

Planetary Phenomena of Pluto from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

Attention, astronomical year style is used: The year -2400 in astronomical counting style is the year 2401 BCE in historical counting style.

conjunction	-2400 Jan 11 j 11:16	2°319'27	-11°12'47	min. Earth dist.	-2394 Jul 22 j 00:54	10°357'22	40.85997 AU
minimum elong	-2400 Jan 11 j 11:03	2°319'26	11°12'51	opposition	-2394 Jul 25 j 04:31	10°353'23	-13°35'33
max. Earth dist.	-2400 Jan 14 j 16:27	2°324'53	41.29635 AU	direct	-2394 Oct 13 j 19:37	9°347'52	
morning rise	-2400 Jan 21 j 18:49	2°336'48		evening set	-2393 Jan 12 j 17:37	11°317'45	
retrograde	-2400 Apr 24 j 05:42	4°310'09					
min. Earth dist.	-2400 Jul 13 j 09:43	3°305'45	39.45603 AU	conjunction	-2393 Jan 20 j 08:33	11°330'07	-13°04'46
opposition	-2400 Jul 16 j 15:17	3°301'35	-11°56'13	minimum elong	-2393 Jan 20 j 08:23	11°330'06	13°04'50
direct	-2400 Oct 05 j 04:58	1°354'40		max. Earth dist.	-2393 Jan 23 j 13:23	11°335'20	42.91916 AU
evening set	-2399 Jan 02 j 03:13	3°323'50		morning rise	-2393 Jan 28 j 00:01	11°342'31	
				retrograde	-2393 May 04 j 00:36	13°316'47	
conjunction	-2399 Jan 12 j 01:29	3°340'26	-11°30'28	min. Earth dist.	-2393 Jul 23 j 13:38	12°313'48	41.08674 AU
minimum elong	-2399 Jan 12 j 01:18	3°340'25	11°30'32	opposition	-2393 Jul 26 j 17:39	12°309'48	-13°50'07
max. Earth dist.	-2399 Jan 15 j 07:33	3°345'53	41.53276 AU	direct	-2393 Oct 15 j 09:35	11°304'31	
morning rise	-2399 Jan 22 j 00:47	3°357'06		evening set	-2392 Jan 14 j 16:32	12°334'40	
retrograde	-2399 Apr 25 j 17:53	5°330'29					
min. Earth dist.	-2399 Jul 15 j 01:58	4°326'13	39.69376 AU	conjunction	-2392 Jan 21 j 21:03	12°346'16	-13°18'37
opposition	-2399 Jul 18 j 06:21	4°322'07	-12°14'16	minimum elong	-2392 Jan 21 j 20:52	12°346'16	13°18'40
direct	-2399 Oct 06 j 21:40	3°315'25		max. Earth dist.	-2392 Jan 25 j 01:34	12°351'26	43.14223 AU
evening set	-2398 Jan 04 j 01:28	4°344'36		morning rise	-2392 Jan 29 j 02:03	12°357'55	
				retrograde	-2392 May 04 j 13:42	14°332'27	
conjunction	-2398 Jan 13 j 15:14	5°300'31	-11°47'35	min. Earth dist.	-2392 Jul 24 j 04:10	13°329'35	41.31000 AU
minimum elong	-2398 Jan 13 j 15:02	5°300'30	11°47'38	opposition	-2392 Jul 27 j 06:30	13°325'41	-14°04'09
max. Earth dist.	-2398 Jan 16 j 20:55	5°305'56	41.76763 AU	direct	-2392 Oct 15 j 22:19	12°320'39	
morning rise	-2398 Jan 23 j 05:51	5°316'31		evening set	-2391 Jan 15 j 15:52	13°351'04	
retrograde	-2398 Apr 27 j 06:51	6°349'58					
min. Earth dist.	-2398 Jul 16 j 15:38	5°345'56	39.93001 AU	conjunction	-2391 Jan 22 j 09:25	14°301'53	-13°31'59
opposition	-2398 Jul 19 j 20:59	5°341'48	-12°31'42	minimum elong	-2391 Jan 22 j 09:15	14°301'53	13°32'03
direct	-2398 Oct 08 j 13:12	4°335'19		max. Earth dist.	-2391 Jan 25 j 13:33	14°307'00	43.36160 AU
evening set	-2397 Jan 05 j 23:48	6°304'33		morning rise	-2391 Jan 29 j 03:16	14°312'44	
				retrograde	-2391 May 06 j 02:32	15°347'34	
conjunction	-2397 Jan 15 j 04:47	6°319'48	-12°04'07	min. Earth dist.	-2391 Jul 25 j 17:06	14°344'53	41.52911 AU
minimum elong	-2397 Jan 15 j 04:35	6°319'47	12°04'11	opposition	-2391 Jul 28 j 19:07	14°341'02	-14°17'41
max. Earth dist.	-2397 Jan 18 j 10:21	6°325'10	42.00110 AU	direct	-2391 Oct 17 j 10:37	13°336'11	
morning rise	-2397 Jan 24 j 10:44	6°335'06		evening set	-2390 Jan 17 j 15:21	15°306'56	
retrograde	-2397 Apr 28 j 22:22	8°308'38					
min. Earth dist.	-2397 Jul 18 j 06:37	7°304'46	40.16505 AU	conjunction	-2390 Jan 23 j 21:16	15°316'56	-13°44'53
opposition	-2397 Jul 21 j 11:21	7°300'41	-12°48'32	minimum elong	-2390 Jan 23 j 21:06	15°316'55	13°44'55
direct	-2397 Oct 10 j 01:58	5°354'26		max. Earth dist.	-2390 Jan 26 j 23:46	15°321'54	43.57670 AU
evening set	-2396 Jan 07 j 22:07	7°323'47		morning rise	-2390 Jan 30 j 03:32	15°326'57	
				retrograde	-2390 May 07 j 17:20	17°302'06	
conjunction	-2396 Jan 16 j 18:12	7°338'20	-12°20'06	min. Earth dist.	-2390 Jul 27 j 06:16	15°359'34	41.74399 AU
minimum elong	-2396 Jan 16 j 17:59	7°338'19	12°20'09	opposition	-2390 Jul 30 j 07:37	15°355'46	-14°30'43
max. Earth dist.	-2396 Jan 20 j 00:21	7°343'42	42.23338 AU	direct	-2390 Oct 18 j 20:17	14°351'07	
morning rise	-2396 Jan 25 j 14:56	7°352'56		evening set	-2389 Jan 19 j 15:29	16°322'13	
retrograde	-2396 Apr 29 j 12:09	9°326'35					
min. Earth dist.	-2396 Jul 18 j 20:46	8°322'56	40.39854 AU	conjunction	-2389 Jan 25 j 09:10	16°331'22	-13°57'18
opposition	-2396 Jul 22 j 01:18	8°318'52	-13°04'47	minimum elong	-2389 Jan 25 j 09:01	16°331'21	13°57'22
direct	-2396 Oct 10 j 15:16	7°312'52		max. Earth dist.	-2389 Jan 28 j 11:59	16°336'20	43.78761 AU
evening set	-2395 Jan 08 j 20:31	8°342'21		morning rise	-2389 Jan 31 j 03:02	16°340'30	
				retrograde	-2389 May 09 j 04:12	18°316'01	
conjunction	-2395 Jan 17 j 07:07	8°356'11	-12°35'31	min. Earth dist.	-2389 Jul 28 j 19:51	17°313'34	41.95463 AU
minimum elong	-2395 Jan 17 j 06:56	8°356'10	12°35'35	opposition	-2389 Jul 31 j 19:39	17°309'51	-14°43'16
max. Earth dist.	-2395 Jan 20 j 12:16	9°301'27	42.46403 AU	direct	-2389 Oct 20 j 09:15	16°305'23	
morning rise	-2395 Jan 25 j 18:30	9°310'04		evening set	-2388 Jan 21 j 16:20	17°336'54	
retrograde	-2395 May 01 j 02:16	10°343'53					
min. Earth dist.	-2395 Jul 20 j 10:08	9°340'29	40.63038 AU	conjunction	-2388 Jan 26 j 20:41	17°345'07	-14°09'15
opposition	-2395 Jul 23 j 15:01	9°336'25	-13°20'27	minimum elong	-2388 Jan 26 j 20:32	17°345'07	14°09'18
direct	-2395 Oct 12 j 03:54	8°330'39		max. Earth dist.	-2388 Jan 29 j 21:53	17°349'58	43.99465 AU
evening set	-2394 Jan 10 j 18:55	10°300'19		morning rise	-2388 Feb 01 j 01:10	17°353'21	
				retrograde	-2388 May 09 j 13:17	19°329'16	
conjunction	-2394 Jan 18 j 19:59	10°313'26	-12°50'25	min. Earth dist.	-2388 Jul 29 j 07:15	18°327'00	42.16168 AU
minimum elong	-2394 Jan 18 j 19:47	10°313'25	12°50'28	opposition	-2388 Aug 01 j 07:23	18°323'16	-14°55'20
max. Earth dist.	-2394 Jan 22 j 01:58	10°318'44	42.69280 AU	direct	-2388 Oct 20 j 22:37	17°318'57	
morning rise	-2394 Jan 26 j 21:37	10°326'35		evening set	-2387 Jan 22 j 17:58	18°350'58	
retrograde	-2394 May 02 j 12:38	12°300'37					

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Attention, astronomical year style is used: The year -2387 in astronomical counting style is the year 2388 BCE in historical counting style.

conjunction	-2387 Jan 27 j 07:51	18° Z 58'12	-14°20'44	min. Earth dist.	-2380 Aug 08 j 01:44	27° Z 53'13	43.72610 AU
minimum elong	-2387 Jan 27 j 07:41	18° Z 58'11	14°20'49	opposition	-2380 Aug 10 j 20:28	27° Z 49'50	-16°14'15
max. Earth dist.	-2387 Jan 30 j 09:09	19° Z 03'02	44.19828 AU	direct	-2380 Oct 30 j 14:03	26° Z 46'54	
morning rise	-2387 Jan 31 j 21:47	19° Z 05'26					
retrograde	-2387 May 10 j 22:15	20° Z 41'51		conjunction	-2379 Feb 05 j 18:40	28° Z 22'46	-15°35'57
min. Earth dist.	-2387 Jul 30 j 20:18	19° Z 39'40	42.36568 AU	minimum elong	-2379 Feb 05 j 18:34	28° Z 22'46	15°36'00
opposition	-2387 Aug 02 j 18:55	19° Z 36'01	-15°06'54	max. Earth dist.	-2379 Feb 08 j 15:56	28° Z 27'10	45.73961 AU
direct	-2387 Oct 22 j 12:46	18° Z 31'52			-2379 May 04 j 03:35	0° \approx	
evening set	-2386 Jan 24 j 21:19	20° Z 04'30		retrograde	-2379 May 20 j 09:55	0° \approx 02'59	
					-2379 Jun 05 j 18:01	30° R Z	
conjunction	-2386 Jan 28 j 18:54	20° Z 10'37	-14°31'45	min. Earth dist.	-2379 Aug 09 j 12:33	29° Z 01'54	43.90700 AU
minimum elong	-2386 Jan 28 j 18:46	20° Z 10'37	14°31'48	opposition	-2379 Aug 12 j 06:10	28° Z 58'36	-16°22'05
morning rise	-2386 Feb 01 j 16:27	20° Z 16'45		direct	-2379 Oct 31 j 23:28	27° Z 55'49	
max. Earth dist.	-2386 Jan 31 j 19:46	20° Z 15'24	44.39938 AU				
retrograde	-2386 May 12 j 09:09	21° Z 53'48		conjunction	-2378 Feb 07 j 04:20	29° Z 31'19	-15°43'26
min. Earth dist.	-2386 Aug 01 j 07:07	20° Z 51'47	42.56721 AU	minimum elong	-2378 Feb 07 j 04:16	29° Z 31'18	15°43'30
opposition	-2386 Aug 04 j 06:03	20° Z 48'07	-15°17'57	max. Earth dist.	-2378 Feb 09 j 23:33	29° Z 35'34	45.91699 AU
direct	-2386 Oct 24 j 00:30	19° Z 44'08			-2378 Feb 26 j 07:51	0° \approx	
evening set	-2385 Jan 27 j 03:10	21° Z 17'35		retrograde	-2378 May 21 j 20:40	1° \approx 11'08	
				min. Earth dist.	-2378 Aug 10 j 22:39	0° \approx 10'10	44.08327 AU
conjunction	-2385 Jan 30 j 05:33	21° Z 22'25	-14°42'17	opposition	-2378 Aug 13 j 15:45	0° \approx 06'54	-16°29'32
minimum elong	-2385 Jan 30 j 05:25	21° Z 22'25	14°42'21		-2378 Aug 19 j 08:47	30° R Z	
morning rise	-2385 Feb 02 j 07:51	21° Z 27'16		direct	-2378 Nov 02 j 07:47	29° Z 04'16	
max. Earth dist.	-2385 Feb 02 j 05:34	21° Z 27'07	44.59818 AU		-2377 Jan 12 j 19:04	0° \approx	
retrograde	-2385 May 13 j 21:44	23° Z 05'08					
min. Earth dist.	-2385 Aug 02 j 18:52	22° Z 03'14	42.76666 AU	conjunction	-2377 Feb 08 j 13:54	0° \approx 39'23	-15°50'33
opposition	-2385 Aug 05 j 17:06	21° Z 59'38	-15°28'31	minimum elong	-2377 Feb 08 j 13:49	0° \approx 39'22	15°50'36
direct	-2385 Oct 25 j 09:44	20° Z 55'49		max. Earth dist.	-2377 Feb 11 j 08:57	0° \approx 43'36	46.08965 AU
evening set	-2384 Jan 29 j 15:14	22° Z 30'29		retrograde	-2377 May 23 j 03:39	2° \approx 18'48	
				min. Earth dist.	-2377 Aug 12 j 10:01	1° \approx 17'52	44.25476 AU
conjunction	-2384 Jan 31 j 16:17	22° Z 33'40	-14°52'21	opposition	-2377 Aug 15 j 01:10	1° \approx 14'42	-16°36'36
minimum elong	-2384 Jan 31 j 16:11	22° Z 33'39	14°52'23	direct	-2377 Nov 03 j 19:22	0° \approx 12'12	
morning rise	-2384 Feb 02 j 17:13	22° Z 36'50					
max. Earth dist.	-2384 Feb 03 j 16:54	22° Z 38'22	44.79498 AU	conjunction	-2376 Feb 09 j 23:18	1° \approx 46'56	-15°57'17
retrograde	-2384 May 14 j 08:22	24° Z 15'55		minimum elong	-2376 Feb 09 j 23:14	1° \approx 46'56	15°57'21
min. Earth dist.	-2384 Aug 03 j 06:09	23° Z 14'09	42.96389 AU	max. Earth dist.	-2376 Feb 12 j 16:51	1° \approx 51'03	46.25790 AU
opposition	-2384 Aug 06 j 03:38	23° Z 10'35	-15°38'36	retrograde	-2376 May 23 j 10:56	3° \approx 25'57	
direct	-2384 Oct 25 j 19:57	22° Z 06'56		min. Earth dist.	-2376 Aug 12 j 18:58	2° \approx 25'10	44.42201 AU
				opposition	-2376 Aug 15 j 10:05	2° \approx 21'59	-16°43'16
conjunction	-2383 Feb 01 j 02:36	23° Z 44'22	-15°01'56	direct	-2376 Nov 04 j 05:58	1° \approx 19'37	
minimum elong	-2383 Feb 01 j 02:28	23° Z 44'22	15°01'59				
max. Earth dist.	-2383 Feb 04 j 01:42	23° Z 48'58	44.98969 AU	conjunction	-2375 Feb 10 j 08:21	2° \approx 53'59	-16°03'38
retrograde	-2383 May 15 j 19:26	25° Z 26'11		minimum elong	-2375 Feb 10 j 08:17	2° \approx 53'59	16°03'41
min. Earth dist.	-2383 Aug 04 j 16:20	24° Z 24'36	43.15896 AU	max. Earth dist.	-2375 Feb 13 j 00:58	2° \approx 58'02	46.42217 AU
opposition	-2383 Aug 07 j 14:08	24° Z 21'03	-15°48'11	retrograde	-2375 May 24 j 20:22	4° \approx 32'38	
direct	-2383 Oct 27 j 05:27	23° Z 17'35		min. Earth dist.	-2375 Aug 14 j 05:30	3° \approx 31'53	44.58570 AU
				opposition	-2375 Aug 16 j 19:04	3° \approx 28'48	-16°49'31
conjunction	-2382 Feb 02 j 12:42	24° Z 54'36	-15°11'05	direct	-2375 Nov 05 j 15:13	2° \approx 26'33	
minimum elong	-2382 Feb 02 j 12:36	24° Z 54'36	15°11'08				
max. Earth dist.	-2382 Feb 05 j 12:12	24° Z 59'12	45.18202 AU	conjunction	-2374 Feb 11 j 17:14	4° \approx 00'33	-16°09'36
retrograde	-2382 May 17 j 03:30	26° Z 36'01		minimum elong	-2374 Feb 11 j 17:11	4° \approx 00'33	16°09'40
min. Earth dist.	-2382 Aug 06 j 04:25	25° Z 34'32	43.35139 AU	max. Earth dist.	-2374 Feb 14 j 09:59	4° \approx 04'35	46.58326 AU
opposition	-2382 Aug 09 j 00:33	25° Z 31'04	-15°57'19	retrograde	-2374 May 26 j 05:37	5° \approx 38'50	
direct	-2382 Oct 28 j 17:13	24° Z 27'47		min. Earth dist.	-2374 Aug 15 j 14:37	4° \approx 38'11	44.74623 AU
				opposition	-2374 Aug 18 j 03:44	4° \approx 35'08	-16°55'23
conjunction	-2381 Feb 03 j 22:51	26° Z 04'24	-15°19'47	direct	-2374 Nov 06 j 23:48	3° \approx 33'00	
minimum elong	-2381 Feb 03 j 22:44	26° Z 04'24	15°19'50				
max. Earth dist.	-2381 Feb 06 j 21:29	26° Z 08'56	45.37162 AU	conjunction	-2373 Feb 13 j 01:58	5° \approx 06'41	-16°15'10
retrograde	-2381 May 18 j 11:49	27° Z 45'24		minimum elong	-2373 Feb 13 j 01:56	5° \approx 06'41	16°15'12
min. Earth dist.	-2381 Aug 07 j 14:16	26° Z 44'07	43.54064 AU	max. Earth dist.	-2373 Feb 15 j 16:58	5° \approx 10'36	46.74150 AU
opposition	-2381 Aug 10 j 10:28	26° Z 40'39	-16°06'00	retrograde	-2373 May 27 j 16:50	6° \approx 44'36	
direct	-2381 Oct 30 j 05:16	25° Z 37'33		min. Earth dist.	-2373 Aug 16 j 23:20	5° \approx 44'05	44.90415 AU
				opposition	-2373 Aug 19 j 12:09	5° \approx 41'03	-17°00'50
conjunction	-2380 Feb 05 j 08:48	27° Z 13'47	-15°28'04	direct	-2373 Nov 08 j 05:21	4° \approx 39'04	
minimum elong	-2380 Feb 05 j 08:43	27° Z 13'47	15°28'07				
max. Earth dist.	-2380 Feb 08 j 06:14	27° Z 18'14	45.55765 AU	conjunction	-2372 Feb 14 j 10:41	6° \approx 12'26	-16°20'21
retrograde	-2380 May 18 j 23:56	28° Z 54'24		minimum elong	-2372 Feb 14 j 10:38	6° \approx 12'26	16°20'24

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Attention, astronomical year style is used: The year -2372 in astronomical counting style is the year 2373 BCE in historical counting style.

max. Earth dist.	-2372 Feb 17 j 02:02	6°16'21	46.89716 AU			-2364 Mar 02 j 06:29	15°	
retrograde	-2372 May 28 j 00:21	7°50'01		retrograde		-2364 Jun 05 j 11:54	16°23'29	
min. Earth dist.	-2372 Aug 17 j 09:15	6°49'34	45.05938 AU	min. Earth dist.		-2364 Aug 26 j 06:42	15°23'44	46.16746 AU
opposition	-2372 Aug 19 j 20:32	6°46'37	-17°05'52	opposition		-2364 Aug 28 j 09:55	15°21'14	-17°33'09
direct	-2372 Nov 08 j 14:08	5°44'47				-2364 Sep 15 j 20:32	15°R	
				direct		-2364 Nov 17 j 09:14	14°20'23	
conjunction	-2371 Feb 14 j 19:02	7°17'50	-16°25'08			-2363 Jan 16 j 20:10	15°	
minimum elong	-2371 Feb 14 j 19:01	7°17'50	16°25'11					
max. Earth dist.	-2371 Feb 17 j 09:12	7°21'41	47.05034 AU	conjunction		-2363 Feb 23 j 11:23	15°51'16	-16°51'02
retrograde	-2371 May 29 j 05:51	8°55'07		minimum elong		-2363 Feb 23 j 11:25	15°51'16	16°51'06
min. Earth dist.	-2371 Aug 18 j 17:00	7°54'50	45.21196 AU	max. Earth dist.		-2363 Feb 25 j 16:20	15°54'27	48.13671 AU
opposition	-2371 Aug 21 j 04:39	7°51'53	-17°10'31	retrograde		-2363 Jun 06 j 22:15	17°26'11	
direct	-2371 Nov 10 j 00:29	6°50'11		min. Earth dist.		-2363 Aug 27 j 14:52	16°26'27	46.28519 AU
				opposition		-2363 Aug 29 j 17:01	16°24'01	-17°35'06
conjunction	-2370 Feb 16 j 03:20	8°22'58	-16°29'33	direct		-2363 Nov 18 j 13:58	15°23'14	
minimum elong	-2370 Feb 16 j 03:18	8°22'58	16°29'36					
max. Earth dist.	-2370 Feb 18 j 16:47	8°26'45	47.20072 AU	conjunction		-2362 Feb 24 j 18:57	16°53'51	-16°52'51
retrograde	-2370 May 30 j 13:58	9°59'57		minimum elong		-2362 Feb 24 j 18:59	16°53'51	16°52'53
min. Earth dist.	-2370 Aug 20 j 02:46	8°59'45	45.36164 AU	max. Earth dist.		-2362 Feb 27 j 00:00	16°57'02	48.25220 AU
opposition	-2370 Aug 22 j 12:46	8°56'53	-17°14'46	retrograde		-2362 Jun 08 j 05:42	18°28'28	
direct	-2370 Nov 11 j 09:46	7°55'21		min. Earth dist.		-2362 Aug 28 j 23:11	17°28'45	46.39921 AU
				opposition		-2362 Aug 30 j 23:51	17°26'23	-17°36'42
conjunction	-2369 Feb 17 j 11:41	9°27'51	-16°33'36	direct		-2362 Nov 19 j 20:45	16°25'40	
minimum elong	-2369 Feb 17 j 11:42	9°27'51	16°33'39					
max. Earth dist.	-2369 Feb 20 j 00:53	9°31'36	47.34808 AU	conjunction		-2361 Feb 26 j 02:19	17°56'02	-16°54'20
retrograde	-2369 May 31 j 22:52	11°04'33		minimum elong		-2361 Feb 26 j 02:21	17°56'02	16°54'23
min. Earth dist.	-2369 Aug 21 j 11:10	10°04'29	45.50773 AU	max. Earth dist.		-2361 Feb 28 j 05:44	17°59'07	48.36440 AU
opposition	-2369 Aug 23 j 20:35	10°01'39	-17°18'40	retrograde		-2361 Jun 09 j 11:38	19°30'22	
direct	-2369 Nov 12 j 17:27	9°00'16		min. Earth dist.		-2361 Aug 30 j 05:52	18°30'44	46.51006 AU
				opposition		-2361 Sep 01 j 06:33	18°28'22	-17°37'57
conjunction	-2368 Feb 18 j 19:51	10°32'30	-16°37'18	direct		-2361 Nov 21 j 03:41	17°27'44	
minimum elong	-2368 Feb 18 j 19:50	10°32'30	16°37'21					
max. Earth dist.	-2368 Feb 21 j 07:01	10°36'07	47.49154 AU	conjunction		-2360 Feb 27 j 09:34	18°57'52	-16°55'29
retrograde	-2368 Jun 01 j 09:31	12°08'55		minimum elong		-2360 Feb 27 j 09:37	18°57'52	16°55'30
min. Earth dist.	-2368 Aug 21 j 19:56	11°08'57	45.64974 AU	max. Earth dist.		-2360 Feb 29 j 12:18	19°00'54	48.47343 AU
opposition	-2368 Aug 24 j 04:15	11°06'11	-17°22'13	retrograde		-2360 Jun 09 j 16:20	20°31'56	
direct	-2368 Nov 12 j 22:48	10°04'56		min. Earth dist.		-2360 Aug 30 j 14:12	19°32'20	46.61787 AU
				opposition		-2360 Sep 01 j 13:09	19°30'02	-17°38'53
conjunction	-2367 Feb 19 j 04:05	11°36'56	-16°40'40	direct		-2360 Nov 21 j 12:31	18°29'30	
minimum elong	-2367 Feb 19 j 04:06	11°36'56	16°40'43					
max. Earth dist.	-2367 Feb 21 j 15:06	11°40'31	47.63057 AU	conjunction		-2359 Feb 27 j 16:45	19°59'25	-16°56'18
retrograde	-2367 Jun 02 j 17:04	13°13'03		minimum elong		-2359 Feb 27 j 16:48	19°59'25	16°56'21
min. Earth dist.	-2367 Aug 23 j 05:29	12°13'08	45.78687 AU	max. Earth dist.		-2359 Mar 01 j 19:02	20°02'24	48.57972 AU
opposition	-2367 Aug 25 j 11:56	12°10'27	-17°25'25	retrograde		-2359 Jun 10 j 22:07	21°33'14	
direct	-2367 Nov 14 j 06:21	11°09'20		min. Earth dist.		-2359 Aug 31 j 20:47	20°33'44	46.72272 AU
				opposition		-2359 Sep 02 j 19:36	20°31'27	-17°39'28
conjunction	-2366 Feb 20 j 12:03	12°41'04	-16°43'43	direct		-2359 Nov 22 j 20:34	19°31'01	
minimum elong	-2366 Feb 20 j 12:02	12°41'04	16°43'45					
max. Earth dist.	-2366 Feb 22 j 20:57	12°44'31	47.76468 AU	conjunction		-2358 Feb 28 j 23:36	21°00'43	-16°56'48
retrograde	-2366 Jun 03 j 23:58	14°16'53		minimum elong		-2358 Feb 28 j 23:40	21°00'43	16°56'49
min. Earth dist.	-2366 Aug 24 j 13:20	13°17'05	45.91884 AU	max. Earth dist.		-2358 Mar 03 j 00:13	21°03'36	48.68300 AU
opposition	-2366 Aug 26 j 19:26	13°14'25	-17°28'19	retrograde		-2358 Jun 12 j 07:09	22°34'19	
direct	-2366 Nov 15 j 14:19	12°13'24		min. Earth dist.		-2358 Sep 02 j 04:23	21°34'53	46.82451 AU
				opposition		-2358 Sep 04 j 02:05	21°32'40	-17°39'44
conjunction	-2365 Feb 21 j 20:03	13°44'52	-16°46'28	direct		-2358 Nov 24 j 01:20	20°32'20	
minimum elong	-2365 Feb 21 j 20:04	13°44'52	16°46'31					
max. Earth dist.	-2365 Feb 24 j 03:48	13°48'15	47.89349 AU	conjunction		-2357 Mar 02 j 06:44	22°01'51	-16°56'59
	-2365 Apr 22 j 09:13	15°		minimum elong		-2357 Mar 02 j 06:47	22°01'51	16°57'01
retrograde	-2365 Jun 05 j 05:44	15°20'23		max. Earth dist.		-2357 Mar 04 j 07:23	22°04'44	48.78298 AU
	-2365 Jul 19 j 20:17	15°R		retrograde		-2357 Jun 13 j 14:38	23°35'14	
min. Earth dist.	-2365 Aug 25 j 23:02	14°20'34	46.04559 AU	min. Earth dist.		-2357 Sep 03 j 12:04	22°35'51	46.92259 AU
opposition	-2365 Aug 28 j 02:48	14°18'02	-17°30'54	opposition		-2357 Sep 05 j 08:16	22°33'43	-17°39'40
direct	-2365 Nov 16 j 23:52	13°17'06		direct		-2357 Nov 25 j 06:50	21°33'29	
conjunction	-2364 Feb 23 j 03:58	14°48'16	-16°48'55	conjunction		-2356 Mar 02 j 13:42	23°02'51	-16°56'52
minimum elong	-2364 Feb 23 j 03:58	14°48'16	16°48'57	minimum elong		-2356 Mar 02 j 13:47	23°02'51	16°56'54
max. Earth dist.	-2364 Feb 25 j 10:55	14°51'36	48.01739 AU	max. Earth dist.		-2356 Mar 04 j 12:18	23°05'36	48.87916 AU

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Attention, astronomical year style is used: The year -2356 in astronomical counting style is the year 2357 BCE in historical counting style.

retrograde	-2356 Jun 13 j 22:09	24° \approx 36'02		minimum elong	-2348 Mar 10 j 18:46	1° \mathbb{H} 03'47	16°46'12
min. Earth dist.	-2356 Sep 03 j 18:38	23° \approx 36'45	47.01654 AU	max. Earth dist.	-2348 Mar 12 j 07:13	1° \mathbb{H} 05'54	49.47981 AU
opposition	-2356 Sep 05 j 14:25	23° \approx 34'38	-17°39'19	retrograde	-2348 Jun 21 j 20:20	2° \mathbb{H} 35'22	
direct	-2356 Nov 25 j 11:55	22° \approx 34'31		min. Earth dist.	-2348 Sep 12 j 02:28	1° \mathbb{H} 36'13	47.59819 AU
				opposition	-2348 Sep 13 j 12:16	1° \mathbb{H} 34'36	-17°26'29
				direct	-2348 Dec 03 j 15:51	0° \mathbb{H} 34'57	
conjunction	-2355 Mar 03 j 20:30	24° \approx 03'42	-16°56'29				
minimum elong	-2355 Mar 03 j 20:33	24° \approx 03'43	16°56'31				
max. Earth dist.	-2355 Mar 05 j 18:09	24° \approx 06'24	48.97074 AU	conjunction	-2347 Mar 12 j 00:48	2° \mathbb{H} 02'50	-16°43'33
retrograde	-2355 Jun 15 j 03:10	25° \approx 36'42		minimum elong	-2347 Mar 12 j 00:56	2° \mathbb{H} 02'50	16°43'34
min. Earth dist.	-2355 Sep 05 j 03:14	24° \approx 37'25	47.10562 AU	max. Earth dist.	-2347 Mar 13 j 13:32	2° \mathbb{H} 04'57	49.53825 AU
opposition	-2355 Sep 06 j 20:40	24° \approx 35'25	-17°38'41	retrograde	-2347 Jun 23 j 03:13	3° \mathbb{H} 34'16	
direct	-2355 Nov 26 j 19:24	23° \approx 35'24		min. Earth dist.	-2347 Sep 13 j 08:41	2° \mathbb{H} 35'09	47.65468 AU
				opposition	-2347 Sep 14 j 17:36	2° \mathbb{H} 33'35	-17°23'34
				direct	-2347 Dec 04 j 20:50	1° \mathbb{H} 33'59	
conjunction	-2354 Mar 05 j 03:28	25° \approx 04'25	-16°55'49				
minimum elong	-2354 Mar 05 j 03:34	25° \approx 04'26	16°55'51				
max. Earth dist.	-2354 Mar 07 j 00:02	25° \approx 07'03	49.05741 AU	conjunction	-2346 Mar 13 j 06:56	3° \mathbb{H} 01'44	-16°40'39
retrograde	-2354 Jun 16 j 07:43	26° \approx 37'13		minimum elong	-2346 Mar 13 j 07:03	3° \mathbb{H} 01'45	16°40'41
min. Earth dist.	-2354 Sep 06 j 09:44	25° \approx 38'01	47.18944 AU	max. Earth dist.	-2346 Mar 14 j 17:48	3° \mathbb{H} 03'45	49.59392 AU
opposition	-2354 Sep 08 j 02:35	25° \approx 36'02	-17°37'46	retrograde	-2346 Jun 24 j 11:30	4° \mathbb{H} 33'01	
direct	-2354 Nov 28 j 04:03	24° \approx 36'06		opposition	-2346 Sep 15 j 22:45	3° \mathbb{H} 32'25	-17°20'21
				min. Earth dist.	-2346 Sep 14 j 14:10	3° \mathbb{H} 33'58	47.70831 AU
				direct	-2346 Dec 05 j 23:16	2° \mathbb{H} 32'53	
conjunction	-2353 Mar 06 j 10:15	26° \approx 04'57	-16°54'53				
minimum elong	-2353 Mar 06 j 10:19	26° \approx 04'57	16°54'55				
max. Earth dist.	-2353 Mar 08 j 04:21	26° \approx 07'25	49.13875 AU	conjunction	-2345 Mar 14 j 13:09	4° \mathbb{H} 00'32	-16°37'29
retrograde	-2353 Jun 17 j 16:52	27° \approx 37'33		minimum elong	-2345 Mar 14 j 13:17	4° \mathbb{H} 00'33	16°37'30
min. Earth dist.	-2353 Sep 07 j 17:26	26° \approx 38'20	47.26802 AU	max. Earth dist.	-2345 Mar 15 j 23:25	4° \mathbb{H} 02'31	49.64640 AU
opposition	-2353 Sep 09 j 08:35	26° \approx 36'27	-17°36'36	retrograde	-2345 Jun 25 j 16:55	5° \mathbb{H} 31'40	
direct	-2353 Nov 29 j 08:40	25° \approx 36'34		min. Earth dist.	-2345 Sep 15 j 21:31	4° \mathbb{H} 32'37	47.75845 AU
				opposition	-2345 Sep 17 j 04:01	4° \mathbb{H} 31'09	-17°16'52
				direct	-2345 Dec 07 j 04:28	3° \mathbb{H} 31'42	
conjunction	-2352 Mar 06 j 17:03	27° \approx 05'15	-16°53'42				
minimum elong	-2352 Mar 06 j 17:09	27° \approx 05'15	16°53'44				
max. Earth dist.	-2352 Mar 08 j 10:52	27° \approx 07'42	49.21496 AU	conjunction	-2344 Mar 14 j 19:20	4° \mathbb{H} 59'15	-16°34'02
retrograde	-2352 Jun 18 j 00:12	28° \approx 37'38		minimum elong	-2344 Mar 14 j 19:27	4° \mathbb{H} 59'15	16°34'03
min. Earth dist.	-2352 Sep 08 j 00:44	27° \approx 38'25	47.34154 AU	max. Earth dist.	-2344 Mar 16 j 04:36	5° \mathbb{H} 01'10	49.69526 AU
opposition	-2352 Sep 09 j 14:17	27° \approx 36'37	-17°35'09	retrograde	-2344 Jun 25 j 19:27	6° \mathbb{H} 30'15	
direct	-2352 Nov 29 j 13:37	26° \approx 36'47		min. Earth dist.	-2344 Sep 16 j 02:51	5° \mathbb{H} 31'16	47.80452 AU
				opposition	-2344 Sep 17 j 09:00	5° \mathbb{H} 29'50	-17°13'06
				direct	-2344 Dec 07 j 12:37	4° \mathbb{H} 30'26	
conjunction	-2351 Mar 07 j 23:33	28° \approx 05'16	-16°52'14				
minimum elong	-2351 Mar 07 j 23:39	28° \approx 05'17	16°52'16				
max. Earth dist.	-2351 Mar 09 j 15:18	28° \approx 07'36	49.28665 AU	conjunction	-2343 Mar 16 j 01:24	5° \mathbb{H} 57'53	-16°30'19
retrograde	-2351 Jun 19 j 06:46	29° \approx 37'27		minimum elong	-2343 Mar 16 j 01:33	5° \mathbb{H} 57'54	16°30'21
min. Earth dist.	-2351 Sep 09 j 06:42	28° \approx 38'16	47.41089 AU	max. Earth dist.	-2343 Mar 17 j 08:28	5° \mathbb{H} 59'41	49.73972 AU
opposition	-2351 Sep 10 j 19:54	28° \approx 36'29	-17°33'26	retrograde	-2343 Jun 27 j 01:49	7° \mathbb{H} 28'46	
direct	-2351 Nov 30 j 18:12	27° \approx 36'42		min. Earth dist.	-2343 Sep 17 j 09:53	6° \mathbb{H} 29'46	47.84600 AU
				opposition	-2343 Sep 18 j 14:10	6° \mathbb{H} 28'25	-17°09'05
				direct	-2343 Dec 08 j 18:15	5° \mathbb{H} 29'05	
conjunction	-2350 Mar 09 j 05:56	29° \approx 05'02	-16°50'30				
minimum elong	-2350 Mar 09 j 06:02	29° \approx 05'02	16°50'32				
max. Earth dist.	-2350 Mar 10 j 20:57	29° \approx 07'18	49.35429 AU	conjunction	-2342 Mar 17 j 07:36	6° \mathbb{H} 56'26	-16°26'22
	-2350 Apr 20 j 08:14	0° \mathbb{H}		minimum elong	-2342 Mar 17 j 07:43	6° \mathbb{H} 56'27	16°26'23
retrograde	-2350 Jun 20 j 09:49	0° \mathbb{H} 37'00		max. Earth dist.	-2342 Mar 18 j 14:14	6° \mathbb{H} 58'12	49.77927 AU
	-2350 Aug 21 j 17:26	30° \mathbb{R} \approx		retrograde	-2342 Jun 28 j 08:29	8° \mathbb{H} 27'12	
min. Earth dist.	-2350 Sep 10 j 14:19	29° \approx 37'47	47.47645 AU	opposition	-2342 Sep 19 j 19:16	7° \mathbb{H} 26'55	-17°04'49
opposition	-2350 Sep 12 j 01:33	29° \approx 36'06	-17°31'25	min. Earth dist.	-2342 Sep 18 j 16:32	7° \mathbb{H} 28'11	47.88212 AU
direct	-2350 Dec 02 j 02:36	28° \approx 36'21		direct	-2342 Dec 09 j 23:07	6° \mathbb{H} 27'36	
	-2349 Mar 07 j 06:53	0° \mathbb{H}					
				conjunction	-2341 Mar 18 j 13:45	7° \mathbb{H} 54'52	-16°22'12
conjunction	-2349 Mar 10 j 12:25	0° \mathbb{H} 04'31	-16°48'29	minimum elong	-2341 Mar 18 j 13:54	7° \mathbb{H} 54'53	16°22'13
minimum elong	-2349 Mar 10 j 12:31	0° \mathbb{H} 04'31	16°48'29	max. Earth dist.	-2341 Mar 19 j 17:52	7° \mathbb{H} 56'29	49.81352 AU
max. Earth dist.	-2349 Mar 12 j 02:42	0° \mathbb{H} 06'45	49.41861 AU	retrograde	-2341 Jun 29 j 16:11	9° \mathbb{H} 25'29	
retrograde	-2349 Jun 21 j 13:02	1° \mathbb{H} 36'17		min. Earth dist.	-2341 Sep 19 j 22:16	8° \mathbb{H} 26'29	47.91296 AU
min. Earth dist.	-2349 Sep 11 j 19:41	0° \mathbb{H} 37'08	47.53875 AU	opposition	-2341 Sep 21 j 00:09	8° \mathbb{H} 25'15	-17°00'19
opposition	-2349 Sep 13 j 06:48	0° \mathbb{H} 35'27	-17°29'06	direct	-2341 Dec 11 j 02:12	7° \mathbb{H} 25'58	
	-2349 Oct 16 j 04:21	30° \mathbb{R} \approx					
direct	-2349 Dec 03 j 10:52	29° \approx 35'45		conjunction	-2340 Mar 18 j 19:51	8° \mathbb{H} 53'08	-16°17'47
	-2348 Jan 19 j 18:35	0° \mathbb{H}		minimum elong	-2340 Mar 18 j 19:59	8° \mathbb{H} 53'08	16°17'47
				max. Earth dist.	-2340 Mar 19 j 22:47	8° \mathbb{H} 54'41	49.84245 AU
conjunction	-2348 Mar 10 j 18:40	1° \mathbb{H} 03'46	-16°46'10	retrograde	-2340 Jun 29 j 20:11	10° \mathbb{H} 23'36	

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Attention, astronomical year style is used: The year -2340 in astronomical counting style is the year 2341 BCE in historical counting style.

min. Earth dist.	-2340 Sep 20 j 05:32	9° $\mathbf{\text{H}}$ 24'32	47.93865 AU	conjunction	-2331 Mar 28 j 00:04	17° $\mathbf{\text{H}}$ 32'29	-15°26'35
opposition	-2340 Sep 21 j 05:10	9° $\mathbf{\text{H}}$ 23'24	-16°55'35	minimum elong	-2331 Mar 28 j 00:14	17° $\mathbf{\text{H}}$ 32'30	15°26'36
direct	-2340 Dec 11 j 08:36	8° $\mathbf{\text{H}}$ 24'08		max. Earth dist.	-2331 Mar 28 j 16:00	17° $\mathbf{\text{H}}$ 33'24	49.93273 AU
				retrograde	-2331 Jul 08 j 22:43	19° $\mathbf{\text{H}}$ 02'16	
conjunction	-2339 Mar 20 j 01:42	9° $\mathbf{\text{H}}$ 51'13	-16°13'07	opposition	-2331 Sep 29 j 22:55	18° $\mathbf{\text{H}}$ 02'30	-16°01'05
minimum elong	-2339 Mar 20 j 01:52	9° $\mathbf{\text{H}}$ 51'13	16°13'09	min. Earth dist.	-2331 Sep 29 j 08:32	18° $\mathbf{\text{H}}$ 03'11	48.00341 AU
max. Earth dist.	-2339 Mar 21 j 03:40	9° $\mathbf{\text{H}}$ 52'42	49.86668 AU	direct	-2331 Dec 20 j 03:06	17° $\mathbf{\text{H}}$ 03'28	
retrograde	-2339 Jun 30 j 22:53	11° $\mathbf{\text{H}}$ 21'33					
min. Earth dist.	-2339 Sep 21 j 10:39	10° $\mathbf{\text{H}}$ 22'29	47.95980 AU	conjunction	-2330 Mar 29 j 06:02	18° $\mathbf{\text{H}}$ 30'14	-15°19'39
opposition	-2339 Sep 22 j 09:57	10° $\mathbf{\text{H}}$ 21'23	-16°50'36	minimum elong	-2330 Mar 29 j 06:14	18° $\mathbf{\text{H}}$ 30'14	15°19'39
direct	-2339 Dec 12 j 16:01	9° $\mathbf{\text{H}}$ 22'07		max. Earth dist.	-2330 Mar 29 j 20:45	18° $\mathbf{\text{H}}$ 31'04	49.92328 AU
				retrograde	-2330 Jul 10 j 03:32	19° $\mathbf{\text{H}}$ 59'57	
conjunction	-2338 Mar 21 j 07:33	10° $\mathbf{\text{H}}$ 49'06	-16°08'13	opposition	-2330 Oct 01 j 03:31	19° $\mathbf{\text{H}}$ 00'14	-15°53'46
minimum elong	-2338 Mar 21 j 07:42	10° $\mathbf{\text{H}}$ 49'07	16°08'14	min. Earth dist.	-2330 Sep 30 j 15:31	19° $\mathbf{\text{H}}$ 00'48	47.99014 AU
max. Earth dist.	-2338 Mar 22 j 07:29	10° $\mathbf{\text{H}}$ 50'29	49.88661 AU	direct	-2330 Dec 21 j 08:12	18° $\mathbf{\text{H}}$ 01'12	
retrograde	-2338 Jul 02 j 04:54	12° $\mathbf{\text{H}}$ 19'20					
opposition	-2338 Sep 23 j 14:42	11° $\mathbf{\text{H}}$ 19'11	-16°45'21	conjunction	-2329 Mar 30 j 12:04	19° $\mathbf{\text{H}}$ 27'57	-15°12'29
min. Earth dist.	-2338 Sep 22 j 17:08	11° $\mathbf{\text{H}}$ 20'13	47.97706 AU	minimum elong	-2329 Mar 30 j 12:14	19° $\mathbf{\text{H}}$ 27'58	15°12'30
direct	-2338 Dec 13 j 21:07	10° $\mathbf{\text{H}}$ 19'57		max. Earth dist.	-2329 Mar 31 j 01:17	19° $\mathbf{\text{H}}$ 28'42	49.90847 AU
				retrograde	-2329 Jul 11 j 06:12	20° $\mathbf{\text{H}}$ 57'37	
conjunction	-2337 Mar 22 j 13:33	11° $\mathbf{\text{H}}$ 46'51	-16°03'03	opposition	-2329 Oct 02 j 08:03	19° $\mathbf{\text{H}}$ 57'54	-15°46'13
minimum elong	-2337 Mar 22 j 13:42	11° $\mathbf{\text{H}}$ 46'51	16°03'05	min. Earth dist.	-2329 Oct 01 j 20:39	19° $\mathbf{\text{H}}$ 58'27	47.97131 AU
max. Earth dist.	-2337 Mar 23 j 13:20	11° $\mathbf{\text{H}}$ 48'12	49.90290 AU	direct	-2329 Dec 22 j 15:29	18° $\mathbf{\text{H}}$ 58'51	
retrograde	-2337 Jul 03 j 10:24	13° $\mathbf{\text{H}}$ 16'58					
opposition	-2337 Sep 24 j 19:23	12° $\mathbf{\text{H}}$ 16'52	-16°39'50	conjunction	-2328 Mar 30 j 17:49	20° $\mathbf{\text{H}}$ 25'36	-15°05'07
min. Earth dist.	-2337 Sep 23 j 22:46	12° $\mathbf{\text{H}}$ 17'51	47.99071 AU	minimum elong	-2328 Mar 30 j 18:01	20° $\mathbf{\text{H}}$ 25'37	15°05'08
direct	-2337 Dec 15 j 02:27	11° $\mathbf{\text{H}}$ 17'38		max. Earth dist.	-2328 Mar 31 j 04:37	20° $\mathbf{\text{H}}$ 26'13	49.88809 AU
				retrograde	-2328 Jul 11 j 10:35	21° $\mathbf{\text{H}}$ 55'13	
conjunction	-2336 Mar 22 j 19:15	12° $\mathbf{\text{H}}$ 44'29	-15°57'38	opposition	-2328 Oct 02 j 12:36	20° $\mathbf{\text{H}}$ 55'30	-15°38'27
minimum elong	-2336 Mar 22 j 19:25	12° $\mathbf{\text{H}}$ 44'29	15°57'38	min. Earth dist.	-2328 Oct 02 j 03:20	20° $\mathbf{\text{H}}$ 55'56	47.94721 AU
max. Earth dist.	-2336 Mar 23 j 17:04	12° $\mathbf{\text{H}}$ 45'43	49.91593 AU	direct	-2328 Dec 22 j 21:38	19° $\mathbf{\text{H}}$ 56'25	
retrograde	-2336 Jul 03 j 18:18	14° $\mathbf{\text{H}}$ 14'30		evening set	-2327 Mar 30 j 19:04	21° $\mathbf{\text{H}}$ 21'31	
opposition	-2336 Sep 24 j 23:58	13° $\mathbf{\text{H}}$ 14'27	-16°34'02				
min. Earth dist.	-2336 Sep 24 j 03:44	13° $\mathbf{\text{H}}$ 15'25	48.00131 AU	conjunction	-2327 Mar 31 j 23:43	21° $\mathbf{\text{H}}$ 23'08	-14°57'31
direct	-2336 Dec 15 j 04:16	12° $\mathbf{\text{H}}$ 15'14		minimum elong	-2327 Mar 31 j 23:53	21° $\mathbf{\text{H}}$ 23'09	14°57'31
				max. Earth dist.	-2327 Apr 01 j 10:02	21° $\mathbf{\text{H}}$ 23'43	49.86275 AU
conjunction	-2335 Mar 24 j 01:01	13° $\mathbf{\text{H}}$ 42'03	-15°51'56	morning rise	-2327 Apr 02 j 04:45	21° $\mathbf{\text{H}}$ 24'47	
minimum elong	-2335 Mar 24 j 01:11	13° $\mathbf{\text{H}}$ 42'03	15°51'58	retrograde	-2327 Jul 12 j 14:43	22° $\mathbf{\text{H}}$ 52'42	
max. Earth dist.	-2335 Mar 24 j 22:18	13° $\mathbf{\text{H}}$ 43'16	49.92591 AU	opposition	-2327 Oct 03 j 17:01	21° $\mathbf{\text{H}}$ 52'58	-15°30'27
retrograde	-2335 Jul 04 j 23:58	15° $\mathbf{\text{H}}$ 11'59		min. Earth dist.	-2327 Oct 03 j 08:49	21° $\mathbf{\text{H}}$ 53'21	47.91829 AU
min. Earth dist.	-2335 Sep 25 j 10:18	14° $\mathbf{\text{H}}$ 12'51	48.00890 AU	direct	-2327 Dec 24 j 03:51	20° $\mathbf{\text{H}}$ 53'51	
opposition	-2335 Sep 26 j 04:40	14° $\mathbf{\text{H}}$ 11'59	-16°27'58	evening set	-2326 Mar 30 j 18:55	22° $\mathbf{\text{H}}$ 17'14	
direct	-2335 Dec 16 j 08:23	13° $\mathbf{\text{H}}$ 12'49					
				conjunction	-2326 Apr 02 j 05:23	22° $\mathbf{\text{H}}$ 20'32	-14°49'41
conjunction	-2334 Mar 25 j 06:45	14° $\mathbf{\text{H}}$ 39'36	-15°45'59	minimum elong	-2326 Apr 02 j 05:35	22° $\mathbf{\text{H}}$ 20'33	14°49'42
minimum elong	-2334 Mar 25 j 06:56	14° $\mathbf{\text{H}}$ 39'36	15°45'59	max. Earth dist.	-2326 Apr 02 j 13:31	22° $\mathbf{\text{H}}$ 21'00	49.83301 AU
max. Earth dist.	-2334 Mar 26 j 03:12	14° $\mathbf{\text{H}}$ 40'46	49.93308 AU	morning rise	-2326 Apr 04 j 16:19	22° $\mathbf{\text{H}}$ 23'53	
retrograde	-2334 Jul 06 j 02:26	16° $\mathbf{\text{H}}$ 09'28		retrograde	-2326 Jul 13 j 22:50	23° $\mathbf{\text{H}}$ 50'03	
opposition	-2334 Sep 27 j 09:13	15° $\mathbf{\text{H}}$ 09'32	-16°21'38	opposition	-2326 Oct 04 j 21:26	22° $\mathbf{\text{H}}$ 50'17	-15°22'12
min. Earth dist.	-2334 Sep 26 j 14:50	15° $\mathbf{\text{H}}$ 10'24	48.01337 AU	min. Earth dist.	-2326 Oct 04 j 14:04	22° $\mathbf{\text{H}}$ 50'38	47.88529 AU
direct	-2334 Dec 17 j 15:32	14° $\mathbf{\text{H}}$ 10'24		direct	-2326 Dec 25 j 05:58	21° $\mathbf{\text{H}}$ 51'08	
				evening set	-2325 Mar 31 j 05:08	23° $\mathbf{\text{H}}$ 13'24	
conjunction	-2333 Mar 26 j 12:31	15° $\mathbf{\text{H}}$ 37'10	-15°39'46				
minimum elong	-2333 Mar 26 j 12:41	15° $\mathbf{\text{H}}$ 37'10	15°39'47	conjunction	-2325 Apr 03 j 11:13	23° $\mathbf{\text{H}}$ 17'49	-14°41'37
max. Earth dist.	-2333 Mar 27 j 06:58	15° $\mathbf{\text{H}}$ 38'13	49.93690 AU	minimum elong	-2325 Apr 03 j 11:24	23° $\mathbf{\text{H}}$ 17'50	14°41'36
retrograde	-2333 Jul 07 j 07:29	17° $\mathbf{\text{H}}$ 07'00		max. Earth dist.	-2325 Apr 03 j 18:32	23° $\mathbf{\text{H}}$ 18'14	49.79927 AU
opposition	-2333 Sep 28 j 13:46	16° $\mathbf{\text{H}}$ 07'07	-16°15'02	morning rise	-2325 Apr 06 j 17:48	23° $\mathbf{\text{H}}$ 22'17	
min. Earth dist.	-2333 Sep 27 j 21:14	16° $\mathbf{\text{H}}$ 07'55	48.01440 AU	retrograde	-2325 Jul 15 j 05:19	24° $\mathbf{\text{H}}$ 47'16	
direct	-2333 Dec 18 j 21:21	15° $\mathbf{\text{H}}$ 08'02		opposition	-2325 Oct 06 j 01:48	23° $\mathbf{\text{H}}$ 47'30	-15°13'42
				min. Earth dist.	-2325 Oct 05 j 20:21	23° $\mathbf{\text{H}}$ 47'46	47.84857 AU
conjunction	-2332 Mar 26 j 18:26	16° $\mathbf{\text{H}}$ 34'48	-15°33'17	direct	-2325 Dec 26 j 09:27	22° $\mathbf{\text{H}}$ 48'18	
minimum elong	-2332 Mar 26 j 18:37	16° $\mathbf{\text{H}}$ 34'48	15°33'18	evening set	-2324 Mar 30 j 19:06	24° $\mathbf{\text{H}}$ 09'41	
max. Earth dist.	-2332 Mar 27 j 12:45	16° $\mathbf{\text{H}}$ 35'50	49.93701 AU				
retrograde	-2332 Jul 07 j 14:03	18° $\mathbf{\text{H}}$ 04'36		conjunction	-2324 Apr 03 j 16:57	24° $\mathbf{\text{H}}$ 15'00	-14°33'17
opposition	-2332 Sep 28 j 18:20	17° $\mathbf{\text{H}}$ 04'47	-16°08'10	minimum elong	-2324 Apr 03 j 17:09	24° $\mathbf{\text{H}}$ 15'01	14°33'17
min. Earth dist.	-2332 Sep 28 j 03:00	17° $\mathbf{\text{H}}$ 05'31	48.01125 AU	max. Earth dist.	-2324 Apr 03 j 23:22	24° $\mathbf{\text{H}}$ 15'22	49.76228 AU
direct	-2332 Dec 19 j 01:32	16° $\mathbf{\text{H}}$ 05'44		morning rise	-2324 Apr 07 j 15:21	24° $\mathbf{\text{H}}$ 20'21	

