

Attention, astronomical year style is used: The year -12400 in astronomical counting style is the year 12401 BCE in historical counting style.

direct	-12400 Jan 31 j 20:39	24° \approx 19'12		max. Earth dist.	-12395 May 27 j 22:01	7° \mathbb{H} 47'58	31.20512 AU
evening set	-12400 May 02 j 00:13	26° \approx 16'16		morning rise	-12395 Jun 13 j 09:57	8° \mathbb{H} 24'53	
				retrograde	-12395 Sep 07 j 16:28	10° \mathbb{H} 16'58	
conjunction	-12400 May 17 j 17:41	26° \approx 51'22	-0°29'16	opposition	-12395 Nov 24 j 12:45	8° \mathbb{H} 55'15	0°05'56
minimum elong	-12400 May 17 j 17:41	26° \approx 51'22	0°29'41	min. Earth dist.	-12395 Nov 25 j 11:59	8° \mathbb{H} 53'40	29.20790 AU
max. Earth dist.	-12400 May 16 j 16:10	26° \approx 48'59	31.16379 AU	direct	-12394 Feb 14 j 00:27	7° \mathbb{H} 30'14	
morning rise	-12400 Jun 02 j 07:19	27° \approx 26'08		evening set	-12394 May 15 j 18:41	9° \mathbb{H} 26'55	
retrograde	-12400 Aug 27 j 12:35	29° \approx 18'07		max. Earth dist.	-12394 May 30 j 09:35	9° \mathbb{H} 59'35	31.20978 AU
opposition	-12400 Nov 13 j 00:42	27° \approx 56'19	-0°28'00				
min. Earth dist.	-12400 Nov 13 j 23:46	27° \approx 54'44	29.16927 AU	conjunction	-12394 May 31 j 09:07	10° \mathbb{H} 01'48	0°08'52
direct	-12399 Feb 02 j 09:48	26° \approx 31'01		minimum elong	-12394 May 31 j 09:07	10° \mathbb{H} 01'48	0°08'35
evening set	-12399 May 04 j 11:25	28° \approx 28'03		behind sun begin	-12394 May 31 j 03:29	10° \mathbb{H} 01'17	
max. Earth dist.	-12399 May 19 j 04:05	29° \approx 00'51	31.17397 AU	behind sun end	-12394 May 31 j 14:44	10° \mathbb{H} 02'18	
				morning rise	-12394 Jun 15 j 19:46	10° \mathbb{H} 36'22	
conjunction	-12399 May 20 j 04:30	29° \approx 03'08	-0°22'58	retrograde	-12394 Sep 10 j 00:56	12° \mathbb{H} 28'27	
minimum elong	-12399 May 20 j 04:30	29° \approx 03'08	0°23'22	opposition	-12394 Nov 27 j 00:47	11° \mathbb{H} 06'42	0°12'43
morning rise	-12399 Jun 04 j 17:32	29° \approx 37'52		min. Earth dist.	-12394 Nov 27 j 23:49	11° \mathbb{H} 05'07	29.21203 AU
	-12399 Jun 15 j 01:11	0° \mathbb{H}		direct	-12393 Feb 16 j 13:41	9° \mathbb{H} 41'41	
retrograde	-12399 Aug 29 j 23:43	1° \mathbb{H} 29'53		evening set	-12393 May 18 j 05:27	11° \mathbb{H} 38'16	
opposition	-12399 Nov 15 j 12:43	0° \mathbb{H} 08'08	-0°21'15				
min. Earth dist.	-12399 Nov 16 j 12:37	0° \mathbb{H} 06'30	29.17926 AU	conjunction	-12393 Jun 02 j 19:11	12° \mathbb{H} 13'06	0°15'11
	-12399 Nov 20 j 11:38	30° \mathbb{R}		minimum elong	-12393 Jun 02 j 19:11	12° \mathbb{H} 13'06	0°14'57
direct	-12398 Feb 04 j 22:47	28° \approx 42'56		behind sun begin	-12393 Jun 02 j 16:39	12° \mathbb{H} 12'52	
	-12398 Apr 17 j 19:33	0° \mathbb{H}		behind sun end	-12393 Jun 02 j 21:43	12° \mathbb{H} 13'20	
evening set	-12398 May 06 j 22:32	0° \mathbb{H} 39'55		max. Earth dist.	-12393 Jun 01 j 18:57	12° \mathbb{H} 10'50	31.21361 AU
				morning rise	-12393 Jun 18 j 05:32	12° \mathbb{H} 47'38	
conjunction	-12398 May 22 j 15:01	1° \mathbb{H} 14'57	-0°16'39	retrograde	-12393 Sep 12 j 12:09	14° \mathbb{H} 39'44	
minimum elong	-12398 May 22 j 15:01	1° \mathbb{H} 14'57	0°17'01	opposition	-12393 Nov 29 j 12:47	13° \mathbb{H} 17'55	0°19'29
max. Earth dist.	-12398 May 21 j 14:18	1° \mathbb{H} 12'38	31.18367 AU	min. Earth dist.	-12393 Nov 30 j 11:01	13° \mathbb{H} 16'24	29.21570 AU
morning rise	-12398 Jun 07 j 03:43	1° \mathbb{H} 49'40		direct	-12392 Feb 19 j 00:18	11° \mathbb{H} 52'55	
retrograde	-12398 Sep 01 j 10:46	3° \mathbb{H} 41'42		evening set	-12392 May 19 j 15:54	13° \mathbb{H} 49'24	
opposition	-12398 Nov 18 j 00:36	2° \mathbb{H} 19'59	-0°14'28	max. Earth dist.	-12392 Jun 03 j 06:36	14° \mathbb{H} 22'04	31.21712 AU
min. Earth dist.	-12398 Nov 18 j 23:26	2° \mathbb{H} 18'26	29.18839 AU				
direct	-12397 Feb 07 j 12:15	0° \mathbb{H} 54'51		conjunction	-12392 Jun 04 j 05:13	14° \mathbb{H} 24'11	0°21'29
evening set	-12397 May 09 j 09:43	2° \mathbb{H} 51'48		minimum elong	-12392 Jun 04 j 05:13	14° \mathbb{H} 24'11	0°21'16
max. Earth dist.	-12397 May 24 j 01:06	3° \mathbb{H} 24'29	31.19215 AU	morning rise	-12392 Jun 19 j 14:53	14° \mathbb{H} 58'41	
				retrograde	-12392 Sep 13 j 21:14	16° \mathbb{H} 50'48	
conjunction	-12397 May 25 j 01:43	3° \mathbb{H} 26'48	-0°10'19	opposition	-12392 Dec 01 j 00:59	15° \mathbb{H} 28'56	0°26'12
minimum elong	-12397 May 25 j 01:43	3° \mathbb{H} 26'48	0°10'40	min. Earth dist.	-12392 Dec 01 j 23:24	15° \mathbb{H} 27'25	29.21926 AU
behind sun begin	-12397 May 24 j 20:43	3° \mathbb{H} 26'21		direct	-12391 Feb 20 j 12:27	14° \mathbb{H} 03'57	
behind sun end	-12397 May 25 j 06:43	3° \mathbb{H} 27'15		evening set	-12391 May 22 j 02:27	16° \mathbb{H} 00'20	
morning rise	-12397 Jun 09 j 13:52	4° \mathbb{H} 01'28					
retrograde	-12397 Sep 03 j 20:14	5° \mathbb{H} 53'32		conjunction	-12391 Jun 06 j 15:00	16° \mathbb{H} 35'04	0°27'45
opposition	-12397 Nov 20 j 12:32	4° \mathbb{H} 31'50	-0°07'40	minimum elong	-12391 Jun 06 j 15:00	16° \mathbb{H} 35'04	0°27'34
min. Earth dist.	-12397 Nov 21 j 12:17	4° \mathbb{H} 30'13	29.19629 AU	max. Earth dist.	-12391 Jun 05 j 16:14	16° \mathbb{H} 32'56	31.22097 AU
direct	-12396 Feb 09 j 23:55	3° \mathbb{H} 06'45		morning rise	-12391 Jun 22 j 00:20	17° \mathbb{H} 09'32	
evening set	-12396 May 10 j 20:52	5° \mathbb{H} 03'38		retrograde	-12391 Sep 16 j 09:12	19° \mathbb{H} 01'41	
				opposition	-12391 Dec 03 j 13:07	17° \mathbb{H} 39'47	0°32'53
conjunction	-12396 May 26 j 12:21	5° \mathbb{H} 38'36	-0°03'58	min. Earth dist.	-12391 Dec 04 j 09:49	17° \mathbb{H} 38'22	29.22350 AU
minimum elong	-12396 May 26 j 12:21	5° \mathbb{H} 38'36	0°04'19	direct	-12390 Feb 23 j 01:06	16° \mathbb{H} 14'49	
behind sun begin	-12396 May 26 j 06:00	5° \mathbb{H} 38'02		evening set	-12390 May 24 j 12:37	18° \mathbb{H} 11'07	
behind sun end	-12396 May 26 j 18:41	5° \mathbb{H} 39'10		max. Earth dist.	-12390 Jun 08 j 03:33	18° \mathbb{H} 43'50	31.22553 AU
max. Earth dist.	-12396 May 25 j 12:04	5° \mathbb{H} 36'19	31.19939 AU				
morning rise	-12396 Jun 11 j 00:00	6° \mathbb{H} 13'14		conjunction	-12390 Jun 09 j 00:44	18° \mathbb{H} 45'49	0°33'58
retrograde	-12396 Sep 05 j 06:00	8° \mathbb{H} 05'18		minimum elong	-12390 Jun 09 j 00:44	18° \mathbb{H} 45'49	0°33'48
opposition	-12396 Nov 22 j 00:36	6° \mathbb{H} 43'37	-0°00'52	morning rise	-12390 Jun 24 j 09:27	19° \mathbb{H} 20'14	
min. Earth dist.	-12396 Nov 22 j 23:42	6° \mathbb{H} 42'02	29.20269 AU	retrograde	-12390 Sep 18 j 19:51	21° \mathbb{H} 12'28	
asc. node	-12395 Jan 06 j 20:08	5° \mathbb{H} 37'55		opposition	-12390 Dec 06 j 01:22	19° \mathbb{H} 50'31	0°39'31
direct	-12395 Feb 11 j 13:28	5° \mathbb{H} 18'34		min. Earth dist.	-12390 Dec 06 j 22:17	19° \mathbb{H} 49'06	29.22859 AU
evening set	-12395 May 13 j 07:53	7° \mathbb{H} 15'21		direct	-12389 Feb 25 j 13:22	18° \mathbb{H} 25'37	
				evening set	-12389 May 26 j 22:57	20° \mathbb{H} 21'51	
conjunction	-12395 May 28 j 22:42	7° \mathbb{H} 50'17	0°02'32				
minimum elong	-12395 May 28 j 22:43	7° \mathbb{H} 50'17	0°02'13	conjunction	-12389 Jun 11 j 10:24	20° \mathbb{H} 56'30	0°40'09
behind sun begin	-12395 May 28 j 16:16	7° \mathbb{H} 49'42		minimum elong	-12389 Jun 11 j 10:24	20° \mathbb{H} 56'30	0°40'00
behind sun end	-12395 May 29 j 05:09	7° \mathbb{H} 50'51		max. Earth dist.	-12389 Jun 10 j 13:37	20° \mathbb{H} 54'33	31.23113 AU

Attention, astronomical year style is used: The year -12389 in astronomical counting style is the year 12390 BCE in historical counting style.

morning rise	-12389 Jun 26 j 18:43	21° $\mathbf{\text{H}}$ 30'53		direct	-12382 Mar 12 j 23:57	3° $\mathbf{\text{Y}}$ 42'55	
retrograde	-12389 Sep 21 j 06:41	23° $\mathbf{\text{H}}$ 23'10		evening set	-12382 Jun 10 j 21:52	5° $\mathbf{\text{Y}}$ 38'44	
opposition	-12389 Dec 08 j 13:23	22° $\mathbf{\text{H}}$ 01'14	0°46'05				
min. Earth dist.	-12389 Dec 09 j 08:29	21° $\mathbf{\text{H}}$ 59'56	29.23455 AU	conjunction	-12382 Jun 26 j 05:03	6° $\mathbf{\text{Y}}$ 13'05	1°21'17
direct	-12388 Feb 28 j 02:10	20° $\mathbf{\text{H}}$ 36'25		minimum elong	-12382 Jun 26 j 05:03	6° $\mathbf{\text{Y}}$ 13'05	1°21'21
evening set	-12388 May 28 j 09:13	22° $\mathbf{\text{H}}$ 32'36		max. Earth dist.	-12382 Jun 25 j 12:15	6° $\mathbf{\text{Y}}$ 11'30	31.26567 AU
				morning rise	-12382 Jul 11 j 09:59	6° $\mathbf{\text{Y}}$ 47'15	
conjunction	-12388 Jun 12 j 20:05	23° $\mathbf{\text{H}}$ 07'12	0°46'16	retrograde	-12382 Oct 06 j 08:29	8° $\mathbf{\text{Y}}$ 40'17	
minimum elong	-12388 Jun 12 j 20:04	23° $\mathbf{\text{H}}$ 07'12	0°46'09	opposition	-12382 Dec 24 j 04:59	7° $\mathbf{\text{Y}}$ 18'16	1°29'44
max. Earth dist.	-12388 Jun 12 j 00:04	23° $\mathbf{\text{H}}$ 05'19	31.23741 AU	min. Earth dist.	-12382 Dec 24 j 20:15	7° $\mathbf{\text{Y}}$ 17'14	29.26689 AU
morning rise	-12388 Jun 28 j 03:51	23° $\mathbf{\text{H}}$ 41'33		direct	-12381 Mar 15 j 12:07	5° $\mathbf{\text{Y}}$ 53'58	
retrograde	-12388 Sep 22 j 16:58	25° $\mathbf{\text{H}}$ 33'57		evening set	-12381 Jun 13 j 07:43	7° $\mathbf{\text{Y}}$ 49'41	
opposition	-12388 Dec 10 j 01:47	24° $\mathbf{\text{H}}$ 12'01	0°52'35				
min. Earth dist.	-12388 Dec 10 j 21:03	24° $\mathbf{\text{H}}$ 10'43	29.24119 AU	conjunction	-12381 Jun 28 j 14:26	8° $\mathbf{\text{Y}}$ 24'00	1°26'45
direct	-12387 Mar 01 j 13:46	22° $\mathbf{\text{H}}$ 47'18		minimum elong	-12381 Jun 28 j 14:25	8° $\mathbf{\text{Y}}$ 24'00	1°26'51
evening set	-12387 May 30 j 19:17	24° $\mathbf{\text{H}}$ 43'26		max. Earth dist.	-12381 Jun 27 j 22:51	8° $\mathbf{\text{Y}}$ 22'32	31.26631 AU
max. Earth dist.	-12387 Jun 14 j 10:46	25° $\mathbf{\text{H}}$ 16'14	31.24416 AU	morning rise	-12381 Jul 13 j 18:46	8° $\mathbf{\text{Y}}$ 58'07	
				retrograde	-12381 Oct 08 j 19:26	10° $\mathbf{\text{Y}}$ 51'15	
conjunction	-12387 Jun 15 j 05:35	25° $\mathbf{\text{H}}$ 18'00	0°52'19	opposition	-12381 Dec 26 j 17:35	9° $\mathbf{\text{Y}}$ 29'10	1°35'30
minimum elong	-12387 Jun 15 j 05:34	25° $\mathbf{\text{H}}$ 18'00	0°52'14	min. Earth dist.	-12381 Dec 27 j 09:15	9° $\mathbf{\text{Y}}$ 28'06	29.26726 AU
morning rise	-12387 Jun 30 j 12:50	25° $\mathbf{\text{H}}$ 52'19		direct	-12380 Mar 16 j 23:43	8° $\mathbf{\text{Y}}$ 04'53	
retrograde	-12387 Sep 25 j 03:05	27° $\mathbf{\text{H}}$ 44'49		evening set	-12380 Jun 14 j 17:31	10° $\mathbf{\text{Y}}$ 00'31	
opposition	-12387 Dec 12 j 14:12	26° $\mathbf{\text{H}}$ 22'55	0°59'02				
min. Earth dist.	-12387 Dec 13 j 08:14	26° $\mathbf{\text{H}}$ 21'41	29.24784 AU	conjunction	-12380 Jun 29 j 23:36	10° $\mathbf{\text{Y}}$ 34'46	1°32'05
direct	-12386 Mar 04 j 03:05	24° $\mathbf{\text{H}}$ 58'17		minimum elong	-12380 Jun 29 j 23:35	10° $\mathbf{\text{Y}}$ 34'46	1°32'13
evening set	-12386 Jun 02 j 05:32	26° $\mathbf{\text{H}}$ 54'22		max. Earth dist.	-12380 Jun 29 j 08:36	10° $\mathbf{\text{Y}}$ 33'21	31.26647 AU
				morning rise	-12380 Jul 15 j 03:33	11° $\mathbf{\text{Y}}$ 08'51	
conjunction	-12386 Jun 17 j 15:08	27° $\mathbf{\text{H}}$ 28'54	0°58'18	retrograde	-12380 Oct 10 j 06:18	13° $\mathbf{\text{Y}}$ 02'04	
minimum elong	-12386 Jun 17 j 15:07	27° $\mathbf{\text{H}}$ 28'54	0°58'14	opposition	-12380 Dec 28 j 06:12	11° $\mathbf{\text{Y}}$ 39'54	1°41'09
max. Earth dist.	-12386 Jun 16 j 20:17	27° $\mathbf{\text{H}}$ 27'08	31.25058 AU	min. Earth dist.	-12380 Dec 28 j 19:55	11° $\mathbf{\text{Y}}$ 38'59	29.26734 AU
morning rise	-12386 Jul 02 j 21:58	28° $\mathbf{\text{H}}$ 03'12		direct	-12379 Mar 19 j 12:21	10° $\mathbf{\text{Y}}$ 15'39	
retrograde	-12386 Sep 27 j 14:09	29° $\mathbf{\text{H}}$ 55'48		evening set	-12379 Jun 17 j 03:04	12° $\mathbf{\text{Y}}$ 11'10	
opposition	-12386 Dec 15 j 02:33	28° $\mathbf{\text{H}}$ 33'55	1°05'22				
min. Earth dist.	-12386 Dec 15 j 20:24	28° $\mathbf{\text{H}}$ 32'42	29.25412 AU	conjunction	-12379 Jul 02 j 08:34	12° $\mathbf{\text{Y}}$ 45'22	1°37'17
direct	-12385 Mar 06 j 13:32	27° $\mathbf{\text{H}}$ 09'23		minimum elong	-12379 Jul 02 j 08:33	12° $\mathbf{\text{Y}}$ 45'22	1°37'27
evening set	-12385 Jun 04 j 15:38	29° $\mathbf{\text{H}}$ 05'25		max. Earth dist.	-12379 Jul 01 j 18:25	12° $\mathbf{\text{Y}}$ 44'02	31.26650 AU
max. Earth dist.	-12385 Jun 19 j 07:21	29° $\mathbf{\text{H}}$ 38'16	31.25629 AU	morning rise	-12379 Jul 17 j 12:05	13° $\mathbf{\text{Y}}$ 19'26	
				retrograde	-12379 Oct 12 j 17:03	15° $\mathbf{\text{Y}}$ 12'45	
conjunction	-12385 Jun 20 j 00:46	29° $\mathbf{\text{H}}$ 39'55	1°04'11	opposition	-12379 Dec 30 j 18:58	13° $\mathbf{\text{Y}}$ 50'29	1°46'38
minimum elong	-12385 Jun 20 j 00:45	29° $\mathbf{\text{H}}$ 39'54	1°04'10	min. Earth dist.	-12379 Dec 31 j 08:32	13° $\mathbf{\text{Y}}$ 49'34	29.26779 AU
	-12385 Jun 28 j 22:18	0° $\mathbf{\text{Y}}$		direct	-12378 Mar 22 j 00:43	12° $\mathbf{\text{Y}}$ 26'16	
morning rise	-12385 Jul 05 j 06:59	0° $\mathbf{\text{Y}}$ 14'10		evening set	-12378 Jun 19 j 12:38	14° $\mathbf{\text{Y}}$ 21'41	
retrograde	-12385 Sep 29 j 23:00	2° $\mathbf{\text{Y}}$ 06'54					
opposition	-12385 Dec 17 j 15:06	0° $\mathbf{\text{Y}}$ 45'00	1°11'38	conjunction	-12378 Jul 04 j 17:38	14° $\mathbf{\text{Y}}$ 55'51	1°42'21
min. Earth dist.	-12385 Dec 18 j 08:32	0° $\mathbf{\text{Y}}$ 43'49	29.25923 AU	minimum elong	-12378 Jul 04 j 17:37	14° $\mathbf{\text{Y}}$ 55'51	1°42'31
	-12384 Jan 15 j 20:02	30° $\mathbf{\text{H}}$		max. Earth dist.	-12378 Jul 04 j 05:06	14° $\mathbf{\text{Y}}$ 54'40	31.26723 AU
direct	-12384 Mar 08 j 02:13	29° $\mathbf{\text{H}}$ 20'34		morning rise	-12378 Jul 19 j 20:40	15° $\mathbf{\text{Y}}$ 29'52	
	-12384 Apr 27 j 02:42	0° $\mathbf{\text{Y}}$		retrograde	-12378 Oct 15 j 03:25	17° $\mathbf{\text{Y}}$ 23'16	
evening set	-12384 Jun 06 j 01:50	1° $\mathbf{\text{Y}}$ 16'32		opposition	-12377 Jan 02 j 07:25	16° $\mathbf{\text{Y}}$ 00'57	1°51'58
				min. Earth dist.	-12377 Jan 02 j 19:17	16° $\mathbf{\text{Y}}$ 00'09	29.26897 AU
conjunction	-12384 Jun 21 j 10:10	1° $\mathbf{\text{Y}}$ 50'59	1°10'00	direct	-12377 Mar 24 j 14:28	14° $\mathbf{\text{Y}}$ 36'46	
minimum elong	-12384 Jun 21 j 10:09	1° $\mathbf{\text{Y}}$ 50'59	1°10'00	evening set	-12377 Jun 21 j 22:11	16° $\mathbf{\text{Y}}$ 32'06	
max. Earth dist.	-12384 Jun 20 j 16:09	1° $\mathbf{\text{Y}}$ 49'17	31.26073 AU				
morning rise	-12384 Jul 06 j 16:02	2° $\mathbf{\text{Y}}$ 25'12		conjunction	-12377 Jul 07 j 02:32	17° $\mathbf{\text{Y}}$ 06'14	1°47'16
retrograde	-12384 Oct 01 j 10:37	4° $\mathbf{\text{Y}}$ 18'03		minimum elong	-12377 Jul 07 j 02:31	17° $\mathbf{\text{Y}}$ 06'14	1°47'28
opposition	-12384 Dec 19 j 03:42	2° $\mathbf{\text{Y}}$ 56'08	1°17'47	max. Earth dist.	-12377 Jul 06 j 14:19	17° $\mathbf{\text{Y}}$ 05'05	31.26883 AU
min. Earth dist.	-12384 Dec 19 j 20:11	2° $\mathbf{\text{Y}}$ 55'01	29.26312 AU	morning rise	-12377 Jul 22 j 05:15	17° $\mathbf{\text{Y}}$ 40'13	
direct	-12383 Mar 10 j 12:13	1° $\mathbf{\text{Y}}$ 31'45		retrograde	-12377 Oct 17 j 14:09	19° $\mathbf{\text{Y}}$ 33'45	
evening set	-12383 Jun 08 j 11:52	3° $\mathbf{\text{Y}}$ 27'39		opposition	-12376 Jan 04 j 20:05	18° $\mathbf{\text{Y}}$ 11'23	1°57'08
				min. Earth dist.	-12376 Jan 05 j 07:05	18° $\mathbf{\text{Y}}$ 10'39	29.27126 AU
conjunction	-12383 Jun 23 j 19:47	4° $\mathbf{\text{Y}}$ 02'03	1°15'42	direct	-12376 Mar 26 j 00:58	16° $\mathbf{\text{Y}}$ 47'16	
minimum elong	-12383 Jun 23 j 19:46	4° $\mathbf{\text{Y}}$ 02'03	1°15'44	evening set	-12376 Jun 23 j 07:30	18° $\mathbf{\text{Y}}$ 42'31	
max. Earth dist.	-12383 Jun 23 j 03:15	4° $\mathbf{\text{Y}}$ 00'30	31.26382 AU				
morning rise	-12383 Jul 09 j 00:59	4° $\mathbf{\text{Y}}$ 36'15		conjunction	-12376 Jul 08 j 11:28	19° $\mathbf{\text{Y}}$ 16'36	1°52'01
retrograde	-12383 Oct 03 j 20:15	6° $\mathbf{\text{Y}}$ 29'12		minimum elong	-12376 Jul 08 j 11:26	19° $\mathbf{\text{Y}}$ 16'36	1°52'15
opposition	-12383 Dec 21 j 16:26	5° $\mathbf{\text{Y}}$ 07'15	1°23'49	max. Earth dist.	-12376 Jul 08 j 01:24	19° $\mathbf{\text{Y}}$ 15'39	31.27151 AU
min. Earth dist.	-12383 Dec 22 j 09:11	5° $\mathbf{\text{Y}}$ 06'07	29.26560 AU	morning rise	-12376 Jul 23 j 13:37	19° $\mathbf{\text{Y}}$ 50'34	

Attention, astronomical year style is used: The year -12376 in astronomical counting style is the year 12377 BCE in historical counting style.

retrograde	-12376 Oct 18 j 22:43	21° Υ 44'14		min. Earth dist.	-12369 Jan 20 j 19:48	3° \mathcal{B} 26'10	29.28609 AU
opposition	-12375 Jan 06 j 08:52	20° Υ 21'51	2°02'09	direct	-12369 Apr 11 j 08:16	2° \mathcal{B} 02'58	
min. Earth dist.	-12375 Jan 06 j 18:45	20° Υ 21'11	29.27435 AU	evening set	-12369 Jul 09 j 01:30	3° \mathcal{B} 57'43	
direct	-12375 Mar 28 j 13:47	18° Υ 57'49					
evening set	-12375 Jun 25 j 17:00	20° Υ 53'00		conjunction	-12369 Jul 24 j 02:16	4° \mathcal{B} 31'34	2°20'32
				minimum elong	-12369 Jul 24 j 02:15	4° \mathcal{B} 31'34	2°20'57
conjunction	-12375 Jul 10 j 20:17	21° Υ 27'03	1°56'38	max. Earth dist.	-12369 Jul 23 j 21:46	4° \mathcal{B} 31'09	31.28332 AU
minimum elong	-12375 Jul 10 j 20:16	21° Υ 27'03	1°56'54	morning rise	-12369 Aug 08 j 02:17	5° \mathcal{B} 05'23	
max. Earth dist.	-12375 Jul 10 j 10:14	21° Υ 26'06	31.27492 AU	retrograde	-12369 Nov 04 j 06:57	7° \mathcal{B} 00'04	
morning rise	-12375 Jul 25 j 22:15	22° Υ 00'59		opposition	-12368 Jan 23 j 03:28	5° \mathcal{B} 37'24	2°31'57
retrograde	-12375 Oct 21 j 10:29	23° Υ 54'48		min. Earth dist.	-12368 Jan 23 j 07:26	5° \mathcal{B} 37'08	29.28385 AU
opposition	-12374 Jan 08 j 21:35	22° Υ 32'23	2°06'59	direct	-12368 Apr 12 j 21:55	4° \mathcal{B} 13'53	
min. Earth dist.	-12374 Jan 09 j 05:59	22° Υ 31'49	29.27810 AU	evening set	-12368 Jul 10 j 10:46	6° \mathcal{B} 08'32	
direct	-12374 Mar 30 j 23:44	21° Υ 08'27					
evening set	-12374 Jun 28 j 02:16	23° Υ 03'34		conjunction	-12368 Jul 25 j 11:02	6° \mathcal{B} 42'21	2°23'51
				minimum elong	-12368 Jul 25 j 11:01	6° \mathcal{B} 42'21	2°24'18
conjunction	-12374 Jul 13 j 05:14	23° Υ 37'35	2°01'04	max. Earth dist.	-12368 Jul 25 j 06:33	6° \mathcal{B} 41'56	31.28056 AU
minimum elong	-12374 Jul 13 j 05:13	23° Υ 37'35	2°01'21	morning rise	-12368 Aug 09 j 10:58	7° \mathcal{B} 16'10	
max. Earth dist.	-12374 Jul 12 j 21:07	23° Υ 36'49	31.27855 AU	retrograde	-12368 Nov 05 j 18:20	9° \mathcal{B} 10'59	
morning rise	-12374 Jul 28 j 06:42	24° Υ 11'31		opposition	-12367 Jan 24 j 16:37	7° \mathcal{B} 48'13	2°35'23
retrograde	-12374 Oct 23 j 20:21	26° Υ 05'29		min. Earth dist.	-12367 Jan 24 j 19:57	7° \mathcal{B} 48'00	29.28091 AU
opposition	-12373 Jan 11 j 10:31	24° Υ 43'03	2°11'38	direct	-12367 Apr 15 j 08:43	6° \mathcal{B} 24'43	
min. Earth dist.	-12373 Jan 11 j 18:49	24° Υ 42'30	29.28165 AU	evening set	-12367 Jul 12 j 19:53	8° \mathcal{B} 19'16	
direct	-12373 Apr 02 j 11:18	23° Υ 19'13					
evening set	-12373 Jun 30 j 11:47	25° Υ 14'16		conjunction	-12367 Jul 27 j 19:59	8° \mathcal{B} 53'03	2°26'58
				minimum elong	-12367 Jul 27 j 19:58	8° \mathcal{B} 53'03	2°27'26
conjunction	-12373 Jul 15 j 14:07	25° Υ 48'15	2°05'20	max. Earth dist.	-12367 Jul 27 j 17:33	8° \mathcal{B} 52'50	31.27731 AU
minimum elong	-12373 Jul 15 j 14:06	25° Υ 48'15	2°05'39	morning rise	-12367 Aug 11 j 19:36	9° \mathcal{B} 26'51	
max. Earth dist.	-12373 Jul 15 j 06:06	25° Υ 47'29	31.28181 AU	retrograde	-12367 Nov 08 j 03:18	11° \mathcal{B} 21'47	
morning rise	-12373 Jul 30 j 15:21	26° Υ 22'09		opposition	-12366 Jan 27 j 05:35	9° \mathcal{B} 58'56	2°38'36
retrograde	-12373 Oct 26 j 08:30	28° Υ 16'16		min. Earth dist.	-12366 Jan 27 j 07:55	9° \mathcal{B} 58'47	29.27767 AU
opposition	-12372 Jan 13 j 23:17	26° Υ 53'50	2°16'06	direct	-12366 Apr 17 j 21:59	8° \mathcal{B} 35'28	
min. Earth dist.	-12372 Jan 14 j 05:55	26° Υ 53'23	29.28461 AU	evening set	-12366 Jul 15 j 05:03	10° \mathcal{B} 29'54	
direct	-12372 Apr 03 j 22:01	25° Υ 30'04					
evening set	-12372 Jul 01 j 21:14	27° Υ 25'04		conjunction	-12366 Jul 30 j 04:43	11° \mathcal{B} 03'41	2°29'52
				minimum elong	-12366 Jul 30 j 04:42	11° \mathcal{B} 03'41	2°30'20
conjunction	-12372 Jul 16 j 23:11	27° Υ 59'01	2°09'25	max. Earth dist.	-12366 Jul 30 j 02:20	11° \mathcal{B} 03'27	31.27417 AU
minimum elong	-12372 Jul 16 j 23:10	27° Υ 59'01	2°09'45	morning rise	-12366 Aug 14 j 04:20	11° \mathcal{B} 37'28	
max. Earth dist.	-12372 Jul 16 j 16:23	27° Υ 58'22	31.28411 AU	retrograde	-12366 Nov 10 j 15:10	13° \mathcal{B} 32'31	
morning rise	-12372 Aug 01 j 00:00	28° Υ 32'53		opposition	-12365 Jan 29 j 18:32	12° \mathcal{B} 09'36	2°41'35
	-12372 Sep 17 j 06:30	0° \mathcal{B}		min. Earth dist.	-12365 Jan 29 j 19:13	12° \mathcal{B} 09'33	29.27490 AU
retrograde	-12372 Oct 27 j 19:59	0° \mathcal{B} 27'10		direct	-12365 Apr 20 j 08:35	10° \mathcal{B} 46'09	
	-12372 Dec 09 j 00:16	30° \mathcal{R} Υ		evening set	-12365 Jul 17 j 14:03	12° \mathcal{B} 40'30	
opposition	-12371 Jan 15 j 12:28	29° Υ 04'41	2°20'22				
min. Earth dist.	-12371 Jan 15 j 19:21	29° Υ 04'14	29.28648 AU	conjunction	-12365 Aug 01 j 13:33	13° \mathcal{B} 14'16	2°32'33
direct	-12371 Apr 06 j 08:26	27° Υ 41'01		minimum elong	-12365 Aug 01 j 13:32	13° \mathcal{B} 14'16	2°33'03
evening set	-12371 Jul 04 j 06:38	29° Υ 35'56		max. Earth dist.	-12365 Aug 01 j 13:14	13° \mathcal{B} 14'14	31.27155 AU
	-12371 Jul 15 j 00:01	0° \mathcal{B}		morning rise	-12365 Aug 16 j 12:52	13° \mathcal{B} 48'03	
					-12365 Sep 22 j 06:28	15° \mathcal{B}	
conjunction	-12371 Jul 19 j 08:08	0° \mathcal{B} 09'51	2°13'19	retrograde	-12365 Nov 13 j 00:45	15° \mathcal{B} 43'15	
minimum elong	-12371 Jul 19 j 08:07	0° \mathcal{B} 09'51	2°13'41		-12364 Jan 06 j 15:50	15° \mathcal{R} \mathcal{B}	
max. Earth dist.	-12371 Jul 19 j 01:58	0° \mathcal{B} 09'16	31.28530 AU	opposition	-12364 Feb 01 j 07:33	14° \mathcal{B} 20'16	2°44'20
morning rise	-12371 Aug 03 j 08:42	0° \mathcal{B} 43'42		min. Earth dist.	-12364 Feb 01 j 07:43	14° \mathcal{B} 20'15	29.27277 AU
retrograde	-12371 Oct 30 j 07:48	2° \mathcal{B} 38'08		direct	-12364 Apr 21 j 20:17	12° \mathcal{B} 56'52	
opposition	-12370 Jan 18 j 01:28	1° \mathcal{B} 15'37	2°24'26	evening set	-12364 Jul 18 j 23:10	14° \mathcal{B} 51'09	
min. Earth dist.	-12370 Jan 18 j 06:35	1° \mathcal{B} 15'16	29.28698 AU		-12364 Jul 22 j 22:32	15° \mathcal{B}	
	-12370 Mar 17 j 09:31	30° \mathcal{R} Υ					
direct	-12370 Apr 08 j 20:35	29° Υ 52'00		conjunction	-12364 Aug 02 j 22:20	15° \mathcal{B} 24'53	2°35'00
	-12370 Apr 30 j 23:47	0° \mathcal{B}		minimum elong	-12364 Aug 02 j 22:19	15° \mathcal{B} 24'53	2°35'31
evening set	-12370 Jul 06 j 16:09	1° \mathcal{B} 46'50		max. Earth dist.	-12364 Aug 02 j 22:39	15° \mathcal{B} 24'55	31.26994 AU
				morning rise	-12364 Aug 17 j 21:40	15° \mathcal{B} 58'40	
conjunction	-12370 Jul 21 j 17:12	2° \mathcal{B} 20'43	2°17'02	retrograde	-12364 Nov 14 j 12:46	17° \mathcal{B} 54'01	
minimum elong	-12370 Jul 21 j 17:11	2° \mathcal{B} 20'43	2°17'24	opposition	-12363 Feb 02 j 20:33	16° \mathcal{B} 30'59	2°46'51
max. Earth dist.	-12370 Jul 21 j 11:19	2° \mathcal{B} 20'10	31.28494 AU	min. Earth dist.	-12363 Feb 02 j 18:30	16° \mathcal{B} 31'07	29.27165 AU
morning rise	-12370 Aug 05 j 17:33	2° \mathcal{B} 54'34		direct	-12363 Apr 24 j 06:28	15° \mathcal{B} 07'40	
retrograde	-12370 Nov 01 j 19:45	4° \mathcal{B} 49'07		evening set	-12363 Jul 21 j 08:07	17° \mathcal{B} 01'52	
opposition	-12369 Jan 20 j 14:27	3° \mathcal{B} 26'32	2°28'18				

Attention, astronomical year style is used: The year -12363 in astronomical counting style is the year 12364 BCE in historical counting style.

conjunction	-12363 Aug 05 j 07:08	17° 8 35'36	2°37'15	retrograde	-12357 Dec 01 j 01:54	3° II 12'57	
minimum elong	-12363 Aug 05 j 07:07	17° 8 35'36	2°37'48	opposition	-12356 Feb 19 j 16:24	1° II 49'34	2°57'37
max. Earth dist.	-12363 Aug 05 j 08:58	17° 8 35'46	31.26904 AU	min. Earth dist.	-12356 Feb 19 j 08:42	1° II 50'05	29.25537 AU
morning rise	-12363 Aug 20 j 06:23	18° 8 09'22		direct	-12356 May 09 j 13:41	0° II 26'40	
retrograde	-12363 Nov 17 j 00:16	20° 8 04'54		evening set	-12356 Aug 05 j 00:07	2° II 20'20	
opposition	-12362 Feb 05 j 09:41	18° 8 41'50	2°49'08				
min. Earth dist.	-12362 Feb 05 j 07:34	18° 8 41'58	29.27111 AU	conjunction	-12356 Aug 19 j 22:44	2° II 54'03	2°46'29
direct	-12362 Apr 26 j 15:45	17° 8 18'36		minimum elong	-12356 Aug 19 j 22:44	2° II 54'03	2°47'09
evening set	-12362 Jul 23 j 17:11	19° 8 12'44		max. Earth dist.	-12356 Aug 20 j 06:24	2° II 54'47	31.24937 AU
				morning rise	-12356 Sep 03 j 22:30	3° II 27'54	
conjunction	-12362 Aug 07 j 16:03	19° 8 46'27	2°39'16	retrograde	-12356 Dec 02 j 11:36	5° II 24'23	
minimum elong	-12362 Aug 07 j 16:03	19° 8 46'27	2°39'49	opposition	-12355 Feb 21 j 05:38	4° II 00'54	2°58'08
max. Earth dist.	-12362 Aug 07 j 19:00	19° 8 46'44	31.26866 AU	min. Earth dist.	-12355 Feb 20 j 21:52	4° II 01'26	29.24829 AU
morning rise	-12362 Aug 22 j 15:16	20° 8 20'14		direct	-12355 May 12 j 01:45	2° II 38'00	
retrograde	-12362 Nov 19 j 12:27	22° 8 15'55		evening set	-12355 Aug 07 j 09:11	4° II 31'33	
opposition	-12361 Feb 07 j 22:30	20° 8 52'50	2°51'10				
min. Earth dist.	-12361 Feb 07 j 18:21	20° 8 53'07	29.27073 AU	conjunction	-12355 Aug 22 j 07:51	5° II 05'15	2°46'52
direct	-12361 Apr 29 j 03:01	19° 8 29'41		minimum elong	-12355 Aug 22 j 07:51	5° II 05'15	2°47'33
evening set	-12361 Jul 26 j 02:20	21° 8 23'47		max. Earth dist.	-12355 Aug 22 j 15:56	5° II 06'01	31.24199 AU
				morning rise	-12355 Sep 06 j 07:57	5° II 39'07	
conjunction	-12361 Aug 10 j 00:59	21° 8 57'29	2°41'03	retrograde	-12355 Dec 04 j 23:05	7° II 35'42	
minimum elong	-12361 Aug 10 j 00:58	21° 8 57'29	2°41'38	opposition	-12354 Feb 23 j 18:41	6° II 12'06	2°58'25
max. Earth dist.	-12361 Aug 10 j 04:22	21° 8 57'48	31.26807 AU	min. Earth dist.	-12354 Feb 23 j 09:09	6° II 12'45	29.24063 AU
morning rise	-12361 Aug 25 j 00:16	22° 8 31'16		direct	-12354 May 14 j 12:47	4° II 49'11	
retrograde	-12361 Nov 22 j 01:39	24° 8 27'07		evening set	-12354 Aug 09 j 18:16	6° II 42'37	
opposition	-12360 Feb 10 j 11:43	23° 8 04'00	2°52'57				
min. Earth dist.	-12360 Feb 10 j 07:34	23° 8 04'17	29.27004 AU	conjunction	-12354 Aug 24 j 17:04	7° II 16'20	2°47'00
direct	-12360 Apr 30 j 13:48	21° 8 40'56		minimum elong	-12354 Aug 24 j 17:04	7° II 16'20	2°47'40
evening set	-12360 Jul 27 j 11:18	23° 8 34'58		max. Earth dist.	-12354 Aug 25 j 02:14	7° II 17'13	31.23412 AU
				morning rise	-12354 Sep 08 j 17:24	7° II 50'13	
conjunction	-12360 Aug 11 j 09:58	24° 8 08'40	2°42'36	retrograde	-12354 Dec 07 j 09:56	9° II 46'54	
minimum elong	-12360 Aug 11 j 09:57	24° 8 08'40	2°43'12	opposition	-12353 Feb 26 j 07:38	8° II 23'12	2°58'26
max. Earth dist.	-12360 Aug 11 j 15:03	24° 8 09'09	31.26696 AU	min. Earth dist.	-12353 Feb 25 j 22:11	8° II 23'50	29.23292 AU
morning rise	-12360 Aug 26 j 09:09	24° 8 42'28		direct	-12353 May 16 j 22:42	7° II 00'16	
retrograde	-12360 Nov 23 j 14:06	26° 8 38'28		evening set	-12353 Aug 12 j 03:16	8° II 53'36	
opposition	-12359 Feb 12 j 00:53	25° 8 15'18	2°54'30				
min. Earth dist.	-12359 Feb 11 j 19:18	25° 8 15'41	29.26841 AU	conjunction	-12353 Aug 27 j 02:16	9° II 27'20	2°46'54
direct	-12359 May 03 j 02:25	23° 8 52'19		minimum elong	-12353 Aug 27 j 02:15	9° II 27'20	2°47'35
evening set	-12359 Jul 29 j 20:37	25° 8 46'17		max. Earth dist.	-12353 Aug 27 j 12:45	9° II 28'19	31.22669 AU
				morning rise	-12353 Sep 11 j 02:49	10° II 01'14	
conjunction	-12359 Aug 13 j 19:03	26° 8 19'59	2°43'56	retrograde	-12353 Dec 09 j 21:56	11° II 58'00	
minimum elong	-12359 Aug 13 j 19:03	26° 8 19'58	2°44'33	opposition	-12352 Feb 28 j 20:34	10° II 34'13	2°58'12
max. Earth dist.	-12359 Aug 13 j 23:55	26° 8 20'26	31.26472 AU	min. Earth dist.	-12352 Feb 28 j 08:52	10° II 35'00	29.22581 AU
morning rise	-12359 Aug 28 j 18:29	26° 8 53'47		direct	-12352 May 18 j 10:09	9° II 11'18	
retrograde	-12359 Nov 26 j 02:24	28° 8 49'56		evening set	-12352 Aug 13 j 12:13	11° II 04'32	
opposition	-12358 Feb 14 j 14:02	27° 8 26'43	2°55'47				
min. Earth dist.	-12358 Feb 14 j 08:08	27° 8 27'07	29.26564 AU	conjunction	-12352 Aug 28 j 11:18	11° II 38'17	2°46'33
direct	-12358 May 05 j 12:39	26° 8 03'46		minimum elong	-12352 Aug 28 j 11:18	11° II 38'17	2°47'15
evening set	-12358 Aug 01 j 05:46	27° 8 57'39		max. Earth dist.	-12352 Aug 28 j 22:20	11° II 39'19	31.21997 AU
				morning rise	-12352 Sep 12 j 12:19	12° II 12'13	
conjunction	-12358 Aug 16 j 04:21	28° 8 31'21	2°45'01	retrograde	-12352 Dec 11 j 10:54	14° II 09'07	
minimum elong	-12358 Aug 16 j 04:21	28° 8 31'21	2°45'39	opposition	-12351 Mar 02 j 09:40	12° II 45'14	2°57'43
max. Earth dist.	-12358 Aug 16 j 10:52	28° 8 31'58	31.26109 AU	min. Earth dist.	-12351 Mar 01 j 21:41	12° II 46'03	29.21964 AU
morning rise	-12358 Aug 31 j 03:45	29° 8 05'10		direct	-12351 May 20 j 20:06	11° II 22'21	
	-12358 Sep 26 j 20:24	0° II		evening set	-12351 Aug 15 j 21:11	13° II 15'31	
retrograde	-12358 Nov 28 j 12:57	1° II 01'26					
	-12357 Feb 03 j 10:48	30° 8		conjunction	-12351 Aug 30 j 20:40	13° II 49'17	2°45'58
opposition	-12357 Feb 17 j 03:14	29° 8 38'09	2°56'49	minimum elong	-12351 Aug 30 j 20:40	13° II 49'17	2°46'41
min. Earth dist.	-12357 Feb 16 j 20:39	29° 8 38'36	29.26121 AU	max. Earth dist.	-12351 Aug 31 j 09:43	13° II 50'31	31.21428 AU
direct	-12357 May 08 j 02:19	28° 8 15'15		morning rise	-12351 Sep 14 j 21:55	14° II 23'15	
	-12357 Jul 30 j 12:24	0° II		retrograde	-12351 Dec 13 j 23:15	16° II 20'15	
evening set	-12357 Aug 03 j 15:00	0° II 09'02		opposition	-12350 Mar 04 j 22:26	14° II 56'20	2°56'57
				min. Earth dist.	-12350 Mar 04 j 08:45	14° II 57'16	29.21429 AU
conjunction	-12357 Aug 18 j 13:27	0° II 42'44	2°45'52	direct	-12350 May 23 j 07:42	13° II 33'30	
minimum elong	-12357 Aug 18 j 13:26	0° II 42'44	2°46'31	evening set	-12350 Aug 18 j 06:18	15° II 26'37	
max. Earth dist.	-12357 Aug 18 j 19:35	0° II 43'19	31.25593 AU				
morning rise	-12357 Sep 02 j 13:07	1° II 16'34		conjunction	-12350 Sep 02 j 05:55	16° II 00'24	2°45'09

Attention, astronomical year style is used: The year -12350 in astronomical counting style is the year 12351 BCE in historical counting style.

minimum elong	-12350 Sep 02 j 05:55	16°II00'24	2°45'52			-12343 Apr 01 j 03:53	30°RII	
max. Earth dist.	-12350 Sep 02 j 18:59	16°II01'38	31.20933 AU	direct		-12343 Jun 07 j 12:47	28°II55'56	
morning rise	-12350 Sep 17 j 07:44	16°II34'24				-12343 Aug 09 j 11:50	0°☾	
retrograde	-12350 Dec 16 j 12:23	18°II31'33		evening set		-12343 Sep 01 j 23:23	0°☾48'36	
opposition	-12349 Mar 07 j 11:24	17°II07'35	2°55'57					
min. Earth dist.	-12349 Mar 06 j 21:08	17°II08'33	29.20963 AU	conjunction		-12343 Sep 17 j 01:53	1°☾22'38	2°32'43
direct	-12349 May 25 j 17:20	15°II44'49		minimum elong		-12343 Sep 17 j 01:54	1°☾22'38	2°33'29
evening set	-12349 Aug 20 j 15:14	17°II37'52		max. Earth dist.		-12343 Sep 17 j 19:35	1°☾24'18	31.16375 AU
				morning rise		-12343 Oct 02 j 07:26	1°☾56'57	
conjunction	-12349 Sep 04 j 15:17	18°II11'42	2°44'04	retrograde		-12342 Jan 01 j 01:21	3°☾54'49	
minimum elong	-12349 Sep 04 j 15:17	18°II11'42	2°44'49	min. Earth dist.		-12342 Mar 22 j 11:33	2°☾31'43	29.16105 AU
max. Earth dist.	-12349 Sep 05 j 06:22	18°II13'07	31.20477 AU	opposition		-12342 Mar 23 j 05:39	2°☾30'29	2°41'48
morning rise	-12349 Sep 19 j 17:22	18°II45'44		direct		-12342 Jun 09 j 22:18	1°☾07'53	
retrograde	-12349 Dec 19 j 00:06	20°II43'01		evening set		-12342 Sep 04 j 08:43	3°☾00'27	
min. Earth dist.	-12348 Mar 08 j 09:13	19°II20'03	29.20504 AU					
opposition	-12348 Mar 09 j 00:22	19°II19'02	2°54'40	conjunction		-12342 Sep 19 j 11:56	3°☾34'31	2°30'02
direct	-12348 May 27 j 06:15	17°II56'20		minimum elong		-12342 Sep 19 j 11:57	3°☾34'31	2°30'47
evening set	-12348 Aug 22 j 00:29	19°II49'20		max. Earth dist.		-12342 Sep 20 j 07:17	3°☾36'21	31.15378 AU
				morning rise		-12342 Oct 04 j 17:59	4°☾08'53	
conjunction	-12348 Sep 06 j 00:44	20°II23'11	2°42'46	retrograde		-12341 Jan 03 j 13:21	6°☾06'48	
minimum elong	-12348 Sep 06 j 00:44	20°II23'11	2°43'30	opposition		-12341 Mar 25 j 18:16	4°☾42'22	2°38'50
max. Earth dist.	-12348 Sep 06 j 15:42	20°II24'36	31.20023 AU	min. Earth dist.		-12341 Mar 24 j 22:49	4°☾43'42	29.15094 AU
morning rise	-12348 Sep 21 j 03:25	20°II57'16		direct		-12341 Jun 12 j 09:30	3°☾19'43	
retrograde	-12348 Dec 20 j 14:21	22°II54'41		evening set		-12341 Sep 06 j 18:06	5°☾12'12	
opposition	-12347 Mar 11 j 13:18	21°II30'40	2°53'09					
min. Earth dist.	-12347 Mar 10 j 21:03	21°II31'46	29.20032 AU	conjunction		-12341 Sep 21 j 21:41	5°☾46'19	2°27'08
direct	-12347 May 29 j 16:58	20°II08'01		minimum elong		-12341 Sep 21 j 21:42	5°☾46'19	2°27'54
evening set	-12347 Aug 24 j 09:42	22°II00'59		max. Earth dist.		-12341 Sep 22 j 16:53	5°☾48'08	31.14392 AU
				morning rise		-12341 Oct 07 j 04:34	6°☾20'44	
conjunction	-12347 Sep 08 j 10:26	22°II34'52	2°41'13	retrograde		-12340 Jan 06 j 02:42	8°☾18'42	
minimum elong	-12347 Sep 08 j 10:26	22°II34'52	2°41'58	min. Earth dist.		-12340 Mar 26 j 11:08	6°☾55'31	29.14143 AU
max. Earth dist.	-12347 Sep 09 j 02:46	22°II36'25	31.19512 AU	opposition		-12340 Mar 27 j 07:00	6°☾54'10	2°35'37
morning rise	-12347 Sep 23 j 13:32	23°II09'00		direct		-12340 Jun 13 j 19:29	5°☾31'30	
retrograde	-12347 Dec 23 j 00:53	25°II06'32		evening set		-12340 Sep 08 j 03:29	7°☾23'54	
min. Earth dist.	-12346 Mar 13 j 10:11	23°II43'35	29.19472 AU					
opposition	-12346 Mar 14 j 02:19	23°II42'30	2°51'22	conjunction		-12340 Sep 23 j 07:49	7°☾58'03	2°24'02
direct	-12346 Jun 01 j 04:29	22°II19'54		minimum elong		-12340 Sep 23 j 07:50	7°☾58'03	2°24'46
evening set	-12346 Aug 26 j 19:08	24°II12'48		max. Earth dist.		-12340 Sep 24 j 04:56	8°☾00'03	31.13484 AU
				morning rise		-12340 Oct 08 j 15:14	8°☾32'31	
conjunction	-12346 Sep 10 j 20:14	24°II46'43	2°39'26	retrograde		-12339 Jan 07 j 15:13	10°☾30'32	
minimum elong	-12346 Sep 10 j 20:14	24°II46'43	2°40'10	opposition		-12339 Mar 29 j 19:31	9°☾05'56	2°32'10
max. Earth dist.	-12346 Sep 11 j 12:44	24°II48'17	31.18909 AU	min. Earth dist.		-12339 Mar 28 j 22:46	9°☾07'21	29.13279 AU
morning rise	-12346 Sep 25 j 23:53	25°II20'54		direct		-12339 Jun 16 j 08:08	7°☾43'15	
retrograde	-12346 Dec 25 j 13:01	27°II18'32		evening set		-12339 Sep 10 j 13:02	9°☾35'35	
opposition	-12345 Mar 16 j 15:03	25°II54'27	2°49'20					
min. Earth dist.	-12345 Mar 15 j 21:35	25°II55'38	29.18805 AU	conjunction		-12339 Sep 25 j 17:53	10°☾09'47	2°20'42
direct	-12345 Jun 03 j 15:21	24°II31'53		minimum elong		-12339 Sep 25 j 17:54	10°☾09'47	2°21'27
evening set	-12345 Aug 29 j 04:34	26°II24'43		max. Earth dist.		-12339 Sep 26 j 14:56	10°☾11'47	31.12691 AU
				morning rise		-12339 Oct 11 j 02:10	10°☾44'19	
conjunction	-12345 Sep 13 j 06:04	26°II58'40	2°37'25	retrograde		-12338 Jan 10 j 05:26	12°☾42'23	
minimum elong	-12345 Sep 13 j 06:05	26°II58'40	2°38'10	min. Earth dist.		-12338 Mar 31 j 10:06	11°☾19'13	29.12536 AU
max. Earth dist.	-12345 Sep 13 j 23:04	27°II00'17	31.18175 AU	opposition		-12338 Apr 01 j 08:03	11°☾17'43	2°28'31
morning rise	-12345 Sep 28 j 10:18	27°II32'54		direct		-12338 Jun 18 j 18:41	9°☾55'03	
retrograde	-12345 Dec 28 j 00:38	29°II30'38		evening set		-12338 Sep 12 j 22:33	11°☾47'19	
min. Earth dist.	-12344 Mar 17 j 11:10	28°II07'38	29.18007 AU					
opposition	-12344 Mar 18 j 04:05	28°II06'29	2°47'04	conjunction		-12338 Sep 28 j 04:06	12°☾21'35	2°17'10
direct	-12344 Jun 05 j 01:07	26°II43'55		minimum elong		-12338 Sep 28 j 04:07	12°☾21'35	2°17'54
evening set	-12344 Aug 30 j 13:52	28°II36'40		max. Earth dist.		-12338 Sep 29 j 02:35	12°☾23'42	31.11995 AU
				morning rise		-12338 Oct 13 j 13:00	12°☾56'10	
conjunction	-12344 Sep 14 j 15:58	29°II10'40	2°35'11	retrograde		-12337 Jan 12 j 16:26	14°☾54'18	
minimum elong	-12344 Sep 14 j 15:59	29°II10'40	2°35'56	opposition		-12337 Apr 03 j 20:30	13°☾29'36	2°24'37
max. Earth dist.	-12344 Sep 15 j 09:50	29°II12'21	31.17330 AU	min. Earth dist.		-12337 Apr 02 j 22:29	13°☾31'06	29.11879 AU
morning rise	-12344 Sep 29 j 20:45	29°II44'56		direct		-12337 Jun 21 j 05:53	12°☾06'58	
	-12344 Oct 06 j 18:16	0°☾		evening set		-12337 Sep 15 j 08:10	13°☾59'11	
retrograde	-12344 Dec 29 j 12:46	1°☾42'45						
opposition	-12343 Mar 20 j 16:55	0°☾18'31	2°44'33	conjunction		-12337 Sep 30 j 14:23	14°☾33'29	2°13'26
min. Earth dist.	-12343 Mar 19 j 22:26	0°☾19'46	29.17092 AU	minimum elong		-12337 Sep 30 j 14:23	14°☾33'29	2°14'10

