

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

evening set	-4400 Jan 09 j 07:03	1° $\overline{3}$ 19'40		morning rise	-4394 Feb 23 j 07:17	15° $\overline{3}$ 58'36	
				retrograde	-4394 May 26 j 00:39	17° $\overline{3}$ 57'46	
conjunction	-4400 Jan 25 j 01:19	1° $\overline{3}$ 55'01	-1°06'42	min. Earth dist.	-4394 Aug 13 j 05:35	16° $\overline{3}$ 33'59	28.86373 AU
minimum elong	-4400 Jan 25 j 01:18	1° $\overline{3}$ 55'01	1°06'54	opposition	-4394 Aug 14 j 03:53	16° $\overline{3}$ 32'25	-1°40'32
max. Earth dist.	-4400 Jan 26 j 03:17	1° $\overline{3}$ 57'28	30.89237 AU	direct	-4394 Oct 30 j 08:14	15° $\overline{3}$ 09'11	
morning rise	-4400 Feb 09 j 23:35	2° $\overline{3}$ 30'45		evening set	-4393 Jan 24 j 22:53	17° $\overline{3}$ 02'13	
retrograde	-4400 May 11 j 15:49	4° $\overline{3}$ 29'45					
min. Earth dist.	-4400 Jul 30 j 04:32	3° $\overline{3}$ 05'58	28.89044 AU	conjunction	-4393 Feb 09 j 20:05	17° $\overline{3}$ 37'46	-1°35'51
opposition	-4400 Jul 31 j 04:25	3° $\overline{3}$ 04'18	-1°13'48	minimum elong	-4393 Feb 09 j 20:05	17° $\overline{3}$ 37'46	1°36'03
direct	-4400 Oct 16 j 15:37	1° $\overline{3}$ 41'13		max. Earth dist.	-4393 Feb 10 j 20:29	17° $\overline{3}$ 40'04	30.85926 AU
evening set	-4399 Jan 10 j 19:07	3° $\overline{3}$ 33'45		morning rise	-4393 Feb 25 j 20:54	18° $\overline{3}$ 13'40	
				retrograde	-4393 May 28 j 14:09	20° $\overline{3}$ 12'48	
conjunction	-4399 Jan 26 j 13:52	4° $\overline{3}$ 09'08	-1°11'12	opposition	-4393 Aug 16 j 15:42	18° $\overline{3}$ 47'24	-1°44'30
minimum elong	-4399 Jan 26 j 13:51	4° $\overline{3}$ 09'08	1°11'25	min. Earth dist.	-4393 Aug 15 j 18:07	18° $\overline{3}$ 48'55	28.85685 AU
max. Earth dist.	-4399 Jan 27 j 15:59	4° $\overline{3}$ 11'35	30.88730 AU	direct	-4393 Nov 01 j 21:58	17° $\overline{3}$ 24'06	
morning rise	-4399 Feb 11 j 12:30	4° $\overline{3}$ 44'54		evening set	-4392 Jan 27 j 12:00	19° $\overline{3}$ 17'10	
retrograde	-4399 May 14 j 05:14	6° $\overline{3}$ 43'56					
opposition	-4399 Aug 02 j 16:18	5° $\overline{3}$ 18'30	-1°18'34	conjunction	-4392 Feb 12 j 09:32	19° $\overline{3}$ 52'44	-1°39'29
min. Earth dist.	-4399 Aug 01 j 15:28	5° $\overline{3}$ 20'14	28.88589 AU	minimum elong	-4392 Feb 12 j 09:31	19° $\overline{3}$ 52'44	1°39'41
direct	-4399 Oct 19 j 02:31	3° $\overline{3}$ 55'25		max. Earth dist.	-4392 Feb 13 j 08:33	19° $\overline{3}$ 54'54	30.85216 AU
evening set	-4398 Jan 13 j 07:15	5° $\overline{3}$ 48'02		morning rise	-4392 Feb 28 j 10:47	20° $\overline{3}$ 28'39	
				retrograde	-4392 May 30 j 04:35	22° $\overline{3}$ 27'44	
conjunction	-4398 Jan 29 j 02:18	6° $\overline{3}$ 23'26	-1°15'37	min. Earth dist.	-4392 Aug 17 j 05:39	21° $\overline{3}$ 03'49	28.84967 AU
minimum elong	-4398 Jan 29 j 02:18	6° $\overline{3}$ 23'26	1°15'50	opposition	-4392 Aug 18 j 03:15	21° $\overline{3}$ 02'18	-1°48'18
max. Earth dist.	-4398 Jan 30 j 04:09	6° $\overline{3}$ 25'53	30.88306 AU	direct	-4392 Nov 03 j 10:10	19° $\overline{3}$ 38'53	
morning rise	-4398 Feb 14 j 01:25	6° $\overline{3}$ 59'14		evening set	-4391 Jan 29 j 01:05	21° $\overline{3}$ 32'01	
retrograde	-4398 May 16 j 18:01	8° $\overline{3}$ 58'20					
min. Earth dist.	-4398 Aug 04 j 04:39	7° $\overline{3}$ 34'35	28.88207 AU	conjunction	-4391 Feb 13 j 22:59	22° $\overline{3}$ 07'36	-1°42'58
opposition	-4398 Aug 05 j 04:22	7° $\overline{3}$ 32'56	-1°23'13	minimum elong	-4391 Feb 13 j 22:59	22° $\overline{3}$ 07'36	1°43'10
direct	-4398 Oct 21 j 11:12	6° $\overline{3}$ 09'50		max. Earth dist.	-4391 Feb 14 j 22:07	22° $\overline{3}$ 09'46	30.84485 AU
evening set	-4397 Jan 15 j 19:36	8° $\overline{3}$ 02'32		morning rise	-4391 Mar 02 j 00:30	22° $\overline{3}$ 43'32	
				retrograde	-4391 Jun 01 j 16:27	24° $\overline{3}$ 42'32	
conjunction	-4397 Jan 31 j 15:13	8° $\overline{3}$ 37'59	-1°19'55	opposition	-4391 Aug 20 j 14:53	23° $\overline{3}$ 17'04	-1°51'57
minimum elong	-4397 Jan 31 j 15:13	8° $\overline{3}$ 37'59	1°20'07	min. Earth dist.	-4391 Aug 19 j 18:24	23° $\overline{3}$ 18'30	28.84262 AU
max. Earth dist.	-4397 Feb 01 j 17:36	8° $\overline{3}$ 40'28	30.87943 AU	direct	-4391 Nov 05 j 21:50	21° $\overline{3}$ 53'34	
morning rise	-4397 Feb 16 j 14:36	9° $\overline{3}$ 13'48		evening set	-4390 Jan 31 j 13:59	23° $\overline{3}$ 46'44	
retrograde	-4397 May 19 j 07:09	11° $\overline{3}$ 12'56					
opposition	-4397 Aug 07 j 16:08	9° $\overline{3}$ 47'34	-1°27'45	conjunction	-4390 Feb 16 j 12:19	24° $\overline{3}$ 22'20	-1°46'17
min. Earth dist.	-4397 Aug 06 j 15:47	9° $\overline{3}$ 49'17	28.87848 AU	minimum elong	-4390 Feb 16 j 12:18	24° $\overline{3}$ 22'20	1°46'29
direct	-4397 Oct 23 j 23:07	8° $\overline{3}$ 24'28		max. Earth dist.	-4390 Feb 17 j 11:09	24° $\overline{3}$ 24'29	30.83817 AU
evening set	-4396 Jan 18 j 08:21	10° $\overline{3}$ 17'17		morning rise	-4390 Mar 04 j 14:08	24° $\overline{3}$ 58'17	
				retrograde	-4390 Jun 04 j 06:30	26° $\overline{3}$ 57'14	
conjunction	-4396 Feb 03 j 04:12	10° $\overline{3}$ 52'45	-1°24'05	min. Earth dist.	-4390 Aug 22 j 05:14	25° $\overline{3}$ 33'13	28.83641 AU
minimum elong	-4396 Feb 03 j 04:12	10° $\overline{3}$ 52'45	1°24'18	opposition	-4390 Aug 23 j 02:21	25° $\overline{3}$ 31'44	-1°55'25
max. Earth dist.	-4396 Feb 04 j 05:16	10° $\overline{3}$ 55'06	30.87564 AU	direct	-4390 Nov 08 j 10:00	24° $\overline{3}$ 08'08	
morning rise	-4396 Feb 19 j 04:07	11° $\overline{3}$ 28'36		evening set	-4389 Feb 03 j 03:14	26° $\overline{3}$ 01'22	
retrograde	-4396 May 20 j 20:52	13° $\overline{3}$ 27'45					
min. Earth dist.	-4396 Aug 08 j 05:01	12° $\overline{3}$ 04'02	28.87454 AU	conjunction	-4389 Feb 19 j 01:50	26° $\overline{3}$ 37'00	-1°49'27
opposition	-4396 Aug 09 j 04:09	12° $\overline{3}$ 02'25	-1°32'09	minimum elong	-4389 Feb 19 j 01:50	26° $\overline{3}$ 37'00	1°49'38
direct	-4396 Oct 25 j 09:17	10° $\overline{3}$ 39'18		max. Earth dist.	-4389 Feb 20 j 00:10	26° $\overline{3}$ 39'06	30.83236 AU
evening set	-4395 Jan 19 j 21:04	12° $\overline{3}$ 32'11		morning rise	-4389 Mar 07 j 04:01	27° $\overline{3}$ 12'57	
				retrograde	-4389 Jun 06 j 18:46	29° $\overline{3}$ 11'51	
conjunction	-4395 Feb 04 j 17:28	13° $\overline{3}$ 07'41	-1°28'09	opposition	-4389 Aug 25 j 13:46	27° $\overline{3}$ 46'19	-1°58'43
minimum elong	-4395 Feb 04 j 17:27	13° $\overline{3}$ 07'41	1°28'21	min. Earth dist.	-4389 Aug 24 j 17:57	27° $\overline{3}$ 47'43	28.83136 AU
max. Earth dist.	-4395 Feb 05 j 19:07	13° $\overline{3}$ 10'06	30.87117 AU	direct	-4389 Nov 10 j 19:50	26° $\overline{3}$ 22'40	
morning rise	-4395 Feb 20 j 17:32	13° $\overline{3}$ 43'33		evening set	-4388 Feb 05 j 16:25	28° $\overline{3}$ 15'58	
retrograde	-4395 May 23 j 09:57	15° $\overline{3}$ 42'43					
opposition	-4395 Aug 11 j 15:57	14° $\overline{3}$ 17'23	-1°36'25	conjunction	-4388 Feb 21 j 15:32	28° $\overline{3}$ 51'37	-1°52'27
min. Earth dist.	-4395 Aug 10 j 16:53	14° $\overline{3}$ 19'01	28.86960 AU	minimum elong	-4388 Feb 21 j 15:32	28° $\overline{3}$ 51'37	1°52'39
direct	-4395 Oct 27 j 21:38	12° $\overline{3}$ 54'14		max. Earth dist.	-4388 Feb 22 j 14:10	28° $\overline{3}$ 53'44	30.82798 AU
evening set	-4394 Jan 22 j 10:03	14° $\overline{3}$ 47'12		morning rise	-4388 Mar 08 j 17:54	29° $\overline{3}$ 27'35	
					-4388 Mar 24 j 01:34	0° $\overline{\infty}$	
conjunction	-4394 Feb 07 j 06:41	15° $\overline{3}$ 22'43	-1°32'04	retrograde	-4388 Jun 08 j 06:58	1° $\overline{\infty}$ 26'25	
minimum elong	-4394 Feb 07 j 06:41	15° $\overline{3}$ 22'43	1°32'16	min. Earth dist.	-4388 Aug 26 j 04:32	0° $\overline{\infty}$ 02'22	28.82768 AU
max. Earth dist.	-4394 Feb 08 j 06:40	15° $\overline{3}$ 24'59	30.86573 AU	opposition	-4388 Aug 27 j 01:03	0° $\overline{\infty}$ 00'55	-2°01'50

Planetary Phenomena of Neptune from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2

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

	-4388 Aug 27 j 13:54	30° \approx 37'11	max. Earth dist.	-4381 Mar 10 j 11:23	14° \approx 38'39	30.82061 AU
direct	-4388 Nov 12 j 08:07	28° \approx 37'11		-4381 Mar 20 j 00:06	15° \approx	
	-4387 Jan 23 j 19:02	0° \approx	morning rise	-4381 Mar 25 j 21:50	15° \approx 13'02	
evening set	-4387 Feb 07 j 05:46	0° \approx 30'35	retrograde	-4381 Jun 25 j 06:12	17° \approx 11'35	
			opposition	-4381 Sep 12 j 07:53	15° \approx 46'23	-2°18'11
conjunction	-4387 Feb 23 j 05:03	1° \approx 06'15	min. Earth dist.	-4381 Sep 11 j 15:54	15° \approx 47'31	28.82121 AU
minimum elong	-4387 Feb 23 j 05:03	1° \approx 06'15		-4381 Oct 11 j 04:04	15° \approx	
max. Earth dist.	-4387 Feb 24 j 02:31	1° \approx 08'15	direct	-4381 Nov 28 j 17:22	14° \approx 22'26	
morning rise	-4387 Mar 11 j 07:49	1° \approx 42'13		-4380 Jan 15 j 01:52	15° \approx	
retrograde	-4387 Jun 10 j 19:28	3° \approx 41'02	evening set	-4380 Feb 24 j 06:17	16° \approx 16'36	
opposition	-4387 Aug 29 j 12:27	2° \approx 15'33				
min. Earth dist.	-4387 Aug 28 j 16:55	2° \approx 16'56	conjunction	-4380 Mar 11 j 08:05	16° \approx 52'25	-2°09'56
direct	-4387 Nov 14 j 17:47	0° \approx 51'48	minimum elong	-4380 Mar 11 j 08:05	16° \approx 52'25	2°10'06
evening set	-4386 Feb 09 j 19:03	2° \approx 45'18	max. Earth dist.	-4380 Mar 12 j 00:42	16° \approx 53'58	30.81837 AU
			morning rise	-4380 Mar 27 j 12:31	17° \approx 28'28	
conjunction	-4386 Feb 25 j 18:53	3° \approx 20'59	retrograde	-4380 Jun 26 j 18:29	19° \approx 26'55	
minimum elong	-4386 Feb 25 j 18:53	3° \approx 20'59	opposition	-4380 Sep 13 j 19:07	18° \approx 01'44	-2°19'42
max. Earth dist.	-4386 Feb 26 j 17:08	3° \approx 23'04	min. Earth dist.	-4380 Sep 13 j 05:00	18° \approx 02'44	28.81883 AU
morning rise	-4386 Mar 13 j 21:46	3° \approx 56'58	direct	-4380 Nov 30 j 04:05	16° \approx 37'42	
retrograde	-4386 Jun 13 j 08:07	5° \approx 55'45	evening set	-4379 Feb 25 j 20:10	18° \approx 31'56	
opposition	-4386 Aug 31 j 23:41	4° \approx 30'19				
min. Earth dist.	-4386 Aug 31 j 04:03	4° \approx 31'42	conjunction	-4379 Mar 13 j 22:24	19° \approx 07'45	-2°11'16
direct	-4386 Nov 17 j 05:25	3° \approx 06'32	minimum elong	-4379 Mar 13 j 22:24	19° \approx 07'45	2°11'24
evening set	-4385 Feb 12 j 08:38	5° \approx 00'09	max. Earth dist.	-4379 Mar 14 j 14:40	19° \approx 09'17	30.81595 AU
			morning rise	-4379 Mar 30 j 02:56	19° \approx 43'49	
conjunction	-4385 Feb 28 j 08:41	5° \approx 35'51	retrograde	-4379 Jun 29 j 06:33	21° \approx 42'09	
minimum elong	-4385 Feb 28 j 08:41	5° \approx 35'51	opposition	-4379 Sep 16 j 06:04	20° \approx 16'58	-2°21'01
max. Earth dist.	-4385 Mar 01 j 05:24	5° \approx 37'47	min. Earth dist.	-4379 Sep 15 j 15:43	20° \approx 18'00	28.81642 AU
morning rise	-4385 Mar 16 j 12:01	6° \approx 11'51	direct	-4379 Dec 02 j 17:05	18° \approx 52'51	
retrograde	-4385 Jun 15 j 22:20	8° \approx 10'37	evening set	-4378 Feb 28 j 10:17	20° \approx 47'09	
opposition	-4385 Sep 03 j 11:01	6° \approx 45'14				
min. Earth dist.	-4385 Sep 02 j 16:10	6° \approx 46'34	conjunction	-4378 Mar 16 j 12:41	21° \approx 22'59	-2°12'23
direct	-4385 Nov 19 j 15:44	5° \approx 21'26	minimum elong	-4378 Mar 16 j 12:41	21° \approx 22'59	2°12'32
evening set	-4384 Feb 14 j 22:21	7° \approx 15'11	max. Earth dist.	-4378 Mar 17 j 03:23	21° \approx 24'22	30.81373 AU
			morning rise	-4378 Apr 01 j 17:34	21° \approx 59'03	
conjunction	-4384 Mar 01 j 22:52	7° \approx 50'55	retrograde	-4378 Jul 01 j 18:44	23° \approx 57'17	
minimum elong	-4384 Mar 01 j 22:52	7° \approx 50'55	opposition	-4378 Sep 18 j 17:01	22° \approx 32'06	-2°22'06
max. Earth dist.	-4384 Mar 02 j 19:57	7° \approx 52'53	min. Earth dist.	-4378 Sep 18 j 04:05	22° \approx 33'01	28.81465 AU
morning rise	-4384 Mar 18 j 02:16	8° \approx 26'56	direct	-4378 Dec 05 j 02:57	21° \approx 07'53	
retrograde	-4384 Jun 17 j 11:33	10° \approx 25'40	evening set	-4377 Mar 03 j 00:14	23° \approx 02'15	
opposition	-4384 Sep 04 j 22:11	9° \approx 00'21				
min. Earth dist.	-4384 Sep 04 j 04:16	9° \approx 01'37	conjunction	-4377 Mar 19 j 03:10	23° \approx 38'07	-2°13'19
direct	-4384 Nov 21 j 04:42	7° \approx 36'32	minimum elong	-4377 Mar 19 j 03:10	23° \approx 38'07	2°13'26
evening set	-4383 Feb 16 j 12:16	9° \approx 30'25	max. Earth dist.	-4377 Mar 19 j 18:12	23° \approx 39'31	30.81237 AU
			morning rise	-4377 Apr 04 j 08:05	24° \approx 14'10	
conjunction	-4383 Mar 04 j 13:01	10° \approx 06'10	retrograde	-4377 Jul 04 j 06:32	26° \approx 12'16	
minimum elong	-4383 Mar 04 j 13:01	10° \approx 06'10	opposition	-4377 Sep 21 j 03:52	24° \approx 47'07	-2°22'59
max. Earth dist.	-4383 Mar 05 j 08:21	10° \approx 07'58	min. Earth dist.	-4377 Sep 20 j 15:00	24° \approx 48'02	28.81377 AU
morning rise	-4383 Mar 20 j 16:46	10° \approx 42'11	direct	-4377 Dec 07 j 14:40	23° \approx 22'49	
retrograde	-4383 Jun 20 j 02:15	12° \approx 40'53	evening set	-4376 Mar 04 j 14:25	25° \approx 17'16	
opposition	-4383 Sep 07 j 09:27	11° \approx 15'38				
min. Earth dist.	-4383 Sep 06 j 15:48	11° \approx 16'52	conjunction	-4376 Mar 20 j 17:28	25° \approx 53'07	-2°14'02
direct	-4383 Nov 23 j 16:38	9° \approx 51'47	minimum elong	-4376 Mar 20 j 17:28	25° \approx 53'07	2°14'10
evening set	-4382 Feb 19 j 02:05	11° \approx 45'46	max. Earth dist.	-4376 Mar 21 j 06:47	25° \approx 54'22	30.81212 AU
			morning rise	-4376 Apr 05 j 22:43	26° \approx 29'12	
conjunction	-4382 Mar 07 j 03:13	12° \approx 21'33	retrograde	-4376 Jul 05 j 18:44	28° \approx 27'11	
minimum elong	-4382 Mar 07 j 03:13	12° \approx 21'33	opposition	-4376 Sep 22 j 14:39	27° \approx 02'03	-2°23'38
max. Earth dist.	-4382 Mar 07 j 22:13	12° \approx 23'19	min. Earth dist.	-4376 Sep 22 j 02:32	27° \approx 02'55	28.81432 AU
morning rise	-4382 Mar 23 j 07:08	12° \approx 57'35	direct	-4376 Dec 09 j 01:24	25° \approx 37'40	
retrograde	-4382 Jun 22 j 15:07	14° \approx 56'13	evening set	-4375 Mar 07 j 04:25	27° \approx 32'13	
opposition	-4382 Sep 09 j 20:50	13° \approx 31'00				
min. Earth dist.	-4382 Sep 09 j 04:48	13° \approx 32'08	conjunction	-4375 Mar 23 j 07:55	28° \approx 08'05	-2°14'33
direct	-4382 Nov 26 j 04:32	12° \approx 07'07	minimum elong	-4375 Mar 23 j 07:55	28° \approx 08'05	2°14'39
evening set	-4381 Feb 21 j 16:07	14° \approx 01'12	max. Earth dist.	-4375 Mar 23 j 21:47	28° \approx 09'23	30.81337 AU
			morning rise	-4375 Apr 08 j 13:10	28° \approx 44'09	
conjunction	-4381 Mar 09 j 17:39	14° \approx 36'59		-4375 May 18 j 00:47	0° \approx	
minimum elong	-4381 Mar 09 j 17:39	14° \approx 36'59	retrograde	-4375 Jul 08 j 06:12	0° \approx 42'02	

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

	-4375 Aug 29 j 14:39	30° 8 38'02	conjunction	-4368 Apr 08 j 14:28	13° 8 54'05	-2°12'21
opposition	-4375 Sep 25 j 01:29	29° 8 16'56 -2°24'05	minimum elong	-4368 Apr 08 j 14:28	13° 8 54'05	2°12'25
min. Earth dist.	-4375 Sep 24 j 14:00	29° 8 17'45 28.81633 AU	max. Earth dist.	-4368 Apr 08 j 21:15	13° 8 54'43	30.84455 AU
direct	-4375 Dec 11 j 14:04	27° 8 52'31	morning rise	-4368 Apr 24 j 20:39	14° 8 30'09	
evening set	-4374 Mar 09 j 18:25	29° 8 47'09	retrograde	-4368 Jul 24 j 01:16	16° 8 27'13	
	-4374 Mar 15 j 14:46	0° 8	opposition	-4368 Oct 10 j 04:42	15° 8 02'37	-2°20'56
			min. Earth dist.	-4368 Oct 09 j 23:16	15° 8 03'00	28.84765 AU
conjunction	-4374 Mar 25 j 22:08	0° 8 23'02 -2°14'51	direct	-4368 Dec 27 j 02:07	13° 8 37'58	
minimum elong	-4374 Mar 25 j 22:08	0° 8 23'02 2°14'58	evening set	-4367 Mar 25 j 23:33	15° 8 33'14	
max. Earth dist.	-4374 Mar 26 j 10:25	0° 8 24'11 30.81626 AU				
morning rise	-4374 Apr 11 j 03:44	0° 8 59'06	conjunction	-4367 Apr 11 j 05:09	16° 8 09'13	-2°11'13
retrograde	-4374 Jul 10 j 20:06	2° 8 56'53	minimum elong	-4367 Apr 11 j 05:09	16° 8 09'13	2°11'16
opposition	-4374 Sep 27 j 12:14	1° 8 31'51 -2°24'17	max. Earth dist.	-4367 Apr 11 j 09:40	16° 8 09'39	30.84752 AU
min. Earth dist.	-4374 Sep 27 j 00:47	1° 8 32'40 28.81995 AU	morning rise	-4367 Apr 27 j 11:35	16° 8 45'18	
direct	-4374 Dec 14 j 01:33	0° 8 07'23	retrograde	-4367 Jul 26 j 13:00	18° 8 42'12	
evening set	-4373 Mar 12 j 08:37	2° 8 02'07	opposition	-4367 Oct 12 j 15:21	17° 8 17'39	-2°19'38
			min. Earth dist.	-4367 Oct 12 j 11:07	17° 8 17'57	28.85049 AU
conjunction	-4373 Mar 28 j 12:43	2° 8 38'02 -2°14'57	direct	-4367 Dec 29 j 13:11	15° 8 52'55	
minimum elong	-4373 Mar 28 j 12:44	2° 8 38'02 2°15'03	evening set	-4366 Mar 28 j 13:50	17° 8 48'14	
max. Earth dist.	-4373 Mar 29 j 00:59	2° 8 39'10 30.82046 AU				
morning rise	-4373 Apr 13 j 18:21	3° 8 14'06	conjunction	-4366 Apr 13 j 19:52	18° 8 24'14	-2°09'54
retrograde	-4373 Jul 13 j 08:25	5° 8 11'46	minimum elong	-4366 Apr 13 j 19:53	18° 8 24'15	2°09'57
opposition	-4373 Sep 29 j 22:57	3° 8 46'49 -2°24'17	max. Earth dist.	-4366 Apr 14 j 00:30	18° 8 24'40	30.85028 AU
min. Earth dist.	-4373 Sep 29 j 13:00	3° 8 47'32 28.82467 AU	morning rise	-4366 Apr 30 j 02:15	19° 8 00'19	
direct	-4373 Dec 16 j 13:30	2° 8 22'21	retrograde	-4366 Jul 28 j 23:35	20° 8 57'03	
evening set	-4372 Mar 13 j 23:00	4° 8 17'11	opposition	-4366 Oct 15 j 01:57	19° 8 32'32	-2°18'06
			min. Earth dist.	-4366 Oct 14 j 22:51	19° 8 32'45	28.85319 AU
conjunction	-4372 Mar 30 j 03:21	4° 8 53'06 -2°14'50	direct	-4365 Jan 01 j 01:48	18° 8 07'44	
minimum elong	-4372 Mar 30 j 03:21	4° 8 53'07 2°14'57	evening set	-4365 Mar 31 j 04:23	20° 8 03'07	
max. Earth dist.	-4372 Mar 30 j 14:21	4° 8 54'08 30.82571 AU				
morning rise	-4372 Apr 15 j 09:11	5° 8 29'11	conjunction	-4365 Apr 16 j 10:30	20° 8 39'07	-2°08'22
retrograde	-4372 Jul 14 j 23:16	7° 8 26'45	minimum elong	-4365 Apr 16 j 10:31	20° 8 39'07	2°08'24
opposition	-4372 Oct 01 j 09:39	6° 8 01'53 -2°24'03	max. Earth dist.	-4365 Apr 16 j 13:03	20° 8 39'21	30.85326 AU
min. Earth dist.	-4372 Sep 30 j 23:40	6° 8 02'35 28.83012 AU	morning rise	-4365 May 02 j 17:08	21° 8 15'11	
direct	-4372 Dec 18 j 02:47	4° 8 37'24	retrograde	-4365 Jul 31 j 12:32	23° 8 11'46	
evening set	-4371 Mar 16 j 13:19	6° 8 32'20	opposition	-4365 Oct 17 j 12:21	21° 8 47'17	-2°16'23
			min. Earth dist.	-4365 Oct 17 j 09:34	21° 8 47'29	28.85645 AU
conjunction	-4371 Apr 01 j 17:53	7° 8 08'17 -2°14'32	direct	-4364 Jan 03 j 13:17	20° 8 22'24	
minimum elong	-4371 Apr 01 j 17:54	7° 8 08'17 2°14'37	evening set	-4364 Apr 01 j 18:46	22° 8 17'51	
max. Earth dist.	-4371 Apr 02 j 04:00	7° 8 09'14 30.83117 AU				
morning rise	-4371 Apr 17 j 23:49	7° 8 44'22	conjunction	-4364 Apr 18 j 01:12	22° 8 53'52	-2°06'40
retrograde	-4371 Jul 17 j 11:24	9° 8 41'50	minimum elong	-4364 Apr 18 j 01:13	22° 8 53'52	2°06'42
opposition	-4371 Oct 03 j 20:31	8° 8 17'03 -2°23'36	max. Earth dist.	-4364 Apr 18 j 03:41	22° 8 54'06	30.85686 AU
min. Earth dist.	-4371 Oct 03 j 12:30	8° 8 17'37 28.83557 AU	morning rise	-4364 May 04 j 07:44	23° 8 29'56	
direct	-4371 Dec 20 j 14:06	6° 8 52'33	retrograde	-4364 Aug 01 j 23:37	25° 8 26'21	
evening set	-4370 Mar 19 j 03:47	8° 8 47'35	opposition	-4364 Oct 18 j 22:57	24° 8 01'55	-2°14'26
			min. Earth dist.	-4364 Oct 18 j 21:37	24° 8 02'00	28.86052 AU
conjunction	-4370 Apr 04 j 08:43	9° 8 23'33 -2°14'00	direct	-4363 Jan 05 j 01:45	22° 8 36'59	
minimum elong	-4370 Apr 04 j 08:44	9° 8 23'33 2°14'06	evening set	-4363 Apr 04 j 08:58	24° 8 32'29	
max. Earth dist.	-4370 Apr 04 j 17:57	9° 8 24'25 30.83646 AU				
morning rise	-4370 Apr 20 j 14:44	9° 8 59'38	conjunction	-4363 Apr 20 j 15:32	25° 8 08'31	-2°04'45
retrograde	-4370 Jul 20 j 00:50	11° 8 56'58	minimum elong	-4363 Apr 20 j 15:33	25° 8 08'31	2°04'47
opposition	-4370 Oct 06 j 07:10	10° 8 32'16 -2°22'56	max. Earth dist.	-4363 Apr 20 j 16:43	25° 8 08'38	30.86164 AU
min. Earth dist.	-4370 Oct 05 j 23:20	10° 8 32'50 28.84046 AU	morning rise	-4363 May 06 j 22:13	25° 8 44'34	
direct	-4370 Dec 23 j 03:06	9° 8 07'44	retrograde	-4363 Aug 04 j 13:13	27° 8 40'51	
evening set	-4369 Mar 21 j 18:27	11° 8 02'52	opposition	-4363 Oct 21 j 09:22	26° 8 16'28	-2°12'18
			min. Earth dist.	-4363 Oct 21 j 07:45	26° 8 16'35	28.86588 AU
conjunction	-4369 Apr 06 j 23:33	11° 8 38'50 -2°13'17	direct	-4362 Jan 07 j 15:32	24° 8 51'30	
minimum elong	-4369 Apr 06 j 23:34	11° 8 38'50 2°13'21	evening set	-4362 Apr 06 j 23:18	26° 8 47'05	
max. Earth dist.	-4369 Apr 07 j 06:43	11° 8 39'30 30.84092 AU				
morning rise	-4369 Apr 23 j 05:47	12° 8 14'55	conjunction	-4362 Apr 23 j 06:05	27° 8 23'07	-2°02'40
retrograde	-4369 Jul 22 j 13:48	14° 8 12'07	minimum elong	-4362 Apr 23 j 06:06	27° 8 23'07	2°02'42
opposition	-4369 Oct 08 j 18:03	12° 8 47'29 -2°22'03	max. Earth dist.	-4362 Apr 23 j 06:43	27° 8 23'10	30.86766 AU
min. Earth dist.	-4369 Oct 08 j 12:02	12° 8 47'54 28.84451 AU	morning rise	-4362 May 09 j 12:45	27° 8 59'10	
direct	-4369 Dec 25 j 13:44	11° 8 22'54	retrograde	-4362 Aug 07 j 00:37	29° 8 55'18	
evening set	-4368 Mar 23 j 08:57	13° 8 18'05	opposition	-4362 Oct 23 j 19:49	28° 8 30'59	-2°09'58
			min. Earth dist.	-4362 Oct 23 j 19:53	28° 8 30'59	28.87260 AU

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

direct	-4361 Jan 10 j 03:12	27° \mathbf{K} 06'00	minimum elong	-4355 May 09 j 11:39	13° \mathbf{P} 06'05	1°42'55
evening set	-4361 Apr 09 j 13:38	29° \mathbf{K} 01'40	max. Earth dist.	-4355 May 09 j 04:51	13° \mathbf{P} 05'27	30.92295 AU
			morning rise	-4355 May 25 j 18:00	13° \mathbf{P} 42'05	
conjunction	-4361 Apr 25 j 20:40	29° \mathbf{K} 37'43 -2°00'23	retrograde	-4355 Aug 22 j 10:18	15° \mathbf{P} 37'11	
minimum elong	-4361 Apr 25 j 20:40	29° \mathbf{K} 37'43 2°00'23	opposition	-4355 Nov 07 j 21:11	14° \mathbf{P} 13'29	-1°48'15
max. Earth dist.	-4361 Apr 25 j 20:38	29° \mathbf{K} 37'43 30.87514 AU	min. Earth dist.	-4355 Nov 08 j 04:05	14° \mathbf{P} 12'59	28.92672 AU
	-4361 May 05 j 20:47	0° \mathbf{P}	direct	-4354 Jan 25 j 14:57	12° \mathbf{P} 48'20	
morning rise	-4361 May 12 j 03:21	0° \mathbf{P} 13'45	evening set	-4354 Apr 25 j 18:16	14° \mathbf{P} 44'25	
retrograde	-4361 Aug 09 j 14:00	2° \mathbf{P} 09'44				
opposition	-4361 Oct 26 j 06:13	0° \mathbf{P} 45'32 -2°07'25	conjunction	-4354 May 12 j 01:58	15° \mathbf{P} 20'30	-1°39'30
min. Earth dist.	-4361 Oct 26 j 06:05	0° \mathbf{P} 45'33 28.88050 AU	minimum elong	-4354 May 12 j 01:58	15° \mathbf{P} 20'30	1°39'28
	-4361 Nov 23 j 09:02	30° \mathbf{K}	max. Earth dist.	-4354 May 11 j 17:18	15° \mathbf{P} 19'42	30.92851 AU
direct	-4360 Jan 12 j 16:24	29° \mathbf{K} 20'33	morning rise	-4354 May 28 j 08:22	15° \mathbf{P} 56'29	
	-4360 Mar 01 j 23:54	0° \mathbf{P}	retrograde	-4354 Aug 24 j 22:32	17° \mathbf{P} 51'23	
evening set	-4360 Apr 11 j 04:01	1° \mathbf{P} 16'18	opposition	-4354 Nov 10 j 07:24	16° \mathbf{P} 27'43	-1°44'28
			min. Earth dist.	-4354 Nov 10 j 14:25	16° \mathbf{P} 27'13	28.93198 AU
conjunction	-4360 Apr 27 j 11:05	1° \mathbf{P} 52'22 -1°57'55	direct	-4353 Jan 28 j 04:39	15° \mathbf{P} 02'29	
minimum elong	-4360 Apr 27 j 11:06	1° \mathbf{P} 52'22 1°57'55	evening set	-4353 Apr 28 j 08:32	16° \mathbf{P} 58'36	
max. Earth dist.	-4360 Apr 27 j 09:38	1° \mathbf{P} 52'14 30.88354 AU				
morning rise	-4360 May 13 j 17:48	2° \mathbf{P} 28'24	conjunction	-4353 May 14 j 16:19	17° \mathbf{P} 34'41	-1°35'53
retrograde	-4360 Aug 11 j 03:09	4° \mathbf{P} 24'16	minimum elong	-4353 May 14 j 16:19	17° \mathbf{P} 34'41	1°35'50
opposition	-4360 Oct 27 j 16:42	3° \mathbf{P} 00'10 -2°04'41	max. Earth dist.	-4353 May 14 j 06:58	17° \mathbf{P} 33'49	30.93368 AU
min. Earth dist.	-4360 Oct 27 j 18:06	3° \mathbf{P} 00'04 28.88929 AU	morning rise	-4353 May 30 j 22:30	18° \mathbf{P} 10'39	
direct	-4359 Jan 14 j 03:20	1° \mathbf{P} 35'11	retrograde	-4353 Aug 27 j 09:02	20° \mathbf{P} 05'22	
evening set	-4359 Apr 13 j 18:18	3° \mathbf{P} 31'01	opposition	-4353 Nov 12 j 17:52	18° \mathbf{P} 41'43	-1°40'33
			min. Earth dist.	-4353 Nov 13 j 02:46	18° \mathbf{P} 41'05	28.93719 AU
conjunction	-4359 Apr 30 j 01:39	4° \mathbf{P} 07'06 -1°55'16	direct	-4352 Jan 30 j 16:37	17° \mathbf{P} 16'25	
minimum elong	-4359 Apr 30 j 01:39	4° \mathbf{P} 07'06 1°55'15	evening set	-4352 Apr 29 j 22:33	19° \mathbf{P} 12'33	
max. Earth dist.	-4359 Apr 29 j 24:00	4° \mathbf{P} 06'57 30.89260 AU				
morning rise	-4359 May 16 j 08:15	4° \mathbf{P} 43'08	conjunction	-4352 May 16 j 06:20	19° \mathbf{P} 48'36	-1°32'09
retrograde	-4359 Aug 13 j 14:20	6° \mathbf{P} 38'51	minimum elong	-4352 May 16 j 06:20	19° \mathbf{P} 48'37	1°32'05
opposition	-4359 Oct 30 j 03:04	5° \mathbf{P} 14'53 -2°01'45	max. Earth dist.	-4352 May 15 j 20:13	19° \mathbf{P} 47'40	30.93915 AU
min. Earth dist.	-4359 Oct 30 j 05:00	5° \mathbf{P} 14'44 28.89824 AU	morning rise	-4352 Jun 01 j 12:24	20° \mathbf{P} 24'33	
direct	-4358 Jan 16 j 15:51	3° \mathbf{P} 49'54	retrograde	-4352 Aug 28 j 21:20	22° \mathbf{P} 19'05	
evening set	-4358 Apr 16 j 08:45	5° \mathbf{P} 45'49	opposition	-4352 Nov 14 j 04:07	20° \mathbf{P} 55'28	-1°36'28
			min. Earth dist.	-4352 Nov 14 j 12:48	20° \mathbf{P} 54'51	28.94285 AU
conjunction	-4358 May 02 j 16:04	6° \mathbf{P} 21'54 -1°52'26	direct	-4351 Feb 01 j 06:50	19° \mathbf{P} 30'07	
minimum elong	-4358 May 02 j 16:05	6° \mathbf{P} 21'54 1°52'25	evening set	-4351 May 02 j 12:34	21° \mathbf{P} 26'15	
max. Earth dist.	-4358 May 02 j 12:13	6° \mathbf{P} 21'32 30.90148 AU				
morning rise	-4358 May 18 j 22:48	6° \mathbf{P} 57'56	conjunction	-4351 May 18 j 20:15	22° \mathbf{P} 02'19	-1°28'16
retrograde	-4358 Aug 16 j 02:06	8° \mathbf{P} 53'31	minimum elong	-4351 May 18 j 20:16	22° \mathbf{P} 02'19	1°28'12
opposition	-4358 Nov 01 j 13:37	7° \mathbf{P} 29'38 -1°58'38	max. Earth dist.	-4351 May 18 j 08:58	22° \mathbf{P} 01'16	30.94525 AU
min. Earth dist.	-4358 Nov 01 j 16:49	7° \mathbf{P} 29'25 28.90684 AU	morning rise	-4351 Jun 04 j 02:11	22° \mathbf{P} 38'14	
direct	-4357 Jan 19 j 02:54	6° \mathbf{P} 04'39	retrograde	-4351 Aug 31 j 09:14	24° \mathbf{P} 32'36	
evening set	-4357 Apr 18 j 23:11	8° \mathbf{P} 00'37	opposition	-4351 Nov 16 j 14:25	23° \mathbf{P} 09'01	-1°32'15
			min. Earth dist.	-4351 Nov 17 j 00:23	23° \mathbf{P} 08'18	28.94956 AU
conjunction	-4357 May 05 j 06:47	8° \mathbf{P} 36'43 -1°49'26	direct	-4350 Feb 03 j 18:50	21° \mathbf{P} 43'36	
minimum elong	-4357 May 05 j 06:47	8° \mathbf{P} 36'43 1°49'24	evening set	-4350 May 05 j 02:21	23° \mathbf{P} 39'47	
max. Earth dist.	-4357 May 05 j 02:45	8° \mathbf{P} 36'20 30.90962 AU				
morning rise	-4357 May 21 j 13:17	9° \mathbf{P} 12'44	conjunction	-4350 May 21 j 10:09	24° \mathbf{P} 15'50	-1°24'15
retrograde	-4357 Aug 18 j 12:30	11° \mathbf{P} 08'10	minimum elong	-4350 May 21 j 10:10	24° \mathbf{P} 15'50	1°24'11
opposition	-4357 Nov 04 j 00:07	9° \mathbf{P} 44'22 -1°55'20	max. Earth dist.	-4350 May 20 j 22:54	24° \mathbf{P} 14'47	30.95261 AU
min. Earth dist.	-4357 Nov 04 j 04:42	9° \mathbf{P} 44'03 28.91438 AU	morning rise	-4350 Jun 06 j 15:51	24° \mathbf{P} 51'44	
direct	-4356 Jan 21 j 14:52	8° \mathbf{P} 19'21	retrograde	-4350 Sep 02 j 19:48	26° \mathbf{P} 45'56	
evening set	-4356 Apr 20 j 13:44	10° \mathbf{P} 15'23	opposition	-4350 Nov 19 j 00:42	25° \mathbf{P} 22'25	-1°27'54
			min. Earth dist.	-4350 Nov 19 j 10:47	25° \mathbf{P} 21'42	28.95739 AU
conjunction	-4356 May 06 j 21:15	10° \mathbf{P} 51'28 -1°46'17	direct	-4349 Feb 06 j 08:20	23° \mathbf{P} 56'59	
minimum elong	-4356 May 06 j 21:16	10° \mathbf{P} 51'28 1°46'15	evening set	-4349 May 07 j 16:20	25° \mathbf{P} 53'12	
max. Earth dist.	-4356 May 06 j 14:47	10° \mathbf{P} 50'52 30.91678 AU				
morning rise	-4356 May 23 j 03:51	11° \mathbf{P} 27'29	conjunction	-4349 May 23 j 23:54	26° \mathbf{P} 29'14	-1°20'07
retrograde	-4356 Aug 20 j 00:49	13° \mathbf{P} 22'45	minimum elong	-4349 May 23 j 23:55	26° \mathbf{P} 29'14	1°20'02
opposition	-4356 Nov 05 j 10:38	11° \mathbf{P} 59'01 -1°51'53	max. Earth dist.	-4349 May 23 j 11:01	26° \mathbf{P} 28'02	30.96120 AU
min. Earth dist.	-4356 Nov 05 j 15:43	11° \mathbf{P} 58'39 28.92102 AU	morning rise	-4349 Jun 09 j 05:30	27° \mathbf{P} 05'07	
direct	-4355 Jan 23 j 02:01	10° \mathbf{P} 33'56	retrograde	-4349 Sep 05 j 07:17	28° \mathbf{P} 59'11	
evening set	-4355 Apr 23 j 03:55	12° \mathbf{P} 30'00	opposition	-4349 Nov 21 j 10:59	27° \mathbf{P} 35'45	-1°23'24
			min. Earth dist.	-4349 Nov 21 j 21:43	27° \mathbf{P} 34'59	28.96668 AU
conjunction	-4355 May 09 j 11:38	13° \mathbf{P} 06'05 -1°42'58	direct	-4348 Feb 08 j 19:21	26° \mathbf{P} 10'19	

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

evening set	-4348 May 09 j 06:05	28° Υ 06'34		max. Earth dist.	-4342 Jun 08 j 04:15	12° \mathcal{B} 01'50	31.03063 AU
				morning rise	-4342 Jun 25 j 02:33	12° \mathcal{B} 39'18	
conjunction	-4348 May 25 j 13:44	28° Υ 42'37	-1°15'52	retrograde	-4342 Sep 20 j 12:25	14° \mathcal{B} 32'32	
minimum elong	-4348 May 25 j 13:45	28° Υ 42'37	1°15'47	opposition	-4342 Dec 06 j 11:56	13° \mathcal{B} 09'42	-0°48'57
max. Earth dist.	-4348 May 25 j 01:23	28° Υ 41'28	30.97115 AU	min. Earth dist.	-4342 Dec 07 j 04:46	13° \mathcal{B} 08'31	29.03473 AU
morning rise	-4348 Jun 10 j 18:57	29° Υ 18'29		direct	-4341 Feb 24 j 08:51	11° \mathcal{B} 44'17	
	-4348 Jun 30 j 21:57	0° \mathcal{B}		evening set	-4341 May 26 j 06:02	13° \mathcal{B} 40'52	
retrograde	-4348 Sep 06 j 17:24	1° \mathcal{B} 12'25					
	-4348 Nov 16 j 10:39	30° $\mathcal{R}\Upsilon$		conjunction	-4341 Jun 11 j 12:18	14° \mathcal{B} 16'48	-0°43'19
opposition	-4348 Nov 22 j 21:22	29° Υ 49'05	-1°18'48	minimum elong	-4341 Jun 11 j 12:19	14° \mathcal{B} 16'48	0°43'11
min. Earth dist.	-4348 Nov 23 j 08:58	29° Υ 48'16	28.97703 AU	max. Earth dist.	-4341 Jun 10 j 17:19	14° \mathcal{B} 15'02	31.03794 AU
direct	-4347 Feb 10 j 07:06	28° Υ 23'41		morning rise	-4341 Jun 27 j 15:23	14° \mathcal{B} 52'29	
	-4347 May 02 j 09:48	0° \mathcal{B}			-4341 Jul 01 j 02:52	15° \mathcal{B}	
evening set	-4347 May 11 j 19:49	0° \mathcal{B} 19'59		retrograde	-4341 Sep 22 j 22:28	16° \mathcal{B} 45'35	
				opposition	-4341 Dec 08 j 22:22	15° \mathcal{B} 22'47	-0°43'41
conjunction	-4347 May 28 j 03:12	0° \mathcal{B} 56'02	-1°11'30	min. Earth dist.	-4341 Dec 09 j 15:32	15° \mathcal{B} 21'35	29.04172 AU
minimum elong	-4347 May 28 j 03:12	0° \mathcal{B} 56'02	1°11'24		-4341 Dec 22 j 14:29	15° $\mathcal{R}\mathcal{B}$	
max. Earth dist.	-4347 May 27 j 13:05	0° \mathcal{B} 54'43	30.98203 AU	direct	-4340 Feb 26 j 22:53	13° \mathcal{B} 57'20	
morning rise	-4347 Jun 13 j 08:21	1° \mathcal{B} 31'53			-4340 May 01 j 00:11	15° \mathcal{B}	
retrograde	-4347 Sep 09 j 05:11	3° \mathcal{B} 25'42		evening set	-4340 May 27 j 19:29	15° \mathcal{B} 53'55	
opposition	-4347 Nov 25 j 07:39	2° \mathcal{B} 02'29	-1°14'04	max. Earth dist.	-4340 Jun 12 j 04:45	16° \mathcal{B} 27'55	31.04496 AU
min. Earth dist.	-4347 Nov 25 j 19:22	2° \mathcal{B} 01'40	28.98811 AU				
direct	-4346 Feb 12 j 17:47	0° \mathcal{B} 37'06		conjunction	-4340 Jun 13 j 01:20	16° \mathcal{B} 29'49	-0°38'22
evening set	-4346 May 14 j 09:36	2° \mathcal{B} 33'29		minimum elong	-4340 Jun 13 j 01:20	16° \mathcal{B} 29'49	0°38'14
				morning rise	-4340 Jun 29 j 04:06	17° \mathcal{B} 05'29	
conjunction	-4346 May 30 j 16:59	3° \mathcal{B} 09'31	-1°07'01	retrograde	-4340 Sep 24 j 10:04	18° \mathcal{B} 58'25	
minimum elong	-4346 May 30 j 17:00	3° \mathcal{B} 09'31	1°06'55	opposition	-4340 Dec 10 j 08:49	17° \mathcal{B} 35'40	-0°38'23
max. Earth dist.	-4346 May 30 j 02:57	3° \mathcal{B} 08'13	30.99313 AU	min. Earth dist.	-4340 Dec 11 j 02:35	17° \mathcal{B} 34'25	29.04891 AU
morning rise	-4346 Jun 15 j 21:42	3° \mathcal{B} 45'21		direct	-4339 Feb 28 j 10:46	16° \mathcal{B} 10'10	
retrograde	-4346 Sep 11 j 14:22	5° \mathcal{B} 39'04		evening set	-4339 May 30 j 08:29	18° \mathcal{B} 06'44	
opposition	-4346 Nov 27 j 18:02	4° \mathcal{B} 15'58	-1°09'13				
min. Earth dist.	-4346 Nov 28 j 07:29	4° \mathcal{B} 15'01	28.99905 AU	conjunction	-4339 Jun 15 j 14:11	18° \mathcal{B} 42'37	-0°33'23
direct	-4345 Feb 15 j 05:50	2° \mathcal{B} 50'36		minimum elong	-4339 Jun 15 j 14:12	18° \mathcal{B} 42'37	0°33'14
evening set	-4345 May 16 j 23:33	4° \mathcal{B} 47'04		max. Earth dist.	-4339 Jun 14 j 18:17	18° \mathcal{B} 40'46	31.05232 AU
				morning rise	-4339 Jul 01 j 16:26	19° \mathcal{B} 18'14	
conjunction	-4345 Jun 02 j 06:38	5° \mathcal{B} 23'05	-1°02'26	retrograde	-4339 Sep 26 j 19:44	21° \mathcal{B} 11'02	
minimum elong	-4345 Jun 02 j 06:39	5° \mathcal{B} 23'05	1°02'20	opposition	-4339 Dec 12 j 19:18	19° \mathcal{B} 48'19	-0°33'01
max. Earth dist.	-4345 Jun 01 j 14:46	5° \mathcal{B} 21'36	31.00391 AU	min. Earth dist.	-4339 Dec 13 j 13:51	19° \mathcal{B} 47'01	29.05648 AU
morning rise	-4345 Jun 18 j 11:12	5° \mathcal{B} 58'53		direct	-4338 Mar 02 j 23:49	18° \mathcal{B} 22'47	
retrograde	-4345 Sep 14 j 02:24	7° \mathcal{B} 52'30		evening set	-4338 Jun 01 j 21:45	20° \mathcal{B} 19'21	
opposition	-4345 Nov 30 j 04:28	6° \mathcal{B} 29'29	-1°04'17	max. Earth dist.	-4338 Jun 17 j 05:32	20° \mathcal{B} 53'13	31.06038 AU
min. Earth dist.	-4345 Nov 30 j 17:54	6° \mathcal{B} 28'33	29.00940 AU				
direct	-4344 Feb 17 j 18:28	5° \mathcal{B} 04'08		conjunction	-4338 Jun 18 j 02:55	20° \mathcal{B} 55'12	-0°28'21
evening set	-4344 May 18 j 13:13	7° \mathcal{B} 00'39		minimum elong	-4338 Jun 18 j 02:55	20° \mathcal{B} 55'12	0°28'12
				morning rise	-4338 Jul 04 j 04:53	21° \mathcal{B} 30'47	
conjunction	-4344 Jun 03 j 20:10	7° \mathcal{B} 36'39	-0°57'46	retrograde	-4338 Sep 29 j 06:18	23° \mathcal{B} 23'28	
minimum elong	-4344 Jun 03 j 20:10	7° \mathcal{B} 36'39	0°57'39	opposition	-4338 Dec 15 j 05:37	22° \mathcal{B} 00'46	-0°27'37
max. Earth dist.	-4344 Jun 03 j 03:46	7° \mathcal{B} 35'07	31.01374 AU	min. Earth dist.	-4338 Dec 15 j 23:50	21° \mathcal{B} 59'30	29.06510 AU
morning rise	-4344 Jun 20 j 00:17	8° \mathcal{B} 12'26		direct	-4337 Mar 05 j 11:29	20° \mathcal{B} 35'13	
retrograde	-4344 Sep 15 j 12:37	10° \mathcal{B} 05'56		evening set	-4337 Jun 04 j 10:46	22° \mathcal{B} 31'47	
opposition	-4344 Dec 01 j 15:04	8° \mathcal{B} 43'00	-0°59'15				
min. Earth dist.	-4344 Dec 02 j 06:24	8° \mathcal{B} 41'55	29.01878 AU	conjunction	-4337 Jun 20 j 15:43	23° \mathcal{B} 07'37	-0°23'16
direct	-4343 Feb 19 j 05:42	7° \mathcal{B} 17'38		minimum elong	-4337 Jun 20 j 15:43	23° \mathcal{B} 07'37	0°23'07
evening set	-4343 May 21 j 02:55	9° \mathcal{B} 14'11		max. Earth dist.	-4337 Jun 19 j 19:02	23° \mathcal{B} 05'42	31.06955 AU
				morning rise	-4337 Jul 06 j 17:02	23° \mathcal{B} 43'09	
conjunction	-4343 Jun 06 j 09:38	9° \mathcal{B} 50'10	-0°53'01	retrograde	-4337 Oct 01 j 14:22	25° \mathcal{B} 35'43	
minimum elong	-4343 Jun 06 j 09:39	9° \mathcal{B} 50'10	0°52'54	opposition	-4337 Dec 17 j 16:15	24° \mathcal{B} 13'06	-0°22'10
max. Earth dist.	-4343 Jun 05 j 16:11	9° \mathcal{B} 48'33	31.02270 AU	min. Earth dist.	-4337 Dec 18 j 11:31	24° \mathcal{B} 11'45	29.07491 AU
morning rise	-4343 Jun 22 j 13:30	10° \mathcal{B} 25'55		direct	-4336 Mar 06 j 23:11	22° \mathcal{B} 47'33	
retrograde	-4343 Sep 18 j 00:39	12° \mathcal{B} 19'17		evening set	-4336 Jun 05 j 23:41	24° \mathcal{B} 44'07	
opposition	-4343 Dec 04 j 01:25	10° \mathcal{B} 56'25	-0°54'08	max. Earth dist.	-4336 Jun 21 j 06:23	25° \mathcal{B} 17'55	31.08010 AU
min. Earth dist.	-4343 Dec 04 j 16:46	10° \mathcal{B} 55'20	29.02715 AU				
direct	-4342 Feb 21 j 20:08	9° \mathcal{B} 31'02		conjunction	-4336 Jun 22 j 04:06	25° \mathcal{B} 19'55	-0°18'10
evening set	-4342 May 23 j 16:34	11° \mathcal{B} 27'36		minimum elong	-4336 Jun 22 j 04:06	25° \mathcal{B} 19'55	0°18'01
				morning rise	-4336 Jul 08 j 05:05	25° \mathcal{B} 55'26	
conjunction	-4342 Jun 08 j 23:02	12° \mathcal{B} 03'34	-0°48'12	retrograde	-4336 Oct 03 j 01:31	27° \mathcal{B} 47'54	
minimum elong	-4342 Jun 08 j 23:03	12° \mathcal{B} 03'34	0°48'04	opposition	-4336 Dec 19 j 02:43	26° \mathcal{B} 25'21	-0°16'42