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Attention, astronomical year style is used: The year -2324 in astronomical counting style is the year 2325 BCE in historical counting style.

retrograde	-2324 Jul 15 j 08:28	25° H 44'25		direct	-2317 Jan 01 j 20:45	29° H 29'19	
opposition	-2324 Oct 06 j 06:09	24° H 44'38	-15°04'55		-2317 Feb 25 j 10:29	0° Y	
min. Earth dist.	-2324 Oct 06 j 00:38	24° H 44'54	47.80871 AU	evening set	-2317 Apr 04 j 06:37	0° Y 46'49	
direct	-2324 Dec 26 j 15:16	23° H 45'23					
evening set	-2323 Mar 31 j 10:45	25° H 06'01		conjunction	-2317 Apr 11 j 09:55	0° Y 56'32	-13°27'56
				minimum elong	-2317 Apr 11 j 10:08	0° Y 56'32	13°27'56
conjunction	-2323 Apr 04 j 22:26	25° H 12'07	-14°24'42	max. Earth dist.	-2317 Apr 11 j 07:23	0° Y 56'23	49.40930 AU
minimum elong	-2323 Apr 04 j 22:39	25° H 12'08	14°24'41	morning rise	-2317 Apr 18 j 13:57	1° Y 06'18	
max. Earth dist.	-2323 Apr 05 j 03:04	25° H 12'23	49.72223 AU	retrograde	-2317 Jul 22 j 19:54	2° Y 26'11	
morning rise	-2323 Apr 09 j 10:46	25° H 18'15		opposition	-2317 Oct 13 j 13:14	1° Y 26'26	-13°56'19
retrograde	-2323 Jul 16 j 12:09	26° H 41'32		min. Earth dist.	-2317 Oct 13 j 16:47	1° Y 26'16	47.43193 AU
opposition	-2323 Oct 07 j 10:40	25° H 41'44	-14°55'53	direct	-2316 Jan 03 j 02:58	0° Y 27'03	
min. Earth dist.	-2323 Oct 07 j 06:46	25° H 41'55	47.76598 AU	evening set	-2316 Apr 04 j 03:57	1° Y 44'08	
direct	-2323 Dec 27 j 21:30	24° H 42'28					
evening set	-2322 Apr 01 j 04:05	26° H 02'26		conjunction	-2316 Apr 11 j 15:56	1° Y 54'21	-13°17'40
				minimum elong	-2316 Apr 11 j 16:07	1° Y 54'21	13°17'39
conjunction	-2322 Apr 06 j 04:17	26° H 09'14	-14°15'51	max. Earth dist.	-2316 Apr 11 j 10:53	1° Y 54'03	49.34074 AU
minimum elong	-2322 Apr 06 j 04:28	26° H 09'15	14°15'52	morning rise	-2316 Apr 19 j 04:46	2° Y 04'38	
max. Earth dist.	-2322 Apr 06 j 08:57	26° H 09'30	49.67938 AU	retrograde	-2316 Jul 23 j 04:11	3° Y 24'03	
morning rise	-2322 Apr 11 j 05:02	26° H 16'05		opposition	-2316 Oct 13 j 17:48	2° Y 24'17	-13°45'33
retrograde	-2322 Jul 17 j 16:40	27° H 38'39		min. Earth dist.	-2316 Oct 13 j 22:28	2° Y 24'03	47.35942 AU
opposition	-2322 Oct 08 j 14:58	26° H 38'52	-14°46'35	direct	-2315 Jan 03 j 05:12	1° Y 24'50	
min. Earth dist.	-2322 Oct 08 j 11:53	26° H 39'01	47.72024 AU	evening set	-2315 Apr 05 j 01:21	2° Y 41'31	
direct	-2322 Dec 29 j 03:12	25° H 39'35					
evening set	-2321 Apr 01 j 22:26	26° H 58'58		conjunction	-2315 Apr 12 j 21:53	2° Y 52'13	-13°07'10
				minimum elong	-2315 Apr 12 j 22:06	2° Y 52'14	13°07'10
conjunction	-2321 Apr 07 j 10:02	27° H 06'25	-14°06'45	max. Earth dist.	-2315 Apr 12 j 15:49	2° Y 51'52	49.26723 AU
minimum elong	-2321 Apr 07 j 10:14	27° H 06'26	14°06'45	morning rise	-2315 Apr 20 j 19:16	3° Y 02'59	
max. Earth dist.	-2321 Apr 07 j 12:35	27° H 06'34	49.63355 AU	retrograde	-2315 Jul 24 j 11:24	4° Y 21'58	
morning rise	-2321 Apr 12 j 22:20	27° H 13'55		opposition	-2315 Oct 14 j 22:26	3° Y 22'09	-13°34'34
retrograde	-2321 Jul 19 j 01:00	28° H 35'52		min. Earth dist.	-2315 Oct 15 j 05:10	3° Y 21'50	47.28218 AU
opposition	-2321 Oct 09 j 19:22	27° H 36'06	-14°37'01	direct	-2314 Jan 04 j 08:37	2° Y 22'39	
min. Earth dist.	-2321 Oct 09 j 16:57	27° H 36'13	47.67139 AU	evening set	-2314 Apr 05 j 23:23	3° Y 38'57	
direct	-2321 Dec 30 j 04:50	26° H 36'49					
evening set	-2320 Apr 01 j 17:25	27° H 55'39		conjunction	-2314 Apr 14 j 04:00	3° Y 50'08	-12°56'26
				minimum elong	-2314 Apr 14 j 04:12	3° Y 50'08	12°56'25
conjunction	-2320 Apr 07 j 15:50	28° H 03'43	-13°57'24	max. Earth dist.	-2314 Apr 13 j 20:45	3° Y 49'43	49.18946 AU
minimum elong	-2320 Apr 07 j 16:01	28° H 03'44	13°57'24	morning rise	-2314 Apr 22 j 09:28	4° Y 01'21	
max. Earth dist.	-2320 Apr 07 j 17:35	28° H 03'49	49.58417 AU	retrograde	-2314 Jul 25 j 16:11	5° Y 19'54	
morning rise	-2320 Apr 13 j 14:56	28° H 11'50		opposition	-2314 Oct 16 j 02:48	4° Y 20'03	-13°23'19
retrograde	-2320 Jul 19 j 06:51	29° H 33'13		min. Earth dist.	-2314 Oct 16 j 09:45	4° Y 19'44	47.20090 AU
opposition	-2320 Oct 09 j 23:50	28° H 33'28	-14°27'12	direct	-2313 Jan 05 j 13:48	3° Y 20'28	
min. Earth dist.	-2320 Oct 09 j 23:29	28° H 33'29	47.61867 AU	evening set	-2313 Apr 06 j 21:35	4° Y 36'26	
direct	-2320 Dec 30 j 08:43	27° H 34'11					
evening set	-2319 Apr 02 j 13:18	28° H 52'32		conjunction	-2313 Apr 15 j 10:06	4° Y 48'04	-12°45'28
				minimum elong	-2313 Apr 15 j 10:18	4° Y 48'04	12°45'28
conjunction	-2319 Apr 08 j 21:45	29° H 01'11	-13°47'48	max. Earth dist.	-2313 Apr 15 j 00:49	4° Y 47'32	49.10779 AU
minimum elong	-2319 Apr 08 j 21:58	29° H 01'12	13°47'48	morning rise	-2313 Apr 23 j 23:36	4° Y 59'44	
max. Earth dist.	-2319 Apr 08 j 22:23	29° H 01'13	49.53084 AU	retrograde	-2313 Jul 26 j 19:31	6° Y 17'54	
morning rise	-2319 Apr 15 j 06:56	29° H 09'52		opposition	-2313 Oct 17 j 07:28	5° Y 18'00	-13°11'49
	-2319 May 25 j 21:17	0° Y		min. Earth dist.	-2313 Oct 17 j 16:20	5° Y 17'35	47.11610 AU
retrograde	-2319 Jul 20 j 10:50	0° Y 30'43		direct	-2312 Jan 06 j 20:45	4° Y 18'20	
	-2319 Sep 14 j 15:14	30° R H		evening set	-2312 Apr 06 j 19:56	5° Y 33'58	
opposition	-2319 Oct 11 j 04:10	29° H 30'59	-14°17'08				
min. Earth dist.	-2319 Oct 11 j 04:19	29° H 30'59	47.56159 AU	conjunction	-2312 Apr 15 j 16:11	5° Y 46'02	-12°34'14
direct	-2319 Dec 31 j 14:53	28° H 31'41		minimum elong	-2312 Apr 15 j 16:23	5° Y 46'03	12°34'13
evening set	-2318 Apr 03 j 09:37	29° H 49'36		max. Earth dist.	-2312 Apr 15 j 06:53	5° Y 45'30	49.02286 AU
				morning rise	-2312 Apr 24 j 13:13	5° Y 58'10	
conjunction	-2318 Apr 10 j 03:42	29° H 58'48	-13°37'59	retrograde	-2312 Jul 26 j 22:37	7° Y 15'57	
minimum elong	-2318 Apr 10 j 03:54	29° H 58'48	13°37'58	opposition	-2312 Oct 17 j 12:02	6° Y 16'01	-13°00'03
max. Earth dist.	-2318 Apr 10 j 01:50	29° H 58'41	49.47267 AU	min. Earth dist.	-2312 Oct 17 j 21:27	6° Y 15'33	47.02816 AU
	-2318 Apr 11 j 00:53	0° Y		direct	-2311 Jan 07 j 04:11	5° Y 16'16	
morning rise	-2318 Apr 16 j 22:37	0° Y 08'02		evening set	-2311 Apr 07 j 18:39	6° Y 31'36	
retrograde	-2318 Jul 21 j 15:38	1° Y 28'23					
opposition	-2318 Oct 12 j 08:47	0° Y 28'40	-14°06'50	conjunction	-2311 Apr 16 j 22:13	6° Y 44'06	-12°22'44
min. Earth dist.	-2318 Oct 12 j 11:09	0° Y 28'33	47.49946 AU	minimum elong	-2311 Apr 16 j 22:25	6° Y 44'06	12°22'45
	-2318 Nov 07 j 11:41	30° R H		max. Earth dist.	-2311 Apr 16 j 10:52	6° Y 43'27	48.93512 AU

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Attention, astronomical year style is used: The year -2311 in astronomical counting style is the year 2312 BCE in historical counting style.

morning rise	-2311 Apr 26 j 02:47	6° Υ 56'40	conjunction	-2304 Apr 23 j 19:46	13° Υ 35'41	-10°55'12
retrograde	-2311 Jul 28 j 06:57	8° Υ 14'06	minimum elong	-2304 Apr 23 j 19:59	13° Υ 35'42	10°55'12
opposition	-2311 Oct 18 j 16:37	7° Υ 14'07 -12°48'00	max. Earth dist.	-2304 Apr 22 j 23:17	13° Υ 34'31	48.22406 AU
min. Earth dist.	-2311 Oct 19 j 02:41	7° Υ 13'38 46.93759 AU	morning rise	-2304 May 04 j 23:22	13° Υ 51'05	
direct	-2310 Jan 08 j 06:13	6° Υ 14'19	retrograde	-2304 Aug 04 j 03:37	15° Υ 06'37	
evening set	-2310 Apr 08 j 17:30	7° Υ 29'21	opposition	-2304 Oct 25 j 03:07	14° Υ 06'19	-11°16'22
			min. Earth dist.	-2304 Oct 25 j 21:54	14° Υ 05'25	46.20091 AU
conjunction	-2310 Apr 18 j 04:27	7° Υ 42'17 -12°10'59	direct	-2303 Jan 14 j 16:42	13° Υ 05'59	
minimum elong	-2310 Apr 18 j 04:40	7° Υ 42'17 12°10'58	evening set	-2303 Apr 13 j 17:54	14° Υ 19'33	
max. Earth dist.	-2310 Apr 17 j 16:32	7° Υ 41'36 48.84463 AU	max. Earth dist.	-2303 Apr 24 j 03:49	14° Υ 33'56	48.10369 AU
morning rise	-2310 Apr 27 j 16:20	7° Υ 55'17				
retrograde	-2310 Jul 29 j 14:08	9° Υ 12'24	conjunction	-2303 Apr 25 j 02:38	14° Υ 35'15	-10°41'44
opposition	-2310 Oct 19 j 21:25	8° Υ 12'22 -12°35'41	minimum elong	-2303 Apr 25 j 02:49	14° Υ 35'16	10°41'43
min. Earth dist.	-2310 Oct 20 j 09:09	8° Υ 11'49 46.84418 AU	morning rise	-2303 May 06 j 12:24	14° Υ 51'00	
direct	-2309 Jan 09 j 09:30	7° Υ 12'31	retrograde	-2303 Aug 05 j 08:42	16° Υ 06'19	
evening set	-2309 Apr 09 j 16:48	8° Υ 27'17	opposition	-2303 Oct 26 j 08:20	15° Υ 05'56	-11°02'16
			min. Earth dist.	-2303 Oct 27 j 05:25	15° Υ 04'54	46.07673 AU
conjunction	-2309 Apr 19 j 10:46	8° Υ 40'38 -11°58'58	direct	-2302 Jan 15 j 23:16	14° Υ 05'28	
minimum elong	-2309 Apr 19 j 10:58	8° Υ 40'39 11°58'58	evening set	-2302 Apr 14 j 18:54	15° Υ 18'53	
max. Earth dist.	-2309 Apr 18 j 21:56	8° Υ 39'54 48.75140 AU	max. Earth dist.	-2302 Apr 25 j 10:27	15° Υ 33'35	47.97887 AU
morning rise	-2309 Apr 29 j 05:38	8° Υ 54'03				
retrograde	-2309 Jul 30 j 19:42	10° Υ 10'51	conjunction	-2302 Apr 26 j 09:40	15° Υ 34'56	-10°28'02
opposition	-2309 Oct 21 j 02:02	9° Υ 10'49 -12°23'06	minimum elong	-2302 Apr 26 j 09:53	15° Υ 34'57	10°28'01
min. Earth dist.	-2309 Oct 21 j 13:56	9° Υ 10'14 46.74780 AU	morning rise	-2302 May 08 j 01:12	15° Υ 51'03	
direct	-2308 Jan 10 j 15:00	8° Υ 10'53	retrograde	-2302 Aug 06 j 11:55	17° Υ 06'10	
evening set	-2308 Apr 09 j 16:17	9° Υ 25'26	opposition	-2302 Oct 27 j 13:34	16° Υ 05'41	-10°47'55
			min. Earth dist.	-2302 Oct 28 j 11:24	16° Υ 04'37	45.94823 AU
conjunction	-2308 Apr 19 j 17:06	9° Υ 39'12 -11°46'42	direct	-2301 Jan 17 j 07:51	15° Υ 05'05	
minimum elong	-2308 Apr 19 j 17:19	9° Υ 39'13 11°46'42	evening set	-2301 Apr 15 j 20:17	16° Υ 18'21	
max. Earth dist.	-2308 Apr 19 j 02:13	9° Υ 38'21 48.65488 AU				
morning rise	-2308 Apr 29 j 19:00	9° Υ 53'01	conjunction	-2301 Apr 27 j 16:38	16° Υ 34'46	-10°14'04
retrograde	-2308 Jul 31 j 00:40	11° Υ 09'33	minimum elong	-2301 Apr 27 j 16:50	16° Υ 34'47	10°14'02
opposition	-2308 Oct 21 j 06:57	10° Υ 09'29 -12°10'15	max. Earth dist.	-2301 Apr 26 j 15:04	16° Υ 33'17	47.85004 AU
min. Earth dist.	-2308 Oct 21 j 20:49	10° Υ 08'49 46.64795 AU	morning rise	-2301 May 09 j 14:02	16° Υ 51'15	
direct	-2307 Jan 10 j 21:04	9° Υ 09'30	retrograde	-2301 Aug 07 j 19:44	18° Υ 06'10	
evening set	-2307 Apr 10 j 15:53	10° Υ 23'51	opposition	-2301 Oct 28 j 18:49	17° Υ 05'35	-10°33'18
			min. Earth dist.	-2301 Oct 29 j 17:41	17° Υ 04'29	45.81613 AU
conjunction	-2307 Apr 20 j 23:32	10° Υ 38'00 -11°34'11	direct	-2300 Jan 18 j 11:50	16° Υ 04'52	
minimum elong	-2307 Apr 20 j 23:44	10° Υ 38'01 11°34'10	evening set	-2300 Apr 15 j 21:38	17° Υ 18'01	
max. Earth dist.	-2307 Apr 20 j 08:21	10° Υ 37'08 48.55453 AU				
morning rise	-2307 May 01 j 08:01	10° Υ 52'13	conjunction	-2300 Apr 27 j 23:46	17° Υ 34'47	-9°59'50
retrograde	-2307 Aug 01 j 04:36	12° Υ 08'30	minimum elong	-2300 Apr 27 j 23:58	17° Υ 34'48	9°59'50
opposition	-2307 Oct 22 j 11:52	11° Υ 08'24 -11°57'09	max. Earth dist.	-2300 Apr 26 j 21:35	17° Υ 33'16	47.71772 AU
min. Earth dist.	-2307 Oct 23 j 02:42	11° Υ 07'41 46.54376 AU	morning rise	-2300 May 10 j 02:41	17° Υ 51'37	
direct	-2306 Jan 12 j 04:20	10° Υ 08'21	retrograde	-2300 Aug 08 j 03:19	19° Υ 06'23	
evening set	-2306 Apr 11 j 16:07	11° Υ 22'29	opposition	-2300 Oct 29 j 00:20	18° Υ 05'42	-10°18'24
			min. Earth dist.	-2300 Oct 30 j 00:47	18° Υ 04'31	45.68079 AU
conjunction	-2306 Apr 22 j 06:10	11° Υ 37'02 -11°21'26	direct	-2299 Jan 18 j 15:58	17° Υ 04'52	
minimum elong	-2306 Apr 22 j 06:23	11° Υ 37'03 11°21'25	evening set	-2299 Apr 16 j 23:14	18° Υ 17'54	
max. Earth dist.	-2306 Apr 21 j 12:28	11° Υ 36'01 48.44956 AU	max. Earth dist.	-2299 Apr 28 j 03:40	18° Υ 33'27	47.58255 AU
morning rise	-2306 May 02 j 21:17	11° Υ 51'39				
retrograde	-2306 Aug 02 j 12:12	13° Υ 07'41	conjunction	-2299 Apr 29 j 06:47	18° Υ 35'02	-9°45'21
opposition	-2306 Oct 23 j 16:48	12° Υ 07'32 -11°43'48	minimum elong	-2299 Apr 29 j 06:59	18° Υ 35'02	9°45'19
min. Earth dist.	-2306 Oct 24 j 09:02	12° Υ 06'45 46.43474 AU	morning rise	-2299 May 11 j 15:10	18° Υ 52'13	
direct	-2305 Jan 13 j 08:12	11° Υ 07'24	retrograde	-2299 Aug 09 j 10:42	20° Υ 06'49	
evening set	-2305 Apr 12 j 16:30	12° Υ 21'20	opposition	-2299 Oct 30 j 05:49	19° Υ 06'04	-10°03'14
			min. Earth dist.	-2299 Oct 31 j 06:17	19° Υ 04'52	45.54268 AU
conjunction	-2305 Apr 23 j 13:03	12° Υ 36'17 -11°08'26	direct	-2298 Jan 19 j 21:31	18° Υ 05'06	
minimum elong	-2305 Apr 23 j 13:15	12° Υ 36'17 11°08'25	evening set	-2298 Apr 18 j 01:12	19° Υ 18'04	
max. Earth dist.	-2305 Apr 22 j 18:01	12° Υ 35'11 48.33938 AU	max. Earth dist.	-2298 Apr 29 j 09:03	19° Υ 33'51	47.44455 AU
morning rise	-2305 May 04 j 10:31	12° Υ 51'17				
retrograde	-2305 Aug 03 j 20:08	14° Υ 07'05	conjunction	-2298 Apr 30 j 14:05	19° Υ 35'33	-9°30'35
opposition	-2305 Oct 24 j 22:02	13° Υ 06'51 -11°30'12	minimum elong	-2298 Apr 30 j 14:16	19° Υ 35'34	9°30'34
min. Earth dist.	-2305 Oct 25 j 16:23	13° Υ 05'58 46.32038 AU	morning rise	-2298 May 13 j 03:53	19° Υ 53'05	
direct	-2304 Jan 14 j 12:06	12° Υ 06'37	retrograde	-2298 Aug 10 j 17:13	21° Υ 07'34	
evening set	-2304 Apr 12 j 17:05	13° Υ 20'22	opposition	-2298 Oct 31 j 11:27	20° Υ 06'43	-9°47'46
			min. Earth dist.	-2298 Nov 01 j 13:47	20° Υ 05'26	45.40188 AU

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Attention, astronomical year style is used: The year -2297 in astronomical counting style is the year 2298 BCE in historical counting style.

direct	-2297 Jan 21 j 04:07	19° Υ 05'39		retrograde	-2291 Aug 17 j 19:55	28° Υ 23'44	
evening set	-2297 Apr 19 j 03:25	20° Υ 18'35		opposition	-2291 Nov 07 j 06:31	27° Υ 22'11	-7°51'45
				min. Earth dist.	-2291 Nov 08 j 17:32	27° Υ 20'26	44.30834 AU
conjunction	-2297 May 01 j 21:37	20° Υ 36'24	-9°15'33	direct	-2290 Jan 28 j 02:06	26° Υ 20'07	
minimum elong	-2297 May 01 j 21:49	20° Υ 36'25	9°15'32	evening set	-2290 Apr 25 j 03:05	27° Υ 33'05	
max. Earth dist.	-2297 Apr 30 j 16:33	20° Υ 34'42	47.30386 AU	max. Earth dist.	-2290 May 07 j 13:56	27° Υ 50'48	46.20523 AU
morning rise	-2297 May 14 j 16:27	20° Υ 54'17					
retrograde	-2297 Aug 11 j 21:47	22° Υ 08'40		conjunction	-2290 May 09 j 05:52	27° Υ 53'12	-7°22'59
opposition	-2297 Nov 01 j 17:12	21° Υ 07'46	-9°32'01	minimum elong	-2290 May 09 j 06:02	27° Υ 53'12	7°22'57
min. Earth dist.	-2297 Nov 02 j 19:58	21° Υ 06'27	45.25814 AU	morning rise	-2290 May 23 j 08:59	28° Υ 13'21	
direct	-2296 Jan 22 j 12:31	20° Υ 06'35		retrograde	-2290 Aug 19 j 03:10	29° Υ 27'24	
evening set	-2296 Apr 19 j 05:51	21° Υ 19'29		opposition	-2290 Nov 08 j 13:07	28° Υ 25'41	-7°34'04
max. Earth dist.	-2296 Apr 30 j 21:45	21° Υ 35'49	47.16009 AU	min. Earth dist.	-2290 Nov 10 j 01:47	28° Υ 23'51	44.13425 AU
				direct	-2289 Jan 29 j 08:51	27° Υ 23'26	
conjunction	-2296 May 02 j 04:58	21° Υ 37'39	-9°00'15	evening set	-2289 Apr 26 j 07:41	28° Υ 36'26	
minimum elong	-2296 May 02 j 05:09	21° Υ 37'39	9°00'14	max. Earth dist.	-2289 May 08 j 21:09	28° Υ 54'22	46.03079 AU
morning rise	-2296 May 15 j 04:59	21° Υ 55'52					
retrograde	-2296 Aug 12 j 05:37	23° Υ 10'11		conjunction	-2289 May 10 j 14:27	28° Υ 56'51	-7°05'51
opposition	-2296 Nov 01 j 23:04	22° Υ 09'13	-9°15'59	minimum elong	-2289 May 10 j 14:37	28° Υ 56'51	7°05'50
min. Earth dist.	-2296 Nov 03 j 03:06	22° Υ 07'50	45.11119 AU	morning rise	-2289 May 24 j 21:39	29° Υ 17'18	
direct	-2295 Jan 22 j 17:27	21° Υ 07'56			-2289 Jun 27 j 09:52	0° \mathcal{B}	
evening set	-2295 Apr 20 j 08:35	22° Υ 20'49		retrograde	-2289 Aug 20 j 13:04	0° \mathcal{B} 31'20	
max. Earth dist.	-2295 May 02 j 04:43	22° Υ 37'26	47.01260 AU		-2289 Oct 14 j 05:48	30° $\mathcal{R}\Upsilon$	
				opposition	-2289 Nov 09 j 19:52	29° Υ 29'28	-7°16'07
conjunction	-2295 May 03 j 12:46	22° Υ 39'19	-8°44'41	min. Earth dist.	-2289 Nov 11 j 08:49	29° Υ 27'37	43.95685 AU
minimum elong	-2295 May 03 j 12:58	22° Υ 39'20	8°44'40	direct	-2288 Jan 30 j 14:12	28° Υ 26'59	
morning rise	-2295 May 16 j 17:35	22° Υ 57'53		evening set	-2288 Apr 26 j 12:20	29° Υ 40'04	
retrograde	-2295 Aug 13 j 14:16	24° Υ 12'08		max. Earth dist.	-2288 May 09 j 04:01	29° Υ 58'11	45.85310 AU
opposition	-2295 Nov 03 j 05:04	23° Υ 11'05	-8°59'41				
min. Earth dist.	-2295 Nov 04 j 10:55	23° Υ 09'36	44.96016 AU	conjunction	-2288 May 10 j 23:01	0° \mathcal{B} 00'47	-6°48'27
direct	-2294 Jan 23 j 21:57	22° Υ 09'41		minimum elong	-2288 May 10 j 23:10	0° \mathcal{B} 00'47	6°48'24
evening set	-2294 Apr 21 j 11:48	23° Υ 22'34			-2288 May 10 j 10:06	0° \mathcal{B}	
max. Earth dist.	-2294 May 03 j 11:05	23° Υ 39'25	46.86087 AU	morning rise	-2288 May 25 j 10:05	0° \mathcal{B} 21'32	
				retrograde	-2288 Aug 20 j 22:50	1° \mathcal{B} 35'35	
conjunction	-2294 May 04 j 20:43	23° Υ 41'24	-8°28'51	opposition	-2288 Nov 10 j 02:54	0° \mathcal{B} 33'32	-6°57'51
minimum elong	-2294 May 04 j 20:54	23° Υ 41'25	8°28'50	min. Earth dist.	-2288 Nov 11 j 17:39	0° \mathcal{B} 31'35	43.77662 AU
morning rise	-2294 May 18 j 06:19	24° Υ 00'18			-2288 Dec 09 j 10:23	30° $\mathcal{R}\Upsilon$	
retrograde	-2294 Aug 15 j 01:07	25° Υ 14'30		direct	-2287 Jan 30 j 20:44	29° Υ 30'51	
opposition	-2294 Nov 04 j 11:11	24° Υ 13'21	-8°43'06		-2287 Mar 23 j 21:48	0° \mathcal{B}	
min. Earth dist.	-2294 Nov 05 j 17:36	24° Υ 11'51	44.80453 AU	evening set	-2287 Apr 27 j 17:21	0° \mathcal{B} 44'02	
direct	-2293 Jan 25 j 01:47	23° Υ 11'49		max. Earth dist.	-2287 May 10 j 12:56	1° \mathcal{B} 02'26	45.67292 AU
evening set	-2293 Apr 22 j 15:17	24° Υ 24'44					
max. Earth dist.	-2293 May 04 j 16:53	24° Υ 41'46	46.70410 AU	conjunction	-2287 May 12 j 07:55	1° \mathcal{B} 05'02	-6°30'45
				minimum elong	-2287 May 12 j 08:04	1° \mathcal{B} 05'03	6°30'44
conjunction	-2293 May 06 j 04:49	24° Υ 43'53	-8°12'46	morning rise	-2287 May 26 j 22:36	1° \mathcal{B} 26'05	
minimum elong	-2293 May 06 j 05:01	24° Υ 43'54	8°12'44	retrograde	-2287 Aug 22 j 05:38	2° \mathcal{B} 40'10	
morning rise	-2293 May 19 j 19:05	25° Υ 03'06		opposition	-2287 Nov 11 j 09:53	1° \mathcal{B} 37'57	-6°39'17
retrograde	-2293 Aug 16 j 08:43	26° Υ 17'15		min. Earth dist.	-2287 Nov 13 j 00:44	1° \mathcal{B} 35'59	43.59403 AU
opposition	-2293 Nov 05 j 17:33	25° Υ 15'59	-8°26'15	direct	-2286 Feb 01 j 06:17	0° \mathcal{B} 35'04	
min. Earth dist.	-2293 Nov 07 j 02:24	25° Υ 14'22	44.64389 AU	evening set	-2286 Apr 28 j 22:52	1° \mathcal{B} 48'22	
direct	-2292 Jan 26 j 08:21	24° Υ 14'18		max. Earth dist.	-2286 May 11 j 19:51	2° \mathcal{B} 06'56	45.49050 AU
evening set	-2292 Apr 22 j 18:57	25° Υ 27'14					
max. Earth dist.	-2292 May 05 j 00:30	25° Υ 44'32	46.54243 AU	conjunction	-2286 May 13 j 16:56	2° \mathcal{B} 09'40	-6°12'47
				minimum elong	-2286 May 13 j 17:05	2° \mathcal{B} 09'41	6°12'45
conjunction	-2292 May 06 j 13:07	25° Υ 46'42	-7°56'26	morning rise	-2286 May 28 j 11:21	2° \mathcal{B} 31'01	
minimum elong	-2292 May 06 j 13:17	25° Υ 46'43	7°56'24	retrograde	-2286 Aug 23 j 13:56	3° \mathcal{B} 45'09	
morning rise	-2292 May 20 j 07:41	26° Υ 06'15		opposition	-2286 Nov 12 j 17:12	2° \mathcal{B} 42'47	-6°20'25
retrograde	-2292 Aug 16 j 12:55	27° Υ 20'20		min. Earth dist.	-2286 Nov 14 j 09:17	2° \mathcal{B} 40'46	43.40938 AU
opposition	-2292 Nov 05 j 23:57	26° Υ 18'57	-8°09'08	direct	-2285 Feb 02 j 13:35	1° \mathcal{B} 39'44	
min. Earth dist.	-2292 Nov 07 j 09:28	26° Υ 17'17	44.47834 AU	evening set	-2285 Apr 30 j 04:33	2° \mathcal{B} 53'10	
direct	-2291 Jan 26 j 18:43	25° Υ 17'05		max. Earth dist.	-2285 May 13 j 04:54	3° \mathcal{B} 12'00	45.30585 AU
evening set	-2291 Apr 23 j 22:52	26° Υ 30'01					
max. Earth dist.	-2291 May 06 j 06:04	26° Υ 47'29	46.37603 AU	conjunction	-2285 May 15 j 02:15	3° \mathcal{B} 14'46	-5°54'32
				minimum elong	-2285 May 15 j 02:23	3° \mathcal{B} 14'46	5°54'30
conjunction	-2291 May 07 j 21:16	26° Υ 49'49	-7°39'50	morning rise	-2285 May 29 j 23:54	3° \mathcal{B} 36'24	
minimum elong	-2291 May 07 j 21:27	26° Υ 49'50	7°39'49	retrograde	-2285 Aug 24 j 21:10	4° \mathcal{B} 50'38	
morning rise	-2291 May 21 j 20:21	27° Υ 09'40		opposition	-2285 Nov 14 j 00:41	3° \mathcal{B} 48'08	-6°01'15

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Attention, astronomical year style is used: The year -2285 in astronomical counting style is the year 2286 BCE in historical counting style.

min. Earth dist.	-2285 Nov 15 j 17:52	3° 8 46'02	43.22241 AU	morning rise	-2278 Jun 07 j 18:40	11° 8 30'28	
direct	-2284 Feb 03 j 21:49	2° 8 44'53		retrograde	-2278 Sep 01 j 21:59	12° 8 45'59	
evening set	-2284 Apr 30 j 10:45	3° 8 58'30		opposition	-2278 Nov 21 j 11:09	11° 8 42'17	-3°38'40
max. Earth dist.	-2284 May 13 j 13:00	4° 8 17'32	45.11895 AU	min. Earth dist.	-2278 Nov 23 j 13:18	11° 8 39'41	41.81521 AU
				direct	-2277 Feb 11 j 05:11	10° 8 37'32	
conjunction	-2284 May 15 j 11:39	4° 8 20'23	-5°35'59	evening set	-2277 May 08 j 17:25	11° 8 52'59	
minimum elong	-2284 May 15 j 11:48	4° 8 20'24	5°35'57	max. Earth dist.	-2277 May 22 j 04:49	12° 8 13'12	43.70507 AU
morning rise	-2284 May 30 j 12:40	4° 8 42'18					
retrograde	-2284 Aug 25 j 08:40	5° 8 56'41		conjunction	-2277 May 24 j 12:56	12° 8 16'45	-3°18'22
opposition	-2284 Nov 14 j 08:16	4° 8 54'02	-5°41'46	minimum elong	-2277 May 24 j 13:01	12° 8 16'45	3°18'19
min. Earth dist.	-2284 Nov 16 j 01:45	4° 8 51'56	43.03299 AU	morning rise	-2277 Jun 09 j 07:46	12° 8 40'30	
direct	-2283 Feb 04 j 02:53	3° 8 50'37		retrograde	-2277 Sep 03 j 10:13	13° 8 56'16	
evening set	-2283 May 01 j 17:12	5° 8 04'27		opposition	-2277 Nov 22 j 20:18	12° 8 52'21	-3°17'05
max. Earth dist.	-2283 May 14 j 21:03	5° 8 23'39	44.92900 AU	min. Earth dist.	-2277 Nov 24 j 22:30	12° 8 49'44	41.59938 AU
				direct	-2276 Feb 12 j 14:59	11° 8 47'19	
conjunction	-2283 May 16 j 21:18	5° 8 26'37	-5°17'09	evening set	-2276 May 09 j 02:54	13° 8 03'07	
minimum elong	-2283 May 16 j 21:26	5° 8 26'37	5°17'07	max. Earth dist.	-2276 May 22 j 14:00	13° 8 23'26	43.48870 AU
morning rise	-2283 Jun 01 j 01:24	5° 8 48'49					
retrograde	-2283 Aug 26 j 19:50	7° 8 03'21		conjunction	-2276 May 25 j 00:13	13° 8 27'07	-2°57'35
opposition	-2283 Nov 15 j 16:15	6° 8 00'34	-5°22'00	minimum elong	-2276 May 25 j 00:18	13° 8 27'08	2°57'33
min. Earth dist.	-2283 Nov 17 j 11:59	5° 8 58'20	42.84026 AU	morning rise	-2276 Jun 09 j 20:59	13° 8 51'07	
direct	-2282 Feb 05 j 08:53	4° 8 56'57			-2276 Aug 10 j 08:45	15° 8	
evening set	-2282 May 03 j 00:15	6° 8 11'02		retrograde	-2276 Sep 03 j 21:00	15° 8 07'09	
max. Earth dist.	-2282 May 16 j 06:33	6° 8 30'27	44.73545 AU		-2276 Sep 28 j 06:37	15° 8	
				opposition	-2276 Nov 23 j 05:48	14° 8 03'00	-2°55'13
conjunction	-2282 May 18 j 07:26	6° 8 33'28	-4°58'03	min. Earth dist.	-2276 Nov 25 j 09:39	14° 8 00'17	41.38132 AU
minimum elong	-2282 May 18 j 07:33	6° 8 33'29	4°58'00	direct	-2275 Feb 13 j 00:39	12° 8 57'42	
morning rise	-2282 Jun 02 j 14:21	6° 8 55'57		evening set	-2275 May 10 j 12:36	14° 8 13'52	
retrograde	-2282 Aug 28 j 04:33	8° 8 10'38		max. Earth dist.	-2275 May 24 j 01:39	14° 8 34'23	43.27021 AU
opposition	-2282 Nov 17 j 00:16	7° 8 07'43	-5°01'55				
min. Earth dist.	-2282 Nov 18 j 20:28	7° 8 05'27	42.64358 AU	conjunction	-2275 May 26 j 11:49	14° 8 38'06	-2°36'31
direct	-2281 Feb 06 j 19:29	6° 8 03'55		minimum elong	-2275 May 26 j 11:53	14° 8 38'07	2°36'28
evening set	-2281 May 04 j 07:50	7° 8 18'14			-2275 Jun 09 j 20:39	15° 8	
max. Earth dist.	-2281 May 17 j 14:07	7° 8 37'46	44.53765 AU	morning rise	-2275 Jun 11 j 10:04	15° 8 02'20	
				retrograde	-2275 Sep 05 j 04:45	16° 8 18'40	
conjunction	-2281 May 19 j 17:41	7° 8 40'58	-4°38'40	opposition	-2275 Nov 24 j 15:36	15° 8 14'18	-2°33'02
minimum elong	-2281 May 19 j 17:47	7° 8 40'58	4°38'38	min. Earth dist.	-2275 Nov 26 j 19:57	15° 8 11'32	41.16130 AU
morning rise	-2281 Jun 04 j 03:28	8° 8 03'42			-2275 Dec 06 j 01:14	15° 8	
retrograde	-2281 Aug 29 j 13:57	9° 8 18'35		direct	-2274 Feb 14 j 13:29	14° 8 08'43	
opposition	-2281 Nov 18 j 08:43	8° 8 15'29	-4°41'33		-2274 Apr 24 j 06:03	15° 8	
min. Earth dist.	-2281 Nov 20 j 06:46	8° 8 13'07	42.44267 AU	evening set	-2274 May 11 j 23:06	15° 8 25'17	
direct	-2280 Feb 08 j 04:48	7° 8 11'28		max. Earth dist.	-2274 May 25 j 11:52	15° 8 45'54	43.05002 AU
evening set	-2280 May 04 j 15:28	8° 8 26'03					
max. Earth dist.	-2280 May 18 j 00:02	8° 8 45'48	44.33543 AU	conjunction	-2274 May 27 j 23:40	15° 8 49'45	-2°15'10
				minimum elong	-2274 May 27 j 23:44	15° 8 49'46	2°15'08
conjunction	-2280 May 20 j 04:07	8° 8 49'03	-4°19'00	morning rise	-2274 Jun 12 j 23:28	16° 8 14'12	
minimum elong	-2280 May 20 j 04:14	8° 8 49'03	4°18'58	retrograde	-2274 Sep 06 j 16:23	17° 8 30'52	
morning rise	-2280 Jun 04 j 16:18	9° 8 12'03		opposition	-2274 Nov 26 j 01:33	16° 8 26'17	-2°10'32
retrograde	-2280 Aug 29 j 22:11	10° 8 27'08		min. Earth dist.	-2274 Nov 28 j 06:21	16° 8 23'29	40.93984 AU
opposition	-2280 Nov 18 j 17:24	9° 8 23'51	-4°20'53	direct	-2273 Feb 15 j 22:24	15° 8 20'26	
min. Earth dist.	-2280 Nov 20 j 16:45	9° 8 21'25	42.23732 AU	evening set	-2273 May 13 j 10:00	16° 8 37'26	
direct	-2279 Feb 08 j 14:35	8° 8 19'37		max. Earth dist.	-2273 May 26 j 23:25	16° 8 58'13	42.82820 AU
evening set	-2279 May 05 j 23:46	9° 8 34'27					
max. Earth dist.	-2279 May 19 j 08:45	9° 8 54'20	44.12904 AU	conjunction	-2273 May 29 j 11:57	17° 8 02'08	-1°53'33
				minimum elong	-2273 May 29 j 12:00	17° 8 02'08	1°53'30
conjunction	-2279 May 21 j 14:47	9° 8 57'43	-3°59'04	morning rise	-2273 Jun 14 j 12:50	17° 8 26'48	
minimum elong	-2279 May 21 j 14:53	9° 8 57'43	3°59'02	retrograde	-2273 Sep 08 j 04:45	18° 8 43'51	
morning rise	-2279 Jun 06 j 05:31	10° 8 20'59		opposition	-2273 Nov 27 j 12:03	17° 8 39'03	-1°47'44
retrograde	-2279 Aug 31 j 09:34	11° 8 36'16		min. Earth dist.	-2273 Nov 29 j 18:24	17° 8 36'09	40.71681 AU
opposition	-2279 Nov 20 j 02:02	10° 8 32'48	-3°59'55	direct	-2272 Feb 17 j 06:14	16° 8 32'56	
min. Earth dist.	-2279 Nov 22 j 02:11	10° 8 30'18	42.02808 AU	evening set	-2272 May 13 j 21:16	17° 8 50'25	
direct	-2278 Feb 09 j 21:41	9° 8 28'18		max. Earth dist.	-2272 May 27 j 11:21	18° 8 11'21	42.60483 AU
evening set	-2278 May 07 j 08:25	10° 8 43'26					
max. Earth dist.	-2278 May 20 j 18:07	11° 8 03'27	43.91869 AU	conjunction	-2272 May 30 j 00:18	18° 8 15'18	-1°31'38
				minimum elong	-2272 May 30 j 00:21	18° 8 15'19	1°31'36
conjunction	-2278 May 23 j 01:49	11° 8 06'57	-3°38'51	morning rise	-2272 Jun 15 j 02:13	18° 8 40'11	
minimum elong	-2278 May 23 j 01:55	11° 8 06'57	3°38'49	retrograde	-2272 Sep 08 j 18:46	19° 8 57'39	

