:11	15° $\overline{3}$ 11'23	47.61391 AU
conjunction	-4342 Jan 28 j 17:03	6° $\overline{3}$ 24'01	-16°00'42	retrograde	-4334 May 21 j 04:43	16° $\overline{3}$ 44'03	
minimum elong	-4342 Jan 28 j 16:59	6° $\overline{3}$ 24'01	16°00'53	min. Earth dist.	-4334 Aug 10 j 16:09	15° $\overline{3}$ 44'00	45.76781 AU
max. Earth dist.	-4342 Jan 31 j 10:25	6° $\overline{3}$ 28'07	46.41378 AU	opposition	-4334 Aug 12 j 21:39	15° $\overline{3}$ 41'22	-17°24'07
retrograde	-4342 May 12 j 08:21	8° $\overline{3}$ 02'44		direct	-4334 Nov 01 j 15:03	14° $\overline{3}$ 40'10	
min. Earth dist.	-4342 Aug 01 j 14:33	7° $\overline{3}$ 02'00	44.57721 AU				
opposition	-4342 Aug 04 j 05:14	6° $\overline{3}$ 58'51	-16°46'33	conjunction	-4333 Feb 07 j 22:23	16° $\overline{3}$ 11'51	-16°42'35
direct	-4342 Oct 23 j 21:06	5° $\overline{3}$ 56'39		minimum elong	-4333 Feb 07 j 22:23	16° $\overline{3}$ 11'51	16°42'46
				max. Earth dist.	-4333 Feb 10 j 07:13	16° $\overline{3}$ 15'18	47.74366 AU
conjunction	-4341 Jan 30 j 02:03	7° $\overline{3}$ 30'38	-16°06'49	retrograde	-4333 May 22 j 12:17	17° $\overline{3}$ 47'39	
minimum elong	-4341 Jan 30 j 01:59	7° $\overline{3}$ 30'38	16°07'01	min. Earth dist.	-4333 Aug 12 j 00:52	16° $\overline{3}$ 47'37	45.89574 AU
max. Earth dist.	-4341 Feb 01 j 19:08	7° $\overline{3}$ 34'41	46.57568 AU	opposition	-4333 Aug 14 j 04:55	16° $\overline{3}$ 45'04	-17°27'17
retrograde	-4341 May 13 j 16:19	9° $\overline{3}$ 09'00		direct	-4333 Nov 02 j 22:36	15° $\overline{3}$ 43'56	
min. Earth dist.	-4341 Aug 03 j 00:50	8° $\overline{3}$ 08'20	44.73890 AU				
opposition	-4341 Aug 05 j 13:48	8° $\overline{3}$ 05'17	-16°52'34	conjunction	-4332 Feb 09 j 06:21	17° $\overline{3}$ 15'21	-16°45'34
direct	-4341 Oct 25 j 07:29	7° $\overline{3}$ 03'13		minimum elong	-4332 Feb 09 j 06:22	17° $\overline{3}$ 15'21	16°45'46
				max. Earth dist.	-4332 Feb 11 j 13:04	17° $\overline{3}$ 18'39	47.86902 AU
conjunction	-4340 Jan 31 j 11:04	8° $\overline{3}$ 36'53	-16°12'32	retrograde	-4332 May 22 j 19:37	18° $\overline{3}$ 50'49	
minimum elong	-4340 Jan 31 j 11:02	8° $\overline{3}$ 36'53	16°12'44	min. Earth dist.	-4332 Aug 12 j 08:24	17° $\overline{3}$ 50'52	46.01963 AU
max. Earth dist.	-4340 Feb 03 j 03:39	8° $\overline{3}$ 40'54	46.73514 AU	opposition	-4332 Aug 14 j 12:05	17° $\overline{3}$ 48'20	-17°30'05
retrograde	-4340 May 14 j 02:41	10° $\overline{3}$ 14'55		direct	-4332 Nov 03 j 05:46	16° $\overline{3}$ 47'17	
min. Earth dist.	-4340 Aug 03 j 09:15	9° $\overline{3}$ 14'24	44.89781 AU				

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Attention, astronomical year style is used: The year -4331 in astronomical counting style is the year 4332 BCE in historical counting style.

conjunction	-4331 Feb 09 j 14:04	18° $\overline{3}$ 18'25	-16°48'13	retrograde	-4323 Jun 01 j 10:44	28° $\overline{3}$ 06'49	
minimum elong	-4331 Feb 09 j 14:05	18° $\overline{3}$ 18'25	16°48'24	min. Earth dist.	-4323 Aug 22 j 05:20	27° $\overline{3}$ 07'27	46.98492 AU
max. Earth dist.	-4331 Feb 11 j 20:26	18° $\overline{3}$ 21'41	47.99051 AU	opposition	-4323 Aug 23 j 22:57	27° $\overline{3}$ 05'26	-17°40'09
retrograde	-4331 May 23 j 23:50	19° $\overline{3}$ 53'35		direct	-4323 Nov 12 j 19:29	26° $\overline{3}$ 05'16	
min. Earth dist.	-4331 Aug 13 j 17:19	18° $\overline{3}$ 53'38	46.13993 AU				
opposition	-4331 Aug 15 j 19:10	18° $\overline{3}$ 51'11	-17°32'34	conjunction	-4322 Feb 19 j 07:59	27° $\overline{3}$ 34'37	-16°57'21
direct	-4331 Nov 04 j 16:05	17° $\overline{3}$ 50'13		minimum elong	-4322 Feb 19 j 08:03	27° $\overline{3}$ 34'37	16°57'32
				max. Earth dist.	-4322 Feb 21 j 03:41	27° $\overline{3}$ 37'11	48.93739 AU
conjunction	-4330 Feb 10 j 21:46	19° $\overline{3}$ 21'06	-16°50'31	retrograde	-4322 Jun 02 j 19:03	29° $\overline{3}$ 07'40	
minimum elong	-4330 Feb 10 j 21:47	19° $\overline{3}$ 21'06	16°50'44	min. Earth dist.	-4322 Aug 23 j 12:15	28° $\overline{3}$ 08'20	47.07075 AU
max. Earth dist.	-4330 Feb 13 j 03:15	19° $\overline{3}$ 24'19	48.10892 AU	opposition	-4322 Aug 25 j 04:58	28° $\overline{3}$ 06'22	-17°39'44
retrograde	-4330 May 25 j 06:40	20° $\overline{3}$ 55'59		direct	-4322 Nov 14 j 00:03	27° $\overline{3}$ 06'15	
min. Earth dist.	-4330 Aug 15 j 00:06	19° $\overline{3}$ 56'09	46.25720 AU				
opposition	-4330 Aug 17 j 01:58	19° $\overline{3}$ 53'42	-17°34'40	conjunction	-4321 Feb 20 j 15:01	28° $\overline{3}$ 35'25	-16°56'54
direct	-4330 Nov 06 j 00:00	18° $\overline{3}$ 52'49		minimum elong	-4321 Feb 20 j 15:06	28° $\overline{3}$ 35'25	16°57'05
				max. Earth dist.	-4321 Feb 22 j 10:04	28° $\overline{3}$ 37'57	49.02077 AU
conjunction	-4329 Feb 12 j 05:14	20° $\overline{3}$ 23'28	-16°52'29		-4321 May 07 j 00:10	0° \approx	
minimum elong	-4329 Feb 12 j 05:16	20° $\overline{3}$ 23'28	16°52'40	retrograde	-4321 Jun 03 j 21:33	0° \approx 08'15	
max. Earth dist.	-4329 Feb 14 j 09:19	20° $\overline{3}$ 26'35	48.22441 AU		-4321 Jul 01 j 23:21	30° \overline{R} $\overline{3}$	
retrograde	-4329 May 26 j 16:20	21° $\overline{3}$ 58'05		min. Earth dist.	-4321 Aug 24 j 20:25	29° $\overline{3}$ 08'52	47.15165 AU
min. Earth dist.	-4329 Aug 16 j 08:17	20° $\overline{3}$ 58'18	46.37170 AU	opposition	-4321 Aug 26 j 10:57	29° $\overline{3}$ 07'01	-17°39'03
opposition	-4329 Aug 18 j 08:49	20° $\overline{3}$ 55'55	-17°36'26	direct	-4321 Nov 15 j 09:34	28° $\overline{3}$ 06'57	
direct	-4329 Nov 07 j 04:35	19° $\overline{3}$ 55'08					
				conjunction	-4320 Feb 21 j 21:56	29° $\overline{3}$ 35'55	-16°56'10
conjunction	-4328 Feb 13 j 12:48	21° $\overline{3}$ 25'34	-16°54'07	minimum elong	-4320 Feb 21 j 22:00	29° $\overline{3}$ 35'55	16°56'21
minimum elong	-4328 Feb 13 j 12:50	21° $\overline{3}$ 25'34	16°54'19	max. Earth dist.	-4320 Feb 23 j 15:30	29° $\overline{3}$ 38'21	49.09969 AU
max. Earth dist.	-4328 Feb 15 j 16:57	21° $\overline{3}$ 28'40	48.33720 AU		-4320 Mar 10 j 05:11	0° \approx	
retrograde	-4328 May 26 j 23:09	22° $\overline{3}$ 59'56		retrograde	-4320 Jun 04 j 01:16	1° \approx 08'30	
min. Earth dist.	-4328 Aug 16 j 15:40	22° $\overline{3}$ 00'13	46.48325 AU	min. Earth dist.	-4320 Aug 25 j 02:16	0° \approx 09'12	47.22831 AU
opposition	-4328 Aug 18 j 15:19	21° $\overline{3}$ 57'54	-17°37'51	opposition	-4320 Aug 26 j 16:32	0° \approx 07'20	-17°38'05
direct	-4328 Nov 07 j 11:32	20° $\overline{3}$ 57'13			-4320 Sep 02 j 00:59	30° \overline{R} $\overline{3}$	
				direct	-4320 Nov 15 j 18:15	29° $\overline{3}$ 07'19	
conjunction	-4327 Feb 13 j 20:04	22° $\overline{3}$ 27'27	-16°55'25		-4319 Jan 26 j 17:51	0° \approx	
minimum elong	-4327 Feb 13 j 20:07	22° $\overline{3}$ 27'27	16°55'36				
max. Earth dist.	-4327 Feb 15 j 22:16	22° $\overline{3}$ 30'27	48.44715 AU	conjunction	-4319 Feb 22 j 04:35	0° \approx 36'06	-16°55'09
retrograde	-4327 May 28 j 06:11	24° $\overline{3}$ 01'35		minimum elong	-4319 Feb 22 j 04:41	0° \approx 36'06	16°55'21
min. Earth dist.	-4327 Aug 17 j 22:31	23° $\overline{3}$ 01'59	46.59187 AU	max. Earth dist.	-4319 Feb 23 j 20:39	0° \approx 38'27	49.17461 AU
opposition	-4327 Aug 19 j 21:50	22° $\overline{3}$ 59'41	-17°38'55	retrograde	-4319 Jun 05 j 08:58	2° \approx 08'29	
direct	-4327 Nov 08 j 17:33	21° $\overline{3}$ 59'07		min. Earth dist.	-4319 Aug 26 j 09:47	1° \approx 09'08	47.30138 AU
				opposition	-4319 Aug 27 j 22:18	1° \approx 07'22	-17°36'48
conjunction	-4326 Feb 15 j 03:13	23° $\overline{3}$ 29'11	-16°56'23	direct	-4319 Nov 16 j 23:38	0° \approx 07'23	
minimum elong	-4326 Feb 15 j 03:15	23° $\overline{3}$ 29'11	16°56'35				
max. Earth dist.	-4326 Feb 17 j 05:15	23° $\overline{3}$ 32'09	48.55388 AU	conjunction	-4318 Feb 23 j 11:10	1° \approx 35'59	-16°53'51
retrograde	-4326 May 29 j 11:14	25° $\overline{3}$ 03'06		minimum elong	-4318 Feb 23 j 11:16	1° \approx 36'00	16°54'01
min. Earth dist.	-4326 Aug 19 j 07:05	24° $\overline{3}$ 03'32	46.69693 AU	max. Earth dist.	-4318 Feb 25 j 03:08	1° \approx 38'19	49.24627 AU
opposition	-4326 Aug 21 j 04:20	24° $\overline{3}$ 01'20	-17°39'41	retrograde	-4318 Jun 06 j 15:06	3° \approx 08'10	
direct	-4326 Nov 10 j 01:53	23° $\overline{3}$ 00'54		min. Earth dist.	-4318 Aug 27 j 15:56	2° \approx 08'51	47.37117 AU
				opposition	-4318 Aug 29 j 03:51	2° \approx 07'07	-17°35'13
conjunction	-4325 Feb 16 j 10:33	24° $\overline{3}$ 30'46	-16°57'03	direct	-4318 Nov 18 j 05:35	1° \approx 07'11	
minimum elong	-4325 Feb 16 j 10:38	24° $\overline{3}$ 30'46	16°57'14				
max. Earth dist.	-4325 Feb 18 j 11:15	24° $\overline{3}$ 33'40	48.65692 AU	conjunction	-4317 Feb 24 j 17:41	2° \approx 35'37	-16°52'14
retrograde	-4325 May 30 j 17:12	26° $\overline{3}$ 04'29		minimum elong	-4317 Feb 24 j 17:47	2° \approx 35'38	16°52'25
min. Earth dist.	-4325 Aug 20 j 13:31	25° $\overline{3}$ 05'03	46.79786 AU	max. Earth dist.	-4317 Feb 26 j 07:38	2° \approx 37'50	49.31494 AU
opposition	-4325 Aug 22 j 10:28	25° $\overline{3}$ 02'52	-17°40'07	retrograde	-4317 Jun 07 j 23:08	4° \approx 07'35	
direct	-4325 Nov 11 j 09:42	24° $\overline{3}$ 02'31		min. Earth dist.	-4317 Aug 28 j 22:00	3° \approx 08'19	47.43814 AU
				opposition	-4317 Aug 30 j 09:15	3° \approx 06'37	-17°33'19
conjunction	-4324 Feb 17 j 17:47	25° $\overline{3}$ 32'14	-16°57'26	direct	-4317 Nov 19 j 08:52	2° \approx 06'43	
minimum elong	-4324 Feb 17 j 17:49	25° $\overline{3}$ 32'14	16°57'37				
max. Earth dist.	-4324 Feb 19 j 16:30	25° $\overline{3}$ 35'00	48.75542 AU	conjunction	-4316 Feb 26 j 00:15	3° \approx 35'02	-16°50'20
retrograde	-4324 May 31 j 02:27	27° $\overline{3}$ 05'45		minimum elong	-4316 Feb 26 j 00:22	3° \approx 35'02	16°50'30
min. Earth dist.	-4324 Aug 20 j 21:55	26° $\overline{3}$ 06'19	46.89405 AU	max. Earth dist.	-4316 Feb 27 j 14:05	3° \approx 37'14	49.38074 AU
opposition	-4324 Aug 22 j 16:48	26° $\overline{3}$ 04'15	-17°40'16	retrograde	-4316 Jun 08 j 03:50	5° \approx 06'48	
direct	-4324 Nov 11 j 14:47	25° $\overline{3}$ 04'00		min. Earth dist.	-4316 Aug 29 j 05:10	4° \approx 07'32	47.50216 AU
				opposition	-4316 Aug 30 j 14:44	4° \approx 05'55	-17°31'08
conjunction	-4323 Feb 18 j 00:58	26° $\overline{3}$ 33'32	-16°57'31	direct	-4316 Nov 19 j 15:37	3° \approx 06'06	
minimum elong	-4323 Feb 18 j 01:03	26° $\overline{3}$ 33'32	16°57'42				
max. Earth dist.	-4323 Feb 19 j 23:14	26° $\overline{3}$ 36'16	48.84899 AU	conjunction	-4315 Feb 26 j 06:33	4° \approx 34'16	-16°48'08

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Attention, astronomical year style is used: The year -4315 in astronomical counting style is the year 4316 BCE in historical counting style.

minimum elong	-4315 Feb 26 j 06:40	4°34'17	16°48'19	opposition	-4307 Sep 08 j 12:41	12°55'05	-16°59'10
max. Earth dist.	-4315 Feb 27 j 19:07	4°36'24	49.44376 AU	min. Earth dist.	-4307 Sep 07 j 14:07	12°56'10	47.88829 AU
retrograde	-4315 Jun 09 j 07:48	6°05'53		direct	-4307 Nov 28 j 15:44	11°55'40	
min. Earth dist.	-4315 Aug 30 j 10:25	5°06'43	47.56315 AU				
opposition	-4315 Aug 31 j 20:03	5°05'06	-17°28'38	conjunction	-4306 Mar 07 j 15:13	13°23'00	-16°16'35
direct	-4315 Nov 20 j 22:36	4°05'20		minimum elong	-4306 Mar 07 j 15:22	13°23'00	16°16'45
				max. Earth dist.	-4306 Mar 08 j 15:37	13°24'24	49.81521 AU
conjunction	-4314 Feb 27 j 12:53	5°33'24	-16°45'38	retrograde	-4306 Jun 18 j 14:00	14°53'22	
minimum elong	-4314 Feb 27 j 13:01	5°33'24	16°45'49	opposition	-4306 Sep 09 j 17:28	13°53'12	-16°54'19
max. Earth dist.	-4314 Feb 28 j 23:58	5°35'26	49.50351 AU	min. Earth dist.	-4306 Sep 08 j 20:39	13°54'12	47.90877 AU
retrograde	-4314 Jun 10 j 14:17	7°04'52		direct	-4306 Nov 29 j 21:46	12°53'48	
min. Earth dist.	-4314 Aug 31 j 17:42	6°05'42	47.62071 AU				
opposition	-4314 Sep 02 j 01:22	6°04'11	-17°25'50	conjunction	-4305 Mar 08 j 21:16	14°21'04	-16°11'49
direct	-4314 Nov 22 j 04:24	5°04'30		minimum elong	-4305 Mar 08 j 21:26	14°21'05	16°11'57
				max. Earth dist.	-4305 Mar 09 j 20:10	14°22'23	49.83497 AU
conjunction	-4313 Feb 28 j 19:25	6°32'27	-16°42'52		-4305 Apr 07 j 04:14	15°	
minimum elong	-4313 Feb 28 j 19:31	6°32'27	16°43'03	retrograde	-4305 Jun 19 j 17:30	15°51'20	
max. Earth dist.	-4313 Mar 02 j 06:09	6°34'28	49.55959 AU		-4305 Sep 03 j 05:33	15°	
retrograde	-4313 Jun 11 j 21:35	8°03'47		opposition	-4305 Sep 10 j 22:09	14°51'13	-16°49'12
min. Earth dist.	-4313 Sep 01 j 23:57	7°04'40	47.67402 AU	min. Earth dist.	-4305 Sep 10 j 01:18	14°52'12	47.92607 AU
opposition	-4313 Sep 03 j 06:34	7°03'12	-17°22'47	direct	-4305 Dec 01 j 04:03	13°51'49	
direct	-4313 Nov 23 j 08:58	6°03'35			-4304 Feb 24 j 03:42	15°	
conjunction	-4312 Mar 01 j 01:47	7°31'27	-16°39'51	conjunction	-4304 Mar 09 j 03:13	15°19'02	-16°06'46
minimum elong	-4312 Mar 01 j 01:56	7°31'28	16°40'01	minimum elong	-4304 Mar 09 j 03:23	15°19'03	16°06'55
max. Earth dist.	-4312 Mar 02 j 09:57	7°33'19	49.61112 AU	max. Earth dist.	-4304 Mar 10 j 00:40	15°20'16	49.85151 AU
retrograde	-4312 Jun 12 j 06:16	9°02'39		retrograde	-4304 Jun 19 j 22:04	16°49'13	
min. Earth dist.	-4312 Sep 02 j 06:13	8°03'34	47.72257 AU	min. Earth dist.	-4304 Sep 10 j 07:57	15°50'03	47.94030 AU
opposition	-4312 Sep 03 j 11:41	8°02'10	-17°19'28	opposition	-4304 Sep 11 j 02:52	15°49'09	-16°43'48
direct	-4312 Nov 23 j 11:39	7°02'36			-4304 Oct 31 j 14:28	15°	
				direct	-4304 Dec 01 j 10:31	14°49'48	
conjunction	-4311 Mar 02 j 08:14	8°30'23	-16°36'35		-4304 Dec 31 j 23:02	15°	
minimum elong	-4311 Mar 02 j 08:21	8°30'24	16°36'45				
max. Earth dist.	-4311 Mar 03 j 15:34	8°32'12	49.65755 AU	conjunction	-4303 Mar 10 j 09:14	16°16'57	-16°01'27
retrograde	-4311 Jun 13 j 10:12	10°01'27		minimum elong	-4303 Mar 10 j 09:25	16°16'58	16°01'35
opposition	-4311 Sep 04 j 16:55	9°01'02	-17°15'54	max. Earth dist.	-4303 Mar 11 j 06:32	16°18'10	49.86514 AU
min. Earth dist.	-4311 Sep 03 j 13:40	9°02'20	47.76575 AU	retrograde	-4303 Jun 21 j 04:25	17°47'03	
direct	-4311 Nov 24 j 18:35	8°01'32		opposition	-4303 Sep 12 j 07:30	16°47'03	-16°38'07
				min. Earth dist.	-4303 Sep 11 j 13:05	16°47'56	47.95133 AU
conjunction	-4310 Mar 03 j 14:31	9°29'13	-16°33'04	direct	-4303 Dec 02 j 15:09	15°47'44	
minimum elong	-4310 Mar 03 j 14:40	9°29'13	16°33'14				
max. Earth dist.	-4310 Mar 04 j 20:02	9°30'55	49.69874 AU	conjunction	-4302 Mar 11 j 15:01	17°14'51	-15°55'52
retrograde	-4310 Jun 14 j 13:38	11°00'08		minimum elong	-4302 Mar 11 j 15:10	17°14'52	15°56'01
opposition	-4310 Sep 05 j 21:58	9°59'47	-17°12'06	max. Earth dist.	-4302 Mar 12 j 10:01	17°15'56	49.87548 AU
min. Earth dist.	-4310 Sep 04 j 19:17	10°01'04	47.80354 AU	retrograde	-4302 Jun 22 j 13:44	18°44'53	
direct	-4310 Nov 26 j 02:22	9°00'19		opposition	-4302 Sep 13 j 12:10	17°44'57	-16°32'10
				min. Earth dist.	-4302 Sep 12 j 18:50	17°45'46	47.95891 AU
conjunction	-4309 Mar 04 j 20:48	10°27'54	-16°29'20	direct	-4302 Dec 03 j 16:06	16°45'39	
minimum elong	-4309 Mar 04 j 20:56	10°27'55	16°29'29				
max. Earth dist.	-4309 Mar 06 j 00:19	10°29'29	49.73454 AU	conjunction	-4301 Mar 12 j 21:08	18°12'46	-15°50'02
retrograde	-4309 Jun 15 j 20:00	11°58'41		minimum elong	-4301 Mar 12 j 21:19	18°12'47	15°50'10
min. Earth dist.	-4309 Sep 06 j 02:33	10°59'33	47.83622 AU	max. Earth dist.	-4301 Mar 13 j 15:38	18°13'49	49.88196 AU
opposition	-4309 Sep 07 j 02:57	10°58'23	-17°08'03	retrograde	-4301 Jun 23 j 18:48	19°42'44	
direct	-4309 Nov 27 j 07:53	9°58'56		opposition	-4301 Sep 14 j 16:43	18°42'51	-16°25'58
				min. Earth dist.	-4301 Sep 14 j 01:24	18°43'35	47.96222 AU
conjunction	-4308 Mar 05 j 03:10	11°26'26	-16°25'20	direct	-4301 Dec 04 j 21:09	17°43'35	
minimum elong	-4308 Mar 05 j 03:20	11°26'26	16°25'30				
max. Earth dist.	-4308 Mar 06 j 06:06	11°27'59	49.76556 AU	conjunction	-4300 Mar 13 j 03:12	19°10'41	-15°43'57
retrograde	-4308 Jun 16 j 01:34	12°57'05		minimum elong	-4300 Mar 13 j 03:22	19°10'42	15°44'05
min. Earth dist.	-4308 Sep 06 j 08:15	11°57'57	47.86421 AU	max. Earth dist.	-4300 Mar 13 j 19:53	19°11'38	49.88405 AU
opposition	-4308 Sep 07 j 07:49	11°56'49	-17°03'44	retrograde	-4300 Jun 23 j 21:46	20°40'35	
direct	-4308 Nov 27 j 13:13	10°57'23		opposition	-4300 Sep 14 j 21:17	19°40'45	-16°19'31
				min. Earth dist.	-4300 Sep 14 j 06:34	19°41'27	47.96077 AU
conjunction	-4307 Mar 06 j 09:05	12°24'47	-16°21'06	direct	-4300 Dec 05 j 04:21	18°41'30	
minimum elong	-4307 Mar 06 j 09:14	12°24'48	16°21'15				
max. Earth dist.	-4307 Mar 07 j 09:45	12°26'12	49.79226 AU	conjunction	-4299 Mar 14 j 09:05	20°08'35	-15°37'38
retrograde	-4307 Jun 17 j 09:37	13°55'18		minimum elong	-4299 Mar 14 j 09:17	20°08'36	15°37'47

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Attention, astronomical year style is used: The year -4299 in astronomical counting style is the year 4300 BCE in historical counting style.

max. Earth dist.	-4299 Mar 14 j 23:47	20°09'26	49.88095 AU	conjunction	-4291 Mar 22 j 08:21	27°48'18	-14°38'38
retrograde	-4299 Jun 25 j 02:00	21°38'26		minimum elong	-4291 Mar 22 j 08:32	27°48'19	14°38'46
opposition	-4299 Sep 16 j 02:02	20°38'37	-16°12'51	max. Earth dist.	-4291 Mar 22 j 13:04	27°48'34	49.69249 AU
min. Earth dist.	-4299 Sep 15 j 13:39	20°39'12	47.95401 AU	morning rise	-4291 Mar 25 j 20:59	27°53'06	
direct	-4299 Dec 06 j 10:54	19°39'22		retrograde	-4291 Jul 02 j 22:54	29°17'46	
				opposition	-4291 Sep 23 j 13:33	28°18'00	-15°10'36
conjunction	-4298 Mar 15 j 15:14	21°06'26	-15°31'06	min. Earth dist.	-4291 Sep 23 j 10:32	28°18'08	47.74058 AU
minimum elong	-4298 Mar 15 j 15:24	21°06'26	15°31'14	direct	-4291 Dec 13 j 22:52	27°18'34	
max. Earth dist.	-4298 Mar 16 j 05:03	21°07'13	49.87257 AU	evening set	-4290 Mar 19 j 10:53	28°40'02	
retrograde	-4298 Jun 26 j 06:48	22°36'12					
opposition	-4298 Sep 17 j 06:32	21°36'24	-16°05'57	conjunction	-4290 Mar 23 j 14:13	28°45'40	-14°30'06
min. Earth dist.	-4298 Sep 16 j 19:06	21°36'57	47.94177 AU	minimum elong	-4290 Mar 23 j 14:27	28°45'41	14°30'13
direct	-4298 Dec 07 j 16:42	20°37'08		max. Earth dist.	-4290 Mar 23 j 17:31	28°45'52	49.65405 AU
				morning rise	-4290 Mar 27 j 18:09	28°51'20	
conjunction	-4297 Mar 16 j 21:13	22°04'09	-15°24'21		-4290 May 26 j 18:07	0°	
minimum elong	-4297 Mar 16 j 21:25	22°04'10	15°24'29	retrograde	-4290 Jul 04 j 02:34	0°15'08	
max. Earth dist.	-4297 Mar 17 j 08:23	22°04'48	49.85888 AU		-4290 Aug 11 j 14:31	30°	
retrograde	-4297 Jun 27 j 14:50	23°33'51		opposition	-4290 Sep 24 j 17:48	29°15'25	-15°01'37
opposition	-4297 Sep 18 j 11:06	22°34'04	-15°58'48	min. Earth dist.	-4290 Sep 24 j 15:04	29°15'33	47.69911 AU
min. Earth dist.	-4297 Sep 18 j 01:10	22°34'32	47.92445 AU	direct	-4290 Dec 15 j 04:58	28°15'59	
direct	-4297 Dec 08 j 19:21	21°34'46		evening set	-4289 Mar 20 j 03:21	29°36'46	
conjunction	-4296 Mar 17 j 03:13	23°01'46	-15°17'21	conjunction	-4289 Mar 24 j 20:13	29°43'11	-14°21'20
minimum elong	-4296 Mar 17 j 03:24	23°01'46	15°17'29	minimum elong	-4289 Mar 24 j 20:25	29°43'12	14°21'27
max. Earth dist.	-4296 Mar 17 j 13:43	23°02'21	49.84019 AU	max. Earth dist.	-4289 Mar 24 j 21:45	29°43'16	49.61202 AU
retrograde	-4296 Jun 27 j 20:02	24°31'22		morning rise	-4289 Mar 29 j 13:41	29°49'37	
opposition	-4296 Sep 18 j 15:34	23°31'34	-15°51'26		-4289 Apr 06 j 05:59	0°	
min. Earth dist.	-4296 Sep 18 j 07:28	23°31'57	47.90237 AU	retrograde	-4289 Jul 05 j 06:40	1°12'41	
direct	-4296 Dec 09 j 00:14	22°32'14		opposition	-4289 Sep 25 j 22:19	0°13'00	-14°52'23
				min. Earth dist.	-4289 Sep 25 j 21:48	0°13'01	47.65379 AU
conjunction	-4295 Mar 18 j 09:04	23°59'13	-15°10'07		-4289 Oct 07 j 08:40	30°	
minimum elong	-4295 Mar 18 j 09:16	23°59'14	15°10'16	direct	-4289 Dec 16 j 11:24	29°13'34	
max. Earth dist.	-4295 Mar 18 j 17:55	23°59'43	49.81731 AU		-4288 Feb 22 j 23:04	0°	
retrograde	-4295 Jun 29 j 00:18	25°28'45		evening set	-4288 Mar 19 j 21:15	0°33'45	
opposition	-4295 Sep 19 j 19:53	24°28'57	-15°43'48				
min. Earth dist.	-4295 Sep 19 j 12:01	24°29'19	47.87637 AU	conjunction	-4288 Mar 25 j 02:18	0°40'51	-14°12'19
direct	-4295 Dec 10 j 05:33	23°29'34		minimum elong	-4288 Mar 25 j 02:32	0°40'52	14°12'25
				max. Earth dist.	-4288 Mar 25 j 03:15	0°40'54	49.56588 AU
conjunction	-4294 Mar 19 j 14:48	24°56'33	-15°02'39	morning rise	-4288 Mar 30 j 07:57	0°48'00	
minimum elong	-4294 Mar 19 j 15:00	24°56'34	15°02'45	retrograde	-4288 Jul 05 j 11:39	2°10'24	
max. Earth dist.	-4294 Mar 19 j 22:09	24°56'58	49.79065 AU	opposition	-4288 Sep 26 j 02:42	1°10'44	-14°42'55
retrograde	-4294 Jun 30 j 03:56	26°26'03		min. Earth dist.	-4288 Sep 26 j 02:57	1°10'43	47.60388 AU
opposition	-4294 Sep 21 j 00:23	25°26'14	-15°35'54	direct	-4288 Dec 16 j 16:47	0°11'18	
min. Earth dist.	-4294 Sep 20 j 18:32	25°26'31	47.84689 AU	evening set	-4287 Mar 20 j 16:02	1°30'56	
direct	-4294 Dec 11 j 11:59	24°26'50					
evening set	-4293 Mar 19 j 04:00	25°51'29		conjunction	-4287 Mar 26 j 08:19	1°38'40	-14°03'03
				minimum elong	-4287 Mar 26 j 08:31	1°38'41	14°03'10
conjunction	-4293 Mar 20 j 20:48	25°53'48	-14°54'54	max. Earth dist.	-4287 Mar 26 j 06:35	1°38'34	49.51492 AU
minimum elong	-4293 Mar 20 j 21:00	25°53'49	14°55'01	morning rise	-4287 Apr 01 j 01:17	1°46'27	
max. Earth dist.	-4293 Mar 21 j 03:52	25°54'12	49.76082 AU	retrograde	-4287 Jul 06 j 19:58	3°08'16	
morning rise	-4293 Mar 22 j 14:02	25°56'09		opposition	-4287 Sep 27 j 07:13	2°08'36	-14°33'13
retrograde	-4293 Jul 01 j 08:23	27°23'16		min. Earth dist.	-4287 Sep 27 j 09:07	2°08'31	47.54904 AU
opposition	-4293 Sep 22 j 04:38	26°23'28	-15°27'44	direct	-4287 Dec 17 j 18:59	1°09'09	
min. Earth dist.	-4293 Sep 21 j 23:12	26°23'43	47.81428 AU	evening set	-4286 Mar 21 j 11:33	2°28'15	
direct	-4293 Dec 12 j 17:44	25°24'02					
evening set	-4292 Mar 18 j 08:43	26°47'18		conjunction	-4286 Mar 27 j 14:29	2°36'36	-13°53'35
				minimum elong	-4286 Mar 27 j 14:43	2°36'36	13°53'41
conjunction	-4292 Mar 21 j 02:35	26°51'02	-14°46'54	max. Earth dist.	-4286 Mar 27 j 11:53	2°36'27	49.45875 AU
minimum elong	-4292 Mar 21 j 02:47	26°51'03	14°47'00	morning rise	-4286 Apr 02 j 18:05	2°44'59	
max. Earth dist.	-4292 Mar 21 j 07:26	26°51'19	49.72807 AU	retrograde	-4286 Jul 08 j 02:29	4°06'13	
morning rise	-4292 Mar 23 j 20:57	26°54'48		opposition	-4286 Sep 28 j 11:50	3°06'33	-14°23'16
retrograde	-4292 Jul 01 j 17:04	28°20'29		min. Earth dist.	-4286 Sep 28 j 15:38	3°06'22	47.48876 AU
opposition	-4292 Sep 22 j 09:04	27°20'42	-15°19'18	direct	-4286 Dec 18 j 23:04	2°07'03	
min. Earth dist.	-4292 Sep 22 j 04:32	27°20'54	47.77892 AU	evening set	-4285 Mar 22 j 07:53	3°25'40	
direct	-4292 Dec 12 j 18:53	26°21'15					
evening set	-4291 Mar 18 j 20:12	27°43'32		conjunction	-4285 Mar 28 j 20:41	3°34'35	-13°43'52
				minimum elong	-4285 Mar 28 j 20:53	3°34'35	13°43'58

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Attention, astronomical year style is used: The year -4285 in astronomical counting style is the year 4286 BCE in historical counting style.

max. Earth dist.	-4285 Mar 28 j 16:01	3° $\mathbf{\text{H}}$ 34'19	49.39741 AU	conjunction	-4278 Apr 04 j 15:56	10° $\mathbf{\text{H}}$ 20'53	-12°29'04
morning rise	-4285 Apr 04 j 10:12	3° $\mathbf{\text{H}}$ 43'31		minimum elong	-4278 Apr 04 j 16:08	10° $\mathbf{\text{H}}$ 20'54	12°29'09
retrograde	-4285 Jul 09 j 08:09	5° $\mathbf{\text{H}}$ 04'12		max. Earth dist.	-4278 Apr 04 j 03:06	10° $\mathbf{\text{H}}$ 20'09	48.85774 AU
opposition	-4285 Sep 29 j 16:12	4° $\mathbf{\text{H}}$ 04'31	-14°13'06	morning rise	-4278 Apr 13 j 16:50	10° $\mathbf{\text{H}}$ 33'15	
min. Earth dist.	-4285 Sep 29 j 20:37	4° $\mathbf{\text{H}}$ 04'19	47.42343 AU	retrograde	-4278 Jul 15 j 18:29	11° $\mathbf{\text{H}}$ 50'54	
direct	-4285 Dec 20 j 04:11	3° $\mathbf{\text{H}}$ 04'57		opposition	-4278 Oct 06 j 00:22	10° $\mathbf{\text{H}}$ 50'58	-12°54'41
evening set	-4284 Mar 22 j 04:32	4° $\mathbf{\text{H}}$ 23'07		min. Earth dist.	-4278 Oct 06 j 12:40	10° $\mathbf{\text{H}}$ 50'22	46.86144 AU
				direct	-4278 Dec 26 j 18:52	9° $\mathbf{\text{H}}$ 50'56	
conjunction	-4284 Mar 29 j 02:51	4° $\mathbf{\text{H}}$ 32'34	-13°33'56	evening set	-4277 Mar 27 j 14:48	11° $\mathbf{\text{H}}$ 06'35	
minimum elong	-4284 Mar 29 j 03:04	4° $\mathbf{\text{H}}$ 32'35	13°34'03				
max. Earth dist.	-4284 Mar 28 j 20:21	4° $\mathbf{\text{H}}$ 32'12	49.33106 AU	conjunction	-4277 Apr 05 j 22:20	11° $\mathbf{\text{H}}$ 19'20	-12°17'21
morning rise	-4284 Apr 05 j 01:57	4° $\mathbf{\text{H}}$ 42'03		minimum elong	-4277 Apr 05 j 22:34	11° $\mathbf{\text{H}}$ 19'21	12°17'25
retrograde	-4284 Jul 09 j 11:22	6° $\mathbf{\text{H}}$ 02'14		max. Earth dist.	-4277 Apr 05 j 07:08	11° $\mathbf{\text{H}}$ 18'28	48.76792 AU
opposition	-4284 Sep 29 j 20:50	5° $\mathbf{\text{H}}$ 02'30	-14°02'41	morning rise	-4277 Apr 15 j 06:49	11° $\mathbf{\text{H}}$ 32'09	
min. Earth dist.	-4284 Sep 30 j 03:35	5° $\mathbf{\text{H}}$ 02'11	47.35343 AU	retrograde	-4277 Jul 17 j 02:19	12° $\mathbf{\text{H}}$ 49'29	
direct	-4284 Dec 20 j 10:58	4° $\mathbf{\text{H}}$ 02'52		opposition	-4277 Oct 07 j 05:04	11° $\mathbf{\text{H}}$ 49'32	-12°42'24
evening set	-4283 Mar 23 j 01:30	5° $\mathbf{\text{H}}$ 20'35		min. Earth dist.	-4277 Oct 07 j 18:59	11° $\mathbf{\text{H}}$ 48'52	46.76817 AU
				direct	-4277 Dec 27 j 21:55	10° $\mathbf{\text{H}}$ 49'27	
conjunction	-4283 Mar 30 j 08:54	5° $\mathbf{\text{H}}$ 30'32	-13°23'46	evening set	-4276 Mar 27 j 14:06	12° $\mathbf{\text{H}}$ 04'51	
minimum elong	-4283 Mar 30 j 09:07	5° $\mathbf{\text{H}}$ 30'33	13°23'51				
max. Earth dist.	-4283 Mar 30 j 01:55	5° $\mathbf{\text{H}}$ 30'09	49.26044 AU	conjunction	-4276 Apr 06 j 05:01	12° $\mathbf{\text{H}}$ 18'02	-12°05'23
morning rise	-4283 Apr 06 j 16:57	5° $\mathbf{\text{H}}$ 40'33		minimum elong	-4276 Apr 06 j 05:13	12° $\mathbf{\text{H}}$ 18'03	12°05'27
retrograde	-4283 Jul 10 j 14:19	7° $\mathbf{\text{H}}$ 00'14		max. Earth dist.	-4276 Apr 05 j 13:08	12° $\mathbf{\text{H}}$ 17'07	48.67396 AU
opposition	-4283 Oct 01 j 01:19	6° $\mathbf{\text{H}}$ 00'28	-13°52'01	morning rise	-4276 Apr 15 j 20:38	12° $\mathbf{\text{H}}$ 31'17	
min. Earth dist.	-4283 Oct 01 j 08:31	6° $\mathbf{\text{H}}$ 00'07	47.27933 AU	retrograde	-4276 Jul 17 j 09:33	13° $\mathbf{\text{H}}$ 48'19	
direct	-4283 Dec 21 j 18:21	5° $\mathbf{\text{H}}$ 00'45		opposition	-4276 Oct 07 j 10:01	12° $\mathbf{\text{H}}$ 48'20	-12°29'52
evening set	-4282 Mar 23 j 22:57	6° $\mathbf{\text{H}}$ 18'03		min. Earth dist.	-4276 Oct 08 j 01:38	12° $\mathbf{\text{H}}$ 47'35	46.67034 AU
				direct	-4276 Dec 28 j 02:02	11° $\mathbf{\text{H}}$ 48'11	
conjunction	-4282 Mar 31 j 14:59	6° $\mathbf{\text{H}}$ 28'30	-13°13'21	evening set	-4275 Mar 28 j 13:42	13° $\mathbf{\text{H}}$ 03'21	
minimum elong	-4282 Mar 31 j 15:12	6° $\mathbf{\text{H}}$ 28'31	13°13'27				
max. Earth dist.	-4282 Mar 31 j 05:38	6° $\mathbf{\text{H}}$ 27'59	49.18601 AU	conjunction	-4275 Apr 07 j 11:31	13° $\mathbf{\text{H}}$ 16'58	-11°53'10
morning rise	-4282 Apr 08 j 07:52	6° $\mathbf{\text{H}}$ 39'02		minimum elong	-4275 Apr 07 j 11:45	13° $\mathbf{\text{H}}$ 16'59	11°53'14
retrograde	-4282 Jul 11 j 22:38	7° $\mathbf{\text{H}}$ 58'14		max. Earth dist.	-4275 Apr 06 j 17:40	13° $\mathbf{\text{H}}$ 15'56	48.57530 AU
opposition	-4282 Oct 02 j 05:47	6° $\mathbf{\text{H}}$ 58'25	-13°41'06	morning rise	-4275 Apr 17 j 10:11	13° $\mathbf{\text{H}}$ 30'38	
min. Earth dist.	-4282 Oct 02 j 14:17	6° $\mathbf{\text{H}}$ 58'01	47.20178 AU	retrograde	-4275 Jul 18 j 17:09	14° $\mathbf{\text{H}}$ 47'22	
direct	-4282 Dec 22 j 20:34	5° $\mathbf{\text{H}}$ 58'38		opposition	-4275 Oct 08 j 14:58	13° $\mathbf{\text{H}}$ 47'21	-12°17'06
evening set	-4281 Mar 24 j 20:44	7° $\mathbf{\text{H}}$ 15'33		min. Earth dist.	-4275 Oct 09 j 07:17	13° $\mathbf{\text{H}}$ 46'34	46.56751 AU
				direct	-4275 Dec 29 j 06:35	12° $\mathbf{\text{H}}$ 47'08	
conjunction	-4281 Apr 01 j 21:17	7° $\mathbf{\text{H}}$ 26'29	-13°02'40	evening set	-4274 Mar 29 j 13:37	14° $\mathbf{\text{H}}$ 02'05	
minimum elong	-4281 Apr 01 j 21:30	7° $\mathbf{\text{H}}$ 26'30	13°02'45				
max. Earth dist.	-4281 Apr 01 j 11:40	7° $\mathbf{\text{H}}$ 25'56	49.10824 AU	conjunction	-4274 Apr 08 j 18:21	14° $\mathbf{\text{H}}$ 16'06	-11°40'44
morning rise	-4281 Apr 09 j 22:33	7° $\mathbf{\text{H}}$ 37'29		minimum elong	-4274 Apr 08 j 18:33	14° $\mathbf{\text{H}}$ 16'07	11°40'47
retrograde	-4281 Jul 13 j 05:27	8° $\mathbf{\text{H}}$ 56'16		max. Earth dist.	-4274 Apr 07 j 22:27	14° $\mathbf{\text{H}}$ 14'58	48.47127 AU
opposition	-4281 Oct 03 j 10:26	7° $\mathbf{\text{H}}$ 56'24	-13°29'54	morning rise	-4274 Apr 18 j 23:56	14° $\mathbf{\text{H}}$ 30'11	
min. Earth dist.	-4281 Oct 03 j 20:20	7° $\mathbf{\text{H}}$ 55'56	47.12101 AU	retrograde	-4274 Jul 19 j 22:19	15° $\mathbf{\text{H}}$ 46'39	
direct	-4281 Dec 24 j 00:09	6° $\mathbf{\text{H}}$ 56'32		opposition	-4274 Oct 09 j 20:01	14° $\mathbf{\text{H}}$ 46'35	-12°04'05
evening set	-4280 Mar 24 j 18:50	8° $\mathbf{\text{H}}$ 13'05		min. Earth dist.	-4274 Oct 10 j 14:55	14° $\mathbf{\text{H}}$ 45'40	46.45927 AU
				direct	-4274 Dec 30 j 12:55	13° $\mathbf{\text{H}}$ 46'16	
conjunction	-4280 Apr 02 j 03:23	8° $\mathbf{\text{H}}$ 24'31	-12°51'44	evening set	-4273 Mar 30 j 13:55	15° $\mathbf{\text{H}}$ 01'01	
minimum elong	-4280 Apr 02 j 03:36	8° $\mathbf{\text{H}}$ 24'31	12°51'49	max. Earth dist.	-4273 Apr 09 j 04:29	15° $\mathbf{\text{H}}$ 14'13	48.36197 AU
max. Earth dist.	-4280 Apr 01 j 16:19	8° $\mathbf{\text{H}}$ 23'53	49.02758 AU				
morning rise	-4280 Apr 10 j 12:45	8° $\mathbf{\text{H}}$ 35'59		conjunction	-4273 Apr 10 j 01:21	15° $\mathbf{\text{H}}$ 15'26	-11°28'03
retrograde	-4280 Jul 13 j 10:47	9° $\mathbf{\text{H}}$ 54'21		minimum elong	-4273 Apr 10 j 01:35	15° $\mathbf{\text{H}}$ 15'26	11°28'07
opposition	-4280 Oct 03 j 14:58	8° $\mathbf{\text{H}}$ 54'27	-13°18'26	morning rise	-4273 Apr 20 j 13:27	15° $\mathbf{\text{H}}$ 29'54	
min. Earth dist.	-4280 Oct 04 j 00:59	8° $\mathbf{\text{H}}$ 53'58	47.03744 AU	retrograde	-4273 Jul 21 j 01:53	16° $\mathbf{\text{H}}$ 46'06	
direct	-4280 Dec 24 j 05:08	7° $\mathbf{\text{H}}$ 54'31		opposition	-4273 Oct 11 j 01:05	15° $\mathbf{\text{H}}$ 45'58	-11°50'49
evening set	-4279 Mar 25 j 17:06	9° $\mathbf{\text{H}}$ 10'45		min. Earth dist.	-4273 Oct 11 j 20:39	15° $\mathbf{\text{H}}$ 45'01	46.34574 AU
				direct	-4273 Dec 31 j 20:49	14° $\mathbf{\text{H}}$ 45'33	
conjunction	-4279 Apr 03 j 09:35	9° $\mathbf{\text{H}}$ 22'37	-12°40'32	evening set	-4272 Mar 30 j 14:18	16° $\mathbf{\text{H}}$ 00'05	
minimum elong	-4279 Apr 03 j 09:49	9° $\mathbf{\text{H}}$ 22'38	12°40'37	max. Earth dist.	-4272 Apr 09 j 08:32	16° $\mathbf{\text{H}}$ 13'32	48.24754 AU
max. Earth dist.	-4279 Apr 02 j 21:03	9° $\mathbf{\text{H}}$ 21'54	48.94407 AU				
morning rise	-4279 Apr 12 j 02:56	9° $\mathbf{\text{H}}$ 34'33		conjunction	-4272 Apr 10 j 08:06	16° $\mathbf{\text{H}}$ 14'54	-11°15'08
retrograde	-4279 Jul 14 j 14:37	10° $\mathbf{\text{H}}$ 52'33		minimum elong	-4272 Apr 10 j 08:18	16° $\mathbf{\text{H}}$ 14'54	11°15'11
opposition	-4279 Oct 04 j 19:42	9° $\mathbf{\text{H}}$ 52'37	-13°06'41	morning rise	-4272 Apr 21 j 02:49	16° $\mathbf{\text{H}}$ 29'46	
min. Earth dist.	-4279 Oct 05 j 07:34	9° $\mathbf{\text{H}}$ 52'03	46.95105 AU	retrograde	-4272 Jul 21 j 09:45	17° $\mathbf{\text{H}}$ 45'42	
direct	-4279 Dec 25 j 11:59	8° $\mathbf{\text{H}}$ 52'38		opposition	-4272 Oct 11 j 06:13	16° $\mathbf{\text{H}}$ 45'30	-11°37'18
evening set	-4278 Mar 26 j 15:44	10° $\mathbf{\text{H}}$ 08'34		min. Earth dist.	-4272 Oct 12 j 03:28	16° $\mathbf{\text{H}}$ 44'28	46.22745 AU

