

## Planetary Phenomena of Uranus from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -10400 in astronomical counting style is the year 10401 BCE in historical counting style.

evening set	-10400 Mar 10 j 15:52	19° $\text{Z}$ 00'37		evening set	-10394 Feb 28 j 03:54	15° $\approx$	
max. Earth dist.	-10400 Mar 26 j 01:25	19° $\text{Z}$ 56'36	19.64311 AU	max. Earth dist.	-10394 Apr 09 j 15:31	17° $\approx$ 11'33	
					-10394 Apr 24 j 18:53	18° $\approx$ 08'01	19.32837 AU
conjunction	-10400 Mar 27 j 10:46	20° $\text{Z}$ 01'42	-1°03'57	conjunction	-10394 Apr 26 j 06:20	18° $\approx$ 13'34	-0°45'11
minimum elong	-10400 Mar 27 j 10:46	20° $\text{Z}$ 01'42	1°04'30	minimum elong	-10394 Apr 26 j 06:20	18° $\approx$ 13'35	0°45'38
morning rise	-10400 Apr 13 j 03:03	21° $\text{Z}$ 02'26		morning rise	-10394 May 12 j 16:54	19° $\approx$ 15'01	
retrograde	-10400 Jul 14 j 06:25	24° $\text{Z}$ 20'54		retrograde	-10394 Aug 12 j 01:41	22° $\approx$ 36'43	
opposition	-10400 Sep 25 j 17:50	22° $\text{Z}$ 18'46	-1°10'09	opposition	-10394 Oct 24 j 04:19	20° $\approx$ 34'38	-0°48'05
min. Earth dist.	-10400 Sep 26 j 22:17	22° $\text{Z}$ 15'40	17.61151 AU	min. Earth dist.	-10394 Oct 25 j 11:32	20° $\approx$ 31'13	17.31000 AU
direct	-10400 Dec 10 j 09:26	20° $\text{Z}$ 13'18		direct	-10393 Jan 08 j 11:14	18° $\approx$ 27'56	
evening set	-10399 Mar 15 j 18:22	23° $\text{Z}$ 37'49		evening set	-10393 Apr 14 j 21:00	21° $\approx$ 59'05	
max. Earth dist.	-10399 Mar 31 j 02:56	24° $\text{Z}$ 33'54	19.57962 AU	max. Earth dist.	-10393 Apr 29 j 22:22	22° $\approx$ 55'26	19.29138 AU
conjunction	-10399 Apr 01 j 12:50	24° $\text{Z}$ 39'06	-1°01'50	conjunction	-10393 May 01 j 10:43	23° $\approx$ 01'10	-0°40'46
minimum elong	-10399 Apr 01 j 12:50	24° $\text{Z}$ 39'06	1°02'23	minimum elong	-10393 May 01 j 10:43	23° $\approx$ 01'10	0°41'10
morning rise	-10399 Apr 18 j 04:22	25° $\text{Z}$ 40'00		morning rise	-10393 May 17 j 20:21	24° $\approx$ 02'39	
retrograde	-10399 Jul 19 j 04:50	28° $\text{Z}$ 59'04		retrograde	-10393 Aug 17 j 03:30	27° $\approx$ 24'45	
opposition	-10399 Sep 30 j 13:12	26° $\text{Z}$ 56'53	-1°07'36	opposition	-10393 Oct 29 j 05:07	25° $\approx$ 22'40	-0°42'59
min. Earth dist.	-10399 Oct 01 j 17:23	26° $\text{Z}$ 53'48	17.55010 AU	min. Earth dist.	-10393 Oct 30 j 11:38	25° $\approx$ 19'20	17.27522 AU
direct	-10399 Dec 15 j 08:19	24° $\text{Z}$ 51'07		direct	-10392 Jan 13 j 15:23	23° $\approx$ 15'49	
evening set	-10398 Mar 20 j 21:23	28° $\text{Z}$ 16'54		evening set	-10392 Apr 19 j 02:35	26° $\approx$ 47'42	
max. Earth dist.	-10398 Apr 05 j 04:40	29° $\text{Z}$ 13'03	19.52036 AU	max. Earth dist.	-10392 May 04 j 04:28	27° $\approx$ 44'19	19.25887 AU
conjunction	-10398 Apr 06 j 15:17	29° $\text{Z}$ 18'23	-0°59'18	conjunction	-10392 May 05 j 15:23	27° $\approx$ 49'49	-0°36'03
minimum elong	-10398 Apr 06 j 15:18	29° $\text{Z}$ 18'23	0°59'50	minimum elong	-10392 May 05 j 15:24	27° $\approx$ 49'49	0°36'24
	-10398 Apr 17 j 21:47	0° $\approx$		morning rise	-10392 May 21 j 23:39	28° $\approx$ 51'19	
morning rise	-10398 Apr 23 j 05:55	0° $\approx$ 19'26			-10392 Jun 10 j 09:30	0° $\text{H}$	
retrograde	-10398 Jul 24 j 02:15	3° $\approx$ 39'05		retrograde	-10392 Aug 21 j 04:44	2° $\text{H}$ 13'44	
opposition	-10398 Oct 05 j 09:37	1° $\approx$ 36'53	-1°04'34	opposition	-10392 Nov 02 j 06:47	0° $\text{H}$ 11'39	-0°37'34
min. Earth dist.	-10398 Oct 06 j 15:23	1° $\approx$ 33'38	17.49317 AU	min. Earth dist.	-10392 Nov 03 j 13:36	0° $\text{H}$ 08'17	17.24507 AU
	-10398 Nov 16 j 14:25	30° $\text{R}$ $\text{Z}$			-10392 Nov 06 j 17:34	30° $\text{R}$ $\approx$	
direct	-10398 Dec 20 j 05:58	29° $\text{Z}$ 30'52		direct	-10391 Jan 17 j 18:42	28° $\approx$ 04'42	
	-10397 Jan 22 j 15:19	0° $\approx$			-10391 Mar 27 j 03:20	0° $\text{H}$	
evening set	-10397 Mar 26 j 01:08	2° $\approx$ 57'54		evening set	-10391 Apr 24 j 08:20	1° $\text{H}$ 37'10	
max. Earth dist.	-10397 Apr 10 j 07:05	3° $\approx$ 54'06	19.46577 AU	max. Earth dist.	-10391 May 09 j 08:27	2° $\text{H}$ 33'41	19.23139 AU
conjunction	-10397 Apr 11 j 18:22	3° $\approx$ 59'34	-0°56'21	conjunction	-10391 May 10 j 19:51	2° $\text{H}$ 39'17	-0°31'03
minimum elong	-10397 Apr 11 j 18:22	3° $\approx$ 59'34	0°56'52	minimum elong	-10391 May 10 j 19:51	2° $\text{H}$ 39'17	0°31'23
morning rise	-10397 Apr 28 j 08:13	5° $\approx$ 00'44		morning rise	-10391 May 27 j 03:03	3° $\text{H}$ 40'47	
retrograde	-10397 Jul 29 j 02:02	8° $\approx$ 20'57		retrograde	-10391 Aug 26 j 06:38	7° $\text{H}$ 03'28	
opposition	-10397 Oct 10 j 06:40	6° $\approx$ 18'46	-1°01'05	opposition	-10391 Nov 07 j 09:02	5° $\text{H}$ 01'21	-0°31'53
min. Earth dist.	-10397 Oct 11 j 12:03	6° $\approx$ 15'33	17.44079 AU	min. Earth dist.	-10391 Nov 08 j 14:53	4° $\text{H}$ 58'06	17.22027 AU
direct	-10397 Dec 25 j 06:56	4° $\approx$ 12'32		direct	-10390 Jan 22 j 22:50	2° $\text{H}$ 54'17	
evening set	-10396 Mar 30 j 05:31	7° $\approx$ 40'46		evening set	-10390 Apr 29 j 13:37	6° $\text{H}$ 27'12	
max. Earth dist.	-10396 Apr 14 j 10:44	8° $\approx$ 37'04	19.41557 AU	max. Earth dist.	-10390 May 14 j 14:57	7° $\text{H}$ 24'02	19.20939 AU
conjunction	-10396 Apr 15 j 22:05	8° $\approx$ 42'34	-0°53'00	conjunction	-10390 May 16 j 00:08	7° $\text{H}$ 29'18	-0°25'51
minimum elong	-10396 Apr 15 j 22:05	8° $\approx$ 42'34	0°53'31	minimum elong	-10390 May 16 j 00:08	7° $\text{H}$ 29'18	0°26'07
morning rise	-10396 May 02 j 10:49	9° $\approx$ 43'52		morning rise	-10390 Jun 01 j 06:00	8° $\text{H}$ 30'45	
retrograde	-10396 Aug 02 j 00:44	13° $\approx$ 04'36		retrograde	-10390 Aug 31 j 08:38	11° $\text{H}$ 53'39	
opposition	-10396 Oct 14 j 05:02	11° $\approx$ 02'28	-0°57'10	opposition	-10390 Nov 12 j 11:51	9° $\text{H}$ 51'30	-0°25'57
min. Earth dist.	-10396 Oct 15 j 11:52	10° $\approx$ 59'06	17.39283 AU	min. Earth dist.	-10390 Nov 13 j 17:05	9° $\text{H}$ 48'18	17.20107 AU
direct	-10396 Dec 29 j 06:29	8° $\approx$ 56'04		direct	-10389 Jan 28 j 03:55	7° $\text{H}$ 44'22	
evening set	-10395 Apr 04 j 10:21	12° $\approx$ 25'23		evening set	-10389 May 04 j 18:59	11° $\text{H}$ 17'35	
max. Earth dist.	-10395 Apr 19 j 13:46	13° $\approx$ 21'39	19.36983 AU	max. Earth dist.	-10389 May 19 j 19:10	12° $\text{H}$ 14'22	19.19333 AU
conjunction	-10395 Apr 21 j 01:57	13° $\approx$ 27'18	-0°49'17	conjunction	-10389 May 21 j 04:08	12° $\text{H}$ 19'37	-0°20'27
minimum elong	-10395 Apr 21 j 01:57	13° $\approx$ 27'18	0°49'44	minimum elong	-10389 May 21 j 04:08	12° $\text{H}$ 19'37	0°20'42
morning rise	-10395 May 07 j 13:47	14° $\approx$ 28'41		morning rise	-10389 Jun 06 j 08:52	13° $\text{H}$ 21'00	
	-10395 May 16 j 06:28	15° $\approx$		retrograde	-10389 Sep 05 j 09:25	16° $\text{H}$ 44'03	
retrograde	-10395 Aug 07 j 01:49	17° $\approx$ 49'56		opposition	-10389 Nov 17 j 14:59	14° $\text{H}$ 41'51	-0°19'51
opposition	-10395 Oct 19 j 04:11	15° $\approx$ 47'49	-0°52'49	min. Earth dist.	-10389 Nov 18 j 19:09	14° $\text{H}$ 38'47	17.18821 AU
min. Earth dist.	-10395 Oct 20 j 10:25	15° $\approx$ 44'31	17.34926 AU	direct	-10388 Feb 02 j 08:27	12° $\text{H}$ 34'41	
	-10395 Nov 06 j 20:42	15° $\text{R}$ $\approx$		evening set	-10388 May 08 j 23:55	16° $\text{H}$ 08'04	
direct	-10394 Jan 03 j 09:45	13° $\approx$ 41'16					

## Planetary Phenomena of Uranus from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 2

Attention, astronomical year style is used: The year -10388 in astronomical counting style is the year 10389 BCE in historical counting style.

max. Earth dist.	-10388 May 24 j 01:36	17° $\text{H}$ 05'11	19.18379 AU	behind sun begin	-10383 Jun 18 j 15:11	11° $\text{Y}$ 16'52	
				behind sun end	-10383 Jun 18 j 22:35	11° $\text{Y}$ 18'02	
conjunction	-10388 May 25 j 07:56	17° $\text{H}$ 10'01	-0°14'56	max. Earth dist.	-10383 Jun 17 j 23:51	11° $\text{Y}$ 14'25	19.24347 AU
minimum elong	-10388 May 25 j 07:56	17° $\text{H}$ 10'01	0°15'07	morning rise	-10383 Jul 04 j 16:08	12° $\text{Y}$ 17'55	
behind sun begin	-10388 May 25 j 05:38	17° $\text{H}$ 09'39		retrograde	-10383 Oct 03 j 15:09	15° $\text{Y}$ 40'49	
behind sun end	-10388 May 25 j 10:13	17° $\text{H}$ 10'22		opposition	-10383 Dec 16 j 17:03	13° $\text{Y}$ 38'54	0°18'07
morning rise	-10388 Jun 10 j 11:19	18° $\text{H}$ 11'18		min. Earth dist.	-10383 Dec 17 j 09:59	13° $\text{Y}$ 37'05	17.25908 AU
retrograde	-10388 Sep 09 j 11:30	21° $\text{H}$ 34'26		direct	-10382 Mar 03 j 20:33	11° $\text{Y}$ 32'46	
opposition	-10388 Nov 21 j 18:44	19° $\text{H}$ 32'12	-0°13'36	evening set	-10382 Jun 07 j 19:17	15° $\text{Y}$ 04'21	
min. Earth dist.	-10388 Nov 22 j 21:14	19° $\text{H}$ 29'19	17.18195 AU				
direct	-10387 Feb 06 j 15:30	17° $\text{H}$ 25'04		conjunction	-10382 Jun 23 j 19:13	16° $\text{Y}$ 05'09	0°19'04
evening set	-10387 May 14 j 04:27	20° $\text{H}$ 58'27		minimum elong	-10382 Jun 23 j 19:13	16° $\text{Y}$ 05'09	0°19'11
max. Earth dist.	-10387 May 29 j 05:56	21° $\text{H}$ 55'38	19.18113 AU	max. Earth dist.	-10382 Jun 23 j 02:21	16° $\text{Y}$ 02'28	19.27588 AU
				morning rise	-10382 Jul 09 j 15:28	17° $\text{Y}$ 05'25	
conjunction	-10387 May 30 j 11:01	22° $\text{H}$ 00'16	-0°09'18	retrograde	-10382 Oct 08 j 17:05	20° $\text{Y}$ 28'06	
minimum elong	-10387 May 30 j 11:01	22° $\text{H}$ 00'16	0°09'27	opposition	-10382 Dec 21 j 21:42	18° $\text{Y}$ 26'18	0°24'13
behind sun begin	-10387 May 30 j 05:27	21° $\text{H}$ 59'24		min. Earth dist.	-10382 Dec 22 j 11:21	18° $\text{Y}$ 24'51	17.29419 AU
behind sun end	-10387 May 30 j 16:35	22° $\text{H}$ 01'08		direct	-10381 Mar 09 j 02:33	16° $\text{Y}$ 20'31	
morning rise	-10387 Jun 15 j 13:11	23° $\text{H}$ 01'26		evening set	-10381 Jun 12 j 20:20	19° $\text{Y}$ 51'22	
retrograde	-10387 Sep 14 j 11:22	26° $\text{H}$ 24'38					
opposition	-10387 Nov 26 j 22:50	24° $\text{H}$ 22'24	-0°07'15	conjunction	-10381 Jun 28 j 19:03	20° $\text{Y}$ 51'54	0°24'27
min. Earth dist.	-10387 Nov 28 j 00:01	24° $\text{H}$ 19'40	17.18297 AU	minimum elong	-10381 Jun 28 j 19:03	20° $\text{Y}$ 51'54	0°24'36
direct	-10386 Feb 11 j 20:51	22° $\text{H}$ 15'20		max. Earth dist.	-10381 Jun 28 j 05:18	20° $\text{Y}$ 49'43	19.31361 AU
evening set	-10386 May 19 j 08:30	25° $\text{H}$ 48'37		morning rise	-10381 Jul 14 j 14:04	21° $\text{Y}$ 51'55	
max. Earth dist.	-10386 Jun 03 j 11:30	26° $\text{H}$ 46'04	19.18588 AU	retrograde	-10381 Oct 13 j 16:41	25° $\text{Y}$ 14'21	
				opposition	-10381 Dec 27 j 02:23	23° $\text{Y}$ 12'41	0°30'08
conjunction	-10386 Jun 04 j 13:49	26° $\text{H}$ 50'16	-0°03'38	min. Earth dist.	-10381 Dec 27 j 14:50	23° $\text{Y}$ 11'22	17.33442 AU
minimum elong	-10386 Jun 04 j 13:49	26° $\text{H}$ 50'16	0°03'44	direct	-10380 Mar 13 j 06:32	21° $\text{Y}$ 07'14	
behind sun begin	-10386 Jun 04 j 07:13	26° $\text{H}$ 49'15		evening set	-10380 Jun 16 j 20:44	24° $\text{Y}$ 37'15	
behind sun end	-10386 Jun 04 j 20:24	26° $\text{H}$ 51'18					
morning rise	-10386 Jun 20 j 14:43	27° $\text{H}$ 51'17		conjunction	-10380 Jul 02 j 18:04	25° $\text{Y}$ 37'30	0°29'38
	-10386 Jul 29 j 10:02	0° $\text{Y}$		minimum elong	-10380 Jul 02 j 18:03	25° $\text{Y}$ 37'30	0°29'51
retrograde	-10386 Sep 19 j 13:10	1° $\text{Y}$ 14'28		max. Earth dist.	-10380 Jul 02 j 06:01	25° $\text{Y}$ 35'35	19.35626 AU
	-10386 Nov 13 j 05:57	30° $\text{R}$ $\text{H}$		morning rise	-10380 Jul 18 j 12:11	26° $\text{Y}$ 37'16	
opposition	-10386 Dec 02 j 03:00	29° $\text{H}$ 12'16	-0°00'52	retrograde	-10380 Oct 17 j 17:54	29° $\text{Y}$ 59'23	
min. Earth dist.	-10386 Dec 03 j 01:38	29° $\text{H}$ 09'49	17.19129 AU	opposition	-10380 Dec 31 j 06:51	27° $\text{Y}$ 57'49	0°35'49
asc. node	-10385 Jan 19 j 15:17	27° $\text{H}$ 26'08		min. Earth dist.	-10380 Dec 31 j 15:55	27° $\text{Y}$ 56'51	17.37926 AU
direct	-10385 Feb 17 j 04:30	27° $\text{H}$ 05'21		direct	-10379 Mar 18 j 11:45	25° $\text{Y}$ 52'44	
	-10385 May 14 j 00:25	0° $\text{Y}$		evening set	-10379 Jun 21 j 20:00	29° $\text{Y}$ 21'47	
evening set	-10385 May 24 j 12:08	0° $\text{Y}$ 38'23			-10379 Jul 01 j 23:32	0° $\text{B}$	
conjunction	-10385 Jun 09 j 16:05	1° $\text{Y}$ 39'52	0°02'13	conjunction	-10379 Jul 07 j 16:17	0° $\text{B}$ 21'43	0°34'36
minimum elong	-10385 Jun 09 j 16:06	1° $\text{Y}$ 39'52	0°02'11	minimum elong	-10379 Jul 07 j 16:17	0° $\text{B}$ 21'43	0°34'50
behind sun begin	-10385 Jun 09 j 09:27	1° $\text{Y}$ 38'50		max. Earth dist.	-10379 Jul 07 j 07:43	0° $\text{B}$ 20'22	19.40313 AU
behind sun end	-10385 Jun 09 j 22:45	1° $\text{Y}$ 40'54		morning rise	-10379 Jul 23 j 09:18	1° $\text{B}$ 21'13	
max. Earth dist.	-10385 Jun 08 j 15:45	1° $\text{Y}$ 35'59	19.19796 AU	retrograde	-10379 Oct 22 j 16:29	4° $\text{B}$ 42'59	
morning rise	-10385 Jun 25 j 15:45	2° $\text{Y}$ 40'44		opposition	-10378 Jan 05 j 11:07	2° $\text{B}$ 41'30	0°41'12
retrograde	-10385 Sep 24 j 12:56	6° $\text{Y}$ 03'52		min. Earth dist.	-10378 Jan 05 j 18:43	2° $\text{B}$ 40'42	17.42809 AU
opposition	-10385 Dec 07 j 07:34	4° $\text{Y}$ 01'43	0°05'32	direct	-10378 Mar 23 j 15:37	0° $\text{B}$ 36'47	
min. Earth dist.	-10385 Dec 08 j 04:53	3° $\text{Y}$ 59'25	17.20703 AU	evening set	-10378 Jun 26 j 18:38	4° $\text{B}$ 04'45	
direct	-10384 Feb 22 j 09:20	1° $\text{Y}$ 55'00					
evening set	-10384 May 28 j 15:08	5° $\text{Y}$ 27'42		conjunction	-10378 Jul 12 j 13:37	5° $\text{B}$ 04'23	0°39'18
				minimum elong	-10378 Jul 12 j 13:37	5° $\text{B}$ 04'23	0°39'35
conjunction	-10384 Jun 13 j 17:44	6° $\text{Y}$ 28'58	0°07'55	max. Earth dist.	-10378 Jul 12 j 06:31	5° $\text{B}$ 03'16	19.45389 AU
minimum elong	-10384 Jun 13 j 17:44	6° $\text{Y}$ 28'58	0°07'55	morning rise	-10378 Jul 28 j 05:56	6° $\text{B}$ 03'37	
behind sun begin	-10384 Jun 13 j 11:47	6° $\text{Y}$ 28'02		retrograde	-10378 Oct 27 j 16:12	9° $\text{B}$ 24'57	
behind sun end	-10384 Jun 13 j 23:41	6° $\text{Y}$ 29'54		opposition	-10377 Jan 10 j 14:35	7° $\text{B}$ 23'32	0°46'17
max. Earth dist.	-10384 Jun 12 j 19:58	6° $\text{Y}$ 25'30	19.21736 AU	min. Earth dist.	-10377 Jan 10 j 18:59	7° $\text{B}$ 23'05	17.48064 AU
morning rise	-10384 Jun 29 j 16:14	7° $\text{Y}$ 29'39		direct	-10377 Mar 28 j 19:35	5° $\text{B}$ 19'10	
retrograde	-10384 Sep 28 j 15:04	10° $\text{Y}$ 52'41		evening set	-10377 Jul 01 j 16:06	8° $\text{B}$ 46'00	
opposition	-10384 Dec 11 j 12:13	8° $\text{Y}$ 50'38	0°11'52				
min. Earth dist.	-10384 Dec 12 j 06:24	8° $\text{Y}$ 48'41	17.22974 AU	conjunction	-10377 Jul 17 j 10:11	9° $\text{B}$ 45'19	0°43'43
direct	-10383 Feb 26 j 16:21	6° $\text{Y}$ 44'12		minimum elong	-10377 Jul 17 j 10:11	9° $\text{B}$ 45'19	0°44'02
evening set	-10383 Jun 02 j 17:34	10° $\text{Y}$ 16'24		max. Earth dist.	-10377 Jul 17 j 06:42	9° $\text{B}$ 44'46	19.50813 AU
				morning rise	-10377 Aug 02 j 01:32	10° $\text{B}$ 44'15	
conjunction	-10383 Jun 18 j 18:53	11° $\text{Y}$ 17'27	0°13'32	retrograde	-10377 Nov 01 j 13:34	14° $\text{B}$ 05'06	
minimum elong	-10383 Jun 18 j 18:53	11° $\text{Y}$ 17'27	0°13'36	opposition	-10376 Jan 15 j 17:50	12° $\text{B}$ 03'46	0°51'01

## Planetary Phenomena of Uranus from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 3

Attention, astronomical year style is used: The year -10376 in astronomical counting style is the year 10377 BCE in historical counting style.

min. Earth dist.	-10376 Jan 15 j 20:25	12° <b>8</b> 03'30	17.53654 AU	direct	-10370 Apr 30 j 23:18	7° <b>II</b> 20'03	
direct	-10376 Apr 01 j 23:03	9° <b>8</b> 59'46		evening set	-10370 Aug 01 j 17:03	10° <b>II</b> 37'20	
evening set	-10376 Jul 05 j 12:34	13° <b>8</b> 25'20					
				conjunction	-10370 Aug 17 j 05:50	11° <b>II</b> 34'21	1°04'45
conjunction	-10376 Jul 21 j 05:29	14° <b>8</b> 24'19	0°47'48	minimum elong	-10370 Aug 17 j 05:49	11° <b>II</b> 34'21	1°05'18
minimum elong	-10376 Jul 21 j 05:28	14° <b>8</b> 24'19	0°48'10	max. Earth dist.	-10370 Aug 17 j 20:39	11° <b>II</b> 36'38	19.98071 AU
max. Earth dist.	-10376 Jul 21 j 03:36	14° <b>8</b> 24'01	19.56578 AU	morning rise	-10370 Sep 01 j 18:22	12° <b>II</b> 31'21	
	-10376 Jul 30 j 16:20	15° <b>8</b>		retrograde	-10370 Dec 03 j 02:56	15° <b>II</b> 48'05	
morning rise	-10376 Aug 05 j 20:18	15° <b>8</b> 22'59		opposition	-10369 Feb 17 j 19:54	13° <b>II</b> 47'24	1°12'52
retrograde	-10376 Nov 05 j 11:31	18° <b>8</b> 43'19		min. Earth dist.	-10369 Feb 17 j 03:50	13° <b>II</b> 49'03	18.01974 AU
opposition	-10375 Jan 19 j 20:26	16° <b>8</b> 42'01	0°55'23	direct	-10369 May 05 j 17:37	11° <b>II</b> 46'19	
min. Earth dist.	-10375 Jan 19 j 19:51	16° <b>8</b> 42'05	17.59594 AU	evening set	-10369 Aug 06 j 06:23	15° <b>II</b> 02'12	
	-10375 Mar 08 j 14:58	15° <b>8</b>					
direct	-10375 Apr 07 j 01:44	14° <b>8</b> 38'21		conjunction	-10369 Aug 21 j 18:55	15° <b>II</b> 58'55	1°06'14
	-10375 May 05 j 20:52	15° <b>8</b>		minimum elong	-10369 Aug 21 j 18:55	15° <b>II</b> 58'55	1°06'47
evening set	-10375 Jul 10 j 07:51	18° <b>8</b> 02'38		max. Earth dist.	-10369 Aug 22 j 12:50	16° <b>II</b> 01'40	20.05853 AU
				morning rise	-10369 Sep 06 j 07:18	16° <b>II</b> 55'38	
conjunction	-10375 Jul 26 j 00:02	19° <b>8</b> 01'17	0°51'33	retrograde	-10369 Dec 07 j 20:30	20° <b>II</b> 11'45	
minimum elong	-10375 Jul 26 j 00:01	19° <b>8</b> 01'17	0°51'58	opposition	-10368 Feb 22 j 17:03	18° <b>II</b> 11'15	1°14'16
max. Earth dist.	-10375 Jul 26 j 02:02	19° <b>8</b> 01'36	19.62683 AU	min. Earth dist.	-10368 Feb 21 j 22:08	18° <b>II</b> 13'11	18.09791 AU
morning rise	-10375 Aug 10 j 14:05	19° <b>8</b> 59'39		direct	-10368 May 09 j 14:06	16° <b>II</b> 10'39	
retrograde	-10375 Nov 10 j 07:09	23° <b>8</b> 19'26		evening set	-10368 Aug 09 j 18:54	19° <b>II</b> 25'06	
opposition	-10374 Jan 24 j 22:15	21° <b>8</b> 18'11	0°59'21				
min. Earth dist.	-10374 Jan 24 j 19:23	21° <b>8</b> 18'29	17.65867 AU	conjunction	-10368 Aug 25 j 07:02	20° <b>II</b> 21'32	1°07'19
direct	-10374 Apr 12 j 03:59	19° <b>8</b> 14'53		minimum elong	-10368 Aug 25 j 07:02	20° <b>II</b> 21'32	1°07'53
evening set	-10374 Jul 15 j 02:11	22° <b>8</b> 37'48		max. Earth dist.	-10368 Aug 26 j 02:38	20° <b>II</b> 24'31	20.13683 AU
				morning rise	-10368 Sep 09 j 19:36	21° <b>II</b> 18'01	
conjunction	-10374 Jul 30 j 17:22	23° <b>8</b> 36'07	0°54'57	retrograde	-10368 Dec 11 j 12:14	24° <b>II</b> 33'31	
minimum elong	-10374 Jul 30 j 17:22	23° <b>8</b> 36'07	0°55'22	opposition	-10367 Feb 26 j 13:30	22° <b>II</b> 33'09	1°15'13
max. Earth dist.	-10374 Jul 30 j 21:06	23° <b>8</b> 36'42	19.69128 AU	min. Earth dist.	-10367 Feb 25 j 17:20	22° <b>II</b> 35'13	18.17634 AU
morning rise	-10374 Aug 15 j 07:05	24° <b>8</b> 34'12		direct	-10367 May 14 j 06:40	20° <b>II</b> 33'02	
retrograde	-10374 Nov 15 j 03:19	27° <b>8</b> 53'24		evening set	-10367 Aug 14 j 06:37	23° <b>II</b> 46'05	
opposition	-10373 Jan 29 j 23:21	25° <b>8</b> 52'12	1°02'54				
min. Earth dist.	-10373 Jan 29 j 17:33	25° <b>8</b> 52'48	17.72493 AU	conjunction	-10367 Aug 29 j 18:42	24° <b>II</b> 42'14	1°08'00
direct	-10373 Apr 17 j 04:06	23° <b>8</b> 49'17		minimum elong	-10367 Aug 29 j 18:42	24° <b>II</b> 42'14	1°08'34
evening set	-10373 Jul 19 j 19:19	27° <b>8</b> 10'49		max. Earth dist.	-10367 Aug 30 j 16:45	24° <b>II</b> 45'35	20.21497 AU
				morning rise	-10367 Sep 14 j 07:19	25° <b>II</b> 38'28	
conjunction	-10373 Aug 04 j 09:53	28° <b>8</b> 08'48	0°57'58	retrograde	-10367 Dec 16 j 04:51	28° <b>II</b> 53'18	
minimum elong	-10373 Aug 04 j 09:52	28° <b>8</b> 08'48	0°58'27	min. Earth dist.	-10366 Mar 02 j 10:02	26° <b>II</b> 55'25	18.25402 AU
max. Earth dist.	-10373 Aug 04 j 17:28	28° <b>8</b> 09'59	19.75915 AU	opposition	-10366 Mar 03 j 08:45	26° <b>II</b> 53'06	1°15'43
morning rise	-10373 Aug 19 j 22:58	29° <b>8</b> 06'35		direct	-10366 May 19 j 01:37	24° <b>II</b> 53'26	
	-10373 Sep 04 j 01:48	0° <b>II</b>		evening set	-10366 Aug 18 j 17:40	28° <b>II</b> 05'06	
retrograde	-10373 Nov 19 j 21:28	2° <b>II</b> 25'11					
opposition	-10372 Feb 03 j 23:41	0° <b>II</b> 24'05	1°06'03	conjunction	-10366 Sep 03 j 05:34	29° <b>II</b> 00'59	1°08'17
min. Earth dist.	-10372 Feb 03 j 15:04	0° <b>II</b> 24'58	17.79443 AU	minimum elong	-10366 Sep 03 j 05:35	29° <b>II</b> 00'59	1°08'52
	-10372 Feb 13 j 17:26	30° <b>8</b>		max. Earth dist.	-10366 Sep 04 j 04:54	29° <b>II</b> 04'31	20.29191 AU
direct	-10372 Apr 21 j 04:12	28° <b>8</b> 21'35		morning rise	-10366 Sep 18 j 18:30	29° <b>II</b> 57'00	
	-10372 Jun 23 j 00:21	0° <b>II</b>			-10366 Sep 19 j 14:50	0° <b>8</b>	
evening set	-10372 Jul 23 j 11:37	1° <b>II</b> 41'42		retrograde	-10366 Dec 20 j 19:06	3° <b>8</b> 11'11	
				min. Earth dist.	-10365 Mar 07 j 04:02	1° <b>8</b> 13'29	18.33029 AU
conjunction	-10372 Aug 08 j 01:22	2° <b>II</b> 39'21	1°00'37	opposition	-10365 Mar 08 j 03:25	1° <b>8</b> 11'07	1°15'47
minimum elong	-10372 Aug 08 j 01:21	2° <b>II</b> 39'21	1°01'06		-10365 Apr 08 j 10:40	30° <b>8</b> 11	
max. Earth dist.	-10372 Aug 08 j 10:49	2° <b>II</b> 40'49	19.83029 AU	direct	-10365 May 23 j 16:39	29° <b>II</b> 11'51	
morning rise	-10372 Aug 23 j 14:16	3° <b>II</b> 36'53			-10365 Jul 06 j 05:23	0° <b>8</b>	
retrograde	-10372 Nov 23 j 16:04	6° <b>II</b> 54'52		evening set	-10365 Aug 23 j 03:43	2° <b>8</b> 22'09	
opposition	-10371 Feb 07 j 23:19	4° <b>II</b> 53'52	1°08'46				
min. Earth dist.	-10371 Feb 07 j 12:05	4° <b>II</b> 55'01	17.86724 AU	conjunction	-10365 Sep 07 j 15:44	3° <b>8</b> 17'46	1°08'11
direct	-10371 Apr 26 j 01:20	2° <b>II</b> 51'49		minimum elong	-10365 Sep 07 j 15:44	3° <b>8</b> 17'46	1°08'46
evening set	-10371 Jul 28 j 02:41	6° <b>II</b> 10'31		max. Earth dist.	-10365 Sep 08 j 16:57	3° <b>8</b> 21'34	20.36717 AU
				morning rise	-10365 Sep 23 j 04:54	4° <b>8</b> 13'34	
conjunction	-10371 Aug 12 j 16:03	7° <b>II</b> 07'51	1°02'53	retrograde	-10365 Dec 25 j 09:57	7° <b>8</b> 27'06	
minimum elong	-10371 Aug 12 j 16:03	7° <b>II</b> 07'51	1°03'24	opposition	-10364 Mar 11 j 21:06	5° <b>8</b> 27'07	1°15'26
max. Earth dist.	-10371 Aug 13 j 05:07	7° <b>II</b> 09'53	19.90444 AU	min. Earth dist.	-10364 Mar 10 j 19:15	5° <b>8</b> 29'44	18.40442 AU
morning rise	-10371 Aug 28 j 04:37	8° <b>II</b> 05'06		direct	-10364 May 27 j 10:15	3° <b>8</b> 28'14	
retrograde	-10371 Nov 28 j 09:52	11° <b>II</b> 22'28		evening set	-10364 Aug 26 j 13:11	6° <b>8</b> 37'12	
opposition	-10370 Feb 12 j 22:02	9° <b>II</b> 21'38	1°11'02				
min. Earth dist.	-10370 Feb 12 j 07:52	9° <b>II</b> 23'05	17.94252 AU	conjunction	-10364 Sep 11 j 01:15	7° <b>8</b> 32'34	1°07'43

## Planetary Phenomena of Uranus from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 4

Attention, astronomical year style is used: The year -10364 in astronomical counting style is the year 10365 BCE in historical counting style.

minimum elong	-10364 Sep 11 j 01:15	7° $\mathring{\text{E}}$ 32'35	1°08'18	opposition	-10357 Apr 11 j 22:48	4° $\mathring{\text{N}}$ 25'47	1°02'27
max. Earth dist.	-10364 Sep 12 j 03:38	7° $\mathring{\text{E}}$ 36'32	20.44006 AU	min. Earth dist.	-10357 Apr 10 j 14:38	4° $\mathring{\text{N}}$ 29'00	18.85553 AU
morning rise	-10364 Sep 26 j 14:55	8° $\mathring{\text{E}}$ 28'11		direct	-10357 Jun 26 j 20:40	2° $\mathring{\text{N}}$ 28'54	
retrograde	-10364 Dec 28 j 22:49	11° $\mathring{\text{E}}$ 41'03		evening set	-10357 Sep 24 j 11:33	5° $\mathring{\text{N}}$ 29'51	
min. Earth dist.	-10363 Mar 15 j 11:49	9° $\mathring{\text{E}}$ 43'47	18.47619 AU				
opposition	-10363 Mar 16 j 13:56	9° $\mathring{\text{E}}$ 41'08	1°14'40	conjunction	-10357 Oct 10 j 02:52	6° $\mathring{\text{N}}$ 24'01	0°55'04
direct	-10363 May 31 j 23:39	7° $\mathring{\text{E}}$ 42'35		minimum elong	-10357 Oct 10 j 02:53	6° $\mathring{\text{N}}$ 24'01	0°55'34
evening set	-10363 Aug 30 j 21:44	10° $\mathring{\text{E}}$ 50'13		max. Earth dist.	-10357 Oct 11 j 13:06	6° $\mathring{\text{N}}$ 29'00	20.88256 AU
				morning rise	-10357 Oct 25 j 21:26	7° $\mathring{\text{N}}$ 18'38	
conjunction	-10363 Sep 15 j 10:08	11° $\mathring{\text{E}}$ 45'23	1°06'52	retrograde	-10356 Jan 28 j 02:44	10° $\mathring{\text{N}}$ 27'28	
minimum elong	-10363 Sep 15 j 10:08	11° $\mathring{\text{E}}$ 45'23	1°07'28	min. Earth dist.	-10356 Apr 13 j 23:41	8° $\mathring{\text{N}}$ 31'18	18.91018 AU
max. Earth dist.	-10363 Sep 16 j 13:58	11° $\mathring{\text{E}}$ 49'32	20.51053 AU	opposition	-10356 Apr 15 j 09:24	8° $\mathring{\text{N}}$ 27'56	0°59'17
morning rise	-10363 Oct 01 j 00:16	12° $\mathring{\text{E}}$ 40'48		direct	-10356 Jun 30 j 05:37	6° $\mathring{\text{N}}$ 31'20	
retrograde	-10362 Jan 02 j 11:55	15° $\mathring{\text{E}}$ 53'00		evening set	-10356 Sep 27 j 16:20	9° $\mathring{\text{N}}$ 31'27	
min. Earth dist.	-10362 Mar 20 j 01:19	13° $\mathring{\text{E}}$ 56'00	18.54527 AU				
opposition	-10362 Mar 21 j 05:39	13° $\mathring{\text{E}}$ 53'08	1°13'31	conjunction	-10356 Oct 13 j 08:21	10° $\mathring{\text{N}}$ 25'31	0°52'06
direct	-10362 Jun 05 j 15:03	11° $\mathring{\text{E}}$ 54'53		minimum elong	-10356 Oct 13 j 08:22	10° $\mathring{\text{N}}$ 25'31	0°52'36
evening set	-10362 Sep 04 j 05:37	15° $\mathring{\text{E}}$ 01'15		max. Earth dist.	-10356 Oct 14 j 19:17	10° $\mathring{\text{N}}$ 30'35	20.93554 AU
				morning rise	-10356 Oct 29 j 03:53	11° $\mathring{\text{N}}$ 20'04	
conjunction	-10362 Sep 19 j 18:14	15° $\mathring{\text{E}}$ 56'12	1°05'41	retrograde	-10355 Jan 31 j 10:09	14° $\mathring{\text{N}}$ 28'27	
minimum elong	-10362 Sep 19 j 18:14	15° $\mathring{\text{E}}$ 56'12	1°06'15	min. Earth dist.	-10355 Apr 18 j 10:26	12° $\mathring{\text{N}}$ 32'20	18.96144 AU
max. Earth dist.	-10362 Sep 20 j 23:13	16° $\mathring{\text{E}}$ 00'30	20.57822 AU	opposition	-10355 Apr 19 j 19:19	12° $\mathring{\text{N}}$ 29'03	0°55'51
morning rise	-10362 Oct 05 j 08:59	16° $\mathring{\text{E}}$ 51'26		direct	-10355 Jul 04 j 12:12	10° $\mathring{\text{N}}$ 32'43	
retrograde	-10361 Jan 06 j 22:57	20° $\mathring{\text{E}}$ 03'00		evening set	-10355 Oct 01 j 20:47	13° $\mathring{\text{N}}$ 32'03	
opposition	-10361 Mar 25 j 20:30	18° $\mathring{\text{E}}$ 03'09	1°11'59				
min. Earth dist.	-10361 Mar 24 j 16:06	18° $\mathring{\text{E}}$ 06'01	18.61182 AU	conjunction	-10355 Oct 17 j 13:39	14° $\mathring{\text{N}}$ 26'02	0°48'53
direct	-10361 Jun 10 j 02:54	16° $\mathring{\text{E}}$ 05'11		minimum elong	-10355 Oct 17 j 13:40	14° $\mathring{\text{N}}$ 26'02	0°49'21
evening set	-10361 Sep 08 j 12:44	19° $\mathring{\text{E}}$ 10'19		max. Earth dist.	-10355 Oct 19 j 00:41	14° $\mathring{\text{N}}$ 31'06	20.98497 AU
					-10355 Oct 27 j 09:29	15° $\mathring{\text{N}}$	
conjunction	-10361 Sep 24 j 01:47	20° $\mathring{\text{E}}$ 05'04	1°04'10	morning rise	-10355 Nov 02 j 10:09	15° $\mathring{\text{N}}$ 20'32	
minimum elong	-10361 Sep 24 j 01:47	20° $\mathring{\text{E}}$ 05'04	1°04'45	retrograde	-10354 Feb 04 j 20:24	18° $\mathring{\text{N}}$ 28'31	
max. Earth dist.	-10361 Sep 25 j 08:06	20° $\mathring{\text{E}}$ 09'33	20.64363 AU	min. Earth dist.	-10354 Apr 22 j 18:43	16° $\mathring{\text{N}}$ 32'36	19.00874 AU
morning rise	-10361 Oct 09 j 17:08	21° $\mathring{\text{E}}$ 00'09		opposition	-10354 Apr 24 j 04:31	16° $\mathring{\text{N}}$ 29'13	0°52'09
retrograde	-10360 Jan 11 j 10:49	24° $\mathring{\text{E}}$ 11'05			-10354 Jun 05 j 13:05	15° $\mathring{\text{R}}$	
min. Earth dist.	-10360 Mar 28 j 03:45	22° $\mathring{\text{E}}$ 14'21	18.67609 AU	direct	-10354 Jul 08 j 19:42	14° $\mathring{\text{N}}$ 33'08	
opposition	-10360 Mar 29 j 10:21	22° $\mathring{\text{E}}$ 11'16	1°10'06		-10354 Aug 10 j 04:09	15° $\mathring{\text{N}}$	
direct	-10360 Jun 13 j 15:42	20° $\mathring{\text{E}}$ 13'34		evening set	-10354 Oct 06 j 01:05	17° $\mathring{\text{N}}$ 31'46	
evening set	-10360 Sep 11 j 19:12	23° $\mathring{\text{E}}$ 17'32					
				conjunction	-10354 Oct 21 j 18:43	18° $\mathring{\text{N}}$ 25'42	0°45'27
conjunction	-10360 Sep 27 j 08:39	24° $\mathring{\text{E}}$ 12'07	1°02'20	minimum elong	-10354 Oct 21 j 18:43	18° $\mathring{\text{N}}$ 25'42	0°45'53
minimum elong	-10360 Sep 27 j 08:39	24° $\mathring{\text{E}}$ 12'07	1°02'52	max. Earth dist.	-10354 Oct 23 j 05:58	18° $\mathring{\text{N}}$ 30'46	21.02993 AU
max. Earth dist.	-10360 Sep 28 j 16:12	24° $\mathring{\text{E}}$ 16'46	20.70671 AU	morning rise	-10354 Nov 06 j 16:12	19° $\mathring{\text{N}}$ 20'09	
morning rise	-10360 Oct 13 j 00:46	25° $\mathring{\text{E}}$ 07'04		retrograde	-10353 Feb 09 j 02:56	22° $\mathring{\text{N}}$ 27'47	
retrograde	-10359 Jan 14 j 20:29	28° $\mathring{\text{E}}$ 17'24		min. Earth dist.	-10353 Apr 27 j 04:43	20° $\mathring{\text{N}}$ 31'50	19.05133 AU
opposition	-10359 Apr 02 j 23:28	26° $\mathring{\text{E}}$ 17'38	1°07'52	opposition	-10353 Apr 28 j 13:16	20° $\mathring{\text{N}}$ 28'35	0°48'13
min. Earth dist.	-10359 Apr 01 j 16:54	26° $\mathring{\text{E}}$ 20'42	18.73818 AU	direct	-10353 Jul 13 j 01:18	18° $\mathring{\text{N}}$ 32'42	
direct	-10359 Jun 18 j 01:55	24° $\mathring{\text{E}}$ 20'12		evening set	-10353 Oct 10 j 05:15	21° $\mathring{\text{N}}$ 30'43	
evening set	-10359 Sep 16 j 01:10	27° $\mathring{\text{E}}$ 23'05					
				conjunction	-10353 Oct 25 j 23:49	22° $\mathring{\text{N}}$ 24'35	0°41'48
conjunction	-10359 Oct 01 j 15:14	28° $\mathring{\text{E}}$ 17'30	1°00'11	minimum elong	-10353 Oct 25 j 23:49	22° $\mathring{\text{N}}$ 24'36	0°42'11
minimum elong	-10359 Oct 01 j 15:14	28° $\mathring{\text{E}}$ 17'30	1°00'44	max. Earth dist.	-10353 Oct 27 j 10:36	22° $\mathring{\text{N}}$ 29'35	21.07011 AU
max. Earth dist.	-10359 Oct 02 j 23:46	28° $\mathring{\text{E}}$ 22'17	20.76775 AU	morning rise	-10353 Nov 10 j 22:19	23° $\mathring{\text{N}}$ 19'01	
morning rise	-10359 Oct 17 j 08:05	29° $\mathring{\text{E}}$ 12'19		retrograde	-10352 Feb 13 j 12:30	26° $\mathring{\text{N}}$ 26'20	
	-10359 Oct 31 j 16:27	0° $\mathring{\text{N}}$		opposition	-10352 May 01 j 21:21	24° $\mathring{\text{N}}$ 27'11	0°44'03
retrograde	-10358 Jan 19 j 07:34	2° $\mathring{\text{N}}$ 22'06		min. Earth dist.	-10352 Apr 30 j 12:23	24° $\mathring{\text{N}}$ 30'28	19.08881 AU
min. Earth dist.	-10358 Apr 06 j 02:54	0° $\mathring{\text{N}}$ 25'39	18.79808 AU	direct	-10352 Jul 16 j 07:36	22° $\mathring{\text{N}}$ 31'27	
opposition	-10358 Apr 07 j 11:22	0° $\mathring{\text{N}}$ 22'24	1°05'19	evening set	-10352 Oct 13 j 09:23	25° $\mathring{\text{N}}$ 28'55	
	-10358 Apr 16 j 20:14	30° $\mathring{\text{R}}$					
direct	-10358 Jun 22 j 12:23	28° $\mathring{\text{E}}$ 25'14		conjunction	-10352 Oct 29 j 04:51	26° $\mathring{\text{N}}$ 22'46	0°37'57
	-10358 Aug 23 j 18:09	0° $\mathring{\text{N}}$		minimum elong	-10352 Oct 29 j 04:51	26° $\mathring{\text{N}}$ 22'46	0°38'20
evening set	-10358 Sep 20 j 06:41	1° $\mathring{\text{N}}$ 27'07		max. Earth dist.	-10352 Oct 30 j 15:20	26° $\mathring{\text{N}}$ 27'42	21.10468 AU
				morning rise	-10352 Nov 14 j 04:27	27° $\mathring{\text{N}}$ 17'11	
conjunction	-10358 Oct 05 j 21:17	2° $\mathring{\text{N}}$ 21'24	0°57'46		-10351 Jan 15 j 23:16	0° $\mathring{\text{N}}$	
minimum elong	-10358 Oct 05 j 21:17	2° $\mathring{\text{N}}$ 21'25	0°58'17	retrograde	-10351 Feb 16 j 18:56	0° $\mathring{\text{N}}$ 24'11	
max. Earth dist.	-10358 Oct 07 j 06:49	2° $\mathring{\text{N}}$ 26'18	20.82639 AU		-10351 Mar 21 j 06:17	30° $\mathring{\text{R}}$	
morning rise	-10358 Oct 21 j 14:59	3° $\mathring{\text{N}}$ 16'07		min. Earth dist.	-10351 May 04 j 21:44	28° $\mathring{\text{N}}$ 28'12	19.12043 AU
retrograde	-10357 Jan 23 j 16:02	6° $\mathring{\text{N}}$ 25'24		opposition	-10351 May 06 j 05:03	28° $\mathring{\text{N}}$ 25'05	0°39'42

Attention, astronomical year style is used: The year -10351 in astronomical counting style is the year 10352 BCE in historical counting style.

direct	-10351 Jul 20 j 12:31	26° <u>0</u> 29'28		minimum elong	-10345 Nov 26 j 16:29	23° <u>0</u> 53'51	0°07'39
evening set	-10351 Oct 17 j 13:28	29° <u>0</u> 26'25		behind sun begin	-10345 Nov 26 j 10:28	23° <u>0</u> 53'02	
	-10351 Oct 27 j 11:53	0° <u>0</u>		behind sun end	-10345 Nov 26 j 22:30	23° <u>0</u> 54'41	
				max. Earth dist.	-10345 Nov 27 j 20:18	23° <u>0</u> 57'47	21.18986 AU
conjunction	-10351 Nov 02 j 09:57	0° <u>0</u> 20'16	0°33'56	morning rise	-10345 Dec 12 j 23:45	24° <u>0</u> 48'37	
minimum elong	-10351 Nov 02 j 09:57	0° <u>0</u> 20'16	0°34'16	retrograde	-10344 Mar 16 j 20:44	27° <u>0</u> 54'22	
max. Earth dist.	-10351 Nov 03 j 19:23	0° <u>0</u> 25'02	21.13340 AU	opposition	-10344 Jun 02 j 21:03	25° <u>0</u> 54'51	0°05'37
morning rise	-10351 Nov 18 j 10:36	1° <u>0</u> 14'41		min. Earth dist.	-10344 Jun 01 j 19:59	25° <u>0</u> 57'23	19.18743 AU
retrograde	-10350 Feb 21 j 03:30	4° <u>0</u> 21'24		direct	-10344 Aug 16 j 17:18	23° <u>0</u> 58'58	
min. Earth dist.	-10350 May 09 j 04:39	2° <u>0</u> 25'25	19.14604 AU	evening set	-10344 Nov 13 j 18:23	26° <u>0</u> 54'31	
opposition	-10350 May 10 j 11:58	2° <u>0</u> 22'17	0°35'10				
direct	-10350 Jul 24 j 18:03	0° <u>0</u> 26'43		conjunction	-10344 Nov 29 j 22:16	27° <u>0</u> 48'47	0°02'53
evening set	-10350 Oct 21 j 17:28	3° <u>0</u> 23'15		minimum elong	-10344 Nov 29 j 22:17	27° <u>0</u> 48'47	0°02'58
				behind sun begin	-10344 Nov 29 j 15:39	27° <u>0</u> 47'53	
conjunction	-10350 Nov 06 j 14:55	4° <u>0</u> 17'06	0°29'47	behind sun end	-10344 Nov 30 j 04:55	27° <u>0</u> 49'42	
minimum elong	-10350 Nov 06 j 14:55	4° <u>0</u> 17'06	0°30'05	max. Earth dist.	-10344 Dec 01 j 01:08	27° <u>0</u> 52'34	21.18318 AU
max. Earth dist.	-10350 Nov 07 j 23:44	4° <u>0</u> 21'46	21.15596 AU	morning rise	-10344 Dec 16 j 06:36	28° <u>0</u> 43'40	
morning rise	-10350 Nov 22 j 16:40	5° <u>0</u> 11'32			-10343 Jan 09 j 21:27	0° <u>0</u>	
retrograde	-10349 Feb 25 j 09:35	8° <u>0</u> 17'59		retrograde	-10343 Mar 21 j 02:58	1° <u>0</u> 49'25	
opposition	-10349 May 14 j 18:37	6° <u>0</u> 18'50	0°30'29		-10343 Jun 02 j 21:33	30° <u>0</u> 5'00	
min. Earth dist.	-10349 May 13 j 13:04	6° <u>0</u> 21'48	19.16560 AU	min. Earth dist.	-10343 Jun 06 j 02:38	29° <u>0</u> 52'13	19.17856 AU
direct	-10349 Jul 28 j 22:06	4° <u>0</u> 23'17		opposition	-10343 Jun 07 j 01:39	29° <u>0</u> 49'53	0°00'29
evening set	-10349 Oct 25 j 21:14	7° <u>0</u> 19'25		desc. node	-10343 Jul 10 j 01:52	28° <u>0</u> 35'53	
				direct	-10343 Aug 20 j 19:48	27° <u>0</u> 53'55	
conjunction	-10349 Nov 10 j 19:46	8° <u>0</u> 13'18	0°25'30		-10343 Nov 02 j 09:09	0° <u>0</u>	
minimum elong	-10349 Nov 10 j 19:47	8° <u>0</u> 13'18	0°25'46	evening set	-10343 Nov 17 j 23:24	0° <u>0</u> 49'38	
max. Earth dist.	-10349 Nov 12 j 03:30	8° <u>0</u> 17'48	21.17280 AU				
morning rise	-10349 Nov 26 j 22:40	9° <u>0</u> 07'46		conjunction	-10343 Dec 04 j 04:25	1° <u>0</u> 44'02	-0°01'54
retrograde	-10348 Feb 29 j 17:41	12° <u>0</u> 14'00		minimum elong	-10343 Dec 04 j 04:24	1° <u>0</u> 44'01	0°01'52
min. Earth dist.	-10348 May 16 j 19:17	10° <u>0</u> 17'43	19.17959 AU	behind sun begin	-10343 Dec 03 j 21:44	1° <u>0</u> 43'07	
opposition	-10348 May 18 j 00:42	10° <u>0</u> 14'46	0°25'41	behind sun end	-10343 Dec 04 j 11:04	1° <u>0</u> 44'56	
direct	-10348 Aug 01 j 03:15	8° <u>0</u> 19'11		max. Earth dist.	-10343 Dec 05 j 05:30	1° <u>0</u> 47'34	21.17228 AU
evening set	-10348 Oct 29 j 01:15	11° <u>0</u> 15'01		morning rise	-10343 Dec 20 j 13:45	2° <u>0</u> 39'02	
				retrograde	-10342 Mar 25 j 11:04	5° <u>0</u> 44'52	
conjunction	-10348 Nov 14 j 00:49	12° <u>0</u> 08'56	0°21'06	min. Earth dist.	-10342 Jun 10 j 07:42	3° <u>0</u> 47'34	19.16539 AU
minimum elong	-10348 Nov 14 j 00:49	12° <u>0</u> 08'56	0°21'20	opposition	-10342 Jun 11 j 05:58	3° <u>0</u> 45'18	-0°04'41
max. Earth dist.	-10348 Nov 15 j 07:54	12° <u>0</u> 13'20	21.18407 AU	direct	-10342 Aug 24 j 23:16	1° <u>0</u> 49'15	
morning rise	-10348 Nov 30 j 04:48	13° <u>0</u> 03'28		evening set	-10342 Nov 22 j 04:54	4° <u>0</u> 45'14	
retrograde	-10347 Mar 04 j 23:13	16° <u>0</u> 09'28					
min. Earth dist.	-10347 May 21 j 02:42	14° <u>0</u> 12'57	19.18831 AU	conjunction	-10342 Dec 08 j 10:57	5° <u>0</u> 39'46	-0°06'35
opposition	-10347 May 22 j 06:15	14° <u>0</u> 10'10	0°20'47	minimum elong	-10342 Dec 08 j 10:57	5° <u>0</u> 39'46	0°06'34
direct	-10347 Aug 05 j 06:15	12° <u>0</u> 14'32		behind sun begin	-10342 Dec 08 j 04:41	5° <u>0</u> 38'55	
evening set	-10347 Nov 02 j 05:16	15° <u>0</u> 10'09		behind sun end	-10342 Dec 08 j 17:12	5° <u>0</u> 40'38	
				max. Earth dist.	-10342 Dec 09 j 10:48	5° <u>0</u> 43'07	21.15681 AU
conjunction	-10347 Nov 18 j 05:57	16° <u>0</u> 04'08	0°16'38	morning rise	-10342 Dec 24 j 21:17	6° <u>0</u> 34'55	
minimum elong	-10347 Nov 18 j 05:56	16° <u>0</u> 04'08	0°16'50	retrograde	-10341 Mar 29 j 17:48	9° <u>0</u> 40'53	
max. Earth dist.	-10347 Nov 19 j 11:47	16° <u>0</u> 08'21	21.19050 AU	opposition	-10341 Jun 15 j 10:25	7° <u>0</u> 41'19	-0°09'50
morning rise	-10347 Dec 04 j 11:02	16° <u>0</u> 58'43		min. Earth dist.	-10341 Jun 14 j 14:28	7° <u>0</u> 43'20	19.14757 AU
retrograde	-10346 Mar 09 j 07:12	20° <u>0</u> 04'35		direct	-10341 Aug 29 j 02:02	5° <u>0</u> 45'10	
min. Earth dist.	-10346 May 25 j 08:08	18° <u>0</u> 07'57	19.19237 AU	evening set	-10341 Nov 26 j 10:49	8° <u>0</u> 41'28	
opposition	-10346 May 26 j 11:27	18° <u>0</u> 05'12	0°15'47				
direct	-10346 Aug 09 j 10:51	16° <u>0</u> 09'28		conjunction	-10341 Dec 12 j 17:58	9° <u>0</u> 36'11	-0°11'12
evening set	-10346 Nov 06 j 09:21	19° <u>0</u> 04'59		minimum elong	-10341 Dec 12 j 17:58	9° <u>0</u> 36'11	0°11'15
				behind sun begin	-10341 Dec 12 j 13:05	9° <u>0</u> 35'31	
conjunction	-10346 Nov 22 j 11:02	19° <u>0</u> 59'02	0°12'06	behind sun end	-10341 Dec 12 j 22:51	9° <u>0</u> 36'51	
minimum elong	-10346 Nov 22 j 11:02	19° <u>0</u> 59'02	0°12'15	max. Earth dist.	-10341 Dec 13 j 15:40	9° <u>0</u> 39'14	21.13671 AU
behind sun begin	-10346 Nov 22 j 06:37	19° <u>0</u> 58'26		morning rise	-10341 Dec 29 j 05:21	10° <u>0</u> 31'29	
behind sun end	-10346 Nov 22 j 15:27	19° <u>0</u> 59'39		retrograde	-10340 Apr 02 j 02:45	13° <u>0</u> 37'38	
max. Earth dist.	-10346 Nov 23 j 16:13	20° <u>0</u> 03'09	21.19224 AU	opposition	-10340 Jun 18 j 14:50	11° <u>0</u> 38'03	-0°14'57
morning rise	-10346 Dec 08 j 17:11	20° <u>0</u> 53'42		min. Earth dist.	-10340 Jun 17 j 20:03	11° <u>0</u> 39'57	19.12487 AU
retrograde	-10345 Mar 13 j 12:46	23° <u>0</u> 59'29		direct	-10340 Sep 01 j 05:37	9° <u>0</u> 41'45	
opposition	-10345 May 30 j 16:27	22° <u>0</u> 00'02	0°10'44	evening set	-10340 Nov 29 j 17:34	12° <u>0</u> 38'31	
min. Earth dist.	-10345 May 29 j 14:56	22° <u>0</u> 02'36	19.19195 AU				
direct	-10345 Aug 13 j 13:17	20° <u>0</u> 04'14		conjunction	-10340 Dec 16 j 01:45	13° <u>0</u> 33'24	-0°15'48
evening set	-10345 Nov 10 j 13:41	22° <u>0</u> 59'42		minimum elong	-10340 Dec 16 j 01:45	13° <u>0</u> 33'24	0°15'52
				max. Earth dist.	-10340 Dec 16 j 21:40	13° <u>0</u> 36'12	21.11131 AU
conjunction	-10345 Nov 26 j 16:29	23° <u>0</u> 53'51	0°07'31	morning rise	-10339 Jan 01 j 14:01	14° <u>0</u> 28'52	

