

Planetary Phenomena of Uranus from -400 through 102 (UT), Astrodienst AG 18-Feb-2025 14:23, page 1

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

direct	-400 Feb 23 j 03:09	11°II18'37		opposition	-394 Jan 05 j 15:19	11°☾01'24	0°30'54
evening set	-400 May 27 j 00:09	14°II37'35		min. Earth dist.	-394 Jan 06 j 13:50	10°☾58'56	17.49894 AU
				direct	-394 Mar 22 j 05:27	8°☾55'57	
conjunction	-400 Jun 12 j 19:41	15°II38'11	0°10'24	evening set	-394 Jun 25 j 13:55	12°☾22'06	
minimum elong	-400 Jun 12 j 19:41	15°II38'11	0°10'24	max. Earth dist.	-394 Jul 11 j 03:37	13°☾19'29	19.47766 AU
behind sun begin	-400 Jun 12 j 14:25	15°II37'24					
behind sun end	-400 Jun 13 j 00:57	15°II38'57		conjunction	-394 Jul 12 j 07:31	13°☾23'48	0°29'09
max. Earth dist.	-400 Jun 11 j 21:33	15°II34'50	19.78555 AU	minimum elong	-394 Jul 12 j 07:31	13°☾23'48	0°29'10
morning rise	-400 Jun 29 j 14:23	16°II38'41		morning rise	-394 Jul 28 j 22:19	14°☾25'07	
retrograde	-400 Sep 30 j 12:55	19°II56'46		retrograde	-394 Oct 29 j 02:19	17°☾46'00	
opposition	-400 Dec 13 j 16:50	17°II54'20	0°13'24	opposition	-393 Jan 10 j 12:41	15°☾43'40	0°33'56
min. Earth dist.	-400 Dec 14 j 11:28	17°II52'19	17.75508 AU	min. Earth dist.	-393 Jan 11 j 12:56	15°☾41'01	17.45799 AU
direct	-399 Feb 26 j 21:24	15°II50'12		direct	-393 Mar 27 j 04:36	13°☾37'59	
evening set	-399 Jun 01 j 00:34	19°II10'27		evening set	-393 Jun 30 j 18:15	17°☾05'06	
				max. Earth dist.	-393 Jul 16 j 06:35	18°☾02'27	19.43845 AU
conjunction	-399 Jun 17 j 20:12	20°II11'17	0°13'45				
minimum elong	-399 Jun 17 j 20:13	20°II11'17	0°13'46	conjunction	-393 Jul 17 j 11:09	18°☾06'53	0°31'47
behind sun begin	-399 Jun 17 j 16:48	20°II10'47		minimum elong	-393 Jul 17 j 11:08	18°☾06'53	0°31'47
behind sun end	-399 Jun 17 j 23:37	20°II11'48		morning rise	-393 Aug 03 j 01:04	19°☾08'16	
max. Earth dist.	-399 Jun 16 j 21:59	20°II07'55	19.72533 AU	retrograde	-393 Nov 03 j 02:19	22°☾29'28	
morning rise	-399 Jul 04 j 14:24	21°II11'58		opposition	-392 Jan 15 j 10:41	20°☾27'08	0°36'46
retrograde	-399 Oct 05 j 10:27	24°II30'35		min. Earth dist.	-392 Jan 16 j 10:28	20°☾24'32	17.42058 AU
opposition	-399 Dec 18 j 10:01	22°II28'07	0°17'07	direct	-392 Mar 31 j 06:09	18°☾21'14	
min. Earth dist.	-399 Dec 19 j 05:06	22°II26'03	17.69662 AU	evening set	-392 Jul 04 j 22:41	21°☾49'12	
direct	-398 Mar 03 j 16:54	20°II23'41		max. Earth dist.	-392 Jul 20 j 10:06	22°☾46'35	19.40286 AU
evening set	-398 Jun 06 j 01:59	23°II45'12					
conjunction	-398 Jun 22 j 21:18	24°II46'15	0°17'03	conjunction	-392 Jul 21 j 14:52	22°☾51'03	0°34'12
minimum elong	-398 Jun 22 j 21:18	24°II46'15	0°17'03	minimum elong	-392 Jul 21 j 14:52	22°☾51'03	0°34'12
max. Earth dist.	-398 Jun 21 j 20:54	24°II42'32	19.66868 AU	morning rise	-392 Aug 07 j 03:43	23°☾52'28	
morning rise	-398 Jul 09 j 15:06	25°II47'06		retrograde	-392 Nov 07 j 00:43	27°☾13'55	
retrograde	-398 Oct 10 j 07:21	29°II06'14		opposition	-391 Jan 19 j 09:26	25°☾11'35	0°39'21
opposition	-398 Dec 23 j 04:10	27°II03'47	0°20'45	min. Earth dist.	-391 Jan 20 j 10:36	25°☾08'50	17.38708 AU
min. Earth dist.	-398 Dec 24 j 00:52	27°II01'31	17.64192 AU	direct	-391 Apr 05 j 07:20	23°☾05'28	
direct	-397 Mar 08 j 12:20	24°II59'02		evening set	-391 Jul 10 j 03:30	26°☾34'11	
evening set	-397 Jun 11 j 03:55	28°II21'49		conjunction	-391 Jul 26 j 18:46	27°☾36'05	0°36'24
				minimum elong	-391 Jul 26 j 18:46	27°☾36'05	0°36'24
conjunction	-397 Jun 27 j 23:03	29°II23'03	0°20'16	max. Earth dist.	-391 Jul 25 j 13:17	27°☾31'29	19.37153 AU
minimum elong	-397 Jun 27 j 23:03	29°II23'03	0°20'16	morning rise	-391 Aug 12 j 06:43	28°☾37'30	
max. Earth dist.	-397 Jun 26 j 22:31	29°II19'18	19.61575 AU		-391 Sep 05 j 04:04	0°♂	
	-397 Jul 08 j 00:35	0°☾		retrograde	-391 Nov 12 j 00:46	1°♂59'09	
morning rise	-397 Jul 14 j 16:09	0°☾24'04			-390 Jan 23 j 03:09	30°♂☾	
retrograde	-397 Oct 15 j 06:23	3°☾43'41		opposition	-390 Jan 24 j 08:27	29°☾56'48	0°41'40
opposition	-397 Dec 27 j 23:02	1°☾41'16	0°24'16	min. Earth dist.	-390 Jan 25 j 08:52	29°☾54'08	17.35798 AU
min. Earth dist.	-397 Dec 28 j 19:53	1°☾39'00	17.59077 AU	direct	-390 Apr 10 j 10:31	27°☾50'29	
	-396 Feb 11 j 04:24	30°♂II			-390 Jun 22 j 07:44	0°♂	
direct	-396 Mar 12 j 09:14	29°II36'18		evening set	-390 Jul 15 j 08:22	1°♂19'51	
	-396 Apr 11 j 07:49	0°☾					
evening set	-396 Jun 15 j 06:41	3°☾00'15		conjunction	-390 Jul 31 j 22:49	2°♂21'46	0°38'20
max. Earth dist.	-396 Jun 30 j 23:05	3°☾57'39	19.56633 AU	minimum elong	-390 Jul 31 j 22:49	2°♂21'46	0°38'20
				max. Earth dist.	-390 Jul 30 j 18:04	2°♂17'16	19.34473 AU
conjunction	-396 Jul 02 j 01:19	4°☾01'41	0°23'22	morning rise	-390 Aug 17 j 09:31	3°♂23'09	
minimum elong	-396 Jul 02 j 01:19	4°☾01'41	0°23'23	retrograde	-390 Nov 16 j 23:42	6°♂44'57	
morning rise	-396 Jul 18 j 17:47	5°☾02'49		opposition	-389 Jan 29 j 08:19	4°♂42'36	0°43'43
retrograde	-396 Oct 19 j 04:25	8°☾22'55		min. Earth dist.	-389 Jan 30 j 09:35	4°♂39'50	17.33374 AU
opposition	-396 Dec 31 j 18:48	6°☾20'32	0°27'40	direct	-389 Apr 15 j 12:41	2°♂36'07	
min. Earth dist.	-395 Jan 01 j 17:23	6°☾18'04	17.54324 AU	evening set	-389 Jul 20 j 13:07	6°♂06'00	
direct	-395 Mar 17 j 06:19	4°☾15'18		max. Earth dist.	-389 Aug 04 j 21:14	7°♂03'18	19.32319 AU
evening set	-395 Jun 20 j 09:55	7°☾40'25					
max. Earth dist.	-395 Jul 06 j 01:27	8°☾37'52	19.52043 AU	conjunction	-389 Aug 06 j 02:26	7°♂07'53	0°40'02
				minimum elong	-389 Aug 06 j 02:26	7°♂07'53	0°40'02
conjunction	-395 Jul 07 j 04:10	8°☾41'59	0°26'20	morning rise	-389 Aug 22 j 12:10	8°♂09'14	
minimum elong	-395 Jul 07 j 04:09	8°☾41'59	0°26'20	retrograde	-389 Nov 22 j 00:23	11°♂31'09	
morning rise	-395 Jul 23 j 19:52	9°☾43'14		opposition	-388 Feb 03 j 08:29	9°♂28'46	0°45'27
retrograde	-395 Oct 24 j 04:09	13°☾03'44		min. Earth dist.	-388 Feb 04 j 08:35	9°♂26'08	17.31502 AU

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Attention, astronomical year style is used: The year -388 in astronomical counting style is the year 389 BCE in historical counting style.

direct	-388 Apr 19 j 16:41	7°Ω22'08		evening set	-382 Aug 23 j 15:28	9°♐31'40	
evening set	-388 Jul 24 j 17:41	10°Ω52'27					
max. Earth dist.	-388 Aug 09 j 02:37	11°Ω49'58	19.30734 AU	conjunction	-382 Sep 08 j 20:52	10°♐32'43	0°43'44
				minimum elong	-382 Sep 08 j 20:52	10°♐32'43	0°43'44
conjunction	-388 Aug 10 j 06:07	11°Ω54'17	0°41'26	max. Earth dist.	-382 Sep 08 j 01:05	10°♐29'35	19.34751 AU
minimum elong	-388 Aug 10 j 06:07	11°Ω54'17	0°41'26	morning rise	-382 Sep 24 j 22:12	11°♐33'11	
morning rise	-388 Aug 26 j 14:31	12°Ω55'35		retrograde	-382 Dec 25 j 02:03	14°♐54'38	
	-388 Oct 03 j 10:40	15°Ω		opposition	-381 Mar 08 j 19:37	12°♐53'00	0°48'26
retrograde	-388 Nov 25 j 23:41	16°Ω17'31		min. Earth dist.	-381 Mar 09 j 12:40	12°♐51'10	17.36061 AU
	-387 Jan 20 j 20:02	15°♐Ω		direct	-381 May 24 j 16:49	10°♐47'06	
opposition	-387 Feb 07 j 09:06	14°Ω15'10	0°46'52	evening set	-381 Aug 28 j 17:26	14°♐17'16	
min. Earth dist.	-387 Feb 08 j 09:21	14°Ω12'31	17.30226 AU				
direct	-387 Apr 24 j 19:01	12°Ω08'26		conjunction	-381 Sep 13 j 21:32	15°♐18'06	0°43'04
	-387 Jul 19 j 02:12	15°Ω		minimum elong	-381 Sep 13 j 21:32	15°♐18'06	0°43'04
evening set	-387 Jul 29 j 22:14	15°Ω39'04		max. Earth dist.	-381 Sep 13 j 02:48	15°♐15'09	19.37430 AU
max. Earth dist.	-387 Aug 14 j 05:43	16°Ω36'28	19.29781 AU	morning rise	-381 Sep 29 j 21:47	16°♐18'22	
				retrograde	-381 Dec 30 j 00:34	19°♐39'36	
conjunction	-387 Aug 15 j 09:25	16°Ω40'50	0°42'34	opposition	-380 Mar 12 j 22:02	17°♐38'07	0°47'31
minimum elong	-387 Aug 15 j 09:25	16°Ω40'50	0°42'33	min. Earth dist.	-380 Mar 13 j 14:19	17°♐36'22	17.38974 AU
morning rise	-387 Aug 31 j 16:48	17°Ω42'02		direct	-380 May 28 j 20:11	15°♐32'27	
retrograde	-387 Dec 01 j 00:39	21°Ω04'00		evening set	-380 Sep 01 j 18:48	19°♐02'08	
opposition	-386 Feb 12 j 10:06	19°Ω01'40	0°47'58				
min. Earth dist.	-386 Feb 13 j 08:59	18°Ω59'10	17.29603 AU	conjunction	-380 Sep 17 j 21:46	20°♐02'44	0°42'06
direct	-386 Apr 29 j 22:55	16°Ω54'55		minimum elong	-380 Sep 17 j 21:46	20°♐02'44	0°42'05
evening set	-386 Aug 04 j 02:22	20°Ω25'45		max. Earth dist.	-380 Sep 17 j 04:59	20°♐00'05	19.40562 AU
max. Earth dist.	-386 Aug 19 j 11:11	21°Ω23'25	19.29485 AU	morning rise	-380 Oct 03 j 20:57	21°♐02'47	
				retrograde	-379 Jan 03 j 00:10	24°♐23'43	
conjunction	-386 Aug 20 j 12:33	21°Ω27'25	0°43'23	opposition	-379 Mar 18 j 00:12	22°♐22'22	0°46'17
minimum elong	-386 Aug 20 j 12:33	21°Ω27'25	0°43'24	min. Earth dist.	-379 Mar 18 j 14:25	22°♐20'51	17.42296 AU
morning rise	-386 Sep 05 j 18:33	22°Ω28'31		direct	-379 Jun 03 j 01:29	20°♐16'59	
retrograde	-386 Dec 06 j 00:32	25°Ω50'26		evening set	-379 Sep 06 j 19:34	23°♐46'02	
opposition	-385 Feb 17 j 11:33	23°Ω48'12	0°48'44				
min. Earth dist.	-385 Feb 18 j 09:47	23°Ω45'47	17.29638 AU	conjunction	-379 Sep 22 j 21:20	24°♐46'23	0°40'51
direct	-385 May 05 j 01:50	21°Ω41'31		minimum elong	-379 Sep 22 j 21:21	24°♐46'23	0°40'52
evening set	-385 Aug 09 j 06:21	25°Ω12'27		max. Earth dist.	-379 Sep 22 j 06:01	24°♐43'59	19.44081 AU
				morning rise	-379 Oct 08 j 19:26	25°♐46'13	
conjunction	-385 Aug 25 j 15:12	26°Ω13'59	0°43'56	retrograde	-378 Jan 07 j 21:24	29°♐06'47	
minimum elong	-385 Aug 25 j 15:12	26°Ω13'59	0°43'55	opposition	-378 Mar 23 j 02:31	27°♐05'34	0°44'44
max. Earth dist.	-385 Aug 24 j 14:03	26°Ω10'01	19.29869 AU	min. Earth dist.	-378 Mar 23 j 16:04	27°♐04'07	17.46005 AU
morning rise	-385 Sep 10 j 20:09	27°Ω14'57		direct	-378 Jun 08 j 04:18	25°♐00'26	
	-385 Nov 04 j 16:52	0°♐		evening set	-378 Sep 11 j 19:22	28°♐28'45	
retrograde	-385 Dec 11 j 01:20	0°♐36'50					
	-384 Jan 17 j 06:56	30°♐Ω		conjunction	-378 Sep 27 j 19:59	29°♐28'51	0°39'20
opposition	-384 Feb 22 j 13:14	28°Ω34'43	0°49'10	minimum elong	-378 Sep 27 j 19:59	29°♐28'51	0°39'20
min. Earth dist.	-384 Feb 23 j 10:06	28°Ω32'27	17.30360 AU	max. Earth dist.	-378 Sep 27 j 06:22	29°♐26'42	19.47977 AU
direct	-384 May 09 j 05:15	26°Ω28'09					
evening set	-384 Aug 13 j 09:40	29°Ω59'04		morning rise	-378 Oct 13 j 17:09	0°♐28'26	
	-384 Aug 13 j 15:45	0°♐		retrograde	-377 Jan 12 j 20:18	3°♐48'36	
				opposition	-377 Mar 28 j 04:30	1°♐47'29	0°42'53
conjunction	-384 Aug 29 j 17:31	1°♐00'29	0°44'10	min. Earth dist.	-377 Mar 28 j 15:27	1°♐46'19	17.50064 AU
minimum elong	-384 Aug 29 j 17:31	1°♐00'29	0°44'10				
max. Earth dist.	-384 Aug 28 j 18:54	0°♐56'54	19.30915 AU	direct	-377 Jun 13 j 09:00	29°♐42'37	
morning rise	-384 Sep 14 j 21:11	2°♐01'18			-377 Jul 09 j 02:59	0°♐	
retrograde	-384 Dec 15 j 01:41	5°♐23'04		evening set	-377 Sep 16 j 18:21	3°♐10'05	
opposition	-383 Feb 26 j 15:10	3°♐21'07	0°49'16				
min. Earth dist.	-383 Feb 27 j 10:53	3°♐18'59	17.31699 AU	conjunction	-377 Oct 02 j 17:55	4°♐09'54	0°37'34
direct	-383 May 14 j 08:53	1°♐14'44		minimum elong	-377 Oct 02 j 17:55	4°♐09'54	0°37'34
evening set	-383 Aug 18 j 12:52	4°♐45'32		max. Earth dist.	-377 Oct 02 j 06:28	4°♐08'06	19.52215 AU
				morning rise	-377 Oct 18 j 14:05	5°♐09'15	
conjunction	-383 Sep 03 j 19:22	5°♐46'46	0°44'06	retrograde	-376 Jan 17 j 16:31	8°♐28'58	
minimum elong	-383 Sep 03 j 19:22	5°♐46'46	0°44'06	opposition	-376 Apr 01 j 06:11	6°♐27'55	0°40'45
max. Earth dist.	-383 Sep 02 j 21:16	5°♐43'16	19.32555 AU	min. Earth dist.	-376 Apr 01 j 16:26	6°♐26'50	17.54479 AU
morning rise	-383 Sep 19 j 21:57	6°♐47'25		direct	-376 Jun 17 j 10:28	4°♐23'18	
retrograde	-383 Dec 20 j 01:38	10°♐09'04		evening set	-376 Sep 20 j 16:19	7°♐49'49	
opposition	-382 Mar 03 j 17:15	8°♐07'16	0°49'01				
min. Earth dist.	-382 Mar 04 j 11:59	8°♐05'15	17.33625 AU	conjunction	-376 Oct 06 j 14:49	8°♐49'22	0°35'33
direct	-382 May 19 j 12:02	6°♐01'06		minimum elong	-376 Oct 06 j 14:49	8°♐49'22	0°35'33

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Attention, astronomical year style is used: The year -376 in astronomical counting style is the year 377 BCE in historical counting style.

max. Earth dist.	-376 Oct 06 j 04:53	8°♂47'48	19.56812 AU	min. Earth dist.	-369 May 04 j 22:34	8°♂21'37	17.95035 AU
morning rise	-376 Oct 22 j 10:16	9°♂48'27		direct	-369 Jul 21 j 09:07	6°♂18'57	
retrograde	-375 Jan 21 j 14:30	13°♂07'39		evening set	-369 Oct 22 j 22:50	9°♂37'21	
opposition	-375 Apr 06 j 07:20	11°♂06'41	0°38'22				
min. Earth dist.	-375 Apr 06 j 14:40	11°♂05'54	17.59235 AU	conjunction	-369 Nov 07 j 15:40	10°♂34'49	0°16'25
direct	-375 Jun 22 j 13:09	9°♂02'20		minimum elong	-369 Nov 07 j 15:40	10°♂34'49	0°16'26
evening set	-375 Sep 25 j 13:17	12°♂27'49		max. Earth dist.	-369 Nov 07 j 22:23	10°♂35'50	19.98441 AU
				morning rise	-369 Nov 23 j 06:55	11°♂32'04	
conjunction	-375 Oct 11 j 10:51	13°♂27'04	0°33'18	retrograde	-368 Feb 23 j 01:06	14°♂47'24	
minimum elong	-375 Oct 11 j 10:51	13°♂27'04	0°33'17	opposition	-368 May 09 j 01:27	12°♂47'15	0°16'27
max. Earth dist.	-375 Oct 11 j 03:44	13°♂25'58	19.61745 AU	min. Earth dist.	-368 May 08 j 18:34	12°♂47'58	18.01830 AU
morning rise	-375 Oct 27 j 05:22	14°♂25'54		direct	-368 Jul 25 j 06:16	10°♂45'38	
retrograde	-374 Jan 26 j 10:03	17°♂44'34		evening set	-368 Oct 26 j 13:25	14°♂02'47	
opposition	-374 Apr 11 j 08:13	15°♂43'39	0°35'45				
min. Earth dist.	-374 Apr 11 j 14:33	15°♂42'59	17.64350 AU	conjunction	-368 Nov 11 j 05:32	14°♂59'57	0°13'13
direct	-374 Jun 27 j 13:33	13°♂39'35		minimum elong	-368 Nov 11 j 05:32	14°♂59'57	0°13'13
evening set	-374 Sep 30 j 09:20	17°♂03'59		behind sun begin	-368 Nov 11 j 01:35	14°♂59'22	
				behind sun end	-368 Nov 11 j 09:30	15°♂00'32	
conjunction	-374 Oct 16 j 05:49	18°♂02'55	0°30'52		-368 Nov 11 j 05:53	15°♂	
minimum elong	-374 Oct 16 j 05:49	18°♂02'55	0°30'52	max. Earth dist.	-368 Nov 11 j 13:03	15°♂01'05	20.05274 AU
max. Earth dist.	-374 Oct 16 j 00:16	18°♂02'03	19.67055 AU	morning rise	-368 Nov 26 j 20:41	15°♂56'58	
morning rise	-374 Oct 31 j 23:45	19°♂01'29		retrograde	-367 Feb 26 j 18:16	19°♂11'45	
retrograde	-373 Jan 31 j 06:49	22°♂19'36		opposition	-367 May 13 j 22:15	17°♂11'45	0°12'51
opposition	-373 Apr 16 j 08:29	20°♂18'45	0°32'56	min. Earth dist.	-367 May 13 j 13:10	17°♂12'41	18.08683 AU
min. Earth dist.	-373 Apr 16 j 11:33	20°♂18'26	17.69844 AU	direct	-367 Jul 30 j 01:55	15°♂10'33	
direct	-373 Jul 02 j 14:22	18°♂15'01		evening set	-367 Oct 31 j 02:59	18°♂26'28	
evening set	-373 Oct 05 j 04:10	21°♂38'15					
				conjunction	-367 Nov 15 j 18:45	19°♂23'21	0°09'57
conjunction	-373 Oct 20 j 23:54	22°♂36'54	0°28'15	minimum elong	-367 Nov 15 j 18:45	19°♂23'21	0°09'57
minimum elong	-373 Oct 20 j 23:54	22°♂36'54	0°28'15	behind sun begin	-367 Nov 15 j 13:24	19°♂22'34	
max. Earth dist.	-373 Oct 20 j 21:38	22°♂36'33	19.72733 AU	behind sun end	-367 Nov 16 j 00:06	19°♂24'09	
morning rise	-373 Nov 05 j 17:02	23°♂35'11		max. Earth dist.	-367 Nov 16 j 05:09	19°♂24'56	20.12115 AU
retrograde	-372 Feb 05 j 01:27	26°♂52'45		morning rise	-367 Dec 01 j 09:29	20°♂20'08	
opposition	-372 Apr 20 j 08:19	24°♂52'00	0°29'55	retrograde	-366 Mar 03 j 09:18	23°♂34'21	
min. Earth dist.	-372 Apr 20 j 10:04	24°♂51'49	17.75701 AU	opposition	-366 May 18 j 18:28	21°♂34'31	0°09'11
direct	-372 Jul 06 j 13:53	22°♂48'38		min. Earth dist.	-366 May 18 j 07:56	21°♂35'35	18.15500 AU
evening set	-372 Oct 08 j 22:18	26°♂10'41		direct	-366 Aug 03 j 21:46	19°♂33'45	
				evening set	-366 Nov 04 j 15:57	22°♂48'24	
conjunction	-372 Oct 24 j 17:04	27°♂09'01	0°25'29				
minimum elong	-372 Oct 24 j 17:04	27°♂09'01	0°25'28	conjunction	-366 Nov 20 j 07:08	23°♂45'01	0°06'40
max. Earth dist.	-372 Oct 24 j 16:07	27°♂08'53	19.78771 AU	minimum elong	-366 Nov 20 j 07:08	23°♂45'01	0°06'40
morning rise	-372 Nov 09 j 09:46	28°♂07'04		behind sun begin	-366 Nov 20 j 00:59	23°♂44'06	
	-372 Dec 13 j 20:13	0°♂		behind sun end	-366 Nov 20 j 13:16	23°♂45'55	
retrograde	-371 Feb 08 j 20:58	1°♂24'04		max. Earth dist.	-366 Nov 20 j 18:07	23°♂46'40	20.18899 AU
	-371 Apr 10 j 10:25	30°♂		morning rise	-366 Dec 05 j 21:54	24°♂41'33	
opposition	-371 Apr 25 j 07:18	29°♂23'26	0°26'45	retrograde	-365 Mar 08 j 01:18	27°♂55'14	
min. Earth dist.	-371 Apr 25 j 05:57	29°♂23'34	17.81895 AU	opposition	-365 May 23 j 13:57	25°♂55'30	0°05'29
direct	-371 Jul 11 j 12:56	27°♂20'27		min. Earth dist.	-365 May 23 j 01:43	25°♂56'45	18.22244 AU
	-371 Oct 01 j 22:43	0°♂		direct	-365 Aug 08 j 15:29	23°♂55'08	
evening set	-371 Oct 13 j 15:22	0°♂41'19		evening set	-365 Nov 09 j 03:54	27°♂08'32	
conjunction	-371 Oct 29 j 09:32	1°♂39'22	0°22'35	conjunction	-365 Nov 24 j 18:55	28°♂04'54	0°03'20
minimum elong	-371 Oct 29 j 09:31	1°♂39'22	0°22'35	minimum elong	-365 Nov 24 j 18:55	28°♂04'54	0°03'20
max. Earth dist.	-371 Oct 29 j 11:54	1°♂39'44	19.85111 AU	behind sun begin	-365 Nov 24 j 12:26	28°♂03'56	
morning rise	-371 Nov 14 j 01:33	2°♂37'08		behind sun end	-365 Nov 25 j 01:25	28°♂05'51	
retrograde	-370 Feb 13 j 14:26	5°♂53'34		max. Earth dist.	-365 Nov 25 j 08:28	28°♂06'56	20.25570 AU
opposition	-370 Apr 30 j 06:02	3°♂53'06	0°23'26	morning rise	-365 Dec 10 j 09:29	29°♂01'13	
min. Earth dist.	-370 Apr 30 j 03:16	3°♂53'23	17.88358 AU		-365 Dec 27 j 15:42	0°♂	
direct	-370 Jul 16 j 11:37	1°♂50'35		retrograde	-364 Mar 11 j 14:59	2°♂14'19	
evening set	-370 Oct 18 j 07:33	5°♂10'12		opposition	-364 May 27 j 08:39	0°♂14'42	0°01'47
				min. Earth dist.	-364 May 26 j 18:57	0°♂16'05	18.28829 AU
conjunction	-370 Nov 03 j 00:51	6°♂07'57	0°19'33		-364 Jun 02 j 09:36	30°♂	
minimum elong	-370 Nov 03 j 00:51	6°♂07'57	0°19'32	direct	-364 Aug 12 j 09:45	28°♂14'41	
max. Earth dist.	-370 Nov 03 j 04:24	6°♂08'29	19.91695 AU		-364 Oct 17 j 05:13	0°♂	
morning rise	-370 Nov 18 j 16:37	7°♂05'28		evening set	-364 Nov 12 j 15:14	1°♂26'52	
retrograde	-369 Feb 18 j 08:46	10°♂21'22		desc. node	-364 Nov 21 j 23:45	2°♂00'19	
opposition	-369 May 05 j 04:06	8°♂21'02	0°19'59				

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Attention, astronomical year style is used: The year -364 in astronomical counting style is the year 365 BCE in historical counting style.

conjunction	-364 Nov 28 j 05:50	2°♄22'57	-0°00'04	min. Earth dist.	-358 Jun 22 j 10:06	25°♄33'53	18.64978 AU
minimum elong	-364 Nov 28 j 05:49	2°♄22'57	0°00'04	opposition	-358 Jun 23 j 08:31	25°♄31'37	-0°19'20
behind sun begin	-364 Nov 27 j 23:50	2°♄22'05		direct	-358 Sep 07 j 22:46	23°♄33'24	
behind sun end	-364 Nov 28 j 11:48	2°♄23'49		evening set	-358 Dec 07 j 18:34	26°♄38'43	
max. Earth dist.	-364 Nov 28 j 19:45	2°♄25'03	20.32067 AU				
morning rise	-364 Dec 13 j 20:32	3°♄19'04		conjunction	-358 Dec 23 j 09:02	27°♄33'33	-0°18'55
retrograde	-363 Mar 16 j 05:06	6°♄31'36		minimum elong	-358 Dec 23 j 09:01	27°♄33'33	0°18'55
min. Earth dist.	-363 May 31 j 11:38	4°♄33'33	18.35245 AU	max. Earth dist.	-358 Dec 24 j 07:55	27°♄36'55	20.67740 AU
opposition	-363 Jun 01 j 02:35	4°♄32'03	-0°01'54	morning rise	-357 Jan 08 j 01:14	28°♄28'37	
direct	-363 Aug 17 j 01:27	2°♄32'22			-357 Feb 05 j 16:47	0°♄	
evening set	-363 Nov 17 j 01:35	5°♄43'18		retrograde	-357 Apr 11 j 03:32	1°♄38'09	
					-357 Jun 19 j 01:36	30°♄	
conjunction	-363 Dec 02 j 16:08	6°♄39'09	-0°03'26	opposition	-357 Jun 27 j 21:53	29°♄38'50	-0°22'30
minimum elong	-363 Dec 02 j 16:08	6°♄39'09	0°03'27	min. Earth dist.	-357 Jun 26 j 23:03	29°♄41'07	18.70492 AU
behind sun begin	-363 Dec 02 j 09:39	6°♄38'13		direct	-357 Sep 12 j 08:31	27°♄40'54	
behind sun end	-363 Dec 02 j 22:38	6°♄40'06			-357 Nov 28 j 11:28	0°♄	
max. Earth dist.	-363 Dec 03 j 08:32	6°♄41'37	20.38391 AU	evening set	-357 Dec 12 j 00:55	0°♄45'17	
morning rise	-363 Dec 18 j 06:48	7°♄35'03					
retrograde	-362 Mar 20 j 17:46	10°♄47'02		conjunction	-357 Dec 27 j 15:46	1°♄39'57	-0°21'44
opposition	-362 Jun 05 j 19:48	8°♄47'31	-0°05'33	minimum elong	-357 Dec 27 j 15:46	1°♄39'57	0°21'44
min. Earth dist.	-362 Jun 05 j 03:08	8°♄49'12	18.41475 AU	max. Earth dist.	-357 Dec 28 j 16:31	1°♄43'35	20.73147 AU
direct	-362 Aug 21 j 18:11	6°♄48'09		morning rise	-356 Jan 12 j 08:20	2°♄34'54	
evening set	-362 Nov 21 j 11:09	9°♄57'52		retrograde	-356 Apr 14 j 14:22	5°♄44'01	
				min. Earth dist.	-356 Jun 30 j 09:55	3°♄47'15	18.75778 AU
conjunction	-362 Dec 07 j 01:27	10°♄53'29	-0°06'41	opposition	-356 Jul 01 j 10:30	3°♄44'48	-0°25'33
minimum elong	-362 Dec 07 j 01:27	10°♄53'29	0°06'41	direct	-356 Sep 15 j 19:56	1°♄47'10	
behind sun begin	-362 Dec 06 j 19:19	10°♄52'35		evening set	-356 Dec 15 j 06:59	4°♄50'39	
behind sun end	-362 Dec 07 j 07:34	10°♄54'22					
max. Earth dist.	-362 Dec 07 j 18:28	10°♄56'01	20.44538 AU	conjunction	-356 Dec 30 j 21:57	5°♄45'11	-0°24'25
morning rise	-362 Dec 22 j 16:26	11°♄49'11		minimum elong	-356 Dec 30 j 21:57	5°♄45'11	0°24'27
retrograde	-361 Mar 25 j 06:12	15°♄00'38		max. Earth dist.	-356 Dec 31 j 22:55	5°♄48'50	20.78299 AU
opposition	-361 Jun 10 j 12:15	13°♄01'07	-0°09'07	morning rise	-355 Jan 15 j 15:08	6°♄40'01	
min. Earth dist.	-361 Jun 09 j 18:33	13°♄02'55	18.47557 AU	retrograde	-355 Apr 19 j 00:39	9°♄48'48	
direct	-361 Aug 26 j 07:25	11°♄02'01		opposition	-355 Jul 05 j 22:41	7°♄49'38	-0°28'27
evening set	-361 Nov 25 j 19:56	14°♄10'34		min. Earth dist.	-355 Jul 04 j 22:08	7°♄52'06	18.80799 AU
				direct	-355 Sep 20 j 04:43	5°♄52'18	
conjunction	-361 Dec 11 j 10:20	15°♄05'58	-0°09'52	evening set	-355 Dec 19 j 12:38	8°♄54'57	
minimum elong	-361 Dec 11 j 10:20	15°♄05'58	0°09'52				
behind sun begin	-361 Dec 11 j 04:58	15°♄05'11		conjunction	-354 Jan 04 j 04:05	9°♄49'22	-0°26'59
behind sun end	-361 Dec 11 j 15:42	15°♄06'45		minimum elong	-354 Jan 04 j 04:04	9°♄49'21	0°26'59
max. Earth dist.	-361 Dec 12 j 05:47	15°♄08'52	20.50541 AU	max. Earth dist.	-354 Jan 05 j 06:31	9°♄53'13	20.83164 AU
morning rise	-361 Dec 27 j 01:24	16°♄01'29		morning rise	-354 Jan 19 j 21:41	10°♄44'06	
retrograde	-360 Mar 28 j 18:01	19°♄12'23		retrograde	-354 Apr 23 j 11:07	13°♄52'33	
min. Earth dist.	-360 Jun 13 j 08:02	17°♄14'53	18.53490 AU	min. Earth dist.	-354 Jul 09 j 08:11	11°♄56'04	18.85492 AU
opposition	-360 Jun 14 j 03:36	17°♄12'55	-0°12'37	opposition	-354 Jul 10 j 10:10	11°♄53'28	-0°31'12
direct	-360 Aug 29 j 22:26	15°♄14'06		direct	-354 Sep 24 j 14:46	9°♄56'24	
evening set	-360 Nov 29 j 04:11	18°♄21'31		evening set	-354 Dec 23 j 18:06	12°♄58'17	
conjunction	-360 Dec 14 j 18:25	19°♄16'43	-0°12'58	conjunction	-353 Jan 08 j 09:48	13°♄52'34	-0°29'24
minimum elong	-360 Dec 14 j 18:25	19°♄16'43	0°12'58	minimum elong	-353 Jan 08 j 09:48	13°♄52'34	0°29'25
behind sun begin	-360 Dec 14 j 14:21	19°♄16'07		max. Earth dist.	-353 Jan 09 j 12:07	13°♄56'24	20.87664 AU
behind sun end	-360 Dec 14 j 22:30	19°♄17'18		morning rise	-353 Jan 24 j 04:10	14°♄47'14	
max. Earth dist.	-360 Dec 15 j 14:30	19°♄19'41	20.56406 AU	retrograde	-353 Apr 27 j 20:27	17°♄55'24	
morning rise	-360 Dec 30 j 09:54	20°♄12'04		opposition	-353 Jul 14 j 21:16	15°♄56'23	-0°33'48
retrograde	-359 Apr 02 j 05:20	23°♄22'29		min. Earth dist.	-353 Jul 13 j 19:53	15°♄58'55	18.89800 AU
opposition	-359 Jun 18 j 18:28	21°♄23'02	-0°16'02	direct	-353 Sep 28 j 22:48	13°♄59'32	
min. Earth dist.	-359 Jun 17 j 22:04	21°♄25'05	18.59307 AU	evening set	-353 Dec 27 j 23:19	17°♄00'42	
direct	-359 Sep 03 j 09:34	19°♄24'30					
evening set	-359 Dec 03 j 11:31	22°♄30'51		conjunction	-352 Jan 12 j 15:37	17°♄54'55	-0°31'40
				minimum elong	-352 Jan 12 j 15:37	17°♄54'55	0°31'40
conjunction	-359 Dec 19 j 01:59	23°♄25'51	-0°16'00	max. Earth dist.	-352 Jan 13 j 18:49	17°♄58'52	20.91748 AU
minimum elong	-359 Dec 19 j 01:59	23°♄25'51	0°16'00	morning rise	-352 Jan 28 j 10:30	18°♄49'30	
behind sun begin	-359 Dec 19 j 00:45	23°♄25'41		retrograde	-352 May 01 j 06:44	21°♄57'24	
behind sun end	-359 Dec 19 j 03:12	23°♄26'02		min. Earth dist.	-352 Jul 17 j 05:08	20°♄01'03	18.93648 AU
max. Earth dist.	-359 Dec 20 j 00:22	23°♄29'10	20.62151 AU	opposition	-352 Jul 18 j 07:31	19°♄58'25	-0°36'12
morning rise	-358 Jan 03 j 17:38	24°♄21'03		direct	-352 Oct 02 j 07:46	18°♄01'46	
retrograde	-358 Apr 06 j 16:43	27°♄31'00		evening set	-352 Dec 31 j 04:28	21°♄02'17	

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Attention, astronomical year style is used: The year -351 in astronomical counting style is the year 352 BCE in historical counting style.

conjunction	-351 Jan 15 j 21:07	21° $\overline{3}$ 56'25	-0°33'46	morning rise	-345 Feb 25 j 04:53	16° $\overline{4}$ 44'47	
minimum elong	-351 Jan 15 j 21:07	21° $\overline{3}$ 56'25	0°33'46	retrograde	-345 May 30 j 15:44	19° $\overline{4}$ 51'34	
max. Earth dist.	-351 Jan 16 j 23:47	22° $\overline{3}$ 00'16	20.95345 AU	opposition	-345 Aug 16 j 19:06	17° $\overline{4}$ 52'11	-0°47'24
morning rise	-351 Jan 31 j 16:48	22° $\overline{3}$ 50'58		min. Earth dist.	-345 Aug 15 j 19:17	17° $\overline{4}$ 54'34	19.07176 AU
retrograde	-351 May 05 j 14:41	25° $\overline{3}$ 58'36		direct	-345 Oct 31 j 04:12	15° $\overline{4}$ 55'54	
opposition	-351 Jul 22 j 17:37	23° $\overline{3}$ 59'37	-0°38'26	evening set	-344 Jan 28 j 11:39	18° $\overline{4}$ 53'35	
min. Earth dist.	-351 Jul 21 j 16:14	24° $\overline{3}$ 02'10	18.97002 AU				
direct	-351 Oct 06 j 14:54	22° $\overline{3}$ 03'08		conjunction	-344 Feb 13 j 09:30	19° $\overline{4}$ 47'41	-0°43'15
evening set	-350 Jan 04 j 09:07	25° $\overline{3}$ 03'02		minimum elong	-344 Feb 13 j 09:30	19° $\overline{4}$ 47'41	0°43'15
				max. Earth dist.	-344 Feb 14 j 11:40	19° $\overline{4}$ 51'26	21.07331 AU
conjunction	-350 Jan 20 j 02:30	25° $\overline{3}$ 57'06	-0°35'42	morning rise	-344 Feb 29 j 11:03	20° $\overline{4}$ 42'20	
minimum elong	-350 Jan 20 j 02:30	25° $\overline{3}$ 57'06	0°35'42	retrograde	-344 Jun 03 j 00:16	23° $\overline{4}$ 49'07	
max. Earth dist.	-350 Jan 21 j 05:47	26° $\overline{3}$ 01'03	20.98440 AU	min. Earth dist.	-344 Aug 19 j 01:30	21° $\overline{4}$ 52'09	19.07493 AU
morning rise	-350 Feb 04 j 22:50	26° $\overline{3}$ 51'36		opposition	-344 Aug 20 j 01:55	21° $\overline{4}$ 49'42	-0°48'07
retrograde	-350 May 10 j 00:48	29° $\overline{3}$ 59'02		direct	-344 Nov 03 j 10:20	19° $\overline{4}$ 53'26	
min. Earth dist.	-350 Jul 26 j 00:51	28° $\overline{3}$ 02'38	18.99830 AU	evening set	-343 Jan 31 j 16:20	22° $\overline{4}$ 51'02	
opposition	-350 Jul 27 j 03:03	28° $\overline{3}$ 00'01	-0°40'27				
direct	-350 Oct 10 j 23:17	26° $\overline{3}$ 03'37		conjunction	-343 Feb 16 j 14:56	23° $\overline{4}$ 45'12	-0°43'49
evening set	-349 Jan 08 j 13:53	29° $\overline{3}$ 02'58		minimum elong	-343 Feb 16 j 14:56	23° $\overline{4}$ 45'12	0°43'49
				max. Earth dist.	-343 Feb 17 j 16:07	23° $\overline{4}$ 48'48	21.07463 AU
conjunction	-349 Jan 24 j 07:46	29° $\overline{3}$ 57'00	-0°37'27	morning rise	-343 Mar 04 j 17:33	24° $\overline{4}$ 39'56	
minimum elong	-349 Jan 24 j 07:46	29° $\overline{3}$ 57'00	0°37'26	retrograde	-343 Jun 07 j 07:46	27° $\overline{4}$ 46'48	
max. Earth dist.	-349 Jan 25 j 10:20	0° $\overline{4}$ 00'49	21.01008 AU	min. Earth dist.	-343 Aug 23 j 09:59	25° $\overline{4}$ 49'38	19.07443 AU
	-349 Jan 25 j 04:39	0° $\overline{4}$		opposition	-343 Aug 24 j 08:49	25° $\overline{4}$ 47'20	-0°48'37
morning rise	-349 Feb 09 j 05:02	0° $\overline{4}$ 51'29		direct	-343 Nov 07 j 14:00	23° $\overline{4}$ 51'05	
retrograde	-349 May 14 j 07:41	3° $\overline{4}$ 58'42		evening set	-342 Feb 04 j 21:03	26° $\overline{4}$ 48'40	
min. Earth dist.	-349 Jul 30 j 11:01	2° $\overline{4}$ 02'06	19.02156 AU				
opposition	-349 Jul 31 j 11:56	1° $\overline{4}$ 59'37	-0°42'16	conjunction	-342 Feb 20 j 20:43	27° $\overline{4}$ 42'56	-0°44'10
direct	-349 Oct 15 j 04:59	0° $\overline{4}$ 03'16		minimum elong	-342 Feb 20 j 20:43	27° $\overline{4}$ 42'56	0°44'10
evening set	-348 Jan 12 j 18:16	3° $\overline{4}$ 02'07		max. Earth dist.	-342 Feb 21 j 21:50	27° $\overline{4}$ 46'31	21.07231 AU
				morning rise	-342 Mar 09 j 00:14	28° $\overline{4}$ 37'45	
conjunction	-348 Jan 28 j 12:59	3° $\overline{4}$ 56'08	-0°39'00		-342 Apr 04 j 10:01	0° $\overline{4}$	
minimum elong	-348 Jan 28 j 12:59	3° $\overline{4}$ 56'08	0°39'01	retrograde	-342 Jun 11 j 16:37	1° $\overline{4}$ 44'44	
max. Earth dist.	-348 Jan 29 j 16:01	4° $\overline{4}$ 00'01	21.03095 AU		-342 Aug 22 j 12:57	30° $\overline{4}$ R $\overline{4}$	
morning rise	-348 Feb 13 j 10:58	4° $\overline{4}$ 50'37		opposition	-342 Aug 28 j 15:25	29° $\overline{4}$ 45'16	-0°48'54
retrograde	-348 May 17 j 16:59	7° $\overline{4}$ 57'39		min. Earth dist.	-342 Aug 27 j 16:18	29° $\overline{4}$ 47'35	19.07003 AU
opposition	-348 Aug 03 j 20:14	5° $\overline{4}$ 58'29	-0°43'53	direct	-342 Nov 11 j 19:30	27° $\overline{4}$ 49'00	
min. Earth dist.	-348 Aug 02 j 18:34	6° $\overline{4}$ 01'03	19.04008 AU		-341 Jan 25 j 15:24	0° $\overline{4}$	
direct	-348 Oct 18 j 12:47	4° $\overline{4}$ 02'10		evening set	-341 Feb 09 j 02:24	0° $\overline{4}$ 46'40	
evening set	-347 Jan 15 j 22:36	7° $\overline{4}$ 00'36					
				conjunction	-341 Feb 25 j 02:54	1° $\overline{4}$ 41'03	-0°44'19
conjunction	-347 Jan 31 j 17:53	7° $\overline{4}$ 54'37	-0°40'22	minimum elong	-341 Feb 25 j 02:54	1° $\overline{4}$ 41'03	0°44'19
minimum elong	-347 Jan 31 j 17:53	7° $\overline{4}$ 54'37	0°40'22	max. Earth dist.	-341 Feb 26 j 02:42	1° $\overline{4}$ 44'26	21.06581 AU
max. Earth dist.	-347 Feb 01 j 20:16	7° $\overline{4}$ 58'24	21.04725 AU	morning rise	-341 Mar 13 j 07:29	2° $\overline{4}$ 35'59	
morning rise	-347 Feb 16 j 16:49	8° $\overline{4}$ 49'06		retrograde	-341 Jun 16 j 00:13	5° $\overline{4}$ 43'06	
retrograde	-347 May 21 j 23:43	11° $\overline{4}$ 56'01		opposition	-341 Sep 01 j 21:55	3° $\overline{4}$ 43'37	-0°48'57
min. Earth dist.	-347 Aug 07 j 03:53	9° $\overline{4}$ 59'13	19.05442 AU	min. Earth dist.	-341 Sep 01 j 00:52	3° $\overline{4}$ 45'45	19.06140 AU
opposition	-347 Aug 08 j 04:19	9° $\overline{4}$ 56'46	-0°45'16	direct	-341 Nov 15 j 23:10	1° $\overline{4}$ 47'21	
direct	-347 Oct 22 j 17:17	8° $\overline{4}$ 00'27		evening set	-340 Feb 13 j 08:02	4° $\overline{4}$ 45'10	
evening set	-346 Jan 20 j 02:51	10° $\overline{4}$ 58'34					
				conjunction	-340 Feb 29 j 09:36	5° $\overline{4}$ 39'40	-0°44'15
conjunction	-346 Feb 04 j 23:02	11° $\overline{4}$ 52'35	-0°41'32	minimum elong	-340 Feb 29 j 09:36	5° $\overline{4}$ 39'40	0°44'15
minimum elong	-346 Feb 04 j 23:02	11° $\overline{4}$ 52'35	0°41'33	max. Earth dist.	-340 Mar 01 j 08:50	5° $\overline{4}$ 42'59	21.05501 AU
max. Earth dist.	-346 Feb 06 j 01:51	11° $\overline{4}$ 56'25	21.05967 AU	morning rise	-340 Mar 16 j 15:04	6° $\overline{4}$ 34'44	
morning rise	-346 Feb 20 j 22:44	12° $\overline{4}$ 47'06		retrograde	-340 Jun 19 j 09:41	9° $\overline{4}$ 42'03	
	-346 Apr 08 j 09:09	15° $\overline{4}$		min. Earth dist.	-340 Sep 04 j 07:28	7° $\overline{4}$ 44'38	19.04816 AU
retrograde	-346 May 26 j 08:30	15° $\overline{4}$ 53'55		opposition	-340 Sep 05 j 04:22	7° $\overline{4}$ 42'32	-0°48'45
	-346 Jul 14 j 16:41	15° $\overline{4}$ R $\overline{4}$		direct	-340 Nov 19 j 04:45	5° $\overline{4}$ 46'13	
min. Earth dist.	-346 Aug 11 j 10:34	13° $\overline{4}$ 57'08	19.06493 AU	evening set	-339 Feb 16 j 14:07	8° $\overline{4}$ 44'15	
opposition	-346 Aug 12 j 11:46	13° $\overline{4}$ 54'36	-0°46'27				
direct	-346 Oct 27 j 00:23	11° $\overline{4}$ 58'18		conjunction	-339 Mar 04 j 16:32	9° $\overline{4}$ 38'54	-0°43'58
evening set	-345 Jan 24 j 07:15	14° $\overline{4}$ 56'09		minimum elong	-339 Mar 04 j 16:33	9° $\overline{4}$ 38'54	0°43'59
	-345 Jan 25 j 10:47	15° $\overline{4}$		max. Earth dist.	-339 Mar 05 j 14:06	9° $\overline{4}$ 41'58	21.03925 AU
conjunction	-345 Feb 09 j 04:08	15° $\overline{4}$ 50'12	-0°42'30	morning rise	-339 Mar 20 j 23:04	10° $\overline{4}$ 34'06	
minimum elong	-345 Feb 09 j 04:08	15° $\overline{4}$ 50'12	0°42'30	retrograde	-339 Jun 23 j 17:26	13° $\overline{4}$ 41'38	
max. Earth dist.	-345 Feb 10 j 06:09	15° $\overline{4}$ 53'56	21.06827 AU	opposition	-339 Sep 09 j 11:03	11° $\overline{4}$ 42'04	-0°48'20
				min. Earth dist.	-339 Sep 08 j 16:30	11° $\overline{4}$ 43'57	19.02985 AU

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Attention, astronomical year style is used: The year -339 in astronomical counting style is the year 340 BCE in historical counting style.