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Attention, astronomical year style is used: The year -4271 in astronomical counting style is the year 4272 BCE in historical counting style.

direct	-4271 Jan 01 j 00:32	15° \mathbb{H} 44'59		retrograde	-4265 Jul 29 j 10:21	24° \mathbb{H} 48'24	
evening set	-4271 Mar 31 j 14:49	16° \mathbb{H} 59'18		opposition	-4265 Oct 18 j 20:01	23° \mathbb{H} 47'38	-9°54'59
				min. Earth dist.	-4265 Oct 20 j 00:23	23° \mathbb{H} 46'14	45.30379 AU
conjunction	-4271 Apr 11 j 15:06	17° \mathbb{H} 14'30	-11°01'58	direct	-4264 Jan 08 j 14:18	22° \mathbb{H} 46'19	
minimum elong	-4271 Apr 11 j 15:19	17° \mathbb{H} 14'31	11°02'02	evening set	-4264 Apr 06 j 01:19	23° \mathbb{H} 59'52	
max. Earth dist.	-4271 Apr 10 j 15:03	17° \mathbb{H} 13'07	48.12856 AU	max. Earth dist.	-4264 Apr 17 j 08:30	24° \mathbb{H} 15'41	47.20450 AU
morning rise	-4271 Apr 22 j 16:01	17° \mathbb{H} 29'46					
retrograde	-4271 Jul 22 j 17:15	18° \mathbb{H} 45'28		conjunction	-4264 Apr 18 j 17:42	24° \mathbb{H} 17'38	-9°22'23
opposition	-4271 Oct 12 j 11:22	17° \mathbb{H} 45'10	-11°23'31	minimum elong	-4264 Apr 18 j 17:55	24° \mathbb{H} 17'39	9°22'25
min. Earth dist.	-4271 Oct 13 j 10:09	17° \mathbb{H} 44'04	46.10486 AU	morning rise	-4264 May 01 j 10:39	24° \mathbb{H} 35'27	
direct	-4270 Jan 02 j 04:27	16° \mathbb{H} 44'32		retrograde	-4264 Jul 29 j 18:20	25° \mathbb{H} 50'00	
evening set	-4270 Apr 01 j 15:39	17° \mathbb{H} 58'41		opposition	-4264 Oct 19 j 01:58	24° \mathbb{H} 49'09	-9°39'14
				min. Earth dist.	-4264 Oct 20 j 08:37	24° \mathbb{H} 47'39	45.15879 AU
conjunction	-4270 Apr 12 j 22:00	18° \mathbb{H} 14'16	-10°48'33	direct	-4263 Jan 08 j 20:10	23° \mathbb{H} 47'43	
minimum elong	-4270 Apr 12 j 22:13	18° \mathbb{H} 14'16	10°48'36	evening set	-4263 Apr 07 j 03:56	25° \mathbb{H} 01'14	
max. Earth dist.	-4270 Apr 11 j 20:11	18° \mathbb{H} 12'46	48.00573 AU	max. Earth dist.	-4263 Apr 18 j 15:27	25° \mathbb{H} 17'20	47.05882 AU
morning rise	-4270 Apr 24 j 05:08	18° \mathbb{H} 29'54					
retrograde	-4270 Jul 24 j 00:44	19° \mathbb{H} 45'22		conjunction	-4263 Apr 20 j 01:32	25° \mathbb{H} 19'21	-9°07'05
opposition	-4270 Oct 13 j 16:32	18° \mathbb{H} 44'59	-11°09'29	minimum elong	-4263 Apr 20 j 01:43	25° \mathbb{H} 19'21	9°07'07
min. Earth dist.	-4270 Oct 14 j 15:43	18° \mathbb{H} 43'51	45.97867 AU	morning rise	-4263 May 02 j 23:30	25° \mathbb{H} 37'30	
direct	-4269 Jan 03 j 09:02	17° \mathbb{H} 44'13		retrograde	-4263 Jul 30 j 22:22	26° \mathbb{H} 51'57	
evening set	-4269 Apr 02 j 16:39	18° \mathbb{H} 58'13		opposition	-4263 Oct 20 j 07:51	25° \mathbb{H} 51'01	-9°23'12
max. Earth dist.	-4269 Apr 13 j 01:44	19° \mathbb{H} 12'36	47.87933 AU	min. Earth dist.	-4263 Oct 21 j 15:00	25° \mathbb{H} 49'29	45.00921 AU
				direct	-4262 Jan 10 j 05:17	24° \mathbb{H} 49'27	
conjunction	-4269 Apr 14 j 05:05	19° \mathbb{H} 14'11	-10°34'52	evening set	-4262 Apr 08 j 06:54	26° \mathbb{H} 02'56	
minimum elong	-4269 Apr 14 j 05:18	19° \mathbb{H} 14'12	10°34'55	max. Earth dist.	-4262 Apr 19 j 20:36	26° \mathbb{H} 19'12	46.90827 AU
morning rise	-4269 Apr 25 j 18:16	19° \mathbb{H} 30'12					
retrograde	-4269 Jul 25 j 05:14	20° \mathbb{H} 45'27		conjunction	-4262 Apr 21 j 09:25	26° \mathbb{H} 21'23	-8°51'32
opposition	-4269 Oct 14 j 21:52	19° \mathbb{H} 44'59	-10°55'09	minimum elong	-4262 Apr 21 j 09:38	26° \mathbb{H} 21'24	8°51'33
min. Earth dist.	-4269 Oct 15 j 23:00	19° \mathbb{H} 43'45	45.84927 AU	morning rise	-4262 May 04 j 12:33	26° \mathbb{H} 39'53	
direct	-4268 Jan 04 j 17:04	18° \mathbb{H} 44'06		retrograde	-4262 Aug 01 j 05:02	27° \mathbb{H} 54'14	
evening set	-4268 Apr 02 j 17:55	19° \mathbb{H} 57'58		opposition	-4262 Oct 21 j 14:02	26° \mathbb{H} 53'12	-9°06'55
max. Earth dist.	-4268 Apr 13 j 08:39	20° \mathbb{H} 12'41	47.75010 AU	min. Earth dist.	-4262 Oct 22 j 23:11	26° \mathbb{H} 51'33	44.85472 AU
				direct	-4261 Jan 11 j 12:03	25° \mathbb{H} 51'29	
conjunction	-4268 Apr 14 j 12:15	20° \mathbb{H} 14'18	-10°20'55	evening set	-4261 Apr 09 j 10:07	27° \mathbb{H} 04'55	
minimum elong	-4268 Apr 14 j 12:27	20° \mathbb{H} 14'18	10°20'57	max. Earth dist.	-4261 Apr 21 j 04:09	27° \mathbb{H} 21'29	46.75270 AU
morning rise	-4268 Apr 26 j 07:08	20° \mathbb{H} 30'40					
retrograde	-4268 Jul 25 j 08:51	21° \mathbb{H} 45'44		conjunction	-4261 Apr 22 j 17:40	27° \mathbb{H} 23'43	-8°35'43
opposition	-4268 Oct 15 j 03:15	20° \mathbb{H} 45'11	-10°40'32	minimum elong	-4261 Apr 22 j 17:51	27° \mathbb{H} 23'43	8°35'44
min. Earth dist.	-4268 Oct 16 j 04:27	20° \mathbb{H} 43'57	45.71710 AU	morning rise	-4261 May 06 j 01:26	27° \mathbb{H} 42'32	
direct	-4267 Jan 05 j 01:28	19° \mathbb{H} 44'12		retrograde	-4261 Aug 02 j 12:24	28° \mathbb{H} 56'49	
evening set	-4267 Apr 03 j 19:15	20° \mathbb{H} 57'57		opposition	-4261 Oct 22 j 20:16	27° \mathbb{H} 55'38	-8°50'21
				min. Earth dist.	-4261 Oct 24 j 06:53	27° \mathbb{H} 53'55	44.69522 AU
conjunction	-4267 Apr 15 j 19:13	21° \mathbb{H} 14'39	-10°06'42	direct	-4260 Jan 12 j 18:04	26° \mathbb{H} 53'45	
minimum elong	-4267 Apr 15 j 19:25	21° \mathbb{H} 14'39	10°06'45	evening set	-4260 Apr 09 j 13:40	28° \mathbb{H} 07'11	
max. Earth dist.	-4267 Apr 14 j 13:29	21° \mathbb{H} 12'55	47.61818 AU	max. Earth dist.	-4260 Apr 21 j 10:10	28° \mathbb{H} 23'56	46.59250 AU
morning rise	-4267 Apr 27 j 19:59	21° \mathbb{H} 31'23					
retrograde	-4267 Jul 26 j 16:35	22° \mathbb{H} 46'18		conjunction	-4260 Apr 23 j 01:49	28° \mathbb{H} 26'17	-8°19'39
opposition	-4267 Oct 16 j 08:49	21° \mathbb{H} 45'41	-10°25'38	minimum elong	-4260 Apr 23 j 02:01	28° \mathbb{H} 26'18	8°19'40
min. Earth dist.	-4267 Oct 17 j 11:25	21° \mathbb{H} 44'22	45.58237 AU	morning rise	-4260 May 06 j 14:23	28° \mathbb{H} 45'26	
direct	-4266 Jan 06 j 05:49	20° \mathbb{H} 44'35		retrograde	-4260 Aug 02 j 22:08	29° \mathbb{H} 59'39	
evening set	-4266 Apr 04 j 20:56	21° \mathbb{H} 58'14		opposition	-4260 Oct 23 j 02:34	28° \mathbb{H} 58'20	-8°33'31
max. Earth dist.	-4266 Apr 15 j 20:43	22° \mathbb{H} 13'32	47.48356 AU	min. Earth dist.	-4260 Oct 24 j 13:55	28° \mathbb{H} 56'34	44.53139 AU
				direct	-4259 Jan 12 j 22:28	27° \mathbb{H} 56'15	
conjunction	-4266 Apr 17 j 02:39	22° \mathbb{H} 15'17	-9°52'12	evening set	-4259 Apr 10 j 17:11	29° \mathbb{H} 09'40	
minimum elong	-4266 Apr 17 j 02:52	22° \mathbb{H} 15'18	9°52'14	max. Earth dist.	-4259 Apr 22 j 16:53	29° \mathbb{H} 26'40	46.42796 AU
morning rise	-4266 Apr 29 j 08:51	22° \mathbb{H} 32'23					
retrograde	-4266 Jul 28 j 00:16	23° \mathbb{H} 47'11		conjunction	-4259 Apr 24 j 10:01	29° \mathbb{H} 29'06	-8°03'18
opposition	-4266 Oct 17 j 14:22	22° \mathbb{H} 46'29	-10°10'27	minimum elong	-4259 Apr 24 j 10:12	29° \mathbb{H} 29'07	8°03'19
min. Earth dist.	-4266 Oct 18 j 18:07	22° \mathbb{H} 45'07	45.44470 AU	morning rise	-4259 May 08 j 03:05	29° \mathbb{H} 48'35	
direct	-4265 Jan 07 j 10:41	21° \mathbb{H} 45'17			-4259 May 16 j 09:43	0° \mathbb{Y}	
evening set	-4265 Apr 05 j 23:05	22° \mathbb{H} 58'52		retrograde	-4259 Aug 04 j 05:48	1° \mathbb{Y} 02'43	
max. Earth dist.	-4265 Apr 17 j 02:27	23° \mathbb{H} 14'25	47.34594 AU	opposition	-4259 Oct 24 j 09:07	0° \mathbb{Y} 01'15	-8°16'24
					-4259 Oct 25 j 10:11	30° \mathbb{R} \mathbb{H}	
conjunction	-4265 Apr 18 j 10:08	23° \mathbb{H} 16'17	-9°37'26	min. Earth dist.	-4259 Oct 25 j 22:32	29° \mathbb{H} 59'23	44.36355 AU
minimum elong	-4265 Apr 18 j 10:20	23° \mathbb{H} 16'17	9°37'28	direct	-4258 Jan 14 j 06:09	28° \mathbb{H} 58'59	
morning rise	-4265 Apr 30 j 21:50	23° \mathbb{H} 33'44			-4258 Apr 02 j 20:38	0° \mathbb{Y}	

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Attention, astronomical year style is used: The year -4258 in astronomical counting style is the year 4259 BCE in historical counting style.

evening set	-4258 Apr 11 j 21:11	0°♊12'25		opposition	-4252 Oct 31 j 10:30	7°♊32'15	-6°08'05
max. Earth dist.	-4258 Apr 24 j 00:50	0°♊29'41	46.25984 AU	min. Earth dist.	-4252 Nov 02 j 06:48	7°♊29'59	43.11258 AU
				direct	-4251 Jan 21 j 10:18	6°♊28'47	
conjunction	-4258 Apr 25 j 18:30	0°♊32'11	-7°46'42	evening set	-4251 Apr 18 j 09:41	7°♊43'02	
minimum elong	-4258 Apr 25 j 18:41	0°♊32'11	7°46'42	max. Earth dist.	-4251 May 01 j 08:15	8°♊01'54	45.00794 AU
morning rise	-4258 May 09 j 15:55	0°♊51'58					
retrograde	-4258 Aug 05 j 11:41	2°♊06'03		conjunction	-4251 May 03 j 10:00	8°♊04'57	-5°42'25
opposition	-4258 Oct 25 j 15:31	1°♊04'26	-7°58'59	minimum elong	-4251 May 03 j 10:09	8°♊04'58	5°42'23
min. Earth dist.	-4258 Oct 27 j 05:11	1°♊02'33	44.19237 AU	morning rise	-4251 May 18 j 09:47	8°♊26'52	
direct	-4257 Jan 15 j 15:34	0°♊01'59		retrograde	-4251 Aug 12 j 23:38	9°♊41'24	
evening set	-4257 Apr 13 j 01:34	1°♊15'27		opposition	-4251 Nov 01 j 18:25	8°♊38'51	-5°48'33
max. Earth dist.	-4257 Apr 25 j 07:08	1°♊32'53	46.08855 AU	min. Earth dist.	-4251 Nov 03 j 15:47	8°♊36'32	42.92158 AU
				direct	-4250 Jan 22 j 18:43	7°♊35'13	
conjunction	-4257 Apr 27 j 03:03	1°♊35'31	-7°29'48	evening set	-4250 Apr 19 j 16:36	8°♊49'40	
minimum elong	-4257 Apr 27 j 03:14	1°♊35'32	7°29'48	max. Earth dist.	-4250 May 02 j 15:44	9°♊08'39	44.81593 AU
morning rise	-4257 May 11 j 04:49	1°♊55'38					
retrograde	-4257 Aug 06 j 19:29	3°♊09'42		conjunction	-4250 May 04 j 19:59	9°♊11'52	-5°23'32
opposition	-4257 Oct 26 j 22:19	2°♊07'55	-7°41'16	minimum elong	-4250 May 04 j 20:07	9°♊11'53	5°23'30
min. Earth dist.	-4257 Oct 28 j 13:36	2°♊05'57	44.01846 AU	morning rise	-4250 May 19 j 23:03	9°♊34'05	
direct	-4256 Jan 16 j 22:27	1°♊05'17		retrograde	-4250 Aug 14 j 11:09	10°♊48'45	
evening set	-4256 Apr 13 j 05:55	2°♊18'48		opposition	-4250 Nov 03 j 02:23	9°♊46'03	-5°28'42
max. Earth dist.	-4256 Apr 25 j 15:46	2°♊36'33	45.91465 AU	min. Earth dist.	-4250 Nov 05 j 00:56	9°♊43'40	42.72622 AU
				direct	-4249 Jan 24 j 00:08	8°♊42'12	
conjunction	-4256 Apr 27 j 11:42	2°♊39'11	-7°12'38	evening set	-4249 Apr 20 j 23:47	9°♊56'53	
minimum elong	-4256 Apr 27 j 11:53	2°♊39'12	7°12'38	max. Earth dist.	-4249 May 04 j 00:43	10°♊16'03	44.61928 AU
morning rise	-4256 May 11 j 17:22	2°♊59'37					
retrograde	-4256 Aug 07 j 02:23	4°♊13'42		conjunction	-4249 May 06 j 06:20	10°♊19'22	-5°04'22
opposition	-4256 Oct 27 j 05:14	3°♊11'47	-7°23'15	minimum elong	-4249 May 06 j 06:28	10°♊19'22	5°04'20
min. Earth dist.	-4256 Oct 28 j 21:09	3°♊09'46	43.84208 AU	morning rise	-4249 May 21 j 12:15	10°♊41'51	
direct	-4255 Jan 17 j 06:04	2°♊08'58		retrograde	-4249 Aug 15 j 22:13	11°♊56'40	
evening set	-4255 Apr 14 j 10:49	3°♊22'34		opposition	-4249 Nov 04 j 10:51	10°♊53'48	-5°08'34
max. Earth dist.	-4255 Apr 26 j 22:53	3°♊40'31	45.73862 AU	min. Earth dist.	-4249 Nov 06 j 11:25	10°♊51'18	42.52628 AU
				direct	-4248 Jan 25 j 07:57	9°♊49'43	
conjunction	-4255 Apr 28 j 20:27	3°♊43'16	-6°55'10	evening set	-4248 Apr 21 j 07:14	11°♊04'38	
minimum elong	-4255 Apr 28 j 20:37	3°♊43'16	6°55'09	max. Earth dist.	-4248 May 04 j 09:58	11°♊23'59	44.41833 AU
morning rise	-4255 May 13 j 06:12	4°♊03'59					
retrograde	-4255 Aug 08 j 13:29	5°♊18'06		conjunction	-4248 May 06 j 16:37	11°♊27'23	-4°44'55
opposition	-4255 Oct 28 j 12:10	4°♊16'04	-7°04'55	minimum elong	-4248 May 06 j 16:44	11°♊27'23	4°44'53
min. Earth dist.	-4255 Oct 30 j 04:32	4°♊14'01	43.66370 AU	morning rise	-4248 May 22 j 01:20	11°♊50'08	
direct	-4254 Jan 18 j 10:25	3°♊13'04		retrograde	-4248 Aug 16 j 09:12	13°♊05'07	
evening set	-4254 Apr 15 j 15:56	4°♊26'48		opposition	-4248 Nov 04 j 19:16	12°♊02'03	-4°48'07
max. Earth dist.	-4254 Apr 28 j 06:59	4°♊45'00	45.56031 AU	min. Earth dist.	-4248 Nov 06 j 20:12	11°♊59'31	42.32223 AU
				direct	-4247 Jan 25 j 17:59	10°♊57'44	
conjunction	-4254 Apr 30 j 05:33	4°♊47'49	-6°37'24	evening set	-4247 Apr 22 j 15:09	12°♊12'53	
minimum elong	-4254 Apr 30 j 05:43	4°♊47'50	6°37'25	max. Earth dist.	-4247 May 05 j 18:15	12°♊32'21	44.21331 AU
morning rise	-4254 May 14 j 19:02	5°♊08'51					
retrograde	-4254 Aug 10 j 00:08	6°♊23'02		conjunction	-4247 May 08 j 03:11	12°♊35'55	-4°25'11
opposition	-4254 Oct 29 j 19:30	5°♊20'52	-6°46'17	minimum elong	-4247 May 08 j 03:18	12°♊35'55	4°25'09
min. Earth dist.	-4254 Oct 31 j 13:42	5°♊18'44	43.48293 AU	morning rise	-4247 May 23 j 14:35	12°♊58'55	
direct	-4253 Jan 19 j 16:28	4°♊17'43		retrograde	-4247 Aug 17 j 18:59	14°♊14'05	
evening set	-4253 Apr 16 j 21:31	5°♊31'37		opposition	-4247 Nov 06 j 03:56	13°♊10'48	-4°27'23
max. Earth dist.	-4253 Apr 29 j 15:39	5°♊50'03	45.37955 AU	min. Earth dist.	-4247 Nov 08 j 06:59	13°♊08'09	42.11455 AU
				direct	-4246 Jan 27 j 03:47	12°♊06'13	
conjunction	-4253 May 01 j 14:50	5°♊52'55	-6°19'22	evening set	-4246 Apr 23 j 23:23	13°♊21'38	
minimum elong	-4253 May 01 j 15:00	5°♊52'56	6°19'21	max. Earth dist.	-4246 May 07 j 04:56	13°♊41'20	44.00489 AU
morning rise	-4253 May 16 j 07:55	6°♊14'15					
retrograde	-4253 Aug 11 j 07:40	7°♊28'32		conjunction	-4246 May 09 j 14:06	13°♊44'56	-4°05'10
opposition	-4253 Oct 31 j 02:48	6°♊26'15	-6°27'20	minimum elong	-4246 May 09 j 14:13	13°♊44'56	4°05'07
min. Earth dist.	-4253 Nov 01 j 21:06	6°♊24'06	43.29942 AU	morning rise	-4246 May 25 j 03:49	14°♊08'12	
direct	-4252 Jan 21 j 01:49	5°♊22'56		retrograde	-4246 Aug 19 j 02:04	15°♊23'33	
evening set	-4252 Apr 17 j 03:32	6°♊37'01		opposition	-4246 Nov 07 j 12:50	14°♊20'03	-4°06'19
max. Earth dist.	-4252 Apr 29 j 22:50	6°♊55'36	45.19562 AU	min. Earth dist.	-4246 Nov 09 j 16:23	14°♊17'22	41.90366 AU
				direct	-4245 Jan 28 j 15:05	13°♊15'13	
conjunction	-4252 May 02 j 00:17	6°♊58'38	-6°01'02	evening set	-4245 Apr 25 j 08:10	14°♊30'54	
minimum elong	-4252 May 02 j 00:26	6°♊58'38	6°01'01	max. Earth dist.	-4245 May 08 j 13:51	14°♊50'43	43.79356 AU
morning rise	-4252 May 16 j 20:55	7°♊20'15					
retrograde	-4252 Aug 11 j 15:40	8°♊34'39		conjunction	-4245 May 11 j 01:02	14°♊54'27	-3°44'51

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Attention, astronomical year style is used: The year -4245 in astronomical counting style is the year 4246 BCE in historical counting style.

minimum elong	-4245 May 11 j 01:09	14° Υ 54'27	3°44'49	max. Earth dist.	-4238 May 16 j 19:38	23° Υ 15'20	42.25283 AU
morning rise	-4245 May 26 j 17:08	15° Υ 17'59					
retrograde	-4245 Aug 20 j 12:52	16° Υ 33'33		conjunction	-4238 May 19 j 14:09	23° Υ 19'42	-1°14'34
opposition	-4245 Nov 08 j 21:55	15° Υ 29'50	-3°44'57	minimum elong	-4238 May 19 j 14:12	23° Υ 19'42	1°14'29
min. Earth dist.	-4245 Nov 11 j 02:25	15° Υ 27'05	41.69034 AU	morning rise	-4238 Jun 04 j 16:13	23° Υ 44'49	
direct	-4244 Jan 29 j 22:53	14° Υ 24'43		retrograde	-4238 Aug 29 j 02:47	25° Υ 02'48	
evening set	-4244 Apr 25 j 17:13	15° Υ 40'42		opposition	-4238 Nov 16 j 22:01	23° Υ 57'34	-1°06'34
max. Earth dist.	-4244 May 09 j 00:42	16° Υ 00'44	43.57983 AU	min. Earth dist.	-4238 Nov 19 j 09:18	23° Υ 54'23	40.13685 AU
				direct	-4237 Feb 06 j 20:22	22° Υ 50'37	
conjunction	-4244 May 11 j 12:22	16° Υ 04'31	-3°24'15	evening set	-4237 May 04 j 23:25	24° Υ 09'43	
minimum elong	-4244 May 11 j 12:28	16° Υ 04'31	3°24'12	max. Earth dist.	-4237 May 18 j 07:19	24° Υ 30'35	42.02050 AU
morning rise	-4244 May 27 j 06:21	16° Υ 28'17					
retrograde	-4244 Aug 21 j 00:34	17° Υ 44'07		conjunction	-4237 May 21 j 03:43	24° Υ 35'06	-0°51'58
opposition	-4244 Nov 09 j 07:27	16° Υ 40'10	-3°23'16	minimum elong	-4237 May 21 j 03:44	24° Υ 35'06	0°51'54
min. Earth dist.	-4244 Nov 11 j 13:17	16° Υ 37'21	41.47493 AU	morning rise	-4237 Jun 06 j 06:12	25° Υ 00'24	
direct	-4243 Jan 30 j 06:14	15° Υ 34'48		retrograde	-4237 Aug 30 j 17:42	26° Υ 18'51	
evening set	-4243 Apr 27 j 02:39	16° Υ 51'07		opposition	-4237 Nov 18 j 09:42	25° Υ 13'21	-0°42'42
max. Earth dist.	-4243 May 10 j 11:13	17° Υ 11'19	43.36435 AU	min. Earth dist.	-4237 Nov 20 j 23:14	25° Υ 10'03	39.90248 AU
				direct	-4236 Feb 08 j 07:00	24° Υ 06'06	
conjunction	-4243 May 12 j 23:43	17° Υ 15'10	-3°03'22	evening set	-4236 May 05 j 12:49	25° Υ 25'46	
minimum elong	-4243 May 12 j 23:48	17° Υ 15'10	3°03'19	max. Earth dist.	-4236 May 18 j 20:41	25° Υ 46'45	41.78461 AU
morning rise	-4243 May 28 j 19:40	17° Υ 39'11					
retrograde	-4243 Aug 22 j 13:16	18° Υ 55'17		conjunction	-4236 May 21 j 17:35	25° Υ 51'20	-0°29'05
opposition	-4243 Nov 10 j 17:05	17° Υ 51'07	-3°01'16	minimum elong	-4236 May 21 j 17:36	25° Υ 51'20	0°29'00
min. Earth dist.	-4243 Nov 12 j 22:47	17° Υ 48'18	41.25784 AU	morning rise	-4236 Jun 06 j 20:22	26° Υ 16'49	
direct	-4242 Jan 31 j 15:11	16° Υ 45'29		retrograde	-4236 Aug 31 j 05:54	27° Υ 35'44	
evening set	-4242 Apr 28 j 12:47	18° Υ 02'13		opposition	-4236 Nov 18 j 21:35	26° Υ 29'58	-0°18'32
max. Earth dist.	-4242 May 11 j 21:23	18° Υ 22'31	43.14699 AU	min. Earth dist.	-4236 Nov 21 j 11:18	26° Υ 26'37	39.66473 AU
				direct	-4235 Feb 08 j 21:15	25° Υ 22'23	
conjunction	-4242 May 14 j 11:35	18° Υ 26'30	-2°42'11	evening set	-4235 May 07 j 02:47	26° Υ 42'38	
minimum elong	-4242 May 14 j 11:39	18° Υ 26'30	2°42'07	max. Earth dist.	-4235 May 20 j 08:23	27° Υ 03'37	41.54543 AU
morning rise	-4242 May 30 j 09:10	18° Υ 50'44					
retrograde	-4242 Aug 24 j 01:15	20° Υ 07'09		conjunction	-4235 May 23 j 07:36	27° Υ 08'22	-0°05'58
opposition	-4242 Nov 12 j 03:02	19° Υ 02'47	-2°38'57	minimum elong	-4235 May 23 j 07:36	27° Υ 08'22	0°05'53
min. Earth dist.	-4242 Nov 14 j 10:35	18° Υ 59'51	41.03898 AU	behind sun begin	-4235 May 23 j 01:23	27° Υ 07'59	
direct	-4241 Feb 02 j 02:06	17° Υ 56'54		behind sun end	-4235 May 23 j 13:50	27° Υ 08'46	
evening set	-4241 Apr 29 j 23:22	19° Υ 14'02		morning rise	-4235 Jun 08 j 10:34	27° Υ 34'02	
max. Earth dist.	-4241 May 13 j 09:42	19° Υ 34'34	42.92773 AU	asc. node	-4235 Aug 24 j 00:53	28° Υ 52'28	
				retrograde	-4235 Sep 01 j 19:02	28° Υ 53'27	
conjunction	-4241 May 15 j 23:49	19° Υ 38'34	-2°20'42	opposition	-4235 Nov 20 j 09:51	27° Υ 47'24	0°05'56
minimum elong	-4241 May 15 j 23:53	19° Υ 38'34	2°20'40	min. Earth dist.	-4235 Nov 23 j 01:14	27° Υ 43'57	39.42410 AU
morning rise	-4241 May 31 j 22:45	20° Υ 03'02		direct	-4234 Feb 10 j 10:05	26° Υ 39'29	
retrograde	-4241 Aug 25 j 11:16	21° Υ 19'48		evening set	-4234 May 08 j 17:20	28° Υ 00'20	
opposition	-4241 Nov 13 j 13:19	20° Υ 15'13	-2°16'19	max. Earth dist.	-4234 May 21 j 22:55	28° Υ 21'27	41.30346 AU
min. Earth dist.	-4241 Nov 15 j 21:09	20° Υ 12'16	40.81797 AU				
direct	-4240 Feb 03 j 14:55	19° Υ 09'06		conjunction	-4234 May 24 j 22:13	28° Υ 26'15	0°17'34
evening set	-4240 Apr 30 j 10:28	20° Υ 26'41		minimum elong	-4234 May 24 j 22:12	28° Υ 26'15	0°17'39
max. Earth dist.	-4240 May 13 j 19:46	20° Υ 47'16	42.70601 AU	morning rise	-4234 Jun 10 j 00:49	28° Υ 52'04	
					-4234 Aug 03 j 13:29	0° \mathcal{B}	
conjunction	-4240 May 16 j 12:04	20° Υ 51'26	-1°58'57	retrograde	-4234 Sep 03 j 07:10	0° \mathcal{B} 12'02	
minimum elong	-4240 May 16 j 12:07	20° Υ 51'26	1°58'53		-4234 Oct 04 j 09:38	30° $\mathcal{R}\Upsilon$	
morning rise	-4240 Jun 01 j 12:22	21° Υ 16'08		opposition	-4234 Nov 21 j 22:24	29° Υ 05'41	0°30'42
retrograde	-4240 Aug 26 j 00:03	22° Υ 33'16		min. Earth dist.	-4234 Nov 24 j 14:42	29° Υ 02'10	39.18107 AU
opposition	-4240 Nov 13 j 23:54	21° Υ 28'30	-1°53'23	direct	-4233 Feb 11 j 23:06	27° Υ 57'24	
min. Earth dist.	-4240 Nov 16 j 09:07	21° Υ 25'27	40.59440 AU	evening set	-4233 May 10 j 08:37	29° Υ 18'55	
direct	-4239 Feb 04 j 00:21	20° Υ 22'06		max. Earth dist.	-4233 May 23 j 12:08	29° Υ 40'02	41.05949 AU
evening set	-4239 May 01 j 22:07	21° Υ 40'10					
max. Earth dist.	-4239 May 15 j 08:05	22° Υ 00'54	42.48117 AU	conjunction	-4233 May 26 j 12:58	29° Υ 44'59	0°41'15
				minimum elong	-4233 May 26 j 12:56	29° Υ 44'58	0°41'20
conjunction	-4239 May 18 j 00:58	22° Υ 05'08	-1°36'54		-4233 Jun 04 j 19:07	0° \mathcal{B}	
minimum elong	-4239 May 18 j 01:01	22° Υ 05'08	1°36'51	morning rise	-4233 Jun 11 j 15:15	0° \mathcal{B} 10'57	
morning rise	-4239 Jun 03 j 02:07	22° Υ 30'03		retrograde	-4233 Sep 04 j 22:46	1° \mathcal{B} 31'29	
retrograde	-4239 Aug 27 j 11:34	23° Υ 47'37		opposition	-4233 Nov 23 j 11:20	0° \mathcal{B} 24'50	0°55'45
opposition	-4239 Nov 15 j 10:47	22° Υ 42'37	-1°30'08	min. Earth dist.	-4233 Nov 26 j 03:58	0° \mathcal{B} 21'17	38.93654 AU
min. Earth dist.	-4239 Nov 17 j 21:30	22° Υ 39'28	40.36743 AU		-4233 Dec 12 j 16:52	30° $\mathcal{R}\Upsilon$	
direct	-4238 Feb 05 j 10:45	21° Υ 35'57		direct	-4232 Feb 13 j 09:58	29° Υ 16'12	
evening set	-4238 May 03 j 10:31	22° Υ 54'31			-4232 Apr 14 j 21:52	0° \mathcal{B}	

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Attention, astronomical year style is used: The year -4232 in astronomical counting style is the year 4233 BCE in historical counting style.