Attention, astronomical year style is used: The year -12337 in astronomical counting style is the year 12338 BCE in historical counting style.

max. Earth dist.	-12337 Oct 01 j 13:22	14° $\overline{035}$ '40	31.11400 AU	direct	-12330 Jul 06 j 08:15	27° $\overline{034}$ '23	
morning rise	-12337 Oct 16 j 00:03	15° $\overline{008}$ '08		evening set	-12330 Sep 30 j 07:02	29° $\overline{026}$ '23	
retrograde	-12336 Jan 15 j 05:46	17° $\overline{006}$ '20					
min. Earth dist.	-12336 Apr 04 j 09:28	15° $\overline{043}$ '13	29.11303 AU	conjunction	-12330 Oct 15 j 18:18	0° Ω 01'05	1°42'00
opposition	-12336 Apr 05 j 08:57	15° $\overline{041}$ '37	2°20'31	minimum elong	-12330 Oct 15 j 18:19	0° Ω 01'05	1°42'39
direct	-12336 Jun 22 j 17:04	14° $\overline{019}$ '01			-12330 Oct 15 j 06:47	0° Ω	
evening set	-12336 Sep 16 j 17:52	16° $\overline{011}$ '12		max. Earth dist.	-12330 Oct 16 j 18:50	0° Ω 03'24	31.06151 AU
				morning rise	-12330 Oct 31 j 09:37	0° Ω 36'10	
conjunction	-12336 Oct 02 j 00:43	16° $\overline{045}$ '34	2°09'30	retrograde	-12329 Jan 31 j 00:24	2° Ω 34'43	
minimum elong	-12336 Oct 02 j 00:44	16° $\overline{045}$ '34	2°10'12	opposition	-12329 Apr 21 j 23:38	1° Ω 09'43	1°46'16
max. Earth dist.	-12336 Oct 03 j 00:16	16° $\overline{047}$ '47	31.10842 AU	min. Earth dist.	-12329 Apr 20 j 23:13	1° Ω 11'24	29.05742 AU
morning rise	-12336 Oct 17 j 11:14	17° $\overline{020}$ '17			-12329 Jun 10 j 22:37	30° \overline{R} $\overline{02}$	
retrograde	-12335 Jan 16 j 18:05	19° $\overline{018}$ '34		direct	-12329 Jul 08 j 18:56	29° $\overline{047}$ '04	
opposition	-12335 Apr 07 j 21:32	17° $\overline{053}$ '49	2°16'12		-12329 Aug 05 j 03:15	0° Ω	
min. Earth dist.	-12335 Apr 06 j 22:40	17° $\overline{055}$ '23	29.10745 AU	evening set	-12329 Oct 02 j 17:26	1° Ω 39'01	
direct	-12335 Jun 25 j 03:00	16° $\overline{031}$ '15					
evening set	-12335 Sep 19 j 03:46	18° $\overline{023}$ '24		conjunction	-12329 Oct 18 j 05:30	2° Ω 13'47	1°36'52
				minimum elong	-12329 Oct 18 j 05:31	2° Ω 13'48	1°37'31
conjunction	-12335 Oct 04 j 11:26	18° $\overline{057}$ '50	2°05'21	max. Earth dist.	-12329 Oct 19 j 06:59	2° Ω 16'11	31.05094 AU
minimum elong	-12335 Oct 04 j 11:27	18° $\overline{057}$ '50	2°06'04	morning rise	-12329 Nov 02 j 21:35	2° Ω 48'56	
max. Earth dist.	-12335 Oct 05 j 11:50	19° $\overline{000}$ '08	31.10290 AU	retrograde	-12328 Feb 02 j 12:10	4° Ω 47'29	
morning rise	-12335 Oct 19 j 22:38	19° $\overline{032}$ '36		min. Earth dist.	-12328 Apr 22 j 11:41	3° Ω 24'05	29.04695 AU
retrograde	-12334 Jan 19 j 06:14	21° $\overline{030}$ '57		opposition	-12328 Apr 23 j 11:46	3° Ω 22'25	1°40'41
min. Earth dist.	-12334 Apr 09 j 09:39	20° $\overline{007}$ '52	29.10157 AU	direct	-12328 Jul 10 j 06:24	1° Ω 59'44	
opposition	-12334 Apr 10 j 09:46	20° $\overline{006}$ '12	2°11'40	evening set	-12328 Oct 04 j 03:51	3° Ω 51'39	
direct	-12334 Jun 27 j 14:06	18° $\overline{043}$ '39					
evening set	-12334 Sep 21 j 13:57	20° $\overline{035}$ '48		conjunction	-12328 Oct 19 j 16:43	4° Ω 26'28	1°31'35
				minimum elong	-12328 Oct 19 j 16:44	4° Ω 26'28	1°32'11
conjunction	-12334 Oct 06 j 22:10	21° $\overline{010}$ '16	2°01'02	max. Earth dist.	-12328 Oct 20 j 18:26	4° Ω 28'53	31.04094 AU
minimum elong	-12334 Oct 06 j 22:11	21° $\overline{010}$ '16	2°01'44	morning rise	-12328 Nov 04 j 09:38	5° Ω 01'41	
max. Earth dist.	-12334 Oct 07 j 22:02	21° $\overline{012}$ '31	31.09672 AU	retrograde	-12327 Feb 04 j 02:20	7° Ω 00'13	
morning rise	-12334 Oct 22 j 10:16	21° $\overline{045}$ '07		opposition	-12327 Apr 25 j 23:44	5° Ω 35'06	1°34'58
retrograde	-12333 Jan 21 j 18:55	23° $\overline{043}$ '32		min. Earth dist.	-12327 Apr 24 j 22:30	5° Ω 36'51	29.03724 AU
opposition	-12333 Apr 12 j 22:20	22° $\overline{018}$ '46	2°06'57	direct	-12327 Jul 12 j 18:19	4° Ω 12'23	
min. Earth dist.	-12333 Apr 11 j 22:56	22° $\overline{020}$ '22	29.09494 AU	evening set	-12327 Oct 06 j 14:33	6° Ω 04'16	
direct	-12333 Jun 29 j 23:05	20° $\overline{056}$ '14					
evening set	-12333 Sep 23 j 23:56	22° $\overline{048}$ '20		conjunction	-12327 Oct 22 j 04:06	6° Ω 39'10	1°26'09
				minimum elong	-12327 Oct 22 j 04:07	6° Ω 39'10	1°26'46
conjunction	-12333 Oct 09 j 09:02	23° $\overline{022}$ '52	1°56'31	max. Earth dist.	-12327 Oct 23 j 06:03	6° Ω 41'36	31.03168 AU
minimum elong	-12333 Oct 09 j 09:03	23° $\overline{022}$ '53	1°57'14	morning rise	-12327 Nov 06 j 21:52	7° Ω 14'26	
max. Earth dist.	-12333 Oct 10 j 10:07	23° $\overline{025}$ '15	31.08963 AU	retrograde	-12326 Feb 06 j 14:42	9° Ω 13'00	
morning rise	-12333 Oct 24 j 21:46	23° $\overline{057}$ '46		min. Earth dist.	-12326 Apr 27 j 11:08	7° Ω 49'32	29.02851 AU
retrograde	-12332 Jan 24 j 07:19	25° $\overline{056}$ '15		opposition	-12326 Apr 28 j 11:40	7° Ω 47'50	1°29'06
min. Earth dist.	-12332 Apr 13 j 10:34	24° $\overline{033}$ '07	29.08709 AU	direct	-12326 Jul 15 j 04:33	6° Ω 25'06	
opposition	-12332 Apr 14 j 10:47	24° $\overline{031}$ '27	2°02'02	evening set	-12326 Oct 09 j 01:08	8° Ω 16'58	
direct	-12332 Jul 01 j 10:03	23° $\overline{008}$ '55					
evening set	-12332 Sep 25 j 10:21	25° $\overline{001}$ '00		conjunction	-12326 Oct 24 j 15:35	8° Ω 51'55	1°20'36
				minimum elong	-12326 Oct 24 j 15:36	8° Ω 51'55	1°21'11
conjunction	-12332 Oct 10 j 20:02	25° $\overline{035}$ '35	1°51'51	max. Earth dist.	-12326 Oct 25 j 18:25	8° Ω 54'27	31.02365 AU
minimum elong	-12332 Oct 10 j 20:03	25° $\overline{035}$ '35	1°52'32	morning rise	-12326 Nov 09 j 10:02	9° Ω 27'15	
max. Earth dist.	-12332 Oct 11 j 20:11	25° $\overline{037}$ '52	31.08131 AU	retrograde	-12325 Feb 09 j 02:32	11° Ω 25'50	
morning rise	-12332 Oct 26 j 09:46	26° $\overline{010}$ '33		opposition	-12325 Apr 30 j 23:31	10° Ω 00'39	1°23'05
retrograde	-12331 Jan 25 j 21:22	28° $\overline{009}$ '04		min. Earth dist.	-12325 Apr 29 j 21:36	10° Ω 02'27	29.02090 AU
opposition	-12331 Apr 16 j 23:12	26° $\overline{044}$ '13	1°56'57	direct	-12325 Jul 17 j 15:49	8° Ω 37'55	
min. Earth dist.	-12331 Apr 15 j 23:24	26° $\overline{045}$ '51	29.07813 AU	evening set	-12325 Oct 11 j 11:51	10° Ω 29'48	
direct	-12331 Jul 03 j 19:48	25° $\overline{021}$ '39					
evening set	-12331 Sep 27 j 20:38	27° $\overline{013}$ '41		conjunction	-12325 Oct 27 j 02:54	11° Ω 04'47	1°14'55
				minimum elong	-12325 Oct 27 j 02:55	11° Ω 04'47	1°15'30
conjunction	-12331 Oct 13 j 07:16	27° $\overline{048}$ '20	1°47'00	max. Earth dist.	-12325 Oct 28 j 05:18	11° Ω 07'16	31.01661 AU
minimum elong	-12331 Oct 13 j 07:16	27° $\overline{048}$ '21	1°47'41	morning rise	-12325 Nov 11 j 22:19	11° Ω 40'11	
max. Earth dist.	-12331 Oct 14 j 08:30	27° $\overline{050}$ '43	31.07181 AU	retrograde	-12324 Feb 11 j 14:49	13° Ω 38'48	
morning rise	-12331 Oct 28 j 21:41	28° $\overline{023}$ '22		min. Earth dist.	-12324 May 01 j 10:17	12° Ω 15'22	29.01428 AU
retrograde	-12331 Dec 22 j 08:18	0° Ω		opposition	-12324 May 02 j 11:34	12° Ω 13'37	1°16'57
	-12330 Jan 28 j 10:15	0° Ω 21'54		direct	-12324 Jul 19 j 00:37	10° Ω 50'53	
	-12330 Mar 07 j 08:43	30° \overline{R} $\overline{02}$		evening set	-12324 Oct 12 j 22:43	12° Ω 42'47	
min. Earth dist.	-12330 Apr 18 j 11:35	28° $\overline{058}$ '37	29.06799 AU				
opposition	-12330 Apr 19 j 11:29	28° $\overline{056}$ '59	1°51'41	conjunction	-12324 Oct 28 j 14:43	13° Ω 17'50	1°09'07

Attention, astronomical year style is used: The year -12324 in astronomical counting style is the year 12325 BCE in historical counting style.

minimum elong	-12324 Oct 28 j 14:44	13° Ω 17'50	1°09'40	opposition	-12317 May 18 j 21:57	27° Ω 48'14	0°31'08
max. Earth dist.	-12324 Oct 29 j 18:24	13° Ω 20'26	31.01043 AU	min. Earth dist.	-12317 May 17 j 22:45	27° Ω 49'51	28.96044 AU
morning rise	-12324 Nov 13 j 10:45	13° Ω 53'17		direct	-12317 Aug 04 j 05:13	26° Ω 25'16	
	-12324 Dec 17 j 02:40	15° Ω		evening set	-12317 Oct 29 j 07:31	28° Ω 17'18	
retrograde	-12323 Feb 13 j 03:14	15° Ω 51'56					
	-12323 Apr 14 j 10:24	15° $\mathbb{R}\Omega$		conjunction	-12317 Nov 14 j 04:35	28° Ω 52'44	0°26'00
opposition	-12323 May 04 j 23:17	14° Ω 26'46	1°10'41	minimum elong	-12317 Nov 14 j 04:35	28° Ω 52'44	0°26'25
min. Earth dist.	-12323 May 03 j 21:18	14° Ω 28'34	29.00820 AU	max. Earth dist.	-12317 Nov 15 j 06:22	28° Ω 55'09	30.95489 AU
direct	-12323 Jul 21 j 10:56	13° Ω 04'01		morning rise	-12317 Nov 30 j 05:38	29° Ω 28'33	
evening set	-12323 Oct 15 j 09:56	14° Ω 55'57			-12317 Dec 15 j 02:22	0° \mathbb{N}	
	-12323 Oct 17 j 06:03	15° Ω		retrograde	-12316 Mar 01 j 00:34	1° \mathbb{N} 27'08	
				min. Earth dist.	-12316 May 19 j 09:28	0° \mathbb{N} 03'26	28.95000 AU
conjunction	-12323 Oct 31 j 02:32	15° Ω 31'04	1°03'12	opposition	-12316 May 20 j 09:26	0° \mathbb{N} 01'45	0°24'19
minimum elong	-12323 Oct 31 j 02:33	15° Ω 31'04	1°03'45		-12316 May 21 j 10:28	30° $\mathbb{R}\Omega$	
max. Earth dist.	-12323 Nov 01 j 05:13	15° Ω 33'34	31.00458 AU	direct	-12316 Aug 05 j 17:25	28° Ω 38'41	
morning rise	-12323 Nov 15 j 23:31	16° Ω 06'35			-12316 Oct 16 j 06:25	0° \mathbb{N}	
retrograde	-12322 Feb 15 j 16:49	18° Ω 05'16		evening set	-12316 Oct 30 j 19:34	0° \mathbb{N} 30'45	
min. Earth dist.	-12322 May 06 j 09:46	16° Ω 41'51	29.00231 AU				
opposition	-12322 May 07 j 11:12	16° Ω 40'05	1°04'18	conjunction	-12316 Nov 15 j 17:08	1° \mathbb{N} 06'13	0°19'37
direct	-12322 Jul 23 j 20:27	15° Ω 17'21		minimum elong	-12316 Nov 15 j 17:08	1° \mathbb{N} 06'13	0°19'59
evening set	-12322 Oct 17 j 21:07	17° Ω 09'19		max. Earth dist.	-12316 Nov 16 j 17:57	1° \mathbb{N} 08'32	30.94461 AU
				morning rise	-12316 Dec 01 j 18:58	1° \mathbb{N} 42'05	
conjunction	-12322 Nov 02 j 14:34	17° Ω 44'29	0°57'11	retrograde	-12315 Mar 03 j 13:08	3° \mathbb{N} 40'37	
minimum elong	-12322 Nov 02 j 14:34	17° Ω 44'29	0°57'42	opposition	-12315 May 22 j 20:50	2° \mathbb{N} 15'11	0°17'28
max. Earth dist.	-12322 Nov 03 j 18:13	17° Ω 47'05	30.99851 AU	min. Earth dist.	-12315 May 21 j 21:56	2° \mathbb{N} 16'47	28.94009 AU
morning rise	-12322 Nov 18 j 12:06	18° Ω 20'03		direct	-12315 Aug 08 j 03:09	0° \mathbb{N} 52'03	
retrograde	-12321 Feb 18 j 05:16	20° Ω 18'46		evening set	-12315 Nov 02 j 07:33	2° \mathbb{N} 44'07	
opposition	-12321 May 09 j 23:00	18° Ω 53'36	0°57'50				
min. Earth dist.	-12321 May 08 j 21:45	18° Ω 55'21	28.99588 AU	conjunction	-12315 Nov 18 j 05:56	3° \mathbb{N} 19'39	0°13'13
direct	-12321 Jul 26 j 07:53	17° Ω 30'51		minimum elong	-12315 Nov 18 j 05:56	3° \mathbb{N} 19'39	0°13'35
evening set	-12321 Oct 20 j 08:37	19° Ω 22'51		behind sun begin	-12315 Nov 18 j 02:24	3° \mathbb{N} 19'20	
				behind sun end	-12315 Nov 18 j 09:27	3° \mathbb{N} 19'58	
conjunction	-12321 Nov 05 j 02:43	19° Ω 58'04	0°51'05	max. Earth dist.	-12315 Nov 19 j 07:41	3° \mathbb{N} 22'03	30.93514 AU
minimum elong	-12321 Nov 05 j 02:43	19° Ω 58'04	0°51'35	morning rise	-12315 Dec 04 j 08:11	3° \mathbb{N} 55'32	
max. Earth dist.	-12321 Nov 06 j 05:11	20° Ω 00'33	30.99187 AU	retrograde	-12314 Mar 06 j 01:04	5° \mathbb{N} 54'03	
morning rise	-12321 Nov 21 j 01:06	20° Ω 33'41		min. Earth dist.	-12314 May 24 j 08:37	4° \mathbb{N} 30'14	28.93109 AU
retrograde	-12320 Feb 20 j 19:48	22° Ω 32'25		opposition	-12314 May 25 j 08:07	4° \mathbb{N} 28'35	0°10'36
min. Earth dist.	-12320 May 10 j 09:35	21° Ω 08'59	28.98875 AU	direct	-12314 Aug 10 j 14:20	3° \mathbb{N} 05'23	
opposition	-12320 May 11 j 10:48	21° Ω 07'14	0°51'15	evening set	-12314 Nov 04 j 19:38	4° \mathbb{N} 57'30	
direct	-12320 Jul 27 j 17:57	19° Ω 44'27					
evening set	-12320 Oct 21 j 20:14	21° Ω 36'28		conjunction	-12314 Nov 20 j 18:25	5° \mathbb{N} 33'03	0°06'48
				minimum elong	-12314 Nov 20 j 18:26	5° \mathbb{N} 33'03	0°07'07
conjunction	-12320 Nov 06 j 15:07	22° Ω 11'45	0°44'54	behind sun begin	-12314 Nov 20 j 12:24	5° \mathbb{N} 32'31	
minimum elong	-12320 Nov 06 j 15:07	22° Ω 11'45	0°45'22	behind sun end	-12314 Nov 21 j 00:27	5° \mathbb{N} 33'36	
max. Earth dist.	-12320 Nov 07 j 17:47	22° Ω 14'15	30.98412 AU	max. Earth dist.	-12314 Nov 21 j 19:07	5° \mathbb{N} 35'22	30.92679 AU
morning rise	-12320 Nov 22 j 14:10	22° Ω 47'26		morning rise	-12314 Dec 06 j 21:23	6° \mathbb{N} 09'00	
retrograde	-12319 Feb 22 j 08:34	24° Ω 46'09		retrograde	-12313 Mar 08 j 13:29	8° \mathbb{N} 07'29	
opposition	-12319 May 13 j 22:40	23° Ω 20'56	0°44'37	opposition	-12313 May 27 j 19:27	6° \mathbb{N} 42'00	0°03'42
min. Earth dist.	-12319 May 12 j 22:29	23° Ω 22'37	28.98030 AU	min. Earth dist.	-12313 May 26 j 20:26	6° \mathbb{N} 43'37	28.92348 AU
direct	-12319 Jul 30 j 05:38	21° Ω 58'06		direct	-12313 Aug 12 j 23:54	5° \mathbb{N} 18'45	
evening set	-12319 Oct 24 j 08:01	23° Ω 50'08		evening set	-12313 Nov 07 j 07:45	7° \mathbb{N} 10'57	
conjunction	-12319 Nov 09 j 03:38	24° Ω 25'28	0°38'39	conjunction	-12313 Nov 23 j 07:18	7° \mathbb{N} 46'33	0°00'19
minimum elong	-12319 Nov 09 j 03:39	24° Ω 25'28	0°39'07	minimum elong	-12313 Nov 23 j 07:17	7° \mathbb{N} 46'33	0°00'38
max. Earth dist.	-12319 Nov 10 j 05:36	24° Ω 27'54	30.97522 AU	behind sun begin	-12313 Nov 23 j 00:45	7° \mathbb{N} 45'58	
morning rise	-12319 Nov 25 j 03:24	25° Ω 01'12		behind sun end	-12313 Nov 23 j 13:49	7° \mathbb{N} 47'08	
retrograde	-12318 Feb 24 j 23:33	26° Ω 59'52		max. Earth dist.	-12313 Nov 24 j 08:59	7° \mathbb{N} 48'57	30.91981 AU
min. Earth dist.	-12318 May 15 j 09:41	25° Ω 36'19	28.97076 AU	morning rise	-12313 Dec 09 j 10:38	8° \mathbb{N} 22'31	
opposition	-12318 May 16 j 10:14	25° Ω 34'37	0°37'54	desc. node	-12313 Dec 10 j 08:15	8° \mathbb{N} 24'29	
direct	-12318 Aug 01 j 18:11	24° Ω 11'43		retrograde	-12312 Mar 10 j 01:02	10° \mathbb{N} 21'00	
evening set	-12318 Oct 26 j 19:52	26° Ω 03'46		min. Earth dist.	-12312 May 28 j 07:43	8° \mathbb{N} 57'08	28.91712 AU
				opposition	-12312 May 29 j 06:37	8° \mathbb{N} 55'31	-0°03'12
conjunction	-12318 Nov 11 j 16:06	26° Ω 39'09	0°32'21	direct	-12312 Aug 14 j 10:50	7° \mathbb{N} 32'15	
minimum elong	-12318 Nov 11 j 16:07	26° Ω 39'09	0°32'46	evening set	-12312 Nov 08 j 20:09	9° \mathbb{N} 24'31	
max. Earth dist.	-12318 Nov 12 j 17:36	26° Ω 41'32	30.96523 AU				
morning rise	-12318 Nov 27 j 16:35	27° Ω 14'55		conjunction	-12312 Nov 24 j 20:11	10° \mathbb{N} 00'10	-0°06'14
retrograde	-12317 Feb 27 j 11:47	29° Ω 13'33		minimum elong	-12312 Nov 24 j 20:12	10° \mathbb{N} 00'10	0°05'58

Attention, astronomical year style is used: The year -12312 in astronomical counting style is the year 12313 BCE in historical counting style.

behind sun begin	-12312 Nov 24 j 13:57	9° <u>10</u> 59'36		opposition	-12305 Jun 14 j 12:40	24° <u>10</u> 35'00	-0°50'57
behind sun end	-12312 Nov 25 j 02:26	10° <u>10</u> 00'43		min. Earth dist.	-12305 Jun 13 j 17:36	24° <u>10</u> 36'21	28.88143 AU
max. Earth dist.	-12312 Nov 25 j 20:46	10° <u>10</u> 02'27	30.91418 AU	direct	-12305 Aug 30 j 17:50	23° <u>10</u> 11'29	
morning rise	-12312 Dec 11 j 00:13	10° <u>10</u> 36'10		evening set	-12305 Nov 25 j 15:23	25° <u>10</u> 04'26	
retrograde	-12311 Mar 12 j 15:19	12° <u>10</u> 34'39					
opposition	-12311 May 31 j 17:50	11° <u>10</u> 09'12	-0°10'06	conjunction	-12305 Dec 11 j 18:36	25° <u>10</u> 40'19	-0°50'43
min. Earth dist.	-12311 May 30 j 18:50	11° <u>10</u> 10'49	28.91202 AU	minimum elong	-12305 Dec 11 j 18:36	25° <u>10</u> 40'19	0°50'37
direct	-12311 Aug 16 j 20:29	9° <u>10</u> 45'54		max. Earth dist.	-12305 Dec 12 j 14:25	25° <u>10</u> 42'10	30.87751 AU
evening set	-12311 Nov 11 j 08:43	11° <u>10</u> 38'17		morning rise	-12305 Dec 28 j 01:16	26° <u>10</u> 16'31	
				retrograde	-12304 Mar 28 j 11:54	28° <u>10</u> 14'48	
conjunction	-12311 Nov 27 j 09:19	12° <u>10</u> 13'58	-0°12'39	opposition	-12304 Jun 15 j 23:37	26° <u>10</u> 49'28	-0°57'33
minimum elong	-12311 Nov 27 j 09:18	12° <u>10</u> 13'58	0°12'24	min. Earth dist.	-12304 Jun 15 j 05:42	26° <u>10</u> 50'44	28.87440 AU
behind sun begin	-12311 Nov 27 j 05:04	12° <u>10</u> 13'35		direct	-12304 Sep 01 j 04:07	25° <u>10</u> 25'50	
behind sun end	-12311 Nov 27 j 13:32	12° <u>10</u> 14'21		evening set	-12304 Nov 27 j 04:48	27° <u>10</u> 18'52	
max. Earth dist.	-12311 Nov 28 j 10:13	12° <u>10</u> 16'17	30.90941 AU				
morning rise	-12311 Dec 13 j 13:41	12° <u>10</u> 50'01		conjunction	-12304 Dec 13 j 08:33	27° <u>10</u> 54'46	-0°56'50
retrograde	-12310 Mar 15 j 03:46	14° <u>10</u> 48'30		minimum elong	-12304 Dec 13 j 08:33	27° <u>10</u> 54'46	0°56'48
min. Earth dist.	-12310 Jun 02 j 06:58	13° <u>10</u> 24'38	28.90759 AU	max. Earth dist.	-12304 Dec 14 j 04:48	27° <u>10</u> 56'39	30.87043 AU
opposition	-12310 Jun 03 j 04:57	13° <u>10</u> 23'05	-0°17'00	morning rise	-12304 Dec 29 j 15:19	28° <u>10</u> 30'58	
direct	-12310 Aug 19 j 07:38	11° <u>10</u> 59'47			-12303 Feb 16 j 07:48	0° <u>10</u> 00'00	
evening set	-12310 Nov 13 j 21:25	13° <u>10</u> 52'16		retrograde	-12303 Mar 30 j 22:54	0° <u>10</u> 29'11	
					-12303 May 13 j 06:32	30° <u>10</u> 00'00	
conjunction	-12310 Nov 29 j 22:32	14° <u>10</u> 27'59	-0°19'05	opposition	-12303 Jun 18 j 10:30	29° <u>10</u> 03'49	-1°04'04
minimum elong	-12310 Nov 29 j 22:32	14° <u>10</u> 27'59	0°18'53	min. Earth dist.	-12303 Jun 17 j 17:12	29° <u>10</u> 05'03	28.86752 AU
max. Earth dist.	-12310 Nov 30 j 22:45	14° <u>10</u> 30'15	30.90532 AU	direct	-12303 Sep 03 j 15:22	27° <u>10</u> 40'06	
morning rise	-12310 Dec 16 j 03:23	15° <u>10</u> 04'04		evening set	-12303 Nov 29 j 18:23	29° <u>10</u> 33'13	
retrograde	-12309 Mar 17 j 19:03	17° <u>10</u> 02'33			-12303 Dec 11 j 20:34	0° <u>10</u> 00'00	
opposition	-12309 Jun 05 j 16:04	15° <u>10</u> 37'11	-0°23'53				
min. Earth dist.	-12309 Jun 04 j 17:46	15° <u>10</u> 38'45	28.90358 AU	conjunction	-12303 Dec 15 j 22:19	0° <u>10</u> 09'07	-1°02'53
direct	-12309 Aug 21 j 19:54	14° <u>10</u> 13'52		minimum elong	-12303 Dec 15 j 22:18	0° <u>10</u> 09'07	1°02'52
evening set	-12309 Nov 16 j 10:17	16° <u>10</u> 06'28		max. Earth dist.	-12303 Dec 16 j 16:58	0° <u>10</u> 10'52	30.86389 AU
				morning rise	-12302 Jan 01 j 05:24	0° <u>10</u> 45'20	
conjunction	-12309 Dec 02 j 11:50	16° <u>10</u> 42'14	-0°25'30	retrograde	-12302 Apr 02 j 12:13	2° <u>10</u> 43'28	
minimum elong	-12309 Dec 02 j 11:49	16° <u>10</u> 42'14	0°25'18	opposition	-12302 Jun 20 j 21:15	1° <u>10</u> 18'06	-1°10'29
max. Earth dist.	-12309 Dec 03 j 11:25	16° <u>10</u> 44'26	30.90115 AU	min. Earth dist.	-12302 Jun 20 j 04:07	1° <u>10</u> 19'19	28.86155 AU
morning rise	-12309 Dec 18 j 17:07	17° <u>10</u> 18'20			-12302 Aug 18 j 20:54	30° <u>10</u> 00'00	
retrograde	-12308 Mar 19 j 07:42	19° <u>10</u> 16'50		direct	-12302 Sep 06 j 01:21	29° <u>10</u> 54'16	
min. Earth dist.	-12308 Jun 06 j 06:46	17° <u>10</u> 52'57	28.89928 AU		-12302 Sep 24 j 06:11	0° <u>10</u> 00'00	
opposition	-12308 Jun 07 j 03:21	17° <u>10</u> 51'30	-0°30'43	evening set	-12302 Dec 02 j 07:55	1° <u>10</u> 47'29	
direct	-12308 Aug 23 j 06:49	16° <u>10</u> 28'09					
evening set	-12308 Nov 17 j 23:24	18° <u>10</u> 20'51		conjunction	-12302 Dec 18 j 12:13	2° <u>10</u> 23'25	-1°08'50
				minimum elong	-12302 Dec 18 j 12:12	2° <u>10</u> 23'25	1°08'51
conjunction	-12308 Dec 04 j 01:32	18° <u>10</u> 56'39	-0°31'53	max. Earth dist.	-12302 Dec 19 j 07:05	2° <u>10</u> 25'10	30.85835 AU
minimum elong	-12308 Dec 04 j 01:32	18° <u>10</u> 56'39	0°31'44	morning rise	-12301 Jan 03 j 19:21	2° <u>10</u> 59'37	
max. Earth dist.	-12308 Dec 05 j 00:44	18° <u>10</u> 58'49	30.89656 AU	retrograde	-12301 Apr 04 j 23:00	4° <u>10</u> 57'42	
morning rise	-12308 Dec 20 j 07:08	19° <u>10</u> 32'48		opposition	-12301 Jun 23 j 08:04	3° <u>10</u> 32'19	-1°16'47
retrograde	-12307 Mar 21 j 21:54	21° <u>10</u> 31'15		min. Earth dist.	-12301 Jun 22 j 15:57	3° <u>10</u> 33'28	28.85677 AU
opposition	-12307 Mar 09 j 14:21	20° <u>10</u> 05'57	-0°37'32	direct	-12301 Sep 08 j 12:54	2° <u>10</u> 08'25	
min. Earth dist.	-12307 Jun 08 j 17:36	20° <u>10</u> 07'25	28.89423 AU	evening set	-12301 Dec 04 j 21:29	4° <u>10</u> 01'44	
direct	-12307 Aug 25 j 19:10	18° <u>10</u> 42'34					
evening set	-12307 Nov 20 j 12:47	20° <u>10</u> 35'22		conjunction	-12301 Dec 21 j 02:03	4° <u>10</u> 37'40	-1°14'41
				minimum elong	-12301 Dec 21 j 02:02	4° <u>10</u> 37'40	1°14'43
conjunction	-12307 Dec 06 j 15:13	21° <u>10</u> 11'12	-0°38'13	max. Earth dist.	-12301 Dec 21 j 20:03	4° <u>10</u> 39'21	30.85432 AU
minimum elong	-12307 Dec 06 j 15:12	21° <u>10</u> 11'12	0°38'04	morning rise	-12300 Jan 06 j 09:26	5° <u>10</u> 13'53	
max. Earth dist.	-12307 Dec 07 j 12:41	21° <u>10</u> 13'12	30.89097 AU	retrograde	-12300 Apr 06 j 12:53	7° <u>10</u> 11'54	
morning rise	-12307 Dec 22 j 21:16	21° <u>10</u> 47'22		opposition	-12300 Jun 24 j 18:47	5° <u>10</u> 46'32	-1°22'59
retrograde	-12306 Mar 24 j 11:52	23° <u>10</u> 45'47		min. Earth dist.	-12300 Jun 24 j 02:17	5° <u>10</u> 47'42	28.85350 AU
min. Earth dist.	-12306 Jun 11 j 06:31	22° <u>10</u> 21'50	28.88826 AU	direct	-12300 Sep 10 j 01:13	4° <u>10</u> 22'34	
opposition	-12306 Jun 12 j 01:37	22° <u>10</u> 20'29	-0°44'17	evening set	-12300 Dec 06 j 11:21	6° <u>10</u> 16'01	
direct	-12306 Aug 28 j 05:42	20° <u>10</u> 57'02					
evening set	-12306 Nov 23 j 01:54	22° <u>10</u> 49'55		conjunction	-12300 Dec 22 j 16:08	6° <u>10</u> 51'58	-1°20'25
				minimum elong	-12300 Dec 22 j 16:07	6° <u>10</u> 51'58	1°20'29
conjunction	-12306 Dec 09 j 04:54	23° <u>10</u> 25'47	-0°44'30	max. Earth dist.	-12300 Dec 23 j 09:38	6° <u>10</u> 53'36	30.85161 AU
minimum elong	-12306 Dec 09 j 04:54	23° <u>10</u> 25'47	0°44'24	morning rise	-12299 Jan 07 j 23:36	7° <u>10</u> 28'11	
max. Earth dist.	-12306 Dec 10 j 02:34	23° <u>10</u> 27'48	30.88454 AU	retrograde	-12299 Apr 09 j 00:54	9° <u>10</u> 26'09	
morning rise	-12306 Dec 25 j 11:06	24° <u>10</u> 01'57		opposition	-12299 Jun 27 j 05:32	8° <u>10</u> 00'49	-1°29'03
retrograde	-12305 Mar 26 j 23:51	26° <u>10</u> 00'19		min. Earth dist.	-12299 Jun 26 j 14:34	8° <u>10</u> 01'53	28.85159 AU

Attention, astronomical year style is used: The year -12299 in astronomical counting style is the year 12300 BCE in historical counting style.

direct	-12299 Sep 12 j 11:57	6° <u>♂</u> 36'49		retrograde	-12292 Apr 24 j 18:25	25° <u>♂</u> 09'34	
evening set	-12299 Dec 09 j 01:13	8° <u>♂</u> 30'23		opposition	-12292 Jul 12 j 08:40	23° <u>♂</u> 44'38	-2°07'22
				min. Earth dist.	-12292 Jul 12 j 00:05	23° <u>♂</u> 45'15	28.84548 AU
conjunction	-12299 Dec 25 j 06:18	9° <u>♂</u> 06'21	-1°26'02	direct	-12292 Sep 27 j 20:44	22° <u>♂</u> 20'20	
minimum elong	-12299 Dec 25 j 06:17	9° <u>♂</u> 06'21	1°26'07	evening set	-12292 Dec 25 j 06:15	24° <u>♂</u> 14'54	
max. Earth dist.	-12299 Dec 25 j 23:31	9° <u>♂</u> 07'58	30.85035 AU				
morning rise	-12298 Jan 10 j 13:47	9° <u>♂</u> 42'34		conjunction	-12291 Jan 10 j 12:02	24° <u>♂</u> 50'54	-2°01'19
retrograde	-12298 Apr 11 j 15:14	11° <u>♂</u> 40'29		minimum elong	-12291 Jan 10 j 12:01	24° <u>♂</u> 50'54	2°01'37
opposition	-12298 Jun 29 j 16:11	10° <u>♂</u> 15'13	-1°35'00	max. Earth dist.	-12291 Jan 10 j 21:09	24° <u>♂</u> 51'45	30.84272 AU
min. Earth dist.	-12298 Jun 29 j 00:50	10° <u>♂</u> 16'18	28.85089 AU	morning rise	-12291 Jan 26 j 19:19	25° <u>♂</u> 27'04	
direct	-12298 Sep 15 j 00:43	8° <u>♂</u> 51'11		retrograde	-12291 Apr 27 j 07:36	27° <u>♂</u> 24'32	
evening set	-12298 Dec 11 j 15:10	10° <u>♂</u> 44'54		opposition	-12291 Jul 14 j 19:09	25° <u>♂</u> 59'38	-2°12'07
				min. Earth dist.	-12291 Jul 14 j 10:43	26° <u>♂</u> 00'14	28.84264 AU
conjunction	-12298 Dec 27 j 20:17	11° <u>♂</u> 20'53	-1°31'32	direct	-12291 Sep 30 j 09:18	24° <u>♂</u> 35'13	
minimum elong	-12298 Dec 27 j 20:16	11° <u>♂</u> 20'53	1°31'40	evening set	-12291 Dec 27 j 20:58	26° <u>♂</u> 29'55	
max. Earth dist.	-12298 Dec 28 j 12:08	11° <u>♂</u> 22'22	30.84999 AU				
morning rise	-12297 Jan 13 j 03:55	11° <u>♂</u> 57'06		conjunction	-12290 Jan 13 j 02:46	27° <u>♂</u> 05'55	-2°05'41
retrograde	-12297 Apr 14 j 04:59	13° <u>♂</u> 54'59		minimum elong	-12290 Jan 13 j 02:44	27° <u>♂</u> 05'55	2°06'00
opposition	-12297 Jul 02 j 03:01	12° <u>♂</u> 29'47	-1°40'48	max. Earth dist.	-12290 Jan 13 j 11:07	27° <u>♂</u> 06'42	30.83980 AU
min. Earth dist.	-12297 Jul 01 j 13:14	12° <u>♂</u> 30'46	28.85100 AU	morning rise	-12290 Jan 29 j 09:51	27° <u>♂</u> 42'04	
direct	-12297 Sep 17 j 11:40	11° <u>♂</u> 05'44		retrograde	-12290 Apr 29 j 18:52	29° <u>♂</u> 39'27	
evening set	-12297 Dec 14 j 05:19	12° <u>♂</u> 59'36		opposition	-12290 Jul 17 j 05:51	28° <u>♂</u> 14'33	-2°16'41
				min. Earth dist.	-12290 Jul 16 j 23:13	28° <u>♂</u> 15'02	28.84011 AU
conjunction	-12297 Dec 30 j 10:45	13° <u>♂</u> 35'36	-1°36'53	direct	-12290 Oct 02 j 20:18	26° <u>♂</u> 50'03	
minimum elong	-12297 Dec 30 j 10:44	13° <u>♂</u> 35'36	1°37'02	evening set	-12290 Dec 30 j 11:25	28° <u>♂</u> 44'52	
max. Earth dist.	-12297 Dec 31 j 02:37	13° <u>♂</u> 37'05	30.85020 AU				
morning rise	-12296 Jan 15 j 18:16	14° <u>♂</u> 11'49		conjunction	-12289 Jan 15 j 17:17	29° <u>♂</u> 20'52	-2°09'51
retrograde	-12296 Apr 15 j 17:40	16° <u>♂</u> 09'39		minimum elong	-12289 Jan 15 j 17:16	29° <u>♂</u> 20'52	2°10'12
opposition	-12296 Jul 03 j 13:36	14° <u>♂</u> 44'32	-1°46'27	max. Earth dist.	-12289 Jan 16 j 01:01	29° <u>♂</u> 21'35	30.83760 AU
min. Earth dist.	-12296 Jul 03 j 00:06	14° <u>♂</u> 45'29	28.85123 AU	morning rise	-12289 Feb 01 j 00:12	29° <u>♂</u> 56'59	
direct	-12296 Sep 19 j 00:07	13° <u>♂</u> 20'28			-12289 Feb 02 j 09:30	0° <u>♂</u>	
evening set	-12296 Dec 15 j 19:51	15° <u>♂</u> 14'29		retrograde	-12289 May 02 j 08:22	1° <u>♂</u> 54'16	
				opposition	-12289 Jul 19 j 16:19	0° <u>♂</u> 29'24	-2°21'02
conjunction	-12295 Jan 01 j 01:15	15° <u>♂</u> 50'29	-1°42'06	min. Earth dist.	-12289 Jul 19 j 09:28	0° <u>♂</u> 29'54	28.83841 AU
minimum elong	-12295 Jan 01 j 01:14	15° <u>♂</u> 50'29	1°42'17		-12289 Aug 06 j 05:11	30° <u>♂</u>	
max. Earth dist.	-12295 Jan 01 j 14:56	15° <u>♂</u> 51'46	30.85022 AU	direct	-12289 Oct 05 j 10:06	29° <u>♂</u> 04'49	
morning rise	-12295 Jan 17 j 08:55	16° <u>♂</u> 26'42			-12289 Dec 03 j 01:58	0° <u>♂</u>	
retrograde	-12295 Apr 18 j 06:57	18° <u>♂</u> 24'30		evening set	-12288 Jan 02 j 02:11	0° <u>♂</u> 59'46	
opposition	-12295 Jul 06 j 00:25	16° <u>♂</u> 59'27	-1°51'56				
min. Earth dist.	-12295 Jul 05 j 12:22	17° <u>♂</u> 00'18	28.85112 AU	conjunction	-12288 Jan 18 j 07:55	1° <u>♂</u> 35'45	-2°13'49
direct	-12295 Sep 21 j 10:36	15° <u>♂</u> 35'21		minimum elong	-12288 Jan 18 j 07:53	1° <u>♂</u> 35'45	2°14'11
evening set	-12295 Dec 18 j 10:18	17° <u>♂</u> 29'31		max. Earth dist.	-12288 Jan 18 j 14:14	1° <u>♂</u> 36'21	30.83631 AU
				morning rise	-12288 Feb 03 j 14:44	2° <u>♂</u> 11'51	
conjunction	-12294 Jan 03 j 15:56	18° <u>♂</u> 05'32	-1°47'09	retrograde	-12288 May 03 j 21:13	4° <u>♂</u> 09'03	
minimum elong	-12294 Jan 03 j 15:55	18° <u>♂</u> 05'32	1°47'22	opposition	-12288 Jul 21 j 02:49	2° <u>♂</u> 44'13	-2°25'10
max. Earth dist.	-12294 Jan 04 j 05:33	18° <u>♂</u> 06'48	30.84954 AU	min. Earth dist.	-12288 Jul 20 j 21:30	2° <u>♂</u> 44'35	28.83792 AU
morning rise	-12294 Jan 19 j 23:20	18° <u>♂</u> 41'44		direct	-12288 Oct 06 j 22:07	1° <u>♂</u> 19'34	
retrograde	-12294 Apr 20 j 18:48	20° <u>♂</u> 39'28		evening set	-12287 Jan 03 j 16:52	3° <u>♂</u> 14'39	
opposition	-12294 Jul 08 j 11:12	19° <u>♂</u> 14'29	-1°57'16				
min. Earth dist.	-12294 Jul 08 j 00:13	19° <u>♂</u> 15'16	28.85003 AU	conjunction	-12287 Jan 19 j 22:43	3° <u>♂</u> 50'38	-2°17'35
direct	-12294 Sep 23 j 22:11	17° <u>♂</u> 50'20		minimum elong	-12287 Jan 19 j 22:42	3° <u>♂</u> 50'38	2°17'59
evening set	-12294 Dec 21 j 00:56	19° <u>♂</u> 44'39		max. Earth dist.	-12287 Jan 20 j 04:59	3° <u>♂</u> 51'13	30.83639 AU
				morning rise	-12287 Feb 05 j 05:13	4° <u>♂</u> 26'43	
conjunction	-12293 Jan 06 j 06:32	20° <u>♂</u> 20'40	-1°52'03	retrograde	-12287 May 06 j 09:38	6° <u>♂</u> 23'48	
minimum elong	-12293 Jan 06 j 06:31	20° <u>♂</u> 20'39	1°52'18	opposition	-12287 Jul 23 j 13:19	4° <u>♂</u> 59'02	-2°29'05
max. Earth dist.	-12293 Jan 06 j 17:48	20° <u>♂</u> 21'43	30.84800 AU	min. Earth dist.	-12287 Jul 23 j 08:02	4° <u>♂</u> 59'24	28.83867 AU
morning rise	-12293 Jan 22 j 14:02	20° <u>♂</u> 56'51		direct	-12287 Oct 09 j 11:26	3° <u>♂</u> 34'20	
retrograde	-12293 Apr 23 j 08:01	22° <u>♂</u> 54'31		evening set	-12286 Jan 06 j 07:38	5° <u>♂</u> 29'33	
opposition	-12293 Jul 10 j 21:54	21° <u>♂</u> 29'34	-2°02'24				
min. Earth dist.	-12293 Jul 10 j 11:39	21° <u>♂</u> 30'18	28.84817 AU	conjunction	-12286 Jan 22 j 13:14	6° <u>♂</u> 05'32	-2°21'08
direct	-12293 Sep 26 j 08:38	20° <u>♂</u> 05'21		minimum elong	-12286 Jan 22 j 13:13	6° <u>♂</u> 05'31	2°21'33
evening set	-12293 Dec 23 j 15:30	21° <u>♂</u> 59'47		max. Earth dist.	-12286 Jan 22 j 17:41	6° <u>♂</u> 05'56	30.83773 AU
				morning rise	-12286 Feb 07 j 19:39	6° <u>♂</u> 41'35	
conjunction	-12292 Jan 08 j 21:18	22° <u>♂</u> 35'48	-1°56'47	retrograde	-12286 May 08 j 23:06	8° <u>♂</u> 38'36	
minimum elong	-12292 Jan 08 j 21:16	22° <u>♂</u> 35'48	1°57'02	opposition	-12286 Jul 25 j 23:52	7° <u>♂</u> 13'53	-2°32'46
max. Earth dist.	-12292 Jan 09 j 08:08	22° <u>♂</u> 36'48	30.84558 AU	min. Earth dist.	-12286 Jul 25 j 19:36	7° <u>♂</u> 14'12	28.84080 AU
morning rise	-12292 Jan 25 j 04:36	23° <u>♂</u> 11'59		direct	-12286 Oct 11 j 22:29	5° <u>♂</u> 49'10	

Attention, astronomical year style is used: The year -12285 in astronomical counting style is the year 12286 BCE in historical counting style.

