Attention, astronomical year style is used: The year -400 in astronomical counting style is the year 401 BCE in historical counting style.

retrograde	-400 Apr 09 j 14:56	17°♐24'24		
opposition	-400 Jun 09 j 12:42	12°♐30'08	0°07'01	
min. Earth dist.	-400 Jun 10 j 09:52	12°♐23'19	4.14950 AU	
desc. node	-400 Jul 23 j 20:14	8°♐00'27		
direct	-400 Aug 09 j 05:29	7°♐34'45		
evening set	-400 Dec 12 j 05:16	26°♐23'27		
conjunction	-400 Dec 24 j 23:47	29°♐24'20	-0°16'30	
minimum elong	-400 Dec 24 j 23:45	29°♐24'20	0°16'30	
max. Earth dist.	-400 Dec 24 j 06:02	29°♐13'51	6.08870 AU	
	-400 Dec 27 j 12:00	0°♑		
morning rise	-399 Jan 06 j 19:42	2°♑26'14		
retrograde	-399 May 16 j 10:20	22°♑05'21		
opposition	-399 Jul 15 j 23:50	17°♑07'39	-0°55'22	
min. Earth dist.	-399 Jul 16 j 02:36	17°♑06'45	4.03615 AU	
direct	-399 Sep 13 j 07:40	12°♑14'07		
	-398 Jan 09 j 15:42	0°♒		
evening set	-398 Jan 16 j 02:29	1°♒32'02		
conjunction	-398 Jan 29 j 02:45	4°♒39'23	-0°53'51	
minimum elong	-398 Jan 29 j 02:42	4°♒39'21	0°53'51	
max. Earth dist.	-398 Jan 29 j 14:16	4°♒46'18	5.99837 AU	
morning rise	-398 Feb 11 j 05:50	7°♒48'20		
	-398 Mar 14 j 09:45	15°♒		
retrograde	-398 Jun 23 j 05:23	28°♒12'28		
opposition	-398 Aug 22 j 09:01	23°♒10'49	-1°39'20	
min. Earth dist.	-398 Aug 21 j 14:32	23°♒17'00	3.97956 AU	
direct	-398 Oct 19 j 14:13	18°♒17'13		
	-397 Jan 18 j 16:39	0°♓		
evening set	-397 Feb 21 j 16:56	7°♓49'25		
conjunction	-397 Mar 07 j 00:43	11°♓00'57	-1°11'30	
minimum elong	-397 Mar 07 j 00:42	11°♓00'57	1°11'29	
max. Earth dist.	-397 Mar 08 j 15:10	11°♓24'01	5.97973 AU	
morning rise	-397 Mar 20 j 11:49	14°♓14'10		
	-397 Jun 04 j 15:16	0°♈		
retrograde	-397 Jul 30 j 14:02	4°♈41'32		
	-397 Sep 25 j 12:30	30°℞♓		
min. Earth dist.	-397 Sep 27 j 01:27	29°♓47'27	4.00225 AU	
opposition	-397 Sep 28 j 08:29	29°♓36'54	-1°44'42	
direct	-397 Nov 25 j 07:03	24°♓41'07		
	-396 Jan 22 j 17:52	0°♈		
evening set	-396 Mar 30 j 00:12	14°♈04'49		
conjunction	-396 Apr 12 j 15:24	17°♈16'53	-1°01'32	
minimum elong	-396 Apr 12 j 15:27	17°♈16'55	1°01'31	
max. Earth dist.	-396 Apr 14 j 20:01	17°♈47'49	6.04086 AU	
morning rise	-396 Apr 26 j 08:48	20°♈29'56		
	-396 Jun 08 j 09:50	0°♉		
retrograde	-396 Sep 03 j 05:57	10°♉15'55		
min. Earth dist.	-396 Oct 31 j 11:18	5°♉21'46	4.09490 AU	
opposition	-396 Nov 01 j 19:01	5°♉10'57	-1°10'19	
direct	-396 Dec 30 j 07:14	0°♉12'08		
	-395 Apr 17 j 04:22	15°♉		
evening set	-395 May 05 j 17:23	19°♉08'52		
conjunction	-395 May 19 j 11:52	22°♉17'15	-0°29'18	
minimum elong	-395 May 19 j 11:54	22°♉17'16	0°29'17	
max. Earth dist.	-395 May 21 j 08:00	22°♉42'26	6.15688 AU	
morning rise	-395 Jun 02 j 07:01	25°♉25'39		
	-395 Jun 22 j 21:21	0°♊		
retrograde	-395 Oct 06 j 16:05	14°♊07'54		
min. Earth dist.	-395 Dec 04 j 08:04	9°♊12'45	4.22165 AU	
opposition	-395 Dec 05 j 06:24	9°♊05'12	-0°13'21	
direct	-394 Feb 02 j 22:56	4°♊03'39		
asc. node	-394 Mar 02 j 15:47	5°♊16'09		
evening set	-394 Jun 09 j 22:36	22°♊27'58		
conjunction	-394 Jun 23 j 14:42	25°♊29'48	0°11'36	
minimum elong	-394 Jun 23 j 14:41	25°♊29'48	0°11'36	
behind sun begin	-394 Jun 23 j 08:53	25°♊26'35		
behind sun end	-394 Jun 23 j 20:29	25°♊33'00		
max. Earth dist.	-394 Jun 24 j 13:21	25°♊42'23	6.28483 AU	
morning rise	-394 Jul 07 j 05:11	28°♊30'39		
	-394 Jul 14 j 00:15	0°♋		
retrograde	-394 Nov 07 j 07:53	16°♋13'27		
opposition	-393 Jan 06 j 02:19	11°♋14'32	0°44'38	
min. Earth dist.	-393 Jan 05 j 20:16	11°♋16'33	4.33970 AU	
direct	-393 Mar 08 j 02:59	6°♋11'31		
evening set	-393 Jul 13 j 08:58	24°♋09'04		
conjunction	-393 Jul 26 j 17:52	27°♋03'49	0°47'24	
minimum elong	-393 Jul 26 j 17:50	27°♋03'47	0°47'25	
max. Earth dist.	-393 Jul 26 j 12:27	27°♋00'51	6.38391 AU	
morning rise	-393 Aug 09 j 00:09	29°♋57'08		
	-393 Aug 09 j 05:26	0°♌		
	-393 Nov 01 j 16:23	15°♌		
retrograde	-393 Dec 07 j 21:34	17°♌01'05		
	-392 Jan 13 j 03:17	15°℞♌		
opposition	-392 Feb 06 j 00:12	12°♌05'49	1°27'22	
min. Earth dist.	-392 Feb 06 j 11:35	12°♌02'05	4.41409 AU	
direct	-392 Apr 08 j 02:37	7°♌02'34		
	-392 Jun 25 j 17:13	15°♌		
evening set	-392 Aug 13 j 06:26	24°♌45'13		
max. Earth dist.	-392 Aug 25 j 03:24	27°♌19'43	6.42733 AU	
conjunction	-392 Aug 26 j 07:11	27°♌34'50	1°08'57	
minimum elong	-392 Aug 26 j 07:09	27°♌34'49	1°08'57	
	-392 Sep 06 j 10:19	0°♍		
morning rise	-392 Sep 08 j 04:41	0°♍22'55		
retrograde	-391 Jan 06 j 08:17	17°♍14'22		
opposition	-391 Mar 07 j 20:22	12°♍21'41	1°45'31	
min. Earth dist.	-391 Mar 08 j 21:54	12°♍13'29	4.42524 AU	
direct	-391 May 09 j 12:10	7°♍19'28		
evening set	-391 Sep 13 j 06:12	25°♍01'22		
max. Earth dist.	-391 Sep 24 j 04:01	27°♍24'50	6.40428 AU	
conjunction	-391 Sep 26 j 00:14	27°♍49'09	1°11'25	
minimum elong	-391 Sep 26 j 00:15	27°♍49'09	1°11'25	
	-391 Oct 05 j 22:24	0°♎		
morning rise	-391 Oct 08 j 15:53	0°♎35'50		
retrograde	-390 Feb 06 j 16:23	17°♎41'54		
opposition	-390 Apr 08 j 11:12	12°♎50'12	1°35'02	
min. Earth dist.	-390 Apr 09 j 21:26	12°♎39'18	4.36987 AU	
direct	-390 Jun 10 j 01:38	7°♎49'54		
evening set	-390 Oct 14 j 02:59	25°♎45'10		
max. Earth dist.	-390 Oct 24 j 19:05	28°♎08'36	6.32051 AU	
conjunction	-390 Oct 26 j 18:03	28°♎34'59	0°53'54	
minimum elong	-390 Oct 26 j 18:05	28°♎35'01	0°53'53	
	-390 Nov 02 j 01:14	0°♏		
morning rise	-390 Nov 08 j 07:34	1°♏24'17		
	-389 Jan 17 j 00:40	15°♏		
retrograde	-389 Mar 11 j 13:51	19°♏10'11		
	-389 May 06 j 00:25	15°℞♏		
opposition	-389 May 11 j 13:23	14°♏17'47	0°56'41	
min. Earth dist.	-389 May 12 j 20:51	14°♏07'45	4.26228 AU	
direct	-389 Jul 12 j 08:08	9°♏20'06		
	-389 Sep 13 j 18:14	15°♏		
evening set	-389 Nov 14 j 18:13	27°♏40'47		

Attention, astronomical year style is used: The year -389 in astronomical counting style is the year 390 BCE in historical counting style.

	-389 Nov 24 j 19:53	0°♐	
max. Earth dist.	-389 Nov 25 j 20:38	0°♐14'19	6.19817 AU
conjunction	-389 Nov 27 j 09:43	0°♐35'46	0°19'43
minimum elong	-389 Nov 27 j 09:44	0°♐35'47	0°19'42
morning rise	-389 Dec 10 j 01:21	3°♐31'05	
retrograde	-388 Apr 14 j 16:15	22°♐15'39	
desc. node	-388 Jun 02 j 19:07	18°♐50'00	
opposition	-388 Jun 14 j 12:26	17°♐20'57	-0°01'52
min. Earth dist.	-388 Jun 15 j 08:26	17°♐14'30	4.13282 AU
direct	-388 Aug 14 j 01:37	12°♐25'51	
	-388 Dec 11 j 08:45	0°♑	
evening set	-388 Dec 16 j 22:52	1°♑18'40	
conjunction	-388 Dec 29 j 18:02	4°♑20'29	-0°22'20
minimum elong	-388 Dec 29 j 18:01	4°♑20'28	0°22'20
max. Earth dist.	-388 Dec 29 j 03:15	4°♑11'43	6.07342 AU
morning rise	-387 Jan 11 j 14:52	7°♑23'25	
retrograde	-387 May 21 j 14:33	27°♑10'18	
opposition	-387 Jul 21 j 03:48	22°♑12'04	-1°03'10
min. Earth dist.	-387 Jul 21 j 03:05	22°♑12'18	4.02393 AU
direct	-387 Sep 18 j 06:34	17°♑18'37	
	-387 Dec 23 j 09:27	0°♒	
evening set	-386 Jan 21 j 02:45	6°♒39'52	
conjunction	-386 Feb 03 j 03:55	9°♒47'59	-0°57'47
minimum elong	-386 Feb 03 j 03:53	9°♒47'58	0°57'47
max. Earth dist.	-386 Feb 03 j 18:50	9°♒56'57	5.99016 AU
morning rise	-386 Feb 16 j 08:06	12°♒57'46	
	-386 Feb 24 j 22:04	15°♒	
	-386 May 12 j 00:13	0°♓	
retrograde	-386 Jun 28 j 11:56	3°♓25'40	
	-386 Aug 15 j 08:44	30°℞♒	
opposition	-386 Aug 27 j 14:00	28°♒23'26	-1°42'39
min. Earth dist.	-386 Aug 26 j 17:37	28°♒30'16	3.97632 AU
direct	-386 Oct 24 j 17:35	23°♒29'33	
	-386 Dec 28 j 18:52	0°♓	
evening set	-385 Feb 26 j 21:37	13°♓02'39	
conjunction	-385 Mar 12 j 06:42	16°♓14'38	-1°11'45
minimum elong	-385 Mar 12 j 06:42	16°♓14'38	1°11'46
max. Earth dist.	-385 Mar 14 j 01:16	16°♓40'08	5.98173 AU
morning rise	-385 Mar 25 j 18:48	19°♓28'12	
	-385 May 11 j 22:35	0°♈	
retrograde	-385 Aug 04 j 18:04	9°♈53'02	
min. Earth dist.	-385 Oct 02 j 03:03	4°♈58'54	4.00935 AU
opposition	-385 Oct 03 j 10:34	4°♈48'11	-1°42'00
	-385 Nov 21 j 15:23	30°℞♓	
direct	-385 Nov 30 j 09:29	29°♓52'02	
	-385 Dec 09 j 04:18	0°♈	
evening set	-384 Apr 04 j 05:41	19°♈13'41	
conjunction	-384 Apr 17 j 21:33	22°♈25'34	-0°58'03
minimum elong	-384 Apr 17 j 21:36	22°♈25'35	0°58'03
max. Earth dist.	-384 Apr 20 j 01:18	22°♈55'53	6.05226 AU
morning rise	-384 May 01 j 15:46	25°♈38'23	
	-384 May 20 j 18:08	0°♉	
	-384 Aug 25 j 24:00	15°♉	
retrograde	-384 Sep 08 j 01:55	15°♉17'04	
	-384 Sep 21 j 03:04	15°℞♉	
min. Earth dist.	-384 Nov 05 j 07:47	10°♉23'02	4.10943 AU
opposition	-384 Nov 06 j 15:26	10°♉12'15	-1°03'06
direct	-383 Jan 04 j 06:33	5°♉13'01	
	-383 Mar 29 j 12:52	15°♉	
evening set	-383 May 10 j 19:42	24°♉05'59	
conjunction	-383 May 24 j 14:19	27°♉13'40	-0°23'40
minimum elong	-383 May 24 j 14:21	27°♉13'41	0°23'39
max. Earth dist.	-383 May 26 j 09:03	27°♉37'58	6.17376 AU
	-383 Jun 05 j 19:31	0°♊	
morning rise	-383 Jun 07 j 09:04	0°♊21'10	
retrograde	-383 Oct 11 j 07:40	18°♊54'41	
opposition	-383 Dec 09 j 21:08	13°♊52'29	-0°04'43
min. Earth dist.	-383 Dec 09 j 00:56	13°♊59'18	4.23939 AU
asc. node	-382 Jan 09 j 19:40	10°♊11'06	
direct	-382 Feb 07 j 18:34	8°♊50'43	
evening set	-382 Jun 14 j 19:15	27°♊10'38	
	-382 Jun 27 j 13:54	0°♋	
conjunction	-382 Jun 28 j 10:29	0°♋11'23	0°17'14
minimum elong	-382 Jun 28 j 10:28	0°♋11'22	0°17'14
max. Earth dist.	-382 Jun 29 j 05:59	0°♋22'10	6.30231 AU
morning rise	-382 Jul 12 j 00:02	3°♋11'05	
retrograde	-382 Nov 11 j 16:05	20°♋46'22	
opposition	-381 Jan 10 j 12:29	15°♋47'56	0°51'50
min. Earth dist.	-381 Jan 10 j 07:59	15°♋49'25	4.35593 AU
direct	-381 Mar 12 j 16:48	10°♋44'48	
evening set	-381 Jul 17 j 22:57	28°♋38'18	
	-381 Jul 24 j 05:42	0°♌	
conjunction	-381 Jul 31 j 06:40	1°♌32'00	0°51'25
minimum elong	-381 Jul 31 j 06:38	1°♌31'58	0°51'25
max. Earth dist.	-381 Jul 30 j 23:16	1°♌27'58	6.39781 AU
morning rise	-381 Aug 13 j 11:29	4°♌24'11	
	-381 Oct 05 j 19:09	15°♌	
retrograde	-381 Dec 12 j 03:27	21°♌23'13	
opposition	-380 Feb 10 j 07:40	16°♌28'24	1°31'24
min. Earth dist.	-380 Feb 10 j 20:59	16°♌24'04	4.42482 AU
	-380 Feb 21 j 19:31	15°℞♌	
direct	-380 Apr 12 j 13:32	11°♌25'16	
	-380 Jun 02 j 06:38	15°♌	
evening set	-380 Aug 17 j 14:57	29°♌05'02	
	-380 Aug 21 j 20:40	0°♍	
max. Earth dist.	-380 Aug 29 j 06:47	1°♍36'42	6.43386 AU
conjunction	-380 Aug 30 j 14:24	1°♍53'53	1°10'26
minimum elong	-380 Aug 30 j 14:23	1°♍53'52	1°10'26
morning rise	-380 Sep 12 j 10:56	4°♍41'19	
retrograde	-379 Jan 10 j 14:14	21°♍31'15	
opposition	-379 Mar 12 j 03:25	16°♍38'46	1°45'40
min. Earth dist.	-379 Mar 13 j 07:02	16°♍29'54	4.42722 AU
direct	-379 May 13 j 20:56	11°♍36'41	
evening set	-379 Sep 17 j 11:13	29°♍17'43	
	-379 Sep 20 j 16:35	0°♎	
max. Earth dist.	-379 Sep 28 j 08:03	1°♎40'45	6.40145 AU
conjunction	-379 Sep 30 j 04:42	2°♎05'20	1°10'06
minimum elong	-379 Sep 30 j 04:43	2°♎05'21	1°10'06
morning rise	-379 Oct 12 j 19:34	4°♎51'53	
retrograde	-378 Feb 10 j 23:24	22°♎00'16	
opposition	-378 Apr 12 j 20:22	17°♎08'35	1°31'15
min. Earth dist.	-378 Apr 14 j 06:43	16°♎57'40	4.36221 AU
direct	-378 Jun 14 j 08:42	12°♎08'37	
	-378 Oct 17 j 22:16	0°♏	
evening set	-378 Oct 18 j 07:55	0°♏05'23	
max. Earth dist.	-378 Oct 28 j 22:46	2°♏28'35	6.30850 AU
conjunction	-378 Oct 30 j 22:39	2°♏55'35	0°50'04
minimum elong	-378 Oct 30 j 22:41	2°♏55'36	0°50'04
morning rise	-378 Nov 12 j 12:18	5°♏45'24	
	-378 Dec 26 j 07:01	15°♏	
retrograde	-377 Mar 16 j 05:03	23°♏37'37	
opposition	-377 May 16 j 03:28	18°♏45'00	0°49'39
min. Earth dist.	-377 May 17 j 11:27	18°♏34'47	4.24626 AU

Attention, astronomical year style is used: The year -377 in astronomical counting style is the year 378 BCE in historical counting style.

	-377 Jun 18 j 13:47	15°℞♏		
direct	-377 Jul 16 j 19:50	13°♏47'37		
	-377 Aug 13 j 22:23	15°♏		
	-377 Nov 09 j 10:49	0°♐		
evening set	-377 Nov 19 j 02:43	2°♐12'24		
max. Earth dist.	-377 Nov 30 j 06:49	4°♐47'30	6.17961 AU	
conjunction	-377 Dec 01 j 18:39	5°♐08'19	0°14'15	
minimum elong	-377 Dec 01 j 18:41	5°♐08'19	0°14'14	
behind sun begin	-377 Dec 01 j 14:40	5°♐06'00		
behind sun end	-377 Dec 01 j 22:41	5°♐10'38		
morning rise	-377 Dec 14 j 10:49	8°♐04'39		
desc. node	-376 Apr 14 j 16:55	26°♐56'17		
retrograde	-376 Apr 19 j 12:37	26°♐58'29		
opposition	-376 Jun 19 j 08:32	22°♐03'26	-0°10'27	
min. Earth dist.	-376 Jun 20 j 02:16	21°♐57'42	4.11308 AU	
direct	-376 Aug 18 j 15:49	17°♐08'38		
	-376 Nov 24 j 22:51	0°♑		
evening set	-376 Dec 21 j 14:28	6°♑07'20		
conjunction	-375 Jan 03 j 10:20	9°♑10'19	-0°27'51	
minimum elong	-375 Jan 03 j 10:18	9°♑10'17	0°27'51	
max. Earth dist.	-375 Jan 02 j 22:01	9°♑02'59	6.05426 AU	
morning rise	-375 Jan 16 j 08:11	12°♑14'31		
	-375 Apr 19 j 02:28	0°♒		
retrograde	-375 May 26 j 19:24	2°♒11'03		
	-375 Jul 03 j 15:18	30°℞♑		
opposition	-375 Jul 26 j 05:57	27°♑12'18	-1°10'21	
min. Earth dist.	-375 Jul 26 j 03:02	27°♑13'16	4.00714 AU	
direct	-375 Sep 23 j 04:46	22°♑18'54		
	-375 Dec 03 j 23:32	0°♒		
evening set	-374 Jan 26 j 02:23	11°♒45'38		
conjunction	-374 Feb 08 j 04:50	14°♒54'53	-1°01'11	
minimum elong	-374 Feb 08 j 04:48	14°♒54'51	1°01'10	
	-374 Feb 08 j 13:20	15°♒		
max. Earth dist.	-374 Feb 09 j 00:44	15°♒06'52	5.97743 AU	
morning rise	-374 Feb 21 j 10:10	18°♒05'48		
	-374 Apr 16 j 02:45	0°♓		
retrograde	-374 Jul 03 j 20:00	8°♓39'06		
opposition	-374 Sep 01 j 18:53	3°♓36'28	-1°45'05	
min. Earth dist.	-374 Aug 31 j 20:32	3°♓43'59	3.96934 AU	
	-374 Oct 02 j 02:13	30°℞♒		
direct	-374 Oct 29 j 19:09	28°♒42'27		
	-374 Nov 26 j 10:44	0°♓		
evening set	-373 Mar 04 j 03:39	18°♓18'02		
conjunction	-373 Mar 17 j 13:47	21°♓30'35	-1°11'23	
minimum elong	-373 Mar 17 j 13:48	21°♓30'36	1°11'22	
max. Earth dist.	-373 Mar 19 j 10:08	21°♓57'08	5.98095 AU	
morning rise	-373 Mar 31 j 03:14	24°♓44'44		
	-373 Apr 22 j 18:01	0°♈		
retrograde	-373 Aug 09 j 21:09	15°♈07'40		
min. Earth dist.	-373 Oct 07 j 03:47	10°♈14'00	4.01491 AU	
opposition	-373 Oct 08 j 13:11	10°♈02'37	-1°38'24	
direct	-373 Dec 05 j 12:19	5°♈06'02		
evening set	-372 Apr 09 j 12:47	24°♈26'11		
conjunction	-372 Apr 23 j 05:34	27°♈37'55	-0°54'02	
minimum elong	-372 Apr 23 j 05:37	27°♈37'57	0°54'02	
max. Earth dist.	-372 Apr 25 j 10:30	28°♈08'51	6.06375 AU	
	-372 May 03 j 09:13	0°♉		
morning rise	-372 May 07 j 00:11	0°♉50'24		
	-372 Jul 14 j 21:26	15°♉		
retrograde	-372 Sep 13 j 00:54	20°♉21'20		
min. Earth dist.	-372 Nov 10 j 06:22	15°♉27'01	4.12510 AU	
opposition	-372 Nov 11 j 12:45	15°♉16'40	-0°55'19	
	-372 Nov 13 j 13:38	15°℞♉		
direct	-371 Jan 09 j 08:10	10°♉16'58		
	-371 Mar 06 j 07:07	15°♉		
evening set	-371 May 15 j 22:46	29°♉05'29		
	-371 May 19 j 23:25	0°♊		
conjunction	-371 May 29 j 17:17	2°♊12'19	-0°17'49	
minimum elong	-371 May 29 j 17:18	2°♊12'20	0°17'48	
max. Earth dist.	-371 May 31 j 10:35	2°♊35'42	6.19210 AU	
morning rise	-371 Jun 12 j 11:40	5°♊18'50		
retrograde	-371 Oct 15 j 20:34	23°♊42'56		
asc. node	-371 Nov 18 j 03:52	21°♊56'15		
opposition	-371 Dec 14 j 12:04	18°♊41'07	0°04'00	
min. Earth dist.	-371 Dec 13 j 16:43	18°♊47'38	4.25832 AU	
direct	-370 Feb 12 j 13:03	13°♊39'01		
	-370 Jun 10 j 22:11	0°♋		
evening set	-370 Jun 19 j 15:45	1°♋54'03		
conjunction	-370 Jul 03 j 06:01	4°♋53'39	0°22'48	
minimum elong	-370 Jul 03 j 05:59	4°♋53'38	0°22'49	
max. Earth dist.	-370 Jul 03 j 21:33	5°♋02'13	6.32009 AU	
morning rise	-370 Jul 16 j 18:24	7°♋52'06		
retrograde	-370 Nov 16 j 02:05	25°♋20'02		
opposition	-369 Jan 14 j 22:50	20°♋22'08	0°58'47	
min. Earth dist.	-369 Jan 14 j 21:32	20°♋22'34	4.37096 AU	
direct	-369 Mar 17 j 08:29	15°♋18'53		
	-369 Jul 07 j 18:29	0°♌		
evening set	-369 Jul 22 j 13:04	3°♌08'52		
conjunction	-369 Aug 04 j 19:35	6°♌01'37	0°55'12	
minimum elong	-369 Aug 04 j 19:32	6°♌01'36	0°55'11	
max. Earth dist.	-369 Aug 04 j 08:11	5°♌55'25	6.40863 AU	
morning rise	-369 Aug 17 j 23:08	8°♌52'51		
	-369 Sep 16 j 05:35	15°♌		
retrograde	-369 Dec 16 j 09:52	25°♌48'18		
opposition	-368 Feb 14 j 16:08	20°♌53'49	1°35'05	
min. Earth dist.	-368 Feb 15 j 07:27	20°♌48'51	4.43096 AU	
direct	-368 Apr 17 j 00:08	15°♌50'42		
	-368 Aug 05 j 14:37	0°♍		
evening set	-368 Aug 22 j 00:35	3°♍29'13		
conjunction	-368 Sep 03 j 23:04	6°♍17'37	1°11'35	
minimum elong	-368 Sep 03 j 23:03	6°♍17'36	1°11'36	
max. Earth dist.	-368 Sep 02 j 13:40	5°♍59'26	6.43472 AU	
morning rise	-368 Sep 16 j 18:29	9°♍04'35		
retrograde	-367 Jan 14 j 22:45	25°♍55'06		
opposition	-367 Mar 16 j 13:22	21°♍02'50	1°45'21	
min. Earth dist.	-367 Mar 17 j 18:40	20°♍53'27	4.42279 AU	
direct	-367 May 18 j 07:22	16°♍01'00		
	-367 Sep 04 j 12:27	0°♎		
evening set	-367 Sep 21 j 19:28	3°♎43'07		
max. Earth dist.	-367 Oct 02 j 12:42	6°♎04'37	6.39187 AU	
conjunction	-367 Oct 04 j 12:12	6°♎30'50	1°08'24	
minimum elong	-367 Oct 04 j 12:13	6°♎30'51	1°08'24	
morning rise	-367 Oct 17 j 02:48	9°♎17'37		
retrograde	-366 Feb 15 j 14:01	26°♎30'42		
opposition	-366 Apr 17 j 10:42	21°♎38'57	1°26'52	
min. Earth dist.	-366 Apr 18 j 21:52	21°♎27'45	4.34800 AU	
direct	-366 Jun 18 j 21:34	16°♎39'13		
	-366 Oct 01 j 12:22	0°♏		
evening set	-366 Oct 22 j 18:00	4°♏39'30		
max. Earth dist.	-366 Nov 02 j 10:30	7°♏04'09	6.29090 AU	
conjunction	-366 Nov 04 j 08:53	7°♏30'24	0°45'46	
minimum elong	-366 Nov 04 j 08:55	7°♏30'26	0°45'46	
morning rise	-366 Nov 16 j 22:32	10°♏21'00		

Attention, astronomical year style is used: The year -366 in astronomical counting style is the year 367 BCE in historical counting style.

	-366 Dec 08 j 00:04	15°♏	
retrograde	-365 Mar 21 j 01:05	28°♏21'19	
opposition	-365 May 21 j 00:08	23°♏28'28	0°41'54
min. Earth dist.	-365 May 22 j 06:37	23°♏18'44	4.22641 AU
direct	-365 Jul 21 j 11:40	18°♏31'29	
	-365 Oct 23 j 04:17	0°♐	
evening set	-365 Nov 23 j 18:05	7°♐01'24	
max. Earth dist.	-365 Dec 05 j 00:20	9°♐38'31	6.15920 AU
conjunction	-365 Dec 06 j 10:19	9°♐58'20	0°08'21
minimum elong	-365 Dec 06 j 10:19	9°♐58'21	0°08'21
behind sun begin	-365 Dec 06 j 03:15	9°♐54'14	
behind sun end	-365 Dec 06 j 17:23	10°♐02'27	
morning rise	-365 Dec 19 j 03:14	12°♐55'51	
desc. node	-364 Feb 22 j 15:36	26°♐27'38	
	-364 Mar 19 j 13:42	0°♑	
retrograde	-364 Apr 24 j 17:58	1°♑59'38	
	-364 May 31 j 03:56	30°℞♐	
opposition	-364 Jun 24 j 12:27	27°♐04'07	-0°19'34
min. Earth dist.	-364 Jun 25 j 03:42	26°♐59'10	4.09376 AU
direct	-364 Aug 23 j 15:29	22°♐09'35	
	-364 Nov 05 j 08:12	0°♑	
evening set	-364 Dec 26 j 12:56	11°♑13'33	
conjunction	-363 Jan 08 j 09:45	14°♑17'37	-0°33'31
minimum elong	-363 Jan 08 j 09:43	14°♑17'36	0°33'32
max. Earth dist.	-363 Jan 08 j 02:55	14°♑13'33	6.03805 AU
morning rise	-363 Jan 21 j 08:29	17°♑22'58	
	-363 Mar 20 j 11:56	0°♒	
retrograde	-363 Jun 01 j 06:18	7°♒27'26	
opposition	-363 Jul 31 j 14:29	2°♒28'10	-1°17'25
min. Earth dist.	-363 Jul 31 j 08:30	2°♒30'09	3.99619 AU
	-363 Aug 20 j 05:22	30°℞♑	
direct	-363 Sep 28 j 08:43	27°♑34'53	
	-363 Nov 05 j 21:00	0°♒	
	-362 Jan 22 j 14:55	15°♒	
evening set	-362 Jan 31 j 07:58	17°♒04'31	
conjunction	-362 Feb 13 j 11:18	20°♒14'24	-1°04'18
minimum elong	-362 Feb 13 j 11:15	20°♒14'23	1°04'18
max. Earth dist.	-362 Feb 14 j 10:33	20°♒28'26	5.97269 AU
morning rise	-362 Feb 26 j 17:56	23°♒26'03	
	-362 Mar 26 j 23:28	0°♓	
retrograde	-362 Jul 09 j 03:38	14°♓00'45	
min. Earth dist.	-362 Sep 06 j 01:01	9°♓06'17	3.97180 AU
opposition	-362 Sep 07 j 02:45	8°♓57'36	-1°46'46
direct	-362 Nov 04 j 01:15	4°♓03'19	
evening set	-361 Mar 09 j 11:52	23°♓37'33	
conjunction	-361 Mar 22 j 23:10	26°♓50'10	-1°10'29
minimum elong	-361 Mar 22 j 23:11	26°♓50'11	1°10'29
max. Earth dist.	-361 Mar 24 j 23:08	27°♓18'47	5.99033 AU
morning rise	-361 Apr 05 j 13:24	0°♈04'14	
	-361 Apr 05 j 06:14	0°♈	
retrograde	-361 Aug 15 j 01:05	20°♈20'54	
min. Earth dist.	-361 Oct 12 j 06:31	15°♈27'00	4.03000 AU
opposition	-361 Oct 13 j 15:37	15°♈15'42	-1°34'04
direct	-361 Dec 10 j 17:54	10°♈18'41	
evening set	-360 Apr 14 j 18:21	29°♈33'46	
	-360 Apr 16 j 15:41	0°♉	
conjunction	-360 Apr 28 j 11:38	2°♉44'53	-0°49'43
minimum elong	-360 Apr 28 j 11:41	2°♉44'54	0°49'42
max. Earth dist.	-360 Apr 30 j 16:47	3°♉15'46	6.08304 AU
morning rise	-360 May 12 j 06:33	5°♉56'35	
	-360 Jun 22 j 16:03	15°♉	
retrograde	-360 Sep 17 j 17:44	25°♉17'07	
min. Earth dist.	-360 Nov 15 j 00:57	20°♉22'57	4.14648 AU
opposition	-360 Nov 16 j 07:01	20°♉12'43	-0°47'23
direct	-359 Jan 14 j 05:29	15°♉12'39	
	-359 May 03 j 04:27	0°♊	
evening set	-359 May 20 j 22:16	3°♊55'10	
conjunction	-359 Jun 03 j 16:20	7°♊00'54	-0°12'03
minimum elong	-359 Jun 03 j 16:21	7°♊00'54	0°12'03
behind sun begin	-359 Jun 03 j 10:48	6°♊57'47	
behind sun end	-359 Jun 03 j 21:54	7°♊04'01	
max. Earth dist.	-359 Jun 05 j 05:19	7°♊21'44	6.21375 AU
morning rise	-359 Jun 17 j 10:11	10°♊06'12	
asc. node	-359 Sep 27 j 23:05	27°♊32'15	
retrograde	-359 Oct 20 j 07:50	28°♊20'36	
opposition	-359 Dec 18 j 23:25	23°♊19'19	0°12'20
min. Earth dist.	-359 Dec 18 j 07:30	23°♊24'40	4.27819 AU
direct	-358 Feb 17 j 06:11	18°♊16'58	
	-358 May 24 j 19:45	0°♋	
evening set	-358 Jun 24 j 08:04	6°♋27'15	
conjunction	-358 Jul 07 j 21:30	9°♋25'48	0°28'02
minimum elong	-358 Jul 07 j 21:28	9°♋25'47	0°28'03
max. Earth dist.	-358 Jul 08 j 09:47	9°♋32'32	6.33661 AU
morning rise	-358 Jul 21 j 08:40	12°♋23'05	
retrograde	-358 Nov 20 j 06:55	29°♋44'48	
opposition	-357 Jan 19 j 06:02	24°♋47'26	1°05'11
min. Earth dist.	-357 Jan 19 j 06:38	24°♋47'14	4.38315 AU
direct	-357 Mar 21 j 18:26	19°♋44'11	
	-357 Jun 20 j 11:29	0°♌	
evening set	-357 Jul 26 j 23:51	7°♌31'50	
conjunction	-357 Aug 09 j 05:07	10°♌23'49	0°58'33
minimum elong	-357 Aug 09 j 05:04	10°♌23'48	0°58'33
max. Earth dist.	-357 Aug 08 j 13:19	10°♌15'14	6.41550 AU
morning rise	-357 Aug 22 j 07:30	13°♌14'18	
	-357 Aug 30 j 12:34	15°♌	
	-357 Dec 11 j 13:20	0°♍	
retrograde	-357 Dec 20 j 16:29	0°♍07'58	
	-357 Dec 29 j 18:34	30°℞♌	
opposition	-356 Feb 18 j 23:01	25°♌13'56	1°38'10
min. Earth dist.	-356 Feb 19 j 17:35	25°♌07'56	4.43227 AU
direct	-356 Apr 21 j 09:53	20°♌11'00	
	-356 Jul 19 j 06:16	0°♍	
evening set	-356 Aug 26 j 08:31	7°♍49'52	
max. Earth dist.	-356 Sep 06 j 17:08	10°♍17'56	6.43019 AU
conjunction	-356 Sep 08 j 06:05	10°♍38'04	1°12'21
minimum elong	-356 Sep 08 j 06:04	10°♍38'04	1°12'20
morning rise	-356 Sep 21 j 00:42	13°♍24'55	
	-355 Jan 05 j 12:34	0°♎	
retrograde	-355 Jan 19 j 07:38	0°♎17'59	
	-355 Feb 02 j 02:36	30°℞♍	
opposition	-355 Mar 20 j 23:03	25°♍25'53	1°44'29
min. Earth dist.	-355 Mar 22 j 05:25	25°♍16'10	4.41296 AU
direct	-355 May 22 j 16:10	20°♍24'19	
	-355 Aug 17 j 22:49	0°♎	
evening set	-355 Sep 26 j 03:37	8°♎09'22	
max. Earth dist.	-355 Oct 06 j 21:02	10°♎31'27	6.37757 AU
conjunction	-355 Oct 08 j 20:02	10°♎57'29	1°06'18
minimum elong	-355 Oct 08 j 20:04	10°♎57'30	1°06'18
morning rise	-355 Oct 21 j 10:12	13°♎44'42	
	-354 Jan 24 j 19:36	0°♏	
retrograde	-354 Feb 20 j 05:08	1°♏04'11	
	-354 Mar 18 j 16:27	30°℞♎	
opposition	-354 Apr 22 j 02:20	26°♎12'27	1°21'57
min. Earth dist.	-354 Apr 23 j 13:35	26°♎01'14	4.33008 AU

Attention, astronomical year style is used: The year -354 in astronomical counting style is the year 355 BCE in historical counting style.

direct	-354 Jun 23 j 10:35	21°♎13'11	
	-354 Sep 13 j 04:23	0°♏	
evening set	-354 Oct 27 j 05:30	9°♏18'05	
max. Earth dist.	-354 Nov 06 j 22:03	11°♏43'31	6.27087 AU
conjunction	-354 Nov 08 j 20:17	12°♏09'49	0°41'09
minimum elong	-354 Nov 08 j 20:19	12°♏09'50	0°41'08
morning rise	-354 Nov 21 j 10:24	15°♏01'24	
	-354 Nov 21 j 07:56	15°♏	
	-353 Feb 07 j 16:24	0°♐	
retrograde	-353 Mar 26 j 00:39	3°♐10'53	
	-353 May 12 j 08:07	30°℞♏	
opposition	-353 May 25 j 23:16	28°♏17'44	0°33'45
min. Earth dist.	-353 May 27 j 03:40	28°♏08'38	4.20558 AU
direct	-353 Jul 26 j 06:42	23°♏21'09	
	-353 Oct 02 j 19:53	0°♐	
evening set	-353 Nov 28 j 11:21	11°♐56'21	
max. Earth dist.	-353 Dec 09 j 23:08	14°♐37'19	6.13968 AU
conjunction	-353 Dec 11 j 04:15	14°♐54'22	0°02'18
minimum elong	-353 Dec 11 j 04:14	14°♐54'22	0°02'18
behind sun begin	-353 Dec 10 j 20:14	14°♐49'42	
behind sun end	-353 Dec 11 j 12:14	14°♐59'02	
morning rise	-353 Dec 23 j 21:42	17°♐52'59	
desc. node	-352 Jan 01 j 05:47	19°♐48'43	
	-352 Feb 18 j 20:31	0°♑	
retrograde	-352 Apr 30 j 01:20	7°♑06'08	
opposition	-352 Jun 29 j 18:04	2°♑10'10	-0°28'41
min. Earth dist.	-352 Jun 30 j 06:28	2°♑06'09	4.07730 AU
	-352 Jul 17 j 01:38	30°℞♐	
direct	-352 Aug 28 j 16:14	27°♐15'58	
	-352 Oct 09 j 09:00	0°♑	
evening set	-352 Dec 31 j 13:14	16°♑23'59	
conjunction	-351 Jan 13 j 10:40	19°♑28'54	-0°38'59
minimum elong	-351 Jan 13 j 10:37	19°♑28'53	0°38'59
max. Earth dist.	-351 Jan 13 j 07:20	19°♑26'54	6.02603 AU
morning rise	-351 Jan 26 j 10:33	22°♑35'14	
	-351 Feb 27 j 17:21	0°♒	
retrograde	-351 Jun 06 j 14:44	12°♒45'35	
opposition	-351 Aug 05 j 22:56	7°♒45'40	-1°23'51
min. Earth dist.	-351 Aug 05 j 12:49	7°♒49'01	3.98998 AU
direct	-351 Oct 03 j 12:53	2°♒52'21	
	-350 Jan 04 j 15:55	15°♒	
evening set	-350 Feb 05 j 13:11	22°♒23'02	
conjunction	-350 Feb 18 j 17:41	25°♒33'24	-1°06'52
minimum elong	-350 Feb 18 j 17:39	25°♒33'23	1°06'53
max. Earth dist.	-350 Feb 19 j 22:24	25°♒50'43	5.97266 AU
morning rise	-350 Mar 04 j 01:14	28°♒45'28	
	-350 Mar 09 j 06:25	0°♓	
retrograde	-350 Jul 14 j 11:54	19°♓19'27	
min. Earth dist.	-350 Sep 11 j 06:19	14°♓24'52	3.97799 AU
opposition	-350 Sep 12 j 09:01	14°♓15'50	-1°47'31
direct	-350 Nov 09 j 08:03	9°♓21'14	
evening set	-349 Mar 14 j 18:29	28°♓52'54	
	-349 Mar 19 j 11:43	0°♈	
conjunction	-349 Mar 28 j 06:43	2°♈05'25	-1°09'03
minimum elong	-349 Mar 28 j 06:44	2°♈05'26	1°09'02
max. Earth dist.	-349 Mar 30 j 08:38	2°♈35'05	6.00192 AU
morning rise	-349 Apr 10 j 21:52	5°♈19'18	
retrograde	-349 Aug 20 j 00:32	25°♈28'47	
min. Earth dist.	-349 Oct 17 j 05:15	20°♈35'07	4.04584 AU
opposition	-349 Oct 18 j 15:13	20°♈23'32	-1°29'06
direct	-349 Dec 15 j 18:31	15°♈26'05	
	-348 Mar 30 j 13:47	0°♉	
evening set	-348 Apr 19 j 22:02	4°♉36'20	
conjunction	-348 May 03 j 15:39	7°♉46'46	-0°45'06
minimum elong	-348 May 03 j 15:41	7°♉46'48	0°45'05
max. Earth dist.	-348 May 05 j 18:03	8°♉15'56	6.10169 AU
morning rise	-348 May 17 j 10:48	10°♉57'41	
	-348 Jun 04 j 08:15	15°♉	
	-348 Sep 13 j 05:06	0°♊	
retrograde	-348 Sep 22 j 09:46	0°♊08'28	
	-348 Oct 01 j 13:35	30°℞♉	
opposition	-348 Nov 20 j 23:18	25°♉04'22	-0°39'16
min. Earth dist.	-348 Nov 19 j 19:35	25°♉13'48	4.16591 AU
direct	-347 Jan 19 j 02:47	20°♉03'52	
	-347 Apr 14 j 23:51	0°♊	
evening set	-347 May 25 j 20:01	8°♊41'19	
conjunction	-347 Jun 08 j 13:55	11°♊46'06	-0°06'17
minimum elong	-347 Jun 08 j 13:55	11°♊46'07	0°06'16
behind sun begin	-347 Jun 08 j 06:03	11°♊41'43	
behind sun end	-347 Jun 08 j 21:47	11°♊50'30	
max. Earth dist.	-347 Jun 10 j 00:48	12°♊05'41	6.23259 AU
morning rise	-347 Jun 22 j 06:58	14°♊50'17	
asc. node	-347 Aug 07 j 20:53	24°♊33'37	
	-347 Sep 10 j 23:09	0°♋	
retrograde	-347 Oct 24 j 16:50	2°♋56'11	
	-347 Dec 07 j 10:26	30°℞♊	
opposition	-347 Dec 23 j 09:54	27°♊55'27	0°20'31
min. Earth dist.	-347 Dec 22 j 19:38	28°♊00'13	4.29490 AU
direct	-346 Feb 21 j 20:28	22°♊52'54	
	-346 May 05 j 07:22	0°♋	
evening set	-346 Jun 28 j 23:59	10°♋59'29	
conjunction	-346 Jul 12 j 12:16	13°♋57'01	0°33'06
minimum elong	-346 Jul 12 j 12:13	13°♋57'00	0°33'06
max. Earth dist.	-346 Jul 12 j 18:53	14°♋00'40	6.34987 AU
morning rise	-346 Jul 25 j 22:25	16°♋53'18	
	-346 Oct 02 j 12:19	0°♌	
retrograde	-346 Nov 24 j 14:27	4°♌09'57	
	-345 Jan 17 j 14:30	30°℞♋	
opposition	-345 Jan 23 j 13:44	29°♋13'06	1°11'13
min. Earth dist.	-345 Jan 23 j 17:54	29°♋11'44	4.39227 AU
direct	-345 Mar 26 j 06:51	24°♋09'45	
	-345 May 31 j 02:18	0°♌	
evening set	-345 Jul 31 j 11:03	11°♌55'54	
conjunction	-345 Aug 13 j 15:20	14°♌47'16	1°01'36
minimum elong	-345 Aug 13 j 15:18	14°♌47'15	1°01'36
max. Earth dist.	-345 Aug 12 j 20:46	14°♌37'11	6.41968 AU
	-345 Aug 14 j 14:46	15°♌	
morning rise	-345 Aug 26 j 16:26	17°♌37'06	
	-345 Oct 30 j 09:03	0°♍	
retrograde	-345 Dec 24 j 22:17	4°♍29'40	
	-344 Feb 20 j 04:31	30°℞♌	
opposition	-344 Feb 23 j 06:52	29°♌35'59	1°40'46
min. Earth dist.	-344 Feb 24 j 02:38	29°♌29'35	4.43162 AU
direct	-344 Apr 25 j 18:26	24°♌33'10	
	-344 Jun 28 j 13:07	0°♍	
evening set	-344 Aug 30 j 17:25	12°♍12'47	
max. Earth dist.	-344 Sep 10 j 23:06	14°♍39'34	6.42468 AU
conjunction	-344 Sep 12 j 14:03	15°♍00'50	1°12'42
minimum elong	-344 Sep 12 j 14:03	15°♍00'50	1°12'41
morning rise	-344 Sep 25 j 07:53	17°♍47'35	
	-344 Nov 27 j 11:52	0°♎	
retrograde	-343 Jan 23 j 18:50	4°♎43'28	
	-343 Mar 24 j 08:07	30°℞♍	
opposition	-343 Mar 25 j 10:31	29°♍51'35	1°43'01

Attention, astronomical year style is used: The year -343 in astronomical counting style is the year 344 BCE in historical counting style.