Attention, astronomical year style is used: The year -4336 in astronomical counting style is the year 4337 BCE in historical counting style.

min. Earth dist.	-4336 Dec 19 j 21:14	26° 8 24'04	29.08599 AU	direct	-4330 Mar 21 j 00:24	6° II 01'32	
direct	-4335 Mar 09 j 10:40	24° 8 59'50		evening set	-4330 Jun 20 j 04:46	7° II 58'17	
evening set	-4335 Jun 08 j 12:34	26° 8 56'26		max. Earth dist.	-4330 Jul 05 j 06:27	8° II 31'39	31.14590 AU
conjunction	-4335 Jun 24 j 16:39	27° 8 32'12	-0°13'03	conjunction	-4330 Jul 06 j 06:24	8° II 33'52	0°12'51
minimum elong	-4335 Jun 24 j 16:39	27° 8 32'12	0°12'53	minimum elong	-4330 Jul 06 j 06:23	8° II 33'52	0°13'02
behind sun begin	-4335 Jun 24 j 12:41	27° 8 31'51		behind sun begin	-4330 Jul 06 j 02:30	8° II 33'32	
behind sun end	-4335 Jun 24 j 20:36	27° 8 32'33		behind sun end	-4330 Jul 06 j 10:16	8° II 34'13	
max. Earth dist.	-4335 Jun 23 j 19:09	27° 8 30'13	31.09165 AU	morning rise	-4330 Jul 22 j 03:58	9° II 09'08	
morning rise	-4335 Jul 10 j 17:02	28° 8 07'41		retrograde	-4330 Oct 16 j 17:41	11° II 01'14	
	-4335 Oct 03 j 06:32	0° II		opposition	-4329 Jan 01 j 19:07	9° II 39'07	0°16'23
retrograde	-4335 Oct 05 j 10:56	0° II 00'05		min. Earth dist.	-4329 Jan 02 j 17:49	9° II 37'33	29.15012 AU
	-4335 Oct 07 j 15:43	30° R 8		direct	-4329 Mar 23 j 14:05	8° II 13'45	
opposition	-4335 Dec 21 j 13:13	28° 8 37'37	-0°11'12	evening set	-4329 Jun 22 j 17:31	10° II 10'30	
min. Earth dist.	-4335 Dec 22 j 09:11	28° 8 36'14	29.09795 AU	conjunction	-4329 Jul 08 j 18:25	10° II 46'03	0°17'58
direct	-4334 Mar 11 j 21:01	27° 8 12'08		minimum elong	-4329 Jul 08 j 18:25	10° II 46'03	0°18'09
evening set	-4334 Jun 11 j 01:31	29° 8 08'47		max. Earth dist.	-4329 Jul 07 j 16:54	10° II 43'40	31.15354 AU
max. Earth dist.	-4334 Jun 26 j 07:06	29° 8 42'28	31.10385 AU	morning rise	-4329 Jul 24 j 15:34	11° II 21'16	
conjunction	-4334 Jun 27 j 05:08	29° 8 44'31	-0°07'54	retrograde	-4329 Oct 19 j 04:34	13° II 13'17	
minimum elong	-4334 Jun 27 j 05:07	29° 8 44'31	0°07'44	opposition	-4328 Jan 04 j 06:01	11° II 51'13	0°21'50
behind sun begin	-4334 Jun 26 j 23:13	29° 8 43'59		min. Earth dist.	-4328 Jan 05 j 04:26	11° II 49'39	29.15733 AU
behind sun end	-4334 Jun 27 j 11:01	29° 8 45'02		direct	-4328 Mar 25 j 02:17	10° II 25'50	
	-4334 Jul 04 j 03:40	0° II		evening set	-4328 Jun 24 j 05:47	12° II 22'34	
morning rise	-4334 Jul 13 j 05:04	0° II 19'57		max. Earth dist.	-4328 Jul 09 j 05:26	12° II 55'45	31.16027 AU
retrograde	-4334 Oct 07 j 22:07	2° II 12'17		conjunction	-4328 Jul 10 j 06:17	12° II 58'04	0°23'03
opposition	-4334 Dec 23 j 23:48	0° II 49'55	-0°05'41	minimum elong	-4328 Jul 10 j 06:17	12° II 58'04	0°23'15
min. Earth dist.	-4334 Dec 24 j 19:25	0° II 48'33	29.11004 AU	morning rise	-4328 Jul 26 j 02:40	13° II 33'14	
	-4333 Jan 24 j 20:23	30° R 8		retrograde	-4328 Oct 20 j 12:37	15° II 25'12	
direct	-4333 Mar 14 j 10:55	29° 8 24'28		opposition	-4327 Jan 05 j 17:00	14° II 03'08	0°27'16
	-4333 May 01 j 01:29	0° II		min. Earth dist.	-4327 Jan 06 j 16:39	14° II 01'30	29.16381 AU
evening set	-4333 Jun 13 j 14:26	1° II 21'10		direct	-4327 Mar 27 j 14:24	12° II 37'45	
conjunction	-4333 Jun 29 j 17:30	1° II 56'52	-0°02'45	evening set	-4327 Jun 26 j 18:09	14° II 34'27	
minimum elong	-4333 Jun 29 j 17:30	1° II 56'52	0°02'34	conjunction	-4327 Jul 12 j 17:56	15° II 09'55	0°28'06
behind sun begin	-4333 Jun 29 j 10:58	1° II 56'17		minimum elong	-4327 Jul 12 j 17:55	15° II 09'55	0°28'17
behind sun end	-4333 Jun 30 j 00:03	1° II 57'26		max. Earth dist.	-4327 Jul 11 j 16:02	15° II 07'30	31.16662 AU
max. Earth dist.	-4333 Jun 28 j 18:43	1° II 54'45	31.11572 AU	morning rise	-4327 Jul 28 j 13:52	15° II 45'02	
morning rise	-4333 Jul 15 j 16:52	2° II 32'15		retrograde	-4327 Oct 22 j 23:13	17° II 36'56	
retrograde	-4333 Oct 10 j 09:30	4° II 24'33		opposition	-4326 Jan 08 j 03:40	16° II 14'53	0°32'38
opposition	-4333 Dec 26 j 10:36	3° II 02'15	-0°00'09	min. Earth dist.	-4326 Jan 09 j 02:35	16° II 13'18	29.17012 AU
min. Earth dist.	-4333 Dec 27 j 07:23	3° II 00'49	29.12174 AU	direct	-4326 Mar 30 j 01:59	14° II 49'29	
asc. node	-4332 Jan 05 j 05:53	2° II 45'57		evening set	-4326 Jun 29 j 06:19	16° II 46'10	
direct	-4332 Mar 15 j 22:36	1° II 36'51		max. Earth dist.	-4326 Jul 14 j 04:05	17° II 19'13	31.17294 AU
evening set	-4332 Jun 15 j 03:16	3° II 33'34		conjunction	-4326 Jul 15 j 05:35	17° II 21'35	0°33'06
max. Earth dist.	-4332 Jun 30 j 07:06	4° II 07'07	31.12699 AU	minimum elong	-4326 Jul 15 j 05:35	17° II 21'35	0°33'18
conjunction	-4332 Jul 01 j 05:55	4° II 09'14	0°02'34	morning rise	-4326 Jul 31 j 00:46	17° II 56'40	
minimum elong	-4332 Jul 01 j 05:55	4° II 09'14	0°02'45	retrograde	-4326 Oct 25 j 08:01	19° II 48'31	
behind sun begin	-4332 Jun 30 j 23:23	4° II 08'39		opposition	-4325 Jan 10 j 14:43	18° II 26'29	0°37'58
behind sun end	-4332 Jul 01 j 12:26	4° II 09'49		min. Earth dist.	-4325 Jan 11 j 14:42	18° II 24'49	29.17678 AU
morning rise	-4332 Jul 17 j 04:40	4° II 44'35		direct	-4325 Apr 01 j 12:39	17° II 01'04	
retrograde	-4332 Oct 11 j 19:55	6° II 36'49		evening set	-4325 Jul 01 j 18:21	18° II 57'45	
opposition	-4332 Dec 27 j 21:24	5° II 14'36	0°05'23	conjunction	-4325 Jul 17 j 16:54	19° II 33'06	0°38'03
min. Earth dist.	-4332 Dec 28 j 18:27	5° II 13'08	29.13243 AU	minimum elong	-4325 Jul 17 j 16:54	19° II 33'06	0°38'15
direct	-4331 Mar 18 j 12:08	3° II 49'13		max. Earth dist.	-4325 Jul 16 j 15:29	19° II 30'44	31.17994 AU
evening set	-4331 Jun 17 j 16:03	5° II 45'58		morning rise	-4325 Aug 02 j 11:30	20° II 08'08	
conjunction	-4331 Jul 03 j 18:04	6° II 21'35	0°07'43	retrograde	-4325 Oct 27 j 18:10	21° II 59'57	
minimum elong	-4331 Jul 03 j 18:04	6° II 21'35	0°07'54	opposition	-4324 Jan 13 j 01:41	20° II 37'57	0°43'14
behind sun begin	-4331 Jul 03 j 12:13	6° II 21'04		min. Earth dist.	-4324 Jan 14 j 00:40	20° II 36'21	29.18419 AU
behind sun end	-4331 Jul 03 j 23:56	6° II 22'06		direct	-4324 Apr 03 j 02:14	19° II 12'33	
max. Earth dist.	-4331 Jul 02 j 17:42	6° II 19'19	31.13707 AU	evening set	-4324 Jul 03 j 06:19	21° II 09'14	
morning rise	-4331 Jul 19 j 16:23	6° II 56'54		max. Earth dist.	-4324 Jul 18 j 02:41	21° II 42'10	31.18781 AU
retrograde	-4331 Oct 14 j 07:55	8° II 49'04		conjunction	-4324 Jul 19 j 04:13	21° II 44'33	0°42'57
opposition	-4331 Dec 30 j 08:15	7° II 26'54	0°10'53				
min. Earth dist.	-4331 Dec 31 j 05:56	7° II 25'24	29.14198 AU				

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Attention, astronomical year style is used: The year -4324 in astronomical counting style is the year 4325 BCE in historical counting style.

minimum elong	-4324 Jul 19 j 04:13	21°II44'33	0°43'09	min. Earth dist.	-4317 Jan 29 j 07:35	5°☾56'54	29.24302 AU
morning rise	-4324 Aug 03 j 22:09	22°II19'32		direct	-4317 Apr 19 j 16:29	4°☾33'25	
retrograde	-4324 Oct 29 j 05:06	24°II11'20		evening set	-4317 Jul 19 j 16:17	6°☾30'06	
opposition	-4323 Jan 14 j 12:41	22°II49'21	0°48'26	max. Earth dist.	-4317 Aug 03 j 08:01	7°☾02'42	31.24464 AU
min. Earth dist.	-4323 Jan 15 j 12:06	22°II47'44	29.19275 AU				
direct	-4323 Apr 05 j 12:48	21°II24'00		conjunction	-4317 Aug 04 j 09:28	7°☾05'05	1°15'05
evening set	-4323 Jul 05 j 18:04	23°II20'42		minimum elong	-4317 Aug 04 j 09:27	7°☾05'05	1°15'17
				morning rise	-4317 Aug 19 j 22:42	7°☾39'44	
conjunction	-4323 Jul 21 j 15:26	23°II55'58	0°47'47	retrograde	-4317 Nov 14 j 05:05	9°☾31'35	
minimum elong	-4323 Jul 21 j 15:26	23°II55'58	0°47'59	opposition	-4316 Jan 30 j 19:50	8°☾09'53	1°22'26
max. Earth dist.	-4323 Jul 20 j 14:40	23°II53'39	31.19681 AU	min. Earth dist.	-4316 Jan 31 j 20:19	8°☾08'12	29.24769 AU
morning rise	-4323 Aug 06 j 08:43	24°II30'54		direct	-4316 Apr 21 j 03:42	6°☾44'48	
retrograde	-4323 Oct 31 j 15:06	26°II22'42		evening set	-4316 Jul 21 j 03:42	8°☾41'26	
opposition	-4322 Jan 16 j 23:44	25°II00'47	0°53'34				
min. Earth dist.	-4322 Jan 17 j 22:48	24°II59'12	29.20199 AU	conjunction	-4316 Aug 05 j 20:10	9°☾16'22	1°19'17
direct	-4322 Apr 08 j 01:42	23°II35'29		minimum elong	-4316 Aug 05 j 20:10	9°☾16'22	1°19'29
evening set	-4322 Jul 08 j 05:59	25°II32'12		max. Earth dist.	-4316 Aug 04 j 18:43	9°☾13'59	31.24874 AU
max. Earth dist.	-4322 Jul 23 j 00:56	26°II05'02	31.20628 AU	morning rise	-4316 Aug 21 j 08:50	9°☾50'58	
				retrograde	-4316 Nov 15 j 14:29	11°☾42'48	
conjunction	-4322 Jul 24 j 02:33	26°II07'25	0°52'33	opposition	-4315 Feb 01 j 07:11	10°☾21'04	1°26'51
minimum elong	-4322 Jul 24 j 02:32	26°II07'25	0°52'46	min. Earth dist.	-4315 Feb 02 j 06:53	10°☾19'27	29.25128 AU
morning rise	-4322 Aug 08 j 19:15	26°II42'19		direct	-4315 Apr 23 j 16:37	8°☾55'58	
retrograde	-4322 Nov 03 j 03:30	28°II34'07		evening set	-4315 Jul 23 j 14:56	10°☾52'34	
opposition	-4321 Jan 19 j 10:49	27°II12'16	0°58'37	max. Earth dist.	-4315 Aug 07 j 05:02	11°☾25'02	31.25187 AU
min. Earth dist.	-4321 Jan 20 j 09:52	27°II10'41	29.21168 AU				
direct	-4321 Apr 10 j 13:54	25°II47'02		conjunction	-4315 Aug 08 j 06:43	11°☾27'26	1°23'22
evening set	-4321 Jul 10 j 17:43	27°II43'46		minimum elong	-4315 Aug 08 j 06:42	11°☾27'26	1°23'34
				morning rise	-4315 Aug 23 j 18:46	12°☾01'59	
conjunction	-4321 Jul 26 j 13:45	28°II18'57	0°57'15	retrograde	-4315 Nov 18 j 00:52	13°☾53'50	
minimum elong	-4321 Jul 26 j 13:45	28°II18'57	0°57'26	opposition	-4314 Feb 03 j 18:42	12°☾32'04	1°31'09
max. Earth dist.	-4321 Jul 25 j 13:15	28°II16'40	31.21585 AU	min. Earth dist.	-4314 Feb 04 j 18:50	12°☾30'25	29.25429 AU
morning rise	-4321 Aug 11 j 05:39	28°II53'47		direct	-4314 Apr 26 j 02:52	11°☾06'57	
	-4321 Sep 14 j 01:10	0°☾		evening set	-4314 Jul 26 j 01:57	13°☾03'29	
retrograde	-4321 Nov 05 j 13:41	0°☾45'37					
	-4321 Dec 30 j 05:39	30°☾II		conjunction	-4314 Aug 10 j 17:07	13°☾38'17	1°27'19
opposition	-4320 Jan 21 j 22:11	29°II23'50	1°03'35	minimum elong	-4314 Aug 10 j 17:06	13°☾38'17	1°27'32
min. Earth dist.	-4320 Jan 22 j 21:48	29°II22'12	29.22103 AU	max. Earth dist.	-4314 Aug 09 j 16:25	13°☾35'59	31.25469 AU
direct	-4320 Apr 12 j 03:37	27°II58'39		morning rise	-4314 Aug 26 j 04:27	14°☾12'48	
evening set	-4320 Jul 12 j 05:25	29°II55'24		retrograde	-4314 Nov 20 j 10:16	16°☾04'38	
	-4320 Jul 14 j 07:58	0°☾		opposition	-4313 Feb 06 j 06:15	14°☾42'50	1°35'18
max. Earth dist.	-4320 Jul 26 j 23:01	0°☾28'08	31.22485 AU	min. Earth dist.	-4313 Feb 07 j 05:48	14°☾41'13	29.25711 AU
				direct	-4313 Apr 28 j 16:15	13°☾17'43	
conjunction	-4320 Jul 28 j 00:36	0°☾30'31	1°01'51	evening set	-4313 Jul 28 j 12:59	15°☾14'12	
minimum elong	-4320 Jul 28 j 00:35	0°☾30'31	1°02'03	max. Earth dist.	-4313 Aug 12 j 02:10	15°☾46'36	31.25770 AU
morning rise	-4320 Aug 12 j 16:00	1°☾05'19					
retrograde	-4320 Nov 07 j 00:48	2°☾57'10		conjunction	-4313 Aug 13 j 03:19	15°☾48'57	1°31'09
opposition	-4319 Jan 23 j 09:26	1°☾35'25	1°08'27	minimum elong	-4313 Aug 13 j 03:18	15°☾48'57	1°31'20
min. Earth dist.	-4319 Jan 24 j 08:29	1°☾33'50	29.22967 AU	morning rise	-4313 Aug 28 j 14:07	16°☾23'24	
direct	-4319 Apr 14 j 15:30	0°☾10'17		retrograde	-4313 Nov 22 j 22:09	18°☾15'16	
evening set	-4319 Jul 14 j 17:04	2°☾07'02		opposition	-4312 Feb 08 j 17:50	16°☾53'26	1°39'20
max. Earth dist.	-4319 Jul 29 j 10:55	2°☾39'48	31.23278 AU	min. Earth dist.	-4312 Feb 09 j 16:46	16°☾51'52	29.26063 AU
				direct	-4312 Apr 30 j 03:54	15°☾28'20	
conjunction	-4319 Jul 30 j 11:43	2°☾42'06	1°06'22	evening set	-4312 Jul 29 j 23:35	17°☾24'46	
minimum elong	-4319 Jul 30 j 11:42	2°☾42'06	1°06'33				
morning rise	-4319 Aug 15 j 02:16	3°☾16'51		conjunction	-4312 Aug 14 j 13:23	17°☾59'29	1°34'50
retrograde	-4319 Nov 09 j 09:27	5°☾08'42		minimum elong	-4312 Aug 14 j 13:23	17°☾59'29	1°35'02
opposition	-4318 Jan 25 j 20:48	3°☾47'00	1°13'13	max. Earth dist.	-4312 Aug 13 j 13:59	17°☾57'17	31.26155 AU
min. Earth dist.	-4318 Jan 26 j 21:00	3°☾45'20	29.23703 AU	morning rise	-4312 Aug 29 j 23:26	18°☾33'53	
direct	-4318 Apr 17 j 04:07	2°☾21'54		retrograde	-4312 Nov 24 j 07:46	20°☾25'47	
evening set	-4318 Jul 17 j 04:50	4°☾18'37		opposition	-4311 Feb 10 j 05:29	19°☾03'57	1°43'12
				min. Earth dist.	-4311 Feb 11 j 04:20	19°☾02'23	29.26496 AU
conjunction	-4318 Aug 01 j 22:38	4°☾53'39	1°10'46	direct	-4311 May 02 j 17:07	17°☾38'53	
minimum elong	-4318 Aug 01 j 22:38	4°☾53'39	1°10'59	evening set	-4311 Aug 01 j 10:25	19°☾35'18	
max. Earth dist.	-4318 Jul 31 j 20:51	4°☾51'14	31.23945 AU				
morning rise	-4318 Aug 17 j 12:40	5°☾28'21		conjunction	-4311 Aug 16 j 23:23	20°☾09'57	1°38'24
retrograde	-4318 Nov 11 j 20:36	7°☾20'12		minimum elong	-4311 Aug 16 j 23:22	20°☾09'57	1°38'35
opposition	-4317 Jan 28 j 08:13	5°☾58'30	1°17'53	max. Earth dist.	-4311 Aug 15 j 23:32	20°☾07'43	31.26640 AU

Attention, astronomical year style is used: The year -4311 in astronomical counting style is the year 4312 BCE in historical counting style.

morning rise	-4311 Sep 01 j 08:59	20° Ω 44'19	direct	-4304 May 18 j 02:24	2° Ω 54'52	
retrograde	-4311 Nov 26 j 18:59	22° Ω 36'16	evening set	-4304 Aug 16 j 11:49	4° Ω 51'06	
opposition	-4310 Feb 12 j 16:55	21° Ω 14'27	1°46'56			
min. Earth dist.	-4310 Feb 13 j 14:26	21° Ω 12'59	29.27035 AU	conjunction	-4304 Aug 31 j 20:20	5° Ω 25'28 1°59'05
direct	-4310 May 05 j 04:33	19° Ω 49'26		minimum elong	-4304 Aug 31 j 20:20	5° Ω 25'28 1°59'16
evening set	-4310 Aug 03 j 21:00	21° Ω 45'51		max. Earth dist.	-4304 Aug 30 j 23:21	5° Ω 23'29 31.29869 AU
max. Earth dist.	-4310 Aug 18 j 11:08	22° Ω 18'22	31.27208 AU	morning rise	-4304 Sep 16 j 02:04	5° Ω 59'35
				retrograde	-4304 Dec 11 j 19:34	7° Ω 52'08
conjunction	-4310 Aug 19 j 09:27	22° Ω 20'28	1°41'49	opposition	-4303 Feb 28 j 04:48	6° Ω 30'22 2°08'27
minimum elong	-4310 Aug 19 j 09:27	22° Ω 20'28	1°42'00	min. Earth dist.	-4303 Mar 01 j 00:11	6° Ω 29'04 29.30063 AU
morning rise	-4310 Sep 03 j 18:17	22° Ω 54'47		direct	-4303 May 20 j 13:31	5° Ω 05'48
retrograde	-4310 Nov 29 j 04:11	24° Ω 46'49		evening set	-4303 Aug 18 j 21:58	7° Ω 01'58
opposition	-4309 Feb 15 j 04:45	23° Ω 25'02	1°50'30	max. Earth dist.	-4303 Sep 02 j 10:35	7° Ω 34'28 31.29921 AU
min. Earth dist.	-4309 Feb 16 j 02:42	23° Ω 23'32	29.27636 AU			
direct	-4309 May 07 j 17:06	22° Ω 00'07		conjunction	-4303 Sep 03 j 06:05	7° Ω 36'18 2°01'23
evening set	-4309 Aug 06 j 07:33	23° Ω 56'30		minimum elong	-4303 Sep 03 j 06:05	7° Ω 36'18 2°01'32
				morning rise	-4303 Sep 18 j 11:10	8° Ω 10'22
conjunction	-4309 Aug 21 j 19:12	24° Ω 31'04	1°45'05	retrograde	-4303 Dec 14 j 05:18	10° Ω 02'59
minimum elong	-4309 Aug 21 j 19:12	24° Ω 31'04	1°45'16	opposition	-4302 Mar 02 j 16:55	8° Ω 41'10 2°10'49
max. Earth dist.	-4309 Aug 20 j 20:47	24° Ω 28'58	31.27829 AU	min. Earth dist.	-4302 Mar 03 j 12:27	8° Ω 39'51 29.30067 AU
morning rise	-4309 Sep 06 j 03:35	25° Ω 05'21		direct	-4302 May 23 j 02:14	7° Ω 16'37
retrograde	-4309 Dec 01 j 15:35	26° Ω 57'29		evening set	-4302 Aug 21 j 08:08	9° Ω 12'43
opposition	-4308 Feb 17 j 16:32	25° Ω 35'44	1°53'55			
min. Earth dist.	-4308 Feb 18 j 13:01	25° Ω 34'20	29.28258 AU	conjunction	-4302 Sep 05 j 15:32	9° Ω 46'59 2°03'31
direct	-4308 May 09 j 05:15	24° Ω 10'53		minimum elong	-4302 Sep 05 j 15:31	9° Ω 46'59 2°03'41
evening set	-4308 Aug 07 j 18:04	26° Ω 07'17		max. Earth dist.	-4302 Sep 04 j 19:40	9° Ω 45'07 31.29901 AU
max. Earth dist.	-4308 Aug 22 j 07:30	26° Ω 39'47	31.28427 AU	morning rise	-4302 Sep 20 j 20:21	10° Ω 21'02
				retrograde	-4302 Dec 16 j 16:50	12° Ω 13'42
conjunction	-4308 Aug 23 j 05:09	26° Ω 41'48	1°48'12	opposition	-4301 Mar 05 j 05:05	10° Ω 51'49 2°13'00
minimum elong	-4308 Aug 23 j 05:09	26° Ω 41'48	1°48'24	min. Earth dist.	-4301 Mar 05 j 23:11	10° Ω 50'36 29.30037 AU
morning rise	-4308 Sep 07 j 12:53	27° Ω 16'04		direct	-4301 May 25 j 13:56	9° Ω 27'17
retrograde	-4308 Dec 03 j 00:38	29° Ω 08'17		evening set	-4301 Aug 23 j 17:52	11° Ω 23'17
opposition	-4307 Feb 19 j 04:24	27° Ω 46'33	1°57'10	max. Earth dist.	-4301 Sep 07 j 06:41	11° Ω 55'48 31.29859 AU
min. Earth dist.	-4307 Feb 20 j 01:38	27° Ω 45'07	29.28845 AU			
direct	-4307 May 11 j 15:52	26° Ω 21'48		conjunction	-4301 Sep 08 j 00:53	11° Ω 57'31 2°05'28
evening set	-4307 Aug 10 j 04:36	28° Ω 18'10		minimum elong	-4301 Sep 08 j 00:52	11° Ω 57'31 2°05'37
				morning rise	-4301 Sep 23 j 05:07	12° Ω 31'32
conjunction	-4307 Aug 25 j 15:02	28° Ω 52'39	1°51'10	retrograde	-4301 Dec 19 j 02:33	14° Ω 24'16
minimum elong	-4307 Aug 25 j 15:02	28° Ω 52'39	1°51'21	opposition	-4300 Mar 06 j 17:27	13° Ω 02'19 2°15'00
max. Earth dist.	-4307 Aug 24 j 17:49	28° Ω 50'40	31.28972 AU	min. Earth dist.	-4300 Mar 07 j 11:40	13° Ω 01'05 29.30017 AU
morning rise	-4307 Sep 09 j 22:15	29° Ω 26'52		direct	-4300 May 27 j 03:31	11° Ω 37'47
	-4307 Sep 25 j 14:21	0° Ω		evening set	-4300 Aug 25 j 03:45	13° Ω 33'42
retrograde	-4307 Dec 05 j 10:19	1° Ω 19'11				
	-4306 Feb 20 j 03:18	30° $\mathcal{R}\Omega$		conjunction	-4300 Sep 09 j 10:08	14° Ω 07'54 2°07'15
opposition	-4306 Feb 21 j 16:21	29° Ω 57'29	2°00'15	minimum elong	-4300 Sep 09 j 10:08	14° Ω 07'54 2°07'24
min. Earth dist.	-4306 Feb 22 j 12:31	29° Ω 56'07	29.29335 AU	max. Earth dist.	-4300 Sep 08 j 16:16	14° Ω 06'13 31.29871 AU
direct	-4306 May 14 j 04:04	28° Ω 32'48		morning rise	-4300 Sep 24 j 14:06	14° Ω 41'53
	-4306 Jul 29 j 21:55	0° Ω			-4300 Oct 02 j 23:04	15° Ω
evening set	-4306 Aug 12 j 15:07	0° Ω 29'08		retrograde	-4300 Dec 20 j 13:58	16° Ω 34'41
max. Earth dist.	-4306 Aug 27 j 03:29	1° Ω 01'35	31.29395 AU	opposition	-4299 Mar 09 j 05:28	15° Ω 12'42 2°16'48
				min. Earth dist.	-4299 Mar 09 j 21:45	15° Ω 11'35 29.30068 AU
conjunction	-4306 Aug 28 j 00:51	1° Ω 03'35	1°53'58		-4299 Mar 17 j 01:47	15° $\mathcal{R}\Omega$
minimum elong	-4306 Aug 28 j 00:50	1° Ω 03'35	1°54'09	direct	-4299 May 29 j 16:15	13° Ω 48'11
morning rise	-4306 Sep 12 j 07:31	1° Ω 37'46			-4299 Aug 06 j 08:55	15° Ω
retrograde	-4306 Dec 07 j 21:15	3° Ω 30'10		evening set	-4299 Aug 27 j 13:29	15° Ω 44'02
opposition	-4305 Feb 24 j 04:30	2° Ω 08'28	2°03'10			
min. Earth dist.	-4305 Feb 25 j 00:54	2° Ω 07'05	29.29711 AU	conjunction	-4299 Sep 11 j 19:27	16° Ω 18'12 2°08'50
direct	-4305 May 16 j 13:20	0° Ω 43'50		minimum elong	-4299 Sep 11 j 19:27	16° Ω 18'12 2°08'58
evening set	-4305 Aug 15 j 01:31	2° Ω 40'08		max. Earth dist.	-4299 Sep 11 j 02:39	16° Ω 16'37 31.29958 AU
				morning rise	-4299 Sep 26 j 22:58	16° Ω 52'10
conjunction	-4305 Aug 30 j 10:44	3° Ω 14'32	1°56'37	retrograde	-4299 Dec 22 j 22:50	18° Ω 45'03
minimum elong	-4305 Aug 30 j 10:44	3° Ω 14'32	1°56'47	opposition	-4298 Mar 11 j 17:50	17° Ω 23'02 2°18'24
max. Earth dist.	-4305 Aug 29 j 14:24	3° Ω 12'37	31.29700 AU	min. Earth dist.	-4298 Mar 12 j 10:11	17° Ω 21'55 29.30210 AU
morning rise	-4305 Sep 14 j 16:48	3° Ω 48'41		direct	-4298 Jun 01 j 03:15	15° Ω 58'35
retrograde	-4305 Dec 10 j 07:08	5° Ω 41'10		evening set	-4298 Aug 29 j 23:07	17° Ω 54'22
opposition	-4304 Feb 26 j 16:40	4° Ω 19'27	2°05'53			
min. Earth dist.	-4304 Feb 27 j 12:31	4° Ω 18'06	29.29947 AU	conjunction	-4298 Sep 14 j 04:36	18° Ω 28'29 2°10'15

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Attention, astronomical year style is used: The year -4298 in astronomical counting style is the year 4299 BCE in historical counting style.

minimum elong	-4298 Sep 14 j 04:36	18°Ω28'29	2°10'24	opposition	-4291 Mar 27 j 09:46	2°♊37'37	2°23'58
max. Earth dist.	-4298 Sep 13 j 13:02	18°Ω27'01	31.30145 AU	min. Earth dist.	-4291 Mar 27 j 21:26	2°♊36'50	29.30852 AU
morning rise	-4298 Sep 29 j 07:45	19°Ω02'26		direct	-4291 Jun 16 j 11:06	1°♊13'42	
retrograde	-4298 Dec 25 j 08:13	20°Ω55'26		evening set	-4291 Sep 13 j 18:01	3°♊09'01	
opposition	-4297 Mar 14 j 06:09	19°Ω33'23	2°19'48				
min. Earth dist.	-4297 Mar 14 j 20:46	19°Ω32'24	29.30424 AU	conjunction	-4291 Sep 28 j 20:58	3°♊43'00	2°14'47
direct	-4297 Jun 03 j 15:38	18°Ω09'01		minimum elong	-4291 Sep 28 j 20:58	3°♊43'00	2°14'53
evening set	-4297 Sep 01 j 08:46	20°Ω04'44		max. Earth dist.	-4291 Sep 28 j 09:44	3°♊41'56	31.30510 AU
				morning rise	-4291 Oct 13 j 22:32	4°♊16'52	
conjunction	-4297 Sep 16 j 13:45	20°Ω38'50	2°11'28	retrograde	-4290 Jan 09 j 15:43	6°♊10'42	
minimum elong	-4297 Sep 16 j 13:45	20°Ω38'50	2°11'36	opposition	-4290 Mar 29 j 22:30	4°♊48'28	2°23'57
max. Earth dist.	-4297 Sep 15 j 22:33	20°Ω37'24	31.30386 AU	min. Earth dist.	-4290 Mar 30 j 08:28	4°♊47'48	29.30470 AU
morning rise	-4297 Oct 01 j 16:40	21°Ω12'46		direct	-4290 Jun 18 j 23:56	3°♊24'35	
retrograde	-4297 Dec 27 j 19:23	23°Ω05'53		evening set	-4290 Sep 16 j 03:17	5°♊19'48	
opposition	-4296 Mar 15 j 18:36	21°Ω43'50	2°21'01				
min. Earth dist.	-4296 Mar 16 j 08:53	21°Ω42'52	29.30692 AU	conjunction	-4290 Oct 01 j 06:00	5°♊53'46	2°14'41
direct	-4296 Jun 05 j 00:56	20°Ω19'33		minimum elong	-4290 Oct 01 j 06:00	5°♊53'46	2°14'47
evening set	-4296 Sep 02 j 18:13	22°Ω15'12		max. Earth dist.	-4290 Sep 30 j 19:31	5°♊52'47	31.30067 AU
				morning rise	-4290 Oct 16 j 07:26	6°♊27'38	
conjunction	-4296 Sep 17 j 22:57	22°Ω49'17	2°12'30	retrograde	-4289 Jan 12 j 01:13	8°♊21'35	
minimum elong	-4296 Sep 17 j 22:57	22°Ω49'17	2°12'38	opposition	-4289 Apr 01 j 11:27	6°♊59'16	2°23'44
max. Earth dist.	-4296 Sep 17 j 09:22	22°Ω48'00	31.30651 AU	min. Earth dist.	-4289 Apr 01 j 21:41	6°♊58'34	29.29990 AU
morning rise	-4296 Oct 03 j 01:28	23°Ω23'12		direct	-4289 Jun 21 j 11:26	5°♊35'24	
retrograde	-4296 Dec 29 j 05:17	25°Ω16'27		evening set	-4289 Sep 18 j 12:31	7°♊30'30	
opposition	-4295 Mar 18 j 07:03	23°Ω54'24	2°22'01				
min. Earth dist.	-4295 Mar 18 j 20:26	23°Ω53'30	29.30932 AU	conjunction	-4289 Oct 03 j 15:04	8°♊04'27	2°14'22
direct	-4295 Jun 07 j 13:25	22°Ω30'12		minimum elong	-4289 Oct 03 j 15:04	8°♊04'27	2°14'27
evening set	-4295 Sep 05 j 03:53	24°Ω25'48		max. Earth dist.	-4289 Oct 03 j 05:54	8°♊03'35	31.29567 AU
				morning rise	-4289 Oct 18 j 16:23	8°♊38'19	
conjunction	-4295 Sep 20 j 08:02	24°Ω59'52	2°13'20	retrograde	-4288 Jan 14 j 10:45	10°♊32'21	
minimum elong	-4295 Sep 20 j 08:02	24°Ω59'52	2°13'27	opposition	-4288 Apr 03 j 00:08	9°♊09'57	2°23'18
max. Earth dist.	-4295 Sep 19 j 18:06	24°Ω58'33	31.30862 AU	min. Earth dist.	-4288 Apr 03 j 08:38	9°♊09'23	29.29471 AU
morning rise	-4295 Oct 05 j 10:25	25°Ω33'46		direct	-4288 Jun 23 j 00:25	7°♊46'06	
retrograde	-4295 Dec 31 j 17:44	27°Ω27'08		evening set	-4288 Sep 19 j 21:39	9°♊41'05	
opposition	-4294 Mar 20 j 19:32	26°Ω05'05	2°22'48				
min. Earth dist.	-4294 Mar 21 j 08:10	26°Ω04'14	29.31110 AU	conjunction	-4288 Oct 04 j 23:55	10°♊15'02	2°13'53
direct	-4294 Jun 09 j 23:11	24°Ω40'58		minimum elong	-4288 Oct 04 j 23:56	10°♊15'02	2°13'58
evening set	-4294 Sep 07 j 13:25	26°Ω36'31		max. Earth dist.	-4288 Oct 04 j 15:04	10°♊14'12	31.29053 AU
				morning rise	-4288 Oct 20 j 01:18	10°♊48'55	
conjunction	-4294 Sep 22 j 17:22	27°Ω10'33	2°13'59	retrograde	-4287 Jan 15 j 21:53	12°♊43'04	
minimum elong	-4294 Sep 22 j 17:22	27°Ω10'33	2°14'07	opposition	-4287 Apr 05 j 12:56	11°♊20'34	2°22'41
max. Earth dist.	-4294 Sep 22 j 05:08	27°Ω09'24	31.30983 AU	min. Earth dist.	-4287 Apr 05 j 20:53	11°♊20'02	29.28984 AU
morning rise	-4294 Oct 07 j 19:20	27°Ω44'26		direct	-4287 Jun 25 j 10:22	9°♊56'45	
retrograde	-4293 Jan 03 j 04:10	29°Ω37'57		evening set	-4287 Sep 22 j 06:39	11°♊51'38	
opposition	-4293 Mar 23 j 08:21	28°Ω15'52	2°23'24				
min. Earth dist.	-4293 Mar 23 j 20:56	28°Ω15'01	29.31169 AU	conjunction	-4287 Oct 07 j 08:53	12°♊25'34	2°13'11
direct	-4293 Jun 12 j 10:52	26°Ω51'51		minimum elong	-4287 Oct 07 j 08:53	12°♊25'35	2°13'15
evening set	-4293 Sep 09 j 22:59	28°Ω47'19		max. Earth dist.	-4287 Oct 07 j 02:01	12°♊24'56	31.28593 AU
				morning rise	-4287 Oct 22 j 10:04	12°♊59'27	
conjunction	-4293 Sep 25 j 02:26	29°Ω21'20	2°14'27	retrograde	-4286 Jan 18 j 07:18	14°♊53'43	
minimum elong	-4293 Sep 25 j 02:26	29°Ω21'20	2°14'33	opposition	-4286 Apr 08 j 01:40	13°♊31'10	2°21'51
max. Earth dist.	-4293 Sep 24 j 13:53	29°Ω20'09	31.30979 AU	min. Earth dist.	-4286 Apr 08 j 08:13	13°♊30'43	29.28552 AU
morning rise	-4293 Oct 10 j 04:22	29°Ω55'13		direct	-4286 Jun 27 j 22:56	12°♊07'24	
	-4293 Oct 12 j 08:34	0°♊		evening set	-4286 Sep 24 j 15:47	14°♊02'11	
retrograde	-4292 Jan 05 j 16:44	1°♊48'51					
opposition	-4292 Mar 24 j 21:03	0°♊26'44	2°23'47	conjunction	-4286 Oct 09 j 17:42	14°♊36'07	2°12'19
min. Earth dist.	-4292 Mar 25 j 08:16	0°♊25'59	29.31092 AU	minimum elong	-4286 Oct 09 j 17:43	14°♊36'07	2°12'23
	-4292 Apr 10 j 16:34	30°♊		max. Earth dist.	-4286 Oct 09 j 10:56	14°♊35'29	31.28214 AU
direct	-4292 Jun 13 j 22:09	29°Ω02'46		morning rise	-4286 Oct 24 j 19:04	15°♊10'01	
	-4292 Aug 13 j 14:05	0°♊		retrograde	-4285 Jan 20 j 19:37	17°♊04'24	
evening set	-4292 Sep 11 j 08:29	0°♊58'10		opposition	-4285 Apr 10 j 14:31	15°♊41'48	2°20'48
				min. Earth dist.	-4285 Apr 10 j 19:42	15°♊41'27	29.28220 AU
conjunction	-4292 Sep 26 j 11:46	1°♊32'10	2°14'43	direct	-4285 Jun 30 j 08:03	14°♊18'06	
minimum elong	-4292 Sep 26 j 11:46	1°♊32'10	2°14'49	evening set	-4285 Sep 27 j 00:36	16°♊12'48	
max. Earth dist.	-4292 Sep 26 j 00:25	1°♊31'06	31.30815 AU				
morning rise	-4292 Oct 11 j 13:24	2°♊06'02		conjunction	-4285 Oct 12 j 02:37	16°♊46'44	2°11'15
retrograde	-4291 Jan 07 j 03:33	3°♊59'47		minimum elong	-4285 Oct 12 j 02:37	16°♊46'45	2°11'17

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 Oct 11 j 22:02	16° $\overline{17}$ 46'19	31.27914 AU	min. Earth dist.	-4278 Apr 26 j 09:19	0° $\underline{59}$ '14	29.25180 AU
morning rise	-4285 Oct 27 j 03:51	17° $\overline{17}$ 20'38			-4278 Jun 06 j 01:19	30° \overline{R} $\overline{17}$	
retrograde	-4284 Jan 23 j 05:58	19° $\overline{17}$ 15'11		direct	-4278 Jul 15 j 16:44	29° $\overline{17}$ 35'56	
opposition	-4284 Apr 12 j 03:27	17° $\overline{17}$ 52'32	2°19'34		-4278 Aug 22 j 22:28	0° $\underline{5}$	
min. Earth dist.	-4284 Apr 12 j 08:05	17° $\overline{17}$ 52'13	29.27937 AU	evening set	-4278 Oct 11 j 15:59	1° $\underline{5}$ 30'01	
direct	-4284 Jul 01 j 18:42	16° $\overline{17}$ 28'55					
evening set	-4284 Sep 28 j 09:41	18° $\overline{17}$ 23'33		conjunction	-4278 Oct 26 j 18:05	2° $\underline{5}$ 04'00	1°58'33
				minimum elong	-4278 Oct 26 j 18:05	2° $\underline{5}$ 04'00	1°58'34
conjunction	-4284 Oct 13 j 11:30	18° $\overline{17}$ 57'29	2°09'59	max. Earth dist.	-4278 Oct 26 j 19:02	2° $\underline{5}$ 04'06	31.24623 AU
minimum elong	-4284 Oct 13 j 11:30	18° $\overline{17}$ 57'29	2°10'02	morning rise	-4278 Nov 10 j 20:23	2° $\underline{5}$ 38'03	
max. Earth dist.	-4284 Oct 13 j 07:05	18° $\overline{17}$ 57'04	31.27661 AU	retrograde	-4277 Feb 07 j 14:57	4° $\underline{5}$ 33'28	
morning rise	-4284 Oct 28 j 12:57	19° $\overline{17}$ 31'24		opposition	-4277 Apr 28 j 22:33	3° $\underline{5}$ 10'22	2°05'20
retrograde	-4283 Jan 24 j 18:58	21° $\overline{17}$ 26'04		min. Earth dist.	-4277 Apr 28 j 21:20	3° $\underline{5}$ 10'27	29.24295 AU
opposition	-4283 Apr 14 j 16:07	20° $\overline{17}$ 03'24	2°18'07	direct	-4277 Jul 18 j 05:27	1° $\underline{5}$ 47'05	
min. Earth dist.	-4283 Apr 14 j 19:03	20° $\overline{17}$ 03'12	29.27683 AU	evening set	-4277 Oct 14 j 00:57	3° $\underline{5}$ 41'02	
direct	-4283 Jul 04 j 05:20	18° $\overline{17}$ 39'51					
evening set	-4283 Sep 30 j 18:40	20° $\overline{17}$ 34'25		conjunction	-4277 Oct 29 j 03:02	4° $\underline{5}$ 15'02	1°56'02
				minimum elong	-4277 Oct 29 j 03:03	4° $\underline{5}$ 15'02	1°56'01
conjunction	-4283 Oct 15 j 20:32	21° $\overline{17}$ 08'22	2°08'32	max. Earth dist.	-4277 Oct 29 j 03:49	4° $\underline{5}$ 15'06	31.23712 AU
minimum elong	-4283 Oct 15 j 20:32	21° $\overline{17}$ 08'22	2°08'34	morning rise	-4277 Nov 13 j 05:48	4° $\underline{5}$ 49'06	
max. Earth dist.	-4283 Oct 15 j 17:37	21° $\overline{17}$ 08'05	31.27394 AU	retrograde	-4276 Feb 10 j 02:46	6° $\underline{5}$ 44'36	
morning rise	-4283 Oct 30 j 21:58	21° $\overline{17}$ 42'18		opposition	-4276 Apr 30 j 11:36	5° $\underline{5}$ 21'24	2°02'33
retrograde	-4282 Jan 27 j 06:57	23° $\overline{17}$ 37'07		min. Earth dist.	-4276 Apr 30 j 09:21	5° $\underline{5}$ 21'33	29.23359 AU
opposition	-4282 Apr 17 j 05:12	22° $\overline{17}$ 14'24	2°16'28	direct	-4276 Jul 19 j 15:25	3° $\underline{5}$ 58'06	
min. Earth dist.	-4282 Apr 17 j 08:13	22° $\overline{17}$ 14'12	29.27395 AU	evening set	-4276 Oct 15 j 09:48	5° $\underline{5}$ 51'55	
direct	-4282 Jul 06 j 17:19	20° $\overline{17}$ 50'56					
evening set	-4282 Oct 03 j 03:39	22° $\overline{17}$ 45'26		conjunction	-4276 Oct 30 j 12:11	6° $\underline{5}$ 25'56	1°53'21
				minimum elong	-4276 Oct 30 j 12:12	6° $\underline{5}$ 25'56	1°53'21
conjunction	-4282 Oct 18 j 05:26	23° $\overline{17}$ 19'22	2°06'54	max. Earth dist.	-4276 Oct 30 j 14:57	6° $\underline{5}$ 26'12	31.22766 AU
minimum elong	-4282 Oct 18 j 05:27	23° $\overline{17}$ 19'22	2°06'56	morning rise	-4276 Nov 14 j 15:05	7° $\underline{5}$ 00'02	
max. Earth dist.	-4282 Oct 18 j 03:08	23° $\overline{17}$ 19'09	31.27086 AU	retrograde	-4275 Feb 11 j 12:47	8° $\underline{5}$ 55'38	
morning rise	-4282 Nov 02 j 07:03	23° $\overline{17}$ 53'20		opposition	-4275 May 03 j 00:30	7° $\underline{5}$ 32'19	1°59'36
retrograde	-4281 Jan 29 j 19:52	25° $\overline{17}$ 48'17		min. Earth dist.	-4275 May 02 j 21:46	7° $\underline{5}$ 32'30	29.22417 AU
opposition	-4281 Apr 19 j 18:14	24° $\overline{17}$ 25'32	2°14'37	direct	-4275 Jul 22 j 02:34	6° $\underline{5}$ 09'01	
min. Earth dist.	-4281 Apr 19 j 19:21	24° $\overline{17}$ 25'27	29.27036 AU	evening set	-4275 Oct 17 j 18:46	8° $\underline{5}$ 02'43	
direct	-4281 Jul 09 j 05:10	23° $\overline{17}$ 02'08					
evening set	-4281 Oct 05 j 12:48	24° $\overline{17}$ 56'33		conjunction	-4275 Nov 01 j 21:11	8° $\underline{5}$ 36'45	1°50'31
				minimum elong	-4275 Nov 01 j 21:11	8° $\underline{5}$ 36'45	1°50'29
conjunction	-4281 Oct 20 j 14:34	25° $\overline{17}$ 30'30	2°05'04	max. Earth dist.	-4275 Nov 02 j 00:22	8° $\underline{5}$ 37'03	31.21866 AU
minimum elong	-4281 Oct 20 j 14:35	25° $\overline{17}$ 30'30	2°05'06	morning rise	-4275 Nov 17 j 00:29	9° $\underline{5}$ 10'53	
max. Earth dist.	-4281 Oct 20 j 12:52	25° $\overline{17}$ 30'20	31.26671 AU	retrograde	-4274 Feb 14 j 01:38	11° $\underline{5}$ 06'35	
morning rise	-4281 Nov 04 j 16:21	26° $\overline{17}$ 04'28		opposition	-4274 May 05 j 13:29	9° $\underline{5}$ 43'10	1°56'29
retrograde	-4280 Feb 01 j 06:39	27° $\overline{17}$ 59'34		min. Earth dist.	-4274 May 05 j 08:44	9° $\underline{5}$ 43'29	29.21555 AU
opposition	-4280 Apr 21 j 07:18	26° $\overline{17}$ 36'45	2°12'34	direct	-4274 Jul 24 j 13:08	8° $\underline{5}$ 19'54	
min. Earth dist.	-4280 Apr 21 j 08:47	26° $\overline{17}$ 36'39	29.26565 AU	evening set	-4274 Oct 20 j 03:30	10° $\underline{5}$ 13'30	
direct	-4280 Jul 10 j 16:26	25° $\overline{17}$ 13'24					
evening set	-4280 Oct 06 j 21:51	27° $\overline{17}$ 07'43		conjunction	-4274 Nov 04 j 06:11	10° $\underline{5}$ 47'33	1°47'31
				minimum elong	-4274 Nov 04 j 06:11	10° $\underline{5}$ 47'33	1°47'30
conjunction	-4280 Oct 21 j 23:46	27° $\overline{17}$ 41'41	2°03'04	max. Earth dist.	-4274 Nov 04 j 11:01	10° $\underline{5}$ 48'00	31.21048 AU
minimum elong	-4280 Oct 21 j 23:46	27° $\overline{17}$ 41'41	2°03'06	morning rise	-4274 Nov 19 j 09:45	11° $\underline{5}$ 21'43	
max. Earth dist.	-4280 Oct 21 j 23:13	27° $\overline{17}$ 41'38	31.26137 AU	retrograde	-4273 Feb 16 j 13:33	13° $\underline{5}$ 17'33	
morning rise	-4280 Nov 06 j 01:39	28° $\overline{17}$ 15'41		opposition	-4273 May 08 j 02:37	11° $\underline{5}$ 54'03	1°53'12
	-4279 Jan 08 j 01:06	0° $\underline{5}$		min. Earth dist.	-4273 May 07 j 21:32	11° $\underline{5}$ 54'23	29.20789 AU
retrograde	-4279 Feb 02 j 17:38	0° $\underline{5}$ 10'53		direct	-4273 Jul 27 j 00:13	10° $\underline{5}$ 30'50	
	-4279 Feb 28 j 22:46	30° \overline{R} $\overline{17}$		evening set	-4273 Oct 22 j 12:24	12° $\underline{5}$ 24'20	
opposition	-4279 Apr 23 j 20:19	28° $\overline{17}$ 48'00	2°10'20				
min. Earth dist.	-4279 Apr 23 j 20:19	28° $\overline{17}$ 48'00	29.25943 AU	conjunction	-4273 Nov 06 j 15:18	12° $\underline{5}$ 58'25	1°44'22
direct	-4279 Jul 13 j 05:56	27° $\overline{17}$ 24'42		minimum elong	-4273 Nov 06 j 15:19	12° $\underline{5}$ 58'25	1°44'19
evening set	-4279 Oct 09 j 07:01	29° $\overline{17}$ 18'54		max. Earth dist.	-4273 Nov 06 j 21:13	12° $\underline{5}$ 58'58	31.20349 AU
				morning rise	-4273 Nov 21 j 19:15	13° $\underline{5}$ 32'37	
conjunction	-4279 Oct 24 j 08:51	29° $\overline{17}$ 52'53	2°00'54	retrograde	-4272 Feb 19 j 02:33	15° $\underline{5}$ 28'34	
minimum elong	-4279 Oct 24 j 08:51	29° $\overline{17}$ 52'53	2°00'54	opposition	-4272 May 09 j 15:23	14° $\underline{5}$ 05'01	1°49'44
max. Earth dist.	-4279 Oct 24 j 08:07	29° $\overline{17}$ 52'48	31.25443 AU	min. Earth dist.	-4272 May 09 j 08:05	14° $\underline{5}$ 05'31	29.20128 AU
	-4279 Oct 27 j 12:06	0° $\underline{5}$		direct	-4272 Jul 28 j 11:11	12° $\underline{5}$ 41'51	
morning rise	-4279 Nov 08 j 11:03	0° $\underline{5}$ 26'54		evening set	-4272 Oct 23 j 21:19	14° $\underline{5}$ 35'18	
retrograde	-4278 Feb 05 j 05:31	2° $\underline{5}$ 22'13					
opposition	-4278 Apr 26 j 09:28	0° $\underline{5}$ 59'14	2°07'55	conjunction	-4272 Nov 08 j 00:25	15° $\underline{5}$ 09'25	1°41'03

