

direct	7100 Feb 05 05:43	14° Π 19'41	direct	7105 Jul 29 18:19	5° X 17'02	
	7100 May 24 11:54	0° E	evening set	7105 Dec 02 14:29	22° X 36'08	
evening set	7100 Jun 11 15:45	4° E 20'22				
conjunction	7100 Jun 24 23:54	7° E 35'18 -0°42'37	conjunction	7105 Dec 15 16:50	25° X 24'14	0°48'39
minimum elong	7100 Jun 24 23:56	7° E 35'19 0°42'42	minimum elong	7105 Dec 15 16:50	25° X 24'15	0°48'43
max. Earth dist.	7100 Jun 26 04:16	7° E 52'37 5.91608 AU	max. Earth dist.	7105 Dec 15 02:14	25° X 16'25	6.48630 AU
morning rise	7100 Jul 08 10:45	10° E 51'43	morning rise	7105 Dec 28 16:39	28° X 11'09	
	7100 Oct 16 09:05	0° Ω		7106 Jan 06 06:26	0° E	
retrograde	7100 Nov 17 17:03	1° Ω 40'53	retrograde	7106 Apr 27 21:35	14° E 47'31	
	7100 Dec 19 21:36	30° R E	opposition	7106 Jun 27 18:24	9° E 53'27	1°01'04
min. Earth dist.	7101 Jan 15 00:04	26° E 47'32 3.93371 AU	min. Earth dist.	7106 Jun 28 13:09	9° E 47'26	4.49247 AU
opposition	7101 Jan 16 04:26	26° E 37'55 -0°46'32	direct	7106 Aug 29 09:30	4° E 51'42	
direct	7101 Mar 15 02:03	21° E 42'47	evening set	7107 Jan 01 23:20	22° E 06'37	
	7101 May 28 14:57	0° Ω	max. Earth dist.	7107 Jan 13 05:36	24° E 32'02	6.47660 AU
evening set	7101 Jul 19 15:14	11° Ω 33'03				
conjunction	7101 Aug 02 05:53	14° Ω 48'14 -0°16'27	conjunction	7107 Jan 14 20:54	24° E 53'15	0°32'46
minimum elong	7101 Aug 02 05:54	14° Ω 48'14 0°16'29	minimum elong	7107 Jan 14 20:55	24° E 53'15	0°32'51
	7101 Aug 03 01:34	15° Ω	morning rise	7107 Jan 27 16:17	27° E 38'55	
max. Earth dist.	7101 Aug 04 13:04	15° Ω 21'14 5.97553 AU		7107 Feb 07 17:33	0° \approx	
morning rise	7101 Aug 15 22:38	18° Ω 04'18	retrograde	7107 May 28 07:07	14° \approx 23'41	
	7101 Oct 09 09:30	0° Π	opposition	7107 Jul 28 06:01	9° \approx 31'05	0°30'59
retrograde	7101 Dec 24 09:26	8° Π 13'11	min. Earth dist.	7107 Jul 29 16:08	9° \approx 20'12	4.44127 AU
min. Earth dist.	7102 Feb 20 07:43	3° Π 21'35 4.03820 AU	direct	7107 Sep 28 23:03	4° \approx 30'03	
opposition	7102 Feb 21 21:40	3° Π 08'40 -0°00'21	evening set	7107 Dec 29 18:13	15° \approx	
asc. node	7102 Feb 24 19:05	2° Π 45'05	max. Earth dist.	7108 Feb 01 07:39	22° \approx 02'00	
	7102 Mar 19 01:35	30° R Ω		7108 Feb 11 20:41	24° \approx 21'13	6.38691 AU
direct	7102 Apr 21 06:11	28° Ω 11'08	conjunction	7108 Feb 14 02:19	24° \approx 50'51	0°07'58
	7102 May 24 14:55	0° Π	minimum elong	7108 Feb 14 02:19	24° \approx 50'51	0°08'00
evening set	7102 Aug 25 20:28	17° Π 23'04	behind sun begin	7108 Feb 13 19:12	24° \approx 46'56	
			behind sun end	7108 Feb 14 09:27	24° \approx 54'46	
conjunction	7102 Sep 08 12:48	20° Π 32'32 0°15'17	morning rise	7108 Feb 26 19:24	27° \approx 39'08	
minimum elong	7102 Sep 08 12:47	20° Π 32'31 0°15'16		7108 Mar 08 13:56	0° H	
behind sun begin	7102 Sep 08 10:34	20° Π 31'14	desc. node	7108 Jun 05 06:53	14° H 13'44	
behind sun end	7102 Sep 08 15:00	20° Π 33'48	retrograde	7108 Jun 28 06:35	15° H 02'34	
max. Earth dist.	7102 Sep 10 22:03	21° Π 05'36 6.11439 AU	opposition	7108 Aug 28 04:16	10° H 09'53	-0°08'48
morning rise	7102 Sep 22 06:07	23° Π 42'05	min. Earth dist.	7108 Aug 29 19:16	9° H 57'24	4.31787 AU
	7102 Oct 20 14:54	0° $\underline{\Omega}$	direct	7108 Oct 29 04:55	5° H 10'17	
retrograde	7103 Jan 27 09:09	12° $\underline{\Omega}$ 40'05	evening set	7109 Mar 03 15:50	23° H 18'43	
min. Earth dist.	7103 Mar 26 19:49	7° $\underline{\Omega}$ 47'48 4.19628 AU	max. Earth dist.	7109 Mar 14 05:21	25° H 43'03	6.23872 AU
opposition	7103 Mar 28 04:51	7° $\underline{\Omega}$ 36'39 0°43'03	conjunction	7109 Mar 16 09:47	26° H 13'01	-0°20'08
direct	7103 May 26 16:36	2° $\underline{\Omega}$ 36'43	minimum elong	7109 Mar 16 09:46	26° H 13'01	0°20'08
evening set	7103 Sep 30 03:48	21° $\underline{\Omega}$ 01'03	morning rise	7109 Mar 29 03:04	29° H 07'21	
				7109 Apr 01 23:56	0° Y	
conjunction	7103 Oct 13 17:20	24° $\underline{\Omega}$ 02'02 0°40'13	retrograde	7109 Aug 01 17:50	17° Y 35'09	
minimum elong	7103 Oct 13 17:18	24° $\underline{\Omega}$ 02'01 0°40'14	opposition	7109 Oct 01 07:29	12° Y 41'10	-0°48'40
max. Earth dist.	7103 Oct 15 10:53	24° $\underline{\Omega}$ 25'10 6.27832 AU	min. Earth dist.	7109 Oct 02 17:21	12° Y 30'13	4.15427 AU
morning rise	7103 Oct 27 05:54	27° $\underline{\Omega}$ 02'16	direct	7109 Dec 01 03:41	7° Y 43'46	
	7103 Nov 09 19:43	0° M	evening set	7110 Apr 05 20:35	26° Y 40'49	
retrograde	7104 Feb 28 01:21	14° M 50'19	max. Earth dist.	7110 Apr 17 03:27	29° Y 20'55	6.07329 AU
min. Earth dist.	7104 Apr 27 11:12	9° M 56'12 4.35214 AU				
opposition	7104 Apr 28 05:54	9° M 50'01 1°09'45	conjunction	7110 Apr 18 16:32	29° Y 42'54	-0°43'08
direct	7104 Jun 28 01:37	4° M 48'43	minimum elong	7110 Apr 18 16:31	29° Y 42'53	0°43'10
	7104 Sep 25 17:21	15° M		7110 Apr 19 21:22	0° B	
evening set	7104 Nov 01 06:27	22° M 32'18	morning rise	7110 May 01 13:30	2° B 45'48	
				7110 Jun 27 02:08	15° B	
conjunction	7104 Nov 14 14:18	25° M 25'23 0°51'45	retrograde	7110 Sep 07 18:05	22° B 29'27	
minimum elong	7104 Nov 14 14:18	25° M 25'23 0°51'49	opposition	7110 Nov 06 20:58	17° B 32'53	-1°14'40
max. Earth dist.	7104 Nov 15 03:15	25° M 32'24 6.41438 AU	min. Earth dist.	7110 Nov 07 11:19	17° B 28'10	4.00131 AU
morning rise	7104 Nov 27 20:29	28° M 17'26		7110 Nov 27 06:20	15° R B	
	7104 Dec 05 20:18	0° X	direct	7111 Jan 05 05:01	12° B 37'44	
retrograde	7105 Mar 29 05:32	15° X 15'47		7111 Feb 12 14:13	15° B	
opposition	7105 May 28 18:44	10° X 18'56 1°15'19		7111 May 01 14:46	0° II	
min. Earth dist.	7105 May 28 19:25	10° X 18'43 4.45997 AU	evening set	7111 May 11 08:25	2° II 20'02	

conjunction	7111 May 24 10:03	5°♊30'23	-0°51'38	max. Earth dist.	7116 Nov 19 13:31	29°♌59'22	6.42961 AU
minimum elong	7111 May 24 10:03	5°♊30'23	0°51'42	morning rise	7116 Dec 02 07:57	2°♌44'39	
max. Earth dist.	7111 May 24 06:00	5°♊27'55	5.94729 AU	retrograde	7117 Apr 02 09:50	19°♌37'34	
morning rise	7111 Jun 06 13:47	8°♊42'04		opposition	7117 Jun 02 01:08	14°♌41'06	1°14'22
retrograde	7111 Oct 16 11:30	29°♊23'38		min. Earth dist.	7117 Jun 02 03:54	14°♌40'12	4.47087 AU
opposition	7111 Dec 15 02:42	24°♊23'34	-1°12'50	direct	7117 Aug 03 04:05	9°♌39'08	
min. Earth dist.	7111 Dec 14 16:59	24°♊26'50	3.91652 AU	evening set	7117 Dec 06 22:45	26°♌55'41	
direct	7112 Feb 11 07:36	19°♊29'22		max. Earth dist.	7117 Dec 19 04:29	29°♌32'41	6.49171 AU
	7112 May 06 10:22	0°♊					
evening set	7112 Jun 16 18:53	9°♊32'54		conjunction	7117 Dec 20 00:10	29°♌43'14	0°47'03
				minimum elong	7117 Dec 20 00:11	29°♌43'15	0°47'09
conjunction	7112 Jun 30 04:15	12°♊48'37	-0°39'54		7117 Dec 21 07:26	0°♊	
minimum elong	7112 Jun 30 04:17	12°♊48'37	0°39'59	morning rise	7118 Jan 01 23:23	2°♊29'41	
max. Earth dist.	7112 Jul 01 13:09	13°♊08'40	5.91222 AU	retrograde	7118 May 02 03:34	19°♊04'43	
morning rise	7112 Jul 13 16:16	16°♊05'44		opposition	7118 Jul 02 00:36	14°♊10'53	0°57'36
	7112 Sep 15 05:06	0°♊		min. Earth dist.	7118 Jul 02 22:36	14°♊03'50	4.49198 AU
retrograde	7112 Nov 22 22:28	6°♊55'04		direct	7118 Sep 02 18:08	9°♊09'05	
min. Earth dist.	7113 Jan 20 01:17	2°♊02'15	3.93642 AU	evening set	7119 Jan 06 05:20	26°♊24'29	
opposition	7113 Jan 21 08:02	1°♊51'48	-0°40'52	max. Earth dist.	7119 Jan 17 08:48	28°♊48'37	6.47004 AU
	7113 Feb 04 10:11	30°♊					
direct	7113 Mar 20 04:29	26°♊56'25		conjunction	7119 Jan 19 02:29	29°♊11'09	0°29'40
	7113 May 02 11:52	0°♊		minimum elong	7119 Jan 19 02:30	29°♊11'10	0°29'43
	7113 Jul 17 10:13	15°♊			7119 Jan 22 20:46	0°♊	
evening set	7113 Jul 24 20:47	16°♊45'30		morning rise	7119 Jan 31 21:18	1°♊56'53	
					7119 Apr 11 17:35	15°♊	
conjunction	7113 Aug 07 11:59	20°♊00'32	-0°12'08	retrograde	7119 Jun 01 14:42	18°♊44'47	
minimum elong	7113 Aug 07 12:00	20°♊00'32	0°12'10		7119 Jul 23 16:23	15°♊	
behind sun begin	7113 Aug 07 06:26	19°♊57'14		opposition	7119 Aug 01 15:00	13°♊52'12	0°25'45
behind sun end	7113 Aug 07 17:34	20°♊03'51		min. Earth dist.	7119 Aug 03 01:42	13°♊41'07	4.42899 AU
max. Earth dist.	7113 Aug 09 19:50	20°♊33'51	5.98442 AU	direct	7119 Oct 03 06:06	8°♊51'17	
morning rise	7113 Aug 21 05:27	23°♊16'26			7119 Dec 09 23:19	15°♊	
	7113 Sep 19 13:39	0°♊		evening set	7120 Feb 05 15:24	26°♊26'56	
retrograde	7113 Dec 29 07:10	13°♊19'09		max. Earth dist.	7120 Feb 16 03:43	28°♊46'19	6.36969 AU
asc. node	7114 Jan 05 17:02	13°♊13'36					
min. Earth dist.	7114 Feb 25 05:52	8°♊27'39	4.05214 AU	conjunction	7120 Feb 18 09:46	29°♊16'19	0°04'02
opposition	7114 Feb 26 20:21	8°♊14'33	0°06'14	minimum elong	7120 Feb 18 09:46	29°♊16'19	0°04'06
direct	7114 Apr 26 07:03	3°♊16'36		behind sun begin	7120 Feb 18 01:55	29°♊11'59	
evening set	7114 Aug 30 22:53	22°♊24'07		behind sun end	7120 Feb 18 17:37	29°♊20'39	
					7120 Feb 21 16:30	0°♊	
conjunction	7114 Sep 13 15:20	25°♊32'46	0°19'22	morning rise	7120 Mar 02 02:40	2°♊05'12	
minimum elong	7114 Sep 13 15:18	25°♊32'46	0°19'22	desc. node	7120 Apr 14 12:49	11°♊06'53	
max. Earth dist.	7114 Sep 16 01:06	26°♊06'00	6.13224 AU	retrograde	7120 Jul 02 23:19	19°♊36'02	
morning rise	7114 Sep 27 08:10	28°♊41'19		opposition	7120 Sep 01 19:34	14°♊43'16	-0°14'42
	7114 Oct 03 02:55	0°♊		min. Earth dist.	7120 Sep 03 11:46	14°♊30'23	4.29658 AU
retrograde	7115 Feb 01 01:06	17°♊30'18		direct	7120 Nov 02 18:09	9°♊43'53	
opposition	7115 Apr 01 21:04	12°♊27'09	0°47'59	evening set	7121 Mar 08 04:33	27°♊58'42	
min. Earth dist.	7115 Mar 31 13:13	12°♊37'52	4.21606 AU		7121 Mar 17 00:34	0°♊	
direct	7115 May 31 13:22	7°♊26'56		max. Earth dist.	7121 Mar 18 17:53	0°♊23'44	6.21496 AU
evening set	7115 Oct 05 00:01	25°♊45'35					
				conjunction	7121 Mar 20 22:34	0°♊54'00	-0°23'54
conjunction	7115 Oct 18 12:45	28°♊45'23	0°42'41	minimum elong	7121 Mar 20 22:33	0°♊53'59	0°23'54
minimum elong	7115 Oct 18 12:44	28°♊45'22	0°42'44	morning rise	7121 Apr 02 16:17	3°♊49'28	
max. Earth dist.	7115 Oct 20 03:03	29°♊06'37	6.29819 AU	retrograde	7121 Aug 06 18:04	22°♊27'55	
	7115 Oct 24 03:24	0°♊		opposition	7121 Oct 06 07:07	17°♊33'37	-0°53'32
morning rise	7115 Nov 01 00:38	1°♊44'27		min. Earth dist.	7121 Oct 07 14:22	17°♊23'29	4.12986 AU
	7116 Jan 08 14:37	15°♊		direct	7121 Dec 05 21:37	12°♊36'30	
retrograde	7116 Mar 03 09:30	19°♊24'13			7122 Apr 03 12:48	0°♊	
	7116 Apr 28 03:47	15°♊		evening set	7122 Apr 10 16:57	1°♊41'06	
opposition	7116 May 02 16:04	14°♊24'14	1°11'46	max. Earth dist.	7122 Apr 22 05:06	4°♊25'07	6.05044 AU
min. Earth dist.	7116 May 01 23:23	14°♊29'45	4.37047 AU				
direct	7116 Jul 02 16:21	9°♊22'40		conjunction	7122 Apr 23 13:35	4°♊44'28	-0°45'24
	7116 Sep 04 17:13	15°♊		minimum elong	7122 Apr 23 13:33	4°♊44'27	0°45'26
evening set	7116 Nov 05 19:46	27°♊01'28		morning rise	7122 May 06 11:13	7°♊48'42	
					7122 Jun 06 19:49	15°♊	
conjunction	7116 Nov 19 02:55	29°♊53'38	0°52'08	retrograde	7122 Sep 13 05:06	27°♊43'07	
minimum elong	7116 Nov 19 02:55	29°♊53'38	0°52'12	opposition	7122 Nov 12 04:40	22°♊46'08	-1°16'18
	7116 Nov 19 14:42	0°♊		min. Earth dist.	7122 Nov 12 16:46	22°♊42'08	3.98225 AU

direct	7123 Jan 10 08:42	17°♄51'14		evening set	7128 Nov 10 05:51	1°♄23'39	
	7123 Apr 13 18:13	0°♄					
evening set	7123 May 16 13:10	7°♄39'17		conjunction	7128 Nov 23 12:04	4°♄14'52	0°52'14
				minimum elong	7128 Nov 23 12:04	4°♄14'52	0°52'17
conjunction	7123 May 29 15:52	10°♄50'46	-0°51'12	max. Earth dist.	7128 Nov 23 17:18	4°♄17'41	6.44494 AU
minimum elong	7123 May 29 15:53	10°♄50'46	0°51'16	morning rise	7128 Dec 06 16:18	7°♄04'58	
max. Earth dist.	7123 May 29 16:54	10°♄51'24	5.93402 AU	retrograde	7129 Apr 06 12:39	23°♄53'08	
morning rise	7123 Jun 11 20:52	14°♄03'39		opposition	7129 Jun 06 05:17	18°♄57'06	1°13'02
	7123 Aug 26 08:12	0°♄		min. Earth dist.	7129 Jun 06 11:09	18°♄55'11	4.48003 AU
retrograde	7123 Oct 21 23:49	4°♄50'37		direct	7129 Aug 07 11:05	13°♄55'04	
	7123 Dec 19 08:22	30°♄			7129 Dec 05 16:06	0°♄	
opposition	7123 Dec 20 13:43	29°♄50'09	-1°09'55	evening set	7129 Dec 11 04:15	1°♄09'56	
min. Earth dist.	7123 Dec 19 23:53	29°♄54'48	3.91102 AU	max. Earth dist.	7129 Dec 23 06:35	3°♄45'04	6.49406 AU
direct	7124 Feb 16 14:47	24°♄56'00					
	7124 Apr 13 04:49	0°♄		conjunction	7129 Dec 24 05:07	3°♄57'09	0°45'16
evening set	7124 Jun 22 04:55	15°♄00'27		minimum elong	7129 Dec 24 05:08	3°♄57'10	0°45'21
				morning rise	7130 Jan 06 03:27	6°♄43'13	
conjunction	7124 Jul 05 15:13	18°♄16'31	-0°36'40	retrograde	7130 May 06 06:36	23°♄18'17	
minimum elong	7124 Jul 05 15:15	18°♄16'32	0°36'44	opposition	7130 Jul 06 05:04	18°♄24'45	0°53'54
max. Earth dist.	7124 Jul 07 03:44	18°♄38'45	5.91508 AU	min. Earth dist.	7130 Jul 07 05:10	18°♄17'02	4.48742 AU
morning rise	7124 Jul 19 04:25	21°♄34'00		direct	7130 Sep 06 22:57	13°♄23'03	
	7124 Aug 24 13:31	0°♄			7131 Jan 07 06:54	0°♄	
retrograde	7124 Nov 28 05:35	12°♄20'05		evening set	7131 Jan 10 10:17	0°♄40'25	
min. Earth dist.	7125 Jan 25 06:47	7°♄27'46	3.94744 AU	max. Earth dist.	7131 Jan 21 09:15	3°♄02'35	6.45877 AU
opposition	7125 Jan 26 16:00	7°♄16'28	-0°34'33				
direct	7125 Mar 25 13:22	2°♄20'47		conjunction	7131 Jan 23 06:49	3°♄27'18	0°26'27
	7125 Jun 29 08:22	15°♄		minimum elong	7131 Jan 23 06:50	3°♄27'19	0°26'30
evening set	7125 Jul 30 05:37	22°♄05'13		morning rise	7131 Feb 05 01:24	6°♄13'21	
					7131 Mar 20 06:34	15°♄	
conjunction	7125 Aug 12 21:27	25°♄19'37	-0°07'34	retrograde	7131 Jun 06 01:13	23°♄06'09	
minimum elong	7125 Aug 12 21:28	25°♄19'38	0°07'37	opposition	7131 Aug 06 00:10	18°♄13'40	0°20'25
behind sun begin	7125 Aug 12 13:53	25°♄15'09		min. Earth dist.	7131 Aug 07 13:23	18°♄01'47	4.41155 AU
behind sun end	7125 Aug 13 05:03	25°♄24'07			7131 Sep 02 13:17	15°♄	
max. Earth dist.	7125 Aug 15 08:38	25°♄54'47	6.00267 AU	direct	7131 Oct 07 14:45	13°♄12'52	
morning rise	7125 Aug 26 15:01	28°♄34'43			7131 Nov 11 14:37	15°♄	
	7125 Sep 01 16:41	0°♄			7132 Feb 05 21:16	0°♄	
asc. node	7125 Nov 14 19:12	14°♄41'48		evening set	7132 Feb 09 23:13	0°♄53'55	
retrograde	7126 Jan 03 06:54	18°♄27'25		max. Earth dist.	7132 Feb 20 10:23	3°♄13'22	6.34734 AU
min. Earth dist.	7126 Mar 02 06:11	13°♄35'49	4.07537 AU				
opposition	7126 Mar 03 20:16	13°♄22'53	0°12'53	conjunction	7132 Feb 22 17:33	3°♄44'07	0°00'02
direct	7126 May 01 11:15	8°♄24'37		minimum elong	7132 Feb 22 17:34	3°♄44'08	0°00'05
evening set	7126 Sep 05 01:25	27°♄24'25		behind sun begin	7132 Feb 22 10:03	3°♄39'58	
	7126 Sep 16 09:57	0°♄		behind sun end	7132 Feb 23 01:05	3°♄48'18	
				desc. node	7132 Feb 23 04:03	3°♄49'57	
conjunction	7126 Sep 18 17:26	0°♄31'43	0°23'20	morning rise	7132 Mar 06 10:27	6°♄33'54	
minimum elong	7126 Sep 18 17:24	0°♄31'43	0°23'20	retrograde	7132 Jul 07 16:15	24°♄14'05	
max. Earth dist.	7126 Sep 21 01:44	1°♄03'54	6.15818 AU	opposition	7132 Sep 06 12:30	19°♄21'10	-0°20'33
morning rise	7126 Oct 02 09:50	3°♄38'51		min. Earth dist.	7132 Sep 08 03:29	19°♄08'41	4.27079 AU
retrograde	7127 Feb 05 12:48	22°♄16'16		direct	7132 Nov 07 05:55	14°♄22'05	
min. Earth dist.	7127 Apr 05 04:43	17°♄23'50	4.24227 AU		7133 Feb 28 16:20	0°♄	
opposition	7127 Apr 06 11:32	17°♄13'29	0°52'31	evening set	7133 Mar 12 19:15	2°♄44'49	
direct	7127 Jun 05 08:15	12°♄13'01		max. Earth dist.	7133 Mar 23 11:11	5°♄12'14	6.18786 AU
	7127 Oct 07 21:29	0°♄					
evening set	7127 Oct 09 17:47	0°♄24'15		conjunction	7133 Mar 25 13:28	5°♄41'18	-0°27'31
				minimum elong	7133 Mar 25 13:27	5°♄41'17	0°27'32
conjunction	7127 Oct 23 05:47	3°♄22'43	0°44'52	morning rise	7133 Apr 07 07:33	8°♄38'03	
minimum elong	7127 Oct 23 05:46	3°♄22'43	0°44'55	retrograde	7133 Aug 12 00:03	27°♄28'29	
max. Earth dist.	7127 Oct 24 16:26	3°♄41'51	6.32262 AU	opposition	7133 Oct 11 09:47	22°♄33'53	-0°58'05
morning rise	7127 Nov 05 16:37	6°♄20'21		min. Earth dist.	7133 Oct 12 15:37	22°♄24'12	4.10358 AU
	7127 Dec 17 13:26	15°♄		direct	7133 Dec 10 19:58	17°♄37'08	
retrograde	7128 Mar 07 16:15	23°♄51'03			7134 Mar 16 22:29	0°♄	
opposition	7128 May 06 23:41	18°♄51'38	1°13'20	evening set	7134 Apr 15 16:26	6°♄49'44	
min. Earth dist.	7128 May 06 10:11	18°♄56'05	4.39118 AU	max. Earth dist.	7134 Apr 27 09:22	9°♄37'25	6.02752 AU
	7128 Jun 09 15:24	15°♄					
direct	7128 Jul 07 05:19	13°♄49'59		conjunction	7134 Apr 28 13:48	9°♄54'27	-0°47'20
	7128 Aug 04 01:54	15°♄		minimum elong	7134 Apr 28 13:47	9°♄54'26	0°47'24
	7128 Nov 03 16:49	0°♄		morning rise	7134 May 11 12:23	13°♄00'06	

	7134 May 19 22:58	15°♄	opposition	7140 May 11 06:28	23°♄16'08	1°14'30
	7134 Aug 04 20:50	0°♄	min. Earth dist.	7140 May 10 19:04	23°♄19'54	4.40816 AU
retrograde	7134 Sep 18 16:20	3°♄04'47	direct	7140 Jul 11 15:04	18°♄14'24	
	7134 Nov 03 00:59	30°♄		7140 Oct 17 23:55	0°♄	
opposition	7134 Nov 17 15:00	28°♄07'19 -1°17'19	evening set	7140 Nov 14 15:35	5°♄44'16	
min. Earth dist.	7134 Nov 17 22:32	28°♄04'50 3.96540 AU				
direct	7135 Jan 15 13:03	23°♄12'41	conjunction	7140 Nov 27 21:00	8°♄34'43	0°52'03
	7135 Mar 23 12:08	0°♄	minimum elong	7140 Nov 27 21:01	8°♄34'43	0°52'08
evening set	7135 May 21 20:35	13°♄05'17	max. Earth dist.	7140 Nov 27 21:56	8°♄35'13	6.45637 AU
			morning rise	7140 Dec 11 00:17	11°♄24'01	
conjunction	7135 Jun 04 00:14	16°♄17'40 -0°50'18	retrograde	7141 Apr 10 17:01	28°♄08'45	
minimum elong	7135 Jun 04 00:15	16°♄17'41 0°50'22	opposition	7141 Jun 10 09:55	23°♄13'11	1°11'21
max. Earth dist.	7135 Jun 04 06:36	16°♄21'33 5.92483 AU	min. Earth dist.	7141 Jun 10 19:06	23°♄10'13	4.48536 AU
morning rise	7135 Jun 17 06:29	19°♄31'33	direct	7141 Aug 11 18:39	18°♄11'12	
	7135 Aug 02 01:26	0°♄		7141 Nov 19 04:42	0°♄	
retrograde	7135 Oct 27 12:31	10°♄21'42	evening set	7141 Dec 15 10:35	5°♄25'30	
min. Earth dist.	7135 Dec 25 08:20	5°♄26'33 3.91063 AU	max. Earth dist.	7141 Dec 27 07:03	7°♄57'40	6.49278 AU
opposition	7135 Dec 26 01:59	5°♄20'36 -1°06'18				
direct	7136 Feb 22 02:06	0°♄26'18	conjunction	7141 Dec 28 10:43	8°♄12'30	0°43'13
evening set	7136 Jun 27 15:26	20°♄29'14	minimum elong	7141 Dec 28 10:44	8°♄12'31	0°43'18
			morning rise	7142 Jan 10 08:35	10°♄58'27	
conjunction	7136 Jul 11 02:50	23°♄45'23 -0°33'06	retrograde	7142 May 10 13:13	27°♄34'43	
minimum elong	7136 Jul 11 02:52	23°♄45'24 0°33'09	opposition	7142 Jul 10 11:26	22°♄41'25	0°49'53
max. Earth dist.	7136 Jul 12 21:24	24°♄11'14 5.92346 AU	min. Earth dist.	7142 Jul 11 14:04	22°♄32'53	4.47976 AU
morning rise	7136 Jul 24 16:44	27°♄02'47	direct	7142 Sep 11 05:23	17°♄39'47	
	7136 Aug 06 01:59	0°♄		7142 Dec 21 21:37	0°♄	
	7136 Oct 23 00:46	15°♄	evening set	7143 Jan 14 16:32	4°♄59'55	
retrograde	7136 Dec 03 12:49	17°♄42'54	max. Earth dist.	7143 Jan 25 14:18	7°♄21'52	6.44526 AU
	7137 Jan 13 23:21	15°♄				
opposition	7137 Jan 31 22:53	12°♄38'57 -0°27'58	conjunction	7143 Jan 27 12:51	7°♄47'12	0°23'01
min. Earth dist.	7137 Jan 30 12:31	12°♄50'39 3.96339 AU	minimum elong	7143 Jan 27 12:52	7°♄47'13	0°23'05
direct	7137 Mar 30 22:01	7°♄42'55	morning rise	7143 Feb 09 06:56	10°♄33'38	
	7137 Jun 08 14:15	15°♄		7143 Mar 02 05:02	15°♄	
evening set	7137 Aug 04 13:22	27°♄20'56	retrograde	7143 Jun 10 12:04	27°♄32'08	
	7137 Aug 15 19:05	0°♄	opposition	7143 Aug 10 11:34	22°♄39'43	0°14'49
			min. Earth dist.	7143 Aug 12 01:11	22°♄27'44	4.39305 AU
conjunction	7137 Aug 18 05:23	0°♄34'27 -0°02'58	direct	7143 Oct 11 23:11	17°♄39'13	
minimum elong	7137 Aug 18 05:23	0°♄34'26 0°03'00	desc. node	7144 Jan 01 21:05	26°♄22'27	
behind sun begin	7137 Aug 17 21:01	0°♄29'31		7144 Jan 20 05:00	0°♄	
behind sun end	7137 Aug 18 13:44	0°♄39'21	evening set	7144 Feb 14 09:26	5°♄25'59	
max. Earth dist.	7137 Aug 20 17:20	1°♄09'50 6.02425 AU	max. Earth dist.	7144 Feb 24 19:47	7°♄45'44	6.32523 AU
morning rise	7137 Aug 31 23:09	3°♄48'31				
asc. node	7137 Sep 23 16:05	9°♄00'20	conjunction	7144 Feb 27 03:31	8°♄16'58	-0°04'05
retrograde	7138 Jan 08 02:05	23°♄30'01	minimum elong	7144 Feb 27 03:29	8°♄16'58	0°04'03
min. Earth dist.	7138 Mar 07 03:12	18°♄38'38 4.10023 AU	behind sun begin	7144 Feb 26 19:38	8°♄12'35	
opposition	7138 Mar 08 17:41	18°♄25'34 0°19'21	behind sun end	7144 Feb 27 11:21	8°♄21'21	
direct	7138 May 06 12:00	13°♄26'55	morning rise	7144 Mar 10 20:30	11°♄07'39	
	7138 Aug 30 18:25	0°♄	retrograde	7144 Jul 12 14:09	28°♄57'16	
evening set	7138 Sep 10 01:45	2°♄18'51	opposition	7144 Sep 11 07:58	24°♄04'16	-0°26'26
			min. Earth dist.	7144 Sep 12 22:49	23°♄51'47	4.24657 AU
conjunction	7138 Sep 23 17:20	5°♄24'48 0°27'07	direct	7144 Nov 11 22:09	19°♄05'32	
minimum elong	7138 Sep 23 17:19	5°♄24'48 0°27'07		7145 Feb 11 01:09	0°♄	
max. Earth dist.	7138 Sep 25 22:36	5°♄55'05 6.18410 AU	evening set	7145 Mar 17 11:47	7°♄35'34	
morning rise	7138 Oct 07 09:04	8°♄30'29	max. Earth dist.	7145 Mar 28 06:42	10°♄05'30	6.16378 AU
retrograde	7139 Feb 10 01:20	26°♄56'57				
min. Earth dist.	7139 Apr 09 20:38	22°♄03'54 4.26691 AU	conjunction	7145 Mar 30 06:21	10°♄33'12	-0°31'03
opposition	7139 Apr 11 00:27	21°♄54'35 0°56'42	minimum elong	7145 Mar 30 06:20	10°♄33'11	0°31'04
direct	7139 Jun 10 03:04	16°♄53'52	morning rise	7145 Apr 12 00:50	13°♄31'09	
	7139 Sep 21 03:13	0°♄		7145 Jul 07 08:24	0°♄	
evening set	7139 Oct 14 09:48	4°♄58'28	retrograde	7145 Aug 17 05:07	2°♄32'26	
				7145 Sep 27 11:35	30°♄	
conjunction	7139 Oct 27 21:03	7°♄55'44 0°46'47	opposition	7145 Oct 16 13:50	27°♄37'33	-1°02'17
minimum elong	7139 Oct 27 21:02	7°♄55'43 0°46'51	min. Earth dist.	7145 Oct 17 16:07	27°♄29'00	4.08201 AU
max. Earth dist.	7139 Oct 29 04:13	8°♄12'51 6.34403 AU	direct	7145 Dec 15 17:41	22°♄41'16	
morning rise	7139 Nov 10 06:57	10°♄52'05		7146 Feb 24 16:55	0°♄	
	7139 Nov 29 14:29	15°♄	evening set	7146 Apr 20 16:40	12°♄00'05	
retrograde	7140 Mar 11 20:50	28°♄15'04				

conjunction	7146 May 03 14:35	15°♄05'50 -0°48'57	conjunction	7151 Nov 01 09:10	12°♄22'15 0°48'23
minimum elong	7146 May 03 14:34	15°♄05'50 0°49'01	minimum elong	7151 Nov 01 09:09	12°♄22'14 0°48'26
max. Earth dist.	7146 May 02 14:48	14°♄51'33 6.01049 AU	max. Earth dist.	7151 Nov 02 10:45	12°♄36'16 6.36133 AU
	7146 May 03 04:52	15°♄		7151 Nov 13 09:56	15°♄
morning rise	7146 May 16 14:06	18°♄12'41	morning rise	7151 Nov 14 18:16	15°♄17'34
	7146 Jul 08 20:07	0°♄		7152 Feb 03 18:16	0°♄
retrograde	7146 Sep 24 02:55	8°♄25'19	retrograde	7152 Mar 16 02:05	2°♄34'26
opposition	7146 Nov 23 00:45	3°♄27'21 -1°17'41		7152 Apr 26 08:44	30°♄♄
min. Earth dist.	7146 Nov 23 04:25	3°♄26'08 3.95482 AU	opposition	7152 May 15 11:21	27°♄36'01 1°15'17
	7146 Dec 22 01:07	30°♄♄	min. Earth dist.	7152 May 15 03:45	27°♄38'30 4.42069 AU
direct	7147 Jan 20 19:45	28°♄32'54	direct	7152 Jul 16 00:17	22°♄34'11
	7147 Feb 19 09:09	0°♄		7152 Sep 29 08:19	0°♄
evening set	7147 May 27 02:35	18°♄27'38	evening set	7152 Nov 18 23:15	10°♄01'34
conjunction	7147 Jun 09 07:23	21°♄40'41 -0°49'02	conjunction	7152 Dec 02 04:02	12°♄51'29 0°51'36
minimum elong	7147 Jun 09 07:24	21°♄40'41 0°49'07	minimum elong	7152 Dec 02 04:02	12°♄51'30 0°51'41
max. Earth dist.	7147 Jun 09 20:48	21°♄48'52 5.92189 AU	max. Earth dist.	7152 Dec 02 01:04	12°♄49'54 6.46332 AU
morning rise	7147 Jun 22 14:33	24°♄55'09	morning rise	7152 Dec 15 06:33	15°♄40'15
	7147 Jul 13 23:19	0°♄		7153 Mar 05 21:43	0°♄
retrograde	7147 Nov 01 22:49	15°♄45'41	retrograde	7153 Apr 14 19:46	2°♄23'00
opposition	7147 Dec 31 10:55	10°♄44'08 -1°02'14		7153 May 24 21:26	30°♄♄
min. Earth dist.	7147 Dec 30 14:48	10°♄50'55 3.91585 AU	opposition	7153 Jun 14 13:53	27°♄27'47 1°09'22
direct	7148 Feb 27 10:07	5°♄49'43	min. Earth dist.	7153 Jun 15 00:58	27°♄24'12 4.48668 AU
evening set	7148 Jul 02 22:44	25°♄49'23	direct	7153 Aug 15 23:06	22°♄25'49
				7153 Oct 31 18:24	0°♄
conjunction	7148 Jul 16 10:50	29°♄05'17 -0°29'23	evening set	7153 Dec 19 16:09	9°♄40'32
minimum elong	7148 Jul 16 10:51	29°♄05'18 0°29'27	max. Earth dist.	7153 Dec 31 10:01	12°♄11'30 6.48854 AU
max. Earth dist.	7148 Jul 18 08:07	29°♄32'41 5.93599 AU			
	7148 Jul 20 05:16	0°♄	conjunction	7154 Jan 01 15:45	12°♄27'29 0°40'58
morning rise	7148 Jul 30 01:38	2°♄22'26	minimum elong	7154 Jan 01 15:46	12°♄27'30 0°41'02
	7148 Sep 25 08:47	15°♄	morning rise	7154 Jan 14 12:56	15°♄13'21
retrograde	7148 Dec 08 12:59	22°♄55'04		7154 Apr 09 14:31	0°♄
min. Earth dist.	7149 Feb 04 12:32	18°♄03'17 3.98182 AU	retrograde	7154 May 14 19:38	1°♄51'35
opposition	7149 Feb 06 00:54	17°♄50'55 -0°21'26		7154 Jun 19 03:11	30°♄♄
	7149 Feb 28 10:35	15°♄♄	opposition	7154 Jul 14 17:52	26°♄58'31 0°45'37
direct	7149 Apr 05 01:19	12°♄54'33	min. Earth dist.	7154 Jul 15 22:31	26°♄49'22 4.47029 AU
	7149 May 10 17:32	15°♄	direct	7154 Sep 15 12:00	21°♄57'02
	7149 Jul 30 05:12	0°♄		7154 Dec 03 16:37	0°♄
asc. node	7149 Aug 04 01:36	1°♄07'17	evening set	7155 Jan 18 23:00	9°♄20'10
evening set	7149 Aug 09 16:20	2°♄25'44	max. Earth dist.	7155 Jan 29 17:20	11°♄40'47 6.43120 AU
conjunction	7149 Aug 23 08:32	5°♄38'16 0°01'35	conjunction	7155 Jan 31 18:47	12°♄07'48 0°19'29
minimum elong	7149 Aug 23 08:32	5°♄38'15 0°01'33	minimum elong	7155 Jan 31 18:48	12°♄07'49 0°19'33
behind sun begin	7149 Aug 23 00:08	5°♄33'21	morning rise	7155 Feb 13 12:46	14°♄54'41
behind sun end	7149 Aug 23 16:56	5°♄43'10		7155 Feb 13 22:33	15°♄
max. Earth dist.	7149 Aug 25 19:40	6°♄12'59 6.04669 AU		7155 May 09 16:41	0°♄
morning rise	7149 Sep 06 02:16	8°♄51'14	retrograde	7155 Jun 15 01:04	1°♄58'52
retrograde	7150 Jan 12 18:49	28°♄21'59		7155 Jul 21 14:28	30°♄♄
min. Earth dist.	7150 Mar 11 22:16	23°♄30'04 4.12414 AU	opposition	7155 Aug 14 23:27	27°♄06'23 0°09'08
opposition	7150 Mar 13 10:45	23°♄17'42 0°25'24	min. Earth dist.	7155 Aug 16 13:39	26°♄54'11 4.37517 AU
direct	7150 May 11 10:17	18°♄18'43	direct	7155 Oct 16 08:58	22°♄06'01
	7150 Aug 13 11:23	0°♄	desc. node	7155 Nov 11 07:39	23°♄06'16
evening set	7150 Sep 14 21:36	7°♄03'28		7156 Jan 01 15:03	0°♄
			evening set	7156 Feb 18 19:09	9°♄57'51
conjunction	7150 Sep 28 12:52	10°♄08'14 0°30'35	max. Earth dist.	7156 Feb 29 07:00	12°♄19'03 6.30486 AU
minimum elong	7150 Sep 28 12:50	10°♄08'13 0°30'36			
max. Earth dist.	7150 Sep 30 16:20	10°♄37'20 6.20750 AU	conjunction	7156 Mar 02 13:17	12°♄49'36 -0°08'04
morning rise	7150 Oct 12 03:53	13°♄12'35	minimum elong	7156 Mar 02 13:17	12°♄49'36 0°08'03
	7151 Jan 14 14:39	0°♄	behind sun begin	7156 Mar 02 06:09	12°♄45'36
retrograde	7151 Feb 14 08:37	1°♄29'23	behind sun end	7156 Mar 02 20:24	12°♄53'35
	7151 Mar 16 21:39	30°♄♄	morning rise	7156 Mar 15 06:10	15°♄41'05
min. Earth dist.	7151 Apr 14 07:11	26°♄36'18 4.28800 AU		7156 May 28 12:54	0°♄
opposition	7151 Apr 15 09:33	26°♄27'29 1°00'23	retrograde	7156 Jul 17 09:31	3°♄39'19
direct	7151 Jun 14 15:05	21°♄26'37		7156 Sep 06 10:17	30°♄♄
	7151 Sep 02 21:25	0°♄	opposition	7156 Sep 16 03:04	28°♄46'05 -0°32'08
evening set	7151 Oct 18 22:45	9°♄26'00	min. Earth dist.	7156 Sep 17 16:23	28°♄34'05 4.22498 AU
			direct	7156 Nov 16 12:19	23°♄47'40

	7157 Jan 21 16:09	0°♈		conjunction	7162 Oct 03 09:52	14°♎54'32	0°33'53
evening set	7157 Mar 22 03:31	12°♈23'48		minimum elong	7162 Oct 03 09:51	14°♎54'31	0°33'55
max. Earth dist.	7157 Apr 02 00:20	14°♈55'36	6.14247 AU	max. Earth dist.	7162 Oct 05 09:09	15°♎21'09	6.22831 AU
				morning rise	7162 Oct 17 00:23	17°♎57'43	
conjunction	7157 Apr 03 22:10	15°♈22'23	-0°34'20		7162 Dec 15 12:54	0°♏	
minimum elong	7157 Apr 03 22:08	15°♈22'22	0°34'21	retrograde	7163 Feb 18 19:22	6°♏05'53	
morning rise	7157 Apr 16 17:12	18°♈21'26		opposition	7163 Apr 19 20:45	1°♏04'27	1°03'47
	7157 Jun 10 02:12	0°♉		min. Earth dist.	7163 Apr 18 21:13	1°♏12'19	4.30733 AU
retrograde	7157 Aug 22 08:46	7°♉32'32			7163 Apr 27 23:35	30°♉♎	
opposition	7157 Oct 21 16:24	2°♉37'13	-1°05'59	direct	7163 Jun 19 07:06	26°♎03'26	
min. Earth dist.	7157 Oct 22 16:06	2°♉29'28	4.06258 AU		7163 Aug 10 13:11	0°♏	
	7157 Nov 11 21:05	30°♉♈		evening set	7163 Oct 23 13:33	13°♏58'08	
direct	7157 Dec 20 16:13	27°♈41'09			7163 Oct 28 07:26	15°♏	
	7158 Jan 27 22:00	0°♉					
	7158 Apr 16 20:02	15°♉		conjunction	7163 Nov 05 23:22	16°♏53'26	0°49'44
evening set	7158 Apr 25 15:17	17°♉05'30		minimum elong	7163 Nov 05 23:22	16°♏53'25	0°49'47
				max. Earth dist.	7163 Nov 06 22:51	17°♏06'15	6.37801 AU
conjunction	7158 May 08 14:06	20°♉12'20	-0°50'10	morning rise	7163 Nov 19 07:26	19°♏47'43	
minimum elong	7158 May 08 14:05	20°♉12'19	0°50'13		7164 Jan 09 06:14	0°♊	
max. Earth dist.	7158 May 07 19:44	20°♉01'15	5.99478 AU	retrograde	7164 Mar 20 06:56	6°♊58'36	
morning rise	7158 May 21 14:23	23°♉20'16		opposition	7164 May 19 18:16	2°♊00'44	1°15'39
	7158 Jun 19 05:13	0°♊		min. Earth dist.	7164 May 19 12:03	2°♊02'46	4.43403 AU
retrograde	7158 Sep 29 12:46	13°♊40'10			7164 Jun 04 14:34	30°♊♏	
opposition	7158 Nov 28 08:10	8°♊41'44	-1°17'25	direct	7164 Jul 20 09:17	26°♏58'59	
min. Earth dist.	7158 Nov 28 09:04	8°♊41'26	3.94462 AU		7164 Sep 04 12:32	0°♊	
direct	7159 Jan 25 23:46	3°♊47'26		evening set	7164 Nov 23 09:01	14°♊23'29	
evening set	7159 Jun 01 07:07	23°♊44'31					
				conjunction	7164 Dec 06 12:52	17°♊12'44	0°50'53
conjunction	7159 Jun 14 12:50	26°♊58'13	-0°47'22	minimum elong	7164 Dec 06 12:53	17°♊12'44	0°50'58
minimum elong	7159 Jun 14 12:51	26°♊58'13	0°47'27	max. Earth dist.	7164 Dec 06 05:50	17°♊08'57	6.47268 AU
max. Earth dist.	7159 Jun 15 05:38	27°♊08'28	5.91802 AU	morning rise	7164 Dec 19 14:36	20°♊00'50	
	7159 Jun 26 23:10	0°♋			7165 Feb 08 06:49	0°♋	
morning rise	7159 Jun 27 21:18	0°♋13'26		retrograde	7165 Apr 19 01:30	6°♋40'44	
retrograde	7159 Nov 07 05:09	21°♋04'44		opposition	7165 Jun 18 19:27	1°♋45'57	1°07'00
opposition	7160 Jan 05 17:52	16°♋02'43	-0°57'41	min. Earth dist.	7165 Jun 19 09:32	1°♋41'25	4.49181 AU
min. Earth dist.	7160 Jan 04 18:12	16°♋10'43	3.91894 AU		7165 Jul 02 19:30	30°♊♊	
direct	7160 Mar 03 15:01	11°♋08'07		direct	7165 Aug 20 07:56	26°♊44'05	
	7160 Jul 03 15:11	0°♌			7165 Oct 07 19:06	0°♋	
evening set	7160 Jul 08 05:08	1°♌05'48		evening set	7165 Dec 23 22:26	13°♋57'48	
conjunction	7160 Jul 21 18:06	4°♌21'38	-0°25'26	conjunction	7166 Jan 05 21:23	16°♋44'30	0°38'32
minimum elong	7160 Jul 21 18:07	4°♌21'39	0°25'31	minimum elong	7166 Jan 05 21:25	16°♋44'31	0°38'37
max. Earth dist.	7160 Jul 23 18:12	4°♌50'40	5.94568 AU	max. Earth dist.	7166 Jan 04 12:45	16°♋26'57	6.48913 AU
morning rise	7160 Aug 04 09:33	7°♌38'37		morning rise	7166 Jan 18 17:58	19°♋30'08	
	7160 Sep 05 05:30	15°♌			7166 Mar 13 08:52	0°♌	
retrograde	7160 Dec 13 15:03	28°♌05'09		retrograde	7166 May 19 01:16	6°♌08'51	
min. Earth dist.	7161 Feb 09 14:05	23°♌13'11	3.99678 AU	opposition	7166 Jul 19 00:28	1°♌15'55	0°41'12
opposition	7161 Feb 11 02:21	23°♌00'50	-0°14'46	min. Earth dist.	7166 Jul 20 05:55	1°♌06'31	4.46643 AU
direct	7161 Apr 10 05:59	18°♌04'05			7166 Jul 29 00:44	30°♊♋	
asc. node	7161 Jun 13 23:11	24°♌24'00		direct	7166 Sep 19 18:00	26°♋14'34	
	7161 Jul 12 11:43	0°♍			7166 Nov 10 21:15	0°♌	
evening set	7161 Aug 14 19:55	7°♍30'07		evening set	7167 Jan 23 04:15	13°♌38'47	
					7167 Jan 29 09:30	15°♌	
conjunction	7161 Aug 28 12:24	10°♍41'52	0°06'02	max. Earth dist.	7167 Feb 02 22:15	15°♌59'28	6.42313 AU
minimum elong	7161 Aug 28 12:23	10°♍41'52	0°06'01				
behind sun begin	7161 Aug 28 04:25	10°♍37'14		conjunction	7167 Feb 04 23:40	16°♌26'32	0°15'57
behind sun end	7161 Aug 28 20:21	10°♍46'30		minimum elong	7167 Feb 04 23:40	16°♌26'33	0°16'01
max. Earth dist.	7161 Aug 31 00:38	11°♍17'05	6.06549 AU	behind sun begin	7167 Feb 04 22:40	16°♌25'59	
morning rise	7161 Sep 11 06:01	13°♍53'56		behind sun end	7167 Feb 05 00:41	16°♌27'06	
	7161 Dec 02 12:42	0°♎		morning rise	7167 Feb 17 17:06	19°♌13'34	
retrograde	7162 Jan 17 11:41	3°♎15'11			7167 Apr 12 16:36	0°♍	
	7162 Mar 04 11:45	30°♊♍		retrograde	7167 Jun 19 10:51	6°♍21'38	
min. Earth dist.	7162 Mar 16 16:08	28°♍23'27	4.14484 AU	opposition	7167 Aug 19 09:31	1°♍29'09	0°03'37
opposition	7162 Mar 18 04:21	28°♍11'11	0°31'19	min. Earth dist.	7167 Aug 21 00:33	1°♍16'42	4.36317 AU
direct	7162 May 16 06:23	23°♍11'56			7167 Aug 31 04:58	30°♊♎	
	7162 Jul 24 05:17	0°♎		desc. node	7167 Sep 23 06:49	27°♌36'30	
evening set	7162 Sep 19 19:14	11°♎50'54		direct	7167 Oct 20 17:19	26°♌29'02	