direct	-339 Nov 23 j 08:35	9° H 45'40	minimum elong	-332 Apr 02 j 09:08	7° Y 52'59	0°36'05
evening set	-338 Feb 20 j 20:43	12° H 43'59	max. Earth dist.	-332 Apr 02 j 19:22	7° Y 54'27	20.79153 AU
			morning rise	-332 Apr 18 j 22:16	8° Y 49'30	
conjunction	-338 Mar 09 j 00:18	13° H 38'47 -0°43'29	retrograde	-332 Jul 22 j 15:05	11° Y 59'04	
minimum elong	-338 Mar 09 j 00:18	13° H 38'47 0°43'28	opposition	-332 Oct 07 j 10:32	9° Y 58'28	-0°38'52
max. Earth dist.	-338 Mar 09 j 20:46	13° H 41'42 21.01837 AU	min. Earth dist.	-332 Oct 07 j 01:44	9° Y 59'23	18.76697 AU
morning rise	-338 Mar 25 j 07:44	14° H 34'08	direct	-332 Dec 21 j 02:13	8° Y 00'19	
retrograde	-338 Jun 28 j 03:44	17° H 41'54	evening set	-331 Mar 21 j 09:50	11° Y 02'14	
opposition	-338 Sep 13 j 17:30	15° H 42'15 -0°47'40				
min. Earth dist.	-338 Sep 12 j 23:30	15° H 44'05 19.00617 AU	conjunction	-331 Apr 06 j 20:33	11° Y 58'31	-0°34'10
direct	-338 Nov 27 j 14:39	13° H 45'42	minimum elong	-331 Apr 06 j 20:33	11° Y 58'31	0°34'09
evening set	-337 Feb 25 j 03:58	16° H 44'21	max. Earth dist.	-331 Apr 07 j 05:02	11° Y 59'44	20.74170 AU
			morning rise	-331 Apr 23 j 10:32	12° Y 55'17	
conjunction	-337 Mar 13 j 08:29	17° H 39'20 -0°42'46	retrograde	-331 Jul 27 j 01:03	16° Y 05'16	
minimum elong	-337 Mar 13 j 08:29	17° H 39'20 0°42'46	opposition	-331 Oct 11 j 18:11	14° Y 04'32	-0°36'38
max. Earth dist.	-337 Mar 14 j 02:50	17° H 41'57 20.99193 AU	min. Earth dist.	-331 Oct 11 j 11:43	14° Y 05'12	18.71600 AU
morning rise	-337 Mar 29 j 17:00	18° H 34'52	direct	-331 Dec 25 j 07:58	12° Y 06'05	
retrograde	-337 Jul 02 j 11:35	21° H 42'52	evening set	-330 Mar 25 j 21:12	15° Y 08'48	
min. Earth dist.	-337 Sep 17 j 08:49	19° H 44'41 18.97699 AU				
opposition	-337 Sep 18 j 00:15	19° H 43'06 -0°46'46	conjunction	-330 Apr 11 j 08:57	16° Y 05'21	-0°32'03
direct	-337 Dec 01 j 19:01	17° H 46'21	minimum elong	-330 Apr 11 j 08:57	16° Y 05'21	0°32'03
evening set	-336 Feb 29 j 11:29	20° H 45'23	max. Earth dist.	-330 Apr 11 j 15:43	16° Y 06'20	20.68982 AU
			morning rise	-330 Apr 27 j 23:46	17° Y 02'22	
conjunction	-336 Mar 16 j 17:08	21° H 40'33 -0°41'51	retrograde	-330 Jul 31 j 14:33	20° Y 12'48	
minimum elong	-336 Mar 16 j 17:08	21° H 40'33 0°41'51	opposition	-330 Oct 16 j 01:55	18° Y 11'56	-0°34'13
max. Earth dist.	-336 Mar 17 j 10:08	21° H 42'58 20.96025 AU	min. Earth dist.	-330 Oct 15 j 20:10	18° Y 12'32	18.66305 AU
morning rise	-336 Apr 02 j 02:32	22° H 36'15	direct	-330 Dec 29 j 16:33	16° Y 13'11	
retrograde	-336 Jul 05 j 22:12	25° H 44'31	evening set	-329 Mar 30 j 09:27	19° Y 16'48	
opposition	-336 Sep 21 j 06:49	23° H 44'36 -0°45'38				
min. Earth dist.	-336 Sep 20 j 15:59	23° H 46'07 18.94273 AU	conjunction	-329 Apr 15 j 22:08	20° Y 13'38	-0°29'46
direct	-336 Dec 05 j 01:28	21° H 47'37	minimum elong	-329 Apr 15 j 22:08	20° Y 13'38	0°29'47
evening set	-335 Mar 04 j 19:39	24° H 47'05	max. Earth dist.	-329 Apr 16 j 03:05	20° Y 14'21	20.63584 AU
			morning rise	-329 May 02 j 13:39	21° Y 10'54	
conjunction	-335 Mar 21 j 02:14	25° H 42'27 -0°40'43	retrograde	-329 Aug 05 j 01:45	24° Y 21'49	
minimum elong	-335 Mar 21 j 02:14	25° H 42'27 0°40'43	opposition	-329 Oct 20 j 10:20	22° Y 20'52	-0°31'36
max. Earth dist.	-335 Mar 21 j 17:14	25° H 44'35 20.92367 AU	min. Earth dist.	-329 Oct 20 j 07:00	22° Y 21'13	18.60810 AU
morning rise	-335 Apr 06 j 12:40	26° H 38'20	direct	-328 Jan 02 j 23:09	20° Y 21'51	
retrograde	-335 Jul 10 j 06:36	29° H 46'53	evening set	-328 Apr 02 j 22:23	23° Y 26'25	
opposition	-335 Sep 25 j 13:38	27° H 46'48 -0°44'17				
min. Earth dist.	-335 Sep 25 j 01:19	27° H 48'03 18.90399 AU	conjunction	-328 Apr 19 j 11:58	24° Y 23'31	-0°27'19
direct	-335 Dec 09 j 06:23	25° H 49'32	minimum elong	-328 Apr 19 j 11:58	24° Y 23'31	0°27'19
evening set	-334 Mar 09 j 04:11	28° H 49'30	max. Earth dist.	-328 Apr 19 j 14:57	24° Y 23'57	20.58007 AU
			morning rise	-328 May 06 j 04:13	25° Y 21'02	
conjunction	-334 Mar 25 j 11:56	29° H 45'05 -0°39'22	retrograde	-328 Aug 08 j 16:24	28° Y 32'30	
minimum elong	-334 Mar 25 j 11:56	29° H 45'05 0°39'23	opposition	-328 Oct 23 j 19:06	26° Y 31'28	-0°28'48
max. Earth dist.	-334 Mar 26 j 01:34	29° H 47'01 20.88306 AU	min. Earth dist.	-328 Oct 23 j 16:41	26° Y 31'44	18.55129 AU
	-334 Mar 29 j 20:17	0° Y	direct	-327 Jan 06 j 08:48	24° Y 32'11	
morning rise	-334 Apr 10 j 23:17	0° Y 41'10	evening set	-327 Apr 07 j 12:24	27° Y 37'46	
retrograde	-334 Jul 14 j 17:47	3° Y 50'01				
opposition	-334 Sep 29 j 20:24	1° Y 49'45 -0°42'41	conjunction	-327 Apr 24 j 02:51	28° Y 35'10	-0°24'42
min. Earth dist.	-334 Sep 29 j 08:39	1° Y 50'58 18.86143 AU	minimum elong	-327 Apr 24 j 02:51	28° Y 35'10	0°24'43
	-334 Nov 26 j 03:18	30° R H	max. Earth dist.	-327 Apr 24 j 04:01	28° Y 35'20	20.52220 AU
direct	-334 Dec 13 j 13:18	29° H 52'12	morning rise	-327 May 10 j 19:41	29° Y 32'58	
	-334 Dec 30 j 18:32	0° Y		-327 May 18 j 21:31	0° B	
evening set	-333 Mar 13 j 13:31	2° Y 52'45	retrograde	-327 Aug 13 j 05:14	2° B 44'58	
			opposition	-327 Oct 28 j 04:26	0° B 43'53	-0°25'49
conjunction	-333 Mar 29 j 22:13	3° Y 48'33 -0°37'50	min. Earth dist.	-327 Oct 28 j 04:39	0° B 43'52	18.49234 AU
minimum elong	-333 Mar 29 j 22:13	3° Y 48'33 0°37'49		-327 Nov 14 j 23:33	30° R Y	
max. Earth dist.	-333 Mar 30 j 09:54	3° Y 50'13 20.83873 AU	direct	-326 Jan 10 j 16:50	28° Y 44'18	
morning rise	-333 Apr 15 j 10:29	4° Y 44'51		-326 Mar 06 j 20:38	0° B	
retrograde	-333 Jul 19 j 02:53	7° Y 54'02	evening set	-326 Apr 12 j 03:24	1° B 50'58	
opposition	-333 Oct 04 j 03:22	5° Y 53'36 -0°40'53				
min. Earth dist.	-333 Oct 03 j 18:03	5° Y 54'33 18.81553 AU	conjunction	-326 Apr 28 j 18:41	2° B 48'40	-0°21'56
direct	-333 Dec 17 j 18:33	3° Y 55'44	minimum elong	-326 Apr 28 j 18:41	2° B 48'40	0°21'55
evening set	-332 Mar 16 j 23:22	6° Y 56'57	max. Earth dist.	-326 Apr 28 j 17:16	2° B 48'28	20.46221 AU
			morning rise	-326 May 15 j 12:11	3° B 46'44	
conjunction	-332 Apr 02 j 09:08	7° Y 52'59 -0°36'05	retrograde	-326 Aug 17 j 20:57	6° B 59'18	

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Attention, astronomical year style is used: The year -326 in astronomical counting style is the year 327 BCE in historical counting style.

opposition	-326 Nov 01 j 14:17	4°8'58"09	-0°22'41"	behind sun end	-320 May 25 j 18:11	28°8'48"47	
min. Earth dist.	-326 Nov 01 j 15:51	4°8'57"59	18.43108 AU	max. Earth dist.	-320 May 24 j 20:06	28°8'45"32	20.05966 AU
direct	-325 Jan 15 j 03:42	2°8'58"15		morning rise	-320 Jun 11 j 06:46	29°8'47"24	
evening set	-325 Apr 16 j 19:25	6°8'06"02			-320 Jun 14 j 22:05	0°II	
				retrograde	-320 Sep 12 j 20:30	3°II03'18	
conjunction	-325 May 03 j 11:29	7°8'04"03	-0°19'01"	opposition	-320 Nov 26 j 14:23	1°II01'19	-0°01'17"
minimum elong	-325 May 03 j 11:29	7°8'04"03	0°19'01"	min. Earth dist.	-320 Nov 27 j 03:15	0°II59'56	18.02506 AU
max. Earth dist.	-325 May 03 j 08:04	7°8'03"34	20.39955 AU		-320 Dec 21 j 11:49	30°R8	
morning rise	-325 May 20 j 05:20	8°8'02"22		direct	-319 Feb 09 j 10:41	28°8'58"54	
retrograde	-325 Aug 22 j 11:12	11°8'15"31			-319 Mar 30 j 10:08	0°II	
opposition	-325 Nov 06 j 00:49	9°8'14"17	-0°19'23"	asc. node	-319 Mar 31 j 09:56	0°II02'22	
min. Earth dist.	-325 Nov 06 j 05:03	9°8'13"50	18.36717 AU	evening set	-319 May 13 j 13:44	2°II13'55	
direct	-324 Jan 19 j 13:51	7°8'14"01					
evening set	-324 Apr 20 j 12:19	10°8'22"58		conjunction	-319 May 30 j 09:03	3°II13'42	0°00'35"
				minimum elong	-319 May 30 j 09:02	3°II13'42	0°00'35"
conjunction	-324 May 07 j 05:03	11°8'21"17	-0°15'59"	behind sun begin	-319 May 30 j 02:16	3°II12'43	
minimum elong	-324 May 07 j 05:02	11°8'21"17	0°15'59"	behind sun end	-319 May 30 j 15:49	3°II14'41	
max. Earth dist.	-324 May 06 j 22:39	11°8'20"21	20.33456 AU	max. Earth dist.	-319 May 29 j 16:58	3°II11'19	19.99099 AU
morning rise	-324 May 23 j 23:27	12°8'19"53		morning rise	-319 Jun 16 j 04:13	4°II13'32	
	-324 Jul 20 j 16:50	15°8		retrograde	-319 Sep 17 j 14:13	7°II29'57	
retrograde	-324 Aug 26 j 03:25	15°8'33"35		opposition	-319 Dec 01 j 04:31	5°II27'50	0°02'31"
	-324 Oct 01 j 20:23	15°R8		min. Earth dist.	-319 Dec 01 j 18:56	5°II26'17	17.95709 AU
opposition	-324 Nov 09 j 11:54	13°8'32"13	-0°15'57"	direct	-318 Feb 14 j 02:55	3°II24'59	
min. Earth dist.	-324 Nov 09 j 17:33	13°8'31"37	18.30105 AU	evening set	-318 May 18 j 11:53	6°II41'16	
direct	-323 Jan 23 j 01:59	11°8'31"34					
evening set	-323 Apr 25 j 05:59	14°8'41"41		conjunction	-318 Jun 04 j 07:16	7°II41'19	0°04'03"
	-323 Apr 30 j 12:40	15°8		minimum elong	-318 Jun 04 j 07:16	7°II41'19	0°04'04"
				behind sun begin	-318 Jun 04 j 00:34	7°II40'21	
conjunction	-323 May 11 j 23:28	15°8'40"19	-0°12'50"	behind sun end	-318 Jun 04 j 13:57	7°II42'18	
minimum elong	-323 May 11 j 23:28	15°8'40"19	0°12'50"	max. Earth dist.	-318 Jun 03 j 12:23	7°II38'30	19.92391 AU
behind sun begin	-323 May 11 j 19:24	15°8'39"44		morning rise	-318 Jun 21 j 02:30	8°II41'23	
behind sun end	-323 May 12 j 03:32	15°8'40"54		retrograde	-318 Sep 22 j 08:27	11°II58'20	
max. Earth dist.	-323 May 11 j 15:22	15°8'39"08	20.26735 AU	opposition	-318 Dec 05 j 19:29	9°II56'05	0°06'20"
morning rise	-323 May 28 j 18:08	16°8'39"10		min. Earth dist.	-318 Dec 06 j 11:13	9°II54'23	17.89114 AU
retrograde	-323 Aug 30 j 18:53	19°8'53"25		direct	-317 Feb 18 j 20:04	7°II52'48	
opposition	-323 Nov 13 j 23:41	17°8'51"55	-0°12'24"	evening set	-317 May 23 j 10:36	11°II10'22	
min. Earth dist.	-323 Nov 14 j 07:45	17°8'51"04	18.23294 AU	max. Earth dist.	-317 Jun 08 j 11:04	12°II07'48	19.85901 AU
direct	-322 Jan 27 j 14:39	15°8'50"52					
evening set	-322 Apr 30 j 00:46	19°8'02"10		conjunction	-317 Jun 09 j 06:15	12°II10'41	0°07'27"
				minimum elong	-317 Jun 09 j 06:14	12°II10'41	0°07'27"
conjunction	-322 May 16 j 18:44	20°8'01"06	-0°09'36"	behind sun begin	-317 Jun 09 j 00:04	12°II09'46	
minimum elong	-322 May 16 j 18:44	20°8'01"06	0°09'36"	behind sun end	-317 Jun 09 j 12:24	12°II11'35	
behind sun begin	-322 May 16 j 13:11	20°8'00"18		morning rise	-317 Jun 26 j 01:04	13°II10'56	
behind sun end	-322 May 17 j 00:17	20°8'01"54		retrograde	-317 Sep 27 j 03:45	16°II28'25	
max. Earth dist.	-322 May 16 j 07:32	19°8'59"27	20.19866 AU	opposition	-317 Dec 10 j 11:09	14°II26'06	0°10'07"
morning rise	-322 Jun 02 j 13:49	21°8'00"13		min. Earth dist.	-317 Dec 11 j 03:51	14°II24'18	17.82759 AU
retrograde	-322 Sep 04 j 11:06	24°8'15"01		direct	-316 Feb 23 j 13:47	12°II22'26	
opposition	-322 Nov 18 j 11:51	22°8'13"21	-0°08'46"	evening set	-316 May 27 j 10:17	15°II41'16	
min. Earth dist.	-322 Nov 18 j 21:25	22°8'12"20	18.16376 AU	max. Earth dist.	-316 Jun 12 j 08:05	16°II38'33	19.79696 AU
direct	-321 Feb 01 j 04:21	20°8'11"50					
evening set	-321 May 04 j 20:19	23°8'24"23		conjunction	-316 Jun 13 j 05:48	16°II41'49	0°10'50"
				minimum elong	-316 Jun 13 j 05:47	16°II41'49	0°10'51"
conjunction	-321 May 21 j 14:53	24°8'23"36	-0°06'18"	behind sun begin	-316 Jun 13 j 00:42	16°II41'04	
minimum elong	-321 May 21 j 14:53	24°8'23"36	0°06'17"	behind sun end	-316 Jun 13 j 10:53	16°II42'34	
behind sun begin	-321 May 21 j 08:29	24°8'22"41		morning rise	-316 Jun 30 j 00:30	17°II42'17	
behind sun end	-321 May 21 j 21:17	24°8'24"32		retrograde	-316 Sep 30 j 23:30	21°II00'18	
max. Earth dist.	-321 May 21 j 02:25	24°8'21"46	20.12911 AU	opposition	-316 Dec 14 j 03:34	18°II57'55	0°13'53"
morning rise	-321 Jun 07 j 09:58	25°8'22"57		min. Earth dist.	-316 Dec 14 j 21:37	18°II55'58	17.76720 AU
retrograde	-321 Sep 09 j 03:45	28°8'38"18		direct	-315 Feb 27 j 07:52	16°II53'54	
opposition	-321 Nov 23 j 00:50	26°8'36"29	-0°05'03"	evening set	-315 Jun 01 j 10:37	20°II14'00	
min. Earth dist.	-321 Nov 23 j 12:21	26°8'35"15	18.09413 AU	max. Earth dist.	-315 Jun 17 j 08:27	21°II11'30	19.73809 AU
direct	-320 Feb 05 j 19:06	24°8'34"32					
evening set	-320 May 08 j 16:36	27°8'48"17		conjunction	-315 Jun 18 j 06:16	21°II14'48	0°14'11"
				minimum elong	-315 Jun 18 j 06:16	21°II14'48	0°14'11"
conjunction	-320 May 25 j 11:26	28°8'47"48	-0°02'56"	behind sun begin	-315 Jun 18 j 03:13	21°II14'21	
minimum elong	-320 May 25 j 11:26	28°8'47"48	0°02'56"	behind sun end	-315 Jun 18 j 09:18	21°II15'15	
behind sun begin	-320 May 25 j 04:40	28°8'46"49		morning rise	-315 Jul 05 j 00:27	22°II15'27	

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Attention, astronomical year style is used: The year -315 in astronomical counting style is the year 316 BCE in historical counting style.

retrograde	-315 Oct 05 j 20:53	25° Π 33'58	evening set	-308 Jul 05 j 08:24	22° \mathfrak{D} 50'35	
opposition	-315 Dec 18 j 20:49	23° Π 31'36 0°17'35	max. Earth dist.	-308 Jul 20 j 19:36	23° \mathfrak{D} 47'53	19.41177 AU
min. Earth dist.	-315 Dec 19 j 15:33	23° Π 29'34 17.70986 AU				
direct	-314 Mar 04 j 03:17	21° Π 27'17	conjunction	-308 Jul 22 j 00:36	23° \mathfrak{D} 52'24 0°34'26	
evening set	-314 Jun 06 j 12:03	24° Π 48'38	minimum elong	-308 Jul 22 j 00:36	23° \mathfrak{D} 52'24 0°34'27	
max. Earth dist.	-314 Jun 22 j 07:09	25° Π 45'58 19.68232 AU	morning rise	-308 Aug 07 j 13:31	24° \mathfrak{D} 53'46	
			retrograde	-308 Nov 07 j 10:23	28° \mathfrak{D} 15'03	
conjunction	-314 Jun 23 j 07:19	25° Π 49'38 0°17'28	opposition	-307 Jan 19 j 19:25	26° \mathfrak{D} 12'41 0°39'36	
minimum elong	-314 Jun 23 j 07:19	25° Π 49'38 0°17'28	min. Earth dist.	-307 Jan 20 j 20:45	26° \mathfrak{D} 09'55 17.39552 AU	
morning rise	-314 Jul 10 j 01:07	26° Π 50'28	direct	-307 Apr 05 j 16:45	24° \mathfrak{D} 06'33	
	-314 Sep 22 j 04:04	0° \mathfrak{D}	evening set	-307 Jul 10 j 13:01	27° \mathfrak{D} 35'03	
retrograde	-314 Oct 10 j 17:48	0° \mathfrak{D} 09'29	max. Earth dist.	-307 Jul 25 j 22:55	28° \mathfrak{D} 32'19 19.37956 AU	
	-314 Oct 29 j 10:53	30° \mathfrak{R} Π				
opposition	-314 Dec 23 j 14:51	28° Π 07'08 0°21'11	conjunction	-307 Jul 27 j 04:22	28° \mathfrak{D} 36'54 0°36'36	
min. Earth dist.	-314 Dec 24 j 11:14	28° Π 04'55 17.65577 AU	minimum elong	-307 Jul 27 j 04:21	28° \mathfrak{D} 36'54 0°36'36	
direct	-313 Mar 08 j 22:31	26° Π 02'31	morning rise	-307 Aug 12 j 16:22	29° \mathfrak{D} 38'17	
evening set	-313 Jun 11 j 14:02	29° Π 25'07		-307 Aug 18 j 16:24	0° \mathfrak{Q}	
	-313 Jun 21 j 05:03	0° \mathfrak{D}	retrograde	-307 Nov 12 j 11:08	2° \mathfrak{Q} 59'46	
max. Earth dist.	-313 Jun 27 j 08:49	0° \mathfrak{D} 22'36 19.62967 AU	opposition	-306 Jan 24 j 18:21	0° \mathfrak{Q} 57'23 0°41'52	
			min. Earth dist.	-306 Jan 25 j 18:50	0° \mathfrak{Q} 54'42 17.36566 AU	
conjunction	-313 Jun 28 j 09:10	0° \mathfrak{D} 26'19 0°20'39		-306 Feb 16 j 11:36	30° \mathfrak{R} \mathfrak{D}	
minimum elong	-313 Jun 28 j 09:10	0° \mathfrak{D} 26'19 0°20'40	direct	-306 Apr 10 j 20:31	28° \mathfrak{D} 51'03	
morning rise	-313 Jul 15 j 02:16	1° \mathfrak{D} 27'17		-306 Jun 01 j 18:59	0° \mathfrak{Q}	
retrograde	-313 Oct 15 j 16:56	4° \mathfrak{D} 46'48	evening set	-306 Jul 15 j 17:37	2° \mathfrak{Q} 20'13	
opposition	-313 Dec 28 j 09:46	2° \mathfrak{D} 44'28 0°24'42	max. Earth dist.	-306 Jul 31 j 03:21	3° \mathfrak{Q} 17'35 19.35216 AU	
min. Earth dist.	-313 Dec 29 j 06:33	2° \mathfrak{D} 42'12 17.60459 AU				
direct	-312 Mar 12 j 20:11	0° \mathfrak{D} 39'35	conjunction	-306 Aug 01 j 08:07	3° \mathfrak{Q} 22'05 0°38'30	
evening set	-312 Jun 15 j 16:42	4° \mathfrak{D} 03'21	minimum elong	-306 Aug 01 j 08:07	3° \mathfrak{Q} 22'05 0°38'31	
max. Earth dist.	-312 Jul 01 j 08:59	5° \mathfrak{D} 00'41 19.57987 AU	morning rise	-306 Aug 17 j 18:53	4° \mathfrak{Q} 23'27	
			retrograde	-306 Nov 17 j 08:58	7° \mathfrak{Q} 45'06	
conjunction	-312 Jul 02 j 11:19	5° \mathfrak{D} 04'44 0°23'44	opposition	-305 Jan 29 j 17:59	5° \mathfrak{Q} 42'42 0°43'52	
minimum elong	-312 Jul 02 j 11:19	5° \mathfrak{D} 04'43 0°23'44	min. Earth dist.	-305 Jan 30 j 19:19	5° \mathfrak{Q} 39'56 17.34103 AU	
morning rise	-312 Jul 19 j 03:49	6° \mathfrak{D} 05'50	direct	-305 Apr 15 j 21:48	3° \mathfrak{Q} 36'12	
retrograde	-312 Oct 19 j 14:17	9° \mathfrak{D} 25'47	evening set	-305 Jul 20 j 22:15	7° \mathfrak{Q} 05'55	
opposition	-311 Jan 01 j 05:33	7° \mathfrak{D} 23'28 0°28'04	max. Earth dist.	-305 Aug 05 j 06:40	8° \mathfrak{Q} 03'13 19.33044 AU	
min. Earth dist.	-311 Jan 02 j 04:07	7° \mathfrak{D} 21'00 17.55635 AU				
direct	-311 Mar 17 j 16:50	5° \mathfrak{D} 18'19	conjunction	-305 Aug 06 j 11:38	8° \mathfrak{Q} 07'46 0°40'08	
evening set	-311 Jun 20 j 20:01	8° \mathfrak{D} 43'12	minimum elong	-305 Aug 06 j 11:38	8° \mathfrak{Q} 07'46 0°40'08	
max. Earth dist.	-311 Jul 06 j 11:30	9° \mathfrak{D} 40'36 19.53300 AU	morning rise	-305 Aug 22 j 21:26	9° \mathfrak{Q} 09'05	
			retrograde	-305 Nov 22 j 09:40	12° \mathfrak{Q} 30'52	
conjunction	-311 Jul 07 j 14:15	9° \mathfrak{D} 44'43 0°26'41	opposition	-304 Feb 03 j 17:55	10° \mathfrak{Q} 28'28 0°45'33	
minimum elong	-311 Jul 07 j 14:15	9° \mathfrak{D} 44'43 0°26'42	min. Earth dist.	-304 Feb 04 j 17:54	10° \mathfrak{Q} 25'51 17.32234 AU	
morning rise	-311 Jul 24 j 05:57	10° \mathfrak{D} 45'55	direct	-304 Apr 20 j 02:10	8° \mathfrak{Q} 21'50	
retrograde	-311 Oct 24 j 14:28	14° \mathfrak{D} 06'16	evening set	-304 Jul 25 j 02:33	11° \mathfrak{Q} 51'59	
opposition	-310 Jan 06 j 01:54	12° \mathfrak{D} 03'57 0°31'16	max. Earth dist.	-304 Aug 09 j 11:45	12° \mathfrak{Q} 49'31 19.31478 AU	
min. Earth dist.	-310 Jan 07 j 00:35	12° \mathfrak{D} 01'29 17.51091 AU				
direct	-310 Mar 22 j 16:50	9° \mathfrak{D} 58'33	conjunction	-304 Aug 10 j 15:03	12° \mathfrak{Q} 53'48 0°41'31	
evening set	-310 Jun 25 j 23:57	13° \mathfrak{D} 24'28	minimum elong	-304 Aug 10 j 15:03	12° \mathfrak{Q} 53'48 0°41'31	
			morning rise	-304 Aug 26 j 23:33	13° \mathfrak{Q} 55'04	
conjunction	-310 Jul 12 j 17:32	14° \mathfrak{D} 26'07 0°29'28		-304 Sep 14 j 08:38	15° \mathfrak{Q}	
minimum elong	-310 Jul 12 j 17:32	14° \mathfrak{D} 26'07 0°29'27	retrograde	-304 Nov 26 j 08:32	17° \mathfrak{Q} 16'55	
max. Earth dist.	-310 Jul 11 j 13:21	14° \mathfrak{D} 21'46 19.48902 AU	opposition	-303 Feb 07 j 18:29	15° \mathfrak{Q} 14'33 0°46'55	
morning rise	-310 Jul 29 j 08:22	15° \mathfrak{D} 27'24	min. Earth dist.	-303 Feb 08 j 18:38	15° \mathfrak{Q} 11'55 17.30989 AU	
retrograde	-310 Oct 29 j 12:07	18° \mathfrak{D} 48'06		-303 Feb 13 j 08:11	15° \mathfrak{R} \mathfrak{Q}	
opposition	-309 Jan 10 j 23:13	16° \mathfrak{D} 45'47 0°34'16	direct	-303 Apr 25 j 04:22	13° \mathfrak{Q} 07'53	
min. Earth dist.	-309 Jan 11 j 23:34	16° \mathfrak{D} 43'07 17.46869 AU		-303 Jul 01 j 12:17	15° \mathfrak{Q}	
direct	-309 Mar 27 j 15:08	14° \mathfrak{D} 40'07	evening set	-303 Jul 30 j 06:59	16° \mathfrak{Q} 38'22	
evening set	-309 Jul 01 j 03:59	18° \mathfrak{D} 07'00				
			conjunction	-303 Aug 15 j 18:14	17° \mathfrak{Q} 40'07 0°42'36	
conjunction	-309 Jul 17 j 20:55	19° \mathfrak{D} 08'44 0°32'03	minimum elong	-303 Aug 15 j 18:14	17° \mathfrak{Q} 40'07 0°42'36	
minimum elong	-309 Jul 17 j 20:55	19° \mathfrak{D} 08'44 0°32'04	max. Earth dist.	-303 Aug 14 j 14:49	17° \mathfrak{Q} 35'48 19.30566 AU	
max. Earth dist.	-309 Jul 16 j 16:20	19° \mathfrak{D} 04'18 19.44851 AU	morning rise	-303 Sep 01 j 01:43	18° \mathfrak{Q} 41'18	
morning rise	-309 Aug 03 j 10:52	20° \mathfrak{D} 10'04	retrograde	-303 Dec 01 j 09:21	22° \mathfrak{Q} 03'11	
retrograde	-309 Nov 03 j 12:42	23° \mathfrak{D} 31'06	opposition	-302 Feb 12 j 19:14	20° \mathfrak{Q} 00'54 0°47'59	
opposition	-308 Jan 15 j 21:00	21° \mathfrak{D} 28'45 0°37'03	min. Earth dist.	-302 Feb 13 j 17:52	19° \mathfrak{Q} 58'26 17.30411 AU	
min. Earth dist.	-308 Jan 16 j 20:56	21° \mathfrak{D} 26'08 17.43002 AU	direct	-302 Apr 30 j 08:14	17° \mathfrak{Q} 54'13	
direct	-308 Mar 31 j 17:02	19° \mathfrak{D} 22'51	evening set	-302 Aug 04 j 11:01	21° \mathfrak{Q} 24'57	

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Attention, astronomical year style is used: The year -302 in astronomical counting style is the year 303 BCE in historical counting style.

conjunction	-302 Aug 20 j 21:19	22° Ω 26'37	0°43'23	retrograde	-295 Jan 03 j 08:26	25° Υ 22'34	
minimum elong	-302 Aug 20 j 21:19	22° Ω 26'37	0°43'23	opposition	-295 Mar 18 j 08:45	23° Υ 21'10	0°46'01
max. Earth dist.	-302 Aug 19 j 20:09	22° Ω 22'39	19.30318 AU	min. Earth dist.	-295 Mar 18 j 23:25	23° Υ 19'36	17.42393 AU
morning rise	-302 Sep 06 j 03:25	23° Ω 27'41		direct	-295 Jun 03 j 10:08	21° Υ 15'42	
retrograde	-302 Dec 06 j 09:24	26° Ω 49'34		evening set	-295 Sep 07 j 04:02	24° Υ 44'40	
opposition	-301 Feb 17 j 20:35	24° Ω 47'24	0°48'42				
min. Earth dist.	-301 Feb 18 j 18:47	24° Ω 44'59	17.30484 AU	conjunction	-295 Sep 23 j 05:54	25° Υ 45'01	0°40'36
direct	-301 May 05 j 10:34	22° Ω 40'49		minimum elong	-295 Sep 23 j 05:54	25° Υ 45'01	0°40'35
evening set	-301 Aug 09 j 14:47	26° Ω 11'39		max. Earth dist.	-295 Sep 22 j 13:57	25° Υ 42'30	19.44075 AU
				morning rise	-295 Oct 09 j 04:07	26° Υ 44'50	
conjunction	-301 Aug 25 j 23:44	27° Ω 13'12	0°43'53		-295 Dec 25 j 12:16	0° Ω	
minimum elong	-301 Aug 25 j 23:44	27° Ω 13'12	0°43'54	retrograde	-294 Jan 08 j 05:52	0° Ω 05'18	
max. Earth dist.	-301 Aug 24 j 22:44	27° Ω 09'15	19.30720 AU		-294 Jan 22 j 04:00	30° Υ	
morning rise	-301 Sep 11 j 04:50	28° Ω 14'10		opposition	-294 Mar 23 j 10:53	28° Υ 03'59	0°44'26
	-301 Oct 12 j 09:45	0° Υ		min. Earth dist.	-294 Mar 24 j 00:44	28° Υ 02'31	17.45905 AU
retrograde	-301 Dec 11 j 10:21	1° Υ 36'00		direct	-294 Jun 08 j 13:02	25° Υ 58'45	
	-300 Feb 12 j 20:09	30° Υ		evening set	-294 Sep 12 j 03:48	29° Υ 26'58	
opposition	-300 Feb 22 j 22:08	29° Ω 33'58	0°49'06		-294 Sep 21 j 00:35	0° Ω	
min. Earth dist.	-300 Feb 23 j 18:56	29° Ω 31'43	17.31196 AU				
direct	-300 May 09 j 13:54	27° Ω 27'30		conjunction	-294 Sep 28 j 04:35	0° Ω 27'03	0°39'03
	-300 Jul 28 j 09:25	0° Υ		minimum elong	-294 Sep 28 j 04:35	0° Ω 27'03	0°39'03
evening set	-300 Aug 13 j 18:11	0° Υ 58'22		max. Earth dist.	-294 Sep 27 j 14:36	0° Ω 24'51	19.47791 AU
max. Earth dist.	-300 Aug 29 j 03:33	1° Υ 56'11	19.31726 AU	morning rise	-294 Oct 14 j 01:50	1° Ω 26'38	
				retrograde	-293 Jan 13 j 04:24	4° Ω 46'42	
conjunction	-300 Aug 30 j 02:08	1° Υ 59'45	0°44'05	opposition	-293 Mar 28 j 12:42	2° Ω 45'27	0°42'33
minimum elong	-300 Aug 30 j 02:08	1° Υ 59'45	0°44'05	min. Earth dist.	-293 Mar 29 j 00:00	2° Ω 44'15	17.49800 AU
morning rise	-300 Sep 15 j 05:54	3° Υ 00'34		direct	-293 Jun 13 j 17:26	0° Ω 40'27	
retrograde	-300 Dec 15 j 10:46	6° Υ 22'18		evening set	-293 Sep 17 j 02:33	4° Ω 07'48	
opposition	-299 Feb 26 j 23:53	4° Υ 20'26	0°49'09				
min. Earth dist.	-299 Feb 27 j 19:55	4° Υ 18'16	17.32471 AU	conjunction	-293 Oct 03 j 02:16	5° Ω 07'38	0°37'15
direct	-299 May 14 j 16:59	2° Υ 14'08		minimum elong	-293 Oct 03 j 02:16	5° Ω 07'38	0°37'15
evening set	-299 Aug 18 j 21:26	5° Υ 44'52		max. Earth dist.	-293 Oct 02 j 14:21	5° Ω 05'46	19.51885 AU
max. Earth dist.	-299 Sep 03 j 05:41	6° Υ 42'35	19.33274 AU	morning rise	-293 Oct 18 j 22:35	6° Ω 06'58	
				retrograde	-292 Jan 18 j 00:41	9° Ω 26'35	
conjunction	-299 Sep 04 j 04:01	6° Υ 46'06	0°43'59	opposition	-292 Apr 01 j 14:17	7° Ω 25'23	0°40'24
minimum elong	-299 Sep 04 j 04:01	6° Υ 46'06	0°43'59	min. Earth dist.	-292 Apr 02 j 00:43	7° Ω 24'17	17.54093 AU
morning rise	-299 Sep 20 j 06:43	7° Υ 46'45		direct	-292 Jun 17 j 18:54	5° Ω 20'38	
retrograde	-299 Dec 20 j 10:48	11° Υ 08'22		evening set	-292 Sep 21 j 00:28	8° Ω 47'04	
opposition	-298 Mar 04 j 02:01	9° Υ 06'37	0°48'52				
min. Earth dist.	-298 Mar 04 j 20:57	9° Υ 04'34	17.34280 AU	conjunction	-292 Oct 06 j 23:06	9° Ω 46'36	0°35'12
direct	-298 May 19 j 20:48	7° Υ 00'30		minimum elong	-292 Oct 06 j 23:06	9° Ω 46'36	0°35'12
evening set	-298 Aug 23 j 23:56	10° Υ 30'59		max. Earth dist.	-292 Oct 06 j 13:03	9° Ω 45'02	19.56387 AU
max. Earth dist.	-298 Sep 08 j 09:27	11° Υ 28'52	19.35326 AU	morning rise	-292 Oct 22 j 18:38	10° Ω 45'42	
				retrograde	-291 Jan 21 j 22:19	14° Ω 04'48	
conjunction	-298 Sep 09 j 05:25	11° Υ 32'01	0°43'35	opposition	-291 Apr 06 j 15:13	12° Ω 03'41	0°37'59
minimum elong	-298 Sep 09 j 05:25	11° Υ 32'01	0°43'35	min. Earth dist.	-291 Apr 06 j 22:40	12° Ω 02'54	17.58789 AU
morning rise	-298 Sep 25 j 06:50	12° Υ 32'29		direct	-291 Jun 22 j 22:08	9° Ω 59'12	
retrograde	-298 Dec 25 j 10:37	15° Υ 53'53		evening set	-291 Sep 25 j 21:26	13° Ω 24'39	
opposition	-297 Mar 09 j 04:19	13° Υ 52'17	0°48'14				
min. Earth dist.	-297 Mar 09 j 21:50	13° Υ 50'24	17.36552 AU	conjunction	-291 Oct 11 j 19:06	14° Ω 23'54	0°32'57
direct	-297 May 25 j 01:21	11° Υ 46'23		minimum elong	-291 Oct 11 j 19:06	14° Ω 23'54	0°32'57
evening set	-297 Aug 29 j 02:03	15° Υ 16'28		max. Earth dist.	-291 Oct 11 j 11:46	14° Ω 22'45	19.61295 AU
max. Earth dist.	-297 Sep 13 j 10:56	16° Υ 14'15	19.37827 AU	morning rise	-291 Oct 27 j 13:43	15° Ω 22'44	
				retrograde	-290 Jan 26 j 17:24	18° Ω 41'20	
conjunction	-297 Sep 14 j 06:13	16° Υ 17'18	0°42'52	opposition	-290 Apr 11 j 16:05	16° Ω 40'19	0°35'22
minimum elong	-297 Sep 14 j 06:13	16° Υ 17'18	0°42'52	min. Earth dist.	-290 Apr 11 j 22:22	16° Ω 39'39	17.63913 AU
morning rise	-297 Sep 30 j 06:35	17° Υ 17'33		direct	-290 Jun 27 j 21:48	14° Ω 36'09	
retrograde	-297 Dec 30 j 09:20	20° Υ 38'43		evening set	-290 Sep 30 j 17:22	18° Ω 00'31	
opposition	-296 Mar 13 j 06:33	18° Υ 37'12	0°47'17				
min. Earth dist.	-296 Mar 13 j 23:10	18° Υ 35'25	17.39277 AU	conjunction	-290 Oct 16 j 13:58	18° Ω 59'29	0°30'30
direct	-296 May 29 j 05:00	16° Υ 31'30		minimum elong	-290 Oct 16 j 13:59	18° Ω 59'29	0°30'29
evening set	-296 Sep 02 j 03:21	20° Υ 01'06		max. Earth dist.	-290 Oct 16 j 08:28	18° Ω 58'37	19.66641 AU
				morning rise	-290 Nov 01 j 07:58	19° Ω 58'03	
conjunction	-296 Sep 18 j 06:27	21° Υ 01'42	0°41'53	retrograde	-289 Jan 31 j 14:36	23° Ω 16'09	
minimum elong	-296 Sep 18 j 06:27	21° Υ 01'42	0°41'53	opposition	-289 Apr 16 j 16:17	21° Ω 15'14	0°32'31
max. Earth dist.	-296 Sep 17 j 13:14	20° Υ 58'59	19.40761 AU	min. Earth dist.	-289 Apr 16 j 19:14	21° Ω 14'56	17.69460 AU
morning rise	-296 Oct 04 j 05:43	22° Υ 01'44		direct	-289 Jul 02 j 23:17	19° Ω 11'27	

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Attention, astronomical year style is used: The year -289 in astronomical counting style is the year 290 BCE in historical counting style.

evening set	-289 Oct 05 j 12:23	22°♄34'43		opposition	-283 May 14 j 06:23	18°♄10'13	0°12'21
				min. Earth dist.	-283 May 13 j 21:35	18°♄11'08	18.08434 AU
conjunction	-289 Oct 21 j 08:13	23°♄33'23	0°27'53	direct	-283 Jul 30 j 09:56	16°♄09'05	
minimum elong	-289 Oct 21 j 08:13	23°♄33'23	0°27'53	evening set	-283 Oct 31 j 11:55	19°♄25'08	
max. Earth dist.	-289 Oct 21 j 05:49	23°♄33'01	19.72389 AU				
morning rise	-289 Nov 06 j 01:26	24°♄31'42		conjunction	-283 Nov 16 j 03:45	20°♄22'04	0°09'31
retrograde	-288 Feb 05 j 08:47	27°♄49'16		minimum elong	-283 Nov 16 j 03:45	20°♄22'04	0°09'30
opposition	-288 Apr 20 j 15:58	25°♄48'31	0°29'30	behind sun begin	-283 Nov 15 j 22:15	20°♄21'15	
min. Earth dist.	-288 Apr 20 j 17:43	25°♄48'20	17.75395 AU	behind sun end	-283 Nov 16 j 09:14	20°♄22'53	
direct	-288 Jul 06 j 21:07	23°♄45'08		max. Earth dist.	-283 Nov 16 j 13:47	20°♄23'35	20.11828 AU
evening set	-288 Oct 09 j 06:35	27°♄07'17		morning rise	-283 Dec 01 j 18:31	21°♄18'51	
				retrograde	-282 Mar 03 j 18:56	24°♄33'09	
conjunction	-288 Oct 25 j 01:29	28°♄05'39	0°25'06	opposition	-282 May 19 j 02:44	22°♄33'22	0°08'40
minimum elong	-288 Oct 25 j 01:29	28°♄05'39	0°25'06	min. Earth dist.	-282 May 18 j 16:42	22°♄34'23	18.15170 AU
max. Earth dist.	-288 Oct 25 j 00:30	28°♄05'30	19.78505 AU	direct	-282 Aug 04 j 05:39	20°♄32'37	
morning rise	-288 Nov 09 j 18:16	29°♄03'43		evening set	-282 Nov 05 j 00:52	23°♄47'24	
	-288 Nov 25 j 19:24	0°♄					
retrograde	-287 Feb 09 j 05:08	2°♄20'45		conjunction	-282 Nov 20 j 16:07	24°♄44'02	0°06'13
opposition	-287 Apr 25 j 15:06	0°♄20'10	0°26'18	minimum elong	-282 Nov 20 j 16:07	24°♄44'02	0°06'12
min. Earth dist.	-287 Apr 25 j 13:44	0°♄20'19	17.81657 AU	behind sun begin	-282 Nov 20 j 09:55	24°♄43'07	
	-287 May 03 j 17:49	30°♄		behind sun end	-282 Nov 20 j 22:20	24°♄44'58	
direct	-287 Jul 11 j 21:02	28°♄17'14		max. Earth dist.	-282 Nov 21 j 02:42	24°♄45'38	20.18519 AU
	-287 Sep 14 j 13:59	0°♄		morning rise	-282 Dec 06 j 06:57	25°♄40'37	
evening set	-287 Oct 13 j 23:41	1°♄38'13		retrograde	-281 Mar 08 j 09:53	28°♄54'20	
				opposition	-281 May 23 j 22:16	26°♄54'38	0°04'59
conjunction	-287 Oct 29 j 17:55	2°♄36'18	0°22'10	min. Earth dist.	-281 May 23 j 10:22	26°♄55'50	18.21808 AU
minimum elong	-287 Oct 29 j 17:55	2°♄36'18	0°22'10	direct	-281 Aug 09 j 00:09	24°♄54'14	
max. Earth dist.	-287 Oct 29 j 20:11	2°♄36'38	19.84901 AU	evening set	-281 Nov 09 j 12:57	28°♄07'45	
morning rise	-287 Nov 14 j 10:01	3°♄34'05					
retrograde	-286 Feb 13 j 22:49	6°♄50'36		conjunction	-281 Nov 25 j 04:03	29°♄04'08	0°02'53
opposition	-286 Apr 30 j 13:56	4°♄50'13	0°22'58	minimum elong	-281 Nov 25 j 04:02	29°♄04'08	0°02'53
min. Earth dist.	-286 Apr 30 j 11:21	4°♄50'29	17.88167 AU	behind sun begin	-281 Nov 24 j 21:31	29°♄03'10	
direct	-286 Jul 16 j 18:01	2°♄47'44		behind sun end	-281 Nov 25 j 10:33	29°♄05'05	
evening set	-286 Oct 18 j 16:06	6°♄07'31		max. Earth dist.	-281 Nov 25 j 17:11	29°♄06'07	20.25081 AU
				morning rise	-281 Dec 10 j 18:37	0°♄00'28	
conjunction	-286 Nov 03 j 09:30	7°♄05'18	0°19'08		-281 Dec 10 j 15:28	0°♄	
minimum elong	-286 Nov 03 j 09:30	7°♄05'17	0°19'09	retrograde	-280 Mar 11 j 24:00	3°♄13'35	
max. Earth dist.	-286 Nov 03 j 12:55	7°♄05'49	19.91517 AU	opposition	-280 May 27 j 16:53	1°♄13'57	0°01'17
morning rise	-286 Nov 19 j 01:20	8°♄02'50		min. Earth dist.	-280 May 27 j 03:43	1°♄15'17	18.28289 AU
retrograde	-285 Feb 18 j 17:47	11°♄18'49			-280 Jun 29 j 08:11	30°♄	
opposition	-285 May 05 j 11:59	9°♄18'35	0°19'31	direct	-280 Aug 12 j 18:16	29°♄13'54	
min. Earth dist.	-285 May 05 j 06:37	9°♄19'09	17.94862 AU		-280 Sep 24 j 10:08	0°♄	
direct	-285 Jul 21 j 16:34	7°♄16'34		desc. node	-280 Oct 03 j 03:41	0°♄19'58	
evening set	-285 Oct 23 j 07:26	10°♄35'08		evening set	-280 Nov 13 j 00:18	2°♄26'08	
conjunction	-285 Nov 08 j 00:22	11°♄32'37	0°16'00	conjunction	-280 Nov 28 j 14:56	3°♄22'15	-0°00'32
minimum elong	-285 Nov 08 j 00:22	11°♄32'37	0°15'59	minimum elong	-280 Nov 28 j 14:57	3°♄22'15	0°00'32
behind sun begin	-285 Nov 07 j 23:06	11°♄32'26		behind sun begin	-280 Nov 28 j 08:26	3°♄21'18	
behind sun end	-285 Nov 08 j 01:37	11°♄32'49		behind sun end	-280 Nov 28 j 21:28	3°♄23'13	
max. Earth dist.	-285 Nov 08 j 06:50	11°♄33'36	19.98261 AU	max. Earth dist.	-280 Nov 29 j 04:32	3°♄24'18	20.31491 AU
morning rise	-285 Nov 23 j 15:41	12°♄29'55		morning rise	-280 Dec 14 j 05:43	4°♄18'22	
	-284 Jan 12 j 17:26	15°♄		retrograde	-279 Mar 16 j 13:24	7°♄30'55	
retrograde	-284 Feb 23 j 10:23	15°♄45'20		opposition	-279 Jun 01 j 10:53	5°♄31'18	-0°02'24
	-284 Apr 06 j 18:20	15°♄		min. Earth dist.	-279 May 31 j 20:10	5°♄32'48	18.34636 AU
opposition	-284 May 09 j 09:33	13°♄45'17	0°15'58	direct	-279 Aug 17 j 10:26	3°♄31'32	
min. Earth dist.	-284 May 09 j 03:04	13°♄45'57	18.01637 AU	evening set	-279 Nov 17 j 10:29	6°♄42'32	
direct	-284 Jul 25 j 13:10	11°♄43'43					
evening set	-284 Oct 26 j 22:09	15°♄01'02		conjunction	-279 Dec 03 j 01:07	7°♄38'24	-0°03'52
	-284 Oct 26 j 15:15	15°♄		minimum elong	-279 Dec 03 j 01:06	7°♄38'24	0°03'52
				behind sun begin	-279 Dec 02 j 18:38	7°♄37'27	
conjunction	-284 Nov 11 j 14:19	15°♄58'13	0°12'47	behind sun end	-279 Dec 03 j 07:33	7°♄39'20	
minimum elong	-284 Nov 11 j 14:19	15°♄58'13	0°12'46	max. Earth dist.	-279 Dec 03 j 17:23	7°♄40'50	20.37764 AU
behind sun begin	-284 Nov 11 j 10:08	15°♄57'36		morning rise	-279 Dec 18 j 15:47	8°♄34'18	
behind sun end	-284 Nov 11 j 18:31	15°♄58'51		retrograde	-278 Mar 21 j 02:11	11°♄46'16	
max. Earth dist.	-284 Nov 11 j 21:33	15°♄59'19	20.05055 AU	min. Earth dist.	-278 Jun 05 j 11:44	9°♄48'20	18.40844 AU
morning rise	-284 Nov 27 j 05:30	16°♄55'16		opposition	-278 Jun 06 j 04:05	9°♄46'41	-0°06'01
retrograde	-283 Feb 27 j 03:24	20°♄10'08		direct	-278 Aug 22 j 02:36	7°♄47'12	

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Attention, astronomical year style is used: The year -278 in astronomical counting style is the year 279 BCE in historical counting style.

evening set	-278 Nov 21 j 20:10	10°♂56'58		min. Earth dist.	-272 Jun 30 j 18:53	4°♂46'40	18.75460 AU
				direct	-272 Sep 16 j 05:12	2°♂46'38	
conjunction	-278 Dec 07 j 10:28	11°♂52'36	-0°07'06	evening set	-272 Dec 15 j 16:36	5°♂50'15	
minimum elong	-278 Dec 07 j 10:28	11°♂52'36	0°07'07				
behind sun begin	-278 Dec 07 j 04:25	11°♂51'43		conjunction	-272 Dec 31 j 07:31	6°♂44'48	-0°24'47
behind sun end	-278 Dec 07 j 16:31	11°♂53'29		minimum elong	-272 Dec 31 j 07:31	6°♂44'48	0°24'46
max. Earth dist.	-278 Dec 08 j 03:21	11°♂55'07	20.43916 AU	max. Earth dist.	-271 Jan 01 j 08:10	6°♂48'25	20.77974 AU
morning rise	-278 Dec 23 j 01:28	12°♂48'19		morning rise	-271 Jan 16 j 00:39	7°♂39'39	
retrograde	-277 Mar 25 j 14:40	15°♂59'44		retrograde	-271 Apr 19 j 09:35	10°♂48'30	
opposition	-277 Jun 10 j 20:23	14°♂00'09	-0°09'35	min. Earth dist.	-271 Jul 05 j 07:19	8°♂51'51	18.80450 AU
min. Earth dist.	-277 Jun 10 j 02:40	14°♂01'57	18.46960 AU	opposition	-271 Jul 06 j 07:36	8°♂49'25	-0°28'50
direct	-277 Aug 26 j 16:40	12°♂00'57		direct	-271 Sep 20 j 13:26	6°♂52'06	
evening set	-277 Nov 26 j 04:55	15°♂09'33		evening set	-271 Dec 19 j 22:20	9°♂54'55	
conjunction	-277 Dec 11 j 19:19	16°♂04'58	-0°10'16	conjunction	-270 Jan 04 j 13:45	10°♂49'20	-0°27'19
minimum elong	-277 Dec 11 j 19:20	16°♂04'58	0°10'16	minimum elong	-270 Jan 04 j 13:45	10°♂49'20	0°27'20
behind sun begin	-277 Dec 11 j 14:05	16°♂04'13		max. Earth dist.	-270 Jan 05 j 15:59	10°♂53'10	20.82779 AU
behind sun end	-277 Dec 12 j 00:34	16°♂05'44		morning rise	-270 Jan 20 j 07:18	11°♂44'05	
max. Earth dist.	-277 Dec 12 j 14:46	16°♂07'52	20.49974 AU	retrograde	-270 Apr 23 j 20:18	14°♂52'38	
morning rise	-277 Dec 27 j 10:22	17°♂00'30		opposition	-270 Jul 10 j 19:17	12°♂53'38	-0°31'34
retrograde	-276 Mar 29 j 02:32	20°♂11'23		min. Earth dist.	-270 Jul 09 j 17:50	12°♂56'11	18.85057 AU
opposition	-276 Jun 14 j 11:54	18°♂11'52	-0°13'04	direct	-270 Sep 25 j 00:09	10°♂56'35	
min. Earth dist.	-276 Jun 13 j 16:22	18°♂13'50	18.52963 AU	evening set	-270 Dec 24 j 04:06	13°♂58'38	
direct	-276 Aug 30 j 06:48	16°♂12'58					
evening set	-276 Nov 29 j 13:08	19°♂20'27		conjunction	-269 Jan 08 j 19:45	14°♂52'57	-0°29'44
				minimum elong	-269 Jan 08 j 19:45	14°♂52'57	0°29'43
conjunction	-276 Dec 15 j 03:22	20°♂15'39	-0°13'22	max. Earth dist.	-269 Jan 09 j 21:33	14°♂56'43	20.87167 AU
minimum elong	-276 Dec 15 j 03:22	20°♂15'39	0°13'23	morning rise	-269 Jan 24 j 14:03	15°♂47'38	
behind sun begin	-276 Dec 14 j 23:31	20°♂15'06		retrograde	-269 Apr 28 j 05:52	18°♂55'54	
behind sun end	-276 Dec 15 j 07:13	20°♂16'13		min. Earth dist.	-269 Jul 14 j 05:35	16°♂59'26	18.89233 AU
max. Earth dist.	-276 Dec 15 j 23:20	20°♂18'37	20.55920 AU	opposition	-269 Jul 15 j 06:24	16°♂56'57	-0°34'08
morning rise	-276 Dec 30 j 18:49	21°♂11'01		direct	-269 Sep 29 j 07:18	15°♂00'07	
retrograde	-275 Apr 02 j 14:10	24°♂21'26		evening set	-269 Dec 28 j 09:27	18°♂01'28	
min. Earth dist.	-275 Jun 18 j 06:12	22°♂24'02	18.58863 AU				
opposition	-275 Jun 19 j 02:48	22°♂21'58	-0°16'28	conjunction	-268 Jan 13 j 01:43	18°♂55'42	-0°31'58
direct	-275 Sep 03 j 18:52	20°♂23'24		minimum elong	-268 Jan 13 j 01:43	18°♂55'42	0°31'58
evening set	-275 Dec 03 j 20:38	23°♂29'49		max. Earth dist.	-268 Jan 14 j 04:28	18°♂59'35	20.91099 AU
				morning rise	-268 Jan 28 j 20:32	19°♂50'19	
conjunction	-275 Dec 19 j 11:06	24°♂24'50	-0°16'23	retrograde	-268 May 01 j 15:48	22°♂58'19	
minimum elong	-275 Dec 19 j 11:06	24°♂24'50	0°16'23	opposition	-268 Jul 18 j 16:56	20°♂59'23	-0°36'31
max. Earth dist.	-275 Dec 20 j 09:26	24°♂28'08	20.61748 AU	min. Earth dist.	-268 Jul 17 j 15:12	21°♂01'57	18.92912 AU
morning rise	-274 Jan 04 j 02:44	25°♂20'03		direct	-268 Oct 02 j 17:11	19°♂02'44	
retrograde	-274 Apr 07 j 01:38	28°♂30'01		evening set	-268 Dec 31 j 14:34	22°♂03'25	
opposition	-274 Jun 23 j 16:56	26°♂30'38	-0°19'45				
min. Earth dist.	-274 Jun 22 j 18:33	26°♂32'53	18.64609 AU	conjunction	-267 Jan 16 j 07:11	22°♂57'34	-0°34'03
direct	-274 Sep 08 j 07:37	24°♂32'23		minimum elong	-267 Jan 16 j 07:11	22°♂57'34	0°34'03
evening set	-274 Dec 08 j 03:43	27°♂37'49		max. Earth dist.	-267 Jan 17 j 09:14	23°♂01'20	20.94522 AU
				morning rise	-267 Feb 01 j 02:50	23°♂52'08	
conjunction	-274 Dec 23 j 18:11	28°♂32'39	-0°19'18	retrograde	-267 May 06 j 01:02	26°♂59'54	
minimum elong	-274 Dec 23 j 18:11	28°♂32'39	0°19'18	min. Earth dist.	-267 Jul 22 j 02:16	25°♂03'25	18.96092 AU
max. Earth dist.	-274 Dec 24 j 16:52	28°♂36'00	20.67402 AU	opposition	-267 Jul 23 j 03:10	25°♂00'56	-0°38'43
morning rise	-273 Jan 08 j 10:24	29°♂27'44		direct	-267 Oct 06 j 23:50	23°♂04'24	
	-273 Jan 17 j 22:54	0°♂		evening set	-266 Jan 04 j 19:22	26°♂04'28	
retrograde	-273 Apr 11 j 12:29	2°♂37'18					
min. Earth dist.	-273 Jun 27 j 07:38	0°♂40'19	18.70168 AU	conjunction	-266 Jan 20 j 12:44	26°♂58'34	-0°35'57
opposition	-273 Jun 28 j 06:30	0°♂38'01	-0°22'55	minimum elong	-266 Jan 20 j 12:43	26°♂58'34	0°35'57
	-273 Jul 14 j 08:02	30°♂♂		max. Earth dist.	-266 Jan 21 j 15:35	27°♂02'27	20.97455 AU
direct	-273 Sep 12 j 17:34	28°♂40'06		morning rise	-266 Feb 05 j 09:00	27°♂53'06	
	-273 Nov 08 j 18:40	0°♂			-266 Mar 20 j 16:11	0°♂	
evening set	-273 Dec 12 j 10:16	1°♂44'35		retrograde	-266 May 10 j 09:55	1°♂00'37	
					-266 Jul 02 j 01:06	30°♂♂	
conjunction	-273 Dec 28 j 01:06	2°♂39'17	-0°22'06	min. Earth dist.	-266 Jul 26 j 10:51	29°♂04'10	18.98779 AU
minimum elong	-273 Dec 28 j 01:06	2°♂39'17	0°22'06	opposition	-266 Jul 27 j 12:34	29°♂01'36	-0°40'43
max. Earth dist.	-273 Dec 29 j 01:43	2°♂42'54	20.72833 AU	direct	-266 Oct 11 j 08:37	27°♂05'09	
morning rise	-272 Jan 12 j 17:35	3°♂34'13			-265 Jan 07 j 14:53	0°♂	
retrograde	-272 Apr 14 j 23:29	6°♂43'25		evening set	-265 Jan 09 j 00:04	0°♂04'39	
opposition	-272 Jul 01 j 19:11	4°♂44'14	-0°25'57				