Planetary Phenomena of Neptune from -4400 through -3898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 11

Attention, astronomical year style is used: The year -4272 in astronomical counting style is the year 4273 BCE in historical counting style.

minimum elong	-4272 Nov 08 j 00:26	15° <u>09</u> '25	1°41'01	min. Earth dist.	-4265 May 25 j 22:28	29° <u>02</u> '47	29.15220 AU
max. Earth dist.	-4272 Nov 08 j 07:07	15° <u>09</u> '03	31.19729 AU	direct	-4265 Aug 13 j 17:17	28° <u>04</u> '09	
morning rise	-4272 Nov 23 j 04:48	15° <u>04</u> '39		evening set	-4265 Nov 08 j 13:35	29° <u>05</u> '05	
retrograde	-4271 Feb 20 j 14:19	17° <u>03</u> '45			-4265 Nov 09 j 21:12	0° <u>00</u> '	
opposition	-4271 May 12 j 04:27	16° <u>01</u> '10	1°46'07				
min. Earth dist.	-4271 May 11 j 21:07	16° <u>01</u> '40	29.19541 AU	conjunction	-4265 Nov 23 j 18:56	0° <u>00</u> '31'25	1°13'58
direct	-4271 Jul 30 j 21:58	14° <u>05</u> '30'05		minimum elong	-4265 Nov 23 j 18:56	0° <u>00</u> '31'25	1°13'52
evening set	-4271 Oct 26 j 06:08	16° <u>04</u> '46'28		max. Earth dist.	-4265 Nov 24 j 07:12	0° <u>00</u> '32'34	31.14631 AU
				morning rise	-4265 Dec 09 j 02:23	1° <u>00</u> '05'58	
conjunction	-4271 Nov 10 j 09:35	17° <u>00</u> '20'36	1°37'35	retrograde	-4264 Mar 08 j 01:46	3° <u>00</u> '02'57	
minimum elong	-4271 Nov 10 j 09:36	17° <u>00</u> '20'36	1°37'32	min. Earth dist.	-4264 May 27 j 11:46	1° <u>00</u> '39'47	29.14146 AU
max. Earth dist.	-4271 Nov 10 j 18:03	17° <u>00</u> '21'24	31.19173 AU	opposition	-4264 May 28 j 00:01	1° <u>00</u> '38'57	1°16'41
morning rise	-4271 Nov 25 j 14:14	17° <u>00</u> '54'53		direct	-4264 Aug 15 j 03:49	0° <u>00</u> '16'09	
retrograde	-4270 Feb 23 j 02:28	19° <u>00</u> '51'08		evening set	-4264 Nov 09 j 22:55	2° <u>00</u> '08'59	
opposition	-4270 May 14 j 17:27	18° <u>00</u> '27'31	1°42'20				
min. Earth dist.	-4270 May 14 j 08:18	18° <u>00</u> '28'08	29.18983 AU	conjunction	-4264 Nov 25 j 04:41	2° <u>00</u> '43'20	1°09'37
direct	-4270 Aug 02 j 10:57	17° <u>00</u> '04'31		minimum elong	-4264 Nov 25 j 04:41	2° <u>00</u> '43'20	1°09'31
evening set	-4270 Oct 28 j 15:15	18° <u>00</u> '57'50		max. Earth dist.	-4264 Nov 25 j 17:44	2° <u>00</u> '44'35	31.13549 AU
				morning rise	-4264 Dec 10 j 12:37	3° <u>00</u> '17'56	
conjunction	-4270 Nov 12 j 18:50	19° <u>00</u> '32'01	1°33'58	retrograde	-4263 Mar 10 j 14:36	5° <u>00</u> '14'59	
minimum elong	-4270 Nov 12 j 18:50	19° <u>00</u> '32'01	1°33'56	opposition	-4263 May 30 j 12:54	3° <u>00</u> '50'53	1°11'59
max. Earth dist.	-4270 Nov 13 j 03:19	19° <u>00</u> '32'49	31.18624 AU	min. Earth dist.	-4263 May 29 j 22:46	3° <u>00</u> '51'51	29.13049 AU
morning rise	-4270 Nov 28 j 00:03	20° <u>00</u> '06'20		direct	-4263 Aug 17 j 14:36	2° <u>00</u> '28'03	
retrograde	-4269 Feb 25 j 15:31	22° <u>00</u> '02'44		evening set	-4263 Nov 12 j 08:12	4° <u>00</u> '20'48	
opposition	-4269 May 17 j 06:35	20° <u>00</u> '39'06	1°38'24				
min. Earth dist.	-4269 May 16 j 21:11	20° <u>00</u> '39'44	29.18426 AU	conjunction	-4263 Nov 27 j 14:13	4° <u>00</u> '55'11	1°05'10
direct	-4269 Aug 04 j 21:14	19° <u>00</u> '16'10		minimum elong	-4263 Nov 27 j 14:14	4° <u>00</u> '55'11	1°05'03
evening set	-4269 Oct 31 j 00:16	21° <u>00</u> '09'26		max. Earth dist.	-4263 Nov 28 j 03:51	4° <u>00</u> '56'28	31.12463 AU
				morning rise	-4263 Dec 12 j 22:44	5° <u>00</u> '29'49	
conjunction	-4269 Nov 15 j 04:19	21° <u>00</u> '43'38	1°30'14	retrograde	-4262 Mar 13 j 03:02	7° <u>00</u> '26'58	
minimum elong	-4269 Nov 15 j 04:20	21° <u>00</u> '43'38	1°30'09	min. Earth dist.	-4262 Jun 01 j 11:53	6° <u>00</u> '03'42	29.11996 AU
max. Earth dist.	-4269 Nov 15 j 14:36	21° <u>00</u> '44'36	31.18044 AU	opposition	-4262 Jun 02 j 01:57	6° <u>00</u> '02'45	1°07'10
morning rise	-4269 Nov 30 j 09:49	22° <u>00</u> '18'01		direct	-4262 Aug 20 j 01:54	4° <u>00</u> '39'55	
retrograde	-4268 Feb 28 j 01:43	24° <u>00</u> '14'33		evening set	-4262 Nov 14 j 17:31	6° <u>00</u> '32'33	
opposition	-4268 May 18 j 19:39	22° <u>00</u> '50'52	1°34'19				
min. Earth dist.	-4268 May 18 j 09:17	22° <u>00</u> '51'35	29.17795 AU	conjunction	-4262 Nov 30 j 00:05	7° <u>00</u> '06'59	1°00'37
direct	-4268 Aug 06 j 09:29	21° <u>00</u> '28'01		minimum elong	-4262 Nov 30 j 00:06	7° <u>00</u> '06'59	1°00'31
evening set	-4268 Nov 01 j 09:38	23° <u>00</u> '21'13		max. Earth dist.	-4262 Nov 30 j 15:30	7° <u>00</u> '08'26	31.11456 AU
				morning rise	-4262 Dec 15 j 09:00	7° <u>00</u> '41'39	
conjunction	-4268 Nov 16 j 13:49	23° <u>00</u> '55'27	1°26'20	retrograde	-4261 Mar 15 j 16:10	9° <u>00</u> '38'52	
minimum elong	-4268 Nov 16 j 13:49	23° <u>00</u> '55'27	1°26'16	opposition	-4261 Jun 04 j 14:45	8° <u>00</u> '14'34	1°02'16
max. Earth dist.	-4268 Nov 16 j 23:39	23° <u>00</u> '56'23	31.17373 AU	min. Earth dist.	-4261 Jun 03 j 22:52	8° <u>00</u> '15'39	29.11030 AU
morning rise	-4268 Dec 01 j 19:53	24° <u>00</u> '29'52		direct	-4261 Aug 22 j 14:47	6° <u>00</u> '51'44	
retrograde	-4267 Mar 01 j 14:05	26° <u>00</u> '26'32		evening set	-4261 Nov 17 j 03:00	8° <u>00</u> '44'19	
opposition	-4267 May 21 j 08:40	25° <u>00</u> '02'49	1°30'06				
min. Earth dist.	-4267 May 20 j 21:36	25° <u>00</u> '03'34	29.17068 AU	conjunction	-4261 Dec 02 j 09:51	9° <u>00</u> '18'47	0°55'59
direct	-4267 Aug 08 j 19:22	23° <u>00</u> '40'00		minimum elong	-4261 Dec 02 j 09:51	9° <u>00</u> '18'47	0°55'52
evening set	-4267 Nov 03 j 18:55	25° <u>00</u> '33'08		max. Earth dist.	-4261 Dec 03 j 01:16	9° <u>00</u> '20'14	31.10546 AU
				morning rise	-4261 Dec 17 j 19:27	9° <u>00</u> '53'30	
conjunction	-4267 Nov 18 j 23:34	26° <u>00</u> '07'24	1°22'20	retrograde	-4260 Mar 17 j 05:11	11° <u>00</u> '50'49	
minimum elong	-4267 Nov 18 j 23:34	26° <u>00</u> '07'24	1°22'15	min. Earth dist.	-4260 Jun 05 j 11:26	10° <u>00</u> '27'33	29.10175 AU
max. Earth dist.	-4267 Nov 19 j 10:55	26° <u>00</u> '08'29	31.16580 AU	opposition	-4260 Jun 06 j 03:40	10° <u>00</u> '26'26	0°57'16
morning rise	-4267 Dec 04 j 05:57	26° <u>00</u> '41'52		direct	-4260 Aug 24 j 01:06	9° <u>00</u> '03'37	
retrograde	-4266 Mar 04 j 01:05	28° <u>00</u> '38'39		evening set	-4260 Nov 18 j 12:24	10° <u>00</u> '56'08	
opposition	-4266 May 23 j 21:55	27° <u>00</u> '14'52	1°25'45				
min. Earth dist.	-4266 May 23 j 10:42	27° <u>00</u> '15'38	29.16201 AU	conjunction	-4260 Dec 03 j 19:50	11° <u>00</u> '30'38	0°51'16
direct	-4266 Aug 11 j 06:35	25° <u>00</u> '52'05		minimum elong	-4260 Dec 03 j 19:50	11° <u>00</u> '30'38	0°51'09
evening set	-4266 Nov 06 j 04:14	27° <u>00</u> '45'07		max. Earth dist.	-4260 Dec 04 j 13:12	11° <u>00</u> '32'17	31.09738 AU
				morning rise	-4260 Dec 19 j 05:47	12° <u>00</u> '05'25	
conjunction	-4266 Nov 21 j 09:09	28° <u>00</u> '19'24	1°18'12	retrograde	-4259 Mar 19 j 16:02	14° <u>00</u> '02'49	
minimum elong	-4266 Nov 21 j 09:10	28° <u>00</u> '19'25	1°18'08	opposition	-4259 Jun 08 j 16:26	12° <u>00</u> '38'24	0°52'10
max. Earth dist.	-4266 Nov 21 j 20:28	28° <u>00</u> '20'29	31.15666 AU	min. Earth dist.	-4259 Jun 07 j 22:58	12° <u>00</u> '39'36	29.09403 AU
morning rise	-4266 Dec 06 j 16:08	28° <u>00</u> '53'55		direct	-4259 Aug 26 j 13:27	11° <u>00</u> '15'38	
	-4265 Jan 08 j 18:10	0° <u>00</u> '		evening set	-4259 Nov 20 j 22:04	13° <u>00</u> '08'06	
retrograde	-4265 Mar 06 j 14:01	0° <u>00</u> '50'49					
	-4265 May 05 j 13:09	30° <u>00</u> ' <u>R</u> ' <u>0</u>		conjunction	-4259 Dec 06 j 05:46	13° <u>00</u> '42'38	0°46'28
opposition	-4265 May 26 j 11:02	29° <u>00</u> '26'56	1°21'16	minimum elong	-4259 Dec 06 j 05:46	13° <u>00</u> '42'38	0°46'20

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Attention, astronomical year style is used: The year -4259 in astronomical counting style is the year 4260 BCE in historical counting style.

max. Earth dist.	-4259 Dec 06 j 23:01	13° ℓ 44'16	31.09020 AU	min. Earth dist.	-4252 Jun 23 j 13:50	28° ℓ 08'31	29.03607 AU
morning rise	-4259 Dec 21 j 16:25	14° ℓ 17'27		direct	-4252 Sep 10 j 17:37	26° ℓ 44'27	
	-4258 Jan 10 j 22:27	15° ℓ		evening set	-4252 Dec 05 j 20:39	28° ℓ 36'44	
retrograde	-4258 Mar 22 j 05:22	16° ℓ 14'58					
	-4258 Jun 05 j 10:03	15° ℓ		conjunction	-4252 Dec 21 j 07:32	29° ℓ 11'33	0°11'14
min. Earth dist.	-4258 Jun 10 j 10:59	14° ℓ 51'47	29.08717 AU	minimum elong	-4252 Dec 21 j 07:32	29° ℓ 11'33	0°11'04
opposition	-4258 Jun 11 j 05:22	14° ℓ 50'31	0°46'59	behind sun begin	-4252 Dec 21 j 02:41	29° ℓ 11'06	
direct	-4258 Aug 28 j 23:48	13° ℓ 27'47		behind sun end	-4252 Dec 21 j 12:23	29° ℓ 11'59	
	-4258 Nov 13 j 23:32	15° ℓ		max. Earth dist.	-4252 Dec 22 j 03:58	29° ℓ 13'28	31.02999 AU
evening set	-4258 Nov 23 j 07:38	15° ℓ 20'13		morning rise	-4251 Jan 05 j 22:02	29° ℓ 46'42	
					-4251 Jan 12 j 00:07	0° ♊	
conjunction	-4258 Dec 08 j 15:54	15° ℓ 54'48	0°41'35	retrograde	-4251 Apr 07 j 00:07	1° ♊ 44'55	
minimum elong	-4258 Dec 08 j 15:54	15° ℓ 54'48	0°41'27	opposition	-4251 Jun 26 j 23:24	0° ♊ 20'08	0°09'08
max. Earth dist.	-4258 Dec 09 j 10:52	15° ℓ 56'36	31.08350 AU	min. Earth dist.	-4251 Jun 26 j 02:54	0° ♊ 21'32	29.02431 AU
morning rise	-4258 Dec 24 j 02:59	16° ℓ 29'40			-4251 Jul 09 j 07:38	30° ℓ	
retrograde	-4257 Mar 24 j 16:51	18° ℓ 27'19		direct	-4251 Sep 13 j 04:07	28° ℓ 57'27	
opposition	-4257 Jun 13 j 18:19	17° ℓ 02'50	0°41'44		-4251 Nov 14 j 04:29	0° ♊	
min. Earth dist.	-4257 Jun 12 j 23:47	17° ℓ 04'06	29.08049 AU	evening set	-4251 Dec 08 j 06:57	0° ♊ 49'41	
direct	-4257 Aug 31 j 11:03	15° ℓ 40'10					
evening set	-4257 Nov 25 j 17:34	17° ℓ 32'34		conjunction	-4251 Dec 23 j 18:27	1° ♊ 24'32	0°06'05
				minimum elong	-4251 Dec 23 j 18:28	1° ♊ 24'32	0°05'54
conjunction	-4257 Dec 11 j 02:13	18° ℓ 07'11	0°36'38	behind sun begin	-4251 Dec 23 j 12:18	1° ♊ 23'59	
minimum elong	-4257 Dec 11 j 02:14	18° ℓ 07'11	0°36'29	behind sun end	-4251 Dec 24 j 00:37	1° ♊ 25'05	
max. Earth dist.	-4257 Dec 11 j 21:14	18° ℓ 08'59	31.07689 AU	max. Earth dist.	-4251 Dec 24 j 16:29	1° ♊ 26'37	31.01817 AU
morning rise	-4257 Dec 26 j 13:56	18° ℓ 42'06		morning rise	-4250 Jan 08 j 09:20	1° ♊ 59'44	
retrograde	-4256 Mar 26 j 05:55	20° ℓ 39'52		retrograde	-4250 Apr 09 j 12:04	3° ♊ 58'00	
min. Earth dist.	-4256 Jun 14 j 11:21	19° ℓ 16'43	29.07368 AU	opposition	-4250 Jun 29 j 12:02	2° ♊ 33'08	0°03'36
opposition	-4256 Jun 15 j 07:02	19° ℓ 15'22	0°36'25	min. Earth dist.	-4250 Jun 28 j 14:39	2° ♊ 34'36	29.01257 AU
direct	-4256 Sep 01 j 21:11	17° ℓ 52'44		direct	-4250 Sep 15 j 16:59	1° ♊ 10'25	
evening set	-4256 Nov 27 j 03:37	19° ℓ 45'07		evening set	-4250 Dec 10 j 17:24	3° ♊ 02'37	
conjunction	-4256 Dec 12 j 12:42	20° ℓ 19'47	0°31'38	conjunction	-4250 Dec 26 j 05:16	3° ♊ 37'30	0°00'52
minimum elong	-4256 Dec 12 j 12:42	20° ℓ 19'47	0°31'30	minimum elong	-4250 Dec 26 j 05:15	3° ♊ 37'30	0°00'42
max. Earth dist.	-4256 Dec 13 j 08:23	20° ℓ 21'38	31.06967 AU	behind sun begin	-4250 Dec 25 j 22:50	3° ♊ 36'55	
morning rise	-4256 Dec 28 j 00:56	20° ℓ 54'45		behind sun end	-4250 Dec 26 j 11:41	3° ♊ 38'05	
retrograde	-4255 Mar 28 j 17:56	22° ℓ 52'38		max. Earth dist.	-4250 Dec 27 j 02:53	3° ♊ 39'32	31.00675 AU
opposition	-4255 Jun 17 j 20:02	21° ℓ 28'07	0°31'02	morning rise	-4249 Jan 10 j 20:51	4° ♊ 12'45	
min. Earth dist.	-4255 Jun 17 j 00:55	21° ℓ 29'25	29.06606 AU	desc. node	-4249 Feb 24 j 01:07	5° ♊ 36'13	
direct	-4255 Sep 04 j 07:10	20° ℓ 05'30		retrograde	-4249 Apr 12 j 02:16	6° ♊ 11'05	
evening set	-4255 Nov 29 j 13:38	21° ℓ 57'52		min. Earth dist.	-4249 Jul 01 j 02:41	4° ♊ 47'37	29.00159 AU
				opposition	-4249 Jul 02 j 00:40	4° ♊ 46'07	-0°01'56
conjunction	-4255 Dec 14 j 23:13	22° ℓ 32'34	0°26'35	direct	-4249 Sep 18 j 04:18	3° ♊ 23'22	
minimum elong	-4255 Dec 14 j 23:14	22° ℓ 32'34	0°26'25	evening set	-4249 Dec 13 j 03:57	5° ♊ 15'33	
max. Earth dist.	-4255 Dec 15 j 19:24	22° ℓ 34'29	31.06161 AU				
morning rise	-4255 Dec 30 j 11:57	23° ℓ 07'35		conjunction	-4249 Dec 28 j 16:22	5° ♊ 50'29	-0°04'24
retrograde	-4254 Mar 31 j 07:35	25° ℓ 05'35		minimum elong	-4249 Dec 28 j 16:22	5° ♊ 50'29	0°04'35
opposition	-4254 Jun 20 j 08:56	23° ℓ 41'02	0°25'36	behind sun begin	-4249 Dec 28 j 10:02	5° ♊ 49'54	
min. Earth dist.	-4254 Jun 19 j 12:26	23° ℓ 42'26	29.05732 AU	behind sun end	-4249 Dec 28 j 22:41	5° ♊ 51'03	
direct	-4254 Sep 06 j 17:48	22° ℓ 18'25		max. Earth dist.	-4249 Dec 29 j 15:27	5° ♊ 52'39	30.99610 AU
evening set	-4254 Dec 01 j 23:59	24° ℓ 10'47		morning rise	-4248 Jan 13 j 08:21	6° ♊ 25'46	
				retrograde	-4248 Apr 13 j 13:34	8° ♊ 24'09	
conjunction	-4254 Dec 17 j 09:57	24° ℓ 45'31	0°21'29	opposition	-4248 Jul 03 j 13:03	6° ♊ 59'08	-0°07'29
minimum elong	-4254 Dec 17 j 09:57	24° ℓ 45'31	0°21'21	min. Earth dist.	-4248 Jul 02 j 14:55	7° ♊ 00'40	28.99147 AU
max. Earth dist.	-4254 Dec 18 j 05:53	24° ℓ 47'24	31.05218 AU	direct	-4248 Sep 19 j 15:56	5° ♊ 36'23	
morning rise	-4253 Jan 01 j 23:19	25° ℓ 20'35		evening set	-4248 Dec 14 j 14:34	7° ♊ 28'33	
retrograde	-4253 Apr 02 j 20:56	27° ℓ 18'40					
opposition	-4253 Jun 22 j 21:53	25° ℓ 54'02	0°20'08	conjunction	-4248 Dec 30 j 03:24	8° ♊ 03'30	-0°09'33
min. Earth dist.	-4253 Jun 22 j 02:11	25° ℓ 55'23	29.04730 AU	minimum elong	-4248 Dec 30 j 03:24	8° ♊ 03'30	0°09'43
direct	-4253 Sep 09 j 04:44	24° ℓ 31'26		behind sun begin	-4248 Dec 29 j 22:05	8° ♊ 03'01	
evening set	-4253 Dec 04 j 10:14	26° ℓ 23'45		behind sun end	-4248 Dec 30 j 08:43	8° ♊ 03'59	
				max. Earth dist.	-4248 Dec 31 j 02:35	8° ♊ 05'42	30.98664 AU
conjunction	-4253 Dec 19 j 20:50	26° ℓ 58'31	0°16'22	morning rise	-4247 Jan 14 j 19:58	8° ♊ 38'50	
minimum elong	-4253 Dec 19 j 20:51	26° ℓ 58'31	0°16'12	retrograde	-4247 Apr 16 j 02:07	10° ♊ 37'18	
max. Earth dist.	-4253 Dec 20 j 17:53	27° ℓ 00'31	31.04160 AU	min. Earth dist.	-4247 Jul 05 j 02:08	9° ♊ 13'51	28.98260 AU
morning rise	-4252 Jan 04 j 10:39	27° ℓ 33'38		opposition	-4247 Jul 06 j 01:30	9° ♊ 12'14	-0°13'00
retrograde	-4252 Apr 04 j 10:52	29° ℓ 31'47		direct	-4247 Sep 22 j 02:25	7° ♊ 49'28	
opposition	-4252 Jun 24 j 10:38	28° ℓ 07'05	0°14'39	evening set	-4247 Dec 17 j 01:09	9° ♊ 41'39	

Attention, astronomical year style is used: The year -4246 in astronomical counting style is the year 4247 BCE in historical counting style.

conjunction	-4246 Jan 01 j 14:27	10°♊16'38	-0°14'42	opposition	-4240 Jul 21 j 16:21	24°♊47'59	-0°50'50
minimum elong	-4246 Jan 01 j 14:26	10°♊16'38	0°14'53	min. Earth dist.	-4240 Jul 20 j 16:36	24°♊49'38	28.92869 AU
behind sun begin	-4246 Jan 01 j 11:54	10°♊16'25		direct	-4240 Oct 07 j 07:15	23°♊25'06	
behind sun end	-4246 Jan 01 j 16:59	10°♊16'52		evening set	-4239 Jan 01 j 08:23	25°♊17'28	
max. Earth dist.	-4246 Jan 02 j 14:27	10°♊18'54	30.97820 AU				
morning rise	-4246 Jan 17 j 07:32	10°♊52'01		conjunction	-4239 Jan 17 j 00:55	25°♊52'42	-0°49'55
retrograde	-4246 Apr 18 j 13:42	12°♊50'34		minimum elong	-4239 Jan 17 j 00:55	25°♊52'42	0°50'06
opposition	-4246 Jul 08 j 14:05	11°♊25'28	-0°18'31	max. Earth dist.	-4239 Jan 18 j 02:06	25°♊55'05	30.92311 AU
min. Earth dist.	-4246 Jul 07 j 15:06	11°♊27'03	28.97472 AU	morning rise	-4239 Feb 01 j 21:22	26°♊28'19	
direct	-4246 Sep 24 j 12:12	10°♊02'42		retrograde	-4239 May 04 j 11:58	28°♊27'15	
evening set	-4246 Dec 19 j 11:57	11°♊54'53		min. Earth dist.	-4239 Jul 23 j 05:19	27°♊03'33	28.91851 AU
				opposition	-4239 Jul 24 j 04:38	27°♊01'55	-0°56'01
conjunction	-4245 Jan 04 j 01:48	12°♊29'55	-0°19'51	direct	-4239 Oct 09 j 19:24	25°♊38'59	
minimum elong	-4245 Jan 04 j 01:48	12°♊29'55	0°20'01	evening set	-4238 Jan 03 j 19:58	27°♊31'20	
max. Earth dist.	-4245 Jan 05 j 02:29	12°♊32'15	30.97084 AU				
morning rise	-4245 Jan 19 j 19:22	13°♊05'20		conjunction	-4238 Jan 19 j 12:56	28°♊06'36	-0°54'43
retrograde	-4245 Apr 21 j 03:18	15°♊03'57		minimum elong	-4238 Jan 19 j 12:56	28°♊06'36	0°54'55
min. Earth dist.	-4245 Jul 10 j 02:00	13°♊40'32	28.96768 AU	max. Earth dist.	-4238 Jan 20 j 13:41	28°♊08'56	30.91292 AU
opposition	-4245 Jul 11 j 02:21	13°♊38'51	-0°24'01	morning rise	-4238 Feb 04 j 09:55	28°♊42'15	
direct	-4245 Sep 26 j 22:27	12°♊16'05			-4238 Mar 16 j 18:34	0°♊	
evening set	-4245 Dec 21 j 23:03	14°♊08'19		retrograde	-4238 May 07 j 01:37	0°♊41'11	
					-4238 Jun 28 j 19:50	30°♊	
conjunction	-4244 Jan 06 j 13:14	14°♊43'23	-0°24'58	opposition	-4238 Jul 26 j 16:47	29°♊15'47	-1°01'06
minimum elong	-4244 Jan 06 j 13:14	14°♊43'23	0°25'10	min. Earth dist.	-4238 Jul 25 j 16:51	29°♊17'27	28.90843 AU
max. Earth dist.	-4244 Jan 07 j 13:44	14°♊45'41	30.96395 AU	direct	-4238 Oct 12 j 06:53	27°♊52'46	
morning rise	-4244 Jan 22 j 07:25	15°♊18'50		evening set	-4237 Jan 06 j 07:48	29°♊45'09	
retrograde	-4244 Apr 22 j 16:07	17°♊17'32			-4237 Jan 12 j 23:58	0°♊	
opposition	-4244 Jul 12 j 14:52	15°♊52'25	-0°29'29				
min. Earth dist.	-4244 Jul 11 j 15:21	15°♊54'03	28.96098 AU	conjunction	-4237 Jan 22 j 01:11	0°♊20'26	-0°59'26
direct	-4244 Sep 28 j 08:46	14°♊29'40		minimum elong	-4237 Jan 22 j 01:11	0°♊20'26	0°59'37
evening set	-4244 Dec 23 j 10:05	16°♊21'55		max. Earth dist.	-4237 Jan 23 j 02:17	0°♊22'48	30.90289 AU
				morning rise	-4237 Feb 06 j 22:37	0°♊56'07	
conjunction	-4243 Jan 08 j 00:51	16°♊57'01	-0°30'04	retrograde	-4237 May 09 j 13:27	2°♊55'03	
minimum elong	-4243 Jan 08 j 00:51	16°♊57'01	0°30'15	min. Earth dist.	-4237 Jul 28 j 05:41	1°♊31'12	28.89885 AU
max. Earth dist.	-4243 Jan 09 j 02:28	16°♊59'26	30.95722 AU	opposition	-4237 Jul 29 j 04:48	1°♊29'36	-1°06'05
morning rise	-4243 Jan 23 j 19:22	17°♊32'30		direct	-4237 Oct 14 j 17:27	0°♊06'31	
retrograde	-4243 Apr 25 j 05:45	19°♊31'17		evening set	-4236 Jan 08 j 19:39	1°♊58'55	
min. Earth dist.	-4243 Jul 14 j 02:46	18°♊07'51	28.95408 AU				
opposition	-4243 Jul 15 j 03:12	18°♊06'09	-0°34'54	conjunction	-4236 Jan 24 j 13:33	2°♊34'14	-1°04'03
direct	-4243 Sep 30 j 20:32	16°♊43'24		minimum elong	-4236 Jan 24 j 13:32	2°♊34'14	1°04'15
evening set	-4243 Dec 25 j 21:33	18°♊35'42		max. Earth dist.	-4236 Jan 25 j 14:57	2°♊36'38	30.89380 AU
				morning rise	-4236 Feb 09 j 11:20	3°♊09'56	
conjunction	-4242 Jan 10 j 12:36	19°♊10'50	-0°35'06	retrograde	-4236 May 11 j 02:38	5°♊08'53	
minimum elong	-4242 Jan 10 j 12:36	19°♊10'50	0°35'19	opposition	-4236 Jul 30 j 16:42	3°♊43'24	-1°10'59
max. Earth dist.	-4242 Jan 11 j 13:15	19°♊13'09	30.95004 AU	min. Earth dist.	-4236 Jul 29 j 16:24	3°♊45'06	28.89036 AU
morning rise	-4242 Jan 26 j 07:45	19°♊46'21		direct	-4236 Oct 16 j 04:29	2°♊20'16	
retrograde	-4242 Apr 27 j 19:52	21°♊45'12		evening set	-4235 Jan 10 j 07:33	4°♊12'43	
opposition	-4242 Jul 17 j 15:42	20°♊20'03	-0°40'17				
min. Earth dist.	-4242 Jul 16 j 16:02	20°♊21'41	28.94667 AU	conjunction	-4235 Jan 26 j 01:43	4°♊48'04	-1°08'35
direct	-4242 Oct 03 j 06:26	18°♊57'16		minimum elong	-4235 Jan 26 j 01:43	4°♊48'03	1°08'46
evening set	-4242 Dec 28 j 08:59	20°♊49'35		max. Earth dist.	-4235 Jan 27 j 02:52	4°♊50'26	30.88581 AU
				morning rise	-4235 Feb 10 j 24:00	5°♊23'47	
conjunction	-4241 Jan 13 j 00:40	21°♊24'46	-0°40'06	retrograde	-4235 May 13 j 14:27	7°♊22'46	
minimum elong	-4241 Jan 13 j 00:40	21°♊24'46	0°40'17	min. Earth dist.	-4235 Aug 01 j 05:13	5°♊58'54	28.88319 AU
max. Earth dist.	-4241 Jan 14 j 02:16	21°♊27'10	30.94207 AU	opposition	-4235 Aug 02 j 04:44	5°♊57'15	-1°15'47
morning rise	-4241 Jan 28 j 20:09	22°♊00'19		direct	-4235 Oct 18 j 14:34	4°♊34'05	
retrograde	-4241 Apr 30 j 09:17	23°♊59'13		evening set	-4234 Jan 12 j 19:30	6°♊26'36	
min. Earth dist.	-4241 Jul 19 j 04:11	22°♊35'40	28.93814 AU				
opposition	-4241 Jul 20 j 04:06	22°♊34'01	-0°45'36	conjunction	-4234 Jan 28 j 14:15	7°♊01'58	-1°13'01
direct	-4241 Oct 05 j 19:34	21°♊11'11		minimum elong	-4234 Jan 28 j 14:15	7°♊01'58	1°13'13
evening set	-4241 Dec 30 j 20:44	23°♊03'32		max. Earth dist.	-4234 Jan 29 j 16:29	7°♊04'26	30.87935 AU
				morning rise	-4234 Feb 13 j 12:48	7°♊37'43	
conjunction	-4240 Jan 15 j 12:45	23°♊38'45	-0°45'03	retrograde	-4234 May 16 j 03:31	9°♊36'44	
minimum elong	-4240 Jan 15 j 12:44	23°♊38'45	0°45'15	opposition	-4234 Aug 04 j 16:32	8°♊11'13	-1°20'27
max. Earth dist.	-4240 Jan 16 j 13:06	23°♊41'02	30.93304 AU	min. Earth dist.	-4234 Aug 03 j 16:01	8°♊12'56	28.87746 AU
morning rise	-4240 Jan 31 j 08:50	24°♊14'20		direct	-4234 Oct 21 j 01:48	6°♊48'01	
retrograde	-4240 May 02 j 00:23	26°♊13'15		evening set	-4233 Jan 15 j 07:44	8°♊40'37	

Attention, astronomical year style is used: The year -4233 in astronomical counting style is the year 4234 BCE in historical counting style.

conjunction	-4233 Jan 31 j 02:45	9° $\overline{3}$ 16'01	-1°17'20	direct	-4227 Nov 05 j 10:17	22° $\overline{3}$ 30'43	
minimum elong	-4233 Jan 31 j 02:45	9° $\overline{3}$ 16'01	1°17'31	evening set	-4226 Jan 31 j 01:08	24° $\overline{3}$ 23'53	
max. Earth dist.	-4233 Feb 01 j 04:06	9° $\overline{3}$ 18'24	30.87425 AU				
morning rise	-4233 Feb 16 j 01:54	9° $\overline{3}$ 51'48		conjunction	-4226 Feb 15 j 22:56	24° $\overline{3}$ 59'28	-1°44'02
retrograde	-4233 May 18 j 17:27	11° $\overline{3}$ 50'51		minimum elong	-4226 Feb 15 j 22:56	24° $\overline{3}$ 59'28	1°44'14
min. Earth dist.	-4233 Aug 06 j 04:38	10° $\overline{3}$ 27'01	28.87307 AU	max. Earth dist.	-4226 Feb 16 j 21:49	25° $\overline{3}$ 01'37	30.84504 AU
opposition	-4233 Aug 07 j 04:28	10° $\overline{3}$ 25'21	-1°25'01	morning rise	-4226 Mar 04 j 00:29	25° $\overline{3}$ 35'25	
direct	-4233 Oct 23 j 11:10	9° $\overline{3}$ 02'09		retrograde	-4226 Jun 03 j 16:14	27° $\overline{3}$ 34'28	
evening set	-4232 Jan 17 j 19:59	10° $\overline{3}$ 54'50		opposition	-4226 Aug 22 j 14:43	26° $\overline{3}$ 09'02	-1°53'03
				min. Earth dist.	-4226 Aug 21 j 18:11	26° $\overline{3}$ 10'29	28.84334 AU
conjunction	-4232 Feb 02 j 15:34	11° $\overline{3}$ 30'16	-1°21'33	direct	-4226 Nov 07 j 20:41	24° $\overline{3}$ 45'35	
minimum elong	-4232 Feb 02 j 15:34	11° $\overline{3}$ 30'16	1°21'45	evening set	-4225 Feb 02 j 14:14	26° $\overline{3}$ 38'48	
max. Earth dist.	-4232 Feb 03 j 18:00	11° $\overline{3}$ 32'45	30.87027 AU				
morning rise	-4232 Feb 18 j 14:54	12° $\overline{3}$ 06'05		conjunction	-4225 Feb 18 j 12:36	27° $\overline{3}$ 14'25	-1°47'16
retrograde	-4232 May 20 j 07:03	14° $\overline{3}$ 05'09		minimum elong	-4225 Feb 18 j 12:36	27° $\overline{3}$ 14'24	1°47'27
opposition	-4232 Aug 08 j 16:09	12° $\overline{3}$ 39'42	-1°29'27	max. Earth dist.	-4225 Feb 19 j 11:49	27° $\overline{3}$ 16'36	30.83918 AU
min. Earth dist.	-4232 Aug 07 j 16:05	12° $\overline{3}$ 41'23	28.86949 AU	morning rise	-4225 Mar 06 j 14:20	27° $\overline{3}$ 50'21	
direct	-4232 Oct 24 j 23:47	11° $\overline{3}$ 16'30		retrograde	-4225 Jun 06 j 05:05	29° $\overline{3}$ 49'20	
evening set	-4231 Jan 19 j 08:32	13° $\overline{3}$ 09'17		min. Earth dist.	-4225 Aug 24 j 05:12	28° $\overline{3}$ 25'22	28.83761 AU
				opposition	-4225 Aug 25 j 02:10	28° $\overline{3}$ 23'53	-1°56'25
conjunction	-4231 Feb 04 j 04:22	13° $\overline{3}$ 44'45	-1°25'38	direct	-4225 Nov 10 j 08:15	27° $\overline{3}$ 00'20	
minimum elong	-4231 Feb 04 j 04:22	13° $\overline{3}$ 44'45	1°25'49	evening set	-4224 Feb 05 j 03:32	28° $\overline{3}$ 53'37	
max. Earth dist.	-4231 Feb 05 j 05:36	13° $\overline{3}$ 47'07	30.86704 AU				
morning rise	-4231 Feb 20 j 04:12	14° $\overline{3}$ 20'35		conjunction	-4224 Feb 21 j 02:05	29° $\overline{3}$ 29'14	-1°50'20
retrograde	-4231 May 22 j 22:40	16° $\overline{3}$ 19'42		minimum elong	-4224 Feb 21 j 02:05	29° $\overline{3}$ 29'14	1°50'31
min. Earth dist.	-4231 Aug 10 j 04:10	14° $\overline{3}$ 55'56	28.86654 AU	max. Earth dist.	-4224 Feb 21 j 23:59	29° $\overline{3}$ 31'18	30.83367 AU
opposition	-4231 Aug 11 j 03:59	14° $\overline{3}$ 54'16	-1°33'45		-4224 Mar 05 j 19:42	0° \approx	
direct	-4231 Oct 27 j 11:07	13° $\overline{3}$ 31'04		morning rise	-4224 Mar 08 j 04:15	0° \approx 05'11	
evening set	-4230 Jan 21 j 21:03	15° $\overline{3}$ 23'57		retrograde	-4224 Jun 07 j 17:33	2° \approx 04'07	
				opposition	-4224 Aug 26 j 13:37	0° \approx 38'39	-1°59'36
conjunction	-4230 Feb 06 j 17:23	15° $\overline{3}$ 59'27	-1°29'36	min. Earth dist.	-4224 Aug 25 j 17:42	0° \approx 40'03	28.83267 AU
minimum elong	-4230 Feb 06 j 17:23	15° $\overline{3}$ 59'27	1°29'48		-4224 Sep 19 j 06:08	30° \overline{R} $\overline{3}$	
max. Earth dist.	-4230 Feb 07 j 19:16	16° $\overline{3}$ 01'53	30.86395 AU	direct	-4224 Nov 11 j 18:11	29° $\overline{3}$ 15'00	
morning rise	-4230 Feb 22 j 17:28	16° $\overline{3}$ 35'19			-4223 Jan 02 j 19:16	0° \approx	
retrograde	-4230 May 25 j 11:07	18° $\overline{3}$ 34'28		evening set	-4223 Feb 06 j 16:42	1° \approx 08'21	
opposition	-4230 Aug 13 j 15:50	17° $\overline{3}$ 09'04	-1°37'55				
min. Earth dist.	-4230 Aug 12 j 16:48	17° $\overline{3}$ 10'41	28.86334 AU	conjunction	-4223 Feb 22 j 15:46	1° \approx 43'59	-1°53'14
direct	-4230 Oct 29 j 22:52	15° $\overline{3}$ 45'51		minimum elong	-4223 Feb 22 j 15:46	1° \approx 43'59	1°53'24
evening set	-4229 Jan 24 j 10:00	17° $\overline{3}$ 38'50		max. Earth dist.	-4223 Feb 23 j 14:29	1° \approx 46'07	30.82918 AU
				morning rise	-4223 Mar 10 j 18:03	2° \approx 19'57	
conjunction	-4229 Feb 09 j 06:42	18° $\overline{3}$ 14'21	-1°33'25	retrograde	-4223 Jun 10 j 05:40	4° \approx 18'49	
minimum elong	-4229 Feb 09 j 06:41	18° $\overline{3}$ 14'21	1°33'36	min. Earth dist.	-4223 Aug 28 j 04:52	2° \approx 54'45	28.82884 AU
max. Earth dist.	-4229 Feb 10 j 07:26	18° $\overline{3}$ 16'41	30.86051 AU	opposition	-4223 Aug 29 j 00:56	2° \approx 53'20	-2°02'36
morning rise	-4229 Feb 25 j 07:13	18° $\overline{3}$ 50'15		direct	-4223 Nov 14 j 06:55	1° \approx 29'37	
retrograde	-4229 May 28 j 02:27	20° $\overline{3}$ 49'23		evening set	-4222 Feb 09 j 05:59	3° \approx 23'02	
min. Earth dist.	-4229 Aug 15 j 04:29	19° $\overline{3}$ 25'38	28.85957 AU				
opposition	-4229 Aug 16 j 03:31	19° $\overline{3}$ 24'01	-1°41'56	conjunction	-4222 Feb 25 j 05:18	3° \approx 58'42	-1°55'58
direct	-4229 Nov 01 j 10:49	18° $\overline{3}$ 00'46		minimum elong	-4222 Feb 25 j 05:18	3° \approx 58'42	1°56'08
evening set	-4228 Jan 26 j 23:03	19° $\overline{3}$ 53'50		max. Earth dist.	-4222 Feb 26 j 02:38	4° \approx 00'42	30.82604 AU
				morning rise	-4222 Mar 13 j 08:03	4° \approx 34'40	
conjunction	-4228 Feb 11 j 20:08	20° $\overline{3}$ 29'23	-1°37'07	retrograde	-4222 Jun 12 j 19:56	6° \approx 33'29	
minimum elong	-4228 Feb 11 j 20:07	20° $\overline{3}$ 29'23	1°37'18	opposition	-4222 Aug 31 j 12:19	5° \approx 08'00	-2°05'26
max. Earth dist.	-4228 Feb 12 j 20:31	20° $\overline{3}$ 31'41	30.85611 AU	min. Earth dist.	-4222 Aug 30 j 16:32	5° \approx 09'24	28.82648 AU
morning rise	-4228 Feb 27 j 20:57	21° $\overline{3}$ 05'18		direct	-4222 Nov 16 j 18:02	3° \approx 44'13	
retrograde	-4228 May 29 j 15:35	23° $\overline{3}$ 04'26		evening set	-4221 Feb 11 j 19:24	5° \approx 37'44	
opposition	-4228 Aug 17 j 15:23	21° $\overline{3}$ 39'03	-1°45'48				
min. Earth dist.	-4228 Aug 16 j 17:49	21° $\overline{3}$ 40'34	28.85478 AU	conjunction	-4221 Feb 27 j 19:12	6° \approx 13'25	-1°58'31
direct	-4228 Nov 02 j 22:11	20° $\overline{3}$ 15'46		minimum elong	-4221 Feb 27 j 19:11	6° \approx 13'25	1°58'40
evening set	-4227 Jan 28 j 11:57	22° $\overline{3}$ 08'53		max. Earth dist.	-4221 Feb 28 j 17:09	6° \approx 15'28	30.82424 AU
				morning rise	-4221 Mar 15 j 22:04	6° \approx 49'24	
conjunction	-4227 Feb 13 j 09:28	22° $\overline{3}$ 44'27	-1°40'39	retrograde	-4221 Jun 15 j 08:18	8° \approx 48'09	
minimum elong	-4227 Feb 13 j 09:28	22° $\overline{3}$ 44'27	1°40'49	opposition	-4221 Sep 02 j 23:32	7° \approx 22'43	-2°08'03
max. Earth dist.	-4227 Feb 14 j 09:20	22° $\overline{3}$ 46'42	30.85092 AU	min. Earth dist.	-4221 Sep 02 j 04:25	7° \approx 24'04	28.82538 AU
morning rise	-4227 Mar 01 j 10:35	23° $\overline{3}$ 20'22		direct	-4221 Nov 19 j 05:40	5° \approx 58'54	
retrograde	-4227 Jun 01 j 04:49	25° $\overline{3}$ 19'28		evening set	-4220 Feb 14 j 08:56	7° \approx 52'31	
min. Earth dist.	-4227 Aug 19 j 05:01	23° $\overline{3}$ 55'38	28.84922 AU				
opposition	-4227 Aug 20 j 03:04	23° $\overline{3}$ 54'05	-1°49'30	conjunction	-4220 Mar 01 j 09:02	8° \approx 28'13	-2°00'53

Attention, astronomical year style is used: The year -4220 in astronomical counting style is the year 4221 BCE in historical counting style.

minimum elong	-4220 Mar 01 j 09:02	8°≈28'13	2°01'03	morning rise	-4214 Apr 01 j 03:11	22°≈36'03	
max. Earth dist.	-4220 Mar 02 j 05:54	8°≈30'10	30.82386 AU	retrograde	-4214 Jul 01 j 04:47	24°≈34'24	
morning rise	-4220 Mar 17 j 12:16	9°≈04'12		opposition	-4214 Sep 18 j 06:08	23°≈09'19	-2°20'47
retrograde	-4220 Jun 16 j 23:43	11°≈02'55		min. Earth dist.	-4214 Sep 17 j 16:09	23°≈10'18	28.82536 AU
opposition	-4220 Sep 04 j 10:48	9°≈37'32	-2°10'29	direct	-4214 Dec 04 j 14:50	21°≈45'15	
min. Earth dist.	-4220 Sep 03 j 15:30	9°≈38'54	28.82560 AU	evening set	-4213 Mar 02 j 10:41	23°≈39'35	
direct	-4220 Nov 20 j 17:55	8°≈13'42					
evening set	-4219 Feb 15 j 22:25	10°≈07'25		conjunction	-4213 Mar 18 j 13:07	24°≈15'25	-2°12'08
				minimum elong	-4213 Mar 18 j 13:07	24°≈15'25	2°12'15
conjunction	-4219 Mar 03 j 22:52	10°≈43'09	-2°03'04	max. Earth dist.	-4213 Mar 19 j 03:31	24°≈16'46	30.82265 AU
minimum elong	-4219 Mar 03 j 22:51	10°≈43'09	2°03'13	morning rise	-4213 Apr 03 j 18:00	24°≈51'29	
max. Earth dist.	-4219 Mar 04 j 19:45	10°≈45'06	30.82443 AU	retrograde	-4213 Jul 03 j 18:10	26°≈49'44	
morning rise	-4219 Mar 20 j 02:18	11°≈19'09		opposition	-4213 Sep 20 j 17:04	25°≈24'38	-2°21'46
retrograde	-4219 Jun 19 j 12:39	13°≈17'51		min. Earth dist.	-4213 Sep 20 j 03:58	25°≈25'34	28.82329 AU
opposition	-4219 Sep 06 j 22:10	11°≈52'30	-2°12'43	direct	-4213 Dec 07 j 01:58	24°≈00'28	
min. Earth dist.	-4219 Sep 06 j 04:17	11°≈53'46	28.82656 AU	evening set	-4212 Mar 04 j 00:47	25°≈54'53	
direct	-4219 Nov 23 j 05:26	10°≈28'41					
evening set	-4218 Feb 18 j 12:10	12°≈22'31		conjunction	-4212 Mar 20 j 03:41	26°≈30'44	-2°12'57
				minimum elong	-4212 Mar 20 j 03:41	26°≈30'44	2°13'04
conjunction	-4218 Mar 06 j 13:01	12°≈58'16	-2°05'04	max. Earth dist.	-4212 Mar 20 j 18:17	26°≈32'06	30.82058 AU
minimum elong	-4218 Mar 06 j 13:01	12°≈58'16	2°05'13	morning rise	-4212 Apr 05 j 08:36	27°≈06'48	
max. Earth dist.	-4218 Mar 07 j 09:10	13°≈00'09	30.82564 AU	retrograde	-4212 Jul 05 j 05:49	29°≈04'56	
morning rise	-4218 Mar 22 j 16:43	13°≈34'17		opposition	-4212 Sep 22 j 04:02	27°≈39'50	-2°22'32
	-4218 May 07 j 17:12	15°≈		min. Earth dist.	-4212 Sep 21 j 15:55	27°≈40'42	28.82143 AU
retrograde	-4218 Jun 22 j 02:54	15°≈32'56		direct	-4212 Dec 08 j 13:48	26°≈15'36	
	-4218 Aug 07 j 04:04	15°≈		evening set	-4211 Mar 06 j 14:48	28°≈10'05	
opposition	-4218 Sep 09 j 09:16	14°≈07'40	-2°14'45				
min. Earth dist.	-4218 Sep 08 j 15:10	14°≈08'57	28.82779 AU	conjunction	-4211 Mar 22 j 17:55	28°≈45'56	-2°13'34
direct	-4218 Nov 25 j 17:36	12°≈43'49		minimum elong	-4211 Mar 22 j 17:55	28°≈45'56	2°13'40
evening set	-4217 Feb 21 j 02:14	14°≈37'47		max. Earth dist.	-4211 Mar 23 j 07:02	28°≈47'10	30.81916 AU
	-4217 Mar 03 j 02:33	15°≈		morning rise	-4211 Apr 07 j 23:10	29°≈22'00	
					-4211 Apr 26 j 03:14	0°≈	
conjunction	-4217 Mar 09 j 03:20	15°≈13'33	-2°06'52	retrograde	-4211 Jul 07 j 20:20	1°≈20'00	
minimum elong	-4217 Mar 09 j 03:20	15°≈13'33	2°07'01		-4211 Sep 21 j 15:27	30°≈	
max. Earth dist.	-4217 Mar 09 j 22:11	15°≈15'19	30.82660 AU	opposition	-4211 Sep 24 j 14:53	29°≈54'55	-2°23'05
morning rise	-4217 Mar 25 j 07:19	15°≈49'35		min. Earth dist.	-4211 Sep 24 j 02:49	29°≈55'47	28.82049 AU
retrograde	-4217 Jun 24 j 15:34	17°≈48'11		direct	-4211 Dec 11 j 03:09	28°≈30'36	
opposition	-4217 Sep 11 j 20:39	16°≈22'59	-2°16'35		-4210 Feb 25 j 08:49	0°≈	
min. Earth dist.	-4217 Sep 11 j 04:25	16°≈24'09	28.82855 AU	evening set	-4210 Mar 09 j 04:56	0°≈25'09	
	-4217 Nov 21 j 00:30	15°≈					
direct	-4217 Nov 28 j 04:00	14°≈59'08		conjunction	-4210 Mar 25 j 08:26	1°≈01'02	-2°13'58
	-4217 Dec 05 j 05:58	15°≈		minimum elong	-4210 Mar 25 j 08:27	1°≈01'02	2°14'04
evening set	-4216 Feb 23 j 16:12	16°≈53'12		max. Earth dist.	-4210 Mar 25 j 21:28	1°≈02'15	30.81867 AU
				morning rise	-4210 Apr 10 j 13:47	1°≈37'06	
conjunction	-4216 Mar 10 j 17:45	17°≈28'59	-2°08'29	retrograde	-4210 Jul 10 j 08:04	3°≈34'59	
minimum elong	-4216 Mar 10 j 17:45	17°≈28'59	2°08'37	opposition	-4210 Sep 27 j 01:41	2°≈09'55	-2°23'24
max. Earth dist.	-4216 Mar 11 j 12:15	17°≈30'43	30.82692 AU	min. Earth dist.	-4210 Sep 26 j 15:05	2°≈10'40	28.82067 AU
morning rise	-4216 Mar 26 j 21:49	18°≈05'02		direct	-4210 Dec 13 j 15:29	0°≈45'31	
retrograde	-4216 Jun 26 j 05:11	20°≈03'34		evening set	-4209 Mar 11 j 19:08	2°≈40'09	
opposition	-4216 Sep 13 j 07:47	18°≈38'26	-2°18'11				
min. Earth dist.	-4216 Sep 12 j 15:37	18°≈39'34	28.82835 AU	conjunction	-4209 Mar 27 j 22:57	3°≈16'03	-2°14'11
direct	-4216 Nov 29 j 15:42	17°≈14'31		minimum elong	-4209 Mar 27 j 22:58	3°≈16'03	2°14'16
evening set	-4215 Feb 25 j 06:23	19°≈08'41		max. Earth dist.	-4209 Mar 28 j 11:04	3°≈17'11	30.81964 AU
				morning rise	-4209 Apr 13 j 04:30	3°≈52'07	
conjunction	-4215 Mar 13 j 08:07	19°≈44'30	-2°09'54	retrograde	-4209 Jul 12 j 22:09	5°≈49'52	
minimum elong	-4215 Mar 13 j 08:06	19°≈44'30	2°10'01	opposition	-4209 Sep 29 j 12:25	4°≈24'51	-2°23'31
max. Earth dist.	-4215 Mar 14 j 00:38	19°≈46'02	30.82623 AU	min. Earth dist.	-4209 Sep 29 j 01:21	4°≈25'39	28.82233 AU
morning rise	-4215 Mar 29 j 12:33	20°≈20'33		direct	-4209 Dec 16 j 04:19	3°≈00'24	
retrograde	-4215 Jun 28 j 17:12	22°≈19'01		evening set	-4208 Mar 13 j 09:17	4°≈55'08	
opposition	-4215 Sep 15 j 19:03	20°≈53'54	-2°19'36				
min. Earth dist.	-4215 Sep 15 j 04:32	20°≈54'55	28.82728 AU	conjunction	-4208 Mar 29 j 13:19	5°≈31'02	-2°14'10
direct	-4215 Dec 02 j 01:53	19°≈29'55		minimum elong	-4208 Mar 29 j 13:19	5°≈31'02	2°14'16
evening set	-4214 Feb 27 j 20:24	21°≈24'10		max. Earth dist.	-4208 Mar 30 j 00:35	5°≈32'06	30.82195 AU
				morning rise	-4208 Apr 14 j 19:01	6°≈07'07	
conjunction	-4214 Mar 15 j 22:40	21°≈59'59	-2°11'07	retrograde	-4208 Jul 14 j 10:55	8°≈04'45	
minimum elong	-4214 Mar 15 j 22:40	21°≈59'59	2°11'15	opposition	-4208 Sep 30 j 23:15	6°≈39'47	-2°23'24
max. Earth dist.	-4214 Mar 16 j 15:14	22°≈01'32	30.82472 AU	min. Earth dist.	-4208 Sep 30 j 13:40	6°≈40'28	28.82542 AU