evening set	-12285 Jan 08 j 22:19	7°M.44'31		conjunction	-12279 Feb 07 j 21:26	21°M.51'44	-2°39'44
				minimum elong	-12279 Feb 07 j 21:25	21°M.51'43	2°40'18
conjunction	-12285 Jan 25 j 04:02	8°M.20'30	-2°24'29	max. Earth dist.	-12279 Feb 07 j 17:42	21°M.51'23	30.85501 AU
minimum elong	-12285 Jan 25 j 04:01	8°M.20'30	2°24'55	morning rise	-12279 Feb 24 j 01:55	22°M.27'37	
max. Earth dist.	-12285 Jan 25 j 08:47	8°M.20'57	30.84033 AU	retrograde	-12279 May 24 j 10:23	24°M.23'54	
morning rise	-12285 Feb 10 j 10:03	8°M.56'32		opposition	-12279 Aug 10 j 01:49	22°M.59'40	-2°51'47
retrograde	-12285 May 11 j 11:24	10°M.53'28		min. Earth dist.	-12279 Aug 10 j 05:22	22°M.59'25	28.85763 AU
opposition	-12285 Jul 28 j 10:18	9°M.28'51	-2°36'13	direct	-12279 Oct 27 j 11:04	21°M.34'33	
min. Earth dist.	-12285 Jul 28 j 06:57	9°M.29'05	28.84388 AU	evening set	-12278 Jan 25 j 07:15	23°M.30'48	
direct	-12285 Oct 14 j 10:39	8°M.04'06					
evening set	-12284 Jan 11 j 13:15	9°M.59'36		conjunction	-12278 Feb 10 j 12:10	24°M.06'42	-2°41'26
				minimum elong	-12278 Feb 10 j 12:09	24°M.06'41	2°42'02
conjunction	-12284 Jan 27 j 18:46	10°M.35'35	-2°27'36	max. Earth dist.	-12278 Feb 10 j 08:01	24°M.06'18	30.85550 AU
minimum elong	-12284 Jan 27 j 18:44	10°M.35'35	2°28'04	morning rise	-12278 Feb 26 j 16:16	24°M.42'33	
max. Earth dist.	-12284 Jan 27 j 21:23	10°M.35'49	30.84375 AU	retrograde	-12278 May 26 j 22:24	26°M.38'42	
morning rise	-12284 Feb 13 j 00:44	11°M.11'36		opposition	-12278 Aug 12 j 12:16	25°M.14'29	-2°53'28
retrograde	-12284 May 13 j 00:05	13°M.08'27		min. Earth dist.	-12278 Aug 12 j 16:06	25°M.14'13	28.85816 AU
opposition	-12284 Jul 29 j 20:49	11°M.43'55	-2°39'26	direct	-12278 Oct 30 j 01:05	23°M.49'16	
min. Earth dist.	-12284 Jul 29 j 18:04	11°M.44'07	28.84757 AU	evening set	-12277 Jan 27 j 22:11	25°M.45'37	
direct	-12284 Oct 15 j 21:44	10°M.19'08					
evening set	-12283 Jan 13 j 04:14	12°M.14'49		conjunction	-12277 Feb 13 j 02:48	26°M.21'30	-2°42'54
				minimum elong	-12277 Feb 13 j 02:48	26°M.21'30	2°43'31
conjunction	-12283 Jan 29 j 09:45	12°M.50'46	-2°30'29	max. Earth dist.	-12277 Feb 12 j 20:43	26°M.20'56	30.85621 AU
minimum elong	-12283 Jan 29 j 09:44	12°M.50'46	2°30'59	morning rise	-12277 Mar 01 j 06:44	26°M.57'19	
max. Earth dist.	-12283 Jan 29 j 12:07	12°M.51'00	30.84726 AU	retrograde	-12277 May 29 j 11:19	28°M.53'19	
morning rise	-12283 Feb 14 j 15:17	13°M.26'47		opposition	-12277 Aug 14 j 22:39	27°M.29'08	-2°54'54
	-12283 Apr 07 j 19:25	15°M.		min. Earth dist.	-12277 Aug 15 j 03:40	27°M.28'47	28.85935 AU
retrograde	-12283 May 15 j 10:26	15°M.23'32		direct	-12277 Nov 01 j 13:09	26°M.03'50	
	-12283 Jun 22 j 11:44	15°R.M.		evening set	-12276 Jan 30 j 12:54	28°M.00'17	
opposition	-12283 Aug 01 j 07:24	13°M.59'06	-2°42'24				
min. Earth dist.	-12283 Aug 01 j 06:23	13°M.59'10	28.85103 AU	conjunction	-12276 Feb 15 j 17:34	28°M.36'09	-2°44'07
direct	-12283 Oct 18 j 09:26	12°M.34'17		minimum elong	-12276 Feb 15 j 17:33	28°M.36'09	2°44'45
evening set	-12282 Jan 15 j 19:21	14°M.30'06		max. Earth dist.	-12276 Feb 15 j 11:42	28°M.35'36	30.85775 AU
	-12282 Jan 29 j 07:46	15°M.		morning rise	-12276 Mar 02 j 21:02	29°M.11'57	
					-12276 Mar 26 j 07:52	0°J.	
conjunction	-12282 Feb 01 j 00:39	15°M.06'03	-2°33'09	retrograde	-12276 May 30 j 22:56	1°J.07'48	
minimum elong	-12282 Feb 01 j 00:38	15°M.06'03	2°33'40		-12276 Aug 06 j 18:44	30°R.M.	
max. Earth dist.	-12282 Feb 01 j 00:57	15°M.06'05	30.85049 AU	opposition	-12276 Aug 16 j 09:08	29°M.43'40	-2°56'04
morning rise	-12282 Feb 17 j 06:01	15°M.42'02		min. Earth dist.	-12276 Aug 16 j 14:58	29°M.43'15	28.86139 AU
retrograde	-12282 May 17 j 23:51	17°M.38'41		direct	-12276 Nov 03 j 02:44	28°M.18'18	
opposition	-12282 Aug 03 j 18:00	16°M.14'20	-2°45'08		-12275 Jan 25 j 05:40	0°J.	
min. Earth dist.	-12282 Aug 03 j 17:15	16°M.14'23	28.85398 AU	evening set	-12275 Feb 01 j 03:44	0°J.14'50	
	-12282 Sep 25 j 18:24	15°R.M.					
direct	-12282 Oct 20 j 21:19	14°M.49'28		conjunction	-12275 Feb 17 j 08:03	0°J.50'41	-2°45'05
	-12282 Nov 14 j 22:03	15°M.		minimum elong	-12275 Feb 17 j 08:02	0°J.50'41	2°45'43
evening set	-12281 Jan 18 j 10:16	16°M.45'24		max. Earth dist.	-12275 Feb 17 j 00:17	0°J.49'58	30.86042 AU
				morning rise	-12275 Mar 05 j 11:21	1°J.26'28	
conjunction	-12281 Feb 03 j 15:30	17°M.21'21	-2°35'35	retrograde	-12275 Jun 02 j 11:06	3°J.22'11	
minimum elong	-12281 Feb 03 j 15:29	17°M.21'21	2°36'07	opposition	-12275 Aug 18 j 19:33	1°J.58'07	-2°56'58
max. Earth dist.	-12281 Feb 03 j 14:52	17°M.21'17	30.85283 AU	min. Earth dist.	-12275 Aug 19 j 01:36	1°J.57'41	28.86485 AU
morning rise	-12281 Feb 19 j 20:31	17°M.57'18		direct	-12275 Nov 05 j 14:39	0°J.32'42	
retrograde	-12281 May 20 j 10:19	19°M.53'52		evening set	-12274 Feb 03 j 18:21	2°J.29'20	
opposition	-12281 Aug 06 j 04:43	18°M.29'33	-2°47'36				
min. Earth dist.	-12281 Aug 06 j 06:09	18°M.29'27	28.85595 AU	conjunction	-12274 Feb 19 j 22:38	3°J.05'11	-2°45'48
direct	-12281 Oct 23 j 08:16	17°M.04'37		minimum elong	-12274 Feb 19 j 22:38	3°J.05'11	2°46'27
evening set	-12280 Jan 21 j 01:20	19°M.00'40		max. Earth dist.	-12274 Feb 19 j 15:09	3°J.04'29	30.86453 AU
				morning rise	-12274 Mar 08 j 01:27	3°J.40'56	
conjunction	-12280 Feb 06 j 06:30	19°M.36'36	-2°37'47	retrograde	-12274 Jun 04 j 21:20	5°J.36'32	
minimum elong	-12280 Feb 06 j 06:28	19°M.36'35	2°38'19	opposition	-12274 Aug 21 j 06:05	4°J.12'33	-2°57'36
max. Earth dist.	-12280 Feb 06 j 04:27	19°M.36'24	30.85434 AU	min. Earth dist.	-12274 Aug 21 j 13:22	4°J.12'02	28.86974 AU
morning rise	-12280 Feb 22 j 11:15	20°M.12'31		direct	-12274 Nov 08 j 02:30	2°J.47'06	
retrograde	-12280 May 21 j 22:40	22°M.08'56		evening set	-12273 Feb 06 j 08:53	4°J.43'51	
opposition	-12280 Aug 07 j 15:09	20°M.44'41	-2°49'49				
min. Earth dist.	-12280 Aug 07 j 16:50	20°M.44'34	28.85703 AU	conjunction	-12273 Feb 22 j 12:56	5°J.19'41	-2°46'16
direct	-12280 Oct 24 j 22:43	19°M.19'39		minimum elong	-12273 Feb 22 j 12:56	5°J.19'41	2°46'55
evening set	-12279 Jan 22 j 16:29	21°M.15'49		max. Earth dist.	-12273 Feb 22 j 03:51	5°J.18'50	30.87021 AU
				morning rise	-12273 Mar 10 j 15:37	5°J.55'25	

Attention, astronomical year style is used: The year -12273 in astronomical counting style is the year 12274 BCE in historical counting style.

retrograde	-12273 Jun 07 j 10:22	7°♂50'55		minimum elong	-12266 Mar 10 j 17:51	21°♂02'49	2°43'09
opposition	-12273 Aug 23 j 16:29	6°♂27'02	-2°57'57	max. Earth dist.	-12266 Mar 10 j 01:09	21°♂01'16	30.91550 AU
min. Earth dist.	-12273 Aug 23 j 23:34	6°♂26'31	28.87603 AU	morning rise	-12266 Mar 26 j 18:18	21°♂38'22	
direct	-12273 Nov 10 j 13:58	5°♂01'34		retrograde	-12266 Jun 22 j 19:39	23°♂33'01	
evening set	-12272 Feb 08 j 23:33	6°♂58'26		opposition	-12266 Sep 07 j 18:46	22°♂09'42	-2°52'55
				min. Earth dist.	-12266 Sep 08 j 08:46	22°♂08'42	28.92036 AU
conjunction	-12272 Feb 25 j 03:30	7°♂34'16	-2°46'28	direct	-12266 Nov 26 j 07:30	20°♂44'02	
minimum elong	-12272 Feb 25 j 03:29	7°♂34'16	2°47'09	evening set	-12265 Feb 25 j 05:08	22°♂41'28	
max. Earth dist.	-12272 Feb 24 j 18:06	7°♂33'23	30.87698 AU				
morning rise	-12272 Mar 12 j 05:45	8°♂09'59		conjunction	-12265 Mar 13 j 07:55	23°♂17'13	-2°40'53
retrograde	-12272 Jun 08 j 20:11	10°♂05'22		minimum elong	-12265 Mar 13 j 07:56	23°♂17'13	2°41'36
opposition	-12272 Aug 25 j 02:59	8°♂41'36	-2°58'03	max. Earth dist.	-12265 Mar 12 j 15:27	23°♂15'41	30.92015 AU
min. Earth dist.	-12272 Aug 25 j 11:55	8°♂40'58	28.88325 AU	morning rise	-12265 Mar 29 j 07:56	23°♂52'44	
direct	-12272 Nov 12 j 00:22	7°♂16'09		retrograde	-12265 Jun 25 j 06:08	25°♂47'12	
evening set	-12271 Feb 10 j 14:16	9°♂13'09		opposition	-12265 Sep 10 j 05:28	24°♂23'56	-2°51'09
				min. Earth dist.	-12265 Sep 10 j 20:54	24°♂22'50	28.92503 AU
conjunction	-12271 Feb 26 j 18:01	9°♂48'57	-2°46'25	direct	-12265 Nov 28 j 20:46	22°♂58'13	
minimum elong	-12271 Feb 26 j 18:01	9°♂48'57	2°47'06	evening set	-12264 Feb 27 j 19:21	24°♂55'40	
max. Earth dist.	-12271 Feb 26 j 07:33	9°♂47'59	30.88454 AU				
morning rise	-12271 Mar 14 j 20:00	10°♂24'39		conjunction	-12264 Mar 14 j 21:48	25°♂31'23	-2°39'06
retrograde	-12271 Jun 11 j 08:03	12°♂19'56		minimum elong	-12264 Mar 14 j 21:49	25°♂31'23	2°39'50
opposition	-12271 Aug 27 j 13:30	10°♂56'17	-2°57'51	max. Earth dist.	-12264 Mar 14 j 03:38	25°♂29'41	30.92515 AU
min. Earth dist.	-12271 Aug 27 j 22:25	10°♂55'39	28.89087 AU	morning rise	-12264 Mar 30 j 21:40	26°♂06'53	
direct	-12271 Nov 14 j 14:15	9°♂30'50		retrograde	-12264 Jun 26 j 18:30	28°♂01'11	
evening set	-12270 Feb 13 j 04:50	11°♂27'57		opposition	-12264 Sep 11 j 15:57	26°♂37'57	-2°49'07
				min. Earth dist.	-12264 Sep 12 j 07:07	26°♂36'52	28.93033 AU
conjunction	-12270 Mar 01 j 08:21	12°♂03'45	-2°46'07	direct	-12264 Nov 30 j 09:26	25°♂12'10	
minimum elong	-12270 Mar 01 j 08:21	12°♂03'45	2°46'49	evening set	-12263 Mar 01 j 09:20	27°♂09'38	
max. Earth dist.	-12270 Feb 28 j 20:39	12°♂02'40	30.89204 AU				
morning rise	-12270 Mar 17 j 10:00	12°♂39'25		conjunction	-12263 Mar 17 j 11:42	27°♂45'21	-2°37'06
retrograde	-12270 Jun 13 j 19:24	14°♂34'37		minimum elong	-12263 Mar 17 j 11:42	27°♂45'21	2°37'49
opposition	-12270 Aug 30 j 00:13	13°♂11'04	-2°57'24	max. Earth dist.	-12263 Mar 16 j 17:36	27°♂43'40	30.93089 AU
min. Earth dist.	-12270 Aug 30 j 10:54	13°♂10'19	28.89831 AU	morning rise	-12263 Apr 02 j 11:06	28°♂20'49	
direct	-12270 Nov 17 j 01:41	11°♂45'36			-12263 May 30 j 15:10	0°♂	
evening set	-12269 Feb 15 j 19:26	13°♂42'49		retrograde	-12263 Jun 29 j 03:25	0°♂14'58	
					-12263 Jul 28 j 23:36	30°♂	
conjunction	-12269 Mar 03 j 22:52	14°♂18'37	-2°45'34	opposition	-12263 Sep 14 j 02:44	28°♂51'47	-2°46'51
minimum elong	-12269 Mar 03 j 22:52	14°♂18'37	2°46'16	min. Earth dist.	-12263 Sep 14 j 19:22	28°♂50'36	28.93664 AU
max. Earth dist.	-12269 Mar 03 j 10:30	14°♂17'28	30.89917 AU	direct	-12263 Dec 02 j 20:54	27°♂25'58	
morning rise	-12269 Mar 20 j 00:09	14°♂54'15		evening set	-12262 Mar 03 j 23:06	29°♂23'27	
retrograde	-12269 Jun 16 j 07:19	16°♂49'20		max. Earth dist.	-12262 Mar 19 j 06:24	29°♂57'23	30.93796 AU
opposition	-12269 Sep 01 j 10:44	15°♂25'52	-2°56'40				
min. Earth dist.	-12269 Sep 01 j 21:55	15°♂25'05	28.90494 AU	conjunction	-12262 Mar 20 j 01:12	29°♂59'08	-2°34'51
direct	-12269 Nov 19 j 15:18	14°♂00'23		minimum elong	-12262 Mar 20 j 01:12	29°♂59'08	2°35'35
evening set	-12268 Feb 18 j 10:10	15°♂57'41			-12262 Mar 20 j 10:25	0°♂	
				morning rise	-12262 Apr 05 j 00:23	0°♂34'35	
conjunction	-12268 Mar 05 j 13:19	16°♂33'28	-2°44'46	retrograde	-12262 Jul 01 j 14:07	1°♂28'36	
minimum elong	-12268 Mar 05 j 13:18	16°♂33'28	2°45'29	opposition	-12262 Sep 16 j 13:21	1°♂05'28	-2°44'19
max. Earth dist.	-12268 Mar 04 j 22:47	16°♂32'06	30.90536 AU	min. Earth dist.	-12262 Sep 17 j 05:26	1°♂04'20	28.94427 AU
morning rise	-12268 Mar 21 j 14:23	17°♂09'05			-12262 Oct 30 j 12:36	30°♂	
retrograde	-12268 Jun 17 j 20:18	19°♂04'02		direct	-12262 Dec 05 j 10:12	29°♂39'37	
opposition	-12268 Sep 02 j 21:29	17°♂40'37	-2°55'41		-12261 Jan 09 j 21:59	0°♂	
min. Earth dist.	-12268 Sep 03 j 09:59	17°♂39'44	28.91075 AU	evening set	-12261 Mar 06 j 12:55	1°♂37'09	
direct	-12268 Nov 21 j 04:13	16°♂15'05					
evening set	-12267 Feb 20 j 00:36	18°♂12'27		conjunction	-12261 Mar 22 j 14:49	2°♂12'50	-2°32'22
				minimum elong	-12261 Mar 22 j 14:50	2°♂12'50	2°33'06
conjunction	-12267 Mar 08 j 03:43	18°♂48'13	-2°43'43	max. Earth dist.	-12261 Mar 21 j 19:31	2°♂11'02	30.94630 AU
minimum elong	-12267 Mar 08 j 03:43	18°♂48'13	2°44'26	morning rise	-12261 Apr 07 j 13:40	2°♂48'15	
max. Earth dist.	-12267 Mar 07 j 13:07	18°♂46'52	30.91072 AU	retrograde	-12261 Jul 04 j 00:34	4°♂42'08	
morning rise	-12267 Mar 24 j 04:19	19°♂23'48		opposition	-12261 Sep 18 j 23:58	3°♂19'05	-2°41'33
retrograde	-12267 Jun 20 j 07:33	21°♂18'36		min. Earth dist.	-12261 Sep 19 j 17:18	3°♂17'52	28.95332 AU
opposition	-12267 Sep 05 j 08:12	19°♂55'15	-2°54'26	direct	-12261 Dec 07 j 20:39	1°♂53'15	
min. Earth dist.	-12267 Sep 05 j 21:47	19°♂54'17	28.91566 AU	evening set	-12260 Mar 08 j 02:41	3°♂50'49	
direct	-12267 Nov 23 j 18:57	18°♂29'40		max. Earth dist.	-12260 Mar 23 j 09:03	4°♂24'40	30.95606 AU
evening set	-12266 Feb 22 j 15:05	20°♂27'04					
				conjunction	-12260 Mar 24 j 04:28	4°♂26'29	-2°29'40
conjunction	-12266 Mar 10 j 17:51	21°♂02'49	-2°42'25	minimum elong	-12260 Mar 24 j 04:28	4°♂26'29	2°30'24

Attention, astronomical year style is used: The year -12260 in astronomical counting style is the year 12261 BCE in historical counting style.

morning rise	-12260 Apr 09 j 03:00	5°30'15.3	conjunction	-12253 Apr 10 j 01:26	20°30'24.1	-2°04'41
retrograde	-12260 Jul 05 j 11:31	6°35'53.9	minimum elong	-12253 Apr 10 j 01:27	20°30'24.1	2°05'22
opposition	-12260 Sep 20 j 10:42	5°33'24.3 -2°38'32	morning rise	-12253 Apr 25 j 21:52	20°33'7.56	
min. Earth dist.	-12260 Sep 21 j 03:57	5°33'13.0 28.96339 AU	retrograde	-12253 Jul 21 j 18:09	22°33'05.6	
direct	-12260 Dec 09 j 10:06	4°30'6.54	opposition	-12253 Oct 06 j 15:21	21°30'8.32	-2°11'04
evening set	-12259 Mar 10 j 16:25	6°30'43.1	min. Earth dist.	-12253 Oct 07 j 13:20	21°30'7.00	29.02459 AU
			direct	-12253 Dec 26 j 04:58	19°34'24.6	
			evening set	-12252 Mar 26 j 14:26	21°34'02.9	
conjunction	-12259 Mar 26 j 17:51	6°34'01.0 -2°26'43				
minimum elong	-12259 Mar 26 j 17:52	6°34'01.0 2°27'27				
max. Earth dist.	-12259 Mar 25 j 21:09	6°33'8.14 30.96659 AU	conjunction	-12252 Apr 11 j 14:20	22°31'6.03	-2°00'20
morning rise	-12259 Apr 11 j 16:08	7°31'53.3	minimum elong	-12252 Apr 11 j 14:21	22°31'6.03	2°01'02
retrograde	-12259 Jul 07 j 23:42	9°30'9.14	max. Earth dist.	-12252 Apr 10 j 13:02	22°31'3.41	31.02601 AU
opposition	-12259 Sep 22 j 21:32	7°34'6.24 -2°35'16	morning rise	-12252 Apr 27 j 10:23	22°35'1.16	
min. Earth dist.	-12259 Sep 23 j 15:36	7°34'5.07 28.97418 AU	retrograde	-12252 Jul 23 j 04:11	24°34'44.09	
direct	-12259 Dec 11 j 22:11	6°32'0.36	opposition	-12252 Oct 08 j 02:28	23°32'14.6	-2°06'20
evening set	-12258 Mar 13 j 06:00	8°31'8.17	min. Earth dist.	-12252 Oct 09 j 01:39	23°32'0.09	29.03074 AU
max. Earth dist.	-12258 Mar 28 j 11:02	8°35'2.02 30.97749 AU	direct	-12252 Dec 27 j 15:16	21°35'5.58	
			evening set	-12251 Mar 29 j 03:13	23°35'3.39	
			max. Earth dist.	-12251 Apr 13 j 01:42	24°36'2.50	31.03239 AU
conjunction	-12258 Mar 29 j 07:23	8°35'3.56 -2°23'34				
minimum elong	-12258 Mar 29 j 07:23	8°35'3.56 2°24'18				
morning rise	-12258 Apr 14 j 05:14	9°32'9.18	conjunction	-12251 Apr 14 j 02:51	24°32'9.11	-1°55'50
retrograde	-12258 Jul 10 j 10:40	11°32'2.53	minimum elong	-12251 Apr 14 j 02:52	24°32'9.11	1°56'30
opposition	-12258 Sep 25 j 08:23	10°30'0.09 -2°31'46	morning rise	-12251 Apr 29 j 22:34	25°30'4.23	
min. Earth dist.	-12258 Sep 26 j 03:21	9°35'8.49 28.98485 AU	retrograde	-12251 Jul 25 j 13:45	26°35'7.09	
direct	-12258 Dec 14 j 12:06	8°33'4.24	opposition	-12251 Oct 10 j 13:32	25°33'4.48	-2°01'25
evening set	-12257 Mar 15 j 19:41	10°33'2.08	min. Earth dist.	-12251 Oct 11 j 12:21	25°33'3.12	29.03721 AU
			direct	-12251 Dec 30 j 05:14	24°30'8.59	
			evening set	-12250 Mar 31 j 15:59	26°30'6.37	
conjunction	-12257 Mar 31 j 20:41	11°30'7.45 -2°20'11				
minimum elong	-12257 Mar 31 j 20:42	11°30'7.45 2°20'54				
max. Earth dist.	-12257 Mar 30 j 22:28	11°30'5.41 30.98799 AU	conjunction	-12250 Apr 16 j 15:16	26°34'2.08	-1°51'09
morning rise	-12257 Apr 16 j 18:25	11°34'3.06	minimum elong	-12250 Apr 16 j 15:17	26°34'2.08	1°51'49
retrograde	-12257 Jul 12 j 23:17	13°36'3.6	max. Earth dist.	-12250 Apr 15 j 13:14	26°33'9.42	31.03934 AU
opposition	-12257 Sep 27 j 19:18	12°31'3.57 -2°28'03	morning rise	-12250 May 02 j 10:42	27°31'7.19	
min. Earth dist.	-12257 Sep 28 j 14:36	12°31'2.36 28.99491 AU	retrograde	-12250 Jul 28 j 00:44	29°30'9.59	
direct	-12257 Dec 17 j 00:24	10°34'8.13	opposition	-12250 Oct 13 j 00:31	27°34'7.39	-1°56'20
evening set	-12256 Mar 17 j 09:14	12°34'6.00	min. Earth dist.	-12250 Oct 13 j 23:41	27°34'6.02	29.04469 AU
			direct	-12249 Jan 01 j 16:45	26°32'14.9	
			evening set	-12249 Apr 03 j 04:29	28°31'9.26	
			max. Earth dist.	-12249 Apr 18 j 02:29	28°35'2.35	31.04741 AU
conjunction	-12256 Apr 02 j 10:10	13°32'1.37 -2°16'36				
minimum elong	-12256 Apr 02 j 10:11	13°32'1.37 2°17'19				
max. Earth dist.	-12256 Apr 01 j 12:10	13°31'9.33 30.99751 AU	conjunction	-12249 Apr 19 j 03:38	28°35'4.56	-1°46'18
morning rise	-12256 Apr 18 j 07:23	13°35'6.56	minimum elong	-12249 Apr 19 j 03:38	28°35'4.56	1°46'57
retrograde	-12256 Jul 14 j 10:09	15°35'0.19	morning rise	-12249 May 04 j 22:39	29°30'0.5	
opposition	-12256 Sep 29 j 06:23	14°32'7.46 -2°24'07		-12249 May 19 j 02:15	0°	
min. Earth dist.	-12256 Sep 30 j 03:11	14°32'6.18 29.00377 AU	retrograde	-12249 Jul 30 j 10:36	1°22'2.39	
direct	-12256 Dec 18 j 14:13	13°30'2.03	opposition	-12249 Oct 15 j 11:38	0°00'0.22	-1°51'04
evening set	-12255 Mar 19 j 22:52	14°35'9.49		-12249 Oct 15 j 16:49	30°30'	
			min. Earth dist.	-12249 Oct 16 j 11:03	29°35'8.44	29.05313 AU
			direct	-12248 Jan 04 j 06:06	28°33'4.33	
				-12248 Mar 20 j 10:25	0°	
			evening set	-12248 Apr 04 j 17:05	0°32'0.9	
conjunction	-12255 Apr 04 j 23:24	15°35'3.26 -2°12'49				
minimum elong	-12255 Apr 04 j 23:25	15°35'3.26 2°13'31				
max. Earth dist.	-12255 Apr 03 j 23:33	15°33'3.12 31.00595 AU	conjunction	-12248 Apr 20 j 15:45	1°07'3.7	-1°41'18
morning rise	-12255 Apr 20 j 20:28	16°31'0.43	minimum elong	-12248 Apr 20 j 15:46	1°07'3.7	1°41'57
retrograde	-12255 Jul 16 j 22:48	18°30'3.59	max. Earth dist.	-12248 Apr 19 j 13:33	1°05'1.0	31.05656 AU
opposition	-12255 Oct 01 j 17:25	16°34'1.30 -2°19'58	morning rise	-12248 May 06 j 10:33	1°42'4.5	
min. Earth dist.	-12255 Oct 02 j 13:59	16°34'0.03 29.01157 AU	retrograde	-12248 Jul 31 j 22:42	3°35'1.5	
direct	-12255 Dec 21 j 03:29	15°31'5.46	opposition	-12248 Oct 16 j 22:44	2°13'0.1	-1°45'39
evening set	-12254 Mar 22 j 12:03	17°31'3.33	min. Earth dist.	-12248 Oct 17 j 21:41	2°11'1.25	29.06276 AU
			direct	-12247 Jan 05 j 17:54	0°47'1.4	
			evening set	-12247 Apr 07 j 05:27	2°44'4.50	
			max. Earth dist.	-12247 Apr 22 j 02:53	3°17'5.6	31.06673 AU
conjunction	-12254 Apr 07 j 12:29	17°34'9.08 -2°08'51				
minimum elong	-12254 Apr 07 j 12:30	17°34'9.08 2°09'34				
max. Earth dist.	-12254 Apr 06 j 12:37	17°34'6.54 31.01326 AU	conjunction	-12247 Apr 23 j 03:58	3°20'1.7	-1°36'09
morning rise	-12254 Apr 23 j 09:06	18°32'4.25	minimum elong	-12247 Apr 23 j 03:59	3°20'1.7	1°36'46
retrograde	-12254 Jul 19 j 07:45	20°31'7.33	morning rise	-12247 May 08 j 22:15	3°55'2.3	
opposition	-12254 Oct 04 j 04:32	18°35'5.07 -2°15'37	retrograde	-12247 Aug 03 j 09:37	5°47'4.9	
min. Earth dist.	-12254 Oct 05 j 02:50	18°35'3.33 29.01839 AU				
direct	-12254 Dec 23 j 15:37	17°32'9.22				
evening set	-12253 Mar 25 j 01:18	19°32'7.07				
max. Earth dist.	-12253 Apr 09 j 00:35	20°30'0.22 31.01988 AU				

Attention, astronomical year style is used: The year -12247 in astronomical counting style is the year 12248 BCE in historical counting style.

opposition	-12247 Oct 19 j 10:02	4°25'40	-1°40'04	max. Earth dist.	-12240 May 07 j 11:41	18°45'19	31.12612 AU
min. Earth dist.	-12247 Oct 20 j 09:50	4°24'00	29.07315 AU				
direct	-12246 Jan 08 j 08:01	2°59'56		conjunction	-12240 May 08 j 14:25	18°47'49	-0°56'38
evening set	-12246 Apr 09 j 17:46	4°57'31		minimum elong	-12240 May 08 j 14:25	18°47'49	0°57'08
				morning rise	-12240 May 24 j 06:02	19°22'44	
conjunction	-12246 Apr 25 j 15:48	5°32'57	-1°30'52	retrograde	-12240 Aug 18 j 09:30	21°14'45	
minimum elong	-12246 Apr 25 j 15:49	5°32'57	1°31'29	opposition	-12240 Nov 03 j 18:05	19°52'49	-0°57'25
max. Earth dist.	-12246 Apr 24 j 13:39	5°30'30	31.07747 AU	min. Earth dist.	-12240 Nov 04 j 19:36	19°51'04	29.12936 AU
morning rise	-12246 May 11 j 09:56	6°08'02		direct	-12239 Jan 23 j 23:46	18°27'15	
retrograde	-12246 Aug 05 j 21:53	8°00'24		evening set	-12239 Apr 25 j 06:16	20°24'29	
opposition	-12246 Oct 21 j 21:13	6°38'19	-1°34'20	max. Earth dist.	-12239 May 09 j 21:58	20°57'08	31.13146 AU
min. Earth dist.	-12246 Oct 22 j 20:19	6°36'43	29.08380 AU				
direct	-12245 Jan 10 j 21:17	5°12'39		conjunction	-12239 May 11 j 01:34	20°59'43	-0°50'37
evening set	-12245 Apr 12 j 06:04	7°10'13		minimum elong	-12239 May 11 j 01:34	20°59'43	0°51'05
max. Earth dist.	-12245 Apr 27 j 02:10	7°43'13	31.08797 AU	morning rise	-12239 May 26 j 16:56	21°34'36	
				retrograde	-12239 Aug 20 j 21:07	23°26'34	
conjunction	-12245 Apr 28 j 03:53	7°45'38	-1°25'26	opposition	-12239 Nov 06 j 05:34	22°04'37	-0°50'56
minimum elong	-12245 Apr 28 j 03:54	7°45'38	1°26'01	min. Earth dist.	-12239 Nov 07 j 06:26	22°02'55	29.13478 AU
morning rise	-12245 May 13 j 21:29	8°20'41		direct	-12238 Jan 26 j 11:34	20°39'03	
retrograde	-12245 Aug 08 j 07:24	10°13'01		evening set	-12238 Apr 27 j 17:33	22°36'12	
opposition	-12245 Oct 24 j 08:33	8°50'59	-1°28'27	max. Earth dist.	-12238 May 12 j 10:24	23°08'57	31.13706 AU
min. Earth dist.	-12245 Oct 25 j 09:06	8°49'17	29.09397 AU				
direct	-12244 Jan 13 j 09:26	7°25'22		conjunction	-12238 May 13 j 12:35	23°11'24	-0°44'31
evening set	-12244 Apr 13 j 18:28	9°22'55		minimum elong	-12238 May 13 j 12:36	23°11'24	0°44'59
				morning rise	-12238 May 29 j 03:23	23°46'15	
conjunction	-12244 Apr 29 j 15:50	9°58'18	-1°19'53	retrograde	-12238 Aug 23 j 07:15	25°38'11	
minimum elong	-12244 Apr 29 j 15:51	9°58'18	1°20'27	opposition	-12238 Nov 08 j 17:11	24°16'14	-0°44'24
max. Earth dist.	-12244 Apr 28 j 13:24	9°55'49	31.09784 AU	min. Earth dist.	-12238 Nov 09 j 18:33	24°14'29	29.14061 AU
morning rise	-12244 May 15 j 09:09	10°33'20		direct	-12237 Jan 29 j 01:27	22°50'40	
retrograde	-12244 Aug 09 j 18:27	12°25'35		evening set	-12237 Apr 30 j 05:01	24°47'46	
opposition	-12244 Oct 25 j 20:00	11°03'38	-1°22'28				
min. Earth dist.	-12244 Oct 26 j 19:58	11°01'58	29.10319 AU	conjunction	-12237 May 15 j 23:25	25°22'56	-0°38'23
direct	-12243 Jan 14 j 23:00	9°38'03		minimum elong	-12237 May 15 j 23:26	25°22'56	0°38'48
evening set	-12243 Apr 16 j 06:37	11°35'33		max. Earth dist.	-12237 May 14 j 20:38	25°20'25	31.14340 AU
max. Earth dist.	-12243 May 01 j 00:56	12°08'25	31.10650 AU	morning rise	-12237 May 31 j 13:56	25°57'45	
				retrograde	-12237 Aug 25 j 18:54	27°49'39	
conjunction	-12243 May 02 j 03:37	12°10'54	-1°14'13	opposition	-12237 Nov 11 j 04:35	26°27'42	-0°37'48
minimum elong	-12243 May 02 j 03:38	12°10'54	1°14'46	min. Earth dist.	-12237 Nov 12 j 04:36	26°26'03	29.14740 AU
morning rise	-12243 May 17 j 20:28	12°45'54		direct	-12236 Jan 31 j 14:19	25°02'10	
retrograde	-12243 Aug 12 j 04:39	14°38'07		evening set	-12236 May 01 j 16:15	26°59'13	
opposition	-12243 Oct 28 j 07:37	13°16'11	-1°16'21	max. Earth dist.	-12236 May 16 j 08:41	27°31'57	31.15077 AU
min. Earth dist.	-12243 Oct 29 j 08:40	13°14'27	29.11129 AU				
direct	-12242 Jan 17 j 09:58	11°50'37		conjunction	-12236 May 17 j 10:19	27°34'21	-0°32'11
evening set	-12242 Apr 18 j 18:44	13°48'04		minimum elong	-12236 May 17 j 10:19	27°34'21	0°32'36
				morning rise	-12236 Jun 02 j 00:13	28°09'08	
conjunction	-12242 May 04 j 15:23	14°23'23	-1°08'26				
minimum elong	-12242 May 04 j 15:24	14°23'23	1°09'00	retrograde	-12236 Aug 19 j 09:32	0°38'	
max. Earth dist.	-12242 May 03 j 12:45	14°20'54	31.11408 AU				
morning rise	-12242 May 20 j 07:52	14°58'22					
	-12242 May 21 j 01:48	15°00'					
retrograde	-12242 Aug 14 j 13:46	16°50'30					
opposition	-12242 Oct 30 j 18:58	15°28'36	-1°10'07				
min. Earth dist.	-12242 Oct 31 j 19:49	15°26'52	29.11812 AU				
	-12242 Nov 17 j 08:30	15°00'					
direct	-12241 Jan 19 j 23:48	14°03'02		conjunction	-12235 May 19 j 20:51	29°45'45	-0°25'56
	-12241 Mar 22 j 01:22	15°00'		minimum elong	-12235 May 19 j 20:52	29°45'45	0°26'19
evening set	-12241 Apr 21 j 06:47	16°00'24		max. Earth dist.	-12235 May 18 j 19:26	29°43'22	31.15941 AU
max. Earth dist.	-12241 May 05 j 23:20	16°33'07	31.12047 AU				
conjunction	-12241 May 07 j 02:58	16°35'43	-1°02'35	morning rise	-12235 Jun 04 j 10:26	0°38'20'30	
minimum elong	-12241 May 07 j 02:59	16°35'43	1°03'06	retrograde	-12235 Aug 29 j 15:21	2°12'25	
morning rise	-12241 May 22 j 19:07	17°10'39		opposition	-12235 Nov 15 j 03:59	0°50'33	-0°24'27
retrograde	-12241 Aug 17 j 00:16	19°02'44		min. Earth dist.	-12235 Nov 16 j 03:13	0°48'57	29.16435 AU
opposition	-12241 Nov 02 j 06:29	17°40'49	-1°03'49				
min. Earth dist.	-12241 Nov 03 j 07:45	17°39'04	29.12408 AU	direct	-12234 Feb 04 j 15:59	29°25'10	
direct	-12240 Jan 22 j 10:47	16°15'15					
evening set	-12240 Apr 22 j 18:31	18°12'33		evening set	-12234 Mar 23 j 17:53	0°38'	
				max. Earth dist.	-12234 May 21 j 06:32	1°54'51	31.16878 AU

Attention, astronomical year style is used: The year -12234 in astronomical counting style is the year 12235 BCE in historical counting style.

conjunction	-12234 May 22 j 07:30	1° ✠ 57'12	-0°19'40	direct	-12228 Feb 18 j 14:30	12° ✠ 35'05	
minimum elong	-12234 May 22 j 07:30	1° ✠ 57'12	0°20'02	evening set	-12228 May 19 j 08:12	14° ✠ 31'42	
morning rise	-12234 Jun 06 j 20:34	2° ✠ 31'55					
retrograde	-12234 Sep 01 j 01:46	4° ✠ 23'52		conjunction	-12228 Jun 03 j 21:51	15° ✠ 06'31	0°18'21
opposition	-12234 Nov 17 j 15:36	3° ✠ 02'03	-0°17'43	minimum elong	-12228 Jun 03 j 21:51	15° ✠ 06'31	0°18'08
min. Earth dist.	-12234 Nov 18 j 15:22	3° ✠ 00'25	29.17399 AU	max. Earth dist.	-12228 Jun 02 j 22:01	15° ✠ 04'17	31.21447 AU
direct	-12233 Feb 07 j 02:42	1° ✠ 36'45		morning rise	-12228 Jun 19 j 08:06	15° ✠ 41'04	
evening set	-12233 May 09 j 01:32	3° ✠ 33'41		retrograde	-12228 Sep 13 j 16:08	17° ✠ 33'13	
				opposition	-12228 Nov 30 j 15:45	16° ✠ 11'25	0°22'51
conjunction	-12233 May 24 j 18:04	4° ✠ 08'43	-0°13'21	min. Earth dist.	-12228 Dec 01 j 13:30	16° ✠ 09'56	29.21689 AU
minimum elong	-12233 May 24 j 18:05	4° ✠ 08'43	0°13'41	direct	-12227 Feb 20 j 02:36	14° ✠ 46'27	
behind sun begin	-12233 May 24 j 14:33	4° ✠ 08'24		evening set	-12227 May 21 j 18:39	16° ✠ 42'58	
behind sun end	-12233 May 24 j 21:36	4° ✠ 09'02		max. Earth dist.	-12227 Jun 05 j 09:06	17° ✠ 15'37	31.21857 AU
max. Earth dist.	-12233 May 23 j 17:51	4° ✠ 06'27	31.17852 AU				
morning rise	-12233 Jun 09 j 06:41	4° ✠ 43'25		conjunction	-12227 Jun 06 j 07:51	17° ✠ 17'45	0°24'37
retrograde	-12233 Sep 03 j 10:45	6° ✠ 35'24		minimum elong	-12227 Jun 06 j 07:51	17° ✠ 17'45	0°24'27
opposition	-12233 Nov 20 j 03:27	5° ✠ 13'38	-0°10'57	morning rise	-12227 Jun 21 j 17:29	17° ✠ 52'15	
min. Earth dist.	-12233 Nov 21 j 02:29	5° ✠ 12'03	29.18349 AU	retrograde	-12227 Sep 16 j 02:05	19° ✠ 44'25	
direct	-12232 Feb 09 j 15:56	3° ✠ 48'26		opposition	-12227 Dec 03 j 04:00	18° ✠ 22'35	0°29'32
evening set	-12232 May 10 j 12:36	5° ✠ 45'19		min. Earth dist.	-12227 Dec 04 j 02:23	18° ✠ 21'03	29.22084 AU
max. Earth dist.	-12232 May 25 j 03:46	6° ✠ 18'00	31.18777 AU	direct	-12226 Feb 22 j 15:26	16° ✠ 57'38	
				evening set	-12226 May 24 j 05:11	18° ✠ 54'02	
conjunction	-12232 May 26 j 04:30	6° ✠ 20'19	-0°07'03				
minimum elong	-12232 May 26 j 04:29	6° ✠ 20'19	0°07'22	conjunction	-12226 Jun 08 j 17:43	19° ✠ 28'46	0°30'51
behind sun begin	-12232 May 25 j 22:34	6° ✠ 19'47		minimum elong	-12226 Jun 08 j 17:43	19° ✠ 28'46	0°30'41
behind sun end	-12232 May 26 j 10:24	6° ✠ 20'51		max. Earth dist.	-12226 Jun 07 j 19:19	19° ✠ 26'40	31.22248 AU
morning rise	-12232 Jun 10 j 16:40	6° ✠ 54'59		morning rise	-12226 Jun 24 j 02:57	20° ✠ 03'13	
retrograde	-12232 Sep 04 j 21:16	8° ✠ 47'01		retrograde	-12226 Sep 18 j 13:08	21° ✠ 55'25	
opposition	-12232 Nov 21 j 15:27	7° ✠ 25'16	-0°04'11	opposition	-12226 Dec 05 j 15:55	20° ✠ 33'32	0°36'10
min. Earth dist.	-12232 Nov 22 j 14:28	7° ✠ 23'42	29.19247 AU	min. Earth dist.	-12226 Dec 06 j 12:50	20° ✠ 32'06	29.22475 AU
direct	-12231 Feb 11 j 02:00	6° ✠ 00'09		direct	-12225 Feb 25 j 05:35	19° ✠ 08'36	
evening set	-12231 May 12 j 23:33	7° ✠ 56'59		evening set	-12225 May 26 j 15:35	21° ✠ 04'55	
				max. Earth dist.	-12225 Jun 10 j 05:45	21° ✠ 37'34	31.22651 AU
conjunction	-12231 May 28 j 15:01	8° ✠ 31'57	-0°00'41				
minimum elong	-12231 May 28 j 15:01	8° ✠ 31'57	0°00'58	conjunction	-12225 Jun 11 j 03:32	21° ✠ 39'36	0°37'02
behind sun begin	-12231 May 28 j 08:35	8° ✠ 31'23		minimum elong	-12225 Jun 11 j 03:31	21° ✠ 39'36	0°36'55
behind sun end	-12231 May 28 j 21:28	8° ✠ 32'32		morning rise	-12225 Jun 26 j 12:13	22° ✠ 14'01	
max. Earth dist.	-12231 May 27 j 15:27	8° ✠ 29'45	31.19626 AU	retrograde	-12225 Sep 20 j 23:26	24° ✠ 06'15	
morning rise	-12231 Jun 13 j 02:36	9° ✠ 06'36		opposition	-12225 Dec 08 j 04:11	22° ✠ 44'19	0°42'45
asc. node	-12231 Jul 05 j 19:41	9° ✠ 53'26		min. Earth dist.	-12225 Dec 09 j 01:07	22° ✠ 42'54	29.22925 AU
retrograde	-12231 Sep 07 j 06:44	10° ✠ 58'40		direct	-12224 Feb 27 j 17:17	21° ✠ 19'25	
opposition	-12231 Nov 24 j 03:30	9° ✠ 36'56	0°02'36	evening set	-12224 May 28 j 01:46	23° ✠ 15'39	
min. Earth dist.	-12231 Nov 25 j 02:39	9° ✠ 35'21	29.20035 AU				
direct	-12230 Feb 13 j 13:59	8° ✠ 11'53		conjunction	-12224 Jun 12 j 13:09	23° ✠ 50'17	0°43'09
evening set	-12230 May 15 j 10:31	10° ✠ 08'39		minimum elong	-12224 Jun 12 j 13:08	23° ✠ 50'17	0°43'02
max. Earth dist.	-12230 May 30 j 00:51	10° ✠ 41'17	31.20356 AU	max. Earth dist.	-12224 Jun 11 j 16:45	23° ✠ 48'22	31.23139 AU
				morning rise	-12224 Jun 27 j 21:16	24° ✠ 24'39	
conjunction	-12230 May 31 j 01:19	10° ✠ 43'34	0°05'46	retrograde	-12224 Sep 22 j 08:05	26° ✠ 16'57	
minimum elong	-12230 May 31 j 01:18	10° ✠ 43'34	0°05'30	opposition	-12224 Dec 09 j 16:27	24° ✠ 55'00	0°49'16
behind sun begin	-12230 May 30 j 19:05	10° ✠ 43'01		min. Earth dist.	-12224 Dec 10 j 11:56	24° ✠ 53'40	29.23454 AU
behind sun end	-12230 May 31 j 07:31	10° ✠ 44'08		direct	-12223 Mar 01 j 06:35	23° ✠ 30'10	
morning rise	-12230 Jun 15 j 12:33	11° ✠ 18'11		evening set	-12223 May 30 j 12:02	25° ✠ 26'18	
retrograde	-12230 Sep 09 j 18:24	13° ✠ 10'17					
opposition	-12230 Nov 26 j 15:30	11° ✠ 48'33	0°09'23	conjunction	-12223 Jun 14 j 22:43	26° ✠ 00'54	0°49'13
min. Earth dist.	-12230 Nov 27 j 13:59	11° ✠ 47'01	29.20704 AU	minimum elong	-12223 Jun 14 j 22:42	26° ✠ 00'54	0°49'08
direct	-12229 Feb 16 j 01:30	10° ✠ 23'33		max. Earth dist.	-12223 Jun 14 j 02:22	25° ✠ 58'59	31.23717 AU
evening set	-12229 May 17 j 21:20	12° ✠ 20'14		morning rise	-12223 Jun 30 j 06:26	26° ✠ 35'14	
				retrograde	-12223 Sep 24 j 18:34	28° ✠ 27'37	
conjunction	-12229 Jun 02 j 11:42	12° ✠ 55'07	0°12'04	opposition	-12223 Dec 12 j 04:39	27° ✠ 05'39	0°55'43
minimum elong	-12229 Jun 02 j 11:42	12° ✠ 55'07	0°11'50	min. Earth dist.	-12223 Dec 12 j 23:27	27° ✠ 04'22	29.24094 AU
behind sun begin	-12229 Jun 02 j 07:10	12° ✠ 54'43		direct	-12222 Mar 03 j 16:54	25° ✠ 40'54	
behind sun end	-12229 Jun 02 j 16:14	12° ✠ 55'32		evening set	-12222 Jun 01 j 22:03	27° ✠ 36'58	
max. Earth dist.	-12229 Jun 01 j 12:29	12° ✠ 52'56	31.20954 AU				
morning rise	-12229 Jun 17 j 22:17	13° ✠ 29'41		conjunction	-12222 Jun 17 j 08:18	28° ✠ 11'32	0°55'12
retrograde	-12229 Sep 12 j 04:32	15° ✠ 21'49		minimum elong	-12222 Jun 17 j 08:17	28° ✠ 11'32	0°55'09
opposition	-12229 Nov 29 j 03:38	14° ✠ 00'04	0°16'08	max. Earth dist.	-12222 Jun 16 j 13:47	28° ✠ 09'48	31.24389 AU
min. Earth dist.	-12229 Nov 30 j 02:44	13° ✠ 58'30	29.21240 AU	morning rise	-12222 Jul 02 j 15:25	28° ✠ 45'50	

Attention, astronomical year style is used: The year -12222 in astronomical counting style is the year 12223 BCE in historical counting style.