Attention, astronomical year style is used: The year -10339 in astronomical counting style is the year 10340 BCE in historical counting style.

retrograde	-10339 Apr 06 j 09:48	17° $\underline{\text{A}}$ 35'14		evening set	-10333 Dec 29 j 10:01	10° $\text{M}$ 44'42	
opposition	-10339 Jun 22 j 19:17	15° $\underline{\text{A}}$ 35'37	-0°20'01				
min. Earth dist.	-10339 Jun 22 j 03:11	15° $\underline{\text{A}}$ 37'16	19.09672 AU	conjunction	-10332 Jan 15 j 00:49	11° $\text{M}$ 41'12	-0°45'03
direct	-10339 Sep 05 j 08:49	13° $\underline{\text{A}}$ 39'10		minimum elong	-10332 Jan 15 j 00:49	11° $\text{M}$ 41'12	0°45'24
evening set	-10339 Dec 04 j 00:54	16° $\underline{\text{A}}$ 36'26		max. Earth dist.	-10332 Jan 15 j 03:08	11° $\text{M}$ 41'31	20.78733 AU
				morning rise	-10332 Jan 31 j 18:25	12° $\text{M}$ 38'06	
conjunction	-10339 Dec 20 j 10:07	17° $\underline{\text{A}}$ 31'31	-0°20'21		-10332 Mar 22 j 04:31	15° $\text{M}$	
minimum elong	-10339 Dec 20 j 10:06	17° $\underline{\text{A}}$ 31'31	0°20'28	retrograde	-10332 May 05 j 03:59	15° $\text{M}$ 46'47	
max. Earth dist.	-10339 Dec 21 j 03:17	17° $\underline{\text{A}}$ 33'56	21.08049 AU		-10332 Jun 18 j 13:57	15° $\text{R}$ $\text{M}$	
morning rise	-10338 Jan 05 j 23:18	18° $\underline{\text{A}}$ 27'09		opposition	-10332 Jul 20 j 08:01	13° $\text{M}$ 46'15	-0°51'53
retrograde	-10338 Apr 10 j 19:44	21° $\underline{\text{A}}$ 33'47		min. Earth dist.	-10332 Jul 20 j 06:25	13° $\text{M}$ 46'25	18.75679 AU
opposition	-10338 Jun 26 j 23:56	19° $\underline{\text{A}}$ 34'06	-0°25'00	direct	-10332 Oct 02 j 22:08	11° $\text{M}$ 47'29	
min. Earth dist.	-10338 Jun 26 j 09:20	19° $\underline{\text{A}}$ 35'35	19.06303 AU	evening set	-10331 Jan 01 j 22:08	14° $\text{M}$ 50'13	
direct	-10338 Sep 09 j 13:18	17° $\underline{\text{A}}$ 37'25			-10331 Jan 04 j 19:54	15° $\text{M}$	
evening set	-10338 Dec 08 j 08:40	20° $\underline{\text{A}}$ 35'17					
				conjunction	-10331 Jan 18 j 13:47	15° $\text{M}$ 47'00	-0°48'34
conjunction	-10338 Dec 24 j 18:54	21° $\underline{\text{A}}$ 30'34	-0°24'48	minimum elong	-10331 Jan 18 j 13:46	15° $\text{M}$ 47'00	0°48'57
minimum elong	-10338 Dec 24 j 18:54	21° $\underline{\text{A}}$ 30'34	0°24'57	max. Earth dist.	-10331 Jan 18 j 14:23	15° $\text{M}$ 47'05	20.72554 AU
max. Earth dist.	-10338 Dec 25 j 10:04	21° $\underline{\text{A}}$ 32'42	21.04386 AU	morning rise	-10331 Feb 04 j 07:44	16° $\text{M}$ 44'08	
morning rise	-10337 Jan 10 j 08:53	22° $\underline{\text{A}}$ 26'24		retrograde	-10331 May 09 j 14:01	19° $\text{M}$ 53'16	
retrograde	-10337 Apr 15 j 03:10	25° $\underline{\text{A}}$ 33'17		opposition	-10331 Jul 24 j 14:30	17° $\text{M}$ 52'37	-0°55'40
opposition	-10337 Jul 01 j 04:50	23° $\underline{\text{A}}$ 33'31	-0°29'53	min. Earth dist.	-10331 Jul 24 j 15:16	17° $\text{M}$ 52'32	18.69388 AU
min. Earth dist.	-10337 Jun 30 j 16:59	23° $\underline{\text{A}}$ 34'44	19.02352 AU	direct	-10331 Oct 07 j 05:03	15° $\text{M}$ 53'27	
direct	-10337 Sep 13 j 16:48	21° $\underline{\text{A}}$ 36'36		evening set	-10330 Jan 06 j 11:06	18° $\text{M}$ 57'17	
evening set	-10337 Dec 12 j 17:14	24° $\underline{\text{A}}$ 35'05					
				conjunction	-10330 Jan 23 j 03:23	19° $\text{M}$ 54'20	-0°51'51
conjunction	-10337 Dec 29 j 04:27	25° $\underline{\text{A}}$ 30'35	-0°29'09	minimum elong	-10330 Jan 23 j 03:22	19° $\text{M}$ 54'19	0°52'14
minimum elong	-10337 Dec 29 j 04:27	25° $\underline{\text{A}}$ 30'35	0°29'21	max. Earth dist.	-10330 Jan 23 j 00:49	19° $\text{M}$ 53'57	20.66168 AU
max. Earth dist.	-10337 Dec 29 j 16:37	25° $\underline{\text{A}}$ 32'18	21.00173 AU	morning rise	-10330 Feb 08 j 21:54	20° $\text{M}$ 51'43	
morning rise	-10336 Jan 14 j 19:20	26° $\underline{\text{A}}$ 26'37		retrograde	-10330 May 14 j 01:40	24° $\text{M}$ 01'22	
retrograde	-10336 Apr 18 j 13:39	29° $\underline{\text{A}}$ 33'48		opposition	-10330 Jul 28 j 21:32	22° $\text{M}$ 00'35	-0°59'11
opposition	-10336 Jul 04 j 09:43	27° $\underline{\text{A}}$ 33'54	-0°34'38	min. Earth dist.	-10330 Jul 28 j 23:55	22° $\text{M}$ 00'20	18.62912 AU
min. Earth dist.	-10336 Jul 03 j 23:34	27° $\underline{\text{A}}$ 34'57	18.97867 AU	direct	-10330 Oct 11 j 12:55	20° $\text{M}$ 01'03	
direct	-10336 Sep 16 j 22:38	25° $\underline{\text{A}}$ 36'39		evening set	-10329 Jan 11 j 00:44	23° $\text{M}$ 06'01	
evening set	-10336 Dec 16 j 02:28	28° $\underline{\text{A}}$ 35'51					
				conjunction	-10329 Jan 27 j 17:48	24° $\text{M}$ 03'22	-0°54'53
conjunction	-10335 Jan 01 j 14:41	29° $\underline{\text{A}}$ 31'35	-0°33'22	minimum elong	-10329 Jan 27 j 17:47	24° $\text{M}$ 03'22	0°55'19
minimum elong	-10335 Jan 01 j 14:41	29° $\underline{\text{A}}$ 31'35	0°33'37	max. Earth dist.	-10329 Jan 27 j 13:42	24° $\text{M}$ 02'46	20.59592 AU
max. Earth dist.	-10335 Jan 02 j 00:47	29° $\underline{\text{A}}$ 33'01	20.95426 AU	morning rise	-10329 Feb 13 j 12:34	25° $\text{M}$ 01'00	
	-10335 Jan 09 j 23:16	0° $\text{M}$		retrograde	-10329 May 18 j 13:34	28° $\text{M}$ 11'12	
morning rise	-10335 Jan 18 j 06:15	0° $\text{M}$ 27'50		opposition	-10329 Aug 02 j 05:12	26° $\text{M}$ 10'20	-1°02'25
retrograde	-10335 Apr 22 j 21:31	3° $\text{M}$ 35'19		min. Earth dist.	-10329 Aug 02 j 09:51	26° $\text{M}$ 09'51	18.56249 AU
opposition	-10335 Jul 08 j 14:56	1° $\text{M}$ 35'17	-0°39'14	direct	-10329 Oct 15 j 21:33	24° $\text{M}$ 10'26	
min. Earth dist.	-10335 Jul 08 j 07:32	1° $\text{M}$ 36'03	18.92877 AU	evening set	-10328 Jan 15 j 15:37	27° $\text{M}$ 16'37	
	-10335 Aug 22 j 10:21	30° $\text{R}$ $\underline{\text{A}}$					
direct	-10335 Sep 21 j 02:37	29° $\underline{\text{A}}$ 37'41		conjunction	-10328 Feb 01 j 09:12	28° $\text{M}$ 14'15	-0°57'39
	-10335 Oct 20 j 14:39	0° $\text{M}$		minimum elong	-10328 Feb 01 j 09:11	28° $\text{M}$ 14'15	0°58'07
evening set	-10335 Dec 20 j 12:16	2° $\text{M}$ 37'39		max. Earth dist.	-10328 Feb 01 j 01:42	28° $\text{M}$ 13'10	20.52854 AU
				morning rise	-10328 Feb 18 j 04:26	29° $\text{M}$ 12'09	
conjunction	-10334 Jan 06 j 01:21	3° $\text{M}$ 33'37	-0°37'27		-10328 Mar 03 j 17:56	0° $\text{A}$	
minimum elong	-10334 Jan 06 j 01:20	3° $\text{M}$ 33'37	0°37'43	retrograde	-10328 May 22 j 02:16	2° $\text{A}$ 22'57	
max. Earth dist.	-10334 Jan 06 j 08:28	3° $\text{M}$ 34'38	20.90227 AU	opposition	-10328 Aug 05 j 13:20	0° $\text{A}$ 22'00	-1°05'21
morning rise	-10334 Jan 22 j 17:41	4° $\text{M}$ 30'05		min. Earth dist.	-10328 Aug 05 j 19:55	0° $\text{A}$ 21'19	18.49431 AU
retrograde	-10334 Apr 27 j 08:13	7° $\text{M}$ 37'56			-10328 Aug 14 j 06:41	30° $\text{R}$ $\text{M}$	
opposition	-10334 Jul 12 j 20:16	5° $\text{M}$ 37'43	-0°43'39	direct	-10328 Oct 19 j 06:51	28° $\text{M}$ 21'43	
min. Earth dist.	-10334 Jul 12 j 14:31	5° $\text{M}$ 38'19	18.87476 AU		-10328 Dec 22 j 00:04	0° $\text{A}$	
direct	-10334 Sep 25 j 09:35	3° $\text{M}$ 39'45		evening set	-10327 Jan 19 j 07:29	1° $\text{A}$ 29'13	
evening set	-10334 Dec 24 j 22:46	6° $\text{M}$ 40'33					
				conjunction	-10327 Feb 05 j 01:43	2° $\text{A}$ 27'09	-1°00'08
conjunction	-10333 Jan 10 j 12:46	7° $\text{M}$ 36'48	-0°41'21	minimum elong	-10327 Feb 05 j 01:43	2° $\text{A}$ 27'09	1°00'37
minimum elong	-10333 Jan 10 j 12:45	7° $\text{M}$ 36'47	0°41'40	max. Earth dist.	-10327 Feb 04 j 16:37	2° $\text{A}$ 25'50	20.45939 AU
max. Earth dist.	-10333 Jan 10 j 18:06	7° $\text{M}$ 37'33	20.84633 AU	morning rise	-10327 Feb 21 j 21:00	3° $\text{A}$ 25'18	
morning rise	-10333 Jan 27 j 05:38	8° $\text{M}$ 33'28		retrograde	-10327 May 26 j 15:49	6° $\text{A}$ 36'43	
retrograde	-10333 May 01 j 16:47	11° $\text{M}$ 41'43		opposition	-10327 Aug 09 j 22:21	4° $\text{A}$ 35'43	-1°07'58
opposition	-10333 Jul 17 j 01:57	9° $\text{M}$ 41'20	-0°47'52	min. Earth dist.	-10327 Aug 10 j 07:14	4° $\text{A}$ 34'46	18.42429 AU
min. Earth dist.	-10333 Jul 16 j 22:44	9° $\text{M}$ 41'40	18.81718 AU	direct	-10327 Oct 23 j 16:55	2° $\text{A}$ 35'04	
direct	-10333 Sep 29 j 14:43	7° $\text{M}$ 42'58		evening set	-10326 Jan 24 j 00:20	5° $\text{A}$ 43'53	

## Planetary Phenomena of Uranus from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 7

Attention, astronomical year style is used: The year -10326 in astronomical counting style is the year 10327 BCE in historical counting style.

conjunction	-10326 Feb 09 j 18:52	6° $\mathring{\text{A}}$ 42'08	-1°02'18	retrograde	-10320 Jun 26 j 10:37	7° $\mathring{\text{B}}$ 12'01	
minimum elong	-10326 Feb 09 j 18:52	6° $\mathring{\text{A}}$ 42'08	1°02'50	opposition	-10320 Sep 08 j 11:24	5° $\mathring{\text{B}}$ 10'15	-1°15'14
max. Earth dist.	-10326 Feb 09 j 06:08	6° $\mathring{\text{A}}$ 40'16	20.38850 AU	min. Earth dist.	-10320 Sep 09 j 10:54	5° $\mathring{\text{B}}$ 07'43	17.89408 AU
morning rise	-10326 Feb 26 j 14:26	7° $\mathring{\text{A}}$ 40'32		direct	-10320 Nov 22 j 18:32	3° $\mathring{\text{B}}$ 06'25	
retrograde	-10326 May 31 j 06:12	10° $\mathring{\text{A}}$ 52'37		evening set	-10319 Feb 25 j 01:43	6° $\mathring{\text{B}}$ 25'17	
opposition	-10326 Aug 14 j 08:05	8° $\mathring{\text{A}}$ 51'32	-1°10'13				
min. Earth dist.	-10326 Aug 14 j 19:07	8° $\mathring{\text{A}}$ 50'22	18.35255 AU	conjunction	-10319 Mar 13 j 21:35	7° $\mathring{\text{B}}$ 25'36	-1°07'20
direct	-10326 Oct 28 j 04:06	6° $\mathring{\text{A}}$ 50'29		minimum elong	-10319 Mar 13 j 21:35	7° $\mathring{\text{B}}$ 25'36	1°07'55
evening set	-10325 Jan 28 j 18:12	10° $\mathring{\text{A}}$ 00'42		max. Earth dist.	-10319 Mar 12 j 17:08	7° $\mathring{\text{B}}$ 21'19	19.85585 AU
				morning rise	-10319 Mar 30 j 15:41	8° $\mathring{\text{B}}$ 25'44	
conjunction	-10325 Feb 14 j 13:17	10° $\mathring{\text{A}}$ 59'15	-1°04'09	retrograde	-10319 Jul 01 j 07:10	11° $\mathring{\text{B}}$ 42'19	
minimum elong	-10325 Feb 14 j 13:17	10° $\mathring{\text{A}}$ 59'15	1°04'40	opposition	-10319 Sep 13 j 02:57	9° $\mathring{\text{B}}$ 40'26	-1°14'31
max. Earth dist.	-10325 Feb 13 j 22:55	10° $\mathring{\text{A}}$ 57'09	20.31567 AU	min. Earth dist.	-10319 Sep 14 j 03:15	9° $\mathring{\text{B}}$ 37'48	17.81913 AU
morning rise	-10325 Mar 03 j 08:44	11° $\mathring{\text{A}}$ 57'55		direct	-10319 Nov 27 j 12:52	7° $\mathring{\text{B}}$ 36'09	
retrograde	-10325 Jun 04 j 21:15	15° $\mathring{\text{A}}$ 10'38		evening set	-10318 Mar 02 j 01:50	10° $\mathring{\text{B}}$ 56'27	
opposition	-10325 Aug 18 j 18:32	13° $\mathring{\text{A}}$ 09'30	-1°12'06				
min. Earth dist.	-10325 Aug 19 j 07:50	13° $\mathring{\text{A}}$ 08'05	18.27878 AU	conjunction	-10318 Mar 18 j 21:22	11° $\mathring{\text{B}}$ 57'02	-1°06'27
direct	-10325 Nov 01 j 15:54	11° $\mathring{\text{A}}$ 08'02		minimum elong	-10318 Mar 18 j 21:22	11° $\mathring{\text{B}}$ 57'02	1°07'02
evening set	-10324 Feb 02 j 13:16	14° $\mathring{\text{A}}$ 19'40		max. Earth dist.	-10318 Mar 17 j 14:28	11° $\mathring{\text{B}}$ 52'21	19.78207 AU
				morning rise	-10318 Apr 04 j 15:03	12° $\mathring{\text{B}}$ 57'24	
conjunction	-10324 Feb 19 j 08:33	15° $\mathring{\text{A}}$ 18'31	-1°05'38	retrograde	-10318 Jul 06 j 01:50	16° $\mathring{\text{B}}$ 14'38	
minimum elong	-10324 Feb 19 j 08:32	15° $\mathring{\text{A}}$ 18'31	1°06'11	opposition	-10318 Sep 17 j 19:27	14° $\mathring{\text{B}}$ 12'38	-1°13'21
max. Earth dist.	-10324 Feb 18 j 14:14	15° $\mathring{\text{A}}$ 15'49	20.24097 AU	min. Earth dist.	-10318 Sep 18 j 21:40	14° $\mathring{\text{B}}$ 09'47	17.74689 AU
morning rise	-10324 Mar 07 j 04:09	16° $\mathring{\text{A}}$ 17'26		direct	-10318 Dec 02 j 06:28	12° $\mathring{\text{B}}$ 07'54	
retrograde	-10324 Jun 08 j 13:07	19° $\mathring{\text{A}}$ 30'49		evening set	-10317 Mar 07 j 02:45	15° $\mathring{\text{B}}$ 29'39	
opposition	-10324 Aug 22 j 05:56	17° $\mathring{\text{A}}$ 29'34	-1°13'35				
min. Earth dist.	-10324 Aug 22 j 21:35	17° $\mathring{\text{A}}$ 27'54	18.20326 AU	conjunction	-10317 Mar 23 j 22:08	16° $\mathring{\text{B}}$ 30'29	-1°05'10
direct	-10324 Nov 05 j 05:09	15° $\mathring{\text{A}}$ 27'38		minimum elong	-10317 Mar 23 j 22:08	16° $\mathring{\text{B}}$ 30'29	1°05'44
evening set	-10323 Feb 06 j 09:09	18° $\mathring{\text{A}}$ 40'43		max. Earth dist.	-10317 Mar 22 j 14:49	16° $\mathring{\text{B}}$ 25'43	19.71134 AU
max. Earth dist.	-10323 Feb 22 j 09:00	19° $\mathring{\text{A}}$ 36'57	20.16452 AU	morning rise	-10317 Apr 09 j 15:09	17° $\mathring{\text{B}}$ 31'03	
				retrograde	-10317 Jul 10 j 23:51	20° $\mathring{\text{B}}$ 48'55	
conjunction	-10323 Feb 23 j 04:50	19° $\mathring{\text{A}}$ 39'53	-1°06'46	opposition	-10317 Sep 22 j 12:41	18° $\mathring{\text{B}}$ 46'50	-1°11'42
minimum elong	-10323 Feb 23 j 04:50	19° $\mathring{\text{A}}$ 39'53	1°07'19	min. Earth dist.	-10317 Sep 23 j 15:12	18° $\mathring{\text{B}}$ 43'57	17.67784 AU
morning rise	-10323 Mar 12 j 00:08	20° $\mathring{\text{A}}$ 39'03		direct	-10317 Dec 07 j 02:35	16° $\mathring{\text{B}}$ 41'45	
retrograde	-10323 Jun 13 j 05:40	23° $\mathring{\text{A}}$ 53'04		evening set	-10316 Mar 11 j 04:38	20° $\mathring{\text{B}}$ 04'53	
opposition	-10323 Aug 26 j 18:04	21° $\mathring{\text{A}}$ 51'43	-1°14'39				
min. Earth dist.	-10323 Aug 27 j 11:39	21° $\mathring{\text{A}}$ 49'50	18.12615 AU	conjunction	-10316 Mar 27 j 23:34	21° $\mathring{\text{B}}$ 05'59	-1°03'26
direct	-10323 Nov 09 j 19:14	19° $\mathring{\text{A}}$ 49'20		minimum elong	-10316 Mar 27 j 23:34	21° $\mathring{\text{B}}$ 05'59	1°04'01
evening set	-10322 Feb 11 j 06:05	23° $\mathring{\text{A}}$ 03'50		max. Earth dist.	-10316 Mar 26 j 14:23	21° $\mathring{\text{B}}$ 00'54	19.64408 AU
max. Earth dist.	-10322 Feb 27 j 02:16	23° $\mathring{\text{A}}$ 59'48	20.08700 AU	morning rise	-10316 Apr 13 j 15:55	22° $\mathring{\text{B}}$ 06'44	
				retrograde	-10316 Jul 14 j 19:45	25° $\mathring{\text{B}}$ 25'14	
conjunction	-10322 Feb 28 j 01:45	24° $\mathring{\text{A}}$ 03'17	-1°07'30	opposition	-10316 Sep 26 j 07:08	23° $\mathring{\text{B}}$ 23'06	-1°09'35
minimum elong	-10322 Feb 28 j 01:45	24° $\mathring{\text{A}}$ 03'17	1°08'05	min. Earth dist.	-10316 Sep 27 j 11:25	23° $\mathring{\text{B}}$ 20'01	17.61263 AU
morning rise	-10322 Mar 16 j 21:02	25° $\mathring{\text{A}}$ 02'43		direct	-10316 Dec 10 j 22:14	21° $\mathring{\text{B}}$ 17'41	
retrograde	-10322 Jun 17 j 22:29	28° $\mathring{\text{A}}$ 17'23		evening set	-10315 Mar 16 j 07:02	24° $\mathring{\text{B}}$ 42'13	
opposition	-10322 Aug 31 j 07:03	26° $\mathring{\text{A}}$ 15'53	-1°15'17	max. Earth dist.	-10315 Mar 31 j 16:01	25° $\mathring{\text{B}}$ 38'21	19.58090 AU
min. Earth dist.	-10322 Sep 01 j 02:54	26° $\mathring{\text{A}}$ 13'45	18.04847 AU				
direct	-10322 Nov 14 j 10:04	24° $\mathring{\text{A}}$ 13'01		conjunction	-10315 Apr 02 j 01:32	25° $\mathring{\text{B}}$ 43'31	-1°01'18
evening set	-10321 Feb 16 j 03:37	27° $\mathring{\text{A}}$ 28'58		minimum elong	-10315 Apr 02 j 01:33	25° $\mathring{\text{B}}$ 43'31	1°01'51
				morning rise	-10315 Apr 18 j 17:08	26° $\mathring{\text{B}}$ 44'25	
conjunction	-10321 Mar 04 j 23:35	28° $\mathring{\text{A}}$ 28'44	-1°07'51				
minimum elong	-10321 Mar 04 j 23:35	28° $\mathring{\text{A}}$ 28'44	1°08'27	retrograde	-10315 Jul 08 j 11:05	0° $\mathring{\text{B}}$	
max. Earth dist.	-10321 Mar 03 j 23:01	28° $\mathring{\text{A}}$ 25'04	20.00917 AU				
morning rise	-10321 Mar 21 j 18:29	29° $\mathring{\text{A}}$ 28'24					
	-10321 Mar 30 j 23:27	0° $\mathring{\text{B}}$		opposition	-10315 Oct 01 j 02:26	28° $\mathring{\text{B}}$ 01'25	-1°07'00
retrograde	-10321 Jun 22 j 16:54	2° $\mathring{\text{B}}$ 43'42		min. Earth dist.	-10315 Oct 02 j 06:32	27° $\mathring{\text{B}}$ 58'21	17.55148 AU
opposition	-10321 Sep 04 j 20:49	0° $\mathring{\text{B}}$ 42'05	-1°15'29	direct	-10315 Dec 15 j 20:40	25° $\mathring{\text{B}}$ 55'44	
min. Earth dist.	-10321 Sep 05 j 18:07	0° $\mathring{\text{B}}$ 39'47	17.97075 AU	evening set	-10314 Mar 21 j 10:14	29° $\mathring{\text{B}}$ 21'34	
	-10321 Sep 21 j 10:30	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$			-10314 Mar 31 j 22:30	0° $\mathring{\text{B}}$	
direct	-10321 Nov 19 j 02:22	28° $\mathring{\text{A}}$ 38'43		max. Earth dist.	-10314 Apr 05 j 17:37	0° $\mathring{\text{B}}$ 17'45	19.52182 AU
	-10320 Jan 15 j 05:30	0° $\mathring{\text{B}}$					
evening set	-10320 Feb 21 j 02:21	1° $\mathring{\text{B}}$ 56'08		conjunction	-10314 Apr 07 j 04:11	0° $\mathring{\text{B}}$ 23'05	-0°58'45
				minimum elong	-10314 Apr 07 j 04:11	0° $\mathring{\text{B}}$ 23'05	0°59'18
conjunction	-10320 Mar 08 j 22:09	2° $\mathring{\text{B}}$ 56'10	-1°07'48	morning rise	-10314 Apr 23 j 18:54	1° $\mathring{\text{B}}$ 24'09	
minimum elong	-10320 Mar 08 j 22:09	2° $\mathring{\text{B}}$ 56'10	1°08'22	retrograde	-10314 Jul 24 j 15:45	4° $\mathring{\text{B}}$ 43'53	
max. Earth dist.	-10320 Mar 07 j 18:22	2° $\mathring{\text{B}}$ 52'00	19.93180 AU	opposition	-10314 Oct 05 j 22:46	2° $\mathring{\text{B}}$ 41'46	-1°03'57
morning rise	-10320 Mar 25 j 16:49	3° $\mathring{\text{B}}$ 56'05		min. Earth dist.	-10314 Oct 07 j 04:35	2° $\mathring{\text{B}}$ 38'30	17.49461 AU
				direct	-10314 Dec 20 j 18:20	0° $\mathring{\text{B}}$ 35'50	

Attention, astronomical year style is used: The year -10313 in astronomical counting style is the year 10314 BCE in historical counting style.

evening set	-10313 Mar 26 j 14:02	4°02'57		max. Earth dist.	-10307 May 09 j 21:29	3°39'28	19.22552 AU
max. Earth dist.	-10313 Apr 10 j 20:12	4°59'10	19.46707 AU				
				conjunction	-10307 May 11 j 09:01	3°45'06	-0°30'27
conjunction	-10313 Apr 12 j 07:21	5°04'37	-0°55'47	minimum elong	-10307 May 11 j 09:02	3°45'06	0°30'45
minimum elong	-10313 Apr 12 j 07:21	5°04'37	0°56'18	morning rise	-10307 May 27 j 16:21	4°46'37	
morning rise	-10313 Apr 28 j 21:17	6°05'50		retrograde	-10307 Aug 26 j 19:59	8°09'19	
retrograde	-10313 Jul 29 j 16:03	9°26'08		opposition	-10307 Nov 07 j 22:26	6°07'04	-0°31'12
opposition	-10313 Oct 10 j 20:01	7°24'02	-1°00'26	min. Earth dist.	-10307 Nov 09 j 04:19	6°03'49	17.21391 AU
min. Earth dist.	-10313 Oct 12 j 01:30	7°20'49	17.44181 AU	direct	-10306 Jan 23 j 13:07	3°59'54	
direct	-10313 Dec 25 j 19:25	5°17'54		evening set	-10306 Apr 30 j 02:48	7°32'48	
evening set	-10312 Mar 30 j 18:31	8°46'11		max. Earth dist.	-10306 May 15 j 04:07	8°29'38	19.20264 AU
max. Earth dist.	-10312 Apr 14 j 23:38	9°42'29	19.41617 AU				
				conjunction	-10306 May 16 j 13:26	8°34'55	-0°25'15
conjunction	-10312 Apr 16 j 11:07	9°48'01	-0°52'25	minimum elong	-10306 May 16 j 13:26	8°34'55	0°25'32
minimum elong	-10312 Apr 16 j 11:08	9°48'01	0°52'53	morning rise	-10306 Jun 01 j 19:24	9°36'23	
morning rise	-10312 May 02 j 23:56	10°49'19		retrograde	-10306 Aug 31 j 20:57	12°59'16	
retrograde	-10312 Aug 02 j 14:18	14°10'10		opposition	-10306 Nov 13 j 01:07	10°57'00	-0°25'18
opposition	-10312 Oct 14 j 18:26	12°08'05	-0°56'29	min. Earth dist.	-10306 Nov 14 j 06:31	10°53'48	17.19403 AU
min. Earth dist.	-10312 Oct 16 j 01:28	12°04'41	17.39296 AU	direct	-10305 Jan 28 j 17:04	8°49'46	
direct	-10312 Dec 29 j 19:40	10°01'45		evening set	-10305 May 05 j 08:11	12°22'58	
evening set	-10311 Apr 04 j 23:31	13°31'07		max. Earth dist.	-10305 May 20 j 08:22	13°19'46	19.18606 AU
max. Earth dist.	-10311 Apr 20 j 02:53	14°27'23	19.36937 AU				
				conjunction	-10305 May 21 j 17:26	13°25'02	-0°19'53
conjunction	-10311 Apr 21 j 15:12	14°33'03	-0°48'40	minimum elong	-10305 May 21 j 17:26	13°25'02	0°20'06
minimum elong	-10311 Apr 21 j 15:12	14°33'03	0°49'08	morning rise	-10305 Jun 06 j 22:17	14°26'26	
	-10311 Apr 28 j 19:44	15°		retrograde	-10305 Sep 05 j 23:00	17°49'30	
morning rise	-10311 May 08 j 03:06	15°34'28		opposition	-10305 Nov 18 j 04:23	15°47'11	-0°19'12
retrograde	-10311 Aug 07 j 15:31	18°55'47		min. Earth dist.	-10305 Nov 19 j 08:27	15°44'08	17.18082 AU
opposition	-10311 Oct 19 j 17:39	16°53'42	-0°52'08	direct	-10304 Feb 02 j 22:54	13°39'55	
min. Earth dist.	-10311 Oct 21 j 00:03	16°50'23	17.34816 AU	evening set	-10304 May 09 j 13:05	17°13'19	
	-10311 Dec 12 j 17:58	15°					
direct	-10310 Jan 03 j 22:44	14°47'10		conjunction	-10304 May 25 j 21:10	18°15'17	-0°14'22
	-10310 Jan 25 j 21:34	15°		minimum elong	-10304 May 25 j 21:11	18°15'17	0°14'33
evening set	-10310 Apr 10 j 04:36	18°17'29		behind sun begin	-10304 May 25 j 18:17	18°14'50	
max. Earth dist.	-10310 Apr 25 j 07:44	19°13'55	19.32653 AU	behind sun end	-10304 May 26 j 00:04	18°15'44	
				max. Earth dist.	-10304 May 24 j 14:55	18°10'28	19.17632 AU
conjunction	-10310 Apr 26 j 19:31	19°19'31	-0°44'34	morning rise	-10304 Jun 11 j 00:38	19°16'36	
minimum elong	-10310 Apr 26 j 19:31	19°19'31	0°44'59	retrograde	-10304 Sep 10 j 00:13	22°39'47	
morning rise	-10310 May 13 j 06:12	20°20'59		opposition	-10304 Nov 22 j 08:12	20°37'29	-0°12'59
retrograde	-10310 Aug 12 j 15:08	23°42'45		min. Earth dist.	-10304 Nov 23 j 10:39	20°34'36	17.17452 AU
opposition	-10310 Oct 24 j 17:51	21°40'39	-0°47'23	direct	-10303 Feb 07 j 04:20	18°30'16	
min. Earth dist.	-10310 Oct 26 j 01:20	21°37'12	17.30741 AU	evening set	-10303 May 14 j 17:50	22°03'43	
direct	-10309 Jan 09 j 00:36	19°33'55		max. Earth dist.	-10303 May 29 j 19:17	23°00'55	19.17378 AU
evening set	-10309 Apr 15 j 10:13	23°05'05					
max. Earth dist.	-10309 Apr 30 j 11:24	24°01'25	19.28804 AU	conjunction	-10303 May 31 j 00:29	23°05'34	-0°08'46
				minimum elong	-10303 May 31 j 00:29	23°05'34	0°08'54
conjunction	-10309 May 02 j 00:01	24°07'11	-0°40'08	behind sun begin	-10303 May 30 j 18:45	23°04'40	
minimum elong	-10309 May 02 j 00:01	24°07'11	0°40'32	behind sun end	-10303 May 31 j 06:13	23°06'28	
morning rise	-10309 May 18 j 09:44	25°08'42		morning rise	-10303 Jun 16 j 02:45	24°06'46	
retrograde	-10309 Aug 17 j 17:09	28°30'49		retrograde	-10303 Sep 15 j 01:44	27°30'03	
opposition	-10309 Oct 29 j 18:33	26°28'40	-0°42'17	opposition	-10303 Nov 27 j 12:18	25°27'45	-0°06'39
min. Earth dist.	-10309 Oct 31 j 01:13	26°25'19	17.27114 AU	min. Earth dist.	-10303 Nov 28 j 13:15	25°25'03	17.17578 AU
direct	-10308 Jan 14 j 05:01	24°21'46		direct	-10302 Feb 12 j 10:09	23°20'39	
evening set	-10308 Apr 19 j 15:49	27°53'39		evening set	-10302 May 19 j 21:56	26°54'03	
max. Earth dist.	-10308 May 04 j 17:30	28°50'14	19.25415 AU	max. Earth dist.	-10302 Jun 04 j 01:05	27°51'33	19.17881 AU
conjunction	-10308 May 06 j 04:44	28°55'47	-0°35'25	conjunction	-10302 Jun 05 j 03:24	27°55'45	-0°03'06
minimum elong	-10308 May 06 j 04:44	28°55'47	0°35'47	minimum elong	-10302 Jun 05 j 03:23	27°55'45	0°03'11
morning rise	-10308 May 22 j 13:06	29°57'19		behind sun begin	-10302 Jun 04 j 20:45	27°54'43	
	-10308 May 23 j 06:34	0°		behind sun end	-10302 Jun 05 j 10:00	27°56'47	
retrograde	-10308 Aug 21 j 17:41	3°19'44		morning rise	-10302 Jun 21 j 04:23	28°56'49	
opposition	-10308 Nov 02 j 20:15	1°17'34	-0°36'53		-10302 Jul 08 j 17:54	0°	
min. Earth dist.	-10308 Nov 04 j 03:17	1°14'10	17.23973 AU	retrograde	-10302 Sep 20 j 03:15	2°07'20'07	
	-10308 Dec 04 j 16:26	30°		opposition	-10302 Dec 02 j 16:42	0°17'55	-0°00'17
direct	-10307 Jan 18 j 07:53	29°10'31		min. Earth dist.	-10302 Dec 03 j 15:16	0°15'28	17.18429 AU
	-10307 Mar 03 j 01:20	0°			-10302 Dec 09 j 14:44	30°	
evening set	-10307 Apr 24 j 21:25	2°42'57		asc. node	-10302 Dec 18 j 14:01	29°37'22	



Attention, astronomical year style is used: The year -10301 in astronomical counting style is the year 10302 BCE in historical counting style.

direct	-10301 Feb 17 j 16:46	28° $\text{X}$ 11'01		opposition	-10296 Dec 31 j 21:50	29° $\text{Y}$ 07'42	0°36'13
	-10301 Apr 24 j 20:31	0° $\text{Y}$		min. Earth dist.	-10295 Jan 01 j 07:17	29° $\text{Y}$ 06'42	17.36670 AU
evening set	-10301 May 25 j 01:48	1° $\text{Y}$ 44'13		direct	-10295 Mar 19 j 02:29	27° $\text{Y}$ 02'37	
max. Earth dist.	-10301 Jun 09 j 05:19	2° $\text{Y}$ 41'51	19.19100 AU		-10295 Jun 13 j 17:48	0° $\text{X}$	
				evening set	-10295 Jun 22 j 11:26	0° $\text{X}$ 31'57	
conjunction	-10301 Jun 10 j 05:51	2° $\text{Y}$ 45'45	0°02'45				
minimum elong	-10301 Jun 10 j 05:50	2° $\text{Y}$ 45'45	0°02'42	conjunction	-10295 Jul 08 j 07:46	1° $\text{X}$ 31'59	0°34'57
behind sun begin	-10301 Jun 09 j 23:12	2° $\text{Y}$ 44'43		minimum elong	-10295 Jul 08 j 07:46	1° $\text{X}$ 31'59	0°35'12
behind sun end	-10301 Jun 10 j 12:28	2° $\text{Y}$ 46'47		max. Earth dist.	-10295 Jul 07 j 22:38	1° $\text{X}$ 30'32	19.38980 AU
morning rise	-10301 Jun 26 j 05:35	3° $\text{Y}$ 46'40		morning rise	-10295 Jul 24 j 00:50	2° $\text{X}$ 31'32	
retrograde	-10301 Sep 25 j 03:58	7° $\text{Y}$ 09'58		retrograde	-10295 Oct 23 j 08:24	5° $\text{X}$ 53'32	
opposition	-10301 Dec 07 j 21:22	5° $\text{Y}$ 07'52	0°06'05	opposition	-10294 Jan 06 j 02:09	3° $\text{X}$ 52'04	0°41'34
min. Earth dist.	-10301 Dec 08 j 18:37	5° $\text{Y}$ 05'34	17.20003 AU	min. Earth dist.	-10294 Jan 06 j 10:14	3° $\text{X}$ 51'13	17.41407 AU
direct	-10300 Feb 22 j 22:30	3° $\text{Y}$ 01'12		direct	-10294 Mar 24 j 05:31	1° $\text{X}$ 47'19	
evening set	-10300 May 29 j 05:06	6° $\text{Y}$ 34'06		evening set	-10294 Jun 27 j 10:12	5° $\text{X}$ 15'34	
max. Earth dist.	-10300 Jun 13 j 09:59	7° $\text{Y}$ 31'57	19.21025 AU				
				conjunction	-10294 Jul 13 j 05:16	6° $\text{X}$ 15'16	0°39'36
conjunction	-10300 Jun 14 j 07:49	7° $\text{Y}$ 35'26	0°08'25	minimum elong	-10294 Jul 13 j 05:16	6° $\text{X}$ 15'16	0°39'54
minimum elong	-10300 Jun 14 j 07:48	7° $\text{Y}$ 35'26	0°08'26	max. Earth dist.	-10294 Jul 12 j 21:46	6° $\text{X}$ 14'05	19.43922 AU
behind sun begin	-10300 Jun 14 j 01:59	7° $\text{Y}$ 34'32		morning rise	-10294 Jul 28 j 21:39	7° $\text{X}$ 14'34	
behind sun end	-10300 Jun 14 j 13:38	7° $\text{Y}$ 36'21		retrograde	-10294 Oct 28 j 08:25	10° $\text{X}$ 36'07	
morning rise	-10300 Jun 30 j 06:22	8° $\text{Y}$ 36'10		opposition	-10293 Jan 11 j 05:55	8° $\text{X}$ 34'41	0°46'36
retrograde	-10300 Sep 29 j 05:53	11° $\text{Y}$ 59'25		min. Earth dist.	-10293 Jan 11 j 10:37	8° $\text{X}$ 34'11	17.46542 AU
opposition	-10300 Dec 12 j 02:17	9° $\text{Y}$ 57'26	0°12'25	direct	-10293 Mar 29 j 10:53	6° $\text{X}$ 30'15	
min. Earth dist.	-10300 Dec 12 j 20:38	9° $\text{Y}$ 55'28	17.22238 AU	evening set	-10293 Jul 02 j 07:44	9° $\text{X}$ 57'20	
direct	-10299 Feb 27 j 05:35	7° $\text{Y}$ 51'05					
evening set	-10299 Jun 03 j 07:43	11° $\text{Y}$ 23'31		conjunction	-10293 Jul 18 j 01:52	10° $\text{X}$ 56'43	0°43'58
				minimum elong	-10293 Jul 18 j 01:52	10° $\text{X}$ 56'43	0°44'18
conjunction	-10299 Jun 19 j 09:06	12° $\text{Y}$ 24'38	0°14'01	max. Earth dist.	-10293 Jul 17 j 22:08	10° $\text{X}$ 56'07	19.49247 AU
minimum elong	-10299 Jun 19 j 09:06	12° $\text{Y}$ 24'38	0°14'05	morning rise	-10293 Aug 02 j 17:16	11° $\text{X}$ 55'43	
behind sun begin	-10299 Jun 19 j 05:44	12° $\text{Y}$ 24'06			-10293 Oct 08 j 11:46	15° $\text{X}$	
behind sun end	-10299 Jun 19 j 12:27	12° $\text{Y}$ 25'09		retrograde	-10293 Nov 02 j 05:31	15° $\text{X}$ 16'47	
max. Earth dist.	-10299 Jun 18 j 13:44	12° $\text{Y}$ 21'32	19.23573 AU		-10293 Nov 27 j 11:42	15° $\text{R}$ $\text{X}$	
morning rise	-10299 Jul 05 j 06:26	13° $\text{Y}$ 25'10		opposition	-10292 Jan 16 j 09:19	13° $\text{X}$ 15'22	0°51'17
retrograde	-10299 Oct 04 j 06:09	16° $\text{Y}$ 48'18		min. Earth dist.	-10292 Jan 16 j 12:12	13° $\text{X}$ 15'04	17.52060 AU
opposition	-10299 Dec 17 j 07:22	14° $\text{Y}$ 46'27	0°18'38	direct	-10292 Apr 02 j 13:58	11° $\text{X}$ 11'17	
min. Earth dist.	-10299 Dec 18 j 00:32	14° $\text{Y}$ 44'37	17.25086 AU	evening set	-10292 Jul 06 j 04:24	14° $\text{X}$ 37'06	
direct	-10298 Mar 04 j 10:15	12° $\text{Y}$ 40'24			-10292 Jul 12 j 07:56	15° $\text{X}$	
evening set	-10298 Jun 08 j 09:51	16° $\text{Y}$ 12'15					
				conjunction	-10292 Jul 21 j 21:23	15° $\text{X}$ 36'08	0°48'00
conjunction	-10298 Jun 24 j 09:51	17° $\text{Y}$ 13'07	0°19'31	minimum elong	-10292 Jul 21 j 21:22	15° $\text{X}$ 36'08	0°48'23
minimum elong	-10298 Jun 24 j 09:51	17° $\text{Y}$ 13'07	0°19'38	max. Earth dist.	-10292 Jul 21 j 19:25	15° $\text{X}$ 35'50	19.54971 AU
max. Earth dist.	-10298 Jun 23 j 16:39	17° $\text{Y}$ 10'23	19.26706 AU	morning rise	-10292 Aug 06 j 12:15	16° $\text{X}$ 34'52	
morning rise	-10298 Jul 10 j 06:08	18° $\text{Y}$ 13'26		retrograde	-10292 Nov 06 j 03:28	19° $\text{X}$ 55'23	
retrograde	-10298 Oct 09 j 08:19	21° $\text{Y}$ 36'23		opposition	-10291 Jan 20 j 12:02	17° $\text{X}$ 54'00	0°55'35
opposition	-10298 Dec 22 j 12:08	19° $\text{Y}$ 34'39	0°24'43	min. Earth dist.	-10291 Jan 20 j 11:30	17° $\text{X}$ 54'03	17.57990 AU
min. Earth dist.	-10298 Dec 23 j 02:12	19° $\text{Y}$ 33'09	17.28472 AU	direct	-10291 Apr 07 j 17:28	15° $\text{X}$ 50'15	
direct	-10297 Mar 09 j 16:54	17° $\text{Y}$ 28'55		evening set	-10291 Jul 10 j 23:43	19° $\text{X}$ 14'44	
evening set	-10297 Jun 13 j 11:15	21° $\text{Y}$ 00'04					
				conjunction	-10291 Jul 26 j 15:57	20° $\text{X}$ 13'27	0°51'42
conjunction	-10297 Jun 29 j 10:02	22° $\text{Y}$ 00'40	0°24'52	minimum elong	-10291 Jul 26 j 15:57	20° $\text{X}$ 13'27	0°52'06
minimum elong	-10297 Jun 29 j 10:01	22° $\text{Y}$ 00'40	0°25'02	max. Earth dist.	-10291 Jul 26 j 18:02	20° $\text{X}$ 13'46	19.61094 AU
max. Earth dist.	-10297 Jun 28 j 19:41	21° $\text{Y}$ 58'23	19.30341 AU	morning rise	-10291 Aug 11 j 06:04	21° $\text{X}$ 11'52	
morning rise	-10297 Jul 15 j 05:05	23° $\text{Y}$ 00'45		retrograde	-10291 Nov 10 j 23:19	24° $\text{X}$ 31'50	
retrograde	-10297 Oct 14 j 07:57	26° $\text{Y}$ 23'27		opposition	-10290 Jan 25 j 14:05	22° $\text{X}$ 30'29	0°59'29
opposition	-10297 Dec 27 j 17:10	24° $\text{Y}$ 21'50	0°30'35	min. Earth dist.	-10290 Jan 25 j 11:13	22° $\text{X}$ 30'47	17.64310 AU
min. Earth dist.	-10297 Dec 28 j 06:02	24° $\text{Y}$ 20'28	17.32348 AU	direct	-10290 Apr 12 j 19:23	20° $\text{X}$ 27'06	
direct	-10296 Mar 13 j 20:29	22° $\text{Y}$ 16'25		evening set	-10290 Jul 15 j 18:16	23° $\text{X}$ 50'13	
evening set	-10296 Jun 17 j 11:49	25° $\text{Y}$ 46'43					
				conjunction	-10290 Jul 31 j 09:29	24° $\text{X}$ 48'35	0°55'03
conjunction	-10296 Jul 03 j 09:12	26° $\text{Y}$ 47'02	0°30'02	minimum elong	-10290 Jul 31 j 09:28	24° $\text{X}$ 48'35	0°55'29
minimum elong	-10296 Jul 03 j 09:12	26° $\text{Y}$ 47'02	0°30'13	max. Earth dist.	-10290 Jul 31 j 13:22	24° $\text{X}$ 49'11	19.67612 AU
max. Earth dist.	-10296 Jul 02 j 20:43	26° $\text{Y}$ 45'03	19.34450 AU	morning rise	-10290 Aug 15 j 23:12	25° $\text{X}$ 46'43	
morning rise	-10296 Jul 19 j 03:22	27° $\text{Y}$ 46'52		retrograde	-10290 Nov 15 j 19:06	29° $\text{X}$ 06'05	
	-10296 Aug 28 j 18:58	0° $\text{X}$		opposition	-10289 Jan 30 j 15:15	27° $\text{X}$ 04'49	1°03'00
retrograde	-10296 Oct 18 j 09:40	1° $\text{X}$ 09'15		min. Earth dist.	-10289 Jan 30 j 09:13	27° $\text{X}$ 05'26	17.71032 AU
	-10296 Dec 10 j 16:29	30° $\text{R}$ $\text{Y}$		direct	-10289 Apr 17 j 19:53	25° $\text{X}$ 01'49	

Attention, astronomical year style is used: The year -10289 in astronomical counting style is the year 10290 BCE in historical counting style.

evening set	-10289 Jul 20 j 11:38	28° $\text{♁}$ 23'33		max. Earth dist.	-10283 Aug 31 j 10:11	26° $\text{♁}$ 00'34	20.20510 AU
				morning rise	-10283 Sep 15 j 00:52	26° $\text{♁}$ 53'30	
conjunction	-10289 Aug 05 j 02:15	29° $\text{♁}$ 21'35	0°58'01		-10283 Nov 28 j 17:57	0° $\text{♁}$	
minimum elong	-10289 Aug 05 j 02:14	29° $\text{♁}$ 21'35	0°58'28	retrograde	-10283 Dec 16 j 22:01	0° $\text{♁}$ 08'28	
max. Earth dist.	-10289 Aug 05 j 10:07	29° $\text{♁}$ 22'49	19.74519 AU		-10282 Jan 04 j 08:40	30° $\text{♁}$ $\text{♁}$	
	-10289 Aug 15 j 08:48	0° $\text{♁}$		min. Earth dist.	-10282 Mar 03 j 03:32	28° $\text{♁}$ 10'33	18.24401 AU
morning rise	-10289 Aug 20 j 15:22	0° $\text{♁}$ 19'26		opposition	-10282 Mar 04 j 02:11	28° $\text{♁}$ 08'15	1°15'21
retrograde	-10289 Nov 20 j 14:13	3° $\text{♁}$ 38'11		direct	-10282 May 19 j 18:44	26° $\text{♁}$ 08'31	
opposition	-10288 Feb 04 j 15:52	1° $\text{♁}$ 37'02	1°06'05	evening set	-10282 Aug 19 j 11:16	29° $\text{♁}$ 20'20	
min. Earth dist.	-10288 Feb 04 j 07:05	1° $\text{♁}$ 37'56	17.78113 AU		-10282 Aug 30 j 11:54	0° $\text{♁}$	
	-10288 Mar 20 j 15:24	30° $\text{♁}$ $\text{♁}$		conjunction	-10282 Sep 03 j 23:11	0° $\text{♁}$ 16'15	1°07'55
direct	-10288 Apr 21 j 19:52	29° $\text{♁}$ 34'29		minimum elong	-10282 Sep 03 j 23:11	0° $\text{♁}$ 16'15	1°08'30
	-10288 May 23 j 02:42	0° $\text{♁}$		max. Earth dist.	-10282 Sep 04 j 22:14	0° $\text{♁}$ 19'44	20.28169 AU
evening set	-10288 Jul 24 j 04:01	2° $\text{♁}$ 54'47		morning rise	-10282 Sep 19 j 12:07	1° $\text{♁}$ 12'18	
conjunction	-10288 Aug 08 j 17:49	3° $\text{♁}$ 52'30	1°00'37	retrograde	-10282 Dec 21 j 12:15	4° $\text{♁}$ 26'36	
minimum elong	-10288 Aug 08 j 17:49	3° $\text{♁}$ 52'30	1°01'07	opposition	-10281 Mar 08 j 20:55	2° $\text{♁}$ 26'29	1°15'22
max. Earth dist.	-10288 Aug 09 j 03:34	3° $\text{♁}$ 54'01	19.81768 AU	min. Earth dist.	-10281 Mar 07 j 21:30	2° $\text{♁}$ 28'51	18.31989 AU
morning rise	-10288 Aug 24 j 06:47	4° $\text{♁}$ 50'04		direct	-10281 May 24 j 10:34	0° $\text{♁}$ 27'09	
retrograde	-10288 Nov 24 j 08:50	8° $\text{♁}$ 08'14		evening set	-10281 Aug 23 j 21:28	3° $\text{♁}$ 37'35	
opposition	-10287 Feb 08 j 15:43	6° $\text{♁}$ 07'11	1°08'44	conjunction	-10281 Sep 08 j 09:31	4° $\text{♁}$ 33'14	1°07'46
min. Earth dist.	-10287 Feb 08 j 04:14	6° $\text{♁}$ 08'22	17.85521 AU	minimum elong	-10281 Sep 08 j 09:31	4° $\text{♁}$ 33'14	1°08'21
direct	-10287 Apr 26 j 17:35	4° $\text{♁}$ 05'06		max. Earth dist.	-10281 Sep 09 j 10:36	4° $\text{♁}$ 37'01	20.35663 AU
evening set	-10287 Jul 28 j 19:23	7° $\text{♁}$ 24'00		morning rise	-10281 Sep 23 j 22:41	5° $\text{♁}$ 29'04	
conjunction	-10287 Aug 13 j 08:49	8° $\text{♁}$ 21'23	1°02'50	retrograde	-10281 Dec 26 j 03:44	8° $\text{♁}$ 42'42	
minimum elong	-10287 Aug 13 j 08:48	8° $\text{♁}$ 21'23	1°03'20	opposition	-10280 Mar 12 j 14:37	6° $\text{♁}$ 42'40	1°14'57
max. Earth dist.	-10287 Aug 13 j 22:10	8° $\text{♁}$ 23'27	19.89300 AU	min. Earth dist.	-10280 Mar 11 j 12:49	6° $\text{♁}$ 45'17	18.39377 AU
morning rise	-10287 Aug 28 j 21:24	9° $\text{♁}$ 18'41		direct	-10280 May 28 j 03:11	4° $\text{♁}$ 43'42	
retrograde	-10287 Nov 29 j 03:01	12° $\text{♁}$ 36'12		evening set	-10280 Aug 27 j 06:51	7° $\text{♁}$ 52'45	
opposition	-10286 Feb 13 j 14:31	10° $\text{♁}$ 35'20	1°10'57	conjunction	-10280 Sep 11 j 18:57	8° $\text{♁}$ 48'10	1°07'14
min. Earth dist.	-10286 Feb 13 j 00:21	10° $\text{♁}$ 36'48	17.93157 AU	minimum elong	-10280 Sep 11 j 18:57	8° $\text{♁}$ 48'10	1°07'50
direct	-10286 May 01 j 15:25	8° $\text{♁}$ 33'45		max. Earth dist.	-10280 Sep 12 j 21:11	8° $\text{♁}$ 52'06	20.42942 AU
evening set	-10286 Aug 02 j 09:59	11° $\text{♁}$ 51'13		morning rise	-10280 Sep 27 j 08:39	9° $\text{♁}$ 43'48	
conjunction	-10286 Aug 17 j 22:47	12° $\text{♁}$ 48'17	1°04'38	retrograde	-10280 Dec 29 j 15:51	12° $\text{♁}$ 56'46	
minimum elong	-10286 Aug 17 j 22:47	12° $\text{♁}$ 48'17	1°05'11	min. Earth dist.	-10279 Mar 16 j 05:18	10° $\text{♁}$ 59'25	18.46560 AU
max. Earth dist.	-10286 Aug 18 j 13:45	12° $\text{♁}$ 50'36	19.97021 AU	opposition	-10279 Mar 17 j 07:30	10° $\text{♁}$ 56'46	1°14'08
morning rise	-10286 Sep 02 j 11:22	13° $\text{♁}$ 45'19		direct	-10279 Jun 01 j 17:21	8° $\text{♁}$ 58'08	
retrograde	-10286 Dec 03 j 20:25	17° $\text{♁}$ 02'13		evening set	-10279 Aug 31 j 15:25	12° $\text{♁}$ 05'51	
opposition	-10285 Feb 18 j 12:44	15° $\text{♁}$ 01'31	1°12'43	conjunction	-10279 Sep 16 j 03:50	13° $\text{♁}$ 01'02	1°06'21
min. Earth dist.	-10285 Feb 17 j 20:35	15° $\text{♁}$ 03'11	18.00955 AU	minimum elong	-10279 Sep 16 j 03:50	13° $\text{♁}$ 01'03	1°06'56
direct	-10285 May 06 j 11:00	13° $\text{♁}$ 00'25		max. Earth dist.	-10279 Sep 17 j 07:48	13° $\text{♁}$ 05'13	20.50018 AU
evening set	-10285 Aug 06 j 23:26	16° $\text{♁}$ 16'28		morning rise	-10279 Oct 01 j 17:58	13° $\text{♁}$ 56'29	
conjunction	-10285 Aug 22 j 12:00	17° $\text{♁}$ 13'14	1°06'03	retrograde	-10278 Jan 03 j 06:00	17° $\text{♁}$ 08'45	
minimum elong	-10285 Aug 22 j 12:00	17° $\text{♁}$ 13'14	1°06'38	opposition	-10278 Mar 21 j 23:00	15° $\text{♁}$ 08'48	1°12'56
max. Earth dist.	-10285 Aug 23 j 06:04	17° $\text{♁}$ 16'00	20.04855 AU	min. Earth dist.	-10278 Mar 20 j 18:34	15° $\text{♁}$ 11'40	18.53529 AU
morning rise	-10285 Sep 07 j 00:23	18° $\text{♁}$ 10'00		direct	-10278 Jun 06 j 08:14	13° $\text{♁}$ 10'28	
retrograde	-10285 Dec 08 j 13:41	21° $\text{♁}$ 26'16		evening set	-10278 Sep 04 j 23:16	16° $\text{♁}$ 16'54	
opposition	-10284 Feb 23 j 10:07	19° $\text{♁}$ 25'45	1°14'02	conjunction	-10278 Sep 20 j 11:52	17° $\text{♁}$ 11'53	1°05'08
min. Earth dist.	-10284 Feb 22 j 15:17	19° $\text{♁}$ 27'40	18.08808 AU	minimum elong	-10278 Sep 20 j 11:52	17° $\text{♁}$ 11'53	1°05'43
direct	-10284 May 10 j 06:57	17° $\text{♁}$ 25'08		max. Earth dist.	-10278 Sep 21 j 17:03	17° $\text{♁}$ 16'13	20.56883 AU
evening set	-10284 Aug 10 j 12:18	20° $\text{♁}$ 39'45		morning rise	-10278 Oct 06 j 02:38	18° $\text{♁}$ 07'09	
conjunction	-10284 Aug 26 j 00:27	21° $\text{♁}$ 36'13	1°07'05	retrograde	-10277 Jan 07 j 16:09	21° $\text{♁}$ 18'46	
minimum elong	-10284 Aug 26 j 00:26	21° $\text{♁}$ 36'13	1°07'38	min. Earth dist.	-10277 Mar 25 j 09:12	19° $\text{♁}$ 21'44	18.60313 AU
max. Earth dist.	-10284 Aug 26 j 19:55	21° $\text{♁}$ 39'11	20.12706 AU	opposition	-10277 Mar 26 j 13:53	19° $\text{♁}$ 18'51	1°11'21
morning rise	-10284 Sep 10 j 13:01	22° $\text{♁}$ 32'44		direct	-10277 Jun 10 j 20:02	17° $\text{♁}$ 20'48	
retrograde	-10284 Dec 12 j 05:43	25° $\text{♁}$ 48'22		evening set	-10277 Sep 09 j 06:13	20° $\text{♁}$ 26'00	
min. Earth dist.	-10283 Feb 26 j 10:30	23° $\text{♁}$ 50'03	18.16659 AU	conjunction	-10277 Sep 24 j 19:17	21° $\text{♁}$ 20'47	1°03'34
opposition	-10283 Feb 27 j 06:40	23° $\text{♁}$ 48'00	1°14'55	minimum elong	-10277 Sep 24 j 19:18	21° $\text{♁}$ 20'47	1°04'07
direct	-10283 May 15 j 00:31	21° $\text{♁}$ 47'50		max. Earth dist.	-10277 Sep 26 j 02:06	21° $\text{♁}$ 25'20	20.63578 AU
evening set	-10283 Aug 15 j 00:07	25° $\text{♁}$ 01'03		morning rise	-10277 Oct 10 j 10:38	22° $\text{♁}$ 15'53	
conjunction	-10283 Aug 30 j 12:15	25° $\text{♁}$ 57'14	1°07'42	retrograde	-10276 Jan 12 j 04:43	25° $\text{♁}$ 26'52	
minimum elong	-10283 Aug 30 j 12:15	25° $\text{♁}$ 57'14	1°08'17	min. Earth dist.	-10276 Mar 28 j 20:45	23° $\text{♁}$ 30'07	18.66919 AU