Attention, astronomical year style is used: The year -4208 in astronomical counting style is the year 4209 BCE in historical counting style.

direct	-4208 Dec 17 j 15:21	5° ✕ 15'19		retrograde	-4201 Jul 30 j 23:54	23° ✕ 49'43	
evening set	-4207 Mar 15 j 23:24	7° ✕ 10'07		opposition	-4201 Oct 17 j 02:03	22° ✕ 25'12	-2°16'30
				min. Earth dist.	-4201 Oct 16 j 23:24	22° ✕ 25'23	28.85415 AU
conjunction	-4207 Apr 01 j 03:52	7° ✕ 46'03	-2°13'58	direct	-4200 Jan 03 j 02:15	21° ✕ 00'24	
minimum elong	-4207 Apr 01 j 03:52	7° ✕ 46'03	2°14'03	evening set	-4200 Apr 01 j 04:32	22° ✕ 55'46	
max. Earth dist.	-4207 Apr 01 j 14:59	7° ✕ 47'05	30.82581 AU				
morning rise	-4207 Apr 17 j 09:39	8° ✕ 22'07		conjunction	-4200 Apr 17 j 10:46	23° ✕ 31'47	-2°06'50
retrograde	-4207 Jul 17 j 00:30	10° ✕ 19'39		minimum elong	-4200 Apr 17 j 10:47	23° ✕ 31'47	2°06'51
opposition	-4207 Oct 03 j 09:50	8° ✕ 54'46	-2°23'04	max. Earth dist.	-4200 Apr 17 j 13:32	23° ✕ 32'03	30.85397 AU
min. Earth dist.	-4207 Oct 03 j 00:07	8° ✕ 55'27	28.82976 AU	morning rise	-4200 May 03 j 17:23	24° ✕ 07'51	
direct	-4207 Dec 20 j 03:37	7° ✕ 30'16		retrograde	-4200 Aug 01 j 13:23	26° ✕ 04'25	
evening set	-4206 Mar 18 j 13:46	9° ✕ 25'10		opposition	-4200 Oct 18 j 12:31	24° ✕ 39'55	-2°14'40
				min. Earth dist.	-4200 Oct 18 j 09:45	24° ✕ 40'07	28.85671 AU
conjunction	-4206 Apr 03 j 18:23	10° ✕ 01'07	-2°13'33	direct	-4199 Jan 04 j 15:42	23° ✕ 15'03	
minimum elong	-4206 Apr 03 j 18:24	10° ✕ 01'07	2°13'38	evening set	-4199 Apr 03 j 18:54	25° ✕ 10'28	
max. Earth dist.	-4206 Apr 04 j 03:53	10° ✕ 02'00	30.83061 AU				
morning rise	-4206 Apr 20 j 00:28	10° ✕ 37'12		conjunction	-4199 Apr 20 j 01:20	25° ✕ 46'30	-2°05'02
retrograde	-4206 Jul 19 j 12:03	12° ✕ 34'37		minimum elong	-4199 Apr 20 j 01:21	25° ✕ 46'30	2°05'03
opposition	-4206 Oct 05 j 20:37	11° ✕ 09'49	-2°22'30	max. Earth dist.	-4199 Apr 20 j 03:06	25° ✕ 46'40	30.85671 AU
min. Earth dist.	-4206 Oct 05 j 12:27	11° ✕ 10'24	28.83488 AU	morning rise	-4199 May 06 j 08:00	26° ✕ 22'33	
direct	-4206 Dec 22 j 14:01	9° ✕ 45'18		retrograde	-4199 Aug 04 j 01:31	28° ✕ 18'57	
evening set	-4205 Mar 21 j 04:09	11° ✕ 40'19		opposition	-4199 Oct 20 j 22:58	26° ✕ 54'29	-2°12'39
				min. Earth dist.	-4199 Oct 20 j 21:59	26° ✕ 54'33	28.85980 AU
conjunction	-4205 Apr 06 j 09:12	12° ✕ 16'17	-2°12'56	direct	-4198 Jan 07 j 03:35	25° ✕ 29'32	
minimum elong	-4205 Apr 06 j 09:13	12° ✕ 16'17	2°13'00	evening set	-4198 Apr 06 j 09:10	27° ✕ 25'01	
max. Earth dist.	-4205 Apr 06 j 18:41	12° ✕ 17'10	30.83584 AU				
morning rise	-4205 Apr 22 j 15:13	12° ✕ 52'22		conjunction	-4198 Apr 22 j 15:55	28° ✕ 01'03	-2°03'02
retrograde	-4205 Jul 21 j 23:39	14° ✕ 49'40		minimum elong	-4198 Apr 22 j 15:55	28° ✕ 01'03	2°03'03
opposition	-4205 Oct 08 j 07:14	13° ✕ 24'57	-2°21'44	max. Earth dist.	-4198 Apr 22 j 17:09	28° ✕ 01'10	30.86030 AU
min. Earth dist.	-4205 Oct 07 j 23:44	13° ✕ 25'29	28.83998 AU	morning rise	-4198 May 08 j 22:36	28° ✕ 37'06	
direct	-4205 Dec 25 j 02:14	12° ✕ 00'25			-4198 Jun 22 j 10:33	0° ☿	
evening set	-4204 Mar 22 j 18:45	13° ✕ 55'31		retrograde	-4198 Aug 06 j 14:18	0° ☿ 33'19	
					-4198 Sep 21 j 06:42	30° ♊	
conjunction	-4204 Apr 07 j 23:53	14° ✕ 31'30	-2°12'06	opposition	-4198 Oct 23 j 09:20	29° ✕ 08'54	-2°10'26
minimum elong	-4204 Apr 07 j 23:54	14° ✕ 31'30	2°12'09	min. Earth dist.	-4198 Oct 23 j 08:12	29° ✕ 08'59	28.86376 AU
max. Earth dist.	-4204 Apr 08 j 07:01	14° ✕ 32'10	30.84081 AU	direct	-4197 Jan 09 j 17:00	27° ✕ 43'54	
morning rise	-4204 Apr 24 j 06:11	15° ✕ 07'35		evening set	-4197 Apr 08 j 23:33	29° ✕ 39'26	
retrograde	-4204 Jul 23 j 12:48	17° ✕ 04'46			-4197 Apr 18 j 07:53	0° ☿	
opposition	-4204 Oct 09 j 18:01	15° ✕ 40'08	-2°20'44				
min. Earth dist.	-4204 Oct 09 j 11:31	15° ✕ 40'35	28.84472 AU	conjunction	-4197 Apr 25 j 06:20	0° ☿ 15'28	-2°00'52
direct	-4204 Dec 26 j 12:37	14° ✕ 15'32		minimum elong	-4197 Apr 25 j 06:21	0° ☿ 15'28	2°00'53
evening set	-4203 Mar 25 j 09:03	16° ✕ 10'44		max. Earth dist.	-4197 Apr 25 j 06:06	0° ☿ 15'27	30.86488 AU
				morning rise	-4197 May 11 j 13:07	0° ☿ 51'32	
conjunction	-4203 Apr 10 j 14:38	16° ✕ 46'43	-2°11'05	retrograde	-4197 Aug 09 j 01:26	2° ☿ 47'35	
minimum elong	-4203 Apr 10 j 14:38	16° ✕ 46'43	2°11'08	opposition	-4197 Oct 25 j 19:45	1° ☿ 23'14	-2°08'00
max. Earth dist.	-4203 Apr 10 j 21:34	16° ✕ 47'22	30.84512 AU	min. Earth dist.	-4197 Oct 25 j 19:55	1° ☿ 23'13	28.86909 AU
morning rise	-4203 Apr 26 j 20:53	17° ✕ 22'48			-4196 Jan 01 j 18:29	30° ♊	
retrograde	-4203 Jul 25 j 23:36	19° ✕ 19'51		direct	-4196 Jan 12 j 03:51	29° ✕ 58'11	
opposition	-4203 Oct 12 j 04:48	17° ✕ 55'16	-2°19'32		-4196 Jan 22 j 11:00	0° ☿	
min. Earth dist.	-4203 Oct 11 j 23:44	17° ✕ 55'38	28.84851 AU	evening set	-4196 Apr 10 j 13:42	1° ☿ 53'47	
direct	-4203 Dec 29 j 00:44	16° ✕ 30'37					
evening set	-4202 Mar 27 j 23:41	18° ✕ 25'53		conjunction	-4196 Apr 26 j 20:49	2° ☿ 29'50	-1°58'31
				minimum elong	-4196 Apr 26 j 20:49	2° ☿ 29'50	1°58'31
conjunction	-4202 Apr 13 j 05:25	19° ✕ 01'52	-2°09'51	max. Earth dist.	-4196 Apr 26 j 20:51	2° ☿ 29'50	30.87100 AU
minimum elong	-4202 Apr 13 j 05:25	19° ✕ 01'52	2°09'54	morning rise	-4196 May 13 j 03:28	3° ☿ 05'53	
max. Earth dist.	-4202 Apr 13 j 10:05	19° ✕ 02'19	30.84863 AU	retrograde	-4196 Aug 10 j 12:46	5° ☿ 01'47	
morning rise	-4202 Apr 29 j 11:55	19° ✕ 37'57		opposition	-4196 Oct 27 j 06:07	3° ☿ 37'31	-2°05'23
retrograde	-4202 Jul 28 j 12:52	21° ✕ 34'51		min. Earth dist.	-4196 Oct 27 j 06:31	3° ☿ 37'29	28.87588 AU
opposition	-4202 Oct 14 j 15:21	20° ✕ 10'18	-2°18'07	direct	-4195 Jan 13 j 16:04	2° ☿ 12'27	
min. Earth dist.	-4202 Oct 14 j 10:49	20° ✕ 10'38	28.85161 AU	evening set	-4195 Apr 13 j 03:53	4° ☿ 08'07	
direct	-4202 Dec 31 j 13:51	18° ✕ 45'35					
evening set	-4201 Mar 30 j 14:13	20° ✕ 40'54		conjunction	-4195 Apr 29 j 11:01	4° ☿ 44'11	-1°55'59
				minimum elong	-4195 Apr 29 j 11:02	4° ☿ 44'11	1°55'59
conjunction	-4201 Apr 15 j 20:16	21° ✕ 16'55	-2°08'26	max. Earth dist.	-4195 Apr 29 j 09:13	4° ☿ 44'01	30.87865 AU
minimum elong	-4201 Apr 15 j 20:16	21° ✕ 16'55	2°08'29	morning rise	-4195 May 15 j 17:53	5° ☿ 20'13	
max. Earth dist.	-4201 Apr 16 j 00:26	21° ✕ 17'18	30.85139 AU	retrograde	-4195 Aug 13 j 01:10	7° ☿ 16'00	
morning rise	-4201 May 02 j 02:44	21° ✕ 52'59		opposition	-4195 Oct 29 j 16:30	5° ☿ 51'50	-2°02'35

Attention, astronomical year style is used: The year -4195 in astronomical counting style is the year 4196 BCE in historical counting style.

min. Earth dist.	-4195 Oct 29 j 17:31	5° Υ 51'45	28.88420 AU	morning rise	-4188 May 31 j 22:13	21° Υ 01'46	
direct	-4194 Jan 16 j 02:00	4° Υ 26'45		retrograde	-4188 Aug 28 j 10:55	22° Υ 56'31	
evening set	-4194 Apr 15 j 18:07	6° Υ 22'30		opposition	-4188 Nov 13 j 17:26	21° Υ 32'55	-1°38'01
				min. Earth dist.	-4188 Nov 14 j 01:50	21° Υ 32'20	28.94303 AU
conjunction	-4194 May 02 j 01:35	6° Υ 58'35	-1°53'16	direct	-4187 Jan 31 j 17:20	20° Υ 07'42	
minimum elong	-4194 May 02 j 01:35	6° Υ 58'35	1°53'15	evening set	-4187 May 01 j 22:08	22° Υ 03'51	
max. Earth dist.	-4194 May 02 j 00:00	6° Υ 58'26	30.88758 AU				
morning rise	-4194 May 18 j 08:15	7° Υ 34'38		conjunction	-4187 May 18 j 06:04	22° Υ 39'56	-1°29'45
retrograde	-4194 Aug 15 j 11:03	9° Υ 30'16		minimum elong	-4187 May 18 j 06:05	22° Υ 39'56	1°29'41
opposition	-4194 Nov 01 j 02:49	8° Υ 06'13	-1°59'35	max. Earth dist.	-4187 May 17 j 20:26	22° Υ 39'02	30.94543 AU
min. Earth dist.	-4194 Nov 01 j 05:01	8° Υ 06'04	28.89346 AU	morning rise	-4187 Jun 03 j 12:10	23° Υ 15'53	
direct	-4193 Jan 18 j 13:42	6° Υ 41'10		retrograde	-4187 Aug 30 j 22:26	25° Υ 10'26	
evening set	-4193 Apr 18 j 08:34	8° Υ 37'00		opposition	-4187 Nov 16 j 03:47	23° Υ 46'53	-1°33'53
				min. Earth dist.	-4187 Nov 16 j 12:47	23° Υ 46'15	28.94932 AU
conjunction	-4193 May 04 j 15:59	9° Υ 13'05	-1°50'23	direct	-4186 Feb 03 j 07:04	22° Υ 21'36	
minimum elong	-4193 May 04 j 16:00	9° Υ 13'05	1°50'22	evening set	-4186 May 04 j 12:19	24° Υ 17'46	
max. Earth dist.	-4193 May 04 j 12:24	9° Υ 12'45	30.89730 AU				
morning rise	-4193 May 20 j 22:47	9° Υ 49'07		conjunction	-4186 May 20 j 20:03	24° Υ 53'50	-1°25'50
retrograde	-4193 Aug 17 j 23:34	11° Υ 44'39		minimum elong	-4186 May 20 j 20:04	24° Υ 53'50	1°25'44
opposition	-4193 Nov 03 j 13:12	10° Υ 20'42	-1°56'24	max. Earth dist.	-4186 May 20 j 08:27	24° Υ 52'45	30.95189 AU
min. Earth dist.	-4193 Nov 03 j 15:43	10° Υ 20'32	28.90328 AU	morning rise	-4186 Jun 06 j 02:07	25° Υ 29'46	
direct	-4192 Jan 21 j 01:58	8° Υ 55'39		retrograde	-4186 Sep 02 j 09:42	27° Υ 24'08	
evening set	-4192 Apr 19 j 22:45	10° Υ 51'35		opposition	-4186 Nov 18 j 14:01	26° Υ 00'37	-1°29'37
				min. Earth dist.	-4186 Nov 18 j 23:42	25° Υ 59'56	28.95603 AU
conjunction	-4192 May 06 j 06:22	11° Υ 27'40	-1°47'19	direct	-4185 Feb 05 j 18:15	24° Υ 35'16	
minimum elong	-4192 May 06 j 06:23	11° Υ 27'40	1°47'17	evening set	-4185 May 07 j 02:12	26° Υ 31'27	
max. Earth dist.	-4192 May 06 j 02:36	11° Υ 27'19	30.90704 AU				
morning rise	-4192 May 22 j 12:57	12° Υ 03'42		conjunction	-4185 May 23 j 10:04	27° Υ 07'30	-1°21'46
retrograde	-4192 Aug 19 j 10:17	13° Υ 59'07		minimum elong	-4185 May 23 j 10:05	27° Υ 07'30	1°21'42
opposition	-4192 Nov 04 j 23:45	12° Υ 35'16	-1°53'03	max. Earth dist.	-4185 May 22 j 22:48	27° Υ 06'28	30.95893 AU
min. Earth dist.	-4192 Nov 05 j 04:10	12° Υ 34'57	28.91282 AU	morning rise	-4185 Jun 08 j 15:46	27° Υ 43'25	
direct	-4191 Jan 22 j 13:20	11° Υ 10'13		retrograde	-4185 Sep 04 j 18:44	29° Υ 37'36	
evening set	-4191 Apr 22 j 13:09	13° Υ 06'14		opposition	-4185 Nov 21 j 00:28	28° Υ 14'08	-1°25'13
				min. Earth dist.	-4185 Nov 21 j 11:07	28° Υ 13'23	28.96343 AU
conjunction	-4191 May 08 j 20:48	13° Υ 42'19	-1°44'06	direct	-4184 Feb 08 j 06:47	26° Υ 48'45	
minimum elong	-4191 May 08 j 20:49	13° Υ 42'19	1°44'05	evening set	-4184 May 08 j 15:58	28° Υ 44'56	
max. Earth dist.	-4191 May 08 j 15:16	13° Υ 41'48	30.91638 AU				
morning rise	-4191 May 25 j 03:26	14° Υ 18'20		conjunction	-4184 May 24 j 23:36	29° Υ 20'59	-1°17'36
retrograde	-4191 Aug 21 j 23:21	16° Υ 13'36		minimum elong	-4184 May 24 j 23:36	29° Υ 20'59	1°17'31
opposition	-4191 Nov 07 j 10:03	14° Υ 49'51	-1°49'31	max. Earth dist.	-4184 May 24 j 10:38	29° Υ 19'47	30.96698 AU
min. Earth dist.	-4191 Nov 07 j 14:37	14° Υ 49'31	28.92166 AU	morning rise	-4184 Jun 10 j 05:16	29° Υ 56'52	
direct	-4190 Jan 25 j 02:41	13° Υ 24'46			-4184 Jun 11 j 15:57	0° \mathcal{B}	
evening set	-4190 Apr 25 j 03:35	15° Υ 20'51		retrograde	-4184 Sep 06 j 06:00	1° \mathcal{B} 50'55	
				opposition	-4184 Nov 22 j 10:44	0° \mathcal{B} 27'30	-1°20'42
conjunction	-4190 May 11 j 11:20	15° Υ 56'56	-1°40'44	min. Earth dist.	-4184 Nov 22 j 21:14	0° \mathcal{B} 26'45	28.97206 AU
minimum elong	-4190 May 11 j 11:20	15° Υ 56'56	1°40'41		-4184 Dec 08 j 22:06	30° \mathcal{R} Υ	
max. Earth dist.	-4190 May 11 j 04:34	15° Υ 56'18	30.92473 AU	direct	-4183 Feb 09 j 18:21	29° Υ 02'05	
morning rise	-4190 May 27 j 17:49	16° Υ 32'56			-4183 Apr 11 j 22:53	0° \mathcal{B}	
retrograde	-4190 Aug 24 j 11:15	18° Υ 28'03		evening set	-4183 May 11 j 05:42	0° \mathcal{B} 58'18	
opposition	-4190 Nov 09 j 20:39	17° Υ 04'22	-1°45'50				
min. Earth dist.	-4190 Nov 10 j 03:14	17° Υ 03'53	28.92954 AU	conjunction	-4183 May 27 j 13:23	1° \mathcal{B} 34'20	-1°13'19
direct	-4189 Jan 27 j 15:29	15° Υ 39'15		minimum elong	-4183 May 27 j 13:23	1° \mathcal{B} 34'21	1°13'15
evening set	-4189 Apr 27 j 17:53	17° Υ 35'22		max. Earth dist.	-4183 May 27 j 00:44	1° \mathcal{B} 33'10	30.97620 AU
				morning rise	-4183 Jun 12 j 18:40	2° \mathcal{B} 10'12	
conjunction	-4189 May 14 j 01:42	18° Υ 11'27	-1°37'13	retrograde	-4183 Sep 08 j 15:40	4° \mathcal{B} 04'06	
minimum elong	-4189 May 14 j 01:42	18° Υ 11'27	1°37'10	opposition	-4183 Nov 24 j 21:03	2° \mathcal{B} 40'46	-1°16'04
max. Earth dist.	-4189 May 13 j 17:52	18° Υ 10'43	30.93224 AU	min. Earth dist.	-4183 Nov 25 j 09:02	2° \mathcal{B} 39'56	28.98185 AU
morning rise	-4189 May 30 j 08:04	18° Υ 47'26		direct	-4182 Feb 12 j 05:07	1° \mathcal{B} 15'21	
retrograde	-4189 Aug 26 j 23:26	20° Υ 42'22		evening set	-4182 May 13 j 19:34	3° \mathcal{B} 11'37	
opposition	-4189 Nov 12 j 07:01	19° Υ 18'44	-1°42'00				
min. Earth dist.	-4189 Nov 12 j 13:49	19° Υ 18'15	28.93649 AU	conjunction	-4182 May 30 j 03:03	3° \mathcal{B} 47'39	-1°08'55
direct	-4188 Jan 30 j 05:57	17° Υ 53'35		minimum elong	-4182 May 30 j 03:04	3° \mathcal{B} 47'39	1°08'49
evening set	-4188 Apr 29 j 08:10	19° Υ 49'43		max. Earth dist.	-4182 May 29 j 13:08	3° \mathcal{B} 46'21	30.98671 AU
				morning rise	-4182 Jun 15 j 08:13	4° \mathcal{B} 23'30	
conjunction	-4188 May 15 j 15:55	20° Υ 25'48	-1°33'33	retrograde	-4182 Sep 11 j 03:30	6° \mathcal{B} 17'16	
minimum elong	-4188 May 15 j 15:56	20° Υ 25'48	1°33'29	opposition	-4182 Nov 27 j 07:20	4° \mathcal{B} 54'02	-1°11'18
max. Earth dist.	-4188 May 15 j 06:23	20° Υ 24'55	30.93894 AU	min. Earth dist.	-4182 Nov 27 j 18:56	4° \mathcal{B} 53'13	28.99271 AU

Attention, astronomical year style is used: The year -4181 in astronomical counting style is the year 4182 BCE in historical counting style.

direct	-4181 Feb 14 j 18:13	3°828'38		max. Earth dist.	-4175 Jun 14 j 04:28	19°819'25	31.05440 AU
evening set	-4181 May 16 j 09:17	5°824'58					
conjunction	-4181 Jun 01 j 16:38	6°800'59	-1°04'25	conjunction	-4175 Jun 15 j 01:08	19°821'20	-0°35'41
minimum elong	-4181 Jun 01 j 16:38	6°800'59	1°04'20	minimum elong	-4175 Jun 15 j 01:08	19°821'21	0°35'34
max. Earth dist.	-4181 Jun 01 j 02:18	5°859'39	30.99790 AU	morning rise	-4175 Jul 01 j 03:56	19°857'00	
morning rise	-4181 Jun 17 j 21:25	6°836'48		retrograde	-4175 Sep 26 j 09:07	21°849'57	
retrograde	-4181 Sep 13 j 14:30	8°830'29		opposition	-4175 Dec 12 j 08:39	20°827'17	-0°35'30
opposition	-4181 Nov 29 j 17:48	7°807'21	-1°06'26	min. Earth dist.	-4175 Dec 13 j 02:15	20°826'02	29.05797 AU
min. Earth dist.	-4181 Nov 30 j 07:01	7°806'25	29.00413 AU	direct	-4174 Mar 02 j 09:44	19°801'51	
direct	-4180 Feb 17 j 06:12	5°841'59		evening set	-4174 Jun 01 j 08:37	20°858'26	
evening set	-4180 May 17 j 23:01	7°838'23		conjunction	-4174 Jun 17 j 14:17	21°834'20	-0°30'42
conjunction	-4180 Jun 03 j 06:12	8°814'23	-0°59'49	minimum elong	-4174 Jun 17 j 14:18	21°834'20	0°30'33
minimum elong	-4180 Jun 03 j 06:13	8°814'23	0°59'42	max. Earth dist.	-4174 Jun 16 j 17:52	21°832'26	31.06091 AU
max. Earth dist.	-4180 Jun 02 j 15:07	8°812'59	31.00946 AU	morning rise	-4174 Jul 03 j 16:31	22°809'57	
morning rise	-4180 Jun 19 j 10:44	8°850'11		retrograde	-4174 Sep 28 j 18:08	24°802'46	
retrograde	-4180 Sep 15 j 02:26	10°843'45		opposition	-4174 Dec 14 j 19:16	22°840'07	-0°30'09
opposition	-4180 Dec 01 j 04:07	9°820'45	-1°01'28	min. Earth dist.	-4174 Dec 15 j 14:25	22°838'47	29.06442 AU
min. Earth dist.	-4180 Dec 01 j 17:23	9°819'48	29.01545 AU	direct	-4173 Mar 04 j 20:27	21°814'40	
direct	-4179 Feb 18 j 20:01	7°855'24		evening set	-4173 Jun 03 j 21:47	23°811'14	
evening set	-4179 May 20 j 12:47	9°851'52		max. Earth dist.	-4173 Jun 19 j 05:28	23°845'06	31.06752 AU
conjunction	-4179 Jun 05 j 19:43	10°827'51	-0°55'08	conjunction	-4173 Jun 20 j 02:58	23°847'05	-0°25'40
minimum elong	-4179 Jun 05 j 19:44	10°827'51	0°55'01	minimum elong	-4173 Jun 20 j 02:58	23°847'05	0°25'31
max. Earth dist.	-4179 Jun 05 j 03:09	10°826'19	31.02048 AU	morning rise	-4173 Jul 06 j 04:53	24°822'41	
morning rise	-4179 Jun 21 j 23:58	11°803'38		retrograde	-4173 Oct 01 j 04:16	26°815'22	
retrograde	-4179 Sep 17 j 14:12	12°857'06		opposition	-4173 Dec 17 j 05:41	24°852'45	-0°24'45
opposition	-4179 Dec 03 j 14:40	11°834'11	-0°56'25	min. Earth dist.	-4173 Dec 18 j 00:14	24°851'27	29.07123 AU
min. Earth dist.	-4179 Dec 04 j 05:28	11°833'08	29.02611 AU	direct	-4172 Mar 06 j 09:56	23°827'14	
direct	-4178 Feb 21 j 07:22	10°808'51		evening set	-4172 Jun 05 j 10:49	25°823'49	
evening set	-4178 May 23 j 02:32	12°805'22		conjunction	-4172 Jun 21 j 15:40	25°859'38	-0°20'36
conjunction	-4178 Jun 08 j 09:20	12°841'21	-0°50'22	minimum elong	-4172 Jun 21 j 15:41	25°859'38	0°20'27
minimum elong	-4178 Jun 08 j 09:21	12°841'21	0°50'14	max. Earth dist.	-4172 Jun 20 j 18:09	25°857'39	31.07462 AU
max. Earth dist.	-4178 Jun 07 j 16:32	12°839'48	31.03061 AU	morning rise	-4172 Jul 07 j 17:01	26°835'11	
morning rise	-4178 Jun 24 j 13:08	13°817'06		retrograde	-4172 Oct 02 j 13:55	28°827'46	
retrograde	-4178 Aug 26 j 09:35	15°8		opposition	-4172 Dec 18 j 16:10	27°805'10	-0°19'19
opposition	-4178 Sep 20 j 01:53	15°810'26		min. Earth dist.	-4172 Dec 19 j 11:57	27°803'47	29.07890 AU
min. Earth dist.	-4178 Dec 06 j 01:11	13°847'37	-0°51'17	direct	-4171 Mar 08 j 21:24	25°839'38	
direct	-4178 Dec 06 j 16:42	13°846'31	29.03554 AU	evening set	-4171 Jun 07 j 23:44	27°836'13	
evening set	-4177 Feb 23 j 21:32	12°822'17		max. Earth dist.	-4171 Jun 23 j 06:24	28°809'59	31.08288 AU
conjunction	-4177 Jun 10 j 22:44	14°854'48	-0°45'32	conjunction	-4171 Jun 24 j 04:13	28°812'00	-0°15'31
minimum elong	-4177 Jun 10 j 22:45	14°854'48	0°45'25	minimum elong	-4171 Jun 24 j 04:13	28°812'00	0°15'22
max. Earth dist.	-4177 Jun 10 j 03:53	14°853'03	31.03952 AU	behind sun begin	-4171 Jun 24 j 02:33	28°811'52	
morning rise	-4177 Jun 13 j 06:42	15°8		behind sun end	-4171 Jun 24 j 05:53	28°812'09	
morning rise	-4177 Jun 27 j 02:18	15°830'31		morning rise	-4171 Jul 10 j 05:08	28°847'31	
retrograde	-4177 Sep 22 j 13:18	17°823'45		retrograde	-4171 Aug 17 j 01:27	0°II	
opposition	-4177 Dec 08 j 11:46	16°800'59	-0°46'05		-4171 Oct 05 j 00:41	0°II39'59	
min. Earth dist.	-4177 Dec 09 j 04:00	15°859'50	29.04396 AU	opposition	-4171 Nov 24 j 11:46	30°R8	
direct	-4176 Jan 17 j 19:58	15°R8		min. Earth dist.	-4171 Dec 21 j 02:39	29°817'26	-0°13'52
evening set	-4176 Apr 05 j 08:09	15°8		direct	-4171 Dec 21 j 21:52	29°816'06	29.08762 AU
conjunction	-4176 Jun 12 j 12:00	17°808'09	-0°40'38	evening set	-4170 Mar 11 j 10:43	27°851'54	
minimum elong	-4176 Jun 12 j 12:01	17°808'09	0°40'30		-4170 Jun 10 j 12:42	29°848'30	
max. Earth dist.	-4176 Jun 11 j 17:20	17°806'25	31.04739 AU	conjunction	-4170 Jun 15 j 18:47	0°II	
morning rise	-4176 Jun 28 j 15:02	17°843'50		minimum elong	-4170 Jun 26 j 16:40	0°II24'16	-0°10'25
retrograde	-4176 Sep 23 j 22:11	19°836'56		behind sun begin	-4170 Jun 26 j 16:40	0°II24'16	0°10'15
opposition	-4176 Dec 09 j 22:21	18°814'13	-0°40'49	behind sun end	-4170 Jun 26 j 11:29	0°II23'48	
min. Earth dist.	-4176 Dec 10 j 15:51	18°812'59	29.05125 AU	max. Earth dist.	-4170 Jun 26 j 21:51	0°II24'43	
direct	-4175 Feb 27 j 22:12	16°848'51		morning rise	-4170 Jun 25 j 18:10	0°II22'11	31.09219 AU
evening set	-4175 May 29 j 19:17	18°845'25		retrograde	-4170 Jul 12 j 17:05	0°II59'44	
				retrograde	-4170 Oct 07 j 11:56	2°II52'07	
				opposition	-4170 Dec 23 j 13:13	1°II29'38	-0°08'23
				min. Earth dist.	-4170 Dec 24 j 09:13	1°II28'14	29.09759 AU
				direct	-4169 Mar 13 j 22:12	0°II04'07	
				evening set	-4169 Jun 13 j 01:27	2°II00'45	

Attention, astronomical year style is used: The year -4169 in astronomical counting style is the year 4170 BCE in historical counting style.

max. Earth dist.	-4169 Jun 28 j 07:10	2°II34'26	31.10269 AU	opposition	-4163 Jan 05 j 05:39	14°II42'35	0°24'24
				min. Earth dist.	-4163 Jan 06 j 03:53	14°II41'02	29.15649 AU
conjunction	-4169 Jun 29 j 05:05	2°II36'28	-0°05'19	direct	-4163 Mar 27 j 01:12	13°II17'11	
minimum elong	-4169 Jun 29 j 05:05	2°II36'28	0°05'09	evening set	-4163 Jun 26 j 05:26	15°II13'54	
behind sun begin	-4169 Jun 28 j 22:44	2°II35'54		max. Earth dist.	-4163 Jul 11 j 04:37	15°II47'04	31.15952 AU
behind sun end	-4169 Jun 29 j 11:26	2°II37'02					
morning rise	-4169 Jul 15 j 04:54	3°II11'54		conjunction	-4163 Jul 12 j 05:49	15°II49'24	0°25'25
retrograde	-4169 Oct 09 j 23:13	5°II04'13		minimum elong	-4163 Jul 12 j 05:49	15°II49'24	0°25'35
opposition	-4169 Dec 25 j 23:50	3°II41'48	-0°02'54	morning rise	-4163 Jul 28 j 02:11	16°II24'34	
min. Earth dist.	-4169 Dec 26 j 19:56	3°II40'24	29.10836 AU	retrograde	-4163 Oct 22 j 11:40	18°II16'32	
direct	-4168 Mar 15 j 12:33	2°II16'20		opposition	-4162 Jan 07 j 16:39	16°II54'28	0°29'46
evening set	-4168 Jun 14 j 14:10	4°II12'59		min. Earth dist.	-4162 Jan 08 j 16:14	16°II52'50	29.16313 AU
				direct	-4162 Mar 29 j 12:11	15°II29'03	
conjunction	-4168 Jun 30 j 17:10	4°II48'41	-0°00'06	evening set	-4162 Jun 28 j 17:47	17°II25'46	
minimum elong	-4168 Jun 30 j 17:10	4°II48'40	0°00'05				
behind sun begin	-4168 Jun 30 j 11:00	4°II48'08		conjunction	-4162 Jul 14 j 17:32	18°II01'13	0°30'25
behind sun end	-4168 Jun 30 j 23:20	4°II49'13		minimum elong	-4162 Jul 14 j 17:32	18°II01'13	0°30'37
max. Earth dist.	-4168 Jun 29 j 18:01	4°II46'32	31.11373 AU	max. Earth dist.	-4162 Jul 13 j 16:03	17°II58'50	31.16579 AU
asc. node	-4168 Jul 08 j 03:29	5°II05'15		morning rise	-4162 Jul 30 j 13:20	18°II36'20	
morning rise	-4168 Jul 16 j 16:37	5°II24'04		retrograde	-4162 Oct 24 j 21:50	20°II28'14	
retrograde	-4168 Oct 11 j 10:25	7°II16'20		opposition	-4161 Jan 10 j 03:31	19°II06'10	0°35'06
opposition	-4168 Dec 27 j 10:28	5°II54'00	0°02'35	min. Earth dist.	-4161 Jan 11 j 02:38	19°II04'34	29.16906 AU
min. Earth dist.	-4168 Dec 28 j 06:48	5°II52'35	29.11953 AU	direct	-4161 Apr 01 j 01:14	17°II40'45	
direct	-4167 Mar 18 j 00:11	4°II28'33		evening set	-4161 Jul 01 j 06:02	19°II37'26	
evening set	-4167 Jun 17 j 02:52	6°II25'15		max. Earth dist.	-4161 Jul 16 j 03:02	20°II10'25	31.17158 AU
max. Earth dist.	-4167 Jul 02 j 06:58	6°II58'49	31.12471 AU				
				conjunction	-4161 Jul 17 j 05:07	20°II12'50	0°35'22
conjunction	-4167 Jul 03 j 05:33	7°II00'54	0°05'06	minimum elong	-4161 Jul 17 j 05:07	20°II12'50	0°35'33
minimum elong	-4167 Jul 03 j 05:32	7°II00'54	0°05'16	morning rise	-4161 Aug 02 j 00:18	20°II47'55	
behind sun begin	-4167 Jul 02 j 23:13	7°II00'21		retrograde	-4161 Oct 27 j 08:43	22°II39'46	
behind sun end	-4167 Jul 03 j 11:52	7°II01'28		opposition	-4160 Jan 12 j 14:29	21°II17'42	0°40'22
morning rise	-4167 Jul 19 j 04:16	7°II36'15		min. Earth dist.	-4160 Jan 13 j 14:14	21°II16'04	29.17504 AU
retrograde	-4167 Oct 13 j 19:49	9°II28'27		direct	-4160 Apr 02 j 12:51	19°II52'16	
opposition	-4167 Dec 29 j 21:09	8°II06'13	0°08'04	evening set	-4160 Jul 02 j 17:53	21°II48'56	
min. Earth dist.	-4167 Dec 30 j 18:34	8°II04'43	29.13021 AU				
direct	-4166 Mar 20 j 13:07	6°II40'48		conjunction	-4160 Jul 18 j 16:28	22°II24'18	0°40'16
evening set	-4166 Jun 19 j 15:45	8°II37'31		minimum elong	-4160 Jul 18 j 16:28	22°II24'18	0°40'28
				max. Earth dist.	-4160 Jul 17 j 15:14	22°II21'57	31.17766 AU
conjunction	-4166 Jul 05 j 17:42	9°II13'08	0°10'12	morning rise	-4160 Aug 03 j 10:58	22°II59'19	
minimum elong	-4166 Jul 05 j 17:43	9°II13'08	0°10'23	retrograde	-4160 Oct 28 j 19:16	24°II51'07	
behind sun begin	-4166 Jul 05 j 12:35	9°II12'41		opposition	-4159 Jan 14 j 01:25	23°II29'04	0°45'34
behind sun end	-4166 Jul 05 j 22:50	9°II13'36		min. Earth dist.	-4159 Jan 15 j 01:03	23°II27'26	29.18132 AU
max. Earth dist.	-4166 Jul 04 j 17:27	9°II10'53	31.13505 AU	direct	-4159 Apr 05 j 03:14	22°II03'38	
morning rise	-4166 Jul 21 j 16:00	9°II48'26		evening set	-4159 Jul 05 j 05:55	24°II00'18	
retrograde	-4166 Oct 16 j 07:19	11°II40'35		max. Earth dist.	-4159 Jul 20 j 01:38	24°II33'10	31.18430 AU
opposition	-4165 Jan 01 j 07:58	10°II18'24	0°13'33				
min. Earth dist.	-4165 Jan 02 j 05:10	10°II16'56	29.14013 AU	conjunction	-4159 Jul 21 j 03:43	24°II35'36	0°45'06
direct	-4165 Mar 23 j 01:01	8°II53'01		minimum elong	-4159 Jul 21 j 03:42	24°II35'36	0°45'17
evening set	-4165 Jun 22 j 04:17	10°II49'44		morning rise	-4159 Aug 05 j 21:39	25°II10'34	
max. Earth dist.	-4165 Jul 07 j 06:00	11°II23'07	31.14431 AU	retrograde	-4159 Oct 31 j 06:06	27°II02'21	
				opposition	-4158 Jan 16 j 12:17	25°II40'19	0°50'41
conjunction	-4165 Jul 08 j 05:50	11°II25'20	0°15'18	min. Earth dist.	-4158 Jan 17 j 11:31	25°II38'43	29.18860 AU
minimum elong	-4165 Jul 08 j 05:50	11°II25'20	0°15'28	direct	-4158 Apr 07 j 14:44	24°II14'54	
behind sun begin	-4165 Jul 08 j 04:14	11°II25'11		evening set	-4158 Jul 07 j 17:43	26°II11'35	
behind sun end	-4165 Jul 08 j 07:26	11°II25'28					
morning rise	-4165 Jul 24 j 03:21	12°II00'35		conjunction	-4158 Jul 23 j 15:00	26°II46'50	0°49'52
retrograde	-4165 Oct 18 j 16:16	13°II52'41		minimum elong	-4158 Jul 23 j 15:00	26°II46'50	0°50'04
opposition	-4164 Jan 03 j 18:58	12°II30'33	0°18'59	max. Earth dist.	-4158 Jul 22 j 14:14	26°II44'31	31.19206 AU
min. Earth dist.	-4164 Jan 04 j 17:40	12°II28'58	29.14887 AU	morning rise	-4158 Aug 08 j 08:08	27°II21'45	
direct	-4164 Mar 24 j 12:21	11°II05'10		retrograde	-4158 Nov 02 j 15:24	29°II13'31	
evening set	-4164 Jun 23 j 16:56	13°II01'53		opposition	-4157 Jan 18 j 23:26	27°II51'32	0°55'45
				min. Earth dist.	-4157 Jan 19 j 22:59	27°II49'55	29.19692 AU
conjunction	-4164 Jul 09 j 17:48	13°II37'26	0°20'23	direct	-4157 Apr 10 j 03:56	26°II26'10	
minimum elong	-4164 Jul 09 j 17:48	13°II37'26	0°20'33	evening set	-4157 Jul 10 j 05:26	28°II22'51	
max. Earth dist.	-4164 Jul 08 j 16:47	13°II35'06	31.15251 AU	max. Earth dist.	-4157 Jul 25 j 00:18	28°II55'40	31.20098 AU
morning rise	-4164 Jul 25 j 14:53	14°II12'39					
retrograde	-4164 Oct 20 j 02:13	16°II04'40		conjunction	-4157 Jul 26 j 01:53	28°II58'03	0°54'34

Attention, astronomical year style is used: The year -4157 in astronomical counting style is the year 4158 BCE in historical counting style.

minimum elong	-4157 Jul 26 j 01:53	28°II58'03	0°54'44	min. Earth dist.	-4150 Feb 04 j 06:22	13°09'50	29.25512 AU
morning rise	-4157 Aug 10 j 18:32	29°II32'56		direct	-4150 Apr 25 j 14:33	11°04'26	
	-4157 Aug 23 j 13:00	0°00'		evening set	-4150 Jul 25 j 14:15	13°04'30	
retrograde	-4157 Nov 05 j 02:59	1°02'42		max. Earth dist.	-4150 Aug 09 j 04:14	14°05'33	31.25634 AU
opposition	-4156 Jan 21 j 10:27	0°02'47	1°00'43				
min. Earth dist.	-4156 Jan 22 j 09:01	0°01'14	29.20636 AU	conjunction	-4150 Aug 10 j 05:53	14°07'56	1°24'51
	-4156 Jan 23 j 02:48	30°RII		minimum elong	-4150 Aug 10 j 05:52	14°07'56	1°25'03
direct	-4156 Apr 11 j 15:59	28°II37'28		morning rise	-4150 Aug 25 j 17:53	14°05'23	
	-4156 Jun 25 j 09:36	0°00'		retrograde	-4150 Nov 20 j 01:59	16°04'24	
evening set	-4156 Jul 11 j 17:02	0°03'41		opposition	-4149 Feb 05 j 18:15	15°02'22	1°32'42
				min. Earth dist.	-4149 Feb 06 j 17:39	15°02'10	29.25923 AU
conjunction	-4156 Jul 27 j 12:59	1°09'20	0°59'11	direct	-4149 Apr 28 j 01:49	13°05'40	
minimum elong	-4156 Jul 27 j 12:59	1°09'20	0°59'23	evening set	-4149 Jul 28 j 01:12	15°05'41	
max. Earth dist.	-4156 Jul 26 j 12:31	1°07'03	31.21067 AU				
morning rise	-4156 Aug 12 j 04:49	1°04'41		conjunction	-4149 Aug 12 j 16:19	16°02'04	1°28'44
retrograde	-4156 Nov 06 j 12:00	3°03'55		minimum elong	-4149 Aug 12 j 16:19	16°02'04	1°28'54
opposition	-4155 Jan 22 j 21:32	2°04'07	1°05'37	max. Earth dist.	-4149 Aug 11 j 15:57	16°02'48	31.25989 AU
min. Earth dist.	-4155 Jan 23 j 21:08	2°02'29	29.21629 AU	morning rise	-4149 Aug 28 j 03:33	17°03'34	
direct	-4155 Apr 14 j 03:16	0°04'53		retrograde	-4149 Nov 22 j 11:35	18°05'29	
evening set	-4155 Jul 14 j 04:47	2°04'53		opposition	-4148 Feb 08 j 05:56	17°03'45	1°36'46
				min. Earth dist.	-4148 Feb 09 j 05:46	17°03'08	29.26244 AU
conjunction	-4155 Jul 29 j 23:57	3°02'04	1°03'43	direct	-4148 Apr 29 j 15:53	16°08'43	
minimum elong	-4155 Jul 29 j 23:56	3°02'04	1°03'54	evening set	-4148 Jul 29 j 12:18	18°05'15	
max. Earth dist.	-4155 Jul 28 j 22:55	3°01'82	31.22066 AU	max. Earth dist.	-4148 Aug 13 j 01:27	18°03'39	31.26292 AU
morning rise	-4155 Aug 14 j 15:16	3°05'53					
retrograde	-4155 Nov 08 j 21:42	5°04'71		conjunction	-4148 Aug 14 j 02:34	18°04'00	1°32'29
opposition	-4154 Jan 25 j 08:43	4°02'53	1°10'24	minimum elong	-4148 Aug 14 j 02:34	18°04'00	1°32'40
min. Earth dist.	-4154 Jan 26 j 07:22	4°02'35	29.22613 AU	morning rise	-4148 Aug 29 j 13:22	19°04'27	
direct	-4154 Apr 16 j 15:24	3°00'22		retrograde	-4148 Nov 23 j 23:06	21°06'22	
evening set	-4154 Jul 16 j 16:21	4°05'06		opposition	-4147 Feb 09 j 17:19	19°04'36	1°40'42
max. Earth dist.	-4154 Jul 31 j 10:07	5°02'52	31.23007 AU	min. Earth dist.	-4147 Feb 10 j 16:04	19°04'02	29.26550 AU
				direct	-4147 May 02 j 04:51	18°09'33	
conjunction	-4154 Aug 01 j 10:51	5°03'21	1°08'09	evening set	-4147 Jul 31 j 23:09	20°06'02	
minimum elong	-4154 Aug 01 j 10:51	5°03'21	1°08'21				
morning rise	-4154 Aug 17 j 01:23	6°06'55		conjunction	-4147 Aug 16 j 12:52	20°05'04	1°36'05
retrograde	-4154 Nov 11 j 07:17	7°05'46		minimum elong	-4147 Aug 16 j 12:52	20°05'04	1°36'15
opposition	-4153 Jan 27 j 20:11	6°03'70	1°15'06	max. Earth dist.	-4147 Aug 15 j 13:03	20°04'83	31.26594 AU
min. Earth dist.	-4153 Jan 28 j 19:51	6°03'55	29.23528 AU	morning rise	-4147 Aug 31 j 22:52	21°02'50	
direct	-4153 Apr 19 j 01:19	5°01'15		retrograde	-4147 Nov 26 j 07:52	23°01'70	
evening set	-4153 Jul 19 j 03:57	7°08'40		opposition	-4146 Feb 12 j 05:06	21°05'51	1°44'29
				min. Earth dist.	-4146 Feb 13 j 04:24	21°05'34	29.26884 AU
conjunction	-4153 Aug 03 j 21:44	7°04'34	1°12'30	direct	-4146 May 04 j 17:06	20°03'14	
minimum elong	-4153 Aug 03 j 21:44	7°04'34	1°12'41	evening set	-4146 Aug 03 j 09:54	22°02'40	
max. Earth dist.	-4153 Aug 02 j 21:00	7°04'12	31.23868 AU				
morning rise	-4153 Aug 19 j 11:39	8°08'18		conjunction	-4146 Aug 18 j 22:49	23°01'19	1°39'34
retrograde	-4153 Nov 13 j 17:31	10°01'05		minimum elong	-4146 Aug 18 j 22:49	23°01'19	1°39'44
opposition	-4152 Jan 30 j 07:36	8°04'83	1°19'41	max. Earth dist.	-4146 Aug 17 j 23:08	22°05'05	31.26963 AU
min. Earth dist.	-4152 Jan 31 j 06:38	8°04'70	29.24329 AU	morning rise	-4146 Sep 03 j 08:19	23°03'40	
direct	-4152 Apr 20 j 13:28	7°02'30		retrograde	-4146 Nov 28 j 17:24	25°02'38	
evening set	-4152 Jul 20 j 15:24	9°02'01		opposition	-4145 Feb 14 j 16:47	24°05'50	1°48'07
max. Earth dist.	-4152 Aug 04 j 07:06	9°05'24	31.24593 AU	min. Earth dist.	-4145 Feb 15 j 14:25	24°04'21	29.27297 AU
				direct	-4145 May 07 j 05:35	22°04'05	
conjunction	-4152 Aug 05 j 08:29	9°05'51	1°16'44	evening set	-4145 Aug 05 j 20:34	24°03'13	
minimum elong	-4152 Aug 05 j 08:28	9°05'51	1°16'55	max. Earth dist.	-4145 Aug 20 j 10:01	25°09'41	31.27413 AU
morning rise	-4152 Aug 20 j 21:46	10°02'51					
retrograde	-4152 Nov 15 j 04:30	12°02'14		conjunction	-4145 Aug 21 j 08:52	25°01'50	1°42'53
opposition	-4151 Jan 31 j 19:07	11°00'04	1°24'09	minimum elong	-4145 Aug 21 j 08:52	25°01'50	1°43'03
min. Earth dist.	-4151 Feb 01 j 18:47	10°05'82	29.24998 AU	morning rise	-4145 Sep 05 j 17:42	25°04'08	
direct	-4151 Apr 23 j 00:55	9°03'50		retrograde	-4145 Dec 01 j 02:59	27°03'81	
evening set	-4151 Jul 23 j 02:49	11°03'14		opposition	-4144 Feb 17 j 04:32	26°06'22	1°51'36
				min. Earth dist.	-4144 Feb 18 j 02:28	26°04'53	29.27806 AU
conjunction	-4151 Aug 07 j 19:17	12°06'38	1°20'51	direct	-4144 May 08 j 15:40	24°05'12	
minimum elong	-4151 Aug 07 j 19:16	12°06'38	1°21'02	evening set	-4144 Aug 07 j 07:05	26°04'48	
max. Earth dist.	-4151 Aug 06 j 18:36	12°04'19	31.25182 AU				
morning rise	-4151 Aug 23 j 07:49	12°04'14		conjunction	-4144 Aug 22 j 18:47	27°02'22	1°46'04
retrograde	-4151 Nov 17 j 14:49	14°03'30		minimum elong	-4144 Aug 22 j 18:46	27°02'22	1°46'15
opposition	-4150 Feb 03 j 06:39	13°01'28	1°28'29	max. Earth dist.	-4144 Aug 21 j 20:43	27°02'01	31.27958 AU