	-12222 Aug 10 j 04:20	0°♊		evening set	-12215 Jun 16 j 20:18	12°♊53'58	
retrograde	-12222 Sep 27 j 03:55	0°♊38'19		max. Earth dist.	-12215 Jul 01 j 11:52	13°♊26'51	31.27500 AU
	-12222 Nov 16 j 11:00	30°♊					
opposition	-12222 Dec 14 j 16:59	29°♊16'22	1°02'05	conjunction	-12215 Jul 02 j 02:19	13°♊28'13	1°34'29
min. Earth dist.	-12222 Dec 15 j 11:17	29°♊15'07	29.24784 AU	minimum elong	-12215 Jul 02 j 02:18	13°♊28'13	1°34'38
direct	-12221 Mar 06 j 04:55	27°♊51'42		morning rise	-12215 Jul 17 j 06:04	14°♊02'18	
evening set	-12221 Jun 04 j 08:14	29°♊47'44		retrograde	-12215 Oct 12 j 08:59	15°♊55'33	
	-12221 Jun 09 j 20:49	0°♊		opposition	-12215 Dec 30 j 09:12	14°♊33'28	1°43'39
				min. Earth dist.	-12215 Dec 30 j 23:14	14°♊32'31	29.27593 AU
conjunction	-12221 Jun 19 j 17:41	0°♊22'15	1°01'07	direct	-12214 Mar 21 j 17:13	13°♊09'19	
minimum elong	-12221 Jun 19 j 17:40	0°♊22'15	1°01'07	evening set	-12214 Jun 19 j 06:04	15°♊04'52	
max. Earth dist.	-12221 Jun 18 j 22:55	0°♊20'29	31.25093 AU				
morning rise	-12221 Jul 05 j 00:26	0°♊56'32		conjunction	-12214 Jul 04 j 11:25	15°♊39'05	1°39'36
retrograde	-12221 Sep 29 j 15:32	2°♊49'07		minimum elong	-12214 Jul 04 j 11:24	15°♊39'04	1°39'46
opposition	-12221 Dec 17 j 05:19	1°♊27'11	1°08'21	max. Earth dist.	-12214 Jul 03 j 20:48	15°♊37'42	31.27486 AU
min. Earth dist.	-12221 Dec 17 j 22:25	1°♊26'01	29.25495 AU	morning rise	-12214 Jul 19 j 14:52	16°♊13'08	
direct	-12220 Mar 07 j 15:28	0°♊02'37		retrograde	-12214 Oct 14 j 19:35	18°♊06'29	
evening set	-12220 Jun 05 j 18:17	1°♊58'37		opposition	-12213 Jan 01 j 21:55	16°♊44'19	1°49'03
max. Earth dist.	-12220 Jun 20 j 10:14	2°♊31'29	31.25778 AU	min. Earth dist.	-12213 Jan 02 j 11:17	16°♊43'25	29.27572 AU
				direct	-12213 Mar 24 j 04:38	15°♊20'11	
conjunction	-12220 Jun 21 j 03:17	2°♊33'05	1°06'57	evening set	-12213 Jun 21 j 15:34	17°♊15'38	
minimum elong	-12220 Jun 21 j 03:16	2°♊33'05	1°06'57				
morning rise	-12220 Jul 06 j 09:22	3°♊07'20		conjunction	-12213 Jul 06 j 20:29	17°♊49'48	1°44'35
retrograde	-12220 Oct 01 j 01:59	5°♊00'03		minimum elong	-12213 Jul 06 j 20:28	17°♊49'48	1°44'48
opposition	-12220 Dec 18 j 17:58	3°♊38'07	1°14'32	max. Earth dist.	-12213 Jul 06 j 07:52	17°♊48'36	31.27443 AU
min. Earth dist.	-12220 Dec 19 j 11:16	3°♊36'57	29.26157 AU	morning rise	-12213 Jul 21 j 23:21	18°♊23'49	
direct	-12219 Mar 10 j 02:59	2°♊13'40		retrograde	-12213 Oct 17 j 04:43	20°♊17'16	
evening set	-12219 Jun 08 j 04:21	4°♊09'37		opposition	-12212 Jan 04 j 10:42	18°♊55'02	1°54'18
				min. Earth dist.	-12212 Jan 04 j 23:18	18°♊54'10	29.27540 AU
conjunction	-12219 Jun 23 j 12:36	4°♊44'02	1°12'41	direct	-12212 Mar 25 j 17:32	17°♊30'55	
minimum elong	-12219 Jun 23 j 12:35	4°♊44'02	1°12'44	evening set	-12212 Jun 23 j 01:13	19°♊26'16	
max. Earth dist.	-12219 Jun 22 j 19:19	4°♊42'24	31.26395 AU				
morning rise	-12219 Jul 08 j 18:21	5°♊18'15		conjunction	-12212 Jul 08 j 05:24	20°♊00'23	1°49'24
retrograde	-12219 Oct 03 j 14:06	7°♊11'06		minimum elong	-12212 Jul 08 j 05:23	20°♊00'23	1°49'37
opposition	-12219 Dec 21 j 06:29	5°♊49'10	1°20'37	max. Earth dist.	-12212 Jul 07 j 16:52	19°♊59'12	31.27434 AU
min. Earth dist.	-12219 Dec 21 j 22:16	5°♊48'06	29.26723 AU	morning rise	-12212 Jul 23 j 08:01	20°♊34'23	
direct	-12218 Mar 12 j 13:56	4°♊24'48		retrograde	-12212 Oct 18 j 15:36	22°♊27'57	
evening set	-12218 Jun 10 j 14:26	6°♊20'42		opposition	-12211 Jan 05 j 23:26	21°♊05'38	1°59'23
				min. Earth dist.	-12211 Jan 06 j 10:21	21°♊04'54	29.27582 AU
conjunction	-12218 Jun 25 j 22:11	6°♊55'05	1°18'19	direct	-12211 Mar 28 j 04:07	19°♊41'34	
minimum elong	-12218 Jun 25 j 22:10	6°♊55'05	1°18'22	evening set	-12211 Jun 25 j 10:33	21°♊36'49	
max. Earth dist.	-12218 Jun 25 j 05:49	6°♊53'32	31.26880 AU				
morning rise	-12218 Jul 11 j 03:20	7°♊29'16		conjunction	-12211 Jul 10 j 14:23	22°♊10'54	1°54'04
retrograde	-12218 Oct 06 j 00:53	9°♊22'13		minimum elong	-12211 Jul 10 j 14:22	22°♊10'54	1°54'20
opposition	-12218 Dec 23 j 19:05	8°♊00'17	1°26'34	max. Earth dist.	-12211 Jul 10 j 03:55	22°♊09'55	31.27500 AU
min. Earth dist.	-12218 Dec 24 j 11:32	7°♊59'10	29.27149 AU	morning rise	-12211 Jul 25 j 16:27	22°♊44'51	
direct	-12217 Mar 15 j 02:10	6°♊36'00		retrograde	-12211 Oct 21 j 01:19	24°♊38'34	
evening set	-12217 Jun 13 j 00:33	8°♊31'50		opposition	-12210 Jan 08 j 12:16	23°♊16'11	2°04'17
				min. Earth dist.	-12210 Jan 08 j 22:50	23°♊15'29	29.27698 AU
conjunction	-12217 Jun 28 j 07:39	9°♊06'10	1°23'49	direct	-12210 Mar 30 j 15:02	21°♊52'11	
minimum elong	-12217 Jun 28 j 07:38	9°♊06'10	1°23'55	evening set	-12210 Jun 27 j 20:04	23°♊47'22	
max. Earth dist.	-12217 Jun 27 j 15:37	9°♊04'39	31.27230 AU				
morning rise	-12217 Jul 13 j 12:22	9°♊40'18		conjunction	-12210 Jul 12 j 23:16	24°♊21'24	1°58'34
retrograde	-12217 Oct 08 j 12:56	11°♊33'22		minimum elong	-12210 Jul 12 j 23:15	24°♊21'24	1°58'50
opposition	-12217 Dec 26 j 07:45	10°♊11'24	1°32'24	max. Earth dist.	-12210 Jul 12 j 13:10	24°♊20'27	31.27658 AU
min. Earth dist.	-12217 Dec 26 j 22:45	10°♊10'23	29.27423 AU	morning rise	-12210 Jul 28 j 01:05	24°♊55'20	
direct	-12216 Mar 16 j 15:59	8°♊47'11		retrograde	-12210 Oct 23 j 13:05	26°♊49'10	
evening set	-12216 Jun 14 j 10:28	10°♊42'56		opposition	-12209 Jan 11 j 00:50	25°♊26'46	2°09'00
				min. Earth dist.	-12209 Jan 11 j 09:17	25°♊26'12	29.27896 AU
conjunction	-12216 Jun 29 j 16:57	11°♊17'13	1°29'13	direct	-12209 Apr 02 j 01:13	24°♊02'50	
minimum elong	-12216 Jun 29 j 16:56	11°♊17'13	1°29'19	evening set	-12209 Jun 30 j 05:27	25°♊57'57	
max. Earth dist.	-12216 Jun 29 j 01:16	11°♊15'45	31.27422 AU				
morning rise	-12216 Jul 14 j 21:12	11°♊51'20		conjunction	-12209 Jul 15 j 08:13	26°♊31'57	2°02'55
retrograde	-12216 Oct 10 j 00:01	13°♊44'31		minimum elong	-12209 Jul 15 j 08:12	26°♊31'57	2°03'13
opposition	-12216 Dec 27 j 20:37	12°♊22'29	1°38'06	max. Earth dist.	-12209 Jul 14 j 23:32	26°♊31'08	31.27871 AU
min. Earth dist.	-12216 Dec 28 j 11:49	12°♊21'28	29.27565 AU	morning rise	-12209 Jul 30 j 09:36	27°♊05'52	
direct	-12215 Mar 19 j 03:40	10°♊58'18		retrograde	-12209 Oct 26 j 00:26	28°♊59'52	

Attention, astronomical year style is used: The year -12208 in astronomical counting style is the year 12209 BCE in historical counting style.

opposition	-12208 Jan 13 j 13:50	27° Υ 37'25	2°13'33	conjunction	-12202 Jul 29 j 22:59	11° δ 47'36	2°28'02
min. Earth dist.	-12208 Jan 13 j 22:18	27° Υ 36'51	29.28137 AU	minimum elong	-12202 Jul 29 j 22:57	11° δ 47'36	2°28'29
direct	-12208 Apr 03 j 12:42	26° Υ 13'35		max. Earth dist.	-12202 Jul 29 j 20:11	11° δ 47'20	31.27571 AU
evening set	-12208 Jul 01 j 14:45	28° Υ 08'38		morning rise	-12202 Aug 13 j 22:31	12° δ 21'24	
				retrograde	-12202 Nov 10 j 05:36	14° δ 16'22	
conjunction	-12208 Jul 16 j 17:02	28° Υ 42'36	2°07'04	opposition	-12201 Jan 29 j 08:53	12° δ 53'31	2°39'40
minimum elong	-12208 Jul 16 j 17:01	28° Υ 42'36	2°07'24	min. Earth dist.	-12201 Jan 29 j 11:47	12° δ 53'19	29.27552 AU
max. Earth dist.	-12208 Jul 16 j 09:27	28° Υ 41'53	31.28114 AU	direct	-12201 Apr 19 j 23:51	11° δ 30'03	
morning rise	-12208 Jul 31 j 18:07	29° Υ 16'29		evening set	-12201 Jul 17 j 08:10	13° δ 24'30	
	-12208 Aug 21 j 12:46	0° δ					
retrograde	-12208 Oct 27 j 12:59	1° δ 10'38		conjunction	-12201 Aug 01 j 07:47	13° δ 58'16	2°30'48
	-12207 Jan 07 j 18:33	30° κ Υ		minimum elong	-12201 Aug 01 j 07:46	13° δ 58'16	2°31'18
opposition	-12207 Jan 15 j 02:44	29° Υ 48'11	2°17'54	max. Earth dist.	-12201 Aug 01 j 05:26	13° δ 58'03	31.27128 AU
min. Earth dist.	-12207 Jan 15 j 09:20	29° Υ 47'44	29.28369 AU	morning rise	-12201 Aug 16 j 07:17	14° δ 32'03	
direct	-12207 Apr 06 j 01:06	28° Υ 24'25			-12201 Aug 29 j 07:10	15° δ	
	-12207 Jun 25 j 01:11	0° δ		retrograde	-12201 Nov 12 j 17:25	16° δ 27'08	
evening set	-12207 Jul 04 j 00:14	0° δ 19'25		opposition	-12200 Jan 31 j 21:53	15° δ 04'12	2°42'32
				min. Earth dist.	-12200 Jan 31 j 22:39	15° δ 04'09	29.27112 AU
conjunction	-12207 Jul 19 j 02:00	0° δ 53'21	2°11'03		-12200 Feb 03 j 12:16	15° κ δ	
minimum elong	-12207 Jul 19 j 01:59	0° δ 53'21	2°11'25	direct	-12200 Apr 21 j 10:29	13° δ 40'44	
max. Earth dist.	-12207 Jul 18 j 18:54	0° δ 52'41	31.28308 AU		-12200 Jul 02 j 04:16	15° δ	
morning rise	-12207 Aug 03 j 02:49	1° δ 27'13		evening set	-12200 Jul 18 j 17:08	15° δ 35'05	
retrograde	-12207 Oct 30 j 00:44	3° δ 21'32					
opposition	-12206 Jan 17 j 15:39	1° δ 59'02	2°22'03	conjunction	-12200 Aug 02 j 16:31	16° δ 08'50	2°33'22
min. Earth dist.	-12206 Jan 17 j 22:19	1° δ 58'35	29.28546 AU	minimum elong	-12200 Aug 02 j 16:30	16° δ 08'50	2°33'52
direct	-12206 Apr 08 j 11:38	0° δ 35'21		max. Earth dist.	-12200 Aug 02 j 15:31	16° δ 08'44	31.26686 AU
evening set	-12206 Jul 06 j 09:37	2° δ 30'17		morning rise	-12200 Aug 17 j 15:53	16° δ 42'37	
				retrograde	-12200 Nov 14 j 04:39	18° δ 37'51	
conjunction	-12206 Jul 21 j 11:04	3° δ 04'11	2°14'50	opposition	-12199 Feb 02 j 11:01	17° δ 14'48	2°45'09
minimum elong	-12206 Jul 21 j 11:03	3° δ 04'11	2°15'13	min. Earth dist.	-12199 Feb 02 j 11:38	17° δ 14'46	29.26713 AU
max. Earth dist.	-12206 Jul 21 j 05:23	3° δ 03'39	31.28424 AU	direct	-12199 Apr 23 j 21:37	15° δ 51'23	
morning rise	-12206 Aug 05 j 11:29	3° δ 38'02		evening set	-12199 Jul 21 j 02:11	17° δ 45'38	
retrograde	-12206 Nov 01 j 11:01	5° δ 32'29					
opposition	-12205 Jan 20 j 04:38	4° δ 09'57	2°26'00	conjunction	-12199 Aug 05 j 01:23	18° δ 19'22	2°35'42
min. Earth dist.	-12205 Jan 20 j 10:01	4° δ 09'35	29.28603 AU	minimum elong	-12199 Aug 05 j 01:22	18° δ 19'22	2°36'14
direct	-12205 Apr 11 j 01:09	2° δ 46'21		max. Earth dist.	-12199 Aug 05 j 01:49	18° δ 19'24	31.26325 AU
evening set	-12205 Jul 08 j 19:05	4° δ 41'12		morning rise	-12199 Aug 20 j 00:37	18° δ 53'08	
				retrograde	-12199 Nov 16 j 17:06	20° δ 48'29	
conjunction	-12205 Jul 23 j 19:57	5° δ 15'05	2°18'26	opposition	-12198 Feb 04 j 23:46	19° δ 25'23	2°47'32
minimum elong	-12205 Jul 23 j 19:56	5° δ 15'05	2°18'51	min. Earth dist.	-12198 Feb 04 j 22:11	19° δ 25'29	29.26400 AU
max. Earth dist.	-12205 Jul 23 j 13:59	5° δ 14'31	31.28406 AU	direct	-12198 Apr 26 j 09:05	18° δ 02'00	
morning rise	-12205 Aug 07 j 20:13	5° δ 48'55		evening set	-12198 Jul 23 j 11:15	19° δ 56'11	
retrograde	-12205 Nov 03 j 23:00	7° δ 43'30					
opposition	-12204 Jan 22 j 17:46	6° δ 20'55	2°29'45	conjunction	-12198 Aug 07 j 10:10	20° δ 29'54	2°37'49
min. Earth dist.	-12204 Jan 22 j 22:33	6° δ 20'35	29.28533 AU	minimum elong	-12198 Aug 07 j 10:09	20° δ 29'54	2°38'21
direct	-12204 Apr 12 j 12:44	4° δ 57'22		max. Earth dist.	-12198 Aug 07 j 11:16	20° δ 30'01	31.26052 AU
evening set	-12204 Jul 10 j 04:25	6° δ 52'07		morning rise	-12198 Aug 22 j 09:26	21° δ 03'41	
				retrograde	-12198 Nov 19 j 05:11	22° δ 59'11	
conjunction	-12204 Jul 25 j 05:05	7° δ 25'58	2°21'50	opposition	-12197 Feb 07 j 12:49	21° δ 36'02	2°49'41
minimum elong	-12204 Jul 25 j 05:04	7° δ 25'58	2°22'15	min. Earth dist.	-12197 Feb 07 j 10:47	21° δ 36'10	29.26192 AU
max. Earth dist.	-12204 Jul 25 j 00:52	7° δ 25'34	31.28254 AU	direct	-12197 Apr 28 j 18:50	20° δ 12'43	
morning rise	-12204 Aug 09 j 04:57	7° δ 59'48		evening set	-12197 Jul 25 j 20:03	22° δ 06'50	
retrograde	-12204 Nov 05 j 08:49	9° δ 54'31					
opposition	-12203 Jan 24 j 06:53	8° δ 31'51	2°33'17	conjunction	-12197 Aug 09 j 18:56	22° δ 40'33	2°39'43
min. Earth dist.	-12203 Jan 24 j 11:08	8° δ 31'34	29.28315 AU	minimum elong	-12197 Aug 09 j 18:56	22° δ 40'33	2°40'17
direct	-12203 Apr 15 j 01:38	7° δ 08'21		max. Earth dist.	-12197 Aug 09 j 22:08	22° δ 40'51	31.25885 AU
evening set	-12203 Jul 12 j 13:48	9° δ 03'00		morning rise	-12197 Aug 24 j 18:04	23° δ 14'19	
				retrograde	-12197 Nov 21 j 16:16	25° δ 09'59	
conjunction	-12203 Jul 27 j 13:59	9° δ 36'49	2°25'02	opposition	-12196 Feb 10 j 01:52	23° δ 46'48	2°51'35
minimum elong	-12203 Jul 27 j 13:58	9° δ 36'49	2°25'30	min. Earth dist.	-12196 Feb 09 j 22:00	23° δ 47'03	29.26059 AU
max. Earth dist.	-12203 Jul 27 j 09:32	9° δ 36'24	31.27971 AU	direct	-12196 Apr 30 j 07:56	22° δ 23'34	
morning rise	-12203 Aug 11 j 13:51	10° δ 10'38		evening set	-12196 Jul 27 j 05:08	24° δ 17'38	
retrograde	-12203 Nov 07 j 20:01	12° δ 05'29					
opposition	-12202 Jan 26 j 19:53	10° δ 42'44	2°36'35	conjunction	-12196 Aug 11 j 03:44	24° δ 51'20	2°41'22
min. Earth dist.	-12202 Jan 26 j 22:52	10° δ 42'32	29.27981 AU	minimum elong	-12196 Aug 11 j 03:44	24° δ 51'20	2°41'57
direct	-12202 Apr 17 j 12:31	9° δ 19'15		max. Earth dist.	-12196 Aug 11 j 07:02	24° δ 51'39	31.25781 AU
evening set	-12202 Jul 14 j 22:59	11° δ 13'48		morning rise	-12196 Aug 26 j 03:04	25° δ 25'07	

Attention, astronomical year style is used: The year -12196 in astronomical counting style is the year 12197 BCE in historical counting style.

retrograde	-12196 Nov 23 j 05:34	27° 8 20'57		evening set	-12189 Aug 11 j 20:54	9° II 36'32	
opposition	-12195 Feb 11 j 14:55	25° 8 57'44	2°53'14				
min. Earth dist.	-12195 Feb 11 j 10:09	25° 8 58'03	29.25982 AU	conjunction	-12189 Aug 26 j 19:41	10° II 10'15	2°46'26
direct	-12195 May 02 j 18:59	24° 8 34'35		minimum elong	-12189 Aug 26 j 19:40	10° II 10'15	2°47'07
evening set	-12195 Jul 29 j 14:03	26° 8 28'36		max. Earth dist.	-12189 Aug 27 j 04:41	10° II 11'07	31.23212 AU
				morning rise	-12189 Sep 10 j 20:08	10° II 44'09	
conjunction	-12195 Aug 13 j 12:45	27° 8 02'18	2°42'48	retrograde	-12189 Dec 09 j 14:26	12° II 40'54	
minimum elong	-12195 Aug 13 j 12:44	27° 8 02'18	2°43'25	opposition	-12188 Feb 28 j 10:52	11° II 17'14	2°57'46
max. Earth dist.	-12195 Aug 13 j 18:06	27° 8 02'49	31.25693 AU	min. Earth dist.	-12188 Feb 28 j 01:05	11° II 17'53	29.23102 AU
morning rise	-12195 Aug 28 j 11:59	27° 8 36'06		direct	-12188 May 17 j 23:49	9° II 54'21	
retrograde	-12195 Nov 25 j 16:08	29° 8 32'06		evening set	-12188 Aug 13 j 05:54	11° II 47'42	
opposition	-12194 Feb 14 j 04:01	28° 8 08'51	2°54'38				
min. Earth dist.	-12194 Feb 13 j 22:33	28° 8 09'13	29.25878 AU	conjunction	-12188 Aug 28 j 05:01	12° II 21'27	2°46'12
direct	-12194 May 05 j 07:11	26° 8 45'48		minimum elong	-12188 Aug 28 j 05:00	12° II 21'27	2°46'53
evening set	-12194 Jul 31 j 23:13	28° 8 39'45		max. Earth dist.	-12188 Aug 28 j 15:54	12° II 22'29	31.22478 AU
				morning rise	-12188 Sep 12 j 05:38	12° II 55'22	
conjunction	-12194 Aug 15 j 21:41	29° 8 13'27	2°44'00	retrograde	-12188 Dec 11 j 02:09	14° II 52'11	
minimum elong	-12194 Aug 15 j 21:40	29° 8 13'27	2°44'36	opposition	-12187 Mar 01 j 23:45	13° II 28'25	2°57'24
max. Earth dist.	-12194 Aug 16 j 02:59	29° 8 13'57	31.25563 AU	min. Earth dist.	-12187 Mar 01 j 12:23	13° II 29'11	29.22372 AU
morning rise	-12194 Aug 30 j 21:07	29° 8 47'16		direct	-12187 May 20 j 12:54	12° II 05'31	
	-12194 Sep 05 j 16:34	0° II		evening set	-12187 Aug 15 j 15:00	13° II 58'47	
retrograde	-12194 Nov 28 j 03:46	1° II 43'24					
opposition	-12193 Feb 16 j 17:03	0° II 20'08	2°55'48	conjunction	-12187 Aug 30 j 14:10	14° II 32'32	2°45'45
min. Earth dist.	-12193 Feb 16 j 10:17	0° II 20'36	29.25717 AU	minimum elong	-12187 Aug 30 j 14:10	14° II 32'32	2°46'27
	-12193 Mar 01 j 07:13	30° 8		max. Earth dist.	-12187 Aug 31 j 01:02	14° II 33'34	31.21771 AU
direct	-12193 May 07 j 17:59	28° 8 57'09		morning rise	-12187 Sep 14 j 15:18	15° II 06'29	
	-12193 Jul 09 j 14:31	0° II		retrograde	-12187 Dec 13 j 15:53	17° II 03'24	
evening set	-12193 Aug 03 j 08:20	0° II 51'02		opposition	-12186 Mar 04 j 12:43	15° II 39'31	2°56'47
				min. Earth dist.	-12186 Mar 04 j 00:28	15° II 40'21	29.21706 AU
conjunction	-12193 Aug 18 j 06:52	1° II 24'45	2°44'58	direct	-12186 May 22 j 23:40	14° II 16'38	
minimum elong	-12193 Aug 18 j 06:52	1° II 24'45	2°45'36	evening set	-12186 Aug 17 j 23:56	16° II 09'49	
max. Earth dist.	-12193 Aug 18 j 13:42	1° II 25'24	31.25341 AU				
morning rise	-12193 Sep 02 j 06:18	1° II 58'34		conjunction	-12186 Sep 01 j 23:28	16° II 43'35	2°45'02
retrograde	-12193 Nov 30 j 14:09	3° II 54'52		minimum elong	-12186 Sep 01 j 23:28	16° II 43'35	2°45'44
opposition	-12192 Feb 19 j 06:21	2° II 31'33	2°56'42	max. Earth dist.	-12186 Sep 02 j 12:28	16° II 44'49	31.21138 AU
min. Earth dist.	-12192 Feb 18 j 23:37	2° II 32'00	29.25443 AU	morning rise	-12186 Sep 17 j 00:47	17° II 17'34	
direct	-12192 May 09 j 05:21	1° II 08'38		retrograde	-12186 Dec 16 j 02:22	19° II 14'35	
evening set	-12192 Aug 04 j 17:29	3° II 02'25		opposition	-12185 Mar 07 j 01:37	17° II 50'38	2°55'54
				min. Earth dist.	-12185 Mar 06 j 12:22	17° II 51'32	29.21115 AU
conjunction	-12192 Aug 19 j 16:00	3° II 36'08	2°45'41	direct	-12185 May 25 j 11:41	16° II 27'47	
minimum elong	-12192 Aug 19 j 15:59	3° II 36'08	2°46'19	evening set	-12185 Aug 20 j 09:02	18° II 20'53	
max. Earth dist.	-12192 Aug 19 j 23:05	3° II 36'48	31.25009 AU				
morning rise	-12192 Sep 03 j 15:40	4° II 09'59		conjunction	-12185 Sep 04 j 08:44	18° II 54'41	2°44'06
retrograde	-12192 Dec 02 j 02:40	6° II 06'24		minimum elong	-12185 Sep 04 j 08:44	18° II 54'41	2°44'49
opposition	-12191 Feb 20 j 19:30	4° II 43'02	2°57'21	max. Earth dist.	-12185 Sep 04 j 22:01	18° II 55'56	31.20608 AU
min. Earth dist.	-12191 Feb 20 j 11:02	4° II 43'36	29.25040 AU	morning rise	-12185 Sep 19 j 10:36	19° II 28'41	
direct	-12191 May 11 j 16:16	3° II 20'09		retrograde	-12185 Dec 18 j 15:04	21° II 25'49	
evening set	-12191 Aug 07 j 02:44	5° II 13'50		opposition	-12184 Mar 08 j 14:33	20° II 01'50	2°54'46
				min. Earth dist.	-12184 Mar 07 j 23:44	20° II 02'50	29.20632 AU
conjunction	-12191 Aug 22 j 01:19	5° II 47'34	2°46'10	direct	-12184 May 26 j 22:31	18° II 39'01	
minimum elong	-12191 Aug 22 j 01:19	5° II 47'33	2°46'50	evening set	-12184 Aug 21 j 18:01	20° II 32'03	
max. Earth dist.	-12191 Aug 22 j 09:01	5° II 48'17	31.24524 AU				
morning rise	-12191 Sep 06 j 01:12	6° II 21'25		conjunction	-12184 Sep 05 j 18:08	21° II 05'53	2°42'55
retrograde	-12191 Dec 04 j 13:49	8° II 17'58		minimum elong	-12184 Sep 05 j 18:08	21° II 05'53	2°43'37
opposition	-12190 Feb 23 j 08:36	6° II 54'31	2°57'44	max. Earth dist.	-12184 Sep 06 j 09:05	21° II 07'18	31.20156 AU
min. Earth dist.	-12190 Feb 23 j 00:34	6° II 55'03	29.24493 AU	morning rise	-12184 Sep 20 j 20:24	21° II 39'56	
direct	-12190 May 14 j 02:48	5° II 31'38		retrograde	-12184 Dec 20 j 02:08	23° II 37'11	
evening set	-12190 Aug 09 j 11:52	7° II 25'14		opposition	-12183 Mar 11 j 03:34	22° II 13'10	2°53'22
				min. Earth dist.	-12183 Mar 10 j 12:36	22° II 14'11	29.20202 AU
conjunction	-12190 Aug 24 j 10:38	7° II 58'57	2°46'25	direct	-12183 May 29 j 09:48	20° II 50'26	
minimum elong	-12190 Aug 24 j 10:37	7° II 58'57	2°47'05	evening set	-12183 Aug 24 j 03:12	22° II 43'24	
max. Earth dist.	-12190 Aug 24 j 19:24	7° II 59'47	31.23919 AU				
morning rise	-12190 Sep 08 j 10:40	8° II 32'50		conjunction	-12183 Sep 08 j 03:40	23° II 17'15	2°41'29
retrograde	-12190 Dec 07 j 02:04	10° II 29'28		minimum elong	-12183 Sep 08 j 03:40	23° II 17'15	2°42'13
opposition	-12189 Feb 25 j 21:39	9° II 05'55	2°57'53	max. Earth dist.	-12183 Sep 08 j 19:12	23° II 18'44	31.19755 AU
min. Earth dist.	-12189 Feb 25 j 11:53	9° II 06'35	29.23827 AU	morning rise	-12183 Sep 23 j 06:26	23° II 51'21	
direct	-12189 May 16 j 13:56	7° II 43'03		retrograde	-12183 Dec 22 j 14:56	25° II 48'44	

Attention, astronomical year style is used: The year -12182 in astronomical counting style is the year 12183 BCE in historical counting style.

opposition	-12182 Mar 13 j 16:17	24°II24'42	2°51'43	direct	-12176 Jun 13 j 12:47	6°☾14'32	
min. Earth dist.	-12182 Mar 12 j 23:32	24°II25'50	29.19798 AU	evening set	-12176 Sep 07 j 21:12	8°☾07'03	
direct	-12182 May 31 j 20:21	23°II02'01					
evening set	-12182 Aug 26 j 12:28	24°II54'57		conjunction	-12176 Sep 23 j 01:02	8°☾41'12	2°25'05
				minimum elong	-12176 Sep 23 j 01:03	8°☾41'12	2°25'47
conjunction	-12182 Sep 10 j 13:15	25°II28'50	2°39'50	max. Earth dist.	-12176 Sep 23 j 20:15	8°☾43'01	31.14762 AU
minimum elong	-12182 Sep 10 j 13:15	25°II28'50	2°40'32	morning rise	-12176 Oct 08 j 08:05	9°☾15'38	
max. Earth dist.	-12182 Sep 11 j 05:27	25°II30'22	31.19338 AU	retrograde	-12175 Jan 07 j 08:34	11°☾13'39	
morning rise	-12182 Sep 25 j 16:33	26°II02'59		opposition	-12175 Mar 29 j 10:37	9°☾49'12	2°33'21
retrograde	-12182 Dec 25 j 02:24	28°II00'30		min. Earth dist.	-12175 Mar 28 j 14:34	9°☾50'34	29.14441 AU
opposition	-12181 Mar 16 j 05:20	26°II36'26	2°49'49	direct	-12175 Jun 16 j 00:36	8°☾26'36	
min. Earth dist.	-12181 Mar 15 j 12:57	26°II37'33	29.19362 AU	evening set	-12175 Sep 10 j 06:45	10°☾19'02	
direct	-12181 Jun 03 j 06:10	25°II13'50					
evening set	-12181 Aug 28 j 21:38	27°II06'42		conjunction	-12175 Sep 25 j 11:13	10°☾53'13	2°21'52
				minimum elong	-12175 Sep 25 j 11:14	10°☾53'13	2°22'34
conjunction	-12181 Sep 12 j 22:56	27°II40'38	2°37'56	max. Earth dist.	-12175 Sep 26 j 07:40	10°☾55'09	31.13707 AU
minimum elong	-12181 Sep 12 j 22:57	27°II40'38	2°38'40	morning rise	-12175 Oct 10 j 18:53	11°☾27'43	
max. Earth dist.	-12181 Sep 13 j 16:22	27°II42'17	31.18879 AU	retrograde	-12174 Jan 09 j 20:10	13°☾25'46	
morning rise	-12181 Sep 28 j 02:42	28°II14'49		opposition	-12174 Mar 31 j 23:09	12°☾01'13	2°29'48
	-12181 Nov 29 j 21:51	0°☾		min. Earth dist.	-12174 Mar 31 j 03:12	12°☾02'34	29.13402 AU
retrograde	-12181 Dec 27 j 15:06	0°☾12'28		direct	-12174 Jun 18 j 12:33	10°☾38'35	
	-12180 Jan 25 j 00:50	30°☾II		evening set	-12174 Sep 12 j 16:17	12°☾30'56	
opposition	-12180 Mar 17 j 18:17	28°II48'23	2°47'40				
min. Earth dist.	-12180 Mar 17 j 00:22	28°II49'36	29.18847 AU	conjunction	-12174 Sep 27 j 21:23	13°☾05'10	2°18'26
direct	-12180 Jun 04 j 16:36	27°II25'49		minimum elong	-12174 Sep 27 j 21:23	13°☾05'10	2°19'08
evening set	-12180 Aug 30 j 07:12	29°II18'39		max. Earth dist.	-12174 Sep 28 j 18:26	13°☾07'10	31.12720 AU
				morning rise	-12174 Oct 13 j 05:45	13°☾39'43	
conjunction	-12180 Sep 14 j 08:49	29°II52'37	2°35'48	retrograde	-12173 Jan 12 j 08:39	15°☾37'49	
minimum elong	-12180 Sep 14 j 08:49	29°II52'37	2°36'31	opposition	-12173 Apr 03 j 11:41	14°☾13'11	2°26'02
max. Earth dist.	-12180 Sep 15 j 01:59	29°II54'14	31.18309 AU	min. Earth dist.	-12173 Apr 02 j 13:55	14°☾14'40	29.12451 AU
	-12180 Sep 17 j 14:47	0°☾		direct	-12173 Jun 20 j 23:44	12°☾50'33	
morning rise	-12180 Sep 29 j 13:17	0°☾26'51		evening set	-12173 Sep 15 j 01:48	14°☾42'49	
retrograde	-12180 Dec 29 j 04:20	2°☾24'37					
opposition	-12179 Mar 20 j 07:15	1°☾00'29	2°45'17	conjunction	-12173 Sep 30 j 07:28	15°☾17'06	2°14'49
min. Earth dist.	-12179 Mar 19 j 13:48	1°☾01'40	29.18217 AU	minimum elong	-12173 Sep 30 j 07:29	15°☾17'06	2°15'31
	-12179 Apr 30 j 20:43	30°☾II		max. Earth dist.	-12173 Oct 01 j 05:10	15°☾19'09	31.11818 AU
direct	-12179 Jun 07 j 01:43	29°II37'57		morning rise	-12173 Oct 15 j 16:39	15°☾51'43	
	-12179 Jul 13 j 06:26	0°☾		retrograde	-12172 Jan 14 j 19:16	17°☾49'52	
evening set	-12179 Sep 01 j 16:39	1°☾30'43		min. Earth dist.	-12172 Apr 04 j 02:47	16°☾26'38	29.11600 AU
				opposition	-12172 Apr 05 j 00:19	16°☾25'10	2°22'03
conjunction	-12179 Sep 16 j 18:57	2°☾04'44	2°33'27	direct	-12172 Jun 22 j 09:44	15°☾02'32	
minimum elong	-12179 Sep 16 j 18:57	2°☾04'44	2°34'11	evening set	-12172 Sep 16 j 11:25	16°☾54'44	
max. Earth dist.	-12179 Sep 17 j 13:27	2°☾06'29	31.17611 AU				
morning rise	-12179 Oct 01 j 23:52	2°☾39'01		conjunction	-12172 Oct 01 j 17:53	17°☾29'04	2°10'59
retrograde	-12179 Dec 31 j 17:10	4°☾36'52		minimum elong	-12172 Oct 01 j 17:54	17°☾29'04	2°11'41
opposition	-12178 Mar 22 j 20:08	3°☾12'41	2°42'38	max. Earth dist.	-12172 Oct 02 j 16:58	17°☾31'15	31.11032 AU
min. Earth dist.	-12178 Mar 22 j 01:41	3°☾13'56	29.17432 AU	morning rise	-12172 Oct 17 j 03:44	18°☾03'44	
direct	-12178 Jun 09 j 14:22	1°☾50'10		retrograde	-12171 Jan 16 j 07:28	20°☾01'57	
evening set	-12178 Sep 04 j 02:13	3°☾42'52		opposition	-12171 Apr 07 j 12:35	18°☾37'13	2°17'51
				min. Earth dist.	-12171 Apr 06 j 13:26	18°☾38'48	29.10846 AU
conjunction	-12178 Sep 19 j 04:50	4°☾16'55	2°30'53	direct	-12171 Jun 24 j 20:08	17°☾14'35	
minimum elong	-12178 Sep 19 j 04:51	4°☾16'55	2°31'36	evening set	-12171 Sep 18 j 21:16	19°☾06'45	
max. Earth dist.	-12178 Sep 19 j 22:41	4°☾18'36	31.16763 AU				
morning rise	-12178 Oct 04 j 10:32	4°☾51'15		conjunction	-12171 Oct 04 j 04:17	19°☾41'08	2°06'58
retrograde	-12177 Jan 03 j 07:52	6°☾49'10		minimum elong	-12171 Oct 04 j 04:18	19°☾41'09	2°07'40
opposition	-12177 Mar 25 j 09:05	5°☾24'55	2°39'46	max. Earth dist.	-12171 Oct 05 j 03:12	19°☾43'18	31.10325 AU
min. Earth dist.	-12177 Mar 24 j 14:25	5°☾26'11	29.16516 AU	morning rise	-12171 Oct 19 j 15:03	20°☾15'52	
direct	-12177 Jun 12 j 00:57	4°☾02'23		retrograde	-12170 Jan 18 j 20:22	22°☾14'09	
evening set	-12177 Sep 06 j 11:40	5°☾54'59		min. Earth dist.	-12170 Apr 09 j 02:17	20°☾50'57	29.10168 AU
				opposition	-12170 Apr 10 j 01:05	20°☾49'23	2°13'27
conjunction	-12177 Sep 21 j 15:00	6°☾29'05	2°28'05	direct	-12170 Jun 27 j 05:02	19°☾26'46	
minimum elong	-12177 Sep 21 j 15:01	6°☾29'05	2°28'49	evening set	-12170 Sep 21 j 06:55	21°☾18'54	
max. Earth dist.	-12177 Sep 22 j 10:22	6°☾30'55	31.15795 AU				
morning rise	-12177 Oct 06 j 21:14	7°☾03'29		conjunction	-12170 Oct 06 j 14:46	21°☾53'21	2°02'45
retrograde	-12176 Jan 05 j 18:55	9°☾01'27		minimum elong	-12170 Oct 06 j 14:47	21°☾53'21	2°03'25
opposition	-12176 Mar 26 j 21:54	7°☾37'06	2°36'40	max. Earth dist.	-12170 Oct 07 j 15:20	21°☾55'40	31.09674 AU
min. Earth dist.	-12176 Mar 26 j 02:51	7°☾38'24	29.15493 AU	morning rise	-12170 Oct 22 j 02:08	22°☾28'08	

Attention, astronomical year style is used: The year -12169 in astronomical counting style is the year 12170 BCE in historical counting style.

retrograde	-12169 Jan 21 j 08:41	24° Ω 26'29		evening set	-12163 Oct 06 j 07:16	6° Ω 47'02	
opposition	-12169 Apr 12 j 13:28	23° Ω 01'42	2°08'50				
min. Earth dist.	-12169 Apr 11 j 13:35	23° Ω 03'20	29.09512 AU	conjunction	-12163 Oct 21 j 20:23	7° Ω 21'52	1°28'29
direct	-12169 Jun 29 j 16:38	21° Ω 39'06		minimum elong	-12163 Oct 21 j 20:24	7° Ω 21'53	1°29'04
evening set	-12169 Sep 23 j 17:00	23° Ω 31'13		max. Earth dist.	-12163 Oct 22 j 22:12	7° Ω 24'18	31.03545 AU
				morning rise	-12163 Nov 06 j 13:27	7° Ω 57'06	
conjunction	-12169 Oct 09 j 01:25	24° Ω 05'43	1°58'21	retrograde	-12162 Feb 06 j 04:11	9° Ω 55'39	
minimum elong	-12169 Oct 09 j 01:26	24° Ω 05'43	1°59'01	min. Earth dist.	-12162 Apr 27 j 02:19	8° Ω 32'14	29.03106 AU
max. Earth dist.	-12169 Oct 10 j 01:20	24° Ω 07'58	31.09032 AU	opposition	-12162 Apr 28 j 03:15	8° Ω 30'31	1°31'38
morning rise	-12169 Oct 24 j 13:45	24° Ω 40'34		direct	-12162 Jul 14 j 21:25	7° Ω 07'46	
retrograde	-12168 Jan 23 j 23:18	26° Ω 38'59		evening set	-12162 Oct 08 j 17:48	8° Ω 59'39	
min. Earth dist.	-12168 Apr 13 j 02:00	25° Ω 15'48	29.08855 AU				
opposition	-12168 Apr 14 j 01:54	25° Ω 14'10	2°04'02	conjunction	-12162 Oct 24 j 07:30	9° Ω 34'32	1°23'00
direct	-12168 Jul 01 j 01:57	23° Ω 51'35		minimum elong	-12162 Oct 24 j 07:31	9° Ω 34'32	1°23'34
evening set	-12168 Sep 25 j 03:07	25° Ω 43'41		max. Earth dist.	-12162 Oct 25 j 08:54	9° Ω 36'56	31.02494 AU
				morning rise	-12162 Nov 09 j 01:30	10° Ω 09'50	
conjunction	-12168 Oct 10 j 12:24	26° Ω 18'14	1°53'46	retrograde	-12161 Feb 08 j 16:13	12° Ω 08'23	
minimum elong	-12168 Oct 10 j 12:25	26° Ω 18'14	1°54'25	opposition	-12161 Apr 30 j 15:21	10° Ω 43'11	1°25'42
max. Earth dist.	-12168 Oct 11 j 13:34	26° Ω 20'37	31.08348 AU	min. Earth dist.	-12161 Apr 29 j 14:56	10° Ω 44'53	29.02100 AU
morning rise	-12168 Oct 26 j 01:23	26° Ω 53'09		direct	-12161 Jul 17 j 06:40	9° Ω 20'24	
retrograde	-12167 Jan 25 j 11:25	28° Ω 51'37		evening set	-12161 Oct 11 j 04:24	11° Ω 12'16	
opposition	-12167 Apr 16 j 14:17	27° Ω 26'47	1°59'03				
min. Earth dist.	-12167 Apr 15 j 14:22	27° Ω 28'26	29.08119 AU	conjunction	-12161 Oct 26 j 19:03	11° Ω 47'13	1°17'25
direct	-12167 Jul 03 j 13:15	26° Ω 04'13		minimum elong	-12161 Oct 26 j 19:03	11° Ω 47'13	1°17'58
evening set	-12167 Sep 27 j 13:29	27° Ω 56'17		max. Earth dist.	-12161 Oct 27 j 21:54	11° Ω 49'44	31.01547 AU
				morning rise	-12161 Nov 11 j 13:40	12° Ω 22'33	
conjunction	-12167 Oct 12 j 23:25	28° Ω 30'54	1°49'01	retrograde	-12160 Feb 11 j 03:51	14° Ω 21'08	
minimum elong	-12167 Oct 12 j 23:26	28° Ω 30'54	1°49'39	min. Earth dist.	-12160 May 01 j 01:47	12° Ω 57'39	29.01203 AU
max. Earth dist.	-12167 Oct 13 j 23:56	28° Ω 33'13	31.07579 AU	opposition	-12160 May 02 j 03:07	12° Ω 55'53	1°19'39
morning rise	-12167 Oct 28 j 13:17	29° Ω 05'53		direct	-12160 Jul 18 j 17:56	11° Ω 33'05	
	-12167 Nov 23 j 23:36	0° Ω		evening set	-12160 Oct 12 j 15:15	13° Ω 24'56	
retrograde	-12166 Jan 28 j 02:22	1° Ω 04'23					
	-12166 Apr 06 j 13:21	30° Ω 00'00		conjunction	-12160 Oct 28 j 06:31	13° Ω 59'57	1°11'42
min. Earth dist.	-12166 Apr 18 j 02:12	29° Ω 41'11	29.07288 AU	minimum elong	-12160 Oct 28 j 06:32	13° Ω 59'57	1°12'14
opposition	-12166 Apr 19 j 02:33	29° Ω 39'30	1°53'53	max. Earth dist.	-12160 Oct 29 j 08:37	14° Ω 02'24	31.00724 AU
direct	-12166 Jul 06 j 00:37	28° Ω 16'56		morning rise	-12160 Nov 13 j 02:07	14° Ω 35'21	
	-12166 Sep 25 j 21:26	0° Ω			-12160 Nov 24 j 14:06	15° Ω	
evening set	-12166 Sep 29 j 23:52	0° Ω 08'58		retrograde	-12159 Feb 12 j 17:49	16° Ω 33'57	
				opposition	-12159 May 04 j 15:01	15° Ω 08'41	1°13'29
conjunction	-12166 Oct 15 j 10:34	0° Ω 43'39	1°44'06	min. Earth dist.	-12159 May 03 j 13:37	15° Ω 10'27	29.00440 AU
minimum elong	-12166 Oct 15 j 10:35	0° Ω 43'39	1°44'43		-12159 May 09 j 20:21	15° Ω 00'00	
max. Earth dist.	-12166 Oct 16 j 11:39	0° Ω 46'01	31.06691 AU	direct	-12159 Jul 21 j 02:45	13° Ω 45'51	
morning rise	-12166 Oct 31 j 01:12	1° Ω 18'41			-12159 Sep 27 j 02:18	15° Ω	
retrograde	-12165 Jan 30 j 14:58	3° Ω 17'13		evening set	-12159 Oct 15 j 02:04	15° Ω 37'44	
opposition	-12165 Apr 21 j 14:58	1° Ω 52'18	1°48'33				
min. Earth dist.	-12165 Apr 20 j 15:18	1° Ω 53'55	29.06335 AU	conjunction	-12159 Oct 30 j 18:11	16° Ω 12'48	1°05'52
direct	-12165 Jul 08 j 12:21	0° Ω 29'42		minimum elong	-12159 Oct 30 j 18:12	16° Ω 12'48	1°06'23
evening set	-12165 Oct 02 j 10:11	2° Ω 21'41		max. Earth dist.	-12159 Oct 31 j 21:37	16° Ω 15'22	31.00017 AU
				morning rise	-12159 Nov 15 j 14:23	16° Ω 48'16	
conjunction	-12165 Oct 17 j 21:43	2° Ω 56'25	1°39'02	retrograde	-12158 Feb 15 j 05:52	18° Ω 46'53	
minimum elong	-12165 Oct 17 j 21:44	2° Ω 56'25	1°39'39	min. Earth dist.	-12158 May 06 j 01:12	17° Ω 23'24	28.99776 AU
max. Earth dist.	-12165 Oct 18 j 22:46	2° Ω 58'47	31.05707 AU	opposition	-12158 May 07 j 02:45	17° Ω 21'37	1°07'12
morning rise	-12165 Nov 02 j 13:12	3° Ω 31'32		direct	-12158 Jul 23 j 13:23	15° Ω 58'48	
retrograde	-12164 Feb 02 j 04:19	5° Ω 30'04		evening set	-12158 Oct 17 j 13:04	17° Ω 50'42	
min. Earth dist.	-12164 Apr 22 j 02:32	4° Ω 06'47	29.05290 AU				
opposition	-12164 Apr 23 j 03:12	4° Ω 05'05	1°43'03	conjunction	-12158 Nov 02 j 05:52	18° Ω 25'49	0°59'56
direct	-12164 Jul 09 j 24:00	2° Ω 42'26		minimum elong	-12158 Nov 02 j 05:53	18° Ω 25'49	1°00'26
evening set	-12164 Oct 03 j 20:47	4° Ω 34'23		max. Earth dist.	-12158 Nov 03 j 08:49	18° Ω 28'21	30.99421 AU
				morning rise	-12158 Nov 18 j 02:56	19° Ω 01'21	
conjunction	-12164 Oct 19 j 09:00	5° Ω 09'10	1°33'49	retrograde	-12157 Feb 17 j 21:20	21° Ω 00'00	
minimum elong	-12164 Oct 19 j 09:01	5° Ω 09'10	1°34'25	opposition	-12157 May 09 j 14:30	19° Ω 34'44	1°00'48
max. Earth dist.	-12164 Oct 20 j 09:53	5° Ω 11'31	31.04631 AU	min. Earth dist.	-12157 May 08 j 12:27	19° Ω 36'33	28.99213 AU
morning rise	-12164 Nov 04 j 01:23	5° Ω 44'21		direct	-12157 Jul 26 j 00:35	18° Ω 11'55	
retrograde	-12163 Feb 03 j 15:37	7° Ω 42'53		evening set	-12157 Oct 20 j 00:11	20° Ω 03'51	
opposition	-12163 Apr 25 j 15:18	6° Ω 17'49	1°37'25				
min. Earth dist.	-12163 Apr 24 j 15:35	6° Ω 19'27	29.04191 AU	conjunction	-12157 Nov 04 j 17:45	20° Ω 39'03	0°53'54
direct	-12163 Jul 12 j 10:24	4° Ω 55'07		minimum elong	-12157 Nov 04 j 17:45	20° Ω 39'03	0°54'23

Attention, astronomical year style is used: The year -12157 in astronomical counting style is the year 12158 BCE in historical counting style.

max. Earth dist.	-12157 Nov 05 j 21:19	20°041'38	30.98880 AU	opposition	-12150 May 25 j 00:04	5°00'15	0°13'54
morning rise	-12157 Nov 20 j 15:32	21°014'37		direct	-12150 Aug 10 j 04:40	3°00'47	0°09'09
retrograde	-12156 Feb 20 j 10:10	23°013'19		evening set	-12150 Nov 04 j 10:50	5°00'39	1°17'17
min. Earth dist.	-12156 May 10 j 01:08	21°049'49	28.98676 AU				
opposition	-12156 May 11 j 02:20	21°048'04	0°54'18	conjunction	-12150 Nov 20 j 09:14	6°00'14	48 0°09'53
direct	-12156 Jul 27 j 11:52	20°025'15		minimum elong	-12150 Nov 20 j 09:14	6°00'14	48 0°10'12
evening set	-12156 Oct 21 j 11:36	22°017'14		behind sun begin	-12150 Nov 20 j 04:02	6°00'14	20
				behind sun end	-12150 Nov 20 j 14:25	6°00'15	16
conjunction	-12156 Nov 06 j 05:56	22°052'28	0°47'47	max. Earth dist.	-12150 Nov 21 j 10:55	6°00'17	12 30.93669 AU
minimum elong	-12156 Nov 06 j 05:57	22°052'28	0°48'14	morning rise	-12150 Dec 06 j 11:33	6°00'50	42
max. Earth dist.	-12156 Nov 07 j 09:14	22°055'02	30.98356 AU	retrograde	-12149 Mar 08 j 03:12	8°00'49	15
morning rise	-12156 Nov 22 j 04:25	23°028'07		opposition	-12149 May 27 j 11:24	7°00'23	49 0°07'02
retrograde	-12155 Feb 22 j 00:29	25°026'49		min. Earth dist.	-12149 May 26 j 12:22	7°00'25	26 28.93267 AU
opposition	-12155 May 13 j 13:53	24°001'35	0°47'43	direct	-12149 Aug 12 j 15:56	6°00'00	39
min. Earth dist.	-12155 May 12 j 12:02	24°003'23	28.98130 AU	evening set	-12149 Nov 06 j 23:01	7°00'52	49
direct	-12155 Jul 29 j 23:14	22°038'46					
evening set	-12155 Oct 23 j 23:16	24°030'47		conjunction	-12149 Nov 22 j 21:57	8°00'28	22 0°03'30
				minimum elong	-12149 Nov 22 j 21:58	8°00'28	22 0°03'46
conjunction	-12155 Nov 08 j 18:12	25°006'05	0°41'36	behind sun begin	-12149 Nov 22 j 15:29	8°00'27	48
minimum elong	-12155 Nov 08 j 18:12	25°006'05	0°42'02	behind sun end	-12149 Nov 23 j 04:26	8°00'28	57
max. Earth dist.	-12155 Nov 09 j 20:55	25°008'36	30.97778 AU	max. Earth dist.	-12149 Nov 23 j 22:45	8°00'30	41 30.92835 AU
morning rise	-12155 Nov 24 j 17:26	25°041'47		morning rise	-12149 Dec 09 j 00:59	9°00'04	19
retrograde	-12154 Feb 24 j 13:29	27°040'29		retrograde	-12148 Mar 09 j 17:23	11°00'02	49
min. Earth dist.	-12154 May 15 j 01:12	26°016'58	28.97513 AU	opposition	-12148 May 28 j 22:43	9°00'37	22 0°00'09
opposition	-12154 May 16 j 01:42	26°015'15	0°41'04	min. Earth dist.	-12148 May 27 j 23:27	9°00'39	00 28.92482 AU
direct	-12154 Aug 01 j 09:57	24°052'26		desc. node	-12148 Jun 06 j 01:16	9°00'23	45
evening set	-12154 Oct 26 j 10:49	26°044'29		direct	-12148 Aug 14 j 03:07	8°00'14	07
				evening set	-12148 Nov 08 j 11:23	10°00'06	20
conjunction	-12154 Nov 11 j 06:35	27°019'50	0°35'20				
minimum elong	-12154 Nov 11 j 06:36	27°019'50	0°35'44	conjunction	-12148 Nov 24 j 10:55	10°00'41	56 -0°03'05
max. Earth dist.	-12154 Nov 12 j 09:37	27°022'22	30.97125 AU	minimum elong	-12148 Nov 24 j 10:55	10°00'41	56 0°02'50
morning rise	-12154 Nov 27 j 06:23	27°055'34		behind sun begin	-12148 Nov 24 j 04:23	10°00'41	21
retrograde	-12153 Feb 27 j 03:32	29°054'17		behind sun end	-12148 Nov 24 j 17:27	10°00'42	31
opposition	-12153 May 18 j 13:24	28°029'02	0°34'20	max. Earth dist.	-12148 Nov 25 j 12:05	10°00'44	17 30.92093 AU
min. Earth dist.	-12153 May 17 j 12:18	28°030'47	28.96796 AU	morning rise	-12148 Dec 10 j 14:23	11°00'17	54
direct	-12153 Aug 03 j 21:54	27°006'10		retrograde	-12147 Mar 12 j 05:16	13°00'16	23
evening set	-12153 Oct 28 j 22:49	28°058'14		min. Earth dist.	-12147 May 30 j 11:35	11°00'52	29 28.91804 AU
				opposition	-12147 May 31 j 09:55	11°00'50	55 -0°06'44
conjunction	-12153 Nov 13 j 19:07	29°033'38	0°29'01	direct	-12147 Aug 16 j 14:07	10°00'27	38
minimum elong	-12153 Nov 13 j 19:07	29°033'38	0°29'25	evening set	-12147 Nov 10 j 23:46	12°00'19	55
max. Earth dist.	-12153 Nov 14 j 20:49	29°036'03	30.96356 AU				
	-12153 Nov 25 j 13:17	0°00'00		conjunction	-12147 Nov 26 j 23:54	12°00'55	33 -0°09'30
morning rise	-12153 Nov 29 j 19:45	0°00'09	26	minimum elong	-12147 Nov 26 j 23:53	12°00'55	33 0°09'15
retrograde	-12152 Feb 29 j 15:13	2°00'08	07	behind sun begin	-12147 Nov 26 j 18:23	12°00'55	04
min. Earth dist.	-12152 May 19 j 01:22	0°00'44	29 28.95977 AU	behind sun end	-12147 Nov 27 j 05:23	12°00'56	03
opposition	-12152 May 20 j 01:05	0°00'42	50 0°27'34	max. Earth dist.	-12147 Nov 28 j 00:43	12°00'57	52 30.91489 AU
	-12152 Jun 15 j 20:46	30°00'00		morning rise	-12147 Dec 13 j 03:51	13°00'31	33
direct	-12152 Aug 05 j 07:41	29°019'54		retrograde	-12146 Mar 14 j 19:52	15°00'30	01
	-12152 Sep 23 j 03:20	0°00'00		opposition	-12146 Jun 02 j 21:06	14°00'04	33 -0°13'36
evening set	-12152 Oct 30 j 10:44	1°00'12	00	min. Earth dist.	-12146 Jun 01 j 21:59	14°00'06	11 28.91260 AU
				direct	-12146 Aug 19 j 01:44	12°00'41	14
conjunction	-12152 Nov 15 j 07:55	1°00'47	26 0°22'40	evening set	-12146 Nov 13 j 12:11	14°00'33	36
minimum elong	-12152 Nov 15 j 07:55	1°00'47	26 0°23'02				
max. Earth dist.	-12152 Nov 16 j 10:13	1°00'49	54 30.95497 AU	conjunction	-12146 Nov 29 j 12:46	15°00'09	17 -0°15'54
morning rise	-12152 Dec 01 j 09:02	2°00'23	16	minimum elong	-12146 Nov 29 j 12:46	15°00'09	17 0°15'42
retrograde	-12151 Mar 03 j 02:40	4°00'21	54	behind sun begin	-12146 Nov 29 j 11:48	15°00'09	12
opposition	-12151 May 22 j 12:36	2°00'56	35 0°20'45	behind sun end	-12146 Nov 29 j 13:44	15°00'09	22
min. Earth dist.	-12151 May 21 j 12:43	2°00'58	15 28.95070 AU	max. Earth dist.	-12146 Nov 30 j 13:12	15°00'11	34 30.90995 AU
direct	-12151 Aug 07 j 19:25	1°00'33	35	morning rise	-12146 Dec 15 j 17:16	15°00'45	20
evening set	-12151 Nov 01 j 22:48	3°00'25	41	retrograde	-12145 Mar 17 j 09:13	17°00'43	47
				min. Earth dist.	-12145 Jun 04 j 10:32	16°00'19	53 28.90820 AU
conjunction	-12151 Nov 17 j 20:27	4°00'01	09 0°16'17	opposition	-12145 Jun 05 j 08:26	16°00'18	21 -0°20'28
minimum elong	-12151 Nov 17 j 20:27	4°00'01	10 0°16'37	direct	-12145 Aug 21 j 12:36	14°00'55	01
max. Earth dist.	-12151 Nov 18 j 21:19	4°00'03	29 30.94578 AU	evening set	-12145 Nov 16 j 00:51	16°00'47	29
morning rise	-12151 Dec 03 j 22:20	4°00'37	02				
retrograde	-12150 Mar 05 j 15:52	6°00'35	38	conjunction	-12145 Dec 02 j 02:06	17°00'23	12 -0°22'18
min. Earth dist.	-12150 May 24 j 00:45	5°00'11	53 28.94152 AU	minimum elong	-12145 Dec 02 j 02:05	17°00'23	12 0°22'07