min. Earth dist.	-343 Mar 26 j 18:43	29°♍41'17	4.40305 AU	
direct	-343 May 27 j 04:07	24°♍50'20		
	-343 Jul 27 j 18:40	0°♎		
evening set	-343 Sep 30 j 12:46	12°♎37'57		
max. Earth dist.	-343 Oct 11 j 04:38	14°♎59'42	6.36405 AU	
conjunction	-343 Oct 13 j 04:45	15°♎26'27	1°03'48	
minimum elong	-343 Oct 13 j 04:47	15°♎26'28	1°03'48	
morning rise	-343 Oct 25 j 18:46	18°♎14'09		
	-343 Dec 23 j 15:54	0°♏		
retrograde	-342 Feb 24 j 21:04	5°♏39'45		
opposition	-342 Apr 26 j 19:16	0°♏47'54	1°16'29	
min. Earth dist.	-342 Apr 28 j 05:17	0°♏37'04	4.31401 AU	
	-342 May 03 j 02:19	30°℞♎		
direct	-342 Jun 28 j 00:16	25°♎49'02		
	-342 Aug 21 j 07:25	0°♏		
evening set	-342 Oct 31 j 17:40	13°♏57'46		
	-342 Nov 05 j 07:22	15°♏		
max. Earth dist.	-342 Nov 11 j 13:49	16°♏25'47	6.25383 AU	
conjunction	-342 Nov 13 j 08:38	16°♏50'14	0°36'15	
minimum elong	-342 Nov 13 j 08:40	16°♏50'15	0°36'14	
morning rise	-342 Nov 25 j 22:52	19°♏42'38		
	-341 Jan 13 j 14:21	0°♐		
retrograde	-341 Mar 31 j 00:30	8°♐00'06		
opposition	-341 May 30 j 22:31	3°♐06'42	0°25'21	
min. Earth dist.	-341 Jun 01 j 01:23	2°♐58'05	4.18881 AU	
	-341 Jun 26 j 06:10	30°℞♏		
direct	-341 Jul 31 j 02:19	28°♏10'33		
	-341 Sep 03 j 12:47	0°♐		
desc. node	-341 Nov 10 j 17:41	11°♐43'06		
evening set	-341 Dec 03 j 04:25	16°♐49'35		
conjunction	-341 Dec 15 j 21:36	19°♐48'24	-0°03'49	
minimum elong	-341 Dec 15 j 21:36	19°♐48'24	0°03'49	
behind sun begin	-341 Dec 15 j 13:40	19°♐43'46		
behind sun end	-341 Dec 16 j 05:33	19°♐53'03		
max. Earth dist.	-341 Dec 14 j 18:51	19°♐32'41	6.12463 AU	
morning rise	-341 Dec 28 j 15:57	22°♐48'01		
	-340 Jan 29 j 14:40	0°♑		
retrograde	-340 May 05 j 05:13	12°♑08'52		
opposition	-340 Jul 04 j 22:11	7°♑12'21	-0°37'25	
min. Earth dist.	-340 Jul 05 j 06:36	7°♑09'36	4.06537 AU	
direct	-340 Sep 02 j 15:11	2°♑18'23		
evening set	-339 Jan 05 j 11:35	21°♑29'00		
conjunction	-339 Jan 18 j 09:54	24°♑34'36	-0°44'01	
minimum elong	-339 Jan 18 j 09:52	24°♑34'35	0°44'01	
max. Earth dist.	-339 Jan 18 j 12:20	24°♑36'04	6.01827 AU	
morning rise	-339 Jan 31 j 10:32	27°♑41'39		
	-339 Feb 10 j 04:44	0°♒		
	-339 Apr 28 j 23:51	15°♒		
retrograde	-339 Jun 11 j 21:58	17°♒56'12		
	-339 Jul 26 j 01:53	15°℞♒		
opposition	-339 Aug 11 j 04:20	12°♒55'44	-1°29'23	
min. Earth dist.	-339 Aug 10 j 16:29	12°♒59'40	3.98734 AU	
direct	-339 Oct 08 j 16:35	8°♒02'23		
	-339 Dec 15 j 08:39	15°♒		
evening set	-338 Feb 10 j 15:42	27°♒33'09		
	-338 Feb 20 j 20:16	0°♓		
conjunction	-338 Feb 23 j 21:07	0°♓43'50	-1°08'50	
minimum elong	-338 Feb 23 j 21:06	0°♓43'49	1°08'50	
max. Earth dist.	-338 Feb 25 j 04:55	1°♓02'58	5.97512 AU	
morning rise	-338 Mar 09 j 05:48	3°♓56'14		
retrograde	-338 Jul 19 j 14:26	24°♓28'19		
min. Earth dist.	-338 Sep 16 j 06:07	19°♓34'09	3.98556 AU	
opposition	-338 Sep 17 j 10:51	19°♓24'25	-1°47'22	
direct	-338 Nov 14 j 08:40	14°♓29'30		
	-337 Mar 02 j 19:23	0°♈		
evening set	-337 Mar 19 j 21:39	3°♈58'39		
conjunction	-337 Apr 02 j 10:44	7°♈11'02	-1°07'07	
minimum elong	-337 Apr 02 j 10:46	7°♈11'03	1°07'08	
max. Earth dist.	-337 Apr 04 j 12:18	7°♈40'24	6.01368 AU	
morning rise	-337 Apr 16 j 02:43	10°♈24'43		
	-337 Aug 08 j 05:33	0°♉		
retrograde	-337 Aug 24 j 20:26	0°♉27'23		
	-337 Sep 10 j 09:07	30°℞♈		
min. Earth dist.	-337 Oct 22 j 02:09	25°♈33'24	4.06034 AU	
opposition	-337 Oct 23 j 11:05	25°♈22'09	-1°23'40	
direct	-337 Dec 20 j 17:21	20°♈24'16		
	-336 Mar 12 j 05:31	0°♉		
evening set	-336 Apr 24 j 22:10	9°♉30'34		
conjunction	-336 May 08 j 16:21	12°♉40'30	-0°40'19	
minimum elong	-336 May 08 j 16:23	12°♉40'31	0°40'19	
max. Earth dist.	-336 May 10 j 18:16	13°♉09'15	6.11791 AU	
	-336 May 18 j 18:52	15°♉		
morning rise	-336 May 22 j 11:29	15°♉50'43		
	-336 Jul 31 j 17:10	0°♊		
retrograde	-336 Sep 26 j 23:38	4°♊53'02		
min. Earth dist.	-336 Nov 24 j 10:38	29°♉58'18	4.18221 AU	
	-336 Nov 24 j 05:39	30°℞♉		
opposition	-336 Nov 25 j 12:54	29°♉49'24	-0°31'10	
direct	-335 Jan 23 j 19:42	24°♉48'38		
	-335 Mar 24 j 09:28	0°♊		
evening set	-335 May 30 j 15:46	13°♊22'23		
conjunction	-335 Jun 13 j 09:04	16°♊26'20	-0°00'35	
minimum elong	-335 Jun 13 j 09:04	16°♊26'20	0°00'34	
behind sun begin	-335 Jun 13 j 00:44	16°♊21'42		
behind sun end	-335 Jun 13 j 17:24	16°♊30'58		
max. Earth dist.	-335 Jun 14 j 14:53	16°♊43'00	6.24774 AU	
asc. node	-335 Jun 18 j 18:07	17°♊38'30		
morning rise	-335 Jun 27 j 01:39	19°♊29'37		
	-335 Aug 17 j 02:17	0°♋		
retrograde	-335 Oct 29 j 01:45	7°♋28'38		
opposition	-335 Dec 27 j 19:03	2°♋28'27	0°28'23	
min. Earth dist.	-335 Dec 27 j 07:40	2°♋32'15	4.30784 AU	
	-334 Jan 16 j 04:42	30°℞♊		
direct	-334 Feb 26 j 10:20	27°♊25'42		
	-334 Apr 09 j 02:25	0°♋		
evening set	-334 Jul 03 j 14:40	15°♋29'55		
conjunction	-334 Jul 17 j 02:09	18°♋26'41	0°37'52	
minimum elong	-334 Jul 17 j 02:07	18°♋26'40	0°37'51	
max. Earth dist.	-334 Jul 17 j 06:29	18°♋29'04	6.35984 AU	
morning rise	-334 Jul 30 j 11:00	21°♋22'04		
	-334 Sep 10 j 10:42	0°♌		
retrograde	-334 Nov 28 j 20:27	8°♌34'48		
opposition	-333 Jan 27 j 21:06	3°♌38'29	1°16'45	
min. Earth dist.	-333 Jan 28 j 02:48	3°♌36'37	4.39883 AU	
	-333 Feb 28 j 01:46	30°℞♋		
direct	-333 Mar 30 j 16:34	28°♋35'12		
	-333 Apr 30 j 16:32	0°♌		
	-333 Jul 29 j 15:56	15°♌		
evening set	-333 Aug 04 j 21:50	16°♌20'24		
max. Earth dist.	-333 Aug 17 j 02:11	18°♌58'52	6.42229 AU	
conjunction	-333 Aug 18 j 00:52	19°♌11'12	1°04'15	
minimum elong	-333 Aug 18 j 00:49	19°♌11'11	1°04'15	
morning rise	-333 Aug 31 j 01:00	22°♌00'30		
	-333 Oct 08 j 23:08	0°♍		

Attention, astronomical year style is used: The year -333 in astronomical counting style is the year 334 BCE in historical counting style.

retrograde	-333 Dec 29 j 06:35	8°♍52'28		
opposition	-332 Feb 27 j 15:18	3°♍59'07	1°42'45	
min. Earth dist.	-332 Feb 28 j 13:41	3°♍51'54	4.43033 AU	
	-332 Apr 03 j 11:48	30°℞♌		
direct	-332 Apr 30 j 05:30	28°♌56'26		
	-332 May 27 j 02:56	0°♍		
evening set	-332 Sep 04 j 01:53	16°♍36'33		
max. Earth dist.	-332 Sep 15 j 05:54	19°♍02'39	6.41946 AU	
conjunction	-332 Sep 16 j 21:49	19°♍24'29	1°12'37	
minimum elong	-332 Sep 16 j 21:49	19°♍24'29	1°12'36	
morning rise	-332 Sep 29 j 14:49	22°♍11'07		
	-332 Nov 06 j 07:37	0°♎		
retrograde	-331 Jan 28 j 03:44	9°♎09'31		
opposition	-331 Mar 29 j 21:44	4°♎17'40	1°40'55	
min. Earth dist.	-331 Mar 31 j 05:39	4°♎07'29	4.39426 AU	
	-331 May 09 j 14:09	30°℞♍		
direct	-331 May 31 j 13:45	29°♍16'40		
	-331 Jun 22 j 16:28	0°♎		
evening set	-331 Oct 04 j 21:19	17°♎06'12		
max. Earth dist.	-331 Oct 15 j 13:23	19°♎28'29	6.35223 AU	
conjunction	-331 Oct 17 j 12:53	19°♎54'59	1°00'56	
minimum elong	-331 Oct 17 j 12:55	19°♎55'00	1°00'55	
morning rise	-331 Oct 30 j 02:39	22°♎43'03		
	-331 Dec 03 j 07:32	0°♏		
retrograde	-330 Mar 01 j 13:32	10°♏14'06		
opposition	-330 May 01 j 11:35	5°♏22'07	1°10'32	
min. Earth dist.	-330 May 02 j 22:00	5°♏11'10	4.29947 AU	
direct	-330 Jul 02 j 15:04	0°♏23'34		
	-330 Oct 20 j 03:22	15°♏		
evening set	-330 Nov 05 j 04:34	18°♏35'24		
max. Earth dist.	-330 Nov 16 j 01:13	21°♏04'17	6.23763 AU	
conjunction	-330 Nov 17 j 19:37	21°♏28'35	0°31'09	
minimum elong	-330 Nov 17 j 19:38	21°♏28'36	0°31'09	
morning rise	-330 Nov 30 j 10:18	24°♏21'48		
	-330 Dec 25 j 19:14	0°♐		
retrograde	-329 Apr 04 j 22:00	12°♐47'07		
opposition	-329 Jun 04 j 20:33	7°♐53'17	0°16'49	
min. Earth dist.	-329 Jun 05 j 20:37	7°♐45'33	4.17187 AU	
direct	-329 Aug 04 j 19:06	2°♐57'25		
desc. node	-329 Sep 20 j 13:50	6°♐15'13		
evening set	-329 Dec 07 j 20:26	21°♐40'32		
conjunction	-329 Dec 20 j 14:14	24°♐40'15	-0°09'45	
minimum elong	-329 Dec 20 j 14:13	24°♐40'15	0°09'46	
behind sun begin	-329 Dec 20 j 07:36	24°♐36'22		
behind sun end	-329 Dec 20 j 20:50	24°♐44'08		
max. Earth dist.	-329 Dec 19 j 15:38	24°♐26'57	6.10847 AU	
morning rise	-328 Jan 02 j 09:09	27°♐40'51		
	-328 Jan 12 j 08:36	0°♑		
retrograde	-328 May 10 j 10:33	17°♑09'55		
opposition	-328 Jul 10 j 01:21	12°♑12'52	-0°45'54	
min. Earth dist.	-328 Jul 10 j 08:09	12°♑10'39	4.05132 AU	
direct	-328 Sep 07 j 14:48	7°♑19'04		
evening set	-327 Jan 10 j 10:07	26°♑33'21		
conjunction	-327 Jan 23 j 09:15	29°♑39'48	-0°48'44	
minimum elong	-327 Jan 23 j 09:13	29°♑39'47	0°48'44	
max. Earth dist.	-327 Jan 23 j 14:49	29°♑43'09	6.00755 AU	
	-327 Jan 24 j 18:53	0°♒		
morning rise	-327 Feb 05 j 11:03	2°♒47'47		
	-327 Apr 02 j 00:34	15°♒		
retrograde	-327 Jun 17 j 04:12	23°♒07'27		
opposition	-327 Aug 16 j 09:31	18°♒06'27	-1°34'19	
min. Earth dist.	-327 Aug 15 j 18:23	18°♒11'30	3.98138 AU	
direct	-327 Sep 10 j 17:53	15°℞♒		
direct	-327 Oct 13 j 17:44	13°♒12'59		
	-327 Nov 15 j 12:05	15°♒		
	-326 Feb 04 j 04:29	0°♓		
evening set	-326 Feb 15 j 19:30	2°♓45'22		
conjunction	-326 Mar 01 j 01:59	5°♓56'34	-1°10'17	
minimum elong	-326 Mar 01 j 01:58	5°♓56'34	1°10'16	
max. Earth dist.	-326 Mar 02 j 12:25	6°♓17'17	5.97422 AU	
morning rise	-326 Mar 14 j 11:48	9°♓09'30		
retrograde	-326 Jul 24 j 18:56	29°♓40'57		
min. Earth dist.	-326 Sep 21 j 08:35	24°♓46'41	3.98979 AU	
opposition	-326 Sep 22 j 14:10	24°♓36'39	-1°46'26	
direct	-326 Nov 19 j 12:14	19°♓41'20		
	-325 Feb 12 j 08:10	0°♈		
evening set	-325 Mar 25 j 03:12	9°♈09'12		
conjunction	-325 Apr 07 j 17:25	12°♈21'39	-1°04'39	
minimum elong	-325 Apr 07 j 17:28	12°♈21'41	1°04'38	
max. Earth dist.	-325 Apr 09 j 21:27	12°♈52'24	6.02271 AU	
morning rise	-325 Apr 21 j 10:05	15°♈35'14		
	-325 Jun 29 j 16:40	0°♉		
retrograde	-325 Aug 29 j 20:00	5°♉31'39		
min. Earth dist.	-325 Oct 27 j 00:35	0°♉37'40	4.07313 AU	
opposition	-325 Oct 28 j 09:13	0°♉26'32	-1°17'30	
	-325 Oct 31 j 15:07	30°℞♈		
direct	-325 Dec 25 j 17:26	25°♈28'16		
	-324 Feb 17 j 23:32	0°♉		
evening set	-324 Apr 30 j 01:49	14°♉31'14		
	-324 May 02 j 04:10	15°♉		
conjunction	-324 May 13 j 20:08	17°♉40'35	-0°35'07	
minimum elong	-324 May 13 j 20:10	17°♉40'37	0°35'07	
max. Earth dist.	-324 May 15 j 19:14	18°♉07'37	6.13340 AU	
morning rise	-324 May 27 j 15:28	20°♉50'09		
	-324 Jul 09 j 03:52	0°♊		
retrograde	-324 Oct 01 j 15:13	9°♊43'59		
min. Earth dist.	-324 Nov 29 j 04:05	4°♊49'14	4.19901 AU	
opposition	-324 Nov 30 j 05:06	4°♊40'45	-0°22'38	
	-323 Jan 14 j 08:54	30°℞♉		
direct	-323 Jan 28 j 16:10	29°♉39'40		
	-323 Feb 12 j 02:16	0°♊		
asc. node	-323 Apr 27 j 19:58	10°♊08'19		
evening set	-323 Jun 04 j 14:12	18°♊09'24		
conjunction	-323 Jun 18 j 07:06	21°♊12'25	0°05'21	
minimum elong	-323 Jun 18 j 07:05	21°♊12'25	0°05'21	
behind sun begin	-323 Jun 17 j 23:04	21°♊07'58		
behind sun end	-323 Jun 18 j 15:06	21°♊16'52		
max. Earth dist.	-323 Jun 19 j 11:05	21°♊28'01	6.26502 AU	
morning rise	-323 Jul 01 j 22:40	24°♊14'35		
	-323 Jul 28 j 17:07	0°♋		
retrograde	-323 Nov 02 j 12:59	12°♋05'49		
opposition	-322 Jan 01 j 06:37	7°♋06'14	0°36'16	
min. Earth dist.	-323 Dec 31 j 21:01	7°♋09'26	4.32441 AU	
direct	-322 Mar 03 j 02:18	2°♋03'27		
evening set	-322 Jul 08 j 07:02	20°♋03'42		
conjunction	-322 Jul 21 j 17:13	22°♋59'22	0°42'29	
minimum elong	-322 Jul 21 j 17:10	22°♋59'21	0°42'30	
max. Earth dist.	-322 Jul 21 j 17:19	22°♋59'26	6.37455 AU	
morning rise	-322 Aug 04 j 00:55	25°♋53'39		
	-322 Aug 23 j 07:17	0°♌		
retrograde	-322 Dec 03 j 03:39	13°♌00'53		
opposition	-321 Feb 01 j 05:36	8°♌05'02	1°21'52	
min. Earth dist.	-321 Feb 01 j 13:38	8°♌02'25	4.41103 AU	
direct	-321 Apr 04 j 05:01	3°♌01'46		

Attention, astronomical year style is used: The year -321 in astronomical counting style is the year 322 BCE in historical counting style.

	-321 Jul 12 j 22:07	15°♌		
evening set	-321 Aug 09 j 08:19	20°♌43'56		
max. Earth dist.	-321 Aug 21 j 10:31	23°♌21'01	6.43107 AU	
conjunction	-321 Aug 22 j 10:16	23°♌33'55	1°06'32	
minimum elong	-321 Aug 22 j 10:14	23°♌33'54	1°06'32	
morning rise	-321 Sep 04 j 08:59	26°♌22'21		
	-321 Sep 21 j 10:43	0°♍		
retrograde	-320 Jan 02 j 11:08	13°♍11'49		
opposition	-320 Mar 02 j 22:36	8°♍18'47	1°44'05	
min. Earth dist.	-320 Mar 03 j 21:55	8°♍11'17	4.43524 AU	
direct	-320 May 04 j 14:03	3°♍16'19		
evening set	-320 Sep 08 j 08:20	20°♍54'54		
max. Earth dist.	-320 Sep 19 j 08:36	23°♍19'06	6.41991 AU	
conjunction	-320 Sep 21 j 03:12	23°♍42'25	1°12'07	
minimum elong	-320 Sep 21 j 03:12	23°♍42'25	1°12'08	
morning rise	-320 Oct 03 j 19:33	26°♍28'46		
	-320 Oct 20 j 05:13	0°♎		
retrograde	-319 Feb 01 j 12:17	13°♎28'14		
opposition	-319 Apr 03 j 06:42	8°♎36'29	1°38'16	
min. Earth dist.	-319 Apr 04 j 16:36	8°♎25'40	4.39002 AU	
direct	-319 Jun 04 j 23:36	3°♎35'44		
evening set	-319 Oct 09 j 02:10	21°♎25'47		
max. Earth dist.	-319 Oct 19 j 17:17	23°♎47'51	6.34352 AU	
conjunction	-319 Oct 21 j 17:28	24°♎14'47	0°57'48	
minimum elong	-319 Oct 21 j 17:30	24°♎14'48	0°57'47	
morning rise	-319 Nov 03 j 07:00	27°♎03'09		
	-319 Nov 16 j 16:37	0°♏		
retrograde	-318 Mar 06 j 00:23	14°♏39'04		
opposition	-318 May 06 j 00:03	9°♏46'55	1°04'21	
min. Earth dist.	-318 May 07 j 09:28	9°♏36'16	4.28664 AU	
direct	-318 Jul 06 j 23:38	4°♏48'41		
	-318 Oct 03 j 07:52	15°♏		
evening set	-318 Nov 09 j 11:48	23°♏03'34		
max. Earth dist.	-318 Nov 20 j 09:54	25°♏33'48	6.22171 AU	
conjunction	-318 Nov 22 j 02:58	25°♏57'26	0°26'03	
minimum elong	-318 Nov 22 j 02:59	25°♏57'27	0°26'03	
morning rise	-318 Dec 04 j 17:57	28°♏51'29		
	-318 Dec 09 j 18:11	0°♐		
retrograde	-317 Apr 09 j 18:08	17°♐24'58		
opposition	-317 Jun 09 j 14:42	12°♐30'49	0°08'28	
min. Earth dist.	-317 Jun 10 j 14:37	12°♐23'08	4.15370 AU	
desc. node	-317 Aug 02 j 12:18	7°♐39'49		
direct	-317 Aug 09 j 09:45	7°♐35'14		
evening set	-317 Dec 12 j 09:11	26°♐23'25		
max. Earth dist.	-317 Dec 24 j 06:41	29°♐11'50	6.08967 AU	
conjunction	-317 Dec 25 j 03:37	29°♐24'13	-0°15'26	
minimum elong	-317 Dec 25 j 03:36	29°♐24'13	0°15'26	
behind sun begin	-317 Dec 25 j 00:59	29°♐22'40		
behind sun end	-317 Dec 25 j 06:13	29°♐25'45		
	-317 Dec 27 j 16:05	0°♑		
morning rise	-316 Jan 06 j 23:28	2°♑26'01		
retrograde	-316 May 15 j 11:13	22°♑04'37		
opposition	-316 Jul 15 j 01:22	17°♑07'07	-0°53'50	
min. Earth dist.	-316 Jul 15 j 05:07	17°♑05'54	4.03372 AU	
direct	-316 Sep 12 j 08:55	12°♑13'29		
	-315 Jan 08 j 17:54	0°♒		
evening set	-315 Jan 15 j 06:42	1°♒33'19		
conjunction	-315 Jan 28 j 06:49	4°♒40'52	-0°52'58	
minimum elong	-315 Jan 28 j 06:46	4°♒40'50	0°52'59	
max. Earth dist.	-315 Jan 28 j 15:47	4°♒46'15	5.99272 AU	
morning rise	-315 Feb 10 j 09:45	7°♒50'01		
	-315 Mar 13 j 09:21	15°♒		
retrograde	-315 Jun 22 j 10:40	28°♒16'46		
opposition	-315 Aug 21 j 13:21	23°♒15'14	-1°38'26	
min. Earth dist.	-315 Aug 20 j 20:15	23°♒20'57	3.97100 AU	
direct	-315 Oct 18 j 19:03	18°♒21'36		
	-314 Jan 17 j 10:13	0°♓		
evening set	-314 Feb 20 j 23:09	7°♓57'33		
conjunction	-314 Mar 06 j 07:02	11°♓09'35	-1°11'07	
minimum elong	-314 Mar 06 j 07:01	11°♓09'35	1°11'06	
max. Earth dist.	-314 Mar 07 j 22:12	11°♓33'08	5.96937 AU	
morning rise	-314 Mar 19 j 18:00	14°♓23'15		
	-314 Jun 02 j 15:15	0°♈		
retrograde	-314 Jul 30 j 00:33	4°♈55'12		
min. Earth dist.	-314 Sep 26 j 10:31	0°♈01'07	3.99121 AU	
	-314 Sep 26 j 13:48	30°℞♓		
opposition	-314 Sep 27 j 17:24	29°♓50'38	-1°44'36	
direct	-314 Nov 24 j 14:32	24°♓54'59		
	-313 Jan 20 j 14:11	0°♈		
evening set	-313 Mar 30 j 10:01	14°♈22'38		
conjunction	-313 Apr 13 j 01:05	17°♈35'10	-1°01'36	
minimum elong	-313 Apr 13 j 01:08	17°♈35'12	1°01'35	
max. Earth dist.	-313 Apr 15 j 05:25	18°♈06'00	6.03010 AU	
morning rise	-313 Apr 26 j 18:45	20°♈48'48		
	-313 Jun 07 j 03:45	0°♉		
retrograde	-313 Sep 03 j 18:33	10°♉39'07		
min. Earth dist.	-313 Oct 31 j 22:47	5°♉45'20	4.08548 AU	
opposition	-313 Nov 02 j 08:01	5°♉34'00	-1°10'41	
direct	-313 Dec 30 j 18:49	0°♉35'14		
	-312 Apr 14 j 18:57	15°♉		
evening set	-312 May 05 j 06:07	19°♉34'38		
conjunction	-312 May 19 j 00:45	22°♉43'22	-0°29'36	
minimum elong	-312 May 19 j 00:47	22°♉43'23	0°29'35	
max. Earth dist.	-312 May 20 j 23:27	23°♉10'05	6.14973 AU	
morning rise	-312 Jun 01 j 19:51	25°♉52'06		
	-312 Jun 20 j 08:46	0°♊		
retrograde	-312 Oct 06 j 08:52	14°♊36'51		
opposition	-312 Dec 04 j 22:01	9°♊33'57	-0°13'54	
min. Earth dist.	-312 Dec 03 j 22:52	9°♊41'46	4.21718 AU	
direct	-311 Feb 02 j 14:05	4°♊32'29		
asc. node	-311 Mar 06 j 04:10	6°♊06'07		
evening set	-311 Jun 09 j 12:46	22°♊57'16		
conjunction	-311 Jun 23 j 04:54	25°♊59'11	0°11'10	
minimum elong	-311 Jun 23 j 04:52	25°♊59'11	0°11'09	
behind sun begin	-311 Jun 22 j 22:49	25°♊55'50		
behind sun end	-311 Jun 23 j 10:56	26°♊02'32		
max. Earth dist.	-311 Jun 24 j 05:34	26°♊12'54	6.28324 AU	
morning rise	-311 Jul 06 j 19:36	29°♊00'10		
	-311 Jul 11 j 08:33	0°♋		
retrograde	-311 Nov 06 j 22:23	16°♋43'14		
opposition	-310 Jan 05 j 18:03	11°♋44'04	0°43'55	
min. Earth dist.	-310 Jan 05 j 10:18	11°♋46'39	4.34098 AU	
direct	-310 Mar 07 j 17:39	6°♋41'01		
evening set	-310 Jul 12 j 22:54	24°♋37'15		
conjunction	-310 Jul 26 j 07:58	27°♋31'53	0°46'54	
minimum elong	-310 Jul 26 j 07:55	27°♋31'52	0°46'54	
max. Earth dist.	-310 Jul 26 j 05:11	27°♋30'22	6.38801 AU	
	-310 Aug 06 j 16:01	0°♌		
morning rise	-310 Aug 08 j 14:15	0°♌25'03		
	-310 Oct 28 j 06:48	15°♌		
retrograde	-310 Dec 07 j 11:19	17°♌27'24		
	-309 Jan 16 j 18:15	15°℞♌		
opposition	-309 Feb 05 j 14:24	12°♌32'00	1°26'36	

Attention, astronomical year style is used: The year -309 in astronomical counting style is the year 310 BCE in historical counting style.

min. Earth dist.	-309 Feb 06 j 00:53	12°♌28'35	4.42037 AU
direct	-309 Apr 08 j 17:17	7°♌28'46	
	-309 Jun 23 j 21:30	15°♌	
evening set	-309 Aug 13 j 18:56	25°♌08'47	
conjunction	-309 Aug 26 j 19:38	27°♌58'05	1°08'31
minimum elong	-309 Aug 26 j 19:36	27°♌58'04	1°08'31
max. Earth dist.	-309 Aug 25 j 15:25	27°♌42'46	6.43526 AU
	-309 Sep 05 j 04:23	0°♍	
morning rise	-309 Sep 08 j 17:24	0°♍45'56	
retrograde	-308 Jan 06 j 19:39	17°♍34'41	
opposition	-308 Mar 07 j 07:50	12°♍41'52	1°44'59
min. Earth dist.	-308 Mar 08 j 09:30	12°♍33'37	4.43415 AU
direct	-308 May 09 j 00:44	7°♍39'31	
evening set	-308 Sep 12 j 16:25	25°♍18'25	
max. Earth dist.	-308 Sep 23 j 15:27	27°♍42'10	6.41357 AU
conjunction	-308 Sep 25 j 10:42	28°♍05'54	1°11'16
minimum elong	-308 Sep 25 j 10:43	28°♍05'54	1°11'16
	-308 Oct 04 j 02:43	0°♎	
morning rise	-308 Oct 08 j 02:14	0°♎52'13	
retrograde	-307 Feb 05 j 22:53	17°♎55'03	
opposition	-307 Apr 07 j 19:05	13°♎03'21	1°35'05
min. Earth dist.	-307 Apr 09 j 05:07	12°♎52'31	4.37879 AU
direct	-307 Jun 09 j 09:39	8°♎02'56	
evening set	-307 Oct 13 j 11:18	25°♎55'43	
max. Earth dist.	-307 Oct 24 j 01:16	28°♎17'44	6.32824 AU
conjunction	-307 Oct 26 j 02:14	28°♎45'13	0°54'13
minimum elong	-307 Oct 26 j 02:16	28°♎45'14	0°54'13
	-307 Oct 31 j 15:28	0°♏	
morning rise	-307 Nov 07 j 15:51	1°♏34'12	
	-306 Jan 15 j 09:56	15°♏	
retrograde	-306 Mar 10 j 20:19	19°♏17'18	
	-306 May 06 j 04:23	15℞♏	
opposition	-306 May 10 j 18:36	14°♏24'58	0°57'30
min. Earth dist.	-306 May 12 j 04:13	14°♏14'15	4.26802 AU
direct	-306 Jul 11 j 15:33	9°♏27'05	
	-306 Sep 12 j 08:40	15°♏	
evening set	-306 Nov 14 j 00:50	27°♏46'40	
	-306 Nov 23 j 16:31	0°♐	
max. Earth dist.	-306 Nov 25 j 01:14	0°♐18'54	6.20147 AU
conjunction	-306 Nov 26 j 16:24	0°♐41'32	0°20'29
minimum elong	-306 Nov 26 j 16:26	0°♐41'33	0°20'29
morning rise	-306 Dec 09 j 07:55	3°♐36'40	
retrograde	-305 Apr 14 j 19:36	22°♐19'52	
desc. node	-305 Jun 11 j 12:32	17°♐49'43	
opposition	-305 Jun 14 j 16:17	17°♐25'21	-0°00'30
min. Earth dist.	-305 Jun 15 j 13:10	17°♐18'37	4.13340 AU
direct	-305 Aug 14 j 05:04	12°♐30'10	
	-305 Dec 11 j 06:17	0°♑	
evening set	-305 Dec 17 j 05:21	1°♑23'53	
max. Earth dist.	-305 Dec 29 j 07:07	4°♑15'32	6.07123 AU
conjunction	-305 Dec 30 j 00:23	4°♑25'47	-0°21'24
minimum elong	-305 Dec 30 j 00:21	4°♑25'46	0°21'23
morning rise	-304 Jan 11 j 21:08	7°♑28'47	
retrograde	-304 May 20 j 20:49	27°♑16'38	
opposition	-304 Jul 20 j 08:48	22°♑18'37	-1°01'53
min. Earth dist.	-304 Jul 20 j 09:40	22°♑18'20	4.01903 AU
direct	-304 Sep 17 j 12:33	17°♑25'08	
	-304 Dec 22 j 01:31	0°♒	
evening set	-303 Jan 20 j 10:16	6°♒49'07	
conjunction	-303 Feb 02 j 11:31	9°♒57'35	-0°57'04
minimum elong	-303 Feb 02 j 11:28	9°♒57'33	0°57'04

max. Earth dist.	-303 Feb 03 j 02:16	10°♒06'28	5.98342 AU
morning rise	-303 Feb 15 j 15:30	13°♒07'39	
	-303 Feb 23 j 12:22	15°♒	
	-303 May 09 j 20:51	0°♓	
retrograde	-303 Jun 27 j 21:55	3°♓38'25	
	-303 Aug 16 j 09:22	30℞♒	
opposition	-303 Aug 26 j 22:15	28°♒36'25	-1°41'56
min. Earth dist.	-303 Aug 26 j 02:22	28°♒43'04	3.96870 AU
direct	-303 Oct 24 j 00:41	23°♒42'42	
	-303 Dec 26 j 20:10	0°♓	
evening set	-302 Feb 26 j 07:20	13°♓18'52	
conjunction	-302 Mar 11 j 16:09	16°♓31'10	-1°11'27
minimum elong	-302 Mar 11 j 16:09	16°♓31'10	1°11'27
max. Earth dist.	-302 Mar 13 j 09:38	16°♓56'04	5.97407 AU
morning rise	-302 Mar 25 j 04:21	19°♓45'06	
	-302 May 09 j 20:11	0°♈	
retrograde	-302 Aug 04 j 04:46	10°♈13'09	
opposition	-302 Oct 02 j 22:05	5°♈08'17	-1°41'55
min. Earth dist.	-302 Oct 01 j 13:11	5°♈19'29	4.00254 AU
direct	-302 Nov 29 j 19:50	0°♈12'15	
evening set	-301 Apr 04 j 17:10	19°♈35'56	
conjunction	-301 Apr 18 j 09:04	22°♈48'03	-0°58'08
minimum elong	-301 Apr 18 j 09:07	22°♈48'05	0°58'07
max. Earth dist.	-301 Apr 20 j 14:44	23°♈19'32	6.04699 AU
morning rise	-301 May 02 j 03:05	26°♈01'04	
	-301 May 19 j 12:25	0°♉	
	-301 Aug 19 j 00:41	15°♉	
retrograde	-301 Sep 08 j 16:50	15°♉41'48	
	-301 Sep 29 j 02:31	15℞♉	
min. Earth dist.	-301 Nov 05 j 21:25	10°♉47'40	4.10582 AU
opposition	-301 Nov 07 j 05:07	10°♉36'51	-1°03'28
direct	-300 Jan 04 j 20:35	5°♉37'41	
	-300 Mar 26 j 22:45	15°♉	
evening set	-300 May 10 j 07:58	24°♉31'03	
conjunction	-300 May 24 j 02:31	27°♉38'48	-0°24'02
minimum elong	-300 May 24 j 02:32	27°♉38'49	0°24'01
max. Earth dist.	-300 May 25 j 23:05	28°♉04'09	6.17168 AU
	-300 Jun 03 j 11:12	0°♊	
morning rise	-300 Jun 06 j 21:18	0°♊46'23	
retrograde	-300 Oct 10 j 20:05	19°♊20'39	
opposition	-300 Dec 09 j 11:11	14°♊18'14	-0°05'23
min. Earth dist.	-300 Dec 08 j 13:21	14°♊25'36	4.23865 AU
asc. node	-299 Jan 13 j 21:58	10°♊14'12	
direct	-299 Feb 07 j 06:59	9°♊16'28	
evening set	-299 Jun 14 j 07:22	27°♊35'52	
	-299 Jun 25 j 04:31	0°♋	
conjunction	-299 Jun 27 j 22:38	0°♋36'36	0°16'43
minimum elong	-299 Jun 27 j 22:36	0°♋36'36	0°16'43
max. Earth dist.	-299 Jun 28 j 18:40	0°♋47'42	6.30252 AU
morning rise	-299 Jul 11 j 12:18	3°♋36'20	
retrograde	-299 Nov 11 j 06:38	21°♋11'46	
opposition	-298 Jan 10 j 02:16	16°♋13'11	0°51'03
min. Earth dist.	-298 Jan 09 j 22:07	16°♋14'34	4.35659 AU
direct	-298 Mar 12 j 07:00	11°♋10'03	
evening set	-298 Jul 17 j 11:03	29°♋02'55	
	-298 Jul 21 j 20:28	0°♌	
conjunction	-298 Jul 30 j 18:59	1°♌56'39	0°50'54
minimum elong	-298 Jul 30 j 18:56	1°♌56'38	0°50'54
max. Earth dist.	-298 Jul 30 j 11:45	1°♌52'43	6.39855 AU
morning rise	-298 Aug 13 j 00:03	4°♌48'54	
	-298 Oct 02 j 22:36	15°♌	
retrograde	-298 Dec 11 j 15:57	21°♌47'55	

Attention, astronomical year style is used: The year -297 in astronomical counting style is the year 298 BCE in historical counting style.

opposition	-297 Feb 09 j 20:43	16°♌52'56	1°30'45	
min. Earth dist.	-297 Feb 10 j 09:29	16°♌48'47	4.42553 AU	
	-297 Feb 24 j 16:45	15°℞♌		
direct	-297 Apr 13 j 01:32	11°♌49'44		
	-297 May 30 j 15:07	15°♌		
evening set	-297 Aug 18 j 03:19	29°♌29'14		
	-297 Aug 20 j 12:22	0°♍		
max. Earth dist.	-297 Aug 29 j 20:28	2°♍01'31	6.43458 AU	
conjunction	-297 Aug 31 j 03:03	2°♍18'09	1°10'05	
minimum elong	-297 Aug 31 j 03:01	2°♍18'08	1°10'05	
morning rise	-297 Sep 12 j 23:41	5°♍05'37		
retrograde	-296 Jan 11 j 02:59	21°♍55'24		
opposition	-296 Mar 11 j 15:57	17°♍02'54	1°45'20	
min. Earth dist.	-296 Mar 12 j 19:36	16°♍54'01	4.42786 AU	
direct	-296 May 13 j 09:11	12°♍00'48		
evening set	-296 Sep 17 j 00:01	29°♍41'47		
	-296 Sep 18 j 09:24	0°♎		
max. Earth dist.	-296 Sep 27 j 19:14	2°♎03'56	6.40195 AU	
conjunction	-296 Sep 29 j 17:35	2°♎29'27	1°10'02	
minimum elong	-296 Sep 29 j 17:36	2°♎29'28	1°10'01	
morning rise	-296 Oct 12 j 08:50	5°♎16'05		
retrograde	-295 Feb 10 j 13:00	22°♎24'12		
opposition	-295 Apr 12 j 08:28	17°♎32'29	1°31'21	
min. Earth dist.	-295 Apr 13 j 19:24	17°♎21'21	4.36263 AU	
direct	-295 Jun 13 j 21:19	12°♎32'22		
	-295 Oct 15 j 16:21	0°♏		
evening set	-295 Oct 17 j 21:07	0°♏29'26		
max. Earth dist.	-295 Oct 28 j 12:55	2°♏53'03	6.30895 AU	
conjunction	-295 Oct 30 j 12:10	3°♏19'41	0°50'17	
minimum elong	-295 Oct 30 j 12:12	3°♏19'43	0°50'17	
morning rise	-295 Nov 12 j 01:45	6°♏09'30		
	-295 Dec 23 j 18:27	15°♏		
retrograde	-294 Mar 15 j 16:08	24°♏01'08		
opposition	-294 May 15 j 15:04	19°♏08'35	0°50'11	
min. Earth dist.	-294 May 16 j 22:58	18°♏58'25	4.24694 AU	
	-294 Jun 23 j 05:58	15°℞♏		
direct	-294 Jul 16 j 07:08	14°♏11'10		
	-294 Aug 08 j 08:11	15°♏		
	-294 Nov 07 j 06:02	0°♐		
evening set	-294 Nov 18 j 16:16	2°♐36'11		
max. Earth dist.	-294 Nov 29 j 19:11	5°♐10'37	6.18047 AU	
conjunction	-294 Dec 01 j 08:05	5°♐32'03	0°14'43	
minimum elong	-294 Dec 01 j 08:05	5°♐32'03	0°14'42	
behind sun begin	-294 Dec 01 j 04:32	5°♐30'00		
behind sun end	-294 Dec 01 j 11:38	5°♐34'06		
morning rise	-294 Dec 14 j 00:17	8°♐28'21		
retrograde	-293 Apr 20 j 00:43	27°♐21'23		
desc. node	-293 Apr 20 j 03:00	27°♐21'23		
opposition	-293 Jun 19 j 20:07	22°♐26'23	-0°09'38	
min. Earth dist.	-293 Jun 20 j 14:21	22°♐20'30	4.11413 AU	
direct	-293 Aug 19 j 04:57	17°♐31'30		
	-293 Nov 23 j 18:07	0°♑		
evening set	-293 Dec 22 j 03:31	6°♑30'08		
conjunction	-292 Jan 03 j 23:26	9°♑33'03	-0°27'16	
minimum elong	-292 Jan 03 j 23:24	9°♑33'02	0°27'16	
max. Earth dist.	-292 Jan 03 j 11:51	9°♑26'09	6.05559 AU	
morning rise	-292 Jan 16 j 21:02	12°♑37'07		
	-292 Apr 15 j 10:44	0°♒		
retrograde	-292 May 26 j 07:06	2°♒32'31		
	-292 Jul 06 j 08:16	30°℞♑		
opposition	-292 Jul 25 j 17:15	27°♑33'54	-1°09'30	
min. Earth dist.	-292 Jul 25 j 14:47	27°♑34'43	4.00880 AU	
direct	-292 Sep 22 j 16:27	22°♑40'32		
	-292 Dec 01 j 14:50	0°♒		
evening set	-291 Jan 25 j 14:41	12°♒06'44		
	-291 Feb 06 j 14:36	15°♒		
conjunction	-291 Feb 07 j 16:44	15°♒15'46	-1°00'42	
minimum elong	-291 Feb 07 j 16:41	15°♒15'44	1°00'42	
max. Earth dist.	-291 Feb 08 j 10:56	15°♒26'44	5.97917 AU	
morning rise	-291 Feb 20 j 21:58	18°♒26'30		
	-291 Apr 13 j 20:32	0°♓		
retrograde	-291 Jul 03 j 05:01	8°♓58'47		
min. Earth dist.	-291 Aug 31 j 06:47	4°♓03'58	3.97103 AU	
opposition	-291 Sep 01 j 05:56	3°♓56'11	-1°44'33	
	-291 Oct 05 j 11:28	30°℞♒		
direct	-291 Oct 29 j 06:29	29°♒02'12		
	-291 Nov 22 j 02:08	0°♓		
evening set	-290 Mar 03 j 14:25	18°♓36'55		
conjunction	-290 Mar 17 j 00:24	21°♓49'18	-1°11'13	
minimum elong	-290 Mar 17 j 00:25	21°♓49'19	1°11'12	
max. Earth dist.	-290 Mar 18 j 21:36	22°♓16'21	5.98260 AU	
morning rise	-290 Mar 30 j 13:24	25°♓03'13		
	-290 Apr 20 j 19:38	0°♈		
retrograde	-290 Aug 09 j 08:42	15°♈25'41		
min. Earth dist.	-290 Oct 06 j 15:48	10°♈31'43	4.01621 AU	
opposition	-290 Oct 08 j 00:21	10°♈20'38	-1°38'28	
direct	-290 Dec 05 j 00:48	5°♈24'09		
evening set	-289 Apr 09 j 22:27	24°♈43'22		
conjunction	-289 Apr 23 j 15:00	27°♈54'59	-0°54'17	
minimum elong	-289 Apr 23 j 15:03	27°♈55'00	0°54'17	
max. Earth dist.	-289 Apr 25 j 20:37	28°♈26'17	6.06450 AU	
	-289 May 02 j 13:24	0°♉		
morning rise	-289 May 07 j 09:30	1°♉07'22		
	-289 Jul 13 j 13:24	15°♉		
retrograde	-289 Sep 13 j 10:26	20°♉38'27		
opposition	-289 Nov 11 j 23:46	15°♉33'45	-0°55'57	
min. Earth dist.	-289 Nov 10 j 16:19	15°♉44'28	4.12534 AU	
	-289 Nov 16 j 03:04	15°℞♉		
direct	-288 Jan 09 j 17:47	10°♉34'10		
	-288 Mar 03 j 20:28	15°♉		
evening set	-288 May 15 j 07:55	29°♉22'11		
	-288 May 18 j 03:01	0°♊		
conjunction	-288 May 29 j 02:16	2°♊28'59	-0°18'23	
minimum elong	-288 May 29 j 02:17	2°♊28'59	0°18'22	
max. Earth dist.	-288 May 30 j 18:47	2°♊51'56	6.19170 AU	
morning rise	-288 Jun 11 j 20:42	5°♊35'31		
retrograde	-288 Oct 15 j 08:31	24°♊00'29		
asc. node	-288 Nov 23 j 18:34	21°♊33'46		
opposition	-288 Dec 13 j 23:27	18°♊58'34	0°03'03	
min. Earth dist.	-288 Dec 13 j 04:52	19°♊04'50	4.25727 AU	
direct	-287 Feb 12 j 00:43	13°♊56'31		
	-287 Jun 08 j 23:11	0°♋		
evening set	-287 Jun 19 j 01:00	2°♋11'33		
conjunction	-287 Jul 02 j 15:33	5°♋11'18	0°22'08	
minimum elong	-287 Jul 02 j 15:31	5°♋11'18	0°22'09	
max. Earth dist.	-287 Jul 03 j 08:30	5°♋20'39	6.31841 AU	
morning rise	-287 Jul 16 j 04:04	8°♋09'55		
retrograde	-287 Nov 15 j 12:27	25°♋38'58		
opposition	-286 Jan 14 j 10:16	20°♋40'57	0°57'52	
min. Earth dist.	-286 Jan 14 j 07:51	20°♋41'45	4.36881 AU	
direct	-286 Mar 16 j 17:55	15°♋37'45		
	-286 Jul 05 j 15:47	0°♌		
evening set	-286 Jul 21 j 23:30	3°♌28'21		

Attention, astronomical year style is used: The year -286 in astronomical counting style is the year 287 BCE in historical counting style.

conjunction	-286 Aug 04 j 06:13	6°♌21'18	0°54'38
minimum elong	-286 Aug 04 j 06:10	6°♌21'17	0°54'37
max. Earth dist.	-286 Aug 03 j 18:33	6°♌14'57	6.40619 AU
morning rise	-286 Aug 17 j 10:07	9°♌12'46	
	-286 Sep 14 j 00:23	15°♌	
retrograde	-286 Dec 15 j 23:15	26°♌09'22	
opposition	-285 Feb 14 j 04:10	21°♌14'52	1°34'26
min. Earth dist.	-285 Feb 14 j 20:07	21°♌09'42	4.42829 AU
direct	-285 Apr 17 j 12:09	16°♌11'48	
	-285 Aug 04 j 08:05	0°♍	
evening set	-285 Aug 22 j 12:19	3°♍51'15	
max. Earth dist.	-285 Sep 03 j 01:10	6°♍21'26	6.43204 AU
conjunction	-285 Sep 04 j 11:07	6°♍39'54	1°11'16
minimum elong	-285 Sep 04 j 11:06	6°♍39'53	1°11'16
morning rise	-285 Sep 17 j 06:53	9°♍27'07	
retrograde	-284 Jan 15 j 11:46	26°♍18'37	
opposition	-284 Mar 16 j 01:47	21°♍26'19	1°45'05
min. Earth dist.	-284 Mar 17 j 06:27	21°♍17'08	4.42047 AU
direct	-284 May 17 j 18:31	16°♍24'30	
	-284 Sep 02 j 02:55	0°♎	
evening set	-284 Sep 21 j 08:34	4°♎07'41	
max. Earth dist.	-284 Oct 02 j 03:45	6°♎30'14	6.39036 AU
conjunction	-284 Oct 04 j 01:40	6°♎55'36	1°08'22
minimum elong	-284 Oct 04 j 01:41	6°♎55'37	1°08'21
morning rise	-284 Oct 16 j 16:21	9°♎42'31	
retrograde	-283 Feb 15 j 03:03	26°♎55'56	
opposition	-283 Apr 16 j 23:18	22°♎04'17	1°27'02
min. Earth dist.	-283 Apr 18 j 10:23	21°♎53'08	4.34763 AU
direct	-283 Jun 18 j 10:08	17°♎04'39	
	-283 Sep 29 j 01:20	0°♏	
evening set	-283 Oct 22 j 08:08	5°♏05'27	
max. Earth dist.	-283 Nov 01 j 23:40	7°♏29'35	6.29191 AU
conjunction	-283 Nov 03 j 22:57	7°♏56'21	0°46'01
minimum elong	-283 Nov 03 j 23:00	7°♏56'22	0°46'01
morning rise	-283 Nov 16 j 12:51	10°♏46'59	
	-283 Dec 05 j 14:11	15°♏	
retrograde	-282 Mar 20 j 13:42	28°♏46'30	
opposition	-282 May 20 j 12:28	23°♏53'43	0°42'29
min. Earth dist.	-282 May 21 j 18:31	23°♏44'07	4.22902 AU
direct	-282 Jul 21 j 00:56	18°♏56'43	
	-282 Oct 20 j 17:58	0°♐	
evening set	-282 Nov 23 j 07:37	7°♐25'59	
conjunction	-282 Dec 05 j 23:57	10°♐22'45	0°08'52
minimum elong	-282 Dec 05 j 23:58	10°♐22'46	0°08'52
behind sun begin	-282 Dec 05 j 17:04	10°♐18'46	
behind sun end	-282 Dec 06 j 06:52	10°♐26'46	
max. Earth dist.	-282 Dec 04 j 15:37	10°♐03'55	6.16349 AU
morning rise	-282 Dec 18 j 16:36	13°♐20'01	
desc. node	-281 Feb 27 j 12:27	27°♐41'17	
	-281 Mar 16 j 16:45	0°♑	
retrograde	-281 Apr 25 j 04:59	2°♑21'27	
	-281 Jun 04 j 01:13	30°℞♐	
opposition	-281 Jun 24 j 23:25	27°♐26'03	-0°18'37
min. Earth dist.	-281 Jun 25 j 14:57	27°♐21'02	4.09955 AU
direct	-281 Aug 24 j 03:43	22°♐31'33	
	-281 Nov 03 j 23:35	0°♑	
evening set	-281 Dec 27 j 00:48	11°♑33'29	
conjunction	-280 Jan 08 j 21:12	14°♑37'08	-0°32'50
minimum elong	-280 Jan 08 j 21:10	14°♑37'06	0°32'51
max. Earth dist.	-280 Jan 08 j 12:44	14°♑32'05	6.04461 AU
morning rise	-280 Jan 21 j 19:49	17°♑42'05	
	-280 Mar 18 j 08:33	0°♒	
retrograde	-280 May 31 j 12:56	7°♒43'16	
opposition	-280 Jul 30 j 23:04	2°♒44'03	-1°16'22
min. Earth dist.	-280 Jul 30 j 16:45	2°♒46'08	4.00269 AU
	-280 Aug 21 j 23:48	30°℞♑	
direct	-280 Sep 27 j 18:02	27°♑50'43	
	-280 Nov 03 j 01:53	0°♒	
	-279 Jan 21 j 00:39	15°♒	
evening set	-279 Jan 30 j 16:41	17°♒17'58	
conjunction	-279 Feb 12 j 19:49	20°♒27'28	-1°03'44
minimum elong	-279 Feb 12 j 19:47	20°♒27'27	1°03'44
max. Earth dist.	-279 Feb 13 j 19:23	20°♒41'40	5.97839 AU
morning rise	-279 Feb 26 j 01:53	23°♒38'38	
	-279 Mar 25 j 09:40	0°♓	
retrograde	-279 Jul 08 j 11:00	14°♓10'58	
min. Earth dist.	-279 Sep 05 j 09:49	9°♓16'03	3.97581 AU
opposition	-279 Sep 06 j 09:53	9°♓07'56	-1°46'12
direct	-279 Nov 03 j 10:26	4°♓13'42	
evening set	-278 Mar 08 j 18:07	23°♓46'24	
conjunction	-278 Mar 22 j 05:02	26°♓58'46	-1°10'24
minimum elong	-278 Mar 22 j 05:03	26°♓58'47	1°10'23
max. Earth dist.	-278 Mar 24 j 03:54	27°♓26'43	5.99218 AU
	-278 Apr 03 j 21:41	0°♈	
morning rise	-278 Apr 04 j 19:03	0°♈12'38	
retrograde	-278 Aug 14 j 07:01	20°♈29'12	
opposition	-278 Oct 12 j 22:29	15°♈24'04	-1°34'22
min. Earth dist.	-278 Oct 11 j 12:58	15°♈35'29	4.02967 AU
direct	-278 Dec 09 j 23:24	10°♈27'10	
evening set	-277 Apr 15 j 00:05	29°♈42'23	
	-277 Apr 16 j 06:31	0°♉	
conjunction	-277 Apr 28 j 17:06	2°♉53'30	-0°50'09
minimum elong	-277 Apr 28 j 17:09	2°♉53'32	0°50'09
max. Earth dist.	-277 Apr 30 j 20:18	3°♉23'18	6.08054 AU
morning rise	-277 May 12 j 11:58	6°♉05'18	
	-277 Jun 22 j 03:17	15°♉	
retrograde	-277 Sep 18 j 01:57	25°♉27'47	
min. Earth dist.	-277 Nov 15 j 10:01	20°♉33'17	4.14218 AU
opposition	-277 Nov 16 j 15:12	20°♉23'20	-0°48'19
direct	-276 Jan 14 j 13:40	15°♉23'21	
	-276 May 01 j 13:34	0°♊	
evening set	-276 May 20 j 04:59	4°♊07'12	
conjunction	-276 Jun 02 j 23:17	7°♊13'14	-0°12'47
minimum elong	-276 Jun 02 j 23:19	7°♊13'15	0°12'47
behind sun begin	-276 Jun 02 j 18:16	7°♊10'25	
behind sun end	-276 Jun 03 j 04:21	7°♊16'05	
max. Earth dist.	-276 Jun 04 j 13:55	7°♊35'01	6.20821 AU
morning rise	-276 Jun 16 j 17:07	10°♊18'49	
asc. node	-276 Oct 04 j 16:08	28°♊13'41	
retrograde	-276 Oct 19 j 17:27	28°♊35'55	
opposition	-276 Dec 18 j 09:25	23°♊34'33	0°11'14
min. Earth dist.	-276 Dec 17 j 16:21	23°♊40'17	4.27213 AU
direct	-275 Feb 16 j 14:07	18°♊32'18	
	-275 May 22 j 19:49	0°♋	
evening set	-275 Jun 23 j 17:04	6°♋44'19	
conjunction	-275 Jul 07 j 06:36	9°♋43'11	0°27'18
minimum elong	-275 Jul 07 j 06:34	9°♋43'10	0°27'19
max. Earth dist.	-275 Jul 07 j 18:11	9°♋49'33	6.33055 AU
morning rise	-275 Jul 20 j 18:14	12°♋40'52	
	-275 Nov 12 j 17:04	0°♌	
retrograde	-275 Nov 19 j 20:05	0°♌04'59	
	-275 Nov 26 j 22:45	30°℞♋	
opposition	-274 Jan 18 j 17:52	25°♋07'29	1°04'14
min. Earth dist.	-274 Jan 18 j 18:47	25°♋07'11	4.37762 AU