Attention, astronomical year style is used: The year -2272 in astronomical counting style is the year 2273 BCE in historical counting style.

opposition	-2272 Nov 27 j 22:39	18° 8 52'38	-1°24'38	max. Earth dist.	-2265 Jun 06 j 04:48	27° 8 07'17	40.95621 AU
min. Earth dist.	-2272 Nov 30 j 04:58	18° 8 49'44	40.49201 AU				
direct	-2271 Feb 17 j 16:37	17° 8 46'16		conjunction	-2265 Jun 09 j 02:39	27° 8 12'02	1°09'23
evening set	-2271 May 15 j 09:24	19° 8 04'15		minimum elong	-2265 Jun 09 j 02:37	27° 8 12'02	1°09'26
max. Earth dist.	-2271 May 28 j 22:09	19° 8 25'14	42.37918 AU	morning rise	-2265 Jun 25 j 04:37	27° 8 38'04	
				retrograde	-2265 Sep 18 j 20:53	28° 8 59'07	
conjunction	-2271 May 31 j 13:12	19° 8 29'21	-1°09'27	opposition	-2265 Dec 07 j 11:14	27° 8 52'14	1°25'25
minimum elong	-2271 May 31 j 13:14	19° 8 29'21	1°09'24	min. Earth dist.	-2265 Dec 10 j 01:46	27° 8 48'48	38.83255 AU
morning rise	-2271 Jun 16 j 15:55	19° 8 54'26		direct	-2264 Feb 27 j 05:33	26° 8 43'36	
retrograde	-2271 Sep 10 j 10:04	21° 8 12'19		evening set	-2264 May 24 j 15:02	28° 8 05'57	
opposition	-2271 Nov 29 j 09:36	20° 8 07'05	-1°01'13	max. Earth dist.	-2264 Jun 06 j 18:00	28° 8 27'16	40.70903 AU
min. Earth dist.	-2271 Dec 01 j 17:55	20° 8 04'05	40.26481 AU				
direct	-2270 Feb 19 j 02:54	19° 8 00'27		conjunction	-2264 Jun 09 j 17:51	28° 8 32'11	1°33'25
evening set	-2270 May 16 j 22:03	20° 8 19'00		minimum elong	-2264 Jun 09 j 17:49	28° 8 32'11	1°33'28
max. Earth dist.	-2270 May 30 j 11:24	20° 8 40'09	42.15068 AU	morning rise	-2264 Jun 25 j 18:55	28° 8 58'20	
					-2264 Aug 10 j 16:31	0° II	
conjunction	-2270 Jun 02 j 02:38	20° 8 44'18	-0°46'59	retrograde	-2264 Sep 19 j 12:49	0° II 20'02	
minimum elong	-2270 Jun 02 j 02:40	20° 8 44'18	0°46'57		-2264 Oct 29 j 16:23	30° R 8	
morning rise	-2270 Jun 18 j 05:44	21° 8 09'33		opposition	-2264 Dec 08 j 00:47	29° 8 12'50	1°50'51
retrograde	-2270 Sep 11 j 22:15	22° 8 27'55		min. Earth dist.	-2264 Dec 10 j 16:29	29° 8 09'18	38.58509 AU
opposition	-2270 Nov 30 j 21:00	21° 8 22'27	-0°37'31	direct	-2263 Feb 27 j 19:35	28° 8 03'49	
min. Earth dist.	-2270 Dec 03 j 06:01	21° 8 19'23	40.03441 AU	evening set	-2263 May 26 j 08:01	29° 8 26'56	
direct	-2269 Feb 20 j 16:29	20° 8 15'32		max. Earth dist.	-2263 Jun 08 j 09:59	29° 8 48'20	40.46043 AU
evening set	-2269 May 18 j 11:27	21° 8 34'38					
max. Earth dist.	-2269 May 31 j 22:40	21° 8 55'47	41.91874 AU	conjunction	-2263 Jun 11 j 09:46	29° 8 53'17	1°57'41
				minimum elong	-2263 Jun 11 j 09:43	29° 8 53'17	1°57'44
conjunction	-2269 Jun 03 j 16:12	22° 8 00'08	-0°24'15		-2263 Jun 15 j 11:09	0° II	
minimum elong	-2269 Jun 03 j 16:13	22° 8 00'08	0°24'11	morning rise	-2263 Jun 27 j 09:21	0° II 19'32	
morning rise	-2269 Jun 19 j 19:43	22° 8 25'34		retrograde	-2263 Sep 21 j 02:36	1° II 41'55	
retrograde	-2269 Sep 13 j 11:10	23° 8 44'25		opposition	-2263 Dec 09 j 14:42	0° II 34'24	2°16'33
opposition	-2269 Dec 02 j 08:44	22° 8 38'42	-0°13'30	min. Earth dist.	-2263 Dec 12 j 07:10	0° II 30'48	38.33658 AU
min. Earth dist.	-2269 Dec 04 j 19:03	22° 8 35'33	39.80057 AU		-2262 Jan 05 j 12:11	30° R 8	
direct	-2268 Feb 22 j 04:00	21° 8 31'28		direct	-2262 Mar 01 j 10:26	29° 8 25'01	
evening set	-2268 May 19 j 01:17	22° 8 51'09			-2262 Apr 24 j 07:42	0° II	
max. Earth dist.	-2268 Jun 01 j 11:46	23° 8 12'23	41.68304 AU	evening set	-2262 May 28 j 01:55	0° II 48'57	
				max. Earth dist.	-2262 Jun 10 j 01:09	1° II 10'20	40.21116 AU
conjunction	-2268 Jun 04 j 06:20	23° 8 16'50	-0°01'16				
minimum elong	-2268 Jun 04 j 06:20	23° 8 16'50	0°01'14	conjunction	-2262 Jun 13 j 01:59	1° II 15'24	2°22'12
behind sun begin	-2268 Jun 03 j 23:48	23° 8 16'25		minimum elong	-2262 Jun 13 j 01:54	1° II 15'23	2°22'15
behind sun end	-2268 Jun 04 j 12:52	23° 8 17'14		morning rise	-2262 Jun 29 j 00:04	1° II 41'44	
morning rise	-2268 Jun 20 j 09:43	23° 8 42'26		retrograde	-2262 Sep 22 j 18:32	3° II 04'51	
asc. node	-2268 Jun 23 j 15:02	23° 8 47'25		opposition	-2262 Dec 11 j 05:04	1° II 57'02	2°42'29
retrograde	-2268 Sep 13 j 23:05	25° 8 01'48		min. Earth dist.	-2262 Dec 13 j 21:33	1° II 53'25	38.08773 AU
opposition	-2268 Dec 02 j 20:53	23° 8 55'49	0°10'48	direct	-2261 Mar 02 j 23:23	0° II 47'17	
min. Earth dist.	-2268 Dec 05 j 08:53	23° 8 52'33	39.56307 AU	evening set	-2261 May 29 j 20:22	2° II 12'06	
direct	-2267 Feb 22 j 16:02	22° 8 48'15		max. Earth dist.	-2261 Jun 11 j 16:53	2° II 33'27	39.96139 AU
evening set	-2267 May 20 j 15:46	24° 8 08'33					
max. Earth dist.	-2267 Jun 03 j 00:51	24° 8 29'50	41.44390 AU	conjunction	-2261 Jun 14 j 18:37	2° II 38'37	2°46'56
				minimum elong	-2261 Jun 14 j 18:31	2° II 38'36	2°46'58
conjunction	-2267 Jun 05 j 20:39	24° 8 34'23	0°22'04	morning rise	-2261 Jun 30 j 14:37	3° II 05'01	
minimum elong	-2267 Jun 05 j 20:39	24° 8 34'23	0°22'07	retrograde	-2261 Sep 24 j 11:59	4° II 28'56	
morning rise	-2267 Jun 21 j 23:58	25° 8 00'09		opposition	-2261 Dec 12 j 20:00	3° II 20'49	3°08'41
retrograde	-2267 Sep 15 j 14:20	26° 8 20'02		min. Earth dist.	-2261 Dec 15 j 13:53	3° II 17'06	37.83863 AU
opposition	-2267 Dec 04 j 09:16	25° 8 13'46	0°35'23	direct	-2260 Mar 03 j 11:24	2° II 10'43	
min. Earth dist.	-2267 Dec 06 j 21:34	25° 8 10'28	39.32226 AU	evening set	-2260 May 30 j 15:38	3° II 36'28	
direct	-2266 Feb 24 j 02:44	24° 8 05'51		max. Earth dist.	-2260 Jun 12 j 10:07	3° II 57'51	39.71145 AU
evening set	-2266 May 22 j 07:00	25° 8 26'48					
max. Earth dist.	-2266 Jun 04 j 13:42	25° 8 48'04	41.20136 AU	conjunction	-2260 Jun 15 j 11:43	4° II 03'03	3°11'52
				minimum elong	-2260 Jun 15 j 11:37	4° II 03'02	3°11'55
conjunction	-2266 Jun 07 j 11:29	25° 8 52'47	0°45'36	morning rise	-2260 Jul 01 j 05:28	4° II 29'30	
minimum elong	-2266 Jun 07 j 11:27	25° 8 52'46	0°45'38	retrograde	-2260 Sep 25 j 06:37	5° II 54'16	
morning rise	-2266 Jun 23 j 14:15	26° 8 18'41		opposition	-2260 Dec 13 j 11:11	4° II 45'51	3°35'07
retrograde	-2266 Sep 17 j 05:56	27° 8 39'09		min. Earth dist.	-2260 Dec 16 j 04:42	4° II 42'09	37.58928 AU
opposition	-2266 Dec 05 j 22:04	26° 8 32'34	1°00'16	direct	-2259 Mar 05 j 01:32	3° II 35'25	
min. Earth dist.	-2266 Dec 08 j 12:30	26° 8 29'09	39.07854 AU	evening set	-2259 Jun 01 j 11:50	5° II 02'09	
direct	-2265 Feb 25 j 14:09	25° 8 24'18		max. Earth dist.	-2259 Jun 14 j 01:55	5° II 23'25	39.46084 AU
evening set	-2265 May 23 j 22:44	26° 8 45'56					

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Attention, astronomical year style is used: The year -2259 in astronomical counting style is the year 2260 BCE in historical counting style.

conjunction	-2259 Jun 17 j 05:17	5°II28'46	3°37'00	evening set	-2252 Jun 13 j 11:04	15°II40'20	
minimum elong	-2259 Jun 17 j 05:10	5°II28'46	3°37'03	max. Earth dist.	-2252 Jun 24 j 14:33	16°II00'21	37.66487 AU
morning rise	-2259 Jul 02 j 20:31	5°II55'16					
retrograde	-2259 Sep 27 j 02:01	7°II20'56		conjunction	-2252 Jun 27 j 23:51	16°II06'29	6°37'34
opposition	-2259 Dec 15 j 03:03	6°II12'13	4°01'46	minimum elong	-2252 Jun 27 j 23:38	16°II06'28	6°37'38
min. Earth dist.	-2259 Dec 17 j 22:12	6°II08'24	37.33918 AU	morning rise	-2252 Jul 12 j 10:05	16°II32'29	
direct	-2258 Mar 06 j 16:31	5°II01'25		retrograde	-2252 Oct 07 j 22:40	18°II05'40	
evening set	-2258 Jun 03 j 08:53	6°II29'13		opposition	-2252 Dec 25 j 09:00	16°II54'25	7°13'29
max. Earth dist.	-2258 Jun 15 j 20:23	6°II50'27	39.20901 AU	min. Earth dist.	-2252 Dec 28 j 09:22	16°II50'07	35.54973 AU
				direct	-2251 Mar 16 j 20:19	15°II40'35	
conjunction	-2258 Jun 18 j 23:35	6°II55'51	4°02'20	evening set	-2251 Jun 15 j 14:45	17°II16'59	
minimum elong	-2258 Jun 18 j 23:27	6°II55'51	4°02'24	max. Earth dist.	-2251 Jun 26 j 13:16	17°II36'48	37.40554 AU
morning rise	-2258 Jul 04 j 11:40	7°II22'21					
retrograde	-2258 Sep 28 j 19:49	8°II48'57		conjunction	-2251 Jun 29 j 21:53	17°II42'57	7°03'47
opposition	-2258 Dec 16 j 19:23	7°II39'57	4°28'38	minimum elong	-2251 Jun 29 j 21:38	17°II42'56	7°03'50
min. Earth dist.	-2258 Dec 19 j 15:04	7°II36'04	37.08765 AU	morning rise	-2251 Jul 14 j 02:07	18°II08'45	
direct	-2257 Mar 08 j 11:23	6°II28'47		retrograde	-2251 Oct 09 j 20:13	19°II43'13	
evening set	-2257 Jun 05 j 07:01	7°II57'40		opposition	-2251 Dec 27 j 05:23	18°II31'32	7°41'21
max. Earth dist.	-2257 Jun 17 j 13:10	8°II18'43	38.95557 AU	min. Earth dist.	-2251 Dec 30 j 05:57	18°II27'12	35.29291 AU
				direct	-2250 Mar 18 j 18:23	17°II17'14	
conjunction	-2257 Jun 20 j 18:15	8°II24'18	4°27'51	evening set	-2250 Jun 17 j 19:43	18°II55'07	
minimum elong	-2257 Jun 20 j 18:06	8°II24'17	4°27'54	max. Earth dist.	-2250 Jun 28 j 10:53	19°II14'34	37.14746 AU
morning rise	-2257 Jul 06 j 03:10	8°II50'48					
retrograde	-2257 Sep 30 j 15:56	10°II18'22		conjunction	-2250 Jul 01 j 20:20	19°II20'50	7°30'01
opposition	-2257 Dec 18 j 12:18	9°II09'03	4°55'42	minimum elong	-2250 Jul 01 j 20:05	19°II20'49	7°30'05
min. Earth dist.	-2257 Dec 21 j 08:44	9°II05'06	36.83457 AU	morning rise	-2250 Jul 15 j 18:23	19°II46'24	
direct	-2256 Mar 09 j 03:51	7°II57'29		retrograde	-2250 Oct 11 j 19:30	21°II22'13	
evening set	-2256 Jun 06 j 05:44	9°II27'29		opposition	-2250 Dec 29 j 02:15	20°II10'09	8°09'15
max. Earth dist.	-2256 Jun 18 j 07:49	9°II48'25	38.70016 AU	min. Earth dist.	-2249 Jan 01 j 02:33	20°II05'48	35.03788 AU
				direct	-2249 Mar 20 j 14:39	18°II55'23	
conjunction	-2256 Jun 21 j 13:28	9°II54'05	4°53'32	evening set	-2249 Jun 20 j 01:39	20°II34'49	
minimum elong	-2256 Jun 21 j 13:19	9°II54'04	4°53'36	max. Earth dist.	-2249 Jun 30 j 10:11	20°II53'56	36.89115 AU
morning rise	-2256 Jul 06 j 18:31	10°II20'33					
retrograde	-2256 Oct 01 j 08:45	11°II49'10		conjunction	-2249 Jul 03 j 19:35	21°II00'16	7°56'15
opposition	-2256 Dec 19 j 05:53	10°II39'29	5°22'58	minimum elong	-2249 Jul 03 j 19:18	21°II00'15	7°56'17
min. Earth dist.	-2256 Dec 22 j 03:45	10°II35'26	36.57959 AU	morning rise	-2249 Jul 17 j 10:40	21°II25'33	
direct	-2255 Mar 10 j 20:42	9°II27'30		retrograde	-2249 Oct 13 j 16:57	23°II02'49	
evening set	-2255 Jun 08 j 05:42	10°II58'40		opposition	-2249 Dec 31 j 00:02	21°II50'21	8°37'07
max. Earth dist.	-2255 Jun 20 j 02:50	11°II19'26	38.44304 AU	min. Earth dist.	-2248 Jan 03 j 01:03	21°II45'56	34.78494 AU
				direct	-2248 Mar 21 j 10:39	20°II35'09	
conjunction	-2255 Jun 23 j 09:17	11°II25'13	5°19'22	evening set	-2248 Jun 21 j 08:44	22°II16'12	
minimum elong	-2255 Jun 23 j 09:06	11°II25'12	5°19'24	max. Earth dist.	-2248 Jul 01 j 10:17	22°II34'59	36.63711 AU
morning rise	-2255 Jul 08 j 10:20	11°II51'36					
retrograde	-2255 Oct 03 j 04:31	13°II21'17		conjunction	-2248 Jul 04 j 19:13	22°II41'21	8°22'25
opposition	-2255 Dec 20 j 23:41	12°II11'14	5°50'24	minimum elong	-2248 Jul 04 j 18:56	22°II41'19	8°22'28
min. Earth dist.	-2255 Dec 23 j 21:38	12°II07'09	36.32312 AU	morning rise	-2248 Jul 18 j 03:03	23°II06'18	
direct	-2254 Mar 12 j 13:18	10°II58'49		retrograde	-2248 Oct 14 j 17:27	24°II45'07	
evening set	-2254 Jun 10 j 06:35	12°II31'12		opposition	-2248 Dec 31 j 22:17	23°II32'16	9°04'58
max. Earth dist.	-2254 Jun 21 j 21:40	12°II51'42	38.18431 AU	min. Earth dist.	-2247 Jan 03 j 22:27	23°II27'52	34.53426 AU
				direct	-2247 Mar 23 j 07:12	22°II16'37	
conjunction	-2254 Jun 25 j 05:44	12°II57'39	5°45'20	evening set	-2247 Jun 23 j 17:11	23°II59'26	
minimum elong	-2254 Jun 25 j 05:32	12°II57'38	5°45'23	max. Earth dist.	-2247 Jul 03 j 09:58	24°II17'43	36.38497 AU
morning rise	-2254 Jul 10 j 02:14	13°II23'57					
retrograde	-2254 Oct 05 j 02:05	14°II54'44		conjunction	-2247 Jul 06 j 19:47	24°II24'12	8°48'31
opposition	-2254 Dec 22 j 18:20	13°II44'18	6°17'59	minimum elong	-2247 Jul 06 j 19:29	24°II24'10	8°48'33
min. Earth dist.	-2254 Dec 25 j 18:02	13°II40'06	36.06552 AU	morning rise	-2247 Jul 19 j 19:44	24°II48'47	
direct	-2253 Mar 14 j 04:44	12°II31'25		retrograde	-2247 Oct 16 j 19:25	26°II29'14	
evening set	-2253 Jun 12 j 08:16	14°II05'05		opposition	-2246 Jan 02 j 21:16	25°II16'01	9°32'43
max. Earth dist.	-2253 Jun 23 j 18:49	14°II25'26	37.92471 AU	min. Earth dist.	-2246 Jan 05 j 22:43	25°II11'31	34.28554 AU
				direct	-2246 Mar 25 j 02:58	23°II59'56	
conjunction	-2253 Jun 27 j 02:32	14°II31'24	6°11'25	evening set	-2246 Jun 26 j 03:01	25°II44'34	
minimum elong	-2253 Jun 27 j 02:19	14°II31'23	6°11'27	max. Earth dist.	-2246 Jul 05 j 12:11	26°II02'26	36.13450 AU
morning rise	-2253 Jul 11 j 18:01	14°II57'34					
retrograde	-2253 Oct 06 j 23:06	16°II29'32		conjunction	-2246 Jul 08 j 21:09	26°II08'55	9°14'30
opposition	-2253 Dec 24 j 13:25	15°II18'41	6°45'41	minimum elong	-2246 Jul 08 j 20:49	26°II08'53	9°14'34
min. Earth dist.	-2253 Dec 27 j 12:46	15°II14'28	35.80742 AU	morning rise	-2246 Jul 21 j 12:32	26°II33'05	
direct	-2252 Mar 15 j 00:39	14°II05'20		retrograde	-2246 Oct 18 j 22:04	28°II15'14	

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Attention, astronomical year style is used: The year -2245 in astronomical counting style is the year 2246 BCE in historical counting style.

opposition	-2245 Jan 04 j 21:08	27° Π 01'39	10°00'22	direct	-2239 Apr 06 j 11:54	6° \mathfrak{D} 56'34	
min. Earth dist.	-2245 Jan 07 j 22:05	26° Π 57'09	34.03829 AU	evening set	-2239 Jul 12 j 15:45	8° \mathfrak{D} 56'25	
direct	-2245 Mar 27 j 03:24	25° Π 45'08		max. Earth dist.	-2239 Jul 18 j 17:48	9° \mathfrak{D} 08'53	34.42007 AU
evening set	-2245 Jun 28 j 14:06	27° Π 31'41					
max. Earth dist.	-2245 Jul 07 j 12:43	27° Π 48'54	35.88523 AU	conjunction	-2239 Jul 22 j 02:32	9° \mathfrak{D} 15'49	12°10'05
				minimum elong	-2239 Jul 22 j 02:10	9° \mathfrak{D} 15'47	12°10'08
conjunction	-2245 Jul 10 j 22:58	27° Π 55'33	9°40'21	morning rise	-2239 Jul 31 j 11:16	9° \mathfrak{D} 35'04	
minimum elong	-2245 Jul 10 j 22:39	27° Π 55'31	9°40'24	retrograde	-2239 Nov 01 j 09:08	11° \mathfrak{D} 31'31	
morning rise	-2245 Jul 23 j 05:24	28° Π 19'14		opposition	-2238 Jan 17 j 18:19	10° \mathfrak{D} 15'01	13°07'09
	-2245 Oct 06 j 15:07	0° \mathfrak{D}		min. Earth dist.	-2238 Jan 20 j 19:23	10° \mathfrak{D} 10'17	32.35178 AU
retrograde	-2245 Oct 21 j 03:20	0° \mathfrak{D} 03'10		direct	-2238 Apr 08 j 17:23	8° \mathfrak{D} 55'10	
	-2245 Nov 04 j 13:58	30° \mathfrak{K} Π		evening set	-2238 Jul 15 j 13:44	10° \mathfrak{D} 57'36	
opposition	-2244 Jan 06 j 21:47	28° Π 49'12	10°27'52	max. Earth dist.	-2238 Jul 21 j 00:32	11° \mathfrak{D} 08'53	34.18599 AU
min. Earth dist.	-2244 Jan 09 j 23:22	28° Π 44'38	33.79233 AU				
direct	-2244 Mar 28 j 03:16	27° Π 32'15		conjunction	-2238 Jul 24 j 09:40	11° \mathfrak{D} 15'55	12°33'36
evening set	-2244 Jun 30 j 02:34	29° Π 20'48		minimum elong	-2238 Jul 24 j 09:15	11° \mathfrak{D} 15'53	12°33'40
max. Earth dist.	-2244 Jul 08 j 16:17	29° Π 37'28	35.63695 AU	morning rise	-2238 Aug 02 j 03:46	11° \mathfrak{D} 34'06	
				retrograde	-2238 Nov 03 j 18:23	13° \mathfrak{D} 33'01	
conjunction	-2244 Jul 12 j 01:49	29° Π 44'07	10°06'01	opposition	-2237 Jan 20 j 00:43	12° \mathfrak{D} 16'04	13°32'07
minimum elong	-2244 Jul 12 j 01:28	29° Π 44'06	10°06'05	min. Earth dist.	-2237 Jan 23 j 01:41	12° \mathfrak{D} 11'20	32.12338 AU
	-2244 Jul 20 j 04:30	0° \mathfrak{D}		direct	-2237 Apr 10 j 21:40	10° \mathfrak{D} 55'44	
morning rise	-2244 Jul 23 j 22:23	0° \mathfrak{D} 07'16		evening set	-2237 Jul 18 j 13:36	13° \mathfrak{D} 00'55	
retrograde	-2244 Oct 22 j 06:08	1° \mathfrak{D} 53'04		max. Earth dist.	-2237 Jul 23 j 10:28	13° \mathfrak{D} 11'06	33.95691 AU
opposition	-2243 Jan 07 j 23:11	0° \mathfrak{D} 38'42	10°55'12				
min. Earth dist.	-2243 Jan 11 j 01:08	0° \mathfrak{D} 34'05	33.54736 AU	conjunction	-2237 Jul 26 j 17:30	13° \mathfrak{D} 18'01	12°56'32
	-2243 Feb 03 j 23:07	30° \mathfrak{K} Π		minimum elong	-2237 Jul 26 j 17:07	13° \mathfrak{D} 17'59	12°56'35
direct	-2243 Mar 30 j 04:51	29° Π 21'18		morning rise	-2237 Aug 03 j 19:35	13° \mathfrak{D} 35'00	
	-2243 May 21 j 23:24	0° \mathfrak{D}		retrograde	-2237 Nov 06 j 03:09	15° \mathfrak{D} 36'31	
evening set	-2243 Jul 02 j 16:39	1° \mathfrak{D} 11'55		opposition	-2236 Jan 22 j 08:02	14° \mathfrak{D} 19'09	13°56'26
max. Earth dist.	-2243 Jul 10 j 18:54	1° \mathfrak{D} 27'50	35.38980 AU	min. Earth dist.	-2236 Jan 25 j 07:53	14° \mathfrak{D} 14'28	31.90017 AU
				direct	-2236 Apr 12 j 04:54	12° \mathfrak{D} 58'23	
conjunction	-2243 Jul 14 j 05:16	1° \mathfrak{D} 34'38	10°31'29	evening set	-2236 Jul 20 j 15:43	15° \mathfrak{D} 06'26	
minimum elong	-2243 Jul 14 j 04:55	1° \mathfrak{D} 34'36	10°31'31	max. Earth dist.	-2236 Jul 24 j 19:12	15° \mathfrak{D} 15'13	33.73341 AU
morning rise	-2243 Jul 25 j 15:35	1° \mathfrak{D} 57'10					
retrograde	-2243 Oct 24 j 10:45	3° \mathfrak{D} 44'54		conjunction	-2236 Jul 28 j 02:07	15° \mathfrak{D} 22'11	13°18'48
opposition	-2242 Jan 10 j 01:21	2° \mathfrak{D} 30'08	11°22'17	minimum elong	-2236 Jul 28 j 01:43	15° \mathfrak{D} 22'09	13°18'51
min. Earth dist.	-2242 Jan 13 j 03:05	2° \mathfrak{D} 25'30	33.30370 AU	morning rise	-2236 Aug 04 j 11:02	15° \mathfrak{D} 37'49	
direct	-2242 Apr 01 j 06:15	1° \mathfrak{D} 12'16		retrograde	-2236 Nov 07 j 15:19	17° \mathfrak{D} 42'07	
evening set	-2242 Jul 05 j 08:01	3° \mathfrak{D} 05'03		opposition	-2235 Jan 23 j 15:58	16° \mathfrak{D} 24'21	14°20'01
max. Earth dist.	-2242 Jul 12 j 23:15	3° \mathfrak{D} 20'12	35.14383 AU	min. Earth dist.	-2235 Jan 26 j 14:47	16° \mathfrak{D} 19'41	31.68273 AU
				direct	-2235 Apr 14 j 12:47	15° \mathfrak{D} 03'08	
conjunction	-2242 Jul 16 j 09:35	3° \mathfrak{D} 27'04	10°56'40	evening set	-2235 Jul 23 j 20:28	17° \mathfrak{D} 14'18	
minimum elong	-2242 Jul 16 j 09:12	3° \mathfrak{D} 27'02	10°56'44	max. Earth dist.	-2235 Jul 27 j 06:37	17° \mathfrak{D} 21'37	33.51553 AU
morning rise	-2242 Jul 27 j 08:40	3° \mathfrak{D} 48'54					
retrograde	-2242 Oct 26 j 14:10	5° \mathfrak{D} 38'40		conjunction	-2235 Jul 30 j 11:47	17° \mathfrak{D} 28'30	13°40'19
opposition	-2241 Jan 12 j 04:29	4° \mathfrak{D} 23'30	11°49'06	minimum elong	-2235 Jul 30 j 11:23	17° \mathfrak{D} 28'28	13°40'21
min. Earth dist.	-2241 Jan 15 j 07:06	4° \mathfrak{D} 18'46	33.06156 AU	morning rise	-2235 Aug 06 j 01:36	17° \mathfrak{D} 42'36	
direct	-2241 Apr 03 j 07:30	3° \mathfrak{D} 05'08		retrograde	-2235 Nov 10 j 01:28	19° \mathfrak{D} 49'52	
evening set	-2241 Jul 08 j 01:06	5° \mathfrak{D} 00'10		opposition	-2234 Jan 26 j 01:06	18° \mathfrak{D} 31'43	14°42'48
max. Earth dist.	-2241 Jul 15 j 04:34	5° \mathfrak{D} 14'30	34.89982 AU	min. Earth dist.	-2234 Jan 28 j 23:42	18° \mathfrak{D} 27'03	31.47077 AU
				direct	-2234 Apr 16 j 20:52	17° \mathfrak{D} 10'06	
conjunction	-2241 Jul 18 j 14:30	5° \mathfrak{D} 21'24	11°21'33	evening set	-2234 Jul 27 j 04:19	19° \mathfrak{D} 24'36	
minimum elong	-2241 Jul 18 j 14:08	5° \mathfrak{D} 21'23	11°21'35	max. Earth dist.	-2234 Jul 29 j 17:41	19° \mathfrak{D} 30'07	33.30326 AU
morning rise	-2241 Jul 29 j 01:42	5° \mathfrak{D} 42'28					
retrograde	-2241 Oct 28 j 19:58	7° \mathfrak{D} 34'22		conjunction	-2234 Aug 01 j 22:01	19° \mathfrak{D} 37'01	14°01'02
opposition	-2240 Jan 14 j 08:15	6° \mathfrak{D} 18'45	12°15'33	minimum elong	-2234 Aug 01 j 21:37	19° \mathfrak{D} 36'59	14°01'05
min. Earth dist.	-2240 Jan 17 j 09:45	6° \mathfrak{D} 14'04	32.82175 AU	morning rise	-2234 Aug 07 j 14:29	19° \mathfrak{D} 49'19	
direct	-2240 Apr 04 j 09:23	4° \mathfrak{D} 59'54		retrograde	-2234 Nov 12 j 13:21	21° \mathfrak{D} 59'47	
evening set	-2240 Jul 09 j 19:26	6° \mathfrak{D} 57'17		opposition	-2233 Jan 28 j 11:02	20° \mathfrak{D} 41'17	15°04'42
max. Earth dist.	-2240 Jul 16 j 09:48	7° \mathfrak{D} 10'39	34.65827 AU	min. Earth dist.	-2233 Jan 31 j 07:59	20° \mathfrak{D} 36'42	31.26426 AU
				direct	-2233 Apr 19 j 05:52	19° \mathfrak{D} 19'16	
conjunction	-2240 Jul 19 j 20:05	7° \mathfrak{D} 17'39	11°46'02	evening set	-2233 Jul 30 j 16:29	21° \mathfrak{D} 37'27	
minimum elong	-2240 Jul 19 j 19:42	7° \mathfrak{D} 17'37	11°46'06	max. Earth dist.	-2233 Aug 01 j 05:54	21° \mathfrak{D} 40'51	33.09619 AU
morning rise	-2240 Jul 29 j 18:36	7° \mathfrak{D} 37'52					
retrograde	-2240 Oct 30 j 01:45	9° \mathfrak{D} 31'59		conjunction	-2233 Aug 04 j 09:16	21° \mathfrak{D} 47'43	14°20'53
opposition	-2239 Jan 15 j 12:56	8° \mathfrak{D} 15'55	12°41'36	minimum elong	-2233 Aug 04 j 08:53	21° \mathfrak{D} 47'41	14°20'55
min. Earth dist.	-2239 Jan 18 j 15:16	8° \mathfrak{D} 11'09	32.58490 AU	morning rise	-2233 Aug 09 j 00:58	21° \mathfrak{D} 57'53	

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Attention, astronomical year style is used: The year -2233 in astronomical counting style is the year 2234 BCE in historical counting style.

retrograde	-2233 Nov 15 j 01:01	24°♄11'55		max. Earth dist.	-2225 Aug 20 j 15:11	10°♄19'00	31.65183 AU
opposition	-2232 Jan 30 j 22:04	22°♄53'03	15°25'40				
min. Earth dist.	-2232 Feb 02 j 19:08	22°♄48'26	31.06288 AU	conjunction	-2225 Aug 23 j 05:12	10°♄25'02	16°19'36
direct	-2232 Apr 20 j 13:57	21°♄30'38		minimum elong	-2225 Aug 23 j 04:58	10°♄25'01	16°19'37
evening set	-2232 Aug 02 j 11:47	23°♄53'06		retrograde	-2225 Dec 04 j 07:51	12°♄59'24	
max. Earth dist.	-2232 Aug 02 j 19:21	23°♄53'47	32.89439 AU	opposition	-2224 Feb 18 j 21:16	11°♄37'38	17°29'23
				min. Earth dist.	-2224 Feb 21 j 05:41	11°♄33'42	29.66559 AU
conjunction	-2232 Aug 05 j 21:11	24°♄00'35	14°39'48	direct	-2224 May 09 j 05:38	10°♄12'17	
minimum elong	-2232 Aug 05 j 20:48	24°♄00'33	14°39'51	max. Earth dist.	-2224 Aug 22 j 11:26	12°♄46'48	31.50712 AU
morning rise	-2232 Aug 09 j 05:39	24°♄07'59					
retrograde	-2232 Nov 16 j 14:27	26°♄26'11		conjunction	-2224 Aug 24 j 22:32	12°♄52'35	16°28'08
opposition	-2231 Feb 01 j 09:55	25°♄06'57	15°45'37	minimum elong	-2224 Aug 24 j 22:19	12°♄52'34	16°28'11
min. Earth dist.	-2231 Feb 04 j 05:06	25°♄02'26	30.86650 AU		-2224 Oct 27 j 01:04	15°♄	
direct	-2231 Apr 23 j 00:23	23°♄44'08		retrograde	-2224 Dec 06 j 02:24	15°♄28'02	
max. Earth dist.	-2231 Aug 05 j 08:35	26°♄08'44	32.69760 AU		-2223 Jan 16 j 10:21	15°♄	
evening set	-2231 Aug 07 j 06:32	26°♄13'00		opposition	-2223 Feb 20 j 15:51	14°♄05'59	17°37'55
				min. Earth dist.	-2223 Feb 22 j 22:51	14°♄02'08	29.52736 AU
conjunction	-2231 Aug 08 j 10:02	26°♄15'33	14°57'43	direct	-2223 May 11 j 22:22	12°♄40'25	
minimum elong	-2231 Aug 08 j 09:41	26°♄15'31	14°57'45		-2223 Aug 18 j 11:34	15°♄	
morning rise	-2231 Aug 09 j 12:50	26°♄18'02		max. Earth dist.	-2223 Aug 25 j 07:58	15°♄16'10	31.37271 AU
retrograde	-2231 Nov 19 j 03:40	28°♄42'32					
opposition	-2230 Feb 03 j 22:43	27°♄22'55	16°04'28	conjunction	-2223 Aug 27 j 16:20	15°♄21'44	16°34'59
min. Earth dist.	-2230 Feb 06 j 17:55	27°♄18'22	30.67525 AU	minimum elong	-2223 Aug 27 j 16:10	15°♄21'43	16°35'01
direct	-2230 Apr 25 j 10:45	25°♄59'42		retrograde	-2223 Dec 08 j 22:10	17°♄58'12	
max. Earth dist.	-2230 Aug 08 j 00:31	28°♄25'53	32.50627 AU	opposition	-2222 Feb 23 j 10:57	16°♄35'55	17°44'37
				min. Earth dist.	-2222 Feb 25 j 14:24	16°♄32'19	29.39909 AU
conjunction	-2230 Aug 10 j 23:42	28°♄32'33	15°14'34	direct	-2222 May 14 j 16:53	15°♄10'10	
minimum elong	-2230 Aug 10 j 23:20	28°♄32'31	15°14'37	max. Earth dist.	-2222 Aug 28 j 04:53	17°♄47'06	31.24846 AU
	-2230 Sep 21 j 10:18	0°♄					
retrograde	-2230 Nov 21 j 17:49	1°♄00'52		conjunction	-2222 Aug 30 j 10:45	17°♄52'27	16°40'06
	-2229 Jan 25 j 16:14	30°♄		minimum elong	-2222 Aug 30 j 10:36	17°♄52'26	16°40'09
opposition	-2229 Feb 06 j 12:30	29°♄40'52	16°22'08	retrograde	-2222 Dec 11 j 16:45	20°♄29'52	
min. Earth dist.	-2229 Feb 09 j 05:54	29°♄36'25	30.48941 AU	opposition	-2221 Feb 26 j 06:58	19°♄07'23	17°49'25
direct	-2229 Apr 28 j 00:18	28°♄17'16		min. Earth dist.	-2221 Feb 28 j 08:58	19°♄03'53	29.28076 AU
	-2229 Jul 21 j 09:34	0°♄		direct	-2221 May 17 j 10:19	17°♄41'30	
max. Earth dist.	-2229 Aug 10 j 15:04	0°♄44'48	32.32077 AU	max. Earth dist.	-2221 Aug 31 j 03:05	20°♄19'36	31.13442 AU
conjunction	-2229 Aug 13 j 13:50	0°♄51'29	15°30'15	conjunction	-2221 Sep 02 j 05:27	20°♄24'38	16°43'27
minimum elong	-2229 Aug 13 j 13:30	0°♄51'27	15°30'17	minimum elong	-2221 Sep 02 j 05:21	20°♄24'37	16°43'28
retrograde	-2229 Nov 24 j 10:04	3°♄21'06		retrograde	-2221 Dec 14 j 13:12	23°♄02'54	
opposition	-2228 Feb 09 j 03:02	2°♄00'44	16°38'32	opposition	-2220 Feb 29 j 03:29	21°♄40'16	17°52'18
min. Earth dist.	-2228 Feb 11 j 19:33	1°♄56'20	30.30965 AU	min. Earth dist.	-2220 Mar 02 j 02:09	21°♄36'59	29.17202 AU
direct	-2228 Apr 29 j 12:41	0°♄36'43		direct	-2220 May 19 j 05:50	20°♄14'15	
max. Earth dist.	-2228 Aug 12 j 08:48	3°♄05'48	32.14173 AU	max. Earth dist.	-2220 Sep 02 j 00:21	22°♄53'17	31.03009 AU
conjunction	-2228 Aug 15 j 04:52	3°♄12'17	15°44'41	conjunction	-2220 Sep 04 j 00:44	22°♄58'08	16°44'58
minimum elong	-2228 Aug 15 j 04:32	3°♄12'15	15°44'44	minimum elong	-2220 Sep 04 j 00:40	22°♄58'08	16°45'01
retrograde	-2228 Nov 26 j 01:36	5°♄43'09		retrograde	-2220 Dec 16 j 09:26	25°♄37'12	
opposition	-2227 Feb 10 j 18:19	4°♄22'24	16°53'34	opposition	-2219 Mar 03 j 00:30	24°♄14'23	17°53'12
min. Earth dist.	-2227 Feb 13 j 09:19	4°♄18'04	30.13644 AU	min. Earth dist.	-2219 Mar 04 j 21:30	24°♄11'14	29.07273 AU
direct	-2227 May 02 j 03:59	2°♄58'01		direct	-2219 May 21 j 23:52	22°♄48'16	
max. Earth dist.	-2227 Aug 15 j 01:16	5°♄28'24	31.96999 AU	max. Earth dist.	-2219 Sep 04 j 23:51	25°♄28'18	30.93548 AU
conjunction	-2227 Aug 17 j 20:24	5°♄34'51	15°57'47	conjunction	-2219 Sep 06 j 20:29	25°♄32'48	16°44'39
minimum elong	-2227 Aug 17 j 20:06	5°♄34'49	15°57'49	minimum elong	-2219 Sep 06 j 20:28	25°♄32'48	16°44'40
retrograde	-2227 Nov 28 j 20:17	8°♄06'56		retrograde	-2219 Dec 19 j 05:06	28°♄12'32	
opposition	-2226 Feb 13 j 10:29	6°♄45'48	17°07'07	opposition	-2218 Mar 05 j 22:14	26°♄49'35	17°52'06
min. Earth dist.	-2226 Feb 15 j 23:27	6°♄41'36	29.97083 AU	min. Earth dist.	-2218 Mar 07 j 16:11	26°♄46'37	28.98262 AU
direct	-2226 May 04 j 20:03	5°♄21'04		direct	-2218 May 24 j 22:04	25°♄23'22	
max. Earth dist.	-2226 Aug 17 j 20:34	7°♄52'56	31.80631 AU	max. Earth dist.	-2218 Sep 07 j 21:28	28°♄04'04	30.85042 AU
conjunction	-2226 Aug 20 j 12:34	7°♄59'07	16°09'27	conjunction	-2218 Sep 09 j 16:19	28°♄08'25	16°42'28
minimum elong	-2226 Aug 20 j 12:17	7°♄59'05	16°09'30	minimum elong	-2218 Sep 09 j 16:20	28°♄08'25	16°42'30
retrograde	-2226 Dec 01 j 12:31	10°♄32'22			-2218 Oct 30 j 08:48	0°♄	
opposition	-2225 Feb 16 j 03:37	9°♄10'54	17°19'06	retrograde	-2218 Dec 22 j 02:44	0°♄48'44	
min. Earth dist.	-2225 Feb 18 j 15:10	9°♄06'47	29.81353 AU		-2217 Feb 15 j 21:06	30°♄	
direct	-2225 May 07 j 12:27	7°♄45'51		opposition	-2217 Mar 08 j 20:24	29°♄25'37	17°48'58

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Attention, astronomical year style is used: The year -2217 in astronomical counting style is the year 2218 BCE in historical counting style.

min. Earth dist.	-2217 Mar 10 j 11:50	29°02'22"50	28.90191 AU	evening set	-2209 Oct 01 j 21:19	21°00'35"07	
direct	-2217 May 27 j 18:19	27°00'59"19					
	-2217 Aug 24 j 21:33	0°00'00"00		conjunction	-2209 Oct 03 j 04:07	21°00'38"14	14°56'52
max. Earth dist.	-2217 Sep 10 j 21:45	0°00'40"49	30.77512 AU	minimum elong	-2209 Oct 03 j 04:26	21°00'38"16	14°56'53
				max. Earth dist.	-2209 Oct 02 j 16:56	21°00'37"06	30.57447 AU
conjunction	-2217 Sep 12 j 12:36	0°00'44"45	16°38'23	morning rise	-2209 Oct 04 j 11:33	21°00'41"26	
minimum elong	-2217 Sep 12 j 12:39	0°00'44"45	16°38'24	retrograde	-2208 Jan 14 j 22:49	24°00'18"55	
retrograde	-2217 Dec 24 j 22:51	3°00'25"31		opposition	-2208 Apr 01 j 10:13	22°00'55"27	15°47'57
opposition	-2216 Mar 10 j 18:50	2°00'02"16	17°43'47	min. Earth dist.	-2208 Apr 01 j 20:05	22°00'54"45	28.65849 AU
min. Earth dist.	-2216 Mar 12 j 07:41	1°00'59"40	28.83060 AU	direct	-2208 Jun 20 j 07:16	21°00'29"47	
direct	-2216 May 29 j 16:06	0°00'35"55		evening set	-2208 Oct 01 j 09:49	24°00'04"42	
max. Earth dist.	-2216 Sep 12 j 19:56	3°00'17"50	30.70981 AU				
				conjunction	-2208 Oct 04 j 23:11	24°00'13"21	14°35'56
conjunction	-2216 Sep 14 j 08:49	3°00'21"36	16°32'24	minimum elong	-2208 Oct 04 j 23:33	24°00'13"23	14°35'56
minimum elong	-2216 Sep 14 j 08:56	3°00'21"36	16°32'26	max. Earth dist.	-2208 Oct 04 j 16:09	24°00'12"38	30.60390 AU
retrograde	-2216 Dec 26 j 21:08	6°00'02"43		morning rise	-2208 Oct 08 j 13:11	24°00'22"04	
opposition	-2215 Mar 13 j 17:30	4°00'39"19	17°36'32	retrograde	-2207 Jan 16 j 17:30	26°00'53"37	
min. Earth dist.	-2215 Mar 15 j 03:06	4°00'36"57	28.76916 AU	opposition	-2207 Apr 04 j 08:43	25°00'30"17	15°24'40
direct	-2215 Jun 01 j 15:08	3°00'12"55		min. Earth dist.	-2207 Apr 04 j 14:44	25°00'29"52	28.68995 AU
max. Earth dist.	-2215 Sep 15 j 20:33	5°00'55"23	30.65482 AU	direct	-2207 Jun 23 j 06:50	24°00'04"54	
				evening set	-2207 Oct 02 j 19:40	26°00'35"49	
conjunction	-2215 Sep 17 j 05:13	5°00'58"43	16°24'29				
minimum elong	-2215 Sep 17 j 05:20	5°00'58"44	16°24'30	conjunction	-2207 Oct 07 j 17:45	26°00'47"45	14°13'23
retrograde	-2215 Dec 29 j 16:58	8°00'40"03		minimum elong	-2207 Oct 07 j 18:06	26°00'47"47	14°13'23
opposition	-2214 Mar 16 j 16:31	7°00'16"32	17°27'13	max. Earth dist.	-2207 Oct 07 j 13:20	26°00'47"18	30.64431 AU
min. Earth dist.	-2214 Mar 17 j 23:44	7°00'14"20	28.71796 AU	morning rise	-2207 Oct 12 j 16:23	26°00'59"43	
direct	-2214 Jun 04 j 14:19	5°00'50"07		retrograde	-2206 Jan 19 j 13:00	29°00'27"31	
max. Earth dist.	-2214 Sep 18 j 19:24	8°00'32"51	30.61090 AU	opposition	-2206 Apr 07 j 07:01	28°00'04"21	14°59'41
				min. Earth dist.	-2206 Apr 07 j 09:49	28°00'04"09	28.73220 AU
conjunction	-2214 Sep 20 j 01:24	8°00'35"54	16°14'38	direct	-2206 Jun 26 j 03:12	26°00'39"15	
minimum elong	-2214 Sep 20 j 01:35	8°00'35"55	16°14'40	evening set	-2206 Oct 04 j 11:53	29°00'06"47	
retrograde	-2213 Jan 01 j 15:17	11°00'17"22					
opposition	-2213 Mar 19 j 15:31	9°00'53"45	17°15'47	conjunction	-2206 Oct 10 j 12:08	29°00'21"17	13°49'18
min. Earth dist.	-2213 Mar 20 j 18:31	9°00'51"51	28.67792 AU	minimum elong	-2206 Oct 10 j 12:32	29°00'21"20	13°49'18
direct	-2213 Jun 07 j 13:20	8°00'27"19		max. Earth dist.	-2206 Oct 10 j 12:00	29°00'21"16	30.69540 AU
				morning rise	-2206 Oct 16 j 12:50	29°00'35"50	
conjunction	-2213 Sep 22 j 21:29	11°00'12"59	16°02'52		-2206 Oct 26 j 16:16	0°00'00"00	
minimum elong	-2213 Sep 22 j 21:41	11°00'13"00	16°02'52	retrograde	-2205 Jan 22 j 06:53	2°00'00"28	
max. Earth dist.	-2213 Sep 21 j 19:46	11°00'10"22	30.57862 AU	opposition	-2205 Apr 10 j 04:56	0°00'37"28	14°33'05
retrograde	-2212 Jan 04 j 11:49	13°00'54"28		min. Earth dist.	-2205 Apr 10 j 04:41	0°00'37"29	28.78459 AU
opposition	-2212 Mar 21 j 14:41	12°00'30"47	17°02'16		-2205 May 03 j 13:35	30°00'00"00	
min. Earth dist.	-2212 Mar 22 j 15:08	12°00'29"03	28.64953 AU	direct	-2205 Jun 29 j 01:09	29°00'12"40	
direct	-2212 Jun 09 j 12:42	11°00'04"25			-2205 Aug 21 j 14:32	0°00'00"00	
				evening set	-2205 Oct 06 j 07:00	1°00'37"05	
conjunction	-2212 Sep 24 j 17:27	13°00'49"51	15°49'09				
minimum elong	-2212 Sep 24 j 17:42	13°00'49"52	15°49'10	conjunction	-2205 Oct 13 j 05:50	1°00'53"47	13°23'47
max. Earth dist.	-2212 Sep 23 j 19:01	13°00'47"33	30.55873 AU	minimum elong	-2205 Oct 13 j 06:13	1°00'53"50	13°23'47
retrograde	-2211 Jan 06 j 09:34	16°00'31"14		max. Earth dist.	-2205 Oct 13 j 07:52	1°00'54"00	30.75656 AU
opposition	-2211 Mar 24 j 13:33	15°00'07"32	16°46'40	morning rise	-2205 Oct 20 j 05:09	2°00'10"32	
min. Earth dist.	-2211 Mar 25 j 09:22	15°00'06"09	28.63337 AU	retrograde	-2204 Jan 25 j 01:25	4°00'32"19	
direct	-2211 Jun 12 j 12:49	13°00'41"17		opposition	-2204 Apr 12 j 02:21	3°00'09"28	14°04'59
				min. Earth dist.	-2204 Apr 11 j 22:29	3°00'09"44	28.84688 AU
conjunction	-2211 Sep 27 j 13:19	16°00'26"23	15°33'33	direct	-2204 Jun 30 j 22:03	1°00'44"57	
minimum elong	-2211 Sep 27 j 13:34	16°00'26"25	15°33'33	evening set	-2204 Oct 07 j 04:13	4°00'06"29	
max. Earth dist.	-2211 Sep 26 j 18:49	16°00'24"30	30.55142 AU				
retrograde	-2210 Jan 09 j 05:26	19°00'07"38		conjunction	-2204 Oct 14 j 23:15	4°00'25"06	12°56'55
opposition	-2210 Mar 27 j 12:41	17°00'43"58	16°29'02	minimum elong	-2204 Oct 14 j 23:40	4°00'25"09	12°56'54
min. Earth dist.	-2210 Mar 28 j 05:50	17°00'42"46	28.62965 AU	max. Earth dist.	-2204 Oct 15 j 05:31	4°00'25"44	30.82744 AU
direct	-2210 Jun 15 j 10:32	16°00'17"52		morning rise	-2204 Oct 22 j 18:35	4°00'43"46	
				retrograde	-2203 Jan 26 j 17:30	7°00'02"51	
conjunction	-2210 Sep 30 j 08:47	19°00'02"33	15°16'06	opposition	-2203 Apr 14 j 23:17	5°00'40"11	13°35'30
minimum elong	-2210 Sep 30 j 09:06	19°00'02"35	15°16'07	min. Earth dist.	-2203 Apr 14 j 17:00	5°00'40"37	28.91860 AU
max. Earth dist.	-2210 Sep 29 j 18:16	19°00'01"04	30.55687 AU	direct	-2203 Jul 03 j 19:22	4°00'15"58	
retrograde	-2209 Jan 12 j 02:39	21°00'43"33		evening set	-2203 Oct 09 j 02:46	6°00'34"43	
opposition	-2209 Mar 30 j 11:35	20°00'19"58	16°09'27				
min. Earth dist.	-2209 Mar 31 j 00:14	20°00'19"05	28.63813 AU	conjunction	-2203 Oct 17 j 15:56	6°00'55"03	12°28'49
direct	-2209 Jun 18 j 10:23	18°00'54"04		minimum elong	-2203 Oct 17 j 16:20	6°00'55"05	12°28'49