evening set	-4232 May 11 j 00:13	0°8'38"24		opposition	-4226 Dec 02 j 18:07	10°8'08"56	3°58'40
max. Earth dist.	-4232 May 24 j 02:26	0°8'59"35	40.81403 AU	min. Earth dist.	-4226 Dec 05 j 15:44	10°8'04"58	37.20282 AU
				direct	-4225 Feb 22 j 13:09	8°8'57"50	
conjunction	-4232 May 27 j 03:59	1°8'04"36	1°05'12	evening set	-4225 May 22 j 12:04	10°8'26"15	
minimum elong	-4232 May 27 j 03:57	1°8'04"36	1°05'17	max. Earth dist.	-4225 Jun 03 j 18:52	10°8'47"15	39.07164 AU
morning rise	-4232 Jun 12 j 05:23	1°8'30"42					
retrograde	-4232 Sep 05 j 14:47	2°8'51"52		conjunction	-4225 Jun 07 j 02:27	10°8'52"59	3°59'30
opposition	-4232 Nov 24 j 00:49	1°8'44"55	1°21'06	minimum elong	-4225 Jun 07 j 02:19	10°8'52"58	3°59'38
min. Earth dist.	-4232 Nov 26 j 18:49	1°8'41"16	38.69096 AU	morning rise	-4225 Jun 22 j 13:59	11°8'19"34	
direct	-4231 Feb 13 j 22:14	0°8'35"56		retrograde	-4225 Sep 16 j 16:09	12°8'46"20	
evening set	-4231 May 12 j 16:40	1°8'58"52		opposition	-4225 Dec 04 j 10:57	11°8'37"15	4°25'46
max. Earth dist.	-4231 May 25 j 17:52	2°8'20"08	40.56787 AU	min. Earth dist.	-4225 Dec 07 j 10:25	11°8'33"09	36.94941 AU
				direct	-4224 Feb 24 j 04:49	10°8'25"45	
conjunction	-4231 May 28 j 19:28	2°8'25"12	1°29'24	evening set	-4224 May 23 j 10:08	11°8'55"13	
minimum elong	-4231 May 28 j 19:25	2°8'25"11	1°29'30	max. Earth dist.	-4224 Jun 04 j 13:45	12°8'16"10	38.81615 AU
morning rise	-4231 Jun 13 j 19:54	2°8'51"24					
retrograde	-4231 Sep 07 j 08:28	4°8'13"14		conjunction	-4224 Jun 07 j 21:15	12°8'21"57	4°25'14
opposition	-4231 Nov 25 j 14:24	3°8'05"59	1°46'43	minimum elong	-4224 Jun 07 j 21:06	12°8'21"56	4°25'21
min. Earth dist.	-4231 Nov 28 j 08:01	3°8'02"20	38.44492 AU	morning rise	-4224 Jun 23 j 05:24	12°8'48"31	
direct	-4230 Feb 15 j 12:21	1°8'56"39		retrograde	-4224 Sep 17 j 11:40	14°8'16"14	
evening set	-4230 May 14 j 09:56	3°8'20"23		opposition	-4224 Dec 05 j 04:09	13°8'06"47	4°53'05
max. Earth dist.	-4230 May 27 j 08:10	3°8'41"37	40.32115 AU	min. Earth dist.	-4224 Dec 08 j 03:32	13°8'02"40	36.69419 AU
				direct	-4223 Feb 24 j 23:44	11°8'54"52	
conjunction	-4230 May 30 j 11:26	3°8'46"50	1°53'52	evening set	-4223 May 25 j 09:18	13°8'25"27	
minimum elong	-4230 May 30 j 11:22	3°8'46"49	1°53'57	max. Earth dist.	-4223 Jun 06 j 07:10	13°8'46"10	38.55894 AU
morning rise	-4230 Jun 15 j 10:33	4°8'13"09					
retrograde	-4230 Sep 09 j 00:56	5°8'35"41		conjunction	-4223 Jun 09 j 16:38	13°8'52"08	4°51'09
opposition	-4230 Nov 27 j 04:40	4°8'28"08	2°12'36	minimum elong	-4223 Jun 09 j 16:28	13°8'52"07	4°51'17
min. Earth dist.	-4230 Nov 29 j 23:47	4°8'24"24	38.19853 AU	morning rise	-4223 Jun 24 j 21:11	14°8'18"40	
direct	-4229 Feb 17 j 02:06	3°8'18"28			-4223 Jul 20 j 17:33	15°8'	
evening set	-4229 May 16 j 03:48	4°8'43"03		retrograde	-4223 Sep 19 j 07:06	15°8'47"23	
max. Earth dist.	-4229 May 29 j 01:01	5°8'04"22	40.07394 AU		-4223 Nov 20 j 12:38	15°8'	
				opposition	-4223 Dec 06 j 21:43	14°8'37"34	5°20'36
conjunction	-4229 Jun 01 j 03:51	5°8'09"36	2°18'33	min. Earth dist.	-4223 Dec 09 j 22:34	14°8'33"20	36.43775 AU
minimum elong	-4229 Jun 01 j 03:47	5°8'09"35	2°18'39	direct	-4222 Feb 26 j 16:47	13°8'25"12	
morning rise	-4229 Jun 17 j 01:12	5°8'36"00		evening set	-4222 May 27 j 09:17	14°8'56"56	
retrograde	-4229 Sep 10 j 14:55	6°8'59"18			-4222 May 29 j 03:51	15°8'	
opposition	-4229 Nov 28 j 19:18	5°8'51"28	2°38'45	max. Earth dist.	-4222 Jun 08 j 03:28	15°8'17"33	38.30056 AU
min. Earth dist.	-4229 Dec 01 j 14:32	5°8'47"42	37.95154 AU				
direct	-4228 Feb 18 j 18:42	4°8'41"28		conjunction	-4222 Jun 11 j 12:42	15°8'23"33	5°17'12
evening set	-4228 May 16 j 22:37	6°8'06"56		minimum elong	-4222 Jun 11 j 12:31	15°8'23"33	5°17'19
max. Earth dist.	-4228 May 29 j 16:05	6°8'28"10	39.82593 AU	morning rise	-4222 Jun 26 j 12:57	15°8'50"01	
				retrograde	-4222 Sep 21 j 00:38	17°8'19"47	
conjunction	-4228 Jun 01 j 20:38	6°8'33"34	2°43'28	opposition	-4222 Dec 08 j 16:03	16°8'09"35	5°48'16
minimum elong	-4228 Jun 01 j 20:32	6°8'33"34	2°43'34	min. Earth dist.	-4222 Dec 11 j 17:24	16°8'05"17	36.18051 AU
morning rise	-4228 Jun 17 j 16:11	7°8'00"03			-4221 Feb 12 j 19:24	15°8'	
retrograde	-4228 Sep 11 j 07:40	8°8'24"09		direct	-4221 Feb 28 j 12:29	14°8'56"46	
opposition	-4228 Nov 29 j 10:20	7°8'16"02	3°05'08		-4221 Mar 16 j 01:04	15°8'	
min. Earth dist.	-4228 Dec 02 j 06:22	7°8'12"12	37.70372 AU	evening set	-4221 May 29 j 10:16	16°8'29"42	
direct	-4227 Feb 19 j 08:24	6°8'05"41		max. Earth dist.	-4221 Jun 09 j 22:34	16°8'50"05	38.04176 AU
evening set	-4227 May 18 j 18:05	7°8'32"05					
max. Earth dist.	-4227 May 31 j 09:11	7°8'53"20	39.57647 AU	conjunction	-4221 Jun 13 j 08:58	16°8'56"14	5°43'24
				minimum elong	-4221 Jun 13 j 08:46	16°8'56"13	5°43'32
conjunction	-4227 Jun 03 j 14:03	7°8'58"47	3°08'36	morning rise	-4221 Jun 28 j 04:49	17°8'22"36	
minimum elong	-4227 Jun 03 j 13:57	7°8'58"46	3°08'44	retrograde	-4221 Sep 22 j 21:31	18°8'53"30	
morning rise	-4227 Jun 19 j 07:10	8°8'25"20		opposition	-4221 Dec 10 j 10:48	17°8'42"53	6°16'05
retrograde	-4227 Sep 13 j 00:12	9°8'50"16		min. Earth dist.	-4221 Dec 13 j 12:09	17°8'38"34	35.92342 AU
opposition	-4227 Dec 01 j 02:04	8°8'41"52	3°31'47	direct	-4220 Mar 01 j 05:35	16°8'29"37	
min. Earth dist.	-4227 Dec 03 j 23:33	8°8'37"55	37.45421 AU	evening set	-4220 May 30 j 12:03	18°8'03"50	
direct	-4226 Feb 20 j 22:04	7°8'31"09		max. Earth dist.	-4220 Jun 10 j 19:25	18°8'24"02	37.78316 AU
evening set	-4226 May 20 j 14:40	8°8'58"32					
max. Earth dist.	-4226 Jun 02 j 02:02	9°8'19"41	39.32518 AU	conjunction	-4220 Jun 14 j 05:56	18°8'30"14	6°09'41
				minimum elong	-4220 Jun 14 j 05:43	18°8'30"13	6°09'49
conjunction	-4226 Jun 05 j 07:57	9°8'25"15	3°33'57	morning rise	-4220 Jun 28 j 20:41	18°8'56"28	
minimum elong	-4226 Jun 05 j 07:50	9°8'25"15	3°34'04	retrograde	-4220 Sep 23 j 17:50	20°8'28"33	
morning rise	-4226 Jun 20 j 22:32	9°8'51"50		opposition	-4220 Dec 11 j 06:15	19°8'17"33	6°44'01
retrograde	-4226 Sep 14 j 19:36	11°8'17"40		min. Earth dist.	-4220 Dec 14 j 08:39	19°8'13"08	35.66710 AU

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Attention, astronomical year style is used: The year -4219 in astronomical counting style is the year 4220 BCE in historical counting style.

direct	-4219 Mar 02 j 22:51	18° 8 03'50		conjunction	-4213 Jun 27 j 01:54	0° II 13'25	9°14'13
evening set	-4219 Jun 01 j 14:55	19° 8 39'24		minimum elong	-4213 Jun 27 j 01:34	0° II 13'23	9°14'23
max. Earth dist.	-4219 Jun 12 j 17:03	19° 8 59'24	37.52570 AU	morning rise	-4213 Jul 09 j 16:14	0° II 37'38	
				retrograde	-4213 Oct 06 j 19:48	2° II 20'10	
conjunction	-4219 Jun 16 j 03:20	20° 8 05'39	6°36'03	opposition	-4213 Dec 23 j 17:11	1° II 06'35	10°00'17
minimum elong	-4219 Jun 16 j 03:06	20° 8 05'37	6°36'12	min. Earth dist.	-4213 Dec 26 j 21:27	1° II 01'52	33.91241 AU
morning rise	-4219 Jun 30 j 12:46	20° 8 31'42			-4212 Feb 16 j 04:11	30° R 8	
retrograde	-4219 Sep 25 j 16:55	22° 8 05'03		direct	-4212 Mar 14 j 02:43	29° 8 49'54	
opposition	-4219 Dec 13 j 02:14	20° 8 53'40	7°12'02		-4212 Apr 09 j 20:59	0° II	
min. Earth dist.	-4219 Dec 16 j 03:51	20° 8 49'16	35.41218 AU	evening set	-4212 Jun 15 j 20:09	1° II 37'12	
direct	-4218 Mar 04 j 18:54	19° 8 39'30		max. Earth dist.	-4212 Jun 24 j 16:27	1° II 54'19	35.75862 AU
evening set	-4218 Jun 03 j 18:56	21° 8 16'31					
max. Earth dist.	-4218 Jun 14 j 14:09	21° 8 36'11	37.26958 AU	conjunction	-4212 Jun 28 j 04:08	2° II 01'08	9°40'18
				minimum elong	-4212 Jun 28 j 03:48	2° II 01'06	9°40'28
conjunction	-4218 Jun 18 j 01:27	21° 8 42'34	7°02'27	morning rise	-4212 Jul 10 j 09:21	2° II 24'52	
minimum elong	-4218 Jun 18 j 01:12	21° 8 42'33	7°02'35	retrograde	-4212 Oct 07 j 23:50	4° II 09'11	
morning rise	-4218 Jul 02 j 04:58	22° 8 08'26		opposition	-4212 Dec 24 j 18:11	2° II 55'10	10°28'04
retrograde	-4218 Sep 27 j 17:35	23° 8 43'07		min. Earth dist.	-4212 Dec 27 j 21:45	2° II 50'28	33.66527 AU
opposition	-4218 Dec 14 j 22:55	22° 8 31'21	7°40'06	direct	-4211 Mar 16 j 02:59	1° II 38'00	
min. Earth dist.	-4218 Dec 18 j 01:37	22° 8 26'52	35.15900 AU	evening set	-4211 Jun 18 j 08:56	3° II 27'18	
direct	-4217 Mar 06 j 14:12	21° 8 16'46		max. Earth dist.	-4211 Jun 26 j 18:21	3° II 43'43	35.50915 AU
evening set	-4217 Jun 06 j 00:01	22° 8 55'18					
max. Earth dist.	-4217 Jun 16 j 13:56	23° 8 14'45	37.01524 AU	conjunction	-4211 Jun 30 j 07:06	3° II 50'40	10°06'14
				minimum elong	-4211 Jun 30 j 06:44	3° II 50'39	10°06'24
conjunction	-4217 Jun 20 j 00:14	23° 8 21'07	7°28'53	morning rise	-4211 Jul 12 j 02:35	4° II 13'51	
minimum elong	-4217 Jun 19 j 23:58	23° 8 21'06	7°29'02	retrograde	-4211 Oct 10 j 04:27	6° II 00'02	
morning rise	-4217 Jul 03 j 21:19	23° 8 46'45		opposition	-4211 Dec 26 j 20:07	4° II 45'35	10°55'39
retrograde	-4217 Sep 29 j 16:21	25° 8 22'51		min. Earth dist.	-4211 Dec 30 j 00:54	4° II 40'47	33.41924 AU
opposition	-4217 Dec 16 j 20:20	24° 8 10'44	8°08'12	direct	-4210 Mar 18 j 02:50	3° II 27'56	
min. Earth dist.	-4217 Dec 19 j 22:24	24° 8 06'16	34.90756 AU	evening set	-4210 Jun 20 j 23:14	5° II 19'18	
direct	-4216 Mar 07 j 12:13	22° 8 55'45		max. Earth dist.	-4210 Jun 28 j 23:07	5° II 35'06	35.26099 AU
evening set	-4216 Jun 07 j 06:11	24° 8 35'53					
max. Earth dist.	-4216 Jun 17 j 12:00	24° 8 54'55	36.76242 AU	conjunction	-4210 Jul 02 j 10:49	5° II 42'02	10°31'55
				minimum elong	-4210 Jul 02 j 10:28	5° II 42'00	10°32'06
conjunction	-4216 Jun 20 j 23:23	25° 8 01'26	7°55'17	morning rise	-4210 Jul 13 j 19:41	6° II 04'35	
minimum elong	-4216 Jun 20 j 23:07	25° 8 01'24	7°55'26	retrograde	-4210 Oct 12 j 08:58	7° II 52'42	
morning rise	-4216 Jul 04 j 13:45	25° 8 26'47		opposition	-4210 Dec 28 j 22:46	6° II 37'49	11°23'01
retrograde	-4216 Sep 30 j 17:04	27° 8 04'22		min. Earth dist.	-4209 Jan 01 j 02:49	6° II 33'02	33.17484 AU
opposition	-4216 Dec 17 j 18:21	25° 8 51'54	8°36'18	direct	-4209 Mar 20 j 06:48	5° II 19'40	
min. Earth dist.	-4216 Dec 20 j 21:02	25° 8 47'22	34.65766 AU	evening set	-4209 Jun 23 j 14:56	7° II 13'10	
direct	-4215 Mar 09 j 09:05	24° 8 36'31		max. Earth dist.	-4209 Jul 01 j 02:31	7° II 28'07	35.01484 AU
evening set	-4215 Jun 09 j 13:37	26° 8 18'20					
max. Earth dist.	-4215 Jun 19 j 12:50	26° 8 37'02	36.51063 AU	conjunction	-4209 Jul 04 j 15:07	7° II 35'12	10°57'21
				minimum elong	-4209 Jul 04 j 14:44	7° II 35'10	10°57'32
conjunction	-4215 Jun 22 j 23:34	26° 8 43'34	8°21'40	morning rise	-4209 Jul 15 j 12:55	7° II 57'04	
minimum elong	-4215 Jun 22 j 23:16	26° 8 43'32	8°21'50	retrograde	-4209 Oct 14 j 16:03	9° II 47'11	
morning rise	-4215 Jul 06 j 06:22	27° 8 08'35		opposition	-4209 Dec 31 j 02:14	8° II 31'51	11°50'03
retrograde	-4215 Oct 02 j 16:16	28° 8 47'45		min. Earth dist.	-4208 Jan 03 j 06:24	8° II 27'01	32.93310 AU
opposition	-4215 Dec 19 j 17:08	27° 8 34'56	9°04'22	direct	-4208 Mar 21 j 10:11	7° II 13'12	
min. Earth dist.	-4215 Dec 22 j 20:25	27° 8 30'20	34.40862 AU	evening set	-4208 Jun 25 j 07:55	9° II 08'57	
direct	-4214 Mar 11 j 07:12	26° 8 19'07		max. Earth dist.	-4208 Jul 02 j 09:03	9° II 23'10	34.77154 AU
evening set	-4214 Jun 11 j 22:36	28° 8 02'43					
max. Earth dist.	-4214 Jun 21 j 12:45	28° 8 20'53	36.25956 AU	conjunction	-4208 Jul 05 j 20:05	9° II 30'11	11°22'25
				minimum elong	-4208 Jul 05 j 19:42	9° II 30'10	11°22'35
conjunction	-4214 Jun 25 j 00:22	28° 8 27'33	8°47'59	morning rise	-4208 Jul 16 j 05:43	9° II 51'16	
minimum elong	-4214 Jun 25 j 00:04	28° 8 27'32	8°48'08	retrograde	-4208 Oct 15 j 20:40	11° II 43'31	
morning rise	-4214 Jul 07 j 23:21	28° 8 52'13		opposition	-4207 Jan 01 j 06:35	10° II 27'44	12°16'43
	-4214 Aug 17 j 23:22	0° II		min. Earth dist.	-4207 Jan 04 j 10:26	10° II 22'53	32.69460 AU
retrograde	-4214 Oct 04 j 18:37	0° II 33'01		direct	-4207 Mar 23 j 14:35	9° II 08'35	
	-4214 Nov 22 j 19:56	30° R 8		evening set	-4207 Jun 28 j 02:42	11° II 06'40	
opposition	-4214 Dec 21 j 16:41	29° 8 19'49	9°32'22	max. Earth dist.	-4207 Jul 04 j 14:43	11° II 19'56	34.53200 AU
min. Earth dist.	-4214 Dec 24 j 19:45	29° 8 15'13	34.16030 AU				
direct	-4213 Mar 13 j 04:22	28° 8 03'35		conjunction	-4207 Jul 08 j 01:45	11° II 27'02	11°47'05
evening set	-4213 Jun 14 j 08:36	29° 8 49'00		minimum elong	-4207 Jul 08 j 01:21	11° II 27'00	11°47'16
	-4213 Jun 20 j 02:56	0° II		morning rise	-4207 Jul 17 j 22:39	11° II 47'13	
max. Earth dist.	-4213 Jun 23 j 13:57	0° II 06'39	36.00879 AU	retrograde	-4207 Oct 18 j 03:00	13° II 41'43	
				opposition	-4206 Jan 03 j 11:32	12° II 25'29	12°42'56

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Attention, astronomical year style is used: The year -4206 in astronomical counting style is the year 4207 BCE in historical counting style.

min. Earth dist.	-4206 Jan 06 j 14:22	12°II20'41	32.46037 AU	morning rise	-4200 Jul 27 j 04:24	26°II12'44	
direct	-4206 Mar 25 j 18:19	11°II05'51		retrograde	-4200 Nov 02 j 04:34	28°II27'29	
evening set	-4206 Jun 30 j 23:08	13°II06'25		opposition	-4199 Jan 18 j 00:53	27°II08'29	15°27'53
max. Earth dist.	-4206 Jul 06 j 22:27	13°II18'44	34.29683 AU	min. Earth dist.	-4199 Jan 20 j 22:26	27°II03'50	30.95680 AU
				direct	-4199 Apr 08 j 21:10	25°II45'53	
conjunction	-4206 Jul 10 j 08:22	13°II25'48	12°11'16	evening set	-4199 Jul 21 j 23:29	28°II09'23	
minimum elong	-4206 Jul 10 j 07:59	13°II25'46	12°11'26	max. Earth dist.	-4199 Jul 22 j 01:55	28°II09'37	32.78807 AU
morning rise	-4206 Jul 19 j 15:24	13°II45'01					
retrograde	-4206 Oct 20 j 08:55	15°II41'53		conjunction	-4199 Jul 25 j 04:17	28°II16'29	14°41'46
opposition	-4205 Jan 05 j 17:40	14°II25'13	13°08'37	minimum elong	-4199 Jul 25 j 03:53	28°II16'27	14°41'58
min. Earth dist.	-4205 Jan 08 j 20:32	14°II20'22	32.23086 AU	morning rise	-4199 Jul 28 j 08:08	28°II23'30	
direct	-4205 Mar 27 j 21:52	13°II05'07			-4199 Sep 14 j 17:08	0°☾	
evening set	-4205 Jul 03 j 21:22	15°II08'18		retrograde	-4199 Nov 04 j 17:04	0°☾42'34	
max. Earth dist.	-4205 Jul 09 j 06:42	15°II19'32	34.06677 AU		-4199 Dec 27 j 19:54	30°R II	
				opposition	-4198 Jan 20 j 13:19	29°II23'10	15°47'57
conjunction	-4205 Jul 12 j 15:29	15°II26'35	12°34'54	min. Earth dist.	-4198 Jan 23 j 10:23	29°II18'31	30.76093 AU
minimum elong	-4205 Jul 12 j 15:04	15°II26'33	12°35'05	direct	-4198 Apr 11 j 08:41	28°II00'09	
morning rise	-4205 Jul 21 j 07:41	15°II44'42			-4198 Jul 13 j 05:27	0°☾	
retrograde	-4205 Oct 22 j 17:45	17°II44'05		max. Earth dist.	-4198 Jul 24 j 15:36	0°☾25'20	32.59209 AU
opposition	-4204 Jan 08 j 00:31	16°II27'01	13°33'43				
min. Earth dist.	-4204 Jan 11 j 01:31	16°II22'15	32.00652 AU	conjunction	-4198 Jul 27 j 17:07	0°☾32'12	14°59'47
direct	-4204 Mar 29 j 02:36	15°II06'28		minimum elong	-4198 Jul 27 j 16:45	0°☾32'10	14°59'58
evening set	-4204 Jul 05 j 21:33	17°II12'25		retrograde	-4198 Nov 07 j 07:33	2°☾59'38	
max. Earth dist.	-4204 Jul 10 j 15:19	17°II22'23	33.84175 AU	opposition	-4197 Jan 23 j 02:40	1°☾39'51	16°06'54
				min. Earth dist.	-4197 Jan 25 j 21:47	1°☾35'18	30.57067 AU
conjunction	-4204 Jul 13 j 23:35	17°II29'28	12°57'56	direct	-4197 Apr 13 j 20:58	0°☾16'25	
minimum elong	-4204 Jul 13 j 23:12	17°II29'26	12°58'07	max. Earth dist.	-4197 Jul 27 j 06:59	2°☾43'07	32.40201 AU
morning rise	-4204 Jul 21 j 23:49	17°II46'22					
retrograde	-4204 Oct 24 j 02:54	19°II48'24		conjunction	-4197 Jul 30 j 06:39	2°☾49'52	15°16'42
opposition	-4203 Jan 09 j 08:14	18°II30'56	13°58'08	minimum elong	-4197 Jul 30 j 06:17	2°☾49'50	15°16'54
min. Earth dist.	-4203 Jan 12 j 09:33	18°II26'09	31.78728 AU	retrograde	-4197 Nov 09 j 21:09	5°☾18'38	
direct	-4203 Mar 31 j 07:49	17°II09'58		opposition	-4196 Jan 25 j 17:00	3°☾58'26	16°24'38
evening set	-4203 Jul 09 j 00:09	19°II18'51		min. Earth dist.	-4196 Jan 28 j 11:35	3°☾53'55	30.38663 AU
max. Earth dist.	-4203 Jul 13 j 02:06	19°II27'32	33.62178 AU	direct	-4196 Apr 15 j 08:44	2°☾34'38	
				max. Earth dist.	-4196 Jul 28 j 23:10	5°☾02'47	32.21887 AU
conjunction	-4203 Jul 16 j 08:30	19°II34'31	13°20'18				
minimum elong	-4203 Jul 16 j 08:05	19°II34'29	13°20'29	conjunction	-4196 Jul 31 j 20:48	5°☾09'24	15°32'24
morning rise	-4203 Jul 23 j 15:11	19°II50'03		minimum elong	-4196 Jul 31 j 20:28	5°☾09'22	15°32'35
retrograde	-4203 Oct 26 j 13:48	21°II54'54		retrograde	-4196 Nov 11 j 13:05	7°☾39'28	
opposition	-4202 Jan 11 j 16:56	20°II37'03	14°21'50	opposition	-4195 Jan 27 j 07:51	6°☾18'53	16°41'02
min. Earth dist.	-4202 Jan 14 j 16:42	20°II32'20	31.57279 AU	min. Earth dist.	-4195 Jan 29 j 23:43	6°☾14'31	30.20976 AU
direct	-4202 Apr 02 j 16:31	19°II15'41		direct	-4195 Apr 17 j 22:04	4°☾54'41	
evening set	-4202 Jul 12 j 05:17	21°II27'42		max. Earth dist.	-4195 Jul 31 j 15:44	7°☾24'15	32.04338 AU
max. Earth dist.	-4202 Jul 15 j 11:43	21°II34'43	33.40640 AU				
				conjunction	-4195 Aug 03 j 11:42	7°☾30'46	15°46'49
conjunction	-4202 Jul 18 j 18:12	21°II41'46	13°41'55	minimum elong	-4195 Aug 03 j 11:23	7°☾30'44	15°47'01
minimum elong	-4202 Jul 18 j 17:49	21°II41'44	13°42'07	retrograde	-4195 Nov 14 j 04:15	10°☾02'06	
morning rise	-4202 Jul 25 j 05:43	21°II55'44		opposition	-4194 Jan 29 j 23:51	8°☾41'09	16°56'00
retrograde	-4202 Oct 29 j 02:05	24°II03'37		min. Earth dist.	-4194 Feb 01 j 14:48	8°☾36'49	30.04090 AU
opposition	-4201 Jan 14 j 02:38	22°II45'22	14°44'45	direct	-4194 Apr 20 j 11:51	7°☾16'35	
min. Earth dist.	-4201 Jan 17 j 02:20	22°II40'38	31.36293 AU	max. Earth dist.	-4194 Aug 03 j 10:25	9°☾47'40	31.87660 AU
direct	-4201 Apr 05 j 00:04	21°II23'35					
evening set	-4201 Jul 15 j 13:49	23°II38'58		conjunction	-4194 Aug 06 j 03:09	9°☾53'55	15°59'49
max. Earth dist.	-4201 Jul 18 j 00:24	23°II44'17	33.19561 AU	minimum elong	-4194 Aug 06 j 02:52	9°☾53'54	16°00'00
				retrograde	-4194 Nov 16 j 20:58	12°☾26'28	
conjunction	-4201 Jul 21 j 04:51	23°II51'13	14°02'46	opposition	-4193 Feb 01 j 16:36	11°☾05'11	17°09'26
minimum elong	-4201 Jul 21 j 04:26	23°II51'10	14°02'57	min. Earth dist.	-4193 Feb 04 j 04:26	11°☾01'03	29.88082 AU
morning rise	-4201 Jul 26 j 18:32	24°II03'21		direct	-4193 Apr 23 j 04:14	9°☾40'19	
retrograde	-4201 Oct 31 j 13:55	26°II14'29		max. Earth dist.	-4193 Aug 06 j 04:10	12°☾12'43	31.71916 AU
opposition	-4200 Jan 16 j 13:21	24°II55'52	15°06'47				
min. Earth dist.	-4200 Jan 19 j 11:52	24°II51'11	31.15751 AU	conjunction	-4193 Aug 08 j 19:15	12°☾18'51	16°11'21
direct	-4200 Apr 06 j 10:33	23°II33'41		minimum elong	-4193 Aug 08 j 18:59	12°☾18'49	16°11'33
evening set	-4200 Jul 18 j 02:35	25°II52'47		retrograde	-4193 Nov 19 j 15:15	14°☾52'35	
max. Earth dist.	-4200 Jul 19 j 11:39	25°II55'48	32.98946 AU	opposition	-4192 Feb 04 j 10:08	13°☾30'59	17°21'13
				min. Earth dist.	-4192 Feb 06 j 20:19	13°☾26'58	29.73023 AU
conjunction	-4200 Jul 22 j 16:01	26°II02'48	14°22'44	direct	-4192 Apr 24 j 18:39	12°☾05'51	
minimum elong	-4200 Jul 22 j 15:38	26°II02'46	14°22'55	max. Earth dist.	-4192 Aug 08 j 00:37	14°☾39'43	31.57156 AU

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Attention, astronomical year style is used: The year -4192 in astronomical counting style is the year 4193 BCE in historical counting style.

conjunction	-4192 Aug 10 j 11:58	14° $\mathring{\text{E}}$ 45'32	16°21'19	max. Earth dist.	-4184 Aug 29 j 05:51	5° $\mathring{\text{O}}$ 06'04	30.73196 AU
minimum elong	-4192 Aug 10 j 11:44	14° $\mathring{\text{E}}$ 45'30	16°21'30				
retrograde	-4192 Nov 21 j 09:38	17° $\mathring{\text{E}}$ 20'25		conjunction	-4184 Aug 30 j 19:02	5° $\mathring{\text{O}}$ 09'51	16°38'40
opposition	-4191 Feb 06 j 04:27	15° $\mathring{\text{E}}$ 58'33	17°31'19	minimum elong	-4184 Aug 30 j 19:06	5° $\mathring{\text{O}}$ 09'52	16°38'50
min. Earth dist.	-4191 Feb 08 j 11:48	15° $\mathring{\text{E}}$ 54'42	29.58903 AU	retrograde	-4184 Dec 12 j 06:22	7° $\mathring{\text{O}}$ 50'52	
direct	-4191 Apr 27 j 12:53	14° $\mathring{\text{E}}$ 33'11		opposition	-4183 Feb 27 j 06:09	6° $\mathring{\text{O}}$ 27'25	17°44'05
max. Earth dist.	-4191 Aug 10 j 19:25	17° $\mathring{\text{E}}$ 08'15	31.43364 AU	min. Earth dist.	-4183 Feb 28 j 17:12	6° $\mathring{\text{O}}$ 24'57	28.78976 AU
				direct	-4183 May 18 j 06:25	5° $\mathring{\text{O}}$ 01'01	
conjunction	-4191 Aug 13 j 05:13	17° $\mathring{\text{E}}$ 13'56	16°29'40	max. Earth dist.	-4183 Sep 01 j 05:49	7° $\mathring{\text{O}}$ 43'13	30.67150 AU
minimum elong	-4191 Aug 13 j 05:01	17° $\mathring{\text{E}}$ 13'55	16°29'52				
retrograde	-4191 Nov 24 j 06:33	19° $\mathring{\text{E}}$ 49'54		conjunction	-4183 Sep 02 j 15:01	7° $\mathring{\text{O}}$ 46'36	16°32'27
opposition	-4190 Feb 08 j 23:24	18° $\mathring{\text{E}}$ 27'47	17°39'37	minimum elong	-4183 Sep 02 j 15:08	7° $\mathring{\text{O}}$ 46'37	16°32'37
min. Earth dist.	-4190 Feb 11 j 04:30	18° $\mathring{\text{E}}$ 24'06	29.45730 AU	retrograde	-4183 Dec 15 j 02:48	10° $\mathring{\text{O}}$ 27'55	
direct	-4190 Apr 30 j 06:56	17° $\mathring{\text{E}}$ 02'14		opposition	-4182 Mar 02 j 05:10	9° $\mathring{\text{O}}$ 04'21	17°36'33
max. Earth dist.	-4190 Aug 13 j 17:15	19° $\mathring{\text{E}}$ 38'39	31.30529 AU	min. Earth dist.	-4182 Mar 03 j 12:07	9° $\mathring{\text{O}}$ 02'10	28.73359 AU
				direct	-4182 May 21 j 06:00	7° $\mathring{\text{O}}$ 37'55	
conjunction	-4190 Aug 15 j 23:13	19° $\mathring{\text{E}}$ 44'00	16°36'20	max. Earth dist.	-4182 Sep 04 j 04:45	10° $\mathring{\text{O}}$ 20'29	30.62250 AU
minimum elong	-4190 Aug 15 j 23:03	19° $\mathring{\text{E}}$ 43'59	16°36'30				
retrograde	-4190 Nov 27 j 01:06	22° $\mathring{\text{E}}$ 20'58		conjunction	-4182 Sep 05 j 11:00	10° $\mathring{\text{O}}$ 23'34	16°24'16
opposition	-4189 Feb 11 j 19:22	20° $\mathring{\text{E}}$ 58'38	17°46'07	minimum elong	-4182 Sep 05 j 11:08	10° $\mathring{\text{O}}$ 23'35	16°24'24
min. Earth dist.	-4189 Feb 13 j 22:17	20° $\mathring{\text{E}}$ 55'05	29.33466 AU	retrograde	-4182 Dec 18 j 00:04	13° $\mathring{\text{O}}$ 05'06	
direct	-4189 May 03 j 01:49	19° $\mathring{\text{E}}$ 32'55		opposition	-4181 Mar 05 j 04:31	11° $\mathring{\text{O}}$ 41'26	17°26'53
max. Earth dist.	-4189 Aug 16 j 13:18	22° $\mathring{\text{E}}$ 10'22	31.18634 AU	min. Earth dist.	-4181 Mar 06 j 08:26	11° $\mathring{\text{O}}$ 39'28	28.68911 AU
				direct	-4181 May 24 j 02:36	10° $\mathring{\text{O}}$ 15'01	
conjunction	-4189 Aug 18 j 17:25	22° $\mathring{\text{E}}$ 15'34	16°41'16	max. Earth dist.	-4181 Sep 07 j 05:22	12° $\mathring{\text{O}}$ 58'01	30.58579 AU
minimum elong	-4189 Aug 18 j 17:17	22° $\mathring{\text{E}}$ 15'33	16°41'27				
retrograde	-4189 Nov 29 j 23:07	24° $\mathring{\text{E}}$ 53'28		conjunction	-4181 Sep 08 j 06:55	13° $\mathring{\text{O}}$ 00'38	16°14'06
opposition	-4188 Feb 14 j 15:50	23° $\mathring{\text{E}}$ 30'55	17°50'43	minimum elong	-4181 Sep 08 j 07:07	13° $\mathring{\text{O}}$ 00'39	16°14'15
min. Earth dist.	-4188 Feb 16 j 15:50	23° $\mathring{\text{E}}$ 27'34	29.22109 AU		-4181 Nov 01 j 22:10	15° $\mathring{\text{O}}$	
direct	-4188 May 04 j 21:27	22° $\mathring{\text{E}}$ 05'03		retrograde	-4181 Dec 20 j 20:28	15° $\mathring{\text{O}}$ 42'18	
max. Earth dist.	-4188 Aug 18 j 11:51	24° $\mathring{\text{E}}$ 43'37	31.07653 AU		-4180 Feb 10 j 12:36	15° $\mathring{\text{R}}$ $\mathring{\text{O}}$	
				opposition	-4180 Mar 07 j 03:53	14° $\mathring{\text{O}}$ 18'35	17°15'05
conjunction	-4188 Aug 20 j 12:25	24° $\mathring{\text{E}}$ 48'29	16°44'27	min. Earth dist.	-4180 Mar 08 j 03:48	14° $\mathring{\text{O}}$ 16'54	28.65657 AU
minimum elong	-4188 Aug 20 j 12:19	24° $\mathring{\text{E}}$ 48'29	16°44'36	direct	-4180 May 26 j 02:06	12° $\mathring{\text{O}}$ 52'15	
retrograde	-4188 Dec 01 j 19:12	27° $\mathring{\text{E}}$ 27'13			-4180 Aug 25 j 14:28	15° $\mathring{\text{O}}$	
opposition	-4187 Feb 16 j 12:55	26° $\mathring{\text{E}}$ 04'29	17°53'25	max. Earth dist.	-4180 Sep 09 j 04:00	15° $\mathring{\text{O}}$ 35'24	30.56153 AU
min. Earth dist.	-4187 Feb 18 j 11:14	26° $\mathring{\text{E}}$ 01'14	29.11630 AU				
direct	-4187 May 07 j 17:46	24° $\mathring{\text{E}}$ 38'28		conjunction	-4180 Sep 10 j 02:48	15° $\mathring{\text{O}}$ 37'44	16°02'00
max. Earth dist.	-4187 Aug 21 j 09:16	27° $\mathring{\text{E}}$ 17'55	30.97602 AU	minimum elong	-4180 Sep 10 j 03:01	15° $\mathring{\text{O}}$ 37'45	16°02'07
				retrograde	-4180 Dec 22 j 18:25	18° $\mathring{\text{O}}$ 19'26	
conjunction	-4187 Aug 23 j 07:42	27° $\mathring{\text{E}}$ 22'35	16°45'48	opposition	-4179 Mar 10 j 03:08	16° $\mathring{\text{O}}$ 55'43	17°01'12
minimum elong	-4187 Aug 23 j 07:38	27° $\mathring{\text{E}}$ 22'35	16°45'59	min. Earth dist.	-4179 Mar 10 j 23:26	16° $\mathring{\text{O}}$ 54'17	28.63632 AU
	-4187 Nov 24 j 00:16	0° $\mathring{\text{O}}$		direct	-4179 May 29 j 00:00	15° $\mathring{\text{O}}$ 29'30	
retrograde	-4187 Dec 04 j 16:43	0° $\mathring{\text{O}}$ 02'02					
	-4187 Dec 15 j 08:22	30° $\mathring{\text{R}}$ $\mathring{\text{E}}$		conjunction	-4179 Sep 12 j 22:43	18° $\mathring{\text{O}}$ 14'45	15°47'58
opposition	-4186 Feb 19 j 10:33	28° $\mathring{\text{E}}$ 39'07	17°54'08	minimum elong	-4179 Sep 12 j 23:00	18° $\mathring{\text{O}}$ 14'47	15°48'06
min. Earth dist.	-4186 Feb 21 j 05:20	28° $\mathring{\text{E}}$ 36'07	29.02048 AU	max. Earth dist.	-4179 Sep 12 j 04:48	18° $\mathring{\text{O}}$ 12'55	30.54974 AU
direct	-4186 May 10 j 15:06	27° $\mathring{\text{E}}$ 12'58		retrograde	-4179 Dec 25 j 14:34	20° $\mathring{\text{O}}$ 56'24	
max. Earth dist.	-4186 Aug 24 j 08:05	29° $\mathring{\text{E}}$ 53'17	30.88475 AU	opposition	-4178 Mar 13 j 02:37	19° $\mathring{\text{O}}$ 32'44	16°45'15
				min. Earth dist.	-4178 Mar 13 j 19:35	19° $\mathring{\text{O}}$ 31'32	28.62797 AU
conjunction	-4186 Aug 26 j 03:17	29° $\mathring{\text{E}}$ 57'39	16°45'19	direct	-4178 May 31 j 23:07	18° $\mathring{\text{O}}$ 06'41	
minimum elong	-4186 Aug 26 j 03:17	29° $\mathring{\text{E}}$ 57'39	16°45'29				
	-4186 Aug 27 j 02:31	0° $\mathring{\text{O}}$		conjunction	-4178 Sep 15 j 18:11	20° $\mathring{\text{O}}$ 51'35	15°32'03
retrograde	-4186 Dec 07 j 12:32	2° $\mathring{\text{O}}$ 37'44		minimum elong	-4178 Sep 15 j 18:28	20° $\mathring{\text{O}}$ 51'37	15°32'11
opposition	-4185 Feb 22 j 08:52	1° $\mathring{\text{O}}$ 14'37	17°52'50	max. Earth dist.	-4178 Sep 15 j 03:01	20° $\mathring{\text{O}}$ 50'02	30.55005 AU
min. Earth dist.	-4185 Feb 24 j 01:52	1° $\mathring{\text{O}}$ 11'44	28.93378 AU	retrograde	-4178 Dec 28 j 13:00	23° $\mathring{\text{O}}$ 33'07	
	-4185 Apr 16 j 19:01	30° $\mathring{\text{R}}$ $\mathring{\text{E}}$		opposition	-4177 Mar 16 j 02:00	22° $\mathring{\text{O}}$ 09'30	16°27'17
direct	-4185 May 13 j 11:34	29° $\mathring{\text{E}}$ 48'23		min. Earth dist.	-4177 Mar 16 j 14:49	22° $\mathring{\text{O}}$ 08'37	28.63135 AU
	-4185 Jun 08 j 14:10	0° $\mathring{\text{O}}$		direct	-4177 Jun 03 j 21:09	20° $\mathring{\text{O}}$ 43'40	
max. Earth dist.	-4185 Aug 27 j 06:55	2° $\mathring{\text{O}}$ 29'24	30.80331 AU				
				conjunction	-4177 Sep 18 j 13:44	23° $\mathring{\text{O}}$ 28'08	15°14'21
conjunction	-4185 Aug 28 j 23:07	2° $\mathring{\text{O}}$ 33'29	16°42'57	minimum elong	-4177 Sep 18 j 14:04	23° $\mathring{\text{O}}$ 28'10	15°14'28
minimum elong	-4185 Aug 28 j 23:09	2° $\mathring{\text{O}}$ 33'29	16°43'08	max. Earth dist.	-4177 Sep 18 j 03:16	23° $\mathring{\text{O}}$ 27'04	30.56196 AU
retrograde	-4185 Dec 10 j 10:39	5° $\mathring{\text{O}}$ 14'04		retrograde	-4177 Dec 31 j 09:34	26° $\mathring{\text{O}}$ 09'24	
opposition	-4184 Feb 25 j 07:17	3° $\mathring{\text{O}}$ 50'47	17°49'30	opposition	-4176 Mar 18 j 01:13	24° $\mathring{\text{O}}$ 45'53	16°07'25
min. Earth dist.	-4184 Feb 26 j 20:25	3° $\mathring{\text{O}}$ 48'10	28.85670 AU	min. Earth dist.	-4176 Mar 18 j 11:22	24° $\mathring{\text{O}}$ 45'11	28.64578 AU
direct	-4184 May 15 j 09:42	2° $\mathring{\text{O}}$ 24'27		direct	-4176 Jun 05 j 21:02	23° $\mathring{\text{O}}$ 20'17	

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Attention, astronomical year style is used: The year -4176 in astronomical counting style is the year 4177 BCE in historical counting style.