Attention, astronomical year style is used: The year -12145 in astronomical counting style is the year 12146 BCE in historical counting style.

max. Earth dist.	-12145 Dec 03 j 02:47	17° <u>0</u> 25'31	30.90604 AU	min. Earth dist.	-12138 Jun 19 j 21:19	2° <u>0</u> 00'48	28.87343 AU
morning rise	-12145 Dec 18 j 06:56	17° <u>0</u> 59'17		direct	-12138 Sep 05 j 17:00	0° <u>0</u> 35'57	
retrograde	-12144 Mar 18 j 23:34	19° <u>0</u> 57'44		evening set	-12138 Dec 01 j 22:11	2° <u>0</u> 29'08	
opposition	-12144 Jun 06 j 19:26	18° <u>0</u> 32'20	-0°27'18				
min. Earth dist.	-12144 Jun 05 j 21:04	18° <u>0</u> 33'55	28.90454 AU	conjunction	-12138 Dec 18 j 02:11	3° <u>0</u> 05'02	-1°05'46
direct	-12144 Aug 23 j 00:40	17° <u>0</u> 09'00		minimum elong	-12138 Dec 18 j 02:10	3° <u>0</u> 05'02	1°05'47
evening set	-12144 Nov 17 j 13:54	19° <u>0</u> 01'35		max. Earth dist.	-12138 Dec 18 j 20:58	3° <u>0</u> 06'47	30.86939 AU
				morning rise	-12137 Jan 03 j 09:10	3° <u>0</u> 41'14	
conjunction	-12144 Dec 03 j 15:28	19° <u>0</u> 37'20	-0°28'41	retrograde	-12137 Apr 04 j 16:02	5° <u>0</u> 39'27	
minimum elong	-12144 Dec 03 j 15:27	19° <u>0</u> 37'20	0°28'32	min. Earth dist.	-12137 Jun 22 j 07:55	4° <u>0</u> 15'20	28.86644 AU
max. Earth dist.	-12144 Dec 04 j 14:48	19° <u>0</u> 39'31	30.90251 AU	opposition	-12137 Jun 23 j 00:57	4° <u>0</u> 14'08	-1°13'32
morning rise	-12144 Dec 19 j 20:50	20° <u>0</u> 13'27		direct	-12137 Sep 08 j 05:27	2° <u>0</u> 50'22	
retrograde	-12143 Mar 21 j 11:58	22° <u>0</u> 11'54		evening set	-12137 Dec 04 j 11:59	4° <u>0</u> 43'39	
min. Earth dist.	-12143 Jun 08 j 09:47	20° <u>0</u> 48'02	28.90114 AU				
opposition	-12143 Jun 09 j 06:42	20° <u>0</u> 46'33	-0°34'06	conjunction	-12137 Dec 20 j 16:12	5° <u>0</u> 19'34	-1°11'39
direct	-12143 Aug 25 j 10:23	19° <u>0</u> 23'13		minimum elong	-12137 Dec 20 j 16:11	5° <u>0</u> 19'34	1°11'42
evening set	-12143 Nov 20 j 02:51	21° <u>0</u> 15'54		max. Earth dist.	-12137 Dec 21 j 10:09	5° <u>0</u> 21'14	30.86252 AU
				morning rise	-12136 Jan 05 j 23:23	5° <u>0</u> 55'47	
conjunction	-12143 Dec 06 j 05:00	21° <u>0</u> 51'42	-0°35'01	retrograde	-12136 Apr 06 j 04:44	7° <u>0</u> 53'54	
minimum elong	-12143 Dec 06 j 04:59	21° <u>0</u> 51'42	0°34'54	opposition	-12136 Jun 24 j 11:45	6° <u>0</u> 28'34	-1°19'46
max. Earth dist.	-12143 Dec 07 j 04:45	21° <u>0</u> 53'55	30.89894 AU	min. Earth dist.	-12136 Jun 23 j 20:17	6° <u>0</u> 29'40	28.86010 AU
morning rise	-12143 Dec 22 j 10:32	22° <u>0</u> 27'50		direct	-12136 Sep 09 j 17:26	5° <u>0</u> 04'42	
retrograde	-12142 Mar 24 j 00:25	24° <u>0</u> 26'17		evening set	-12136 Dec 06 j 01:43	6° <u>0</u> 58'04	
opposition	-12142 Jun 11 j 17:47	23° <u>0</u> 00'59	-0°40'52				
min. Earth dist.	-12142 Jun 10 j 21:02	23° <u>0</u> 02'27	28.89732 AU	conjunction	-12136 Dec 22 j 06:18	7° <u>0</u> 34'01	-1°17'26
direct	-12142 Aug 27 j 21:56	21° <u>0</u> 37'38		minimum elong	-12136 Dec 22 j 06:17	7° <u>0</u> 34'01	1°17'30
evening set	-12142 Nov 22 j 16:12	23° <u>0</u> 30'26		max. Earth dist.	-12136 Dec 23 j 00:09	7° <u>0</u> 35'41	30.85666 AU
				morning rise	-12135 Jan 07 j 13:32	8° <u>0</u> 10'13	
conjunction	-12142 Dec 08 j 18:36	24° <u>0</u> 06'15	-0°41'19	retrograde	-12135 Apr 08 j 18:16	10° <u>0</u> 08'16	
minimum elong	-12142 Dec 08 j 18:36	24° <u>0</u> 06'15	0°41'13	opposition	-12135 Jun 26 j 22:27	8° <u>0</u> 42'55	-1°25'53
max. Earth dist.	-12142 Dec 09 j 16:23	24° <u>0</u> 08'17	30.89480 AU	min. Earth dist.	-12135 Jun 26 j 06:31	8° <u>0</u> 44'03	28.85486 AU
morning rise	-12142 Dec 25 j 00:39	24° <u>0</u> 42'25		direct	-12135 Sep 12 j 06:44	7° <u>0</u> 18'59	
retrograde	-12141 Mar 26 j 14:11	26° <u>0</u> 40'51		evening set	-12135 Dec 08 j 15:30	9° <u>0</u> 12'27	
min. Earth dist.	-12141 Jun 13 j 09:16	25° <u>0</u> 16'59	28.89284 AU				
opposition	-12141 Jun 14 j 04:58	25° <u>0</u> 15'35	-0°47'34	conjunction	-12135 Dec 24 j 20:08	9° <u>0</u> 48'24	-1°23'05
direct	-12141 Aug 30 j 07:03	23° <u>0</u> 52'11		minimum elong	-12135 Dec 24 j 20:07	9° <u>0</u> 48'24	1°23'11
evening set	-12141 Nov 25 j 05:33	25° <u>0</u> 45'06		max. Earth dist.	-12135 Dec 25 j 12:43	9° <u>0</u> 49'57	30.85198 AU
				morning rise	-12134 Jan 10 j 03:34	10° <u>0</u> 24'37	
conjunction	-12141 Dec 11 j 08:32	26° <u>0</u> 20'57	-0°47'33	retrograde	-12134 Apr 11 j 06:47	12° <u>0</u> 22'36	
minimum elong	-12141 Dec 11 j 08:31	26° <u>0</u> 20'57	0°47'29	opposition	-12134 Jun 29 j 09:17	10° <u>0</u> 57'16	-1°31'52
max. Earth dist.	-12141 Dec 12 j 06:22	26° <u>0</u> 22'59	30.88969 AU	min. Earth dist.	-12134 Jun 28 j 18:37	10° <u>0</u> 58'18	28.85106 AU
morning rise	-12141 Dec 27 j 14:44	26° <u>0</u> 57'08		direct	-12134 Sep 14 j 17:04	9° <u>0</u> 33'15	
retrograde	-12140 Mar 28 j 01:19	28° <u>0</u> 55'32		evening set	-12134 Dec 11 j 05:17	11° <u>0</u> 26'50	
opposition	-12140 Jun 15 j 16:07	27° <u>0</u> 30'17	-0°54'12				
min. Earth dist.	-12140 Jun 14 j 21:22	27° <u>0</u> 31'36	28.88715 AU	conjunction	-12134 Dec 27 j 10:19	12° <u>0</u> 02'48	-1°28'37
direct	-12140 Aug 31 j 18:35	26° <u>0</u> 06'49		minimum elong	-12134 Dec 27 j 10:18	12° <u>0</u> 02'48	1°28'44
evening set	-12140 Nov 26 j 19:10	27° <u>0</u> 59'49		max. Earth dist.	-12134 Dec 28 j 03:23	12° <u>0</u> 04'24	30.84884 AU
				morning rise	-12133 Jan 12 j 17:40	12° <u>0</u> 39'01	
conjunction	-12140 Dec 12 j 22:25	28° <u>0</u> 35'41	-0°53'42	retrograde	-12133 Apr 13 j 19:57	14° <u>0</u> 36'55	
minimum elong	-12140 Dec 12 j 22:24	28° <u>0</u> 35'41	0°53'40	opposition	-12133 Jul 01 j 19:51	13° <u>0</u> 11'38	-1°37'43
max. Earth dist.	-12140 Dec 13 j 18:23	28° <u>0</u> 37'33	30.88352 AU	min. Earth dist.	-12133 Jul 01 j 05:11	13° <u>0</u> 12'40	28.84865 AU
morning rise	-12140 Dec 29 j 05:00	29° <u>0</u> 11'53		direct	-12133 Sep 17 j 05:30	11° <u>0</u> 47'34	
	-12139 Jan 21 j 15:16	0° <u>0</u>		evening set	-12133 Dec 13 j 19:23	13° <u>0</u> 41'17	
retrograde	-12139 Mar 30 j 14:38	1° <u>0</u> 10'14					
	-12139 Jun 09 j 05:16	30° <u>0</u> 10'14		conjunction	-12133 Dec 30 j 00:27	14° <u>0</u> 17'16	-1°34'01
min. Earth dist.	-12139 Jun 17 j 08:48	29° <u>0</u> 46'16	28.88057 AU	minimum elong	-12133 Dec 30 j 00:26	14° <u>0</u> 17'16	1°34'11
opposition	-12139 Jun 18 j 03:05	29° <u>0</u> 44'58	-1°00'44	max. Earth dist.	-12133 Dec 30 j 15:43	14° <u>0</u> 18'41	30.84706 AU
direct	-12139 Sep 03 j 06:01	28° <u>0</u> 21'25		morning rise	-12132 Jan 15 j 08:03	14° <u>0</u> 53'28	
	-12139 Nov 22 j 14:48	0° <u>0</u>		retrograde	-12132 Apr 15 j 09:07	16° <u>0</u> 51'19	
evening set	-12139 Nov 29 j 08:45	0° <u>0</u> 14'31		opposition	-12132 Jul 03 j 06:35	15° <u>0</u> 26'05	-1°43'25
				min. Earth dist.	-12132 Jul 02 j 16:46	15° <u>0</u> 27'04	28.84757 AU
conjunction	-12139 Dec 15 j 12:23	0° <u>0</u> 50'25	-0°59'47	direct	-12132 Sep 18 j 15:26	14° <u>0</u> 01'59	
minimum elong	-12139 Dec 15 j 12:22	0° <u>0</u> 50'24	0°59'47	evening set	-12132 Dec 15 j 09:30	15° <u>0</u> 55'51	
max. Earth dist.	-12139 Dec 16 j 08:08	0° <u>0</u> 52'15	30.87650 AU				
morning rise	-12139 Dec 31 j 19:06	1° <u>0</u> 26'36		conjunction	-12132 Dec 31 j 14:51	16° <u>0</u> 31'50	-1°39'17
retrograde	-12138 Apr 02 j 02:04	3° <u>0</u> 24'53		minimum elong	-12132 Dec 31 j 14:49	16° <u>0</u> 31'49	1°39'28
opposition	-12138 Jun 20 j 14:07	1° <u>0</u> 59'36	-1°07'11	max. Earth dist.	-12131 Jan 01 j 06:25	16° <u>0</u> 33'17	30.84631 AU

Attention, astronomical year style is used: The year -12131 in astronomical counting style is the year 12132 BCE in historical counting style.

morning rise	-12131 Jan 16 j 22:15	17° <u>♂</u> 08'02			-12125 Sep 05 j 17:33	30° <u>♂</u>	
retrograde	-12131 Apr 17 j 20:00	19° <u>♂</u> 05'50		direct	-12125 Oct 05 j 01:43	29° <u>♂</u> 45'37	
opposition	-12131 Jul 05 j 17:12	17° <u>♂</u> 40'40	-1°48'57		-12125 Nov 03 j 04:19	0° <u>♂</u>	
min. Earth dist.	-12131 Jul 05 j 04:14	17° <u>♂</u> 41'36	28.84722 AU	evening set	-12124 Jan 01 j 15:24	1° <u>♂</u> 40'26	
direct	-12131 Sep 21 j 03:01	16° <u>♂</u> 16'33					
evening set	-12131 Dec 17 j 23:50	18° <u>♂</u> 10'33		conjunction	-12124 Jan 17 j 21:14	2° <u>♂</u> 16'26	-2°11'29
				minimum elong	-12124 Jan 17 j 21:13	2° <u>♂</u> 16'26	2°11'52
conjunction	-12130 Jan 03 j 05:11	18° <u>♂</u> 46'32	-1°44'23	max. Earth dist.	-12124 Jan 18 j 05:01	2° <u>♂</u> 17'09	30.83643 AU
minimum elong	-12130 Jan 03 j 05:10	18° <u>♂</u> 46'32	1°44'37	morning rise	-12124 Feb 03 j 04:02	2° <u>♂</u> 52'33	
max. Earth dist.	-12130 Jan 03 j 18:55	18° <u>♂</u> 47'49	30.84622 AU	retrograde	-12124 May 03 j 13:37	4° <u>♂</u> 49'49	
morning rise	-12130 Jan 19 j 12:43	19° <u>♂</u> 22'45		opposition	-12124 Jul 20 j 19:44	3° <u>♂</u> 24'56	-2°22'44
retrograde	-12130 Apr 20 j 09:15	21° <u>♂</u> 20'30		min. Earth dist.	-12124 Jul 20 j 13:26	3° <u>♂</u> 25'23	28.83692 AU
opposition	-12130 Jul 08 j 03:51	19° <u>♂</u> 55'24	-1°54'20	direct	-12124 Oct 06 j 15:24	2° <u>♂</u> 00'20	
min. Earth dist.	-12130 Jul 07 j 15:20	19° <u>♂</u> 56'18	28.84735 AU	evening set	-12123 Jan 03 j 06:08	3° <u>♂</u> 55'17	
direct	-12130 Sep 23 j 13:38	18° <u>♂</u> 31'15					
evening set	-12130 Dec 20 j 14:09	20° <u>♂</u> 25'25		conjunction	-12123 Jan 19 j 11:46	4° <u>♂</u> 31'16	-2°15'20
				minimum elong	-12123 Jan 19 j 11:44	4° <u>♂</u> 31'16	2°15'43
conjunction	-12129 Jan 05 j 19:42	21° <u>♂</u> 01'24	-1°49'21	max. Earth dist.	-12123 Jan 19 j 17:33	4° <u>♂</u> 31'48	30.83441 AU
minimum elong	-12129 Jan 05 j 19:40	21° <u>♂</u> 01'24	1°49'35	morning rise	-12123 Feb 04 j 18:30	5° <u>♂</u> 07'22	
max. Earth dist.	-12129 Jan 06 j 09:09	21° <u>♂</u> 02'40	30.84610 AU	retrograde	-12123 May 06 j 02:03	7° <u>♂</u> 04'31	
morning rise	-12129 Jan 22 j 03:05	21° <u>♂</u> 37'36		opposition	-12123 Jul 23 j 06:11	5° <u>♂</u> 39'40	-2°26'44
retrograde	-12129 Apr 22 j 20:49	23° <u>♂</u> 35'19		min. Earth dist.	-12123 Jul 23 j 00:49	5° <u>♂</u> 40'03	28.83560 AU
opposition	-12129 Jul 10 j 14:39	22° <u>♂</u> 10'17	-1°59'33	direct	-12123 Oct 09 j 02:23	4° <u>♂</u> 14'59	
min. Earth dist.	-12129 Jul 10 j 03:56	22° <u>♂</u> 11'03	28.84710 AU	evening set	-12122 Jan 05 j 20:41	6° <u>♂</u> 10'03	
direct	-12129 Sep 26 j 00:11	20° <u>♂</u> 46'05					
evening set	-12129 Dec 23 j 04:48	22° <u>♂</u> 40'24		conjunction	-12122 Jan 22 j 02:26	6° <u>♂</u> 46'02	-2°18'59
				minimum elong	-12122 Jan 22 j 02:25	6° <u>♂</u> 46'02	2°19'24
conjunction	-12128 Jan 08 j 10:25	23° <u>♂</u> 16'24	-1°54'08	max. Earth dist.	-12122 Jan 22 j 08:31	6° <u>♂</u> 46'36	30.83356 AU
minimum elong	-12128 Jan 08 j 10:23	23° <u>♂</u> 16'24	1°54'24	morning rise	-12122 Feb 07 j 08:49	7° <u>♂</u> 22'07	
max. Earth dist.	-12128 Jan 08 j 22:11	23° <u>♂</u> 17'30	30.84551 AU	retrograde	-12122 May 08 j 12:51	9° <u>♂</u> 19'10	
morning rise	-12128 Jan 24 j 17:48	23° <u>♂</u> 52'35		opposition	-12122 Jul 25 j 16:37	7° <u>♂</u> 54'21	-2°30'31
retrograde	-12128 Apr 24 j 10:16	25° <u>♂</u> 50'14		min. Earth dist.	-12122 Jul 25 j 12:00	7° <u>♂</u> 54'41	28.83550 AU
opposition	-12128 Jul 12 j 01:14	24° <u>♂</u> 25'16	-2°04'35	direct	-12122 Oct 11 j 14:41	6° <u>♂</u> 29'37	
min. Earth dist.	-12128 Jul 11 j 14:44	24° <u>♂</u> 26'00	28.84616 AU	evening set	-12121 Jan 08 j 11:22	8° <u>♂</u> 24'49	
direct	-12128 Sep 27 j 12:46	23° <u>♂</u> 01'00					
evening set	-12128 Dec 24 j 19:33	24° <u>♂</u> 55'28		conjunction	-12121 Jan 24 j 16:57	9° <u>♂</u> 00'47	-2°22'25
				minimum elong	-12121 Jan 24 j 16:56	9° <u>♂</u> 00'47	2°22'50
conjunction	-12127 Jan 10 j 01:10	25° <u>♂</u> 31'28	-1°58'45	max. Earth dist.	-12121 Jan 24 j 21:11	9° <u>♂</u> 01'11	30.83419 AU
minimum elong	-12127 Jan 10 j 01:09	25° <u>♂</u> 31'28	1°59'02	morning rise	-12121 Feb 09 j 23:18	9° <u>♂</u> 36'50	
max. Earth dist.	-12127 Jan 10 j 11:38	25° <u>♂</u> 32'26	30.84396 AU	retrograde	-12121 May 11 j 01:46	11° <u>♂</u> 33'48	
morning rise	-12127 Jan 26 j 08:26	26° <u>♂</u> 07'38		opposition	-12121 Jul 28 j 03:04	10° <u>♂</u> 09'03	-2°34'04
retrograde	-12127 Apr 26 j 22:24	28° <u>♂</u> 05'12		min. Earth dist.	-12121 Jul 27 j 22:38	10° <u>♂</u> 09'22	28.83698 AU
opposition	-12127 Jul 14 j 12:06	26° <u>♂</u> 40'16	-2°09'25	direct	-12121 Oct 14 j 01:29	8° <u>♂</u> 44'15	
min. Earth dist.	-12127 Jul 14 j 03:35	26° <u>♂</u> 40'52	28.84432 AU	evening set	-12120 Jan 11 j 02:06	10° <u>♂</u> 39'36	
direct	-12127 Sep 30 j 00:49	25° <u>♂</u> 15'56					
evening set	-12127 Dec 27 j 10:01	27° <u>♂</u> 10'31		conjunction	-12120 Jan 27 j 07:44	11° <u>♂</u> 15'34	-2°25'38
				minimum elong	-12120 Jan 27 j 07:42	11° <u>♂</u> 15'34	2°26'05
conjunction	-12126 Jan 12 j 15:47	27° <u>♂</u> 46'31	-2°03'12	max. Earth dist.	-12120 Jan 27 j 12:02	11° <u>♂</u> 15'58	30.83625 AU
minimum elong	-12126 Jan 12 j 15:45	27° <u>♂</u> 46'31	2°03'30	morning rise	-12120 Feb 12 j 13:42	11° <u>♂</u> 51'36	
max. Earth dist.	-12126 Jan 13 j 01:23	27° <u>♂</u> 47'25	30.84173 AU	retrograde	-12120 May 12 j 12:37	13° <u>♂</u> 48'29	
morning rise	-12126 Jan 28 j 22:53	28° <u>♂</u> 22'40		opposition	-12120 Jul 29 j 13:31	12° <u>♂</u> 23'49	-2°37'23
	-12126 Mar 25 j 12:52	0° <u>♂</u>		min. Earth dist.	-12120 Jul 29 j 10:35	12° <u>♂</u> 24'01	28.83981 AU
retrograde	-12126 Apr 29 j 11:39	0° <u>♂</u> 20'09		direct	-12120 Oct 15 j 11:36	10° <u>♂</u> 58'59	
	-12126 Jun 03 j 18:18	30° <u>♂</u>		evening set	-12119 Jan 12 j 16:56	12° <u>♂</u> 54'28	
opposition	-12126 Jul 16 j 22:41	28° <u>♂</u> 55'14	-2°14'04				
min. Earth dist.	-12126 Jul 16 j 14:15	28° <u>♂</u> 55'50	28.84183 AU	conjunction	-12119 Jan 28 j 22:26	13° <u>♂</u> 30'26	-2°28'37
direct	-12126 Oct 02 j 14:39	27° <u>♂</u> 30'49		minimum elong	-12119 Jan 28 j 22:24	13° <u>♂</u> 30'25	2°29'05
evening set	-12126 Dec 30 j 00:46	29° <u>♂</u> 25'31		max. Earth dist.	-12119 Jan 29 j 01:21	13° <u>♂</u> 30'42	30.83978 AU
	-12125 Jan 14 j 14:09	0° <u>♂</u>		morning rise	-12119 Feb 14 j 04:15	14° <u>♂</u> 06'27	
					-12119 Mar 12 j 14:14	15° <u>♂</u>	
conjunction	-12125 Jan 15 j 06:25	0° <u>♂</u> 01'31	-2°07'26	retrograde	-12119 May 15 j 00:50	16° <u>♂</u> 03'14	
minimum elong	-12125 Jan 15 j 06:24	0° <u>♂</u> 01'31	2°07'46		-12119 Jul 19 j 09:50	15° <u>♂</u>	
max. Earth dist.	-12125 Jan 15 j 14:15	0° <u>♂</u> 02'15	30.83899 AU	opposition	-12119 Jul 31 j 23:57	14° <u>♂</u> 38'40	-2°40'28
morning rise	-12125 Jan 31 j 13:30	0° <u>♂</u> 37'39		min. Earth dist.	-12119 Jul 31 j 20:50	14° <u>♂</u> 38'53	28.84395 AU
retrograde	-12125 May 02 j 00:17	2° <u>♂</u> 35'02		direct	-12119 Oct 18 j 00:07	13° <u>♂</u> 13'49	
opposition	-12125 Jul 19 j 09:14	1° <u>♂</u> 10'07	-2°18'30		-12118 Jan 10 j 22:16	15° <u>♂</u>	
min. Earth dist.	-12125 Jul 19 j 02:36	1° <u>♂</u> 10'36	28.83923 AU	evening set	-12118 Jan 15 j 07:38	15° <u>♂</u> 09'28	

Attention, astronomical year style is used: The year -12118 in astronomical counting style is the year 12119 BCE in historical counting style.

conjunction	-12118 Jan 31 j 13:02	15° M 45'25	-2°31'23	min. Earth dist.	-12112 Aug 16 j 06:25	0° 7 23'52	28.86802 AU
minimum elong	-12118 Jan 31 j 13:01	15° M 45'25	2°31'53		-12112 Aug 30 j 10:00	30° R M	
max. Earth dist.	-12118 Jan 31 j 15:15	15° M 45'37	30.84421 AU	direct	-12112 Nov 02 j 16:38	28° M 58'58	
morning rise	-12118 Feb 16 j 18:34	16° M 21'24			-12111 Jan 04 j 03:49	0° 7	
retrograde	-12118 May 17 j 12:02	18° M 18'08		evening set	-12111 Jan 31 j 16:38	0° 7 55'26	
opposition	-12118 Aug 03 j 10:31	16° M 53'39	-2°43'18				
min. Earth dist.	-12118 Aug 03 j 09:17	16° M 53'45	28.84880 AU	conjunction	-12111 Feb 16 j 21:14	1° 7 31'18	-2°44'06
direct	-12118 Oct 20 j 11:35	15° M 28'47		minimum elong	-12111 Feb 16 j 21:14	1° 7 31'18	2°44'43
evening set	-12117 Jan 17 j 22:33	17° M 24'36		max. Earth dist.	-12111 Feb 16 j 15:03	1° 7 30'44	30.86649 AU
				morning rise	-12111 Mar 05 j 00:41	2° 7 07'06	
conjunction	-12117 Feb 03 j 03:55	18° M 00'32	-2°33'55	retrograde	-12111 Jun 02 j 01:56	4° 7 02'57	
minimum elong	-12117 Feb 03 j 03:54	18° M 00'32	2°34'26	opposition	-12111 Aug 18 j 12:21	2° 7 38'53	-2°55'59
max. Earth dist.	-12117 Feb 03 j 05:08	18° M 00'39	30.84919 AU	min. Earth dist.	-12111 Aug 18 j 18:37	2° 7 38'27	28.87008 AU
morning rise	-12117 Feb 19 j 09:10	18° M 36'30		direct	-12111 Nov 05 j 04:06	1° 7 13'35	
retrograde	-12117 May 20 j 01:06	20° M 33'09		evening set	-12110 Feb 03 j 07:15	3° 7 10'07	
opposition	-12117 Aug 05 j 20:52	19° M 08'46	-2°45'53				
min. Earth dist.	-12117 Aug 05 j 19:49	19° M 08'51	28.85373 AU	conjunction	-12110 Feb 19 j 11:38	3° 7 45'58	-2°44'56
direct	-12117 Oct 23 j 00:47	17° M 43'52		minimum elong	-12110 Feb 19 j 11:37	3° 7 45'58	2°45'34
evening set	-12116 Jan 20 j 13:44	19° M 39'50		max. Earth dist.	-12110 Feb 19 j 03:56	3° 7 45'15	30.86894 AU
				morning rise	-12110 Mar 07 j 14:55	4° 7 21'45	
conjunction	-12116 Feb 05 j 18:52	20° M 15'46	-2°36'13	retrograde	-12110 Jun 04 j 13:27	6° 7 17'27	
minimum elong	-12116 Feb 05 j 18:51	20° M 15'46	2°36'46	opposition	-12110 Aug 20 j 22:45	4° 7 53'26	-2°56'45
max. Earth dist.	-12116 Feb 05 j 18:14	20° M 15'43	30.85380 AU	min. Earth dist.	-12110 Aug 21 j 04:51	4° 7 53'00	28.87299 AU
morning rise	-12116 Feb 21 j 23:54	20° M 51'43		direct	-12110 Nov 07 j 17:01	3° 7 28'03	
retrograde	-12116 May 21 j 13:46	22° M 48'16		evening set	-12109 Feb 05 j 21:57	5° 7 24'40	
opposition	-12116 Aug 07 j 07:34	21° M 23'58	-2°48'13				
min. Earth dist.	-12116 Aug 07 j 08:28	21° M 23'55	28.85818 AU	conjunction	-12109 Feb 22 j 02:13	6° 7 00'31	-2°45'32
direct	-12116 Oct 24 j 12:18	19° M 59'02		minimum elong	-12109 Feb 22 j 02:13	6° 7 00'31	2°46'09
evening set	-12115 Jan 22 j 04:42	21° M 55'08		max. Earth dist.	-12109 Feb 21 j 18:03	5° 7 59'45	30.87226 AU
				morning rise	-12109 Mar 10 j 05:07	6° 7 36'16	
conjunction	-12115 Feb 07 j 09:50	22° M 31'03	-2°38'17	retrograde	-12109 Jun 06 j 23:42	8° 7 31'50	
minimum elong	-12115 Feb 07 j 09:49	22° M 31'03	2°38'49	opposition	-12109 Aug 23 j 09:14	7° 7 07'52	-2°57'14
max. Earth dist.	-12115 Feb 07 j 08:41	22° M 30'57	30.85774 AU	min. Earth dist.	-12109 Aug 23 j 16:59	7° 7 07'19	28.87700 AU
morning rise	-12115 Feb 23 j 14:26	23° M 06'58		direct	-12109 Nov 10 j 04:13	5° 7 42'26	
retrograde	-12115 May 24 j 02:51	25° M 03'24		evening set	-12108 Feb 08 j 12:37	7° 7 39'10	
opposition	-12115 Aug 09 j 18:10	23° M 39'11	-2°50'17				
min. Earth dist.	-12115 Aug 09 j 19:44	23° M 39'04	28.86164 AU	conjunction	-12108 Feb 24 j 16:45	8° 7 14'59	-2°45'52
direct	-12115 Oct 27 j 03:00	22° M 14'12		minimum elong	-12108 Feb 24 j 16:44	8° 7 14'59	2°46'31
evening set	-12114 Jan 24 j 19:50	24° M 10'24		max. Earth dist.	-12108 Feb 24 j 07:45	8° 7 14'09	30.87695 AU
				morning rise	-12108 Mar 11 j 19:22	8° 7 50'43	
conjunction	-12114 Feb 10 j 00:41	24° M 46'19	-2°40'06	retrograde	-12108 Jun 08 j 11:43	10° 7 46'09	
minimum elong	-12114 Feb 10 j 00:40	24° M 46'19	2°40'41	opposition	-12108 Aug 24 j 19:41	9° 7 22'17	-2°57'28
max. Earth dist.	-12114 Feb 09 j 21:07	24° M 45'59	30.86071 AU	min. Earth dist.	-12108 Aug 25 j 03:08	9° 7 21'45	28.88229 AU
morning rise	-12114 Feb 26 j 05:09	25° M 22'12		direct	-12108 Nov 11 j 17:09	7° 7 56'48	
retrograde	-12114 May 26 j 15:21	27° M 18'30		evening set	-12107 Feb 10 j 03:09	9° 7 53'39	
opposition	-12114 Aug 12 j 04:44	25° M 54'20	-2°52'06				
min. Earth dist.	-12114 Aug 12 j 07:37	25° M 54'08	28.86433 AU	conjunction	-12107 Feb 26 j 07:03	10° 7 29'27	-2°45'57
direct	-12114 Oct 29 j 15:06	24° M 29'16		minimum elong	-12107 Feb 26 j 07:02	10° 7 29'27	2°46'36
evening set	-12113 Jan 27 j 10:43	26° M 25'34		max. Earth dist.	-12107 Feb 25 j 20:56	10° 7 28'31	30.88284 AU
				morning rise	-12107 Mar 14 j 09:21	11° 7 05'09	
conjunction	-12113 Feb 12 j 15:39	27° M 01'28	-2°41'41	retrograde	-12107 Jun 10 j 23:14	13° 7 00'30	
minimum elong	-12113 Feb 12 j 15:38	27° M 01'28	2°42'16	opposition	-12107 Aug 27 j 06:17	11° 7 36'43	-2°57'25
max. Earth dist.	-12113 Feb 12 j 11:51	27° M 01'07	30.86295 AU	min. Earth dist.	-12107 Aug 27 j 15:07	11° 7 36'05	28.88888 AU
morning rise	-12113 Feb 28 j 19:42	27° M 37'20		direct	-12107 Nov 14 j 04:42	10° 7 11'14	
retrograde	-12113 May 29 j 02:50	29° M 33'29		evening set	-12106 Feb 12 j 17:39	12° 7 08'11	
opposition	-12113 Aug 14 j 15:19	28° M 09'21	-2°53'40				
min. Earth dist.	-12113 Aug 14 j 19:27	28° M 09'03	28.86623 AU	conjunction	-12106 Feb 28 j 21:30	12° 7 43'59	-2°45'46
direct	-12113 Nov 01 j 04:31	26° M 44'13		minimum elong	-12106 Feb 28 j 21:29	12° 7 43'59	2°46'27
evening set	-12112 Jan 30 j 01:48	28° M 40'35		max. Earth dist.	-12106 Feb 28 j 11:20	12° 7 43'03	30.89000 AU
				morning rise	-12106 Mar 16 j 23:26	13° 7 19'39	
conjunction	-12112 Feb 15 j 06:25	29° M 16'28	-2°43'01	retrograde	-12106 Jun 13 j 11:35	15° 7 14'54	
minimum elong	-12112 Feb 15 j 06:25	29° M 16'28	2°43'38	opposition	-12106 Aug 29 j 16:41	13° 7 51'14	-2°57'05
max. Earth dist.	-12112 Feb 15 j 00:17	29° M 15'54	30.86470 AU	min. Earth dist.	-12106 Aug 30 j 01:54	13° 7 50'34	28.89634 AU
morning rise	-12112 Mar 02 j 10:20	29° M 52'18		direct	-12106 Nov 16 j 19:01	12° 7 25'45	
	-12112 Mar 05 j 23:45	0° 7		evening set	-12105 Feb 15 j 08:19	14° 7 22'50	
retrograde	-12112 May 30 j 15:53	1° 7 48'18					
opposition	-12112 Aug 16 j 01:44	0° 7 24'12	-2°54'57	conjunction	-12105 Mar 03 j 11:52	14° 7 58'38	-2°45'21

Attention, astronomical year style is used: The year -12105 in astronomical counting style is the year 12106 BCE in historical counting style.

minimum elong	-12105 Mar 03 j 11:52	14° \nearrow 58'37	2°46'01	min. Earth dist.	-12099 Sep 14 j 10:59	29° \nearrow 32'17	28.93752 AU
max. Earth dist.	-12105 Mar 02 j 23:49	14° \nearrow 57'30	30.89774 AU	direct	-12099 Dec 02 j 10:48	28° \nearrow 07'40	
morning rise	-12105 Mar 19 j 13:38	15° \nearrow 34'17			-12098 Mar 01 j 03:55	0° \searrow	
retrograde	-12105 Jun 16 j 00:06	17° \nearrow 29'25		evening set	-12098 Mar 03 j 13:00	0° \searrow 05'09	
opposition	-12105 Sep 01 j 03:16	16° \nearrow 05'52	-2°56'30				
min. Earth dist.	-12105 Sep 01 j 13:33	16° \nearrow 05'08	28.90424 AU	conjunction	-12098 Mar 19 j 15:22	0° \searrow 40'52	-2°35'27
direct	-12105 Nov 19 j 06:55	14° \nearrow 40'23		minimum elong	-12098 Mar 19 j 15:23	0° \searrow 40'52	2°36'11
evening set	-12104 Feb 17 j 22:53	16° \nearrow 37'35		max. Earth dist.	-12098 Mar 18 j 20:20	0° \searrow 39'06	30.93737 AU
				morning rise	-12098 Apr 04 j 14:55	1° \searrow 16'21	
conjunction	-12104 Mar 05 j 02:25	17° \nearrow 13'22	-2°44'40	retrograde	-12098 Jul 01 j 05:58	3° \searrow 10'30	
minimum elong	-12104 Mar 05 j 02:25	17° \nearrow 13'22	2°45'22	opposition	-12098 Sep 16 j 06:01	1° \searrow 47'23	-2°45'02
max. Earth dist.	-12104 Mar 04 j 14:22	17° \nearrow 12'15	30.90551 AU	min. Earth dist.	-12098 Sep 16 j 23:00	1° \searrow 46'11	28.94217 AU
morning rise	-12104 Mar 21 j 03:41	17° \nearrow 49'00		direct	-12098 Dec 04 j 22:55	0° \searrow 21'35	
retrograde	-12104 Jun 17 j 12:02	19° \nearrow 44'02		evening set	-12097 Mar 06 j 02:53	2° \searrow 19'06	
opposition	-12104 Sep 02 j 13:57	18° \nearrow 20'35	-2°55'38	max. Earth dist.	-12097 Mar 21 j 10:08	2° \searrow 53'01	30.94247 AU
min. Earth dist.	-12104 Sep 03 j 01:25	18° \nearrow 19'47	28.91172 AU				
direct	-12104 Nov 20 j 20:30	16° \nearrow 55'07		conjunction	-12097 Mar 22 j 05:10	2° \searrow 54'48	-2°33'06
evening set	-12103 Feb 19 j 13:36	18° \nearrow 52'25		minimum elong	-12097 Mar 22 j 05:10	2° \searrow 54'48	2°33'48
				morning rise	-12097 Apr 07 j 04:23	3° \searrow 30'15	
conjunction	-12103 Mar 07 j 16:46	19° \nearrow 28'12	-2°43'44	retrograde	-12097 Jul 03 j 16:38	5° \searrow 24'15	
minimum elong	-12103 Mar 07 j 16:46	19° \nearrow 28'12	2°44'25	opposition	-12097 Sep 18 j 16:41	4° \searrow 01'09	-2°42'23
max. Earth dist.	-12103 Mar 07 j 02:23	19° \nearrow 26'51	30.91272 AU	min. Earth dist.	-12097 Sep 19 j 09:44	3° \searrow 59'57	28.94760 AU
morning rise	-12103 Mar 23 j 17:53	20° \nearrow 03'48		direct	-12097 Dec 07 j 13:05	2° \searrow 35'19	
retrograde	-12103 Jun 20 j 01:43	21° \nearrow 58'43		evening set	-12096 Mar 07 j 16:45	4° \searrow 32'51	
opposition	-12103 Sep 05 j 00:39	20° \nearrow 35'22	-2°54'31				
min. Earth dist.	-12103 Sep 05 j 12:36	20° \nearrow 34'31	28.91856 AU	conjunction	-12096 Mar 23 j 18:41	5° \searrow 08'32	-2°30'31
direct	-12103 Nov 23 j 09:09	19° \nearrow 09'52		minimum elong	-12096 Mar 23 j 18:41	5° \searrow 08'32	2°31'14
evening set	-12102 Feb 22 j 03:56	21° \nearrow 07'14		max. Earth dist.	-12096 Mar 22 j 22:20	5° \searrow 06'38	30.94851 AU
				morning rise	-12096 Apr 08 j 17:40	5° \searrow 43'57	
conjunction	-12102 Mar 10 j 07:07	21° \nearrow 43'01	-2°42'34	retrograde	-12096 Jul 05 j 04:16	7° \searrow 37'49	
minimum elong	-12102 Mar 10 j 07:07	21° \nearrow 43'01	2°43'16	opposition	-12096 Sep 20 j 03:22	6° \searrow 14'46	-2°39'30
max. Earth dist.	-12102 Mar 09 j 16:35	21° \nearrow 41'39	30.91900 AU	min. Earth dist.	-12096 Sep 20 j 20:54	6° \searrow 13'32	28.95435 AU
morning rise	-12102 Mar 26 j 07:46	22° \nearrow 18'36		direct	-12096 Dec 09 j 00:44	4° \searrow 48'54	
retrograde	-12102 Jun 22 j 11:43	24° \nearrow 13'23		evening set	-12095 Mar 10 j 06:20	6° \searrow 46'27	
opposition	-12102 Sep 07 j 11:28	22° \nearrow 50'06	-2°53'07				
min. Earth dist.	-12102 Sep 08 j 01:17	22° \nearrow 49'07	28.92428 AU	conjunction	-12095 Mar 26 j 08:14	7° \searrow 22'07	-2°27'42
direct	-12102 Nov 25 j 21:34	21° \nearrow 24'35		minimum elong	-12095 Mar 26 j 08:15	7° \searrow 22'07	2°28'24
evening set	-12101 Feb 24 j 18:30	23° \nearrow 22'00		max. Earth dist.	-12095 Mar 25 j 12:33	7° \searrow 20'17	30.95600 AU
				morning rise	-12095 Apr 11 j 06:47	7° \searrow 57'31	
conjunction	-12101 Mar 12 j 21:23	23° \nearrow 57'45	-2°41'08	retrograde	-12095 Jul 07 j 15:19	9° \searrow 51'14	
minimum elong	-12101 Mar 12 j 21:23	23° \nearrow 57'45	2°41'50	opposition	-12095 Sep 22 j 14:06	8° \searrow 28'16	-2°36'23
max. Earth dist.	-12101 Mar 12 j 04:51	23° \nearrow 56'13	30.92434 AU	min. Earth dist.	-12095 Sep 23 j 08:10	8° \searrow 26'59	28.96240 AU
morning rise	-12101 Mar 28 j 21:53	24° \nearrow 33'19		direct	-12095 Dec 11 j 14:47	7° \searrow 02'24	
retrograde	-12101 Jun 24 j 23:09	26° \nearrow 27'56		evening set	-12094 Mar 12 j 19:54	8° \searrow 59'59	
opposition	-12101 Sep 09 j 22:00	25° \nearrow 04'43	-2°51'29				
min. Earth dist.	-12101 Sep 10 j 11:56	25° \nearrow 03'44	28.92912 AU	conjunction	-12094 Mar 28 j 21:27	9° \searrow 35'38	-2°24'40
direct	-12101 Nov 28 j 10:44	23° \nearrow 39'08		minimum elong	-12094 Mar 28 j 21:28	9° \searrow 35'38	2°25'23
evening set	-12100 Feb 27 j 08:52	25° \nearrow 36'35		max. Earth dist.	-12094 Mar 28 j 00:13	9° \searrow 33'39	30.96486 AU
				morning rise	-12094 Apr 13 j 19:54	10° \searrow 11'01	
conjunction	-12100 Mar 14 j 11:40	26° \nearrow 12'21	-2°39'29	retrograde	-12094 Jul 10 j 04:15	12° \searrow 04'37	
minimum elong	-12100 Mar 14 j 11:40	26° \nearrow 12'21	2°40'12	opposition	-12094 Sep 25 j 00:45	10° \searrow 41'43	-2°33'01
max. Earth dist.	-12100 Mar 13 j 18:36	26° \nearrow 10'45	30.92881 AU	min. Earth dist.	-12094 Sep 25 j 18:42	10° \searrow 40'28	28.97176 AU
morning rise	-12100 Mar 30 j 11:45	26° \nearrow 47'52		direct	-12094 Dec 14 j 03:50	9° \searrow 15'52	
retrograde	-12100 Jun 26 j 09:19	28° \nearrow 42'20		evening set	-12093 Mar 15 j 09:23	11° \searrow 13'30	
opposition	-12100 Sep 11 j 08:49	27° \nearrow 19'10	-2°49'35				
min. Earth dist.	-12100 Sep 12 j 00:36	27° \nearrow 18'03	28.93337 AU	conjunction	-12093 Mar 31 j 10:54	11° \searrow 49'08	-2°21'25
direct	-12100 Nov 29 j 21:53	25° \nearrow 53'31		minimum elong	-12093 Mar 31 j 10:54	11° \searrow 49'08	2°22'06
evening set	-12099 Feb 28 j 22:57	27° \nearrow 50'59		max. Earth dist.	-12093 Mar 30 j 14:12	11° \searrow 47'12	30.97467 AU
max. Earth dist.	-12099 Mar 16 j 07:28	28° \nearrow 25'02	30.93305 AU	morning rise	-12093 Apr 16 j 08:51	12° \searrow 24'30	
				retrograde	-12093 Jul 12 j 14:08	14° \searrow 18'00	
conjunction	-12099 Mar 17 j 01:31	28° \nearrow 26'43	-2°37'35	opposition	-12093 Sep 27 j 11:32	12° \searrow 55'12	-2°29'25
minimum elong	-12099 Mar 17 j 01:32	28° \nearrow 26'43	2°38'18	min. Earth dist.	-12093 Sep 28 j 06:54	12° \searrow 53'51	28.98176 AU
morning rise	-12099 Apr 02 j 01:23	29° \nearrow 02'14		direct	-12093 Dec 16 j 16:28	11° \searrow 29'23	
	-12099 Apr 30 j 19:58	0° \searrow		evening set	-12092 Mar 16 j 23:00	13° \searrow 27'03	
retrograde	-12099 Jun 28 j 20:05	0° \searrow 56'32		max. Earth dist.	-12092 Apr 01 j 02:03	14° \searrow 00'37	30.98499 AU
	-12099 Aug 28 j 20:28	30° \nearrow					
opposition	-12099 Sep 13 j 19:26	29° \nearrow 33'23	-2°47'26	conjunction	-12092 Apr 02 j 00:08	14° \searrow 02'41	-2°17'57

Attention, astronomical year style is used: The year -12092 in astronomical counting style is the year 12093 BCE in historical counting style.

minimum elong	-12092 Apr 02 j 00:09	14°30'24" 2°18'39"	conjunction	-12085 Apr 18 j 18:21	29°33'08" -1°48'20"
morning rise	-12092 Apr 17 j 21:56	14°33'01"	minimum elong	-12085 Apr 18 j 18:22	29°33'08" 1°48'57"
retrograde	-12092 Jul 14 j 02:14	16°33'25"	max. Earth dist.	-12085 Apr 17 j 16:01	29°33'40" 31.04015 AU
opposition	-12092 Sep 28 j 22:23	15°30'84" -2°25'36"		-12085 Apr 29 j 10:39	0°00'00"
min. Earth dist.	-12092 Sep 29 j 17:26	15°30'72" 28.99198 AU	morning rise	-12085 May 04 j 13:56	0°00'11"19"
direct	-12092 Dec 18 j 05:19	13°34'25"	retrograde	-12085 Jul 30 j 05:33	2°00'03'57"
evening set	-12091 Mar 19 j 12:17	15°34'03"	opposition	-12085 Oct 15 j 03:23	0°00'41'36" -1°53'17"
			min. Earth dist.	-12085 Oct 16 j 02:22	0°00'40'00" 29.04506 AU
conjunction	-12091 Apr 04 j 13:17	16°31'15" -2°14'16"		-12085 Nov 10 j 01:37	30°00'00"
minimum elong	-12091 Apr 04 j 13:18	16°31'15" 2°14'57"	direct	-12084 Jan 03 j 21:44	29°31'54"
max. Earth dist.	-12091 Apr 03 j 15:11	16°31'41" 30.99503 AU		-12084 Feb 26 j 06:09	0°00'00"
morning rise	-12091 Apr 20 j 10:39	16°35'13"	evening set	-12084 Apr 04 j 07:32	1°00'13'22"
retrograde	-12091 Jul 16 j 12:43	18°34'45"	max. Earth dist.	-12084 Apr 19 j 05:24	1°00'46'30" 31.04749 AU
opposition	-12091 Oct 01 j 09:26	17°32'21" -2°21'34"			
min. Earth dist.	-12091 Oct 02 j 06:07	17°32'05" 29.00172 AU	conjunction	-12084 Apr 20 j 06:45	1°00'48'52" -1°43'26"
direct	-12091 Dec 20 j 16:32	15°35'63"	minimum elong	-12084 Apr 20 j 06:46	1°00'48'52" 1°44'02"
evening set	-12090 Mar 22 j 01:42	17°35'41"	morning rise	-12084 May 06 j 01:49	2°00'24'01"
max. Earth dist.	-12090 Apr 06 j 03:17	18°32'74" 31.00447 AU	retrograde	-12084 Jul 31 j 15:01	4°00'16'33"
			opposition	-12084 Oct 16 j 14:37	2°00'54'15" -1°47'58"
conjunction	-12090 Apr 07 j 02:26	18°32'95" -2°10'24"	min. Earth dist.	-12084 Oct 17 j 14:29	2°00'52'35" 29.05282 AU
minimum elong	-12090 Apr 07 j 02:26	18°32'95" 2°11'05"	direct	-12083 Jan 05 j 10:36	1°00'28'25"
morning rise	-12090 Apr 22 j 23:34	19°30'09"	evening set	-12083 Apr 06 j 19:56	3°00'25'59"
retrograde	-12090 Jul 18 j 23:24	20°35'82"			
opposition	-12090 Oct 03 j 20:15	19°33'50" -2°17'20"	conjunction	-12083 Apr 22 j 18:42	4°00'01'27" -1°38'23"
min. Earth dist.	-12090 Oct 04 j 16:47	19°33'42" 29.01053 AU	minimum elong	-12083 Apr 22 j 18:42	4°00'01'27" 1°38'58"
direct	-12090 Dec 23 j 05:26	18°31'00"	max. Earth dist.	-12083 Apr 21 j 16:33	3°00'59'01" 31.05598 AU
evening set	-12089 Mar 24 j 15:07	20°30'74"	morning rise	-12083 May 08 j 13:35	4°00'36'35"
			retrograde	-12083 Aug 03 j 02:47	6°00'29'02"
conjunction	-12089 Apr 09 j 15:36	20°34'32" -2°06'20"	opposition	-12083 Oct 19 j 01:39	5°00'06'47" -1°42'29"
minimum elong	-12089 Apr 09 j 15:37	20°34'32" 2°07'00"	min. Earth dist.	-12083 Oct 20 j 00:32	5°00'05'11" 29.06182 AU
max. Earth dist.	-12089 Apr 08 j 15:26	20°34'10" 31.01281 AU	direct	-12082 Jan 08 j 00:05	3°00'40'58"
morning rise	-12089 Apr 25 j 12:23	21°31'84"	evening set	-12082 Apr 09 j 08:16	5°00'38'31"
retrograde	-12089 Jul 21 j 09:19	23°31'14"	max. Earth dist.	-12082 Apr 24 j 05:22	6°00'11'36" 31.06563 AU
opposition	-12089 Oct 06 j 07:22	21°34'91" -2°12'53"			
min. Earth dist.	-12089 Oct 07 j 05:20	21°34'74" 29.01838 AU	conjunction	-12082 Apr 25 j 06:50	6°00'13'58" -1°33'11"
direct	-12089 Dec 25 j 17:07	20°32'32"	minimum elong	-12082 Apr 25 j 06:51	6°00'13'58" 1°33'46"
evening set	-12088 Mar 26 j 04:16	22°32'11"	morning rise	-12082 May 11 j 01:14	6°00'49'04"
max. Earth dist.	-12088 Apr 10 j 04:16	22°35'43" 31.02028 AU	retrograde	-12082 Aug 05 j 13:18	8°00'41'27"
			opposition	-12082 Oct 21 j 12:44	7°00'19'16" -1°36'51"
conjunction	-12088 Apr 11 j 04:33	22°35'49" -2°02'05"	min. Earth dist.	-12082 Oct 22 j 12:39	7°00'17'36" 29.07201 AU
minimum elong	-12088 Apr 11 j 04:34	22°35'49" 2°02'46"	direct	-12081 Jan 10 j 11:54	5°00'53'30"
morning rise	-12088 Apr 27 j 00:58	23°32'05"	evening set	-12081 Apr 11 j 20:39	7°00'51'02"
retrograde	-12088 Jul 22 j 19:27	25°32'50"			
opposition	-12088 Oct 07 j 18:26	24°30'23" -2°08'15"	conjunction	-12081 Apr 27 j 18:50	8°00'26'28" -1°27'50"
min. Earth dist.	-12088 Oct 08 j 16:35	24°30'10" 29.02525 AU	minimum elong	-12081 Apr 27 j 18:50	8°00'26'28" 1°28'25"
direct	-12088 Dec 27 j 06:37	22°33'65"	max. Earth dist.	-12081 Apr 26 j 17:05	8°00'24'03" 31.07648 AU
evening set	-12087 Mar 28 j 17:25	24°33'43"	morning rise	-12081 May 13 j 12:58	9°00'01'33"
			retrograde	-12081 Aug 07 j 23:22	10°00'53'51"
conjunction	-12087 Apr 13 j 17:20	25°31'06" -1°57'40"	opposition	-12081 Oct 23 j 23:55	9°00'31'45" -1°31'05"
minimum elong	-12087 Apr 13 j 17:20	25°31'06" 1°58'20"	min. Earth dist.	-12081 Oct 24 j 22:58	9°00'30'09" 29.08305 AU
max. Earth dist.	-12087 Apr 12 j 15:43	25°30'74" 31.02699 AU	direct	-12080 Jan 13 j 00:59	8°00'06'03"
morning rise	-12087 Apr 29 j 13:31	25°34'52"	evening set	-12080 Apr 13 j 08:51	10°00'03'34"
retrograde	-12087 Jul 25 j 06:47	27°33'81"	max. Earth dist.	-12080 Apr 28 j 04:46	10°00'36'34" 31.08783 AU
opposition	-12087 Oct 10 j 05:24	26°31'54" -2°03'26"			
min. Earth dist.	-12087 Oct 11 j 04:09	26°31'41" 29.03181 AU	conjunction	-12080 Apr 29 j 06:40	10°00'38'59" -1°22'22"
direct	-12087 Dec 29 j 17:48	24°35'00"	minimum elong	-12080 Apr 29 j 06:41	10°00'38'59" 1°22'56"
evening set	-12086 Mar 31 j 06:08	26°34'74"	morning rise	-12080 May 15 j 00:22	11°00'14'03"
max. Earth dist.	-12086 Apr 15 j 05:01	27°32'05" 31.03351 AU	retrograde	-12080 Aug 09 j 08:58	13°00'06'19"
			opposition	-12080 Oct 25 j 11:18	11°00'44'17" -1°25'10"
conjunction	-12086 Apr 16 j 05:58	27°32'31" -1°53'05"	min. Earth dist.	-12080 Oct 26 j 11:14	11°00'42'38" 29.09450 AU
minimum elong	-12086 Apr 16 j 05:59	27°32'31" 1°53'44"	direct	-12079 Jan 14 j 11:47	10°00'18'39"
morning rise	-12086 May 02 j 01:45	27°35'25"	evening set	-12079 Apr 15 j 21:02	12°00'16'09"
retrograde	-12086 Jul 27 j 17:14	29°35'11"			
opposition	-12086 Oct 12 j 16:27	28°32'84" -1°58'27"	conjunction	-12079 May 01 j 18:32	12°00'51'33" -1°16'47"
min. Earth dist.	-12086 Oct 13 j 15:48	28°32'71" 29.03817 AU	minimum elong	-12079 May 01 j 18:33	12°00'51'33" 1°17'19"
direct	-12085 Jan 01 j 08:21	27°30'25"	max. Earth dist.	-12079 Apr 30 j 16:59	12°00'49'09" 31.09928 AU
evening set	-12085 Apr 02 j 18:59	29°30'03"	morning rise	-12079 May 17 j 11:51	13°00'26'35"

Attention, astronomical year style is used: The year -12079 in astronomical counting style is the year 12080 BCE in historical counting style.