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Attention, astronomical year style is used: The year -2203 in astronomical counting style is the year 2204 BCE in historical counting style.

max. Earth dist.	-2203 Oct 18 j 00:18	6° <u>♁</u> 55'53	30.90795 AU	conjunction	-2196 Nov 02 j 17:33	23° <u>♁</u> 38'08	8°44'41
morning rise	-2203 Oct 26 j 05:31	7° <u>♁</u> 15'25		minimum elong	-2196 Nov 02 j 17:54	23° <u>♁</u> 38'10	8°44'39
retrograde	-2202 Jan 29 j 11:26	9° <u>♁</u> 31'57		max. Earth dist.	-2196 Nov 04 j 00:29	23° <u>♁</u> 41'04	31.75367 AU
opposition	-2202 Apr 17 j 19:39	8° <u>♁</u> 09'28	13°04'43	morning rise	-2196 Nov 15 j 04:08	24° <u>♁</u> 06'19	
min. Earth dist.	-2202 Apr 17 j 09:13	8° <u>♁</u> 10'11	29.00001 AU	retrograde	-2195 Feb 14 j 14:39	26° <u>♁</u> 07'50	
direct	-2202 Jul 06 j 15:02	6° <u>♁</u> 45'32		opposition	-2195 May 04 j 23:25	24° <u>♁</u> 47'03	9°01'16
evening set	-2202 Oct 11 j 01:57	9° <u>♁</u> 01'36		min. Earth dist.	-2195 May 03 j 14:35	24° <u>♁</u> 49'13	29.85483 AU
				direct	-2195 Jul 24 j 00:47	23° <u>♁</u> 25'44	
conjunction	-2202 Oct 20 j 07:58	9° <u>♁</u> 23'27	11°59'33	evening set	-2195 Oct 23 j 09:17	25° <u>♁</u> 25'45	
minimum elong	-2202 Oct 20 j 08:23	9° <u>♁</u> 23'30	11°59'32				
max. Earth dist.	-2202 Oct 20 j 20:28	9° <u>♁</u> 24'41	30.99810 AU	conjunction	-2195 Nov 05 j 04:53	25° <u>♁</u> 54'34	8°09'56
morning rise	-2202 Oct 29 j 14:14	9° <u>♁</u> 45'21		minimum elong	-2195 Nov 05 j 05:12	25° <u>♁</u> 54'36	8°09'54
retrograde	-2201 Feb 01 j 02:57	11° <u>♁</u> 59'28		max. Earth dist.	-2195 Nov 06 j 15:34	25° <u>♁</u> 57'50	31.91307 AU
opposition	-2201 Apr 20 j 15:33	10° <u>♁</u> 37'08	12°32'44	morning rise	-2195 Nov 18 j 00:42	26° <u>♁</u> 23'25	
min. Earth dist.	-2201 Apr 20 j 02:53	10° <u>♁</u> 38'00	29.09119 AU	retrograde	-2194 Feb 17 j 00:31	28° <u>♁</u> 23'09	
direct	-2201 Jul 09 j 12:06	9° <u>♁</u> 13'31		min. Earth dist.	-2194 May 06 j 03:21	27° <u>♁</u> 04'59	30.01499 AU
evening set	-2201 Oct 13 j 02:01	11° <u>♁</u> 27'00		opposition	-2194 May 07 j 14:23	27° <u>♁</u> 02'41	8°23'49
				direct	-2194 Jul 26 j 16:36	25° <u>♁</u> 41'48	
conjunction	-2201 Oct 22 j 23:18	11° <u>♁</u> 50'13	11°29'12	evening set	-2194 Oct 25 j 11:18	27° <u>♁</u> 39'53	
minimum elong	-2201 Oct 22 j 23:42	11° <u>♁</u> 50'15	11°29'12				
max. Earth dist.	-2201 Oct 23 j 14:22	11° <u>♁</u> 51'42	31.09829 AU	conjunction	-2194 Nov 07 j 15:17	28° <u>♁</u> 09'16	7°34'48
morning rise	-2201 Nov 01 j 20:55	12° <u>♁</u> 13'29		minimum elong	-2194 Nov 07 j 15:35	28° <u>♁</u> 09'17	7°34'45
retrograde	-2200 Feb 03 j 19:44	14° <u>♁</u> 25'15		max. Earth dist.	-2194 Nov 09 j 03:34	28° <u>♁</u> 12'39	32.08013 AU
opposition	-2200 Apr 22 j 10:24	13° <u>♁</u> 03'07	11°59'38	morning rise	-2194 Nov 20 j 19:51	28° <u>♁</u> 38'41	
min. Earth dist.	-2200 Apr 21 j 17:26	13° <u>♁</u> 04'15	29.19259 AU		-2193 Jan 02 j 11:20	0° <u>♁</u>	
direct	-2200 Jul 11 j 08:40	11° <u>♁</u> 39'48		retrograde	-2193 Feb 19 j 11:59	0° <u>♁</u> 36'43	
evening set	-2200 Oct 14 j 02:27	13° <u>♁</u> 50'49			-2193 Apr 10 j 22:33	30° <u>♁</u>	
conjunction	-2200 Oct 24 j 14:01	14° <u>♁</u> 15'16	10°57'53	min. Earth dist.	-2193 May 08 j 14:05	29° <u>♁</u> 19'05	30.18272 AU
minimum elong	-2200 Oct 24 j 14:25	14° <u>♁</u> 15'18	10°57'51	opposition	-2193 May 10 j 04:32	29° <u>♁</u> 16'34	7°46'01
max. Earth dist.	-2200 Oct 25 j 08:51	14° <u>♁</u> 17'06	31.20871 AU	direct	-2193 Jul 29 j 06:11	27° <u>♁</u> 56'07	
morning rise	-2200 Nov 04 j 01:51	14° <u>♁</u> 39'45		evening set	-2193 Oct 27 j 13:25	29° <u>♁</u> 52'21	
retrograde	-2199 Feb 05 j 09:57	16° <u>♁</u> 49'17			-2193 Oct 31 j 01:13	0° <u>♁</u>	
min. Earth dist.	-2199 Apr 24 j 09:32	15° <u>♁</u> 28'40	29.30455 AU	conjunction	-2193 Nov 10 j 01:17	0° <u>♁</u> 22'12	6°59'23
opposition	-2199 Apr 25 j 04:55	15° <u>♁</u> 27'21	11°25'32	minimum elong	-2193 Nov 10 j 01:34	0° <u>♁</u> 22'14	6°59'21
direct	-2199 Jul 14 j 02:42	14° <u>♁</u> 04'24		max. Earth dist.	-2193 Nov 11 j 16:55	0° <u>♁</u> 25'53	32.25405 AU
evening set	-2199 Oct 16 j 03:18	16° <u>♁</u> 13'01		morning rise	-2193 Nov 23 j 13:33	0° <u>♁</u> 52'07	
conjunction	-2199 Oct 27 j 03:55	16° <u>♁</u> 38'34	10°25'40	retrograde	-2192 Feb 21 j 20:15	2° <u>♁</u> 48'29	
minimum elong	-2199 Oct 27 j 04:17	16° <u>♁</u> 38'36	10°25'39	min. Earth dist.	-2192 May 10 j 02:07	1° <u>♁</u> 31'15	30.35710 AU
max. Earth dist.	-2199 Oct 28 j 02:02	16° <u>♁</u> 40'42	31.32979 AU	opposition	-2192 May 11 j 17:52	1° <u>♁</u> 28'40	7°07'59
morning rise	-2199 Nov 07 j 04:46	17° <u>♁</u> 04'08		direct	-2192 Jul 30 j 19:50	0° <u>♁</u> 08'39	
retrograde	-2198 Feb 08 j 00:37	19° <u>♁</u> 11'32		evening set	-2192 Oct 28 j 15:47	2° <u>♁</u> 03'05	
opposition	-2198 Apr 27 j 22:37	17° <u>♁</u> 49'51	10°50'32	conjunction	-2192 Nov 11 j 10:31	2° <u>♁</u> 33'20	6°23'46
min. Earth dist.	-2198 Apr 26 j 22:58	17° <u>♁</u> 51'26	29.42708 AU	minimum elong	-2192 Nov 11 j 10:47	2° <u>♁</u> 33'22	6°23'43
direct	-2198 Jul 16 j 22:46	16° <u>♁</u> 27'16		max. Earth dist.	-2192 Nov 13 j 03:23	2° <u>♁</u> 37'07	32.43419 AU
evening set	-2198 Oct 18 j 04:28	18° <u>♁</u> 33'36		morning rise	-2192 Nov 25 j 05:52	3° <u>♁</u> 03'39	
conjunction	-2198 Oct 29 j 17:10	19° <u>♁</u> 00'08	9°52'39	retrograde	-2191 Feb 23 j 06:26	4° <u>♁</u> 58'27	
minimum elong	-2198 Oct 29 j 17:33	19° <u>♁</u> 00'10	9°52'38	min. Earth dist.	-2191 May 12 j 11:26	3° <u>♁</u> 41'44	30.53761 AU
max. Earth dist.	-2198 Oct 30 j 18:22	19° <u>♁</u> 02'33	31.46126 AU	opposition	-2191 May 14 j 06:30	3° <u>♁</u> 38'57	6°29'48
morning rise	-2198 Nov 10 j 06:16	19° <u>♁</u> 26'41		direct	-2191 Aug 02 j 08:08	2° <u>♁</u> 19'20	
retrograde	-2197 Feb 10 j 15:20	21° <u>♁</u> 32'02		evening set	-2191 Oct 30 j 17:57	4° <u>♁</u> 12'03	
opposition	-2197 Apr 30 j 15:39	20° <u>♁</u> 10'37	10°14'45	conjunction	-2191 Nov 13 j 18:58	4° <u>♁</u> 42'38	5°48'02
min. Earth dist.	-2197 Apr 29 j 13:11	20° <u>♁</u> 12'23	29.56015 AU	minimum elong	-2191 Nov 13 j 19:12	4° <u>♁</u> 42'39	5°48'00
direct	-2197 Jul 19 j 15:57	18° <u>♁</u> 48'27		max. Earth dist.	-2191 Nov 15 j 14:36	4° <u>♁</u> 46'37	32.61993 AU
evening set	-2197 Oct 20 j 05:50	20° <u>♁</u> 52'35		morning rise	-2191 Nov 27 j 20:37	5° <u>♁</u> 13'16	
conjunction	-2197 Nov 01 j 05:47	21° <u>♁</u> 19'59	9°18'57	retrograde	-2190 Feb 25 j 14:38	7° <u>♁</u> 06'34	
minimum elong	-2197 Nov 01 j 06:08	21° <u>♁</u> 20'01	9°18'57	min. Earth dist.	-2190 May 14 j 22:17	5° <u>♁</u> 50'12	30.72389 AU
max. Earth dist.	-2197 Nov 02 j 10:33	21° <u>♁</u> 22'44	31.60288 AU	opposition	-2190 May 16 j 18:33	5° <u>♁</u> 47'21	5°51'33
morning rise	-2197 Nov 13 j 05:56	21° <u>♁</u> 47'25		direct	-2190 Aug 04 j 19:45	4° <u>♁</u> 28'08	
retrograde	-2196 Feb 13 j 02:39	23° <u>♁</u> 50'48		evening set	-2190 Nov 01 j 20:11	6° <u>♁</u> 19'13	
min. Earth dist.	-2196 May 01 j 02:08	22° <u>♁</u> 31'40	29.70290 AU	conjunction	-2190 Nov 16 j 02:46	6° <u>♁</u> 50'01	5°12'15
opposition	-2196 May 02 j 07:53	22° <u>♁</u> 29'41	9°38'17	minimum elong	-2190 Nov 16 j 02:59	6° <u>♁</u> 50'03	5°12'13
direct	-2196 Jul 21 j 09:48	21° <u>♁</u> 07'56		max. Earth dist.	-2190 Nov 18 j 00:15	6° <u>♁</u> 54'09	32.81125 AU
evening set	-2196 Oct 21 j 07:29	23° <u>♁</u> 09'59		morning rise	-2190 Nov 30 j 10:00	7° <u>♁</u> 20'55	

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Attention, astronomical year style is used: The year -2189 in astronomical counting style is the year 2190 BCE in historical counting style.

retrograde	-2189 Feb 27 j 23:02	9° ℳ 12'45		opposition	-2183 May 31 j 07:26	19° ℳ 54'21	1°27'49
min. Earth dist.	-2189 May 17 j 06:15	7° ℳ 56'51	30.91584 AU	direct	-2183 Aug 19 j 14:29	18° ℳ 38'00	
opposition	-2189 May 19 j 05:28	7° ℳ 53'50	5°13'20	evening set	-2183 Nov 14 j 09:04	20° ℳ 19'45	
direct	-2189 Aug 07 j 09:04	6° ℳ 35'00					
evening set	-2189 Nov 03 j 22:19	8° ℳ 24'31		conjunction	-2183 Nov 29 j 12:36	20° ℳ 50'36	1°05'39
				minimum elong	-2183 Nov 29 j 12:38	20° ℳ 50'37	1°05'37
conjunction	-2189 Nov 18 j 09:41	8° ℳ 55'30	4°36'29	max. Earth dist.	-2183 Dec 02 j 00:29	20° ℳ 55'44	34.31302 AU
minimum elong	-2189 Nov 18 j 09:52	8° ℳ 55'31	4°36'28	morning rise	-2183 Dec 14 j 17:22	21° ℳ 21'35	
max. Earth dist.	-2189 Nov 20 j 09:12	8° ℳ 59'46	33.00799 AU	retrograde	-2182 Mar 13 j 07:27	23° ℳ 05'19	
morning rise	-2189 Dec 02 j 21:57	9° ℳ 26'34		min. Earth dist.	-2182 May 30 j 23:04	21° ℳ 52'31	32.42939 AU
retrograde	-2188 Mar 01 j 07:14	11° ℳ 17'01		opposition	-2182 Jun 02 j 13:14	21° ℳ 48'42	0°51'25
min. Earth dist.	-2188 May 18 j 14:45	10° ℳ 01'30	31.11376 AU	direct	-2182 Aug 21 j 19:05	20° ℳ 32'47	
opposition	-2188 May 20 j 15:46	9° ℳ 58'23	4°35'10	evening set	-2182 Nov 16 j 10:44	22° ℳ 13'30	
direct	-2188 Aug 08 j 19:42	8° ℳ 39'56					
evening set	-2188 Nov 05 j 00:14	10° ℳ 27'58		conjunction	-2182 Dec 01 j 14:56	22° ℳ 44'10	0°31'37
				minimum elong	-2182 Dec 01 j 14:57	22° ℳ 44'10	0°31'35
conjunction	-2188 Nov 19 j 15:54	10° ℳ 59'04	4°00'49	max. Earth dist.	-2182 Dec 04 j 04:44	22° ℳ 49'25	34.54806 AU
minimum elong	-2188 Nov 19 j 16:04	10° ℳ 59'04	4°00'46	morning rise	-2182 Dec 16 j 20:34	23° ℳ 14'58	
max. Earth dist.	-2188 Nov 21 j 18:06	11° ℳ 03'32	33.21065 AU	retrograde	-2181 Mar 15 j 10:39	24° ℳ 57'48	
morning rise	-2188 Dec 04 j 08:16	11° ℳ 30'14		min. Earth dist.	-2181 Jun 02 j 03:27	23° ℳ 45'23	32.66605 AU
retrograde	-2187 Mar 03 j 11:41	13° ℳ 19'23		opposition	-2181 Jun 04 j 18:20	23° ℳ 41'33	0°15'29
min. Earth dist.	-2187 May 20 j 21:48	12° ℳ 04'18	31.31781 AU	direct	-2181 Aug 23 j 22:47	22° ℳ 26'04	
opposition	-2187 May 23 j 01:10	12° ℳ 01'03	3°57'10	desc. node	-2181 Nov 11 j 15:52	23° ℳ 52'31	
direct	-2187 Aug 11 j 07:14	10° ℳ 43'00		evening set	-2181 Nov 18 j 12:12	24° ℳ 05'48	
evening set	-2187 Nov 07 j 02:16	12° ℳ 29'37					
				conjunction	-2181 Dec 03 j 16:46	24° ℳ 36'15	-0°02'04
conjunction	-2187 Nov 21 j 21:19	13° ℳ 00'45	3°25'17	minimum elong	-2181 Dec 03 j 16:46	24° ℳ 36'15	0°02'06
minimum elong	-2187 Nov 21 j 21:27	13° ℳ 00'46	3°25'15	behind sun begin	-2181 Dec 03 j 10:25	24° ℳ 35'44	
max. Earth dist.	-2187 Nov 24 j 00:57	13° ℳ 05'20	33.41940 AU	behind sun end	-2181 Dec 01 j 23:07	24° ℳ 36'45	
morning rise	-2187 Dec 06 j 17:29	13° ℳ 32'00		max. Earth dist.	-2181 Dec 06 j 08:06	24° ℳ 41'35	34.78634 AU
	-2186 Jan 28 j 12:37	15° ℳ		morning rise	-2181 Dec 18 j 22:36	25° ℳ 06'49	
retrograde	-2186 Mar 05 j 17:00	15° ℳ 19'55		retrograde	-2180 Mar 16 j 12:50	26° ℳ 48'48	
	-2186 Apr 12 j 00:36	15° ℳ		min. Earth dist.	-2180 Jun 03 j 06:11	25° ℳ 36'49	32.90551 AU
min. Earth dist.	-2186 May 23 j 03:50	14° ℳ 05'18	31.52850 AU	opposition	-2180 Jun 05 j 22:44	25° ℳ 32'55	-0°19'56
opposition	-2186 May 25 j 09:54	14° ℳ 01'54	3°19'22	direct	-2180 Aug 25 j 05:26	24° ℳ 17'50	
direct	-2186 Aug 13 j 16:14	12° ℳ 44'15		evening set	-2180 Nov 19 j 13:44	25° ℳ 56'38	
evening set	-2186 Nov 09 j 03:58	14° ℳ 29'31					
	-2186 Nov 23 j 18:22	15° ℳ		conjunction	-2180 Dec 04 j 17:52	26° ℳ 26'50	-0°35'10
				minimum elong	-2180 Dec 04 j 17:51	26° ℳ 26'50	0°35'13
conjunction	-2186 Nov 24 j 02:09	15° ℳ 00'41	2°49'56	max. Earth dist.	-2180 Dec 07 j 09:47	26° ℳ 32'10	35.02682 AU
minimum elong	-2186 Nov 24 j 02:16	15° ℳ 00'42	2°49'54	morning rise	-2180 Dec 19 j 23:40	26° ℳ 57'09	
max. Earth dist.	-2186 Nov 26 j 09:02	15° ℳ 05'30	33.63446 AU	retrograde	-2179 Mar 18 j 15:44	28° ℳ 38'19	
morning rise	-2186 Dec 09 j 01:11	15° ℳ 31'56		min. Earth dist.	-2179 Jun 05 j 08:45	27° ℳ 26'44	33.14728 AU
retrograde	-2185 Mar 07 j 19:49	17° ℳ 18'41		opposition	-2179 Jun 08 j 02:37	27° ℳ 22'45	-0°54'50
min. Earth dist.	-2185 May 25 j 10:18	16° ℳ 04'29	31.74543 AU	direct	-2179 Aug 27 j 09:32	26° ℳ 08'04	
opposition	-2185 May 27 j 17:51	16° ℳ 01'00	2°41'51	evening set	-2179 Nov 21 j 15:02	27° ℳ 46'00	
	-2185 Jul 13 j 12:42	15° ℳ					
direct	-2185 Aug 16 j 01:44	14° ℳ 43'47		conjunction	-2179 Dec 06 j 18:40	28° ℳ 15'53	-1°07'49
	-2185 Sep 17 j 12:37	15° ℳ		minimum elong	-2179 Dec 06 j 18:37	28° ℳ 15'53	1°07'51
evening set	-2185 Nov 11 j 05:51	16° ℳ 27'49		max. Earth dist.	-2179 Dec 09 j 12:29	28° ℳ 21'21	35.26915 AU
				morning rise	-2179 Dec 21 j 23:39	28° ℳ 45'55	
conjunction	-2185 Nov 26 j 06:16	16° ℳ 58'55	2°14'51		-2178 Feb 05 j 11:34	0° ♂	
minimum elong	-2185 Nov 26 j 06:21	16° ℳ 58'55	2°14'49	retrograde	-2178 Mar 20 j 14:36	0° ♂ 26'20	
max. Earth dist.	-2185 Nov 28 j 14:09	17° ℳ 03'47	33.85544 AU		-2178 May 04 j 07:09	30° ♂	
morning rise	-2185 Dec 11 j 07:53	17° ℳ 30'07		min. Earth dist.	-2178 Jun 07 j 11:29	29° ℳ 15'03	33.39068 AU
retrograde	-2184 Mar 09 j 00:30	19° ℳ 15'48		opposition	-2178 Jun 10 j 05:50	29° ℳ 11'04	-1°29'10
min. Earth dist.	-2184 May 26 j 14:12	18° ℳ 02'07	31.96835 AU	direct	-2178 Aug 29 j 14:37	27° ℳ 56'45	
opposition	-2184 May 29 j 00:51	17° ℳ 58'28	2°04'38	evening set	-2178 Nov 23 j 16:16	29° ℳ 33'50	
direct	-2184 Aug 17 j 08:21	16° ℳ 41'41			-2178 Dec 07 j 01:29	0° ♂	
evening set	-2184 Nov 12 j 07:32	18° ℳ 24'32					
				conjunction	-2178 Dec 08 j 18:40	0° ♂ 03'24	-1°39'58
conjunction	-2184 Nov 27 j 09:49	18° ℳ 55'32	1°40'05	minimum elong	-2178 Dec 08 j 18:36	0° ♂ 03'23	1°40'00
minimum elong	-2184 Nov 27 j 09:53	18° ℳ 55'32	1°40'02	max. Earth dist.	-2178 Dec 11 j 12:29	0° ♂ 08'49	35.51286 AU
max. Earth dist.	-2184 Nov 29 j 20:36	19° ℳ 00'37	34.08182 AU	morning rise	-2178 Dec 23 j 22:46	0° ♂ 33'06	
morning rise	-2184 Dec 12 j 13:13	19° ℳ 26'39		retrograde	-2177 Mar 22 j 13:37	2° ♂ 12'47	
retrograde	-2183 Mar 11 j 03:05	21° ℳ 11'19		min. Earth dist.	-2177 Jun 09 j 12:06	1° ♂ 01'54	33.63566 AU
min. Earth dist.	-2183 May 28 j 19:56	19° ℳ 58'02	32.19658 AU	opposition	-2177 Jun 12 j 08:21	0° ♂ 57'49	-2°02'54

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Attention, astronomical year style is used: The year -2177 in astronomical counting style is the year 2178 BCE in historical counting style.

	-2177 Jul 28 j 12:16	30° π 8		max. Earth dist.	-2171 Dec 23 j 05:07	12° π 00'06	37.27202 AU
direct	-2177 Aug 31 j 18:02	29° π 43'50		morning rise	-2170 Jan 03 j 12:57	12° π 21'06	
	-2177 Oct 03 j 23:26	0° π		retrograde	-2170 Apr 02 j 21:06	13° π 57'00	
evening set	-2177 Nov 25 j 17:17	1° π 20'06		min. Earth dist.	-2170 Jun 21 j 04:48	12° π 48'32	35.40984 AU
				opposition	-2170 Jun 24 j 08:35	12° π 44'10	-5°41'08
conjunction	-2177 Dec 10 j 18:13	1° π 49'19	-2°11'34	direct	-2170 Sep 12 j 20:35	11° π 32'39	
minimum elong	-2177 Dec 10 j 18:09	1° π 49'19	2°11'37	evening set	-2170 Dec 07 j 19:51	13° π 04'48	
max. Earth dist.	-2177 Dec 13 j 14:07	1° π 54'52	35.75790 AU				
morning rise	-2177 Dec 25 j 20:43	2° π 18'40		conjunction	-2170 Dec 21 j 23:28	13° π 30'55	-5°36'20
retrograde	-2176 Mar 23 j 10:56	3° π 57'40		minimum elong	-2170 Dec 21 j 23:18	13° π 30'54	5°36'23
min. Earth dist.	-2176 Jun 10 j 13:53	2° π 47'02	33.88227 AU	max. Earth dist.	-2170 Dec 25 j 02:49	13° π 36'45	37.53030 AU
opposition	-2176 Jun 13 j 10:08	2° π 42'59	-2°36'03	morning rise	-2169 Jan 05 j 04:50	13° π 57'10	
direct	-2176 Sep 01 j 21:08	1° π 29'20		retrograde	-2169 Apr 04 j 16:11	15° π 32'44	
evening set	-2176 Nov 26 j 18:08	3° π 04'51		min. Earth dist.	-2169 Jun 23 j 03:15	14° π 24'32	35.66994 AU
				opposition	-2169 Jun 26 j 06:32	14° π 20'13	-6°09'37
conjunction	-2176 Dec 11 j 17:06	3° π 33'40	-2°42'37	direct	-2169 Sep 14 j 19:04	13° π 09'04	
minimum elong	-2176 Dec 11 j 17:00	3° π 33'40	2°42'40	evening set	-2169 Dec 09 j 19:49	14° π 40'49	
max. Earth dist.	-2176 Dec 14 j 13:22	3° π 39'12	36.00474 AU				
morning rise	-2176 Dec 26 j 17:42	4° π 02'38		conjunction	-2169 Dec 23 j 19:03	15° π 06'26	-6°03'07
retrograde	-2175 Mar 25 j 09:51	5° π 40'59		minimum elong	-2169 Dec 23 j 18:53	15° π 06'25	6°03'11
min. Earth dist.	-2175 Jun 12 j 12:51	4° π 30'45	34.13102 AU	max. Earth dist.	-2169 Dec 26 j 22:19	15° π 12'13	37.78872 AU
opposition	-2175 Jun 15 j 11:20	4° π 26'35	-3°08'33	morning rise	-2168 Jan 06 j 19:58	15° π 32'10	
direct	-2175 Sep 03 j 22:14	3° π 13'16		retrograde	-2168 Apr 05 j 12:20	17° π 07'25	
evening set	-2175 Nov 28 j 18:44	4° π 48'05		min. Earth dist.	-2168 Jun 23 j 23:07	15° π 59'37	35.92982 AU
				opposition	-2168 Jun 27 j 03:45	15° π 55'14	-6°37'24
conjunction	-2175 Dec 13 j 15:17	5° π 16'30	-3°13'06	direct	-2168 Sep 15 j 15:54	14° π 44'27	
minimum elong	-2175 Dec 13 j 15:11	5° π 16'29	3°13'09	evening set	-2168 Dec 10 j 19:46	16° π 15'51	
max. Earth dist.	-2175 Dec 16 j 13:10	5° π 22'07	36.25364 AU				
morning rise	-2175 Dec 28 j 13:38	5° π 45'04		conjunction	-2168 Dec 24 j 14:14	16° π 40'55	-6°29'16
retrograde	-2174 Mar 27 j 08:48	7° π 22'49		minimum elong	-2168 Dec 24 j 14:02	16° π 40'55	6°29'19
min. Earth dist.	-2174 Jun 14 j 13:09	6° π 12'52	34.38230 AU	max. Earth dist.	-2168 Dec 27 j 17:58	16° π 46'43	38.04642 AU
opposition	-2174 Jun 17 j 12:04	6° π 08'42	-3°40'25	morning rise	-2167 Jan 07 j 10:34	17° π 06'09	
direct	-2174 Sep 05 j 22:13	4° π 55'43		retrograde	-2167 Apr 07 j 09:47	18° π 41'06	
evening set	-2174 Nov 30 j 19:14	6° π 29'53		min. Earth dist.	-2167 Jun 25 j 20:32	17° π 33'34	36.18892 AU
				opposition	-2167 Jun 29 j 00:50	17° π 29'14	-7°04'31
conjunction	-2174 Dec 15 j 13:11	6° π 57'53	-3°42'58	direct	-2167 Sep 17 j 10:57	16° π 18'48	
minimum elong	-2174 Dec 15 j 13:03	6° π 57'52	3°43'01	evening set	-2167 Dec 12 j 19:24	17° π 49'51	
max. Earth dist.	-2174 Dec 18 j 12:24	7° π 03'34	36.50508 AU				
morning rise	-2174 Dec 30 j 08:43	7° π 26'01		conjunction	-2167 Dec 26 j 09:04	18° π 14'24	-6°54'48
retrograde	-2173 Mar 29 j 07:19	9° π 03'14		minimum elong	-2167 Dec 26 j 08:53	18° π 14'23	6°54'52
min. Earth dist.	-2173 Jun 16 j 11:28	7° π 53'39	34.63605 AU	max. Earth dist.	-2167 Dec 29 j 13:24	18° π 20'11	38.30298 AU
opposition	-2173 Jun 19 j 11:52	7° π 49'25	-4°11'37	morning rise	-2166 Jan 09 j 00:17	18° π 39'04	
direct	-2173 Sep 07 j 22:23	6° π 36'47		retrograde	-2166 Apr 09 j 05:29	20° π 13'46	
evening set	-2173 Dec 02 j 19:41	8° π 10'22		min. Earth dist.	-2166 Jun 27 j 16:46	19° π 06'31	36.44646 AU
				opposition	-2166 Jun 30 j 21:17	19° π 02'12	-7°30'57
conjunction	-2173 Dec 17 j 10:25	8° π 37'55	-4°12'15	direct	-2166 Sep 19 j 07:08	17° π 52'03	
minimum elong	-2173 Dec 17 j 10:17	8° π 37'55	4°12'18	evening set	-2166 Dec 14 j 19:12	19° π 22'49	
max. Earth dist.	-2173 Dec 20 j 10:12	8° π 43'36	36.75879 AU				
morning rise	-2172 Jan 01 j 03:04	9° π 05'37		conjunction	-2166 Dec 28 j 03:29	19° π 46'48	-7°19'43
retrograde	-2172 Mar 30 j 06:06	10° π 42'20		minimum elong	-2166 Dec 28 j 03:17	19° π 46'47	7°19'45
min. Earth dist.	-2172 Jun 17 j 09:37	9° π 33'07	34.89227 AU	max. Earth dist.	-2166 Dec 31 j 07:09	19° π 52'30	38.55777 AU
opposition	-2172 Jun 20 j 11:20	9° π 28'50	-4°42'08	morning rise	-2165 Jan 10 j 13:37	20° π 10'55	
direct	-2172 Sep 08 j 20:44	8° π 16'34		retrograde	-2165 Apr 11 j 00:33	21° π 45'21	
evening set	-2172 Dec 03 j 19:44	9° π 49'38		min. Earth dist.	-2165 Jun 29 j 12:13	20° π 38'22	36.70242 AU
				opposition	-2165 Jul 02 j 17:10	20° π 34'03	-7°56'44
conjunction	-2172 Dec 18 j 07:11	10° π 16'43	-4°40'54	direct	-2165 Sep 21 j 02:42	19° π 24'13	
minimum elong	-2172 Dec 18 j 07:02	10° π 16'42	4°40'57	evening set	-2165 Dec 16 j 18:37	20° π 54'41	
max. Earth dist.	-2172 Dec 21 j 08:57	10° π 22'31	37.01463 AU				
morning rise	-2171 Jan 01 j 20:16	10° π 43'57		conjunction	-2165 Dec 29 j 21:34	21° π 18'06	-7°44'01
retrograde	-2171 Apr 01 j 00:53	12° π 20'14		minimum elong	-2165 Dec 29 j 21:22	21° π 18'05	7°44'05
min. Earth dist.	-2171 Jun 19 j 08:08	11° π 11'21	35.15031 AU	max. Earth dist.	-2164 Jan 02 j 02:26	21° π 23'51	38.81089 AU
opposition	-2171 Jun 22 j 10:15	11° π 07'04	-5°11'59	morning rise	-2164 Jan 12 j 02:03	21° π 41'39	
direct	-2171 Sep 10 j 21:46	9° π 55'10		retrograde	-2164 Apr 11 j 15:27	23° π 15'50	
evening set	-2171 Dec 05 j 19:54	11° π 27'45		min. Earth dist.	-2164 Jun 30 j 08:20	22° π 09'04	36.95674 AU
				opposition	-2164 Jul 03 j 12:38	22° π 04'47	-8°21'50
conjunction	-2171 Dec 20 j 03:30	11° π 54'21	-5°08'56	direct	-2164 Sep 22 j 01:27	20° π 55'13	
minimum elong	-2171 Dec 20 j 03:20	11° π 54'21	5°08'59	evening set	-2164 Dec 17 j 17:51	22° π 25'25	

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Attention, astronomical year style is used: The year -2164 in astronomical counting style is the year 2165 BCE in historical counting style.

conjunction	-2164 Dec 30 j 14:55	22° \nearrow 48'16	-8°07'42	max. Earth dist.	-2157 Jan 11 j 23:22	1° \searrow 33'20	40.56256 AU
minimum elong	-2164 Dec 30 j 14:42	22° \nearrow 48'15	8°07'44	morning rise	-2157 Jan 19 j 22:51	1° \searrow 46'58	
max. Earth dist.	-2163 Jan 02 j 19:03	22° \nearrow 53'56	39.06265 AU	retrograde	-2157 Apr 22 j 08:50	3° \searrow 20'18	
morning rise	-2163 Jan 12 j 13:38	23° \nearrow 11'14		min. Earth dist.	-2157 Jul 11 j 10:34	2° \searrow 15'16	38.72093 AU
retrograde	-2163 Apr 13 j 08:03	24° \nearrow 45'12		opposition	-2157 Jul 14 j 16:24	2° \searrow 11'02	-10°58'45
min. Earth dist.	-2163 Jul 02 j 02:00	23° \nearrow 38'44	37.21008 AU	direct	-2157 Oct 03 j 07:02	1° \searrow 03'23	
opposition	-2163 Jul 05 j 07:36	23° \nearrow 34'24	-8°46'16	evening set	-2157 Dec 30 j 09:23	2° \searrow 32'37	
direct	-2163 Sep 23 j 21:33	22° \nearrow 25'06					
evening set	-2163 Dec 19 j 16:58	23° \nearrow 55'03		conjunction	-2156 Jan 10 j 07:17	2° \searrow 51'10	-10°35'58
				minimum elong	-2156 Jan 10 j 07:04	2° \searrow 51'09	10°36'01
conjunction	-2162 Jan 01 j 08:03	24° \nearrow 17'18	-8°30'45	max. Earth dist.	-2156 Jan 13 j 13:37	2° \searrow 56'45	40.80938 AU
minimum elong	-2162 Jan 01 j 07:50	24° \nearrow 17'17	8°30'49	morning rise	-2156 Jan 21 j 06:23	3° \searrow 09'49	
max. Earth dist.	-2162 Jan 04 j 13:21	24° \nearrow 23'01	39.31355 AU	retrograde	-2156 Apr 22 j 23:29	4° \searrow 43'10	
morning rise	-2162 Jan 14 j 00:45	24° \nearrow 39'41		min. Earth dist.	-2156 Jul 12 j 01:53	3° \searrow 38'25	38.96879 AU
retrograde	-2162 Apr 15 j 00:02	26° \nearrow 13'29		opposition	-2156 Jul 15 j 08:30	3° \searrow 34'09	-11°18'33
min. Earth dist.	-2162 Jul 03 j 21:19	25° \nearrow 07'11	37.46292 AU	direct	-2156 Oct 03 j 23:39	2° \searrow 26'47	
opposition	-2162 Jul 07 j 02:10	25° \nearrow 02'55	-9°10'01	evening set	-2156 Dec 31 j 07:48	3° \searrow 56'00	
direct	-2162 Sep 25 j 16:56	23° \nearrow 53'52					
evening set	-2162 Dec 21 j 15:57	25° \nearrow 23'37		conjunction	-2155 Jan 10 j 21:59	4° \searrow 13'55	-10°54'45
				minimum elong	-2155 Jan 10 j 21:47	4° \searrow 13'54	10°54'48
conjunction	-2161 Jan 03 j 00:49	25° \nearrow 45'16	-8°53'10	max. Earth dist.	-2155 Jan 14 j 04:25	4° \searrow 19'28	41.05375 AU
minimum elong	-2161 Jan 03 j 00:36	25° \nearrow 45'15	8°53'13	morning rise	-2155 Jan 21 j 13:26	4° \searrow 31'55	
max. Earth dist.	-2161 Jan 06 j 06:17	25° \nearrow 50'58	39.56416 AU	retrograde	-2155 Apr 24 j 15:02	6° \searrow 05'17	
morning rise	-2161 Jan 15 j 11:06	26° \nearrow 07'03		min. Earth dist.	-2155 Jul 13 j 19:02	5° \searrow 00'43	39.21402 AU
retrograde	-2161 Apr 16 j 17:01	27° \nearrow 40'42		opposition	-2155 Jul 17 j 00:29	4° \searrow 56'32	-11°37'46
min. Earth dist.	-2161 Jul 05 j 14:08	26° \nearrow 34'42	37.71544 AU	direct	-2155 Oct 05 j 15:05	3° \searrow 49'25	
opposition	-2161 Jul 08 j 20:08	26° \nearrow 30'22	-9°33'05	evening set	-2154 Jan 02 j 06:23	5° \searrow 18'38	
direct	-2161 Sep 27 j 10:48	25° \nearrow 21'36					
evening set	-2161 Dec 23 j 14:51	26° \nearrow 51'10		conjunction	-2154 Jan 12 j 12:43	5° \searrow 35'54	-11°12'57
				minimum elong	-2154 Jan 12 j 12:30	5° \searrow 35'53	11°13'00
conjunction	-2160 Jan 04 j 17:05	27° \nearrow 12'14	-9°14'58	max. Earth dist.	-2154 Jan 15 j 19:06	5° \searrow 41'25	41.29526 AU
minimum elong	-2160 Jan 04 j 16:52	27° \nearrow 12'13	9°15'01	morning rise	-2154 Jan 22 j 19:59	5° \searrow 53'15	
max. Earth dist.	-2160 Jan 07 j 22:40	27° \nearrow 17'53	39.81442 AU	retrograde	-2154 Apr 26 j 06:26	7° \searrow 26'38	
morning rise	-2160 Jan 16 j 20:56	27° \nearrow 33'24		min. Earth dist.	-2154 Jul 15 j 10:36	6° \searrow 22'17	39.45595 AU
retrograde	-2160 Apr 17 j 12:19	29° \nearrow 06'55		opposition	-2154 Jul 18 j 15:52	6° \searrow 18'07	-11°56'23
min. Earth dist.	-2160 Jul 06 j 07:44	28° \nearrow 01'09	37.96784 AU	direct	-2154 Oct 07 j 06:05	5° \searrow 11'15	
opposition	-2160 Jul 09 j 13:48	27° \nearrow 56'51	-9°55'29	evening set	-2153 Jan 04 j 05:00	6° \searrow 40'29	
direct	-2160 Sep 28 j 01:35	26° \nearrow 48'21					
evening set	-2160 Dec 24 j 13:32	28° \nearrow 17'47		conjunction	-2153 Jan 14 j 03:01	6° \searrow 57'05	-11°30'37
				minimum elong	-2153 Jan 14 j 02:49	6° \searrow 57'05	11°30'40
conjunction	-2159 Jan 05 j 09:10	28° \nearrow 38'14	-9°36'08	max. Earth dist.	-2153 Jan 17 j 08:07	7° \searrow 02'29	41.53331 AU
minimum elong	-2159 Jan 05 j 08:58	28° \nearrow 38'14	9°36'10	morning rise	-2153 Jan 24 j 02:08	7° \searrow 13'46	
max. Earth dist.	-2159 Jan 08 j 15:50	28° \nearrow 43'56	40.06455 AU	retrograde	-2153 Apr 27 j 22:59	8° \searrow 47'12	
morning rise	-2159 Jan 17 j 06:04	28° \nearrow 58'48		min. Earth dist.	-2153 Jul 17 j 02:03	7° \searrow 43'02	39.69447 AU
	-2159 Feb 26 j 21:21	0° \searrow		opposition	-2153 Jul 20 j 07:05	7° \searrow 38'54	-12°14'25
retrograde	-2159 Apr 19 j 03:48	0° \searrow 32'13		direct	-2153 Oct 08 j 19:16	6° \searrow 32'15	
	-2159 Jun 11 j 03:48	30° \nearrow		evening set	-2152 Jan 06 j 03:24	8° \searrow 01'32	
min. Earth dist.	-2159 Jul 08 j 00:58	29° \nearrow 26'42	38.21979 AU				
opposition	-2159 Jul 11 j 07:03	29° \nearrow 22'25	-10°17'14	conjunction	-2152 Jan 15 j 17:04	8° \searrow 17'28	-11°47'44
direct	-2159 Sep 29 j 19:19	28° \nearrow 14'12		minimum elong	-2152 Jan 15 j 16:51	8° \searrow 17'27	11°47'47
evening set	-2159 Dec 26 j 12:10	29° \nearrow 43'32		max. Earth dist.	-2152 Jan 18 j 22:42	8° \searrow 22'52	41.76792 AU
	-2158 Jan 05 j 02:01	0° \searrow		morning rise	-2152 Jan 25 j 07:33	8° \searrow 33'27	
				retrograde	-2152 Apr 28 j 10:52	10° \searrow 06'57	
conjunction	-2158 Jan 07 j 00:42	0° \searrow 03'22	-9°56'41	min. Earth dist.	-2152 Jul 17 j 17:59	9° \searrow 02'54	39.92953 AU
minimum elong	-2158 Jan 07 j 00:28	0° \searrow 03'21	9°56'44	opposition	-2152 Jul 20 j 21:48	8° \searrow 58'51	-12°31'52
max. Earth dist.	-2158 Jan 10 j 06:41	0° \searrow 08'59	40.31409 AU	direct	-2152 Oct 09 j 11:54	7° \searrow 52'25	
morning rise	-2158 Jan 18 j 14:41	0° \searrow 23'18		evening set	-2151 Jan 07 j 01:54	9° \searrow 21'45	
retrograde	-2158 Apr 20 j 19:46	1° \searrow 56'40					
min. Earth dist.	-2158 Jul 09 j 17:05	0° \searrow 51'26	38.47107 AU	conjunction	-2151 Jan 16 j 06:41	9° \searrow 36'59	-12°04'18
opposition	-2158 Jul 12 j 23:59	0° \searrow 47'08	-10°38'18	minimum elong	-2151 Jan 16 j 06:30	9° \searrow 36'59	12°04'22
	-2158 Aug 21 j 13:33	30° \nearrow		max. Earth dist.	-2151 Jan 19 j 11:05	9° \searrow 42'17	41.99951 AU
direct	-2158 Oct 01 j 12:13	29° \nearrow 39'12		morning rise	-2151 Jan 25 j 12:20	9° \searrow 52'17	
	-2158 Nov 10 j 09:29	0° \searrow		retrograde	-2151 Apr 29 j 22:47	11° \searrow 25'52	
evening set	-2158 Dec 28 j 10:44	1° \searrow 08'28		min. Earth dist.	-2151 Jul 19 j 07:44	10° \searrow 22'02	40.16192 AU
				opposition	-2151 Jul 22 j 12:12	10° \searrow 17'58	-12°48'45
conjunction	-2157 Jan 08 j 16:10	1° \searrow 27'40	-10°16'37	direct	-2151 Oct 11 j 03:53	9° \searrow 11'44	
minimum elong	-2157 Jan 08 j 15:58	1° \searrow 27'39	10°16'40	evening set	-2150 Jan 09 j 00:09	10° \searrow 41'09	

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Attention, astronomical year style is used: The year -2150 in astronomical counting style is the year 2151 BCE in historical counting style.