Attention, astronomical year style is used: The year -10276 in astronomical counting style is the year 10277 BCE in historical counting style.

opposition	-10276 Mar 30 j 03:42	23° $\mathring{O}$ 27'00	1°09'25	direct	-10270 Jul 09 j 13:20	15° $\mathring{O}$ 49'15	
direct	-10276 Jun 14 j 09:23	21° $\mathring{O}$ 29'15		evening set	-10270 Oct 06 j 18:47	18° $\mathring{O}$ 47'51	
evening set	-10276 Sep 12 j 12:46	24° $\mathring{O}$ 33'17					
				conjunction	-10270 Oct 22 j 12:23	19° $\mathring{O}$ 41'46	0°44'39
conjunction	-10276 Sep 28 j 02:13	25° $\mathring{O}$ 27'53	1°01'42	minimum elong	-10270 Oct 22 j 12:24	19° $\mathring{O}$ 41'46	0°45'04
minimum elong	-10276 Sep 28 j 02:14	25° $\mathring{O}$ 27'53	1°02'16	max. Earth dist.	-10270 Oct 23 j 23:34	19° $\mathring{O}$ 46'50	21.03357 AU
max. Earth dist.	-10276 Sep 29 j 10:09	25° $\mathring{O}$ 32'35	20.70085 AU	morning rise	-10270 Nov 07 j 09:52	20° $\mathring{O}$ 36'12	
morning rise	-10276 Oct 13 j 18:21	26° $\mathring{O}$ 22'51		retrograde	-10269 Feb 09 j 20:47	23° $\mathring{O}$ 43'46	
retrograde	-10275 Jan 15 j 13:53	29° $\mathring{O}$ 33'14		min. Earth dist.	-10269 Apr 27 j 22:08	21° $\mathring{O}$ 47'49	19.05517 AU
min. Earth dist.	-10275 Apr 02 j 09:44	27° $\mathring{O}$ 36'32	18.73344 AU	opposition	-10269 Apr 29 j 06:44	21° $\mathring{O}$ 44'34	0°47'20
opposition	-10275 Apr 03 j 16:39	27° $\mathring{O}$ 33'26	1°07'09	direct	-10269 Jul 13 j 18:44	19° $\mathring{O}$ 48'40	
direct	-10275 Jun 18 j 18:44	25° $\mathring{O}$ 35'58		evening set	-10269 Oct 10 j 22:51	22° $\mathring{O}$ 46'36	
evening set	-10275 Sep 16 j 18:40	28° $\mathring{O}$ 38'55					
				conjunction	-10269 Oct 26 j 17:25	23° $\mathring{O}$ 40'28	0°40'59
conjunction	-10275 Oct 02 j 08:45	29° $\mathring{O}$ 33'21	0°59'32	minimum elong	-10269 Oct 26 j 17:25	23° $\mathring{O}$ 40'28	0°41'23
minimum elong	-10275 Oct 02 j 08:45	29° $\mathring{O}$ 33'21	1°00'04	max. Earth dist.	-10269 Oct 28 j 04:12	23° $\mathring{O}$ 45'28	21.07401 AU
max. Earth dist.	-10275 Oct 03 j 17:49	29° $\mathring{O}$ 38'13	20.76411 AU	morning rise	-10269 Nov 11 j 15:54	24° $\mathring{O}$ 34'53	
	-10275 Oct 09 j 22:38	0° $\mathring{O}$		retrograde	-10268 Feb 14 j 05:47	27° $\mathring{O}$ 42'05	
morning rise	-10275 Oct 18 j 01:36	0° $\mathring{O}$ 28'11		min. Earth dist.	-10268 May 01 j 05:48	25° $\mathring{O}$ 46'13	19.09271 AU
retrograde	-10274 Jan 20 j 01:03	3° $\mathring{O}$ 38'00		opposition	-10268 May 02 j 14:51	25° $\mathring{O}$ 42'55	0°43'09
min. Earth dist.	-10274 Apr 06 j 19:50	1° $\mathring{O}$ 41'36	18.79552 AU	direct	-10268 Jul 17 j 01:36	23° $\mathring{O}$ 47'10	
opposition	-10274 Apr 08 j 04:42	1° $\mathring{O}$ 38'18	1°04'34	evening set	-10268 Oct 14 j 03:01	26° $\mathring{O}$ 44'31	
	-10274 May 26 j 13:14	30° $\mathring{R}$ $\mathring{O}$					
direct	-10274 Jun 23 j 05:59	29° $\mathring{O}$ 41'09		conjunction	-10268 Oct 29 j 22:28	27° $\mathring{O}$ 38'21	0°37'08
	-10274 Jul 20 j 05:50	0° $\mathring{O}$		minimum elong	-10268 Oct 29 j 22:28	27° $\mathring{O}$ 38'21	0°37'30
evening set	-10274 Sep 21 j 00:05	2° $\mathring{O}$ 43'05		max. Earth dist.	-10268 Oct 31 j 08:46	27° $\mathring{O}$ 43'15	21.10860 AU
				morning rise	-10268 Nov 14 j 22:03	28° $\mathring{O}$ 32'45	
conjunction	-10274 Oct 06 j 14:40	3° $\mathring{O}$ 37'23	0°57'04		-10268 Dec 13 j 01:31	0° $\mathring{O}$	
minimum elong	-10274 Oct 06 j 14:41	3° $\mathring{O}$ 37'23	0°57'36	retrograde	-10267 Feb 17 j 12:16	1° $\mathring{O}$ 39'37	
max. Earth dist.	-10274 Oct 08 j 00:38	3° $\mathring{O}$ 42'20	20.82488 AU		-10267 Apr 28 j 17:53	30° $\mathring{R}$ $\mathring{O}$	
morning rise	-10274 Oct 22 j 08:23	4° $\mathring{O}$ 32'06		opposition	-10267 May 06 j 22:21	29° $\mathring{O}$ 40'28	0°38'48
retrograde	-10273 Jan 24 j 09:34	7° $\mathring{O}$ 41'24		min. Earth dist.	-10267 May 05 j 15:02	29° $\mathring{O}$ 43'35	19.12436 AU
min. Earth dist.	-10273 Apr 11 j 07:40	5° $\mathring{O}$ 45'03	18.85500 AU	direct	-10267 Jul 21 j 06:11	27° $\mathring{O}$ 44'48	
opposition	-10273 Apr 12 j 16:10	5° $\mathring{O}$ 41'48	1°01'40		-10267 Oct 05 j 11:03	0° $\mathring{O}$	
direct	-10273 Jun 27 j 13:50	3° $\mathring{O}$ 44'56		evening set	-10267 Oct 18 j 06:55	0° $\mathring{O}$ 41'37	
evening set	-10273 Sep 25 j 05:05	6° $\mathring{O}$ 45'55					
				conjunction	-10267 Nov 03 j 03:25	1° $\mathring{O}$ 35'26	0°33'08
conjunction	-10273 Oct 10 j 20:26	7° $\mathring{O}$ 40'06	0°54'20	minimum elong	-10267 Nov 03 j 03:26	1° $\mathring{O}$ 35'26	0°33'28
minimum elong	-10273 Oct 10 j 20:26	7° $\mathring{O}$ 40'06	0°54'51	max. Earth dist.	-10267 Nov 04 j 12:57	1° $\mathring{O}$ 40'13	21.13744 AU
max. Earth dist.	-10273 Oct 12 j 07:06	7° $\mathring{O}$ 45'09	20.88297 AU	morning rise	-10267 Nov 19 j 04:04	2° $\mathring{O}$ 29'50	
morning rise	-10273 Oct 26 j 14:59	8° $\mathring{O}$ 34'43		retrograde	-10266 Feb 21 j 20:49	5° $\mathring{O}$ 36'23	
retrograde	-10272 Jan 28 j 19:49	11° $\mathring{O}$ 43'32		min. Earth dist.	-10266 May 09 j 21:49	3° $\mathring{O}$ 40'21	19.15023 AU
min. Earth dist.	-10272 Apr 14 j 16:47	9° $\mathring{O}$ 47'27	18.91140 AU	opposition	-10266 May 11 j 05:17	3° $\mathring{O}$ 37'13	0°34'16
opposition	-10272 Apr 16 j 02:45	9° $\mathring{O}$ 44'03	0°58'28	direct	-10266 Jul 25 j 12:05	1° $\mathring{O}$ 41'36	
direct	-10272 Jun 30 j 23:02	7° $\mathring{O}$ 47'28		evening set	-10266 Oct 22 j 10:38	4° $\mathring{O}$ 37'57	
evening set	-10272 Sep 28 j 09:51	10° $\mathring{O}$ 47'35					
				conjunction	-10266 Nov 07 j 08:04	5° $\mathring{O}$ 31'47	0°28'59
conjunction	-10272 Oct 14 j 01:53	11° $\mathring{O}$ 41'40	0°51'21	minimum elong	-10266 Nov 07 j 08:04	5° $\mathring{O}$ 31'47	0°29'17
minimum elong	-10272 Oct 14 j 01:53	11° $\mathring{O}$ 41'40	0°51'49	max. Earth dist.	-10266 Nov 08 j 17:03	5° $\mathring{O}$ 36'28	21.16048 AU
max. Earth dist.	-10272 Oct 15 j 13:01	11° $\mathring{O}$ 46'45	20.93749 AU	morning rise	-10266 Nov 23 j 09:49	6° $\mathring{O}$ 26'12	
morning rise	-10272 Oct 29 j 21:26	12° $\mathring{O}$ 36'13		retrograde	-10265 Feb 26 j 02:15	9° $\mathring{O}$ 32'29	
	-10272 Dec 19 j 21:16	15° $\mathring{O}$		min. Earth dist.	-10265 May 14 j 06:05	7° $\mathring{O}$ 36'14	19.17057 AU
retrograde	-10271 Feb 01 j 03:57	15° $\mathring{O}$ 44'35		opposition	-10265 May 15 j 11:48	7° $\mathring{O}$ 33'16	0°29'37
	-10271 Mar 17 j 18:52	15° $\mathring{R}$ $\mathring{O}$		direct	-10265 Jul 29 j 16:04	5° $\mathring{O}$ 37'39	
min. Earth dist.	-10271 Apr 19 j 03:44	13° $\mathring{O}$ 48'30	18.96397 AU	evening set	-10265 Oct 26 j 14:21	8° $\mathring{O}$ 33'38	
opposition	-10271 Apr 20 j 12:48	13° $\mathring{O}$ 45'12	0°55'00				
direct	-10271 Jul 05 j 05:35	11° $\mathring{O}$ 48'53		conjunction	-10265 Nov 11 j 12:52	9° $\mathring{O}$ 27'28	0°24'43
evening set	-10271 Oct 02 j 14:23	14° $\mathring{O}$ 48'12		minimum elong	-10265 Nov 11 j 12:53	9° $\mathring{O}$ 27'28	0°24'58
	-10271 Oct 06 j 01:44	15° $\mathring{O}$		max. Earth dist.	-10265 Nov 12 j 21:04	9° $\mathring{O}$ 32'02	21.17838 AU
				morning rise	-10265 Nov 27 j 15:43	10° $\mathring{O}$ 21'55	
conjunction	-10271 Oct 18 j 07:14	15° $\mathring{O}$ 42'11	0°48'07	retrograde	-10264 Mar 01 j 10:20	13° $\mathring{O}$ 27'58	
minimum elong	-10271 Oct 18 j 07:15	15° $\mathring{O}$ 42'11	0°48'34	min. Earth dist.	-10264 May 17 j 11:54	11° $\mathring{O}$ 31'40	19.18595 AU
max. Earth dist.	-10271 Oct 19 j 18:28	15° $\mathring{O}$ 47'16	20.98796 AU	opposition	-10264 May 18 j 17:37	11° $\mathring{O}$ 28'41	0°24'50
morning rise	-10271 Nov 03 j 03:41	16° $\mathring{O}$ 36'40		direct	-10264 Aug 01 j 20:49	9° $\mathring{O}$ 33'04	
retrograde	-10270 Feb 05 j 13:17	19° $\mathring{O}$ 44'37		evening set	-10264 Oct 29 j 18:11	12° $\mathring{O}$ 28'45	
min. Earth dist.	-10270 Apr 23 j 11:59	17° $\mathring{O}$ 48'43	19.01210 AU				
opposition	-10270 Apr 24 j 21:55	17° $\mathring{O}$ 45'20	0°51'17	conjunction	-10264 Nov 14 j 17:41	13° $\mathring{O}$ 22'38	0°20'20

Attention, astronomical year style is used: The year -10264 in astronomical counting style is the year 10265 BCE in historical counting style.

minimum elong	-10264 Nov 14 j 17:42	13° $\overline{10}$ 22'38	0°20'34	min. Earth dist.	-10258 Jun 10 j 23:42	5° $\underline{00}$ '33	19.18357 AU
max. Earth dist.	-10264 Nov 16 j 01:12	13° $\overline{10}$ 27'06	21.19132 AU	direct	-10258 Aug 25 j 15:45	3° $\underline{02}$ '22	
morning rise	-10264 Nov 30 j 21:40	14° $\overline{10}$ 17'08		evening set	-10258 Nov 22 j 21:09	5° $\underline{05}$ '15	
retrograde	-10263 Mar 05 j 15:31	17° $\overline{10}$ 22'59					
opposition	-10263 May 22 j 23:09	15° $\overline{10}$ 23'40	0°19'56	conjunction	-10258 Dec 09 j 03:08	6° $\underline{05}$ '24'5	-0°07'13
min. Earth dist.	-10263 May 21 j 19:13	15° $\overline{10}$ 26'28	19.19660 AU	minimum elong	-10258 Dec 09 j 03:07	6° $\underline{05}$ '24'5	0°07'14
direct	-10263 Aug 06 j 00:04	13° $\overline{10}$ 28'01		behind sun begin	-10258 Dec 08 j 20:59	6° $\underline{05}$ '51'55	
evening set	-10263 Nov 02 j 21:59	16° $\overline{10}$ 23'30		behind sun end	-10258 Dec 09 j 09:15	6° $\underline{05}$ '53'36	
				max. Earth dist.	-10258 Dec 10 j 03:05	6° $\underline{05}$ '56'07	21.17541 AU
conjunction	-10263 Nov 18 j 22:35	17° $\overline{10}$ 17'27	0°15'53	morning rise	-10258 Dec 25 j 13:24	7° $\underline{05}$ '47'51	
minimum elong	-10263 Nov 18 j 22:35	17° $\overline{10}$ 17'27	0°16'03	retrograde	-10257 Mar 30 j 09:59	10° $\underline{05}$ '53'44	
max. Earth dist.	-10263 Nov 20 j 05:05	17° $\overline{10}$ 21'45	21.19983 AU	min. Earth dist.	-10257 Jun 15 j 06:43	8° $\underline{05}$ '56'22	19.16639 AU
morning rise	-10263 Dec 05 j 03:36	18° $\overline{10}$ 12'00		opposition	-10257 Jun 16 j 02:45	8° $\underline{05}$ '54'20	-0°10'32
retrograde	-10262 Mar 09 j 23:17	21° $\overline{10}$ 17'44		direct	-10257 Aug 29 j 17:34	6° $\underline{05}$ '58'21	
min. Earth dist.	-10262 May 26 j 00:17	19° $\overline{10}$ 21'10	19.20288 AU	evening set	-10257 Nov 27 j 03:12	9° $\underline{05}$ '54'34	
opposition	-10262 May 27 j 04:08	19° $\overline{10}$ 18'22	0°14'58				
direct	-10262 Aug 10 j 03:53	17° $\overline{10}$ 22'41		conjunction	-10257 Dec 13 j 10:16	10° $\underline{05}$ '49'14	-0°11'50
evening set	-10262 Nov 07 j 02:01	20° $\overline{10}$ 18'04		minimum elong	-10257 Dec 13 j 10:16	10° $\underline{05}$ '49'14	0°11'52
				behind sun begin	-10257 Dec 13 j 05:40	10° $\underline{05}$ '48'36	
conjunction	-10262 Nov 23 j 03:38	21° $\overline{10}$ 12'05	0°11'22	behind sun end	-10257 Dec 13 j 14:52	10° $\underline{05}$ '49'52	
minimum elong	-10262 Nov 23 j 03:37	21° $\overline{10}$ 12'05	0°11'31	max. Earth dist.	-10257 Dec 14 j 08:03	10° $\underline{05}$ '52'17	21.15559 AU
behind sun begin	-10262 Nov 22 j 22:52	21° $\overline{10}$ 11'26		morning rise	-10257 Dec 29 j 21:33	11° $\underline{05}$ '44'29	
behind sun end	-10262 Nov 23 j 08:23	21° $\overline{10}$ 12'44		retrograde	-10256 Apr 02 j 19:13	14° $\underline{05}$ '50'31	
max. Earth dist.	-10262 Nov 24 j 09:16	21° $\overline{10}$ 16'16	21.20393 AU	opposition	-10256 Jun 19 j 07:01	12° $\underline{05}$ '51'06	-0°15'37
morning rise	-10262 Dec 09 j 09:43	22° $\overline{10}$ 06'43		min. Earth dist.	-10256 Jun 18 j 12:16	12° $\underline{05}$ '53'00	19.14367 AU
retrograde	-10261 Mar 14 j 04:44	25° $\overline{10}$ 12'23		direct	-10256 Sep 01 j 22:04	10° $\underline{05}$ '54'57	
min. Earth dist.	-10261 May 30 j 07:02	23° $\overline{10}$ 15'36	19.20484 AU	evening set	-10256 Nov 30 j 09:55	13° $\underline{05}$ '51'36	
opposition	-10261 May 31 j 09:00	23° $\overline{10}$ 12'59	0°09'56				
direct	-10261 Aug 14 j 06:22	21° $\overline{10}$ 17'17		conjunction	-10256 Dec 16 j 18:01	14° $\underline{05}$ '46'26	-0°16'24
evening set	-10261 Nov 11 j 06:07	24° $\overline{10}$ 12'39		minimum elong	-10256 Dec 16 j 18:01	14° $\underline{05}$ '46'26	0°16'29
				max. Earth dist.	-10256 Dec 17 j 13:43	14° $\underline{05}$ '49'12	21.12984 AU
conjunction	-10261 Nov 27 j 08:55	25° $\overline{10}$ 06'46	0°06'48	morning rise	-10255 Jan 02 j 06:12	15° $\underline{05}$ '41'51	
minimum elong	-10261 Nov 27 j 08:54	25° $\overline{10}$ 06'46	0°06'54	retrograde	-10255 Apr 07 j 02:22	18° $\underline{05}$ '48'04	
behind sun begin	-10261 Nov 27 j 02:44	25° $\overline{10}$ 05'55		opposition	-10255 Jun 23 j 11:35	16° $\underline{05}$ '48'35	-0°20'39
behind sun end	-10261 Nov 27 j 15:04	25° $\overline{10}$ 07'36		min. Earth dist.	-10255 Jun 22 j 19:41	16° $\underline{05}$ '50'12	19.11488 AU
max. Earth dist.	-10261 Nov 28 j 13:17	25° $\overline{10}$ 10'45	21.20387 AU	direct	-10255 Sep 06 j 00:44	14° $\underline{05}$ '52'15	
morning rise	-10261 Dec 13 j 16:06	26° $\overline{10}$ 01'29		evening set	-10255 Dec 04 j 17:01	17° $\underline{05}$ '49'22	
retrograde	-10260 Mar 17 j 13:01	29° $\overline{10}$ 07'08					
min. Earth dist.	-10260 Jun 02 j 11:58	27° $\overline{10}$ 10'19	19.20248 AU	conjunction	-10255 Dec 21 j 02:10	18° $\underline{05}$ '44'23	-0°20'54
opposition	-10260 Jun 03 j 13:34	27° $\overline{10}$ 07'44	0°04'51	minimum elong	-10255 Dec 21 j 02:09	18° $\underline{05}$ '44'23	0°21'01
direct	-10260 Aug 17 j 10:01	25° $\overline{10}$ 11'58		max. Earth dist.	-10255 Dec 21 j 19:15	18° $\underline{05}$ '46'47	21.09815 AU
evening set	-10260 Nov 14 j 10:49	28° $\overline{10}$ 07'26		morning rise	-10254 Jan 06 j 15:15	19° $\underline{05}$ '39'58	
				retrograde	-10254 Apr 11 j 11:25	22° $\underline{05}$ '46'25	
conjunction	-10260 Nov 30 j 14:38	29° $\overline{10}$ 01'39	0°02'11	opposition	-10254 Jun 27 j 16:07	20° $\underline{05}$ '46'50	-0°25'35
minimum elong	-10260 Nov 30 j 14:38	29° $\overline{10}$ 01'39	0°02'16	min. Earth dist.	-10254 Jun 27 j 01:39	20° $\underline{05}$ '48'19	19.08016 AU
behind sun begin	-10260 Nov 30 j 07:59	29° $\overline{10}$ 00'45		direct	-10254 Sep 10 j 05:41	18° $\underline{05}$ '50'14	
behind sun end	-10260 Nov 30 j 21:18	29° $\overline{10}$ 02'34		evening set	-10254 Dec 09 j 00:46	21° $\underline{05}$ '47'54	
max. Earth dist.	-10260 Dec 01 j 17:47	29° $\overline{10}$ 05'28	21.19918 AU				
morning rise	-10260 Dec 16 j 22:53	29° $\overline{10}$ 56'29		conjunction	-10254 Dec 25 j 10:56	22° $\underline{05}$ '43'07	-0°25'19
	-10260 Dec 18 j 00:29	0° $\underline{05}$		minimum elong	-10254 Dec 25 j 10:55	22° $\underline{05}$ '43'07	0°25'29
retrograde	-10259 Mar 21 j 18:45	3° $\underline{05}$ '02'09		max. Earth dist.	-10254 Dec 26 j 01:50	22° $\underline{05}$ '45'13	21.06048 AU
desc. node	-10259 May 19 j 08:28	1° $\underline{05}$ '48'32		morning rise	-10253 Jan 11 j 00:51	23° $\underline{05}$ '38'54	
opposition	-10259 Jun 07 j 17:58	1° $\underline{05}$ '02'46	-0°00'17	retrograde	-10253 Apr 15 j 19:08	26° $\underline{05}$ '45'35	
min. Earth dist.	-10259 Jun 06 j 18:37	1° $\underline{05}$ '05'08	19.19542 AU	opposition	-10253 Jul 01 j 20:50	24° $\underline{05}$ '45'51	-0°30'25
	-10259 Jul 05 j 01:54	30° $\overline{10}$		min. Earth dist.	-10253 Jul 01 j 09:15	24° $\underline{05}$ '47'03	19.03966 AU
direct	-10259 Aug 21 j 11:53	29° $\overline{10}$ 06'58		direct	-10253 Sep 14 j 09:33	22° $\underline{05}$ '48'58	
	-10259 Oct 06 j 14:36	0° $\underline{05}$		evening set	-10253 Dec 13 j 09:05	25° $\underline{05}$ '47'13	
evening set	-10259 Nov 18 j 15:47	2° $\underline{05}$ '02'35					
				conjunction	-10253 Dec 29 j 20:16	26° $\underline{05}$ '42'40	-0°29'37
conjunction	-10259 Dec 04 j 20:42	2° $\underline{05}$ '56'56	-0°02'35	minimum elong	-10253 Dec 29 j 20:16	26° $\underline{05}$ '42'40	0°29'49
minimum elong	-10259 Dec 04 j 20:43	2° $\underline{05}$ '56'56	0°02'33	max. Earth dist.	-10253 Dec 30 j 08:24	26° $\underline{05}$ '44'23	21.01748 AU
behind sun begin	-10259 Dec 04 j 14:04	2° $\underline{05}$ '56'02		morning rise	-10252 Jan 15 j 11:06	27° $\underline{05}$ '38'38	
behind sun end	-10259 Dec 05 j 03:22	2° $\underline{05}$ '57'51			-10252 Mar 06 j 08:44	0° $\overline{10}$	
max. Earth dist.	-10259 Dec 05 j 22:11	3° $\underline{05}$ '00'31	21.18988 AU	retrograde	-10252 Apr 19 j 04:24	0° $\overline{10}$ '45'36	
morning rise	-10259 Dec 21 j 06:00	3° $\underline{05}$ '51'54			-10252 Jun 02 j 12:51	30° $\overline{10}$	
retrograde	-10258 Mar 26 j 03:43	6° $\underline{05}$ '57'39		opposition	-10252 Jul 05 j 01:37	28° $\underline{05}$ '45'42	-0°35'07
opposition	-10258 Jun 11 j 22:18	4° $\underline{05}$ '58'15	-0°05'25	min. Earth dist.	-10252 Jul 04 j 15:33	28° $\underline{05}$ '46'44	18.99407 AU

Attention, astronomical year style is used: The year -10252 in astronomical counting style is the year 10253 BCE in historical counting style.

direct	-10252 Sep 17 j 14:47	26° $\overline{0}$ 48'28		conjunction	-10245 Jan 28 j 08:17	25° $\overline{M}$ .11'47	-0°54'59
evening set	-10252 Dec 16 j 18:06	29° $\overline{0}$ 47'25		minimum elong	-10245 Jan 28 j 08:17	25° $\overline{M}$ .11'46	0°55'26
	-10252 Dec 20 j 12:46	0° $\overline{M}$ .		max. Earth dist.	-10245 Jan 28 j 04:19	25° $\overline{M}$ .11'12	20.61389 AU
				morning rise	-10245 Feb 14 j 03:01	26° $\overline{M}$ .09'21	
conjunction	-10251 Jan 02 j 06:14	0° $\overline{M}$ .43'05	-0°33'47	retrograde	-10245 May 19 j 04:02	29° $\overline{M}$ .19'25	
minimum elong	-10251 Jan 02 j 06:14	0° $\overline{M}$ .43'05	0°34'02	opposition	-10245 Aug 02 j 20:03	27° $\overline{M}$ .18'40	-1°02'31
max. Earth dist.	-10251 Jan 02 j 16:16	0° $\overline{M}$ .44'30	20.96945 AU	min. Earth dist.	-10245 Aug 03 j 00:41	27° $\overline{M}$ .18'11	18.58053 AU
morning rise	-10251 Jan 18 j 21:45	1° $\overline{M}$ .39'15		direct	-10245 Oct 16 j 11:12	25° $\overline{M}$ .18'54	
retrograde	-10251 Apr 23 j 12:25	4° $\overline{M}$ .46'30		evening set	-10244 Jan 16 j 06:08	28° $\overline{M}$ .24'56	
opposition	-10251 Jul 09 j 06:33	2° $\overline{M}$ .46'28	-0°39'39				
min. Earth dist.	-10251 Jul 08 j 23:14	2° $\overline{M}$ .47'13	18.94389 AU	conjunction	-10244 Feb 01 j 23:39	29° $\overline{M}$ .22'31	-0°57'43
direct	-10251 Sep 21 j 19:41	0° $\overline{M}$ .48'52		minimum elong	-10244 Feb 01 j 23:39	29° $\overline{M}$ .22'31	0°58'11
evening set	-10251 Dec 21 j 03:42	3° $\overline{M}$ .48'34		max. Earth dist.	-10244 Feb 01 j 16:20	29° $\overline{M}$ .21'27	20.54654 AU
					-10244 Feb 12 j 19:39	0° $\overline{M}$ .	
conjunction	-10250 Jan 06 j 16:44	4° $\overline{M}$ .44'29	-0°37'48	morning rise	-10244 Feb 18 j 18:50	0° $\overline{M}$ .20'21	
minimum elong	-10250 Jan 06 j 16:43	4° $\overline{M}$ .44'29	0°38'06	retrograde	-10244 May 22 j 18:07	3° $\overline{M}$ .31'02	
max. Earth dist.	-10250 Jan 07 j 00:01	4° $\overline{M}$ .45'31	20.91743 AU	opposition	-10244 Aug 06 j 04:12	1° $\overline{M}$ .30'14	-1°05'23
morning rise	-10250 Jan 23 j 09:00	5° $\overline{M}$ .40'52		min. Earth dist.	-10244 Aug 06 j 10:45	1° $\overline{M}$ .29'32	18.51209 AU
retrograde	-10250 Apr 27 j 22:20	8° $\overline{M}$ .48'28			-10244 Sep 15 j 11:42	30° $\overline{R}$ .	
opposition	-10250 Jul 13 j 11:45	6° $\overline{M}$ .48'15	-0°44'01	direct	-10244 Oct 19 j 21:26	29° $\overline{M}$ .30'05	
min. Earth dist.	-10250 Jul 13 j 05:48	6° $\overline{M}$ .48'52	18.89007 AU		-10244 Nov 22 j 23:26	0° $\overline{M}$ .	
direct	-10250 Sep 26 j 01:28	4° $\overline{M}$ .50'16		evening set	-10243 Jan 19 j 21:54	2° $\overline{M}$ .37'26	
evening set	-10250 Dec 25 j 13:53	7° $\overline{M}$ .50'50					
				conjunction	-10243 Feb 05 j 16:02	3° $\overline{M}$ .35'20	-1°00'08
conjunction	-10249 Jan 11 j 03:49	8° $\overline{M}$ .46'59	-0°41'39	minimum elong	-10243 Feb 05 j 16:02	3° $\overline{M}$ .35'20	1°00'39
minimum elong	-10249 Jan 11 j 03:49	8° $\overline{M}$ .46'59	0°41'58	max. Earth dist.	-10243 Feb 05 j 06:52	3° $\overline{M}$ .34'00	20.47678 AU
max. Earth dist.	-10249 Jan 11 j 09:15	8° $\overline{M}$ .47'46	20.86185 AU	morning rise	-10243 Feb 22 j 11:15	4° $\overline{M}$ .33'25	
morning rise	-10249 Jan 27 j 20:40	9° $\overline{M}$ .43'36		retrograde	-10243 May 27 j 06:32	7° $\overline{M}$ .44'44	
retrograde	-10249 May 02 j 07:12	12° $\overline{M}$ .51'36		opposition	-10243 Aug 10 j 13:06	5° $\overline{M}$ .43'52	-1°07'56
opposition	-10249 Jul 17 j 17:22	10° $\overline{M}$ .51'14	-0°48'11	min. Earth dist.	-10243 Aug 10 j 22:14	5° $\overline{M}$ .42'54	18.44118 AU
min. Earth dist.	-10249 Jul 17 j 13:57	10° $\overline{M}$ .51'35	18.83298 AU	direct	-10243 Oct 24 j 06:50	3° $\overline{M}$ .43'22	
direct	-10249 Sep 30 j 06:51	8° $\overline{M}$ .52'54		evening set	-10242 Jan 24 j 14:47	6° $\overline{M}$ .52'03	
evening set	-10249 Dec 30 j 01:01	11° $\overline{M}$ .54'22					
				conjunction	-10242 Feb 10 j 09:16	7° $\overline{M}$ .50'15	-1°02'15
conjunction	-10248 Jan 15 j 15:45	12° $\overline{M}$ .50'48	-0°45'19	minimum elong	-10242 Feb 10 j 09:16	7° $\overline{M}$ .50'15	1°02'46
minimum elong	-10248 Jan 15 j 15:45	12° $\overline{M}$ .50'48	0°45'40	max. Earth dist.	-10242 Feb 09 j 20:23	7° $\overline{M}$ .48'22	20.40473 AU
max. Earth dist.	-10248 Jan 15 j 18:19	12° $\overline{M}$ .51'10	20.80344 AU	morning rise	-10242 Feb 27 j 04:47	8° $\overline{M}$ .48'37	
morning rise	-10248 Feb 01 j 09:17	13° $\overline{M}$ .47'38		retrograde	-10242 May 31 j 21:19	12° $\overline{M}$ .00'35	
	-10248 Feb 24 j 06:41	15° $\overline{M}$ .		opposition	-10242 Aug 14 j 22:45	9° $\overline{M}$ .59'38	-1°10'07
retrograde	-10248 May 05 j 18:24	16° $\overline{M}$ .56'05		min. Earth dist.	-10242 Aug 15 j 09:59	9° $\overline{M}$ .58'26	18.36801 AU
	-10248 Jul 19 j 04:53	15° $\overline{R}$ .		direct	-10242 Oct 28 j 18:25	7° $\overline{M}$ .58'42	
opposition	-10248 Jul 20 j 23:10	14° $\overline{M}$ .55'35	-0°52'08	evening set	-10241 Jan 29 j 08:29	11° $\overline{M}$ .08'46	
min. Earth dist.	-10248 Jul 20 j 21:14	14° $\overline{M}$ .55'47	18.77327 AU				
direct	-10248 Oct 03 j 13:51	12° $\overline{M}$ .56'52		conjunction	-10241 Feb 15 j 03:33	12° $\overline{M}$ .07'17	-1°04'02
	-10248 Dec 15 j 00:11	15° $\overline{M}$ .		minimum elong	-10241 Feb 15 j 03:33	12° $\overline{M}$ .07'17	1°04'35
evening set	-10247 Jan 02 j 12:58	15° $\overline{M}$ .59'22		max. Earth dist.	-10241 Feb 14 j 12:50	12° $\overline{M}$ .05'08	20.33023 AU
				morning rise	-10241 Mar 03 j 22:59	13° $\overline{M}$ .05'54	
conjunction	-10247 Jan 19 j 04:32	16° $\overline{M}$ .56'05	-0°48'46	retrograde	-10241 Jun 05 j 11:41	16° $\overline{M}$ .18'31	
minimum elong	-10247 Jan 19 j 04:32	16° $\overline{M}$ .56'05	0°49'08	opposition	-10241 Aug 19 j 09:14	14° $\overline{M}$ .17'27	-1°11'56
max. Earth dist.	-10247 Jan 19 j 05:16	16° $\overline{M}$ .56'11	20.74239 AU	min. Earth dist.	-10241 Aug 19 j 22:54	14° $\overline{M}$ .16'00	18.29236 AU
morning rise	-10247 Feb 04 j 22:28	17° $\overline{M}$ .53'10		direct	-10241 Nov 02 j 06:26	12° $\overline{M}$ .16'05	
retrograde	-10247 May 10 j 04:21	21° $\overline{M}$ .02'06		evening set	-10240 Feb 03 j 03:27	15° $\overline{M}$ .27'33	
opposition	-10247 Jul 25 j 05:40	19° $\overline{M}$ .01'30	-0°55'52				
min. Earth dist.	-10247 Jul 25 j 06:11	19° $\overline{M}$ .01'27	18.71110 AU	conjunction	-10240 Feb 19 j 22:42	16° $\overline{M}$ .26'22	-1°05'28
direct	-10247 Oct 07 j 19:36	17° $\overline{M}$ .02'26		minimum elong	-10240 Feb 19 j 22:42	16° $\overline{M}$ .26'22	1°06'01
evening set	-10246 Jan 07 j 01:37	20° $\overline{M}$ .06'01		max. Earth dist.	-10240 Feb 19 j 04:04	16° $\overline{M}$ .23'38	20.25358 AU
				morning rise	-10240 Mar 07 j 18:17	17° $\overline{M}$ .25'15	
conjunction	-10246 Jan 23 j 17:50	21° $\overline{M}$ .03'01	-0°52'00	retrograde	-10240 Jun 09 j 03:13	20° $\overline{M}$ .38'30	
minimum elong	-10246 Jan 23 j 17:50	21° $\overline{M}$ .03'01	0°52'25	opposition	-10240 Aug 22 j 20:22	18° $\overline{M}$ .37'19	-1°13'21
max. Earth dist.	-10246 Jan 23 j 15:37	21° $\overline{M}$ .02'41	20.67922 AU	min. Earth dist.	-10240 Aug 23 j 12:15	18° $\overline{M}$ .35'37	18.21488 AU
morning rise	-10246 Feb 09 j 12:19	22° $\overline{M}$ .00'20		direct	-10240 Nov 05 j 19:47	16° $\overline{M}$ .35'27	
retrograde	-10246 May 14 j 17:04	25° $\overline{M}$ .09'50		evening set	-10239 Feb 06 j 23:09	19° $\overline{M}$ .48'21	
opposition	-10246 Jul 29 j 12:34	23° $\overline{M}$ .09'08	-0°59'19				
min. Earth dist.	-10246 Jul 29 j 14:38	23° $\overline{M}$ .08'55	18.64690 AU	conjunction	-10239 Feb 23 j 18:50	20° $\overline{M}$ .47'29	-1°06'32
direct	-10246 Oct 12 j 04:13	21° $\overline{M}$ .09'43		minimum elong	-10239 Feb 23 j 18:50	20° $\overline{M}$ .47'29	1°07'06
evening set	-10245 Jan 11 j 15:18	24° $\overline{M}$ .14'29		max. Earth dist.	-10239 Feb 22 j 22:42	20° $\overline{M}$ .44'30	20.17529 AU
				morning rise	-10239 Mar 12 j 14:08	21° $\overline{M}$ .46'37	

Attention, astronomical year style is used: The year -10239 in astronomical counting style is the year 10240 BCE in historical counting style.

retrograde	-10239 Jun 13 j 19:15	25° $\mathring{\text{A}}$ 00'29		evening set	-10232 Mar 11 j 17:17	21° $\mathring{\text{A}}$ 09'37	
opposition	-10239 Aug 27 j 08:23	22° $\mathring{\text{A}}$ 59'10	-1°14'22	max. Earth dist.	-10232 Mar 27 j 02:59	22° $\mathring{\text{A}}$ 05'35	19.65088 AU
min. Earth dist.	-10239 Aug 28 j 02:16	22° $\mathring{\text{A}}$ 57'15	18.13608 AU				
direct	-10239 Nov 10 j 09:48	20° $\mathring{\text{A}}$ 56'49		conjunction	-10232 Mar 28 j 12:15	22° $\mathring{\text{A}}$ 10'40	-1°02'57
evening set	-10238 Feb 11 j 19:42	24° $\mathring{\text{A}}$ 11'08		minimum elong	-10232 Mar 28 j 12:15	22° $\mathring{\text{A}}$ 10'40	1°03'30
				morning rise	-10232 Apr 14 j 04:40	23° $\mathring{\text{A}}$ 11'24	
conjunction	-10238 Feb 28 j 15:24	25° $\mathring{\text{A}}$ 10'33	-1°07'14	retrograde	-10232 Jul 15 j 08:37	26° $\mathring{\text{A}}$ 29'47	
minimum elong	-10238 Feb 28 j 15:23	25° $\mathring{\text{A}}$ 10'33	1°07'49	opposition	-10232 Sep 26 j 20:16	24° $\mathring{\text{A}}$ 27'41	-1°09'01
max. Earth dist.	-10238 Feb 27 j 15:45	25° $\mathring{\text{A}}$ 07'02	20.09624 AU	min. Earth dist.	-10232 Sep 28 j 00:23	24° $\mathring{\text{A}}$ 24'36	17.61930 AU
morning rise	-10238 Mar 17 j 10:42	26° $\mathring{\text{A}}$ 09'56		direct	-10232 Dec 11 j 11:25	22° $\mathring{\text{A}}$ 22'17	
retrograde	-10238 Jun 18 j 12:05	29° $\mathring{\text{A}}$ 24'28		evening set	-10231 Mar 16 j 19:40	25° $\mathring{\text{A}}$ 46'40	
opposition	-10238 Aug 31 j 21:09	27° $\mathring{\text{A}}$ 22'58	-1°14'57	max. Earth dist.	-10231 Apr 01 j 04:45	26° $\mathring{\text{A}}$ 42'48	19.58739 AU
min. Earth dist.	-10238 Sep 01 j 17:07	27° $\mathring{\text{A}}$ 20'49	18.05705 AU				
direct	-10238 Nov 15 j 00:43	25° $\mathring{\text{A}}$ 20'05		conjunction	-10231 Apr 02 j 14:15	26° $\mathring{\text{A}}$ 47'57	-1°00'47
evening set	-10237 Feb 16 j 17:08	28° $\mathring{\text{A}}$ 35'51		minimum elong	-10231 Apr 02 j 14:16	26° $\mathring{\text{A}}$ 47'57	1°01'20
				morning rise	-10231 Apr 19 j 05:55	27° $\mathring{\text{A}}$ 48'50	
conjunction	-10237 Mar 05 j 13:06	29° $\mathring{\text{A}}$ 35'34	-1°07'32		-10231 May 30 j 17:17	0° $\mathring{\text{A}}$	
minimum elong	-10237 Mar 05 j 13:06	29° $\mathring{\text{A}}$ 35'34	1°08'06	retrograde	-10231 Jul 20 j 07:29	1° $\mathring{\text{A}}$ 07'53	
max. Earth dist.	-10237 Mar 04 j 12:28	29° $\mathring{\text{A}}$ 31'54	20.01724 AU		-10231 Sep 10 j 04:38	30° $\mathring{\text{A}}$	
	-10237 Mar 12 j 08:55	0° $\mathring{\text{A}}$		opposition	-10231 Oct 01 j 15:30	29° $\mathring{\text{A}}$ 05'46	-1°06'24
morning rise	-10237 Mar 22 j 08:01	0° $\mathring{\text{A}}$ 35'13		min. Earth dist.	-10231 Oct 02 j 19:39	29° $\mathring{\text{A}}$ 02'41	17.55764 AU
retrograde	-10237 Jun 23 j 05:44	3° $\mathring{\text{A}}$ 50'22		direct	-10231 Dec 16 j 09:53	27° $\mathring{\text{A}}$ 00'06	
opposition	-10237 Sep 05 j 10:37	1° $\mathring{\text{A}}$ 48'43	-1°15'06		-10230 Mar 14 j 16:30	0° $\mathring{\text{A}}$	
min. Earth dist.	-10237 Sep 06 j 08:06	1° $\mathring{\text{A}}$ 46'24	17.97840 AU	evening set	-10230 Mar 21 j 22:45	0° $\mathring{\text{A}}$ 25'49	
	-10237 Oct 26 j 22:36	30° $\mathring{\text{A}}$		max. Earth dist.	-10230 Apr 06 j 05:56	1° $\mathring{\text{A}}$ 21'56	19.52755 AU
direct	-10237 Nov 19 j 16:20	29° $\mathring{\text{A}}$ 45'20					
	-10237 Dec 13 j 05:55	0° $\mathring{\text{A}}$		conjunction	-10230 Apr 07 j 16:45	1° $\mathring{\text{A}}$ 27'19	-0°58'12
evening set	-10236 Feb 21 j 15:39	3° $\mathring{\text{A}}$ 02'34		minimum elong	-10230 Apr 07 j 16:45	1° $\mathring{\text{A}}$ 27'19	0°58'43
max. Earth dist.	-10236 Mar 08 j 07:39	3° $\mathring{\text{A}}$ 58'24	19.93914 AU	morning rise	-10230 Apr 24 j 07:36	2° $\mathring{\text{A}}$ 28'22	
				retrograde	-10230 Jul 25 j 05:05	5° $\mathring{\text{A}}$ 48'02	
conjunction	-10236 Mar 09 j 11:28	4° $\mathring{\text{A}}$ 02'34	-1°07'26	opposition	-10230 Oct 06 j 11:53	3° $\mathring{\text{A}}$ 45'56	-1°03'19
minimum elong	-10236 Mar 09 j 11:28	4° $\mathring{\text{A}}$ 02'34	1°08'02	min. Earth dist.	-10230 Oct 07 j 17:50	3° $\mathring{\text{A}}$ 42'40	17.49971 AU
morning rise	-10236 Mar 26 j 06:10	5° $\mathring{\text{A}}$ 02'26		direct	-10230 Dec 21 j 07:08	1° $\mathring{\text{A}}$ 40'01	
retrograde	-10236 Jun 27 j 00:12	8° $\mathring{\text{A}}$ 18'14		evening set	-10229 Mar 27 j 02:37	5° $\mathring{\text{A}}$ 07'02	
opposition	-10236 Sep 09 j 01:07	6° $\mathring{\text{A}}$ 16'26	-1°14'48	max. Earth dist.	-10229 Apr 11 j 08:38	6° $\mathring{\text{A}}$ 03'13	19.47141 AU
min. Earth dist.	-10236 Sep 10 j 00:30	6° $\mathring{\text{A}}$ 13'54	17.90119 AU				
direct	-10236 Nov 23 j 08:49	4° $\mathring{\text{A}}$ 12'34		conjunction	-10229 Apr 12 j 20:00	6° $\mathring{\text{A}}$ 08'42	-0°55'12
evening set	-10235 Feb 25 j 14:42	7° $\mathring{\text{A}}$ 31'14		minimum elong	-10229 Apr 12 j 20:00	6° $\mathring{\text{A}}$ 08'42	0°55'42
max. Earth dist.	-10235 Mar 13 j 06:14	8° $\mathring{\text{A}}$ 27'15	19.86277 AU	morning rise	-10229 Apr 29 j 09:59	7° $\mathring{\text{A}}$ 09'54	
				retrograde	-10229 Jul 30 j 05:11	10° $\mathring{\text{A}}$ 30'09	
conjunction	-10235 Mar 14 j 10:33	8° $\mathring{\text{A}}$ 31'31	-1°06'56	opposition	-10229 Oct 11 j 09:03	8° $\mathring{\text{A}}$ 28'03	-0°59'47
minimum elong	-10235 Mar 14 j 10:33	8° $\mathring{\text{A}}$ 31'31	1°07'31	min. Earth dist.	-10229 Oct 12 j 14:49	8° $\mathring{\text{A}}$ 24'48	17.44530 AU
morning rise	-10235 Mar 31 j 04:40	9° $\mathring{\text{A}}$ 31'37		direct	-10229 Dec 26 j 08:17	6° $\mathring{\text{A}}$ 21'55	
retrograde	-10235 Jul 01 j 19:25	12° $\mathring{\text{A}}$ 48'04		evening set	-10228 Mar 31 j 07:08	9° $\mathring{\text{A}}$ 50'07	
opposition	-10235 Sep 13 j 16:28	10° $\mathring{\text{A}}$ 46'09	-1°14'03	max. Earth dist.	-10228 Apr 15 j 11:47	10° $\mathring{\text{A}}$ 46'21	19.41875 AU
min. Earth dist.	-10235 Sep 14 j 16:42	10° $\mathring{\text{A}}$ 43'31	17.82598 AU				
direct	-10235 Nov 28 j 02:18	8° $\mathring{\text{A}}$ 41'50		conjunction	-10228 Apr 16 j 23:48	10° $\mathring{\text{A}}$ 51'57	-0°51'49
evening set	-10234 Mar 02 j 14:47	12° $\mathring{\text{A}}$ 01'57		minimum elong	-10228 Apr 16 j 23:49	10° $\mathring{\text{A}}$ 51'57	0°52'18
max. Earth dist.	-10234 Mar 18 j 03:24	12° $\mathring{\text{A}}$ 57'49	19.78889 AU	morning rise	-10228 May 03 j 12:43	11° $\mathring{\text{A}}$ 53'15	
					-10228 Jul 11 j 20:16	15° $\mathring{\text{A}}$	
conjunction	-10234 Mar 19 j 10:19	13° $\mathring{\text{A}}$ 02'30	-1°06'01	retrograde	-10228 Aug 03 j 03:42	15° $\mathring{\text{A}}$ 14'04	
minimum elong	-10234 Mar 19 j 10:19	13° $\mathring{\text{A}}$ 02'30	1°06'36		-10228 Aug 25 j 17:53	15° $\mathring{\text{A}}$	
morning rise	-10234 Apr 05 j 04:02	14° $\mathring{\text{A}}$ 02'49		opposition	-10228 Oct 15 j 07:31	13° $\mathring{\text{A}}$ 11'58	-0°55'49
retrograde	-10234 Jul 06 j 15:04	17° $\mathring{\text{A}}$ 19'55		min. Earth dist.	-10228 Oct 16 j 14:51	13° $\mathring{\text{A}}$ 08'32	17.39456 AU
opposition	-10234 Sep 18 j 08:43	15° $\mathring{\text{A}}$ 17'53	-1°12'50	direct	-10228 Dec 30 j 07:47	11° $\mathring{\text{A}}$ 05'36	
min. Earth dist.	-10234 Sep 19 j 10:43	15° $\mathring{\text{A}}$ 15'04	17.75373 AU	evening set	-10227 Apr 05 j 11:58	14° $\mathring{\text{A}}$ 34'54	
direct	-10234 Dec 02 j 20:07	13° $\mathring{\text{A}}$ 13'09			-10227 Apr 12 j 07:26	15° $\mathring{\text{A}}$	
evening set	-10233 Mar 07 j 15:31	16° $\mathring{\text{A}}$ 34'43		max. Earth dist.	-10227 Apr 20 j 15:06	15° $\mathring{\text{A}}$ 31'07	19.36994 AU
max. Earth dist.	-10233 Mar 23 j 03:43	17° $\mathring{\text{A}}$ 30'47	19.71819 AU				
				conjunction	-10227 Apr 22 j 03:44	15° $\mathring{\text{A}}$ 36'51	-0°48'03
conjunction	-10233 Mar 24 j 10:58	17° $\mathring{\text{A}}$ 35'32	-1°04'42	minimum elong	-10227 Apr 22 j 03:45	15° $\mathring{\text{A}}$ 36'51	0°48'30
minimum elong	-10233 Mar 24 j 10:58	17° $\mathring{\text{A}}$ 35'32	1°05'16	morning rise	-10227 May 08 j 15:44	16° $\mathring{\text{A}}$ 38'15	
morning rise	-10233 Apr 10 j 04:02	18° $\mathring{\text{A}}$ 36'04		retrograde	-10227 Aug 08 j 04:46	19° $\mathring{\text{A}}$ 59'34	
retrograde	-10233 Jul 11 j 12:05	21° $\mathring{\text{A}}$ 53'48		opposition	-10227 Oct 20 j 06:40	17° $\mathring{\text{A}}$ 57'26	-0°51'26
opposition	-10233 Sep 23 j 01:58	19° $\mathring{\text{A}}$ 51'43	-1°11'10	min. Earth dist.	-10227 Oct 21 j 13:22	17° $\mathring{\text{A}}$ 54'05	17.34768 AU
min. Earth dist.	-10233 Sep 24 j 04:20	19° $\mathring{\text{A}}$ 48'51	17.68467 AU	direct	-10226 Jan 04 j 11:34	15° $\mathring{\text{A}}$ 50'52	
direct	-10233 Dec 07 j 16:04	17° $\mathring{\text{A}}$ 46'38		evening set	-10226 Apr 10 j 17:11	19° $\mathring{\text{A}}$ 21'08	

Attention, astronomical year style is used: The year -10226 in astronomical counting style is the year 10227 BCE in historical counting style.

max. Earth dist.	-10226 Apr 25 j 19:53	20° $\approx$ 17'30	19.32510 AU	morning rise	-10220 Jun 11 j 13:19	20° $\approx$ 20'23	
				retrograde	-10220 Sep 10 j 13:52	23° $\approx$ 43'39	
conjunction	-10226 Apr 27 j 08:11	20° $\approx$ 23'11	-0°43'57	opposition	-10220 Nov 22 j 20:52	21° $\approx$ 41'21	-0°12'22
minimum elong	-10226 Apr 27 j 08:11	20° $\approx$ 23'11	0°44'23	min. Earth dist.	-10220 Nov 23 j 23:08	21° $\approx$ 38'29	17.17155 AU
morning rise	-10226 May 13 j 18:58	21° $\approx$ 24'40		direct	-10219 Feb 07 j 16:41	19° $\approx$ 34'09	
retrograde	-10226 Aug 13 j 03:54	24° $\approx$ 46'24		evening set	-10219 May 15 j 06:17	23° $\approx$ 07'41	
opposition	-10226 Oct 25 j 06:40	22° $\approx$ 44'15	-0°46'41	max. Earth dist.	-10219 May 30 j 08:07	24° $\approx$ 04'57	19.17143 AU
min. Earth dist.	-10226 Oct 26 j 14:32	22° $\approx$ 40'46	17.30507 AU				
direct	-10225 Jan 09 j 12:58	20° $\approx$ 37'29		conjunction	-10219 May 31 j 13:02	24° $\approx$ 09'34	-0°08'13
evening set	-10225 Apr 15 j 22:47	24° $\approx$ 08'37		minimum elong	-10219 May 31 j 13:02	24° $\approx$ 09'34	0°08'21
max. Earth dist.	-10225 Apr 30 j 23:49	25° $\approx$ 04'56	19.28493 AU	behind sun begin	-10219 May 31 j 07:09	24° $\approx$ 08'39	
				behind sun end	-10219 May 31 j 18:55	24° $\approx$ 10'29	
conjunction	-10225 May 02 j 12:41	25° $\approx$ 10'44	-0°39'31	morning rise	-10219 Jun 16 j 15:25	25° $\approx$ 10'48	
minimum elong	-10225 May 02 j 12:41	25° $\approx$ 10'44	0°39'55	retrograde	-10219 Sep 15 j 14:32	28° $\approx$ 34'10	
morning rise	-10225 May 18 j 22:31	26° $\approx$ 12'16		opposition	-10219 Nov 28 j 00:59	26° $\approx$ 31'54	-0°06'03
retrograde	-10225 Aug 18 j 05:40	29° $\approx$ 34'24		min. Earth dist.	-10219 Nov 29 j 01:39	26° $\approx$ 29'14	17.17396 AU
opposition	-10225 Oct 30 j 07:24	27° $\approx$ 32'12	-0°41'36	direct	-10218 Feb 12 j 21:58	24° $\approx$ 24'51	
min. Earth dist.	-10225 Oct 31 j 14:17	27° $\approx$ 28'49	17.26732 AU	evening set	-10218 May 20 j 10:36	27° $\approx$ 58'21	
direct	-10224 Jan 14 j 17:55	25° $\approx$ 25'14					
evening set	-10224 Apr 20 j 04:17	28° $\approx$ 57'07		conjunction	-10218 Jun 05 j 16:09	29° $\approx$ 00'05	-0°02'34
max. Earth dist.	-10224 May 05 j 05:51	29° $\approx$ 53'41	19.24978 AU	minimum elong	-10218 Jun 05 j 16:09	29° $\approx$ 00'05	0°02'39
				behind sun begin	-10218 Jun 05 j 09:30	28° $\approx$ 59'02	
conjunction	-10224 May 06 j 17:16	29° $\approx$ 59'16	-0°34'49	behind sun end	-10218 Jun 05 j 22:48	29° $\approx$ 01'07	
minimum elong	-10224 May 06 j 17:16	29° $\approx$ 59'16	0°35'09	max. Earth dist.	-10218 Jun 04 j 14:11	28° $\approx$ 55'56	19.17753 AU
	-10224 May 06 j 21:53	0° $\approx$		morning rise	-10218 Jun 21 j 17:12	0° $\approx$ 01'10	
morning rise	-10224 May 23 j 01:44	1° $\approx$ 00'49			-10218 Jun 21 j 09:46	0° $\approx$	
retrograde	-10224 Aug 22 j 06:14	4° $\approx$ 23'16		retrograde	-10218 Sep 20 j 16:39	3° $\approx$ 24'33	
opposition	-10224 Nov 03 j 09:01	2° $\approx$ 21'02	-0°36'12	asc. node	-10218 Nov 16 j 10:01	2° $\approx$ 05'08	
min. Earth dist.	-10224 Nov 04 j 16:17	2° $\approx$ 17'37	17.23495 AU	opposition	-10218 Dec 03 j 05:19	1° $\approx$ 22'24	0°00'18
direct	-10223 Jan 18 j 21:02	0° $\approx$ 13'56		min. Earth dist.	-10218 Dec 04 j 03:56	1° $\approx$ 19'57	17.18339 AU
evening set	-10223 Apr 25 j 09:55	3° $\approx$ 46'24			-10217 Jan 06 j 18:55	30° $\approx$	
max. Earth dist.	-10223 May 10 j 10:06	4° $\approx$ 42'56	19.22050 AU	direct	-10217 Feb 18 j 05:20	29° $\approx$ 15'33	
					-10217 Mar 31 j 13:21	0° $\approx$	
conjunction	-10223 May 11 j 21:38	4° $\approx$ 48'33	-0°29'51	evening set	-10217 May 25 j 14:40	2° $\approx$ 48'52	
minimum elong	-10223 May 11 j 21:38	4° $\approx$ 48'34	0°30'09				
morning rise	-10223 May 28 j 05:05	5° $\approx$ 50'06		conjunction	-10217 Jun 10 j 18:46	3° $\approx$ 50'25	0°03'15
retrograde	-10223 Aug 27 j 08:13	9° $\approx$ 12'50		minimum elong	-10217 Jun 10 j 18:46	3° $\approx$ 50'25	0°03'14
opposition	-10223 Nov 08 j 11:03	7° $\approx$ 10'33	-0°30'32	behind sun begin	-10217 Jun 10 j 12:09	3° $\approx$ 49'23	
min. Earth dist.	-10223 Nov 09 j 16:56	7° $\approx$ 07'17	17.20880 AU	behind sun end	-10217 Jun 11 j 01:23	3° $\approx$ 51'27	
direct	-10222 Jan 24 j 01:39	5° $\approx$ 03'19		max. Earth dist.	-10217 Jun 09 j 18:18	3° $\approx$ 46'31	19.19043 AU
evening set	-10222 Apr 30 j 15:12	8° $\approx$ 36'15		morning rise	-10217 Jun 26 j 18:37	4° $\approx$ 51'20	
max. Earth dist.	-10222 May 15 j 16:45	9° $\approx$ 33'08	19.19756 AU	retrograde	-10217 Sep 25 j 17:02	8° $\approx$ 14'43	
				opposition	-10217 Dec 08 j 10:10	6° $\approx$ 12'40	0°06'39
conjunction	-10222 May 17 j 01:56	9° $\approx$ 38'24	-0°24'40	min. Earth dist.	-10217 Dec 09 j 07:26	6° $\approx$ 10'23	17.19958 AU
minimum elong	-10222 May 17 j 01:57	9° $\approx$ 38'24	0°24'55	direct	-10216 Feb 23 j 10:42	4° $\approx$ 06'04	
morning rise	-10222 Jun 02 j 08:01	10° $\approx$ 39'54		evening set	-10216 May 29 j 18:00	7° $\approx$ 39'03	
retrograde	-10222 Sep 01 j 10:00	14° $\approx$ 02'51					
opposition	-10222 Nov 13 j 13:50	12° $\approx$ 00'32	-0°24'39	conjunction	-10216 Jun 14 j 20:47	8° $\approx$ 40'24	0°08'54
min. Earth dist.	-10222 Nov 14 j 19:13	11° $\approx$ 57'20	17.18915 AU	minimum elong	-10216 Jun 14 j 20:47	8° $\approx$ 40'24	0°08'55
direct	-10221 Jan 29 j 05:59	9° $\approx$ 53'16		behind sun begin	-10216 Jun 14 j 15:05	8° $\approx$ 39'31	
evening set	-10221 May 05 j 20:36	13° $\approx$ 26'32		behind sun end	-10216 Jun 15 j 02:29	8° $\approx$ 41'17	
max. Earth dist.	-10221 May 20 j 21:04	14° $\approx$ 23'23	19.18148 AU	max. Earth dist.	-10216 Jun 13 j 23:03	8° $\approx$ 36'56	19.20976 AU
				morning rise	-10216 Jun 30 j 19:24	9° $\approx$ 41'09	
conjunction	-10221 May 22 j 05:55	14° $\approx$ 28'37	-0°19'19	retrograde	-10216 Sep 29 j 19:19	13° $\approx$ 04'27	
minimum elong	-10221 May 22 j 05:55	14° $\approx$ 28'37	0°19'32	opposition	-10216 Dec 12 j 15:10	11° $\approx$ 02'31	0°12'57
morning rise	-10221 Jun 07 j 10:51	15° $\approx$ 30'03		min. Earth dist.	-10216 Dec 13 j 09:47	11° $\approx$ 00'31	17.22173 AU
retrograde	-10221 Sep 06 j 11:31	18° $\approx$ 53'11		direct	-10215 Feb 27 j 18:17	8° $\approx$ 56'11	
opposition	-10221 Nov 18 j 17:02	16° $\approx$ 50'51	-0°18'34	evening set	-10215 Jun 03 j 20:56	12° $\approx$ 28'42	
min. Earth dist.	-10221 Nov 19 j 20:46	16° $\approx$ 47'49	17.17668 AU				
direct	-10220 Feb 03 j 10:37	14° $\approx$ 43'34		conjunction	-10215 Jun 19 j 22:21	13° $\approx$ 29'50	0°14'29
evening set	-10220 May 10 j 01:36	18° $\approx$ 17'03		minimum elong	-10215 Jun 19 j 22:21	13° $\approx$ 29'50	0°14'33
max. Earth dist.	-10220 May 25 j 03:51	19° $\approx$ 14'17	19.17273 AU	behind sun begin	-10215 Jun 19 j 19:23	13° $\approx$ 29'22	
				behind sun end	-10215 Jun 20 j 01:19	13° $\approx$ 26'18	
conjunction	-10220 May 26 j 09:47	19° $\approx$ 19'03	-0°13'49	max. Earth dist.	-10215 Jun 19 j 02:41	13° $\approx$ 26'42	19.23474 AU
minimum elong	-10220 May 26 j 09:47	19° $\approx$ 19'03	0°13'59	morning rise	-10215 Jul 05 j 19:45	14° $\approx$ 30'23	
behind sun begin	-10220 May 26 j 06:24	19° $\approx$ 18'31		retrograde	-10215 Oct 04 j 19:29	17° $\approx$ 53'33	
behind sun end	-10220 May 26 j 13:09	19° $\approx$ 19'34		opposition	-10215 Dec 17 j 20:12	15° $\approx$ 51'43	0°19'08