	7167 Dec 09 08:27	0°♏		conjunction	7173 Sep 02 15:35	15°♎44'26	0°10'19
evening set	7168 Feb 23 02:28	14°♏24'04		minimum elong	7173 Sep 02 15:35	15°♎44'26	0°10'17
max. Earth dist.	7168 Mar 04 12:43	16°♏44'56	6.28966 AU	behind sun begin	7173 Sep 02 09:00	15°♎40'37	
				behind sun end	7173 Sep 02 22:09	15°♎48'14	
conjunction	7168 Mar 06 20:15	17°♏16'19	-0°11'50	max. Earth dist.	7173 Sep 05 02:33	16°♎18'46	6.08076 AU
minimum elong	7168 Mar 06 20:14	17°♏16'18	0°11'48	morning rise	7173 Sep 16 09:21	18°♎55'46	
behind sun begin	7168 Mar 06 14:35	17°♏13'08			7173 Nov 07 02:37	0°♎	
behind sun end	7168 Mar 07 01:53	17°♏19'29		retrograde	7174 Jan 22 04:14	8°♎08'45	
morning rise	7168 Mar 19 13:18	20°♏08'26		min. Earth dist.	7174 Mar 21 10:46	3°♎16'49	4.16281 AU
	7168 May 05 09:41	0°♏		opposition	7174 Mar 22 22:04	3°♎04'52	0°36'52
retrograde	7168 Jul 22 01:51	8°♏13'47			7174 Apr 16 14:37	30°♎	
opposition	7168 Sep 20 18:33	3°♏20'17	-0°37'21	direct	7174 May 21 04:01	28°♎05'15	
min. Earth dist.	7168 Sep 22 07:04	3°♏08'31	4.20733 AU		7174 Jun 25 01:28	0°♎	
	7168 Oct 19 05:54	30°♎		evening set	7174 Sep 24 16:59	16°♎38'59	
direct	7168 Nov 21 00:34	28°♎22'04					
	7168 Dec 23 14:39	0°♏		conjunction	7174 Oct 08 07:19	19°♎41'36	0°36'54
evening set	7169 Mar 26 15:18	17°♏03'17		minimum elong	7174 Oct 08 07:18	19°♎41'35	0°36'56
max. Earth dist.	7169 Apr 06 15:31	19°♏37'38	6.12389 AU	max. Earth dist.	7174 Oct 10 05:52	20°♎07'41	6.24761 AU
				morning rise	7174 Oct 21 20:57	22°♎43'35	
conjunction	7169 Apr 08 10:24	20°♏02'47	-0°37'13		7174 Nov 24 23:05	0°♎	
minimum elong	7169 Apr 08 10:22	20°♏02'46	0°37'15	retrograde	7175 Feb 23 05:20	10°♎43'12	
morning rise	7169 Apr 21 05:44	23°♏02'48		min. Earth dist.	7175 Apr 23 10:00	5°♎49'33	4.32616 AU
	7169 May 22 00:52	0°♏		opposition	7175 Apr 24 08:14	5°♎42'10	1°06'41
retrograde	7169 Aug 27 08:30	12°♏22'52		direct	7175 Jun 23 22:35	0°♎40'58	
opposition	7169 Oct 26 14:25	7°♏27'13	-1°09'02		7175 Oct 11 17:32	15°♎	
min. Earth dist.	7169 Oct 27 12:41	7°♏19'57	4.04458 AU	evening set	7175 Oct 28 04:50	18°♎30'39	
direct	7169 Dec 25 09:59	2°♏31'25					
	7170 Mar 31 03:37	15°♏		conjunction	7175 Nov 10 13:41	21°♎24'55	0°50'44
evening set	7170 Apr 30 09:48	22°♏01'09		minimum elong	7175 Nov 10 13:40	21°♎24'54	0°50'48
				max. Earth dist.	7175 Nov 11 08:23	21°♎35'05	6.39470 AU
conjunction	7170 May 13 09:15	25°♏09'02	-0°50'57	morning rise	7175 Nov 23 20:59	24°♎18'10	
minimum elong	7170 May 13 09:14	25°♏09'01	0°51'00		7175 Dec 21 01:22	0°♏	
max. Earth dist.	7170 May 12 16:46	24°♏59'04	5.97891 AU	retrograde	7176 Mar 24 13:28	11°♏22'48	
morning rise	7170 May 26 10:41	28°♏18'10		opposition	7176 May 24 01:37	6°♏25'17	1°15'33
	7170 Jun 02 12:59	0°♏		min. Earth dist.	7176 May 23 22:32	6°♏26'18	4.44727 AU
retrograde	7170 Oct 04 16:17	18°♏45'40		direct	7176 Jul 24 21:19	1°♏23'23	
opposition	7170 Dec 03 11:01	13°♏46'45	-1°16'35	evening set	7176 Nov 27 18:18	18°♏44'39	
min. Earth dist.	7170 Dec 03 08:22	13°♏47'38	3.93261 AU				
direct	7171 Jan 30 22:16	8°♏52'27		conjunction	7176 Dec 10 21:32	21°♏33'17	0°49'51
evening set	7171 Jun 06 08:12	28°♏53'07		minimum elong	7176 Dec 10 21:33	21°♏33'17	0°49'56
	7171 Jun 10 22:07	0°♏		max. Earth dist.	7176 Dec 10 12:09	21°♏28'14	6.48123 AU
				morning rise	7176 Dec 23 22:18	24°♏20'43	
conjunction	7171 Jun 19 15:08	2°♏07'42	-0°45'25		7177 Jan 20 06:48	0°♏	
minimum elong	7171 Jun 19 15:09	2°♏07'43	0°45'29	retrograde	7177 Apr 23 05:00	10°♏58'04	
max. Earth dist.	7171 Jun 20 12:34	2°♏20'48	5.91124 AU	opposition	7177 Jun 23 01:16	6°♏03'32	1°04'13
morning rise	7171 Jul 03 00:40	5°♏23'45		min. Earth dist.	7177 Jun 23 16:48	5°♏58'32	4.49497 AU
retrograde	7171 Nov 12 10:44	26°♏17'09		direct	7177 Aug 24 14:50	1°♏01'42	
opposition	7172 Jan 10 21:31	21°♏14'44	-0°52'54	evening set	7177 Dec 28 04:52	18°♏14'57	
min. Earth dist.	7172 Jan 09 20:41	21°♏23'09	3.91813 AU	max. Earth dist.	7178 Jan 08 15:16	20°♏42'11	6.48645 AU
direct	7172 Mar 08 18:34	16°♏19'54					
	7172 Jun 16 12:06	0°♏		conjunction	7178 Jan 10 03:06	21°♏01'29	0°35'50
evening set	7172 Jul 13 09:40	6°♏17'25		minimum elong	7178 Jan 10 03:07	21°♏01'29	0°35'55
				morning rise	7178 Jan 22 23:06	23°♏47'00	
conjunction	7172 Jul 26 23:37	9°♏33'26	-0°21'27		7178 Feb 22 00:46	0°♏	
minimum elong	7172 Jul 26 23:38	9°♏33'27	0°21'31	retrograde	7178 May 23 09:21	10°♏27'26	
max. Earth dist.	7172 Jul 29 03:29	10°♏04'40	5.95101 AU	opposition	7178 Jul 23 08:17	5°♏34'40	0°36'24
morning rise	7172 Aug 09 15:52	12°♏50'30		min. Earth dist.	7178 Jul 24 16:30	5°♏24'23	4.45785 AU
	7172 Aug 18 18:23	15°♏		direct	7178 Sep 24 02:35	0°♏33'25	
	7172 Nov 03 07:12	0°♏			7179 Jan 13 11:18	15°♏	
retrograde	7172 Dec 18 15:32	3°♏12'26		evening set	7179 Jan 27 11:02	18°♏00'19	
	7173 Feb 02 01:31	30°♏		max. Earth dist.	7179 Feb 07 01:44	20°♏19'42	6.40909 AU
min. Earth dist.	7173 Feb 14 12:34	28°♏20'49	4.00764 AU				
opposition	7173 Feb 16 02:12	28°♏08'00	-0°08'13	conjunction	7179 Feb 09 06:04	20°♏48'27	0°12'12
direct	7173 Apr 15 06:26	23°♏10'55		minimum elong	7179 Feb 09 06:04	20°♏48'27	0°12'15
asc. node	7173 Apr 25 05:41	23°♏21'05		behind sun begin	7179 Feb 09 00:42	20°♏45'31	
	7173 Jun 21 21:33	0°♏		behind sun end	7179 Feb 09 11:26	20°♏51'23	
evening set	7173 Aug 19 23:05	12°♏33'21		morning rise	7179 Feb 21 23:21	23°♏35'57	

	7179 Mar 24 06:34	0°♏	min. Earth dist.	7185 Feb 19 14:20	3°♎36'08	4.02740 AU
retrograde	7179 Jun 23 23:57	10°♏50'09	opposition	7185 Feb 21 04:51	3°♎23'00	-0°01'21
desc. node	7179 Aug 02 19:05	8°♏30'57	asc. node	7185 Mar 04 10:50	1°♎52'42	
opposition	7179 Aug 23 22:27	5°♏57'35 -0°02'12		7185 Mar 20 17:19	30°♎	
min. Earth dist.	7179 Aug 25 13:26	5°♏45'07 4.34441 AU	direct	7185 Apr 20 11:57	28°♎25'33	
direct	7179 Oct 25 02:57	0°♏57'39		7185 May 21 11:01	0°♎	
evening set	7180 Feb 27 13:01	18°♏58'18	evening set	7185 Aug 25 03:59	17°♎41'02	
max. Earth dist.	7180 Mar 09 01:02	21°♏20'50 6.26758 AU				
			conjunction	7185 Sep 07 20:32	20°♎50'59	0°14'38
conjunction	7180 Mar 11 06:56	21°♏51'26 -0°15'44	minimum elong	7185 Sep 07 20:32	20°♎50'58	0°14'37
minimum elong	7180 Mar 11 06:55	21°♏51'26 0°15'43	behind sun begin	7185 Sep 07 17:15	20°♎49'05	
behind sun begin	7180 Mar 11 04:53	21°♏50'17	behind sun end	7185 Sep 07 23:48	20°♎52'52	
behind sun end	7180 Mar 11 08:56	21°♏52'35	max. Earth dist.	7185 Sep 10 08:25	21°♎25'39	6.10504 AU
morning rise	7180 Mar 23 23:58	24°♏44'29	morning rise	7185 Sep 21 13:46	24°♎00'58	
	7180 Apr 16 19:32	0°♎		7185 Oct 18 09:42	0°♎	
retrograde	7180 Jul 27 00:17	12°♎59'40	retrograde	7186 Jan 26 20:43	13°♎02'23	
opposition	7180 Sep 25 15:28	8°♎06'00 -0°42'42	min. Earth dist.	7186 Mar 26 05:31	8°♎10'16	4.18901 AU
min. Earth dist.	7180 Sep 27 03:34	7°♎54'21 4.18338 AU	opposition	7186 Mar 27 15:31	7°♎58'48	0°42'12
direct	7180 Nov 25 17:20	3°♎08'09	direct	7186 May 26 02:31	2°♎58'56	
evening set	7181 Mar 31 08:56	21°♎56'40	evening set	7186 Sep 29 13:36	21°♎24'48	
max. Earth dist.	7181 Apr 11 10:39	24°♎32'48 6.10002 AU				
			conjunction	7186 Oct 13 03:06	24°♎25'59	0°39'42
conjunction	7181 Apr 13 04:18	24°♎57'21 -0°40'04	minimum elong	7186 Oct 13 03:04	24°♎25'58	0°39'43
minimum elong	7181 Apr 13 04:17	24°♎57'20 0°40'06	max. Earth dist.	7186 Oct 14 21:51	24°♎49'49	6.27334 AU
morning rise	7181 Apr 26 00:26	27°♎58'43	morning rise	7186 Oct 26 15:59	27°♎26'31	
	7181 May 04 16:33	0°♏		7186 Nov 07 08:28	0°♎	
	7181 Jul 23 06:50	15°♏		7187 Feb 14 16:43	15°♎	
retrograde	7181 Sep 01 14:37	17°♏29'57	retrograde	7187 Feb 27 12:26	15°♎16'00	
	7181 Oct 12 07:53	15°♏		7187 Mar 12 07:42	15°♏	
opposition	7181 Oct 31 19:29	12°♏33'55 -1°11'51	opposition	7187 Apr 28 17:47	10°♎15'23	1°09'09
min. Earth dist.	7181 Nov 01 14:04	12°♏27'50 4.02300 AU	min. Earth dist.	7187 Apr 27 21:59	10°♎21'57	4.34942 AU
direct	7181 Dec 30 09:32	7°♏38'25	direct	7187 Jun 28 13:05	5°♎13'58	
	7182 Mar 10 23:34	15°♏		7187 Sep 23 23:13	15°♎	
evening set	7182 May 05 11:48	27°♏14'52	evening set	7187 Nov 01 16:57	22°♎57'32	
	7182 May 16 20:46	0°♎				
			conjunction	7187 Nov 15 01:03	25°♎50'42	0°51'26
conjunction	7182 May 18 12:18	0°♎23'59 -0°51'24	minimum elong	7187 Nov 15 01:03	25°♎50'42	0°51'31
minimum elong	7182 May 18 12:17	0°♎23'59 0°51'29	max. Earth dist.	7187 Nov 15 16:41	25°♎59'11	6.41376 AU
max. Earth dist.	7182 May 18 01:47	0°♎17'37 5.96184 AU	morning rise	7187 Nov 28 07:11	28°♎42'46	
morning rise	7182 May 31 14:40	3°♎34'24		7187 Dec 04 07:28	0°♏	
retrograde	7182 Oct 10 05:17	24°♎09'40	retrograde	7188 Mar 28 16:03	15°♏41'03	
opposition	7182 Dec 08 21:28	19°♎10'18 -1°15'04	opposition	7188 May 28 06:21	10°♏44'01	1°15'02
min. Earth dist.	7182 Dec 08 16:12	19°♎12'04 3.92209 AU	min. Earth dist.	7188 May 28 05:50	10°♏44'10	4.46089 AU
direct	7183 Feb 05 05:46	14°♎16'07	direct	7188 Jul 29 05:48	5°♏42'04	
	7183 May 24 15:09	0°♏	evening set	7188 Dec 02 00:55	23°♏00'16	
evening set	7183 Jun 11 16:42	4°♏19'30	max. Earth dist.	7188 Dec 14 11:57	25°♏40'07	6.48829 AU
conjunction	7183 Jun 25 00:48	7°♏34'47 -0°42'57	conjunction	7188 Dec 15 03:12	25°♏48'17	0°48'35
minimum elong	7183 Jun 25 00:49	7°♏34'48 0°43'01	minimum elong	7188 Dec 15 03:13	25°♏48'18	0°48'40
max. Earth dist.	7183 Jun 26 03:42	7°♏51'14 5.90842 AU	morning rise	7188 Dec 28 03:20	28°♏35'11	
morning rise	7183 Jul 08 11:34	10°♏51'33		7189 Jan 03 19:28	0°♏	
	7183 Oct 15 22:31	0°♎	retrograde	7189 Apr 27 08:43	15°♏10'50	
retrograde	7183 Nov 17 21:18	1°♎44'38	opposition	7189 Jun 27 05:07	10°♏16'37	1°01'10
	7183 Dec 20 16:01	30°♏	min. Earth dist.	7189 Jun 28 00:23	10°♏10'25	4.49515 AU
min. Earth dist.	7184 Jan 15 02:45	26°♏51'28 3.92379 AU	direct	7189 Aug 28 21:19	5°♏14'43	
opposition	7184 Jan 16 07:03	26°♏41'53 -0°47'21	evening set	7190 Jan 01 09:10	22°♏28'35	
direct	7184 Mar 14 02:50	21°♏46'53	max. Earth dist.	7190 Jan 12 16:15	24°♏54'17	6.47962 AU
	7184 May 27 06:08	0°♎				
evening set	7184 Jul 18 19:30	11°♎41'29	conjunction	7190 Jan 14 07:01	25°♏15'11	0°32'59
			minimum elong	7190 Jan 14 07:02	25°♏15'11	0°33'04
conjunction	7184 Aug 01 09:59	14°♎57'09 -0°17'05	morning rise	7190 Jan 27 02:27	28°♏00'46	
minimum elong	7184 Aug 01 10:00	14°♎57'09 0°17'07		7190 Feb 05 10:29	0°♏	
	7184 Aug 01 14:45	15°♎	retrograde	7190 May 27 15:04	14°♏44'27	
max. Earth dist.	7184 Aug 03 15:40	15°♎29'21 5.96450 AU	opposition	7190 Jul 27 15:12	9°♏51'45	0°31'29
morning rise	7184 Aug 15 02:54	18°♎13'48	min. Earth dist.	7190 Jul 29 00:27	9°♏41'08	4.44443 AU
	7184 Oct 07 13:36	0°♎	direct	7190 Sep 28 07:36	4°♏50'36	
retrograde	7184 Dec 23 16:35	8°♎27'34		7190 Dec 27 10:30	15°♏	

evening set	7191 Jan 31 17:14	22° \approx 21'44		conjunction	7196 Aug 06 20:12	20° Ω 18'12	-0°12'34
max. Earth dist.	7191 Feb 11 06:40	24° \approx 41'04	6.38997 AU	minimum elong	7196 Aug 06 20:13	20° Ω 18'13	0°12'37
				behind sun begin	7196 Aug 06 14:57	20° Ω 15'05	
conjunction	7191 Feb 13 11:58	25° \approx 10'29	0°08'25	behind sun end	7196 Aug 07 01:28	20° Ω 21'21	
minimum elong	7191 Feb 13 11:58	25° \approx 10'29	0°08'28	max. Earth dist.	7196 Aug 09 05:30	20° Ω 52'25	5.98282 AU
behind sun begin	7191 Feb 13 04:59	25° \approx 06'39		morning rise	7196 Aug 20 13:19	23° Ω 34'05	
behind sun end	7191 Feb 13 18:57	25° \approx 14'20			7196 Sep 17 13:01	0° \mathbb{M}	
morning rise	7191 Feb 26 05:06	27° \approx 58'40		retrograde	7196 Dec 28 17:22	13° \mathbb{M} 37'43	
	7191 Mar 07 11:42	0° \mathbb{H}		asc. node	7197 Jan 11 10:36	13° \mathbb{M} 18'42	
desc. node	7191 Jun 12 17:18	14° \mathbb{H} 57'19		min. Earth dist.	7197 Feb 24 15:36	8° \mathbb{M} 46'09	4.05061 AU
retrograde	7191 Jun 28 15:32	15° \mathbb{H} 20'51		opposition	7197 Feb 26 05:50	8° \mathbb{M} 33'09	0°05'27
opposition	7191 Aug 28 12:24	10° \mathbb{H} 28'13	-0°08'01	direct	7197 Apr 25 16:42	3° \mathbb{M} 35'21	
min. Earth dist.	7191 Aug 30 04:50	10° \mathbb{H} 15'17	4.32058 AU	evening set	7197 Aug 30 07:08	22° \mathbb{M} 42'58	
direct	7191 Oct 29 14:48	5° \mathbb{H} 28'30					
evening set	7192 Mar 03 00:57	23° \mathbb{H} 36'25		conjunction	7197 Sep 12 23:23	25° \mathbb{M} 51'38	0°18'49
max. Earth dist.	7192 Mar 13 12:33	25° \mathbb{H} 59'36	6.24090 AU	minimum elong	7197 Sep 12 23:22	25° \mathbb{M} 51'37	0°18'49
				max. Earth dist.	7197 Sep 15 09:37	26° \mathbb{M} 25'07	6.13077 AU
conjunction	7192 Mar 15 18:54	26° \mathbb{H} 30'39	-0°19'34	morning rise	7197 Sep 26 16:20	29° \mathbb{M} 00'16	
minimum elong	7192 Mar 15 18:53	26° \mathbb{H} 30'38	0°19'34		7197 Oct 01 01:27	0° $\underline{\Omega}$	
morning rise	7192 Mar 28 12:20	29° \mathbb{H} 24'55		retrograde	7198 Jan 31 09:36	17° $\underline{\Omega}$ 50'09	
	7192 Mar 31 02:10	0° \mathbb{Y}		min. Earth dist.	7198 Mar 30 22:05	12° $\underline{\Omega}$ 58'00	4.21486 AU
retrograde	7192 Aug 01 00:10	17° \mathbb{Y} 51'35		opposition	7198 Apr 01 07:02	12° $\underline{\Omega}$ 46'55	0°47'12
opposition	7192 Sep 30 14:34	12° \mathbb{Y} 57'37	-0°47'51	direct	7198 May 30 22:12	7° $\underline{\Omega}$ 46'47	
min. Earth dist.	7192 Oct 02 00:06	12° \mathbb{Y} 46'47	4.15590 AU	evening set	7198 Oct 04 08:22	26° $\underline{\Omega}$ 05'23	
direct	7192 Nov 30 10:36	8° \mathbb{Y} 00'06					
evening set	7193 Apr 05 05:20	26° \mathbb{Y} 57'08		conjunction	7198 Oct 17 21:12	29° $\underline{\Omega}$ 05'15	0°42'13
max. Earth dist.	7193 Apr 16 12:35	29° \mathbb{Y} 37'23	6.07430 AU	minimum elong	7198 Oct 17 21:10	29° $\underline{\Omega}$ 05'15	0°42'15
				max. Earth dist.	7198 Oct 19 12:16	29° $\underline{\Omega}$ 26'56	6.29735 AU
conjunction	7193 Apr 18 01:22	29° \mathbb{Y} 59'12	-0°42'39		7198 Oct 21 23:53	0° \mathbb{M}	
minimum elong	7193 Apr 18 01:21	29° \mathbb{Y} 59'11	0°42'41	morning rise	7198 Oct 31 09:05	2° \mathbb{M} 04'23	
	7193 Apr 18 02:44	0° \mathbb{B}			7199 Jan 05 17:34	15° \mathbb{M}	
morning rise	7193 Apr 30 22:08	3° \mathbb{B} 01'59		retrograde	7199 Mar 03 20:19	19° \mathbb{M} 44'49	
	7193 Jun 25 00:11	15° \mathbb{B}			7199 May 01 04:17	15° \mathbb{R} \mathbb{M}	
retrograde	7193 Sep 07 02:38	22° \mathbb{B} 44'54		min. Earth dist.	7199 May 02 09:39	14° \mathbb{M} 50'18	4.36983 AU
opposition	7193 Nov 06 03:55	17° \mathbb{B} 48'28	-1°14'07	opposition	7199 May 03 02:16	14° \mathbb{M} 44'48	1°11'14
min. Earth dist.	7193 Nov 06 19:56	17° \mathbb{B} 43'11	4.00156 AU	direct	7199 Jul 03 02:52	9° \mathbb{M} 43'19	
	7193 Nov 28 22:05	15° \mathbb{R} \mathbb{B}			7199 Sep 02 21:43	15° \mathbb{M}	
direct	7194 Jan 04 13:34	12° \mathbb{B} 53'15		evening set	7199 Nov 06 04:31	27° \mathbb{M} 22'01	
	7194 Feb 09 16:31	15° \mathbb{B}			7199 Nov 18 09:23	0° \mathbb{Z}	
	7194 Apr 29 20:35	0° \mathbb{I}					
evening set	7194 May 10 16:55	2° \mathbb{I} 35'56		conjunction	7199 Nov 19 11:44	0° \mathbb{Z} 14'14	0°51'53
				minimum elong	7199 Nov 19 11:43	0° \mathbb{Z} 14'14	0°51'57
conjunction	7194 May 23 18:25	5° \mathbb{I} 46'14	-0°51'26	max. Earth dist.	7199 Nov 19 22:02	0° \mathbb{Z} 19'49	6.42905 AU
minimum elong	7194 May 23 18:25	5° \mathbb{I} 46'14	0°51'30	morning rise	7199 Dec 02 17:04	3° \mathbb{Z} 05'23	
max. Earth dist.	7194 May 23 13:19	5° \mathbb{I} 43'09	5.94684 AU	retrograde	7200 Apr 01 19:50	19° \mathbb{Z} 58'47	
morning rise	7194 Jun 05 22:03	8° \mathbb{I} 57'54		opposition	7200 Jun 01 11:17	15° \mathbb{Z} 02'13	1°14'10
retrograde	7194 Oct 15 18:37	29° \mathbb{I} 39'19		min. Earth dist.	7200 Jun 01 13:47	15° \mathbb{Z} 01'25	4.47042 AU
opposition	7194 Dec 14 10:06	24° \mathbb{I} 39'25	-1°12'49	direct	7200 Aug 02 13:32	10° \mathbb{Z} 00'14	
min. Earth dist.	7194 Dec 14 00:03	24° \mathbb{I} 42'47	3.91561 AU	evening set	7200 Dec 06 07:45	27° \mathbb{Z} 16'48	
direct	7195 Feb 10 14:05	19° \mathbb{I} 45'18					
	7195 May 05 12:01	0° \mathbb{E}		conjunction	7200 Dec 19 09:31	0° \mathbb{Z} 04'28	0°47'03
evening set	7195 Jun 17 03:19	9° \mathbb{E} 49'24		minimum elong	7200 Dec 19 09:31	0° \mathbb{Z} 04'28	0°47'09
				max. Earth dist.	7200 Dec 18 15:27	29° \mathbb{Z} 54'47	6.49144 AU
conjunction	7195 Jun 30 12:21	13° \mathbb{E} 05'03	-0°40'04		7200 Dec 19 01:11	0° \mathbb{Z}	
minimum elong	7195 Jun 30 12:22	13° \mathbb{E} 05'04	0°40'09	morning rise	7201 Jan 01 08:45	2° \mathbb{Z} 50'58	
max. Earth dist.	7195 Jul 01 19:38	13° \mathbb{E} 24'09	5.91092 AU	retrograde	7201 May 01 12:43	19° \mathbb{Z} 26'18	
morning rise	7195 Jul 14 00:15	16° \mathbb{E} 22'10		opposition	7201 Jul 01 10:25	14° \mathbb{Z} 32'26	0°57'47
	7195 Sep 14 00:13	0° Ω		min. Earth dist.	7201 Jul 02 07:43	14° \mathbb{Z} 25'36	4.49183 AU
retrograde	7195 Nov 23 05:47	7° Ω 12'08		direct	7201 Sep 02 03:09	9° \mathbb{Z} 30'41	
min. Earth dist.	7196 Jan 20 09:32	2° Ω 19'23	3.93481 AU	evening set	7202 Jan 05 15:06	26° \mathbb{Z} 46'14	
opposition	7196 Jan 21 16:24	2° Ω 08'54	-0°41'22	max. Earth dist.	7202 Jan 16 17:38	29° \mathbb{Z} 09'53	6.46996 AU
	7196 Feb 07 02:17	30° \mathbb{R} \mathbb{E}					
direct	7196 Mar 19 13:18	27° \mathbb{E} 13'34		conjunction	7202 Jan 18 12:18	29° \mathbb{Z} 32'58	0°29'55
	7196 Apr 29 15:30	0° Ω		minimum elong	7202 Jan 18 12:19	29° \mathbb{Z} 32'59	0°29'59
	7196 Jul 15 12:35	15° Ω			7202 Jan 20 14:16	0° \approx	
evening set	7196 Jul 24 05:00	17° Ω 03'08		morning rise	7202 Jan 31 07:27	2° \approx 18'48	
					7202 Apr 08 13:08	15° \approx	

retrograde	7202 Jun 01 01:44	19° \approx 06'46		direct	7208 Mar 24 19:49	2° Ω 31'31	
	7202 Jul 26 00:25	15° \approx			7208 Jun 27 19:26	15° Ω	
opposition	7202 Aug 01 00:37	14° \approx 14'13	0°26'17	evening set	7208 Jul 29 10:23	22° Ω 14'50	
min. Earth dist.	7202 Aug 02 12:21	14° \approx 02'49	4.42895 AU				
direct	7202 Oct 02 16:51	9° \approx 13'14		conjunction	7208 Aug 12 01:50	25° Ω 29'05	-0°08'09
	7202 Dec 07 02:46	15° \approx		minimum elong	7208 Aug 12 01:50	25° Ω 29'05	0°08'12
evening set	7203 Feb 05 01:38	26° \approx 49'15		behind sun begin	7208 Aug 11 18:26	25° Ω 24'42	
max. Earth dist.	7203 Feb 15 13:54	29° \approx 08'34	6.36981 AU	behind sun end	7208 Aug 12 09:14	25° Ω 33'27	
				max. Earth dist.	7208 Aug 14 11:47	26° Ω 03'29	6.00329 AU
conjunction	7203 Feb 17 20:16	29° \approx 38'43	0°04'29	morning rise	7208 Aug 25 19:19	28° Ω 44'04	
minimum elong	7203 Feb 17 20:17	29° \approx 38'43	0°04'32		7208 Aug 31 04:53	0° Π	
behind sun begin	7203 Feb 17 12:28	29° \approx 34'25		asc. node	7208 Nov 21 19:51	15° Π 53'49	
behind sun end	7203 Feb 18 04:06	29° \approx 43'02		retrograde	7209 Jan 02 11:14	18° Π 37'04	
	7203 Feb 19 10:40	0° X		min. Earth dist.	7209 Mar 01 11:18	13° Π 45'41	4.07423 AU
morning rise	7203 Mar 02 13:17	2° X 27'40		opposition	7209 Mar 03 01:58	13° Π 32'32	0°11'55
desc. node	7203 Apr 21 12:09	12° X 41'01		direct	7209 Apr 30 15:57	8° Π 34'20	
retrograde	7203 Jul 03 07:44	19° X 58'16		evening set	7209 Sep 04 05:52	27° Π 34'24	
opposition	7203 Sep 02 04:52	15° X 05'34	-0°13'58		7209 Sep 14 20:48	0° $\underline{\Omega}$	
min. Earth dist.	7203 Sep 03 20:08	14° X 53'00	4.29716 AU				
direct	7203 Nov 03 02:30	10° X 06'12		conjunction	7209 Sep 17 21:49	0° $\underline{\Omega}$ 41'48	0°22'42
evening set	7204 Mar 07 15:11	28° X 21'14		minimum elong	7209 Sep 17 21:48	0° $\underline{\Omega}$ 41'47	0°22'42
	7204 Mar 14 20:00	0° Υ		max. Earth dist.	7209 Sep 20 05:15	1° $\underline{\Omega}$ 13'31	6.15542 AU
max. Earth dist.	7204 Mar 18 05:16	0° Υ 46'39	6.21618 AU	morning rise	7209 Oct 01 14:12	3° $\underline{\Omega}$ 49'04	
				retrograde	7210 Feb 04 21:07	22° $\underline{\Omega}$ 28'18	
conjunction	7204 Mar 20 09:15	1° Υ 16'32	-0°23'23	opposition	7210 Apr 05 18:37	17° $\underline{\Omega}$ 25'27	0°51'43
minimum elong	7204 Mar 20 09:14	1° Υ 16'31	0°23'24	min. Earth dist.	7210 Apr 04 12:41	17° $\underline{\Omega}$ 35'31	4.23824 AU
morning rise	7204 Apr 02 02:58	4° Υ 11'57		direct	7210 Jun 04 15:28	12° $\underline{\Omega}$ 25'03	
retrograde	7204 Aug 06 04:44	22° Υ 49'37			7210 Oct 06 03:08	0° Π	
opposition	7204 Oct 05 16:14	17° Υ 55'27	-0°52'48	evening set	7210 Oct 08 23:25	0° Π 37'25	
min. Earth dist.	7204 Oct 07 00:27	17° Υ 45'00	4.13188 AU				
direct	7204 Dec 05 08:21	12° Υ 58'19		conjunction	7210 Oct 22 11:37	3° Π 36'10	0°44'25
	7205 Apr 01 10:25	0° X		minimum elong	7210 Oct 22 11:36	3° Π 36'10	0°44'28
evening set	7205 Apr 10 03:16	2° X 02'27		max. Earth dist.	7210 Oct 23 23:12	3° Π 55'49	6.31765 AU
				morning rise	7210 Nov 04 22:41	6° Π 34'06	
conjunction	7205 Apr 22 23:51	5° X 05'41	-0°44'59		7210 Dec 15 13:14	15° Π	
minimum elong	7205 Apr 22 23:50	5° X 05'40	0°45'02	retrograde	7211 Mar 08 00:11	24° Π 07'01	
max. Earth dist.	7205 Apr 21 14:50	4° X 46'01	6.05333 AU	opposition	7211 May 07 08:03	19° Π 07'28	1°12'53
morning rise	7205 May 05 21:26	8° X 09'45		min. Earth dist.	7211 May 06 17:29	19° Π 12'17	4.38590 AU
	7205 Jun 04 15:58	15° X			7211 Jun 13 08:39	15° $\text{R}\Pi$	
retrograde	7205 Sep 12 11:43	28° X 02'17		direct	7211 Jul 07 11:21	14° Π 05'52	
opposition	7205 Nov 11 12:37	23° X 05'24	-1°15'50		7211 Jul 31 21:53	15° Π	
min. Earth dist.	7205 Nov 12 00:04	23° X 01'37	3.98614 AU		7211 Nov 02 15:46	0° X	
direct	7206 Jan 09 16:23	18° X 10'31		evening set	7211 Nov 10 13:32	1° X 41'03	
	7206 Apr 11 17:44	0° Π					
evening set	7206 May 15 22:04	7° Π 57'08		conjunction	7211 Nov 23 20:00	4° X 32'33	0°52'02
				minimum elong	7211 Nov 23 20:00	4° X 32'33	0°52'06
conjunction	7206 May 29 00:24	11° Π 08'15	-0°51'04	max. Earth dist.	7211 Nov 24 02:02	4° X 35'49	6.43991 AU
minimum elong	7206 May 29 00:25	11° Π 08'16	0°51'08	morning rise	7211 Dec 07 00:26	7° X 22'57	
max. Earth dist.	7206 May 29 00:40	11° Π 08'25	5.93846 AU	retrograde	7212 Apr 05 23:41	24° X 12'58	
morning rise	7206 Jun 11 05:08	14° Π 20'48		opposition	7212 Jun 05 15:09	19° X 16'53	1°12'58
	7206 Aug 24 00:18	0° E		min. Earth dist.	7212 Jun 05 20:51	19° X 15'02	4.47562 AU
retrograde	7206 Oct 21 05:26	5° E 05'26		direct	7212 Aug 06 20:22	14° X 14'55	
opposition	7206 Dec 19 20:27	0° E 04'57	-1°09'59		7212 Dec 03 09:44	0° Z	
min. Earth dist.	7206 Dec 19 06:53	0° E 09'31	3.91536 AU	evening set	7212 Dec 10 13:44	1° Z 30'58	
	7206 Dec 20 11:13	30° $\text{R}\Pi$					
direct	7207 Feb 15 23:38	25° Π 10'44		conjunction	7212 Dec 23 14:45	4° Z 18'24	0°45'19
	7207 Apr 12 01:29	0° E		minimum elong	7212 Dec 23 14:46	4° Z 18'25	0°45'24
evening set	7207 Jun 22 11:15	15° E 13'17		max. Earth dist.	7212 Dec 22 15:51	4° Z 06'08	6.49064 AU
				morning rise	7213 Jan 05 13:30	7° Z 04'45	
conjunction	7207 Jul 05 21:24	18° E 29'03	-0°36'56	retrograde	7213 May 05 18:08	23° Z 40'52	
minimum elong	7207 Jul 05 21:26	18° E 29'04	0°37'01	opposition	7213 Jul 05 15:38	18° Z 47'15	0°54'09
max. Earth dist.	7207 Jul 07 10:47	18° E 51'48	5.91883 AU	min. Earth dist.	7213 Jul 06 15:17	18° Z 39'40	4.48538 AU
morning rise	7207 Jul 19 10:05	21° E 46'08		direct	7213 Sep 06 08:42	13° Z 45'32	
	7207 Aug 23 21:39	0° Ω			7214 Jan 04 22:16	0° \approx	
retrograde	7207 Nov 28 11:32	12° Ω 30'44		evening set	7214 Jan 09 20:51	1° \approx 03'29	
opposition	7208 Jan 26 21:47	7° Ω 27'09	-0°35'14	max. Earth dist.	7214 Jan 20 22:23	3° \approx 26'59	6.45842 AU
min. Earth dist.	7208 Jan 25 13:37	7° Ω 38'05	3.94992 AU				

conjunction	7214 Jan 22 17:46	3° \approx 50'31	0°26'43		7219 Aug 05 23:33	0° Ω	
minimum elong	7214 Jan 22 17:47	3° \approx 50'31	0°26'47		7219 Oct 22 18:36	15° Ω	
morning rise	7214 Feb 04 12:23	6° \approx 36'38		retrograde	7219 Dec 03 13:43	17° Ω 45'25	
	7214 Mar 17 15:15	15° \approx			7220 Jan 14 10:29	15° $\mathbb{R}\Omega$	
retrograde	7214 Jun 05 10:43	23° \approx 29'17		min. Earth dist.	7220 Jan 30 14:43	12° Ω 53'19	3.96201 AU
opposition	7214 Aug 05 10:27	18° \approx 36'48	0°20'56	opposition	7220 Feb 01 01:11	12° Ω 41'36	-0°28'54
min. Earth dist.	7214 Aug 06 22:29	18° \approx 25'19	4.41305 AU	direct	7220 Mar 29 23:22	7° Ω 45'39	
	7214 Sep 06 04:07	15° $\mathbb{R}\approx$			7220 Jun 07 10:04	15° Ω	
direct	7214 Oct 07 00:16	13° \approx 36'03		evening set	7220 Aug 03 15:22	27° Ω 24'29	
	7214 Nov 06 21:40	15° \approx			7220 Aug 14 14:50	0° \mathbb{H}	
	7215 Feb 03 14:29	0° \mathbb{H}					
evening set	7215 Feb 09 10:14	1° \mathbb{H} 16'43		conjunction	7220 Aug 17 07:15	0° \mathbb{H} 38'07	-0°03'41
max. Earth dist.	7215 Feb 19 21:32	3° \mathbb{H} 36'11	6.35063 AU	minimum elong	7220 Aug 17 07:15	0° \mathbb{H} 38'07	0°03'43
				behind sun begin	7220 Aug 16 22:57	0° \mathbb{H} 33'13	
conjunction	7215 Feb 22 04:32	4° \mathbb{H} 06'50	0°00'29	behind sun end	7220 Aug 17 15:33	0° \mathbb{H} 43'00	
minimum elong	7215 Feb 22 04:31	4° \mathbb{H} 06'49	0°00'31	max. Earth dist.	7220 Aug 19 17:28	1° \mathbb{H} 12'32	6.02036 AU
behind sun begin	7215 Feb 21 20:34	4° \mathbb{H} 02'24		morning rise	7220 Aug 31 00:52	3° \mathbb{H} 52'20	
behind sun end	7215 Feb 22 12:29	4° \mathbb{H} 11'14		asc. node	7220 Oct 01 16:52	11° \mathbb{H} 02'09	
desc. node	7215 Feb 28 18:16	5° \mathbb{H} 34'43		retrograde	7221 Jan 07 07:39	23° \mathbb{H} 36'22	
morning rise	7215 Mar 06 21:34	6° \mathbb{H} 56'31		min. Earth dist.	7221 Mar 06 08:50	18° \mathbb{H} 44'35	4.09418 AU
retrograde	7215 Jul 08 02:33	24° \mathbb{H} 35'10		opposition	7221 Mar 07 22:04	18° \mathbb{H} 31'56	0°18'18
opposition	7215 Sep 06 21:48	19° \mathbb{H} 42'18	-0°19'49	direct	7221 May 05 16:37	13° \mathbb{H} 33'24	
min. Earth dist.	7215 Sep 08 13:12	19° \mathbb{H} 29'40	4.27571 AU		7221 Aug 29 06:56	0° $\underline{\Omega}$	
direct	7215 Nov 07 16:59	14° \mathbb{H} 43'11		evening set	7221 Sep 09 05:13	2° $\underline{\Omega}$ 27'28	
	7216 Feb 27 14:41	0° \mathbb{Y}					
evening set	7216 Mar 12 05:01	3° \mathbb{Y} 04'22		conjunction	7221 Sep 22 20:59	5° $\underline{\Omega}$ 33'50	0°26'28
max. Earth dist.	7216 Mar 22 21:13	5° \mathbb{Y} 31'42	6.19414 AU	minimum elong	7221 Sep 22 20:58	5° $\underline{\Omega}$ 33'50	0°26'28
				max. Earth dist.	7221 Sep 25 03:28	6° $\underline{\Omega}$ 04'52	6.17652 AU
conjunction	7216 Mar 24 23:19	6° \mathbb{Y} 00'37	-0°27'01	morning rise	7221 Oct 06 12:49	8° $\underline{\Omega}$ 39'55	
minimum elong	7216 Mar 24 23:18	6° \mathbb{Y} 00'36	0°27'01	retrograde	7222 Feb 09 08:19	27° $\underline{\Omega}$ 09'52	
morning rise	7216 Apr 06 17:17	8° \mathbb{Y} 57'05		min. Earth dist.	7222 Apr 09 02:18	22° $\underline{\Omega}$ 17'13	4.25870 AU
retrograde	7216 Aug 11 05:43	27° \mathbb{Y} 44'33		opposition	7222 Apr 10 07:23	22° $\underline{\Omega}$ 07'28	0°55'56
opposition	7216 Oct 10 16:38	22° \mathbb{Y} 50'03	-0°57'19	direct	7222 Jun 09 06:59	17° $\underline{\Omega}$ 06'55	
min. Earth dist.	7216 Oct 11 21:55	22° \mathbb{Y} 40'33	4.11094 AU		7222 Sep 19 04:35	0° \mathbb{L}	
direct	7216 Dec 10 02:54	17° \mathbb{Y} 53'17		evening set	7222 Oct 13 16:15	5° \mathbb{L} 14'06	
	7217 Mar 15 03:28	0° \mathbb{B}					
evening set	7217 Apr 15 00:07	7° \mathbb{B} 03'30		conjunction	7222 Oct 27 03:37	8° \mathbb{L} 11'47	0°46'22
				minimum elong	7222 Oct 27 03:36	8° \mathbb{L} 11'47	0°46'25
conjunction	7217 Apr 27 21:11	10° \mathbb{B} 07'46	-0°46'56	max. Earth dist.	7222 Oct 28 10:25	8° \mathbb{L} 28'45	6.33600 AU
minimum elong	7217 Apr 27 21:10	10° \mathbb{B} 07'46	0°47'00	morning rise	7222 Nov 09 13:53	11° \mathbb{L} 08'37	
max. Earth dist.	7217 Apr 26 15:49	9° \mathbb{B} 50'13	6.03516 AU		7222 Nov 27 12:58	15° \mathbb{L}	
morning rise	7217 May 10 19:35	13° \mathbb{B} 13'00		retrograde	7223 Mar 12 08:25	28° \mathbb{L} 34'41	
	7217 May 18 08:35	15° \mathbb{B}		opposition	7223 May 11 16:00	23° \mathbb{L} 35'41	1°14'08
	7217 Aug 02 19:24	0° \mathbb{I}		min. Earth dist.	7223 May 11 04:44	23° \mathbb{L} 39'24	4.40109 AU
retrograde	7217 Sep 17 19:40	3° \mathbb{I} 14'10		direct	7223 Jul 11 23:57	18° \mathbb{L} 34'03	
	7217 Nov 03 11:40	30° $\mathbb{R}\mathbb{B}$			7223 Oct 16 14:11	0° \mathbb{X}	
opposition	7217 Nov 16 19:14	28° \mathbb{B} 16'47	-1°16'54	evening set	7223 Nov 15 00:37	6° \mathbb{X} 05'53	
min. Earth dist.	7217 Nov 17 03:40	28° \mathbb{B} 14'00	3.97240 AU				
direct	7218 Jan 14 19:35	23° \mathbb{B} 22'06		conjunction	7223 Nov 28 06:22	8° \mathbb{X} 56'40	0°51'54
	7218 Mar 21 22:42	0° \mathbb{I}		minimum elong	7223 Nov 28 06:22	8° \mathbb{X} 56'40	0°51'59
evening set	7218 May 21 01:07	13° \mathbb{I} 12'19		max. Earth dist.	7223 Nov 28 09:15	8° \mathbb{X} 58'13	6.45112 AU
				morning rise	7223 Dec 11 09:54	11° \mathbb{X} 46'18	
conjunction	7218 Jun 03 04:37	16° \mathbb{I} 24'19	-0°50'16	retrograde	7224 Apr 10 03:43	28° \mathbb{X} 32'40	
minimum elong	7218 Jun 03 04:37	16° \mathbb{I} 24'20	0°50'21	opposition	7224 Jun 09 20:51	23° \mathbb{X} 37'00	1°11'22
max. Earth dist.	7218 Jun 03 11:01	16° \mathbb{I} 28'14	5.93060 AU	min. Earth dist.	7224 Jun 10 04:02	23° \mathbb{X} 34'40	4.48269 AU
morning rise	7218 Jun 16 10:20	19° \mathbb{I} 37'44		direct	7224 Aug 11 03:13	18° \mathbb{X} 35'06	
	7218 Jul 31 18:54	0° \mathbb{E}			7224 Nov 16 13:52	0° \mathbb{Z}	
retrograde	7218 Oct 26 15:37	10° \mathbb{E} 25'27		evening set	7224 Dec 14 21:00	5° \mathbb{Z} 49'47	
opposition	7218 Dec 25 04:28	5° \mathbb{E} 24'32	-1°06'36				
min. Earth dist.	7218 Dec 24 12:23	5° \mathbb{E} 29'57	3.91445 AU	conjunction	7224 Dec 27 21:21	8° \mathbb{Z} 36'51	0°43'21
direct	7219 Feb 21 05:38	0° \mathbb{E} 30'17		minimum elong	7224 Dec 27 21:22	8° \mathbb{Z} 36'52	0°43'25
evening set	7219 Jun 27 17:51	20° \mathbb{E} 32'04		max. Earth dist.	7224 Dec 26 20:39	8° \mathbb{Z} 23'36	6.49338 AU
				morning rise	7225 Jan 09 19:18	11° \mathbb{Z} 22'49	
conjunction	7219 Jul 11 04:48	23° \mathbb{E} 47'59	-0°33'32	retrograde	7225 May 09 23:53	27° \mathbb{Z} 58'32	
minimum elong	7219 Jul 11 04:49	23° \mathbb{E} 47'59	0°33'36	opposition	7225 Jul 09 22:04	23° \mathbb{Z} 05'12	0°50'15
max. Earth dist.	7219 Jul 12 20:47	24° \mathbb{E} 12'16	5.92473 AU	min. Earth dist.	7225 Jul 10 23:37	22° \mathbb{Z} 57'02	4.48373 AU
morning rise	7219 Jul 24 18:34	27° \mathbb{E} 05'14		direct	7225 Sep 10 16:21	18° \mathbb{Z} 03'38	