Attention, astronomical year style is used: The year -4144 in astronomical counting style is the year 4145 BCE in historical counting style.

morning rise	-4144 Sep 07 j 03:04	27° $\mathring{\text{O}}$ 56'39		direct	-4137 May 25 j 03:08	10° $\mathring{\text{O}}$ 08'05	
retrograde	-4144 Dec 02 j 12:54	29° $\mathring{\text{O}}$ 48'45		evening set	-4137 Aug 23 j 07:49	12° $\mathring{\text{O}}$ 04'14	
opposition	-4143 Feb 18 j 16:17	28° $\mathring{\text{O}}$ 26'59	1°54'55				
min. Earth dist.	-4143 Feb 19 j 12:59	28° $\mathring{\text{O}}$ 25'34	29.28364 AU	conjunction	-4137 Sep 07 j 15:14	12° $\mathring{\text{O}}$ 38'30	2°03'49
direct	-4143 May 11 j 03:41	27° $\mathring{\text{O}}$ 02'07		minimum elong	-4137 Sep 07 j 15:14	12° $\mathring{\text{O}}$ 38'30	2°03'58
evening set	-4143 Aug 09 j 17:40	28° $\mathring{\text{O}}$ 58'28		max. Earth dist.	-4137 Sep 06 j 19:38	12° $\mathring{\text{O}}$ 36'40	31.30152 AU
max. Earth dist.	-4143 Aug 24 j 06:31	29° $\mathring{\text{O}}$ 30'55	31.28522 AU	morning rise	-4137 Sep 22 j 19:59	13° $\mathring{\text{O}}$ 12'34	
					-4137 Dec 01 j 00:49	15° $\mathring{\text{O}}$	
conjunction	-4143 Aug 25 j 04:37	29° $\mathring{\text{O}}$ 32'59	1°49'06	retrograde	-4137 Dec 18 j 16:28	15° $\mathring{\text{O}}$ 05'17	
minimum elong	-4143 Aug 25 j 04:37	29° $\mathring{\text{O}}$ 32'59	1°49'15		-4136 Jan 05 j 13:29	15° $\mathring{\text{R}}$ $\mathring{\text{O}}$	
	-4143 Sep 06 j 05:46	0° $\mathring{\text{O}}$		opposition	-4136 Mar 06 j 05:02	13° $\mathring{\text{O}}$ 43'28	2°13'16
morning rise	-4143 Sep 09 j 12:22	0° $\mathring{\text{O}}$ 07'14		min. Earth dist.	-4136 Mar 06 j 23:15	13° $\mathring{\text{O}}$ 42'14	29.30242 AU
retrograde	-4143 Dec 05 j 00:01	1° $\mathring{\text{O}}$ 59'26		direct	-4136 May 26 j 16:12	12° $\mathring{\text{O}}$ 18'59	
opposition	-4142 Feb 21 j 04:10	0° $\mathring{\text{O}}$ 37'42	1°58'04	evening set	-4136 Aug 24 j 17:47	14° $\mathring{\text{O}}$ 15'02	
min. Earth dist.	-4142 Feb 22 j 00:54	0° $\mathring{\text{O}}$ 36'17	29.28940 AU	max. Earth dist.	-4136 Sep 08 j 05:44	14° $\mathring{\text{O}}$ 47'30	31.29998 AU
	-4142 Mar 17 j 02:17	30° $\mathring{\text{R}}$ $\mathring{\text{O}}$					
direct	-4142 May 13 j 13:59	29° $\mathring{\text{O}}$ 12'55		conjunction	-4136 Sep 09 j 00:44	14° $\mathring{\text{O}}$ 49'17	2°05'40
	-4142 Jul 07 j 17:33	0° $\mathring{\text{O}}$		minimum elong	-4136 Sep 09 j 00:44	14° $\mathring{\text{O}}$ 49'17	2°05'49
evening set	-4142 Aug 12 j 04:07	1° $\mathring{\text{O}}$ 09'15			-4136 Sep 13 j 18:39	15° $\mathring{\text{O}}$	
				morning rise	-4136 Sep 24 j 05:04	15° $\mathring{\text{O}}$ 23'19	
conjunction	-4142 Aug 27 j 14:33	1° $\mathring{\text{O}}$ 43'44	1°51'58	retrograde	-4136 Dec 20 j 02:15	17° $\mathring{\text{O}}$ 16'06	
minimum elong	-4142 Aug 27 j 14:33	1° $\mathring{\text{O}}$ 43'44	1°52'08	opposition	-4135 Mar 08 j 17:22	15° $\mathring{\text{O}}$ 54'13	2°15'10
max. Earth dist.	-4142 Aug 26 j 17:49	1° $\mathring{\text{O}}$ 41'48	31.29076 AU	min. Earth dist.	-4135 Mar 09 j 11:55	15° $\mathring{\text{O}}$ 52'57	29.30071 AU
morning rise	-4142 Sep 11 j 21:39	2° $\mathring{\text{O}}$ 17'57			-4135 Apr 13 j 22:15	15° $\mathring{\text{R}}$ $\mathring{\text{O}}$	
retrograde	-4142 Dec 07 j 10:35	4° $\mathring{\text{O}}$ 10'15		direct	-4135 May 29 j 03:26	14° $\mathring{\text{O}}$ 29'44	
opposition	-4141 Feb 23 j 16:15	2° $\mathring{\text{O}}$ 48'32	2°01'03		-4135 Jul 11 j 18:37	15° $\mathring{\text{O}}$	
min. Earth dist.	-4141 Feb 24 j 12:35	2° $\mathring{\text{O}}$ 47'10	29.29462 AU	evening set	-4135 Aug 27 j 03:35	16° $\mathring{\text{O}}$ 25'42	
direct	-4141 May 16 j 02:12	1° $\mathring{\text{O}}$ 23'51					
evening set	-4141 Aug 14 j 14:34	3° $\mathring{\text{O}}$ 20'10		conjunction	-4135 Sep 11 j 10:03	16° $\mathring{\text{O}}$ 59'54	2°07'21
max. Earth dist.	-4141 Aug 29 j 02:54	3° $\mathring{\text{O}}$ 52'36	31.29555 AU	minimum elong	-4135 Sep 11 j 10:03	16° $\mathring{\text{O}}$ 59'54	2°07'29
				max. Earth dist.	-4135 Sep 10 j 16:08	16° $\mathring{\text{O}}$ 58'13	31.29816 AU
conjunction	-4141 Aug 30 j 00:13	3° $\mathring{\text{O}}$ 54'37	1°54'40	morning rise	-4135 Sep 26 j 13:57	17° $\mathring{\text{O}}$ 33'54	
minimum elong	-4141 Aug 30 j 00:13	3° $\mathring{\text{O}}$ 54'37	1°54'49	retrograde	-4135 Dec 22 j 11:27	19° $\mathring{\text{O}}$ 26'45	
morning rise	-4141 Sep 14 j 06:56	4° $\mathring{\text{O}}$ 28'48		opposition	-4134 Mar 11 j 05:38	18° $\mathring{\text{O}}$ 04'48	2°16'51
retrograde	-4141 Dec 09 j 22:25	6° $\mathring{\text{O}}$ 21'12		min. Earth dist.	-4134 Mar 11 j 22:37	18° $\mathring{\text{O}}$ 03'39	29.29891 AU
opposition	-4140 Feb 26 j 04:18	4° $\mathring{\text{O}}$ 59'30	2°03'51	direct	-4134 May 31 j 16:16	16° $\mathring{\text{O}}$ 40'20	
min. Earth dist.	-4140 Feb 27 j 00:01	4° $\mathring{\text{O}}$ 58'10	29.29900 AU	evening set	-4134 Aug 29 j 13:23	18° $\mathring{\text{O}}$ 36'11	
direct	-4140 May 17 j 12:27	3° $\mathring{\text{O}}$ 34'53					
evening set	-4140 Aug 16 j 00:57	5° $\mathring{\text{O}}$ 31'11		conjunction	-4134 Sep 13 j 19:16	19° $\mathring{\text{O}}$ 10'22	2°08'50
				minimum elong	-4134 Sep 13 j 19:16	19° $\mathring{\text{O}}$ 10'22	2°08'58
conjunction	-4140 Aug 31 j 10:10	6° $\mathring{\text{O}}$ 05'35	1°57'13	max. Earth dist.	-4134 Sep 13 j 01:36	19° $\mathring{\text{O}}$ 08'42	31.29658 AU
minimum elong	-4140 Aug 31 j 10:10	6° $\mathring{\text{O}}$ 05'35	1°57'22	morning rise	-4134 Sep 28 j 22:52	19° $\mathring{\text{O}}$ 44'20	
max. Earth dist.	-4140 Aug 30 j 14:09	6° $\mathring{\text{O}}$ 03'42	31.29916 AU	retrograde	-4134 Dec 24 j 21:50	21° $\mathring{\text{O}}$ 37'16	
morning rise	-4140 Sep 15 j 16:11	6° $\mathring{\text{O}}$ 39'44		opposition	-4133 Mar 13 j 18:01	20° $\mathring{\text{O}}$ 15'15	2°18'21
retrograde	-4140 Dec 11 j 08:48	8° $\mathring{\text{O}}$ 32'14		min. Earth dist.	-4133 Mar 14 j 10:29	20° $\mathring{\text{O}}$ 14'08	29.29786 AU
opposition	-4139 Feb 27 j 16:23	7° $\mathring{\text{O}}$ 10'32	2°06'29	direct	-4133 Jun 03 j 02:22	18° $\mathring{\text{O}}$ 50'48	
min. Earth dist.	-4139 Feb 28 j 12:31	7° $\mathring{\text{O}}$ 09'10	29.30193 AU	evening set	-4133 Aug 31 j 22:53	20° $\mathring{\text{O}}$ 46'34	
direct	-4139 May 20 j 02:01	5° $\mathring{\text{O}}$ 45'58					
evening set	-4139 Aug 18 j 11:27	7° $\mathring{\text{O}}$ 42'14		conjunction	-4133 Sep 16 j 04:27	21° $\mathring{\text{O}}$ 20'43	2°10'09
				minimum elong	-4133 Sep 16 j 04:27	21° $\mathring{\text{O}}$ 20'43	2°10'16
conjunction	-4139 Sep 02 j 19:55	8° $\mathring{\text{O}}$ 16'36	1°59'35	max. Earth dist.	-4133 Sep 15 j 12:45	21° $\mathring{\text{O}}$ 19'14	31.29593 AU
minimum elong	-4139 Sep 02 j 19:55	8° $\mathring{\text{O}}$ 16'36	1°59'44	morning rise	-4133 Oct 01 j 07:36	21° $\mathring{\text{O}}$ 54'40	
max. Earth dist.	-4139 Sep 01 j 23:09	8° $\mathring{\text{O}}$ 14'39	31.30138 AU	retrograde	-4133 Dec 27 j 07:27	23° $\mathring{\text{O}}$ 47'42	
morning rise	-4139 Sep 18 j 01:36	8° $\mathring{\text{O}}$ 50'42		opposition	-4132 Mar 15 j 06:22	22° $\mathring{\text{O}}$ 25'38	2°19'39
retrograde	-4139 Dec 13 j 21:25	10° $\mathring{\text{O}}$ 43'18		min. Earth dist.	-4132 Mar 15 j 21:48	22° $\mathring{\text{O}}$ 24'35	29.29758 AU
opposition	-4138 Mar 02 j 04:34	9° $\mathring{\text{O}}$ 21'34	2°08'56	direct	-4132 Jun 04 j 13:48	21° $\mathring{\text{O}}$ 01'14	
min. Earth dist.	-4138 Mar 02 j 23:33	9° $\mathring{\text{O}}$ 20'17	29.30344 AU	evening set	-4132 Sep 02 j 08:34	22° $\mathring{\text{O}}$ 56'56	
direct	-4138 May 22 j 14:51	7° $\mathring{\text{O}}$ 57'03					
evening set	-4138 Aug 20 j 21:37	9° $\mathring{\text{O}}$ 53'16		conjunction	-4132 Sep 17 j 13:33	23° $\mathring{\text{O}}$ 31'03	2°11'16
max. Earth dist.	-4138 Sep 04 j 10:00	10° $\mathring{\text{O}}$ 25'45	31.30205 AU	minimum elong	-4132 Sep 17 j 13:33	23° $\mathring{\text{O}}$ 31'03	2°11'23
				max. Earth dist.	-4132 Sep 16 j 21:46	23° $\mathring{\text{O}}$ 29'33	31.29614 AU
conjunction	-4138 Sep 05 j 05:39	10° $\mathring{\text{O}}$ 27'35	2°01'48	morning rise	-4132 Oct 02 j 16:32	24° $\mathring{\text{O}}$ 04'59	
minimum elong	-4138 Sep 05 j 05:39	10° $\mathring{\text{O}}$ 27'35	2°01'57	retrograde	-4132 Dec 28 j 19:16	25° $\mathring{\text{O}}$ 58'07	
morning rise	-4138 Sep 20 j 10:43	11° $\mathring{\text{O}}$ 01'40		opposition	-4131 Mar 17 j 18:35	24° $\mathring{\text{O}}$ 36'01	2°20'45
retrograde	-4138 Dec 16 j 06:48	12° $\mathring{\text{O}}$ 54'21		min. Earth dist.	-4131 Mar 18 j 08:45	24° $\mathring{\text{O}}$ 35'03	29.29826 AU
opposition	-4137 Mar 04 j 16:58	11° $\mathring{\text{O}}$ 32'35	2°11'12	direct	-4131 Jun 06 j 23:40	23° $\mathring{\text{O}}$ 11'41	
min. Earth dist.	-4137 Mar 05 j 12:38	11° $\mathring{\text{O}}$ 31'15	29.30349 AU	evening set	-4131 Sep 04 j 18:03	25° $\mathring{\text{O}}$ 07'19	

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Attention, astronomical year style is used: The year -4131 in astronomical counting style is the year 4132 BCE in historical counting style.

conjunction	-4131 Sep 19 j 22:47	25°041'25	2°12'12	max. Earth dist.	-4125 Oct 02 j 18:55	8°044'17	31.29343 AU
minimum elong	-4131 Sep 19 j 22:47	25°041'25	2°12'18	morning rise	-4125 Oct 18 j 07:08	9°041'10	
max. Earth dist.	-4131 Sep 19 j 08:59	25°040'06	31.29709 AU	retrograde	-4124 Jan 13 j 23:51	11°041'09	
morning rise	-4131 Oct 05 j 01:19	26°015'20		opposition	-4124 Apr 02 j 11:18	9°050'48	2°22'44
retrograde	-4131 Dec 31 j 05:59	28°008'35		min. Earth dist.	-4124 Apr 02 j 20:57	9°050'09	29.29296 AU
opposition	-4130 Mar 20 j 07:09	26°046'28	2°21'38	direct	-4124 Jun 22 j 10:41	8°026'55	
min. Earth dist.	-4130 Mar 20 j 21:02	26°045'31	29.29938 AU	evening set	-4124 Sep 19 j 12:03	10°022'01	
direct	-4130 Jun 09 j 12:15	25°022'13					
evening set	-4130 Sep 07 j 03:32	27°017'48		conjunction	-4124 Oct 04 j 14:43	10°055'59	2°13'23
				minimum elong	-4124 Oct 04 j 14:43	10°055'59	2°13'27
conjunction	-4130 Sep 22 j 07:44	27°051'51	2°12'56	max. Earth dist.	-4124 Oct 04 j 05:48	10°055'09	31.28885 AU
minimum elong	-4130 Sep 22 j 07:44	27°051'51	2°13'03	morning rise	-4124 Oct 19 j 16:04	11°029'52	
max. Earth dist.	-4130 Sep 21 j 17:56	27°050'33	31.29839 AU	retrograde	-4123 Jan 15 j 09:26	13°023'57	
morning rise	-4130 Oct 07 j 10:10	28°025'46		opposition	-4123 Apr 04 j 24:00	12°001'31	2°22'12
	-4130 Nov 29 j 21:44	0°000'00		min. Earth dist.	-4123 Apr 05 j 08:53	12°000'55	29.28785 AU
retrograde	-4129 Jan 02 j 18:52	0°019'09		direct	-4123 Jun 24 j 22:22	10°037'40	
	-4129 Feb 06 j 13:50	30°000'00		evening set	-4123 Sep 21 j 21:20	12°032'39	
opposition	-4129 Mar 22 j 19:40	28°057'00	2°22'20				
min. Earth dist.	-4129 Mar 23 j 07:51	28°056'11	29.30064 AU	conjunction	-4123 Oct 06 j 23:39	13°006'37	2°12'48
direct	-4129 Jun 11 j 23:47	27°032'50		minimum elong	-4123 Oct 06 j 23:39	13°006'37	2°12'51
evening set	-4129 Sep 09 j 12:59	29°028'22		max. Earth dist.	-4123 Oct 06 j 14:36	13°005'46	31.28360 AU
	-4129 Sep 23 j 15:29	0°000'00		morning rise	-4123 Oct 22 j 01:07	13°040'30	
				retrograde	-4122 Jan 17 j 21:31	15°034'41	
conjunction	-4129 Sep 24 j 16:57	0°002'24	2°13'29	opposition	-4122 Apr 07 j 12:48	14°012'10	2°21'28
minimum elong	-4129 Sep 24 j 16:57	0°002'24	2°13'35	min. Earth dist.	-4122 Apr 07 j 20:24	14°011'39	29.28257 AU
max. Earth dist.	-4129 Sep 24 j 04:34	0°001'14	31.29939 AU	direct	-4122 Jun 27 j 08:28	12°048'19	
morning rise	-4129 Oct 09 j 19:02	0°036'18		evening set	-4122 Sep 24 j 06:13	14°043'12	
retrograde	-4128 Jan 05 j 05:06	2°029'49					
opposition	-4128 Mar 24 j 08:14	1°007'39	2°22'49	conjunction	-4122 Oct 09 j 08:32	15°017'09	2°12'01
min. Earth dist.	-4128 Mar 24 j 20:51	1°006'48	29.30141 AU	minimum elong	-4122 Oct 09 j 08:33	15°017'09	2°12'04
	-4128 May 11 j 19:14	30°000'00		max. Earth dist.	-4122 Oct 09 j 01:34	15°016'30	31.27835 AU
direct	-4128 Jun 13 j 11:10	29°043'33		morning rise	-4122 Oct 24 j 09:51	15°051'03	
	-4128 Jul 15 j 08:35	0°000'00		retrograde	-4121 Jan 20 j 08:13	17°045'21	
evening set	-4128 Sep 10 j 22:32	1°039'01		opposition	-4121 Apr 10 j 01:42	16°022'44	2°20'33
				min. Earth dist.	-4121 Apr 10 j 08:46	16°022'16	29.27753 AU
conjunction	-4128 Sep 26 j 02:07	2°013'03	2°13'51	direct	-4121 Jun 29 j 20:40	14°058'56	
minimum elong	-4128 Sep 26 j 02:07	2°013'03	2°13'57	evening set	-4121 Sep 26 j 15:21	16°053'43	
max. Earth dist.	-4128 Sep 25 j 14:07	2°011'55	31.29980 AU				
morning rise	-4128 Oct 11 j 04:04	2°046'56		conjunction	-4121 Oct 11 j 17:25	17°027'40	2°11'03
retrograde	-4127 Jan 06 j 16:08	4°040'34		minimum elong	-4121 Oct 11 j 17:25	17°027'40	2°11'05
opposition	-4127 Mar 26 j 20:51	3°018'23	2°23'06	max. Earth dist.	-4121 Oct 11 j 10:45	17°027'02	31.27376 AU
min. Earth dist.	-4127 Mar 27 j 07:49	3°017'38	29.30123 AU	morning rise	-4121 Oct 26 j 18:52	18°001'34	
direct	-4127 Jun 16 j 00:14	1°054'21		retrograde	-4120 Jan 22 j 21:12	19°055'58	
evening set	-4127 Sep 13 j 07:59	3°049'45		opposition	-4120 Apr 11 j 14:16	18°033'18	2°19'25
				min. Earth dist.	-4120 Apr 11 j 19:18	18°032'58	29.27335 AU
conjunction	-4127 Sep 28 j 11:15	4°023'46	2°14'01	direct	-4120 Jul 01 j 07:24	17°009'32	
minimum elong	-4127 Sep 28 j 11:15	4°023'46	2°14'06	evening set	-4120 Sep 28 j 00:19	19°004'15	
max. Earth dist.	-4127 Sep 27 j 23:46	4°022'41	31.29894 AU				
morning rise	-4127 Oct 13 j 12:59	4°057'39		conjunction	-4120 Oct 13 j 02:23	19°038'12	2°09'54
retrograde	-4126 Jan 09 j 03:08	6°051'24		minimum elong	-4120 Oct 13 j 02:23	19°038'12	2°09'57
opposition	-4126 Mar 29 j 09:43	5°029'11	2°23'11	max. Earth dist.	-4120 Oct 12 j 21:19	19°037'43	31.26999 AU
min. Earth dist.	-4126 Mar 29 j 20:58	5°028'25	29.29982 AU	morning rise	-4120 Oct 28 j 03:46	20°012'06	
direct	-4126 Jun 18 j 11:39	4°005'13		retrograde	-4119 Jan 24 j 07:49	22°006'39	
evening set	-4126 Sep 15 j 17:27	6°000'32		opposition	-4119 Apr 14 j 03:10	20°043'56	2°18'05
				min. Earth dist.	-4119 Apr 14 j 08:05	20°043'36	29.27003 AU
conjunction	-4126 Sep 30 j 20:30	6°034'32	2°14'00	direct	-4119 Jul 03 j 18:17	19°020'15	
minimum elong	-4126 Sep 30 j 20:30	6°034'32	2°14'05	evening set	-4119 Sep 30 j 09:12	21°014'52	
max. Earth dist.	-4126 Sep 30 j 10:03	6°033'32	31.29690 AU				
morning rise	-4126 Oct 15 j 22:03	7°008'25		conjunction	-4119 Oct 15 j 11:10	21°048'49	2°08'33
retrograde	-4125 Jan 11 j 13:01	9°002'16		minimum elong	-4119 Oct 15 j 11:10	21°048'49	2°08'35
opposition	-4125 Mar 31 j 22:29	7°040'00	2°23'03	max. Earth dist.	-4119 Oct 15 j 07:13	21°048'26	31.26719 AU
min. Earth dist.	-4125 Apr 01 j 08:21	7°039'20	29.29700 AU	morning rise	-4119 Oct 30 j 12:40	22°022'44	
direct	-4125 Jun 21 j 00:27	6°016'05		retrograde	-4118 Jan 26 j 19:36	24°017'25	
evening set	-4125 Sep 18 j 02:49	8°011'18		opposition	-4118 Apr 16 j 16:02	22°054'40	2°16'33
				min. Earth dist.	-4118 Apr 16 j 18:44	22°054'29	29.26745 AU
conjunction	-4125 Oct 03 j 05:33	8°045'17	2°13'47	direct	-4118 Jul 06 j 07:23	21°031'04	
minimum elong	-4125 Oct 03 j 05:33	8°045'17	2°13'51	evening set	-4118 Oct 02 j 18:11	23°025'37	

Attention, astronomical year style is used: The year -4118 in astronomical counting style is the year 4119 BCE in historical counting style.

conjunction	-4118 Oct 17 j 20:05	23° <u>00</u> 59'35	2°07'01	retrograde	-4111 Feb 11 j 03:37	9° <u>00</u> 36'32	
minimum elong	-4118 Oct 17 j 20:06	23° <u>00</u> 59'35	2°07'04	opposition	-4111 May 02 j 11:28	8° <u>00</u> 13'24	2°00'24
max. Earth dist.	-4118 Oct 17 j 16:57	23° <u>00</u> 59'17	31.26487 AU	min. Earth dist.	-4111 May 02 j 08:41	8° <u>00</u> 13'35	29.23501 AU
morning rise	-4118 Nov 01 j 21:44	24° <u>00</u> 33'32		direct	-4111 Jul 21 j 13:22	6° <u>00</u> 50'11	
retrograde	-4117 Jan 29 j 07:54	26° <u>00</u> 28'20		evening set	-4111 Oct 17 j 09:32	8° <u>00</u> 44'04	
opposition	-4117 Apr 19 j 05:01	25° <u>00</u> 05'34	2°14'48				
min. Earth dist.	-4117 Apr 19 j 07:37	25° <u>00</u> 05'23	29.26531 AU	conjunction	-4111 Nov 01 j 11:58	9° <u>00</u> 18'06	1°51'18
direct	-4117 Jul 08 j 18:32	23° <u>00</u> 42'04		minimum elong	-4111 Nov 01 j 11:59	9° <u>00</u> 18'06	1°51'17
evening set	-4117 Oct 05 j 03:03	25° <u>00</u> 36'32		max. Earth dist.	-4111 Nov 01 j 14:28	9° <u>00</u> 18'20	31.22937 AU
				morning rise	-4111 Nov 16 j 15:03	9° <u>00</u> 52'13	
conjunction	-4117 Oct 20 j 05:04	26° <u>00</u> 10'30	2°05'18	retrograde	-4110 Feb 13 j 14:48	11° <u>00</u> 47'54	
minimum elong	-4117 Oct 20 j 05:04	26° <u>00</u> 10'30	2°05'19	opposition	-4110 May 05 j 00:45	10° <u>00</u> 24'39	1°57'23
max. Earth dist.	-4117 Oct 20 j 03:28	26° <u>00</u> 10'21	31.26278 AU	min. Earth dist.	-4110 May 04 j 22:07	10° <u>00</u> 24'49	29.22589 AU
morning rise	-4117 Nov 04 j 06:46	26° <u>00</u> 44'29		direct	-4110 Jul 24 j 00:37	9° <u>00</u> 01'26	
retrograde	-4116 Jan 31 j 18:00	28° <u>00</u> 39'26		evening set	-4110 Oct 19 j 18:31	10° <u>00</u> 55'10	
opposition	-4116 Apr 20 j 17:56	27° <u>00</u> 16'38	2°12'53				
min. Earth dist.	-4116 Apr 20 j 18:54	27° <u>00</u> 16'34	29.26292 AU	conjunction	-4110 Nov 03 j 21:09	11° <u>00</u> 29'13	1°48'24
direct	-4116 Jul 10 j 06:58	25° <u>00</u> 53'13		minimum elong	-4110 Nov 03 j 21:09	11° <u>00</u> 29'13	1°48'23
evening set	-4116 Oct 06 j 12:09	27° <u>00</u> 47'37		max. Earth dist.	-4110 Nov 04 j 00:43	11° <u>00</u> 29'34	31.22025 AU
				morning rise	-4110 Nov 19 j 00:32	12° <u>00</u> 03'22	
conjunction	-4116 Oct 21 j 14:01	28° <u>00</u> 21'36	2°03'24	retrograde	-4109 Feb 16 j 03:16	13° <u>00</u> 59'08	
minimum elong	-4116 Oct 21 j 14:01	28° <u>00</u> 21'36	2°03'25	opposition	-4109 May 07 j 13:40	12° <u>00</u> 35'46	1°54'11
max. Earth dist.	-4116 Oct 21 j 12:22	28° <u>00</u> 21'26	31.26015 AU	min. Earth dist.	-4109 May 07 j 09:00	12° <u>00</u> 36'05	29.21670 AU
morning rise	-4116 Nov 05 j 15:59	28° <u>00</u> 55'36		direct	-4109 Jul 26 j 13:35	11° <u>00</u> 12'33	
	-4116 Dec 07 j 20:47	0° <u>00</u> 00'00		evening set	-4109 Oct 22 j 03:29	13° <u>00</u> 06'11	
retrograde	-4115 Feb 02 j 05:10	0° <u>00</u> 50'42					
	-4115 Apr 02 j 20:53	30° <u>00</u> 00'00		conjunction	-4109 Nov 06 j 06:14	13° <u>00</u> 40'15	1°45'20
opposition	-4115 Apr 23 j 06:58	29° <u>00</u> 27'52	2°10'45	minimum elong	-4109 Nov 06 j 06:15	13° <u>00</u> 40'15	1°45'17
min. Earth dist.	-4115 Apr 23 j 07:36	29° <u>00</u> 27'49	29.25995 AU	max. Earth dist.	-4109 Nov 06 j 10:26	13° <u>00</u> 40'39	31.21121 AU
direct	-4115 Jul 12 j 17:15	28° <u>00</u> 04'32		morning rise	-4109 Nov 21 j 10:03	14° <u>00</u> 14'26	
evening set	-4115 Oct 08 j 21:11	29° <u>00</u> 58'50		retrograde	-4108 Feb 18 j 15:48	16° <u>00</u> 10'17	
	-4115 Oct 09 j 09:44	0° <u>00</u> 00'00		opposition	-4108 May 09 j 02:46	14° <u>00</u> 46'49	1°50'50
conjunction	-4115 Oct 23 j 23:14	0° <u>00</u> 32'50	2°01'20	min. Earth dist.	-4108 May 08 j 21:55	14° <u>00</u> 47'09	29.20800 AU
minimum elong	-4115 Oct 23 j 23:14	0° <u>00</u> 32'50	2°01'20	direct	-4108 Jul 28 j 00:42	13° <u>00</u> 23'38	
max. Earth dist.	-4115 Oct 23 j 23:24	0° <u>00</u> 32'51	31.25670 AU	evening set	-4108 Oct 23 j 12:20	15° <u>00</u> 17'09	
morning rise	-4115 Nov 08 j 01:12	1° <u>00</u> 06'51		conjunction	-4108 Nov 07 j 15:24	15° <u>00</u> 51'15	1°42'07
retrograde	-4114 Feb 04 j 15:19	3° <u>00</u> 02'05		minimum elong	-4108 Nov 07 j 15:25	15° <u>00</u> 51'15	1°42'04
opposition	-4114 Apr 25 j 20:09	1° <u>00</u> 39'13	2°08'26	max. Earth dist.	-4108 Nov 07 j 21:26	15° <u>00</u> 51'49	31.20292 AU
min. Earth dist.	-4114 Apr 25 j 20:00	1° <u>00</u> 39'14	29.25580 AU	morning rise	-4108 Nov 22 j 19:25	16° <u>00</u> 25'28	
direct	-4114 Jul 15 j 05:03	0° <u>00</u> 15'57		retrograde	-4107 Feb 20 j 02:08	18° <u>00</u> 21'25	
evening set	-4114 Oct 11 j 06:19	2° <u>00</u> 10'10		opposition	-4107 May 11 j 15:41	16° <u>00</u> 57'53	1°47'18
				min. Earth dist.	-4107 May 11 j 08:51	16° <u>00</u> 58'21	29.20002 AU
conjunction	-4114 Oct 26 j 08:17	2° <u>00</u> 44'09	1°59'04	direct	-4107 Jul 30 j 13:15	15° <u>00</u> 34'44	
minimum elong	-4114 Oct 26 j 08:17	2° <u>00</u> 44'10	1°59'04	evening set	-4107 Oct 25 j 21:22	17° <u>00</u> 28'10	
max. Earth dist.	-4114 Oct 26 j 08:08	2° <u>00</u> 44'09	31.25199 AU				
morning rise	-4114 Nov 10 j 10:39	3° <u>00</u> 18'12		conjunction	-4107 Nov 10 j 00:31	18° <u>00</u> 02'17	1°38'45
retrograde	-4113 Feb 07 j 04:05	5° <u>00</u> 13'35		minimum elong	-4107 Nov 10 j 00:32	18° <u>00</u> 02'17	1°38'41
opposition	-4113 Apr 28 j 09:19	3° <u>00</u> 50'38	2°05'56	max. Earth dist.	-4107 Nov 10 j 06:44	18° <u>00</u> 02'52	31.19550 AU
min. Earth dist.	-4113 Apr 28 j 08:11	3° <u>00</u> 50'43	29.25037 AU	morning rise	-4107 Nov 25 j 05:03	18° <u>00</u> 36'32	
direct	-4113 Jul 17 j 15:23	2° <u>00</u> 27'24		retrograde	-4106 Feb 22 j 14:06	20° <u>00</u> 32'38	
evening set	-4113 Oct 13 j 15:26	4° <u>00</u> 21'31		opposition	-4106 May 14 j 04:47	19° <u>00</u> 09'02	1°43'38
				min. Earth dist.	-4106 May 13 j 21:14	19° <u>00</u> 09'32	29.19306 AU
conjunction	-4113 Oct 28 j 17:39	4° <u>00</u> 55'31	1°56'39	direct	-4106 Aug 01 j 23:40	17° <u>00</u> 45'56	
minimum elong	-4113 Oct 28 j 17:40	4° <u>00</u> 55'31	1°56'38	evening set	-4106 Oct 28 j 06:12	19° <u>00</u> 39'17	
max. Earth dist.	-4113 Oct 28 j 18:58	4° <u>00</u> 55'39	31.24576 AU				
morning rise	-4113 Nov 12 j 20:07	5° <u>00</u> 29'36		conjunction	-4106 Nov 12 j 09:48	20° <u>00</u> 13'26	1°35'14
retrograde	-4112 Feb 09 j 14:40	7° <u>00</u> 25'05		minimum elong	-4106 Nov 12 j 09:49	20° <u>00</u> 13'26	1°35'11
opposition	-4112 Apr 29 j 22:23	6° <u>00</u> 02'03	2°03'15	max. Earth dist.	-4106 Nov 12 j 18:13	20° <u>00</u> 14'14	31.18894 AU
min. Earth dist.	-4112 Apr 29 j 21:13	6° <u>00</u> 02'08	29.24331 AU	morning rise	-4106 Nov 27 j 14:36	20° <u>00</u> 47'44	
direct	-4112 Jul 19 j 02:52	4° <u>00</u> 38'50		retrograde	-4105 Feb 25 j 00:41	22° <u>00</u> 43'58	
evening set	-4112 Oct 15 j 00:37	6° <u>00</u> 32'50		opposition	-4105 May 16 j 17:49	21° <u>00</u> 20'20	1°39'47
				min. Earth dist.	-4105 May 16 j 09:11	21° <u>00</u> 20'55	29.18663 AU
conjunction	-4112 Oct 30 j 02:52	7° <u>00</u> 06'51	1°54'03	direct	-4105 Aug 04 j 11:29	19° <u>00</u> 57'18	
minimum elong	-4112 Oct 30 j 02:52	7° <u>00</u> 06'51	1°54'03	evening set	-4105 Oct 30 j 15:20	21° <u>00</u> 50'35	
max. Earth dist.	-4112 Oct 30 j 04:08	7° <u>00</u> 06'59	31.23816 AU				
morning rise	-4112 Nov 14 j 05:42	7° <u>00</u> 40'57		conjunction	-4105 Nov 14 j 19:04	22° <u>00</u> 24'46	1°31'34

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Attention, astronomical year style is used: The year -4105 in astronomical counting style is the year 4106 BCE in historical counting style.

minimum elong	-4105 Nov 14 j 19:04	22° <u>♂</u> 24'46	1°31'30	opposition	-4098 Jun 01 j 13:30	6° <u>♂</u> 44'07	1°09'07
max. Earth dist.	-4105 Nov 15 j 03:27	22° <u>♂</u> 25'34	31.18282 AU	min. Earth dist.	-4098 May 31 j 23:44	6° <u>♂</u> 45'03	29.12756 AU
morning rise	-4105 Nov 30 j 00:25	22° <u>♂</u> 59'07		direct	-4098 Aug 19 j 16:25	5° <u>♂</u> 21'20	
retrograde	-4104 Feb 27 j 13:35	24° <u>♂</u> 55'29		evening set	-4098 Nov 14 j 08:36	7° <u>♂</u> 14'07	
opposition	-4104 May 18 j 06:42	23° <u>♂</u> 31'49	1°35'48				
min. Earth dist.	-4104 May 17 j 20:55	23° <u>♂</u> 32'29	29.18058 AU	conjunction	-4098 Nov 29 j 14:45	7° <u>♂</u> 48'32	1°02'29
direct	-4104 Aug 05 j 21:16	22° <u>♂</u> 08'52		minimum elong	-4098 Nov 29 j 14:46	7° <u>♂</u> 48'32	1°02'23
evening set	-4104 Nov 01 j 00:24	24° <u>♂</u> 02'06		max. Earth dist.	-4098 Nov 30 j 03:49	7° <u>♂</u> 49'46	31.12120 AU
				morning rise	-4098 Dec 14 j 23:28	8° <u>♂</u> 23'12	
conjunction	-4104 Nov 16 j 04:33	24° <u>♂</u> 36'19	1°27'46	retrograde	-4097 Mar 15 j 05:38	10° <u>♂</u> 20'23	
minimum elong	-4104 Nov 16 j 04:34	24° <u>♂</u> 36'19	1°27'43	opposition	-4097 Jun 04 j 02:33	8° <u>♂</u> 56'12	1°04'17
max. Earth dist.	-4104 Nov 16 j 14:38	24° <u>♂</u> 37'16	31.17670 AU	min. Earth dist.	-4097 Jun 03 j 12:31	8° <u>♂</u> 57'09	29.11569 AU
morning rise	-4104 Dec 01 j 10:12	25° <u>♂</u> 10'42		direct	-4097 Aug 22 j 03:56	7° <u>♂</u> 33'23	
retrograde	-4103 Mar 01 j 00:32	27° <u>♂</u> 07'14		evening set	-4097 Nov 16 j 17:59	9° <u>♂</u> 26'04	
opposition	-4103 May 20 j 19:53	25° <u>♂</u> 43'32	1°31'40				
min. Earth dist.	-4103 May 20 j 09:52	25° <u>♂</u> 44'13	29.17423 AU	conjunction	-4097 Dec 02 j 00:41	10° <u>♂</u> 00'32	0°57'55
direct	-4103 Aug 08 j 08:01	24° <u>♂</u> 20'40		minimum elong	-4097 Dec 02 j 00:42	10° <u>♂</u> 00'32	0°57'47
evening set	-4103 Nov 03 j 09:34	26° <u>♂</u> 13'50		max. Earth dist.	-4097 Dec 02 j 15:43	10° <u>♂</u> 01'57	31.10939 AU
				morning rise	-4097 Dec 17 j 09:43	10° <u>♂</u> 35'14	
conjunction	-4103 Nov 18 j 13:56	26° <u>♂</u> 48'04	1°23'51	retrograde	-4096 Mar 16 j 16:33	12° <u>♂</u> 32'29	
minimum elong	-4103 Nov 18 j 13:57	26° <u>♂</u> 48'05	1°23'46	opposition	-4096 Jun 05 j 15:19	11° <u>♂</u> 08'12	0°59'22
max. Earth dist.	-4103 Nov 19 j 00:15	26° <u>♂</u> 49'03	31.17024 AU	min. Earth dist.	-4096 Jun 05 j 00:19	11° <u>♂</u> 09'13	29.10408 AU
morning rise	-4103 Dec 03 j 20:07	27° <u>♂</u> 22'31		direct	-4096 Aug 23 j 16:44	9° <u>♂</u> 45'22	
retrograde	-4102 Mar 03 j 14:03	29° <u>♂</u> 19'11		evening set	-4096 Nov 18 j 03:31	11° <u>♂</u> 37'58	
opposition	-4102 May 23 j 09:01	27° <u>♂</u> 55'27	1°27'24				
min. Earth dist.	-4102 May 22 j 21:25	27° <u>♂</u> 56'14	29.16733 AU	conjunction	-4096 Dec 03 j 10:29	12° <u>♂</u> 12'27	0°53'16
direct	-4102 Aug 10 j 17:39	26° <u>♂</u> 32'38		minimum elong	-4096 Dec 03 j 10:29	12° <u>♂</u> 12'27	0°53'09
evening set	-4102 Nov 05 j 18:56	28° <u>♂</u> 25'45		max. Earth dist.	-4096 Dec 04 j 01:32	12° <u>♂</u> 13'52	31.09829 AU
				morning rise	-4096 Dec 18 j 20:10	12° <u>♂</u> 47'12	
conjunction	-4102 Nov 20 j 23:39	29° <u>♂</u> 00'02	1°19'47	retrograde	-4095 Mar 19 j 04:54	14° <u>♂</u> 44'32	
minimum elong	-4102 Nov 20 j 23:40	29° <u>♂</u> 00'02	1°19'43	min. Earth dist.	-4095 Jun 07 j 12:00	13° <u>♂</u> 21'15	29.09351 AU
max. Earth dist.	-4102 Nov 21 j 10:49	29° <u>♂</u> 01'05	31.16279 AU	opposition	-4095 Jun 08 j 04:14	13° <u>♂</u> 20'09	0°54'21
morning rise	-4102 Dec 06 j 06:16	29° <u>♂</u> 34'31		direct	-4095 Aug 26 j 03:00	11° <u>♂</u> 57'19	
	-4102 Dec 18 j 01:36	0° <u>♂</u>		evening set	-4095 Nov 20 j 12:52	13° <u>♂</u> 49'50	
retrograde	-4101 Mar 06 j 02:13	1° <u>♂</u> 31'20					
opposition	-4101 May 25 j 22:11	0° <u>♂</u> 07'32	1°23'00	conjunction	-4095 Dec 05 j 20:21	14° <u>♂</u> 24'21	0°48'32
min. Earth dist.	-4101 May 25 j 11:04	0° <u>♂</u> 08'18	29.15931 AU	minimum elong	-4095 Dec 05 j 20:21	14° <u>♂</u> 24'21	0°48'24
	-4101 May 30 j 13:35	30° <u>♂</u> 4		max. Earth dist.	-4095 Dec 06 j 13:11	14° <u>♂</u> 25'57	31.08823 AU
direct	-4101 Aug 13 j 04:05	28° <u>♂</u> 44'46		morning rise	-4095 Dec 21 j 06:28	14° <u>♂</u> 59'09	
	-4101 Oct 21 j 06:54	0° <u>♂</u>			-4095 Dec 21 j 15:40	15° <u>♂</u>	
evening set	-4101 Nov 08 j 04:20	0° <u>♂</u> 37'49		retrograde	-4094 Mar 21 j 14:57	16° <u>♂</u> 56'35	
				opposition	-4094 Jun 10 j 17:10	15° <u>♂</u> 32'07	0°49'15
conjunction	-4101 Nov 23 j 09:28	1° <u>♂</u> 12'08	1°15'37	min. Earth dist.	-4094 Jun 10 j 00:28	15° <u>♂</u> 33'16	29.08401 AU
minimum elong	-4101 Nov 23 j 09:29	1° <u>♂</u> 12'08	1°15'32		-4094 Jun 30 j 20:48	15° <u>♂</u>	
max. Earth dist.	-4101 Nov 23 j 21:21	1° <u>♂</u> 13'15	31.15423 AU	direct	-4094 Aug 28 j 14:10	14° <u>♂</u> 09'18	
morning rise	-4101 Dec 08 j 16:31	1° <u>♂</u> 46'39			-4094 Oct 23 j 03:03	15° <u>♂</u>	
retrograde	-4100 Mar 07 j 16:01	3° <u>♂</u> 43'35		evening set	-4094 Nov 22 j 22:29	16° <u>♂</u> 01'45	
opposition	-4100 May 27 j 11:14	2° <u>♂</u> 19'44	1°18'29				
min. Earth dist.	-4100 May 26 j 22:34	2° <u>♂</u> 20'35	29.14992 AU	conjunction	-4094 Dec 08 j 06:23	16° <u>♂</u> 36'19	0°43'44
direct	-4100 Aug 14 j 16:45	0° <u>♂</u> 56'58		minimum elong	-4094 Dec 08 j 06:23	16° <u>♂</u> 36'19	0°43'37
evening set	-4100 Nov 09 j 13:47	2° <u>♂</u> 49'57		max. Earth dist.	-4094 Dec 08 j 23:40	16° <u>♂</u> 37'57	31.07943 AU
				morning rise	-4094 Dec 23 j 17:05	17° <u>♂</u> 11'09	
conjunction	-4100 Nov 24 j 19:09	3° <u>♂</u> 24'18	1°11'20	retrograde	-4093 Mar 24 j 04:19	19° <u>♂</u> 08'41	
minimum elong	-4100 Nov 24 j 19:10	3° <u>♂</u> 24'18	1°11'15	min. Earth dist.	-4093 Jun 12 j 11:23	17° <u>♂</u> 45'25	29.07572 AU
max. Earth dist.	-4100 Nov 25 j 07:01	3° <u>♂</u> 25'25	31.14414 AU	opposition	-4093 Jun 13 j 05:49	17° <u>♂</u> 44'10	0°44'04
morning rise	-4100 Dec 10 j 02:47	3° <u>♂</u> 58'52		direct	-4093 Aug 30 j 23:52	16° <u>♂</u> 21'22	
retrograde	-4099 Mar 10 j 05:32	5° <u>♂</u> 55'54		evening set	-4093 Nov 25 j 08:10	18° <u>♂</u> 13'47	
opposition	-4099 May 30 j 00:29	4° <u>♂</u> 31'57	1°13'51				
min. Earth dist.	-4099 May 29 j 12:11	4° <u>♂</u> 32'47	29.13921 AU	conjunction	-4093 Dec 10 j 16:28	18° <u>♂</u> 48'22	0°38'51
direct	-4099 Aug 17 j 03:36	3° <u>♂</u> 09'11		minimum elong	-4093 Dec 10 j 16:28	18° <u>♂</u> 48'22	0°38'43
evening set	-4099 Nov 11 j 23:09	5° <u>♂</u> 02'04		max. Earth dist.	-4093 Dec 11 j 10:45	18° <u>♂</u> 50'06	31.07155 AU
				morning rise	-4093 Dec 26 j 03:44	19° <u>♂</u> 23'16	
conjunction	-4099 Nov 27 j 05:04	5° <u>♂</u> 36'27	1°06'57	retrograde	-4092 Mar 25 j 16:05	21° <u>♂</u> 20'54	
minimum elong	-4099 Nov 27 j 05:04	5° <u>♂</u> 36'27	1°06'51	opposition	-4092 Jun 14 j 18:42	19° <u>♂</u> 56'21	0°38'49
max. Earth dist.	-4099 Nov 27 j 18:21	5° <u>♂</u> 37'43	31.13301 AU	min. Earth dist.	-4092 Jun 14 j 00:30	19° <u>♂</u> 57'35	29.06823 AU
morning rise	-4099 Dec 12 j 13:03	6° <u>♂</u> 11'04		direct	-4092 Sep 01 j 09:56	18° <u>♂</u> 33'35	
retrograde	-4098 Mar 12 j 16:41	8° <u>♂</u> 08'10		evening set	-4092 Nov 26 j 17:47	20° <u>♂</u> 25'58	

Attention, astronomical year style is used: The year -4092 in astronomical counting style is the year 4093 BCE in historical counting style.