Attention, astronomical year style is used: The year -10215 in astronomical counting style is the year 10216 BCE in historical counting style.

min. Earth dist.	-10215 Dec 18 j 13:41	15° $\Upsilon$ 49'51	17.24946 AU			-10208 Jun 24 j 23:51	15° $\text{B}$	
direct	-10214 Mar 04 j 23:01	13° $\Upsilon$ 45'39		evening set		-10208 Jul 06 j 17:55	15° $\text{B}$ 42'21	
evening set	-10214 Jun 08 j 23:08	17° $\Upsilon$ 17'35						
				conjunction		-10208 Jul 22 j 10:57	16° $\text{B}$ 41'26	0°48'10
conjunction	-10214 Jun 24 j 23:14	18° $\Upsilon$ 18'28	0°19'57	minimum elong		-10208 Jul 22 j 10:57	16° $\text{B}$ 41'26	0°48'33
minimum elong	-10214 Jun 24 j 23:13	18° $\Upsilon$ 18'28	0°20'04	max. Earth dist.		-10208 Jul 22 j 08:56	16° $\text{B}$ 41'07	19.54080 AU
max. Earth dist.	-10214 Jun 24 j 05:45	18° $\Upsilon$ 15'41	19.26505 AU	morning rise		-10208 Aug 07 j 01:53	17° $\text{B}$ 40'11	
morning rise	-10214 Jul 10 j 19:33	19° $\Upsilon$ 18'48		retrograde		-10208 Nov 06 j 17:25	21° $\text{B}$ 00'48	
retrograde	-10214 Oct 09 j 21:35	22° $\Upsilon$ 41'46		opposition		-10207 Jan 21 j 01:23	18° $\text{B}$ 59'22	0°55'45
opposition	-10214 Dec 23 j 01:11	20° $\Upsilon$ 40'02	0°25'10	min. Earth dist.		-10207 Jan 21 j 00:45	18° $\text{B}$ 59'26	17.57104 AU
min. Earth dist.	-10214 Dec 23 j 15:38	20° $\Upsilon$ 38'29	17.28206 AU	direct		-10207 Apr 08 j 06:22	16° $\text{B}$ 55'33	
direct	-10213 Mar 10 j 05:51	18° $\Upsilon$ 34'15		evening set		-10207 Jul 11 j 13:29	20° $\text{B}$ 20'11	
evening set	-10213 Jun 14 j 00:35	22° $\Upsilon$ 05'28						
				conjunction		-10207 Jul 27 j 05:45	21° $\text{B}$ 18'55	0°51'50
conjunction	-10213 Jun 29 j 23:24	23° $\Upsilon$ 06'04	0°25'16	minimum elong		-10207 Jul 27 j 05:45	21° $\text{B}$ 18'55	0°52'15
minimum elong	-10213 Jun 29 j 23:24	23° $\Upsilon$ 06'04	0°25'25	max. Earth dist.		-10207 Jul 27 j 07:46	21° $\text{B}$ 19'14	19.60223 AU
max. Earth dist.	-10213 Jun 29 j 08:35	23° $\Upsilon$ 03'43	19.29995 AU	morning rise		-10207 Aug 11 j 19:53	22° $\text{B}$ 17'23	
morning rise	-10213 Jul 15 j 18:32	24° $\Upsilon$ 06'10		retrograde		-10207 Nov 11 j 13:04	25° $\text{B}$ 37'27	
retrograde	-10213 Oct 14 j 21:13	27° $\Upsilon$ 28'53		opposition		-10206 Jan 26 j 03:24	23° $\text{B}$ 36'06	0°59'37
opposition	-10213 Dec 28 j 06:17	25° $\Upsilon$ 27'13	0°31'00	min. Earth dist.		-10206 Jan 26 j 00:33	23° $\text{B}$ 36'24	17.63466 AU
min. Earth dist.	-10213 Dec 28 j 19:31	25° $\Upsilon$ 25'49	17.31927 AU	direct		-10206 Apr 13 j 08:08	21° $\text{B}$ 32'42	
direct	-10212 Mar 14 j 10:08	23° $\Upsilon$ 21'45		evening set		-10206 Jul 16 j 08:11	24° $\text{B}$ 56'01	
evening set	-10212 Jun 18 j 01:16	26° $\Upsilon$ 52'06						
				conjunction		-10206 Jul 31 j 23:26	25° $\text{B}$ 54'25	0°55'08
conjunction	-10212 Jul 03 j 22:46	27° $\Upsilon$ 52'26	0°30'22	minimum elong		-10206 Jul 31 j 23:26	25° $\text{B}$ 54'25	0°55'34
minimum elong	-10212 Jul 03 j 22:46	27° $\Upsilon$ 52'26	0°30'36	max. Earth dist.		-10206 Aug 01 j 03:16	25° $\text{B}$ 55'02	19.66800 AU
max. Earth dist.	-10212 Jul 03 j 09:54	27° $\Upsilon$ 50'23	19.33947 AU	morning rise		-10206 Aug 16 j 13:12	26° $\text{B}$ 52'36	
morning rise	-10212 Jul 19 j 16:59	28° $\Upsilon$ 52'16				-10206 Oct 26 j 04:44	0° $\text{B}$	
	-10212 Aug 07 j 16:00	0° $\text{B}$		retrograde		-10206 Nov 16 j 10:20	0° $\text{B}$ 12'07	
retrograde	-10212 Oct 18 j 22:42	2° $\text{B}$ 14'40				-10206 Dec 07 j 23:08	30° $\text{R}$ $\text{B}$	
opposition	-10211 Jan 01 j 10:56	0° $\text{B}$ 13'04	0°36'35	opposition		-10205 Jan 31 j 04:49	28° $\text{B}$ 10'53	1°03'04
min. Earth dist.	-10211 Jan 01 j 20:46	0° $\text{B}$ 12'01	17.36091 AU	min. Earth dist.		-10205 Jan 30 j 22:36	28° $\text{B}$ 11'31	17.70251 AU
	-10211 Jan 06 j 14:12	30° $\text{R}$ $\Upsilon$		direct		-10205 Apr 18 j 09:01	26° $\text{B}$ 07'55	
direct	-10211 Mar 19 j 16:04	28° $\Upsilon$ 07'54		evening set		-10205 Jul 21 j 01:35	29° $\text{B}$ 29'52	
	-10211 May 25 j 20:49	0° $\text{B}$				-10205 Jul 29 j 05:09	0° $\text{B}$	
evening set	-10211 Jun 23 j 00:51	1° $\text{B}$ 37'17						
				conjunction		-10205 Aug 05 j 16:16	0° $\text{B}$ 27'58	0°58'04
conjunction	-10211 Jul 08 j 21:16	2° $\text{B}$ 37'19	0°35'15	minimum elong		-10205 Aug 05 j 16:15	0° $\text{B}$ 27'58	0°58'33
minimum elong	-10211 Jul 08 j 21:16	2° $\text{B}$ 37'19	0°35'30	max. Earth dist.		-10205 Aug 06 j 00:07	0° $\text{B}$ 29'11	19.73769 AU
max. Earth dist.	-10211 Jul 08 j 11:41	2° $\text{B}$ 35'48	19.38326 AU	morning rise		-10205 Aug 21 j 05:25	1° $\text{B}$ 25'51	
morning rise	-10211 Jul 24 j 14:26	3° $\text{B}$ 36'54		retrograde		-10205 Nov 21 j 04:38	4° $\text{B}$ 44'48	
retrograde	-10211 Oct 23 j 21:06	6° $\text{B}$ 58'55		opposition		-10204 Feb 05 j 05:38	2° $\text{B}$ 43'43	1°06'06
opposition	-10210 Jan 06 j 15:22	4° $\text{B}$ 57'22	0°41'53	min. Earth dist.		-10204 Feb 04 j 20:55	2° $\text{B}$ 44'37	17.77386 AU
min. Earth dist.	-10210 Jan 06 j 23:48	4° $\text{B}$ 56'28	17.40684 AU	direct		-10204 Apr 22 j 09:12	0° $\text{B}$ 41'14	
direct	-10210 Mar 24 j 19:36	2° $\text{B}$ 52'31		evening set		-10204 Jul 24 j 18:17	4° $\text{B}$ 01'48	
evening set	-10210 Jun 27 j 23:39	6° $\text{B}$ 20'49						
				conjunction		-10204 Aug 09 j 08:08	4° $\text{B}$ 59'33	1°00'37
conjunction	-10210 Jul 13 j 18:48	7° $\text{B}$ 20'33	0°39'52	minimum elong		-10204 Aug 09 j 08:08	4° $\text{B}$ 59'33	1°01'07
minimum elong	-10210 Jul 13 j 18:48	7° $\text{B}$ 20'33	0°40'10	max. Earth dist.		-10204 Aug 09 j 17:44	5° $\text{B}$ 01'02	19.81061 AU
max. Earth dist.	-10210 Jul 13 j 11:01	7° $\text{B}$ 19'19	19.43140 AU	morning rise		-10204 Aug 24 j 21:08	5° $\text{B}$ 57'10	
morning rise	-10210 Jul 29 j 11:13	8° $\text{B}$ 19'52		retrograde		-10204 Nov 25 j 00:16	9° $\text{B}$ 15'32	
retrograde	-10210 Oct 28 j 21:24	11° $\text{B}$ 41'27		opposition		-10203 Feb 09 j 05:35	7° $\text{B}$ 14'36	1°08'43
opposition	-10209 Jan 11 j 19:05	9° $\text{B}$ 39'56	0°46'52	min. Earth dist.		-10203 Feb 08 j 18:07	7° $\text{B}$ 15'47	17.84823 AU
min. Earth dist.	-10209 Jan 11 j 23:59	9° $\text{B}$ 39'25	17.45710 AU	direct		-10203 Apr 27 j 07:07	5° $\text{B}$ 12'36	
direct	-10209 Mar 30 j 00:14	7° $\text{B}$ 35'24		evening set		-10203 Jul 29 j 09:50	8° $\text{B}$ 31'46	
evening set	-10209 Jul 02 j 21:18	11° $\text{B}$ 02'33						
				conjunction		-10203 Aug 13 j 23:18	9° $\text{B}$ 29'12	1°02'47
conjunction	-10209 Jul 18 j 15:30	12° $\text{B}$ 01'58	0°44'11	minimum elong		-10203 Aug 13 j 23:18	9° $\text{B}$ 29'12	1°03'19
minimum elong	-10209 Jul 18 j 15:30	12° $\text{B}$ 01'57	0°44'31	max. Earth dist.		-10203 Aug 14 j 12:29	9° $\text{B}$ 31'15	19.88599 AU
max. Earth dist.	-10209 Jul 18 j 11:31	12° $\text{B}$ 01'20	19.48383 AU	morning rise		-10203 Aug 29 j 11:54	10° $\text{B}$ 26'33	
morning rise	-10209 Aug 03 j 06:58	13° $\text{B}$ 01'00		retrograde		-10203 Nov 29 j 17:57	13° $\text{B}$ 44'18	
	-10209 Sep 08 j 01:26	15° $\text{B}$		opposition		-10202 Feb 14 j 04:46	11° $\text{B}$ 43'32	1°10'52
retrograde	-10209 Nov 02 j 18:34	16° $\text{B}$ 22'06		min. Earth dist.		-10202 Feb 13 j 14:52	11° $\text{B}$ 44'58	17.92441 AU
	-10208 Jan 01 j 01:15	15° $\text{R}$ $\text{B}$		direct		-10202 May 02 j 05:24	9° $\text{B}$ 42'02	
opposition	-10208 Jan 16 j 22:37	14° $\text{B}$ 20'38	0°51'29	evening set		-10202 Aug 03 j 00:39	12° $\text{B}$ 59'46	
min. Earth dist.	-10208 Jan 17 j 01:38	14° $\text{B}$ 20'19	17.51177 AU					
direct	-10208 Apr 03 j 03:09	12° $\text{B}$ 16'27		conjunction		-10202 Aug 18 j 13:27	13° $\text{B}$ 56'53	1°04'33



Attention, astronomical year style is used: The year -10202 in astronomical counting style is the year 10203 BCE in historical counting style.

minimum elong	-10202 Aug 18 j 13:27	13°II56'53	1°05'06	opposition	-10195 Mar 17 j 22:37	12°☾07'47	1°13'40
max. Earth dist.	-10202 Aug 19 j 04:07	13°II59'09	19.96278 AU	min. Earth dist.	-10195 Mar 16 j 20:35	12°☾10'25	18.45152 AU
morning rise	-10202 Sep 03 j 02:02	14°II53'58		direct	-10195 Jun 02 j 08:51	10°☾09'00	
retrograde	-10202 Dec 04 j 11:44	18°II11'06		evening set	-10195 Sep 01 j 07:02	13°☾16'49	
min. Earth dist.	-10201 Feb 18 j 11:15	16°II12'07	18.00177 AU				
opposition	-10201 Feb 19 j 03:12	16°II10'29	1°12'35	conjunction	-10195 Sep 16 j 19:30	14°☾12'02	1°05'55
direct	-10201 May 07 j 00:35	14°II09'27		minimum elong	-10195 Sep 16 j 19:30	14°☾12'02	1°06'30
evening set	-10201 Aug 07 j 14:27	17°II25'46		max. Earth dist.	-10195 Sep 17 j 23:33	14°☾16'13	20.48617 AU
				morning rise	-10195 Oct 02 j 09:38	15°☾07'30	
conjunction	-10201 Aug 23 j 03:02	18°II22'34	1°05'55	retrograde	-10194 Jan 03 j 20:09	18°☾19'49	
minimum elong	-10201 Aug 23 j 03:02	18°II22'34	1°06'28	min. Earth dist.	-10194 Mar 21 j 09:53	16°☾22'37	18.52152 AU
max. Earth dist.	-10201 Aug 23 j 20:49	18°II25'18	20.04032 AU	opposition	-10194 Mar 22 j 14:19	16°☾19'45	1°12'25
morning rise	-10201 Sep 07 j 15:25	19°II19'23		direct	-10194 Jun 07 j 00:04	14°☾21'16	
retrograde	-10201 Dec 09 j 04:59	22°II35'52		evening set	-10194 Sep 05 j 14:52	17°☾27'47	
min. Earth dist.	-10200 Feb 23 j 06:25	20°II37'17	18.07934 AU				
opposition	-10200 Feb 24 j 00:48	20°II35'24	1°13'51	conjunction	-10194 Sep 21 j 03:28	18°☾22'47	1°04'39
direct	-10200 May 10 j 21:32	18°II34'50		minimum elong	-10194 Sep 21 j 03:28	18°☾22'47	1°05'12
evening set	-10200 Aug 11 j 03:28	21°II49'41		max. Earth dist.	-10194 Sep 22 j 08:42	18°☾27'08	20.55541 AU
				morning rise	-10194 Oct 06 j 18:14	19°☾18'05	
conjunction	-10200 Aug 26 j 15:38	22°II46'12	1°06'53	retrograde	-10193 Jan 08 j 07:31	22°☾29'45	
minimum elong	-10200 Aug 26 j 15:38	22°II46'12	1°07'27	min. Earth dist.	-10193 Mar 26 j 00:23	20°☾32'38	18.59025 AU
max. Earth dist.	-10200 Aug 27 j 10:39	22°II49'06	20.11769 AU	opposition	-10193 Mar 27 j 05:19	20°☾29'43	1°10'48
morning rise	-10200 Sep 11 j 04:13	23°II42'46		direct	-10193 Jun 11 j 11:52	18°☾31'33	
retrograde	-10200 Dec 12 j 21:16	26°II58'35		evening set	-10193 Sep 09 j 21:59	21°☾36'51	
opposition	-10199 Feb 27 j 21:34	24°II58'14	1°14'40				
min. Earth dist.	-10199 Feb 27 j 01:47	25°II00'15	18.15653 AU	conjunction	-10193 Sep 25 j 11:04	22°☾31'39	1°03'03
direct	-10199 May 15 j 14:40	22°II58'04		minimum elong	-10193 Sep 25 j 11:05	22°☾31'39	1°03'37
evening set	-10199 Aug 15 j 15:33	26°II11'29		max. Earth dist.	-10193 Sep 26 j 18:06	22°☾36'15	20.62348 AU
				morning rise	-10193 Oct 11 j 02:24	23°☾26'47	
conjunction	-10199 Aug 31 j 03:41	27°II07'43	1°07'27	retrograde	-10192 Jan 12 j 19:35	26°☾37'50	
minimum elong	-10199 Aug 31 j 03:41	27°II07'43	1°08'00	min. Earth dist.	-10192 Mar 29 j 11:57	24°☾41'01	18.65757 AU
max. Earth dist.	-10199 Sep 01 j 01:15	27°II11'00	20.19431 AU	opposition	-10192 Mar 30 j 19:11	24°☾37'53	1°08'50
morning rise	-10199 Sep 15 j 16:16	28°II04'02		direct	-10192 Jun 15 j 00:24	22°☾40'02	
	-10199 Oct 22 j 01:23	0°☾		evening set	-10192 Sep 13 j 04:33	25°☾44'11	
retrograde	-10199 Dec 17 j 13:18	1°☾19'09					
	-10198 Feb 15 j 12:44	30°R☾II		conjunction	-10192 Sep 28 j 18:02	26°☾38'48	1°01'09
opposition	-10198 Mar 04 j 17:07	29°II18'55	1°15'03	minimum elong	-10192 Sep 28 j 18:02	26°☾38'48	1°01'41
min. Earth dist.	-10198 Mar 03 j 19:01	29°II21'10	18.23250 AU	max. Earth dist.	-10192 Sep 30 j 02:02	26°☾43'31	20.68993 AU
direct	-10198 May 20 j 10:00	27°II19'09		morning rise	-10192 Oct 14 j 10:10	27°☾33'48	
	-10198 Aug 11 j 04:22	0°☾			-10192 Dec 04 j 12:17	0°☾	
evening set	-10198 Aug 20 j 02:52	0°☾31'08		retrograde	-10191 Jan 16 j 05:35	0°☾44'16	
					-10191 Mar 01 j 09:23	30°R☾	
conjunction	-10198 Sep 04 j 14:48	1°☾27'05	1°07'37	min. Earth dist.	-10191 Apr 03 j 01:06	28°☾47'33	18.72316 AU
minimum elong	-10198 Sep 04 j 14:48	1°☾27'05	1°08'12	opposition	-10191 Apr 04 j 08:22	28°☾44'25	1°06'31
max. Earth dist.	-10198 Sep 05 j 13:24	1°☾30'31	20.26955 AU	direct	-10191 Jun 19 j 10:30	26°☾46'54	
morning rise	-10198 Sep 20 j 03:45	2°☾23'10		evening set	-10191 Sep 17 j 10:32	29°☾49'58	
retrograde	-10198 Dec 22 j 03:57	5°☾37'36			-10191 Sep 20 j 08:17	0°☾	
opposition	-10197 Mar 09 j 12:02	3°☾37'25	1°15'00				
min. Earth dist.	-10197 Mar 08 j 13:01	3°☾39'45	18.30710 AU	conjunction	-10191 Oct 03 j 00:38	0°☾44'26	0°58'56
direct	-10197 May 25 j 01:36	1°☾38'00		minimum elong	-10191 Oct 03 j 00:38	0°☾44'26	0°59'28
evening set	-10197 Aug 24 j 12:59	4°☾48'33		max. Earth dist.	-10191 Oct 04 j 09:57	0°☾49'20	20.75448 AU
				morning rise	-10191 Oct 18 j 17:27	1°☾39'18	
conjunction	-10197 Sep 09 j 01:05	5°☾44'15	1°07'25	retrograde	-10190 Jan 20 j 17:11	4°☾49'13	
minimum elong	-10197 Sep 09 j 01:05	5°☾44'15	1°08'00	min. Earth dist.	-10190 Apr 07 j 11:18	2°☾52'49	18.78646 AU
max. Earth dist.	-10197 Sep 10 j 02:00	5°☾48'00	20.34334 AU	opposition	-10190 Apr 08 j 20:27	2°☾49'30	1°03'53
morning rise	-10197 Sep 24 j 14:17	6°☾40'07		direct	-10190 Jun 23 j 21:01	0°☾52'19	
retrograde	-10197 Dec 26 j 18:22	9°☾53'50		evening set	-10190 Sep 21 j 16:09	3°☾54'23	
min. Earth dist.	-10196 Mar 12 j 04:24	7°☾56'16	18.38004 AU				
opposition	-10196 Mar 13 j 05:50	7°☾53'42	1°14'32	conjunction	-10190 Oct 07 j 06:44	4°☾48'43	0°56'27
direct	-10196 May 28 j 19:14	5°☾54'37		minimum elong	-10190 Oct 07 j 06:44	4°☾48'43	0°56'57
evening set	-10196 Aug 27 j 22:30	9°☾03'46		max. Earth dist.	-10190 Oct 08 j 16:45	4°☾53'41	20.81640 AU
				morning rise	-10190 Oct 23 j 00:27	5°☾43'28	
conjunction	-10196 Sep 12 j 10:37	9°☾59'13	1°06'50	retrograde	-10189 Jan 25 j 01:54	8°☾52'53	
minimum elong	-10196 Sep 12 j 10:37	9°☾59'13	1°07'25	min. Earth dist.	-10189 Apr 11 j 23:24	6°☾56'34	18.84696 AU
max. Earth dist.	-10196 Sep 13 j 12:39	10°☾03'08	20.41545 AU	opposition	-10189 Apr 13 j 08:05	6°☾53'17	1°00'57
morning rise	-10196 Sep 28 j 00:21	10°☾54'53		direct	-10189 Jun 28 j 05:22	4°☾56'26	
retrograde	-10196 Dec 30 j 07:23	14°☾07'54		evening set	-10189 Sep 25 j 21:12	7°☾57'34	

Attention, astronomical year style is used: The year -10189 in astronomical counting style is the year 10190 BCE in historical counting style.

conjunction	-10189 Oct 11 j 12:34	8° $\Omega$ 51'46	0°53'41	minimum elong	-10183 Nov 03 j 19:48	2° $\Upsilon$ 48'46	0°32'41
minimum elong	-10189 Oct 11 j 12:34	8° $\Omega$ 51'46	0°54'10	max. Earth dist.	-10183 Nov 05 j 05:28	2° $\Upsilon$ 53'34	21.12904 AU
max. Earth dist.	-10189 Oct 12 j 23:26	8° $\Omega$ 56'51	20.87530 AU	morning rise	-10183 Nov 19 j 20:23	3° $\Upsilon$ 43'10	
morning rise	-10189 Oct 27 j 07:07	9° $\Omega$ 46'25		retrograde	-10182 Feb 22 j 12:37	6° $\Upsilon$ 49'47	
retrograde	-10188 Jan 29 j 13:04	12° $\Omega$ 55'23		opposition	-10182 May 11 j 21:38	4° $\Upsilon$ 50'32	0°33'26
min. Earth dist.	-10188 Apr 15 j 08:48	10° $\Omega$ 59'18	18.90396 AU	min. Earth dist.	-10182 May 10 j 14:02	4° $\Upsilon$ 53'42	19.14208 AU
opposition	-10188 Apr 16 j 18:49	10° $\Omega$ 55'54	0°57'44	direct	-10182 Jul 26 j 04:58	2° $\Upsilon$ 54'51	
direct	-10188 Jul 01 j 14:42	8° $\Omega$ 59'21		evening set	-10182 Oct 23 j 03:05	5° $\Upsilon$ 51'15	
evening set	-10188 Sep 29 j 02:13	11° $\Omega$ 59'36					
conjunction	-10188 Oct 14 j 18:13	12° $\Omega$ 53'43	0°50'39	conjunction	-10182 Nov 08 j 00:27	6° $\Upsilon$ 45'05	0°28'14
minimum elong	-10188 Oct 14 j 18:13	12° $\Omega$ 53'43	0°51'08	minimum elong	-10182 Nov 08 j 00:28	6° $\Upsilon$ 45'05	0°28'31
max. Earth dist.	-10188 Oct 16 j 05:17	12° $\Omega$ 58'48	20.93021 AU	max. Earth dist.	-10182 Nov 09 j 09:34	6° $\Upsilon$ 49'47	21.15276 AU
morning rise	-10188 Oct 30 j 13:45	13° $\Omega$ 48'18		morning rise	-10182 Nov 24 j 02:11	7° $\Upsilon$ 39'30	
retrograde	-10188 Nov 21 j 22:29	15° $\Omega$		retrograde	-10181 Feb 26 j 18:26	10° $\Upsilon$ 45'49	
min. Earth dist.	-10187 Feb 01 j 20:33	16° $\Omega$ 56'48		min. Earth dist.	-10181 May 14 j 22:05	8° $\Upsilon$ 49'31	19.16347 AU
opposition	-10187 Apr 19 j 19:55	15° $\Omega$ 00'44	18.95676 AU	opposition	-10181 May 16 j 04:03	8° $\Upsilon$ 46'31	0°28'47
direct	-10187 Apr 20 j 03:14	15° $\kappa$ $\Omega$		direct	-10181 Jul 30 j 08:29	6° $\Upsilon$ 50'51	
opposition	-10187 Apr 21 j 04:51	14° $\Omega$ 57'26	0°54'14	evening set	-10181 Oct 27 j 06:41	9° $\Upsilon$ 46'50	
direct	-10187 Jul 05 j 21:19	13° $\Omega$ 01'09		conjunction	-10181 Nov 12 j 05:11	10° $\Upsilon$ 40'42	0°23'58
evening set	-10187 Sep 14 j 12:35	15° $\Omega$		minimum elong	-10181 Nov 12 j 05:11	10° $\Upsilon$ 40'42	0°24'13
	-10187 Oct 03 j 06:52	16° $\Omega$ 00'37		max. Earth dist.	-10181 Nov 13 j 13:46	10° $\Upsilon$ 45'19	21.17201 AU
conjunction	-10187 Oct 18 j 23:43	16° $\Omega$ 54'38	0°47'24	morning rise	-10181 Nov 28 j 07:59	11° $\Upsilon$ 35'08	
minimum elong	-10187 Oct 18 j 23:44	16° $\Omega$ 54'38	0°47'50	retrograde	-10180 Mar 02 j 02:03	14° $\Upsilon$ 41'12	
max. Earth dist.	-10187 Oct 20 j 10:57	16° $\Omega$ 59'43	20.98072 AU	min. Earth dist.	-10180 May 18 j 03:39	12° $\Upsilon$ 44'53	19.18047 AU
morning rise	-10187 Nov 03 j 20:08	17° $\Omega$ 49'09		opposition	-10180 May 19 j 09:52	12° $\Upsilon$ 41'51	0°24'01
retrograde	-10186 Feb 06 j 06:46	20° $\Omega$ 57'13		direct	-10180 Aug 02 j 13:37	10° $\Upsilon$ 46'10	
min. Earth dist.	-10186 Apr 24 j 04:25	19° $\Omega$ 01'20	19.00473 AU	evening set	-10180 Oct 30 j 10:31	13° $\Upsilon$ 41'52	
opposition	-10186 Apr 25 j 14:13	18° $\Omega$ 57'57	0°50'29	conjunction	-10180 Nov 15 j 09:58	14° $\Upsilon$ 35'45	0°19'36
direct	-10186 Jul 10 j 05:31	17° $\Omega$ 01'53		minimum elong	-10180 Nov 15 j 09:58	14° $\Upsilon$ 35'45	0°19'49
evening set	-10186 Oct 07 j 11:15	20° $\Omega$ 00'37		max. Earth dist.	-10180 Nov 16 j 17:48	14° $\Upsilon$ 40'16	21.18681 AU
conjunction	-10186 Oct 23 j 04:50	20° $\Omega$ 54'34	0°43'55	morning rise	-10180 Dec 01 j 13:52	15° $\Upsilon$ 30'15	
minimum elong	-10186 Oct 23 j 04:50	20° $\Omega$ 54'34	0°44'20	retrograde	-10179 Mar 06 j 07:30	18° $\Upsilon$ 36'06	
max. Earth dist.	-10186 Oct 24 j 15:51	20° $\Omega$ 59'36	21.02602 AU	min. Earth dist.	-10179 May 22 j 10:50	16° $\Upsilon$ 39'35	19.19320 AU
morning rise	-10186 Nov 08 j 02:18	21° $\Omega$ 49'02		opposition	-10179 May 23 j 15:15	16° $\Upsilon$ 36'44	0°19'08
retrograde	-10185 Feb 10 j 13:24	24° $\Omega$ 56'44		direct	-10179 Aug 06 j 16:02	14° $\Upsilon$ 41'02	
opposition	-10185 Apr 29 j 23:11	22° $\Omega$ 57'31	0°46'30	evening set	-10179 Nov 03 j 14:17	17° $\Upsilon$ 36'32	
min. Earth dist.	-10185 Apr 28 j 14:45	23° $\Omega$ 00'45	19.04737 AU	conjunction	-10179 Nov 19 j 14:52	18° $\Upsilon$ 30'28	0°15'10
direct	-10185 Jul 14 j 11:13	21° $\Omega$ 01'37		minimum elong	-10179 Nov 19 j 14:52	18° $\Upsilon$ 30'28	0°15'21
evening set	-10185 Oct 11 j 15:27	23° $\Omega$ 59'40		behind sun begin	-10179 Nov 19 j 12:55	18° $\Upsilon$ 30'12	
conjunction	-10185 Oct 27 j 10:02	24° $\Omega$ 53'33	0°40'14	behind sun end	-10179 Nov 19 j 16:49	18° $\Upsilon$ 30'44	
minimum elong	-10185 Oct 27 j 10:02	24° $\Omega$ 53'33	0°40'37	max. Earth dist.	-10179 Nov 20 j 21:56	18° $\Upsilon$ 34'52	21.19759 AU
max. Earth dist.	-10185 Oct 28 j 20:45	24° $\Omega$ 58'32	21.06597 AU	morning rise	-10179 Dec 05 j 19:50	19° $\Upsilon$ 25'01	
morning rise	-10185 Nov 12 j 08:30	25° $\Omega$ 47'59		retrograde	-10178 Mar 10 j 15:23	22° $\Upsilon$ 30'44	
retrograde	-10184 Feb 14 j 22:34	28° $\Omega$ 55'18		opposition	-10178 May 27 j 20:19	20° $\Upsilon$ 31'20	0°14'11
min. Earth dist.	-10184 May 01 j 22:19	26° $\Omega$ 59'23	19.08444 AU	min. Earth dist.	-10178 May 26 j 15:50	20° $\Upsilon$ 34'12	19.20185 AU
opposition	-10184 May 03 j 07:13	26° $\Omega$ 56'06	0°42'19	direct	-10178 Aug 10 j 20:23	18° $\Upsilon$ 35'39	
direct	-10184 Jul 17 j 18:12	25° $\Omega$ 00'19		evening set	-10178 Nov 07 j 18:11	21° $\Upsilon$ 31'00	
evening set	-10184 Oct 14 j 19:33	27° $\Omega$ 57'45		conjunction	-10178 Nov 23 j 19:45	22° $\Upsilon$ 25'01	0°10'39
conjunction	-10184 Oct 30 j 15:00	28° $\Omega$ 51'37	0°36'23	minimum elong	-10178 Nov 23 j 19:46	22° $\Upsilon$ 25'01	0°10'48
minimum elong	-10184 Oct 30 j 15:00	28° $\Omega$ 51'37	0°36'45	behind sun begin	-10178 Nov 23 j 14:42	22° $\Upsilon$ 24'20	
max. Earth dist.	-10184 Nov 01 j 01:08	28° $\Omega$ 56'29	21.10019 AU	behind sun end	-10178 Nov 24 j 00:50	22° $\Upsilon$ 25'43	
morning rise	-10184 Nov 15 j 14:35	29° $\Omega$ 46'02		max. Earth dist.	-10178 Nov 25 j 01:55	22° $\Upsilon$ 29'16	21.20412 AU
retrograde	-10183 Feb 18 j 04:43	2° $\Upsilon$ 52'58		morning rise	-10177 Mar 14 j 21:03	26° $\Upsilon$ 25'17	
min. Earth dist.	-10183 May 06 j 07:35	0° $\Upsilon$ 56'53	19.11588 AU	retrograde	-10177 May 30 j 22:48	24° $\Upsilon$ 28'34	19.20621 AU
opposition	-10183 May 07 j 14:50	0° $\Upsilon$ 53'46	0°37'57	min. Earth dist.	-10177 Jun 01 j 01:17	24° $\Upsilon$ 25'54	0°09'09
direct	-10183 May 30 j 21:38	30° $\kappa$ $\Omega$		opposition	-10177 Aug 14 j 22:31	22° $\Upsilon$ 30'11	
evening set	-10183 Sep 09 j 23:00	0° $\Upsilon$		direct	-10177 Nov 11 j 22:25	25° $\Upsilon$ 25'31	
conjunction	-10183 Nov 03 j 19:48	2° $\Upsilon$ 48'46	0°32'22	evening set			
				conjunction	-10177 Nov 28 j 01:11	26° $\Upsilon$ 19'38	0°06'06
				minimum elong	-10177 Nov 28 j 01:11	26° $\Upsilon$ 19'37	0°06'13
				behind sun begin	-10177 Nov 27 j 18:53	26° $\Upsilon$ 18'46	
				behind sun end	-10177 Nov 28 j 07:28	26° $\Upsilon$ 20'29	

Attention, astronomical year style is used: The year -10177 in astronomical counting style is the year 10178 BCE in historical counting style.

max. Earth dist.	-10177 Nov 29 j 06:13	26° $\mathbb{M}$ 23'43	21.20642 AU	direct	-10171 Sep 06 j 17:47	16° $\mathbb{A}$ 04'27	
morning rise	-10177 Dec 14 j 08:20	27° $\mathbb{M}$ 14'20		evening set	-10171 Dec 05 j 09:16	19° $\mathbb{A}$ 01'26	
	-10176 Feb 18 j 06:27	0° $\mathbb{A}$					
retrograde	-10176 Mar 18 j 05:12	0° $\mathbb{A}$ 19'56		conjunction	-10171 Dec 21 j 18:23	19° $\mathbb{A}$ 56'25	-0°21'26
	-10176 Apr 16 j 11:30	30° $\mathbb{R}$ $\mathbb{M}$		minimum elong	-10171 Dec 21 j 18:22	19° $\mathbb{A}$ 56'25	0°21'35
min. Earth dist.	-10176 Jun 03 j 03:42	28° $\mathbb{M}$ 23'11	19.20615 AU	max. Earth dist.	-10171 Dec 22 j 11:39	19° $\mathbb{A}$ 58'50	21.10851 AU
opposition	-10176 Jun 04 j 05:46	28° $\mathbb{M}$ 20'34	0°04'05	morning rise	-10170 Jan 07 j 07:25	20° $\mathbb{A}$ 51'57	
direct	-10176 Aug 18 j 02:19	26° $\mathbb{M}$ 24'50		retrograde	-10170 Apr 12 j 03:14	23° $\mathbb{A}$ 58'16	
evening set	-10176 Nov 15 j 03:07	29° $\mathbb{M}$ 20'14		opposition	-10170 Jun 28 j 08:19	21° $\mathbb{A}$ 58'42	-0°26'09
	-10176 Nov 27 j 00:18	0° $\mathbb{A}$		min. Earth dist.	-10170 Jun 27 j 17:33	22° $\mathbb{A}$ 00'12	19.09087 AU
				direct	-10170 Sep 10 j 22:40	20° $\mathbb{A}$ 02'08	
conjunction	-10176 Dec 01 j 06:54	0° $\mathbb{A}$ 14'27	0°01'29	evening set	-10170 Dec 09 j 16:46	22° $\mathbb{A}$ 59'37	
minimum elong	-10176 Dec 01 j 06:54	0° $\mathbb{A}$ 14'27	0°01'33				
behind sun begin	-10176 Dec 01 j 00:14	0° $\mathbb{A}$ 13'33		conjunction	-10170 Dec 26 j 02:52	23° $\mathbb{A}$ 54'48	-0°25'48
behind sun end	-10176 Dec 01 j 13:33	0° $\mathbb{A}$ 15'22		minimum elong	-10170 Dec 26 j 02:52	23° $\mathbb{A}$ 54'48	0°25'58
max. Earth dist.	-10176 Dec 02 j 10:32	0° $\mathbb{A}$ 18'21	21.20394 AU	max. Earth dist.	-10170 Dec 26 j 17:56	23° $\mathbb{A}$ 56'55	21.07164 AU
morning rise	-10176 Dec 17 j 15:08	1° $\mathbb{A}$ 09'17		morning rise	-10169 Jan 11 j 16:47	24° $\mathbb{A}$ 50'32	
retrograde	-10175 Mar 22 j 11:19	4° $\mathbb{A}$ 14'53		retrograde	-10169 Apr 16 j 09:55	27° $\mathbb{A}$ 57'04	
desc. node	-10175 Mar 28 j 07:15	4° $\mathbb{A}$ 14'05		opposition	-10169 Jul 02 j 12:56	25° $\mathbb{A}$ 57'22	-0°30'56
min. Earth dist.	-10175 Jun 07 j 10:40	2° $\mathbb{A}$ 17'55	19.20117 AU	min. Earth dist.	-10169 Jul 02 j 01:04	25° $\mathbb{A}$ 58'35	19.05132 AU
opposition	-10175 Jun 08 j 10:20	2° $\mathbb{A}$ 15'32	-0°01'01	direct	-10169 Sep 15 j 01:38	24° $\mathbb{A}$ 00'30	
direct	-10175 Aug 22 j 04:35	0° $\mathbb{A}$ 19'46		evening set	-10169 Dec 14 j 00:56	26° $\mathbb{A}$ 58'36	
evening set	-10175 Nov 19 j 08:01	3° $\mathbb{A}$ 15'20					
				conjunction	-10169 Dec 30 j 12:05	27° $\mathbb{A}$ 53'59	-0°30'04
conjunction	-10175 Dec 05 j 12:55	4° $\mathbb{A}$ 09'40	-0°03'16	minimum elong	-10169 Dec 30 j 12:04	27° $\mathbb{A}$ 53'59	0°30'17
minimum elong	-10175 Dec 05 j 12:54	4° $\mathbb{A}$ 09'40	0°03'14	max. Earth dist.	-10169 Dec 31 j 00:38	27° $\mathbb{A}$ 55'46	21.02974 AU
behind sun begin	-10175 Dec 05 j 06:17	4° $\mathbb{A}$ 08'46		morning rise	-10168 Jan 16 j 02:50	28° $\mathbb{A}$ 49'54	
behind sun end	-10175 Dec 05 j 19:32	4° $\mathbb{A}$ 10'34			-10168 Feb 07 j 11:19	0° $\mathbb{M}$	
max. Earth dist.	-10175 Dec 06 j 14:58	4° $\mathbb{A}$ 13'20	21.19649 AU	retrograde	-10168 Apr 19 j 20:02	1° $\mathbb{M}$ 56'42	
morning rise	-10175 Dec 21 j 22:08	5° $\mathbb{A}$ 04'36			-10168 Jul 04 j 10:48	30° $\mathbb{R}$ $\mathbb{A}$	
retrograde	-10174 Mar 26 j 19:39	8° $\mathbb{A}$ 10'18		opposition	-10168 Jul 05 j 17:26	29° $\mathbb{A}$ 56'51	-0°35'34
opposition	-10174 Jun 12 j 14:41	6° $\mathbb{A}$ 10'57	-0°06'08	min. Earth dist.	-10168 Jul 05 j 06:55	29° $\mathbb{A}$ 57'56	19.00706 AU
min. Earth dist.	-10174 Jun 11 j 15:48	6° $\mathbb{A}$ 13'16	19.19099 AU	direct	-10168 Sep 18 j 07:22	27° $\mathbb{A}$ 59'40	
direct	-10174 Aug 26 j 08:14	4° $\mathbb{A}$ 15'07			-10168 Nov 28 j 23:19	0° $\mathbb{M}$	
evening set	-10174 Nov 23 j 13:36	7° $\mathbb{A}$ 10'56		evening set	-10168 Dec 17 j 09:46	0° $\mathbb{M}$ 58'26	
conjunction	-10174 Dec 09 j 19:28	8° $\mathbb{A}$ 05'24	-0°07'52	conjunction	-10167 Jan 02 j 21:49	1° $\mathbb{M}$ 54'03	-0°34'11
minimum elong	-10174 Dec 09 j 19:29	8° $\mathbb{A}$ 05'24	0°07'53	minimum elong	-10167 Jan 02 j 21:48	1° $\mathbb{M}$ 54'03	0°34'26
behind sun begin	-10174 Dec 09 j 13:30	8° $\mathbb{A}$ 04'35		max. Earth dist.	-10167 Jan 03 j 08:15	1° $\mathbb{M}$ 55'32	20.98326 AU
behind sun end	-10174 Dec 10 j 01:28	8° $\mathbb{A}$ 06'13		morning rise	-10167 Jan 19 j 13:16	2° $\mathbb{M}$ 50'11	
max. Earth dist.	-10174 Dec 10 j 19:41	8° $\mathbb{A}$ 08'48	21.18348 AU	retrograde	-10167 Apr 24 j 03:28	5° $\mathbb{M}$ 57'16	
morning rise	-10174 Dec 26 j 05:43	9° $\mathbb{A}$ 00'29		opposition	-10167 Jul 09 j 22:19	3° $\mathbb{M}$ 57'17	-0°40'04
retrograde	-10173 Mar 31 j 02:06	12° $\mathbb{A}$ 06'17		min. Earth dist.	-10167 Jul 09 j 14:33	3° $\mathbb{M}$ 58'05	18.95863 AU
opposition	-10173 Jun 16 j 19:06	10° $\mathbb{A}$ 06'55	-0°11'14	direct	-10167 Sep 22 j 10:46	1° $\mathbb{M}$ 59'45	
min. Earth dist.	-10173 Jun 15 j 22:58	10° $\mathbb{A}$ 08'58	19.17508 AU	evening set	-10167 Dec 21 j 18:59	4° $\mathbb{M}$ 59'17	
direct	-10173 Aug 30 j 10:48	8° $\mathbb{A}$ 10'59					
evening set	-10173 Nov 27 j 19:36	11° $\mathbb{A}$ 07'07		conjunction	-10166 Jan 07 j 07:57	5° $\mathbb{M}$ 55'08	-0°38'09
				minimum elong	-10166 Jan 07 j 07:56	5° $\mathbb{M}$ 55'08	0°38'26
conjunction	-10173 Dec 14 j 02:39	12° $\mathbb{A}$ 01'44	-0°12'26	max. Earth dist.	-10166 Jan 07 j 15:58	5° $\mathbb{M}$ 56'16	20.93309 AU
minimum elong	-10173 Dec 14 j 02:39	12° $\mathbb{A}$ 01'44	0°12'30	morning rise	-10166 Jan 24 j 00:09	6° $\mathbb{M}$ 51'28	
behind sun begin	-10173 Dec 13 j 22:23	12° $\mathbb{A}$ 01'09		retrograde	-10166 Apr 28 j 13:53	9° $\mathbb{M}$ 58'56	
behind sun end	-10173 Dec 14 j 06:55	12° $\mathbb{A}$ 02'19		opposition	-10166 Jul 14 j 03:22	7° $\mathbb{M}$ 58'47	-0°44'22
max. Earth dist.	-10173 Dec 15 j 00:39	12° $\mathbb{A}$ 04'50	21.16470 AU	min. Earth dist.	-10166 Jul 13 j 20:51	7° $\mathbb{M}$ 59'28	18.90676 AU
morning rise	-10173 Dec 30 j 13:52	12° $\mathbb{A}$ 56'58		direct	-10166 Sep 26 j 17:12	6° $\mathbb{M}$ 00'55	
retrograde	-10172 Apr 03 j 11:07	16° $\mathbb{A}$ 02'54		evening set	-10166 Dec 26 j 05:08	9° $\mathbb{M}$ 01'18	
opposition	-10172 Jun 19 j 23:28	14° $\mathbb{A}$ 03'31	-0°16'17				
min. Earth dist.	-10172 Jun 19 j 04:30	14° $\mathbb{A}$ 05'26	19.15315 AU	conjunction	-10165 Jan 11 j 18:58	9° $\mathbb{M}$ 57'24	-0°41'58
direct	-10172 Sep 02 j 14:57	12° $\mathbb{A}$ 07'24		minimum elong	-10165 Jan 11 j 18:58	9° $\mathbb{M}$ 57'24	0°42'17
evening set	-10172 Dec 01 j 02:15	15° $\mathbb{A}$ 03'56		max. Earth dist.	-10165 Jan 12 j 00:58	9° $\mathbb{M}$ 58'15	20.87954 AU
				morning rise	-10165 Jan 28 j 11:46	10° $\mathbb{M}$ 53'57	
conjunction	-10172 Dec 17 j 10:17	15° $\mathbb{A}$ 58'44	-0°16'58	retrograde	-10165 May 02 j 22:33	14° $\mathbb{M}$ 01'48	
minimum elong	-10172 Dec 17 j 10:16	15° $\mathbb{A}$ 58'44	0°17'04	opposition	-10165 Jul 18 j 08:46	12° $\mathbb{M}$ 01'33	-0°48'30
max. Earth dist.	-10172 Dec 18 j 05:59	16° $\mathbb{A}$ 01'30	21.13958 AU	min. Earth dist.	-10165 Jul 18 j 04:56	12° $\mathbb{M}$ 01'57	18.85175 AU
morning rise	-10171 Jan 02 j 22:24	16° $\mathbb{A}$ 54'07		direct	-10165 Sep 30 j 21:47	10° $\mathbb{M}$ 03'20	
retrograde	-10171 Apr 07 j 17:34	20° $\mathbb{A}$ 00'13		evening set	-10165 Dec 30 j 16:04	13° $\mathbb{M}$ 04'38	
min. Earth dist.	-10171 Jun 23 j 11:51	18° $\mathbb{A}$ 02'24	19.12493 AU				
opposition	-10171 Jun 24 j 03:53	18° $\mathbb{A}$ 00'45	-0°21'16	conjunction	-10164 Jan 16 j 06:45	14° $\mathbb{M}$ 01'00	-0°45'35

Attention, astronomical year style is used: The year -10164 in astronomical counting style is the year 10165 BCE in historical counting style.

minimum elong	-10164 Jan 16 j 06:45	14° $\mathcal{M}$ 01'00	0°45'55	max. Earth dist.	-10158 Feb 10 j 10:31	8° $\mathcal{A}$ 56'58	20.42886 AU
max. Earth dist.	-10164 Jan 16 j 10:02	14° $\mathcal{M}$ 01'28	20.82322 AU	morning rise	-10158 Feb 27 j 19:00	9° $\mathcal{A}$ 57'08	
morning rise	-10164 Feb 02 j 00:13	14° $\mathcal{M}$ 57'47		retrograde	-10158 Jun 01 j 11:27	13° $\mathcal{A}$ 08'48	
	-10164 Feb 02 j 16:07	15° $\mathcal{M}$		opposition	-10158 Aug 15 j 13:25	11° $\mathcal{A}$ 07'56	-1°10'02
retrograde	-10164 May 06 j 09:41	18° $\mathcal{M}$ 06'05		min. Earth dist.	-10158 Aug 16 j 00:36	11° $\mathcal{A}$ 06'44	18.39164 AU
opposition	-10164 Jul 21 j 14:32	16° $\mathcal{M}$ 05'43	-0°52'24	direct	-10158 Oct 29 j 09:31	9° $\mathcal{A}$ 07'04	
min. Earth dist.	-10164 Jul 21 j 12:05	16° $\mathcal{M}$ 05'58	18.79406 AU	evening set	-10157 Jan 29 j 22:40	12° $\mathcal{A}$ 16'48	
	-10164 Aug 18 j 11:00	15° $\mathcal{R}$ $\mathcal{M}$					
direct	-10164 Oct 04 j 04:37	14° $\mathcal{M}$ 07'09		conjunction	-10157 Feb 15 j 17:40	13° $\mathcal{A}$ 15'13	-1°03'57
	-10164 Nov 19 j 02:36	15° $\mathcal{M}$		minimum elong	-10157 Feb 15 j 17:40	13° $\mathcal{A}$ 15'13	1°04'28
evening set	-10163 Jan 03 j 03:50	17° $\mathcal{M}$ 09'28		max. Earth dist.	-10157 Feb 15 j 02:41	13° $\mathcal{A}$ 13'02	20.35338 AU
				morning rise	-10157 Mar 04 j 13:05	14° $\mathcal{A}$ 13'45	
conjunction	-10163 Jan 19 j 19:18	18° $\mathcal{M}$ 06'07	-0°48'59	retrograde	-10157 Jun 06 j 01:26	17° $\mathcal{A}$ 26'01	
minimum elong	-10163 Jan 19 j 19:17	18° $\mathcal{M}$ 06'07	0°49'23	opposition	-10157 Aug 19 j 23:34	15° $\mathcal{A}$ 25'01	-1°11'48
max. Earth dist.	-10163 Jan 19 j 20:34	18° $\mathcal{M}$ 06'18	20.76409 AU	min. Earth dist.	-10157 Aug 20 j 13:22	15° $\mathcal{A}$ 23'33	18.31502 AU
morning rise	-10163 Feb 05 j 13:09	19° $\mathcal{M}$ 03'08		direct	-10157 Nov 02 j 20:45	13° $\mathcal{A}$ 23'41	
retrograde	-10163 May 10 j 19:46	22° $\mathcal{M}$ 11'54		evening set	-10156 Feb 03 j 17:19	16° $\mathcal{A}$ 34'47	
opposition	-10163 Jul 25 j 20:51	20° $\mathcal{M}$ 11'28	-0°56'04				
min. Earth dist.	-10163 Jul 25 j 21:03	20° $\mathcal{M}$ 11'27	18.73368 AU	conjunction	-10156 Feb 20 j 12:33	17° $\mathcal{A}$ 33'30	-1°05'19
direct	-10163 Oct 08 j 10:59	18° $\mathcal{M}$ 12'34		minimum elong	-10156 Feb 20 j 12:33	17° $\mathcal{A}$ 33'30	1°05'53
evening set	-10162 Jan 07 j 16:29	21° $\mathcal{M}$ 15'58		max. Earth dist.	-10156 Feb 19 j 17:51	17° $\mathcal{A}$ 30'46	20.27586 AU
				morning rise	-10156 Mar 08 j 08:07	18° $\mathcal{A}$ 32'18	
conjunction	-10162 Jan 24 j 08:38	22° $\mathcal{M}$ 12'54	-0°52'11	retrograde	-10156 Jun 09 j 17:02	21° $\mathcal{A}$ 45'12	
minimum elong	-10162 Jan 24 j 08:38	22° $\mathcal{M}$ 12'54	0°52'36	opposition	-10156 Aug 23 j 10:30	19° $\mathcal{A}$ 44'01	-1°13'09
max. Earth dist.	-10162 Jan 24 j 06:58	22° $\mathcal{M}$ 12'39	20.70258 AU	min. Earth dist.	-10156 Aug 24 j 02:19	19° $\mathcal{A}$ 42'20	18.23679 AU
morning rise	-10162 Feb 10 j 03:02	23° $\mathcal{M}$ 10'10		direct	-10156 Nov 06 j 10:22	17° $\mathcal{A}$ 42'11	
retrograde	-10162 May 15 j 07:35	26° $\mathcal{M}$ 19'28		evening set	-10155 Feb 07 j 12:35	20° $\mathcal{A}$ 54'41	
opposition	-10162 Jul 30 j 03:35	24° $\mathcal{M}$ 18'57	-0°59'29				
min. Earth dist.	-10162 Jul 30 j 05:20	24° $\mathcal{M}$ 18'46	18.67091 AU	conjunction	-10155 Feb 24 j 08:13	21° $\mathcal{A}$ 53'43	-1°06'20
direct	-10162 Oct 12 j 18:34	22° $\mathcal{M}$ 19'42		minimum elong	-10155 Feb 24 j 08:12	21° $\mathcal{A}$ 53'43	1°06'55
evening set	-10161 Jan 12 j 06:04	25° $\mathcal{M}$ 24'16		max. Earth dist.	-10155 Feb 23 j 12:06	21° $\mathcal{A}$ 50'45	20.19693 AU
				morning rise	-10155 Mar 13 j 03:30	22° $\mathcal{A}$ 52'45	
conjunction	-10161 Jan 28 j 22:59	26° $\mathcal{M}$ 21'29	-0°55'07	retrograde	-10155 Jun 14 j 08:18	26° $\mathcal{A}$ 06'16	
minimum elong	-10161 Jan 28 j 22:58	26° $\mathcal{M}$ 21'29	0°55'34	opposition	-10155 Aug 27 j 22:12	24° $\mathcal{A}$ 04'57	-1°14'07
max. Earth dist.	-10161 Jan 28 j 19:14	26° $\mathcal{M}$ 20'57	20.63840 AU	min. Earth dist.	-10155 Aug 28 j 16:06	24° $\mathcal{A}$ 03'02	18.15754 AU
morning rise	-10161 Feb 14 j 17:40	27° $\mathcal{M}$ 19'00		direct	-10155 Nov 10 j 23:37	22° $\mathcal{A}$ 02'37	
	-10161 Apr 15 j 19:23	0° $\mathcal{A}$		evening set	-10154 Feb 12 j 08:55	25° $\mathcal{A}$ 16'32	
retrograde	-10161 May 19 j 19:20	0° $\mathcal{A}$ 28'52		max. Earth dist.	-10154 Feb 28 j 05:06	26° $\mathcal{A}$ 12'22	20.11762 AU
	-10161 Jun 23 j 00:15	30° $\mathcal{R}$ $\mathcal{M}$					
opposition	-10161 Aug 03 j 11:04	28° $\mathcal{M}$ 28'17	-1°02'36	conjunction	-10154 Mar 01 j 04:34	26° $\mathcal{A}$ 15'51	-1°06'59
min. Earth dist.	-10161 Aug 03 j 15:37	28° $\mathcal{M}$ 27'48	18.60536 AU	minimum elong	-10154 Mar 01 j 04:34	26° $\mathcal{A}$ 15'51	1°07'34
direct	-10161 Oct 17 j 02:45	26° $\mathcal{M}$ 28'41		morning rise	-10154 Mar 17 j 23:53	27° $\mathcal{A}$ 15'09	
evening set	-10160 Jan 16 j 20:50	29° $\mathcal{M}$ 34'28			-10154 May 16 j 14:34	0° $\mathcal{B}$	
	-10160 Jan 24 j 08:27	0° $\mathcal{A}$		retrograde	-10154 Jun 19 j 00:50	0° $\mathcal{B}$ 29'19	
					-10154 Jul 22 j 19:06	30° $\mathcal{R}$ $\mathcal{A}$	
conjunction	-10160 Feb 02 j 14:16	0° $\mathcal{A}$ 31'59	-0°57'47	opposition	-10154 Sep 01 j 10:33	28° $\mathcal{A}$ 27'49	-1°14'39
minimum elong	-10160 Feb 02 j 14:16	0° $\mathcal{A}$ 31'59	0°58'16	min. Earth dist.	-10154 Sep 02 j 06:20	28° $\mathcal{A}$ 25'42	18.07842 AU
max. Earth dist.	-10160 Feb 02 j 07:06	0° $\mathcal{A}$ 30'57	20.57150 AU	direct	-10154 Nov 15 j 14:35	26° $\mathcal{A}$ 24'58	
morning rise	-10160 Feb 19 j 09:23	1° $\mathcal{A}$ 29'45		evening set	-10153 Feb 17 j 06:00	29° $\mathcal{A}$ 40'21	
retrograde	-10160 May 23 j 08:09	4° $\mathcal{A}$ 40'12			-10153 Feb 22 j 20:31	0° $\mathcal{B}$	
opposition	-10160 Aug 06 j 19:02	2° $\mathcal{A}$ 39'33	-1°05'26	max. Earth dist.	-10153 Mar 05 j 01:31	0° $\mathcal{B}$ 36'20	20.03866 AU
min. Earth dist.	-10160 Aug 07 j 01:28	2° $\mathcal{A}$ 38'52	18.53706 AU				
direct	-10160 Oct 20 j 12:14	0° $\mathcal{A}$ 39'33		conjunction	-10153 Mar 06 j 01:57	0° $\mathcal{B}$ 39'58	-1°07'15
evening set	-10159 Jan 20 j 12:32	3° $\mathcal{A}$ 46'38		minimum elong	-10153 Mar 06 j 01:57	0° $\mathcal{B}$ 39'58	1°07'50
				morning rise	-10153 Mar 22 j 20:52	1° $\mathcal{B}$ 39'31	
conjunction	-10159 Feb 06 j 06:35	4° $\mathcal{A}$ 44'26	-1°00'09	retrograde	-10153 Jun 23 j 18:06	4° $\mathcal{B}$ 54'20	
minimum elong	-10159 Feb 06 j 06:35	4° $\mathcal{A}$ 44'26	1°00'39	opposition	-10153 Sep 05 j 23:52	2° $\mathcal{B}$ 52'42	-1°14'45
max. Earth dist.	-10159 Feb 05 j 21:15	4° $\mathcal{A}$ 43'05	20.50159 AU	min. Earth dist.	-10153 Sep 06 j 21:14	2° $\mathcal{B}$ 50'23	17.99995 AU
morning rise	-10159 Feb 23 j 01:45	5° $\mathcal{A}$ 42'28		direct	-10153 Nov 20 j 05:57	0° $\mathcal{B}$ 49'22	
retrograde	-10159 May 27 j 21:09	8° $\mathcal{A}$ 53'31		evening set	-10152 Feb 22 j 04:08	4° $\mathcal{B}$ 06'12	
opposition	-10159 Aug 11 j 03:55	6° $\mathcal{A}$ 52'46	-1°07'55				
min. Earth dist.	-10159 Aug 11 j 13:06	6° $\mathcal{A}$ 51'48	18.46571 AU	conjunction	-10152 Mar 09 j 23:54	5° $\mathcal{B}$ 06'07	-1°07'07
direct	-10159 Oct 24 j 21:49	4° $\mathcal{A}$ 52'22		minimum elong	-10152 Mar 09 j 23:54	5° $\mathcal{B}$ 06'07	1°07'41
evening set	-10158 Jan 25 j 05:04	8° $\mathcal{A}$ 00'45		max. Earth dist.	-10152 Mar 08 j 20:23	5° $\mathcal{B}$ 02'00	19.96085 AU
				morning rise	-10152 Mar 26 j 18:36	6° $\mathcal{B}$ 05'54	
conjunction	-10158 Feb 10 j 23:31	8° $\mathcal{A}$ 58'51	-1°02'13	retrograde	-10152 Jun 27 j 11:49	9° $\mathcal{B}$ 21'23	
minimum elong	-10158 Feb 10 j 23:31	8° $\mathcal{A}$ 58'51	1°02'44	opposition	-10152 Sep 09 j 14:01	7° $\mathcal{B}$ 19'38	-1°14'25