	7225 Dec 19 10:45	0°♊		conjunction	7231 Jul 16 09:06	28°♊58'01	-0°30'02
evening set	7226 Jan 14 02:40	5°♊22'05		minimum elong	7231 Jul 16 09:07	28°♊58'02	0°30'06
max. Earth dist.	7226 Jan 25 00:31	7°♊43'53	6.45245 AU	max. Earth dist.	7231 Jul 18 04:31	29°♊24'22	5.92699 AU
					7231 Jul 20 15:15	0°♊	
conjunction	7226 Jan 26 22:54	8°♊09'06	0°23'26	morning rise	7231 Jul 29 23:43	2°♊15'34	
minimum elong	7226 Jan 26 22:55	8°♊09'06	0°23'30		7231 Sep 25 17:04	15°♊	
morning rise	7226 Feb 08 17:12	10°♊55'17		retrograde	7231 Dec 08 16:01	22°♊53'02	
	7226 Feb 27 22:15	15°♊		min. Earth dist.	7232 Feb 04 15:17	18°♊00'48	3.96977 AU
retrograde	7226 Jun 09 20:17	27°♊50'52		opposition	7232 Feb 06 01:59	17°♊48'58	-0°22'38
opposition	7226 Aug 09 19:45	22°♊58'22	0°15'36		7232 Feb 28 04:22	15°♊♊	
min. Earth dist.	7226 Aug 11 08:43	22°♊46'34	4.40305 AU	direct	7232 Apr 04 02:14	12°♊52'40	
direct	7226 Oct 11 08:41	17°♊57'44			7232 May 09 22:47	15°♊	
desc. node	7227 Jan 10 06:05	28°♊23'27			7232 Jul 29 02:57	0°♊♊	
	7227 Jan 18 05:41	0°♊♊		evening set	7232 Aug 08 18:26	2°♊28'46	
evening set	7227 Feb 13 17:03	5°♊40'59		asc. node	7232 Aug 13 03:46	3°♊30'38	
max. Earth dist.	7227 Feb 24 04:56	8°♊01'09	6.33733 AU				
				conjunction	7232 Aug 22 10:49	5°♊42'01	0°00'46
conjunction	7227 Feb 26 11:14	8°♊31'29	-0°03'24	minimum elong	7232 Aug 22 10:49	5°♊42'00	0°00'44
minimum elong	7227 Feb 26 11:13	8°♊31'29	0°03'23	behind sun begin	7232 Aug 22 02:25	5°♊37'05	
behind sun begin	7227 Feb 26 03:18	8°♊27'05		behind sun end	7232 Aug 22 19:13	5°♊46'56	
behind sun end	7227 Feb 26 19:08	8°♊35'53		max. Earth dist.	7232 Aug 24 23:08	6°♊17'32	6.03294 AU
morning rise	7227 Mar 11 03:58	11°♊21'37		morning rise	7232 Sep 05 04:38	8°♊55'42	
retrograde	7227 Jul 12 16:11	29°♊06'18		retrograde	7233 Jan 12 02:12	28°♊32'22	
opposition	7227 Sep 11 11:53	24°♊13'15	-0°25'18	min. Earth dist.	7233 Mar 11 03:15	23°♊40'53	4.11025 AU
min. Earth dist.	7227 Sep 13 02:30	24°♊00'53	4.25985 AU	opposition	7233 Mar 12 17:01	23°♊28'05	0°24'21
direct	7227 Nov 12 03:09	19°♊14'24		direct	7233 May 10 13:25	18°♊29'15	
	7228 Feb 10 17:39	0°♊♊			7233 Aug 11 15:22	0°♊♊	
evening set	7228 Mar 16 15:37	7°♊39'53		evening set	7233 Sep 14 04:22	7°♊18'38	
max. Earth dist.	7228 Mar 27 08:26	10°♊08'11	6.17679 AU				
				conjunction	7233 Sep 27 19:40	10°♊24'01	0°29'57
conjunction	7228 Mar 29 09:51	10°♊36'51	-0°30'17	minimum elong	7233 Sep 27 19:39	10°♊24'01	0°29'58
minimum elong	7228 Mar 29 09:50	10°♊36'50	0°30'18	max. Earth dist.	7233 Sep 29 23:09	10°♊53'13	6.19462 AU
morning rise	7228 Apr 11 04:14	13°♊34'09		morning rise	7233 Oct 11 11:06	13°♊29'05	
	7228 Jul 06 13:56	0°♊♊			7234 Jan 10 12:39	0°♊♊	
retrograde	7228 Aug 16 03:17	2°♊30'02		retrograde	7234 Feb 13 20:39	1°♊50'38	
	7228 Sep 26 01:35	30°♊♊			7234 Mar 19 22:55	30°♊♊	
opposition	7228 Oct 15 13:03	27°♊35'08	-1°01'12	opposition	7234 Apr 14 20:12	26°♊48'33	0°59'41
min. Earth dist.	7228 Oct 16 16:52	27°♊26'05	4.09323 AU	min. Earth dist.	7234 Apr 13 17:21	26°♊57'33	4.27715 AU
direct	7228 Dec 14 19:53	22°♊38'33		direct	7234 Jun 14 00:41	21°♊47'44	
	7229 Feb 24 02:22	0°♊♊			7234 Aug 31 05:47	0°♊♊	
evening set	7229 Apr 19 16:22	11°♊53'51		evening set	7234 Oct 18 08:56	9°♊50'03	
conjunction	7229 May 02 14:12	14°♊59'08	-0°48'27	conjunction	7234 Oct 31 19:46	12°♊46'45	0°47'59
minimum elong	7229 May 02 14:11	14°♊59'08	0°48'31	minimum elong	7234 Oct 31 19:45	12°♊46'44	0°48'02
max. Earth dist.	7229 May 01 12:44	14°♊43'51	6.01876 AU	max. Earth dist.	7234 Nov 02 01:04	13°♊02'49	6.35339 AU
	7229 May 02 15:39	15°♊			7234 Nov 10 23:03	15°♊	
morning rise	7229 May 15 13:16	18°♊05'25		morning rise	7234 Nov 14 04:59	15°♊42'29	
	7229 Jul 08 13:04	0°♊♊			7235 Jan 30 14:43	0°♊♊	
retrograde	7229 Sep 22 23:26	8°♊14'33		retrograde	7235 Mar 16 14:09	3°♊01'43	
opposition	7229 Nov 21 20:52	3°♊16'47	-1°17'20		7235 Apr 30 18:20	30°♊♊	
min. Earth dist.	7229 Nov 22 03:09	3°♊14'42	3.95905 AU	opposition	7235 May 16 00:03	28°♊03'08	1°14'54
	7229 Dec 19 01:19	30°♊♊		min. Earth dist.	7235 May 15 14:02	28°♊06'26	4.41603 AU
direct	7230 Jan 19 17:24	28°♊22'12		direct	7235 Jul 16 10:33	23°♊01'25	
	7230 Feb 20 02:51	0°♊♊			7235 Sep 27 03:57	0°♊♊	
evening set	7230 May 26 00:09	18°♊16'18		evening set	7235 Nov 19 11:21	10°♊29'34	
conjunction	7230 Jun 08 04:30	21°♊29'11	-0°49'08	conjunction	7235 Dec 02 16:08	13°♊19'34	0°51'27
minimum elong	7230 Jun 08 04:31	21°♊29'12	0°49'14	minimum elong	7235 Dec 02 16:09	13°♊19'34	0°51'32
max. Earth dist.	7230 Jun 08 13:15	21°♊34'32	5.92148 AU	max. Earth dist.	7235 Dec 02 14:37	13°♊18'45	6.46225 AU
morning rise	7230 Jun 21 11:33	24°♊43'35		morning rise	7235 Dec 15 18:54	16°♊08'26	
	7230 Jul 13 15:59	0°♊♊			7236 Mar 01 10:49	0°♊♊	
retrograde	7230 Oct 31 18:52	15°♊34'56		retrograde	7236 Apr 14 09:36	2°♊51'11	
opposition	7230 Dec 30 07:43	10°♊33'34	-1°02'54		7236 May 28 13:27	30°♊♊	
min. Earth dist.	7230 Dec 29 12:27	10°♊40'04	3.91078 AU	opposition	7236 Jun 14 02:49	27°♊55'53	1°09'19
direct	7231 Feb 26 06:10	5°♊39'08		min. Earth dist.	7236 Jun 14 13:23	27°♊52'28	4.48904 AU
evening set	7231 Jul 02 21:03	25°♊41'44		direct	7236 Aug 15 12:53	22°♊53'58	
					7236 Oct 28 14:08	0°♊♊	

evening set	7236 Dec 19 03:49	10° Z 07'20		direct	7242 Jan 24 21:36	3° II 41'17	
max. Earth dist.	7236 Dec 30 23:16	12° Z 38'58	6.49414 AU	evening set	7242 May 31 06:36	23° II 39'36	
conjunction	7237 Jan 01 03:31	12° Z 54'07	0°41'05	conjunction	7242 Jun 13 12:14	26° II 53'26	-0°47'31
minimum elong	7237 Jan 01 03:32	12° Z 54'08	0°41'10	minimum elong	7242 Jun 13 12:15	26° II 53'27	0°47'37
morning rise	7237 Jan 14 00:49	15° Z 39'48		max. Earth dist.	7242 Jun 14 03:19	27° II 02'40	5.91370 AU
	7237 Apr 05 04:48	0° \approx		morning rise	7242 Jun 26 20:21	0° Z 08'44	
retrograde	7237 May 14 05:35	2° \approx 15'57			7242 Jun 26 05:57	0° Z	
	7237 Jun 22 11:44	30° R Z		retrograde	7242 Nov 06 06:54	21° Z 02'40	
opposition	7237 Jul 14 04:40	27° Z 22'47	0°45'59	opposition	7243 Jan 04 18:03	16° Z 00'51	-0°58'23
min. Earth dist.	7237 Jul 15 07:38	27° Z 14'09	4.47875 AU	min. Earth dist.	7243 Jan 03 20:34	16° Z 08'07	3.91098 AU
direct	7237 Sep 14 22:28	22° Z 21'17		direct	7243 Mar 03 15:41	11° Z 06'19	
	7237 Nov 30 23:23	0° \approx			7243 Jul 03 13:56	0° Ω	
evening set	7238 Jan 18 08:46	9° \approx 41'29		evening set	7243 Jul 08 06:49	1° Ω 07'46	
max. Earth dist.	7238 Jan 29 05:19	12° \approx 02'56	6.44194 AU				
conjunction	7238 Jan 31 04:39	12° \approx 28'44	0°19'55	conjunction	7243 Jul 21 19:49	4° Ω 24'06	-0°26'03
minimum elong	7238 Jan 31 04:39	12° \approx 28'44	0°19'59	minimum elong	7243 Jul 21 19:50	4° Ω 24'07	0°26'07
	7238 Feb 11 18:28	15° \approx		max. Earth dist.	7243 Jul 23 20:01	4° Ω 53'16	5.93527 AU
morning rise	7238 Feb 12 22:27	15° \approx 15'10		morning rise	7243 Aug 04 11:15	7° Ω 41'36	
	7238 May 06 08:29	0° X			7243 Sep 04 23:32	15° Ω	
retrograde	7238 Jun 14 07:23	2° X 15'29		retrograde	7243 Dec 13 20:55	28° Ω 13'00	
	7238 Jul 23 13:20	30° R \approx		min. Earth dist.	7244 Feb 09 18:03	23° Ω 21'20	3.98542 AU
opposition	7238 Aug 14 06:38	27° \approx 23'02	0°09'59	opposition	7244 Feb 11 06:58	23° Ω 08'46	-0°15'50
min. Earth dist.	7238 Aug 15 20:57	27° \approx 10'49	4.38737 AU	direct	7244 Apr 09 08:13	18° Ω 12'09	
direct	7238 Oct 15 17:32	22° \approx 22'39		asc. node	7244 Jun 22 03:55	26° Ω 12'40	
desc. node	7238 Nov 19 16:31	24° \approx 09'59			7244 Jul 10 20:39	0° P	
	7238 Dec 30 13:34	0° X		evening set	7244 Aug 14 01:28	7° P 42'20	
evening set	7239 Feb 18 01:54	10° X 10'33		conjunction	7244 Aug 27 17:50	10° P 54'36	0°05'20
max. Earth dist.	7239 Feb 28 11:45	12° X 30'18	6.31749 AU	minimum elong	7244 Aug 27 17:50	10° P 54'36	0°05'18
conjunction	7239 Mar 02 19:46	13° X 01'44	-0°07'22	behind sun begin	7244 Aug 27 09:44	10° P 49'53	
minimum elong	7239 Mar 02 19:46	13° X 01'45	0°07'21	behind sun end	7244 Aug 28 01:56	10° P 59'19	
behind sun begin	7239 Mar 02 12:27	12° X 57'40		max. Earth dist.	7244 Aug 30 05:32	11° P 29'35	6.05437 AU
behind sun end	7239 Mar 03 03:04	13° X 05'50		morning rise	7244 Sep 10 11:44	14° P 07'15	
morning rise	7239 Mar 15 12:43	15° X 52'43			7244 Nov 29 18:51	0° $\underline{\text{A}}$	
	7239 May 27 17:53	0° Y		retrograde	7245 Jan 16 20:38	3° $\underline{\text{A}}$ 32'56	
retrograde	7239 Jul 17 11:54	3° Y 46'13			7245 Mar 06 03:51	30° R P	
	7239 Sep 07 11:14	30° R X		min. Earth dist.	7245 Mar 16 00:23	28° P 41'14	4.13507 AU
opposition	7239 Sep 16 05:56	28° X 52'59	-0°30'58	opposition	7245 Mar 17 13:16	28° P 28'43	0°30'21
min. Earth dist.	7239 Sep 17 19:55	28° X 40'46	4.23696 AU	direct	7245 May 15 14:16	23° P 29'30	
direct	7239 Nov 16 17:15	23° X 54'23			7245 Jul 21 18:28	0° $\underline{\text{A}}$	
	7240 Jan 21 07:15	0° Y		evening set	7245 Sep 19 03:32	12° $\underline{\text{A}}$ 11'01	
evening set	7240 Mar 21 06:28	12° Y 26'48		conjunction	7245 Oct 02 18:29	15° $\underline{\text{A}}$ 15'04	0°33'17
max. Earth dist.	7240 Apr 01 02:46	14° Y 57'53	6.15284 AU	minimum elong	7245 Oct 02 18:27	15° $\underline{\text{A}}$ 15'03	0°33'19
conjunction	7240 Apr 03 01:10	15° Y 24'55	-0°33'35	max. Earth dist.	7245 Oct 04 21:04	15° $\underline{\text{A}}$ 43'35	6.22078 AU
minimum elong	7240 Apr 03 01:08	15° Y 24'54	0°33'36	morning rise	7245 Oct 16 08:59	18° $\underline{\text{A}}$ 18'35	
morning rise	7240 Apr 15 19:51	18° Y 23'25			7245 Dec 12 17:44	0° M	
	7240 Jun 09 04:11	0° Z		retrograde	7246 Feb 18 06:18	6° M 29'09	
retrograde	7240 Aug 21 07:27	7° Z 30'17		min. Earth dist.	7246 Apr 18 06:44	1° M 35'54	4.30225 AU
opposition	7240 Oct 20 15:23	2° Z 35'07	-1°04'59	opposition	7246 Apr 19 07:58	1° M 27'29	1°03'04
min. Earth dist.	7240 Oct 21 17:16	2° Z 26'41	4.07023 AU		7246 Apr 30 10:22	30° R $\underline{\text{A}}$	
	7240 Nov 10 12:32	30° R Y		direct	7246 Jun 18 17:04	26° $\underline{\text{A}}$ 26'29	
direct	7240 Dec 19 16:56	27° Y 38'55			7246 Aug 07 03:30	0° M	
	7241 Jan 27 07:34	0° Z		evening set	7246 Oct 22 23:39	14° M 21'49	
	7241 Apr 16 03:07	15° Z			7246 Oct 25 21:57	15° M	
evening set	7241 Apr 24 15:34	17° Z 01'20		conjunction	7246 Nov 05 09:26	17° M 17'13	0°49'19
				minimum elong	7246 Nov 05 09:25	17° M 17'13	0°49'23
conjunction	7241 May 07 14:02	20° Z 07'51	-0°49'44	max. Earth dist.	7246 Nov 06 09:16	17° M 30'14	6.37534 AU
minimum elong	7241 May 07 14:01	20° Z 07'50	0°49'47	morning rise	7246 Nov 18 17:50	20° M 11'40	
max. Earth dist.	7241 May 06 15:19	19° Z 54'10	5.99879 AU		7247 Jan 06 09:43	0° Z	
morning rise	7241 May 20 14:15	23° Z 15'32		retrograde	7247 Mar 20 18:46	7° Z 23'07	
	7241 Jun 18 14:04	0° II		opposition	7247 May 20 05:55	2° Z 24'58	1°15'15
retrograde	7241 Sep 28 09:33	13° II 33'57		min. Earth dist.	7247 May 19 23:30	2° Z 27'04	4.43341 AU
opposition	7241 Nov 27 05:47	8° II 35'42	-1°17'12		7247 Jun 08 12:56	30° R M	
min. Earth dist.	7241 Nov 27 07:46	8° II 35'03	3.94433 AU	direct	7247 Jul 20 21:36	27° M 23'05	

	7247 Sep 01 14:42	0°♌	direct	7252 Dec 24 16:28	2°♏45'46	
evening set	7247 Nov 23 19:11	14°♌47'00		7253 Mar 29 08:50	15°♏	
			evening set	7253 Apr 29 17:48	22°♏15'53	
conjunction	7247 Dec 06 23:20	17°♌36'16 0°50'44				
minimum elong	7247 Dec 06 23:21	17°♌36'16 0°50'49	conjunction	7253 May 12 17:16	25°♏23'46 -0°50'38	
max. Earth dist.	7247 Dec 06 18:41	17°♌33'46 6.47377 AU	minimum elong	7253 May 12 17:16	25°♏23'46 0°50'42	
morning rise	7247 Dec 20 01:04	20°♌24'20	max. Earth dist.	7253 May 12 01:14	25°♏14'04 5.97881 AU	
	7248 Feb 06 11:33	0°♏	morning rise	7253 May 25 18:25	28°♏32'49	
retrograde	7248 Apr 18 10:41	7°♏03'42		7253 May 31 20:07	0°♐	
opposition	7248 Jun 18 06:13	2°♏08'42 1°06'58	retrograde	7253 Oct 04 00:15	19°♐00'13	
min. Earth dist.	7248 Jun 18 18:46	2°♏04'39 4.49411 AU	opposition	7253 Dec 02 17:46	14°♐01'28 -1°16'24	
	7248 Jul 05 11:21	30°♏♌	min. Earth dist.	7253 Dec 02 16:37	14°♐01'51 3.93170 AU	
direct	7248 Aug 19 17:45	27°♌06'47	direct	7254 Jan 30 06:14	9°♐07'13	
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			conjunction	7254 Jun 18 22:51	2°♑23'11 -0°45'28	
conjunction	7249 Jan 05 07:15	17°♏06'00 0°38'40	minimum elong	7254 Jun 18 22:52	2°♑23'12 0°45'33	
minimum elong	7249 Jan 05 07:17	17°♏06'01 0°38'45	max. Earth dist.	7254 Jun 19 19:48	2°♑36'00 5.90967 AU	
morning rise	7249 Jan 18 04:01	19°♏51'34	morning rise	7254 Jul 02 08:15	5°♑39'15	
	7249 Mar 10 17:04	0°♑	retrograde	7254 Nov 11 18:33	26°♑33'18	
retrograde	7249 May 18 11:25	6°♑29'13	min. Earth dist.	7255 Jan 09 03:50	21°♑39'38 3.91629 AU	
opposition	7249 Jul 18 10:03	1°♑36'13 0°41'34	opposition	7255 Jan 10 05:18	21°♑31'02 -0°53'16	
min. Earth dist.	7249 Jul 19 16:17	1°♑26'34 4.46991 AU	direct	7255 Mar 09 01:25	16°♑36'19	
	7249 Jul 31 04:31	30°♏♏		7255 Jun 15 14:07	0°♒	
direct	7249 Sep 19 04:49	26°♏34'47	evening set	7255 Jul 13 17:44	6°♒34'34	
	7249 Nov 07 18:08	0°♑				
evening set	7250 Jan 22 13:33	13°♑57'56	conjunction	7255 Jul 27 07:21	9°♒50'35 -0°21'50	
	7250 Jan 27 07:44	15°♑	minimum elong	7255 Jul 27 07:22	9°♒50'36 0°21'54	
max. Earth dist.	7250 Feb 02 06:17	16°♑17'51 6.42661 AU	max. Earth dist.	7255 Jul 29 09:51	10°♒21'01 5.94897 AU	
			morning rise	7255 Aug 09 23:33	13°♒07'42	
conjunction	7250 Feb 04 09:04	16°♑45'37 0°16'21		7255 Aug 17 20:41	15°♒	
minimum elong	7250 Feb 04 09:05	16°♑45'37 0°16'24		7255 Nov 01 10:14	0°♓	
morning rise	7250 Feb 17 02:43	19°♑32'34	retrograde	7255 Dec 18 23:37	3°♓30'47	
	7250 Apr 10 07:06	0°♒		7256 Feb 04 19:44	30°♒♒	
retrograde	7250 Jun 18 18:36	6°♒39'22	min. Earth dist.	7256 Feb 14 21:22	28°♒39'12 4.00557 AU	
opposition	7250 Aug 18 17:29	1°♒46'50 0°04'21	opposition	7256 Feb 16 11:09	28°♒26'19 -0°08'56	
min. Earth dist.	7250 Aug 20 08:10	1°♒34'29 4.36644 AU	direct	7256 Apr 14 15:23	23°♒29'19	
	7250 Sep 01 23:38	30°♒♑	asc. node	7256 Apr 30 23:26	23°♒56'33	
desc. node	7250 Sep 29 19:17	27°♑23'55		7256 Jun 19 12:17	0°♓	
direct	7250 Oct 20 01:03	26°♑46'36	evening set	7256 Aug 19 07:09	12°♓52'13	
	7250 Dec 06 11:45	0°♒				
evening set	7251 Feb 22 11:11	14°♒40'58	conjunction	7256 Sep 01 23:43	16°♓03'22 0°09'47	
max. Earth dist.	7251 Mar 04 22:22	17°♒02'12 6.29254 AU	minimum elong	7256 Sep 01 23:42	16°♓03'22 0°09'45	
			behind sun begin	7256 Sep 01 16:54	15°♓59'25	
conjunction	7251 Mar 07 05:11	17°♒33'10 -0°11'16	behind sun end	7256 Sep 02 06:31	16°♓07'19	
minimum elong	7251 Mar 07 05:10	17°♒33'09 0°11'15	max. Earth dist.	7256 Sep 04 12:32	16°♓38'49 6.07896 AU	
behind sun begin	7251 Mar 06 23:14	17°♒29'49	morning rise	7256 Sep 15 17:13	19°♓14'43	
behind sun end	7251 Mar 07 11:06	17°♒36'29		7256 Nov 04 17:42	0°♔	
morning rise	7251 Mar 19 22:06	20°♒25'08	retrograde	7257 Jan 21 14:25	8°♔28'43	
	7251 May 04 07:52	0°♕	min. Earth dist.	7257 Mar 20 20:22	3°♔36'51 4.16137 AU	
retrograde	7251 Jul 22 09:18	8°♕29'15	opposition	7257 Mar 22 07:57	3°♔24'49 0°36'04	
opposition	7251 Sep 21 01:32	3°♕35'52 -0°36'29		7257 Apr 19 07:39	30°♒♓	
min. Earth dist.	7251 Sep 22 15:18	3°♕23'43 4.20966 AU	direct	7257 May 20 13:36	28°♓25'22	
	7251 Oct 22 09:12	30°♒♒		7257 Jun 21 02:50	0°♔	
direct	7251 Nov 21 08:29	28°♒37'37	evening set	7257 Sep 24 01:17	16°♔59'03	
	7251 Dec 21 04:05	0°♕				
evening set	7252 Mar 25 23:37	17°♕18'33	conjunction	7257 Oct 07 15:28	20°♔01'41 0°36'23	
max. Earth dist.	7252 Apr 05 21:23	19°♕51'28 6.12544 AU	minimum elong	7257 Oct 07 15:27	20°♔01'40 0°36'25	
			max. Earth dist.	7257 Oct 09 14:05	20°♔27'49 6.24645 AU	
conjunction	7252 Apr 07 18:36	20°♕17'58 -0°36'40	morning rise	7257 Oct 21 05:19	23°♔03'47	
minimum elong	7252 Apr 07 18:34	20°♕17'58 0°36'43		7257 Nov 22 15:05	0°♕	
morning rise	7252 Apr 20 14:05	23°♕17'58	retrograde	7258 Feb 22 14:30	11°♕04'10	
	7252 May 20 05:14	0°♏	opposition	7258 Apr 23 18:21	6°♕02'59 1°06'03	
retrograde	7252 Aug 26 14:08	12°♏37'11	min. Earth dist.	7258 Apr 22 19:38	6°♕10'33 4.32538 AU	
opposition	7252 Oct 25 20:43	7°♏41'38 -1°08'21	direct	7258 Jun 23 08:13	1°♕01'49	
min. Earth dist.	7252 Oct 26 18:49	7°♏34'25 4.04527 AU		7258 Oct 09 10:29	15°♕	





























































































































































































evening set	7258 Oct 27 13:15	18° \mathbb{M} 51'19			7264 May 02 15:43	0° \mathcal{B}
					7264 Jul 20 00:21	15° \mathcal{B}
conjunction	7258 Nov 09 22:21	21° \mathbb{M} 45'40	0°50'23	retrograde	7264 Sep 01 00:15	17° \mathcal{B} 48'58
minimum elong	7258 Nov 09 22:21	21° \mathbb{M} 45'39	0°50'28		7264 Oct 14 10:00	15° $\mathcal{R}\mathcal{B}$
max. Earth dist.	7258 Nov 10 18:56	21° \mathbb{M} 56'52	6.39436 AU	opposition	7264 Oct 31 03:40	12° \mathcal{B} 53'03 -1°11'15
morning rise	7258 Nov 23 05:38	24° \mathbb{M} 38'57		min. Earth dist.	7264 Oct 31 23:21	12° \mathcal{B} 46'36 4.02555 AU
	7258 Dec 18 16:45	0° \mathcal{A}		direct	7264 Dec 29 19:24	7° \mathcal{B} 57'31
retrograde	7259 Mar 24 22:46	11° \mathcal{A} 43'59			7265 Mar 08 16:29	15° \mathcal{B}
opposition	7259 May 24 11:35	6° \mathcal{A} 46'24	1°15'13	evening set	7265 May 04 21:07	27° \mathcal{B} 33'08
min. Earth dist.	7259 May 24 07:46	6° \mathcal{A} 47'39	4.44719 AU		7265 May 15 00:06	0° \mathbb{I}
direct	7259 Jul 25 06:57	1° \mathcal{A} 44'33				
evening set	7259 Nov 28 03:10	19° \mathcal{A} 05'33		conjunction	7265 May 17 21:26	0° \mathbb{I} 42'02 -0°51'09
				minimum elong	7265 May 17 21:25	0° \mathbb{I} 42'02 0°51'14
conjunction	7259 Dec 11 06:23	21° \mathcal{A} 54'12	0°49'46	max. Earth dist.	7265 May 17 10:14	0° \mathbb{I} 35'15 5.96504 AU
minimum elong	7259 Dec 11 06:24	21° \mathcal{A} 54'13	0°49'51	morning rise	7265 May 30 23:41	3° \mathbb{I} 52'12
max. Earth dist.	7259 Dec 10 19:54	21° \mathcal{A} 48'35	6.48129 AU	retrograde	7265 Oct 09 11:11	24° \mathbb{I} 25'24
morning rise	7259 Dec 24 07:30	24° \mathcal{A} 41'44		opposition	7265 Dec 08 04:35	19° \mathbb{I} 26'07 -1°14'57
	7260 Jan 18 21:43	0° \mathcal{B}		min. Earth dist.	7265 Dec 07 22:38	19° \mathbb{I} 28'06 3.92583 AU
retrograde	7260 Apr 22 15:28	11° \mathcal{B} 19'15		direct	7266 Feb 04 12:38	14° \mathbb{I} 31'56
opposition	7260 Jun 22 11:01	6° \mathcal{B} 24'38	1°04'17		7266 May 22 21:56	0° \mathcal{E}
min. Earth dist.	7260 Jun 23 03:11	6° \mathcal{B} 19'26	4.49512 AU	evening set	7266 Jun 11 00:10	4° \mathcal{E} 33'44
direct	7260 Aug 24 01:13	1° \mathcal{B} 22'43				
evening set	7260 Dec 27 13:53	18° \mathcal{B} 35'51		conjunction	7266 Jun 24 07:50	7° \mathcal{E} 48'40 -0°43'05
max. Earth dist.	7261 Jan 08 01:19	21° \mathcal{B} 03'33	6.48666 AU	minimum elong	7266 Jun 24 07:51	7° \mathcal{E} 48'41 0°43'09
				max. Earth dist.	7266 Jun 25 09:20	8° \mathcal{E} 04'15 5.91213 AU
conjunction	7261 Jan 09 12:28	21° \mathcal{B} 22'28	0°36'01	morning rise	7266 Jul 07 18:19	11° \mathcal{E} 05'04
minimum elong	7261 Jan 09 12:29	21° \mathcal{B} 22'29	0°36'06		7266 Oct 13 06:20	0° \mathcal{O}
morning rise	7261 Jan 22 08:35	24° \mathcal{B} 08'02		retrograde	7266 Nov 17 01:52	1° \mathcal{O} 56'27
	7261 Feb 19 15:39	0° \mathcal{A}			7266 Dec 21 19:13	30° $\mathcal{R}\mathcal{E}$
retrograde	7261 May 22 17:33	10° \mathcal{A} 48'25		min. Earth dist.	7267 Jan 14 09:17	27° \mathcal{E} 03'08 3.92674 AU
opposition	7261 Jul 22 17:24	5° \mathcal{A} 55'34	0°36'50	opposition	7267 Jan 15 13:13	26° \mathcal{E} 53'40 -0°47'52
min. Earth dist.	7261 Jul 24 00:39	5° \mathcal{A} 45'35	4.45815 AU	direct	7267 Mar 14 10:24	21° \mathcal{E} 58'38
direct	7261 Sep 23 10:35	0° \mathcal{A} 54'16			7267 May 26 13:18	0° \mathcal{O}
	7262 Jan 11 05:02	15° \mathcal{A}		evening set	7267 Jul 19 00:52	11° \mathcal{O} 51'54
evening set	7262 Jan 26 20:42	18° \mathcal{A} 21'17				
max. Earth dist.	7262 Feb 06 11:59	20° \mathcal{A} 40'58	6.40948 AU	conjunction	7267 Aug 01 15:15	15° \mathcal{O} 07'22 -0°17'35
				minimum elong	7267 Aug 01 15:16	15° \mathcal{O} 07'23 0°17'38
conjunction	7262 Feb 08 15:52	21° \mathcal{A} 09'28	0°12'36		7267 Aug 01 02:56	15° \mathcal{O}
minimum elong	7262 Feb 08 15:53	21° \mathcal{A} 09'29	0°12'39	max. Earth dist.	7267 Aug 03 21:37	15° \mathcal{O} 39'59 5.96633 AU
behind sun begin	7262 Feb 08 10:46	21° \mathcal{A} 06'41		morning rise	7267 Aug 15 07:43	18° \mathcal{O} 23'47
behind sun end	7262 Feb 08 20:59	21° \mathcal{A} 12'16			7267 Oct 06 22:09	0° \mathbb{N}
morning rise	7262 Feb 21 09:18	23° \mathcal{A} 57'01		retrograde	7267 Dec 23 22:58	8° \mathbb{N} 37'14
	7262 Mar 21 22:48	0° \mathcal{H}		min. Earth dist.	7268 Feb 19 21:03	3° \mathbb{N} 45'32 4.02771 AU
retrograde	7262 Jun 23 09:57	11° \mathcal{H} 10'55		opposition	7268 Feb 21 10:44	3° \mathbb{N} 32'42 -0°02'16
desc. node	7262 Aug 08 21:58	8° \mathcal{H} 05'53		asc. node	7268 Mar 11 09:05	1° \mathbb{N} 05'23
opposition	7262 Aug 23 07:21	6° \mathcal{H} 18'24	-0°01'30		7268 Mar 21 16:06	30° $\mathcal{R}\mathcal{O}$
min. Earth dist.	7262 Aug 24 23:32	6° \mathcal{H} 05'34	4.34484 AU	direct	7268 Apr 19 18:08	28° \mathcal{O} 35'20
direct	7262 Oct 24 13:17	1° \mathcal{H} 18'25			7268 May 19 00:01	0° \mathbb{N}
evening set	7263 Feb 26 23:03	19° \mathcal{H} 19'17		evening set	7268 Aug 24 08:40	17° \mathbb{N} 50'35
max. Earth dist.	7263 Mar 09 09:42	21° \mathcal{H} 41'02	6.26818 AU			
				conjunction	7268 Sep 07 00:59	21° \mathbb{N} 00'31 0°13'59
conjunction	7263 Mar 11 17:01	22° \mathcal{H} 12'26	-0°15'13	minimum elong	7268 Sep 07 00:58	21° \mathbb{N} 00'31 0°13'59
minimum elong	7263 Mar 11 17:00	22° \mathcal{H} 12'26	0°15'12	behind sun begin	7268 Sep 06 20:56	20° \mathbb{N} 58'11
behind sun begin	7263 Mar 11 14:07	22° \mathcal{H} 10'48		behind sun end	7268 Sep 07 05:00	21° \mathbb{N} 02'50
behind sun end	7263 Mar 11 19:53	22° \mathcal{H} 14'03		max. Earth dist.	7268 Sep 09 11:59	21° \mathbb{N} 34'41 6.10357 AU
morning rise	7263 Mar 24 10:15	25° \mathcal{H} 05'31		morning rise	7268 Sep 20 18:18	24° \mathbb{N} 10'35
	7263 Apr 15 14:39	0° \mathcal{Y}			7268 Oct 16 20:01	0° \mathcal{U}
retrograde	7263 Jul 27 08:07	13° \mathcal{Y} 20'08		retrograde	7269 Jan 26 02:04	13° \mathcal{U} 13'17
opposition	7263 Sep 26 00:02	8° \mathcal{Y} 26'30	-0°41'55	min. Earth dist.	7269 Mar 25 11:34	8° \mathcal{U} 21'19 4.18614 AU
min. Earth dist.	7263 Sep 27 11:18	8° \mathcal{Y} 15'07	4.18444 AU	opposition	7269 Mar 26 22:04	8° \mathcal{U} 09'40 0°41'19
direct	7263 Nov 26 01:36	3° \mathcal{Y} 28'36		direct	7269 May 25 07:45	3° \mathcal{U} 09'53
evening set	7264 Mar 30 19:02	22° \mathcal{Y} 17'07		evening set	7269 Sep 28 18:48	21° \mathcal{U} 36'36
max. Earth dist.	7264 Apr 10 22:05	24° \mathcal{Y} 53'56	6.10179 AU			
				conjunction	7269 Oct 12 08:27	24° \mathcal{U} 38'00 0°39'10
conjunction	7264 Apr 12 14:30	25° \mathcal{Y} 17'45	-0°39'35	minimum elong	7269 Oct 12 08:26	24° \mathcal{U} 37'59 0°39'12
minimum elong	7264 Apr 12 14:29	25° \mathcal{Y} 17'45	0°39'38	max. Earth dist.	7269 Oct 14 03:27	25° \mathcal{U} 01'59 6.26943 AU
morning rise	7264 Apr 25 10:28	28° \mathcal{Y} 19'00		morning rise	7269 Oct 25 21:23	27° \mathcal{U} 38'45

	7269 Nov 05 15:07	0°♄		min. Earth dist.	7275 Oct 02 08:52	13°♑05'07	4.16238 AU
	7270 Feb 09 03:03	15°♄		direct	7275 Nov 30 20:46	8°♑18'42	
retrograde	7270 Feb 26 21:36	15°♄30'17		evening set	7276 Apr 04 13:43	27°♑13'37	
	7270 Mar 16 12:34	15°♄		max. Earth dist.	7276 Apr 15 19:51	29°♑52'58	6.08148 AU
min. Earth dist.	7270 Apr 27 06:13	10°♄36'08	4.34486 AU		7276 Apr 16 07:44	0°♄	
opposition	7270 Apr 28 01:46	10°♄29'39	1°08'34				
direct	7270 Jun 27 20:46	5°♄28'21		conjunction	7276 Apr 17 09:39	0°♄15'20	-0°42'11
	7270 Sep 21 22:08	15°♄		minimum elong	7276 Apr 17 09:37	0°♄15'19	0°42'14
evening set	7270 Oct 31 23:57	23°♄13'16		morning rise	7276 Apr 30 06:19	3°♄17'45	
					7276 Jun 23 01:27	15°♄	
conjunction	7270 Nov 14 08:12	26°♄06'43	0°51'09	retrograde	7276 Sep 06 05:57	22°♄57'11	
minimum elong	7270 Nov 14 08:12	26°♄06'43	0°51'14	opposition	7276 Nov 05 08:54	18°♄00'51	-1°13'33
max. Earth dist.	7270 Nov 14 23:34	26°♄15'03	6.40887 AU	min. Earth dist.	7276 Nov 06 00:39	17°♄55'41	4.00894 AU
morning rise	7270 Nov 27 14:43	28°♄59'07			7276 Nov 30 02:36	15°♄	
	7270 Dec 02 08:10	0°♄		direct	7277 Jan 03 18:45	13°♄05'36	
retrograde	7271 Mar 29 01:37	15°♄59'23			7277 Feb 07 02:59	15°♄	
opposition	7271 May 28 15:32	11°♄02'16	1°14'51		7277 Apr 28 09:08	0°♄	
min. Earth dist.	7271 May 28 14:36	11°♄02'34	4.45624 AU	evening set	7277 May 09 22:39	2°♄45'50	
direct	7271 Jul 29 13:38	6°♄00'21					
evening set	7271 Dec 02 09:42	23°♄19'58		conjunction	7277 May 22 23:46	5°♄55'40	-0°51'15
				minimum elong	7277 May 22 23:46	5°♄55'40	0°51'20
conjunction	7271 Dec 15 12:23	26°♄08'17	0°48'34	max. Earth dist.	7277 May 22 17:20	5°♄51'45	5.95356 AU
minimum elong	7271 Dec 15 12:23	26°♄08'17	0°48'39	morning rise	7277 Jun 05 03:04	9°♄06'51	
max. Earth dist.	7271 Dec 14 23:09	26°♄01'11	6.48440 AU	retrograde	7277 Oct 14 20:28	29°♄45'14	
morning rise	7271 Dec 28 12:35	28°♄55'24		opposition	7277 Dec 13 12:55	24°♄45'26	-1°12'53
	7272 Jan 02 14:21	0°♄		min. Earth dist.	7277 Dec 13 04:01	24°♄48'25	3.92076 AU
retrograde	7272 Apr 26 18:39	15°♄32'24		direct	7278 Feb 09 19:28	19°♄51'15	
opposition	7272 Jun 26 15:14	10°♄38'10	1°01'20		7278 May 04 06:05	0°♄	
min. Earth dist.	7272 Jun 27 09:24	10°♄32'20	4.49237 AU	evening set	7278 Jun 16 06:10	9°♄53'37	
direct	7272 Aug 28 06:12	5°♄36'23					
evening set	7272 Dec 31 19:25	22°♄51'07		conjunction	7278 Jun 29 15:01	13°♄09'00	-0°40'21
max. Earth dist.	7273 Jan 12 02:22	25°♄16'48	6.47822 AU	minimum elong	7278 Jun 29 15:02	13°♄09'01	0°40'27
				max. Earth dist.	7278 Jun 30 22:23	13°♄28'07	5.91408 AU
conjunction	7273 Jan 13 17:20	25°♄37'50	0°33'12	morning rise	7278 Jul 13 02:24	16°♄25'45	
minimum elong	7273 Jan 13 17:21	25°♄37'50	0°33'17		7278 Sep 12 19:27	0°♄	
morning rise	7273 Jan 26 13:09	28°♄23'36		retrograde	7278 Nov 22 08:32	7°♄14'47	
	7273 Feb 03 01:56	0°♄		opposition	7279 Jan 20 18:39	2°♄11'40	-0°42'09
	7273 May 18 02:05	15°♄		min. Earth dist.	7279 Jan 19 13:09	2°♄21'41	3.93554 AU
retrograde	7273 May 27 02:56	15°♄07'38			7279 Feb 06 13:39	30°♄	
	7273 Jun 05 03:09	15°♄		direct	7279 Mar 19 15:48	27°♄16'24	
opposition	7273 Jul 27 01:37	10°♄14'57	0°31'56		7279 Apr 29 09:30	0°♄	
min. Earth dist.	7273 Jul 28 11:12	10°♄04'14	4.44459 AU		7279 Jul 15 09:47	15°♄	
direct	7273 Sep 27 18:57	5°♄13'49		evening set	7279 Jul 24 06:49	17°♄05'54	
	7273 Dec 24 20:49	15°♄					
evening set	7274 Jan 31 04:01	22°♄45'00		conjunction	7279 Aug 06 21:39	20°♄20'56	-0°13'14
max. Earth dist.	7274 Feb 10 18:20	25°♄04'45	6.39179 AU	minimum elong	7279 Aug 06 21:40	20°♄20'56	0°13'18
				behind sun begin	7279 Aug 06 16:56	20°♄18'07	
conjunction	7274 Feb 12 23:00	25°♄33'47	0°08'49	behind sun end	7279 Aug 07 02:25	20°♄23'46	
minimum elong	7274 Feb 12 23:01	25°♄33'48	0°08'51	max. Earth dist.	7279 Aug 09 04:55	20°♄53'57	5.98084 AU
behind sun begin	7274 Feb 12 16:09	25°♄30'02		morning rise	7279 Aug 20 14:46	23°♄36'52	
behind sun end	7274 Feb 13 05:53	25°♄37'34			7279 Sep 17 08:56	0°♄	
morning rise	7274 Feb 25 16:13	28°♄21'58		retrograde	7279 Dec 28 19:32	13°♄42'03	
	7274 Mar 05 03:52	0°♄		asc. node	7280 Jan 20 13:40	12°♄50'35	
desc. node	7274 Jun 18 10:31	15°♄34'32		min. Earth dist.	7280 Feb 24 18:31	8°♄50'38	4.04628 AU
retrograde	7274 Jun 27 23:38	15°♄43'08		opposition	7280 Feb 26 09:05	8°♄37'30	0°04'22
opposition	7274 Aug 27 21:46	10°♄50'33	-0°07'20	direct	7280 Apr 24 18:46	3°♄39'47	
min. Earth dist.	7274 Aug 29 12:50	10°♄38'04	4.32421 AU	evening set	7280 Aug 29 09:47	22°♄49'01	
direct	7274 Oct 28 23:35	5°♄50'52					
evening set	7275 Mar 03 11:16	23°♄57'46		conjunction	7280 Sep 12 02:02	25°♄57'58	0°18'06
max. Earth dist.	7275 Mar 13 23:56	26°♄21'24	6.24612 AU	minimum elong	7280 Sep 12 02:01	25°♄57'57	0°18'06
				max. Earth dist.	7280 Sep 14 11:25	26°♄31'01	6.12453 AU
conjunction	7275 Mar 16 05:13	26°♄51'48	-0°19'04	morning rise	7280 Sep 25 18:58	29°♄06'53	
minimum elong	7275 Mar 16 05:12	26°♄51'48	0°19'04		7280 Sep 29 16:18	0°♄	
morning rise	7275 Mar 28 22:34	29°♄45'51		retrograde	7281 Jan 30 17:10	17°♄59'56	
	7275 Mar 29 23:32	0°♄		min. Earth dist.	7281 Mar 30 04:48	13°♄07'28	4.20732 AU
retrograde	7275 Aug 01 08:49	18°♄10'07		opposition	7281 Mar 31 12:55	12°♄56'39	0°46'19
opposition	7275 Sep 30 22:22	13°♄16'16	-0°47'04	direct	7281 May 30 03:54	7°♄56'36	

evening set	7281 Oct 03 13:20	26°♄17'33	conjunction	7287 Mar 20 14:41	1°♃24'28 -0°22'37
			minimum elong	7287 Mar 20 14:40	1°♃24'27 0°22'38
conjunction	7281 Oct 17 02:24	29°♄17'52 0°41'42	morning rise	7287 Apr 02 08:09	4°♃19'13
minimum elong	7281 Oct 17 02:22	29°♄17'51 0°41'45	retrograde	7287 Aug 06 03:25	22°♃51'14
max. Earth dist.	7281 Oct 18 18:41	29°♄40'15 6.28917 AU	opposition	7287 Oct 05 17:14	17°♃57'04 -0°51'38
	7281 Oct 20 06:15	0°♄	min. Earth dist.	7287 Oct 07 01:30	17°♃46'38 4.14527 AU
morning rise	7281 Oct 30 14:34	2°♄17'27	direct	7287 Dec 05 10:29	12°♃59'48
	7282 Jan 03 08:57	15°♄		7288 Mar 31 16:08	0°♄
retrograde	7282 Mar 03 04:30	20°♄01'10	evening set	7288 Apr 09 04:29	1°♄59'28
opposition	7282 May 02 10:34	15°♄01'01 1°10'43	max. Earth dist.	7288 Apr 20 13:33	4°♄41'09 6.06502 AU
min. Earth dist.	7282 May 01 16:32	15°♄06'59 4.36192 AU			
	7282 May 02 13:38	15°♄	conjunction	7288 Apr 22 00:43	5°♄02'02 -0°44'21
direct	7282 Jul 02 08:22	9°♄59'36	minimum elong	7288 Apr 22 00:42	5°♄02'02 0°44'24
	7282 Aug 31 08:28	15°♄	morning rise	7288 May 04 22:01	8°♄05'27
evening set	7282 Nov 05 12:24	27°♄40'35		7288 Jun 04 02:23	15°♄
	7282 Nov 16 06:36	0°♄	retrograde	7288 Sep 11 07:47	27°♄53'07
			opposition	7288 Nov 10 09:20	22°♄56'20 -1°15'10
conjunction	7282 Nov 18 19:53	0°♄33'12 0°51'39	min. Earth dist.	7288 Nov 10 23:06	22°♄51'48 3.99451 AU
minimum elong	7282 Nov 18 19:53	0°♄33'12 0°51'43	direct	7289 Jan 08 16:00	18°♄01'15
max. Earth dist.	7282 Nov 19 07:32	0°♄39'30 6.42232 AU		7289 Apr 11 11:24	0°♄
morning rise	7282 Dec 02 01:28	3°♄24'43	evening set	7289 May 14 19:33	7°♄45'35
retrograde	7283 Apr 02 07:37	20°♄20'24			
opposition	7283 Jun 01 21:41	15°♄23'48 1°14'03	conjunction	7289 May 27 21:43	10°♄56'23 -0°50'57
min. Earth dist.	7283 Jun 01 23:32	15°♄23'12 4.46551 AU	minimum elong	7289 May 27 21:44	10°♄56'23 0°51'01
direct	7283 Aug 02 23:13	10°♄21'56	max. Earth dist.	7289 May 27 19:56	10°♄55'17 5.94270 AU
evening set	7283 Dec 06 17:46	27°♄39'38	morning rise	7289 Jun 10 01:58	14°♄08'32
	7283 Dec 17 16:24	0°♄		7289 Aug 24 05:34	0°♄
			retrograde	7289 Oct 20 02:11	4°♄51'51
conjunction	7283 Dec 19 19:38	0°♄27'28 0°47'06		7289 Dec 17 15:08	30°♄
minimum elong	7283 Dec 19 19:39	0°♄27'28 0°47'12	opposition	7289 Dec 18 16:01	29°♄51'39 -1°10'21
max. Earth dist.	7283 Dec 19 02:18	0°♄18'10 6.48909 AU	min. Earth dist.	7289 Dec 18 04:55	29°♄55'23 3.91486 AU
morning rise	7284 Jan 01 19:15	3°♄14'11	direct	7290 Feb 14 19:40	24°♄57'27
retrograde	7284 May 01 00:12	19°♄50'02		7290 Apr 12 06:02	0°♄
opposition	7284 Jun 30 21:25	14°♄56'04 0°58'02	evening set	7290 Jun 21 07:59	15°♄01'14
min. Earth dist.	7284 Jul 01 17:29	14°♄49'38 4.49258 AU			
direct	7284 Sep 01 13:28	9°♄54'20	conjunction	7290 Jul 04 17:43	18°♄17'06 -0°37'28
evening set	7285 Jan 05 01:30	27°♄09'13	minimum elong	7290 Jul 04 17:45	18°♄17'07 0°37'33
max. Earth dist.	7285 Jan 16 07:34	29°♄34'35 6.47418 AU	max. Earth dist.	7290 Jul 06 03:09	18°♄37'29 5.91356 AU
			morning rise	7290 Jul 18 06:22	21°♄34'25
conjunction	7285 Jan 17 22:59	29°♄55'53 0°30'14		7290 Aug 23 13:44	0°♄
minimum elong	7285 Jan 17 23:00	29°♄55'53 0°30'18	retrograde	7290 Nov 27 09:23	12°♄22'22
	7285 Jan 18 06:37	0°♄	opposition	7291 Jan 25 19:57	7°♄18'57 -0°36'24
morning rise	7285 Jan 30 18:05	2°♄41'34	min. Earth dist.	7291 Jan 24 12:06	7°♄29'47 3.94058 AU
	7285 Apr 05 11:59	15°♄	direct	7291 Mar 24 16:04	2°♄23'25
retrograde	7285 May 31 09:32	19°♄27'40		7291 Jun 28 04:03	15°♄
	7285 Jul 28 03:40	15°♄	evening set	7291 Jul 29 09:40	22°♄11'02
opposition	7285 Jul 31 09:59	14°♄35'04 0°26'55			
min. Earth dist.	7285 Aug 01 19:57	14°♄24'14 4.43657 AU	conjunction	7291 Aug 12 01:11	25°♄25'53 -0°08'59
direct	7285 Oct 02 02:11	9°♄34'07	minimum elong	7291 Aug 12 01:12	25°♄25'53 0°09'02
	7285 Dec 04 09:56	15°♄	behind sun begin	7291 Aug 11 18:05	25°♄21'40
evening set	7286 Feb 04 10:44	27°♄07'22	behind sun end	7291 Aug 12 08:18	25°♄30'06
max. Earth dist.	7286 Feb 14 23:24	29°♄26'38 6.38032 AU	max. Earth dist.	7291 Aug 14 09:50	25°♄59'38 5.99104 AU
			morning rise	7291 Aug 25 18:39	28°♄41'29
conjunction	7286 Feb 17 05:13	29°♄56'24 0°05'04		7291 Aug 31 08:18	0°♄
minimum elong	7286 Feb 17 05:12	29°♄56'24 0°05'07	asc. node	7291 Dec 02 12:52	17°♄06'43
behind sun begin	7286 Feb 16 21:29	29°♄52'09	retrograde	7292 Jan 02 16:46	18°♄40'26
behind sun end	7286 Feb 17 12:56	0°♄00'39	min. Earth dist.	7292 Feb 29 15:35	13°♄48'45 4.06034 AU
	7286 Feb 17 11:45	0°♄	opposition	7292 Mar 02 05:16	13°♄35'55 0°10'42
morning rise	7286 Mar 01 22:17	2°♄44'56	direct	7292 Apr 29 18:30	8°♄37'52
desc. node	7286 Apr 29 18:12	14°♄27'39	evening set	7292 Sep 03 09:36	27°♄42'57
retrograde	7286 Jul 02 13:47	20°♄11'20		7292 Sep 13 08:48	0°♄
opposition	7286 Sep 01 10:54	15°♄18'36 -0°12'56			
min. Earth dist.	7286 Sep 03 02:36	15°♄05'54 4.30974 AU	conjunction	7292 Sep 17 01:50	0°♄51'06 0°21'57
direct	7286 Nov 02 11:24	10°♄19'06	minimum elong	7292 Sep 17 01:49	0°♄51'06 0°21'57
evening set	7287 Mar 07 20:40	28°♄29'47	max. Earth dist.	7292 Sep 19 11:15	1°♄24'03 6.14125 AU
	7287 Mar 14 11:04	0°♄	morning rise	7292 Sep 30 18:26	3°♄59'07
max. Earth dist.	7287 Mar 18 10:18	0°♄54'28 6.22976 AU	retrograde	7293 Feb 04 05:44	22°♄43'57