conjunction	-2150 Jan 17 j 19:57	10°35'41	-12°20'20	direct	-2144 Oct 20 j 01:35	18°30'30	
minimum elong	-2150 Jan 17 j 19:45	10°35'41	12°20'22	evening set	-2143 Jan 20 j 16:39	19°38'38	
max. Earth dist.	-2150 Jan 21 j 00:56	11°30'00	42.22859 AU				
morning rise	-2150 Jan 26 j 16:34	11°31'07		conjunction	-2143 Jan 26 j 10:04	19°34'45	-13°57'26
retrograde	-2150 May 01 j 11:01	12°34'58		minimum elong	-2143 Jan 26 j 09:54	19°34'45	13°57'30
min. Earth dist.	-2150 Jul 20 j 23:05	11°34'016	40.39211 AU	max. Earth dist.	-2143 Jan 29 j 13:08	19°35'245	43.78343 AU
opposition	-2150 Jul 24 j 02:20	11°33'616	-13°05'03	morning rise	-2143 Feb 01 j 03:43	19°35'654	
direct	-2150 Oct 12 j 19:23	10°33'015		retrograde	-2143 May 10 j 02:30	21°33'225	
evening set	-2149 Jan 10 j 22:40	11°35'947		min. Earth dist.	-2143 Jul 29 j 19:00	20°33'003	41.95295 AU
				opposition	-2143 Aug 01 j 20:03	20°32'616	-14°43'22
				direct	-2143 Oct 21 j 12:15	19°32'148	
				evening set	-2142 Jan 22 j 17:24	20°33'322	
conjunction	-2149 Jan 19 j 09:06	12°31'336	-12°35'48				
minimum elong	-2149 Jan 19 j 08:56	12°31'335	12°35'51	conjunction	-2142 Jan 27 j 21:41	21°30'135	-14°09'18
max. Earth dist.	-2149 Jan 22 j 13:49	12°31'852	42.45584 AU	minimum elong	-2142 Jan 27 j 21:33	21°30'134	14°09'21
morning rise	-2149 Jan 27 j 20:09	12°32'729		max. Earth dist.	-2142 Jan 31 j 00:38	21°30'632	43.99527 AU
retrograde	-2149 May 02 j 23:49	14°30'118		morning rise	-2142 Feb 02 j 02:05	21°30'948	
min. Earth dist.	-2149 Jul 22 j 11:59	12°35'750	40.62052 AU	retrograde	-2142 May 11 j 13:59	22°34'545	
opposition	-2149 Jul 25 j 15:48	12°35'349	-13°20'46	min. Earth dist.	-2142 Jul 31 j 07:34	21°34'333	42.16438 AU
direct	-2149 Oct 14 j 09:11	11°34'800		opposition	-2142 Aug 03 j 07:52	21°33'949	-14°55'20
evening set	-2148 Jan 12 j 21:07	13°31'742		direct	-2142 Oct 23 j 00:18	20°33'532	
				evening set	-2141 Jan 24 j 19:14	22°30'737	
conjunction	-2148 Jan 20 j 21:47	13°33'047	-12°50'44				
minimum elong	-2148 Jan 20 j 21:36	13°33'047	12°50'46	conjunction	-2141 Jan 29 j 09:04	22°31'450	-14°20'43
max. Earth dist.	-2148 Jan 24 j 01:56	13°33'558	42.68148 AU	minimum elong	-2141 Jan 29 j 08:55	22°31'450	14°20'46
morning rise	-2148 Jan 28 j 23:09	13°34'356		max. Earth dist.	-2141 Feb 01 j 10:05	22°31'939	44.20282 AU
retrograde	-2148 May 03 j 14:52	15°31'757		morning rise	-2141 Feb 02 j 22:58	22°32'204	
min. Earth dist.	-2148 Jul 23 j 01:50	14°31'438	40.84757 AU	retrograde	-2141 May 13 j 03:10	23°35'831	
opposition	-2148 Jul 26 j 05:15	14°31'040	-13°35'55	min. Earth dist.	-2141 Aug 01 j 19:36	22°35'628	42.37151 AU
direct	-2148 Oct 14 j 20:29	13°30'504		opposition	-2141 Aug 04 j 19:22	22°35'246	-15°06'50
evening set	-2147 Jan 13 j 19:33	14°33'457		direct	-2141 Oct 24 j 09:51	21°34'840	
				evening set	-2140 Jan 26 j 22:34	23°32'121	
conjunction	-2147 Jan 21 j 10:15	14°34'719	-13°05'07				
minimum elong	-2147 Jan 21 j 10:05	14°34'718	13°05'10	conjunction	-2140 Jan 30 j 20:16	23°32'730	-14°31'41
max. Earth dist.	-2147 Jan 24 j 15:21	14°35'232	42.90580 AU	minimum elong	-2140 Jan 30 j 20:09	23°32'729	14°31'43
morning rise	-2147 Jan 29 j 01:24	14°35'942		morning rise	-2140 Feb 03 j 17:58	23°33'338	
retrograde	-2147 May 05 j 03:35	16°33'356		max. Earth dist.	-2140 Feb 02 j 21:32	23°33'217	44.40605 AU
min. Earth dist.	-2147 Jul 24 j 15:23	15°33'048	41.07303 AU	retrograde	-2140 May 13 j 12:43	25°31'041	
opposition	-2147 Jul 27 j 18:21	15°32'652	-13°50'29	min. Earth dist.	-2140 Aug 02 j 08:41	24°30'841	42.57427 AU
direct	-2147 Oct 16 j 09:03	14°32'130		opposition	-2140 Aug 05 j 06:45	24°30'505	-15°17'52
evening set	-2146 Jan 15 j 18:21	15°35'138		direct	-2140 Oct 24 j 22:37	23°30'109	
				evening set	-2139 Jan 28 j 04:28	24°33'437	
conjunction	-2146 Jan 22 j 22:28	16°30'314	-13°18'57				
minimum elong	-2146 Jan 22 j 22:17	16°30'313	13°18'59	conjunction	-2139 Jan 31 j 07:00	24°33'929	-14°42'12
max. Earth dist.	-2146 Jan 26 j 02:22	16°30'821	43.12859 AU	minimum elong	-2139 Jan 31 j 06:52	24°33'929	14°42'15
morning rise	-2146 Jan 30 j 03:04	16°31'450		morning rise	-2139 Feb 03 j 09:25	24°34'421	
retrograde	-2146 May 06 j 17:11	17°34'920		max. Earth dist.	-2139 Feb 03 j 06:51	24°34'411	44.60529 AU
min. Earth dist.	-2146 Jul 26 j 03:33	16°34'627	41.29689 AU	retrograde	-2139 May 14 j 21:32	26°32'212	
opposition	-2146 Jul 29 j 07:05	16°34'230	-14°04'30	min. Earth dist.	-2139 Aug 03 j 19:23	25°32'021	42.77325 AU
direct	-2146 Oct 17 j 20:31	15°33'721		opposition	-2139 Aug 06 j 17:48	25°31'645	-15°28'26
evening set	-2145 Jan 17 j 17:19	17°30'747		direct	-2139 Oct 26 j 10:54	24°31'257	
				evening set	-2138 Jan 30 j 16:23	25°34'737	
conjunction	-2145 Jan 24 j 10:34	17°31'835	-13°32'17				
minimum elong	-2145 Jan 24 j 10:24	17°31'835	13°32'20	conjunction	-2138 Feb 01 j 17:38	25°35'049	-14°52'17
max. Earth dist.	-2145 Jan 27 j 15:07	17°32'343	43.34949 AU	minimum elong	-2138 Feb 01 j 17:31	25°35'049	14°52'19
morning rise	-2145 Jan 31 j 04:12	17°32'925		morning rise	-2138 Feb 03 j 18:45	25°35'401	
retrograde	-2145 May 08 j 01:57	19°30'412		max. Earth dist.	-2138 Feb 04 j 17:04	25°35'528	44.80097 AU
min. Earth dist.	-2145 Jul 27 j 17:40	18°30'128	41.51853 AU	retrograde	-2138 May 16 j 07:02	27°33'303	
opposition	-2145 Jul 30 j 19:41	17°35'736	-14°17'58	min. Earth dist.	-2138 Aug 05 j 07:43	26°33'117	42.96904 AU
direct	-2145 Oct 19 j 11:46	16°35'241		opposition	-2138 Aug 08 j 04:34	26°32'745	-15°38'32
evening set	-2144 Jan 19 j 16:46	18°32'327		direct	-2138 Oct 27 j 23:25	25°32'406	
conjunction	-2144 Jan 25 j 22:24	18°33'325	-13°45'06	conjunction	-2137 Feb 03 j 04:09	27°30'131	-15°01'54
minimum elong	-2144 Jan 25 j 22:15	18°33'325	13°45'09	minimum elong	-2137 Feb 03 j 04:02	27°30'130	15°01'57
max. Earth dist.	-2144 Jan 29 j 02:05	18°33'829	43.56802 AU	max. Earth dist.	-2137 Feb 06 j 03:31	27°30'608	44.99384 AU
morning rise	-2144 Feb 01 j 04:18	18°34'326		retrograde	-2137 May 17 j 17:41	28°34'317	
retrograde	-2144 May 08 j 12:36	20°31'833		min. Earth dist.	-2137 Aug 06 j 18:18	27°34'139	43.16202 AU
min. Earth dist.	-2144 Jul 28 j 05:29	19°31'603	41.73739 AU				
opposition	-2144 Jul 31 j 07:53	19°31'211	-14°30'55				

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Attention, astronomical year style is used: The year -2137 in astronomical counting style is the year 2138 BCE in historical counting style.

opposition	-2137 Aug 09 j 15:01	27° $\overline{3}$ 38'08	-15°48'10	opposition	-2129 Aug 18 j 19:53	6° \approx 45'37	-16°49'10
direct	-2137 Oct 29 j 10:04	26° $\overline{3}$ 34'38		direct	-2129 Nov 07 j 11:34	5° \approx 43'30	
conjunction	-2136 Feb 04 j 14:11	28° $\overline{3}$ 11'37	-15°11'05	conjunction	-2128 Feb 13 j 18:28	7° \approx 17'37	-16°09'16
minimum elong	-2136 Feb 04 j 14:06	28° $\overline{3}$ 11'36	15°11'08	minimum elong	-2128 Feb 13 j 18:24	7° \approx 17'36	16°09'19
max. Earth dist.	-2136 Feb 07 j 12:18	28° $\overline{3}$ 16'07	45.18413 AU	max. Earth dist.	-2128 Feb 16 j 10:47	7° \approx 21'37	46.60132 AU
retrograde	-2136 May 18 j 06:02	29° $\overline{3}$ 52'57		retrograde	-2128 May 27 j 06:48	8° \approx 55'58	
min. Earth dist.	-2136 Aug 07 j 04:53	28° $\overline{3}$ 51'26	43.35270 AU	min. Earth dist.	-2128 Aug 16 j 16:15	7° \approx 55'26	44.76434 AU
opposition	-2136 Aug 10 j 01:21	28° $\overline{3}$ 47'58	-15°57'20	opposition	-2128 Aug 19 j 04:48	7° \approx 52'25	-16°55'00
direct	-2136 Oct 29 j 17:58	27° $\overline{3}$ 44'37		direct	-2128 Nov 07 j 23:53	6° \approx 50'25	
conjunction	-2135 Feb 05 j 00:16	29° $\overline{3}$ 21'11	-15°19'48	conjunction	-2127 Feb 14 j 03:26	8° \approx 24'11	-16°14'50
minimum elong	-2135 Feb 05 j 00:09	29° $\overline{3}$ 21'11	15°19'50	minimum elong	-2127 Feb 14 j 03:24	8° \approx 24'11	16°14'52
max. Earth dist.	-2135 Feb 07 j 22:57	29° $\overline{3}$ 25'43	45.37224 AU	max. Earth dist.	-2127 Feb 16 j 18:44	8° \approx 28'07	46.75925 AU
	-2135 Mar 02 j 22:07	0° \approx		retrograde	-2127 May 28 j 14:01	10° \approx 02'11	
retrograde	-2135 May 19 j 14:44	1° \approx 02'06		min. Earth dist.	-2127 Aug 18 j 01:01	9° \approx 01'45	44.92090 AU
min. Earth dist.	-2135 Aug 08 j 16:08	0° \approx 00'42	43.54104 AU	opposition	-2127 Aug 20 j 13:19	8° \approx 58'45	-17°00'29
	-2135 Aug 09 j 06:00	30° \overline{R} 3		direct	-2127 Nov 09 j 10:40	7° \approx 56'52	
opposition	-2135 Aug 11 j 11:27	29° $\overline{3}$ 57'17	-16°06'01	conjunction	-2126 Feb 15 j 12:04	9° \approx 30'17	-16°20'03
direct	-2135 Oct 31 j 04:56	28° $\overline{3}$ 54'07		minimum elong	-2126 Feb 15 j 12:01	9° \approx 30'17	16°20'06
	-2134 Jan 17 j 07:35	0° \approx		max. Earth dist.	-2126 Feb 18 j 01:51	9° \approx 34'07	46.91284 AU
conjunction	-2134 Feb 06 j 10:04	0° \approx 30'18	-15°28'05	retrograde	-2126 May 30 j 00:43	11° \approx 07'55	
minimum elong	-2134 Feb 06 j 09:59	0° \approx 30'17	15°28'08	min. Earth dist.	-2126 Aug 19 j 10:49	10° \approx 07'32	45.07353 AU
max. Earth dist.	-2134 Feb 09 j 07:25	0° \approx 34'43	45.55815 AU	opposition	-2126 Aug 21 j 21:47	10° \approx 04'36	-17°05'35
retrograde	-2134 May 20 j 23:20	2° \approx 10'48		direct	-2126 Nov 10 j 17:41	9° \approx 02'50	
min. Earth dist.	-2134 Aug 10 j 01:38	1° \approx 09'36	43.72699 AU	conjunction	-2125 Feb 16 j 20:43	10° \approx 35'54	-16°24'54
opposition	-2134 Aug 12 j 21:18	1° \approx 06'11	-16°14'15	minimum elong	-2125 Feb 16 j 20:42	10° \approx 35'54	16°24'56
direct	-2134 Nov 01 j 15:32	0° \approx 03'12		max. Earth dist.	-2125 Feb 19 j 10:37	10° \approx 39'43	47.06280 AU
conjunction	-2133 Feb 07 j 19:47	1° \approx 39'00	-15°35'56	retrograde	-2125 May 31 j 08:57	12° \approx 13'11	
minimum elong	-2133 Feb 07 j 19:41	1° \approx 39'00	15°35'58	min. Earth dist.	-2125 Aug 20 j 19:51	11° \approx 12'52	45.22259 AU
max. Earth dist.	-2133 Feb 10 j 16:59	1° \approx 43'24	45.74142 AU	opposition	-2125 Aug 23 j 05:50	11° \approx 10'00	-17°10'18
retrograde	-2133 May 22 j 08:09	3° \approx 19'09		direct	-2125 Nov 12 j 02:08	10° \approx 08'19	
min. Earth dist.	-2133 Aug 11 j 12:58	2° \approx 18'03	43.91013 AU	conjunction	-2124 Feb 18 j 05:01	11° \approx 41'05	-16°29'23
opposition	-2133 Aug 14 j 06:57	2° \approx 14'43	-16°22'03	minimum elong	-2124 Feb 18 j 04:59	11° \approx 41'05	16°29'25
direct	-2133 Nov 03 j 02:18	1° \approx 11'55		max. Earth dist.	-2124 Feb 20 j 17:09	11° \approx 44'46	47.20964 AU
conjunction	-2132 Feb 09 j 05:24	2° \approx 47'22	-15°43'22	retrograde	-2124 May 31 j 17:58	13° \approx 18'00	
minimum elong	-2132 Feb 09 j 05:20	2° \approx 47'22	15°43'25	min. Earth dist.	-2124 Aug 21 j 03:54	12° \approx 17'48	45.36879 AU
max. Earth dist.	-2132 Feb 12 j 02:07	2° \approx 51'44	45.92181 AU	opposition	-2124 Aug 23 j 13:52	12° \approx 14'56	-17°14'37
retrograde	-2132 May 22 j 17:25	4° \approx 27'09		direct	-2124 Nov 12 j 08:24	11° \approx 13'22	
min. Earth dist.	-2132 Aug 11 j 22:32	3° \approx 26'15	44.08991 AU	conjunction	-2123 Feb 18 j 13:07	12° \approx 45'50	-16°33'29
opposition	-2132 Aug 14 j 16:23	3° \approx 22'56	-16°29'25	minimum elong	-2123 Feb 18 j 13:07	12° \approx 45'50	16°33'31
direct	-2132 Nov 03 j 12:20	2° \approx 20'19		max. Earth dist.	-2123 Feb 21 j 01:25	12° \approx 49'31	47.35366 AU
conjunction	-2131 Feb 09 j 14:39	3° \approx 55'26	-15°50'24	retrograde	-2123 Jun 02 j 00:22	14° \approx 22'26	
minimum elong	-2131 Feb 09 j 14:34	3° \approx 55'25	15°50'25	min. Earth dist.	-2123 Aug 22 j 13:33	13° \approx 22'15	45.51216 AU
max. Earth dist.	-2131 Feb 12 j 09:46	3° \approx 59'40	46.09854 AU	opposition	-2123 Aug 24 j 21:50	13° \approx 19'29	-17°18'34
retrograde	-2131 May 24 j 05:58	5° \approx 34'52		direct	-2123 Nov 13 j 17:23	12° \approx 18'02	
min. Earth dist.	-2131 Aug 13 j 09:08	4° \approx 34'04	44.26582 AU	conjunction	-2122 Feb 19 j 21:17	13° \approx 50'11	-16°37'13
opposition	-2131 Aug 16 j 01:48	4° \approx 30'50	-16°36'23	minimum elong	-2122 Feb 19 j 21:16	13° \approx 50'11	16°37'15
direct	-2131 Nov 04 j 19:07	3° \approx 28'24		max. Earth dist.	-2122 Feb 22 j 08:40	13° \approx 53'49	47.49509 AU
conjunction	-2130 Feb 11 j 00:10	5° \approx 03'11	-15°57'03		-2122 Apr 14 j 04:52	15° \approx	
minimum elong	-2130 Feb 11 j 00:06	5° \approx 03'11	15°57'05	retrograde	-2122 Jun 03 j 05:52	15° \approx 26'29	
max. Earth dist.	-2130 Feb 13 j 19:20	5° \approx 07'24	46.27105 AU		-2122 Jul 24 j 09:59	15° \overline{R}	
retrograde	-2130 May 25 j 15:56	6° \approx 42'16		min. Earth dist.	-2122 Aug 23 j 20:53	14° \approx 26'27	45.65274 AU
min. Earth dist.	-2130 Aug 14 j 19:54	5° \approx 41'34	44.43701 AU	opposition	-2122 Aug 26 j 05:23	14° \approx 23'40	-17°22'08
opposition	-2130 Aug 17 j 10:53	5° \approx 38'25	-16°42'57	direct	-2122 Nov 15 j 03:12	13° \approx 22'20	
direct	-2130 Nov 06 j 03:26	4° \approx 36'08		conjunction	-2121 Feb 21 j 05:13	14° \approx 54'13	-16°40'36
conjunction	-2129 Feb 12 j 09:27	6° \approx 10'36	-16°03'20	minimum elong	-2121 Feb 21 j 05:14	14° \approx 54'13	16°40'38
minimum elong	-2129 Feb 12 j 09:24	6° \approx 10'35	16°03'21	max. Earth dist.	-2121 Feb 23 j 15:19	14° \approx 57'45	47.63361 AU
max. Earth dist.	-2129 Feb 15 j 02:23	6° \approx 14'40	46.43874 AU		-2121 Feb 25 j 04:09	15° \approx	
retrograde	-2129 May 27 j 01:27	7° \approx 49'19		retrograde	-2121 Jun 04 j 14:36	16° \approx 30'13	
min. Earth dist.	-2129 Aug 16 j 05:09	6° \approx 48'45	44.60321 AU	min. Earth dist.	-2121 Aug 25 j 05:59	15° \approx 30'15	45.79036 AU

Planetary Phenomena of Pluto from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 21

Attention, astronomical year style is used: The year -2121 in astronomical counting style is the year 2122 BCE in historical counting style.

opposition	-2121 Aug 27 j 13:02	15° \approx 27'33	-17°25'20	direct	-2113 Nov 24 j 18:38	22° \approx 47'47	
	-2121 Sep 20 j 16:45	15° \approx					
direct	-2121 Nov 16 j 11:05	14° \approx 26'21		conjunction	-2112 Mar 02 j 00:42	24° \approx 17'27	-16°56'33
	-2120 Jan 10 j 13:55	15° \approx		minimum elong	-2112 Mar 02 j 00:46	24° \approx 17'28	16°56'35
				max. Earth dist.	-2112 Mar 04 j 01:17	24° \approx 20'20	48.69354 AU
conjunction	-2120 Feb 22 j 13:03	15° \approx 57'57	-16°43'37	retrograde	-2112 Jun 13 j 06:37	25° \approx 51'01	
minimum elong	-2120 Feb 22 j 13:02	15° \approx 57'57	16°43'39	min. Earth dist.	-2112 Sep 03 j 05:18	24° \approx 51'34	46.83387 AU
max. Earth dist.	-2120 Feb 24 j 23:18	16° \approx 01'30	47.76903 AU	opposition	-2112 Sep 05 j 03:02	24° \approx 49'21	-17°39'29
retrograde	-2120 Jun 04 j 23:31	17° \approx 33'41		direct	-2112 Nov 25 j 02:20	23° \approx 49'01	
min. Earth dist.	-2120 Aug 25 j 14:22	16° \approx 33'48	45.92441 AU				
opposition	-2120 Aug 27 j 20:28	16° \approx 31'09	-17°28'10	conjunction	-2111 Mar 03 j 07:34	25° \approx 18'29	-16°56'47
direct	-2120 Nov 16 j 17:45	15° \approx 30'05		minimum elong	-2111 Mar 03 j 07:37	25° \approx 18'29	16°56'48
				max. Earth dist.	-2111 Mar 05 j 06:59	25° \approx 21'17	48.79149 AU
conjunction	-2119 Feb 22 j 20:48	17° \approx 01'26	-16°46'18	retrograde	-2111 Jun 14 j 12:32	26° \approx 51'49	
minimum elong	-2119 Feb 22 j 20:49	17° \approx 01'26	16°46'21	min. Earth dist.	-2111 Sep 04 j 13:13	25° \approx 52'24	46.93055 AU
max. Earth dist.	-2119 Feb 25 j 05:01	17° \approx 04'50	47.90076 AU	opposition	-2111 Sep 06 j 09:19	25° \approx 50'16	-17°39'28
retrograde	-2119 Jun 06 j 09:38	18° \approx 36'53		direct	-2111 Nov 26 j 10:25	24° \approx 50'01	
min. Earth dist.	-2119 Aug 26 j 22:13	17° \approx 37'07	46.05456 AU				
opposition	-2119 Aug 29 j 03:44	17° \approx 34'30	-17°30'40	conjunction	-2110 Mar 04 j 14:31	26° \approx 19'17	-16°56'41
direct	-2119 Nov 17 j 22:38	16° \approx 33'33		minimum elong	-2110 Mar 04 j 14:36	26° \approx 19'18	16°56'43
				max. Earth dist.	-2110 Mar 06 j 14:01	26° \approx 22'06	48.88682 AU
conjunction	-2118 Feb 24 j 04:37	18° \approx 04'40	-16°48'40	retrograde	-2110 Jun 15 j 20:00	27° \approx 52'25	
minimum elong	-2118 Feb 24 j 04:38	18° \approx 04'40	16°48'42	min. Earth dist.	-2110 Sep 05 j 19:50	26° \approx 53'05	47.02434 AU
max. Earth dist.	-2118 Feb 26 j 12:21	18° \approx 08'02	48.02814 AU	opposition	-2110 Sep 07 j 15:25	26° \approx 50'59	-17°39'07
retrograde	-2118 Jun 07 j 15:15	19° \approx 39'50		direct	-2110 Nov 27 j 16:42	25° \approx 50'50	
min. Earth dist.	-2118 Aug 28 j 07:41	18° \approx 40'05	46.17993 AU				
opposition	-2118 Aug 30 j 11:01	18° \approx 37'35	-17°32'52	conjunction	-2109 Mar 05 j 21:11	27° \approx 19'56	-16°56'17
direct	-2118 Nov 19 j 07:20	17° \approx 36'45		minimum elong	-2109 Mar 05 j 21:15	27° \approx 19'56	16°56'18
				max. Earth dist.	-2109 Mar 07 j 18:41	27° \approx 22'37	48.97927 AU
conjunction	-2117 Feb 25 j 12:23	19° \approx 07'37	-16°50'44	retrograde	-2109 Jun 17 j 05:55	28° \approx 52'51	
minimum elong	-2117 Feb 25 j 12:25	19° \approx 07'37	16°50'46	min. Earth dist.	-2109 Sep 07 j 02:23	27° \approx 53'37	47.11522 AU
max. Earth dist.	-2117 Feb 27 j 18:32	19° \approx 10'53	48.15066 AU	opposition	-2109 Sep 08 j 21:23	27° \approx 51'32	-17°38'26
retrograde	-2117 Jun 08 j 20:15	20° \approx 42'30		direct	-2109 Nov 28 j 19:18	26° \approx 51'29	
min. Earth dist.	-2117 Aug 29 j 15:01	19° \approx 42'52	46.30016 AU				
opposition	-2117 Aug 31 j 17:55	19° \approx 40'22	-17°34'44	conjunction	-2108 Mar 06 j 03:54	28° \approx 20'26	-16°55'34
direct	-2117 Nov 20 j 16:29	18° \approx 39'38		minimum elong	-2108 Mar 06 j 04:00	28° \approx 20'26	16°55'36
				max. Earth dist.	-2108 Mar 08 j 01:21	28° \approx 23'06	49.06862 AU
conjunction	-2116 Feb 26 j 19:53	20° \approx 10'16	-16°52'30	retrograde	-2108 Jun 17 j 11:46	29° \approx 53'10	
minimum elong	-2116 Feb 26 j 19:55	20° \approx 10'16	16°52'31	min. Earth dist.	-2108 Sep 07 j 10:11	28° \approx 53'57	47.20266 AU
max. Earth dist.	-2116 Feb 29 j 00:18	20° \approx 13'25	48.26799 AU	opposition	-2108 Sep 09 j 03:23	28° \approx 51'58	-17°37'28
retrograde	-2116 Jun 09 j 04:06	21° \approx 44'53		direct	-2108 Nov 29 j 01:17	27° \approx 52'02	
min. Earth dist.	-2116 Aug 29 j 23:58	20° \approx 45'14	46.41533 AU				
opposition	-2116 Sep 01 j 00:58	20° \approx 42'51	-17°36'19	conjunction	-2107 Mar 07 j 10:30	29° \approx 20'49	-16°54'33
direct	-2116 Nov 20 j 23:56	19° \approx 42'12		minimum elong	-2107 Mar 07 j 10:34	29° \approx 20'50	16°54'34
				max. Earth dist.	-2107 Mar 09 j 06:29	29° \approx 23'24	49.15444 AU
conjunction	-2115 Feb 27 j 03:19	21° \approx 12'34	-16°53'59				
minimum elong	-2115 Feb 27 j 03:21	21° \approx 12'35	16°54'01	retrograde	-2107 Apr 05 j 03:52	0° \approx	
max. Earth dist.	-2115 Mar 01 j 07:22	21° \approx 15'41	48.38048 AU		-2107 Jun 18 j 15:58	0° \approx 53'22	
retrograde	-2115 Jun 10 j 10:51	22° \approx 46'55		min. Earth dist.	-2107 Sep 03 j 16:46	30° \approx	
min. Earth dist.	-2115 Aug 31 j 07:44	21° \approx 47'19	46.52564 AU	opposition	-2107 Sep 08 j 16:17	29° \approx 54'16	47.28613 AU
opposition	-2115 Sep 02 j 07:43	21° \approx 44'59	-17°37'35	direct	-2107 Sep 10 j 09:12	29° \approx 52'18	-17°36'11
direct	-2115 Nov 22 j 07:34	20° \approx 44'25			-2107 Nov 30 j 08:48	28° \approx 52'27	
					-2106 Feb 21 j 13:38	0° \approx	
conjunction	-2114 Feb 28 j 10:35	22° \approx 14'32	-16°55'09	conjunction	-2106 Mar 08 j 17:11	0° \approx 21'06	-16°53'16
minimum elong	-2114 Feb 28 j 10:38	22° \approx 14'32	16°55'10	minimum elong	-2106 Mar 08 j 17:17	0° \approx 21'06	16°53'18
max. Earth dist.	-2114 Mar 02 j 12:27	22° \approx 17'30	48.48849 AU	max. Earth dist.	-2106 Mar 10 j 11:36	0° \approx 23'35	49.23580 AU
retrograde	-2114 Jun 11 j 20:06	23° \approx 48'36		retrograde	-2106 Jun 19 j 21:15	1° \approx 53'28	
min. Earth dist.	-2114 Sep 01 j 14:57	22° \approx 49'03	46.63187 AU	min. Earth dist.	-2106 Sep 10 j 00:20	0° \approx 54'22	47.36490 AU
opposition	-2114 Sep 03 j 14:13	22° \approx 46'45	-17°38'33	opposition	-2106 Sep 11 j 14:59	0° \approx 52'30	-17°34'39
direct	-2114 Nov 23 j 11:42	21° \approx 46'15			-2106 Nov 06 j 00:37	30° \approx	
				direct	-2106 Dec 01 j 16:16	29° \approx 52'45	
conjunction	-2113 Mar 01 j 17:48	23° \approx 16'09	-16°56'01		-2106 Dec 27 j 00:24	0° \approx	
minimum elong	-2113 Mar 01 j 17:50	23° \approx 16'09	16°56'03				
max. Earth dist.	-2113 Mar 03 j 19:35	23° \approx 19'07	48.59262 AU	conjunction	-2105 Mar 09 j 23:58	1° \approx 21'14	-16°51'44
retrograde	-2113 Jun 13 j 02:14	24° \approx 49'57		minimum elong	-2105 Mar 10 j 00:03	1° \approx 21'14	16°51'44
min. Earth dist.	-2113 Sep 02 j 23:17	23° \approx 50'24	46.73442 AU	max. Earth dist.	-2105 Mar 11 j 17:36	1° \approx 23'40	49.31228 AU
opposition	-2113 Sep 04 j 20:44	23° \approx 48'12	-17°39'11	retrograde	-2105 Jun 21 j 02:43	2° \approx 53'26	

Planetary Phenomena of Pluto from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 22

Attention, astronomical year style is used: The year -2105 in astronomical counting style is the year 2106 BCE in historical counting style.

min. Earth dist.	-2105 Sep 11 j 06:58	1° H 54'22	47.43836 AU	conjunction	-2096 Mar 18 j 07:44	10° H 11'58	-16°25'59
opposition	-2105 Sep 12 j 20:43	1° H 52'33	-17°32'50	minimum elong	-2096 Mar 18 j 07:51	10° H 11'59	16°25'59
direct	-2105 Dec 02 j 23:37	0° H 52'51		max. Earth dist.	-2096 Mar 19 j 14:13	10° H 13'44	49.80304 AU
				retrograde	-2096 Jun 29 j 07:23	11° H 42'38	
conjunction	-2104 Mar 10 j 06:19	2° H 21'11	-16°49'56	opposition	-2096 Sep 20 j 20:13	10° H 42'20	-17°04'22
minimum elong	-2104 Mar 10 j 06:25	2° H 21'11	16°49'58	min. Earth dist.	-2096 Sep 19 j 16:49	10° H 43'38	47.90714 AU
max. Earth dist.	-2104 Mar 11 j 21:30	2° H 23'28	49.38342 AU	direct	-2096 Dec 11 j 00:15	9° H 43'03	
retrograde	-2104 Jun 21 j 11:55	3° H 53'11					
min. Earth dist.	-2104 Sep 11 j 13:59	2° H 54'07	47.50656 AU	conjunction	-2095 Mar 19 j 13:50	11° H 10'14	-16°21'45
opposition	-2104 Sep 13 j 02:27	2° H 52'22	-17°30'47	minimum elong	-2095 Mar 19 j 14:00	11° H 10'14	16°21'47
direct	-2104 Dec 03 j 03:10	1° H 52'44		max. Earth dist.	-2095 Mar 20 j 19:52	11° H 11'57	49.84018 AU
				retrograde	-2095 Jun 30 j 11:56	12° H 40'47	
conjunction	-2103 Mar 11 j 12:53	3° H 20'53	-16°47'53	min. Earth dist.	-2095 Sep 20 j 22:22	11° H 41'51	47.94132 AU
minimum elong	-2103 Mar 11 j 12:59	3° H 20'54	16°47'54	opposition	-2095 Sep 22 j 01:02	11° H 40'35	-16°59'49
max. Earth dist.	-2103 Mar 13 j 03:35	3° H 23'08	49.44937 AU	direct	-2095 Dec 12 j 06:55	10° H 41'22	
retrograde	-2103 Jun 22 j 18:55	4° H 52'41					
min. Earth dist.	-2103 Sep 12 j 21:31	3° H 53'35	47.56964 AU	conjunction	-2094 Mar 20 j 19:52	12° H 08'29	-16°17'17
opposition	-2103 Sep 14 j 08:00	3° H 51'56	-17°28'27	minimum elong	-2094 Mar 20 j 20:00	12° H 08'29	16°17'17
direct	-2103 Dec 04 j 07:56	2° H 52'19		max. Earth dist.	-2094 Mar 21 j 23:24	12° H 10'03	49.87284 AU
				retrograde	-2094 Jul 01 j 20:23	13° H 38'58	
conjunction	-2102 Mar 12 j 19:17	4° H 20'19	-16°45'34	min. Earth dist.	-2094 Sep 22 j 04:52	12° H 40'02	47.97076 AU
minimum elong	-2102 Mar 12 j 19:23	4° H 20'19	16°45'37	opposition	-2094 Sep 23 j 06:01	12° H 38'50	-16°55'01
max. Earth dist.	-2102 Mar 14 j 08:10	4° H 22'27	49.51062 AU	direct	-2094 Dec 13 j 10:02	11° H 39'40	
retrograde	-2102 Jun 24 j 00:11	5° H 51'53					
min. Earth dist.	-2102 Sep 14 j 03:07	4° H 52'50	47.62821 AU	conjunction	-2093 Mar 22 j 01:58	13° H 06'44	-16°12'35
opposition	-2102 Sep 15 j 13:21	4° H 51'11	-17°25'52	minimum elong	-2093 Mar 22 j 02:07	13° H 06'44	16°12'36
direct	-2102 Dec 05 j 13:17	3° H 51'36		max. Earth dist.	-2093 Mar 23 j 04:52	13° H 08'16	49.90033 AU
				retrograde	-2093 Jul 03 j 03:25	14° H 37'07	
conjunction	-2101 Mar 14 j 01:30	5° H 19'26	-16°43'00	min. Earth dist.	-2093 Sep 23 j 11:47	13° H 38'09	47.99470 AU
minimum elong	-2101 Mar 14 j 01:37	5° H 19'27	16°43'01	opposition	-2093 Sep 24 j 10:55	13° H 37'03	-16°49'59
max. Earth dist.	-2101 Mar 15 j 13:01	5° H 21'30	49.56752 AU	direct	-2093 Dec 14 j 13:38	12° H 37'56	
retrograde	-2101 Jun 25 j 03:23	6° H 50'50					
min. Earth dist.	-2101 Sep 15 j 10:26	5° H 51'43	47.68281 AU	conjunction	-2092 Mar 22 j 07:58	14° H 04'56	-16°07'39
opposition	-2101 Sep 16 j 18:41	5° H 50'10	-17°23'00	minimum elong	-2092 Mar 22 j 08:07	14° H 04'56	16°07'39
direct	-2101 Dec 06 j 21:25	4° H 50'37		max. Earth dist.	-2092 Mar 23 j 08:42	14° H 06'21	49.92248 AU
				retrograde	-2092 Jul 03 j 09:56	15° H 35'12	
conjunction	-2100 Mar 14 j 07:45	6° H 18'18	-16°40'09	opposition	-2092 Sep 24 j 15:43	14° H 35'11	-16°44'43
minimum elong	-2100 Mar 14 j 07:51	6° H 18'18	16°40'11	min. Earth dist.	-2092 Sep 23 j 17:04	14° H 36'16	48.01323 AU
max. Earth dist.	-2100 Mar 15 j 19:03	6° H 20'20	49.62088 AU	direct	-2092 Dec 14 j 17:17	13° H 36'05	
retrograde	-2100 Jun 25 j 07:28	7° H 49'30					
opposition	-2100 Sep 16 j 23:50	6° H 48'54	-17°19'51	conjunction	-2091 Mar 23 j 13:50	15° H 03'01	-16°02'29
min. Earth dist.	-2100 Sep 15 j 16:03	6° H 50'25	47.73394 AU	minimum elong	-2091 Mar 23 j 13:59	15° H 03'02	16°02'30
direct	-2100 Dec 07 j 04:58	5° H 49'23		max. Earth dist.	-2091 Mar 24 j 12:53	15° H 04'20	49.93916 AU
				retrograde	-2091 Jul 04 j 12:45	16° H 33'11	
conjunction	-2099 Mar 15 j 13:41	7° H 16'55	-16°37'02	opposition	-2091 Sep 25 j 20:37	15° H 33'12	-16°39'13
minimum elong	-2099 Mar 15 j 13:50	7° H 16'56	16°37'02	min. Earth dist.	-2091 Sep 25 j 00:24	15° H 34'09	48.02647 AU
max. Earth dist.	-2099 Mar 16 j 22:58	7° H 18'51	49.67101 AU	direct	-2091 Dec 16 j 00:47	14° H 34'06	
retrograde	-2099 Jun 26 j 15:59	8° H 47'58					
min. Earth dist.	-2099 Sep 16 j 22:02	7° H 48'55	47.78202 AU	conjunction	-2090 Mar 24 j 19:52	16° H 00'57	-15°57'06
opposition	-2099 Sep 18 j 05:02	7° H 47'26	-17°16'24	minimum elong	-2090 Mar 24 j 20:02	16° H 00'58	15°57'06
direct	-2099 Dec 08 j 07:54	6° H 47'57		max. Earth dist.	-2090 Mar 25 j 18:14	16° H 02'14	49.95091 AU
				retrograde	-2090 Jul 05 j 15:10	17° H 31'01	
conjunction	-2098 Mar 16 j 19:53	8° H 15'22	-16°33'37	min. Earth dist.	-2090 Sep 26 j 05:34	16° H 31'59	48.03491 AU
minimum elong	-2098 Mar 16 j 20:00	8° H 15'23	16°33'38	opposition	-2090 Sep 27 j 01:08	16° H 31'03	-16°33'29
max. Earth dist.	-2098 Mar 18 j 05:01	8° H 17'17	49.71809 AU	direct	-2090 Dec 17 j 08:59	15° H 31'57	
retrograde	-2098 Jun 27 j 22:03	9° H 46'17					
min. Earth dist.	-2098 Sep 18 j 04:39	8° H 47'12	47.82695 AU	conjunction	-2089 Mar 26 j 01:36	16° H 58'44	-15°51'28
opposition	-2098 Sep 19 j 10:04	8° H 45'48	-17°12'40	minimum elong	-2089 Mar 26 j 01:45	16° H 58'45	15°51'29
direct	-2098 Dec 09 j 12:43	7° H 46'23		max. Earth dist.	-2089 Mar 26 j 21:35	16° H 59'53	49.95822 AU
				retrograde	-2089 Jul 06 j 23:03	18° H 28'41	
conjunction	-2097 Mar 18 j 01:56	9° H 13'42	-16°29'56	min. Earth dist.	-2089 Sep 27 j 11:28	17° H 29'37	48.03936 AU
minimum elong	-2097 Mar 18 j 02:05	9° H 13'43	16°29'57	opposition	-2089 Sep 28 j 05:48	17° H 28'44	-16°27'29
max. Earth dist.	-2097 Mar 19 j 09:40	9° H 15'32	49.76225 AU	direct	-2089 Dec 18 j 12:01	16° H 29'38	
retrograde	-2097 Jun 29 j 02:57	10° H 44'28					
min. Earth dist.	-2097 Sep 19 j 09:43	9° H 45'29	47.86881 AU	conjunction	-2088 Mar 26 j 07:15	17° H 56'21	-15°45'35
opposition	-2097 Sep 20 j 15:05	9° H 44'05	-17°08'39	minimum elong	-2088 Mar 26 j 07:26	17° H 56'22	15°45'35
direct	-2097 Dec 10 j 17:50	8° H 44'44		max. Earth dist.	-2088 Mar 27 j 03:09	17° H 57'29	49.96173 AU

Planetary Phenomena of Pluto from -2400 through -1898 (UT), Astrodienst AG 18-Feb-2025 14:23, page 23

Attention, astronomical year style is used: The year -2088 in astronomical counting style is the year 2089 BCE in historical counting style.

retrograde	-2088 Jul 07 j 05:14	19° ✕ 26'12		morning rise	-2080 Apr 05 j 17:01	25° ✕ 38'26	
opposition	-2088 Sep 28 j 10:27	18° ✕ 26'17	-16°21'14	retrograde	-2080 Jul 14 j 20:11	27° ✕ 04'30	
min. Earth dist.	-2088 Sep 27 j 17:32	18° ✕ 27'05	48.04015 AU	opposition	-2080 Oct 05 j 22:09	26° ✕ 04'47	-15°21'45
direct	-2088 Dec 18 j 16:14	17° ✕ 27'10		min. Earth dist.	-2080 Oct 05 j 14:03	26° ✕ 05'11	47.92337 AU
				direct	-2080 Dec 26 j 08:10	25° ✕ 05'43	
conjunction	-2087 Mar 27 j 12:57	18° ✕ 53'49	-15°39'26	evening set	-2079 Apr 01 j 03:54	26° ✕ 27'53	
minimum elong	-2087 Mar 27 j 13:07	18° ✕ 53'50	15°39'26				
max. Earth dist.	-2087 Mar 28 j 07:20	18° ✕ 54'52	49.96203 AU	conjunction	-2079 Apr 04 j 10:46	26° ✕ 32'21	-14°41'12
retrograde	-2087 Jul 08 j 10:35	20° ✕ 23'35		minimum elong	-2079 Apr 04 j 10:57	26° ✕ 32'22	14°41'11
opposition	-2087 Sep 29 j 14:50	19° ✕ 23'40	-16°14'42	max. Earth dist.	-2079 Apr 04 j 18:04	26° ✕ 32'46	49.83840 AU
min. Earth dist.	-2087 Sep 28 j 22:05	19° ✕ 24'28	48.03790 AU	morning rise	-2079 Apr 07 j 18:09	26° ✕ 36'51	
direct	-2087 Dec 19 j 19:53	18° ✕ 24'34		retrograde	-2079 Jul 16 j 02:43	28° ✕ 01'47	
				opposition	-2079 Oct 07 j 02:33	27° ✕ 02'05	-15°13'14
conjunction	-2086 Mar 28 j 18:39	19° ✕ 51'11	-15°33'02	min. Earth dist.	-2079 Oct 06 j 20:05	27° ✕ 02'23	47.88817 AU
minimum elong	-2086 Mar 28 j 18:51	19° ✕ 51'12	15°33'02	direct	-2079 Dec 27 j 12:14	26° ✕ 02'58	
max. Earth dist.	-2086 Mar 29 j 11:47	19° ✕ 52'10	49.95927 AU	evening set	-2078 Apr 01 j 18:09	27° ✕ 24'16	
retrograde	-2086 Jul 09 j 14:07	21° ✕ 20'52					
opposition	-2086 Sep 30 j 19:28	20° ✕ 20'59	-16°07'54	conjunction	-2078 Apr 05 j 16:42	27° ✕ 29'37	-14°32'53
min. Earth dist.	-2086 Sep 30 j 04:30	20° ✕ 21'41	48.03269 AU	minimum elong	-2078 Apr 05 j 16:53	27° ✕ 29'37	14°32'54
direct	-2086 Dec 21 j 02:00	19° ✕ 21'52		max. Earth dist.	-2078 Apr 05 j 23:28	27° ✕ 30'00	49.80202 AU
				morning rise	-2078 Apr 09 j 15:47	27° ✕ 35'00	
conjunction	-2085 Mar 30 j 00:19	20° ✕ 48'28	-15°26'21	retrograde	-2078 Jul 17 j 08:44	28° ✕ 59'01	
minimum elong	-2085 Mar 30 j 00:28	20° ✕ 48'29	15°26'22	opposition	-2078 Oct 08 j 07:00	27° ✕ 59'18	-15°04'29
max. Earth dist.	-2085 Mar 30 j 17:10	20° ✕ 49'26	49.95371 AU	min. Earth dist.	-2078 Oct 08 j 02:15	27° ✕ 59'32	47.84817 AU
retrograde	-2085 Jul 10 j 16:36	22° ✕ 18'05		direct	-2078 Dec 28 j 16:25	27° ✕ 00'10	
opposition	-2085 Oct 01 j 23:50	21° ✕ 18'14	-16°00'50	evening set	-2077 Apr 02 j 10:12	28° ✕ 20'42	
min. Earth dist.	-2085 Oct 01 j 09:06	21° ✕ 18'56	48.02446 AU				
direct	-2085 Dec 22 j 09:18	20° ✕ 19'09		conjunction	-2077 Apr 06 j 22:21	28° ✕ 26'49	-14°24'20
				minimum elong	-2077 Apr 06 j 22:33	28° ✕ 26'50	14°24'19
conjunction	-2084 Mar 30 j 05:51	21° ✕ 45'44	-15°19'26	max. Earth dist.	-2077 Apr 07 j 03:22	28° ✕ 27'06	49.76128 AU
minimum elong	-2084 Mar 30 j 06:02	21° ✕ 45'45	15°19'27	morning rise	-2077 Apr 11 j 11:07	28° ✕ 32'59	
max. Earth dist.	-2084 Mar 30 j 20:40	21° ✕ 46'34	49.94513 AU	retrograde	-2077 Jul 18 j 14:51	29° ✕ 56'12	
retrograde	-2084 Jul 10 j 23:19	23° ✕ 15'19		opposition	-2077 Oct 09 j 11:17	28° ✕ 56'28	-14°55'30
opposition	-2084 Oct 02 j 04:18	22° ✕ 15'30	-15°53'30	min. Earth dist.	-2077 Oct 09 j 06:52	28° ✕ 56'41	47.80412 AU
min. Earth dist.	-2084 Oct 01 j 14:51	22° ✕ 16'09	48.01315 AU	direct	-2077 Dec 29 j 19:36	27° ✕ 57'17	
direct	-2084 Dec 22 j 13:02	21° ✕ 16'26		evening set	-2076 Apr 02 j 03:29	29° ✕ 17'09	
conjunction	-2083 Mar 31 j 11:35	22° ✕ 43'01	-15°12'15	conjunction	-2076 Apr 07 j 04:02	29° ✕ 23'59	-14°15'32
minimum elong	-2083 Mar 31 j 11:46	22° ✕ 43'01	15°12'14	minimum elong	-2076 Apr 07 j 04:13	29° ✕ 24'00	14°15'32
max. Earth dist.	-2083 Apr 01 j 02:07	22° ✕ 43'50	49.93311 AU	max. Earth dist.	-2076 Apr 07 j 07:36	29° ✕ 24'11	49.71665 AU
retrograde	-2083 Jul 12 j 06:11	24° ✕ 12'34		morning rise	-2076 Apr 12 j 05:13	29° ✕ 30'51	
opposition	-2083 Oct 03 j 08:47	23° ✕ 12'48	-15°45'55		-2076 May 04 j 09:07	0° °	
min. Earth dist.	-2083 Oct 02 j 20:58	23° ✕ 13'21	47.99792 AU	retrograde	-2076 Jul 18 j 18:49	0° ° 53'21	
direct	-2083 Dec 23 j 16:38	22° ✕ 13'44			-2076 Oct 04 j 01:09	30° ° ✕	
				opposition	-2076 Oct 09 j 15:42	29° ✕ 53'37	-14°46'15
conjunction	-2082 Apr 01 j 17:23	23° ✕ 40'20	-15°04'49	min. Earth dist.	-2076 Oct 09 j 13:16	29° ✕ 53'44	47.75653 AU
minimum elong	-2082 Apr 01 j 17:35	23° ✕ 40'21	15°04'49	direct	-2076 Dec 30 j 01:25	28° ✕ 54'24	
max. Earth dist.	-2082 Apr 02 j 05:58	23° ✕ 41'03	49.91699 AU		-2075 Mar 23 j 17:20	0° °	
retrograde	-2082 Jul 13 j 13:51	25° ✕ 09'51		evening set	-2075 Apr 02 j 21:53	0° ° ° 13'40	
opposition	-2082 Oct 04 j 13:04	24° ✕ 10'07	-15°38'05				
min. Earth dist.	-2082 Oct 04 j 01:51	24° ✕ 10'39	47.97826 AU	conjunction	-2075 Apr 08 j 09:48	0° ° ° 21'08	-14°06'29
direct	-2082 Dec 24 j 18:54	23° ✕ 11'04		minimum elong	-2075 Apr 08 j 10:01	0° ° ° 21'09	14°06'29
evening set	-2081 Apr 01 j 16:31	24° ✕ 35'57		max. Earth dist.	-2075 Apr 08 j 13:05	0° ° ° 21'20	49.66884 AU
				morning rise	-2075 Apr 13 j 22:21	0° ° ° 28'39	
conjunction	-2081 Apr 02 j 23:13	24° ✕ 37'41	-14°57'10	retrograde	-2075 Jul 19 j 21:10	1° ° ° 50'31	
minimum elong	-2081 Apr 02 j 23:24	24° ✕ 37'42	14°57'09	opposition	-2075 Oct 10 j 20:01	0° ° ° 50'46	-14°36'45
max. Earth dist.	-2081 Apr 03 j 10:04	24° ✕ 38'18	49.89598 AU	min. Earth dist.	-2075 Oct 10 j 17:46	0° ° ° 50'52	47.70574 AU
morning rise	-2081 Apr 04 j 06:20	24° ✕ 39'27			-2075 Dec 03 j 04:08	30° ° ° ✕	
retrograde	-2081 Jul 14 j 18:07	26° ✕ 07'10		direct	-2075 Dec 31 j 08:50	29° ✕ 51'31	
opposition	-2081 Oct 05 j 17:40	25° ✕ 07'28	-15°30'02		-2074 Jan 28 j 06:43	0° ° °	
min. Earth dist.	-2081 Oct 05 j 08:53	25° ✕ 07'53	47.95350 AU	evening set	-2074 Apr 03 j 16:58	1° ° ° 10'15	
direct	-2081 Dec 26 j 00:15	24° ✕ 08'25					
evening set	-2080 Mar 31 j 17:24	25° ✕ 31'39		conjunction	-2074 Apr 09 j 15:30	1° ° ° 18'19	-13°57'11
				minimum elong	-2074 Apr 09 j 15:41	1° ° ° 18'20	13°57'11
conjunction	-2080 Apr 03 j 04:59	25° ✕ 35'02	-14°49'17	max. Earth dist.	-2074 Apr 09 j 16:39	1° ° ° 18'23	49.61797 AU
minimum elong	-2080 Apr 03 j 05:10	25° ✕ 35'03	14°49'18	morning rise	-2074 Apr 15 j 14:47	1° ° ° 26'26	
max. Earth dist.	-2080 Apr 03 j 15:00	25° ✕ 35'36	49.86983 AU	retrograde	-2074 Jul 21 j 03:26	2° ° ° 47'44	