Attention, astronomical year style is used: The year -274 in astronomical counting style is the year 275 BCE in historical counting style.

direct	-274 Mar 21 j 06:11	20°♋04'11	
	-274 Jun 18 j 02:43	0°♌	
evening set	-274 Jul 26 j 11:01	7°♌53'21	
conjunction	-274 Aug 08 j 16:45	10°♌45'40	0°57'59
minimum elong	-274 Aug 08 j 16:43	10°♌45'39	0°57'59
max. Earth dist.	-274 Aug 08 j 02:47	10°♌38'05	6.41100 AU
morning rise	-274 Aug 21 j 19:21	13°♌36'27	
	-274 Aug 28 j 06:48	15°♌	
	-274 Dec 02 j 00:22	0°♍	
retrograde	-274 Dec 20 j 04:33	0°♍31'28	
	-273 Jan 07 j 09:11	30°℞♌	
opposition	-273 Feb 18 j 11:42	25°♌37'19	1°37'32
min. Earth dist.	-273 Feb 19 j 04:36	25°♌31'50	4.42921 AU
direct	-273 Apr 21 j 20:48	20°♌34'22	
	-273 Jul 17 j 16:09	0°♍	
evening set	-273 Aug 26 j 21:24	8°♍14'00	
max. Earth dist.	-273 Sep 07 j 07:14	10°♍42'47	6.42895 AU
conjunction	-273 Sep 08 j 19:08	11°♍02'21	1°12'01
minimum elong	-273 Sep 08 j 19:07	11°♍02'20	1°12'01
morning rise	-273 Sep 21 j 14:01	13°♍49'19	
	-273 Dec 29 j 13:10	0°♎	
retrograde	-272 Jan 19 j 21:22	0°♎42'27	
	-272 Feb 10 j 04:22	30°℞♍	
opposition	-272 Mar 20 j 11:57	25°♍50'20	1°44'13
min. Earth dist.	-272 Mar 21 j 18:30	25°♍40'34	4.41359 AU
direct	-272 May 22 j 06:01	20°♍48'43	
	-272 Aug 15 j 08:36	0°♎	
evening set	-272 Sep 25 j 16:52	8°♎33'27	
max. Earth dist.	-272 Oct 06 j 10:11	10°♎55'24	6.38001 AU
conjunction	-272 Oct 08 j 09:26	11°♎21'34	1°06'17
minimum elong	-272 Oct 08 j 09:28	11°♎21'35	1°06'18
morning rise	-272 Oct 20 j 23:50	14°♎08'45	
	-271 Jan 19 j 21:07	0°♏	
retrograde	-271 Feb 19 j 16:15	1°♏26'53	
	-271 Mar 22 j 16:13	30°℞♎	
opposition	-271 Apr 21 j 13:59	26°♎35'05	1°22'10
min. Earth dist.	-271 Apr 23 j 00:18	26°♎24'09	4.33428 AU
direct	-271 Jun 22 j 22:20	21°♎35'42	
	-271 Sep 10 j 18:13	0°♏	
evening set	-271 Oct 26 j 18:06	9°♏39'22	
max. Earth dist.	-271 Nov 06 j 12:17	12°♏05'30	6.27654 AU
conjunction	-271 Nov 08 j 08:59	12°♏30'53	0°41'29
minimum elong	-271 Nov 08 j 09:02	12°♏30'55	0°41'29
	-271 Nov 19 j 07:38	15°♏	
morning rise	-271 Nov 20 j 22:53	15°♏22'11	
	-270 Feb 04 j 18:42	0°♐	
retrograde	-270 Mar 25 j 10:17	3°♐28'57	
	-270 May 14 j 05:37	30°℞♏	
opposition	-270 May 25 j 08:53	28°♏35'54	0°34'31
min. Earth dist.	-270 May 26 j 14:07	28°♏26'34	4.21232 AU
direct	-270 Jul 25 j 18:13	23°♏39'15	
	-270 Sep 30 j 15:08	0°♐	
evening set	-270 Nov 27 j 22:06	12°♐12'23	
max. Earth dist.	-270 Dec 09 j 07:37	14°♐51'50	6.14677 AU
conjunction	-270 Dec 10 j 14:41	15°♐10'00	0°03'00
minimum elong	-270 Dec 10 j 14:41	15°♐10'00	0°03'01
behind sun begin	-270 Dec 10 j 06:43	15°♐05'22	
behind sun end	-270 Dec 10 j 22:40	15°♐14'38	
morning rise	-270 Dec 23 j 08:07	18°♐08'16	
desc. node	-269 Jan 07 j 07:59	21°♐34'51	
	-269 Feb 16 j 23:55	0°♑	
retrograde	-269 Apr 30 j 06:51	7°♑18'05	
opposition	-269 Jun 30 j 01:07	2°♑22'10	-0°27'27
min. Earth dist.	-269 Jun 30 j 13:25	2°♑18'10	4.08411 AU
	-269 Jul 19 j 03:07	30°℞♐	
direct	-269 Aug 29 j 00:15	27°♐27'50	
	-269 Oct 08 j 03:53	0°♑	
evening set	-269 Dec 31 j 21:17	16°♑33'48	
conjunction	-268 Jan 13 j 18:36	19°♑38'22	-0°38'09
minimum elong	-268 Jan 13 j 18:34	19°♑38'21	0°38'09
max. Earth dist.	-268 Jan 13 j 15:18	19°♑36'23	6.03188 AU
morning rise	-268 Jan 26 j 18:00	22°♑44'16	
	-268 Feb 27 j 09:12	0°♒	
retrograde	-268 Jun 05 j 20:31	12°♒51'58	
opposition	-268 Aug 05 j 04:13	7°♒52'12	-1°22'41
min. Earth dist.	-268 Aug 04 j 20:15	7°♒54'51	3.99402 AU
direct	-268 Oct 02 j 20:29	2°♒58'52	
	-267 Jan 03 j 11:40	15°♒	
evening set	-267 Feb 04 j 19:00	22°♒28'25	
conjunction	-267 Feb 17 j 23:07	25°♒38'34	-1°06'19
minimum elong	-267 Feb 17 j 23:05	25°♒38'33	1°06'19
max. Earth dist.	-267 Feb 19 j 01:43	25°♒54'35	5.97439 AU
morning rise	-267 Mar 03 j 06:27	28°♒50'25	
	-267 Mar 08 j 03:14	0°♓	
retrograde	-267 Jul 13 j 16:13	19°♓23'56	
min. Earth dist.	-267 Sep 10 j 11:24	14°♓29'30	3.97721 AU
opposition	-267 Sep 11 j 14:03	14°♓20'31	-1°47'05
direct	-267 Nov 08 j 12:21	9°♓26'00	
evening set	-266 Mar 13 j 23:32	28°♓58'16	
	-266 Mar 18 j 07:39	0°♈	
conjunction	-266 Mar 27 j 11:29	2°♈10'49	-1°09'03
minimum elong	-266 Mar 27 j 11:30	2°♈10'50	1°09'02
max. Earth dist.	-266 Mar 29 j 11:14	2°♈39'14	5.99865 AU
morning rise	-266 Apr 10 j 02:28	5°♈24'48	
retrograde	-266 Aug 19 j 07:20	25°♈36'34	
opposition	-266 Oct 17 j 22:09	20°♈31'22	-1°29'32
min. Earth dist.	-266 Oct 16 j 13:06	20°♈42'39	4.04030 AU
direct	-266 Dec 15 j 01:25	15°♈34'02	
	-265 Mar 30 j 02:48	0°♉	
evening set	-265 Apr 20 j 04:20	4°♉46'25	
conjunction	-265 May 03 j 22:06	7°♉57'13	-0°45'34
minimum elong	-265 May 03 j 22:09	7°♉57'15	0°45'33
max. Earth dist.	-265 May 06 j 01:53	8°♉27'14	6.09462 AU
morning rise	-265 May 17 j 17:09	11°♉08'29	
	-265 Jun 03 j 18:28	15°♉	
	-265 Sep 07 j 15:21	0°♊	
retrograde	-265 Sep 22 j 20:16	0°♊22'49	
	-265 Oct 07 j 22:22	30°℞♉	
min. Earth dist.	-265 Nov 20 j 04:39	25°♉28'26	4.15819 AU
opposition	-265 Nov 21 j 09:04	25°♉18'47	-0°40'10
direct	-264 Jan 19 j 10:23	20°♉18'32	
	-264 Apr 12 j 23:46	0°♊	
evening set	-264 May 25 j 05:02	8°♊58'30	
conjunction	-264 Jun 07 j 22:53	12°♊03'40	-0°06'57
minimum elong	-264 Jun 07 j 22:53	12°♊03'40	0°06'56
behind sun begin	-264 Jun 07 j 15:11	11°♊59'21	
behind sun end	-264 Jun 08 j 06:36	12°♊07'59	
max. Earth dist.	-264 Jun 09 j 09:26	12°♊23'05	6.22504 AU
morning rise	-264 Jun 21 j 16:20	15°♊08'19	
asc. node	-264 Aug 13 j 18:24	26°♊04'11	
	-264 Sep 07 j 19:01	0°♋	
retrograde	-264 Oct 24 j 05:46	3°♋17'29	
	-264 Dec 09 j 19:30	30°℞♊	
opposition	-264 Dec 22 j 22:18	28°♊16'40	0°19'33

Attention, astronomical year style is used: The year -264 in astronomical counting style is the year 265 BCE in historical counting style.

min. Earth dist.	-264 Dec 22 j 07:28	28°♊21'38	4.28857 AU	
direct	-263 Feb 21 j 08:03	23°♊14'15		
	-263 May 02 j 14:55	0°♋		
evening set	-263 Jun 28 j 11:15	11°♋22'30		
conjunction	-263 Jul 11 j 23:56	14°♋20'22	0°32'27	
minimum elong	-263 Jul 11 j 23:54	14°♋20'21	0°32'26	
max. Earth dist.	-263 Jul 12 j 09:57	14°♋25'51	6.34579 AU	
morning rise	-263 Jul 25 j 10:12	17°♋16'54		
	-263 Sep 29 j 06:33	0°♌		
retrograde	-263 Nov 24 j 03:25	4°♌34'57		
	-262 Jan 20 j 08:17	30°℞♋		
opposition	-262 Jan 23 j 03:08	29°♋38'02	1°10'20	
min. Earth dist.	-262 Jan 23 j 05:14	29°♋37'21	4.39089 AU	
direct	-262 Mar 25 j 18:46	24°♋34'50		
	-262 May 27 j 23:04	0°♌		
evening set	-262 Jul 30 j 23:34	12°♌20'51		
max. Earth dist.	-262 Aug 12 j 09:56	15°♌02'28	6.42137 AU	
	-262 Aug 12 j 05:24	15°♌		
conjunction	-262 Aug 13 j 03:53	15°♌12'13	1°01'03	
minimum elong	-262 Aug 13 j 03:51	15°♌12'12	1°01'04	
morning rise	-262 Aug 26 j 05:22	18°♌02'06		
	-262 Oct 27 j 05:19	0°♍		
retrograde	-262 Dec 24 j 11:40	4°♍53'50		
opposition	-261 Feb 22 j 19:42	0°♍00'04	1°40'04	
	-261 Feb 22 j 19:55	30°℞♌		
min. Earth dist.	-261 Feb 23 j 15:15	29°♌53'45	4.43619 AU	
direct	-261 Apr 26 j 08:34	24°♌57'14		
	-261 Jun 26 j 11:59	0°♍		
evening set	-261 Aug 31 j 04:58	12°♍34'52		
max. Earth dist.	-261 Sep 11 j 12:45	15°♍02'29	6.43189 AU	
conjunction	-261 Sep 13 j 01:51	15°♍22'43	1°12'23	
minimum elong	-261 Sep 13 j 01:50	15°♍22'42	1°12'22	
morning rise	-261 Sep 25 j 19:42	18°♍09'12		
	-261 Nov 25 j 19:18	0°♎		
retrograde	-260 Jan 24 j 02:51	5°♎02'19		
opposition	-260 Mar 24 j 20:32	0°♎10'19	1°42'45	
min. Earth dist.	-260 Mar 26 j 03:13	0°♎00'31	4.41231 AU	
	-260 Mar 26 j 04:49	30°℞♍		
direct	-260 May 26 j 14:06	25°♍08'58		
	-260 Jul 25 j 06:08	0°♎		
evening set	-260 Sep 29 j 22:18	12°♎53'26		
max. Earth dist.	-260 Oct 10 j 14:39	15°♎15'06	6.37453 AU	
conjunction	-260 Oct 12 j 14:15	15°♎41'30	1°03'54	
minimum elong	-260 Oct 12 j 14:17	15°♎41'31	1°03'54	
morning rise	-260 Oct 25 j 04:13	18°♎28'46		
	-260 Dec 21 j 18:27	0°♏		
retrograde	-259 Feb 24 j 03:22	5°♏50'21		
opposition	-259 Apr 26 j 01:32	0°♏58'31	1°16'56	
min. Earth dist.	-259 Apr 27 j 13:02	0°♏47'13	4.32459 AU	
	-259 May 03 j 18:28	30°℞♎		
direct	-259 Jun 27 j 09:21	25°♎59'26		
	-259 Aug 19 j 11:44	0°♏		
evening set	-259 Oct 31 j 00:22	14°♏04'59		
	-259 Nov 04 j 01:32	15°♏		
max. Earth dist.	-259 Nov 10 j 17:40	16°♏31'05	6.26336 AU	
conjunction	-259 Nov 12 j 15:12	16°♏57'01	0°36'52	
minimum elong	-259 Nov 12 j 15:14	16°♏57'02	0°36'51	
morning rise	-259 Nov 25 j 05:25	19°♏48'58		
	-258 Jan 12 j 10:17	0°♐		
retrograde	-258 Mar 30 j 02:00	8°♐02'37		
opposition	-258 May 30 j 01:10	3°♐09'14	0°26'37	
min. Earth dist.	-258 May 31 j 04:34	3°♐00'27	4.19635 AU	
	-258 Jun 25 j 19:16	30°℞♏		
direct	-258 Jul 30 j 05:40	28°♏12'50		
	-258 Sep 02 j 08:54	0°♐		
desc. node	-258 Nov 19 j 07:09	13°♐49'46		
evening set	-258 Dec 02 j 08:36	16°♐50'02		
max. Earth dist.	-258 Dec 13 j 21:41	19°♐32'07	6.12944 AU	
conjunction	-258 Dec 15 j 01:46	19°♐48'36	-0°02'48	
minimum elong	-258 Dec 15 j 01:44	19°♐48'35	0°02'48	
behind sun begin	-258 Dec 14 j 17:45	19°♐43'55		
behind sun end	-258 Dec 15 j 09:44	19°♐53'15		
morning rise	-258 Dec 27 j 19:43	22°♐47'52		
	-257 Jan 28 j 19:32	0°♑		
retrograde	-257 May 05 j 07:34	12°♑06'42		
opposition	-257 Jul 04 j 23:21	7°♑10'21	-0°35'48	
min. Earth dist.	-257 Jul 05 j 10:43	7°♑06'39	4.06669 AU	
direct	-257 Sep 02 j 18:23	2°♑16'12		
evening set	-256 Jan 05 j 14:53	21°♑27'17		
conjunction	-256 Jan 18 j 13:00	24°♑32'55	-0°43'02	
minimum elong	-256 Jan 18 j 12:57	24°♑32'53	0°43'01	
max. Earth dist.	-256 Jan 18 j 11:51	24°♑32'13	6.01594 AU	
morning rise	-256 Jan 31 j 13:35	27°♑40'00		
	-256 Feb 10 j 10:18	0°♒		
	-256 Apr 28 j 05:11	15°♒		
retrograde	-256 Jun 11 j 00:09	17°♒55'32		
	-256 Jul 25 j 02:48	15°℞♒		
opposition	-256 Aug 10 j 06:33	12°♒55'17	-1°28'14	
min. Earth dist.	-256 Aug 09 j 19:22	12°♒58'59	3.98151 AU	
direct	-256 Oct 07 j 17:52	8°♒01'53		
	-256 Dec 14 j 11:11	15°♒		
evening set	-255 Feb 09 j 20:10	27°♒35'37		
	-255 Feb 19 j 20:08	0°♓		
conjunction	-255 Feb 23 j 01:27	0°♓46'39	-1°08'17	
minimum elong	-255 Feb 23 j 01:26	0°♓46'38	1°08'18	
max. Earth dist.	-255 Feb 24 j 07:15	1°♓04'37	5.96643 AU	
morning rise	-255 Mar 08 j 10:00	3°♓59'25		
retrograde	-255 Jul 18 j 21:37	24°♓35'38		
opposition	-255 Sep 16 j 17:12	19°♓31'46	-1°47'05	
min. Earth dist.	-255 Sep 15 j 13:21	19°♓41'12	3.97475 AU	
direct	-255 Nov 13 j 14:47	14°♓36'53		
	-254 Mar 01 j 07:51	0°♈		
evening set	-254 Mar 19 j 05:00	4°♈10'11		
conjunction	-254 Apr 01 j 18:15	7°♈23'09	-1°07'06	
minimum elong	-254 Apr 01 j 18:17	7°♈23'10	1°07'07	
max. Earth dist.	-254 Apr 03 j 21:36	7°♈53'40	6.00206 AU	
morning rise	-254 Apr 15 j 10:10	10°♈37'23		
	-254 Aug 02 j 22:10	0°♉		
retrograde	-254 Aug 24 j 09:00	0°♉45'03		
	-254 Sep 14 j 14:20	30°℞♈		
opposition	-254 Oct 22 j 22:09	25°♈39'48	-1°23'59	
min. Earth dist.	-254 Oct 21 j 12:32	25°♈51'16	4.04914 AU	
direct	-254 Dec 20 j 02:28	20°♈42'03		
	-253 Mar 11 j 00:32	0°♉		
evening set	-253 Apr 25 j 09:27	9°♉51'57		
conjunction	-253 May 09 j 03:30	13°♉02'19	-0°40'36	
minimum elong	-253 May 09 j 03:33	13°♉02'21	0°40'36	
max. Earth dist.	-253 May 11 j 05:42	13°♉31'18	6.10798 AU	
	-253 May 17 j 15:36	15°♉		
morning rise	-253 May 22 j 22:57	16°♉13'05		
	-253 Jul 29 j 15:04	0°♊		
retrograde	-253 Sep 27 j 13:45	5°♊19'08		
min. Earth dist.	-253 Nov 24 j 23:40	0°♊24'43	4.17445 AU	
opposition	-253 Nov 26 j 03:21	0°♊15'18	-0°31'42	

Attention, astronomical year style is used: The year -253 in astronomical counting style is the year 254 BCE in historical counting style.

	-253 Nov 28 j 00:24	30°℞♉		
direct	-252 Jan 24 j 09:04	25°♉14'35		
	-252 Mar 21 j 02:41	0°♊		
evening set	-252 May 30 j 05:19	13°♊50'09		
conjunction	-252 Jun 12 j 22:50	16°♊54'22	-0°00'59	
minimum elong	-252 Jun 12 j 22:52	16°♊54'22	0°00'59	
behind sun begin	-252 Jun 12 j 14:31	16°♊49'43		
behind sun end	-252 Jun 13 j 07:13	16°♊59'01		
max. Earth dist.	-252 Jun 14 j 07:58	17°♊12'55	6.24287 AU	
asc. node	-252 Jun 22 j 05:45	18°♊59'04		
morning rise	-252 Jun 26 j 15:25	19°♊57'52		
	-252 Aug 14 j 00:45	0°♋		
retrograde	-252 Oct 28 j 18:06	7°♋58'25		
opposition	-252 Dec 27 j 11:00	2°♋58'04	0°27'45	
min. Earth dist.	-252 Dec 26 j 22:07	3°♋02'22	4.30600 AU	
	-251 Jan 20 j 06:52	30°℞♊		
direct	-251 Feb 26 j 01:31	27°♊55'25		
	-251 Apr 04 j 07:02	0°♋		
evening set	-251 Jul 03 j 05:03	15°♋59'17		
conjunction	-251 Jul 16 j 16:31	18°♋56'02	0°37'24	
minimum elong	-251 Jul 16 j 16:29	18°♋56'00	0°37'24	
max. Earth dist.	-251 Jul 16 j 21:46	18°♋58'54	6.36101 AU	
morning rise	-251 Jul 30 j 01:41	21°♋51'27		
	-251 Sep 07 j 11:34	0°♌		
retrograde	-251 Nov 28 j 11:28	9°♌03'34		
opposition	-250 Jan 27 j 12:24	4°♌07'04	1°16'03	
min. Earth dist.	-250 Jan 27 j 17:17	4°♌05'28	4.40276 AU	
	-250 Mar 05 j 12:35	30°℞♋		
direct	-250 Mar 30 j 08:04	29°♋03'45		
	-250 Apr 24 j 10:13	0°♌		
	-250 Jul 27 j 03:10	15°♌		
evening set	-250 Aug 04 j 11:19	16°♌47'01		
conjunction	-250 Aug 17 j 14:36	19°♌37'38	1°03'48	
minimum elong	-250 Aug 17 j 14:34	19°♌37'37	1°03'48	
max. Earth dist.	-250 Aug 16 j 18:47	19°♌26'53	6.42872 AU	
morning rise	-250 Aug 30 j 14:40	22°♌26'41		
	-250 Oct 06 j 07:24	0°♍		
retrograde	-250 Dec 28 j 17:48	9°♍16'23		
opposition	-249 Feb 27 j 04:09	4°♍22'58	1°42'09	
min. Earth dist.	-249 Feb 28 j 01:09	4°♍16'12	4.43862 AU	
	-249 Apr 09 j 17:45	30°℞♌		
direct	-249 Apr 30 j 18:14	29°♌20'18		
	-249 May 21 j 22:58	0°♍		
evening set	-249 Sep 04 j 13:36	16°♍57'29		
max. Earth dist.	-249 Sep 15 j 16:56	19°♍22'57	6.42899 AU	
conjunction	-249 Sep 17 j 09:24	19°♍45'03	1°12'22	
minimum elong	-249 Sep 17 j 09:24	19°♍45'02	1°12'22	
morning rise	-249 Sep 30 j 02:36	22°♍31'22		
	-249 Nov 05 j 03:24	0°♎		
retrograde	-248 Jan 28 j 13:57	9°♎26'33		
opposition	-248 Mar 29 j 07:29	4°♎34'41	1°40'46	
min. Earth dist.	-248 Mar 30 j 16:28	4°♎24'10	4.40421 AU	
	-248 May 13 j 21:32	30°℞♍		
direct	-248 May 31 j 01:43	29°♍33'34		
	-248 Jun 17 j 05:45	0°♎		
evening set	-248 Oct 04 j 06:27	17°♎20'05		
max. Earth dist.	-248 Oct 14 j 21:50	19°♎41'38	6.36179 AU	
conjunction	-248 Oct 16 j 22:10	20°♎08'32	1°01'06	
minimum elong	-248 Oct 16 j 22:12	20°♎08'33	1°01'05	
morning rise	-248 Oct 29 j 11:54	22°♎56'14		
	-248 Dec 01 j 16:15	0°♏		
retrograde	-247 Feb 28 j 18:12	10°♏23'53		

opposition	-247 Apr 30 j 17:36	5°♏31'55	1°11'06	
min. Earth dist.	-247 May 02 j 03:59	5°♏20'59	4.30795 AU	
direct	-247 Jul 01 j 21:08	0°♏33'14		
	-247 Oct 18 j 19:57	15°♏		
evening set	-247 Nov 04 j 11:40	18°♏43'00		
max. Earth dist.	-247 Nov 15 j 06:58	21°♏10'52	6.24423 AU	
conjunction	-247 Nov 17 j 02:38	21°♏35'52	0°31'48	
minimum elong	-247 Nov 17 j 02:40	21°♏35'53	0°31'48	
morning rise	-247 Nov 29 j 17:10	24°♏28'46		
	-247 Dec 24 j 13:54	0°♐		
retrograde	-246 Apr 04 j 03:14	12°♐51'37		
opposition	-246 Jun 04 j 00:20	7°♐57'56	0°18'05	
min. Earth dist.	-246 Jun 05 j 03:03	7°♐49'22	4.17586 AU	
direct	-246 Aug 04 j 01:02	3°♐01'56		
desc. node	-246 Sep 28 j 09:44	7°♐33'42		
evening set	-246 Dec 07 j 02:09	21°♐44'41		
conjunction	-246 Dec 19 j 19:51	24°♐44'20	-0°08'49	
minimum elong	-246 Dec 19 j 19:51	24°♐44'20	0°08'49	
behind sun begin	-246 Dec 19 j 12:54	24°♐40'15		
behind sun end	-246 Dec 20 j 02:48	24°♐48'24		
max. Earth dist.	-246 Dec 18 j 18:15	24°♐29'15	6.10952 AU	
morning rise	-245 Jan 01 j 14:44	27°♐44'51		
	-245 Jan 11 j 07:09	0°♑		
retrograde	-245 May 10 j 13:22	17°♑13'30		
opposition	-245 Jul 10 j 04:46	12°♑16'41	-0°44'29	
min. Earth dist.	-245 Jul 10 j 12:15	12°♑14'15	4.04937 AU	
direct	-245 Sep 07 j 17:36	7°♑22'51		
evening set	-244 Jan 10 j 16:07	26°♑38'57		
conjunction	-244 Jan 23 j 15:10	29°♑45'35	-0°47'54	
minimum elong	-244 Jan 23 j 15:07	29°♑45'34	0°47'54	
max. Earth dist.	-244 Jan 23 j 18:47	29°♑47'46	6.00292 AU	
	-244 Jan 24 j 15:08	0°♒		
morning rise	-244 Feb 05 j 16:49	2°♒53'45		
	-244 Mar 31 j 15:28	15°♒		
retrograde	-244 Jun 16 j 11:14	23°♒15'36		
opposition	-244 Aug 15 j 15:22	18°♒14'48	-1°33'24	
min. Earth dist.	-244 Aug 15 j 01:31	18°♒19'25	3.97450 AU	
	-244 Sep 11 j 09:11	15°℞♒		
direct	-244 Oct 13 j 00:22	13°♒21'23		
	-244 Nov 13 j 08:48	15°♒		
	-243 Feb 02 j 17:11	0°♓		
evening set	-243 Feb 15 j 03:09	2°♓56'54		
conjunction	-243 Feb 28 j 09:41	6°♓08'30	-1°09'52	
minimum elong	-243 Feb 28 j 09:40	6°♓08'29	1°09'51	
max. Earth dist.	-243 Mar 01 j 20:59	6°♓29'45	5.96625 AU	
morning rise	-243 Mar 13 j 19:19	9°♓21'46		
retrograde	-243 Jul 24 j 05:35	29°♓56'41		
opposition	-243 Sep 21 j 23:43	24°♓52'30	-1°46'13	
min. Earth dist.	-243 Sep 20 j 17:59	25°♓02'35	3.98183 AU	
direct	-243 Nov 18 j 20:26	19°♓57'21		
	-242 Feb 10 j 07:57	0°♈		
evening set	-242 Mar 24 j 13:17	9°♈27'57		
conjunction	-242 Apr 07 j 03:16	12°♈40'40	-1°04'40	
minimum elong	-242 Apr 07 j 03:18	12°♈40'42	1°04'39	
max. Earth dist.	-242 Apr 09 j 07:02	13°♈11'19	6.01548 AU	
morning rise	-242 Apr 20 j 20:05	15°♈54'38		
	-242 Jun 27 j 00:14	0°♉		
retrograde	-242 Aug 29 j 07:30	5°♉53'56		
min. Earth dist.	-242 Oct 26 j 11:35	1°♉00'18	4.06731 AU	
opposition	-242 Oct 27 j 21:36	0°♉48'41	-1°17'48	
	-242 Nov 02 j 20:57	30°℞♈		
direct	-242 Dec 25 j 05:03	25°♈50'27		

Attention, astronomical year style is used: The year -241 in astronomical counting style is the year 242 BCE in historical counting style.

	-241 Feb 14 j 23:31	0°♉	
evening set	-241 Apr 30 j 13:23	14°♉54'43	
	-241 Apr 30 j 22:37	15°♉	
conjunction	-241 May 14 j 07:48	18°♉04'16	-0°35'26
minimum elong	-241 May 14 j 07:50	18°♉04'17	0°35'26
max. Earth dist.	-241 May 16 j 09:10	18°♉32'38	6.12942 AU
morning rise	-241 May 28 j 03:00	21°♉13'57	
	-241 Jul 07 j 14:42	0°♊	
retrograde	-241 Oct 02 j 06:06	10°♊09'13	
opposition	-241 Nov 30 j 19:01	5°♊05'48	-0°23'15
min. Earth dist.	-241 Nov 29 j 17:38	5°♊14'24	4.19669 AU
direct	-240 Jan 29 j 06:01	0°♊04'43	
asc. node	-240 May 02 j 00:36	11°♊29'35	
evening set	-240 Jun 04 j 02:11	18°♊34'15	
conjunction	-240 Jun 17 j 19:02	21°♊37'17	0°04'51
minimum elong	-240 Jun 17 j 19:02	21°♊37'17	0°04'51
behind sun begin	-240 Jun 17 j 10:56	21°♊32'47	
behind sun end	-240 Jun 18 j 03:08	21°♊41'47	
max. Earth dist.	-240 Jun 19 j 00:04	21°♊53'28	6.26401 AU
morning rise	-240 Jul 01 j 10:49	24°♊39'32	
	-240 Jul 26 j 05:11	0°♋	
retrograde	-240 Nov 02 j 01:33	12°♋31'09	
opposition	-240 Dec 31 j 20:22	7°♋31'17	0°35'29
min. Earth dist.	-240 Dec 31 j 09:44	7°♋34'50	4.32438 AU
direct	-239 Mar 02 j 14:50	2°♋28'25	
evening set	-239 Jul 07 j 18:56	20°♋28'01	
conjunction	-239 Jul 21 j 05:21	23°♋23'43	0°41'58
minimum elong	-239 Jul 21 j 05:19	23°♋23'42	0°41'58
max. Earth dist.	-239 Jul 21 j 06:54	23°♋24'34	6.37524 AU
morning rise	-239 Aug 03 j 13:09	26°♋18'01	
	-239 Aug 20 j 21:00	0°♌	
retrograde	-239 Dec 02 j 17:08	13°♌25'07	
opposition	-238 Jan 31 j 18:43	8°♌29'09	1°21'09
min. Earth dist.	-238 Feb 01 j 02:33	8°♌26'35	4.41199 AU
direct	-238 Apr 03 j 17:53	3°♌25'51	
	-238 Jul 10 j 10:46	15°♌	
evening set	-238 Aug 08 j 20:25	21°♌07'26	
conjunction	-238 Aug 21 j 22:29	23°♌57'26	1°06'08
minimum elong	-238 Aug 21 j 22:27	23°♌57'25	1°06'08
max. Earth dist.	-238 Aug 20 j 21:33	23°♌43'54	6.43201 AU
morning rise	-238 Sep 03 j 21:36	26°♌45'57	
	-238 Sep 19 j 02:12	0°♍	
retrograde	-237 Jan 02 j 00:33	13°♍35'10	
opposition	-237 Mar 03 j 11:07	8°♍42'01	1°43'39
min. Earth dist.	-237 Mar 04 j 10:48	8°♍34'23	4.43608 AU
direct	-237 May 05 j 02:29	3°♍39'26	
evening set	-237 Sep 08 j 20:31	21°♍17'47	
max. Earth dist.	-237 Sep 19 j 22:15	23°♍42'40	6.42070 AU
conjunction	-237 Sep 21 j 15:46	24°♍05'23	1°11'58
minimum elong	-237 Sep 21 j 15:47	24°♍05'24	1°11'59
morning rise	-237 Oct 04 j 08:09	26°♍51'45	
	-237 Oct 18 j 22:31	0°♎	
retrograde	-236 Feb 01 j 23:36	13°♎50'52	
opposition	-236 Apr 02 j 18:28	8°♎59'06	1°38'15
min. Earth dist.	-236 Apr 04 j 03:45	8°♎48'29	4.39079 AU
direct	-236 Jun 04 j 10:12	3°♎58'18	
evening set	-236 Oct 08 j 14:59	21°♎48'26	
max. Earth dist.	-236 Oct 19 j 05:01	24°♎09'53	6.34424 AU
conjunction	-236 Oct 21 j 06:18	24°♎37'26	0°57'57
minimum elong	-236 Oct 21 j 06:20	24°♎37'28	0°57'55
morning rise	-236 Nov 02 j 20:04	27°♎25'50	
	-236 Nov 14 j 11:57	0°♏	
	-235 Mar 01 j 23:03	15°♏	
retrograde	-235 Mar 05 j 13:38	15°♏01'13	
	-235 Mar 09 j 03:55	15°℞♏	
opposition	-235 May 05 j 11:25	10°♏09'07	1°04'47
min. Earth dist.	-235 May 06 j 22:01	9°♏58'06	4.28728 AU
direct	-235 Jul 06 j 12:17	5°♏10'46	
	-235 Sep 30 j 23:49	15°♏	
evening set	-235 Nov 09 j 00:44	23°♏25'55	
max. Earth dist.	-235 Nov 19 j 22:31	25°♏55'56	6.22236 AU
conjunction	-235 Nov 21 j 16:04	26°♏19'49	0°26'28
minimum elong	-235 Nov 21 j 16:06	26°♏19'50	0°26'28
morning rise	-235 Dec 04 j 07:03	29°♏13'50	
	-235 Dec 07 j 15:55	0°♐	
retrograde	-234 Apr 09 j 04:24	17°♐46'36	
opposition	-234 Jun 09 j 01:45	12°♐52'32	0°09'15
min. Earth dist.	-234 Jun 10 j 01:09	12°♐45'01	4.15458 AU
desc. node	-234 Aug 07 j 02:42	7°♐57'14	
direct	-234 Aug 08 j 20:06	7°♐56'57	
evening set	-234 Dec 11 j 22:08	26°♐45'16	
conjunction	-234 Dec 24 j 16:25	29°♐45'59	-0°14'52
minimum elong	-234 Dec 24 j 16:24	29°♐45'58	0°14'52
behind sun begin	-234 Dec 24 j 13:01	29°♐43'59	
behind sun end	-234 Dec 24 j 19:46	29°♐47'58	
max. Earth dist.	-234 Dec 23 j 19:03	29°♐33'20	6.09076 AU
	-234 Dec 25 j 16:06	0°♑	
morning rise	-233 Jan 06 j 12:10	2°♑47'41	
retrograde	-233 May 15 j 22:48	22°♑25'27	
opposition	-233 Jul 15 j 12:27	17°♑28'03	-0°52'56
min. Earth dist.	-233 Jul 15 j 16:52	17°♑26'36	4.03490 AU
direct	-233 Sep 12 j 21:40	12°♑34'21	
	-232 Jan 07 j 19:13	0°♒	
evening set	-232 Jan 15 j 18:57	1°♒54'00	
conjunction	-232 Jan 28 j 19:00	5°♒01'27	-0°52'26
minimum elong	-232 Jan 28 j 18:57	5°♒01'25	0°52'27
max. Earth dist.	-232 Jan 29 j 04:32	5°♒07'11	5.99405 AU
morning rise	-232 Feb 10 j 21:38	8°♒10'27	
	-232 Mar 11 j 08:21	15°♒	
retrograde	-232 Jun 21 j 21:55	28°♒36'13	
min. Earth dist.	-232 Aug 20 j 07:24	23°♒40'29	3.97251 AU
opposition	-232 Aug 21 j 00:16	23°♒34'51	-1°37'47
direct	-232 Oct 18 j 05:57	18°♒41'19	
	-231 Jan 15 j 09:53	0°♓	
evening set	-231 Feb 20 j 10:24	8°♓16'40	
conjunction	-231 Mar 05 j 17:49	11°♓28'28	-1°10'50
minimum elong	-231 Mar 05 j 17:48	11°♓28'28	1°10'50
max. Earth dist.	-231 Mar 07 j 07:21	11°♓51'02	5.97080 AU
morning rise	-231 Mar 19 j 04:39	14°♓41'59	
	-231 May 31 j 03:26	0°♈	
retrograde	-231 Jul 29 j 09:34	5°♈13'23	
min. Earth dist.	-231 Sep 25 j 20:39	0°♈19'35	3.99247 AU
opposition	-231 Sep 27 j 04:16	0°♈08'51	-1°44'29
	-231 Sep 28 j 06:19	30°℞♓	
direct	-231 Nov 24 j 01:25	25°♓13'17	
	-230 Jan 18 j 04:07	0°♈	
evening set	-230 Mar 29 j 19:48	14°♈40'10	
conjunction	-230 Apr 12 j 10:45	17°♈52'35	-1°01'44
minimum elong	-230 Apr 12 j 10:48	17°♈52'36	1°01'44
max. Earth dist.	-230 Apr 14 j 16:02	18°♈23'59	6.03116 AU
morning rise	-230 Apr 26 j 04:02	21°♈06'02	
	-230 Jun 05 j 03:42	0°♉	
retrograde	-230 Sep 03 j 06:23	10°♉56'27	

Attention, astronomical year style is used: The year -230 in astronomical counting style is the year 231 BCE in historical counting style.

min. Earth dist.	-230 Oct 31 j 10:33	6°♉02'26	4.08613 AU
opposition	-230 Nov 01 j 19:04	5°♉51'21	-1°11'10
direct	-230 Dec 30 j 06:41	0°♉52'42	
	-229 Apr 13 j 21:11	15°♉	
evening set	-229 May 05 j 15:17	19°♉51'28	
conjunction	-229 May 19 j 09:45	23°♉00'09	-0°30'06
minimum elong	-229 May 19 j 09:47	23°♉00'11	0°30'05
max. Earth dist.	-229 May 21 j 09:02	23°♉27'11	6.14976 AU
morning rise	-229 Jun 02 j 04:51	26°♉08'52	
	-229 Jun 19 j 11:02	0°♊	
retrograde	-229 Oct 06 j 18:20	14°♊54'13	
min. Earth dist.	-229 Dec 04 j 08:45	9°♊59'27	4.21672 AU
opposition	-229 Dec 05 j 08:55	9°♊51'16	-0°14'47
direct	-228 Feb 02 j 23:25	4°♊49'53	
asc. node	-228 Mar 11 j 20:24	7°♊02'15	
evening set	-228 Jun 08 j 21:50	23°♊14'32	
conjunction	-228 Jun 22 j 13:59	26°♊16'30	0°10'30
minimum elong	-228 Jun 22 j 13:58	26°♊16'30	0°10'29
behind sun begin	-228 Jun 22 j 07:34	26°♊12'58	
behind sun end	-228 Jun 22 j 20:22	26°♊20'02	
max. Earth dist.	-228 Jun 23 j 14:34	26°♊30'10	6.28230 AU
morning rise	-228 Jul 06 j 04:49	29°♊17'35	
	-228 Jul 09 j 10:00	0°♋	
retrograde	-228 Nov 06 j 10:50	17°♋01'37	
opposition	-227 Jan 05 j 05:18	12°♋02'24	0°42'58
min. Earth dist.	-227 Jan 04 j 22:09	12°♋04'47	4.33955 AU
direct	-227 Mar 07 j 04:50	6°♋59'25	
evening set	-227 Jul 12 j 08:34	24°♋55'55	
conjunction	-227 Jul 25 j 17:54	27°♋50'45	0°46'17
minimum elong	-227 Jul 25 j 17:52	27°♋50'43	0°46'17
max. Earth dist.	-227 Jul 25 j 15:14	27°♋49'18	6.38606 AU
	-227 Aug 04 j 15:11	0°♌	
morning rise	-227 Aug 08 j 00:31	0°♌44'07	
	-227 Oct 24 j 23:46	15°♌	
retrograde	-227 Dec 06 j 22:32	17°♌47'32	
	-226 Jan 19 j 03:42	15℞♌	
opposition	-226 Feb 05 j 01:44	12°♌52'02	1°25'52
min. Earth dist.	-226 Feb 05 j 11:40	12°♌48'47	4.41811 AU
direct	-226 Apr 08 j 02:58	7°♌48'46	
	-226 Jun 21 j 09:02	15°♌	
evening set	-226 Aug 13 j 05:55	25°♌29'38	
max. Earth dist.	-226 Aug 25 j 03:44	28°♌04'22	6.43293 AU
conjunction	-226 Aug 26 j 06:58	28°♌19'09	1°08'07
minimum elong	-226 Aug 26 j 06:56	28°♌19'09	1°08'07
	-226 Sep 03 j 00:40	0°♍	
morning rise	-226 Sep 08 j 04:54	1°♍07'12	
retrograde	-225 Jan 06 j 08:09	17°♍56'49	
opposition	-225 Mar 07 j 19:35	13°♍04'02	1°44'37
min. Earth dist.	-225 Mar 08 j 21:12	12°♍55'48	4.43191 AU
direct	-225 May 09 j 11:40	8°♍01'44	
evening set	-225 Sep 13 j 04:48	25°♍41'36	
max. Earth dist.	-225 Sep 24 j 02:37	28°♍04'47	6.41161 AU
conjunction	-225 Sep 25 j 23:12	28°♍29'16	1°11'10
minimum elong	-225 Sep 25 j 23:13	28°♍29'16	1°11'09
	-225 Oct 02 j 20:36	0°♎	
morning rise	-225 Oct 08 j 15:10	1°♎15'48	
retrograde	-224 Feb 06 j 12:52	18°♎19'11	
opposition	-224 Apr 07 j 07:13	13°♎27'30	1°35'08
min. Earth dist.	-224 Apr 08 j 17:28	13°♎16'35	4.37748 AU
direct	-224 Jun 08 j 21:44	8°♎27'02	
evening set	-224 Oct 13 j 00:39	26°♎20'40	
max. Earth dist.	-224 Oct 23 j 16:19	28°♎43'34	6.32797 AU
conjunction	-224 Oct 25 j 15:57	29°♎10'17	0°54'24
minimum elong	-224 Oct 25 j 15:59	29°♎10'18	0°54'24
	-224 Oct 29 j 08:30	0°♏	
morning rise	-224 Nov 07 j 05:32	1°♏59'20	
	-223 Jan 12 j 04:46	15°♏	
retrograde	-223 Mar 10 j 07:48	19°♏42'02	
	-223 May 08 j 22:32	15℞♏	
opposition	-223 May 10 j 06:31	14°♏49'49	0°57'59
min. Earth dist.	-223 May 11 j 15:30	14°♏39'18	4.26922 AU
direct	-223 Jul 11 j 02:57	9°♏51'58	
	-223 Sep 09 j 07:31	15°♏	
evening set	-223 Nov 13 j 14:35	28°♏11'30	
	-223 Nov 21 j 11:19	0°♐	
max. Earth dist.	-223 Nov 24 j 14:33	0°♐43'26	6.20420 AU
conjunction	-223 Nov 26 j 06:00	1°♐06'14	0°20'57
minimum elong	-223 Nov 26 j 06:02	1°♐06'15	0°20'56
morning rise	-223 Dec 08 j 21:33	4°♐01'15	
retrograde	-222 Apr 14 j 07:01	22°♐42'45	
opposition	-222 Jun 14 j 03:30	17°♐48'17	0°00'22
min. Earth dist.	-222 Jun 15 j 00:33	17°♐41'30	4.13762 AU
desc. node	-222 Jun 16 j 10:50	17°♐30'28	
direct	-222 Aug 13 j 18:25	12°♐53'02	
	-222 Dec 09 j 05:38	0°♑	
evening set	-222 Dec 16 j 17:39	1°♑45'20	
conjunction	-222 Dec 29 j 12:40	4°♑46'57	-0°20'44
minimum elong	-222 Dec 29 j 12:39	4°♑46'56	0°20'44
max. Earth dist.	-222 Dec 28 j 20:27	4°♑37'20	6.07674 AU
morning rise	-221 Jan 11 j 09:07	7°♑49'35	
retrograde	-221 May 21 j 05:51	27°♑34'22	
opposition	-221 Jul 20 j 18:08	22°♑36'27	-1°00'49
min. Earth dist.	-221 Jul 20 j 19:20	22°♑36'04	4.02537 AU
direct	-221 Sep 17 j 22:57	17°♑42'56	
	-221 Dec 21 j 06:23	0°♒	
evening set	-220 Jan 20 j 20:09	7°♒04'33	
conjunction	-220 Feb 02 j 20:54	10°♒12'31	-0°56'26
minimum elong	-220 Feb 02 j 20:51	10°♒12'30	0°56'26
max. Earth dist.	-220 Feb 03 j 09:36	10°♒20'10	5.98962 AU
morning rise	-220 Feb 16 j 00:41	13°♒22'10	
	-220 Feb 22 j 21:11	15°♒	
	-220 May 07 j 17:42	0°♓	
retrograde	-220 Jun 27 j 02:38	3°♓49'57	
	-220 Aug 17 j 04:32	30℞♒	
min. Earth dist.	-220 Aug 25 j 09:31	28°♒54'42	3.97384 AU
opposition	-220 Aug 26 j 05:31	28°♒48'00	-1°41'11
direct	-220 Oct 23 j 08:59	23°♒54'15	
	-220 Dec 25 j 03:36	0°♓	
evening set	-219 Feb 25 j 14:09	13°♓28'26	
conjunction	-219 Mar 10 j 22:45	16°♓40'24	-1°11'12
minimum elong	-219 Mar 10 j 22:45	16°♓40'24	1°11'12
max. Earth dist.	-219 Mar 12 j 16:13	17°♓05'17	5.97765 AU
morning rise	-219 Mar 24 j 10:24	19°♓53'58	
	-219 May 08 j 09:41	0°♈	
retrograde	-219 Aug 03 j 11:56	10°♈20'59	
min. Earth dist.	-219 Sep 30 j 21:26	5°♈26'53	4.00401 AU
opposition	-219 Oct 02 j 04:50	5°♈16'12	-1°41'57
direct	-219 Nov 29 j 04:00	0°♈20'14	
evening set	-218 Apr 03 j 22:38	19°♈43'17	
conjunction	-218 Apr 17 j 14:15	22°♈55'19	-0°58'26
minimum elong	-218 Apr 17 j 14:18	22°♈55'20	0°58'26
max. Earth dist.	-218 Apr 19 j 19:21	23°♈26'27	6.04619 AU
morning rise	-218 May 01 j 08:10	26°♈08'18	
	-218 May 18 j 04:27	0°♉	

Attention, astronomical year style is used: The year -218 in astronomical counting style is the year 219 BCE in historical counting style.