evening set	-4176 Sep 18 j 18:00	26°00'14		max. Earth dist.	-4170 Oct 06 j 07:56	11°02'11'10	30.93727 AU
				morning rise	-4170 Oct 14 j 09:33	11°02'40'20	
conjunction	-4176 Sep 20 j 08:50	26°00'41'11	14°54'53	retrograde	-4169 Jan 17 j 19:10	13°02'56'42	
minimum elong	-4176 Sep 20 j 09:11	26°00'41'13	14°55'00	opposition	-4169 Apr 06 j 10:02	12°02'34'05	13°01'42
max. Earth dist.	-4176 Sep 20 j 00:54	26°00'32'23	30.58501 AU	min. Earth dist.	-4169 Apr 05 j 20:05	12°02'35'02	29.03112 AU
morning rise	-4176 Sep 22 j 00:21	26°00'08'12		direct	-4169 Jun 25 j 07:35	11°02'10'18	
retrograde	-4175 Jan 02 j 07:03	28°00'45'07		evening set	-4169 Sep 29 j 03:48	13°02'25'34	
opposition	-4175 Mar 21 j 00:10	27°00'21'43	15°45'42				
min. Earth dist.	-4175 Mar 21 j 05:57	27°00'21'19	28.67085 AU	conjunction	-4169 Oct 08 j 10:30	13°02'47'29	11°56'45
direct	-4175 Jun 08 j 19:59	25°00'56'20		minimum elong	-4169 Oct 08 j 10:55	13°02'47'31	11°56'49
evening set	-4175 Sep 19 j 11:09	28°00'30'36		max. Earth dist.	-4169 Oct 09 j 02:13	13°02'49'02	31.03206 AU
				morning rise	-4169 Oct 17 j 17:48	14°02'09'27	
conjunction	-4175 Sep 23 j 03:45	28°00'39'35	14°33'46	retrograde	-4168 Jan 20 j 10:40	16°02'23'22	
minimum elong	-4175 Sep 23 j 04:08	28°00'39'37	14°33'53	opposition	-4168 Apr 08 j 05:33	15°02'00'56	12°29'36
max. Earth dist.	-4175 Sep 22 j 23:56	28°00'39'12	30.61851 AU	min. Earth dist.	-4168 Apr 07 j 12:04	15°02'02'07	29.12763 AU
morning rise	-4175 Sep 26 j 21:00	28°00'48'38		direct	-4168 Jun 27 j 02:01	13°02'37'28	
	-4175 Oct 27 j 17:21	0°02'00		evening set	-4168 Sep 30 j 03:29	15°02'50'09	
retrograde	-4174 Jan 05 j 02:16	1°02'20'04					
	-4174 Mar 22 j 00:41	30°02'00		conjunction	-4168 Oct 10 j 01:34	16°02'13'25	11°26'19
opposition	-4174 Mar 23 j 23:02	29°00'56'47	15°22'14	minimum elong	-4168 Oct 10 j 01:58	16°02'13'28	11°26'22
min. Earth dist.	-4174 Mar 24 j 02:34	29°00'56'32	28.70604 AU	max. Earth dist.	-4168 Oct 10 j 21:43	16°02'15'24	31.13794 AU
direct	-4174 Jun 11 j 18:22	28°00'31'40		morning rise	-4168 Oct 19 j 23:59	16°02'36'44	
	-4174 Aug 25 j 04:25	0°02'00		retrograde	-4167 Jan 22 j 00:30	18°02'48'20	
evening set	-4174 Sep 20 j 21:59	1°02'01'58		min. Earth dist.	-4167 Apr 10 j 03:50	17°02'27'31	29.23502 AU
				opposition	-4167 Apr 11 j 00:32	17°02'26'07	11°56'24
conjunction	-4174 Sep 25 j 22:15	1°02'14'07	14°11'05	direct	-4167 Jun 29 j 21:06	16°02'03'00	
minimum elong	-4174 Sep 25 j 22:37	1°02'14'10	14°11'10	evening set	-4167 Oct 02 j 03:41	18°02'13'13	
max. Earth dist.	-4174 Sep 25 j 21:13	1°02'14'01	30.66232 AU				
morning rise	-4174 Sep 30 j 23:06	1°02'26'20		conjunction	-4167 Oct 12 j 15:42	18°02'37'41	10°54'54
retrograde	-4173 Jan 07 j 23:22	3°02'54'03		minimum elong	-4167 Oct 12 j 16:07	18°02'37'44	10°54'57
opposition	-4173 Mar 26 j 21:25	2°02'30'53	14°57'06	max. Earth dist.	-4167 Oct 13 j 14:19	18°02'39'54	31.25465 AU
min. Earth dist.	-4173 Mar 26 j 20:35	2°02'30'57	28.75118 AU	morning rise	-4167 Oct 23 j 04:21	19°02'02'13	
direct	-4173 Jun 14 j 18:02	1°02'06'02		retrograde	-4166 Jan 24 j 16:21	21°02'11'36	
evening set	-4173 Sep 22 j 14:16	3°02'32'55		opposition	-4166 Apr 13 j 18:50	19°02'49'38	11°22'12
				min. Earth dist.	-4166 Apr 12 j 17:56	19°02'51'19	29.35327 AU
conjunction	-4173 Sep 28 j 16:16	3°02'47'36	13°46'53	direct	-4166 Jul 02 j 14:10	18°02'26'54	
minimum elong	-4173 Sep 28 j 16:41	3°02'47'39	13°46'58	evening set	-4166 Oct 04 j 04:13	20°02'34'46	
max. Earth dist.	-4173 Sep 28 j 18:50	3°02'47'52	30.71600 AU				
morning rise	-4173 Oct 04 j 18:52	4°02'02'21		conjunction	-4166 Oct 15 j 05:25	21°02'00'19	10°22'37
retrograde	-4172 Jan 10 j 17:16	6°02'26'53		minimum elong	-4166 Oct 15 j 05:48	21°02'00'21	10°22'40
opposition	-4172 Mar 28 j 19:29	5°02'03'51	14°30'23	max. Earth dist.	-4166 Oct 16 j 08:22	21°02'02'55	31.38185 AU
min. Earth dist.	-4172 Mar 28 j 16:24	5°02'04'04	28.80609 AU	morning rise	-4166 Oct 26 j 07:01	21°02'25'55	
direct	-4172 Jun 16 j 15:27	3°02'39'15		retrograde	-4165 Jan 27 j 05:46	23°02'33'12	
evening set	-4172 Sep 23 j 09:38	6°02'02'59		min. Earth dist.	-4165 Apr 15 j 09:12	22°02'13'20	29.48173 AU
				opposition	-4165 Apr 16 j 12:31	22°02'11'30	10°47'09
conjunction	-4172 Sep 30 j 09:50	6°02'19'50	13°21'16	direct	-4165 Jul 05 j 08:28	20°02'49'11	
minimum elong	-4172 Sep 30 j 10:14	6°02'19'52	13°21'21	evening set	-4165 Oct 06 j 05:11	22°02'54'46	
max. Earth dist.	-4172 Sep 30 j 15:41	6°02'20'25	30.77963 AU				
morning rise	-4172 Oct 07 j 10:33	6°02'36'44		conjunction	-4165 Oct 17 j 18:16	23°02'21'17	9°49'35
retrograde	-4171 Jan 12 j 10:27	8°02'58'21		minimum elong	-4165 Oct 17 j 18:40	23°02'21'19	9°49'36
opposition	-4171 Mar 31 j 16:44	7°02'35'28	14°02'12	max. Earth dist.	-4165 Oct 18 j 23:24	23°02'24'05	31.51888 AU
min. Earth dist.	-4171 Mar 31 j 09:29	7°02'35'58	28.87076 AU	morning rise	-4165 Oct 29 j 08:02	23°02'47'52	
direct	-4171 Jun 19 j 14:10	6°02'11'07		retrograde	-4164 Jan 29 j 20:53	25°02'53'07	
evening set	-4171 Sep 25 j 06:37	8°02'31'54		min. Earth dist.	-4164 Apr 16 j 21:56	24°02'33'48	29.61972 AU
				opposition	-4164 Apr 18 j 05:21	24°02'31'43	10°11'20
conjunction	-4171 Oct 03 j 02:44	8°02'50'38	12°54'19	direct	-4164 Jul 07 j 01:18	23°02'09'49	
minimum elong	-4171 Oct 03 j 03:10	8°02'50'41	12°54'24	evening set	-4164 Oct 07 j 06:22	25°02'13'14	
max. Earth dist.	-4171 Oct 03 j 11:39	8°02'51'32	30.85319 AU				
morning rise	-4171 Oct 10 j 23:25	9°02'09'25		conjunction	-4164 Oct 19 j 06:38	25°02'40'36	9°15'53
retrograde	-4170 Jan 15 j 03:48	11°02'28'21		minimum elong	-4164 Oct 19 j 06:59	25°02'40'38	9°15'54
opposition	-4170 Apr 03 j 13:44	10°02'05'35	13°32'36	max. Earth dist.	-4164 Oct 20 j 15:24	25°02'43'44	31.66476 AU
min. Earth dist.	-4170 Apr 03 j 03:39	10°02'06'16	28.94568 AU	morning rise	-4164 Oct 31 j 07:28	26°02'08'02	
direct	-4170 Jun 22 j 10:00	8°02'41'30		retrograde	-4163 Jan 31 j 09:06	28°02'11'21	
evening set	-4170 Sep 27 j 04:46	10°02'59'28		opposition	-4163 Apr 20 j 21:33	26°02'50'16	9°34'54
				min. Earth dist.	-4163 Apr 19 j 12:23	26°02'52'27	29.76639 AU
conjunction	-4170 Oct 05 j 18:57	11°02'19'53	12°26'07	direct	-4163 Jul 09 j 17:06	25°02'28'48	
minimum elong	-4170 Oct 05 j 19:22	11°02'19'55	12°26'11	evening set	-4163 Oct 09 j 07:58	27°02'30'07	

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Attention, astronomical year style is used: The year -4163 in astronomical counting style is the year 4164 BCE in historical counting style.

conjunction	-4163 Oct 21 j 18:19	27° <u>0</u> 58'14	8°41'39	retrograde	-4156 Feb 16 j 02:20	13° <u>0</u> 28'22	
minimum elong	-4163 Oct 21 j 18:40	27° <u>0</u> 58'16	8°41'39	min. Earth dist.	-4156 May 04 j 14:47	12° <u>0</u> 12'35	30.99084 AU
max. Earth dist.	-4163 Oct 23 j 05:23	28° <u>0</u> 01'33	31.81891 AU	opposition	-4156 May 06 j 17:24	12° <u>0</u> 09'21	5°10'46
morning rise	-4163 Nov 03 j 05:20	28° <u>0</u> 26'25		direct	-4156 Jul 25 j 17:05	10° <u>0</u> 50'44	
	-4163 Dec 23 j 09:40	0° <u>0</u>		evening set	-4156 Oct 21 j 20:33	12° <u>0</u> 39'29	
retrograde	-4162 Feb 02 j 22:15	0° <u>0</u> 27'52					
	-4162 Mar 18 j 02:47	30° <u>0</u> 00'00		conjunction	-4156 Nov 05 j 07:51	13° <u>0</u> 10'23	4°34'15
min. Earth dist.	-4162 Apr 22 j 00:08	29° <u>0</u> 09'31	29.92102 AU	minimum elong	-4156 Nov 05 j 08:02	13° <u>0</u> 10'24	4°34'13
opposition	-4162 Apr 23 j 13:02	29° <u>0</u> 07'05	8°57'56	max. Earth dist.	-4156 Nov 07 j 11:20	13° <u>0</u> 15'00	33.08496 AU
direct	-4162 Jul 12 j 10:24	27° <u>0</u> 46'04		morning rise	-4156 Nov 19 j 20:27	13° <u>0</u> 41'22	
evening set	-4162 Oct 11 j 09:35	29° <u>0</u> 45'22		retrograde	-4155 Feb 17 j 10:16	15° <u>0</u> 31'44	
	-4162 Oct 17 j 22:51	0° <u>0</u>		min. Earth dist.	-4155 May 06 j 21:00	14° <u>0</u> 16'28	31.19297 AU
				opposition	-4155 May 09 j 03:09	14° <u>0</u> 13'02	4°32'46
conjunction	-4162 Oct 24 j 05:14	0° <u>0</u> 14'08	8°06'58	direct	-4155 Jul 28 j 01:47	12° <u>0</u> 54'49	
minimum elong	-4162 Oct 24 j 05:33	0° <u>0</u> 14'10	8°06'58	evening set	-4155 Oct 23 j 22:14	14° <u>0</u> 42'08	
max. Earth dist.	-4162 Oct 25 j 19:02	0° <u>0</u> 17'41	31.98037 AU				
morning rise	-4162 Nov 06 j 01:42	0° <u>0</u> 42'58		conjunction	-4155 Nov 07 j 13:45	15° <u>0</u> 13'07	3°58'42
retrograde	-4161 Feb 05 j 10:21	2° <u>0</u> 42'39		minimum elong	-4155 Nov 07 j 13:55	15° <u>0</u> 13'08	3°58'40
min. Earth dist.	-4161 Apr 24 j 13:11	1° <u>0</u> 24'42	30.08297 AU	max. Earth dist.	-4155 Nov 09 j 20:21	15° <u>0</u> 17'58	33.29225 AU
opposition	-4161 Apr 26 j 03:55	1° <u>0</u> 22'10	8°20'34	morning rise	-4155 Nov 22 j 06:34	15° <u>0</u> 44'14	
direct	-4161 Jul 15 j 01:22	0° <u>0</u> 01'34		retrograde	-4154 Feb 19 j 16:06	17° <u>0</u> 33'19	
evening set	-4161 Oct 13 j 11:28	1° <u>0</u> 58'56		min. Earth dist.	-4154 May 09 j 04:51	16° <u>0</u> 18'26	31.40214 AU
				opposition	-4154 May 11 j 12:22	16° <u>0</u> 14'57	3°54'55
conjunction	-4161 Oct 26 j 15:40	2° <u>0</u> 28'15	7°31'56	direct	-4154 Jul 30 j 10:23	14° <u>0</u> 57'10	
minimum elong	-4161 Oct 26 j 15:59	2° <u>0</u> 28'17	7°31'55	evening set	-4154 Oct 25 j 23:45	16° <u>0</u> 43'04	
max. Earth dist.	-4161 Oct 28 j 08:01	2° <u>0</u> 32'01	32.14870 AU				
morning rise	-4161 Nov 08 j 20:34	2° <u>0</u> 57'39		conjunction	-4154 Nov 09 j 18:52	17° <u>0</u> 14'07	3°23'19
retrograde	-4160 Feb 07 j 19:34	4° <u>0</u> 55'36		minimum elong	-4154 Nov 09 j 19:00	17° <u>0</u> 14'07	3°23'16
min. Earth dist.	-4160 Apr 26 j 00:04	3° <u>0</u> 38'09	30.25149 AU	max. Earth dist.	-4154 Nov 12 j 03:21	17° <u>0</u> 19'05	33.50624 AU
opposition	-4160 Apr 27 j 17:40	3° <u>0</u> 35'26	7°42'54	morning rise	-4154 Nov 24 j 15:20	17° <u>0</u> 45'17	
direct	-4160 Jul 16 j 16:57	2° <u>0</u> 15'14		retrograde	-4153 Feb 21 j 22:34	19° <u>0</u> 33'09	
evening set	-4160 Oct 14 j 13:27	4° <u>0</u> 10'45		min. Earth dist.	-4153 May 11 j 10:01	18° <u>0</u> 18'48	31.61781 AU
				opposition	-4153 May 13 j 20:39	18° <u>0</u> 15'07	3°17'16
conjunction	-4160 Oct 28 j 01:15	4° <u>0</u> 40'32	6°56'37	direct	-4153 Aug 01 j 20:40	16° <u>0</u> 57'46	
minimum elong	-4160 Oct 28 j 01:32	4° <u>0</u> 40'34	6°56'37	evening set	-4153 Oct 28 j 01:25	18° <u>0</u> 42'23	
max. Earth dist.	-4160 Oct 29 j 19:15	4° <u>0</u> 44'26	32.32322 AU				
morning rise	-4160 Nov 10 j 14:04	5° <u>0</u> 10'25		conjunction	-4153 Nov 11 j 23:25	19° <u>0</u> 13'26	2°48'07
retrograde	-4159 Feb 09 j 04:42	7° <u>0</u> 06'41		minimum elong	-4153 Nov 11 j 23:32	19° <u>0</u> 13'26	2°48'04
min. Earth dist.	-4159 Apr 28 j 11:03	5° <u>0</u> 49'40	30.42649 AU	max. Earth dist.	-4153 Nov 14 j 10:00	19° <u>0</u> 18'33	33.72610 AU
opposition	-4159 Apr 30 j 06:53	5° <u>0</u> 46'49	7°05'00	morning rise	-4153 Nov 26 j 23:02	19° <u>0</u> 44'36	
direct	-4159 Jul 19 j 05:40	4° <u>0</u> 27'02		retrograde	-4152 Feb 24 j 04:45	21° <u>0</u> 31'19	
evening set	-4159 Oct 16 j 15:11	6° <u>0</u> 20'44		min. Earth dist.	-4152 May 12 j 16:05	20° <u>0</u> 17'23	31.83943 AU
				opposition	-4152 May 15 j 04:10	20° <u>0</u> 13'39	2°39'55
conjunction	-4159 Oct 30 j 10:04	6° <u>0</u> 50'54	6°21'08	direct	-4152 Aug 03 j 04:15	18° <u>0</u> 56'45	
minimum elong	-4159 Oct 30 j 10:20	6° <u>0</u> 50'56	6°21'07	evening set	-4152 Oct 29 j 02:53	20° <u>0</u> 40'07	
max. Earth dist.	-4159 Nov 01 j 07:16	6° <u>0</u> 55'04	32.50395 AU				
morning rise	-4159 Nov 13 j 05:44	7° <u>0</u> 21'10		conjunction	-4152 Nov 13 j 03:24	21° <u>0</u> 11'07	2°13'12
retrograde	-4158 Feb 11 j 11:40	9° <u>0</u> 15'52		minimum elong	-4152 Nov 13 j 03:30	21° <u>0</u> 11'07	2°13'09
min. Earth dist.	-4158 Apr 30 j 21:20	7° <u>0</u> 59'15	30.60777 AU	max. Earth dist.	-4152 Nov 15 j 16:14	21° <u>0</u> 16'23	33.95131 AU
opposition	-4158 May 02 j 19:16	7° <u>0</u> 56'17	6°26'58	morning rise	-4152 Nov 28 j 05:20	21° <u>0</u> 42'15	
direct	-4158 Jul 21 j 19:10	6° <u>0</u> 36'53		retrograde	-4151 Feb 25 j 07:08	23° <u>0</u> 27'53	
evening set	-4158 Oct 18 j 17:07	8° <u>0</u> 28'51		min. Earth dist.	-4151 May 14 j 20:59	22° <u>0</u> 14'25	32.06599 AU
				opposition	-4151 May 17 j 11:02	22° <u>0</u> 10'34	2°02'53
conjunction	-4158 Nov 01 j 18:02	8° <u>0</u> 59'20	5°45'32	direct	-4151 Aug 05 j 12:45	20° <u>0</u> 54'07	
minimum elong	-4158 Nov 01 j 18:17	8° <u>0</u> 59'21	5°45'31	evening set	-4151 Oct 31 j 04:23	22° <u>0</u> 36'20	
max. Earth dist.	-4158 Nov 03 j 16:40	9° <u>0</u> 03'35	32.69092 AU				
morning rise	-4158 Nov 15 j 20:11	9° <u>0</u> 29'55		conjunction	-4151 Nov 15 j 06:33	23° <u>0</u> 07'13	1°38'35
retrograde	-4157 Feb 13 j 20:21	11° <u>0</u> 23'05		minimum elong	-4151 Nov 15 j 06:37	23° <u>0</u> 07'13	1°38'31
min. Earth dist.	-4157 May 03 j 05:41	10° <u>0</u> 06'56	30.79587 AU	max. Earth dist.	-4151 Nov 17 j 20:21	23° <u>0</u> 12'32	34.18081 AU
opposition	-4157 May 05 j 06:43	10° <u>0</u> 03'47	5°48'52	morning rise	-4151 Nov 30 j 10:32	23° <u>0</u> 38'15	
direct	-4157 Jul 24 j 06:00	8° <u>0</u> 44'46		retrograde	-4150 Feb 27 j 10:14	25° <u>0</u> 22'52	
evening set	-4157 Oct 20 j 18:46	10° <u>0</u> 35'05		min. Earth dist.	-4150 May 17 j 01:26	24° <u>0</u> 09'52	32.29689 AU
				opposition	-4150 May 19 j 17:22	24° <u>0</u> 05'55	1°26'15
conjunction	-4157 Nov 04 j 01:22	11° <u>0</u> 05'48	5°09'53	direct	-4150 Aug 07 j 19:00	22° <u>0</u> 49'54	
minimum elong	-4157 Nov 04 j 01:35	11° <u>0</u> 05'49	5°09'51	evening set	-4150 Nov 02 j 05:50	24° <u>0</u> 31'00	
max. Earth dist.	-4157 Nov 06 j 03:29	11° <u>0</u> 10'20	32.88452 AU				
morning rise	-4157 Nov 18 j 08:59	11° <u>0</u> 36'38		conjunction	-4150 Nov 17 j 09:26	25° <u>0</u> 01'45	1°04'20

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Attention, astronomical year style is used: The year -4150 in astronomical counting style is the year 4151 BCE in historical counting style.

minimum elong	-4150 Nov 17 j 09:29	25° <u>01</u> '45	1°04'16	max. Earth dist.	-4144 Nov 30 j 12:14	6° <u>01</u> '15	35.85910 AU
max. Earth dist.	-4150 Nov 20 j 01:45	25° <u>07</u> '14	34.41392 AU	morning rise	-4144 Dec 12 j 16:57	6° <u>02</u> '47	
morning rise	-4150 Dec 02 j 14:37	25° <u>03</u> '29		retrograde	-4143 Mar 11 j 16:11	8° <u>03</u> '39	
retrograde	-4149 Mar 01 j 11:08	27° <u>01</u> '18		min. Earth dist.	-4143 May 29 j 17:17	6° <u>05</u> '11	33.98477 AU
min. Earth dist.	-4149 May 19 j 06:15	26° <u>03</u> '40	32.53107 AU	opposition	-4143 Jun 01 j 17:48	6° <u>04</u> '53	-2°36'16
opposition	-4149 May 21 j 22:52	25° <u>05</u> '42	0°50'03	direct	-4143 Aug 20 j 22:14	5° <u>03</u> '28	
direct	-4149 Aug 10 j 01:43	24° <u>04</u> '06		evening set	-4143 Nov 14 j 12:53	7° <u>01</u> '19	
evening set	-4149 Nov 04 j 07:20	26° <u>02</u> '49					
				conjunction	-4143 Nov 29 j 12:15	7° <u>03</u> '03	-2°42'43
conjunction	-4149 Nov 19 j 11:36	26° <u>05</u> '42	0°30'29	minimum elong	-4143 Nov 29 j 12:09	7° <u>03</u> '02	2°42'49
minimum elong	-4149 Nov 19 j 11:37	26° <u>05</u> '43	0°30'24	max. Earth dist.	-4143 Dec 02 j 13:06	7° <u>04</u> '55	36.10820 AU
max. Earth dist.	-4149 Nov 22 j 04:09	27° <u>00</u> '10	34.64978 AU	morning rise	-4143 Dec 14 j 13:32	8° <u>07</u> '57	
morning rise	-4149 Dec 04 j 17:47	27° <u>02</u> '25		retrograde	-4142 Mar 13 j 12:56	9° <u>04</u> '11	
retrograde	-4148 Mar 02 j 14:13	29° <u>08</u> '10		min. Earth dist.	-4142 May 31 j 17:34	8° <u>03</u> '60	34.23610 AU
min. Earth dist.	-4148 May 20 j 08:50	27° <u>05</u> '59	32.76790 AU	opposition	-4142 Jun 03 j 18:43	8° <u>03</u> '14	-3°08'35
opposition	-4148 May 23 j 03:43	27° <u>05</u> '15	0°14'19	direct	-4142 Aug 23 j 00:48	7° <u>01</u> '18	
direct	-4148 Aug 11 j 05:51	26° <u>03</u> '42		evening set	-4142 Nov 16 j 13:24	8° <u>05</u> '53	
desc. node	-4148 Oct 18 j 16:48	27° <u>04</u> '44					
evening set	-4148 Nov 05 j 08:39	28° <u>01</u> '45		conjunction	-4142 Dec 01 j 10:21	9° <u>02</u> '13	-3°13'01
				minimum elong	-4142 Dec 01 j 10:14	9° <u>02</u> '12	3°13'08
conjunction	-4148 Nov 20 j 13:15	28° <u>04</u> '05	-0°03'03	max. Earth dist.	-4142 Dec 04 j 11:25	9° <u>02</u> '04	36.36000 AU
minimum elong	-4148 Nov 20 j 13:14	28° <u>04</u> '05	0°03'08	morning rise	-4142 Dec 16 j 09:31	9° <u>04</u> '43	
behind sun begin	-4148 Nov 20 j 06:54	28° <u>04</u> '35		retrograde	-4141 Mar 15 j 11:15	11° <u>02</u> '24	
behind sun end	-4148 Nov 20 j 19:35	28° <u>04</u> '35		min. Earth dist.	-4141 Jun 02 j 15:39	10° <u>01</u> '42	34.49022 AU
max. Earth dist.	-4148 Nov 23 j 07:51	28° <u>05</u> '14	34.88767 AU	opposition	-4141 Jun 05 j 18:52	10° <u>01</u> '17	-3°40'15
morning rise	-4148 Dec 05 j 19:40	29° <u>01</u> '35		direct	-4141 Aug 25 j 00:13	9° <u>00</u> '38	
	-4148 Dec 29 j 12:18	0° <u>00</u> '		evening set	-4141 Nov 18 j 13:39	10° <u>03</u> '12	
retrograde	-4147 Mar 04 j 15:15	0° <u>00</u> '58	28				
	-4147 May 13 j 04:52	30° <u>04</u> '		conjunction	-4141 Dec 03 j 08:02	11° <u>02</u> '07	-3°42'44
min. Earth dist.	-4147 May 22 j 12:59	29° <u>04</u> '35	33.00677 AU	minimum elong	-4141 Dec 03 j 07:54	11° <u>02</u> '06	3°42'50
opposition	-4147 May 25 j 07:58	29° <u>04</u> '31	-0°20'55	max. Earth dist.	-4141 Dec 06 j 11:10	11° <u>08</u> '05	36.61411 AU
direct	-4147 Aug 13 j 10:02	28° <u>02</u> '41		morning rise	-4141 Dec 18 j 04:31	11° <u>03</u> '12	
	-4147 Nov 04 j 09:55	0° <u>00</u> '		retrograde	-4140 Mar 16 j 09:03	13° <u>07</u> '23	
evening set	-4147 Nov 07 j 09:52	0° <u>00</u> '05	47	min. Earth dist.	-4140 Jun 03 j 15:25	11° <u>05</u> '00	34.74651 AU
				opposition	-4140 Jun 06 j 18:37	11° <u>05</u> '36	-4°11'16
conjunction	-4147 Nov 22 j 14:17	0° <u>00</u> '35	51	direct	-4140 Aug 25 j 23:00	10° <u>04</u> '12	
minimum elong	-4147 Nov 22 j 14:16	0° <u>00</u> '35	51	evening set	-4140 Nov 19 j 13:46	12° <u>01</u> '42	
max. Earth dist.	-4147 Nov 25 j 09:19	0° <u>00</u> '41	26				
morning rise	-4147 Dec 07 j 20:36	1° <u>00</u> '06	05	conjunction	-4140 Dec 04 j 05:07	12° <u>04</u> '15	-4°11'51
retrograde	-4146 Mar 06 j 17:43	2° <u>00</u> '47	08	minimum elong	-4140 Dec 04 j 04:59	12° <u>04</u> '14	4°11'58
min. Earth dist.	-4146 May 24 j 14:22	1° <u>00</u> '35	39	max. Earth dist.	-4140 Dec 07 j 08:33	12° <u>04</u> '47	36.87005 AU
opposition	-4146 May 27 j 11:26	1° <u>00</u> '31	30	morning rise	-4140 Dec 18 j 22:33	13° <u>09</u> '29	
direct	-4146 Aug 15 j 13:08	0° <u>00</u> '17	01	retrograde	-4139 Mar 18 j 07:46	14° <u>04</u> '12	
evening set	-4146 Nov 09 j 10:52	1° <u>00</u> '54	13	min. Earth dist.	-4139 Jun 05 j 12:41	13° <u>03</u> '71	35.00434 AU
				opposition	-4139 Jun 08 j 17:41	13° <u>03</u> '24	-4°41'38
conjunction	-4146 Nov 24 j 14:36	2° <u>00</u> '24	00	direct	-4139 Aug 27 j 20:26	12° <u>02</u> '53	
minimum elong	-4146 Nov 24 j 14:34	2° <u>00</u> '24	00	evening set	-4139 Nov 21 j 13:54	13° <u>05</u> '24	
max. Earth dist.	-4146 Nov 27 j 11:08	2° <u>00</u> '29	39				
morning rise	-4146 Dec 09 j 20:25	2° <u>00</u> '53	56	conjunction	-4139 Dec 06 j 01:49	14° <u>02</u> '25	-4°40'21
retrograde	-4145 Mar 08 j 18:25	4° <u>00</u> '34	13	minimum elong	-4139 Dec 06 j 01:40	14° <u>02</u> '24	4°40'28
min. Earth dist.	-4145 May 26 j 16:52	3° <u>00</u> '23	01	max. Earth dist.	-4139 Dec 09 j 06:13	14° <u>02</u> '26	37.12702 AU
opposition	-4145 May 29 j 14:22	3° <u>00</u> '18	51	morning rise	-4139 Dec 20 j 15:59	14° <u>04</u> '37	
direct	-4145 Aug 17 j 15:33	2° <u>00</u> '04	44		-4139 Dec 27 j 12:27	15° <u>00</u> '	
evening set	-4145 Nov 11 j 11:43	3° <u>00</u> '41	05	retrograde	-4138 Mar 20 j 05:38	16° <u>02</u> '34	
				min. Earth dist.	-4138 Jun 07 j 11:30	15° <u>01</u> '15	35.26314 AU
conjunction	-4145 Nov 26 j 14:30	4° <u>00</u> '10	32	opposition	-4138 Jun 10 j 16:25	15° <u>01</u> '04	-5°11'19
minimum elong	-4145 Nov 26 j 14:26	4° <u>00</u> '10	32		-4138 Jun 18 j 11:44	15° <u>01</u> '	
max. Earth dist.	-4145 Nov 29 j 12:29	4° <u>00</u> '16	16	direct	-4138 Aug 29 j 18:50	13° <u>05</u> '18	
morning rise	-4145 Dec 11 j 19:08	4° <u>00</u> '40	09		-4138 Nov 05 j 12:35	15° <u>00</u> '	
retrograde	-4144 Mar 09 j 16:56	6° <u>00</u> '19	41	evening set	-4138 Nov 23 j 13:51	15° <u>03</u> '21	
min. Earth dist.	-4144 May 27 j 17:13	5° <u>00</u> '08	51				
opposition	-4144 May 30 j 16:15	5° <u>00</u> '04	37	conjunction	-4138 Dec 07 j 22:14	15° <u>05</u> '57	-5°08'15
direct	-4144 Aug 18 j 20:14	3° <u>00</u> '50	51	minimum elong	-4138 Dec 07 j 22:04	15° <u>05</u> '57	5°08'24
evening set	-4144 Nov 12 j 12:31	5° <u>00</u> '26	25	max. Earth dist.	-4138 Dec 11 j 03:36	16° <u>03</u> '55	37.38445 AU
				morning rise	-4138 Dec 22 j 08:34	16° <u>04</u> '24	
conjunction	-4144 Nov 27 j 13:37	5° <u>00</u> '55	31	retrograde	-4137 Mar 22 j 01:58	18° <u>00</u> '00	
minimum elong	-4144 Nov 27 j 13:32	5° <u>00</u> '55	31	min. Earth dist.	-4137 Jun 09 j 08:57	16° <u>05</u> '21	35.52188 AU

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Attention, astronomical year style is used: The year -4137 in astronomical counting style is the year 4138 BCE in historical counting style.

opposition	-4137 Jun 12 j 14:28	16°M.47'45	-5°40'20	morning rise	-4131 Dec 31 j 08:50	27°M.11'04	
direct	-4137 Aug 31 j 18:36	15°M.36'36		retrograde	-4130 Apr 01 j 10:18	28°M.44'52	
evening set	-4137 Nov 25 j 13:58	17°M.08'14		min. Earth dist.	-4130 Jun 20 j 04:00	27°M.38'22	37.30670 AU
				opposition	-4130 Jun 23 j 11:08	27°M.33'57	-8°44'46
conjunction	-4137 Dec 09 j 18:09	17°M.34'18	-5°35'32	direct	-4130 Sep 11 j 18:13	26°M.24'49	
minimum elong	-4137 Dec 09 j 17:59	17°M.34'17	5°35'40	evening set	-4130 Dec 07 j 09:34	27°M.54'09	
max. Earth dist.	-4137 Dec 12 j 23:06	17°M.40'14	37.64130 AU				
morning rise	-4137 Dec 24 j 00:37	18°M.00'31		conjunction	-4130 Dec 20 j 01:44	28°M.16'23	-8°29'19
retrograde	-4136 Mar 22 j 22:48	19°M.36'02		minimum elong	-4130 Dec 20 j 01:31	28°M.16'22	8°29'29
min. Earth dist.	-4136 Jun 10 j 05:54	18°M.28'04	35.78002 AU	max. Earth dist.	-4130 Dec 23 j 09:02	28°M.22'13	39.41039 AU
opposition	-4136 Jun 13 j 11:59	18°M.23'36	-6°08'41	morning rise	-4129 Jan 01 j 19:52	28°M.38'46	
direct	-4136 Sep 01 j 16:10	17°M.12'47			-4129 Mar 02 j 22:33	0°J	
evening set	-4136 Nov 26 j 13:48	18°M.44'01		retrograde	-4129 Apr 03 j 03:24	0°J.12'23	
					-4129 May 04 j 20:13	30°R.M.	
conjunction	-4136 Dec 10 j 13:50	19°M.09'34	-6°02'13	min. Earth dist.	-4129 Jun 21 j 21:14	29°M.06'10	37.56017 AU
minimum elong	-4136 Dec 10 j 13:39	19°M.09'33	6°02'22	opposition	-4129 Jun 25 j 05:21	29°M.01'43	-9°08'25
max. Earth dist.	-4136 Dec 13 j 19:59	19°M.15'33	37.89714 AU	direct	-4129 Sep 13 j 12:12	27°M.52'52	
morning rise	-4136 Dec 24 j 15:50	19°M.35'17		evening set	-4129 Dec 09 j 08:20	29°M.22'01	
retrograde	-4135 Mar 24 j 15:15	21°M.10'28					
min. Earth dist.	-4135 Jun 12 j 03:39	20°M.02'44	36.03685 AU	conjunction	-4129 Dec 21 j 18:25	29°M.43'40	-8°51'39
opposition	-4135 Jun 15 j 09:10	19°M.58'18	-6°36'22	minimum elong	-4129 Dec 21 j 18:13	29°M.43'39	8°51'47
direct	-4135 Sep 03 j 15:31	18°M.47'49		max. Earth dist.	-4129 Dec 25 j 03:08	29°M.49'34	39.66168 AU
evening set	-4135 Nov 28 j 13:30	20°M.18'38			-4129 Dec 31 j 02:44	0°J	
				morning rise	-4128 Jan 03 j 06:11	0°J.05'27	
conjunction	-4135 Dec 12 j 08:50	20°M.43'40	-6°28'17	retrograde	-4128 Apr 03 j 17:02	1°J.38'55	
minimum elong	-4135 Dec 12 j 08:39	20°M.43'39	6°28'24	min. Earth dist.	-4128 Jun 22 j 15:34	0°J.32'56	37.81340 AU
max. Earth dist.	-4135 Dec 15 j 14:08	20°M.49'33	38.15156 AU	opposition	-4128 Jun 25 j 23:01	0°J.28'32	-9°31'23
morning rise	-4135 Dec 26 j 06:17	21°M.08'52			-4128 Jul 18 j 01:52	30°R.M.	
retrograde	-4134 Mar 26 j 09:49	22°M.43'43		direct	-4128 Sep 14 j 08:19	29°M.19'59	
min. Earth dist.	-4134 Jun 13 j 23:10	21°M.36'18	36.29234 AU		-4128 Nov 08 j 22:52	0°J	
opposition	-4134 Jun 17 j 05:49	21°M.31'50	-7°03'24	evening set	-4128 Dec 10 j 07:05	0°J.48'58	
direct	-4134 Sep 05 j 12:32	20°M.21'38					
evening set	-4134 Nov 30 j 13:03	21°M.52'05		conjunction	-4128 Dec 22 j 10:40	1°J.10'01	-9°13'21
				minimum elong	-4128 Dec 22 j 10:26	1°J.10'00	9°13'30
conjunction	-4134 Dec 14 j 03:34	22°M.16'35	-6°53'44	max. Earth dist.	-4128 Dec 25 j 18:46	1°J.15'51	39.91270 AU
minimum elong	-4134 Dec 14 j 03:22	22°M.16'34	6°53'53	morning rise	-4127 Jan 03 j 15:55	1°J.31'12	
max. Earth dist.	-4134 Dec 17 j 09:59	22°M.22'31	38.40451 AU	retrograde	-4127 Apr 05 j 09:50	3°J.04'35	
morning rise	-4134 Dec 27 j 20:07	22°M.41'14		min. Earth dist.	-4127 Jun 24 j 07:44	1°J.58'55	38.06617 AU
retrograde	-4133 Mar 28 j 04:18	24°M.15'47		opposition	-4127 Jun 27 j 16:22	1°J.54'28	-9°53'42
min. Earth dist.	-4133 Jun 15 j 20:09	23°M.08'32	36.54663 AU	direct	-4127 Sep 16 j 01:05	0°J.46'12	
opposition	-4133 Jun 19 j 01:53	23°M.04'08	-7°29'45	evening set	-4127 Dec 12 j 05:36	2°J.15'05	
direct	-4133 Sep 07 j 08:11	21°M.54'13					
evening set	-4133 Dec 02 j 12:26	23°M.24'20		conjunction	-4127 Dec 24 j 02:29	2°J.35'32	-9°34'27
				minimum elong	-4127 Dec 24 j 02:16	2°J.35'31	9°34'36
conjunction	-4133 Dec 15 j 21:49	23°M.48'17	-7°18'34	max. Earth dist.	-4127 Dec 27 j 11:20	2°J.41'22	40.16285 AU
minimum elong	-4133 Dec 15 j 21:37	23°M.48'16	7°18'42	morning rise	-4126 Jan 05 j 01:05	2°J.56'07	
max. Earth dist.	-4133 Dec 19 j 04:09	23°M.54'09	38.65649 AU	retrograde	-4126 Apr 07 j 03:05	4°J.29'25	
morning rise	-4133 Dec 29 j 09:05	24°M.12'22		min. Earth dist.	-4126 Jun 26 j 01:48	3°J.23'58	38.31789 AU
retrograde	-4132 Mar 28 j 22:49	25°M.46'38		opposition	-4126 Jun 29 j 09:29	3°J.19'35	-10°15'22
min. Earth dist.	-4132 Jun 16 j 14:28	24°M.39'41	36.80011 AU	direct	-4126 Sep 17 j 16:37	2°J.11'37	
opposition	-4132 Jun 19 j 21:22	24°M.35'14	-7°55'26	evening set	-4126 Dec 14 j 04:14	3°J.40'25	
direct	-4132 Sep 08 j 03:38	23°M.25'34					
evening set	-4132 Dec 03 j 11:35	24°M.55'23		conjunction	-4126 Dec 25 j 18:17	4°J.00'16	-9°54'56
				minimum elong	-4126 Dec 25 j 18:04	4°J.00'15	9°55'06
conjunction	-4132 Dec 16 j 15:24	25°M.18'46	-7°42'47	max. Earth dist.	-4126 Dec 29 j 03:14	4°J.06'04	40.41165 AU
minimum elong	-4132 Dec 16 j 15:11	25°M.18'45	7°42'57	morning rise	-4125 Jan 06 j 09:45	4°J.20'13	
max. Earth dist.	-4132 Dec 19 j 22:01	25°M.24'37	38.90776 AU	retrograde	-4125 Apr 08 j 19:03	5°J.53'28	
morning rise	-4132 Dec 29 j 21:18	25°M.42'18		min. Earth dist.	-4125 Jun 27 j 17:56	4°J.48'18	38.56778 AU
retrograde	-4131 Mar 30 j 18:00	27°M.16'19		opposition	-4125 Jul 01 j 01:54	4°J.43'56	-10°36'24
min. Earth dist.	-4131 Jun 18 j 09:44	26°M.09'34	37.05341 AU	direct	-4125 Sep 19 j 09:25	3°J.36'15	
opposition	-4131 Jun 21 j 16:34	26°M.05'09	-8°20'26	evening set	-4125 Dec 16 j 02:54	5°J.05'00	
direct	-4131 Sep 09 j 22:01	24°M.55'45					
evening set	-4131 Dec 05 j 10:35	26°M.25'18		conjunction	-4125 Dec 27 j 09:39	5°J.24'13	-10°14'51
				minimum elong	-4125 Dec 27 j 09:27	5°J.24'12	10°15'01
conjunction	-4131 Dec 18 j 08:51	26°M.48'07	-8°06'22	max. Earth dist.	-4125 Dec 30 j 17:43	5°J.29'55	40.65821 AU
minimum elong	-4131 Dec 18 j 08:38	26°M.48'06	8°06'30	morning rise	-4124 Jan 07 j 18:01	5°J.43'33	
max. Earth dist.	-4131 Dec 21 j 16:37	26°M.54'01	39.15906 AU	retrograde	-4124 Apr 09 j 11:48	7°J.16'46	

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Attention, astronomical year style is used: The year -4124 in astronomical counting style is the year 4125 BCE in historical counting style.