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Attention, astronomical year style is used: The year -2074 in astronomical counting style is the year 2075 BCE in historical counting style.

opposition	-2074 Oct 12 j 00:21	1° Υ 47'59	-14°26'58	max. Earth dist.	-2067 Apr 16 j 01:03	8° Υ 01'59	49.16176 AU
min. Earth dist.	-2074 Oct 11 j 23:24	1° Υ 48'02	47.65214 AU	morning rise	-2067 Apr 24 j 22:45	8° Υ 14'08	
direct	-2073 Jan 01 j 12:42	0° Υ 48'43		retrograde	-2067 Jul 27 j 21:40	9° Υ 32'18	
evening set	-2073 Apr 04 j 12:41	2° Υ 06'57		opposition	-2067 Oct 18 j 08:00	8° Υ 32'31	-13°11'28
				min. Earth dist.	-2067 Oct 18 j 15:39	8° Υ 32'09	47.17042 AU
conjunction	-2073 Apr 10 j 21:20	2° Υ 15'35	-13°47'38	direct	-2066 Jan 07 j 18:38	7° Υ 32'59	
minimum elong	-2073 Apr 10 j 21:33	2° Υ 15'36	13°47'38	evening set	-2066 Apr 08 j 19:12	8° Υ 48'33	
max. Earth dist.	-2073 Apr 10 j 22:22	2° Υ 15'38	49.56429 AU				
morning rise	-2073 Apr 17 j 06:42	2° Υ 24'17		conjunction	-2066 Apr 17 j 15:30	9° Υ 00'37	-12°33'57
retrograde	-2073 Jul 22 j 09:59	3° Υ 45'03		minimum elong	-2066 Apr 17 j 15:43	9° Υ 00'38	12°33'56
opposition	-2073 Oct 13 j 04:50	2° Υ 45'18	-14°16'56	max. Earth dist.	-2066 Apr 17 j 05:29	9° Υ 00'03	49.07718 AU
min. Earth dist.	-2073 Oct 13 j 05:00	2° Υ 45'18	47.59558 AU	morning rise	-2066 Apr 26 j 12:46	9° Υ 12'45	
direct	-2072 Jan 02 j 16:24	1° Υ 46'01		retrograde	-2066 Jul 29 j 03:14	10° Υ 30'31	
evening set	-2072 Apr 04 j 08:47	3° Υ 03'47		opposition	-2066 Oct 19 j 12:40	9° Υ 30'41	-12°59'44
				min. Earth dist.	-2066 Oct 19 j 22:35	9° Υ 30'12	47.08197 AU
conjunction	-2072 Apr 11 j 02:56	3° Υ 12'59	-13°37'49	direct	-2065 Jan 08 j 23:57	8° Υ 31'04	
minimum elong	-2072 Apr 11 j 03:08	3° Υ 13'00	13°37'48	evening set	-2065 Apr 09 j 18:03	9° Υ 46'18	
max. Earth dist.	-2072 Apr 11 j 02:26	3° Υ 12'57	49.50778 AU				
morning rise	-2072 Apr 17 j 21:52	3° Υ 22'14		conjunction	-2065 Apr 18 j 21:46	9° Υ 58'49	-12°22'30
retrograde	-2072 Jul 22 j 18:31	4° Υ 42'30		minimum elong	-2065 Apr 18 j 21:58	9° Υ 58'49	12°22'30
opposition	-2072 Oct 13 j 09:14	3° Υ 42'46	-14°06'37	max. Earth dist.	-2065 Apr 18 j 11:08	9° Υ 58'12	48.98807 AU
min. Earth dist.	-2072 Oct 13 j 09:42	3° Υ 42'45	47.53599 AU	morning rise	-2065 Apr 28 j 02:19	10° Υ 11'22	
direct	-2071 Jan 02 j 17:56	2° Υ 43'28		retrograde	-2065 Jul 30 j 05:55	11° Υ 28'46	
evening set	-2071 Apr 05 j 05:28	4° Υ 00'50		opposition	-2065 Oct 20 j 17:16	10° Υ 28'51	-12°47'45
				min. Earth dist.	-2065 Oct 21 j 03:37	10° Υ 28'21	46.98918 AU
conjunction	-2071 Apr 12 j 08:51	4° Υ 10'33	-13°27'45	direct	-2064 Jan 10 j 07:35	9° Υ 29'09	
minimum elong	-2071 Apr 12 j 09:04	4° Υ 10'34	13°27'45	evening set	-2064 Apr 09 j 16:57	10° Υ 44'05	
max. Earth dist.	-2071 Apr 12 j 07:00	4° Υ 10'27	49.44781 AU				
morning rise	-2071 Apr 19 j 13:05	4° Υ 20'19		conjunction	-2064 Apr 19 j 03:47	10° Υ 57'00	-12°10'49
retrograde	-2071 Jul 24 j 00:17	5° Υ 40'08		minimum elong	-2064 Apr 19 j 04:00	10° Υ 57'01	12°10'48
opposition	-2071 Oct 14 j 13:42	4° Υ 40'25	-13°56'04	max. Earth dist.	-2064 Apr 18 j 14:52	10° Υ 56'16	48.89487 AU
min. Earth dist.	-2071 Oct 14 j 16:28	4° Υ 40'17	47.47269 AU	morning rise	-2064 Apr 28 j 15:43	11° Υ 09'59	
direct	-2070 Jan 03 j 21:53	3° Υ 41'07		retrograde	-2064 Jul 30 j 11:24	12° Υ 27'02	
evening set	-2070 Apr 06 j 02:47	4° Υ 58'05		opposition	-2064 Oct 20 j 22:02	11° Υ 27'03	-12°35'31
				min. Earth dist.	-2064 Oct 21 j 09:55	11° Υ 26'29	46.89268 AU
conjunction	-2070 Apr 13 j 14:58	5° Υ 08'19	-13°17'26	direct	-2063 Jan 10 j 12:56	10° Υ 27'15	
minimum elong	-2070 Apr 13 j 15:09	5° Υ 08'19	13°17'25	evening set	-2063 Apr 10 j 16:11	11° Υ 41'54	
max. Earth dist.	-2070 Apr 13 j 12:21	5° Υ 08'10	49.38388 AU				
morning rise	-2070 Apr 21 j 03:53	5° Υ 18'34		conjunction	-2063 Apr 20 j 10:11	11° Υ 55'14	-11°58'53
retrograde	-2070 Jul 25 j 02:12	6° Υ 37'57		minimum elong	-2063 Apr 20 j 10:23	11° Υ 55'14	11°58'52
opposition	-2070 Oct 15 j 18:10	5° Υ 38'15	-13°45'16	max. Earth dist.	-2063 Apr 19 j 20:57	11° Υ 54'28	48.79811 AU
min. Earth dist.	-2070 Oct 15 j 21:29	5° Υ 38'06	47.40492 AU	morning rise	-2063 Apr 30 j 05:03	12° Υ 08'37	
direct	-2069 Jan 05 j 06:06	4° Υ 38'55		retrograde	-2063 Jul 31 j 16:14	13° Υ 25'21	
evening set	-2069 Apr 07 j 00:19	5° Υ 55'32		opposition	-2063 Oct 22 j 02:42	12° Υ 25'18	-12°23'01
				min. Earth dist.	-2063 Oct 22 j 15:45	12° Υ 24'40	46.79276 AU
conjunction	-2069 Apr 14 j 20:52	6° Υ 06'14	-13°06'54	direct	-2062 Jan 11 j 18:53	11° Υ 25'24	
minimum elong	-2069 Apr 14 j 21:04	6° Υ 06'15	13°06'54	evening set	-2062 Apr 11 j 15:49	12° Υ 39'48	
max. Earth dist.	-2069 Apr 14 j 15:36	6° Υ 05'56	49.31510 AU				
morning rise	-2069 Apr 22 j 18:22	6° Υ 17'00		conjunction	-2062 Apr 21 j 16:32	12° Υ 53'32	-11°46'42
retrograde	-2069 Jul 26 j 07:34	7° Υ 35'58		minimum elong	-2062 Apr 21 j 16:45	12° Υ 53'32	11°46'41
opposition	-2069 Oct 16 j 22:47	6° Υ 36'15	-13°34'13	max. Earth dist.	-2062 Apr 21 j 01:41	12° Υ 52'41	48.69829 AU
min. Earth dist.	-2069 Oct 17 j 03:56	6° Υ 36'00	47.33214 AU	morning rise	-2062 May 01 j 18:16	13° Υ 07'20	
direct	-2068 Jan 06 j 11:33	5° Υ 36'53		retrograde	-2062 Aug 02 j 00:41	14° Υ 23'45	
evening set	-2068 Apr 06 j 22:17	6° Υ 53'08		opposition	-2062 Oct 23 j 07:29	13° Υ 23'39	-12°10'15
				min. Earth dist.	-2062 Oct 23 j 20:49	13° Υ 23'00	46.68995 AU
conjunction	-2068 Apr 15 j 03:06	7° Υ 04'18	-12°56'08	direct	-2061 Jan 12 j 21:20	12° Υ 23'39	
minimum elong	-2068 Apr 15 j 03:18	7° Υ 04'19	12°56'07	evening set	-2061 Apr 12 j 15:20	13° Υ 37'49	
max. Earth dist.	-2068 Apr 14 j 21:08	7° Υ 03'58	49.24107 AU				
morning rise	-2068 Apr 23 j 08:43	7° Υ 15'32		conjunction	-2061 Apr 22 j 22:48	13° Υ 51'57	-11°34'15
retrograde	-2068 Jul 26 j 13:49	8° Υ 34'06		minimum elong	-2061 Apr 22 j 22:59	13° Υ 51'58	11°34'14
opposition	-2068 Oct 17 j 03:25	7° Υ 34'21	-13°22'58	max. Earth dist.	-2061 Apr 22 j 06:45	13° Υ 51'02	48.59549 AU
min. Earth dist.	-2068 Oct 17 j 10:17	7° Υ 34'02	47.25390 AU	morning rise	-2061 May 03 j 07:16	14° Υ 06'09	
direct	-2067 Jan 06 j 15:58	6° Υ 34'55		retrograde	-2061 Aug 03 j 08:04	15° Υ 22'18	
evening set	-2067 Apr 07 j 20:38	7° Υ 50'49		opposition	-2061 Oct 24 j 12:27	14° Υ 22'09	-11°57'12
				min. Earth dist.	-2061 Oct 25 j 03:40	14° Υ 21'25	46.58424 AU
conjunction	-2067 Apr 16 j 09:14	8° Υ 02'26	-12°45'09	direct	-2060 Jan 14 j 00:52	13° Υ 22'05	
minimum elong	-2067 Apr 16 j 09:26	8° Υ 02'27	12°45'09	evening set	-2060 Apr 12 j 15:18	14° Υ 36'03	

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Attention, astronomical year style is used: The year -2060 in astronomical counting style is the year 2061 BCE in historical counting style.

conjunction	-2060 Apr 23 j 05:18	14° Υ 50'35	-11°21'32	direct	-2053 Jan 20 j 17:42	20° Υ 18'29	
minimum elong	-2060 Apr 23 j 05:30	14° Υ 50'35	11°21'32	evening set	-2053 Apr 18 j 22:16	21° Υ 31'29	
max. Earth dist.	-2060 Apr 22 j 12:51	14° Υ 49'38	48.48994 AU	max. Earth dist.	-2053 Apr 30 j 02:38	21° Υ 47'00	47.63261 AU
morning rise	-2060 May 03 j 20:10	15° Υ 05'10					
retrograde	-2060 Aug 03 j 11:36	16° Υ 21'04		conjunction	-2053 May 01 j 05:43	21° Υ 48'35	-9°45'35
opposition	-2060 Oct 24 j 17:15	15° Υ 20'52	-11°43'53	minimum elong	-2053 May 01 j 05:55	21° Υ 48'36	9°45'34
min. Earth dist.	-2060 Oct 25 j 08:37	15° Υ 20'08	46.47554 AU	morning rise	-2053 May 13 j 13:53	22° Υ 05'45	
direct	-2059 Jan 14 j 08:16	14° Υ 20'45		retrograde	-2053 Aug 11 j 06:49	23° Υ 20'22	
evening set	-2059 Apr 13 j 15:31	15° Υ 34'32		opposition	-2053 Nov 01 j 06:12	22° Υ 19'41	-10°03'29
				min. Earth dist.	-2053 Nov 02 j 07:30	22° Υ 18'27	45.59151 AU
conjunction	-2059 Apr 24 j 11:48	15° Υ 49'27	-11°08'33	direct	-2052 Jan 22 j 01:07	21° Υ 18'51	
minimum elong	-2059 Apr 24 j 12:00	15° Υ 49'28	11°08'32	evening set	-2052 Apr 19 j 00:15	22° Υ 31'45	
max. Earth dist.	-2059 Apr 23 j 17:04	15° Υ 48'22	48.38115 AU	max. Earth dist.	-2052 Apr 30 j 07:58	22° Υ 47'30	47.49204 AU
morning rise	-2059 May 05 j 09:13	16° Υ 04'26					
retrograde	-2059 Aug 04 j 17:10	17° Υ 20'07		conjunction	-2052 May 01 j 12:53	22° Υ 49'11	-9°30'53
opposition	-2059 Oct 25 j 22:18	16° Υ 19'53	-11°30'18	minimum elong	-2052 May 01 j 13:04	22° Υ 49'12	9°30'53
min. Earth dist.	-2059 Oct 26 j 15:22	16° Υ 19'04	46.36339 AU	morning rise	-2052 May 14 j 02:27	23° Υ 06'42	
direct	-2058 Jan 15 j 14:09	15° Υ 19'42		retrograde	-2052 Aug 11 j 15:56	24° Υ 21'10	
evening set	-2058 Apr 14 j 16:00	16° Υ 33'20		opposition	-2052 Nov 01 j 11:37	23° Υ 20'23	-9°48'06
				min. Earth dist.	-2052 Nov 02 j 13:34	23° Υ 19'07	45.44776 AU
conjunction	-2058 Apr 25 j 18:38	16° Υ 48'38	-10°55'20	direct	-2051 Jan 22 j 04:20	22° Υ 19'23	
minimum elong	-2058 Apr 25 j 18:51	16° Υ 48'38	10°55'19	evening set	-2051 Apr 20 j 02:22	23° Υ 32'12	
max. Earth dist.	-2058 Apr 24 j 23:30	16° Υ 47'31	48.26845 AU				
morning rise	-2058 May 06 j 22:07	17° Υ 03'59		conjunction	-2051 May 02 j 20:17	23° Υ 49'59	-9°15'56
retrograde	-2058 Aug 05 j 23:21	18° Υ 19'29		minimum elong	-2051 May 02 j 20:29	23° Υ 50'00	9°15'54
opposition	-2058 Oct 27 j 03:21	17° Υ 19'13	-11°16'28	max. Earth dist.	-2051 May 01 j 14:09	23° Υ 48'14	47.34809 AU
min. Earth dist.	-2058 Oct 27 j 21:56	17° Υ 18'19	46.24693 AU	morning rise	-2051 May 15 j 15:02	24° Υ 07'51	
direct	-2057 Jan 16 j 19:21	16° Υ 18'57		retrograde	-2051 Aug 13 j 01:38	25° Υ 22'10	
evening set	-2057 Apr 15 j 16:54	17° Υ 32'27		opposition	-2051 Nov 02 j 17:23	24° Υ 21'16	-9°32'26
max. Earth dist.	-2057 Apr 26 j 04:08	17° Υ 46'53	48.15131 AU	min. Earth dist.	-2051 Nov 03 j 21:12	24° Υ 19'54	45.30090 AU
				direct	-2050 Jan 23 j 07:37	23° Υ 20'07	
conjunction	-2057 Apr 27 j 01:26	17° Υ 48'07	-10°41'52	evening set	-2050 Apr 21 j 04:46	24° Υ 32'53	
minimum elong	-2057 Apr 27 j 01:38	17° Υ 48'07	10°41'50	max. Earth dist.	-2050 May 02 j 21:08	24° Υ 49'13	47.20139 AU
morning rise	-2057 May 08 j 11:00	18° Υ 03'51					
retrograde	-2057 Aug 07 j 08:21	19° Υ 19'10		conjunction	-2050 May 04 j 03:45	24° Υ 51'01	-9°00'42
opposition	-2057 Oct 28 j 08:32	18° Υ 18'51	-11°02'22	minimum elong	-2050 May 04 j 03:56	24° Υ 51'01	9°00'41
min. Earth dist.	-2057 Oct 29 j 03:52	18° Υ 17'54	46.12579 AU	morning rise	-2050 May 17 j 03:25	25° Υ 09'12	
direct	-2056 Jan 17 j 21:54	17° Υ 18'30		retrograde	-2050 Aug 14 j 07:07	26° Υ 23'25	
evening set	-2056 Apr 15 j 17:46	18° Υ 31'51		opposition	-2050 Nov 03 j 23:02	25° Υ 22'24	-9°16'28
max. Earth dist.	-2056 Apr 26 j 09:13	18° Υ 46'33	48.02906 AU	min. Earth dist.	-2050 Nov 05 j 02:46	25° Υ 21'02	45.15141 AU
				direct	-2049 Jan 24 j 15:05	24° Υ 21'06	
conjunction	-2056 Apr 27 j 08:18	18° Υ 47'54	-10°28'09	evening set	-2049 Apr 22 j 07:26	25° Υ 33'50	
minimum elong	-2056 Apr 27 j 08:30	18° Υ 47'54	10°28'08	max. Earth dist.	-2049 May 04 j 02:36	25° Υ 50'22	47.05216 AU
morning rise	-2056 May 08 j 23:49	19° Υ 04'00					
retrograde	-2056 Aug 07 j 15:34	20° Υ 19'07		conjunction	-2049 May 05 j 11:14	25° Υ 52'17	-8°45'12
opposition	-2056 Oct 28 j 13:58	19° Υ 18'44	-10°48'02	minimum elong	-2049 May 05 j 11:25	25° Υ 52'18	8°45'11
min. Earth dist.	-2056 Oct 29 j 11:41	19° Υ 17'41	45.99942 AU	morning rise	-2049 May 18 j 15:56	26° Υ 10'49	
direct	-2055 Jan 18 j 03:14	18° Υ 18'17		retrograde	-2049 Aug 15 j 12:39	27° Υ 24'56	
evening set	-2055 Apr 16 j 19:08	19° Υ 31'31		opposition	-2049 Nov 05 j 05:01	26° Υ 23'49	-9°00'14
				min. Earth dist.	-2049 Nov 06 j 10:14	26° Υ 22'22	44.99961 AU
conjunction	-2055 Apr 28 j 15:28	19° Υ 47'56	-10°14'12	direct	-2048 Jan 25 j 22:43	25° Υ 22'23	
minimum elong	-2055 Apr 28 j 15:40	19° Υ 47'56	10°14'11	evening set	-2048 Apr 22 j 10:08	26° Υ 35'06	
max. Earth dist.	-2055 Apr 27 j 15:27	19° Υ 46'32	47.90173 AU	max. Earth dist.	-2048 May 04 j 10:19	26° Υ 51'58	46.90055 AU
morning rise	-2055 May 10 j 12:36	20° Υ 04'24					
retrograde	-2055 Aug 08 j 20:18	21° Υ 19'19		conjunction	-2048 May 05 j 18:54	26° Υ 53'53	-8°29'26
opposition	-2055 Oct 29 j 19:11	20° Υ 18'51	-10°33'26	minimum elong	-2048 May 05 j 19:04	26° Υ 53'54	8°29'24
min. Earth dist.	-2055 Oct 30 j 17:29	20° Υ 17'46	45.86796 AU	morning rise	-2048 May 19 j 04:12	27° Υ 12'44	
direct	-2054 Jan 19 j 11:09	19° Υ 18'17		retrograde	-2048 Aug 15 j 17:31	28° Υ 26'48	
evening set	-2054 Apr 17 j 20:45	20° Υ 31'25		opposition	-2048 Nov 05 j 11:05	27° Υ 25'35	-8°43'42
				min. Earth dist.	-2048 Nov 06 j 17:09	27° Υ 24'05	44.84518 AU
conjunction	-2054 Apr 29 j 22:35	20° Υ 48'10	-10°00'01	direct	-2047 Jan 26 j 07:03	26° Υ 24'01	
minimum elong	-2054 Apr 29 j 22:46	20° Υ 48'11	10°00'01	evening set	-2047 Apr 23 j 13:29	27° Υ 36'44	
max. Earth dist.	-2054 Apr 28 j 19:53	20° Υ 46'37	47.76940 AU	max. Earth dist.	-2047 May 05 j 16:18	27° Υ 53'49	46.74625 AU
morning rise	-2054 May 12 j 01:28	21° Υ 04'59					
retrograde	-2054 Aug 10 j 02:20	22° Υ 19'45		conjunction	-2047 May 07 j 02:46	27° Υ 55'51	-8°13'22
opposition	-2054 Oct 31 j 00:42	21° Υ 19'11	-10°18'35	minimum elong	-2047 May 07 j 02:57	27° Υ 55'52	8°13'21
min. Earth dist.	-2054 Nov 01 j 00:56	21° Υ 18'00	45.73186 AU	morning rise	-2047 May 20 j 16:49	28° Υ 15'01	

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Attention, astronomical year style is used: The year -2047 in astronomical counting style is the year 2048 BCE in historical counting style.

retrograde	-2047 Aug 17 j 02:35	29° Υ 29'03	min. Earth dist.	-2041 Nov 15 j 01:09	4° \mathcal{B} 47'11	43.65432 AU
opposition	-2047 Nov 06 j 17:06	28° Υ 27'45 -8°26'52	direct	-2040 Feb 03 j 03:02	3° \mathcal{B} 46'26	
min. Earth dist.	-2047 Nov 07 j 23:53	28° Υ 26'13 44.68788 AU	evening set	-2040 Apr 29 j 21:01	4° \mathcal{B} 59'38	
direct	-2046 Jan 27 j 11:20	27° Υ 26'03	max. Earth dist.	-2040 May 12 j 18:44	5° \mathcal{B} 18'13	45.55000 AU
evening set	-2046 Apr 24 j 17:04	28° Υ 38'48				
max. Earth dist.	-2046 May 06 j 23:11	28° Υ 56'07 46.58852 AU	conjunction	-2040 May 14 j 14:58	5° \mathcal{B} 20'54 -6°13'35	
			minimum elong	-2040 May 14 j 15:07	5° \mathcal{B} 20'54 6°13'32	
conjunction	-2046 May 08 j 10:56	28° Υ 58'14 -7°57'03	morning rise	-2040 May 29 j 09:06	5° \mathcal{B} 42'12	
minimum elong	-2046 May 08 j 11:06	28° Υ 58'14 7°57'01	retrograde	-2040 Aug 24 j 14:29	6° \mathcal{B} 56'19	
morning rise	-2046 May 22 j 05:23	29° Υ 17'44	opposition	-2040 Nov 13 j 16:46	5° \mathcal{B} 54'03 -6°21'16	
	-2046 Jun 24 j 14:43	0° \mathcal{B}	min. Earth dist.	-2040 Nov 15 j 08:25	5° \mathcal{B} 52'03 43.46776 AU	
retrograde	-2046 Aug 18 j 11:54	0° \mathcal{B} 31'44	direct	-2039 Feb 03 j 10:03	4° \mathcal{B} 51'06	
	-2046 Oct 12 j 22:43	30° $\mathcal{R}\Upsilon$	evening set	-2039 May 01 j 02:51	6° \mathcal{B} 04'27	
opposition	-2046 Nov 07 j 23:33	29° Υ 30'20 -8°09'46	max. Earth dist.	-2039 May 14 j 01:52	6° \mathcal{B} 23'11 45.36308 AU	
min. Earth dist.	-2046 Nov 09 j 08:25	29° Υ 28'42 44.52687 AU				
direct	-2045 Jan 28 j 16:09	28° Υ 28'30	conjunction	-2039 May 16 j 00:12	6° \mathcal{B} 26'00 -5°55'23	
evening set	-2045 Apr 25 j 20:52	29° Υ 41'18	minimum elong	-2039 May 16 j 00:20	6° \mathcal{B} 26'00 5°55'22	
max. Earth dist.	-2045 May 08 j 06:32	29° Υ 58'52 46.42685 AU	morning rise	-2039 May 30 j 21:50	6° \mathcal{B} 47'36	
			retrograde	-2039 Aug 25 j 22:59	8° \mathcal{B} 01'47	
conjunction	-2045 May 09 j 19:06	0° \mathcal{B} 01'03 -7°40'28	opposition	-2039 Nov 15 j 00:10	6° \mathcal{B} 59'21 -6°02'10	
minimum elong	-2045 May 09 j 19:16	0° \mathcal{B} 01'03 7°40'27	min. Earth dist.	-2039 Nov 16 j 17:42	6° \mathcal{B} 57'14 43.27837 AU	
	-2045 May 09 j 01:33	0° \mathcal{B}	direct	-2038 Feb 04 j 18:37	5° \mathcal{B} 56'11	
morning rise	-2045 May 23 j 17:49	0° \mathcal{B} 20'51	evening set	-2038 May 02 j 08:53	7° \mathcal{B} 09'42	
retrograde	-2045 Aug 19 j 20:45	1° \mathcal{B} 34'51	max. Earth dist.	-2038 May 15 j 11:26	7° \mathcal{B} 28'43 45.17354 AU	
opposition	-2045 Nov 09 j 06:01	0° \mathcal{B} 33'20 -7°52'23				
min. Earth dist.	-2045 Nov 10 j 15:19	0° \mathcal{B} 31'40 44.36156 AU	conjunction	-2038 May 17 j 09:42	7° \mathcal{B} 31'32 -5°36'55	
	-2045 Dec 08 j 17:08	30° $\mathcal{R}\Upsilon$	minimum elong	-2038 May 17 j 09:50	7° \mathcal{B} 31'32 5°36'53	
direct	-2044 Jan 29 j 23:03	29° Υ 31'21	morning rise	-2038 Jun 01 j 10:24	7° \mathcal{B} 53'25	
	-2044 Mar 21 j 17:41	0° \mathcal{B}	retrograde	-2038 Aug 27 j 05:00	9° \mathcal{B} 07'43	
evening set	-2044 Apr 26 j 01:10	0° \mathcal{B} 44'12	opposition	-2038 Nov 16 j 07:50	8° \mathcal{B} 05'07 -5°42'46	
max. Earth dist.	-2044 May 08 j 12:18	1° \mathcal{B} 01'56 46.26055 AU	min. Earth dist.	-2038 Nov 18 j 01:46	8° \mathcal{B} 02'58 43.08652 AU	
			direct	-2037 Feb 06 j 05:18	7° \mathcal{B} 01'45	
conjunction	-2044 May 10 j 03:32	1° \mathcal{B} 04'16 -7°23'37	evening set	-2037 May 03 j 15:14	8° \mathcal{B} 15'27	
minimum elong	-2044 May 10 j 03:41	1° \mathcal{B} 04'17 7°23'35	max. Earth dist.	-2037 May 16 j 18:54	8° \mathcal{B} 34'37 44.98177 AU	
morning rise	-2044 May 24 j 06:33	1° \mathcal{B} 24'24				
retrograde	-2044 Aug 20 j 05:01	2° \mathcal{B} 38'23	conjunction	-2037 May 18 j 19:02	8° \mathcal{B} 37'35 -5°18'10	
opposition	-2044 Nov 09 j 12:40	1° \mathcal{B} 36'44 -7°34'43	minimum elong	-2037 May 18 j 19:09	8° \mathcal{B} 37'35 5°18'08	
min. Earth dist.	-2044 Nov 11 j 00:10	1° \mathcal{B} 34'58 44.19159 AU	morning rise	-2037 Jun 02 j 22:59	8° \mathcal{B} 59'44	
direct	-2043 Jan 30 j 06:17	0° \mathcal{B} 34'35	retrograde	-2037 Aug 28 j 14:45	10° \mathcal{B} 14'10	
evening set	-2043 Apr 27 j 05:41	1° \mathcal{B} 47'31	opposition	-2037 Nov 17 j 15:40	9° \mathcal{B} 11'25 -5°23'04	
max. Earth dist.	-2043 May 09 j 20:26	2° \mathcal{B} 05'30 46.08947 AU	min. Earth dist.	-2037 Nov 19 j 10:16	9° \mathcal{B} 09'14 42.89268 AU	
			direct	-2036 Feb 07 j 12:06	8° \mathcal{B} 07'52	
conjunction	-2043 May 11 j 12:19	2° \mathcal{B} 07'53 -7°06'30	evening set	-2036 May 03 j 22:00	9° \mathcal{B} 21'46	
minimum elong	-2043 May 11 j 12:29	2° \mathcal{B} 07'54 7°06'29	max. Earth dist.	-2036 May 17 j 04:09	9° \mathcal{B} 41'10 44.78783 AU	
morning rise	-2043 May 25 j 19:12	2° \mathcal{B} 28'19				
retrograde	-2043 Aug 21 j 10:27	3° \mathcal{B} 42'19	conjunction	-2036 May 19 j 04:55	9° \mathcal{B} 44'10 -4°59'07	
opposition	-2043 Nov 10 j 19:32	2° \mathcal{B} 40'31 -7°16'47	minimum elong	-2036 May 19 j 05:03	9° \mathcal{B} 44'11 4°59'06	
min. Earth dist.	-2043 Nov 12 j 08:05	2° \mathcal{B} 38'41 44.01673 AU	morning rise	-2036 Jun 03 j 11:41	10° \mathcal{B} 06'37	
direct	-2042 Jan 31 j 15:32	1° \mathcal{B} 38'11	retrograde	-2036 Aug 29 j 00:37	11° \mathcal{B} 21'13	
evening set	-2042 Apr 28 j 10:39	2° \mathcal{B} 51'11	opposition	-2036 Nov 17 j 23:41	10° \mathcal{B} 18'19 -5°03'03	
max. Earth dist.	-2042 May 11 j 02:53	3° \mathcal{B} 09'19 45.91372 AU	min. Earth dist.	-2036 Nov 19 j 19:49	10° \mathcal{B} 16'03 42.69660 AU	
			direct	-2035 Feb 07 j 18:46	9° \mathcal{B} 14'34	
conjunction	-2042 May 12 j 21:02	3° \mathcal{B} 11'52 -6°49'08	evening set	-2035 May 05 j 05:17	10° \mathcal{B} 28'44	
minimum elong	-2042 May 12 j 21:11	3° \mathcal{B} 11'52 6°49'06	max. Earth dist.	-2035 May 18 j 13:27	10° \mathcal{B} 48'20 44.59167 AU	
morning rise	-2042 May 27 j 07:56	3° \mathcal{B} 32'35				
retrograde	-2042 Aug 22 j 19:08	4° \mathcal{B} 46'36	conjunction	-2035 May 20 j 15:01	10° \mathcal{B} 51'24 -4°39'47	
opposition	-2042 Nov 12 j 02:24	3° \mathcal{B} 44'40 -6°58'34	minimum elong	-2035 May 20 j 15:08	10° \mathcal{B} 51'25 4°39'46	
min. Earth dist.	-2042 Nov 13 j 16:02	3° \mathcal{B} 42'47 43.83752 AU	morning rise	-2035 Jun 05 j 00:36	11° \mathcal{B} 14'07	
direct	-2041 Feb 01 j 21:45	2° \mathcal{B} 42'08	retrograde	-2035 Aug 30 j 13:02	12° \mathcal{B} 28'55	
evening set	-2041 Apr 29 j 15:43	3° \mathcal{B} 55'13	opposition	-2035 Nov 19 j 07:52	11° \mathcal{B} 25'51 -4°42'44	
max. Earth dist.	-2041 May 12 j 10:36	4° \mathcal{B} 13'34 45.73365 AU	min. Earth dist.	-2035 Nov 21 j 04:12	11° \mathcal{B} 23'35 42.49804 AU	
			direct	-2034 Feb 09 j 01:27	10° \mathcal{B} 21'56	
conjunction	-2041 May 14 j 06:00	4° \mathcal{B} 16'12 -6°31'29	evening set	-2034 May 06 j 13:02	11° \mathcal{B} 36'22	
minimum elong	-2041 May 14 j 06:09	4° \mathcal{B} 16'12 6°31'29	max. Earth dist.	-2034 May 19 j 21:40	11° \mathcal{B} 56'07 44.39247 AU	
morning rise	-2041 May 28 j 20:32	4° \mathcal{B} 37'13				
retrograde	-2041 Aug 24 j 05:05	5° \mathcal{B} 51'17	conjunction	-2034 May 22 j 01:21	11° \mathcal{B} 59'19 -4°20'10	
opposition	-2041 Nov 13 j 09:35	4° \mathcal{B} 49'10 -6°40'04	minimum elong	-2034 May 22 j 01:28	11° \mathcal{B} 59'20 4°20'08	

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Attention, astronomical year style is used: The year -2034 in astronomical counting style is the year 2035 BCE in historical counting style.

morning rise	-2034 Jun 06 j 13:31	12°822'18		opposition	-2028 Nov 27 j 00:45	19°836'57	-2°12'06
retrograde	-2034 Sep 01 j 01:40	13°837'19		min. Earth dist.	-2028 Nov 29 j 06:03	19°834'09	41.00118 AU
opposition	-2034 Nov 20 j 16:24	12°834'06	-4°22'07	direct	-2027 Feb 16 j 20:08	18°831'13	
min. Earth dist.	-2034 Nov 22 j 14:54	12°831'43	42.29628 AU	evening set	-2027 May 14 j 07:42	19°848'04	
direct	-2033 Feb 10 j 08:55	11°829'58		max. Earth dist.	-2027 May 27 j 19:53	20°808'45	42.88758 AU
evening set	-2033 May 07 j 21:08	12°844'43					
max. Earth dist.	-2033 May 21 j 08:01	13°804'41	44.18975 AU	conjunction	-2027 May 30 j 09:26	20°812'43	-1°55'05
				minimum elong	-2027 May 30 j 09:29	20°812'43	1°55'03
conjunction	-2033 May 23 j 12:04	13°807'56	-4°00'17	morning rise	-2027 Jun 15 j 10:24	20°837'20	
minimum elong	-2033 May 23 j 12:10	13°807'57	4°00'14	retrograde	-2027 Sep 09 j 05:43	21°854'16	
morning rise	-2033 Jun 08 j 02:29	13°831'10		opposition	-2027 Nov 28 j 11:02	20°849'30	-1°49'23
retrograde	-2033 Sep 02 j 09:53	14°846'25		min. Earth dist.	-2027 Nov 30 j 17:39	20°846'36	40.77392 AU
opposition	-2033 Nov 22 j 01:09	13°843'02	-4°01'12	direct	-2026 Feb 18 j 06:55	19°843'26	
min. Earth dist.	-2033 Nov 24 j 00:15	13°840'36	42.09067 AU	evening set	-2026 May 15 j 18:57	21°800'44	
direct	-2032 Feb 11 j 19:55	12°838'42		max. Earth dist.	-2026 May 29 j 08:13	21°821'35	42.65962 AU
evening set	-2032 May 08 j 05:47	13°853'45					
max. Earth dist.	-2032 May 21 j 16:20	14°813'48	43.98292 AU	conjunction	-2026 May 31 j 21:55	21°825'35	-1°33'15
				minimum elong	-2026 May 31 j 21:57	21°825'35	1°33'13
conjunction	-2032 May 23 j 22:52	14°817'14	-3°40'06	morning rise	-2026 Jun 16 j 23:41	21°850'25	
minimum elong	-2032 May 23 j 22:58	14°817'14	3°40'04	retrograde	-2026 Sep 10 j 14:51	23°807'43	
morning rise	-2032 Jun 08 j 15:42	14°840'43		opposition	-2026 Nov 29 j 21:40	22°802'41	-1°26'21
	-2032 Jun 22 j 04:45	15°8		min. Earth dist.	-2026 Dec 02 j 05:08	21°859'44	40.54476 AU
retrograde	-2032 Sep 02 j 19:08	15°856'12		direct	-2025 Feb 19 j 18:58	20°856'20	
	-2032 Nov 16 j 12:02	15°88		evening set	-2025 May 17 j 06:50	22°814'05	
opposition	-2032 Nov 22 j 10:13	14°852'38	-3°39'59	max. Earth dist.	-2025 May 30 j 19:47	22°835'02	42.43019 AU
min. Earth dist.	-2032 Nov 24 j 10:52	14°850'07	41.88083 AU				
direct	-2031 Feb 12 j 05:55	13°848'03		conjunction	-2025 Jun 02 j 10:34	22°839'08	-1°11'08
	-2031 May 07 j 06:46	15°8		minimum elong	-2025 Jun 02 j 10:36	22°839'09	1°11'06
evening set	-2031 May 09 j 14:53	15°803'26		morning rise	-2025 Jun 18 j 13:15	23°804'10	
max. Earth dist.	-2031 May 23 j 02:38	15°823'38	43.77152 AU	retrograde	-2025 Sep 12 j 03:40	24°821'53	
				opposition	-2025 Dec 01 j 08:28	23°816'36	-1°03'01
conjunction	-2031 May 25 j 10:14	15°827'09	-3°19'40	min. Earth dist.	-2025 Dec 03 j 16:01	23°813'38	40.31441 AU
minimum elong	-2031 May 25 j 10:19	15°827'10	3°19'37	direct	-2024 Feb 21 j 04:24	22°809'57	
morning rise	-2031 Jun 10 j 04:55	15°850'53		evening set	-2024 May 17 j 19:10	23°828'13	
retrograde	-2031 Sep 04 j 04:43	17°806'38		max. Earth dist.	-2024 May 31 j 07:37	23°849'16	42.19938 AU
opposition	-2031 Nov 23 j 19:31	16°802'51	-3°18'28				
min. Earth dist.	-2031 Nov 25 j 21:59	16°800'13	41.66648 AU	conjunction	-2024 Jun 02 j 23:36	23°853'28	-0°48'44
	-2030 Jan 31 j 13:44	15°88		minimum elong	-2024 Jun 02 j 23:38	23°853'28	0°48'43
direct	-2030 Feb 13 j 15:06	14°858'00		morning rise	-2024 Jun 19 j 02:48	24°818'41	
	-2030 Feb 26 j 13:32	15°8		retrograde	-2024 Sep 12 j 18:15	25°836'52	
evening set	-2030 May 11 j 00:30	16°813'43		opposition	-2024 Dec 01 j 19:48	24°831'20	-0°39'23
max. Earth dist.	-2030 May 24 j 12:34	16°834'03	43.55591 AU	min. Earth dist.	-2024 Dec 04 j 05:02	24°828'15	40.08278 AU
				direct	-2023 Feb 21 j 12:49	23°824'23	
conjunction	-2030 May 26 j 21:43	16°837'41	-2°58'56	evening set	-2023 May 19 j 08:10	24°843'14	
minimum elong	-2030 May 26 j 21:48	16°837'41	2°58'55	max. Earth dist.	-2023 Jun 01 j 21:00	25°804'26	41.96729 AU
morning rise	-2030 Jun 11 j 18:19	17°801'39					
retrograde	-2030 Sep 05 j 17:10	18°817'40		conjunction	-2023 Jun 04 j 13:06	25°808'40	-0°26'05
opposition	-2030 Nov 25 j 05:01	17°813'39	-2°56'39	minimum elong	-2023 Jun 04 j 13:06	25°808'40	0°26'02
min. Earth dist.	-2030 Nov 27 j 07:54	17°811'00	41.44812 AU	morning rise	-2023 Jun 20 j 16:34	25°834'04	
direct	-2029 Feb 14 j 22:33	16°808'31		retrograde	-2023 Sep 14 j 07:59	26°852'44	
evening set	-2029 May 12 j 10:21	17°824'35		opposition	-2023 Dec 03 j 07:13	25°846'59	-0°15'28
max. Earth dist.	-2029 May 25 j 22:10	17°845'01	43.33626 AU	min. Earth dist.	-2023 Dec 05 j 16:22	25°843'54	39.84971 AU
				direct	-2022 Feb 23 j 00:50	24°839'45	
conjunction	-2029 May 28 j 09:15	17°848'47	-2°37'56	evening set	-2022 May 20 j 21:56	25°859'13	
minimum elong	-2029 May 28 j 09:20	17°848'47	2°37'53	max. Earth dist.	-2022 Jun 03 j 08:44	26°820'26	41.73339 AU
morning rise	-2029 Jun 13 j 07:29	18°812'58					
retrograde	-2029 Sep 07 j 05:54	19°829'17		conjunction	-2022 Jun 06 j 02:53	26°824'50	-0°03'12
opposition	-2029 Nov 26 j 14:53	18°825'01	-2°34'32	minimum elong	-2022 Jun 06 j 02:52	26°824'50	0°03'10
min. Earth dist.	-2029 Nov 28 j 19:52	18°822'15	41.22616 AU	behind sun begin	-2022 Jun 05 j 20:22	26°824'25	
direct	-2028 Feb 16 j 07:53	17°819'36		behind sun end	-2022 Jun 06 j 09:22	26°825'14	
evening set	-2028 May 12 j 20:41	18°836'02		morning rise	-2022 Jun 22 j 06:30	26°850'24	
max. Earth dist.	-2028 May 26 j 09:59	18°856'39	43.11331 AU	asc. node	-2022 Jul 25 j 17:59	27°837'03	
				retrograde	-2022 Sep 15 j 22:57	28°809'36	
conjunction	-2028 May 28 j 21:16	19°800'27	-2°16'39	opposition	-2022 Dec 04 j 19:14	27°803'37	0°08'46
minimum elong	-2028 May 28 j 21:19	19°800'28	2°16'38	min. Earth dist.	-2022 Dec 07 j 06:01	27°800'25	39.61477 AU
morning rise	-2028 Jun 13 j 20:51	19°824'52		direct	-2021 Feb 24 j 12:46	25°856'06	
retrograde	-2028 Sep 07 j 17:26	20°841'28		evening set	-2021 May 22 j 12:01	27°816'12	

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Attention, astronomical year style is used: The year -2021 in astronomical counting style is the year 2022 BCE in historical counting style.