	-12079 Jul 09 j 17:54	15°	min. Earth dist.	-12073 Nov 11 j 21:37	27°	29.15020 AU
retrograde	-12079 Aug 11 j 18:48	15°	direct	-12072 Jan 31 j 04:55	25°	
	-12079 Sep 14 j 15:02	15°	evening set	-12072 May 01 j 07:52	27°	
opposition	-12079 Oct 27 j 22:36	13°	max. Earth dist.	-12072 May 15 j 23:48	28°	31.15263 AU
min. Earth dist.	-12079 Oct 28 j 22:29	13°				
direct	-12078 Jan 16 j 23:58	12°	conjunction	-12072 May 17 j 02:20	28°	-0°35'05
evening set	-12078 Apr 18 j 09:13	14°	minimum elong	-12072 May 17 j 02:20	28°	0°35'29
	-12078 May 02 j 10:16	15°	morning rise	-12072 Jun 01 j 16:48	28°	51°50
max. Earth dist.	-12078 May 03 j 03:39	15°		-12072 Jul 06 j 14:38	0°	
			retrograde	-12072 Aug 26 j 21:20	0°	43°44
conjunction	-12078 May 04 j 06:15	15°		-12072 Oct 19 j 06:39	30°	
minimum elong	-12078 May 04 j 06:16	15°	opposition	-12072 Nov 12 j 07:39	29°	-0°34'17
morning rise	-12078 May 19 j 23:15	15°	min. Earth dist.	-12072 Nov 13 j 08:00	29°	29.15602 AU
retrograde	-12078 Aug 14 j 06:05	17°	direct	-12071 Feb 01 j 18:36	27°	56°22
opposition	-12078 Oct 30 j 10:04	16°	evening set	-12071 May 03 j 19:10	29°	53°22
min. Earth dist.	-12078 Oct 31 j 10:20	16°		-12071 May 06 j 19:28	0°	
	-12078 Dec 18 j 06:07	15°	max. Earth dist.	-12071 May 18 j 10:51	0°	26°02 31.15878 AU
direct	-12077 Jan 19 j 10:53	14°				
	-12077 Feb 20 j 07:07	15°	conjunction	-12071 May 19 j 13:09	0°	28°30 -0°28'53
evening set	-12077 Apr 20 j 21:17	16°	minimum elong	-12071 May 19 j 13:10	0°	28°30 0°29'16
			morning rise	-12071 Jun 04 j 03:08	1°	03°17
conjunction	-12077 May 06 j 18:02	17°	retrograde	-12071 Aug 29 j 06:44	2°	55°10
minimum elong	-12077 May 06 j 18:03	17°	opposition	-12071 Nov 14 j 19:15	1°	33°16 -0°27'37
max. Earth dist.	-12077 May 05 j 16:08	17°	min. Earth dist.	-12071 Nov 15 j 19:56	1°	31°34 29.16270 AU
morning rise	-12077 May 22 j 10:30	17°	direct	-12070 Feb 04 j 05:38	0°	07°50
retrograde	-12077 Aug 16 j 15:55	19°	evening set	-12070 May 06 j 06:19	2°	04°47
opposition	-12077 Nov 01 j 21:39	18°				
min. Earth dist.	-12077 Nov 02 j 22:31	18°	conjunction	-12070 May 21 j 23:53	2°	39°53 -0°22'38
direct	-12076 Jan 22 j 00:45	16°	minimum elong	-12070 May 21 j 23:53	2°	39°53 0°22'59
evening set	-12076 Apr 22 j 09:25	18°	max. Earth dist.	-12070 May 20 j 22:33	2°	37°30 31.16599 AU
max. Earth dist.	-12076 May 07 j 02:17	19°	morning rise	-12070 Jun 06 j 13:23	3°	14°38
			retrograde	-12070 Aug 31 j 15:56	5°	06°30
conjunction	-12076 May 08 j 05:35	19°	opposition	-12070 Nov 17 j 06:57	3°	44°38 -0°20'56
minimum elong	-12076 May 08 j 05:36	19°	min. Earth dist.	-12070 Nov 18 j 06:49	3°	43°00 29.17024 AU
morning rise	-12076 May 23 j 21:47	20°	direct	-12069 Feb 06 j 17:57	2°	19°15
retrograde	-12076 Aug 18 j 04:00	21°	evening set	-12069 May 08 j 17:29	4°	16°09
opposition	-12076 Nov 03 j 09:12	20°	max. Earth dist.	-12069 May 23 j 08:49	4°	48°49 31.17406 AU
min. Earth dist.	-12076 Nov 04 j 09:40	20°				
direct	-12075 Jan 23 j 13:08	19°	conjunction	-12069 May 24 j 10:24	4°	51°13 -0°16'22
evening set	-12075 Apr 24 j 21:05	21°	minimum elong	-12069 May 24 j 10:24	4°	51°13 0°16'42
			morning rise	-12069 Jun 08 j 23:30	5°	25°56
conjunction	-12075 May 10 j 17:01	21°	retrograde	-12069 Sep 03 j 02:52	7°	17°51
minimum elong	-12075 May 10 j 17:02	21°	opposition	-12069 Nov 19 j 18:42	5°	56°00 -0°14'12
max. Earth dist.	-12075 May 09 j 14:35	21°	min. Earth dist.	-12069 Nov 20 j 18:09	5°	54°24 29.17879 AU
morning rise	-12075 May 26 j 08:40	22°	direct	-12068 Feb 09 j 04:29	4°	30°42
retrograde	-12075 Aug 20 j 13:34	24°	evening set	-12068 May 10 j 04:28	6°	27°34
opposition	-12075 Nov 05 j 20:53	22°				
min. Earth dist.	-12075 Nov 06 j 22:27	22°	conjunction	-12068 May 25 j 21:00	7°	02°36 -0°10'05
direct	-12074 Jan 26 j 02:00	21°	minimum elong	-12068 May 25 j 21:01	7°	02°36 0°10'23
evening set	-12074 Apr 27 j 08:55	23°	behind sun begin	-12068 May 25 j 15:55	7°	02°08
max. Earth dist.	-12074 May 12 j 00:54	23°	behind sun end	-12068 May 26 j 02:07	7°	03°03
			max. Earth dist.	-12068 May 24 j 20:58	7°	00°21 31.18296 AU
conjunction	-12074 May 13 j 04:16	23°	morning rise	-12068 Jun 10 j 09:31	7°	37°17
minimum elong	-12074 May 13 j 04:17	23°	retrograde	-12068 Sep 04 j 12:30	9°	29°15
morning rise	-12074 May 28 j 19:40	24°	opposition	-12068 Nov 21 j 06:36	8°	07°27 -0°07'27
retrograde	-12074 Aug 23 j 01:19	26°	min. Earth dist.	-12068 Nov 22 j 05:59	8°	05°51 29.18779 AU
opposition	-12074 Nov 08 j 08:15	24°	direct	-12067 Feb 10 j 16:57	6°	42°15
min. Earth dist.	-12074 Nov 09 j 08:58	24°	evening set	-12067 May 12 j 15:27	8°	39°04
direct	-12073 Jan 28 j 16:06	23°	max. Earth dist.	-12067 May 27 j 06:33	9°	11°45 31.19209 AU
evening set	-12073 Apr 29 j 20:30	25°				
			conjunction	-12067 May 28 j 07:18	9°	14°04 -0°03'48
conjunction	-12073 May 15 j 15:31	26°	minimum elong	-12067 May 28 j 07:18	9°	14°04 0°04'04
minimum elong	-12073 May 15 j 15:31	26°	behind sun begin	-12067 May 28 j 00:56	9°	13°29
max. Earth dist.	-12073 May 14 j 12:52	26°	behind sun end	-12067 May 28 j 13:40	9°	14°38
morning rise	-12073 May 31 j 06:20	26°	morning rise	-12067 Jun 12 j 19:30	9°	48°44
retrograde	-12073 Aug 25 j 11:39	28°	retrograde	-12067 Sep 07 j 00:35	11°	40°44
opposition	-12073 Nov 10 j 20:01	27°	opposition	-12067 Nov 23 j 18:26	10°	18°58 -0°00'42

Attention, astronomical year style is used: The year -12067 in astronomical counting style is the year 12068 BCE in historical counting style.

min. Earth dist.	-12067 Nov 24 j 16:56	10° ✕ 17'26	29.19681 AU	min. Earth dist.	-12061 Dec 08 j 16:41	23° ✕ 26'23	29.22844 AU
asc. node	-12067 Dec 30 j 17:55	9° ✕ 23'19		direct	-12060 Feb 27 j 09:22	22° ✕ 02'59	
direct	-12066 Feb 13 j 03:44	8° ✕ 53'51		evening set	-12060 May 27 j 18:44	23° ✕ 59'19	
evening set	-12066 May 15 j 02:22	10° ✕ 50'40		max. Earth dist.	-12060 Jun 11 j 08:02	24° ✕ 31'54	31.22937 AU
conjunction	-12066 May 30 j 17:49	11° ✕ 25'37	0°02'40	conjunction	-12060 Jun 12 j 06:31	24° ✕ 34'00	0°40'05
minimum elong	-12066 May 30 j 17:49	11° ✕ 25'37	0°02'26	minimum elong	-12060 Jun 12 j 06:30	24° ✕ 34'00	0°40'00
behind sun begin	-12066 May 30 j 11:23	11° ✕ 25'02		morning rise	-12060 Jun 27 j 15:10	25° ✕ 08'25	
behind sun end	-12066 May 31 j 00:15	11° ✕ 26'11		retrograde	-12060 Sep 22 j 01:18	27° ✕ 00'42	
max. Earth dist.	-12066 May 29 j 18:17	11° ✕ 23'25	31.20074 AU	opposition	-12060 Dec 09 j 07:22	25° ✕ 38'48	0°46'00
morning rise	-12066 Jun 15 j 05:20	12° ✕ 00'15		min. Earth dist.	-12060 Dec 10 j 04:16	25° ✕ 37'22	29.23113 AU
retrograde	-12066 Sep 09 j 10:31	13° ✕ 52'19		direct	-12059 Feb 28 j 20:22	24° ✕ 13'56	
opposition	-12066 Nov 26 j 06:25	12° ✕ 30'35	0°06'04	evening set	-12059 May 30 j 04:49	26° ✕ 10'10	
min. Earth dist.	-12066 Nov 27 j 05:45	12° ✕ 29'00	29.20503 AU	conjunction	-12059 Jun 14 j 16:10	26° ✕ 44'48	0°46'10
direct	-12065 Feb 15 j 15:36	11° ✕ 05'33		minimum elong	-12059 Jun 14 j 16:09	26° ✕ 44'48	0°46'06
evening set	-12065 May 17 j 13:27	13° ✕ 02'19		max. Earth dist.	-12059 Jun 13 j 19:32	26° ✕ 42'52	31.23212 AU
max. Earth dist.	-12065 Jun 01 j 04:02	13° ✕ 34'57	31.20850 AU	morning rise	-12059 Jun 30 j 00:11	27° ✕ 19'11	
conjunction	-12065 Jun 02 j 04:11	13° ✕ 37'13	0°08'58	retrograde	-12059 Sep 24 j 09:35	29° ✕ 11'30	
minimum elong	-12065 Jun 02 j 04:10	13° ✕ 37'13	0°08'45	opposition	-12059 Dec 11 j 19:36	27° ✕ 49'32	0°52'27
behind sun begin	-12065 Jun 01 j 22:35	13° ✕ 36'43		min. Earth dist.	-12059 Dec 12 j 16:02	27° ✕ 48'09	29.23414 AU
behind sun end	-12065 Jun 02 j 09:45	13° ✕ 37'43		direct	-12058 Mar 03 j 08:47	26° ✕ 24'42	
morning rise	-12065 Jun 17 j 15:20	14° ✕ 11'49		evening set	-12058 Jun 01 j 15:04	28° ✕ 20'50	
retrograde	-12065 Sep 11 j 23:03	16° ✕ 03'56		max. Earth dist.	-12058 Jun 16 j 04:45	28° ✕ 53'28	31.23553 AU
opposition	-12065 Nov 28 j 18:30	14° ✕ 42'13	0°12'49	conjunction	-12058 Jun 17 j 01:37	28° ✕ 55'26	0°52'10
min. Earth dist.	-12065 Nov 29 j 16:41	14° ✕ 40'43	29.21218 AU	minimum elong	-12058 Jun 17 j 01:37	28° ✕ 55'26	0°52'08
direct	-12064 Feb 18 j 05:31	13° ✕ 17'15		morning rise	-12058 Jul 02 j 09:16	29° ✕ 29'46	
evening set	-12064 May 19 j 00:14	15° ✕ 13'57			-12058 Jul 16 j 14:17	0° ✕	
conjunction	-12064 Jun 03 j 14:28	15° ✕ 48'50	0°15'15	retrograde	-12058 Sep 26 j 20:51	1° ✕ 22'08	
minimum elong	-12064 Jun 03 j 14:28	15° ✕ 48'50	0°15'03	opposition	-12058 Dec 14 j 07:43	0° ✕ 00'09	0°58'50
behind sun begin	-12064 Jun 03 j 12:04	15° ✕ 48'37			-12058 Dec 14 j 09:48	30° ✕	
behind sun end	-12064 Jun 03 j 16:53	15° ✕ 49'03		min. Earth dist.	-12058 Dec 15 j 02:34	29° ✕ 58'52	29.23812 AU
max. Earth dist.	-12064 Jun 02 j 15:07	15° ✕ 46'38	31.21491 AU	direct	-12057 Mar 05 j 19:02	28° ✕ 35'21	
morning rise	-12064 Jun 19 j 01:00	16° ✕ 23'23			-12057 May 20 j 05:46	0° ✕	
retrograde	-12064 Sep 13 j 10:11	18° ✕ 15'33		evening set	-12057 Jun 04 j 01:08	0° ✕ 31'24	
opposition	-12064 Nov 30 j 06:47	16° ✕ 53'50	0°19'32	conjunction	-12057 Jun 19 j 11:14	1° ✕ 05'57	0°58'05
min. Earth dist.	-12064 Dec 01 j 05:48	16° ✕ 52'16	29.21799 AU	minimum elong	-12057 Jun 19 j 11:13	1° ✕ 05'57	0°58'04
direct	-12063 Feb 19 j 18:08	15° ✕ 28'55		max. Earth dist.	-12057 Jun 18 j 16:13	1° ✕ 04'10	31.23996 AU
evening set	-12063 May 21 j 11:05	17° ✕ 25'33		morning rise	-12057 Jul 04 j 18:12	1° ✕ 40'15	
max. Earth dist.	-12063 Jun 05 j 01:23	17° ✕ 58'11	31.22008 AU	retrograde	-12057 Sep 29 j 06:35	3° ✕ 32'43	
conjunction	-12063 Jun 06 j 00:42	18° ✕ 00'22	0°21'32	opposition	-12057 Dec 16 j 20:09	2° ✕ 10'42	1°05'08
minimum elong	-12063 Jun 06 j 00:42	18° ✕ 00'22	0°21'20	min. Earth dist.	-12057 Dec 17 j 14:59	2° ✕ 09'25	29.24311 AU
morning rise	-12063 Jun 21 j 10:49	18° ✕ 34'54		direct	-12056 Mar 07 j 06:43	0° ✕ 45'59	
retrograde	-12063 Sep 15 j 19:58	20° ✕ 27'05		evening set	-12056 Jun 05 j 11:08	2° ✕ 41'57	
opposition	-12063 Dec 02 j 18:45	19° ✕ 05'20	0°26'14	conjunction	-12056 Jun 20 j 20:30	3° ✕ 16'27	1°03'56
min. Earth dist.	-12063 Dec 03 j 16:39	19° ✕ 03'51	29.22244 AU	minimum elong	-12056 Jun 20 j 20:29	3° ✕ 16'27	1°03'57
direct	-12062 Feb 22 j 07:44	17° ✕ 40'27		max. Earth dist.	-12056 Jun 20 j 01:45	3° ✕ 14'41	31.24548 AU
evening set	-12062 May 23 j 21:49	19° ✕ 37'00		morning rise	-12056 Jul 06 j 03:07	3° ✕ 50'43	
max. Earth dist.	-12062 Jun 07 j 11:29	20° ✕ 09'35	31.22388 AU	retrograde	-12056 Sep 30 j 18:48	5° ✕ 43'17	
conjunction	-12062 Jun 08 j 10:51	20° ✕ 11'47	0°27'46	opposition	-12056 Dec 18 j 08:27	4° ✕ 21'15	1°11'20
minimum elong	-12062 Jun 08 j 10:51	20° ✕ 11'47	0°27'37	min. Earth dist.	-12056 Dec 19 j 01:25	4° ✕ 20'07	29.24901 AU
morning rise	-12062 Jun 23 j 20:28	20° ✕ 46'16		direct	-12055 Mar 09 j 19:03	2° ✕ 56'38	
retrograde	-12062 Sep 18 j 05:57	22° ✕ 38'29		evening set	-12055 Jun 07 j 21:07	4° ✕ 52'34	
opposition	-12062 Dec 05 j 06:57	21° ✕ 16'42	0°32'53	conjunction	-12055 Jun 23 j 05:58	5° ✕ 27'01	1°09'41
min. Earth dist.	-12062 Dec 06 j 05:17	21° ✕ 15'10	29.22583 AU	minimum elong	-12055 Jun 23 j 05:57	5° ✕ 27'01	1°09'43
direct	-12061 Feb 24 j 19:46	19° ✕ 51'49		max. Earth dist.	-12055 Jun 22 j 12:31	5° ✕ 25'23	31.25152 AU
evening set	-12061 May 26 j 08:16	21° ✕ 48'16		morning rise	-12055 Jul 08 j 12:00	6° ✕ 01'15	
conjunction	-12061 Jun 10 j 20:46	22° ✕ 23'00	0°33'57	retrograde	-12055 Oct 03 j 06:02	7° ✕ 53'56	
minimum elong	-12061 Jun 10 j 20:45	22° ✕ 23'00	0°33'50	opposition	-12055 Dec 20 j 20:48	6° ✕ 31'55	1°17'26
max. Earth dist.	-12061 Jun 09 j 22:28	22° ✕ 20'54	31.22686 AU	min. Earth dist.	-12055 Dec 21 j 14:07	6° ✕ 30'44	29.25528 AU
morning rise	-12061 Jun 26 j 05:48	22° ✕ 57'27		direct	-12054 Mar 12 j 06:10	5° ✕ 07'23	
retrograde	-12061 Sep 20 j 15:02	24° ✕ 49'41		evening set	-12054 Jun 10 j 07:08	7° ✕ 03'16	
opposition	-12061 Dec 07 j 19:10	23° ✕ 27'51	0°39'28				

Attention, astronomical year style is used: The year -12054 in astronomical counting style is the year 12055 BCE in historical counting style.

conjunction	-12054 Jun 25 j 15:20	7° Υ 37'41	1°15'20	direct	-12047 Mar 27 j 17:42	20° Υ 24'02	
minimum elong	-12054 Jun 25 j 15:19	7° Υ 37'41	1°15'25	evening set	-12047 Jun 25 j 03:52	22° Υ 19'23	
max. Earth dist.	-12054 Jun 24 j 22:34	7° Υ 36'06	31.25773 AU				
morning rise	-12054 Jul 10 j 20:55	8° Υ 11'53		conjunction	-12047 Jul 10 j 07:59	22° Υ 53'29	1°51'27
retrograde	-12054 Oct 05 j 16:40	10° Υ 04'41		minimum elong	-12047 Jul 10 j 07:58	22° Υ 53'29	1°51'42
opposition	-12054 Dec 23 j 09:15	8° Υ 42'41	1°23'25	max. Earth dist.	-12047 Jul 09 j 19:39	22° Υ 52'19	31.27388 AU
min. Earth dist.	-12054 Dec 24 j 00:59	8° Υ 41'37	29.26127 AU	morning rise	-12047 Jul 25 j 10:27	23° Υ 27'28	
direct	-12053 Mar 14 j 19:12	7° Υ 18'15		retrograde	-12047 Oct 20 j 18:52	25° Υ 21'05	
evening set	-12053 Jun 12 j 17:04	9° Υ 14'05		opposition	-12046 Jan 08 j 02:07	23° Υ 58'46	2°01'31
max. Earth dist.	-12053 Jun 27 j 08:08	9° Υ 46'54	31.26328 AU	min. Earth dist.	-12046 Jan 08 j 13:00	23° Υ 58'02	29.27502 AU
				direct	-12046 Mar 30 j 05:28	22° Υ 34'42	
				evening set	-12046 Jun 27 j 13:20	24° Υ 29'59	
conjunction	-12053 Jun 28 j 00:37	9° Υ 48'28	1°20'53				
minimum elong	-12053 Jun 28 j 00:36	9° Υ 48'27	1°20'59	conjunction	-12046 Jul 12 j 16:58	25° Υ 04'03	1°56'01
morning rise	-12053 Jul 13 j 05:43	10° Υ 22'38		minimum elong	-12046 Jul 12 j 16:57	25° Υ 04'03	1°56'18
retrograde	-12053 Oct 08 j 03:50	12° Υ 15'34		max. Earth dist.	-12046 Jul 12 j 05:59	25° Υ 03'01	31.27381 AU
opposition	-12053 Dec 25 j 21:59	10° Υ 53'33	1°29'17	morning rise	-12046 Jul 27 j 18:58	25° Υ 38'00	
min. Earth dist.	-12053 Dec 26 j 13:47	10° Υ 52'29	29.26656 AU	retrograde	-12046 Oct 23 j 06:12	27° Υ 31'44	
direct	-12052 Mar 16 j 06:56	9° Υ 29'13		opposition	-12045 Jan 10 j 14:59	26° Υ 09'21	2°06'18
evening set	-12052 Jun 14 j 03:02	11° Υ 25'00		min. Earth dist.	-12045 Jan 11 j 01:46	26° Υ 08'37	29.27546 AU
				direct	-12045 Apr 01 j 15:48	24° Υ 45'20	
conjunction	-12052 Jun 29 j 10:04	11° Υ 59'20	1°26'19	evening set	-12045 Jun 29 j 22:41	26° Υ 40'31	
minimum elong	-12052 Jun 29 j 10:02	11° Υ 59'20	1°26'26				
max. Earth dist.	-12052 Jun 28 j 18:51	11° Υ 57'54	31.26797 AU	conjunction	-12045 Jul 15 j 01:48	27° Υ 14'33	2°00'25
morning rise	-12052 Jul 14 j 14:35	12° Υ 33'28		minimum elong	-12045 Jul 15 j 01:47	27° Υ 14'33	2°00'43
retrograde	-12052 Oct 09 j 13:47	14° Υ 26'31		max. Earth dist.	-12045 Jul 14 j 16:07	27° Υ 13'38	31.27464 AU
opposition	-12052 Dec 27 j 10:37	13° Υ 04'30	1°35'02	morning rise	-12045 Jul 30 j 03:25	27° Υ 48'28	
min. Earth dist.	-12052 Dec 28 j 01:31	13° Υ 03'29	29.27065 AU	retrograde	-12045 Oct 25 j 16:55	29° Υ 42'20	
direct	-12051 Mar 18 j 20:18	11° Υ 40'14		opposition	-12044 Jan 13 j 03:45	28° Υ 19'54	2°10'55
evening set	-12051 Jun 16 j 13:00	13° Υ 35'58		min. Earth dist.	-12044 Jan 13 j 12:20	28° Υ 19'19	29.27676 AU
				direct	-12044 Apr 03 j 04:47	26° Υ 55'57	
conjunction	-12051 Jul 01 j 19:19	14° Υ 10'15	1°31'38	evening set	-12044 Jul 01 j 08:05	28° Υ 51'04	
minimum elong	-12051 Jul 01 j 19:19	14° Υ 10'15	1°31'46				
max. Earth dist.	-12051 Jul 01 j 03:45	14° Υ 08'47	31.27133 AU	conjunction	-12044 Jul 16 j 10:40	29° Υ 25'03	2°04'39
morning rise	-12051 Jul 16 j 23:32	14° Υ 44'21		minimum elong	-12044 Jul 16 j 10:38	29° Υ 25'03	2°04'58
retrograde	-12051 Oct 12 j 00:48	16° Υ 37'32		max. Earth dist.	-12044 Jul 16 j 01:35	29° Υ 24'12	31.27629 AU
opposition	-12051 Dec 29 j 23:18	15° Υ 15'29	1°40'38	morning rise	-12044 Jul 31 j 12:00	29° Υ 58'57	
min. Earth dist.	-12051 Dec 30 j 13:43	15° Υ 14'30	29.27347 AU		-12044 Jul 31 j 23:20	0° \mathcal{B}	
direct	-12050 Mar 21 j 07:08	13° Υ 51'17		retrograde	-12044 Oct 27 j 05:03	1° \mathcal{B} 52'57	
evening set	-12050 Jun 18 j 22:49	15° Υ 46'56		opposition	-12043 Jan 14 j 16:32	0° \mathcal{B} 30'29	2°15'21
				min. Earth dist.	-12043 Jan 15 j 00:40	0° \mathcal{B} 29'56	29.27902 AU
conjunction	-12050 Jul 04 j 04:42	16° Υ 21'10	1°36'48		-12043 Feb 02 j 23:31	30° \mathcal{R} Υ	
minimum elong	-12050 Jul 04 j 04:41	16° Υ 21'10	1°36'59	direct	-12043 Apr 05 j 16:17	29° Υ 06'37	
max. Earth dist.	-12050 Jul 03 j 14:43	16° Υ 19'51	31.27332 AU		-12043 Jun 02 j 23:40	0° \mathcal{B}	
morning rise	-12050 Jul 19 j 08:17	16° Υ 55'15		evening set	-12043 Jul 03 j 17:19	1° \mathcal{B} 01'40	
retrograde	-12050 Oct 14 j 09:26	18° Υ 48'32					
opposition	-12049 Jan 01 j 12:02	17° Υ 26'26	1°46'06	conjunction	-12043 Jul 18 j 19:35	1° \mathcal{B} 35'38	2°08'42
min. Earth dist.	-12049 Jan 02 j 02:11	17° Υ 25'29	29.27483 AU	minimum elong	-12043 Jul 18 j 19:34	1° \mathcal{B} 35'38	2°09'03
direct	-12049 Mar 23 j 19:36	16° Υ 02'18		max. Earth dist.	-12043 Jul 18 j 12:24	1° \mathcal{B} 34'57	31.27880 AU
evening set	-12049 Jun 21 j 08:43	17° Υ 57'51		morning rise	-12043 Aug 02 j 20:30	2° \mathcal{B} 09'31	
				retrograde	-12043 Oct 29 j 15:37	4° \mathcal{B} 03'39	
conjunction	-12049 Jul 06 j 13:52	18° Υ 32'03	1°41'50	opposition	-12042 Jan 17 j 05:22	2° \mathcal{B} 41'10	2°19'35
minimum elong	-12049 Jul 06 j 13:51	18° Υ 32'03	1°42'02	min. Earth dist.	-12042 Jan 17 j 12:06	2° \mathcal{B} 40'43	29.28167 AU
max. Earth dist.	-12049 Jul 05 j 23:30	18° Υ 30'41	31.27415 AU	direct	-12042 Apr 08 j 05:34	1° \mathcal{B} 17'24	
morning rise	-12049 Jul 21 j 17:11	19° Υ 06'05		evening set	-12042 Jul 06 j 02:42	3° \mathcal{B} 12'23	
retrograde	-12049 Oct 16 j 21:06	20° Υ 59'29					
opposition	-12048 Jan 04 j 00:47	19° Υ 37'20	1°51'24	conjunction	-12042 Jul 21 j 04:19	3° \mathcal{B} 46'19	2°12'34
min. Earth dist.	-12048 Jan 04 j 13:30	19° Υ 36'28	29.27530 AU	minimum elong	-12042 Jul 21 j 04:18	3° \mathcal{B} 46'19	2°12'57
direct	-12048 Mar 25 j 05:50	18° Υ 13'13		max. Earth dist.	-12042 Jul 20 j 21:13	3° \mathcal{B} 45'39	31.28145 AU
evening set	-12048 Jun 22 j 18:13	20° Υ 08'40		morning rise	-12042 Aug 05 j 05:05	4° \mathcal{B} 20'11	
				retrograde	-12042 Nov 01 j 02:53	6° \mathcal{B} 14'29	
conjunction	-12048 Jul 07 j 22:59	20° Υ 42'49	1°46'43	opposition	-12041 Jan 19 j 18:19	4° \mathcal{B} 51'59	2°23'38
minimum elong	-12048 Jul 07 j 22:58	20° Υ 42'49	1°46'57	min. Earth dist.	-12041 Jan 20 j 00:08	4° \mathcal{B} 51'35	29.28440 AU
max. Earth dist.	-12048 Jul 07 j 10:18	20° Υ 41'37	31.27413 AU	direct	-12041 Apr 10 j 15:57	3° \mathcal{B} 28'18	
morning rise	-12048 Jul 23 j 01:45	21° Υ 16'50		evening set	-12041 Jul 08 j 12:00	5° \mathcal{B} 23'14	
retrograde	-12048 Oct 18 j 06:51	23° Υ 10'21					
opposition	-12047 Jan 05 j 13:38	21° Υ 48'06	1°56'32	conjunction	-12041 Jul 23 j 13:21	5° \mathcal{B} 57'08	2°16'15
min. Earth dist.	-12047 Jan 06 j 02:27	21° Υ 47'15	29.27514 AU				

Attention, astronomical year style is used: The year -12041 in astronomical counting style is the year 12042 BCE in historical counting style.

minimum elong	-12041 Jul 23 j 13:20	5° 8 57'08	2°16'39	opposition	-12034 Feb 04 j 14:01	20° 8 08'51	2°45'52
max. Earth dist.	-12041 Jul 23 j 08:14	5° 8 56'39	31.28385 AU	min. Earth dist.	-12034 Feb 04 j 14:37	20° 8 08'49	29.27325 AU
morning rise	-12041 Aug 07 j 13:39	6° 8 30'59		direct	-12034 Apr 26 j 00:18	18° 8 45'29	
retrograde	-12041 Nov 03 j 12:03	8° 8 25'26		evening set	-12034 Jul 23 j 04:57	20° 8 39'46	
opposition	-12040 Jan 22 j 07:26	7° 8 02'55	2°27'27				
min. Earth dist.	-12040 Jan 22 j 12:43	7° 8 02'33	29.28652 AU	conjunction	-12034 Aug 07 j 04:08	21° 8 13'30	2°36'19
direct	-12040 Apr 12 j 04:43	5° 8 39'20		minimum elong	-12034 Aug 07 j 04:07	21° 8 13'30	2°36'51
evening set	-12040 Jul 09 j 21:24	7° 8 34'10		max. Earth dist.	-12034 Aug 07 j 04:36	21° 8 13'33	31.26862 AU
				morning rise	-12034 Aug 22 j 03:17	21° 8 47'16	
conjunction	-12040 Jul 24 j 22:13	8° 8 08'03	2°19'44	retrograde	-12034 Nov 18 j 20:47	23° 8 42'39	
minimum elong	-12040 Jul 24 j 22:11	8° 8 08'03	2°20'10	opposition	-12033 Feb 07 j 03:05	22° 8 19'35	2°48'07
max. Earth dist.	-12040 Jul 24 j 16:53	8° 8 07'33	31.28548 AU	min. Earth dist.	-12033 Feb 07 j 02:05	22° 8 19'39	29.26853 AU
morning rise	-12040 Aug 08 j 22:26	8° 8 41'53		direct	-12033 Apr 28 j 13:32	20° 8 56'15	
retrograde	-12040 Nov 05 j 00:30	10° 8 36'30		evening set	-12033 Jul 25 j 14:06	22° 8 50'26	
opposition	-12039 Jan 23 j 20:29	9° 8 13'56	2°31'05				
min. Earth dist.	-12039 Jan 24 j 00:20	9° 8 13'40	29.28767 AU	conjunction	-12033 Aug 09 j 12:56	23° 8 24'09	2°38'19
direct	-12039 Apr 14 j 15:16	7° 8 50'25		minimum elong	-12033 Aug 09 j 12:55	23° 8 24'09	2°38'51
evening set	-12039 Jul 12 j 06:48	9° 8 45'12		max. Earth dist.	-12033 Aug 09 j 13:37	23° 8 24'13	31.26418 AU
				morning rise	-12033 Aug 24 j 12:12	23° 8 57'56	
conjunction	-12039 Jul 27 j 07:21	10° 8 19'02	2°23'02	retrograde	-12033 Nov 21 j 08:34	25° 8 53'26	
minimum elong	-12039 Jul 27 j 07:20	10° 8 19'02	2°23'27	opposition	-12032 Feb 09 j 16:10	24° 8 30'18	2°50'08
max. Earth dist.	-12039 Jul 27 j 03:25	10° 8 18'40	31.28577 AU	min. Earth dist.	-12032 Feb 09 j 13:59	24° 8 30'26	29.26464 AU
morning rise	-12039 Aug 11 j 07:12	10° 8 52'52		direct	-12032 Apr 29 j 23:59	23° 8 07'00	
retrograde	-12039 Nov 07 j 10:20	12° 8 47'38		evening set	-12032 Jul 26 j 22:59	25° 8 01'06	
opposition	-12038 Jan 26 j 09:32	11° 8 25'01	2°34'29				
min. Earth dist.	-12038 Jan 26 j 13:39	11° 8 24'44	29.28733 AU	conjunction	-12032 Aug 10 j 21:51	25° 8 34'49	2°40'05
direct	-12038 Apr 17 j 02:49	10° 8 01'33		minimum elong	-12032 Aug 10 j 21:50	25° 8 34'48	2°40'39
evening set	-12038 Jul 14 j 16:17	11° 8 56'15		max. Earth dist.	-12032 Aug 11 j 00:47	25° 8 35'05	31.26058 AU
				morning rise	-12032 Aug 25 j 20:58	26° 8 08'35	
conjunction	-12038 Jul 29 j 16:24	12° 8 30'04	2°26'07	retrograde	-12032 Nov 22 j 18:06	28° 8 04'15	
minimum elong	-12038 Jul 29 j 16:23	12° 8 30'03	2°26'34	opposition	-12031 Feb 11 j 05:14	26° 8 41'03	2°51'55
max. Earth dist.	-12038 Jul 29 j 12:41	12° 8 29'42	31.28468 AU	min. Earth dist.	-12031 Feb 11 j 02:06	26° 8 41'15	29.26146 AU
morning rise	-12038 Aug 13 j 16:07	13° 8 03'52		direct	-12031 May 02 j 12:49	25° 8 17'49	
retrograde	-12038 Nov 09 j 22:30	14° 8 58'46		evening set	-12031 Jul 29 j 08:05	27° 8 11'50	
opposition	-12037 Jan 28 j 22:39	13° 8 36'05	2°37'40				
min. Earth dist.	-12037 Jan 29 j 01:02	13° 8 35'55	29.28551 AU	conjunction	-12031 Aug 13 j 06:41	27° 8 45'33	2°41'37
direct	-12037 Apr 19 j 13:56	12° 8 12'40		minimum elong	-12031 Aug 13 j 06:41	27° 8 45'33	2°42'11
evening set	-12037 Jul 17 j 01:32	14° 8 07'15		max. Earth dist.	-12031 Aug 13 j 09:49	27° 8 45'51	31.25782 AU
				morning rise	-12031 Aug 28 j 05:58	28° 8 19'20	
conjunction	-12037 Aug 01 j 01:22	14° 8 41'03	2°28'59		-12031 Oct 25 j 21:24	0° II	
minimum elong	-12037 Aug 01 j 01:21	14° 8 41'03	2°29'27	retrograde	-12031 Nov 25 j 06:51	0° II 15'08	
max. Earth dist.	-12037 Jul 31 j 22:30	14° 8 40'47	31.28200 AU		-12031 Dec 26 j 11:12	30° R 8	
	-12037 Aug 09 j 09:46	15° 8		opposition	-12030 Feb 13 j 18:06	28° 8 51'54	2°53'26
morning rise	-12037 Aug 16 j 00:54	15° 8 14'51		min. Earth dist.	-12030 Feb 13 j 13:09	28° 8 52'14	29.25909 AU
retrograde	-12037 Nov 12 j 10:04	17° 8 09'53		direct	-12030 May 04 j 23:14	27° 8 28'45	
opposition	-12036 Jan 31 j 11:57	15° 8 47'06	2°40'38	evening set	-12030 Jul 31 j 17:03	29° 8 22'43	
min. Earth dist.	-12036 Jan 31 j 14:37	15° 8 46'56	29.28228 AU				
	-12036 Mar 02 j 11:34	15° R 8		conjunction	-12030 Aug 15 j 15:40	29° 8 56'25	2°42'56
direct	-12036 Apr 21 j 00:04	14° 8 23'43		minimum elong	-12030 Aug 15 j 15:39	29° 8 56'25	2°43'32
	-12036 Jun 07 j 11:33	15° 8		max. Earth dist.	-12030 Aug 15 j 20:33	29° 8 56'53	31.25558 AU
evening set	-12036 Jul 18 j 10:47	16° 8 18'12			-12030 Aug 17 j 05:25	0° II	
				morning rise	-12030 Aug 30 j 14:55	0° II 30'13	
conjunction	-12036 Aug 02 j 10:25	16° 8 51'58	2°31'39	retrograde	-12030 Nov 27 j 16:50	2° II 26'12	
minimum elong	-12036 Aug 02 j 10:24	16° 8 51'58	2°32'08	opposition	-12029 Feb 16 j 07:17	1° II 02'56	2°54'42
max. Earth dist.	-12036 Aug 02 j 08:37	16° 8 51'48	31.27818 AU	min. Earth dist.	-12029 Feb 16 j 02:09	1° II 03'17	29.25703 AU
morning rise	-12036 Aug 17 j 09:47	17° 8 25'45			-12029 Apr 01 j 08:50	30° R 8	
retrograde	-12036 Nov 13 j 21:28	19° 8 20'54		direct	-12029 May 07 j 10:15	29° 8 39'52	
opposition	-12035 Feb 02 j 00:53	17° 8 58'02	2°43'22		-12029 Jun 11 j 06:06	0° II	
min. Earth dist.	-12035 Feb 02 j 01:45	17° 8 57'59	29.27799 AU	evening set	-12029 Aug 03 j 02:00	1° II 33'46	
direct	-12035 Apr 23 j 13:00	16° 8 34'39					
evening set	-12035 Jul 20 j 20:00	18° 8 29'02		conjunction	-12029 Aug 18 j 00:32	2° II 07'28	2°44'00
				minimum elong	-12029 Aug 18 j 00:32	2° II 07'28	2°44'36
conjunction	-12035 Aug 04 j 19:17	19° 8 02'47	2°34'05	max. Earth dist.	-12029 Aug 18 j 06:12	2° II 08'00	31.25361 AU
minimum elong	-12035 Aug 04 j 19:16	19° 8 02'47	2°34'36	morning rise	-12029 Sep 01 j 23:56	2° II 41'17	
max. Earth dist.	-12035 Aug 04 j 17:44	19° 8 02'38	31.27347 AU	retrograde	-12029 Nov 30 j 05:10	4° II 37'26	
morning rise	-12035 Aug 19 j 18:40	19° 8 36'34		opposition	-12028 Feb 18 j 20:21	3° II 14'08	2°55'44
retrograde	-12035 Nov 16 j 10:07	21° 8 31'50		min. Earth dist.	-12028 Feb 18 j 13:18	3° II 14'37	29.25491 AU

Attention, astronomical year style is used: The year -12028 in astronomical counting style is the year 12029 BCE in historical counting style.

direct	-12028 May 08 j 20:32	1°II51'08		retrograde	-12022 Dec 15 j 19:21	19°II58'09	
evening set	-12028 Aug 04 j 11:09	3°II44'59		opposition	-12021 Mar 06 j 16:06	18°II34'17	2°55'46
				min. Earth dist.	-12021 Mar 06 j 03:44	18°II35'07	29.21226 AU
conjunction	-12028 Aug 19 j 09:40	4°II18'42	2°44'50	direct	-12021 May 25 j 04:16	17°II11'25	
minimum elong	-12028 Aug 19 j 09:39	4°II18'42	2°45'28	evening set	-12021 Aug 20 j 02:52	19°II04'36	
max. Earth dist.	-12028 Aug 19 j 16:09	4°II19'19	31.25113 AU				
morning rise	-12028 Sep 03 j 09:14	4°II52'32		conjunction	-12021 Sep 04 j 02:28	19°II38'23	2°44'02
retrograde	-12028 Dec 01 j 17:09	6°II48'50		minimum elong	-12021 Sep 04 j 02:28	19°II38'23	2°44'43
opposition	-12027 Feb 20 j 09:27	5°II25'30	2°56'30	max. Earth dist.	-12021 Sep 04 j 14:51	19°II39'34	31.20570 AU
min. Earth dist.	-12027 Feb 20 j 02:43	5°II25'58	29.25217 AU	morning rise	-12021 Sep 19 j 03:59	20°II12'23	
direct	-12027 May 11 j 05:19	4°II02'34		retrograde	-12021 Dec 18 j 04:48	22°II09'25	
evening set	-12027 Aug 06 j 20:16	5°II56'22		opposition	-12020 Mar 08 j 05:08	20°II45'27	2°54'46
				min. Earth dist.	-12020 Mar 07 j 16:32	20°II46'19	29.20447 AU
conjunction	-12027 Aug 21 j 18:54	6°II30'04	2°45'26	direct	-12020 May 26 j 15:46	19°II22'35	
minimum elong	-12027 Aug 21 j 18:54	6°II30'04	2°46'04	evening set	-12020 Aug 21 j 11:57	21°II15'40	
max. Earth dist.	-12027 Aug 22 j 02:32	6°II30'48	31.24790 AU				
morning rise	-12027 Sep 05 j 18:33	7°II03'55		conjunction	-12020 Sep 05 j 11:51	21°II49'28	2°42'59
retrograde	-12027 Dec 04 j 05:31	9°II00'22		minimum elong	-12020 Sep 05 j 11:51	21°II49'28	2°43'40
opposition	-12026 Feb 22 j 22:31	7°II37'00	2°57'01	max. Earth dist.	-12020 Sep 06 j 01:11	21°II50'44	31.19846 AU
min. Earth dist.	-12026 Feb 22 j 14:05	7°II37'34	29.24832 AU	morning rise	-12020 Sep 20 j 13:47	22°II23'30	
direct	-12026 May 13 j 17:48	6°II14'07		retrograde	-12020 Dec 19 j 16:32	24°II20'37	
evening set	-12026 Aug 09 j 05:27	8°II07'50		opposition	-12019 Mar 10 j 17:48	22°II56'35	2°53'30
				min. Earth dist.	-12019 Mar 10 j 03:09	22°II57'35	29.19771 AU
conjunction	-12026 Aug 24 j 03:59	8°II41'33	2°45'48	direct	-12019 May 29 j 02:26	21°II33'44	
minimum elong	-12026 Aug 24 j 03:59	8°II41'33	2°46'27	evening set	-12019 Aug 23 j 21:02	23°II26'43	
max. Earth dist.	-12026 Aug 24 j 11:32	8°II42'16	31.24335 AU				
morning rise	-12026 Sep 08 j 03:58	9°II15'25		conjunction	-12019 Sep 07 j 21:12	24°II00'34	2°41'41
retrograde	-12026 Dec 06 j 19:29	11°II12'01		minimum elong	-12019 Sep 07 j 21:12	24°II00'34	2°42'22
opposition	-12025 Feb 25 j 11:51	9°II48'34	2°57'16	max. Earth dist.	-12019 Sep 08 j 11:25	24°II01'55	31.19219 AU
min. Earth dist.	-12025 Feb 25 j 03:24	9°II49'08	29.24320 AU	morning rise	-12019 Sep 22 j 23:39	24°II34'38	
direct	-12025 May 16 j 04:12	8°II25'43		retrograde	-12019 Dec 22 j 04:15	26°II31'52	
evening set	-12025 Aug 11 j 14:36	10°II19'21		opposition	-12018 Mar 13 j 06:46	25°II07'46	2°52'00
				min. Earth dist.	-12018 Mar 12 j 16:05	25°II08'46	29.19199 AU
conjunction	-12025 Aug 26 j 13:25	10°II53'05	2°45'55	direct	-12018 May 31 j 11:32	23°II44'57	
minimum elong	-12025 Aug 26 j 13:25	10°II53'05	2°46'34	evening set	-12018 Aug 26 j 05:55	25°II37'53	
max. Earth dist.	-12025 Aug 26 j 22:36	10°II53'57	31.23754 AU				
morning rise	-12025 Sep 10 j 13:29	11°II26'58		conjunction	-12018 Sep 10 j 06:33	26°II11'45	2°40'08
retrograde	-12025 Dec 09 j 06:59	13°II23'40		minimum elong	-12018 Sep 10 j 06:34	26°II11'45	2°40'51
opposition	-12024 Feb 28 j 00:59	12°II00'08	2°57'16	max. Earth dist.	-12018 Sep 10 j 22:26	26°II13'15	31.18703 AU
min. Earth dist.	-12024 Feb 27 j 15:25	12°II00'47	29.23665 AU	morning rise	-12018 Sep 25 j 09:24	26°II45'51	
direct	-12024 May 17 j 16:43	10°II37'18		retrograde	-12018 Dec 24 j 16:32	28°II43'12	
evening set	-12024 Aug 12 j 23:49	12°II30'49		opposition	-12017 Mar 15 j 19:38	27°II19'05	2°50'14
				min. Earth dist.	-12017 Mar 15 j 02:56	27°II20'13	29.18710 AU
conjunction	-12024 Aug 27 j 22:39	13°II04'34	2°45'48	direct	-12017 Jun 02 j 23:10	25°II56'18	
minimum elong	-12024 Aug 27 j 22:39	13°II04'34	2°46'29	evening set	-12017 Aug 28 j 15:09	27°II49'11	
max. Earth dist.	-12024 Aug 28 j 07:31	13°II05'25	31.23042 AU				
morning rise	-12024 Sep 11 j 23:12	13°II38'29		conjunction	-12017 Sep 12 j 16:02	28°II23'05	2°38'22
retrograde	-12024 Dec 10 j 19:45	15°II35'16		minimum elong	-12017 Sep 12 j 16:02	28°II23'05	2°39'04
opposition	-12023 Mar 01 j 14:07	14°II11'38	2°57'02	max. Earth dist.	-12017 Sep 13 j 08:00	28°II24'36	31.18247 AU
min. Earth dist.	-12023 Mar 01 j 03:59	14°II12'19	29.22902 AU	morning rise	-12017 Sep 27 j 19:33	28°II57'14	
direct	-12023 May 20 j 03:36	12°II48'47			-12017 Oct 28 j 23:06	0°☾	
evening set	-12023 Aug 15 j 08:51	14°II42'12		retrograde	-12017 Dec 27 j 06:29	0°☾54'43	
					-12016 Feb 27 j 20:39	30°☿II	
conjunction	-12023 Aug 30 j 08:01	15°II15'58	2°45'27	opposition	-12016 Mar 17 j 08:32	29°II30'33	2°48'12
minimum elong	-12023 Aug 30 j 08:01	15°II15'58	2°46'07	min. Earth dist.	-12016 Mar 16 j 15:44	29°II31'41	29.18275 AU
max. Earth dist.	-12023 Aug 30 j 18:40	15°II16'59	31.22229 AU	direct	-12016 Jun 04 j 08:13	28°II07'50	
morning rise	-12023 Sep 14 j 08:43	15°II49'54			-12016 Aug 29 j 17:05	0°☾	
retrograde	-12023 Dec 13 j 06:17	17°II46'46		evening set	-12016 Aug 30 j 00:17	0°☾00'40	
opposition	-12022 Mar 04 j 03:06	16°II23'02	2°56'32				
min. Earth dist.	-12022 Mar 03 j 16:24	16°II23'45	29.22057 AU	conjunction	-12016 Sep 14 j 01:47	0°☾34'37	2°36'22
direct	-12022 May 22 j 17:09	15°II00'10		minimum elong	-12016 Sep 14 j 01:47	0°☾34'37	2°37'05
evening set	-12022 Aug 17 j 17:57	16°II53'28		max. Earth dist.	-12016 Sep 14 j 19:36	0°☾36'18	31.17817 AU
				morning rise	-12016 Sep 29 j 05:42	1°☾08'48	
conjunction	-12022 Sep 01 j 17:13	17°II27'14	2°44'52	retrograde	-12016 Dec 28 j 18:36	3°☾06'24	
minimum elong	-12022 Sep 01 j 17:13	17°II27'14	2°45'33	opposition	-12015 Mar 19 j 21:22	1°☾42'14	2°45'56
max. Earth dist.	-12022 Sep 02 j 03:59	17°II28'16	31.21387 AU	min. Earth dist.	-12015 Mar 19 j 03:27	1°☾43'27	29.17822 AU
morning rise	-12022 Sep 16 j 18:24	18°II01'12		direct	-12015 Jun 06 j 19:43	0°☾19'35	