min. Earth dist.	7293 Apr 03 18:49	17°♌51'44	4.22519 AU		7299 Feb 26 07:10	0°♑	
opposition	7293 Apr 05 02:44	17°♌41'00	0°50'50	evening set	7299 Mar 12 09:14	3°♑10'15	
direct	7293 Jun 03 20:09	12°♌40'45		max. Earth dist.	7299 Mar 22 23:20	5°♑36'00	6.20674 AU
	7293 Oct 03 23:37	0°♌					
evening set	7293 Oct 08 07:32	0°♌57'01		conjunction	7299 Mar 25 03:13	6°♑05'52	-0°26'14
				minimum elong	7299 Mar 25 03:12	6°♑05'52	0°26'14
conjunction	7293 Oct 21 19:53	3°♌56'19	0°43'54	morning rise	7299 Apr 06 21:06	9°♑01'44	
minimum elong	7293 Oct 21 19:52	3°♌56'18	0°43'58	retrograde	7299 Aug 11 05:01	27°♑44'11	
max. Earth dist.	7293 Oct 23 08:18	4°♌16'29	6.30676 AU	opposition	7299 Oct 10 16:29	22°♑49'41	-0°56'10
morning rise	7293 Nov 04 07:20	6°♌54'50		min. Earth dist.	7299 Oct 11 23:25	22°♑39'39	4.12168 AU
	7293 Dec 13 00:10	15°♌		direct	7299 Dec 10 05:34	17°♑52'39	
retrograde	7294 Mar 07 13:43	24°♌31'25			7300 Mar 15 09:26	0°♌	
opposition	7294 May 06 19:37	19°♌31'42	1°12'23	evening set	7300 Apr 15 00:25	6°♌59'35	
min. Earth dist.	7294 May 06 04:29	19°♌36'42	4.37779 AU				
	7294 Jun 19 01:32	15°♌		conjunction	7300 Apr 27 21:27	10°♌03'26	-0°46'21
direct	7294 Jul 06 22:16	14°♌30'09		minimum elong	7300 Apr 27 21:26	10°♌03'25	0°46'25
	7294 Jul 24 21:45	15°♌		max. Earth dist.	7300 Apr 26 14:24	9°♌44'54	6.04308 AU
	7294 Oct 31 01:26	0°♌		morning rise	7300 May 10 19:28	13°♌08'09	
evening set	7294 Nov 10 00:25	2°♌07'13			7300 May 18 17:04	15°♌	
					7300 Aug 03 16:01	0°♌	
conjunction	7294 Nov 23 07:10	4°♌59'01	0°51'47	retrograde	7300 Sep 17 16:41	3°♌05'59	
minimum elong	7294 Nov 23 07:10	4°♌59'01	0°51'52		7300 Nov 02 06:13	30°♌	
max. Earth dist.	7294 Nov 23 16:02	5°♌03'48	6.43513 AU	opposition	7300 Nov 16 16:07	28°♌08'48	-1°16'22
morning rise	7294 Dec 06 11:49	7°♌49'41		min. Earth dist.	7300 Nov 17 02:54	28°♌05'15	3.97655 AU
retrograde	7295 Apr 06 11:30	24°♌40'53		direct	7301 Jan 14 17:47	23°♌13'58	
opposition	7295 Jun 06 03:37	19°♌44'37	1°12'48		7301 Mar 22 15:51	0°♌	
min. Earth dist.	7295 Jun 06 07:03	19°♌43'30	4.47437 AU	evening set	7301 May 20 23:33	13°♌03'36	
direct	7295 Aug 07 06:46	14°♌42'42					
	7295 Dec 01 16:48	0°♌		conjunction	7301 Jun 03 02:38	16°♌15'27	-0°50'14
evening set	7295 Dec 11 01:26	1°♌58'29		minimum elong	7301 Jun 03 02:38	16°♌15'27	0°50'19
max. Earth dist.	7295 Dec 23 06:38	4°♌35'10	6.49311 AU	max. Earth dist.	7301 Jun 03 04:28	16°♌16'34	5.93039 AU
				morning rise	7301 Jun 16 08:16	19°♌28'47	
conjunction	7295 Dec 24 02:35	4°♌45'52	0°45'20		7301 Aug 01 09:25	0°♌	
minimum elong	7295 Dec 24 02:36	4°♌45'53	0°45'26	retrograde	7301 Oct 26 12:08	10°♌17'07	
morning rise	7296 Jan 06 01:22	7°♌32'08		min. Earth dist.	7301 Dec 24 10:43	5°♌21'30	3.90984 AU
retrograde	7296 May 05 05:31	24°♌07'04		opposition	7301 Dec 25 01:54	5°♌16'23	-1°07'04
opposition	7296 Jul 05 03:15	19°♌13'24	0°54'23	direct	7302 Feb 21 02:36	0°♌22'06	
min. Earth dist.	7296 Jul 06 01:54	19°♌06'09	4.49122 AU	evening set	7302 Jun 27 16:56	20°♌26'38	
direct	7296 Sep 05 20:53	14°♌11'44					
	7297 Jan 02 11:40	0°♌		conjunction	7302 Jul 11 03:52	23°♌42'53	-0°34'04
evening set	7297 Jan 09 07:23	1°♌27'20		minimum elong	7302 Jul 11 03:53	23°♌42'54	0°34'09
max. Earth dist.	7297 Jan 20 08:50	3°♌50'33	6.46715 AU	max. Earth dist.	7302 Jul 12 18:40	24°♌06'31	5.91660 AU
				morning rise	7302 Jul 24 17:23	27°♌00'28	
conjunction	7297 Jan 22 04:13	4°♌14'02	0°27'02		7302 Aug 06 05:52	0°♌	
minimum elong	7297 Jan 22 04:14	4°♌14'02	0°27'07		7302 Oct 22 23:21	15°♌	
morning rise	7297 Feb 03 23:02	6°♌59'51		retrograde	7302 Dec 03 17:11	17°♌45'00	
	7297 Mar 15 02:22	15°♌			7303 Jan 14 10:49	15°♌	
retrograde	7297 Jun 04 19:17	23°♌49'17		min. Earth dist.	7303 Jan 30 17:46	12°♌52'31	3.95135 AU
opposition	7297 Aug 04 19:05	18°♌56'43	0°21'37	opposition	7303 Feb 01 02:44	12°♌41'17	-0°29'59
min. Earth dist.	7297 Aug 06 06:39	18°♌45'22	4.42407 AU	direct	7303 Mar 31 01:02	7°♌45'26	
	7297 Sep 09 13:29	15°♌			7303 Jun 08 08:36	15°♌	
direct	7297 Oct 06 10:11	13°♌55'51		evening set	7303 Aug 04 17:49	27°♌28'33	
	7297 Nov 02 08:40	15°♌			7303 Aug 15 09:40	0°♌	
	7298 Feb 01 16:18	0°♌		conjunction	7303 Aug 18 09:50	0°♌42'47	-0°04'27
evening set	7298 Feb 08 18:00	1°♌32'50		minimum elong	7303 Aug 18 09:50	0°♌42'47	0°04'29
max. Earth dist.	7298 Feb 19 06:36	3°♌52'33	6.36316 AU	behind sun begin	7303 Aug 18 01:36	0°♌37'56	
				behind sun end	7303 Aug 18 18:04	0°♌47'38	
conjunction	7298 Feb 21 12:24	4°♌22'26	0°01'08	max. Earth dist.	7303 Aug 20 21:25	1°♌18'06	6.00862 AU
minimum elong	7298 Feb 21 12:24	4°♌22'26	0°01'10	morning rise	7303 Sep 01 03:33	3°♌57'37	
behind sun begin	7298 Feb 21 04:26	4°♌18'02		asc. node	7303 Oct 12 14:40	13°♌12'28	
behind sun end	7298 Feb 21 20:22	4°♌26'50		retrograde	7304 Jan 08 14:27	23°♌46'40	
morning rise	7298 Mar 06 05:12	7°♌11'34		min. Earth dist.	7304 Mar 06 13:30	18°♌55'21	4.08284 AU
desc. node	7298 Mar 09 02:54	7°♌50'00		opposition	7304 Mar 08 04:12	18°♌42'12	0°17'12
retrograde	7298 Jul 07 05:00	24°♌45'25		direct	7304 May 05 19:59	13°♌43'48	
opposition	7298 Sep 06 02:00	19°♌52'34	-0°18'43				
min. Earth dist.	7298 Sep 07 17:18	19°♌39'59	4.28888 AU		7304 Aug 28 12:44	0°♌	
direct	7298 Nov 06 22:03	14°♌53'21		evening set	7304 Sep 09 11:28	2°♌41'24	

conjunction	7304 Sep 23 03:13	5°♌48'13	0°25'46	direct	7310 Nov 12 09:59	19°♏28'28	
minimum elong	7304 Sep 23 03:11	5°♌48'12	0°25'46		7311 Feb 09 21:43	0°♏	
max. Earth dist.	7304 Sep 25 09:51	6°♌19'24	6.16660 AU	evening set	7311 Mar 17 22:53	7°♏53'31	
morning rise	7304 Oct 06 19:21	8°♌54'50		max. Earth dist.	7311 Mar 28 16:09	10°♏21'57	6.17906 AU
retrograde	7305 Feb 09 18:40	27°♌28'23					
min. Earth dist.	7305 Apr 09 11:26	22°♌35'39	4.25089 AU	conjunction	7311 Mar 30 17:20	10°♏50'27	-0°29'41
opposition	7305 Apr 10 16:59	22°♌25'43	0°55'05	minimum elong	7311 Mar 30 17:19	10°♏50'26	0°29'42
direct	7305 Jun 09 16:07	17°♌25'09		morning rise	7311 Apr 12 11:33	13°♏47'39	
	7305 Sep 17 23:11	0°♌			7311 Jul 06 02:09	0°♏	
evening set	7305 Oct 14 00:42	5°♌34'00		retrograde	7311 Aug 17 08:55	2°♏42'25	
					7311 Sep 29 03:03	30°♏	
conjunction	7305 Oct 27 12:25	8°♌31'59	0°45'53	opposition	7311 Oct 16 18:23	27°♏47'41	-1°00'23
minimum elong	7305 Oct 27 12:24	8°♌31'59	0°45'56	min. Earth dist.	7311 Oct 17 23:14	27°♏38'19	4.09468 AU
max. Earth dist.	7305 Oct 28 22:44	8°♌50'53	6.33081 AU	direct	7311 Dec 16 01:26	22°♏51'06	
morning rise	7305 Nov 09 22:45	11°♌29'05			7312 Feb 24 05:53	0°♏	
	7305 Nov 26 06:44	15°♌		evening set	7312 Apr 19 23:28	12°♏06'32	
retrograde	7306 Mar 12 18:01	28°♌56'35					
opposition	7306 May 12 02:42	23°♌57'20	1°13'37	conjunction	7312 May 02 21:05	15°♏11'46	-0°48'02
min. Earth dist.	7306 May 11 13:20	24°♌01'45	4.39842 AU	minimum elong	7312 May 02 21:04	15°♏11'45	0°48'06
direct	7306 Jul 12 08:44	18°♌55'41		max. Earth dist.	7312 May 01 17:11	14°♏55'02	6.01920 AU
	7306 Oct 15 03:40	0°♏			7312 May 02 01:28	15°♏	
evening set	7306 Nov 15 10:08	6°♏27'31		morning rise	7312 May 15 20:13	18°♏18'02	
					7312 Jul 07 17:44	0°♏	
conjunction	7306 Nov 28 15:54	9°♏18'20	0°51'40	retrograde	7312 Sep 23 04:09	8°♏26'46	
minimum elong	7306 Nov 28 15:54	9°♏18'20	0°51'45	opposition	7312 Nov 22 02:05	3°♏29'08	-1°16'57
max. Earth dist.	7306 Nov 28 19:19	9°♏20'10	6.45076 AU	min. Earth dist.	7312 Nov 22 08:14	3°♏27'06	3.95844 AU
morning rise	7306 Dec 11 19:43	12°♏08'03			7312 Dec 21 10:42	30°♏	
retrograde	7307 Apr 11 15:03	28°♏54'17		direct	7313 Jan 19 22:51	28°♏34'32	
opposition	7307 Jun 11 07:21	23°♏58'27	1°11'12		7313 Feb 18 06:17	0°♏	
min. Earth dist.	7307 Jun 11 14:43	23°♏56'04	4.48403 AU	evening set	7313 May 26 07:00	18°♏29'27	
direct	7307 Aug 12 14:38	18°♏56'29					
	7307 Nov 16 04:42	0°♏		conjunction	7313 Jun 08 11:21	21°♏42'22	-0°49'04
evening set	7307 Dec 16 06:09	6°♏10'14		minimum elong	7313 Jun 08 11:22	21°♏42'23	0°49'10
max. Earth dist.	7307 Dec 28 06:30	8°♏44'19	6.49594 AU	max. Earth dist.	7313 Jun 08 20:29	21°♏47'57	5.92008 AU
				morning rise	7313 Jun 21 18:02	24°♏56'43	
conjunction	7307 Dec 29 06:41	8°♏57'17	0°43'23		7313 Jul 12 23:30	0°♏	
minimum elong	7307 Dec 29 06:42	8°♏57'17	0°43'28	retrograde	7313 Nov 01 02:17	15°♏48'41	
morning rise	7308 Jan 11 04:48	11°♏43'11		opposition	7313 Dec 30 14:12	10°♏47'27	-1°03'07
retrograde	7308 May 10 08:33	28°♏18'02		min. Earth dist.	7313 Dec 29 20:11	10°♏53'31	3.90867 AU
opposition	7308 Jul 10 07:14	23°♏24'33	0°50'31	direct	7314 Feb 26 13:26	5°♏53'06	
min. Earth dist.	7308 Jul 11 07:47	23°♏16'41	4.48712 AU	evening set	7314 Jul 03 04:02	25°♏56'37	
direct	7308 Sep 11 00:37	18°♏22'54					
	7308 Dec 18 06:20	0°♏		conjunction	7314 Jul 16 15:54	29°♏12'57	-0°30'20
evening set	7309 Jan 14 11:15	5°♏40'16		minimum elong	7314 Jul 16 15:56	29°♏12'58	0°30'25
max. Earth dist.	7309 Jan 25 10:31	8°♏02'39	6.45633 AU	max. Earth dist.	7314 Jul 18 11:50	29°♏39'37	5.92445 AU
					7314 Jul 19 21:26	0°♏	
conjunction	7309 Jan 27 07:43	8°♏27'11	0°23'46	morning rise	7314 Jul 30 06:23	2°♏30'34	
minimum elong	7309 Jan 27 07:43	8°♏27'12	0°23'50		7314 Sep 24 14:58	15°♏	
morning rise	7309 Feb 09 02:01	11°♏13'16		retrograde	7314 Dec 08 23:54	23°♏09'10	
	7309 Feb 26 20:55	15°♏		min. Earth dist.	7315 Feb 04 22:11	18°♏17'17	3.96725 AU
retrograde	7309 Jun 10 03:53	28°♏07'30		opposition	7315 Feb 06 09:47	18°♏05'11	-0°23'18
opposition	7309 Aug 10 03:16	23°♏15'02	0°16'16		7315 Mar 03 00:23	15°♏	
min. Earth dist.	7309 Aug 11 16:42	23°♏03'06	4.40700 AU	direct	7315 Apr 05 08:53	13°♏09'00	
direct	7309 Oct 11 16:32	18°♏14'21			7315 May 08 18:42	15°♏	
	7310 Jan 17 06:25	0°♏			7315 Jul 29 05:02	0°♏	
desc. node	7310 Jan 18 03:10	0°♏10'36		evening set	7315 Aug 10 01:56	2°♏45'47	
evening set	7310 Feb 14 01:06	5°♏56'41		asc. node	7315 Aug 21 03:37	5°♏22'14	
max. Earth dist.	7310 Feb 24 10:59	8°♏15'40	6.34095 AU				
				conjunction	7315 Aug 23 18:01	5°♏59'02	0°00'13
conjunction	7310 Feb 26 19:12	8°♏47'04	-0°02'51	minimum elong	7315 Aug 23 18:02	5°♏59'03	0°00'12
minimum elong	7310 Feb 26 19:13	8°♏47'04	0°02'50	behind sun begin	7315 Aug 23 09:42	5°♏54'10	
behind sun begin	7310 Feb 26 11:16	8°♏42'39		behind sun end	7315 Aug 24 02:21	6°♏03'56	
behind sun end	7310 Feb 27 03:10	8°♏51'29		max. Earth dist.	7315 Aug 26 05:19	6°♏34'00	6.03054 AU
morning rise	7310 Mar 11 12:13	11°♏37'08		morning rise	7315 Sep 06 11:53	9°♏12'51	
retrograde	7310 Jul 12 23:15	29°♏20'26		retrograde	7316 Jan 13 10:31	28°♏50'42	
opposition	7310 Sep 11 18:05	24°♏27'27	-0°24'24	min. Earth dist.	7316 Mar 11 12:12	23°♏59'08	4.10813 AU
min. Earth dist.	7310 Sep 13 09:10	24°♏14'54	4.26284 AU	opposition	7316 Mar 13 01:56	23°♏46'18	0°23'31

direct	7316 May 10 22:16	18°  47'31		direct	7321 Oct 16 00:51	22°  40'20	
	7316 Aug 10 11:26	0° 		desc. node	7321 Nov 27 03:51	25°  13'47	
evening set	7316 Sep 14 11:56	7°  37'07			7321 Dec 29 06:09	0° 	
conjunction	7316 Sep 28 03:23	10°  42'36	0°29'23	evening set	7322 Feb 18 10:51	10°  28'25	
minimum elong	7316 Sep 28 03:21	10°  42'35	0°29'25	max. Earth dist.	7322 Feb 28 21:59	12°  48'47	6.31812 AU
max. Earth dist.	7316 Sep 30 09:03	11°  13'03	6.19305 AU	conjunction	7322 Mar 03 04:59	13°  19'40	-0°06'50
morning rise	7316 Oct 11 18:39	13°  47'41		minimum elong	7322 Mar 03 04:58	13°  19'40	0°06'49
	7317 Jan 07 20:59	0° 		behind sun begin	7322 Mar 02 21:33	13°  15'31	
retrograde	7317 Feb 14 05:34	2°  10'02		behind sun end	7322 Mar 03 12:24	13°  23'49	
	7317 Mar 23 09:36	30°  R 		morning rise	7322 Mar 15 21:51	16°  10'36	
min. Earth dist.	7317 Apr 14 01:54	27°  17'10	4.27616 AU		7322 May 26 01:06	0° 	
opposition	7317 Apr 15 05:42	27°  17'52	0°58'58	retrograde	7322 Jul 17 20:00	4°  Y03'33	
direct	7317 Jun 14 09:15	22°  17'08			7322 Sep 10 02:13	30°  R 	
	7317 Aug 29 19:32	0° 		opposition	7322 Sep 16 13:30	29°  10'25	-0°30'08
evening set	7317 Oct 18 16:49	10°  18'09'10		min. Earth dist.	7322 Sep 18 04:23	28°  15'56	4.23771 AU
				direct	7322 Nov 17 01:34	24°  11'49	
conjunction	7317 Nov 01 03:33	13°  18'05'53	0°47'34		7323 Jan 19 22:16	0° 	
minimum elong	7317 Nov 01 03:32	13°  18'05'52	0°47'38	evening set	7323 Mar 22 15:44	12°  Y44'27	
max. Earth dist.	7317 Nov 02 08:14	13°  18'21'36	6.35285 AU	max. Earth dist.	7323 Apr 02 10:15	15°  Y14'31	6.15380 AU
	7317 Nov 09 19:54	15° 					
morning rise	7317 Nov 14 13:06	16°  18'01'43		conjunction	7323 Apr 04 10:19	15°  Y42'31	-0°33'03
	7318 Jan 28 11:11	0° 		minimum elong	7323 Apr 04 10:17	15°  Y42'30	0°33'04
retrograde	7318 Mar 16 23:51	3°  R  21'22		morning rise	7323 Apr 17 05:10	18°  Y41'01	
	7318 May 03 19:29	30°  R 			7323 Jun 08 23:48	0° 	
opposition	7318 May 16 09:36	28°  18'22'36	1°14'28	retrograde	7323 Aug 22 14:10	7°  R47'04	
min. Earth dist.	7318 May 15 23:53	28°  18'25'48	4.41591 AU	opposition	7323 Oct 21 22:39	2°  R51'58	-1°04'17
direct	7318 Jul 16 20:38	23°  18'20'50		min. Earth dist.	7323 Oct 22 23:55	2°  R43'44	4.07166 AU
	7318 Sep 25 14:32	0° 			7323 Nov 14 10:26	30°  R  Y	
evening set	7318 Nov 19 19:23	10°  R  48'36		direct	7323 Dec 21 00:30	27°  Y55'43	
					7324 Jan 26 04:33	0° 	
conjunction	7318 Dec 03 00:30	13°  R  38'40	0°51'17		7324 Apr 15 07:33	15°  R	
minimum elong	7318 Dec 03 00:31	13°  R  38'40	0°51'22	evening set	7324 Apr 25 00:23	17°  R  17'59	
max. Earth dist.	7318 Dec 03 00:50	13°  R  38'51	6.46250 AU				
morning rise	7318 Dec 16 03:17	16°  R  27'34		conjunction	7324 May 07 22:53	20°  R  24'24	-0°49'23
	7319 Feb 28 06:50	0° 		minimum elong	7324 May 07 22:53	20°  R  24'24	0°49'27
retrograde	7319 Apr 15 17:18	3°  R  10'20		max. Earth dist.	7324 May 07 01:31	20°  R  11'32	6.00087 AU
	7319 Jun 01 14:58	30°  R  R 		morning rise	7324 May 20 22:47	23°  R  31'54	
opposition	7319 Jun 15 11:47	28°  R  14'53	1°09'16		7324 Jun 17 17:32	0° 	
min. Earth dist.	7319 Jun 15 21:09	28°  R  11'52	4.48956 AU	retrograde	7324 Sep 28 17:16	13°  R  48'54	
direct	7319 Aug 16 20:45	23°  R  12'57		opposition	7324 Nov 27 12:37	8°  R  50'46	-1°16'55
	7319 Oct 28 02:01	0° 		min. Earth dist.	7324 Nov 27 15:43	8°  R  49'44	3.94699 AU
evening set	7319 Dec 20 12:14	10°  R  25'58		direct	7325 Jan 25 06:08	3°  R  56'21	
max. Earth dist.	7320 Jan 01 07:32	12°  R  25'30	6.49486 AU	evening set	7325 May 31 14:12	23°  R  53'41	
conjunction	7320 Jan 02 11:59	13°  R  12'46	0°41'12	conjunction	7325 Jun 13 19:31	27°  R  07'15	-0°47'32
minimum elong	7320 Jan 02 12:01	13°  R  12'47	0°41'17	minimum elong	7325 Jun 13 19:32	27°  R  07'16	0°47'38
morning rise	7320 Jan 15 09:31	15°  R  25'8'30		max. Earth dist.	7325 Jun 14 10:03	27°  R  16'08	5.91663 AU
	7320 Apr 02 20:43	0° 			7325 Jun 25 14:43	0° 	
retrograde	7320 May 14 15:07	2°  R  34'26		morning rise	7325 Jun 27 03:26	0° 	
	7320 Jun 25 15:51	30°  R  R 		retrograde	7325 Nov 06 11:45	21°  R  14'32	
opposition	7320 Jul 14 13:17	27°  R  41'11	0°46'21	min. Earth dist.	7326 Jan 04 01:54	16°  R  20'17	3.91392 AU
min. Earth dist.	7320 Jul 15 17:08	27°  R  32'17	4.47951 AU	opposition	7326 Jan 05 00:02	16°  R  12'49	-0°58'42
direct	7320 Sep 15 08:03	22°  R  39'36		direct	7326 Mar 03 21:26	11°  R  18'20	
	7320 Nov 29 13:57	0° 			7326 Jul 03 01:39	0° 	
evening set	7321 Jan 18 17:20	9°  R  59'38		evening set	7326 Jul 08 12:35	1°  R  18'29	
max. Earth dist.	7321 Jan 29 12:54	12°  R  20'30	6.44261 AU				
				conjunction	7326 Jul 22 01:07	4°  R  34'31	-0°26'28
conjunction	7321 Jan 31 13:25	12°  R  46'55	0°20'17	minimum elong	7326 Jul 22 01:09	4°  R  34'32	0°26'33
minimum elong	7321 Jan 31 13:26	12°  R  46'56	0°20'22	max. Earth dist.	7326 Jul 23 23:32	5°  R  02'36	5.93762 AU
	7321 Feb 10 17:53	15° 		morning rise	7326 Aug 04 16:21	7°  R  51'47	
morning rise	7321 Feb 13 07:29	15°  R  33'25			7326 Sep 04 10:32	15°  R 	
	7321 May 04 02:40	0° 		retrograde	7326 Dec 14 01:16	28°  R  22'31	
retrograde	7321 Jun 14 15:18	2°  R  33'22		min. Earth dist.	7327 Feb 10 00:07	23°  R  30'40	3.98659 AU
	7321 Jul 26 14:40	30°  R 		opposition	7327 Feb 11 12:31	23°  R  18'16	-0°16'41
opposition	7321 Aug 14 14:32	27°  R  40'51	0°10'40	direct	7327 Apr 10 14:41	18°  R  21'41	
min. Earth dist.	7321 Aug 16 04:22	27°  R  28'46	4.38800 AU	asc. node	7327 Jul 01 05:30	27°  R  54'18	

	7327 Jul 11 08:16	0°♎		direct	7332 Sep 19 12:53	26°♊56'40	
evening set	7327 Aug 15 05:48	7°♎51'19			7332 Nov 05 06:14	0°♊	
				evening set	7333 Jan 22 23:38	14°♊20'11	
conjunction	7327 Aug 28 22:11	11°♎03'32	0°04'41		7333 Jan 26 01:00	15°♊	
minimum elong	7327 Aug 28 22:11	11°♎03'33	0°04'39	max. Earth dist.	7333 Feb 02 17:45	16°♊40'49	6.42729 AU
behind sun begin	7327 Aug 28 14:00	10°♎58'46					
behind sun end	7327 Aug 29 06:23	11°♎08'20		conjunction	7333 Feb 04 19:17	17°♊07'54	0°16'43
max. Earth dist.	7327 Aug 31 10:50	11°♎39'06	6.05421 AU	minimum elong	7333 Feb 04 19:17	17°♊07'55	0°16'46
morning rise	7327 Sep 11 15:46	14°♎16'08		morning rise	7333 Feb 17 13:05	19°♊54'54	
	7327 Nov 29 20:29	0°♎			7333 Apr 08 14:20	0°♋	
retrograde	7328 Jan 18 03:05	3°♎42'34		retrograde	7333 Jun 19 04:51	7°♋01'10	
	7328 Mar 07 15:31	30°♋♎		opposition	7333 Aug 19 02:45	2°♋08'43	0°05'01
min. Earth dist.	7328 Mar 16 06:41	28°♎50'49	4.13350 AU	min. Earth dist.	7333 Aug 20 18:00	1°♋56'11	4.36877 AU
opposition	7328 Mar 17 19:17	28°♎38'26	0°29'23		7333 Sep 05 11:17	30°♋♊	
direct	7328 May 15 19:48	23°♎39'23		desc. node	7333 Oct 06 19:18	27°♊25'31	
	7328 Jul 21 00:21	0°♎		direct	7333 Oct 20 11:54	27°♊08'28	
evening set	7328 Sep 19 08:06	12°♎21'19			7333 Dec 03 23:48	0°♋	
				evening set	7334 Feb 22 21:12	15°♋02'12	
conjunction	7328 Oct 02 22:54	15°♎25'28	0°32'41	max. Earth dist.	7334 Mar 05 07:40	17°♋22'57	6.29641 AU
minimum elong	7328 Oct 02 22:53	15°♎25'27	0°32'43				
max. Earth dist.	7328 Oct 05 00:35	15°♎53'29	6.21781 AU	conjunction	7334 Mar 07 15:13	17°♋54'17	-0°10'46
morning rise	7328 Oct 16 13:39	18°♎29'12		minimum elong	7334 Mar 07 15:13	17°♋54'16	0°10'44
	7328 Dec 11 20:25	0°♌		behind sun begin	7334 Mar 07 09:03	17°♋50'49	
retrograde	7329 Feb 18 12:49	6°♌41'36		behind sun end	7334 Mar 07 21:23	17°♋57'44	
opposition	7329 Apr 19 15:00	1°♌39'53	1°02'21	morning rise	7334 Mar 20 08:18	20°♋46'09	
min. Earth dist.	7329 Apr 18 13:39	1°♌48'21	4.29837 AU		7334 May 02 23:02	0°♌	
	7329 May 02 08:36	30°♌♎		retrograde	7334 Jul 22 15:45	8°♌48'21	
direct	7329 Jun 18 23:00	26°♎38'58		opposition	7334 Sep 21 09:21	3°♌54'58	-0°35'40
	7329 Aug 05 18:49	0°♌		min. Earth dist.	7334 Sep 22 22:00	3°♌43'10	4.21502 AU
evening set	7329 Oct 23 05:21	14°♌35'28			7334 Oct 26 13:10	30°♌♋	
	7329 Oct 25 02:32	15°♌		direct	7334 Nov 21 16:36	28°♋56'40	
					7334 Dec 17 19:16	0°♌	
conjunction	7329 Nov 05 15:28	17°♌31'09	0°48'57	evening set	7335 Mar 27 08:14	17°♌35'53	
minimum elong	7329 Nov 05 15:27	17°♌31'09	0°49'01	max. Earth dist.	7335 Apr 07 07:22	20°♌09'20	6.13196 AU
max. Earth dist.	7329 Nov 06 16:52	17°♌45'02	6.37103 AU				
morning rise	7329 Nov 18 23:56	20°♌25'52		conjunction	7335 Apr 09 03:13	20°♌35'01	-0°36'09
	7330 Jan 05 06:41	0°♌♋		minimum elong	7335 Apr 09 03:11	20°♌35'00	0°36'12
retrograde	7330 Mar 21 03:05	7°♌39'16		morning rise	7335 Apr 21 22:25	23°♌34'38	
opposition	7330 May 20 14:06	2°♌41'07	1°14'56		7335 May 20 07:51	0°♌	
min. Earth dist.	7330 May 20 06:59	2°♌43'27	4.42902 AU	retrograde	7335 Aug 27 20:38	12°♌50'42	
	7330 Jun 11 06:34	30°♌♌		opposition	7335 Oct 27 02:25	7°♌55'15	-1°07'39
direct	7330 Jul 21 04:42	27°♌39'22		min. Earth dist.	7335 Oct 28 01:49	7°♌47'37	4.05240 AU
	7330 Aug 30 11:46	0°♌		direct	7335 Dec 26 00:33	2°♌59'19	
evening set	7330 Nov 24 02:51	15°♌04'36			7336 Mar 28 17:37	15°♌	
				evening set	7336 Apr 30 00:03	22°♌26'55	
conjunction	7330 Dec 07 07:04	17°♌54'06	0°50'39				
minimum elong	7330 Dec 07 07:05	17°♌54'06	0°50'44	conjunction	7336 May 12 23:14	25°♌34'22	-0°50'20
max. Earth dist.	7330 Dec 07 01:33	17°♌51'08	6.46966 AU	minimum elong	7336 May 12 23:13	25°♌34'21	0°50'24
morning rise	7330 Dec 20 09:15	20°♌42'29		max. Earth dist.	7336 May 12 05:32	25°♌23'41	5.98580 AU
	7331 Feb 05 01:02	0°♌		morning rise	7336 May 26 00:11	28°♌42'58	
retrograde	7331 Apr 19 21:19	7°♌23'25			7336 May 31 08:58	0°♌	
opposition	7331 Jun 19 15:34	2°♌28'23	1°07'03	retrograde	7336 Oct 04 01:25	19°♌06'52	
min. Earth dist.	7331 Jun 20 04:23	2°♌24'15	4.49066 AU	opposition	7336 Dec 02 20:43	14°♌08'13	-1°16'13
	7331 Jul 09 17:34	30°♌♋		min. Earth dist.	7336 Dec 02 19:27	14°♌08'39	3.93793 AU
direct	7331 Aug 21 03:02	27°♌26'29		direct	7337 Jan 30 09:20	9°♌13'55	
	7331 Oct 02 16:44	0°♌		evening set	7337 Jun 05 19:30	29°♌13'08	
evening set	7331 Dec 24 17:16	14°♌40'09			7337 Jun 09 00:35	0°♌	
max. Earth dist.	7332 Jan 05 09:45	17°♌10'22	6.48988 AU				
				conjunction	7337 Jun 19 01:47	2°♌27'17	-0°45'37
conjunction	7332 Jan 06 16:38	17°♌26'58	0°38'50	minimum elong	7337 Jun 19 01:49	2°♌27'18	0°45'42
minimum elong	7332 Jan 06 16:39	17°♌26'58	0°38'55	max. Earth dist.	7337 Jun 19 20:44	2°♌38'51	5.91439 AU
morning rise	7332 Jan 19 13:31	20°♌12'42		morning rise	7337 Jul 02 10:48	5°♌42'56	
	7332 Mar 09 00:31	0°♌		retrograde	7337 Nov 11 19:19	26°♌35'07	
retrograde	7332 May 18 20:20	6°♌51'06		min. Earth dist.	7338 Jan 09 06:44	21°♌41'09	3.91874 AU
opposition	7332 Jul 18 19:40	1°♌58'03	0°41'58	opposition	7338 Jan 10 07:05	21°♌32'54	-0°53'52
min. Earth dist.	7332 Jul 20 00:20	1°♌48'54	4.46897 AU	direct	7338 Mar 09 04:55	16°♌38'09	
	7332 Aug 03 15:35	30°♌♋			7338 Jun 15 13:37	0°♌	

evening set	7338 Jul 13 18:58	6°♏35'33		minimum elong	7344 Jan 10 22:35	21°♁44'23	0°36'21
				max. Earth dist.	7344 Jan 09 12:13	21°♁25'53	6.48776 AU
conjunction	7338 Jul 27 08:28	9°♏51'27 -0°22'26		morning rise	7344 Jan 23 19:00	24°♁30'00	
minimum elong	7338 Jul 27 08:29	9°♏51'28 0°22'30			7344 Feb 19 06:06	0°♁	
max. Earth dist.	7338 Jul 29 11:09	10°♏22'00 5.94904 AU		retrograde	7344 May 23 04:22	11°♁09'44	
morning rise	7338 Aug 10 00:13	13°♏08'24		opposition	7344 Jul 23 03:20	6°♁16'52	0°37'22
	7338 Aug 17 20:10	15°♏		min. Earth dist.	7344 Jul 24 10:12	6°♁07'01	4.46261 AU
	7338 Nov 01 07:55	0°♏		direct	7344 Sep 23 21:48	1°♁15'37	
retrograde	7338 Dec 19 02:36	3°♏32'08			7345 Jan 10 00:18	15°♁	
	7339 Feb 05 02:09	30°♏♏		evening set	7345 Jan 27 06:05	18°♁40'55	
min. Earth dist.	7339 Feb 15 00:40	28°♏40'17 4.00323 AU		max. Earth dist.	7345 Feb 06 23:13	21°♁01'21	6.41725 AU
opposition	7339 Feb 16 13:29	28°♏27'45 -0°10'01					
direct	7339 Apr 15 17:26	23°♏30'50		conjunction	7345 Feb 09 01:27	21°♁28'53	0°13'07
asc. node	7339 May 11 08:28	24°♏36'42		minimum elong	7345 Feb 09 01:27	21°♁28'53	0°13'10
	7339 Jun 20 10:19	0°♏		behind sun begin	7345 Feb 08 20:41	21°♁26'17	
evening set	7339 Aug 20 08:40	12°♏54'35		behind sun end	7345 Feb 09 06:13	21°♁31'29	
				morning rise	7345 Feb 21 18:51	24°♁16'08	
conjunction	7339 Sep 03 01:00	16°♏05'53 0°09'01			7345 Mar 20 19:56	0°♏	
minimum elong	7339 Sep 03 00:59	16°♏05'52 0°09'00		retrograde	7345 Jun 23 14:53	11°♏26'54	
behind sun begin	7339 Sep 02 17:52	16°♏01'45		desc. node	7345 Aug 18 01:53	7°♏16'32	
behind sun end	7339 Sep 03 08:06	16°♏10'00		opposition	7345 Aug 23 14:27	6°♏34'21	-0°00'34
max. Earth dist.	7339 Sep 05 12:26	16°♏40'32 6.07421 AU		min. Earth dist.	7345 Aug 25 04:50	6°♏22'06	4.35566 AU
morning rise	7339 Sep 16 18:38	19°♏17'28		direct	7345 Oct 24 20:36	1°♏34'22	
	7339 Nov 05 11:33	0°♏		evening set	7346 Feb 27 05:58	19°♏31'33	
retrograde	7340 Jan 22 17:40	8°♏34'04		max. Earth dist.	7346 Mar 09 17:40	21°♏53'30	6.28116 AU
min. Earth dist.	7340 Mar 21 00:03	3°♏42'17 4.15489 AU					
opposition	7340 Mar 22 12:02	3°♏30'06 0°35'02		conjunction	7346 Mar 11 23:48	22°♏24'09	-0°14'30
	7340 Apr 20 09:31	30°♏♏		minimum elong	7346 Mar 11 23:47	22°♏24'08	0°14'29
direct	7340 May 20 16:12	28°♏30'41		behind sun begin	7346 Mar 11 20:04	22°♏22'03	
	7340 Jun 20 06:46	0°♏		behind sun end	7346 Mar 12 03:30	22°♏26'14	
evening set	7340 Sep 24 04:32	17°♏06'30		morning rise	7346 Mar 24 16:49	25°♏16'37	
					7346 Apr 15 02:05	0°♏	
conjunction	7340 Oct 07 18:56	20°♏09'31 0°35'47		retrograde	7346 Jul 27 10:40	13°♏25'57	
minimum elong	7340 Oct 07 18:54	20°♏09'30 0°35'48		opposition	7346 Sep 26 02:49	8°♏32'23	-0°40'44
max. Earth dist.	7340 Oct 09 17:56	20°♏35'55 6.23889 AU		min. Earth dist.	7346 Sep 27 15:23	8°♏20'37	4.19845 AU
morning rise	7340 Oct 21 08:51	23°♏12'00		direct	7346 Nov 26 07:55	3°♏34'23	
	7340 Nov 22 01:00	0°♏		evening set	7347 Mar 31 21:32	22°♏18'07	
retrograde	7341 Feb 22 22:50	11°♏15'40		max. Earth dist.	7347 Apr 11 22:14	24°♏53'04	6.11541 AU
min. Earth dist.	7341 Apr 23 02:31	6°♏21'58 4.31742 AU					
opposition	7341 Apr 24 01:10	6°♏14'26 1°05'23		conjunction	7347 Apr 13 16:46	25°♏18'03	-0°38'52
direct	7341 Jun 23 14:17	1°♏13'21		minimum elong	7347 Apr 13 16:44	25°♏18'02	0°38'54
	7341 Oct 08 14:31	15°♏		morning rise	7347 Apr 26 12:30	28°♏18'35	
evening set	7341 Oct 27 19:16	19°♏05'11			7347 May 03 18:54	0°♏	
					7347 Jul 21 15:47	15°♏	
conjunction	7341 Nov 10 04:33	21°♏59'57 0°50'03		retrograde	7347 Sep 01 19:39	17°♏42'46	
minimum elong	7341 Nov 10 04:33	21°♏59'57 0°50'08			7347 Oct 14 10:31	15°♏♏	
max. Earth dist.	7341 Nov 11 01:28	22°♏11'20 6.38663 AU		opposition	7347 Nov 01 01:15	12°♏46'57	-1°10'20
morning rise	7341 Nov 23 12:17	24°♏53'43		min. Earth dist.	7347 Nov 01 21:32	12°♏40'19	4.03738 AU
	7341 Dec 17 17:19	0°♏		direct	7347 Dec 30 18:05	7°♏51'16	
retrograde	7342 Mar 25 08:10	12°♏01'35			7348 Mar 09 08:15	15°♏	
opposition	7342 May 24 20:33	7°♏03'53 1°14'59		evening set	7348 May 04 19:13	27°♏23'11	
min. Earth dist.	7342 May 24 15:49	7°♏05'25 4.44055 AU			7348 May 15 15:05	0°♏	
direct	7342 Jul 25 14:06	2°♏02'04					
evening set	7342 Nov 28 11:46	19°♏24'57		conjunction	7348 May 17 19:08	0°♏31'31	-0°50'50
				minimum elong	7348 May 17 19:08	0°♏31'31	0°50'55
conjunction	7342 Dec 11 15:23	22°♏13'55 0°49'44		max. Earth dist.	7348 May 17 05:12	0°♏23'05	5.97370 AU
minimum elong	7342 Dec 11 15:24	22°♏13'55 0°49'49		morning rise	7348 May 30 20:59	3°♏41'07	
max. Earth dist.	7342 Dec 11 07:45	22°♏09'49 6.47664 AU		retrograde	7348 Oct 09 05:24	24°♏11'00	
morning rise	7342 Dec 24 16:36	25°♏01'43		opposition	7348 Dec 07 23:15	19°♏11'55	-1°14'57
	7343 Jan 17 14:18	0°♏		min. Earth dist.	7348 Dec 07 19:57	19°♏13'01	3.92996 AU
retrograde	7343 Apr 24 01:29	11°♏40'39		direct	7349 Feb 04 09:49	14°♏17'39	
opposition	7343 Jun 23 21:15	6°♏46'01 1°04'26			7349 May 23 18:54	0°♏	
min. Earth dist.	7343 Jun 24 11:41	6°♏41'23 4.49306 AU		evening set	7349 Jun 10 19:36	4°♏18'52	
direct	7343 Aug 25 10:15	1°♏44'16					
evening set	7343 Dec 28 23:59	18°♏57'45		conjunction	7349 Jun 24 03:06	7°♏33'43	-0°43'26
				minimum elong	7349 Jun 24 03:07	7°♏33'44	0°43'32
conjunction	7344 Jan 10 22:34	21°♏44'22 0°36'15		max. Earth dist.	7349 Jun 25 02:58	7°♏48'18	5.91148 AU

morning rise	7349 Jul 07 13:07	10° \mathfrak{D} 50'00			7355 Jan 01 01:21	0° \mathfrak{Z}	
	7349 Oct 15 07:26	0° \mathfrak{Q}		retrograde	7355 Apr 28 06:04	15° \mathfrak{Z} 57'45	
retrograde	7349 Nov 16 23:03	1° \mathfrak{Q} 42'40		opposition	7355 Jun 28 02:37	11° \mathfrak{Z} 03'21	1°01'26
	7349 Dec 19 10:11	30° \mathfrak{R} \mathfrak{E}		min. Earth dist.	7355 Jun 28 19:22	10° \mathfrak{Z} 57'57	4.49475 AU
min. Earth dist.	7350 Jan 14 06:55	26° \mathfrak{E} 48'57	3.92138 AU	direct	7355 Aug 29 17:05	6° \mathfrak{Z} 01'31	
opposition	7350 Jan 15 08:53	26° \mathfrak{E} 40'10	-0°48'53	evening set	7356 Jan 02 05:41	23° \mathfrak{Z} 14'50	
direct	7350 Mar 14 05:31	21° \mathfrak{E} 45'15		max. Earth dist.	7356 Jan 13 16:11	25° \mathfrak{Z} 42'10	6.48414 AU
	7350 May 27 10:42	0° \mathfrak{Q}					
evening set	7350 Jul 18 21:25	11° \mathfrak{Q} 41'26		conjunction	7356 Jan 15 03:51	26° \mathfrak{Z} 01'23	0°33'26
				minimum elong	7356 Jan 15 03:52	26° \mathfrak{Z} 01'24	0°33'31
conjunction	7350 Aug 01 11:33	14° \mathfrak{Q} 57'18	-0°18'25	morning rise	7356 Jan 27 23:34	28° \mathfrak{Z} 46'55	
minimum elong	7350 Aug 01 11:34	14° \mathfrak{Q} 57'19	0°18'29		7356 Feb 02 16:40	0° \mathfrak{A}	
	7350 Aug 01 16:03	15° \mathfrak{Q}			7356 May 09 21:08	15° \mathfrak{A}	
max. Earth dist.	7350 Aug 03 14:58	15° \mathfrak{Q} 28'13	5.95682 AU	retrograde	7356 May 27 10:15	15° \mathfrak{A} 28'34	
morning rise	7350 Aug 15 04:10	18° \mathfrak{Q} 14'13			7356 Jun 14 00:09	15° \mathfrak{R} \mathfrak{A}	
	7350 Oct 07 10:21	0° \mathfrak{M}		opposition	7356 Jul 27 10:48	10° \mathfrak{A} 35'48	0°32'29
retrograde	7350 Dec 23 22:30	8° \mathfrak{M} 32'43		min. Earth dist.	7356 Jul 28 18:44	10° \mathfrak{A} 25'37	4.45361 AU
min. Earth dist.	7351 Feb 19 20:30	3° \mathfrak{M} 41'13	4.01530 AU	direct	7356 Sep 28 04:17	5° \mathfrak{A} 34'39	
opposition	7351 Feb 21 10:28	3° \mathfrak{M} 28'17	-0°03'37		7356 Dec 23 13:39	15° \mathfrak{A}	
	7351 Mar 21 20:46	30° \mathfrak{R} \mathfrak{Q}		evening set	7357 Jan 31 12:28	23° \mathfrak{A} 02'36	
asc. node	7351 Mar 23 16:55	29° \mathfrak{Q} 49'44		max. Earth dist.	7357 Feb 11 02:50	25° \mathfrak{A} 22'02	6.40322 AU
direct	7351 Apr 20 15:35	28° \mathfrak{Q} 31'03					
	7351 May 20 15:13	0° \mathfrak{M}		conjunction	7357 Feb 13 07:18	25° \mathfrak{A} 50'54	0°09'21
evening set	7351 Aug 25 09:04	17° \mathfrak{M} 51'10		minimum elong	7357 Feb 13 07:18	25° \mathfrak{A} 50'54	0°09'24
				behind sun begin	7357 Feb 13 00:38	25° \mathfrak{A} 47'15	
conjunction	7351 Sep 08 01:37	21° \mathfrak{M} 01'51	0°13'07	behind sun end	7357 Feb 13 13:58	25° \mathfrak{A} 54'33	
minimum elong	7351 Sep 08 01:36	21° \mathfrak{M} 01'50	0°13'06	morning rise	7357 Feb 26 00:35	28° \mathfrak{A} 38'37	
behind sun begin	7351 Sep 07 20:46	20° \mathfrak{M} 59'02			7357 Mar 04 05:58	0° \mathfrak{H}	
behind sun end	7351 Sep 08 06:26	21° \mathfrak{M} 04'38		desc. node	7357 Jun 27 19:48	15° \mathfrak{H} 55'26	
max. Earth dist.	7351 Sep 10 12:27	21° \mathfrak{M} 36'02	6.08966 AU	retrograde	7357 Jun 28 05:09	15° \mathfrak{H} 55'27	
morning rise	7351 Sep 21 19:04	24° \mathfrak{M} 12'39		opposition	7357 Aug 28 03:13	11° \mathfrak{H} 02'49	-0°06'19
	7351 Oct 17 14:44	0° \mathfrak{A}		min. Earth dist.	7357 Aug 29 18:55	10° \mathfrak{H} 50'07	4.33716 AU
retrograde	7352 Jan 27 09:40	13° \mathfrak{A} 21'21		direct	7357 Oct 29 07:52	6° \mathfrak{H} 02'58	
min. Earth dist.	7352 Mar 25 16:56	8° \mathfrak{A} 29'14	4.17200 AU	evening set	7358 Mar 03 16:10	24° \mathfrak{H} 05'32	
opposition	7352 Mar 27 03:10	8° \mathfrak{A} 17'40	0°40'14	max. Earth dist.	7358 Mar 14 04:09	26° \mathfrak{H} 28'18	6.25959 AU
direct	7352 May 25 11:51	3° \mathfrak{A} 18'00					
evening set	7352 Sep 28 23:48	21° \mathfrak{A} 49'12		conjunction	7358 Mar 16 10:06	26° \mathfrak{H} 58'59	-0°18'17
				minimum elong	7358 Mar 16 10:05	26° \mathfrak{H} 58'58	0°18'18
conjunction	7352 Oct 12 13:45	24° \mathfrak{A} 51'18	0°38'32	morning rise	7358 Mar 29 03:16	29° \mathfrak{H} 52'24	
minimum elong	7352 Oct 12 13:44	24° \mathfrak{A} 51'17	0°38'34		7358 Mar 29 16:43	0° \mathfrak{Y}	
max. Earth dist.	7352 Oct 14 10:58	25° \mathfrak{A} 16'35	6.25629 AU	retrograde	7358 Aug 01 07:13	18° \mathfrak{Y} 11'13	
morning rise	7352 Oct 26 03:04	27° \mathfrak{A} 52'46		opposition	7358 Sep 30 22:58	13° \mathfrak{Y} 17'23	-0°45'50
	7352 Nov 04 18:16	0° \mathfrak{M}		min. Earth dist.	7358 Oct 02 09:29	13° \mathfrak{Y} 06'14	4.17535 AU
	7353 Feb 04 16:03	15° \mathfrak{M}		direct	7358 Nov 30 22:17	8° \mathfrak{Y} 19'39	
retrograde	7353 Feb 27 06:45	15° \mathfrak{M} 48'57		evening set	7359 Apr 05 14:36	27° \mathfrak{Y} 10'20	
	7353 Mar 21 19:00	15° \mathfrak{R} \mathfrak{M}		max. Earth dist.	7359 Apr 16 18:34	29° \mathfrak{Y} 48'01	6.09268 AU
opposition	7353 Apr 28 10:51	10° \mathfrak{M} 48'07	1°07'55		7359 Apr 17 14:51	0° \mathfrak{B}	
min. Earth dist.	7353 Apr 27 13:09	10° \mathfrak{M} 55'20	4.33381 AU				
direct	7353 Jun 28 02:44	5° \mathfrak{M} 46'53		conjunction	7359 Apr 18 10:13	0° \mathfrak{B} 11'26	-0°41'29
	7353 Sep 20 11:28	15° \mathfrak{M}		minimum elong	7359 Apr 18 10:11	0° \mathfrak{B} 11'25	0°41'31
evening set	7353 Nov 01 08:42	23° \mathfrak{M} 34'41		morning rise	7359 May 01 06:37	3° \mathfrak{B} 13'14	
					7359 Jun 24 15:17	15° \mathfrak{B}	
conjunction	7353 Nov 14 17:15	26° \mathfrak{M} 28'34	0°50'49	retrograde	7359 Sep 07 02:11	22° \mathfrak{B} 48'04	
minimum elong	7353 Nov 14 17:14	26° \mathfrak{M} 28'34	0°50'53	opposition	7359 Nov 06 05:36	17° \mathfrak{B} 51'48	-1°12'43
max. Earth dist.	7353 Nov 15 10:53	26° \mathfrak{M} 38'09	6.40084 AU	min. Earth dist.	7359 Nov 06 23:40	17° \mathfrak{B} 45'51	4.01698 AU
morning rise	7353 Nov 28 00:02	29° \mathfrak{M} 21'23			7359 Nov 29 13:08	15° \mathfrak{R} \mathfrak{B}	
	7353 Nov 30 23:48	0° \mathfrak{X}		direct	7360 Jan 04 18:23	12° \mathfrak{B} 56'19	
retrograde	7354 Mar 29 14:14	16° \mathfrak{X} 23'58			7360 Feb 09 12:24	15° \mathfrak{B}	
opposition	7354 May 29 02:49	11° \mathfrak{X} 26'42	1°14'34		7360 Apr 29 01:56	0° \mathfrak{I}	
min. Earth dist.	7354 May 29 00:47	11° \mathfrak{X} 27'22	4.45149 AU	evening set	7360 May 09 20:11	2° \mathfrak{I} 34'21	
direct	7354 Jul 30 00:22	6° \mathfrak{X} 24'49					
evening set	7354 Dec 02 20:20	23° \mathfrak{X} 45'10		conjunction	7360 May 22 21:10	5° \mathfrak{I} 43'53	-0°51'01
				minimum elong	7360 May 22 21:10	5° \mathfrak{I} 43'53	0°51'06
conjunction	7354 Dec 15 23:07	26° \mathfrak{X} 33'34	0°48'30	max. Earth dist.	7360 May 22 12:28	5° \mathfrak{I} 38'36	5.95770 AU
minimum elong	7354 Dec 15 23:08	26° \mathfrak{X} 33'35	0°48'35	morning rise	7360 Jun 05 00:03	8° \mathfrak{I} 54'42	
max. Earth dist.	7354 Dec 15 11:08	26° \mathfrak{X} 27'09	6.48322 AU	retrograde	7360 Oct 14 16:47	29° \mathfrak{I} 31'37	
morning rise	7354 Dec 28 23:41	29° \mathfrak{X} 20'51		opposition	7360 Dec 13 08:16	24° \mathfrak{I} 32'05	-1°13'02