min. Earth dist.	-4124 Jun 28 j 10:36	6°♂11'50	38.81531 AU	max. Earth dist.	-4117 Jan 08 j 19:15	14°♂54'43	42.30859 AU
opposition	-4124 Jul 01 j 18:13	6°♂07'30	-10°56'49	morning rise	-4117 Jan 14 j 11:21	15°♂04'00	
direct	-4124 Sep 20 j 00:51	5°♂00'05		retrograde	-4117 Apr 19 j 12:03	16°♂37'32	
evening set	-4124 Dec 17 j 01:18	6°♂28'49		min. Earth dist.	-4117 Jul 08 j 19:54	15°♂33'55	40.47254 AU
				opposition	-4117 Jul 12 j 01:38	15°♂29'48	-13°03'03
conjunction	-4124 Dec 28 j 00:47	6°♂47'25	-10°34'11	direct	-4117 Sep 30 j 11:26	14°♂23'57	
minimum elong	-4124 Dec 28 j 00:33	6°♂47'24	10°34'21	evening set	-4117 Dec 29 j 13:39	15°♂53'03	
max. Earth dist.	-4124 Dec 31 j 09:29	6°♂53'08	40.90208 AU				
morning rise	-4123 Jan 08 j 01:31	7°♂06'06		conjunction	-4116 Jan 07 j 01:58	16°♂06'56	-12°33'55
retrograde	-4123 Apr 11 j 01:08	8°♂39'20		minimum elong	-4116 Jan 07 j 01:47	16°♂06'55	12°34'06
min. Earth dist.	-4123 Jun 30 j 03:32	7°♂34'34	39.05975 AU	max. Earth dist.	-4116 Jan 10 j 09:15	16°♂12'20	42.53694 AU
opposition	-4123 Jul 03 j 10:10	7°♂30'18	-11°16'38	morning rise	-4116 Jan 15 j 15:03	16°♂20'53	
direct	-4123 Sep 21 j 18:47	6°♂23'09		retrograde	-4116 Apr 19 j 22:37	17°♂54'34	
evening set	-4123 Dec 18 j 23:55	7°♂51'52		min. Earth dist.	-4116 Jul 09 j 10:34	16°♂51'07	40.70220 AU
				opposition	-4116 Jul 12 j 15:07	16°♂47'03	-13°18'43
conjunction	-4123 Dec 29 j 15:37	8°♂09'48	-10°52'58	direct	-4116 Oct 01 j 02:38	15°♂41'27	
minimum elong	-4123 Dec 29 j 15:24	8°♂09'48	10°53'08	evening set	-4116 Dec 30 j 11:57	17°♂10'42	
max. Earth dist.	-4122 Jan 01 j 22:54	8°♂15'24	41.14285 AU				
morning rise	-4122 Jan 09 j 08:40	8°♂27'51		conjunction	-4115 Jan 07 j 14:35	17°♂23'52	-12°48'49
retrograde	-4122 Apr 12 j 14:55	10°♂01'05		minimum elong	-4115 Jan 07 j 14:23	17°♂23'51	12°48'58
min. Earth dist.	-4122 Jul 01 j 18:35	8°♂56'34	39.30111 AU	max. Earth dist.	-4115 Jan 10 j 21:03	17°♂29'12	42.76390 AU
opposition	-4122 Jul 05 j 01:40	8°♂52'17	-11°35'50	morning rise	-4115 Jan 15 j 17:51	17°♂37'06	
direct	-4122 Sep 23 j 10:59	7°♂45'23		retrograde	-4115 Apr 21 j 10:44	19°♂10'58	
evening set	-4122 Dec 20 j 22:15	9°♂14'05		min. Earth dist.	-4115 Jul 10 j 22:54	18°♂07'47	40.93023 AU
				opposition	-4115 Jul 14 j 04:16	18°♂03'41	-13°33'50
conjunction	-4122 Dec 31 j 06:09	9°♂31'23	-11°11'11	direct	-4115 Oct 02 j 16:35	16°♂58'19	
minimum elong	-4122 Dec 31 j 05:55	9°♂31'22	11°11'21	evening set	-4114 Jan 01 j 10:24	18°♂27'46	
max. Earth dist.	-4121 Jan 03 j 13:54	9°♂36'58	41.38046 AU				
morning rise	-4121 Jan 10 j 15:16	9°♂48'46		conjunction	-4114 Jan 09 j 03:04	18°♂40'12	-13°03'10
retrograde	-4121 Apr 14 j 04:26	11°♂22'01		minimum elong	-4114 Jan 09 j 02:53	18°♂40'12	13°03'21
min. Earth dist.	-4121 Jul 03 j 11:16	10°♂17'38	39.53942 AU	max. Earth dist.	-4114 Jan 12 j 09:33	18°♂45'30	42.98895 AU
opposition	-4121 Jul 06 j 16:53	10°♂13'27	-11°54'28	morning rise	-4114 Jan 16 j 20:24	18°♂52'42	
direct	-4121 Sep 25 j 03:21	9°♂06'45		retrograde	-4114 Apr 23 j 01:34	20°♂26'47	
evening set	-4121 Dec 22 j 20:40	10°♂35'28		min. Earth dist.	-4114 Jul 12 j 13:06	19°♂23'45	41.15621 AU
				opposition	-4114 Jul 15 j 17:12	19°♂19'45	-13°48'23
conjunction	-4120 Jan 01 j 20:22	10°♂52'06	-11°28'51	direct	-4114 Oct 04 j 03:44	18°♂14'36	
minimum elong	-4120 Jan 01 j 20:10	10°♂52'05	11°29'02	evening set	-4113 Jan 03 j 09:12	19°♂44'18	
max. Earth dist.	-4120 Jan 05 j 03:24	10°♂57'37	41.61534 AU				
morning rise	-4120 Jan 11 j 21:06	11°♂08'50		conjunction	-4113 Jan 10 j 15:31	19°♂55'59	-13°17'01
retrograde	-4120 Apr 14 j 19:40	12°♂42'06		minimum elong	-4113 Jan 10 j 15:21	19°♂55'58	13°17'11
min. Earth dist.	-4120 Jul 04 j 01:20	11°♂37'56	39.77516 AU	max. Earth dist.	-4113 Jan 13 j 21:52	20°♂01'15	43.21173 AU
opposition	-4120 Jul 07 j 07:28	11°♂33'44	-12°12'30	morning rise	-4113 Jan 17 j 22:15	20°♂07'42	
direct	-4120 Sep 25 j 16:54	10°♂27'15		retrograde	-4113 Apr 24 j 14:29	21°♂42'03	
evening set	-4120 Dec 23 j 18:55	11°♂56'01		min. Earth dist.	-4113 Jul 14 j 01:56	20°♂39'13	41.37932 AU
				opposition	-4113 Jul 17 j 05:45	20°♂35'15	-14°02'24
conjunction	-4119 Jan 02 j 10:07	12°♂11'59	-11°45'57	direct	-4113 Oct 05 j 15:25	19°♂30'19	
minimum elong	-4119 Jan 02 j 09:54	12°♂11'58	11°46'08	evening set	-4112 Jan 05 j 08:16	21°♂00'18	
max. Earth dist.	-4119 Jan 05 j 16:52	12°♂17'26	41.84793 AU				
morning rise	-4119 Jan 12 j 02:27	12°♂28'02		conjunction	-4112 Jan 12 j 03:36	21°♂11'13	-13°30'22
retrograde	-4119 Apr 16 j 10:29	14°♂01'22		minimum elong	-4112 Jan 12 j 03:25	21°♂11'12	13°30'33
min. Earth dist.	-4119 Jul 05 j 16:31	12°♂57'21	40.00910 AU	max. Earth dist.	-4112 Jan 15 j 08:31	21°♂16'21	43.43128 AU
opposition	-4119 Jul 08 j 21:58	12°♂53'12	-12°29'57	morning rise	-4112 Jan 18 j 23:24	21°♂22'08	
direct	-4119 Sep 27 j 06:05	11°♂46'56		retrograde	-4112 Apr 25 j 03:33	22°♂56'46	
evening set	-4119 Dec 25 j 17:03	13°♂15'45		min. Earth dist.	-4112 Jul 14 j 14:58	21°♂54'06	41.59906 AU
				opposition	-4112 Jul 17 j 18:07	21°♂50'11	-14°15'55
conjunction	-4118 Jan 03 j 23:40	13°♂31'03	-12°02'30	direct	-4112 Oct 06 j 03:08	20°♂45'28	
minimum elong	-4118 Jan 03 j 23:28	13°♂31'02	12°02'41	evening set	-4111 Jan 06 j 07:44	22°♂15'47	
max. Earth dist.	-4118 Jan 07 j 07:09	13°♂36'31	42.07897 AU				
morning rise	-4118 Jan 13 j 07:07	13°♂46'24		conjunction	-4111 Jan 12 j 15:41	22°♂25'53	-13°43'14
retrograde	-4118 Apr 17 j 22:58	15°♂19'49		minimum elong	-4111 Jan 12 j 15:32	22°♂25'52	13°43'25
min. Earth dist.	-4118 Jul 07 j 06:43	14°♂15'59	40.24143 AU	max. Earth dist.	-4111 Jan 15 j 20:55	22°♂31'01	43.64717 AU
opposition	-4118 Jul 10 j 12:01	14°♂11'52	-12°46'47	morning rise	-4111 Jan 18 j 23:56	22°♂35'59	
direct	-4118 Sep 28 j 21:25	13°♂05'48		retrograde	-4111 Apr 26 j 12:50	24°♂10'56	
evening set	-4118 Dec 27 j 15:26	14°♂34'45		min. Earth dist.	-4111 Jul 16 j 04:38	23°♂08'23	41.81472 AU
				opposition	-4111 Jul 19 j 06:18	23°♂04'33	-14°28'56
conjunction	-4117 Jan 05 j 12:55	14°♂49'21	-12°18'29	direct	-4111 Oct 07 j 17:48	22°♂00'02	
minimum elong	-4117 Jan 05 j 12:43	14°♂49'20	12°18'39	evening set	-4110 Jan 08 j 07:44	23°♂30'42	

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Attention, astronomical year style is used: The year -4110 in astronomical counting style is the year 4111 BCE in historical counting style.

conjunction	-4110 Jan 14 j 03:26	23° \nearrow 39'57	-13°55'38	retrograde	-4104 May 04 j 14:04	2° \searrow 32'53	
minimum elong	-4110 Jan 14 j 03:16	23° \nearrow 39'56	13°55'49	min. Earth dist.	-4104 Jul 24 j 14:59	1° \searrow 31'15	43.22219 AU
max. Earth dist.	-4110 Jan 17 j 06:49	23° \nearrow 44'57	43.85893 AU	opposition	-4104 Jul 27 j 11:43	1° \searrow 27'44	-15°46'38
morning rise	-4110 Jan 19 j 23:22	23° \nearrow 49'12		direct	-4104 Oct 16 j 03:14	0° \searrow 24'23	
retrograde	-4110 Apr 27 j 23:46	25° \nearrow 24'30					
min. Earth dist.	-4110 Jul 17 j 16:29	24° \nearrow 22'08	42.02609 AU	conjunction	-4103 Jan 22 j 07:31	2° \searrow 01'09	-15°09'40
opposition	-4110 Jul 20 j 18:12	24° \nearrow 18'18	-14°41'28	minimum elong	-4103 Jan 22 j 07:25	2° \searrow 01'08	15°09'51
direct	-4110 Oct 09 j 06:32	23° \nearrow 13'58		max. Earth dist.	-4103 Jan 25 j 07:13	2° \searrow 05'45	45.24439 AU
evening set	-4109 Jan 10 j 08:25	24° \nearrow 45'03		retrograde	-4103 May 06 j 00:53	3° \searrow 42'28	
				min. Earth dist.	-4103 Jul 26 j 00:44	2° \searrow 41'02	43.41257 AU
conjunction	-4109 Jan 15 j 15:05	24° \nearrow 53'23	-14°07'36	opposition	-4103 Jul 28 j 21:46	2° \searrow 37'31	-15°55'49
minimum elong	-4109 Jan 15 j 14:56	24° \nearrow 53'23	14°07'46	direct	-4103 Oct 17 j 12:57	1° \searrow 34'20	
max. Earth dist.	-4109 Jan 18 j 18:06	24° \nearrow 58'20	44.06632 AU				
morning rise	-4109 Jan 20 j 21:56	25° \nearrow 01'44		conjunction	-4102 Jan 23 j 17:29	3° \searrow 10'44	-15°18'26
retrograde	-4109 Apr 29 j 10:33	26° \nearrow 37'26		minimum elong	-4102 Jan 23 j 17:22	3° \searrow 10'44	15°18'36
min. Earth dist.	-4109 Jul 19 j 06:00	25° \nearrow 35'08	42.23321 AU	max. Earth dist.	-4102 Jan 26 j 16:12	3° \searrow 15'15	45.43202 AU
opposition	-4109 Jul 22 j 05:46	25° \nearrow 31'25	-14°53'32	retrograde	-4102 May 07 j 13:06	4° \searrow 51'40	
direct	-4109 Oct 10 j 19:10	24° \nearrow 27'14		min. Earth dist.	-4102 Jul 27 j 12:02	3° \searrow 50'21	43.60018 AU
evening set	-4108 Jan 12 j 10:07	25° \nearrow 58'49		opposition	-4102 Jul 30 j 07:48	3° \searrow 46'55	-16°04'34
				direct	-4102 Oct 18 j 20:54	2° \searrow 43'56	
conjunction	-4108 Jan 17 j 02:28	26° \nearrow 06'10	-14°19'05				
minimum elong	-4108 Jan 17 j 02:19	26° \nearrow 06'10	14°19'16	conjunction	-4101 Jan 25 j 03:36	4° \searrow 19'58	-15°26'46
max. Earth dist.	-4108 Jan 20 j 04:50	26° \nearrow 11'03	44.26982 AU	minimum elong	-4101 Jan 25 j 03:30	4° \searrow 19'58	15°26'57
morning rise	-4108 Jan 21 j 18:51	26° \nearrow 13'32		max. Earth dist.	-4101 Jan 28 j 02:29	4° \searrow 24'29	45.61665 AU
retrograde	-4108 Apr 29 j 22:08	27° \nearrow 49'43		retrograde	-4101 May 08 j 23:03	6° \searrow 00'31	
min. Earth dist.	-4108 Jul 19 j 17:20	26° \nearrow 47'34	42.43652 AU	min. Earth dist.	-4101 Jul 28 j 22:39	4° \searrow 59'21	43.78428 AU
opposition	-4108 Jul 22 j 17:01	26° \nearrow 43'52	-15°05'07	opposition	-4101 Jul 31 j 17:21	4° \searrow 55'59	-16°12'52
direct	-4108 Oct 11 j 06:18	25° \nearrow 39'51		direct	-4101 Oct 20 j 06:13	3° \searrow 53'10	
evening set	-4107 Jan 13 j 12:59	27° \nearrow 12'01					
conjunction	-4107 Jan 17 j 13:18	27° \nearrow 18'18	-14°30'08	conjunction	-4100 Jan 26 j 13:25	5° \searrow 28'53	-15°34'41
minimum elong	-4107 Jan 17 j 13:10	27° \nearrow 18'18	14°30'19	minimum elong	-4100 Jan 26 j 13:19	5° \searrow 28'52	15°34'52
morning rise	-4107 Jan 21 j 13:40	27° \nearrow 24'35		max. Earth dist.	-4100 Jan 29 j 10:14	5° \searrow 33'14	45.79758 AU
max. Earth dist.	-4107 Jan 20 j 14:30	27° \nearrow 23'05	44.46978 AU	retrograde	-4100 May 09 j 09:40	7° \searrow 09'02	
retrograde	-4107 May 01 j 11:19	29° \nearrow 01'22		min. Earth dist.	-4100 Jul 29 j 08:36	6° \searrow 08'02	43.96445 AU
min. Earth dist.	-4107 Jul 21 j 05:14	27° \nearrow 59'19	42.63674 AU	opposition	-4100 Aug 01 j 02:55	6° \searrow 04'42	-16°20'45
opposition	-4107 Jul 24 j 04:10	27° \nearrow 55'40	-15°16'13	direct	-4100 Oct 20 j 15:09	5° \searrow 02'04	
direct	-4107 Oct 12 j 15:04	26° \nearrow 51'48		conjunction	-4099 Jan 26 j 23:04	6° \searrow 37'25	-15°42'14
evening set	-4106 Jan 15 j 18:33	28° \nearrow 24'46		minimum elong	-4099 Jan 26 j 22:59	6° \searrow 37'25	15°42'25
				max. Earth dist.	-4099 Jan 29 j 19:44	6° \searrow 41'45	45.97416 AU
conjunction	-4106 Jan 19 j 00:13	28° \nearrow 29'49	-14°40'42	retrograde	-4099 May 10 j 16:08	8° \searrow 17'13	
minimum elong	-4106 Jan 19 j 00:05	28° \nearrow 29'48	14°40'53	min. Earth dist.	-4099 Jul 30 j 20:16	7° \searrow 16'17	44.13991 AU
morning rise	-4106 Jan 22 j 05:47	28° \nearrow 34'51		opposition	-4099 Aug 02 j 12:25	7° \searrow 13'03	-16°28'15
max. Earth dist.	-4106 Jan 22 j 01:52	28° \nearrow 34'35	44.66696 AU	direct	-4099 Oct 22 j 03:06	6° \searrow 10'35	
	-4106 Mar 30 j 19:46	0° \searrow					
retrograde	-4106 May 02 j 20:19	0° \searrow 12'24		conjunction	-4098 Jan 28 j 08:46	7° \searrow 45'34	-15°49'23
	-4106 Jun 05 j 05:31	30° \nearrow		minimum elong	-4098 Jan 28 j 08:42	7° \searrow 45'34	15°49'33
min. Earth dist.	-4106 Jul 22 j 16:56	29° \nearrow 10'28	42.83422 AU	max. Earth dist.	-4098 Jan 31 j 03:49	7° \searrow 49'48	46.14605 AU
opposition	-4106 Jul 25 j 14:52	29° \nearrow 06'53	-15°26'50	retrograde	-4098 May 12 j 00:23	9° \searrow 25'00	
direct	-4106 Oct 14 j 03:21	28° \nearrow 03'10		min. Earth dist.	-4098 Aug 01 j 05:36	8° \searrow 24'12	44.31040 AU
evening set	-4105 Jan 18 j 05:21	29° \nearrow 37'16		opposition	-4098 Aug 03 j 21:30	8° \searrow 20'59	-16°35'22
				direct	-4098 Oct 23 j 14:08	7° \searrow 18'38	
conjunction	-4105 Jan 20 j 10:51	29° \nearrow 40'44	-14°50'49				
minimum elong	-4105 Jan 20 j 10:44	29° \nearrow 40'44	14°51'00	conjunction	-4097 Jan 29 j 18:13	8° \searrow 53'16	-15°56'11
morning rise	-4105 Jan 22 j 16:14	29° \nearrow 44'12		minimum elong	-4097 Jan 29 j 18:08	8° \searrow 53'16	15°56'22
max. Earth dist.	-4105 Jan 23 j 11:01	29° \nearrow 45'25	44.86171 AU	max. Earth dist.	-4097 Feb 01 j 11:50	8° \searrow 57'23	46.31287 AU
	-4105 Feb 01 j 22:17	0° \searrow		retrograde	-4097 May 13 j 12:12	10° \searrow 32'19	
retrograde	-4105 May 04 j 05:11	1° \searrow 22'53		min. Earth dist.	-4097 Aug 02 j 16:35	9° \searrow 31'33	44.47600 AU
min. Earth dist.	-4105 Jul 24 j 03:10	0° \searrow 21'08	43.02939 AU	opposition	-4097 Aug 05 j 06:37	9° \searrow 28'26	-16°42'06
opposition	-4105 Jul 27 j 01:23	0° \searrow 17'32	-15°36'58	direct	-4097 Oct 24 j 21:34	8° \searrow 26'12	
	-4105 Aug 10 j 11:56	30° \nearrow					
direct	-4105 Oct 15 j 15:06	29° \nearrow 14'00		conjunction	-4096 Jan 31 j 03:28	10° \searrow 00'29	-16°02'37
	-4105 Dec 18 j 02:05	0° \searrow		minimum elong	-4096 Jan 31 j 03:25	10° \searrow 00'29	16°02'48
				max. Earth dist.	-4096 Feb 02 j 20:44	10° \searrow 04'33	46.47508 AU
conjunction	-4104 Jan 21 j 21:13	0° \searrow 51'10	-15°00'28	retrograde	-4096 May 13 j 20:42	11° \searrow 39'08	
minimum elong	-4104 Jan 21 j 21:05	0° \searrow 51'09	15°00'39	min. Earth dist.	-4096 Aug 03 j 02:06	10° \searrow 38'26	44.63701 AU
max. Earth dist.	-4104 Jan 24 j 21:40	0° \searrow 55'50	45.05412 AU	opposition	-4096 Aug 05 j 15:18	10° \searrow 35'22	-16°48'28

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Attention, astronomical year style is used: The year -4096 in astronomical counting style is the year 4097 BCE in historical counting style.

direct	-4096 Oct 25 j 06:33	9° $\overline{33}$ '14		minimum elong	-4087 Feb 09 j 07:24	19° $\overline{34}$ '21	16°43'44
				max. Earth dist.	-4087 Feb 11 j 16:22	19° $\overline{34}$ '48	47.78993 AU
conjunction	-4095 Jan 31 j 12:25	11° $\overline{30}$ '09	-16°08'40	retrograde	-4087 May 23 j 19:13	21° $\overline{32}$ '03	
minimum elong	-4095 Jan 31 j 12:21	11° $\overline{30}$ '09	16°08'52	min. Earth dist.	-4087 Aug 13 j 09:37	20° $\overline{32}$ '08	45.94376 AU
max. Earth dist.	-4095 Feb 03 j 03:46	11° $\overline{31}$ '05	46.63317 AU	opposition	-4087 Aug 15 j 14:14	20° $\overline{31}$ '33	-17°28'10
retrograde	-4095 May 15 j 06:02	12° $\overline{34}$ '24		direct	-4087 Nov 04 j 10:01	19° $\overline{31}$ '30	
min. Earth dist.	-4095 Aug 04 j 11:16	11° $\overline{34}$ '47	44.79436 AU				
opposition	-4095 Aug 06 j 23:53	11° $\overline{34}$ '45	-16°54'25	conjunction	-4086 Feb 10 j 15:30	20° $\overline{34}$ '51	-16°46'23
direct	-4095 Oct 26 j 14:24	10° $\overline{33}$ '44		minimum elong	-4086 Feb 10 j 15:31	20° $\overline{34}$ '51	16°46'33
				max. Earth dist.	-4086 Feb 12 j 23:34	20° $\overline{35}$ '14	47.91806 AU
conjunction	-4094 Feb 01 j 21:17	12° $\overline{31}$ '18	-16°14'21	retrograde	-4086 May 25 j 03:23	22° $\overline{32}$ '17	
minimum elong	-4094 Feb 01 j 21:15	12° $\overline{31}$ '18	16°14'32	min. Earth dist.	-4086 Aug 14 j 17:36	21° $\overline{32}$ '28	46.06969 AU
max. Earth dist.	-4094 Feb 04 j 12:54	12° $\overline{31}$ '14	46.78781 AU	opposition	-4086 Aug 16 j 21:25	21° $\overline{32}$ '55	-17°30'49
retrograde	-4094 May 16 j 11:36	13° $\overline{35}$ '10		direct	-4086 Nov 05 j 16:57	20° $\overline{32}$ '05	
min. Earth dist.	-4094 Aug 05 j 21:17	12° $\overline{35}$ '03	44.94837 AU				
opposition	-4094 Aug 08 j 08:17	12° $\overline{34}$ '38	-16°59'59	conjunction	-4085 Feb 11 j 23:22	21° $\overline{35}$ '05	-16°48'53
direct	-4094 Oct 28 j 01:34	11° $\overline{34}$ '53		minimum elong	-4085 Feb 11 j 23:24	21° $\overline{35}$ '05	16°49'02
				max. Earth dist.	-4085 Feb 14 j 05:04	21° $\overline{35}$ '19	48.04100 AU
conjunction	-4093 Feb 03 j 06:02	13° $\overline{31}$ '57	-16°19'38	retrograde	-4085 May 26 j 12:56	23° $\overline{32}$ '14	
minimum elong	-4093 Feb 03 j 05:59	13° $\overline{31}$ '57	16°19'49	min. Earth dist.	-4085 Aug 16 j 02:00	22° $\overline{32}$ '27	46.19060 AU
max. Earth dist.	-4093 Feb 05 j 20:13	13° $\overline{32}$ '47	46.93953 AU	opposition	-4085 Aug 18 j 04:26	22° $\overline{32}$ '49	-17°33'08
retrograde	-4093 May 17 j 18:19	14° $\overline{35}$ '27		direct	-4085 Nov 06 j 22:15	21° $\overline{32}$ '08	
min. Earth dist.	-4093 Aug 07 j 05:01	13° $\overline{35}$ '00	45.09958 AU				
opposition	-4093 Aug 09 j 16:17	13° $\overline{35}$ '03	-17°05'09	conjunction	-4084 Feb 13 j 07:10	22° $\overline{35}$ '00	-16°51'04
direct	-4093 Oct 29 j 11:03	12° $\overline{35}$ '13		minimum elong	-4084 Feb 13 j 07:11	22° $\overline{35}$ '00	16°51'15
				max. Earth dist.	-4084 Feb 15 j 12:41	22° $\overline{35}$ '13	48.15908 AU
conjunction	-4092 Feb 04 j 14:30	14° $\overline{32}$ '08	-16°24'33	retrograde	-4084 May 26 j 18:26	24° $\overline{32}$ '52	
minimum elong	-4092 Feb 04 j 14:29	14° $\overline{32}$ '08	16°24'43	min. Earth dist.	-4084 Aug 16 j 10:39	23° $\overline{33}$ '05	46.30671 AU
max. Earth dist.	-4092 Feb 07 j 04:01	14° $\overline{32}$ '56	47.08854 AU	opposition	-4084 Aug 18 j 11:22	23° $\overline{32}$ '42	-17°35'09
retrograde	-4092 May 18 j 03:04	16° $\overline{30}$ '19		direct	-4084 Nov 07 j 06:40	22° $\overline{32}$ '57	
min. Earth dist.	-4092 Aug 07 j 14:40	15° $\overline{30}$ '55	45.24822 AU				
opposition	-4092 Aug 10 j 00:24	14° $\overline{35}$ '02	-17°09'55	conjunction	-4083 Feb 13 j 14:35	23° $\overline{35}$ '34	-16°52'57
direct	-4092 Oct 29 j 19:28	13° $\overline{35}$ '20		minimum elong	-4083 Feb 13 j 14:37	23° $\overline{35}$ '34	16°53'07
				max. Earth dist.	-4083 Feb 15 j 18:11	24° $\overline{30}$ '40	48.27285 AU
conjunction	-4091 Feb 04 j 22:50	15° $\overline{32}$ '57	-16°29'04	retrograde	-4083 May 28 j 00:10	25° $\overline{33}$ '09	
minimum elong	-4091 Feb 04 j 22:47	15° $\overline{32}$ '57	16°29'14	min. Earth dist.	-4083 Aug 17 j 17:30	24° $\overline{33}$ '28	46.41877 AU
max. Earth dist.	-4091 Feb 07 j 12:19	15° $\overline{33}$ '43	47.23515 AU	opposition	-4083 Aug 19 j 18:06	24° $\overline{33}$ '05	-17°36'51
retrograde	-4091 May 19 j 12:07	17° $\overline{30}$ '54		direct	-4083 Nov 08 j 14:29	23° $\overline{32}$ '24	
min. Earth dist.	-4091 Aug 08 j 22:50	16° $\overline{30}$ '31	45.39416 AU				
opposition	-4091 Aug 11 j 08:15	16° $\overline{30}$ '24	-17°14'18	conjunction	-4082 Feb 14 j 22:02	24° $\overline{35}$ '47	-16°54'32
direct	-4091 Oct 31 j 02:46	15° $\overline{30}$ '16		minimum elong	-4082 Feb 14 j 22:03	24° $\overline{35}$ '47	16°54'42
				max. Earth dist.	-4082 Feb 17 j 00:52	25° $\overline{30}$ '25	48.38273 AU
conjunction	-4090 Feb 06 j 07:03	16° $\overline{33}$ '26	-16°33'13	retrograde	-4082 May 29 j 05:50	26° $\overline{33}$ '46	
minimum elong	-4090 Feb 06 j 07:02	16° $\overline{33}$ '26	16°33'24	min. Earth dist.	-4082 Aug 19 j 02:08	25° $\overline{33}$ '42	46.52728 AU
max. Earth dist.	-4090 Feb 08 j 18:47	16° $\overline{33}$ '05	47.37904 AU	opposition	-4082 Aug 21 j 00:41	25° $\overline{33}$ '09	-17°38'12
retrograde	-4090 May 20 j 22:40	18° $\overline{30}$ '58		direct	-4082 Nov 09 j 23:18	24° $\overline{33}$ '32	
min. Earth dist.	-4090 Aug 10 j 07:09	17° $\overline{30}$ '48	45.53732 AU				
opposition	-4090 Aug 12 j 15:53	17° $\overline{30}$ '00	-17°18'18	conjunction	-4081 Feb 16 j 05:28	26° $\overline{30}$ '41	-16°55'46
direct	-4090 Nov 01 j 07:55	16° $\overline{30}$ '53		minimum elong	-4081 Feb 16 j 05:32	26° $\overline{30}$ '41	16°55'56
				max. Earth dist.	-4081 Feb 18 j 07:50	26° $\overline{30}$ '41	48.48945 AU
conjunction	-4089 Feb 07 j 15:19	17° $\overline{33}$ '38	-16°37'01	retrograde	-4081 May 30 j 13:08	27° $\overline{33}$ '45	
minimum elong	-4089 Feb 07 j 15:18	17° $\overline{33}$ '38	16°37'11	min. Earth dist.	-4081 Aug 20 j 08:42	26° $\overline{33}$ '09	46.63261 AU
max. Earth dist.	-4089 Feb 10 j 03:07	17° $\overline{34}$ '17	47.51988 AU	opposition	-4081 Aug 22 j 07:05	26° $\overline{33}$ '53	-17°39'13
retrograde	-4089 May 22 j 04:54	19° $\overline{31}$ '53		direct	-4081 Nov 11 j 06:20	25° $\overline{33}$ '21	
min. Earth dist.	-4089 Aug 11 j 16:28	18° $\overline{31}$ '47	45.67698 AU				
opposition	-4089 Aug 13 j 23:28	18° $\overline{31}$ '04	-17°21'56	conjunction	-4080 Feb 17 j 12:28	27° $\overline{30}$ '18	-16°56'41
direct	-4089 Nov 02 j 16:53	17° $\overline{30}$ '46		minimum elong	-4080 Feb 17 j 12:31	27° $\overline{30}$ '18	16°56'51
				max. Earth dist.	-4080 Feb 19 j 13:02	27° $\overline{30}$ '11	48.59317 AU
conjunction	-4088 Feb 08 j 23:22	18° $\overline{34}$ '36	-16°40'27	retrograde	-4080 May 30 j 23:39	28° $\overline{33}$ '06	
minimum elong	-4088 Feb 08 j 23:23	18° $\overline{34}$ '36	16°40'39	min. Earth dist.	-4080 Aug 20 j 16:02	27° $\overline{33}$ '34	46.73517 AU
max. Earth dist.	-4088 Feb 11 j 09:29	18° $\overline{34}$ '58	47.65708 AU	opposition	-4080 Aug 22 j 13:30	27° $\overline{33}$ '52	-17°39'54
retrograde	-4088 May 22 j 10:49	20° $\overline{31}$ '34		direct	-4080 Nov 11 j 09:01	26° $\overline{33}$ '45	
min. Earth dist.	-4088 Aug 12 j 00:04	19° $\overline{31}$ '37	45.81267 AU				
opposition	-4088 Aug 14 j 06:50	19° $\overline{31}$ '45	-17°25'13	conjunction	-4079 Feb 17 j 19:39	28° $\overline{30}$ '43	-16°57'16
direct	-4088 Nov 03 j 02:11	18° $\overline{31}$ '45		minimum elong	-4079 Feb 17 j 19:43	28° $\overline{30}$ '43	16°57'26
				max. Earth dist.	-4079 Feb 19 j 20:26	28° $\overline{30}$ '33	48.69422 AU
conjunction	-4087 Feb 09 j 07:24	19° $\overline{34}$ '21	-16°43'34	retrograde	-4079 Jun 01 j 06:06	29° $\overline{33}$ '14	

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Attention, astronomical year style is used: The year -4079 in astronomical counting style is the year 4080 BCE in historical counting style.

min. Earth dist.	-4079 Aug 21 j 23:34	28° $\overline{3}$ 38'44	46.83485 AU	max. Earth dist.	-4071 Feb 27 j 16:47	6° \approx 11'05	49.36121 AU
opposition	-4079 Aug 23 j 19:44	28° $\overline{3}$ 36'36	-17°40'15	retrograde	-4071 Jun 09 j 04:43	7° \approx 40'47	
direct	-4079 Nov 12 j 15:34	27° $\overline{3}$ 36'15		min. Earth dist.	-4071 Aug 30 j 07:57	6° \approx 41'34	47.48247 AU
				opposition	-4071 Aug 31 j 18:30	6° \approx 39'54	-17°32'25
conjunction	-4078 Feb 19 j 02:39	29° $\overline{3}$ 05'48	-16°57'32	direct	-4071 Nov 20 j 21:29	5° \approx 40'06	
minimum elong	-4078 Feb 19 j 02:42	29° $\overline{3}$ 05'48	16°57'42				
max. Earth dist.	-4078 Feb 21 j 01:41	29° $\overline{3}$ 08'35	48.79250 AU	conjunction	-4070 Feb 27 j 09:08	7° \approx 08'20	-16°49'29
	-4078 Mar 31 j 20:34	0° \approx		minimum elong	-4070 Feb 27 j 09:15	7° \approx 08'21	16°49'38
retrograde	-4078 Jun 02 j 10:45	0° \approx 39'09		max. Earth dist.	-4070 Feb 28 j 21:09	7° \approx 10'26	49.42330 AU
	-4078 Aug 05 j 09:37	30° \overline{R} $\overline{3}$		retrograde	-4070 Jun 10 j 13:35	8° \approx 40'03	
min. Earth dist.	-4078 Aug 23 j 05:51	29° $\overline{3}$ 39'46	46.93155 AU	opposition	-4070 Sep 01 j 23:58	7° \approx 39'15	-17°30'12
opposition	-4078 Aug 25 j 01:53	29° $\overline{3}$ 37'38	-17°40'17	min. Earth dist.	-4070 Aug 31 j 14:55	7° \approx 40'50	47.54235 AU
direct	-4078 Nov 13 j 23:05	28° $\overline{3}$ 37'23		direct	-4070 Nov 22 j 00:54	6° \approx 39'29	
	-4077 Feb 15 j 14:49	0° \approx					
conjunction	-4077 Feb 20 j 09:39	0° \approx 06'46	-16°57'30	conjunction	-4069 Feb 28 j 15:41	8° \approx 07'34	-16°47'16
minimum elong	-4077 Feb 20 j 09:44	0° \approx 06'47	16°57'40	minimum elong	-4069 Feb 28 j 15:47	8° \approx 07'34	16°47'25
max. Earth dist.	-4077 Feb 22 j 07:57	0° \approx 09'30	48.88745 AU	max. Earth dist.	-4069 Mar 02 j 03:38	8° \approx 09'39	49.48170 AU
retrograde	-4077 Jun 03 j 15:25	1° \approx 39'55		retrograde	-4069 Jun 11 j 19:41	9° \approx 39'06	
min. Earth dist.	-4077 Aug 24 j 13:58	0° \approx 40'34	47.02470 AU	min. Earth dist.	-4069 Sep 01 j 21:24	8° \approx 39'53	47.59859 AU
opposition	-4077 Aug 26 j 07:55	0° \approx 38'32	-17°39'59	opposition	-4069 Sep 03 j 05:12	8° \approx 38'21	-17°27'42
	-4077 Oct 01 j 05:38	30° \overline{R} $\overline{3}$		direct	-4069 Nov 23 j 06:07	7° \approx 38'37	
direct	-4077 Nov 15 j 07:35	29° $\overline{3}$ 38'23		conjunction	-4068 Feb 29 j 21:59	9° \approx 06'35	-16°44'46
	-4077 Dec 29 j 14:28	0° \approx		minimum elong	-4068 Feb 29 j 22:07	9° \approx 06'36	16°44'54
				max. Earth dist.	-4068 Mar 02 j 08:04	9° \approx 08'34	49.53689 AU
conjunction	-4076 Feb 21 j 16:40	1° \approx 07'36	-16°57'09	retrograde	-4068 Jun 12 j 01:06	10° \approx 37'56	
minimum elong	-4076 Feb 21 j 16:44	1° \approx 07'36	16°57'18	min. Earth dist.	-4068 Sep 02 j 02:50	9° \approx 38'47	47.65181 AU
max. Earth dist.	-4076 Feb 23 j 14:02	1° \approx 10'16	48.97876 AU	opposition	-4068 Sep 03 j 10:26	9° \approx 37'16	-17°24'54
retrograde	-4076 Jun 03 j 21:49	2° \approx 40'33		direct	-4068 Nov 23 j 11:17	8° \approx 37'36	
min. Earth dist.	-4076 Aug 24 j 20:21	1° \approx 41'17	47.11371 AU				
opposition	-4076 Aug 26 j 13:51	1° \approx 39'17	-17°39'24	conjunction	-4067 Mar 02 j 04:09	10° \approx 05'27	-16°41'58
direct	-4076 Nov 15 j 14:31	0° \approx 39'13		minimum elong	-4067 Mar 02 j 04:16	10° \approx 05'27	16°42'06
				max. Earth dist.	-4067 Mar 03 j 13:36	10° \approx 07'23	49.58901 AU
conjunction	-4075 Feb 21 j 23:24	2° \approx 08'17	-16°56'32	retrograde	-4067 Jun 13 j 04:30	11° \approx 36'40	
minimum elong	-4075 Feb 21 j 23:29	2° \approx 08'17	16°56'42	min. Earth dist.	-4067 Sep 03 j 10:00	10° \approx 37'30	47.70195 AU
max. Earth dist.	-4075 Feb 23 j 18:39	2° \approx 10'49	49.06556 AU	opposition	-4067 Sep 04 j 15:44	10° \approx 36'04	-17°21'48
retrograde	-4075 Jun 05 j 06:52	3° \approx 41'02		direct	-4067 Nov 24 j 19:15	9° \approx 36'27	
min. Earth dist.	-4075 Aug 26 j 04:08	2° \approx 41'47	47.19799 AU				
opposition	-4075 Aug 27 j 19:52	2° \approx 39'52	-17°38'32	conjunction	-4066 Mar 03 j 10:30	11° \approx 04'12	-16°38'54
direct	-4075 Nov 16 j 18:36	1° \approx 39'54		minimum elong	-4066 Mar 03 j 10:39	11° \approx 04'13	16°39'02
				max. Earth dist.	-4066 Mar 04 j 19:10	11° \approx 06'06	49.63823 AU
conjunction	-4074 Feb 23 j 06:27	3° \approx 08'47	-16°55'39	retrograde	-4066 Jun 14 j 09:30	12° \approx 35'17	
minimum elong	-4074 Feb 23 j 06:32	3° \approx 08'48	16°55'47	opposition	-4066 Sep 05 j 20:41	11° \approx 34'47	-17°18'24
max. Earth dist.	-4074 Feb 25 j 01:11	3° \approx 11'17	49.14733 AU	min. Earth dist.	-4066 Sep 04 j 15:08	11° \approx 36'12	47.74890 AU
retrograde	-4074 Jun 06 j 13:46	4° \approx 41'20		direct	-4066 Nov 26 j 01:51	10° \approx 35'14	
min. Earth dist.	-4074 Aug 27 j 11:38	3° \approx 42'06	47.27683 AU				
opposition	-4074 Aug 29 j 01:38	3° \approx 40'16	-17°37'24	conjunction	-4065 Mar 04 j 16:42	12° \approx 02'55	-16°35'32
direct	-4074 Nov 18 j 00:10	2° \approx 40'21		minimum elong	-4065 Mar 04 j 16:49	12° \approx 02'55	16°35'40
				max. Earth dist.	-4065 Mar 05 j 23:25	12° \approx 04'41	49.68408 AU
conjunction	-4073 Feb 24 j 13:20	4° \approx 09'05	-16°54'30	retrograde	-4065 Jun 15 j 17:37	13° \approx 33'53	
minimum elong	-4073 Feb 24 j 13:26	4° \approx 09'05	16°54'39	min. Earth dist.	-4065 Sep 05 j 21:57	12° \approx 34'49	47.79241 AU
max. Earth dist.	-4073 Feb 26 j 05:32	4° \approx 11'26	49.22375 AU	opposition	-4065 Sep 07 j 01:50	12° \approx 33'29	-17°14'44
retrograde	-4073 Jun 07 j 20:24	5° \approx 41'24		direct	-4065 Nov 27 j 05:10	11° \approx 34'00	
min. Earth dist.	-4073 Aug 28 j 18:04	4° \approx 42'13	47.35033 AU				
opposition	-4073 Aug 30 j 07:23	4° \approx 40'25	-17°36'01	conjunction	-4064 Mar 04 j 22:51	13° \approx 01'36	-16°31'55
direct	-4073 Nov 19 j 05:48	3° \approx 40'33		minimum elong	-4064 Mar 04 j 23:01	13° \approx 01'36	16°32'04
				max. Earth dist.	-4064 Mar 06 j 05:26	13° \approx 03'21	49.72620 AU
conjunction	-4072 Feb 25 j 19:56	5° \approx 09'07	-16°53'06	retrograde	-4064 Jun 16 j 00:37	14° \approx 32'28	
minimum elong	-4072 Feb 25 j 20:03	5° \approx 09'07	16°53'14	min. Earth dist.	-4064 Sep 06 j 04:18	13° \approx 33'25	47.83169 AU
max. Earth dist.	-4072 Feb 27 j 11:04	5° \approx 11'24	49.29482 AU	opposition	-4064 Sep 07 j 06:51	13° \approx 32'09	-17°10'48
retrograde	-4072 Jun 08 j 00:08	6° \approx 41'14		direct	-4064 Nov 27 j 09:13	12° \approx 32'44	
min. Earth dist.	-4072 Aug 29 j 02:07	5° \approx 41'59	47.41867 AU				
opposition	-4072 Aug 30 j 13:06	5° \approx 40'18	-17°34'21	conjunction	-4063 Mar 06 j 05:04	14° \approx 00'16	-16°28'02
direct	-4072 Nov 19 j 13:49	4° \approx 40'28		minimum elong	-4063 Mar 06 j 05:12	14° \approx 00'17	16°28'10
				max. Earth dist.	-4063 Mar 07 j 09:12	14° \approx 01'53	49.76397 AU
conjunction	-4071 Feb 26 j 02:39	6° \approx 08'52	-16°51'26				
minimum elong	-4071 Feb 26 j 02:45	6° \approx 08'52	16°51'35	retrograde	-4063 Jun 17 j 07:50	15° \approx	

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Attention, astronomical year style is used: The year -4063 in astronomical counting style is the year 4064 BCE in historical counting style.