Attention, astronomical year style is used: The year -12015 in astronomical counting style is the year 12016 BCE in historical counting style.

evening set	-12015 Sep 01 j 09:41	2°☾12'22		opposition	-12008 Apr 04 j 14:41	17°☾07'02	2°23'32
				min. Earth dist.	-12008 Apr 03 j 17:05	17°☾08'31	29.12200 AU
conjunction	-12015 Sep 16 j 11:27	2°☾46'20	2°34'08	direct	-12008 Jun 22 j 01:42	15°☾44'25	
minimum elong	-12015 Sep 16 j 11:28	2°☾46'21	2°34'49	evening set	-12008 Sep 16 j 04:36	17°☾36'42	
max. Earth dist.	-12015 Sep 17 j 04:55	2°☾48'00	31.17347 AU				
morning rise	-12015 Oct 01 j 16:04	3°☾20'36		conjunction	-12008 Oct 01 j 10:26	18°☾11'00	2°12'26
retrograde	-12015 Dec 31 j 08:41	5°☾18'18		minimum elong	-12008 Oct 01 j 10:27	18°☾11'00	2°13'07
opposition	-12014 Mar 22 j 10:13	3°☾54'06	2°43'26	max. Earth dist.	-12008 Oct 02 j 07:45	18°☾13'01	31.11558 AU
min. Earth dist.	-12014 Mar 21 j 15:54	3°☾55'21	29.17319 AU	morning rise	-12008 Oct 16 j 19:53	18°☾45'38	
direct	-12014 Jun 09 j 05:49	2°☾31'30		retrograde	-12007 Jan 15 j 22:19	20°☾43'48	
evening set	-12014 Sep 03 j 19:04	4°☾24'15		min. Earth dist.	-12007 Apr 06 j 05:41	19°☾20'36	29.11311 AU
				opposition	-12007 Apr 07 j 03:17	19°☾19'07	2°19'28
conjunction	-12014 Sep 18 j 21:27	4°☾58'16	2°31'40	direct	-12007 Jun 24 j 10:21	17°☾56'29	
minimum elong	-12014 Sep 18 j 21:27	4°☾58'16	2°32'22	evening set	-12007 Sep 18 j 14:08	19°☾48'42	
max. Earth dist.	-12014 Sep 19 j 16:25	5°☾00'04	31.16799 AU				
morning rise	-12014 Oct 04 j 02:32	5°☾32'34		conjunction	-12007 Oct 03 j 20:47	20°☾23'03	2°08'31
retrograde	-12013 Jan 02 j 21:01	7°☾30'23		minimum elong	-12007 Oct 03 j 20:48	20°☾23'03	2°09'11
opposition	-12013 Mar 24 j 23:08	6°☾06'09	2°40'41	max. Earth dist.	-12007 Oct 04 j 19:59	20°☾25'15	31.10720 AU
min. Earth dist.	-12013 Mar 24 j 04:36	6°☾07'25	29.16711 AU	morning rise	-12007 Oct 19 j 06:47	20°☾57'44	
direct	-12013 Jun 11 j 18:35	4°☾43'36		retrograde	-12006 Jan 18 j 10:06	22°☾55'58	
evening set	-12013 Sep 06 j 04:36	6°☾36'16		opposition	-12006 Apr 09 j 15:41	21°☾31'13	2°15'10
				min. Earth dist.	-12006 Apr 08 j 16:50	21°☾32'47	29.10515 AU
conjunction	-12013 Sep 21 j 07:26	7°☾10'21	2°28'59	direct	-12006 Jun 26 j 21:20	20°☾08'35	
minimum elong	-12013 Sep 21 j 07:27	7°☾10'21	2°29'41	evening set	-12006 Sep 20 j 23:57	22°☾00'46	
max. Earth dist.	-12013 Sep 22 j 02:05	7°☾12'07	31.16146 AU				
morning rise	-12013 Oct 06 j 13:17	7°☾44'42		conjunction	-12006 Oct 06 j 07:08	22°☾35'10	2°04'25
retrograde	-12012 Jan 05 j 11:13	9°☾42'37		minimum elong	-12006 Oct 06 j 07:09	22°☾35'10	2°05'05
opposition	-12012 Mar 26 j 12:01	8°☾18'20	2°37'42	max. Earth dist.	-12006 Oct 07 j 06:05	22°☾37'20	31.09995 AU
min. Earth dist.	-12012 Mar 25 j 16:27	8°☾19'39	29.15985 AU	morning rise	-12006 Oct 21 j 18:04	23°☾09'54	
direct	-12012 Jun 13 j 05:31	6°☾55'47		retrograde	-12005 Jan 21 j 00:37	25°☾08'11	
evening set	-12012 Sep 07 j 14:13	8°☾48'24		min. Earth dist.	-12005 Apr 11 j 04:49	23°☾45'01	29.09837 AU
				opposition	-12005 Apr 12 j 04:11	23°☾43'25	2°10'41
conjunction	-12012 Sep 22 j 17:40	9°☾22'31	2°26'05	direct	-12005 Jun 29 j 07:18	22°☾20'47	
minimum elong	-12012 Sep 22 j 17:40	9°☾22'31	2°26'47	evening set	-12005 Sep 23 j 09:40	24°☾12'55	
max. Earth dist.	-12012 Sep 23 j 13:04	9°☾24'21	31.15350 AU				
morning rise	-12012 Oct 08 j 00:07	9°☾56'56		conjunction	-12005 Oct 08 j 17:43	24°☾47'23	2°00'08
retrograde	-12011 Jan 06 j 21:33	11°☾54'54		minimum elong	-12005 Oct 08 j 17:44	24°☾47'23	2°00'46
min. Earth dist.	-12011 Mar 28 j 05:41	10°☾31'51	29.15121 AU	max. Earth dist.	-12005 Oct 09 j 18:19	24°☾49'42	31.09360 AU
opposition	-12011 Mar 29 j 00:45	10°☾30'33	2°34'29	morning rise	-12005 Oct 24 j 05:20	25°☾22'12	
direct	-12011 Jun 15 j 17:00	9°☾08'01		retrograde	-12004 Jan 23 j 13:38	27°☾20'32	
evening set	-12011 Sep 09 j 23:48	11°☾00'33		opposition	-12004 Apr 13 j 16:37	25°☾55'44	2°06'00
				min. Earth dist.	-12004 Apr 12 j 16:58	25°☾57'21	29.09221 AU
conjunction	-12011 Sep 25 j 03:52	11°☾34'42	2°22'59	direct	-12004 Jun 30 j 19:26	24°☾33'08	
minimum elong	-12011 Sep 25 j 03:52	11°☾34'42	2°23'40	evening set	-12004 Sep 24 j 19:43	26°☾25'14	
max. Earth dist.	-12011 Sep 25 j 23:42	11°☾36'35	31.14450 AU				
morning rise	-12011 Oct 10 j 10:59	12°☾09'10		conjunction	-12004 Oct 10 j 04:24	26°☾59'45	1°55'39
retrograde	-12010 Jan 09 j 10:02	14°☾07'12		minimum elong	-12004 Oct 10 j 04:25	26°☾59'46	1°56'18
opposition	-12010 Mar 31 j 13:27	12°☾42'46	2°31'03	max. Earth dist.	-12004 Oct 11 j 04:46	27°☾02'04	31.08784 AU
min. Earth dist.	-12010 Mar 30 j 16:57	12°☾44'10	29.14164 AU	morning rise	-12004 Oct 25 j 16:53	27°☾34'38	
direct	-12010 Jun 18 j 04:19	11°☾20'12		retrograde	-12003 Jan 25 j 03:48	29°☾33'02	
evening set	-12010 Sep 12 j 09:18	13°☾12'39		min. Earth dist.	-12003 Apr 15 j 04:17	28°☾09'54	29.08647 AU
				opposition	-12003 Apr 16 j 04:51	28°☾08'13	2°01'07
conjunction	-12010 Sep 27 j 13:52	13°☾46'51	2°19'40	direct	-12003 Jul 03 j 05:43	26°☾45'38	
minimum elong	-12010 Sep 27 j 13:53	13°☾46'51	2°20'22	evening set	-12003 Sep 27 j 05:50	28°☾37'44	
max. Earth dist.	-12010 Sep 28 j 10:03	13°☾48'46	31.13468 AU				
morning rise	-12010 Oct 12 j 21:48	14°☾21'23		conjunction	-12003 Oct 12 j 15:14	29°☾12'18	1°51'00
retrograde	-12009 Jan 11 j 21:41	16°☾19'28		minimum elong	-12003 Oct 12 j 15:15	29°☾12'18	1°51'37
min. Earth dist.	-12009 Apr 02 j 06:17	14°☾56'18	29.13169 AU	max. Earth dist.	-12003 Oct 13 j 16:23	29°☾14'40	31.08207 AU
opposition	-12009 Apr 03 j 02:16	14°☾54'56	2°27'24	morning rise	-12003 Oct 28 j 04:29	29°☾47'14	
direct	-12009 Jun 20 j 13:55	13°☾32'21			-12003 Nov 03 j 00:59	0°☾	
evening set	-12009 Sep 14 j 18:51	15°☾24'42		retrograde	-12002 Jan 27 j 15:50	1°☾45'42	
				opposition	-12002 Apr 18 j 17:19	0°☾20'52	1°56'03
conjunction	-12009 Sep 30 j 00:12	15°☾58'57	2°16'09	min. Earth dist.	-12002 Apr 17 j 17:18	0°☾22'31	29.08049 AU
minimum elong	-12009 Sep 30 j 00:13	15°☾58'57	2°16'49		-12002 May 01 j 12:16	30°☾	
max. Earth dist.	-12009 Sep 30 j 21:44	16°☾00'59	31.12490 AU	direct	-12002 Jul 05 j 17:05	28°☾58'19	
morning rise	-12009 Oct 15 j 08:44	16°☾33'32			-12002 Sep 05 j 03:24	0°☾	
retrograde	-12008 Jan 14 j 09:16	18°☾31'39		evening set	-12002 Sep 29 j 15:58	0°☾50'23	

Attention, astronomical year style is used: The year -12002 in astronomical counting style is the year 12003 BCE in historical counting style.

conjunction	-12002 Oct 15 j 02:10	1°Ω25'01	1°46'11	retrograde	-11995 Feb 12 j 08:52	17°Ω16'26	
minimum elong	-12002 Oct 15 j 02:10	1°Ω25'01	1°46'48	min. Earth dist.	-11995 May 03 j 06:05	15°Ω52'56	29.01412 AU
max. Earth dist.	-12002 Oct 16 j 03:38	1°Ω27'25	31.07601 AU	opposition	-11995 May 04 j 06:35	15°Ω51'14	1°16'13
morning rise	-12002 Oct 30 j 16:11	2°Ω00'01			-11995 Jun 06 j 10:02	15°RΩ	
retrograde	-12001 Jan 30 j 06:01	3°Ω58'32		direct	-11995 Jul 20 j 20:47	14°Ω28'26	
min. Earth dist.	-12001 Apr 20 j 04:37	2°Ω35'24	29.07390 AU		-11995 Sep 01 j 22:59	15°Ω	
opposition	-12001 Apr 21 j 05:41	2°Ω33'41	1°50'49	evening set	-11995 Oct 14 j 18:36	16°Ω20'18	
direct	-12001 Jul 08 j 04:47	1°Ω11'08					
evening set	-12001 Oct 02 j 02:31	3°Ω03'11		conjunction	-11995 Oct 30 j 10:04	16°Ω55'19	1°08'27
				minimum elong	-11995 Oct 30 j 10:04	16°Ω55'20	1°08'56
conjunction	-12001 Oct 17 j 13:22	3°Ω37'52	1°41'12	max. Earth dist.	-11995 Oct 31 j 12:01	16°Ω57'46	31.00846 AU
minimum elong	-12001 Oct 17 j 13:23	3°Ω37'52	1°41'47	morning rise	-11995 Nov 15 j 05:44	17°Ω30'44	
max. Earth dist.	-12001 Oct 18 j 14:32	3°Ω40'15	31.06891 AU	retrograde	-11994 Feb 14 j 22:57	19°Ω29'20	
morning rise	-12001 Nov 02 j 04:17	4°Ω12'56		opposition	-11994 May 06 j 18:26	18°Ω04'04	1°10'00
retrograde	-12000 Feb 01 j 18:11	6°Ω11'30		min. Earth dist.	-11994 May 05 j 17:03	18°Ω05'50	29.00458 AU
opposition	-12000 Apr 22 j 18:03	4°Ω46'37	1°45'24	direct	-11994 Jul 23 j 07:05	16°Ω41'14	
min. Earth dist.	-12000 Apr 21 j 18:07	4°Ω48'15	29.06619 AU	evening set	-11994 Oct 17 j 05:26	18°Ω33'06	
direct	-12000 Jul 09 j 14:38	3°Ω24'04					
evening set	-12000 Oct 03 j 13:02	5°Ω16'04		conjunction	-11994 Nov 01 j 21:39	19°Ω08'11	1°02'36
				minimum elong	-11994 Nov 01 j 21:39	19°Ω08'11	1°03'05
conjunction	-12000 Oct 19 j 00:48	5°Ω50'49	1°36'04	max. Earth dist.	-11994 Nov 03 j 00:18	19°Ω10'41	30.99947 AU
minimum elong	-12000 Oct 19 j 00:49	5°Ω50'49	1°36'40	morning rise	-11994 Nov 17 j 18:05	19°Ω43'39	
max. Earth dist.	-12000 Oct 20 j 02:36	5°Ω53'15	31.06067 AU	retrograde	-11993 Feb 17 j 11:33	21°Ω42'16	
morning rise	-12000 Nov 03 j 16:24	6°Ω25'57		min. Earth dist.	-11993 May 08 j 05:29	20°Ω18'42	28.99613 AU
retrograde	-11999 Feb 03 j 06:05	8°Ω24'31		opposition	-11993 May 09 j 06:20	20°Ω16'58	1°03'41
min. Earth dist.	-11999 Apr 24 j 05:28	7°Ω01'19	29.05711 AU	direct	-11993 Jul 25 j 18:35	18°Ω54'07	
opposition	-11999 Apr 25 j 06:18	6°Ω59'36	1°39'51	evening set	-11993 Oct 19 j 16:29	20°Ω46'00	
direct	-11999 Jul 12 j 02:24	5°Ω37'01					
evening set	-11999 Oct 05 j 23:39	7°Ω29'00		conjunction	-11993 Nov 04 j 09:31	21°Ω21'09	0°56'38
				minimum elong	-11993 Nov 04 j 09:32	21°Ω21'09	0°57'06
conjunction	-11999 Oct 21 j 11:59	8°Ω03'48	1°30'48	max. Earth dist.	-11993 Nov 05 j 12:30	21°Ω23'41	30.99177 AU
minimum elong	-11999 Oct 21 j 12:00	8°Ω03'48	1°31'21	morning rise	-11993 Nov 20 j 06:41	21°Ω56'41	
max. Earth dist.	-11999 Oct 22 j 12:48	8°Ω06'08	31.05103 AU	retrograde	-11992 Feb 20 j 02:28	23°Ω55'17	
morning rise	-11999 Nov 06 j 04:33	8°Ω38'59		opposition	-11992 May 10 j 17:56	22°Ω30'00	0°57'16
retrograde	-11998 Feb 05 j 18:44	10°Ω37'35		min. Earth dist.	-11992 May 09 j 16:00	22°Ω31'48	28.98887 AU
opposition	-11998 Apr 27 j 18:39	9°Ω12'35	1°34'08	direct	-11992 Jul 27 j 06:23	21°Ω07'08	
min. Earth dist.	-11998 Apr 26 j 18:34	9°Ω14'15	29.04687 AU	evening set	-11992 Oct 21 j 03:45	22°Ω59'03	
direct	-11998 Jul 14 j 11:28	7°Ω49'58					
evening set	-11998 Oct 08 j 10:14	9°Ω41'54		conjunction	-11992 Nov 05 j 21:24	23°Ω34'15	0°50'35
				minimum elong	-11992 Nov 05 j 21:25	23°Ω34'15	0°51'02
conjunction	-11998 Oct 23 j 23:31	10°Ω16'46	1°25'23	max. Earth dist.	-11992 Nov 07 j 00:11	23°Ω36'46	30.98498 AU
minimum elong	-11998 Oct 23 j 23:31	10°Ω16'46	1°25'57	morning rise	-11992 Nov 21 j 19:24	24°Ω09'51	
max. Earth dist.	-11998 Oct 25 j 01:29	10°Ω19'13	31.04044 AU	retrograde	-11991 Feb 21 j 14:37	26°Ω08'30	
morning rise	-11998 Nov 08 j 16:43	10°Ω52'00		min. Earth dist.	-11991 May 12 j 04:50	24°Ω44'56	28.98246 AU
retrograde	-11997 Feb 08 j 06:37	12°Ω50'36		opposition	-11991 May 13 j 05:46	24°Ω43'12	0°50'45
min. Earth dist.	-11997 Apr 29 j 06:06	11°Ω27'14	29.03583 AU	direct	-11991 Jul 29 j 16:13	23°Ω20'21	
opposition	-11997 Apr 30 j 06:42	11°Ω25'32	1°28'17	evening set	-11991 Oct 23 j 14:53	25°Ω12'18	
direct	-11997 Jul 16 j 22:46	10°Ω02'51					
evening set	-11997 Oct 10 j 20:59	11°Ω54'45		conjunction	-11991 Nov 08 j 09:23	25°Ω47'33	0°44'27
				minimum elong	-11991 Nov 08 j 09:24	25°Ω47'33	0°44'52
conjunction	-11997 Oct 26 j 10:54	12°Ω29'39	1°19'52	max. Earth dist.	-11991 Nov 09 j 13:01	25°Ω50'09	30.97896 AU
minimum elong	-11997 Oct 26 j 10:55	12°Ω29'40	1°20'23	morning rise	-11991 Nov 24 j 07:57	26°Ω23'12	
max. Earth dist.	-11997 Oct 27 j 12:03	12°Ω32'01	31.02942 AU	retrograde	-11990 Feb 24 j 02:53	28°Ω21'52	
morning rise	-11997 Nov 11 j 05:05	13°Ω04'58		opposition	-11990 May 15 j 17:25	26°Ω56'36	0°44'09
	-11996 Jan 27 j 01:02	15°Ω		min. Earth dist.	-11990 May 14 j 15:36	26°Ω58'24	28.97651 AU
retrograde	-11996 Feb 10 j 20:32	15°Ω03'33		direct	-11990 Aug 01 j 03:43	25°Ω33'45	
	-11996 Feb 25 j 18:57	15°RΩ		evening set	-11990 Oct 26 j 02:30	27°Ω25'45	
opposition	-11996 May 01 j 18:46	13°Ω38'24	1°22'19				
min. Earth dist.	-11996 Apr 30 j 18:15	13°Ω40'06	29.02479 AU	conjunction	-11990 Nov 10 j 21:32	28°Ω01'03	0°38'15
direct	-11996 Jul 18 j 08:55	12°Ω15'39		minimum elong	-11990 Nov 10 j 21:33	28°Ω01'03	0°38'39
evening set	-11996 Oct 12 j 07:46	14°Ω07'32		max. Earth dist.	-11990 Nov 12 j 00:04	28°Ω03'32	30.97311 AU
				morning rise	-11990 Nov 26 j 20:57	28°Ω36'45	
conjunction	-11996 Oct 27 j 22:31	14°Ω42'30	1°14'13		-11989 Jan 10 j 03:32	0°Π	
minimum elong	-11996 Oct 27 j 22:32	14°Ω42'30	1°14'43	retrograde	-11989 Feb 26 j 16:04	0°Π35'27	
max. Earth dist.	-11996 Oct 29 j 00:51	14°Ω44'59	31.01850 AU		-11989 Apr 16 j 08:04	30°RΩ	
	-11996 Nov 04 j 16:44	15°Ω		min. Earth dist.	-11989 May 17 j 04:20	29°Ω11'55	28.97062 AU
morning rise	-11996 Nov 12 j 17:21	15°Ω17'51		opposition	-11989 May 18 j 05:07	29°Ω10'11	0°37'29

Attention, astronomical year style is used: The year -11899 in astronomical counting style is the year 11990 BCE in historical counting style.

direct	-11899 Aug 03 j 12:18	27°04'20"		opposition	-11893 May 31 j 02:06	12°03'25"	-0°03'24"
evening set	-11899 Oct 28 j 14:11	29°03'23"		direct	-11893 Aug 16 j 07:57	11°09'39"	
	-11899 Nov 06 j 20:49	0°00'		evening set	-11893 Nov 10 j 14:49	13°01'53"	
conjunction	-11899 Nov 13 j 10:05	0°00'14"	0°31'59"	conjunction	-11893 Nov 26 j 14:21	13°00'37"	-0°06'23"
minimum elong	-11899 Nov 13 j 10:06	0°00'14"	0°32'21"	minimum elong	-11893 Nov 26 j 14:21	13°00'37"	0°06'10"
max. Earth dist.	-11899 Nov 14 j 13:25	0°00'17"	30.96702 AU	behind sun begin	-11893 Nov 26 j 08:08	13°00'36"	56'
morning rise	-11899 Nov 29 j 10:01	0°00'50"	30'	behind sun end	-11893 Nov 26 j 20:33	13°00'38"	03'
retrograde	-11898 Feb 29 j 04:11	2°00'49"	12'	max. Earth dist.	-11893 Nov 27 j 14:46	13°00'39"	47' 30.91604 AU
opposition	-11898 May 19 j 16:45	1°00'23"	57' 0°30'45"	morning rise	-11893 Dec 12 j 17:56	14°00'13"	29'
min. Earth dist.	-11898 May 18 j 15:52	1°00'25"	41' 28.96407 AU	retrograde	-11892 Mar 14 j 10:25	16°00'11"	59'
direct	-11898 Aug 04 j 23:25	0°00'01"	05'	opposition	-11892 Jun 02 j 13:26	14°00'46"	28' -0°10'15"
evening set	-11898 Oct 30 j 02:10	1°00'53"	10'	min. Earth dist.	-11892 Jun 01 j 15:28	14°00'48"	01' 28.91247 AU
conjunction	-11898 Nov 14 j 22:35	2°00'28"	34' 0°25'40"	direct	-11892 Aug 18 j 18:29	13°00'23"	09'
minimum elong	-11898 Nov 14 j 22:35	2°00'28"	34' 0°26'01"	evening set	-11892 Nov 13 j 03:09	15°00'15"	25'
max. Earth dist.	-11898 Nov 16 j 00:25	2°00'30"	59' 30.96010 AU	conjunction	-11892 Nov 29 j 03:23	15°00'51"	04' -0°12'45"
morning rise	-11898 Nov 30 j 23:18	3°00'04"	22'	minimum elong	-11892 Nov 29 j 03:22	15°00'51"	04' 0°12'33"
retrograde	-11897 Mar 02 j 17:24	5°00'03"	05'	behind sun begin	-11892 Nov 28 j 23:13	15°00'50"	42'
min. Earth dist.	-11897 May 21 j 04:09	3°00'39"	30' 28.95668 AU	behind sun end	-11892 Nov 29 j 07:32	15°00'51"	26'
opposition	-11897 May 22 j 04:22	3°00'37"	48' 0°23'58"	max. Earth dist.	-11892 Nov 30 j 04:22	15°00'53"	24' 30.90861 AU
direct	-11897 Aug 07 j 09:20	2°00'14"	53'	morning rise	-11892 Dec 15 j 07:20	16°00'27"	05'
evening set	-11897 Nov 01 j 14:07	4°00'07"	01'	retrograde	-11891 Mar 16 j 23:32	18°00'25"	32'
conjunction	-11897 Nov 17 j 11:18	4°00'42"	28' 0°19'19"	min. Earth dist.	-11891 Jun 04 j 01:44	17°00'01"	37' 28.90567 AU
minimum elong	-11897 Nov 17 j 11:19	4°00'42"	28' 0°19'38"	opposition	-11891 Jun 05 j 00:27	17°00'00"	01' -0°17'05"
max. Earth dist.	-11897 Nov 18 j 13:38	4°00'44"	56' 30.95216 AU	direct	-11891 Aug 21 j 06:36	15°00'36"	38'
morning rise	-11897 Dec 03 j 12:31	5°00'18"	18'	evening set	-11891 Nov 15 j 15:48	17°00'28"	59'
retrograde	-11896 Mar 05 j 05:16	7°00'17"	00'	conjunction	-11891 Dec 01 j 16:24	18°00'04"	40' -0°19'08"
opposition	-11896 May 24 j 15:59	5°00'51"	42' 0°17'09"	minimum elong	-11891 Dec 01 j 16:24	18°00'04"	40' 0°18'58"
min. Earth dist.	-11896 May 23 j 16:26	5°00'53"	20' 28.94819 AU	max. Earth dist.	-11891 Dec 02 j 16:11	18°00'06"	53' 30.90248 AU
direct	-11896 Aug 09 j 20:40	4°00'28"	42'	morning rise	-11891 Dec 17 j 20:58	18°00'40"	43'
evening set	-11896 Nov 04 j 02:08	6°00'20"	52'	retrograde	-11890 Mar 18 j 12:55	20°00'39"	08'
conjunction	-11896 Nov 19 j 23:57	6°00'56"	21' 0°12'56"	opposition	-11890 Jun 06 j 11:40	19°00'13"	37' -0°23'54"
minimum elong	-11896 Nov 19 j 23:57	6°00'56"	21' 0°13'15"	min. Earth dist.	-11890 Jun 05 j 13:52	19°00'15"	09' 28.90031 AU
behind sun begin	-11896 Nov 19 j 20:12	6°00'56"	01'	direct	-11890 Aug 22 j 16:01	17°00'50"	13'
behind sun end	-11896 Nov 20 j 03:42	6°00'56"	41'	evening set	-11890 Nov 17 j 04:20	19°00'42"	38'
max. Earth dist.	-11896 Nov 21 j 01:05	6°00'58"	42' 30.94341 AU	conjunction	-11890 Dec 03 j 05:34	20°00'18"	21' -0°25'29"
morning rise	-11896 Dec 06 j 01:53	7°00'32"	14'	minimum elong	-11890 Dec 03 j 05:34	20°00'18"	21' 0°25'20"
retrograde	-11895 Mar 07 j 19:30	9°00'30"	53'	max. Earth dist.	-11890 Dec 04 j 06:15	20°00'20"	40' 30.89772 AU
min. Earth dist.	-11895 May 26 j 03:52	8°00'07"	11' 28.93905 AU	morning rise	-11890 Dec 19 j 10:22	20°00'54"	26'
opposition	-11895 May 27 j 03:31	8°00'05"	32' 0°10'19"	retrograde	-11897 Mar 21 j 00:25	22°00'52"	50'
direct	-11895 Aug 12 j 07:14	6°00'42"	27'	opposition	-11897 Jun 08 j 22:40	21°00'27"	21' -0°30'41"
evening set	-11895 Nov 06 j 14:23	8°00'34"	38'	min. Earth dist.	-11897 Jun 08 j 00:37	21°00'28"	54' 28.89612 AU
conjunction	-11895 Nov 22 j 12:49	9°00'10"	10' 0°06'34"	direct	-11897 Aug 25 j 03:20	20°00'03"	56'
minimum elong	-11895 Nov 22 j 12:49	9°00'10"	10' 0°06'50"	evening set	-11897 Nov 19 j 17:11	21°00'56"	27'
behind sun begin	-11895 Nov 22 j 06:43	9°00'09"	37'	conjunction	-11897 Dec 05 j 18:45	22°00'32"	12' -0°31'49"
behind sun end	-11895 Nov 22 j 18:54	9°00'10"	43'	minimum elong	-11897 Dec 05 j 18:44	22°00'32"	12' 0°31'42"
max. Earth dist.	-11895 Nov 23 j 13:54	9°00'12"	31' 30.93399 AU	max. Earth dist.	-11897 Dec 06 j 18:03	22°00'34"	22' 30.89416 AU
morning rise	-11895 Dec 08 j 15:18	9°00'46"	05'	morning rise	-11897 Dec 22 j 00:06	23°00'08"	18'
retrograde	-11894 Mar 09 j 07:58	11°00'44"	41'	retrograde	-11897 Mar 23 j 13:24	25°00'06"	42'
opposition	-11894 May 28 j 14:51	10°00'19"	16' 0°03'28"	opposition	-11897 Jun 11 j 09:45	23°00'41"	16' -0°37'26"
min. Earth dist.	-11894 May 27 j 16:23	10°00'20"	50' 28.92956 AU	min. Earth dist.	-11897 Jun 10 j 12:17	23°00'42"	47' 28.89308 AU
direct	-11894 Aug 13 j 19:20	8°00'56"	06'	direct	-11897 Aug 27 j 12:48	22°00'17"	49'
evening set	-11894 Nov 08 j 02:36	10°00'48"	18'	evening set	-11897 Nov 22 j 06:04	24°00'10"	28'
conjunction	-11894 Nov 24 j 01:43	11°00'23"	53' 0°00'06"	conjunction	-11897 Dec 08 j 08:13	24°00'46"	15' -0°38'06"
minimum elong	-11894 Nov 24 j 01:41	11°00'23"	53' 0°00'22"	minimum elong	-11897 Dec 08 j 08:12	24°00'46"	15' 0°38'00"
behind sun begin	-11894 Nov 23 j 19:10	11°00'23"	18'	max. Earth dist.	-11897 Dec 09 j 08:06	24°00'48"	29' 30.89135 AU
behind sun end	-11894 Nov 24 j 08:12	11°00'24"	28'	morning rise	-11897 Dec 24 j 13:48	25°00'22"	23'
max. Earth dist.	-11894 Nov 25 j 02:33	11°00'26"	12' 30.92473 AU	retrograde	-11897 Mar 26 j 01:11	27°00'20"	47'
desc. node	-11894 Nov 29 j 09:13	11°00'35"	49'	opposition	-11897 Jun 13 j 20:51	25°00'55"	24' -0°44'08"
morning rise	-11894 Dec 10 j 04:41	11°00'59"	50'	min. Earth dist.	-11897 Jun 13 j 00:12	25°00'56"	51' 28.89042 AU
retrograde	-11893 Mar 11 j 22:25	13°00'58"	22'	direct	-11897 Aug 29 j 23:29	24°00'31"	57'
min. Earth dist.	-11893 May 30 j 02:57	12°00'34"	31' 28.92055 AU	evening set	-11897 Nov 24 j 19:22	26°00'24"	43'

Attention, astronomical year style is used: The year -11977 in astronomical counting style is the year 11978 BCE in historical counting style.

conjunction	-11977 Dec 10 j 21:51	27° <u>00</u> '32	-0°44'20	retrograde	-11970 Apr 10 j 21:56	13° <u>02</u> '47	
minimum elong	-11977 Dec 10 j 21:51	27° <u>00</u> '32	0°44'17	min. Earth dist.	-11970 Jun 28 j 09:59	11° <u>03</u> '36	28.85881 AU
max. Earth dist.	-11977 Dec 11 j 20:14	27° <u>02</u> '37	30.88877 AU	opposition	-11970 Jun 29 j 01:31	11° <u>03</u> '30	-1°28'39
morning rise	-11977 Dec 27 j 03:52	27° <u>36</u> '41		direct	-11970 Sep 14 j 09:39	10° <u>13</u> '37	
retrograde	-11976 Mar 27 j 15:29	29° <u>35</u> '05		evening set	-11970 Dec 10 j 19:01	12° <u>07</u> '07	
min. Earth dist.	-11976 Jun 14 j 11:22	28° <u>11</u> '12	28.88778 AU				
opposition	-11976 Jun 15 j 07:47	28° <u>09</u> '45	-0°50'46	conjunction	-11970 Dec 26 j 23:38	12° <u>04</u> '03	-1°25'38
direct	-11976 Aug 31 j 09:35	26° <u>46</u> '17		minimum elong	-11970 Dec 26 j 23:37	12° <u>04</u> '03	1°25'45
evening set	-11976 Nov 26 j 08:48	28° <u>39</u> '11		max. Earth dist.	-11970 Dec 27 j 15:57	12° <u>04</u> '35	30.85588 AU
				morning rise	-11969 Jan 12 j 07:03	13° <u>19</u> '16	
conjunction	-11976 Dec 12 j 11:41	29° <u>15</u> '02	-0°50'31	retrograde	-11969 Apr 13 j 10:39	15° <u>17</u> '16	
minimum elong	-11976 Dec 12 j 11:40	29° <u>15</u> '02	0°50'28	opposition	-11969 Jul 01 j 12:19	13° <u>51</u> '59	-1°34'33
max. Earth dist.	-11976 Dec 13 j 09:39	29° <u>17</u> '05	30.88573 AU	min. Earth dist.	-11969 Jun 30 j 21:29	13° <u>53</u> '02	28.85481 AU
morning rise	-11976 Dec 28 j 17:53	29° <u>51</u> '12		direct	-11969 Sep 16 j 19:53	12° <u>28</u> '01	
	-11975 Jan 01 j 19:20	0° <u>00</u> '		evening set	-11969 Dec 13 j 08:57	14° <u>21</u> '38	
retrograde	-11975 Mar 30 j 04:03	1° <u>49</u> '35					
opposition	-11975 Jun 17 j 18:58	0° <u>24</u> '18	-0°57'20	conjunction	-11969 Dec 29 j 13:54	14° <u>57</u> '35	-1°31'05
min. Earth dist.	-11975 Jun 17 j 00:06	0° <u>25</u> '38	28.88447 AU	minimum elong	-11969 Dec 29 j 13:53	14° <u>57</u> '35	1°31'14
	-11975 Jul 02 j 07:36	30° <u>00</u> '		max. Earth dist.	-11969 Dec 30 j 06:41	14° <u>59</u> '09	30.85230 AU
direct	-11975 Sep 02 j 21:27	29° <u>00</u> '48		morning rise	-11968 Jan 14 j 21:12	15° <u>33</u> '47	
	-11975 Nov 02 j 07:09	0° <u>00</u> '		retrograde	-11968 Apr 14 j 21:53	17° <u>31</u> '43	
evening set	-11975 Nov 28 j 22:10	0° <u>53</u> '49		opposition	-11968 Jul 02 j 22:58	16° <u>06</u> '28	-1°40'18
				min. Earth dist.	-11968 Jul 02 j 08:57	16° <u>07</u> '27	28.85195 AU
conjunction	-11975 Dec 15 j 01:27	1° <u>29</u> '41	-0°56'36	direct	-11968 Sep 18 j 06:37	14° <u>42</u> '26	
minimum elong	-11975 Dec 15 j 01:26	1° <u>29</u> '41	0°56'36	evening set	-11968 Dec 14 j 23:00	16° <u>03</u> '10	
max. Earth dist.	-11975 Dec 15 j 22:26	1° <u>31</u> '39	30.88204 AU				
morning rise	-11975 Dec 31 j 07:55	2° <u>05</u> '52		conjunction	-11968 Dec 31 j 04:02	17° <u>12</u> '07	-1°36'24
retrograde	-11974 Apr 01 j 18:36	4° <u>04</u> '14		minimum elong	-11968 Dec 31 j 04:00	17° <u>12</u> '07	1°36'34
min. Earth dist.	-11974 Jun 19 j 11:04	2° <u>40</u> '18	28.88031 AU	max. Earth dist.	-11968 Dec 31 j 19:18	17° <u>13</u> '33	30.85014 AU
opposition	-11974 Jun 20 j 06:01	2° <u>38</u> '57	-1°03'48	morning rise	-11967 Jan 16 j 11:29	17° <u>48</u> '20	
direct	-11974 Sep 05 j 10:20	1° <u>15</u> '24		retrograde	-11967 Apr 17 j 10:54	19° <u>46</u> '11	
evening set	-11974 Dec 01 j 11:54	3° <u>08</u> '32		opposition	-11967 Jul 05 j 09:39	18° <u>20</u> '58	-1°45'54
				min. Earth dist.	-11967 Jul 04 j 19:34	18° <u>21</u> '59	28.85056 AU
conjunction	-11974 Dec 17 j 15:26	3° <u>44</u> '26	-1°02'37	direct	-11967 Sep 20 j 17:00	16° <u>56</u> '53	
minimum elong	-11974 Dec 17 j 15:26	3° <u>44</u> '26	1°02'37	evening set	-11967 Dec 17 j 12:56	18° <u>50</u> '45	
max. Earth dist.	-11974 Dec 18 j 11:11	3° <u>46</u> '16	30.87729 AU				
morning rise	-11973 Jan 02 j 22:13	4° <u>20</u> '37		conjunction	-11966 Jan 02 j 18:10	19° <u>26</u> '43	-1°41'34
retrograde	-11973 Apr 04 j 07:09	6° <u>18</u> '56		minimum elong	-11966 Jan 02 j 18:09	19° <u>26</u> '43	1°41'46
opposition	-11973 Jun 22 j 17:03	4° <u>53</u> '40	-1°10'11	max. Earth dist.	-11966 Jan 03 j 09:24	19° <u>28</u> '09	30.84920 AU
min. Earth dist.	-11973 Jun 22 j 00:02	4° <u>54</u> '52	28.87521 AU	morning rise	-11966 Jan 19 j 01:34	20° <u>02</u> '55	
direct	-11973 Sep 07 j 21:19	3° <u>30</u> '02		retrograde	-11966 Apr 19 j 21:50	22° <u>00</u> '44	
evening set	-11973 Dec 04 j 01:36	5° <u>23</u> '16		opposition	-11966 Jul 07 j 20:26	20° <u>35</u> '34	-1°51'21
				min. Earth dist.	-11966 Jul 07 j 07:45	20° <u>36</u> '29	28.85024 AU
conjunction	-11973 Dec 20 j 05:37	5° <u>59</u> '11	-1°08'32	direct	-11966 Sep 23 j 04:41	19° <u>11</u> '27	
minimum elong	-11973 Dec 20 j 05:36	5° <u>59</u> '11	1°08'35	evening set	-11966 Dec 20 j 03:12	21° <u>05</u> '28	
max. Earth dist.	-11973 Dec 21 j 01:02	6° <u>00</u> '59	30.87187 AU				
morning rise	-11972 Jan 05 j 12:29	6° <u>35</u> '23		conjunction	-11965 Jan 05 j 08:35	21° <u>41</u> '26	-1°46'35
retrograde	-11972 Apr 05 j 21:14	8° <u>33</u> '36		minimum elong	-11965 Jan 05 j 08:34	21° <u>41</u> '26	1°46'48
min. Earth dist.	-11972 Jun 23 j 10:51	7° <u>09</u> '33	28.86953 AU	max. Earth dist.	-11965 Jan 05 j 22:46	21° <u>42</u> '46	30.84937 AU
opposition	-11972 Jun 24 j 03:56	7° <u>08</u> '20	-1°16'28	morning rise	-11965 Jan 21 j 16:01	22° <u>17</u> '38	
direct	-11972 Sep 09 j 10:29	5° <u>44</u> '38		retrograde	-11965 Apr 22 j 11:39	24° <u>15</u> '23	
evening set	-11972 Dec 05 j 15:23	7° <u>37</u> '57		opposition	-11965 Jul 10 j 06:56	22° <u>50</u> '18	-1°56'37
				min. Earth dist.	-11965 Jul 09 j 18:08	22° <u>51</u> '12	28.85078 AU
conjunction	-11972 Dec 21 j 19:29	8° <u>13</u> '53	-1°14'21	direct	-11965 Sep 25 j 16:55	21° <u>26</u> '08	
minimum elong	-11972 Dec 21 j 19:28	8° <u>13</u> '52	1°14'25	evening set	-11965 Dec 22 j 17:43	23° <u>20</u> '19	
max. Earth dist.	-11972 Dec 22 j 13:11	8° <u>15</u> '32	30.86602 AU				
morning rise	-11971 Jan 07 j 02:39	8° <u>50</u> '05		conjunction	-11964 Jan 07 j 23:08	23° <u>56</u> '17	-1°51'26
retrograde	-11971 Apr 08 j 10:48	10° <u>48</u> '14		minimum elong	-11964 Jan 07 j 23:07	23° <u>56</u> '17	1°51'42
opposition	-11971 Jun 26 j 14:50	9° <u>22</u> '57	-1°22'37	max. Earth dist.	-11964 Jan 08 j 12:14	23° <u>57</u> '31	30.84995 AU
min. Earth dist.	-11971 Jun 25 j 23:09	9° <u>24</u> '04	28.86391 AU	morning rise	-11964 Jan 24 j 06:30	24° <u>32</u> '28	
direct	-11971 Sep 11 j 21:15	7° <u>59</u> '09		retrograde	-11964 Apr 24 j 00:03	26° <u>30</u> '11	
evening set	-11971 Dec 08 j 05:05	9° <u>52</u> '33		opposition	-11964 Jul 11 j 17:43	25° <u>05</u> '10	-2°01'44
				min. Earth dist.	-11964 Jul 11 j 06:53	25° <u>05</u> '56	28.85155 AU
conjunction	-11971 Dec 24 j 09:37	10° <u>28</u> '30	-1°20'03	direct	-11964 Sep 27 j 03:43	23° <u>40</u> '58	
minimum elong	-11971 Dec 24 j 09:36	10° <u>28</u> '30	1°20'10	evening set	-11964 Dec 24 j 08:08	25° <u>35</u> '18	
max. Earth dist.	-11971 Dec 25 j 03:41	10° <u>30</u> '11	30.86054 AU				
morning rise	-11970 Jan 09 j 16:44	11° <u>04</u> '43		conjunction	-11963 Jan 09 j 13:42	26° <u>11</u> '17	-1°56'07

Attention, astronomical year style is used: The year -11963 in astronomical counting style is the year 11964 BCE in historical counting style.

minimum elong	-11963 Jan 09 j 13:41	26° $\underline{\text{A}}$ 11'17	1°56'24	opposition	-11957 Jul 27 j 20:02	10° M .50'00	-2°31'52
max. Earth dist.	-11963 Jan 10 j 02:16	26° $\underline{\text{A}}$ 12'27	30.85057 AU	min. Earth dist.	-11957 Jul 27 j 16:16	10° M .50'16	28.84146 AU
morning rise	-11963 Jan 25 j 20:54	26° $\underline{\text{A}}$ 47'27		direct	-11957 Oct 13 j 16:09	9° M .25'16	
retrograde	-11963 Apr 26 j 14:09	28° $\underline{\text{A}}$ 45'06		evening set	-11956 Jan 10 j 15:29	11° M .20'29	
opposition	-11963 Jul 14 j 04:22	27° $\underline{\text{A}}$ 20'09	-2°06'39				
min. Earth dist.	-11963 Jul 13 j 17:40	27° $\underline{\text{A}}$ 20'55	28.85198 AU	conjunction	-11956 Jan 26 j 21:03	11° M .56'26	-2°23'37
direct	-11963 Sep 29 j 17:21	25° $\underline{\text{A}}$ 55'56		minimum elong	-11956 Jan 26 j 21:02	11° M .56'26	2°24'04
evening set	-11963 Dec 26 j 22:53	27° $\underline{\text{A}}$ 50'24		max. Earth dist.	-11956 Jan 27 j 01:04	11° M .56'49	30.83919 AU
				morning rise	-11956 Feb 12 j 03:16	12° M .32'29	
conjunction	-11962 Jan 12 j 04:22	28° $\underline{\text{A}}$ 26'24	-2°00'38	retrograde	-11956 May 12 j 03:48	14° M .29'25	
minimum elong	-11962 Jan 12 j 04:21	28° $\underline{\text{A}}$ 26'24	2°00'57	opposition	-11956 Jul 29 j 06:27	13° M .04'42	-2°35'18
max. Earth dist.	-11962 Jan 12 j 14:49	28° $\underline{\text{A}}$ 27'22	30.85053 AU	min. Earth dist.	-11956 Jul 29 j 02:25	13° M .04'59	28.84097 AU
morning rise	-11962 Jan 28 j 11:35	29° $\underline{\text{A}}$ 02'33		direct	-11956 Oct 15 j 04:21	11° M .39'53	
	-11962 Feb 26 j 00:53	0° M .		evening set	-11955 Jan 12 j 06:06	13° M .35'14	
retrograde	-11962 Apr 29 j 03:37	1° M .00'08					
	-11962 Jul 01 j 22:02	30° R . $\underline{\text{A}}$		conjunction	-11955 Jan 28 j 11:34	14° M .11'11	-2°26'43
opposition	-11962 Jul 16 j 15:06	29° $\underline{\text{A}}$ 35'14	-2°11'23	minimum elong	-11955 Jan 28 j 11:33	14° M .11'11	2°27'10
min. Earth dist.	-11962 Jul 16 j 06:14	29° $\underline{\text{A}}$ 35'52	28.85169 AU	max. Earth dist.	-11955 Jan 28 j 14:52	14° M .11'30	30.83921 AU
direct	-11962 Oct 02 j 04:50	28° $\underline{\text{A}}$ 10'57		morning rise	-11955 Feb 13 j 17:31	14° M .47'13	
	-11962 Dec 26 j 23:55	0° M .			-11955 Feb 19 j 16:03	15° M .	
evening set	-11962 Dec 29 j 13:36	0° M .05'34		retrograde	-11955 May 14 j 14:51	16° M .44'04	
				opposition	-11955 Jul 31 j 17:00	15° M .19'23	-2°38'29
conjunction	-11961 Jan 14 j 19:19	0° M .41'34	-2°04'58	min. Earth dist.	-11955 Jul 31 j 14:35	15° M .19'34	28.84188 AU
minimum elong	-11961 Jan 14 j 19:17	0° M .41'34	2°05'17		-11955 Aug 12 j 02:40	15° R . M .	
max. Earth dist.	-11961 Jan 15 j 05:22	0° M .42'30	30.84963 AU	direct	-11955 Oct 17 j 15:15	13° M .54'32	
morning rise	-11961 Jan 31 j 02:17	1° M .17'42			-11955 Dec 21 j 06:58	15° M .	
retrograde	-11961 May 01 j 15:51	3° M .15'12		evening set	-11954 Jan 14 j 20:46	15° M .50'00	
opposition	-11961 Jul 19 j 01:49	1° M .50'20	-2°15'54				
min. Earth dist.	-11961 Jul 18 j 17:38	1° M .50'55	28.85026 AU	conjunction	-11954 Jan 31 j 02:15	16° M .25'57	-2°29'35
direct	-11961 Oct 04 j 18:03	0° M .25'59		minimum elong	-11954 Jan 31 j 02:14	16° M .25'57	2°30'04
evening set	-11960 Jan 01 j 04:31	2° M .20'44		max. Earth dist.	-11954 Jan 31 j 05:09	16° M .26'13	30.84087 AU
				morning rise	-11954 Feb 16 j 07:57	17° M .01'57	
conjunction	-11960 Jan 17 j 10:05	2° M .56'43	-2°09'06	retrograde	-11954 May 17 j 04:00	18° M .58'42	
minimum elong	-11960 Jan 17 j 10:04	2° M .56'43	2°09'28	opposition	-11954 Aug 03 j 03:16	17° M .34'06	-2°41'25
max. Earth dist.	-11960 Jan 17 j 17:41	2° M .57'25	30.84770 AU	min. Earth dist.	-11954 Aug 03 j 00:43	17° M .34'17	28.84425 AU
morning rise	-11960 Feb 02 j 17:04	3° M .32'51		direct	-11954 Oct 20 j 05:14	16° M .09'12	
retrograde	-11960 May 03 j 05:10	5° M .30'14		evening set	-11953 Jan 17 j 11:39	18° M .04'50	
opposition	-11960 Jul 20 j 12:27	4° M .05'24	-2°20'13				
min. Earth dist.	-11960 Jul 20 j 05:30	4° M .05'53	28.84809 AU	conjunction	-11953 Feb 02 j 16:58	18° M .40'47	-2°32'13
direct	-11960 Oct 06 j 05:15	2° M .40'57		minimum elong	-11953 Feb 02 j 16:57	18° M .40'46	2°32'43
evening set	-11959 Jan 02 j 19:15	4° M .35'48		max. Earth dist.	-11953 Feb 02 j 18:16	18° M .40'54	30.84381 AU
				morning rise	-11953 Feb 18 j 22:30	19° M .16'45	
conjunction	-11959 Jan 19 j 00:58	5° M .11'48	-2°13'03	retrograde	-11953 May 19 j 16:46	21° M .13'26	
minimum elong	-11959 Jan 19 j 00:56	5° M .11'48	2°13'25	opposition	-11953 Aug 05 j 13:48	19° M .48'55	-2°44'07
max. Earth dist.	-11959 Jan 19 j 08:31	5° M .12'30	30.84515 AU	min. Earth dist.	-11953 Aug 05 j 12:41	19° M .48'59	28.84791 AU
morning rise	-11959 Feb 04 j 07:37	5° M .47'54		direct	-11953 Oct 22 j 17:08	18° M .23'59	
retrograde	-11959 May 05 j 16:26	7° M .45'11		evening set	-11952 Jan 20 j 02:24	20° M .19'46	
opposition	-11959 Jul 22 j 23:04	6° M .20'22	-2°24'20				
min. Earth dist.	-11959 Jul 22 j 17:22	6° M .20'46	28.84547 AU	conjunction	-11952 Feb 05 j 07:45	20° M .55'42	-2°34'38
direct	-11959 Oct 08 j 16:55	4° M .55'50		minimum elong	-11952 Feb 05 j 07:44	20° M .55'42	2°35'09
evening set	-11958 Jan 05 j 09:55	6° M .50'47		max. Earth dist.	-11952 Feb 05 j 09:02	20° M .55'50	30.84786 AU
				morning rise	-11952 Feb 21 j 12:53	21° M .31'40	
conjunction	-11958 Jan 21 j 15:31	7° M .26'46	-2°16'47	retrograde	-11952 May 21 j 05:09	23° M .28'15	
minimum elong	-11958 Jan 21 j 15:30	7° M .26'46	2°17'11	opposition	-11952 Aug 07 j 00:11	22° M .03'50	-2°46'34
max. Earth dist.	-11958 Jan 21 j 21:07	7° M .27'17	30.84258 AU	min. Earth dist.	-11952 Aug 06 j 23:33	22° M .03'53	28.85227 AU
morning rise	-11958 Feb 06 j 22:11	8° M .02'52		direct	-11952 Oct 24 j 06:10	20° M .38'54	
retrograde	-11958 May 08 j 04:45	10° M .00'01		evening set	-11951 Jan 21 j 17:23	22° M .34'50	
opposition	-11958 Jul 25 j 09:34	8° M .35'14	-2°28'13				
min. Earth dist.	-11958 Jul 25 j 04:12	8° M .35'37	28.84315 AU	conjunction	-11951 Feb 06 j 22:27	23° M .10'46	-2°36'48
direct	-11958 Oct 11 j 04:18	7° M .10'35		minimum elong	-11951 Feb 06 j 22:26	23° M .10'46	2°37'20
evening set	-11957 Jan 08 j 00:41	9° M .05'40		max. Earth dist.	-11951 Feb 06 j 21:33	23° M .10'41	30.85242 AU
				morning rise	-11951 Feb 23 j 03:28	23° M .46'42	
conjunction	-11957 Jan 24 j 06:21	9° M .41'38	-2°20'19	retrograde	-11951 May 23 j 19:24	25° M .43'12	
minimum elong	-11957 Jan 24 j 06:20	9° M .41'38	2°20'43	opposition	-11951 Aug 09 j 10:41	24° M .18'53	-2°48'46
max. Earth dist.	-11957 Jan 24 j 11:39	9° M .42'08	30.84036 AU	min. Earth dist.	-11951 Aug 09 j 11:08	24° M .18'51	28.85703 AU
morning rise	-11957 Feb 09 j 12:42	10° M .17'43		direct	-11951 Oct 26 j 17:53	22° M .53'55	
retrograde	-11957 May 10 j 14:46	12° M .14'46		evening set	-11950 Jan 24 j 08:09	24° M .50'00	