min. Earth dist.	7360 Dec 13 01:38	24° Π 34'18	3.92045 AU	evening set	7366 Dec 07 02:03	27° X 58'21	
direct	7361 Feb 09 15:10	19° Π 37'52			7366 Dec 16 13:57	0° Z	
	7361 May 05 03:15	0° E					
evening set	7361 Jun 16 03:04	9° E 41'25		conjunction	7366 Dec 20 04:04	0° Z 46'10	0°47'04
				minimum elong	7366 Dec 20 04:05	0° Z 46'10	0°47'10
conjunction	7361 Jun 29 11:31	12° E 56'52	-0°40'46	max. Earth dist.	7366 Dec 19 12:29	0° Z 37'48	6.49080 AU
minimum elong	7361 Jun 29 11:32	12° E 56'53	0°40'53	morning rise	7367 Jan 02 03:45	3° Z 32'50	
max. Earth dist.	7361 Jun 30 14:49	13° E 13'33	5.90931 AU	retrograde	7367 May 02 08:42	20° Z 07'58	
morning rise	7361 Jul 12 22:51	16° E 13'49		opposition	7367 Jul 02 05:51	15° Z 13'55	0°58'12
	7361 Sep 13 14:49	0° Ω		min. Earth dist.	7367 Jul 03 01:47	15° Z 07'32	4.49563 AU
retrograde	7361 Nov 22 06:06	7° Ω 05'48		direct	7367 Sep 02 22:22	10° Z 12'09	
min. Earth dist.	7362 Jan 19 11:23	2° Ω 12'47	3.92705 AU	evening set	7368 Jan 06 09:15	27° Z 25'52	
opposition	7362 Jan 20 16:35	2° Ω 02'52	-0°43'11	max. Earth dist.	7368 Jan 17 14:13	29° Z 50'34	6.47804 AU
	7362 Feb 05 06:59	30° R E			7368 Jan 18 07:43	0° \approx	
direct	7362 Mar 19 12:14	27° E 07'42					
	7362 Apr 30 08:32	0° Ω		conjunction	7368 Jan 19 06:44	0° \approx 12'25	0°30'31
	7362 Jul 15 17:32	15° Ω		minimum elong	7368 Jan 19 06:45	0° \approx 12'26	0°30'35
evening set	7362 Jul 24 05:53	17° Ω 01'07		morning rise	7368 Feb 01 02:07	2° \approx 58'02	
					7368 Apr 04 01:51	15° \approx	
conjunction	7362 Aug 06 20:47	20° Ω 16'42	-0°14'02	retrograde	7368 May 31 17:03	19° \approx 42'47	
minimum elong	7362 Aug 06 20:48	20° Ω 16'43	0°14'06		7368 Jul 30 09:53	15° R \approx	
behind sun begin	7362 Aug 06 16:49	20° Ω 14'20		opposition	7368 Jul 31 16:48	14° \approx 50'08	0°27'31
behind sun end	7362 Aug 07 00:48	20° Ω 19'06		min. Earth dist.	7368 Aug 02 02:58	14° \approx 39'14	4.44080 AU
max. Earth dist.	7362 Aug 09 03:30	20° Ω 49'29	5.96996 AU	direct	7368 Oct 02 09:24	9° \approx 49'03	
morning rise	7362 Aug 20 13:48	23° Ω 33'10			7368 Dec 03 03:13	15° \approx	
	7362 Sep 17 12:40	0° P		evening set	7369 Feb 04 17:32	27° \approx 21'11	
retrograde	7362 Dec 29 00:23	13° P 43'42		max. Earth dist.	7369 Feb 15 07:03	29° \approx 40'42	6.38455 AU
asc. node	7363 Jan 31 04:06	11° P 56'23			7369 Feb 16 17:58	0° H	
min. Earth dist.	7363 Feb 24 22:05	8° P 52'03	4.03435 AU				
opposition	7363 Feb 26 11:53	8° P 39'11	0°03'08	conjunction	7369 Feb 17 12:18	0° H 10'08	0°05'36
direct	7363 Apr 25 20:58	3° P 41'36		minimum elong	7369 Feb 17 12:18	0° H 10'08	0°05'40
evening set	7363 Aug 30 12:49	22° P 55'03		behind sun begin	7369 Feb 17 04:40	0° H 05'56	
				behind sun end	7369 Feb 17 19:57	0° H 14'20	
conjunction	7363 Sep 13 05:16	26° P 04'36	0°17'18	morning rise	7369 Mar 02 05:18	2° H 58'30	
minimum elong	7363 Sep 13 05:14	26° P 04'36	0°17'18	desc. node	7369 May 08 04:29	15° H 56'37	
max. Earth dist.	7363 Sep 15 16:46	26° P 38'58	6.11289 AU	retrograde	7369 Jul 02 18:08	20° H 23'15	
morning rise	7363 Sep 26 22:22	29° P 14'09		opposition	7369 Sep 01 15:47	15° H 30'35	-0°12'01
	7363 Sep 30 06:38	0° $\underline{\text{A}}$		min. Earth dist.	7369 Sep 03 07:34	15° H 17'52	4.31368 AU
retrograde	7364 Jan 31 23:55	18° $\underline{\text{A}}$ 11'45		direct	7369 Nov 02 15:52	10° H 31'01	
min. Earth dist.	7364 Mar 30 09:30	13° $\underline{\text{A}}$ 19'53	4.19721 AU	evening set	7370 Mar 08 02:54	28° H 40'56	
opposition	7364 Mar 31 19:42	13° $\underline{\text{A}}$ 08'21	0°45'18		7370 Mar 13 21:52	0° Y	
direct	7364 May 30 07:49	8° $\underline{\text{A}}$ 08'25		max. Earth dist.	7370 Mar 18 14:54	1° Y 04'36	6.23300 AU
evening set	7364 Oct 03 19:40	26° $\underline{\text{A}}$ 32'07					
				conjunction	7370 Mar 20 20:48	1° Y 35'28	-0°21'58
conjunction	7364 Oct 17 08:48	29° $\underline{\text{A}}$ 32'49	0°41'06	minimum elong	7370 Mar 20 20:47	1° Y 35'28	0°21'59
minimum elong	7364 Oct 17 08:47	29° $\underline{\text{A}}$ 32'48	0°41'09	morning rise	7370 Apr 02 14:23	4° Y 30'07	
max. Earth dist.	7364 Oct 19 01:56	29° $\underline{\text{A}}$ 55'43	6.28137 AU	retrograde	7370 Aug 06 08:26	23° Y 00'42	
	7364 Oct 19 09:38	0° M		opposition	7370 Oct 05 21:03	18° Y 06'37	-0°50'41
morning rise	7364 Oct 30 21:15	2° M 32'49		min. Earth dist.	7370 Oct 07 06:32	17° Y 55'46	4.14747 AU
	7365 Jan 01 21:25	15° M		direct	7370 Dec 05 15:44	13° Y 09'11	
retrograde	7365 Mar 03 15:11	20° M 19'07			7371 Apr 01 05:35	0° B	
opposition	7365 May 02 19:49	15° M 18'46	1°10'04	evening set	7371 Apr 10 09:54	2° B 08'45	
min. Earth dist.	7365 May 02 01:24	15° M 24'52	4.35668 AU	max. Earth dist.	7371 Apr 21 18:33	4° B 50'05	6.06614 AU
	7365 May 05 04:25	15° R M					
direct	7365 Jul 02 17:30	10° M 17'21		conjunction	7371 Apr 23 06:16	5° B 11'17	-0°43'49
	7365 Aug 29 16:26	15° M		minimum elong	7371 Apr 23 06:15	5° B 11'17	0°43'52
evening set	7365 Nov 05 20:17	27° M 59'08		morning rise	7371 May 06 03:23	8° B 14'36	
	7365 Nov 15 04:08	0° X			7371 Jun 04 15:05	15° B	
				retrograde	7371 Sep 12 11:30	28° B 01'25	
conjunction	7365 Nov 19 04:02	0° X 51'56	0°51'18	opposition	7371 Nov 11 12:43	23° B 04'50	-1°14'36
minimum elong	7365 Nov 19 04:01	0° X 51'56	0°51'23	min. Earth dist.	7371 Nov 12 03:23	23° B 00'00	3.99456 AU
max. Earth dist.	7365 Nov 19 18:09	0° X 59'35	6.41971 AU	direct	7372 Jan 09 19:29	18° B 09'43	
morning rise	7365 Dec 02 09:48	3° X 43'38			7372 Apr 11 00:23	0° I	
retrograde	7366 Apr 02 15:59	20° X 39'54		evening set	7372 May 15 00:57	7° I 54'40	
opposition	7366 Jun 02 07:02	15° X 43'03	1°13'47				
min. Earth dist.	7366 Jun 02 07:07	15° X 43'01	4.46523 AU	conjunction	7372 May 28 02:50	11° I 05'26	-0°50'46
direct	7366 Aug 03 06:48	10° X 41'08		minimum elong	7372 May 28 02:50	11° I 05'26	0°50'51

max. Earth dist.	7372 May 27 22:29	11°♊02'48	5.94158 AU	retrograde	7378 Apr 06 20:43	24°♊57'02	
morning rise	7372 Jun 10 07:05	14°♊17'36		opposition	7378 Jun 06 11:52	20°♊00'39	1°12'38
	7372 Aug 23 10:47	0°♊		min. Earth dist.	7378 Jun 06 15:55	19°♊59'20	4.47514 AU
retrograde	7372 Oct 20 05:19	5°♊01'13		direct	7378 Aug 07 15:54	14°♊58'40	
opposition	7372 Dec 18 20:11	0°♊01'07	-1°10'25		7378 Nov 30 18:16	0°♊	
min. Earth dist.	7372 Dec 18 08:54	0°♊04'54	3.91267 AU	evening set	7378 Dec 11 08:34	2°♊13'56	
	7372 Dec 18 23:30	30°♋♊					
direct	7373 Feb 14 23:52	25°♊06'54		conjunction	7378 Dec 24 09:57	5°♊01'22	0°45'23
	7373 Apr 11 11:26	0°♊		minimum elong	7378 Dec 24 09:58	5°♊01'23	0°45'28
evening set	7373 Jun 21 13:24	15°♊11'51		max. Earth dist.	7378 Dec 23 14:13	4°♊50'48	6.49412 AU
				morning rise	7379 Jan 06 08:55	7°♊47'40	
conjunction	7373 Jul 04 23:06	18°♊27'47	-0°37'42	retrograde	7379 May 06 12:40	24°♊22'20	
minimum elong	7373 Jul 04 23:07	18°♊27'48	0°37'47	opposition	7379 Jul 06 10:45	19°♊28'32	0°54'38
max. Earth dist.	7373 Jul 06 09:04	18°♊48'31	5.91078 AU	min. Earth dist.	7379 Jul 07 08:33	19°♊21'32	4.49241 AU
morning rise	7373 Jul 18 11:22	21°♊45'06		direct	7379 Sep 07 03:16	14°♊26'46	
	7373 Aug 22 22:29	0°♋			7380 Jan 02 14:59	0°♋	
retrograde	7373 Nov 27 16:17	12°♋03'19		evening set	7380 Jan 10 14:34	1°♋42'01	
min. Earth dist.	7374 Jan 24 19:06	7°♋41'28	3.93741 AU	max. Earth dist.	7380 Jan 21 17:20	4°♋05'50	6.46846 AU
opposition	7374 Jan 26 01:59	7°♋30'58	-0°37'01				
direct	7374 Mar 24 23:15	2°♋35'30		conjunction	7380 Jan 23 11:39	4°♋28'45	0°27'22
	7374 Jun 27 10:58	15°♋		minimum elong	7380 Jan 23 11:40	4°♋28'45	0°27'26
evening set	7374 Jul 29 15:38	22°♋24'03		morning rise	7380 Feb 05 06:31	7°♋14'33	
					7380 Mar 14 03:10	15°♋	
conjunction	7374 Aug 12 07:03	25°♋39'00	-0°09'30	retrograde	7380 Jun 05 02:22	24°♋03'31	
minimum elong	7374 Aug 12 07:03	25°♋39'01	0°09'34	opposition	7380 Aug 05 01:52	19°♋10'58	0°22'16
behind sun begin	7374 Aug 12 00:08	25°♋34'54		min. Earth dist.	7380 Aug 06 13:50	18°♋59'29	4.42534 AU
behind sun end	7374 Aug 12 13:58	25°♋43'07			7380 Sep 13 01:48	15°♋	
max. Earth dist.	7374 Aug 14 16:56	26°♋13'30	5.98785 AU	direct	7380 Oct 06 17:04	14°♋10'04	
morning rise	7374 Aug 26 00:25	28°♋54'43			7380 Oct 30 10:00	15°♋	
	7374 Aug 30 15:19	0°♌			7381 Jan 31 21:43	0°♌	
asc. node	7374 Dec 09 21:42	17°♌58'12		evening set	7381 Feb 09 01:31	1°♌46'56	
retrograde	7375 Jan 02 23:44	18°♌55'01		max. Earth dist.	7381 Feb 19 12:18	4°♌05'39	6.36421 AU
min. Earth dist.	7375 Mar 01 21:43	14°♌03'43	4.05753 AU				
opposition	7375 Mar 03 12:41	13°♌50'28	0°09'50	conjunction	7381 Feb 21 19:54	4°♌36'32	0°01'41
direct	7375 May 01 00:24	8°♌52'29		minimum elong	7381 Feb 21 19:55	4°♌36'33	0°01'43
evening set	7375 Sep 04 16:15	27°♌58'04		behind sun begin	7381 Feb 21 11:57	4°♌32'08	
	7375 Sep 13 12:58	0°♍		behind sun end	7381 Feb 22 03:54	4°♌40'57	
				morning rise	7381 Mar 06 13:02	7°♌25'44	
conjunction	7375 Sep 18 08:17	1°♍06'16	0°21'21	desc. node	7381 Mar 17 04:45	9°♌45'51	
minimum elong	7375 Sep 18 08:16	1°♍06'15	0°21'21	retrograde	7381 Jul 07 12:15	24°♌59'02	
max. Earth dist.	7375 Sep 20 16:59	1°♍38'50	6.13896 AU	opposition	7381 Sep 06 08:08	20°♌06'14	-0°17'50
morning rise	7375 Oct 02 00:58	4°♍14'24		min. Earth dist.	7381 Sep 07 23:47	19°♌53'31	4.28969 AU
retrograde	7376 Feb 05 14:19	23°♍00'16		direct	7381 Nov 07 04:34	15°♌06'54	
min. Earth dist.	7376 Apr 04 03:32	18°♍07'50	4.22348 AU		7382 Feb 25 13:43	0°♎	
opposition	7376 Apr 05 11:13	17°♍57'10	0°50'01	evening set	7382 Mar 12 16:49	3°♎24'07	
direct	7376 Jun 04 04:58	12°♍56'54		max. Earth dist.	7382 Mar 23 07:46	5°♎50'16	6.20744 AU
	7376 Oct 03 01:01	0°♏					
evening set	7376 Oct 08 14:12	1°♏13'03		conjunction	7382 Mar 25 11:04	6°♎19'48	-0°25'38
				minimum elong	7382 Mar 25 11:03	6°♎19'47	0°25'39
conjunction	7376 Oct 22 02:46	4°♏12'26	0°43'25	morning rise	7382 Apr 07 04:50	9°♎15'37	
minimum elong	7376 Oct 22 02:45	4°♏12'26	0°43'29	retrograde	7382 Aug 11 11:13	27°♎57'27	
max. Earth dist.	7376 Oct 23 17:36	4°♏33'57	6.30578 AU	opposition	7382 Oct 10 22:25	23°♎03'09	-0°55'21
morning rise	7376 Nov 04 14:10	7°♏11'01		min. Earth dist.	7382 Oct 12 05:48	22°♎52'59	4.12254 AU
	7376 Dec 11 21:36	15°♏		direct	7382 Dec 10 11:24	18°♎06'11	
retrograde	7377 Mar 07 20:54	24°♏48'04			7383 Mar 14 15:33	0°♐	
min. Earth dist.	7377 May 06 11:34	19°♏53'41	4.37752 AU	evening set	7383 Apr 15 08:07	7°♐13'19	
opposition	7377 May 07 04:09	19°♏48'12	1°11'49	max. Earth dist.	7383 Apr 26 20:25	9°♐57'40	6.04416 AU
	7377 Jun 25 08:15	15°♐					
direct	7377 Jul 07 05:10	14°♐46'41		conjunction	7383 Apr 28 04:56	10°♐17'05	-0°45'54
	7377 Jul 19 05:23	15°♐		minimum elong	7383 Apr 28 04:55	10°♐17'04	0°45'59
	7377 Oct 30 01:48	0°♑		morning rise	7383 May 11 03:02	13°♐21'47	
evening set	7377 Nov 10 07:30	2°♑23'18			7383 May 18 01:24	15°♐	
					7383 Aug 02 07:29	0°♑	
conjunction	7377 Nov 23 14:15	5°♑15'06	0°51'32	retrograde	7383 Sep 17 21:39	3°♑18'46	
minimum elong	7377 Nov 23 14:15	5°♑15'06	0°51'36		7383 Nov 04 05:54	30°♒♑	
max. Earth dist.	7377 Nov 23 22:44	5°♑19'41	6.43548 AU	opposition	7383 Nov 16 21:51	28°♒21'42	-1°15'55
morning rise	7377 Dec 06 19:11	8°♑05'50		min. Earth dist.	7383 Nov 17 08:03	28°♒18'20	3.97800 AU

direct	7384 Jan 15 00:12	23°♄26'52		conjunction	7389 Nov 27 22:08	9°♂33'05	0°51'29
	7384 Mar 20 18:24	0°♄		minimum elong	7389 Nov 27 22:08	9°♂33'05	0°51'35
evening set	7384 May 20 06:29	13°♄16'15		max. Earth dist.	7389 Nov 28 03:31	9°♂35'59	6.44672 AU
				morning rise	7389 Dec 11 02:05	12°♂23'02	
conjunction	7384 Jun 02 09:31	16°♄27'57	-0°50'08	retrograde	7390 Apr 10 22:20	29°♂10'54	
minimum elong	7384 Jun 02 09:31	16°♄27'58	0°50'13	opposition	7390 Jun 10 15:14	24°♂14'58	1°11'10
max. Earth dist.	7384 Jun 02 12:34	16°♄29'49	5.93232 AU	min. Earth dist.	7390 Jun 10 21:13	24°♂13'02	4.48041 AU
morning rise	7384 Jun 15 14:42	19°♄41'02		direct	7390 Aug 11 20:42	19°♂13'05	
	7384 Jul 30 16:42	0°♄			7390 Nov 14 00:30	0°♄	
retrograde	7384 Oct 25 18:11	10°♄28'12		evening set	7390 Dec 15 13:51	6°♄27'52	
opposition	7384 Dec 24 07:22	5°♄27'36	-1°07'14				
min. Earth dist.	7384 Dec 23 17:13	5°♄32'21	3.91202 AU	conjunction	7390 Dec 28 14:29	9°♄15'05	0°43'30
direct	7385 Feb 20 09:25	0°♄33'23		minimum elong	7390 Dec 28 14:30	9°♄15'06	0°43'35
evening set	7385 Jun 26 22:25	20°♄36'57		max. Earth dist.	7390 Dec 27 14:29	9°♄02'13	6.49312 AU
				morning rise	7391 Jan 10 12:55	12°♄01'13	
conjunction	7385 Jul 10 08:58	23°♄52'57	-0°34'23	retrograde	7391 May 10 18:32	28°♄36'58	
minimum elong	7385 Jul 10 09:00	23°♄52'58	0°34'28	opposition	7391 Jul 10 15:53	23°♄43'27	0°50'52
max. Earth dist.	7385 Jul 11 23:39	24°♄16'29	5.91861 AU	min. Earth dist.	7391 Jul 11 16:50	23°♄35'28	4.48536 AU
morning rise	7385 Jul 23 22:14	27°♄10'18		direct	7391 Sep 11 09:44	18°♄41'50	
	7385 Aug 04 18:05	0°♄			7391 Dec 16 23:57	0°♄	
	7385 Oct 20 22:40	15°♄		evening set	7392 Jan 14 19:58	5°♄59'40	
retrograde	7385 Dec 02 21:24	17°♄53'58		max. Earth dist.	7392 Jan 25 19:20	8°♄22'07	6.45586 AU
	7386 Jan 14 21:33	15°♄					
min. Earth dist.	7386 Jan 29 22:04	13°♄01'46	3.95294 AU	conjunction	7392 Jan 27 16:39	8°♄46'43	0°24'06
opposition	7386 Jan 31 07:44	12°♄50'20	-0°30'44	minimum elong	7392 Jan 27 16:40	8°♄46'43	0°24'11
direct	7386 Mar 30 05:27	7°♄54'34		morning rise	7392 Feb 09 11:13	11°♄32'54	
	7386 Jun 06 18:23	15°♄			7392 Feb 25 16:28	15°♄	
evening set	7386 Aug 03 21:48	27°♄36'51		retrograde	7392 Jun 09 12:17	28°♄27'02	
	7386 Aug 13 23:37	0°♄		opposition	7392 Aug 09 11:41	23°♄34'30	0°16'55
				min. Earth dist.	7392 Aug 10 23:57	23°♄22'55	4.40808 AU
conjunction	7386 Aug 17 13:26	0°♄50'54	-0°05'04	direct	7392 Oct 11 00:10	18°♄33'47	
minimum elong	7386 Aug 17 13:26	0°♄50'54	0°05'07		7393 Jan 15 01:20	0°♄	
behind sun begin	7386 Aug 17 05:18	0°♄46'06		desc. node	7393 Jan 24 15:16	1°♄58'45	
behind sun end	7386 Aug 17 21:34	0°♄55'42		evening set	7393 Feb 13 10:10	6°♄15'50	
max. Earth dist.	7386 Aug 19 23:18	1°♄25'13	6.00922 AU	max. Earth dist.	7393 Feb 23 22:15	8°♄35'54	6.34366 AU
morning rise	7386 Aug 31 07:02	4°♄05'39					
asc. node	7386 Oct 19 23:00	14°♄59'07		conjunction	7393 Feb 26 04:33	9°♄06'12	-0°02'20
retrograde	7387 Jan 07 19:02	23°♄55'07		minimum elong	7393 Feb 26 04:32	9°♄06'11	0°02'19
min. Earth dist.	7387 Mar 06 19:19	19°♄03'32	4.08218 AU	behind sun begin	7393 Feb 25 20:34	9°♄01'46	
opposition	7387 Mar 08 09:19	18°♄50'37	0°16'11	behind sun end	7393 Feb 26 12:30	9°♄10'37	
direct	7387 May 06 01:25	13°♄52'17		morning rise	7393 Mar 10 21:28	11°♄56'08	
	7387 Aug 28 01:10	0°♄		retrograde	7393 Jul 12 06:37	29°♄37'57	
evening set	7387 Sep 09 14:56	2°♄49'55		opposition	7393 Sep 11 01:27	24°♄45'01	-0°23'34
				min. Earth dist.	7393 Sep 12 16:53	24°♄32'23	4.26714 AU
conjunction	7387 Sep 23 06:48	5°♄56'51	0°25'07	direct	7393 Nov 11 18:34	19°♄46'02	
minimum elong	7387 Sep 23 06:47	5°♄56'50	0°25'07		7394 Feb 07 20:49	0°♄	
max. Earth dist.	7387 Sep 25 14:48	6°♄28'49	6.16471 AU	evening set	7394 Mar 17 07:16	8°♄09'43	
morning rise	7387 Oct 06 22:45	9°♄03'32		max. Earth dist.	7394 Mar 27 23:07	10°♄37'13	6.18461 AU
retrograde	7388 Feb 10 00:19	27°♄38'30					
opposition	7388 Apr 09 22:51	22°♄35'51	0°54'14	conjunction	7394 Mar 30 01:32	11°♄06'23	-0°29'08
min. Earth dist.	7388 Apr 08 16:49	22°♄45'55	4.24802 AU	minimum elong	7394 Mar 30 01:30	11°♄06'22	0°29'08
direct	7388 Jun 08 20:34	17°♄35'27		morning rise	7394 Apr 11 19:50	14°♄03'20	
	7388 Sep 16 06:42	0°♄			7394 Jul 03 13:21	0°♄	
evening set	7388 Oct 13 05:07	5°♄45'02		retrograde	7394 Aug 16 13:08	2°♄55'20	
					7394 Sep 30 04:33	30°♄	
conjunction	7388 Oct 26 16:46	8°♄43'12	0°45'24	opposition	7394 Oct 15 23:49	28°♄00'37	-0°59'35
minimum elong	7388 Oct 26 16:45	8°♄43'11	0°45'28	min. Earth dist.	7394 Oct 17 04:06	27°♄51'25	4.10116 AU
max. Earth dist.	7388 Oct 28 01:58	9°♄01'30	6.32710 AU	direct	7394 Dec 15 08:09	23°♄03'55	
morning rise	7388 Nov 09 03:27	11°♄40'34			7395 Feb 22 10:08	0°♄	
	7388 Nov 24 13:18	15°♄		evening set	7395 Apr 20 05:39	12°♄17'07	
retrograde	7389 Mar 12 01:44	29°♄09'57			7395 May 01 14:33	15°♄	
opposition	7389 May 11 09:44	24°♄10'37	1°13'09	max. Earth dist.	7395 May 02 00:24	15°♄05'54	6.02617 AU
min. Earth dist.	7389 May 10 20:49	24°♄14'53	4.39433 AU				
direct	7389 Jul 11 15:25	19°♄09'00		conjunction	7395 May 03 03:14	15°♄21'58	-0°47'38
	7389 Oct 13 04:38	0°♄		minimum elong	7395 May 03 03:13	15°♄21'58	0°47'42
evening set	7389 Nov 14 15:57	6°♄41'58		morning rise	7395 May 16 01:57	18°♄27'47	
					7395 Jul 07 05:47	0°♄	

retrograde	7395 Sep 23 07:41	8° Π 33'03		retrograde	7401 Mar 17 07:32	3° X 34'07	
opposition	7395 Nov 22 05:09	3° Π 35'30	-1°16'35		7401 May 05 19:35	30° R M	
min. Earth dist.	7395 Nov 22 12:53	3° Π 32'57	3.96516 AU	opposition	7401 May 16 16:44	28° M 35'20	1°14'05
	7395 Dec 22 18:23	30° R S		min. Earth dist.	7401 May 16 06:00	28° M 38'51	4.40851 AU
direct	7396 Jan 20 04:08	28° S 40'50		direct	7401 Jul 17 02:08	23° M 33'43	
	7396 Feb 17 08:27	0° Π			7401 Sep 24 11:36	0° X	
evening set	7396 May 25 10:29	18° Π 33'19		evening set	7401 Nov 20 02:07	11° X 03'40	
conjunction	7396 Jun 07 14:25	21° Π 45'48	-0°49'05	conjunction	7401 Dec 03 07:22	13° X 54'05	0°51'09
minimum elong	7396 Jun 07 14:26	21° Π 45'48	0°49'11	minimum elong	7401 Dec 03 07:22	13° X 54'05	0°51'15
max. Earth dist.	7396 Jun 07 21:41	21° Π 50'14	5.92576 AU	max. Earth dist.	7401 Dec 03 07:28	13° X 54'08	6.45621 AU
morning rise	7396 Jun 20 20:51	24° Π 59'43		morning rise	7401 Dec 16 10:39	16° X 43'24	
	7396 Jul 11 21:45	0° S			7402 Feb 26 09:55	0° S	
retrograde	7396 Oct 31 01:52	15° S 49'00		retrograde	7402 Apr 16 03:40	3° S 28'22	
opposition	7396 Dec 29 15:19	10° S 47'54	-1°03'30		7402 Jun 04 10:54	30° R X	
min. Earth dist.	7396 Dec 28 21:12	10° S 54'00	3.91273 AU	opposition	7402 Jun 15 20:42	28° X 32'53	1°09'19
direct	7397 Feb 25 14:34	5° S 53'33		min. Earth dist.	7402 Jun 16 05:46	28° X 29'57	4.48510 AU
evening set	7397 Jul 02 05:03	25° S 55'39		direct	7402 Aug 17 05:10	23° X 31'02	
					7402 Oct 26 13:04	0° S	
conjunction	7397 Jul 15 16:29	29° S 11'42	-0°30'50	evening set	7402 Dec 20 20:51	10° S 45'19	
minimum elong	7397 Jul 15 16:30	29° S 11'43	0°30'55				
max. Earth dist.	7397 Jul 17 09:54	29° S 36'51	5.92638 AU	conjunction	7403 Jan 02 21:01	13° S 32'20	0°41'21
	7397 Jul 19 00:04	0° Ω		minimum elong	7403 Jan 02 21:02	13° S 32'21	0°41'27
morning rise	7397 Jul 29 06:38	2° Ω 29'03		max. Earth dist.	7403 Jan 01 19:08	13° S 18'27	6.49298 AU
	7397 Sep 23 18:42	15° Ω		morning rise	7403 Jan 15 18:39	16° S 18'14	
retrograde	7397 Dec 08 00:02	23° Ω 07'28			7403 Apr 01 11:37	0° \approx	
min. Earth dist.	7398 Feb 04 00:19	18° Ω 15'16	3.96668 AU	retrograde	7403 May 15 23:28	2° \approx 54'37	
opposition	7398 Feb 05 10:52	18° Ω 03'30	-0°24'20		7403 Jun 30 00:02	30° R S	
	7398 Mar 01 19:28	15° R Ω		opposition	7403 Jul 15 22:31	28° S 01'22	0°46'46
direct	7398 Apr 04 10:55	13° Ω 07'21		min. Earth dist.	7403 Jul 17 00:03	27° S 53'12	4.48079 AU
	7398 May 08 01:56	15° Ω		direct	7403 Sep 16 15:39	22° S 59'57	
	7398 Jul 28 07:56	0° M			7403 Nov 29 00:04	0° \approx	
evening set	7398 Aug 09 02:05	2° M 44'23		evening set	7404 Jan 20 02:27	10° \approx 19'22	
				max. Earth dist.	7404 Jan 31 00:18	12° \approx 41'21	6.44735 AU
conjunction	7398 Aug 22 18:12	5° M 57'44	-0°00'36				
minimum elong	7398 Aug 22 18:13	5° M 57'45	0°00'37	conjunction	7404 Feb 01 22:35	13° \approx 06'32	0°20'43
behind sun begin	7398 Aug 22 09:50	5° M 52'49		minimum elong	7404 Feb 01 22:36	13° \approx 06'33	0°20'47
behind sun end	7398 Aug 23 02:36	6° M 02'40			7404 Feb 10 15:08	15° \approx	
max. Earth dist.	7398 Aug 25 06:07	6° M 33'06	6.02767 AU	morning rise	7404 Feb 14 16:46	15° \approx 52'55	
asc. node	7398 Aug 29 23:03	7° M 39'39			7404 May 01 23:04	0° H	
morning rise	7398 Sep 05 11:47	9° M 11'36		retrograde	7404 Jun 14 23:33	2° H 50'55	
retrograde	7399 Jan 12 13:48	28° M 51'27			7404 Jul 29 12:19	30° R \approx	
min. Earth dist.	7399 Mar 11 15:03	23° M 59'46	4.10325 AU	opposition	7404 Aug 14 22:21	27° \approx 58'27	0°11'29
opposition	7399 Mar 13 04:26	23° M 47'05	0°22'22	min. Earth dist.	7404 Aug 16 12:03	27° \approx 46'26	4.39610 AU
direct	7399 May 10 23:49	18° M 48'26		direct	7404 Oct 16 10:41	22° \approx 58'00	
	7399 Aug 10 09:21	0° Ω		desc. node	7404 Dec 06 09:05	26° \approx 38'02	
evening set	7399 Sep 14 13:31	7° Ω 39'41			7404 Dec 28 00:12	0° H	
				evening set	7405 Feb 18 18:21	10° H 43'17	
conjunction	7399 Sep 28 04:52	10° Ω 45'28	0°28'41	max. Earth dist.	7405 Mar 01 05:18	13° H 03'15	6.32908 AU
minimum elong	7399 Sep 28 04:51	10° Ω 45'27	0°28'42				
max. Earth dist.	7399 Sep 30 09:27	11° Ω 15'20	6.18643 AU	conjunction	7405 Mar 03 12:25	13° H 34'07	-0°06'10
morning rise	7399 Oct 11 20:27	13° Ω 50'57		minimum elong	7405 Mar 03 12:25	13° H 34'06	0°06'09
	7400 Jan 07 03:57	0° M		behind sun begin	7405 Mar 03 04:51	13° H 29'53	
retrograde	7400 Feb 14 10:15	2° M 16'28		behind sun end	7405 Mar 03 19:59	13° H 38'19	
	7400 Mar 24 13:38	30° R Ω		morning rise	7405 Mar 16 05:21	16° H 24'37	
min. Earth dist.	7400 Apr 14 06:34	27° Ω 23'34	4.26855 AU		7405 May 25 00:39	0° Y	
opposition	7400 Apr 15 10:32	27° Ω 14'12	0°58'08	retrograde	7405 Jul 17 21:42	4° Y 13'04	
direct	7400 Jun 14 12:33	22° Ω 13'32			7405 Sep 11 12:12	30° R H	
	7400 Aug 29 06:26	0° M		opposition	7405 Sep 16 17:22	29° H 19'56	-0°29'00
evening set	7400 Oct 18 20:36	10° M 17'55		min. Earth dist.	7405 Sep 18 07:06	29° H 07'50	4.25089 AU
				direct	7405 Nov 17 06:41	24° H 21'15	
conjunction	7400 Nov 01 07:44	13° M 15'06	0°47'08		7406 Jan 19 07:37	0° Y	
minimum elong	7400 Nov 01 07:43	13° M 15'05	0°47'11	evening set	7406 Mar 22 19:29	12° Y 49'23	
max. Earth dist.	7400 Nov 02 14:16	13° M 31'52	6.34502 AU	max. Earth dist.	7406 Apr 02 14:52	15° Y 19'26	6.16803 AU
	7400 Nov 09 06:48	15° M					
morning rise	7400 Nov 14 17:24	16° M 11'21		conjunction	7406 Apr 04 13:57	15° Y 46'47	-0°32'17
	7401 Jan 27 05:36	0° X		minimum elong	7406 Apr 04 13:56	15° Y 46'47	0°32'19

morning rise	7406 Apr 17 08:24	18° Υ 44'33	retrograde	7412 Feb 19 20:56	6° \mathbb{M} 52'04	
	7406 Jun 09 00:27	0° \mathcal{B}	opposition	7412 Apr 19 21:05	1° \mathbb{M} 50'13	1°01'31
retrograde	7406 Aug 22 12:53	7° \mathcal{B} 44'33	min. Earth dist.	7412 Apr 18 19:10	1° \mathbb{M} 58'52	4.28534 AU
opposition	7406 Oct 21 21:39	2° \mathcal{B} 49'34 -1°03'12		7412 May 03 23:17	30° \mathcal{R} $\underline{\mathcal{A}}$	
min. Earth dist.	7406 Oct 23 00:52	2° \mathcal{B} 40'43 4.08551 AU	direct	7412 Jun 19 03:51	26° $\underline{\mathcal{A}}$ 49'22	
	7406 Nov 14 00:49	30° \mathcal{R} Υ		7412 Aug 04 13:01	0° \mathbb{M}	
direct	7406 Dec 21 03:02	27° Υ 53'11	evening set	7412 Oct 23 11:12	14° \mathbb{M} 49'31	
	7407 Jan 26 16:44	0° \mathcal{B}		7412 Oct 24 06:27	15° \mathbb{M}	
	7407 Apr 16 18:16	15° \mathcal{B}				
evening set	7407 Apr 25 23:18	17° \mathcal{B} 10'41	conjunction	7412 Nov 05 21:32	17° \mathbb{M} 45'47	0°48'30
			minimum elong	7412 Nov 05 21:31	17° \mathbb{M} 45'46	0°48'34
conjunction	7407 May 08 21:24	20° \mathcal{B} 16'24 -0°48'54	max. Earth dist.	7412 Nov 07 00:23	18° \mathbb{M} 00'29	6.36002 AU
minimum elong	7407 May 08 21:23	20° \mathcal{B} 16'24 0°48'58	morning rise	7412 Nov 19 06:30	20° \mathbb{M} 41'06	
max. Earth dist.	7407 May 07 20:46	20° \mathcal{B} 01'37 6.01275 AU		7413 Jan 04 00:42	0° \mathcal{A}	
morning rise	7407 May 21 21:02	23° \mathcal{B} 23'12	retrograde	7413 Mar 21 12:32	7° \mathcal{A} 57'58	
	7407 Jun 19 09:13	0° \mathbb{I}	opposition	7413 May 20 23:15	2° \mathcal{A} 59'33	1°14'32
retrograde	7407 Sep 29 09:38	13° \mathbb{I} 35'09	min. Earth dist.	7413 May 20 14:32	3° \mathcal{A} 02'25	4.42082 AU
opposition	7407 Nov 28 07:05	8° \mathbb{I} 37'11 -1°16'34		7413 Jun 14 12:13	30° \mathcal{R} \mathbb{M}	
min. Earth dist.	7407 Nov 28 11:11	8° \mathbb{I} 35'49 3.95551 AU	direct	7413 Jul 21 11:58	27° \mathbb{M} 57'46	
direct	7408 Jan 26 01:17	3° \mathbb{I} 42'38		7413 Aug 27 21:39	0° \mathcal{A}	
evening set	7408 May 31 09:19	23° \mathbb{I} 37'35	evening set	7413 Nov 24 11:30	15° \mathcal{A} 24'52	
conjunction	7408 Jun 13 14:12	26° \mathbb{I} 50'45 -0°47'41	conjunction	7413 Dec 07 16:08	18° \mathcal{A} 14'40	0°50'29
minimum elong	7408 Jun 13 14:13	26° \mathbb{I} 50'46 0°47'47	minimum elong	7413 Dec 07 16:08	18° \mathcal{A} 14'40	0°50'35
max. Earth dist.	7408 Jun 14 01:24	26° \mathbb{I} 57'36 5.92080 AU	max. Earth dist.	7413 Dec 07 14:10	18° \mathcal{A} 13'37	6.46495 AU
morning rise	7408 Jun 26 21:40	0° \mathcal{E} 05'24	morning rise	7413 Dec 20 18:25	21° \mathcal{A} 03'18	
	7408 Jun 26 12:45	0° \mathcal{E}		7414 Feb 03 10:38	0° \mathcal{B}	
retrograde	7408 Nov 06 05:19	20° \mathcal{E} 56'38	retrograde	7414 Apr 20 07:00	7° \mathcal{B} 45'15	
opposition	7409 Jan 04 17:34	15° \mathcal{E} 55'07 -0°59'28	opposition	7414 Jun 20 01:44	2° \mathcal{B} 50'05	1°07'02
min. Earth dist.	7409 Jan 03 21:52	16° \mathcal{E} 01'46 3.91302 AU	min. Earth dist.	7414 Jun 20 12:35	2° \mathcal{B} 46'34	4.48953 AU
direct	7409 Mar 03 16:42	11° \mathcal{E} 00'36		7414 Jul 13 11:17	30° \mathcal{R} \mathcal{A}	
	7409 Jul 03 23:31	0° Ω	direct	7414 Aug 21 12:21	27° \mathcal{A} 48'13	
evening set	7409 Jul 08 06:41	1° Ω 02'00		7414 Sep 29 19:46	0° \mathcal{B}	
			evening set	7414 Dec 25 02:59	15° \mathcal{B} 01'33	
conjunction	7409 Jul 21 19:09	4° Ω 18'14 -0°27'14	max. Earth dist.	7415 Jan 05 20:19	17° \mathcal{B} 32'11	6.49244 AU
minimum elong	7409 Jul 21 19:11	4° Ω 18'15 0°27'20				
max. Earth dist.	7409 Jul 23 16:34	4° Ω 45'44 5.93201 AU	conjunction	7415 Jan 07 02:19	17° \mathcal{B} 48'17	0°38'58
morning rise	7409 Aug 04 10:02	7° Ω 35'40	minimum elong	7415 Jan 07 02:20	17° \mathcal{B} 48'18	0°39'04
	7409 Sep 05 07:57	15° Ω	morning rise	7415 Jan 19 23:30	20° \mathcal{B} 33'59	
retrograde	7409 Dec 13 23:24	28° Ω 09'58		7415 Mar 08 10:37	0° \approx	
min. Earth dist.	7410 Feb 09 21:49	23° Ω 17'52 3.97707 AU	retrograde	7415 May 20 06:04	7° \approx 11'03	
opposition	7410 Feb 11 09:01	23° Ω 05'53 -0°18'05	opposition	7415 Jul 20 04:57	2° \approx 17'54	0°42'23
direct	7410 Apr 10 09:31	18° Ω 09'27	min. Earth dist.	7415 Jul 21 09:15	2° \approx 08'52	4.47495 AU
	7410 Jul 11 23:17	0° \mathbb{P}		7415 Aug 07 21:37	30° \mathcal{R} \mathcal{B}	
asc. node	7410 Jul 13 06:17	0° \mathbb{P} 16'37	direct	7415 Sep 20 23:46	27° \mathcal{B} 16'28	
evening set	7410 Aug 15 02:45	7° \mathbb{P} 43'05		7415 Nov 03 22:45	0° \approx	
			evening set	7416 Jan 24 08:01	14° \approx 37'37	
conjunction	7410 Aug 28 19:02	10° \mathbb{P} 55'54 0°03'43		7416 Jan 26 01:22	15° \approx	
minimum elong	7410 Aug 28 19:02	10° \mathbb{P} 55'54 0°03'41	max. Earth dist.	7416 Feb 04 03:57	16° \approx 58'55	6.43636 AU
behind sun begin	7410 Aug 28 10:44	10° \mathbb{P} 51'02				
behind sun end	7410 Aug 29 03:21	11° \mathbb{P} 00'46	conjunction	7416 Feb 06 03:50	17° \approx 25'02	0°17'11
max. Earth dist.	7410 Aug 31 05:58	11° \mathbb{P} 30'32 6.04168 AU	minimum elong	7416 Feb 06 03:51	17° \approx 25'03	0°17'14
morning rise	7410 Sep 11 12:57	14° \mathbb{P} 09'11	morning rise	7416 Feb 18 21:35	20° \approx 11'41	
	7410 Nov 30 03:40	0° $\underline{\mathcal{A}}$		7416 Apr 07 12:06	0° \mathcal{H}	
retrograde	7411 Jan 18 04:21	3° $\underline{\mathcal{A}}$ 41'25	retrograde	7416 Jun 19 08:30	7° \mathcal{H} 14'23	
	7411 Mar 08 13:34	30° \mathcal{R} \mathbb{P}	opposition	7416 Aug 19 08:42	2° \mathcal{H} 21'50	0°05'54
min. Earth dist.	7411 Mar 17 07:21	28° \mathbb{P} 49'49 4.11950 AU	min. Earth dist.	7416 Aug 20 22:19	2° \mathcal{H} 09'50	4.38041 AU
opposition	7411 Mar 18 20:31	28° \mathbb{P} 37'13 0°28'05		7416 Sep 07 15:58	30° \mathcal{R} \approx	
direct	7411 May 16 18:43	23° \mathbb{P} 38'13	desc. node	7416 Oct 16 06:15	27° \approx 23'23	
	7411 Jul 21 23:19	0° $\underline{\mathcal{A}}$	direct	7416 Oct 20 18:10	27° \approx 21'32	
evening set	7411 Sep 20 09:34	12° $\underline{\mathcal{A}}$ 24'58		7416 Dec 02 13:06	0° \mathcal{H}	
			evening set	7417 Feb 23 02:52	15° \mathcal{H} 11'22	
conjunction	7411 Oct 04 00:43	15° $\underline{\mathcal{A}}$ 29'51 0°31'55	max. Earth dist.	7417 Mar 05 14:04	17° \mathcal{H} 32'05	6.30971 AU
minimum elong	7411 Oct 04 00:42	15° $\underline{\mathcal{A}}$ 29'50 0°31'57				
max. Earth dist.	7411 Oct 06 03:43	15° $\underline{\mathcal{A}}$ 58'43 6.20372 AU	conjunction	7417 Mar 07 20:46	18° \mathcal{H} 02'51	-0°10'02
morning rise	7411 Oct 17 15:39	18° $\underline{\mathcal{A}}$ 34'19	minimum elong	7417 Mar 07 20:46	18° \mathcal{H} 02'51	0°10'00
	7411 Dec 12 05:22	0° \mathbb{M}	behind sun begin	7417 Mar 07 14:17	17° \mathcal{H} 59'14	