Attention, astronomical year style is used: The year -10152 in astronomical counting style is the year 10153 BCE in historical counting style.

min. Earth dist.	-10152 Sep 10 j 13:06	7° $\overline{3}$ 17'08	17.92313 AU	conjunction	-10145 Apr 13 j 07:06	7° $\approx$ 09'22	-0°54'41
direct	-10152 Nov 23 j 22:12	5° $\overline{3}$ 15'50		minimum elong	-10145 Apr 13 j 07:06	7° $\approx$ 09'22	0°55'11
evening set	-10151 Feb 26 j 02:55	8° $\overline{3}$ 34'09		morning rise	-10145 Apr 29 j 21:07	8° $\approx$ 10'31	
				retrograde	-10145 Jul 30 j 16:33	11° $\approx$ 30'34	
conjunction	-10151 Mar 14 j 22:46	9° $\overline{3}$ 34'21	-1°06'35	opposition	-10145 Oct 11 j 20:31	9° $\approx$ 28'33	-0°59'12
minimum elong	-10151 Mar 14 j 22:47	9° $\overline{3}$ 34'21	1°07'10	min. Earth dist.	-10145 Oct 13 j 02:43	9° $\approx$ 25'15	17.46199 AU
max. Earth dist.	-10151 Mar 13 j 18:47	9° $\overline{3}$ 30'09	19.88496 AU	direct	-10145 Dec 26 j 19:14	7° $\approx$ 22'30	
morning rise	-10151 Mar 31 j 16:54	10° $\overline{3}$ 34'22		evening set	-10144 Mar 31 j 17:56	10° $\approx$ 50'27	
retrograde	-10151 Jul 02 j 07:25	13° $\overline{3}$ 50'31		max. Earth dist.	-10144 Apr 15 j 21:57	11° $\approx$ 46'31	19.43407 AU
opposition	-10151 Sep 14 j 05:09	11° $\overline{3}$ 48'40	-1°13'38				
min. Earth dist.	-10151 Sep 15 j 05:13	11° $\overline{3}$ 46'04	17.84843 AU	conjunction	-10144 Apr 17 j 10:37	11° $\approx$ 52'13	-0°51'18
direct	-10151 Nov 28 j 15:23	9° $\overline{3}$ 44'29		minimum elong	-10144 Apr 17 j 10:37	11° $\approx$ 52'13	0°51'46
evening set	-10150 Mar 03 j 02:35	13° $\overline{3}$ 04'15		morning rise	-10144 May 03 j 23:36	12° $\approx$ 53'28	
					-10144 Jun 12 j 02:14	15° $\approx$	
conjunction	-10150 Mar 19 j 22:09	14° $\overline{3}$ 04'44	-1°05'38	retrograde	-10144 Aug 03 j 14:33	16° $\approx$ 14'05	
minimum elong	-10150 Mar 19 j 22:09	14° $\overline{3}$ 04'44	1°06'12		-10144 Sep 26 j 23:27	15° $\approx$	
max. Earth dist.	-10150 Mar 18 j 15:31	14° $\overline{3}$ 00'06	19.81157 AU	opposition	-10144 Oct 15 j 18:42	14° $\approx$ 12'00	-0°55'14
morning rise	-10150 Apr 05 j 15:56	15° $\overline{3}$ 04'59		min. Earth dist.	-10144 Oct 17 j 02:27	14° $\approx$ 08'32	17.40852 AU
retrograde	-10150 Jul 07 j 02:33	18° $\overline{3}$ 21'49		direct	-10144 Dec 30 j 19:35	12° $\approx$ 05'41	
opposition	-10150 Sep 18 j 21:12	16° $\overline{3}$ 19'54	-1°12'23		-10143 Mar 27 j 06:04	15° $\approx$	
min. Earth dist.	-10150 Sep 19 j 22:57	16° $\overline{3}$ 17'06	17.77652 AU	evening set	-10143 Apr 05 j 22:37	15° $\approx$ 34'42	
direct	-10150 Dec 03 j 08:56	14° $\overline{3}$ 15'19		max. Earth dist.	-10143 Apr 21 j 01:22	16° $\approx$ 30'48	19.38253 AU
evening set	-10149 Mar 08 j 03:09	17° $\overline{3}$ 36'34					
				conjunction	-10143 Apr 22 j 14:28	16° $\approx$ 36'36	-0°47'32
conjunction	-10149 Mar 24 j 22:37	18° $\overline{3}$ 37'19	-1°04'17	minimum elong	-10143 Apr 22 j 14:29	16° $\approx$ 36'36	0°48'00
minimum elong	-10149 Mar 24 j 22:37	18° $\overline{3}$ 37'19	1°04'51	morning rise	-10143 May 09 j 02:32	17° $\approx$ 37'57	
max. Earth dist.	-10149 Mar 23 j 15:40	18° $\overline{3}$ 32'37	19.74106 AU	retrograde	-10143 Aug 08 j 15:03	20° $\approx$ 59'03	
morning rise	-10149 Apr 10 j 15:42	19° $\overline{3}$ 37'46		opposition	-10143 Oct 20 j 17:29	18° $\approx$ 56'54	-0°50'52
retrograde	-10149 Jul 12 j 00:07	22° $\overline{3}$ 55'17		min. Earth dist.	-10143 Oct 22 j 00:37	18° $\approx$ 53'30	17.35894 AU
opposition	-10149 Sep 23 j 14:08	20° $\overline{3}$ 53'21	-1°10'40	direct	-10142 Jan 04 j 22:19	16° $\approx$ 50'19	
min. Earth dist.	-10149 Sep 24 j 16:33	20° $\overline{3}$ 50'28	17.70746 AU	evening set	-10142 Apr 11 j 03:33	20° $\approx$ 20'19	
direct	-10149 Dec 08 j 03:59	18° $\overline{3}$ 48'26		max. Earth dist.	-10142 Apr 26 j 05:41	21° $\approx$ 16'32	19.33508 AU
evening set	-10148 Mar 12 j 04:45	22° $\overline{3}$ 11'09					
				conjunction	-10142 Apr 27 j 18:38	21° $\approx$ 22'19	-0°43'26
conjunction	-10148 Mar 28 j 23:43	23° $\overline{3}$ 12'08	-1°02'30	minimum elong	-10142 Apr 27 j 18:38	21° $\approx$ 22'19	0°43'51
minimum elong	-10148 Mar 28 j 23:44	23° $\overline{3}$ 12'08	1°03'04	morning rise	-10142 May 14 j 05:32	22° $\approx$ 23'45	
max. Earth dist.	-10148 Mar 27 j 14:32	23° $\overline{3}$ 07'04	19.67354 AU	retrograde	-10142 Aug 13 j 14:05	25° $\approx$ 45'17	
morning rise	-10148 Apr 14 j 16:13	24° $\overline{3}$ 12'48		opposition	-10142 Oct 25 j 17:18	23° $\approx$ 43'04	-0°46'07
retrograde	-10148 Jul 15 j 20:41	27° $\overline{3}$ 31'00		min. Earth dist.	-10142 Oct 27 j 01:34	23° $\approx$ 39'32	17.31382 AU
opposition	-10148 Sep 27 j 08:17	25° $\overline{3}$ 29'02	-1°08'30	direct	-10141 Jan 10 j 00:16	21° $\approx$ 36'15	
min. Earth dist.	-10148 Sep 28 j 12:27	25° $\overline{3}$ 25'58	17.64160 AU	evening set	-10141 Apr 16 j 08:50	25° $\approx$ 07'07	
direct	-10148 Dec 11 j 23:34	23° $\overline{3}$ 23'49		max. Earth dist.	-10141 May 01 j 09:36	26° $\approx$ 03'19	19.29253 AU
evening set	-10147 Mar 17 j 06:50	26° $\overline{3}$ 47'56					
max. Earth dist.	-10147 Apr 01 j 16:01	27° $\overline{3}$ 44'01	19.60917 AU	conjunction	-10141 May 02 j 22:50	26° $\approx$ 09'11	-0°39'01
				minimum elong	-10141 May 02 j 22:51	26° $\approx$ 09'11	0°39'24
conjunction	-10147 Apr 03 j 01:27	27° $\overline{3}$ 49'09	-1°00'18	morning rise	-10141 May 19 j 08:45	27° $\approx$ 10'40	
minimum elong	-10147 Apr 03 j 01:27	27° $\overline{3}$ 49'09	1°00'50		-10141 Jul 15 j 14:18	0° $\overline{H}$	
morning rise	-10147 Apr 19 j 17:09	28° $\overline{3}$ 50'00		retrograde	-10141 Aug 18 j 15:34	0° $\overline{H}$ 32'35	
	-10147 May 10 j 03:27	0° $\approx$			-10141 Sep 22 j 09:16	30° $\approx$	
retrograde	-10147 Jul 20 j 19:26	2° $\approx$ 08'51		opposition	-10141 Oct 30 j 17:42	28° $\approx$ 30'17	-0°41'03
opposition	-10147 Oct 02 j 03:21	0° $\approx$ 06'53	-1°05'51	min. Earth dist.	-10141 Nov 01 j 00:51	28° $\approx$ 26'53	17.27387 AU
min. Earth dist.	-10147 Oct 03 j 07:48	0° $\approx$ 03'47	17.57869 AU	direct	-10140 Jan 15 j 04:38	26° $\approx$ 23'15	
	-10147 Oct 04 j 18:24	30° $\overline{R}$ $\overline{3}$		evening set	-10140 Apr 20 j 14:09	29° $\approx$ 54'52	
direct	-10147 Dec 16 j 20:52	28° $\overline{3}$ 01'23			-10140 Apr 21 j 23:30	0° $\overline{H}$	
	-10146 Feb 24 j 17:12	0° $\approx$		max. Earth dist.	-10140 May 05 j 15:21	0° $\overline{H}$ 51'20	19.25541 AU
evening set	-10146 Mar 22 j 09:56	1° $\approx$ 26'51					
max. Earth dist.	-10146 Apr 06 j 16:44	2° $\approx$ 22'52	19.54772 AU	conjunction	-10140 May 07 j 03:14	0° $\overline{H}$ 56'59	-0°34'20
				minimum elong	-10140 May 07 j 03:14	0° $\overline{H}$ 56'59	0°34'40
conjunction	-10146 Apr 08 j 03:56	2° $\approx$ 28'17	-0°57'42	morning rise	-10140 May 23 j 11:49	1° $\overline{H}$ 58'29	
minimum elong	-10146 Apr 08 j 03:57	2° $\approx$ 28'17	0°58'14	retrograde	-10140 Aug 22 j 15:28	5° $\overline{H}$ 20'44	
morning rise	-10146 Apr 24 j 18:50	3° $\approx$ 29'17		opposition	-10140 Nov 03 j 19:05	3° $\overline{H}$ 18'24	-0°35'41
retrograde	-10146 Jul 25 j 16:49	6° $\approx$ 48'46		min. Earth dist.	-10140 Nov 05 j 02:35	3° $\overline{H}$ 14'57	17.23978 AU
opposition	-10146 Oct 06 j 23:25	4° $\approx$ 46'47	-1°02'45	direct	-10139 Jan 19 j 07:14	1° $\overline{H}$ 11'12	
min. Earth dist.	-10146 Oct 08 j 05:43	4° $\approx$ 43'28	17.51885 AU	evening set	-10139 Apr 25 j 19:25	4° $\overline{H}$ 43'25	
direct	-10146 Dec 21 j 18:47	2° $\approx$ 41'00		max. Earth dist.	-10139 May 10 j 19:28	5° $\overline{H}$ 39'53	19.22459 AU
evening set	-10145 Mar 27 j 13:40	6° $\approx$ 07'46					
max. Earth dist.	-10145 Apr 11 j 19:22	7° $\approx$ 03'50	19.48937 AU	conjunction	-10139 May 12 j 07:15	5° $\overline{H}$ 45'33	-0°29'23

Attention, astronomical year style is used: The year -10139 in astronomical counting style is the year 10140 BCE in historical counting style.

minimum elong	-10139 May 12 j 07:15	5° $\text{H}$ 45'33	0°29'41	conjunction	-10133 Jun 11 j 04:26	4° $\text{V}$ 46'16	0°03'36
morning rise	-10139 May 28 j 14:49	6° $\text{H}$ 47'03		minimum elong	-10133 Jun 11 j 04:25	4° $\text{V}$ 46'16	0°03'35
retrograde	-10139 Aug 27 j 17:47	10° $\text{H}$ 09'37		behind sun begin	-10133 Jun 10 j 21:49	4° $\text{V}$ 45'14	
opposition	-10139 Nov 08 j 20:56	8° $\text{H}$ 07'13	-0°30'02	behind sun end	-10133 Jun 11 j 11:01	4° $\text{V}$ 47'17	
min. Earth dist.	-10139 Nov 10 j 02:50	8° $\text{H}$ 03'57	17.21225 AU	morning rise	-10133 Jun 27 j 04:24	5° $\text{V}$ 47'13	
direct	-10138 Jan 24 j 12:19	5° $\text{H}$ 59'54		retrograde	-10133 Sep 26 j 04:03	9° $\text{V}$ 10'42	
evening set	-10138 May 01 j 00:39	9° $\text{H}$ 32'38		opposition	-10133 Dec 08 j 19:44	7° $\text{V}$ 08'41	0°07'01
max. Earth dist.	-10138 May 16 j 02:01	10° $\text{H}$ 29'27	19.20046 AU	min. Earth dist.	-10133 Dec 09 j 17:20	7° $\text{V}$ 06'21	17.19681 AU
				direct	-10132 Feb 23 j 19:39	5° $\text{V}$ 02'07	
conjunction	-10138 May 17 j 11:29	10° $\text{H}$ 34'45	-0°24'14	evening set	-10132 May 30 j 03:48	8° $\text{V}$ 35'14	
minimum elong	-10138 May 17 j 11:29	10° $\text{H}$ 34'45	0°24'30	max. Earth dist.	-10132 Jun 14 j 08:30	9° $\text{V}$ 33'04	19.20601 AU
morning rise	-10138 Jun 02 j 17:39	11° $\text{H}$ 36'14					
retrograde	-10138 Sep 01 j 18:24	14° $\text{H}$ 59'02		conjunction	-10132 Jun 15 j 06:44	9° $\text{V}$ 36'37	0°09'13
opposition	-10138 Nov 13 j 23:26	12° $\text{H}$ 56'38	-0°24'11	minimum elong	-10132 Jun 15 j 06:43	9° $\text{V}$ 36'37	0°09'16
min. Earth dist.	-10138 Nov 15 j 04:58	12° $\text{H}$ 53'24	17.19162 AU	behind sun begin	-10132 Jun 15 j 01:07	9° $\text{V}$ 35'45	
direct	-10137 Jan 29 j 15:43	10° $\text{H}$ 49'16		behind sun end	-10132 Jun 15 j 12:20	9° $\text{V}$ 37'30	
evening set	-10137 May 06 j 06:00	14° $\text{H}$ 22'24		morning rise	-10132 Jul 01 j 05:26	10° $\text{V}$ 37'24	
max. Earth dist.	-10137 May 21 j 06:21	15° $\text{H}$ 19'13	19.18359 AU	retrograde	-10132 Sep 30 j 05:48	14° $\text{V}$ 00'50	
				opposition	-10132 Dec 13 j 00:50	11° $\text{V}$ 58'55	0°13'17
conjunction	-10137 May 22 j 15:25	15° $\text{H}$ 24'28	-0°18'54	min. Earth dist.	-10132 Dec 13 j 20:01	11° $\text{V}$ 56'52	17.21703 AU
minimum elong	-10137 May 22 j 15:25	15° $\text{H}$ 24'28	0°19'06	direct	-10131 Feb 28 j 02:57	9° $\text{V}$ 52'37	
morning rise	-10137 Jun 07 j 20:29	16° $\text{H}$ 25'54		evening set	-10131 Jun 04 j 06:48	13° $\text{V}$ 25'17	
retrograde	-10137 Sep 06 j 21:03	19° $\text{H}$ 48'55		max. Earth dist.	-10131 Jun 19 j 11:56	14° $\text{V}$ 23'12	19.22898 AU
opposition	-10137 Nov 19 j 02:34	17° $\text{H}$ 46'32	-0°18'08				
min. Earth dist.	-10137 Nov 20 j 06:16	17° $\text{H}$ 43'31	17.17844 AU	conjunction	-10131 Jun 20 j 08:21	14° $\text{V}$ 26'28	0°14'46
direct	-10136 Feb 03 j 21:11	15° $\text{H}$ 39'13		minimum elong	-10131 Jun 20 j 08:21	14° $\text{V}$ 26'28	0°14'51
evening set	-10136 May 10 j 10:51	19° $\text{H}$ 12'36		behind sun begin	-10131 Jun 20 j 05:40	14° $\text{V}$ 26'02	
				behind sun end	-10131 Jun 20 j 11:02	14° $\text{V}$ 26'53	
conjunction	-10136 May 26 j 19:10	20° $\text{H}$ 14'36	-0°13'25	morning rise	-10131 Jul 06 j 05:54	15° $\text{V}$ 27'03	
minimum elong	-10136 May 26 j 19:10	20° $\text{H}$ 14'36	0°13'36	retrograde	-10131 Oct 05 j 06:13	18° $\text{V}$ 50'22	
behind sun begin	-10136 May 26 j 15:31	20° $\text{H}$ 14'02		opposition	-10131 Dec 18 j 06:03	16° $\text{V}$ 48'33	0°19'27
behind sun end	-10136 May 26 j 22:49	20° $\text{H}$ 15'10		min. Earth dist.	-10131 Dec 18 j 23:59	16° $\text{V}$ 46'38	17.24266 AU
max. Earth dist.	-10136 May 25 j 13:03	20° $\text{H}$ 09'48	19.17416 AU	direct	-10130 Mar 05 j 08:37	14° $\text{V}$ 42'29	
morning rise	-10136 Jun 11 j 22:48	21° $\text{H}$ 15'56		evening set	-10130 Jun 09 j 09:12	18° $\text{V}$ 14'36	
retrograde	-10136 Sep 10 j 22:27	24° $\text{H}$ 39'09					
opposition	-10136 Nov 23 j 06:19	22° $\text{H}$ 36'50	-0°11'56	conjunction	-10130 Jun 25 j 09:26	19° $\text{V}$ 15'31	0°20'12
min. Earth dist.	-10136 Nov 24 j 08:48	22° $\text{H}$ 33'57	17.17260 AU	minimum elong	-10130 Jun 25 j 09:25	19° $\text{V}$ 15'31	0°20'20
direct	-10135 Feb 08 j 01:40	20° $\text{H}$ 29'38		max. Earth dist.	-10130 Jun 24 j 15:26	19° $\text{V}$ 12'39	19.25716 AU
evening set	-10135 May 15 j 15:41	24° $\text{H}$ 03'09		morning rise	-10130 Jul 11 j 05:49	20° $\text{V}$ 15'54	
				retrograde	-10130 Oct 10 j 07:52	23° $\text{V}$ 39'01	
conjunction	-10135 May 31 j 22:33	25° $\text{H}$ 05'03	-0°07'51	opposition	-10130 Dec 23 j 11:06	21° $\text{V}$ 37'16	0°25'27
minimum elong	-10135 May 31 j 22:33	25° $\text{H}$ 05'03	0°07'59	min. Earth dist.	-10130 Dec 24 j 02:06	21° $\text{V}$ 35'40	17.27318 AU
behind sun begin	-10135 May 31 j 16:35	25° $\text{H}$ 04'07		direct	-10129 Mar 10 j 15:50	19° $\text{V}$ 31'29	
behind sun end	-10135 Jun 01 j 04:32	25° $\text{H}$ 05'58		evening set	-10129 Jun 14 j 10:53	23° $\text{V}$ 02'53	
max. Earth dist.	-10135 May 30 j 17:16	25° $\text{H}$ 00'22	19.17210 AU				
morning rise	-10135 Jun 17 j 01:05	26° $\text{H}$ 06'17		conjunction	-10129 Jun 30 j 09:49	24° $\text{V}$ 03'33	0°25'29
retrograde	-10135 Sep 16 j 00:53	29° $\text{H}$ 29'38		minimum elong	-10129 Jun 30 j 09:48	24° $\text{V}$ 03'32	0°25'40
opposition	-10135 Nov 28 j 10:15	27° $\text{H}$ 27'24	-0°05'39	max. Earth dist.	-10129 Jun 29 j 18:17	24° $\text{V}$ 01'04	19.29016 AU
min. Earth dist.	-10135 Nov 29 j 11:05	27° $\text{H}$ 24'43	17.17413 AU	morning rise	-10129 Jul 16 j 05:03	25° $\text{V}$ 03'41	
direct	-10134 Feb 13 j 07:16	25° $\text{H}$ 20'22		retrograde	-10129 Oct 15 j 07:31	28° $\text{V}$ 26'32	
evening set	-10134 May 20 j 20:04	28° $\text{H}$ 53'54		opposition	-10129 Dec 28 j 16:16	26° $\text{V}$ 24'52	0°31'15
max. Earth dist.	-10134 Jun 04 j 23:27	29° $\text{H}$ 51'28	19.17710 AU	min. Earth dist.	-10129 Dec 29 j 05:57	26° $\text{V}$ 23'24	17.30863 AU
				direct	-10128 Mar 14 j 20:07	24° $\text{V}$ 19'21	
conjunction	-10134 Jun 06 j 01:48	29° $\text{H}$ 55'40	-0°02'13	evening set	-10128 Jun 18 j 11:32	27° $\text{V}$ 49'53	
minimum elong	-10134 Jun 06 j 01:46	29° $\text{H}$ 55'40	0°02'16				
behind sun begin	-10134 Jun 05 j 19:07	29° $\text{H}$ 54'38		conjunction	-10128 Jul 04 j 09:10	28° $\text{V}$ 50'16	0°30'34
behind sun end	-10134 Jun 06 j 08:25	29° $\text{H}$ 56'42		minimum elong	-10128 Jul 04 j 09:10	28° $\text{V}$ 50'16	0°30'47
	-10134 Jun 07 j 04:55	0° $\text{V}$		max. Earth dist.	-10128 Jul 03 j 19:56	28° $\text{V}$ 48'09	19.32809 AU
morning rise	-10134 Jun 22 j 02:57	0° $\text{V}$ 56'46		morning rise	-10128 Jul 20 j 03:29	29° $\text{V}$ 50'09	
retrograde	-10134 Sep 21 j 02:37	4° $\text{V}$ 20'12			-10128 Jul 22 j 19:00	0° $\text{H}$	
asc. node	-10134 Oct 25 j 19:15	3° $\text{V}$ 47'54		retrograde	-10128 Oct 19 j 08:53	3° $\text{H}$ 12'41	
opposition	-10134 Dec 03 j 14:49	2° $\text{V}$ 18'06	0°00'41	opposition	-10127 Jan 01 j 20:58	1° $\text{H}$ 11'03	0°36'47
min. Earth dist.	-10134 Dec 04 j 13:52	2° $\text{V}$ 15'36	17.18228 AU	min. Earth dist.	-10127 Jan 02 j 07:14	1° $\text{H}$ 09'57	17.34885 AU
direct	-10133 Feb 18 j 13:26	0° $\text{V}$ 11'17			-10127 Jan 31 j 12:18	30° $\text{R}$ $\text{V}$	
evening set	-10133 May 26 j 00:13	3° $\text{V}$ 44'41		direct	-10127 Mar 20 j 02:08	29° $\text{V}$ 05'48	
max. Earth dist.	-10133 Jun 10 j 03:23	4° $\text{V}$ 42'16	19.18850 AU		-10127 May 04 j 22:02	0° $\text{H}$	
				evening set	-10127 Jun 23 j 11:19	2° $\text{H}$ 35'22	

Attention, astronomical year style is used: The year -10127 in astronomical counting style is the year 10128 BCE in historical counting style.

conjunction	-10127 Jul 09 j 07:50	3°835'28	0°35'24	minimum elong	-10121 Aug 06 j 03:37	1°II27'56	0°58'30
minimum elong	-10127 Jul 09 j 07:50	3°835'28	0°35'41	max. Earth dist.	-10121 Aug 06 j 11:24	1°II29'09	19.72596 AU
max. Earth dist.	-10127 Jul 08 j 21:47	3°833'52	19.37069 AU	morning rise	-10121 Aug 21 j 16:49	2°II25'53	
morning rise	-10127 Jul 25 j 01:06	4°835'06		retrograde	-10121 Nov 21 j 16:33	5°II44'59	
retrograde	-10127 Oct 24 j 07:41	7°857'14		opposition	-10120 Feb 05 j 16:25	3°II43'54	1°06'03
opposition	-10126 Jan 07 j 01:18	5°855'37	0°42'03	min. Earth dist.	-10120 Feb 05 j 08:01	3°II44'47	17.76210 AU
min. Earth dist.	-10126 Jan 07 j 10:08	5°854'41	17.39388 AU	direct	-10120 Apr 22 j 19:22	1°II41'25	
direct	-10126 Mar 25 j 05:21	3°850'40		evening set	-10120 Jul 25 j 05:45	5°II02'13	
evening set	-10126 Jun 28 j 10:11	7°819'10					
conjunction	-10126 Jul 14 j 05:27	8°818'56	0°39'59	conjunction	-10120 Aug 09 j 19:40	6°II00'01	1°00'33
minimum elong	-10126 Jul 14 j 05:26	8°818'56	0°40'17	minimum elong	-10120 Aug 09 j 19:39	6°II00'01	1°01'04
max. Earth dist.	-10126 Jul 13 j 21:32	8°817'41	19.41820 AU	max. Earth dist.	-10120 Aug 10 j 05:02	6°II01'29	19.79868 AU
morning rise	-10126 Jul 29 j 21:57	9°818'18		morning rise	-10120 Aug 25 j 08:42	6°II57'42	
retrograde	-10126 Oct 29 j 07:41	12°840'00		retrograde	-10120 Nov 25 j 11:57	10°II16'15	
opposition	-10125 Jan 12 j 05:11	10°838'25	0°46'59	opposition	-10119 Feb 09 j 16:39	8°II15'19	1°08'37
min. Earth dist.	-10125 Jan 12 j 10:17	10°837'52	17.44378 AU	min. Earth dist.	-10119 Feb 09 j 05:25	8°II16'28	17.83599 AU
direct	-10125 Mar 30 j 10:23	8°833'47		direct	-10119 Apr 27 j 17:59	6°II13'18	
evening set	-10125 Jul 03 j 07:49	12°801'07		evening set	-10119 Jul 29 j 21:40	9°II32'43	
conjunction	-10125 Jul 19 j 02:06	13°800'34	0°44'16	conjunction	-10119 Aug 14 j 11:10	10°II30'13	1°02'41
minimum elong	-10125 Jul 19 j 02:06	13°800'34	0°44'37	minimum elong	-10119 Aug 14 j 11:10	10°II30'12	1°03'12
max. Earth dist.	-10125 Jul 18 j 22:02	12°859'56	19.47050 AU	max. Earth dist.	-10119 Aug 15 j 00:03	10°II32'12	19.87332 AU
morning rise	-10125 Aug 03 j 17:38	13°859'39		morning rise	-10119 Aug 29 j 23:47	11°II27'36	
	-10125 Aug 20 j 15:16	15°8		retrograde	-10119 Nov 30 j 06:17	14°II45'32	
retrograde	-10125 Nov 03 j 05:22	17°820'53		opposition	-10118 Feb 14 j 16:00	12°II44'47	1°10'45
opposition	-10124 Jan 17 j 08:48	15°819'20	0°51'34	min. Earth dist.	-10118 Feb 14 j 02:38	12°II46'10	17.91125 AU
min. Earth dist.	-10124 Jan 17 j 12:00	15°819'00	17.49858 AU	direct	-10118 May 02 j 16:19	10°II43'16	
	-10124 Jan 25 j 01:09	15°8		evening set	-10118 Aug 03 j 12:50	14°II01'15	
direct	-10124 Apr 03 j 13:07	13°815'03		conjunction	-10118 Aug 19 j 01:40	14°II58'26	1°04'25
	-10124 Jun 07 j 12:10	15°8		minimum elong	-10118 Aug 19 j 01:40	14°II58'26	1°04'57
evening set	-10124 Jul 07 j 04:40	16°841'10		max. Earth dist.	-10118 Aug 19 j 15:50	15°II00'37	19.94904 AU
conjunction	-10124 Jul 22 j 21:47	17°840'17	0°48'13	morning rise	-10118 Sep 03 j 14:17	15°II55'34	
minimum elong	-10124 Jul 22 j 21:47	17°840'17	0°48'36	retrograde	-10118 Dec 05 j 00:23	19°II12'54	
max. Earth dist.	-10124 Jul 22 j 19:47	17°839'58	19.52780 AU	opposition	-10117 Feb 19 j 14:46	17°II12'17	1°12'25
morning rise	-10124 Aug 07 j 12:45	18°839'05		min. Earth dist.	-10117 Feb 18 j 23:11	17°II13'52	17.98737 AU
retrograde	-10124 Nov 07 j 03:47	21°859'49		direct	-10117 May 07 j 12:49	15°II11'12	
opposition	-10123 Jan 21 j 11:31	19°858'20	0°55'47	evening set	-10117 Aug 08 j 02:49	18°II27'47	
min. Earth dist.	-10123 Jan 21 j 10:55	19°858'23	17.55833 AU	conjunction	-10117 Aug 23 j 15:27	19°II24'39	1°05'44
direct	-10123 Apr 08 j 16:29	17°854'26		minimum elong	-10117 Aug 23 j 15:27	19°II24'39	1°06'18
evening set	-10123 Jul 12 j 00:19	21°819'16		max. Earth dist.	-10117 Aug 24 j 08:45	19°II27'19	20.02515 AU
conjunction	-10123 Jul 27 j 16:41	22°818'04	0°51'51	morning rise	-10117 Sep 08 j 03:51	20°II21'31	
minimum elong	-10123 Jul 27 j 16:41	22°818'04	0°52'15	retrograde	-10117 Dec 09 j 17:34	23°II38'13	
max. Earth dist.	-10123 Jul 27 j 18:40	22°818'23	19.58979 AU	opposition	-10116 Feb 24 j 12:40	21°II37'44	1°13'38
morning rise	-10123 Aug 12 j 06:52	23°816'35		min. Earth dist.	-10116 Feb 23 j 18:52	21°II39'33	18.06337 AU
retrograde	-10123 Nov 12 j 00:12	26°836'47		direct	-10116 May 11 j 09:18	19°II37'06	
opposition	-10122 Jan 26 j 13:49	24°835'24	0°59'37	evening set	-10116 Aug 11 j 16:11	22°II52'14	
min. Earth dist.	-10122 Jan 26 j 11:07	24°835'41	17.62249 AU	conjunction	-10116 Aug 27 j 04:24	23°II48'48	1°06'40
direct	-10122 Apr 13 j 18:13	22°831'57		minimum elong	-10116 Aug 27 j 04:24	23°II48'48	1°07'13
evening set	-10122 Jul 16 j 19:09	25°855'29		max. Earth dist.	-10116 Aug 27 j 22:43	23°II51'37	20.10088 AU
conjunction	-10122 Aug 01 j 10:28	26°853'57	0°55'07	morning rise	-10116 Sep 11 j 17:00	24°II45'26	
minimum elong	-10122 Aug 01 j 10:28	26°853'56	0°55'35	retrograde	-10116 Dec 13 j 09:58	28°II01'27	
max. Earth dist.	-10122 Aug 01 j 14:18	26°854'33	19.65606 AU	opposition	-10115 Feb 28 j 09:32	26°II01'04	1°14'25
morning rise	-10122 Aug 17 j 00:16	27°852'10		min. Earth dist.	-10115 Feb 27 j 14:11	26°II03'03	18.13889 AU
	-10122 Sep 25 j 10:57	0°II		direct	-10115 May 16 j 03:36	24°II00'50	
retrograde	-10122 Nov 16 j 20:55	1°II11'51		evening set	-10115 Aug 16 j 04:26	27°II14'32	
	-10121 Jan 11 j 06:56	30°8		conjunction	-10115 Aug 31 j 16:39	28°II10'50	1°07'11
opposition	-10121 Jan 31 j 15:23	29°810'36	1°03'03	minimum elong	-10115 Aug 31 j 16:39	28°II10'50	1°07'47
min. Earth dist.	-10121 Jan 31 j 09:12	29°811'15	17.69070 AU	max. Earth dist.	-10115 Sep 01 j 13:39	28°II14'03	20.17588 AU
direct	-10121 Apr 18 j 19:18	27°807'36		morning rise	-10115 Sep 16 j 05:16	29°II07'13	
	-10121 Jul 13 j 06:26	0°II			-10115 Oct 01 j 12:40	0°8	
evening set	-10121 Jul 21 j 12:53	0°II29'47		retrograde	-10115 Dec 18 j 01:57	2°822'33	
conjunction	-10121 Aug 06 j 03:38	1°II27'56	0°58'02	min. Earth dist.	-10114 Mar 04 j 07:52	0°824'28	18.21330 AU
				opposition	-10114 Mar 05 j 05:30	0°822'16	1°14'45

Attention, astronomical year style is used: The year -10114 in astronomical counting style is the year 10115 BCE in historical counting style.

	-10114 Mar 14 j 09:29	30° $\kappa$ II		max. Earth dist.	-10108 Sep 30 j 16:15	27° $\epsilon$ 50'48	20.67174 AU
direct	-10114 May 20 j 22:18	28° $\Pi$ 22'24		morning rise	-10108 Oct 15 j 00:20	28° $\epsilon$ 41'08	
	-10114 Jul 22 j 18:05	0° $\epsilon$			-10108 Nov 08 j 08:15	0° $\Omega$	
evening set	-10114 Aug 20 j 15:48	1° $\epsilon$ 34'40		retrograde	-10107 Jan 16 j 20:31	1° $\Omega$ 51'54	
					-10107 Apr 01 j 15:09	30° $\kappa$ $\epsilon$	
conjunction	-10114 Sep 05 j 03:47	2° $\epsilon$ 30'41	1°07'20	opposition	-10107 Apr 04 j 22:10	29° $\epsilon$ 52'04	1°05'58
minimum elong	-10114 Sep 05 j 03:47	2° $\epsilon$ 30'41	1°07'55	min. Earth dist.	-10107 Apr 03 j 14:54	29° $\epsilon$ 55'12	18.70534 AU
max. Earth dist.	-10114 Sep 06 j 01:51	2° $\epsilon$ 34'02	20.24971 AU	direct	-10107 Jun 19 j 23:14	27° $\epsilon$ 54'33	
morning rise	-10114 Sep 20 j 16:46	3° $\epsilon$ 26'51			-10107 Aug 31 j 11:23	0° $\Omega$	
retrograde	-10114 Dec 22 j 16:31	6° $\epsilon$ 41'30		evening set	-10107 Sep 18 j 00:55	0° $\Omega$ 57'56	
min. Earth dist.	-10113 Mar 09 j 01:50	4° $\epsilon$ 43'34	18.28671 AU				
opposition	-10113 Mar 10 j 00:39	4° $\epsilon$ 41'15	1°14'40	conjunction	-10107 Oct 03 j 15:02	1° $\Omega$ 52'28	0°58'25
direct	-10113 May 25 j 14:26	2° $\epsilon$ 41'44		minimum elong	-10107 Oct 03 j 15:02	1° $\Omega$ 52'28	0°58'56
evening set	-10113 Aug 25 j 02:11	5° $\epsilon$ 52'35		max. Earth dist.	-10107 Oct 05 j 00:32	1° $\Omega$ 57'24	20.73701 AU
				morning rise	-10107 Oct 19 j 07:51	2° $\Omega$ 47'24	
conjunction	-10113 Sep 09 j 14:20	6° $\epsilon$ 48'21	1°07'05	retrograde	-10106 Jan 21 j 07:49	5° $\Omega$ 57'37	
minimum elong	-10113 Sep 09 j 14:20	6° $\epsilon$ 48'21	1°07'41	min. Earth dist.	-10106 Apr 08 j 01:34	4° $\Omega$ 01'13	18.76921 AU
max. Earth dist.	-10113 Sep 10 j 15:00	6° $\epsilon$ 52'04	20.32257 AU	opposition	-10106 Apr 09 j 10:38	3° $\Omega$ 57'54	1°03'18
morning rise	-10113 Sep 25 j 03:32	7° $\epsilon$ 44'17		direct	-10106 Jun 24 j 11:11	2° $\Omega$ 00'44	
retrograde	-10113 Dec 27 j 07:37	10° $\epsilon$ 58'14		evening set	-10106 Sep 22 j 06:41	5° $\Omega$ 03'05	
opposition	-10112 Mar 13 j 18:35	8° $\epsilon$ 58'02	1°14'10				
min. Earth dist.	-10112 Mar 12 j 17:23	9° $\epsilon$ 00'35	18.35904 AU	conjunction	-10106 Oct 07 j 21:16	5° $\Omega$ 57'28	0°55'53
direct	-10112 May 29 j 07:31	6° $\epsilon$ 58'50		minimum elong	-10106 Oct 07 j 21:16	5° $\Omega$ 57'28	0°56'24
evening set	-10112 Aug 28 j 11:48	10° $\epsilon$ 08'18		max. Earth dist.	-10106 Oct 09 j 07:15	6° $\Omega$ 02'27	20.79932 AU
				morning rise	-10106 Oct 23 j 14:59	6° $\Omega$ 52'17	
conjunction	-10112 Sep 12 j 23:57	11° $\epsilon$ 03'49	1°06'29	retrograde	-10105 Jan 25 j 17:24	10° $\Omega$ 01'59	
minimum elong	-10112 Sep 12 j 23:57	11° $\epsilon$ 03'49	1°07'04	opposition	-10105 Apr 13 j 22:34	8° $\Omega$ 02'23	1°00'19
max. Earth dist.	-10112 Sep 14 j 01:45	11° $\epsilon$ 07'41	20.39437 AU	min. Earth dist.	-10105 Apr 12 j 13:59	8° $\Omega$ 05'39	18.82993 AU
morning rise	-10112 Sep 28 j 13:43	11° $\epsilon$ 59'33		direct	-10105 Jun 28 j 19:18	6° $\Omega$ 05'31	
retrograde	-10112 Dec 30 j 20:14	15° $\epsilon$ 12'49		evening set	-10105 Sep 26 j 12:07	9° $\Omega$ 06'54	
min. Earth dist.	-10111 Mar 17 j 09:36	13° $\epsilon$ 15'17	18.43051 AU				
opposition	-10111 Mar 18 j 11:39	13° $\epsilon$ 12'39	1°13'16	conjunction	-10105 Oct 12 j 03:28	10° $\Omega$ 01'10	0°53'05
direct	-10111 Jun 02 j 21:23	11° $\epsilon$ 13'47		minimum elong	-10105 Oct 12 j 03:29	10° $\Omega$ 01'11	0°53'34
evening set	-10111 Sep 01 j 20:30	14° $\epsilon$ 21'54		max. Earth dist.	-10105 Oct 13 j 14:18	10° $\Omega$ 06'15	20.85821 AU
				morning rise	-10105 Oct 27 j 21:59	10° $\Omega$ 55'53	
conjunction	-10111 Sep 17 j 08:58	15° $\epsilon$ 17'11	1°05'31	retrograde	-10104 Jan 30 j 03:39	14° $\Omega$ 05'05	
minimum elong	-10111 Sep 17 j 08:58	15° $\epsilon$ 17'11	1°06'05	min. Earth dist.	-10104 Apr 15 j 23:37	12° $\Omega$ 08'59	18.88675 AU
max. Earth dist.	-10111 Sep 18 j 13:07	15° $\epsilon$ 21'24	20.46534 AU	opposition	-10104 Apr 17 j 09:27	12° $\Omega$ 05'35	0°57'03
morning rise	-10111 Oct 02 j 23:04	16° $\epsilon$ 12'43		direct	-10104 Jul 02 j 05:13	10° $\Omega$ 08'59	
retrograde	-10110 Jan 04 j 10:19	19° $\epsilon$ 25'19		evening set	-10104 Sep 29 j 17:22	13° $\Omega$ 09'30	
min. Earth dist.	-10110 Mar 21 j 23:02	17° $\epsilon$ 28'05	18.50102 AU				
opposition	-10110 Mar 23 j 03:31	17° $\epsilon$ 25'12	1°11'58	conjunction	-10104 Oct 15 j 09:20	14° $\Omega$ 03'39	0°50'02
direct	-10110 Jun 07 j 12:38	15° $\epsilon$ 26'40		minimum elong	-10104 Oct 15 j 09:21	14° $\Omega$ 03'39	0°50'29
evening set	-10110 Sep 06 j 04:37	18° $\epsilon$ 33'30		max. Earth dist.	-10104 Oct 16 j 20:04	14° $\Omega$ 08'42	20.91276 AU
				morning rise	-10104 Oct 31 j 04:52	14° $\Omega$ 58'17	
conjunction	-10110 Sep 21 j 17:13	19° $\epsilon$ 28'35	1°04'13		-10104 Oct 31 j 16:58	15° $\Omega$	
minimum elong	-10110 Sep 21 j 17:14	19° $\epsilon$ 28'35	1°04'48	retrograde	-10103 Feb 02 j 12:12	18° $\Omega$ 07'01	
max. Earth dist.	-10110 Sep 22 j 22:29	19° $\epsilon$ 32'56	20.53536 AU	min. Earth dist.	-10103 Apr 20 j 11:04	16° $\Omega$ 10'52	18.93902 AU
morning rise	-10110 Oct 07 j 08:00	20° $\epsilon$ 23'57		opposition	-10103 Apr 21 j 19:50	16° $\Omega$ 07'35	0°53'31
retrograde	-10109 Jan 08 j 21:26	23° $\epsilon$ 35'54			-10103 May 21 j 20:07	15° $\kappa$ $\Omega$	
opposition	-10109 Mar 27 j 18:44	21° $\epsilon$ 35'52	1°10'19	direct	-10103 Jul 06 j 12:12	14° $\Omega$ 11'13	
min. Earth dist.	-10109 Mar 26 j 13:40	21° $\epsilon$ 38'47	18.57067 AU		-10103 Aug 19 j 10:52	15° $\Omega$	
direct	-10109 Jun 12 j 00:09	19° $\epsilon$ 37'40		evening set	-10103 Oct 03 j 22:07	17° $\Omega$ 10'54	
evening set	-10109 Sep 10 j 11:50	22° $\epsilon$ 43'17					
				conjunction	-10103 Oct 19 j 14:57	18° $\Omega$ 04'58	0°46'44
conjunction	-10109 Sep 26 j 00:58	23° $\epsilon$ 38'09	1°02'36	minimum elong	-10103 Oct 19 j 14:58	18° $\Omega$ 04'58	0°47'11
minimum elong	-10109 Sep 26 j 00:58	23° $\epsilon$ 38'09	1°03'08	max. Earth dist.	-10103 Oct 21 j 01:58	18° $\Omega$ 10'02	20.96256 AU
max. Earth dist.	-10109 Sep 27 j 08:14	23° $\epsilon$ 42'48	20.60440 AU	morning rise	-10103 Nov 04 j 11:19	18° $\Omega$ 59'31	
morning rise	-10109 Oct 11 j 16:18	24° $\epsilon$ 33'22		retrograde	-10102 Feb 06 j 21:34	22° $\Omega$ 07'48	
retrograde	-10108 Jan 13 j 10:14	27° $\epsilon$ 44'42		min. Earth dist.	-10102 Apr 24 j 19:42	20° $\Omega$ 11'48	18.98617 AU
min. Earth dist.	-10108 Mar 30 j 01:36	25° $\epsilon$ 47'55	18.63892 AU	opposition	-10102 Apr 26 j 05:22	20° $\Omega$ 08'26	0°49'45
opposition	-10108 Mar 31 j 08:53	25° $\epsilon$ 44'46	1°08'19	direct	-10102 Jul 10 j 20:38	18° $\Omega$ 12'15	
direct	-10108 Jun 15 j 13:53	23° $\epsilon$ 46'55		evening set	-10102 Oct 08 j 02:47	21° $\Omega$ 11'09	
evening set	-10108 Sep 13 j 18:43	26° $\epsilon$ 51'23					
				conjunction	-10102 Oct 23 j 20:21	22° $\Omega$ 05'08	0°43'14
conjunction	-10108 Sep 29 j 08:11	27° $\epsilon$ 46'05	1°00'39	minimum elong	-10102 Oct 23 j 20:21	22° $\Omega$ 05'08	0°43'39
minimum elong	-10108 Sep 29 j 08:11	27° $\epsilon$ 46'05	1°01'12	max. Earth dist.	-10102 Oct 25 j 06:56	22° $\Omega$ 10'07	21.00705 AU



Attention, astronomical year style is used: The year -10102 in astronomical counting style is the year 10103 BCE in historical counting style.

morning rise	-10102 Nov 08 j 17:48	22° $\Omega$ 59'39		direct	-10095 Aug 07 j 08:09	15° $\Upsilon$ 51'51	
retrograde	-10101 Feb 11 j 05:01	26° $\Omega$ 07'30		evening set	-10095 Nov 04 j 05:59	18° $\Upsilon$ 47'30	
min. Earth dist.	-10101 Apr 29 j 06:09	24° $\Omega$ 11'22	19.02802 AU				
opposition	-10101 Apr 30 j 14:25	24° $\Omega$ 08'09	0°45'45	conjunction	-10095 Nov 20 j 06:33	19° $\Upsilon$ 41'29	0°14'29
direct	-10101 Jul 15 j 02:33	22° $\Omega$ 12'06		minimum elong	-10095 Nov 20 j 06:33	19° $\Upsilon$ 41'29	0°14'39
evening set	-10101 Oct 12 j 06:59	25° $\Omega$ 10'17		behind sun begin	-10095 Nov 20 j 03:46	19° $\Upsilon$ 41'06	
				behind sun end	-10095 Nov 20 j 09:20	19° $\Upsilon$ 41'52	
conjunction	-10101 Oct 28 j 01:35	26° $\Omega$ 04'14	0°39'33	max. Earth dist.	-10095 Nov 21 j 14:07	19° $\Upsilon$ 45'57	21.18379 AU
minimum elong	-10101 Oct 28 j 01:36	26° $\Omega$ 04'14	0°39'56	morning rise	-10095 Dec 06 j 11:29	20° $\Upsilon$ 36'04	
max. Earth dist.	-10101 Oct 29 j 12:10	26° $\Omega$ 09'12	21.04634 AU	retrograde	-10094 Mar 11 j 07:24	23° $\Upsilon$ 41'58	
morning rise	-10101 Nov 13 j 00:02	26° $\Omega$ 58'42		min. Earth dist.	-10094 May 27 j 07:25	21° $\Upsilon$ 45'26	19.18885 AU
	-10100 Jan 30 j 14:29	0° $\Upsilon$		opposition	-10094 May 28 j 12:15	21° $\Upsilon$ 42'33	0°13'25
retrograde	-10100 Feb 15 j 13:54	0° $\Upsilon$ 06'08		direct	-10094 Aug 11 j 12:21	19° $\Upsilon$ 46'50	
	-10100 Mar 02 j 14:59	30° $\Upsilon$ 0		evening set	-10094 Nov 08 j 10:07	22° $\Upsilon$ 42'22	
opposition	-10100 May 03 j 22:37	28° $\Omega$ 06'46	0°41'34				
min. Earth dist.	-10100 May 02 j 13:46	28° $\Omega$ 10'03	19.06456 AU	conjunction	-10094 Nov 24 j 11:40	23° $\Upsilon$ 36'25	0°09'59
direct	-10100 Jul 18 j 09:52	26° $\Omega$ 10'49		minimum elong	-10094 Nov 24 j 11:40	23° $\Upsilon$ 36'25	0°10'07
evening set	-10100 Oct 15 j 11:10	29° $\Omega$ 08'22		behind sun begin	-10094 Nov 24 j 06:21	23° $\Upsilon$ 35'42	
	-10100 Oct 30 j 14:43	0° $\Upsilon$		behind sun end	-10094 Nov 24 j 16:59	23° $\Upsilon$ 37'09	
				max. Earth dist.	-10094 Nov 25 j 18:04	23° $\Upsilon$ 40'43	21.19188 AU
conjunction	-10100 Oct 31 j 06:35	0° $\Upsilon$ 02'16	0°35'41	morning rise	-10094 Dec 10 j 17:45	24° $\Upsilon$ 31'06	
minimum elong	-10100 Oct 31 j 06:35	0° $\Upsilon$ 02'16	0°36'01	retrograde	-10093 Mar 15 j 13:13	27° $\Upsilon$ 36'55	
max. Earth dist.	-10100 Nov 01 j 16:35	0° $\Upsilon$ 07'08	21.08026 AU	opposition	-10093 Jun 01 j 17:15	25° $\Upsilon$ 37'31	0°08'24
morning rise	-10100 Nov 16 j 06:09	0° $\Upsilon$ 56'44		min. Earth dist.	-10093 May 31 j 14:33	25° $\Upsilon$ 40'13	19.19467 AU
retrograde	-10099 Feb 18 j 20:01	4° $\Upsilon$ 03'46		direct	-10093 Aug 15 j 14:30	23° $\Upsilon$ 41'50	
min. Earth dist.	-10099 May 06 j 22:54	2° $\Upsilon$ 07'31	19.09602 AU	evening set	-10093 Nov 12 j 14:27	26° $\Upsilon$ 37'21	
opposition	-10099 May 08 j 06:09	2° $\Upsilon$ 04'23	0°37'12				
direct	-10099 Jul 22 j 14:36	0° $\Upsilon$ 08'29		conjunction	-10093 Nov 28 j 17:11	27° $\Upsilon$ 31'30	0°05'26
evening set	-10099 Oct 19 j 14:59	3° $\Upsilon$ 05'29		minimum elong	-10093 Nov 28 j 17:11	27° $\Upsilon$ 31'30	0°05'31
				behind sun begin	-10093 Nov 28 j 10:47	27° $\Upsilon$ 30'37	
conjunction	-10099 Nov 04 j 11:28	3° $\Upsilon$ 59'21	0°31'41	behind sun end	-10093 Nov 28 j 23:35	27° $\Upsilon$ 32'22	
minimum elong	-10099 Nov 04 j 11:28	3° $\Upsilon$ 59'21	0°31'59	max. Earth dist.	-10093 Nov 29 j 22:32	27° $\Upsilon$ 35'38	21.19546 AU
max. Earth dist.	-10099 Nov 05 j 21:22	4° $\Upsilon$ 04'12	21.10947 AU	morning rise	-10093 Dec 15 j 00:19	28° $\Upsilon$ 26'15	
morning rise	-10099 Nov 20 j 12:02	4° $\Upsilon$ 53'48			-10092 Jan 14 j 22:13	0° $\Omega$	
retrograde	-10098 Feb 23 j 04:29	8° $\Upsilon$ 00'31		retrograde	-10092 Mar 18 j 21:33	1° $\Omega$ 32'03	
min. Earth dist.	-10098 May 11 j 05:17	6° $\Upsilon$ 04'16	19.12292 AU		-10092 May 24 j 12:47	30° $\Upsilon$	
opposition	-10098 May 12 j 13:05	6° $\Upsilon$ 01'05	0°32'40	opposition	-10092 Jun 04 j 21:58	29° $\Upsilon$ 32'42	0°03'20
direct	-10098 Jul 26 j 20:41	4° $\Upsilon$ 05'14		min. Earth dist.	-10092 Jun 03 j 19:39	29° $\Upsilon$ 35'21	19.19566 AU
evening set	-10098 Oct 23 j 18:42	7° $\Upsilon$ 01'45		direct	-10092 Aug 18 j 18:39	27° $\Upsilon$ 36'59	
					-10092 Nov 05 j 17:13	0° $\Omega$	
conjunction	-10098 Nov 08 j 16:03	7° $\Upsilon$ 55'38	0°27'32	evening set	-10092 Nov 15 j 19:18	0° $\Omega$ 32'35	
minimum elong	-10098 Nov 08 j 16:04	7° $\Upsilon$ 55'38	0°27'48				
max. Earth dist.	-10098 Nov 10 j 01:25	8° $\Upsilon$ 00'22	21.13416 AU	conjunction	-10092 Dec 01 j 22:58	1° $\Omega$ 26'50	0°00'48
morning rise	-10098 Nov 24 j 17:47	8° $\Upsilon$ 50'06		minimum elong	-10092 Dec 01 j 22:59	1° $\Omega$ 26'50	0°00'51
retrograde	-10097 Feb 27 j 09:50	11° $\Upsilon$ 56'31		behind sun begin	-10092 Dec 01 j 16:20	1° $\Omega$ 25'55	
opposition	-10097 May 16 j 19:38	9° $\Upsilon$ 57'04	0°28'01	behind sun end	-10092 Dec 02 j 05:38	1° $\Omega$ 27'45	
min. Earth dist.	-10097 May 15 j 13:26	10° $\Upsilon$ 00'06	19.14554 AU	max. Earth dist.	-10092 Dec 03 j 02:41	1° $\Omega$ 30'44	21.19379 AU
direct	-10097 Jul 31 j 00:25	8° $\Upsilon$ 01'16		morning rise	-10092 Dec 18 j 07:10	2° $\Omega$ 21'42	
evening set	-10097 Oct 27 j 22:25	10° $\Upsilon$ 57'23		desc. node	-10091 Feb 03 j 12:45	4° $\Omega$ 34'42	
				retrograde	-10091 Mar 23 j 03:32	5° $\Omega$ 27'31	
conjunction	-10097 Nov 12 j 20:54	11° $\Upsilon$ 51'17	0°23'17	min. Earth dist.	-10091 Jun 08 j 02:48	3° $\Omega$ 30'35	19.19130 AU
minimum elong	-10097 Nov 12 j 20:55	11° $\Upsilon$ 51'17	0°23'31	opposition	-10091 Jun 09 j 02:35	3° $\Omega$ 28'11	-0°01'45
max. Earth dist.	-10097 Nov 14 j 05:56	11° $\Upsilon$ 55'58	21.15481 AU	direct	-10091 Aug 22 j 20:22	1° $\Omega$ 32'26	
morning rise	-10097 Nov 28 j 23:40	12° $\Upsilon$ 45'46		evening set	-10091 Nov 20 j 00:25	4° $\Omega$ 28'11	
retrograde	-10096 Mar 02 j 18:02	15° $\Upsilon$ 51'57					
min. Earth dist.	-10096 May 18 j 18:54	13° $\Upsilon$ 55'34	19.16411 AU	conjunction	-10091 Dec 06 j 05:16	5° $\Omega$ 22'33	-0°03'55
opposition	-10096 May 20 j 01:25	13° $\Upsilon$ 52'30	0°23'15	minimum elong	-10091 Dec 06 j 05:15	5° $\Omega$ 22'33	0°03'55
direct	-10096 Aug 03 j 05:17	11° $\Upsilon$ 56'43		behind sun begin	-10091 Dec 05 j 22:40	5° $\Omega$ 21'39	
evening set	-10096 Oct 31 j 02:17	14° $\Upsilon$ 52'34		behind sun end	-10091 Dec 06 j 11:50	5° $\Omega$ 23'27	
				max. Earth dist.	-10091 Dec 07 j 07:24	5° $\Omega$ 26'14	21.18676 AU
conjunction	-10096 Nov 16 j 01:43	15° $\Upsilon$ 46'30	0°18'55	morning rise	-10091 Dec 22 j 14:25	6° $\Omega$ 17'32	
minimum elong	-10096 Nov 16 j 01:43	15° $\Upsilon$ 46'30	0°19'08	retrograde	-10090 Mar 27 j 12:22	9° $\Omega$ 23'25	
max. Earth dist.	-10096 Nov 17 j 09:52	15° $\Upsilon$ 51'03	21.17130 AU	min. Earth dist.	-10090 Jun 12 j 08:04	7° $\Omega$ 26'23	19.18130 AU
morning rise	-10096 Dec 02 j 05:37	16° $\Upsilon$ 41'02		opposition	-10090 Jun 13 j 07:03	7° $\Omega$ 24'04	-0°06'51
retrograde	-10095 Mar 06 j 23:21	19° $\Upsilon$ 47'03		direct	-10090 Aug 27 j 00:43	5° $\Omega$ 28'14	
min. Earth dist.	-10095 May 23 j 02:20	17° $\Upsilon$ 50'29	19.17857 AU	evening set	-10090 Nov 24 j 06:01	8° $\Omega$ 24'12	
opposition	-10095 May 24 j 07:03	17° $\Upsilon$ 47'36	0°18'23				