	-218 Aug 16 j 07:23	15°♉	
retrograde	-218 Sep 07 j 22:58	15°♉50'11	
	-218 Sep 30 j 09:50	15°℞♉	
min. Earth dist.	-218 Nov 05 j 04:02	10°♉56'17	4.10310 AU
opposition	-218 Nov 06 j 12:25	10°♉45'15	-1°04'16
direct	-217 Jan 04 j 02:05	5°♉46'11	
	-217 Mar 26 j 10:47	15°♉	
evening set	-217 May 10 j 14:01	24°♉40'27	
conjunction	-217 May 24 j 08:29	27°♉48'21	-0°24'43
minimum elong	-217 May 24 j 08:31	27°♉48'22	0°24'42
max. Earth dist.	-217 May 26 j 03:56	28°♉13'06	6.16735 AU
	-217 Jun 03 j 00:01	0°♊	
morning rise	-217 Jun 07 j 03:23	0°♊56'11	
retrograde	-217 Oct 11 j 06:19	19°♊32'56	
opposition	-217 Dec 09 j 20:24	14°♊30'26	-0°06'30
min. Earth dist.	-217 Dec 08 j 23:21	14°♊37'33	4.23321 AU
asc. node	-216 Jan 21 j 17:54	9°♊56'44	
direct	-216 Feb 07 j 15:57	9°♊28'45	
evening set	-216 Jun 13 j 15:03	27°♊49'42	
	-216 Jun 23 j 10:55	0°♋	
conjunction	-216 Jun 27 j 06:39	0°♋50'49	0°15'56
minimum elong	-216 Jun 27 j 06:37	0°♋50'49	0°15'57
max. Earth dist.	-216 Jun 28 j 04:24	1°♋02'52	6.29657 AU
morning rise	-216 Jul 10 j 20:30	3°♋50'54	
retrograde	-216 Nov 10 j 16:41	21°♋28'53	
opposition	-215 Jan 09 j 13:04	16°♋30'11	0°50'02
min. Earth dist.	-215 Jan 09 j 07:26	16°♋32'03	4.35079 AU
direct	-215 Mar 11 j 15:23	11°♋27'07	
evening set	-215 Jul 16 j 21:11	29°♋21'37	
	-215 Jul 19 j 20:04	0°♌	
conjunction	-215 Jul 30 j 05:20	2°♌15'41	0°50'16
minimum elong	-215 Jul 30 j 05:18	2°♌15'39	0°50'16
max. Earth dist.	-215 Jul 29 j 22:28	2°♌11'56	6.39351 AU
morning rise	-215 Aug 12 j 10:49	5°♌08'17	
	-215 Sep 30 j 11:33	15°♌	
retrograde	-215 Dec 11 j 05:31	22°♌09'03	
opposition	-214 Feb 09 j 08:52	17°♌14'01	1°30'01
min. Earth dist.	-214 Feb 09 j 21:45	17°♌09'49	4.42157 AU
	-214 Feb 27 j 03:38	15°℞♌	
direct	-214 Apr 12 j 13:34	12°♌10'50	
	-214 May 27 j 04:34	15°♌	
evening set	-214 Aug 17 j 15:16	29°♌51'25	
	-214 Aug 18 j 07:11	0°♍	
max. Earth dist.	-214 Aug 29 j 09:09	2°♍24'10	6.43204 AU
conjunction	-214 Aug 30 j 15:19	2°♍40'35	1°09'41
minimum elong	-214 Aug 30 j 15:18	2°♍40'34	1°09'41
morning rise	-214 Sep 12 j 12:18	5°♍28'16	
retrograde	-213 Jan 10 j 15:44	22°♍18'42	
opposition	-213 Mar 12 j 04:32	17°♍26'06	1°44'57
min. Earth dist.	-213 Mar 13 j 06:59	17°♍17'37	4.42704 AU
direct	-213 May 13 j 20:40	12°♍23'59	
evening set	-213 Sep 17 j 12:49	0°♎05'10	
	-213 Sep 17 j 03:19	0°♎	
max. Earth dist.	-213 Sep 28 j 10:29	2°♎28'36	6.40310 AU
conjunction	-213 Sep 30 j 06:40	2°♎52'54	1°09'55
minimum elong	-213 Sep 30 j 06:41	2°♎52'55	1°09'54
morning rise	-213 Oct 12 j 21:57	5°♎39'33	
retrograde	-212 Feb 11 j 00:48	22°♎46'54	
opposition	-212 Apr 11 j 20:22	17°♎55'13	1°31'25
min. Earth dist.	-212 Apr 13 j 06:57	17°♎44'12	4.36569 AU
direct	-212 Jun 13 j 09:40	12°♎55'07	
	-212 Oct 13 j 13:37	0°♏	
evening set	-212 Oct 17 j 09:48	0°♏51'17	
max. Earth dist.	-212 Oct 28 j 00:34	3°♏14'14	6.31364 AU
conjunction	-212 Oct 30 j 00:45	3°♏41'22	0°50'32
minimum elong	-212 Oct 30 j 00:48	3°♏41'23	0°50'32
morning rise	-212 Nov 11 j 14:32	6°♏31'03	
	-212 Dec 21 j 11:57	15°♏	
retrograde	-211 Mar 15 j 02:13	24°♏20'29	
opposition	-211 May 15 j 01:09	19°♏27'58	0°50'48
min. Earth dist.	-211 May 16 j 08:57	19°♏17'49	4.25296 AU
	-211 Jun 27 j 21:51	15°℞♏	
direct	-211 Jul 15 j 18:36	14°♏30'27	
	-211 Aug 02 j 15:14	15°♏	
	-211 Nov 05 j 09:30	0°♐	
evening set	-211 Nov 18 j 03:19	2°♐53'43	
max. Earth dist.	-211 Nov 29 j 07:14	5°♐28'27	6.18737 AU
conjunction	-211 Nov 30 j 19:10	5°♐49'17	0°15'19
minimum elong	-211 Nov 30 j 19:11	5°♐49'18	0°15'19
behind sun begin	-211 Nov 30 j 16:22	5°♐47'40	
behind sun end	-211 Nov 30 j 22:01	5°♐50'55	
morning rise	-211 Dec 13 j 11:03	8°♐45'12	
retrograde	-210 Apr 19 j 07:58	27°♐35'01	
desc. node	-210 Apr 26 j 06:06	27°♐30'31	
opposition	-210 Jun 19 j 03:49	22°♐40'10	-0°08'30
min. Earth dist.	-210 Jun 19 j 22:49	22°♐34'03	4.12141 AU
direct	-210 Aug 18 j 14:10	17°♐45'15	
	-210 Nov 22 j 04:34	0°♑	
evening set	-210 Dec 21 j 12:11	6°♑41'37	
conjunction	-209 Jan 03 j 07:41	9°♑44'06	-0°26'26
minimum elong	-209 Jan 03 j 07:39	9°♑44'05	0°26'27
max. Earth dist.	-209 Jan 02 j 17:46	9°♑35'50	6.06239 AU
morning rise	-209 Jan 16 j 05:10	12°♑47'47	
	-209 Apr 14 j 13:53	0°♒	
retrograde	-209 May 26 j 10:59	2°♒40'06	
	-209 Jul 07 j 16:00	30°℞♑	
opposition	-209 Jul 25 j 22:37	27°♑41'36	-1°08'15
min. Earth dist.	-209 Jul 25 j 20:25	27°♑42'19	4.01431 AU
direct	-209 Sep 22 j 22:42	22°♑48'09	
	-209 Dec 01 j 06:32	0°♒	
evening set	-208 Jan 25 j 20:38	12°♒12'42	
	-208 Feb 06 j 10:56	15°♒	
conjunction	-208 Feb 07 j 22:31	15°♒21'27	-1°00'01
minimum elong	-208 Feb 07 j 22:28	15°♒21'25	1°00'01
max. Earth dist.	-208 Feb 08 j 16:35	15°♒32'20	5.98287 AU
morning rise	-208 Feb 21 j 03:12	18°♒31'49	
	-208 Apr 12 j 15:47	0°♓	
retrograde	-208 Jul 02 j 10:11	9°♓02'44	
opposition	-208 Aug 31 j 10:29	4°♓00'19	-1°43'51
min. Earth dist.	-208 Aug 30 j 13:19	4°♓07'25	3.97228 AU
	-208 Oct 05 j 13:45	30°℞♒	
direct	-208 Oct 28 j 12:38	29°♒06'23	
	-208 Nov 20 j 09:56	0°♓	
evening set	-207 Mar 02 j 18:52	18°♓40'53	
conjunction	-207 Mar 16 j 04:28	21°♓53'11	-1°11'02
minimum elong	-207 Mar 16 j 04:29	21°♓53'12	1°11'02
max. Earth dist.	-207 Mar 17 j 24:00	22°♓19'15	5.98118 AU
morning rise	-207 Mar 29 j 17:19	25°♓07'05	
	-207 Apr 19 j 16:23	0°♈	
retrograde	-207 Aug 08 j 13:47	15°♈30'50	
min. Earth dist.	-207 Oct 05 j 20:58	10°♈37'07	4.01237 AU
opposition	-207 Oct 07 j 05:54	10°♈25'55	-1°38'40
direct	-207 Dec 04 j 04:44	5°♈29'33	
evening set	-206 Apr 09 j 03:23	24°♈50'18	

Attention, astronomical year style is used: The year -206 in astronomical counting style is the year 207 BCE in historical counting style.

conjunction	-206 Apr 22 j 19:45	28°♈02'08	-0°54'39
minimum elong	-206 Apr 22 j 19:48	28°♈02'10	0°54'40
max. Earth dist.	-206 Apr 24 j 23:43	28°♈32'32	6.05854 AU
	-206 May 01 j 05:31	0°♉	
morning rise	-206 May 06 j 14:14	1°♉14'48	
	-206 Jul 11 j 20:38	15°♉	
retrograde	-206 Sep 12 j 19:03	20°♉49'16	
min. Earth dist.	-206 Nov 10 j 01:13	15°♉55'00	4.11788 AU
opposition	-206 Nov 11 j 07:57	15°♉44'31	-0°56'48
	-206 Nov 16 j 19:02	15°℞♉	
direct	-205 Jan 09 j 01:28	10°♉45'04	
	-205 Mar 02 j 20:36	15°♉	
evening set	-205 May 15 j 15:05	29°♉35'36	
	-205 May 17 j 10:18	0°♊	
conjunction	-205 May 29 j 09:40	2°♊42'50	-0°19'02
minimum elong	-205 May 29 j 09:42	2°♊42'51	0°19'02
max. Earth dist.	-205 May 31 j 04:17	3°♊07'01	6.18360 AU
morning rise	-205 Jun 12 j 04:09	5°♊49'48	
retrograde	-205 Oct 15 j 19:14	24°♊18'21	
asc. node	-205 Nov 30 j 21:35	21°♊03'27	
opposition	-205 Dec 14 j 10:20	19°♊16'24	0°02'03
min. Earth dist.	-205 Dec 13 j 14:10	19°♊23'12	4.24958 AU
direct	-204 Feb 12 j 09:11	14°♊14'34	
	-204 Jun 06 j 19:56	0°♋	
evening set	-204 Jun 18 j 11:05	2°♋31'48	
conjunction	-204 Jul 02 j 01:41	5°♋31'54	0°21'27
minimum elong	-204 Jul 02 j 01:39	5°♋31'54	0°21'28
max. Earth dist.	-204 Jul 02 j 18:53	5°♋41'25	6.31206 AU
morning rise	-204 Jul 15 j 14:38	8°♋30'56	
retrograde	-204 Nov 15 j 02:29	26°♋02'23	
opposition	-203 Jan 13 j 23:16	21°♋04'15	0°56'58
min. Earth dist.	-203 Jan 13 j 20:28	21°♋05'11	4.36461 AU
direct	-203 Mar 16 j 06:52	16°♋01'08	
	-203 Jul 03 j 05:25	0°♌	
evening set	-203 Jul 21 j 11:18	3°♌52'30	
conjunction	-203 Aug 03 j 18:25	6°♌45'38	0°54'03
minimum elong	-203 Aug 03 j 18:23	6°♌45'36	0°54'03
max. Earth dist.	-203 Aug 03 j 09:49	6°♌40'57	6.40485 AU
morning rise	-203 Aug 16 j 22:28	9°♌37'14	
	-203 Sep 11 j 12:10	15°♌	
retrograde	-203 Dec 15 j 10:51	26°♌34'02	
opposition	-202 Feb 13 j 17:08	21°♌39'24	1°33'42
min. Earth dist.	-202 Feb 14 j 06:47	21°♌34'58	4.43005 AU
direct	-202 Apr 16 j 23:56	16°♌36'22	
	-202 Aug 01 j 22:21	0°♍	
evening set	-202 Aug 22 j 00:30	4°♍14'40	
conjunction	-202 Sep 03 j 23:20	7°♍03'09	1°10'53
minimum elong	-202 Sep 03 j 23:19	7°♍03'08	1°10'53
max. Earth dist.	-202 Sep 02 j 15:03	6°♍45'36	6.43703 AU
morning rise	-202 Sep 16 j 19:17	9°♍50'14	
retrograde	-201 Jan 14 j 22:57	26°♍39'39	
opposition	-201 Mar 16 j 13:07	21°♍47'16	1°44'41
min. Earth dist.	-201 Mar 17 j 17:42	21°♍38'07	4.42819 AU
direct	-201 May 18 j 07:51	16°♍45'23	
	-201 Sep 01 j 01:37	0°♎	
evening set	-201 Sep 21 j 19:02	4°♎25'39	
max. Earth dist.	-201 Oct 02 j 14:06	6°♎47'50	6.40019 AU
conjunction	-201 Oct 04 j 12:10	7°♎13'12	1°08'19
minimum elong	-201 Oct 04 j 12:11	7°♎13'13	1°08'19
morning rise	-201 Oct 17 j 02:57	9°♎59'45	
retrograde	-200 Feb 15 j 09:13	27°♎09'21	
opposition	-200 Apr 16 j 06:58	22°♎17'35	1°27'15
min. Earth dist.	-200 Apr 17 j 17:28	22°♎06'36	4.35875 AU
direct	-200 Jun 17 j 18:55	17°♎17'43	
	-200 Sep 27 j 13:20	0°♏	
evening set	-200 Oct 21 j 15:46	5°♏14'56	
max. Earth dist.	-200 Nov 01 j 07:57	7°♏39'00	6.30325 AU
conjunction	-200 Nov 03 j 06:39	8°♏05'22	0°46'29
minimum elong	-200 Nov 03 j 06:41	8°♏05'23	0°46'29
morning rise	-200 Nov 15 j 20:16	10°♏55'27	
	-200 Dec 04 j 07:12	15°♏	
retrograde	-199 Mar 19 j 16:44	28°♏50'25	
opposition	-199 May 19 j 16:01	23°♏57'42	0°43'32
min. Earth dist.	-199 May 20 j 23:50	23°♏47'33	4.23945 AU
direct	-199 Jul 20 j 07:06	19°♏00'29	
	-199 Oct 19 j 19:18	0°♐	
evening set	-199 Nov 22 j 12:17	7°♐26'45	
max. Earth dist.	-199 Dec 03 j 16:21	10°♐02'10	6.17183 AU
conjunction	-199 Dec 05 j 04:18	10°♐23'04	0°09'49
minimum elong	-199 Dec 05 j 04:18	10°♐23'04	0°09'49
behind sun begin	-199 Dec 04 j 21:44	10°♐19'16	
behind sun end	-199 Dec 05 j 10:53	10°♐26'52	
morning rise	-199 Dec 17 j 20:53	13°♐19'53	
desc. node	-198 Mar 08 j 05:52	29°♐01'09	
	-198 Mar 16 j 05:24	0°♑	
retrograde	-198 Apr 24 j 04:24	2°♑17'51	
	-198 Jun 02 j 12:23	30°℞♐	
opposition	-198 Jun 23 j 23:56	27°♐22'32	-0°17'00
min. Earth dist.	-198 Jun 24 j 16:37	27°♐17'08	4.10487 AU
direct	-198 Aug 23 j 05:24	22°♐27'47	
	-198 Nov 03 j 11:01	0°♑	
evening set	-198 Dec 26 j 03:08	11°♑28'45	
conjunction	-197 Jan 07 j 23:31	14°♑32'15	-0°31'45
minimum elong	-197 Jan 07 j 23:29	14°♑32'14	0°31'46
max. Earth dist.	-197 Jan 07 j 13:41	14°♑26'23	6.04647 AU
morning rise	-197 Jan 20 j 21:44	17°♑36'59	
	-197 Mar 18 j 21:41	0°♒	
retrograde	-197 May 31 j 14:42	7°♒37'29	
opposition	-197 Jul 30 j 23:20	2°♒38'29	-1°14'57
min. Earth dist.	-197 Jul 30 j 19:57	2°♒39'36	4.00060 AU
	-197 Aug 21 j 03:43	30°℞♑	
direct	-197 Sep 27 j 19:57	27°♑45'04	
	-197 Nov 03 j 22:34	0°♒	
	-196 Jan 21 j 09:59	15°♒	
evening set	-196 Jan 30 j 19:01	17°♒14'01	
conjunction	-196 Feb 12 j 21:54	20°♒23'42	-1°03'02
minimum elong	-196 Feb 12 j 21:52	20°♒23'41	1°03'01
max. Earth dist.	-196 Feb 13 j 18:20	20°♒36'02	5.97258 AU
morning rise	-196 Feb 26 j 03:58	23°♒35'07	
	-196 Mar 24 j 16:51	0°♓	
retrograde	-196 Jul 07 j 14:09	14°♓10'16	
opposition	-196 Sep 05 j 12:51	9°♓07'26	-1°45'40
min. Earth dist.	-196 Sep 04 j 12:53	9°♓15'30	3.96689 AU
direct	-196 Nov 02 j 11:39	4°♓13'16	
evening set	-195 Mar 07 j 22:38	23°♓49'51	
conjunction	-195 Mar 21 j 09:28	27°♓02'42	-1°10'17
minimum elong	-195 Mar 21 j 09:29	27°♓02'43	1°10'16
max. Earth dist.	-195 Mar 23 j 06:57	27°♓29'55	5.98117 AU
	-195 Apr 02 j 18:37	0°♈	
morning rise	-195 Apr 03 j 23:26	0°♈17'05	
retrograde	-195 Aug 13 j 15:39	20°♈38'52	
min. Earth dist.	-195 Oct 10 j 21:14	15°♈45'01	4.01760 AU
opposition	-195 Oct 12 j 06:18	15°♈33'44	-1°34'38
direct	-195 Dec 09 j 06:34	10°♈36'56	

Attention, astronomical year style is used: The year -194 in astronomical counting style is the year 195 BCE in historical counting style.

evening set	-194 Apr 14 j 08:18	29°♈56'27	
	-194 Apr 14 j 14:25	0°♉	
conjunction	-194 Apr 28 j 01:34	3°♉08'12	-0°50'27
minimum elong	-194 Apr 28 j 01:37	3°♉08'14	0°50'26
max. Earth dist.	-194 Apr 30 j 07:17	3°♉39'32	6.06876 AU
morning rise	-194 May 11 j 20:27	6°♉20'35	
	-194 Jun 20 j 02:53	15°♉	
retrograde	-194 Sep 17 j 15:02	25°♉47'53	
min. Earth dist.	-194 Nov 14 j 20:41	20°♉53'48	4.13181 AU
opposition	-194 Nov 16 j 03:19	20°♉43'22	-0°48'55
direct	-193 Jan 13 j 23:17	15°♉43'32	
	-193 Apr 30 j 07:21	0°♊	
evening set	-193 May 20 j 16:52	4°♊30'26	
conjunction	-193 Jun 03 j 11:09	7°♊36'52	-0°13'13
minimum elong	-193 Jun 03 j 11:09	7°♊36'53	0°13'13
behind sun begin	-193 Jun 03 j 06:28	7°♊34'14	
behind sun end	-193 Jun 03 j 15:51	7°♊39'31	
max. Earth dist.	-193 Jun 05 j 02:21	7°♊59'01	6.19998 AU
morning rise	-193 Jun 17 j 05:21	10°♊42'56	
asc. node	-193 Oct 09 j 15:02	28°♊51'31	
retrograde	-193 Oct 20 j 08:27	29°♊02'57	
min. Earth dist.	-193 Dec 18 j 06:10	24°♊07'28	4.26664 AU
opposition	-193 Dec 19 j 00:16	24°♊01'23	0°10'34
direct	-192 Feb 17 j 04:27	18°♊59'11	
	-192 May 20 j 02:01	0°♋	
evening set	-192 Jun 23 j 06:32	7°♋12'10	
conjunction	-192 Jul 06 j 20:24	10°♋11'14	0°26'50
minimum elong	-192 Jul 06 j 20:22	10°♋11'13	0°26'50
max. Earth dist.	-192 Jul 07 j 11:47	10°♋19'42	6.32829 AU
morning rise	-192 Jul 20 j 08:03	13°♋09'04	
	-192 Oct 31 j 17:20	0°♌	
retrograde	-192 Nov 19 j 10:27	0°♌33'44	
	-192 Dec 08 j 02:01	30°℞♋	
opposition	-191 Jan 18 j 09:04	25°♋36'06	1°03'33
min. Earth dist.	-191 Jan 18 j 07:50	25°♋36'30	4.37851 AU
direct	-191 Mar 20 j 20:15	20°♋32'55	
	-191 Jun 15 j 05:00	0°♌	
evening set	-191 Jul 26 j 00:47	8°♌21'02	
conjunction	-191 Aug 08 j 06:29	11°♌13'13	0°57'32
minimum elong	-191 Aug 08 j 06:26	11°♌13'12	0°57'32
max. Earth dist.	-191 Aug 07 j 17:00	11°♌05'54	6.41492 AU
morning rise	-191 Aug 21 j 09:25	14°♌03'56	
	-191 Aug 25 j 17:39	15°♌	
	-191 Nov 25 j 00:35	0°♍	
retrograde	-191 Dec 19 j 18:35	0°♍57'28	
	-190 Jan 13 j 10:36	30°℞♌	
opposition	-190 Feb 18 j 01:24	26°♌03'13	1°36'54
min. Earth dist.	-190 Feb 18 j 18:18	25°♌57'45	4.43564 AU
direct	-190 Apr 21 j 12:03	21°♌00'14	
	-190 Jul 15 j 00:05	0°♍	
evening set	-190 Aug 26 j 09:35	8°♍37'24	
max. Earth dist.	-190 Sep 06 j 21:19	11°♍06'52	6.43743 AU
conjunction	-190 Sep 08 j 07:34	11°♍25'29	1°11'43
minimum elong	-190 Sep 08 j 07:33	11°♍25'29	1°11'43
morning rise	-190 Sep 21 j 02:26	14°♍12'10	
	-190 Dec 24 j 08:22	0°♎	
retrograde	-189 Jan 19 j 05:59	1°♎02'22	
	-189 Feb 14 j 06:12	30°℞♍	
opposition	-189 Mar 20 j 22:37	26°♍10'10	1°43'55
min. Earth dist.	-189 Mar 22 j 03:50	26°♍00'49	4.42350 AU
direct	-189 May 22 j 16:37	21°♍08'31	
	-189 Aug 14 j 04:11	0°♎	
evening set	-189 Sep 26 j 02:47	8°♎50'03	
max. Earth dist.	-189 Oct 06 j 20:20	11°♎11'47	6.39061 AU
conjunction	-189 Oct 08 j 19:19	11°♎37'45	1°06'20
minimum elong	-189 Oct 08 j 19:20	11°♎37'46	1°06'20
morning rise	-189 Oct 21 j 09:42	14°♎24'32	
	-188 Jan 17 j 23:57	0°♏	
retrograde	-188 Feb 19 j 23:24	1°♏38'56	
	-188 Mar 24 j 03:37	30°℞♎	
opposition	-188 Apr 20 j 21:01	26°♎47'11	1°22'31
min. Earth dist.	-188 Apr 22 j 08:49	26°♎35'49	4.34467 AU
direct	-188 Jun 22 j 08:03	21°♎47'40	
	-188 Sep 09 j 03:04	0°♏	
evening set	-188 Oct 26 j 01:22	9°♏48'23	
max. Earth dist.	-188 Nov 05 j 16:50	12°♏12'40	6.28576 AU
conjunction	-188 Nov 07 j 16:12	12°♏39'31	0°42'02
minimum elong	-188 Nov 07 j 16:14	12°♏39'32	0°42'01
	-188 Nov 18 j 00:13	15°♏	
morning rise	-188 Nov 20 j 06:07	15°♏30'25	
	-187 Feb 03 j 07:43	0°♐	
retrograde	-187 Mar 24 j 12:49	3°♐33'42	
	-187 May 14 j 00:56	30°℞♏	
opposition	-187 May 24 j 12:21	28°♏40'42	0°35'39
min. Earth dist.	-187 May 25 j 18:04	28°♏31'12	4.21965 AU
direct	-187 Jul 24 j 22:14	23°♏43'50	
	-187 Sep 29 j 10:56	0°♐	
evening set	-187 Nov 27 j 03:13	12°♐15'23	
max. Earth dist.	-187 Dec 08 j 11:35	14°♐53'57	6.15156 AU
conjunction	-187 Dec 09 j 19:46	15°♐12'45	0°03'56
minimum elong	-187 Dec 09 j 19:47	15°♐12'46	0°03'57
behind sun begin	-187 Dec 09 j 11:53	15°♐08'10	
behind sun end	-187 Dec 10 j 03:41	15°♐17'22	
morning rise	-187 Dec 22 j 12:54	18°♐10'43	
desc. node	-186 Jan 15 j 13:14	23°♐37'35	
	-186 Feb 16 j 00:43	0°♑	
retrograde	-186 Apr 29 j 10:20	7°♑18'38	
opposition	-186 Jun 29 j 03:13	2°♑22'55	-0°25'56
min. Earth dist.	-186 Jun 29 j 18:18	2°♑18'02	4.08577 AU
	-186 Jul 18 j 07:48	30°℞♐	
direct	-186 Aug 28 j 04:03	27°♐28'29	
	-186 Oct 07 j 05:23	0°♑	
evening set	-186 Dec 31 j 01:29	16°♑34'52	
conjunction	-185 Jan 12 j 22:37	19°♑39'26	-0°37'12
minimum elong	-185 Jan 12 j 22:35	19°♑39'25	0°37'12
max. Earth dist.	-185 Jan 12 j 15:52	19°♑35'24	6.03031 AU
morning rise	-185 Jan 25 j 22:01	22°♑45'23	
	-185 Feb 26 j 10:35	0°♒	
retrograde	-185 Jun 05 j 23:05	12°♒53'48	
opposition	-185 Aug 05 j 07:12	7°♒54'17	-1°21'30
min. Earth dist.	-185 Aug 04 j 23:38	7°♒56'47	3.98950 AU
direct	-185 Oct 02 j 22:37	3°♒00'58	
	-184 Jan 03 j 09:49	15°♒	
evening set	-184 Feb 05 j 00:14	22°♒33'03	
conjunction	-184 Feb 18 j 04:14	25°♒43'28	-1°05'44
minimum elong	-184 Feb 18 j 04:12	25°♒43'26	1°05'45
max. Earth dist.	-184 Feb 19 j 05:26	25°♒58'41	5.96765 AU
morning rise	-184 Mar 02 j 11:23	28°♒55'35	
	-184 Mar 06 j 23:20	0°♓	
retrograde	-184 Jul 12 j 23:36	19°♓32'17	
opposition	-184 Sep 10 j 20:27	14°♓28'57	-1°46'42
min. Earth dist.	-184 Sep 09 j 18:39	14°♓37'40	3.96904 AU
direct	-184 Nov 07 j 19:02	9°♓34'31	
evening set	-183 Mar 13 j 06:52	29°♓09'54	

Attention, astronomical year style is used: The year -183 in astronomical counting style is the year 184 BCE in historical counting style.

	-183 Mar 16 j 19:12	0°♈	
conjunction	-183 Mar 26 j 18:51	2°♈22'50	-1°08'59
minimum elong	-183 Mar 26 j 18:53	2°♈22'51	1°08'59
max. Earth dist.	-183 Mar 28 j 20:33	2°♈52'28	5.99028 AU
morning rise	-183 Apr 09 j 09:41	5°♈37'10	
retrograde	-183 Aug 18 j 18:13	25°♈52'29	
min. Earth dist.	-183 Oct 15 j 22:21	20°♈58'48	4.03275 AU
opposition	-183 Oct 17 j 08:13	20°♈47'15	-1°29'49
direct	-183 Dec 14 j 09:56	15°♈50'02	
	-182 Mar 28 j 04:30	0°♉	
evening set	-182 Apr 19 j 14:02	5°♉04'31	
conjunction	-182 May 03 j 07:35	8°♉15'33	-0°45'53
minimum elong	-182 May 03 j 07:38	8°♉15'34	0°45'53
max. Earth dist.	-182 May 05 j 11:28	8°♉45'39	6.08838 AU
morning rise	-182 May 17 j 02:51	11°♉27'08	
	-182 Jun 01 j 17:59	15°♉	
	-182 Sep 01 j 04:53	0°♊	
retrograde	-182 Sep 22 j 07:42	0°♊43'49	
	-182 Oct 13 j 07:23	30°℞♉	
opposition	-182 Nov 20 j 21:20	25°♉39'32	-0°40'49
min. Earth dist.	-182 Nov 19 j 15:47	25°♉49'35	4.15364 AU
direct	-181 Jan 18 j 22:17	20°♉39'14	
	-181 Apr 11 j 15:30	0°♊	
evening set	-181 May 25 j 15:48	9°♊19'49	
conjunction	-181 Jun 08 j 09:49	12°♊25'07	-0°07'28
minimum elong	-181 Jun 08 j 09:50	12°♊25'07	0°07'27
behind sun begin	-181 Jun 08 j 02:15	12°♊20'53	
behind sun end	-181 Jun 08 j 17:24	12°♊29'22	
max. Earth dist.	-181 Jun 09 j 22:58	12°♊46'01	6.22233 AU
morning rise	-181 Jun 22 j 03:10	15°♊29'51	
asc. node	-181 Aug 19 j 12:25	27°♊21'27	
	-181 Sep 05 j 13:07	0°♋	
retrograde	-181 Oct 24 j 18:59	3°♋39'53	
	-181 Dec 13 j 06:11	30°℞♊	
opposition	-181 Dec 23 j 11:14	28°♊38'51	0°18'43
min. Earth dist.	-181 Dec 22 j 19:33	28°♊44'06	4.28736 AU
direct	-180 Feb 21 j 20:26	23°♊36'26	
	-180 Apr 29 j 22:32	0°♋	
evening set	-180 Jun 27 j 22:19	11°♋44'11	
conjunction	-180 Jul 11 j 11:00	14°♋42'03	0°31'52
minimum elong	-180 Jul 11 j 10:58	14°♋42'02	0°31'51
max. Earth dist.	-180 Jul 11 j 20:52	14°♋47'28	6.34561 AU
morning rise	-180 Jul 24 j 21:36	17°♋38'42	
	-180 Sep 26 j 09:13	0°♌	
retrograde	-180 Nov 23 j 15:56	4°♌56'51	
opposition	-179 Jan 22 j 15:40	29°♋59'41	1°09'32
	-179 Jan 22 j 14:43	30°℞♋	
min. Earth dist.	-179 Jan 22 j 17:42	29°♋59'01	4.39139 AU
direct	-179 Mar 25 j 07:05	24°♋56'21	
	-179 May 25 j 02:51	0°♌	
evening set	-179 Jul 30 j 10:35	12°♌41'47	
	-179 Aug 10 j 02:06	15°♌	
conjunction	-179 Aug 12 j 15:18	15°♌33'13	1°00'34
minimum elong	-179 Aug 12 j 15:15	15°♌33'12	1°00'35
max. Earth dist.	-179 Aug 11 j 23:11	15°♌24'28	6.42232 AU
morning rise	-179 Aug 25 j 16:50	18°♌23'07	
	-179 Oct 24 j 11:39	0°♍	
retrograde	-179 Dec 23 j 22:36	5°♍14'35	
opposition	-178 Feb 22 j 07:20	0°♍20'44	1°39'32
min. Earth dist.	-178 Feb 23 j 02:05	0°♍14'40	4.43729 AU
	-178 Feb 24 j 23:30	30°℞♌	
direct	-178 Apr 25 j 19:12	25°♌17'52	
	-178 Jun 23 j 16:08	0°♍	
evening set	-178 Aug 30 j 16:23	12°♍55'07	
max. Earth dist.	-178 Sep 10 j 23:03	15°♍22'08	6.43299 AU
conjunction	-178 Sep 12 j 13:19	15°♍42'59	1°12'09
minimum elong	-178 Sep 12 j 13:19	15°♍42'59	1°12'08
morning rise	-178 Sep 25 j 07:32	18°♍29'32	
	-178 Nov 23 j 04:14	0°♎	
retrograde	-177 Jan 23 j 15:30	5°♎22'16	
opposition	-177 Mar 25 j 07:39	0°♎30'15	1°42'38
min. Earth dist.	-177 Mar 26 j 15:24	0°♎20'06	4.41331 AU
	-177 Mar 29 j 06:25	30°℞♍	
direct	-177 May 27 j 02:14	25°♍28'48	
	-177 Jul 23 j 11:44	0°♎	
evening set	-177 Sep 30 j 09:52	13°♎13'14	
max. Earth dist.	-177 Oct 11 j 02:14	15°♎34'50	6.37542 AU
conjunction	-177 Oct 13 j 02:08	16°♎01'23	1°03'59
minimum elong	-177 Oct 13 j 02:10	16°♎01'24	1°03'59
morning rise	-177 Oct 25 j 16:13	18°♎48'41	
	-177 Dec 20 j 07:13	0°♏	
retrograde	-176 Feb 24 j 13:10	6°♏09'45	
opposition	-176 Apr 25 j 11:46	1°♏17'56	1°17'19
min. Earth dist.	-176 Apr 26 j 22:34	1°♏06'51	4.32549 AU
	-176 May 05 j 19:29	30°℞♎	
direct	-176 Jun 26 j 18:28	26°♎18'47	
	-176 Aug 16 j 15:00	0°♏	
evening set	-176 Oct 30 j 12:21	14°♏24'37	
	-176 Nov 02 j 02:56	15°♏	
max. Earth dist.	-176 Nov 10 j 05:47	16°♏50'45	6.26425 AU
conjunction	-176 Nov 12 j 03:16	17°♏16'40	0°37'16
minimum elong	-176 Nov 12 j 03:18	17°♏16'41	0°37'16
morning rise	-176 Nov 24 j 17:28	20°♏08'35	
	-175 Jan 10 j 04:42	0°♐	
retrograde	-175 Mar 29 j 13:49	8°♐21'34	
opposition	-175 May 29 j 11:10	3°♐28'19	0°27'25
min. Earth dist.	-175 May 30 j 16:01	3°♐19'05	4.19719 AU
	-175 Jun 28 j 14:28	30°℞♏	
direct	-175 Jul 29 j 17:11	28°♏31'52	
	-175 Aug 29 j 13:25	0°♐	
desc. node	-175 Nov 24 j 11:11	15°♐26'48	
evening set	-175 Dec 01 j 20:32	17°♐09'23	
max. Earth dist.	-175 Dec 13 j 08:15	19°♐50'40	6.13027 AU
conjunction	-175 Dec 14 j 13:38	20°♐07'53	-0°02'11
minimum elong	-175 Dec 14 j 13:38	20°♐07'53	0°02'12
behind sun begin	-175 Dec 14 j 05:36	20°♐03'12	
behind sun end	-175 Dec 14 j 21:39	20°♐12'34	
morning rise	-175 Dec 27 j 07:36	23°♐07'07	
	-174 Jan 26 j 19:25	0°♑	
retrograde	-174 May 04 j 16:20	12°♑25'08	
opposition	-174 Jul 04 j 09:06	7°♑28'56	-0°34'50
min. Earth dist.	-174 Jul 04 j 19:49	7°♑25'27	4.06770 AU
direct	-174 Sep 02 j 03:34	2°♑34'50	
evening set	-173 Jan 05 j 02:25	21°♑46'00	
conjunction	-173 Jan 18 j 00:22	24°♑51'31	-0°42'25
minimum elong	-173 Jan 18 j 00:20	24°♑51'30	0°42'24
max. Earth dist.	-173 Jan 17 j 23:04	24°♑50'44	6.01711 AU
morning rise	-173 Jan 31 j 00:43	27°♑58'28	
	-173 Feb 08 j 14:04	0°♒	
	-173 Apr 26 j 08:19	15°♒	
retrograde	-173 Jun 11 j 10:14	18°♒13'13	
	-173 Jul 27 j 22:35	15°℞♒	
opposition	-173 Aug 10 j 16:22	13°♒13'05	-1°27'26
min. Earth dist.	-173 Aug 10 j 05:57	13°♒16'32	3.98264 AU

Attention, astronomical year style is used: The year -173 in astronomical counting style is the year 174 BCE in historical counting style.

direct	-173 Oct 08 j 05:32	8°♒19'44		
	-173 Dec 13 j 07:15	15°♒		
evening set	-172 Feb 10 j 06:40	27°♒53'10		
	-172 Feb 19 j 01:33	0°♓		
conjunction	-172 Feb 23 j 11:49	1°♓04'04	-1°07'55	
minimum elong	-172 Feb 23 j 11:47	1°♓04'03	1°07'55	
max. Earth dist.	-172 Feb 24 j 18:23	1°♓22'30	5.96758 AU	
morning rise	-172 Mar 07 j 20:01	4°♓16'40		
retrograde	-172 Jul 18 j 07:34	24°♓52'16		
min. Earth dist.	-172 Sep 14 j 23:16	19°♓57'58	3.97593 AU	
opposition	-172 Sep 16 j 03:08	19°♓48'32	-1°46'48	
direct	-172 Nov 13 j 00:25	14°♓53'50		
	-171 Feb 27 j 12:39	0°♈		
evening set	-171 Mar 18 j 14:23	4°♈26'28		
conjunction	-171 Apr 01 j 03:09	7°♈39'13	-1°07'08	
minimum elong	-171 Apr 01 j 03:11	7°♈39'15	1°07'08	
max. Earth dist.	-171 Apr 03 j 05:12	8°♈08'57	6.00301 AU	
morning rise	-171 Apr 14 j 18:58	10°♈53'20		
	-171 Jul 29 j 17:26	0°♉		
retrograde	-171 Aug 23 j 17:16	1°♉00'59		
	-171 Sep 17 j 13:08	30°℞♈		
min. Earth dist.	-171 Oct 20 j 21:55	26°♈07'24	4.04981 AU	
opposition	-171 Oct 22 j 08:08	25°♈55'43	-1°24'21	
direct	-171 Dec 19 j 12:26	20°♈58'04		
	-170 Mar 09 j 01:41	0°♉		
evening set	-170 Apr 24 j 17:47	10°♉07'20		
conjunction	-170 May 08 j 11:50	13°♉17'39	-0°41'03	
minimum elong	-170 May 08 j 11:52	13°♉17'41	0°41'03	
max. Earth dist.	-170 May 10 j 15:10	13°♉47'18	6.10840 AU	
	-170 May 15 j 21:11	15°♉		
morning rise	-170 May 22 j 06:59	16°♉28'18		
	-170 Jul 27 j 09:40	0°♊		
retrograde	-170 Sep 27 j 00:55	5°♊34'50		
min. Earth dist.	-170 Nov 24 j 10:14	0°♊40'15	4.17445 AU	
opposition	-170 Nov 25 j 13:31	0°♊30'59	-0°32'34	
	-170 Nov 29 j 08:56	30°℞♉		
direct	-169 Jan 23 j 19:25	25°♉30'23		
	-169 Mar 19 j 18:16	0°♊		
evening set	-169 May 30 j 13:30	14°♊05'32		
conjunction	-169 Jun 13 j 06:59	17°♊09'47	-0°01'42	
minimum elong	-169 Jun 13 j 06:58	17°♊09'46	0°01'41	
behind sun begin	-169 Jun 12 j 22:37	17°♊05'07		
behind sun end	-169 Jun 13 j 15:19	17°♊14'26		
max. Earth dist.	-169 Jun 14 j 16:05	17°♊28'19	6.24229 AU	
morning rise	-169 Jun 26 j 23:42	20°♊13'22		
asc. node	-169 Jun 29 j 08:35	20°♊44'55		
	-169 Aug 12 j 23:24	0°♋		
retrograde	-169 Oct 29 j 03:26	8°♋14'43		
opposition	-169 Dec 27 j 21:14	3°♋14'13	0°26'43	
min. Earth dist.	-169 Dec 27 j 07:43	3°♋18'45	4.30499 AU	
	-168 Jan 23 j 07:16	30°℞♊		
direct	-168 Feb 26 j 10:18	28°♊11'36		
	-168 Apr 01 j 01:11	0°♋		
evening set	-168 Jul 02 j 13:28	16°♋15'30		
conjunction	-168 Jul 16 j 01:12	19°♋12'23	0°36'42	
minimum elong	-168 Jul 16 j 01:09	19°♋12'22	0°36'42	
max. Earth dist.	-168 Jul 16 j 07:28	19°♋15'50	6.35969 AU	
morning rise	-168 Jul 29 j 10:30	22°♋07'56		
	-168 Sep 05 j 09:43	0°♌		
retrograde	-168 Nov 27 j 22:45	9°♌20'57		
opposition	-167 Jan 26 j 22:48	4°♌24'23	1°15'10	
min. Earth dist.	-167 Jan 27 j 03:39	4°♌22'48	4.40110 AU	
	-167 Mar 09 j 03:53	30°℞♋		
direct	-167 Mar 29 j 17:43	29°♋21'06		
	-167 Apr 19 j 12:17	0°♌		
	-167 Jul 25 j 03:14	15°♌		
evening set	-167 Aug 03 j 20:53	17°♌04'48		
max. Earth dist.	-167 Aug 16 j 03:22	19°♌44'12	6.42672 AU	
conjunction	-167 Aug 17 j 00:21	19°♌55'35	1°03'19	
minimum elong	-167 Aug 17 j 00:19	19°♌55'34	1°03'19	
morning rise	-167 Aug 30 j 00:54	22°♌44'53		
	-167 Oct 04 j 03:21	0°♍		
retrograde	-167 Dec 28 j 05:43	9°♍35'23		
opposition	-166 Feb 26 j 14:45	4°♍41'52	1°41'39	
min. Earth dist.	-166 Feb 27 j 12:03	4°♍35'00	4.43647 AU	
	-166 Apr 14 j 23:44	30°℞♌		
direct	-166 Apr 30 j 04:12	29°♌39'06		
	-166 May 15 j 11:02	0°♍		
evening set	-166 Sep 04 j 00:21	17°♍17'09		
max. Earth dist.	-166 Sep 15 j 05:23	19°♍43'31	6.42696 AU	
conjunction	-166 Sep 16 j 20:37	20°♍04'56	1°12'11	
minimum elong	-166 Sep 16 j 20:37	20°♍04'56	1°12'11	
morning rise	-166 Sep 29 j 13:54	22°♍51'24		
	-166 Nov 02 j 21:06	0°♎		
retrograde	-165 Jan 28 j 00:45	9°♎47'09		
opposition	-165 Mar 29 j 18:19	4°♎55'17	1°40'44	
min. Earth dist.	-165 Mar 31 j 02:27	4°♎45'02	4.40260 AU	
	-165 May 23 j 10:14	30°℞♍		
direct	-165 May 31 j 10:53	29°♍54'10		
	-165 Jun 08 j 12:42	0°♎		
evening set	-165 Oct 04 j 18:30	17°♎41'30		
max. Earth dist.	-165 Oct 15 j 09:18	20°♎02'48	6.36084 AU	
conjunction	-165 Oct 17 j 10:16	20°♎30'04	1°01'14	
minimum elong	-165 Oct 17 j 10:18	20°♎30'05	1°01'13	
morning rise	-165 Oct 30 j 00:17	23°♎17'53		
	-165 Nov 30 j 09:28	0°♏		
retrograde	-164 Feb 29 j 07:23	10°♏45'32		
opposition	-164 Apr 30 j 04:41	5°♏53'38	1°11'32	
min. Earth dist.	-164 May 01 j 15:46	5°♏42'27	4.30794 AU	
direct	-164 Jul 01 j 09:10	0°♏54'52		
	-164 Oct 16 j 16:03	15°♏		
evening set	-164 Nov 04 j 00:16	19°♏05'01		
max. Earth dist.	-164 Nov 14 j 20:00	21°♏33'04	6.24544 AU	
conjunction	-164 Nov 16 j 15:25	21°♏57'54	0°32'14	
minimum elong	-164 Nov 16 j 15:27	21°♏57'55	0°32'14	
morning rise	-164 Nov 29 j 05:55	24°♏50'45		
	-164 Dec 22 j 09:59	0°♐		
retrograde	-163 Apr 03 j 12:34	13°♐12'25		
opposition	-163 Jun 03 j 10:45	8°♐18'49	0°18'55	
min. Earth dist.	-163 Jun 04 j 12:25	8°♐10'35	4.17869 AU	
direct	-163 Aug 03 j 10:55	3°♐22'49		
desc. node	-163 Oct 03 j 18:35	8°♐50'21		
evening set	-163 Dec 06 j 14:16	22°♐04'46		
max. Earth dist.	-163 Dec 18 j 06:29	24°♐49'16	6.11381 AU	
conjunction	-163 Dec 19 j 07:48	25°♐04'11	-0°08'10	
minimum elong	-163 Dec 19 j 07:47	25°♐04'10	0°08'10	
behind sun begin	-163 Dec 19 j 00:38	24°♐59'59		
behind sun end	-163 Dec 19 j 14:56	25°♐08'22		
morning rise	-162 Jan 01 j 02:29	28°♐04'25		
	-162 Jan 09 j 09:15	0°♑		
retrograde	-162 May 09 j 22:40	17°♑30'37		
opposition	-162 Jul 09 j 14:06	12°♑33'51	-0°43'24	
min. Earth dist.	-162 Jul 09 j 22:07	12°♑31'14	4.05476 AU	
direct	-162 Sep 07 j 05:24	7°♑39'55		

Attention, astronomical year style is used: The year -161 in astronomical counting style is the year 162 BCE in historical counting style.

evening set	-161 Jan 10 j 01:59	26°♉53'57		
conjunction	-161 Jan 23 j 00:51	0°♒00'12	-0°47'13	
minimum elong	-161 Jan 23 j 00:49	0°♒00'11	0°47'13	
max. Earth dist.	-161 Jan 23 j 04:53	0°♒02'37	6.00890 AU	
	-161 Jan 23 j 00:31	0°♒		
morning rise	-161 Feb 05 j 02:08	3°♒07'56		
	-161 Mar 30 j 21:24	15°♒		
retrograde	-161 Jun 16 j 17:55	23°♒26'39		
opposition	-161 Aug 15 j 22:40	18°♒25'57	-1°32'28	
min. Earth dist.	-161 Aug 15 j 09:12	18°♒30'25	3.98037 AU	
	-161 Sep 13 j 15:24	15°℞♒		
direct	-161 Oct 13 j 08:19	13°♒32'31		
	-161 Nov 11 j 21:05	15°♒		
	-160 Feb 02 j 08:51	0°♓		
evening set	-160 Feb 15 j 10:16	3°♓05'43		
conjunction	-160 Feb 28 j 16:14	6°♓16'51	-1°09'28	
minimum elong	-160 Feb 28 j 16:13	6°♓16'51	1°09'27	
max. Earth dist.	-160 Mar 01 j 01:03	6°♓36'37	5.97103 AU	
morning rise	-160 Mar 13 j 01:37	9°♓29'44		
	-160 Jul 18 j 02:01	0°♈		
retrograde	-160 Jul 23 j 09:22	0°♈02'49		
	-160 Jul 28 j 16:56	30°℞♓		
min. Earth dist.	-160 Sep 19 j 23:57	25°♓08'44	3.98483 AU	
opposition	-160 Sep 21 j 05:40	24°♓58'40	-1°46'01	
direct	-160 Nov 18 j 03:03	20°♓03'34		
	-159 Feb 09 j 02:54	0°♈		
evening set	-159 Mar 23 j 18:01	9°♈32'57		
conjunction	-159 Apr 06 j 07:50	12°♈45'30	-1°04'49	
minimum elong	-159 Apr 06 j 07:52	12°♈45'31	1°04'49	
max. Earth dist.	-159 Apr 08 j 11:45	13°♈16'14	6.01649 AU	
morning rise	-159 Apr 20 j 00:10	15°♈59'15		
	-159 Jun 25 j 17:24	0°♉		
retrograde	-159 Aug 28 j 14:40	5°♉59'04		
min. Earth dist.	-159 Oct 25 j 19:07	1°♉05'04	4.06623 AU	
opposition	-159 Oct 27 j 03:55	0°♉53'52	-1°18'28	
	-159 Nov 02 j 18:39	30°℞♈		
direct	-159 Dec 24 j 11:55	25°♈55'47		
	-158 Feb 13 j 14:25	0°♉		
evening set	-158 Apr 29 j 17:56	15°♉00'18		
	-158 Apr 29 j 17:25	15°♉		
conjunction	-158 May 13 j 12:12	18°♉09'56	-0°36'05	
minimum elong	-158 May 13 j 12:14	18°♉09'57	0°36'05	
max. Earth dist.	-158 May 15 j 13:23	18°♉38'12	6.12630 AU	
morning rise	-158 May 27 j 07:29	21°♉19'48		
	-158 Jul 06 j 06:29	0°♊		
retrograde	-158 Oct 01 j 12:31	10°♊17'13		
min. Earth dist.	-158 Nov 29 j 00:16	5°♊22'39	4.19215 AU	
opposition	-158 Nov 30 j 02:28	5°♊13'46	-0°24'24	
direct	-157 Jan 28 j 11:25	0°♊12'49		
asc. node	-157 May 10 j 07:26	13°♊18'08		
evening set	-157 Jun 04 j 08:11	18°♊43'46		
conjunction	-157 Jun 18 j 01:11	21°♊47'07	0°04'02	
minimum elong	-157 Jun 18 j 01:09	21°♊47'06	0°04'02	
behind sun begin	-157 Jun 17 j 16:57	21°♊42'32		
behind sun end	-157 Jun 18 j 09:22	21°♊51'40		
max. Earth dist.	-157 Jun 19 j 06:10	22°♊03'18	6.25857 AU	
morning rise	-157 Jul 01 j 17:08	24°♊49'41		
	-157 Jul 25 j 15:14	0°♋		
retrograde	-157 Nov 02 j 12:34	12°♋43'58		
opposition	-156 Jan 01 j 05:45	7°♋44'04	0°34'20	
min. Earth dist.	-157 Dec 31 j 19:31	7°♋47'29	4.31859 AU	
direct	-156 Mar 01 j 23:33	2°♋41'19		

evening set	-156 Jul 07 j 03:02	20°♋42'35		
conjunction	-156 Jul 20 j 13:47	23°♋38'40	0°41'14	
minimum elong	-156 Jul 20 j 13:44	23°♋38'38	0°41'14	
max. Earth dist.	-156 Jul 20 j 16:10	23°♋39'58	6.36961 AU	
morning rise	-156 Aug 02 j 21:58	26°♋33'21		
	-156 Aug 19 j 00:09	0°♌		
retrograde	-156 Dec 02 j 03:48	13°♌42'41		
opposition	-155 Jan 31 j 05:23	8°♌46'35	1°20'17	
min. Earth dist.	-155 Jan 31 j 12:04	8°♌44'24	4.40711 AU	
direct	-155 Apr 03 j 02:26	3°♌43'19		
	-155 Jul 08 j 07:18	15°♌		
evening set	-155 Aug 08 j 06:42	21°♌26'22		
max. Earth dist.	-155 Aug 20 j 10:02	24°♌04'06	6.42846 AU	
conjunction	-155 Aug 21 j 09:09	24°♌16'39	1°05'39	
minimum elong	-155 Aug 21 j 09:07	24°♌16'38	1°05'38	
morning rise	-155 Sep 03 j 08:30	27°♌05'26		
	-155 Sep 16 j 23:48	0°♍		
retrograde	-154 Jan 01 j 12:43	13°♍55'47		
opposition	-154 Mar 02 j 22:35	9°♍02'38	1°43'10	
min. Earth dist.	-154 Mar 03 j 21:38	8°♍55'13	4.43404 AU	
direct	-154 May 04 j 13:07	4°♍00'07		
evening set	-154 Sep 08 j 08:14	21°♍39'05		
max. Earth dist.	-154 Sep 19 j 09:33	24°♍03'46	6.42041 AU	
conjunction	-154 Sep 21 j 03:36	24°♍26'48	1°11'47	
minimum elong	-154 Sep 21 j 03:37	24°♍26'48	1°11'47	
morning rise	-154 Oct 03 j 20:23	27°♍13'18		
	-154 Oct 16 j 18:01	0°♎		
retrograde	-153 Feb 01 j 12:16	14°♎12'15		
opposition	-153 Apr 03 j 05:48	9°♎20'27	1°38'13	
min. Earth dist.	-153 Apr 04 j 14:50	9°♎09'55	4.39235 AU	
direct	-153 Jun 04 j 21:43	4°♎19'37		
evening set	-153 Oct 09 j 02:48	22°♎09'20		
max. Earth dist.	-153 Oct 19 j 18:56	24°♎31'48	6.34770 AU	
conjunction	-153 Oct 21 j 18:25	24°♎58'19	0°58'06	
minimum elong	-153 Oct 21 j 18:27	24°♎58'20	0°58'05	
morning rise	-153 Nov 03 j 08:07	27°♎46'36		
	-153 Nov 13 j 10:15	0°♏		
	-152 Feb 19 j 05:07	15°♏		
retrograde	-152 Mar 04 j 22:32	15°♏20'15		
	-152 Mar 19 j 16:31	15°℞♏		
opposition	-152 May 04 j 21:11	10°♏28'13	1°05'17	
min. Earth dist.	-152 May 06 j 07:04	10°♏17'25	4.29253 AU	
direct	-152 Jul 05 j 21:57	5°♏29'52		
	-152 Sep 28 j 21:24	15°♏		
evening set	-152 Nov 08 j 11:43	23°♏43'32		
max. Earth dist.	-152 Nov 19 j 08:41	26°♏12'54	6.22889 AU	
conjunction	-152 Nov 21 j 02:51	26°♏37'08	0°27'00	
minimum elong	-152 Nov 21 j 02:52	26°♏37'09	0°27'00	
morning rise	-152 Dec 03 j 17:50	29°♏30'51		
	-152 Dec 05 j 20:57	0°♐		
retrograde	-151 Apr 08 j 12:08	18°♐00'37		
opposition	-151 Jun 08 j 09:21	13°♐06'38	0°10'19	
min. Earth dist.	-151 Jun 09 j 09:28	12°♐58'53	4.16180 AU	
direct	-151 Aug 08 j 06:16	8°♐10'56		
desc. node	-151 Aug 13 j 14:12	8°♐13'40		
evening set	-151 Dec 11 j 06:38	26°♐57'00		
max. Earth dist.	-151 Dec 23 j 03:35	29°♐44'48	6.09812 AU	
conjunction	-151 Dec 24 j 00:51	29°♐57'21	-0°14'02	
minimum elong	-151 Dec 24 j 00:50	29°♐57'21	0°14'02	
behind sun begin	-151 Dec 23 j 20:38	29°♐54'52		
behind sun end	-151 Dec 24 j 05:03	29°♐59'49		

Attention, astronomical year style is used: The year -151 in astronomical counting style is the year 152 BCE in historical counting style.