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Attention, astronomical year style is used: The year -265 in astronomical counting style is the year 266 BCE in historical counting style.

conjunction	-265 Jan 24 j 17:55	0°58'43	-0°37'40	retrograde	-259 Jun 07 j 17:49	28°50'19	
minimum elong	-265 Jan 24 j 17:55	0°58'43	0°37'41	opposition	-259 Aug 24 j 19:09	26°50'52	-0°48'37
max. Earth dist.	-265 Jan 25 j 20:01	1°02'28	20.99909 AU	min. Earth dist.	-259 Aug 23 j 20:18	26°53'10	19.06568 AU
morning rise	-265 Feb 09 j 15:09	1°53'14		direct	-259 Nov 07 j 23:56	24°54'36	
retrograde	-265 May 14 j 18:22	5°00'33		evening set	-258 Feb 05 j 07:42	27°52'18	
opposition	-265 Jul 31 j 21:38	3°01'26	-0°42'30				
min. Earth dist.	-265 Jul 30 j 20:55	3°03'55	19.01021 AU	conjunction	-258 Feb 21 j 07:18	28°46'36	-0°44'08
direct	-265 Oct 15 j 14:42	1°05'02		minimum elong	-258 Feb 21 j 07:18	28°46'36	0°44'09
evening set	-264 Jan 13 j 04:27	4°04'03		max. Earth dist.	-258 Feb 22 j 08:35	28°50'12	21.06369 AU
				morning rise	-258 Mar 09 j 10:43	29°41'27	
conjunction	-264 Jan 28 j 23:06	4°58'05	-0°39'11		-258 Mar 15 j 01:40	0°	
minimum elong	-264 Jan 28 j 23:06	4°58'05	0°39'11	retrograde	-258 Jun 12 j 03:26	2°48'32	
max. Earth dist.	-264 Jan 30 j 02:00	5°01'58	21.01939 AU	min. Earth dist.	-258 Aug 28 j 02:49	0°51'22	19.06145 AU
morning rise	-264 Feb 13 j 21:00	5°52'36		opposition	-258 Aug 29 j 01:47	0°49'03	-0°48'51
retrograde	-264 May 18 j 02:47	8°59'45			-258 Sep 18 j 23:36	30°	
min. Earth dist.	-264 Aug 03 j 04:22	7°03'07	19.02849 AU	direct	-258 Nov 12 j 05:59	28°52'47	
opposition	-264 Aug 04 j 05:57	7°00'33	-0°44'04		-257 Jan 03 j 06:23	0°	
direct	-264 Oct 18 j 22:03	5°04'11		evening set	-257 Feb 09 j 13:12	1°50'34	
evening set	-263 Jan 16 j 08:54	8°02'47					
				conjunction	-257 Feb 25 j 13:36	2°44'58	-0°44'15
conjunction	-263 Feb 01 j 04:07	8°56'49	-0°40'31	minimum elong	-257 Feb 25 j 13:36	2°44'58	0°44'15
minimum elong	-263 Feb 01 j 04:07	8°56'49	0°40'32	max. Earth dist.	-257 Feb 26 j 13:14	2°48'20	21.05716 AU
max. Earth dist.	-263 Feb 02 j 06:18	9°00'34	21.03577 AU	morning rise	-257 Mar 13 j 18:07	3°39'56	
morning rise	-263 Feb 17 j 02:59	9°51'20		retrograde	-257 Jun 16 j 10:46	6°47'10	
retrograde	-263 May 22 j 10:07	12°58'22		min. Earth dist.	-257 Sep 01 j 11:44	4°49'45	19.05255 AU
opposition	-263 Aug 08 j 14:07	10°59'05	-0°45'25	opposition	-257 Sep 02 j 08:34	4°47'39	-0°48'51
min. Earth dist.	-263 Aug 07 j 13:35	11°01'33	19.04317 AU	direct	-257 Nov 16 j 09:23	2°51'21	
direct	-263 Oct 23 j 03:33	9°02'45		evening set	-256 Feb 13 j 18:53	5°49'16	
evening set	-262 Jan 20 j 13:06	12°01'00					
				conjunction	-256 Feb 29 j 20:22	6°43'47	-0°44'09
conjunction	-262 Feb 05 j 09:14	12°55'03	-0°41'38	minimum elong	-256 Feb 29 j 20:22	6°43'47	0°44'09
minimum elong	-262 Feb 05 j 09:14	12°55'03	0°41'38	max. Earth dist.	-256 Mar 01 j 19:29	6°47'05	21.04577 AU
max. Earth dist.	-262 Feb 06 j 12:09	12°58'54	21.04868 AU	morning rise	-256 Mar 17 j 01:43	7°38'52	
morning rise	-262 Feb 21 j 08:53	13°49'36		retrograde	-256 Jun 19 j 20:37	10°46'17	
retrograde	-262 Mar 15 j 13:14	15°		opposition	-256 Sep 05 j 15:11	8°46'44	-0°48'37
opposition	-262 May 26 j 19:09	16°56'33		min. Earth dist.	-256 Sep 04 j 18:33	8°48'49	19.03847 AU
min. Earth dist.	-262 Aug 11 j 17:53	15°		direct	-256 Nov 19 j 15:37	6°50'21	
direct	-262 Aug 12 j 21:43	14°57'12	-0°46'33	evening set	-255 Feb 17 j 01:14	9°48'29	
evening set	-262 Aug 11 j 20:24	14°59'45	19.05426 AU				
	-262 Oct 27 j 09:55	13°00'53		conjunction	-255 Mar 05 j 03:34	10°43'08	-0°43'50
conjunction	-261 Jan 06 j 08:22	15°		minimum elong	-255 Mar 05 j 03:34	10°43'08	0°43'49
minimum elong	-261 Jan 24 j 17:37	15°58'53		max. Earth dist.	-255 Mar 06 j 00:38	10°46'08	21.02900 AU
max. Earth dist.				morning rise	-255 Mar 21 j 10:01	11°38'22	
morning rise	-261 Feb 09 j 14:26	16°52'58	-0°42'34	retrograde	-255 Jun 24 j 04:37	14°45'59	
retrograde	-261 Feb 09 j 14:26	16°52'58	0°42'34	opposition	-255 Sep 09 j 21:57	12°46'20	-0°48'09
opposition	-261 Feb 10 j 16:24	16°56'41	21.05796 AU	min. Earth dist.	-255 Sep 09 j 03:43	12°48'11	19.01898 AU
min. Earth dist.	-261 Feb 25 j 15:07	17°47'35		direct	-255 Nov 23 j 19:29	10°49'50	
direct	-261 May 31 j 01:44	20°54'29		evening set	-254 Feb 21 j 07:49	13°48'13	
evening set	-261 Aug 16 j 05:05	18°57'30	19.06182 AU				
conjunction	-261 Aug 17 j 05:01	18°55'06	-0°47'28	conjunction	-254 Mar 09 j 11:21	14°43'03	-0°43'18
minimum elong	-261 Oct 31 j 14:20	16°58'48		minimum elong	-254 Mar 09 j 11:21	14°43'03	0°43'18
max. Earth dist.	-260 Jan 28 j 22:04	19°56'37		max. Earth dist.	-254 Mar 10 j 07:28	14°45'55	21.00684 AU
morning rise				morning rise	-254 Mar 25 j 18:43	15°38'25	
retrograde	-260 Feb 13 j 19:53	20°50'46	-0°43'18	retrograde	-254 Jun 28 j 14:35	18°46'15	
minimum elong	-260 Feb 13 j 19:52	20°50'46	0°43'18	min. Earth dist.	-254 Sep 13 j 10:46	16°48'18	18.99396 AU
max. Earth dist.	-260 Feb 14 j 22:15	20°54'32	21.06374 AU	opposition	-254 Sep 14 j 04:34	16°46'30	-0°47'27
morning rise	-260 Feb 29 j 21:21	21°45'25		direct	-254 Nov 28 j 01:57	14°49'50	
retrograde	-260 Jun 03 j 11:07	24°52'21		evening set	-253 Feb 25 j 15:05	17°48'32	
min. Earth dist.	-260 Aug 19 j 11:35	22°55'23	19.06568 AU				
opposition	-260 Aug 20 j 12:04	22°52'55	-0°48'09	conjunction	-253 Mar 13 j 19:30	18°43'31	-0°42'33
direct	-260 Nov 03 j 20:23	20°56'39		minimum elong	-253 Mar 13 j 19:30	18°43'31	0°42'32
evening set	-259 Feb 01 j 02:44	23°54'22		max. Earth dist.	-253 Mar 14 j 13:25	18°46'04	20.97916 AU
				morning rise	-253 Mar 30 j 03:56	19°39'04	
conjunction	-259 Feb 17 j 01:16	24°48'35	-0°43'49	retrograde	-253 Jul 02 j 22:48	20°47'08	
minimum elong	-259 Feb 17 j 01:16	24°48'35	0°43'49	opposition	-253 Sep 18 j 11:11	20°47'14	-0°46'30
max. Earth dist.	-259 Feb 18 j 02:32	24°52'11	21.06569 AU	min. Earth dist.	-253 Sep 17 j 19:55	20°48'47	18.96376 AU
morning rise	-259 Mar 05 j 03:50	25°43'20		direct	-253 Dec 02 j 06:20	18°50'21	

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Attention, astronomical year style is used: The year -252 in astronomical counting style is the year 253 BCE in historical counting style.

evening set	-252 Feb 29 j 22:34	21° H 49'26		max. Earth dist.	-246 Apr 12 j 03:16	17° Y 11'10	20.68147 AU
				morning rise	-246 Apr 28 j 10:43	18° Y 07'10	
conjunction	-252 Mar 17 j 04:09	22° H 44'37	-0°41'35	retrograde	-246 Aug 01 j 01:27	21° Y 17'46	
minimum elong	-252 Mar 17 j 04:09	22° H 44'37	0°41'35	opposition	-246 Oct 16 j 13:20	19° Y 16'56	-0°33'43
max. Earth dist.	-252 Mar 17 j 21:06	22° H 47'02	20.94674 AU	min. Earth dist.	-246 Oct 16 j 07:13	19° Y 17'35	18.65538 AU
morning rise	-252 Apr 02 j 13:29	23° H 40'20		direct	-246 Dec 30 j 03:23	17° Y 18'14	
retrograde	-252 Jul 06 j 08:53	26° H 48'39		evening set	-245 Mar 30 j 20:33	20° Y 22'00	
opposition	-252 Sep 21 j 17:47	24° H 48'36	-0°45'20				
min. Earth dist.	-252 Sep 21 j 02:54	24° H 50'07	18.92905 AU	conjunction	-245 Apr 16 j 09:09	21° Y 18'52	-0°29'19
direct	-252 Dec 05 j 13:03	22° H 51'29		minimum elong	-245 Apr 16 j 09:09	21° Y 18'52	0°29'19
evening set	-251 Mar 05 j 06:35	25° H 51'00		max. Earth dist.	-245 Apr 16 j 14:25	21° Y 19'37	20.62881 AU
				morning rise	-245 May 03 j 00:37	22° Y 16'10	
conjunction	-251 Mar 21 j 13:06	26° H 46'23	-0°40'25	retrograde	-245 Aug 05 j 13:32	25° Y 27'16	
minimum elong	-251 Mar 21 j 13:06	26° H 46'23	0°40'25	opposition	-245 Oct 20 j 21:48	23° Y 26'22	-0°31'05
max. Earth dist.	-251 Mar 22 j 04:04	26° H 48'31	20.91000 AU	min. Earth dist.	-245 Oct 20 j 18:16	23° Y 26'44	18.60165 AU
morning rise	-251 Apr 06 j 23:29	27° H 42'18		direct	-244 Jan 03 j 10:29	21° Y 27'25	
	-251 May 25 j 11:27	0° Y		evening set	-244 Apr 03 j 09:41	24° Y 32'08	
retrograde	-251 Jul 10 j 17:27	0° Y 50'56					
	-251 Aug 26 j 23:30	30° R H		conjunction	-244 Apr 19 j 23:13	25° Y 29'16	-0°26'50
opposition	-251 Sep 26 j 00:38	28° H 50'42	-0°43'56	minimum elong	-244 Apr 19 j 23:13	25° Y 29'16	0°26'51
min. Earth dist.	-251 Sep 25 j 12:11	28° H 51'59	18.89043 AU	max. Earth dist.	-244 Apr 20 j 02:36	25° Y 29'45	20.57411 AU
direct	-251 Dec 09 j 17:46	26° H 53'20		morning rise	-244 May 06 j 15:25	26° Y 26'49	
evening set	-250 Mar 09 j 15:11	29° H 53'22		retrograde	-244 Aug 09 j 04:04	29° Y 38'28	
	-250 Mar 11 j 14:33	0° Y		opposition	-244 Oct 24 j 06:39	27° Y 37'29	-0°28'15
				min. Earth dist.	-244 Oct 24 j 04:03	27° Y 37'46	18.54571 AU
conjunction	-250 Mar 25 j 22:52	0° Y 48'58	-0°39'02	direct	-243 Jan 06 j 19:49	25° Y 38'15	
minimum elong	-250 Mar 25 j 22:52	0° Y 48'58	0°39'02	evening set	-243 Apr 07 j 23:47	28° Y 43'58	
max. Earth dist.	-250 Mar 26 j 12:48	0° Y 50'58	20.86975 AU				
morning rise	-250 Apr 11 j 10:08	1° Y 45'05		conjunction	-243 Apr 24 j 14:11	29° Y 41'24	-0°24'12
retrograde	-250 Jul 15 j 04:22	4° Y 54'02		minimum elong	-243 Apr 24 j 14:11	29° Y 41'24	0°24'11
opposition	-250 Sep 30 j 07:18	2° Y 53'39	-0°42'18	max. Earth dist.	-243 Apr 24 j 15:24	29° Y 41'35	20.51684 AU
min. Earth dist.	-250 Sep 29 j 19:19	2° Y 54'53	18.84850 AU		-243 Apr 29 j 22:05	0° B	
direct	-250 Dec 14 j 00:50	0° Y 56'01		morning rise	-243 May 11 j 07:00	0° B 39'14	
evening set	-249 Mar 14 j 00:31	3° Y 56'40		retrograde	-243 Aug 13 j 17:12	3° B 51'23	
				opposition	-243 Oct 28 j 16:13	1° B 50'21	-0°25'15
conjunction	-249 Mar 30 j 09:07	4° Y 52'29	-0°37'28	min. Earth dist.	-243 Oct 28 j 16:24	1° B 50'19	18.48710 AU
minimum elong	-249 Mar 30 j 09:07	4° Y 52'29	0°37'28		-243 Dec 23 j 10:43	30° R Y	
max. Earth dist.	-249 Mar 30 j 21:03	4° Y 54'11	20.82629 AU	direct	-242 Jan 11 j 04:15	29° Y 50'48	
morning rise	-249 Apr 15 j 21:21	5° Y 48'49			-242 Jan 29 j 21:20	0° B	
retrograde	-249 Jul 19 j 13:36	8° Y 58'08		evening set	-242 Apr 12 j 14:57	2° B 57'34	
opposition	-249 Oct 04 j 14:27	6° Y 57'36	-0°40'28				
min. Earth dist.	-249 Oct 04 j 04:51	6° Y 58'36	18.80368 AU	conjunction	-242 Apr 29 j 06:11	3° B 55'18	-0°21'25
direct	-249 Dec 18 j 05:59	4° Y 59'42		minimum elong	-242 Apr 29 j 06:11	3° B 55'18	0°21'25
evening set	-248 Mar 17 j 10:13	8° Y 01'01		max. Earth dist.	-242 Apr 29 j 04:52	3° B 55'06	20.45695 AU
				morning rise	-242 May 15 j 23:37	4° B 53'22	
conjunction	-248 Apr 02 j 19:55	8° Y 57'05	-0°35'42	retrograde	-242 Aug 18 j 08:53	8° B 06'04	
minimum elong	-248 Apr 02 j 19:55	8° Y 57'05	0°35'42	opposition	-242 Nov 02 j 02:07	6° B 04'55	-0°22'06
max. Earth dist.	-248 Apr 03 j 06:42	8° Y 58'37	20.78028 AU	min. Earth dist.	-242 Nov 02 j 03:31	6° B 04'46	18.42579 AU
morning rise	-248 Apr 19 j 08:58	9° Y 53'38		direct	-241 Jan 15 j 15:33	4° B 05'01	
retrograde	-248 Jul 23 j 01:37	13° Y 03'21		evening set	-241 Apr 17 j 07:02	7° B 12'52	
opposition	-248 Oct 07 j 21:43	11° Y 02'42	-0°38'25				
min. Earth dist.	-248 Oct 07 j 12:32	11° Y 03'39	18.75641 AU	conjunction	-241 May 03 j 23:02	8° B 10'54	-0°18'29
direct	-248 Dec 21 j 13:22	9° Y 04'32		minimum elong	-241 May 03 j 23:02	8° B 10'54	0°18'29
evening set	-247 Mar 21 j 20:53	12° Y 06'35		max. Earth dist.	-241 May 03 j 19:32	8° B 10'24	20.39421 AU
				morning rise	-241 May 20 j 16:53	9° B 09'14	
conjunction	-247 Apr 07 j 07:31	13° Y 02'54	-0°33'45	retrograde	-241 Aug 22 j 22:43	12° B 22'27	
minimum elong	-247 Apr 07 j 07:31	13° Y 02'54	0°33'46	opposition	-241 Nov 06 j 12:50	10° B 21'10	-0°18'47
max. Earth dist.	-247 Apr 07 j 16:20	13° Y 04'10	20.73187 AU	min. Earth dist.	-241 Nov 06 j 16:55	10° B 20'44	18.36179 AU
morning rise	-247 Apr 23 j 21:27	13° Y 59'42		direct	-240 Jan 20 j 01:31	8° B 20'54	
retrograde	-247 Jul 27 j 12:15	17° Y 09'51		evening set	-240 Apr 20 j 23:46	11° B 29'50	
opposition	-247 Oct 12 j 05:23	15° Y 09'06	-0°36'10				
min. Earth dist.	-247 Oct 11 j 22:38	15° Y 09'48	18.70693 AU	conjunction	-240 May 07 j 16:28	12° B 28'10	-0°15'26
direct	-247 Dec 25 j 19:23	13° Y 10'39		minimum elong	-240 May 07 j 16:28	12° B 28'10	0°15'26
evening set	-246 Mar 26 j 08:14	16° Y 13'32		behind sun begin	-240 May 07 j 15:06	12° B 27'58	
				behind sun end	-240 May 07 j 17:51	12° B 28'22	
conjunction	-246 Apr 11 j 19:58	17° Y 10'07	-0°31'37	max. Earth dist.	-240 May 07 j 10:17	12° B 27'16	20.32921 AU
minimum elong	-246 Apr 11 j 19:58	17° Y 10'07	0°31'38	morning rise	-240 May 24 j 10:51	13° B 26'46	

Attention, astronomical year style is used: The year -240 in astronomical counting style is the year 241 BCE in historical counting style.

	-240 Jun 22 j 17:50	15°♄		min. Earth dist.	-235 Dec 02 j 06:21	6°♄31'50	17.95839 AU
retrograde	-240 Aug 26 j 15:07	16°♄40'31		direct	-234 Feb 14 j 14:06	4°♄30'28	
	-240 Nov 01 j 17:47	15°♄		evening set	-234 May 18 j 23:07	7°♄46'40	
opposition	-240 Nov 09 j 23:56	14°♄39'04	-0°15'21				
min. Earth dist.	-240 Nov 10 j 05:16	14°♄38'30	18.29576 AU	conjunction	-234 Jun 04 j 18:26	8°♄46'42	0°04'34
direct	-239 Jan 23 j 14:49	12°♄38'22		minimum elong	-234 Jun 04 j 18:27	8°♄46'43	0°04'35
	-239 Apr 11 j 05:02	15°♄		behind sun begin	-234 Jun 04 j 11:48	8°♄45'44	
evening set	-239 Apr 25 j 17:33	15°♄48'27		behind sun end	-234 Jun 05 j 01:05	8°♄47'41	
				max. Earth dist.	-234 Jun 04 j 00:19	8°♄44'00	19.92621 AU
conjunction	-239 May 12 j 10:58	16°♄47'05	-0°12'17	morning rise	-234 Jun 21 j 13:39	9°♄46'45	
minimum elong	-239 May 12 j 10:58	16°♄47'05	0°12'18	retrograde	-234 Sep 22 j 20:28	13°♄03'41	
behind sun begin	-239 May 12 j 06:35	16°♄46'27		opposition	-234 Dec 06 j 07:17	11°♄01'27	0°06'54
behind sun end	-239 May 12 j 15:21	16°♄47'42		min. Earth dist.	-234 Dec 06 j 22:22	10°♄59'49	17.89449 AU
max. Earth dist.	-239 May 12 j 03:00	16°♄45'55	20.26229 AU	direct	-233 Feb 19 j 07:17	8°♄58'12	
morning rise	-239 May 29 j 05:37	17°♄45'56		evening set	-233 May 23 j 21:54	12°♄15'42	
retrograde	-239 Aug 31 j 05:39	21°♄00'11					
opposition	-239 Nov 14 j 11:36	18°♄58'36	-0°11'48	conjunction	-233 Jun 09 j 17:30	13°♄16'00	0°07'58
min. Earth dist.	-239 Nov 14 j 19:27	18°♄57'45	18.22820 AU	minimum elong	-233 Jun 09 j 17:31	13°♄16'00	0°07'58
direct	-238 Jan 28 j 02:20	16°♄57'27		behind sun begin	-233 Jun 09 j 11:28	13°♄15'07	
evening set	-238 Apr 30 j 12:15	20°♄08'42		behind sun end	-233 Jun 09 j 23:33	13°♄16'53	
				max. Earth dist.	-233 Jun 08 j 23:01	13°♄13'13	19.86341 AU
conjunction	-238 May 17 j 06:11	21°♄07'37	-0°09'03	morning rise	-233 Jun 26 j 12:20	14°♄16'15	
minimum elong	-238 May 17 j 06:11	21°♄07'37	0°09'03	retrograde	-233 Sep 27 j 15:33	17°♄33'43	
behind sun begin	-238 May 17 j 00:27	21°♄06'48		opposition	-233 Dec 10 j 23:03	15°♄31'28	0°10'41
behind sun end	-238 May 17 j 11:55	21°♄08'27		min. Earth dist.	-233 Dec 11 j 15:18	15°♄29'42	17.83299 AU
max. Earth dist.	-238 May 16 j 19:26	21°♄06'03	20.19437 AU	direct	-232 Feb 24 j 00:48	13°♄27'53	
morning rise	-238 Jun 03 j 01:14	22°♄06'44		evening set	-232 May 27 j 21:32	16°♄46'41	
retrograde	-238 Sep 04 j 22:58	25°♄21'30					
opposition	-238 Nov 18 j 23:49	23°♄19'44	-0°08'09	conjunction	-232 Jun 13 j 17:02	17°♄47'13	0°11'20
min. Earth dist.	-238 Nov 19 j 08:54	23°♄18'46	18.16002 AU	minimum elong	-232 Jun 13 j 17:02	17°♄47'13	0°11'20
direct	-237 Feb 01 j 17:18	21°♄18'09		behind sun begin	-232 Jun 13 j 12:09	17°♄46'30	
evening set	-237 May 05 j 07:37	24°♄30'36		behind sun end	-232 Jun 13 j 21:54	17°♄47'56	
				max. Earth dist.	-232 Jun 12 j 20:00	17°♄44'03	19.80331 AU
conjunction	-237 May 22 j 02:07	25°♄29'49	-0°05'45	morning rise	-232 Jun 30 j 11:46	18°♄47'41	
minimum elong	-237 May 22 j 02:06	25°♄29'49	0°05'45	retrograde	-232 Oct 01 j 11:31	22°♄05'43	
behind sun begin	-237 May 21 j 19:37	25°♄28'52		opposition	-232 Dec 14 j 15:33	20°♄03'27	0°14'25
behind sun end	-237 May 22 j 08:35	25°♄30'45		min. Earth dist.	-232 Dec 15 j 09:07	20°♄01'32	17.77430 AU
max. Earth dist.	-237 May 21 j 14:08	25°♄28'03	20.12597 AU	direct	-231 Feb 27 j 19:18	17°♄59'33	
morning rise	-237 Jun 07 j 21:09	26°♄29'09		evening set	-231 Jun 01 j 22:03	21°♄19'39	
retrograde	-237 Sep 09 j 14:24	29°♄44'28					
opposition	-237 Nov 23 j 12:43	27°♄42'33	-0°04'26	conjunction	-231 Jun 18 j 17:40	22°♄20'26	0°14'40
min. Earth dist.	-237 Nov 23 j 23:52	27°♄41'21	18.09175 AU	minimum elong	-231 Jun 18 j 17:40	22°♄20'26	0°14'40
direct	-236 Feb 06 j 06:37	25°♄40'31		behind sun begin	-231 Jun 18 j 15:07	22°♄20'03	
evening set	-236 May 09 j 03:57	28°♄54'12		behind sun end	-231 Jun 18 j 20:12	22°♄20'48	
				max. Earth dist.	-231 Jun 17 j 20:23	22°♄17'12	19.74585 AU
conjunction	-236 May 25 j 22:42	29°♄53'41	-0°02'23	morning rise	-231 Jul 05 j 11:51	23°♄21'04	
minimum elong	-236 May 25 j 22:44	29°♄53'41	0°02'22	retrograde	-231 Oct 06 j 08:34	26°♄39'37	
behind sun begin	-236 May 25 j 15:57	29°♄52'42		opposition	-231 Dec 19 j 08:45	24°♄37'23	0°18'06
behind sun end	-236 May 26 j 05:30	29°♄54'40		min. Earth dist.	-231 Dec 20 j 03:22	24°♄35'22	17.71812 AU
max. Earth dist.	-236 May 25 j 08:05	29°♄51'31	20.05810 AU	direct	-230 Mar 04 j 14:44	22°♄33'13	
	-236 May 27 j 17:08	0°♄		evening set	-230 Jun 06 j 23:36	25°♄54'35	
morning rise	-236 Jun 11 j 18:02	0°♄53'17					
retrograde	-236 Sep 13 j 08:33	4°♄09'07		conjunction	-230 Jun 23 j 18:51	26°♄55'35	0°17'56
opposition	-236 Nov 27 j 02:09	2°♄07'04	-0°00'41	minimum elong	-230 Jun 23 j 18:51	26°♄55'35	0°17'56
min. Earth dist.	-236 Nov 27 j 14:27	2°♄05'44	18.02442 AU	max. Earth dist.	-230 Jun 22 j 19:00	26°♄51'57	19.69092 AU
asc. node	-235 Feb 01 j 16:26	0°♄06'25		morning rise	-230 Jul 10 j 12:40	27°♄56'23	
direct	-235 Feb 09 j 22:39	0°♄04'35			-230 Aug 18 j 08:57	0°♄	
evening set	-235 May 14 j 01:00	3°♄19'31		retrograde	-230 Oct 11 j 05:58	1°♄15'28	
					-230 Dec 05 j 17:32	30°♄♄	
conjunction	-235 May 30 j 20:15	4°♄19'18	0°01'08	opposition	-230 Dec 24 j 02:56	29°♄13'14	0°21'42
minimum elong	-235 May 30 j 20:16	4°♄19'18	0°01'08	min. Earth dist.	-230 Dec 24 j 23:09	29°♄11'03	17.66455 AU
behind sun begin	-235 May 30 j 13:29	4°♄18'19		direct	-229 Mar 09 j 10:40	27°♄08'47	
behind sun end	-235 May 31 j 03:03	4°♄20'17			-229 Jun 03 j 03:35	0°♄	
max. Earth dist.	-235 May 30 j 04:50	4°♄17'00	19.99128 AU	evening set	-229 Jun 12 j 01:31	0°♄31'22	
morning rise	-235 Jun 16 j 15:26	5°♄19'07					
retrograde	-235 Sep 18 j 01:40	8°♄35'30		conjunction	-229 Jun 28 j 20:37	1°♄32'33	0°21'06
opposition	-235 Dec 01 j 16:24	6°♄33'20	0°03'06	minimum elong	-229 Jun 28 j 20:37	1°♄32'33	0°21'06

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Attention, astronomical year style is used: The year -229 in astronomical counting style is the year 230 BCE in historical counting style.

max. Earth dist.	-229 Jun 27 j 20:33	1° $\overline{28}$ '53	19.63844 AU	direct	-222 Apr 11 j 07:48	29° $\overline{56}$ '52	
morning rise	-229 Jul 15 j 13:43	2° $\overline{33}$ '31			-222 Apr 22 j 03:50	0° $\overline{0}$	
retrograde	-229 Oct 16 j 04:35	5° $\overline{53}$ '03		evening set	-222 Jul 16 j 04:33	3° $\overline{0}$ 25'49	
opposition	-229 Dec 28 j 21:54	3° $\overline{50}$ '51	0°25'11				
min. Earth dist.	-229 Dec 29 j 18:43	3° $\overline{48}$ '35	17.61328 AU	conjunction	-222 Aug 01 j 19:05	4° $\overline{0}$ 27'39	0°38'41
direct	-228 Mar 13 j 07:41	1° $\overline{46}$ '07		minimum elong	-222 Aug 01 j 19:05	4° $\overline{0}$ 27'39	0°38'41
evening set	-228 Jun 16 j 04:22	5° $\overline{09}$ '51		max. Earth dist.	-222 Jul 31 j 14:35	4° $\overline{0}$ 23'12	19.36089 AU
				morning rise	-222 Aug 18 j 05:55	5° $\overline{0}$ 28'59	
conjunction	-228 Jul 02 j 22:57	6° $\overline{11}$ '13	0°24'10	retrograde	-222 Nov 17 j 20:14	8° $\overline{0}$ 50'28	
minimum elong	-228 Jul 02 j 22:57	6° $\overline{11}$ '13	0°24'10	opposition	-221 Jan 30 j 05:24	6° $\overline{0}$ 48'03	0°44'02
max. Earth dist.	-228 Jul 01 j 20:35	6° $\overline{07}$ '10	19.58837 AU	min. Earth dist.	-221 Jan 31 j 06:16	6° $\overline{0}$ 45'20	17.35038 AU
morning rise	-228 Jul 19 j 15:28	7° $\overline{12}$ '18		direct	-221 Apr 16 j 09:24	4° $\overline{0}$ 41'33	
retrograde	-228 Oct 20 j 02:58	10° $\overline{32}$ '16		evening set	-221 Jul 21 j 08:52	8° $\overline{0}$ 11'02	
opposition	-227 Jan 01 j 17:33	8° $\overline{30}$ '03	0°28'31				
min. Earth dist.	-227 Jan 02 j 16:04	8° $\overline{27}$ '35	17.56464 AU	conjunction	-221 Aug 06 j 22:19	9° $\overline{0}$ 12'51	0°40'17
direct	-227 Mar 18 j 05:11	6° $\overline{25}$ '00		minimum elong	-221 Aug 06 j 22:19	9° $\overline{0}$ 12'51	0°40'17
evening set	-227 Jun 21 j 07:38	9° $\overline{49}$ '51		max. Earth dist.	-221 Aug 05 j 17:52	9° $\overline{0}$ 08'23	19.34044 AU
max. Earth dist.	-227 Jul 06 j 23:11	10° $\overline{47}$ '14	19.54102 AU	morning rise	-221 Aug 23 j 08:11	10° $\overline{0}$ 14'08	
				retrograde	-221 Nov 22 j 20:31	13° $\overline{0}$ 35'44	
conjunction	-227 Jul 08 j 01:54	10° $\overline{51}$ '21	0°27'04	opposition	-220 Feb 04 j 05:12	11° $\overline{0}$ 33'20	0°45'41
minimum elong	-227 Jul 08 j 01:53	10° $\overline{51}$ '21	0°27'04	min. Earth dist.	-220 Feb 05 j 04:37	11° $\overline{0}$ 30'47	17.33306 AU
morning rise	-227 Jul 24 j 17:36	11° $\overline{52}$ '32		direct	-220 Apr 20 j 13:13	9° $\overline{0}$ 26'44	
retrograde	-227 Oct 25 j 02:11	15° $\overline{12}$ '52		evening set	-220 Jul 25 j 13:11	12° $\overline{0}$ 56'40	
opposition	-226 Jan 06 j 13:58	13° $\overline{10}$ '38	0°31'41	max. Earth dist.	-220 Aug 09 j 22:45	13° $\overline{0}$ 54'12	19.32627 AU
min. Earth dist.	-226 Jan 07 j 12:39	13° $\overline{08}$ '09	17.51869 AU				
direct	-226 Mar 23 j 04:05	11° $\overline{05}$ '19		conjunction	-220 Aug 11 j 01:44	13° $\overline{0}$ 58'26	0°41'36
evening set	-226 Jun 26 j 11:26	14° $\overline{31}$ '09		minimum elong	-220 Aug 11 j 01:44	13° $\overline{0}$ 58'26	0°41'36
max. Earth dist.	-226 Jul 12 j 00:44	15° $\overline{28}$ '24	19.49658 AU	morning rise	-220 Aug 27 j 10:18	14° $\overline{0}$ 59'39	
					-220 Aug 27 j 12:34	15° $\overline{0}$	
conjunction	-226 Jul 13 j 05:01	15° $\overline{32}$ '47	0°29'49	retrograde	-220 Nov 26 j 19:23	18° $\overline{0}$ 21'19	
minimum elong	-226 Jul 13 j 05:01	15° $\overline{32}$ '47	0°29'50	opposition	-219 Feb 08 j 05:30	16° $\overline{0}$ 18'59	0°47'00
morning rise	-226 Jul 29 j 19:53	16° $\overline{34}$ '02		min. Earth dist.	-219 Feb 09 j 05:14	16° $\overline{0}$ 16'24	17.32214 AU
retrograde	-226 Oct 30 j 00:35	19° $\overline{54}$ '42			-219 Mar 12 j 20:35	15° $\overline{0}$ 00	
opposition	-225 Jan 11 j 11:08	17° $\overline{52}$ '26	0°34'39	direct	-219 Apr 25 j 15:02	14° $\overline{0}$ 12'21	
min. Earth dist.	-225 Jan 12 j 11:21	17° $\overline{49}$ '47	17.47610 AU		-219 Jun 07 j 12:12	15° $\overline{0}$	
direct	-225 Mar 28 j 03:07	15° $\overline{46}$ '49		evening set	-219 Jul 30 j 17:33	17° $\overline{0}$ 42'38	
evening set	-225 Jul 01 j 15:26	19° $\overline{13}$ '35		max. Earth dist.	-219 Aug 15 j 01:50	18° $\overline{0}$ 40'05	19.31868 AU
max. Earth dist.	-225 Jul 17 j 03:59	20° $\overline{10}$ '54	19.45586 AU				
				conjunction	-219 Aug 16 j 04:53	18° $\overline{0}$ 44'20	0°42'39
conjunction	-225 Jul 18 j 08:25	20° $\overline{15}$ '18	0°32'22	minimum elong	-219 Aug 16 j 04:53	18° $\overline{0}$ 44'20	0°42'38
minimum elong	-225 Jul 18 j 08:24	20° $\overline{15}$ '18	0°32'22	morning rise	-219 Sep 01 j 12:25	19° $\overline{0}$ 45'28	
morning rise	-225 Aug 03 j 22:24	21° $\overline{16}$ '37		retrograde	-219 Dec 01 j 20:21	23° $\overline{0}$ 07'11	
retrograde	-225 Nov 04 j 00:02	24° $\overline{37}$ '34		opposition	-218 Feb 13 j 06:13	21° $\overline{0}$ 04'57	0°48'00
opposition	-224 Jan 16 j 08:45	22° $\overline{35}$ '14	0°37'23	min. Earth dist.	-218 Feb 14 j 04:24	21° $\overline{0}$ 02'32	17.31771 AU
min. Earth dist.	-224 Jan 17 j 08:33	22° $\overline{32}$ '38	17.43737 AU	direct	-218 Apr 30 j 18:57	18° $\overline{0}$ 58'21	
direct	-224 Apr 01 j 04:16	20° $\overline{29}$ '22		evening set	-218 Aug 04 j 21:27	22° $\overline{0}$ 28'52	
evening set	-224 Jul 05 j 19:39	23° $\overline{56}$ '57		max. Earth dist.	-218 Aug 20 j 06:54	23° $\overline{0}$ 26'34	19.31732 AU
max. Earth dist.	-224 Jul 21 j 06:56	24° $\overline{54}$ '14	19.41923 AU				
				conjunction	-218 Aug 21 j 07:48	23° $\overline{0}$ 30'29	0°43'24
conjunction	-224 Jul 22 j 11:54	24° $\overline{58}$ '44	0°34'43	minimum elong	-218 Aug 21 j 07:48	23° $\overline{0}$ 30'29	0°43'25
minimum elong	-224 Jul 22 j 11:54	24° $\overline{58}$ '44	0°34'43	morning rise	-218 Sep 06 j 13:58	24° $\overline{0}$ 31'31	
morning rise	-224 Aug 08 j 00:54	26° $\overline{00}$ '05		retrograde	-218 Dec 06 j 19:59	27° $\overline{0}$ 53'14	
retrograde	-224 Nov 07 j 22:11	29° $\overline{21}$ '15		opposition	-217 Feb 18 j 07:28	25° $\overline{0}$ 51'08	0°48'41
opposition	-223 Jan 20 j 07:09	27° $\overline{18}$ '53	0°39'53	min. Earth dist.	-217 Feb 19 j 05:34	25° $\overline{0}$ 48'44	17.31933 AU
min. Earth dist.	-223 Jan 21 j 08:13	27° $\overline{16}$ '08	17.40313 AU	direct	-217 May 05 j 21:25	23° $\overline{0}$ 44'39	
direct	-223 Apr 06 j 04:51	25° $\overline{12}$ '46		evening set	-217 Aug 10 j 01:20	27° $\overline{0}$ 15'17	
evening set	-223 Jul 11 j 00:06	28° $\overline{41}$ '05		max. Earth dist.	-217 Aug 25 j 09:26	28° $\overline{0}$ 12'51	19.32192 AU
max. Earth dist.	-223 Jul 26 j 10:24	29° $\overline{38}$ '22	19.38743 AU				
				conjunction	-217 Aug 26 j 10:21	28° $\overline{0}$ 16'47	0°43'51
conjunction	-223 Jul 27 j 15:29	29° $\overline{42}$ '54	0°36'49	minimum elong	-217 Aug 26 j 10:21	28° $\overline{0}$ 16'47	0°43'51
minimum elong	-223 Jul 27 j 15:29	29° $\overline{42}$ '54	0°36'50	morning rise	-217 Sep 11 j 15:30	29° $\overline{0}$ 17'42	
	-223 Aug 01 j 05:00	0° $\overline{0}$			-217 Sep 23 j 08:56	0° $\overline{0}$ 00	
morning rise	-223 Aug 13 j 03:32	0° $\overline{0}$ 44'15		retrograde	-217 Dec 11 j 20:48	2° $\overline{0}$ 39'22	
retrograde	-223 Nov 12 j 21:47	4° $\overline{05}$ '36		opposition	-216 Feb 23 j 08:48	0° $\overline{0}$ 37'25	0°49'02
opposition	-222 Jan 25 j 05:51	2° $\overline{03}$ '12	0°42'06	min. Earth dist.	-216 Feb 24 j 05:33	0° $\overline{0}$ 35'10	17.32672 AU
min. Earth dist.	-222 Jan 26 j 05:59	2° $\overline{00}$ '33	17.37390 AU		-216 Mar 08 j 23:22	30° $\overline{0}$ 00	
	-222 Mar 31 j 10:53	30° $\overline{0}$ 00		direct	-216 May 10 j 00:55	28° $\overline{0}$ 31'02	

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Attention, astronomical year style is used: The year -216 in astronomical counting style is the year 217 BCE in historical counting style.

	-216 Jul 08 j 13:13	0° $\overline{00}$		minimum elong	-210 Sep 28 j 14:15	1° $\underline{028}$ '08	0°38'42
evening set	-216 Aug 14 j 04:43	2° $\overline{00}$ '142		max. Earth dist.	-210 Sep 28 j 00:12	1° $\underline{025}$ '55	19.48558 AU
				morning rise	-210 Oct 14 j 11:36	2° $\underline{027}$ '41	
conjunction	-216 Aug 30 j 12:45	3° $\overline{00}$ '03'03	0°44'00	retrograde	-209 Jan 13 j 14:00	5° $\underline{047}$ '34	
minimum elong	-216 Aug 30 j 12:45	3° $\overline{00}$ '03'03	0°44'01	opposition	-209 Mar 28 j 22:09	3° $\underline{046}$ '18	0°42'09
max. Earth dist.	-216 Aug 29 j 14:04	2° $\overline{00}$ '59'29	19.33190 AU	min. Earth dist.	-209 Mar 29 j 09:47	3° $\underline{045}$ '03	17.50526 AU
morning rise	-216 Sep 15 j 16:34	4° $\overline{00}$ '03'49		direct	-209 Jun 14 j 03:24	1° $\underline{041}$ '16	
retrograde	-216 Dec 15 j 21:00	7° $\overline{00}$ '25'23		evening set	-209 Sep 17 j 12:01	5° $\underline{040}$ '27	
opposition	-215 Feb 27 j 10:39	5° $\overline{00}$ '23'35	0°49'02				
min. Earth dist.	-215 Feb 28 j 06:54	5° $\overline{00}$ '21'24	17.33911 AU	conjunction	-209 Oct 03 j 11:48	6° $\underline{040}$ '15	0°36'53
direct	-215 May 15 j 04:12	3° $\overline{00}$ '17'22		minimum elong	-209 Oct 03 j 11:48	6° $\underline{040}$ '15	0°36'52
evening set	-215 Aug 19 j 07:54	6° $\overline{00}$ '47'55		max. Earth dist.	-209 Oct 02 j 23:40	6° $\underline{040}$ '21	19.52585 AU
				morning rise	-209 Oct 19 j 08:13	7° $\underline{040}$ '734	
conjunction	-215 Sep 04 j 14:31	7° $\overline{00}$ '49'05	0°43'51	retrograde	-208 Jan 18 j 09:25	10° $\underline{042}$ '700	
minimum elong	-215 Sep 04 j 14:31	7° $\overline{00}$ '49'05	0°43'51	opposition	-208 Apr 01 j 23:18	8° $\underline{042}$ '547	0°39'58
max. Earth dist.	-215 Sep 03 j 15:56	7° $\overline{00}$ '45'31	19.34673 AU	min. Earth dist.	-208 Apr 02 j 09:54	8° $\underline{042}$ '39	17.54783 AU
morning rise	-215 Sep 20 j 17:17	8° $\overline{00}$ '49'42		direct	-208 Jun 18 j 04:35	6° $\underline{042}$ '059	
retrograde	-215 Dec 20 j 21:05	12° $\overline{00}$ '11'08		evening set	-208 Sep 21 j 09:44	9° $\underline{042}$ '17	
opposition	-214 Mar 04 j 12:37	10° $\overline{00}$ '09'27	0°48'42				
min. Earth dist.	-214 Mar 05 j 07:39	10° $\overline{00}$ '07'24	17.35631 AU	conjunction	-208 Oct 07 j 08:28	10° $\underline{042}$ '48	0°34'49
direct	-214 May 20 j 07:20	8° $\overline{00}$ '03'24		minimum elong	-208 Oct 07 j 08:28	10° $\underline{042}$ '48	0°34'49
evening set	-214 Aug 24 j 10:23	11° $\overline{00}$ '33'41		max. Earth dist.	-208 Oct 06 j 22:29	10° $\underline{042}$ '14	19.57076 AU
				morning rise	-208 Oct 23 j 04:03	11° $\underline{042}$ '51	
conjunction	-214 Sep 09 j 15:57	12° $\overline{00}$ '34'41	0°43'24	retrograde	-207 Jan 22 j 06:56	15° $\underline{042}$ '0448	
minimum elong	-214 Sep 09 j 15:57	12° $\overline{00}$ '34'41	0°43'24	opposition	-207 Apr 07 j 00:08	13° $\underline{042}$ '03'41	0°37'33
max. Earth dist.	-214 Sep 08 j 19:41	12° $\overline{00}$ '31'29	19.36617 AU	min. Earth dist.	-207 Apr 07 j 07:40	13° $\underline{042}$ '02'53	17.59490 AU
morning rise	-214 Sep 25 j 17:25	13° $\overline{00}$ '35'06		direct	-207 Jun 23 j 07:17	10° $\underline{042}$ '59'11	
retrograde	-214 Dec 25 j 21:19	16° $\overline{00}$ '56'20		evening set	-207 Sep 26 j 06:28	14° $\underline{042}$ '24'29	
opposition	-213 Mar 09 j 14:45	14° $\overline{00}$ '54'46	0°48'01				
min. Earth dist.	-213 Mar 10 j 08:38	14° $\overline{00}$ '52'51	17.37783 AU	conjunction	-207 Oct 12 j 04:11	15° $\underline{042}$ '343	0°32'33
direct	-213 May 25 j 11:42	12° $\overline{00}$ '48'55		minimum elong	-207 Oct 12 j 04:11	15° $\underline{042}$ '343	0°32'32
evening set	-213 Aug 29 j 12:16	16° $\overline{00}$ '18'48		max. Earth dist.	-207 Oct 11 j 20:49	15° $\underline{042}$ '23'4	19.62012 AU
				morning rise	-207 Oct 27 j 22:53	16° $\underline{042}$ '23'1	
conjunction	-213 Sep 14 j 16:32	17° $\overline{00}$ '19'36	0°42'39	retrograde	-206 Jan 27 j 02:00	19° $\underline{042}$ '40'59	
minimum elong	-213 Sep 14 j 16:32	17° $\overline{00}$ '19'36	0°42'40	opposition	-206 Apr 12 j 00:46	17° $\underline{042}$ '39'58	0°34'54
max. Earth dist.	-213 Sep 13 j 20:47	17° $\overline{00}$ '16'29	19.38986 AU	min. Earth dist.	-206 Apr 12 j 07:02	17° $\underline{042}$ '39'18	17.64656 AU
morning rise	-213 Sep 30 j 17:00	18° $\overline{00}$ '19'50		direct	-206 Jun 28 j 07:03	15° $\underline{042}$ '35'48	
retrograde	-213 Dec 30 j 19:43	21° $\overline{00}$ '40'48		evening set	-206 Oct 01 j 02:20	19° $\underline{042}$ '00'05	
opposition	-212 Mar 13 j 16:49	19° $\overline{00}$ '39'20	0°47'01				
min. Earth dist.	-212 Mar 14 j 09:41	19° $\overline{00}$ '37'31	17.40360 AU	conjunction	-206 Oct 16 j 23:03	19° $\underline{042}$ '59'01	0°30'05
direct	-212 May 29 j 14:42	17° $\overline{00}$ '33'39		minimum elong	-206 Oct 16 j 23:03	19° $\underline{042}$ '59'01	0°30'05
evening set	-212 Sep 02 j 13:27	21° $\overline{00}$ '03'03		max. Earth dist.	-206 Oct 16 j 17:38	19° $\underline{042}$ '58'11	19.67407 AU
				morning rise	-206 Nov 01 j 17:07	20° $\underline{042}$ '57'34	
conjunction	-212 Sep 18 j 16:39	22° $\overline{00}$ '03'37	0°41'37	retrograde	-205 Jan 31 j 22:55	24° $\underline{042}$ '15'32	
minimum elong	-212 Sep 18 j 16:39	22° $\overline{00}$ '03'37	0°41'36	opposition	-205 Apr 17 j 00:42	22° $\underline{042}$ '14'40	0°32'02
max. Earth dist.	-212 Sep 17 j 23:08	22° $\overline{00}$ '00'52	19.41769 AU	min. Earth dist.	-205 Apr 17 j 03:42	22° $\underline{042}$ '14'21	17.70246 AU
morning rise	-212 Oct 04 j 15:58	23° $\overline{00}$ '03'38		direct	-205 Jul 03 j 07:33	20° $\underline{042}$ '10'53	
retrograde	-211 Jan 03 j 19:04	26° $\overline{00}$ '24'17		evening set	-205 Oct 05 j 21:09	23° $\underline{042}$ '34'04	
opposition	-211 Mar 18 j 18:42	24° $\overline{00}$ '22'54	0°45'42				
min. Earth dist.	-211 Mar 19 j 09:49	24° $\overline{00}$ '21'17	17.43330 AU	conjunction	-205 Oct 21 j 17:06	24° $\underline{042}$ '32'44	0°27'26
direct	-211 Jun 03 j 19:55	22° $\overline{00}$ '17'26		minimum elong	-205 Oct 21 j 17:06	24° $\underline{042}$ '32'44	0°27'26
evening set	-211 Sep 07 j 13:59	25° $\overline{00}$ '46'13		max. Earth dist.	-205 Oct 21 j 14:34	24° $\underline{042}$ '32'20	19.73188 AU
				morning rise	-205 Nov 06 j 10:26	25° $\underline{042}$ '31'01	
conjunction	-211 Sep 23 j 15:56	26° $\overline{00}$ '46'32	0°40'18	retrograde	-204 Feb 05 j 17:25	28° $\underline{042}$ '48'28	
minimum elong	-211 Sep 23 j 15:56	26° $\overline{00}$ '46'32	0°40'18	opposition	-204 Apr 21 j 00:23	26° $\underline{042}$ '47'46	0°29'00
max. Earth dist.	-211 Sep 22 j 23:33	26° $\overline{00}$ '43'58	19.44950 AU	min. Earth dist.	-204 Apr 21 j 02:17	26° $\underline{042}$ '47'34	17.76194 AU
morning rise	-211 Oct 09 j 14:15	27° $\overline{00}$ '46'19		direct	-204 Jul 07 j 06:03	24° $\underline{042}$ '44'25	
	-211 Nov 20 j 00:19	0° $\underline{042}$		evening set	-204 Oct 09 j 15:16	28° $\underline{042}$ '06'29	
retrograde	-210 Jan 08 j 15:45	1° $\underline{042}$ '06'37					
	-210 Mar 01 j 16:09	30° $\overline{00}$ ' $\overline{00}$		conjunction	-204 Oct 25 j 10:15	29° $\underline{042}$ '04'50	0°24'39
opposition	-210 Mar 23 j 20:36	29° $\overline{00}$ '05'17	0°44'04	minimum elong	-204 Oct 25 j 10:15	29° $\underline{042}$ '04'50	0°24'38
min. Earth dist.	-210 Mar 24 j 10:44	29° $\overline{00}$ '03'47	17.46720 AU	max. Earth dist.	-204 Oct 25 j 09:15	29° $\underline{042}$ '04'41	19.79295 AU
direct	-210 Jun 08 j 22:37	27° $\overline{00}$ '00'02			-204 Nov 09 j 08:07	0° $\overline{042}$	
	-210 Sep 04 j 19:40	0° $\underline{042}$		morning rise	-204 Nov 10 j 03:06	0° $\overline{042}$ '02'53	
evening set	-210 Sep 12 j 13:22	0° $\underline{042}$ '28'04		retrograde	-203 Feb 09 j 13:40	3° $\overline{042}$ '19'48	
				opposition	-203 Apr 25 j 23:24	1° $\overline{042}$ '19'16	0°25'48
conjunction	-210 Sep 28 j 14:15	1° $\underline{042}$ '28'08	0°38'43	min. Earth dist.	-203 Apr 25 j 22:12	1° $\overline{042}$ '19'24	17.82426 AU

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Attention, astronomical year style is used: The year -203 in astronomical counting style is the year 204 BCE in historical counting style.