max. Earth dist.	-2021 Jun 04 j 22:50	27° 8 37'34	41.49713 AU	conjunction	-2015 Jun 15 j 14:51	5° II 46'16	2°44'34
				minimum elong	-2015 Jun 15 j 14:46	5° II 46'16	2°44'37
conjunction	-2021 Jun 07 j 17:01	27° 8 42'00	0°20'06	morning rise	-2015 Jul 01 j 11:17	6° II 12'39	
minimum elong	-2021 Jun 07 j 17:00	27° 8 42'00	0°20'09	retrograde	-2015 Sep 25 j 10:34	7° II 36'27	
morning rise	-2021 Jun 23 j 20:17	28° 8 07'43		opposition	-2015 Dec 13 j 17:41	6° II 28'24	3°06'10
retrograde	-2021 Sep 17 j 11:14	29° 8 27'30		min. Earth dist.	-2015 Dec 16 j 11:20	6° II 24'43	37.89467 AU
opposition	-2021 Dec 06 j 07:36	28° 8 21'16	0°33'17	direct	-2014 Mar 05 j 11:22	5° II 18'24	
min. Earth dist.	-2021 Dec 08 j 19:19	28° 8 18'01	39.37718 AU	evening set	-2014 Jun 01 j 11:37	6° II 43'57	
direct	-2020 Feb 26 j 03:03	27° 8 13'28		max. Earth dist.	-2014 Jun 14 j 05:48	7° II 05'17	39.76596 AU
evening set	-2020 May 23 j 03:07	28° 8 34'15					
max. Earth dist.	-2020 Jun 05 j 11:26	28° 8 55'35	41.25802 AU	conjunction	-2014 Jun 17 j 07:59	7° II 10'31	3°09'27
				minimum elong	-2014 Jun 17 j 07:53	7° II 10'30	3°09'30
conjunction	-2020 Jun 08 j 07:36	29° 8 00'11	0°43'33	morning rise	-2014 Jul 03 j 01:59	7° II 36'57	
minimum elong	-2020 Jun 08 j 07:35	29° 8 00'11	0°43'35	retrograde	-2014 Sep 27 j 01:50	9° II 01'33	
morning rise	-2020 Jun 24 j 10:35	29° 8 26'04		opposition	-2014 Dec 15 j 09:01	7° II 53'10	3°32'32
	-2020 Jul 17 j 09:30	0° II		min. Earth dist.	-2014 Dec 18 j 03:35	7° II 49'24	37.64218 AU
retrograde	-2020 Sep 18 j 02:14	0° II 46'26		direct	-2013 Mar 07 j 02:42	6° II 42'47	
	-2020 Nov 21 j 08:20	30° 8		evening set	-2013 Jun 03 j 07:28	8° II 09'15	
opposition	-2020 Dec 06 j 20:11	29° 8 39'57	0°58'05	max. Earth dist.	-2013 Jun 15 j 22:29	8° II 30'32	39.51262 AU
min. Earth dist.	-2020 Dec 09 j 08:46	29° 8 36'38	39.13668 AU				
direct	-2019 Feb 26 j 14:42	28° 8 31'50		conjunction	-2013 Jun 19 j 01:14	8° II 35'51	3°34'32
evening set	-2019 May 24 j 18:52	29° 8 53'19		minimum elong	-2013 Jun 19 j 01:07	8° II 35'50	3°34'34
	-2019 May 28 j 23:24	0° II		morning rise	-2013 Jul 04 j 16:48	9° II 02'19	
max. Earth dist.	-2019 Jun 07 j 01:19	0° II 14'41	41.01559 AU	retrograde	-2013 Sep 28 j 19:03	10° II 27'46	
				opposition	-2013 Dec 17 j 00:38	9° II 19'04	3°59'07
conjunction	-2019 Jun 09 j 22:49	0° II 19'24	1°07'16	min. Earth dist.	-2013 Dec 19 j 18:50	9° II 15'17	37.38986 AU
minimum elong	-2019 Jun 09 j 22:47	0° II 19'24	1°07'18	direct	-2012 Mar 07 j 16:56	8° II 08'16	
morning rise	-2019 Jun 26 j 00:55	0° II 45'26		evening set	-2012 Jun 04 j 04:17	9° II 35'45	
retrograde	-2019 Sep 19 j 16:31	2° II 06'25		max. Earth dist.	-2012 Jun 16 j 15:23	9° II 56'55	39.25932 AU
opposition	-2019 Dec 08 j 09:26	0° II 59'40	1°23'10				
min. Earth dist.	-2019 Dec 10 j 23:54	0° II 56'13	38.89296 AU	conjunction	-2012 Jun 19 j 19:14	10° II 02'21	3°59'49
	-2018 Feb 01 j 07:51	30° 8		minimum elong	-2012 Jun 19 j 19:06	10° II 02'21	3°59'51
direct	-2018 Feb 28 j 02:23	29° 8 51'12		morning rise	-2012 Jul 05 j 07:50	10° II 28'50	
	-2018 Mar 26 j 17:44	0° II		retrograde	-2012 Sep 29 j 13:57	11° II 55'13	
evening set	-2018 May 26 j 11:12	1° II 13'25		opposition	-2012 Dec 17 j 16:46	10° II 46'10	4°25'55
max. Earth dist.	-2018 Jun 08 j 16:01	1° II 34'50	40.77011 AU	min. Earth dist.	-2012 Dec 20 j 12:25	10° II 42'17	37.13786 AU
				direct	-2011 Mar 09 j 06:36	9° II 34'59	
conjunction	-2018 Jun 11 j 14:12	1° II 39'38	1°31'14	evening set	-2011 Jun 06 j 02:00	11° II 03'32	
minimum elong	-2018 Jun 11 j 14:09	1° II 39'38	1°31'16	max. Earth dist.	-2011 Jun 18 j 10:24	11° II 24'42	39.00637 AU
morning rise	-2018 Jun 27 j 15:20	2° II 05'46					
retrograde	-2018 Sep 21 j 09:37	3° II 27'25		conjunction	-2011 Jun 21 j 13:48	11° II 30'08	4°25'15
opposition	-2018 Dec 09 j 22:53	2° II 20'21	1°48'31	minimum elong	-2011 Jun 21 j 13:39	11° II 30'08	4°25'17
min. Earth dist.	-2018 Dec 12 j 13:28	2° II 16'54	38.64638 AU	morning rise	-2011 Jul 06 j 23:05	11° II 56'36	
direct	-2017 Mar 01 j 14:43	1° II 11'31		retrograde	-2011 Oct 01 j 10:21	13° II 23'57	
evening set	-2017 May 28 j 04:17	2° II 34'32		opposition	-2011 Dec 19 j 09:27	12° II 14'35	4°52'54
max. Earth dist.	-2017 Jun 10 j 05:41	2° II 55'52	40.52179 AU	min. Earth dist.	-2011 Dec 22 j 04:42	12° II 10'43	36.88614 AU
				direct	-2010 Mar 10 j 22:50	11° II 03'02	
conjunction	-2017 Jun 13 j 06:01	3° II 00'51	1°55'27	evening set	-2010 Jun 08 j 00:38	12° II 32'43	
minimum elong	-2017 Jun 13 j 05:57	3° II 00'51	1°55'29	max. Earth dist.	-2010 Jun 20 j 03:38	12° II 53'40	38.75339 AU
morning rise	-2017 Jun 29 j 05:53	3° II 27'05					
retrograde	-2017 Sep 23 j 03:20	4° II 49'25		conjunction	-2010 Jun 23 j 08:41	12° II 59'17	4°50'51
opposition	-2017 Dec 11 j 12:46	3° II 42'02	2°14'09	minimum elong	-2010 Jun 23 j 08:32	12° II 59'16	4°50'54
min. Earth dist.	-2017 Dec 14 j 05:18	3° II 38'27	38.39745 AU	morning rise	-2010 Jul 08 j 14:24	13° II 25'43	
direct	-2016 Mar 02 j 03:02	2° II 32'50		retrograde	-2010 Oct 03 j 06:56	14° II 54'06	
evening set	-2016 May 28 j 21:53	3° II 56'39		opposition	-2010 Dec 21 j 02:42	13° II 44'24	5°20'04
max. Earth dist.	-2016 Jun 10 j 22:00	4° II 18'02	40.27129 AU	min. Earth dist.	-2010 Dec 23 j 23:16	13° II 40'26	36.63440 AU
				direct	-2009 Mar 12 j 14:33	12° II 32'28	
conjunction	-2016 Jun 13 j 22:17	4° II 23'03	2°19'54	evening set	-2009 Jun 10 j 00:10	14° II 03'20	
minimum elong	-2016 Jun 13 j 22:12	4° II 23'03	2°19'57	max. Earth dist.	-2009 Jun 21 j 23:35	14° II 24'13	38.49992 AU
morning rise	-2016 Jun 29 j 20:28	4° II 49'22					
retrograde	-2016 Sep 23 j 18:17	6° II 12'25		conjunction	-2009 Jun 25 j 04:23	14° II 29'51	5°16'36
opposition	-2016 Dec 12 j 03:03	5° II 04'43	2°40'02	minimum elong	-2009 Jun 25 j 04:12	14° II 29'51	5°16'37
min. Earth dist.	-2016 Dec 14 j 19:49	5° II 01'05	38.14660 AU	morning rise	-2009 Jul 10 j 05:53	14° II 56'14	
direct	-2015 Mar 03 j 19:34	3° II 55'07		retrograde	-2009 Oct 05 j 01:58	16° II 25'41	
evening set	-2015 May 30 j 16:28	5° II 19'47		opposition	-2009 Dec 22 j 20:30	15° II 15'40	5°47'24
max. Earth dist.	-2015 Jun 12 j 12:44	5° II 41'05	40.01913 AU	min. Earth dist.	-2009 Dec 25 j 17:38	15° II 11'39	36.38198 AU
				direct	-2008 Mar 13 j 10:11	14° II 03'20	

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Attention, astronomical year style is used: The year -2008 in astronomical counting style is the year 2009 BCE in historical counting style.

evening set	-2008 Jun	11 j 00:53	15° Π 35'27		opposition	-2001 Jan	02 j 18:42	26° Π 35'58	9°01'35
max. Earth dist.	-2008 Jun	22 j 18:10	15° Π 56'05	38.24553 AU	min. Earth dist.	-2001 Jan	05 j 20:06	26° Π 31'29	34.59436 AU
					direct	-2001 Mar	25 j 04:37	25° Π 20'27	
conjunction	-2008 Jun	26 j 00:32	16° Π 01'53	5°42'28	evening set	-2001 Jun	25 j 11:02	27° Π 02'56	
minimum elong	-2008 Jun	26 j 00:20	16° Π 01'53	5°42'31	max. Earth dist.	-2001 Jul	05 j 04:37	27° Π 21'14	36.44351 AU
morning rise	-2008 Jul	10 j 21:45	16° Π 28'11						
retrograde	-2008 Oct	05 j 23:10	17° Π 58'45		conjunction	-2001 Jul	08 j 14:36	27° Π 27'43	8°45'23
opposition	-2008 Dec	23 j 14:54	16° Π 48'24	6°14'52	minimum elong	-2001 Jul	08 j 14:19	27° Π 27'42	8°45'25
min. Earth dist.	-2008 Dec	26 j 12:32	16° Π 44'19	36.12855 AU	morning rise	-2001 Jul	21 j 15:41	27° Π 52'21	
direct	-2007 Mar	15 j 04:19	15° Π 35'40		retrograde	-2001 Oct	18 j 16:57	29° Π 32'31	
evening set	-2007 Jun	13 j 02:33	17° Π 09'04		opposition	-2000 Jan	04 j 17:27	28° Π 19'22	9°29'22
max. Earth dist.	-2007 Jun	24 j 14:24	17° Π 29'29	37.98966 AU	min. Earth dist.	-2000 Jan	07 j 18:19	28° Π 14'54	34.34196 AU
					direct	-2000 Mar	26 j 02:29	27° Π 03'23	
conjunction	-2007 Jun	27 j 21:28	17° Π 35'23	6°08'27	evening set	-2000 Jun	26 j 20:28	28° Π 47'40	
minimum elong	-2007 Jun	27 j 21:16	17° Π 35'23	6°08'29	max. Earth dist.	-2000 Jul	06 j 05:50	29° Π 05'30	36.18970 AU
morning rise	-2007 Jul	12 j 13:39	18° Π 01'33						
retrograde	-2007 Oct	07 j 18:50	19° Π 33'20		conjunction	-2000 Jul	09 j 15:46	29° Π 12'02	9°11'23
opposition	-2007 Dec	25 j 10:04	18° Π 22'37	6°42'29	minimum elong	-2000 Jul	09 j 15:27	29° Π 12'01	9°11'25
min. Earth dist.	-2007 Dec	28 j 09:15	18° Π 18'25	35.87376 AU	morning rise	-2000 Jul	22 j 08:22	29° Π 36'15	
direct	-2006 Mar	16 j 21:52	17° Π 09'26			-2000 Aug	04 j 06:13	0° Θ	
evening set	-2006 Jun	15 j 05:19	18° Π 44'11		retrograde	-2000 Oct	19 j 16:29	1° Θ 18'05	
max. Earth dist.	-2006 Jun	26 j 11:19	19° Π 04'21	37.73261 AU	opposition	-1999 Jan	05 j 17:13	0° Θ 04'33	9°57'01
						-1999 Jan	08 j 18:56	30° \mathbb{R} Π	
conjunction	-2006 Jun	29 j 18:52	19° Π 10'21	6°34'32	min. Earth dist.	-1999 Jan	08 j 18:53	0° Θ 00'00	34.09207 AU
minimum elong	-2006 Jun	29 j 18:39	19° Π 10'20	6°34'35	direct	-1999 Mar	28 j 00:03	28° Π 48'07	
morning rise	-2006 Jul	14 j 05:48	19° Π 36'22			-1999 Jun	10 j 13:05	0° Θ	
retrograde	-2006 Oct	09 j 16:23	21° Π 09'22		evening set	-1999 Jun	29 j 07:23	0° Θ 34'16	
opposition	-2006 Dec	27 j 05:42	19° Π 58'17	7°10'13	max. Earth dist.	-1999 Jul	08 j 08:16	0° Θ 51'37	35.93862 AU
min. Earth dist.	-2006 Dec	30 j 04:40	19° Π 54'04	35.61799 AU					
direct	-2005 Mar	18 j 16:50	18° Π 44'39		conjunction	-1999 Jul	11 j 17:32	0° Θ 58'11	9°37'13
evening set	-2005 Jun	17 j 08:56	20° Π 20'48		minimum elong	-1999 Jul	11 j 17:13	0° Θ 58'09	9°37'15
max. Earth dist.	-2005 Jun	28 j 07:36	20° Π 40'37	37.47447 AU	morning rise	-1999 Jul	24 j 01:08	1° Θ 21'54	
					retrograde	-1999 Oct	21 j 18:51	3° Θ 05'31	
conjunction	-2005 Jul	01 j 16:44	20° Π 46'47	7°00'41	opposition	-1998 Jan	07 j 17:33	1° Θ 51'36	10°24'30
minimum elong	-2005 Jul	01 j 16:30	20° Π 46'46	7°00'43	min. Earth dist.	-1998 Jan	10 j 18:11	1° Θ 47'05	33.84500 AU
morning rise	-2005 Jul	15 j 21:54	21° Π 12'36		direct	-1998 Mar	29 j 22:56	0° Θ 34'43	
retrograde	-2005 Oct	11 j 15:56	22° Π 46'55		evening set	-1998 Jul	01 j 19:32	2° Θ 22'52	
opposition	-2005 Dec	29 j 02:03	21° Π 35'25	7°38'01	max. Earth dist.	-1998 Jul	10 j 10:03	2° Θ 39'33	35.69016 AU
min. Earth dist.	-2004 Jan	01 j 02:37	21° Π 31'05	35.36154 AU					
direct	-2004 Mar	19 j 10:46	20° Π 21'20		conjunction	-1998 Jul	13 j 20:03	2° Θ 46'14	10°02'52
evening set	-2004 Jun	18 j 13:46	21° Π 58'57		minimum elong	-1998 Jul	13 j 19:43	2° Θ 46'12	10°02'55
max. Earth dist.	-2004 Jun	29 j 06:44	22° Π 18'30	37.21583 AU	morning rise	-1998 Jul	25 j 18:07	3° Θ 09'26	
					retrograde	-1998 Oct	23 j 23:06	4° Θ 54'55	
conjunction	-2004 Jul	02 j 15:24	22° Π 24'42	7°26'53	opposition	-1997 Jan	09 j 18:48	3° Θ 40'37	10°51'47
minimum elong	-2004 Jul	02 j 15:09	22° Π 24'41	7°26'56	min. Earth dist.	-1997 Jan	12 j 20:24	3° Θ 36'01	33.60067 AU
morning rise	-2004 Jul	16 j 14:14	22° Π 50'17		direct	-1997 Mar	31 j 20:18	2° Θ 23'18	
retrograde	-2004 Oct	12 j 14:49	24° Π 25'57		evening set	-1997 Jul	04 j 09:05	4° Θ 13'31	
opposition	-2004 Dec	29 j 22:49	23° Π 14'03	8°05'53	max. Earth dist.	-1997 Jul	12 j 14:26	4° Θ 29'38	35.44418 AU
min. Earth dist.	-2003 Jan	01 j 23:12	23° Π 09'42	35.10492 AU					
direct	-2003 Mar	21 j 08:16	21° Π 59'29		conjunction	-1997 Jul	15 j 23:16	4° Θ 36'17	10°28'17
evening set	-2003 Jun	20 j 19:49	23° Π 38'39		minimum elong	-1997 Jul	15 j 22:56	4° Θ 36'16	10°28'20
max. Earth dist.	-2003 Jul	01 j 04:25	23° Π 57'46	36.95727 AU	morning rise	-1997 Jul	27 j 10:56	4° Θ 58'54	
					retrograde	-1997 Oct	26 j 03:30	6° Θ 46'19	
conjunction	-2003 Jul	04 j 14:34	24° Π 04'08	7°53'05	opposition	-1996 Jan	11 j 20:48	5° Θ 31'39	11°18'50
minimum elong	-2003 Jul	04 j 14:18	24° Π 04'07	7°53'08	min. Earth dist.	-1996 Jan	14 j 21:43	5° Θ 27'04	33.35854 AU
morning rise	-2003 Jul	18 j 06:46	24° Π 29'27		direct	-1996 Apr	01 j 22:16	4° Θ 13'54	
retrograde	-2003 Oct	14 j 15:49	26° Π 06'32		evening set	-1996 Jul	06 j 00:18	6° Θ 06'17	
opposition	-2003 Dec	31 j 20:23	24° Π 54'13	8°33'45	max. Earth dist.	-1996 Jul	13 j 17:21	6° Θ 21'34	35.20016 AU
min. Earth dist.	-2002 Jan	03 j 21:33	24° Π 49'47	34.84900 AU					
direct	-2002 Mar	23 j 05:02	23° Π 39'10		conjunction	-1996 Jul	17 j 03:20	6° Θ 28'23	10°53'26
evening set	-2002 Jun	23 j 02:43	25° Π 19'57		minimum elong	-1996 Jul	17 j 02:58	6° Θ 28'21	10°53'29
max. Earth dist.	-2002 Jul	03 j 04:52	25° Π 38'45	36.69952 AU	morning rise	-1996 Jul	28 j 04:09	6° Θ 50'19	
					retrograde	-1996 Oct	27 j 11:11	8° Θ 39'47	
conjunction	-2002 Jul	06 j 14:18	25° Π 45'07	8°19'16	opposition	-1995 Jan	12 j 23:33	7° Θ 24'43	11°45'35
minimum elong	-2002 Jul	06 j 14:01	25° Π 45'06	8°19'19	min. Earth dist.	-1995 Jan	16 j 01:02	7° Θ 20'04	33.11846 AU
morning rise	-2002 Jul	19 j 23:03	26° Π 10'06		direct	-1995 Apr	04 j 00:36	6° Θ 06'30	
retrograde	-2002 Oct	16 j 14:57	27° Π 48'41		evening set	-1995 Jul	08 j 17:05	8° Θ 01'10	

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Attention, astronomical year style is used: The year -1995 in astronomical counting style is the year 1996 BCE in historical counting style.

max. Earth dist.	-1995 Jul	15 j 23:22	8°☿15'43	34.95790 AU	min. Earth dist.	-1988 Jan	30 j 18:38	21°♄26'32	31.51246 AU
					direct	-1988 Apr	17 j 12:53	20°♄09'37	
conjunction	-1995 Jul	19 j 08:21	8°♄22'31	11°18'17	evening set	-1988 Jul	27 j 18:37	22°♄23'28	
minimum elong	-1995 Jul	19 j 07:59	8°♄22'29	11°18'19	max. Earth dist.	-1988 Jul	30 j 10:46	22°♄29'13	33.34300 AU
morning rise	-1995 Jul	29 j 21:14	8°♄43'41						
retrograde	-1995 Oct	29 j 16:48	10°♄35'16		conjunction	-1988 Aug	02 j 15:26	22°♄36'07	13°58'22
opposition	-1994 Jan	15 j 03:24	9°♄19'48	12°12'00	minimum elong	-1988 Aug	02 j 15:02	22°♄36'05	13°58'24
min. Earth dist.	-1994 Jan	18 j 05:03	9°♄15'07	32.88011 AU	morning rise	-1988 Aug	08 j 10:55	22°♄48'40	
direct	-1994 Apr	06 j 04:57	8°♄01'08		retrograde	-1988 Nov	13 j 03:59	24°♄58'32	
evening set	-1994 Jul	11 j 11:24	9°♄58'08		opposition	-1987 Jan	29 j 05:03	23°♄39'59	15°01'53
max. Earth dist.	-1994 Jul	18 j 04:14	10°♄11'43	34.71755 AU	min. Earth dist.	-1987 Feb	01 j 02:54	23°♄35'20	31.30161 AU
					direct	-1987 Apr	19 j 22:11	22°♄17'54	
conjunction	-1994 Jul	21 j 13:49	10°♄18'38	11°42'45	evening set	-1987 Jul	31 j 05:59	24°♄35'21	
minimum elong	-1994 Jul	21 j 13:26	10°♄18'36	11°42'48	max. Earth dist.	-1987 Aug	01 j 22:05	24°♄38'59	33.13248 AU
morning rise	-1994 Jul	31 j 14:13	10°♄38'58						
retrograde	-1994 Nov	01 j 00:01	12°♄32'46		conjunction	-1987 Aug	05 j 02:18	24°♄45'54	14°18'22
opposition	-1993 Jan	17 j 07:55	11°♄16'53	12°38'02	minimum elong	-1987 Aug	05 j 01:55	24°♄45'52	14°18'23
min. Earth dist.	-1993 Jan	20 j 09:05	11°♄12'11	32.64389 AU	morning rise	-1987 Aug	09 j 21:34	24°♄56'23	
direct	-1993 Apr	08 j 08:49	9°♄57'43		retrograde	-1987 Nov	15 j 18:16	27°♄09'44	
evening set	-1993 Jul	14 j 07:25	11°♄57'11		opposition	-1986 Jan	31 j 15:42	25°♄50'47	15°22'59
max. Earth dist.	-1993 Jul	20 j 11:06	12°♄09'47	34.47925 AU	min. Earth dist.	-1986 Feb	03 j 12:13	25°♄46'12	31.09763 AU
					direct	-1986 Apr	22 j 08:07	24°♄28'18	
conjunction	-1993 Jul	23 j 20:19	12°♄16'44	12°06'49	evening set	-1986 Aug	03 j 23:46	26°♄49'55	
minimum elong	-1993 Jul	23 j 19:57	12°♄16'42	12°06'50	max. Earth dist.	-1986 Aug	04 j 12:07	26°♄51'03	32.92884 AU
morning rise	-1993 Aug	02 j 07:07	12°♄36'08						
retrograde	-1993 Nov	03 j 05:35	14°♄32'14		conjunction	-1986 Aug	07 j 13:57	26°♄57'49	14°37'24
opposition	-1992 Jan	19 j 13:17	13°♄15'55	13°03'37	minimum elong	-1986 Aug	07 j 13:33	26°♄57'47	14°37'26
min. Earth dist.	-1992 Jan	22 j 15:08	13°♄11'09	32.41000 AU	morning rise	-1986 Aug	11 j 03:09	27°♄05'38	
direct	-1992 Apr	09 j 12:58	11°♄56'16		retrograde	-1986 Nov	18 j 06:52	29°♄23'04	
evening set	-1992 Jul	16 j 05:24	13°♄58'17		opposition	-1985 Feb	03 j 03:20	28°♄03'45	15°43'03
max. Earth dist.	-1992 Jul	21 j 18:45	14°♄09'47	34.24370 AU	min. Earth dist.	-1985 Feb	05 j 23:06	27°♄59'11	30.90037 AU
					direct	-1985 Apr	24 j 19:02	26°♄40'53	
conjunction	-1992 Jul	25 j 03:30	14°♄16'47	12°30'23	max. Earth dist.	-1985 Aug	07 j 01:35	29°♄05'10	32.73216 AU
minimum elong	-1992 Jul	25 j 03:06	14°♄16'44	12°30'26	evening set	-1985 Aug	08 j 11:18	29°♄08'17	
morning rise	-1992 Aug	02 j 23:45	14°♄35'06						
retrograde	-1992 Nov	04 j 14:03	16°♄33'39		conjunction	-1985 Aug	10 j 02:22	29°♄11'54	14°55'24
opposition	-1991 Jan	20 j 19:27	15°♄16'52	13°28'40	minimum elong	-1985 Aug	10 j 02:01	29°♄11'52	14°55'26
min. Earth dist.	-1991 Jan	23 j 20:04	15°♄12'09	32.17912 AU	morning rise	-1985 Aug	11 j 16:43	29°♄15'27	
direct	-1991 Apr	11 j 17:59	13°♄56'43			-1985 Sep	01 j 02:35	0°♂	
evening set	-1991 Jul	19 j 05:05	16°♄01'26		retrograde	-1985 Nov	20 j 21:49	1°♂38'32	
max. Earth dist.	-1991 Jul	24 j 02:40	16°♄11'40	34.01133 AU	opposition	-1984 Feb	05 j 15:34	0°♂18'53	16°01'58
					min. Earth dist.	-1984 Feb	08 j 09:26	0°♂14'26	30.70987 AU
conjunction	-1991 Jul	27 j 11:24	16°♄18'44	12°53'24		-1984 Feb	17 j 09:18	30°♂	
minimum elong	-1991 Jul	27 j 11:01	16°♄18'42	12°53'27	direct	-1984 Apr	26 j 06:27	28°♄55'40	
morning rise	-1991 Aug	04 j 15:58	16°♄35'52			-1984 Jun	30 j 15:38	0°♂	
retrograde	-1991 Nov	06 j 21:20	18°♄36'59		max. Earth dist.	-1984 Aug	08 j 16:34	1°♂21'31	32.54201 AU
opposition	-1990 Jan	23 j 02:35	17°♄19'45	13°53'06					
min. Earth dist.	-1990 Jan	26 j 03:48	17°♄14'58	31.95196 AU	conjunction	-1984 Aug	11 j 15:47	1°♂28'10	15°12'19
direct	-1990 Apr	13 j 22:29	15°♄59'05		minimum elong	-1984 Aug	11 j 15:25	1°♂28'08	15°12'21
evening set	-1990 Jul	22 j 07:03	18°♄06'38		retrograde	-1984 Nov	22 j 11:43	3°♂56'12	
max. Earth dist.	-1990 Jul	26 j 13:03	18°♄15'36	33.78322 AU	opposition	-1983 Feb	07 j 05:06	2°♂36'13	16°19'42
					min. Earth dist.	-1983 Feb	09 j 22:42	2°♂31'45	30.52571 AU
conjunction	-1990 Jul	29 j 20:02	18°♄22'35	13°15'48	direct	-1983 Apr	28 j 17:38	1°♂12'39	
minimum elong	-1990 Jul	29 j 19:37	18°♄22'33	13°15'51	max. Earth dist.	-1983 Aug	11 j 08:20	3°♂40'03	32.35841 AU
morning rise	-1990 Aug	06 j 07:22	18°♄38'24						
retrograde	-1990 Nov	09 j 06:10	20°♄42'13		conjunction	-1983 Aug	14 j 05:47	3°♂46'36	15°28'03
opposition	-1989 Jan	25 j 10:31	19°♄24'32	14°16'51	minimum elong	-1983 Aug	14 j 05:27	3°♂46'34	15°28'05
min. Earth dist.	-1989 Jan	28 j 10:07	19°♄19'49	31.72944 AU	retrograde	-1983 Nov	25 j 04:13	6°♂15'58	
direct	-1989 Apr	16 j 06:24	18°♄03'22		opposition	-1982 Feb	09 j 19:26	4°♂55'40	16°36'10
evening set	-1989 Jul	25 j 11:12	20°♄13'57		min. Earth dist.	-1982 Feb	12 j 10:41	4°♂51'20	30.34784 AU
max. Earth dist.	-1989 Jul	28 j 22:15	20°♄21'20	33.56015 AU	direct	-1982 May	01 j 06:35	3°♂31'46	
					max. Earth dist.	-1982 Aug	14 j 00:17	6°♂00'35	32.18118 AU
conjunction	-1989 Aug	01 j 05:14	20°♄28'22	13°37'29					
minimum elong	-1989 Aug	01 j 04:51	20°♄28'20	13°37'31	conjunction	-1982 Aug	16 j 20:40	6°♂07'05	15°42'34
morning rise	-1989 Aug	07 j 21:53	20°♄42'40		minimum elong	-1982 Aug	16 j 20:20	6°♂07'03	15°42'36
retrograde	-1989 Nov	11 j 17:21	22°♄49'24		retrograde	-1982 Nov	27 j 19:02	8°♂37'46	
opposition	-1988 Jan	27 j 19:21	21°♄31'15	14°39'48	opposition	-1981 Feb	12 j 10:41	7°♂17'08	16°51'17

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Attention, astronomical year style is used: The year -1981 in astronomical counting style is the year 1982 BCE in historical counting style.

min. Earth dist.	-1981 Feb 15 j 01:39	7°Ω12'49	30.17638 AU	min. Earth dist.	-1973 Mar 06 j 11:43	27°Ω04'09	29.09280 AU
direct	-1981 May 03 j 18:53	5°Ω52'55		direct	-1973 May 23 j 18:36	25°Ω41'03	
max. Earth dist.	-1981 Aug 16 j 18:20	8°Ω23'14	32.01071 AU	max. Earth dist.	-1973 Sep 06 j 14:17	28°Ω20'46	30.95522 AU
conjunction	-1981 Aug 19 j 12:12	8°Ω29'33	15°55'46	conjunction	-1973 Sep 08 j 11:42	28°Ω25'20	16°44'41
minimum elong	-1981 Aug 19 j 11:55	8°Ω29'31	15°55'48	minimum elong	-1973 Sep 08 j 11:40	28°Ω25'20	16°44'42
retrograde	-1981 Nov 30 j 11:02	11°Ω01'28			-1973 Oct 20 j 08:08	0°൬	
opposition	-1980 Feb 15 j 02:44	9°Ω40'31	17°04'57	retrograde	-1973 Dec 20 j 21:22	1°൬04'49	
min. Earth dist.	-1980 Feb 17 j 15:23	9°Ω36'20	30.01139 AU		-1972 Feb 24 j 15:57	30°ꣳΩ	
direct	-1980 May 05 j 10:43	8°Ω15'58		opposition	-1972 Mar 06 j 12:52	29°Ω41'47	17°52'12
max. Earth dist.	-1980 Aug 18 j 11:19	10°Ω47'34	31.84709 AU	min. Earth dist.	-1972 Mar 08 j 07:26	29°Ω38'47	29.00246 AU
				direct	-1972 May 25 j 14:04	28°Ω15'30	
conjunction	-1980 Aug 21 j 04:25	10°Ω53'51	16°07'35		-1972 Aug 15 j 19:07	0°൬	
minimum elong	-1980 Aug 21 j 04:08	10°Ω53'50	16°07'37	max. Earth dist.	-1972 Sep 08 j 13:13	0°൬56'04	30.87058 AU
retrograde	-1980 Dec 02 j 04:41	13°Ω26'58					
opposition	-1979 Feb 16 j 19:34	12°Ω05'41	17°17'07	conjunction	-1972 Sep 10 j 07:25	1°൬00'20	16°42'42
min. Earth dist.	-1979 Feb 19 j 07:15	12°Ω01'34	29.85347 AU	minimum elong	-1972 Sep 10 j 07:26	1°൬00'20	16°42'44
direct	-1979 May 08 j 00:43	10°Ω40'49		retrograde	-1972 Dec 22 j 19:42	3°൬40'25	
max. Earth dist.	-1979 Aug 21 j 07:21	13°Ω13'51	31.69106 AU	opposition	-1971 Mar 09 j 10:41	2°൬17'16	17°49'16
				min. Earth dist.	-1971 Mar 11 j 01:30	2°൬14'32	28.92257 AU
conjunction	-1979 Aug 23 j 21:19	13°Ω19'52	16°17'55	direct	-1971 May 28 j 12:05	0°൬50'57	
minimum elong	-1979 Aug 23 j 21:05	13°Ω19'51	16°17'57	max. Earth dist.	-1971 Sep 11 j 12:06	3°൬32'14	30.79650 AU
	-1979 Oct 09 j 08:35	15°Ω					
retrograde	-1979 Dec 04 j 21:49	15°Ω54'07		conjunction	-1971 Sep 13 j 03:29	3°൬36'13	16°38'49
	-1978 Feb 02 j 16:54	15°ꣳΩ		minimum elong	-1971 Sep 13 j 03:32	3°൬36'13	16°38'49
opposition	-1978 Feb 19 j 13:18	14°Ω32'30	17°27'39	retrograde	-1971 Dec 25 j 16:17	6°൬16'49	
min. Earth dist.	-1978 Feb 21 j 22:42	14°Ω28'31	29.70309 AU	opposition	-1970 Mar 12 j 09:08	4°൬53'34	17°44'16
direct	-1978 May 10 j 18:02	13°Ω07'20		min. Earth dist.	-1970 Mar 13 j 22:02	4°൬50'58	28.85294 AU
	-1978 Aug 06 j 02:07	15°Ω		direct	-1970 May 31 j 07:58	3°൬27'14	
max. Earth dist.	-1978 Aug 24 j 01:42	15°Ω41'31	31.54328 AU	max. Earth dist.	-1970 Sep 14 j 11:57	6°൬09'11	30.73290 AU
conjunction	-1978 Aug 26 j 14:26	15°Ω47'28	16°26'43	conjunction	-1970 Sep 15 j 23:39	6°൬12'48	16°32'59
minimum elong	-1978 Aug 26 j 14:12	15°Ω47'27	16°26'45	minimum elong	-1970 Sep 15 j 23:45	6°൬12'49	16°33'01
retrograde	-1978 Dec 07 j 17:31	18°Ω22'46		retrograde	-1970 Dec 28 j 12:56	8°൬53'47	
opposition	-1977 Feb 22 j 07:36	17°Ω00'50	17°36'29	opposition	-1969 Mar 15 j 07:47	7°൬30'28	17°37'13
min. Earth dist.	-1977 Feb 24 j 14:58	16°Ω56'59	29.56123 AU	min. Earth dist.	-1969 Mar 16 j 17:08	7°൬28'07	28.79314 AU
direct	-1977 May 13 j 11:54	15°Ω35'22		direct	-1969 Jun 03 j 07:10	6°൬04'09	
max. Earth dist.	-1977 Aug 26 j 23:16	18°Ω10'53	31.40455 AU	max. Earth dist.	-1969 Sep 17 j 10:32	8°൬46'30	30.67937 AU
conjunction	-1977 Aug 29 j 08:20	18°Ω16'30	16°33'52	conjunction	-1969 Sep 18 j 20:03	8°൬49'54	16°25'16
minimum elong	-1977 Aug 29 j 08:10	18°Ω16'29	16°33'53	minimum elong	-1969 Sep 18 j 20:10	8°൬49'55	16°25'15
retrograde	-1977 Dec 10 j 11:09	20°Ω52'46		retrograde	-1969 Dec 31 j 10:23	11°൬31'10	
opposition	-1976 Feb 25 j 02:34	19°Ω30'33	17°43'32	opposition	-1968 Mar 17 j 06:37	10°൬07'47	17°28'05
min. Earth dist.	-1976 Feb 27 j 07:57	19°Ω26'49	29.42847 AU	min. Earth dist.	-1968 Mar 18 j 13:37	10°൬05'36	28.74319 AU
direct	-1976 May 15 j 06:35	18°Ω04'50		direct	-1968 Jun 05 j 03:39	8°൬41'29	
max. Earth dist.	-1976 Aug 28 j 19:23	20°Ω41'25	31.27581 AU	max. Earth dist.	-1968 Sep 19 j 11:06	11°൬24'17	30.63601 AU
conjunction	-1976 Aug 31 j 02:32	20°Ω46'53	16°39'19	conjunction	-1968 Sep 20 j 16:36	11°൬27'18	16°15'37
minimum elong	-1976 Aug 31 j 02:22	20°Ω46'52	16°39'21	minimum elong	-1968 Sep 20 j 16:46	11°൬27'19	16°15'38
retrograde	-1976 Dec 12 j 08:11	23°Ω24'04		retrograde	-1967 Jan 02 j 06:39	14°൬08'44	
opposition	-1975 Feb 26 j 22:13	22°Ω01'34	17°48'41	opposition	-1967 Mar 20 j 05:48	12°൬45'18	17°16'54
min. Earth dist.	-1975 Mar 01 j 00:26	21°Ω58'04	29.30587 AU	min. Earth dist.	-1967 Mar 21 j 09:39	12°൬43'20	28.70293 AU
direct	-1975 May 18 j 01:34	20°Ω35'38		direct	-1967 Jun 08 j 02:51	11°൬19'02	
max. Earth dist.	-1975 Aug 31 j 17:51	23°Ω13'24	31.15771 AU	max. Earth dist.	-1967 Sep 22 j 09:31	14°൬01'59	30.60279 AU
conjunction	-1975 Sep 02 j 21:13	23°Ω18'31	16°42'58	conjunction	-1967 Sep 23 j 12:51	14°൬04'46	16°04'05
minimum elong	-1975 Sep 02 j 21:07	23°Ω18'31	16°42'59	minimum elong	-1967 Sep 23 j 13:03	14°൬04'47	16°04'05
retrograde	-1975 Dec 15 j 03:57	25°Ω56'33		retrograde	-1966 Jan 05 j 03:51	16°൬46'16	
opposition	-1974 Mar 01 j 18:41	24°Ω33'50	17°51'53	opposition	-1966 Mar 23 j 05:02	15°൬22'47	17°03'40
min. Earth dist.	-1974 Mar 03 j 18:51	24°Ω30'27	29.19385 AU	min. Earth dist.	-1966 Mar 24 j 05:46	15°൬21'02	28.67278 AU
direct	-1974 May 20 j 21:45	23°Ω07'44		direct	-1966 Jun 11 j 01:06	13°൬56'34	
max. Earth dist.	-1974 Sep 03 j 15:28	25°Ω46'29	31.05090 AU	max. Earth dist.	-1966 Sep 25 j 10:17	16°൬39'46	30.58007 AU
conjunction	-1974 Sep 05 j 16:13	25°Ω51'22	16°44'46	conjunction	-1966 Sep 26 j 09:13	16°൬42'07	15°50'41
minimum elong	-1974 Sep 05 j 16:09	25°Ω51'21	16°44'48	minimum elong	-1966 Sep 26 j 09:27	16°൬42'08	15°50'42
retrograde	-1974 Dec 18 j 01:19	28°Ω30'10		retrograde	-1965 Jan 07 j 23:21	19°൬23'33	
opposition	-1973 Mar 04 j 15:22	27°Ω07'16	17°53'04	opposition	-1965 Mar 26 j 04:08	18°൬00'02	16°48'26

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Attention, astronomical year style is used: The year -1965 in astronomical counting style is the year 1966 BCE in historical counting style.

min. Earth dist.	-1965 Mar 27 j 02:08	17° <u>0</u> 58'29	28.65290 AU	retrograde	-1958 Jan 25 j 18:04	7° <u>0</u> 25'19	
direct	-1965 Jun 14 j 00:26	16° <u>0</u> 33'54		opposition	-1958 Apr 13 j 16:36	6° <u>0</u> 02'26	14°09'00
max. Earth dist.	-1965 Sep 28 j 08:36	19° <u>0</u> 17'01	30.56824 AU	min. Earth dist.	-1958 Apr 13 j 13:07	6° <u>0</u> 02'40	28.83921 AU
				direct	-1958 Jul 02 j 15:07	4° <u>0</u> 37'51	
conjunction	-1965 Sep 29 j 05:10	19° <u>0</u> 19'06	15°35'26	evening set	-1958 Oct 08 j 22:44	6° <u>0</u> 59'46	
minimum elong	-1965 Sep 29 j 05:25	19° <u>0</u> 19'08	15°35'26				
retrograde	-1964 Jan 10 j 20:53	22° <u>0</u> 00'23		conjunction	-1958 Oct 16 j 15:08	7° <u>0</u> 18'09	13°00'44
opposition	-1964 Mar 28 j 03:09	20° <u>0</u> 36'51	16°31'12	minimum elong	-1958 Oct 16 j 15:33	7° <u>0</u> 18'11	13°00'44
min. Earth dist.	-1964 Mar 28 j 21:10	20° <u>0</u> 35'35	28.64400 AU	max. Earth dist.	-1958 Oct 16 j 20:15	7° <u>0</u> 18'39	30.81938 AU
direct	-1964 Jun 15 j 22:33	19° <u>0</u> 10'49		morning rise	-1958 Oct 24 j 07:59	7° <u>0</u> 36'34	
max. Earth dist.	-1964 Sep 30 j 08:59	21° <u>0</u> 53'58	30.56780 AU	retrograde	-1957 Jan 28 j 12:25	9° <u>0</u> 55'57	
				opposition	-1957 Apr 16 j 13:28	8° <u>0</u> 33'16	13°39'39
conjunction	-1964 Oct 01 j 00:54	21° <u>0</u> 55'35	15°18'21	min. Earth dist.	-1957 Apr 16 j 07:18	8° <u>0</u> 33'42	28.91133 AU
minimum elong	-1964 Oct 01 j 01:13	21° <u>0</u> 55'37	15°18'22	direct	-1957 Jul 05 j 11:16	7° <u>0</u> 09'01	
retrograde	-1963 Jan 12 j 16:18	24° <u>0</u> 36'37		evening set	-1957 Oct 10 j 21:05	9° <u>0</u> 28'10	
opposition	-1963 Mar 31 j 02:12	23° <u>0</u> 13'05	16°12'01				
min. Earth dist.	-1963 Mar 31 j 17:28	23° <u>0</u> 12'01	28.64652 AU	conjunction	-1957 Oct 19 j 08:01	9° <u>0</u> 48'18	12°32'45
direct	-1963 Jun 18 j 22:32	21° <u>0</u> 47'12		minimum elong	-1957 Oct 19 j 08:25	9° <u>0</u> 48'20	12°32'44
				max. Earth dist.	-1957 Oct 19 j 16:54	9° <u>0</u> 49'11	30.90037 AU
conjunction	-1963 Oct 03 j 20:14	24° <u>0</u> 31'26	14°59'29	morning rise	-1957 Oct 27 j 19:11	10° <u>0</u> 08'26	
minimum elong	-1963 Oct 03 j 20:33	24° <u>0</u> 31'28	14°59'29	retrograde	-1956 Jan 31 j 04:54	12° <u>0</u> 25'18	
evening set	-1963 Oct 03 j 07:49	24° <u>0</u> 30'10		opposition	-1956 Apr 18 j 09:55	11° <u>0</u> 02'50	13°09'00
max. Earth dist.	-1963 Oct 03 j 07:10	24° <u>0</u> 30'06	30.57951 AU	min. Earth dist.	-1956 Apr 18 j 00:25	11° <u>0</u> 03'29	28.99315 AU
morning rise	-1963 Oct 04 j 09:17	24° <u>0</u> 32'46		direct	-1956 Jul 07 j 09:01	9° <u>0</u> 38'55	
retrograde	-1962 Jan 15 j 13:26	27° <u>0</u> 12'07		evening set	-1956 Oct 11 j 20:20	11° <u>0</u> 55'24	
opposition	-1962 Apr 03 j 00:52	25° <u>0</u> 48'38	15°50'55				
min. Earth dist.	-1962 Apr 03 j 11:25	25° <u>0</u> 47'54	28.66120 AU	conjunction	-1956 Oct 21 j 00:07	12° <u>0</u> 17'04	12°03'36
direct	-1962 Jun 21 j 21:50	24° <u>0</u> 22'55		minimum elong	-1956 Oct 21 j 00:32	12° <u>0</u> 17'07	12°03'35
evening set	-1962 Oct 03 j 07:09	26° <u>0</u> 58'26		max. Earth dist.	-1956 Oct 21 j 11:18	12° <u>0</u> 18'11	30.99084 AU
				morning rise	-1956 Oct 30 j 04:18	12° <u>0</u> 38'46	
conjunction	-1962 Oct 06 j 15:16	27° <u>0</u> 06'33	14°38'53	retrograde	-1955 Feb 01 j 20:58	14° <u>0</u> 53'12	
minimum elong	-1962 Oct 06 j 15:38	27° <u>0</u> 06'35	14°38'53	opposition	-1955 Apr 21 j 05:55	13° <u>0</u> 30'57	12°37'08
max. Earth dist.	-1962 Oct 06 j 06:39	27° <u>0</u> 05'40	30.60358 AU	min. Earth dist.	-1955 Apr 20 j 17:12	13° <u>0</u> 31'49	29.08442 AU
morning rise	-1962 Oct 10 j 00:00	27° <u>0</u> 14'43		direct	-1955 Jul 10 j 04:20	12° <u>0</u> 07'21	
retrograde	-1961 Jan 18 j 08:18	29° <u>0</u> 46'49		evening set	-1955 Oct 13 j 20:25	14° <u>0</u> 21'17	
opposition	-1961 Apr 05 j 23:23	28° <u>0</u> 23'26	15°27'58				
min. Earth dist.	-1961 Apr 06 j 07:20	28° <u>0</u> 22'53	28.68808 AU	conjunction	-1955 Oct 23 j 15:52	14° <u>0</u> 44'20	11°33'23
direct	-1961 Jun 24 j 19:31	26° <u>0</u> 57'57		minimum elong	-1955 Oct 23 j 16:16	14° <u>0</u> 44'23	11°33'22
evening set	-1961 Oct 04 j 15:51	29° <u>0</u> 29'21		max. Earth dist.	-1955 Oct 24 j 07:02	14° <u>0</u> 45'50	31.09052 AU
				morning rise	-1955 Nov 02 j 11:27	15° <u>0</u> 07'25	
conjunction	-1961 Oct 09 j 09:54	29° <u>0</u> 40'52	14°16'37	retrograde	-1954 Feb 04 j 10:41	17° <u>0</u> 19'31	
minimum elong	-1961 Oct 09 j 10:15	29° <u>0</u> 40'54	14°16'36	min. Earth dist.	-1954 Apr 23 j 09:55	15° <u>0</u> 58'31	29.18462 AU
max. Earth dist.	-1961 Oct 09 j 04:33	29° <u>0</u> 40'19	30.64013 AU	opposition	-1954 Apr 24 j 01:13	15° <u>0</u> 57'28	12°04'11
morning rise	-1961 Oct 14 j 04:29	29° <u>0</u> 52'26		direct	-1954 Jul 13 j 00:19	14° <u>0</u> 34'13	
	-1961 Oct 17 j 07:38	0° <u>0</u>		evening set	-1954 Oct 15 j 21:03	16° <u>0</u> 45'39	
retrograde	-1960 Jan 21 j 05:04	2° <u>0</u> 20'37					
opposition	-1960 Apr 07 j 21:20	0° <u>0</u> 57'23	15°03'16	conjunction	-1954 Oct 26 j 06:43	17° <u>0</u> 09'57	11°02'11
min. Earth dist.	-1960 Apr 08 j 00:39	0° <u>0</u> 57'09	28.72700 AU	minimum elong	-1954 Oct 26 j 07:08	17° <u>0</u> 09'59	11°02'10
	-1960 May 15 j 14:22	30° <u>0</u> 8'00		max. Earth dist.	-1954 Oct 26 j 23:46	17° <u>0</u> 11'37	31.19904 AU
direct	-1960 Jun 26 j 19:14	29° <u>0</u> 32'10		morning rise	-1954 Nov 05 j 16:48	17° <u>0</u> 34'16	
	-1960 Aug 06 j 10:06	0° <u>0</u>		retrograde	-1953 Feb 07 j 02:39	19° <u>0</u> 44'08	
evening set	-1960 Oct 05 j 07:14	2° <u>0</u> 00'08		opposition	-1953 Apr 26 j 19:47	18° <u>0</u> 22'17	11°30'14
				min. Earth dist.	-1953 Apr 26 j 00:44	18° <u>0</u> 23'34	29.29372 AU
conjunction	-1960 Oct 11 j 04:10	2° <u>0</u> 14'18	13°52'46	direct	-1953 Jul 15 j 18:15	16° <u>0</u> 59'20	
minimum elong	-1960 Oct 11 j 04:34	2° <u>0</u> 14'21	13°52'46	evening set	-1953 Oct 17 j 21:57	19° <u>0</u> 08'22	
max. Earth dist.	-1960 Oct 11 j 02:41	2° <u>0</u> 14'09	30.68859 AU				
morning rise	-1960 Oct 17 j 01:36	2° <u>0</u> 28'31		conjunction	-1953 Oct 28 j 21:02	19° <u>0</u> 33'46	10°30'08
retrograde	-1959 Jan 23 j 00:10	4° <u>0</u> 53'30		minimum elong	-1953 Oct 28 j 21:24	19° <u>0</u> 33'49	10°30'06
opposition	-1959 Apr 10 j 19:14	3° <u>0</u> 30'25	14°36'55	max. Earth dist.	-1953 Oct 29 j 17:59	19° <u>0</u> 35'49	31.31632 AU
min. Earth dist.	-1959 Apr 10 j 19:57	3° <u>0</u> 30'22	28.77761 AU	morning rise	-1953 Nov 08 j 20:14	19° <u>0</u> 59'13	
direct	-1959 Jun 29 j 16:37	2° <u>0</u> 05'31		retrograde	-1952 Feb 09 j 14:47	22° <u>0</u> 06'54	
evening set	-1959 Oct 07 j 01:56	4° <u>0</u> 30'21		opposition	-1952 Apr 28 j 13:41	20° <u>0</u> 45'15	10°55'25
				min. Earth dist.	-1952 Apr 27 j 16:34	20° <u>0</u> 46'40	29.41169 AU
conjunction	-1959 Oct 13 j 21:51	4° <u>0</u> 46'46	13°27'26	direct	-1952 Jul 17 j 13:11	19° <u>0</u> 22'38	
minimum elong	-1959 Oct 13 j 22:14	4° <u>0</u> 46'48	13°27'26	evening set	-1952 Oct 18 j 23:18	21° <u>0</u> 29'20	
max. Earth dist.	-1959 Oct 14 j 00:01	4° <u>0</u> 46'59	30.74864 AU				
morning rise	-1959 Oct 20 j 18:09	5° <u>0</u> 03'13		conjunction	-1952 Oct 30 j 10:27	21° <u>0</u> 55'44	9°57'17