	-151 Dec 24 j 05:22	0°♉	
morning rise	-150 Jan 05 j 20:14	2°♉58'36	
retrograde	-150 May 15 j 03:23	22°♉32'51	
opposition	-150 Jul 14 j 17:31	17°♉35'37	-0°51'36
min. Earth dist.	-150 Jul 14 j 22:43	17°♉33'55	4.04175 AU
direct	-150 Sep 12 j 03:57	12°♉41'54	
	-149 Jan 06 j 15:44	0°♒	
evening set	-149 Jan 15 j 00:50	1°♒59'20	
conjunction	-149 Jan 28 j 00:25	5°♒06'21	-0°51'38
minimum elong	-149 Jan 28 j 00:22	5°♒06'20	0°51'39
max. Earth dist.	-149 Jan 28 j 07:14	5°♒10'27	5.99954 AU
morning rise	-149 Feb 10 j 02:50	8°♒14'58	
	-149 Mar 11 j 06:10	15°♒	
retrograde	-149 Jun 21 j 23:19	28°♒38'20	
min. Earth dist.	-149 Aug 20 j 11:09	23°♒42'33	3.97581 AU
opposition	-149 Aug 21 j 03:34	23°♒37'04	-1°36'49
direct	-149 Oct 18 j 10:06	18°♒43'30	
	-148 Jan 15 j 10:59	0°♓	
evening set	-148 Feb 20 j 13:53	8°♓17'53	
conjunction	-148 Mar 04 j 21:08	11°♓29'32	-1°10'29
minimum elong	-148 Mar 04 j 21:07	11°♓29'32	1°10'29
max. Earth dist.	-148 Mar 06 j 10:20	11°♓51'54	5.97170 AU
morning rise	-148 Mar 18 j 07:26	14°♓42'49	
	-148 May 30 j 04:03	0°♈	
retrograde	-148 Jul 28 j 14:17	5°♈14'24	
min. Earth dist.	-148 Sep 25 j 02:07	0°♈20'09	3.99064 AU
opposition	-148 Sep 26 j 08:04	0°♈09'59	-1°44'27
	-148 Sep 27 j 13:28	30°℞♓	
direct	-148 Nov 23 j 06:11	25°♓14'30	
	-147 Jan 17 j 04:22	0°♈	
evening set	-147 Mar 28 j 22:54	14°♈42'07	
conjunction	-147 Apr 11 j 13:33	17°♈54'37	-1°02'01
minimum elong	-147 Apr 11 j 13:36	17°♈54'38	1°02'00
max. Earth dist.	-147 Apr 13 j 17:51	18°♈25'27	6.02672 AU
morning rise	-147 Apr 25 j 06:48	21°♈08'14	
	-147 Jun 04 j 00:44	0°♉	
retrograde	-147 Sep 02 j 11:23	11°♉01'20	
min. Earth dist.	-147 Oct 30 j 15:30	6°♉07'34	4.07972 AU
opposition	-147 Nov 01 j 00:46	5°♉56'13	-1°11'58
direct	-147 Dec 29 j 10:08	0°♉57'42	
	-146 Apr 12 j 13:54	15°♉	
evening set	-146 May 04 j 20:11	19°♉58'41	
conjunction	-146 May 18 j 14:39	23°♉07'43	-0°30'47
minimum elong	-146 May 18 j 14:41	23°♉07'45	0°30'46
max. Earth dist.	-146 May 20 j 13:09	23°♉34'22	6.14197 AU
morning rise	-146 Jun 01 j 09:53	26°♉16'51	
	-146 Jun 18 j 00:41	0°♊	
retrograde	-146 Oct 06 j 04:18	15°♊05'56	
opposition	-146 Dec 04 j 17:37	10°♊02'53	-0°15'54
min. Earth dist.	-146 Dec 03 j 17:59	10°♊10'54	4.20836 AU
direct	-145 Feb 02 j 07:26	5°♊01'37	
asc. node	-145 Mar 19 j 14:32	8°♊07'59	
evening set	-145 Jun 09 j 05:32	23°♊28'49	
conjunction	-145 Jun 22 j 22:00	26°♊31'16	0°09'44
minimum elong	-145 Jun 22 j 22:00	26°♊31'16	0°09'44
behind sun begin	-145 Jun 22 j 15:15	26°♊27'31	
behind sun end	-145 Jun 23 j 04:45	26°♊35'00	
max. Earth dist.	-145 Jun 24 j 00:55	26°♊46'14	6.27430 AU
morning rise	-145 Jul 06 j 13:04	29°♊32'48	
	-145 Jul 08 j 14:25	0°♋	
retrograde	-145 Nov 06 j 21:12	17°♋19'58	
opposition	-144 Jan 05 j 16:26	12°♋20'37	0°41'57
min. Earth dist.	-144 Jan 05 j 07:14	12°♋23'40	4.33297 AU
direct	-144 Mar 06 j 13:24	7°♋17'46	
evening set	-144 Jul 11 j 18:54	25°♋15'55	
conjunction	-144 Jul 25 j 04:26	28°♋11'01	0°45'38
minimum elong	-144 Jul 25 j 04:23	28°♋11'00	0°45'39
max. Earth dist.	-144 Jul 25 j 03:09	28°♋10'19	6.38185 AU
	-144 Aug 02 j 12:15	0°♌	
morning rise	-144 Aug 07 j 11:25	1°♌04'43	
	-144 Oct 21 j 14:59	15°♌	
retrograde	-144 Dec 06 j 11:52	18°♌09'26	
	-143 Jan 21 j 17:06	15°℞♌	
opposition	-143 Feb 04 j 14:07	13°♌13'49	1°25'04
min. Earth dist.	-143 Feb 04 j 23:26	13°♌10'47	4.41674 AU
direct	-143 Apr 07 j 15:33	8°♌10'37	
	-143 Jun 18 j 17:01	15°♌	
evening set	-143 Aug 12 j 17:23	25°♌51'18	
conjunction	-143 Aug 25 j 18:42	28°♌40'52	1°07'40
minimum elong	-143 Aug 25 j 18:40	28°♌40'51	1°07'40
max. Earth dist.	-143 Aug 24 j 17:03	28°♌26'57	6.43477 AU
	-143 Aug 31 j 20:31	0°♍	
morning rise	-143 Sep 07 j 16:55	1°♍28'57	
retrograde	-142 Jan 05 j 18:47	18°♍17'33	
opposition	-142 Mar 07 j 06:59	13°♍24'36	1°44'07
min. Earth dist.	-142 Mar 08 j 06:52	13°♍16'55	4.43696 AU
direct	-142 May 08 j 22:47	8°♍22'15	
evening set	-142 Sep 12 j 15:32	26°♍00'04	
max. Earth dist.	-142 Sep 23 j 16:06	28°♍24'26	6.41971 AU
conjunction	-142 Sep 25 j 10:07	28°♍47'27	1°11'01
minimum elong	-142 Sep 25 j 10:08	28°♍47'28	1°11'01
	-142 Sep 30 j 22:32	0°♎	
morning rise	-142 Oct 08 j 02:01	1°♎33'40	
retrograde	-141 Feb 05 j 20:24	18°♎33'50	
opposition	-141 Apr 07 j 15:50	13°♎42'05	1°35'11
min. Earth dist.	-141 Apr 09 j 01:42	13°♎31'18	4.38794 AU
direct	-141 Jun 09 j 07:54	8°♎41'33	
evening set	-141 Oct 13 j 08:56	26°♎31'37	
max. Earth dist.	-141 Oct 23 j 23:07	28°♎53'21	6.33977 AU
conjunction	-141 Oct 26 j 00:03	29°♎20'44	0°54'44
minimum elong	-141 Oct 26 j 00:05	29°♎20'45	0°54'44
	-141 Oct 28 j 22:13	0°♏	
morning rise	-141 Nov 07 j 13:45	2°♏09'18	
	-140 Jan 11 j 17:08	15°♏	
retrograde	-140 Mar 09 j 11:32	19°♏47'25	
	-140 May 08 j 19:38	15°℞♏	
opposition	-140 May 09 j 10:54	14°♏55'08	0°58'49
min. Earth dist.	-140 May 10 j 20:29	14°♏44'26	4.28128 AU
direct	-140 Jul 10 j 09:39	9°♏57'02	
	-140 Sep 08 j 02:58	15°♏	
evening set	-140 Nov 12 j 19:25	28°♏12'55	
	-140 Nov 20 j 14:14	0°♐	
max. Earth dist.	-140 Nov 23 j 19:00	0°♐44'11	6.21534 AU
conjunction	-140 Nov 25 j 10:51	1°♐07'09	0°21'48
minimum elong	-140 Nov 25 j 10:53	1°♐07'10	0°21'48
morning rise	-140 Dec 08 j 02:01	4°♐01'34	
retrograde	-139 Apr 13 j 06:27	22°♐38'28	
opposition	-139 Jun 13 j 03:45	17°♐44'10	0°01'57
min. Earth dist.	-139 Jun 14 j 02:38	17°♐36'49	4.14678 AU
desc. node	-139 Jun 25 j 14:05	16°♐09'51	
direct	-139 Aug 12 j 20:36	12°♐48'45	
	-139 Dec 08 j 18:36	0°♑	
evening set	-139 Dec 15 j 19:28	1°♑38'40	

Attention, astronomical year style is used: The year -139 in astronomical counting style is the year 140 BCE in historical counting style.

conjunction	-139 Dec 28 j 14:04	4°♑39'52	-0°19'36
minimum elong	-139 Dec 28 j 14:03	4°♑39'52	0°19'35
max. Earth dist.	-139 Dec 27 j 17:54	4°♑27'56	6.08285 AU
morning rise	-138 Jan 10 j 10:23	7°♑42'09	
retrograde	-138 May 20 j 03:23	27°♑24'31	
opposition	-138 Jul 19 j 16:26	22°♑26'46	-0°59'09
min. Earth dist.	-138 Jul 19 j 19:08	22°♑25'52	4.02759 AU
direct	-138 Sep 16 j 22:18	17°♑33'06	
	-138 Dec 21 j 00:11	0°♒	
evening set	-137 Jan 19 j 20:11	6°♒54'55	
conjunction	-137 Feb 01 j 20:56	10°♒02'55	-0°55'32
minimum elong	-137 Feb 01 j 20:53	10°♒02'54	0°55'32
max. Earth dist.	-137 Feb 02 j 08:22	10°♒09'49	5.98793 AU
morning rise	-137 Feb 15 j 00:18	13°♒12'31	
	-137 Feb 22 j 13:02	15°♒	
	-137 May 08 j 18:02	0°♓	
retrograde	-137 Jun 27 j 04:03	3°♓41'31	
	-137 Aug 16 j 02:35	30°℞♒	
min. Earth dist.	-137 Aug 25 j 11:43	28°♒45'40	3.96816 AU
opposition	-137 Aug 26 j 05:12	28°♒39'49	-1°40'19
direct	-137 Oct 23 j 09:16	23°♒46'08	
	-137 Dec 25 j 20:39	0°♓	
evening set	-136 Feb 25 j 15:21	13°♓23'14	
conjunction	-136 Mar 09 j 23:41	16°♓35'33	-1°10'56
minimum elong	-136 Mar 09 j 23:41	16°♓35'33	1°10'56
max. Earth dist.	-136 Mar 11 j 14:56	16°♓59'09	5.96862 AU
morning rise	-136 Mar 23 j 11:22	19°♓49'34	
	-136 May 07 j 16:10	0°♈	
retrograde	-136 Aug 02 j 15:55	10°♈21'04	
min. Earth dist.	-136 Sep 30 j 00:28	5°♈27'18	3.99272 AU
opposition	-136 Oct 01 j 08:27	5°♈16'26	-1°42'07
direct	-136 Nov 28 j 05:17	0°♈20'37	
evening set	-135 Apr 03 j 03:03	19°♈48'05	
conjunction	-135 Apr 16 j 18:40	23°♈00'42	-0°58'44
minimum elong	-135 Apr 16 j 18:43	23°♈00'43	0°58'43
max. Earth dist.	-135 Apr 18 j 23:08	23°♈31'35	6.03385 AU
morning rise	-135 Apr 30 j 12:39	26°♈14'19	
	-135 May 16 j 20:59	0°♉	
	-135 Aug 13 j 04:17	15°♉	
retrograde	-135 Sep 07 j 08:46	16°♉01'50	
	-135 Oct 02 j 07:17	15°℞♉	
opposition	-135 Nov 05 j 21:04	10°♉56'48	-1°04'59
min. Earth dist.	-135 Nov 04 j 12:48	11°♉07'49	4.09085 AU
direct	-134 Jan 03 j 09:46	5°♉57'52	
	-134 Mar 24 j 14:23	15°♉	
evening set	-134 May 09 j 22:23	24°♉56'06	
conjunction	-134 May 23 j 17:10	28°♉04'37	-0°25'15
minimum elong	-134 May 23 j 17:12	28°♉04'38	0°25'14
max. Earth dist.	-134 May 25 j 15:44	28°♉31'12	6.15638 AU
	-134 Jun 01 j 03:32	0°♊	
morning rise	-134 Jun 06 j 12:11	1°♊13'01	
retrograde	-134 Oct 10 j 18:27	19°♊53'56	
min. Earth dist.	-134 Dec 08 j 09:25	14°♊59'09	4.22443 AU
opposition	-134 Dec 09 j 08:38	14°♊51'18	-0°07'19
asc. node	-133 Jan 26 j 15:11	10°♊02'40	
direct	-133 Feb 07 j 01:32	9°♊49'47	
evening set	-133 Jun 14 j 02:35	28°♊12'57	
	-133 Jun 22 j 04:09	0°♋	
conjunction	-133 Jun 27 j 18:11	1°♋14'22	0°15'23
minimum elong	-133 Jun 27 j 18:10	1°♋14'21	0°15'24
behind sun begin	-133 Jun 27 j 16:20	1°♋13'21	
behind sun end	-133 Jun 27 j 20:00	1°♋15'22	
max. Earth dist.	-133 Jun 28 j 16:50	1°♋26'56	6.29061 AU
morning rise	-133 Jul 11 j 08:25	4°♋14'49	
retrograde	-133 Nov 11 j 07:21	21°♋54'43	
opposition	-132 Jan 10 j 03:08	16°♋55'50	0°49'16
min. Earth dist.	-132 Jan 09 j 20:50	16°♋57'56	4.34792 AU
direct	-132 Mar 11 j 05:38	11°♋52'49	
evening set	-132 Jul 16 j 09:40	29°♋47'23	
	-132 Jul 17 j 09:00	0°♌	
conjunction	-132 Jul 29 j 18:11	2°♌41'32	0°49'46
minimum elong	-132 Jul 29 j 18:08	2°♌41'30	0°49'45
max. Earth dist.	-132 Jul 29 j 14:36	2°♌39'35	6.39396 AU
morning rise	-132 Aug 11 j 23:44	5°♌34'10	
	-132 Sep 27 j 14:59	15°♌	
retrograde	-132 Dec 10 j 17:10	22°♌34'30	
opposition	-131 Feb 08 j 22:10	17°♌39'18	1°29'20
min. Earth dist.	-131 Feb 09 j 08:47	17°♌35'50	4.42511 AU
	-131 Mar 02 j 10:31	15°℞♌	
direct	-131 Apr 12 j 01:52	12°♌36'09	
	-131 May 23 j 02:22	15°♌	
	-131 Aug 15 j 23:30	0°♍	
evening set	-131 Aug 17 j 03:22	0°♍14'59	
max. Earth dist.	-131 Aug 28 j 22:32	2°♍48'14	6.43847 AU
conjunction	-131 Aug 30 j 03:28	3°♍03'56	1°09'19
minimum elong	-131 Aug 30 j 03:26	3°♍03'55	1°09'20
morning rise	-131 Sep 12 j 00:37	5°♍51'26	
retrograde	-130 Jan 10 j 02:43	22°♍39'27	
opposition	-130 Mar 11 j 15:39	17°♍46'48	1°44'33
min. Earth dist.	-130 Mar 12 j 18:16	17°♍38'16	4.43565 AU
direct	-130 May 13 j 09:57	12°♍44'39	
	-130 Sep 15 j 04:58	0°♎	
evening set	-130 Sep 16 j 22:54	0°♎22'47	
max. Earth dist.	-130 Sep 27 j 20:16	2°♎45'43	6.41324 AU
conjunction	-130 Sep 29 j 16:48	3°♎10'09	1°09'52
minimum elong	-130 Sep 29 j 16:49	3°♎10'09	1°09'51
morning rise	-130 Oct 12 j 08:12	5°♎56'25	
retrograde	-129 Feb 10 j 06:47	23°♎00'06	
opposition	-129 Apr 12 j 03:51	18°♎08'20	1°31'36
min. Earth dist.	-129 Apr 13 j 13:57	17°♎57'29	4.37666 AU
direct	-129 Jun 13 j 18:09	13°♎08'04	
	-129 Oct 13 j 03:24	0°♏	
evening set	-129 Oct 17 j 17:11	1°♏00'51	
max. Earth dist.	-129 Oct 28 j 08:33	3°♏23'44	6.32460 AU
conjunction	-129 Oct 30 j 08:13	3°♏50'30	0°50'57
minimum elong	-129 Oct 30 j 08:15	3°♏50'32	0°50'57
morning rise	-129 Nov 11 j 21:45	6°♏39'40	
	-129 Dec 21 j 04:16	15°♏	
retrograde	-128 Mar 14 j 05:13	24°♏24'54	
opposition	-128 May 14 j 04:39	19°♏32'29	0°51'46
min. Earth dist.	-128 May 15 j 14:05	19°♏21'50	4.26299 AU
	-128 Jun 28 j 11:10	15°℞♏	
direct	-128 Jul 15 j 00:37	14°♏34'46	
	-128 Jul 31 j 12:37	15°♏	
	-128 Nov 04 j 10:42	0°♐	
evening set	-128 Nov 17 j 08:03	2°♐55'18	
max. Earth dist.	-128 Nov 28 j 08:11	5°♐27'37	6.19548 AU
conjunction	-128 Nov 29 j 23:39	5°♐50'27	0°16'13
minimum elong	-128 Nov 29 j 23:40	5°♐50'27	0°16'13
behind sun begin	-128 Nov 29 j 22:51	5°♐49'59	
behind sun end	-128 Nov 30 j 00:29	5°♐50'56	
morning rise	-128 Dec 12 j 15:31	8°♐45'58	
retrograde	-127 Apr 18 j 07:53	27°♐32'26	
desc. node	-127 May 05 j 02:50	27°♐06'01	

Attention, astronomical year style is used: The year -127 in astronomical counting style is the year 128 BCE in historical counting style.

opposition	-127 Jun 18 j 04:24	22°♐37'42	-0°06'55
min. Earth dist.	-127 Jun 19 j 00:30	22°♐31'12	4.12677 AU
direct	-127 Aug 17 j 15:58	17°♐42'33	
	-127 Nov 21 j 13:22	0°♑	
evening set	-127 Dec 20 j 14:44	6°♑37'58	
conjunction	-126 Jan 02 j 10:13	9°♑40'18	-0°25'22
minimum elong	-126 Jan 02 j 10:12	9°♑40'17	0°25'22
max. Earth dist.	-126 Jan 01 j 19:08	9°♑31'20	6.06466 AU
morning rise	-126 Jan 15 j 07:17	12°♑43'44	
	-126 Apr 14 j 06:47	0°♒	
retrograde	-126 May 25 j 12:39	2°♒35'08	
	-126 Jul 05 j 23:27	30°℞♑	
opposition	-126 Jul 24 j 22:54	27°♑36'52	-1°06'47
min. Earth dist.	-126 Jul 24 j 23:24	27°♑36'42	4.01314 AU
direct	-126 Sep 22 j 00:29	22°♑43'22	
	-126 Nov 30 j 17:51	0°♒	
evening set	-125 Jan 24 j 23:06	12°♒09'17	
	-125 Feb 05 j 18:39	15°♒	
conjunction	-125 Feb 07 j 00:43	15°♒18'09	-0°59'15
minimum elong	-125 Feb 07 j 00:41	15°♒18'07	0°59'14
max. Earth dist.	-125 Feb 07 j 15:38	15°♒27'08	5.97854 AU
morning rise	-125 Feb 20 j 05:24	18°♒28'41	
	-125 Apr 12 j 22:24	0°♓	
retrograde	-125 Jul 02 j 12:31	9°♓01'36	
opposition	-125 Aug 31 j 12:53	3°♓59'24	-1°43'12
min. Earth dist.	-125 Aug 30 j 15:38	4°♓06'32	3.96549 AU
	-125 Oct 05 j 11:54	30°℞♒	
direct	-125 Oct 28 j 13:44	29°♒05'33	
	-125 Nov 20 j 16:24	0°♓	
evening set	-124 Mar 01 j 22:58	18°♓43'06	
conjunction	-124 Mar 15 j 08:27	21°♓55'44	-1°10'51
minimum elong	-124 Mar 15 j 08:27	21°♓55'44	1°10'51
max. Earth dist.	-124 Mar 17 j 03:10	22°♓21'22	5.97298 AU
morning rise	-124 Mar 28 j 21:07	25°♓09'57	
	-124 Apr 18 j 13:57	0°♈	
retrograde	-124 Aug 07 j 20:46	15°♈37'32	
min. Earth dist.	-124 Oct 05 j 03:46	10°♈43'41	4.00372 AU
opposition	-124 Oct 06 j 12:18	10°♈32'35	-1°38'54
direct	-124 Dec 03 j 11:05	5°♈36'20	
evening set	-123 Apr 08 j 09:46	24°♈59'54	
conjunction	-123 Apr 22 j 02:12	28°♈12'07	-0°54'59
minimum elong	-123 Apr 22 j 02:15	28°♈12'08	0°54'59
max. Earth dist.	-123 Apr 24 j 08:46	28°♈44'05	6.05053 AU
	-123 Apr 29 j 18:29	0°♉	
morning rise	-123 May 05 j 20:35	1°♉25'07	
	-123 Jul 09 j 22:34	15°♉	
retrograde	-123 Sep 12 j 04:52	21°♉02'51	
min. Earth dist.	-123 Nov 09 j 09:18	16°♉08'58	4.11129 AU
opposition	-123 Nov 10 j 17:29	15°♉57'59	-0°57'33
	-123 Nov 17 j 20:50	15°℞♉	
direct	-122 Jan 08 j 09:04	10°♉58'38	
	-122 Feb 28 j 15:10	15°♉	
evening set	-122 May 14 j 23:39	29°♉50'40	
	-122 May 15 j 16:10	0°♊	
conjunction	-122 May 28 j 18:05	2°♊58'05	-0°19'38
minimum elong	-122 May 28 j 18:06	2°♊58'06	0°19'38
max. Earth dist.	-122 May 30 j 12:50	3°♊22'22	6.17867 AU
morning rise	-122 Jun 11 j 12:49	6°♊05'19	
retrograde	-122 Oct 15 j 05:56	24°♊35'39	
asc. node	-122 Dec 06 j 15:27	20°♊31'45	
opposition	-122 Dec 13 j 21:22	19°♊33'26	0°01'05
min. Earth dist.	-122 Dec 13 j 00:40	19°♊40'25	4.24638 AU
direct	-121 Feb 11 j 20:13	14°♊31'32	
	-121 Jun 05 j 21:26	0°♋	
evening set	-121 Jun 18 j 20:17	2°♋48'56	
conjunction	-121 Jul 02 j 11:10	5°♋49'10	0°20'46
minimum elong	-121 Jul 02 j 11:08	5°♋49'09	0°20'47
max. Earth dist.	-121 Jul 03 j 07:11	6°♋00'13	6.31052 AU
morning rise	-121 Jul 16 j 00:06	8°♋48'16	
retrograde	-121 Nov 15 j 12:47	26°♋20'13	
opposition	-120 Jan 14 j 10:19	21°♋21'53	0°56'02
min. Earth dist.	-120 Jan 14 j 06:09	21°♋23'16	4.36431 AU
direct	-120 Mar 15 j 16:42	16°♋18'46	
	-120 Jul 01 j 05:39	0°♌	
evening set	-120 Jul 20 j 20:49	4°♌09'37	
conjunction	-120 Aug 03 j 03:58	7°♌02'47	0°53'28
minimum elong	-120 Aug 03 j 03:55	7°♌02'45	0°53'28
max. Earth dist.	-120 Aug 02 j 18:41	6°♌57'44	6.40537 AU
morning rise	-120 Aug 16 j 08:27	9°♌54'30	
	-120 Sep 09 j 12:19	15°♌	
retrograde	-120 Dec 14 j 22:18	26°♌51'13	
opposition	-119 Feb 13 j 03:38	21°♌56'27	1°33'01
min. Earth dist.	-119 Feb 13 j 17:58	21°♌51'47	4.43099 AU
direct	-119 Apr 16 j 11:16	16°♌53'18	
	-119 Jul 30 j 23:28	0°♍	
evening set	-119 Aug 21 j 10:06	4°♍31'13	
max. Earth dist.	-119 Sep 02 j 01:56	7°♍02'43	6.43816 AU
conjunction	-119 Sep 03 j 09:21	7°♍19'47	1°10'33
minimum elong	-119 Sep 03 j 09:20	7°♍19'47	1°10'34
morning rise	-119 Sep 16 j 05:25	10°♍06'54	
retrograde	-118 Jan 14 j 07:28	26°♍55'58	
opposition	-118 Mar 15 j 22:35	22°♍03'33	1°44'27
min. Earth dist.	-118 Mar 17 j 02:15	21°♍54'41	4.42942 AU
direct	-118 May 17 j 16:07	17°♍01'36	
	-118 Aug 30 j 04:15	0°♎	
evening set	-118 Sep 21 j 05:03	4°♎41'47	
max. Earth dist.	-118 Oct 02 j 00:15	7°♎04'00	6.40145 AU
conjunction	-118 Oct 03 j 22:18	7°♎29'22	1°08'21
minimum elong	-118 Oct 03 j 22:19	7°♎29'23	1°08'21
morning rise	-118 Oct 16 j 13:16	10°♎15'56	
retrograde	-117 Feb 14 j 19:22	27°♎25'01	
opposition	-117 Apr 16 j 15:53	22°♎33'20	1°27'34
min. Earth dist.	-117 Apr 18 j 03:34	22°♎21'59	4.35995 AU
direct	-117 Jun 18 j 05:10	17°♎33'25	
	-117 Sep 26 j 16:56	0°♏	
evening set	-117 Oct 22 j 01:55	5°♏30'47	
max. Earth dist.	-117 Nov 01 j 16:26	7°♏53'54	6.30428 AU
conjunction	-117 Nov 03 j 16:54	8°♏21'14	0°46'53
minimum elong	-117 Nov 03 j 16:56	8°♏21'16	0°46'53
morning rise	-117 Nov 16 j 06:43	11°♏11'21	
	-117 Dec 03 j 12:19	15°♏	
retrograde	-116 Mar 19 j 00:45	29°♏05'40	
opposition	-116 May 19 j 00:11	24°♏13'02	0°44'21
min. Earth dist.	-116 May 20 j 07:32	24°♏03'01	4.24043 AU
direct	-116 Jul 19 j 14:46	19°♏15'43	
	-116 Oct 17 j 23:01	0°♐	
evening set	-116 Nov 21 j 22:31	7°♐42'23	
max. Earth dist.	-116 Dec 03 j 03:18	10°♐18'08	6.17277 AU
conjunction	-116 Dec 04 j 14:38	10°♐38'41	0°10'28
minimum elong	-116 Dec 04 j 14:39	10°♐38'41	0°10'29
behind sun begin	-116 Dec 04 j 08:21	10°♐35'02	
behind sun end	-116 Dec 04 j 20:57	10°♐42'20	
morning rise	-116 Dec 17 j 07:01	13°♐35'25	

Attention, astronomical year style is used: The year -115 in astronomical counting style is the year 116 BCE in historical counting style.

	-115 Mar 13 j 10:54	0°♉	
desc. node	-115 Mar 14 j 07:24	0°♉06'01	
retrograde	-115 Apr 23 j 14:00	2°♉32'36	
	-115 Jun 04 j 02:21	30°℞♐	
opposition	-115 Jun 23 j 07:59	27°♐37'29	-0°15'54
min. Earth dist.	-115 Jun 24 j 02:04	27°♐31'38	4.10579 AU
direct	-115 Aug 22 j 14:42	22°♐42'45	
	-115 Nov 01 j 12:17	0°♉	
evening set	-115 Dec 25 j 13:04	11°♉43'54	
conjunction	-114 Jan 07 j 09:14	14°♉47'19	-0°31'02
minimum elong	-114 Jan 07 j 09:12	14°♉47'17	0°31'02
max. Earth dist.	-114 Jan 06 j 21:42	14°♉40'26	6.04734 AU
morning rise	-114 Jan 20 j 07:25	17°♉51'59	
	-114 Mar 16 j 23:22	0°♒	
retrograde	-114 May 30 j 21:10	7°♒51'39	
opposition	-114 Jul 30 j 07:19	2°♒52'49	-1°13'58
min. Earth dist.	-114 Jul 30 j 03:11	2°♒54'11	4.00155 AU
	-114 Aug 22 j 17:05	30°℞♉	
direct	-114 Sep 27 j 03:33	27°♉59'27	
	-114 Nov 01 j 04:50	0°♒	
	-113 Jan 19 j 18:55	15°♒	
evening set	-113 Jan 30 j 04:08	17°♒28'18	
conjunction	-113 Feb 12 j 06:50	20°♒37'51	-1°02'31
minimum elong	-113 Feb 12 j 06:48	20°♒37'49	1°02'31
max. Earth dist.	-113 Feb 13 j 03:12	20°♒50'09	5.97359 AU
morning rise	-113 Feb 25 j 12:33	23°♒49'05	
	-113 Mar 24 j 00:31	0°♓	
retrograde	-113 Jul 07 j 22:34	14°♓23'42	
opposition	-113 Sep 05 j 21:08	9°♓20'57	-1°45'12
min. Earth dist.	-113 Sep 04 j 21:57	9°♓28'46	3.96774 AU
direct	-113 Nov 02 j 21:43	4°♓26'52	
evening set	-112 Mar 07 j 06:35	24°♓02'55	
conjunction	-112 Mar 20 j 17:13	27°♓15'38	-1°10'12
minimum elong	-112 Mar 20 j 17:14	27°♓15'39	1°10'11
max. Earth dist.	-112 Mar 22 j 16:05	27°♓43'40	5.98192 AU
	-112 Apr 01 j 04:33	0°♈	
morning rise	-112 Apr 03 j 06:49	0°♈29'51	
retrograde	-112 Aug 12 j 23:45	20°♈51'29	
min. Earth dist.	-112 Oct 10 j 05:20	15°♈57'48	4.01831 AU
opposition	-112 Oct 11 j 14:49	15°♈46'24	-1°34'54
direct	-112 Dec 08 j 14:24	10°♈49'46	
evening set	-111 Apr 13 j 15:19	0°♉08'32	
	-111 Apr 13 j 00:36	0°♉	
conjunction	-111 Apr 27 j 08:09	3°♉20'06	-0°50'51
minimum elong	-111 Apr 27 j 08:12	3°♉20'08	0°50'50
max. Earth dist.	-111 Apr 29 j 12:50	3°♉50'50	6.06918 AU
morning rise	-111 May 11 j 03:03	6°♉32'26	
	-111 Jun 18 j 10:17	15°♉	
retrograde	-111 Sep 16 j 22:18	26°♉00'07	
min. Earth dist.	-111 Nov 14 j 04:59	21°♉06'04	4.13192 AU
opposition	-111 Nov 15 j 11:58	20°♉55'30	-0°49'47
direct	-110 Jan 13 j 08:12	15°♉55'44	
	-110 Apr 28 j 16:21	0°♊	
evening set	-110 May 19 j 23:17	4°♊42'02	
conjunction	-110 Jun 02 j 17:40	7°♊48'28	-0°13'57
minimum elong	-110 Jun 02 j 17:41	7°♊48'29	0°13'57
behind sun begin	-110 Jun 02 j 13:41	7°♊46'13	
behind sun end	-110 Jun 02 j 21:42	7°♊50'44	
max. Earth dist.	-110 Jun 04 j 10:27	8°♊11'31	6.19984 AU
morning rise	-110 Jun 16 j 11:43	10°♊54'30	
asc. node	-110 Oct 16 j 12:18	29°♊14'09	
retrograde	-110 Oct 19 j 17:42	29°♊15'11	
opposition	-110 Dec 18 j 09:05	24°♊13'32	0°09'24
min. Earth dist.	-110 Dec 17 j 14:42	24°♊19'43	4.26614 AU
direct	-109 Feb 16 j 12:38	19°♊11'25	
	-109 May 19 j 08:47	0°♋	
evening set	-109 Jun 23 j 13:11	7°♋24'03	
conjunction	-109 Jul 07 j 03:02	10°♋23'10	0°26'02
minimum elong	-109 Jul 07 j 03:00	10°♋23'09	0°26'02
max. Earth dist.	-109 Jul 07 j 17:41	10°♋31'14	6.32733 AU
morning rise	-109 Jul 20 j 15:03	13°♋21'09	
	-109 Oct 28 j 17:48	0°♌	
retrograde	-109 Nov 19 j 19:30	0°♌46'39	
	-109 Dec 11 j 18:26	30°℞♋	
opposition	-108 Jan 18 j 17:56	25°♋48'50	1°02'30
min. Earth dist.	-108 Jan 18 j 16:49	25°♋49'12	4.37720 AU
direct	-108 Mar 20 j 04:29	20°♋45'35	
	-108 Jun 13 j 09:11	0°♌	
evening set	-108 Jul 25 j 08:03	8°♌33'50	
conjunction	-108 Aug 07 j 14:13	11°♌26'14	0°56'54
minimum elong	-108 Aug 07 j 14:10	11°♌26'12	0°56'55
max. Earth dist.	-108 Aug 07 j 02:25	11°♌19'49	6.41341 AU
morning rise	-108 Aug 20 j 17:17	14°♌17'05	
	-108 Aug 24 j 01:01	15°♌	
	-108 Nov 21 j 12:26	0°♍	
retrograde	-108 Dec 19 j 03:04	1°♍11'20	
	-107 Jan 15 j 17:23	30°℞♌	
opposition	-107 Feb 17 j 10:10	26°♌17'00	1°36'14
min. Earth dist.	-107 Feb 18 j 02:16	26°♌11'47	4.43395 AU
direct	-107 Apr 20 j 19:19	21°♌13'58	
	-107 Jul 13 j 01:49	0°♍	
evening set	-107 Aug 25 j 18:15	8°♍51'42	
max. Earth dist.	-107 Sep 06 j 04:55	11°♍20'39	6.43567 AU
conjunction	-107 Sep 07 j 16:22	11°♍39'56	1°11'26
minimum elong	-107 Sep 07 j 16:22	11°♍39'56	1°11'25
morning rise	-107 Sep 20 j 11:43	14°♍26'50	
	-107 Dec 20 j 16:39	0°♎	
retrograde	-106 Jan 18 j 16:59	1°♎17'34	
	-106 Feb 16 j 18:00	30°℞♍	
opposition	-106 Mar 20 j 07:42	26°♍25'21	1°43'47
min. Earth dist.	-106 Mar 21 j 13:51	26°♍15'42	4.42175 AU
direct	-106 May 22 j 02:14	21°♍23'35	
	-106 Aug 12 j 03:54	0°♎	
evening set	-106 Sep 25 j 12:30	9°♎05'56	
max. Earth dist.	-106 Oct 06 j 06:34	11°♎27'56	6.38916 AU
conjunction	-106 Oct 08 j 05:25	11°♎53'48	1°06'25
minimum elong	-106 Oct 08 j 05:26	11°♎53'49	1°06'25
morning rise	-106 Oct 20 j 19:57	14°♎40'43	
	-105 Jan 14 j 16:44	0°♏	
retrograde	-105 Feb 19 j 08:14	1°♏55'21	
	-105 Mar 27 j 08:26	30°℞♎	
opposition	-105 Apr 21 j 06:08	27°♎03'37	1°22'55
min. Earth dist.	-105 Apr 22 j 16:48	26°♎52'35	4.34390 AU
direct	-105 Jun 22 j 15:36	22°♎04'04	
	-105 Sep 08 j 00:48	0°♏	
evening set	-105 Oct 26 j 12:13	10°♏05'27	
max. Earth dist.	-105 Nov 06 j 04:27	12°♏30'10	6.28596 AU
conjunction	-105 Nov 08 j 03:07	12°♏56'38	0°42'27
minimum elong	-105 Nov 08 j 03:10	12°♏56'39	0°42'26
	-105 Nov 17 j 04:50	15°♏	
morning rise	-105 Nov 20 j 17:05	15°♏47'33	
	-104 Feb 01 j 17:37	0°♐	
retrograde	-104 Mar 23 j 23:38	3°♐50'14	
	-104 May 15 j 15:33	30°℞♏	

Attention, astronomical year style is used: The year -104 in astronomical counting style is the year 105 BCE in historical counting style.

opposition	-104 May 23 j 21:24	28°♏57'22	0°36'30
min. Earth dist.	-104 May 25 j 04:01	28°♏47'35	4.22105 AU
direct	-104 Jul 24 j 08:46	24°♏00'28	
	-104 Sep 27 j 06:16	0°♐	
evening set	-104 Nov 26 j 14:03	12°♐31'53	
max. Earth dist.	-104 Dec 07 j 21:43	15°♐09'58	6.15428 AU
conjunction	-104 Dec 09 j 06:34	15°♐29'09	0°04'38
minimum elong	-104 Dec 09 j 06:34	15°♐29'09	0°04'38
behind sun begin	-104 Dec 08 j 22:44	15°♐24'36	
behind sun end	-104 Dec 09 j 14:24	15°♐33'42	
morning rise	-104 Dec 21 j 23:40	18°♐26'58	
desc. node	-103 Jan 21 j 16:11	25°♐20'14	
	-103 Feb 14 j 01:04	0°♑	
retrograde	-103 Apr 28 j 17:00	7°♑33'01	
opposition	-103 Jun 28 j 11:21	2°♑37'24	-0°24'47
min. Earth dist.	-103 Jun 29 j 01:16	2°♑32'53	4.08993 AU
	-103 Jul 19 j 20:34	30°℞♐	
direct	-103 Aug 27 j 12:03	27°♐42'58	
	-103 Oct 04 j 14:24	0°♑	
evening set	-103 Dec 30 j 10:52	16°♑47'56	
conjunction	-102 Jan 12 j 07:46	19°♑52'10	-0°36'25
minimum elong	-102 Jan 12 j 07:44	19°♑52'09	0°36'25
max. Earth dist.	-102 Jan 12 j 01:31	19°♑48'26	6.03558 AU
morning rise	-102 Jan 25 j 06:48	22°♑57'44	
	-102 Feb 24 j 21:42	0°♒	
retrograde	-102 Jun 05 j 05:30	13°♒03'23	
opposition	-102 Aug 04 j 13:54	8°♒03'56	-1°20'25
min. Earth dist.	-102 Aug 04 j 07:12	8°♒06'09	3.99516 AU
direct	-102 Oct 02 j 07:52	3°♒10'34	
	-101 Jan 02 j 02:07	15°♒	
evening set	-101 Feb 04 j 06:55	22°♒40'24	
conjunction	-101 Feb 17 j 10:38	25°♒50'25	-1°05'12
minimum elong	-101 Feb 17 j 10:36	25°♒50'24	1°05'12
max. Earth dist.	-101 Feb 18 j 11:52	26°♒05'38	5.97302 AU
morning rise	-101 Mar 02 j 17:22	29°♒02'07	
	-101 Mar 06 j 18:24	0°♓	
retrograde	-101 Jul 13 j 04:03	19°♓36'20	
min. Earth dist.	-101 Sep 10 j 00:00	14°♓41'43	3.97339 AU
opposition	-101 Sep 11 j 01:26	14°♓33'09	-1°46'14
direct	-101 Nov 08 j 00:13	9°♓38'48	
evening set	-100 Mar 12 j 11:02	29°♓12'29	
	-100 Mar 15 j 19:02	0°♈	
conjunction	-100 Mar 25 j 22:27	2°♈25'05	-1°08'59
minimum elong	-100 Mar 25 j 22:28	2°♈25'06	1°09'00
max. Earth dist.	-100 Mar 27 j 21:40	2°♈53'14	5.99285 AU
morning rise	-100 Apr 08 j 13:03	5°♈39'10	
retrograde	-100 Aug 17 j 21:06	25°♈54'10	
min. Earth dist.	-100 Oct 15 j 03:04	21°♈00'29	4.03324 AU
opposition	-100 Oct 16 j 12:49	20°♈48'58	-1°30'18
direct	-100 Dec 13 j 14:32	15°♈51'53	
	-99 Mar 27 j 04:47	0°♉	
evening set	-99 Apr 18 j 16:49	5°♉06'06	
conjunction	-99 May 02 j 10:20	8°♉17'08	-0°46'29
minimum elong	-99 May 02 j 10:23	8°♉17'10	0°46'28
max. Earth dist.	-99 May 04 j 14:50	8°♉47'37	6.08688 AU
morning rise	-99 May 16 j 05:18	11°♉28'43	
	-99 May 31 j 17:29	15°♉	
	-99 Aug 30 j 14:39	0°♊	
retrograde	-99 Sep 21 j 14:37	0°♊47'09	
	-99 Oct 13 j 07:47	30°℞♉	
min. Earth dist.	-99 Nov 18 j 22:05	25°♉52'43	4.15040 AU
opposition	-99 Nov 20 j 02:56	25°♉42'54	-0°41'59
direct	-98 Jan 18 j 03:31	20°♉42'47	
	-98 Apr 10 j 11:08	0°♊	
evening set	-98 May 24 j 19:38	9°♊24'23	
conjunction	-98 Jun 07 j 13:38	12°♊29'55	-0°08'21
minimum elong	-98 Jun 07 j 13:38	12°♊29'55	0°08'20
behind sun begin	-98 Jun 07 j 06:20	12°♊25'50	
behind sun end	-98 Jun 07 j 20:57	12°♊34'01	
max. Earth dist.	-98 Jun 09 j 02:28	12°♊50'39	6.21757 AU
morning rise	-98 Jun 21 j 07:16	15°♊34'59	
asc. node	-98 Aug 27 j 12:30	28°♊53'59	
	-98 Sep 03 j 22:54	0°♋	
retrograde	-98 Oct 24 j 01:40	3°♋47'37	
	-98 Dec 13 j 13:12	30°℞♊	
opposition	-98 Dec 22 j 18:17	28°♊46'31	0°17'25
min. Earth dist.	-98 Dec 22 j 01:59	28°♊51'59	4.28181 AU
direct	-97 Feb 21 j 01:31	23°♊44'11	
	-97 Apr 29 j 07:51	0°♋	
evening set	-97 Jun 28 j 04:03	11°♋53'40	
conjunction	-97 Jul 11 j 17:04	14°♋51'54	0°31'01
minimum elong	-97 Jul 11 j 17:02	14°♋51'53	0°31'00
max. Earth dist.	-97 Jul 12 j 04:18	14°♋58'04	6.33992 AU
morning rise	-97 Jul 25 j 03:53	17°♋48'54	
	-97 Sep 25 j 10:47	0°♌	
retrograde	-97 Nov 24 j 02:01	5°♌09'29	
opposition	-96 Jan 23 j 00:21	0°♌12'18	1°08'29
min. Earth dist.	-96 Jan 23 j 01:57	0°♌11'46	4.38606 AU
	-96 Jan 24 j 13:42	30°℞♋	
direct	-96 Mar 24 j 14:22	25°♋09'05	
	-96 May 22 j 23:08	0°♌	
evening set	-96 Jul 29 j 18:33	12°♌56'03	
	-96 Aug 08 j 07:30	15°♌	
conjunction	-96 Aug 11 j 23:32	15°♌47'49	0°59'58
minimum elong	-96 Aug 11 j 23:29	15°♌47'48	0°59'58
max. Earth dist.	-96 Aug 11 j 07:08	15°♌38'55	6.41777 AU
morning rise	-96 Aug 25 j 01:37	18°♌38'06	
	-96 Oct 22 j 05:13	0°♍	
retrograde	-96 Dec 23 j 09:44	5°♍31'10	
opposition	-95 Feb 21 j 17:02	0°♍37'13	1°38'54
min. Earth dist.	-95 Feb 22 j 11:27	0°♍31'15	4.43397 AU
	-95 Feb 26 j 12:11	30°℞♌	
direct	-95 Apr 25 j 03:55	25°♌34'19	
	-95 Jun 21 j 02:55	0°♍	
evening set	-95 Aug 30 j 02:06	13°♍12'38	
max. Earth dist.	-95 Sep 10 j 11:27	15°♍41'03	6.43134 AU
conjunction	-95 Sep 11 j 23:30	16°♍00'43	1°11'52
minimum elong	-95 Sep 11 j 23:29	16°♍00'42	1°11'52
morning rise	-95 Sep 24 j 17:50	18°♍47'25	
	-95 Nov 20 j 17:48	0°♎	
retrograde	-94 Jan 23 j 01:00	5°♎40'25	
opposition	-94 Mar 24 j 17:21	0°♎48'24	1°42'29
min. Earth dist.	-94 Mar 25 j 23:45	0°♎38'41	4.41352 AU
	-94 Mar 31 j 01:28	30°℞♍	
direct	-94 May 26 j 10:25	25°♍46'59	
	-94 Jul 20 j 18:53	0°♎	
evening set	-94 Sep 29 j 20:27	13°♎31'25	
max. Earth dist.	-94 Oct 10 j 12:45	15°♎52'57	6.37756 AU
conjunction	-94 Oct 12 j 12:43	16°♎19'33	1°04'05
minimum elong	-94 Oct 12 j 12:45	16°♎19'34	1°04'05
morning rise	-94 Oct 25 j 03:04	19°♎06'49	
	-94 Dec 18 j 00:27	0°♏	
retrograde	-93 Feb 23 j 23:50	6°♏26'42	
opposition	-93 Apr 25 j 20:46	1°♏34'54	1°17'43

Attention, astronomical year style is used: The year -93 in astronomical counting style is the year 94 BCE in historical counting style.

min. Earth dist.	-93 Apr 27 j 08:02	1°♏23'40	4.32947 AU
	-93 May 08 j 11:57	30°℞♎	
direct	-93 Jun 27 j 04:48	26°♎35'40	
	-93 Aug 14 j 22:47	0°♏	
evening set	-93 Oct 30 j 22:13	14°♏40'22	
	-93 Nov 01 j 09:01	15°♏	
max. Earth dist.	-93 Nov 10 j 16:05	17°♏06'31	6.26982 AU
conjunction	-93 Nov 12 j 13:16	17°♏32'13	0°37'46
minimum elong	-93 Nov 12 j 13:18	17°♏32'14	0°37'46
morning rise	-93 Nov 25 j 03:24	20°♏23'54	
	-92 Jan 09 j 08:13	0°♐	
retrograde	-92 Mar 28 j 19:04	8°♐34'07	
opposition	-92 May 28 j 17:53	3°♐40'55	0°28'25
min. Earth dist.	-92 May 29 j 21:56	3°♐31'57	4.20413 AU
	-92 Jun 30 j 07:15	30°℞♏	
direct	-92 Jul 28 j 23:47	28°♏44'24	
	-92 Aug 26 j 14:12	0°♐	
evening set	-92 Dec 01 j 04:39	17°♐19'49	
desc. node	-92 Dec 01 j 13:00	17°♐24'40	
conjunction	-92 Dec 13 j 21:29	20°♐17'54	-0°01'20
minimum elong	-92 Dec 13 j 21:31	20°♐17'55	0°01'21
behind sun begin	-92 Dec 13 j 13:30	20°♐13'14	
behind sun end	-92 Dec 14 j 05:32	20°♐22'35	
max. Earth dist.	-92 Dec 12 j 15:53	20°♐00'33	6.13789 AU
morning rise	-92 Dec 26 j 15:15	23°♐16'42	
	-91 Jan 25 j 10:32	0°♑	
retrograde	-91 May 03 j 20:29	12°♑31'05	
opposition	-91 Jul 03 j 13:23	7°♑34'58	-0°33'26
min. Earth dist.	-91 Jul 04 j 01:24	7°♑31'03	4.07521 AU
direct	-91 Sep 01 j 10:55	2°♑40'44	
evening set	-90 Jan 04 j 07:31	21°♑49'24	
conjunction	-90 Jan 17 j 05:16	24°♑54'30	-0°41'30
minimum elong	-90 Jan 17 j 05:14	24°♑54'28	0°41'30
max. Earth dist.	-90 Jan 17 j 03:17	24°♑53'18	6.02388 AU
morning rise	-90 Jan 30 j 05:14	28°♑00'59	
	-90 Feb 07 j 14:33	0°♒	
	-90 Apr 25 j 10:57	15°♒	
retrograde	-90 Jun 10 j 11:43	18°♒12'27	
	-90 Jul 26 j 22:24	15°℞♒	
opposition	-90 Aug 09 j 18:27	13°♒12'29	-1°26'13
min. Earth dist.	-90 Aug 09 j 08:50	13°♒15'40	3.98795 AU
direct	-90 Oct 07 j 08:16	8°♒19'05	
	-90 Dec 12 j 13:28	15°♒	
evening set	-89 Feb 09 j 09:10	27°♒50'46	
	-89 Feb 18 j 08:06	0°♓	
conjunction	-89 Feb 22 j 13:47	1°♓01'19	-1°07'22
minimum elong	-89 Feb 22 j 13:46	1°♓01'18	1°07'22
max. Earth dist.	-89 Feb 23 j 17:17	1°♓17'53	5.97069 AU
morning rise	-89 Mar 07 j 21:45	4°♓13'37	
retrograde	-89 Jul 18 j 07:08	24°♓48'10	
min. Earth dist.	-89 Sep 15 j 01:14	19°♓53'46	3.97629 AU
opposition	-89 Sep 16 j 04:35	19°♓44'31	-1°46'29
direct	-89 Nov 13 j 02:31	14°♓49'48	
	-88 Feb 27 j 21:08	0°♈	
evening set	-88 Mar 17 j 15:21	4°♈22'25	
conjunction	-88 Mar 31 j 04:00	7°♈35'10	-1°07'16
minimum elong	-88 Mar 31 j 04:02	7°♈35'11	1°07'16
max. Earth dist.	-88 Apr 02 j 05:59	8°♈04'53	6.00072 AU
morning rise	-88 Apr 13 j 19:21	10°♈49'14	
	-88 Jul 29 j 07:44	0°♉	
retrograde	-88 Aug 22 j 21:36	0°♉58'43	
	-88 Sep 16 j 04:30	30°℞♈	
min. Earth dist.	-88 Oct 20 j 02:15	26°♈04'44	4.04502 AU
opposition	-88 Oct 21 j 11:13	25°♈53'29	-1°25'03
direct	-88 Dec 18 j 15:43	20°♈55'56	
	-87 Mar 08 j 06:36	0°♉	
evening set	-87 Apr 23 j 19:45	10°♉06'49	
conjunction	-87 May 07 j 13:40	13°♉17'25	-0°41'44
minimum elong	-87 May 07 j 13:43	13°♉17'26	0°41'44
max. Earth dist.	-87 May 09 j 16:37	13°♉46'52	6.10146 AU
	-87 May 14 j 23:13	15°♉	
morning rise	-87 May 21 j 08:59	16°♉28'26	
	-87 Jul 26 j 07:23	0°♊	
retrograde	-87 Sep 26 j 05:45	5°♊38'31	
opposition	-87 Nov 24 j 19:06	0°♊34'34	-0°33'47
min. Earth dist.	-87 Nov 23 j 14:50	0°♊44'11	4.16626 AU
	-87 Nov 29 j 01:06	30°℞♉	
direct	-86 Jan 22 j 22:32	25°♉34'03	
	-86 Mar 18 j 10:58	0°♊	
evening set	-86 May 29 j 18:10	14°♊11'52	
conjunction	-86 Jun 12 j 11:50	17°♊16'34	-0°02'34
minimum elong	-86 Jun 12 j 11:50	17°♊16'34	0°02'34
behind sun begin	-86 Jun 12 j 03:30	17°♊11'55	
behind sun end	-86 Jun 12 j 20:11	17°♊21'13	
max. Earth dist.	-86 Jun 13 j 21:23	17°♊35'24	6.23368 AU
morning rise	-86 Jun 26 j 04:48	20°♊20'39	
asc. node	-86 Jul 07 j 00:52	22°♊44'05	
	-86 Aug 11 j 10:18	0°♋	
retrograde	-86 Oct 28 j 13:52	8°♋25'39	
opposition	-86 Dec 27 j 05:53	3°♋25'06	0°25'31
min. Earth dist.	-86 Dec 26 j 16:21	3°♋29'38	4.29681 AU
	-85 Jan 24 j 11:30	30°℞♊	
direct	-85 Feb 25 j 17:57	28°♊22'37	
	-85 Mar 30 j 10:14	0°♋	
evening set	-85 Jul 02 j 21:05	16°♋28'49	
conjunction	-85 Jul 16 j 09:09	19°♋26'08	0°35'56
minimum elong	-85 Jul 16 j 09:06	19°♋26'07	0°35'57
max. Earth dist.	-85 Jul 16 j 17:09	19°♋30'32	6.35286 AU
morning rise	-85 Jul 29 j 18:51	22°♋22'08	
	-85 Sep 04 j 11:11	0°♌	
retrograde	-85 Nov 28 j 08:56	9°♌37'35	
opposition	-84 Jan 27 j 09:17	4°♌40'52	1°14'14
min. Earth dist.	-84 Jan 27 j 12:15	4°♌39'54	4.39653 AU
	-84 Mar 13 j 14:10	30°℞♋	
direct	-84 Mar 29 j 02:03	29°♋37'40	
	-84 Apr 13 j 18:28	0°♌	
	-84 Jul 23 j 03:46	15°♌	
evening set	-84 Aug 03 j 06:40	17°♌22'23	
conjunction	-84 Aug 16 j 10:29	20°♌13'22	1°02'46
minimum elong	-84 Aug 16 j 10:26	20°♌13'21	1°02'46
max. Earth dist.	-84 Aug 15 j 16:18	20°♌03'30	6.42529 AU
morning rise	-84 Aug 29 j 11:14	23°♌02'50	
	-84 Oct 02 j 00:39	0°♍	
retrograde	-84 Dec 27 j 16:32	9°♍53'31	
opposition	-83 Feb 26 j 01:22	4°♍59'57	1°41'03
min. Earth dist.	-83 Feb 26 j 21:22	4°♍53'30	4.43834 AU
	-83 Apr 24 j 02:59	30°℞♌	
direct	-83 Apr 29 j 14:30	29°♌57'17	
	-83 May 05 j 02:38	0°♍	
evening set	-83 Sep 03 j 10:31	17°♍34'18	
max. Earth dist.	-83 Sep 14 j 15:53	20°♍00'43	6.43217 AU
conjunction	-83 Sep 16 j 06:50	20°♍21'57	1°11'57
minimum elong	-83 Sep 16 j 06:50	20°♍21'57	1°11'58
morning rise	-83 Sep 29 j 00:27	23°♍08'19	

Attention, astronomical year style is used: The year -83 in astronomical counting style is the year 84 BCE in historical counting style.