behind sun end	7417 Mar 08 03:14	18° H 06'28			7422 Nov 05 09:31	0° L	
morning rise	7417 Mar 20 13:40	20° H 54'08	retrograde		7423 Jan 22 23:25	8° L 38'09	
	7417 May 02 15:26	0° Y	min. Earth dist.		7423 Mar 22 03:42	3° L 46'19	4.14321 AU
retrograde	7417 Jul 22 17:10	8° Y 51'03	opposition		7423 Mar 23 15:38	3° L 34'10	0°33'51
opposition	7417 Sep 21 10:52	3° Y 57'44 -0°34'27			7423 Apr 22 06:06	30° R M	
min. Earth dist.	7417 Sep 23 00:59	3° Y 45'29 4.22886 AU	direct		7423 May 21 18:58	28° M 34'55	
	7417 Oct 27 05:27	30° R H			7423 Jun 20 13:26	0° L	
direct	7417 Nov 21 21:34	28° H 59'18	evening set		7423 Sep 25 07:52	17° L 14'19	
	7417 Dec 17 10:23	0° Y					
evening set	7418 Mar 27 09:42	17° Y 33'56	conjunction		7423 Oct 08 22:26	20° L 17'53	0°35'04
max. Earth dist.	7418 Apr 07 06:13	20° Y 05'26 6.14511 AU	minimum elong		7423 Oct 08 22:25	20° L 17'52	0°35'06
			max. Earth dist.		7423 Oct 10 23:44	20° L 45'37	6.22869 AU
conjunction	7418 Apr 09 04:27	20° Y 32'25 -0°35'22	morning rise		7423 Oct 22 12:39	23° L 20'56	
minimum elong	7418 Apr 09 04:26	20° Y 32'24 0°35'25			7423 Nov 22 09:30	0° M	
morning rise	7418 Apr 21 23:29	23° Y 31'22	retrograde		7424 Feb 24 05:08	11° M 28'13	
	7418 May 20 17:03	0° B	min. Earth dist.		7424 Apr 23 07:06	6° M 35'04	4.30953 AU
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opposition	7418 Oct 26 23:00	7° B 46'34 -1°06'36	direct		7424 Jun 23 18:29	1° M 25'46	
min. Earth dist.	7418 Oct 27 22:56	7° B 38'45 4.06369 AU			7424 Oct 07 17:40	15° M	
direct	7418 Dec 25 22:15	2° B 50'28	evening set		7424 Oct 28 01:03	19° M 19'21	
	7419 Mar 30 11:48	15° B					
evening set	7419 Apr 30 21:26	22° B 14'38	conjunction		7424 Nov 10 10:33	22° M 14'23	0°49'37
			minimum elong		7424 Nov 10 10:32	22° M 14'23	0°49'42
conjunction	7419 May 13 20:18	25° B 21'33 -0°49'54	max. Earth dist.		7424 Nov 11 09:32	22° M 26'56	6.38159 AU
minimum elong	7419 May 13 20:18	25° B 21'32 0°49'59	morning rise		7424 Nov 23 18:27	25° M 08'25	
max. Earth dist.	7419 May 13 00:14	25° B 09'27 5.99408 AU			7424 Dec 16 18:06	0° J	
morning rise	7419 May 26 20:51	28° B 29'37	retrograde		7425 Mar 25 17:10	12° J 17'44	
	7419 Jun 02 04:24	0° II	opposition		7425 May 25 04:35	7° J 19'51	1°14'35
retrograde	7419 Oct 04 19:17	18° II 50'15	min. Earth dist.		7425 May 24 23:03	7° J 21'39	4.43820 AU
opposition	7419 Dec 03 14:33	13° II 51'48 -1°16'02	direct		7425 Jul 25 22:04	2° J 18'01	
min. Earth dist.	7419 Dec 03 16:04	13° II 51'17 3.94194 AU	evening set		7425 Nov 28 18:33	19° J 40'51	
direct	7420 Jan 31 05:39	8° II 57'23					
evening set	7420 Jun 05 14:30	28° II 56'08	conjunction		7425 Dec 11 22:16	22° J 29'52	0°49'36
	7420 Jun 09 23:26	0° E	minimum elong		7425 Dec 11 22:16	22° J 29'52	0°49'41
			max. Earth dist.		7425 Dec 11 15:13	22° J 26'05	6.47670 AU
conjunction	7420 Jun 18 20:37	2° E 10'13 -0°45'51	morning rise		7425 Dec 24 23:48	25° J 17'44	
minimum elong	7420 Jun 18 20:38	2° E 10'14 0°45'56			7426 Jan 16 13:53	0° Z	
max. Earth dist.	7420 Jun 19 13:40	2° E 20'38 5.91385 AU	retrograde		7426 Apr 24 08:44	11° Z 56'21	
morning rise	7420 Jul 02 05:13	5° E 25'44	opposition		7426 Jun 24 04:36	7° Z 01'31	1°04'29
retrograde	7420 Nov 11 15:29	26° E 18'58	min. Earth dist.		7426 Jun 24 18:21	6° Z 57'05	4.49507 AU
min. Earth dist.	7421 Jan 09 03:13	21° E 24'41 3.91378 AU	direct		7426 Aug 25 17:13	1° Z 59'37	
opposition	7421 Jan 10 01:49	21° E 17'04 -0°54'44	evening set		7426 Dec 29 06:23	19° Z 12'04	
direct	7421 Mar 08 23:02	16° E 22'27	max. Earth dist.		7427 Jan 09 21:00	21° Z 41'17	6.49128 AU
	7421 Jun 16 09:56	0° O					
evening set	7421 Jul 13 14:55	6° O 22'43	conjunction		7427 Jan 11 05:15	21° Z 58'37	0°36'27
			minimum elong		7427 Jan 11 05:17	21° Z 58'38	0°36'33
conjunction	7421 Jul 27 04:06	9° O 38'57 -0°23'12	morning rise		7427 Jan 24 01:39	24° Z 44'07	
minimum elong	7421 Jul 27 04:08	9° O 38'58 0°23'16			7427 Feb 18 09:07	0° A	
max. Earth dist.	7421 Jul 29 03:45	10° O 07'44 5.94028 AU	retrograde		7427 May 24 08:47	11° A 22'30	
morning rise	7421 Aug 09 19:57	12° O 56'22	opposition		7427 Jul 24 09:07	6° A 29'33	0°37'53
	7421 Aug 18 11:45	15° O	min. Earth dist.		7427 Jul 25 15:09	6° A 19'58	4.46709 AU
	7421 Nov 02 05:58	0° M	direct		7427 Sep 25 03:19	1° A 28'13	
retrograde	7421 Dec 19 01:03	3° M 24'51			7428 Jan 10 07:52	15° A	
	7422 Feb 04 03:07	30° R O	evening set		7428 Jan 28 11:43	18° A 52'05	
min. Earth dist.	7422 Feb 14 23:03	28° O 33'16 3.99202 AU	max. Earth dist.		7428 Feb 08 03:52	21° A 11'51	6.42210 AU
opposition	7422 Feb 16 12:15	28° O 20'36 -0°11'22					
direct	7422 Apr 15 14:04	23° O 23'52	conjunction		7428 Feb 10 07:01	21° A 39'52	0°13'37
asc. node	7422 May 22 16:38	25° O 38'42	minimum elong		7428 Feb 10 07:02	21° A 39'52	0°13'40
	7422 Jun 20 20:53	0° M	behind sun begin		7428 Feb 10 02:39	21° A 37'29	
evening set	7422 Aug 20 08:06	12° M 52'05	behind sun end		7428 Feb 10 11:24	21° A 42'15	
			morning rise		7428 Feb 23 00:40	24° A 26'59	
conjunction	7422 Sep 03 00:37	16° M 04'02 0°08'08			7428 Mar 20 05:13	0° H	
minimum elong	7422 Sep 03 00:36	16° M 04'01 0°08'06	retrograde		7428 Jun 23 19:57	11° H 35'55	
behind sun begin	7422 Sep 02 17:11	15° M 59'42	opposition		7428 Aug 23 18:24	6° H 43'22	0°00'21
behind sun end	7422 Sep 03 08:01	16° M 08'20	min. Earth dist.		7428 Aug 25 09:59	6° H 30'43	4.36034 AU
max. Earth dist.	7422 Sep 05 12:29	16° M 39'03 6.06212 AU	desc. node		7428 Aug 27 02:40	6° H 17'44	
morning rise	7422 Sep 16 18:17	19° M 16'15	direct		7428 Oct 25 02:23	1° H 43'11	
















































































































































evening set	7429 Feb 27 10:32	19° K 39'11		evening set	7434 Aug 25 13:54	18° P 01'41	
max. Earth dist.	7429 Mar 09 21:17	22° K 00'25	6.28528 AU				
conjunction	7429 Mar 12 04:32	22° K 31'39	-0°13'49	conjunction	7434 Sep 08 06:24	21° P 12'28	0°12'29
minimum elong	7429 Mar 12 04:31	22° K 31'39	0°13'48	minimum elong	7434 Sep 08 06:23	21° P 12'28	0°12'29
behind sun begin	7429 Mar 12 00:11	22° K 29'12		behind sun begin	7434 Sep 08 01:03	21° P 09'23	
behind sun end	7429 Mar 12 08:52	22° K 34'05		behind sun end	7434 Sep 08 11:42	21° P 15'32	
morning rise	7429 Mar 24 21:34	25° K 23'58		max. Earth dist.	7434 Sep 10 18:53	21° P 47'38	6.08632 AU
	7429 Apr 14 17:44	0° Y		morning rise	7434 Sep 21 23:51	24° P 23'25	
retrograde	7429 Jul 27 11:52	13° Y 31'25			7434 Oct 16 23:10	0° L	
opposition	7429 Sep 26 04:52	8° Y 37'54	-0°39'42	retrograde	7435 Jan 27 15:28	13° L 33'32	
min. Earth dist.	7429 Sep 27 17:20	8° Y 26'10	4.20178 AU	min. Earth dist.	7435 Mar 26 22:13	8° L 41'52	4.16943 AU
direct	7429 Nov 26 09:31	3° Y 39'45		opposition	7435 Mar 28 10:04	8° L 29'45	0°39'20
evening set	7430 Apr 01 01:23	22° Y 22'56		direct	7435 May 26 16:58	3° L 30'10	
max. Earth dist.	7430 Apr 12 01:01	24° Y 57'12	6.11763 AU	evening set	7435 Sep 30 05:16	22° L 01'35	
conjunction	7430 Apr 13 20:31	25° Y 22'45	-0°38'14	conjunction	7435 Oct 13 19:07	25° L 03'43	0°37'58
minimum elong	7430 Apr 13 20:30	25° Y 22'45	0°38'17	minimum elong	7435 Oct 13 19:06	25° L 03'43	0°38'00
morning rise	7430 Apr 26 16:11	28° Y 23'09		max. Earth dist.	7435 Oct 15 16:14	25° L 28'59	6.25460 AU
	7430 May 03 14:49	0° B		morning rise	7435 Oct 27 08:32	28° L 05'17	
	7430 Jul 21 06:39	15° B			7435 Nov 05 00:46	0° M	
retrograde	7430 Sep 01 21:57	17° B 46'10		retrograde	7436 Feb 02 23:34	15° M	
	7430 Oct 14 23:38	15° R B			7436 Feb 28 15:09	16° M 02'18	
opposition	7430 Nov 01 02:48	12° B 50'26	-1°09'35		7436 Mar 25 00:45	15° R M	
min. Earth dist.	7430 Nov 02 00:41	12° B 43'16	4.03815 AU	opposition	7436 Apr 28 18:25	11° M 01'20	1°07'15
direct	7430 Dec 30 21:21	7° B 54'36		min. Earth dist.	7436 Apr 27 20:59	11° M 08'28	4.33297 AU
	7431 Mar 10 03:44	15° B		direct	7436 Jun 28 10:46	6° M 00'07	
evening set	7431 May 05 22:28	27° B 26'49		evening set	7436 Sep 19 13:29	15° M	
	7431 May 16 12:19	0° I			7436 Nov 01 14:16	23° M 47'34	
conjunction	7431 May 18 22:24	0° I 35'09	-0°50'32	conjunction	7436 Nov 14 23:00	26° M 41'30	0°50'28
minimum elong	7431 May 18 22:24	0° I 35'09	0°50'37	minimum elong	7436 Nov 14 23:00	26° M 41'30	0°50'33
max. Earth dist.	7431 May 18 07:39	0° I 26'13	5.97309 AU	max. Earth dist.	7436 Nov 15 18:17	26° M 51'58	6.40081 AU
morning rise	7431 Jun 01 00:03	3° I 44'42		morning rise	7436 Nov 28 05:55	29° M 34'23	
retrograde	7431 Oct 10 08:08	24° I 14'32			7436 Nov 30 05:29	0° X	
opposition	7431 Dec 09 01:14	19° I 15'36	-1°14'51	retrograde	7437 Mar 29 20:10	16° X 37'10	
min. Earth dist.	7431 Dec 08 22:38	19° I 16'28	3.92813 AU	opposition	7437 May 29 09:56	11° X 39'44	1°14'17
direct	7432 Feb 05 11:44	14° I 21'20		min. Earth dist.	7437 May 29 06:38	11° X 40'49	4.45219 AU
	7432 May 23 14:35	0° E		direct	7437 Jul 30 05:47	6° X 37'51	
evening set	7432 Jun 10 23:13	4° E 23'41		evening set	7437 Dec 03 02:07	23° X 57'39	
conjunction	7432 Jun 24 06:21	7° E 38'32	-0°43'35	conjunction	7437 Dec 16 05:05	26° X 46'04	0°48'27
minimum elong	7432 Jun 24 06:22	7° E 38'33	0°43'41	minimum elong	7437 Dec 16 05:05	26° X 46'04	0°48'33
max. Earth dist.	7432 Jun 25 03:58	7° E 51'46	5.90851 AU	max. Earth dist.	7437 Dec 15 18:08	26° X 40'12	6.48460 AU
morning rise	7432 Jul 07 16:19	10° E 54'54		morning rise	7437 Dec 29 05:45	29° X 33'20	
	7432 Oct 14 11:14	0° L			7437 Dec 31 07:56	0° Z	
retrograde	7432 Nov 17 01:29	1° L 48'49		retrograde	7438 Apr 28 12:49	16° Z 09'56	
	7432 Dec 20 13:54	30° R E		opposition	7438 Jun 28 09:03	11° Z 15'30	1°01'36
min. Earth dist.	7433 Jan 14 10:03	26° E 55'18	3.91766 AU	min. Earth dist.	7438 Jun 29 02:00	11° Z 10'03	4.49648 AU
opposition	7433 Jan 15 12:29	26° E 46'21	-0°49'25	direct	7438 Aug 29 23:52	6° Z 13'40	
direct	7433 Mar 14 08:38	21° E 51'28		evening set	7439 Jan 02 11:30	23° Z 26'24	
	7433 May 27 00:46	0° L		max. Earth dist.	7439 Jan 13 20:42	25° Z 53'01	6.48597 AU
evening set	7433 Jul 19 01:26	11° L 49'01		conjunction	7439 Jan 15 09:43	26° Z 12'56	0°33'42
conjunction	7433 Aug 01 15:31	15° L 05'01	-0°18'55	minimum elong	7439 Jan 15 09:44	26° Z 12'57	0°33'47
minimum elong	7433 Aug 01 15:32	15° L 05'01	0°18'59	morning rise	7439 Jan 28 05:46	28° Z 58'29	
	7433 Aug 01 07:11	15° L			7439 Feb 02 01:05	0° A	
max. Earth dist.	7433 Aug 03 19:46	15° L 36'29	5.95293 AU		7439 May 07 23:08	15° A	
morning rise	7433 Aug 15 07:49	18° L 22'00		retrograde	7439 May 28 16:41	15° A 39'37	
	7433 Oct 06 20:22	0° P			7439 Jun 18 09:24	15° R A	
retrograde	7433 Dec 24 05:14	8° P 42'21		opposition	7439 Jul 28 16:22	10° A 46'49	0°33'05
min. Earth dist.	7434 Feb 20 02:49	3° P 50'37	4.01154 AU	min. Earth dist.	7439 Jul 30 00:32	10° A 36'32	4.45541 AU
opposition	7434 Feb 21 16:13	3° P 37'52	-0°04'30	direct	7439 Sep 29 09:54	5° A 45'33	
	7434 Mar 23 19:40	30° R L			7439 Dec 23 20:26	15° A	
asc. node	7434 Mar 31 12:09	29° L 23'08		evening set	7440 Feb 01 18:08	23° A 13'12	
direct	7434 Apr 20 21:57	28° L 40'43		max. Earth dist.	7440 Feb 12 09:31	25° A 33'04	6.40490 AU
	7434 May 19 02:48	0° P		conjunction	7440 Feb 14 13:19	26° A 01'33	0°09'53




































































































































minimum elong	7440 Feb 14 13:20	26° \approx 01'33	0°09'57	max. Earth dist.	7445 Aug 09 07:04	20° Ω 56'35	5.97064 AU
behind sun begin	7440 Feb 14 06:51	25° \approx 58'01		morning rise	7445 Aug 20 16:44	23° Ω 39'53	
behind sun end	7440 Feb 14 19:48	26° \approx 05'06			7445 Sep 17 03:29	0° Π	
morning rise	7440 Feb 27 06:36	28° \approx 49'14		retrograde	7445 Dec 29 03:37	13° Π 50'23	
	7440 Mar 03 16:29	0° X		asc. node	7446 Feb 08 19:02	11° Π 06'18	
retrograde	7440 Jun 28 09:17	16° X 05'23		min. Earth dist.	7446 Feb 25 01:22	8° Π 59'01	4.03434 AU
desc. node	7440 Jul 06 12:51	15° X 59'12		opposition	7446 Feb 26 16:02	8° Π 45'52	0°02'07
opposition	7440 Aug 28 07:40	11° X 12'49	-0°05'25	direct	7446 Apr 26 00:06	3° Π 48'21	
min. Earth dist.	7440 Aug 29 23:16	11° X 00'11	4.33864 AU	evening set	7446 Aug 30 15:38	23° Π 01'29	
direct	7440 Oct 29 11:33	6° X 12'57					
evening set	7441 Mar 03 22:07	24° X 15'37		conjunction	7446 Sep 13 07:50	26° Π 10'59	0°16'36
max. Earth dist.	7441 Mar 14 08:51	26° X 37'40	6.26071 AU	minimum elong	7446 Sep 13 07:49	26° Π 10'59	0°16'36
				max. Earth dist.	7446 Sep 15 17:48	26° Π 44'30	6.11187 AU
conjunction	7441 Mar 16 16:01	27° X 09'03	-0°17'39	morning rise	7446 Sep 27 00:58	29° Π 20'34	
minimum elong	7441 Mar 16 16:00	27° X 09'03	0°17'39		7446 Sep 29 21:58	0° Ω	
morning rise	7441 Mar 29 09:21	0° Υ 02'29		retrograde	7447 Feb 01 05:04	18° Ω 19'12	
	7441 Mar 29 04:58	0° Υ		min. Earth dist.	7447 Mar 31 15:08	13° Ω 26'57	4.19515 AU
retrograde	7441 Aug 01 13:05	18° Υ 20'43		opposition	7447 Apr 02 00:27	13° Ω 15'43	0°44'20
opposition	7441 Oct 01 03:06	13° Υ 27'00	-0°44'54	direct	7447 May 31 12:46	8° Ω 15'49	
min. Earth dist.	7441 Oct 02 14:37	13° Υ 15'32	4.17601 AU	evening set	7447 Oct 04 22:41	26° Ω 39'54	
direct	7441 Dec 01 03:31	8° Υ 29'12					
evening set	7442 Apr 05 20:26	27° Υ 20'21		conjunction	7447 Oct 18 12:03	29° Ω 40'47	0°40'32
max. Earth dist.	7442 Apr 17 00:27	29° Υ 58'00	6.09314 AU	minimum elong	7447 Oct 18 12:01	29° Ω 40'46	0°40'36
	7442 Apr 17 03:50	0° B			7447 Oct 19 22:33	0° Π	
conjunction	7442 Apr 18 16:11	0° B 21'28	-0°40'56	max. Earth dist.	7447 Oct 20 06:49	0° Π 04'36	6.27844 AU
minimum elong	7442 Apr 18 16:10	0° B 21'27	0°40'58	morning rise	7447 Nov 01 00:29	2° Π 40'57	
morning rise	7442 May 01 12:28	3° B 23'13			7448 Jan 02 02:54	15° Π	
	7442 Jun 23 23:53	15° B		retrograde	7448 Mar 03 19:53	20° Π 28'49	
retrograde	7442 Sep 07 06:19	22° B 57'27		min. Earth dist.	7448 May 02 05:51	15° Π 34'50	4.35325 AU
opposition	7442 Nov 06 09:39	18° B 01'25	-1°12'07	opposition	7448 May 03 01:23	15° Π 28'22	1°09'27
min. Earth dist.	7442 Nov 07 03:53	17° B 55'26	4.01758 AU		7448 May 06 15:05	15° $\text{R}\Pi$	
	7442 Dec 01 06:08	15° RB		direct	7448 Jul 02 20:50	10° Π 27'02	
direct	7443 Jan 04 21:58	13° B 06'02			7448 Aug 28 17:52	15° Π	
	7443 Feb 08 05:51	15° B		evening set	7448 Nov 06 00:37	28° Π 09'39	
	7443 Apr 29 14:49	0° Π			7448 Nov 14 12:53	0° X	
evening set	7443 May 11 02:01	2° Π 44'17		conjunction	7448 Nov 19 08:26	1° X 02'39	0°51'02
conjunction	7443 May 24 02:42	5° Π 53'42	-0°50'47	minimum elong	7448 Nov 19 08:25	1° X 02'38	0°51'07
minimum elong	7443 May 24 02:42	5° Π 53'42	0°50'53	max. Earth dist.	7448 Nov 19 21:56	1° X 09'58	6.41606 AU
max. Earth dist.	7443 May 23 16:27	5° Π 47'29	5.95851 AU	morning rise	7448 Dec 02 14:34	3° X 54'36	
morning rise	7443 Jun 06 05:33	9° Π 04'27		retrograde	7449 Apr 03 00:10	20° X 52'26	
retrograde	7443 Oct 15 19:47	29° Π 40'37		opposition	7449 Jun 02 13:40	15° X 55'30	1°13'38
opposition	7443 Dec 14 12:17	24° Π 41'11	-1°13'01	min. Earth dist.	7449 Jun 02 14:21	15° X 55'17	4.46169 AU
min. Earth dist.	7443 Dec 14 05:12	24° Π 43'33	3.92146 AU	direct	7449 Aug 03 13:32	10° X 53'34	
direct	7444 Feb 10 19:57	19° Π 46'59		evening set	7449 Dec 07 07:54	28° X 11'43	
	7444 May 04 15:19	0° B			7449 Dec 15 18:44	0° B	
evening set	7444 Jun 16 07:52	9° B 50'13		conjunction	7449 Dec 20 10:15	0° B 59'46	0°47'06
conjunction	7444 Jun 29 16:11	13° B 05'31	-0°40'59	minimum elong	7449 Dec 20 10:16	0° B 59'47	0°47'12
minimum elong	7444 Jun 29 16:12	13° B 05'32	0°41'05	max. Earth dist.	7449 Dec 19 19:19	0° B 51'46	6.48765 AU
max. Earth dist.	7444 Jun 30 20:34	13° B 22'51	5.91058 AU	morning rise	7450 Jan 02 10:13	3° B 46'40	
morning rise	7444 Jul 13 03:02	16° B 22'13		retrograde	7450 May 02 15:52	20° B 22'51	
	7444 Sep 13 01:08	0° Ω		opposition	7450 Jul 02 12:55	15° B 28'41	0°58'28
retrograde	7444 Nov 22 10:35	7° Ω 13'32		min. Earth dist.	7450 Jul 03 07:39	15° B 22'40	4.49330 AU
opposition	7445 Jan 20 20:48	2° Ω 10'39	-0°43'48	direct	7450 Sep 03 03:44	10° B 26'53	
min. Earth dist.	7445 Jan 19 16:36	2° Ω 20'13	3.92823 AU	evening set	7451 Jan 06 16:26	27° B 41'18	
	7445 Feb 06 12:41	30° RB			7451 Jan 17 10:23	0° \approx	
direct	7445 Mar 19 17:49	27° B 15'33		max. Earth dist.	7451 Jan 17 23:24	0° \approx 07'02	6.47686 AU
	7445 Apr 29 13:11	0° Ω		conjunction	7451 Jan 19 14:13	0° \approx 27'59	0°30'49
	7445 Jul 15 09:05	15° Ω		minimum elong	7451 Jan 19 14:14	0° \approx 28'00	0°30'54
evening set	7445 Jul 24 09:18	17° Ω 08'09		morning rise	7451 Feb 01 09:42	3° \approx 13'42	
					7451 Apr 03 16:10	15° \approx	
conjunction	7445 Aug 06 23:55	20° Ω 23'33	-0°14'37	retrograde	7451 Jun 02 00:50	19° \approx 58'39	
minimum elong	7445 Aug 06 23:55	20° Ω 23'34	0°14'41	opposition	7451 Aug 02 00:06	15° \approx 05'59	0°28'08
behind sun begin	7445 Aug 06 20:36	20° Ω 21'35			7451 Aug 02 18:50	15° $\text{R}\approx$	
behind sun end	7445 Aug 07 03:15	20° Ω 25'33		min. Earth dist.	7451 Aug 03 10:02	14° \approx 55'09	4.44099 AU

direct	7451 Oct 03 16:34	10°≈04'54		conjunction	7457 Aug 12 05:57	25°♎34'46	-0°10'16
	7451 Dec 02 16:59	15°≈		minimum elong	7457 Aug 12 05:57	25°♎34'46	0°10'20
evening set	7452 Feb 06 01:24	27°≈37'00		behind sun begin	7457 Aug 11 23:23	25°♎30'52	
	7452 Feb 16 21:15	0°♋		behind sun end	7457 Aug 12 12:31	25°♎38'41	
max. Earth dist.	7452 Feb 16 14:09	29°≈56'05	6.38614 AU	max. Earth dist.	7457 Aug 14 13:36	26°♎07'58	5.98682 AU
				morning rise	7457 Aug 25 23:10	28°♎50'27	
conjunction	7452 Feb 18 20:11	0°♋25'56	0°06'07		7457 Aug 30 21:18	0°♎	
minimum elong	7452 Feb 18 20:12	0°♋25'56	0°06'10	asc. node	7457 Dec 20 02:32	18°♎32'49	
behind sun begin	7452 Feb 18 12:39	0°♋21'47		retrograde	7458 Jan 03 00:33	18°♎52'08	
behind sun end	7452 Feb 19 03:46	0°♋30'05		min. Earth dist.	7458 Mar 01 23:40	14°♎00'30	4.05424 AU
morning rise	7452 Mar 02 13:32	3°♋14'21		opposition	7458 Mar 03 13:33	13°♎47'36	0°08'37
desc. node	7452 May 16 06:10	17°♋17'07		direct	7458 May 01 01:36	8°♎49'42	
retrograde	7452 Jul 03 01:32	20°♋38'09		evening set	7458 Sep 04 15:51	27°♎56'28	
opposition	7452 Sep 01 22:23	15°♋45'27	-0°11'10		7458 Sep 13 15:09	0°♏	
min. Earth dist.	7452 Sep 03 13:52	15°♋32'49	4.31673 AU				
direct	7452 Nov 02 23:02	10°♋45'47		conjunction	7458 Sep 18 08:04	1°♏04'57	0°20'34
evening set	7453 Mar 08 10:20	28°♋54'51		minimum elong	7458 Sep 18 08:03	1°♏04'56	0°20'33
	7453 Mar 13 05:04	0°♐		max. Earth dist.	7458 Sep 20 17:57	1°♏38'14	6.13379 AU
max. Earth dist.	7453 Mar 18 23:55	1°♐19'13	6.23744 AU	morning rise	7458 Oct 02 00:40	4°♏13'19	
				retrograde	7459 Feb 05 17:27	23°♏02'00	
conjunction	7453 Mar 21 04:28	1°♐49'16	-0°21'23	min. Earth dist.	7459 Apr 05 05:53	18°♏09'43	4.21695 AU
minimum elong	7453 Mar 21 04:27	1°♐49'16	0°21'23	opposition	7459 Apr 06 14:01	17°♏58'54	0°49'01
morning rise	7453 Apr 02 21:53	4°♐43'42		direct	7459 Jun 05 05:47	12°♏58'49	
retrograde	7453 Aug 06 12:42	23°♐11'57			7459 Oct 03 19:40	0°♐	
opposition	7453 Oct 06 01:58	18°♐17'58	-0°49'48	evening set	7459 Oct 09 16:00	1°♐17'04	
min. Earth dist.	7453 Oct 07 11:31	18°♐07'07	4.15321 AU				
direct	7453 Dec 05 21:17	13°♐20'32		conjunction	7459 Oct 23 04:34	4°♐16'49	0°42'52
	7454 Mar 31 18:49	0°♑		minimum elong	7459 Oct 23 04:33	4°♐16'48	0°42'55
evening set	7454 Apr 10 15:58	2°♑18'15		max. Earth dist.	7459 Oct 24 18:20	4°♐37'45	6.29832 AU
max. Earth dist.	7454 Apr 21 23:02	4°♑58'28	6.07262 AU	morning rise	7459 Nov 05 16:23	7°♐15'51	
					7459 Dec 12 12:09	15°♐	
conjunction	7454 Apr 23 12:02	5°♑20'25	-0°43'19	retrograde	7460 Mar 08 03:10	24°♐56'08	
minimum elong	7454 Apr 23 12:01	5°♑20'24	0°43'23	opposition	7460 May 07 09:20	19°♐56'11	1°11'17
morning rise	7454 May 06 09:07	8°♑23'24		min. Earth dist.	7460 May 06 17:02	20°♐01'35	4.36984 AU
	7454 Jun 04 05:51	15°♑			7460 Jun 29 22:52	15°♑♐	
retrograde	7454 Sep 12 12:57	28°♑07'01		direct	7460 Jul 07 09:18	14°♐54'45	
opposition	7454 Nov 11 15:29	23°♑10'28	-1°14'02		7460 Jul 14 20:53	15°♐	
min. Earth dist.	7454 Nov 12 06:02	23°♑05'41	4.00122 AU		7460 Oct 29 10:54	0°♑	
direct	7455 Jan 09 24:00	18°♑15'16		evening set	7460 Nov 10 11:45	2°♑33'40	
	7455 Apr 11 20:31	0°♒					
evening set	7455 May 16 04:16	7°♒57'55		conjunction	7460 Nov 23 19:00	5°♑25'56	0°51'18
				minimum elong	7460 Nov 23 18:59	5°♑25'56	0°51'23
conjunction	7455 May 29 06:02	11°♒08'17	-0°50'37	max. Earth dist.	7460 Nov 24 05:54	5°♑31'49	6.42832 AU
minimum elong	7455 May 29 06:02	11°♒08'18	0°50'43	morning rise	7460 Dec 07 00:07	8°♑17'04	
max. Earth dist.	7455 May 29 02:20	11°♒06'03	5.94788 AU	retrograde	7461 Apr 07 03:32	25°♑10'54	
morning rise	7455 Jun 11 09:46	14°♒19'58		opposition	7461 Jun 06 18:49	20°♑14'28	1°12'33
	7455 Aug 24 11:23	0°♓		min. Earth dist.	7461 Jun 06 21:06	20°♑13'43	4.46916 AU
retrograde	7455 Oct 21 06:27	5°♓00'38		direct	7461 Aug 07 20:26	15°♑12'39	
opposition	7455 Dec 19 20:58	0°♓00'41	-1°10'34		7461 Nov 29 19:05	0°♓	
min. Earth dist.	7455 Dec 19 11:22	0°♓03'54	3.91784 AU	evening set	7461 Dec 11 15:30	2°♓29'42	
	7455 Dec 19 23:00	30°♑♒					
direct	7456 Feb 16 02:28	25°♒06'29		conjunction	7461 Dec 24 17:03	5°♓17'23	0°45'28
	7456 Apr 11 15:22	0°♓		minimum elong	7461 Dec 24 17:04	5°♓17'24	0°45'33
evening set	7456 Jun 21 14:10	15°♓09'37		max. Earth dist.	7461 Dec 23 22:05	5°♓07'14	6.49006 AU
				morning rise	7462 Jan 06 16:23	8°♓03'59	
conjunction	7456 Jul 04 23:24	18°♓25'11	-0°38'05	retrograde	7462 May 06 22:28	24°♓39'56	
minimum elong	7456 Jul 04 23:25	18°♓25'12	0°38'10	opposition	7462 Jul 06 18:58	19°♓46'09	0°54'58
max. Earth dist.	7456 Jul 06 07:40	18°♓44'52	5.91413 AU	min. Earth dist.	7462 Jul 07 16:32	19°♓39'14	4.49079 AU
morning rise	7456 Jul 18 11:23	21°♓42'12		direct	7462 Sep 07 11:38	14°♓44'33	
	7456 Aug 23 04:12	0°♎			7463 Jan 01 12:46	0°≈	
retrograde	7456 Nov 27 15:07	12°♎30'17		evening set	7463 Jan 10 22:41	2°≈00'09	
min. Earth dist.	7457 Jan 24 18:49	7°♎37'37	3.93869 AU	max. Earth dist.	7463 Jan 22 02:39	4°≈24'35	6.46983 AU
opposition	7457 Jan 26 01:52	7°♎27'05	-0°37'55				
direct	7457 Mar 24 22:31	2°♎31'42		conjunction	7463 Jan 23 19:58	4°≈46'55	0°27'44
	7457 Jun 27 18:00	15°♎		minimum elong	7463 Jan 23 19:59	4°≈46'56	0°27'49
evening set	7457 Jul 29 14:53	22°♎19'55		morning rise	7463 Feb 05 15:03	7°≈32'46	
					7463 Mar 13 21:43	15°≈	

retrograde	7463 Jun 06 09:37	24° \approx 20'58		min. Earth dist.	7469 Jan 29 17:38	12° Ω 41'42	3.94716 AU
opposition	7463 Aug 06 09:27	19° \approx 28'23	0°22'59	opposition	7469 Jan 31 01:18	12° Ω 30'56	-0°32'05
min. Earth dist.	7463 Aug 07 19:31	19° \approx 17'30	4.43008 AU	direct	7469 Mar 29 23:36	7° Ω 35'13	
	7463 Sep 19 01:11	15° \approx			7469 Jun 08 03:33	15° Ω	
direct	7463 Oct 07 23:54	14° \approx 27'33		evening set	7469 Aug 03 15:33	27° Ω 20'15	
	7463 Oct 27 02:09	15° \approx			7469 Aug 14 20:47	0° η	
	7464 Jan 31 23:40	0° χ					
evening set	7464 Feb 10 09:04	2° χ 02'44		conjunction	7469 Aug 17 07:17	0° η 34'46	-0°06'04
max. Earth dist.	7464 Feb 20 22:55	4° χ 22'51	6.37233 AU	minimum elong	7469 Aug 17 07:17	0° η 34'46	0°06'07
				behind sun begin	7469 Aug 16 23:20	0° η 30'04	
conjunction	7464 Feb 23 03:40	4° χ 52'06	0°02'18	behind sun end	7469 Aug 17 15:14	0° η 39'29	
minimum elong	7464 Feb 23 03:39	4° χ 52'05	0°02'21	max. Earth dist.	7469 Aug 19 17:12	1° η 09'11	5.99955 AU
behind sun begin	7464 Feb 22 19:41	4° χ 47'42		morning rise	7469 Aug 31 00:43	3° η 49'58	
behind sun end	7464 Feb 23 11:36	4° χ 56'29		asc. node	7469 Nov 01 14:46	17° η 09'31	
morning rise	7464 Mar 06 20:37	7° χ 40'55		retrograde	7470 Jan 07 18:19	23° η 44'26	
desc. node	7464 Mar 26 13:39	11° χ 57'00		min. Earth dist.	7470 Mar 06 17:19	18° η 52'49	4.06987 AU
retrograde	7464 Jul 07 16:27	25° χ 10'47		opposition	7470 Mar 08 07:04	18° η 39'59	0°14'43
opposition	7464 Sep 06 12:56	20° χ 18'01	-0°16'47	direct	7470 May 05 21:01	13° η 41'47	
min. Earth dist.	7464 Sep 08 04:24	20° χ 05'24	4.30084 AU		7470 Aug 28 10:43	0° $\underline{\Omega}$	
direct	7464 Nov 07 11:15	15° χ 18'43		evening set	7470 Sep 09 12:53	2° $\underline{\Omega}$ 43'55	
	7465 Feb 25 02:58	0° Υ					
evening set	7465 Mar 12 21:42	3° Υ 32'02		conjunction	7470 Sep 23 04:46	5° $\underline{\Omega}$ 51'32	0°24'12
max. Earth dist.	7465 Mar 23 11:20	5° Υ 57'04	6.22066 AU	minimum elong	7470 Sep 23 04:45	5° $\underline{\Omega}$ 51'31	0°24'12
				max. Earth dist.	7470 Sep 25 11:52	6° $\underline{\Omega}$ 23'05	6.15083 AU
conjunction	7465 Mar 25 15:39	6° Υ 27'06	-0°24'53	morning rise	7470 Oct 06 21:11	8° $\underline{\Omega}$ 58'59	
minimum elong	7465 Mar 25 15:38	6° Υ 27'06	0°24'53	retrograde	7471 Feb 10 03:21	27° $\underline{\Omega}$ 39'39	
morning rise	7465 Apr 07 09:24	9° Υ 22'20		min. Earth dist.	7471 Apr 09 18:48	22° $\underline{\Omega}$ 47'07	4.23400 AU
retrograde	7465 Aug 11 09:18	27° Υ 58'27		opposition	7471 Apr 11 01:21	22° $\underline{\Omega}$ 36'50	0°53'11
opposition	7465 Oct 10 22:33	23° Υ 04'07	-0°54'11	direct	7471 Jun 09 21:01	17° $\underline{\Omega}$ 36'28	
min. Earth dist.	7465 Oct 12 05:45	22° Υ 54'01	4.13671 AU		7471 Sep 17 00:43	0° \mathbb{M}	
direct	7465 Dec 10 14:02	18° Υ 06'59		evening set	7471 Oct 14 07:32	5° \mathbb{M} 50'23	
	7466 Mar 14 20:46	0° \mathcal{B}					
evening set	7466 Apr 15 08:11	7° \mathcal{B} 09'07		conjunction	7471 Oct 27 19:40	8° \mathbb{M} 49'14	0°44'49
max. Earth dist.	7466 Apr 26 20:29	9° \mathcal{B} 52'54	6.05793 AU	minimum elong	7471 Oct 27 19:39	8° \mathbb{M} 49'13	0°44'53
				max. Earth dist.	7471 Oct 29 07:39	9° \mathbb{M} 09'08	6.31426 AU
conjunction	7466 Apr 28 04:50	10° \mathcal{B} 12'09	-0°45'17	morning rise	7471 Nov 10 06:32	11° \mathbb{M} 47'15	
minimum elong	7466 Apr 28 04:49	10° \mathcal{B} 12'08	0°45'21		7471 Nov 25 02:54	15° \mathbb{M}	
morning rise	7466 May 11 02:22	13° \mathcal{B} 16'00		retrograde	7472 Mar 12 08:57	29° \mathbb{M} 21'02	
	7466 May 18 11:10	15° \mathcal{B}		opposition	7472 May 11 16:11	24° \mathbb{M} 21'32	1°12'36
	7466 Aug 03 11:34	0° \mathbb{I}		min. Earth dist.	7472 May 11 01:36	24° \mathbb{M} 26'21	4.38356 AU
retrograde	7466 Sep 17 16:57	3° \mathbb{I} 06'55		direct	7472 Jul 11 19:58	19° \mathbb{M} 20'00	
	7466 Nov 02 10:19	30° \mathcal{R} \mathcal{B}			7472 Oct 12 08:01	0° \mathcal{Z}	
opposition	7466 Nov 16 17:05	28° \mathcal{B} 09'59	-1°15'16	evening set	7472 Nov 14 22:09	6° \mathcal{Z} 55'44	
min. Earth dist.	7466 Nov 17 05:46	28° \mathcal{B} 05'48	3.98975 AU				
direct	7467 Jan 14 22:27	23° \mathcal{B} 14'59		conjunction	7472 Nov 28 04:28	9° \mathcal{Z} 47'15	0°51'14
	7467 Mar 22 20:35	0° \mathbb{I}		minimum elong	7472 Nov 28 04:28	9° \mathcal{Z} 47'15	0°51'20
evening set	7467 May 21 01:57	13° \mathbb{I} 00'25		max. Earth dist.	7472 Nov 28 10:37	9° \mathcal{Z} 50'34	6.43874 AU
				morning rise	7472 Dec 11 08:56	12° \mathcal{Z} 37'41	
conjunction	7467 Jun 03 04:26	16° \mathbb{I} 11'30	-0°50'03	retrograde	7473 Apr 11 08:00	29° \mathcal{Z} 27'49	
minimum elong	7467 Jun 03 04:27	16° \mathbb{I} 11'30	0°50'09	opposition	7473 Jun 10 23:47	24° \mathcal{Z} 31'43	1°11'04
max. Earth dist.	7467 Jun 03 03:36	16° \mathbb{I} 10'59	5.94063 AU	min. Earth dist.	7473 Jun 11 04:58	24° \mathcal{Z} 30'02	4.47568 AU
morning rise	7467 Jun 16 09:19	19° \mathbb{I} 24'00		direct	7473 Aug 12 04:52	19° \mathcal{Z} 29'47	
	7467 Aug 01 22:14	0° \mathfrak{D}			7473 Nov 12 20:20	0° \mathfrak{Z}	
retrograde	7467 Oct 26 08:40	10° \mathfrak{D} 07'49		evening set	7473 Dec 15 21:53	6° \mathfrak{Z} 45'27	
opposition	7467 Dec 24 23:33	5° \mathfrak{D} 07'25	-1°07'40				
min. Earth dist.	7467 Dec 24 10:27	5° \mathfrak{D} 11'49	3.91586 AU	conjunction	7473 Dec 28 22:54	9° \mathfrak{Z} 32'49	0°43'33
direct	7468 Feb 21 01:44	0° \mathfrak{D} 13'08		minimum elong	7473 Dec 28 22:55	9° \mathfrak{Z} 32'50	0°43'39
evening set	7468 Jun 26 15:17	20° \mathfrak{D} 16'06		max. Earth dist.	7473 Dec 28 02:04	9° \mathfrak{Z} 21'39	6.49203 AU
				morning rise	7474 Jan 10 21:24	12° \mathfrak{Z} 19'03	
conjunction	7468 Jul 10 01:27	23° \mathfrak{D} 31'58	-0°35'01	retrograde	7474 May 11 01:36	28° \mathfrak{Z} 54'40	
minimum elong	7468 Jul 10 01:29	23° \mathfrak{D} 31'58	0°35'06	opposition	7474 Jul 11 00:14	24° \mathfrak{Z} 01'02	0°51'10
max. Earth dist.	7468 Jul 11 12:24	23° \mathfrak{D} 53'15	5.91762 AU	min. Earth dist.	7474 Jul 11 22:46	23° \mathfrak{Z} 53'49	4.48794 AU
morning rise	7468 Jul 23 14:21	26° \mathfrak{D} 49'12		direct	7474 Sep 11 16:50	18° \mathfrak{Z} 59'28	
	7468 Aug 05 21:46	0° Ω			7474 Dec 15 21:42	0° \approx	
	7468 Oct 23 07:26	15° Ω		evening set	7475 Jan 15 04:02	6° \approx 16'04	
retrograde	7468 Dec 02 15:05	17° Ω 34'27		max. Earth dist.	7475 Jan 26 05:26	8° \approx 39'26	6.46202 AU
	7469 Jan 11 22:12	15° \mathcal{R} Ω					

conjunction	7475 Jan 28 00:42	9° \approx 02'54	0°24'29	morning rise	7480 Jul 28 23:26	2° Ω 10'17	
minimum elong	7475 Jan 28 00:43	9° \approx 02'54	0°24'34		7480 Sep 24 23:54	15° Ω	
morning rise	7475 Feb 09 19:21	11° \approx 48'52		retrograde	7480 Dec 07 20:57	22° Ω 52'08	
	7475 Feb 24 18:36	15° \approx		min. Earth dist.	7481 Feb 03 20:30	17° Ω 59'52	3.95776 AU
retrograde	7475 Jun 10 18:55	28° \approx 40'30		opposition	7481 Feb 05 06:08	17° Ω 48'26	-0°25'41
opposition	7475 Aug 10 18:06	23° \approx 47'57	0°17'40		7481 Feb 27 06:52	15° \mathbb{R} Ω	
min. Earth dist.	7475 Aug 12 06:22	23° \approx 36'23	4.41736 AU	direct	7481 Apr 04 04:29	12° Ω 52'30	
direct	7475 Oct 12 08:47	18° \approx 47'15			7481 May 10 01:07	15° Ω	
	7476 Jan 15 08:51	0° \mathbb{X}			7481 Jul 28 23:27	0° \mathbb{P}	
desc. node	7476 Feb 04 06:21	4° \mathbb{X} 09'44		evening set	7481 Aug 08 21:58	2° \mathbb{P} 33'26	
evening set	7476 Feb 14 16:01	6° \mathbb{X} 26'06					
max. Earth dist.	7476 Feb 25 03:40	8° \mathbb{X} 45'35	6.35535 AU	conjunction	7481 Aug 22 13:55	5° \mathbb{P} 47'19	-0°01'35
				minimum elong	7481 Aug 22 13:56	5° \mathbb{P} 47'19	0°01'37
conjunction	7476 Feb 27 10:20	9° \mathbb{X} 16'00	-0°01'39	behind sun begin	7481 Aug 22 05:31	5° \mathbb{P} 42'21	
minimum elong	7476 Feb 27 10:20	9° \mathbb{X} 16'00	0°01'38	behind sun end	7481 Aug 22 22:20	5° \mathbb{P} 52'16	
behind sun begin	7476 Feb 27 02:21	9° \mathbb{X} 11'35		max. Earth dist.	7481 Aug 25 00:09	6° \mathbb{P} 21'46	6.01628 AU
behind sun end	7476 Feb 27 18:18	9° \mathbb{X} 20'25		morning rise	7481 Sep 05 07:46	9° \mathbb{P} 01'49	
morning rise	7476 Mar 11 03:18	12° \mathbb{X} 05'29		asc. node	7481 Sep 11 01:03	10° \mathbb{P} 21'58	
retrograde	7476 Jul 12 06:51	29° \mathbb{X} 42'43		retrograde	7482 Jan 12 13:23	28° \mathbb{P} 47'05	
opposition	7476 Sep 11 03:40	24° \mathbb{X} 49'46	-0°22'24	min. Earth dist.	7482 Mar 11 14:09	23° \mathbb{P} 55'42	4.09100 AU
min. Earth dist.	7476 Sep 12 18:11	24° \mathbb{X} 37'25	4.28050 AU	opposition	7482 Mar 13 04:19	23° \mathbb{P} 42'44	0°21'00
direct	7476 Nov 11 21:56	19° \mathbb{X} 50'41		direct	7482 May 10 21:35	18° \mathbb{P} 44'13	
	7477 Feb 07 19:14	0° \mathbb{Y}			7482 Aug 10 11:51	0° $\underline{\Omega}$	
evening set	7477 Mar 17 09:26	8° \mathbb{Y} 10'01		evening set	7482 Sep 14 13:18	7° $\underline{\Omega}$ 39'38	
max. Earth dist.	7477 Mar 28 01:57	10° \mathbb{Y} 37'23	6.19854 AU				
				conjunction	7482 Sep 28 04:59	10° $\underline{\Omega}$ 46'02	0°27'50
conjunction	7477 Mar 30 03:38	11° \mathbb{Y} 06'03	-0°28'19	minimum elong	7482 Sep 28 04:57	10° $\underline{\Omega}$ 46'01	0°27'52
minimum elong	7477 Mar 30 03:37	11° \mathbb{Y} 06'02	0°28'20	max. Earth dist.	7482 Sep 30 11:23	11° $\underline{\Omega}$ 17'02	6.17481 AU
morning rise	7477 Apr 11 21:33	14° \mathbb{Y} 02'18		morning rise	7482 Oct 11 20:40	13° $\underline{\Omega}$ 52'07	
	7477 Jul 04 05:57	0° \mathbb{Z}			7483 Jan 06 13:24	0° \mathbb{M}	
retrograde	7477 Aug 16 10:10	2° \mathbb{Z} 48'32		retrograde	7483 Feb 14 15:51	2° \mathbb{M} 22'08	
	7477 Sep 29 02:37	30° \mathbb{R} \mathbb{Y}			7483 Mar 25 14:05	30° \mathbb{R} $\underline{\Omega}$	
opposition	7477 Oct 15 21:11	27° \mathbb{Y} 53'59	-0°58'24	min. Earth dist.	7483 Apr 14 09:47	27° $\underline{\Omega}$ 29'24	4.25854 AU
min. Earth dist.	7477 Oct 17 03:30	27° \mathbb{Y} 44'09	4.11441 AU	opposition	7483 Apr 15 14:34	27° $\underline{\Omega}$ 19'45	0°57'09
direct	7477 Dec 15 08:55	22° \mathbb{Y} 57'10		direct	7483 Jun 14 15:42	22° $\underline{\Omega}$ 19'13	
	7478 Feb 23 03:28	0° \mathbb{Z}			7483 Aug 28 17:54	0° \mathbb{M}	
evening set	7478 Apr 20 03:23	12° \mathbb{Z} 06'05		evening set	7483 Oct 18 23:46	10° \mathbb{M} 26'06	
max. Earth dist.	7478 May 01 18:16	14° \mathbb{Z} 52'12	6.03739 AU				
	7478 May 02 07:21	15° \mathbb{Z}		conjunction	7483 Nov 01 11:01	13° \mathbb{M} 23'40	0°46'35
				minimum elong	7483 Nov 01 11:00	13° \mathbb{M} 23'39	0°46'38
conjunction	7478 May 03 00:33	15° \mathbb{Z} 10'17	-0°47'02	max. Earth dist.	7483 Nov 02 19:08	13° \mathbb{M} 41'20	6.33734 AU
minimum elong	7478 May 03 00:33	15° \mathbb{Z} 10'16	0°47'06		7483 Nov 08 18:15	15° \mathbb{M}	
morning rise	7478 May 15 23:04	18° \mathbb{Z} 15'27		morning rise	7483 Nov 14 21:05	16° \mathbb{M} 20'22	
	7478 Jul 08 08:09	0° \mathbb{I}			7484 Jan 26 03:03	0° \mathbb{X}	
retrograde	7478 Sep 22 22:57	8° \mathbb{I} 16'00		retrograde	7484 Mar 16 13:17	3° \mathbb{X} 45'33	
opposition	7478 Nov 21 22:21	3° \mathbb{I} 18'39	-1°16'03		7484 May 06 13:15	30° \mathbb{R} \mathbb{M}	
min. Earth dist.	7478 Nov 22 07:01	3° \mathbb{I} 15'47	3.97315 AU	opposition	7484 May 15 22:51	28° \mathbb{M} 46'29	1°13'33
	7478 Dec 19 11:46	30° \mathbb{R} \mathbb{Z}		min. Earth dist.	7484 May 15 10:34	28° \mathbb{M} 50'32	4.40358 AU
direct	7479 Jan 19 22:11	28° \mathbb{Z} 23'51		direct	7484 Jul 16 06:54	23° \mathbb{M} 44'48	
	7479 Feb 20 03:16	0° \mathbb{I}			7484 Sep 22 12:32	0° \mathbb{X}	
evening set	7479 May 26 04:38	18° \mathbb{I} 14'17		evening set	7484 Nov 19 06:52	11° \mathbb{X} 15'23	
conjunction	7479 Jun 08 08:14	21° \mathbb{I} 26'24	-0°49'06	conjunction	7484 Dec 02 12:28	14° \mathbb{X} 05'58	0°50'56
minimum elong	7479 Jun 08 08:15	21° \mathbb{I} 26'24	0°49'13	minimum elong	7484 Dec 02 12:28	14° \mathbb{X} 05'59	0°51'02
max. Earth dist.	7479 Jun 08 12:42	21° \mathbb{I} 29'08	5.92968 AU	max. Earth dist.	7484 Dec 02 15:44	14° \mathbb{X} 07'44	6.45427 AU
morning rise	7479 Jun 21 14:12	24° \mathbb{I} 39'57		morning rise	7484 Dec 15 15:49	16° \mathbb{X} 55'24	
	7479 Jul 14 01:30	0° \mathbb{E}			7485 Feb 24 03:26	0° \mathbb{Z}	
retrograde	7479 Oct 31 18:30	15° \mathbb{E} 28'17		retrograde	7485 Apr 15 08:56	3° \mathbb{Z} 40'37	
opposition	7479 Dec 30 07:41	10° \mathbb{E} 27'26	-1°04'06		7485 Jun 05 08:00	30° \mathbb{R} \mathbb{X}	
min. Earth dist.	7479 Dec 29 16:14	10° \mathbb{E} 32'38	3.91182 AU	opposition	7485 Jun 15 02:46	28° \mathbb{X} 44'55	1°09'15
direct	7480 Feb 26 08:46	5° \mathbb{E} 33'06		min. Earth dist.	7485 Jun 15 10:21	28° \mathbb{X} 42'28	4.48571 AU
evening set	7480 Jul 01 22:19	25° \mathbb{E} 36'33		direct	7485 Aug 16 10:47	23° \mathbb{X} 43'00	
					7485 Oct 24 14:00	0° \mathbb{Z}	
conjunction	7480 Jul 15 09:37	28° \mathbb{E} 52'47	-0°31'31	evening set	7485 Dec 20 01:58	10° \mathbb{Z} 56'24	
minimum elong	7480 Jul 15 09:39	28° \mathbb{E} 52'48	0°31'37	max. Earth dist.	7486 Jan 01 00:05	13° \mathbb{Z} 29'22	6.49569 AU
max. Earth dist.	7480 Jul 17 02:01	29° \mathbb{E} 17'20	5.92103 AU				
	7480 Jul 20 00:15	0° Ω		conjunction	7486 Jan 02 02:07	13° \mathbb{Z} 43'20	0°41'30