	-203 May 30 j 11:47	30° 8 ⁵		behind sun end	-198 Nov 21 j 07:18	25° 1 ⁴² '48	
direct	-203 Jul 12 j 05:17	29° 5 ¹⁶ '21		max. Earth dist.	-198 Nov 21 j 10:57	25° 1 ⁴³ '21	20.18497 AU
	-203 Aug 22 j 14:26	0° 1 ¹		morning rise	-198 Dec 06 j 15:52	26° 1 ³⁸ '25	
evening set	-203 Oct 14 j 08:26	2° 1 ³⁷ '16		retrograde	-197 Mar 08 j 18:46	29° 1 ⁵² '01	
				opposition	-197 May 24 j 06:09	27° 1 ⁵² '15	0°04'27
conjunction	-203 Oct 30 j 02:45	3° 1 ³⁵ '20	0°21'43	min. Earth dist.	-197 May 23 j 18:41	27° 1 ⁵³ '26	18.21706 AU
minimum elong	-203 Oct 30 j 02:45	3° 1 ³⁵ '20	0°21'43	direct	-197 Aug 09 j 08:28	25° 1 ⁵¹ '46	
max. Earth dist.	-203 Oct 30 j 04:42	3° 1 ³⁵ '38	19.85641 AU	evening set	-197 Nov 09 j 21:38	29° 1 ⁰⁵ '15	
morning rise	-203 Nov 14 j 18:56	4° 1 ³³ '07					
retrograde	-202 Feb 14 j 06:56	7° 1 ⁴⁹ '30		conjunction	-197 Nov 25 j 12:48	0° 7 ⁰¹ '37	0°02'24
opposition	-202 Apr 30 j 22:12	5° 1 ⁴⁹ '09	0°22'27	minimum elong	-197 Nov 25 j 12:48	0° 7 ⁰¹ '37	0°02'24
min. Earth dist.	-202 Apr 30 j 19:58	5° 1 ⁴⁹ '23	17.88867 AU	behind sun begin	-197 Nov 25 j 06:16	0° 7 ⁰⁰ '40	
direct	-202 Jul 17 j 03:06	3° 1 ⁴⁶ '41		behind sun end	-197 Nov 25 j 19:20	0° 7 ⁰² '35	
evening set	-202 Oct 19 j 00:44	7° 1 ⁰⁶ '23			-197 Nov 25 j 02:00	0° 7 ⁰	
				max. Earth dist.	-197 Nov 26 j 01:27	0° 7 ⁰³ '31	20.24915 AU
conjunction	-202 Nov 03 j 18:13	8° 1 ⁰⁴ '09	0°18'40	morning rise	-197 Dec 11 j 03:25	0° 7 ⁵⁷ '57	
minimum elong	-202 Nov 03 j 18:14	8° 1 ⁰⁴ '09	0°18'39	retrograde	-196 Mar 12 j 07:47	4° 7 ¹⁰ '58	
max. Earth dist.	-202 Nov 03 j 21:19	8° 1 ⁰⁴ '37	19.92162 AU	opposition	-196 May 28 j 00:49	2° 7 ¹¹ '15	0°00'46
morning rise	-202 Nov 19 j 10:07	9° 1 ⁰¹ '41		min. Earth dist.	-196 May 27 j 12:10	2° 7 ¹² '33	18.28073 AU
retrograde	-201 Feb 19 j 02:09	12° 1 ¹⁷ '33		desc. node	-196 Aug 12 j 18:31	0° 7 ¹¹ '06	
opposition	-201 May 05 j 20:14	10° 1 ¹⁷ '20	0°18'59	direct	-196 Aug 13 j 02:26	0° 7 ¹¹ '06	
min. Earth dist.	-201 May 05 j 15:12	10° 1 ¹⁷ '52	17.95441 AU	evening set	-196 Nov 13 j 08:48	3° 7 ²³ '19	
direct	-201 Jul 22 j 01:04	8° 1 ¹⁵ '19					
evening set	-201 Oct 23 j 16:13	11° 1 ³³ '48		conjunction	-196 Nov 28 j 23:28	4° 7 ¹⁹ '25	-0°01'00
				minimum elong	-196 Nov 28 j 23:29	4° 7 ¹⁹ '25	0°01'00
conjunction	-201 Nov 08 j 09:12	12° 1 ³¹ '17	0°15'31	behind sun begin	-196 Nov 28 j 16:57	4° 7 ¹⁸ '28	
minimum elong	-201 Nov 08 j 09:12	12° 1 ³¹ '17	0°15'31	behind sun end	-196 Nov 29 j 06:00	4° 7 ²⁰ '23	
behind sun begin	-201 Nov 08 j 07:10	12° 1 ³⁰ '58		max. Earth dist.	-196 Nov 29 j 12:47	4° 7 ²¹ '25	20.31242 AU
behind sun end	-201 Nov 08 j 11:14	12° 1 ³¹ '35		morning rise	-196 Dec 14 j 14:16	5° 7 ¹⁵ '33	
max. Earth dist.	-201 Nov 08 j 15:05	12° 1 ³² '10	19.98766 AU	retrograde	-195 Mar 16 j 22:11	8° 7 ²⁸ '00	
morning rise	-201 Nov 24 j 00:33	13° 1 ²⁸ '33		opposition	-195 Jun 01 j 18:42	6° 7 ²⁸ '19	-0°02'54
	-201 Dec 21 j 09:20	15° 1 ¹		min. Earth dist.	-195 Jun 01 j 04:06	6° 7 ²⁹ '48	18.34373 AU
retrograde	-200 Feb 23 j 18:01	16° 1 ⁴³ '51		direct	-195 Aug 17 j 18:56	4° 7 ²⁸ '28	
	-200 May 03 j 03:49	15° 8 ¹		evening set	-195 Nov 17 j 19:01	7° 7 ³⁹ '27	
opposition	-200 May 09 j 17:40	14° 1 ⁴³ '48	0°15'26				
min. Earth dist.	-200 May 09 j 11:45	14° 1 ⁴⁴ '25	18.02063 AU	conjunction	-195 Dec 03 j 09:39	8° 7 ³⁵ '20	-0°04'19
direct	-200 Jul 25 j 21:45	12° 1 ⁴² '12		minimum elong	-195 Dec 03 j 09:39	8° 7 ³⁵ '20	0°04'20
	-200 Oct 10 j 00:34	15° 1 ¹		behind sun begin	-195 Dec 03 j 03:13	8° 7 ³⁴ '23	
evening set	-200 Oct 27 j 07:01	15° 1 ⁵⁹ '27		behind sun end	-195 Dec 03 j 16:04	8° 7 ³⁶ '16	
				max. Earth dist.	-195 Dec 04 j 01:50	8° 7 ³⁷ '45	20.37505 AU
conjunction	-200 Nov 11 j 23:15	16° 1 ⁵⁶ '39	0°12'18	morning rise	-195 Dec 19 j 00:19	9° 7 ³¹ '14	
minimum elong	-200 Nov 11 j 23:16	16° 1 ⁵⁶ '39	0°12'17	retrograde	-194 Mar 21 j 10:20	12° 7 ⁴³ '08	
behind sun begin	-200 Nov 11 j 18:49	16° 1 ⁵⁵ '59		opposition	-194 Jun 06 j 11:48	10° 7 ⁴³ '31	-0°06'31
behind sun end	-200 Nov 12 j 03:42	16° 1 ⁵⁷ '18		min. Earth dist.	-194 Jun 05 j 19:38	10° 7 ⁴⁵ '09	18.40610 AU
max. Earth dist.	-200 Nov 12 j 05:52	16° 1 ⁵⁷ '38	20.05395 AU	direct	-194 Aug 22 j 11:04	8° 7 ⁴³ '59	
morning rise	-200 Nov 27 j 14:27	17° 1 ⁵³ '40		evening set	-194 Nov 22 j 04:35	11° 7 ⁵³ '47	
retrograde	-199 Feb 27 j 11:53	21° 1 ⁰⁸ '25					
opposition	-199 May 14 j 14:33	19° 1 ⁰⁸ '29	0°11'49	conjunction	-194 Dec 07 j 18:54	12° 7 ⁴⁹ '25	-0°07'32
min. Earth dist.	-199 May 14 j 06:10	19° 1 ⁰⁹ '20	18.08682 AU	minimum elong	-194 Dec 07 j 18:54	12° 7 ⁴⁹ '25	0°07'32
direct	-199 Jul 30 j 18:20	17° 1 ⁰⁷ '16		behind sun begin	-194 Dec 07 j 12:56	12° 7 ⁴⁸ '33	
evening set	-199 Oct 31 j 20:41	20° 1 ²³ '17		behind sun end	-194 Dec 08 j 00:52	12° 7 ⁵⁰ '17	
				max. Earth dist.	-194 Dec 08 j 11:45	12° 7 ⁵¹ '56	20.43716 AU
conjunction	-199 Nov 16 j 12:34	21° 1 ²⁰ '11	0°09'02	morning rise	-194 Dec 23 j 09:54	13° 7 ⁴⁵ '08	
minimum elong	-199 Nov 16 j 12:34	21° 1 ²⁰ '11	0°09'02	retrograde	-193 Mar 25 j 23:02	16° 7 ⁵⁶ '31	
behind sun begin	-199 Nov 16 j 06:57	21° 1 ¹⁹ '21		min. Earth dist.	-193 Jun 10 j 10:16	14° 7 ⁵⁸ '45	18.46803 AU
behind sun end	-199 Nov 16 j 18:11	21° 1 ²¹ '01		opposition	-193 Jun 11 j 04:06	14° 7 ⁵⁶ '57	-0°10'03
max. Earth dist.	-199 Nov 16 j 21:57	21° 1 ²¹ '36	20.11983 AU	direct	-193 Aug 27 j 00:45	12° 7 ⁵⁷ '44	
morning rise	-199 Dec 02 j 03:22	22° 1 ¹⁶ '58		evening set	-193 Nov 26 j 13:21	16° 7 ⁰⁶ '25	
retrograde	-198 Mar 04 j 02:28	25° 1 ³¹ '09					
opposition	-198 May 19 j 10:51	23° 1 ³¹ '19	0°08'08	conjunction	-193 Dec 12 j 03:46	17° 7 ⁰¹ '50	-0°10'41
min. Earth dist.	-198 May 19 j 01:27	23° 1 ³² '17	18.15233 AU	minimum elong	-193 Dec 12 j 03:45	17° 7 ⁰¹ '50	0°10'42
direct	-198 Aug 04 j 13:48	21° 1 ³⁰ '30		behind sun begin	-193 Dec 11 j 22:40	17° 7 ⁰¹ '06	
evening set	-198 Nov 05 j 09:43	24° 1 ⁴⁵ '14		behind sun end	-193 Dec 12 j 08:51	17° 7 ⁰² '34	
				max. Earth dist.	-193 Dec 12 j 23:16	17° 7 ⁰⁴ '44	20.49862 AU
conjunction	-198 Nov 21 j 01:02	25° 1 ⁴¹ '52	0°05'44	morning rise	-193 Dec 27 j 18:45	17° 7 ⁵⁷ '22	
minimum elong	-198 Nov 21 j 01:01	25° 1 ⁴¹ '52	0°05'44	retrograde	-192 Mar 29 j 10:42	21° 7 ⁰⁸ '16	
behind sun begin	-198 Nov 20 j 18:45	25° 1 ⁴⁰ '56		opposition	-192 Jun 14 j 19:32	19° 7 ⁰⁸ '47	-0°13'31

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Attention, astronomical year style is used: The year -192 in astronomical counting style is the year 193 BCE in historical counting style.

min. Earth dist.	-192 Jun 14 j 00:07	19° \mathring{A} 10'45	18.52901 AU	evening set	-186 Dec 24 j 13:09	14° \mathring{B} 57'51	
direct	-192 Aug 30 j 15:09	17° \mathring{A} 09'55					
evening set	-192 Nov 29 j 21:40	20° \mathring{A} 17'31		conjunction	-185 Jan 09 j 04:46	15° \mathring{B} 52'10	-0°30'02
				minimum elong	-185 Jan 09 j 04:46	15° \mathring{B} 52'10	0°30'02
conjunction	-192 Dec 15 j 11:54	21° \mathring{A} 12'44	-0°13'46	max. Earth dist.	-185 Jan 10 j 05:47	15° \mathring{B} 55'49	20.86963 AU
minimum elong	-192 Dec 15 j 11:54	21° \mathring{A} 12'43	0°13'46	morning rise	-185 Jan 24 j 23:01	16° \mathring{B} 46'52	
behind sun begin	-192 Dec 15 j 08:17	21° \mathring{A} 12'12		retrograde	-185 Apr 28 j 14:30	19° \mathring{B} 55'10	
behind sun end	-192 Dec 15 j 15:30	21° \mathring{A} 13'15		opposition	-185 Jul 15 j 14:45	17° \mathring{B} 56'14	-0°34'28
max. Earth dist.	-192 Dec 16 j 07:51	21° \mathring{A} 15'41	20.55910 AU	min. Earth dist.	-185 Jul 14 j 14:19	17° \mathring{B} 58'40	18.88939 AU
morning rise	-192 Dec 31 j 03:19	22° \mathring{A} 08'06		direct	-185 Sep 29 j 16:24	15° \mathring{B} 59'23	
retrograde	-191 Apr 02 j 22:23	25° \mathring{A} 18'33		evening set	-185 Dec 28 j 18:29	19° \mathring{B} 00'48	
opposition	-191 Jun 19 j 10:29	23° \mathring{A} 19'10	-0°16'54				
min. Earth dist.	-191 Jun 18 j 13:50	23° \mathring{A} 21'14	18.58896 AU	conjunction	-184 Jan 13 j 10:43	19° \mathring{B} 55'02	-0°32'15
direct	-191 Sep 04 j 02:41	21° \mathring{A} 20'38		minimum elong	-184 Jan 13 j 10:43	19° \mathring{B} 55'02	0°32'15
evening set	-191 Dec 04 j 05:06	24° \mathring{A} 27'11		max. Earth dist.	-184 Jan 14 j 12:52	19° \mathring{B} 58'50	20.90713 AU
				morning rise	-184 Jan 29 j 05:26	20° \mathring{B} 49'39	
conjunction	-191 Dec 19 j 19:34	25° \mathring{A} 22'13	-0°16'46	retrograde	-184 May 02 j 00:33	23° \mathring{B} 57'40	
minimum elong	-191 Dec 19 j 19:34	25° \mathring{A} 22'13	0°16'46	min. Earth dist.	-184 Jul 18 j 00:07	22° \mathring{B} 01'14	18.92436 AU
max. Earth dist.	-191 Dec 20 j 17:58	25° \mathring{A} 25'32	20.61818 AU	opposition	-184 Jul 19 j 01:22	21° \mathring{B} 58'42	-0°36'49
morning rise	-190 Jan 04 j 11:11	26° \mathring{A} 17'26		direct	-184 Oct 03 j 01:57	20° \mathring{B} 02'00	
retrograde	-190 Apr 07 j 09:42	29° \mathring{A} 27'27		evening set	-184 Dec 31 j 23:42	23° \mathring{B} 02'44	
min. Earth dist.	-190 Jun 23 j 02:35	27° \mathring{A} 30'25	18.64704 AU				
opposition	-190 Jun 24 j 00:42	27° \mathring{A} 28'11	-0°20'10	conjunction	-183 Jan 16 j 16:17	23° \mathring{B} 56'53	-0°34'18
direct	-190 Sep 08 j 15:15	25° \mathring{A} 30'01		minimum elong	-183 Jan 16 j 16:17	23° \mathring{B} 56'53	0°34'18
evening set	-190 Dec 08 j 12:21	28° \mathring{A} 35'35		max. Earth dist.	-183 Jan 17 j 17:43	24° \mathring{B} 00'34	20.93971 AU
				morning rise	-183 Feb 01 j 11:53	24° \mathring{B} 51'28	
conjunction	-190 Dec 24 j 02:49	29° \mathring{A} 30'26	-0°19'40	retrograde	-183 May 06 j 08:52	27° \mathring{B} 59'13	
minimum elong	-190 Dec 24 j 02:49	29° \mathring{A} 30'26	0°19'40	min. Earth dist.	-183 Jul 22 j 11:03	26° \mathring{B} 02'38	18.95472 AU
max. Earth dist.	-190 Dec 25 j 01:20	29° \mathring{A} 33'45	20.67515 AU	opposition	-183 Jul 23 j 11:37	26° \mathring{B} 00'11	-0°38'59
	-189 Jan 01 j 11:24	0° \mathring{B}		direct	-183 Oct 07 j 09:05	24° \mathring{B} 03'34	
morning rise	-189 Jan 08 j 18:59	0° \mathring{B} 25'32		evening set	-182 Jan 05 j 04:23	27° \mathring{B} 03'40	
retrograde	-189 Apr 11 j 20:52	3° \mathring{B} 35'09					
opposition	-189 Jun 28 j 14:11	1° \mathring{B} 35'59	-0°23'19	conjunction	-182 Jan 20 j 21:44	27° \mathring{B} 57'46	-0°36'10
min. Earth dist.	-189 Jun 27 j 15:31	1° \mathring{B} 38'15	18.70286 AU	minimum elong	-182 Jan 20 j 21:44	27° \mathring{B} 57'46	0°36'11
	-189 Aug 14 j 02:35	30° \mathring{R} \mathring{A}		max. Earth dist.	-182 Jan 22 j 00:20	28° \mathring{B} 01'37	20.96782 AU
direct	-189 Sep 13 j 01:35	29° \mathring{A} 38'08		morning rise	-182 Feb 05 j 17:57	28° \mathring{B} 52'18	
	-189 Oct 12 j 08:24	0° \mathring{B}			-182 Feb 26 j 19:51	0° \mathring{B}	
evening set	-189 Dec 12 j 19:00	2° \mathring{B} 42'47		retrograde	-182 May 10 j 18:27	1° \mathring{B} 59'49	
				opposition	-182 Jul 27 j 21:07	0° \mathring{B} 00'43	-0°40'56
conjunction	-189 Dec 28 j 09:49	3° \mathring{B} 37'29	-0°22'27	min. Earth dist.	-182 Jul 26 j 19:44	0° \mathring{B} 03'15	18.98064 AU
minimum elong	-189 Dec 28 j 09:49	3° \mathring{B} 37'29	0°22'27		-182 Jul 28 j 04:12	30° \mathring{R} \mathring{B}	
max. Earth dist.	-189 Dec 29 j 10:15	3° \mathring{B} 41'04	20.72944 AU	direct	-182 Oct 11 j 17:49	28° \mathring{B} 04'09	
morning rise	-188 Jan 13 j 02:16	4° \mathring{B} 32'26			-182 Dec 20 j 13:17	0° \mathring{B}	
retrograde	-188 Apr 15 j 07:43	7° \mathring{B} 41'41		evening set	-181 Jan 09 j 09:10	1° \mathring{B} 03'42	
min. Earth dist.	-188 Jul 01 j 03:14	5° \mathring{B} 45'01	18.75551 AU				
opposition	-188 Jul 02 j 03:07	5° \mathring{B} 42'38	-0°26'20	conjunction	-181 Jan 25 j 02:57	1° \mathring{B} 57'46	-0°37'51
direct	-188 Sep 16 j 12:28	3° \mathring{B} 45'06		minimum elong	-181 Jan 25 j 02:57	1° \mathring{B} 57'46	0°37'51
evening set	-188 Dec 16 j 01:21	6° \mathring{B} 48'51		max. Earth dist.	-181 Jan 26 j 04:49	2° \mathring{B} 01'30	20.99169 AU
				morning rise	-181 Feb 10 j 00:06	2° \mathring{B} 52'17	
conjunction	-188 Dec 31 j 16:14	7° \mathring{B} 43'25	-0°25'07	retrograde	-181 May 15 j 01:53	5° \mathring{B} 59'36	
minimum elong	-188 Dec 31 j 16:14	7° \mathring{B} 43'25	0°25'08	min. Earth dist.	-181 Jul 31 j 05:31	4° \mathring{B} 02'52	19.00270 AU
max. Earth dist.	-187 Jan 01 j 16:27	7° \mathring{B} 46'57	20.78031 AU	opposition	-181 Aug 01 j 06:04	4° \mathring{B} 00'25	-0°42'41
morning rise	-187 Jan 16 j 09:19	8° \mathring{B} 38'16		direct	-181 Oct 15 j 23:21	2° \mathring{B} 03'55	
retrograde	-187 Apr 19 j 18:21	11° \mathring{B} 47'12		evening set	-180 Jan 13 j 13:36	5° \mathring{B} 02'59	
opposition	-187 Jul 06 j 15:40	9° \mathring{B} 48'12	-0°29'12				
min. Earth dist.	-187 Jul 05 j 15:42	9° \mathring{B} 50'36	18.80461 AU	conjunction	-180 Jan 29 j 08:12	5° \mathring{B} 57'02	-0°39'21
direct	-187 Sep 20 j 21:58	7° \mathring{B} 50'56		minimum elong	-180 Jan 29 j 08:12	5° \mathring{B} 57'02	0°39'21
evening set	-187 Dec 20 j 07:19	10° \mathring{B} 53'52		max. Earth dist.	-180 Jan 30 j 11:08	6° \mathring{B} 00'54	21.01189 AU
				morning rise	-180 Feb 14 j 05:59	6° \mathring{B} 51'33	
conjunction	-186 Jan 04 j 22:42	11° \mathring{B} 48'18	-0°27'39	retrograde	-180 May 18 j 10:52	9° \mathring{B} 58'42	
minimum elong	-186 Jan 04 j 22:42	11° \mathring{B} 48'18	0°27'38	opposition	-180 Aug 04 j 14:34	7° \mathring{B} 59'27	-0°44'14
max. Earth dist.	-186 Jan 06 j 00:24	11° \mathring{B} 52'04	20.82726 AU	min. Earth dist.	-180 Aug 03 j 13:07	8° \mathring{B} 02'00	19.02110 AU
morning rise	-186 Jan 20 j 16:11	12° \mathring{B} 43'04		direct	-180 Oct 19 j 07:12	6° \mathring{B} 03'01	
retrograde	-186 Apr 24 j 04:53	15° \mathring{B} 51'40		evening set	-179 Jan 16 j 17:59	9° \mathring{B} 01'41	
min. Earth dist.	-186 Jul 10 j 02:30	13° \mathring{B} 55'13	18.84935 AU				
opposition	-186 Jul 11 j 03:24	13° \mathring{B} 52'43	-0°31'55	conjunction	-179 Feb 01 j 13:08	9° \mathring{B} 55'44	-0°40'39
direct	-186 Sep 25 j 07:58	11° \mathring{B} 55'42		minimum elong	-179 Feb 01 j 13:08	9° \mathring{B} 55'44	0°40'38

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Attention, astronomical year style is used: The year -179 in astronomical counting style is the year 180 BCE in historical counting style.

max. Earth dist.	-179 Feb 02 j 15:17	9° \approx 59'29	21.02853 AU	morning rise	-173 Mar 14 j 03:56	4° \mathbb{H} 41'16	
morning rise	-179 Feb 17 j 11:56	10° \approx 50'16		retrograde	-173 Jun 16 j 21:44	7° \mathbb{H} 48'42	
retrograde	-179 May 22 j 18:43	13° \approx 57'21		opposition	-173 Sep 02 j 18:19	5° \mathbb{H} 49'15	-0°48'46
opposition	-179 Aug 08 j 22:51	11° \approx 58'02	-0°45'33	min. Earth dist.	-173 Sep 01 j 21:47	5° \mathbb{H} 51'19	19.04376 AU
min. Earth dist.	-179 Aug 07 j 22:20	12° \approx 00'30	19.03612 AU	direct	-173 Nov 16 j 19:04	3° \mathbb{H} 52'59	
direct	-179 Oct 23 j 11:39	10° \approx 01'39		evening set	-172 Feb 14 j 05:10	6° \mathbb{H} 51'07	
evening set	-178 Jan 20 j 22:20	13° \approx 00'00					
				conjunction	-172 Mar 01 j 06:34	7° \mathbb{H} 45'40	-0°44'03
conjunction	-178 Feb 05 j 18:25	13° \approx 54'04	-0°41'45	minimum elong	-172 Mar 01 j 06:34	7° \mathbb{H} 45'40	0°44'02
minimum elong	-178 Feb 05 j 18:25	13° \approx 54'04	0°41'45	max. Earth dist.	-172 Mar 02 j 05:18	7° \mathbb{H} 48'55	21.03620 AU
max. Earth dist.	-178 Feb 06 j 21:23	13° \approx 57'56	21.04181 AU	morning rise	-172 Mar 17 j 11:49	8° \mathbb{H} 40'47	
morning rise	-178 Feb 21 j 17:58	14° \approx 48'38		retrograde	-172 Jun 20 j 07:33	11° \mathbb{H} 48'24	
	-178 Feb 25 j 03:46	15° \approx		min. Earth dist.	-172 Sep 05 j 04:52	9° \mathbb{H} 50'54	19.02805 AU
retrograde	-178 May 27 j 03:20	17° \approx 55'40		opposition	-172 Sep 06 j 01:08	9° \mathbb{H} 48'51	-0°48'30
min. Earth dist.	-178 Aug 12 j 05:15	15° \approx 58'51	19.04758 AU	direct	-172 Nov 20 j 01:13	7° \mathbb{H} 52'30	
opposition	-178 Aug 13 j 06:28	15° \approx 56'19	-0°46'39	evening set	-171 Feb 17 j 11:29	10° \mathbb{H} 50'48	
	-178 Sep 06 j 16:01	15° \mathbb{R}					
direct	-178 Oct 27 j 18:38	14° \approx 00'00		conjunction	-171 Mar 05 j 13:46	11° \mathbb{H} 45'30	-0°43'41
	-178 Dec 15 j 19:52	15° \approx		minimum elong	-171 Mar 05 j 13:46	11° \mathbb{H} 45'30	0°43'42
evening set	-177 Jan 25 j 02:56	16° \approx 58'08		max. Earth dist.	-171 Mar 06 j 10:20	11° \mathbb{H} 48'26	21.01774 AU
				morning rise	-171 Mar 21 j 20:10	12° \mathbb{H} 40'46	
conjunction	-177 Feb 09 j 23:41	17° \approx 52'14	-0°42'39	retrograde	-171 Jun 24 j 15:06	15° \mathbb{H} 48'34	
minimum elong	-177 Feb 09 j 23:41	17° \approx 52'14	0°42'38	opposition	-171 Sep 10 j 08:04	13° \mathbb{H} 48'54	-0°47'59
max. Earth dist.	-177 Feb 11 j 01:30	17° \approx 55'56	21.05146 AU	min. Earth dist.	-171 Sep 09 j 14:10	13° \mathbb{H} 50'43	19.00685 AU
morning rise	-177 Feb 26 j 00:17	18° \approx 46'51		direct	-171 Nov 24 j 05:36	11° \mathbb{H} 52'22	
retrograde	-177 May 31 j 11:43	21° \approx 53'53		evening set	-170 Feb 21 j 18:11	14° \mathbb{H} 50'55	
opposition	-177 Aug 17 j 14:05	19° \approx 54'31	-0°47'32				
min. Earth dist.	-177 Aug 16 j 14:08	19° \approx 56'55	19.05543 AU	conjunction	-170 Mar 09 j 21:39	15° \mathbb{H} 45'46	-0°43'07
direct	-177 Oct 31 j 22:35	17° \approx 58'15		minimum elong	-170 Mar 09 j 21:39	15° \mathbb{H} 45'46	0°43'06
evening set	-176 Jan 29 j 07:25	20° \approx 56'13		max. Earth dist.	-170 Mar 10 j 17:33	15° \mathbb{H} 48'37	20.99399 AU
				morning rise	-170 Mar 26 j 04:56	16° \mathbb{H} 41'11	
conjunction	-176 Feb 14 j 05:08	21° \approx 50'23	-0°43'21	retrograde	-170 Jun 29 j 01:07	19° \mathbb{H} 49'10	
minimum elong	-176 Feb 14 j 05:08	21° \approx 50'23	0°43'21	opposition	-170 Sep 14 j 14:37	17° \mathbb{H} 49'21	-0°47'14
max. Earth dist.	-176 Feb 15 j 07:30	21° \approx 54'09	21.05739 AU	min. Earth dist.	-170 Sep 13 j 21:08	17° \mathbb{H} 51'08	18.98047 AU
morning rise	-176 Mar 01 j 06:31	22° \approx 45'04		direct	-170 Nov 28 j 12:19	15° \mathbb{H} 52'38	
retrograde	-176 Jun 03 j 20:19	25° \approx 52'09		evening set	-169 Feb 26 j 01:25	18° \mathbb{H} 51'28	
opposition	-176 Aug 20 j 21:18	23° \approx 52'47	-0°48'11				
min. Earth dist.	-176 Aug 19 j 20:54	23° \approx 55'14	19.05930 AU	conjunction	-169 Mar 14 j 05:46	19° \mathbb{H} 46'30	-0°42'19
direct	-176 Nov 04 j 04:44	21° \approx 56'33		minimum elong	-169 Mar 14 j 05:46	19° \mathbb{H} 46'30	0°42'20
evening set	-175 Feb 01 j 12:23	24° \approx 54'28		max. Earth dist.	-169 Mar 14 j 23:28	19° \mathbb{H} 49'01	20.96526 AU
				morning rise	-169 Mar 30 j 14:10	20° \mathbb{H} 42'04	
conjunction	-175 Feb 17 j 10:49	25° \approx 48'41	-0°43'50	retrograde	-169 Jul 03 j 08:36	23° \mathbb{H} 50'16	
minimum elong	-175 Feb 17 j 10:49	25° \approx 48'41	0°43'51	opposition	-169 Sep 18 j 21:25	21° \mathbb{H} 50'17	-0°46'15
max. Earth dist.	-175 Feb 18 j 11:48	25° \approx 52'16	21.05923 AU	min. Earth dist.	-169 Sep 18 j 06:18	21° \mathbb{H} 51'50	18.94954 AU
morning rise	-175 Mar 05 j 13:18	26° \approx 43'28		direct	-169 Dec 02 j 16:40	19° \mathbb{H} 53'20	
retrograde	-175 Jun 08 j 04:40	29° \approx 50'39		evening set	-168 Mar 01 j 08:45	22° \mathbb{H} 52'31	
min. Earth dist.	-175 Aug 24 j 05:47	27° \approx 53'32	19.05902 AU				
opposition	-175 Aug 25 j 04:30	27° \approx 51'15	-0°48'37	conjunction	-168 Mar 17 j 14:17	23° \mathbb{H} 47'44	-0°41'20
direct	-175 Nov 08 j 08:54	25° \approx 55'03		minimum elong	-168 Mar 17 j 14:17	23° \mathbb{H} 47'44	0°41'20
evening set	-174 Feb 05 j 17:31	28° \approx 52'58		max. Earth dist.	-168 Mar 18 j 07:22	23° \mathbb{H} 50'10	20.93237 AU
				morning rise	-168 Apr 02 j 23:32	24° \mathbb{H} 43'29	
conjunction	-174 Feb 21 j 17:03	29° \approx 47'18	-0°44'07	retrograde	-168 Jul 06 j 19:03	27° \mathbb{H} 51'56	
minimum elong	-174 Feb 21 j 17:03	29° \approx 47'18	0°44'07	opposition	-168 Sep 22 j 04:06	25° \mathbb{H} 51'47	-0°45'02
max. Earth dist.	-174 Feb 22 j 18:06	29° \approx 50'52	21.05669 AU	min. Earth dist.	-168 Sep 21 j 13:14	25° \mathbb{H} 53'18	18.91468 AU
	-174 Feb 25 j 09:58	0° \mathbb{H}		direct	-168 Dec 05 j 23:36	23° \mathbb{H} 54'34	
morning rise	-174 Mar 09 j 20:22	0° \mathbb{H} 42'10		evening set	-167 Mar 05 j 16:55	26° \mathbb{H} 54'12	
retrograde	-174 Jun 12 j 13:55	3° \mathbb{H} 49'28					
opposition	-174 Aug 29 j 11:25	1° \mathbb{H} 50'03	-0°48'49	conjunction	-167 Mar 21 j 23:21	27° \mathbb{H} 49'36	-0°40'07
min. Earth dist.	-174 Aug 28 j 12:43	1° \mathbb{H} 52'20	19.05398 AU	minimum elong	-167 Mar 21 j 23:21	27° \mathbb{H} 49'36	0°40'07
	-174 Oct 28 j 01:02	30° \mathbb{R}		max. Earth dist.	-167 Mar 22 j 14:20	27° \mathbb{H} 51'45	20.89575 AU
direct	-174 Nov 12 j 14:38	29° \approx 53'50		morning rise	-167 Apr 07 j 09:41	28° \mathbb{H} 45'33	
	-174 Nov 27 j 23:46	0° \mathbb{H}			-167 Apr 30 j 23:20	0° \mathbb{Y}	
evening set	-173 Feb 09 j 23:15	2° \mathbb{H} 51'50		retrograde	-167 Jul 11 j 03:19	1° \mathbb{Y} 54'18	
					-167 Sep 24 j 00:02	30° \mathbb{R}	
conjunction	-173 Feb 25 j 23:32	3° \mathbb{H} 46'16	-0°44'12	opposition	-167 Sep 26 j 10:56	29° \mathbb{H} 53'57	-0°43'35
minimum elong	-173 Feb 25 j 23:32	3° \mathbb{H} 46'16	0°44'12	min. Earth dist.	-167 Sep 25 j 22:24	29° \mathbb{H} 55'15	18.87646 AU
max. Earth dist.	-173 Feb 26 j 22:41	3° \mathbb{H} 49'34	21.04907 AU	direct	-167 Dec 10 j 04:16	27° \mathbb{H} 56'29	

Attention, astronomical year style is used: The year -166 in astronomical counting style is the year 167 BCE in historical counting style.

	-166 Feb 20 j 10:50	0°♊			-160 Jun 28 j 22:33	0°♋
evening set	-166 Mar 10 j 01:30	0°♊56'38		retrograde	-160 Aug 09 j 14:56	0°♋42'44
					-160 Sep 20 j 19:51	30°♋♊
conjunction	-166 Mar 26 j 09:07	1°♊52'15 -0°38'43		opposition	-160 Oct 24 j 17:57	28°♊41'43 -0°27'42
minimum elong	-166 Mar 26 j 09:07	1°♊52'15 0°38'43		min. Earth dist.	-160 Oct 24 j 15:19	28°♊41'59 18.53615 AU
max. Earth dist.	-166 Mar 26 j 23:18	1°♊54'17 20.85608 AU		direct	-159 Jan 07 j 07:28	26°♊42'27
morning rise	-166 Apr 11 j 20:19	2°♊48'24		evening set	-159 Apr 08 j 10:50	29°♊48'16
retrograde	-166 Jul 15 j 14:33	5°♊57'27			-159 Apr 11 j 21:15	0°♋
opposition	-166 Sep 30 j 17:48	3°♊56'58 -0°41'56				
min. Earth dist.	-166 Sep 30 j 05:34	3°♊58'14 18.83526 AU		conjunction	-159 Apr 25 j 01:09	0°♋45'43 -0°23'41
direct	-166 Dec 14 j 11:24	1°♊59'14		minimum elong	-159 Apr 25 j 01:09	0°♋45'43 0°23'41
evening set	-165 Mar 14 j 10:48	4°♊59'59		max. Earth dist.	-159 Apr 25 j 02:12	0°♋45'53 20.50693 AU
				morning rise	-159 May 11 j 17:55	1°♋43'34
conjunction	-165 Mar 30 j 19:18	5°♊55'49 -0°37'07		retrograde	-159 Aug 14 j 03:59	4°♋55'52
minimum elong	-165 Mar 30 j 19:18	5°♊55'49 0°37'06		opposition	-159 Oct 29 j 03:34	2°♋54'45 -0°24'40
max. Earth dist.	-165 Mar 31 j 07:22	5°♊57'33 20.81349 AU		min. Earth dist.	-159 Oct 29 j 03:53	2°♋54'43 18.47679 AU
morning rise	-165 Apr 16 j 07:28	6°♊52'11		direct	-158 Jan 11 j 16:05	0°♋55'09
retrograde	-165 Jul 19 j 23:53	10°♊01'36		evening set	-158 Apr 13 j 02:01	4°♋02'01
opposition	-165 Oct 05 j 01:00	8°♊00'59 -0°40'04				
min. Earth dist.	-165 Oct 04 j 15:05	8°♊02'00 18.79142 AU		conjunction	-158 Apr 29 j 17:13	4°♋59'46 -0°20'52
direct	-165 Dec 18 j 16:26	6°♊03'00		minimum elong	-158 Apr 29 j 17:14	4°♋59'46 0°20'52
evening set	-164 Mar 17 j 20:38	9°♊04'24		max. Earth dist.	-158 Apr 29 j 15:57	4°♋59'35 20.44620 AU
				morning rise	-158 May 16 j 10:36	5°♋57'53
conjunction	-164 Apr 03 j 06:17	10°♊00'29 -0°35'19		retrograde	-158 Aug 18 j 19:34	9°♋10'42
minimum elong	-164 Apr 03 j 06:18	10°♊00'29 0°35'20		opposition	-158 Nov 02 j 13:38	7°♋09'28 -0°21'29
max. Earth dist.	-164 Apr 03 j 17:24	10°♊02'05 20.76856 AU		min. Earth dist.	-158 Nov 02 j 15:04	7°♋09'19 18.41460 AU
morning rise	-164 Apr 19 j 19:16	10°♊57'04		direct	-157 Jan 16 j 03:11	5°♋09'30
retrograde	-164 Jul 23 j 12:15	14°♊06'54		evening set	-157 Apr 17 j 18:02	8°♋17'26
opposition	-164 Oct 08 j 08:21	12°♊06'10 -0°37'59				
min. Earth dist.	-164 Oct 07 j 22:48	12°♊07'09 18.74525 AU		conjunction	-157 May 04 j 09:58	9°♋15'29 -0°17'56
direct	-164 Dec 22 j 00:11	10°♊07'56		minimum elong	-157 May 04 j 09:58	9°♋15'29 0°17'56
evening set	-163 Mar 22 j 07:19	13°♊10'04		max. Earth dist.	-157 May 04 j 06:24	9°♋14'58 20.38267 AU
				morning rise	-157 May 21 j 03:47	10°♋13'51
conjunction	-163 Apr 07 j 17:53	14°♊06'25 -0°33'21		retrograde	-157 Aug 23 j 09:52	13°♋27'12
minimum elong	-163 Apr 07 j 17:53	14°♊06'25 0°33'20		opposition	-157 Nov 07 j 00:21	11°♋25'49 -0°18'10
max. Earth dist.	-163 Apr 08 j 02:53	14°♊07'42 20.72125 AU		min. Earth dist.	-157 Nov 07 j 04:31	11°♋25'23 18.34998 AU
morning rise	-163 Apr 24 j 07:48	15°♊03'15		direct	-156 Jan 20 j 13:35	9°♋25'27
retrograde	-163 Jul 27 j 22:45	18°♊13'31		evening set	-156 Apr 21 j 10:52	12°♋34'29
opposition	-163 Oct 12 j 16:13	16°♊12'41 -0°35'42				
min. Earth dist.	-163 Oct 12 j 09:10	16°♊13'25 18.69676 AU		conjunction	-156 May 08 j 03:32	13°♋32'50 -0°14'52
direct	-163 Dec 26 j 05:52	14°♊14'13		minimum elong	-156 May 08 j 03:32	13°♋32'50 0°14'53
evening set	-162 Mar 26 j 18:50	17°♊17'11		behind sun begin	-156 May 08 j 01:14	13°♋32'30
				behind sun end	-156 May 08 j 05:50	13°♋33'10
conjunction	-162 Apr 12 j 06:29	18°♊13'47 -0°31'11		max. Earth dist.	-156 May 07 j 21:36	13°♋31'59 20.31728 AU
minimum elong	-162 Apr 12 j 06:29	18°♊13'47 0°31'11		morning rise	-156 May 24 j 21:53	14°♋31'28
max. Earth dist.	-162 Apr 12 j 14:08	18°♊14'53 20.67170 AU			-156 Jun 02 j 08:19	15°♋
morning rise	-162 Apr 28 j 21:09	19°♊10'51		retrograde	-156 Aug 27 j 02:01	17°♋45'20
retrograde	-162 Aug 01 j 12:26	22°♊21'36		opposition	-156 Nov 10 j 11:21	15°♋43'48 -0°14'43
opposition	-162 Oct 17 j 00:11	20°♊20'43 -0°33'13		min. Earth dist.	-156 Nov 10 j 16:35	15°♋43'15 18.28383 AU
min. Earth dist.	-162 Oct 16 j 17:50	20°♊21'22 18.64590 AU			-156 Nov 28 j 01:11	15°♋
direct	-162 Dec 30 j 14:40	18°♊21'59		direct	-155 Jan 24 j 01:54	13°♋43'01
evening set	-161 Mar 31 j 07:19	21°♊25'51			-155 Mar 20 j 13:48	15°♋
				evening set	-155 Apr 26 j 04:36	16°♋53'11
conjunction	-161 Apr 16 j 19:49	22°♊22'45 -0°28'51				
minimum elong	-161 Apr 16 j 19:49	22°♊22'45 0°28'51		conjunction	-155 May 12 j 21:58	17°♋51'50 -0°11'43
max. Earth dist.	-161 Apr 17 j 01:10	22°♊23'31 20.61955 AU		minimum elong	-155 May 12 j 21:59	17°♋51'50 0°11'43
morning rise	-161 May 03 j 11:15	23°♊20'04		behind sun begin	-155 May 12 j 17:17	17°♋51'10
retrograde	-161 Aug 06 j 00:03	26°♊31'19		behind sun end	-155 May 13 j 02:40	17°♋52'30
opposition	-161 Oct 21 j 08:53	24°♊30'22 -0°30'33		max. Earth dist.	-155 May 12 j 14:10	17°♋50'42 20.25050 AU
min. Earth dist.	-161 Oct 21 j 05:16	24°♊30'45 18.59244 AU		morning rise	-155 May 29 j 16:37	18°♋50'43
direct	-160 Jan 03 j 21:30	22°♊31'23		retrograde	-155 Aug 31 j 17:25	22°♋05'06
evening set	-160 Apr 03 j 20:27	25°♊36'12		opposition	-155 Nov 14 j 23:06	20°♋03'25 -0°11'09
				min. Earth dist.	-155 Nov 15 j 06:49	20°♋02'35 18.21668 AU
conjunction	-160 Apr 20 j 09:57	26°♊33'22 -0°26'21		direct	-154 Jan 28 j 14:05	18°♋02'12
minimum elong	-160 Apr 20 j 09:57	26°♊33'22 0°26'20		evening set	-154 Apr 30 j 23:14	21°♋13'32
max. Earth dist.	-160 Apr 20 j 13:32	26°♊33'53 20.56479 AU				
morning rise	-160 May 07 j 02:05	27°♊30'57		conjunction	-154 May 17 j 17:07	22°♋12'29 -0°08'29

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Attention, astronomical year style is used: The year -154 in astronomical counting style is the year 155 BCE in historical counting style.

minimum elong	-154 May 17 j 17:07	22°♄12'29	0°08'29	behind sun end	-149 Jun 10 j 10:22	14°♄22'46	
behind sun begin	-154 May 17 j 11:13	22°♄11'38		morning rise	-149 Jun 26 j 23:19	15°♄22'10	
behind sun end	-154 May 17 j 23:01	22°♄13'20		retrograde	-149 Sep 28 j 03:11	18°♄39'45	
max. Earth dist.	-154 May 17 j 06:52	22°♄10'59	20.18325 AU	opposition	-149 Dec 11 j 10:48	16°♄37'31	0°11'16
morning rise	-154 Jun 03 j 12:07	23°♄11'37		min. Earth dist.	-149 Dec 12 j 02:36	16°♄35'49	17.83259 AU
retrograde	-154 Sep 05 j 09:58	26°♄26'32		direct	-148 Feb 24 j 11:46	14°♄34'01	
opposition	-154 Nov 19 j 11:14	24°♄24'41	-0°07'31	evening set	-148 May 28 j 08:45	17°♄52'51	
min. Earth dist.	-154 Nov 19 j 19:54	24°♄23'45	18.14945 AU	max. Earth dist.	-148 Jun 13 j 07:44	18°♄50'18	19.80379 AU
direct	-153 Feb 02 j 03:56	22°♄23'02					
evening set	-153 May 05 j 18:39	25°♄35'34		conjunction	-148 Jun 14 j 04:14	18°♄53'24	0°11'52
				minimum elong	-148 Jun 14 j 04:13	18°♄53'24	0°11'52
conjunction	-153 May 22 j 13:05	26°♄34'48	-0°05'11	behind sun begin	-148 Jun 13 j 23:37	18°♄52'43	
minimum elong	-153 May 22 j 13:05	26°♄34'48	0°05'10	behind sun end	-148 Jun 14 j 08:50	18°♄54'05	
behind sun begin	-153 May 22 j 06:31	26°♄33'51		morning rise	-148 Jun 30 j 22:58	19°♄53'52	
behind sun end	-153 May 22 j 19:39	26°♄35'45		retrograde	-148 Oct 01 j 23:27	23°♄11'59	
max. Earth dist.	-153 May 22 j 01:31	26°♄33'06	20.11611 AU	opposition	-148 Dec 15 j 03:15	21°♄09'45	0°15'00
morning rise	-153 Jun 08 j 08:08	27°♄34'11		min. Earth dist.	-148 Dec 15 j 20:22	21°♄07'54	17.77548 AU
	-153 Jul 27 j 22:44	0°♄		direct	-147 Feb 28 j 06:43	19°♄05'56	
retrograde	-153 Sep 10 j 02:25	0°♄49'37		evening set	-147 Jun 02 j 09:24	22°♄26'02	
	-153 Oct 24 j 20:49	30°♄		max. Earth dist.	-147 Jun 18 j 08:03	23°♄23'39	19.74755 AU
opposition	-153 Nov 24 j 00:11	28°♄47'39	-0°03'49				
min. Earth dist.	-153 Nov 24 j 10:54	28°♄46'29	18.08274 AU	conjunction	-147 Jun 19 j 05:00	23°♄26'49	0°15'11
direct	-152 Feb 06 j 17:50	26°♄45'35		minimum elong	-147 Jun 19 j 04:59	23°♄26'49	0°15'11
evening set	-152 May 09 j 14:49	29°♄59'20		behind sun begin	-147 Jun 19 j 03:08	23°♄26'33	
	-152 May 09 j 19:28	0°♄		behind sun end	-147 Jun 19 j 06:51	23°♄27'06	
				morning rise	-147 Jul 05 j 23:10	24°♄27'28	
conjunction	-152 May 26 j 09:37	0°♄58'51	-0°01'48	retrograde	-147 Oct 06 j 20:35	27°♄46'04	
minimum elong	-152 May 26 j 09:36	0°♄58'51	0°01'48	opposition	-147 Dec 19 j 20:41	25°♄43'52	0°18'40
behind sun begin	-152 May 26 j 02:49	0°♄57'52		min. Earth dist.	-147 Dec 20 j 15:07	25°♄41'52	17.72018 AU
behind sun end	-152 May 26 j 16:23	0°♄59'50		direct	-146 Mar 05 j 02:00	23°♄39'45	
max. Earth dist.	-152 May 25 j 19:37	0°♄56'46	20.05000 AU	evening set	-146 Jun 07 j 10:57	27°♄01'05	
morning rise	-152 Jun 12 j 04:55	1°♄58'28		max. Earth dist.	-146 Jun 23 j 06:28	27°♄58'28	19.69314 AU
retrograde	-152 Sep 13 j 19:43	5°♄14'27					
opposition	-152 Nov 27 j 13:43	3°♄12'20	-0°00'03	conjunction	-146 Jun 24 j 06:09	28°♄02'04	0°18'26
min. Earth dist.	-152 Nov 28 j 01:18	3°♄11'06	18.01733 AU	minimum elong	-146 Jun 24 j 06:09	28°♄02'04	0°18'27
asc. node	-152 Dec 03 j 05:39	2°♄57'46		morning rise	-146 Jul 10 j 23:58	29°♄02'53	
direct	-151 Feb 10 j 09:35	1°♄09'52			-146 Jul 27 j 13:46	0°♄	
evening set	-151 May 14 j 12:00	4°♄24'52		retrograde	-146 Oct 11 j 17:45	2°♄21'58	
				opposition	-146 Dec 24 j 14:53	0°♄19'45	0°22'15
conjunction	-151 May 31 j 07:14	5°♄24'40	0°01'42	min. Earth dist.	-146 Dec 25 j 10:50	0°♄17'35	17.66683 AU
minimum elong	-151 May 31 j 07:14	5°♄24'40	0°01'42		-145 Jan 01 j 05:15	30°♄	
behind sun begin	-151 May 31 j 00:26	5°♄23'41		direct	-145 Mar 09 j 22:14	28°♄15'19	
behind sun end	-151 May 31 j 14:01	5°♄25'39			-145 May 13 j 23:54	0°♄	
max. Earth dist.	-151 May 30 j 16:20	5°♄22'27	19.98526 AU	evening set	-145 Jun 12 j 13:00	1°♄37'51	
morning rise	-151 Jun 17 j 02:23	6°♄24'31		max. Earth dist.	-145 Jun 28 j 08:06	2°♄35'21	19.64065 AU
retrograde	-151 Sep 18 j 13:17	9°♄41'01					
opposition	-151 Dec 02 j 03:57	7°♄38'51	0°03'43	conjunction	-145 Jun 29 j 08:07	2°♄39'01	0°21'35
min. Earth dist.	-151 Dec 02 j 17:19	7°♄37'24	17.95354 AU	minimum elong	-145 Jun 29 j 08:06	2°♄39'01	0°21'35
direct	-150 Feb 15 j 01:00	5°♄36'00		morning rise	-145 Jul 16 j 01:12	3°♄39'58	
evening set	-150 May 19 j 10:09	8°♄52'16		retrograde	-145 Oct 16 j 16:27	6°♄59'29	
				opposition	-145 Dec 29 j 09:50	4°♄57'16	0°25'42
conjunction	-150 Jun 05 j 05:29	9°♄52'20	0°05'07	min. Earth dist.	-145 Dec 30 j 06:38	4°♄55'00	17.61538 AU
minimum elong	-150 Jun 05 j 05:28	9°♄52'20	0°05'07	direct	-144 Mar 13 j 19:42	2°♄52'31	
behind sun begin	-150 Jun 04 j 22:54	9°♄51'22		evening set	-144 Jun 16 j 15:46	6°♄16'10	
behind sun end	-150 Jun 05 j 12:03	9°♄53'18		max. Earth dist.	-144 Jul 02 j 07:58	7°♄13'27	19.59029 AU
max. Earth dist.	-150 Jun 04 j 12:02	9°♄49'43	19.92257 AU				
morning rise	-150 Jun 22 j 00:41	10°♄52'24		conjunction	-144 Jul 03 j 10:23	7°♄17'30	0°24'37
retrograde	-150 Sep 23 j 08:06	14°♄09'26		minimum elong	-144 Jul 03 j 10:23	7°♄17'30	0°24'37
opposition	-150 Dec 06 j 18:58	12°♄07'13	0°07'30	morning rise	-144 Jul 20 j 02:58	8°♄18'35	
min. Earth dist.	-150 Dec 07 j 09:17	12°♄05'40	17.89199 AU	retrograde	-144 Oct 20 j 13:56	11°♄38'30	
direct	-149 Feb 19 j 18:39	10°♄04'01		opposition	-143 Jan 02 j 05:34	9°♄36'14	0°29'01
evening set	-149 May 24 j 08:52	13°♄21'34		min. Earth dist.	-143 Jan 03 j 03:56	9°♄33'48	17.56633 AU
max. Earth dist.	-149 Jun 09 j 10:37	14°♄19'13	19.86203 AU	direct	-143 Mar 18 j 17:05	7°♄31'10	
				evening set	-143 Jun 21 j 19:00	10°♄55'54	
conjunction	-149 Jun 10 j 04:28	14°♄21'54	0°08'30	max. Earth dist.	-143 Jul 07 j 10:43	11°♄53'18	19.54251 AU
minimum elong	-149 Jun 10 j 04:28	14°♄21'54	0°08'30				
behind sun begin	-149 Jun 09 j 22:34	14°♄21'02		conjunction	-143 Jul 08 j 13:17	11°♄57'23	0°27'30