	-83 Oct 31 j 22:14	0°♎	
retrograde	-82 Jan 27 j 09:55	10°♎01'52	
opposition	-82 Mar 29 j 03:07	5°♎09'56	1°40'38
min. Earth dist.	-82 Mar 30 j 10:37	4°♎59'52	4.41083 AU
direct	-82 May 30 j 20:42	0°♎08'45	
evening set	-82 Oct 04 j 02:46	17°♎53'12	
max. Earth dist.	-82 Oct 14 j 19:45	20°♎15'19	6.37156 AU
conjunction	-82 Oct 16 j 18:43	20°♎41'23	1°01'27
minimum elong	-82 Oct 16 j 18:45	20°♎41'24	1°01'26
morning rise	-82 Oct 29 j 08:33	23°♎28'45	
	-82 Nov 28 j 22:14	0°♏	
retrograde	-81 Feb 28 j 10:30	10°♏52'10	
opposition	-81 Apr 30 j 09:32	6°♏00'16	1°12'11
min. Earth dist.	-81 May 01 j 20:06	5°♏49'17	4.32032 AU
direct	-81 Jul 01 j 14:57	1°♏01'25	
	-81 Oct 16 j 15:00	15°♏	
evening set	-81 Nov 04 j 05:32	19°♏07'40	
max. Earth dist.	-81 Nov 14 j 23:33	21°♏34'22	6.25821 AU
conjunction	-81 Nov 16 j 20:23	21°♏59'57	0°33'00
minimum elong	-81 Nov 16 j 20:25	21°♏59'58	0°32'59
morning rise	-81 Nov 29 j 10:49	24°♏52'13	
	-81 Dec 22 j 13:44	0°♐	
retrograde	-80 Apr 02 j 12:52	13°♐08'46	
opposition	-80 Jun 02 j 11:03	8°♐15'15	0°20'24
min. Earth dist.	-80 Jun 03 j 14:30	8°♐06'27	4.19050 AU
direct	-80 Aug 02 j 14:29	3°♐19'01	
desc. node	-80 Oct 13 j 12:03	10°♐36'18	
evening set	-80 Dec 05 j 15:35	21°♐57'35	
max. Earth dist.	-80 Dec 17 j 06:01	24°♐40'39	6.12355 AU
conjunction	-80 Dec 18 j 09:00	24°♐56'30	-0°07'00
minimum elong	-80 Dec 18 j 09:00	24°♐56'30	0°07'00
behind sun begin	-80 Dec 18 j 01:33	24°♐52'09	
behind sun end	-80 Dec 18 j 16:26	25°♐00'51	
morning rise	-80 Dec 31 j 03:18	27°♐56'10	
	-79 Jan 09 j 00:46	0°♑	
retrograde	-79 May 08 j 18:49	17°♑18'16	
opposition	-79 Jul 08 j 10:56	12°♑21'45	-0°41'33
min. Earth dist.	-79 Jul 08 j 20:47	12°♑18'32	4.06143 AU
direct	-79 Sep 06 j 03:33	7°♑27'44	
evening set	-78 Jan 09 j 00:31	26°♑40'19	
conjunction	-78 Jan 21 j 22:57	29°♑46'18	-0°46'06
minimum elong	-78 Jan 21 j 22:54	29°♑46'16	0°46'07
max. Earth dist.	-78 Jan 21 j 22:58	29°♑46'18	6.01175 AU
	-78 Jan 22 j 21:47	0°♒	
morning rise	-78 Feb 04 j 00:00	2°♒53'47	
	-78 Mar 31 j 01:15	15°♒	
retrograde	-78 Jun 15 j 13:44	23°♒11'42	
opposition	-78 Aug 14 j 19:02	18°♒11'13	-1°31'13
min. Earth dist.	-78 Aug 14 j 07:01	18°♒15'13	3.97881 AU
	-78 Sep 09 j 23:20	15°℞♒	
direct	-78 Oct 12 j 05:14	13°♒17'45	
	-78 Nov 13 j 05:20	15°♒	
	-77 Feb 02 j 05:49	0°♓	
evening set	-77 Feb 14 j 08:09	2°♓52'30	
conjunction	-77 Feb 27 j 14:04	6°♓03'50	-1°08'58
minimum elong	-77 Feb 27 j 14:03	6°♓03'50	1°08'58
max. Earth dist.	-77 Feb 28 j 21:57	6°♓23'04	5.96551 AU
morning rise	-77 Mar 12 j 23:02	9°♓16'51	
retrograde	-77 Jul 23 j 10:35	29°♓53'04	
min. Earth dist.	-77 Sep 20 j 01:05	24°♓58'36	3.97582 AU
opposition	-77 Sep 21 j 04:58	24°♓49'09	-1°45'57
direct	-77 Nov 18 j 02:07	19°♓54'11	

	-76 Feb 09 j 17:00	0°♈	
evening set	-76 Mar 22 j 18:14	9°♈27'24	
conjunction	-76 Apr 05 j 07:50	12°♈40'26	-1°05'04
minimum elong	-76 Apr 05 j 07:53	12°♈40'28	1°05'03
max. Earth dist.	-76 Apr 07 j 10:35	13°♈10'33	6.00495 AU
morning rise	-76 Apr 19 j 00:18	15°♈54'46	
	-76 Jun 24 j 21:26	0°♉	
retrograde	-76 Aug 27 j 18:55	6°♉00'05	
min. Earth dist.	-76 Oct 24 j 21:56	1°♉06'30	4.05356 AU
opposition	-76 Oct 26 j 07:57	0°♉54'53	-1°19'16
	-76 Nov 02 j 01:47	30°℞♈	
direct	-76 Dec 23 j 13:02	25°♈56'57	
	-75 Feb 12 j 11:40	0°♉	
evening set	-75 Apr 28 j 22:02	15°♉05'54	
	-75 Apr 28 j 11:46	15°♉	
conjunction	-75 May 12 j 16:24	18°♉16'09	-0°36'43
minimum elong	-75 May 12 j 16:27	18°♉16'10	0°36'43
max. Earth dist.	-75 May 14 j 18:01	18°♉44'46	6.11372 AU
morning rise	-75 May 26 j 11:52	21°♉26'40	
	-75 Jul 04 j 18:10	0°♊	
retrograde	-75 Sep 30 j 22:45	10°♊29'21	
min. Earth dist.	-75 Nov 28 j 08:49	5°♊34'40	4.18073 AU
opposition	-75 Nov 29 j 11:09	5°♊25'43	-0°25'26
direct	-74 Jan 27 j 19:00	0°♊24'52	
asc. node	-74 May 16 j 11:32	14°♊59'56	
evening set	-74 Jun 03 j 16:10	18°♊59'05	
conjunction	-74 Jun 17 j 09:27	22°♊02'56	0°03'20
minimum elong	-74 Jun 17 j 09:27	22°♊02'56	0°03'20
behind sun begin	-74 Jun 17 j 01:10	21°♊58'19	
behind sun end	-74 Jun 17 j 17:44	22°♊07'33	
max. Earth dist.	-74 Jun 18 j 17:39	22°♊20'57	6.24923 AU
morning rise	-74 Jul 01 j 01:38	25°♊06'01	
	-74 Jul 23 j 15:33	0°♋	
retrograde	-74 Nov 01 j 22:56	13°♋03'29	
opposition	-74 Dec 31 j 17:04	8°♋03'22	0°33'23
min. Earth dist.	-74 Dec 31 j 04:21	8°♋07'37	4.31204 AU
direct	-73 Mar 02 j 08:27	3°♋00'41	
evening set	-73 Jul 07 j 13:26	21°♋03'14	
conjunction	-73 Jul 21 j 00:18	23°♋59'30	0°40'37
minimum elong	-73 Jul 21 j 00:15	23°♋59'29	0°40'38
max. Earth dist.	-73 Jul 21 j 04:25	24°♋01'46	6.36637 AU
morning rise	-73 Aug 03 j 08:47	26°♋54'26	
	-73 Aug 17 j 18:45	0°♌	
retrograde	-73 Dec 02 j 16:32	14°♌04'31	
opposition	-72 Jan 31 j 17:32	9°♌08'14	1°19'31
min. Earth dist.	-72 Jan 31 j 23:31	9°♌06'17	4.40715 AU
direct	-72 Apr 02 j 15:03	4°♌04'59	
	-72 Jul 05 j 23:00	15°♌	
evening set	-72 Aug 07 j 17:26	21°♌47'11	
conjunction	-72 Aug 20 j 20:08	24°♌37'26	1°05'13
minimum elong	-72 Aug 20 j 20:06	24°♌37'25	1°05'12
max. Earth dist.	-72 Aug 19 j 22:41	24°♌25'49	6.43172 AU
morning rise	-72 Sep 02 j 19:43	27°♌26'10	
	-72 Sep 14 j 19:56	0°♍	
retrograde	-72 Dec 31 j 22:13	14°♍15'03	
opposition	-71 Mar 02 j 09:09	9°♍21'42	1°42'40
min. Earth dist.	-71 Mar 03 j 06:37	9°♍14'46	4.44019 AU
direct	-71 May 03 j 23:33	4°♍19'07	
evening set	-71 Sep 07 j 17:54	21°♍55'40	
max. Earth dist.	-71 Sep 18 j 21:37	24°♍21'20	6.42908 AU
conjunction	-71 Sep 20 j 13:25	24°♍43'05	1°11'39

Attention, astronomical year style is used: The year -71 in astronomical counting style is the year 72 BCE in historical counting style.

minimum elong	-71 Sep 20 j 13:26	24°♍43'05	1°11'39
morning rise	-71 Oct 03 j 06:09	27°♍29'14	
	-71 Oct 14 j 22:31	0°♎	
retrograde	-70 Jan 31 j 18:45	14°♎24'53	
opposition	-70 Apr 02 j 13:21	9°♎33'02	1°38'15
min. Earth dist.	-70 Apr 03 j 22:12	9°♎22'34	4.40281 AU
direct	-70 Jun 04 j 06:58	4°♎32'08	
evening set	-70 Oct 08 j 10:06	22°♎18'24	
max. Earth dist.	-70 Oct 19 j 00:35	24°♎39'37	6.35909 AU
conjunction	-70 Oct 21 j 01:33	25°♎06'53	0°58'26
minimum elong	-70 Oct 21 j 01:35	25°♎06'55	0°58'25
morning rise	-70 Nov 02 j 15:22	27°♎54'43	
	-70 Nov 12 j 03:09	0°♏	
	-69 Feb 17 j 00:17	15°♏	
retrograde	-69 Mar 05 j 01:34	15°♏24'02	
	-69 Mar 21 j 02:47	15°℞♏	
opposition	-69 May 05 j 00:46	10°♏31'57	1°06'07
min. Earth dist.	-69 May 06 j 11:19	10°♏20'57	4.30398 AU
direct	-69 Jul 06 j 03:46	5°♏33'22	
	-69 Sep 28 j 22:34	15°♏	
evening set	-69 Nov 08 j 15:49	23°♏43'39	
max. Earth dist.	-69 Nov 19 j 12:29	26°♏12'25	6.23947 AU
conjunction	-69 Nov 21 j 07:01	26°♏36'47	0°27'52
minimum elong	-69 Nov 21 j 07:03	26°♏36'48	0°27'52
morning rise	-69 Dec 03 j 21:40	29°♏29'58	
	-69 Dec 06 j 02:29	0°♐	
retrograde	-68 Apr 07 j 10:51	17°♐55'21	
opposition	-68 Jun 07 j 09:00	13°♐01'31	0°11'54
min. Earth dist.	-68 Jun 08 j 10:45	12°♐53'16	4.17061 AU
direct	-68 Aug 07 j 07:45	8°♐05'39	
desc. node	-68 Aug 23 j 06:24	8°♐29'48	
evening set	-68 Dec 10 j 08:05	26°♐49'29	
max. Earth dist.	-68 Dec 22 j 00:56	29°♐34'42	6.10422 AU
conjunction	-68 Dec 23 j 01:55	29°♐49'26	-0°12'52
minimum elong	-68 Dec 23 j 01:54	29°♐49'25	0°12'52
behind sun begin	-68 Dec 22 j 20:49	29°♐46'26	
behind sun end	-68 Dec 23 j 06:59	29°♐52'24	
	-68 Dec 23 j 19:51	0°♑	
morning rise	-67 Jan 04 j 21:09	2°♑50'19	
retrograde	-67 May 14 j 00:29	22°♑22'01	
opposition	-67 Jul 13 j 15:14	17°♑24'56	-0°49'52
min. Earth dist.	-67 Jul 13 j 21:56	17°♑22'45	4.04439 AU
direct	-67 Sep 11 j 03:01	12°♑31'04	
	-66 Jan 06 j 09:49	0°♒	
evening set	-66 Jan 14 j 00:29	1°♒48'32	
conjunction	-66 Jan 27 j 00:02	4°♒55'32	-0°50'39
minimum elong	-66 Jan 26 j 23:59	4°♒55'30	0°50'39
max. Earth dist.	-66 Jan 27 j 05:52	4°♒59'02	5.99877 AU
morning rise	-66 Feb 09 j 02:02	8°♒04'03	
	-66 Mar 11 j 00:40	15°♒	
retrograde	-66 Jun 20 j 23:40	28°♒28'02	
opposition	-66 Aug 20 j 02:23	23°♒27'03	-1°35'48
min. Earth dist.	-66 Aug 19 j 12:13	23°♒31'46	3.97169 AU
direct	-66 Oct 17 j 09:39	18°♒33'33	
	-65 Jan 15 j 03:13	0°♓	
evening set	-65 Feb 19 j 14:18	8°♓10'14	
conjunction	-65 Mar 04 j 21:14	11°♓22'06	-1°10'08
minimum elong	-65 Mar 04 j 21:13	11°♓22'05	1°10'08
max. Earth dist.	-65 Mar 06 j 08:15	11°♓43'11	5.96489 AU
morning rise	-65 Mar 18 j 07:33	14°♓35'41	
	-65 May 30 j 16:55	0°♈	
retrograde	-65 Jul 28 j 16:04	5°♈10'37	
min. Earth dist.	-65 Sep 25 j 03:20	0°♈16'48	3.98225 AU
opposition	-65 Sep 26 j 10:06	0°♈06'22	-1°44'31
	-65 Sep 27 j 04:50	30°℞♓	
direct	-65 Nov 23 j 06:21	25°♓11'04	
	-64 Jan 17 j 12:57	0°♈	
evening set	-64 Mar 28 j 01:25	14°♈41'51	
conjunction	-64 Apr 10 j 15:58	17°♈54'43	-1°02'18
minimum elong	-64 Apr 10 j 16:01	17°♈54'44	1°02'17
max. Earth dist.	-64 Apr 12 j 20:11	18°♈25'36	6.01790 AU
morning rise	-64 Apr 24 j 09:06	21°♈08'44	
	-64 Jun 02 j 23:46	0°♉	
retrograde	-64 Sep 01 j 17:59	11°♉05'57	
min. Earth dist.	-64 Oct 29 j 21:30	6°♉12'06	4.07138 AU
opposition	-64 Oct 31 j 06:45	6°♉00'44	-1°12'48
direct	-64 Dec 28 j 15:50	1°♉02'21	
	-63 Apr 11 j 06:56	15°♉	
evening set	-63 May 04 j 01:06	20°♉05'41	
conjunction	-63 May 17 j 19:42	23°♉15'04	-0°31'28
minimum elong	-63 May 17 j 19:45	23°♉15'05	0°31'27
max. Earth dist.	-63 May 19 j 21:12	23°♉43'28	6.13494 AU
morning rise	-63 May 31 j 14:57	26°♉24'33	
	-63 Jun 16 j 15:15	0°♊	
retrograde	-63 Oct 05 j 11:57	15°♊16'24	
min. Earth dist.	-63 Dec 03 j 00:13	10°♊21'52	4.20312 AU
opposition	-63 Dec 04 j 01:51	10°♊13'11	-0°17'02
direct	-62 Feb 01 j 13:21	5°♊12'01	
asc. node	-62 Mar 26 j 15:19	9°♊22'07	
evening set	-62 Jun 08 j 12:13	23°♊40'07	
conjunction	-62 Jun 22 j 04:40	26°♊42'43	0°08'56
minimum elong	-62 Jun 22 j 04:38	26°♊42'43	0°08'56
behind sun begin	-62 Jun 21 j 21:35	26°♊38'48	
behind sun end	-62 Jun 22 j 11:42	26°♊46'38	
max. Earth dist.	-62 Jun 23 j 07:47	26°♊57'50	6.27091 AU
morning rise	-62 Jul 05 j 20:01	29°♊44'29	
	-62 Jul 07 j 00:09	0°♋	
retrograde	-62 Nov 06 j 06:46	17°♋32'54	
opposition	-61 Jan 05 j 01:36	12°♋33'19	0°40'48
min. Earth dist.	-61 Jan 04 j 16:20	12°♋36'25	4.33118 AU
direct	-61 Mar 06 j 22:53	7°♋30'26	
evening set	-61 Jul 12 j 01:55	25°♋28'23	
conjunction	-61 Jul 25 j 11:49	28°♋23'36	0°44'55
minimum elong	-61 Jul 25 j 11:46	28°♋23'35	0°44'55
max. Earth dist.	-61 Jul 25 j 12:48	28°♋24'08	6.38139 AU
	-61 Aug 01 j 20:31	0°♌	
morning rise	-61 Aug 07 j 18:56	1°♌17'23	
	-61 Oct 20 j 08:12	15°♌	
retrograde	-61 Dec 06 j 19:08	18°♌22'21	
	-60 Jan 23 j 19:41	15°℞♌	
opposition	-60 Feb 04 j 22:43	13°♌26'32	1°24'10
min. Earth dist.	-60 Feb 05 j 06:32	13°♌23'59	4.41722 AU
direct	-60 Apr 06 j 22:33	8°♌23'20	
	-60 Jun 16 j 18:41	15°♌	
evening set	-60 Aug 12 j 00:51	26°♌03'32	
max. Earth dist.	-60 Aug 24 j 00:41	28°♌39'14	6.43591 AU
conjunction	-60 Aug 25 j 02:19	28°♌53'09	1°07'13
minimum elong	-60 Aug 25 j 02:17	28°♌53'08	1°07'13
	-60 Aug 30 j 05:32	0°♍	
morning rise	-60 Sep 07 j 00:52	1°♍41'17	
retrograde	-59 Jan 05 j 03:29	18°♍29'34	
opposition	-59 Mar 06 j 14:43	13°♍36'35	1°43'43
min. Earth dist.	-59 Mar 07 j 15:26	13°♍28'38	4.43834 AU
direct	-59 May 08 j 07:39	8°♍34'10	

Attention, astronomical year style is used: The year -59 in astronomical counting style is the year 60 BCE in historical counting style.

evening set	-59 Sep 11 j 23:11	26°♍11'41	
max. Earth dist.	-59 Sep 22 j 23:01	28°♍35'36	6.42111 AU
conjunction	-59 Sep 24 j 18:01	28°♍59'08	1°10'58
minimum elong	-59 Sep 24 j 18:02	28°♍59'08	1°10'58
	-59 Sep 29 j 09:13	0°♎	
morning rise	-59 Oct 07 j 10:12	1°♎45'24	
retrograde	-58 Feb 05 j 03:00	18°♎45'02	
opposition	-58 Apr 06 j 22:40	13°♎53'15	1°35'24
min. Earth dist.	-58 Apr 08 j 08:11	13°♎42'34	4.38932 AU
direct	-58 Jun 08 j 14:17	8°♎52'36	
evening set	-58 Oct 12 j 16:45	26°♎42'41	
max. Earth dist.	-58 Oct 23 j 07:59	29°♎04'55	6.34111 AU
conjunction	-58 Oct 25 j 08:07	29°♎31'50	0°55'06
minimum elong	-58 Oct 25 j 08:09	29°♎31'51	0°55'06
	-58 Oct 27 j 10:26	0°♏	
morning rise	-58 Nov 06 j 21:47	2°♏20'23	
	-57 Jan 09 j 21:21	15°♏	
retrograde	-57 Mar 09 j 18:08	19°♏57'45	
opposition	-57 May 09 j 17:00	15°♏05'35	0°59'39
	-57 May 10 j 10:34	15℞♏	
min. Earth dist.	-57 May 11 j 03:29	14°♏54'37	4.28255 AU
direct	-57 Jul 10 j 16:53	10°♏07'27	
	-57 Sep 07 j 07:15	15°♏	
evening set	-57 Nov 13 j 03:30	28°♏23'32	
	-57 Nov 20 j 03:49	0°♐	
max. Earth dist.	-57 Nov 24 j 00:46	0°♐53'30	6.21638 AU
conjunction	-57 Nov 25 j 18:50	1°♐17'43	0°22'32
minimum elong	-57 Nov 25 j 18:52	1°♐17'44	0°22'31
morning rise	-57 Dec 08 j 10:11	4°♐12'08	
retrograde	-56 Apr 12 j 12:10	22°♐48'11	
opposition	-56 Jun 12 j 09:19	17°♐53'59	0°03'11
min. Earth dist.	-56 Jun 13 j 08:11	17°♐46'37	4.14762 AU
desc. node	-56 Jul 02 j 19:04	15°♐23'56	
direct	-56 Aug 12 j 02:38	12°♐58'27	
	-56 Dec 07 j 09:05	0°♑	
evening set	-56 Dec 15 j 03:14	1°♑48'43	
conjunction	-56 Dec 27 j 21:55	4°♑49'53	-0°18'45
minimum elong	-56 Dec 27 j 21:54	4°♑49'52	0°18'44
max. Earth dist.	-56 Dec 27 j 02:27	4°♑38'21	6.08359 AU
morning rise	-55 Jan 09 j 17:54	7°♑52'02	
retrograde	-55 May 19 j 10:20	27°♑33'34	
opposition	-55 Jul 18 j 22:14	22°♑36'00	-0°57'56
min. Earth dist.	-55 Jul 19 j 02:11	22°♑34'42	4.02828 AU
direct	-55 Sep 16 j 05:10	17°♑42'22	
	-55 Dec 19 j 14:39	0°♒	
evening set	-54 Jan 19 j 03:27	7°♒04'11	
conjunction	-54 Feb 01 j 03:50	10°♒12'03	-0°54'51
minimum elong	-54 Feb 01 j 03:47	10°♒12'02	0°54'51
max. Earth dist.	-54 Feb 01 j 13:36	10°♒17'56	5.98850 AU
morning rise	-54 Feb 14 j 07:08	13°♒21'33	
	-54 Feb 21 j 04:31	15°♒	
	-54 May 06 j 23:51	0°♓	
retrograde	-54 Jun 26 j 08:40	3°♓49'55	
	-54 Aug 16 j 10:55	30℞♒	
opposition	-54 Aug 25 j 11:10	28°♒48'19	-1°39'36
min. Earth dist.	-54 Aug 24 j 16:49	28°♒54'28	3.96870 AU
direct	-54 Oct 22 j 14:58	23°♒54'41	
	-54 Dec 24 j 08:12	0°♓	
evening set	-53 Feb 24 j 21:42	13°♓31'31	
conjunction	-53 Mar 10 j 05:47	16°♓43'41	-1°10'42
minimum elong	-53 Mar 10 j 05:47	16°♓43'40	1°10'43
max. Earth dist.	-53 Mar 11 j 21:03	17°♓07'17	5.96913 AU
morning rise	-53 Mar 23 j 17:03	19°♓57'29	
	-53 May 07 j 06:21	0°♈	
retrograde	-53 Aug 02 j 22:12	10°♈28'52	
min. Earth dist.	-53 Sep 30 j 07:37	5°♈34'53	3.99306 AU
opposition	-53 Oct 01 j 14:56	5°♈24'13	-1°42'13
direct	-53 Nov 28 j 13:00	0°♈28'28	
evening set	-52 Apr 02 j 08:17	19°♈55'19	
conjunction	-52 Apr 15 j 23:43	23°♈07'49	-0°59'04
minimum elong	-52 Apr 15 j 23:45	23°♈07'50	0°59'04
max. Earth dist.	-52 Apr 18 j 05:55	23°♈39'43	6.03407 AU
morning rise	-52 Apr 29 j 17:23	26°♈21'18	
	-52 May 15 j 13:24	0°♉	
	-52 Aug 10 j 22:37	15°♉	
retrograde	-52 Sep 06 j 14:51	16°♉09'04	
	-52 Oct 03 j 00:34	15℞♉	
min. Earth dist.	-52 Nov 03 j 18:42	11°♉15'19	4.09105 AU
opposition	-52 Nov 05 j 03:51	11°♉04'00	-1°05'50
direct	-51 Jan 02 j 15:19	6°♉05'12	
	-51 Mar 23 j 05:24	15°♉	
evening set	-51 May 09 j 03:04	25°♉02'42	
conjunction	-51 May 22 j 21:32	28°♉11'07	-0°26'00
minimum elong	-51 May 22 j 21:34	28°♉11'08	0°26'00
max. Earth dist.	-51 May 24 j 19:09	28°♉37'09	6.15632 AU
	-51 May 30 j 20:31	0°♊	
morning rise	-51 Jun 05 j 16:41	1°♊19'32	
retrograde	-51 Oct 10 j 00:46	20°♊01'05	
opposition	-51 Dec 08 j 15:34	14°♊58'17	-0°08'35
min. Earth dist.	-51 Dec 07 j 16:30	15°♊06'05	4.22414 AU
asc. node	-50 Feb 03 j 11:41	9°♊57'34	
direct	-50 Feb 06 j 08:49	9°♊56'45	
evening set	-50 Jun 13 j 07:04	28°♊19'26	
	-50 Jun 20 j 21:00	0°♋	
conjunction	-50 Jun 26 j 22:56	1°♋20'56	0°14'29
minimum elong	-50 Jun 26 j 22:55	1°♋20'56	0°14'29
behind sun begin	-50 Jun 26 j 19:33	1°♋19'04	
behind sun end	-50 Jun 27 j 02:17	1°♋22'47	
max. Earth dist.	-50 Jun 27 j 23:33	1°♋34'35	6.29009 AU
morning rise	-50 Jul 10 j 13:09	4°♋21'26	
retrograde	-50 Nov 10 j 13:38	22°♋02'00	
opposition	-49 Jan 09 j 09:55	17°♋03'00	0°48'00
min. Earth dist.	-49 Jan 09 j 02:42	17°♋05'24	4.34718 AU
direct	-49 Mar 11 j 11:01	12°♋00'01	
evening set	-49 Jul 16 j 14:46	29°♋54'26	
	-49 Jul 17 j 01:05	0°♌	
conjunction	-49 Jul 29 j 23:21	2°♌48'41	0°49'00
minimum elong	-49 Jul 29 j 23:19	2°♌48'39	0°48'59
max. Earth dist.	-49 Jul 29 j 18:43	2°♌46'09	6.39295 AU
morning rise	-49 Aug 12 j 05:23	5°♌41'31	
	-49 Sep 27 j 04:07	15°♌	
retrograde	-49 Dec 11 j 01:15	22°♌42'31	
opposition	-48 Feb 09 j 05:01	17°♌47'11	1°28'27
min. Earth dist.	-48 Feb 09 j 16:28	17°♌43'27	4.42387 AU
	-48 Mar 02 j 21:55	15℞♌	
direct	-48 Apr 11 j 09:06	12°♌43'57	
	-48 May 21 j 03:29	15°♌	
	-48 Aug 14 j 14:18	0°♍	
evening set	-48 Aug 16 j 09:16	0°♍23'06	
max. Earth dist.	-48 Aug 28 j 05:54	2°♍57'05	6.43705 AU
conjunction	-48 Aug 29 j 09:52	3°♍12'16	1°08'54
minimum elong	-48 Aug 29 j 09:51	3°♍12'15	1°08'54
morning rise	-48 Sep 11 j 07:16	5°♍59'57	

Attention, astronomical year style is used: The year -47 in astronomical counting style is the year 48 BCE in historical counting style.

retrograde	-47 Jan 09 j 08:42	22°♍48'30		
opposition	-47 Mar 10 j 22:13	17°♍55'46	1°44'15	
min. Earth dist.	-47 Mar 11 j 23:53	17°♍47'32	4.43419 AU	
direct	-47 May 12 j 14:48	12°♍53'33		
	-47 Sep 13 j 18:24	0°♎		
evening set	-47 Sep 16 j 06:13	0°♎32'28		
max. Earth dist.	-47 Sep 27 j 03:50	2°♎55'33	6.41191 AU	
conjunction	-47 Sep 29 j 00:19	3°♎19'58	1°09'53	
minimum elong	-47 Sep 29 j 00:20	3°♎19'59	1°09'52	
morning rise	-47 Oct 11 j 15:58	6°♎06'24		
retrograde	-46 Feb 09 j 15:09	23°♎10'22		
opposition	-46 Apr 11 j 10:40	18°♎18'41	1°31'56	
min. Earth dist.	-46 Apr 12 j 21:43	18°♎07'32	4.37559 AU	
direct	-46 Jun 13 j 01:54	13°♎18'23		
	-46 Oct 11 j 15:34	0°♏		
evening set	-46 Oct 17 j 01:32	1°♏12'01		
max. Earth dist.	-46 Oct 27 j 15:47	3°♏34'18	6.32400 AU	
conjunction	-46 Oct 29 j 16:43	4°♏01'47	0°51'23	
minimum elong	-46 Oct 29 j 16:45	4°♏01'48	0°51'23	
morning rise	-46 Nov 11 j 06:30	6°♏51'03		
	-46 Dec 19 j 13:33	15°♏		
retrograde	-45 Mar 14 j 11:57	24°♏36'07		
opposition	-45 May 14 j 11:20	19°♏43'46	0°52'40	
min. Earth dist.	-45 May 15 j 19:54	19°♏33'23	4.26327 AU	
	-45 Jul 03 j 00:34	15°℞♏		
direct	-45 Jul 15 j 06:36	14°♏46'01		
	-45 Jul 27 j 13:08	15°♏		
	-45 Nov 03 j 22:25	0°♐		
evening set	-45 Nov 17 j 16:53	3°♐07'03		
max. Earth dist.	-45 Nov 28 j 18:29	5°♐40'08	6.19688 AU	
conjunction	-45 Nov 30 j 08:37	6°♐02'12	0°16'57	
minimum elong	-45 Nov 30 j 08:38	6°♐02'13	0°16'57	
morning rise	-45 Dec 13 j 00:19	8°♐57'38		
retrograde	-44 Apr 17 j 15:34	27°♐42'56		
desc. node	-44 May 12 j 05:15	26°♐46'50		
opposition	-44 Jun 17 j 10:49	22°♐48'23	-0°05'40	
min. Earth dist.	-44 Jun 18 j 07:48	22°♐41'37	4.12948 AU	
direct	-44 Aug 16 j 23:52	17°♐53'16		
	-44 Nov 20 j 02:25	0°♑		
evening set	-44 Dec 19 j 22:55	6°♑48'03		
conjunction	-43 Jan 01 j 18:08	9°♑50'08	-0°24'30	
minimum elong	-43 Jan 01 j 18:06	9°♑50'07	0°24'30	
max. Earth dist.	-43 Jan 01 j 01:48	9°♑40'26	6.06853 AU	
morning rise	-43 Jan 14 j 15:08	12°♑53'21		
	-43 Apr 12 j 11:07	0°♒		
retrograde	-43 May 24 j 15:50	2°♒42'25		
	-43 Jul 06 j 06:06	30°℞♑		
opposition	-43 Jul 24 j 04:06	27°♑44'16	-1°05'30	
min. Earth dist.	-43 Jul 24 j 03:37	27°♑44'25	4.01801 AU	
direct	-43 Sep 21 j 05:54	22°♑50'48		
	-43 Nov 29 j 09:51	0°♒		
evening set	-42 Jan 24 j 05:02	12°♒14'55		
	-42 Feb 04 j 15:35	15°♒		
conjunction	-42 Feb 06 j 06:24	15°♒23'24	-0°58'33	
minimum elong	-42 Feb 06 j 06:21	15°♒23'23	0°58'32	
max. Earth dist.	-42 Feb 06 j 21:31	15°♒32'31	5.98389 AU	
morning rise	-42 Feb 19 j 10:35	18°♒33'31		
	-42 Apr 11 j 19:24	0°♓		
retrograde	-42 Jul 01 j 15:59	9°♓03'53		
opposition	-42 Aug 30 j 16:42	4°♓01'46	-1°42'27	
min. Earth dist.	-42 Aug 29 j 20:38	4°♓08'30	3.97036 AU	
	-42 Oct 05 j 04:45	30°℞♒		
direct	-42 Oct 27 j 20:07	29°♒07'56		
	-42 Nov 19 j 08:58	0°♓		
evening set	-41 Mar 02 j 02:06	18°♓43'31		
conjunction	-41 Mar 15 j 11:15	21°♓55'48	-1°10'41	
minimum elong	-41 Mar 15 j 11:15	21°♓55'48	1°10'41	
max. Earth dist.	-41 Mar 17 j 06:10	22°♓21'32	5.97672 AU	
morning rise	-41 Mar 28 j 23:29	25°♓09'41		
	-41 Apr 18 j 17:10	0°♈		
retrograde	-41 Aug 07 j 23:00	15°♈36'04		
min. Earth dist.	-41 Oct 05 j 06:48	10°♈42'17	4.00583 AU	
opposition	-41 Oct 06 j 15:14	10°♈31'15	-1°39'08	
direct	-41 Dec 03 j 13:28	5°♈35'10		
evening set	-40 Apr 07 j 11:07	24°♈57'50		
conjunction	-40 Apr 21 j 03:04	28°♈09'51	-0°55'28	
minimum elong	-40 Apr 21 j 03:07	28°♈09'53	0°55'28	
max. Earth dist.	-40 Apr 23 j 07:30	28°♈40'35	6.05058 AU	
	-40 Apr 28 j 23:14	0°♉		
morning rise	-40 May 04 j 21:22	1°♉22'49		
	-40 Jul 09 j 04:09	15°♉		
retrograde	-40 Sep 11 j 07:06	21°♉01'36		
opposition	-40 Nov 09 j 20:51	15°♉56'44	-0°58'40	
min. Earth dist.	-40 Nov 08 j 12:55	16°♉07'37	4.10938 AU	
	-40 Nov 16 j 20:20	15°℞♉		
direct	-39 Jan 07 j 12:21	10°♉57'30		
	-39 Feb 27 j 20:12	15°♉		
evening set	-39 May 14 j 00:57	29°♉50'02		
	-39 May 14 j 18:35	0°♊		
conjunction	-39 May 27 j 19:33	2°♊57'39	-0°20'34	
minimum elong	-39 May 27 j 19:35	2°♊57'40	0°20'34	
max. Earth dist.	-39 May 29 j 15:27	3°♊22'36	6.17516 AU	
morning rise	-39 Jun 10 j 14:11	6°♊05'03		
retrograde	-39 Oct 14 j 11:41	24°♊37'42		
min. Earth dist.	-39 Dec 12 j 05:15	19°♊42'30	4.24170 AU	
opposition	-39 Dec 13 j 02:04	19°♊35'29	-0°00'22	
asc. node	-39 Dec 15 j 12:12	19°♊15'54		
direct	-38 Feb 10 j 23:38	14°♊33'44		
	-38 Jun 04 j 18:10	0°♋		
evening set	-38 Jun 17 j 23:26	2°♋52'32		
conjunction	-38 Jul 01 j 14:25	5°♋53'04	0°19'48	
minimum elong	-38 Jul 01 j 14:23	5°♋53'03	0°19'48	
max. Earth dist.	-38 Jul 02 j 09:40	6°♋03'42	6.30503 AU	
morning rise	-38 Jul 15 j 03:50	8°♋52'35		
retrograde	-38 Nov 14 j 19:53	26°♋27'05		
opposition	-37 Jan 13 j 16:41	21°♋28'38	0°54'45	
min. Earth dist.	-37 Jan 13 j 12:25	21°♋30'03	4.35867 AU	
direct	-37 Mar 15 j 21:52	16°♋25'31		
	-37 Jun 30 j 19:13	0°♌		
evening set	-37 Jul 21 j 01:59	4°♌17'59		
conjunction	-37 Aug 03 j 09:40	7°♌11'33	0°52'43	
minimum elong	-37 Aug 03 j 09:38	7°♌11'31	0°52'43	
max. Earth dist.	-37 Aug 03 j 02:41	7°♌07'45	6.40024 AU	
morning rise	-37 Aug 16 j 14:22	10°♌03'35		
	-37 Sep 08 j 23:51	15°♌		
retrograde	-37 Dec 15 j 05:50	27°♌02'12		
opposition	-36 Feb 13 j 11:06	22°♌07'21	1°32'11	
min. Earth dist.	-36 Feb 14 j 00:06	22°♌03'08	4.42681 AU	
direct	-36 Apr 15 j 16:45	17°♌04'16		
	-36 Jul 29 j 07:20	0°♍		
evening set	-36 Aug 20 j 17:34	4°♍43'22		
max. Earth dist.	-36 Sep 01 j 09:12	7°♍14'54	6.43533 AU	
conjunction	-36 Sep 02 j 17:00	7°♍32'11	1°10'10	

Attention, astronomical year style is used: The year -36 in astronomical counting style is the year 37 BCE in historical counting style.

minimum elong	-36 Sep 02 j 16:58	7°♍32'10	1°10'09	
morning rise	-36 Sep 15 j 13:35	10°♍19'34		
retrograde	-35 Jan 13 j 17:22	27°♍09'21		
opposition	-35 Mar 15 j 06:36	22°♍16'53	1°44'10	
min. Earth dist.	-35 Mar 16 j 10:33	22°♍07'55	4.42817 AU	
direct	-35 May 17 j 00:37	17°♍14'51		
	-35 Aug 28 j 10:04	0°♎		
evening set	-35 Sep 20 j 13:34	4°♎55'28		
max. Earth dist.	-35 Oct 01 j 10:10	7°♎18'21	6.40201 AU	
conjunction	-35 Oct 03 j 07:13	7°♎43'09	1°08'22	
minimum elong	-35 Oct 03 j 07:14	7°♎43'09	1°08'22	
morning rise	-35 Oct 15 j 22:18	10°♎29'46		
retrograde	-34 Feb 14 j 02:06	27°♎38'09		
opposition	-34 Apr 15 j 23:18	22°♎46'25	1°27'53	
min. Earth dist.	-34 Apr 17 j 09:24	22°♎35'34	4.36250 AU	
direct	-34 Jun 17 j 11:24	17°♎46'27		
	-34 Sep 25 j 01:10	0°♏		
evening set	-34 Oct 21 j 10:30	5°♏43'06		
max. Earth dist.	-34 Nov 01 j 02:07	8°♏06'40	6.30873 AU	
conjunction	-34 Nov 03 j 01:30	8°♏33'24	0°47'20	
minimum elong	-34 Nov 03 j 01:32	8°♏33'25	0°47'19	
morning rise	-34 Nov 15 j 15:19	11°♏23'19		
	-34 Dec 01 j 23:17	15°♏		
retrograde	-33 Mar 19 j 07:53	29°♏15'22		
opposition	-33 May 19 j 06:04	24°♏22'47	0°45'18	
min. Earth dist.	-33 May 20 j 14:19	24°♏12'29	4.24648 AU	
direct	-33 Jul 19 j 22:45	19°♏25'22		
	-33 Oct 17 j 13:28	0°♐		
evening set	-33 Nov 22 j 05:39	7°♐50'11		
max. Earth dist.	-33 Dec 03 j 09:14	10°♐24'59	6.17991 AU	
conjunction	-33 Dec 04 j 21:39	10°♐46'08	0°11'18	
minimum elong	-33 Dec 04 j 21:40	10°♐46'08	0°11'18	
behind sun begin	-33 Dec 04 j 15:44	10°♐42'43		
behind sun end	-33 Dec 05 j 03:36	10°♐49'34		
morning rise	-33 Dec 17 j 13:57	13°♐42'30		
	-32 Mar 12 j 01:18	0°♑		
desc. node	-32 Mar 22 j 02:48	1°♑04'38		
retrograde	-32 Apr 22 j 15:13	2°♑36'05		
	-32 Jun 03 j 17:52	30°℞♐		
opposition	-32 Jun 22 j 11:04	27°♐41'02	-0°14'27	
min. Earth dist.	-32 Jun 23 j 04:33	27°♐35'23	4.11358 AU	
direct	-32 Aug 21 j 18:18	22°♐46'11		
	-32 Oct 31 j 11:53	0°♑		
evening set	-32 Dec 24 j 17:32	11°♑44'51		
conjunction	-31 Jan 06 j 13:26	14°♑47'47	-0°30'02	
minimum elong	-31 Jan 06 j 13:24	14°♑47'46	0°30'02	
max. Earth dist.	-31 Jan 06 j 01:42	14°♑40'47	6.05503 AU	
morning rise	-31 Jan 19 j 11:11	17°♑51'55		
	-31 Mar 16 j 06:03	0°♒		
retrograde	-31 May 29 j 21:56	7°♒47'56		
opposition	-31 Jul 29 j 08:11	2°♒49'11	-1°12'31	
min. Earth dist.	-31 Jul 29 j 05:42	2°♒50'00	4.00820 AU	
	-31 Aug 21 j 04:54	30°℞♑		
direct	-31 Sep 26 j 07:22	27°♑55'44		
	-31 Oct 31 j 21:43	0°♒		
	-30 Jan 19 j 06:12	15°♒		
evening set	-30 Jan 29 j 05:23	17°♒22'16		
conjunction	-30 Feb 11 j 07:45	20°♒31'25	-1°01'47	
minimum elong	-30 Feb 11 j 07:42	20°♒31'23	1°01'47	
max. Earth dist.	-30 Feb 12 j 03:00	20°♒43'01	5.97856 AU	
morning rise	-30 Feb 24 j 13:04	23°♒42'14		
	-30 Mar 23 j 13:51	0°♓		

retrograde	-30 Jul 06 j 21:29	14°♓14'43		
opposition	-30 Sep 04 j 20:36	9°♓12'07	-1°44'32	
min. Earth dist.	-30 Sep 03 j 22:04	9°♓19'42	3.97046 AU	
direct	-30 Nov 01 j 21:11	4°♓18'04		
evening set	-29 Mar 07 j 05:52	23°♓53'16		
conjunction	-29 Mar 20 j 15:57	27°♓05'46	-1°10'09	
minimum elong	-29 Mar 20 j 15:58	27°♓05'46	1°10'08	
max. Earth dist.	-29 Mar 22 j 11:46	27°♓31'59	5.98189 AU	
	-29 Apr 01 j 19:54	0°♈		
morning rise	-29 Apr 03 j 05:19	0°♈19'50		
retrograde	-29 Aug 12 j 22:35	20°♈42'15		
min. Earth dist.	-29 Oct 10 j 05:56	15°♈48'27	4.01544 AU	
opposition	-29 Oct 11 j 14:55	15°♈37'12	-1°35'24	
direct	-29 Dec 08 j 14:31	10°♈40'38		
evening set	-28 Apr 12 j 14:19	0°♉00'27		
	-28 Apr 12 j 13:32	0°♉		
conjunction	-28 Apr 26 j 07:09	3°♉12'13	-0°51'29	
minimum elong	-28 Apr 26 j 07:12	3°♉12'15	0°51'29	
max. Earth dist.	-28 Apr 28 j 12:28	3°♉43'22	6.06389 AU	
morning rise	-28 May 10 j 01:44	6°♉24'43		
	-28 Jun 17 j 22:36	15°♉		
retrograde	-28 Sep 16 j 02:25	25°♉55'35		
min. Earth dist.	-28 Nov 13 j 08:09	21°♉01'19	4.12474 AU	
opposition	-28 Nov 14 j 14:32	20°♉50'59	-0°51'04	
direct	-27 Jan 12 j 09:50	15°♉51'21		
	-27 Apr 27 j 22:15	0°♊		
evening set	-27 May 19 j 00:29	4°♊40'00		
conjunction	-27 Jun 01 j 18:52	7°♊46'51	-0°14'54	
minimum elong	-27 Jun 01 j 18:53	7°♊46'52	0°14'55	
behind sun begin	-27 Jun 01 j 16:08	7°♊45'19		
behind sun end	-27 Jun 01 j 21:39	7°♊48'25		
max. Earth dist.	-27 Jun 03 j 11:28	8°♊09'51	6.19127 AU	
morning rise	-27 Jun 15 j 13:17	10°♊53'25		
retrograde	-27 Oct 18 j 22:51	29°♊18'03		
asc. node	-27 Oct 25 j 06:30	29°♊14'04		
opposition	-27 Dec 17 j 14:23	24°♊16'17	0°07'59	
min. Earth dist.	-27 Dec 16 j 19:11	24°♊22'46	4.25718 AU	
direct	-26 Feb 15 j 15:41	19°♊14'17		
	-26 May 18 j 03:26	0°♋		
evening set	-26 Jun 22 j 17:32	7°♋29'43		
conjunction	-26 Jul 06 j 07:46	10°♋29'21	0°25'07	
minimum elong	-26 Jul 06 j 07:44	10°♋29'20	0°25'07	
max. Earth dist.	-26 Jul 07 j 00:22	10°♋38'30	6.31895 AU	
morning rise	-26 Jul 19 j 20:01	13°♋27'49		
	-26 Oct 25 j 19:49	0°♌		
retrograde	-26 Nov 19 j 04:51	0°♌56'34		
	-26 Dec 13 j 09:15	30°℞♋		
opposition	-25 Jan 18 j 01:49	25°♋58'44	1°01'21	
min. Earth dist.	-25 Jan 17 j 23:47	25°♋59'24	4.37024 AU	
direct	-25 Mar 20 j 10:46	20°♋55'40		
	-25 Jun 12 j 15:53	0°♌		
evening set	-25 Jul 25 j 15:15	8°♌45'49		
conjunction	-25 Aug 07 j 21:39	11°♌38'33	0°56'15	
minimum elong	-25 Aug 07 j 21:37	11°♌38'31	0°56'15	
max. Earth dist.	-25 Aug 07 j 10:40	11°♌32'34	6.40871 AU	
morning rise	-25 Aug 21 j 01:16	14°♌29'47		
	-25 Aug 23 j 09:17	15°♌		
	-25 Nov 19 j 05:22	0°♍		
retrograde	-25 Dec 19 j 13:11	1°♍25'32		
	-24 Jan 18 j 20:00	30°℞♌		
opposition	-24 Feb 17 j 19:13	26°♌31'06	1°35'30	
min. Earth dist.	-24 Feb 18 j 10:12	26°♌26'14	4.43219 AU	