minimum elong	7486 Jan 02 02:08	13°  43'20	0°41'35	minimum elong	7491 Jun 13 15:30	26°  49'26	0°47'49
morning rise	7486 Jan 15 00:06	16°  29'12		max. Earth dist.	7491 Jun 14 02:19	26°  56'02	5.91796 AU
	7486 Mar 30 08:34	0° 		morning rise	7491 Jun 26 22:43	0°  04'07	
retrograde	7486 May 15 04:55	3°  04'22			7491 Jun 26 15:57	0° 	
	7486 Jun 30 13:28	30°  R 		retrograde	7491 Nov 06 07:24	20°  56'28	
opposition	7486 Jul 15 03:27	28°  10'57	0°47'12	opposition	7492 Jan 04 18:41	15°  55'07	-0°59'54
min. Earth dist.	7486 Jul 16 05:24	28°  02'38	4.48491 AU	min. Earth dist.	7492 Jan 03 23:21	16°  50'1'38	3.90913 AU
direct	7486 Sep 15 22:09	23°  09'21		direct	7492 Mar 02 17:07	11°  50'0'42	
	7486 Nov 27 07:46	0° 			7492 Jul 02 22:48	0° 	
evening set	7487 Jan 19 06:35	10°  27'11		evening set	7492 Jul 07 08:53	1°  03'49	
max. Earth dist.	7487 Jan 30 05:12	12°  49'21	6.45234 AU				
				conjunction	7492 Jul 20 21:00	4°  20'09	-0°27'41
conjunction	7487 Feb 01 02:58	13°  14'13	0°21'12	minimum elong	7492 Jul 20 21:01	4°  20'10	0°27'47
minimum elong	7487 Feb 01 02:59	13°  14'14	0°21'16	max. Earth dist.	7492 Jul 22 16:44	4°  20'46'41	5.92738 AU
	7487 Feb 09 05:38	15° 		morning rise	7492 Aug 03 11:52	7°  03'7'46	
morning rise	7487 Feb 13 21:11	16°  00'25			7492 Sep 04 04:55	15° 	
	7487 May 01 07:29	0° 		retrograde	7492 Dec 13 01:39	28°  01'4'14	
retrograde	7487 Jun 15 00:35	2°  X  56'28		min. Earth dist.	7493 Feb 09 00:24	23°  02'22'25	3.97227 AU
	7487 Jul 30 10:06	30°  R 		opposition	7493 Feb 10 12:27	23°  01'0'08	-0°18'59
opposition	7487 Aug 15 01:03	28°  03'54	0°12'22	direct	7493 Apr 09 12:02	18°  01'3'48	
min. Earth dist.	7487 Aug 16 13:53	27°  05'2'09	4.40148 AU		7493 Jul 10 16:30	0° 	
direct	7487 Oct 16 13:03	23°  03'18		asc. node	7493 Jul 20 14:34	2°  09'5'3	
desc. node	7487 Dec 16 02:58	28°  06'21		evening set	7493 Aug 14 05:47	7°  04'8'54	
	7487 Dec 27 16:44	0° 					
evening set	7488 Feb 18 21:30	10°  X  47'00		conjunction	7493 Aug 27 22:04	11°  01'5'4	0°03'04
max. Earth dist.	7488 Feb 29 08:28	13°  X  06'47	6.33429 AU	minimum elong	7493 Aug 27 22:06	11°  01'5'4	0°03'02
				behind sun begin	7493 Aug 27 13:44	10°  01'5'7'01	
conjunction	7488 Mar 02 15:38	13°  X  37'38	-0°05'28	behind sun end	7493 Aug 28 06:27	11°  01'5'06'48	
minimum elong	7488 Mar 02 15:38	13°  X  37'38	0°05'26	max. Earth dist.	7493 Aug 30 10:11	11°  01'5'37'17	6.03733 AU
behind sun begin	7488 Mar 02 07:56	13°  X  33'21		morning rise	7493 Sep 10 15:48	14°  01'5'15'20	
behind sun end	7488 Mar 02 23:19	13°  X  41'55			7493 Nov 28 09:45	0° 	
morning rise	7488 Mar 15 08:34	16°  X  27'57		retrograde	7494 Jan 17 10:50	3°  01'5'49'38	
	7488 May 23 21:58	0° 			7494 Mar 08 19:41	30°  R 	
retrograde	7488 Jul 16 23:28	4°  Y  14'13		min. Earth dist.	7494 Mar 16 12:54	28°  01'5'57'56	4.11584 AU
	7488 Sep 10 16:28	30°  R 		opposition	7494 Mar 18 02:00	28°  01'5'45'21	0°27'07
opposition	7488 Sep 15 18:06	29°  X  21'07	-0°27'53	direct	7494 May 16 00:17	23°  01'5'46'29	
min. Earth dist.	7488 Sep 17 09:37	29°  X  08'26	4.25536 AU		7494 Jul 20 07:56	0° 	
direct	7488 Nov 16 09:40	24°  X  22'14		evening set	7494 Sep 19 13:37	12°  01'5'33'52	
	7489 Jan 18 07:59	0° 					
evening set	7489 Mar 21 21:32	12°  Y  49'21		conjunction	7494 Oct 03 04:44	15°  01'5'38'53	0°31'17
max. Earth dist.	7489 Apr 01 14:24	15°  Y  17'51	6.17134 AU	minimum elong	7494 Oct 03 04:43	15°  01'5'38'52	0°31'20
				max. Earth dist.	7494 Oct 05 09:16	16°  01'5'40'8'37	6.20093 AU
conjunction	7489 Apr 03 16:00	15°  Y  46'37	-0°31'34	morning rise	7494 Oct 16 19:48	18°  01'5'40'43'31	
minimum elong	7489 Apr 03 15:59	15°  Y  46'37	0°31'36		7494 Dec 10 11:43	0° 	
morning rise	7489 Apr 16 10:31	18°  Y  44'14		retrograde	7495 Feb 19 01:47	7°  01'5'02'28	
	7489 Jun 08 04:26	0° 		min. Earth dist.	7495 Apr 18 23:44	2°  01'5'09'41	4.28366 AU
retrograde	7489 Aug 21 11:19	7°  08'42'33		opposition	7495 Apr 20 03:14	2°  01'5'00'29	1°00'44
opposition	7489 Oct 20 21:00	2°  08'47'38	-1°02'16		7495 May 05 15:08	30°  R 	
min. Earth dist.	7489 Oct 22 00:14	2°  08'38'47	4.08741 AU	direct	7495 Jun 19 08:21	26°  01'5'40'59'43	
	7489 Nov 12 17:04	30°  R 			7495 Aug 03 09:26	0° 	
direct	7489 Dec 20 02:06	27°  Y  51'06		evening set	7495 Oct 23 15:38	14°  01'5'00'59'49	
	7490 Jan 26 00:42	0° 			7495 Oct 23 15:59	15° 	
	7490 Apr 15 23:03	15° 					
evening set	7490 Apr 25 00:37	17°  08'37		conjunction	7495 Nov 06 02:04	17°  01'5'00'56'07	0°48'04
				minimum elong	7495 Nov 06 02:03	17°  01'5'00'56'07	0°48'09
conjunction	7490 May 07 22:38	20°  08'14'16	-0°48'27	max. Earth dist.	7495 Nov 07 06:00	18°  01'5'00'11'26	6.35955 AU
minimum elong	7490 May 07 22:38	20°  08'14'16	0°48'31	morning rise	7495 Nov 19 11:05	20°  01'5'00'11'51'30	
max. Earth dist.	7490 May 06 21:11	19°  08'58'59	6.01312 AU		7496 Jan 03 06:29	0° 	
morning rise	7490 May 20 22:04	23°  08'20'58		retrograde	7496 Mar 20 19:30	8°  01'5'00'08'47	
	7490 Jun 18 14:12	0° 		opposition	7496 May 20 05:31	3°  01'5'00'07'10'17	1°14'07
retrograde	7490 Sep 28 10:14	13°  02'32'36		min. Earth dist.	7496 May 19 20:37	3°  01'5'00'07'13'12	4.42136 AU
opposition	7490 Nov 27 06:45	8°  02'34'44	-1°16'16		7496 Jun 15 12:18	30°  R 	
min. Earth dist.	7490 Nov 27 12:36	8°  02'32'48	3.95413 AU	direct	7496 Jul 20 18:24	28°  01'5'00'08'34	
direct	7491 Jan 25 02:33	3° 02'40'08			7496 Aug 25 08:59	0°	
evening set	7491 May 31 10:39	23° 02'36'10		evening set	7496 Nov 23 15:57	15° 01'5'00'07'35'01	
conjunction	7491 Jun 13 15:29	26° 02'49'25	-0°47'43	conjunction	7496 Dec 06 20:40	18° 01'5'00'07'24'49	0°50'22

minimum elong	7496 Dec 06 20:41	18°  24'49	0°50'28	conjunction	7502 May 14 00:17	25°  27'21	-0°49'33
max. Earth dist.	7496 Dec 06 18:41	18°  23'45	6.46629 AU	minimum elong	7502 May 14 00:17	25°  27'20	0°49'38
morning rise	7496 Dec 19 23:17	21°  13'30		morning rise	7502 May 27 00:41	28°  35'22	
	7497 Feb 01 17:19	0°  3			7502 Jun 01 22:29	0°  II	
retrograde	7497 Apr 19 12:18	7°  355'14		retrograde	7502 Oct 04 21:42	18°  II55'35	
opposition	7497 Jun 19 07:06	2°  359'56	1°07'05	opposition	7502 Dec 03 16:57	13°  II57'19	-1°15'50
min. Earth dist.	7497 Jun 19 17:38	2°  356'31	4.49152 AU	min. Earth dist.	7502 Dec 03 18:27	13°  II56'49	3.94186 AU
	7497 Jul 14 06:26	30°  R 		direct	7503 Jan 31 07:56	9°  II02'56	
direct	7497 Aug 20 17:09	27°  158'00		evening set	7503 Jun 06 18:21	29°  II01'57	
	7497 Sep 27 11:10	0°  3			7503 Jun 10 17:46	0°  3	
evening set	7497 Dec 24 07:17	15°  310'37					
max. Earth dist.	7498 Jan 05 02:38	17°  342'10	6.49489 AU	conjunction	7503 Jun 20 00:06	2°  315'53	-0°45'57
				minimum elong	7503 Jun 20 00:07	2°  315'53	0°46'02
conjunction	7498 Jan 06 06:57	17°  357'22	0°39'11	max. Earth dist.	7503 Jun 20 15:31	2°  325'18	5.91389 AU
minimum elong	7498 Jan 06 06:58	17°  357'23	0°39'17	morning rise	7503 Jul 03 08:36	5°  331'18	
morning rise	7498 Jan 19 04:08	20°  343'01		retrograde	7503 Nov 12 16:47	26°  324'11	
	7498 Mar 06 19:38	0°  3		min. Earth dist.	7504 Jan 10 05:36	21°  330'05	3.91389 AU
retrograde	7498 May 19 09:13	7°  319'22		opposition	7504 Jan 11 04:39	21°  322'17	-0°55'14
opposition	7498 Jul 19 09:06	2°  326'12	0°42'55	direct	7504 Mar 09 02:18	16°  327'40	
min. Earth dist.	7498 Jul 20 12:47	2°  317'22	4.47763 AU		7504 Jun 16 04:06	0°  3	
	7498 Aug 08 07:15	30°  R 		evening set	7504 Jul 13 17:43	6°  327'37	
direct	7498 Sep 20 03:26	27°  324'45					
	7498 Nov 01 22:54	0°  3		conjunction	7504 Jul 27 06:46	9°  3243'43	-0°23'43
evening set	7499 Jan 23 12:15	14°  345'15		minimum elong	7504 Jul 27 06:47	9°  3243'44	0°23'48
	7499 Jan 24 15:32	15°  3		max. Earth dist.	7504 Jul 29 07:30	10°  3213'11	5.94049 AU
max. Earth dist.	7499 Feb 03 07:00	17°  3405'51	6.43897 AU	morning rise	7504 Aug 09 22:09	13°  3200'56	
					7504 Aug 18 06:16	15°  3	
conjunction	7499 Feb 05 08:04	17°  332'36	0°17'42		7504 Nov 01 18:54	0°  3	
minimum elong	7499 Feb 05 08:04	17°  332'37	0°17'46	retrograde	7504 Dec 19 04:54	3°  329'25	
morning rise	7499 Feb 18 02:06	20°  319'13			7505 Feb 04 20:07	30°  R 	
	7499 Apr 07 00:21	0°  3		min. Earth dist.	7505 Feb 15 03:17	28°  3237'29	3.99195 AU
retrograde	7499 Jun 19 13:01	7°  321'02		opposition	7505 Feb 16 15:38	28°  3225'06	-0°12'20
opposition	7499 Aug 19 11:50	2°  328'31	0°06'48	direct	7505 Apr 15 18:41	23°  3228'24	
min. Earth dist.	7499 Aug 21 02:40	2°  316'08	4.38268 AU	asc. node	7505 May 31 14:50	26°  3250'03	
	7499 Sep 08 18:50	30°  R 			7505 Jun 20 14:04	0°  3	
direct	7499 Oct 20 22:42	27°  328'05		evening set	7505 Aug 20 10:05	12°  3256'05	
desc. node	7499 Oct 25 15:20	27°  330'07					
	7499 Dec 01 18:00	0°  3		conjunction	7505 Sep 03 02:25	16°  3207'58	0°07'24
evening set	7500 Feb 23 06:44	15°  3217'38		minimum elong	7505 Sep 03 02:24	16°  3207'57	0°07'23
max. Earth dist.	7500 Mar 05 17:14	17°  3237'53	6.31146 AU	behind sun begin	7505 Sep 02 18:46	16°  3203'31	
				behind sun end	7505 Sep 03 10:02	16°  3212'24	
conjunction	7500 Mar 08 00:54	18°  3209'10	-0°09'21	max. Earth dist.	7505 Sep 05 14:54	16°  3243'20	6.06144 AU
minimum elong	7500 Mar 08 00:53	18°  3209'09	0°09'19	morning rise	7505 Sep 16 20:02	19°  3220'10	
behind sun begin	7500 Mar 07 18:10	18°  3205'23			7505 Nov 05 02:54	0°  3	
behind sun end	7500 Mar 08 07:37	18°  3212'55		retrograde	7506 Jan 23 01:46	8°  3242'41	
morning rise	7500 Mar 20 17:53	21°  3200'25		min. Earth dist.	7506 Mar 22 06:16	3°  3251'08	4.14186 AU
	7500 May 02 07:04	0°  3		opposition	7506 Mar 23 19:14	3°  3238'37	0°32'47
retrograde	7500 Jul 22 18:36	8°  3256'27			7506 Apr 23 05:06	30°  R 	
opposition	7500 Sep 21 12:53	4°  3203'13	-0°33'25	direct	7506 May 21 21:07	28°  3239'23	
min. Earth dist.	7500 Sep 23 02:42	3°  3251'04	4.23009 AU		7506 Jun 19 20:40	0°  3	
	7500 Oct 28 12:48	30°  R 		evening set	7506 Sep 25 09:55	17°  3218'51	
direct	7500 Nov 21 22:46	29°  3204'42					
	7500 Dec 16 08:44	0°  3		conjunction	7506 Oct 09 00:27	20°  3222'29	0°34'25
evening set	7501 Mar 27 13:45	17°  3239'39		minimum elong	7506 Oct 09 00:25	20°  3222'28	0°34'26
max. Earth dist.	7501 Apr 07 09:50	20°  3210'53	6.14576 AU	max. Earth dist.	7506 Oct 11 00:46	20°  3249'42	6.22660 AU
				morning rise	7506 Oct 22 14:46	23°  3245'39	
conjunction	7501 Apr 09 08:30	20°  3238'07	-0°34'44		7506 Nov 22 02:04	0°  3	
minimum elong	7501 Apr 09 08:29	20°  3238'06	0°34'47	retrograde	7507 Feb 24 10:48	11°  3234'15	
morning rise	7501 Apr 22 03:31	23°  3237'03		opposition	7507 Apr 25 12:26	6°  3232'43	1°03'49
	7501 May 20 10:36	0°  3		min. Earth dist.	7507 Apr 24 12:23	6°  3240'44	4.30679 AU
retrograde	7501 Aug 27 18:32	12°  3247'03		direct	7507 Jun 24 23:10	1°  3231'43	
opposition	7501 Oct 27 01:05	7°  3251'50	-1°05'49		7507 Oct 08 08:15	15°  3	
min. Earth dist.	7501 Oct 28 02:21	7°  3243'36	4.06374 AU	evening set	7507 Oct 29 03:48	19°  3225'48	
direct	7501 Dec 26 01:46	2°  3255'41					
	7502 Mar 30 05:19	15°  3		conjunction	7507 Nov 11 13:33	22°  3221'03	0°49'14
evening set	7502 May 01 01:24	22°  3220'26		minimum elong	7507 Nov 11 13:32	22°  3221'03	0°49'20
max. Earth dist.	7502 May 13 03:51	25°  3215'01	5.99387 AU	max. Earth dist.	7507 Nov 12 13:38	22°  3234'12	6.37839 AU

morning rise	7507 Nov 24 21:39	25° \mathbb{M} 15'18	min. Earth dist.	7513 Nov 02 03:00	12° \mathbb{B} 48'32	4.04439 AU
	7507 Dec 17 07:37	0° \mathbb{A}	direct	7513 Dec 30 23:52	7° \mathbb{B} 59'52	
retrograde	7508 Mar 25 21:34	12° \mathbb{A} 26'06		7514 Mar 09 21:44	15° \mathbb{B}	
opposition	7508 May 25 09:44	7° \mathbb{A} 28'03 1°14'18	evening set	7514 May 06 01:52	27° \mathbb{B} 30'04	
min. Earth dist.	7508 May 25 03:06	7° \mathbb{A} 30'13 4.43494 AU		7514 May 16 10:37	0° \mathbb{I}	
direct	7508 Jul 26 00:58	2° \mathbb{A} 26'15	max. Earth dist.	7514 May 18 09:01	0° \mathbb{I} 28'04	5.97936 AU
evening set	7508 Nov 28 22:47	19° \mathbb{A} 49'53				
conjunction	7508 Dec 12 02:46	22° \mathbb{A} 39'07 0°49'33	conjunction	7514 May 19 01:24	0° \mathbb{I} 37'59 -0°50'15	
minimum elong	7508 Dec 12 02:47	22° \mathbb{A} 39'07 0°49'39	minimum elong	7514 May 19 01:24	0° \mathbb{I} 37'59 0°50'21	
max. Earth dist.	7508 Dec 11 20:39	22° \mathbb{A} 35'50 6.47376 AU	morning rise	7514 Jun 01 02:53	3° \mathbb{I} 47'08	
morning rise	7508 Dec 25 04:32	25° \mathbb{A} 27'12	retrograde	7514 Oct 10 07:02	24° \mathbb{I} 13'58	
	7509 Jan 15 23:35	0° \mathbb{B}	opposition	7514 Dec 09 01:32	19° \mathbb{I} 15'10 -1°14'45	
retrograde	7509 Apr 24 15:29	12° \mathbb{B} 06'55	min. Earth dist.	7514 Dec 08 23:09	19° \mathbb{I} 15'57 3.93373 AU	
opposition	7509 Jun 24 10:23	7° \mathbb{B} 12'02 1°04'40	direct	7515 Feb 05 13:46	14° \mathbb{I} 20'51	
min. Earth dist.	7509 Jun 25 00:09	7° \mathbb{B} 07'36 4.49264 AU		7515 May 24 18:56	0° \mathbb{O}	
direct	7509 Aug 25 22:46	2° \mathbb{B} 10'09	evening set	7515 Jun 11 23:52	4° \mathbb{O} 21'21	
evening set	7509 Dec 29 12:04	19° \mathbb{B} 23'19	conjunction	7515 Jun 25 06:48	7° \mathbb{O} 35'51 -0°43'48	
max. Earth dist.	7510 Jan 10 01:58	21° \mathbb{B} 52'14 6.48957 AU	minimum elong	7515 Jun 25 06:49	7° \mathbb{O} 35'52 0°43'54	
			max. Earth dist.	7515 Jun 26 04:37	7° \mathbb{O} 49'11 5.91297 AU	
conjunction	7510 Jan 11 11:05	22° \mathbb{B} 10'02 0°36'43	morning rise	7515 Jul 08 16:11	10° \mathbb{O} 51'46	
minimum elong	7510 Jan 11 11:06	22° \mathbb{B} 10'02 0°36'49		7515 Oct 16 04:21	0° \mathbb{Q}	
morning rise	7510 Jan 24 07:53	24° \mathbb{B} 55'43	retrograde	7515 Nov 18 01:07	1° \mathbb{Q} 43'56	
	7510 Feb 17 16:07	0° \mathbb{A}		7515 Dec 20 17:57	30° \mathbb{R} \mathbb{O}	
retrograde	7510 May 24 16:03	11° \mathbb{A} 34'35	min. Earth dist.	7516 Jan 15 10:53	26° \mathbb{O} 50'02 3.92036 AU	
opposition	7510 Jul 24 15:11	6° \mathbb{A} 41'35 0°38'27	opposition	7516 Jan 16 11:39	26° \mathbb{O} 41'39 -0°50'09	
min. Earth dist.	7510 Jul 25 20:57	6° \mathbb{A} 32'04 4.46638 AU	direct	7516 Mar 14 09:04	21° \mathbb{O} 46'52	
direct	7510 Sep 25 08:59	1° \mathbb{A} 40'11		7516 May 27 10:32	0° \mathbb{Q}	
	7511 Jan 09 14:32	15° \mathbb{A}	evening set	7516 Jul 19 00:09	11° \mathbb{Q} 43'32	
evening set	7511 Jan 28 18:05	19° \mathbb{A} 04'23				
max. Earth dist.	7511 Feb 08 12:15	21° \mathbb{A} 25'09 6.42266 AU	conjunction	7516 Aug 01 13:49	14° \mathbb{Q} 59'20 -0°19'37	
			minimum elong	7516 Aug 01 13:51	14° \mathbb{Q} 59'21 0°19'41	
conjunction	7511 Feb 10 13:46	21° \mathbb{A} 52'15 0°14'07		7516 Aug 01 14:56	15° \mathbb{Q}	
minimum elong	7511 Feb 10 13:47	21° \mathbb{A} 52'16 0°14'10	max. Earth dist.	7516 Aug 03 17:04	15° \mathbb{Q} 30'10 5.95346 AU	
behind sun begin	7511 Feb 10 09:51	21° \mathbb{A} 50'07	morning rise	7516 Aug 15 05:55	18° \mathbb{Q} 16'12	
behind sun end	7511 Feb 10 17:43	21° \mathbb{A} 54'24		7516 Oct 07 06:11	0° \mathbb{R}	
morning rise	7511 Feb 23 07:25	24° \mathbb{A} 39'24	retrograde	7516 Dec 24 03:51	8° \mathbb{R} 36'59	
	7511 Mar 20 11:48	0° \mathbb{K}	min. Earth dist.	7517 Feb 20 01:47	3° \mathbb{R} 45'30 4.01002 AU	
retrograde	7511 Jun 25 00:59	11° \mathbb{K} 47'50	opposition	7517 Feb 21 15:38	3° \mathbb{R} 32'37 -0°05'44	
opposition	7511 Aug 24 23:56	6° \mathbb{K} 55'19 0°01'11		7517 Mar 22 20:41	30° \mathbb{R} \mathbb{Q}	
min. Earth dist.	7511 Aug 26 14:37	6° \mathbb{K} 42'58 4.36237 AU	asc. node	7517 Apr 10 23:53	28° \mathbb{Q} 45'37	
desc. node	7511 Sep 05 16:05	5° \mathbb{K} 27'10	direct	7517 Apr 20 20:09	28° \mathbb{Q} 35'35	
direct	7511 Oct 26 07:06	1° \mathbb{K} 55'10		7517 May 20 00:00	0° \mathbb{R}	
evening set	7512 Feb 28 17:11	19° \mathbb{K} 50'45	evening set	7517 Aug 25 12:16	17° \mathbb{R} 57'08	
max. Earth dist.	7512 Mar 10 03:42	22° \mathbb{K} 11'46 6.28866 AU				
conjunction	7512 Mar 12 11:08	22° \mathbb{K} 43'07 -0°13'11	conjunction	7517 Sep 08 04:34	21° \mathbb{R} 08'01 0°11'38	
minimum elong	7512 Mar 12 11:08	22° \mathbb{K} 43'06 0°13'11	minimum elong	7517 Sep 08 04:33	21° \mathbb{R} 08'01 0°11'38	
behind sun begin	7512 Mar 12 06:19	22° \mathbb{K} 40'24	behind sun begin	7517 Sep 07 22:41	21° \mathbb{R} 04'37	
behind sun end	7512 Mar 12 15:56	22° \mathbb{K} 45'48	behind sun end	7517 Sep 08 10:24	21° \mathbb{R} 11'24	
morning rise	7512 Mar 25 04:19	25° \mathbb{K} 35'20	max. Earth dist.	7517 Sep 10 15:15	21° \mathbb{R} 42'11 6.08277 AU	
	7512 Apr 14 03:40	0° \mathbb{Y}	morning rise	7517 Sep 21 22:01	24° \mathbb{R} 19'08	
retrograde	7512 Jul 27 17:26	13° \mathbb{Y} 41'06		7517 Oct 17 04:33	0° \mathbb{U}	
opposition	7512 Sep 26 09:11	8° \mathbb{Y} 47'40 -0°38'45	retrograde	7518 Jan 27 17:36	13° \mathbb{U} 31'36	
min. Earth dist.	7512 Sep 27 22:12	8° \mathbb{Y} 35'44 4.20633 AU	min. Earth dist.	7518 Mar 27 00:24	8° \mathbb{U} 39'33 4.16418 AU	
direct	7512 Nov 26 15:31	3° \mathbb{Y} 49'26	opposition	7518 Mar 28 11:10	8° \mathbb{U} 27'47 0°38'11	
evening set	7513 Apr 01 06:51	22° \mathbb{Y} 31'22	direct	7518 May 26 17:57	3° \mathbb{U} 28'16	
max. Earth dist.	7513 Apr 12 06:45	25° \mathbb{Y} 05'34 6.12314 AU	evening set	7518 Sep 30 05:01	22° \mathbb{U} 01'22	
conjunction	7513 Apr 14 02:04	25° \mathbb{Y} 30'58 -0°37'40	conjunction	7518 Oct 13 19:09	25° \mathbb{U} 03'53 0°37'18	
minimum elong	7513 Apr 14 02:03	25° \mathbb{Y} 30'57 0°37'42	minimum elong	7518 Oct 13 19:07	25° \mathbb{U} 03'52 0°37'20	
morning rise	7513 Apr 26 21:32	28° \mathbb{Y} 31'04	max. Earth dist.	7518 Oct 15 17:49	25° \mathbb{U} 30'03 6.24809 AU	
	7513 May 03 06:38	0° \mathbb{B}	morning rise	7518 Oct 27 08:38	28° \mathbb{U} 05'48	
	7513 Jul 20 15:47	15° \mathbb{B}		7518 Nov 04 23:38	0° \mathbb{M}	
retrograde	7513 Sep 01 23:30	17° \mathbb{B} 51'14	retrograde	7519 Feb 02 10:14	15° \mathbb{M}	
	7513 Oct 15 19:45	15° \mathbb{R} \mathbb{B}		7519 Feb 28 17:54	16° \mathbb{M} 05'46	
opposition	7513 Nov 01 05:10	12° \mathbb{B} 55'40 -1°08'51	opposition	7519 Mar 26 21:25	15° \mathbb{R} \mathbb{M}	
				7519 Apr 29 21:28	11° \mathbb{M} 04'44 1°06'31	

min. Earth dist.	7519 Apr 28 22:55	11° \mathbb{M} 12'15	4.32583 AU	conjunction	7525 Apr 18 17:22	0° \mathcal{B} 19'27	-0°40'14
direct	7519 Jun 29 11:04	6° \mathbb{M} 03'39		minimum elong	7525 Apr 18 17:21	0° \mathcal{B} 19'26	0°40'17
	7519 Sep 20 05:24	15° \mathbb{M}		morning rise	7525 May 01 13:27	3° \mathcal{B} 20'28	
evening set	7519 Nov 02 16:33	23° \mathbb{M} 53'14			7525 Jun 24 11:54	15° \mathcal{B}	
				retrograde	7525 Sep 07 00:45	22° \mathcal{B} 48'25	
conjunction	7519 Nov 16 01:23	26° \mathbb{M} 47'32	0°50'08	opposition	7525 Nov 06 06:03	17° \mathcal{B} 52'23	-1°11'13
minimum elong	7519 Nov 16 01:23	26° \mathbb{M} 47'32	0°50'13	min. Earth dist.	7525 Nov 07 00:59	17° \mathcal{B} 46'11	4.03095 AU
max. Earth dist.	7519 Nov 16 20:15	26° \mathbb{M} 57'48	6.39359 AU		7525 Nov 29 16:45	15° $\mathcal{R}\mathcal{B}$	
morning rise	7519 Nov 29 08:42	29° \mathbb{M} 40'52		direct	7526 Jan 04 21:37	12° \mathcal{B} 56'47	
	7519 Nov 30 20:12	0° \mathcal{A}			7526 Feb 09 16:02	15° \mathcal{B}	
retrograde	7520 Mar 30 03:23	16° \mathcal{A} 46'25			7526 Apr 30 10:18	0° \mathbb{I}	
opposition	7520 May 29 15:12	11° \mathcal{A} 48'54	1°14'04	evening set	7526 May 10 22:23	2° \mathbb{I} 30'17	
min. Earth dist.	7520 May 29 12:14	11° \mathcal{A} 49'53	4.44549 AU				
direct	7520 Jul 30 10:27	6° \mathcal{A} 47'05		conjunction	7526 May 23 22:49	5° \mathbb{I} 39'00	-0°50'31
evening set	7520 Dec 03 06:47	24° \mathcal{A} 08'48		minimum elong	7526 May 23 22:49	5° \mathbb{I} 39'00	0°50'36
				max. Earth dist.	7526 May 23 11:58	5° \mathbb{I} 32'26	5.96989 AU
conjunction	7520 Dec 16 10:09	26° \mathcal{A} 57'35	0°48'27	morning rise	7526 Jun 06 01:01	8° \mathbb{I} 48'57	
minimum elong	7520 Dec 16 10:09	26° \mathcal{A} 57'36	0°48'34	retrograde	7526 Oct 15 12:11	29° \mathbb{I} 20'14	
max. Earth dist.	7520 Dec 16 00:33	26° \mathcal{A} 52'27	6.47899 AU	opposition	7526 Dec 14 04:43	24° \mathbb{I} 20'58	-1°13'05
morning rise	7520 Dec 29 11:09	29° \mathcal{A} 45'13		min. Earth dist.	7526 Dec 14 00:18	24° \mathbb{I} 22'26	3.92937 AU
	7520 Dec 30 14:55	0° \mathcal{B}		direct	7527 Feb 10 14:37	19° \mathbb{I} 26'41	
retrograde	7521 Apr 28 19:41	16° \mathcal{B} 23'39			7527 May 07 01:38	0° \mathcal{E}	
opposition	7521 Jun 28 15:33	11° \mathcal{B} 29'08	1°01'50	evening set	7527 Jun 17 00:27	9° \mathcal{E} 27'31	
min. Earth dist.	7521 Jun 29 06:48	11° \mathcal{B} 24'14	4.49267 AU				
direct	7521 Aug 30 04:10	6° \mathcal{B} 27'22		conjunction	7527 Jun 30 08:13	12° \mathcal{E} 42'24	-0°41'25
evening set	7522 Jan 02 18:13	23° \mathcal{B} 41'13		minimum elong	7527 Jun 30 08:14	12° \mathcal{E} 42'25	0°41'32
max. Earth dist.	7522 Jan 14 06:11	26° \mathcal{B} 09'19	6.48466 AU	max. Earth dist.	7527 Jul 01 08:42	12° \mathcal{E} 57'21	5.91402 AU
				morning rise	7527 Jul 13 18:47	15° \mathcal{E} 58'46	
conjunction	7522 Jan 15 16:42	26° \mathcal{B} 27'55	0°34'01		7527 Sep 15 21:01	0° \mathcal{O}	
minimum elong	7522 Jan 15 16:43	26° \mathcal{B} 27'55	0°34'06	retrograde	7527 Nov 23 01:11	6° \mathcal{O} 49'23	
morning rise	7522 Jan 28 12:52	29° \mathcal{B} 13'35		min. Earth dist.	7528 Jan 20 08:57	1° \mathcal{O} 56'03	3.92689 AU
	7522 Feb 01 03:51	0° \approx		opposition	7528 Jan 21 12:25	1° \mathcal{O} 46'45	-0°44'58
	7522 May 04 12:49	15° \approx			7528 Feb 03 23:20	30° $\mathcal{R}\mathcal{E}$	
retrograde	7522 May 29 00:01	15° \approx 54'51		direct	7528 Mar 19 08:45	26° \mathcal{E} 51'42	
	7522 Jun 22 10:11	15° $\mathcal{R}\approx$			7528 May 02 05:30	0° \mathcal{O}	
opposition	7522 Jul 28 23:12	11° \approx 02'04	0°33'43		7528 Jul 16 15:29	15° \mathcal{O}	
min. Earth dist.	7522 Jul 30 06:28	10° \approx 52'05	4.45705 AU	evening set	7528 Jul 24 01:07	16° \mathcal{O} 45'32	
direct	7522 Sep 29 16:35	6° \approx 00'56					
	7522 Dec 22 19:09	15° \approx		conjunction	7528 Aug 06 15:27	20° \mathcal{O} 01'06	-0°15'35
evening set	7523 Feb 02 01:17	23° \approx 27'53		minimum elong	7528 Aug 06 15:28	20° \mathcal{O} 01'06	0°15'39
max. Earth dist.	7523 Feb 12 16:54	25° \approx 47'46	6.40973 AU	behind sun begin	7528 Aug 06 13:57	20° \mathcal{O} 00'12	
				behind sun end	7528 Aug 06 16:58	20° \mathcal{O} 02'00	
conjunction	7523 Feb 14 20:26	26° \approx 16'04	0°10'26	max. Earth dist.	7528 Aug 08 19:28	20° \mathcal{O} 32'19	5.96479 AU
minimum elong	7523 Feb 14 20:27	26° \approx 16'05	0°10'30	morning rise	7528 Aug 20 08:05	23° \mathcal{O} 17'38	
behind sun begin	7523 Feb 14 14:12	26° \approx 12'40			7528 Sep 18 09:46	0° \mathbb{N}	
behind sun end	7523 Feb 15 02:41	26° \approx 19'30		retrograde	7528 Dec 28 23:07	13° \mathbb{N} 31'56	
morning rise	7523 Feb 27 13:59	29° \approx 03'39		asc. node	7529 Feb 21 18:38	9° \mathbb{N} 05'35	
	7523 Mar 03 21:25	0° \mathcal{H}		min. Earth dist.	7529 Feb 24 21:39	8° \mathbb{N} 40'08	4.02473 AU
retrograde	7523 Jun 29 14:53	16° \mathcal{H} 17'35		opposition	7529 Feb 26 10:45	8° \mathbb{N} 27'29	0°00'33
desc. node	7523 Jul 16 23:36	15° \mathcal{H} 49'29		direct	7529 Apr 25 18:37	3° \mathbb{N} 30'05	
opposition	7523 Aug 29 12:58	11° \mathcal{H} 25'00	-0°04'27	evening set	7529 Aug 30 10:02	22° \mathbb{N} 46'59	
min. Earth dist.	7523 Aug 31 03:40	11° \mathcal{H} 12'38	4.34670 AU				
direct	7523 Oct 30 17:49	6° \mathcal{H} 25'04		conjunction	7529 Sep 13 02:31	25° \mathbb{N} 57'09	0°15'35
evening set	7524 Mar 04 03:25	24° \mathcal{H} 24'54		minimum elong	7529 Sep 13 02:30	25° \mathbb{N} 57'09	0°15'35
max. Earth dist.	7524 Mar 14 16:19	26° \mathcal{H} 47'46	6.27160 AU	behind sun begin	7529 Sep 13 01:03	25° \mathbb{N} 56'18	
				behind sun end	7529 Sep 13 03:57	25° \mathbb{N} 57'59	
conjunction	7524 Mar 16 21:27	27° \mathcal{H} 17'55	-0°16'55	max. Earth dist.	7529 Sep 15 13:38	26° \mathbb{N} 31'26	6.09969 AU
minimum elong	7524 Mar 16 21:26	27° \mathcal{H} 17'55	0°16'55	morning rise	7529 Sep 26 19:42	29° \mathbb{N} 07'23	
	7524 Mar 28 19:22	0° \mathcal{Y}			7529 Sep 30 15:35	0° \mathcal{U}	
morning rise	7524 Mar 29 14:32	0° \mathcal{Y} 10'49		retrograde	7530 Feb 01 05:19	18° \mathcal{U} 11'34	
retrograde	7524 Aug 01 12:42	18° \mathcal{Y} 24'11		opposition	7530 Apr 01 23:37	13° \mathcal{U} 08'04	0°43'04
opposition	7524 Oct 01 04:28	13° \mathcal{Y} 30'30	-0°43'44	min. Earth dist.	7530 Mar 31 13:32	13° \mathcal{U} 19'34	4.18173 AU
min. Earth dist.	7524 Oct 02 15:47	13° \mathcal{Y} 19'08	4.18914 AU	direct	7530 May 31 09:03	8° \mathcal{U} 08'20	
direct	7524 Dec 01 06:29	8° \mathcal{Y} 32'39		evening set	7530 Oct 04 21:48	26° \mathcal{U} 36'53	
evening set	7525 Apr 05 22:03	27° \mathcal{Y} 19'06					
max. Earth dist.	7525 Apr 17 00:12	29° \mathcal{Y} 55'13	6.10715 AU	conjunction	7530 Oct 18 11:17	29° \mathcal{U} 38'26	0°39'49
	7525 Apr 17 08:20	0° \mathcal{B}		minimum elong	7530 Oct 18 11:15	29° \mathcal{U} 38'25	0°39'52

max. Earth dist.	7530 Oct 20 05:37	0° \mathbb{M} 02'05	6.26491 AU	retrograde	7536 Aug 06 09:17	23° \mathbb{Y} 08'06	
	7530 Oct 20 01:54	0° \mathbb{M}		opposition	7536 Oct 06 00:12	18° \mathbb{Y} 14'08	-0°48'34
morning rise	7530 Nov 01 00:16	2° \mathbb{M} 39'22		min. Earth dist.	7536 Oct 07 09:52	18° \mathbb{Y} 03'15	4.16697 AU
	7531 Jan 02 00:32	15° \mathbb{M}		direct	7536 Dec 05 21:46	13° \mathbb{Y} 16'34	
retrograde	7531 Mar 05 01:00	20° \mathbb{M} 32'21			7537 Apr 01 07:22	0° \mathbb{B}	
min. Earth dist.	7531 May 03 09:11	15° \mathbb{M} 38'19	4.34074 AU	evening set	7537 Apr 10 14:23	2° \mathbb{B} 09'44	
opposition	7531 May 04 05:00	15° \mathbb{M} 31'44	1°08'44	max. Earth dist.	7537 Apr 21 21:14	4° \mathbb{B} 49'18	6.08564 AU
	7531 May 08 04:43	15° \mathbb{R} \mathbb{M}					
direct	7531 Jul 03 22:52	10° \mathbb{M} 30'28		conjunction	7537 Apr 23 10:20	5° \mathbb{B} 11'15	-0°42'37
	7531 Aug 29 07:47	15° \mathbb{M}		minimum elong	7537 Apr 23 10:19	5° \mathbb{B} 11'14	0°42'41
evening set	7531 Nov 07 03:39	28° \mathbb{M} 16'38		morning rise	7537 May 06 06:54	8° \mathbb{B} 13'28	
	7531 Nov 15 02:41	0° \mathbb{A}			7537 Jun 04 23:56	15° \mathbb{B}	
				retrograde	7537 Sep 12 06:44	27° \mathbb{B} 51'31	
conjunction	7531 Nov 20 11:59	1° \mathbb{A} 10'13	0°50'40	opposition	7537 Nov 11 09:11	22° \mathbb{B} 55'09	-1°13'13
minimum elong	7531 Nov 20 11:58	1° \mathbb{A} 10'13	0°50'45	min. Earth dist.	7537 Nov 12 02:08	22° \mathbb{B} 49'36	4.01214 AU
max. Earth dist.	7531 Nov 21 04:56	1° \mathbb{A} 19'26	6.40564 AU	direct	7538 Jan 09 20:30	17° \mathbb{B} 59'50	
morning rise	7531 Dec 03 18:20	4° \mathbb{A} 02'43			7538 Apr 12 23:39	0° \mathbb{I}	
retrograde	7532 Apr 03 06:17	21° \mathbb{A} 03'54		evening set	7538 May 15 22:26	7° \mathbb{I} 39'01	
opposition	7532 Jun 02 19:59	16° \mathbb{A} 06'48	1°13'24				
min. Earth dist.	7532 Jun 02 18:14	16° \mathbb{A} 07'23	4.45402 AU	conjunction	7538 May 28 23:40	10° \mathbb{I} 48'50	-0°50'26
direct	7532 Aug 03 17:15	11° \mathbb{A} 05'00		minimum elong	7538 May 28 23:41	10° \mathbb{I} 48'50	0°50'32
evening set	7532 Dec 07 13:58	28° \mathbb{A} 24'59		max. Earth dist.	7538 May 28 15:58	10° \mathbb{I} 44'09	5.95546 AU
	7532 Dec 14 23:52	0° \mathbb{B}		morning rise	7538 Jun 11 03:09	14° \mathbb{I} 00'00	
					7538 Aug 26 11:21	0° \mathbb{D}	
conjunction	7532 Dec 20 16:29	1° \mathbb{B} 13'18	0°47'05	retrograde	7538 Oct 20 19:49	4° \mathbb{D} 37'42	
minimum elong	7532 Dec 20 16:30	1° \mathbb{B} 13'18	0°47'11		7538 Dec 16 18:06	30° \mathbb{R} \mathbb{I}	
max. Earth dist.	7532 Dec 20 02:59	1° \mathbb{B} 06'03	6.48334 AU	opposition	7538 Dec 19 12:00	29° \mathbb{I} 37'57	-1°10'50
morning rise	7533 Jan 02 16:49	4° \mathbb{B} 00'30		min. Earth dist.	7538 Dec 19 03:22	29° \mathbb{I} 40'51	3.92115 AU
retrograde	7533 May 03 00:36	20° \mathbb{B} 37'43		direct	7539 Feb 15 17:30	24° \mathbb{I} 43'42	
opposition	7533 Jul 02 20:16	15° \mathbb{B} 43'29	0°58'40		7539 Apr 14 15:19	0° \mathbb{D}	
min. Earth dist.	7533 Jul 03 14:27	15° \mathbb{B} 37'38	4.49245 AU	evening set	7539 Jun 22 06:05	14° \mathbb{D} 46'31	
direct	7533 Sep 03 11:24	10° \mathbb{B} 41'44					
evening set	7534 Jan 06 23:22	27° \mathbb{B} 55'59		conjunction	7539 Jul 05 14:58	18° \mathbb{D} 02'00	-0°38'36
	7534 Jan 16 14:15	0° \mathbb{A}		minimum elong	7539 Jul 05 15:00	18° \mathbb{D} 02'01	0°38'42
max. Earth dist.	7534 Jan 18 07:50	0° \mathbb{A} 22'26	6.47958 AU	max. Earth dist.	7539 Jul 06 20:11	18° \mathbb{D} 19'49	5.91288 AU
				morning rise	7539 Jul 19 02:33	21° \mathbb{D} 18'54	
conjunction	7534 Jan 19 21:20	0° \mathbb{A} 42'39	0°31'07		7539 Aug 25 13:29	0° \mathbb{Q}	
minimum elong	7534 Jan 19 21:21	0° \mathbb{A} 42'39	0°31'12	retrograde	7539 Nov 28 08:09	12° \mathbb{Q} 08'36	
morning rise	7534 Feb 01 17:02	3° \mathbb{A} 28'20		opposition	7540 Jan 26 18:16	7° \mathbb{Q} 05'35	-0°39'10
	7534 Apr 02 11:23	15° \mathbb{A}		min. Earth dist.	7540 Jan 25 13:18	7° \mathbb{Q} 15'26	3.93294 AU
retrograde	7534 Jun 02 06:23	20° \mathbb{A} 11'58		direct	7540 Mar 24 15:44	2° \mathbb{Q} 10'18	
opposition	7534 Aug 02 06:17	15° \mathbb{A} 19'13	0°28'46		7540 Jun 28 22:27	15° \mathbb{Q}	
min. Earth dist.	7534 Aug 03 14:20	15° \mathbb{A} 08'59	4.44716 AU	evening set	7540 Jul 29 07:44	22° \mathbb{Q} 01'21	
	7534 Aug 04 18:29	15° \mathbb{R} \mathbb{A}					
direct	7534 Oct 03 22:04	10° \mathbb{A} 18'10		conjunction	7540 Aug 11 22:49	25° \mathbb{Q} 16'39	-0°11'14
	7534 Dec 01 13:05	15° \mathbb{A}		minimum elong	7540 Aug 11 22:50	25° \mathbb{Q} 16'39	0°11'18
evening set	7535 Feb 06 07:07	27° \mathbb{A} 48'03		behind sun begin	7540 Aug 11 16:44	25° \mathbb{Q} 13'02	
	7535 Feb 16 07:33	0° \mathbb{H}		behind sun end	7540 Aug 12 04:55	25° \mathbb{Q} 20'16	
max. Earth dist.	7535 Feb 16 22:45	0° \mathbb{H} 08'23	6.39544 AU	max. Earth dist.	7540 Aug 14 06:38	25° \mathbb{Q} 50'00	5.97754 AU
				morning rise	7540 Aug 25 15:51	28° \mathbb{Q} 32'45	
conjunction	7535 Feb 19 02:04	0° \mathbb{H} 36'41	0°06'42		7540 Aug 31 19:48	0° \mathbb{H}	
minimum elong	7535 Feb 19 02:03	0° \mathbb{H} 36'40	0°06'46	asc. node	7541 Jan 01 16:14	18° \mathbb{H} 39'09	
behind sun begin	7535 Feb 18 18:38	0° \mathbb{H} 32'36		retrograde	7541 Jan 02 22:33	18° \mathbb{H} 39'18	
behind sun end	7535 Feb 19 09:29	0° \mathbb{H} 40'45		min. Earth dist.	7541 Mar 01 20:07	13° \mathbb{H} 47'49	4.04288 AU
morning rise	7535 Mar 03 19:14	3° \mathbb{H} 24'41		opposition	7541 Mar 03 10:10	13° \mathbb{H} 34'53	0°07'08
desc. node	7535 May 26 23:40	18° \mathbb{H} 34'07		direct	7541 Apr 30 19:41	8° \mathbb{H} 37'11	
retrograde	7535 Jul 04 03:59	20° \mathbb{H} 44'49		evening set	7541 Sep 04 12:26	27° \mathbb{H} 48'03	
opposition	7535 Sep 03 01:25	15° \mathbb{H} 52'10	-0°10'06		7541 Sep 14 01:37	0° \mathbb{U}	
min. Earth dist.	7535 Sep 04 16:49	15° \mathbb{H} 39'35	4.32856 AU				
direct	7535 Nov 04 03:50	10° \mathbb{H} 52'31		conjunction	7541 Sep 18 04:37	0° \mathbb{U} 57'08	0°19'37
evening set	7536 Mar 08 13:14	28° \mathbb{H} 57'38		minimum elong	7541 Sep 18 04:36	0° \mathbb{U} 57'07	0°19'36
	7536 Mar 13 03:21	0° \mathbb{Y}		max. Earth dist.	7541 Sep 20 13:59	1° \mathbb{U} 30'13	6.12159 AU
max. Earth dist.	7536 Mar 19 01:11	1° \mathbb{Y} 20'43	6.25078 AU	morning rise	7541 Oct 01 21:38	4° \mathbb{U} 06'12	
				retrograde	7542 Feb 05 18:34	23° \mathbb{U} 00'00	
conjunction	7536 Mar 21 07:06	1° \mathbb{Y} 51'27	-0°20'35	min. Earth dist.	7542 Apr 05 06:08	18° \mathbb{U} 07'50	4.20540 AU
minimum elong	7536 Mar 21 07:05	1° \mathbb{Y} 51'26	0°20'36	opposition	7542 Apr 06 15:03	17° \mathbb{U} 56'44	0°47'51
morning rise	7536 Apr 03 00:31	4° \mathbb{Y} 45'18		direct	7542 Jun 05 05:08	12° \mathbb{U} 56'43	