conjunction	-4092 Dec 12 j 02:36	21°M.00'35	0°33'55	evening set	-4086 Dec 10 j 07:17	3°♂42'32	
minimum elong	-4092 Dec 12 j 02:36	21°M.00'35	0°33'47				
max. Earth dist.	-4092 Dec 12 j 22:02	21°M.02'26	31.06447 AU	conjunction	-4086 Dec 25 j 18:49	4°♂17'24	0°03'27
morning rise	-4092 Dec 27 j 14:19	21°M.35'31		minimum elong	-4086 Dec 25 j 18:50	4°♂17'24	0°03'18
retrograde	-4091 Mar 28 j 05:43	23°M.33'17		behind sun begin	-4086 Dec 25 j 12:25	4°♂16'49	
min. Earth dist.	-4091 Jun 16 j 11:35	22°M.10'03	29.06126 AU	behind sun end	-4086 Dec 26 j 01:14	4°♂17'58	
opposition	-4091 Jun 17 j 07:29	22°M.08'42	0°33'31	max. Earth dist.	-4086 Dec 26 j 16:42	4°♂19'28	31.01263 AU
direct	-4091 Sep 03 j 21:21	20°M.45'58		morning rise	-4085 Jan 10 j 09:49	4°♂52'37	
evening set	-4091 Nov 29 j 03:47	22°M.38'20		retrograde	-4085 Apr 11 j 11:02	6°♂50'54	
				opposition	-4085 Jul 01 j 12:13	5°♂26'01	0°00'48
conjunction	-4091 Dec 14 j 12:54	23°M.13'00	0°28'55	min. Earth dist.	-4085 Jun 30 j 15:16	5°♂27'27	29.00726 AU
minimum elong	-4091 Dec 14 j 12:54	23°M.13'00	0°28'47	desc. node	-4085 Aug 23 j 13:44	4°♂13'47	
max. Earth dist.	-4091 Dec 15 j 08:23	23°M.14'50	31.05756 AU	direct	-4085 Sep 17 j 17:30	4°♂03'18	
morning rise	-4091 Dec 30 j 01:17	23°M.47'59		evening set	-4085 Dec 12 j 17:48	5°♂55'31	
retrograde	-4090 Mar 30 j 19:25	25°M.45'51					
opposition	-4090 Jun 19 j 20:23	24°M.21'14	0°28'08	conjunction	-4085 Dec 28 j 05:48	6°♂30'25	-0°01'49
min. Earth dist.	-4090 Jun 19 j 00:57	24°M.22'34	29.05438 AU	minimum elong	-4085 Dec 28 j 05:47	6°♂30'25	0°01'59
direct	-4090 Sep 06 j 06:55	22°M.58'33		behind sun begin	-4085 Dec 27 j 23:20	6°♂29'50	
evening set	-4090 Dec 01 j 13:46	24°M.50'54		behind sun end	-4085 Dec 28 j 12:14	6°♂31'00	
				max. Earth dist.	-4085 Dec 29 j 03:41	6°♂32'29	31.00154 AU
conjunction	-4090 Dec 16 j 23:30	25°M.25'37	0°23'53	morning rise	-4084 Jan 12 j 21:21	7°♂05'40	
minimum elong	-4090 Dec 16 j 23:30	25°M.25'37	0°23'44	retrograde	-4084 Apr 13 j 00:47	9°♂04'00	
max. Earth dist.	-4090 Dec 17 j 20:19	25°M.27'35	31.05050 AU	min. Earth dist.	-4084 Jul 02 j 02:32	7°♂40'35	28.99629 AU
morning rise	-4089 Jan 01 j 12:16	26°M.00'38		opposition	-4084 Jul 03 j 00:46	7°♂39'03	-0°04'43
retrograde	-4089 Apr 02 j 08:15	27°M.58'37		direct	-4084 Sep 19 j 03:53	6°♂16'17	
opposition	-4089 Jun 22 j 09:08	26°M.33'59	0°22'44	evening set	-4084 Dec 14 j 04:16	8°♂08'29	
min. Earth dist.	-4089 Jun 21 j 12:32	26°M.35'23	29.04691 AU				
direct	-4089 Sep 08 j 19:21	25°M.11'19		conjunction	-4084 Dec 29 j 16:39	8°♂43'25	-0°06'58
evening set	-4089 Dec 04 j 00:09	27°M.03'40		minimum elong	-4084 Dec 29 j 16:39	8°♂43'25	0°07'08
				behind sun begin	-4084 Dec 29 j 10:41	8°♂42'53	
conjunction	-4089 Dec 19 j 10:08	27°M.38'25	0°18'48	behind sun end	-4084 Dec 29 j 22:36	8°♂43'57	
minimum elong	-4089 Dec 19 j 10:08	27°M.38'25	0°18'39	max. Earth dist.	-4084 Dec 30 j 15:16	8°♂45'33	30.99073 AU
max. Earth dist.	-4089 Dec 20 j 06:13	27°M.40'18	31.04259 AU	morning rise	-4083 Jan 14 j 08:45	9°♂18'43	
morning rise	-4088 Jan 03 j 23:35	28°M.13'29		retrograde	-4083 Apr 15 j 11:48	11°♂17'07	
	-4088 Mar 08 j 03:15	0°♂		opposition	-4083 Jul 05 j 13:26	9°♂52'05	-0°10'13
retrograde	-4088 Apr 03 j 22:48	0°♂11'34		min. Earth dist.	-4083 Jul 04 j 15:36	9°♂53'36	28.98598 AU
	-4088 May 01 j 02:27	30°K.M.		direct	-4083 Sep 21 j 14:17	8°♂29'18	
opposition	-4088 Jun 23 j 21:57	28°M.46'53	0°17'16	evening set	-4083 Dec 16 j 14:52	10°♂21'29	
min. Earth dist.	-4088 Jun 23 j 01:36	28°M.48'16	29.03854 AU				
direct	-4088 Sep 10 j 06:22	27°M.24'14		conjunction	-4082 Jan 01 j 03:48	10°♂56'27	-0°12'05
evening set	-4088 Dec 05 j 10:26	29°M.16'33		minimum elong	-4082 Jan 01 j 03:48	10°♂56'27	0°12'15
				behind sun begin	-4083 Dec 31 j 23:28	10°♂56'03	
conjunction	-4088 Dec 20 j 21:02	29°M.51'21	0°13'42	behind sun end	-4082 Jan 01 j 08:08	10°♂56'50	
minimum elong	-4088 Dec 20 j 21:03	29°M.51'21	0°13'33	max. Earth dist.	-4082 Jan 02 j 03:25	10°♂58'41	30.98098 AU
behind sun begin	-4088 Dec 20 j 17:25	29°M.51'01		morning rise	-4082 Jan 16 j 20:21	11°♂31'47	
behind sun end	-4088 Dec 21 j 00:41	29°M.51'41		retrograde	-4082 Apr 18 j 00:57	13°♂30'15	
max. Earth dist.	-4088 Dec 21 j 18:29	29°M.53'22	31.03362 AU	min. Earth dist.	-4082 Jul 07 j 02:24	12°♂06'47	28.97681 AU
	-4088 Dec 24 j 16:23	0°♂		opposition	-4082 Jul 08 j 01:47	12°♂05'10	-0°15'42
morning rise	-4087 Jan 05 j 10:52	0°♂26'28		direct	-4082 Sep 24 j 01:23	10°♂42'21	
retrograde	-4087 Apr 06 j 11:02	2°♂24'38		evening set	-4082 Dec 19 j 01:40	12°♂34'33	
opposition	-4087 Jun 26 j 10:48	0°♂59'54	0°11'48				
min. Earth dist.	-4087 Jun 25 j 14:02	1°♂01'19	29.02893 AU	conjunction	-4081 Jan 03 j 14:57	13°♂09'33	-0°17'12
	-4087 Aug 06 j 02:05	30°K.M.		minimum elong	-4081 Jan 03 j 14:57	13°♂09'33	0°17'22
direct	-4087 Sep 12 j 19:08	29°M.37'14		max. Earth dist.	-4081 Jan 04 j 14:29	13°♂11'46	30.97233 AU
	-4087 Oct 19 j 06:46	0°♂		morning rise	-4081 Jan 19 j 08:09	13°♂44'55	
evening set	-4087 Dec 07 j 20:49	1°♂29'32		retrograde	-4081 Apr 20 j 14:09	15°♂43'29	
				opposition	-4081 Jul 10 j 14:19	14°♂18'21	-0°21'10
conjunction	-4087 Dec 23 j 07:48	2°♂04'22	0°08'35	min. Earth dist.	-4081 Jul 09 j 15:23	14°♂19'56	28.96885 AU
minimum elong	-4087 Dec 23 j 07:48	2°♂04'22	0°08'26	direct	-4081 Sep 26 j 10:19	12°♂55'32	
behind sun begin	-4087 Dec 23 j 02:08	2°♂03'51		evening set	-4081 Dec 21 j 12:24	14°♂47'45	
behind sun end	-4087 Dec 23 j 13:28	2°♂04'52					
max. Earth dist.	-4087 Dec 24 j 04:37	2°♂06'20	31.02358 AU	conjunction	-4080 Jan 06 j 02:17	15°♂22'47	-0°22'18
morning rise	-4086 Jan 07 j 22:20	2°♂39'32		minimum elong	-4080 Jan 06 j 02:17	15°♂22'47	0°22'29
retrograde	-4086 Apr 09 j 00:22	4°♂37'46		max. Earth dist.	-4080 Jan 07 j 03:15	15°♂25'08	30.96492 AU
opposition	-4086 Jun 28 j 23:38	3°♂12'58	0°06'18	morning rise	-4080 Jan 21 j 19:48	15°♂58'11	
min. Earth dist.	-4086 Jun 28 j 02:28	3°♂14'25	29.01842 AU	retrograde	-4080 Apr 22 j 03:23	17°♂56'49	
direct	-4086 Sep 15 j 05:53	1°♂50'16		min. Earth dist.	-4080 Jul 11 j 02:22	16°♂33'21	28.96194 AU

Attention, astronomical year style is used: The year -4080 in astronomical counting style is the year 4081 BCE in historical counting style.

opposition	-4080 Jul 12 j 02:36	16° \nearrow 31'40	-0°26'37	conjunction	-4073 Jan 21 j 13:36	1° \searrow 00'09	-0°56'47
direct	-4080 Sep 27 j 22:37	15° \nearrow 08'52		minimum elong	-4073 Jan 21 j 13:36	1° \searrow 00'08	0°56'58
evening set	-4080 Dec 22 j 23:26	17° \nearrow 01'06		max. Earth dist.	-4073 Jan 22 j 14:55	1° \searrow 02'32	30.91796 AU
				morning rise	-4073 Feb 06 j 10:29	1° \searrow 35'48	
conjunction	-4079 Jan 07 j 13:36	17° \nearrow 36'11	-0°27'22	retrograde	-4073 May 09 j 01:15	3° \searrow 34'47	
minimum elong	-4079 Jan 07 j 13:36	17° \nearrow 36'11	0°27'33	opposition	-4073 Jul 28 j 17:07	2° \searrow 09'29	-1°03'17
max. Earth dist.	-4079 Jan 08 j 14:01	17° \nearrow 38'29	30.95854 AU	min. Earth dist.	-4073 Jul 27 j 17:01	2° \searrow 11'10	28.91380 AU
morning rise	-4079 Jan 23 j 07:48	18° \nearrow 11'38		direct	-4073 Oct 14 j 06:12	0° \searrow 46'33	
retrograde	-4079 Apr 24 j 18:52	20° \nearrow 10'20		evening set	-4072 Jan 08 j 08:31	2° \searrow 39'00	
opposition	-4079 Jul 14 j 15:06	18° \nearrow 45'11	-0°32'01				
min. Earth dist.	-4079 Jul 13 j 15:01	18° \nearrow 46'50	28.95606 AU	conjunction	-4072 Jan 24 j 01:48	3° \searrow 14'17	-1°01'26
direct	-4079 Sep 30 j 09:23	17° \nearrow 22'23		minimum elong	-4072 Jan 24 j 01:48	3° \searrow 14'17	1°01'37
evening set	-4079 Dec 25 j 10:24	19° \nearrow 14'39		max. Earth dist.	-4072 Jan 25 j 02:24	3° \searrow 16'36	30.90836 AU
				morning rise	-4072 Feb 08 j 23:13	3° \searrow 49'58	
conjunction	-4078 Jan 10 j 01:12	19° \nearrow 49'46	-0°32'25	retrograde	-4072 May 10 j 13:42	5° \searrow 48'58	
minimum elong	-4078 Jan 10 j 01:12	19° \nearrow 49'46	0°32'35	min. Earth dist.	-4072 Jul 29 j 06:17	4° \searrow 25'12	28.90426 AU
max. Earth dist.	-4078 Jan 11 j 03:08	19° \nearrow 52'13	30.95287 AU	opposition	-4072 Jul 30 j 05:18	4° \searrow 23'36	-1°08'12
morning rise	-4078 Jan 25 j 19:45	20° \nearrow 25'16		direct	-4072 Oct 15 j 15:37	3° \searrow 00'35	
retrograde	-4078 Apr 27 j 07:34	22° \nearrow 24'03		evening set	-4071 Jan 09 j 20:24	4° \searrow 53'03	
min. Earth dist.	-4078 Jul 16 j 03:05	21° \nearrow 00'35	28.95052 AU				
opposition	-4078 Jul 17 j 03:31	20° \nearrow 58'53	-0°37'23	conjunction	-4071 Jan 25 j 14:17	5° \searrow 28'22	-1°06'00
direct	-4078 Oct 02 j 21:46	19° \nearrow 36'07		minimum elong	-4071 Jan 25 j 14:16	5° \searrow 28'22	1°06'11
evening set	-4078 Dec 27 j 21:50	21° \nearrow 28'26		max. Earth dist.	-4071 Jan 26 j 15:49	5° \searrow 30'46	30.89891 AU
				morning rise	-4071 Feb 10 j 11:58	6° \searrow 04'04	
conjunction	-4077 Jan 12 j 12:58	22° \nearrow 03'35	-0°37'24	retrograde	-4071 May 13 j 02:28	8° \searrow 03'03	
minimum elong	-4077 Jan 12 j 12:57	22° \nearrow 03'35	0°37'35	opposition	-4071 Aug 01 j 17:17	6° \searrow 37'38	-1°13'01
max. Earth dist.	-4077 Jan 13 j 14:06	22° \nearrow 05'57	30.94740 AU	min. Earth dist.	-4071 Jul 31 j 17:24	6° \searrow 39'18	28.89506 AU
morning rise	-4077 Jan 28 j 08:07	22° \nearrow 39'06		direct	-4071 Oct 18 j 04:20	5° \searrow 14'32	
retrograde	-4077 Apr 29 j 22:05	24° \nearrow 37'57		evening set	-4070 Jan 12 j 08:29	7° \searrow 07'02	
opposition	-4077 Jul 19 j 15:47	23° \nearrow 12'48	-0°42'42				
min. Earth dist.	-4077 Jul 18 j 15:16	23° \nearrow 14'30	28.94500 AU	conjunction	-4070 Jan 28 j 02:38	7° \searrow 42'23	-1°10'27
direct	-4077 Oct 05 j 08:18	21° \nearrow 50'02		minimum elong	-4070 Jan 28 j 02:37	7° \searrow 42'23	1°10'38
evening set	-4077 Dec 30 j 09:21	23° \nearrow 42'24		max. Earth dist.	-4070 Jan 29 j 03:13	7° \searrow 44'41	30.89004 AU
				morning rise	-4070 Feb 13 j 00:55	8° \searrow 18'06	
conjunction	-4076 Jan 15 j 00:58	24° \nearrow 17'35	-0°42'21	retrograde	-4070 May 15 j 16:48	10° \searrow 17'06	
minimum elong	-4076 Jan 15 j 00:58	24° \nearrow 17'35	0°42'32	min. Earth dist.	-4070 Aug 03 j 05:56	8° \searrow 53'15	28.88678 AU
max. Earth dist.	-4076 Jan 16 j 02:50	24° \nearrow 20'01	30.94146 AU	opposition	-4070 Aug 04 j 05:20	8° \searrow 51'37	-1°17'44
morning rise	-4076 Jan 30 j 20:29	24° \nearrow 53'08		direct	-4070 Oct 20 j 14:55	7° \searrow 28'28	
retrograde	-4076 May 01 j 10:38	26° \nearrow 52'03		evening set	-4069 Jan 14 j 20:35	9° \searrow 21'01	
min. Earth dist.	-4076 Jul 20 j 04:19	25° \nearrow 28'33	28.93872 AU				
opposition	-4076 Jul 21 j 04:13	25° \nearrow 26'53	-0°47'58	conjunction	-4069 Jan 30 j 15:19	9° \searrow 56'23	-1°14'49
direct	-4076 Oct 06 j 20:34	24° \nearrow 04'07		minimum elong	-4069 Jan 30 j 15:18	9° \searrow 56'23	1°14'59
evening set	-4076 Dec 31 j 20:54	25° \nearrow 56'30		max. Earth dist.	-4069 Jan 31 j 17:07	9° \searrow 58'49	30.88215 AU
				morning rise	-4069 Feb 15 j 13:50	10° \searrow 32'08	
conjunction	-4075 Jan 16 j 12:56	26° \nearrow 31'43	-0°47'14	retrograde	-4069 May 18 j 05:11	12° \searrow 31'08	
minimum elong	-4075 Jan 16 j 12:56	26° \nearrow 31'43	0°47'25	opposition	-4069 Aug 06 j 17:06	11° \searrow 05'38	-1°22'20
max. Earth dist.	-4075 Jan 17 j 14:14	26° \nearrow 34'06	30.93475 AU	min. Earth dist.	-4069 Aug 05 j 17:26	11° \searrow 07'18	28.87951 AU
morning rise	-4075 Feb 01 j 08:57	27° \nearrow 07'19		direct	-4069 Oct 23 j 03:07	9° \searrow 42'26	
retrograde	-4075 May 04 j 01:19	29° \nearrow 06'17		evening set	-4068 Jan 17 j 08:51	11° \searrow 35'03	
opposition	-4075 Jul 23 j 16:37	27° \nearrow 41'05	-0°53'09				
min. Earth dist.	-4075 Jul 22 j 16:04	27° \nearrow 42'47	28.93149 AU	conjunction	-4068 Feb 02 j 03:52	12° \searrow 10'27	-1°19'03
direct	-4075 Oct 09 j 07:56	26° \nearrow 18'16		minimum elong	-4068 Feb 02 j 03:52	12° \searrow 10'27	1°19'13
evening set	-4074 Jan 03 j 08:45	28° \nearrow 10'41		max. Earth dist.	-4068 Feb 03 j 04:50	12° \searrow 12'48	30.87556 AU
				morning rise	-4068 Feb 18 j 02:54	12° \searrow 46'13	
conjunction	-4074 Jan 19 j 01:12	28° \nearrow 45'56	-0°52'03	retrograde	-4068 May 19 j 20:09	14° \searrow 45'14	
minimum elong	-4074 Jan 19 j 01:11	28° \nearrow 45'56	0°52'14	min. Earth dist.	-4068 Aug 07 j 05:08	13° \searrow 21'24	28.87367 AU
max. Earth dist.	-4074 Jan 20 j 02:21	28° \nearrow 48'18	30.92681 AU	opposition	-4068 Aug 08 j 05:00	13° \searrow 19'44	-1°26'48
morning rise	-4074 Feb 03 j 21:41	29° \nearrow 21'34		direct	-4068 Oct 24 j 13:53	11° \searrow 56'30	
	-4074 Feb 22 j 03:03	0° \searrow		evening set	-4067 Jan 18 j 20:59	13° \searrow 49'11	
retrograde	-4074 May 06 j 12:14	1° \searrow 20'33					
	-4074 Jul 23 j 09:26	30° \nearrow		conjunction	-4067 Feb 03 j 16:29	14° \searrow 24'37	-1°23'11
min. Earth dist.	-4074 Jul 25 j 05:38	29° \nearrow 56'56	28.92307 AU	minimum elong	-4067 Feb 03 j 16:29	14° \searrow 24'37	1°23'21
opposition	-4074 Jul 26 j 04:58	29° \nearrow 55'19	-0°58'15	max. Earth dist.	-4067 Feb 04 j 18:22	14° \searrow 27'03	30.87020 AU
direct	-4074 Oct 11 j 18:39	28° \nearrow 32'27		morning rise	-4067 Feb 19 j 15:50	15° \searrow 00'25	
	-4074 Dec 25 j 06:27	0° \searrow		retrograde	-4067 May 22 j 09:19	16° \searrow 59'28	
evening set	-4073 Jan 05 j 20:35	0° \searrow 24'52		opposition	-4067 Aug 10 j 16:55	15° \searrow 33'58	-1°31'09
				min. Earth dist.	-4067 Aug 09 j 17:31	15° \searrow 35'37	28.86893 AU

Attention, astronomical year style is used: The year -4067 in astronomical counting style is the year 4068 BCE in historical counting style.

direct	-4067 Oct 27 j 02:12	14° $\overline{3}$ 10'44		minimum elong	-4060 Feb 20 j 13:38	0° \approx 08'35	1°48'23
evening set	-4066 Jan 21 j 09:27	16° $\overline{3}$ 03'30		max. Earth dist.	-4060 Feb 21 j 12:44	0° \approx 10'45	30.83952 AU
				morning rise	-4060 Mar 07 j 15:18	0° \approx 44'31	
conjunction	-4066 Feb 06 j 05:22	16° $\overline{3}$ 38'58	-1°27'11	retrograde	-4060 Jun 07 j 04:48	2° \approx 43'33	
minimum elong	-4066 Feb 06 j 05:22	16° $\overline{3}$ 38'58	1°27'21	min. Earth dist.	-4060 Aug 25 j 06:27	1° \approx 19'35	28.83772 AU
max. Earth dist.	-4066 Feb 07 j 06:43	16° $\overline{3}$ 41'21	30.86604 AU	opposition	-4060 Aug 26 j 02:53	1° \approx 18'08	-1°57'23
morning rise	-4066 Feb 22 j 05:09	17° $\overline{3}$ 14'47			-4060 Oct 24 j 15:49	30° \overline{R} $\overline{3}$	
retrograde	-4066 May 25 j 00:11	19° $\overline{3}$ 13'52		direct	-4060 Nov 11 j 07:38	29° $\overline{3}$ 54'36	
min. Earth dist.	-4066 Aug 12 j 04:36	17° $\overline{3}$ 50'05	28.86522 AU		-4060 Nov 28 j 21:59	0° \approx	
opposition	-4066 Aug 13 j 04:36	17° $\overline{3}$ 48'24	-1°35'21	evening set	-4059 Feb 06 j 04:29	1° \approx 47'57	
direct	-4066 Oct 29 j 13:33	16° $\overline{3}$ 25'09					
evening set	-4065 Jan 23 j 22:09	18° $\overline{3}$ 18'01		conjunction	-4059 Feb 22 j 03:03	2° \approx 23'34	-1°51'12
				minimum elong	-4059 Feb 22 j 03:03	2° \approx 23'34	1°51'21
conjunction	-4065 Feb 08 j 18:25	18° $\overline{3}$ 53'31	-1°31'03	max. Earth dist.	-4059 Feb 23 j 00:44	2° \approx 25'36	30.83342 AU
minimum elong	-4065 Feb 08 j 18:25	18° $\overline{3}$ 53'30	1°31'13	morning rise	-4059 Mar 10 j 05:12	2° \approx 59'31	
max. Earth dist.	-4065 Feb 09 j 19:42	18° $\overline{3}$ 55'53	30.86247 AU	retrograde	-4059 Jun 09 j 19:21	4° \approx 58'30	
morning rise	-4065 Feb 24 j 18:34	19° $\overline{3}$ 29'22		opposition	-4059 Aug 28 j 14:24	3° \approx 33'03	-2°00'28
retrograde	-4065 May 27 j 11:56	21° $\overline{3}$ 28'28		min. Earth dist.	-4059 Aug 27 j 18:21	3° \approx 34'28	28.83186 AU
opposition	-4065 Aug 15 j 16:27	20° $\overline{3}$ 03'03	-1°39'25	direct	-4059 Nov 13 j 19:17	2° \approx 09'25	
min. Earth dist.	-4065 Aug 14 j 17:44	20° $\overline{3}$ 04'38	28.86190 AU	evening set	-4058 Feb 08 j 17:46	4° \approx 02'49	
direct	-4065 Nov 01 j 00:03	18° $\overline{3}$ 39'48					
evening set	-4064 Jan 26 j 10:50	20° $\overline{3}$ 32'46		conjunction	-4058 Feb 24 j 16:48	4° \approx 38'28	-1°54'00
				minimum elong	-4058 Feb 24 j 16:48	4° \approx 38'28	1°54'08
conjunction	-4064 Feb 11 j 07:33	21° $\overline{3}$ 08'17	-1°34'47	max. Earth dist.	-4058 Feb 25 j 14:57	4° \approx 40'32	30.82770 AU
minimum elong	-4064 Feb 11 j 07:33	21° $\overline{3}$ 08'17	1°34'57	morning rise	-4058 Mar 12 j 19:07	5° \approx 14'25	
max. Earth dist.	-4064 Feb 12 j 08:49	21° $\overline{3}$ 10'40	30.85918 AU	retrograde	-4058 Jun 12 j 08:05	7° \approx 13'19	
morning rise	-4064 Feb 27 j 07:56	21° $\overline{3}$ 44'09		min. Earth dist.	-4058 Aug 30 j 06:28	5° \approx 49'11	28.82660 AU
retrograde	-4064 May 29 j 01:59	23° $\overline{3}$ 43'17		opposition	-4058 Aug 31 j 01:40	5° \approx 47'50	-2°03'21
min. Earth dist.	-4064 Aug 16 j 04:55	22° $\overline{3}$ 19'32	28.85851 AU	direct	-4058 Nov 16 j 08:25	4° \approx 24'07	
opposition	-4064 Aug 17 j 04:10	22° $\overline{3}$ 17'54	-1°43'20	evening set	-4057 Feb 11 j 07:07	6° \approx 17'35	
direct	-4064 Nov 02 j 11:19	20° $\overline{3}$ 54'38					
evening set	-4063 Jan 27 j 23:53	22° $\overline{3}$ 47'42		conjunction	-4057 Feb 27 j 06:29	6° \approx 53'15	-1°56'37
				minimum elong	-4057 Feb 27 j 06:29	6° \approx 53'15	1°56'46
conjunction	-4063 Feb 12 j 20:52	23° $\overline{3}$ 23'15	-1°38'22	max. Earth dist.	-4057 Feb 28 j 03:40	6° \approx 55'14	30.82302 AU
minimum elong	-4063 Feb 12 j 20:51	23° $\overline{3}$ 23'15	1°38'33	morning rise	-4057 Mar 15 j 09:10	7° \approx 29'13	
max. Earth dist.	-4063 Feb 13 j 21:00	23° $\overline{3}$ 25'31	30.85543 AU	retrograde	-4057 Jun 14 j 22:11	9° \approx 28'02	
morning rise	-4063 Feb 28 j 21:42	23° $\overline{3}$ 59'09		opposition	-4057 Sep 02 j 12:55	8° \approx 02'33	-2°06'04
retrograde	-4063 May 31 j 14:41	25° $\overline{3}$ 58'17		min. Earth dist.	-4057 Sep 01 j 17:17	8° \approx 03'56	28.82260 AU
opposition	-4063 Aug 19 j 16:01	24° $\overline{3}$ 32'55	-1°47'06	direct	-4057 Nov 18 j 20:34	6° \approx 38'45	
min. Earth dist.	-4063 Aug 18 j 18:20	24° $\overline{3}$ 34'27	28.85455 AU	evening set	-4056 Feb 13 j 20:25	8° \approx 32'17	
direct	-4063 Nov 04 j 20:16	23° $\overline{3}$ 09'37					
evening set	-4062 Jan 30 j 12:54	25° $\overline{3}$ 02'46		conjunction	-4056 Feb 29 j 20:05	9° \approx 07'58	-1°59'04
				minimum elong	-4056 Feb 29 j 20:05	9° \approx 07'58	1°59'12
conjunction	-4062 Feb 15 j 10:27	25° $\overline{3}$ 38'20	-1°41'49	max. Earth dist.	-4056 Mar 01 j 17:14	9° \approx 09'56	30.81954 AU
minimum elong	-4062 Feb 15 j 10:27	25° $\overline{3}$ 38'20	1°41'59	morning rise	-4056 Mar 16 j 22:59	9° \approx 43'56	
max. Earth dist.	-4062 Feb 16 j 10:47	25° $\overline{3}$ 40'38	30.85100 AU	retrograde	-4056 Jun 16 j 10:30	11° \approx 42'42	
morning rise	-4062 Mar 03 j 11:30	26° $\overline{3}$ 14'16		min. Earth dist.	-4056 Sep 03 j 05:45	10° \approx 18'31	28.81997 AU
retrograde	-4062 Jun 03 j 03:08	28° $\overline{3}$ 13'23		opposition	-4056 Sep 04 j 00:16	10° \approx 17'12	-2°08'35
min. Earth dist.	-4062 Aug 21 j 05:50	26° $\overline{3}$ 49'34	28.84961 AU	direct	-4056 Nov 20 j 07:49	8° \approx 53'21	
opposition	-4062 Aug 22 j 03:43	26° $\overline{3}$ 48'01	-1°50'42	evening set	-4055 Feb 15 j 09:47	10° \approx 46'58	
direct	-4062 Nov 07 j 09:15	25° $\overline{3}$ 24'40					
evening set	-4061 Feb 02 j 02:13	27° $\overline{3}$ 17'54		conjunction	-4055 Mar 03 j 09:55	11° \approx 22'40	-2°01'19
				minimum elong	-4055 Mar 03 j 09:55	11° \approx 22'40	2°01'28
conjunction	-4061 Feb 17 j 23:59	27° $\overline{3}$ 53'29	-1°45'06	max. Earth dist.	-4055 Mar 04 j 06:56	11° \approx 24'38	30.81775 AU
minimum elong	-4061 Feb 17 j 23:59	27° $\overline{3}$ 53'29	1°45'16	morning rise	-4055 Mar 19 j 13:04	11° \approx 58'39	
max. Earth dist.	-4061 Feb 18 j 22:31	27° $\overline{3}$ 55'36	30.84556 AU	retrograde	-4055 Jun 19 j 01:02	13° \approx 57'20	
morning rise	-4061 Mar 06 j 01:30	28° $\overline{3}$ 29'25		opposition	-4055 Sep 06 j 11:21	12° \approx 31'53	-2°10'54
	-4061 Apr 24 j 12:31	0° \approx		min. Earth dist.	-4055 Sep 05 j 16:12	12° \approx 33'14	28.81894 AU
retrograde	-4061 Jun 05 j 16:29	0° \approx 28'30		direct	-4055 Nov 22 j 19:54	11° \approx 07'59	
	-4061 Jul 18 j 16:15	30° \overline{R} $\overline{3}$		evening set	-4054 Feb 17 j 23:25	13° \approx 01'41	
opposition	-4061 Aug 24 j 15:21	29° $\overline{3}$ 03'07	-1°54'08				
min. Earth dist.	-4061 Aug 23 j 18:39	29° $\overline{3}$ 04'35	28.84390 AU	conjunction	-4054 Mar 05 j 23:49	13° \approx 37'24	-2°03'24
direct	-4061 Nov 09 j 19:33	27° $\overline{3}$ 39'40		minimum elong	-4054 Mar 05 j 23:49	13° \approx 37'24	2°03'32
evening set	-4060 Feb 04 j 15:20	29° $\overline{3}$ 32'58		max. Earth dist.	-4054 Mar 06 j 19:57	13° \approx 39'18	30.81735 AU
	-4060 Feb 16 j 18:18	0° \approx		morning rise	-4054 Mar 22 j 03:20	14° \approx 13'25	
					-4054 Apr 13 j 16:36	15° \approx	
conjunction	-4060 Feb 20 j 13:39	0° \approx 08'35	-1°48'14	retrograde	-4054 Jun 21 j 13:05	16° \approx 12'03	

Attention, astronomical year style is used: The year -4054 in astronomical counting style is the year 4055 BCE in historical counting style.

	-4054 Sep 01 j 01:12	15° \approx 8	conjunction	-4047 Mar 22 j 04:05	29° \approx 23'48	-2°12'31
opposition	-4054 Sep 08 j 22:38	14° \approx 46'38	minimum elong	-4047 Mar 22 j 04:05	29° \approx 23'48	2°12'38
min. Earth dist.	-4054 Sep 08 j 04:54	14° \approx 47'53	max. Earth dist.	-4047 Mar 22 j 18:30	29° \approx 25'08	30.82214 AU
direct	-4054 Nov 25 j 05:34	13° \approx 22'43	morning rise	-4047 Apr 07 j 09:05	29° \approx 59'51	
	-4053 Feb 12 j 20:56	15° \approx		-4047 Apr 07 j 10:41	0° \approx	
evening set	-4053 Feb 20 j 13:01	15° \approx 16'31	retrograde	-4047 Jul 07 j 08:14	1° \approx 57'58	
			opposition	-4047 Sep 24 j 04:18	0° \approx 32'53	-2°22'01
conjunction	-4053 Mar 08 j 13:54	15° \approx 52'15	min. Earth dist.	-4047 Sep 23 j 16:21	0° \approx 33'44	28.82344 AU
minimum elong	-4053 Mar 08 j 13:54	15° \approx 52'15		-4047 Oct 13 j 23:10	30° \approx	
max. Earth dist.	-4053 Mar 09 j 10:19	15° \approx 54'10	direct	-4047 Dec 10 j 16:05	29° \approx 08'40	
morning rise	-4053 Mar 24 j 17:31	16° \approx 28'16		-4046 Feb 04 j 18:31	0° \approx	
retrograde	-4053 Jun 24 j 01:21	18° \approx 26'51	evening set	-4046 Mar 08 j 15:24	1° \approx 03'09	
opposition	-4053 Sep 11 j 09:39	17° \approx 01'31				
min. Earth dist.	-4053 Sep 10 j 15:40	17° \approx 02'47	conjunction	-4046 Mar 24 j 18:39	1° \approx 39'02	-2°13'02
direct	-4053 Nov 27 j 17:53	15° \approx 37'35	minimum elong	-4046 Mar 24 j 18:39	1° \approx 39'02	2°13'07
evening set	-4052 Feb 23 j 02:54	17° \approx 31'30	max. Earth dist.	-4046 Mar 25 j 08:11	1° \approx 40'17	30.82149 AU
			morning rise	-4046 Apr 09 j 23:52	2° \approx 15'05	
conjunction	-4052 Mar 10 j 03:57	18° \approx 07'15	retrograde	-4046 Jul 09 j 22:52	4° \approx 13'05	
minimum elong	-4052 Mar 10 j 03:57	18° \approx 07'15	opposition	-4046 Sep 26 j 15:07	2° \approx 48'01	-2°22'27
max. Earth dist.	-4052 Mar 10 j 22:40	18° \approx 09'01	min. Earth dist.	-4046 Sep 26 j 02:58	2° \approx 48'52	28.82293 AU
morning rise	-4052 Mar 26 j 07:57	18° \approx 43'17	direct	-4046 Dec 13 j 05:18	1° \approx 23'42	
retrograde	-4052 Jun 25 j 14:31	20° \approx 41'50	evening set	-4045 Mar 11 j 05:36	3° \approx 18'16	
opposition	-4052 Sep 12 j 20:52	19° \approx 16'33				
min. Earth dist.	-4052 Sep 12 j 04:06	19° \approx 17'45	conjunction	-4045 Mar 27 j 09:03	3° \approx 54'09	-2°13'20
direct	-4052 Nov 29 j 03:24	17° \approx 52'36	minimum elong	-4045 Mar 27 j 09:03	3° \approx 54'09	2°13'26
evening set	-4051 Feb 24 j 16:40	19° \approx 46'38	max. Earth dist.	-4045 Mar 27 j 21:30	3° \approx 55'19	30.82121 AU
			morning rise	-4045 Apr 12 j 14:28	4° \approx 30'13	
conjunction	-4051 Mar 12 j 18:15	20° \approx 22'25	retrograde	-4045 Jul 12 j 10:14	6° \approx 28'05	
minimum elong	-4051 Mar 12 j 18:14	20° \approx 22'25	opposition	-4045 Sep 29 j 01:58	5° \approx 03'02	-2°22'40
max. Earth dist.	-4051 Mar 13 j 13:16	20° \approx 24'12	min. Earth dist.	-4045 Sep 28 j 15:27	5° \approx 03'47	28.82320 AU
morning rise	-4051 Mar 28 j 22:19	20° \approx 58'27	direct	-4045 Dec 15 j 15:54	3° \approx 38'40	
retrograde	-4051 Jun 28 j 02:56	22° \approx 56'57	evening set	-4044 Mar 12 j 19:39	5° \approx 33'18	
opposition	-4051 Sep 15 j 08:01	21° \approx 31'45				
min. Earth dist.	-4051 Sep 14 j 15:54	21° \approx 32'53	conjunction	-4044 Mar 28 j 23:33	6° \approx 09'12	-2°13'26
direct	-4051 Dec 01 j 15:06	20° \approx 07'46	minimum elong	-4044 Mar 28 j 23:33	6° \approx 09'12	2°13'31
evening set	-4050 Feb 27 j 06:52	22° \approx 01'55	max. Earth dist.	-4044 Mar 29 j 12:01	6° \approx 10'22	30.82208 AU
			morning rise	-4044 Apr 14 j 05:01	6° \approx 45'16	
conjunction	-4050 Mar 15 j 08:39	22° \approx 37'43	retrograde	-4044 Jul 13 j 22:26	8° \approx 43'00	
minimum elong	-4050 Mar 15 j 08:39	22° \approx 37'43	opposition	-4044 Sep 30 j 12:39	7° \approx 18'00	-2°22'40
max. Earth dist.	-4050 Mar 16 j 01:33	22° \approx 39'18	min. Earth dist.	-4044 Sep 30 j 01:53	7° \approx 18'46	28.82465 AU
morning rise	-4050 Mar 31 j 13:07	23° \approx 13'46	direct	-4044 Dec 17 j 04:38	5° \approx 53'34	
retrograde	-4050 Jun 30 j 16:59	25° \approx 12'12	evening set	-4043 Mar 15 j 09:47	7° \approx 48'16	
opposition	-4050 Sep 17 j 19:06	23° \approx 47'02				
min. Earth dist.	-4050 Sep 17 j 03:53	23° \approx 48'07	conjunction	-4043 Mar 31 j 13:51	8° \approx 24'11	-2°13'20
direct	-4050 Dec 04 j 02:33	22° \approx 23'01	minimum elong	-4043 Mar 31 j 13:52	8° \approx 24'11	2°13'25
evening set	-4049 Mar 01 j 21:01	24° \approx 17'17	max. Earth dist.	-4043 Apr 01 j 00:41	8° \approx 25'12	30.82423 AU
			morning rise	-4043 Apr 16 j 19:40	9° \approx 00'16	
conjunction	-4049 Mar 17 j 23:15	24° \approx 53'06	retrograde	-4043 Jul 16 j 11:09	10° \approx 57'52	
minimum elong	-4049 Mar 17 j 23:15	24° \approx 53'06	opposition	-4043 Oct 02 j 23:27	9° \approx 32'55	-2°22'27
max. Earth dist.	-4049 Mar 18 j 16:01	24° \approx 54'40	min. Earth dist.	-4043 Oct 02 j 13:45	9° \approx 33'37	28.82757 AU
morning rise	-4049 Apr 03 j 03:46	25° \approx 29'09	direct	-4043 Dec 19 j 14:12	8° \approx 08'26	
retrograde	-4049 Jul 03 j 05:25	27° \approx 27'29	evening set	-4042 Mar 17 j 23:56	10° \approx 03'14	
opposition	-4049 Sep 20 j 06:18	26° \approx 02'22				
min. Earth dist.	-4049 Sep 19 j 16:28	26° \approx 03'21	conjunction	-4042 Apr 03 j 04:29	10° \approx 39'10	-2°13'02
direct	-4049 Dec 06 j 15:33	24° \approx 38'18	minimum elong	-4042 Apr 03 j 04:29	10° \approx 39'10	2°13'05
evening set	-4048 Mar 03 j 11:03	26° \approx 32'38	max. Earth dist.	-4042 Apr 03 j 15:40	10° \approx 40'12	30.82785 AU
			morning rise	-4042 Apr 19 j 10:17	11° \approx 15'14	
conjunction	-4048 Mar 19 j 13:33	27° \approx 08'28	retrograde	-4042 Jul 18 j 22:13	13° \approx 12'44	
minimum elong	-4048 Mar 19 j 13:33	27° \approx 08'28	opposition	-4042 Oct 05 j 10:04	11° \approx 47'51	-2°22'01
max. Earth dist.	-4048 Mar 20 j 04:35	27° \approx 09'53	min. Earth dist.	-4042 Oct 05 j 00:46	11° \approx 48'31	28.83178 AU
morning rise	-4048 Apr 04 j 18:23	27° \approx 44'32	direct	-4042 Dec 22 j 01:48	10° \approx 23'21	
retrograde	-4048 Jul 04 j 19:36	29° \approx 42'46	evening set	-4041 Mar 20 j 14:17	12° \approx 18'14	
opposition	-4048 Sep 21 j 17:21	28° \approx 17'40				
min. Earth dist.	-4048 Sep 21 j 03:38	28° \approx 18'39	conjunction	-4041 Apr 05 j 18:57	12° \approx 54'11	-2°12'31
direct	-4048 Dec 08 j 04:05	26° \approx 53'31	minimum elong	-4041 Apr 05 j 18:57	12° \approx 54'11	2°12'36
evening set	-4047 Mar 06 j 01:14	28° \approx 47'56	max. Earth dist.	-4041 Apr 06 j 04:19	12° \approx 55'03	30.83281 AU
			morning rise	-4041 Apr 22 j 01:03	13° \approx 30'16	

Attention, astronomical year style is used: The year -4041 in astronomical counting style is the year 4042 BCE in historical counting style.

retrograde	-4041 Jul 21 j 10:44	15° H 27'39		minimum elong	-4034 Apr 22 j 02:06	28° H 40'17	2°03'21
opposition	-4041 Oct 07 j 20:47	14° H 02'51	-2°21'21	max. Earth dist.	-4034 Apr 22 j 03:15	28° H 40'23	30.86682 AU
min. Earth dist.	-4041 Oct 07 j 12:04	14° H 03'28	28.83733 AU	morning rise	-4034 May 08 j 08:53	29° H 16'21	
direct	-4041 Dec 24 j 12:56	12° H 38'20			-4034 May 29 j 12:50	0° Y	
evening set	-4040 Mar 22 j 04:23	14° H 33'19		retrograde	-4034 Aug 06 j 03:23	1° Y 12'44	
					-4034 Oct 16 j 03:27	30° R H	
conjunction	-4040 Apr 07 j 09:28	15° H 09'17	-2°11'49	opposition	-4034 Oct 22 j 23:22	29° H 48'21	-2°10'48
minimum elong	-4040 Apr 07 j 09:28	15° H 09'17	2°11'51	min. Earth dist.	-4034 Oct 22 j 22:20	29° H 48'26	28.86961 AU
max. Earth dist.	-4040 Apr 07 j 19:07	15° H 10'11	30.83875 AU	direct	-4033 Jan 09 j 03:23	28° H 23'30	
morning rise	-4040 Apr 23 j 15:33	15° H 45'21			-4033 Mar 30 j 12:29	0° Y	
retrograde	-4040 Jul 22 j 22:08	17° H 42'39		evening set	-4033 Apr 08 j 09:58	0° Y 18'58	
opposition	-4040 Oct 09 j 07:32	16° H 17'57	-2°20'29				
min. Earth dist.	-4040 Oct 09 j 00:08	16° H 18'28	28.84349 AU	conjunction	-4033 Apr 24 j 16:48	0° Y 55'00	-2°01'16
direct	-4040 Dec 26 j 01:04	14° H 53'24		minimum elong	-4033 Apr 24 j 16:49	0° Y 55'01	2°01'17
evening set	-4039 Mar 24 j 18:53	16° H 48'30		max. Earth dist.	-4033 Apr 24 j 17:58	0° Y 55'07	30.86972 AU
				morning rise	-4033 May 10 j 23:29	1° Y 31'04	
conjunction	-4039 Apr 10 j 00:09	17° H 24'28	-2°10'53	retrograde	-4033 Aug 08 j 13:42	3° Y 27'16	
minimum elong	-4039 Apr 10 j 00:09	17° H 24'28	2°10'57	opposition	-4033 Oct 25 j 09:51	2° Y 02'56	-2°08'29
max. Earth dist.	-4039 Apr 10 j 07:53	17° H 25'12	30.84514 AU	min. Earth dist.	-4033 Oct 25 j 09:24	2° Y 02'58	28.87260 AU
morning rise	-4039 Apr 26 j 06:30	18° H 00'34		direct	-4032 Jan 11 j 16:00	0° Y 38'00	
retrograde	-4039 Jul 25 j 12:06	19° H 57'44		evening set	-4032 Apr 10 j 00:13	2° Y 33'30	
opposition	-4039 Oct 11 j 18:05	18° H 33'07	-2°19'23				
min. Earth dist.	-4039 Oct 11 j 11:00	18° H 33'38	28.84979 AU	conjunction	-4032 Apr 26 j 07:05	3° Y 09'33	-1°59'01
direct	-4039 Dec 28 j 12:52	17° H 08'33		minimum elong	-4032 Apr 26 j 07:06	3° Y 09'33	1°59'00
evening set	-4038 Mar 27 j 09:28	19° H 03'46		max. Earth dist.	-4032 Apr 26 j 06:18	3° Y 09'28	30.87313 AU
				morning rise	-4032 May 12 j 13:59	3° Y 45'36	
conjunction	-4038 Apr 12 j 15:03	19° H 39'45	-2°09'46	retrograde	-4032 Aug 10 j 01:16	5° Y 41'38	
minimum elong	-4038 Apr 12 j 15:03	19° H 39'45	2°09'48	opposition	-4032 Oct 26 j 20:18	4° Y 17'20	-2°05'59
max. Earth dist.	-4038 Apr 12 j 22:01	19° H 40'24	30.85112 AU	min. Earth dist.	-4032 Oct 26 j 20:28	4° Y 17'19	28.87646 AU
morning rise	-4038 Apr 28 j 21:24	20° H 15'50		direct	-4031 Jan 13 j 03:14	2° Y 52'19	
retrograde	-4038 Jul 28 j 00:27	22° H 12'53		evening set	-4031 Apr 12 j 14:27	4° Y 47'53	
opposition	-4038 Oct 14 j 04:56	20° H 48'21	-2°18'05				
min. Earth dist.	-4038 Oct 13 j 23:51	20° H 48'43	28.85541 AU	conjunction	-4031 Apr 28 j 21:40	5° Y 23'56	-1°56'35
direct	-4038 Dec 31 j 01:29	19° H 23'46		minimum elong	-4031 Apr 28 j 21:41	5° Y 23'56	1°56'35
evening set	-4037 Mar 29 j 24:00	21° H 19'02		max. Earth dist.	-4031 Apr 28 j 21:11	5° Y 23'53	30.87749 AU
				morning rise	-4031 May 15 j 04:25	5° Y 59'59	
conjunction	-4037 Apr 15 j 05:49	21° H 55'02	-2°08'27	retrograde	-4031 Aug 12 j 11:31	7° Y 55'51	
minimum elong	-4037 Apr 15 j 05:49	21° H 55'02	2°08'29	opposition	-4031 Oct 29 j 06:39	6° Y 31'36	-2°03'17
max. Earth dist.	-4037 Apr 15 j 11:16	21° H 55'33	30.85637 AU	min. Earth dist.	-4031 Oct 29 j 08:01	6° Y 31'30	28.88134 AU
morning rise	-4037 May 01 j 12:16	22° H 31'07		direct	-4030 Jan 15 j 15:03	5° Y 06'33	
retrograde	-4037 Jul 30 j 14:23	24° H 28'02		evening set	-4030 Apr 15 j 04:49	7° Y 02'10	
opposition	-4037 Oct 16 j 15:35	23° H 03'33	-2°16'34				
min. Earth dist.	-4037 Oct 16 j 10:39	23° H 03'54	28.86008 AU	conjunction	-4030 May 01 j 12:04	7° Y 38'13	-1°53'59
direct	-4036 Jan 02 j 15:29	21° H 38'54		minimum elong	-4030 May 01 j 12:04	7° Y 38'14	1°53'57
evening set	-4036 Mar 31 j 14:36	23° H 34'15		max. Earth dist.	-4030 May 01 j 09:50	7° Y 38'01	30.88318 AU
				morning rise	-4030 May 17 j 18:58	8° Y 14'16	
conjunction	-4036 Apr 16 j 20:36	24° H 10'16	-2°06'56	retrograde	-4030 Aug 15 j 00:10	10° Y 10'00	
minimum elong	-4036 Apr 16 j 20:36	24° H 10'16	2°06'57	opposition	-4030 Oct 31 j 17:01	8° Y 45'49	-2°00'24
max. Earth dist.	-4036 Apr 17 j 00:33	24° H 10'38	30.86054 AU	min. Earth dist.	-4030 Oct 31 j 18:14	8° Y 45'43	28.88770 AU
morning rise	-4036 May 03 j 03:10	24° H 46'21		direct	-4029 Jan 18 j 02:37	7° Y 20'43	
retrograde	-4036 Aug 01 j 02:12	26° H 43'06		evening set	-4029 Apr 17 j 18:55	9° Y 16'25	
opposition	-4036 Oct 18 j 02:18	25° H 18'39	-2°14'50				
min. Earth dist.	-4036 Oct 17 j 23:28	25° H 18'51	28.86383 AU	conjunction	-4029 May 04 j 02:22	9° Y 52'29	-1°51'12
direct	-4035 Jan 04 j 02:59	23° H 53'57		minimum elong	-4029 May 04 j 02:23	9° Y 52'29	1°51'11
evening set	-4035 Apr 03 j 05:01	25° H 49'20		max. Earth dist.	-4029 May 04 j 00:05	9° Y 52'16	30.89021 AU
				morning rise	-4029 May 20 j 09:07	10° Y 28'31	
conjunction	-4035 Apr 19 j 11:25	26° H 25'22	-2°05'14	retrograde	-4029 Aug 17 j 11:11	12° Y 24'07	
minimum elong	-4035 Apr 19 j 11:25	26° H 25'22	2°05'16	opposition	-4029 Nov 03 j 03:29	11° Y 00'01	-1°57'20
max. Earth dist.	-4035 Apr 19 j 14:39	26° H 25'40	30.86399 AU	min. Earth dist.	-4029 Nov 03 j 06:12	10° Y 59'49	28.89538 AU
morning rise	-4035 May 05 j 18:02	27° H 01'26		direct	-4028 Jan 20 j 15:08	9° Y 34'55	
retrograde	-4035 Aug 03 j 15:01	28° H 58'00		evening set	-4028 Apr 19 j 09:06	11° Y 30'42	
opposition	-4035 Oct 20 j 12:52	27° H 33'36	-2°12'55				
min. Earth dist.	-4035 Oct 20 j 10:19	27° H 33'47	28.86681 AU	conjunction	-4028 May 05 j 16:39	12° Y 06'46	-1°48'15
direct	-4034 Jan 06 j 16:36	26° H 08'49		minimum elong	-4028 May 05 j 16:40	12° Y 06'46	1°48'13
evening set	-4034 Apr 05 j 19:38	28° H 04'15		max. Earth dist.	-4028 May 05 j 13:13	12° Y 06'27	30.89866 AU
				morning rise	-4028 May 21 j 23:28	12° Y 42'48	
conjunction	-4034 Apr 22 j 02:06	28° H 40'17	-2°03'21	retrograde	-4028 Aug 19 j 00:18	14° Y 38'16	

Attention, astronomical year style is used: The year -4028 in astronomical counting style is the year 4029 BCE in historical counting style.