	-4063 Aug 12 j 19:49	15° \approx 14'45	retrograde	-4055 Jun 24 j 22:33	23° \approx 14'45	
min. Earth dist.	-4063 Sep 07 j 10:01	14° \approx 32'01 47.86635 AU	min. Earth dist.	-4055 Sep 15 j 10:07	22° \approx 15'30 47.97443 AU	
opposition	-4063 Sep 08 j 11:45	14° \approx 30'47 -17°06'36	opposition	-4055 Sep 16 j 01:29	22° \approx 14'46 -16°24'05	
direct	-4063 Nov 28 j 13:01	13° \approx 31'25	direct	-4055 Dec 06 j 10:20	21° \approx 15'26	
conjunction	-4062 Mar 07 j 11:23	14° \approx 58'54 -16°23'55	conjunction	-4054 Mar 15 j 11:12	22° \approx 42'21 -15°42'07	
minimum elong	-4062 Mar 07 j 11:32	14° \approx 58'55 16°24'03	minimum elong	-4054 Mar 15 j 11:22	22° \approx 42'21 15°42'14	
	-4062 Mar 08 j 06:31	15° \approx	max. Earth dist.	-4054 Mar 16 j 04:23	22° \approx 43'19 49.89594 AU	
max. Earth dist.	-4062 Mar 08 j 14:21	15° \approx 00'27 49.79665 AU	retrograde	-4054 Jun 26 j 04:38	24° \approx 12'06	
retrograde	-4062 Jun 18 j 11:36	16° \approx 29'32	opposition	-4054 Sep 17 j 06:00	23° \approx 12'10 -16°17'34	
opposition	-4062 Sep 09 j 16:50	15° \approx 29'22 -17°02'10	min. Earth dist.	-4054 Sep 16 j 15:31	23° \approx 12'52 47.97236 AU	
min. Earth dist.	-4062 Sep 08 j 17:35	15° \approx 30'29 47.89566 AU	direct	-4054 Dec 07 j 14:48	22° \approx 12'51	
	-4062 Oct 06 j 11:39	15° \approx				
direct	-4062 Nov 29 j 19:42	14° \approx 30'02	conjunction	-4053 Mar 16 j 16:58	23° \approx 39'45 -15°35'43	
	-4061 Jan 22 j 08:04	15° \approx	minimum elong	-4053 Mar 16 j 17:10	23° \approx 39'46 15°35'50	
			max. Earth dist.	-4053 Mar 17 j 08:07	23° \approx 40'37 49.89343 AU	
conjunction	-4061 Mar 08 j 17:39	15° \approx 57'26 -16°19'34	retrograde	-4053 Jun 27 j 12:12	25° \approx 09'27	
minimum elong	-4061 Mar 08 j 17:49	15° \approx 57'26 16°19'41	opposition	-4053 Sep 18 j 10:25	24° \approx 09'34 -16°10'46	
max. Earth dist.	-4061 Mar 09 j 19:12	15° \approx 58'54 49.82406 AU	min. Earth dist.	-4053 Sep 17 j 20:32	24° \approx 10'14 47.96710 AU	
retrograde	-4061 Jun 19 j 14:23	17° \approx 27'56	direct	-4053 Dec 08 j 17:07	23° \approx 10'17	
opposition	-4061 Sep 10 j 21:36	16° \approx 27'50 -16°57'30				
min. Earth dist.	-4061 Sep 09 j 22:53	16° \approx 28'55 47.91954 AU	conjunction	-4052 Mar 16 j 22:51	24° \approx 37'12 -15°29'03	
direct	-4061 Dec 01 j 03:56	15° \approx 28'30	minimum elong	-4052 Mar 16 j 23:02	24° \approx 37'13 15°29'10	
			max. Earth dist.	-4052 Mar 17 j 13:12	24° \approx 38'01 49.88737 AU	
conjunction	-4060 Mar 08 j 23:42	16° \approx 55'49 -16°14'58	retrograde	-4052 Jun 27 j 17:04	26° \approx 06'51	
minimum elong	-4060 Mar 08 j 23:51	16° \approx 55'49 16°15'07	opposition	-4052 Sep 18 j 14:57	25° \approx 07'02 -16°03'43	
max. Earth dist.	-4060 Mar 09 j 22:49	16° \approx 57'08 49.84615 AU	min. Earth dist.	-4052 Sep 18 j 03:16	25° \approx 07'35 47.95797 AU	
retrograde	-4060 Jun 19 j 21:57	18° \approx 26'12	direct	-4052 Dec 08 j 22:08	24° \approx 07'46	
min. Earth dist.	-4060 Sep 10 j 05:42	17° \approx 27'07 47.93842 AU				
opposition	-4060 Sep 11 j 02:29	17° \approx 26'07 -16°52'35	conjunction	-4051 Mar 18 j 04:44	25° \approx 34'42 -15°22'09	
direct	-4060 Dec 01 j 08:01	16° \approx 26'48	minimum elong	-4051 Mar 18 j 04:56	25° \approx 34'43 15°22'16	
			max. Earth dist.	-4051 Mar 18 j 17:53	25° \approx 35'27 49.87725 AU	
conjunction	-4059 Mar 10 j 05:44	17° \approx 54'01 -16°10'09	retrograde	-4051 Jun 28 j 20:06	27° \approx 04'19	
minimum elong	-4059 Mar 10 j 05:54	17° \approx 54'02 16°10'16	opposition	-4051 Sep 19 j 19:24	26° \approx 04'33 -15°56'26	
max. Earth dist.	-4059 Mar 11 j 04:35	17° \approx 55'19 49.86349 AU	min. Earth dist.	-4051 Sep 19 j 08:11	26° \approx 05'05 47.94428 AU	
retrograde	-4059 Jun 21 j 04:25	19° \approx 24'16	direct	-4051 Dec 10 j 05:13	25° \approx 05'18	
min. Earth dist.	-4059 Sep 11 j 11:44	18° \approx 25'08 47.95260 AU				
opposition	-4059 Sep 12 j 07:14	18° \approx 24'12 -16°47'25	conjunction	-4050 Mar 19 j 10:44	26° \approx 32'15 -15°15'01	
direct	-4059 Dec 02 j 12:04	17° \approx 24'53	minimum elong	-4050 Mar 19 j 10:55	26° \approx 32'16 15°15'06	
			max. Earth dist.	-4050 Mar 19 j 21:20	26° \approx 32'52 49.86216 AU	
conjunction	-4058 Mar 11 j 11:43	18° \approx 52'01 -16°05'04	retrograde	-4050 Jun 30 j 02:35	28° \approx 01'52	
minimum elong	-4058 Mar 11 j 11:52	18° \approx 52'01 16°05'12	opposition	-4050 Sep 20 j 23:54	27° \approx 02'08 -15°48'54	
max. Earth dist.	-4058 Mar 12 j 08:21	18° \approx 53'12 49.87656 AU	min. Earth dist.	-4050 Sep 20 j 14:51	27° \approx 02'34 47.92548 AU	
retrograde	-4058 Jun 22 j 10:51	20° \approx 22'08	direct	-4050 Dec 11 j 09:36	26° \approx 02'53	
opposition	-4058 Sep 13 j 11:44	19° \approx 22'05 -16°42'00				
min. Earth dist.	-4058 Sep 12 j 16:55	19° \approx 22'59 47.96291 AU	conjunction	-4049 Mar 20 j 16:52	27° \approx 29'51 -15°07'40	
direct	-4058 Dec 03 j 15:38	18° \approx 22'45	minimum elong	-4049 Mar 20 j 17:04	27° \approx 29'52 15°07'46	
			max. Earth dist.	-4049 Mar 21 j 02:53	27° \approx 30'26 49.84183 AU	
conjunction	-4057 Mar 12 j 17:40	19° \approx 49'49 -15°59'44	retrograde	-4049 Jul 01 j 09:16	28° \approx 59'26	
minimum elong	-4057 Mar 12 j 17:51	19° \approx 49'49 15°59'51	opposition	-4049 Sep 22 j 04:26	27° \approx 59'44 -15°41'09	
max. Earth dist.	-4057 Mar 13 j 13:32	19° \approx 50'57 49.88588 AU	min. Earth dist.	-4049 Sep 21 j 20:48	28° \approx 00'06 47.90122 AU	
retrograde	-4057 Jun 23 j 13:24	21° \approx 19'49	direct	-4049 Dec 12 j 13:09	27° \approx 00'29	
opposition	-4057 Sep 14 j 16:25	20° \approx 19'47 -16°36'18				
min. Earth dist.	-4057 Sep 13 j 23:27	20° \approx 20'35 47.96969 AU	conjunction	-4048 Mar 20 j 22:37	28° \approx 27'27 -15°00'05	
direct	-4057 Dec 04 j 23:01	19° \approx 20'26	minimum elong	-4048 Mar 20 j 22:49	28° \approx 27'28 15°00'10	
			max. Earth dist.	-4048 Mar 21 j 06:07	28° \approx 27'53 49.81625 AU	
conjunction	-4056 Mar 12 j 23:26	20° \approx 47'26 -15°54'08	retrograde	-4048 Jul 01 j 16:44	29° \approx 57'00	
minimum elong	-4056 Mar 12 j 23:36	20° \approx 47'27 15°54'15	opposition	-4048 Sep 22 j 08:56	28° \approx 57'18 -15°33'10	
max. Earth dist.	-4056 Mar 13 j 18:30	20° \approx 48'31 49.89211 AU	min. Earth dist.	-4048 Sep 22 j 02:12	28° \approx 57'37 47.87190 AU	
retrograde	-4056 Jun 23 j 16:02	22° \approx 17'20	direct	-4048 Dec 12 j 15:45	27° \approx 58'01	
opposition	-4056 Sep 14 j 20:56	21° \approx 17'19 -16°30'20	evening set	-4047 Mar 20 j 02:05	29° \approx 22'09	
min. Earth dist.	-4056 Sep 14 j 03:59	21° \approx 18'08 47.97345 AU				
direct	-4056 Dec 05 j 06:15	20° \approx 17'58	conjunction	-4047 Mar 22 j 04:36	29° \approx 25'01 -14°52'16	
			minimum elong	-4047 Mar 22 j 04:48	29° \approx 25'02 14°52'22	
conjunction	-4055 Mar 14 j 05:13	21° \approx 44'56 -15°48'16	max. Earth dist.	-4047 Mar 22 j 10:59	29° \approx 25'23 49.78568 AU	
minimum elong	-4055 Mar 14 j 05:24	21° \approx 44'56 15°48'23	morning rise	-4047 Mar 24 j 07:33	29° \approx 27'54	
max. Earth dist.	-4055 Mar 14 j 22:31	21° \approx 45'55 49.89540 AU		-4047 Apr 17 j 13:03	0° \approx	

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Attention, astronomical year style is used: The year -4047 in astronomical counting style is the year 4048 BCE in historical counting style.

retrograde	-4047 Jul 02 j 19:42	0° H 54'31	direct	-4041 Dec 20 j 04:17	4° H 40'22	
	-4047 Sep 19 j 00:27	30° R	evening set	-4040 Mar 22 j 15:49	5° H 59'12	
opposition	-4047 Sep 23 j 13:21	29° R 54'49	-15°24'57			
min. Earth dist.	-4047 Sep 23 j 08:51	29° R 55'02	47.83782 AU	conjunction	-4040 Mar 28 j 21:47	6° H 07'43 -13°50'36
direct	-4047 Dec 13 j 22:46	28° R 55'31		minimum elong	-4040 Mar 28 j 22:00	6° H 07'44 13°50'41
	-4046 Mar 06 j 17:15	0° H		max. Earth dist.	-4040 Mar 28 j 19:09	6° H 07'34 49.47074 AU
evening set	-4046 Mar 20 j 10:18	0° H 18'25		morning rise	-4040 Apr 04 j 04:31	6° H 16'16
				retrograde	-4040 Jul 09 j 07:00	7° H 37'17
conjunction	-4046 Mar 23 j 10:36	0° H 22'32	-14°44'13	opposition	-4040 Sep 29 j 20:14	6° H 37'36 -14°20'06
minimum elong	-4046 Mar 23 j 10:49	0° H 22'33	14°44'19	min. Earth dist.	-4040 Sep 29 j 23:11	6° H 37'28 47.50151 AU
max. Earth dist.	-4046 Mar 23 j 15:52	0° H 22'50	49.75080 AU	direct	-4040 Dec 20 j 10:05	5° H 38'08
morning rise	-4046 Mar 26 j 11:25	0° H 26'40		evening set	-4039 Mar 23 j 12:09	6° H 56'31
retrograde	-4046 Jul 03 j 22:07	1° H 52'00				
opposition	-4046 Sep 24 j 17:42	0° H 52'18	-15°16'28	conjunction	-4039 Mar 30 j 04:01	7° H 05'35 -13°40'47
min. Earth dist.	-4046 Sep 24 j 13:29	0° H 52'30	47.79960 AU	minimum elong	-4039 Mar 30 j 04:13	7° H 05'36 13°40'51
	-4046 Nov 19 j 15:15	30° R		max. Earth dist.	-4039 Mar 30 j 00:59	7° H 05'25 49.41186 AU
direct	-4046 Dec 15 j 06:18	29° R 52'57		morning rise	-4039 Apr 05 j 20:32	7° H 14'42
	-4045 Jan 09 j 15:18	0° H		retrograde	-4039 Jul 10 j 13:15	8° H 35'12
evening set	-4045 Mar 20 j 23:06	1° H 14'56		opposition	-4039 Oct 01 j 00:40	7° H 35'32 -14°09'48
				min. Earth dist.	-4039 Oct 01 j 04:52	7° H 35'20 47.43877 AU
conjunction	-4045 Mar 24 j 16:23	1° H 20'00	-14°35'55	direct	-4039 Dec 21 j 14:29	6° H 36'01
minimum elong	-4045 Mar 24 j 16:35	1° H 20'00	14°36'01	evening set	-4038 Mar 24 j 09:07	7° H 53'58
max. Earth dist.	-4045 Mar 24 j 19:35	1° H 20'11	49.71193 AU			
morning rise	-4045 Mar 28 j 10:12	1° H 25'06		conjunction	-4038 Mar 31 j 10:14	8° H 03'34 -13°30'44
retrograde	-4045 Jul 05 j 03:57	2° H 49'27		minimum elong	-4038 Mar 31 j 10:27	8° H 03'35 13°30'49
opposition	-4045 Sep 25 j 22:06	1° H 49'45	-15°07'45	max. Earth dist.	-4038 Mar 31 j 04:30	8° H 03'15 49.34809 AU
min. Earth dist.	-4045 Sep 25 j 19:43	1° H 49'51	47.75779 AU	morning rise	-4038 Apr 07 j 12:10	8° H 13'14
direct	-4045 Dec 16 j 10:51	0° H 50'22		retrograde	-4038 Jul 11 j 21:53	9° H 33'14
evening set	-4044 Mar 20 j 14:32	2° H 11'33		opposition	-4038 Oct 02 j 05:15	8° H 33'34 -13°59'17
				min. Earth dist.	-4038 Oct 02 j 10:40	8° H 33'18 47.37091 AU
conjunction	-4044 Mar 24 j 22:19	2° H 17'26	-14°27'22	direct	-4038 Dec 22 j 16:25	7° H 34'00
minimum elong	-4044 Mar 24 j 22:32	2° H 17'27	14°27'28	evening set	-4037 Mar 25 j 06:20	8° H 51'32
max. Earth dist.	-4044 Mar 25 j 01:25	2° H 17'37	49.66978 AU			
morning rise	-4044 Mar 29 j 06:39	2° H 23'22		conjunction	-4037 Apr 01 j 16:31	9° H 01'39 -13°20'27
retrograde	-4044 Jul 05 j 09:30	3° H 46'54		minimum elong	-4037 Apr 01 j 16:44	9° H 01'40 13°20'31
opposition	-4044 Sep 26 j 02:28	2° H 47'11	-14°58'45	max. Earth dist.	-4037 Apr 01 j 09:26	9° H 01'15 49.27883 AU
min. Earth dist.	-4044 Sep 26 j 00:46	2° H 47'16	47.71276 AU	morning rise	-4037 Apr 09 j 03:26	9° H 11'49
direct	-4044 Dec 16 j 15:31	1° H 47'47		retrograde	-4037 Jul 13 j 02:57	10° H 31'22
evening set	-4043 Mar 21 j 07:20	3° H 08'17		opposition	-4037 Oct 03 j 09:57	9° H 31'39 -13°48'31
				min. Earth dist.	-4037 Oct 03 j 17:37	9° H 31'17 47.29746 AU
conjunction	-4043 Mar 26 j 04:02	3° H 14'54	-14°18'34	direct	-4037 Dec 23 j 22:01	8° H 32'02
minimum elong	-4043 Mar 26 j 04:13	3° H 14'54	14°18'39	evening set	-4036 Mar 25 j 04:06	9° H 49'10
max. Earth dist.	-4043 Mar 26 j 05:06	3° H 14'57	49.62467 AU			
morning rise	-4043 Mar 31 j 01:20	3° H 21'33		conjunction	-4036 Apr 01 j 22:48	9° H 59'47 -13°09'57
retrograde	-4043 Jul 06 j 17:55	4° H 44'21		minimum elong	-4036 Apr 01 j 23:01	9° H 59'48 13°10'02
opposition	-4043 Sep 27 j 06:51	3° H 44'39	-14°49'29	max. Earth dist.	-4036 Apr 01 j 14:16	9° H 59'18 49.20428 AU
min. Earth dist.	-4043 Sep 27 j 05:47	3° H 44'42	47.66485 AU	morning rise	-4036 Apr 09 j 18:15	10° H 10'26
direct	-4043 Dec 17 j 16:57	2° H 45'13		retrograde	-4036 Jul 13 j 06:21	11° H 29'31
evening set	-4042 Mar 22 j 01:23	4° H 05'06		opposition	-4036 Oct 03 j 14:28	10° H 29'46 -13°37'31
				min. Earth dist.	-4036 Oct 03 j 22:44	10° H 29'23 47.21877 AU
conjunction	-4042 Mar 27 j 10:01	4° H 12'24	-14°09'30	direct	-4036 Dec 24 j 05:19	9° H 30'04
minimum elong	-4042 Mar 27 j 10:14	4° H 12'25	14°09'35	evening set	-4035 Mar 26 j 02:00	10° H 46'49
max. Earth dist.	-4042 Mar 27 j 10:26	4° H 12'26	49.57654 AU			
morning rise	-4042 Apr 01 j 19:17	4° H 19'44		conjunction	-4035 Apr 03 j 05:01	10° H 57'55 -12°59'14
retrograde	-4042 Jul 07 j 23:48	5° H 41'52		minimum elong	-4035 Apr 03 j 05:14	10° H 57'56 12°59'17
opposition	-4042 Sep 28 j 11:17	4° H 42'10	-14°39'57	max. Earth dist.	-4035 Apr 02 j 18:04	10° H 57'17 49.12456 AU
min. Earth dist.	-4042 Sep 28 j 12:05	4° H 42'08	47.61384 AU	morning rise	-4035 Apr 11 j 08:55	11° H 09'03
direct	-4042 Dec 18 j 21:21	3° H 42'44		retrograde	-4035 Jul 14 j 11:18	12° H 27'42
evening set	-4041 Mar 22 j 20:24	5° H 02'04		opposition	-4035 Oct 04 j 19:10	11° H 27'54 -13°26'17
				min. Earth dist.	-4035 Oct 05 j 05:36	11° H 27'24 47.13521 AU
conjunction	-4041 Mar 28 j 16:00	5° H 10'00	-14°00'10	direct	-4035 Dec 25 j 11:09	10° H 28'06
minimum elong	-4041 Mar 28 j 16:12	5° H 10'01	14°00'15	evening set	-4034 Mar 27 j 00:20	11° H 44'30
max. Earth dist.	-4041 Mar 28 j 15:23	5° H 09'58	49.52545 AU			
morning rise	-4041 Apr 03 j 12:14	5° H 17'57		conjunction	-4034 Apr 04 j 11:27	11° H 56'03 -12°48'16
retrograde	-4041 Jul 09 j 02:21	6° H 39'30		minimum elong	-4034 Apr 04 j 11:40	11° H 56'03 12°48'20
opposition	-4041 Sep 29 j 15:40	5° H 39'49	-14°30'09	max. Earth dist.	-4034 Apr 04 j 00:02	11° H 55'23 49.04024 AU
min. Earth dist.	-4041 Sep 29 j 16:35	5° H 39'47	47.55959 AU	morning rise	-4034 Apr 12 j 23:15	12° H 07'39

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Attention, astronomical year style is used: The year -4034 in astronomical counting style is the year 4035 BCE in historical counting style.

retrograde	-4034 Jul 15 j 15:54	13° H 25'53	minimum elong	-4027 Apr 11 j 08:42	18° H 45'54	11°24'22
opposition	-4034 Oct 05 j 23:42	12° H 26'01 -13°14'49	max. Earth dist.	-4027 Apr 10 j 12:09	18° H 44'43	48.35680 AU
min. Earth dist.	-4034 Oct 06 j 11:04	12° H 25'29 47.04725 AU	morning rise	-4027 Apr 21 j 22:33	19° H 00'29	
direct	-4034 Dec 26 j 17:08	11° H 26'08	retrograde	-4027 Jul 22 j 13:37	20° H 16'35	
evening set	-4033 Mar 27 j 22:58	12° H 42'11	opposition	-4027 Oct 12 j 09:30	19° H 16'27 -11°46'53	
			min. Earth dist.	-4027 Oct 13 j 04:59	19° H 15'30	46.34147 AU
conjunction	-4033 Apr 05 j 17:42	12° H 54'11 -12°37'03	direct	-4026 Jan 02 j 00:02	18° H 16'05	
minimum elong	-4033 Apr 05 j 17:55	12° H 54'12 12°37'07	evening set	-4026 Apr 01 j 19:44	19° H 30'30	
max. Earth dist.	-4033 Apr 05 j 04:05	12° H 53'25 48.95194 AU				
morning rise	-4033 Apr 14 j 13:21	13° H 06'15	conjunction	-4026 Apr 12 j 15:24	19° H 45'25 -11°11'18	
retrograde	-4033 Jul 17 j 00:14	14° H 24'05	minimum elong	-4026 Apr 12 j 15:37	19° H 45'26 11°11'20	
opposition	-4033 Oct 07 j 04:21	13° H 24'10 -13°03'04	max. Earth dist.	-4026 Apr 11 j 17:37	19° H 44'09	48.24502 AU
min. Earth dist.	-4033 Oct 07 j 16:35	13° H 23'35 46.95570 AU	morning rise	-4026 Apr 23 j 11:50	20° H 00'23	
direct	-4033 Dec 27 j 19:26	12° H 24'12	retrograde	-4026 Jul 23 j 18:33	21° H 16'15	
evening set	-4032 Mar 27 j 21:29	13° H 39'56	opposition	-4026 Oct 13 j 14:29	20° H 16'05 -11°33'15	
			min. Earth dist.	-4026 Oct 14 j 10:33	20° H 15'07	46.22563 AU
conjunction	-4032 Apr 05 j 23:54	13° H 52'23 -12°25'36	direct	-4025 Jan 03 j 07:40	19° H 15'38	
minimum elong	-4032 Apr 06 j 00:06	13° H 52'23 12°25'39	evening set	-4025 Apr 02 j 20:25	20° H 29'53	
max. Earth dist.	-4032 Apr 05 j 09:37	13° H 51'34 48.86015 AU				
morning rise	-4032 Apr 15 j 03:05	14° H 04'53	conjunction	-4025 Apr 13 j 22:21	20° H 45'12 -10°58'03	
retrograde	-4032 Jul 17 j 06:39	15° H 22'22	minimum elong	-4025 Apr 13 j 22:34	20° H 45'12 10°58'05	
opposition	-4032 Oct 07 j 09:10	14° H 22'23 -12°51'03	max. Earth dist.	-4025 Apr 12 j 22:04	20° H 43'47	48.12815 AU
min. Earth dist.	-4032 Oct 07 j 23:08	14° H 21'43 46.86087 AU	morning rise	-4025 Apr 25 j 01:10	21° H 00'33	
direct	-4032 Dec 28 j 00:09	13° H 22'20	retrograde	-4025 Jul 24 j 23:31	22° H 16'12	
evening set	-4031 Mar 28 j 20:37	14° H 37'47	opposition	-4025 Oct 14 j 19:49	21° H 15'58 -11°19'23	
			min. Earth dist.	-4025 Oct 15 j 18:12	21° H 14'52	46.10470 AU
conjunction	-4031 Apr 07 j 06:17	14° H 50'40 -12°13'52	direct	-4024 Jan 04 j 14:38	20° H 15'25	
minimum elong	-4031 Apr 07 j 06:31	14° H 50'41 12°13'55	evening set	-4024 Apr 02 j 21:11	21° H 29'30	
max. Earth dist.	-4031 Apr 06 j 15:02	14° H 49'47 48.76547 AU	max. Earth dist.	-4024 Apr 13 j 04:29	21° H 43'44	48.00625 AU
morning rise	-4031 Apr 16 j 16:45	15° H 03'35				
retrograde	-4031 Jul 18 j 10:50	16° H 20'45	conjunction	-4024 Apr 14 j 05:21	21° H 45'11 -10°44'33	
opposition	-4031 Oct 08 j 13:46	15° H 20'44 -12°38'46	minimum elong	-4024 Apr 14 j 05:34	21° H 45'11 10°44'34	
min. Earth dist.	-4031 Oct 09 j 03:41	15° H 20'03 46.76321 AU	morning rise	-4024 Apr 25 j 14:08	22° H 00'55	
direct	-4031 Dec 29 j 06:28	14° H 20'36	retrograde	-4024 Jul 25 j 04:17	23° H 16'21	
evening set	-4030 Mar 29 j 19:54	15° H 35'48	opposition	-4024 Oct 15 j 01:08	22° H 16'02 -11°05'15	
			min. Earth dist.	-4024 Oct 16 j 00:23	22° H 14'54	45.97867 AU
conjunction	-4030 Apr 08 j 12:43	15° H 49'06 -12°01'52	direct	-4023 Jan 04 j 21:46	21° H 15'22	
minimum elong	-4030 Apr 08 j 12:56	15° H 49'07 12°01'56	evening set	-4023 Apr 03 j 22:25	22° H 29'17	
max. Earth dist.	-4030 Apr 07 j 19:33	15° H 48'07 48.66792 AU	max. Earth dist.	-4023 Apr 14 j 09:02	22° H 43'44	47.87948 AU
morning rise	-4030 Apr 18 j 06:28	16° H 02'27				
retrograde	-4030 Jul 19 j 15:31	17° H 19'19	conjunction	-4023 Apr 15 j 12:26	22° H 45'20 -10°30'48	
opposition	-4030 Oct 09 j 18:41	16° H 19'15 -12°26'12	minimum elong	-4023 Apr 15 j 12:39	22° H 45'20 10°30'50	
min. Earth dist.	-4030 Oct 10 j 10:26	16° H 18'30 46.66280 AU	morning rise	-4023 Apr 27 j 03:19	23° H 01'27	
direct	-4030 Dec 30 j 12:40	15° H 19'04	retrograde	-4023 Jul 26 j 13:07	24° H 16'40	
evening set	-4029 Mar 30 j 19:22	16° H 34'02	opposition	-4023 Oct 16 j 06:21	23° H 16'15 -10°50'52	
			min. Earth dist.	-4023 Oct 17 j 07:00	23° H 15'03	45.84810 AU
conjunction	-4029 Apr 09 j 19:14	16° H 47'45 -11°49'37	direct	-4022 Jan 06 j 01:00	22° H 15'27	
minimum elong	-4029 Apr 09 j 19:28	16° H 47'46 11°49'40	evening set	-4022 Apr 04 j 23:47	23° H 29'13	
max. Earth dist.	-4029 Apr 09 j 02:05	16° H 46'46 48.56759 AU				
morning rise	-4029 Apr 19 j 19:48	17° H 01'31	conjunction	-4022 Apr 16 j 19:46	23° H 45'38 -10°16'48	
retrograde	-4029 Jul 20 j 21:16	18° H 18'07	minimum elong	-4022 Apr 16 j 19:59	23° H 45'39 10°16'49	
opposition	-4029 Oct 10 j 23:31	17° H 18'02 -12°13'22	max. Earth dist.	-4022 Apr 15 j 15:26	23° H 43'59	47.74823 AU
min. Earth dist.	-4029 Oct 11 j 15:56	17° H 17'14 46.55932 AU	morning rise	-4022 Apr 28 j 16:23	24° H 02'07	
direct	-4029 Dec 31 j 17:58	16° H 17'47	retrograde	-4022 Jul 27 j 21:26	25° H 17'08	
evening set	-4028 Mar 30 j 19:12	17° H 32'33	opposition	-4022 Oct 17 j 11:51	24° H 16'36 -10°36'13	
max. Earth dist.	-4028 Apr 09 j 06:18	17° H 45'33 48.46413 AU	min. Earth dist.	-4022 Oct 18 j 14:19	24° H 15'19	45.71331 AU
			direct	-4021 Jan 07 j 05:27	23° H 15'39	
conjunction	-4028 Apr 10 j 01:43	17° H 46'40 -11°37'06	evening set	-4021 Apr 06 j 01:20	24° H 29'17	
minimum elong	-4028 Apr 10 j 01:55	17° H 46'41 11°37'09	max. Earth dist.	-4021 Apr 16 j 21:21	24° H 44'21	47.61322 AU
morning rise	-4028 Apr 20 j 09:10	18° H 00'51				
retrograde	-4028 Jul 21 j 06:46	19° H 17'11	conjunction	-4021 Apr 18 j 02:55	24° H 46'04 -10°02'32	
opposition	-4028 Oct 11 j 04:22	18° H 17'05 -12°00'15	minimum elong	-4021 Apr 18 j 03:07	24° H 46'05 10°02'34	
min. Earth dist.	-4028 Oct 11 j 21:47	18° H 16'15 46.45254 AU	morning rise	-4021 Apr 30 j 05:08	25° H 02'54	
direct	-4028 Dec 31 j 19:15	17° H 16'47	retrograde	-4021 Jul 29 j 04:31	26° H 17'44	
evening set	-4027 Mar 31 j 19:11	18° H 31'22	opposition	-4021 Oct 18 j 17:14	25° H 17'06 -10°21'17	
			min. Earth dist.	-4021 Oct 19 j 19:50	25° H 15'48	45.57505 AU
conjunction	-4027 Apr 11 j 08:29	18° H 45'54 -11°24'19	direct	-4020 Jan 08 j 11:15	24° H 15'59	

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Attention, astronomical year style is used: The year -4020 in astronomical counting style is the year 4021 BCE in historical counting style.

evening set	-4020 Apr 06 j 03:05	25° H 29'31		conjunction	-4014 Apr 25 j 08:57	1° Y 56'02	-8°15'05
max. Earth dist.	-4020 Apr 17 j 02:49	25° H 44'49	47.47488 AU	minimum elong	-4014 Apr 25 j 09:09	1° Y 56'02	8°15'06
				morning rise	-4014 May 08 j 22:40	2° Y 15'15	
conjunction	-4020 Apr 18 j 10:10	25° H 46'39	-9°48'01	retrograde	-4014 Aug 05 j 03:19	3° Y 29'25	
minimum elong	-4020 Apr 18 j 10:23	25° H 46'40	9°48'02	opposition	-4014 Oct 25 j 10:53	2° Y 28'07	-8°28'42
morning rise	-4020 Apr 30 j 18:00	26° H 03'51		min. Earth dist.	-4014 Oct 26 j 21:27	2° Y 26'24	44.52665 AU
retrograde	-4020 Jul 29 j 08:56	27° H 18'30		direct	-4013 Jan 15 j 09:53	1° Y 26'07	
opposition	-4020 Oct 18 j 22:50	26° H 17'45	-10°06'04	evening set	-4013 Apr 12 j 23:16	2° Y 39'29	
min. Earth dist.	-4020 Oct 20 j 03:20	26° H 16'21	45.43385 AU	max. Earth dist.	-4013 Apr 25 j 00:48	2° Y 56'35	46.42515 AU
direct	-4019 Jan 08 j 18:57	25° H 16'30					
evening set	-4019 Apr 07 j 05:02	26° H 29'56		conjunction	-4013 Apr 26 j 17:10	2° Y 58'59	-7°58'39
max. Earth dist.	-4019 Apr 18 j 10:13	26° H 45'35	47.33383 AU	minimum elong	-4013 Apr 26 j 17:21	2° Y 59'00	7°58'39
				morning rise	-4013 May 10 j 11:32	3° Y 18'33	
conjunction	-4019 Apr 19 j 17:39	26° H 47'25	-9°33'13	retrograde	-4013 Aug 06 j 12:16	4° Y 32'41	
minimum elong	-4019 Apr 19 j 17:51	26° H 47'26	9°33'14	opposition	-4013 Oct 26 j 17:27	3° Y 31'16	-8°11'29
morning rise	-4019 May 02 j 06:42	27° H 04'57		min. Earth dist.	-4013 Oct 28 j 05:39	3° Y 29'28	44.36156 AU
retrograde	-4019 Jul 30 j 12:56	28° H 19'28		direct	-4012 Jan 16 j 15:00	2° Y 29'07	
opposition	-4019 Oct 20 j 04:31	27° H 18'37	-9°50'34	evening set	-4012 Apr 13 j 03:19	3° Y 42'31	
min. Earth dist.	-4019 Oct 21 j 09:22	27° H 17'12	45.28994 AU	max. Earth dist.	-4012 Apr 25 j 08:26	3° Y 59'53	46.25892 AU
direct	-4018 Jan 10 j 03:26	26° H 17'14					
evening set	-4018 Apr 08 j 07:26	27° H 30'35		conjunction	-4012 Apr 27 j 01:48	4° Y 02'21	-7°41'58
max. Earth dist.	-4018 Apr 19 j 15:33	27° H 46'27	47.19024 AU	minimum elong	-4012 Apr 27 j 01:59	4° Y 02'22	7°41'58
				morning rise	-4012 May 11 j 00:22	4° Y 22'14	
conjunction	-4018 Apr 21 j 01:08	27° H 48'25	-9°18'09	retrograde	-4012 Aug 06 j 21:31	5° Y 36'22	
minimum elong	-4018 Apr 21 j 01:20	27° H 48'26	9°18'09	opposition	-4012 Oct 27 j 00:10	4° Y 34'49	-7°53'59
morning rise	-4018 May 03 j 19:33	28° H 06'18		min. Earth dist.	-4012 Oct 28 j 14:11	4° Y 32'55	44.19152 AU
retrograde	-4018 Jul 31 j 21:52	29° H 20'42		direct	-4011 Jan 16 j 20:31	3° Y 32'30	
opposition	-4018 Oct 21 j 10:14	28° H 19'45	-9°34'47	evening set	-4011 Apr 14 j 07:48	4° Y 45'57	
min. Earth dist.	-4018 Oct 22 j 16:00	28° H 18'17	45.14366 AU	max. Earth dist.	-4011 Apr 26 j 15:21	5° Y 03'31	46.08804 AU
direct	-4017 Jan 11 j 06:58	27° H 18'14					
evening set	-4017 Apr 09 j 09:53	28° H 31'33		conjunction	-4011 Apr 28 j 10:28	5° Y 06'06	-7°25'00
max. Earth dist.	-4017 Apr 20 j 22:50	28° H 47'43	47.04412 AU	minimum elong	-4011 Apr 28 j 10:38	5° Y 06'07	7°24'59
				morning rise	-4011 May 12 j 13:19	5° Y 26'17	
conjunction	-4017 Apr 22 j 08:52	28° H 49'44	-9°02'47	retrograde	-4011 Aug 08 j 08:05	6° Y 40'25	
minimum elong	-4017 Apr 22 j 09:04	28° H 49'44	9°02'48	opposition	-4011 Oct 28 j 06:54	5° Y 38'44	-7°36'13
morning rise	-4017 May 05 j 08:15	29° H 07'57		min. Earth dist.	-4011 Oct 29 j 21:25	5° Y 36'48	44.01695 AU
	-4017 Jun 17 j 14:33	0° Y		direct	-4010 Jan 18 j 02:18	4° Y 36'13	
retrograde	-4017 Aug 02 j 06:00	0° Y 22'16		evening set	-4010 Apr 15 j 12:32	5° Y 49'45	
	-4017 Sep 17 j 03:23	30° R H		max. Earth dist.	-4010 Apr 27 j 22:12	6° Y 07'30	45.91260 AU
opposition	-4017 Oct 22 j 16:16	29° H 21'13	-9°18'41				
min. Earth dist.	-4017 Oct 23 j 23:31	29° H 19'41	44.99470 AU	conjunction	-4010 Apr 29 j 19:19	6° Y 10'13	-7°07'46
direct	-4016 Jan 12 j 11:49	28° H 19'36		minimum elong	-4010 Apr 29 j 19:29	6° Y 10'14	7°07'46
evening set	-4016 Apr 09 j 12:38	29° H 32'53		morning rise	-4010 May 14 j 02:13	6° Y 30'43	
max. Earth dist.	-4016 Apr 21 j 05:25	29° H 49'20	46.89531 AU	retrograde	-4010 Aug 09 j 15:00	7° Y 44'50	
				opposition	-4010 Oct 29 j 13:53	6° Y 43'00	-7°18'09
conjunction	-4016 Apr 22 j 16:32	29° H 51'24	-8°47'10	min. Earth dist.	-4010 Oct 31 j 06:41	6° Y 40'58	43.83824 AU
minimum elong	-4016 Apr 22 j 16:44	29° H 51'25	8°47'10	direct	-4009 Jan 19 j 10:47	5° Y 40'18	
	-4016 Apr 28 j 18:20	0° Y		evening set	-4009 Apr 16 j 17:30	6° Y 53'55	
morning rise	-4016 May 05 j 20:54	0° Y 09'58		max. Earth dist.	-4009 Apr 29 j 06:54	7° Y 11'57	45.73341 AU
retrograde	-4016 Aug 02 j 14:16	1° Y 24'12					
opposition	-4016 Oct 22 j 22:16	0° Y 23'05	-9°02'18	conjunction	-4009 May 01 j 04:19	7° Y 14'42	-6°50'16
min. Earth dist.	-4016 Oct 24 j 05:50	0° Y 21'31	44.84273 AU	minimum elong	-4009 May 01 j 04:29	7° Y 14'42	6°50'15
	-4016 Nov 11 j 20:04	30° R H		morning rise	-4009 May 15 j 15:00	7° Y 35'29	
direct	-4015 Jan 12 j 18:13	29° H 21'20		retrograde	-4009 Aug 10 j 20:05	8° Y 49'38	
	-4015 Mar 14 j 21:20	0° Y		opposition	-4009 Oct 30 j 20:57	7° Y 47'39	-6°59'47
evening set	-4015 Apr 10 j 15:51	0° Y 34'38		min. Earth dist.	-4009 Nov 01 j 14:04	7° Y 45'34	43.65603 AU
max. Earth dist.	-4015 Apr 22 j 11:23	0° Y 51'18	46.74293 AU	direct	-4008 Jan 20 j 21:21	6° Y 44'45	
				evening set	-4008 Apr 16 j 22:42	7° Y 58'27	
conjunction	-4015 Apr 24 j 00:35	0° Y 53'30	-8°31'15	max. Earth dist.	-4008 Apr 29 j 13:29	8° Y 16'38	45.55095 AU
minimum elong	-4015 Apr 24 j 00:46	0° Y 53'30	8°31'15				
morning rise	-4015 May 07 j 09:48	1° Y 12'24		conjunction	-4008 May 01 j 13:12	8° Y 19'32	-6°32'29
retrograde	-4015 Aug 03 j 21:31	2° Y 26'35		minimum elong	-4008 May 01 j 13:21	8° Y 19'33	6°32'28
opposition	-4015 Oct 24 j 04:28	1° Y 25'23	-8°45'39	morning rise	-4008 May 16 j 03:48	8° Y 40'38	
min. Earth dist.	-4015 Oct 25 j 14:19	1° Y 23'42	44.68696 AU	retrograde	-4008 Aug 11 j 05:03	9° Y 54'50	
direct	-4014 Jan 14 j 01:26	0° Y 23'30		opposition	-4008 Oct 31 j 04:13	8° Y 52'41	-6°41'07
evening set	-4014 Apr 11 j 19:25	1° Y 36'50		min. Earth dist.	-4008 Nov 01 j 22:38	8° Y 50'32	43.47095 AU
max. Earth dist.	-4014 Apr 23 j 19:13	1° Y 53'47	46.58642 AU	direct	-4007 Jan 21 j 03:36	7° Y 49'35	

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Attention, astronomical year style is used: The year -4007 in astronomical counting style is the year 4008 BCE in historical counting style.