## Planetary Phenomena of Uranus from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 26

Attention, astronomical year style is used: The year -10090 in astronomical counting style is the year 10091 BCE in historical counting style.

conjunction	-10090 Dec 10 j 11:53	9° <u>♂</u> 18'43	-0°08'30	conjunction	-10083 Jan 03 j 13:58	3° <u>♂</u> 07'17	-0°34'36
minimum elong	-10090 Dec 10 j 11:53	9° <u>♂</u> 18'43	0°08'32	minimum elong	-10083 Jan 03 j 13:58	3° <u>♂</u> 07'17	0°34'52
behind sun begin	-10090 Dec 10 j 06:04	9° <u>♂</u> 17'55		max. Earth dist.	-10083 Jan 04 j 00:56	3° <u>♂</u> 08'50	20.97723 AU
behind sun end	-10090 Dec 10 j 17:42	9° <u>♂</u> 19'31		morning rise	-10083 Jan 20 j 05:23	4° <u>♂</u> 03'24	
max. Earth dist.	-10090 Dec 11 j 11:57	9° <u>♂</u> 22'06	21.17372 AU	retrograde	-10083 Apr 24 j 19:14	7° <u>♂</u> 10'30	
morning rise	-10090 Dec 26 j 22:06	10° <u>♂</u> 13'49		opposition	-10083 Jul 10 j 14:48	5° <u>♂</u> 10'25	-0°40'30
retrograde	-10089 Mar 31 j 18:41	13° <u>♂</u> 19'47		min. Earth dist.	-10083 Jul 10 j 06:33	5° <u>♂</u> 11'16	18.95376 AU
opposition	-10089 Jun 17 j 11:40	11° <u>♂</u> 20'25	-0°11'55	direct	-10083 Sep 23 j 04:11	3° <u>♂</u> 12'49	
min. Earth dist.	-10089 Jun 16 j 15:32	11° <u>♂</u> 22'27	19.16517 AU	evening set	-10083 Dec 22 j 11:20	6° <u>♂</u> 12'19	
direct	-10089 Aug 31 j 02:48	9° <u>♂</u> 24'27					
evening set	-10089 Nov 28 j 12:08	12° <u>♂</u> 20'42		conjunction	-10082 Jan 08 j 00:15	7° <u>♂</u> 08'10	-0°38'32
				minimum elong	-10082 Jan 08 j 00:15	7° <u>♂</u> 08'10	0°38'50
conjunction	-10089 Dec 14 j 19:09	13° <u>♂</u> 15'22	-0°13'03	max. Earth dist.	-10082 Jan 08 j 08:55	7° <u>♂</u> 09'24	20.92937 AU
minimum elong	-10089 Dec 14 j 19:09	13° <u>♂</u> 15'22	0°13'06	morning rise	-10082 Jan 24 j 16:24	8° <u>♂</u> 04'30	
behind sun begin	-10089 Dec 14 j 15:15	13° <u>♂</u> 14'49		retrograde	-10082 Apr 29 j 05:37	11° <u>♂</u> 11'57	
behind sun end	-10089 Dec 14 j 23:04	13° <u>♂</u> 15'54		opposition	-10082 Jul 14 j 19:48	9° <u>♂</u> 11'45	-0°44'46
max. Earth dist.	-10089 Dec 15 j 17:10	13° <u>♂</u> 18'27	21.15461 AU	min. Earth dist.	-10082 Jul 14 j 12:40	9° <u>♂</u> 12'29	18.90429 AU
morning rise	-10089 Dec 31 j 06:19	14° <u>♂</u> 10'36		direct	-10082 Sep 27 j 10:00	7° <u>♂</u> 13'50	
retrograde	-10088 Apr 04 j 03:32	17° <u>♂</u> 16'40		evening set	-10082 Dec 26 j 21:27	10° <u>♂</u> 14'11	
opposition	-10088 Jun 20 j 15:57	15° <u>♂</u> 17'13	-0°16'56				
min. Earth dist.	-10088 Jun 19 j 20:58	15° <u>♂</u> 19'09	19.14290 AU	conjunction	-10081 Jan 12 j 11:16	11° <u>♂</u> 10'17	-0°42'18
direct	-10088 Sep 03 j 07:31	13° <u>♂</u> 21'04		minimum elong	-10081 Jan 12 j 11:15	11° <u>♂</u> 10'17	0°42'38
evening set	-10088 Dec 01 j 18:46	16° <u>♂</u> 17'41		max. Earth dist.	-10081 Jan 12 j 17:44	11° <u>♂</u> 11'12	20.87826 AU
				morning rise	-10081 Jan 29 j 04:02	12° <u>♂</u> 06'50	
conjunction	-10088 Dec 18 j 02:45	17° <u>♂</u> 12'30	-0°17'33		-10081 Apr 09 j 05:53	15° <u>♂</u>	
minimum elong	-10088 Dec 18 j 02:45	17° <u>♂</u> 12'30	0°17'40	retrograde	-10081 May 03 j 14:15	15° <u>♂</u> 14'40	
max. Earth dist.	-10088 Dec 18 j 22:26	17° <u>♂</u> 15'16	21.12929 AU		-10081 May 28 j 01:37	15° <u>♂</u>	
morning rise	-10087 Jan 03 j 14:53	18° <u>♂</u> 07'54		opposition	-10081 Jul 19 j 01:20	13° <u>♂</u> 14'24	-0°48'51
retrograde	-10087 Apr 08 j 10:20	21° <u>♂</u> 14'06		min. Earth dist.	-10081 Jul 18 j 20:57	13° <u>♂</u> 14'51	18.85166 AU
opposition	-10087 Jun 24 j 20:29	19° <u>♂</u> 14'33	-0°21'53	direct	-10081 Oct 01 j 14:34	11° <u>♂</u> 16'11	
min. Earth dist.	-10087 Jun 24 j 04:26	19° <u>♂</u> 16'11	19.11464 AU	evening set	-10081 Dec 31 j 08:27	14° <u>♂</u> 17'28	
direct	-10087 Sep 07 j 10:24	17° <u>♂</u> 18'10			-10080 Jan 12 j 22:07	15° <u>♂</u>	
evening set	-10087 Dec 06 j 01:35	20° <u>♂</u> 15'10					
				conjunction	-10080 Jan 16 j 23:05	15° <u>♂</u> 13'50	-0°45'53
conjunction	-10087 Dec 22 j 10:41	21° <u>♂</u> 10'10	-0°21'58	minimum elong	-10080 Jan 16 j 23:05	15° <u>♂</u> 13'50	0°46'15
minimum elong	-10087 Dec 22 j 10:41	21° <u>♂</u> 10'10	0°22'07	max. Earth dist.	-10080 Jan 17 j 02:57	15° <u>♂</u> 14'23	20.82423 AU
max. Earth dist.	-10087 Dec 23 j 04:17	21° <u>♂</u> 12'39	21.09839 AU	morning rise	-10080 Feb 02 j 16:29	16° <u>♂</u> 10'36	
morning rise	-10086 Jan 07 j 23:42	22° <u>♂</u> 05'44		retrograde	-10080 May 07 j 02:04	19° <u>♂</u> 18'53	
retrograde	-10086 Apr 12 j 19:01	25° <u>♂</u> 12'06		opposition	-10080 Jul 22 j 07:04	17° <u>♂</u> 18'33	-0°52'43
min. Earth dist.	-10086 Jun 28 j 09:57	23° <u>♂</u> 13'56	19.08104 AU	min. Earth dist.	-10080 Jul 22 j 04:01	17° <u>♂</u> 18'52	18.79612 AU
opposition	-10086 Jun 29 j 00:54	23° <u>♂</u> 12'25	-0°26'44	direct	-10080 Oct 04 j 21:38	15° <u>♂</u> 20'01	
direct	-10086 Sep 11 j 15:15	21° <u>♂</u> 15'45		evening set	-10079 Jan 03 j 20:18	18° <u>♂</u> 22'20	
evening set	-10086 Dec 10 j 09:10	24° <u>♂</u> 13'15					
				conjunction	-10079 Jan 20 j 11:43	19° <u>♂</u> 18'58	-0°49'15
conjunction	-10086 Dec 26 j 19:13	25° <u>♂</u> 08'27	-0°26'18	minimum elong	-10079 Jan 20 j 11:43	19° <u>♂</u> 18'58	0°49'39
minimum elong	-10086 Dec 26 j 19:13	25° <u>♂</u> 08'27	0°26'30	max. Earth dist.	-10079 Jan 20 j 13:22	19° <u>♂</u> 19'12	20.76713 AU
max. Earth dist.	-10086 Dec 27 j 10:35	25° <u>♂</u> 10'37	21.06228 AU	morning rise	-10079 Feb 06 j 05:33	20° <u>♂</u> 15'59	
morning rise	-10085 Jan 12 j 09:07	26° <u>♂</u> 04'11		retrograde	-10079 May 11 j 11:53	23° <u>♂</u> 24'46	
retrograde	-10085 Apr 17 j 02:21	29° <u>♂</u> 10'44		opposition	-10079 Jul 26 j 13:30	21° <u>♂</u> 24'23	-0°56'20
opposition	-10085 Jul 03 j 05:22	27° <u>♂</u> 10'55	-0°31'28	min. Earth dist.	-10079 Jul 26 j 13:19	21° <u>♂</u> 24'24	18.73753 AU
min. Earth dist.	-10085 Jul 02 j 17:19	27° <u>♂</u> 12'09	19.04262 AU	direct	-10079 Oct 09 j 02:47	19° <u>♂</u> 25'33	
direct	-10085 Sep 15 j 18:52	25° <u>♂</u> 13'57		evening set	-10078 Jan 08 j 08:54	22° <u>♂</u> 28'57	
evening set	-10085 Dec 14 j 17:17	28° <u>♂</u> 12'02					
				conjunction	-10078 Jan 25 j 01:03	23° <u>♂</u> 25'51	-0°52'24
conjunction	-10085 Dec 31 j 04:24	29° <u>♂</u> 07'26	-0°30'31	minimum elong	-10078 Jan 25 j 01:02	23° <u>♂</u> 25'51	0°52'50
minimum elong	-10085 Dec 31 j 04:23	29° <u>♂</u> 07'26	0°30'44	max. Earth dist.	-10078 Jan 24 j 23:49	23° <u>♂</u> 25'41	20.70710 AU
max. Earth dist.	-10085 Dec 31 j 17:31	29° <u>♂</u> 09'17	21.02180 AU	morning rise	-10078 Feb 10 j 19:26	24° <u>♂</u> 23'07	
	-10084 Jan 15 j 18:44	0° <u>♂</u>		retrograde	-10078 May 16 j 01:06	27° <u>♂</u> 32'27	
morning rise	-10084 Jan 16 j 19:06	0° <u>♂</u> 03'22		opposition	-10078 Jul 30 j 20:20	25° <u>♂</u> 32'00	-0°59'42
retrograde	-10084 Apr 20 j 11:34	3° <u>♂</u> 10'09		min. Earth dist.	-10078 Jul 30 j 21:48	25° <u>♂</u> 31'51	18.67590 AU
opposition	-10084 Jul 06 j 09:56	1° <u>♂</u> 10'12	-0°36'04	direct	-10078 Oct 13 j 11:32	23° <u>♂</u> 32'51	
min. Earth dist.	-10084 Jul 05 j 22:59	1° <u>♂</u> 11'19	19.00007 AU	evening set	-10077 Jan 12 j 22:42	26° <u>♂</u> 37'25	
	-10084 Aug 05 j 20:58	30° <u>♂</u>					
direct	-10084 Sep 18 j 23:59	29° <u>♂</u> 12'55		conjunction	-10077 Jan 29 j 15:34	27° <u>♂</u> 34'38	-0°55'17
	-10084 Nov 01 j 06:41	0° <u>♂</u>		minimum elong	-10077 Jan 29 j 15:33	27° <u>♂</u> 34'38	0°55'44
evening set	-10084 Dec 18 j 02:00	2° <u>♂</u> 11'40		max. Earth dist.	-10077 Jan 29 j 11:57	27° <u>♂</u> 34'06	20.64370 AU
				morning rise	-10077 Feb 15 j 10:14	28° <u>♂</u> 32'08	

Attention, astronomical year style is used: The year -10077 in astronomical counting style is the year 10078 BCE in historical counting style.

	-10077 Mar 15 j 10:53	0°♈	evening set	-10070 Feb 13 j 01:04	26°♈29'54	
retrograde	-10077 May 20 j 12:00	1°♈42'01				
	-10077 Jul 27 j 19:23	30°♈♌	conjunction	-10070 Mar 01 j 20:44	27°♈29'12	-1°06'47
opposition	-10077 Aug 04 j 03:49	29°♈41'32	minimum elong	-10070 Mar 01 j 20:44	27°♈29'12	1°07'22
min. Earth dist.	-10077 Aug 04 j 08:22	29°♈41'03	max. Earth dist.	-10070 Feb 28 j 21:36	27°♈25'46	20.12283 AU
direct	-10077 Oct 17 j 18:21	27°♈42'01	morning rise	-10070 Mar 18 j 16:05	28°♈28'29	
	-10076 Jan 02 j 22:45	0°♈		-10070 Apr 16 j 01:13	0°♈	
evening set	-10076 Jan 17 j 13:32	0°♈47'49	retrograde	-10070 Jun 19 j 17:02	1°♈42'36	
				-10070 Aug 25 j 18:46	30°♈♈	
conjunction	-10076 Feb 03 j 06:58	1°♈45'19	opposition	-10070 Sep 02 j 03:06	29°♈41'07	-1°14'24
minimum elong	-10076 Feb 03 j 06:57	1°♈45'19	min. Earth dist.	-10070 Sep 02 j 22:29	29°♈39'02	18.08415 AU
max. Earth dist.	-10076 Feb 02 j 23:55	1°♈44'18	direct	-10070 Nov 16 j 07:11	27°♈38'18	
morning rise	-10076 Feb 20 j 02:02	2°♈43'05		-10069 Feb 01 j 23:36	0°♈	
retrograde	-10076 May 24 j 02:11	5°♈53'33	evening set	-10069 Feb 17 j 22:06	0°♈53'34	
opposition	-10076 Aug 07 j 11:58	3°♈52'58				
min. Earth dist.	-10076 Aug 07 j 18:23	3°♈52'18	conjunction	-10069 Mar 06 j 18:02	1°♈53'11	-1°07'00
direct	-10076 Oct 21 j 04:44	1°♈53'04	minimum elong	-10069 Mar 06 j 18:02	1°♈53'11	1°07'33
evening set	-10075 Jan 21 j 05:07	5°♈00'07	max. Earth dist.	-10069 Mar 05 j 17:56	1°♈49'35	20.04495 AU
			morning rise	-10069 Mar 23 j 12:56	2°♈52'42	
conjunction	-10075 Feb 06 j 23:08	5°♈57'56	retrograde	-10069 Jun 24 j 10:01	6°♈07'26	
minimum elong	-10075 Feb 06 j 23:08	5°♈57'56	opposition	-10069 Sep 06 j 16:17	4°♈05'50	-1°14'27
max. Earth dist.	-10075 Feb 06 j 13:47	5°♈56'34	min. Earth dist.	-10069 Sep 07 j 13:20	4°♈03'34	18.00692 AU
morning rise	-10075 Feb 23 j 18:18	6°♈55'56	direct	-10069 Nov 20 j 22:19	2°♈02'33	
retrograde	-10075 May 28 j 14:12	10°♈07'00	evening set	-10068 Feb 22 j 20:10	5°♈19'17	
opposition	-10075 Aug 11 j 20:51	8°♈06'19				
min. Earth dist.	-10075 Aug 12 j 06:11	8°♈05'20	conjunction	-10068 Mar 10 j 15:56	6°♈19'10	-1°06'49
direct	-10075 Oct 25 j 14:06	6°♈05'59	minimum elong	-10068 Mar 10 j 15:56	6°♈19'10	1°07'24
evening set	-10074 Jan 25 j 21:45	9°♈14'20	max. Earth dist.	-10068 Mar 09 j 12:49	6°♈15'07	19.96853 AU
			morning rise	-10068 Mar 27 j 10:39	7°♈18'56	
conjunction	-10074 Feb 11 j 16:12	10°♈12'26	retrograde	-10068 Jun 28 j 04:18	10°♈34'21	
minimum elong	-10074 Feb 11 j 16:12	10°♈12'26	opposition	-10068 Sep 10 j 06:27	8°♈32'37	-1°14'03
max. Earth dist.	-10074 Feb 11 j 03:15	10°♈10'33	min. Earth dist.	-10068 Sep 11 j 05:00	8°♈30'11	17.93153 AU
morning rise	-10074 Feb 28 j 11:40	11°♈10'43	direct	-10068 Nov 24 j 14:30	6°♈28'54	
retrograde	-10074 Jun 02 j 04:41	14°♈22'22	evening set	-10067 Feb 26 j 18:45	9°♈47'06	
opposition	-10074 Aug 16 j 06:12	12°♈21'33	max. Earth dist.	-10067 Mar 14 j 11:04	10°♈43'07	19.89409 AU
min. Earth dist.	-10074 Aug 16 j 17:26	12°♈20'21				
direct	-10074 Oct 30 j 01:45	10°♈20'44	conjunction	-10067 Mar 15 j 14:38	10°♈47'16	-1°06'14
evening set	-10073 Jan 30 j 15:16	13°♈30'25	minimum elong	-10067 Mar 15 j 14:38	10°♈47'16	1°06'48
			morning rise	-10067 Apr 01 j 08:47	11°♈47'16	
conjunction	-10073 Feb 16 j 10:16	14°♈28'50	retrograde	-10067 Jul 02 j 23:16	15°♈03'20	
minimum elong	-10073 Feb 16 j 10:16	14°♈28'50	opposition	-10067 Sep 14 j 21:32	13°♈01'33	-1°13'13
max. Earth dist.	-10073 Feb 15 j 19:16	14°♈26'38	min. Earth dist.	-10067 Sep 15 j 21:14	12°♈58'59	17.85821 AU
morning rise	-10073 Mar 05 j 05:41	15°♈27'21	direct	-10067 Nov 29 j 07:24	10°♈57'26	
retrograde	-10073 Jun 06 j 18:22	18°♈39'36	evening set	-10066 Mar 03 j 18:34	14°♈17'05	
opposition	-10073 Aug 20 j 16:24	16°♈38'37	max. Earth dist.	-10066 Mar 19 j 07:48	15°♈12'57	19.82201 AU
min. Earth dist.	-10073 Aug 21 j 06:16	16°♈37'09				
direct	-10073 Nov 03 j 13:38	14°♈37'20	conjunction	-10066 Mar 20 j 14:08	15°♈17'32	-1°05'14
evening set	-10072 Feb 04 j 09:45	17°♈48'22	minimum elong	-10066 Mar 20 j 14:08	15°♈17'32	1°05'49
max. Earth dist.	-10072 Feb 20 j 10:29	18°♈44'22	morning rise	-10066 Apr 06 j 07:56	16°♈17'45	
			retrograde	-10066 Jul 07 j 19:00	19°♈34'30	
conjunction	-10072 Feb 21 j 04:58	18°♈47'04	opposition	-10066 Sep 19 j 13:25	17°♈32'40	-1°11'55
minimum elong	-10072 Feb 21 j 04:57	18°♈47'04	min. Earth dist.	-10066 Sep 20 j 14:49	17°♈29'54	17.78747 AU
morning rise	-10072 Mar 09 j 00:31	19°♈45'51	direct	-10066 Dec 04 j 01:00	15°♈28'10	
retrograde	-10072 Jun 10 j 09:20	22°♈58'43	evening set	-10065 Mar 08 j 19:11	18°♈49'18	
opposition	-10072 Aug 24 j 03:10	20°♈57'33	max. Earth dist.	-10065 Mar 24 j 07:57	19°♈45'21	19.75245 AU
min. Earth dist.	-10072 Aug 24 j 18:48	20°♈55'53				
direct	-10072 Nov 07 j 02:50	18°♈55'45	conjunction	-10065 Mar 25 j 14:40	19°♈50'01	-1°03'50
evening set	-10071 Feb 08 j 04:58	22°♈08'11	minimum elong	-10065 Mar 25 j 14:40	19°♈50'01	1°04'25
max. Earth dist.	-10071 Feb 24 j 04:40	23°♈04'15	morning rise	-10065 Apr 11 j 07:46	20°♈50'27	
			retrograde	-10065 Jul 12 j 16:02	24°♈07'51	
conjunction	-10071 Feb 25 j 00:34	23°♈07'11	opposition	-10065 Sep 24 j 06:28	22°♈06'00	-1°10'09
minimum elong	-10071 Feb 25 j 00:34	23°♈07'11	min. Earth dist.	-10065 Sep 25 j 08:45	22°♈03'09	17.71911 AU
morning rise	-10071 Mar 13 j 19:52	24°♈06'13	direct	-10065 Dec 08 j 20:23	20°♈01'11	
retrograde	-10071 Jun 15 j 00:35	27°♈19'41	evening set	-10064 Mar 12 j 20:44	23°♈23'46	
opposition	-10071 Aug 28 j 14:45	25°♈18'22	max. Earth dist.	-10064 Mar 28 j 06:32	24°♈19'39	19.68531 AU
min. Earth dist.	-10071 Aug 29 j 08:30	25°♈16'28				
direct	-10071 Nov 11 j 16:23	23°♈16'04	conjunction	-10064 Mar 29 j 15:40	24°♈24'43	-1°02'01

Attention, astronomical year style is used: The year -10064 in astronomical counting style is the year 10065 BCE in historical counting style.

minimum elong	-10064 Mar 29 j 15:41	24° $\text{Z}$ 24'43	1°02'34	morning rise	-10058 May 14 j 21:04	23° $\text{Z}$ 34'11	
morning rise	-10064 Apr 15 j 08:11	25° $\text{Z}$ 25'20		retrograde	-10058 Aug 14 j 05:14	26° $\text{Z}$ 55'33	
retrograde	-10064 Jul 16 j 12:41	28° $\text{Z}$ 43'26		opposition	-10058 Oct 26 j 08:46	24° $\text{Z}$ 53'18	-0°45'23
opposition	-10064 Sep 28 j 00:33	26° $\text{Z}$ 41'33	-1°07'55	min. Earth dist.	-10058 Oct 27 j 17:11	24° $\text{Z}$ 49'46	17.32026 AU
min. Earth dist.	-10064 Sep 29 j 04:38	26° $\text{Z}$ 38'29	17.65333 AU	direct	-10057 Jan 10 j 15:22	22° $\text{Z}$ 46'27	
direct	-10064 Dec 12 j 15:37	24° $\text{Z}$ 36'24		evening set	-10057 Apr 17 j 00:05	26° $\text{Z}$ 17'08	
evening set	-10063 Mar 17 j 22:56	28° $\text{Z}$ 00'23		max. Earth dist.	-10057 May 02 j 01:01	27° $\text{Z}$ 13'21	19.29884 AU
max. Earth dist.	-10063 Apr 02 j 08:05	28° $\text{Z}$ 56'26	19.62070 AU				
conjunction	-10063 Apr 03 j 17:34	29° $\text{Z}$ 01'34	-0°59'46	conjunction	-10057 May 03 j 14:09	27° $\text{Z}$ 19'11	-0°38'22
minimum elong	-10063 Apr 03 j 17:35	29° $\text{Z}$ 01'34	1°00'19	minimum elong	-10057 May 03 j 14:09	27° $\text{Z}$ 19'11	0°38'43
	-10063 Apr 19 j 17:27	0° $\text{Z}$		morning rise	-10057 May 20 j 00:07	28° $\text{Z}$ 20'38	
morning rise	-10063 Apr 20 j 09:16	0° $\text{Z}$ 02'22			-10057 Jun 18 j 04:01	0° $\text{Z}$	
retrograde	-10063 Jul 21 j 11:29	3° $\text{Z}$ 21'06		retrograde	-10057 Aug 19 j 06:38	1° $\text{Z}$ 42'24	
opposition	-10063 Oct 02 j 19:32	1° $\text{Z}$ 19'11	-1°05'14		-10057 Oct 23 j 18:21	30° $\text{Z}$	
min. Earth dist.	-10063 Oct 04 j 00:08	1° $\text{Z}$ 16'04	17.58992 AU	opposition	-10057 Oct 31 j 09:03	29° $\text{Z}$ 40'05	-0°40'18
	-10063 Nov 04 j 14:14	30° $\text{Z}$		min. Earth dist.	-10057 Nov 01 j 16:12	29° $\text{Z}$ 36'40	17.28012 AU
direct	-10063 Dec 17 j 13:46	29° $\text{Z}$ 13'45		direct	-10056 Jan 15 j 20:16	27° $\text{Z}$ 33'01	
	-10062 Jan 28 j 22:12	0° $\text{Z}$			-10056 Apr 03 j 00:05	0° $\text{Z}$	
evening set	-10062 Mar 23 j 01:59	2° $\text{Z}$ 39'03		evening set	-10056 Apr 21 j 05:02	1° $\text{Z}$ 04'27	
max. Earth dist.	-10062 Apr 07 j 08:29	3° $\text{Z}$ 34'58	19.55849 AU	max. Earth dist.	-10056 May 06 j 06:24	2° $\text{Z}$ 00'55	19.26167 AU
conjunction	-10062 Apr 08 j 20:01	3° $\text{Z}$ 40'26	-0°57'08	conjunction	-10056 May 07 j 18:09	2° $\text{Z}$ 06'33	-0°33'40
minimum elong	-10062 Apr 08 j 20:01	3° $\text{Z}$ 40'27	0°57'38	minimum elong	-10056 May 07 j 18:10	2° $\text{Z}$ 06'33	0°34'00
morning rise	-10062 Apr 25 j 10:58	4° $\text{Z}$ 41'25		morning rise	-10056 May 24 j 02:48	3° $\text{Z}$ 08'01	
retrograde	-10062 Jul 26 j 08:46	8° $\text{Z}$ 00'45		retrograde	-10056 Aug 23 j 06:08	6° $\text{Z}$ 30'09	
opposition	-10062 Oct 07 j 15:40	5° $\text{Z}$ 58'48	-1°02'05	opposition	-10056 Nov 04 j 10:13	4° $\text{Z}$ 27'47	-0°34'56
min. Earth dist.	-10062 Oct 08 j 22:06	5° $\text{Z}$ 55'28	17.52909 AU	min. Earth dist.	-10056 Nov 05 j 17:43	4° $\text{Z}$ 24'20	17.24616 AU
direct	-10062 Dec 22 j 10:56	3° $\text{Z}$ 53'02		direct	-10055 Jan 19 j 22:42	2° $\text{Z}$ 20'35	
evening set	-10061 Mar 28 j 05:37	7° $\text{Z}$ 19'37		evening set	-10055 Apr 26 j 10:13	5° $\text{Z}$ 52'40	
max. Earth dist.	-10061 Apr 12 j 11:10	8° $\text{Z}$ 15'38	19.49900 AU	max. Earth dist.	-10055 May 11 j 10:35	6° $\text{Z}$ 49'09	19.23113 AU
conjunction	-10061 Apr 13 j 23:05	8° $\text{Z}$ 21'11	-0°54'05	conjunction	-10055 May 12 j 22:06	6° $\text{Z}$ 54'46	-0°28'44
minimum elong	-10061 Apr 13 j 23:05	8° $\text{Z}$ 21'11	0°54'34	minimum elong	-10055 May 12 j 22:06	6° $\text{Z}$ 54'46	0°29'02
morning rise	-10061 Apr 30 j 13:07	9° $\text{Z}$ 22'17		morning rise	-10055 May 29 j 05:44	7° $\text{Z}$ 56'15	
retrograde	-10061 Jul 31 j 08:41	12° $\text{Z}$ 42'12		retrograde	-10055 Aug 28 j 08:01	11° $\text{Z}$ 18'41	
opposition	-10061 Oct 12 j 12:36	10° $\text{Z}$ 40'11	-0°58'30	opposition	-10055 Nov 09 j 11:45	9° $\text{Z}$ 16'17	-0°29'18
min. Earth dist.	-10061 Oct 13 j 19:02	10° $\text{Z}$ 36'51	17.47101 AU	min. Earth dist.	-10055 Nov 10 j 17:33	9° $\text{Z}$ 13'02	17.21904 AU
direct	-10061 Dec 27 j 11:51	8° $\text{Z}$ 34'08		direct	-10054 Jan 25 j 03:28	7° $\text{Z}$ 08'59	
evening set	-10060 Apr 01 j 09:49	12° $\text{Z}$ 01'53		evening set	-10054 May 01 j 15:19	10° $\text{Z}$ 41'36	
max. Earth dist.	-10060 Apr 16 j 13:31	12° $\text{Z}$ 57'52	19.44255 AU	max. Earth dist.	-10054 May 16 j 16:54	11° $\text{Z}$ 38'26	19.20752 AU
conjunction	-10060 Apr 18 j 02:32	13° $\text{Z}$ 03'37	-0°50'40	conjunction	-10054 May 18 j 02:12	11° $\text{Z}$ 43'43	-0°23'35
minimum elong	-10060 Apr 18 j 02:32	13° $\text{Z}$ 03'37	0°51'08	minimum elong	-10054 May 18 j 02:13	11° $\text{Z}$ 43'43	0°23'50
morning rise	-10060 May 04 j 15:34	14° $\text{Z}$ 04'50		morning rise	-10054 Jun 03 j 08:25	12° $\text{Z}$ 45'09	
	-10060 May 20 j 07:54	15° $\text{Z}$		retrograde	-10054 Sep 02 j 09:08	16° $\text{Z}$ 07'52	
retrograde	-10060 Aug 04 j 06:28	17° $\text{Z}$ 25'17		opposition	-10054 Nov 14 j 14:14	14° $\text{Z}$ 05'30	-0°23'27
opposition	-10060 Oct 16 j 10:37	15° $\text{Z}$ 23'12	-0°54'30	min. Earth dist.	-10054 Nov 15 j 19:42	14° $\text{Z}$ 02'17	17.19895 AU
min. Earth dist.	-10060 Oct 17 j 18:33	15° $\text{Z}$ 19'42	17.41646 AU	direct	-10053 Jan 30 j 06:43	11° $\text{Z}$ 58'11	
	-10060 Oct 25 j 07:49	15° $\text{Z}$		evening set	-10053 May 06 j 20:27	15° $\text{Z}$ 31'13	
direct	-10060 Dec 31 j 11:02	13° $\text{Z}$ 16'51		max. Earth dist.	-10053 May 21 j 21:04	16° $\text{Z}$ 28'02	19.19117 AU
	-10059 Mar 06 j 01:35	15° $\text{Z}$		conjunction	-10053 May 23 j 05:56	16° $\text{Z}$ 33'16	-0°18'16
evening set	-10059 Apr 06 j 14:11	16° $\text{Z}$ 45'41		minimum elong	-10053 May 23 j 05:56	16° $\text{Z}$ 33'16	0°18'28
max. Earth dist.	-10059 Apr 21 j 16:56	17° $\text{Z}$ 41'44	19.39001 AU	morning rise	-10053 Jun 08 j 11:03	17° $\text{Z}$ 34'40	
conjunction	-10059 Apr 23 j 06:07	17° $\text{Z}$ 47'32	-0°46'53	retrograde	-10053 Sep 07 j 11:28	20° $\text{Z}$ 57'38	
minimum elong	-10059 Apr 23 j 06:07	17° $\text{Z}$ 47'32	0°47'19	opposition	-10053 Nov 19 j 17:12	18° $\text{Z}$ 55'18	-0°17'25
morning rise	-10059 May 09 j 18:14	18° $\text{Z}$ 48'52		min. Earth dist.	-10053 Nov 20 j 20:45	18° $\text{Z}$ 52'18	17.18619 AU
retrograde	-10059 Aug 09 j 07:05	22° $\text{Z}$ 09'47		direct	-10052 Feb 04 j 11:27	16° $\text{Z}$ 48'02	
opposition	-10059 Oct 21 j 09:16	20° $\text{Z}$ 07'37	-0°50'07	evening set	-10052 May 11 j 01:19	20° $\text{Z}$ 21'21	
min. Earth dist.	-10059 Oct 22 j 16:33	20° $\text{Z}$ 04'12	17.36596 AU	max. Earth dist.	-10052 May 26 j 03:41	21° $\text{Z}$ 18'33	19.18203 AU
direct	-10058 Jan 05 j 14:24	18° $\text{Z}$ 01'01		conjunction	-10052 May 27 j 09:42	21° $\text{Z}$ 23'20	-0°12'48
evening set	-10058 Apr 11 j 19:00	21° $\text{Z}$ 30'49		minimum elong	-10052 May 27 j 09:42	21° $\text{Z}$ 23'20	0°12'57
max. Earth dist.	-10058 Apr 26 j 20:59	22° $\text{Z}$ 26'59	19.34178 AU	behind sun begin	-10052 May 27 j 05:38	21° $\text{Z}$ 22'42	
conjunction	-10058 Apr 28 j 10:07	22° $\text{Z}$ 32'47	-0°42'46	behind sun end	-10052 May 27 j 13:46	21° $\text{Z}$ 23'58	
minimum elong	-10058 Apr 28 j 10:07	22° $\text{Z}$ 32'47	0°43'11	morning rise	-10052 Jun 12 j 13:24	22° $\text{Z}$ 24'40	
				retrograde	-10052 Sep 11 j 13:34	25° $\text{Z}$ 47'48	

Attention, astronomical year style is used: The year -10052 in astronomical counting style is the year 10053 BCE in historical counting style.

opposition	-10052 Nov 23 j 20:47	23° $\text{H}$ 45'34	-0°11'15	evening set	-10046 Jun 09 j 23:32	19° $\text{Y}$ 22'23	
min. Earth dist.	-10052 Nov 24 j 23:24	23° $\text{H}$ 42'40	17.18047 AU				
direct	-10051 Feb 08 j 16:02	21° $\text{H}$ 38'26		conjunction	-10046 Jun 25 j 23:50	20° $\text{Y}$ 23'18	0°20'39
evening set	-10051 May 16 j 06:02	25° $\text{H}$ 11'53		minimum elong	-10046 Jun 25 j 23:49	20° $\text{Y}$ 23'18	0°20'47
max. Earth dist.	-10051 May 31 j 07:38	26° $\text{H}$ 09'05	19.17982 AU	max. Earth dist.	-10046 Jun 25 j 05:25	20° $\text{Y}$ 20'21	19.25748 AU
				morning rise	-10046 Jul 11 j 20:15	21° $\text{Y}$ 23'39	
conjunction	-10051 Jun 01 j 12:59	26° $\text{H}$ 13'46	-0°07'15	retrograde	-10046 Oct 10 j 21:47	24° $\text{Y}$ 46'39	
minimum elong	-10051 Jun 01 j 12:59	26° $\text{H}$ 13'46	0°07'21	opposition	-10046 Dec 24 j 01:07	22° $\text{Y}$ 44'50	0°25'55
behind sun begin	-10051 Jun 01 j 06:52	26° $\text{H}$ 12'49		min. Earth dist.	-10046 Dec 24 j 16:32	22° $\text{Y}$ 43'11	17.27263 AU
behind sun end	-10051 Jun 01 j 19:05	26° $\text{H}$ 14'43		direct	-10045 Mar 11 j 06:14	20° $\text{Y}$ 38'57	
morning rise	-10051 Jun 17 j 15:35	27° $\text{H}$ 14'59		evening set	-10045 Jun 15 j 01:00	24° $\text{Y}$ 10'14	
	-10051 Aug 10 j 17:50	0° $\text{Y}$					
retrograde	-10051 Sep 16 j 15:17	0° $\text{Y}$ 38'17		conjunction	-10045 Jun 30 j 23:59	25° $\text{Y}$ 10'53	0°25'53
	-10051 Oct 24 j 12:50	30° $\text{R}$ $\text{H}$		minimum elong	-10045 Jun 30 j 23:59	25° $\text{Y}$ 10'53	0°26'04
opposition	-10051 Nov 29 j 00:46	28° $\text{H}$ 36'07	-0°04'59	max. Earth dist.	-10045 Jun 30 j 07:59	25° $\text{Y}$ 08'20	19.28881 AU
min. Earth dist.	-10051 Nov 30 j 01:41	28° $\text{H}$ 33'25	17.18153 AU	morning rise	-10045 Jul 16 j 19:17	26° $\text{Y}$ 11'01	
direct	-10050 Feb 13 j 21:25	26° $\text{H}$ 29'08		retrograde	-10045 Oct 15 j 21:11	29° $\text{Y}$ 33'46	
	-10050 May 20 j 17:38	0° $\text{Y}$		opposition	-10045 Dec 29 j 06:08	27° $\text{Y}$ 31'58	0°31'39
evening set	-10050 May 21 j 10:27	0° $\text{Y}$ 02'37		min. Earth dist.	-10045 Dec 29 j 20:06	27° $\text{Y}$ 30'29	17.30660 AU
				direct	-10044 Mar 15 j 10:38	25° $\text{Y}$ 26'20	
conjunction	-10050 Jun 06 j 16:11	1° $\text{Y}$ 04'21	-0°01'37	evening set	-10044 Jun 19 j 01:39	28° $\text{Y}$ 56'47	
minimum elong	-10050 Jun 06 j 16:11	1° $\text{Y}$ 04'21	0°01'40				
behind sun begin	-10050 Jun 06 j 09:31	1° $\text{Y}$ 03'19		conjunction	-10044 Jul 04 j 23:21	29° $\text{Y}$ 57'09	0°30'55
behind sun end	-10050 Jun 06 j 22:51	1° $\text{Y}$ 05'23		minimum elong	-10044 Jul 04 j 23:21	29° $\text{Y}$ 57'09	0°31'09
max. Earth dist.	-10050 Jun 05 j 13:46	1° $\text{Y}$ 00'08	19.18404 AU	max. Earth dist.	-10044 Jul 04 j 09:54	29° $\text{Y}$ 55'01	19.32547 AU
morning rise	-10050 Jun 22 j 17:23	2° $\text{Y}$ 05'27			-10044 Jul 05 j 17:12	0° $\text{R}$	
asc. node	-10050 Sep 19 j 02:32	5° $\text{Y}$ 28'37		morning rise	-10044 Jul 20 j 17:42	0° $\text{R}$ 57'03	
retrograde	-10050 Sep 21 j 17:19	5° $\text{Y}$ 28'48		retrograde	-10044 Oct 19 j 22:17	4° $\text{R}$ 19'28	
opposition	-10050 Dec 04 j 05:13	3° $\text{Y}$ 26'45	0°01'20	opposition	-10043 Jan 02 j 10:36	2° $\text{R}$ 17'42	0°37'09
min. Earth dist.	-10050 Dec 05 j 04:39	3° $\text{Y}$ 24'13	17.18867 AU	min. Earth dist.	-10043 Jan 02 j 21:07	2° $\text{R}$ 16'35	17.34580 AU
direct	-10049 Feb 19 j 04:03	1° $\text{Y}$ 19'59		direct	-10043 Mar 20 j 16:51	0° $\text{R}$ 12'20	
evening set	-10049 May 26 j 14:40	4° $\text{Y}$ 53'18		evening set	-10043 Jun 24 j 01:16	3° $\text{R}$ 41'50	
conjunction	-10049 Jun 11 j 18:53	5° $\text{Y}$ 54'52	0°04'09	conjunction	-10043 Jul 09 j 21:51	4° $\text{R}$ 41'55	0°35'42
minimum elong	-10049 Jun 11 j 18:54	5° $\text{Y}$ 54'52	0°04'10	minimum elong	-10043 Jul 09 j 21:51	4° $\text{R}$ 41'55	0°35'59
behind sun begin	-10049 Jun 11 j 12:20	5° $\text{Y}$ 53'50		max. Earth dist.	-10043 Jul 09 j 11:32	4° $\text{R}$ 40'17	19.36732 AU
behind sun end	-10049 Jun 12 j 01:27	5° $\text{Y}$ 55'53		morning rise	-10043 Jul 25 j 15:10	5° $\text{R}$ 41'33	
max. Earth dist.	-10049 Jun 10 j 17:30	5° $\text{Y}$ 50'49	19.19420 AU	retrograde	-10043 Oct 24 j 20:30	9° $\text{R}$ 03'36	
morning rise	-10049 Jun 27 j 18:55	6° $\text{Y}$ 55'48		opposition	-10042 Jan 07 j 14:57	7° $\text{R}$ 01'53	0°42'21
retrograde	-10049 Sep 26 j 18:15	10° $\text{Y}$ 19'12		min. Earth dist.	-10042 Jan 07 j 23:52	7° $\text{R}$ 00'56	17.39038 AU
opposition	-10049 Dec 09 j 10:06	8° $\text{Y}$ 17'12	0°07'37	direct	-10042 Mar 25 j 19:49	4° $\text{R}$ 56'49	
min. Earth dist.	-10049 Dec 10 j 07:58	8° $\text{Y}$ 14'50	17.20176 AU	evening set	-10042 Jun 29 j 00:00	8° $\text{R}$ 25'16	
direct	-10048 Feb 24 j 10:03	6° $\text{Y}$ 10'38					
evening set	-10048 May 30 j 18:06	9° $\text{Y}$ 43'39		conjunction	-10042 Jul 14 j 19:19	9° $\text{R}$ 25'03	0°40'14
				minimum elong	-10042 Jul 14 j 19:19	9° $\text{R}$ 25'03	0°40'34
conjunction	-10048 Jun 15 j 21:05	10° $\text{Y}$ 45'02	0°09'44	max. Earth dist.	-10042 Jul 14 j 11:26	9° $\text{R}$ 23'48	19.41465 AU
minimum elong	-10048 Jun 15 j 21:05	10° $\text{Y}$ 45'02	0°09'46	morning rise	-10042 Jul 30 j 11:50	10° $\text{R}$ 24'25	
behind sun begin	-10048 Jun 15 j 15:38	10° $\text{Y}$ 44'11		retrograde	-10042 Oct 29 j 21:05	13° $\text{R}$ 46'04	
behind sun end	-10048 Jun 16 j 02:32	10° $\text{Y}$ 45'53		opposition	-10041 Jan 12 j 18:46	11° $\text{R}$ 44'23	0°47'14
max. Earth dist.	-10048 Jun 14 j 22:32	10° $\text{Y}$ 41'26	19.21008 AU	min. Earth dist.	-10041 Jan 12 j 23:45	11° $\text{R}$ 43'52	17.44039 AU
morning rise	-10048 Jul 01 j 19:49	11° $\text{Y}$ 45'48		direct	-10041 Mar 31 j 00:42	9° $\text{R}$ 39'40	
retrograde	-10048 Sep 30 j 20:02	15° $\text{Y}$ 09'07		evening set	-10041 Jul 03 j 21:44	13° $\text{R}$ 07'00	
opposition	-10048 Dec 13 j 15:07	13° $\text{Y}$ 07'12	0°13'51				
min. Earth dist.	-10048 Dec 14 j 10:46	13° $\text{Y}$ 05'05	17.22018 AU	conjunction	-10041 Jul 19 j 16:02	14° $\text{R}$ 06'28	0°44'28
direct	-10047 Feb 28 j 17:40	11° $\text{Y}$ 00'52		minimum elong	-10041 Jul 19 j 16:02	14° $\text{R}$ 06'28	0°44'49
evening set	-10047 Jun 04 j 21:11	14° $\text{Y}$ 33'26		max. Earth dist.	-10041 Jul 19 j 11:53	14° $\text{R}$ 05'49	19.46738 AU
					-10041 Aug 02 j 19:45	15° $\text{R}$	
conjunction	-10047 Jun 20 j 22:46	15° $\text{Y}$ 34'35	0°15'15	morning rise	-10041 Aug 04 j 07:36	15° $\text{R}$ 05'34	
minimum elong	-10047 Jun 20 j 22:46	15° $\text{Y}$ 34'35	0°15'21	retrograde	-10041 Nov 03 j 18:14	18° $\text{R}$ 26'46	
behind sun begin	-10047 Jun 20 j 20:39	15° $\text{Y}$ 34'16		opposition	-10040 Jan 17 j 22:17	16° $\text{R}$ 25'11	0°51'47
behind sun end	-10047 Jun 21 j 00:53	15° $\text{Y}$ 34'55		min. Earth dist.	-10040 Jan 18 j 01:20	16° $\text{R}$ 24'52	17.49588 AU
max. Earth dist.	-10047 Jun 20 j 01:45	15° $\text{Y}$ 31'14	19.23115 AU		-10040 Feb 24 j 01:53	15° $\text{R}$ $\text{R}$	
morning rise	-10047 Jul 06 j 20:21	16° $\text{Y}$ 35'10		direct	-10040 Apr 04 j 02:25	14° $\text{R}$ 20'52	
retrograde	-10047 Oct 05 j 20:09	19° $\text{Y}$ 58'22			-10040 May 13 j 00:02	15° $\text{R}$	
opposition	-10047 Dec 18 j 20:05	17° $\text{Y}$ 56'30	0°19'58	evening set	-10040 Jul 07 j 18:29	17° $\text{R}$ 47'00	
min. Earth dist.	-10047 Dec 19 j 14:24	17° $\text{Y}$ 54'32	17.24389 AU				
direct	-10046 Mar 05 j 23:00	15° $\text{Y}$ 50'22		conjunction	-10040 Jul 23 j 11:40	18° $\text{R}$ 46'09	0°48'23

Attention, astronomical year style is used: The year -10040 in astronomical counting style is the year 10041 BCE in historical counting style.

minimum elong	-10040 Jul 23 j 11:40	18° <del>8</del> 46'09	0°48'46	opposition	-10033 Feb 20 j 04:49	18° <del>II</del> 20'17	1°12'16
max. Earth dist.	-10040 Jul 23 j 09:43	18° <del>8</del> 45'51	19.52553 AU	min. Earth dist.	-10033 Feb 19 j 13:31	18° <del>II</del> 21'51	17.98568 AU
morning rise	-10040 Aug 08 j 02:41	19° <del>8</del> 44'58		direct	-10033 May 08 j 02:40	16° <del>II</del> 19'14	
retrograde	-10040 Nov 07 j 17:58	23° <del>8</del> 05'43		evening set	-10033 Aug 08 j 17:22	19° <del>II</del> 35'53	
opposition	-10039 Jan 22 j 01:03	21° <del>8</del> 04'14	0°55'57				
min. Earth dist.	-10039 Jan 22 j 00:13	21° <del>8</del> 04'19	17.55649 AU	conjunction	-10033 Aug 24 j 06:01	20° <del>II</del> 32'47	1°05'34
direct	-10039 Apr 09 j 05:49	19° <del>8</del> 00'21		minimum elong	-10033 Aug 24 j 06:01	20° <del>II</del> 32'47	1°06'08
evening set	-10039 Jul 12 j 14:14	22° <del>8</del> 25'16		max. Earth dist.	-10033 Aug 24 j 22:58	20° <del>II</del> 35'23	20.02289 AU
				morning rise	-10033 Sep 08 j 18:25	21° <del>II</del> 29'39	
conjunction	-10039 Jul 28 j 06:38	23° <del>8</del> 24'05	0°51'58	retrograde	-10033 Dec 10 j 07:41	24° <del>II</del> 46'23	
minimum elong	-10039 Jul 28 j 06:37	23° <del>8</del> 24'05	0°52'24	min. Earth dist.	-10032 Feb 24 j 09:22	22° <del>II</del> 47'41	18.06054 AU
max. Earth dist.	-10039 Jul 28 j 08:34	23° <del>8</del> 24'24	19.58842 AU	opposition	-10032 Feb 25 j 02:40	22° <del>II</del> 45'55	1°13'26
morning rise	-10039 Aug 12 j 20:50	24° <del>8</del> 22'37		direct	-10032 May 11 j 23:41	20° <del>II</del> 45'16	
retrograde	-10039 Nov 12 j 13:55	27° <del>8</del> 42'52		evening set	-10032 Aug 12 j 06:40	24° <del>II</del> 00'27	
opposition	-10038 Jan 27 j 03:18	25° <del>8</del> 41'33	0°59'44				
min. Earth dist.	-10038 Jan 27 j 00:33	25° <del>8</del> 41'50	17.62153 AU	conjunction	-10032 Aug 27 j 18:54	24° <del>II</del> 57'03	1°06'27
direct	-10038 Apr 14 j 06:36	23° <del>8</del> 38'09		minimum elong	-10032 Aug 27 j 18:54	24° <del>II</del> 57'03	1°07'02
evening set	-10038 Jul 17 j 09:10	27° <del>8</del> 01'47		max. Earth dist.	-10032 Aug 28 j 12:49	24° <del>II</del> 59'47	20.09747 AU
				morning rise	-10032 Sep 12 j 07:33	25° <del>II</del> 53'41	
conjunction	-10038 Aug 02 j 00:33	28° <del>8</del> 00'16	0°55'12	retrograde	-10032 Dec 14 j 00:15	29° <del>II</del> 09'43	
minimum elong	-10038 Aug 02 j 00:33	28° <del>8</del> 00'16	0°55'39	opposition	-10031 Feb 28 j 23:38	27° <del>II</del> 09'19	1°14'09
max. Earth dist.	-10038 Aug 02 j 04:22	28° <del>8</del> 00'52	19.65552 AU	min. Earth dist.	-10031 Feb 28 j 04:36	27° <del>II</del> 11'15	18.13488 AU
morning rise	-10038 Aug 17 j 14:23	28° <del>8</del> 58'31		direct	-10031 May 16 j 17:33	25° <del>II</del> 09'01	
	-10038 Sep 04 j 00:07	0° <del>II</del>		evening set	-10031 Aug 16 j 18:50	28° <del>II</del> 22'46	
retrograde	-10038 Nov 17 j 12:13	2° <del>II</del> 18'15					
opposition	-10037 Feb 01 j 05:01	0° <del>II</del> 17'06	1°03'07	conjunction	-10031 Sep 01 j 07:04	29° <del>II</del> 19'04	1°06'56
min. Earth dist.	-10037 Jan 31 j 22:45	0° <del>II</del> 17'45	17.69042 AU	minimum elong	-10031 Sep 01 j 07:04	29° <del>II</del> 19'04	1°07'30
	-10037 Feb 08 j 01:58	30° <del>R</del> 8		max. Earth dist.	-10031 Sep 02 j 03:53	29° <del>II</del> 22'14	20.17135 AU
direct	-10037 Apr 19 j 08:32	28° <del>8</del> 14'11			-10031 Sep 12 j 12:23	0° <del>II</del>	
	-10037 Jun 23 j 15:17	0° <del>II</del>		morning rise	-10031 Sep 16 j 19:40	0° <del>II</del> 15'27	
evening set	-10037 Jul 22 j 02:55	1° <del>II</del> 36'29		retrograde	-10031 Dec 18 j 15:43	3° <del>II</del> 30'47	
				opposition	-10030 Mar 05 j 19:32	1° <del>II</del> 30'26	1°14'27
conjunction	-10037 Aug 06 j 17:42	2° <del>II</del> 34'39	0°58'04	min. Earth dist.	-10030 Mar 04 j 22:19	1° <del>II</del> 32'36	18.20834 AU
minimum elong	-10037 Aug 06 j 17:41	2° <del>II</del> 34'39	0°58'33		-10030 Apr 16 j 16:50	30° <del>R</del> II	
max. Earth dist.	-10037 Aug 07 j 01:24	2° <del>II</del> 35'51	19.72588 AU	direct	-10030 May 21 j 12:52	29° <del>II</del> 30'30	
morning rise	-10037 Aug 22 j 06:55	3° <del>II</del> 32'37			-10030 Jun 24 j 07:48	0° <del>II</del>	
retrograde	-10037 Nov 22 j 06:48	6° <del>II</del> 51'49		evening set	-10030 Aug 21 j 06:15	2° <del>II</del> 42'47	
opposition	-10036 Feb 06 j 06:11	4° <del>II</del> 50'50	1°06'04				
min. Earth dist.	-10036 Feb 05 j 21:59	4° <del>II</del> 51'41	17.76208 AU	conjunction	-10030 Sep 05 j 18:14	3° <del>II</del> 38'49	1°07'02
direct	-10036 Apr 23 j 08:31	2° <del>II</del> 48'25		minimum elong	-10030 Sep 05 j 18:14	3° <del>II</del> 38'49	1°07'37
evening set	-10036 Jul 25 j 20:01	6° <del>II</del> 09'21		max. Earth dist.	-10030 Sep 06 j 16:08	3° <del>II</del> 42'08	20.24448 AU
				morning rise	-10030 Sep 21 j 07:14	4° <del>II</del> 34'59	
conjunction	-10036 Aug 10 j 09:58	7° <del>II</del> 07'11	1°00'32	retrograde	-10030 Dec 23 j 06:45	7° <del>II</del> 49'37	
minimum elong	-10036 Aug 10 j 09:57	7° <del>II</del> 07'10	1°01'02	opposition	-10029 Mar 10 j 14:38	5° <del>II</del> 49'17	1°14'19
max. Earth dist.	-10036 Aug 10 j 19:08	7° <del>II</del> 08'36	19.79864 AU	min. Earth dist.	-10029 Mar 09 j 15:59	5° <del>II</del> 51'35	18.28131 AU
morning rise	-10036 Aug 25 j 23:00	8° <del>II</del> 04'52		direct	-10029 May 26 j 04:57	3° <del>II</del> 49'41	
retrograde	-10036 Nov 26 j 03:09	11° <del>II</del> 23'29		evening set	-10029 Aug 25 j 16:31	7° <del>II</del> 00'32	
opposition	-10035 Feb 10 j 06:21	9° <del>II</del> 22'39	1°08'35				
min. Earth dist.	-10035 Feb 09 j 19:19	9° <del>II</del> 23'47	17.83582 AU	conjunction	-10029 Sep 10 j 04:41	7° <del>II</del> 56'19	1°06'45
direct	-10035 Apr 28 j 07:45	7° <del>II</del> 20'42		minimum elong	-10029 Sep 10 j 04:41	7° <del>II</del> 56'19	1°07'20
evening set	-10035 Jul 30 j 12:02	10° <del>II</del> 40'15		max. Earth dist.	-10029 Sep 11 j 05:24	8° <del>II</del> 00'03	20.31710 AU
				morning rise	-10029 Sep 25 j 17:53	8° <del>II</del> 52'15	
conjunction	-10035 Aug 15 j 01:34	11° <del>II</del> 37'46	1°02'37	retrograde	-10029 Dec 27 j 20:59	12° <del>II</del> 06'11	
minimum elong	-10035 Aug 15 j 01:34	11° <del>II</del> 37'46	1°03'09	min. Earth dist.	-10028 Mar 13 j 07:33	10° <del>II</del> 08'27	18.35363 AU
max. Earth dist.	-10035 Aug 15 j 14:11	11° <del>II</del> 39'43	19.87291 AU	opposition	-10028 Mar 14 j 08:36	10° <del>II</del> 05'54	1°13'47
morning rise	-10035 Aug 30 j 14:11	12° <del>II</del> 35'10		direct	-10028 May 29 j 22:06	8° <del>II</del> 06'38	
retrograde	-10035 Nov 30 j 20:39	15° <del>II</del> 53'11		evening set	-10028 Aug 29 j 02:14	11° <del>II</del> 16'07	
opposition	-10034 Feb 15 j 05:58	13° <del>II</del> 52'30	1°10'39				
min. Earth dist.	-10034 Feb 14 j 17:00	13° <del>II</del> 53'50	17.91051 AU	conjunction	-10028 Sep 13 j 14:21	12° <del>II</del> 11'39	1°06'07
direct	-10034 May 03 j 06:16	11° <del>II</del> 51'01		minimum elong	-10028 Sep 13 j 14:22	12° <del>II</del> 11'39	1°06'41
evening set	-10034 Aug 04 j 03:12	15° <del>II</del> 09'08		max. Earth dist.	-10028 Sep 14 j 16:05	12° <del>II</del> 15'31	20.38911 AU
				morning rise	-10028 Sep 29 j 04:06	13° <del>II</del> 07'23	
conjunction	-10034 Aug 19 j 16:04	16° <del>II</del> 06'19	1°04'18	retrograde	-10028 Dec 31 j 10:27	16° <del>II</del> 20'39	
minimum elong	-10034 Aug 19 j 16:03	16° <del>II</del> 06'19	1°04'51	min. Earth dist.	-10027 Mar 17 j 23:25	14° <del>II</del> 23'03	18.42552 AU
max. Earth dist.	-10034 Aug 20 j 05:52	16° <del>II</del> 08'27	19.94785 AU	opposition	-10027 Mar 19 j 01:32	14° <del>II</del> 20'25	1°12'50
morning rise	-10034 Sep 04 j 04:40	17° <del>II</del> 03'28		direct	-10027 Jun 03 j 12:00	12° <del>II</del> 21'29	
retrograde	-10034 Dec 05 j 14:56	20° <del>II</del> 20'51		evening set	-10027 Sep 02 j 10:59	15° <del>II</del> 29'39	

Attention, astronomical year style is used: The year -10027 in astronomical counting style is the year 10028 BCE in historical counting style.