opposition	-4028 Nov 04 j 13:40	13° Υ 14'17	-1°54'05	max. Earth dist.	-4021 May 22 j 08:50	27° Υ 46'09	30.95331 AU
min. Earth dist.	-4028 Nov 04 j 16:12	13° Υ 14'06	28.90419 AU	morning rise	-4021 Jun 08 j 02:35	28° Υ 23'11	
direct	-4027 Jan 22 j 04:42	11° Υ 49'11			-4021 Aug 03 j 04:24	0° \mathcal{B}	
evening set	-4027 Apr 21 j 23:22	13° Υ 45'04		retrograde	-4021 Sep 04 j 08:32	0° \mathcal{B} 17'33	
					-4021 Oct 06 j 21:02	30° $\mathcal{R}\Upsilon$	
conjunction	-4027 May 08 j 07:02	14° Υ 21'09	-1°45'07	opposition	-4021 Nov 20 j 14:31	28° Υ 54'04	-1°26'54
minimum elong	-4027 May 08 j 07:03	14° Υ 21'09	1°45'06	min. Earth dist.	-4021 Nov 21 j 00:04	28° Υ 53'24	28.95695 AU
max. Earth dist.	-4027 May 08 j 02:38	14° Υ 20'44	30.90781 AU	direct	-4020 Feb 07 j 17:03	27° Υ 28'45	
morning rise	-4027 May 24 j 13:47	14° Υ 57'10		evening set	-4020 May 08 j 02:35	29° Υ 24'56	
retrograde	-4027 Aug 21 j 12:05	16° Υ 52'31			-4020 May 23 j 23:44	0° \mathcal{B}	
opposition	-4027 Nov 07 j 00:09	15° Υ 28'38	-1°50'40	conjunction	-4020 May 24 j 10:28	0° \mathcal{B} 01'00	-1°19'13
min. Earth dist.	-4027 Nov 07 j 04:35	15° Υ 28'19	28.91350 AU	minimum elong	-4020 May 24 j 10:28	0° \mathcal{B} 01'00	1°19'08
direct	-4026 Jan 24 j 15:58	14° Υ 03'33		max. Earth dist.	-4020 May 23 j 22:42	29° Υ 59'54	30.95935 AU
evening set	-4026 Apr 24 j 13:39	15° Υ 59'31		morning rise	-4020 Jun 09 j 16:14	0° \mathcal{B} 36'55	
				retrograde	-4020 Sep 05 j 17:42	2° \mathcal{B} 31'07	
conjunction	-4026 May 10 j 21:27	16° Υ 35'37	-1°41'51	opposition	-4020 Nov 22 j 00:47	1° \mathcal{B} 07'40	-1°22'28
minimum elong	-4026 May 10 j 21:28	16° Υ 35'37	1°41'47	min. Earth dist.	-4020 Nov 22 j 11:59	1° \mathcal{B} 06'52	28.96321 AU
max. Earth dist.	-4026 May 10 j 16:23	16° Υ 35'08	30.91716 AU		-4019 Jan 07 j 01:25	30° $\mathcal{R}\Upsilon$	
morning rise	-4026 May 27 j 04:04	17° Υ 11'38		direct	-4019 Feb 09 j 05:39	29° Υ 42'17	
retrograde	-4026 Aug 24 j 01:13	19° Υ 06'50			-4019 Mar 14 j 05:25	0° \mathcal{B}	
opposition	-4026 Nov 09 j 10:27	17° Υ 43'04	-1°47'05	evening set	-4019 May 10 j 16:29	1° \mathcal{B} 38'28	
min. Earth dist.	-4026 Nov 09 j 15:10	17° Υ 42'44	28.92254 AU	max. Earth dist.	-4019 May 26 j 11:13	2° \mathcal{B} 13'19	30.96608 AU
direct	-4025 Jan 27 j 05:40	16° Υ 17'59					
evening set	-4025 Apr 27 j 04:02	18° Υ 14'02		conjunction	-4019 May 27 j 00:14	2° \mathcal{B} 14'31	-1°15'01
				minimum elong	-4019 May 27 j 00:14	2° \mathcal{B} 14'31	1°14'56
conjunction	-4025 May 13 j 11:46	18° Υ 50'07	-1°38'25	morning rise	-4019 Jun 12 j 05:55	2° \mathcal{B} 50'25	
minimum elong	-4025 May 13 j 11:47	18° Υ 50'08	1°38'22	retrograde	-4019 Sep 08 j 05:23	4° \mathcal{B} 44'26	
max. Earth dist.	-4025 May 13 j 04:43	18° Υ 49'28	30.92594 AU	opposition	-4019 Nov 24 j 10:59	3° \mathcal{B} 21'01	-1°17'55
morning rise	-4025 May 29 j 18:22	19° Υ 26'08		min. Earth dist.	-4019 Nov 24 j 21:50	3° \mathcal{B} 20'15	28.97030 AU
retrograde	-4025 Aug 26 j 13:58	21° Υ 21'12		direct	-4018 Feb 11 j 19:00	1° \mathcal{B} 55'35	
opposition	-4025 Nov 11 j 20:59	19° Υ 57'31	-1°43'20	evening set	-4018 May 13 j 06:16	3° \mathcal{B} 51'47	
min. Earth dist.	-4025 Nov 12 j 03:12	19° Υ 57'04	28.93100 AU				
direct	-4024 Jan 29 j 16:56	18° Υ 32'26		conjunction	-4018 May 29 j 13:54	4° \mathcal{B} 27'50	-1°10'43
evening set	-4024 Apr 28 j 18:07	20° Υ 28'31		minimum elong	-4018 May 29 j 13:54	4° \mathcal{B} 27'50	1°10'36
				max. Earth dist.	-4018 May 29 j 00:22	4° \mathcal{B} 26'34	30.97370 AU
conjunction	-4024 May 15 j 02:04	21° Υ 04'37	-1°34'50	morning rise	-4018 Jun 14 j 19:15	5° \mathcal{B} 03'42	
minimum elong	-4024 May 15 j 02:05	21° Υ 04'37	1°34'46	retrograde	-4018 Sep 10 j 15:57	6° \mathcal{B} 57'34	
max. Earth dist.	-4024 May 14 j 18:44	21° Υ 03'56	30.93398 AU	opposition	-4018 Nov 26 j 21:21	5° \mathcal{B} 34'12	-1°13'16
morning rise	-4024 May 31 j 08:28	21° Υ 40'36		min. Earth dist.	-4018 Nov 27 j 09:37	5° \mathcal{B} 33'20	28.97862 AU
retrograde	-4024 Aug 28 j 00:05	23° Υ 35'31		direct	-4017 Feb 14 j 06:26	4° \mathcal{B} 08'44	
opposition	-4024 Nov 13 j 07:27	22° Υ 11'55	-1°39'26	evening set	-4017 May 15 j 19:55	6° \mathcal{B} 04'58	
min. Earth dist.	-4024 Nov 13 j 14:34	22° Υ 11'24	28.93840 AU				
direct	-4023 Jan 31 j 06:14	20° Υ 46'47		conjunction	-4017 Jun 01 j 03:28	6° \mathcal{B} 40'59	-1°06'18
evening set	-4023 May 01 j 08:31	22° Υ 42'55		minimum elong	-4017 Jun 01 j 03:29	6° \mathcal{B} 40'59	1°06'12
				max. Earth dist.	-4017 May 31 j 13:45	6° \mathcal{B} 39'43	30.98282 AU
conjunction	-4023 May 17 j 16:19	23° Υ 19'00	-1°31'07	morning rise	-4017 Jun 17 j 08:34	7° \mathcal{B} 16'50	
minimum elong	-4023 May 17 j 16:20	23° Υ 19'00	1°31'04	retrograde	-4017 Sep 13 j 03:59	9° \mathcal{B} 10'33	
max. Earth dist.	-4023 May 17 j 06:35	23° Υ 18'06	30.94103 AU	opposition	-4017 Nov 29 j 07:35	7° \mathcal{B} 47'15	-1°08'29
morning rise	-4023 Jun 02 j 22:45	23° Υ 54'59		min. Earth dist.	-4017 Nov 29 j 19:33	7° \mathcal{B} 46'24	28.98833 AU
retrograde	-4023 Aug 30 j 11:35	25° Υ 49'43		direct	-4016 Feb 16 j 20:35	6° \mathcal{B} 21'47	
opposition	-4023 Nov 15 j 17:46	24° Υ 26'10	-1°35'23	evening set	-4016 May 17 j 09:30	8° \mathcal{B} 18'03	
min. Earth dist.	-4023 Nov 16 j 01:49	24° Υ 25'36	28.94504 AU				
direct	-4022 Feb 02 j 17:31	23° Υ 00'59		conjunction	-4016 Jun 02 j 16:51	8° \mathcal{B} 54'04	-1°01'47
evening set	-4022 May 03 j 22:41	24° Υ 57'08		minimum elong	-4016 Jun 02 j 16:51	8° \mathcal{B} 54'04	1°01'41
				max. Earth dist.	-4016 Jun 02 j 01:56	8° \mathcal{B} 52'41	30.99326 AU
conjunction	-4022 May 20 j 06:40	25° Υ 33'14	-1°27'17	morning rise	-4016 Jun 18 j 21:46	9° \mathcal{B} 29'53	
minimum elong	-4022 May 20 j 06:40	25° Υ 33'14	1°27'12	retrograde	-4016 Sep 14 j 15:54	11° \mathcal{B} 23'29	
max. Earth dist.	-4022 May 19 j 20:55	25° Υ 32'20	30.94733 AU	opposition	-4016 Nov 30 j 17:55	10° \mathcal{B} 00'17	-1°03'37
morning rise	-4022 Jun 05 j 12:45	26° Υ 09'12		min. Earth dist.	-4016 Dec 01 j 06:50	9° \mathcal{B} 59'22	28.99938 AU
retrograde	-4022 Sep 01 j 21:28	28° Υ 03'45		direct	-4015 Feb 18 j 08:18	8° \mathcal{B} 34'49	
opposition	-4022 Nov 18 j 04:15	26° Υ 40'14	-1°31'13	evening set	-4015 May 19 j 23:07	10° \mathcal{B} 31'09	
min. Earth dist.	-4022 Nov 18 j 13:47	26° Υ 39'34	28.95101 AU				
direct	-4021 Feb 05 j 05:12	25° Υ 15'00		conjunction	-4015 Jun 05 j 06:25	11° \mathcal{B} 07'10	-0°57'10
evening set	-4021 May 06 j 12:42	27° Υ 11'09		minimum elong	-4015 Jun 05 j 06:26	11° \mathcal{B} 07'10	0°57'04
				max. Earth dist.	-4015 Jun 04 j 15:44	11° \mathcal{B} 05'48	31.00481 AU
conjunction	-4021 May 22 j 20:30	27° Υ 47'14	-1°23'18	morning rise	-4015 Jun 21 j 10:56	11° \mathcal{B} 42'57	
minimum elong	-4021 May 22 j 20:30	27° Υ 47'14	1°23'14				

Attention, astronomical year style is used: The year -4015 in astronomical counting style is the year 4016 BCE in historical counting style.

retrograde	-4015 Sep 17 j 02:09	13° 8 36'26		evening set	-4008 Jun 04 j 21:35	26° 8 03'09	
opposition	-4015 Dec 03 j 04:11	12° 8 13'21	-0°58'38	max. Earth dist.	-4008 Jun 20 j 05:57	26° 8 37'04	31.07390 AU
min. Earth dist.	-4015 Dec 03 j 17:41	12° 8 12'24	29.01109 AU				
direct	-4014 Feb 20 j 21:24	10° 8 47'55		conjunction	-4008 Jun 21 j 02:51	26° 8 39'00	-0°23'00
evening set	-4014 May 22 j 12:54	12° 8 44'19		minimum elong	-4008 Jun 21 j 02:51	26° 8 39'00	0°22'51
				morning rise	-4008 Jul 07 j 04:42	27° 8 14'35	
conjunction	-4014 Jun 07 j 19:49	13° 8 20'18	-0°52'29	retrograde	-4008 Oct 02 j 05:06	29° 8 07'17	
minimum elong	-4014 Jun 07 j 19:50	13° 8 20'18	0°52'22	opposition	-4008 Dec 18 j 05:39	27° 8 44'43	-0°21'55
max. Earth dist.	-4014 Jun 07 j 03:17	13° 8 18'46	31.01676 AU	min. Earth dist.	-4008 Dec 19 j 00:22	27° 8 43'24	29.07775 AU
morning rise	-4014 Jun 24 j 00:08	13° 8 56'05		direct	-4007 Mar 08 j 10:39	26° 8 19'15	
	-4014 Jul 26 j 12:36	15° 8		evening set	-4007 Jun 07 j 10:48	28° 8 15'51	
retrograde	-4014 Sep 19 j 14:09	15° 8 49'27					
	-4014 Nov 15 j 04:52	15° 8		conjunction	-4007 Jun 23 j 15:35	28° 8 51'40	-0°17'57
opposition	-4014 Dec 05 j 14:37	14° 8 26'29	-0°53'35	minimum elong	-4007 Jun 23 j 15:36	28° 8 51'40	0°17'48
min. Earth dist.	-4014 Dec 06 j 04:39	14° 8 25'29	29.02307 AU	max. Earth dist.	-4007 Jun 22 j 17:34	28° 8 49'38	31.08123 AU
direct	-4013 Feb 23 j 08:32	13° 8 01'05		morning rise	-4007 Jul 09 j 17:00	29° 8 27'13	
evening set	-4013 May 25 j 02:19	14° 8 57'32			-4007 Jul 25 j 08:51	0° II	
	-4013 May 26 j 05:35	15° 8		retrograde	-4007 Oct 04 j 16:23	1° II 19'48	
					-4007 Dec 19 j 00:44	30° 8	
conjunction	-4013 Jun 10 j 09:10	15° 8 33'31	-0°47'43	opposition	-4007 Dec 20 j 16:09	29° 8 57'15	-0°16'30
minimum elong	-4013 Jun 10 j 09:10	15° 8 33'31	0°47'35	min. Earth dist.	-4007 Dec 21 j 11:42	29° 8 55'53	29.08534 AU
max. Earth dist.	-4013 Jun 09 j 16:58	15° 8 32'01	31.02851 AU	direct	-4006 Mar 10 j 23:02	28° 8 31'46	
morning rise	-4013 Jun 26 j 12:58	16° 8 09'16			-4006 May 27 j 12:11	0° II	
retrograde	-4013 Sep 22 j 00:03	18° 8 02'32		evening set	-4006 Jun 09 j 23:46	0° II 28'21	
opposition	-4013 Dec 08 j 01:10	16° 8 39'40	-0°48'26	max. Earth dist.	-4006 Jun 25 j 06:44	1° II 02'09	31.08909 AU
min. Earth dist.	-4013 Dec 08 j 16:38	16° 8 38'35	29.03444 AU				
direct	-4012 Feb 25 j 20:07	15° 8 14'18		conjunction	-4006 Jun 26 j 04:16	1° II 04'09	-0°12'53
evening set	-4012 May 26 j 16:01	17° 8 10'48		minimum elong	-4006 Jun 26 j 04:15	1° II 04'09	0°12'44
				behind sun begin	-4006 Jun 26 j 00:12	1° II 03'47	
conjunction	-4012 Jun 11 j 22:27	17° 8 46'45	-0°42'52	behind sun end	-4006 Jun 26 j 08:18	1° II 04'30	
minimum elong	-4012 Jun 11 j 22:27	17° 8 46'45	0°42'45	morning rise	-4006 Jul 12 j 05:04	1° II 39'39	
max. Earth dist.	-4012 Jun 11 j 04:16	17° 8 45'04	31.03954 AU	retrograde	-4006 Oct 07 j 02:06	3° II 32'07	
morning rise	-4012 Jun 28 j 02:03	18° 8 22'29		opposition	-4006 Dec 23 j 02:46	2° II 09'37	-0°11'04
retrograde	-4012 Sep 23 j 11:10	20° 8 15'39		min. Earth dist.	-4006 Dec 23 j 22:31	2° II 08'14	29.09352 AU
opposition	-4012 Dec 09 j 11:30	18° 8 52'52	-0°43'14	direct	-4005 Mar 13 j 12:28	0° II 44'07	
min. Earth dist.	-4012 Dec 10 j 03:03	18° 8 51'47	29.04497 AU	evening set	-4005 Jun 12 j 12:36	2° II 40'43	
direct	-4011 Feb 27 j 07:47	17° 8 27'30					
evening set	-4011 May 29 j 05:35	19° 8 24'02		conjunction	-4005 Jun 28 j 16:29	3° II 16'28	-0°07'49
				minimum elong	-4005 Jun 28 j 16:29	3° II 16'28	0°07'40
conjunction	-4011 Jun 14 j 11:52	19° 8 59'59	-0°37'58	behind sun begin	-4005 Jun 28 j 10:34	3° II 15'56	
minimum elong	-4011 Jun 14 j 11:52	19° 8 59'59	0°37'51	behind sun end	-4005 Jun 28 j 22:24	3° II 16'59	
max. Earth dist.	-4011 Jun 13 j 17:28	19° 8 58'16	31.04945 AU	max. Earth dist.	-4005 Jun 27 j 17:42	3° II 14'21	31.09778 AU
morning rise	-4011 Jun 30 j 14:55	20° 8 35'40		morning rise	-4005 Jul 14 j 16:56	3° II 51'55	
retrograde	-4011 Sep 25 j 20:15	22° 8 28'44		retrograde	-4005 Oct 09 j 13:57	5° II 44'18	
opposition	-4011 Dec 11 j 22:09	21° 8 06'01	-0°37'58	opposition	-4005 Dec 25 j 13:19	4° II 21'51	-0°05'37
min. Earth dist.	-4011 Dec 12 j 15:30	21° 8 04'48	29.05433 AU	min. Earth dist.	-4005 Dec 26 j 08:58	4° II 20'28	29.10282 AU
direct	-4010 Mar 01 j 19:48	19° 8 40'39		direct	-4004 Mar 15 j 00:41	2° II 56'21	
evening set	-4010 May 31 j 19:04	21° 8 37'13		evening set	-4004 Jun 14 j 01:20	4° II 52'57	
max. Earth dist.	-4010 Jun 16 j 05:04	22° 8 11'17	31.05836 AU	max. Earth dist.	-4004 Jun 29 j 07:04	5° II 26'39	31.10758 AU
conjunction	-4010 Jun 17 j 00:56	22° 8 13'07	-0°33'01	conjunction	-4004 Jun 30 j 04:58	5° II 28'41	-0°02'43
minimum elong	-4010 Jun 17 j 00:56	22° 8 13'08	0°32'53	minimum elong	-4004 Jun 30 j 04:57	5° II 28'41	0°02'34
morning rise	-4010 Jul 03 j 03:41	22° 8 48'47		behind sun begin	-4004 Jun 29 j 22:24	5° II 28'06	
retrograde	-4010 Sep 28 j 07:30	24° 8 41'44		behind sun end	-4004 Jun 30 j 11:29	5° II 29'16	
opposition	-4010 Dec 14 j 08:38	23° 8 19'05	-0°32'39	morning rise	-4004 Jul 16 j 04:43	6° II 04'06	
min. Earth dist.	-4010 Dec 15 j 01:47	23° 8 17'52	29.06268 AU	retrograde	-4004 Oct 10 j 23:21	7° II 56'24	
direct	-4009 Mar 04 j 08:29	21° 8 53'41		opposition	-4004 Dec 26 j 23:52	6° II 34'01	-0°00'09
evening set	-4009 Jun 03 j 08:26	23° 8 50'16		min. Earth dist.	-4004 Dec 27 j 20:25	6° II 32'34	29.11309 AU
				asc. node	-4003 Jan 06 j 07:51	6° II 16'49	
conjunction	-4009 Jun 19 j 14:00	24° 8 26'09	-0°28'02	direct	-4003 Mar 17 j 13:00	5° II 08'33	
minimum elong	-4009 Jun 19 j 14:01	24° 8 26'09	0°27'54	evening set	-4003 Jun 16 j 14:14	7° II 05'11	
max. Earth dist.	-4009 Jun 18 j 17:30	24° 8 24'15	31.06631 AU				
morning rise	-4009 Jul 05 j 16:15	25° 8 01'46		conjunction	-4003 Jul 02 j 17:12	7° II 40'52	0°02'31
retrograde	-4009 Sep 30 j 17:40	26° 8 54'36		minimum elong	-4003 Jul 02 j 17:12	7° II 40'52	0°02'41
opposition	-4009 Dec 16 j 19:11	25° 8 31'59	-0°27'18	behind sun begin	-4003 Jul 02 j 10:40	7° II 40'17	
min. Earth dist.	-4009 Dec 17 j 13:59	25° 8 30'40	29.07042 AU	behind sun end	-4003 Jul 02 j 23:44	7° II 41'27	
direct	-4008 Mar 05 j 19:51	24° 8 06'34		max. Earth dist.	-4003 Jul 01 j 18:03	7° II 38'43	31.11838 AU

Attention, astronomical year style is used: The year -4003 in astronomical counting style is the year 4004 BCE in historical counting style.

morning rise	-4003 Jul 18 j 16:36	8°II16'15		min. Earth dist.	-3996 Jan 13 j 03:17	21°II57'15	29.17861 AU
retrograde	-4003 Oct 13 j 09:52	10°II08'28		direct	-3996 Apr 02 j 02:00	20°II33'32	
opposition	-4003 Dec 29 j 10:27	8°II46'10	0°05'18	evening set	-3996 Jul 02 j 06:07	22°II30'15	
min. Earth dist.	-4003 Dec 30 j 06:26	8°II44'47	29.12421 AU	max. Earth dist.	-3996 Jul 17 j 02:40	23°II03'11	31.18096 AU
direct	-4002 Mar 20 j 00:48	7°II20'45					
evening set	-4002 Jun 19 j 02:51	9°II17'24		conjunction	-3996 Jul 18 j 05:07	23°II05'38	0°37'39
max. Earth dist.	-4002 Jul 04 j 06:51	9°II50'58	31.12961 AU	minimum elong	-3996 Jul 18 j 05:07	23°II05'38	0°37'49
				morning rise	-3996 Aug 03 j 00:17	23°II40'42	
conjunction	-4002 Jul 05 j 05:26	9°II53'04	0°07'37	retrograde	-3996 Oct 28 j 10:48	25°II32'34	
minimum elong	-4002 Jul 05 j 05:25	9°II53'04	0°07'46	opposition	-3995 Jan 13 j 14:36	24°II10'35	0°42'46
behind sun begin	-4002 Jul 04 j 23:32	9°II52'32		min. Earth dist.	-3995 Jan 14 j 14:08	24°II08'57	29.18402 AU
behind sun end	-4002 Jul 05 j 11:18	9°II53'35		direct	-3995 Apr 04 j 14:47	22°II45'13	
morning rise	-4002 Jul 21 j 04:04	10°II28'24		evening set	-3995 Jul 04 j 18:13	24°II41'55	
retrograde	-4002 Oct 15 j 18:30	12°II20'35					
opposition	-4002 Dec 31 j 21:16	10°II58'22	0°10'45	conjunction	-3995 Jul 20 j 16:45	25°II17'15	0°42'30
min. Earth dist.	-4001 Jan 01 j 18:36	10°II56'53	29.13551 AU	minimum elong	-3995 Jul 20 j 16:45	25°II17'15	0°42'41
direct	-4001 Mar 22 j 11:50	9°II32'59		max. Earth dist.	-3995 Jul 19 j 15:15	25°II14'53	31.18605 AU
evening set	-4001 Jun 21 j 15:35	11°II29'40		morning rise	-3995 Aug 05 j 11:07	25°II52'16	
				retrograde	-3995 Oct 30 j 19:56	27°II44'05	
conjunction	-4001 Jul 07 j 17:31	12°II05'17	0°12'41	opposition	-3994 Jan 16 j 01:43	26°II22'06	0°47'55
minimum elong	-4001 Jul 07 j 17:31	12°II05'17	0°12'51	min. Earth dist.	-3994 Jan 17 j 02:06	26°II20'24	29.18900 AU
behind sun begin	-4001 Jul 07 j 13:32	12°II04'56		direct	-3994 Apr 07 j 04:04	24°II56'43	
behind sun end	-4001 Jul 07 j 21:30	12°II05'39		evening set	-3994 Jul 07 j 06:10	26°II53'23	
max. Earth dist.	-4001 Jul 06 j 17:57	12°II03'06	31.14083 AU	max. Earth dist.	-3994 Jul 22 j 01:29	27°II26'13	31.19108 AU
morning rise	-4001 Jul 23 j 15:44	12°II40'35					
retrograde	-4001 Oct 18 j 05:35	14°II32'43		conjunction	-3994 Jul 23 j 03:52	27°II28'40	0°47'17
opposition	-4000 Jan 03 j 07:55	13°II10'35	0°16'11	minimum elong	-3994 Jul 23 j 03:52	27°II28'40	0°47'27
min. Earth dist.	-4000 Jan 04 j 04:47	13°II09'08	29.14644 AU	morning rise	-3994 Aug 07 j 21:46	28°II03'38	
direct	-4000 Mar 23 j 23:19	11°II45'14		retrograde	-3994 Nov 02 j 06:08	29°II55'24	
evening set	-4000 Jun 23 j 04:13	13°II41'57		opposition	-3993 Jan 18 j 12:41	28°II33'25	0°52'59
max. Earth dist.	-4000 Jul 08 j 05:43	14°II15'18	31.15124 AU	min. Earth dist.	-3993 Jan 19 j 12:06	28°II31'48	29.19428 AU
				direct	-3993 Apr 09 j 16:23	27°II08'02	
conjunction	-4000 Jul 09 j 05:40	14°II17'32	0°17'45	evening set	-3993 Jul 09 j 17:55	29°II04'41	
minimum elong	-4000 Jul 09 j 05:40	14°II17'32	0°17'55				
morning rise	-4000 Jul 25 j 03:13	14°II52'47		conjunction	-3993 Jul 25 j 15:06	29°II39'56	0°51'59
retrograde	-4000 Oct 19 j 15:20	16°II44'53		minimum elong	-3993 Jul 25 j 15:06	29°II39'56	0°52'09
opposition	-3999 Jan 04 j 18:52	15°II22'48	0°21'35	max. Earth dist.	-3993 Jul 24 j 13:43	29°II37'34	31.19656 AU
min. Earth dist.	-3999 Jan 05 j 17:14	15°II21'15	29.15642 AU		-3993 Aug 03 j 14:40	0°00'00	
direct	-3999 Mar 26 j 10:34	13°II57'28		morning rise	-3993 Aug 10 j 08:11	0°00'14'50	
evening set	-3999 Jun 25 j 16:52	15°II54'12		retrograde	-3993 Nov 04 j 14:27	2°00'06'35	
				opposition	-3992 Jan 20 j 23:44	0°00'44'37	0°57'58
conjunction	-3999 Jul 11 j 17:44	16°II29'44	0°22'47	min. Earth dist.	-3992 Jan 21 j 23:59	0°00'42'57	29.20030 AU
minimum elong	-3999 Jul 11 j 17:44	16°II29'44	0°22'58		-3992 Feb 18 j 08:06	30°00'00'00	
max. Earth dist.	-3999 Jul 10 j 17:27	16°II27'28	31.16057 AU	direct	-3992 Apr 11 j 03:40	29°II19'14	
morning rise	-3999 Jul 27 j 14:41	17°II04'56			-3992 Jun 01 j 09:03	0°00'00'00	
retrograde	-3999 Oct 22 j 02:00	18°II56'59		evening set	-3992 Jul 11 j 05:42	1°00'15'52	
opposition	-3998 Jan 07 j 05:46	17°II34'57	0°26'58	max. Earth dist.	-3992 Jul 26 j 00:24	1°00'48'40	31.20309 AU
min. Earth dist.	-3998 Jan 08 j 04:02	17°II33'24	29.16503 AU				
direct	-3998 Mar 29 j 00:35	16°II09'37		conjunction	-3992 Jul 27 j 02:08	1°00'51'04	0°56'37
evening set	-3998 Jun 28 j 05:30	18°II06'21		minimum elong	-3992 Jul 27 j 02:08	1°00'51'04	0°56'47
max. Earth dist.	-3998 Jul 13 j 04:19	18°II39'29	31.16850 AU	morning rise	-3992 Aug 11 j 18:41	2°00'25'57	
				retrograde	-3992 Nov 06 j 00:52	4°00'17'40	
conjunction	-3998 Jul 14 j 05:43	18°II41'51	0°27'48	opposition	-3991 Jan 22 j 10:45	2°00'55'45	1°02'52
minimum elong	-3998 Jul 14 j 05:43	18°II41'51	0°27'57	min. Earth dist.	-3991 Jan 23 j 09:46	2°00'54'09	29.20731 AU
morning rise	-3998 Jul 30 j 02:04	19°II17'01		direct	-3991 Apr 13 j 15:03	1°00'30'23	
retrograde	-3998 Oct 24 j 13:15	21°II09'00		evening set	-3991 Jul 13 j 17:21	3°00'27'02	
opposition	-3997 Jan 09 j 16:49	19°II46'59	0°32'17	max. Earth dist.	-3991 Jul 28 j 11:48	3°00'59'50	31.21052 AU
min. Earth dist.	-3997 Jan 10 j 15:52	19°II45'24	29.17246 AU				
direct	-3997 Mar 31 j 12:15	18°II21'39		conjunction	-3991 Jul 29 j 13:08	4°00'02'12	1°01'09
evening set	-3997 Jun 30 j 17:44	20°II18'23		minimum elong	-3991 Jul 29 j 13:08	4°00'02'12	1°01'20
				morning rise	-3991 Aug 14 j 04:56	4°00'37'01	
conjunction	-3997 Jul 16 j 17:29	20°II53'50	0°32'45	retrograde	-3991 Nov 08 j 10:16	6°00'28'46	
minimum elong	-3997 Jul 16 j 17:29	20°II53'50	0°32'55	opposition	-3990 Jan 24 j 21:58	5°00'06'53	1°07'41
max. Earth dist.	-3997 Jul 15 j 16:30	20°II51'30	31.17527 AU	min. Earth dist.	-3990 Jan 25 j 21:41	5°00'05'15	29.21532 AU
morning rise	-3997 Aug 01 j 13:09	21°II28'57		direct	-3990 Apr 16 j 01:49	3°00'41'36	
retrograde	-3997 Oct 26 j 23:03	23°II20'52		evening set	-3990 Jul 16 j 04:56	5°00'38'15	
opposition	-3996 Jan 12 j 03:48	21°II58'53	0°37'34	max. Earth dist.	-3990 Jul 30 j 23:17	6°00'11'03	31.21891 AU

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Attention, astronomical year style is used: The year -3990 in astronomical counting style is the year 3991 BCE in historical counting style.

conjunction	-3990 Aug 01 j 00:04	6°☾13'22	1°05'37	evening set	-3983 Jul 31 j 12:19	20°☾57'38	
minimum elong	-3990 Aug 01 j 00:03	6°☾13'22	1°05'47	max. Earth dist.	-3983 Aug 15 j 01:43	21°☾30'04	31.26088 AU
morning rise	-3990 Aug 16 j 15:13	6°☾48'09					
retrograde	-3990 Nov 10 j 20:41	8°☾39'56		conjunction	-3983 Aug 16 j 02:32	21°☾32'23	1°33'47
opposition	-3989 Jan 27 j 09:10	7°☾18'06	1°12'24	minimum elong	-3983 Aug 16 j 02:32	21°☾32'23	1°33'57
min. Earth dist.	-3989 Jan 28 j 08:08	7°☾16'31	29.22387 AU	morning rise	-3983 Aug 31 j 13:11	22°☾06'50	
direct	-3989 Apr 18 j 14:22	5°☾52'53		retrograde	-3983 Nov 25 j 22:08	23°☾58'47	
evening set	-3989 Jul 18 j 16:24	7°☾49'33		opposition	-3982 Feb 11 j 17:34	22°☾37'03	1°42'03
max. Earth dist.	-3989 Aug 02 j 09:35	8°☾22'16	31.22748 AU	min. Earth dist.	-3982 Feb 12 j 16:22	22°☾35'29	29.26313 AU
				direct	-3982 May 04 j 05:26	21°☾12'01	
				evening set	-3982 Aug 02 j 23:13	23°☾08'31	
conjunction	-3989 Aug 03 j 10:46	8°☾24'37	1°09'58				
minimum elong	-3989 Aug 03 j 10:46	8°☾24'37	1°10'09	conjunction	-3982 Aug 18 j 12:47	23°☾43'14	1°37'18
morning rise	-3989 Aug 19 j 01:20	8°☾59'21		minimum elong	-3982 Aug 18 j 12:47	23°☾43'14	1°37'28
retrograde	-3989 Nov 13 j 08:02	10°☾51'11		max. Earth dist.	-3982 Aug 17 j 12:23	23°☾40'57	31.26317 AU
opposition	-3988 Jan 29 j 20:27	9°☾29'24	1°17'00	morning rise	-3982 Sep 02 j 22:46	24°☾17'38	
min. Earth dist.	-3988 Jan 30 j 19:43	9°☾27'49	29.23250 AU	retrograde	-3982 Nov 28 j 06:49	26°☾09'36	
direct	-3988 Apr 20 j 00:35	8°☾04'15		opposition	-3981 Feb 14 j 05:16	24°☾47'49	1°45'44
evening set	-3988 Jul 20 j 03:51	10°☾00'57		min. Earth dist.	-3981 Feb 15 j 04:36	24°☾46'13	29.26560 AU
				direct	-3981 May 06 j 16:22	23°☾22'47	
conjunction	-3988 Aug 04 j 21:39	10°☾35'58	1°14'14	evening set	-3981 Aug 05 j 09:49	25°☾19'13	
minimum elong	-3988 Aug 04 j 21:39	10°☾35'58	1°14'24				
max. Earth dist.	-3988 Aug 03 j 21:20	10°☾33'41	31.23577 AU	conjunction	-3981 Aug 20 j 22:46	25°☾53'52	1°40'41
morning rise	-3988 Aug 20 j 11:26	11°☾10'39		minimum elong	-3981 Aug 20 j 22:45	25°☾53'52	1°40'51
retrograde	-3988 Nov 14 j 18:07	13°☾02'31		max. Earth dist.	-3981 Aug 19 j 23:18	25°☾51'40	31.26574 AU
opposition	-3987 Jan 31 j 07:46	11°☾40'48	1°21'30	morning rise	-3981 Sep 05 j 08:10	26°☾28'14	
min. Earth dist.	-3987 Feb 01 j 07:11	11°☾39'11	29.24038 AU	retrograde	-3981 Nov 30 j 15:57	28°☾20'13	
direct	-3987 Apr 22 j 13:46	10°☾15'41		opposition	-3980 Feb 16 j 16:54	26°☾58'24	1°49'16
evening set	-3987 Jul 22 j 15:28	12°☾12'24		min. Earth dist.	-3980 Feb 17 j 15:06	26°☾56'53	29.26839 AU
max. Earth dist.	-3987 Aug 06 j 06:56	12°☾44'59	31.24315 AU	direct	-3980 May 08 j 04:42	25°☾33'22	
				evening set	-3980 Aug 06 j 20:31	27°☾29'45	
conjunction	-3987 Aug 07 j 08:23	12°☾47'22	1°18'23	max. Earth dist.	-3980 Aug 21 j 09:12	28°☾02'09	31.26886 AU
minimum elong	-3987 Aug 07 j 08:22	12°☾47'22	1°18'33				
morning rise	-3987 Aug 22 j 21:38	13°☾22'00		conjunction	-3980 Aug 22 j 08:42	28°☾04'21	1°43'55
retrograde	-3987 Nov 17 j 06:51	15°☾13'54		minimum elong	-3980 Aug 22 j 08:42	28°☾04'21	1°44'03
opposition	-3986 Feb 02 j 19:16	13°☾52'12	1°25'52	morning rise	-3980 Sep 06 j 17:33	28°☾38'40	
min. Earth dist.	-3986 Feb 03 j 18:22	13°☾50'38	29.24735 AU		-3980 Oct 20 j 08:56	0°☾	
direct	-3986 Apr 25 j 02:33	12°☾27'09		retrograde	-3980 Dec 02 j 02:48	0°☾30'42	
evening set	-3986 Jul 25 j 02:41	14°☾23'51			-3979 Jan 15 j 10:47	30°☾	
				opposition	-3979 Feb 18 j 04:32	29°☾08'51	1°52'39
conjunction	-3986 Aug 09 j 19:04	14°☾58'46	1°22'25	min. Earth dist.	-3979 Feb 19 j 02:21	29°☾07'22	29.27216 AU
minimum elong	-3986 Aug 09 j 19:04	14°☾58'46	1°22'35	direct	-3979 May 10 j 14:26	27°☾43'51	
max. Earth dist.	-3986 Aug 08 j 18:43	14°☾56'29	31.24939 AU	evening set	-3979 Aug 09 j 07:00	29°☾40'12	
morning rise	-3986 Aug 25 j 07:29	15°☾33'21			-3979 Aug 18 j 05:12	0°☾	
retrograde	-3986 Nov 19 j 16:23	17°☾25'17					
opposition	-3985 Feb 05 j 06:56	16°☾03'36	1°30'07	conjunction	-3979 Aug 24 j 18:40	0°☾14'45	1°47'00
min. Earth dist.	-3985 Feb 06 j 06:51	16°☾01'58	29.25298 AU	minimum elong	-3979 Aug 24 j 18:39	0°☾14'45	1°47'09
direct	-3985 Apr 27 j 15:44	14°☾38'35		max. Earth dist.	-3979 Aug 23 j 20:47	0°☾12'42	31.27310 AU
evening set	-3985 Jul 27 j 14:05	16°☾35'15		morning rise	-3979 Sep 09 j 02:48	0°☾49'01	
max. Earth dist.	-3985 Aug 11 j 04:18	17°☾07'44	31.25436 AU	retrograde	-3979 Dec 04 j 12:35	2°☾41'07	
				opposition	-3978 Feb 20 j 16:22	1°☾19'16	1°55'52
conjunction	-3985 Aug 12 j 05:38	17°☾10'06	1°26'20	min. Earth dist.	-3978 Feb 21 j 13:32	1°☾17'50	29.27687 AU
minimum elong	-3985 Aug 12 j 05:37	17°☾10'06	1°26'30		-3978 Apr 24 j 04:09	30°☾	
morning rise	-3985 Aug 27 j 17:35	17°☾44'39		direct	-3978 May 13 j 03:23	29°☾54'20	
retrograde	-3985 Nov 22 j 03:01	19°☾36'36			-3978 May 31 j 22:06	0°☾	
opposition	-3984 Feb 07 j 18:17	18°☾14'55	1°34'14	evening set	-3978 Aug 11 j 17:24	1°☾50'39	
min. Earth dist.	-3984 Feb 08 j 17:21	18°☾13'20	29.25739 AU	max. Earth dist.	-3978 Aug 26 j 06:04	2°☾23'05	31.27829 AU
direct	-3984 Apr 29 j 04:15	16°☾49'53					
evening set	-3984 Jul 29 j 01:15	18°☾46'31		conjunction	-3978 Aug 27 j 04:17	2°☾25'10	1°49'56
				minimum elong	-3978 Aug 27 j 04:16	2°☾25'10	1°50'04
conjunction	-3984 Aug 13 j 16:16	19°☾21'20	1°30'08	morning rise	-3978 Sep 11 j 12:02	2°☾59'24	
minimum elong	-3984 Aug 13 j 16:15	19°☾21'20	1°30'17	retrograde	-3978 Dec 07 j 01:08	4°☾51'35	
max. Earth dist.	-3984 Aug 12 j 15:41	19°☾19'02	31.25806 AU	opposition	-3977 Feb 23 j 04:11	3°☾29'45	1°58'54
morning rise	-3984 Aug 29 j 03:26	19°☾55'50		min. Earth dist.	-3977 Feb 24 j 00:18	3°☾28'23	29.28250 AU
retrograde	-3984 Nov 23 j 11:57	21°☾47'47		direct	-3977 May 15 j 14:44	2°☾04'53	
opposition	-3983 Feb 09 j 05:59	20°☾26'04	1°38'13	evening set	-3977 Aug 14 j 03:43	4°☾01'11	
min. Earth dist.	-3983 Feb 10 j 06:00	20°☾24'26	29.26063 AU				
direct	-3983 May 01 j 16:44	19°☾01'03					

Attention, astronomical year style is used: The year -3977 in astronomical counting style is the year 3978 BCE in historical counting style.

conjunction	-3977 Aug 29 j 14:09	4°Ω35'40	1°52'42	retrograde	-3971 Dec 22 j 01:35	20°Ω07'37	
minimum elong	-3977 Aug 29 j 14:09	4°Ω35'39	1°52'51	opposition	-3970 Mar 10 j 17:25	18°Ω45'47	2°15'15
max. Earth dist.	-3977 Aug 28 j 17:38	4°Ω33'44	31.28405 AU	min. Earth dist.	-3970 Mar 11 j 11:17	18°Ω44'34	29.30397 AU
morning rise	-3977 Sep 13 j 21:13	5°Ω09'51		direct	-3970 May 31 j 00:25	17°Ω21'22	
retrograde	-3977 Dec 09 j 10:58	7°Ω02'08		evening set	-3970 Aug 29 j 03:14	19°Ω17'21	
opposition	-3976 Feb 25 j 16:01	5°Ω40'20	2°01'47				
min. Earth dist.	-3976 Feb 26 j 12:30	5°Ω38'56	29.28833 AU	conjunction	-3970 Sep 13 j 09:44	19°Ω51'34	2°07'23
direct	-3976 May 17 j 02:50	4°Ω15'34		minimum elong	-3970 Sep 13 j 09:44	19°Ω51'34	2°07'30
evening set	-3976 Aug 15 j 14:12	6°Ω11'51		max. Earth dist.	-3970 Sep 12 j 16:16	19°Ω49'55	31.30165 AU
				morning rise	-3970 Sep 28 j 13:36	20°Ω25'34	
conjunction	-3976 Aug 30 j 23:52	6°Ω46'17	1°55'18	retrograde	-3970 Dec 24 j 11:18	22°Ω18'30	
minimum elong	-3976 Aug 30 j 23:51	6°Ω46'17	1°55'27	opposition	-3969 Mar 13 j 05:48	20°Ω56'35	2°16'50
max. Earth dist.	-3976 Aug 30 j 02:58	6°Ω44'19	31.28982 AU	min. Earth dist.	-3969 Mar 13 j 23:09	20°Ω55'25	29.30244 AU
morning rise	-3976 Sep 15 j 06:33	7°Ω20'27		direct	-3969 Jun 02 j 13:39	19°Ω32'11	
retrograde	-3976 Dec 10 j 22:31	9°Ω12'50		evening set	-3969 Aug 31 j 13:08	21°Ω28'05	
opposition	-3975 Feb 27 j 04:00	7°Ω51'03	2°04'29				
min. Earth dist.	-3975 Feb 27 j 23:07	7°Ω49'46	29.29390 AU	conjunction	-3969 Sep 15 j 19:01	22°Ω02'15	2°08'47
direct	-3975 May 19 j 14:59	6°Ω26'23		minimum elong	-3969 Sep 15 j 19:01	22°Ω02'15	2°08'54
evening set	-3975 Aug 18 j 00:28	8°Ω22'39		max. Earth dist.	-3969 Sep 15 j 01:11	22°Ω00'34	31.30000 AU
				morning rise	-3969 Sep 30 j 22:41	22°Ω36'14	
conjunction	-3975 Sep 02 j 09:37	8°Ω57'03	1°57'45	retrograde	-3969 Dec 26 j 23:48	24°Ω29'14	
minimum elong	-3975 Sep 02 j 09:36	8°Ω57'03	1°57'54	opposition	-3968 Mar 14 j 17:57	23°Ω07'15	2°18'14
max. Earth dist.	-3975 Sep 01 j 13:51	8°Ω55'11	31.29489 AU	min. Earth dist.	-3968 Mar 15 j 10:09	23°Ω06'09	29.30087 AU
morning rise	-3975 Sep 17 j 15:39	9°Ω31'11		direct	-3968 Jun 04 j 00:34	21°Ω42'51	
retrograde	-3975 Dec 13 j 08:32	11°Ω23'40		evening set	-3968 Sep 01 j 22:49	23°Ω38'40	
opposition	-3974 Mar 01 j 16:18	10°Ω01'55	2°07'01				
min. Earth dist.	-3974 Mar 02 j 12:03	10°Ω00'34	29.29860 AU	conjunction	-3968 Sep 17 j 04:23	24°Ω12'49	2°09'59
direct	-3974 May 22 j 03:15	8°Ω37'19		minimum elong	-3968 Sep 17 j 04:23	24°Ω12'49	2°10'05
evening set	-3974 Aug 20 j 10:51	10°Ω33'34		max. Earth dist.	-3968 Sep 16 j 12:28	24°Ω11'19	31.29848 AU
				morning rise	-3968 Oct 02 j 07:32	24°Ω46'46	
conjunction	-3974 Sep 04 j 19:20	11°Ω07'55	2°00'02	retrograde	-3968 Dec 28 j 09:29	26°Ω39'51	
minimum elong	-3974 Sep 04 j 19:20	11°Ω07'55	2°00'09	opposition	-3967 Mar 17 j 06:28	25°Ω17'48	2°19'26
max. Earth dist.	-3974 Sep 03 j 23:35	11°Ω06'04	31.29904 AU	min. Earth dist.	-3967 Mar 17 j 22:31	25°Ω16'43	29.29964 AU
morning rise	-3974 Sep 20 j 00:58	11°Ω42'02		direct	-3967 Jun 06 j 12:13	23°Ω53'27	
retrograde	-3974 Dec 15 j 19:26	13°Ω34'36		evening set	-3967 Sep 04 j 08:27	25°Ω49'11	
opposition	-3973 Mar 04 j 04:25	12°Ω12'52	2°09'21				
min. Earth dist.	-3973 Mar 04 j 22:51	12°Ω11'37	29.30210 AU	conjunction	-3967 Sep 19 j 13:26	26°Ω23'17	2°11'01
direct	-3973 May 24 j 15:47	10°Ω48'20		minimum elong	-3967 Sep 19 j 13:26	26°Ω23'17	2°11'07
evening set	-3973 Aug 22 j 21:04	12°Ω44'33		max. Earth dist.	-3967 Sep 18 j 21:45	26°Ω21'49	31.29768 AU
max. Earth dist.	-3973 Sep 06 j 09:30	13°Ω17'02	31.30173 AU	morning rise	-3967 Oct 04 j 16:25	26°Ω57'14	
				retrograde	-3967 Dec 30 j 21:17	28°Ω50'24	
conjunction	-3973 Sep 07 j 05:02	13°Ω18'52	2°02'08	opposition	-3966 Mar 19 j 18:53	27°Ω28'19	2°20'25
minimum elong	-3973 Sep 07 j 05:02	13°Ω18'52	2°02'16	min. Earth dist.	-3966 Mar 20 j 08:54	27°Ω27'22	29.29927 AU
morning rise	-3973 Sep 22 j 10:12	13°Ω52'57		direct	-3966 Jun 09 j 00:44	26°Ω04'00	
	-3973 Oct 26 j 11:58	15°Ω		evening set	-3966 Sep 06 j 17:58	27°Ω59'40	
retrograde	-3973 Dec 18 j 04:55	15°Ω45'38					
	-3972 Feb 11 j 16:15	15°κΩ		conjunction	-3966 Sep 21 j 22:40	28°Ω33'45	2°11'51
opposition	-3972 Mar 05 j 16:45	14°Ω23'52	2°11'30	minimum elong	-3966 Sep 21 j 22:40	28°Ω33'45	2°11'56
min. Earth dist.	-3972 Mar 06 j 11:47	14°Ω22'35	29.30415 AU	max. Earth dist.	-3966 Sep 21 j 08:31	28°Ω32'25	31.29766 AU
direct	-3972 May 26 j 02:36	12°Ω59'24		morning rise	-3966 Oct 07 j 01:16	29°Ω07'40	
evening set	-3972 Aug 24 j 07:16	14°Ω55'33			-3966 Nov 01 j 14:17	0°൬	
	-3972 Aug 26 j 07:44	15°Ω		retrograde	-3965 Jan 02 j 08:07	1°൬00'57	
					-3965 Mar 09 j 02:20	30°κΩ	
conjunction	-3972 Sep 08 j 14:44	15°Ω29'50	2°04'04	opposition	-3965 Mar 22 j 07:21	29°Ω38'50	2°21'13
minimum elong	-3972 Sep 08 j 14:44	15°Ω29'50	2°04'11	min. Earth dist.	-3965 Mar 22 j 21:26	29°Ω37'53	29.29970 AU
max. Earth dist.	-3972 Sep 07 j 20:00	15°Ω28'04	31.30299 AU	direct	-3965 Jun 11 j 13:06	28°Ω14'36	
morning rise	-3972 Sep 23 j 19:24	16°Ω03'53			-3965 Sep 04 j 11:22	0°൬	
retrograde	-3972 Dec 19 j 14:16	17°Ω56'39		evening set	-3965 Sep 09 j 03:27	0°൬10'12	
opposition	-3971 Mar 08 j 05:00	16°Ω34'52	2°13'29				
min. Earth dist.	-3971 Mar 08 j 23:07	16°Ω33'38	29.30460 AU	conjunction	-3965 Sep 24 j 07:47	0°൬44'16	2°12'29
direct	-3971 May 28 j 14:47	15°Ω10'26		minimum elong	-3965 Sep 24 j 07:46	0°൬44'16	2°12'35
evening set	-3971 Aug 26 j 17:28	17°Ω06'30		max. Earth dist.	-3965 Sep 23 j 18:20	0°൬43'00	31.29844 AU
max. Earth dist.	-3971 Sep 10 j 05:15	17°Ω38'57	31.30279 AU	morning rise	-3965 Oct 09 j 10:12	1°൬18'10	
				retrograde	-3964 Jan 04 j 19:10	3°൬11'34	
conjunction	-3971 Sep 11 j 00:18	17°Ω40'45	2°05'49	opposition	-3964 Mar 23 j 19:46	1°൬49'26	2°21'48
minimum elong	-3971 Sep 11 j 00:18	17°Ω40'45	2°05'57	min. Earth dist.	-3964 Mar 24 j 07:57	1°൬48'36	29.30052 AU
morning rise	-3971 Sep 26 j 04:39	18°Ω14'47		direct	-3964 Jun 13 j 01:43	0°൬25'16	

Attention, astronomical year style is used: The year -3964 in astronomical counting style is the year 3965 BCE in historical counting style.