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Attention, astronomical year style is used: The year -143 in astronomical counting style is the year 144 BCE in historical counting style.

minimum elong	-143 Jul 08 j 13:17	11° $\mathring{\text{U}}$ 57'23	0°27'31	min. Earth dist.	-136 Feb 05 j 15:43	12° $\mathring{\text{U}}$ 35'41	17.33843 AU
morning rise	-143 Jul 25 j 05:00	12° $\mathring{\text{U}}$ 58'33		direct	-136 Apr 20 j 23:55	10° $\mathring{\text{U}}$ 31'43	
retrograde	-143 Oct 25 j 13:49	16° $\mathring{\text{U}}$ 18'50		evening set	-136 Jul 26 j 00:20	14° $\mathring{\text{U}}$ 01'38	
opposition	-142 Jan 07 j 01:52	14° $\mathring{\text{U}}$ 16'32	0°32'09	max. Earth dist.	-136 Aug 10 j 10:18	14° $\mathring{\text{U}}$ 59'14	19.33230 AU
min. Earth dist.	-142 Jan 08 j 00:34	14° $\mathring{\text{U}}$ 14'04	17.52000 AU		-136 Aug 10 j 15:10	15° $\mathring{\text{U}}$	
direct	-142 Mar 23 j 16:45	12° $\mathring{\text{U}}$ 11'11					
evening set	-142 Jun 26 j 22:47	15° $\mathring{\text{U}}$ 36'54		conjunction	-136 Aug 11 j 12:56	15° $\mathring{\text{U}}$ 03'25	0°41'46
				minimum elong	-136 Aug 11 j 12:56	15° $\mathring{\text{U}}$ 03'25	0°41'46
conjunction	-142 Jul 13 j 16:23	16° $\mathring{\text{U}}$ 38'30	0°30'13	morning rise	-136 Aug 27 j 21:34	16° $\mathring{\text{U}}$ 04'38	
minimum elong	-142 Jul 13 j 16:23	16° $\mathring{\text{U}}$ 38'30	0°30'13	retrograde	-136 Nov 27 j 07:06	19° $\mathring{\text{U}}$ 26'21	
max. Earth dist.	-142 Jul 12 j 12:10	16° $\mathring{\text{U}}$ 34'09	19.49784 AU	opposition	-135 Feb 08 j 17:05	17° $\mathring{\text{U}}$ 24'07	0°47'10
morning rise	-142 Jul 30 j 07:19	17° $\mathring{\text{U}}$ 39'45		min. Earth dist.	-135 Feb 09 j 16:35	17° $\mathring{\text{U}}$ 21'34	17.32872 AU
retrograde	-142 Oct 30 j 11:23	21° $\mathring{\text{U}}$ 00'21		direct	-135 Apr 26 j 01:56	15° $\mathring{\text{U}}$ 17'39	
opposition	-141 Jan 11 j 22:59	18° $\mathring{\text{U}}$ 58'01	0°35'04	evening set	-135 Jul 31 j 04:43	18° $\mathring{\text{U}}$ 47'57	
min. Earth dist.	-141 Jan 12 j 23:04	18° $\mathring{\text{U}}$ 55'23	17.47731 AU				
direct	-141 Mar 28 j 15:15	16° $\mathring{\text{U}}$ 52'21		conjunction	-135 Aug 16 j 16:05	19° $\mathring{\text{U}}$ 49'38	0°42'46
evening set	-141 Jul 02 j 02:32	20° $\mathring{\text{U}}$ 19'00		minimum elong	-135 Aug 16 j 16:05	19° $\mathring{\text{U}}$ 49'38	0°42'47
				max. Earth dist.	-135 Aug 15 j 13:28	19° $\mathring{\text{U}}$ 45'27	19.32570 AU
conjunction	-141 Jul 18 j 19:34	21° $\mathring{\text{U}}$ 20'42	0°32'44	morning rise	-135 Sep 01 j 23:41	20° $\mathring{\text{U}}$ 50'47	
minimum elong	-141 Jul 18 j 19:34	21° $\mathring{\text{U}}$ 20'42	0°32'44	retrograde	-135 Dec 02 j 08:10	24° $\mathring{\text{U}}$ 12'33	
max. Earth dist.	-141 Jul 17 j 15:31	21° $\mathring{\text{U}}$ 16'21	19.45712 AU	opposition	-134 Feb 13 j 17:47	22° $\mathring{\text{U}}$ 10'27	0°48'07
morning rise	-141 Aug 04 j 09:37	22° $\mathring{\text{U}}$ 22'00		min. Earth dist.	-134 Feb 14 j 15:47	22° $\mathring{\text{U}}$ 08'04	17.32503 AU
retrograde	-141 Nov 04 j 11:48	25° $\mathring{\text{U}}$ 42'53		direct	-134 May 01 j 06:12	20° $\mathring{\text{U}}$ 04'02	
opposition	-140 Jan 16 j 20:34	23° $\mathring{\text{U}}$ 40'30	0°37'46	evening set	-134 Aug 05 j 08:48	23° $\mathring{\text{U}}$ 34'35	
min. Earth dist.	-140 Jan 17 j 20:16	23° $\mathring{\text{U}}$ 37'55	17.43871 AU				
direct	-140 Apr 01 j 16:25	21° $\mathring{\text{U}}$ 34'35		conjunction	-134 Aug 21 j 19:12	24° $\mathring{\text{U}}$ 36'11	0°43'29
evening set	-140 Jul 06 j 06:48	25° $\mathring{\text{U}}$ 02'04		minimum elong	-134 Aug 21 j 19:12	24° $\mathring{\text{U}}$ 36'11	0°43'29
				max. Earth dist.	-134 Aug 20 j 18:27	24° $\mathring{\text{U}}$ 32'18	19.32483 AU
conjunction	-140 Jul 22 j 23:03	26° $\mathring{\text{U}}$ 03'50	0°35'02	morning rise	-134 Sep 07 j 01:26	25° $\mathring{\text{U}}$ 37'14	
minimum elong	-140 Jul 22 j 23:03	26° $\mathring{\text{U}}$ 03'50	0°35'02	retrograde	-134 Dec 07 j 07:40	28° $\mathring{\text{U}}$ 58'59	
max. Earth dist.	-140 Jul 21 j 18:19	25° $\mathring{\text{U}}$ 59'22	19.42078 AU	opposition	-133 Feb 18 j 19:04	26° $\mathring{\text{U}}$ 57'02	0°48'45
morning rise	-140 Aug 08 j 12:07	27° $\mathring{\text{U}}$ 05'10		min. Earth dist.	-133 Feb 19 j 17:12	26° $\mathring{\text{U}}$ 54'38	17.32690 AU
	-140 Oct 08 j 15:20	0° $\mathring{\text{U}}$		direct	-133 May 06 j 08:23	24° $\mathring{\text{U}}$ 50'42	
retrograde	-140 Nov 08 j 09:26	0° $\mathring{\text{U}}$ 26'17		evening set	-133 Aug 10 j 12:40	28° $\mathring{\text{U}}$ 21'22	
	-140 Dec 09 j 14:14	30° $\mathring{\text{R}}$ $\mathring{\text{U}}$					
opposition	-139 Jan 20 j 18:45	28° $\mathring{\text{U}}$ 23'52	0°40'13	conjunction	-133 Aug 26 j 21:46	29° $\mathring{\text{U}}$ 22'51	0°43'53
min. Earth dist.	-139 Jan 21 j 19:38	28° $\mathring{\text{U}}$ 21'09	17.40499 AU	minimum elong	-133 Aug 26 j 21:46	29° $\mathring{\text{U}}$ 22'51	0°43'54
direct	-139 Apr 06 j 16:10	26° $\mathring{\text{U}}$ 17'43		max. Earth dist.	-133 Aug 25 j 20:53	29° $\mathring{\text{U}}$ 18'56	19.32937 AU
evening set	-139 Jul 11 j 11:11	29° $\mathring{\text{U}}$ 45'58			-133 Sep 05 j 17:54	0° $\mathring{\text{U}}$	
	-139 Jul 15 j 07:01	0° $\mathring{\text{U}}$		morning rise	-133 Sep 12 j 03:01	0° $\mathring{\text{U}}$ 23'46	
max. Earth dist.	-139 Jul 26 j 22:03	0° $\mathring{\text{U}}$ 43'19	19.38970 AU	retrograde	-133 Dec 12 j 09:03	3° $\mathring{\text{U}}$ 45'29	
				opposition	-132 Feb 23 j 20:32	1° $\mathring{\text{U}}$ 43'39	0°49'03
conjunction	-139 Jul 28 j 02:36	0° $\mathring{\text{U}}$ 47'46	0°37'06	min. Earth dist.	-132 Feb 24 j 17:14	1° $\mathring{\text{U}}$ 41'24	17.33393 AU
minimum elong	-139 Jul 28 j 02:36	0° $\mathring{\text{U}}$ 47'46	0°37'06		-132 Apr 10 j 18:09	30° $\mathring{\text{R}}$ $\mathring{\text{U}}$	
morning rise	-139 Aug 13 j 14:41	1° $\mathring{\text{U}}$ 49'07		direct	-132 May 10 j 12:30	29° $\mathring{\text{U}}$ 37'24	
retrograde	-139 Nov 13 j 10:02	5° $\mathring{\text{U}}$ 10'25			-132 Jun 08 j 19:55	0° $\mathring{\text{U}}$	
opposition	-138 Jan 25 j 17:31	3° $\mathring{\text{U}}$ 08'00	0°42'23	evening set	-132 Aug 14 j 16:12	3° $\mathring{\text{U}}$ 08'04	
min. Earth dist.	-138 Jan 26 j 17:21	3° $\mathring{\text{U}}$ 05'24	17.37667 AU	max. Earth dist.	-132 Aug 30 j 01:29	4° $\mathring{\text{U}}$ 05'49	19.33874 AU
direct	-138 Apr 11 j 19:02	1° $\mathring{\text{U}}$ 01'41					
evening set	-138 Jul 16 j 15:31	4° $\mathring{\text{U}}$ 30'34		conjunction	-132 Aug 31 j 00:16	4° $\mathring{\text{U}}$ 09'25	0°44'00
max. Earth dist.	-138 Aug 01 j 01:58	5° $\mathring{\text{U}}$ 28'01	19.36423 AU	minimum elong	-132 Aug 31 j 00:16	4° $\mathring{\text{U}}$ 09'25	0°43'59
				morning rise	-132 Sep 16 j 04:09	5° $\mathring{\text{U}}$ 10'11	
conjunction	-138 Aug 02 j 06:02	5° $\mathring{\text{U}}$ 32'24	0°38'55	retrograde	-132 Dec 16 j 08:42	8° $\mathring{\text{U}}$ 31'45	
minimum elong	-138 Aug 02 j 06:02	5° $\mathring{\text{U}}$ 32'24	0°38'56	opposition	-131 Feb 27 j 22:18	6° $\mathring{\text{U}}$ 30'03	0°49'00
morning rise	-138 Aug 18 j 16:56	6° $\mathring{\text{U}}$ 33'43		min. Earth dist.	-131 Feb 28 j 18:45	6° $\mathring{\text{U}}$ 27'50	17.34555 AU
retrograde	-138 Nov 18 j 07:45	9° $\mathring{\text{U}}$ 55'12		direct	-131 May 15 j 15:05	4° $\mathring{\text{U}}$ 23'55	
opposition	-137 Jan 30 j 17:00	7° $\mathring{\text{U}}$ 52'49	0°44'17	evening set	-131 Aug 19 j 19:27	7° $\mathring{\text{U}}$ 54'26	
min. Earth dist.	-137 Jan 31 j 17:29	7° $\mathring{\text{U}}$ 50'08	17.35438 AU	max. Earth dist.	-131 Sep 04 j 03:19	8° $\mathring{\text{U}}$ 52'01	19.35270 AU
direct	-137 Apr 16 j 19:58	5° $\mathring{\text{U}}$ 46'22					
evening set	-137 Jul 21 j 19:57	9° $\mathring{\text{U}}$ 15'50		conjunction	-131 Sep 05 j 02:09	8° $\mathring{\text{U}}$ 55'37	0°43'48
max. Earth dist.	-137 Aug 06 j 05:34	10° $\mathring{\text{U}}$ 13'16	19.34513 AU	minimum elong	-131 Sep 05 j 02:09	8° $\mathring{\text{U}}$ 55'37	0°43'48
				morning rise	-131 Sep 21 j 04:59	9° $\mathring{\text{U}}$ 56'13	
conjunction	-137 Aug 07 j 09:27	10° $\mathring{\text{U}}$ 17'38	0°40'29	retrograde	-131 Dec 21 j 09:22	13° $\mathring{\text{U}}$ 17'37	
minimum elong	-137 Aug 07 j 09:27	10° $\mathring{\text{U}}$ 17'38	0°40'28	opposition	-130 Mar 05 j 00:17	11° $\mathring{\text{U}}$ 16'00	0°48'36
morning rise	-137 Aug 23 j 19:21	11° $\mathring{\text{U}}$ 18'55		min. Earth dist.	-130 Mar 05 j 19:22	11° $\mathring{\text{U}}$ 13'56	17.36177 AU
retrograde	-137 Nov 23 j 08:32	14° $\mathring{\text{U}}$ 40'32		direct	-130 May 20 j 19:20	9° $\mathring{\text{U}}$ 09'59	
opposition	-136 Feb 04 j 16:39	12° $\mathring{\text{U}}$ 38'12	0°45'53	evening set	-130 Aug 24 j 21:48	12° $\mathring{\text{U}}$ 40'13	

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Attention, astronomical year style is used: The year -130 in astronomical counting style is the year 131 BCE in historical counting style.

max. Earth dist.	-130 Sep 09 j 07:02	13° <u>♏</u> 37'59	19.37107 AU	morning rise	-124 Oct 23 j 15:09	12° <u>♏</u> 50'06	
				retrograde	-123 Jan 22 j 17:53	16° <u>♏</u> 08'56	
conjunction	-130 Sep 10 j 03:28	13° <u>♏</u> 41'13	0°43'18	opposition	-123 Apr 07 j 11:04	14° <u>♏</u> 07'46	0°37'07
minimum elong	-130 Sep 10 j 03:28	13° <u>♏</u> 41'13	0°43'18	min. Earth dist.	-123 Apr 07 j 18:24	14° <u>♏</u> 07'00	17.59894 AU
morning rise	-130 Sep 26 j 05:01	14° <u>♏</u> 41'38		direct	-123 Jun 23 j 18:28	12° <u>♏</u> 03'15	
retrograde	-130 Dec 26 j 08:26	18° <u>♏</u> 02'48		evening set	-123 Sep 26 j 17:27	15° <u>♏</u> 28'27	
opposition	-129 Mar 10 j 02:21	16° <u>♏</u> 01'15	0°47'52				
min. Earth dist.	-129 Mar 10 j 20:30	15° <u>♏</u> 59'18	17.38217 AU	conjunction	-123 Oct 12 j 15:15	16° <u>♏</u> 27'40	0°32'09
direct	-129 May 25 j 22:50	13° <u>♏</u> 55'24		minimum elong	-123 Oct 12 j 15:16	16° <u>♏</u> 27'40	0°32'09
evening set	-129 Aug 29 j 23:47	17° <u>♏</u> 25'13		max. Earth dist.	-123 Oct 12 j 07:52	16° <u>♏</u> 26'31	19.62468 AU
max. Earth dist.	-129 Sep 14 j 08:03	18° <u>♏</u> 22'50	19.39369 AU	morning rise	-123 Oct 28 j 10:03	17° <u>♏</u> 26'28	
				retrograde	-122 Jan 27 j 13:05	20° <u>♏</u> 44'50	
conjunction	-129 Sep 15 j 04:07	18° <u>♏</u> 26'00	0°42'30	opposition	-122 Apr 12 j 11:37	18° <u>♏</u> 43'49	0°34'26
minimum elong	-129 Sep 15 j 04:07	18° <u>♏</u> 26'00	0°42'29	min. Earth dist.	-122 Apr 12 j 17:41	18° <u>♏</u> 43'11	17.65155 AU
morning rise	-129 Oct 01 j 04:41	19° <u>♏</u> 26'13		direct	-122 Jun 28 j 17:53	16° <u>♏</u> 39'41	
retrograde	-129 Dec 31 j 07:31	22° <u>♏</u> 47'05		evening set	-122 Oct 01 j 13:10	20° <u>♏</u> 03'53	
opposition	-128 Mar 14 j 04:10	20° <u>♏</u> 45'36	0°46'49				
min. Earth dist.	-128 Mar 14 j 21:08	20° <u>♏</u> 43'47	17.40696 AU	conjunction	-122 Oct 17 j 10:01	21° <u>♏</u> 02'48	0°29'39
direct	-128 May 30 j 02:58	18° <u>♏</u> 39'53		minimum elong	-122 Oct 17 j 10:01	21° <u>♏</u> 02'48	0°29'39
evening set	-128 Sep 03 j 00:54	22° <u>♏</u> 09'11		max. Earth dist.	-122 Oct 17 j 04:44	21° <u>♏</u> 01'59	19.67944 AU
max. Earth dist.	-128 Sep 18 j 10:33	23° <u>♏</u> 06'57	19.42066 AU	morning rise	-122 Nov 02 j 04:10	22° <u>♏</u> 01'21	
				retrograde	-121 Feb 01 j 09:51	25° <u>♏</u> 19'14	
conjunction	-128 Sep 19 j 04:13	23° <u>♏</u> 09'44	0°41'25	opposition	-121 Apr 17 j 11:31	23° <u>♏</u> 18'24	0°31'33
minimum elong	-128 Sep 19 j 04:13	23° <u>♏</u> 09'44	0°41'25	min. Earth dist.	-121 Apr 17 j 14:30	23° <u>♏</u> 18'05	17.70803 AU
morning rise	-128 Oct 05 j 03:37	24° <u>♏</u> 09'44		direct	-121 Jul 03 j 19:04	21° <u>♏</u> 14'40	
retrograde	-127 Jan 04 j 05:36	27° <u>♏</u> 30'16		evening set	-121 Oct 06 j 08:08	24° <u>♏</u> 37'49	
opposition	-127 Mar 19 j 06:05	25° <u>♏</u> 28'49	0°45'27				
min. Earth dist.	-127 Mar 19 j 21:24	25° <u>♏</u> 27'11	17.43594 AU	conjunction	-121 Oct 22 j 04:08	25° <u>♏</u> 36'28	0°26'59
direct	-127 Jun 04 j 07:18	23° <u>♏</u> 23'17		minimum elong	-121 Oct 22 j 04:08	25° <u>♏</u> 36'28	0°26'59
evening set	-127 Sep 08 j 01:13	26° <u>♏</u> 51'56		max. Earth dist.	-121 Oct 22 j 01:25	25° <u>♏</u> 36'03	19.73760 AU
max. Earth dist.	-127 Sep 23 j 10:41	27° <u>♏</u> 49'38	19.45192 AU	morning rise	-121 Nov 06 j 21:32	26° <u>♏</u> 34'45	
				retrograde	-120 Feb 06 j 04:04	29° <u>♏</u> 52'08	
conjunction	-127 Sep 24 j 03:15	27° <u>♏</u> 52'14	0°40'03	opposition	-120 Apr 21 j 11:03	27° <u>♏</u> 51'30	0°28'29
minimum elong	-127 Sep 24 j 03:15	27° <u>♏</u> 52'14	0°40'03	min. Earth dist.	-120 Apr 21 j 13:06	27° <u>♏</u> 51'17	17.76768 AU
morning rise	-127 Oct 10 j 01:41	28° <u>♏</u> 52'00		direct	-120 Jul 07 j 16:48	25° <u>♏</u> 48'12	
	-127 Oct 29 j 08:38	0° <u>♏</u>		evening set	-120 Oct 10 j 02:19	29° <u>♏</u> 10'15	
retrograde	-126 Jan 09 j 03:09	2° <u>♏</u> 12'10			-120 Oct 23 j 13:59	0° <u>♏</u>	
opposition	-126 Mar 24 j 07:50	0° <u>♏</u> 10'45	0°43'46				
min. Earth dist.	-126 Mar 24 j 21:53	0° <u>♏</u> 09'15	17.46952 AU	conjunction	-120 Oct 25 j 21:23	0° <u>♏</u> 08'36	0°24'10
	-126 Mar 28 j 12:48	30° <u>♏</u>		minimum elong	-120 Oct 25 j 21:23	0° <u>♏</u> 08'36	0°24'10
direct	-126 Jun 09 j 10:28	28° <u>♏</u> 05'24		max. Earth dist.	-120 Oct 25 j 20:15	0° <u>♏</u> 08'26	19.79863 AU
	-126 Aug 16 j 19:17	0° <u>♏</u>		morning rise	-120 Nov 10 j 14:16	1° <u>♏</u> 06'38	
evening set	-126 Sep 13 j 00:34	1° <u>♏</u> 33'17		retrograde	-119 Feb 10 j 00:13	4° <u>♏</u> 23'31	
max. Earth dist.	-126 Sep 28 j 11:36	2° <u>♏</u> 31'09	19.48790 AU	opposition	-119 Apr 26 j 10:09	2° <u>♏</u> 23'03	0°25'15
				min. Earth dist.	-119 Apr 26 j 09:11	2° <u>♏</u> 23'09	17.82973 AU
conjunction	-126 Sep 29 j 01:34	2° <u>♏</u> 33'20	0°38'25	direct	-119 Jul 12 j 16:27	0° <u>♏</u> 20'12	
minimum elong	-126 Sep 29 j 01:34	2° <u>♏</u> 33'20	0°38'26	evening set	-119 Oct 14 j 19:26	3° <u>♏</u> 41'06	
morning rise	-126 Oct 14 j 22:59	3° <u>♏</u> 32'52					
retrograde	-125 Jan 14 j 00:39	6° <u>♏</u> 52'36		conjunction	-119 Oct 30 j 13:48	4° <u>♏</u> 39'10	0°21'13
opposition	-125 Mar 29 j 09:11	4° <u>♏</u> 51'15	0°41'48	minimum elong	-119 Oct 30 j 13:48	4° <u>♏</u> 39'10	0°21'12
min. Earth dist.	-125 Mar 29 j 20:47	4° <u>♏</u> 50'01	17.50777 AU	max. Earth dist.	-119 Oct 30 j 15:26	4° <u>♏</u> 39'25	19.86157 AU
direct	-125 Jun 14 j 14:14	2° <u>♏</u> 46'07		morning rise	-119 Nov 15 j 06:02	5° <u>♏</u> 36'57	
evening set	-125 Sep 17 j 23:05	6° <u>♏</u> 13'11		retrograde	-118 Feb 14 j 17:59	8° <u>♏</u> 53'19	
				opposition	-118 May 01 j 08:55	6° <u>♏</u> 53'01	0°21'53
conjunction	-125 Oct 03 j 22:57	7° <u>♏</u> 12'57	0°36'33	min. Earth dist.	-118 May 01 j 07:05	6° <u>♏</u> 53'13	17.89343 AU
minimum elong	-125 Oct 03 j 22:57	7° <u>♏</u> 12'57	0°36'33	direct	-118 Jul 17 j 13:14	4° <u>♏</u> 50'36	
max. Earth dist.	-125 Oct 03 j 10:47	7° <u>♏</u> 11'03	19.52862 AU	evening set	-118 Oct 19 j 11:54	8° <u>♏</u> 10'19	
morning rise	-125 Oct 19 j 19:28	8° <u>♏</u> 12'15					
retrograde	-124 Jan 18 j 20:51	11° <u>♏</u> 31'32		conjunction	-118 Nov 04 j 05:26	9° <u>♏</u> 08'05	0°18'08
opposition	-124 Apr 02 j 10:22	9° <u>♏</u> 30'15	0°39'35	minimum elong	-118 Nov 04 j 05:26	9° <u>♏</u> 08'05	0°18'09
min. Earth dist.	-124 Apr 02 j 20:40	9° <u>♏</u> 29'10	17.55098 AU	max. Earth dist.	-118 Nov 04 j 08:13	9° <u>♏</u> 08'30	19.92587 AU
direct	-124 Jun 18 j 15:44	7° <u>♏</u> 25'24		morning rise	-118 Nov 19 j 21:21	10° <u>♏</u> 05'37	
evening set	-124 Sep 21 j 20:42	10° <u>♏</u> 51'34		retrograde	-117 Feb 19 j 12:42	13° <u>♏</u> 21'26	
				opposition	-117 May 06 j 06:45	11° <u>♏</u> 21'18	0°18'24
conjunction	-124 Oct 07 j 19:30	11° <u>♏</u> 51'04	0°34'27	min. Earth dist.	-117 May 06 j 02:11	11° <u>♏</u> 21'46	17.95810 AU
minimum elong	-124 Oct 07 j 19:30	11° <u>♏</u> 51'04	0°34'27	direct	-117 Jul 22 j 11:34	9° <u>♏</u> 19'17	
max. Earth dist.	-124 Oct 07 j 09:46	11° <u>♏</u> 49'32	19.57432 AU	evening set	-117 Oct 24 j 03:22	12° <u>♏</u> 37'48	

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Attention, astronomical year style is used: The year -117 in astronomical counting style is the year 118 BCE in historical counting style.

conjunction	-117 Nov 08 j 20:24	13° \mathbb{M} 35'17	0°14'59	conjunction	-112 Nov 29 j 10:04	5° \mathbb{A} 22'38	-0°01'33
minimum elong	-117 Nov 08 j 20:24	13° \mathbb{M} 35'17	0°14'58	minimum elong	-112 Nov 29 j 10:04	5° \mathbb{A} 22'38	0°01'34
behind sun begin	-117 Nov 08 j 17:45	13° \mathbb{M} 34'53		behind sun begin	-112 Nov 29 j 03:32	5° \mathbb{A} 21'41	
behind sun end	-117 Nov 08 j 23:03	13° \mathbb{M} 35'41		behind sun end	-112 Nov 29 j 16:36	5° \mathbb{A} 23'36	
max. Earth dist.	-117 Nov 09 j 01:48	13° \mathbb{M} 36'06	19.99067 AU	max. Earth dist.	-112 Nov 29 j 23:19	5° \mathbb{A} 24'38	20.31093 AU
morning rise	-117 Nov 24 j 11:47	14° \mathbb{M} 32'33		morning rise	-112 Dec 15 j 00:51	6° \mathbb{A} 18'45	
	-117 Dec 02 j 05:44	15° \mathbb{M}		retrograde	-111 Mar 17 j 07:43	9° \mathbb{A} 31'06	
retrograde	-116 Feb 24 j 05:24	17° \mathbb{M} 47'49		opposition	-111 Jun 02 j 04:32	7° \mathbb{A} 31'22	-0°03'29
opposition	-116 May 10 j 04:16	15° \mathbb{M} 47'48	0°14'50	min. Earth dist.	-111 Jun 01 j 13:48	7° \mathbb{A} 32'51	18.34252 AU
min. Earth dist.	-116 May 09 j 22:55	15° \mathbb{M} 48'21	18.02296 AU	direct	-111 Aug 18 j 05:23	5° \mathbb{A} 31'25	
	-116 May 30 j 01:39	15° \mathbb{R} \mathbb{M}		evening set	-111 Nov 18 j 05:24	8° \mathbb{A} 42'23	
direct	-116 Jul 26 j 07:53	13° \mathbb{M} 46'12					
	-116 Sep 18 j 18:44	15° \mathbb{M}		conjunction	-111 Dec 03 j 20:03	9° \mathbb{A} 38'15	-0°04'50
evening set	-116 Oct 27 j 18:01	17° \mathbb{M} 03'28		minimum elong	-111 Dec 03 j 20:03	9° \mathbb{A} 38'15	0°04'50
				behind sun begin	-111 Dec 03 j 13:40	9° \mathbb{A} 37'19	
conjunction	-116 Nov 12 j 10:19	18° \mathbb{M} 00'39	0°11'45	behind sun end	-111 Dec 04 j 02:26	9° \mathbb{A} 39'11	
minimum elong	-116 Nov 12 j 10:19	18° \mathbb{M} 00'39	0°11'45	max. Earth dist.	-111 Dec 04 j 12:16	9° \mathbb{A} 40'40	20.37419 AU
behind sun begin	-116 Nov 12 j 05:38	17° \mathbb{M} 59'57		morning rise	-111 Dec 19 j 10:44	10° \mathbb{A} 34'09	
behind sun end	-116 Nov 12 j 15:00	18° \mathbb{M} 01'21		retrograde	-110 Mar 21 j 19:58	13° \mathbb{A} 45'57	
max. Earth dist.	-116 Nov 12 j 16:32	18° \mathbb{M} 01'35	20.05553 AU	opposition	-110 Jun 06 j 21:34	11° \mathbb{A} 46'17	-0°07'05
morning rise	-116 Nov 28 j 01:32	18° \mathbb{M} 57'41		min. Earth dist.	-110 Jun 06 j 05:25	11° \mathbb{A} 47'55	18.40569 AU
retrograde	-115 Feb 27 j 22:27	22° \mathbb{M} 12'23		direct	-110 Aug 22 j 21:08	9° \mathbb{A} 46'41	
opposition	-115 May 15 j 01:01	20° \mathbb{M} 12'28	0°11'12	evening set	-110 Nov 22 j 15:00	12° \mathbb{A} 56'28	
min. Earth dist.	-115 May 14 j 17:04	20° \mathbb{M} 13'17	18.08768 AU				
direct	-115 Jul 31 j 04:45	18° \mathbb{M} 11'14		conjunction	-110 Dec 08 j 05:22	13° \mathbb{A} 52'06	-0°08'02
evening set	-115 Nov 01 j 07:41	21° \mathbb{M} 27'14		minimum elong	-110 Dec 08 j 05:21	13° \mathbb{A} 52'06	0°08'03
				behind sun begin	-110 Dec 07 j 23:30	13° \mathbb{A} 51'15	
conjunction	-115 Nov 16 j 23:38	22° \mathbb{M} 24'08	0°08'28	behind sun end	-110 Dec 08 j 11:12	13° \mathbb{A} 52'57	
minimum elong	-115 Nov 16 j 23:38	22° \mathbb{M} 24'08	0°08'28	max. Earth dist.	-110 Dec 08 j 22:09	13° \mathbb{A} 54'36	20.43724 AU
behind sun begin	-115 Nov 16 j 17:52	22° \mathbb{M} 23'17		morning rise	-110 Dec 23 j 20:20	14° \mathbb{A} 47'48	
behind sun end	-115 Nov 17 j 05:24	22° \mathbb{M} 25'00		retrograde	-109 Mar 26 j 09:05	17° \mathbb{A} 59'06	
max. Earth dist.	-115 Nov 17 j 08:34	22° \mathbb{M} 25'29	20.12000 AU	opposition	-109 Jun 11 j 13:39	15° \mathbb{A} 59'31	-0°10'37
morning rise	-115 Dec 02 j 14:29	23° \mathbb{M} 20'55		min. Earth dist.	-109 Jun 10 j 19:39	16° \mathbb{A} 01'20	18.46859 AU
retrograde	-114 Mar 04 j 13:31	26° \mathbb{M} 35'02		direct	-109 Aug 27 j 11:03	14° \mathbb{A} 00'15	
opposition	-114 May 19 j 21:07	24° \mathbb{M} 35'11	0°07'31	evening set	-109 Nov 26 j 23:45	17° \mathbb{A} 08'55	
min. Earth dist.	-114 May 19 j 12:15	24° \mathbb{M} 36'05	18.15191 AU				
direct	-114 Aug 05 j 00:24	22° \mathbb{M} 34'18		conjunction	-109 Dec 12 j 14:11	18° \mathbb{A} 04'20	-0°11'11
evening set	-114 Nov 05 j 20:27	25° \mathbb{M} 49'00		minimum elong	-109 Dec 12 j 14:11	18° \mathbb{A} 04'20	0°11'10
				behind sun begin	-109 Dec 12 j 09:16	18° \mathbb{A} 03'37	
conjunction	-114 Nov 21 j 11:52	26° \mathbb{M} 45'39	0°05'11	behind sun end	-109 Dec 12 j 19:06	18° \mathbb{A} 05'03	
minimum elong	-114 Nov 21 j 11:51	26° \mathbb{M} 45'39	0°05'11	max. Earth dist.	-109 Dec 13 j 09:40	18° \mathbb{A} 07'14	20.49969 AU
behind sun begin	-114 Nov 21 j 05:31	26° \mathbb{M} 44'42		morning rise	-109 Dec 28 j 05:11	18° \mathbb{A} 59'52	
behind sun end	-114 Nov 21 j 18:12	26° \mathbb{M} 46'35		retrograde	-108 Mar 29 j 20:26	22° \mathbb{A} 10'40	
max. Earth dist.	-114 Nov 21 j 21:30	26° \mathbb{M} 47'05	20.18404 AU	min. Earth dist.	-108 Jun 14 j 09:51	20° \mathbb{A} 13'09	18.53051 AU
morning rise	-114 Dec 07 j 02:45	27° \mathbb{M} 42'12		opposition	-108 Jun 15 j 05:14	20° \mathbb{A} 11'12	-0°14'04
	-113 Jan 21 j 09:18	0° \mathbb{A}		direct	-108 Aug 31 j 00:55	18° \mathbb{A} 12'19	
retrograde	-113 Mar 09 j 04:35	0° \mathbb{A} 55'43		evening set	-108 Nov 30 j 07:56	21° \mathbb{A} 19'53	
	-113 Apr 27 j 01:35	30° \mathbb{R} \mathbb{M}					
opposition	-113 May 24 j 16:20	28° \mathbb{M} 55'54	0°03'50	conjunction	-108 Dec 15 j 22:11	22° \mathbb{A} 15'06	-0°14'15
min. Earth dist.	-113 May 24 j 05:05	28° \mathbb{M} 57'03	18.21573 AU	minimum elong	-108 Dec 15 j 22:11	22° \mathbb{A} 15'06	0°14'15
direct	-113 Aug 09 j 19:09	26° \mathbb{M} 55'20		behind sun begin	-108 Dec 15 j 18:55	22° \mathbb{A} 14'37	
	-113 Nov 07 j 20:40	0° \mathbb{A}		behind sun end	-108 Dec 16 j 01:27	22° \mathbb{A} 15'34	
evening set	-113 Nov 10 j 08:16	0° \mathbb{A} 08'46		max. Earth dist.	-108 Dec 16 j 18:06	22° \mathbb{A} 18'03	20.56102 AU
				morning rise	-108 Dec 31 j 13:37	23° \mathbb{A} 10'28	
conjunction	-113 Nov 25 j 23:26	1° \mathbb{A} 05'08	0°01'51	retrograde	-107 Apr 03 j 08:59	26° \mathbb{A} 20'50	
minimum elong	-113 Nov 25 j 23:27	1° \mathbb{A} 05'08	0°01'51	opposition	-107 Jun 19 j 20:13	24° \mathbb{A} 21'28	-0°17'26
behind sun begin	-113 Nov 25 j 16:54	1° \mathbb{A} 04'10		min. Earth dist.	-107 Jun 18 j 23:28	24° \mathbb{A} 23'33	18.59117 AU
behind sun end	-113 Nov 26 j 05:59	1° \mathbb{A} 06'06		direct	-107 Sep 04 j 13:02	22° \mathbb{A} 22'57	
max. Earth dist.	-113 Nov 26 j 11:55	1° \mathbb{A} 07'01	20.24758 AU	evening set	-107 Dec 04 j 15:32	25° \mathbb{A} 29'30	
morning rise	-113 Dec 11 j 14:05	2° \mathbb{A} 01'28					
retrograde	-112 Mar 12 j 18:00	5° \mathbb{A} 14'23		conjunction	-107 Dec 20 j 06:01	26° \mathbb{A} 24'31	-0°17'14
opposition	-112 May 28 j 10:46	3° \mathbb{A} 14'36	0°00'10	minimum elong	-107 Dec 20 j 06:01	26° \mathbb{A} 24'31	0°17'14
min. Earth dist.	-112 May 27 j 22:21	3° \mathbb{A} 15'52	18.27911 AU	max. Earth dist.	-107 Dec 21 j 04:20	26° \mathbb{A} 27'49	20.62065 AU
desc. node	-112 Jun 13 j 17:52	2° \mathbb{A} 35'31		morning rise	-106 Jan 04 j 21:36	27° \mathbb{A} 19'44	
direct	-112 Aug 13 j 13:06	1° \mathbb{A} 14'21			-106 Mar 04 j 07:07	0° \mathbb{B}	
evening set	-112 Nov 13 j 19:22	4° \mathbb{A} 26'32		retrograde	-106 Apr 07 j 19:51	0° \mathbb{B} 29'41	
					-106 May 13 j 09:18	30° \mathbb{R} \mathbb{A}	

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Attention, astronomical year style is used: The year -106 in astronomical counting style is the year 107 BCE in historical counting style.

opposition	-106 Jun 24 j 10:24	28° $\overline{30}$ '26	-0°20'41	minimum elong	-99 Jan 17 j 02:35	24° $\overline{58}$ '47	0°34'37
min. Earth dist.	-106 Jun 23 j 12:30	28° $\overline{32}$ '38	18.64969 AU	max. Earth dist.	-99 Jan 18 j 03:55	25° $\overline{50}$ '27	20.93951 AU
direct	-106 Sep 09 j 01:37	26° $\overline{32}$ '17		morning rise	-99 Feb 01 j 22:09	25° $\overline{53}$ '21	
evening set	-106 Dec 08 j 22:48	29° $\overline{37}$ '51		retrograde	-99 May 06 j 18:38	29° $\overline{50}$ '03	
	-106 Dec 15 j 07:20	0° $\overline{5}$		opposition	-99 Jul 23 j 21:24	27° $\overline{50}$ '01	-0°39'18
				min. Earth dist.	-99 Jul 22 j 20:50	27° $\overline{50}$ '28	18.95463 AU
conjunction	-106 Dec 24 j 13:15	0° $\overline{53}$ '42	-0°20'07	direct	-99 Oct 07 j 19:11	25° $\overline{50}$ '22	
minimum elong	-106 Dec 24 j 13:15	0° $\overline{53}$ '42	0°20'07	evening set	-98 Jan 05 j 14:44	28° $\overline{50}$ '28	
max. Earth dist.	-106 Dec 25 j 11:35	0° $\overline{53}$ '59	20.67790 AU				
morning rise	-105 Jan 09 j 05:24	1° $\overline{52}$ '46		conjunction	-98 Jan 21 j 08:01	28° $\overline{59}$ '34	-0°36'27
retrograde	-105 Apr 12 j 07:24	4° $\overline{37}$ '21		minimum elong	-98 Jan 21 j 08:00	28° $\overline{59}$ '34	0°36'27
min. Earth dist.	-105 Jun 28 j 01:27	2° $\overline{54}$ '28	18.70560 AU	max. Earth dist.	-98 Jan 22 j 10:39	29° $\overline{50}$ '25	20.96798 AU
opposition	-105 Jun 29 j 00:04	2° $\overline{53}$ '12	-0°23'49	morning rise	-98 Feb 06 j 04:08	29° $\overline{54}$ '06	
direct	-105 Sep 13 j 11:45	0° $\overline{54}$ '22			-98 Feb 07 j 22:10	0° \approx	
evening set	-105 Dec 13 j 05:29	3° $\overline{54}$ '01		retrograde	-98 May 11 j 03:14	3° \approx 01'34	
				min. Earth dist.	-98 Jul 27 j 05:19	1° \approx 05'01	18.98121 AU
conjunction	-105 Dec 28 j 20:15	4° $\overline{53}$ '43	-0°22'53	opposition	-98 Jul 28 j 06:41	1° \approx 02'29	-0°41'14
minimum elong	-105 Dec 28 j 20:15	4° $\overline{53}$ '43	0°22'55		-98 Aug 24 j 17:34	30° $\overline{58}$ ' $\overline{5}$	
max. Earth dist.	-105 Dec 29 j 20:32	4° $\overline{54}$ '17	20.73205 AU	direct	-98 Oct 12 j 03:04	29° $\overline{50}$ '55	
morning rise	-104 Jan 13 j 12:38	5° $\overline{53}$ '40			-98 Nov 27 j 15:40	0° \approx	
retrograde	-104 Apr 15 j 17:49	8° $\overline{54}$ '52		evening set	-97 Jan 09 j 19:24	2° \approx 05'29	
opposition	-104 Jul 02 j 13:04	6° $\overline{54}$ '51	-0°26'49				
min. Earth dist.	-104 Jul 01 j 13:32	6° $\overline{54}$ '12	18.75796 AU	conjunction	-97 Jan 25 j 13:06	2° \approx 59'33	-0°38'06
direct	-104 Sep 16 j 23:33	4° $\overline{54}$ '19		minimum elong	-97 Jan 25 j 13:06	2° \approx 59'33	0°38'06
evening set	-104 Dec 16 j 12:01	7° $\overline{51}$ '06		max. Earth dist.	-97 Jan 26 j 14:57	3° \approx 03'16	20.99271 AU
				morning rise	-97 Feb 10 j 10:10	3° \approx 54'03	
conjunction	-103 Jan 01 j 02:52	8° $\overline{54}$ '39	-0°25'32	retrograde	-97 May 15 j 11:51	7° \approx 01'21	
minimum elong	-103 Jan 01 j 02:52	8° $\overline{54}$ '39	0°25'32	opposition	-97 Aug 01 j 15:42	5° \approx 02'12	-0°42'56
max. Earth dist.	-103 Jan 02 j 02:46	8° $\overline{54}$ '08	20.78250 AU	min. Earth dist.	-97 Jul 31 j 14:53	5° \approx 04'41	19.00428 AU
morning rise	-103 Jan 16 j 19:54	9° $\overline{54}$ '29		direct	-97 Oct 16 j 09:11	3° \approx 05'43	
retrograde	-103 Apr 20 j 04:30	12° $\overline{54}$ '22		evening set	-96 Jan 13 j 23:38	6° \approx 04'50	
min. Earth dist.	-103 Jul 06 j 01:54	10° $\overline{52}$ '46	18.80648 AU				
opposition	-103 Jul 07 j 01:37	10° $\overline{55}$ '24	-0°29'40	conjunction	-96 Jan 29 j 18:09	6° \approx 58'52	-0°39'33
direct	-103 Sep 21 j 08:08	8° $\overline{53}$ '08		minimum elong	-96 Jan 29 j 18:09	6° \approx 58'52	0°39'33
evening set	-103 Dec 20 j 17:57	11° $\overline{56}$ '05		max. Earth dist.	-96 Jan 30 j 21:14	7° \approx 02'46	21.01398 AU
				morning rise	-96 Feb 14 j 15:51	7° \approx 53'22	
conjunction	-102 Jan 05 j 09:19	12° $\overline{50}$ '30	-0°28'03	retrograde	-96 May 18 j 20:39	11° \approx 00'33	
minimum elong	-102 Jan 05 j 09:19	12° $\overline{50}$ '30	0°28'03	min. Earth dist.	-96 Aug 03 j 22:34	9° \approx 03'55	19.02377 AU
max. Earth dist.	-102 Jan 06 j 10:45	12° $\overline{54}$ '13	20.82872 AU	opposition	-96 Aug 05 j 00:12	9° \approx 01'21	-0°44'27
morning rise	-102 Jan 21 j 02:45	13° $\overline{54}$ '15		direct	-96 Oct 19 j 16:09	7° \approx 04'58	
retrograde	-102 Apr 24 j 14:26	16° $\overline{53}$ '49		evening set	-95 Jan 17 j 04:08	10° \approx 03'41	
opposition	-102 Jul 11 j 13:27	14° $\overline{54}$ '53	-0°32'21				
min. Earth dist.	-102 Jul 10 j 13:00	14° $\overline{57}$ '19	18.85036 AU	conjunction	-95 Feb 01 j 23:12	10° \approx 57'43	-0°40'50
direct	-102 Sep 25 j 18:56	12° $\overline{57}$ '50		minimum elong	-95 Feb 01 j 23:12	10° \approx 57'43	0°40'50
evening set	-102 Dec 24 j 23:48	16° $\overline{50}$ '00		max. Earth dist.	-95 Feb 03 j 01:21	11° \approx 01'28	21.03175 AU
				morning rise	-95 Feb 17 j 21:55	11° \approx 52'15	
conjunction	-101 Jan 09 j 15:23	16° $\overline{54}$ '19	-0°30'24	retrograde	-95 May 23 j 04:33	14° \approx 59'20	
minimum elong	-101 Jan 09 j 15:23	16° $\overline{54}$ '19	0°30'24	min. Earth dist.	-95 Aug 08 j 07:40	13° \approx 02'36	19.03986 AU
max. Earth dist.	-101 Jan 10 j 16:02	16° $\overline{57}$ '54	20.87022 AU	opposition	-95 Aug 09 j 08:26	13° \approx 00'07	-0°45'44
morning rise	-101 Jan 25 j 09:34	17° $\overline{54}$ '59		direct	-95 Oct 23 j 21:27	11° \approx 03'48	
retrograde	-101 Apr 29 j 00:13	20° $\overline{57}$ '14		evening set	-94 Jan 21 j 08:26	14° \approx 02'12	
min. Earth dist.	-101 Jul 15 j 00:29	19° $\overline{50}$ '43	18.88958 AU				
opposition	-101 Jul 16 j 00:38	18° $\overline{58}$ '18	-0°34'51	conjunction	-94 Feb 06 j 04:28	14° \approx 56'16	-0°41'54
direct	-101 Sep 30 j 02:43	17° $\overline{50}$ '24		minimum elong	-94 Feb 06 j 04:28	14° \approx 56'16	0°41'54
evening set	-101 Dec 29 j 05:04	20° $\overline{50}$ '25		max. Earth dist.	-94 Feb 07 j 07:32	15° \approx 00'09	21.04599 AU
					-94 Feb 07 j 06:29	15° \approx	
conjunction	-100 Jan 13 j 21:17	20° $\overline{57}$ '04	-0°32'35	morning rise	-94 Feb 22 j 03:55	15° \approx 50'50	
minimum elong	-100 Jan 13 j 21:17	20° $\overline{57}$ '04	0°32'36	retrograde	-94 May 27 j 14:06	18° \approx 57'52	
max. Earth dist.	-100 Jan 14 j 23:15	21° $\overline{50}$ '50	20.90709 AU	opposition	-94 Aug 13 j 16:13	16° \approx 58'38	-0°46'48
morning rise	-100 Jan 29 j 15:57	21° $\overline{51}$ '40		min. Earth dist.	-94 Aug 12 j 14:56	17° \approx 01'10	19.05212 AU
retrograde	-100 May 02 j 09:22	24° $\overline{59}$ '37		direct	-94 Oct 28 j 03:53	15° \approx 02'24	
min. Earth dist.	-100 Jul 18 j 10:19	23° $\overline{50}$ '09	18.92415 AU	evening set	-93 Jan 25 j 13:05	18° \approx 00'35	
opposition	-100 Jul 19 j 11:15	23° $\overline{50}$ '39	-0°37'11				
direct	-100 Oct 03 j 12:06	21° $\overline{50}$ '55		conjunction	-93 Feb 10 j 09:44	18° \approx 54'40	-0°42'46
evening set	-99 Jan 01 j 10:03	24° $\overline{50}$ '38		minimum elong	-93 Feb 10 j 09:44	18° \approx 54'40	0°42'47
				max. Earth dist.	-93 Feb 11 j 11:33	18° \approx 58'22	21.05627 AU
conjunction	-99 Jan 17 j 02:35	24° $\overline{58}$ '47	-0°34'36	morning rise	-93 Feb 26 j 10:14	19° \approx 49'17	