Attention, astronomical year style is used: The year -11950 in astronomical counting style is the year 11951 BCE in historical counting style.

conjunction	-11950 Feb 09 j 13:18	25° $\overline{\text{M}}$ 25'55	-2°38'44	max. Earth dist.	-11944 Feb 23 j 20:44	8° $\overline{\text{A}}$ 54'41	30.87222 AU
minimum elong	-11950 Feb 09 j 13:17	25° $\overline{\text{M}}$ 25'55	2°39'17	morning rise	-11944 Mar 11 j 08:37	9° $\overline{\text{A}}$ 31'15	
max. Earth dist.	-11950 Feb 09 j 12:20	25° $\overline{\text{M}}$ 25'50	30.85691 AU	retrograde	-11944 Jun 08 j 02:56	11° $\overline{\text{A}}$ 26'48	
morning rise	-11950 Feb 25 j 17:53	26° $\overline{\text{M}}$ 01'50		opposition	-11944 Aug 24 j 12:16	10° $\overline{\text{A}}$ 02'49	-2°56'48
retrograde	-11950 May 26 j 06:50	27° $\overline{\text{M}}$ 58'14		min. Earth dist.	-11944 Aug 24 j 20:08	10° $\overline{\text{A}}$ 02'16	28.87647 AU
opposition	-11950 Aug 11 j 21:16	26° $\overline{\text{M}}$ 34'00	-2°50'42	direct	-11944 Nov 11 j 08:13	8° $\overline{\text{A}}$ 37'21	
min. Earth dist.	-11950 Aug 11 j 23:11	26° $\overline{\text{M}}$ 33'52	28.86125 AU	evening set	-11943 Feb 09 j 15:58	10° $\overline{\text{A}}$ 34'04	
direct	-11950 Oct 29 j 06:22	25° $\overline{\text{M}}$ 09'01					
evening set	-11949 Jan 26 j 23:17	27° $\overline{\text{M}}$ 05'13		conjunction	-11943 Feb 25 j 20:09	11° $\overline{\text{A}}$ 09'53	-2°45'23
				minimum elong	-11943 Feb 25 j 20:09	11° $\overline{\text{A}}$ 09'53	2°46'02
conjunction	-11949 Feb 12 j 04:09	27° $\overline{\text{M}}$ 41'08	-2°40'25	max. Earth dist.	-11943 Feb 25 j 11:15	11° $\overline{\text{A}}$ 09'03	30.87591 AU
minimum elong	-11949 Feb 12 j 04:08	27° $\overline{\text{M}}$ 41'07	2°40'59	morning rise	-11943 Mar 13 j 22:42	11° $\overline{\text{A}}$ 45'36	
max. Earth dist.	-11949 Feb 12 j 00:45	27° $\overline{\text{M}}$ 40'49	30.86076 AU	retrograde	-11943 Jun 10 j 14:35	13° $\overline{\text{A}}$ 40'59	
morning rise	-11949 Feb 28 j 08:37	28° $\overline{\text{M}}$ 17'01		opposition	-11943 Aug 26 j 22:38	12° $\overline{\text{A}}$ 17'05	-2°56'53
	-11949 Apr 30 j 17:18	0° $\overline{\text{A}}$		min. Earth dist.	-11943 Aug 27 j 06:42	12° $\overline{\text{A}}$ 16'30	28.88079 AU
retrograde	-11949 May 28 j 19:18	0° $\overline{\text{A}}$ 13'18		direct	-11943 Nov 13 j 21:46	10° $\overline{\text{A}}$ 51'33	
	-11949 Jun 25 j 23:17	30° $\overline{\text{R}}$ $\overline{\text{M}}$		evening set	-11942 Feb 12 j 06:31	12° $\overline{\text{A}}$ 48'21	
opposition	-11949 Aug 14 j 07:46	28° $\overline{\text{M}}$ 49'09	-2°52'22				
min. Earth dist.	-11949 Aug 14 j 10:16	28° $\overline{\text{M}}$ 48'58	28.86474 AU	conjunction	-11942 Feb 28 j 10:25	13° $\overline{\text{A}}$ 24'10	-2°45'20
direct	-11949 Oct 31 j 18:28	27° $\overline{\text{M}}$ 24'05		minimum elong	-11942 Feb 28 j 10:25	13° $\overline{\text{A}}$ 24'10	2°45'59
evening set	-11948 Jan 29 j 14:17	29° $\overline{\text{M}}$ 20'24		max. Earth dist.	-11942 Feb 27 j 23:43	13° $\overline{\text{A}}$ 23'10	30.88097 AU
				morning rise	-11942 Mar 16 j 12:49	13° $\overline{\text{A}}$ 59'51	
conjunction	-11948 Feb 14 j 19:09	29° $\overline{\text{M}}$ 56'18	-2°41'52	retrograde	-11942 Jun 13 j 03:55	15° $\overline{\text{A}}$ 55'07	
minimum elong	-11948 Feb 14 j 19:08	29° $\overline{\text{M}}$ 56'18	2°42'27	opposition	-11942 Aug 29 j 09:05	14° $\overline{\text{A}}$ 31'16	-2°56'42
max. Earth dist.	-11948 Feb 14 j 15:12	29° $\overline{\text{M}}$ 55'56	30.86368 AU	min. Earth dist.	-11942 Aug 29 j 17:48	14° $\overline{\text{A}}$ 30'39	28.88665 AU
	-11948 Feb 16 j 10:46	0° $\overline{\text{A}}$		direct	-11942 Nov 16 j 10:16	13° $\overline{\text{A}}$ 05'43	
morning rise	-11948 Mar 01 j 23:09	0° $\overline{\text{A}}$ 32'10		evening set	-11941 Feb 14 j 20:58	15° $\overline{\text{A}}$ 02'37	
retrograde	-11948 May 30 j 05:30	2° $\overline{\text{A}}$ 28'19					
opposition	-11948 Aug 15 j 18:28	1° $\overline{\text{A}}$ 04'13	-2°53'47	conjunction	-11941 Mar 03 j 00:53	15° $\overline{\text{A}}$ 38'25	-2°45'03
min. Earth dist.	-11948 Aug 15 j 22:52	1° $\overline{\text{A}}$ 03'54	28.86730 AU	minimum elong	-11941 Mar 03 j 00:52	15° $\overline{\text{A}}$ 38'25	2°45'42
	-11948 Sep 27 j 08:28	30° $\overline{\text{R}}$ $\overline{\text{M}}$		max. Earth dist.	-11941 Mar 02 j 14:36	15° $\overline{\text{A}}$ 37'27	30.88751 AU
direct	-11948 Nov 02 j 06:15	29° $\overline{\text{M}}$ 39'05		morning rise	-11941 Mar 19 j 02:48	16° $\overline{\text{A}}$ 14'04	
	-11948 Dec 07 j 20:23	0° $\overline{\text{A}}$		retrograde	-11941 Jun 15 j 14:45	18° $\overline{\text{A}}$ 09'13	
evening set	-11947 Jan 31 j 05:05	1° $\overline{\text{A}}$ 35'29		opposition	-11941 Aug 31 j 19:33	16° $\overline{\text{A}}$ 45'29	-2°56'15
				min. Earth dist.	-11941 Sep 01 j 05:16	16° $\overline{\text{A}}$ 44'47	28.89379 AU
conjunction	-11947 Feb 16 j 09:45	2° $\overline{\text{A}}$ 11'22	-2°43'04	direct	-11941 Nov 18 j 23:22	15° $\overline{\text{A}}$ 19'55	
minimum elong	-11947 Feb 16 j 09:44	2° $\overline{\text{A}}$ 11'22	2°43'40	evening set	-11940 Feb 17 j 11:33	17° $\overline{\text{A}}$ 16'55	
max. Earth dist.	-11947 Feb 16 j 03:59	2° $\overline{\text{A}}$ 10'50	30.86595 AU				
morning rise	-11947 Mar 04 j 13:35	2° $\overline{\text{A}}$ 47'12		conjunction	-11940 Mar 04 j 15:08	17° $\overline{\text{A}}$ 52'43	-2°44'30
retrograde	-11947 Jun 01 j 18:13	4° $\overline{\text{A}}$ 43'12		minimum elong	-11940 Mar 04 j 15:08	17° $\overline{\text{A}}$ 52'43	2°45'10
opposition	-11947 Aug 18 j 04:55	3° $\overline{\text{A}}$ 19'09	-2°54'56	max. Earth dist.	-11940 Mar 04 j 03:04	17° $\overline{\text{A}}$ 51'35	30.89538 AU
min. Earth dist.	-11947 Aug 18 j 09:24	3° $\overline{\text{A}}$ 18'49	28.86931 AU	morning rise	-11940 Mar 20 j 16:55	18° $\overline{\text{A}}$ 28'21	
direct	-11947 Nov 04 j 18:24	1° $\overline{\text{A}}$ 53'55		retrograde	-11940 Jun 17 j 03:29	20° $\overline{\text{A}}$ 23'23	
evening set	-11946 Feb 02 j 19:58	3° $\overline{\text{A}}$ 50'24		opposition	-11940 Sep 02 j 06:03	18° $\overline{\text{A}}$ 59'46	-2°55'32
				min. Earth dist.	-11940 Sep 02 j 15:48	18° $\overline{\text{A}}$ 59'04	28.90219 AU
conjunction	-11946 Feb 19 j 00:31	4° $\overline{\text{A}}$ 26'16	-2°44'01	direct	-11940 Nov 20 j 11:25	17° $\overline{\text{A}}$ 34'13	
minimum elong	-11946 Feb 19 j 00:30	4° $\overline{\text{A}}$ 26'16	2°44'38	evening set	-11939 Feb 19 j 01:46	19° $\overline{\text{A}}$ 31'19	
max. Earth dist.	-11946 Feb 18 j 17:47	4° $\overline{\text{A}}$ 25'39	30.86773 AU				
morning rise	-11946 Mar 07 j 04:00	5° $\overline{\text{A}}$ 02'05		conjunction	-11939 Mar 07 j 05:21	20° $\overline{\text{A}}$ 07'07	-2°43'42
retrograde	-11946 Jun 04 j 03:48	6° $\overline{\text{A}}$ 57'55		minimum elong	-11939 Mar 07 j 05:21	20° $\overline{\text{A}}$ 07'07	2°44'23
opposition	-11946 Aug 20 j 15:22	5° $\overline{\text{A}}$ 33'53	-2°55'49	max. Earth dist.	-11939 Mar 06 j 17:27	20° $\overline{\text{A}}$ 06'00	30.90409 AU
min. Earth dist.	-11946 Aug 20 j 21:53	5° $\overline{\text{A}}$ 33'26	28.87117 AU	morning rise	-11939 Mar 23 j 06:42	20° $\overline{\text{A}}$ 42'44	
direct	-11946 Nov 07 j 05:56	4° $\overline{\text{A}}$ 08'34		retrograde	-11939 Jun 19 j 14:04	22° $\overline{\text{A}}$ 37'40	
evening set	-11945 Feb 05 j 10:46	6° $\overline{\text{A}}$ 05'08		opposition	-11939 Sep 04 j 16:41	21° $\overline{\text{A}}$ 14'11	-2°54'32
				min. Earth dist.	-11939 Sep 05 j 04:06	21° $\overline{\text{A}}$ 13'22	28.91109 AU
conjunction	-11945 Feb 21 j 15:14	6° $\overline{\text{A}}$ 40'59	-2°44'43	direct	-11939 Nov 22 j 22:57	19° $\overline{\text{A}}$ 48'39	
minimum elong	-11945 Feb 21 j 15:13	6° $\overline{\text{A}}$ 40'59	2°45'21	evening set	-11938 Feb 21 j 16:18	21° $\overline{\text{A}}$ 45'51	
max. Earth dist.	-11945 Feb 21 j 07:40	6° $\overline{\text{A}}$ 40'17	30.86973 AU				
morning rise	-11945 Mar 09 j 18:26	7° $\overline{\text{A}}$ 16'45		conjunction	-11938 Mar 09 j 19:37	22° $\overline{\text{A}}$ 21'38	-2°42'39
retrograde	-11945 Jun 06 j 15:29	9° $\overline{\text{A}}$ 12'26		minimum elong	-11938 Mar 09 j 19:37	22° $\overline{\text{A}}$ 21'38	2°43'19
opposition	-11945 Aug 23 j 01:46	7° $\overline{\text{A}}$ 48'26	-2°56'27	max. Earth dist.	-11938 Mar 09 j 05:59	22° $\overline{\text{A}}$ 20'22	30.91311 AU
min. Earth dist.	-11945 Aug 23 j 08:17	7° $\overline{\text{A}}$ 47'59	28.87335 AU	morning rise	-11938 Mar 25 j 20:48	22° $\overline{\text{A}}$ 57'15	
direct	-11945 Nov 09 j 20:17	6° $\overline{\text{A}}$ 23'02		retrograde	-11938 Jun 22 j 02:57	24° $\overline{\text{A}}$ 52'04	
evening set	-11944 Feb 08 j 01:29	8° $\overline{\text{A}}$ 19'40		opposition	-11938 Sep 07 j 03:06	23° $\overline{\text{A}}$ 28'42	-2°53'17
				min. Earth dist.	-11938 Sep 07 j 14:34	23° $\overline{\text{A}}$ 27'53	28.91991 AU
conjunction	-11944 Feb 24 j 05:41	8° $\overline{\text{A}}$ 55'31	-2°45'11	direct	-11938 Nov 25 j 10:36	22° $\overline{\text{A}}$ 03'10	
minimum elong	-11944 Feb 24 j 05:40	8° $\overline{\text{A}}$ 55'31	2°45'49	evening set	-11937 Feb 24 j 06:51	24° $\overline{\text{A}}$ 00'29	

Attention, astronomical year style is used: The year -11937 in astronomical counting style is the year 11938 BCE in historical counting style.

conjunction	-11937 Mar 12 j 10:02	24° \mathring{A} 36'16	-2°41'21	retrograde	-11931 Jul 07 j 09:20	10° \mathring{S} 31'41	
minimum elong	-11937 Mar 12 j 10:02	24° \mathring{A} 36'16	2°42'02	opposition	-11931 Sep 22 j 06:08	9° \mathring{S} 08'43	-2°37'25
max. Earth dist.	-11937 Mar 11 j 19:34	24° \mathring{A} 34'55	30.92158 AU	min. Earth dist.	-11931 Sep 22 j 23:34	9° \mathring{S} 07'29	28.96326 AU
morning rise	-11937 Mar 28 j 10:48	25° \mathring{A} 11'51		direct	-11931 Dec 11 j 05:36	7° \mathring{S} 42'55	
retrograde	-11937 Jun 24 j 12:32	27° \mathring{A} 06'34		evening set	-11930 Mar 12 j 09:12	9° \mathring{S} 40'28	
opposition	-11937 Sep 09 j 13:56	25° \mathring{A} 43'18	-2°51'46				
min. Earth dist.	-11937 Sep 10 j 03:26	25° \mathring{A} 42'21	28.92803 AU	conjunction	-11930 Mar 28 j 11:13	10° \mathring{S} 16'09	-2°25'42
direct	-11937 Nov 27 j 22:03	24° \mathring{A} 17'46		minimum elong	-11930 Mar 28 j 11:14	10° \mathring{S} 16'09	2°26'22
evening set	-11936 Feb 26 j 21:13	26° \mathring{A} 15'10		max. Earth dist.	-11930 Mar 27 j 15:09	10° \mathring{S} 14'16	30.96447 AU
max. Earth dist.	-11936 Mar 13 j 08:40	26° \mathring{A} 49'28	30.92927 AU	morning rise	-11930 Apr 13 j 09:52	10° \mathring{S} 51'33	
				retrograde	-11930 Jul 09 j 19:42	12° \mathring{S} 45'14	
conjunction	-11936 Mar 14 j 00:13	26° \mathring{A} 50'55	-2°39'49	opposition	-11930 Sep 24 j 16:50	11° \mathring{S} 22'19	-2°34'11
minimum elong	-11936 Mar 14 j 00:14	26° \mathring{A} 50'55	2°40'30	min. Earth dist.	-11930 Sep 25 j 11:33	11° \mathring{S} 21'00	28.97031 AU
morning rise	-11936 Mar 30 j 00:43	27° \mathring{A} 26'29		direct	-11930 Dec 13 j 18:34	9° \mathring{S} 56'30	
retrograde	-11936 Jun 25 j 23:51	29° \mathring{A} 21'05		evening set	-11929 Mar 14 j 22:55	11° \mathring{S} 54'04	
opposition	-11936 Sep 11 j 00:39	27° \mathring{A} 57'54	-2°50'00	max. Earth dist.	-11929 Mar 30 j 03:18	12° \mathring{S} 27'44	30.97227 AU
min. Earth dist.	-11936 Sep 11 j 14:18	27° \mathring{A} 56'56	28.93510 AU				
direct	-11936 Nov 29 j 11:51	26° \mathring{A} 32'20		conjunction	-11929 Mar 31 j 00:36	12° \mathring{S} 29'43	-2°22'34
evening set	-11935 Feb 28 j 11:36	28° \mathring{A} 29'47		minimum elong	-11929 Mar 31 j 00:36	12° \mathring{S} 29'43	2°23'16
				morning rise	-11929 Apr 15 j 23:05	13° \mathring{S} 05'06	
conjunction	-11935 Mar 16 j 14:23	29° \mathring{A} 05'32	-2°38'02	retrograde	-11929 Jul 12 j 07:41	14° \mathring{S} 58'40	
minimum elong	-11935 Mar 16 j 14:23	29° \mathring{A} 05'33	2°38'44	opposition	-11929 Sep 27 j 03:34	13° \mathring{S} 35'49	-2°30'44
max. Earth dist.	-11935 Mar 15 j 21:17	29° \mathring{A} 03'57	30.93586 AU	min. Earth dist.	-11929 Sep 27 j 21:37	13° \mathring{S} 34'33	28.97862 AU
morning rise	-11935 Apr 01 j 14:36	29° \mathring{A} 41'05		direct	-11929 Dec 16 j 07:23	12° \mathring{S} 09'59	
	-11935 Apr 10 j 10:40	0° \mathring{S}		evening set	-11928 Mar 16 j 12:18	14° \mathring{S} 07'34	
retrograde	-11935 Jun 28 j 10:58	1° \mathring{S} 35'32					
opposition	-11935 Sep 13 j 11:20	0° \mathring{S} 12'25	-2°47'58	conjunction	-11928 Apr 01 j 13:50	14° \mathring{S} 43'13	-2°19'14
min. Earth dist.	-11935 Sep 14 j 02:37	0° \mathring{S} 11'20	28.94131 AU	minimum elong	-11928 Apr 01 j 13:51	14° \mathring{S} 43'13	2°19'54
	-11935 Sep 20 j 19:23	30° \mathring{A}		max. Earth dist.	-11928 Mar 31 j 16:38	14° \mathring{S} 41'14	30.98120 AU
direct	-11935 Dec 01 j 23:09	28° \mathring{A} 46'49		morning rise	-11928 Apr 17 j 11:54	15° \mathring{S} 18'35	
	-11934 Feb 09 j 13:38	0° \mathring{S}		retrograde	-11928 Jul 13 j 16:41	17° \mathring{S} 12'01	
evening set	-11934 Mar 03 j 01:45	0° \mathring{S} 44'18		opposition	-11928 Sep 28 j 14:27	15° \mathring{S} 49'16	-2°27'02
max. Earth dist.	-11934 Mar 18 j 11:03	1° \mathring{S} 18'25	30.94172 AU	min. Earth dist.	-11928 Sep 29 j 09:52	15° \mathring{S} 47'54	28.98806 AU
				direct	-11928 Dec 17 j 18:44	14° \mathring{S} 23'27	
conjunction	-11934 Mar 19 j 04:30	1° \mathring{S} 20'03	-2°36'01	evening set	-11927 Mar 19 j 01:45	16° \mathring{S} 21'03	
minimum elong	-11934 Mar 19 j 04:30	1° \mathring{S} 20'03	2°36'43	max. Earth dist.	-11927 Apr 03 j 05:21	16° \mathring{S} 54'40	30.99123 AU
morning rise	-11934 Apr 04 j 04:23	1° \mathring{S} 55'34					
retrograde	-11934 Jun 30 j 22:06	3° \mathring{S} 49'52		conjunction	-11927 Apr 04 j 03:03	16° \mathring{S} 56'41	-2°15'40
opposition	-11934 Sep 15 j 22:03	2° \mathring{S} 26'47	-2°45'42	minimum elong	-11927 Apr 04 j 03:04	16° \mathring{S} 56'42	2°16'21
min. Earth dist.	-11934 Sep 16 j 13:52	2° \mathring{S} 25'40	28.94667 AU	morning rise	-11927 Apr 20 j 00:54	17° \mathring{S} 32'02	
direct	-11934 Dec 04 j 13:17	1° \mathring{S} 01'08		retrograde	-11927 Jul 16 j 03:33	19° \mathring{S} 25'22	
evening set	-11933 Mar 05 j 15:57	2° \mathring{S} 58'39		opposition	-11927 Oct 01 j 01:06	18° \mathring{S} 02'42	-2°23'08
				min. Earth dist.	-11927 Oct 01 j 20:15	18° \mathring{S} 01'21	28.99821 AU
conjunction	-11933 Mar 21 j 18:22	3° \mathring{S} 34'22	-2°33'47	direct	-11927 Dec 20 j 07:23	16° \mathring{S} 36'54	
minimum elong	-11933 Mar 21 j 18:23	3° \mathring{S} 34'22	2°34'29	evening set	-11926 Mar 21 j 15:12	18° \mathring{S} 34'33	
max. Earth dist.	-11933 Mar 20 j 23:00	3° \mathring{S} 32'34	30.94694 AU				
morning rise	-11933 Apr 06 j 18:04	4° \mathring{S} 09'52		conjunction	-11926 Apr 06 j 16:16	19° \mathring{S} 10'11	-2°11'55
retrograde	-11933 Jul 03 j 10:51	6° \mathring{S} 04'01		minimum elong	-11926 Apr 06 j 16:17	19° \mathring{S} 10'11	2°12'34
opposition	-11933 Sep 18 j 08:42	4° \mathring{S} 40'58	-2°43'11	max. Earth dist.	-11926 Apr 05 j 17:43	19° \mathring{S} 08'05	31.00156 AU
min. Earth dist.	-11933 Sep 19 j 01:19	4° \mathring{S} 39'48	28.95184 AU	morning rise	-11926 Apr 22 j 13:49	19° \mathring{S} 45'31	
direct	-11933 Dec 07 j 02:44	3° \mathring{S} 15'15		retrograde	-11926 Jul 18 j 14:21	21° \mathring{S} 38'45	
evening set	-11932 Mar 07 j 05:50	5° \mathring{S} 12'48		opposition	-11926 Oct 03 j 12:03	20° \mathring{S} 16'11	-2°19'00
				min. Earth dist.	-11926 Oct 04 j 08:27	20° \mathring{S} 14'45	29.00851 AU
conjunction	-11932 Mar 23 j 08:14	5° \mathring{S} 48'30	-2°31'19	direct	-11926 Dec 22 j 17:46	18° \mathring{S} 50'25	
minimum elong	-11932 Mar 23 j 08:14	5° \mathring{S} 48'30	2°32'00	evening set	-11925 Mar 24 j 04:33	20° \mathring{S} 48'06	
max. Earth dist.	-11932 Mar 22 j 13:16	5° \mathring{S} 46'44	30.95218 AU	max. Earth dist.	-11925 Apr 08 j 06:52	21° \mathring{S} 21'36	31.01171 AU
morning rise	-11932 Apr 08 j 07:28	6° \mathring{S} 23'58					
retrograde	-11932 Jul 04 j 20:55	8° \mathring{S} 17'57		conjunction	-11925 Apr 09 j 05:27	21° \mathring{S} 23'42	-2°07'57
opposition	-11932 Sep 19 j 19:30	6° \mathring{S} 54'57	-2°40'25	minimum elong	-11925 Apr 09 j 05:27	21° \mathring{S} 23'42	2°08'37
min. Earth dist.	-11932 Sep 20 j 13:05	6° \mathring{S} 53'42	28.95716 AU	morning rise	-11925 Apr 25 j 02:36	21° \mathring{S} 59'01	
direct	-11932 Dec 08 j 16:45	5° \mathring{S} 29'11		retrograde	-11925 Jul 21 j 00:48	23° \mathring{S} 52'09	
evening set	-11931 Mar 09 j 19:34	7° \mathring{S} 26'44		opposition	-11925 Oct 05 j 23:03	22° \mathring{S} 29'41	-2°14'40
				min. Earth dist.	-11925 Oct 06 j 19:48	22° \mathring{S} 28'13	29.01815 AU
conjunction	-11931 Mar 25 j 21:37	8° \mathring{S} 02'25	-2°28'37	direct	-11925 Dec 25 j 07:45	21° \mathring{S} 03'56	
minimum elong	-11931 Mar 25 j 21:37	8° \mathring{S} 02'25	2°29'18	evening set	-11924 Mar 25 j 17:59	23° \mathring{S} 01'38	
max. Earth dist.	-11931 Mar 25 j 01:03	8° \mathring{S} 00'30	30.95791 AU				
morning rise	-11931 Apr 10 j 20:45	8° \mathring{S} 37'51		conjunction	-11924 Apr 10 j 18:29	23° \mathring{S} 37'13	-2°03'48

Attention, astronomical year style is used: The year -11924 in astronomical counting style is the year 11925 BCE in historical counting style.

minimum elong	-11924 Apr 10 j 18:30	23° 3 37'14	2°04'26	morning rise	-11918 May 10 j 16:55	7° 3 30'50	
max. Earth dist.	-11924 Apr 09 j 18:13	23° 3 34'58	31.02101 AU	retrograde	-11918 Aug 05 j 04:20	9° 3 23'13	
morning rise	-11924 Apr 26 j 15:25	24° 3 12'31		opposition	-11918 Oct 21 j 04:31	8° 3 01'00	-1°39'17
retrograde	-11924 Jul 22 j 13:06	26° 3 05'34		min. Earth dist.	-11918 Oct 22 j 04:12	7° 3 59'21	29.06507 AU
opposition	-11924 Oct 07 j 10:07	24° 3 43'09	-2°10'08	direct	-11917 Jan 10 j 02:55	6° 3 35'11	
min. Earth dist.	-11924 Oct 08 j 07:31	24° 3 41'39	29.02699 AU	evening set	-11917 Apr 11 j 11:24	8° 3 32'41	
direct	-11924 Dec 26 j 20:02	23° 3 17'25		max. Earth dist.	-11917 Apr 26 j 07:26	9° 3 05'40	31.06768 AU
evening set	-11923 Mar 28 j 07:01	25° 3 15'07		conjunction	-11917 Apr 27 j 09:57	9° 3 08'09	-1°30'09
max. Earth dist.	-11923 Apr 12 j 07:31	25° 3 48'27	31.02931 AU	minimum elong	-11917 Apr 27 j 09:58	9° 3 08'09	1°30'43
conjunction	-11923 Apr 13 j 07:27	25° 3 50'42	-1°59'29	morning rise	-11917 May 13 j 04:28	9° 3 43'15	
minimum elong	-11923 Apr 13 j 07:28	25° 3 50'42	2°00'07	retrograde	-11917 Aug 07 j 14:17	11° 3 35'35	
morning rise	-11923 Apr 29 j 03:56	26° 3 25'57		opposition	-11917 Oct 23 j 15:45	10° 3 13'23	-1°33'36
retrograde	-11923 Jul 24 j 23:06	28° 3 18'54		min. Earth dist.	-11917 Oct 24 j 15:57	10° 3 11'42	29.07286 AU
opposition	-11923 Oct 09 j 21:15	26° 3 56'32	-2°05'25	direct	-11916 Jan 12 j 13:01	8° 3 47'35	
min. Earth dist.	-11923 Oct 10 j 19:46	26° 3 54'58	29.03454 AU	evening set	-11916 Apr 12 j 23:36	10° 3 45'04	
direct	-11923 Dec 29 j 09:41	25° 3 30'48		conjunction	-11916 Apr 28 j 21:54	11° 3 20'30	-1°24'47
evening set	-11922 Mar 30 j 20:16	27° 3 28'30		minimum elong	-11916 Apr 28 j 21:54	11° 3 20'30	1°25'19
conjunction	-11922 Apr 15 j 20:16	28° 3 04'03	-1°54'58	max. Earth dist.	-11916 Apr 27 j 20:07	11° 3 18'05	31.07621 AU
minimum elong	-11922 Apr 15 j 20:17	28° 3 04'03	1°55'35	morning rise	-11916 May 14 j 16:00	11° 3 55'35	
max. Earth dist.	-11922 Apr 14 j 18:32	28° 3 01'39	31.03644 AU	retrograde	-11916 Aug 08 j 23:35	13° 3 47'51	
morning rise	-11922 May 01 j 16:35	28° 3 39'17		opposition	-11916 Oct 25 j 02:54	12° 3 25'42	-1°27'47
retrograde	-11922 Jun 13 j 20:23	0° 3		min. Earth dist.	-11916 Oct 26 j 02:42	12° 3 24'03	29.08183 AU
opposition	-11922 Jul 27 j 11:31	0° 3 32'08		direct	-11915 Jan 14 j 02:37	10° 3 59'57	
min. Earth dist.	-11922 Oct 12 j 08:11	29° 3 09'48	-2°00'31	evening set	-11915 Apr 15 j 11:43	12° 3 57'24	
direct	-11922 Dec 31 j 22:49	27° 3 44'03		max. Earth dist.	-11915 Apr 30 j 06:58	13° 3 30'19	31.08585 AU
evening set	-11921 Apr 02 j 09:14	29° 3 41'43		conjunction	-11915 May 01 j 09:34	13° 3 32'49	-1°19'16
max. Earth dist.	-11921 Apr 17 j 07:53	0° 3 14'54	31.04265 AU	minimum elong	-11915 May 01 j 09:34	13° 3 32'49	1°19'48
conjunction	-11921 Apr 18 j 09:08	0° 3 17'16	-1°50'18	morning rise	-11915 May 17 j 03:26	14° 3 07'52	
minimum elong	-11921 Apr 18 j 09:08	0° 3 17'16	1°50'56	retrograde	-11915 Jun 11 j 18:53	15° 3	
morning rise	-11921 May 04 j 04:56	0° 3 52'28		opposition	-11915 Oct 14 j 05:16	15° 3 44'	
retrograde	-11921 Jul 29 j 21:57	2° 3 45'12		min. Earth dist.	-11915 Oct 27 j 14:05	14° 3 38'00	-1°21'50
opposition	-11921 Oct 14 j 19:25	1° 3 22'54	-1°55'27	direct	-11915 Oct 28 j 13:48	14° 3 36'22	29.09187 AU
min. Earth dist.	-11921 Oct 15 j 19:16	1° 3 21'13	29.04693 AU	evening set	-11914 Jan 16 j 13:25	13° 3 12'18	
direct	-11921 Dec 21 j 02:32	30° 3 43'		conjunction	-11914 Apr 13 j 11:36	15° 3	
evening set	-11920 Jan 03 j 12:36	29° 3 57'08		minimum elong	-11914 Apr 17 j 23:45	15° 3 09'45	
max. Earth dist.	-11920 Jan 16 j 19:14	0° 3		conjunction	-11914 May 03 j 21:22	15° 3 45'09	-1°13'39
conjunction	-11920 Apr 03 j 21:58	1° 3 54'45		minimum elong	-11914 May 03 j 21:23	15° 3 45'09	1°14'08
minimum elong	-11920 Apr 19 j 21:27	2° 3 30'16	-1°45'29	max. Earth dist.	-11914 May 02 j 19:50	15° 3 42'45	31.09625 AU
max. Earth dist.	-11920 Apr 19 j 21:27	2° 3 30'16	1°46'05	morning rise	-11914 May 19 j 14:42	16° 3 20'11	
morning rise	-11920 Apr 18 j 19:02	2° 3 27'48	31.04844 AU	retrograde	-11914 Aug 13 j 20:45	18° 3 12'22	
retrograde	-11920 May 05 j 17:05	3° 3 05'27		opposition	-11914 Oct 30 j 01:22	16° 3 50'21	-1°15'46
opposition	-11920 Jul 31 j 09:29	4° 3 58'04		min. Earth dist.	-11914 Oct 31 j 01:42	16° 3 48'40	29.10227 AU
min. Earth dist.	-11920 Oct 16 j 06:25	3° 3 35'47	-1°50'12	direct	-11913 Jan 19 j 01:42	15° 3 24'43	
direct	-11920 Oct 17 j 05:36	3° 3 34'10	29.05255 AU	evening set	-11913 Apr 20 j 11:56	17° 3 22'09	
evening set	-11919 Jan 05 j 02:12	2° 3 09'59		max. Earth dist.	-11913 May 05 j 06:20	17° 3 55'01	31.10681 AU
max. Earth dist.	-11919 Apr 06 j 10:33	4° 3 07'35		conjunction	-11913 May 06 j 08:58	17° 3 57'30	-1°07'55
conjunction	-11919 Apr 21 j 07:41	4° 3 40'38	31.05416 AU	minimum elong	-11913 May 06 j 08:59	17° 3 57'30	1°08'24
minimum elong	-11919 Apr 22 j 09:50	4° 3 43'05	-1°40'31	morning rise	-11913 May 22 j 02:04	18° 3 32'31	
morning rise	-11919 Apr 22 j 09:51	4° 3 43'05	1°41'07	retrograde	-11913 Aug 16 j 09:25	20° 3 24'41	
retrograde	-11919 May 08 j 05:02	5° 3 18'14		opposition	-11913 Nov 01 j 12:46	19° 3 02'43	-1°09'35
opposition	-11919 Aug 02 j 18:09	7° 3 10'44		min. Earth dist.	-11913 Nov 02 j 12:33	19° 3 01'05	29.11266 AU
min. Earth dist.	-11919 Oct 18 j 17:27	5° 3 48'29	-1°44'49	direct	-11912 Jan 21 j 14:25	17° 3 37'09	
direct	-11919 Oct 19 j 17:54	5° 3 46'46	29.05846 AU	evening set	-11912 Apr 21 j 23:44	19° 3 34'33	
evening set	-11918 Jan 07 j 13:59	4° 3 22'40		conjunction	-11912 May 07 j 20:32	20° 3 09'54	-1°02'05
conjunction	-11918 Apr 08 j 23:04	6° 3 20'13		minimum elong	-11912 May 07 j 20:33	20° 3 09'54	1°02'32
minimum elong	-11918 Apr 24 j 21:59	6° 3 55'42	-1°35'24	max. Earth dist.	-11912 May 06 j 18:50	20° 3 07'29	31.11689 AU
max. Earth dist.	-11918 Apr 24 j 22:00	6° 3 55'42	1°35'58	morning rise	-11912 May 23 j 13:03	20° 3 44'52	
retrograde	-11918 Apr 23 j 19:37	6° 3 53'14	31.06052 AU	retrograde	-11912 Aug 17 j 20:09	22° 3 37'01	
opposition				opposition	-11912 Nov 03 j 00:22	21° 3 15'06	-1°03'18
min. Earth dist.				min. Earth dist.	-11912 Nov 04 j 01:17	21° 3 13'23	29.12229 AU

Attention, astronomical year style is used: The year -11911 in astronomical counting style is the year 11912 BCE in historical counting style.

direct	-11911 Jan 23 j 04:09	19° \approx 49'35		conjunction	-11905 May 24 j 02:27	5° \mathbb{H} 33'04	-0°19'24
evening set	-11911 Apr 24 j 11:47	21° \approx 46'57		minimum elong	-11905 May 24 j 02:27	5° \mathbb{H} 33'04	0°19'43
max. Earth dist.	-11911 May 09 j 05:16	22° \approx 19'45	31.12612 AU	morning rise	-11905 Jun 08 j 15:52	6° \mathbb{H} 07'49	
				retrograde	-11905 Sep 02 j 17:44	7° \mathbb{H} 59'41	
conjunction	-11911 May 10 j 08:02	22° \approx 22'15	-0°56'10	opposition	-11905 Nov 19 j 09:34	6° \mathbb{H} 37'46	-0°17'27
minimum elong	-11911 May 10 j 08:02	22° \approx 22'15	0°56'37	min. Earth dist.	-11905 Nov 20 j 10:00	6° \mathbb{H} 36'05	29.16888 AU
morning rise	-11911 May 26 j 00:17	22° \approx 57'12		direct	-11904 Feb 08 j 19:12	5° \mathbb{H} 12'21	
retrograde	-11911 Aug 20 j 07:42	24° \approx 49'18		evening set	-11904 May 09 j 19:56	7° \mathbb{H} 09'12	
opposition	-11911 Nov 05 j 11:41	23° \approx 27'25	-0°56'56	max. Earth dist.	-11904 May 24 j 11:05	7° \mathbb{H} 41'50	31.17235 AU
min. Earth dist.	-11911 Nov 06 j 11:52	23° \approx 25'45	29.13088 AU				
direct	-11910 Jan 25 j 17:34	22° \approx 01'55		conjunction	-11904 May 25 j 12:49	7° \mathbb{H} 44'15	-0°13'08
evening set	-11910 Apr 26 j 23:41	23° \approx 59'15		minimum elong	-11904 May 25 j 12:49	7° \mathbb{H} 44'15	0°13'25
				behind sun begin	-11904 May 25 j 09:07	7° \mathbb{H} 43'55	
conjunction	-11910 May 12 j 19:35	24° \approx 34'31	-0°50'11	behind sun end	-11904 May 25 j 16:30	7° \mathbb{H} 44'35	
minimum elong	-11910 May 12 j 19:36	24° \approx 34'31	0°50'36	morning rise	-11904 Jun 10 j 01:56	8° \mathbb{H} 18'58	
max. Earth dist.	-11910 May 11 j 17:01	24° \approx 32'02	31.13412 AU	retrograde	-11904 Sep 04 j 05:40	10° \mathbb{H} 10'50	
morning rise	-11910 May 28 j 11:17	25° \approx 09'27		opposition	-11904 Nov 20 j 21:13	8° \mathbb{H} 48'56	-0°10'45
retrograde	-11910 Aug 22 j 17:16	27° \approx 01'29		min. Earth dist.	-11904 Nov 21 j 20:24	8° \mathbb{H} 47'21	29.17677 AU
opposition	-11910 Nov 07 j 23:23	25° \approx 39'38	-0°50'29	direct	-11903 Feb 10 j 07:10	7° \mathbb{H} 23'35	
min. Earth dist.	-11910 Nov 09 j 00:48	25° \approx 37'53	29.13832 AU	evening set	-11903 May 12 j 06:51	9° \mathbb{H} 20'23	
direct	-11909 Jan 28 j 05:57	24° \approx 14'09					
evening set	-11909 Apr 29 j 11:26	26° \approx 11'24		conjunction	-11903 May 27 j 23:22	9° \mathbb{H} 55'24	-0°06'53
max. Earth dist.	-11909 May 14 j 04:03	26° \approx 44'08	31.14113 AU	minimum elong	-11903 May 27 j 23:22	9° \mathbb{H} 55'24	0°07'10
				behind sun begin	-11903 May 27 j 17:25	9° \mathbb{H} 54'52	
conjunction	-11909 May 15 j 06:49	26° \approx 46'39	-0°44'07	behind sun end	-11903 May 28 j 05:19	9° \mathbb{H} 55'56	
minimum elong	-11909 May 15 j 06:50	26° \approx 46'39	0°44'32	max. Earth dist.	-11903 May 26 j 23:11	9° \mathbb{H} 53'08	31.18074 AU
morning rise	-11909 May 30 j 22:08	27° \approx 21'32		morning rise	-11903 Jun 12 j 11:50	10° \mathbb{H} 30'05	
retrograde	-11909 Aug 25 j 03:47	29° \approx 13'31		retrograde	-11903 Sep 06 j 16:03	12° \mathbb{H} 21'59	
opposition	-11909 Nov 10 j 11:00	27° \approx 51'40	-0°43'58	opposition	-11903 Nov 23 j 08:54	11° \mathbb{H} 00'07	-0°04'02
min. Earth dist.	-11909 Nov 11 j 11:41	27° \approx 49'58	29.14472 AU	min. Earth dist.	-11903 Nov 24 j 08:34	10° \mathbb{H} 58'30	29.18560 AU
direct	-11908 Jan 30 j 19:54	26° \approx 26'12		direct	-11902 Feb 12 j 19:45	9° \mathbb{H} 34'51	
evening set	-11908 Apr 30 j 23:04	28° \approx 23'22		evening set	-11902 May 14 j 17:53	11° \mathbb{H} 31'37	
				max. Earth dist.	-11902 May 29 j 09:18	12° \mathbb{H} 04'18	31.19006 AU
conjunction	-11908 May 16 j 18:00	28° \approx 58'34	-0°38'00				
minimum elong	-11908 May 16 j 18:00	28° \approx 58'34	0°38'22	conjunction	-11902 May 30 j 09:43	12° \mathbb{H} 06'36	-0°00'34
max. Earth dist.	-11908 May 15 j 15:00	28° \approx 56'03	31.14720 AU	minimum elong	-11902 May 30 j 09:43	12° \mathbb{H} 06'36	0°00'48
morning rise	-11908 Jun 01 j 08:52	29° \approx 33'25		behind sun begin	-11902 May 30 j 03:17	12° \mathbb{H} 06'01	
	-11908 Jun 13 j 20:31	0° \mathbb{H}		behind sun end	-11902 May 30 j 16:09	12° \mathbb{H} 07'10	
retrograde	-11908 Aug 26 j 13:30	1° \mathbb{H} 25'22		morning rise	-11902 Jun 14 j 21:51	12° \mathbb{H} 41'15	
opposition	-11908 Nov 11 j 22:34	0° \mathbb{H} 03'30	-0°37'24	asc. node	-11902 Jul 01 j 05:17	13° \mathbb{H} 15'38	
min. Earth dist.	-11908 Nov 12 j 23:52	0° \mathbb{H} 01'45	29.15060 AU	retrograde	-11902 Sep 09 j 03:46	14° \mathbb{H} 33'12	
	-11908 Nov 14 j 01:17	30° \mathbb{R}		opposition	-11902 Nov 25 j 20:44	13° \mathbb{H} 11'22	0°02'42
direct	-11907 Feb 01 j 06:54	28° \approx 38'01		min. Earth dist.	-11902 Nov 26 j 18:54	13° \mathbb{H} 09'51	29.19510 AU
	-11907 Apr 16 j 17:16	0° \mathbb{H}		direct	-11901 Feb 15 j 08:13	11° \mathbb{H} 46'12	
evening set	-11907 May 03 j 10:25	0° \mathbb{H} 35'06		evening set	-11901 May 17 j 04:39	13° \mathbb{H} 42'57	
max. Earth dist.	-11907 May 18 j 02:46	1° \mathbb{H} 07'49	31.15297 AU				
				conjunction	-11901 Jun 01 j 19:59	14° \mathbb{H} 17'53	0°05'50
conjunction	-11907 May 19 j 04:58	1° \mathbb{H} 10'16	-0°31'50	minimum elong	-11901 Jun 01 j 20:00	14° \mathbb{H} 17'53	0°05'36
minimum elong	-11907 May 19 j 04:58	1° \mathbb{H} 10'16	0°32'12	behind sun begin	-11901 Jun 01 j 13:48	14° \mathbb{H} 17'20	
morning rise	-11907 Jun 03 j 19:23	1° \mathbb{H} 45'06		behind sun end	-11901 Jun 02 j 02:12	14° \mathbb{H} 18'26	
retrograde	-11907 Aug 28 j 22:00	3° \mathbb{H} 36'59		max. Earth dist.	-11901 May 31 j 20:29	14° \mathbb{H} 15'41	31.19962 AU
opposition	-11907 Nov 14 j 10:10	2° \mathbb{H} 15'06	-0°30'47	morning rise	-11901 Jun 17 j 07:31	14° \mathbb{H} 52'30	
min. Earth dist.	-11907 Nov 15 j 11:02	2° \mathbb{H} 13'23	29.15616 AU	retrograde	-11901 Sep 11 j 13:59	16° \mathbb{H} 44'32	
direct	-11906 Feb 03 j 20:30	0° \mathbb{H} 49'38		opposition	-11901 Nov 28 j 08:49	15° \mathbb{H} 22'45	0°09'26
evening set	-11906 May 05 j 21:47	2° \mathbb{H} 46'38		min. Earth dist.	-11901 Nov 29 j 07:41	15° \mathbb{H} 21'11	29.20467 AU
				direct	-11900 Feb 17 j 20:19	13° \mathbb{H} 57'41	
conjunction	-11906 May 21 j 15:42	3° \mathbb{H} 21'46	-0°25'38	evening set	-11900 May 18 j 15:32	15° \mathbb{H} 54'24	
minimum elong	-11906 May 21 j 15:43	3° \mathbb{H} 21'46	0°25'57	max. Earth dist.	-11900 Jun 02 j 07:05	16° \mathbb{H} 27'07	31.20902 AU
max. Earth dist.	-11906 May 20 j 12:54	3° \mathbb{H} 19'15	31.15867 AU				
morning rise	-11906 Jun 06 j 05:45	3° \mathbb{H} 56'33		conjunction	-11900 Jun 03 j 06:17	16° \mathbb{H} 29'18	0°12'05
retrograde	-11906 Aug 31 j 08:37	5° \mathbb{H} 48'25		minimum elong	-11900 Jun 03 j 06:16	16° \mathbb{H} 29'18	0°11'54
opposition	-11906 Nov 16 j 21:45	4° \mathbb{H} 26'30	-0°24'08	behind sun begin	-11900 Jun 03 j 01:47	16° \mathbb{H} 28'53	
min. Earth dist.	-11906 Nov 17 j 22:13	4° \mathbb{H} 24'50	29.16215 AU	behind sun end	-11900 Jun 03 j 10:46	16° \mathbb{H} 29'42	
direct	-11905 Feb 06 j 07:00	3° \mathbb{H} 01'03		morning rise	-11900 Jun 18 j 17:21	17° \mathbb{H} 03'53	
evening set	-11905 May 08 j 08:54	4° \mathbb{H} 57'59		retrograde	-11900 Sep 13 j 01:08	18° \mathbb{H} 55'57	
max. Earth dist.	-11905 May 23 j 01:10	5° \mathbb{H} 30'42	31.16502 AU	opposition	-11900 Nov 29 j 20:44	17° \mathbb{H} 34'14	0°16'09
				min. Earth dist.	-11900 Nov 30 j 18:37	17° \mathbb{H} 32'44	29.21365 AU

direct	-11899 Feb 19 j 09:58	16° 18 09'15	
evening set	-11899 May 21 j 02:24	18° 18 05'56	
conjunction	-11899 Jun 05 j 16:32	18° 18 40'47	0°18'21
minimum elong	-11899 Jun 05 j 16:32	18° 18 40'47	0°18'11
max. Earth dist.	-11899 Jun 04 j 17:14	18° 18 38'36	31.21745 AU
morning rise	-11899 Jun 21 j 03:06	19° 18 15'21	
retrograde	-11899 Sep 15 j 11:30	21° 18 07'29	
opposition	-11899 Dec 02 j 08:54	19° 18 45'47	0°22'50
min. Earth dist.	-11899 Dec 03 j 07:12	19° 18 44'15	29.22159 AU