evening set	-3964 Sep 10 j 12:54	2° $\mathring{\mu}$ 20'49		opposition	-3957 Apr 09 j 13:15	17° $\mathring{\mu}$ 05'28	2°20'12
				min. Earth dist.	-3957 Apr 09 j 20:48	17° $\mathring{\mu}$ 04'58	29.28387 AU
conjunction	-3964 Sep 25 j 16:50	2° $\mathring{\mu}$ 54'51	2°12'57	direct	-3957 Jun 29 j 09:02	15° $\mathring{\mu}$ 41'41	
minimum elong	-3964 Sep 25 j 16:50	2° $\mathring{\mu}$ 54'52	2°13'01	evening set	-3957 Sep 26 j 06:30	17° $\mathring{\mu}$ 36'35	
max. Earth dist.	-3964 Sep 25 j 04:02	2° $\mathring{\mu}$ 53'39	31.29926 AU				
morning rise	-3964 Oct 10 j 19:02	3° $\mathring{\mu}$ 28'46		conjunction	-3957 Oct 11 j 08:54	18° $\mathring{\mu}$ 10'33	2°10'47
retrograde	-3963 Jan 06 j 04:53	5° $\mathring{\mu}$ 22'17		minimum elong	-3957 Oct 11 j 08:54	18° $\mathring{\mu}$ 10'33	2°10'50
opposition	-3963 Mar 26 j 08:25	4° $\mathring{\mu}$ 00'08	2°22'11	max. Earth dist.	-3957 Oct 11 j 01:12	18° $\mathring{\mu}$ 09'50	31.27894 AU
min. Earth dist.	-3963 Mar 26 j 20:42	3° $\mathring{\mu}$ 59'18	29.30134 AU	morning rise	-3957 Oct 26 j 10:23	18° $\mathring{\mu}$ 44'28	
direct	-3963 Jun 15 j 12:23	2° $\mathring{\mu}$ 36'04		retrograde	-3956 Jan 22 j 10:56	20° $\mathring{\mu}$ 38'47	
evening set	-3963 Sep 12 j 22:20	4° $\mathring{\mu}$ 31'32		opposition	-3956 Apr 11 j 02:11	19° $\mathring{\mu}$ 16'12	2°19'10
				min. Earth dist.	-3956 Apr 11 j 09:52	19° $\mathring{\mu}$ 15'40	29.27717 AU
conjunction	-3963 Sep 28 j 02:02	5° $\mathring{\mu}$ 05'34	2°13'12	direct	-3956 Jun 30 j 21:22	17° $\mathring{\mu}$ 52'25	
minimum elong	-3963 Sep 28 j 02:02	5° $\mathring{\mu}$ 05'34	2°13'17	evening set	-3956 Sep 27 j 15:32	19° $\mathring{\mu}$ 47'13	
max. Earth dist.	-3963 Sep 27 j 14:38	5° $\mathring{\mu}$ 04'29	31.29991 AU				
morning rise	-3963 Oct 13 j 03:58	5° $\mathring{\mu}$ 39'27		conjunction	-3956 Oct 12 j 17:46	20° $\mathring{\mu}$ 21'10	2°09'43
retrograde	-3962 Jan 08 j 14:34	7° $\mathring{\mu}$ 33'06		minimum elong	-3956 Oct 12 j 17:46	20° $\mathring{\mu}$ 21'10	2°09'45
opposition	-3962 Mar 28 j 21:08	6° $\mathring{\mu}$ 10'56	2°22'21	max. Earth dist.	-3956 Oct 12 j 11:06	20° $\mathring{\mu}$ 20'32	31.27232 AU
min. Earth dist.	-3962 Mar 29 j 08:08	6° $\mathring{\mu}$ 10'12	29.30158 AU	morning rise	-3956 Oct 27 j 19:15	20° $\mathring{\mu}$ 55'05	
direct	-3962 Jun 18 j 00:46	4° $\mathring{\mu}$ 46'57		retrograde	-3955 Jan 23 j 22:01	22° $\mathring{\mu}$ 49'30	
evening set	-3962 Sep 15 j 07:47	6° $\mathring{\mu}$ 42'20		opposition	-3955 Apr 13 j 14:59	21° $\mathring{\mu}$ 26'50	2°17'56
				min. Earth dist.	-3955 Apr 13 j 20:29	21° $\mathring{\mu}$ 26'27	29.27063 AU
conjunction	-3962 Sep 30 j 11:03	7° $\mathring{\mu}$ 16'21	2°13'16	direct	-3955 Jul 03 j 10:10	20° $\mathring{\mu}$ 03'04	
minimum elong	-3962 Sep 30 j 11:04	7° $\mathring{\mu}$ 16'21	2°13'20	evening set	-3955 Sep 30 j 00:35	21° $\mathring{\mu}$ 57'46	
max. Earth dist.	-3962 Sep 29 j 23:32	7° $\mathring{\mu}$ 15'16	31.29971 AU				
morning rise	-3962 Oct 15 j 12:58	7° $\mathring{\mu}$ 50'15		conjunction	-3955 Oct 15 j 02:40	22° $\mathring{\mu}$ 31'43	2°08'29
retrograde	-3961 Jan 11 j 02:27	9° $\mathring{\mu}$ 44'02		minimum elong	-3955 Oct 15 j 02:40	22° $\mathring{\mu}$ 31'43	2°08'31
opposition	-3961 Mar 31 j 09:54	8° $\mathring{\mu}$ 21'50	2°22'20	max. Earth dist.	-3955 Oct 14 j 20:45	22° $\mathring{\mu}$ 31'10	31.26610 AU
min. Earth dist.	-3961 Mar 31 j 20:32	8° $\mathring{\mu}$ 21'07	29.30091 AU	morning rise	-3955 Oct 30 j 04:15	23° $\mathring{\mu}$ 05'39	
direct	-3961 Jun 20 j 10:33	6° $\mathring{\mu}$ 57'54		retrograde	-3954 Jan 26 j 08:13	25° $\mathring{\mu}$ 00'11	
evening set	-3961 Sep 17 j 17:11	8° $\mathring{\mu}$ 53'13		opposition	-3954 Apr 16 j 03:57	23° $\mathring{\mu}$ 37'26	2°16'31
				min. Earth dist.	-3954 Apr 16 j 09:07	23° $\mathring{\mu}$ 37'05	29.26493 AU
conjunction	-3961 Oct 02 j 20:22	9° $\mathring{\mu}$ 27'13	2°13'09	direct	-3954 Jul 05 j 21:05	22° $\mathring{\mu}$ 13'43	
minimum elong	-3961 Oct 02 j 20:22	9° $\mathring{\mu}$ 27'13	2°13'13	evening set	-3954 Oct 02 j 09:25	24° $\mathring{\mu}$ 08'19	
max. Earth dist.	-3961 Oct 02 j 10:22	9° $\mathring{\mu}$ 26'17	31.29832 AU				
morning rise	-3961 Oct 17 j 21:58	10° $\mathring{\mu}$ 01'07		conjunction	-3954 Oct 17 j 11:34	24° $\mathring{\mu}$ 42'16	2°07'03
retrograde	-3960 Jan 13 j 12:14	11° $\mathring{\mu}$ 55'01		minimum elong	-3954 Oct 17 j 11:35	24° $\mathring{\mu}$ 42'16	2°07'04
opposition	-3960 Apr 01 j 22:37	10° $\mathring{\mu}$ 32'47	2°22'06	max. Earth dist.	-3954 Oct 17 j 07:36	24° $\mathring{\mu}$ 41'54	31.26091 AU
min. Earth dist.	-3960 Apr 02 j 08:48	10° $\mathring{\mu}$ 32'05	29.29872 AU	morning rise	-3954 Nov 01 j 13:09	25° $\mathring{\mu}$ 16'13	
direct	-3960 Jun 21 j 23:02	9° $\mathring{\mu}$ 08'55		retrograde	-3953 Jan 28 j 17:54	27° $\mathring{\mu}$ 10'52	
evening set	-3960 Sep 19 j 02:47	11° $\mathring{\mu}$ 04'08		opposition	-3953 Apr 18 j 16:45	25° $\mathring{\mu}$ 48'04	2°14'54
				min. Earth dist.	-3953 Apr 18 j 20:07	25° $\mathring{\mu}$ 47'50	29.26005 AU
conjunction	-3960 Oct 04 j 05:32	11° $\mathring{\mu}$ 38'08	2°12'50	direct	-3953 Jul 08 j 09:42	24° $\mathring{\mu}$ 24'25	
minimum elong	-3960 Oct 04 j 05:33	11° $\mathring{\mu}$ 38'08	2°12'53	evening set	-3953 Oct 04 j 18:27	26° $\mathring{\mu}$ 18'55	
max. Earth dist.	-3960 Oct 03 j 19:01	11° $\mathring{\mu}$ 37'08	31.29547 AU				
morning rise	-3960 Oct 19 j 07:12	12° $\mathring{\mu}$ 12'01		conjunction	-3953 Oct 19 j 20:25	26° $\mathring{\mu}$ 52'54	2°05'26
retrograde	-3959 Jan 15 j 01:00	14° $\mathring{\mu}$ 06'02		minimum elong	-3953 Oct 19 j 20:26	26° $\mathring{\mu}$ 52'54	2°05'27
opposition	-3959 Apr 04 j 11:31	12° $\mathring{\mu}$ 43'44	2°21'40	max. Earth dist.	-3953 Oct 19 j 16:38	26° $\mathring{\mu}$ 52'32	31.25653 AU
min. Earth dist.	-3959 Apr 04 j 20:37	12° $\mathring{\mu}$ 43'07	29.29513 AU	morning rise	-3953 Nov 03 j 22:14	27° $\mathring{\mu}$ 26'51	
direct	-3959 Jun 24 j 09:13	11° $\mathring{\mu}$ 19'54		retrograde	-3952 Jan 31 j 05:58	29° $\mathring{\mu}$ 21'39	
evening set	-3959 Sep 21 j 12:01	13° $\mathring{\mu}$ 15'02		opposition	-3952 Apr 20 j 05:32	27° $\mathring{\mu}$ 58'48	2°13'04
				min. Earth dist.	-3952 Apr 20 j 08:04	27° $\mathring{\mu}$ 58'38	29.25609 AU
conjunction	-3959 Oct 06 j 14:44	13° $\mathring{\mu}$ 49'01	2°12'20	direct	-3952 Jul 09 j 19:22	26° $\mathring{\mu}$ 35'14	
minimum elong	-3959 Oct 06 j 14:44	13° $\mathring{\mu}$ 49'01	2°12'24	evening set	-3952 Oct 06 j 03:19	28° $\mathring{\mu}$ 29'40	
max. Earth dist.	-3959 Oct 06 j 05:48	13° $\mathring{\mu}$ 48'10	31.29108 AU				
morning rise	-3959 Oct 21 j 16:10	14° $\mathring{\mu}$ 22'54		conjunction	-3952 Oct 21 j 05:27	29° $\mathring{\mu}$ 03'39	2°03'38
retrograde	-3958 Jan 17 j 11:14	16° $\mathring{\mu}$ 17'02		minimum elong	-3952 Oct 21 j 05:27	29° $\mathring{\mu}$ 03'39	2°03'39
opposition	-3958 Apr 07 j 00:33	14° $\mathring{\mu}$ 54'39	2°21'02	max. Earth dist.	-3952 Oct 21 j 03:47	29° $\mathring{\mu}$ 03'29	31.25289 AU
min. Earth dist.	-3958 Apr 07 j 09:47	14° $\mathring{\mu}$ 54'02	29.29000 AU	morning rise	-3952 Nov 05 j 07:13	29° $\mathring{\mu}$ 37'38	
direct	-3958 Jun 26 j 20:44	13° $\mathring{\mu}$ 30'51			-3952 Nov 15 j 15:29	0° $\mathring{\mu}$	
evening set	-3958 Sep 23 j 21:23	15° $\mathring{\mu}$ 25'52		retrograde	-3951 Feb 01 j 15:45	1° $\mathring{\mu}$ 32'35	
				opposition	-3951 Apr 22 j 18:32	0° $\mathring{\mu}$ 09'42	2°11'03
conjunction	-3958 Oct 08 j 23:50	15° $\mathring{\mu}$ 59'50	2°11'39	min. Earth dist.	-3951 Apr 22 j 20:01	0° $\mathring{\mu}$ 09'36	29.25252 AU
minimum elong	-3958 Oct 08 j 23:50	15° $\mathring{\mu}$ 59'50	2°11'42		-3951 Apr 28 j 18:35	30° $\mathring{\mu}$	
max. Earth dist.	-3958 Oct 08 j 14:56	15° $\mathring{\mu}$ 59'00	31.28547 AU	direct	-3951 Jul 12 j 07:13	28° $\mathring{\mu}$ 46'13	
morning rise	-3958 Oct 24 j 01:22	16° $\mathring{\mu}$ 33'44			-3951 Sep 19 j 04:49	0° $\mathring{\mu}$	
retrograde	-3957 Jan 19 j 23:37	18° $\mathring{\mu}$ 27'57		evening set	-3951 Oct 08 j 12:16	0° $\mathring{\mu}$ 40'34	

Attention, astronomical year style is used: The year -3951 in astronomical counting style is the year 3952 BCE in historical counting style.

conjunction	-3951 Oct 23 j 14:15	1° <u>♂</u> 14'33	2°01'40	direct	-3944 Jul 27 j 15:17	14° <u>♂</u> 05'44	
minimum elong	-3951 Oct 23 j 14:15	1° <u>♂</u> 14'34	2°01'41	evening set	-3944 Oct 23 j 03:36	15° <u>♂</u> 59'24	
max. Earth dist.	-3951 Oct 23 j 12:36	1° <u>♂</u> 14'24	31.24955 AU				
morning rise	-3951 Nov 07 j 16:22	1° <u>♂</u> 48'34		conjunction	-3944 Nov 07 j 06:28	16° <u>♂</u> 33'30	1°43'06
retrograde	-3950 Feb 04 j 04:41	3° <u>♂</u> 43'40		minimum elong	-3944 Nov 07 j 06:28	16° <u>♂</u> 33'30	1°43'03
opposition	-3950 Apr 25 j 07:32	2° <u>♂</u> 20'46	2°08'51	max. Earth dist.	-3944 Nov 07 j 10:20	16° <u>♂</u> 33'52	31.20373 AU
min. Earth dist.	-3950 Apr 25 j 07:37	2° <u>♂</u> 20'45	29.24914 AU	morning rise	-3944 Nov 22 j 10:26	17° <u>♂</u> 07'42	
direct	-3950 Jul 14 j 16:20	0° <u>♂</u> 57'21		retrograde	-3943 Feb 19 j 15:35	19° <u>♂</u> 03'36	
evening set	-3950 Oct 10 j 21:14	2° <u>♂</u> 51'38		opposition	-3943 May 11 j 03:07	17° <u>♂</u> 40'07	1°48'25
				min. Earth dist.	-3943 May 10 j 22:00	17° <u>♂</u> 40'28	29.20012 AU
conjunction	-3950 Oct 25 j 23:24	3° <u>♂</u> 25'39	1°59'31	direct	-3943 Jul 30 j 01:46	16° <u>♂</u> 16'56	
minimum elong	-3950 Oct 25 j 23:25	3° <u>♂</u> 25'39	1°59'30	evening set	-3943 Oct 25 j 12:24	18° <u>♂</u> 10'28	
max. Earth dist.	-3950 Oct 25 j 23:32	3° <u>♂</u> 25'39	31.24595 AU				
morning rise	-3950 Nov 10 j 01:34	3° <u>♂</u> 59'41		conjunction	-3943 Nov 09 j 15:38	18° <u>♂</u> 44'35	1°39'50
retrograde	-3949 Feb 06 j 15:25	5° <u>♂</u> 54'56		minimum elong	-3943 Nov 09 j 15:39	18° <u>♂</u> 44'35	1°39'47
opposition	-3949 Apr 27 j 20:30	4° <u>♂</u> 31'59	2°06'27	max. Earth dist.	-3943 Nov 09 j 21:40	18° <u>♂</u> 45'09	31.19471 AU
min. Earth dist.	-3949 Apr 27 j 20:36	4° <u>♂</u> 31'59	29.24523 AU	morning rise	-3943 Nov 24 j 19:48	19° <u>♂</u> 18'49	
direct	-3949 Jul 17 j 02:40	3° <u>♂</u> 08'40		retrograde	-3942 Feb 22 j 00:54	21° <u>♂</u> 14'48	
evening set	-3949 Oct 13 j 06:21	5° <u>♂</u> 02'52		opposition	-3942 May 13 j 16:11	19° <u>♂</u> 51'14	1°44'50
				min. Earth dist.	-3942 May 13 j 09:57	19° <u>♂</u> 51'39	29.19135 AU
conjunction	-3949 Oct 28 j 08:30	5° <u>♂</u> 36'53	1°57'11	direct	-3942 Aug 01 j 14:05	18° <u>♂</u> 28'04	
minimum elong	-3949 Oct 28 j 08:30	5° <u>♂</u> 36'53	1°57'11	evening set	-3942 Oct 27 j 21:28	20° <u>♂</u> 21'28	
max. Earth dist.	-3949 Oct 28 j 08:50	5° <u>♂</u> 36'55	31.24177 AU				
morning rise	-3949 Nov 12 j 10:58	6° <u>♂</u> 10'56		conjunction	-3942 Nov 12 j 00:49	20° <u>♂</u> 55'37	1°36'25
retrograde	-3948 Feb 09 j 04:51	8° <u>♂</u> 06'20		minimum elong	-3942 Nov 12 j 00:49	20° <u>♂</u> 55'37	1°36'21
opposition	-3948 Apr 29 j 09:30	6° <u>♂</u> 43'20	2°03'53	max. Earth dist.	-3942 Nov 12 j 06:58	20° <u>♂</u> 56'12	31.18650 AU
min. Earth dist.	-3948 Apr 29 j 07:55	6° <u>♂</u> 43'27	29.24048 AU	morning rise	-3942 Nov 27 j 05:30	21° <u>♂</u> 29'53	
direct	-3948 Jul 18 j 14:23	5° <u>♂</u> 20'04		retrograde	-3941 Feb 24 j 13:17	23° <u>♂</u> 25'59	
evening set	-3948 Oct 14 j 15:23	7° <u>♂</u> 14'12		opposition	-3941 May 16 j 05:01	22° <u>♂</u> 02'20	1°41'06
				min. Earth dist.	-3941 May 15 j 21:12	22° <u>♂</u> 02'52	29.18363 AU
conjunction	-3948 Oct 29 j 17:39	7° <u>♂</u> 48'14	1°54'41	direct	-3941 Aug 03 j 23:38	20° <u>♂</u> 39'11	
minimum elong	-3948 Oct 29 j 17:39	7° <u>♂</u> 48'14	1°54'40	evening set	-3941 Oct 30 j 06:25	22° <u>♂</u> 32'31	
max. Earth dist.	-3948 Oct 29 j 18:54	7° <u>♂</u> 48'21	31.23639 AU				
morning rise	-3948 Nov 13 j 20:17	8° <u>♂</u> 22'19		conjunction	-3941 Nov 14 j 10:07	23° <u>♂</u> 06'41	1°32'51
retrograde	-3947 Feb 10 j 17:28	10° <u>♂</u> 17'50		minimum elong	-3941 Nov 14 j 10:08	23° <u>♂</u> 06'41	1°32'48
opposition	-3947 May 01 j 22:46	8° <u>♂</u> 54'46	2°01'07	max. Earth dist.	-3941 Nov 14 j 18:11	23° <u>♂</u> 07'27	31.17924 AU
min. Earth dist.	-3947 May 01 j 21:28	8° <u>♂</u> 54'52	29.23447 AU	morning rise	-3941 Nov 29 j 15:05	23° <u>♂</u> 41'00	
direct	-3947 Jul 21 j 01:46	7° <u>♂</u> 31'33		retrograde	-3940 Feb 27 j 00:05	25° <u>♂</u> 37'13	
evening set	-3947 Oct 17 j 00:30	9° <u>♂</u> 25'35		opposition	-3940 May 17 j 18:06	24° <u>♂</u> 13'30	1°37'14
				min. Earth dist.	-3940 May 17 j 09:53	24° <u>♂</u> 14'04	29.17678 AU
conjunction	-3947 Nov 01 j 02:55	9° <u>♂</u> 59'38	1°52'01	direct	-3940 Aug 05 j 10:12	22° <u>♂</u> 50'25	
minimum elong	-3947 Nov 01 j 02:56	9° <u>♂</u> 59'38	1°52'01	evening set	-3940 Oct 31 j 15:21	24° <u>♂</u> 43'40	
max. Earth dist.	-3947 Nov 01 j 04:58	9° <u>♂</u> 59'49	31.22985 AU				
morning rise	-3947 Nov 16 j 05:48	10° <u>♂</u> 33'45		conjunction	-3940 Nov 15 j 19:16	25° <u>♂</u> 17'51	1°29'09
retrograde	-3946 Feb 13 j 05:25	12° <u>♂</u> 29'22		minimum elong	-3940 Nov 15 j 19:17	25° <u>♂</u> 17'51	1°29'05
opposition	-3946 May 04 j 11:49	11° <u>♂</u> 06'14	1°58'11	max. Earth dist.	-3940 Nov 16 j 04:03	25° <u>♂</u> 18'41	31.17299 AU
min. Earth dist.	-3946 May 04 j 08:44	11° <u>♂</u> 06'26	29.22715 AU	morning rise	-3940 Dec 01 j 00:42	25° <u>♂</u> 52'13	
direct	-3946 Jul 23 j 14:03	9° <u>♂</u> 43'02		retrograde	-3939 Feb 28 j 13:29	27° <u>♂</u> 48'34	
evening set	-3946 Oct 19 j 09:35	11° <u>♂</u> 36'57		opposition	-3939 May 20 j 07:07	26° <u>♂</u> 24'49	1°33'12
				min. Earth dist.	-3939 May 19 j 20:52	26° <u>♂</u> 25'31	29.17082 AU
conjunction	-3946 Nov 03 j 12:06	12° <u>♂</u> 11'01	1°49'12	direct	-3939 Aug 07 j 20:58	25° <u>♂</u> 01'48	
minimum elong	-3946 Nov 03 j 12:07	12° <u>♂</u> 11'01	1°49'10	evening set	-3939 Nov 03 j 00:25	26° <u>♂</u> 54'59	
max. Earth dist.	-3946 Nov 03 j 14:18	12° <u>♂</u> 11'13	31.22193 AU				
morning rise	-3946 Nov 18 j 15:24	12° <u>♂</u> 45'10		conjunction	-3939 Nov 18 j 04:39	27° <u>♂</u> 29'13	1°25'19
retrograde	-3945 Feb 15 j 16:53	14° <u>♂</u> 40'53		minimum elong	-3939 Nov 18 j 04:39	27° <u>♂</u> 29'13	1°25'15
opposition	-3945 May 07 j 01:01	13° <u>♂</u> 17'38	1°55'06	max. Earth dist.	-3939 Nov 18 j 14:32	27° <u>♂</u> 30'09	31.16729 AU
min. Earth dist.	-3945 May 06 j 22:06	13° <u>♂</u> 17'50	29.21866 AU	morning rise	-3939 Dec 03 j 10:31	28° <u>♂</u> 03'37	
direct	-3945 Jul 26 j 01:41	11° <u>♂</u> 54'27			-3938 Feb 28 j 11:17	0° <u>♂</u>	
evening set	-3945 Oct 21 j 18:32	13° <u>♂</u> 48'14		retrograde	-3938 Mar 03 j 02:22	0° <u>♂</u> 00'07	
					-3938 Mar 05 j 17:21	30° <u>♂</u>	
conjunction	-3945 Nov 05 j 21:22	14° <u>♂</u> 22'19	1°46'14	opposition	-3938 May 22 j 20:14	28° <u>♂</u> 36'20	1°29'02
minimum elong	-3945 Nov 05 j 21:23	14° <u>♂</u> 22'19	1°46'12	min. Earth dist.	-3938 May 22 j 10:05	28° <u>♂</u> 37'01	29.16530 AU
max. Earth dist.	-3945 Nov 06 j 01:13	14° <u>♂</u> 22'41	31.21305 AU	direct	-3938 Aug 10 j 07:03	27° <u>♂</u> 13'23	
morning rise	-3945 Nov 21 j 00:50	14° <u>♂</u> 56'29		evening set	-3938 Nov 05 j 09:31	29° <u>♂</u> 06'31	
retrograde	-3944 Feb 18 j 03:32	16° <u>♂</u> 52'17					
opposition	-3944 May 08 j 13:58	15° <u>♂</u> 28'56	1°51'50	conjunction	-3938 Nov 20 j 14:08	29° <u>♂</u> 40'46	1°21'21
min. Earth dist.	-3944 May 08 j 09:37	15° <u>♂</u> 29'14	29.20934 AU	minimum elong	-3938 Nov 20 j 14:09	29° <u>♂</u> 40'47	1°21'16

Attention, astronomical year style is used: The year -3938 in astronomical counting style is the year 3939 BCE in historical counting style.

max. Earth dist.	-3938 Nov 21 j 01:11	29° 0 41'49	31.16193 AU		-3931 Apr 28 j 23:45	15° 8 11	
	-3938 Nov 29 j 01:17	0° 1 11		opposition	-3931 Jun 07 j 15:56	14° 1 01'30	0°56'29
morning rise	-3938 Dec 05 j 20:25	0° 1 15'13		min. Earth dist.	-3931 Jun 07 j 01:17	14° 1 02'30	29.10600 AU
retrograde	-3937 Mar 05 j 15:13	2° 1 11'52		direct	-3931 Aug 25 j 15:24	12° 1 38'45	
opposition	-3937 May 25 j 09:13	0° 1 48'04	1°24'43	evening set	-3931 Nov 20 j 03:51	14° 1 31'23	
min. Earth dist.	-3937 May 24 j 21:13	0° 1 48'52	29.15970 AU		-3931 Dec 02 j 20:53	15° 1 11	
	-3937 Jun 25 j 21:15	30° 8 11					
direct	-3937 Aug 12 j 18:35	29° 0 25'11		conjunction	-3931 Dec 05 j 11:00	15° 1 05'53	0°50'33
	-3937 Sep 27 j 16:22	0° 1 11		minimum elong	-3931 Dec 05 j 11:00	15° 1 05'53	0°50'27
evening set	-3937 Nov 07 j 18:50	1° 1 18'17		max. Earth dist.	-3931 Dec 06 j 02:20	15° 1 07'20	31.10011 AU
				morning rise	-3931 Dec 20 j 20:45	15° 1 40'39	
conjunction	-3937 Nov 22 j 23:37	1° 1 52'34	1°17'15	retrograde	-3930 Mar 21 j 04:09	17° 1 38'03	
minimum elong	-3937 Nov 22 j 23:38	1° 1 52'34	1°17'10	opposition	-3930 Jun 10 j 04:43	16° 1 13'44	0°51'26
max. Earth dist.	-3937 Nov 23 j 10:49	1° 1 53'38	31.15610 AU	min. Earth dist.	-3930 Jun 09 j 12:24	16° 1 14'51	29.09494 AU
morning rise	-3937 Dec 08 j 06:26	2° 1 27'04			-3930 Aug 04 j 15:12	15° 8 11	
retrograde	-3936 Mar 07 j 04:12	4° 1 23'51		direct	-3930 Aug 28 j 02:09	14° 1 50'58	
opposition	-3936 May 26 j 22:23	3° 1 00'01	1°20'17		-3930 Sep 20 j 02:25	15° 1 11	
min. Earth dist.	-3936 May 26 j 10:36	3° 1 00'49	29.15358 AU	evening set	-3930 Nov 22 j 13:28	16° 1 43'32	
direct	-3936 Aug 14 j 05:35	1° 1 37'13					
evening set	-3936 Nov 09 j 04:10	3° 1 30'15		conjunction	-3930 Dec 07 j 21:00	17° 1 18'04	0°45'48
				minimum elong	-3930 Dec 07 j 21:00	17° 1 18'04	0°45'41
conjunction	-3936 Nov 24 j 09:27	4° 1 04'35	1°13'03	max. Earth dist.	-3930 Dec 08 j 13:10	17° 1 19'36	31.08926 AU
minimum elong	-3936 Nov 24 j 09:27	4° 1 04'35	1°12'57	morning rise	-3930 Dec 23 j 07:18	17° 1 52'52	
max. Earth dist.	-3936 Nov 24 j 22:13	4° 1 05'48	31.14960 AU	retrograde	-3929 Mar 23 j 16:15	19° 1 50'21	
morning rise	-3936 Dec 09 j 16:34	4° 1 39'07		opposition	-3929 Jun 12 j 17:41	18° 1 25'57	0°46'20
retrograde	-3935 Mar 09 j 16:49	6° 1 36'03		min. Earth dist.	-3929 Jun 12 j 01:29	18° 1 27'03	29.08453 AU
opposition	-3935 May 29 j 11:32	5° 1 12'10	1°15'44	direct	-3929 Aug 30 j 11:42	17° 1 03'10	
min. Earth dist.	-3935 May 28 j 22:32	5° 1 13'03	29.14643 AU	evening set	-3929 Nov 24 j 23:00	18° 1 55'40	
direct	-3935 Aug 16 j 18:49	3° 1 49'25					
evening set	-3935 Nov 11 j 13:42	5° 1 42'24		conjunction	-3929 Dec 10 j 07:02	19° 1 30'14	0°40'59
				minimum elong	-3929 Dec 10 j 07:02	19° 1 30'14	0°40'52
conjunction	-3935 Nov 26 j 19:10	6° 1 16'46	1°08'44	max. Earth dist.	-3929 Dec 11 j 00:30	19° 1 31'53	31.07937 AU
minimum elong	-3935 Nov 26 j 19:11	6° 1 16'46	1°08'39	morning rise	-3929 Dec 25 j 17:45	20° 1 05'05	
max. Earth dist.	-3935 Nov 27 j 07:28	6° 1 17'56	31.14190 AU	retrograde	-3928 Mar 25 j 05:07	22° 1 02'39	
morning rise	-3935 Dec 12 j 02:57	6° 1 51'22		opposition	-3928 Jun 14 j 06:28	20° 1 38'11	0°41'09
retrograde	-3934 Mar 12 j 05:51	8° 1 48'24		min. Earth dist.	-3928 Jun 13 j 12:15	20° 1 39'25	29.07507 AU
min. Earth dist.	-3934 May 31 j 11:36	7° 1 25'22	29.13807 AU	direct	-3928 Aug 31 j 23:04	19° 1 15'24	
opposition	-3934 Jun 01 j 00:46	7° 1 24'28	1°11'04	evening set	-3928 Nov 26 j 08:48	21° 1 07'52	
direct	-3934 Aug 19 j 05:13	6° 1 01'45					
evening set	-3934 Nov 13 j 23:14	7° 1 54'39		conjunction	-3928 Dec 11 j 17:07	21° 1 42'28	0°36'07
				minimum elong	-3928 Dec 11 j 17:07	21° 1 42'28	0°35'59
conjunction	-3934 Nov 29 j 05:15	8° 1 29'03	1°04'19	max. Earth dist.	-3928 Dec 12 j 10:47	21° 1 44'08	31.07044 AU
minimum elong	-3934 Nov 29 j 05:15	8° 1 29'04	1°04'13	morning rise	-3928 Dec 27 j 04:30	22° 1 17'22	
max. Earth dist.	-3934 Nov 29 j 19:00	8° 1 30'22	31.13281 AU	retrograde	-3927 Mar 27 j 18:53	24° 1 15'02	
morning rise	-3934 Dec 14 j 13:22	9° 1 03'42		opposition	-3927 Jun 16 j 19:25	22° 1 50'29	0°35'54
retrograde	-3933 Mar 14 j 15:52	11° 1 00'50		min. Earth dist.	-3927 Jun 16 j 01:15	22° 1 51'44	29.06669 AU
opposition	-3933 Jun 03 j 13:45	9° 1 36'50	1°06'18	direct	-3927 Sep 03 j 09:54	21° 1 27'44	
min. Earth dist.	-3933 Jun 03 j 00:06	9° 1 37'46	29.12819 AU	evening set	-3927 Nov 28 j 18:27	23° 1 20'09	
direct	-3933 Aug 21 j 17:48	8° 1 14'07					
evening set	-3933 Nov 16 j 08:53	10° 1 06'57		conjunction	-3927 Dec 14 j 03:24	23° 1 54'47	0°31'10
				minimum elong	-3927 Dec 14 j 03:24	23° 1 54'48	0°31'03
conjunction	-3933 Dec 01 j 15:10	10° 1 41'23	0°59'49	max. Earth dist.	-3927 Dec 14 j 22:56	23° 1 56'38	31.06252 AU
minimum elong	-3933 Dec 01 j 15:10	10° 1 41'23	0°59'43	morning rise	-3927 Dec 29 j 15:12	24° 1 29'44	
max. Earth dist.	-3933 Dec 02 j 04:30	10° 1 42'39	31.12249 AU	retrograde	-3926 Mar 30 j 08:16	26° 1 27'30	
morning rise	-3933 Dec 16 j 23:55	11° 1 16'04		opposition	-3926 Jun 19 j 08:14	25° 1 02'55	0°30'35
retrograde	-3932 Mar 16 j 04:47	13° 1 13'17		min. Earth dist.	-3926 Jun 18 j 12:40	25° 1 04'15	29.05900 AU
opposition	-3932 Jun 05 j 02:49	11° 1 49'11	1°01'26	direct	-3926 Sep 05 j 22:39	23° 1 40'11	
min. Earth dist.	-3932 Jun 04 j 12:11	11° 1 50'11	29.11737 AU	evening set	-3926 Dec 01 j 04:30	25° 1 32'35	
direct	-3932 Aug 23 j 04:07	10° 1 26'28					
evening set	-3932 Nov 17 j 18:15	12° 1 19'12		conjunction	-3926 Dec 16 j 13:43	26° 1 07'16	0°26'11
				minimum elong	-3926 Dec 16 j 13:44	26° 1 07'16	0°26'02
conjunction	-3932 Dec 03 j 01:01	12° 1 53'40	0°55'13	max. Earth dist.	-3926 Dec 17 j 08:54	26° 1 09'04	31.05513 AU
minimum elong	-3932 Dec 03 j 01:01	12° 1 53'40	0°55'06	morning rise	-3925 Jan 01 j 02:13	26° 1 42'15	
max. Earth dist.	-3932 Dec 03 j 15:50	12° 1 55'04	31.11131 AU	retrograde	-3925 Apr 01 j 21:31	28° 1 40'08	
morning rise	-3932 Dec 18 j 10:12	13° 1 28'23		opposition	-3925 Jun 21 j 20:59	27° 1 15'31	0°25'13
	-3931 Feb 06 j 16:52	15° 1 11		min. Earth dist.	-3925 Jun 21 j 01:15	27° 1 16'52	29.05181 AU
retrograde	-3931 Mar 18 j 15:29	15° 1 25'43		direct	-3925 Sep 08 j 08:34	25° 1 52'49	

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

evening set	-3925 Dec 03 j 14:30	27° \mathbb{M} 45'11		behind sun end	-3920 Dec 29 j 13:04	9° \mathbb{A} 25'43	
				max. Earth dist.	-3920 Dec 30 j 04:55	9° \mathbb{A} 27'14	31.00066 AU
conjunction	-3925 Dec 19 j 00:18	28° \mathbb{M} 19'54	0°21'09	morning rise	-3919 Jan 13 j 22:17	10° \mathbb{A} 00'24	
minimum elong	-3925 Dec 19 j 00:18	28° \mathbb{M} 19'54	0°21'01	retrograde	-3919 Apr 15 j 00:52	11° \mathbb{A} 58'47	
max. Earth dist.	-3925 Dec 19 j 21:07	28° \mathbb{M} 21'52	31.04793 AU	min. Earth dist.	-3919 Jul 04 j 03:45	10° \mathbb{A} 35'22	28.99495 AU
morning rise	-3924 Jan 03 j 13:09	28° \mathbb{M} 54'57		opposition	-3919 Jul 05 j 01:48	10° \mathbb{A} 33'51	-0°07'31
	-3924 Feb 05 j 00:46	0° \mathbb{A}		direct	-3919 Sep 21 j 03:33	9° \mathbb{A} 11'06	
retrograde	-3924 Apr 03 j 09:15	0° \mathbb{A} 52'55		evening set	-3919 Dec 16 j 05:22	11° \mathbb{A} 03'20	
	-3924 Jun 03 j 14:09	30° \mathbb{K} \mathbb{M}					
opposition	-3924 Jun 23 j 09:51	29° \mathbb{M} 28'17	0°19'49	conjunction	-3919 Dec 31 j 17:46	11° \mathbb{A} 38'16	-0°09'34
min. Earth dist.	-3924 Jun 22 j 13:36	29° \mathbb{M} 29'40	29.04447 AU	minimum elong	-3919 Dec 31 j 17:46	11° \mathbb{A} 38'16	0°09'44
direct	-3924 Sep 09 j 21:14	28° \mathbb{M} 05'37		behind sun begin	-3919 Dec 31 j 12:27	11° \mathbb{A} 37'47	
evening set	-3924 Dec 05 j 00:41	29° \mathbb{M} 57'58		behind sun end	-3919 Dec 31 j 23:05	11° \mathbb{A} 38'45	
	-3924 Dec 05 j 22:41	0° \mathbb{A}		max. Earth dist.	-3918 Jan 01 j 15:37	11° \mathbb{A} 40'20	30.98882 AU
				morning rise	-3918 Jan 16 j 09:59	12° \mathbb{A} 13'34	
conjunction	-3924 Dec 20 j 10:48	0° \mathbb{A} 32'44	0°16'05	retrograde	-3918 Apr 17 j 14:27	14° \mathbb{A} 12'00	
minimum elong	-3924 Dec 20 j 10:48	0° \mathbb{A} 32'44	0°15'56	opposition	-3918 Jul 07 j 14:29	12° \mathbb{A} 46'59	-0°12'59
behind sun begin	-3924 Dec 20 j 09:42	0° \mathbb{A} 32'38		min. Earth dist.	-3918 Jul 06 j 16:57	12° \mathbb{A} 48'27	28.98328 AU
behind sun end	-3924 Dec 20 j 11:54	0° \mathbb{A} 32'50		direct	-3918 Sep 23 j 14:20	11° \mathbb{A} 24'11	
max. Earth dist.	-3924 Dec 21 j 07:13	0° \mathbb{A} 34'40	31.04049 AU	evening set	-3918 Dec 18 j 16:01	13° \mathbb{A} 16'23	
morning rise	-3923 Jan 05 j 00:19	1° \mathbb{A} 07'49					
retrograde	-3923 Apr 05 j 23:32	3° \mathbb{A} 05'54		conjunction	-3917 Jan 03 j 05:01	13° \mathbb{A} 51'22	-0°14'40
opposition	-3923 Jun 25 j 22:45	1° \mathbb{A} 41'14	0°14'23	minimum elong	-3917 Jan 03 j 05:01	13° \mathbb{A} 51'22	0°14'50
min. Earth dist.	-3923 Jun 25 j 01:47	1° \mathbb{A} 42'40	29.03672 AU	behind sun begin	-3917 Jan 03 j 02:25	13° \mathbb{A} 51'08	
direct	-3923 Sep 12 j 07:58	0° \mathbb{A} 18'35		behind sun end	-3917 Jan 03 j 07:37	13° \mathbb{A} 51'36	
evening set	-3923 Dec 07 j 11:05	2° \mathbb{A} 10'55		max. Earth dist.	-3917 Jan 04 j 04:24	13° \mathbb{A} 53'34	30.97735 AU
				morning rise	-3917 Jan 18 j 21:33	14° \mathbb{A} 26'42	
conjunction	-3923 Dec 22 j 21:43	2° \mathbb{A} 45'43	0°11'00	retrograde	-3917 Apr 20 j 03:37	16° \mathbb{A} 25'11	
minimum elong	-3923 Dec 22 j 21:44	2° \mathbb{A} 45'43	0°10'52	min. Earth dist.	-3917 Jul 09 j 04:06	15° \mathbb{A} 01'38	28.97219 AU
behind sun begin	-3923 Dec 22 j 16:48	2° \mathbb{A} 45'16		opposition	-3917 Jul 10 j 02:46	15° \mathbb{A} 00'05	-0°18'26
behind sun end	-3923 Dec 23 j 02:39	2° \mathbb{A} 46'10		direct	-3917 Sep 26 j 02:55	13° \mathbb{A} 37'14	
max. Earth dist.	-3923 Dec 23 j 19:06	2° \mathbb{A} 47'44	31.03217 AU	evening set	-3917 Dec 21 j 02:50	15° \mathbb{A} 29'27	
morning rise	-3922 Jan 07 j 11:42	3° \mathbb{A} 20'51					
retrograde	-3922 Apr 08 j 10:46	5° \mathbb{A} 19'02		conjunction	-3916 Jan 05 j 16:07	16° \mathbb{A} 04'27	-0°19'44
opposition	-3922 Jun 28 j 11:33	3° \mathbb{A} 54'19	0°08'55	minimum elong	-3916 Jan 05 j 16:07	16° \mathbb{A} 04'27	0°19'53
min. Earth dist.	-3922 Jun 27 j 15:05	3° \mathbb{A} 55'43	29.02788 AU	max. Earth dist.	-3916 Jan 06 j 15:03	16° \mathbb{A} 06'37	30.96679 AU
direct	-3922 Sep 14 j 19:12	2° \mathbb{A} 31'40		morning rise	-3916 Jan 21 j 09:19	16° \mathbb{A} 39'50	
evening set	-3922 Dec 09 j 21:37	4° \mathbb{A} 23'59		retrograde	-3916 Apr 21 j 17:10	18° \mathbb{A} 38'22	
				opposition	-3916 Jul 11 j 15:17	17° \mathbb{A} 13'12	-0°23'51
conjunction	-3922 Dec 25 j 08:44	4° \mathbb{A} 58'50	0°05'54	min. Earth dist.	-3916 Jul 10 j 16:27	17° \mathbb{A} 14'47	28.96234 AU
minimum elong	-3922 Dec 25 j 08:44	4° \mathbb{A} 58'49	0°05'45	direct	-3916 Sep 27 j 12:48	15° \mathbb{A} 50'20	
behind sun begin	-3922 Dec 25 j 02:33	4° \mathbb{A} 58'16		evening set	-3916 Dec 22 j 13:31	17° \mathbb{A} 42'33	
behind sun end	-3922 Dec 25 j 14:54	4° \mathbb{A} 59'23					
max. Earth dist.	-3922 Dec 26 j 06:00	5° \mathbb{A} 00'50	31.02282 AU	conjunction	-3915 Jan 07 j 03:24	18° \mathbb{A} 17'36	-0°24'47
morning rise	-3921 Jan 09 j 23:15	5° \mathbb{A} 34'00		minimum elong	-3915 Jan 07 j 03:24	18° \mathbb{A} 17'36	0°24'57
retrograde	-3921 Apr 10 j 23:44	7° \mathbb{A} 32'16		max. Earth dist.	-3915 Jan 08 j 03:59	18° \mathbb{A} 19'55	30.95749 AU
min. Earth dist.	-3921 Jun 30 j 02:50	6° \mathbb{A} 08'58	29.01786 AU	morning rise	-3915 Jan 22 j 20:58	18° \mathbb{A} 53'01	
opposition	-3921 Jul 01 j 00:20	6° \mathbb{A} 07'29	0°03'26	retrograde	-3915 Apr 24 j 05:51	20° \mathbb{A} 51'37	
direct	-3921 Sep 17 j 06:06	4° \mathbb{A} 44'49		min. Earth dist.	-3915 Jul 13 j 04:14	19° \mathbb{A} 28'02	28.95369 AU
evening set	-3921 Dec 12 j 08:09	6° \mathbb{A} 37'07		opposition	-3915 Jul 14 j 03:40	19° \mathbb{A} 26'25	-0°29'14
				direct	-3915 Sep 30 j 01:46	18° \mathbb{A} 03'32	
conjunction	-3921 Dec 27 j 19:37	7° \mathbb{A} 11'59	0°00'44	evening set	-3915 Dec 25 j 00:32	19° \mathbb{A} 55'46	
minimum elong	-3921 Dec 27 j 19:38	7° \mathbb{A} 11'59	0°00'36				
behind sun begin	-3921 Dec 27 j 13:12	7° \mathbb{A} 11'25		conjunction	-3914 Jan 09 j 14:47	20° \mathbb{A} 30'51	-0°29'48
behind sun end	-3921 Dec 28 j 02:04	7° \mathbb{A} 12'34		minimum elong	-3914 Jan 09 j 14:47	20° \mathbb{A} 30'51	0°29'57
max. Earth dist.	-3921 Dec 28 j 17:02	7° \mathbb{A} 14'00	31.01212 AU	max. Earth dist.	-3914 Jan 10 j 14:59	20° \mathbb{A} 33'09	30.94956 AU
morning rise	-3920 Jan 12 j 10:43	7° \mathbb{A} 47'12		morning rise	-3914 Jan 25 j 08:58	21° \mathbb{A} 06'18	
desc. node	-3920 Feb 17 j 01:51	8° \mathbb{A} 57'33		retrograde	-3914 Apr 26 j 20:47	23° \mathbb{A} 04'59	
retrograde	-3920 Apr 12 j 11:42	9° \mathbb{A} 45'32		opposition	-3914 Jul 16 j 15:53	21° \mathbb{A} 39'45	-0°34'35
opposition	-3920 Jul 02 j 13:13	8° \mathbb{A} 20'41	-0°02'03	min. Earth dist.	-3914 Jul 15 j 15:42	21° \mathbb{A} 41'26	28.94644 AU
min. Earth dist.	-3920 Jul 01 j 16:30	8° \mathbb{A} 22'07	29.00669 AU	direct	-3914 Oct 02 j 12:41	20° \mathbb{A} 16'53	
direct	-3920 Sep 18 j 15:54	6° \mathbb{A} 57'59		evening set	-3914 Dec 27 j 11:37	22° \mathbb{A} 09'09	
evening set	-3920 Dec 13 j 18:40	8° \mathbb{A} 50'15					
				conjunction	-3913 Jan 12 j 02:22	22° \mathbb{A} 44'16	-0°34'47
conjunction	-3920 Dec 29 j 06:45	9° \mathbb{A} 25'09	-0°04'29	minimum elong	-3913 Jan 12 j 02:22	22° \mathbb{A} 44'16	0°34'57
minimum elong	-3920 Dec 29 j 06:45	9° \mathbb{A} 25'09	0°04'39	max. Earth dist.	-3913 Jan 13 j 03:39	22° \mathbb{A} 46'40	30.94272 AU
behind sun begin	-3920 Dec 29 j 00:26	9° \mathbb{A} 24'35		morning rise	-3913 Jan 27 j 20:58	23° \mathbb{A} 19'46	

Attention, astronomical year style is used: The year -3913 in astronomical counting style is the year 3914 BCE in historical counting style.

retrograde	-3913 Apr 29 j 08:04	25° ♁ 18'31		evening set	-3906 Jan 11 j 21:21	7° ♁ 47'24	
min. Earth dist.	-3913 Jul 18 j 04:22	23° ♁ 54'56	28.94010 AU				
opposition	-3913 Jul 19 j 04:15	23° ♁ 53'17	-0°39'53	conjunction	-3906 Jan 27 j 15:14	8° ♁ 22'43	-1°07'53
direct	-3913 Oct 04 j 23:50	22° ♁ 30'26		minimum elong	-3906 Jan 27 j 15:14	8° ♁ 22'43	1°08'02
evening set	-3913 Dec 29 j 22:42	24° ♁ 22'44		max. Earth dist.	-3906 Jan 28 j 16:47	8° ♁ 25'08	30.89499 AU
				morning rise	-3906 Feb 12 j 12:56	8° ♁ 58'26	
conjunction	-3912 Jan 14 j 13:53	24° ♁ 57'53	-0°39'43	retrograde	-3906 May 15 j 04:33	10° ♁ 57'27	
minimum elong	-3912 Jan 14 j 13:53	24° ♁ 57'53	0°39'52	opposition	-3906 Aug 03 j 17:55	9° ♁ 32'03	-1°15'00
max. Earth dist.	-3912 Jan 15 j 15:22	25° ♁ 00'17	30.93684 AU	min. Earth dist.	-3906 Aug 02 j 18:30	9° ♁ 33'41	28.89131 AU
morning rise	-3912 Jan 30 j 08:58	25° ♁ 33'25		direct	-3906 Oct 20 j 05:19	8° ♁ 08'57	
retrograde	-3912 Apr 30 j 21:16	27° ♁ 32'14		evening set	-3905 Jan 14 j 09:29	10° ♁ 01'30	
opposition	-3912 Jul 20 j 16:33	26° ♁ 07'01	-0°45'08				
min. Earth dist.	-3912 Jul 19 j 15:38	26° ♁ 08'45	28.93451 AU	conjunction	-3905 Jan 30 j 03:41	10° ♁ 36'51	-1°12'16
direct	-3912 Oct 06 j 10:34	24° ♁ 44'10		minimum elong	-3905 Jan 30 j 03:40	10° ♁ 36'51	1°12'26
evening set	-3912 Dec 31 j 10:09	26° ♁ 36'32		max. Earth dist.	-3905 Jan 31 j 04:17	10° ♁ 39'11	30.88635 AU
				morning rise	-3905 Feb 15 j 01:55	11° ♁ 12'35	
conjunction	-3911 Jan 16 j 01:43	27° ♁ 11'43	-0°44'36	retrograde	-3905 May 17 j 19:12	13° ♁ 11'36	
minimum elong	-3911 Jan 16 j 01:43	27° ♁ 11'43	0°44'46	min. Earth dist.	-3905 Aug 05 j 06:12	11° ♁ 47'47	28.88303 AU
max. Earth dist.	-3911 Jan 17 j 03:18	27° ♁ 14'08	30.93128 AU	opposition	-3905 Aug 06 j 05:54	11° ♁ 46'08	-1°19'37
morning rise	-3911 Jan 31 j 21:18	27° ♁ 47'17		direct	-3905 Oct 22 j 16:56	10° ♁ 22'57	
retrograde	-3911 May 03 j 09:54	29° ♁ 46'11		evening set	-3904 Jan 16 j 21:28	12° ♁ 15'32	
min. Earth dist.	-3911 Jul 22 j 05:01	28° ♁ 22'37	28.92906 AU				
opposition	-3911 Jul 23 j 04:55	28° ♁ 20'58	-0°50'19	conjunction	-3904 Feb 01 j 16:06	12° ♁ 50'55	-1°16'32
direct	-3911 Oct 08 j 19:46	26° ♁ 58'07		minimum elong	-3904 Feb 01 j 16:06	12° ♁ 50'55	1°16'41
evening set	-3910 Jan 02 j 21:43	28° ♁ 50'32		max. Earth dist.	-3904 Feb 02 j 17:33	12° ♁ 53'19	30.87830 AU
				morning rise	-3904 Feb 17 j 14:39	13° ♁ 26'40	
conjunction	-3910 Jan 18 j 13:51	29° ♁ 25'45	-0°49'25	retrograde	-3904 May 19 j 06:56	15° ♁ 25'41	
minimum elong	-3910 Jan 18 j 13:51	29° ♁ 25'45	0°49'34	opposition	-3904 Aug 07 j 17:54	14° ♁ 00'10	-1°24'08
max. Earth dist.	-3910 Jan 19 j 15:51	29° ♁ 28'12	30.92569 AU	min. Earth dist.	-3904 Aug 06 j 18:41	14° ♁ 01'48	28.87557 AU
	-3910 Feb 02 j 19:13	0° ♁		direct	-3904 Oct 24 j 04:40	12° ♁ 36'57	
morning rise	-3910 Feb 03 j 09:49	0° ♁ 01'21		evening set	-3903 Jan 18 j 09:41	14° ♁ 29'34	
retrograde	-3910 May 05 j 23:05	2° ♁ 00'19					
opposition	-3910 Jul 25 j 17:09	0° ♁ 35'05	-0°55'26	conjunction	-3903 Feb 03 j 04:45	15° ♁ 04'58	-1°20'42
min. Earth dist.	-3910 Jul 24 j 16:21	0° ♁ 36'49	28.92316 AU	minimum elong	-3903 Feb 03 j 04:45	15° ♁ 04'58	1°20'51
	-3910 Aug 16 j 10:54	30° ♁		max. Earth dist.	-3903 Feb 04 j 06:03	15° ♁ 07'21	30.87147 AU
direct	-3910 Oct 11 j 07:19	29° ♁ 12'14		morning rise	-3903 Feb 19 j 03:43	15° ♁ 40'44	
	-3910 Dec 03 j 19:40	0° ♁		retrograde	-3903 May 21 j 21:03	17° ♁ 39'44	
evening set	-3909 Jan 05 j 09:36	1° ♁ 04'42		min. Earth dist.	-3903 Aug 09 j 05:35	16° ♁ 15'53	28.86946 AU
				opposition	-3903 Aug 10 j 05:38	16° ♁ 14'12	-1°28'31
conjunction	-3909 Jan 21 j 01:59	1° ♁ 39'56	-0°54'09	direct	-3903 Oct 26 j 16:13	14° ♁ 50'56	
minimum elong	-3909 Jan 21 j 01:59	1° ♁ 39'56	0°54'20	evening set	-3902 Jan 20 j 22:04	16° ♁ 43'37	
max. Earth dist.	-3909 Jan 22 j 03:01	1° ♁ 42'18	30.91927 AU				
morning rise	-3909 Feb 05 j 22:30	2° ♁ 15'34		conjunction	-3902 Feb 05 j 17:29	17° ♁ 19'03	-1°24'44
retrograde	-3909 May 08 j 12:07	4° ♁ 14'35		minimum elong	-3902 Feb 05 j 17:29	17° ♁ 19'03	1°24'53
min. Earth dist.	-3909 Jul 27 j 05:48	2° ♁ 50'59	28.91639 AU	max. Earth dist.	-3902 Feb 06 j 18:48	17° ♁ 21'26	30.86588 AU
opposition	-3909 Jul 28 j 05:29	2° ♁ 49'20	-1°00'28	morning rise	-3902 Feb 21 j 16:52	17° ♁ 54'50	
direct	-3909 Oct 13 j 17:28	1° ♁ 26'27		retrograde	-3902 May 24 j 09:39	19° ♁ 53'52	
evening set	-3908 Jan 07 j 21:25	3° ♁ 18'57		opposition	-3902 Aug 12 j 17:31	18° ♁ 28'19	-1°32'46
				min. Earth dist.	-3902 Aug 11 j 18:26	18° ♁ 29'56	28.86465 AU
conjunction	-3908 Jan 23 j 14:24	3° ♁ 54'13	-0°58'49	direct	-3902 Oct 29 j 02:07	17° ♁ 05'01	
minimum elong	-3908 Jan 23 j 14:24	3° ♁ 54'13	0°58'59	evening set	-3901 Jan 23 j 10:23	18° ♁ 57'46	
max. Earth dist.	-3908 Jan 24 j 16:15	3° ♁ 56'39	30.91197 AU				
morning rise	-3908 Feb 08 j 11:12	4° ♁ 29'52		conjunction	-3901 Feb 08 j 06:19	19° ♁ 33'14	-1°28'38
retrograde	-3908 May 10 j 01:13	6° ♁ 28'55		minimum elong	-3901 Feb 08 j 06:18	19° ♁ 33'14	1°28'49
opposition	-3908 Jul 29 j 17:43	5° ♁ 03'38	-1°05'25	max. Earth dist.	-3901 Feb 09 j 08:04	19° ♁ 35'39	30.86172 AU
min. Earth dist.	-3908 Jul 28 j 17:32	5° ♁ 05'19	28.90858 AU	morning rise	-3901 Feb 24 j 05:57	20° ♁ 09'03	
direct	-3908 Oct 15 j 05:31	3° ♁ 40'41		retrograde	-3901 May 26 j 22:23	22° ♁ 08'05	
evening set	-3907 Jan 09 j 09:21	5° ♁ 33'12		min. Earth dist.	-3901 Aug 14 j 05:05	20° ♁ 44'16	28.86112 AU
				opposition	-3901 Aug 15 j 05:11	20° ♁ 42'34	-1°36'52
conjunction	-3907 Jan 25 j 02:39	6° ♁ 08'30	-1°03'24	direct	-3901 Oct 31 j 13:42	19° ♁ 19'16	
minimum elong	-3907 Jan 25 j 02:39	6° ♁ 08'30	1°03'34	evening set	-3900 Jan 25 j 23:00	21° ♁ 12'06	
max. Earth dist.	-3907 Jan 26 j 03:16	6° ♁ 10'49	30.90376 AU				
morning rise	-3907 Feb 10 j 00:05	6° ♁ 44'11		conjunction	-3900 Feb 10 j 19:10	21° ♁ 47'35	-1°32'25
retrograde	-3907 May 12 j 15:24	8° ♁ 43'14		minimum elong	-3900 Feb 10 j 19:10	21° ♁ 47'35	1°32'34
min. Earth dist.	-3907 Jul 31 j 06:30	7° ♁ 19'31	28.90011 AU	max. Earth dist.	-3900 Feb 11 j 20:08	21° ♁ 49'56	30.85871 AU
opposition	-3907 Aug 01 j 06:00	7° ♁ 17'53	-1°10'15	morning rise	-3900 Feb 26 j 19:18	22° ♁ 23'26	
direct	-3907 Oct 17 j 15:56	5° ♁ 54'52		retrograde	-3900 May 28 j 11:02	24° ♁ 22'29	

Attention, astronomical year style is used: The year -3900 in astronomical counting style is the year 3901 BCE in historical counting style.

opposition	-3900 Aug 16 j 17:01	22° 3 57'01	-1°40'50
min. Earth dist.	-3900 Aug 15 j 17:57	22° 3 58'38	28.85871 AU
direct	-3900 Nov 01 j 23:08	21° 3 33'42	
evening set	-3899 Jan 27 j 11:34	23° 3 26'39	

conjunction	-3899 Feb 12 j 08:19	24° 3 02'09	-1°36'04
minimum elong	-3899 Feb 12 j 08:18	24° 3 02'09	1°36'14
max. Earth dist.	-3899 Feb 13 j 10:08	24° 3 04'35	30.85662 AU
morning rise	-3899 Feb 28 j 08:40	24° 3 38'01	
retrograde	-3899 May 31 j 00:12	26° 3 37'07	
min. Earth dist.	-3899 Aug 18 j 05:16	25° 3 13'20	28.85679 AU
opposition	-3899 Aug 19 j 04:41	25° 3 11'41	-1°44'39
direct	-3899 Nov 04 j 10:28	23° 3 48'22	