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

retrograde	-93 May 31 j 21:19	22° \approx 56'20	evening set	-86 Feb 22 j 04:37	15° \mathbb{H} 53'32
opposition	-93 Aug 17 j 23:49	20° \approx 57'05 -0°47'39			
min. Earth dist.	-93 Aug 16 j 23:51	20° \approx 59'29 19.06040 AU	conjunction	-86 Mar 10 j 08:01	16° \mathbb{H} 48'23 -0°43'00
direct	-93 Nov 01 j 08:17	19° \approx 00'54	minimum elong	-86 Mar 10 j 08:01	16° \mathbb{H} 48'23 0°43'01
evening set	-92 Jan 29 j 17:44	21° \approx 58'56	max. Earth dist.	-86 Mar 11 j 03:40	16° \mathbb{H} 51'11 20.99163 AU
			morning rise	-86 Mar 26 j 15:13	17° \mathbb{H} 43'47
conjunction	-92 Feb 14 j 15:23	22° \approx 53'05 -0°43'27	retrograde	-86 Jun 29 j 10:57	20° \mathbb{H} 51'43
minimum elong	-92 Feb 14 j 15:23	22° \approx 53'05 0°43'27	min. Earth dist.	-86 Sep 14 j 07:37	18° \mathbb{H} 53'35 18.97766 AU
max. Earth dist.	-92 Feb 15 j 17:46	22° \approx 56'51 21.06245 AU	opposition	-86 Sep 15 j 00:58	18° \mathbb{H} 51'49 -0°47'05
morning rise	-92 Mar 01 j 16:39	23° \approx 47'45	direct	-86 Nov 28 j 22:31	16° \mathbb{H} 55'02
retrograde	-92 Jun 04 j 07:02	26° \approx 54'51	evening set	-85 Feb 26 j 11:43	19° \mathbb{H} 53'49
min. Earth dist.	-92 Aug 20 j 07:01	24° \approx 58'01 19.06428 AU			
opposition	-92 Aug 21 j 07:11	24° \approx 55'35 -0°48'17	conjunction	-85 Mar 14 j 15:57	20° \mathbb{H} 48'50 -0°42'10
direct	-92 Nov 04 j 14:44	22° \approx 59'27	minimum elong	-85 Mar 14 j 15:57	20° \mathbb{H} 48'50 0°42'10
evening set	-91 Feb 01 j 22:45	25° \approx 57'23	max. Earth dist.	-85 Mar 15 j 09:27	20° \mathbb{H} 51'20 20.96215 AU
			morning rise	-85 Mar 31 j 00:15	21° \mathbb{H} 44'24
conjunction	-91 Feb 17 j 21:06	26° \approx 51'37 -0°43'54	retrograde	-85 Jul 03 j 19:20	24° \mathbb{H} 52'35
minimum elong	-91 Feb 17 j 21:06	26° \approx 51'37 0°43'54	opposition	-85 Sep 19 j 07:43	22° \mathbb{H} 52'31 -0°46'03
max. Earth dist.	-91 Feb 18 j 21:53	26° \approx 55'09 21.06399 AU	min. Earth dist.	-85 Sep 18 j 16:33	22° \mathbb{H} 54'04 18.94627 AU
morning rise	-91 Mar 05 j 23:30	27° \approx 46'23	direct	-85 Dec 03 j 03:15	20° \mathbb{H} 55'30
	-91 Apr 21 j 19:15	0° \mathbb{H}	evening set	-84 Mar 01 j 19:06	23° \mathbb{H} 54'41
retrograde	-91 Jun 08 j 14:34	0° \mathbb{H} 53'34			
	-91 Jul 27 j 17:21	30° \mathbb{R}	conjunction	-84 Mar 18 j 00:32	24° \mathbb{H} 49'53 -0°41'08
opposition	-91 Aug 25 j 14:33	28° \approx 54'15 -0°48'40	minimum elong	-84 Mar 18 j 00:32	24° \mathbb{H} 49'53 0°41'08
min. Earth dist.	-91 Aug 24 j 16:08	28° \approx 56'31 19.06339 AU	max. Earth dist.	-84 Mar 18 j 17:43	24° \mathbb{H} 52'20 20.92904 AU
direct	-91 Nov 08 j 18:34	26° \approx 58'07	morning rise	-84 Apr 03 j 09:41	25° \mathbb{H} 45'38
evening set	-90 Feb 06 j 04:04	29° \approx 56'03	retrograde	-84 Jul 07 j 05:16	28° \mathbb{H} 54'05
	-90 Feb 07 j 08:21	0° \mathbb{H}	opposition	-84 Sep 22 j 14:21	26° \mathbb{H} 53'52 -0°44'48
			min. Earth dist.	-84 Sep 21 j 23:24	26° \mathbb{H} 55'24 18.91142 AU
conjunction	-90 Feb 22 j 03:30	0° \mathbb{H} 50'22 -0°44'09	direct	-84 Dec 06 j 09:45	24° \mathbb{H} 56'37
minimum elong	-90 Feb 22 j 03:30	0° \mathbb{H} 50'22 0°44'09	evening set	-83 Mar 06 j 03:10	27° \mathbb{H} 56'15
max. Earth dist.	-90 Feb 23 j 04:15	0° \mathbb{H} 53'54 21.06050 AU			
morning rise	-90 Mar 10 j 06:42	1° \mathbb{H} 45'14	conjunction	-83 Mar 22 j 09:30	28° \mathbb{H} 51'39 -0°39'54
retrograde	-90 Jun 12 j 23:57	4° \mathbb{H} 52'31	minimum elong	-83 Mar 22 j 09:30	28° \mathbb{H} 51'39 0°39'54
opposition	-90 Aug 29 j 21:27	2° \mathbb{H} 53'10 -0°48'50	max. Earth dist.	-83 Mar 23 j 00:32	28° \mathbb{H} 53'48 20.89261 AU
min. Earth dist.	-90 Aug 28 j 23:16	2° \mathbb{H} 55'24 19.05711 AU	morning rise	-83 Apr 07 j 19:46	29° \mathbb{H} 47'36
direct	-90 Nov 13 j 01:14	0° \mathbb{H} 56'59		-83 Apr 11 j 13:14	0° \mathbb{Y}
evening set	-89 Feb 10 j 09:51	3° \mathbb{H} 54'59	retrograde	-83 Jul 11 j 14:03	2° \mathbb{Y} 56'22
			opposition	-83 Sep 26 j 21:17	0° \mathbb{Y} 56'01 -0°43'20
conjunction	-89 Feb 26 j 10:04	4° \mathbb{H} 49'24 -0°44'12	min. Earth dist.	-83 Sep 26 j 08:34	0° \mathbb{Y} 57'19 18.87350 AU
minimum elong	-89 Feb 26 j 10:04	4° \mathbb{H} 49'24 0°44'11		-83 Oct 20 j 13:20	30° \mathbb{R} \mathbb{H}
max. Earth dist.	-89 Feb 27 j 08:38	4° \mathbb{H} 52'37 21.05144 AU	direct	-83 Dec 10 j 14:38	28° \mathbb{H} 58'32
morning rise	-89 Mar 14 j 14:22	5° \mathbb{H} 44'23		-82 Jan 29 j 02:56	0° \mathbb{Y}
retrograde	-89 Jun 17 j 08:02	8° \mathbb{H} 51'48	evening set	-82 Mar 10 j 11:43	1° \mathbb{Y} 58'42
min. Earth dist.	-89 Sep 02 j 08:28	6° \mathbb{H} 54'23 19.04525 AU			
opposition	-89 Sep 03 j 04:35	6° \mathbb{H} 52'21 -0°48'45	conjunction	-82 Mar 26 j 19:15	2° \mathbb{Y} 54'20 -0°38'28
direct	-89 Nov 17 j 05:06	4° \mathbb{H} 56'05	minimum elong	-82 Mar 26 j 19:15	2° \mathbb{Y} 54'20 0°38'27
evening set	-88 Feb 14 j 15:37	7° \mathbb{H} 54'11	max. Earth dist.	-82 Mar 27 j 09:43	2° \mathbb{Y} 56'24 20.85332 AU
			morning rise	-82 Apr 12 j 06:19	3° \mathbb{Y} 50'29
conjunction	-88 Mar 01 j 16:58	8° \mathbb{H} 48'44 -0°44'01	retrograde	-82 Jul 16 j 00:59	6° \mathbb{Y} 59'36
minimum elong	-88 Mar 01 j 16:58	8° \mathbb{H} 48'44 0°44'01	opposition	-82 Oct 01 j 04:04	4° \mathbb{Y} 59'07 -0°41'38
max. Earth dist.	-88 Mar 02 j 15:15	8° \mathbb{H} 51'54 21.03680 AU	min. Earth dist.	-82 Sep 30 j 15:40	5° \mathbb{Y} 00'24 18.83276 AU
morning rise	-88 Mar 17 j 22:08	9° \mathbb{H} 43'50	direct	-82 Dec 14 j 21:39	3° \mathbb{Y} 01'25
retrograde	-88 Jun 20 j 17:16	12° \mathbb{H} 51'24	evening set	-81 Mar 14 j 21:02	6° \mathbb{Y} 02'12
opposition	-88 Sep 06 j 11:29	10° \mathbb{H} 51'50 -0°48'26			
min. Earth dist.	-88 Sep 05 j 15:38	10° \mathbb{H} 53'50 19.02773 AU	conjunction	-81 Mar 31 j 05:27	6° \mathbb{Y} 58'04 -0°36'50
direct	-88 Nov 20 j 11:49	8° \mathbb{H} 55'26	minimum elong	-81 Mar 31 j 05:27	6° \mathbb{Y} 58'04 0°36'50
evening set	-87 Feb 17 j 22:01	11° \mathbb{H} 53'41	max. Earth dist.	-81 Mar 31 j 17:39	6° \mathbb{Y} 59'49 20.81129 AU
			morning rise	-81 Apr 16 j 17:32	7° \mathbb{Y} 54'26
conjunction	-87 Mar 06 j 00:13	12° \mathbb{H} 48'22 -0°43'37	retrograde	-81 Jul 20 j 10:21	11° \mathbb{Y} 03'57
minimum elong	-87 Mar 06 j 00:13	12° \mathbb{H} 48'22 0°43'36	opposition	-81 Oct 05 j 11:24	9° \mathbb{Y} 03'22 -0°39'44
max. Earth dist.	-87 Mar 06 j 20:15	12° \mathbb{H} 51'13 21.01665 AU	min. Earth dist.	-81 Oct 05 j 01:19	9° \mathbb{Y} 04'25 18.78947 AU
morning rise	-87 Mar 22 j 06:33	13° \mathbb{H} 43'37	direct	-81 Dec 19 j 02:46	7° \mathbb{Y} 05'27
retrograde	-87 Jun 25 j 01:38	16° \mathbb{H} 51'21	evening set	-80 Mar 18 j 06:46	10° \mathbb{Y} 06'55
opposition	-87 Sep 10 j 18:19	14° \mathbb{H} 51'38 -0°47'53			
min. Earth dist.	-87 Sep 10 j 00:41	14° \mathbb{H} 53'25 19.00505 AU	conjunction	-80 Apr 03 j 16:22	11° \mathbb{Y} 03'01 -0°35'00
direct	-87 Nov 24 j 16:05	12° \mathbb{H} 55'03	minimum elong	-80 Apr 03 j 16:22	11° \mathbb{Y} 03'01 0°34'59

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Attention, astronomical year style is used: The year -80 in astronomical counting style is the year 81 BCE in historical counting style.

max. Earth dist.	-80 Apr 04 j 03:49	11°♈04'40	20.76685 AU	min. Earth dist.	-74 Nov 03 j 02:03	8°♏13'50	18.40683 AU
morning rise	-80 Apr 20 j 05:15	11°♈59'37		direct	-73 Jan 16 j 14:43	6°♏13'57	
retrograde	-80 Jul 23 j 22:41	15°♈09'34		evening set	-73 Apr 18 j 04:39	9°♏21'53	
opposition	-80 Oct 08 j 18:52	13°♈08'54	-0°37'37				
min. Earth dist.	-80 Oct 08 j 09:13	13°♈09'54	18.74365 AU	conjunction	-73 May 04 j 20:31	10°♏19'57	-0°17'25
direct	-80 Dec 22 j 10:26	11°♈10'46		minimum elong	-73 May 04 j 20:31	10°♏19'57	0°17'25
evening set	-79 Mar 22 j 17:38	14°♈13'00		max. Earth dist.	-73 May 04 j 16:40	10°♏19'24	20.37438 AU
				morning rise	-73 May 21 j 14:19	11°♏18'20	
conjunction	-79 Apr 08 j 04:06	15°♈09'22	-0°33'00	retrograde	-73 Aug 23 j 19:44	14°♏31'42	
minimum elong	-79 Apr 08 j 04:06	15°♈09'22	0°33'00	opposition	-73 Nov 07 j 11:14	12°♏30'13	-0°17'35
max. Earth dist.	-79 Apr 08 j 13:08	15°♈10'39	20.71975 AU	min. Earth dist.	-73 Nov 07 j 15:27	12°♏29'46	18.34126 AU
morning rise	-79 Apr 24 j 17:58	16°♈06'12		direct	-72 Jan 21 j 00:22	10°♏29'45	
retrograde	-79 Jul 28 j 09:17	19°♈16'36		evening set	-72 Apr 21 j 21:19	13°♏38'45	
opposition	-79 Oct 13 j 02:42	17°♈15'52	-0°35'18				
min. Earth dist.	-79 Oct 12 j 19:44	17°♈16'36	18.69521 AU	conjunction	-72 May 08 j 13:58	14°♏37'07	-0°14'21
direct	-79 Dec 26 j 16:29	15°♈17'29		minimum elong	-72 May 08 j 13:58	14°♏37'07	0°14'21
evening set	-78 Mar 27 j 05:16	18°♈20'34		behind sun begin	-72 May 08 j 11:05	14°♏36'42	
				behind sun end	-72 May 08 j 16:52	14°♏37'32	
conjunction	-78 Apr 12 j 16:51	19°♈17'12	-0°30'48	max. Earth dist.	-72 May 08 j 08:07	14°♏36'16	20.30826 AU
minimum elong	-78 Apr 12 j 16:51	19°♈17'12	0°30'48		-72 May 15 j 01:46	15°♏	
max. Earth dist.	-78 Apr 13 j 00:34	19°♈18'19	20.66998 AU	morning rise	-72 May 25 j 08:17	15°♏35'45	
morning rise	-78 Apr 29 j 07:25	20°♈14'17		retrograde	-72 Aug 27 j 12:35	18°♏49'39	
retrograde	-78 Aug 01 j 22:52	23°♈25'10		opposition	-72 Nov 10 j 22:16	16°♏47'58	-0°14'07
opposition	-78 Oct 17 j 10:53	21°♈24'22	-0°32'47	min. Earth dist.	-72 Nov 11 j 03:21	16°♏47'26	18.27458 AU
min. Earth dist.	-78 Oct 17 j 04:42	21°♈25'01	18.64386 AU		-71 Jan 02 j 07:36	15°♏	
direct	-78 Dec 31 j 01:01	19°♈25'44		direct	-71 Jan 24 j 13:45	14°♏47'03	
evening set	-77 Mar 31 j 17:46	22°♈29'43			-71 Feb 15 j 16:20	15°♏	
				evening set	-71 Apr 26 j 15:04	17°♏57'12	
conjunction	-77 Apr 17 j 06:09	23°♈26'37	-0°28'26				
minimum elong	-77 Apr 17 j 06:09	23°♈26'37	0°28'26	conjunction	-71 May 13 j 08:22	18°♏55'51	-0°11'11
max. Earth dist.	-77 Apr 17 j 11:15	23°♈27'20	20.61703 AU	minimum elong	-71 May 13 j 08:22	18°♏55'51	0°11'11
morning rise	-77 May 03 j 21:32	24°♈23'57		behind sun begin	-71 May 13 j 03:26	18°♏55'09	
retrograde	-77 Aug 06 j 10:53	27°♈35'21		behind sun end	-71 May 13 j 13:18	18°♏56'34	
opposition	-77 Oct 21 j 19:43	25°♈34'27	-0°30'04	max. Earth dist.	-71 May 13 j 00:33	18°♏54'43	20.24118 AU
min. Earth dist.	-77 Oct 21 j 16:22	25°♈34'48	18.58933 AU	morning rise	-71 May 30 j 02:59	19°♏54'45	
direct	-76 Jan 04 j 08:18	23°♈35'32		retrograde	-71 Sep 01 j 02:50	23°♏09'09	
evening set	-76 Apr 04 j 07:09	26°♈40'26		opposition	-71 Nov 15 j 09:55	21°♏07'19	-0°10'34
				min. Earth dist.	-71 Nov 15 j 17:31	21°♏06'30	18.20741 AU
conjunction	-76 Apr 20 j 20:34	27°♈37'37	-0°25'54	direct	-70 Jan 29 j 01:01	19°♏05'58	
minimum elong	-76 Apr 20 j 20:34	27°♈37'37	0°25'54	evening set	-70 May 01 j 09:37	22°♏17'16	
max. Earth dist.	-76 Apr 20 j 23:53	27°♈38'06	20.56094 AU				
morning rise	-76 May 07 j 12:36	28°♈35'13		conjunction	-70 May 18 j 03:29	23°♏16'13	-0°07'57
	-76 Jun 03 j 05:33	0°♏		minimum elong	-70 May 18 j 03:29	23°♏16'13	0°07'56
retrograde	-76 Aug 10 j 01:43	1°♏47'07		behind sun begin	-70 May 17 j 21:26	23°♏15'21	
	-76 Oct 19 j 15:57	30°♏		behind sun end	-70 May 18 j 09:31	23°♏17'05	
opposition	-76 Oct 25 j 04:48	29°♈46'06	-0°27'11	max. Earth dist.	-70 May 17 j 17:35	23°♏14'46	20.17413 AU
min. Earth dist.	-76 Oct 25 j 02:25	29°♈46'21	18.53151 AU	morning rise	-70 Jun 03 j 22:27	24°♏15'22	
direct	-75 Jan 07 j 18:26	27°♈46'50		retrograde	-70 Sep 05 j 20:32	27°♏30'18	
	-75 Mar 23 j 19:56	0°♏		opposition	-70 Nov 19 j 22:08	25°♏28'19	-0°06'55
evening set	-75 Apr 08 j 21:32	0°♏52'44		min. Earth dist.	-70 Nov 20 j 06:27	25°♏27'25	18.14060 AU
				direct	-69 Feb 02 j 15:42	23°♏26'33	
conjunction	-75 Apr 25 j 11:46	1°♏50'12	-0°23'13	evening set	-69 May 06 j 04:51	26°♏39'03	
minimum elong	-75 Apr 25 j 11:46	1°♏50'12	0°23'12				
max. Earth dist.	-75 Apr 25 j 12:18	1°♏50'17	20.50147 AU	conjunction	-69 May 22 j 23:13	27°♏38'18	-0°04'39
morning rise	-75 May 12 j 04:30	2°♏48'04		minimum elong	-69 May 22 j 23:14	27°♏38'18	0°04'39
retrograde	-75 Aug 14 j 14:30	6°♏00'27		behind sun begin	-69 May 22 j 16:36	27°♏37'20	
opposition	-75 Oct 29 j 14:34	3°♏59'18	-0°24'08	behind sun end	-69 May 23 j 05:52	27°♏39'15	
min. Earth dist.	-75 Oct 29 j 15:07	3°♏59'15	18.47049 AU	max. Earth dist.	-69 May 22 j 12:00	27°♏36'39	20.10758 AU
direct	-74 Jan 12 j 02:51	1°♏59'40		morning rise	-69 Jun 08 j 18:17	28°♏37'41	
evening set	-74 Apr 13 j 12:39	5°♏06'33			-69 Jul 03 j 22:58	0°♐	
				retrograde	-69 Sep 10 j 12:07	1°♐53'10	
conjunction	-74 Apr 30 j 03:48	6°♏04'19	-0°20'23		-69 Nov 20 j 23:52	30°♏	
minimum elong	-74 Apr 30 j 03:48	6°♏04'19	0°20'23	opposition	-69 Nov 24 j 11:09	29°♏51'04	-0°03'13
max. Earth dist.	-74 Apr 30 j 02:18	6°♏04'06	20.43912 AU	min. Earth dist.	-69 Nov 24 j 21:37	29°♏49'56	18.07464 AU
morning rise	-74 May 16 j 21:05	7°♏02'26		direct	-68 Feb 07 j 04:40	27°♏48'54	
retrograde	-74 Aug 19 j 06:26	10°♏15'19			-68 Apr 21 j 06:41	0°♐	
opposition	-74 Nov 03 j 00:33	8°♏14'00	-0°20'56	evening set	-68 May 10 j 01:08	1°♐02'39	

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Attention, astronomical year style is used: The year -68 in astronomical counting style is the year 69 BCE in historical counting style.

conjunction	-68 May 26 j 19:53	2°II02'10	-0°01'16	retrograde	-63 Oct 07 j 07:46	28°II50'37	
minimum elong	-68 May 26 j 19:54	2°II02'10	0°01'15	opposition	-63 Dec 20 j 08:06	26°II48'25	0°19'13
behind sun begin	-68 May 26 j 13:07	2°II01'11		min. Earth dist.	-63 Dec 21 j 02:35	26°II46'25	17.71520 AU
behind sun end	-68 May 27 j 02:41	2°II03'09		direct	-62 Mar 05 j 12:56	24°II44'21	
max. Earth dist.	-68 May 26 j 06:28	2°II00'11	20.04237 AU	evening set	-62 Jun 07 j 21:51	28°II05'47	
morning rise	-68 Jun 12 j 15:12	3°II01'49					
retrograde	-68 Sep 14 j 06:50	6°II17'50		conjunction	-62 Jun 24 j 17:03	29°II06'47	0°18'55
asc. node	-68 Oct 06 j 20:02	6°II04'28		minimum elong	-62 Jun 24 j 17:03	29°II06'47	0°18'55
opposition	-68 Nov 28 j 00:37	4°II15'39	0°00'32	max. Earth dist.	-62 Jun 23 j 17:25	29°II03'11	19.68796 AU
min. Earth dist.	-68 Nov 28 j 11:49	4°II14'27	18.01023 AU		-62 Jul 09 j 07:50	0°00'	
direct	-67 Feb 10 j 20:28	2°II13'07		morning rise	-62 Jul 11 j 10:54	0°00'07'37	
evening set	-67 May 14 j 22:21	5°II28'08		retrograde	-62 Oct 12 j 05:11	3°00'26'52	
				opposition	-62 Dec 25 j 02:25	1°00'24'39	0°22'47
conjunction	-67 May 31 j 17:32	6°II27'57	0°02'14	min. Earth dist.	-62 Dec 25 j 22:11	1°00'22'30	17.66146 AU
minimum elong	-67 May 31 j 17:32	6°II27'57	0°02'14		-61 Jan 29 j 19:29	30°R00'II	
behind sun begin	-67 May 31 j 10:45	6°II26'58		direct	-61 Mar 10 j 09:39	29°II20'14	
behind sun end	-67 Jun 01 j 00:19	6°II28'56			-61 Apr 18 j 09:44	0°00'	
max. Earth dist.	-67 May 31 j 03:05	6°II25'48	19.97872 AU	evening set	-61 Jun 12 j 23:50	2°00'42'50	
morning rise	-67 Jun 17 j 12:42	7°II27'49					
retrograde	-67 Sep 19 j 00:09	10°II44'24		conjunction	-61 Jun 29 j 18:58	3°00'44'02	0°22'03
opposition	-67 Dec 02 j 15:02	8°II42'11	0°04'18	minimum elong	-61 Jun 29 j 18:58	3°00'44'02	0°22'03
min. Earth dist.	-67 Dec 03 j 04:09	8°II40'46	17.94752 AU	max. Earth dist.	-61 Jun 28 j 19:06	3°00'40'23	19.63513 AU
direct	-66 Feb 15 j 11:31	6°II39'19		morning rise	-61 Jul 16 j 12:06	4°00'45'01	
evening set	-66 May 19 j 20:27	9°II55'38		retrograde	-61 Oct 17 j 03:15	8°00'40'40	
				opposition	-61 Dec 29 j 21:27	6°00'02'26	0°26'13
conjunction	-66 Jun 05 j 15:45	10°II55'43	0°05'38	min. Earth dist.	-61 Dec 30 j 18:12	6°00'00'10	17.60974 AU
minimum elong	-66 Jun 05 j 15:45	10°II55'43	0°05'38	direct	-60 Mar 14 j 07:03	3°00'57'41	
behind sun begin	-66 Jun 05 j 09:14	10°II54'45		evening set	-60 Jun 17 j 02:45	7°00'21'24	
behind sun end	-66 Jun 05 j 22:15	10°II56'40					
max. Earth dist.	-66 Jun 04 j 22:55	10°II53'11	19.91702 AU	conjunction	-60 Jul 03 j 21:22	8°00'22'46	0°25'03
morning rise	-66 Jun 22 j 10:57	11°II55'48		minimum elong	-60 Jul 03 j 21:22	8°00'22'46	0°25'04
retrograde	-66 Sep 23 j 19:38	15°II12'58		max. Earth dist.	-60 Jul 02 j 19:04	8°00'18'44	19.58468 AU
opposition	-66 Dec 07 j 06:04	13°II10'44	0°08'05	morning rise	-60 Jul 20 j 13:59	9°00'23'52	
min. Earth dist.	-66 Dec 07 j 20:02	13°II09'13	17.88684 AU	retrograde	-60 Oct 21 j 01:39	12°00'43'54	
direct	-65 Feb 20 j 04:37	11°II07'33		opposition	-59 Jan 02 j 17:02	10°00'41'36	0°29'29
evening set	-65 May 24 j 19:24	14°II25'11		min. Earth dist.	-59 Jan 03 j 15:09	10°00'39'12	17.56082 AU
				direct	-59 Mar 19 j 04:58	8°00'36'32	
conjunction	-65 Jun 10 j 14:58	15°II25'32	0°09'01	evening set	-59 Jun 22 j 05:59	12°00'01'18	
minimum elong	-65 Jun 10 j 14:58	15°II25'32	0°09'01	max. Earth dist.	-59 Jul 07 j 22:03	12°00'58'46	19.53726 AU
behind sun begin	-65 Jun 10 j 09:13	15°II24'41					
behind sun end	-65 Jun 10 j 20:42	15°II26'22		conjunction	-59 Jul 09 j 00:18	13°00'02'49	0°27'55
max. Earth dist.	-65 Jun 09 j 21:27	15°II22'54	19.85720 AU	minimum elong	-59 Jul 09 j 00:18	13°00'02'49	0°27'54
morning rise	-65 Jun 27 j 09:49	16°II25'49		morning rise	-59 Jul 25 j 16:04	14°00'04'01	
retrograde	-65 Sep 28 j 14:46	19°II43'33		retrograde	-59 Oct 26 j 00:34	17°00'24'22	
opposition	-65 Dec 11 j 21:55	17°II41'20	0°11'51	opposition	-58 Jan 07 j 13:24	15°00'22'02	0°32'35
min. Earth dist.	-65 Dec 12 j 13:41	17°II39'37	17.82796 AU	min. Earth dist.	-58 Jan 08 j 11:51	15°00'19'35	17.51510 AU
direct	-64 Feb 24 j 22:06	15°II37'52		direct	-58 Mar 24 j 03:46	13°00'16'39	
evening set	-64 May 28 j 19:22	18°II56'48		evening set	-58 Mar 27 j 09:35	16°00'42'23	
				max. Earth dist.	-58 Jul 12 j 23:19	17°00'39'41	19.49340 AU
conjunction	-64 Jun 14 j 14:51	19°II57'23	0°12'22				
minimum elong	-64 Jun 14 j 14:51	19°II57'23	0°12'22	conjunction	-58 Jul 14 j 03:12	17°00'44'00	0°30'35
behind sun begin	-64 Jun 14 j 10:30	19°II56'44		minimum elong	-58 Jul 14 j 03:11	17°00'44'00	0°30'36
behind sun end	-64 Jun 14 j 19:11	19°II58'01		morning rise	-58 Jul 30 j 18:12	18°00'45'16	
max. Earth dist.	-64 Jun 13 j 18:36	19°II54'19	19.79922 AU	retrograde	-58 Oct 30 j 23:16	22°00'05'56	
morning rise	-64 Jul 01 j 09:36	20°II57'53		opposition	-57 Jan 12 j 10:26	20°00'03'32	0°35'28
retrograde	-64 Oct 02 j 11:05	24°II16'09		min. Earth dist.	-57 Jan 13 j 10:02	20°00'00'57	17.47344 AU
opposition	-64 Dec 15 j 14:36	22°II13'56	0°15'34	direct	-57 Mar 29 j 02:41	17°00'57'50	
min. Earth dist.	-64 Dec 16 j 07:34	22°II12'06	17.77085 AU	evening set	-57 Jul 02 j 13:25	21°00'24'28	
direct	-63 Feb 28 j 17:06	20°II10'09		max. Earth dist.	-57 Jul 18 j 02:59	22°00'21'55	19.45392 AU
evening set	-63 Jun 02 j 20:10	23°II30'22					
				conjunction	-57 Jul 19 j 06:29	22°00'26'11	0°33'04
conjunction	-63 Jun 19 j 15:44	24°II31'11	0°15'41	minimum elong	-57 Jul 19 j 06:29	22°00'26'11	0°33'04
minimum elong	-63 Jun 19 j 15:44	24°II31'11	0°15'42	morning rise	-57 Aug 04 j 20:34	23°00'27'30	
behind sun begin	-63 Jun 19 j 15:16	24°II31'07		retrograde	-57 Nov 04 j 22:34	26°00'48'24	
behind sun end	-63 Jun 19 j 16:11	24°II31'15		opposition	-56 Jan 17 j 07:52	24°00'45'58	0°38'07
max. Earth dist.	-63 Jun 18 j 18:53	24°II28'01	19.74274 AU	min. Earth dist.	-56 Jan 18 j 07:07	24°00'43'25	17.43631 AU
morning rise	-63 Jul 06 j 09:54	25°II31'51		direct	-56 Apr 02 j 03:26	22°00'40'01	

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Attention, astronomical year style is used: The year -56 in astronomical counting style is the year 57 BCE in historical counting style.

evening set	-56 Jul 06 j 17:38	26° Ω 07'28		max. Earth dist.	-50 Aug 21 j 05:26	25° Ω 37'22	19.33208 AU
max. Earth dist.	-56 Jul 22 j 05:36	27° Ω 04'50	19.41926 AU				
				conjunction	-50 Aug 22 j 06:11	25° Ω 41'16	0°43'33
conjunction	-56 Jul 23 j 09:54	27° Ω 09'14	0°35'20	minimum elong	-50 Aug 22 j 06:11	25° Ω 41'16	0°43'33
minimum elong	-56 Jul 23 j 09:54	27° Ω 09'14	0°35'20	morning rise	-50 Sep 07 j 12:31	26° Ω 42'17	
morning rise	-56 Aug 08 j 23:02	28° Ω 10'35			-50 Nov 25 j 23:05	0° Π	
	-56 Sep 10 j 20:42	0° Ω		retrograde	-50 Dec 07 j 19:18	0° Π 04'00	
retrograde	-56 Nov 08 j 20:54	1° Ω 31'42			-50 Dec 19 j 19:25	30° κ δ	
	-55 Jan 09 j 09:34	30° κ Ω		opposition	-49 Feb 19 j 06:28	28° Ω 02'06	0°48'48
opposition	-55 Jan 21 j 06:08	29° Ω 29'14	0°40'31	min. Earth dist.	-49 Feb 20 j 04:40	27° Ω 59'41	17.33408 AU
min. Earth dist.	-55 Jan 22 j 06:22	29° Ω 26'35	17.40443 AU	direct	-49 May 06 j 19:23	25° Ω 55'49	
direct	-55 Apr 07 j 03:24	27° Ω 23'04		evening set	-49 Aug 10 j 23:47	29° Ω 26'24	
	-55 Jun 27 j 10:24	0° Ω			-49 Aug 19 j 23:57	0° Π	
evening set	-55 Jul 11 j 21:55	0° Ω 51'15		max. Earth dist.	-49 Aug 26 j 07:59	0° Π 23'56	19.33634 AU
max. Earth dist.	-55 Jul 27 j 09:31	1° Ω 48'42	19.39013 AU				
				conjunction	-49 Aug 27 j 08:56	0° Π 27'52	0°43'55
conjunction	-55 Jul 28 j 13:22	1° Ω 53'03	0°37'22	minimum elong	-49 Aug 27 j 08:56	0° Π 27'52	0°43'54
minimum elong	-55 Jul 28 j 13:22	1° Ω 53'03	0°37'22	morning rise	-49 Sep 12 j 14:15	1° Π 28'46	
morning rise	-55 Aug 14 j 01:29	2° Ω 54'23		retrograde	-49 Dec 12 j 20:11	4° Π 50'25	
retrograde	-55 Nov 13 j 20:43	6° Ω 15'42		opposition	-48 Feb 24 j 07:49	2° Π 48'37	0°49'03
opposition	-54 Jan 26 j 04:51	4° Ω 13'15	0°42'40	min. Earth dist.	-48 Feb 25 j 04:36	2° Π 46'22	17.34064 AU
min. Earth dist.	-54 Jan 27 j 04:03	4° Ω 10'43	17.37817 AU	direct	-48 May 10 j 23:45	0° Π 42'25	
direct	-54 Apr 12 j 06:04	2° Ω 06'56		evening set	-48 Aug 15 j 03:21	4° Π 13'00	
evening set	-54 Jul 17 j 02:21	5° Ω 35'45					
				conjunction	-48 Aug 31 j 11:30	5° Π 14'20	0°43'59
conjunction	-54 Aug 02 j 16:54	6° Ω 37'34	0°39'09	minimum elong	-48 Aug 31 j 11:30	5° Π 14'20	0°43'59
minimum elong	-54 Aug 02 j 16:54	6° Ω 37'34	0°39'08	max. Earth dist.	-48 Aug 30 j 12:32	5° Π 10'43	19.34510 AU
max. Earth dist.	-54 Aug 01 j 13:16	6° Ω 33'15	19.36682 AU	morning rise	-48 Sep 16 j 15:26	6° Π 15'05	
morning rise	-54 Aug 09 j 03:52	7° Ω 38'53		retrograde	-48 Dec 16 j 19:54	9° Π 36'36	
retrograde	-54 Nov 18 j 19:14	11° Ω 00'21		opposition	-47 Feb 28 j 09:41	7° Π 34'55	0°48'57
opposition	-53 Jan 31 j 04:15	8° Ω 57'58	0°44'31	min. Earth dist.	-47 Mar 01 j 06:23	7° Π 32'41	17.35156 AU
min. Earth dist.	-53 Feb 01 j 04:09	8° Ω 55'21	17.35801 AU	direct	-47 May 16 j 02:57	5° Π 28'49	
direct	-53 Apr 17 j 06:59	6° Ω 51'33		evening set	-47 Aug 20 j 06:30	8° Π 59'15	
evening set	-53 Jul 22 j 06:43	10° Ω 20'57					
				conjunction	-47 Sep 05 j 13:15	10° Π 00'24	0°43'45
conjunction	-53 Aug 07 j 20:18	11° Ω 22'44	0°40'40	minimum elong	-47 Sep 05 j 13:15	10° Π 00'24	0°43'44
minimum elong	-53 Aug 07 j 20:18	11° Ω 22'44	0°40'40	max. Earth dist.	-47 Sep 04 j 14:16	9° Π 56'47	19.35829 AU
max. Earth dist.	-53 Aug 06 j 16:58	11° Ω 18'28	19.34974 AU	morning rise	-47 Sep 21 j 16:11	11° Π 01'00	
morning rise	-53 Aug 24 j 06:18	12° Ω 24'01		retrograde	-47 Dec 21 j 20:04	14° Π 22'21	
	-53 Oct 14 j 03:38	15° Ω		opposition	-46 Mar 05 j 11:36	12° Π 20'44	0°48'31
retrograde	-53 Nov 23 j 19:50	15° Ω 45'37		min. Earth dist.	-46 Mar 06 j 06:46	12° Π 18'40	17.36696 AU
	-52 Jan 04 j 11:59	15° κ δ		direct	-46 May 21 j 06:33	10° Π 14'45	
opposition	-52 Feb 05 j 04:00	13° Ω 43'19	0°46'04	evening set	-46 Aug 25 j 08:56	13° Π 44'54	
min. Earth dist.	-52 Feb 06 j 02:36	13° Ω 40'51	17.34381 AU				
direct	-52 Apr 21 j 10:46	11° Ω 36'53		conjunction	-46 Sep 10 j 14:41	14° Π 45'53	0°43'12
	-52 Jul 24 j 14:59	15° Ω		minimum elong	-46 Sep 10 j 14:41	14° Π 45'53	0°43'12
evening set	-52 Jul 26 j 11:12	15° Ω 06'45		max. Earth dist.	-46 Sep 09 j 18:07	14° Π 42'38	19.37591 AU
				morning rise	-46 Sep 26 j 16:19	15° Π 46'17	
conjunction	-52 Aug 11 j 23:51	16° Ω 08'30	0°41'55	retrograde	-46 Dec 26 j 19:47	19° Π 07'23	
minimum elong	-52 Aug 11 j 23:51	16° Ω 08'30	0°41'55	opposition	-45 Mar 10 j 13:30	17° Π 05'51	0°47'44
max. Earth dist.	-52 Aug 10 j 21:27	16° Ω 04'22	19.33840 AU	min. Earth dist.	-45 Mar 11 j 07:54	17° Π 03'52	17.38671 AU
morning rise	-52 Aug 28 j 08:33	17° Ω 09'43		direct	-45 May 26 j 10:23	15° Π 00'01	
retrograde	-52 Nov 27 j 18:46	20° Ω 31'23		evening set	-45 Aug 30 j 10:49	18° Π 29'45	
opposition	-51 Feb 09 j 04:22	18° Ω 29'14	0°47'18				
min. Earth dist.	-51 Feb 10 j 03:37	18° Ω 26'42	17.33533 AU	conjunction	-45 Sep 15 j 15:16	19° Π 30'31	0°42'21
direct	-51 Apr 26 j 12:23	16° Ω 22'49		minimum elong	-45 Sep 15 j 15:16	19° Π 30'31	0°42'22
evening set	-51 Jul 31 j 15:42	19° Ω 53'03		max. Earth dist.	-45 Sep 14 j 19:03	19° Π 27'20	19.39801 AU
max. Earth dist.	-51 Aug 16 j 00:46	20° Ω 50'35	19.33271 AU	morning rise	-45 Oct 01 j 15:57	20° Π 30'44	
				retrograde	-45 Dec 31 j 18:26	23° Π 51'32	
conjunction	-51 Aug 17 j 03:09	20° Ω 54'44	0°42'53	opposition	-44 Mar 14 j 15:21	21° Π 50'03	0°46'38
minimum elong	-51 Aug 17 j 03:09	20° Ω 54'44	0°42'53	min. Earth dist.	-44 Mar 15 j 08:18	21° Π 48'14	17.41109 AU
morning rise	-51 Sep 02 j 10:49	21° Ω 55'52		direct	-44 May 30 j 13:17	19° Π 44'21	
retrograde	-51 Dec 02 j 20:00	25° Ω 17'35		evening set	-44 Sep 03 j 11:49	23° Π 13'34	
opposition	-50 Feb 14 j 05:09	23° Ω 15'33	0°48'13				
min. Earth dist.	-50 Feb 15 j 02:58	23° Ω 13'11	17.33224 AU	conjunction	-44 Sep 19 j 15:13	24° Π 14'07	0°41'14
direct	-50 May 01 j 16:54	21° Ω 09'12		minimum elong	-44 Sep 19 j 15:13	24° Π 14'07	0°41'13
evening set	-50 Aug 05 j 19:44	24° Ω 39'40		max. Earth dist.	-44 Sep 18 j 21:42	24° Π 11'21	19.42474 AU

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Attention, astronomical year style is used: The year -44 in astronomical counting style is the year 45 BCE in historical counting style.

morning rise	-44 Oct 05 j 14:41	25° \mathbb{M} 14'06	direct	-37 Jul 04 j 05:18	22° \mathbb{A} 19'26	
retrograde	-43 Jan 04 j 17:31	28° \mathbb{M} 34'34	evening set	-37 Oct 06 j 19:06	25° \mathbb{A} 42'34	
opposition	-43 Mar 19 j 17:07	26° \mathbb{M} 33'08 0°45'13				
min. Earth dist.	-43 Mar 20 j 08:30	26° \mathbb{M} 31'29 17.44008 AU	conjunction	-37 Oct 22 j 15:09	26° \mathbb{A} 41'12 0°26'35	
direct	-43 Jun 04 j 18:02	24° \mathbb{M} 27'37	minimum elong	-37 Oct 22 j 15:09	26° \mathbb{A} 41'12 0°26'34	
evening set	-43 Sep 08 j 12:07	27° \mathbb{M} 56'11	max. Earth dist.	-37 Oct 22 j 12:16	26° \mathbb{A} 40'45 19.74696 AU	
			morning rise	-37 Nov 07 j 08:37	27° \mathbb{A} 39'28	
conjunction	-43 Sep 24 j 14:14	28° \mathbb{M} 56'29 0°39'49		-37 Dec 22 j 09:16	0° \mathbb{M}	
minimum elong	-43 Sep 24 j 14:14	28° \mathbb{M} 56'29 0°39'50	retrograde	-36 Feb 06 j 15:06	0° \mathbb{M} 56'47	
max. Earth dist.	-43 Sep 23 j 21:47	28° \mathbb{M} 53'54 19.45628 AU		-36 Mar 26 j 02:10	30° \mathbb{R} \mathbb{A}	
morning rise	-43 Oct 10 j 12:46	29° \mathbb{M} 56'15	opposition	-36 Apr 21 j 21:41	28° \mathbb{A} 56'15 0°28'00	
	-43 Oct 11 j 13:14	0° \mathbb{A}	min. Earth dist.	-36 Apr 21 j 23:54	28° \mathbb{A} 56'01 17.77692 AU	
retrograde	-42 Jan 09 j 14:15	3° \mathbb{A} 16'20	direct	-36 Jul 08 j 03:29	26° \mathbb{A} 53'02	
opposition	-42 Mar 24 j 18:44	1° \mathbb{A} 14'57 0°43'30		-36 Oct 06 j 08:58	0° \mathbb{M}	
min. Earth dist.	-42 Mar 25 j 08:34	1° \mathbb{A} 13'28 17.47425 AU	evening set	-36 Oct 10 j 13:14	0° \mathbb{M} 15'02	
	-42 Apr 25 j 04:53	30° \mathbb{R} \mathbb{M}				
direct	-42 Jun 09 j 20:32	29° \mathbb{M} 09'37	conjunction	-36 Oct 26 j 08:22	1° \mathbb{M} 13'22 0°23'43	
	-42 Jul 24 j 05:36	0° \mathbb{A}	minimum elong	-36 Oct 26 j 08:22	1° \mathbb{M} 13'22 0°23'43	
evening set	-42 Sep 13 j 11:17	2° \mathbb{A} 37'28	max. Earth dist.	-36 Oct 26 j 07:09	1° \mathbb{M} 13'11 19.80758 AU	
			morning rise	-36 Nov 11 j 01:17	2° \mathbb{M} 11'23	
conjunction	-42 Sep 29 j 12:23	3° \mathbb{A} 37'30 0°38'10	retrograde	-35 Feb 10 j 11:20	5° \mathbb{M} 28'10	
minimum elong	-42 Sep 29 j 12:23	3° \mathbb{A} 37'30 0°38'09	opposition	-35 Apr 26 j 20:45	3° \mathbb{M} 27'47 0°24'44	
max. Earth dist.	-42 Sep 28 j 22:48	3° \mathbb{A} 35'22 19.49307 AU	min. Earth dist.	-35 Apr 26 j 20:02	3° \mathbb{M} 27'51 17.83832 AU	
morning rise	-42 Oct 15 j 09:53	4° \mathbb{A} 37'02	direct	-35 Jul 13 j 03:18	1° \mathbb{M} 24'58	
retrograde	-41 Jan 14 j 12:10	7° \mathbb{A} 56'43	evening set	-35 Oct 15 j 06:30	4° \mathbb{M} 45'48	
opposition	-41 Mar 29 j 20:03	5° \mathbb{A} 55'24 0°41'30				
min. Earth dist.	-41 Mar 30 j 07:30	5° \mathbb{A} 54'11 17.51347 AU	conjunction	-35 Oct 31 j 00:54	5° \mathbb{M} 43'50 0°20'44	
direct	-41 Jun 15 j 01:01	3° \mathbb{A} 50'20	minimum elong	-35 Oct 31 j 00:54	5° \mathbb{M} 43'50 0°20'45	
evening set	-41 Sep 18 j 09:52	7° \mathbb{A} 17'21	max. Earth dist.	-35 Oct 31 j 02:05	5° \mathbb{M} 44'01 19.86967 AU	
			morning rise	-35 Nov 15 j 17:11	6° \mathbb{M} 41'36	
conjunction	-41 Oct 04 j 09:47	8° \mathbb{A} 17'08 0°36'16	retrograde	-34 Feb 15 j 04:16	9° \mathbb{M} 57'50	
minimum elong	-41 Oct 04 j 09:47	8° \mathbb{A} 17'08 0°36'15	opposition	-34 May 01 j 19:24	7° \mathbb{M} 57'35 0°21'21	
max. Earth dist.	-41 Oct 03 j 21:48	8° \mathbb{A} 15'15 19.53493 AU	min. Earth dist.	-34 May 01 j 17:56	7° \mathbb{M} 57'44 17.90102 AU	
morning rise	-41 Oct 20 j 06:22	9° \mathbb{A} 16'25	direct	-34 Jul 18 j 00:23	5° \mathbb{M} 55'11	
retrograde	-40 Jan 19 j 07:40	12° \mathbb{A} 35'40	evening set	-34 Oct 19 j 22:52	9° \mathbb{M} 14'48	
opposition	-40 Apr 02 j 21:01	10° \mathbb{A} 34'27 0°39'15				
min. Earth dist.	-40 Apr 03 j 07:02	10° \mathbb{A} 33'24 17.55793 AU	conjunction	-34 Nov 04 j 16:30	10° \mathbb{M} 12'32 0°17'39	
direct	-40 Jun 19 j 02:05	8° \mathbb{A} 29'41	minimum elong	-34 Nov 04 j 16:30	10° \mathbb{M} 12'32 0°17'38	
evening set	-40 Sep 22 j 07:30	11° \mathbb{A} 55'51	max. Earth dist.	-34 Nov 04 j 18:50	10° \mathbb{M} 12'54 19.93279 AU	
			morning rise	-34 Nov 20 j 08:27	11° \mathbb{M} 10'02	
conjunction	-40 Oct 08 j 06:24	12° \mathbb{A} 55'20 0°34'08	retrograde	-33 Feb 19 j 23:31	14° \mathbb{M} 25'43	
minimum elong	-40 Oct 08 j 06:24	12° \mathbb{A} 55'20 0°34'08	opposition	-33 May 06 j 17:15	12° \mathbb{M} 25'35 0°17'51	
max. Earth dist.	-40 Oct 07 j 21:00	12° \mathbb{A} 53'52 19.58194 AU	min. Earth dist.	-33 May 06 j 13:00	12° \mathbb{M} 26'01 17.96432 AU	
morning rise	-40 Oct 24 j 02:06	13° \mathbb{A} 54'22	direct	-33 Jul 22 j 22:52	10° \mathbb{M} 23'32	
retrograde	-39 Jan 23 j 04:57	17° \mathbb{A} 13'10	evening set	-33 Oct 24 j 14:18	13° \mathbb{M} 41'56	
opposition	-39 Apr 07 j 21:44	15° \mathbb{A} 12'07 0°36'45				
min. Earth dist.	-39 Apr 08 j 04:56	15° \mathbb{A} 11'21 17.60710 AU	conjunction	-33 Nov 09 j 07:22	14° \mathbb{M} 39'23 0°14'28	
direct	-39 Jun 24 j 04:54	13° \mathbb{A} 07'42	minimum elong	-33 Nov 09 j 07:21	14° \mathbb{M} 39'23 0°14'28	
evening set	-39 Sep 27 j 04:10	16° \mathbb{A} 32'54	behind sun begin	-33 Nov 09 j 04:16	14° \mathbb{M} 38'55	
			behind sun end	-33 Nov 09 j 10:27	14° \mathbb{M} 39'51	
conjunction	-39 Oct 13 j 02:03	17° \mathbb{A} 32'07 0°31'48	max. Earth dist.	-33 Nov 09 j 12:08	14° \mathbb{M} 40'06 19.99614 AU	
minimum elong	-39 Oct 13 j 02:03	17° \mathbb{A} 32'07 0°31'47		-33 Nov 14 j 21:34	15° \mathbb{M}	
max. Earth dist.	-39 Oct 12 j 18:46	17° \mathbb{A} 30'59 19.63335 AU	morning rise	-33 Nov 24 j 22:47	15° \mathbb{M} 36'38	
morning rise	-39 Oct 28 j 20:56	18° \mathbb{A} 30'54	retrograde	-32 Feb 24 j 14:47	18° \mathbb{M} 51'44	
retrograde	-38 Jan 27 j 23:58	21° \mathbb{A} 49'14	opposition	-32 May 10 j 14:36	16° \mathbb{M} 51'41 0°14'15	
opposition	-38 Apr 12 j 22:14	19° \mathbb{A} 48'20 0°34'02	min. Earth dist.	-32 May 10 j 09:39	16° \mathbb{M} 52'12 18.02772 AU	
min. Earth dist.	-38 Apr 13 j 04:12	19° \mathbb{A} 47'42 17.66056 AU		-32 Jul 06 j 20:47	15° \mathbb{R} \mathbb{M}	
direct	-38 Jun 29 j 04:28	17° \mathbb{A} 44'19	direct	-32 Jul 26 j 18:51	14° \mathbb{M} 50'01	
evening set	-38 Oct 02 j 00:03	21° \mathbb{A} 08'30		-32 Aug 15 j 12:22	15° \mathbb{M}	
			evening set	-32 Oct 28 j 04:53	18° \mathbb{M} 07'09	
conjunction	-38 Oct 17 j 20:59	22° \mathbb{A} 07'25 0°29'16				
minimum elong	-38 Oct 17 j 20:59	22° \mathbb{A} 07'25 0°29'17	conjunction	-32 Nov 12 j 21:16	19° \mathbb{M} 04'19 0°11'14	
max. Earth dist.	-38 Oct 17 j 15:51	22° \mathbb{A} 06'37 19.68870 AU	minimum elong	-32 Nov 12 j 21:16	19° \mathbb{M} 04'19 0°11'13	
morning rise	-38 Nov 02 j 15:10	23° \mathbb{A} 05'57	behind sun begin	-32 Nov 12 j 16:22	19° \mathbb{M} 03'35	
retrograde	-37 Feb 01 j 20:45	26° \mathbb{A} 23'47	behind sun end	-32 Nov 13 j 02:10	19° \mathbb{M} 05'03	
opposition	-37 Apr 17 j 22:00	24° \mathbb{A} 23'04 0°31'06	max. Earth dist.	-32 Nov 13 j 03:00	19° \mathbb{M} 05'10 20.05964 AU	
min. Earth dist.	-37 Apr 18 j 01:07	24° \mathbb{A} 22'45 17.71740 AU	morning rise	-32 Nov 28 j 12:31	20° \mathbb{M} 01'19	

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Attention, astronomical year style is used: The year -31 in astronomical counting style is the year 32 BCE in historical counting style.

retrograde	-31 Feb 28 j 08:32	23° \mathbb{M} 15'49		direct	-26 Aug 23 j 06:38	10° \mathbb{X} 47'55	
opposition	-31 May 15 j 11:13	21° \mathbb{M} 15'50	0°10'37	evening set	-26 Nov 23 j 01:05	13° \mathbb{X} 57'41	
min. Earth dist.	-31 May 15 j 03:33	21° \mathbb{M} 16'37	18.09117 AU				
direct	-31 Jul 31 j 15:55	19° \mathbb{M} 14'30		conjunction	-26 Dec 08 j 15:28	14° \mathbb{X} 53'19	-0°08'31
evening set	-31 Nov 01 j 18:17	22° \mathbb{M} 30'21		minimum elong	-26 Dec 08 j 15:28	14° \mathbb{X} 53'19	0°08'31
				behind sun begin	-26 Dec 08 j 09:44	14° \mathbb{X} 52'28	
conjunction	-31 Nov 17 j 10:18	23° \mathbb{M} 27'14	0°07'57	behind sun end	-26 Dec 08 j 21:13	14° \mathbb{X} 54'09	
minimum elong	-31 Nov 17 j 10:18	23° \mathbb{M} 27'14	0°07'57	max. Earth dist.	-26 Dec 09 j 08:17	14° \mathbb{X} 55'49	20.44179 AU
behind sun begin	-31 Nov 17 j 04:25	23° \mathbb{M} 26'22		morning rise	-26 Dec 24 j 06:27	15° \mathbb{X} 49'01	
behind sun end	-31 Nov 17 j 16:11	23° \mathbb{M} 28'07		retrograde	-25 Mar 26 j 19:07	19° \mathbb{X} 00'15	
max. Earth dist.	-31 Nov 17 j 18:48	23° \mathbb{M} 28'31	20.12301 AU	opposition	-25 Jun 11 j 23:08	17° \mathbb{X} 00'43	-0°11'09
morning rise	-31 Dec 03 j 01:13	24° \mathbb{M} 24'00		min. Earth dist.	-25 Jun 11 j 05:06	17° \mathbb{X} 02'32	18.47342 AU
retrograde	-30 Mar 04 j 22:33	27° \mathbb{M} 37'55		direct	-25 Aug 27 j 20:52	15° \mathbb{X} 01'30	
opposition	-30 May 20 j 07:11	25° \mathbb{M} 37'59	0°06'56	evening set	-25 Nov 27 j 09:43	18° \mathbb{X} 10'11	
min. Earth dist.	-30 May 19 j 22:39	25° \mathbb{M} 38'51	18.15452 AU				
direct	-30 Aug 05 j 10:24	23° \mathbb{M} 36'59		conjunction	-25 Dec 13 j 00:10	19° \mathbb{X} 05'36	-0°11'39
evening set	-30 Nov 06 j 06:59	26° \mathbb{M} 51'33		minimum elong	-25 Dec 13 j 00:09	19° \mathbb{X} 05'36	0°11'40
				behind sun begin	-25 Dec 12 j 19:27	19° \mathbb{X} 04'55	
conjunction	-30 Nov 21 j 22:25	27° \mathbb{M} 48'10	0°04'40	behind sun end	-25 Dec 13 j 04:52	19° \mathbb{X} 06'17	
minimum elong	-30 Nov 21 j 22:26	27° \mathbb{M} 48'10	0°04'39	max. Earth dist.	-25 Dec 13 j 19:39	19° \mathbb{X} 08'30	20.50474 AU
behind sun begin	-30 Nov 21 j 16:02	27° \mathbb{M} 47'13		morning rise	-25 Dec 28 j 15:08	20° \mathbb{X} 01'07	
behind sun end	-30 Nov 22 j 04:50	27° \mathbb{M} 49'07		retrograde	-24 Mar 30 j 06:54	23° \mathbb{X} 11'54	
max. Earth dist.	-30 Nov 22 j 07:51	27° \mathbb{M} 49'35	20.18645 AU	opposition	-24 Jun 15 j 14:40	21° \mathbb{X} 12'30	-0°14'35
morning rise	-30 Dec 07 j 13:21	28° \mathbb{M} 44'42		min. Earth dist.	-24 Jun 14 j 19:32	21° \mathbb{X} 14'26	18.53570 AU
	-30 Dec 29 j 22:59	0° \mathbb{X}		direct	-24 Aug 31 j 10:41	19° \mathbb{X} 13'41	
retrograde	-29 Mar 09 j 14:29	1° \mathbb{X} 58'01		evening set	-24 Nov 30 j 18:00	22° \mathbb{X} 21'18	
	-29 May 24 j 07:42	30° \mathbb{R} \mathbb{M}					
opposition	-29 May 25 j 02:05	29° \mathbb{M} 58'07	0°03'16	conjunction	-24 Dec 16 j 08:16	23° \mathbb{X} 16'30	-0°14'43
min. Earth dist.	-29 May 24 j 14:58	29° \mathbb{M} 59'15	18.21806 AU	minimum elong	-24 Dec 16 j 08:15	23° \mathbb{X} 16'30	0°14'42
direct	-29 Aug 10 j 05:35	27° \mathbb{M} 57'26		behind sun begin	-24 Dec 16 j 05:22	23° \mathbb{X} 16'05	
	-29 Oct 20 j 17:24	0° \mathbb{X}		behind sun end	-24 Dec 16 j 11:09	23° \mathbb{X} 16'56	
evening set	-29 Nov 10 j 18:41	1° \mathbb{X} 10'46		max. Earth dist.	-24 Dec 17 j 04:04	23° \mathbb{X} 19'27	20.56628 AU
				morning rise	-24 Dec 31 j 23:40	24° \mathbb{X} 11'52	
conjunction	-29 Nov 26 j 09:53	2° \mathbb{X} 07'07	0°01'19	retrograde	-23 Apr 03 j 18:44	27° \mathbb{X} 22'13	
minimum elong	-29 Nov 26 j 09:53	2° \mathbb{X} 07'07	0°01'19	min. Earth dist.	-23 Jun 19 j 08:58	25° \mathbb{X} 25'01	18.59639 AU
behind sun begin	-29 Nov 26 j 03:21	2° \mathbb{X} 06'10		opposition	-23 Jun 20 j 05:35	25° \mathbb{X} 22'57	-0°17'56
behind sun end	-29 Nov 26 j 16:25	2° \mathbb{X} 08'05		direct	-23 Sep 04 j 22:51	23° \mathbb{X} 24'30	
max. Earth dist.	-29 Nov 26 j 22:14	2° \mathbb{X} 08'59	20.25001 AU	evening set	-23 Dec 05 j 01:32	26° \mathbb{X} 31'06	
morning rise	-29 Dec 12 j 00:32	3° \mathbb{X} 03'25					
retrograde	-28 Mar 13 j 03:23	6° \mathbb{X} 16'10		conjunction	-23 Dec 20 j 16:02	27° \mathbb{X} 26'07	-0°17'41
desc. node	-28 Apr 17 j 18:20	5° \mathbb{X} 45'27		minimum elong	-23 Dec 20 j 16:02	27° \mathbb{X} 26'07	0°17'41
opposition	-28 May 28 j 20:32	4° \mathbb{X} 16'21	-0°00'24	max. Earth dist.	-23 Dec 21 j 14:08	27° \mathbb{X} 29'23	20.62571 AU
min. Earth dist.	-28 May 28 j 08:15	4° \mathbb{X} 17'36	18.28179 AU	morning rise	-22 Jan 05 j 07:35	28° \mathbb{X} 21'20	
direct	-28 Aug 13 j 22:33	2° \mathbb{X} 16'01			-22 Feb 05 j 10:32	0° \mathbb{X}	
evening set	-28 Nov 14 j 05:33	5° \mathbb{X} 28'07		retrograde	-22 Apr 08 j 05:50	1° \mathbb{X} 31'16	
					-22 Jun 13 j 03:38	30° \mathbb{R} \mathbb{X}	
conjunction	-28 Nov 29 j 20:17	6° \mathbb{X} 24'12	-0°02'04	opposition	-22 Jun 24 j 19:50	29° \mathbb{X} 32'08	-0°21'10
minimum elong	-28 Nov 29 j 20:18	6° \mathbb{X} 24'12	0°02'04	min. Earth dist.	-22 Jun 23 j 22:21	29° \mathbb{X} 34'17	18.65448 AU
behind sun begin	-28 Nov 29 j 13:46	6° \mathbb{X} 23'14		direct	-22 Sep 09 j 11:03	27° \mathbb{X} 34'02	
behind sun end	-28 Nov 30 j 02:50	6° \mathbb{X} 25'09			-22 Nov 27 j 14:17	0° \mathbb{X}	
max. Earth dist.	-28 Nov 30 j 09:36	6° \mathbb{X} 26'12	20.31391 AU	evening set	-22 Dec 09 j 08:54	0° \mathbb{X} 39'39	
morning rise	-28 Dec 15 j 11:05	7° \mathbb{X} 20'17					
retrograde	-27 Mar 17 j 17:56	10° \mathbb{X} 32'31		conjunction	-22 Dec 24 j 23:19	1° \mathbb{X} 34'30	-0°20'33
opposition	-27 Jun 02 j 14:10	8° \mathbb{X} 32'45	-0°04'02	minimum elong	-22 Dec 24 j 23:19	1° \mathbb{X} 34'30	0°20'34
min. Earth dist.	-27 Jun 01 j 23:21	8° \mathbb{X} 34'16	18.34588 AU	max. Earth dist.	-22 Dec 25 j 21:15	1° \mathbb{X} 37'43	20.68229 AU
direct	-27 Aug 18 j 15:24	6° \mathbb{X} 32'47		morning rise	-21 Jan 09 j 15:24	2° \mathbb{X} 29'34	
evening set	-27 Nov 18 j 15:37	9° \mathbb{X} 43'42		retrograde	-21 Apr 12 j 17:03	5° \mathbb{X} 39'07	
				min. Earth dist.	-21 Jun 28 j 11:05	3° \mathbb{X} 42'18	18.70952 AU
conjunction	-27 Dec 04 j 06:18	10° \mathbb{X} 39'34	-0°05'20	opposition	-21 Jun 29 j 09:23	3° \mathbb{X} 40'04	-0°24'17
minimum elong	-27 Dec 04 j 06:18	10° \mathbb{X} 39'34	0°05'20	direct	-21 Sep 13 j 21:57	1° \mathbb{X} 42'16	
behind sun begin	-27 Dec 03 j 23:58	10° \mathbb{X} 38'38		evening set	-21 Dec 13 j 15:41	4° \mathbb{X} 46'59	
behind sun end	-27 Dec 04 j 12:37	10° \mathbb{X} 40'29					
max. Earth dist.	-27 Dec 04 j 22:30	10° \mathbb{X} 41'59	20.37796 AU	conjunction	-21 Dec 29 j 06:26	5° \mathbb{X} 41'40	-0°23'18
morning rise	-27 Dec 19 j 20:59	11° \mathbb{X} 35'26		minimum elong	-21 Dec 29 j 06:26	5° \mathbb{X} 41'40	0°23'18
retrograde	-26 Mar 22 j 06:09	14° \mathbb{X} 47'09		max. Earth dist.	-21 Dec 30 j 06:12	5° \mathbb{X} 45'09	20.73541 AU
opposition	-26 Jun 07 j 06:59	12° \mathbb{X} 47'30	-0°07'37	morning rise	-20 Jan 13 j 22:45	6° \mathbb{X} 36'36	
min. Earth dist.	-26 Jun 06 j 14:59	12° \mathbb{X} 49'07	18.40987 AU	retrograde	-20 Apr 16 j 03:21	9° \mathbb{X} 45'47	