evening set	-4007 Apr 18 j 04:17	9° Υ 03'24		opposition	-4001 Nov 08 j 12:44	16° Υ 42'29	-4°21'51
max. Earth dist.	-4007 Apr 30 j 22:37	9° Υ 21'52	45.36569 AU	min. Earth dist.	-4001 Nov 10 j 14:28	16° Υ 39'54	42.09981 AU
				direct	-4000 Jan 29 j 09:53	15° Υ 37'56	
conjunction	-4007 May 02 j 22:36	9° Υ 24'47	-6°14'25	evening set	-4000 Apr 25 j 06:31	16° Υ 53'20	
minimum elong	-4007 May 02 j 22:46	9° Υ 24'48	6°14'23	max. Earth dist.	-4000 May 08 j 12:10	17° Υ 13'04	43.99058 AU
morning rise	-4007 May 17 j 16:36	9° Υ 46'11					
retrograde	-4007 Aug 12 j 13:42	11° Υ 00'27		conjunction	-4000 May 10 j 21:45	17° Υ 16'41	-3°59'51
opposition	-4007 Nov 01 j 11:39	9° Υ 58'09	-6°22'09	minimum elong	-4000 May 10 j 21:51	17° Υ 16'41	3°59'48
min. Earth dist.	-4007 Nov 03 j 07:14	9° Υ 55'56	43.28324 AU	morning rise	-4000 May 26 j 12:09	17° Υ 40'01	
direct	-4006 Jan 22 j 10:22	8° Υ 54'50		retrograde	-4000 Aug 20 j 13:46	18° Υ 55'25	
evening set	-4006 Apr 19 j 10:22	10° Υ 08'49		opposition	-4000 Nov 08 j 21:53	17° Υ 51'56	-4°00'44
max. Earth dist.	-4006 May 02 j 06:46	10° Υ 27'29	45.17812 AU	min. Earth dist.	-4000 Nov 11 j 01:53	17° Υ 49'14	41.88906 AU
				direct	-3999 Jan 29 j 18:17	16° Υ 47'08	
conjunction	-4006 May 04 j 08:04	10° Υ 30'29	-5°56'04	evening set	-3999 Apr 26 j 15:27	18° Υ 02'49	
minimum elong	-4006 May 04 j 08:12	10° Υ 30'30	5°56'02	max. Earth dist.	-3999 May 09 j 22:39	18° Υ 22'44	43.77865 AU
morning rise	-4006 May 19 j 05:35	10° Υ 52'10					
retrograde	-4006 Aug 14 j 01:13	12° Υ 06'32		conjunction	-3999 May 12 j 09:01	18° Υ 26'25	-3°39'29
opposition	-4006 Nov 02 j 19:16	11° Υ 04'05	-6°02'53	minimum elong	-3999 May 12 j 09:08	18° Υ 26'26	3°39'27
min. Earth dist.	-4006 Nov 04 j 15:03	11° Υ 01'51	43.09338 AU	morning rise	-3999 May 28 j 01:36	18° Υ 50'00	
direct	-4005 Jan 23 j 16:29	10° Υ 00'34		retrograde	-3999 Aug 21 j 23:50	20° Υ 05'37	
evening set	-4005 Apr 20 j 16:34	11° Υ 14'45		opposition	-3999 Nov 10 j 06:59	19° Υ 01'54	-3°39'19
max. Earth dist.	-4005 May 03 j 14:53	11° Υ 33'36	44.98819 AU	min. Earth dist.	-3999 Nov 12 j 11:24	18° Υ 59'10	41.67423 AU
				direct	-3998 Jan 31 j 06:24	17° Υ 56'50	
conjunction	-4005 May 05 j 17:37	11° Υ 36'42	-5°37'25	evening set	-3998 Apr 28 j 00:53	19° Υ 12'51	
minimum elong	-4005 May 05 j 17:46	11° Υ 36'43	5°37'23	max. Earth dist.	-3998 May 11 j 07:33	19° Υ 32'50	43.56275 AU
morning rise	-4005 May 20 j 18:21	11° Υ 58'40					
retrograde	-4005 Aug 15 j 12:02	13° Υ 13'10		conjunction	-3998 May 13 j 20:26	19° Υ 36'42	-3°18'51
opposition	-4005 Nov 04 j 03:13	12° Υ 10'32	-5°43'17	minimum elong	-3998 May 13 j 20:32	19° Υ 36'42	3°18'47
min. Earth dist.	-4005 Nov 06 j 00:49	12° Υ 08'13	42.90118 AU	morning rise	-3998 May 29 j 15:07	20° Υ 00'31	
direct	-4004 Jan 25 j 00:27	11° Υ 06'51		retrograde	-3998 Aug 23 j 10:14	21° Υ 16'22	
evening set	-4004 Apr 20 j 23:14	12° Υ 21'14		opposition	-3998 Nov 11 j 16:31	20° Υ 12'25	-3°17'35
max. Earth dist.	-4004 May 04 j 00:36	12° Υ 40'21	44.79591 AU	min. Earth dist.	-3998 Nov 13 j 22:47	20° Υ 09'35	41.45590 AU
				direct	-3997 Feb 01 j 16:51	19° Υ 07'04	
conjunction	-4004 May 06 j 03:32	12° Υ 43'29	-5°18'28	evening set	-3997 Apr 29 j 10:23	20° Υ 23'24	
minimum elong	-4004 May 06 j 03:40	12° Υ 43'30	5°18'27	max. Earth dist.	-3997 May 12 j 19:02	20° Υ 43'37	43.34350 AU
morning rise	-4004 May 21 j 07:18	13° Υ 05'44					
retrograde	-4004 Aug 15 j 19:57	14° Υ 20'22		conjunction	-3997 May 15 j 08:00	20° Υ 47'30	-2°57'55
opposition	-4004 Nov 04 j 11:08	13° Υ 17'36	-5°23'23	minimum elong	-3997 May 15 j 08:05	20° Υ 47'30	2°57'52
min. Earth dist.	-4004 Nov 06 j 08:56	13° Υ 15'15	42.70635 AU	morning rise	-3997 May 31 j 04:19	21° Υ 11'34	
direct	-4003 Jan 25 j 10:56	12° Υ 13'43		retrograde	-3997 Aug 24 j 19:16	22° Υ 27'42	
evening set	-4003 Apr 22 j 06:29	13° Υ 28'20		opposition	-3997 Nov 13 j 02:17	21° Υ 23'30	-2°55'32
max. Earth dist.	-4003 May 05 j 08:23	13° Υ 47'34	44.60059 AU	min. Earth dist.	-3997 Nov 15 j 09:17	21° Υ 20'36	41.23454 AU
				direct	-3996 Feb 03 j 04:00	20° Υ 17'51	
conjunction	-4003 May 07 j 13:40	13° Υ 50'52	-4°59'14	evening set	-3996 Apr 29 j 20:35	21° Υ 34'33	
minimum elong	-4003 May 07 j 13:48	13° Υ 50'53	4°59'13	max. Earth dist.	-3996 May 13 j 05:04	21° Υ 54'51	43.12164 AU
morning rise	-4003 May 22 j 20:30	14° Υ 13'25					
retrograde	-4003 Aug 17 j 04:56	15° Υ 28'12		conjunction	-3996 May 15 j 19:45	21° Υ 58'52	-2°36'42
opposition	-4003 Nov 05 j 19:26	14° Υ 25'17	-5°03'10	minimum elong	-3996 May 15 j 19:49	21° Υ 58'53	2°36'38
min. Earth dist.	-4003 Nov 07 j 19:03	14° Υ 22'50	42.50827 AU	morning rise	-3996 May 31 j 17:51	22° Υ 23'10	
direct	-4002 Jan 26 j 19:06	13° Υ 21'12		retrograde	-3996 Aug 25 j 07:38	23° Υ 39'36	
evening set	-4002 Apr 23 j 14:03	14° Υ 36'04		opposition	-3996 Nov 13 j 12:04	22° Υ 35'10	-2°33'11
max. Earth dist.	-4002 May 06 j 18:22	14° Υ 55'32	44.40149 AU	min. Earth dist.	-3996 Nov 15 j 19:43	22° Υ 32'13	41.01101 AU
				direct	-3995 Feb 03 j 12:08	21° Υ 29'13	
conjunction	-4002 May 09 j 00:13	14° Υ 58'53	-4°39'44	evening set	-3995 May 01 j 07:09	22° Υ 46'19	
minimum elong	-4002 May 09 j 00:20	14° Υ 58'53	4°39'41	max. Earth dist.	-3995 May 14 j 16:20	23° Υ 06'47	42.89758 AU
morning rise	-4002 May 24 j 09:35	15° Υ 21'41					
retrograde	-4002 Aug 18 j 13:39	16° Υ 36'41		conjunction	-3995 May 17 j 07:56	23° Υ 10'52	-2°15'11
opposition	-4002 Nov 07 j 03:59	15° Υ 33'35	-4°42'40	minimum elong	-3995 May 17 j 08:00	23° Υ 10'53	2°15'08
min. Earth dist.	-4002 Nov 09 j 04:59	15° Υ 31'04	42.30613 AU	morning rise	-3995 Jun 02 j 07:18	23° Υ 35'23	
direct	-4001 Jan 28 j 03:54	14° Υ 29'18		retrograde	-3995 Aug 26 j 20:48	24° Υ 52'10	
evening set	-4001 Apr 24 j 22:11	15° Υ 44'25		opposition	-3995 Nov 14 j 22:27	23° Υ 47'28	-2°10'31
max. Earth dist.	-4001 May 08 j 02:57	16° Υ 04'00	44.19829 AU	min. Earth dist.	-3995 Nov 17 j 07:37	23° Υ 44'26	40.78562 AU
				direct	-3994 Feb 04 j 21:06	22° Υ 41'15	
conjunction	-4001 May 10 j 10:51	16° Υ 07'30	-4°19'56	evening set	-3994 May 02 j 18:15	23° Υ 58'47	
minimum elong	-4001 May 10 j 10:59	16° Υ 07'30	4°19'53	max. Earth dist.	-3994 May 16 j 04:18	24° Υ 19'25	42.67200 AU
morning rise	-4001 May 25 j 22:56	16° Υ 30'34					
retrograde	-4001 Aug 20 j 02:21	17° Υ 45'45		conjunction	-3994 May 18 j 20:16	24° Υ 23'34	-1°53'24

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Attention, astronomical year style is used: The year -3994 in astronomical counting style is the year 3995 BCE in historical counting style.

minimum elong	-3994 May 18 j 20:20	24° Υ 23'34	1°53'19	morning rise	-3988 Jun 11 j 08:36	2° \mathcal{B} 24'16	
morning rise	-3994 Jun 03 j 20:50	24° Υ 48'17		retrograde	-3988 Sep 04 j 21:31	3° \mathcal{B} 44'24	
retrograde	-3994 Aug 28 j 10:13	26° Υ 05'26		opposition	-3988 Nov 23 j 07:30	2° \mathcal{B} 38'04	0°36'46
opposition	-3994 Nov 16 j 08:56	25° Υ 00'31	-1°47'32	min. Earth dist.	-3988 Nov 25 j 23:30	2° \mathcal{B} 34'34	39.15758 AU
min. Earth dist.	-3994 Nov 18 j 17:47	24° Υ 57'30	40.55889 AU	direct	-3987 Feb 13 j 03:56	1° \mathcal{B} 29'51	
direct	-3993 Feb 06 j 07:55	23° Υ 54'01		evening set	-3987 May 11 j 16:38	2° \mathcal{B} 51'29	
evening set	-3993 May 04 j 05:55	25° Υ 12'03		max. Earth dist.	-3987 May 24 j 21:22	3° \mathcal{B} 12'43	41.03656 AU
max. Earth dist.	-3993 May 17 j 15:13	25° Υ 32'45	42.44503 AU				
conjunction	-3993 May 20 j 08:54	25° Υ 37'02	-1°31'19	conjunction	-3987 May 27 j 21:00	3° \mathcal{B} 17'35	0°47'02
minimum elong	-3993 May 20 j 08:57	25° Υ 37'03	1°31'15	minimum elong	-3987 May 27 j 20:59	3° \mathcal{B} 17'35	0°47'07
morning rise	-3993 Jun 05 j 10:27	26° Υ 01'59		morning rise	-3987 Jun 12 j 23:06	3° \mathcal{B} 43'34	
retrograde	-3993 Aug 29 j 22:18	27° Υ 19'32		retrograde	-3987 Sep 06 j 10:51	5° \mathcal{B} 04'17	
opposition	-3993 Nov 17 j 19:51	26° Υ 14'24	-1°24'15	opposition	-3987 Nov 24 j 20:35	3° \mathcal{B} 57'40	1°01'52
min. Earth dist.	-3993 Nov 20 j 06:20	26° Υ 11'16	40.33097 AU	min. Earth dist.	-3987 Nov 27 j 12:50	3° \mathcal{B} 54'08	38.91390 AU
direct	-3992 Feb 07 j 18:54	25° Υ 07'38		direct	-3986 Feb 14 j 19:18	2° \mathcal{B} 49'06	
evening set	-3992 May 04 j 17:56	26° Υ 26'11		evening set	-3986 May 13 j 08:46	4° \mathcal{B} 11'26	
max. Earth dist.	-3992 May 18 j 04:28	26° Υ 47'05	42.21670 AU	max. Earth dist.	-3986 May 26 j 10:25	4° \mathcal{B} 32'37	40.79131 AU
conjunction	-3992 May 20 j 21:55	26° Υ 51'23	-1°08'57	conjunction	-3986 May 29 j 12:15	4° \mathcal{B} 37'40	1°11'01
minimum elong	-3992 May 20 j 21:58	26° Υ 51'23	1°08'52	minimum elong	-3986 May 29 j 12:13	4° \mathcal{B} 37'40	1°11'06
morning rise	-3992 Jun 06 j 00:06	27° Υ 16'31		morning rise	-3986 Jun 14 j 13:38	5° \mathcal{B} 03'47	
retrograde	-3992 Aug 30 j 08:35	28° Υ 34'32		retrograde	-3986 Sep 08 j 00:50	6° \mathcal{B} 25'06	
opposition	-3992 Nov 18 j 07:03	27° Υ 29'11	-1°00'39	opposition	-3986 Nov 26 j 10:00	5° \mathcal{B} 18'11	1°27'14
min. Earth dist.	-3992 Nov 20 j 17:54	27° Υ 26'01	40.10143 AU	min. Earth dist.	-3986 Nov 29 j 03:42	5° \mathcal{B} 14'33	38.66775 AU
direct	-3991 Feb 08 j 08:16	26° Υ 22'10		direct	-3985 Feb 16 j 08:56	4° \mathcal{B} 09'14	
evening set	-3991 May 06 j 06:54	27° Υ 41'15		evening set	-3985 May 15 j 01:23	5° \mathcal{B} 32'18	
max. Earth dist.	-3991 May 19 j 15:49	28° Υ 02'12	41.98649 AU	max. Earth dist.	-3985 May 28 j 02:02	5° \mathcal{B} 53'34	40.54367 AU
conjunction	-3991 May 22 j 11:19	28° Υ 06'40	-0°46'18	conjunction	-3985 May 31 j 04:01	5° \mathcal{B} 58'39	1°35'16
minimum elong	-3991 May 22 j 11:20	28° Υ 06'40	0°46'14	minimum elong	-3985 May 31 j 03:58	5° \mathcal{B} 58'39	1°35'21
morning rise	-3991 Jun 07 j 14:08	28° Υ 32'00		morning rise	-3985 Jun 16 j 04:08	6° \mathcal{B} 24'53	
retrograde	-3991 Aug 31 j 22:37	29° Υ 50'30		retrograde	-3985 Sep 09 j 13:55	7° \mathcal{B} 46'51	
opposition	-3991 Nov 19 j 18:28	28° Υ 44'56	-0°36'45	opposition	-3985 Nov 27 j 23:52	6° \mathcal{B} 39'36	1°52'54
min. Earth dist.	-3991 Nov 22 j 06:21	28° Υ 41'42	39.86989 AU	min. Earth dist.	-3985 Nov 30 j 18:33	6° \mathcal{B} 35'54	38.41961 AU
direct	-3990 Feb 09 j 17:37	27° Υ 37'39		direct	-3984 Feb 17 j 22:59	5° \mathcal{B} 30'17	
evening set	-3990 May 07 j 20:24	28° Υ 57'20		evening set	-3984 May 15 j 18:43	6° \mathcal{B} 54'07	
max. Earth dist.	-3990 May 21 j 05:06	29° Υ 18'24	41.75369 AU	max. Earth dist.	-3984 May 28 j 16:43	7° \mathcal{B} 15'21	40.29443 AU
conjunction	-3990 May 24 j 01:16	29° Υ 22'56	-0°23'24	conjunction	-3984 May 31 j 19:56	7° \mathcal{B} 20'34	1°59'45
minimum elong	-3990 May 24 j 01:17	29° Υ 22'56	0°23'18	minimum elong	-3984 May 31 j 19:52	7° \mathcal{B} 20'34	1°59'51
morning rise	-3990 Jun 09 j 04:09	29° Υ 48'28		morning rise	-3984 Jun 16 j 18:51	7° \mathcal{B} 46'54	
retrograde	-3990 Jun 16 j 17:29	0° \mathcal{B}		retrograde	-3984 Sep 10 j 06:39	9° \mathcal{B} 09'34	
opposition	-3990 Sep 02 j 12:16	1° \mathcal{B} 07'29		opposition	-3984 Nov 28 j 14:02	8° \mathcal{B} 01'59	2°18'49
min. Earth dist.	-3990 Nov 21 j 06:33	0° \mathcal{B} 01'41	-0°12'32	min. Earth dist.	-3984 Dec 01 j 08:49	7° \mathcal{B} 58'14	38.17027 AU
direct	-3990 Nov 22 j 13:35	30° $\mathcal{K}\Upsilon$		direct	-3983 Feb 18 j 10:53	6° \mathcal{B} 52'16	
evening set	-3990 Nov 23 j 20:04	29° Υ 58'21	39.63556 AU	evening set	-3983 May 17 j 12:50	8° \mathcal{B} 16'54	
max. Earth dist.	-3989 Feb 11 j 03:49	28° Υ 54'07		max. Earth dist.	-3983 May 30 j 08:18	8° \mathcal{B} 38'08	40.04395 AU
conjunction	-3989 Apr 29 j 23:32	0° \mathcal{B}		conjunction	-3983 Jun 02 j 12:29	8° \mathcal{B} 43'27	2°24'28
minimum elong	-3989 May 09 j 10:25	0° \mathcal{B} 14'25		minimum elong	-3983 Jun 02 j 12:24	8° \mathcal{B} 43'27	2°24'35
morning rise	-3989 May 22 j 18:02	0° \mathcal{B} 35'33	41.51796 AU	morning rise	-3983 Jun 18 j 09:34	9° \mathcal{B} 09'52	
retrograde	-3989 May 25 j 15:18	0° \mathcal{B} 40'11	-0°00'11	retrograde	-3983 Sep 11 j 23:48	10° \mathcal{B} 33'16	
opposition	-3989 May 25 j 15:18	0° \mathcal{B} 40'11	0°00'06	opposition	-3983 Nov 30 j 04:46	9° \mathcal{B} 25'20	2°45'00
min. Earth dist.	-3989 May 25 j 09:02	0° \mathcal{B} 39'48		min. Earth dist.	-3983 Dec 03 j 01:04	9° \mathcal{B} 21'30	37.92020 AU
direct	-3989 May 25 j 21:33	0° \mathcal{B} 40'35		direct	-3982 Feb 20 j 00:28	8° \mathcal{B} 15'15	
evening set	-3989 May 28 j 09:40	0° \mathcal{B} 44'38		evening set	-3982 May 19 j 07:42	9° \mathcal{B} 40'45	
max. Earth dist.	-3989 Jun 10 j 18:16	1° \mathcal{B} 05'53		max. Earth dist.	-3982 Jun 01 j 01:27	10° \mathcal{B} 02'01	39.79310 AU
conjunction	-3989 Jun 04 j 04:35	2° \mathcal{B} 25'27		conjunction	-3982 Jun 04 j 05:25	10° \mathcal{B} 07'21	2°49'25
opposition	-3989 Nov 22 j 18:50	1° \mathcal{B} 19'24	0°11'58	minimum elong	-3982 Jun 04 j 05:19	10° \mathcal{B} 07'21	2°49'31
min. Earth dist.	-3989 Nov 25 j 08:39	1° \mathcal{B} 16'02	39.39819 AU	morning rise	-3982 Jun 20 j 00:28	10° \mathcal{B} 33'50	
direct	-3988 Feb 12 j 15:37	0° \mathcal{B} 11'31		retrograde	-3982 Sep 13 j 18:16	11° \mathcal{B} 58'00	
evening set	-3988 May 10 j 01:13	1° \mathcal{B} 32'29		opposition	-3982 Dec 01 j 19:57	10° \mathcal{B} 49'45	3°11'25
max. Earth dist.	-3988 May 23 j 06:35	1° \mathcal{B} 53'37	41.27884 AU	min. Earth dist.	-3982 Dec 04 j 15:45	10° \mathcal{B} 45'56	37.67003 AU
conjunction	-3988 May 26 j 05:55	1° \mathcal{B} 58'25	0°23'19	direct	-3981 Feb 21 j 16:44	9° \mathcal{B} 39'17	
minimum elong	-3988 May 26 j 05:54	1° \mathcal{B} 58'25	0°23'23	evening set	-3981 May 21 j 03:14	11° \mathcal{B} 05'43	
				max. Earth dist.	-3981 Jun 02 j 17:01	11° \mathcal{B} 26'53	39.54212 AU

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Attention, astronomical year style is used: The year -3981 in astronomical counting style is the year 3982 BCE in historical counting style.

conjunction	-3981 Jun 05 j 22:33	11° 8 32'23	3°14'34	opposition	-3975 Dec 11 j 20:56	21° 8 17'32	6°22'18
minimum elong	-3981 Jun 05 j 22:27	11° 8 32'23	3°14'41	min. Earth dist.	-3975 Dec 14 j 22:00	21° 8 13'14	35.90395 AU
morning rise	-3981 Jun 21 j 15:20	11° 8 58'54		direct	-3974 Mar 03 j 14:34	20° 8 04'21	
retrograde	-3981 Sep 15 j 13:06	13° 8 23'55		evening set	-3974 Jun 01 j 22:35	21° 8 38'52	
opposition	-3981 Dec 03 j 11:38	12° 8 15'21	3°38'05	max. Earth dist.	-3974 Jun 13 j 04:15	21° 8 58'59	37.76327 AU
min. Earth dist.	-3981 Dec 06 j 08:41	12° 8 11'26	37.42002 AU				
direct	-3980 Feb 23 j 08:01	11° 8 04'30		conjunction	-3974 Jun 16 j 15:16	22° 8 05'14	6°15'33
evening set	-3980 May 21 j 23:37	12° 8 31'56		minimum elong	-3974 Jun 16 j 15:03	22° 8 05'13	6°15'40
max. Earth dist.	-3980 Jun 03 j 11:28	12° 8 53'07	39.29114 AU	morning rise	-3974 Jul 01 j 05:06	22° 8 31'26	
				retrograde	-3974 Sep 26 j 08:30	24° 8 03'50	
conjunction	-3980 Jun 06 j 16:29	12° 8 58'38	3°39'55	opposition	-3974 Dec 13 j 16:35	22° 8 52'54	6°50'14
minimum elong	-3980 Jun 06 j 16:21	12° 8 58'37	3°40'01	min. Earth dist.	-3974 Dec 16 j 18:48	22° 8 48'30	35.64695 AU
morning rise	-3980 Jun 22 j 06:26	13° 8 25'11		direct	-3973 Mar 05 j 09:17	21° 8 39'16	
retrograde	-3980 Sep 16 j 05:01	14° 8 51'05		evening set	-3973 Jun 04 j 01:37	23° 8 15'09	
opposition	-3980 Dec 04 j 03:41	13° 8 42'13	4°04'58	max. Earth dist.	-3973 Jun 15 j 02:18	23° 8 35'04	37.50409 AU
min. Earth dist.	-3980 Dec 07 j 00:56	13° 8 38'15	37.16989 AU				
direct	-3979 Feb 24 j 01:08	12° 8 31'01		conjunction	-3973 Jun 18 j 12:58	23° 8 41'21	6°41'55
evening set	-3979 May 23 j 21:08	13° 8 59'29		minimum elong	-3973 Jun 18 j 12:44	23° 8 41'20	6°42'03
max. Earth dist.	-3979 Jun 05 j 04:18	14° 8 20'31	39.03984 AU	morning rise	-3973 Jul 02 j 21:08	24° 8 07'22	
				retrograde	-3973 Sep 28 j 03:53	25° 8 41'02	
conjunction	-3979 Jun 08 j 10:49	14° 8 26'11	4°05'28	opposition	-3973 Dec 15 j 12:50	24° 8 29'42	7°18'16
minimum elong	-3979 Jun 08 j 10:41	14° 8 26'11	4°05'35	min. Earth dist.	-3973 Dec 18 j 15:33	24° 8 25'15	35.38950 AU
morning rise	-3979 Jun 23 j 21:53	14° 8 52'45		direct	-3972 Mar 06 j 06:16	23° 8 15'37	
	-3979 Jun 28 j 05:49	15° 8		evening set	-3972 Jun 05 j 06:01	24° 8 52'55	
retrograde	-3979 Sep 17 j 23:26	16° 8 19'36		max. Earth dist.	-3972 Jun 15 j 23:33	25° 8 12'29	37.24485 AU
opposition	-3979 Dec 05 j 20:19	15° 8 10'26	4°32'04				
min. Earth dist.	-3979 Dec 08 j 18:11	15° 8 06'25	36.91938 AU	conjunction	-3972 Jun 19 j 11:13	25° 8 18'55	7°08'20
	-3979 Dec 13 j 10:20	15° 8		minimum elong	-3972 Jun 19 j 10:58	25° 8 18'54	7°08'28
direct	-3978 Feb 25 j 16:25	13° 8 58'52		morning rise	-3972 Jul 03 j 13:34	25° 8 44'44	
	-3978 May 08 j 07:42	15° 8		retrograde	-3972 Sep 29 j 02:26	27° 8 19'43	
evening set	-3978 May 25 j 19:21	15° 8 28'26		opposition	-3972 Dec 16 j 09:26	26° 8 07'59	7°46'22
max. Earth dist.	-3978 Jun 06 j 22:55	15° 8 49'24	38.78753 AU	min. Earth dist.	-3972 Dec 19 j 12:07	26° 8 03'30	35.13255 AU
				direct	-3971 Mar 08 j 01:07	24° 8 53'25	
conjunction	-3978 Jun 10 j 05:47	15° 8 55'08	4°31'11	evening set	-3971 Jun 07 j 11:22	26° 8 32'14	
minimum elong	-3978 Jun 10 j 05:38	15° 8 55'07	4°31'18	max. Earth dist.	-3971 Jun 17 j 22:25	26° 8 51'29	36.98612 AU
morning rise	-3978 Jun 25 j 13:13	16° 8 21'41					
retrograde	-3978 Sep 19 j 17:52	17° 8 49'33		conjunction	-3971 Jun 21 j 10:13	26° 8 57'59	7°34'47
opposition	-3978 Dec 07 j 13:41	16° 8 40'03	4°59'21	minimum elong	-3971 Jun 21 j 09:57	26° 8 57'58	7°34'56
min. Earth dist.	-3978 Dec 10 j 13:00	16° 8 35'56	36.66772 AU	morning rise	-3971 Jul 05 j 05:58	27° 8 23'33	
direct	-3977 Feb 27 j 07:27	15° 8 28'07		retrograde	-3971 Oct 01 j 00:49	28° 8 59'56	
evening set	-3977 May 27 j 18:41	16° 8 58'50		opposition	-3971 Dec 18 j 07:02	27° 8 47'47	8°14'29
max. Earth dist.	-3977 Jun 08 j 17:37	17° 8 19'39	38.53395 AU	min. Earth dist.	-3971 Dec 21 j 10:46	27° 8 43'12	34.87666 AU
				direct	-3970 Mar 09 j 19:29	26° 8 32'45	
conjunction	-3977 Jun 12 j 01:14	17° 8 25'30	4°57'04	evening set	-3970 Jun 09 j 17:51	28° 8 13'08	
minimum elong	-3977 Jun 12 j 01:04	17° 8 25'29	4°57'12	max. Earth dist.	-3970 Jun 19 j 22:12	28° 8 32'04	36.72889 AU
morning rise	-3977 Jun 27 j 04:58	17° 8 52'00					
retrograde	-3977 Sep 21 j 14:52	19° 8 20'57		conjunction	-3970 Jun 23 j 09:34	28° 8 38'35	8°01'13
opposition	-3977 Dec 09 j 07:26	18° 8 11'07	5°26'50	minimum elong	-3970 Jun 23 j 09:18	28° 8 38'34	8°01'21
min. Earth dist.	-3977 Dec 12 j 06:39	18° 8 06'59	36.41473 AU	morning rise	-3970 Jul 06 j 22:22	29° 8 03'51	
direct	-3976 Feb 28 j 23:50	16° 8 58'47			-3970 Aug 09 j 11:42	0° II	
evening set	-3976 May 28 j 18:54	18° 8 30'43		retrograde	-3970 Oct 03 j 01:42	0° II 41'43	
max. Earth dist.	-3976 Jun 09 j 12:03	18° 8 51'18	38.27861 AU		-3970 Nov 28 j 08:35	30° 8	
				opposition	-3970 Dec 20 j 05:09	29° 8 29'09	8°42'36
conjunction	-3976 Jun 12 j 21:19	18° 8 57'19	5°23'06	min. Earth dist.	-3970 Dec 23 j 07:52	29° 8 24'37	34.62270 AU
minimum elong	-3976 Jun 12 j 21:08	18° 8 57'18	5°23'13	direct	-3969 Mar 11 j 17:50	28° 8 13'40	
morning rise	-3976 Jun 27 j 20:48	19° 8 23'45		evening set	-3969 Jun 12 j 01:29	29° 8 55'42	
retrograde	-3976 Sep 22 j 12:44	20° 8 53'48			-3969 Jun 14 j 08:45	0° II	
opposition	-3976 Dec 10 j 01:58	19° 8 43'36	5°54'29	max. Earth dist.	-3969 Jun 21 j 21:29	0° II 14'11	36.47366 AU
min. Earth dist.	-3976 Dec 13 j 03:01	19° 8 39'20	36.16008 AU				
direct	-3975 Mar 01 j 17:37	18° 8 30'52		conjunction	-3969 Jun 25 j 09:41	0° II 20'50	8°27'36
evening set	-3975 May 30 j 20:12	20° 8 04'03		minimum elong	-3969 Jun 25 j 09:23	0° II 20'48	8°27'44
max. Earth dist.	-3975 Jun 11 j 08:56	20° 8 24'30	38.02162 AU	morning rise	-3969 Jul 08 j 14:59	0° II 45'46	
				retrograde	-3969 Oct 05 j 04:39	2° II 25'11	
conjunction	-3975 Jun 14 j 18:04	20° 8 30'33	5°49'16	opposition	-3969 Dec 22 j 03:58	1° II 12'13	9°10'39
minimum elong	-3975 Jun 14 j 17:52	20° 8 30'32	5°49'24	min. Earth dist.	-3969 Dec 25 j 07:35	1° II 07'36	34.37118 AU
morning rise	-3975 Jun 29 j 12:51	20° 8 56'53			-3968 Feb 25 j 07:30	30° 8	
retrograde	-3975 Sep 24 j 10:24	22° 8 28'05		direct	-3968 Mar 12 j 15:05	29° 8 56'16	

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Attention, astronomical year style is used: The year -3968 in astronomical counting style is the year 3969 BCE in historical counting style.

	-3968 Mar 28 j 23:24	0°II		retrograde	-3962 Oct 18 j 06:53	15°II22'08	
evening set	-3968 Jun 13 j 10:21	1°II40'04		opposition	-3961 Jan 03 j 17:58	14°II06'20	12°22'16
max. Earth dist.	-3968 Jun 22 j 23:32	1°II58'12	36.22092 AU	min. Earth dist.	-3961 Jan 06 j 22:02	14°II01'28	32.66812 AU
				direct	-3961 Mar 25 j 21:15	12°II47'10	
conjunction	-3968 Jun 26 j 10:30	2°II04'49	8°53'53	evening set	-3961 Jun 30 j 16:25	14°II45'43	
minimum elong	-3968 Jun 26 j 10:12	2°II04'47	8°54'01	max. Earth dist.	-3961 Jul 07 j 02:23	14°II58'49	34.50460 AU
morning rise	-3968 Jul 09 j 07:39	2°II29'21					
retrograde	-3968 Oct 06 j 06:16	4°II10'25		conjunction	-3961 Jul 10 j 12:46	15°II05'52	11°52'14
opposition	-3968 Dec 23 j 03:34	2°II57'04	9°38'37	minimum elong	-3961 Jul 10 j 12:22	15°II05'50	11°52'23
min. Earth dist.	-3968 Dec 26 j 06:24	2°II52'28	34.12207 AU	morning rise	-3961 Jul 20 j 06:51	15°II25'51	
direct	-3967 Mar 14 j 15:33	1°II40'41		retrograde	-3961 Oct 20 j 13:47	17°II20'49	
evening set	-3967 Jun 15 j 20:39	3°II26'20		opposition	-3960 Jan 05 j 23:08	16°II04'33	12°48'23
max. Earth dist.	-3967 Jun 25 j 00:01	3°II43'52	35.97047 AU	min. Earth dist.	-3960 Jan 09 j 02:07	15°II59'44	32.43299 AU
				direct	-3960 Mar 27 j 03:03	14°II44'53	
conjunction	-3967 Jun 28 j 11:58	3°II50'37	9°20'03	evening set	-3960 Jul 02 j 13:17	16°II45'56	
minimum elong	-3967 Jun 28 j 11:38	3°II50'36	9°20'12	max. Earth dist.	-3960 Jul 08 j 08:29	16°II57'54	34.26798 AU
morning rise	-3967 Jul 11 j 00:36	4°II14'44					
retrograde	-3967 Oct 08 j 09:29	5°II57'31		conjunction	-3960 Jul 11 j 19:28	17°II05'04	12°16'20
opposition	-3967 Dec 25 j 03:50	4°II43'47	10°06'27	minimum elong	-3960 Jul 11 j 19:05	17°II05'02	12°16'30
min. Earth dist.	-3967 Dec 28 j 07:09	4°II39'07	33.87538 AU	morning rise	-3960 Jul 20 j 23:40	17°II24'04	
direct	-3966 Mar 16 j 14:28	3°II26'58		retrograde	-3960 Oct 21 j 23:22	19°II21'24	
evening set	-3966 Jun 18 j 08:13	5°II14'33		opposition	-3959 Jan 07 j 05:15	18°II04'41	13°14'00
max. Earth dist.	-3966 Jun 27 j 03:23	5°II31'36	35.72202 AU	min. Earth dist.	-3959 Jan 10 j 08:18	17°II59'50	32.20139 AU
				direct	-3959 Mar 29 j 08:32	16°II44'31	
conjunction	-3966 Jun 30 j 14:19	5°II38'21	9°46'03	evening set	-3959 Jul 05 j 12:00	18°II48'11	
minimum elong	-3966 Jun 30 j 13:59	5°II38'19	9°46'12	max. Earth dist.	-3959 Jul 10 j 17:53	18°II59'07	34.03514 AU
morning rise	-3966 Jul 12 j 17:31	6°II01'57					
retrograde	-3966 Oct 10 j 11:14	7°II46'33		conjunction	-3959 Jul 14 j 02:58	19°II06'12	12°39'54
opposition	-3966 Dec 27 j 05:06	6°II32'26	10°34'07	minimum elong	-3959 Jul 14 j 02:33	19°II06'10	12°40'05
min. Earth dist.	-3966 Dec 30 j 08:36	6°II27'43	33.63057 AU	morning rise	-3959 Jul 22 j 15:55	19°II24'04	
direct	-3965 Mar 18 j 15:58	5°II15'11		retrograde	-3959 Oct 24 j 07:07	21°II23'55	
evening set	-3965 Jun 20 j 21:10	7°II04'46		opposition	-3958 Jan 09 j 12:17	20°II06'44	13°39'01
max. Earth dist.	-3965 Jun 29 j 05:33	7°II21'08	35.47535 AU	min. Earth dist.	-3958 Jan 12 j 14:34	20°II01'54	31.97400 AU
				direct	-3958 Mar 31 j 16:04	18°II46'05	
conjunction	-3965 Jul 02 j 17:07	7°II28'00	10°11'51	evening set	-3958 Jul 08 j 12:43	20°II52'30	
minimum elong	-3965 Jul 02 j 16:45	7°II27'58	10°12'01	max. Earth dist.	-3958 Jul 13 j 02:13	21°II02'08	33.80714 AU
morning rise	-3965 Jul 14 j 10:32	7°II51'02					
retrograde	-3965 Oct 12 j 16:17	9°II37'32		conjunction	-3958 Jul 16 j 11:04	21°II09'15	13°02'51
opposition	-3965 Dec 29 j 07:01	8°II23'01	11°01'35	minimum elong	-3958 Jul 16 j 10:40	21°II09'13	13°03'01
min. Earth dist.	-3964 Jan 01 j 10:06	8°II18'19	33.38750 AU	morning rise	-3958 Jul 24 j 07:45	21°II25'52	
direct	-3964 Mar 19 j 16:05	7°II05'18		retrograde	-3958 Oct 26 j 17:06	23°II28'22	
evening set	-3964 Jun 22 j 11:36	8°II57'01		opposition	-3957 Jan 11 j 20:08	22°II10'46	14°03'22
max. Earth dist.	-3964 Jun 30 j 09:31	9°II12'40	35.23002 AU	min. Earth dist.	-3957 Jan 14 j 21:10	22°II05'58	31.75200 AU
				direct	-3957 Apr 02 j 22:32	20°II49'38	
conjunction	-3964 Jul 03 j 20:59	9°II19'36	10°37'25	evening set	-3957 Jul 11 j 15:30	22°II59'00	
minimum elong	-3964 Jul 03 j 20:38	9°II19'34	10°37'35	max. Earth dist.	-3957 Jul 15 j 12:53	23°II07'17	33.58471 AU
morning rise	-3964 Jul 15 j 03:42	9°II42'00					
retrograde	-3964 Oct 13 j 18:46	11°II30'29		conjunction	-3957 Jul 18 j 19:57	23°II14'20	13°25'07
opposition	-3964 Dec 30 j 09:48	10°II15'33	11°28'48	minimum elong	-3957 Jul 18 j 19:32	23°II14'17	13°25'17
min. Earth dist.	-3963 Jan 02 j 13:54	10°II10'45	33.14586 AU	morning rise	-3957 Jul 25 j 22:42	23°II29'31	
direct	-3963 Mar 21 j 16:40	8°II57'22		retrograde	-3957 Oct 29 j 01:33	25°II34'52	
evening set	-3963 Jun 25 j 03:45	10°II51'15		opposition	-3956 Jan 14 j 04:59	24°II16'50	14°26'56
max. Earth dist.	-3963 Jul 02 j 14:25	11°II06'08	34.98628 AU	min. Earth dist.	-3956 Jan 17 j 05:32	24°II12'03	31.53582 AU
				direct	-3956 Apr 04 j 05:35	22°II55'16	
conjunction	-3963 Jul 06 j 01:32	11°II13'07	11°02'43	evening set	-3956 Jul 13 j 21:14	25°II07'47	
minimum elong	-3963 Jul 06 j 01:09	11°II13'05	11°02'52	max. Earth dist.	-3956 Jul 16 j 23:43	25°II14'29	33.36859 AU
morning rise	-3963 Jul 16 j 20:54	11°II34'48					
retrograde	-3963 Oct 16 j 00:18	13°II25'21		conjunction	-3956 Jul 20 j 05:37	25°II21'29	13°46'35
opposition	-3962 Jan 01 j 13:26	12°II09'59	11°55'43	minimum elong	-3956 Jul 20 j 05:14	25°II21'27	13°46'45
min. Earth dist.	-3962 Jan 04 j 16:36	12°II05'13	32.90593 AU	morning rise	-3956 Jul 26 j 12:39	25°II35'04	
direct	-3962 Mar 23 j 19:27	10°II51'19		retrograde	-3956 Oct 30 j 13:28	27°II43'27	
evening set	-3962 Jun 27 j 21:11	12°II47'29		opposition	-3955 Jan 15 j 14:28	26°II25'03	14°49'40
max. Earth dist.	-3962 Jul 04 j 19:05	13°II01'27	34.74423 AU	min. Earth dist.	-3955 Jan 18 j 12:57	26°II20'22	31.32603 AU
				direct	-3955 Apr 06 j 12:56	25°II03'04	
conjunction	-3962 Jul 08 j 06:45	13°II08'32	11°27'40	evening set	-3955 Jul 17 j 06:16	27°II19'02	
minimum elong	-3962 Jul 08 j 06:22	13°II08'31	11°27'49	max. Earth dist.	-3955 Jul 19 j 11:34	27°II23'52	33.15882 AU
morning rise	-3962 Jul 18 j 13:59	13°II29'26					

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Attention, astronomical year style is used: The year -3955 in astronomical counting style is the year 3956 BCE in historical counting style.