conjunction	-10027 Sep 17 j 23:27	16°☾24'57	1°05'08			-10020 Jan 06 j 03:16	15°♈	
minimum elong	-10027 Sep 17 j 23:27	16°☾24'57	1°05'42	retrograde		-10020 Jan 30 j 20:05	15°♈14'45	
max. Earth dist.	-10027 Sep 19 j 03:39	16°☾29'10	20.46066 AU			-10020 Feb 24 j 18:24	15°♈	
morning rise	-10027 Oct 03 j 13:31	17°☾20'30		min. Earth dist.		-10020 Apr 16 j 15:11	13°♈18'39	18.87980 AU
retrograde	-10026 Jan 04 j 23:34	20°☾33'06		opposition		-10020 Apr 18 j 00:33	13°♈15'18	0°56'23
opposition	-10026 Mar 23 j 17:34	18°☾32'58	1°11'31	direct		-10020 Jul 02 j 19:47	11°♈18'44	
min. Earth dist.	-10026 Mar 22 j 13:04	18°☾35'51	18.49665 AU	evening set		-10020 Sep 30 j 08:53	14°♈19'24	
direct	-10026 Jun 08 j 02:49	16°☾34'24				-10020 Oct 12 j 03:16	15°♈	
evening set	-10026 Sep 06 j 19:03	19°☾41'19						
conjunction	-10026 Sep 22 j 07:39	20°☾36'23	1°03'48	conjunction		-10020 Oct 16 j 00:49	15°♈13'36	0°49'24
minimum elong	-10026 Sep 22 j 07:40	20°☾36'23	1°04'21	minimum elong		-10020 Oct 16 j 00:49	15°♈13'36	0°49'52
max. Earth dist.	-10026 Sep 23 j 12:49	20°☾40'44	20.53131 AU	max. Earth dist.		-10020 Oct 17 j 10:59	15°♈18'33	20.90492 AU
morning rise	-10026 Oct 07 j 22:26	21°☾31'46		morning rise		-10020 Oct 31 j 20:18	16°♈08'16	
retrograde	-10025 Jan 09 j 11:46	24°☾43'46		retrograde		-10019 Feb 03 j 03:53	19°♈17'08	
min. Earth dist.	-10025 Mar 27 j 03:45	22°☾46'41	18.56684 AU	min. Earth dist.		-10019 Apr 21 j 02:44	17°♈20'58	18.93023 AU
opposition	-10025 Mar 28 j 08:56	22°☾43'44	1°09'50	opposition		-10019 Apr 22 j 11:00	17°♈17'44	0°52'49
direct	-10025 Jun 12 j 14:47	20°☾45'32		direct		-10019 Jul 07 j 02:47	15°♈21'22	
evening set	-10025 Sep 11 j 02:29	23°☾51'15		evening set		-10019 Oct 04 j 13:47	18°♈21'12	
conjunction	-10025 Sep 26 j 15:37	24°☾46'08	1°02'08	conjunction		-10019 Oct 20 j 06:38	19°♈15'18	0°46'06
minimum elong	-10025 Sep 26 j 15:38	24°☾46'09	1°02'42	minimum elong		-10019 Oct 20 j 06:38	19°♈15'18	0°46'31
max. Earth dist.	-10025 Sep 27 j 22:51	24°☾50'46	20.60077 AU	max. Earth dist.		-10019 Oct 21 j 17:14	19°♈20'19	20.95289 AU
morning rise	-10025 Oct 12 j 06:56	25°☾41'21		morning rise		-10019 Nov 05 j 02:59	20°♈09'54	
retrograde	-10024 Jan 14 j 00:24	28°☾52'46		retrograde		-10018 Feb 07 j 13:55	23°♈18'19	
opposition	-10024 Mar 31 j 23:05	26°☾52'52	1°07'47	min. Earth dist.		-10018 Apr 25 j 11:32	21°♈22'16	18.97558 AU
min. Earth dist.	-10024 Mar 30 j 15:53	26°☾56'00	18.63536 AU	opposition		-10018 Apr 26 j 20:43	21°♈18'57	0°49'02
direct	-10024 Jun 16 j 03:23	24°☾55'02		direct		-10018 Jul 11 j 12:02	19°♈22'44	
evening set	-10024 Sep 14 j 09:28	27°☾59'37		evening set		-10018 Oct 08 j 18:22	22°♈21'47	
conjunction	-10024 Sep 29 j 22:55	28°☾54'20	1°00'10	conjunction		-10018 Oct 24 j 11:57	23°♈15'49	0°42'35
minimum elong	-10024 Sep 29 j 22:56	28°☾54'20	1°00'42	minimum elong		-10018 Oct 24 j 11:58	23°♈15'49	0°42'59
max. Earth dist.	-10024 Oct 01 j 06:44	28°☾59'01	20.66819 AU	max. Earth dist.		-10018 Oct 25 j 22:06	23°♈20'45	20.99570 AU
morning rise	-10024 Oct 15 j 15:04	29°☾49'25		morning rise		-10018 Nov 09 j 09:26	24°♈10'23	
retrograde	-10024 Oct 18 j 17:01	0°♈		retrograde		-10017 Feb 11 j 20:56	27°♈18'21	
min. Earth dist.	-10023 Jan 17 j 11:03	3°♈00'16		min. Earth dist.		-10017 Apr 29 j 22:01	25°♈22'09	19.01591 AU
opposition	-10023 Apr 04 j 05:29	1°♈03'37	18.70164 AU	opposition		-10017 May 01 j 05:53	25°♈18'58	0°45'01
direct	-10023 Apr 05 j 12:40	1°♈00'29	1°05'24	direct		-10017 Jul 15 j 17:54	23°♈22'52	
evening set	-10023 May 01 j 20:52	30°♈		evening set		-10017 Oct 12 j 22:40	26°♈21'12	
conjunction	-10023 Jun 20 j 13:44	29°☾03'01		conjunction		-10017 Oct 28 j 17:17	27°♈15'11	0°38'53
minimum elong	-10023 Aug 07 j 03:07	0°♈		minimum elong		-10017 Oct 28 j 17:17	27°♈15'11	0°39'14
max. Earth dist.	-10023 Sep 18 j 15:46	2°♈06'32		max. Earth dist.		-10017 Oct 30 j 03:40	27°♈20'07	21.03368 AU
morning rise	-10023 Oct 04 j 05:52	3°♈01'06	0°57'53	morning rise		-10017 Nov 13 j 15:43	28°♈09'42	
retrograde	-10023 Oct 04 j 05:52	3°♈01'06	0°58'25	retrograde		-10017 Dec 20 j 07:33	0°♈	
max. Earth dist.	-10023 Oct 05 j 15:13	3°♈06'00	20.73305 AU	min. Earth dist.		-10016 Feb 16 j 05:34	1°♈17'15	
morning rise	-10023 Oct 19 j 22:37	3°♈56'02		opposition		-10016 Apr 16 j 15:15	30°♈	
retrograde	-10022 Jan 21 j 23:22	7°♈06'22		direct		-10016 May 03 j 05:25	29°♈21'06	19.05147 AU
min. Earth dist.	-10022 Apr 08 j 16:31	5°♈10'01	18.76487 AU	opposition		-10016 May 04 j 13:59	29°♈17'50	0°40'49
opposition	-10022 Apr 10 j 01:20	5°♈06'43	1°02'42	direct		-10016 Jul 19 j 01:36	27°♈21'49	
direct	-10022 Jun 25 j 00:52	3°♈09'35		evening set		-10016 Oct 10 j 05:33	0°♈	
evening set	-10022 Sep 22 j 21:53	6°♈12'06		conjunction		-10016 Oct 16 j 02:50	0°♈19'31	
conjunction	-10022 Oct 08 j 12:25	7°♈06'31	0°55'19	conjunction		-10016 Oct 31 j 22:14	1°♈13'27	0°35'00
minimum elong	-10022 Oct 08 j 12:25	7°♈06'31	0°55'49	minimum elong		-10016 Oct 31 j 22:15	1°♈13'27	0°35'21
max. Earth dist.	-10022 Oct 09 j 21:59	7°♈11'26	20.79451 AU	max. Earth dist.		-10016 Nov 02 j 08:03	1°♈18'17	21.06695 AU
morning rise	-10022 Oct 24 j 06:07	8°♈01'22		morning rise		-10016 Nov 16 j 21:49	2°♈07'57	
retrograde	-10021 Jan 26 j 08:33	11°♈11'11		retrograde		-10015 Feb 19 j 12:00	5°♈15'07	
min. Earth dist.	-10021 Apr 13 j 05:11	9°♈14'53	18.82453 AU	opposition		-10015 May 08 j 21:43	3°♈15'40	0°36'27
opposition	-10021 Apr 14 j 13:24	9°♈11'39	0°59'41	min. Earth dist.		-10015 May 07 j 14:31	3°♈18'47	19.08264 AU
direct	-10021 Jun 29 j 09:36	7°♈14'49		direct		-10015 Jul 23 j 06:17	1°♈19'42	
evening set	-10021 Sep 27 j 03:27	10°♈16'22		evening set		-10015 Oct 20 j 06:33	4°♈16'50	
conjunction	-10021 Oct 12 j 18:48	11°♈10'40	0°52'29	conjunction		-10015 Nov 05 j 03:01	5°♈10'45	0°31'00
minimum elong	-10021 Oct 12 j 18:48	11°♈10'40	0°52'58	minimum elong		-10015 Nov 05 j 03:01	5°♈10'45	0°31'17
max. Earth dist.	-10021 Oct 14 j 05:17	11°♈15'42	20.85209 AU	max. Earth dist.		-10015 Nov 06 j 13:02	5°♈15'36	21.09613 AU
morning rise	-10021 Oct 28 j 13:17	12°♈05'25		morning rise		-10015 Nov 21 j 03:33	6°♈05'14	
retrograde				retrograde		-10014 Feb 23 j 19:45	9°♈12'05	

Attention, astronomical year style is used: The year -10014 in astronomical counting style is the year 10015 BCE in historical counting style.

min. Earth dist.	-10014 May 11 j 20:49	7° $\mathring{M}$ 15'48	19.10978 AU	opposition	-10008 Jun 05 j 14:13	0° $\mathring{A}$ 45'48	0°02'35
opposition	-10014 May 13 j 04:44	7° $\mathring{M}$ 12'36	0°31'55	min. Earth dist.	-10008 Jun 04 j 12:03	0° $\mathring{A}$ 48'27	19.18543 AU
direct	-10014 Jul 27 j 12:34	5° $\mathring{M}$ 16'41			-10008 Jun 25 j 00:48	30° $\mathring{R}$ $\mathring{M}$	
evening set	-10014 Oct 24 j 10:27	8° $\mathring{M}$ 13'20		direct	-10008 Aug 19 j 10:42	28° $\mathring{M}$ 50'04	
					-10008 Oct 11 j 16:49	0° $\mathring{A}$	
conjunction	-10014 Nov 09 j 07:46	9° $\mathring{M}$ 07'15	0°26'51	evening set	-10008 Nov 16 j 11:50	1° $\mathring{A}$ 45'47	
minimum elong	-10014 Nov 09 j 07:46	9° $\mathring{M}$ 07'15	0°27'07				
max. Earth dist.	-10014 Nov 10 j 17:07	9° $\mathring{M}$ 12'00	21.12129 AU	conjunction	-10008 Dec 02 j 15:29	2° $\mathring{A}$ 40'04	0°00'06
morning rise	-10014 Nov 25 j 09:29	10° $\mathring{M}$ 01'45		minimum elong	-10008 Dec 02 j 15:29	2° $\mathring{A}$ 40'04	0°00'08
retrograde	-10013 Feb 28 j 01:57	13° $\mathring{M}$ 08'19		behind sun begin	-10008 Dec 02 j 08:57	2° $\mathring{A}$ 39'10	
min. Earth dist.	-10013 May 16 j 04:54	11° $\mathring{M}$ 11'52	19.13306 AU	behind sun end	-10008 Dec 02 j 22:01	2° $\mathring{A}$ 40'57	
opposition	-10013 May 17 j 11:18	11° $\mathring{M}$ 08'49	0°27'16	max. Earth dist.	-10008 Dec 03 j 18:59	2° $\mathring{A}$ 43'56	21.18333 AU
direct	-10013 Jul 31 j 15:56	9° $\mathring{M}$ 12'57		desc. node	-10008 Dec 10 j 21:19	3° $\mathring{A}$ 07'56	
evening set	-10013 Oct 28 j 14:11	12° $\mathring{M}$ 09'13		morning rise	-10008 Dec 18 j 23:38	3° $\mathring{A}$ 34'57	
				retrograde	-10007 Mar 23 j 20:19	6° $\mathring{A}$ 40'53	
conjunction	-10013 Nov 13 j 12:40	13° $\mathring{M}$ 03'09	0°22'35	opposition	-10007 Jun 09 j 19:06	4° $\mathring{A}$ 41'30	-0°02'29
minimum elong	-10013 Nov 13 j 12:41	13° $\mathring{M}$ 03'09	0°22'50	min. Earth dist.	-10007 Jun 08 j 19:33	4° $\mathring{A}$ 43'52	19.18052 AU
max. Earth dist.	-10013 Nov 14 j 21:54	13° $\mathring{M}$ 07'53	21.14271 AU	direct	-10007 Aug 23 j 13:13	2° $\mathring{A}$ 45'42	
morning rise	-10013 Nov 29 j 15:24	13° $\mathring{M}$ 57'41		evening set	-10007 Nov 20 j 16:57	5° $\mathring{A}$ 41'32	
retrograde	-10012 Mar 03 j 09:40	17° $\mathring{M}$ 04'01					
min. Earth dist.	-10012 May 19 j 10:30	15° $\mathring{M}$ 07'36	19.15242 AU	conjunction	-10007 Dec 06 j 21:46	6° $\mathring{A}$ 35'56	-0°04'34
opposition	-10012 May 20 j 17:18	15° $\mathring{M}$ 04'31	0°22'30	minimum elong	-10007 Dec 06 j 21:47	6° $\mathring{A}$ 35'56	0°04'34
direct	-10012 Aug 03 j 21:11	13° $\mathring{M}$ 08'42		behind sun begin	-10007 Dec 06 j 15:15	6° $\mathring{A}$ 35'03	
evening set	-10012 Oct 31 j 18:06	16° $\mathring{M}$ 04'41		behind sun end	-10007 Dec 07 j 04:18	6° $\mathring{A}$ 36'50	
				max. Earth dist.	-10007 Dec 07 j 23:48	6° $\mathring{A}$ 39'36	21.17553 AU
conjunction	-10012 Nov 16 j 17:28	16° $\mathring{M}$ 58'39	0°18'14	morning rise	-10007 Dec 23 j 06:54	7° $\mathring{A}$ 30'57	
minimum elong	-10012 Nov 16 j 17:28	16° $\mathring{M}$ 58'39	0°18'25	retrograde	-10006 Mar 28 j 04:54	10° $\mathring{A}$ 36'56	
max. Earth dist.	-10012 Nov 18 j 01:44	17° $\mathring{M}$ 03'13	21.16000 AU	opposition	-10006 Jun 13 j 23:45	8° $\mathring{A}$ 37'30	-0°07'33
morning rise	-10012 Dec 02 j 21:21	17° $\mathring{M}$ 53'13		min. Earth dist.	-10006 Jun 13 j 00:59	8° $\mathring{A}$ 39'49	19.16957 AU
retrograde	-10011 Mar 07 j 15:36	20° $\mathring{M}$ 59'23		direct	-10006 Aug 27 j 17:32	6° $\mathring{A}$ 41'36	
opposition	-10011 May 24 j 23:00	18° $\mathring{M}$ 59'54	0°17'37	evening set	-10006 Nov 24 j 22:47	9° $\mathring{A}$ 37'39	
min. Earth dist.	-10011 May 23 j 18:02	19° $\mathring{M}$ 02'48	19.16764 AU				
direct	-10011 Aug 07 j 23:39	17° $\mathring{M}$ 04'08		conjunction	-10006 Dec 11 j 04:37	10° $\mathring{A}$ 32'11	-0°09'07
evening set	-10011 Nov 04 j 22:00	19° $\mathring{M}$ 59'54		minimum elong	-10006 Dec 11 j 04:36	10° $\mathring{A}$ 32'11	0°09'09
				behind sun begin	-10006 Dec 10 j 22:57	10° $\mathring{A}$ 31'25	
conjunction	-10011 Nov 20 j 22:33	20° $\mathring{M}$ 53'55	0°13'48	behind sun end	-10006 Dec 11 j 10:15	10° $\mathring{A}$ 32'58	
minimum elong	-10011 Nov 20 j 22:33	20° $\mathring{M}$ 53'55	0°13'58	max. Earth dist.	-10006 Dec 12 j 04:18	10° $\mathring{A}$ 35'31	21.16147 AU
behind sun begin	-10011 Nov 20 j 19:12	20° $\mathring{M}$ 53'28		morning rise	-10006 Dec 27 j 14:49	11° $\mathring{A}$ 27'19	
behind sun end	-10011 Nov 21 j 01:55	20° $\mathring{M}$ 54'23		retrograde	-10005 Apr 01 j 11:08	14° $\mathring{A}$ 33'22	
max. Earth dist.	-10011 Nov 22 j 06:22	20° $\mathring{M}$ 58'25	21.17321 AU	min. Earth dist.	-10005 Jun 17 j 08:28	12° $\mathring{A}$ 35'55	19.15243 AU
morning rise	-10011 Dec 07 j 03:27	21° $\mathring{M}$ 48'33		opposition	-10005 Jun 18 j 04:21	12° $\mathring{A}$ 33'54	-0°12'36
retrograde	-10010 Mar 11 j 23:46	24° $\mathring{M}$ 54'35		direct	-10005 Aug 31 j 20:17	10° $\mathring{A}$ 37'50	
min. Earth dist.	-10010 May 27 j 23:19	22° $\mathring{M}$ 58'03	19.17854 AU	evening set	-10005 Nov 29 j 04:54	13° $\mathring{A}$ 34'09	
opposition	-10010 May 29 j 04:19	22° $\mathring{M}$ 55'08	0°12'40				
direct	-10010 Aug 12 j 04:12	20° $\mathring{M}$ 59'24		conjunction	-10005 Dec 15 j 11:54	14° $\mathring{A}$ 28'50	-0°13'38
evening set	-10010 Nov 09 j 02:14	23° $\mathring{M}$ 55'04		minimum elong	-10005 Dec 15 j 11:54	14° $\mathring{A}$ 28'50	0°13'43
				behind sun begin	-10005 Dec 15 j 08:25	14° $\mathring{A}$ 28'22	
conjunction	-10010 Nov 25 j 03:46	24° $\mathring{M}$ 49'09	0°09'18	behind sun end	-10005 Dec 15 j 15:24	14° $\mathring{A}$ 29'19	
minimum elong	-10010 Nov 25 j 03:45	24° $\mathring{M}$ 49'09	0°09'24	max. Earth dist.	-10005 Dec 16 j 09:45	14° $\mathring{A}$ 31'55	21.14145 AU
behind sun begin	-10010 Nov 24 j 22:12	24° $\mathring{M}$ 48'23		morning rise	-10005 Dec 31 j 23:03	15° $\mathring{A}$ 24'07	
behind sun end	-10010 Nov 25 j 09:18	24° $\mathring{M}$ 49'55		retrograde	-10004 Apr 04 j 19:56	18° $\mathring{A}$ 30'15	
max. Earth dist.	-10010 Nov 26 j 10:13	24° $\mathring{M}$ 53'27	21.18176 AU	opposition	-10004 Jun 21 j 08:47	16° $\mathring{A}$ 30'41	-0°17'34
morning rise	-10010 Dec 11 j 09:50	25° $\mathring{M}$ 43'51		min. Earth dist.	-10004 Jun 20 j 13:52	16° $\mathring{A}$ 32'37	19.12938 AU
retrograde	-10009 Mar 16 j 05:45	28° $\mathring{M}$ 49'49		direct	-10004 Sep 04 j 01:04	14° $\mathring{A}$ 34'25	
min. Earth dist.	-10009 Jun 01 j 06:49	26° $\mathring{M}$ 53'05	19.18461 AU	evening set	-10004 Dec 02 j 11:25	17° $\mathring{A}$ 31'05	
opposition	-10009 Jun 02 j 09:31	26° $\mathring{M}$ 50'24	0°07'39				
direct	-10009 Aug 16 j 06:33	24° $\mathring{M}$ 54'40		conjunction	-10004 Dec 18 j 19:22	18° $\mathring{A}$ 25'56	-0°18'06
evening set	-10009 Nov 13 j 06:48	27° $\mathring{M}$ 50'19		minimum elong	-10004 Dec 18 j 19:22	18° $\mathring{A}$ 25'56	0°18'13
				max. Earth dist.	-10004 Dec 19 j 14:55	18° $\mathring{A}$ 28'41	21.11557 AU
conjunction	-10009 Nov 29 j 09:30	28° $\mathring{M}$ 44'29	0°04'45	morning rise	-10003 Jan 04 j 07:28	19° $\mathring{A}$ 21'22	
minimum elong	-10009 Nov 29 j 09:30	28° $\mathring{M}$ 44'29	0°04'50	retrograde	-10003 Apr 09 j 02:07	22° $\mathring{A}$ 27'38	
behind sun begin	-10009 Nov 29 j 03:01	28° $\mathring{M}$ 43'36		opposition	-10003 Jun 25 j 13:18	20° $\mathring{A}$ 27'57	-0°22'29
behind sun end	-10009 Nov 29 j 15:59	28° $\mathring{M}$ 45'23		min. Earth dist.	-10003 Jun 24 j 21:12	20° $\mathring{A}$ 29'36	19.10087 AU
max. Earth dist.	-10009 Nov 30 j 14:55	28° $\mathring{M}$ 48'39	21.18536 AU	direct	-10003 Sep 08 j 03:43	18° $\mathring{A}$ 31'27	
morning rise	-10009 Dec 15 j 16:33	29° $\mathring{M}$ 39'17		evening set	-10003 Dec 06 j 18:20	21° $\mathring{A}$ 28'32	
	-10009 Dec 22 j 00:58	0° $\mathring{A}$					
retrograde	-10008 Mar 19 j 14:11	2° $\mathring{A}$ 45'12		conjunction	-10003 Dec 23 j 03:25	22° $\mathring{A}$ 23'34	-0°22'29



Attention, astronomical year style is used: The year -10003 in astronomical counting style is the year 10004 BCE in historical counting style.

minimum elong	-10003 Dec 23 j 03:24	22° $\mathbb{A}$ 23'34	0°22'40	max. Earth dist.	-9996 Jan 17 j 20:24	16° $\mathbb{M}$ 29'03	20.82001 AU
max. Earth dist.	-10003 Dec 23 j 21:11	22° $\mathbb{A}$ 26'04	21.08475 AU	morning rise	-9996 Feb 03 j 09:18	17° $\mathbb{M}$ 25'13	
morning rise	-10002 Jan 08 j 16:23	23° $\mathbb{A}$ 19'09		retrograde	-9996 May 07 j 19:20	20° $\mathbb{M}$ 33'39	
retrograde	-10002 Apr 13 j 11:31	26° $\mathbb{A}$ 25'35		opposition	-9996 Jul 23 j 00:11	18° $\mathbb{M}$ 33'21	-0°53'00
opposition	-10002 Jun 29 j 17:37	24° $\mathbb{A}$ 25'47	-0°27'17	min. Earth dist.	-9996 Jul 22 j 20:48	18° $\mathbb{M}$ 33'42	18.79273 AU
min. Earth dist.	-10002 Jun 29 j 02:27	24° $\mathbb{A}$ 27'20	19.06770 AU	direct	-9996 Oct 05 j 13:45	16° $\mathbb{M}$ 34'53	
direct	-10002 Sep 12 j 08:52	22° $\mathbb{A}$ 29'01		evening set	-9995 Jan 04 j 13:07	19° $\mathbb{M}$ 37'18	
evening set	-10002 Dec 11 j 01:54	25° $\mathbb{A}$ 26'36					
				conjunction	-9995 Jan 21 j 04:29	20° $\mathbb{M}$ 33'57	-0°49'30
conjunction	-10002 Dec 27 j 11:55	26° $\mathbb{A}$ 21'49	-0°26'47	minimum elong	-9995 Jan 21 j 04:29	20° $\mathbb{M}$ 33'57	0°49'55
minimum elong	-10002 Dec 27 j 11:55	26° $\mathbb{A}$ 21'49	0°26'59	max. Earth dist.	-9995 Jan 21 j 06:34	20° $\mathbb{M}$ 34'15	20.76447 AU
max. Earth dist.	-10002 Dec 28 j 03:26	26° $\mathbb{A}$ 24'01	21.04936 AU	morning rise	-9995 Feb 06 j 22:20	21° $\mathbb{M}$ 30'59	
morning rise	-10001 Jan 13 j 01:48	27° $\mathbb{A}$ 17'36		retrograde	-9995 May 12 j 05:50	24° $\mathbb{M}$ 39'54	
	-10001 Mar 17 j 02:17	0° $\mathbb{M}$		opposition	-9995 Jul 27 j 06:43	22° $\mathbb{M}$ 39'34	-0°56'35
retrograde	-10001 Apr 17 j 18:10	0° $\mathbb{M}$ 24'14		min. Earth dist.	-9995 Jul 27 j 06:22	22° $\mathbb{M}$ 39'36	18.73553 AU
	-10001 May 19 j 18:10	30° $\mathbb{R}$ $\mathbb{A}$		direct	-9995 Oct 09 j 20:03	20° $\mathbb{M}$ 40'47	
opposition	-10001 Jul 03 j 22:12	28° $\mathbb{A}$ 24'19	-0°31'59	evening set	-9994 Jan 09 j 01:58	23° $\mathbb{M}$ 44'16	
min. Earth dist.	-10001 Jul 03 j 09:49	28° $\mathbb{A}$ 25'36	19.03028 AU				
direct	-10001 Sep 16 j 11:32	26° $\mathbb{A}$ 27'16		conjunction	-9994 Jan 25 j 18:05	24° $\mathbb{M}$ 41'12	-0°52'35
evening set	-10001 Dec 15 j 09:59	29° $\mathbb{A}$ 25'27		minimum elong	-9994 Jan 25 j 18:05	24° $\mathbb{M}$ 41'12	0°53'01
	-10001 Dec 25 j 17:23	0° $\mathbb{M}$		max. Earth dist.	-9994 Jan 25 j 17:14	24° $\mathbb{M}$ 41'05	20.70560 AU
				morning rise	-9994 Feb 11 j 12:27	25° $\mathbb{M}$ 38'29	
conjunction	-10001 Dec 31 j 21:03	0° $\mathbb{M}$ 20'53	-0°30'58	retrograde	-9994 May 16 j 18:05	28° $\mathbb{M}$ 47'54	
minimum elong	-10001 Dec 31 j 21:02	0° $\mathbb{M}$ 20'53	0°31'12	opposition	-9994 Jul 31 j 13:33	26° $\mathbb{M}$ 47'30	-0°59'53
max. Earth dist.	-10000 Jan 01 j 10:39	0° $\mathbb{M}$ 22'48	21.01010 AU	min. Earth dist.	-9994 Jul 31 j 14:51	26° $\mathbb{M}$ 47'21	18.67483 AU
morning rise	-10000 Jan 17 j 11:41	1° $\mathbb{M}$ 16'50		direct	-9994 Oct 14 j 04:04	24° $\mathbb{M}$ 48'22	
retrograde	-10000 Apr 21 j 04:14	4° $\mathbb{M}$ 23'44		evening set	-9993 Jan 13 j 15:53	27° $\mathbb{M}$ 53'00	
opposition	-10000 Jul 07 j 02:41	2° $\mathbb{M}$ 23'43	-0°36'32				
min. Earth dist.	-10000 Jul 06 j 15:16	2° $\mathbb{M}$ 24'53	18.98919 AU	conjunction	-9993 Jan 30 j 08:42	28° $\mathbb{M}$ 50'13	-0°55'26
direct	-10000 Sep 19 j 17:08	0° $\mathbb{M}$ 26'23		minimum elong	-9993 Jan 30 j 08:42	28° $\mathbb{M}$ 50'12	0°55'54
evening set	-10000 Dec 18 j 18:44	3° $\mathbb{M}$ 25'15		max. Earth dist.	-9993 Jan 30 j 05:08	28° $\mathbb{M}$ 49'42	20.64289 AU
				morning rise	-9993 Feb 16 j 03:22	29° $\mathbb{M}$ 47'44	
conjunction	-9999 Jan 04 j 06:40	4° $\mathbb{M}$ 20'54	-0°35'00		-9993 Feb 19 j 19:23	0° $\mathbb{A}$	
minimum elong	-9999 Jan 04 j 06:40	4° $\mathbb{M}$ 20'53	0°35'17	retrograde	-9993 May 21 j 05:43	2° $\mathbb{A}$ 57'40	
max. Earth dist.	-9999 Jan 04 j 18:02	4° $\mathbb{M}$ 22'30	20.96723 AU	opposition	-9993 Aug 04 j 21:15	0° $\mathbb{A}$ 57'11	-1°02'54
morning rise	-9999 Jan 20 j 22:04	5° $\mathbb{M}$ 17'02		min. Earth dist.	-9993 Aug 05 j 01:42	0° $\mathbb{A}$ 56'43	18.61025 AU
retrograde	-9999 Apr 25 j 11:58	8° $\mathbb{M}$ 24'15			-9993 Aug 28 j 12:46	30° $\mathbb{R}$ $\mathbb{M}$	
opposition	-9999 Jul 11 j 07:39	6° $\mathbb{M}$ 24'09	-0°40'56	direct	-9993 Oct 18 j 12:12	28° $\mathbb{M}$ 57'41	
min. Earth dist.	-9999 Jul 10 j 22:57	6° $\mathbb{M}$ 25'02	18.94473 AU		-9993 Dec 07 j 12:44	0° $\mathbb{A}$	
direct	-9999 Sep 23 j 20:24	4° $\mathbb{M}$ 26'32		evening set	-9992 Jan 18 j 06:40	2° $\mathbb{A}$ 03'29	
evening set	-9999 Dec 23 j 03:57	7° $\mathbb{M}$ 26'09					
				conjunction	-9992 Feb 04 j 00:03	3° $\mathbb{A}$ 00'59	-0°57'59
conjunction	-9998 Jan 08 j 16:53	8° $\mathbb{M}$ 22'02	-0°38'54	minimum elong	-9992 Feb 04 j 00:03	3° $\mathbb{A}$ 00'59	0°58'29
minimum elong	-9998 Jan 08 j 16:53	8° $\mathbb{M}$ 22'02	0°39'12	max. Earth dist.	-9992 Feb 03 j 17:09	2° $\mathbb{A}$ 59'59	20.57647 AU
max. Earth dist.	-9998 Jan 09 j 02:12	8° $\mathbb{M}$ 23'21	20.92131 AU	morning rise	-9992 Feb 20 j 19:05	3° $\mathbb{A}$ 58'44	
morning rise	-9998 Jan 25 j 09:01	9° $\mathbb{M}$ 18'24		retrograde	-9992 May 24 j 18:45	7° $\mathbb{A}$ 09'13	
retrograde	-9998 Apr 29 j 22:37	12° $\mathbb{M}$ 25'58		opposition	-9992 Aug 08 j 05:20	5° $\mathbb{A}$ 08'37	-1°05'36
opposition	-9998 Jul 15 j 12:47	10° $\mathbb{M}$ 25'47	-0°45'10	min. Earth dist.	-9992 Aug 08 j 11:31	5° $\mathbb{A}$ 07'58	18.54203 AU
min. Earth dist.	-9998 Jul 15 j 05:08	10° $\mathbb{M}$ 26'34	18.89720 AU	direct	-9992 Oct 21 j 22:16	3° $\mathbb{A}$ 08'41	
direct	-9998 Sep 28 j 02:29	8° $\mathbb{M}$ 27'53		evening set	-9991 Jan 21 j 22:19	6° $\mathbb{A}$ 15'42	
evening set	-9998 Dec 27 j 14:13	11° $\mathbb{M}$ 28'22					
				conjunction	-9991 Feb 07 j 16:19	7° $\mathbb{A}$ 13'29	-1°00'15
conjunction	-9997 Jan 13 j 04:00	12° $\mathbb{M}$ 24'29	-0°42'38	minimum elong	-9991 Feb 07 j 16:18	7° $\mathbb{A}$ 13'29	1°00'45
minimum elong	-9997 Jan 13 j 04:00	12° $\mathbb{M}$ 24'29	0°42'58	max. Earth dist.	-9991 Feb 07 j 06:54	7° $\mathbb{A}$ 12'08	20.50645 AU
max. Earth dist.	-9997 Jan 13 j 10:58	12° $\mathbb{M}$ 25'29	20.87216 AU	morning rise	-9991 Feb 24 j 11:28	8° $\mathbb{A}$ 11'30	
morning rise	-9997 Jan 29 j 20:47	13° $\mathbb{M}$ 21'04		retrograde	-9991 May 29 j 07:12	11° $\mathbb{A}$ 22'31	
	-9997 Mar 03 j 08:10	15° $\mathbb{M}$		opposition	-9991 Aug 12 j 14:09	9° $\mathbb{A}$ 21'47	-1°07'57
retrograde	-9997 May 04 j 07:53	16° $\mathbb{M}$ 29'03		min. Earth dist.	-9991 Aug 12 j 23:20	9° $\mathbb{A}$ 20'49	18.47047 AU
	-9997 Jul 07 j 02:09	15° $\mathbb{R}$ $\mathbb{M}$		direct	-9991 Oct 26 j 07:36	7° $\mathbb{A}$ 21'24	
opposition	-9997 Jul 19 j 18:17	14° $\mathbb{M}$ 28'48	-0°49'12	evening set	-9990 Jan 26 j 14:49	10° $\mathbb{A}$ 29'40	
min. Earth dist.	-9997 Jul 19 j 13:35	14° $\mathbb{M}$ 29'17	18.84651 AU				
direct	-9997 Oct 02 j 07:03	12° $\mathbb{M}$ 30'37		conjunction	-9990 Feb 12 j 09:16	11° $\mathbb{A}$ 27'45	-1°02'12
	-9997 Dec 22 j 06:08	15° $\mathbb{M}$		minimum elong	-9990 Feb 12 j 09:16	11° $\mathbb{A}$ 27'45	1°02'44
evening set	-9996 Jan 01 j 01:16	15° $\mathbb{M}$ 32'02		max. Earth dist.	-9990 Feb 11 j 20:29	11° $\mathbb{A}$ 25'53	20.43359 AU
				morning rise	-9990 Mar 01 j 04:45	12° $\mathbb{A}$ 26'00	
conjunction	-9996 Jan 17 j 15:55	16° $\mathbb{M}$ 28'25	-0°46'10	retrograde	-9990 Jun 02 j 21:34	15° $\mathbb{A}$ 37'35	
minimum elong	-9996 Jan 17 j 15:55	16° $\mathbb{M}$ 28'25	0°46'32	opposition	-9990 Aug 16 j 23:30	13° $\mathbb{A}$ 36'41	-1°09'58

Attention, astronomical year style is used: The year -9990 in astronomical counting style is the year 9991 BCE in historical counting style.

min. Earth dist.	-9990 Aug 17 j 10:26	13° $\nearrow$ 35'31	18.39639 AU	conjunction	-9983 Mar 16 j 07:16	12° $\searrow$ 00'37	-1°05'52
direct	-9990 Oct 30 j 19:45	11° $\nearrow$ 35'48		minimum elong	-9983 Mar 16 j 07:16	12° $\searrow$ 00'37	1°06'28
evening set	-9989 Jan 31 j 08:18	14° $\nearrow$ 45'23		morning rise	-9983 Apr 02 j 01:25	13° $\searrow$ 00'35	
				retrograde	-9983 Jul 03 j 15:58	16° $\searrow$ 16'37	
conjunction	-9989 Feb 17 j 03:16	15° $\nearrow$ 43'46	-1°03'49	opposition	-9983 Sep 15 j 14:19	14° $\searrow$ 14'57	-1°12'47
minimum elong	-9989 Feb 17 j 03:15	15° $\nearrow$ 43'46	1°04'21	min. Earth dist.	-9983 Sep 16 j 13:53	14° $\searrow$ 12'24	17.86867 AU
max. Earth dist.	-9989 Feb 16 j 12:26	15° $\nearrow$ 41'36	20.35835 AU	direct	-9983 Nov 30 j 00:00	12° $\searrow$ 10'58	
morning rise	-9989 Mar 05 j 22:40	16° $\nearrow$ 42'16		evening set	-9982 Mar 04 j 11:14	15° $\searrow$ 30'35	
retrograde	-9989 Jun 07 j 10:51	19° $\nearrow$ 54'25		max. Earth dist.	-9982 Mar 20 j 00:47	16° $\searrow$ 26'29	19.83298 AU
opposition	-9989 Aug 21 j 09:31	17° $\nearrow$ 53'22	-1°11'36				
min. Earth dist.	-9989 Aug 21 j 23:10	17° $\nearrow$ 51'54	18.32036 AU	conjunction	-9982 Mar 21 j 06:48	16° $\searrow$ 31'01	-1°04'50
direct	-9989 Nov 04 j 06:29	15° $\nearrow$ 52'00		minimum elong	-9982 Mar 21 j 06:48	16° $\searrow$ 31'01	1°05'25
evening set	-9988 Feb 05 j 02:41	19° $\nearrow$ 02'54		morning rise	-9982 Apr 07 j 00:39	17° $\searrow$ 31'13	
				retrograde	-9982 Jul 08 j 11:48	20° $\searrow$ 47'56	
conjunction	-9988 Feb 21 j 21:53	20° $\nearrow$ 01'35	-1°05'06	opposition	-9982 Sep 20 j 06:19	18° $\searrow$ 46'15	-1°11'26
minimum elong	-9988 Feb 21 j 21:53	20° $\nearrow$ 01'35	1°05'39	min. Earth dist.	-9982 Sep 21 j 07:34	18° $\searrow$ 43'30	17.79875 AU
max. Earth dist.	-9988 Feb 21 j 03:49	19° $\nearrow$ 58'56	20.28179 AU	direct	-9982 Dec 04 j 17:59	16° $\searrow$ 41'54	
morning rise	-9988 Mar 09 j 17:26	21° $\nearrow$ 00'21		evening set	-9981 Mar 09 j 11:52	20° $\searrow$ 03'01	
retrograde	-9988 Jun 11 j 02:36	24° $\nearrow$ 13'06		max. Earth dist.	-9981 Mar 25 j 00:49	20° $\searrow$ 59'04	19.76389 AU
opposition	-9988 Aug 24 j 20:15	22° $\nearrow$ 11'52	-1°12'50				
min. Earth dist.	-9988 Aug 25 j 11:28	22° $\nearrow$ 10'15	18.24349 AU	conjunction	-9981 Mar 26 j 07:20	21° $\searrow$ 03'42	-1°03'23
direct	-9988 Nov 07 j 20:18	20° $\nearrow$ 10'00		minimum elong	-9981 Mar 26 j 07:20	21° $\searrow$ 03'42	1°03'57
evening set	-9987 Feb 08 j 21:39	23° $\nearrow$ 22'18		morning rise	-9981 Apr 12 j 00:25	22° $\searrow$ 04'06	
				retrograde	-9981 Jul 13 j 09:01	25° $\searrow$ 21'30	
conjunction	-9987 Feb 25 j 17:15	24° $\nearrow$ 21'17	-1°06'01	opposition	-9981 Sep 24 j 23:20	23° $\searrow$ 19'48	-1°09'37
minimum elong	-9987 Feb 25 j 17:14	24° $\nearrow$ 21'17	1°06'34	min. Earth dist.	-9981 Sep 26 j 01:43	23° $\searrow$ 16'56	17.73058 AU
max. Earth dist.	-9987 Feb 24 j 21:48	24° $\nearrow$ 18'25	20.20459 AU	direct	-9981 Dec 09 j 12:46	21° $\searrow$ 15'08	
morning rise	-9987 Mar 14 j 12:34	25° $\nearrow$ 20'17		evening set	-9980 Mar 13 j 13:30	24° $\searrow$ 37'40	
retrograde	-9987 Jun 15 j 17:13	28° $\nearrow$ 33'39		max. Earth dist.	-9980 Mar 28 j 23:15	25° $\searrow$ 33'32	19.69665 AU
opposition	-9987 Aug 29 j 07:49	26° $\nearrow$ 32'17	-1°13'41				
min. Earth dist.	-9987 Aug 30 j 01:14	26° $\nearrow$ 30'25	18.16634 AU	conjunction	-9980 Mar 30 j 08:27	25° $\searrow$ 38'36	-1°01'31
direct	-9987 Nov 12 j 08:55	24° $\nearrow$ 29'57		minimum elong	-9980 Mar 30 j 08:27	25° $\searrow$ 38'36	1°02'04
evening set	-9986 Feb 13 j 17:47	27° $\nearrow$ 43'39		morning rise	-9980 Apr 16 j 01:00	26° $\searrow$ 39'13	
				retrograde	-9980 Jul 17 j 06:07	29° $\searrow$ 57'16	
conjunction	-9986 Mar 02 j 13:27	28° $\nearrow$ 42'56	-1°06'33	opposition	-9980 Sep 28 j 17:26	27° $\searrow$ 55'31	-1°07'20
minimum elong	-9986 Mar 02 j 13:27	28° $\nearrow$ 42'56	1°07'07	min. Earth dist.	-9980 Sep 29 j 21:34	27° $\searrow$ 52'27	17.66443 AU
max. Earth dist.	-9986 Mar 01 j 14:53	28° $\nearrow$ 39'36	20.12766 AU	direct	-9980 Dec 13 j 08:44	25° $\searrow$ 50'30	
morning rise	-9986 Mar 19 j 08:47	29° $\nearrow$ 42'12		evening set	-9979 Mar 18 j 15:33	29° $\searrow$ 14'25	
	-9986 Mar 24 j 13:09	0° $\searrow$			-9979 Mar 31 j 04:32	0° $\approx$	
retrograde	-9986 Jun 20 j 10:03	2° $\searrow$ 56'12		max. Earth dist.	-9979 Apr 03 j 00:39	0° $\approx$ 10'26	19.63141 AU
opposition	-9986 Sep 02 j 20:00	0° $\searrow$ 54'43	-1°14'07				
min. Earth dist.	-9986 Sep 03 j 14:55	0° $\searrow$ 52'41	18.08984 AU	conjunction	-9979 Apr 04 j 10:14	0° $\approx$ 15'35	-0°59'14
	-9986 Sep 24 j 19:18	30° $\nearrow$		minimum elong	-9979 Apr 04 j 10:14	0° $\approx$ 15'35	0°59'45
direct	-9986 Nov 17 j 00:04	28° $\nearrow$ 51'54		morning rise	-9979 Apr 21 j 01:58	1° $\approx$ 16'22	
	-9985 Jan 08 j 02:03	0° $\searrow$		retrograde	-9979 Jul 22 j 04:25	4° $\approx$ 35'03	
evening set	-9985 Feb 18 j 14:46	2° $\searrow$ 07'04		opposition	-9979 Oct 03 j 12:27	2° $\approx$ 33'15	-1°04'36
max. Earth dist.	-9985 Mar 06 j 11:07	3° $\searrow$ 03'09	20.05152 AU	min. Earth dist.	-9979 Oct 04 j 17:15	2° $\approx$ 30'06	17.60016 AU
				direct	-9979 Dec 18 j 05:44	0° $\approx$ 27'54	
conjunction	-9985 Mar 07 j 10:42	3° $\searrow$ 06'39	-1°06'43	evening set	-9978 Mar 23 j 18:37	3° $\approx$ 53'08	
minimum elong	-9985 Mar 07 j 10:42	3° $\searrow$ 06'39	1°07'19	max. Earth dist.	-9978 Apr 08 j 00:51	4° $\approx$ 48'59	19.56824 AU
morning rise	-9985 Mar 24 j 05:36	4° $\searrow$ 06'09					
retrograde	-9985 Jun 25 j 02:46	7° $\searrow$ 20'49		conjunction	-9978 Apr 09 j 12:40	4° $\approx$ 54'30	-0°56'33
opposition	-9985 Sep 07 j 09:16	5° $\searrow$ 19'14	-1°14'07	minimum elong	-9978 Apr 09 j 12:41	4° $\approx$ 54'30	0°57'04
min. Earth dist.	-9985 Sep 08 j 05:58	5° $\searrow$ 17'00	18.01437 AU	morning rise	-9978 Apr 26 j 03:39	5° $\approx$ 55'26	
direct	-9985 Nov 21 j 14:51	3° $\searrow$ 16'01		retrograde	-9978 Jul 27 j 02:04	9° $\approx$ 14'42	
evening set	-9984 Feb 23 j 12:41	6° $\searrow$ 32'39		opposition	-9978 Oct 08 j 08:24	7° $\approx$ 12'49	-1°01'25
max. Earth dist.	-9984 Mar 10 j 05:54	7° $\searrow$ 28'33	19.97683 AU	min. Earth dist.	-9978 Oct 09 j 14:56	7° $\approx$ 09'29	17.53833 AU
				direct	-9978 Dec 23 j 04:01	5° $\approx$ 07'07	
conjunction	-9984 Mar 11 j 08:26	7° $\searrow$ 32'31	-1°06'30	evening set	-9977 Mar 28 j 22:09	8° $\approx$ 33'36	
minimum elong	-9984 Mar 11 j 08:26	7° $\searrow$ 32'31	1°07'04	max. Earth dist.	-9977 Apr 13 j 03:37	9° $\approx$ 29'34	19.50781 AU
morning rise	-9984 Mar 28 j 03:10	8° $\searrow$ 32'15					
retrograde	-9984 Jun 28 j 20:54	11° $\searrow$ 34'37		conjunction	-9977 Apr 14 j 15:40	9° $\approx$ 35'09	-0°53'29
opposition	-9984 Sep 10 j 23:21	9° $\searrow$ 45'58	-1°13'41	minimum elong	-9977 Apr 14 j 15:40	9° $\approx$ 35'09	0°53'58
min. Earth dist.	-9984 Sep 11 j 21:27	9° $\searrow$ 43'34	17.94062 AU	morning rise	-9977 May 01 j 05:44	10° $\approx$ 36'13	
direct	-9984 Nov 25 j 07:20	7° $\searrow$ 42'20		retrograde	-9977 Aug 01 j 01:03	13° $\approx$ 56'01	
evening set	-9983 Feb 27 j 11:24	11° $\searrow$ 00'28		opposition	-9977 Oct 13 j 05:17	11° $\approx$ 54'03	-0°57'49
max. Earth dist.	-9983 Mar 15 j 04:10	11° $\searrow$ 56'33	19.90392 AU	min. Earth dist.	-9977 Oct 14 j 11:48	11° $\approx$ 50'43	17.47939 AU

Attention, astronomical year style is used: The year -9976 in astronomical counting style is the year 9977 BCE in historical counting style.

direct	-9977 Dec 28 j 03:57	9° $\approx$ 48'02		evening set	-9970 May 02 j 06:52	11° $\approx$ 52'47	
evening set	-9976 Apr 02 j 02:02	13° $\approx$ 15'39		max. Earth dist.	-9970 May 17 j 08:31	12° $\approx$ 49'35	19.21733 AU
max. Earth dist.	-9976 Apr 17 j 05:37	14° $\approx$ 11'34	19.45060 AU				
				conjunction	-9970 May 18 j 17:47	12° $\approx$ 54'51	-0°22'56
conjunction	-9976 Apr 18 j 18:47	14° $\approx$ 17'21	-0°50'02	minimum elong	-9970 May 18 j 17:47	12° $\approx$ 54'51	0°23'10
minimum elong	-9976 Apr 18 j 18:48	14° $\approx$ 17'21	0°50'30	morning rise	-9970 Jun 04 j 00:02	13° $\approx$ 56'16	
	-9976 Apr 30 j 06:24	15° $\approx$		retrograde	-9970 Sep 03 j 00:15	17° $\approx$ 18'50	
morning rise	-9976 May 05 j 07:54	15° $\approx$ 18'32		opposition	-9970 Nov 15 j 05:54	15° $\approx$ 16'30	-0°22'43
retrograde	-9976 Aug 04 j 22:54	18° $\approx$ 38'52		min. Earth dist.	-9970 Nov 16 j 11:16	15° $\approx$ 13'18	17.20901 AU
opposition	-9976 Oct 17 j 03:07	16° $\approx$ 36'47	-0°53'48	direct	-9969 Jan 30 j 22:23	13° $\approx$ 09'15	
min. Earth dist.	-9976 Oct 18 j 11:02	16° $\approx$ 33'17	17.42421 AU	evening set	-9969 May 07 j 12:02	16° $\approx$ 42'07	
	-9976 Nov 28 j 05:37	15° $\approx$					
direct	-9975 Jan 01 j 04:11	14° $\approx$ 30'27		conjunction	-9969 May 23 j 21:33	17° $\approx$ 44'08	-0°17'37
	-9975 Feb 03 j 19:27	15° $\approx$		minimum elong	-9969 May 23 j 21:33	17° $\approx$ 44'08	0°17'47
evening set	-9975 Apr 07 j 06:21	17° $\approx$ 59'06		max. Earth dist.	-9969 May 22 j 12:42	17° $\approx$ 38'55	19.20142 AU
max. Earth dist.	-9975 Apr 22 j 09:13	18° $\approx$ 55'09	19.39760 AU	morning rise	-9969 Jun 09 j 02:43	18° $\approx$ 45'30	
				retrograde	-9969 Sep 08 j 03:05	22° $\approx$ 08'20	
conjunction	-9975 Apr 23 j 22:20	19° $\approx$ 00'56	-0°46'14	opposition	-9969 Nov 20 j 08:49	20° $\approx$ 06'04	-0°16'42
minimum elong	-9975 Apr 23 j 22:20	19° $\approx$ 00'56	0°46'41	min. Earth dist.	-9969 Nov 21 j 12:17	20° $\approx$ 03'04	17.19645 AU
morning rise	-9975 May 10 j 10:30	20° $\approx$ 02'14		direct	-9968 Feb 05 j 03:33	17° $\approx$ 58'53	
retrograde	-9975 Aug 09 j 22:39	23° $\approx$ 23'00		evening set	-9968 May 11 j 16:44	21° $\approx$ 32'03	
opposition	-9975 Oct 22 j 01:29	21° $\approx$ 20'49	-0°49'24	max. Earth dist.	-9968 May 26 j 19:03	22° $\approx$ 29'13	19.19217 AU
min. Earth dist.	-9975 Oct 23 j 08:46	21° $\approx$ 17'24	17.37344 AU				
direct	-9974 Jan 06 j 06:31	19° $\approx$ 14'12		conjunction	-9968 May 28 j 01:10	22° $\approx$ 34'00	-0°12'10
evening set	-9974 Apr 12 j 11:01	22° $\approx$ 43'49		minimum elong	-9968 May 28 j 01:10	22° $\approx$ 34'00	0°12'18
max. Earth dist.	-9974 Apr 27 j 13:01	23° $\approx$ 39'57	19.34928 AU	behind sun begin	-9968 May 27 j 20:45	22° $\approx$ 33'19	
				behind sun end	-9968 May 28 j 05:36	22° $\approx$ 34'42	
conjunction	-9974 Apr 29 j 02:10	23° $\approx$ 45'45	-0°42'07	morning rise	-9968 Jun 13 j 04:56	23° $\approx$ 35'18	
minimum elong	-9974 Apr 29 j 02:10	23° $\approx$ 45'45	0°42'31	retrograde	-9968 Sep 12 j 04:29	26° $\approx$ 58'20	
morning rise	-9974 May 15 j 13:11	24° $\approx$ 47'07		opposition	-9968 Nov 24 j 12:23	24° $\approx$ 56'09	-0°10'32
retrograde	-9974 Aug 14 j 21:17	28° $\approx$ 08'19		min. Earth dist.	-9968 Nov 25 j 15:14	24° $\approx$ 53'14	17.19030 AU
opposition	-9974 Oct 27 j 00:58	26° $\approx$ 06'03	-0°44'39	direct	-9967 Feb 09 j 07:38	22° $\approx$ 49'06	
min. Earth dist.	-9974 Oct 28 j 09:14	26° $\approx$ 02'31	17.32786 AU	evening set	-9967 May 16 j 21:35	26° $\approx$ 22'26	
direct	-9973 Jan 11 j 08:16	23° $\approx$ 59'10		max. Earth dist.	-9967 May 31 j 22:53	27° $\approx$ 19'33	19.18919 AU
evening set	-9973 Apr 17 j 15:51	27° $\approx$ 29'39					
max. Earth dist.	-9973 May 02 j 17:03	28° $\approx$ 25'52	19.30659 AU	conjunction	-9967 Jun 02 j 04:33	27° $\approx$ 24'17	-0°06'37
				minimum elong	-9967 Jun 02 j 04:33	27° $\approx$ 24'17	0°06'43
conjunction	-9973 May 04 j 05:57	28° $\approx$ 31'39	-0°37'42	behind sun begin	-9967 Jun 01 j 22:18	27° $\approx$ 23'19	
minimum elong	-9973 May 04 j 05:57	28° $\approx$ 31'39	0°38'04	behind sun end	-9967 Jun 02 j 10:47	27° $\approx$ 25'15	
morning rise	-9973 May 20 j 15:57	29° $\approx$ 33'04		morning rise	-9967 Jun 18 j 07:11	28° $\approx$ 25'29	
	-9973 May 28 j 02:01	0° $\approx$			-9967 Jul 15 j 11:10	0° $\approx$	
retrograde	-9973 Aug 19 j 22:12	2° $\approx$ 54'40		retrograde	-9967 Sep 17 j 07:06	1° $\approx$ 48'40	
opposition	-9973 Nov 01 j 01:05	0° $\approx$ 52'19	-0°39'34		-9967 Nov 24 j 12:01	30° $\approx$	
min. Earth dist.	-9973 Nov 02 j 07:58	0° $\approx$ 48'56	17.28812 AU	opposition	-9967 Nov 29 j 16:12	29° $\approx$ 46'34	-0°04'17
	-9973 Nov 21 j 13:51	30° $\approx$		min. Earth dist.	-9967 Nov 30 j 17:23	29° $\approx$ 43'50	17.19032 AU
direct	-9972 Jan 16 j 12:16	28° $\approx$ 45'14		direct	-9966 Feb 14 j 13:12	27° $\approx$ 39'39	
	-9972 Mar 10 j 17:32	0° $\approx$			-9966 May 01 j 13:49	0° $\approx$	
evening set	-9972 Apr 21 j 20:48	2° $\approx$ 16'29		evening set	-9966 May 22 j 02:01	1° $\approx$ 13'01	
max. Earth dist.	-9972 May 06 j 22:16	3° $\approx$ 12'55	19.27000 AU	max. Earth dist.	-9966 Jun 06 j 04:57	2° $\approx$ 10'27	19.19210 AU
conjunction	-9972 May 08 j 09:56	3° $\approx$ 18'32	-0°33'01	conjunction	-9966 Jun 07 j 07:48	2° $\approx$ 14'44	-0°00'59
minimum elong	-9972 May 08 j 09:57	3° $\approx$ 18'32	0°33'20	minimum elong	-9966 Jun 07 j 07:48	2° $\approx$ 14'44	0°01'02
morning rise	-9972 May 24 j 18:38	4° $\approx$ 19'58		behind sun begin	-9966 Jun 07 j 01:08	2° $\approx$ 13'42	
retrograde	-9972 Aug 23 j 21:41	7° $\approx$ 41'55		behind sun end	-9966 Jun 07 j 14:27	2° $\approx$ 15'46	
opposition	-9972 Nov 05 j 02:04	5° $\approx$ 39'32	-0°34'12	morning rise	-9966 Jun 23 j 09:00	3° $\approx$ 15'48	
min. Earth dist.	-9972 Nov 06 j 09:18	5° $\approx$ 36'07	17.25490 AU	asc. node	-9966 Aug 10 j 21:36	5° $\approx$ 48'51	
direct	-9971 Jan 20 j 14:30	3° $\approx$ 32'20		retrograde	-9966 Sep 22 j 08:45	6° $\approx$ 39'04	
evening set	-9971 Apr 27 j 01:49	7° $\approx$ 04'13		opposition	-9966 Dec 04 j 20:43	4° $\approx$ 37'03	0°02'00
max. Earth dist.	-9971 May 12 j 02:24	8° $\approx$ 00'42	19.24025 AU	min. Earth dist.	-9966 Dec 05 j 20:37	4° $\approx$ 34'28	17.19593 AU
				direct	-9965 Feb 19 j 19:04	2° $\approx$ 30'19	
conjunction	-9971 May 13 j 13:46	8° $\approx$ 06'17	-0°28'05	evening set	-9965 May 27 j 06:06	6° $\approx$ 03'33	
minimum elong	-9971 May 13 j 13:46	8° $\approx$ 06'17	0°28'21	max. Earth dist.	-9965 Jun 11 j 08:23	7° $\approx$ 00'57	19.20052 AU
morning rise	-9971 May 29 j 21:26	9° $\approx$ 07'44					
retrograde	-9971 Aug 28 j 23:49	12° $\approx$ 30'01		conjunction	-9965 Jun 12 j 10:22	7° $\approx$ 05'05	0°04'44
opposition	-9971 Nov 10 j 03:35	10° $\approx$ 27'37	-0°28'34	minimum elong	-9965 Jun 12 j 10:21	7° $\approx$ 05'05	0°04'44
min. Earth dist.	-9971 Nov 11 j 09:03	10° $\approx$ 24'24	17.22851 AU	behind sun begin	-9965 Jun 12 j 03:51	7° $\approx$ 04'05	
direct	-9970 Jan 25 j 19:20	8° $\approx$ 20'21		behind sun end	-9965 Jun 12 j 16:52	7° $\approx$ 06'06	

Attention, astronomical year style is used: The year -9965 in astronomical counting style is the year 9966 BCE in historical counting style.