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Attention, astronomical year style is used: The year -1952 in astronomical counting style is the year 1953 BCE in historical counting style.

minimum elong	-1952 Oct 30 j 10:50	21° <u>♂</u> 55'46	9°57'15	min. Earth dist.	-1945 May 14 j 03:39	6° <u>♂</u> 36'56	30.50133 AU
max. Earth dist.	-1952 Oct 31 j 09:33	21° <u>♂</u> 57'57	31.44268 AU	opposition	-1945 May 15 j 21:49	6° <u>♂</u> 34'12	6°35'17
morning rise	-1952 Nov 10 j 21:56	22° <u>♂</u> 22'10		direct	-1945 Aug 04 j 02:39	5° <u>♂</u> 14'27	
retrograde	-1951 Feb 11 j 05:05	24° <u>♂</u> 27'45		evening set	-1945 Nov 01 j 12:01	7° <u>♂</u> 07'28	
min. Earth dist.	-1951 Apr 30 j 05:33	23° <u>♂</u> 08'00	29.53908 AU				
opposition	-1951 May 01 j 06:49	23° <u>♂</u> 06'19	10°19'48	conjunction	-1945 Nov 15 j 12:10	7° <u>♂</u> 38'00	5°53'07
direct	-1951 Jul 20 j 06:50	21° <u>♂</u> 44'02		minimum elong	-1945 Nov 15 j 12:25	7° <u>♂</u> 38'02	5°53'05
evening set	-1951 Oct 21 j 00:34	23° <u>♂</u> 48'29		max. Earth dist.	-1945 Nov 17 j 07:10	7° <u>♂</u> 41'57	32.58450 AU
				morning rise	-1945 Nov 29 j 13:04	8° <u>♂</u> 08'37	
conjunction	-1951 Nov 01 j 23:06	24° <u>♂</u> 15'46	9°23'45	retrograde	-1944 Feb 27 j 07:54	10° <u>♂</u> 02'05	
minimum elong	-1951 Nov 01 j 23:27	24° <u>♂</u> 15'48	9°23'43	min. Earth dist.	-1944 May 15 j 12:24	8° <u>♂</u> 45'45	30.68999 AU
max. Earth dist.	-1951 Nov 03 j 02:06	24° <u>♂</u> 18'21	31.57837 AU	opposition	-1944 May 17 j 09:40	8° <u>♂</u> 42'50	5°57'00
morning rise	-1951 Nov 13 j 21:52	24° <u>♂</u> 43'05		direct	-1944 Aug 05 j 13:55	7° <u>♂</u> 23'32	
retrograde	-1950 Feb 13 j 17:02	26° <u>♂</u> 46'40		evening set	-1944 Nov 02 j 14:10	9° <u>♂</u> 14'56	
opposition	-1950 May 03 j 23:20	25° <u>♂</u> 25'28	9°43'30				
min. Earth dist.	-1950 May 02 j 19:55	25° <u>♂</u> 27'17	29.67616 AU	conjunction	-1944 Nov 16 j 20:05	9° <u>♂</u> 45'44	5°17'18
direct	-1950 Jul 22 j 22:44	24° <u>♂</u> 03'33		minimum elong	-1944 Nov 16 j 20:18	9° <u>♂</u> 45'45	5°17'16
evening set	-1950 Oct 23 j 02:17	26° <u>♂</u> 05'51		max. Earth dist.	-1944 Nov 18 j 18:17	9° <u>♂</u> 49'56	32.77841 AU
				morning rise	-1944 Dec 01 j 02:31	10° <u>♂</u> 16'36	
conjunction	-1950 Nov 04 j 11:06	26° <u>♂</u> 33'54	8°49'36	retrograde	-1943 Feb 28 j 13:40	12° <u>♂</u> 08'40	
minimum elong	-1950 Nov 04 j 11:27	26° <u>♂</u> 33'56	8°49'34	min. Earth dist.	-1943 May 17 j 22:27	10° <u>♂</u> 52'45	30.88465 AU
max. Earth dist.	-1950 Nov 05 j 16:48	26° <u>♂</u> 36'44	31.72380 AU	opposition	-1943 May 19 j 20:57	10° <u>♂</u> 49'46	5°18'43
morning rise	-1950 Nov 16 j 20:13	27° <u>♂</u> 01'59		direct	-1943 Aug 08 j 01:43	9° <u>♂</u> 30'55	
retrograde	-1949 Feb 16 j 05:48	29° <u>♂</u> 03'40		evening set	-1943 Nov 04 j 16:25	11° <u>♂</u> 20'46	
min. Earth dist.	-1949 May 05 j 07:12	27° <u>♂</u> 44'49	29.82303 AU				
opposition	-1949 May 06 j 14:43	27° <u>♂</u> 42'44	9°06'37	conjunction	-1943 Nov 19 j 03:11	11° <u>♂</u> 51'45	4°41'30
direct	-1949 Jul 25 j 16:18	26° <u>♂</u> 21'12		minimum elong	-1943 Nov 19 j 03:22	11° <u>♂</u> 51'46	4°41'28
evening set	-1949 Oct 25 j 04:03	28° <u>♂</u> 21'28		max. Earth dist.	-1943 Nov 21 j 02:21	11° <u>♂</u> 56'01	32.97779 AU
				morning rise	-1943 Dec 03 j 14:44	12° <u>♂</u> 22'49	
conjunction	-1949 Nov 06 j 22:21	28° <u>♂</u> 50'12	8°14'57	retrograde	-1942 Mar 02 j 21:39	14° <u>♂</u> 13'31	
minimum elong	-1949 Nov 06 j 22:41	28° <u>♂</u> 50'14	8°14'56	min. Earth dist.	-1942 May 20 j 05:48	12° <u>♂</u> 58'07	31.08466 AU
max. Earth dist.	-1949 Nov 08 j 07:09	28° <u>♂</u> 53'17	31.87876 AU	opposition	-1942 May 22 j 07:20	12° <u>♂</u> 54'58	4°40'31
morning rise	-1949 Nov 19 j 17:04	29° <u>♂</u> 18'58		direct	-1942 Aug 10 j 11:16	11° <u>♂</u> 36'32	
	-1949 Dec 09 j 00:21	0° <u>♂</u>		evening set	-1942 Nov 06 j 18:40	13° <u>♂</u> 24'55	
retrograde	-1948 Feb 18 j 18:15	1° <u>♂</u> 18'50					
min. Earth dist.	-1948 May 06 j 19:43	0° <u>♂</u> 00'26	29.97962 AU	conjunction	-1942 Nov 21 j 09:45	13° <u>♂</u> 56'01	4°05'47
	-1948 May 07 j 02:12	30° <u>♂</u> 18'50		minimum elong	-1942 Nov 21 j 09:55	13° <u>♂</u> 56'02	4°05'45
opposition	-1948 May 08 j 05:41	29° <u>♂</u> 58'11	8°29'15	max. Earth dist.	-1942 Nov 23 j 11:30	14° <u>♂</u> 00'28	33.18190 AU
direct	-1948 Jul 27 j 07:27	28° <u>♂</u> 37'05		morning rise	-1942 Dec 06 j 01:37	14° <u>♂</u> 27'13	
	-1948 Oct 09 j 13:13	0° <u>♂</u>			-1942 Dec 22 j 09:08	15° <u>♂</u>	
evening set	-1948 Oct 26 j 05:50	0° <u>♂</u> 35'24		retrograde	-1941 Mar 05 j 03:37	16° <u>♂</u> 16'37	
				min. Earth dist.	-1941 May 22 j 14:35	15° <u>♂</u> 01'34	31.28949 AU
conjunction	-1948 Nov 08 j 08:50	1° <u>♂</u> 04'43	7°39'53		-1941 May 23 j 15:22	15° <u>♂</u> 18'50	
minimum elong	-1948 Nov 08 j 09:09	1° <u>♂</u> 04'44	7°39'51	opposition	-1941 May 24 j 16:56	14° <u>♂</u> 58'23	4°02'28
max. Earth dist.	-1948 Nov 09 j 20:49	1° <u>♂</u> 08'05	32.04310 AU	direct	-1941 Aug 12 j 19:43	13° <u>♂</u> 40'22	
morning rise	-1948 Nov 21 j 12:08	1° <u>♂</u> 34'04			-1941 Oct 26 j 06:03	15° <u>♂</u>	
retrograde	-1947 Feb 20 j 04:27	3° <u>♂</u> 32'12		evening set	-1941 Nov 08 j 20:49	15° <u>♂</u> 27'19	
min. Earth dist.	-1947 May 09 j 06:31	2° <u>♂</u> 14'20	30.14528 AU				
opposition	-1947 May 10 j 19:50	2° <u>♂</u> 11'54	7°51'30	conjunction	-1941 Nov 23 j 15:35	15° <u>♂</u> 58'29	3°30'13
direct	-1947 Jul 29 j 23:28	0° <u>♂</u> 51'14		minimum elong	-1941 Nov 23 j 15:43	15° <u>♂</u> 58'30	3°30'11
evening set	-1947 Oct 28 j 07:51	2° <u>♂</u> 47'42		max. Earth dist.	-1941 Nov 25 j 18:45	16° <u>♂</u> 03'01	33.39059 AU
				morning rise	-1941 Dec 08 j 11:09	16° <u>♂</u> 29'45	
conjunction	-1947 Nov 10 j 18:37	3° <u>♂</u> 17'30	7°04'29	retrograde	-1940 Mar 06 j 10:08	18° <u>♂</u> 17'54	
minimum elong	-1947 Nov 10 j 18:53	3° <u>♂</u> 17'31	7°04'29	min. Earth dist.	-1940 May 23 j 20:40	17° <u>♂</u> 03'18	31.49896 AU
max. Earth dist.	-1947 Nov 12 j 08:47	3° <u>♂</u> 21'03	32.21598 AU	opposition	-1940 May 26 j 01:48	16° <u>♂</u> 59'58	3°24'37
morning rise	-1947 Nov 24 j 05:58	3° <u>♂</u> 47'21		direct	-1940 Aug 14 j 06:38	15° <u>♂</u> 42'20	
retrograde	-1946 Feb 22 j 14:38	5° <u>♂</u> 43'51		evening set	-1940 Nov 09 j 22:46	17° <u>♂</u> 27'56	
min. Earth dist.	-1946 May 11 j 17:10	4° <u>♂</u> 26'30	30.31955 AU				
opposition	-1946 May 13 j 09:11	4° <u>♂</u> 23'53	7°13'29	conjunction	-1940 Nov 24 j 20:28	17° <u>♂</u> 59'06	2°54'50
direct	-1946 Aug 01 j 12:16	3° <u>♂</u> 03'41		minimum elong	-1940 Nov 24 j 20:36	17° <u>♂</u> 59'07	2°54'49
evening set	-1946 Oct 30 j 09:48	4° <u>♂</u> 58'23		max. Earth dist.	-1940 Nov 27 j 01:35	18° <u>♂</u> 03'46	33.60368 AU
				morning rise	-1940 Dec 09 j 19:15	18° <u>♂</u> 30'22	
conjunction	-1946 Nov 13 j 03:49	5° <u>♂</u> 28'36	6°28'52	retrograde	-1939 Mar 08 j 16:59	20° <u>♂</u> 17'20	
minimum elong	-1946 Nov 13 j 04:05	5° <u>♂</u> 28'37	6°28'51	min. Earth dist.	-1939 May 26 j 03:27	19° <u>♂</u> 03'06	31.71339 AU
max. Earth dist.	-1946 Nov 14 j 21:26	5° <u>♂</u> 32'26	32.39680 AU	opposition	-1939 May 28 j 10:04	18° <u>♂</u> 59'42	2°47'03
morning rise	-1946 Nov 26 j 22:10	5° <u>♂</u> 58'51		direct	-1939 Aug 16 j 14:49	17° <u>♂</u> 42'27	
retrograde	-1945 Feb 24 j 22:18	7° <u>♂</u> 53'48		evening set	-1939 Nov 12 j 00:36	19° <u>♂</u> 26'45	

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Attention, astronomical year style is used: The year -1939 in astronomical counting style is the year 1940 BCE in historical counting style.

conjunction	-1939 Nov 27 j 00:52	19° \mathbb{M} .57'52	2°19'43	minimum elong	-1933 Dec 08 j 13:15	1° \mathbb{A} .15'04	1°03'21
minimum elong	-1939 Nov 27 j 00:58	19° \mathbb{M} .57'53	2°19'41	max. Earth dist.	-1933 Dec 11 j 06:52	1° \mathbb{A} .20'30	35.23036 AU
max. Earth dist.	-1939 Nov 29 j 08:19	20° \mathbb{M} .02'42	33.82166 AU	morning rise	-1933 Dec 23 j 18:30	1° \mathbb{A} .45'08	
morning rise	-1939 Dec 12 j 02:03	20° \mathbb{M} .29'05		retrograde	-1932 Mar 21 j 07:38	3° \mathbb{A} .25'35	
retrograde	-1938 Mar 10 j 20:14	22° \mathbb{M} .14'55		min. Earth dist.	-1932 Jun 08 j 03:57	2° \mathbb{A} .14'17	33.35342 AU
min. Earth dist.	-1938 May 28 j 08:38	21° \mathbb{M} .01'06	31.93292 AU	opposition	-1932 Jun 10 j 22:41	2° \mathbb{A} .10'17	-1°24'26
opposition	-1938 May 30 j 17:17	20° \mathbb{M} .57'35	2°09'48	direct	-1932 Aug 30 j 05:40	0° \mathbb{A} .55'52	
direct	-1938 Aug 19 j 00:05	19° \mathbb{M} .40'42		evening set	-1932 Nov 24 j 10:44	2° \mathbb{A} .33'06	
evening set	-1938 Nov 14 j 02:26	21° \mathbb{M} .23'47					
conjunction	-1938 Nov 29 j 04:25	21° \mathbb{M} .54'49	1°44'54	conjunction	-1932 Dec 09 j 13:24	3° \mathbb{A} .02'43	-1°35'32
minimum elong	-1938 Nov 29 j 04:30	21° \mathbb{M} .54'49	1°44'52	minimum elong	-1932 Dec 09 j 13:21	3° \mathbb{A} .02'42	1°35'34
max. Earth dist.	-1938 Dec 01 j 13:04	21° \mathbb{M} .59'42	34.04464 AU	max. Earth dist.	-1932 Dec 12 j 08:23	3° \mathbb{A} .08'14	35.47747 AU
morning rise	-1938 Dec 14 j 07:43	22° \mathbb{M} .25'57		morning rise	-1932 Dec 24 j 17:28	3° \mathbb{A} .32'27	
retrograde	-1937 Mar 12 j 23:47	24° \mathbb{M} .10'43		retrograde	-1931 Mar 23 j 07:43	5° \mathbb{A} .12'13	
min. Earth dist.	-1937 May 30 j 12:54	22° \mathbb{M} .57'19	32.15795 AU	min. Earth dist.	-1931 Jun 10 j 05:14	4° \mathbb{A} .01'20	33.60185 AU
opposition	-1937 Jun 01 j 23:54	22° \mathbb{M} .53'41	1°32'55	opposition	-1931 Jun 13 j 01:21	3° \mathbb{A} .57'16	-1°58'15
direct	-1937 Aug 21 j 07:05	21° \mathbb{M} .37'12		direct	-1931 Sep 01 j 10:05	2° \mathbb{A} .43'15	
evening set	-1937 Nov 16 j 03:57	23° \mathbb{M} .19'08		evening set	-1931 Nov 26 j 12:02	4° \mathbb{A} .19'43	
conjunction	-1937 Dec 01 j 07:25	23° \mathbb{M} .50'01	1°10'25	conjunction	-1931 Dec 11 j 13:03	4° \mathbb{A} .48'59	-2°07'13
minimum elong	-1937 Dec 01 j 07:27	23° \mathbb{M} .50'01	1°10'23	minimum elong	-1931 Dec 11 j 12:58	4° \mathbb{A} .48'58	2°07'15
max. Earth dist.	-1937 Dec 03 j 19:01	23° \mathbb{M} .55'08	34.27285 AU	max. Earth dist.	-1931 Dec 14 j 08:18	4° \mathbb{A} .54'29	35.72596 AU
morning rise	-1937 Dec 16 j 11:54	24° \mathbb{M} .21'01		morning rise	-1931 Dec 26 j 15:48	5° \mathbb{A} .18'23	
retrograde	-1936 Mar 14 j 00:18	26° \mathbb{M} .04'47		retrograde	-1930 Mar 25 j 08:50	6° \mathbb{A} .57'29	
min. Earth dist.	-1936 May 31 j 17:29	24° \mathbb{M} .51'47	32.38822 AU	min. Earth dist.	-1930 Jun 12 j 06:13	5° \mathbb{A} .46'58	33.85169 AU
opposition	-1936 Jun 03 j 05:49	24° \mathbb{M} .48'05	0°56'28	opposition	-1930 Jun 15 j 03:21	5° \mathbb{A} .42'52	-2°31'28
direct	-1936 Aug 22 j 15:35	23° \mathbb{M} .32'00		direct	-1930 Sep 03 j 12:04	4° \mathbb{A} .29'14	
evening set	-1936 Nov 17 j 05:34	25° \mathbb{M} .12'52		evening set	-1930 Nov 28 j 13:03	6° \mathbb{A} .04'58	
conjunction	-1936 Dec 02 j 09:42	25° \mathbb{M} .43'34	0°36'19	conjunction	-1930 Dec 13 j 12:19	6° \mathbb{A} .33'52	-2°38'21
minimum elong	-1936 Dec 02 j 09:43	25° \mathbb{M} .43'34	0°36'17	minimum elong	-1930 Dec 13 j 12:14	6° \mathbb{A} .33'52	2°38'22
max. Earth dist.	-1936 Dec 04 j 22:07	25° \mathbb{M} .48'42	34.50612 AU	max. Earth dist.	-1930 Dec 16 j 09:15	6° \mathbb{A} .39'28	35.97532 AU
morning rise	-1936 Dec 17 j 15:13	26° \mathbb{M} .14'23		morning rise	-1930 Dec 28 j 13:03	7° \mathbb{A} .02'54	
retrograde	-1935 Mar 16 j 03:25	27° \mathbb{M} .57'14		retrograde	-1929 Mar 27 j 06:37	8° \mathbb{A} .41'23	
min. Earth dist.	-1935 Jun 02 j 19:47	26° \mathbb{M} .44'44	32.62365 AU	min. Earth dist.	-1929 Jun 14 j 07:34	7° \mathbb{A} .31'10	34.10210 AU
opposition	-1935 Jun 05 j 10:59	26° \mathbb{M} .40'52	0°20'27	opposition	-1929 Jun 17 j 04:48	7° \mathbb{A} .27'05	-3°04'04
direct	-1935 Aug 24 j 20:31	25° \mathbb{M} .25'12		direct	-1929 Sep 05 j 15:38	6° \mathbb{A} .13'49	
evening set	-1935 Nov 19 j 06:54	27° \mathbb{M} .05'03		evening set	-1929 Nov 30 j 13:57	7° \mathbb{A} .48'52	
conjunction	-1935 Dec 04 j 11:27	27° \mathbb{M} .35'32	0°02'42	conjunction	-1929 Dec 15 j 10:47	8° \mathbb{A} .17'22	-3°08'54
minimum elong	-1935 Dec 04 j 11:27	27° \mathbb{M} .35'32	0°02'40	minimum elong	-1929 Dec 15 j 10:41	8° \mathbb{A} .17'21	3°08'57
behind sun begin	-1935 Dec 04 j 05:06	27° \mathbb{M} .35'02		max. Earth dist.	-1929 Dec 18 j 07:29	8° \mathbb{A} .22'54	36.22502 AU
behind sun end	-1935 Dec 04 j 17:48	27° \mathbb{M} .36'03		morning rise	-1929 Dec 30 j 09:22	8° \mathbb{A} .46'00	
max. Earth dist.	-1935 Dec 07 j 02:31	27° \mathbb{M} .40'52	34.74392 AU	retrograde	-1928 Mar 28 j 04:42	10° \mathbb{A} .23'53	
morning rise	-1935 Dec 19 j 17:17	28° \mathbb{M} .06'09		min. Earth dist.	-1928 Jun 15 j 06:39	9° \mathbb{A} .14'04	34.35303 AU
desc. node	-1934 Jan 02 j 10:09	28° \mathbb{M} .32'15		opposition	-1928 Jun 18 j 05:40	9° \mathbb{A} .09'53	-3°36'02
retrograde	-1934 Mar 18 j 03:35	29° \mathbb{M} .48'09		direct	-1928 Sep 06 j 16:48	7° \mathbb{A} .56'58	
min. Earth dist.	-1934 Jun 04 j 23:50	28° \mathbb{M} .36'00	32.86348 AU	evening set	-1928 Dec 01 j 14:39	9° \mathbb{A} .31'22	
opposition	-1934 Jun 07 j 15:36	28° \mathbb{M} .32'08	-0°15'03	conjunction	-1928 Dec 16 j 08:54	9° \mathbb{A} .59'26	-3°38'53
direct	-1934 Aug 27 j 01:16	27° \mathbb{M} .16'53		minimum elong	-1928 Dec 16 j 08:47	9° \mathbb{A} .59'26	3°38'55
evening set	-1934 Nov 21 j 08:18	28° \mathbb{M} .55'48		max. Earth dist.	-1928 Dec 19 j 07:22	10° \mathbb{A} .05'04	36.47508 AU
conjunction	-1934 Dec 06 j 12:39	29° \mathbb{M} .26'01	-0°30'36	morning rise	-1928 Dec 31 j 04:47	10° \mathbb{A} .27'39	
minimum elong	-1934 Dec 06 j 12:38	29° \mathbb{M} .26'01	0°30'38	retrograde	-1927 Mar 30 j 00:56	12° \mathbb{A} .05'00	
max. Earth dist.	-1934 Dec 09 j 04:32	29° \mathbb{M} .31'22	34.98565 AU	min. Earth dist.	-1927 Jun 17 j 07:11	10° \mathbb{A} .55'25	34.60461 AU
morning rise	-1934 Dec 21 j 18:23	29° \mathbb{M} .56'22		opposition	-1927 Jun 20 j 05:56	10° \mathbb{A} .51'17	-4°07'21
retrograde	-1933 Mar 20 j 05:35	1° \mathbb{A} .37'34		direct	-1927 Sep 08 j 18:06	9° \mathbb{A} .38'41	
min. Earth dist.	-1933 Jun 07 j 01:10	0° \mathbb{A} .25'54	33.10696 AU	evening set	-1927 Dec 03 j 15:07	11° \mathbb{A} .12'28	
opposition	-1933 Jun 09 j 19:16	0° \mathbb{A} .21'55	-0°50'01	conjunction	-1927 Dec 18 j 06:21	11° \mathbb{A} .40'06	-4°08'16
direct	-1933 Jun 25 j 03:10	30° \mathbb{K} . \mathbb{M} .		minimum elong	-1927 Dec 18 j 06:13	11° \mathbb{A} .40'05	4°08'19
evening set	-1933 Aug 29 j 04:19	29° \mathbb{M} .07'05		max. Earth dist.	-1927 Dec 21 j 05:00	11° \mathbb{A} .45'42	36.72591 AU
conjunction	-1933 Oct 29 j 07:35	0° \mathbb{A} .		morning rise	-1926 Jan 01 j 23:15	12° \mathbb{A} .07'52	
evening set	-1933 Nov 23 j 09:39	0° \mathbb{A} .45'08		retrograde	-1926 Mar 31 j 22:44	13° \mathbb{A} .44'42	
conjunction	-1933 Dec 08 j 13:17	1° \mathbb{A} .15'04	-1°03'19	min. Earth dist.	-1926 Jun 19 j 04:55	12° \mathbb{A} .35'29	34.85717 AU
				opposition	-1926 Jun 22 j 05:27	12° \mathbb{A} .31'16	-4°38'00
				direct	-1926 Sep 10 j 17:05	11° \mathbb{A} .19'00	

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Attention, astronomical year style is used: The year -1926 in astronomical counting style is the year 1927 BCE in historical counting style.

evening set	-1926 Dec 05 j 15:31	12°♄52'13		min. Earth dist.	-1919 Jun 30 j 06:16	23°♄41'43	36.65990 AU
				opposition	-1919 Jul 03 j 11:37	23°♄37'21	-7°53'20
conjunction	-1926 Dec 20 j 03:17	13°♄19'23	-4°37'03	direct	-1919 Sep 22 j 01:12	22°♄27'27	
minimum elong	-1926 Dec 20 j 03:08	13°♄19'22	4°37'05	evening set	-1919 Dec 17 j 13:55	23°♄58'00	
max. Earth dist.	-1926 Dec 23 j 03:04	13°♄25'02	36.97769 AU				
morning rise	-1925 Jan 03 j 16:53	13°♄46'41		conjunction	-1919 Dec 30 j 17:23	24°♄21'30	-7°40'49
retrograde	-1925 Apr 02 j 20:23	15°♄23'04		minimum elong	-1919 Dec 30 j 17:11	24°♄21'29	7°40'52
min. Earth dist.	-1925 Jun 21 j 03:40	14°♄14'07	35.11120 AU	max. Earth dist.	-1918 Jan 02 j 21:50	24°♄27'14	38.77024 AU
opposition	-1925 Jun 24 j 04:26	14°♄09'54	-5°07'59	morning rise	-1918 Jan 12 j 22:39	24°♄45'08	
direct	-1925 Sep 12 j 15:10	12°♄57'57		retrograde	-1918 Apr 13 j 11:35	26°♄19'22	
evening set	-1925 Dec 07 j 15:39	14°♄30'40		min. Earth dist.	-1918 Jul 02 j 02:22	25°♄12'38	36.91732 AU
				opposition	-1918 Jul 05 j 07:17	25°♄08'19	-8°18'30
conjunction	-1925 Dec 21 j 23:50	14°♄57'21	-5°05'12	direct	-1918 Sep 23 j 19:15	23°♄58'43	
minimum elong	-1925 Dec 21 j 23:40	14°♄57'20	5°05'15	evening set	-1918 Dec 19 j 13:18	25°♄29'01	
max. Earth dist.	-1925 Dec 25 j 00:56	15°♄03'04	37.23108 AU				
morning rise	-1924 Jan 05 j 09:33	15°♄24'10		conjunction	-1917 Jan 01 j 11:10	25°♄51'57	-8°04'33
retrograde	-1924 Apr 03 j 17:25	17°♄00'07		minimum elong	-1917 Jan 01 j 10:58	25°♄51'56	8°04'35
min. Earth dist.	-1924 Jun 22 j 00:53	15°♄51'31	35.36683 AU	max. Earth dist.	-1917 Jan 04 j 16:15	25°♄57'41	39.02468 AU
opposition	-1924 Jun 25 j 02:53	15°♄47'15	-5°37'16	morning rise	-1917 Jan 14 j 10:28	26°♄15'00	
direct	-1924 Sep 13 j 14:17	14°♄35'38		retrograde	-1917 Apr 15 j 05:52	27°♄49'02	
evening set	-1924 Dec 08 j 15:39	16°♄07'54		min. Earth dist.	-1917 Jul 03 j 21:30	26°♄42'32	37.17269 AU
				opposition	-1917 Jul 07 j 02:19	26°♄38'15	-8°43'01
conjunction	-1924 Dec 22 j 19:39	16°♄34'05	-5°32'44	direct	-1917 Sep 25 j 14:23	25°♄28'56	
minimum elong	-1924 Dec 22 j 19:29	16°♄34'04	5°32'45	evening set	-1917 Dec 21 j 12:42	26°♄59'00	
max. Earth dist.	-1924 Dec 25 j 21:00	16°♄39'46	37.48595 AU				
morning rise	-1923 Jan 06 j 01:31	17°♄00'24		conjunction	-1916 Jan 03 j 04:26	27°♄21'21	-8°27'41
retrograde	-1923 Apr 05 j 15:24	18°♄35'59		minimum elong	-1916 Jan 03 j 04:13	27°♄21'20	8°27'44
min. Earth dist.	-1923 Jun 23 j 21:39	17°♄27'43	35.62415 AU	max. Earth dist.	-1916 Jan 06 j 08:35	27°♄26'59	39.27697 AU
opposition	-1923 Jun 27 j 00:54	17°♄23'25	-6°05'52	morning rise	-1916 Jan 15 j 21:50	27°♄43'49	
direct	-1923 Sep 15 j 11:24	16°♄12'08		retrograde	-1916 Apr 16 j 00:29	29°♄17'40	
evening set	-1923 Dec 10 j 15:29	17°♄43'59		min. Earth dist.	-1916 Jul 04 j 15:40	28°♄11'25	37.42605 AU
				opposition	-1916 Jul 07 j 21:06	28°♄07'08	-9°06'51
conjunction	-1923 Dec 24 j 15:19	18°♄09'40	-5°59'37	direct	-1916 Sep 26 j 08:18	26°♄58'04	
minimum elong	-1923 Dec 24 j 15:09	18°♄09'39	5°59'39	evening set	-1916 Dec 22 j 11:41	28°♄27'55	
max. Earth dist.	-1923 Dec 27 j 18:29	18°♄15'27	37.74224 AU				
morning rise	-1922 Jan 07 j 16:44	18°♄35'29		conjunction	-1915 Jan 03 j 21:20	28°♄49'40	-8°50'12
retrograde	-1922 Apr 07 j 09:03	20°♄10'42		minimum elong	-1915 Jan 03 j 21:07	28°♄49'39	8°50'14
min. Earth dist.	-1922 Jun 25 j 19:01	19°♄02'45	35.88263 AU	max. Earth dist.	-1915 Jan 07 j 02:35	28°♄55'21	39.52716 AU
opposition	-1922 Jun 28 j 22:12	18°♄58'27	-6°33'46	morning rise	-1915 Jan 16 j 08:24	29°♄11'32	
direct	-1922 Sep 17 j 10:17	17°♄47'32			-1915 Feb 15 j 19:05	0°♄	
evening set	-1922 Dec 12 j 15:18	19°♄19'00		retrograde	-1915 Apr 17 j 14:10	0°♄45'13	
					-1915 Jun 20 j 07:44	30°♄♂	
conjunction	-1922 Dec 26 j 10:24	19°♄44'09	-6°25'52	min. Earth dist.	-1915 Jul 06 j 10:57	29°♄39'08	37.67734 AU
minimum elong	-1922 Dec 26 j 10:13	19°♄44'08	6°25'53	opposition	-1915 Jul 09 j 15:25	29°♄34'54	-9°30'03
max. Earth dist.	-1922 Dec 29 j 13:13	19°♄49'53	37.99944 AU	direct	-1915 Sep 28 j 05:29	28°♄26'06	
morning rise	-1921 Jan 09 j 07:15	20°♄09'26		evening set	-1915 Dec 24 j 10:44	29°♄55'45	
retrograde	-1921 Apr 09 j 02:56	21°♄44'22			-1915 Dec 26 j 21:49	0°♄	
min. Earth dist.	-1921 Jun 27 j 14:18	20°♄36'48	36.14188 AU				
opposition	-1921 Jun 30 j 19:06	20°♄32'26	-7°00'59	conjunction	-1914 Jan 05 j 13:50	0°♄16'53	-9°12'06
direct	-1921 Sep 19 j 08:24	19°♄21'51		minimum elong	-1914 Jan 05 j 13:37	0°♄16'52	9°12'09
evening set	-1921 Dec 14 j 14:48	20°♄52'59		max. Earth dist.	-1914 Jan 08 j 18:17	0°♄22'29	39.77555 AU
				morning rise	-1914 Jan 17 j 18:23	0°♄38'08	
conjunction	-1921 Dec 28 j 05:00	21°♄17'36	-6°51'28	retrograde	-1914 Apr 19 j 05:08	2°♄11'39	
minimum elong	-1921 Dec 28 j 04:49	21°♄17'35	6°51'31	min. Earth dist.	-1914 Jul 08 j 03:29	1°♄05'51	37.92714 AU
max. Earth dist.	-1921 Dec 31 j 09:24	21°♄23'25	38.25691 AU	opposition	-1914 Jul 11 j 08:58	1°♄01'34	-9°52'35
morning rise	-1920 Jan 10 j 20:55	21°♄42'21			-1914 Sep 06 j 19:38	30°♄♂	
retrograde	-1920 Apr 09 j 20:44	23°♄17'02		direct	-1914 Sep 30 j 00:40	29°♄53'00	
min. Earth dist.	-1920 Jun 28 j 11:27	22°♄09'42	36.40120 AU		-1914 Oct 22 j 18:22	0°♄	
opposition	-1920 Jul 01 j 15:42	22°♄05'23	-7°27'30	evening set	-1914 Dec 26 j 09:33	1°♄22'29	
direct	-1920 Sep 20 j 05:36	20°♄55'10					
evening set	-1920 Dec 15 j 14:23	22°♄25'59		conjunction	-1913 Jan 07 j 05:54	1°♄43'01	-9°33'24
				minimum elong	-1913 Jan 07 j 05:42	1°♄43'00	9°33'26
conjunction	-1920 Dec 28 j 23:25	22°♄50'03	-7°16'27	max. Earth dist.	-1913 Jan 10 j 11:09	1°♄48'38	40.02258 AU
minimum elong	-1920 Dec 28 j 23:13	22°♄50'02	7°16'29	morning rise	-1913 Jan 19 j 03:44	2°♄03'39	
max. Earth dist.	-1919 Jan 01 j 03:45	22°♄55'49	38.51415 AU	retrograde	-1913 Apr 20 j 20:59	3°♄37'04	
morning rise	-1919 Jan 11 j 10:01	23°♄14'14		min. Earth dist.	-1913 Jul 09 j 21:34	2°♄31'25	38.17598 AU
retrograde	-1919 Apr 11 j 15:33	24°♄48'41		opposition	-1913 Jul 13 j 02:23	2°♄27'11	-10°14'28

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Attention, astronomical year style is used: The year -1913 in astronomical counting style is the year 1914 BCE in historical counting style.

direct	-1913 Oct 01 j 18:12	1° $\overline{3}$ 18'52		retrograde	-1906 Apr 30 j 06:13	13° $\overline{3}$ 11'08	
evening set	-1913 Dec 28 j 08:05	2° $\overline{3}$ 48'13		min. Earth dist.	-1906 Jul 19 j 12:01	12° $\overline{3}$ 07'10	39.89424 AU
				opposition	-1906 Jul 22 j 16:58	12° $\overline{3}$ 03'04	-12°29'33
conjunction	-1912 Jan 08 j 21:32	3° $\overline{3}$ 08'07	-9°54'05	direct	-1906 Oct 11 j 07:36	10° $\overline{3}$ 56'38	
minimum elong	-1912 Jan 08 j 21:19	3° $\overline{3}$ 08'06	9°54'08	evening set	-1905 Jan 08 j 21:06	12° $\overline{3}$ 26'03	
max. Earth dist.	-1912 Jan 12 j 03:11	3° $\overline{3}$ 13'43	40.26896 AU				
morning rise	-1912 Jan 20 j 12:11	3° $\overline{3}$ 28'07		conjunction	-1905 Jan 18 j 03:07	12° $\overline{3}$ 41'23	-12°02'04
retrograde	-1912 Apr 21 j 12:28	5° $\overline{3}$ 01'27		minimum elong	-1905 Jan 18 j 02:55	12° $\overline{3}$ 41'22	12°02'07
min. Earth dist.	-1912 Jul 10 j 13:33	3° $\overline{3}$ 56'04	38.42421 AU	max. Earth dist.	-1905 Jan 21 j 09:10	12° $\overline{3}$ 46'47	41.96689 AU
opposition	-1912 Jul 13 j 19:14	3° $\overline{3}$ 51'49	-10°35'41	morning rise	-1905 Jan 27 j 09:51	12° $\overline{3}$ 56'47	
direct	-1912 Oct 02 j 11:16	2° $\overline{3}$ 43'44		retrograde	-1905 May 01 j 20:27	14° $\overline{3}$ 30'25	
evening set	-1912 Dec 29 j 06:42	4° $\overline{3}$ 13'00		min. Earth dist.	-1905 Jul 21 j 03:02	13° $\overline{3}$ 26'40	40.13109 AU
				opposition	-1905 Jul 24 j 07:28	13° $\overline{3}$ 22'36	-12°46'27
conjunction	-1911 Jan 09 j 12:49	4° $\overline{3}$ 32'16	-10°14'09	direct	-1905 Oct 12 j 22:06	12° $\overline{3}$ 16'25	
minimum elong	-1911 Jan 09 j 12:37	4° $\overline{3}$ 32'16	10°14'11	evening set	-1904 Jan 10 j 19:33	13° $\overline{3}$ 45'56	
max. Earth dist.	-1911 Jan 12 j 18:13	4° $\overline{3}$ 37'49	40.51482 AU				
morning rise	-1911 Jan 20 j 20:22	4° $\overline{3}$ 51'39		conjunction	-1904 Jan 19 j 16:27	14° $\overline{3}$ 00'35	-12°18'07
retrograde	-1911 Apr 23 j 06:11	6° $\overline{3}$ 24'55		minimum elong	-1904 Jan 19 j 16:15	14° $\overline{3}$ 00'34	12°18'08
min. Earth dist.	-1911 Jul 12 j 05:51	5° $\overline{3}$ 19'46	38.67216 AU	max. Earth dist.	-1904 Jan 22 j 20:56	14° $\overline{3}$ 05'51	42.19986 AU
opposition	-1911 Jul 15 j 11:45	5° $\overline{3}$ 15'32	-10°56'14	morning rise	-1904 Jan 28 j 14:12	14° $\overline{3}$ 15'16	
direct	-1911 Oct 04 j 01:37	4° $\overline{3}$ 07'43		retrograde	-1904 May 02 j 11:32	15° $\overline{3}$ 49'01	
evening set	-1911 Dec 31 j 05:06	5° $\overline{3}$ 36'55		min. Earth dist.	-1904 Jul 21 j 17:21	14° $\overline{3}$ 45'29	40.36435 AU
				opposition	-1904 Jul 24 j 21:47	14° $\overline{3}$ 41'26	-13°02'47
conjunction	-1910 Jan 11 j 03:58	5° $\overline{3}$ 55'34	-10°33'36	direct	-1904 Oct 13 j 10:58	13° $\overline{3}$ 35'28	
minimum elong	-1910 Jan 11 j 03:45	5° $\overline{3}$ 55'33	10°33'38	evening set	-1903 Jan 11 j 18:02	15° $\overline{3}$ 05'07	
max. Earth dist.	-1910 Jan 14 j 10:34	6° $\overline{3}$ 01'10	40.76034 AU				
morning rise	-1910 Jan 22 j 03:54	6° $\overline{3}$ 14'18		conjunction	-1903 Jan 20 j 05:46	15° $\overline{3}$ 19'03	-12°33'38
retrograde	-1910 Apr 24 j 20:45	7° $\overline{3}$ 47'33		minimum elong	-1903 Jan 20 j 05:35	15° $\overline{3}$ 19'02	12°33'41
min. Earth dist.	-1910 Jul 13 j 22:21	6° $\overline{3}$ 42'38	38.91943 AU	max. Earth dist.	-1903 Jan 23 j 10:49	15° $\overline{3}$ 24'20	42.42917 AU
opposition	-1910 Jul 17 j 03:51	6° $\overline{3}$ 38'25	-11°16'08	morning rise	-1903 Jan 28 j 18:10	15° $\overline{3}$ 33'01	
direct	-1910 Oct 05 j 18:26	5° $\overline{3}$ 30'53		retrograde	-1903 May 03 j 23:14	17° $\overline{3}$ 06'55	
evening set	-1909 Jan 02 j 03:33	7° $\overline{3}$ 00'05		min. Earth dist.	-1903 Jul 23 j 08:49	16° $\overline{3}$ 03'28	40.59392 AU
				opposition	-1903 Jul 26 j 11:38	15° $\overline{3}$ 59'31	-13°18'34
conjunction	-1909 Jan 12 j 18:35	7° $\overline{3}$ 18'05	-10°52'27	direct	-1903 Oct 15 j 02:11	14° $\overline{3}$ 53'45	
minimum elong	-1909 Jan 12 j 18:23	7° $\overline{3}$ 18'04	10°52'29	evening set	-1902 Jan 13 j 16:42	16° $\overline{3}$ 23'33	
max. Earth dist.	-1909 Jan 16 j 00:23	7° $\overline{3}$ 23'35	41.00510 AU				
morning rise	-1909 Jan 23 j 10:50	7° $\overline{3}$ 36'09		conjunction	-1902 Jan 21 j 18:43	16° $\overline{3}$ 36'45	-12°48'39
retrograde	-1909 Apr 26 j 11:29	9° $\overline{3}$ 09'26		minimum elong	-1902 Jan 21 j 18:31	16° $\overline{3}$ 36'44	12°48'40
min. Earth dist.	-1909 Jul 15 j 13:01	8° $\overline{3}$ 04'49	39.16587 AU	max. Earth dist.	-1902 Jan 24 j 22:31	16° $\overline{3}$ 41'55	42.65512 AU
opposition	-1909 Jul 18 j 19:34	8° $\overline{3}$ 00'34	-11°35'25	morning rise	-1902 Jan 29 j 21:18	16° $\overline{3}$ 49'59	
direct	-1909 Oct 07 j 09:49	6° $\overline{3}$ 53'19		retrograde	-1902 May 05 j 09:32	18° $\overline{3}$ 24'02	
evening set	-1908 Jan 04 j 01:49	8° $\overline{3}$ 22'32		min. Earth dist.	-1902 Jul 24 j 21:41	17° $\overline{3}$ 20'48	40.82030 AU
				opposition	-1902 Jul 28 j 01:06	17° $\overline{3}$ 16'49	-13°33'48
conjunction	-1908 Jan 14 j 09:03	8° $\overline{3}$ 39'52	-11°10'42	direct	-1902 Oct 16 j 17:52	16° $\overline{3}$ 11'15	
minimum elong	-1908 Jan 14 j 08:50	8° $\overline{3}$ 39'52	11°10'44	evening set	-1901 Jan 15 j 15:13	17° $\overline{3}$ 41'12	
max. Earth dist.	-1908 Jan 17 j 15:49	8° $\overline{3}$ 45'26	41.24874 AU				
morning rise	-1908 Jan 24 j 17:21	8° $\overline{3}$ 57'18		conjunction	-1901 Jan 23 j 07:13	17° $\overline{3}$ 53'39	-13°03'08
retrograde	-1908 Apr 26 j 23:51	10° $\overline{3}$ 30'38		minimum elong	-1901 Jan 23 j 07:02	17° $\overline{3}$ 53'38	13°03'11
min. Earth dist.	-1908 Jul 16 j 05:41	9° $\overline{3}$ 26'13	39.41093 AU	max. Earth dist.	-1901 Jan 26 j 11:03	17° $\overline{3}$ 58'48	42.87804 AU
opposition	-1908 Jul 19 j 11:07	9° $\overline{3}$ 22'02	-11°54'03	morning rise	-1901 Jan 30 j 23:48	18° $\overline{3}$ 06'09	
direct	-1908 Oct 08 j 03:29	8° $\overline{3}$ 15'04		retrograde	-1901 May 06 j 21:38	19° $\overline{3}$ 40'23	
evening set	-1907 Jan 05 j 00:10	9° $\overline{3}$ 44'20		min. Earth dist.	-1901 Jul 26 j 12:08	18° $\overline{3}$ 37'15	41.04408 AU
				opposition	-1901 Jul 29 j 14:21	18° $\overline{3}$ 33'21	-13°48'30
conjunction	-1907 Jan 14 j 23:14	10° $\overline{3}$ 01'01	-11°28'23	direct	-1901 Oct 18 j 08:13	17° $\overline{3}$ 27'58	
minimum elong	-1907 Jan 14 j 23:02	10° $\overline{3}$ 01'00	11°28'25	evening set	-1900 Jan 17 j 14:03	18° $\overline{3}$ 58'07	
max. Earth dist.	-1907 Jan 18 j 05:28	10° $\overline{3}$ 06'30	41.49079 AU				
morning rise	-1907 Jan 24 j 23:13	10° $\overline{3}$ 17'46		conjunction	-1900 Jan 24 j 19:38	19° $\overline{3}$ 09'48	-13°17'05
retrograde	-1907 Apr 28 j 14:21	11° $\overline{3}$ 51'12		minimum elong	-1900 Jan 24 j 19:28	19° $\overline{3}$ 09'47	13°17'07
min. Earth dist.	-1907 Jul 17 j 20:13	10° $\overline{3}$ 47'03	39.65392 AU	max. Earth dist.	-1900 Jan 27 j 23:31	19° $\overline{3}$ 14'56	43.09882 AU
opposition	-1907 Jul 21 j 02:12	10° $\overline{3}$ 42'52	-12°12'06	morning rise	-1900 Feb 01 j 01:35	19° $\overline{3}$ 21'32	
direct	-1907 Oct 09 j 18:43	9° $\overline{3}$ 36'10		retrograde	-1900 May 07 j 10:30	20° $\overline{3}$ 55'58	
evening set	-1906 Jan 06 j 22:37	11° $\overline{3}$ 05'30		min. Earth dist.	-1900 Jul 27 j 00:49	19° $\overline{3}$ 53'02	41.26573 AU
				opposition	-1900 Jul 30 j 03:12	19° $\overline{3}$ 49'08	-14°02'38
conjunction	-1906 Jan 16 j 13:14	11° $\overline{3}$ 21'31	-11°45'30	direct	-1900 Oct 18 j 20:39	18° $\overline{3}$ 43'56	
minimum elong	-1906 Jan 16 j 13:01	11° $\overline{3}$ 21'30	11°45'32	evening set	-1899 Jan 18 j 13:00	20° $\overline{3}$ 14'20	
max. Earth dist.	-1906 Jan 19 j 19:05	11° $\overline{3}$ 26'57	41.73032 AU				
morning rise	-1906 Jan 26 j 04:51	11° $\overline{3}$ 37'36		conjunction	-1899 Jan 25 j 07:36	20° $\overline{3}$ 25'13	-13°30'32

Attention, astronomical year style is used: The year -1899 in astronomical counting style is the year 1900 BCE in historical counting style.

minimum elong	-1899 Jan 25 j 07:25	20°325'13	13°30'35
max. Earth dist.	-1899 Jan 28 j 10:36	20°330'15	43.31763 AU
morning rise	-1899 Feb 01 j 02:37	20°336'09	
retrograde	-1899 May 09 j 00:22	22°310'52	
min. Earth dist.	-1899 Jul 28 j 13:38	21°308'05	41.48564 AU
opposition	-1899 Jul 31 j 15:53	21°304'12	-14°16'13
direct	-1899 Oct 20 j 07:34	19°359'13	