Attention, astronomical year style is used: The year -24 in astronomical counting style is the year 25 BCE in historical counting style.

direct	-24 Apr 20 j 03:27	21°♌28'08	
	-24 Jul 11 j 02:37	0°♍	
evening set	-24 Aug 25 j 02:45	9°♍06'05	
max. Earth dist.	-24 Sep 05 j 17:11	11°♍36'56	6.43740 AU
conjunction	-24 Sep 07 j 01:19	11°♍54'25	1°11'06
minimum elong	-24 Sep 07 j 01:18	11°♍54'24	1°11'05
morning rise	-24 Sep 19 j 20:43	14°♍41'19	
	-24 Dec 17 j 12:42	0°♎	
retrograde	-23 Jan 18 j 00:09	1°♎31'04	
	-23 Feb 18 j 14:53	30°℞♍	
opposition	-23 Mar 19 j 15:45	26°♍38'50	1°43'33
min. Earth dist.	-23 Mar 20 j 19:56	26°♍29'49	4.42696 AU
direct	-23 May 21 j 09:22	21°♍37'09	
	-23 Aug 10 j 08:14	0°♎	
evening set	-23 Sep 24 j 20:33	9°♎17'35	
max. Earth dist.	-23 Oct 05 j 14:58	11°♎39'34	6.39758 AU
conjunction	-23 Oct 07 j 13:22	12°♎05'09	1°06'32
minimum elong	-23 Oct 07 j 13:24	12°♎05'10	1°06'32
morning rise	-23 Oct 20 j 04:05	14°♎51'47	
	-22 Jan 12 j 15:58	0°♏	
retrograde	-22 Feb 18 j 14:15	2°♏03'00	
	-22 Mar 27 j 19:33	30°℞♎	
opposition	-22 Apr 20 j 11:25	27°♎11'17	1°23'23
min. Earth dist.	-22 Apr 21 j 22:28	27°♎00'08	4.35488 AU
direct	-22 Jun 21 j 23:12	22°♎11'37	
	-22 Sep 06 j 17:22	0°♏	
evening set	-22 Oct 25 j 17:27	10°♏09'25	
max. Earth dist.	-22 Nov 05 j 09:50	12°♏33'46	6.29858 AU
conjunction	-22 Nov 07 j 08:24	13°♏00'05	0°43'06
minimum elong	-22 Nov 07 j 08:26	13°♏00'06	0°43'06
	-22 Nov 16 j 04:38	15°♏	
morning rise	-22 Nov 19 j 22:11	15°♏50'26	
	-21 Jan 31 j 22:55	0°♐	
retrograde	-21 Mar 23 j 22:05	3°♐47'56	
	-21 May 15 j 08:52	30°℞♏	
opposition	-21 May 23 j 21:56	28°♏55'06	0°37'51
min. Earth dist.	-21 May 25 j 04:15	28°♏45'26	4.23430 AU
direct	-21 Jul 24 j 10:04	23°♏58'04	
	-21 Sep 27 j 17:24	0°♐	
evening set	-21 Nov 26 j 15:33	12°♐25'27	
max. Earth dist.	-21 Dec 07 j 21:38	15°♐02'11	6.16675 AU
conjunction	-21 Dec 09 j 07:46	15°♐22'04	0°05'47
minimum elong	-21 Dec 09 j 07:46	15°♐22'04	0°05'47
behind sun begin	-21 Dec 09 j 00:07	15°♐17'38	
behind sun end	-21 Dec 09 j 15:25	15°♐26'30	
morning rise	-21 Dec 22 j 00:32	18°♐19'12	
desc. node	-20 Feb 02 j 01:17	27°♐31'52	
	-20 Feb 14 j 23:20	0°♑	
retrograde	-20 Apr 27 j 13:16	7°♑20'03	
opposition	-20 Jun 27 j 07:37	2°♑24'36	-0°22'50
min. Earth dist.	-20 Jun 28 j 00:05	2°♑19'16	4.10018 AU
	-20 Jul 16 j 19:02	30°℞♐	
direct	-20 Aug 26 j 11:57	27°♐29'58	
	-20 Oct 05 j 10:18	0°♑	
evening set	-20 Dec 29 j 08:20	16°♑32'03	
conjunction	-19 Jan 11 j 04:59	19°♑35'50	-0°35'10
minimum elong	-19 Jan 11 j 04:56	19°♑35'49	0°35'09
max. Earth dist.	-19 Jan 10 j 20:08	19°♑30'34	6.04267 AU
morning rise	-19 Jan 24 j 03:37	22°♑40'55	
	-19 Feb 25 j 02:22	0°♒	
retrograde	-19 Jun 03 j 23:03	12°♒43'36	
opposition	-19 Aug 03 j 07:54	7°♒44'26	-1°18'46
min. Earth dist.	-19 Aug 03 j 02:50	7°♒46'06	3.99829 AU
direct	-19 Oct 01 j 02:28	2°♒51'02	
	-18 Jan 02 j 09:53	15°♒	
evening set	-18 Feb 03 j 02:22	22°♒20'36	
conjunction	-18 Feb 16 j 05:38	25°♒30'30	-1°04'26
minimum elong	-18 Feb 16 j 05:36	25°♒30'28	1°04'27
max. Earth dist.	-18 Feb 17 j 02:50	25°♒43'17	5.97189 AU
morning rise	-18 Mar 01 j 12:08	28°♒42'07	
	-18 Mar 06 j 22:44	0°♓	
retrograde	-18 Jul 11 j 22:17	19°♓17'32	
opposition	-18 Sep 09 j 20:36	14°♓14'31	-1°45'47
min. Earth dist.	-18 Sep 08 j 20:23	14°♓22'41	3.96789 AU
direct	-18 Nov 06 j 19:29	9°♓20'12	
evening set	-17 Mar 12 j 07:03	28°♓56'34	
	-17 Mar 16 j 17:35	0°♈	
conjunction	-17 Mar 25 j 18:28	2°♈09'33	-1°09'05
minimum elong	-17 Mar 25 j 18:29	2°♈09'34	1°09'05
max. Earth dist.	-17 Mar 27 j 17:29	2°♈37'39	5.98385 AU
morning rise	-17 Apr 08 j 08:44	5°♈23'59	
retrograde	-17 Aug 17 j 22:36	25°♈43'40	
min. Earth dist.	-17 Oct 15 j 03:30	20°♈49'45	4.02172 AU
opposition	-17 Oct 16 j 12:15	20°♈38'35	-1°31'03
direct	-17 Dec 13 j 13:13	15°♈41'38	
	-16 Mar 26 j 16:47	0°♉	
evening set	-16 Apr 17 j 16:14	5°♉00'03	
conjunction	-16 May 01 j 09:39	8°♉11'40	-0°47'11
minimum elong	-16 May 01 j 09:42	8°♉11'42	0°47'10
max. Earth dist.	-16 May 03 j 14:05	8°♉42'12	6.07392 AU
morning rise	-16 May 15 j 04:53	11°♉23'56	
	-16 May 31 j 00:21	15°♉	
	-16 Aug 29 j 15:09	0°♊	
retrograde	-16 Sep 20 j 18:31	0°♊48'05	
	-16 Oct 12 j 17:57	30°℞♉	
min. Earth dist.	-16 Nov 18 j 00:42	25°♉54'03	4.13746 AU
opposition	-16 Nov 19 j 07:06	25°♉43'41	-0°43'15
direct	-15 Jan 17 j 04:45	20°♉43'39	
	-15 Apr 09 j 08:09	0°♊	
evening set	-15 May 23 j 23:18	9°♊29'16	
conjunction	-15 Jun 06 j 17:33	12°♊35'24	-0°09'13
minimum elong	-15 Jun 06 j 17:34	12°♊35'25	0°09'12
behind sun begin	-15 Jun 06 j 10:34	12°♊31'29	
behind sun end	-15 Jun 07 j 00:34	12°♊39'20	
max. Earth dist.	-15 Jun 08 j 07:58	12°♊57'06	6.20585 AU
morning rise	-15 Jun 20 j 11:26	15°♊41'05	
	-15 Sep 02 j 02:48	0°♋	
asc. node	-15 Sep 04 j 04:03	0°♋17'22	
retrograde	-15 Oct 23 j 11:27	3°♋58'07	
	-15 Dec 14 j 04:47	30°℞♊	
min. Earth dist.	-15 Dec 21 j 09:27	29°♊02'29	4.27210 AU
opposition	-15 Dec 22 j 02:21	28°♊56'48	0°16'13
direct	-14 Feb 20 j 08:27	23°♊54'32	
	-14 Apr 27 j 11:20	0°♋	
evening set	-14 Jun 27 j 11:10	12°♋06'24	
conjunction	-14 Jul 11 j 00:29	15°♋05'03	0°30'15
minimum elong	-14 Jul 11 j 00:27	15°♋05'02	0°30'14
max. Earth dist.	-14 Jul 11 j 14:07	15°♋12'33	6.33292 AU
morning rise	-14 Jul 24 j 11:40	18°♋02'28	
	-14 Sep 23 j 05:56	0°♌	
retrograde	-14 Nov 23 j 11:09	5°♌25'11	
opposition	-13 Jan 22 j 10:15	0°♌27'42	1°07'32
min. Earth dist.	-13 Jan 22 j 09:40	0°♌27'54	4.38222 AU
	-13 Jan 25 j 22:20	30°℞♋	

Attention, astronomical year style is used: The year -13 in astronomical counting style is the year 14 BCE in historical counting style.

direct	-13 Mar 24 j 22:23	25°♋24'29	
	-13 May 21 j 13:33	0°♌	
evening set	-13 Jul 30 j 03:14	13°♌11'49	
	-13 Aug 07 j 11:15	15°♌	
conjunction	-13 Aug 12 j 08:30	16°♌03'42	0°59'25
minimum elong	-13 Aug 12 j 08:28	16°♌03'41	0°59'25
max. Earth dist.	-13 Aug 11 j 19:05	15°♌56'24	6.41750 AU
morning rise	-13 Aug 25 j 10:47	18°♌54'04	
	-13 Oct 20 j 23:40	0°♍	
retrograde	-13 Dec 23 j 19:08	5°♍46'48	
opposition	-12 Feb 22 j 02:36	0°♍52'42	1°38'16
min. Earth dist.	-12 Feb 22 j 19:43	0°♍47'09	4.43698 AU
	-12 Feb 28 j 22:13	30°℞♌	
direct	-12 Apr 24 j 13:26	25°♌49'49	
	-12 Jun 18 j 17:05	0°♍	
evening set	-12 Aug 29 j 10:43	13°♍26'32	
max. Earth dist.	-12 Sep 09 j 20:13	15°♍54'53	6.43737 AU
conjunction	-12 Sep 11 j 08:10	16°♍14'26	1°11'38
minimum elong	-12 Sep 11 j 08:09	16°♍14'26	1°11'38
morning rise	-12 Sep 24 j 02:49	19°♍01'00	
	-12 Nov 18 j 20:37	0°♎	
retrograde	-11 Jan 22 j 08:26	5°♎51'33	
opposition	-11 Mar 24 j 00:38	0°♎59'24	1°42'22
min. Earth dist.	-11 Mar 25 j 06:37	0°♎49'48	4.42207 AU
	-11 Mar 31 j 19:32	30°℞♍	
direct	-11 May 25 j 18:50	25°♍57'51	
	-11 Jul 18 j 21:18	0°♎	
evening set	-11 Sep 29 j 03:10	13°♎39'22	
max. Earth dist.	-11 Oct 09 j 21:26	16°♎01'34	6.38808 AU
conjunction	-11 Oct 11 j 19:39	16°♎27'07	1°04'18
minimum elong	-11 Oct 11 j 19:41	16°♎27'08	1°04'18
morning rise	-11 Oct 24 j 09:49	19°♎13'57	
	-11 Dec 16 j 18:43	0°♏	
retrograde	-10 Feb 23 j 01:37	6°♏29'46	
opposition	-10 Apr 25 j 00:17	1°♏37'57	1°18'23
min. Earth dist.	-10 Apr 26 j 11:05	1°♏26'54	4.34123 AU
	-10 May 08 j 02:03	30°℞♎	
direct	-10 Jun 26 j 09:12	26°♎38'38	
	-10 Aug 13 j 20:40	0°♏	
evening set	-10 Oct 30 j 02:06	14°♏39'42	
	-10 Oct 31 j 14:11	15°♏	
max. Earth dist.	-10 Nov 09 j 18:20	17°♏04'34	6.28177 AU
conjunction	-10 Nov 11 j 16:54	17°♏31'00	0°38'32
minimum elong	-10 Nov 11 j 16:56	17°♏31'01	0°38'32
morning rise	-10 Nov 24 j 07:01	20°♏22'09	
	-9 Jan 08 j 18:50	0°♐	
retrograde	-9 Mar 28 j 18:39	8°♐27'40	
opposition	-9 May 28 j 17:16	3°♐34'32	0°29'55
min. Earth dist.	-9 May 29 j 23:05	3°♐25'00	4.21520 AU
	-9 Jun 29 j 01:11	30°℞♏	
direct	-9 Jul 29 j 02:16	28°♏37'48	
	-9 Aug 27 j 22:36	0°♐	
evening set	-9 Dec 01 j 05:06	17°♐10'07	
conjunction	-9 Dec 13 j 21:52	20°♐07'45	-0°00'06
minimum elong	-9 Dec 13 j 21:54	20°♐07'46	0°00'06
behind sun begin	-9 Dec 13 j 14:08	20°♐03'15	
behind sun end	-9 Dec 14 j 05:39	20°♐12'16	
max. Earth dist.	-9 Dec 12 j 14:37	19°♐49'29	6.14711 AU
desc. node	-9 Dec 13 j 01:45	19°♐55'59	
morning rise	-9 Dec 26 j 15:17	23°♐06'01	
	-8 Jan 26 j 07:59	0°♑	
retrograde	-8 May 02 j 15:32	12°♑16'28	
opposition	-8 Jul 02 j 09:21	7°♑20'35	-0°31'30
min. Earth dist.	-8 Jul 02 j 22:56	7°♑16'11	4.08178 AU
direct	-8 Aug 31 j 08:00	2°♑26'15	
evening set	-7 Jan 03 j 05:26	21°♑33'33	
conjunction	-7 Jan 16 j 02:46	24°♑38'22	-0°40'19
minimum elong	-7 Jan 16 j 02:44	24°♑38'20	0°40'18
max. Earth dist.	-7 Jan 15 j 21:12	24°♑35'02	6.02709 AU
morning rise	-7 Jan 29 j 02:30	27°♑44'36	
	-7 Feb 07 j 15:51	0°♒	
	-7 Apr 26 j 12:38	15°♒	
retrograde	-7 Jun 09 j 06:53	17°♒55'00	
	-7 Jul 23 j 08:58	15°℞♒	
opposition	-7 Aug 08 j 13:55	12°♒55'16	-1°24'48
min. Earth dist.	-7 Aug 08 j 05:47	12°♒57'58	3.98732 AU
direct	-7 Oct 06 j 04:42	8°♒01'52	
	-7 Dec 12 j 23:01	15°♒	
evening set	-6 Feb 08 j 06:08	27°♒34'43	
	-6 Feb 18 j 07:29	0°♓	
conjunction	-6 Feb 21 j 10:42	0°♓45'24	-1°06'46
minimum elong	-6 Feb 21 j 10:41	0°♓45'23	1°06'46
max. Earth dist.	-6 Feb 22 j 13:43	1°♓01'42	5.96672 AU
morning rise	-6 Mar 06 j 18:15	3°♓57'46	
retrograde	-6 Jul 17 j 06:48	24°♓34'43	
min. Earth dist.	-6 Sep 14 j 00:43	19°♓40'04	3.96954 AU
opposition	-6 Sep 15 j 02:34	19°♓31'20	-1°46'15
direct	-6 Nov 12 j 00:11	14°♓36'50	
	-5 Feb 27 j 14:16	0°♈	
evening set	-5 Mar 17 j 14:03	4°♈12'24	
conjunction	-5 Mar 31 j 02:22	7°♈25'27	-1°07'27
minimum elong	-5 Mar 31 j 02:24	7°♈25'29	1°07'28
max. Earth dist.	-5 Apr 02 j 03:13	7°♈54'34	5.99215 AU
morning rise	-5 Apr 13 j 17:46	10°♈39'57	
	-5 Jul 30 j 13:02	0°♉	
retrograde	-5 Aug 22 j 23:00	0°♉53'38	
	-5 Sep 15 j 04:32	30°℞♈	
min. Earth dist.	-5 Oct 20 j 02:33	26°♈00'12	4.03596 AU
opposition	-5 Oct 21 j 12:56	25°♈48'28	-1°25'53
direct	-5 Dec 18 j 15:11	20°♈51'08	
	-4 Mar 07 j 14:26	0°♉	
evening set	-4 Apr 22 j 20:56	10°♉04'59	
conjunction	-4 May 06 j 14:49	13°♉15'57	-0°42'28
minimum elong	-4 May 06 j 14:52	13°♉15'59	0°42'29
max. Earth dist.	-4 May 08 j 18:39	13°♉46'00	6.09296 AU
	-4 May 14 j 02:27	15°♉	
morning rise	-4 May 20 j 10:08	16°♉27'23	
	-4 Jul 25 j 06:50	0°♊	
retrograde	-4 Sep 25 j 11:57	5°♊41'16	
min. Earth dist.	-4 Nov 22 j 19:49	0°♊46'51	4.15903 AU
opposition	-4 Nov 24 j 00:16	0°♊37'10	-0°35'06
	-4 Nov 28 j 13:49	30°℞♉	
direct	-3 Jan 22 j 03:09	25°♉36'47	
	-3 Mar 17 j 05:56	0°♊	
evening set	-3 May 28 j 21:31	14°♊16'14	
conjunction	-3 Jun 11 j 15:23	17°♊21'14	-0°03'32
minimum elong	-3 Jun 11 j 15:23	17°♊21'14	0°03'31
behind sun begin	-3 Jun 11 j 07:06	17°♊16'36	
behind sun end	-3 Jun 11 j 23:40	17°♊25'52	
max. Earth dist.	-3 Jun 13 j 03:50	17°♊41'43	6.22817 AU
morning rise	-3 Jun 25 j 08:31	20°♊25'38	
asc. node	-3 Jul 15 j 11:48	24°♊49'45	
	-3 Aug 10 j 02:11	0°♋	
retrograde	-3 Oct 27 j 19:06	8°♋32'43	

Attention, astronomical year style is used: The year -3 in astronomical counting style is the year 4 BCE in historical counting style.

opposition	-3 Dec 26 j 12:22	3°♋31'55	0°24'08
min. Earth dist.	-3 Dec 25 j 20:44	3°♋37'09	4.29321 AU
	-2 Jan 24 j 22:08	30°℞♊	
direct	-2 Feb 24 j 22:12	28°♊29'28	
	-2 Mar 28 j 09:57	0°♋	
evening set	-2 Jul 02 j 01:43	16°♋35'58	
conjunction	-2 Jul 15 j 13:53	19°♋33'24	0°35'03
minimum elong	-2 Jul 15 j 13:51	19°♋33'23	0°35'03
max. Earth dist.	-2 Jul 15 j 22:45	19°♋38'16	6.35111 AU
morning rise	-2 Jul 28 j 23:54	22°♋29'34	
	-2 Sep 03 j 00:50	0°♌	
retrograde	-2 Nov 27 j 16:16	9°♌45'39	
opposition	-1 Jan 26 j 15:58	4°♌48'43	1°13'06
min. Earth dist.	-1 Jan 26 j 18:58	4°♌47'44	4.39617 AU
	-1 Mar 16 j 20:19	30°℞♋	
direct	-1 Mar 29 j 09:03	29°♋45'28	
	-1 Apr 10 j 23:14	0°♌	
	-1 Jul 22 j 18:48	15°♌	
evening set	-1 Aug 03 j 11:32	17°♌29'40	
conjunction	-1 Aug 16 j 15:41	20°♌20'45	1°02'09
minimum elong	-1 Aug 16 j 15:39	20°♌20'44	1°02'09
max. Earth dist.	-1 Aug 15 j 22:06	20°♌11'12	6.42591 AU
morning rise	-1 Aug 29 j 16:47	23°♌10'18	
	-1 Oct 01 j 15:12	0°♍	
retrograde	-1 Dec 27 j 21:45	10°♍00'47	
opposition	00 Feb 26 j 07:01	5°♍07'01	1°40'26
min. Earth dist.	00 Feb 27 j 02:14	5°♍00'48	4.43959 AU
direct	00 Apr 28 j 19:09	0°♍04'13	
evening set	00 Sep 02 j 15:40	17°♍40'46	
max. Earth dist.	00 Sep 13 j 22:33	20°♍07'53	6.43385 AU
conjunction	00 Sep 15 j 12:20	20°♍28'28	1°11'46
minimum elong	00 Sep 15 j 12:20	20°♍28'28	1°11'46
morning rise	00 Sep 28 j 06:05	23°♍14'51	
	00 Oct 30 j 15:09	0°♎	
retrograde	01 Jan 26 j 14:44	10°♎07'42	
opposition	01 Mar 28 j 07:42	5°♎15'45	1°40'42
min. Earth dist.	01 Mar 29 j 15:33	5°♎05'35	4.41261 AU
direct	01 May 30 j 01:48	0°♎14'29	
evening set	01 Oct 03 j 08:15	17°♎58'41	
max. Earth dist.	01 Oct 13 j 23:22	20°♎19'44	6.37321 AU
conjunction	01 Oct 16 j 00:14	20°♎46'51	1°01'46
minimum elong	01 Oct 16 j 00:16	20°♎46'52	1°01'45
morning rise	01 Oct 28 j 14:24	23°♎34'15	
	01 Nov 27 j 17:38	0°♏	
retrograde	02 Feb 27 j 15:02	10°♏56'49	
opposition	02 Apr 29 j 13:18	6°♏04'54	1°13'00
min. Earth dist.	02 May 01 j 00:28	5°♏53'42	4.32176 AU
direct	02 Jun 30 j 19:30	1°♏05'52	
	02 Oct 15 j 11:56	15°♏	
evening set	02 Nov 03 j 11:00	19°♏12'13	
max. Earth dist.	02 Nov 14 j 05:33	21°♏39'06	6.25943 AU
conjunction	02 Nov 16 j 02:08	22°♏04'31	0°33'45
minimum elong	02 Nov 16 j 02:09	22°♏04'32	0°33'45
morning rise	02 Nov 28 j 16:26	24°♏56'43	
	02 Dec 21 j 11:12	0°♐	
retrograde	03 Apr 02 j 15:41	13°♐12'15	
opposition	03 Jun 02 j 14:04	8°♐18'52	0°21'45
min. Earth dist.	03 Jun 03 j 18:05	8°♐09'54	4.19156 AU
direct	03 Aug 02 j 18:05	3°♐22'33	
desc. node	03 Oct 22 j 23:16	12°♐25'24	
evening set	03 Dec 05 j 21:13	22°♐01'25	
max. Earth dist.	03 Dec 17 j 09:26	24°♐43'14	6.12428 AU
conjunction	03 Dec 18 j 14:26	25°♐00'15	-0°06'01
minimum elong	03 Dec 18 j 14:25	25°♐00'15	0°06'01
behind sun begin	03 Dec 18 j 06:47	24°♐55'47	
behind sun end	03 Dec 18 j 22:04	25°♐04'43	
morning rise	03 Dec 31 j 08:45	27°♐59'52	
	04 Jan 08 j 23:47	0°♑	
retrograde	04 May 07 j 21:56	17°♑21'05	
opposition	04 Jul 07 j 13:58	12°♑24'40	-0°40'05
min. Earth dist.	04 Jul 08 j 00:09	12°♑21'21	4.06178 AU
direct	04 Sep 05 j 07:39	7°♑30'33	
evening set	05 Jan 08 j 05:31	26°♑43'27	
conjunction	05 Jan 21 j 03:57	29°♑49'22	-0°45'14
minimum elong	05 Jan 21 j 03:54	29°♑49'20	0°45'14
max. Earth dist.	05 Jan 21 j 04:44	29°♑49'50	6.01193 AU
	05 Jan 21 j 21:40	0°♒	
morning rise	05 Feb 03 j 04:37	2°♒56'42	
	05 Mar 29 j 23:37	15°♒	
retrograde	05 Jun 14 j 18:02	23°♒14'03	
opposition	05 Aug 13 j 22:39	18°♒13'42	-1°30'12
min. Earth dist.	05 Aug 13 j 11:40	18°♒17'21	3.97889 AU
	05 Sep 09 j 13:23	15°℞♒	
direct	05 Oct 11 j 09:53	13°♒20'18	
	05 Nov 11 j 23:59	15°♒	
	06 Feb 01 j 06:01	0°♓	
evening set	06 Feb 13 j 12:39	2°♓55'01	
conjunction	06 Feb 26 j 18:09	6°♓06'13	-1°08'34
minimum elong	06 Feb 26 j 18:08	6°♓06'12	1°08'33
max. Earth dist.	06 Feb 28 j 00:41	6°♓24'37	5.96544 AU
morning rise	06 Mar 12 j 03:01	9°♓19'08	
retrograde	06 Jul 22 j 13:08	29°♓55'09	
min. Earth dist.	06 Sep 19 j 04:04	25°♓01'06	3.97572 AU
opposition	06 Sep 20 j 09:01	24°♓51'18	-1°45'48
direct	06 Nov 17 j 05:44	19°♓56'24	
	07 Feb 08 j 17:06	0°♈	
evening set	07 Mar 22 j 21:49	9°♈29'19	
conjunction	07 Apr 05 j 11:09	12°♈42'14	-1°05'16
minimum elong	07 Apr 05 j 11:11	12°♈42'15	1°05'16
max. Earth dist.	07 Apr 07 j 13:58	13°♈12'25	6.00487 AU
morning rise	07 Apr 19 j 03:13	15°♈56'24	
	07 Jun 24 j 20:19	0°♉	
retrograde	07 Aug 27 j 23:25	6°♉02'08	
min. Earth dist.	07 Oct 25 j 03:15	1°♉08'19	4.05341 AU
opposition	07 Oct 26 j 12:47	0°♉56'52	-1°20'01
	07 Nov 02 j 12:23	30°℞♈	
direct	07 Dec 23 j 18:47	25°♈59'01	
	08 Feb 12 j 10:19	0°♉	
	08 Apr 27 j 11:56	15°♉	
evening set	08 Apr 28 j 00:44	15°♉07'21	
conjunction	08 May 11 j 19:00	18°♉17'32	-0°37'28
minimum elong	08 May 11 j 19:02	18°♉17'33	0°37'28
max. Earth dist.	08 May 13 j 22:30	18°♉47'14	6.11352 AU
morning rise	08 May 25 j 14:17	21°♉28'00	
	08 Jul 03 j 17:53	0°♊	
retrograde	08 Sep 30 j 02:31	10°♊31'17	
opposition	08 Nov 28 j 16:07	5°♊27'34	-0°26'47
min. Earth dist.	08 Nov 27 j 12:24	5°♊36'59	4.18058 AU
direct	09 Jan 26 j 22:14	0°♊26'50	
asc. node	09 May 25 j 08:00	17°♊08'25	
evening set	09 Jun 02 j 18:49	19°♊00'29	
conjunction	09 Jun 16 j 11:59	22°♊04'19	0°02'19
minimum elong	09 Jun 16 j 11:59	22°♊04'19	0°02'19
behind sun begin	09 Jun 16 j 03:39	21°♊59'41	

behind sun end	09 Jun	16 j 20:19	22°♊08'57	
max. Earth dist.	09 Jun	17 j 19:22	22°♊21'52	6.24899 AU
morning rise	09 Jun	30 j 04:24	25°♊07'28	
	09 Jul	22 j 15:30	0°♋	
retrograde	09 Nov	01 j 04:20	13°♋05'38	
opposition	09 Dec	30 j 22:06	8°♋05'22	0°31'56
min. Earth dist.	09 Dec	30 j 09:55	8°♋09'26	4.31164 AU
direct	10 Mar	01 j 13:51	3°♋02'41	
evening set	10 Jul	06 j 16:12	21°♋04'56	
conjunction	10 Jul	20 j 03:27	24°♋01'21	0°39'41
minimum elong	10 Jul	20 j 03:25	24°♋01'20	0°39'42
max. Earth dist.	10 Jul	20 j 09:10	24°♋04'29	6.36581 AU
morning rise	10 Aug	02 j 12:06	26°♋56'24	
	10 Aug	16 j 18:27	0°♌	
retrograde	10 Dec	01 j 20:14	14°♌07'07	
opposition	11 Jan	30 j 22:15	9°♌10'42	1°18'22
min. Earth dist.	11 Jan	31 j 03:04	9°♌09'07	4.40645 AU
direct	11 Apr	02 j 17:47	4°♌07'28	
	11 Jul	05 j 21:15	15°♌	
evening set	11 Aug	07 j 21:02	21°♌49'45	
conjunction	11 Aug	20 j 23:57	24°♌40'09	1°04'37
minimum elong	11 Aug	20 j 23:55	24°♌40'08	1°04'36
max. Earth dist.	11 Aug	20 j 02:12	24°♌28'21	6.43094 AU
morning rise	11 Sep	02 j 23:57	27°♌29'04	
	11 Sep	14 j 18:41	0°♍	
retrograde	12 Jan	01 j 04:11	14°♍18'25	
opposition	12 Mar	01 j 13:43	9°♍25'03	1°42'08
min. Earth dist.	12 Mar	02 j 12:04	9°♍17'50	4.43924 AU
direct	12 May	03 j 04:45	4°♍22'24	
evening set	12 Sep	06 j 22:33	21°♍59'30	
max. Earth dist.	12 Sep	18 j 01:40	24°♍24'52	6.42795 AU
conjunction	12 Sep	19 j 18:25	24°♍47'07	1°11'32
minimum elong	12 Sep	19 j 18:26	24°♍47'07	1°11'32
morning rise	12 Oct	02 j 11:31	27°♍33'27	
	12 Oct	13 j 19:51	0°♎	
retrograde	13 Jan	30 j 23:18	14°♎29'25	
opposition	13 Apr	01 j 17:36	9°♎37'34	1°38'27
min. Earth dist.	13 Apr	03 j 02:05	9°♎27'12	4.40171 AU
direct	13 Jun	03 j 10:16	4°♎36'34	
evening set	13 Oct	07 j 15:54	22°♎23'48	
max. Earth dist.	13 Oct	18 j 07:38	24°♎45'41	6.35822 AU
conjunction	13 Oct	20 j 07:40	25°♎12'27	0°58'49
minimum elong	13 Oct	20 j 07:42	25°♎12'28	0°58'48
morning rise	13 Nov	01 j 21:30	28°♎00'22	
	13 Nov	10 j 23:01	0°♏	
	14 Feb	14 j 09:59	15°♏	
retrograde	14 Mar	04 j 06:45	15°♏29'41	
	14 Mar	22 j 03:44	15°℞♏	
opposition	14 May	04 j 05:07	10°♏37'45	1°06'59
min. Earth dist.	14 May	05 j 16:14	10°♏26'35	4.30361 AU
direct	14 Jul	05 j 08:46	5°♏39'11	
	14 Sep	27 j 15:30	15°♏	
evening set	14 Nov	07 j 22:25	23°♏50'16	
max. Earth dist.	14 Nov	18 j 17:23	26°♏18'07	6.23970 AU
conjunction	14 Nov	20 j 13:34	26°♏43'26	0°28'38
minimum elong	14 Nov	20 j 13:35	26°♏43'27	0°28'38
morning rise	14 Dec	03 j 04:25	29°♏36'39	
	14 Dec	04 j 21:27	0°♐	
retrograde	15 Apr	07 j 15:16	18°♐01'27	
opposition	15 Jun	07 j 13:10	13°♐07'44	0°13'15
min. Earth dist.	15 Jun	08 j 14:31	12°♐59'36	4.17179 AU
direct	15 Aug	07 j 12:24	8°♐11'49	
desc. node	15 Sep	01 j 10:22	9°♐10'14	
evening set	15 Dec	10 j 14:30	26°♐55'50	
max. Earth dist.	15 Dec	22 j 08:45	29°♐41'44	6.10653 AU
conjunction	15 Dec	23 j 08:26	29°♐55'42	-0°11'54
minimum elong	15 Dec	23 j 08:24	29°♐55'41	0°11'54
behind sun begin	15 Dec	23 j 02:45	29°♐52'22	
behind sun end	15 Dec	23 j 14:04	29°♐59'00	
	15 Dec	23 j 15:45	0°♑	
morning rise	16 Jan	05 j 03:20	2°♑56'23	
retrograde	16 May	13 j 05:01	22°♑26'22	
opposition	16 Jul	12 j 18:53	17°♑29'30	-0°48'25
min. Earth dist.	16 Jul	13 j 02:23	17°♑27'03	4.04789 AU
direct	16 Sep	10 j 07:57	12°♑35'41	
	17 Jan	05 j 08:49	0°♒	
evening set	17 Jan	13 j 05:33	1°♒52'00	
conjunction	17 Jan	26 j 04:39	4°♒58'39	-0°49'47
minimum elong	17 Jan	26 j 04:36	4°♒58'38	0°49'48
max. Earth dist.	17 Jan	26 j 08:56	5°♒01'14	6.00305 AU
morning rise	17 Feb	08 j 06:29	8°♒06'52	
	17 Mar	10 j 00:39	15°♒	
retrograde	17 Jun	19 j 23:52	28°♒28'24	
opposition	17 Aug	19 j 04:48	23°♒27'30	-1°34'46
min. Earth dist.	17 Aug	18 j 13:50	23°♒32'30	3.97632 AU
direct	17 Oct	16 j 12:29	18°♒34'02	
	18 Jan	14 j 07:25	0°♓	
evening set	18 Feb	18 j 16:41	8°♓08'48	
conjunction	18 Mar	03 j 23:18	11°♓20'17	-1°09'45
minimum elong	18 Mar	03 j 23:17	11°♓20'17	1°09'45
max. Earth dist.	18 Mar	05 j 10:13	11°♓41'19	5.96923 AU
morning rise	18 Mar	17 j 09:04	14°♓33'27	
	18 May	30 j 02:18	0°♈	
retrograde	18 Jul	27 j 17:30	5°♈06'42	
min. Earth dist.	18 Sep	24 j 06:12	0°♈12'27	3.98539 AU
opposition	18 Sep	25 j 11:38	0°♈02'28	-1°44'28
	18 Sep	25 j 18:55	30°℞♓	
direct	18 Nov	22 j 09:52	25°♓07'13	
	19 Jan	17 j 01:08	0°♈	
evening set	19 Mar	28 j 01:30	14°♈36'33	
conjunction	19 Apr	10 j 15:43	17°♈49'11	-1°02'39
minimum elong	19 Apr	10 j 15:46	17°♈49'13	1°02'38
max. Earth dist.	19 Apr	12 j 20:26	18°♈20'21	6.01936 AU
morning rise	19 Apr	24 j 08:29	21°♈02'59	
	19 Jun	03 j 10:21	0°♉	
retrograde	19 Sep	01 j 18:37	11°♉00'21	
min. Earth dist.	19 Oct	29 j 22:36	6°♉06'39	4.07110 AU
opposition	19 Oct	31 j 08:12	5°♉55'11	-1°13'47
direct	19 Dec	28 j 15:51	0°♉56'58	
	20 Apr	10 j 16:54	15°♉	
evening set	20 May	03 j 00:31	20°♉00'06	
conjunction	20 May	16 j 18:49	23°♉09'29	-0°32'22
minimum elong	20 May	16 j 18:51	23°♉09'31	0°32'22
max. Earth dist.	20 May	18 j 18:34	23°♉36'54	6.13278 AU
morning rise	20 May	30 j 14:10	26°♉19'05	
	20 Jun	16 j 00:02	0°♊	
retrograde	20 Oct	04 j 14:14	15°♊12'51	
min. Earth dist.	20 Dec	02 j 03:17	10°♊18'02	4.19943 AU
opposition	20 Dec	03 j 04:23	10°♊09'32	-0°18'35
direct	21 Jan	31 j 15:52	5°♊08'26	
asc. node	21 Apr	05 j 08:43	10°♊58'06	
evening set	21 Jun	07 j 12:35	23°♊37'29	
conjunction	21 Jun	21 j 05:24	26°♊40'24	0°07'51

minimum elong	21 Jun	21 j 05:22	26°♊40'23	0°07'50
behind sun begin	21 Jun	20 j 21:56	26°♊36'16	
behind sun end	21 Jun	21 j 12:48	26°♊44'30	
max. Earth dist.	21 Jun	22 j 10:18	26°♊56'30	6.26616 AU
morning rise	21 Jul	04 j 20:50	29°♊42'26	
	21 Jul	06 j 04:38	0°♋	
retrograde	21 Nov	05 j 10:42	17°♋33'16	
opposition	22 Jan	04 j 05:30	12°♋33'36	0°39'18
min. Earth dist.	22 Jan	03 j 19:16	12°♋37'00	4.32588 AU
direct	22 Mar	06 j 00:41	7°♋30'49	
evening set	22 Jul	11 j 04:34	25°♋30'12	
conjunction	22 Jul	24 j 14:38	28°♋25'45	0°44'00
minimum elong	22 Jul	24 j 14:35	28°♋25'43	0°44'00
max. Earth dist.	22 Jul	24 j 14:52	28°♋25'52	6.37604 AU
	22 Jul	31 j 19:16	0°♌	
morning rise	22 Aug	06 j 22:18	1°♌19'56	
	22 Oct	19 j 00:34	15°♌	
retrograde	22 Dec	06 j 02:06	18°♌27'00	
	23 Jan	23 j 15:43	15°℞♌	
opposition	23 Feb	04 j 04:06	13°♌31'05	1°23'07
min. Earth dist.	23 Feb	04 j 12:20	13°♌28'23	4.41232 AU
direct	23 Apr	07 j 03:52	8°♌27'50	
	23 Jun	16 j 10:37	15°♌	
evening set	23 Aug	12 j 05:30	26°♌09'22	
max. Earth dist.	23 Aug	24 j 07:45	28°♌46'25	6.43200 AU
conjunction	23 Aug	25 j 07:32	28°♌59'20	1°06'40
minimum elong	23 Aug	25 j 07:31	28°♌59'19	1°06'40
	23 Aug	29 j 23:16	0°♍	
morning rise	23 Sep	07 j 06:22	1°♍47'46	
retrograde	24 Jan	05 j 08:48	18°♍37'13	
opposition	24 Mar	05 j 20:37	13°♍44'07	1°43'15
min. Earth dist.	24 Mar	06 j 19:42	13°♍36'41	4.43582 AU
direct	24 May	07 j 11:36	8°♍41'40	
evening set	24 Sep	11 j 05:41	26°♍19'59	
max. Earth dist.	24 Sep	22 j 06:39	28°♍44'31	6.42033 AU
conjunction	24 Sep	24 j 00:44	29°♍07'34	1°10'52
minimum elong	24 Sep	24 j 00:45	29°♍07'34	1°10'52
	24 Sep	28 j 00:29	0°♎	
morning rise	24 Oct	06 j 17:13	1°♎53'58	
retrograde	25 Feb	04 j 10:09	18°♎53'26	
opposition	25 Apr	06 j 04:36	14°♎01'40	1°35'36
min. Earth dist.	25 Apr	07 j 14:26	13°♎50'53	4.39034 AU
direct	25 Jun	07 j 21:22	9°♎00'58	
evening set	25 Oct	11 j 23:43	26°♎50'50	
max. Earth dist.	25 Oct	22 j 14:30	29°♎12'42	6.34396 AU
conjunction	25 Oct	24 j 15:12	29°♎39'55	0°55'29
minimum elong	25 Oct	24 j 15:14	29°♎39'56	0°55'29
	25 Oct	26 j 03:08	0°♏	
morning rise	25 Nov	06 j 05:03	2°♏28'24	
	26 Jan	08 j 09:47	15°♏	
retrograde	26 Mar	08 j 22:15	20°♏04'08	
opposition	26 May	08 j 21:42	15°♏11'58	1°00'31
min. Earth dist.	26 May	10 j 07:03	15°♏01'20	4.28724 AU
	26 May	10 j 11:15	15°℞♏	
direct	26 Jul	09 j 21:30	10°♏13'43	
	26 Sep	05 j 21:34	15°♏	
evening set	26 Nov	12 j 09:38	28°♏28'29	
	26 Nov	19 j 01:38	0°♐	
max. Earth dist.	26 Nov	23 j 08:22	0°♐59'02	6.22265 AU
conjunction	26 Nov	25 j 01:02	1°♐22'25	0°23'20
minimum elong	26 Nov	25 j 01:04	1°♐22'26	0°23'19
morning rise	26 Dec	07 j 16:07	4°♐16'29	
retrograde	27 Apr	12 j 15:12	22°♐49'23	
opposition	27 Jun	12 j 11:49	17°♐55'18	0°04'38
min. Earth dist.	27 Jun	13 j 11:45	17°♐47'37	4.15503 AU
desc. node	27 Jul	12 j 08:12	14°♐28'03	
direct	27 Aug	12 j 07:21	12°♐59'43	
	27 Dec	07 j 14:31	0°♑	
evening set	27 Dec	15 j 07:12	1°♑47'40	
max. Earth dist.	27 Dec	27 j 04:03	4°♑35'41	6.09140 AU
conjunction	27 Dec	28 j 01:32	4°♑48'23	-0°17'41
minimum elong	27 Dec	28 j 01:31	4°♑48'22	0°17'41
morning rise	28 Jan	09 j 21:22	7°♑50'05	
retrograde	28 May	18 j 07:57	27°♑27'46	
opposition	28 Jul	17 j 22:01	22°♑30'18	-0°56'19
min. Earth dist.	28 Jul	18 j 01:37	22°♑29'08	4.03580 AU
direct	28 Sep	15 j 05:50	17°♑36'37	
	28 Dec	19 j 05:09	0°♒	
evening set	29 Jan	18 j 04:05	6°♒55'56	
conjunction	29 Jan	31 j 04:10	10°♒03'21	-0°53'56
minimum elong	29 Jan	31 j 04:07	10°♒03'19	0°53'56
max. Earth dist.	29 Jan	31 j 13:28	10°♒08'57	5.99504 AU
morning rise	29 Feb	13 j 06:53	13°♒12'19	
	29 Feb	20 j 20:12	15°♒	
	29 May	07 j 06:21	0°♓	
retrograde	29 Jun	25 j 06:35	3°♓37'51	
	29 Aug	13 j 19:37	30°℞♒	
opposition	29 Aug	24 j 09:17	28°♒36'24	-1°38'35
min. Earth dist.	29 Aug	23 j 16:47	28°♒41'55	3.97332 AU
direct	29 Oct	21 j 15:40	23°♒42'46	
	29 Dec	24 j 11:22	0°♓	
evening set	30 Feb	23 j 19:32	13°♓18'00	
conjunction	30 Mar	09 j 03:14	16°♓29'52	-1°10'25
minimum elong	30 Mar	09 j 03:14	16°♓29'52	1°10'25
max. Earth dist.	30 Mar	10 j 17:32	16°♓52'53	5.97137 AU
morning rise	30 Mar	22 j 14:06	19°♓43'24	
	30 May	07 j 07:09	0°♈	
retrograde	30 Aug	01 j 19:28	10°♈14'22	
min. Earth dist.	30 Sep	29 j 05:43	5°♈20'24	3.99267 AU
opposition	30 Sep	30 j 12:43	5°♈09'53	-1°42'24
direct	30 Nov	27 j 10:03	0°♈14'17	
evening set	31 Apr	02 j 05:09	19°♈41'22	
conjunction	31 Apr	15 j 20:07	22°♈53'50	-0°59'34
minimum elong	31 Apr	15 j 20:09	22°♈53'51	0°59'34
max. Earth dist.	31 Apr	17 j 23:48	23°♈24'18	6.03088 AU
morning rise	31 Apr	29 j 13:40	26°♈07'24	
	31 May	16 j 09:45	0°♉	
	31 Aug	13 j 06:59	15°♉	
retrograde	31 Sep	06 j 13:41	15°♉57'38	
	31 Sep	30 j 16:07	15°℞♉	
min. Earth dist.	31 Nov	03 j 18:41	11°♉03'43	4.08542 AU
opposition	31 Nov	05 j 03:22	10°♉52'33	-1°07'05
direct	32 Jan	02 j 14:19	5°♉53'53	
	32 Mar	23 j 00:59	15°♉	
evening set	32 May	08 j 00:50	24°♉53'15	
conjunction	32 May	21 j 19:30	28°♉02'03	-0°27'02
minimum elong	32 May	21 j 19:32	28°♉02'04	0°27'01
max. Earth dist.	32 May	23 j 18:31	28°♉28'56	6.14885 AU
	32 May	30 j 09:58	0°♊	
morning rise	32 Jun	04 j 14:34	1°♊10'50	
retrograde	32 Oct	09 j 04:15	19°♊56'17	
opposition	32 Dec	07 j 17:48	14°♊53'27	-0°10'11
min. Earth dist.	32 Dec	06 j 18:24	15°♊01'22	4.21556 AU
direct	33 Feb	05 j 09:08	9°♊52'07	

asc. node	33 Feb 13 j 07:55	9°♊58'17		
evening set	33 Jun 12 j 08:00	28°♊17'31		
	33 Jun 20 j 00:58	0°♋		
conjunction	33 Jun 25 j 24:00	1°♋19'30	0°13'24	
minimum elong	33 Jun 25 j 23:59	1°♋19'29	0°13'25	
behind sun begin	33 Jun 25 j 19:29	1°♋17'00		
behind sun end	33 Jun 26 j 04:29	1°♋21'59		
max. Earth dist.	33 Jun 27 j 00:13	1°♋32'57	6.28104 AU	
morning rise	33 Jul 09 j 14:45	4°♋20'35		
retrograde	33 Nov 09 j 19:29	22°♋04'57		
opposition	34 Jan 08 j 14:53	17°♋05'50	0°46'36	
min. Earth dist.	34 Jan 08 j 07:15	17°♋08'23	4.33861 AU	
direct	34 Mar 10 j 14:28	12°♋02'56		
evening set	34 Jul 15 j 18:50	29°♋59'55		
	34 Jul 15 j 18:59	0°♌		
conjunction	34 Jul 29 j 03:58	2°♌54'40	0°48'10	
minimum elong	34 Jul 29 j 03:55	2°♌54'38	0°48'09	
max. Earth dist.	34 Jul 29 j 02:22	2°♌53'47	6.38589 AU	
morning rise	34 Aug 11 j 10:14	5°♌47'56		
	34 Sep 25 j 17:03	15°♌		
retrograde	34 Dec 10 j 08:09	22°♌51'26		
opposition	35 Feb 08 j 11:50	17°♌56'03	1°27'32	
min. Earth dist.	35 Feb 08 j 21:19	17°♌52'58	4.41908 AU	
	35 Mar 04 j 13:41	15°℞♌		
direct	35 Apr 11 j 13:44	12°♌52'59		
	35 May 19 j 22:40	15°♌		
	35 Aug 14 j 01:45	0°♍		
evening set	35 Aug 16 j 15:48	0°♍33'20		
conjunction	35 Aug 29 j 16:34	3°♍22'42	1°08'26	
minimum elong	35 Aug 29 j 16:32	3°♍22'42	1°08'27	
max. Earth dist.	35 Aug 28 j 13:16	3°♍07'53	6.43526 AU	
morning rise	35 Sep 11 j 14:28	6°♍10'38		
retrograde	36 Jan 09 j 17:21	22°♍59'30		
opposition	36 Mar 10 j 05:25	18°♍06'43	1°43'52	
min. Earth dist.	36 Mar 11 j 06:37	17°♍58'38	4.43573 AU	
direct	36 May 11 j 22:40	13°♍04'30		
	36 Sep 12 j 06:29	0°♎		
evening set	36 Sep 15 j 13:11	0°♎42'39		
max. Earth dist.	36 Sep 26 j 13:08	3°♎06'49	6.41693 AU	
conjunction	36 Sep 28 j 07:36	3°♎30'05	1°09'52	
minimum elong	36 Sep 28 j 07:37	3°♎30'06	1°09'51	
morning rise	36 Oct 10 j 23:19	6°♎16'22		
retrograde	37 Feb 08 j 18:49	23°♎18'02		
opposition	37 Apr 10 j 15:45	18°♎26'18	1°32'14	
min. Earth dist.	37 Apr 12 j 00:48	18°♎15'47	4.38394 AU	
direct	37 Jun 12 j 06:32	13°♎25'58		
	37 Oct 10 j 11:57	0°♏		
evening set	37 Oct 16 j 06:58	1°♏16'47		
max. Earth dist.	37 Oct 26 j 22:29	3°♏39'25	6.33509 AU	
conjunction	37 Oct 28 j 22:04	4°♏06'05	0°51'54	
minimum elong	37 Oct 28 j 22:06	4°♏06'06	0°51'55	
morning rise	37 Nov 10 j 11:44	6°♏54'52		
	37 Dec 18 j 13:48	15°♏		
retrograde	38 Mar 13 j 13:47	24°♏35'19		
opposition	38 May 13 j 12:46	19°♏43'00	0°53'49	
min. Earth dist.	38 May 14 j 22:20	19°♏32'18	4.27616 AU	
	38 Jul 01 j 17:41	15°℞♏		
direct	38 Jul 14 j 11:00	14°♏45'06		
	38 Jul 27 j 03:03	15°♏		
	38 Nov 03 j 08:25	0°♐		
evening set	38 Nov 16 j 18:42	3°♐01'56		
max. Earth dist.	38 Nov 27 j 18:21	5°♐33'26	6.21029 AU	