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Attention, astronomical year style is used: The year -20 in astronomical counting style is the year 21 BCE in historical counting style.

opposition	-20 Jul 02 j 22:27	7°34'49" -0°27'15"	conjunction	-13 Jan 25 j 22:29	3°59'43" -0°38'19"
min. Earth dist.	-20 Jul 01 j 23:26	7°34'07" 18.76069 AU	minimum elong	-13 Jan 25 j 22:29	3°59'43" 0°38'18"
direct	-20 Sep 17 j 08:38	5°34'18"	max. Earth dist.	-13 Jan 27 j 00:30	4°03'28" 20.99357 AU
evening set	-20 Dec 16 j 22:05	8°35'06"	morning rise	-13 Feb 10 j 19:26	4°54'12"
			retrograde	-13 May 15 j 20:04	8°01'24"
conjunction	-19 Jan 01 j 12:56	9°34'38" -0°25'56"	min. Earth dist.	-13 Jul 31 j 23:32	6°04'44" 19.00581 AU
minimum elong	-19 Jan 01 j 12:55	9°34'38" 0°25'56"	opposition	-13 Aug 02 j 00:34	6°02'13" -0°43'10"
max. Earth dist.	-19 Jan 02 j 12:13	9°51'03" 20.78452 AU	direct	-13 Oct 16 j 18:26	4°05'42"
morning rise	-19 Jan 17 j 05:55	10°34'28"	evening set	-12 Jan 14 j 09:09	7°04'46"
retrograde	-19 Apr 20 j 14:02	13°51'18"			
min. Earth dist.	-19 Jul 06 j 11:36	11°54'41" 18.80775 AU	conjunction	-12 Jan 30 j 03:37	7°58'47" -0°39'45"
opposition	-19 Jul 07 j 10:59	11°52'21" -0°30'05"	minimum elong	-12 Jan 30 j 03:37	7°58'47" 0°39'45"
direct	-19 Sep 21 j 18:36	9°55'03"	max. Earth dist.	-12 Jan 31 j 06:56	8°02'43" 21.01623 AU
evening set	-19 Dec 21 j 04:04	12°58'00"	morning rise	-12 Feb 15 j 01:13	8°53'16"
			retrograde	-12 May 19 j 04:37	12°00'21"
conjunction	-18 Jan 05 j 19:24	13°52'25" -0°28'25"	min. Earth dist.	-12 Aug 04 j 07:25	10°03'45" 19.02673 AU
minimum elong	-18 Jan 05 j 19:24	13°52'25" 0°28'24"	opposition	-12 Aug 05 j 09:07	10°01'11" -0°44'38"
max. Earth dist.	-18 Jan 06 j 20:15	13°56'03" 20.82928 AU	direct	-12 Oct 20 j 01:47	8°04'47"
morning rise	-18 Jan 21 j 12:46	14°34'09"	evening set	-11 Jan 17 j 13:32	11°03'28"
retrograde	-18 Apr 24 j 23:38	17°55'37"			
opposition	-18 Jul 11 j 22:35	15°56'40" -0°32'44"	conjunction	-11 Feb 02 j 08:33	11°57'30" -0°40'59"
min. Earth dist.	-18 Jul 10 j 22:38	15°59'03" 18.85026 AU	minimum elong	-11 Feb 02 j 08:33	11°57'30" 0°40'58"
direct	-18 Sep 26 j 04:27	13°59'33"	max. Earth dist.	-11 Feb 03 j 10:52	12°01'16" 21.03540 AU
evening set	-18 Dec 25 j 09:43	17°30'14"	morning rise	-11 Feb 18 j 07:12	12°52'00"
				-11 Apr 03 j 09:03	15°
conjunction	-17 Jan 10 j 01:17	17°55'59" -0°30'44"	retrograde	-11 May 23 j 13:28	15°59'02"
minimum elong	-17 Jan 10 j 01:17	17°55'59" 0°30'45"		-11 Jul 14 j 11:01	15°
max. Earth dist.	-17 Jan 11 j 01:29	17°59'30" 20.86964 AU	opposition	-11 Aug 09 j 17:26	13°59'51" -0°45'54"
morning rise	-17 Jan 25 j 19:26	18°50'38"	min. Earth dist.	-11 Aug 08 j 16:29	14°02'21" 19.04410 AU
retrograde	-17 Apr 29 j 09:09	21°58'47"	direct	-11 Oct 24 j 06:25	12°03'33"
min. Earth dist.	-17 Jul 15 j 09:47	20°30'10" 18.88860 AU	evening set	-10 Jan 21 j 17:56	15°01'58"
opposition	-17 Jul 16 j 09:45	19°59'47" -0°35'13"		-10 Jan 21 j 03:54	15°
direct	-17 Sep 30 j 12:49	18°30'48"			
evening set	-17 Dec 29 j 14:45	21°30'41"	conjunction	-10 Feb 06 j 13:53	15°56'00" -0°42'02"
			minimum elong	-10 Feb 06 j 13:53	15°56'00" 0°42'02"
conjunction	-16 Jan 14 j 06:54	21°58'23" -0°32'54"	max. Earth dist.	-10 Feb 07 j 17:06	15°59'54" 21.05077 AU
minimum elong	-16 Jan 14 j 06:54	21°58'23" 0°32'54"	morning rise	-10 Feb 22 j 13:14	16°50'33"
max. Earth dist.	-16 Jan 15 j 08:44	22°30'08" 20.90590 AU	retrograde	-10 May 27 j 21:54	19°57'32"
morning rise	-16 Jan 30 j 01:31	22°52'58"	min. Earth dist.	-10 Aug 12 j 23:54	18°00'55" 19.05735 AU
retrograde	-16 May 02 j 18:14	26°30'48"	opposition	-10 Aug 14 j 01:08	17°58'23" -0°46'56"
opposition	-16 Jul 19 j 20:17	24°30'145" -0°37'30"	direct	-10 Oct 28 j 12:44	16°02'12"
min. Earth dist.	-16 Jul 18 j 19:33	24°30'413" 18.92293 AU	evening set	-9 Jan 25 j 22:37	19°00'24"
direct	-16 Oct 03 j 22:13	22°30'454"			
evening set	-15 Jan 01 j 19:43	25°30'534"	conjunction	-9 Feb 10 j 19:11	19°54'28" -0°42'53"
			minimum elong	-9 Feb 10 j 19:11	19°54'28" 0°42'52"
conjunction	-15 Jan 17 j 12:12	25°59'42" -0°34'53"	max. Earth dist.	-9 Feb 11 j 20:58	19°58'09" 21.06190 AU
minimum elong	-15 Jan 17 j 12:12	25°59'42" 0°34'53"	morning rise	-9 Feb 26 j 19:35	20°49'04"
max. Earth dist.	-15 Jan 18 j 13:29	26°30'21" 20.93845 AU	retrograde	-9 Jun 01 j 07:01	23°56'06"
morning rise	-15 Feb 02 j 07:41	26°54'14"	min. Earth dist.	-9 Aug 17 j 08:52	21°59'21" 19.06626 AU
	-15 Apr 28 j 12:31	0°	opposition	-9 Aug 18 j 08:54	21°56'56" -0°47'45"
retrograde	-15 May 07 j 02:57	0°01'49"	direct	-9 Nov 01 j 17:09	20°00'50"
	-15 May 15 j 19:11	30°	evening set	-8 Jan 30 j 03:13	22°58'53"
min. Earth dist.	-15 Jul 23 j 05:36	28°30'510" 18.95391 AU			
opposition	-15 Jul 24 j 06:15	28°30'242" -0°39'35"	conjunction	-8 Feb 15 j 00:46	23°53'01" -0°43'31"
direct	-15 Oct 08 j 04:46	26°30'557"	minimum elong	-8 Feb 15 j 00:46	23°53'01" 0°43'31"
evening set	-14 Jan 06 j 00:16	29°30'600"	max. Earth dist.	-8 Feb 16 j 03:06	23°56'47" 21.06839 AU
			morning rise	-8 Mar 02 j 01:56	24°47'41"
conjunction	-14 Jan 21 j 17:30	0°00'05" -0°36'41"	retrograde	-8 Jun 04 j 15:46	27°54'47"
minimum elong	-14 Jan 21 j 17:30	0°00'05" 0°36'42"	opposition	-8 Aug 21 j 16:22	25°55'37" -0°48'21"
	-14 Jan 21 j 16:56	0°	min. Earth dist.	-8 Aug 20 j 16:22	25°58'02" 19.07016 AU
max. Earth dist.	-14 Jan 22 j 20:17	0°03'57" 20.96767 AU	direct	-8 Nov 04 j 23:01	23°59'34"
morning rise	-14 Feb 06 j 13:33	0°54'35"	evening set	-7 Feb 02 j 08:25	26°57'33"
retrograde	-14 May 11 j 11:40	4°01'56"			
opposition	-14 Jul 27 j 15:37	2°02'47" -0°41'29"	conjunction	-7 Feb 18 j 06:40	27°51'45" -0°43'57"
min. Earth dist.	-14 Jul 27 j 14:14	2°05'20" 18.98146 AU	minimum elong	-7 Feb 18 j 06:40	27°51'45" 0°43'57"
direct	-14 Oct 12 j 13:11	0°06'09"	max. Earth dist.	-7 Feb 19 j 07:06	27°55'15" 21.06966 AU
evening set	-13 Jan 10 j 04:51	3°05'41"	morning rise	-7 Mar 06 j 08:57	28°46'31"

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Attention, astronomical year style is used: The year -7 in astronomical counting style is the year 8 BCE in historical counting style.

	-7 Mar 29 j 16:07	0°♄	evening set	00 Mar 02 j 04:13	24°♄55'19	
retrograde	-7 Jun 09 j 00:32	1°♄53'42				
	-7 Aug 23 j 16:56	30°♄	conjunction	00 Mar 18 j 09:33	25°♄50'30 -0°40'58	
opposition	-7 Aug 25 j 23:42	29°♄54'30 -0°48'42	minimum elong	00 Mar 18 j 09:33	25°♄50'30 0°40'58	
min. Earth dist.	-7 Aug 25 j 01:26	29°♄56'44 19.06872 AU	max. Earth dist.	00 Mar 19 j 02:58	25°♄52'59 20.93155 AU	
direct	-7 Nov 09 j 03:41	27°♄58'26	morning rise	00 Apr 03 j 18:35	26°♄46'15	
	-6 Jan 19 j 23:21	0°♄	retrograde	00 Jul 07 j 14:16	29°♄54'41	
evening set	-6 Feb 06 j 13:44	0°♄56'24	opposition	00 Sep 22 j 23:32	27°♄54'30 -0°44'36	
			min. Earth dist.	00 Sep 22 j 08:27	27°♄56'02 18.91429 AU	
conjunction	-6 Feb 22 j 13:05	1°♄50'43 -0°44'10	direct	00 Dec 06 j 19:14	25°♄57'17	
minimum elong	-6 Feb 22 j 13:05	1°♄50'43 0°44'10	evening set	01 Mar 06 j 12:21	28°♄56'54	
max. Earth dist.	-6 Feb 23 j 13:29	1°♄54'12 21.06533 AU				
morning rise	-6 Mar 10 j 16:09	2°♄45'34	conjunction	01 Mar 22 j 18:34	29°♄52'18 -0°39'42	
retrograde	-6 Jun 13 j 09:55	5°♄52'52	minimum elong	01 Mar 22 j 18:34	29°♄52'18 0°39'42	
min. Earth dist.	-6 Aug 29 j 08:53	3°♄55'48 19.06139 AU	max. Earth dist.	01 Mar 23 j 09:40	29°♄54'27 20.89586 AU	
opposition	-6 Aug 30 j 06:49	3°♄53'35 -0°48'50		01 Mar 25 j 00:26	0°♄	
direct	-6 Nov 13 j 09:39	1°♄57'28	morning rise	01 Apr 08 j 04:44	0°♄48'14	
evening set	-5 Feb 10 j 19:23	4°♄55'29	retrograde	01 Jul 11 j 23:02	3°♄56'59	
			opposition	01 Sep 27 j 06:22	1°♄56'39 -0°43'06	
conjunction	-5 Feb 26 j 19:29	5°♄49'54 -0°44'11	min. Earth dist.	01 Sep 26 j 17:27	1°♄57'59 18.87715 AU	
minimum elong	-5 Feb 26 j 19:29	5°♄49'54 0°44'11		01 Dec 05 j 12:31	30°♄	
max. Earth dist.	-5 Feb 27 j 17:42	5°♄53'04 21.05512 AU	direct	01 Dec 10 j 23:43	29°♄59'13	
morning rise	-5 Mar 14 j 23:42	6°♄44'52		01 Dec 16 j 10:02	0°♄	
retrograde	-5 Jun 17 j 17:40	9°♄52'18	evening set	02 Mar 10 j 20:53	2°♄59'23	
opposition	-5 Sep 03 j 13:56	7°♄52'54 -0°48'43				
min. Earth dist.	-5 Sep 02 j 17:58	7°♄54'55 19.04834 AU	conjunction	02 Mar 27 j 04:19	3°♄54'59 -0°38'15	
direct	-5 Nov 17 j 14:30	5°♄56'41	minimum elong	02 Mar 27 j 04:19	3°♄54'59 0°38'15	
evening set	-4 Feb 15 j 01:12	8°♄54'47	max. Earth dist.	02 Mar 27 j 18:58	3°♄57'05 20.85735 AU	
			morning rise	02 Apr 12 j 15:17	4°♄51'08	
conjunction	-4 Mar 02 j 02:27	9°♄49'19 -0°43'58	retrograde	02 Jul 16 j 10:00	8°♄00'14	
minimum elong	-4 Mar 02 j 02:27	9°♄49'19 0°43'57	opposition	02 Oct 01 j 13:21	5°♄59'48 -0°41'23	
max. Earth dist.	-4 Mar 03 j 00:34	9°♄52'29 21.03940 AU	min. Earth dist.	02 Oct 01 j 00:46	6°♄01'06 18.83714 AU	
morning rise	-4 Mar 18 j 07:30	10°♄44'25	direct	02 Dec 15 j 06:45	4°♄02'10	
retrograde	-4 Jun 21 j 03:27	13°♄51'59	evening set	03 Mar 15 j 06:07	7°♄02'55	
opposition	-4 Sep 06 j 20:45	11°♄52'26 -0°48'21				
min. Earth dist.	-4 Sep 06 j 01:08	11°♄54'26 19.02992 AU	conjunction	03 Mar 31 j 14:25	7°♄58'45 -0°36'35	
direct	-4 Nov 20 j 20:53	9°♄56'04	minimum elong	03 Mar 31 j 14:25	7°♄58'45 0°36'35	
evening set	-3 Feb 18 j 07:26	12°♄54'19	max. Earth dist.	03 Apr 01 j 02:42	8°♄00'31 20.81599 AU	
			morning rise	03 Apr 17 j 02:25	8°♄55'07	
conjunction	-3 Mar 06 j 09:33	13°♄49'00 -0°43'32	retrograde	03 Jul 20 j 19:58	12°♄04'38	
minimum elong	-3 Mar 06 j 09:33	13°♄49'00 0°43'33	opposition	03 Oct 05 j 20:48	10°♄04'06 -0°39'27	
max. Earth dist.	-3 Mar 07 j 05:28	13°♄51'50 21.01858 AU	min. Earth dist.	03 Oct 05 j 10:31	10°♄05'09 18.79438 AU	
morning rise	-3 Mar 22 j 15:47	14°♄44'14	direct	03 Dec 19 j 11:57	8°♄06'15	
retrograde	-3 Jun 25 j 10:45	17°♄51'58	evening set	04 Mar 18 j 16:04	11°♄07'41	
min. Earth dist.	-3 Sep 10 j 10:01	15°♄54'03 19.00679 AU				
opposition	-3 Sep 11 j 03:36	15°♄52'16 -0°47'46	conjunction	04 Apr 04 j 01:33	12°♄03'47 -0°34'44	
direct	-3 Nov 25 j 01:16	13°♄55'42	minimum elong	04 Apr 04 j 01:33	12°♄03'47 0°34'45	
evening set	-2 Feb 22 j 13:57	16°♄54'11	max. Earth dist.	04 Apr 04 j 13:10	12°♄05'27 20.77191 AU	
			morning rise	04 Apr 20 j 14:21	13°♄00'22	
conjunction	-2 Mar 10 j 17:14	17°♄49'00 -0°42'53	retrograde	04 Jul 24 j 08:08	16°♄10'18	
minimum elong	-2 Mar 10 j 17:14	17°♄49'00 0°42'53	opposition	04 Oct 09 j 04:17	14°♄09'42 -0°37'18	
max. Earth dist.	-2 Mar 11 j 13:00	17°♄51'50 20.99330 AU	min. Earth dist.	04 Oct 08 j 18:36	14°♄10'42 18.74873 AU	
morning rise	-2 Mar 27 j 00:17	18°♄44'24	direct	04 Dec 22 j 19:39	12°♄11'37	
retrograde	-2 Jun 29 j 20:25	21°♄52'19	evening set	05 Mar 23 j 03:03	15°♄13'50	
opposition	-2 Sep 15 j 10:05	19°♄52'27 -0°46'57				
min. Earth dist.	-2 Sep 14 j 16:48	19°♄54'12 18.97942 AU	conjunction	05 Apr 08 j 13:24	16°♄10'11 -0°32'41	
direct	-2 Nov 29 j 08:08	17°♄55'41	minimum elong	05 Apr 08 j 13:24	16°♄10'11 0°32'41	
evening set	-1 Feb 26 j 21:01	20°♄54'28	max. Earth dist.	05 Apr 08 j 22:19	16°♄11'28 20.72472 AU	
			morning rise	05 Apr 25 j 03:10	17°♄07'01	
conjunction	-1 Mar 15 j 01:08	21°♄49'28 -0°42'02	retrograde	05 Jul 28 j 19:13	20°♄17'25	
minimum elong	-1 Mar 15 j 01:08	21°♄49'28 0°42'02	opposition	05 Oct 13 j 12:20	18°♄16'44 -0°34'57	
max. Earth dist.	-1 Mar 15 j 18:43	21°♄51'59 20.96409 AU	min. Earth dist.	05 Oct 13 j 05:25	18°♄17'27 18.69990 AU	
morning rise	-1 Mar 31 j 09:19	22°♄45'01	direct	05 Dec 27 j 01:49	16°♄18'25	
retrograde	-1 Jul 04 j 04:09	25°♄53'11	evening set	06 Mar 27 j 14:43	19°♄21'28	
opposition	-1 Sep 19 j 16:51	23°♄53'09 -0°45'53				
min. Earth dist.	-1 Sep 19 j 01:33	23°♄54'43 18.94850 AU	conjunction	06 Apr 13 j 02:11	20°♄18'04 -0°30'28	
direct	-1 Dec 03 j 12:14	21°♄56'09	minimum elong	06 Apr 13 j 02:11	20°♄18'04 0°30'28	

max. Earth dist.	06 Apr 13 j 09:52	20° Υ 19'11	20.67420 AU	behind sun end	12 May 09 j 02:19	15° \mathcal{B} 37'44	
morning rise	06 Apr 29 j 16:37	21° Υ 15'08		max. Earth dist.	12 May 08 j 17:30	15° \mathcal{B} 36'28	20.30643 AU
retrograde	06 Aug 02 j 08:34	24° Υ 26'02		morning rise	12 May 25 j 17:17	16° \mathcal{B} 35'54	
opposition	06 Oct 17 j 20:34	22° Υ 25'15	-0°32'24	retrograde	12 Aug 27 j 21:04	19° \mathcal{B} 49'48	
min. Earth dist.	06 Oct 17 j 14:32	22° Υ 25'53	18.64753 AU	opposition	12 Nov 11 j 07:49	17° \mathcal{B} 48'06	-0°13'37
direct	06 Dec 31 j 10:50	20° Υ 26'40		min. Earth dist.	12 Nov 11 j 12:44	17° \mathcal{B} 47'34	18.27284 AU
evening set	07 Apr 01 j 03:23	23° Υ 30'36		direct	13 Jan 24 j 23:17	15° \mathcal{B} 47'10	
				evening set	13 Apr 27 j 00:04	18° \mathcal{B} 57'17	
conjunction	07 Apr 17 j 15:39	24° Υ 27'29	-0°28'04				
minimum elong	07 Apr 17 j 15:39	24° Υ 27'29	0°28'04	conjunction	13 May 13 j 17:16	19° \mathcal{B} 55'56	-0°10'43
max. Earth dist.	07 Apr 17 j 20:24	24° Υ 28'10	20.62004 AU	minimum elong	13 May 13 j 17:17	19° \mathcal{B} 55'56	0°10'43
morning rise	07 May 04 j 06:57	25° Υ 24'48		behind sun begin	13 May 13 j 12:09	19° \mathcal{B} 55'12	
retrograde	07 Aug 06 j 20:22	28° Υ 36'11		behind sun end	13 May 13 j 22:25	19° \mathcal{B} 56'40	
opposition	07 Oct 22 j 05:29	26° Υ 35'18	-0°29'39	max. Earth dist.	13 May 13 j 09:39	19° \mathcal{B} 54'50	20.23960 AU
min. Earth dist.	07 Oct 22 j 02:20	26° Υ 35'37	18.59160 AU	morning rise	13 May 30 j 11:53	20° \mathcal{B} 54'50	
direct	08 Jan 04 j 18:16	24° Υ 36'23		retrograde	13 Sep 01 j 12:22	24° \mathcal{B} 09'16	
evening set	08 Apr 04 j 16:38	27° Υ 41'14		opposition	13 Nov 15 j 19:33	22° \mathcal{B} 07'25	-0°10'03
				min. Earth dist.	13 Nov 16 j 02:56	22° \mathcal{B} 06'37	18.20610 AU
conjunction	08 Apr 21 j 06:01	28° Υ 38'24	-0°25'31	direct	14 Jan 29 j 10:44	20° \mathcal{B} 06'04	
minimum elong	08 Apr 21 j 06:01	28° Υ 38'24	0°25'30	evening set	14 May 01 j 18:23	23° \mathcal{B} 17'22	
max. Earth dist.	08 Apr 21 j 09:11	28° Υ 38'52	20.56244 AU				
morning rise	08 May 07 j 21:58	29° Υ 35'59		conjunction	14 May 18 j 12:10	24° \mathcal{B} 16'18	-0°07'29
	08 May 15 j 02:00	0° \mathcal{B}		minimum elong	14 May 18 j 12:10	24° \mathcal{B} 16'18	0°07'29
retrograde	08 Aug 10 j 10:49	2° \mathcal{B} 47'52		behind sun begin	14 May 18 j 06:02	24° \mathcal{B} 15'25	
opposition	08 Oct 25 j 14:38	0° \mathcal{B} 46'49	-0°26'45	behind sun end	14 May 18 j 18:19	24° \mathcal{B} 17'12	
min. Earth dist.	08 Oct 25 j 12:27	0° \mathcal{B} 47'03	18.53222 AU	max. Earth dist.	14 May 18 j 02:47	24° \mathcal{B} 14'56	20.17310 AU
	08 Nov 13 j 17:32	30° $\mathcal{K}\Upsilon$		morning rise	14 Jun 04 j 07:05	25° \mathcal{B} 15'27	
direct	09 Jan 08 j 04:34	28° Υ 47'33		retrograde	14 Sep 06 j 05:36	28° \mathcal{B} 30'27	
	09 Mar 02 j 23:23	0° \mathcal{B}		opposition	14 Nov 20 j 07:41	26° \mathcal{B} 28'27	-0°06'24
evening set	09 Apr 09 j 07:00	1° \mathcal{B} 53'22		min. Earth dist.	14 Nov 20 j 15:35	26° \mathcal{B} 27'37	18.13996 AU
				direct	15 Feb 03 j 00:45	24° \mathcal{B} 26'43	
conjunction	09 Apr 25 j 21:09	2° \mathcal{B} 50'50	-0°22'48	evening set	15 May 06 j 13:40	27° \mathcal{B} 39'13	
minimum elong	09 Apr 25 j 21:09	2° \mathcal{B} 50'50	0°22'48				
max. Earth dist.	09 Apr 25 j 21:24	2° \mathcal{B} 50'52	20.50150 AU	conjunction	15 May 23 j 07:59	28° \mathcal{B} 38'28	-0°04'11
morning rise	09 May 12 j 13:50	3° \mathcal{B} 48'41		minimum elong	15 May 23 j 07:59	28° \mathcal{B} 38'28	0°04'11
retrograde	09 Aug 14 j 23:33	7° \mathcal{B} 01'03		behind sun begin	15 May 23 j 01:18	28° \mathcal{B} 37'30	
opposition	09 Oct 30 j 00:16	4° \mathcal{B} 59'51	-0°23'40	behind sun end	15 May 23 j 14:39	28° \mathcal{B} 39'26	
min. Earth dist.	09 Oct 30 j 01:00	4° \mathcal{B} 59'46	18.46990 AU	max. Earth dist.	15 May 22 j 20:59	28° \mathcal{B} 36'51	20.10736 AU
direct	10 Jan 12 j 13:30	3° \mathcal{B} 00'11		morning rise	15 Jun 09 j 03:01	29° \mathcal{B} 37'52	
evening set	10 Apr 13 j 22:00	6° \mathcal{B} 07'01			15 Jun 15 j 13:43	0° \mathcal{B}	
				retrograde	15 Sep 10 j 21:52	2° \mathcal{B} 53'24	
conjunction	10 Apr 30 j 13:06	7° \mathcal{B} 04'46	-0°19'57	opposition	15 Nov 24 j 20:37	0° \mathcal{B} 51'20	-0°02'42
minimum elong	10 Apr 30 j 13:06	7° \mathcal{B} 04'46	0°19'56	min. Earth dist.	15 Nov 25 j 06:45	0° \mathcal{B} 50'14	18.07487 AU
max. Earth dist.	10 Apr 30 j 11:41	7° \mathcal{B} 04'34	20.43809 AU		15 Dec 15 j 10:15	30° $\mathcal{K}\mathcal{B}$	
morning rise	10 May 17 j 06:20	8° \mathcal{B} 02'53		direct	16 Feb 07 j 13:32	28° \mathcal{B} 49'13	
retrograde	10 Aug 19 j 14:45	11° \mathcal{B} 15'44			16 Mar 31 j 13:02	0° \mathcal{B}	
opposition	10 Nov 03 j 10:16	9° \mathcal{B} 14'23	-0°20'26	evening set	16 May 10 j 09:53	2° \mathcal{B} 02'58	
min. Earth dist.	10 Nov 03 j 11:49	9° \mathcal{B} 14'13	18.40540 AU				
direct	11 Jan 17 j 00:39	7° \mathcal{B} 14'18		conjunction	16 May 27 j 04:38	3° \mathcal{B} 02'30	-0°00'47
evening set	11 Apr 18 j 13:46	10° \mathcal{B} 22'11		minimum elong	16 May 27 j 04:37	3° \mathcal{B} 02'30	0°00'47
				behind sun begin	16 May 26 j 21:51	3° \mathcal{B} 01'31	
conjunction	11 May 05 j 05:33	11° \mathcal{B} 20'14	-0°16'59	behind sun end	16 May 27 j 11:24	3° \mathcal{B} 03'29	
minimum elong	11 May 05 j 05:33	11° \mathcal{B} 20'14	0°16'59	max. Earth dist.	16 May 26 j 15:36	3° \mathcal{B} 00'34	20.04302 AU
max. Earth dist.	11 May 05 j 01:43	11° \mathcal{B} 19'41	20.37274 AU	morning rise	16 Jun 12 j 23:53	4° \mathcal{B} 02'09	
morning rise	11 May 21 j 23:21	12° \mathcal{B} 18'36		asc. node	16 Aug 16 j 21:43	6° \mathcal{B} 56'35	
	11 Jul 19 j 14:56	15° \mathcal{B}		retrograde	16 Sep 14 j 16:15	7° \mathcal{B} 18'15	
retrograde	11 Aug 24 j 04:56	15° \mathcal{B} 31'59		opposition	16 Nov 28 j 10:10	5° \mathcal{B} 16'06	0°01'03
	11 Sep 29 j 03:37	15° $\mathcal{K}\mathcal{B}$		min. Earth dist.	16 Nov 28 j 20:54	5° \mathcal{B} 14'57	18.01121 AU
opposition	11 Nov 07 j 20:56	13° \mathcal{B} 30'27	-0°17'05	direct	17 Feb 11 j 05:28	3° \mathcal{B} 13'39	
min. Earth dist.	11 Nov 08 j 01:09	13° \mathcal{B} 30'00	18.33946 AU	evening set	17 May 15 j 07:08	6° \mathcal{B} 28'41	
direct	12 Jan 21 j 10:55	11° \mathcal{B} 29'56		max. Earth dist.	17 May 31 j 11:57	7° \mathcal{B} 26'22	19.97998 AU
evening set	12 Apr 22 j 06:25	14° \mathcal{B} 38'55					
	12 Apr 28 j 08:34	15° \mathcal{B}		conjunction	17 Jun 01 j 02:16	7° \mathcal{B} 28'30	0°02'43
conjunction	12 May 08 j 23:01	15° \mathcal{B} 37'16	-0°13'54	minimum elong	17 Jun 01 j 02:14	7° \mathcal{B} 28'30	0°02'43
minimum elong	12 May 08 j 23:01	15° \mathcal{B} 37'16	0°13'54	behind sun begin	17 May 31 j 19:28	7° \mathcal{B} 27'31	
behind sun begin	12 May 08 j 19:43	15° \mathcal{B} 36'48		behind sun end	17 Jun 01 j 09:01	7° \mathcal{B} 29'29	
				morning rise	17 Jun 17 j 21:23	8° \mathcal{B} 28'22	

retrograde	17 Sep 19 j 09:43	11°II45'02		retrograde	23 Oct 17 j 12:12	9°☾05'05	
opposition	17 Dec 03 j 00:31	9°II42'52	0°04'50	opposition	23 Dec 30 j 06:53	7°☾02'43	0°26'39
min. Earth dist.	17 Dec 03 j 13:26	9°II41'29	17.94894 AU	min. Earth dist.	23 Dec 31 j 03:48	7°☾00'26	17.60516 AU
direct	18 Feb 15 j 19:59	7°II40'05		direct	24 Mar 14 j 16:30	4°☾57'52	
evening set	18 May 20 j 05:20	10°II56'25		evening set	24 Jun 17 j 11:33	8°☾21'29	
max. Earth dist.	18 Jun 05 j 07:58	11°II54'01	19.91852 AU	max. Earth dist.	24 Jul 03 j 03:53	9°☾18'48	19.57971 AU
conjunction	18 Jun 06 j 00:36	11°II56'30	0°06'06	conjunction	24 Jul 04 j 06:12	9°☾22'50	0°25'26
minimum elong	18 Jun 06 j 00:36	11°II56'30	0°06'07	minimum elong	24 Jul 04 j 06:12	9°☾22'50	0°25'26
behind sun begin	18 Jun 05 j 18:10	11°II55'34		morning rise	24 Jul 20 j 22:53	10°☾23'56	
behind sun end	18 Jun 06 j 07:02	11°II57'27		retrograde	24 Oct 21 j 09:59	13°☾43'56	
morning rise	18 Jun 22 j 19:47	12°II56'36		opposition	25 Jan 03 j 02:28	11°☾41'29	0°29'53
retrograde	18 Sep 24 j 05:23	16°II13'51		min. Earth dist.	25 Jan 04 j 00:29	11°☾39'05	17.55552 AU
opposition	18 Dec 07 j 15:36	14°II11'39	0°08'36	direct	25 Mar 19 j 14:39	9°☾36'17	
min. Earth dist.	18 Dec 08 j 05:22	14°II10'10	17.88820 AU	evening set	25 Jun 22 j 14:37	13°☾00'57	
direct	19 Feb 20 j 14:10	12°II08'32		max. Earth dist.	25 Jul 08 j 06:56	13°☾58'27	19.53175 AU
evening set	19 May 25 j 04:17	15°II26'10		conjunction	25 Jul 09 j 08:57	14°☾02'28	0°28'15
conjunction	19 Jun 10 j 23:48	16°II26'31	0°09'29	minimum elong	25 Jul 09 j 08:56	14°☾02'27	0°28'16
minimum elong	19 Jun 10 j 23:48	16°II26'31	0°09'29	morning rise	25 Jul 26 j 00:44	15°☾03'39	
behind sun begin	19 Jun 10 j 18:12	16°II25'41		retrograde	25 Oct 26 j 09:08	18°☾23'59	
behind sun end	19 Jun 11 j 05:24	16°II27'20		opposition	26 Jan 07 j 22:43	16°☾21'30	0°32'57
max. Earth dist.	19 Jun 10 j 06:12	16°II23'52	19.85828 AU	min. Earth dist.	26 Jan 08 j 21:08	16°☾19'03	17.50952 AU
morning rise	19 Jun 27 j 18:40	17°II26'49		direct	26 Mar 24 j 13:40	14°☾15'59	
retrograde	19 Sep 29 j 00:04	20°II44'36		evening set	26 Jun 27 j 18:13	17°☾41'38	
opposition	19 Dec 12 j 07:37	18°II42'24	0°12'22	max. Earth dist.	26 Jul 13 j 08:12	18°☾38'59	19.48790 AU
min. Earth dist.	19 Dec 12 j 23:28	18°II40'41	17.82859 AU	conjunction	26 Jul 14 j 11:51	18°☾43'15	0°30'54
direct	20 Feb 25 j 06:51	16°II38'58		minimum elong	26 Jul 14 j 11:50	18°☾43'15	0°30'54
evening set	20 May 29 j 04:24	19°II57'52		morning rise	26 Jul 31 j 02:56	19°☾44'32	
conjunction	20 Jun 14 j 23:51	20°II58'26	0°12'50	retrograde	26 Oct 31 j 07:09	23°☾05'10	
minimum elong	20 Jun 14 j 23:51	20°II58'26	0°12'51	opposition	27 Jan 12 j 19:36	21°☾02'39	0°35'48
behind sun begin	20 Jun 14 j 19:47	20°II57'51		min. Earth dist.	27 Jan 13 j 18:56	21°☾00'06	17.46816 AU
behind sun end	20 Jun 15 j 03:55	20°II59'02		direct	27 Mar 29 j 12:28	18°☾56'50	
max. Earth dist.	20 Jun 14 j 03:30	20°II55'22	19.79927 AU	evening set	27 Jul 02 j 21:53	22°☾23'25	
morning rise	20 Jul 01 j 18:36	21°II58'56		conjunction	27 Jul 19 j 15:02	23°☾25'08	0°33'21
retrograde	20 Oct 02 j 20:51	25°II17'14		minimum elong	27 Jul 19 j 15:02	23°☾25'08	0°33'22
opposition	20 Dec 16 j 00:13	23°II15'00	0°16'05	max. Earth dist.	27 Jul 18 j 12:02	23°☾20'57	19.44895 AU
min. Earth dist.	20 Dec 16 j 17:13	23°II13'10	17.77025 AU	morning rise	27 Aug 05 j 05:11	24°☾26'27	
direct	21 Mar 01 j 02:59	21°II11'13		retrograde	27 Nov 05 j 07:24	27°☾47'22	
evening set	21 Jun 03 j 05:13	24°II31'22		opposition	28 Jan 17 j 17:08	25°☾44'50	0°38'25
max. Earth dist.	21 Jun 19 j 03:40	25°II28'59	19.74142 AU	min. Earth dist.	28 Jan 18 j 16:08	25°☾42'19	17.43178 AU
conjunction	21 Jun 20 j 00:46	25°II32'11	0°16'08	direct	28 Apr 02 j 12:44	23°☾38'49	
minimum elong	21 Jun 20 j 00:46	25°II32'11	0°16'07	evening set	28 Jul 07 j 02:08	27°☾06'14	
morning rise	21 Jul 06 j 18:57	26°II32'51		conjunction	28 Jul 23 j 18:26	28°☾08'01	0°35'35
retrograde	21 Oct 07 j 17:06	29°II51'37		minimum elong	28 Jul 23 j 18:25	28°☾08'01	0°35'35
opposition	21 Dec 20 j 17:49	27°II49'21	0°19'43	max. Earth dist.	28 Jul 22 j 14:31	28°☾03'41	19.41527 AU
min. Earth dist.	21 Dec 21 j 12:31	27°II47'19	17.71315 AU	morning rise	28 Aug 09 j 07:39	29°☾09'22	
direct	22 Mar 05 j 22:06	25°II45'13			28 Aug 23 j 15:14	0°♂	
evening set	22 Jun 08 j 06:42	29°II06'34		retrograde	28 Nov 09 j 05:47	2°♂30'32	
	22 Jun 23 j 00:19	0°☾		opposition	29 Jan 21 j 15:17	0°♂28'01	0°40'47
max. Earth dist.	22 Jun 24 j 02:10	0°☾03'57	19.68519 AU	min. Earth dist.	29 Jan 22 j 15:04	0°♂25'25	17.40110 AU
conjunction	22 Jun 25 j 01:54	0°☾07'34	0°19'21		29 Feb 01 j 09:31	30°♂☾	
minimum elong	22 Jun 25 j 01:54	0°☾07'34	0°19'21	direct	29 Apr 07 j 12:36	28°☾21'49	
morning rise	22 Jul 11 j 19:47	1°☾08'24			29 Jun 09 j 06:21	0°♂	
retrograde	22 Oct 12 j 14:27	4°☾27'38		evening set	29 Jul 12 j 06:25	1°♂50'02	
opposition	22 Dec 25 j 12:03	2°☾25'18	0°23'15	conjunction	29 Jul 28 j 21:58	2°♂51'51	0°37'35
min. Earth dist.	22 Dec 26 j 07:49	2°☾23'09	17.65799 AU	minimum elong	29 Jul 28 j 21:58	2°♂51'51	0°37'35
direct	23 Mar 10 j 19:21	0°☾20'47		max. Earth dist.	29 Jul 27 j 18:45	2°♂47'36	19.38754 AU
evening set	23 Jun 13 j 08:44	3°☾43'18		morning rise	29 Aug 14 j 10:10	3°♂53'12	
max. Earth dist.	23 Jun 29 j 03:56	4°☾40'50	19.63107 AU	retrograde	29 Nov 14 j 06:27	7°♂14'35	
conjunction	23 Jun 30 j 03:53	4°☾44'30	0°22'27	opposition	30 Jan 26 j 14:03	5°♂12'09	0°42'54
minimum elong	23 Jun 30 j 03:53	4°☾44'30	0°22'27	min. Earth dist.	30 Jan 27 j 12:51	5°♂09'39	17.37631 AU
morning rise	23 Jul 16 j 21:03	5°☾45'28		direct	30 Apr 12 j 14:12	3°♂05'52	

evening set	30 Jul 17 j 10:46	6°♌34'44		conjunction	36 Aug 31 j 20:43	6°♏15'22	0°43'59
max. Earth dist.	30 Aug 01 j 22:12	7°♌32'19	19.36571 AU	minimum elong	36 Aug 31 j 20:43	6°♏15'22	0°43'58
				max. Earth dist.	36 Aug 30 j 21:34	6°♏11'43	19.34467 AU
conjunction	30 Aug 03 j 01:24	7°♌36'34	0°39'20	morning rise	36 Sep 17 j 00:45	7°♏16'08	
minimum elong	30 Aug 03 j 01:24	7°♌36'34	0°39'21	retrograde	36 Dec 17 j 04:56	10°♏37'41	
morning rise	30 Aug 19 j 12:31	8°♌37'55		opposition	37 Feb 28 j 19:08	8°♏36'00	0°48'55
retrograde	30 Nov 19 j 04:59	11°♌59'29		min. Earth dist.	37 Mar 01 j 15:55	8°♏33'45	17.35075 AU
opposition	31 Jan 31 j 13:29	9°♌57'09	0°44'43	direct	37 May 16 j 11:54	6°♏29'54	
min. Earth dist.	31 Feb 01 j 13:00	9°♌54'34	17.35752 AU	evening set	37 Aug 20 j 15:44	10°♏00'18	
direct	31 Apr 17 j 15:08	7°♌50'49					
evening set	31 Jul 22 j 15:19	11°♌20'17		conjunction	37 Sep 05 j 22:36	11°♏01'29	0°43'42
max. Earth dist.	31 Aug 07 j 02:14	12°♌17'54	19.34982 AU	minimum elong	37 Sep 05 j 22:36	11°♏01'29	0°43'42
				max. Earth dist.	37 Sep 04 j 23:27	10°♏57'50	19.35713 AU
conjunction	31 Aug 08 j 05:01	12°♌22'06	0°40'50	morning rise	37 Sep 22 j 01:38	12°♏02'05	
minimum elong	31 Aug 08 j 05:00	12°♌22'06	0°40'49	retrograde	37 Dec 22 j 05:53	15°♏23'25	
morning rise	31 Aug 24 j 15:05	13°♌23'24		opposition	38 Mar 05 j 20:55	13°♏21'46	0°48'26
	31 Sep 21 j 23:17	15°♌		min. Earth dist.	38 Mar 06 j 16:03	13°♏19'42	17.36546 AU
retrograde	31 Nov 24 j 05:53	16°♌45'07		direct	38 May 21 j 16:26	11°♏15'45	
	32 Jan 29 j 23:59	15°♏♌		evening set	38 Aug 25 j 18:01	14°♏45'51	
opposition	32 Feb 05 j 13:10	14°♌42'54	0°46'14				
min. Earth dist.	32 Feb 06 j 11:33	14°♌40'28	17.34432 AU	conjunction	38 Sep 10 j 23:54	15°♏46'51	0°43'07
direct	32 Apr 21 j 18:35	12°♌36'35		minimum elong	38 Sep 10 j 23:54	15°♏46'51	0°43'07
	32 Jul 07 j 22:22	15°♌		max. Earth dist.	38 Sep 10 j 03:13	15°♏43'35	19.37413 AU
evening set	32 Jul 26 j 19:58	16°♌06'32		morning rise	38 Sep 27 j 01:40	16°♏47'16	
max. Earth dist.	32 Aug 11 j 06:31	17°♌04'13	19.33923 AU	retrograde	38 Dec 27 j 04:24	20°♏08'20	
				opposition	39 Mar 10 j 22:49	18°♏06'44	0°47'37
conjunction	32 Aug 12 j 08:41	17°♌08'19	0°42'03	min. Earth dist.	39 Mar 11 j 17:20	18°♏04'44	17.38469 AU
minimum elong	32 Aug 12 j 08:41	17°♌08'19	0°42'03	direct	39 May 26 j 19:11	16°♏00'49	
morning rise	32 Aug 28 j 17:30	18°♌09'33		evening set	39 Aug 30 j 19:55	19°♏30'30	
retrograde	32 Nov 28 j 04:37	21°♌31'21		max. Earth dist.	39 Sep 15 j 04:09	20°♏28'05	19.39586 AU
opposition	33 Feb 09 j 13:43	19°♌29'16	0°47'26				
min. Earth dist.	33 Feb 10 j 12:51	19°♌26'45	17.33636 AU	conjunction	39 Sep 16 j 00:27	20°♏31'17	0°42'14
direct	33 Apr 26 j 20:59	17°♌22'58		minimum elong	39 Sep 16 j 00:27	20°♏31'17	0°42'14
evening set	33 Aug 01 j 00:28	20°♌53'17		morning rise	39 Oct 02 j 01:15	21°♏31'29	
max. Earth dist.	33 Aug 16 j 09:56	21°♌50'53	19.33377 AU	retrograde	40 Jan 01 j 03:56	24°♏52'15	
				opposition	40 Mar 15 j 00:28	22°♏50'41	0°46'29
conjunction	33 Aug 17 j 12:00	21°♌54'59	0°42'59	min. Earth dist.	40 Mar 15 j 17:18	22°♏48'53	17.40890 AU
minimum elong	33 Aug 17 j 11:59	21°♌54'59	0°42'59	direct	40 May 30 j 23:33	20°♏44'53	
morning rise	33 Sep 02 j 19:45	22°♌56'08		evening set	40 Sep 03 j 20:53	24°♏14'03	
retrograde	33 Dec 03 j 05:38	26°♌17'59		max. Earth dist.	40 Sep 19 j 06:58	25°♏11'52	19.42265 AU
opposition	34 Feb 14 j 14:34	24°♌16'00	0°48'19				
min. Earth dist.	34 Feb 15 j 12:18	24°♌13'39	17.33326 AU	conjunction	40 Sep 20 j 00:24	25°♏14'36	0°41'05
direct	34 May 02 j 01:38	22°♌09'45		minimum elong	40 Sep 20 j 00:24	25°♏14'36	0°41'05
evening set	34 Aug 06 j 04:46	25°♌40'16		morning rise	40 Oct 05 j 23:58	26°♏14'36	
				retrograde	41 Jan 05 j 01:37	29°♏35'00	
conjunction	34 Aug 22 j 15:17	26°♌41'53	0°43'37	opposition	41 Mar 20 j 02:16	27°♏33'30	0°45'02
minimum elong	34 Aug 22 j 15:17	26°♌41'53	0°43'37	min. Earth dist.	41 Mar 20 j 17:36	27°♏31'51	17.43822 AU
max. Earth dist.	34 Aug 21 j 14:29	26°♌37'59	19.33293 AU	direct	41 Jun 05 j 02:50	25°♏27'54	
morning rise	34 Sep 07 j 21:43	27°♌42'56		evening set	41 Sep 08 j 21:04	28°♏56'24	
	34 Oct 20 j 12:41	0°♏					
retrograde	34 Dec 08 j 04:41	1°♏04'44		conjunction	41 Sep 24 j 23:16	29°♏56'43	0°39'39
	35 Jan 27 j 19:37	30°♏♌		minimum elong	41 Sep 24 j 23:16	29°♏56'43	0°39'38
opposition	35 Feb 19 j 15:50	29°♌02'52	0°48'52	max. Earth dist.	41 Sep 24 j 06:53	29°♏54'08	19.45473 AU
min. Earth dist.	35 Feb 20 j 14:06	29°♌00'27	17.33474 AU		41 Sep 25 j 20:12	0°♏	
direct	35 May 07 j 04:25	26°♌56'39		morning rise	41 Oct 10 j 21:55	0°♏56'29	
	35 Aug 03 j 20:46	0°♏		retrograde	42 Jan 09 j 23:46	4°♏16'32	
evening set	35 Aug 11 j 08:54	0°♏27'16		opposition	42 Mar 25 j 03:50	2°♏15'05	0°43'17
				min. Earth dist.	42 Mar 25 j 17:20	2°♏13'38	17.47310 AU
conjunction	35 Aug 27 j 18:09	1°♏28'46	0°43'57	direct	42 Jun 10 j 06:05	0°♏09'42	
minimum elong	35 Aug 27 j 18:09	1°♏28'46	0°43'58	evening set	42 Sep 13 j 20:25	3°♏37'31	
max. Earth dist.	35 Aug 26 j 17:09	1°♏24'49	19.33668 AU				
morning rise	35 Sep 12 j 23:34	2°♏29'41		conjunction	42 Sep 29 j 21:37	4°♏37'34	0°37'58
retrograde	35 Dec 13 j 05:58	5°♏51'23		minimum elong	42 Sep 29 j 21:37	4°♏37'34	0°37'58
opposition	36 Feb 24 j 17:18	3°♏49'37	0°49'04	max. Earth dist.	42 Sep 29 j 08:12	4°♏35'27	19.49238 AU
min. Earth dist.	36 Feb 25 j 14:03	3°♏47'22	17.34061 AU	morning rise	42 Oct 15 j 19:11	5°♏37'06	
direct	36 May 11 j 09:19	1°♏43'26		retrograde	43 Jan 14 j 21:00	8°♏56'44	
evening set	36 Aug 15 j 12:30	5°♏14'02		opposition	43 Mar 30 j 05:01	6°♏55'25	0°41'16