	7542 Oct 03 18:10	0°♌		minimum elong	7548 Mar 25 16:15	6°♑22'53	0°24'05
evening set	7542 Oct 09 16:21	1°♌18'15		morning rise	7548 Apr 07 09:52	9°♑17'54	
				retrograde	7548 Aug 11 07:49	27°♑51'53	
conjunction	7542 Oct 23 05:19	4°♌18'32	0°42'12	opposition	7548 Oct 10 20:10	22°♑57'42	-0°53'05
minimum elong	7542 Oct 23 05:17	4°♌18'31	0°42'16	min. Earth dist.	7548 Oct 12 05:24	22°♑46'57	4.13999 AU
max. Earth dist.	7542 Oct 24 22:19	4°♌41'19	6.28862 AU	direct	7548 Dec 10 13:32	18°♑00'26	
morning rise	7542 Nov 05 17:15	7°♌18'03			7549 Mar 15 08:56	0°♑	
	7542 Dec 12 06:42	15°♌		evening set	7549 Apr 15 07:43	7°♑02'09	
retrograde	7543 Mar 09 07:21	25°♌01'37		max. Earth dist.	7549 Apr 26 16:40	9°♑43'57	6.05942 AU
opposition	7543 May 08 13:20	20°♌01'27	1°10'36				
min. Earth dist.	7543 May 07 19:12	20°♌07'27	4.36263 AU	conjunction	7549 Apr 28 04:12	10°♑05'05	-0°44'42
direct	7543 Jul 08 11:59	15°♌00'05		minimum elong	7549 Apr 28 04:11	10°♑05'04	0°44'47
	7543 Oct 30 01:14	0°♑		morning rise	7549 May 11 01:47	13°♑08'52	
evening set	7543 Nov 11 14:40	2°♑40'20			7549 May 18 22:45	15°♑	
					7549 Aug 04 10:06	0°♑	
conjunction	7543 Nov 24 21:57	5°♑32'49	0°50'59	retrograde	7549 Sep 17 13:08	2°♑58'54	
minimum elong	7543 Nov 24 21:56	5°♑32'48	0°51'05		7549 Nov 01 05:33	30°♑	
max. Earth dist.	7543 Nov 25 09:40	5°♑39'09	6.42399 AU	opposition	7549 Nov 16 14:10	28°♑02'07	-1°14'43
morning rise	7543 Dec 08 03:31	8°♑24'14		min. Earth dist.	7549 Nov 17 03:02	27°♑57'53	3.98929 AU
retrograde	7544 Apr 07 08:52	25°♑19'09		direct	7550 Jan 14 19:21	23°♑07'03	
opposition	7544 Jun 06 23:43	20°♑22'25	1°12'23		7550 Mar 23 11:53	0°♑	
min. Earth dist.	7544 Jun 07 01:23	20°♑21'53	4.46770 AU	evening set	7550 May 21 01:13	12°♑53'29	
direct	7544 Aug 08 01:30	15°♑20'29					
	7544 Nov 29 08:13	0°♑		conjunction	7550 Jun 03 03:38	16°♑04'38	-0°49'57
evening set	7544 Dec 11 18:58	2°♑37'07		minimum elong	7550 Jun 03 03:38	16°♑04'38	0°50'03
				max. Earth dist.	7550 Jun 03 02:00	16°♑03'38	5.93840 AU
conjunction	7544 Dec 24 20:53	5°♑24'52	0°45'31	morning rise	7550 Jun 16 08:13	19°♑17'08	
minimum elong	7544 Dec 24 20:54	5°♑24'52	0°45'37		7550 Aug 02 09:27	0°♑	
max. Earth dist.	7544 Dec 24 04:37	5°♑16'09	6.49131 AU	retrograde	7550 Oct 26 08:15	10°♑02'00	
morning rise	7545 Jan 06 20:18	8°♑11'26		opposition	7550 Dec 24 22:08	5°♑01'45	-1°07'56
retrograde	7545 May 07 00:35	24°♑46'35		min. Earth dist.	7550 Dec 24 10:38	5°♑05'37	3.91189 AU
opposition	7545 Jul 06 22:44	19°♑52'33	0°55'19	direct	7551 Feb 21 01:34	0°♑07'31	
min. Earth dist.	7545 Jul 07 18:33	19°♑46'12	4.49422 AU	evening set	7551 Jun 27 15:18	20°♑12'30	
direct	7545 Sep 07 14:29	14°♑50'49					
	7546 Jan 01 06:25	0°♑		conjunction	7551 Jul 11 01:24	23°♑28'34	-0°35'25
evening set	7546 Jan 11 01:49	2°♑04'55		minimum elong	7551 Jul 11 01:26	23°♑28'35	0°35'30
max. Earth dist.	7546 Jan 22 06:35	4°♑29'36	6.47484 AU	max. Earth dist.	7551 Jul 12 12:52	23°♑50'12	5.91247 AU
				morning rise	7551 Jul 24 14:04	26°♑45'59	
conjunction	7546 Jan 23 23:09	4°♑51'31	0°28'09		7551 Aug 07 02:29	0°♑	
minimum elong	7546 Jan 23 23:10	4°♑51'32	0°28'15		7551 Oct 24 11:47	15°♑	
morning rise	7546 Feb 05 18:22	7°♑37'12		retrograde	7551 Dec 03 17:15	17°♑33'36	
	7546 Mar 13 17:08	15°♑			7552 Jan 12 21:02	15°♑	
retrograde	7546 Jun 06 11:56	24°♑23'25		min. Earth dist.	7552 Jan 30 18:30	12°♑41'05	3.94151 AU
opposition	7546 Aug 06 11:20	19°♑30'45	0°23'49	opposition	7552 Feb 01 02:26	12°♑30'14	-0°32'57
min. Earth dist.	7546 Aug 07 22:18	19°♑19'36	4.43592 AU	direct	7552 Mar 29 23:29	7°♑34'41	
	7546 Sep 19 19:05	15°♑			7552 Jun 08 04:14	15°♑	
direct	7546 Oct 08 03:51	14°♑29'46		evening set	7552 Aug 03 16:58	27°♑21'48	
	7546 Oct 26 12:46	15°♑			7552 Aug 14 19:07	0°♑	
	7547 Feb 01 00:29	0°♑					
evening set	7547 Feb 10 10:51	2°♑03'05		conjunction	7552 Aug 17 08:24	0°♑36'30	-0°06'44
max. Earth dist.	7547 Feb 20 23:11	4°♑22'11	6.37832 AU	minimum elong	7552 Aug 17 08:24	0°♑36'30	0°06'46
				behind sun begin	7552 Aug 17 00:36	0°♑31'52	
conjunction	7547 Feb 23 05:31	4°♑52'15	0°03'01	behind sun end	7552 Aug 17 16:12	0°♑41'07	
minimum elong	7547 Feb 23 05:30	4°♑52'14	0°03'04	max. Earth dist.	7552 Aug 19 17:24	1°♑10'25	5.99386 AU
behind sun begin	7547 Feb 22 21:34	4°♑47'52		morning rise	7552 Aug 31 01:57	3°♑51'58	
behind sun end	7547 Feb 23 13:26	4°♑56'36		asc. node	7552 Nov 10 10:59	18°♑41'43	
morning rise	7547 Mar 07 22:39	7°♑40'53		retrograde	7553 Jan 07 20:38	23°♑49'03	
desc. node	7547 Apr 07 02:05	14°♑05'58		min. Earth dist.	7553 Mar 06 19:57	18°♑57'43	4.06473 AU
retrograde	7547 Jul 08 14:53	25°♑08'22		opposition	7553 Mar 08 10:40	18°♑44'32	0°13'42
opposition	7547 Sep 07 12:19	20°♑15'33	-0°15'37	direct	7553 May 05 23:38	13°♑46'27	
min. Earth dist.	7547 Sep 09 03:36	20°♑02'58	4.30644 AU		7553 Aug 28 03:01	0°♑	
direct	7547 Nov 08 10:56	15°♑16'02		evening set	7553 Sep 09 15:29	2°♑49'54	
	7548 Feb 26 10:25	0°♑					
evening set	7548 Mar 12 22:09	3°♑27'59		conjunction	7553 Sep 23 07:31	5°♑57'43	0°23'31
max. Earth dist.	7548 Mar 23 12:01	5°♑52'56	6.22536 AU	minimum elong	7553 Sep 23 07:29	5°♑57'42	0°23'32
				max. Earth dist.	7553 Sep 25 16:31	6°♑30'24	6.14683 AU
conjunction	7548 Mar 25 16:16	6°♑22'54	-0°24'05	morning rise	7553 Oct 06 23:49	9°♑05'21	

retrograde	7554 Feb 10 09:06	27°♏47'43		conjunction	7560 Mar 30 05:52	11°♑07'07	-0°27'36
min. Earth dist.	7554 Apr 09 23:21	22°♏55'18	4.23125 AU	minimum elong	7560 Mar 30 05:51	11°♑07'07	0°27'37
opposition	7554 Apr 11 06:28	22°♏44'51	0°52'19	morning rise	7560 Apr 11 23:56	14°♑03'21	
direct	7554 Jun 10 01:56	17°♏44'36			7560 Jul 04 06:13	0°♐	
	7554 Sep 16 12:10	0°♏		retrograde	7560 Aug 16 09:29	2°♐48'41	
evening set	7554 Oct 14 11:02	5°♏58'45			7560 Sep 29 03:26	30°♑♑	
				opposition	7560 Oct 15 20:59	27°♑54'13	-0°57'27
conjunction	7554 Oct 27 23:07	8°♏57'41	0°44'19	min. Earth dist.	7560 Oct 17 03:05	27°♑44'27	4.11473 AU
minimum elong	7554 Oct 27 23:06	8°♏57'41	0°44'23	direct	7560 Dec 15 08:12	22°♑57'17	
max. Earth dist.	7554 Oct 29 11:47	9°♏17'58	6.31278 AU		7561 Feb 23 04:13	0°♐	
morning rise	7554 Nov 10 10:16	11°♏55'50		evening set	7561 Apr 20 05:37	12°♐06'50	
	7554 Nov 24 14:20	15°♏		max. Earth dist.	7561 May 01 20:22	14°♐52'52	6.03693 AU
retrograde	7555 Mar 13 13:25	29°♏30'19			7561 May 02 08:17	15°♐	
opposition	7555 May 12 21:34	24°♏30'38	1°12'04				
min. Earth dist.	7555 May 12 06:02	24°♏35'46	4.38340 AU	conjunction	7561 May 03 02:47	15°♐11'03	-0°46'33
direct	7555 Jul 13 00:37	19°♏29'08		minimum elong	7561 May 03 02:46	15°♐11'03	0°46'38
	7555 Oct 12 17:29	0°♐		morning rise	7561 May 16 01:06	18°♐16'11	
evening set	7555 Nov 16 01:35	7°♐04'19			7561 Jul 08 08:16	0°♑	
				retrograde	7561 Sep 23 00:37	8°♑16'33	
conjunction	7555 Nov 29 08:11	9°♐55'52	0°51'01	opposition	7561 Nov 21 22:54	3°♑19'20	-1°15'40
minimum elong	7555 Nov 29 08:11	9°♐55'52	0°51'08	min. Earth dist.	7561 Nov 22 08:58	3°♑16'00	3.97206 AU
max. Earth dist.	7555 Nov 29 16:36	10°♐00'24	6.43992 AU		7561 Dec 19 15:20	30°♑♐	
morning rise	7555 Dec 12 12:39	12°♐46'17		direct	7562 Jan 20 00:10	28°♐24'31	
retrograde	7556 Apr 11 11:48	29°♐36'11			7562 Feb 20 01:53	0°♑	
opposition	7556 Jun 11 04:26	24°♐39'58	1°10'59	evening set	7562 May 26 06:54	18°♑15'43	
min. Earth dist.	7556 Jun 11 08:38	24°♐38'36	4.47790 AU				
direct	7556 Aug 12 09:07	19°♐38'05		conjunction	7562 Jun 08 10:24	21°♑27'51	-0°49'04
	7556 Nov 12 07:51	0°♑		minimum elong	7562 Jun 08 10:24	21°♑27'52	0°49'11
evening set	7556 Dec 16 01:17	6°♑52'44		max. Earth dist.	7562 Jun 08 14:46	21°♑30'31	5.92834 AU
max. Earth dist.	7556 Dec 28 04:37	9°♑28'24	6.49500 AU	morning rise	7562 Jun 21 16:11	24°♑41'23	
					7562 Jul 14 00:49	0°♑	
conjunction	7556 Dec 29 02:19	9°♑40'01	0°43'42	retrograde	7562 Oct 31 20:22	15°♑29'50	
minimum elong	7556 Dec 29 02:20	9°♑40'02	0°43'47	opposition	7562 Dec 30 09:08	10°♑29'05	-1°04'26
morning rise	7557 Jan 11 01:11	12°♑26'14		min. Earth dist.	7562 Dec 29 17:27	10°♑34'21	3.91065 AU
retrograde	7557 May 11 05:46	29°♑00'57		direct	7563 Feb 26 09:49	5°♑34'47	
opposition	7557 Jul 11 03:37	24°♑07'14	0°51'36	evening set	7563 Jul 03 00:36	25°♑38'37	
min. Earth dist.	7557 Jul 12 02:55	23°♑59'46	4.49131 AU				
direct	7557 Sep 11 21:36	19°♑05'33		conjunction	7563 Jul 16 11:28	28°♑54'44	-0°31'57
	7557 Dec 15 13:28	0°♑		minimum elong	7563 Jul 16 11:30	28°♑54'45	0°32'03
evening set	7558 Jan 15 06:52	6°♑21'07		max. Earth dist.	7563 Jul 18 02:28	29°♑18'26	5.91995 AU
max. Earth dist.	7558 Jan 26 08:49	8°♑44'37	6.46549 AU		7563 Jul 20 22:50	0°♑	
				morning rise	7563 Jul 30 01:10	2°♑12'11	
conjunction	7558 Jan 28 03:52	9°♑07'55	0°24'57		7563 Sep 25 21:07	15°♑	
minimum elong	7558 Jan 28 03:53	9°♑07'55	0°25'03	retrograde	7563 Dec 08 21:32	22°♑54'19	
morning rise	7558 Feb 09 22:35	11°♑53'48		min. Earth dist.	7564 Feb 04 22:11	18°♑02'11	3.95678 AU
	7558 Feb 24 12:50	15°♑		opposition	7564 Feb 06 08:24	17°♑50'32	-0°26'36
retrograde	7558 Jun 10 19:22	28°♑44'12			7564 Feb 28 17:10	15°♑♑	
opposition	7558 Aug 10 19:52	23°♑51'35	0°18'33	direct	7564 Apr 04 06:47	12°♑54'36	
min. Earth dist.	7558 Aug 12 07:24	23°♑40'15	4.42074 AU		7564 May 09 19:59	15°♑	
direct	7558 Oct 12 09:56	18°♑50'46			7564 Jul 28 21:43	0°♑♑	
	7559 Jan 15 05:05	0°♑		evening set	7564 Aug 08 23:27	2°♑35'23	
evening set	7559 Feb 14 18:26	6°♑28'51					
desc. node	7559 Feb 14 09:23	6°♑23'52		conjunction	7564 Aug 22 15:19	5°♑49'13	-0°02'18
max. Earth dist.	7559 Feb 25 06:07	8°♑48'14	6.35830 AU	minimum elong	7564 Aug 22 15:19	5°♑49'13	0°02'20
				behind sun begin	7564 Aug 22 06:55	5°♑44'16	
conjunction	7559 Feb 27 12:51	9°♑18'40	-0°00'56	behind sun end	7564 Aug 22 23:42	5°♑54'10	
minimum elong	7559 Feb 27 12:51	9°♑18'40	0°00'55	max. Earth dist.	7564 Aug 25 02:36	6°♑24'19	6.01537 AU
behind sun begin	7559 Feb 27 04:53	9°♑14'16		morning rise	7564 Sep 05 08:47	9°♑03'37	
behind sun end	7559 Feb 27 20:49	9°♑23'05		asc. node	7564 Sep 20 06:25	12°♑30'39	
morning rise	7559 Mar 12 05:54	12°♑08'05		retrograde	7565 Jan 12 17:06	28°♑49'33	
retrograde	7559 Jul 13 08:40	29°♑44'03		min. Earth dist.	7565 Mar 11 17:43	23°♑57'53	4.08986 AU
opposition	7559 Sep 12 04:16	24°♑51'10	-0°21'18	opposition	7565 Mar 13 07:24	23°♑45'05	0°19'54
min. Earth dist.	7559 Sep 13 20:28	24°♑38'17	4.28270 AU	direct	7565 May 11 01:07	18°♑46'38	
direct	7559 Nov 13 00:24	19°♑51'56			7565 Aug 10 09:11	0°♑	
	7560 Feb 08 18:51	0°♑		evening set	7565 Sep 14 14:35	7°♑41'50	
evening set	7560 Mar 17 11:37	8°♑11'06					
max. Earth dist.	7560 Mar 28 01:47	10°♑37'06	6.19978 AU	conjunction	7565 Sep 28 06:09	10°♑48'17	0°27'08

minimum elong	7565 Sep 28 06:08	10° <u>♄</u> 48'16	0°27'09	conjunction	7571 Mar 03 21:20	13° <u>♄</u> 47'21	-0°04'50
max. Earth dist.	7565 Sep 30 13:03	11° <u>♄</u> 19'33	6.17312 AU	minimum elong	7571 Mar 03 21:21	13° <u>♄</u> 47'22	0°04'48
morning rise	7565 Oct 11 21:58	13° <u>♄</u> 54'29		behind sun begin	7571 Mar 03 13:34	13° <u>♄</u> 43'02	
	7566 Jan 06 04:41	0° <u>♄</u>		behind sun end	7571 Mar 04 05:08	13° <u>♄</u> 51'41	
retrograde	7566 Feb 14 18:02	2° <u>♄</u> 25'35		morning rise	7571 Mar 16 14:22	16° <u>♄</u> 37'38	
	7566 Mar 26 05:24	30° <u>♄</u>			7571 May 24 02:52	0° <u>♄</u>	
opposition	7566 Apr 15 18:03	27° <u>♄</u> 23'04	0°56'15	retrograde	7571 Jul 18 02:07	4° <u>♄</u> 22'43	
min. Earth dist.	7566 Apr 14 12:19	27° <u>♄</u> 33'02	4.25642 AU		7571 Sep 12 23:05	30° <u>♄</u>	
direct	7566 Jun 14 17:34	22° <u>♄</u> 22'33		opposition	7571 Sep 16 21:42	29° <u>♄</u> 29'42	-0°26'54
	7566 Aug 28 12:19	0° <u>♄</u>		min. Earth dist.	7571 Sep 18 12:06	29° <u>♄</u> 17'23	4.25889 AU
evening set	7566 Oct 19 01:35	10° <u>♄</u> 29'46		direct	7571 Nov 17 12:39	24° <u>♄</u> 30'49	
					7572 Jan 18 16:01	0° <u>♄</u>	
conjunction	7566 Nov 01 12:57	13° <u>♄</u> 27'29	0°46'06	evening set	7572 Mar 22 02:35	12° <u>♄</u> 57'09	
minimum elong	7566 Nov 01 12:56	13° <u>♄</u> 27'28	0°46'10	max. Earth dist.	7572 Apr 01 19:59	15° <u>♄</u> 25'49	6.17593 AU
max. Earth dist.	7566 Nov 02 21:26	13° <u>♄</u> 45'21	6.33490 AU				
	7566 Nov 08 13:06	15° <u>♄</u>		conjunction	7572 Apr 03 21:00	15° <u>♄</u> 54'14	-0°30'56
morning rise	7566 Nov 14 23:07	16° <u>♄</u> 24'19		minimum elong	7572 Apr 03 20:59	15° <u>♄</u> 54'13	0°30'58
	7567 Jan 25 16:05	0° <u>♄</u>		morning rise	7572 Apr 16 15:26	18° <u>♄</u> 51'38	
retrograde	7567 Mar 17 18:38	3° <u>♄</u> 50'50			7572 Jun 07 18:57	0° <u>♄</u>	
	7567 May 08 09:45	30° <u>♄</u>		retrograde	7572 Aug 21 14:37	7° <u>♄</u> 47'40	
opposition	7567 May 17 03:07	28° <u>♄</u> 51'43	1°13'06	opposition	7572 Oct 20 23:10	2° <u>♄</u> 52'54	-1°01'24
min. Earth dist.	7567 May 16 15:01	28° <u>♄</u> 55'42	4.40094 AU	min. Earth dist.	7572 Oct 22 03:28	2° <u>♄</u> 43'41	4.09270 AU
direct	7567 Jul 17 10:55	23° <u>♄</u> 50'07			7572 Nov 13 15:27	30° <u>♄</u>	
	7567 Sep 23 02:02	0° <u>♄</u>		direct	7572 Dec 20 06:27	27° <u>♄</u> 56'20	
evening set	7567 Nov 20 09:44	11° <u>♄</u> 21'16			7573 Jan 25 10:01	0° <u>♄</u>	
					7573 Apr 15 19:57	15° <u>♄</u>	
conjunction	7567 Dec 03 15:29	14° <u>♄</u> 12'02	0°50'47	evening set	7573 Apr 25 03:54	17° <u>♄</u> 12'15	
minimum elong	7567 Dec 03 15:29	14° <u>♄</u> 12'02	0°50'54	max. Earth dist.	7573 May 06 23:44	20° <u>♄</u> 01'58	6.01876 AU
max. Earth dist.	7567 Dec 03 18:31	14° <u>♄</u> 13'41	6.45158 AU				
morning rise	7567 Dec 16 19:14	17° <u>♄</u> 01'43		conjunction	7573 May 08 01:47	20° <u>♄</u> 17'35	-0°48'03
	7568 Feb 24 10:55	0° <u>♄</u>		minimum elong	7573 May 08 01:46	20° <u>♄</u> 17'35	0°48'07
retrograde	7568 Apr 15 14:03	3° <u>♄</u> 48'08		morning rise	7573 May 21 00:58	23° <u>♄</u> 23'56	
	7568 Jun 06 12:35	30° <u>♄</u>			7573 Jun 18 12:36	0° <u>♄</u>	
opposition	7568 Jun 15 07:29	28° <u>♄</u> 52'20	1°09'18	retrograde	7573 Sep 28 09:17	13° <u>♄</u> 32'38	
min. Earth dist.	7568 Jun 15 14:44	28° <u>♄</u> 49'59	4.48332 AU	opposition	7573 Nov 27 06:56	8° <u>♄</u> 34'57	-1°15'56
direct	7568 Aug 16 14:19	23° <u>♄</u> 50'24		min. Earth dist.	7573 Nov 27 12:46	8° <u>♄</u> 33'02	3.95975 AU
	7568 Oct 23 22:41	0° <u>♄</u>		direct	7574 Jan 25 02:57	3° <u>♄</u> 40'24	
evening set	7568 Dec 20 06:03	11° <u>♄</u> 04'32		evening set	7574 May 31 11:37	23° <u>♄</u> 34'33	
max. Earth dist.	7569 Jan 01 06:32	13° <u>♄</u> 38'45	6.49390 AU				
				conjunction	7574 Jun 13 15:57	26° <u>♄</u> 47'23	-0°47'47
conjunction	7569 Jan 02 06:38	13° <u>♄</u> 51'40	0°41'41	minimum elong	7574 Jun 13 15:58	26° <u>♄</u> 47'23	0°47'53
minimum elong	7569 Jan 02 06:39	13° <u>♄</u> 51'40	0°41'48	max. Earth dist.	7574 Jun 14 00:35	26° <u>♄</u> 52'39	5.92287 AU
morning rise	7569 Jan 15 04:42	16° <u>♄</u> 37'41		morning rise	7574 Jun 26 22:55	0° <u>♄</u> 01'41	
	7569 Mar 29 09:40	0° <u>♄</u>			7574 Jun 26 20:09	0° <u>♄</u>	
retrograde	7569 May 15 09:18	3° <u>♄</u> 13'31		retrograde	7574 Nov 06 04:33	20° <u>♄</u> 51'52	
	7569 Jul 02 01:23	30° <u>♄</u>		opposition	7575 Jan 04 17:24	15° <u>♄</u> 50'37	-1°00'25
opposition	7569 Jul 15 08:15	28° <u>♄</u> 20'06	0°47'42	min. Earth dist.	7575 Jan 03 22:28	15° <u>♄</u> 57'00	3.91266 AU
min. Earth dist.	7569 Jul 16 09:17	28° <u>♄</u> 12'05	4.48392 AU	direct	7575 Mar 03 17:14	10° <u>♄</u> 56'11	
direct	7569 Sep 16 01:55	23° <u>♄</u> 18'33			7575 Jul 04 06:53	0° <u>♄</u>	
	7569 Nov 26 14:11	0° <u>♄</u>		evening set	7575 Jul 08 07:27	0° <u>♄</u> 58'06	
evening set	7570 Jan 19 11:52	10° <u>♄</u> 36'52					
max. Earth dist.	7570 Jan 30 10:00	12° <u>♄</u> 58'49	6.45231 AU	conjunction	7575 Jul 21 19:21	4° <u>♄</u> 14'12	-0°28'17
				minimum elong	7575 Jul 21 19:23	4° <u>♄</u> 14'13	0°28'23
conjunction	7570 Feb 01 08:17	13° <u>♄</u> 23'58	0°21'40	max. Earth dist.	7575 Jul 23 15:21	4° <u>♄</u> 40'53	5.92929 AU
minimum elong	7570 Feb 01 08:18	13° <u>♄</u> 23'59	0°21'44	morning rise	7575 Aug 04 09:40	7° <u>♄</u> 31'31	
	7570 Feb 08 17:02	15° <u>♄</u>			7575 Sep 05 14:10	15° <u>♄</u>	
morning rise	7570 Feb 14 02:50	16° <u>♄</u> 10'16		retrograde	7575 Dec 14 00:52	28° <u>♄</u> 07'42	
	7570 Apr 30 05:51	0° <u>♄</u>		min. Earth dist.	7576 Feb 10 00:32	23° <u>♄</u> 15'30	3.97225 AU
retrograde	7570 Jun 15 06:50	3° <u>♄</u> 06'13		opposition	7576 Feb 11 11:12	23° <u>♄</u> 03'43	-0°20'08
	7570 Aug 01 00:02	30° <u>♄</u>		direct	7576 Apr 09 11:44	18° <u>♄</u> 07'29	
opposition	7570 Aug 15 05:49	28° <u>♄</u> 13'42	0°13'12		7576 Jul 11 02:35	0° <u>♄</u>	
min. Earth dist.	7570 Aug 16 19:13	28° <u>♄</u> 01'46	4.40252 AU	asc. node	7576 Jul 31 08:15	4° <u>♄</u> 30'19	
direct	7570 Oct 16 18:53	23° <u>♄</u> 13'05		evening set	7576 Aug 14 03:19	7° <u>♄</u> 42'28	
desc. node	7570 Dec 25 04:12	29° <u>♄</u> 41'49					
	7570 Dec 26 22:56	0° <u>♄</u>		conjunction	7576 Aug 27 19:21	10° <u>♄</u> 55'27	0°02'12
evening set	7571 Feb 19 02:58	10° <u>♄</u> 56'43		minimum elong	7576 Aug 27 19:22	10° <u>♄</u> 55'28	0°02'10
max. Earth dist.	7571 Mar 01 14:18	13° <u>♄</u> 16'37	6.33651 AU	behind sun begin	7576 Aug 27 10:58	10° <u>♄</u> 50'32	

behind sun end	7576 Aug 28 03:46	11° \cap 00'23		conjunction	7582 Feb 05 14:34	17° \approx 44'54	0°18'11
max. Earth dist.	7576 Aug 30 07:04	11° \cap 30'37	6.03524 AU	minimum elong	7582 Feb 05 14:35	17° \approx 44'54	0°18'15
morning rise	7576 Sep 10 13:01	14° \cap 08'58		morning rise	7582 Feb 18 08:35	20° \approx 31'30	
	7576 Nov 28 22:48	0° $\underline{\cap}$			7582 Apr 06 04:14	0° \mathbb{H}	
retrograde	7577 Jan 17 09:33	3° $\underline{\cap}$ 44'50		retrograde	7582 Jun 19 17:23	7° \mathbb{H} 32'15	
	7577 Mar 08 04:57	30° \mathbb{R} \cap		opposition	7582 Aug 19 17:02	2° \mathbb{H} 39'46	0°07'42
min. Earth dist.	7577 Mar 16 11:51	28° \cap 53'23	4.11208 AU	min. Earth dist.	7582 Aug 21 06:12	2° \mathbb{H} 27'55	4.38757 AU
opposition	7577 Mar 18 01:42	28° \cap 40'33	0°25'52		7582 Sep 10 17:22	30° \mathbb{R} \approx	
direct	7577 May 15 22:23	23° \cap 41'46		direct	7582 Oct 21 03:18	27° \approx 39'25	
	7577 Jul 20 16:44	0° $\underline{\cap}$		desc. node	7582 Nov 04 02:52	27° \approx 57'05	
evening set	7577 Sep 19 12:01	12° $\underline{\cap}$ 30'16			7582 Nov 30 08:40	0° \mathbb{H}	
				evening set	7583 Feb 23 12:23	15° \mathbb{H} 27'14	
conjunction	7577 Oct 03 03:08	15° $\underline{\cap}$ 35'31	0°30'31	max. Earth dist.	7583 Mar 05 23:36	17° \mathbb{H} 47'39	6.31942 AU
minimum elong	7577 Oct 03 03:07	15° $\underline{\cap}$ 35'30	0°30'33				
max. Earth dist.	7577 Oct 05 06:36	16° $\underline{\cap}$ 04'42	6.19576 AU	conjunction	7583 Mar 08 06:26	18° \mathbb{H} 18'26	-0°08'39
morning rise	7577 Oct 16 18:19	18° $\underline{\cap}$ 40'25		minimum elong	7583 Mar 08 06:25	18° \mathbb{H} 18'25	0°08'38
	7577 Dec 10 15:09	0° \mathbb{M}		behind sun begin	7583 Mar 07 23:28	18° \mathbb{H} 14'32	
retrograde	7578 Feb 19 05:07	7° \mathbb{M} 02'00		behind sun end	7583 Mar 08 13:22	18° \mathbb{H} 22'18	
min. Earth dist.	7578 Apr 19 02:14	2° \mathbb{M} 08'50	4.27747 AU	morning rise	7583 Mar 20 23:31	21° \mathbb{H} 09'23	
opposition	7578 Apr 20 04:52	1° \mathbb{M} 59'55	0°59'50		7583 May 01 20:14	0° \mathbb{Y}	
	7578 May 05 14:22	30° \mathbb{R} $\underline{\cap}$		retrograde	7583 Jul 22 21:41	9° \mathbb{Y} 01'53	
direct	7578 Jun 19 09:42	26° $\underline{\cap}$ 59'11		opposition	7583 Sep 21 15:32	4° \mathbb{Y} 08'40	-0°32'17
	7578 Aug 03 10:20	0° \mathbb{M}		min. Earth dist.	7583 Sep 23 05:27	3° \mathbb{Y} 56'29	4.24075 AU
evening set	7578 Oct 23 15:58	15° \mathbb{M} 01'02			7583 Oct 29 22:03	30° \mathbb{R} \mathbb{H}	
	7578 Oct 23 14:05	15° \mathbb{M}		direct	7583 Nov 22 03:52	29° \mathbb{H} 10'04	
					7583 Dec 15 07:52	0° \mathbb{Y}	
conjunction	7578 Nov 06 02:41	17° \mathbb{M} 57'43	0°47'36	evening set	7584 Mar 26 16:29	17° \mathbb{Y} 41'14	
minimum elong	7578 Nov 06 02:40	17° \mathbb{M} 57'42	0°47'42	max. Earth dist.	7584 Apr 06 12:55	20° \mathbb{Y} 12'13	6.15832 AU
max. Earth dist.	7578 Nov 07 07:44	18° \mathbb{M} 13'40	6.35275 AU				
morning rise	7578 Nov 19 11:58	20° \mathbb{M} 53'29		conjunction	7584 Apr 08 11:11	20° \mathbb{Y} 39'08	-0°34'00
	7579 Jan 03 01:20	0° \mathbb{Z}		minimum elong	7584 Apr 08 11:10	20° \mathbb{Y} 39'07	0°34'03
retrograde	7579 Mar 21 22:35	8° \mathbb{Z} 13'28		morning rise	7584 Apr 21 05:53	23° \mathbb{Y} 37'24	
opposition	7579 May 21 08:58	3° \mathbb{Z} 14'49	1°13'45		7584 May 19 14:26	0° \mathbb{B}	
min. Earth dist.	7579 May 20 22:50	3° \mathbb{Z} 18'08	4.41460 AU	retrograde	7584 Aug 26 14:24	12° \mathbb{B} 41'37	
	7579 Jun 17 09:23	30° \mathbb{R} \mathbb{M}		opposition	7584 Oct 25 23:02	7° \mathbb{B} 46'29	-1°04'48
direct	7579 Jul 21 19:08	28° \mathbb{M} 13'07		min. Earth dist.	7584 Oct 27 00:16	7° \mathbb{B} 38'16	4.07727 AU
	7579 Aug 25 15:38	0° \mathbb{Z}		direct	7584 Dec 25 01:02	2° \mathbb{B} 50'14	
evening set	7579 Nov 24 18:42	15° \mathbb{Z} 41'26			7585 Mar 29 19:56	15° \mathbb{B}	
				evening set	7585 Apr 29 23:37	22° \mathbb{B} 10'08	
conjunction	7579 Dec 07 23:43	18° \mathbb{Z} 31'36	0°50'16				
minimum elong	7579 Dec 07 23:44	18° \mathbb{Z} 31'36	0°50'22	conjunction	7585 May 12 21:58	25° \mathbb{B} 16'15	-0°49'07
max. Earth dist.	7579 Dec 07 22:57	18° \mathbb{Z} 31'11	6.46019 AU	minimum elong	7585 May 12 21:57	25° \mathbb{B} 16'15	0°49'12
morning rise	7579 Dec 21 02:37	21° \mathbb{Z} 20'38		max. Earth dist.	7585 May 11 23:27	25° \mathbb{B} 02'43	6.00680 AU
	7580 Feb 02 03:29	0° \mathbb{B}		morning rise	7585 May 25 22:00	28° \mathbb{B} 23'30	
retrograde	7580 Apr 19 18:42	8° \mathbb{B} 04'27			7585 Jun 01 16:16	0° \mathbb{I}	
opposition	7580 Jun 19 12:14	3° \mathbb{B} 09'06	1°07'13	retrograde	7585 Oct 03 13:15	18° \mathbb{I} 38'00	
min. Earth dist.	7580 Jun 19 22:26	3° \mathbb{B} 05'49	4.48654 AU	opposition	7585 Dec 02 10:24	13° \mathbb{I} 39'50	-1°15'34
	7580 Jul 15 23:24	30° \mathbb{R} \mathbb{Z}		min. Earth dist.	7585 Dec 02 13:11	13° \mathbb{I} 38'54	3.95252 AU
direct	7580 Aug 20 21:33	28° \mathbb{Z} 07'14		direct	7586 Jan 30 04:14	8° \mathbb{I} 45'18	
	7580 Sep 26 02:19	0° \mathbb{B}		evening set	7586 Jun 05 11:37	28° \mathbb{I} 40'43	
evening set	7580 Dec 24 12:21	15° \mathbb{B} 21'14			7586 Jun 10 22:04	0° \mathbb{G}	
max. Earth dist.	7581 Jan 05 07:45	17° \mathbb{B} 52'56	6.49155 AU				
				conjunction	7586 Jun 18 17:05	1° \mathbb{G} 54'06	-0°46'09
conjunction	7581 Jan 06 12:12	18° \mathbb{B} 08'13	0°39'25	minimum elong	7586 Jun 18 17:06	1° \mathbb{G} 54'07	0°46'15
minimum elong	7581 Jan 06 12:13	18° \mathbb{B} 08'14	0°39'32	max. Earth dist.	7586 Jun 19 07:21	2° \mathbb{G} 02'49	5.92121 AU
morning rise	7581 Jan 19 09:50	20° \mathbb{B} 54'08		morning rise	7586 Jul 02 00:54	5° \mathbb{G} 08'55	
	7581 Mar 05 23:27	0° \approx		retrograde	7586 Nov 11 08:38	25° \mathbb{G} 59'16	
retrograde	7581 May 19 16:19	7° \approx 31'23		opposition	7587 Jan 09 19:54	20° \mathbb{G} 57'37	-0°56'05
opposition	7581 Jul 19 14:57	2° \approx 38'10	0°43'27	min. Earth dist.	7587 Jan 08 23:27	21° \mathbb{G} 04'31	3.91688 AU
min. Earth dist.	7581 Jul 20 17:48	2° \approx 29'34	4.47652 AU	direct	7587 Mar 08 18:49	16° \mathbb{G} 03'03	
	7581 Aug 10 08:38	30° \mathbb{R} \mathbb{B}			7587 Jun 17 15:48	0° \mathbb{Q}	
direct	7581 Sep 20 08:35	27° \mathbb{B} 36'43		evening set	7587 Jul 13 08:51	6° \mathbb{Q} 02'35	
	7581 Oct 31 09:27	0° \approx					
evening set	7582 Jan 23 18:24	14° \approx 57'30		conjunction	7587 Jul 26 21:26	9° \mathbb{Q} 18'35	-0°24'35
	7582 Jan 23 23:02	15° \approx		minimum elong	7587 Jul 26 21:27	9° \mathbb{Q} 18'36	0°24'39
max. Earth dist.	7582 Feb 03 16:09	17° \approx 19'36	6.44066 AU	max. Earth dist.	7587 Jul 28 19:08	9° \mathbb{Q} 46'13	5.93875 AU
				morning rise	7587 Aug 09 12:38	12° \mathbb{Q} 35'48	

	7587 Aug 19 15:06	15°♏		min. Earth dist.	7593 Jul 25 01:36	6°♐44'51	4.46941 AU
	7587 Nov 04 08:30	0°♐		direct	7593 Sep 24 14:42	1°♐52'42	
retrograde	7587 Dec 18 20:55	3°♐06'15			7594 Jan 07 21:36	15°♐	
	7588 Feb 01 12:38	30°♐♏		evening set	7594 Jan 27 23:37	19°♐15'36	
min. Earth dist.	7588 Feb 14 19:59	28°♏14'26	3.98601 AU	max. Earth dist.	7594 Feb 07 17:56	21°♐36'18	6.42898 AU
opposition	7588 Feb 16 08:08	28°♏02'08	-0°13'53				
direct	7588 Apr 14 09:24	23°♏05'36		conjunction	7594 Feb 09 19:15	22°♐03'15	0°14'38
asc. node	7588 Jun 12 19:00	28°♏31'16		minimum elong	7594 Feb 09 19:16	22°♐03'15	0°14'42
	7588 Jun 21 06:56	0°♐		behind sun begin	7594 Feb 09 15:52	22°♐01'25	
evening set	7588 Aug 19 02:20	12°♐36'00		behind sun end	7594 Feb 09 22:39	22°♐05'06	
				morning rise	7594 Feb 22 13:09	24°♐50'13	
conjunction	7588 Sep 01 18:34	15°♐48'18	0°06'21		7594 Mar 18 21:22	0°♐	
minimum elong	7588 Sep 01 18:34	15°♐48'18	0°06'18	retrograde	7594 Jun 24 04:43	11°♐56'01	
behind sun begin	7588 Sep 01 10:40	15°♐43'41		opposition	7594 Aug 24 03:31	7°♐03'27	0°02'09
behind sun end	7588 Sep 02 02:28	15°♐52'55		min. Earth dist.	7594 Aug 25 17:30	6°♐51'19	4.37163 AU
max. Earth dist.	7588 Sep 04 05:01	16°♐22'35	6.05202 AU	desc. node	7594 Sep 14 08:21	4°♐28'56	
morning rise	7588 Sep 15 12:15	19°♐01'00		direct	7594 Oct 25 11:39	2°♐03'14	
	7588 Nov 05 07:24	0°♏		evening set	7595 Feb 27 20:27	19°♐55'38	
retrograde	7589 Jan 22 00:12	8°♏28'34		max. Earth dist.	7595 Mar 10 08:49	22°♐17'16	6.30027 AU
min. Earth dist.	7589 Mar 21 03:59	3°♏36'38	4.13007 AU				
opposition	7589 Mar 22 15:48	3°♏24'30	0°31'21	conjunction	7595 Mar 12 14:34	22°♐47'33	-0°12'26
	7589 Apr 19 13:04	30°♐♐		minimum elong	7595 Mar 12 14:33	22°♐47'33	0°12'25
direct	7589 May 20 16:50	28°♐25'25		behind sun begin	7595 Mar 12 09:15	22°♐44'35	
	7589 Jun 21 02:01	0°♏		behind sun end	7595 Mar 12 19:51	22°♐50'31	
evening set	7589 Sep 24 05:50	17°♏09'02		morning rise	7595 Mar 25 07:31	25°♐39'15	
					7595 Apr 14 01:02	0°♐	
conjunction	7589 Oct 07 20:45	20°♏13'23	0°33'34	retrograde	7595 Jul 27 15:14	13°♐40'08	
minimum elong	7589 Oct 07 20:44	20°♏13'23	0°33'35	opposition	7595 Sep 26 08:33	8°♐46'44	-0°37'32
max. Earth dist.	7589 Oct 09 23:00	20°♏41'46	6.21363 AU	min. Earth dist.	7595 Sep 27 21:28	8°♐34'52	4.21954 AU
morning rise	7589 Oct 21 11:19	23°♏17'16		direct	7595 Nov 26 16:13	3°♐48'27	
	7589 Nov 21 12:34	0°♐		evening set	7596 Mar 31 06:32	22°♐25'56	
retrograde	7590 Feb 23 11:57	11°♐31'12		max. Earth dist.	7596 Apr 11 04:26	24°♐58'32	6.13666 AU
min. Earth dist.	7590 Apr 23 11:34	6°♐38'08	4.29389 AU				
opposition	7590 Apr 24 13:08	6°♐29'35	1°02'54	conjunction	7596 Apr 13 01:23	25°♐24'49	-0°36'54
direct	7590 Jun 23 20:23	1°♐28'45		minimum elong	7596 Apr 13 01:21	25°♐24'48	0°36'56
	7590 Oct 07 08:12	15°♐		morning rise	7596 Apr 25 20:42	28°♐24'15	
evening set	7590 Oct 28 04:14	19°♐26'47			7596 May 02 18:07	0°♐	
					7596 Jul 21 01:24	15°♐	
conjunction	7590 Nov 10 14:11	22°♐22'38	0°48'46	retrograde	7596 Aug 31 16:36	17°♐38'34	
minimum elong	7590 Nov 10 14:10	22°♐22'37	0°48'51		7596 Oct 12 18:14	15°♐♐	
max. Earth dist.	7590 Nov 11 14:43	22°♐36'04	6.36661 AU	opposition	7596 Oct 30 23:45	12°♐43'02	-1°07'51
morning rise	7590 Nov 23 22:47	25°♐17'33		min. Earth dist.	7596 Oct 31 22:39	12°♐35'33	4.05685 AU
	7590 Dec 16 02:57	0°♐		direct	7596 Dec 29 21:41	7°♐47'02	
retrograde	7591 Mar 26 04:04	12°♐32'26			7597 Mar 10 01:04	15°♐	
opposition	7591 May 25 14:01	7°♐34'16	1°13'56	evening set	7597 May 04 20:48	27°♐13'02	
min. Earth dist.	7591 May 25 07:05	7°♐36'33	4.42510 AU		7597 May 16 10:25	0°♐	
direct	7591 Jul 26 04:09	2°♐32'33					
evening set	7591 Nov 29 02:28	19°♐58'46		conjunction	7597 May 17 20:08	0°♐20'21	-0°49'52
				minimum elong	7597 May 17 20:08	0°♐20'20	0°49'58
conjunction	7591 Dec 12 06:52	22°♐48'26	0°49'27	max. Earth dist.	7597 May 17 02:55	0°♐09'58	5.98967 AU
minimum elong	7591 Dec 12 06:52	22°♐48'27	0°49'33	morning rise	7597 May 30 21:00	3°♐28'47	
max. Earth dist.	7591 Dec 12 03:10	22°♐46'27	6.46659 AU	retrograde	7597 Oct 08 22:20	23°♐51'11	
morning rise	7591 Dec 25 08:59	25°♐36'57		opposition	7597 Dec 07 16:37	18°♐52'34	-1°14'39
	7592 Jan 15 08:13	0°♐		min. Earth dist.	7597 Dec 07 16:46	18°♐52'31	3.94064 AU
retrograde	7592 Apr 23 21:30	12°♐18'45		direct	7598 Feb 04 06:47	13°♐58'10	
opposition	7592 Jun 23 16:14	7°♐23'43	1°04'46		7598 May 25 04:13	0°♐	
min. Earth dist.	7592 Jun 24 03:45	7°♐20'00	4.48863 AU	evening set	7598 Jun 10 15:33	3°♐56'42	
direct	7592 Aug 25 02:16	2°♐21'53					
evening set	7592 Dec 28 17:40	19°♐35'51		conjunction	7598 Jun 23 21:56	7°♐10'51	-0°44'08
max. Earth dist.	7593 Jan 09 10:49	22°♐06'29	6.48912 AU	minimum elong	7598 Jun 23 21:58	7°♐10'52	0°44'14
				max. Earth dist.	7598 Jun 24 15:36	7°♐21'38	5.91562 AU
conjunction	7593 Jan 10 16:58	22°♐22'42	0°36'56	morning rise	7598 Jul 07 07:05	10°♐26'30	
minimum elong	7593 Jan 10 16:59	22°♐22'42	0°37'03		7598 Oct 19 06:18	0°♏	
morning rise	7593 Jan 23 13:55	25°♐08'28		retrograde	7598 Nov 16 14:20	1°♏18'10	
	7593 Feb 15 20:52	0°♐			7598 Dec 14 20:22	30°♐♐	
retrograde	7593 May 23 22:01	11°♐47'02		min. Earth dist.	7599 Jan 14 02:04	26°♐24'13	3.91846 AU
opposition	7593 Jul 23 20:53	6°♐54'01	0°38'59	opposition	7599 Jan 15 02:09	26°♐16'04	-0°51'11

direct	7599 Mar 13 23:00	21° \mathring{O} 21'19	
	7599 May 29 04:34	0° \mathring{O}	
evening set	7599 Jul 18 15:21	11° \mathring{O} 19'30	
conjunction	7599 Aug 01 04:47	14° \mathring{O} 35'29	-0°20'31
minimum elong	7599 Aug 01 04:48	14° \mathring{O} 35'29	0°20'36
	7599 Aug 02 21:27	15° \mathring{O}	
max. Earth dist.	7599 Aug 03 05:20	15° \mathring{O} 04'46	5.94739 AU
morning rise	7599 Aug 14 20:39	17° \mathring{O} 52'33	
	7599 Oct 08 18:57	0° \mathring{O}	
retrograde	7599 Dec 23 22:40	8° \mathring{O} 17'07	
min. Earth dist.	7600 Feb 19 21:08	3° \mathring{O} 25'12	4.00056 AU
opposition	7600 Feb 21 09:28	3° \mathring{O} 12'50	-0°07'16
	7600 Mar 18 05:28	30° \mathring{O}	
direct	7600 Apr 19 13:57	28° \mathring{O} 15'55	
asc. node	7600 Apr 22 19:11	28° \mathring{O} 17'00	
	7600 May 21 23:48	0° \mathring{O}	
evening set	7600 Aug 24 05:57	17° \mathring{O} 41'09	
conjunction	7600 Sep 06 22:27	20° \mathring{O} 52'39	0°10'37
minimum elong	7600 Sep 06 22:26	20° \mathring{O} 52'39	0°10'37
behind sun begin	7600 Sep 06 16:01	20° \mathring{O} 48'55	
behind sun end	7600 Sep 07 04:51	20° \mathring{O} 56'22	
max. Earth dist.	7600 Sep 09 10:41	21° \mathring{O} 27'48	6.07130 AU
morning rise	7600 Sep 20 15:57	24° \mathring{O} 04'22	
	7600 Oct 16 23:57	0° \mathring{O}	
retrograde	7601 Jan 26 16:34	13° \mathring{O} 22'04	
min. Earth dist.	7601 Mar 25 21:28	8° \mathring{O} 30'23	4.15227 AU
opposition	7601 Mar 27 09:28	8° \mathring{O} 18'13	0°36'52
direct	7601 May 25 13:25	3° \mathring{O} 18'53	
evening set	7601 Sep 29 02:59	21° \mathring{O} 55'44	
conjunction	7601 Oct 12 17:10	24° \mathring{O} 58'48	0°36'31
minimum elong	7601 Oct 12 17:08	24° \mathring{O} 58'47	0°36'34
max. Earth dist.	7601 Oct 14 15:55	25° \mathring{O} 25'04	6.23695 AU
morning rise	7601 Oct 26 07:07	28° \mathring{O} 01'21	
	7601 Nov 04 05:40	0° \mathring{O}	