conjunction	38 Nov 29 j 10:13	5°♐56'26	0°18'02	
minimum elong	38 Nov 29 j 10:14	5°♐56'26	0°18'02	
morning rise	38 Dec 12 j 01:45	8°♐51'11		
retrograde	39 Apr 17 j 09:42	27°♐30'44		
desc. node	39 May 24 j 04:35	25°♐29'40		
opposition	39 Jun 17 j 07:10	22°♐36'14	-0°03'45	
min. Earth dist.	39 Jun 18 j 04:20	22°♐29'25	4.14219 AU	
direct	39 Aug 16 j 21:24	17°♐40'55		
	39 Nov 21 j 04:02	0°♑		
evening set	39 Dec 19 j 20:26	6°♑31'48		
conjunction	40 Jan 01 j 15:22	9°♑33'16	-0°23'08	
minimum elong	40 Jan 01 j 15:20	9°♑33'15	0°23'09	
max. Earth dist.	39 Dec 31 j 21:42	9°♑22'48	6.07922 AU	
morning rise	40 Jan 14 j 11:49	12°♑35'47		
	40 Apr 14 j 05:12	0°♒		
retrograde	40 May 23 j 08:47	2°♒20'17		
	40 Jul 01 j 16:38	30°℞♑		
opposition	40 Jul 22 j 21:00	27°♑22'19	-1°03'33	
min. Earth dist.	40 Jul 22 j 23:22	27°♑21'32	4.02533 AU	
direct	40 Sep 20 j 02:10	22°♑28'42		
	40 Nov 30 j 05:27	0°♒		
evening set	41 Jan 22 j 23:00	11°♒50'51		
conjunction	41 Feb 04 j 23:58	14°♒59'00	-0°57'32	
minimum elong	41 Feb 04 j 23:56	14°♒58'58	0°57'31	
	41 Feb 05 j 01:38	15°♒		
max. Earth dist.	41 Feb 05 j 12:11	15°♒06'21	5.98722 AU	
morning rise	41 Feb 18 j 03:48	18°♒08'47		
	41 Apr 12 j 15:53	0°♓		
retrograde	41 Jun 30 j 08:04	8°♓38'05		
opposition	41 Aug 29 j 09:00	3°♓36'13	-1°41'33	
min. Earth dist.	41 Aug 28 j 14:09	3°♓42'32	3.96934 AU	
	41 Sep 28 j 17:45	30°℞♒		
direct	41 Oct 26 j 11:58	28°♒42'25		
	41 Nov 23 j 04:36	0°♓		
evening set	42 Feb 28 j 19:14	18°♓19'03		
conjunction	42 Mar 14 j 03:58	21°♓31'25	-1°10'32	
minimum elong	42 Mar 14 j 03:58	21°♓31'25	1°10'32	
max. Earth dist.	42 Mar 15 j 19:14	21°♓55'00	5.97146 AU	
morning rise	42 Mar 27 j 16:02	24°♓45'27		
	42 Apr 19 j 03:26	0°♈		
retrograde	42 Aug 06 j 17:47	15°♈15'05		
min. Earth dist.	42 Oct 04 j 02:50	10°♈21'05	3.99684 AU	
opposition	42 Oct 05 j 10:23	10°♈10'20	-1°39'41	
direct	42 Dec 02 j 08:09	5°♈14'20		
evening set	43 Apr 07 j 06:14	24°♈40'32		
conjunction	43 Apr 20 j 22:18	27°♈53'05	-0°56'09	
minimum elong	43 Apr 20 j 22:21	27°♈53'07	0°56'09	
max. Earth dist.	43 Apr 23 j 03:42	28°♈24'29	6.03904 AU	
	43 Apr 29 j 22:27	0°♉		
morning rise	43 May 04 j 16:24	1°♉06'33		
	43 Jul 10 j 07:30	15°♉		
retrograde	43 Sep 11 j 09:08	20°♉50'57		
opposition	43 Nov 09 j 20:50	15°♉46'03	-1°00'05	
min. Earth dist.	43 Nov 08 j 13:01	15°♉56'53	4.09656 AU	
	43 Nov 15 j 12:22	15°℞♉		
direct	44 Jan 07 j 10:40	10°♉46'58		
	44 Feb 28 j 20:41	15°♉		
evening set	44 May 13 j 00:16	29°♉43'41		
	44 May 14 j 05:02	0°♊		
conjunction	44 May 26 j 18:54	2°♊51'56	-0°21'35	
minimum elong	44 May 26 j 18:56	2°♊51'57	0°21'35	
max. Earth dist.	44 May 28 j 15:20	3°♊17'15	6.16212 AU	

morning rise	44 Jun 09 j 13:59	6°♊00'04	
retrograde	44 Oct 13 j 15:54	24°♊38'02	
min. Earth dist.	44 Dec 11 j 08:05	19°♊43'05	4.22970 AU
opposition	44 Dec 12 j 06:20	19°♊35'34	-0°01'52
asc. node	44 Dec 24 j 15:37	17°♊57'11	
direct	45 Feb 10 j 01:24	14°♊33'52	
	45 Jun 03 j 15:46	0°♋	
evening set	45 Jun 17 j 02:48	2°♋56'03	
conjunction	45 Jun 30 j 18:13	5°♋57'09	0°18'50
minimum elong	45 Jun 30 j 18:11	5°♋57'08	0°18'51
max. Earth dist.	45 Jul 01 j 16:23	6°♋09'26	6.29516 AU
morning rise	45 Jul 14 j 07:54	8°♋57'12	
retrograde	45 Nov 14 j 04:16	26°♋35'05	
opposition	46 Jan 12 j 23:54	21°♋36'27	0°53'33
min. Earth dist.	46 Jan 12 j 18:14	21°♋38'19	4.35145 AU
direct	46 Mar 15 j 03:33	16°♋33'25	
	46 Jun 29 j 07:29	0°♌	
evening set	46 Jul 20 j 08:08	4°♌27'23	
conjunction	46 Aug 02 j 16:01	7°♌21'13	0°52'00
minimum elong	46 Aug 02 j 15:59	7°♌21'12	0°52'00
max. Earth dist.	46 Aug 02 j 10:17	7°♌18'06	6.39615 AU
morning rise	46 Aug 15 j 21:14	10°♌13'36	
	46 Sep 07 j 10:52	15°♌	
retrograde	46 Dec 14 j 14:25	27°♌13'15	
opposition	47 Feb 12 j 19:06	22°♌18'11	1°31'23
min. Earth dist.	47 Feb 13 j 06:52	22°♌14'21	4.42603 AU
direct	47 Apr 16 j 00:06	17°♌15'04	
	47 Jul 28 j 17:27	0°♍	
evening set	47 Aug 21 j 00:26	4°♍53'46	
max. Earth dist.	47 Sep 01 j 19:49	7°♍27'08	6.43804 AU
conjunction	47 Sep 03 j 00:18	7°♍42'36	1°09'48
minimum elong	47 Sep 03 j 00:17	7°♍42'35	1°09'47
morning rise	47 Sep 15 j 20:58	10°♍29'57	
retrograde	48 Jan 13 j 22:47	27°♍18'24	
opposition	48 Mar 14 j 13:05	22°♍25'50	1°43'54
min. Earth dist.	48 Mar 15 j 15:12	22°♍17'28	4.43402 AU
direct	48 May 16 j 06:21	17°♍23'49	
	48 Aug 27 j 01:46	0°♎	
evening set	48 Sep 19 j 19:45	5°♎02'17	
max. Earth dist.	48 Sep 30 j 16:23	7°♎24'58	6.41055 AU
conjunction	48 Oct 02 j 13:21	7°♎49'40	1°08'28
minimum elong	48 Oct 02 j 13:22	7°♎49'41	1°08'28
morning rise	48 Oct 15 j 04:40	10°♎36'00	
retrograde	49 Feb 13 j 06:25	27°♎41'04	
opposition	49 Apr 15 j 02:55	22°♎49'21	1°28'21
min. Earth dist.	49 Apr 16 j 13:36	22°♎38'19	4.37301 AU
direct	49 Jun 16 j 17:16	17°♎49'15	
	49 Sep 24 j 03:52	0°♏	
evening set	49 Oct 20 j 14:04	5°♏42'36	
max. Earth dist.	49 Oct 31 j 05:41	8°♏05'46	6.32043 AU
conjunction	49 Nov 02 j 05:09	8°♏32'27	0°48'00
minimum elong	49 Nov 02 j 05:11	8°♏32'29	0°47'59
morning rise	49 Nov 14 j 18:49	11°♏21'51	
	49 Dec 01 j 06:36	15°♏	
retrograde	50 Mar 18 j 05:18	29°♏09'17	
opposition	50 May 18 j 05:23	24°♏16'45	0°46'40
min. Earth dist.	50 May 19 j 13:17	24°♏06'35	4.25858 AU
direct	50 Jul 18 j 22:39	19°♏19'13	
	50 Oct 17 j 06:14	0°♐	
evening set	50 Nov 21 j 06:04	7°♐40'32	
max. Earth dist.	50 Dec 02 j 08:18	10°♐14'11	6.19130 AU
conjunction	50 Dec 03 j 21:50	10°♐35'55	0°12'29
minimum elong	50 Dec 03 j 21:51	10°♐35'56	0°12'29
behind sun begin	50 Dec 03 j 16:34	10°♐32'53	
behind sun end	50 Dec 04 j 03:08	10°♐38'59	
morning rise	50 Dec 16 j 13:51	13°♐31'42	
	51 Mar 14 j 00:34	0°♑	
desc. node	51 Apr 03 j 10:04	1°♑46'45	
retrograde	51 Apr 22 j 11:13	2°♑20'35	
	51 Jun 01 j 05:20	30°℞♐	
opposition	51 Jun 22 j 06:28	27°♐25'43	-0°12'26
min. Earth dist.	51 Jun 23 j 02:28	27°♐19'15	4.12305 AU
direct	51 Aug 21 j 17:03	22°♐30'42	
	51 Nov 01 j 20:50	0°♑	
evening set	51 Dec 24 j 14:30	11°♑26'54	
conjunction	52 Jan 06 j 10:10	14°♑29'27	-0°28'41
minimum elong	52 Jan 06 j 10:08	14°♑29'26	0°28'42
max. Earth dist.	52 Jan 05 j 19:43	14°♑20'52	6.06175 AU
morning rise	52 Jan 19 j 07:35	17°♑33'09	
	52 Mar 16 j 21:08	0°♒	
retrograde	52 May 28 j 14:30	7°♒26'17	
opposition	52 Jul 28 j 01:25	2°♒27'52	-1°10'43
min. Earth dist.	52 Jul 28 j 00:17	2°♒28'15	4.01148 AU
	52 Aug 16 j 17:07	30°℞♑	
direct	52 Sep 25 j 01:03	27°♑34'25	
	52 Nov 02 j 18:13	0°♒	
	53 Jan 19 j 13:38	15°♒	
evening set	53 Jan 28 j 00:21	17°♒00'43	
conjunction	53 Feb 10 j 02:17	20°♒09'44	-1°00'54
minimum elong	53 Feb 10 j 02:15	20°♒09'42	1°00'54
max. Earth dist.	53 Feb 10 j 18:09	20°♒19'18	5.97818 AU
morning rise	53 Feb 23 j 07:19	23°♒20'27	
	53 Mar 23 j 22:41	0°♓	
retrograde	53 Jul 05 j 15:22	13°♓53'45	
opposition	53 Sep 03 j 14:57	8°♓51'24	-1°43'53
min. Earth dist.	53 Sep 02 j 17:36	8°♓58'35	3.96636 AU
direct	53 Oct 31 j 15:56	3°♓57'26	
evening set	54 Mar 06 j 01:08	23°♓34'52	
conjunction	54 Mar 19 j 11:10	26°♓47'38	-1°10'08
minimum elong	54 Mar 19 j 11:11	26°♓47'39	1°10'07
max. Earth dist.	54 Mar 21 j 07:16	27°♓14'05	5.97504 AU
	54 Apr 01 j 20:54	0°♈	
morning rise	54 Apr 02 j 00:09	0°♈01'56	
retrograde	54 Aug 11 j 22:04	20°♈28'04	
min. Earth dist.	54 Oct 09 j 04:25	15°♈34'13	4.00690 AU
opposition	54 Oct 10 j 12:47	15°♈23'12	-1°36'04
direct	54 Dec 07 j 11:34	10°♈26'53	
evening set	55 Apr 12 j 12:01	29°♈49'48	
	55 Apr 13 j 05:33	0°♉	
conjunction	55 Apr 26 j 04:36	3°♉01'56	-0°52'13
minimum elong	55 Apr 26 j 04:39	3°♉01'57	0°52'12
max. Earth dist.	55 Apr 28 j 09:48	3°♉33'03	6.05465 AU
morning rise	55 May 09 j 23:19	6°♉14'53	
	55 Jun 18 j 12:48	15°♉	
retrograde	55 Sep 16 j 03:15	25°♉50'01	
min. Earth dist.	55 Nov 13 j 07:58	20°♉56'14	4.11608 AU
opposition	55 Nov 14 j 16:03	20°♉45'18	-0°52'30
direct	56 Jan 12 j 09:09	15°♉45'49	
	56 Apr 27 j 05:19	0°♊	
evening set	56 May 18 j 00:38	4°♊36'48	
conjunction	56 May 31 j 19:09	7°♊44'01	-0°15'59
minimum elong	56 May 31 j 19:11	7°♊44'01	0°15'59
max. Earth dist.	56 Jun 02 j 13:37	8°♊08'06	6.18402 AU

morning rise	56 Jun 14 j 13:39	10°♊50'56	
retrograde	56 Oct 18 j 04:03	29°♊18'31	
asc. node	56 Nov 04 j 02:10	28°♊49'56	
opposition	56 Dec 16 j 18:25	24°♊16'32	0°06'23
min. Earth dist.	56 Dec 15 j 22:40	24°♊23'11	4.25173 AU
direct	57 Feb 14 j 18:57	19°♊14'35	
	57 May 17 j 03:56	0°♋	
evening set	57 Jun 21 j 19:35	7°♋30'50	
conjunction	57 Jul 05 j 10:01	10°♋30'42	0°24'03
minimum elong	57 Jul 05 j 09:59	10°♋30'41	0°24'03
max. Earth dist.	57 Jul 06 j 04:27	10°♋40'52	6.31541 AU
morning rise	57 Jul 18 j 22:36	13°♋29'25	
	57 Oct 24 j 10:01	0°♌	
retrograde	57 Nov 18 j 08:21	0°♌59'19	
	57 Dec 13 j 03:49	30°℞♋	
opposition	58 Jan 17 j 06:19	26°♋01'09	0°59'58
min. Earth dist.	58 Jan 17 j 02:42	26°♋02'21	4.36853 AU
direct	58 Mar 19 j 13:41	20°♋58'00	
	58 Jun 11 j 14:01	0°♌	
evening set	58 Jul 24 j 18:03	8°♌47'54	
conjunction	58 Aug 07 j 00:46	11°♌40'43	0°55'26
minimum elong	58 Aug 07 j 00:44	11°♌40'42	0°55'26
max. Earth dist.	58 Aug 06 j 15:34	11°♌35'43	6.40867 AU
morning rise	58 Aug 20 j 04:35	14°♌32'03	
	58 Aug 22 j 08:27	15°♌	
	58 Nov 17 j 23:52	0°♍	
retrograde	58 Dec 18 j 17:15	1°♍27'40	
	59 Jan 18 j 09:09	30°℞♌	
opposition	59 Feb 16 j 23:09	26°♌33'03	1°34'37
min. Earth dist.	59 Feb 17 j 13:44	26°♌28'19	4.43325 AU
direct	59 Apr 20 j 07:05	21°♌29'59	
	59 Jul 11 j 02:14	0°♍	
evening set	59 Aug 25 j 05:47	9°♍07'13	
max. Earth dist.	59 Sep 05 j 19:15	11°♍37'30	6.43908 AU
conjunction	59 Sep 07 j 04:32	11°♍55'35	1°10'44
minimum elong	59 Sep 07 j 04:31	11°♍55'34	1°10'44
morning rise	59 Sep 20 j 00:25	14°♍42'33	
	59 Dec 17 j 13:44	0°♎	
retrograde	60 Jan 18 j 03:55	1°♎31'34	
	60 Feb 18 j 19:46	30°℞♍	
opposition	60 Mar 18 j 18:30	26°♍39'10	1°43'25
min. Earth dist.	60 Mar 19 j 23:07	26°♍30'00	4.42892 AU
direct	60 May 20 j 12:24	21°♍37'15	
	60 Aug 09 j 11:17	0°♎	
evening set	60 Sep 23 j 23:41	9°♎17'17	
max. Earth dist.	60 Oct 04 j 19:21	11°♎39'47	6.39959 AU
conjunction	60 Oct 06 j 16:55	12°♎04'53	1°06'44
minimum elong	60 Oct 06 j 16:57	12°♎04'54	1°06'45
morning rise	60 Oct 19 j 07:39	14°♎51'28	
	61 Jan 11 j 23:04	0°♏	
retrograde	61 Feb 17 j 15:16	2°♏01'38	
	61 Mar 26 j 15:56	30°℞♎	
opposition	61 Apr 19 j 12:51	27°♎09'54	1°24'05
min. Earth dist.	61 Apr 20 j 23:47	26°♎58'47	4.35680 AU
direct	61 Jun 21 j 00:17	22°♎10'07	
	61 Sep 05 j 23:32	0°♏	
evening set	61 Oct 24 j 20:50	10°♏07'51	
max. Earth dist.	61 Nov 04 j 11:43	12°♏31'19	6.30017 AU
conjunction	61 Nov 06 j 11:45	12°♏58'27	0°43'51
minimum elong	61 Nov 06 j 11:47	12°♏58'29	0°43'51
	61 Nov 15 j 11:00	15°♏	
morning rise	61 Nov 19 j 01:42	15°♏48'47	
	62 Jan 31 j 08:15	0°♐	
retrograde	62 Mar 23 j 00:24	3°♐45'14	
	62 May 14 j 01:04	30°℞♏	
opposition	62 May 22 j 22:45	28°♏52'28	0°39'15
min. Earth dist.	62 May 24 j 06:32	28°♏42'19	4.23544 AU
direct	62 Jul 23 j 12:38	23°♏55'14	
	62 Sep 27 j 02:11	0°♐	
evening set	62 Nov 25 j 18:44	12°♐22'57	
max. Earth dist.	62 Dec 07 j 00:11	14°♐59'15	6.16738 AU
conjunction	62 Dec 08 j 11:06	15°♐19'34	0°06'51
minimum elong	62 Dec 08 j 11:06	15°♐19'34	0°06'51
behind sun begin	62 Dec 08 j 03:39	15°♐15'15	
behind sun end	62 Dec 08 j 18:33	15°♐23'53	
morning rise	62 Dec 21 j 03:45	18°♐16'39	
desc. node	63 Feb 11 j 17:45	29°♐31'16	
	63 Feb 14 j 08:27	0°♑	
retrograde	63 Apr 27 j 13:15	7°♑16'31	
opposition	63 Jun 27 j 08:01	2°♑21'14	-0°21'09
min. Earth dist.	63 Jun 28 j 00:48	2°♑15'49	4.10047 AU
	63 Jul 16 j 07:36	30°℞♐	
direct	63 Aug 26 j 12:23	27°♐26'34	
	63 Oct 05 j 23:29	0°♑	
evening set	63 Dec 29 j 11:29	16°♑29'12	
conjunction	64 Jan 11 j 07:52	19°♑32'55	-0°34'06
minimum elong	64 Jan 11 j 07:50	19°♑32'53	0°34'06
max. Earth dist.	64 Jan 10 j 21:30	19°♑26'43	6.04252 AU
morning rise	64 Jan 24 j 06:22	22°♑37'55	
	64 Feb 25 j 10:30	0°♒	
retrograde	64 Jun 02 j 23:58	12°♒40'10	
opposition	64 Aug 02 j 08:54	7°♒41'06	-1°17'26
min. Earth dist.	64 Aug 02 j 04:17	7°♒42'38	3.99768 AU
direct	64 Sep 30 j 04:43	2°♒47'41	
	65 Jan 01 j 17:55	15°♒	
evening set	65 Feb 02 j 04:51	22°♒17'44	
conjunction	65 Feb 15 j 08:02	25°♒27'35	-1°03'48
minimum elong	65 Feb 15 j 08:00	25°♒27'34	1°03'48
max. Earth dist.	65 Feb 16 j 06:26	25°♒41'07	5.97114 AU
morning rise	65 Feb 28 j 14:07	28°♒39'07	
	65 Mar 06 j 05:44	0°♓	
retrograde	65 Jul 11 j 01:07	19°♓14'36	
opposition	65 Sep 08 j 22:41	14°♓11'43	-1°45'20
min. Earth dist.	65 Sep 07 j 23:03	14°♓19'41	3.96711 AU
direct	65 Nov 05 j 21:58	9°♓17'32	
evening set	66 Mar 11 j 09:10	28°♓54'00	
	66 Mar 15 j 23:55	0°♈	
conjunction	66 Mar 24 j 20:06	2°♈06'51	-1°09'07
minimum elong	66 Mar 24 j 20:07	2°♈06'51	1°09'07
max. Earth dist.	66 Mar 26 j 18:13	2°♈34'25	5.98303 AU
morning rise	66 Apr 07 j 10:16	5°♈21'13	
retrograde	66 Aug 16 j 23:50	25°♈41'25	
min. Earth dist.	66 Oct 14 j 05:03	20°♈47'57	4.02102 AU
opposition	66 Oct 15 j 15:07	20°♈36'20	-1°31'37
direct	66 Dec 12 j 15:16	15°♈39'33	
	67 Mar 26 j 22:40	0°♉	
evening set	67 Apr 17 j 17:34	4°♉57'40	
conjunction	67 May 01 j 10:47	8°♉09'12	-0°47'51
minimum elong	67 May 01 j 10:50	8°♉09'14	0°47'51
max. Earth dist.	67 May 03 j 15:46	8°♉40'05	6.07346 AU
morning rise	67 May 15 j 05:43	11°♉21'23	
	67 May 31 j 05:40	15°♉	
	67 Aug 30 j 03:29	0°♊	
retrograde	67 Sep 20 j 22:22	0°♊46'22	

	67 Oct 12 j 11:01	30°℞♉		
min. Earth dist.	67 Nov 18 j 04:39	25°♉52'08	4.13717 AU	
opposition	67 Nov 19 j 10:44	25°♉41'53	-0°44'35	
direct	68 Jan 17 j 08:51	20°♉42'00		
	68 Apr 08 j 13:50	0°♊		
evening set	68 May 23 j 00:13	9°♊26'59		
conjunction	68 Jun 05 j 18:29	12°♊33'08	-0°10'16	
minimum elong	68 Jun 05 j 18:30	12°♊33'09	0°10'15	
behind sun begin	68 Jun 05 j 11:57	12°♊29'28		
behind sun end	68 Jun 06 j 01:03	12°♊36'49		
max. Earth dist.	68 Jun 07 j 10:39	12°♊55'49	6.20566 AU	
morning rise	68 Jun 19 j 12:24	15°♊38'51		
	68 Sep 01 j 09:50	0°♋		
asc. node	68 Sep 13 j 21:04	1°♋36'40		
retrograde	68 Oct 22 j 13:24	3°♋56'36		
	68 Dec 13 j 03:24	30°℞♊		
min. Earth dist.	68 Dec 20 j 11:25	29°♊01'19	4.27207 AU	
opposition	68 Dec 21 j 05:47	28°♊55'09	0°14'36	
direct	69 Feb 19 j 09:54	23°♊52'59		
	69 Apr 26 j 17:10	0°♋		
evening set	69 Jun 26 j 12:15	12°♋04'20		
conjunction	69 Jul 10 j 01:40	15°♋03'03	0°29'10	
minimum elong	69 Jul 10 j 01:38	15°♋03'02	0°29'10	
max. Earth dist.	69 Jul 10 j 15:14	15°♋10'31	6.33300 AU	
morning rise	69 Jul 23 j 13:08	18°♋00'35		
	69 Sep 22 j 12:17	0°♌		
retrograde	69 Nov 22 j 15:22	5°♌23'49		
opposition	70 Jan 21 j 13:34	0°♌26'15	1°06'08	
min. Earth dist.	70 Jan 21 j 13:29	0°♌26'17	4.38220 AU	
	70 Jan 24 j 21:14	30°℞♋		
direct	70 Mar 24 j 01:48	25°♋23'04		
	70 May 20 j 19:23	0°♌		
evening set	70 Jul 29 j 04:37	13°♌10'06		
	70 Aug 06 j 15:46	15°♌		
conjunction	70 Aug 11 j 10:14	16°♌02'08	0°58'38	
minimum elong	70 Aug 11 j 10:12	16°♌02'07	0°58'38	
max. Earth dist.	70 Aug 10 j 20:59	15°♌54'57	6.41730 AU	
morning rise	70 Aug 24 j 12:52	18°♌52'40		
	70 Oct 20 j 05:16	0°♍		
retrograde	70 Dec 22 j 21:42	5°♍45'49		
opposition	71 Feb 21 j 05:20	0°♍51'35	1°37'28	
min. Earth dist.	71 Feb 21 j 21:52	0°♍46'13	4.43665 AU	
	71 Feb 27 j 21:18	30°℞♌		
direct	71 Apr 24 j 14:36	25°♌48'39		
	71 Jun 18 j 22:05	0°♍		
evening set	71 Aug 29 j 12:56	13°♍25'35		
max. Earth dist.	71 Sep 09 j 23:50	15°♍54'37	6.43698 AU	
conjunction	71 Sep 11 j 10:48	16°♍13'39	1°11'21	
minimum elong	71 Sep 11 j 10:48	16°♍13'39	1°11'20	
morning rise	71 Sep 24 j 05:41	19°♍00'21		
	71 Nov 19 j 01:03	0°♎		
retrograde	72 Jan 22 j 11:27	5°♎51'05		
opposition	72 Mar 23 j 02:50	0°♎58'56	1°42'22	
min. Earth dist.	72 Mar 24 j 09:10	0°♎49'15	4.42153 AU	
	72 Mar 30 j 20:22	30°℞♍		
direct	72 May 24 j 20:59	25°♍57'21		
	72 Jul 18 j 00:28	0°♎		
evening set	72 Sep 28 j 06:32	13°♎39'32		
max. Earth dist.	72 Oct 08 j 23:01	16°♎00'48	6.38735 AU	
conjunction	72 Oct 10 j 23:09	16°♎27'24	1°04'35	
minimum elong	72 Oct 10 j 23:10	16°♎27'25	1°04'35	
morning rise	72 Oct 23 j 13:43	19°♎14'24		

	72 Dec 15 j 21:26	0°♏		
retrograde	73 Feb 22 j 05:06	6°♏30'15		
opposition	73 Apr 24 j 02:26	1°♏38'29	1°19'11	
min. Earth dist.	73 Apr 25 j 13:44	1°♏27'15	4.34046 AU	
	73 May 07 j 05:40	30°℞♎		
direct	73 Jun 25 j 11:34	26°♎39'03		
	73 Aug 12 j 21:28	0°♏		
evening set	73 Oct 29 j 06:13	14°♏41'03		
	73 Oct 30 j 15:53	15°♏		
max. Earth dist.	73 Nov 08 j 23:21	17°♏06'23	6.28122 AU	
conjunction	73 Nov 10 j 21:20	17°♏32'29	0°39'19	
minimum elong	73 Nov 10 j 21:22	17°♏32'30	0°39'18	
morning rise	73 Nov 23 j 11:22	20°♏23'41		
	74 Jan 07 j 19:58	0°♐		
retrograde	74 Mar 27 j 20:42	8°♐28'53		
opposition	74 May 27 j 19:22	3°♐35'55	0°31'20	
min. Earth dist.	74 May 29 j 01:11	3°♐26'23	4.21526 AU	
	74 Jun 28 j 09:49	30°℞♏		
direct	74 Jul 28 j 04:33	28°♏39'11		
	74 Aug 26 j 19:11	0°♐		
evening set	74 Nov 30 j 09:54	17°♐12'08		
max. Earth dist.	74 Dec 11 j 17:57	19°♐50'42	6.14788 AU	
conjunction	74 Dec 13 j 02:32	20°♐09'44	0°00'59	
minimum elong	74 Dec 13 j 02:31	20°♐09'43	0°00'58	
behind sun begin	74 Dec 12 j 18:30	20°♐05'04		
behind sun end	74 Dec 13 j 10:31	20°♐14'23		
desc. node	74 Dec 22 j 05:58	22°♐17'55		
morning rise	74 Dec 25 j 19:56	23°♐07'57		
	75 Jan 25 j 09:08	0°♑		
retrograde	75 May 02 j 17:48	12°♑17'22		
opposition	75 Jul 02 j 11:21	7°♑21'37	-0°29'53	
min. Earth dist.	75 Jul 03 j 00:59	7°♑17'11	4.08341 AU	
direct	75 Aug 31 j 11:27	2°♑27'14		
evening set	76 Jan 03 j 09:24	21°♑34'15		
conjunction	76 Jan 16 j 06:42	24°♑38'53	-0°39'18	
minimum elong	76 Jan 16 j 06:39	24°♑38'52	0°39'18	
max. Earth dist.	76 Jan 16 j 02:16	24°♑36'14	6.02970 AU	
morning rise	76 Jan 29 j 06:00	27°♑44'50		
	76 Feb 07 j 19:03	0°♒		
	76 Apr 25 j 18:15	15°♒		
retrograde	76 Jun 08 j 08:45	17°♒53'21		
	76 Jul 22 j 05:01	15°℞♒		
opposition	76 Aug 07 j 15:32	12°♒53'44	-1°23'30	
min. Earth dist.	76 Aug 07 j 08:03	12°♒56'13	3.99078 AU	
direct	76 Oct 05 j 07:30	8°♒00'23		
	76 Dec 12 j 06:15	15°♒		
evening set	77 Feb 07 j 08:13	27°♒31'42		
	77 Feb 17 j 14:37	0°♓		
conjunction	77 Feb 20 j 12:13	0°♓41'59	-1°06'10	
minimum elong	77 Feb 20 j 12:11	0°♓41'58	1°06'10	
max. Earth dist.	77 Feb 21 j 13:43	0°♓57'22	5.97045 AU	
morning rise	77 Mar 05 j 19:32	3°♓54'01		
retrograde	77 Jul 16 j 05:11	24°♓29'02		
min. Earth dist.	77 Sep 13 j 00:34	19°♓34'39	3.97296 AU	
opposition	77 Sep 14 j 03:12	19°♓25'40	-1°45'51	
direct	77 Nov 11 j 01:13	14°♓31'10		
	78 Feb 27 j 02:37	0°♈		
evening set	78 Mar 16 j 13:41	4°♈05'02		
conjunction	78 Mar 30 j 01:40	7°♈17'47	-1°07'35	
minimum elong	78 Mar 30 j 01:41	7°♈17'48	1°07'35	
max. Earth dist.	78 Apr 01 j 02:18	7°♈46'46	5.99467 AU	
morning rise	78 Apr 12 j 16:31	10°♈31'55		

	78 Jul 31 j 11:35	0°♉		
retrograde	78 Aug 21 j 23:03	0°♉45'06		
	78 Sep 12 j 04:53	30℞♈		
min. Earth dist.	78 Oct 19 j 04:04	25°♈51'14	4.03696 AU	
opposition	78 Oct 20 j 13:16	25°♈39'54	-1°26'38	
direct	78 Dec 17 j 16:42	20°♈42'38		
	79 Mar 08 j 07:36	0°♉		
evening set	79 Apr 22 j 19:03	9°♉55'40		
conjunction	79 May 06 j 12:43	13°♉06'33	-0°43'18	
minimum elong	79 May 06 j 12:46	13°♉06'34	0°43'18	
max. Earth dist.	79 May 08 j 17:16	13°♉37'00	6.09221 AU	
	79 May 14 j 16:38	15°♉		
morning rise	79 May 20 j 07:49	16°♉17'55		
	79 Jul 26 j 02:39	0°♊		
retrograde	79 Sep 25 j 11:35	5°♊33'01		
min. Earth dist.	79 Nov 22 j 19:40	0°♊38'51	4.15680 AU	
opposition	79 Nov 24 j 01:03	0°♊28'52	-0°36'39	
	79 Nov 27 j 14:08	30℞♉		
direct	80 Jan 22 j 01:49	25°♉28'36		
	80 Mar 17 j 02:55	0°♊		
evening set	80 May 27 j 20:01	14°♊08'25		
conjunction	80 Jun 10 j 13:48	17°♊13'34	-0°04'41	
minimum elong	80 Jun 10 j 13:49	17°♊13'34	0°04'41	
behind sun begin	80 Jun 10 j 05:39	17°♊09'00		
behind sun end	80 Jun 10 j 21:58	17°♊18'08		
max. Earth dist.	80 Jun 12 j 01:02	17°♊33'23	6.22457 AU	
morning rise	80 Jun 24 j 07:12	20°♊18'12		
asc. node	80 Jul 25 j 21:23	27°♊06'10		
	80 Aug 09 j 15:28	0°♋		
retrograde	80 Oct 26 j 21:59	8°♋27'32		
opposition	80 Dec 25 j 14:29	3°♋26'35	0°22'28	
min. Earth dist.	80 Dec 24 j 23:33	3°♋31'36	4.28865 AU	
	81 Jan 23 j 01:23	30℞♊		
direct	81 Feb 24 j 00:11	28°♊24'10		
	81 Mar 28 j 08:41	0°♋		
evening set	81 Jul 01 j 01:53	16°♋31'51		
conjunction	81 Jul 14 j 14:30	19°♋29'39	0°33'59	
minimum elong	81 Jul 14 j 14:28	19°♋29'38	0°33'59	
max. Earth dist.	81 Jul 15 j 01:01	19°♋35'25	6.34605 AU	
morning rise	81 Jul 28 j 00:45	22°♋26'10		
	81 Sep 02 j 07:47	0°♌		
retrograde	81 Nov 26 j 18:53	9°♌44'26		
opposition	82 Jan 25 j 19:10	4°♌47'22	1°11'48	
min. Earth dist.	82 Jan 25 j 20:48	4°♌46'49	4.39117 AU	
	82 Mar 15 j 09:02	30℞♋		
direct	82 Mar 28 j 09:44	29°♋44'09		
	82 Apr 10 j 14:20	0°♌		
	82 Jul 21 j 21:14	15°♌		
evening set	82 Aug 02 j 14:03	17°♌29'46		
conjunction	82 Aug 15 j 18:28	20°♌21'09	1°01'26	
minimum elong	82 Aug 15 j 18:26	20°♌21'08	1°01'26	
max. Earth dist.	82 Aug 15 j 01:11	20°♌11'46	6.42153 AU	
morning rise	82 Aug 28 j 20:02	23°♌11'04		
	82 Sep 30 j 16:19	0°♍		
retrograde	82 Dec 27 j 03:38	10°♍03'04		
opposition	83 Feb 25 j 11:20	5°♍09'15	1°39'45	
min. Earth dist.	83 Feb 26 j 06:51	5°♍02'56	4.43617 AU	
direct	83 Apr 28 j 23:41	0°♍06'26		
evening set	83 Sep 02 j 20:00	17°♍44'02		
max. Earth dist.	83 Sep 14 j 03:23	20°♍11'27	6.43171 AU	
conjunction	83 Sep 15 j 17:03	20°♍31'59	1°11'32	
minimum elong	83 Sep 15 j 17:03	20°♍31'59	1°11'33	
morning rise	83 Sep 28 j 11:13	23°♍18'36		
	83 Oct 30 j 12:25	0°♎		
retrograde	84 Jan 26 j 19:15	10°♎11'54		
opposition	84 Mar 27 j 12:04	5°♎19'52	1°40'44	
min. Earth dist.	84 Mar 28 j 18:52	5°♎10'02	4.41208 AU	
direct	84 May 29 j 05:09	0°♎18'32		
evening set	84 Oct 02 j 13:43	18°♎03'09		
max. Earth dist.	84 Oct 13 j 07:00	20°♎25'17	6.37452 AU	
conjunction	84 Oct 15 j 06:01	20°♎51'22	1°02'03	
minimum elong	84 Oct 15 j 06:03	20°♎51'23	1°02'02	
morning rise	84 Oct 27 j 20:11	23°♎38'45		
	84 Nov 26 j 14:54	0°♏		
retrograde	85 Feb 26 j 19:01	11°♏00'18		
opposition	85 Apr 28 j 17:00	6°♏08'29	1°13'44	
min. Earth dist.	85 Apr 30 j 04:08	5°♏57'19	4.32496 AU	
direct	85 Jun 30 j 00:11	1°♏09'27		
	85 Oct 14 j 11:23	15°♏		
evening set	85 Nov 02 j 16:20	19°♏15'04		
max. Earth dist.	85 Nov 13 j 09:37	21°♏41'08	6.26428 AU	
conjunction	85 Nov 15 j 07:20	22°♏07'10	0°34'30	
minimum elong	85 Nov 15 j 07:22	22°♏07'12	0°34'30	
morning rise	85 Nov 27 j 21:47	24°♏59'12		
	85 Dec 20 j 12:33	0°♐		
retrograde	86 Apr 01 j 17:22	13°♐12'16		
opposition	86 Jun 01 j 16:02	8°♐18'57	0°23'09	
min. Earth dist.	86 Jun 02 j 19:43	8°♐10'05	4.19784 AU	
direct	86 Aug 01 j 21:19	3°♐22'32		
desc. node	86 Nov 01 j 02:41	14°♐26'02		
evening set	86 Dec 05 j 00:43	21°♐59'38		
conjunction	86 Dec 17 j 17:56	24°♐58'08	-0°04'57	
minimum elong	86 Dec 17 j 17:56	24°♐58'08	0°04'57	
behind sun begin	86 Dec 17 j 10:08	24°♐53'35		
behind sun end	86 Dec 18 j 01:45	25°♐02'42		
max. Earth dist.	86 Dec 16 j 13:56	24°♐41'43	6.13155 AU	
morning rise	86 Dec 30 j 11:52	27°♐57'19		
	87 Jan 08 j 07:43	0°♑		
retrograde	87 May 07 j 21:33	17°♑14'53		
opposition	87 Jul 07 j 13:27	12°♑18'41	-0°38'22	
min. Earth dist.	87 Jul 08 j 00:49	12°♑14'59	4.06946 AU	
direct	87 Sep 05 j 09:05	7°♑24'34		
evening set	88 Jan 08 j 06:14	26°♑35'00		
conjunction	88 Jan 21 j 04:08	29°♑40'25	-0°44'11	
minimum elong	88 Jan 21 j 04:06	29°♑40'23	0°44'11	
max. Earth dist.	88 Jan 21 j 02:23	29°♑39'22	6.01917 AU	
	88 Jan 22 j 12:49	0°♒		
morning rise	88 Feb 03 j 04:35	2°♒47'17		
	88 Mar 29 j 21:55	15°♒		
retrograde	88 Jun 13 j 12:47	23°♒01'13		
opposition	88 Aug 12 j 19:50	18°♒01'02	-1°28'52	
min. Earth dist.	88 Aug 12 j 08:44	18°♒04'43	3.98492 AU	
	88 Sep 06 j 09:20	15℞♒		
direct	88 Oct 10 j 07:51	13°♒07'39		
	88 Nov 12 j 23:39	15°♒		
	89 Feb 01 j 04:12	0°♓		
evening set	89 Feb 12 j 10:00	2°♓40'20		
conjunction	89 Feb 25 j 15:11	5°♓51'08	-1°08'01	
minimum elong	89 Feb 25 j 15:09	5°♓51'08	1°08'00	
max. Earth dist.	89 Feb 26 j 21:07	6°♓09'11	5.96974 AU	
morning rise	89 Mar 10 j 23:26	9°♓03'38		
retrograde	89 Jul 21 j 09:53	29°♓38'17		
min. Earth dist.	89 Sep 18 j 02:23	24°♓43'44	3.97754 AU	
opposition	89 Sep 19 j 05:29	24°♓34'34	-1°45'36	

direct	89 Nov 16 j 04:13	19°♓39'45	
	90 Feb 08 j 22:11	0°♈	
evening set	90 Mar 21 j 17:16	9°♈12'02	
conjunction	90 Apr 04 j 06:15	12°♈24'50	-1°05'35
minimum elong	90 Apr 04 j 06:18	12°♈24'51	1°05'34
max. Earth dist.	90 Apr 06 j 08:44	12°♈54'48	6.00400 AU
morning rise	90 Apr 17 j 22:02	15°♈38'56	
	90 Jun 25 j 07:18	0°♉	
retrograde	90 Aug 26 j 20:12	5°♉45'58	
min. Earth dist.	90 Oct 24 j 00:21	0°♉52'18	4.05003 AU
opposition	90 Oct 25 j 10:06	0°♉40'48	-1°21'05
	90 Oct 30 j 10:09	30℞♈	
direct	90 Dec 22 j 14:17	25°♈43'08	
	91 Feb 13 j 00:59	0°♉	
evening set	91 Apr 27 j 20:27	14°♉52'35	
	91 Apr 28 j 09:22	15°♉	
conjunction	91 May 11 j 14:26	18°♉02'56	-0°38'28
minimum elong	91 May 11 j 14:29	18°♉02'58	0°38'28
max. Earth dist.	91 May 13 j 16:06	18°♉31'37	6.10778 AU
morning rise	91 May 25 j 09:49	21°♉13'42	
	91 Jul 04 j 16:05	0°♊	
retrograde	91 Sep 30 j 02:22	10°♊20'26	
opposition	91 Nov 28 j 15:50	5°♊16'37	-0°28'29
min. Earth dist.	91 Nov 27 j 12:43	5°♊25'49	4.17308 AU
direct	92 Jan 26 j 21:23	0°♊15'59	
evening set	92 Jun 01 j 16:37	18°♊51'56	
asc. node	92 Jun 05 j 01:28	19°♊37'01	
conjunction	92 Jun 15 j 10:12	21°♊56'17	0°01'06
minimum elong	92 Jun 15 j 10:12	21°♊56'17	0°01'05
behind sun begin	92 Jun 15 j 01:51	21°♊51'38	
behind sun end	92 Jun 15 j 18:32	22°♊00'56	
max. Earth dist.	92 Jun 16 j 19:36	22°♊15'00	6.24045 AU
morning rise	92 Jun 29 j 02:46	24°♊59'55	
	92 Jul 22 j 03:11	0°♋	
retrograde	92 Oct 31 j 06:56	13°♋01'56	
min. Earth dist.	92 Dec 29 j 10:59	8°♋06'02	4.30285 AU
opposition	92 Dec 30 j 00:21	8°♋01'34	0°30'17
direct	93 Feb 28 j 13:25	2°♋59'02	
evening set	93 Jul 05 j 17:29	21°♋03'54	
conjunction	93 Jul 19 j 04:58	24°♋00'49	0°38'41
minimum elong	93 Jul 19 j 04:56	24°♋00'47	0°38'41
max. Earth dist.	93 Jul 19 j 10:24	24°♋03'47	6.35752 AU
morning rise	93 Aug 01 j 14:15	26°♋56'25	
	93 Aug 15 j 19:52	0°♌	
retrograde	93 Dec 01 j 02:42	14°♌10'15	
opposition	94 Jan 30 j 02:59	9°♌13'44	1°17'12
min. Earth dist.	94 Jan 30 j 07:45	9°♌12'10	4.39945 AU
direct	94 Apr 01 j 22:09	4°♌10'33	
	94 Jul 04 j 15:55	15°♌	
evening set	94 Aug 07 j 00:59	21°♌54'44	
max. Earth dist.	94 Aug 19 j 09:32	24°♌35'15	6.42614 AU
conjunction	94 Aug 20 j 04:29	24°♌45'32	1°04'00
minimum elong	94 Aug 20 j 04:27	24°♌45'31	1°03'59
morning rise	94 Sep 02 j 04:48	27°♌34'48	
	94 Sep 13 j 12:30	0°♍	
retrograde	94 Dec 31 j 09:05	14°♍25'35	
opposition	95 Mar 01 j 19:24	9°♍32'06	1°41'35
min. Earth dist.	95 Mar 02 j 15:24	9°♍25'39	4.43732 AU
direct	95 May 03 j 08:24	4°♍29'31	
evening set	95 Sep 07 j 04:18	22°♍06'55	
max. Earth dist.	95 Sep 18 j 09:29	24°♍33'21	6.42947 AU
conjunction	95 Sep 20 j 00:22	24°♍54'35	1°11'23
minimum elong	95 Sep 20 j 00:23	24°♍54'35	1°11'23
morning rise	95 Oct 02 j 17:45	27°♍40'59	
	95 Oct 13 j 12:10	0°♎	
retrograde	96 Jan 31 j 04:53	14°♎35'52	
opposition	96 Mar 31 j 22:32	9°♎43'59	1°38'34
min. Earth dist.	96 Apr 02 j 06:40	9°♎33'45	4.40667 AU
direct	96 Jun 02 j 16:45	4°♎42'58	
evening set	96 Oct 06 j 21:06	22°♎28'23	
max. Earth dist.	96 Oct 17 j 13:00	24°♎50'07	6.36637 AU
conjunction	96 Oct 19 j 12:55	25°♎16'44	0°59'12
minimum elong	96 Oct 19 j 12:57	25°♎16'45	0°59'11
morning rise	96 Nov 01 j 02:53	28°♎04'22	
	96 Nov 09 j 21:24	0°♏	
	97 Feb 13 j 08:39	15°♏	
retrograde	97 Mar 03 j 07:28	15°♏30'05	
	97 Mar 21 j 07:51	15℞♏	
opposition	97 May 03 j 07:07	10°♏38'05	1°07'56
min. Earth dist.	97 May 04 j 16:53	10°♏27'20	4.31451 AU
direct	97 Jul 04 j 11:33	5°♏39'21	
	97 Sep 26 j 21:56	15°♏	
evening set	97 Nov 07 j 00:54	23°♏46'47	
max. Earth dist.	97 Nov 17 j 21:15	26°♏14'57	6.25246 AU
conjunction	97 Nov 19 j 16:01	26°♏39'23	0°29'36
minimum elong	97 Nov 19 j 16:03	26°♏39'24	0°29'36
morning rise	97 Dec 02 j 06:31	29°♏31'58	
	97 Dec 04 j 07:57	0°♐	
retrograde	98 Apr 06 j 12:33	17°♐51'13	
opposition	98 Jun 06 j 10:45	12°♐57'35	0°15'02
min. Earth dist.	98 Jun 07 j 13:28	12°♐49'01	4.18524 AU
direct	98 Aug 06 j 13:00	8°♐01'29	
desc. node	98 Sep 12 j 19:01	10°♐09'09	
evening set	98 Dec 09 j 12:57	26°♐41'07	
max. Earth dist.	98 Dec 21 j 03:44	29°♐24'35	6.11920 AU
conjunction	98 Dec 22 j 06:26	29°♐40'16	-0°10'32
minimum elong	98 Dec 22 j 06:24	29°♐40'15	0°10'32
behind sun begin	98 Dec 22 j 00:06	29°♐36'34	
behind sun end	98 Dec 22 j 12:43	29°♐43'57	
	98 Dec 23 j 16:00	0°♑	
morning rise	99 Jan 04 j 01:07	2°♑40'16	
retrograde	99 May 12 j 19:34	22°♑04'37	
opposition	99 Jul 12 j 11:46	17°♑07'52	-0°46'17
min. Earth dist.	99 Jul 12 j 19:55	17°♑05'12	4.05844 AU
direct	99 Sep 10 j 02:30	12°♑13'52	
	100 Jan 06 j 20:59	0°♒	
evening set	100 Jan 12 j 23:36	1°♒27'00	
conjunction	100 Jan 25 j 22:24	4°♒33'08	-0°48'33
minimum elong	100 Jan 25 j 22:21	4°♒33'07	0°48'34
max. Earth dist.	100 Jan 26 j 01:03	4°♒34'44	6.01051 AU
morning rise	100 Feb 07 j 23:36	7°♒40'45	
	100 Mar 10 j 18:20	15°♒	
retrograde	100 Jun 18 j 15:14	27°♒59'21	
opposition	100 Aug 17 j 19:50	22°♒58'40	-1°33'24
min. Earth dist.	100 Aug 17 j 07:43	23°♒02'42	3.97961 AU
direct	100 Oct 15 j 06:03	18°♒05'09	
	101 Jan 15 j 05:29	0°♓	
evening set	101 Feb 17 j 08:12	7°♓39'18	
conjunction	101 Mar 02 j 14:25	10°♓50'40	-1°09'18
minimum elong	101 Mar 02 j 14:24	10°♓50'39	1°09'18
max. Earth dist.	101 Mar 03 j 22:48	11°♓10'10	5.96817 AU
morning rise	101 Mar 15 j 23:52	14°♓03'45	
	101 May 31 j 18:54	0°♈	

retrograde	101 Jul	26 j 09:34	4°♈38'17	
	101 Sep	20 j 23:49	30°℞♓	
min. Earth dist.	101 Sep	22 j 23:01	29°♓44'02	3.98019 AU
opposition	101 Sep	24 j 03:51	29°♓34'16	-1°44'37
direct	101 Nov	21 j 00:42	24°♓39'08	