conjunction	-3955 Jul 22 j 16:14	27° Π 30'50	14°07'14	opposition	-3947 Feb 03 j 05:16	14° \mathfrak{D} 48'03	17°11'43
minimum elong	-3955 Jul 22 j 15:49	27° Π 30'47	14°07'23	min. Earth dist.	-3947 Feb 05 j 17:59	14° \mathfrak{D} 43'51	29.86946 AU
morning rise	-3955 Jul 28 j 00:54	27° Π 42'31		direct	-3947 Apr 24 j 17:32	13° \mathfrak{D} 23'14	
retrograde	-3955 Nov 02 j 00:15	29° Π 54'15		max. Earth dist.	-3947 Aug 07 j 16:59	15° \mathfrak{D} 55'52	31.70718 AU
opposition	-3954 Jan 18 j 01:11	28° Π 35'28	15°11'28				
min. Earth dist.	-3954 Jan 20 j 23:33	28° Π 30'47	31.12263 AU	conjunction	-3947 Aug 10 j 08:03	16° \mathfrak{D} 02'00	16°13'21
direct	-3954 Apr 08 j 20:24	27° Π 13'07		minimum elong	-3947 Aug 10 j 07:46	16° \mathfrak{D} 01'58	16°13'32
evening set	-3954 Jul 20 j 20:13	29° Π 32'56		retrograde	-3947 Nov 21 j 08:08	18° \mathfrak{D} 35'56	
max. Earth dist.	-3954 Jul 22 j 00:55	29° Π 35'33	32.95556 AU	opposition	-3946 Feb 05 j 22:55	17° \mathfrak{D} 14'21	17°23'15
				min. Earth dist.	-3946 Feb 08 j 08:38	17° \mathfrak{D} 10'22	29.71785 AU
conjunction	-3954 Jul 25 j 03:25	29° Π 42'24	14°26'56	direct	-3946 Apr 27 j 10:29	15° \mathfrak{D} 49'14	
minimum elong	-3954 Jul 25 j 03:02	29° Π 42'22	14°27'06	max. Earth dist.	-3946 Aug 10 j 12:35	18° \mathfrak{D} 23'10	31.55808 AU
morning rise	-3954 Jul 29 j 09:36	29° Π 51'47					
	-3954 Aug 02 j 03:34	0° \mathfrak{D}		conjunction	-3946 Aug 13 j 00:51	18° \mathfrak{D} 29'05	16°23'05
retrograde	-3954 Nov 04 j 13:14	2° \mathfrak{D} 07'16		minimum elong	-3946 Aug 13 j 00:38	18° \mathfrak{D} 29'03	16°23'15
opposition	-3953 Jan 20 j 12:43	0° \mathfrak{D} 48'08	15°32'15	retrograde	-3946 Nov 24 j 00:24	21° \mathfrak{D} 04'05	
min. Earth dist.	-3953 Jan 23 j 08:56	0° \mathfrak{D} 43'34	30.92543 AU	opposition	-3945 Feb 08 j 17:29	19° \mathfrak{D} 42'11	17°33'05
	-3953 Feb 21 j 10:55	30° \mathfrak{R} Π		min. Earth dist.	-3945 Feb 11 j 01:53	19° \mathfrak{D} 38'16	29.57507 AU
direct	-3953 Apr 11 j 07:20	29° Π 25'25		direct	-3945 Apr 30 j 02:53	18° \mathfrak{D} 16'46	
	-3953 May 28 j 17:47	0° \mathfrak{D}		max. Earth dist.	-3945 Aug 13 j 08:54	20° \mathfrak{D} 51'58	31.41865 AU
evening set	-3953 Jul 24 j 19:23	1° \mathfrak{D} 49'54					
max. Earth dist.	-3953 Jul 24 j 13:37	1° \mathfrak{D} 49'22	32.75838 AU	conjunction	-3945 Aug 15 j 18:14	20° \mathfrak{D} 57'37	16°31'11
				minimum elong	-3945 Aug 15 j 18:01	20° \mathfrak{D} 57'36	16°31'21
conjunction	-3953 Jul 27 j 15:33	1° \mathfrak{D} 56'13	14°45'40	retrograde	-3945 Nov 26 j 19:23	23° \mathfrak{D} 33'38	
minimum elong	-3953 Jul 27 j 15:10	1° \mathfrak{D} 56'10	14°45'51	opposition	-3944 Feb 11 j 12:26	22° \mathfrak{D} 11'27	17°41'08
morning rise	-3953 Jul 30 j 10:51	2° \mathfrak{D} 02'27		min. Earth dist.	-3944 Feb 13 j 17:18	22° \mathfrak{D} 07'46	29.44196 AU
retrograde	-3953 Nov 07 j 03:33	4° \mathfrak{D} 22'30		direct	-3944 May 01 j 21:11	20° \mathfrak{D} 45'47	
opposition	-3952 Jan 23 j 01:07	3° \mathfrak{D} 03'02	15°51'59	max. Earth dist.	-3944 Aug 15 j 05:24	23° \mathfrak{D} 22'08	31.28938 AU
min. Earth dist.	-3952 Jan 25 j 21:06	2° \mathfrak{D} 58'27	30.73428 AU				
direct	-3952 Apr 12 j 16:42	1° \mathfrak{D} 39'57		conjunction	-3944 Aug 17 j 12:13	23° \mathfrak{D} 27'35	16°37'35
max. Earth dist.	-3952 Jul 26 j 05:05	4° \mathfrak{D} 05'32	32.56724 AU	minimum elong	-3944 Aug 17 j 12:04	23° \mathfrak{D} 27'34	16°37'44
				retrograde	-3944 Nov 28 j 14:20	26° \mathfrak{D} 04'33	
conjunction	-3952 Jul 29 j 04:36	4° \mathfrak{D} 12'13	15°03'21	opposition	-3943 Feb 13 j 08:21	24° \mathfrak{D} 42'07	17°47'19
minimum elong	-3952 Jul 29 j 04:15	4° \mathfrak{D} 12'11	15°03'31	min. Earth dist.	-3943 Feb 15 j 11:29	24° \mathfrak{D} 38'33	29.31906 AU
retrograde	-3952 Nov 08 j 18:06	6° \mathfrak{D} 39'55		direct	-3943 May 04 j 13:33	23° \mathfrak{D} 16'15	
opposition	-3951 Jan 24 j 14:36	5° \mathfrak{D} 20'06	16°10'33	max. Earth dist.	-3943 Aug 18 j 03:29	25° \mathfrak{D} 53'48	31.17090 AU
min. Earth dist.	-3951 Jan 27 j 08:44	5° \mathfrak{D} 15'37	30.54883 AU				
direct	-3951 Apr 15 j 05:39	3° \mathfrak{D} 56'40		conjunction	-3943 Aug 20 j 06:34	25° \mathfrak{D} 58'55	16°42'12
max. Earth dist.	-3951 Jul 28 j 19:07	6° \mathfrak{D} 23'40	32.38199 AU	minimum elong	-3943 Aug 20 j 06:26	25° \mathfrak{D} 58'54	16°42'22
				retrograde	-3943 Dec 01 j 09:38	28° \mathfrak{D} 36'47	
conjunction	-3951 Jul 31 j 18:15	6° \mathfrak{D} 30'22	15°19'55	opposition	-3942 Feb 16 j 04:52	27° \mathfrak{D} 14'08	17°51'34
minimum elong	-3951 Jul 31 j 17:53	6° \mathfrak{D} 30'20	15°20'05	min. Earth dist.	-3942 Feb 18 j 04:20	27° \mathfrak{D} 10'49	29.20654 AU
retrograde	-3951 Nov 11 j 11:34	8° \mathfrak{D} 59'25		direct	-3942 May 07 j 10:14	25° \mathfrak{D} 48'08	
opposition	-3950 Jan 27 j 05:00	7° \mathfrak{D} 39'14	16°27'54	max. Earth dist.	-3942 Aug 21 j 00:31	28° \mathfrak{D} 26'40	31.06309 AU
min. Earth dist.	-3950 Jan 29 j 22:08	7° \mathfrak{D} 34'49	30.36934 AU				
direct	-3950 Apr 17 j 19:12	6° \mathfrak{D} 15'28		conjunction	-3942 Aug 23 j 01:22	28° \mathfrak{D} 31'34	16°45'00
max. Earth dist.	-3950 Jul 31 j 12:28	8° \mathfrak{D} 44'02	32.20290 AU	minimum elong	-3942 Aug 23 j 01:18	28° \mathfrak{D} 31'33	16°45'09
					-3942 Sep 30 j 22:04	0° \mathfrak{D}	
conjunction	-3950 Aug 03 j 08:51	8° \mathfrak{D} 50'32	15°35'17	retrograde	-3942 Dec 04 j 06:27	1° \mathfrak{D} 10'16	
minimum elong	-3950 Aug 03 j 08:31	8° \mathfrak{D} 50'30	15°35'26		-3941 Feb 11 j 14:02	30° \mathfrak{R} \mathfrak{D}	
retrograde	-3950 Nov 14 j 02:48	11° \mathfrak{D} 20'53		opposition	-3941 Feb 19 j 01:56	29° \mathfrak{D} 47'26	17°53'49
opposition	-3949 Jan 29 j 20:20	10° \mathfrak{D} 00'22	16°43'57	min. Earth dist.	-3941 Feb 20 j 23:09	29° \mathfrak{D} 44'16	29.10447 AU
min. Earth dist.	-3949 Feb 01 j 12:06	9° \mathfrak{D} 56'01	30.19592 AU	direct	-3941 May 10 j 04:36	28° \mathfrak{D} 21'20	
direct	-3949 Apr 20 j 10:27	8° \mathfrak{D} 36'14			-3941 Jul 28 j 23:40	0° \mathfrak{D}	
max. Earth dist.	-3949 Aug 03 j 04:19	11° \mathfrak{D} 06'08	32.03039 AU	max. Earth dist.	-3941 Aug 23 j 23:49	1° \mathfrak{D} 00'56	30.96590 AU
conjunction	-3949 Aug 05 j 23:50	11° \mathfrak{D} 12'37	15°49'22	conjunction	-3941 Aug 25 j 20:36	1° \mathfrak{D} 05'27	16°45'57
minimum elong	-3949 Aug 05 j 23:31	11° \mathfrak{D} 12'35	15°49'32	minimum elong	-3941 Aug 25 j 20:33	1° \mathfrak{D} 05'27	16°46'06
retrograde	-3949 Nov 16 j 20:35	13° \mathfrak{D} 44'13		retrograde	-3941 Dec 07 j 02:51	3° \mathfrak{D} 44'54	
opposition	-3948 Feb 01 j 12:21	12° \mathfrak{D} 23'20	16°58'35	opposition	-3940 Feb 21 j 23:36	2° \mathfrak{D} 21'56	17°54'04
min. Earth dist.	-3948 Feb 04 j 02:10	12° \mathfrak{D} 19'06	30.02915 AU	min. Earth dist.	-3940 Feb 23 j 17:47	2° \mathfrak{D} 18'58	29.01232 AU
direct	-3948 Apr 22 j 01:20	10° \mathfrak{D} 58'52		direct	-3940 May 12 j 01:33	0° \mathfrak{D} 55'45	
max. Earth dist.	-3948 Aug 04 j 22:56	13° \mathfrak{D} 30'13	31.86484 AU	max. Earth dist.	-3940 Aug 25 j 21:21	3° \mathfrak{D} 36'07	30.87886 AU
conjunction	-3948 Aug 07 j 15:45	13° \mathfrak{D} 36'29	16°02'05	conjunction	-3940 Aug 27 j 16:06	3° \mathfrak{D} 40'27	16°45'01
minimum elong	-3948 Aug 07 j 15:28	13° \mathfrak{D} 36'27	16°02'15	minimum elong	-3940 Aug 27 j 16:06	3° \mathfrak{D} 40'27	16°45'09
retrograde	-3948 Nov 18 j 13:07	16° \mathfrak{D} 09'16		retrograde	-3940 Dec 09 j 01:15	6° \mathfrak{D} 20'34	

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Attention, astronomical year style is used: The year -3939 in astronomical counting style is the year 3940 BCE in historical counting style.

opposition	-3939 Feb 23 j 21:42	4°Ω57'27	17°52'17	opposition	-3931 Mar 17 j 15:18	25°Ω54'38	16°23'51
min. Earth dist.	-3939 Feb 25 j 13:09	4°Ω54'41	28.93002 AU	min. Earth dist.	-3931 Mar 18 j 04:33	25°Ω53'42	28.63056 AU
direct	-3939 May 14 j 22:07	3°Ω31'13		direct	-3931 Jun 05 j 14:04	24°Ω28'44	
max. Earth dist.	-3939 Aug 28 j 21:30	6°Ω12'28	30.80184 AU				
				conjunction	-3931 Sep 20 j 03:27	27°Ω13'04	15°11'00
conjunction	-3939 Aug 30 j 12:05	6°Ω16'23	16°42'11	minimum elong	-3931 Sep 20 j 03:47	27°Ω13'06	15°11'06
minimum elong	-3939 Aug 30 j 12:07	6°Ω16'23	16°42'20	max. Earth dist.	-3931 Sep 19 j 15:42	27°Ω11'52	30.56103 AU
retrograde	-3939 Dec 11 j 22:20	8°Ω57'03		retrograde	-3930 Jan 01 j 22:30	29°Ω54'09	
opposition	-3938 Feb 26 j 20:27	7°Ω33'50	17°48'26	opposition	-3930 Mar 20 j 14:27	28°Ω30'34	16°03'42
min. Earth dist.	-3938 Feb 28 j 09:22	7°Ω31'14	28.85722 AU	min. Earth dist.	-3930 Mar 21 j 00:30	28°Ω29'52	28.64403 AU
direct	-3938 May 17 j 21:04	6°Ω07'35		direct	-3930 Jun 08 j 11:05	27°Ω04'52	
max. Earth dist.	-3938 Aug 31 j 19:30	8°Ω49'21	30.73473 AU	evening set	-3930 Sep 20 j 19:12	29°Ω43'23	
conjunction	-3938 Sep 02 j 08:00	8°Ω53'04	16°37'27	conjunction	-3930 Sep 22 j 22:24	29°Ω48'36	14°51'15
minimum elong	-3938 Sep 02 j 08:05	8°Ω53'05	16°37'34	minimum elong	-3930 Sep 22 j 22:45	29°Ω48'38	14°51'20
retrograde	-3938 Dec 14 j 20:57	11°Ω34'11		max. Earth dist.	-3930 Sep 22 j 15:15	29°Ω47'52	30.58386 AU
opposition	-3937 Mar 01 j 19:22	10°Ω10'51	17°42'32	morning rise	-3930 Sep 25 j 02:16	29°Ω53'52	
min. Earth dist.	-3937 Mar 03 j 04:47	10°Ω08'31	28.79404 AU		-3930 Sep 27 j 14:40	0°൬	
direct	-3937 May 20 j 18:58	8°Ω44'35		retrograde	-3929 Jan 04 j 17:49	2°൬29'18	
max. Earth dist.	-3937 Sep 03 j 19:47	11°Ω26'59	30.67742 AU	opposition	-3929 Mar 23 j 13:14	1°൬05'49	15°41'39
				min. Earth dist.	-3929 Mar 23 j 19:12	1°൬05'24	28.66951 AU
conjunction	-3937 Sep 05 j 04:21	11°Ω30'18	16°30'48		-3929 May 07 j 09:39	30°℞Ω	
minimum elong	-3937 Sep 05 j 04:28	11°Ω30'19	16°30'56	direct	-3929 Jun 11 j 09:32	29°Ω40'21	
retrograde	-3937 Dec 17 j 18:02	14°Ω11'44			-3929 Jul 15 j 08:28	0°൬	
opposition	-3936 Mar 03 j 18:31	12°Ω48'19	17°34'34	evening set	-3929 Sep 21 j 17:58	2°൬13'45	
min. Earth dist.	-3936 Mar 05 j 01:49	12°Ω46'07	28.74033 AU				
direct	-3936 May 22 j 17:58	11°Ω22'04		conjunction	-3929 Sep 25 j 16:59	2°൬23'23	14°29'49
max. Earth dist.	-3936 Sep 05 j 18:28	14°Ω04'46	30.63023 AU	minimum elong	-3929 Sep 25 j 17:22	2°൬23'25	14°29'55
				max. Earth dist.	-3929 Sep 25 j 12:42	2°൬22'57	30.61871 AU
conjunction	-3936 Sep 07 j 00:36	14°Ω07'51	16°22'15	morning rise	-3929 Sep 29 j 16:41	2°൬33'05	
minimum elong	-3936 Sep 07 j 00:45	14°Ω07'52	16°22'21	retrograde	-3928 Jan 07 j 13:29	5°൬03'38	
	-3936 Sep 28 j 16:01	15°Ω		opposition	-3928 Mar 25 j 11:38	3°൬40'17	15°17'50
retrograde	-3936 Dec 19 j 17:15	16°Ω49'29		min. Earth dist.	-3928 Mar 25 j 14:07	3°൬40'07	28.70677 AU
opposition	-3935 Mar 06 j 17:50	15°Ω25'59	17°24'32	direct	-3928 Jun 13 j 06:40	2°൬15'04	
min. Earth dist.	-3935 Mar 07 j 21:05	15°Ω24'04	28.69653 AU	evening set	-3928 Sep 22 j 05:57	4°൬44'40	
	-3935 Mar 22 j 09:03	15°℞Ω					
direct	-3935 May 25 j 17:48	13°Ω59'44		conjunction	-3928 Sep 27 j 11:21	4°൬57'20	14°06'47
	-3935 Jul 25 j 03:29	15°Ω		minimum elong	-3928 Sep 27 j 11:44	4°൬57'22	14°06'51
				max. Earth dist.	-3928 Sep 27 j 11:43	4°൬57'22	30.66519 AU
conjunction	-3935 Sep 09 j 20:47	16°Ω45'28	16°11'46	morning rise	-3928 Oct 02 j 17:18	5°൬10'03	
minimum elong	-3935 Sep 09 j 20:59	16°Ω45'30	16°11'54	retrograde	-3927 Jan 09 j 07:25	7°൬37'02	
max. Earth dist.	-3935 Sep 08 j 18:34	16°Ω42'48	30.59331 AU	opposition	-3927 Mar 28 j 09:55	6°൬13'50	14°52'20
retrograde	-3935 Dec 22 j 13:06	19°Ω27'13		min. Earth dist.	-3927 Mar 28 j 09:06	6°൬13'53	28.75507 AU
opposition	-3934 Mar 09 j 17:26	18°Ω03'38	17°12'26	direct	-3927 Jun 16 j 05:15	4°൬48'55	
min. Earth dist.	-3934 Mar 10 j 18:31	18°Ω01'52	28.66301 AU	evening set	-3927 Sep 23 j 22:40	7°൬15'11	
direct	-3934 May 28 j 16:23	16°Ω37'26					
				conjunction	-3927 Sep 30 j 05:01	7°൬30'17	13°42'15
conjunction	-3934 Sep 12 j 16:47	19°Ω22'58	15°59'23	minimum elong	-3927 Sep 30 j 05:26	7°൬30'20	13°42'19
minimum elong	-3934 Sep 12 j 17:01	19°Ω23'00	15°59'30	max. Earth dist.	-3927 Sep 30 j 07:53	7°൬30'34	30.72262 AU
max. Earth dist.	-3934 Sep 11 j 17:54	19°Ω20'38	30.56744 AU	morning rise	-3927 Oct 06 j 12:00	7°൬45'28	
retrograde	-3934 Dec 25 j 10:38	22°Ω04'41		retrograde	-3926 Jan 12 j 03:16	10°൬09'22	
opposition	-3933 Mar 12 j 16:42	20°Ω41'03	16°58'16	opposition	-3926 Mar 31 j 07:45	8°൬46'19	14°25'14
min. Earth dist.	-3933 Mar 13 j 13:18	20°Ω39'37	28.64048 AU	min. Earth dist.	-3926 Mar 31 j 02:57	8°൬46'39	28.81406 AU
direct	-3933 May 31 j 16:19	19°Ω14'55		direct	-3926 Jun 19 j 01:39	7°൬21'42	
				evening set	-3926 Sep 25 j 18:16	9°൬44'54	
conjunction	-3933 Sep 15 j 12:38	22°Ω00'10	15°45'07	conjunction	-3926 Oct 02 j 22:32	10°൬02'07	13°16'18
minimum elong	-3933 Sep 15 j 12:54	22°Ω00'11	15°45'14	minimum elong	-3926 Oct 02 j 22:56	10°൬02'10	13°16'21
max. Earth dist.	-3933 Sep 14 j 17:27	21°Ω58'12	30.55302 AU	max. Earth dist.	-3926 Oct 03 j 05:43	10°൬02'50	30.79044 AU
retrograde	-3933 Dec 28 j 07:27	24°Ω41'45		morning rise	-3926 Oct 10 j 03:14	10°൬19'24	
opposition	-3932 Mar 14 j 16:08	23°Ω18'06	16°42'04	retrograde	-3925 Jan 14 j 20:28	12°൬40'29	
min. Earth dist.	-3932 Mar 15 j 10:05	23°Ω16'50	28.62952 AU	opposition	-3925 Apr 03 j 05:04	11°൬17'37	13°56'41
direct	-3932 Jun 02 j 13:54	21°Ω52'03		min. Earth dist.	-3925 Apr 02 j 21:48	11°൬18'07	28.88301 AU
				direct	-3925 Jun 21 j 23:26	9°൬53'18	
conjunction	-3932 Sep 17 j 08:10	24°Ω36'53	15°28'58	evening set	-3925 Sep 27 j 15:41	12°൬13'37	
minimum elong	-3932 Sep 17 j 08:27	24°Ω36'55	15°29'03				
max. Earth dist.	-3932 Sep 16 j 17:03	24°Ω35'21	30.55081 AU	conjunction	-3925 Oct 05 j 15:22	12°൬32'41	12°49'02
retrograde	-3932 Dec 30 j 02:48	27°Ω18'16					

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Attention, astronomical year style is used: The year -3925 in astronomical counting style is the year 3926 BCE in historical counting style.

minimum elong	-3925 Oct 05 j 15:48	12° $\overline{10}$ 32'43	12°49'05	evening set	-3918 Oct 09 j 16:42	28° $\overline{10}$ 53'17	
max. Earth dist.	-3925 Oct 06 j 00:46	12° $\overline{10}$ 33'37	30.86815 AU				
morning rise	-3925 Oct 13 j 15:40	12° $\overline{10}$ 51'49		conjunction	-3918 Oct 21 j 18:53	29° $\overline{10}$ 20'48	9°09'28
retrograde	-3924 Jan 17 j 15:41	15° $\overline{10}$ 10'15		minimum elong	-3918 Oct 21 j 19:15	29° $\overline{10}$ 20'51	9°09'29
opposition	-3924 Apr 05 j 01:50	13° $\overline{10}$ 47'33	13°26'46	max. Earth dist.	-3918 Oct 23 j 02:44	29° $\overline{10}$ 23'51	31.67829 AU
min. Earth dist.	-3924 Apr 04 j 14:27	13° $\overline{10}$ 48'20	28.96156 AU	morning rise	-3918 Nov 02 j 21:49	29° $\overline{10}$ 48'23	
direct	-3924 Jun 23 j 21:10	12° $\overline{10}$ 23'33			-3918 Nov 08 j 02:37	0° $\overline{10}$	
evening set	-3924 Sep 28 j 14:06	14° $\overline{10}$ 41'06		retrograde	-3917 Feb 02 j 19:42	1° $\overline{10}$ 51'16	
				min. Earth dist.	-3917 Apr 21 j 22:50	0° $\overline{10}$ 32'23	29.77961 AU
conjunction	-3924 Oct 07 j 07:42	15° $\overline{10}$ 01'49	12°20'33	opposition	-3917 Apr 23 j 08:48	0° $\overline{10}$ 30'08	9°27'59
minimum elong	-3924 Oct 07 j 08:06	15° $\overline{10}$ 01'51	12°20'36		-3917 May 12 j 17:55	30° $\overline{10}$	
max. Earth dist.	-3924 Oct 07 j 21:02	15° $\overline{10}$ 03'08	30.95521 AU	direct	-3917 Jul 12 j 06:39	29° $\overline{10}$ 08'36	
morning rise	-3924 Oct 16 j 01:42	15° $\overline{10}$ 22'36			-3917 Sep 07 j 06:26	0° $\overline{10}$	
retrograde	-3923 Jan 19 j 07:31	17° $\overline{10}$ 38'31		evening set	-3917 Oct 11 j 18:01	1° $\overline{10}$ 09'32	
opposition	-3923 Apr 07 j 22:13	16° $\overline{10}$ 16'00	12°55'36				
min. Earth dist.	-3923 Apr 07 j 08:42	16° $\overline{10}$ 16'55	29.04938 AU	conjunction	-3917 Oct 24 j 06:22	1° $\overline{10}$ 37'47	8°35'07
direct	-3923 Jun 26 j 17:26	14° $\overline{10}$ 52'18		minimum elong	-3917 Oct 24 j 06:44	1° $\overline{10}$ 37'49	8°35'08
evening set	-3923 Sep 30 j 13:35	17° $\overline{10}$ 07'11		max. Earth dist.	-3917 Oct 25 j 18:16	1° $\overline{10}$ 41'11	31.83336 AU
				morning rise	-3917 Nov 05 j 19:13	2° $\overline{10}$ 06'06	
conjunction	-3923 Oct 09 j 23:23	17° $\overline{10}$ 29'23	11°50'57	retrograde	-3916 Feb 05 j 05:44	4° $\overline{10}$ 07'08	
minimum elong	-3923 Oct 09 j 23:48	17° $\overline{10}$ 29'26	11°51'00	min. Earth dist.	-3916 Apr 23 j 11:33	2° $\overline{10}$ 48'44	29.93592 AU
max. Earth dist.	-3923 Oct 10 j 15:19	17° $\overline{10}$ 30'58	31.05165 AU	opposition	-3916 Apr 25 j 00:01	2° $\overline{10}$ 46'19	8°50'55
morning rise	-3923 Oct 19 j 09:40	17° $\overline{10}$ 51'38		direct	-3916 Jul 13 j 22:30	1° $\overline{10}$ 25'15	
retrograde	-3922 Jan 22 j 00:33	20° $\overline{10}$ 05'08		evening set	-3916 Oct 12 j 19:34	3° $\overline{10}$ 24'11	
opposition	-3922 Apr 10 j 17:46	18° $\overline{10}$ 42'48	12°23'17				
min. Earth dist.	-3922 Apr 10 j 00:00	18° $\overline{10}$ 44'01	29.14649 AU	conjunction	-3916 Oct 25 j 16:55	3° $\overline{10}$ 53'05	8°00'19
direct	-3922 Jun 29 j 14:33	17° $\overline{10}$ 19'26		minimum elong	-3916 Oct 25 j 17:14	3° $\overline{10}$ 53'06	8°00'20
evening set	-3922 Oct 02 j 13:23	19° $\overline{10}$ 31'44		max. Earth dist.	-3916 Oct 27 j 06:38	3° $\overline{10}$ 56'37	31.99739 AU
				morning rise	-3916 Nov 07 j 15:06	4° $\overline{10}$ 22'02	
conjunction	-3922 Oct 12 j 14:18	19° $\overline{10}$ 55'16	11°20'21	retrograde	-3915 Feb 06 j 18:10	6° $\overline{10}$ 21'19	
minimum elong	-3922 Oct 12 j 14:42	19° $\overline{10}$ 55'18	11°20'23	min. Earth dist.	-3915 Apr 25 j 22:16	5° $\overline{10}$ 03'28	30.10112 AU
max. Earth dist.	-3922 Oct 13 j 09:40	19° $\overline{10}$ 57'10	31.15729 AU	opposition	-3915 Apr 27 j 14:29	5° $\overline{10}$ 00'50	8°13'25
morning rise	-3922 Oct 22 j 15:42	20° $\overline{10}$ 18'50		direct	-3915 Jul 16 j 11:26	3° $\overline{10}$ 40'13	
retrograde	-3921 Jan 24 j 16:01	22° $\overline{10}$ 30'01		evening set	-3915 Oct 14 j 21:11	5° $\overline{10}$ 37'15	
opposition	-3921 Apr 13 j 12:45	21° $\overline{10}$ 07'52	11°49'55				
min. Earth dist.	-3921 Apr 12 j 16:41	21° $\overline{10}$ 09'14	29.25307 AU	conjunction	-3915 Oct 28 j 03:00	6° $\overline{10}$ 06'41	7°25'10
direct	-3921 Jul 02 j 09:55	19° $\overline{10}$ 44'49		minimum elong	-3915 Oct 28 j 03:19	6° $\overline{10}$ 06'43	7°25'10
evening set	-3921 Oct 04 j 13:49	21° $\overline{10}$ 54'40		max. Earth dist.	-3915 Oct 29 j 20:27	6° $\overline{10}$ 10'33	32.16960 AU
				morning rise	-3915 Nov 10 j 09:31	6° $\overline{10}$ 36'11	
conjunction	-3921 Oct 15 j 04:34	22° $\overline{10}$ 19'22	10°48'48	retrograde	-3914 Feb 09 j 03:45	8° $\overline{10}$ 33'48	
minimum elong	-3921 Oct 15 j 04:58	22° $\overline{10}$ 19'24	10°48'49	min. Earth dist.	-3914 Apr 28 j 10:28	7° $\overline{10}$ 16'23	30.27427 AU
max. Earth dist.	-3921 Oct 16 j 03:09	22° $\overline{10}$ 21'34	31.27255 AU	opposition	-3914 Apr 30 j 04:15	7° $\overline{10}$ 13'40	7°35'37
morning rise	-3921 Oct 25 j 19:44	22° $\overline{10}$ 44'06		direct	-3914 Jul 19 j 00:11	5° $\overline{10}$ 53'30	
retrograde	-3920 Jan 27 j 06:03	24° $\overline{10}$ 53'04		evening set	-3914 Oct 16 j 23:01	7° $\overline{10}$ 48'43	
min. Earth dist.	-3920 Apr 14 j 06:41	23° $\overline{10}$ 32'45	29.36935 AU				
opposition	-3920 Apr 15 j 06:45	23° $\overline{10}$ 31'08	11°15'36	conjunction	-3914 Oct 30 j 12:19	8° $\overline{10}$ 18'36	6°49'46
direct	-3920 Jul 04 j 05:53	22° $\overline{10}$ 08'25		minimum elong	-3914 Oct 30 j 12:36	8° $\overline{10}$ 18'38	6°49'45
evening set	-3920 Oct 05 j 14:31	24° $\overline{10}$ 15'53		max. Earth dist.	-3914 Nov 01 j 07:26	8° $\overline{10}$ 22'36	32.34920 AU
				morning rise	-3914 Nov 13 j 02:31	8° $\overline{10}$ 48'34	
conjunction	-3920 Oct 16 j 18:02	24° $\overline{10}$ 41'38	10°16'24	retrograde	-3913 Feb 11 j 15:16	10° $\overline{10}$ 44'34	
minimum elong	-3920 Oct 16 j 18:25	24° $\overline{10}$ 41'40	10°16'25	min. Earth dist.	-3913 Apr 30 j 19:51	9° $\overline{10}$ 27'43	30.45452 AU
max. Earth dist.	-3920 Oct 17 j 19:33	24° $\overline{10}$ 44'06	31.39761 AU	opposition	-3913 May 02 j 17:09	9° $\overline{10}$ 24'47	6°57'37
morning rise	-3920 Oct 27 j 22:10	25° $\overline{10}$ 07'27		direct	-3913 Jul 21 j 14:23	8° $\overline{10}$ 05'04	
retrograde	-3919 Jan 28 j 19:02	27° $\overline{10}$ 14'17		evening set	-3913 Oct 19 j 00:57	9° $\overline{10}$ 58'33	
min. Earth dist.	-3919 Apr 16 j 21:18	25° $\overline{10}$ 54'23	29.49592 AU				
opposition	-3919 Apr 18 j 00:19	25° $\overline{10}$ 52'34	10°40'26	conjunction	-3913 Nov 01 j 21:03	10° $\overline{10}$ 28'48	6°14'11
direct	-3919 Jul 06 j 22:35	24° $\overline{10}$ 30'14		minimum elong	-3913 Nov 01 j 21:19	10° $\overline{10}$ 28'50	6°14'09
evening set	-3919 Oct 07 j 15:24	26° $\overline{10}$ 35'25		max. Earth dist.	-3913 Nov 03 j 18:59	10° $\overline{10}$ 33'01	32.53512 AU
				morning rise	-3913 Nov 15 j 18:06	10° $\overline{10}$ 59'09	
conjunction	-3919 Oct 19 j 06:49	27° $\overline{10}$ 02'06	9°43'16	retrograde	-3912 Feb 14 j 01:20	12° $\overline{10}$ 53'37	
minimum elong	-3919 Oct 19 j 07:12	27° $\overline{10}$ 02'09	9°43'16	min. Earth dist.	-3912 May 02 j 06:48	11° $\overline{10}$ 37'09	30.64106 AU
max. Earth dist.	-3919 Oct 20 j 12:20	27° $\overline{10}$ 04'57	31.53295 AU	opposition	-3912 May 04 j 05:25	11° $\overline{10}$ 34'09	6°19'29
morning rise	-3919 Oct 30 j 22:39	27° $\overline{10}$ 28'51		direct	-3912 Jul 23 j 02:51	10° $\overline{10}$ 14'53	
retrograde	-3918 Jan 31 j 06:36	29° $\overline{10}$ 33'40		evening set	-3912 Oct 20 j 02:58	12° $\overline{10}$ 06'42	
min. Earth dist.	-3918 Apr 19 j 10:33	28° $\overline{10}$ 14'15	29.63268 AU				
opposition	-3918 Apr 20 j 17:02	28° $\overline{10}$ 12'13	10°04'32	conjunction	-3912 Nov 03 j 05:10	12° $\overline{10}$ 37'15	5°38'30
direct	-3918 Jul 09 j 16:15	26° $\overline{10}$ 50'17		minimum elong	-3912 Nov 03 j 05:23	12° $\overline{10}$ 37'16	5°38'28

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Attention, astronomical year style is used: The year -3912 in astronomical counting style is the year 3913 BCE in historical counting style.

max. Earth dist.	-3912 Nov 05 j 04:58	12° <u>♂</u> 41'36	32.72690 AU	conjunction	-3905 Nov 17 j 17:34	26° <u>♂</u> 44'03	1°31'40
morning rise	-3912 Nov 17 j 08:17	13° <u>♂</u> 07'54		minimum elong	-3905 Nov 17 j 17:38	26° <u>♂</u> 44'04	1°31'36
retrograde	-3911 Feb 15 j 09:26	15° <u>♂</u> 00'52		max. Earth dist.	-3905 Nov 20 j 07:12	26° <u>♂</u> 49'21	34.21259 AU
min. Earth dist.	-3911 May 04 j 15:22	13° <u>♂</u> 44'54	30.83321 AU	morning rise	-3905 Dec 02 j 21:42	27° <u>♂</u> 15'04	
opposition	-3911 May 06 j 16:54	13° <u>♂</u> 41'44	5°41'20	retrograde	-3904 Feb 29 j 19:08	28° <u>♂</u> 59'25	
direct	-3911 Jul 25 j 15:50	12° <u>♂</u> 22'53		min. Earth dist.	-3904 May 18 j 11:12	27° <u>♂</u> 46'24	32.32831 AU
evening set	-3911 Oct 22 j 04:57	14° <u>♂</u> 13'05		opposition	-3904 May 21 j 03:07	27° <u>♂</u> 42'27	1°18'56
				direct	-3904 Aug 09 j 04:59	26° <u>♂</u> 26'23	
				evening set	-3904 Nov 03 j 16:26	28° <u>♂</u> 07'17	
conjunction	-3911 Nov 05 j 12:26	14° <u>♂</u> 43'52	5°02'48				
minimum elong	-3911 Nov 05 j 12:39	14° <u>♂</u> 43'53	5°02'46				
max. Earth dist.	-3911 Nov 07 j 14:01	14° <u>♂</u> 48'20	32.92374 AU	conjunction	-3904 Nov 18 j 20:05	28° <u>♂</u> 37'59	0°57'28
morning rise	-3911 Nov 19 j 21:10	15° <u>♂</u> 14'45		minimum elong	-3904 Nov 18 j 20:08	28° <u>♂</u> 37'59	0°57'23
retrograde	-3910 Feb 17 j 16:37	17° <u>♂</u> 06'17		max. Earth dist.	-3904 Nov 21 j 11:45	28° <u>♂</u> 43'24	34.44565 AU
min. Earth dist.	-3910 May 07 j 00:35	15° <u>♂</u> 50'43	31.03065 AU	morning rise	-3904 Dec 04 j 01:33	29° <u>♂</u> 08'51	
opposition	-3910 May 09 j 03:43	15° <u>♂</u> 47'28	5°03'13		-3903 Jan 01 j 00:56	0° <u>♂</u>	
direct	-3910 Jul 28 j 03:03	14° <u>♂</u> 29'02		retrograde	-3903 Mar 02 j 23:25	0° <u>♂</u> 52'16	
evening set	-3910 Oct 24 j 06:52	16° <u>♂</u> 17'40			-3903 May 06 j 12:07	30° <u>♂</u>	
				min. Earth dist.	-3903 May 20 j 15:37	29° <u>♂</u> 39'37	32.56331 AU
conjunction	-3910 Nov 07 j 19:13	16° <u>♂</u> 48'36	4°27'10	opposition	-3903 May 23 j 08:38	29° <u>♂</u> 35'39	0°42'47
minimum elong	-3910 Nov 07 j 19:24	16° <u>♂</u> 48'37	4°27'07	direct	-3903 Aug 11 j 09:58	28° <u>♂</u> 20'01	
max. Earth dist.	-3910 Nov 09 j 23:18	16° <u>♂</u> 53'16	33.12555 AU	evening set	-3903 Nov 05 j 17:35	29° <u>♂</u> 59'53	
morning rise	-3910 Nov 22 j 08:36	17° <u>♂</u> 19'39			-3903 Nov 05 j 19:06	0° <u>♂</u>	
retrograde	-3909 Feb 19 j 21:35	19° <u>♂</u> 09'48					
min. Earth dist.	-3909 May 09 j 08:22	17° <u>♂</u> 54'39	31.23305 AU	conjunction	-3903 Nov 20 j 22:04	0° <u>♂</u> 30'24	0°23'40
opposition	-3909 May 11 j 13:25	17° <u>♂</u> 51'17	4°25'13	minimum elong	-3903 Nov 20 j 22:05	0° <u>♂</u> 30'24	0°23'36
direct	-3909 Jul 30 j 15:32	16° <u>♂</u> 33'14		max. Earth dist.	-3903 Nov 23 j 15:34	0° <u>♂</u> 35'56	34.68300 AU
evening set	-3909 Oct 26 j 08:49	18° <u>♂</u> 20'23		morning rise	-3903 Dec 06 j 04:10	1° <u>♂</u> 01'04	
				retrograde	-3902 Mar 05 j 00:52	2° <u>♂</u> 43'36	
conjunction	-3909 Nov 10 j 01:03	18° <u>♂</u> 51'25	3°51'38	min. Earth dist.	-3902 May 22 j 18:30	1° <u>♂</u> 31'25	32.80219 AU
minimum elong	-3909 Nov 10 j 01:13	18° <u>♂</u> 51'26	3°51'35	opposition	-3902 May 25 j 13:18	1° <u>♂</u> 27'21	0°07'07
max. Earth dist.	-3909 Nov 12 j 06:18	18° <u>♂</u> 56'08	33.33218 AU	desc. node	-3902 Aug 07 j 11:19	0° <u>♂</u> 12'44	
morning rise	-3909 Nov 24 j 18:45	19° <u>♂</u> 22'33		direct	-3902 Aug 13 j 16:14	0° <u>♂</u> 12'09	
retrograde	-3908 Feb 22 j 03:46	21° <u>♂</u> 11'25		evening set	-3902 Nov 07 j 18:58	1° <u>♂</u> 51'04	
min. Earth dist.	-3908 May 10 j 14:58	19° <u>♂</u> 56'41	31.44083 AU				
opposition	-3908 May 12 j 22:32	19° <u>♂</u> 53'11	3°47'23	conjunction	-3902 Nov 22 j 23:27	2° <u>♂</u> 21'21	-0°09'46
direct	-3908 Aug 01 j 00:13	18° <u>♂</u> 35'30		minimum elong	-3902 Nov 22 j 23:27	2° <u>♂</u> 21'21	0°09'51
evening set	-3908 Oct 27 j 10:22	20° <u>♂</u> 21'14		behind sun begin	-3902 Nov 22 j 18:13	2° <u>♂</u> 20'56	
				behind sun end	-3902 Nov 23 j 04:41	2° <u>♂</u> 21'46	
conjunction	-3908 Nov 11 j 06:11	20° <u>♂</u> 52'18	3°16'16	max. Earth dist.	-3902 Nov 25 j 17:42	2° <u>♂</u> 26'54	34.92357 AU
minimum elong	-3908 Nov 11 j 06:19	20° <u>♂</u> 52'19	3°16'12	morning rise	-3902 Dec 08 j 05:57	2° <u>♂</u> 51'48	
max. Earth dist.	-3908 Nov 13 j 14:33	20° <u>♂</u> 57'16	33.54402 AU	retrograde	-3901 Mar 07 j 02:18	4° <u>♂</u> 33'30	
morning rise	-3908 Nov 26 j 03:13	21° <u>♂</u> 23'29		min. Earth dist.	-3901 May 24 j 21:04	3° <u>♂</u> 21'45	33.04430 AU
retrograde	-3907 Feb 23 j 06:13	23° <u>♂</u> 11'07		opposition	-3901 May 27 j 17:14	3° <u>♂</u> 17'37	-0°28'02
min. Earth dist.	-3907 May 12 j 21:57	21° <u>♂</u> 56'45	31.65412 AU	direct	-3901 Aug 15 j 20:05	2° <u>♂</u> 02'51	
opposition	-3907 May 15 j 06:55	21° <u>♂</u> 53'10	3°09'47	evening set	-3901 Nov 09 j 20:09	3° <u>♂</u> 40'52	
direct	-3907 Aug 03 j 09:50	20° <u>♂</u> 35'53					
evening set	-3907 Oct 29 j 12:05	22° <u>♂</u> 20'16		conjunction	-3901 Nov 25 j 00:29	4° <u>♂</u> 10'54	-0°42'38
				minimum elong	-3901 Nov 25 j 00:27	4° <u>♂</u> 10'53	0°42'43
conjunction	-3907 Nov 13 j 10:37	22° <u>♂</u> 51'19	2°41'07	max. Earth dist.	-3901 Nov 27 j 20:53	4° <u>♂</u> 16'35	35.16671 AU
minimum elong	-3907 Nov 13 j 10:43	22° <u>♂</u> 51'19	2°41'03	morning rise	-3901 Dec 10 j 06:33	4° <u>♂</u> 41'05	
max. Earth dist.	-3907 Nov 15 j 19:59	22° <u>♂</u> 56'20	33.76138 AU	retrograde	-3900 Mar 08 j 01:03	6° <u>♂</u> 22'01	
morning rise	-3907 Nov 28 j 10:42	23° <u>♂</u> 22'29		min. Earth dist.	-3900 May 25 j 23:58	5° <u>♂</u> 10'38	33.28862 AU
retrograde	-3906 Feb 25 j 11:26	25° <u>♂</u> 08'57		opposition	-3900 May 28 j 20:41	5° <u>♂</u> 06'29	-1°02'39
min. Earth dist.	-3906 May 15 j 02:18	23° <u>♂</u> 55'03	31.87331 AU	direct	-3900 Aug 17 j 01:16	3° <u>♂</u> 52'08	
opposition	-3906 May 17 j 14:20	23° <u>♂</u> 51'19	2°32'28	evening set	-3900 Nov 10 j 21:15	5° <u>♂</u> 29'18	
direct	-3906 Aug 05 j 16:05	22° <u>♂</u> 34'25					
evening set	-3906 Oct 31 j 13:35	24° <u>♂</u> 17'33		conjunction	-3900 Nov 26 j 00:42	5° <u>♂</u> 59'02	-1°15'02
				minimum elong	-3900 Nov 26 j 00:39	5° <u>♂</u> 59'02	1°15'08
conjunction	-3906 Nov 15 j 14:27	24° <u>♂</u> 48'32	2°06'14	max. Earth dist.	-3900 Nov 28 j 21:07	6° <u>♂</u> 04'41	35.41155 AU
minimum elong	-3906 Nov 15 j 14:32	24° <u>♂</u> 48'32	2°06'10	morning rise	-3900 Dec 11 j 06:12	6° <u>♂</u> 28'56	
max. Earth dist.	-3906 Nov 18 j 02:44	24° <u>♂</u> 53'45	33.98429 AU	retrograde	-3899 Mar 10 j 02:20	8° <u>♂</u> 09'08	
morning rise	-3906 Nov 30 j 16:49	25° <u>♂</u> 19'39		min. Earth dist.	-3899 May 28 j 00:52	6° <u>♂</u> 58'11	33.53459 AU
retrograde	-3905 Feb 27 j 14:46	27° <u>♂</u> 05'02		opposition	-3899 May 30 j 23:31	6° <u>♂</u> 53'57	-1°36'42
min. Earth dist.	-3905 May 17 j 08:11	25° <u>♂</u> 51'29	32.09817 AU	direct	-3899 Aug 19 j 03:17	5° <u>♂</u> 40'00	
opposition	-3905 May 19 j 21:11	25° <u>♂</u> 47'43	1°55'30	evening set	-3899 Nov 12 j 22:19	7° <u>♂</u> 16'21	
direct	-3905 Aug 07 j 22:12	24° <u>♂</u> 31'13					
evening set	-3905 Nov 02 j 15:01	26° <u>♂</u> 13'12		conjunction	-3899 Nov 28 j 00:41	7° <u>♂</u> 45'46	-1°46'56

Attention, astronomical year style is used: The year -3899 in astronomical counting style is the year 3900 BCE in historical counting style.

minimum elong	-3899 Nov 28 j 00:37	7° 11 45'45	1°47'01
max. Earth dist.	-3899 Nov 30 j 22:54	7° 11 51'31	35.65747 AU
morning rise	-3899 Dec 13 j 04:58	8° 11 15'20	