morning rise	-9965 Jun 28 j 10:25	8° $\Upsilon$ 06'01		morning rise	-9959 Jul 26 j 05:53	6° $\delta$ 50'32	
retrograde	-9965 Sep 27 j 10:14	11° $\Upsilon$ 29'19		retrograde	-9959 Oct 25 j 11:03	10° $\delta$ 12'33	
opposition	-9965 Dec 10 j 01:28	9° $\Upsilon$ 27'21	0°08'15	opposition	-9958 Jan 08 j 05:21	8° $\delta$ 10'46	0°42'39
min. Earth dist.	-9965 Dec 10 j 23:43	9° $\Upsilon$ 24'57	17.20712 AU	min. Earth dist.	-9958 Jan 08 j 14:21	8° $\delta$ 09'49	17.38802 AU
direct	-9964 Feb 25 j 01:15	7° $\Upsilon$ 20'47		direct	-9958 Mar 26 j 10:36	6° $\delta$ 05'38	
evening set	-9964 May 31 j 09:35	10° $\Upsilon$ 53'44		evening set	-9958 Jun 29 j 14:39	9° $\delta$ 34'06	
conjunction	-9964 Jun 16 j 12:37	11° $\Upsilon$ 55'06	0°10'17	conjunction	-9958 Jul 15 j 10:01	10° $\delta$ 33'53	0°40'29
minimum elong	-9964 Jun 16 j 12:37	11° $\Upsilon$ 55'06	0°10'20	minimum elong	-9958 Jul 15 j 10:00	10° $\delta$ 33'52	0°40'48
behind sun begin	-9964 Jun 16 j 07:21	11° $\Upsilon$ 54'16		max. Earth dist.	-9958 Jul 15 j 02:09	10° $\delta$ 32'38	19.41233 AU
behind sun end	-9964 Jun 16 j 17:52	11° $\Upsilon$ 55'55		morning rise	-9958 Jul 31 j 02:33	11° $\delta$ 33'15	
max. Earth dist.	-9964 Jun 15 j 13:32	11° $\Upsilon$ 51'25	19.21441 AU	retrograde	-9958 Oct 30 j 11:04	14° $\delta$ 54'52	
morning rise	-9964 Jul 02 j 11:22	12° $\Upsilon$ 55'50		opposition	-9957 Jan 13 j 09:08	12° $\delta$ 53'10	0°47'29
retrograde	-9964 Oct 01 j 11:31	16° $\Upsilon$ 19'05		min. Earth dist.	-9957 Jan 13 j 14:09	12° $\delta$ 52'38	17.43819 AU
opposition	-9964 Dec 14 j 06:14	14° $\Upsilon$ 17'10	0°14'26	direct	-9957 Mar 31 j 14:53	10° $\delta$ 48'24	
min. Earth dist.	-9964 Dec 15 j 02:28	14° $\Upsilon$ 14'59	17.22353 AU	evening set	-9957 Jul 04 j 12:14	14° $\delta$ 15'45	
direct	-9963 Mar 01 j 08:24	12° $\Upsilon$ 10'48			-9957 Jul 16 j 06:27	15° $\delta$	
evening set	-9963 Jun 05 j 12:33	15° $\Upsilon$ 43'19		conjunction	-9957 Jul 20 j 06:36	15° $\delta$ 15'14	0°44'40
conjunction	-9963 Jun 21 j 14:10	16° $\Upsilon$ 44'28	0°15'45	minimum elong	-9957 Jul 20 j 06:36	15° $\delta$ 15'14	0°45'02
minimum elong	-9963 Jun 21 j 14:10	16° $\Upsilon$ 44'28	0°15'51	max. Earth dist.	-9957 Jul 20 j 02:25	15° $\delta$ 14'35	19.46530 AU
behind sun begin	-9963 Jun 21 j 12:52	16° $\Upsilon$ 44'16		morning rise	-9957 Aug 04 j 22:13	16° $\delta$ 14'20	
behind sun end	-9963 Jun 21 j 15:28	16° $\Upsilon$ 44'40		retrograde	-9957 Nov 04 j 09:10	19° $\delta$ 35'33	
max. Earth dist.	-9963 Jun 20 j 16:31	16° $\Upsilon$ 41'01	19.23352 AU	opposition	-9956 Jan 18 j 12:38	17° $\delta$ 33'57	0°51'59
morning rise	-9963 Jul 07 j 11:48	17° $\Upsilon$ 45'02		min. Earth dist.	-9956 Jan 18 j 15:46	17° $\delta$ 33'37	17.49389 AU
retrograde	-9963 Oct 06 j 11:34	21° $\Upsilon$ 08'09		direct	-9956 Apr 04 j 16:58	15° $\delta$ 29'36	
opposition	-9963 Dec 19 j 11:09	19° $\Upsilon$ 06'15	0°20'30	evening set	-9956 Jul 08 j 09:06	18° $\delta$ 55'48	
min. Earth dist.	-9963 Dec 20 j 05:53	19° $\Upsilon$ 04'15	17.24533 AU	conjunction	-9956 Jul 24 j 02:21	19° $\delta$ 54'57	0°48'33
direct	-9962 Mar 06 j 14:21	17° $\Upsilon$ 00'05		minimum elong	-9956 Jul 24 j 02:20	19° $\delta$ 54'57	0°48'56
evening set	-9962 Jun 10 j 14:39	20° $\Upsilon$ 32'02		max. Earth dist.	-9956 Jul 24 j 00:26	19° $\delta$ 54'39	19.52363 AU
conjunction	-9962 Jun 26 j 15:00	21° $\Upsilon$ 32'57	0°21'06	morning rise	-9956 Aug 08 j 17:23	20° $\delta$ 53'47	
minimum elong	-9962 Jun 26 j 15:00	21° $\Upsilon$ 32'57	0°21'15	retrograde	-9956 Nov 08 j 08:01	24° $\delta$ 14'32	
max. Earth dist.	-9962 Jun 25 j 20:15	21° $\Upsilon$ 29'57	19.25804 AU	opposition	-9955 Jan 22 j 15:16	22° $\delta$ 13'04	0°56'06
morning rise	-9962 Jul 12 j 11:27	22° $\Upsilon$ 33'18		min. Earth dist.	-9955 Jan 22 j 14:35	22° $\delta$ 13'08	17.55457 AU
retrograde	-9962 Oct 11 j 12:29	25° $\Upsilon$ 56'14		direct	-9955 Apr 09 j 19:54	20° $\delta$ 09'10	
opposition	-9962 Dec 24 j 16:00	23° $\Upsilon$ 54'22	0°26'24	evening set	-9955 Jul 13 j 04:55	23° $\delta$ 34'09	
min. Earth dist.	-9962 Dec 25 j 07:54	23° $\Upsilon$ 52'40	17.27241 AU	conjunction	-9955 Jul 28 j 21:22	24° $\delta$ 33'00	0°52'05
direct	-9961 Mar 11 j 21:33	21° $\Upsilon$ 48'25		minimum elong	-9955 Jul 28 j 21:21	24° $\delta$ 33'00	0°52'31
evening set	-9961 Jun 15 j 16:02	25° $\Upsilon$ 19'39		max. Earth dist.	-9955 Jul 28 j 23:12	24° $\delta$ 33'17	19.58644 AU
conjunction	-9961 Jul 01 j 15:04	26° $\Upsilon$ 20'19	0°26'17	morning rise	-9955 Aug 13 j 11:37	25° $\delta$ 31'32	
minimum elong	-9961 Jul 01 j 15:04	26° $\Upsilon$ 20'19	0°26'29	retrograde	-9955 Nov 13 j 04:49	28° $\delta$ 51'48	
max. Earth dist.	-9961 Jun 30 j 22:39	26° $\Upsilon$ 17'42	19.28795 AU	opposition	-9954 Jan 27 j 17:44	26° $\delta$ 50'30	0°59'50
morning rise	-9961 Jul 17 j 10:26	27° $\Upsilon$ 20'26		min. Earth dist.	-9954 Jan 27 j 15:16	26° $\delta$ 50'46	17.61936 AU
retrograde	-9961 Sep 07 j 01:52	0° $\delta$		direct	-9954 Apr 14 j 21:24	24° $\delta$ 47'06	
	-9961 Oct 16 j 11:42	0° $\delta$ 43'07		evening set	-9954 Jul 17 j 23:52	28° $\delta$ 10'48	
	-9961 Nov 26 j 11:11	30° $\kappa$ $\Upsilon$		conjunction	-9954 Aug 02 j 15:17	29° $\delta$ 09'18	0°55'16
opposition	-9961 Dec 29 j 20:48	28° $\Upsilon$ 41'16	0°32'04	minimum elong	-9954 Aug 02 j 15:17	29° $\delta$ 09'18	0°55'45
min. Earth dist.	-9961 Dec 30 j 11:05	28° $\Upsilon$ 39'45	17.30523 AU	max. Earth dist.	-9954 Aug 02 j 19:00	29° $\delta$ 09'53	19.65305 AU
direct	-9960 Mar 16 j 01:53	26° $\Upsilon$ 35'33			-9954 Aug 16 j 03:57	0° $\Pi$	
	-9960 Jun 18 j 01:53	0° $\delta$		morning rise	-9954 Aug 18 j 05:08	0° $\Pi$ 07'34	
evening set	-9960 Jun 19 j 16:23	0° $\delta$ 05'58		retrograde	-9954 Nov 18 j 02:18	3° $\Pi$ 27'20	
conjunction	-9960 Jul 05 j 14:10	1° $\delta$ 06'20	0°31'15	opposition	-9953 Feb 01 j 19:32	1° $\Pi$ 26'11	1°03'10
minimum elong	-9960 Jul 05 j 14:10	1° $\delta$ 06'20	0°31'30	min. Earth dist.	-9953 Feb 01 j 13:32	1° $\Pi$ 26'49	17.68754 AU
max. Earth dist.	-9960 Jul 05 j 00:36	1° $\delta$ 04'11	19.32366 AU		-9953 Mar 12 j 01:20	30° $\kappa$ $\delta$	
morning rise	-9960 Jul 21 j 08:34	2° $\delta$ 06'14		direct	-9953 Apr 19 j 22:47	29° $\delta$ 23'15	
retrograde	-9960 Oct 20 j 12:25	5° $\delta$ 28'36		evening set	-9953 May 27 j 14:32	0° $\Pi$	
opposition	-9959 Jan 03 j 01:11	3° $\delta$ 26'46	0°37'30		-9953 Jul 22 j 17:51	2° $\Pi$ 45'38	
min. Earth dist.	-9959 Jan 03 j 11:57	3° $\delta$ 25'38	17.34369 AU	conjunction	-9953 Aug 07 j 08:39	3° $\Pi$ 43'49	0°58'05
direct	-9959 Mar 21 j 07:34	1° $\delta$ 21'20		minimum elong	-9953 Aug 07 j 08:39	3° $\Pi$ 43'49	0°58'34
evening set	-9959 Jun 24 j 15:57	4° $\delta$ 50'48		max. Earth dist.	-9953 Aug 07 j 16:03	3° $\Pi$ 44'58	19.72249 AU
conjunction	-9959 Jul 10 j 12:32	5° $\delta$ 50'54	0°36'00	morning rise	-9953 Aug 22 j 21:53	4° $\Pi$ 41'47	
minimum elong	-9959 Jul 10 j 12:32	5° $\delta$ 50'54	0°36'18	retrograde	-9953 Nov 22 j 21:54	8° $\Pi$ 01'01	
max. Earth dist.	-9959 Jul 10 j 02:02	5° $\delta$ 49'14	19.36500 AU	opposition	-9952 Feb 06 j 20:42	6° $\Pi$ 00'02	1°06'04

## Planetary Phenomena of Uranus from -10400 through -9898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 37

Attention, astronomical year style is used: The year -9952 in astronomical counting style is the year 9953 BCE in historical counting style.

min. Earth dist.	-9952 Feb 06 j 12:58	6° $\Pi$ 00'50	17.75816 AU	conjunction	-9946 Sep 06 j 09:27	4° $\mathfrak{E}$ 48'10	1°06'43
direct	-9952 Apr 23 j 23:02	3° $\Pi$ 57'35		minimum elong	-9946 Sep 06 j 09:27	4° $\mathfrak{E}$ 48'10	1°07'17
evening set	-9952 Jul 26 j 11:02	7° $\Pi$ 18'35		max. Earth dist.	-9946 Sep 07 j 07:20	4° $\mathfrak{E}$ 51'29	20.23457 AU
				morning rise	-9946 Sep 21 j 22:28	5° $\mathfrak{E}$ 44'21	
conjunction	-9952 Aug 11 j 01:00	8° $\Pi$ 16'26	1°00'30	retrograde	-9946 Dec 23 j 21:24	8° $\mathfrak{E}$ 59'03	
minimum elong	-9952 Aug 11 j 01:00	8° $\Pi$ 16'26	1°01'02	min. Earth dist.	-9945 Mar 10 j 06:38	7° $\mathfrak{E}$ 01'00	18.27182 AU
max. Earth dist.	-9952 Aug 11 j 09:47	8° $\Pi$ 17'48	19.79403 AU	opposition	-9945 Mar 11 j 05:31	6° $\mathfrak{E}$ 58'40	1°13'57
morning rise	-9952 Aug 26 j 14:04	9° $\Pi$ 14'09		direct	-9945 May 26 j 20:07	4° $\mathfrak{E}$ 58'59	
retrograde	-9952 Nov 26 j 17:49	12° $\Pi$ 32'48		evening set	-9945 Aug 26 j 07:50	8° $\mathfrak{E}$ 09'58	
opposition	-9951 Feb 10 j 21:05	10° $\Pi$ 31'56	1°08'31				
min. Earth dist.	-9951 Feb 10 j 10:21	10° $\Pi$ 33'03	17.83049 AU	conjunction	-9945 Sep 10 j 20:01	9° $\mathfrak{E}$ 05'46	1°06'24
direct	-9951 Apr 28 j 22:22	8° $\Pi$ 29'57		minimum elong	-9945 Sep 10 j 20:01	9° $\mathfrak{E}$ 05'46	1°06'59
evening set	-9951 Jul 31 j 03:08	11° $\Pi$ 49'33		max. Earth dist.	-9945 Sep 11 j 20:54	9° $\mathfrak{E}$ 09'32	20.30817 AU
				morning rise	-9945 Sep 26 j 09:11	10° $\mathfrak{E}$ 01'44	
conjunction	-9951 Aug 15 j 16:40	12° $\Pi$ 47'06	1°02'32	retrograde	-9945 Dec 28 j 11:52	13° $\mathfrak{E}$ 15'45	
minimum elong	-9951 Aug 15 j 16:40	12° $\Pi$ 47'05	1°03'04	opposition	-9944 Mar 14 j 23:22	11° $\mathfrak{E}$ 15'27	1°13'22
max. Earth dist.	-9951 Aug 16 j 04:51	12° $\Pi$ 48'59	19.86677 AU	min. Earth dist.	-9944 Mar 13 j 22:12	11° $\mathfrak{E}$ 18'01	18.34539 AU
morning rise	-9951 Aug 31 j 05:16	13° $\Pi$ 44'31		direct	-9944 May 30 j 12:57	9° $\mathfrak{E}$ 16'09	
retrograde	-9951 Dec 01 j 11:54	17° $\Pi$ 02'34		evening set	-9944 Aug 29 j 17:34	12° $\mathfrak{E}$ 25'47	
opposition	-9950 Feb 15 j 20:47	15° $\Pi$ 01'50	1°10'32				
min. Earth dist.	-9950 Feb 15 j 08:15	15° $\Pi$ 03'08	17.90362 AU	conjunction	-9944 Sep 14 j 05:42	13° $\mathfrak{E}$ 21'20	1°05'44
direct	-9950 May 03 j 21:07	13° $\Pi$ 00'18		minimum elong	-9944 Sep 14 j 05:42	13° $\mathfrak{E}$ 21'20	1°06'19
evening set	-9950 Aug 04 j 18:29	16° $\Pi$ 18'28		max. Earth dist.	-9944 Sep 15 j 07:35	13° $\mathfrak{E}$ 25'13	20.38162 AU
				morning rise	-9944 Sep 29 j 19:26	14° $\mathfrak{E}$ 17'06	
conjunction	-9950 Aug 20 j 07:22	17° $\Pi$ 15'41	1°04'10	retrograde	-9943 Jan 01 j 01:18	17° $\mathfrak{E}$ 30'28	
minimum elong	-9950 Aug 20 j 07:22	17° $\Pi$ 15'41	1°04'43	opposition	-9943 Mar 19 j 16:31	15° $\mathfrak{E}$ 30'16	1°12'24
max. Earth dist.	-9950 Aug 20 j 20:40	17° $\Pi$ 17'45	19.94021 AU	min. Earth dist.	-9943 Mar 18 j 14:05	15° $\mathfrak{E}$ 32'56	18.41879 AU
morning rise	-9950 Sep 04 j 19:59	18° $\Pi$ 12'51		direct	-9943 Jun 04 j 02:13	13° $\mathfrak{E}$ 31'20	
retrograde	-9950 Dec 06 j 06:21	21° $\Pi$ 30'17		evening set	-9943 Sep 03 j 02:16	16° $\mathfrak{E}$ 39'40	
opposition	-9949 Feb 20 j 19:39	19° $\Pi$ 29'38	1°12'06				
min. Earth dist.	-9949 Feb 20 j 04:37	19° $\Pi$ 31'11	17.97733 AU	conjunction	-9943 Sep 18 j 14:45	17° $\mathfrak{E}$ 34'59	1°04'42
direct	-9949 May 08 j 18:13	17° $\Pi$ 28'30		minimum elong	-9943 Sep 18 j 14:45	17° $\mathfrak{E}$ 34'59	1°05'16
evening set	-9949 Aug 09 j 08:35	20° $\Pi$ 45'14		max. Earth dist.	-9943 Sep 19 j 19:18	17° $\mathfrak{E}$ 39'16	20.45468 AU
				morning rise	-9943 Oct 04 j 04:48	18° $\mathfrak{E}$ 30'34	
conjunction	-9949 Aug 24 j 21:17	21° $\Pi$ 42'09	1°05'24	retrograde	-9942 Jan 05 j 15:12	21° $\mathfrak{E}$ 43'18	
minimum elong	-9949 Aug 24 j 21:17	21° $\Pi$ 42'09	1°05'58	min. Earth dist.	-9942 Mar 23 j 04:02	19° $\mathfrak{E}$ 46'07	18.49137 AU
max. Earth dist.	-9949 Aug 25 j 13:50	21° $\Pi$ 44'41	20.01390 AU	opposition	-9942 Mar 24 j 08:42	19° $\mathfrak{E}$ 43'13	1°11'02
morning rise	-9949 Sep 09 j 09:43	22° $\Pi$ 39'03		direct	-9942 Jun 08 j 17:30	17° $\mathfrak{E}$ 44'42	
retrograde	-9949 Dec 10 j 22:51	25° $\Pi$ 55'48		evening set	-9942 Sep 07 j 10:33	20° $\mathfrak{E}$ 51'46	
opposition	-9948 Feb 25 j 17:36	23° $\Pi$ 55'16	1°13'13				
min. Earth dist.	-9948 Feb 25 j 00:38	23° $\Pi$ 57'00	18.05097 AU	conjunction	-9942 Sep 22 j 23:10	21° $\mathfrak{E}$ 46'53	1°03'20
direct	-9948 May 12 j 14:57	21° $\Pi$ 54'30		minimum elong	-9942 Sep 22 j 23:10	21° $\mathfrak{E}$ 46'53	1°03'55
evening set	-9948 Aug 12 j 21:58	25° $\Pi$ 09'47		max. Earth dist.	-9942 Sep 24 j 04:31	21° $\mathfrak{E}$ 51'16	20.52669 AU
				morning rise	-9942 Oct 08 j 13:57	22° $\mathfrak{E}$ 42'17	
conjunction	-9948 Aug 28 j 10:14	26° $\Pi$ 06'24	1°06'13	retrograde	-9941 Jan 10 j 03:30	25° $\mathfrak{E}$ 54'26	
minimum elong	-9948 Aug 28 j 10:13	26° $\Pi$ 06'24	1°06'47	min. Earth dist.	-9941 Mar 27 j 18:49	23° $\mathfrak{E}$ 57'26	18.56276 AU
max. Earth dist.	-9948 Aug 29 j 03:46	26° $\Pi$ 09'05	20.08750 AU	opposition	-9941 Mar 29 j 00:07	23° $\mathfrak{E}$ 54'28	1°09'19
morning rise	-9948 Sep 12 j 22:52	27° $\Pi$ 03'03		direct	-9941 Jun 13 j 04:50	21° $\mathfrak{E}$ 56'20	
	-9948 Nov 17 j 11:21	0° $\mathfrak{E}$		evening set	-9941 Sep 11 j 18:02	25° $\mathfrak{E}$ 02'13	
retrograde	-9948 Dec 14 j 15:22	0° $\mathfrak{E}$ 19'08					
	-9947 Jan 11 j 11:49	30° $\mathfrak{R}$ $\Pi$		conjunction	-9941 Sep 27 j 07:12	25° $\mathfrak{E}$ 57'08	1°01'39
opposition	-9947 Mar 01 j 14:25	28° $\Pi$ 18'38	1°13'53	minimum elong	-9941 Sep 27 j 07:12	25° $\mathfrak{E}$ 57'08	1°02'11
min. Earth dist.	-9947 Feb 28 j 19:28	28° $\Pi$ 20'34	18.12463 AU	max. Earth dist.	-9941 Sep 28 j 14:40	26° $\mathfrak{E}$ 01'48	20.59712 AU
direct	-9947 May 17 j 09:33	26° $\Pi$ 18'14		morning rise	-9941 Oct 12 j 22:30	26° $\mathfrak{E}$ 52'23	
evening set	-9947 Aug 17 j 10:08	29° $\Pi$ 32'04			-9940 Jan 02 j 01:15	0° $\mathfrak{Q}$	
	-9947 Aug 25 j 03:54	0° $\mathfrak{E}$		retrograde	-9940 Jan 14 j 16:21	0° $\mathfrak{Q}$ 03'56	
					-9940 Jan 27 j 08:39	30° $\mathfrak{R}$ $\mathfrak{E}$	
conjunction	-9947 Sep 01 j 22:23	0° $\mathfrak{E}$ 28'24	1°06'40	min. Earth dist.	-9940 Mar 31 j 07:24	28° $\mathfrak{E}$ 07'15	18.63199 AU
minimum elong	-9947 Sep 01 j 22:23	0° $\mathfrak{E}$ 28'24	1°07'15	opposition	-9940 Apr 01 j 14:32	28° $\mathfrak{E}$ 04'07	1°07'13
max. Earth dist.	-9947 Sep 02 j 19:06	0° $\mathfrak{E}$ 31'34	20.16106 AU	direct	-9940 Jun 16 j 18:41	26° $\mathfrak{E}$ 06'22	
morning rise	-9947 Sep 17 j 11:00	1° $\mathfrak{E}$ 24'49		evening set	-9940 Sep 15 j 01:13	29° $\mathfrak{E}$ 11'06	
retrograde	-9947 Dec 19 j 06:33	4° $\mathfrak{E}$ 40'11			-9940 Sep 28 j 23:03	0° $\mathfrak{Q}$	
opposition	-9946 Mar 06 j 10:25	2° $\mathfrak{E}$ 39'46	1°14'08				
min. Earth dist.	-9946 Mar 05 j 13:16	2° $\mathfrak{E}$ 41'55	18.19814 AU	conjunction	-9940 Sep 30 j 14:39	0° $\mathfrak{Q}$ 05'51	0°59'38
direct	-9946 May 22 j 04:14	0° $\mathfrak{E}$ 39'44		minimum elong	-9940 Sep 30 j 14:39	0° $\mathfrak{Q}$ 05'51	1°00'10
evening set	-9946 Aug 21 j 21:27	3° $\mathfrak{E}$ 52'07		max. Earth dist.	-9940 Oct 01 j 22:26	0° $\mathfrak{Q}$ 10'33	20.66498 AU
				morning rise	-9940 Oct 16 j 06:46	1° $\mathfrak{Q}$ 00'57	

Attention, astronomical year style is used: The year -9939 in astronomical counting style is the year 9940 BCE in historical counting style.

retrograde	-9939 Jan 18 j 03:42	4°Ω11'57		evening set	-9933 Oct 13 j 14:59	27°Ω33'52	
min. Earth dist.	-9939 Apr 04 j 21:07	2°Ω15'22	18.69847 AU				
opposition	-9939 Apr 06 j 04:12	2°Ω12'15	1°04'48	conjunction	-9933 Oct 29 j 09:35	28°Ω27'51	0°38'11
direct	-9939 Jun 21 j 04:26	0°Ω14'51		minimum elong	-9933 Oct 29 j 09:36	28°Ω27'51	0°38'33
evening set	-9939 Sep 19 j 07:45	3°Ω18'31		max. Earth dist.	-9933 Oct 30 j 20:03	28°Ω32'48	21.02549 AU
				morning rise	-9933 Nov 14 j 08:00	29°Ω22'22	
conjunction	-9939 Oct 04 j 21:51	4°Ω13'06	0°57'19		-9933 Nov 25 j 19:13	0°൬	
minimum elong	-9939 Oct 04 j 21:51	4°Ω13'06	0°57'50	retrograde	-9932 Feb 16 j 21:55	2°൬29'57	
max. Earth dist.	-9939 Oct 06 j 07:08	4°Ω18'00	20.72980 AU	min. Earth dist.	-9932 May 03 j 21:39	0°൬33'42	19.04336 AU
morning rise	-9939 Oct 20 j 14:35	5°Ω08'04		opposition	-9932 May 05 j 06:17	0°൬30'26	0°40'03
retrograde	-9938 Jan 22 j 15:02	8°Ω18'31			-9932 May 18 j 01:49	30°℞Ω	
min. Earth dist.	-9938 Apr 09 j 08:29	6°Ω22'12	18.76142 AU	direct	-9932 Jul 19 j 17:45	28°Ω34'20	
opposition	-9938 Apr 10 j 17:03	6°Ω18'56	1°02'03		-9932 Sep 16 j 20:59	0°൬	
direct	-9938 Jun 25 j 16:45	4°Ω21'51		evening set	-9932 Oct 16 j 19:08	1°൬32'03	
evening set	-9938 Sep 23 j 13:57	7°Ω24'29					
				conjunction	-9932 Nov 01 j 14:29	2°൬26'00	0°34'19
conjunction	-9938 Oct 09 j 04:29	8°Ω18'55	0°54'44	minimum elong	-9932 Nov 01 j 14:29	2°൬26'00	0°34'38
minimum elong	-9938 Oct 09 j 04:30	8°Ω18'55	0°55'13	max. Earth dist.	-9932 Nov 03 j 00:23	2°൬30'51	21.05901 AU
max. Earth dist.	-9938 Oct 10 j 13:43	8°Ω23'47	20.79071 AU	morning rise	-9932 Nov 17 j 14:01	3°൬20'30	
morning rise	-9938 Oct 24 j 22:12	9°Ω13'47		retrograde	-9931 Feb 20 j 04:04	6°൬27'43	
retrograde	-9937 Jan 27 j 01:28	12°Ω23'43		min. Earth dist.	-9931 May 08 j 06:39	4°൬31'20	19.07502 AU
min. Earth dist.	-9937 Apr 13 j 21:20	10°Ω27'25	18.82028 AU	opposition	-9931 May 09 j 14:01	4°൬28'11	0°35'40
opposition	-9937 Apr 15 j 05:19	10°Ω24'13	0°59'00	direct	-9931 Jul 23 j 22:28	2°൬32'10	
direct	-9937 Jun 30 j 01:21	8°Ω27'24		evening set	-9931 Oct 20 j 23:00	5°൬29'20	
evening set	-9937 Sep 27 j 19:43	11°Ω29'03					
				conjunction	-9931 Nov 05 j 19:26	6°൬23'16	0°30'18
conjunction	-9937 Oct 13 j 11:05	12°Ω23'22	0°51'52	minimum elong	-9931 Nov 05 j 19:26	6°൬23'16	0°30'35
minimum elong	-9937 Oct 13 j 11:05	12°Ω23'22	0°52'20	max. Earth dist.	-9931 Nov 07 j 05:44	6°൬28'10	21.08887 AU
max. Earth dist.	-9937 Oct 14 j 21:12	12°Ω28'21	20.84729 AU	morning rise	-9931 Nov 21 j 19:55	7°൬17'46	
morning rise	-9937 Oct 29 j 05:32	13°Ω18'08		retrograde	-9930 Feb 24 j 12:45	10°൬24'40	
	-9937 Dec 01 j 01:36	15°Ω		opposition	-9930 May 13 j 21:03	8°൬25'08	0°31'09
retrograde	-9936 Jan 31 j 11:32	16°Ω27'33		min. Earth dist.	-9930 May 12 j 12:58	8°൬28'21	19.10296 AU
	-9936 Apr 05 j 05:46	15°℞Ω		direct	-9930 Jul 28 j 04:41	6°൬29'12	
min. Earth dist.	-9936 Apr 17 j 07:25	14°Ω31'24	18.87440 AU	evening set	-9930 Oct 25 j 02:53	9°൬25'55	
opposition	-9936 Apr 18 j 16:27	14°Ω28'06	0°55'41				
direct	-9936 Jul 03 j 11:44	12°Ω31'30		conjunction	-9930 Nov 10 j 00:11	10°൬19'51	0°26'09
	-9936 Sep 21 j 08:55	15°Ω		minimum elong	-9930 Nov 10 j 00:11	10°൬19'51	0°26'24
evening set	-9936 Oct 01 j 01:13	15°Ω32'15		max. Earth dist.	-9930 Nov 11 j 09:41	10°൬24'37	21.11491 AU
				morning rise	-9930 Nov 26 j 01:53	11°൬14'22	
conjunction	-9936 Oct 16 j 17:09	16°Ω26'27	0°48'46	retrograde	-9929 Feb 28 j 18:33	14°൬21'01	
minimum elong	-9936 Oct 16 j 17:10	16°Ω26'27	0°49'12	min. Earth dist.	-9929 May 16 j 21:14	12°൬24'34	19.12709 AU
max. Earth dist.	-9936 Oct 18 j 02:48	16°Ω31'20	20.89894 AU	opposition	-9929 May 18 j 03:46	12°൬21'30	0°26'29
morning rise	-9936 Nov 01 j 12:39	17°Ω21'08		direct	-9929 Aug 01 j 08:10	10°൬25'39	
retrograde	-9935 Feb 03 j 20:19	20°Ω30'03		evening set	-9929 Oct 29 j 06:45	13°൬22'00	
min. Earth dist.	-9935 Apr 21 j 19:05	18°Ω33'50	18.92363 AU				
opposition	-9935 Apr 23 j 03:09	18°Ω30'37	0°52'06	conjunction	-9929 Nov 14 j 05:13	14°൬15'58	0°21'53
direct	-9935 Jul 07 j 19:19	16°Ω34'12		minimum elong	-9929 Nov 14 j 05:13	14°൬15'58	0°22'06
evening set	-9935 Oct 05 j 06:00	19°Ω34'04		max. Earth dist.	-9929 Nov 15 j 14:39	14°൬20'43	21.13712 AU
				morning rise	-9929 Nov 30 j 07:53	15°൬10'30	
conjunction	-9935 Oct 20 j 22:52	20°Ω28'11	0°45'26	retrograde	-9928 Mar 04 j 02:55	18°൬16'57	
minimum elong	-9935 Oct 20 j 22:52	20°Ω28'11	0°45'52	min. Earth dist.	-9928 May 20 j 02:52	16°൬20'34	19.14715 AU
max. Earth dist.	-9935 Oct 22 j 09:14	20°Ω33'10	20.94577 AU	opposition	-9928 May 21 j 09:44	16°൬17'28	0°21'42
morning rise	-9935 Nov 05 j 19:13	21°Ω22'48		direct	-9928 Aug 04 j 13:27	14°൬21'42	
retrograde	-9934 Feb 08 j 05:40	24°Ω31'15		evening set	-9928 Nov 01 j 10:47	17°൬17'47	
min. Earth dist.	-9934 Apr 26 j 03:55	22°Ω35'06	18.96797 AU				
opposition	-9934 Apr 27 j 12:56	22°Ω31'48	0°48'17	conjunction	-9928 Nov 17 j 10:08	18°൬11'47	0°17'31
direct	-9934 Jul 12 j 04:07	20°Ω35'30		minimum elong	-9928 Nov 17 j 10:08	18°൬11'47	0°17'43
evening set	-9934 Oct 09 j 10:43	23°Ω34'35		max. Earth dist.	-9928 Nov 18 j 18:24	18°൬16'21	21.15505 AU
				morning rise	-9928 Dec 03 j 14:00	19°൬06'22	
conjunction	-9934 Oct 25 j 04:18	24°Ω28'37	0°41'54	retrograde	-9927 Mar 08 j 08:48	22°൬12'40	
minimum elong	-9934 Oct 25 j 04:18	24°Ω28'37	0°42'17	min. Earth dist.	-9927 May 24 j 10:40	20°൬16'08	19.16287 AU
max. Earth dist.	-9934 Oct 26 j 14:12	24°Ω33'31	20.98778 AU	opposition	-9927 May 25 j 15:39	20°൬13'14	0°16'50
morning rise	-9934 Nov 10 j 01:47	25°Ω23'11		direct	-9927 Aug 08 j 16:13	18°൬17'31	
retrograde	-9933 Feb 12 j 12:58	28°Ω31'11		evening set	-9927 Nov 05 j 14:43	21°൬13'25	
opposition	-9933 May 01 j 22:02	26°Ω31'42	0°44'16				
min. Earth dist.	-9933 Apr 30 j 14:14	26°Ω34'53	19.00779 AU	conjunction	-9927 Nov 21 j 15:15	22°൬07'28	0°13'05
direct	-9933 Jul 16 j 10:21	24°Ω35'31		minimum elong	-9927 Nov 21 j 15:15	22°൬07'28	0°13'13

Attention, astronomical year style is used: The year -9927 in astronomical counting style is the year 9928 BCE in historical counting style.

behind sun begin	-9927 Nov 21 j 11:23	22° <u>06</u> '56		morning rise	-9922 Dec 28 j 08:07	12° <u>42</u> '52	
behind sun end	-9927 Nov 21 j 19:08	22° <u>08</u> '00		retrograde	-9921 Apr 02 j 04:21	15° <u>49</u> '00	
max. Earth dist.	-9927 Nov 22 j 23:08	22° <u>11</u> '59	21.16854 AU	opposition	-9921 Jun 18 j 21:42	13° <u>49</u> '28	-0°13'17
morning rise	-9927 Dec 07 j 20:07	23° <u>02</u> '07		min. Earth dist.	-9921 Jun 18 j 02:01	13° <u>51</u> '28	19.14219 AU
retrograde	-9926 Mar 12 j 17:04	26° <u>08</u> '19		direct	-9921 Sep 01 j 13:34	11° <u>53</u> '20	
opposition	-9926 May 29 j 21:08	24° <u>08</u> '55	0°11'52	evening set	-9921 Nov 29 j 22:09	14° <u>49</u> '43	
min. Earth dist.	-9926 May 28 j 16:13	24° <u>11</u> '50	19.17381 AU				
direct	-9926 Aug 12 j 21:00	22° <u>13</u> '15		conjunction	-9921 Dec 16 j 05:09	15° <u>44</u> '26	-0°14'15
evening set	-9926 Nov 09 j 19:14	25° <u>09</u> '04		minimum elong	-9921 Dec 16 j 05:08	15° <u>44</u> '26	0°14'21
				behind sun begin	-9921 Dec 16 j 02:10	15° <u>44</u> '01	
conjunction	-9926 Nov 25 j 20:42	26° <u>03</u> '11	0°08'35	behind sun end	-9921 Dec 16 j 08:07	15° <u>44</u> '50	
minimum elong	-9926 Nov 25 j 20:43	26° <u>03</u> '11	0°08'42	max. Earth dist.	-9921 Dec 17 j 02:56	15° <u>47</u> '30	21.13072 AU
behind sun begin	-9926 Nov 25 j 14:58	26° <u>02</u> '23		morning rise	-9920 Jan 01 j 16:14	16° <u>39</u> '43	
behind sun end	-9926 Nov 26 j 02:28	26° <u>03</u> '58		retrograde	-9920 Apr 05 j 12:47	19° <u>45</u> '56	
max. Earth dist.	-9926 Nov 27 j 02:56	26° <u>07</u> '27	21.17688 AU	min. Earth dist.	-9920 Jun 21 j 07:12	17° <u>48</u> '11	19.11830 AU
morning rise	-9926 Dec 12 j 02:46	26° <u>57</u> '55		opposition	-9920 Jun 22 j 02:00	17° <u>46</u> '16	-0°18'14
	-9925 Mar 04 j 01:41	0° <u>04</u> '02		direct	-9920 Sep 04 j 18:21	15° <u>49</u> '55	
retrograde	-9925 Mar 16 j 23:19	0° <u>04</u> '02		evening set	-9920 Dec 03 j 04:42	18° <u>46</u> '38	
	-9925 Mar 30 j 00:42	30° <u>07</u> '20					
min. Earth dist.	-9925 Jun 01 j 23:53	28° <u>07</u> '20	19.17946 AU	conjunction	-9920 Dec 19 j 12:37	19° <u>41</u> '30	-0°18'41
opposition	-9925 Jun 03 j 02:22	28° <u>04</u> '40	0°06'51	minimum elong	-9920 Dec 19 j 12:36	19° <u>41</u> '30	0°18'50
direct	-9925 Aug 16 j 23:19	26° <u>09</u> '01		max. Earth dist.	-9920 Dec 20 j 08:06	19° <u>44</u> '15	21.10432 AU
evening set	-9925 Nov 13 j 23:57	29° <u>04</u> '48		morning rise	-9919 Jan 05 j 00:42	20° <u>36</u> '57	
				retrograde	-9919 Apr 09 j 19:23	23° <u>43</u> '17	
conjunction	-9925 Nov 30 j 02:39	29° <u>59</u> '01	0°04'03	opposition	-9919 Jun 26 j 06:30	21° <u>43</u> '29	-0°23'06
minimum elong	-9925 Nov 30 j 02:37	29° <u>59</u> '01	0°04'06	min. Earth dist.	-9919 Jun 25 j 14:27	21° <u>45</u> '07	19.08959 AU
behind sun begin	-9925 Nov 29 j 20:04	29° <u>58</u> '07		direct	-9919 Sep 08 j 21:17	19° <u>46</u> '52	
behind sun end	-9925 Nov 30 j 09:11	29° <u>59</u> '55		evening set	-9919 Dec 07 j 11:28	22° <u>44</u> '00	
	-9925 Nov 30 j 09:46	0° <u>03</u> '08					
max. Earth dist.	-9925 Dec 01 j 07:49	0° <u>03</u> '08	21.17978 AU	conjunction	-9919 Dec 23 j 20:32	23° <u>39</u> '02	-0°23'02
morning rise	-9925 Dec 16 j 09:38	0° <u>53</u> '50		minimum elong	-9919 Dec 23 j 20:32	23° <u>39</u> '02	0°23'12
retrograde	-9924 Mar 20 j 07:31	3° <u>59</u> '55		max. Earth dist.	-9919 Dec 24 j 14:31	23° <u>41</u> '34	21.07351 AU
min. Earth dist.	-9924 Jun 05 j 05:23	2° <u>03</u> '11	19.17933 AU	morning rise	-9918 Jan 09 j 09:30	24° <u>34</u> '39	
opposition	-9924 Jun 06 j 07:21	2° <u>00</u> '34	0°01'49	retrograde	-9918 Apr 14 j 04:07	27° <u>41</u> '08	
direct	-9924 Aug 20 j 04:01	0° <u>04</u> '52		opposition	-9918 Jun 30 j 10:54	25° <u>41</u> '13	-0°27'52
desc. node	-9924 Oct 14 j 12:46	1° <u>20</u> '10		min. Earth dist.	-9918 Jun 29 j 19:38	25° <u>42</u> '46	19.05663 AU
evening set	-9924 Nov 17 j 04:59	3° <u>00</u> '43		direct	-9918 Sep 13 j 01:59	23° <u>44</u> '20	
				evening set	-9918 Dec 11 j 19:04	26° <u>41</u> '58	
conjunction	-9924 Dec 03 j 08:36	3° <u>55</u> '01	-0°00'37				
minimum elong	-9924 Dec 03 j 08:35	3° <u>55</u> '01	0°00'35	conjunction	-9918 Dec 28 j 05:03	27° <u>37</u> '12	-0°27'17
behind sun begin	-9924 Dec 03 j 01:57	3° <u>54</u> '06		minimum elong	-9918 Dec 28 j 05:03	27° <u>37</u> '12	0°27'30
behind sun end	-9924 Dec 03 j 15:14	3° <u>55</u> '56		max. Earth dist.	-9918 Dec 28 j 20:39	27° <u>39</u> '24	21.03852 AU
max. Earth dist.	-9924 Dec 04 j 11:41	3° <u>58</u> '50	21.17658 AU	morning rise	-9917 Jan 13 j 18:56	28° <u>32</u> '59	
morning rise	-9924 Dec 19 j 16:43	4° <u>49</u> '56			-9917 Feb 11 j 02:55	0° <u>00</u> '00	
retrograde	-9923 Mar 24 j 13:45	7° <u>56</u> '02		retrograde	-9917 Apr 18 j 11:25	1° <u>39</u> '41	
opposition	-9923 Jun 10 j 12:22	5° <u>56</u> '39	-0°03'15		-9917 Jun 26 j 08:09	30° <u>00</u> '00	
min. Earth dist.	-9923 Jun 09 j 13:03	5° <u>59</u> '00	19.17305 AU	opposition	-9917 Jul 04 j 15:24	29° <u>39</u> '39	-0°32'30
direct	-9923 Aug 24 j 06:11	4° <u>00</u> '51		min. Earth dist.	-9917 Jul 04 j 02:55	29° <u>40</u> '56	19.01980 AU
evening set	-9923 Nov 21 j 10:18	6° <u>56</u> '49		direct	-9917 Sep 17 j 05:21	27° <u>42</u> '30	
					-9917 Dec 03 j 11:45	0° <u>00</u> '00	
conjunction	-9923 Dec 07 j 15:07	7° <u>51</u> '15	-0°05'14	evening set	-9917 Dec 16 j 03:07	0° <u>40</u> '43	
minimum elong	-9923 Dec 07 j 15:07	7° <u>51</u> '15	0°05'15				
behind sun begin	-9923 Dec 07 j 08:40	7° <u>50</u> '22		conjunction	-9916 Jan 01 j 14:11	1° <u>36</u> '10	-0°31'25
behind sun end	-9923 Dec 07 j 21:34	7° <u>52</u> '08		minimum elong	-9916 Jan 01 j 14:10	1° <u>36</u> '10	0°31'39
max. Earth dist.	-9923 Dec 08 j 16:50	7° <u>54</u> '52	21.16733 AU	max. Earth dist.	-9916 Jan 02 j 04:02	1° <u>38</u> '07	20.99999 AU
morning rise	-9923 Dec 24 j 00:12	8° <u>46</u> '16		morning rise	-9916 Jan 18 j 04:48	2° <u>32</u> '08	
retrograde	-9922 Mar 28 j 22:10	11° <u>52</u> '23		retrograde	-9916 Apr 21 j 20:59	5° <u>39</u> '06	
opposition	-9922 Jun 14 j 17:00	9° <u>52</u> '56	-0°08'17	opposition	-9916 Jul 07 j 20:03	3° <u>38</u> '58	-0°37'01
min. Earth dist.	-9922 Jun 13 j 18:28	9° <u>55</u> '13	19.16063 AU	min. Earth dist.	-9916 Jul 07 j 08:24	3° <u>40</u> '10	18.97949 AU
direct	-9922 Aug 28 j 11:04	7° <u>57</u> '00		direct	-9916 Sep 20 j 10:30	1° <u>41</u> '33	
evening set	-9922 Nov 25 j 16:06	10° <u>53</u> '08		evening set	-9916 Dec 19 j 11:44	4° <u>40</u> '27	
conjunction	-9922 Dec 11 j 21:54	11° <u>47</u> '42	-0°09'46	conjunction	-9915 Jan 04 j 23:39	5° <u>36</u> '07	-0°35'26
minimum elong	-9922 Dec 11 j 21:54	11° <u>47</u> '42	0°09'49	minimum elong	-9915 Jan 04 j 23:38	5° <u>36</u> '07	0°35'42
behind sun begin	-9922 Dec 11 j 16:29	11° <u>46</u> '57		max. Earth dist.	-9915 Jan 05 j 11:11	5° <u>37</u> '45	20.95794 AU
behind sun end	-9922 Dec 12 j 03:20	11° <u>48</u> '27		morning rise	-9915 Jan 21 j 15:03	6° <u>32</u> '17	
max. Earth dist.	-9922 Dec 12 j 21:15	11° <u>50</u> '59	21.15187 AU	retrograde	-9915 Apr 26 j 04:50	9° <u>39</u> '35	

Attention, astronomical year style is used: The year -9915 in astronomical counting style is the year 9916 BCE in historical counting style.

opposition	-9915 Jul 12 j 01:05	7° $\mathbb{M}$ .39'23	-0°41'23	min. Earth dist.	-9909 Aug 05 j 19:50	2° $\mathbb{A}$ .12'53	18.59927 AU
min. Earth dist.	-9915 Jul 11 j 16:11	7° $\mathbb{M}$ .40'18	18.93582 AU	direct	-9909 Oct 19 j 05:34	0° $\mathbb{A}$ .13'48	
direct	-9915 Sep 24 j 14:14	5° $\mathbb{M}$ .41'43		evening set	-9908 Jan 19 j 00:33	3° $\mathbb{A}$ .19'42	
evening set	-9915 Dec 23 j 21:08	8° $\mathbb{M}$ .41'23					
				conjunction	-9908 Feb 04 j 17:58	4° $\mathbb{A}$ .17'14	-0°58'04
conjunction	-9914 Jan 09 j 10:03	9° $\mathbb{M}$ .37'17	-0°39'17	minimum elong	-9908 Feb 04 j 17:57	4° $\mathbb{A}$ .17'14	0°58'33
minimum elong	-9914 Jan 09 j 10:03	9° $\mathbb{M}$ .37'17	0°39'36	max. Earth dist.	-9908 Feb 04 j 10:56	4° $\mathbb{A}$ .16'13	20.56501 AU
max. Earth dist.	-9914 Jan 09 j 19:37	9° $\mathbb{M}$ .38'38	20.91274 AU	morning rise	-9908 Feb 21 j 12:59	5° $\mathbb{A}$ .15'02	
morning rise	-9914 Jan 26 j 02:10	10° $\mathbb{M}$ .33'39		retrograde	-9908 May 25 j 13:22	8° $\mathbb{A}$ .25'37	
retrograde	-9914 Apr 30 j 15:50	13° $\mathbb{M}$ .41'19		opposition	-9908 Aug 08 j 23:18	6° $\mathbb{A}$ .24'57	-1°05'39
opposition	-9914 Jul 16 j 06:11	11° $\mathbb{M}$ .41'04	-0°45'34	min. Earth dist.	-9908 Aug 09 j 05:36	6° $\mathbb{A}$ .24'17	18.53012 AU
min. Earth dist.	-9914 Jul 15 j 22:21	11° $\mathbb{M}$ .41'53	18.88892 AU	direct	-9908 Oct 22 j 16:01	4° $\mathbb{A}$ .24'57	
direct	-9914 Sep 28 j 20:21	9° $\mathbb{M}$ .43'08		evening set	-9907 Jan 22 j 16:04	7° $\mathbb{A}$ .32'03	
evening set	-9914 Dec 28 j 07:31	12° $\mathbb{M}$ .43'40					
				conjunction	-9907 Feb 08 j 10:05	8° $\mathbb{A}$ .29'53	-1°00'16
conjunction	-9913 Jan 13 j 21:16	13° $\mathbb{M}$ .39'49	-0°42'58	minimum elong	-9907 Feb 08 j 10:05	8° $\mathbb{A}$ .29'53	1°00'47
minimum elong	-9913 Jan 13 j 21:15	13° $\mathbb{M}$ .39'49	0°43'19	max. Earth dist.	-9907 Feb 08 j 00:37	8° $\mathbb{A}$ .28'31	20.49427 AU
max. Earth dist.	-9913 Jan 14 j 04:15	13° $\mathbb{M}$ .40'49	20.86409 AU	morning rise	-9907 Feb 25 j 05:17	9° $\mathbb{A}$ .27'56	
morning rise	-9913 Jan 30 j 14:02	14° $\mathbb{M}$ .36'25		retrograde	-9907 May 30 j 01:18	12° $\mathbb{A}$ .39'04	
	-9913 Feb 06 j 18:12	15° $\mathbb{M}$ .		opposition	-9907 Aug 13 j 08:10	10° $\mathbb{A}$ .38'15	-1°07'56
retrograde	-9913 May 05 j 00:38	17° $\mathbb{M}$ .44'30		min. Earth dist.	-9907 Aug 13 j 17:29	10° $\mathbb{A}$ .37'16	18.45810 AU
opposition	-9913 Jul 20 j 11:52	15° $\mathbb{M}$ .44'13	-0°49'33	direct	-9907 Oct 27 j 01:24	8° $\mathbb{A}$ .37'47	
min. Earth dist.	-9913 Jul 20 j 07:04	15° $\mathbb{M}$ .44'43	18.83856 AU	evening set	-9906 Jan 27 j 08:39	11° $\mathbb{A}$ .46'09	
	-9913 Aug 07 j 15:53	15° $\mathbb{K}$ .					
direct	-9913 Oct 03 j 00:34	13° $\mathbb{M}$ .46'01		conjunction	-9906 Feb 13 j 03:08	12° $\mathbb{A}$ .44'16	-1°02'09
	-9913 Nov 26 j 21:52	15° $\mathbb{M}$ .		minimum elong	-9906 Feb 13 j 03:07	12° $\mathbb{A}$ .44'16	1°02'41
evening set	-9912 Jan 01 j 18:37	16° $\mathbb{M}$ .47'30		max. Earth dist.	-9906 Feb 12 j 14:34	12° $\mathbb{A}$ .42'27	20.42123 AU
				morning rise	-9906 Mar 01 j 22:37	13° $\mathbb{A}$ .42'34	
conjunction	-9912 Jan 18 j 09:13	17° $\mathbb{M}$ .43'54	-0°46'27	retrograde	-9906 Jun 03 j 15:41	16° $\mathbb{A}$ .54'16	
minimum elong	-9912 Jan 18 j 09:13	17° $\mathbb{M}$ .43'54	0°46'51	opposition	-9906 Aug 17 j 17:23	14° $\mathbb{A}$ .53'17	-1°09'53
max. Earth dist.	-9912 Jan 18 j 13:49	17° $\mathbb{M}$ .44'34	20.81202 AU	min. Earth dist.	-9906 Aug 18 j 04:15	14° $\mathbb{A}$ .52'08	18.38417 AU
morning rise	-9912 Feb 04 j 02:33	18° $\mathbb{M}$ .40'44		direct	-9906 Oct 31 j 13:00	12° $\mathbb{A}$ .52'20	
retrograde	-9912 May 08 j 13:01	21° $\mathbb{M}$ .49'16		evening set	-9905 Feb 01 j 02:07	16° $\mathbb{A}$ .02'01	
opposition	-9912 Jul 23 j 17:48	19° $\mathbb{M}$ .48'57	-0°53'18				
min. Earth dist.	-9912 Jul 23 j 14:22	19° $\mathbb{M}$ .49'18	18.78461 AU	conjunction	-9905 Feb 17 j 21:06	17° $\mathbb{A}$ .00'26	-1°03'43
direct	-9912 Oct 06 j 08:00	17° $\mathbb{M}$ .50'27		minimum elong	-9905 Feb 17 j 21:05	17° $\mathbb{A}$ .00'26	1°04'16
evening set	-9911 Jan 05 j 06:45	20° $\mathbb{M}$ .52'58		max. Earth dist.	-9905 Feb 17 j 06:30	16° $\mathbb{A}$ .58'18	20.34646 AU
				morning rise	-9905 Mar 06 j 16:32	17° $\mathbb{A}$ .58'59	
conjunction	-9911 Jan 21 j 22:04	21° $\mathbb{M}$ .49'39	-0°49'44	retrograde	-9905 Jun 08 j 05:14	21° $\mathbb{A}$ .11'15	
minimum elong	-9911 Jan 21 j 22:04	21° $\mathbb{M}$ .49'39	0°50'09	opposition	-9905 Aug 22 j 03:32	19° $\mathbb{A}$ .10'07	-1°11'27
max. Earth dist.	-9911 Jan 21 j 23:57	21° $\mathbb{M}$ .49'55	20.75610 AU	min. Earth dist.	-9905 Aug 22 j 17:02	19° $\mathbb{A}$ .08'41	18.30894 AU
morning rise	-9911 Feb 07 j 15:53	22° $\mathbb{M}$ .46'43		direct	-9905 Nov 05 j 00:40	17° $\mathbb{A}$ .08'41	
retrograde	-9911 May 12 j 22:56	25° $\mathbb{M}$ .55'44		evening set	-9904 Feb 05 j 20:21	20° $\mathbb{A}$ .19'42	
opposition	-9911 Jul 28 j 00:24	23° $\mathbb{M}$ .55'22	-0°56'49				
min. Earth dist.	-9911 Jul 28 j 00:12	23° $\mathbb{M}$ .55'23	18.72682 AU	conjunction	-9904 Feb 22 j 15:34	21° $\mathbb{A}$ .18'26	-1°04'56
direct	-9911 Oct 10 j 13:17	21° $\mathbb{M}$ .56'33		minimum elong	-9904 Feb 22 j 15:34	21° $\mathbb{A}$ .18'26	1°05'30
evening set	-9910 Jan 09 j 19:41	25° $\mathbb{M}$ .00'09		max. Earth dist.	-9904 Feb 21 j 22:00	21° $\mathbb{A}$ .15'51	20.27094 AU
				morning rise	-9904 Mar 10 j 11:08	22° $\mathbb{A}$ .17'13	
conjunction	-9910 Jan 26 j 11:48	25° $\mathbb{M}$ .57'06	-0°52'47	retrograde	-9904 Jun 11 j 20:13	25° $\mathbb{A}$ .30'06	
minimum elong	-9910 Jan 26 j 11:48	25° $\mathbb{M}$ .57'06	0°53'13	opposition	-9904 Aug 25 j 14:16	23° $\mathbb{A}$ .28'49	-1°12'39
max. Earth dist.	-9910 Jan 26 j 10:47	25° $\mathbb{M}$ .56'58	20.69639 AU	min. Earth dist.	-9904 Aug 26 j 05:04	23° $\mathbb{A}$ .27'14	18.23337 AU
morning rise	-9910 Feb 12 j 06:08	26° $\mathbb{M}$ .54'25		direct	-9904 Nov 08 j 13:44	21° $\mathbb{A}$ .26'54	
	-9910 May 04 j 23:36	0° $\mathbb{A}$ .		evening set	-9903 Feb 09 j 15:29	24° $\mathbb{A}$ .39'19	
retrograde	-9910 May 17 j 12:26	0° $\mathbb{A}$ .03'57					
	-9910 May 29 j 22:45	30° $\mathbb{K}$ .		conjunction	-9903 Feb 26 j 11:05	25° $\mathbb{A}$ .38'20	-1°05'48
opposition	-9910 Aug 01 j 07:27	28° $\mathbb{M}$ .03'30	-1°00'04	minimum elong	-9903 Feb 26 j 11:05	25° $\mathbb{A}$ .38'20	1°06'22
min. Earth dist.	-9910 Aug 01 j 08:53	28° $\mathbb{M}$ .03'21	18.66505 AU	max. Earth dist.	-9903 Feb 25 j 16:02	25° $\mathbb{A}$ .35'31	20.19526 AU
direct	-9910 Oct 14 j 22:22	26° $\mathbb{M}$ .04'20		morning rise	-9903 Mar 15 j 06:25	26° $\mathbb{A}$ .37'22	
evening set	-9909 Jan 14 j 09:44	29° $\mathbb{M}$ .09'04		retrograde	-9903 Jun 16 j 11:24	29° $\mathbb{A}$ .50'51	
	-9909 Jan 29 j 06:42	0° $\mathbb{A}$ .		opposition	-9903 Aug 30 j 01:48	27° $\mathbb{A}$ .49'27	-1°13'26
				min. Earth dist.	-9903 Aug 30 j 18:51	27° $\mathbb{A}$ .47'38	18.15794 AU
conjunction	-9909 Jan 31 j 02:31	0° $\mathbb{A}$ .06'19	-0°55'34	direct	-9903 Nov 13 j 03:00	25° $\mathbb{A}$ .47'06	
minimum elong	-9909 Jan 31 j 02:31	0° $\mathbb{A}$ .06'19	0°56'01	evening set	-9902 Feb 14 j 11:40	29° $\mathbb{A}$ .00'55	
max. Earth dist.	-9909 Jan 30 j 22:36	0° $\mathbb{A}$ .05'45	20.63250 AU	max. Earth dist.	-9902 Mar 02 j 09:15	29° $\mathbb{A}$ .56'57	20.12019 AU
morning rise	-9909 Feb 16 j 21:10	1° $\mathbb{A}$ .03'51					
retrograde	-9909 May 21 j 23:21	4° $\mathbb{A}$ .13'55		conjunction	-9902 Mar 03 j 07:21	0° $\mathbb{B}$ .00'14	-1°06'18
opposition	-9909 Aug 05 j 15:08	2° $\mathbb{A}$ .13'22	-1°03'01	minimum elong	-9902 Mar 03 j 07:21	0° $\mathbb{B}$ .00'14	1°06'53



Attention, astronomical year style is used: The year -9902 in astronomical counting style is the year 9903 BCE in historical counting style.

	-9902 Mar 03 j 05:49	0° $\overline{3}$	
morning rise	-9902 Mar 20 j 02:43	0° $\overline{3}$ 59'31	
retrograde	-9902 Jun 21 j 04:04	4° $\overline{3}$ 13'39	
opposition	-9902 Sep 03 j 14:10	2° $\overline{3}$ 12'09	-1°13'48
min. Earth dist.	-9902 Sep 04 j 08:31	2° $\overline{3}$ 10'10	18.08333 AU
direct	-9902 Nov 17 j 17:54	0° $\overline{3}$ 09'20	
evening set	-9901 Feb 19 j 08:42	3° $\overline{3}$ 24'37	
max. Earth dist.	-9901 Mar 07 j 05:28	4° $\overline{3}$ 20'47	20.04595 AU
conjunction	-9901 Mar 08 j 04:38	4° $\overline{3}$ 24'14	-1°06'25
minimum elong	-9901 Mar 08 j 04:38	4° $\overline{3}$ 24'14	1°06'59
morning rise	-9901 Mar 24 j 23:33	5° $\overline{3}$ 23'45	
retrograde	-9901 Jun 25 j 21:01	8° $\overline{3}$ 38'32	
opposition	-9901 Sep 08 j 03:27	6° $\overline{3}$ 36'58	-1°13'45
min. Earth dist.	-9901 Sep 08 j 23:45	6° $\overline{3}$ 34'47	18.00970 AU
direct	-9901 Nov 22 j 08:43	4° $\overline{3}$ 33'46	
evening set	-9900 Feb 24 j 06:47	7° $\overline{3}$ 50'31	
max. Earth dist.	-9900 Mar 11 j 00:25	8° $\overline{3}$ 46'30	19.97304 AU
conjunction	-9900 Mar 12 j 02:35	8° $\overline{3}$ 50'24	-1°06'08
minimum elong	-9900 Mar 12 j 02:35	8° $\overline{3}$ 50'24	1°06'44
morning rise	-9900 Mar 28 j 21:20	9° $\overline{3}$ 50'10	
retrograde	-9900 Jun 29 j 15:38	13° $\overline{3}$ 05'38	
opposition	-9900 Sep 11 j 17:37	11° $\overline{3}$ 04'01	-1°13'15
min. Earth dist.	-9900 Sep 12 j 15:19	11° $\overline{3}$ 01'40	17.93756 AU
direct	-9900 Nov 26 j 01:07	9° $\overline{3}$ 00'26	
evening set	-9899 Feb 28 j 05:32	12° $\overline{3}$ 18'39	
max. Earth dist.	-9899 Mar 15 j 22:36	13° $\overline{3}$ 14'48	19.90147 AU
conjunction	-9899 Mar 17 j 01:28	13° $\overline{3}$ 18'50	-1°05'27
minimum elong	-9899 Mar 17 j 01:28	13° $\overline{3}$ 18'50	1°06'01
morning rise	-9899 Apr 02 j 19:41	14° $\overline{3}$ 18'50	
retrograde	-9899 Jul 04 j 10:44	17° $\overline{3}$ 34'57	
opposition	-9899 Sep 16 j 08:48	15° $\overline{3}$ 33'19	-1°12'17
min. Earth dist.	-9899 Sep 17 j 08:13	15° $\overline{3}$ 30'47	17.86662 AU
direct	-9899 Nov 30 j 17:56	13° $\overline{3}$ 29'23	