min. Earth dist.	43 Mar 30 j 16:23	6° <u>♂</u> 54'12	17.51328 AU	conjunction	49 Oct 31 j 11:02	6° <u>♂</u> 45'34	0°20'21
direct	43 Jun 15 j 09:07	4° <u>♂</u> 50'20		minimum elong	49 Oct 31 j 11:02	6° <u>♂</u> 45'34	0°20'21
evening set	43 Sep 18 j 19:07	8° <u>♂</u> 17'22		max. Earth dist.	49 Oct 31 j 11:42	6° <u>♂</u> 45'40	19.86838 AU
				morning rise	49 Nov 16 j 03:25	7° <u>♂</u> 43'21	
conjunction	43 Oct 04 j 19:08	9° <u>♂</u> 17'09	0°36'02	retrograde	50 Feb 15 j 14:37	10° <u>♂</u> 59'40	
minimum elong	43 Oct 04 j 19:08	9° <u>♂</u> 17'09	0°36'02	opposition	50 May 02 j 05:10	8° <u>♂</u> 59'29	0°20'54
max. Earth dist.	43 Oct 04 j 07:06	9° <u>♂</u> 15'16	19.53524 AU	min. Earth dist.	50 May 02 j 04:08	8° <u>♂</u> 59'35	17.89909 AU
morning rise	43 Oct 20 j 15:51	10° <u>♂</u> 16'27		direct	50 Jul 18 j 10:02	6° <u>♂</u> 57'06	
retrograde	44 Jan 19 j 17:50	13° <u>♂</u> 35'41		evening set	50 Oct 20 j 09:05	10° <u>♂</u> 16'51	
opposition	44 Apr 03 j 06:08	11° <u>♂</u> 34'30	0°38'59				
min. Earth dist.	44 Apr 03 j 15:56	11° <u>♂</u> 33'28	17.55864 AU	conjunction	50 Nov 05 j 02:49	11° <u>♂</u> 14'37	0°17'14
direct	44 Jun 19 j 10:49	9° <u>♂</u> 29'45		minimum elong	50 Nov 05 j 02:49	11° <u>♂</u> 14'37	0°17'14
evening set	44 Sep 22 j 16:45	12° <u>♂</u> 55'56		max. Earth dist.	50 Nov 05 j 04:48	11° <u>♂</u> 14'55	19.93020 AU
				morning rise	50 Nov 20 j 18:49	12° <u>♂</u> 12'09	
conjunction	44 Oct 08 j 15:47	13° <u>♂</u> 55'27	0°33'53		51 Jan 18 j 22:36	15° <u>♂</u>	
minimum elong	44 Oct 08 j 15:47	13° <u>♂</u> 55'27	0°33'53	retrograde	51 Feb 20 j 09:02	15° <u>♂</u> 27'53	
max. Earth dist.	44 Oct 08 j 06:32	13° <u>♂</u> 54'00	19.58299 AU		51 Mar 25 j 17:54	15° <u>♂</u> 11'11	
morning rise	44 Oct 24 j 11:34	14° <u>♂</u> 54'30		opposition	51 May 07 j 02:57	13° <u>♂</u> 27'47	0°17'23
retrograde	45 Jan 23 j 14:54	18° <u>♂</u> 13'18		min. Earth dist.	51 May 06 j 23:10	13° <u>♂</u> 28'11	17.96107 AU
opposition	45 Apr 08 j 06:57	16° <u>♂</u> 12'18	0°36'27	direct	51 Jul 23 j 08:16	11° <u>♂</u> 25'46	
min. Earth dist.	45 Apr 08 j 14:13	16° <u>♂</u> 11'32	17.60836 AU	evening set	51 Oct 25 j 00:38	14° <u>♂</u> 44'16	
direct	45 Jun 24 j 13:20	14° <u>♂</u> 07'57			51 Oct 29 j 08:56	15° <u>♂</u>	
evening set	45 Sep 27 j 13:43	17° <u>♂</u> 33'13					
				conjunction	51 Nov 09 j 17:46	15° <u>♂</u> 41'45	0°14'03
conjunction	45 Oct 13 j 11:41	18° <u>♂</u> 32'27	0°31'31	minimum elong	51 Nov 09 j 17:47	15° <u>♂</u> 41'45	0°14'02
minimum elong	45 Oct 13 j 11:41	18° <u>♂</u> 32'27	0°31'32	behind sun begin	51 Nov 09 j 14:21	15° <u>♂</u> 41'14	
max. Earth dist.	45 Oct 13 j 04:12	18° <u>♂</u> 31'17	19.63476 AU	behind sun end	51 Nov 09 j 21:12	15° <u>♂</u> 42'16	
morning rise	45 Oct 29 j 06:41	19° <u>♂</u> 31'15		max. Earth dist.	51 Nov 09 j 22:08	15° <u>♂</u> 42'25	19.99236 AU
retrograde	46 Jan 28 j 10:27	22° <u>♂</u> 49'37		morning rise	51 Nov 25 j 09:17	16° <u>♂</u> 39'01	
opposition	46 Apr 13 j 07:27	20° <u>♂</u> 48'47	0°33'42	retrograde	52 Feb 25 j 01:26	19° <u>♂</u> 54'10	
min. Earth dist.	46 Apr 13 j 13:31	20° <u>♂</u> 48'09	17.66200 AU	opposition	52 May 11 j 00:27	17° <u>♂</u> 54'08	0°13'46
direct	46 Jun 29 j 13:16	18° <u>♂</u> 44'50		min. Earth dist.	52 May 10 j 19:55	17° <u>♂</u> 54'36	18.02343 AU
evening set	46 Oct 02 j 09:40	22° <u>♂</u> 09'06		direct	52 Jul 27 j 04:30	15° <u>♂</u> 52'27	
				evening set	52 Oct 28 j 15:06	19° <u>♂</u> 09'41	
conjunction	46 Oct 18 j 06:44	23° <u>♂</u> 08'03	0°28'58				
minimum elong	46 Oct 18 j 06:44	23° <u>♂</u> 08'03	0°28'57	conjunction	52 Nov 13 j 07:35	20° <u>♂</u> 06'52	0°10'47
max. Earth dist.	46 Oct 18 j 01:30	23° <u>♂</u> 07'14	19.69002 AU	minimum elong	52 Nov 13 j 07:35	20° <u>♂</u> 06'52	0°10'48
morning rise	46 Nov 03 j 01:00	24° <u>♂</u> 06'36		behind sun begin	52 Nov 13 j 02:31	20° <u>♂</u> 06'07	
retrograde	47 Feb 02 j 06:58	27° <u>♂</u> 24'29		behind sun end	52 Nov 13 j 12:39	20° <u>♂</u> 07'37	
opposition	47 Apr 18 j 07:28	25° <u>♂</u> 23'51	0°30'45	max. Earth dist.	52 Nov 13 j 13:13	20° <u>♂</u> 07'43	20.05499 AU
min. Earth dist.	47 Apr 18 j 10:53	25° <u>♂</u> 23'29	17.71849 AU	morning rise	52 Nov 28 j 22:54	21° <u>♂</u> 03'54	
direct	47 Jul 04 j 14:44	23° <u>♂</u> 20'18		retrograde	53 Feb 28 j 18:26	24° <u>♂</u> 18'26	
evening set	47 Oct 07 j 04:53	26° <u>♂</u> 43'31		opposition	53 May 15 j 21:03	22° <u>♂</u> 18'27	0°10'07
				min. Earth dist.	53 May 15 j 13:37	22° <u>♂</u> 19'13	18.08624 AU
conjunction	47 Oct 23 j 01:00	27° <u>♂</u> 42'11	0°26'14	direct	53 Aug 01 j 01:12	20° <u>♂</u> 17'05	
minimum elong	47 Oct 23 j 01:00	27° <u>♂</u> 42'11	0°26'14	evening set	53 Nov 02 j 04:37	23° <u>♂</u> 33'01	
max. Earth dist.	47 Oct 22 j 21:43	27° <u>♂</u> 41'40	19.74771 AU				
morning rise	47 Nov 07 j 18:33	28° <u>♂</u> 40'28		conjunction	53 Nov 17 j 20:41	24° <u>♂</u> 29'55	0°07'30
	47 Nov 30 j 22:07	0° <u>♂</u>		minimum elong	53 Nov 17 j 20:41	24° <u>♂</u> 29'56	0°07'30
retrograde	48 Feb 07 j 01:15	1° <u>♂</u> 57'52		behind sun begin	53 Nov 17 j 14:42	24° <u>♂</u> 29'02	
	48 Apr 21 j 06:13	30° <u>♂</u> 11'11		behind sun end	53 Nov 18 j 02:40	24° <u>♂</u> 30'49	
opposition	48 Apr 22 j 07:13	29° <u>♂</u> 57'24	0°27'37	max. Earth dist.	53 Nov 18 j 05:04	24° <u>♂</u> 31'11	20.11799 AU
min. Earth dist.	48 Apr 22 j 09:45	29° <u>♂</u> 57'08	17.77728 AU	morning rise	53 Dec 03 j 11:40	25° <u>♂</u> 26'42	
direct	48 Jul 08 j 13:07	27° <u>♂</u> 54'15		retrograde	54 Mar 05 j 08:55	28° <u>♂</u> 40'38	
	48 Sep 18 j 17:41	0° <u>♂</u>		opposition	54 May 20 j 16:52	26° <u>♂</u> 40'41	0°06'26
evening set	48 Oct 10 j 23:14	1° <u>♂</u> 16'22		min. Earth dist.	54 May 20 j 08:32	26° <u>♂</u> 41'32	18.14960 AU
				direct	54 Aug 05 j 20:30	24° <u>♂</u> 39'38	
conjunction	48 Oct 26 j 18:28	2° <u>♂</u> 14'43	0°23'22	evening set	54 Nov 06 j 17:16	27° <u>♂</u> 54'18	
minimum elong	48 Oct 26 j 18:29	2° <u>♂</u> 14'43	0°23'21				
max. Earth dist.	48 Oct 26 j 16:58	2° <u>♂</u> 14'29	19.80745 AU	conjunction	54 Nov 22 j 08:48	28° <u>♂</u> 50'56	0°04'12
morning rise	48 Nov 11 j 11:26	3° <u>♂</u> 12'45		minimum elong	54 Nov 22 j 08:47	28° <u>♂</u> 50'55	0°04'12
retrograde	49 Feb 10 j 21:07	6° <u>♂</u> 29'37		behind sun begin	54 Nov 22 j 02:21	28° <u>♂</u> 49'58	
opposition	49 Apr 27 j 06:24	4° <u>♂</u> 29'18	0°24'19	behind sun end	54 Nov 22 j 15:14	28° <u>♂</u> 51'53	
min. Earth dist.	49 Apr 27 j 06:06	4° <u>♂</u> 29'20	17.83766 AU	max. Earth dist.	54 Nov 22 j 18:18	28° <u>♂</u> 52'21	20.18172 AU
direct	49 Jul 13 j 12:54	2° <u>♂</u> 26'33		morning rise	54 Dec 07 j 23:44	29° <u>♂</u> 47'28	
evening set	49 Oct 15 j 16:32	5° <u>♂</u> 47'30			54 Dec 11 j 12:49	0° <u>♂</u>	
				retrograde	55 Mar 10 j 00:31	3° <u>♂</u> 00'49	

opposition	55 May 25 j 11:53	1°♏00'54	0°02'45	conjunction	60 Dec 16 j 18:54	24°♏19'43	-0°15'09
min. Earth dist.	55 May 25 j 00:39	1°♏02'03	18.21369 AU	minimum elong	60 Dec 16 j 18:54	24°♏19'43	0°15'10
	55 Jun 20 j 12:55	30°♏		behind sun begin	60 Dec 16 j 16:27	24°♏19'22	
direct	55 Aug 10 j 15:05	29°♏00'11		behind sun end	60 Dec 16 j 21:21	24°♏20'04	
	55 Sep 28 j 11:29	0°♏		max. Earth dist.	60 Dec 17 j 14:31	24°♏22'38	20.56570 AU
evening set	55 Nov 11 j 04:55	2°♏13'35		morning rise	61 Jan 01 j 10:17	25°♏15'05	
				retrograde	61 Apr 04 j 05:51	28°♏25'24	
conjunction	55 Nov 26 j 20:08	3°♏09'57	0°00'51	opposition	61 Jun 20 j 15:38	26°♏26'09	-0°18'25
minimum elong	55 Nov 26 j 20:09	3°♏09'57	0°00'51	min. Earth dist.	61 Jun 19 j 19:10	26°♏28'12	18.59569 AU
behind sun begin	55 Nov 26 j 13:37	3°♏08'59		direct	61 Sep 05 j 09:13	24°♏27'40	
behind sun end	55 Nov 27 j 02:41	3°♏10'55		evening set	61 Dec 05 j 12:23	27°♏34'18	
max. Earth dist.	55 Nov 27 j 08:33	3°♏11'49	20.24604 AU				
morning rise	55 Dec 12 j 10:49	4°♏06'16		conjunction	61 Dec 21 j 02:51	28°♏29'19	-0°18'07
desc. node	56 Feb 26 j 21:28	7°♏12'41		minimum elong	61 Dec 21 j 02:51	28°♏29'19	0°18'07
retrograde	56 Mar 13 j 13:30	7°♏19'02		max. Earth dist.	61 Dec 22 j 00:37	28°♏32'33	20.62479 AU
opposition	56 May 29 j 06:20	5°♏19'12	-0°00'55	morning rise	62 Jan 05 j 18:22	29°♏24'31	
min. Earth dist.	56 May 28 j 17:57	5°♏20'28	18.27835 AU		62 Jan 16 j 05:25	0°♏	
direct	56 Aug 14 j 08:43	3°♏18'51		retrograde	62 Apr 08 j 16:05	2°♏34'25	
evening set	56 Nov 14 j 15:55	6°♏31'01		min. Earth dist.	62 Jun 24 j 08:49	0°♏37'23	18.65327 AU
				opposition	62 Jun 25 j 05:47	0°♏35'17	-0°21'39
conjunction	56 Nov 30 j 06:44	7°♏27'08	-0°02'32		62 Jul 10 j 02:33	30°♏	
minimum elong	56 Nov 30 j 06:43	7°♏27'08	0°02'32	direct	62 Sep 09 j 21:39	28°♏37'08	
behind sun begin	56 Nov 30 j 00:11	7°♏26'10			62 Nov 06 j 23:58	0°♏	
behind sun end	56 Nov 30 j 13:14	7°♏28'05		evening set	62 Dec 09 j 19:48	1°♏42'47	
max. Earth dist.	56 Nov 30 j 20:05	7°♏29'08	20.31101 AU				
morning rise	56 Dec 15 j 21:30	8°♏23'14		conjunction	62 Dec 25 j 10:13	2°♏37'38	-0°20'59
retrograde	57 Mar 18 j 04:05	11°♏35'28		minimum elong	62 Dec 25 j 10:13	2°♏37'38	0°20'59
opposition	57 Jun 02 j 23:55	9°♏35'43	-0°04'33	max. Earth dist.	62 Dec 26 j 07:46	2°♏40'48	20.68069 AU
min. Earth dist.	57 Jun 02 j 08:52	9°♏37'15	18.34350 AU	morning rise	63 Jan 10 j 02:16	3°♏32'42	
direct	57 Aug 19 j 01:06	7°♏35'44		retrograde	63 Apr 13 j 03:55	6°♏42'12	
evening set	57 Nov 19 j 01:57	10°♏46'43		opposition	63 Jun 29 j 19:29	4°♏43'08	-0°24'45
				min. Earth dist.	63 Jun 28 j 21:31	4°♏45'20	18.70746 AU
conjunction	57 Dec 04 j 16:41	11°♏42'35	-0°05'47	direct	63 Sep 14 j 08:30	2°♏45'17	
minimum elong	57 Dec 04 j 16:41	11°♏42'35	0°05'47	evening set	63 Dec 14 j 02:29	5°♏49'59	
behind sun begin	57 Dec 04 j 10:25	11°♏41'40					
behind sun end	57 Dec 04 j 22:57	11°♏43'30		conjunction	63 Dec 29 j 17:13	6°♏44'41	-0°23'43
max. Earth dist.	57 Dec 05 j 08:51	11°♏45'00	20.37607 AU	minimum elong	63 Dec 29 j 17:13	6°♏44'41	0°23'43
morning rise	57 Dec 20 j 07:24	12°♏38'29		max. Earth dist.	63 Dec 30 j 16:37	6°♏48'07	20.73282 AU
retrograde	58 Mar 22 j 16:00	15°♏50'11		morning rise	64 Jan 14 j 09:30	7°♏39'37	
opposition	58 Jun 07 j 16:52	13°♏50'34	-0°08'08	retrograde	64 Apr 16 j 13:44	10°♏48'45	
min. Earth dist.	58 Jun 07 j 00:51	13°♏52'11	18.40838 AU	min. Earth dist.	64 Jul 02 j 10:05	8°♏51'58	18.75756 AU
direct	58 Aug 23 j 16:33	11°♏50'58		opposition	64 Jul 03 j 08:35	8°♏49'43	-0°27'42
evening set	58 Nov 23 j 11:32	15°♏00'48		direct	64 Sep 17 j 20:08	6°♏52'08	
				evening set	64 Dec 17 j 08:56	9°♏55'56	
conjunction	58 Dec 09 j 01:57	15°♏56'26	-0°08'58				
minimum elong	58 Dec 09 j 01:56	15°♏56'26	0°08'59	conjunction	65 Jan 01 j 23:47	10°♏50'28	-0°26'19
behind sun begin	58 Dec 08 j 20:19	15°♏55'37		minimum elong	65 Jan 01 j 23:47	10°♏50'28	0°26'18
behind sun end	58 Dec 09 j 07:33	15°♏57'15		max. Earth dist.	65 Jan 02 j 22:42	10°♏53'50	20.78090 AU
max. Earth dist.	58 Dec 09 j 18:41	15°♏58'56	20.44065 AU	morning rise	65 Jan 17 j 16:45	11°♏45'18	
morning rise	58 Dec 24 j 16:54	16°♏52'08		retrograde	65 Apr 21 j 00:12	14°♏54'04	
retrograde	59 Mar 27 j 05:48	20°♏03'22		opposition	65 Jul 07 j 20:57	12°♏55'03	-0°30'29
opposition	59 Jun 12 j 08:58	18°♏03'51	-0°11'39	min. Earth dist.	65 Jul 06 j 21:53	12°♏57'21	18.80368 AU
min. Earth dist.	59 Jun 11 j 14:52	18°♏05'41	18.47252 AU	direct	65 Sep 22 j 05:21	10°♏57'39	
direct	59 Aug 28 j 06:52	16°♏04'38		evening set	65 Dec 21 j 14:44	14°♏00'36	
evening set	59 Nov 27 j 20:21	19°♏13'22					
				conjunction	66 Jan 06 j 06:05	14°♏55'01	-0°28'46
conjunction	59 Dec 13 j 10:47	20°♏08'47	-0°12'06	minimum elong	66 Jan 06 j 06:05	14°♏55'01	0°28'47
minimum elong	59 Dec 13 j 10:47	20°♏08'47	0°12'06	max. Earth dist.	66 Jan 07 j 06:42	14°♏58'36	20.82489 AU
behind sun begin	59 Dec 13 j 06:16	20°♏08'08		morning rise	66 Jan 21 j 23:27	15°♏49'45	
behind sun end	59 Dec 13 j 15:18	20°♏09'26		retrograde	66 Apr 25 j 09:19	18°♏58'09	
max. Earth dist.	59 Dec 14 j 06:06	20°♏11'40	20.50406 AU	min. Earth dist.	66 Jul 11 j 09:02	17°♏01'28	18.84566 AU
morning rise	59 Dec 29 j 01:46	21°♏04'18		opposition	66 Jul 12 j 08:37	16°♏59'07	-0°33'07
retrograde	60 Mar 30 j 16:44	24°♏15'04		direct	66 Sep 26 j 15:38	15°♏01'54	
min. Earth dist.	60 Jun 15 j 05:44	22°♏17'36	18.53513 AU	evening set	66 Dec 25 j 20:15	18°♏04'02	
opposition	60 Jun 16 j 00:40	22°♏15'42	-0°15'05				
direct	60 Aug 31 j 20:38	20°♏16'52		conjunction	67 Jan 10 j 11:47	18°♏58'20	-0°31'04
evening set	60 Dec 01 j 04:38	23°♏24'31		minimum elong	67 Jan 10 j 11:47	18°♏58'20	0°31'04

max. Earth dist.	67 Jan 11 j 11:54	19°30'15" 20.86501 AU	min. Earth dist.	73 Aug 09 j 02:01	15°05'02" 19.04673 AU
morning rise	67 Jan 26 j 05:52	19°35'25" 20.86501 AU	opposition	73 Aug 10 j 03:09	15°02'31" -0°46'03"
retrograde	67 Apr 29 j 18:47	23°30'05" 20.86501 AU		73 Aug 11 j 04:20	15°00'00" 19.04673 AU
opposition	67 Jul 16 j 19:41	21°30'02" -0°35'33"	direct	73 Oct 24 j 16:01	13°00'06" 18.88411 AU
min. Earth dist.	67 Jul 15 j 19:40	21°30'04" 18.88411 AU		74 Jan 01 j 21:06	15°00'00" 19.04673 AU
direct	67 Sep 30 j 23:48	19°30'04" 18.88411 AU	evening set	74 Jan 22 j 04:13	16°00'04" 19.04673 AU
evening set	67 Dec 30 j 01:16	22°30'06" 20.86501 AU			
conjunction	68 Jan 14 j 17:23	23°30'03" -0°33'11"	conjunction	74 Feb 07 j 00:06	16°00'58" -0°42'10"
minimum elong	68 Jan 14 j 17:23	23°30'03" 0°33'12"	minimum elong	74 Feb 07 j 00:06	16°00'58" 0°42'09"
max. Earth dist.	68 Jan 15 j 19:16	23°30'04" 20.90171 AU	max. Earth dist.	74 Feb 08 j 03:26	17°00'02" 21.05380 AU
morning rise	68 Jan 30 j 11:57	23°35'07" 20.90171 AU	morning rise	74 Feb 22 j 23:21	17°00'53" 20.90171 AU
retrograde	68 May 03 j 03:20	27°30'25" 20.90171 AU	retrograde	74 May 28 j 08:33	21°00'00" 21.05380 AU
min. Earth dist.	68 Jul 19 j 05:25	25°30'06" 18.91923 AU	min. Earth dist.	74 Aug 13 j 09:53	19°00'03" 19.06066 AU
opposition	68 Jul 20 j 06:08	25°30'03" -0°37'48"	opposition	74 Aug 14 j 11:03	19°00'01" -0°47'04"
direct	68 Oct 04 j 08:11	23°30'06" 18.91923 AU	direct	74 Oct 28 j 22:35	17°00'05" 08.91923 AU
evening set	69 Jan 02 j 06:05	26°30'07" 20.90171 AU	evening set	75 Jan 26 j 08:52	20°00'03" 22.09353 AU
conjunction	69 Jan 17 j 22:33	27°30'14" -0°35'09"	conjunction	75 Feb 11 j 05:20	20°00'57" -0°42'59"
minimum elong	69 Jan 17 j 22:33	27°30'14" 0°35'09"	minimum elong	75 Feb 11 j 05:20	20°00'57" 0°42'59"
max. Earth dist.	69 Jan 18 j 23:54	27°30'05" 20.93530 AU	max. Earth dist.	75 Feb 12 j 07:10	21°00'01" 21.06538 AU
morning rise	69 Feb 02 j 17:58	27°35'17" 20.93530 AU	morning rise	75 Feb 27 j 05:38	21°00'52" 01.06538 AU
retrograde	69 Mar 16 j 13:19	0°00'00" 20.93530 AU	retrograde	75 Jun 01 j 16:42	24°00'59" 04.06538 AU
	69 May 07 j 12:34	1°00'03" 52.06538 AU	opposition	75 Aug 18 j 18:53	22°00'59" -0°47'51"
	69 Jun 30 j 16:46	30°00'00" 52.06538 AU	min. Earth dist.	75 Aug 17 j 18:52	23°00'02" 22.06982 AU
opposition	69 Jul 24 j 16:06	29°30'04" -0°39'52"	direct	75 Nov 02 j 03:00	21°00'03" 53.06982 AU
min. Earth dist.	69 Jul 23 j 15:09	29°30'07" 18.95139 AU	evening set	76 Jan 30 j 13:40	24°00'01" 57.06982 AU
direct	69 Oct 08 j 15:24	27°30'07" 57.06982 AU	conjunction	76 Feb 15 j 11:07	24°00'56" 05.06982 AU
evening set	70 Jan 04 j 01:10	0°00'00" 57.06982 AU	minimum elong	76 Feb 15 j 11:07	24°00'56" 05.06982 AU
	70 Jan 06 j 10:39	0°00'08" 04.06982 AU	max. Earth dist.	76 Feb 16 j 13:23	24°00'59" 50.06982 AU
conjunction	70 Jan 22 j 03:49	1°00'02" 09.06982 AU	morning rise	76 Mar 02 j 12:09	25°00'50" 43.06982 AU
minimum elong	70 Jan 22 j 03:49	1°00'02" 09.06982 AU	retrograde	76 Jun 05 j 01:51	28°00'57" 47.06982 AU
max. Earth dist.	70 Jan 23 j 06:42	1°00'06" 02.06982 AU	min. Earth dist.	76 Aug 21 j 02:36	27°00'01" 02.07357 AU
morning rise	70 Feb 06 j 23:47	1°00'56" 39.06982 AU	opposition	76 Aug 22 j 02:20	26°00'58" 39.06982 AU
retrograde	70 May 11 j 20:59	5°00'04" 01.06982 AU	direct	76 Nov 05 j 09:41	25°00'02" 37.06982 AU
min. Earth dist.	70 Jul 27 j 23:46	3°00'07" 26.06982 AU	evening set	77 Feb 02 j 18:49	28°00'00" 34.06982 AU
opposition	70 Jul 29 j 01:18	3°00'04" 53.06982 AU	conjunction	77 Feb 18 j 16:59	28°00'54" 45.06982 AU
direct	70 Oct 12 j 22:17	1°00'08" 15.06982 AU	minimum elong	77 Feb 18 j 16:59	28°00'54" 45.06982 AU
evening set	71 Jan 10 j 15:11	4°00'07" 51.06982 AU	max. Earth dist.	77 Feb 19 j 17:13	28°00'58" 13.06982 AU
conjunction	71 Jan 26 j 08:46	5°00'01" 53.06982 AU	morning rise	77 Mar 06 j 19:10	29°00'49" 29.06982 AU
minimum elong	71 Jan 26 j 08:46	5°00'01" 53.06982 AU		77 Mar 09 j 23:03	0°00'00" 00.06982 AU
max. Earth dist.	71 Jan 27 j 10:53	5°00'05" 39.06982 AU	retrograde	77 Jun 09 j 10:09	2°00'56" 37.06982 AU
morning rise	71 Feb 11 j 05:40	5°00'56" 22.06982 AU	min. Earth dist.	77 Aug 25 j 11:37	0°00'59" 37.06982 AU
retrograde	71 May 16 j 05:52	9°00'03" 36.06982 AU	opposition	77 Aug 26 j 09:45	0°00'57" 24.06982 AU
min. Earth dist.	71 Aug 01 j 08:56	7°00'07" 01.06982 AU		77 Sep 20 j 06:26	30°00'00" 00.06982 AU
opposition	71 Aug 02 j 10:20	7°00'04" 28.06982 AU	direct	77 Nov 09 j 13:59	29°00'01" 18.06982 AU
direct	71 Oct 17 j 04:25	5°00'07" 59.06982 AU	evening set	77 Dec 28 j 03:09	0°00'00" 00.06982 AU
evening set	72 Jan 14 j 19:20	8°00'07" 07.06982 AU		78 Feb 07 j 00:05	1°00'59" 13.06982 AU
conjunction	72 Jan 30 j 13:45	9°00'01" 09.06982 AU	conjunction	78 Feb 22 j 23:20	2°00'53" 30.06982 AU
minimum elong	72 Jan 30 j 13:44	9°00'01" 09.06982 AU	minimum elong	78 Feb 22 j 23:20	2°00'53" 30.06982 AU
max. Earth dist.	72 Jan 31 j 17:15	9°00'05" 06.06982 AU	max. Earth dist.	78 Feb 23 j 23:34	2°00'56" 57.06982 AU
morning rise	72 Feb 15 j 11:17	9°00'55" 37.06982 AU	morning rise	78 Mar 11 j 02:17	3°00'48" 19.06982 AU
retrograde	72 May 19 j 14:47	13°00'02" 45.06982 AU	retrograde	78 Jun 13 j 18:37	6°00'55" 30.06982 AU
opposition	72 Aug 05 j 18:56	11°00'03" 38.06982 AU	opposition	78 Aug 30 j 16:43	4°00'56" 11.06982 AU
min. Earth dist.	72 Aug 04 j 17:06	11°00'06" 13.06982 AU	min. Earth dist.	78 Aug 29 j 18:59	4°00'58" 22.06982 AU
direct	72 Oct 20 j 11:01	9°00'07" 17.06982 AU	direct	78 Nov 13 j 20:37	3°00'00" 01.06982 AU
evening set	73 Jan 17 j 23:49	12°00'06" 03.06982 AU	evening set	79 Feb 11 j 05:39	5°00'57" 55.06982 AU
conjunction	73 Feb 02 j 18:46	13°00'00" 04.06982 AU	conjunction	79 Feb 27 j 05:40	6°00'52" 18.06982 AU
minimum elong	73 Feb 02 j 18:46	13°00'00" 04.06982 AU	minimum elong	79 Feb 27 j 05:40	6°00'52" 18.06982 AU
max. Earth dist.	73 Feb 03 j 21:12	13°00'03" 52.06982 AU	max. Earth dist.	79 Feb 28 j 03:45	6°00'55" 27.06982 AU
morning rise	73 Feb 18 j 17:20	13°00'54" 34.06982 AU	morning rise	79 Mar 15 j 09:47	7°00'47" 14.06982 AU
retrograde	73 Mar 11 j 04:14	15°00'00" 00.06982 AU	retrograde	79 Jun 18 j 03:11	10°00'54" 31.06982 AU
	73 May 23 j 23:16	17°00'01" 38.06982 AU	opposition	79 Sep 03 j 23:44	8°00'55" 03.06982 AU
			min. Earth dist.	79 Sep 03 j 03:42	8°00'57" 05.06982 AU

direct	79 Nov 18 j 00:52	6° Υ 58'45		minimum elong	86 Mar 27 j 13:34	4° Υ 55'09	0°38'02
evening set	80 Feb 15 j 11:12	9° Υ 56'44		max. Earth dist.	86 Mar 28 j 04:41	4° Υ 57'19	20.86857 AU
				morning rise	86 Apr 13 j 00:24	5° Υ 51'16	
conjunction	80 Mar 02 j 12:22	10° Υ 51'14	-0°43'54	retrograde	86 Jul 16 j 20:14	9° Υ 00'20	
minimum elong	80 Mar 02 j 12:22	10° Υ 51'14	0°43'55	opposition	86 Oct 01 j 22:53	7° Υ 00'02	-0°41'08
max. Earth dist.	80 Mar 03 j 10:35	10° Υ 54'24	21.04228 AU	min. Earth dist.	86 Oct 01 j 10:06	7° Υ 01'21	18.84888 AU
morning rise	80 Mar 18 j 17:20	11° Υ 46'17		direct	86 Dec 15 j 15:53	5° Υ 02'33	
retrograde	80 Jun 21 j 11:31	14° Υ 53'42		evening set	87 Mar 15 j 15:36	8° Υ 03'16	
min. Earth dist.	80 Sep 06 j 10:46	12° Υ 56'05	19.03316 AU				
opposition	80 Sep 07 j 06:28	12° Υ 54'05	-0°48'16	conjunction	87 Mar 31 j 23:46	8° Υ 59'06	-0°36'21
direct	80 Nov 21 j 07:02	10° Υ 57'38		minimum elong	87 Mar 31 j 23:46	8° Υ 59'06	0°36'22
evening set	81 Feb 18 j 17:22	13° Υ 55'46		max. Earth dist.	87 Apr 01 j 12:17	9° Υ 00'53	20.82817 AU
				morning rise	87 Apr 17 j 11:41	9° Υ 55'25	
conjunction	81 Mar 06 j 19:22	14° Υ 50'24	-0°43'27	retrograde	87 Jul 21 j 05:48	13° Υ 04'56	
minimum elong	81 Mar 06 j 19:23	14° Υ 50'24	0°43'26	opposition	87 Oct 06 j 06:18	11° Υ 04'33	-0°39'10
max. Earth dist.	81 Mar 07 j 15:25	14° Υ 53'15	21.02232 AU	min. Earth dist.	87 Oct 05 j 19:56	11° Υ 05'37	18.80683 AU
morning rise	81 Mar 23 j 01:31	15° Υ 45'36		direct	87 Dec 19 j 21:00	9° Υ 06'52	
retrograde	81 Jun 25 j 20:13	18° Υ 53'10		evening set	88 Mar 19 j 01:30	12° Υ 08'18	
opposition	81 Sep 11 j 13:04	16° Υ 53'24	-0°47'39				
min. Earth dist.	81 Sep 10 j 19:10	16° Υ 55'13	19.01116 AU	conjunction	88 Apr 04 j 10:54	13° Υ 04'22	-0°34'29
direct	81 Nov 25 j 11:25	14° Υ 56'47		minimum elong	88 Apr 04 j 10:54	13° Υ 04'22	0°34'28
evening set	82 Feb 22 j 23:44	17° Υ 55'08		max. Earth dist.	88 Apr 04 j 22:40	13° Υ 06'03	20.78442 AU
				morning rise	88 Apr 20 j 23:34	14° Υ 00'55	
conjunction	82 Mar 11 j 02:55	18° Υ 49'56	-0°42'46	retrograde	88 Jul 24 j 18:10	17° Υ 10'52	
minimum elong	82 Mar 11 j 02:55	18° Υ 49'56	0°42'47	opposition	88 Oct 09 j 13:53	15° Υ 10'25	-0°37'00
max. Earth dist.	82 Mar 11 j 22:59	18° Υ 52'48	20.99837 AU	min. Earth dist.	88 Oct 09 j 04:20	15° Υ 11'25	18.76114 AU
morning rise	82 Mar 27 j 09:51	19° Υ 45'16		direct	88 Dec 23 j 05:09	13° Υ 12'32	
retrograde	82 Jun 30 j 05:08	22° Υ 53'03		evening set	89 Mar 23 j 12:34	16° Υ 14'43	
opposition	82 Sep 15 j 19:37	20° Υ 53'09	-0°46'48				
min. Earth dist.	82 Sep 15 j 01:59	20° Υ 54'57	18.98527 AU	conjunction	89 Apr 08 j 22:47	17° Υ 11'02	-0°32'25
direct	82 Nov 29 j 17:12	18° Υ 56'22		minimum elong	89 Apr 08 j 22:47	17° Υ 11'02	0°32'25
evening set	83 Feb 27 j 06:32	21° Υ 55'02		max. Earth dist.	89 Apr 09 j 07:29	17° Υ 12'17	20.73684 AU
				morning rise	89 Apr 25 j 12:27	18° Υ 07'50	
conjunction	83 Mar 15 j 10:32	22° Υ 49'59	-0°41'54	retrograde	89 Jul 29 j 04:41	21° Υ 18'15	
minimum elong	83 Mar 15 j 10:32	22° Υ 49'59	0°41'53	opposition	89 Oct 13 j 21:53	19° Υ 17'42	-0°34'37
max. Earth dist.	83 Mar 16 j 04:29	22° Υ 52'33	20.97075 AU	min. Earth dist.	89 Oct 13 j 15:08	19° Υ 18'24	18.71161 AU
morning rise	83 Mar 31 j 18:38	23° Υ 45'31		direct	89 Dec 27 j 11:25	17° Υ 19'32	
retrograde	83 Jul 04 j 13:53	26° Υ 53'34		evening set	90 Mar 28 j 00:13	20° Υ 22'33	
min. Earth dist.	83 Sep 19 j 10:35	24° Υ 55'08	18.95600 AU				
opposition	83 Sep 20 j 02:22	24° Υ 53'31	-0°45'43	conjunction	90 Apr 13 j 11:35	21° Υ 19'08	-0°30'10
direct	83 Dec 03 j 21:56	22° Υ 56'34		minimum elong	90 Apr 13 j 11:35	21° Υ 19'08	0°30'10
evening set	84 Mar 02 j 13:47	25° Υ 55'37		max. Earth dist.	90 Apr 13 j 19:03	21° Υ 20'13	20.68535 AU
				morning rise	90 Apr 30 j 01:55	22° Υ 16'11	
conjunction	84 Mar 18 j 19:01	26° Υ 50'46	-0°40'48	retrograde	90 Aug 02 j 17:59	25° Υ 27'03	
minimum elong	84 Mar 18 j 19:01	26° Υ 50'46	0°40'48	opposition	90 Oct 18 j 06:15	23° Υ 26'24	-0°32'03
max. Earth dist.	84 Mar 19 j 12:53	26° Υ 53'19	20.93987 AU	min. Earth dist.	90 Oct 18 j 00:24	23° Υ 27'00	18.65804 AU
morning rise	84 Apr 04 j 03:56	27° Υ 46'28		direct	90 Dec 31 j 20:32	21° Υ 27'55	
	84 May 20 j 18:48	0° Υ		evening set	91 Apr 01 j 12:39	24° Υ 31'46	
retrograde	84 Jul 08 j 00:01	0° Υ 54'49					
	84 Aug 26 j 04:38	30° Υ		conjunction	91 Apr 18 j 00:50	25° Υ 28'38	-0°27'45
opposition	84 Sep 23 j 08:58	28° Υ 54'41	-0°44'24	minimum elong	91 Apr 18 j 00:51	25° Υ 28'38	0°27'45
min. Earth dist.	84 Sep 22 j 17:33	28° Υ 56'15	18.92343 AU	max. Earth dist.	91 Apr 18 j 05:12	25° Υ 29'15	20.62988 AU
direct	84 Dec 07 j 04:01	26° Υ 57'33		morning rise	91 May 04 j 16:05	26° Υ 25'56	
evening set	85 Mar 06 j 21:48	29° Υ 57'04		retrograde	91 Aug 07 j 05:35	29° Υ 37'16	
	85 Mar 07 j 18:47	0° Υ		opposition	91 Oct 22 j 15:10	27° Υ 36'27	-0°29'17
				min. Earth dist.	91 Oct 22 j 12:08	27° Υ 36'46	18.60073 AU
conjunction	85 Mar 23 j 03:56	0° Υ 52'26	-0°39'31	direct	92 Jan 05 j 04:06	25° Υ 37'37	
minimum elong	85 Mar 23 j 03:56	0° Υ 52'26	0°39'32	evening set	92 Apr 05 j 01:54	28° Υ 42'22	
max. Earth dist.	85 Mar 23 j 19:23	0° Υ 54'39	20.90578 AU				
morning rise	85 Apr 08 j 14:00	1° Υ 48'20		conjunction	92 Apr 21 j 15:11	29° Υ 39'30	-0°25'10
retrograde	85 Jul 12 j 09:01	4° Υ 57'02		minimum elong	92 Apr 21 j 15:11	29° Υ 39'30	0°25'11
opposition	85 Sep 27 j 15:56	2° Υ 56'48	-0°42'53	max. Earth dist.	92 Apr 21 j 18:12	29° Υ 39'56	20.57096 AU
min. Earth dist.	85 Sep 27 j 02:37	2° Υ 58'10	18.88777 AU				
direct	85 Dec 11 j 08:51	0° Υ 59'29		morning rise	92 May 08 j 07:04	0° Υ 37'03	
evening set	86 Mar 11 j 06:15	3° Υ 59'35		retrograde	92 Aug 10 j 19:51	3° Υ 48'51	
				opposition	92 Oct 26 j 00:09	1° Υ 47'51	-0°26'21
conjunction	86 Mar 27 j 13:34	4° Υ 55'09	-0°38'02	min. Earth dist.	92 Oct 25 j 22:03	1° Υ 48'05	18.54016 AU

	92 Dec 18 j 15:03	30° $\mathbf{\text{R}}^{\mathbf{\text{Y}}}$	morning rise	98 Jun 04 j 15:23	26° $\mathbf{\text{R}}^{\mathbf{\text{I}}}$ 14'26
direct	93 Jan 08 j 14:28	29° $\mathbf{\text{Y}}^{\mathbf{\text{48}}}$ 37	retrograde	98 Sep 06 j 13:53	29° $\mathbf{\text{R}}^{\mathbf{\text{29}}}$ 18
	93 Jan 29 j 07:42	0° $\mathbf{\text{R}}^{\mathbf{\text{8}}}$	opposition	98 Nov 20 j 16:41	27° $\mathbf{\text{R}}^{\mathbf{\text{27}}}$ 19 -0°05'58
evening set	93 Apr 09 j 16:06	2° $\mathbf{\text{R}}^{\mathbf{\text{54}}}$ 19	min. Earth dist.	98 Nov 21 j 00:13	27° $\mathbf{\text{R}}^{\mathbf{\text{26}}}$ 31 18.14854 AU
			direct	99 Feb 03 j 10:07	25° $\mathbf{\text{R}}^{\mathbf{\text{25}}}$ 38
conjunction	93 Apr 26 j 06:09	3° $\mathbf{\text{R}}^{\mathbf{\text{51}}}$ 44 -0°22'27	evening set	99 May 06 j 21:59	28° $\mathbf{\text{R}}^{\mathbf{\text{37}}}$ 58
minimum elong	93 Apr 26 j 06:09	3° $\mathbf{\text{R}}^{\mathbf{\text{51}}}$ 44 0°22'26			
max. Earth dist.	93 Apr 26 j 06:12	3° $\mathbf{\text{R}}^{\mathbf{\text{51}}}$ 45 20.50903 AU	conjunction	99 May 23 j 16:13	29° $\mathbf{\text{R}}^{\mathbf{\text{37}}}$ 10 -0°03'47
morning rise	93 May 12 j 22:47	4° $\mathbf{\text{R}}^{\mathbf{\text{49}}}$ 33	minimum elong	99 May 23 j 16:13	29° $\mathbf{\text{R}}^{\mathbf{\text{37}}}$ 10 0°03'47
retrograde	93 Aug 15 j 08:15	8° $\mathbf{\text{R}}^{\mathbf{\text{01}}}$ 50	behind sun begin	99 May 23 j 09:31	29° $\mathbf{\text{R}}^{\mathbf{\text{36}}}$ 12
opposition	93 Oct 30 j 09:45	6° $\mathbf{\text{R}}^{\mathbf{\text{00}}}$ 38 -0°23'16	behind sun end	99 May 23 j 22:56	29° $\mathbf{\text{R}}^{\mathbf{\text{38}}}$ 09
min. Earth dist.	93 Oct 30 j 10:27	6° $\mathbf{\text{R}}^{\mathbf{\text{00}}}$ 33 18.47707 AU	max. Earth dist.	99 May 23 j 05:30	29° $\mathbf{\text{R}}^{\mathbf{\text{35}}}$ 36 20.11630 AU
direct	94 Jan 12 j 22:51	4° $\mathbf{\text{R}}^{\mathbf{\text{00}}}$ 59		99 May 30 j 02:05	0° $\mathbf{\text{II}}^{\mathbf{\text{0}}}$
evening set	94 Apr 14 j 06:48	7° $\mathbf{\text{R}}^{\mathbf{\text{07}}}$ 39	morning rise	99 Jun 09 j 11:15	0° $\mathbf{\text{II}}^{\mathbf{\text{36}}}$ 32
			retrograde	99 Sep 11 j 05:59	3° $\mathbf{\text{II}}^{\mathbf{\text{52}}}$ 00
conjunction	94 Apr 30 j 21:48	8° $\mathbf{\text{R}}^{\mathbf{\text{05}}}$ 22 -0°19'35	opposition	99 Nov 25 j 05:41	1° $\mathbf{\text{II}}^{\mathbf{\text{49}}}$ 57 -0°02'15
minimum elong	94 Apr 30 j 21:48	8° $\mathbf{\text{R}}^{\mathbf{\text{05}}}$ 22 0°19'35	min. Earth dist.	99 Nov 25 j 15:37	1° $\mathbf{\text{II}}^{\mathbf{\text{48}}}$ 53 18.08405 AU
max. Earth dist.	94 Apr 30 j 20:36	8° $\mathbf{\text{R}}^{\mathbf{\text{05}}}$ 12 20.44501 AU		100 Jan 17 j 13:14	30° $\mathbf{\text{R}}^{\mathbf{\text{8}}}$
morning rise	94 May 17 j 14:56	9° $\mathbf{\text{R}}^{\mathbf{\text{03}}}$ 26	direct	100 Feb 07 j 22:54	29° $\mathbf{\text{R}}^{\mathbf{\text{47}}}$ 54
retrograde	94 Aug 19 j 23:49	12° $\mathbf{\text{R}}^{\mathbf{\text{16}}}$ 12		100 Feb 29 j 08:08	0° $\mathbf{\text{II}}^{\mathbf{\text{0}}}$
opposition	94 Nov 03 j 19:37	10° $\mathbf{\text{R}}^{\mathbf{\text{14}}}$ 49 -0°20'01	evening set	100 May 10 j 18:15	3° $\mathbf{\text{II}}^{\mathbf{\text{01}}}$ 31
min. Earth dist.	94 Nov 03 j 21:00	10° $\mathbf{\text{R}}^{\mathbf{\text{14}}}$ 40 18.41220 AU			
direct	95 Jan 17 j 10:37	8° $\mathbf{\text{R}}^{\mathbf{\text{14}}}$ 44	conjunction	100 May 27 j 12:56	4° $\mathbf{\text{II}}^{\mathbf{\text{01}}}$ 01 -0°00'22
evening set	95 Apr 18 j 22:34	11° $\mathbf{\text{R}}^{\mathbf{\text{22}}}$ 27	minimum elong	100 May 27 j 12:56	4° $\mathbf{\text{II}}^{\mathbf{\text{01}}}$ 01 0°00'21
			behind sun begin	100 May 27 j 06:11	4° $\mathbf{\text{II}}^{\mathbf{\text{00}}}$ 02
conjunction	95 May 05 j 14:14	12° $\mathbf{\text{R}}^{\mathbf{\text{20}}}$ 27 -0°16'36	behind sun end	100 May 27 j 19:41	4° $\mathbf{\text{II}}^{\mathbf{\text{01}}}$ 59
minimum elong	95 May 05 j 14:14	12° $\mathbf{\text{R}}^{\mathbf{\text{20}}}$ 27 0°16'35	max. Earth dist.	100 May 27 j 00:20	3° $\mathbf{\text{II}}^{\mathbf{\text{59}}}$ 09 20.05240 AU
max. Earth dist.	95 May 05 j 10:29	12° $\mathbf{\text{R}}^{\mathbf{\text{19}}}$ 55 20.37952 AU	morning rise	100 Jun 13 j 08:09	5° $\mathbf{\text{II}}^{\mathbf{\text{00}}}$ 38
morning rise	95 May 22 j 07:58	13° $\mathbf{\text{R}}^{\mathbf{\text{18}}}$ 47	asc. node	100 Jul 04 j 06:41	6° $\mathbf{\text{II}}^{\mathbf{\text{10}}}$ 13
	95 Jun 23 j 13:54	15° $\mathbf{\text{R}}^{\mathbf{\text{8}}}$	retrograde	100 Sep 15 j 00:59	8° $\mathbf{\text{II}}^{\mathbf{\text{16}}}$ 40
retrograde	95 Aug 24 j 12:54	16° $\mathbf{\text{R}}^{\mathbf{\text{32}}}$ 03	opposition	100 Nov 28 j 19:06	6° $\mathbf{\text{II}}^{\mathbf{\text{14}}}$ 35 0°01'30
	95 Oct 27 j 12:26	15° $\mathbf{\text{R}}^{\mathbf{\text{8}}}$	min. Earth dist.	100 Nov 29 j 05:43	6° $\mathbf{\text{II}}^{\mathbf{\text{13}}}$ 26 18.02063 AU
opposition	95 Nov 08 j 06:05	14° $\mathbf{\text{R}}^{\mathbf{\text{30}}}$ 29 -0°16'39	direct	101 Feb 11 j 14:18	4° $\mathbf{\text{II}}^{\mathbf{\text{12}}}$ 12
min. Earth dist.	95 Nov 08 j 10:06	14° $\mathbf{\text{R}}^{\mathbf{\text{30}}}$ 03 18.34634 AU	evening set	101 May 15 j 15:32	7° $\mathbf{\text{II}}^{\mathbf{\text{27}}}$ 08
direct	96 Jan 21 j 20:03	12° $\mathbf{\text{R}}^{\mathbf{\text{29}}}$ 58			
	96 Apr 11 j 01:29	15° $\mathbf{\text{R}}^{\mathbf{\text{8}}}$	conjunction	101 Jun 01 j 10:35	8° $\mathbf{\text{II}}^{\mathbf{\text{26}}}$ 55 0°03'07
evening set	96 Apr 22 j 15:02	15° $\mathbf{\text{R}}^{\mathbf{\text{38}}}$ 46	minimum elong	101 Jun 01 j 10:35	8° $\mathbf{\text{II}}^{\mathbf{\text{26}}}$ 55 0°03'07
			behind sun begin	101 Jun 01 j 03:49	8° $\mathbf{\text{II}}^{\mathbf{\text{25}}}$ 56
conjunction	96 May 09 j 07:33	16° $\mathbf{\text{R}}^{\mathbf{\text{37}}}$ 05 -0°13'31	behind sun end	101 Jun 01 j 17:20	8° $\mathbf{\text{II}}^{\mathbf{\text{27}}}$ 54
minimum elong	96 May 09 j 07:33	16° $\mathbf{\text{R}}^{\mathbf{\text{37}}}$ 04 0°13'30	max. Earth dist.	101 May 31 j 20:23	8° $\mathbf{\text{II}}^{\mathbf{\text{24}}}$ 48 19.98935 AU
behind sun begin	96 May 09 j 03:57	16° $\mathbf{\text{R}}^{\mathbf{\text{36}}}$ 34	morning rise	101 Jun 18 j 05:43	9° $\mathbf{\text{II}}^{\mathbf{\text{26}}}$ 46
behind sun end	96 May 09 j 11:09	16° $\mathbf{\text{R}}^{\mathbf{\text{37}}}$ 35	retrograde	101 Sep 19 j 18:43	12° $\mathbf{\text{II}}^{\mathbf{\text{43}}}$ 23
max. Earth dist.	96 May 09 j 02:25	16° $\mathbf{\text{R}}^{\mathbf{\text{36}}}$ 20 20.31344 AU	opposition	101 Dec 03 j 09:34	10° $\mathbf{\text{II}}^{\mathbf{\text{41}}}$ 18 0°05'17
morning rise	96 May 26 j 01:43	17° $\mathbf{\text{R}}^{\mathbf{\text{35}}}$ 40	min. Earth dist.	101 Dec 03 j 22:37	10° $\mathbf{\text{II}}^{\mathbf{\text{39}}}$ 53 17.95807 AU
retrograde	96 Aug 28 j 05:46	20° $\mathbf{\text{R}}^{\mathbf{\text{49}}}$ 27			
opposition	96 Nov 11 j 16:58	18° $\mathbf{\text{R}}^{\mathbf{\text{47}}}$ 43 -0°13'11			
min. Earth dist.	96 Nov 11 j 21:34	18° $\mathbf{\text{R}}^{\mathbf{\text{47}}}$ 13 18.28007 AU			
direct	97 Jan 25 j 09:02	16° $\mathbf{\text{R}}^{\mathbf{\text{46}}}$ 47			
evening set	97 Apr 27 j 08:34	19° $\mathbf{\text{R}}^{\mathbf{\text{56}}}$ 43			
conjunction	97 May 14 j 01:39	20° $\mathbf{\text{R}}^{\mathbf{\text{55}}}$ 20 -0°10'20			
minimum elong	97 May 14 j 01:38	20° $\mathbf{\text{R}}^{\mathbf{\text{55}}}$ 20 0°10'20			
behind sun begin	97 May 13 j 20:21	20° $\mathbf{\text{R}}^{\mathbf{\text{54}}}$ 34			
behind sun end	97 May 14 j 06:56	20° $\mathbf{\text{R}}^{\mathbf{\text{56}}}$ 05			
max. Earth dist.	97 May 13 j 18:15	20° $\mathbf{\text{R}}^{\mathbf{\text{54}}}$ 15 20.24709 AU			
morning rise	97 May 30 j 20:10	21° $\mathbf{\text{R}}^{\mathbf{\text{54}}}$ 11			
retrograde	97 Sep 01 j 20:04	25° $\mathbf{\text{R}}^{\mathbf{\text{08}}}$ 30			
opposition	97 Nov 16 j 04:33	23° $\mathbf{\text{R}}^{\mathbf{\text{06}}}$ 37 -0°09'37			
min. Earth dist.	97 Nov 16 j 11:38	23° $\mathbf{\text{R}}^{\mathbf{\text{05}}}$ 52 18.21394 AU			
direct	98 Jan 29 j 20:07	21° $\mathbf{\text{R}}^{\mathbf{\text{05}}}$ 17			
evening set	98 May 02 j 02:49	24° $\mathbf{\text{R}}^{\mathbf{\text{16}}}$ 25			
conjunction	98 May 18 j 20:33	25° $\mathbf{\text{R}}^{\mathbf{\text{15}}}$ 19 -0°07'05			
minimum elong	98 May 18 j 20:33	25° $\mathbf{\text{R}}^{\mathbf{\text{15}}}$ 19 0°07'05			
behind sun begin	98 May 18 j 14:19	25° $\mathbf{\text{R}}^{\mathbf{\text{14}}}$ 25			
behind sun end	98 May 19 j 02:47	25° $\mathbf{\text{R}}^{\mathbf{\text{16}}}$ 13			
max. Earth dist.	98 May 18 j 11:39	25° $\mathbf{\text{R}}^{\mathbf{\text{14}}}$ 01 20.18131 AU			