

morning rise	14600 Jan 09 03:53	22° Z 05'29		opposition	14605 Dec 16 16:26	8° Z 51'50	-0°36'32
	14600 Feb 13 13:02	0° \approx		min. Earth dist.	14605 Dec 18 05:55	8° Z 39'48	4.37820 AU
retrograde	14600 May 17 05:08	11° \approx 29'24		direct	14606 Feb 16 19:03	3° Z 51'22	
min. Earth dist.	14600 Jul 14 11:25	6° \approx 39'02	4.13453 AU	evening set	14606 Jun 21 19:41	21° Z 40'59	
opposition	14600 Jul 16 01:32	6° \approx 26'12	0°48'42	max. Earth dist.	14606 Jul 02 08:11	24° Z 02'21	6.30000 AU
direct	14600 Sep 13 08:37	1° \approx 27'51					
	14600 Dec 25 11:09	15° \approx		conjunction	14606 Jul 04 16:19	24° Z 33'54	-0°30'10
evening set	14601 Jan 17 17:33	20° \approx 07'22		minimum elong	14606 Jul 04 16:19	24° Z 33'54	0°31'08
				morning rise	14606 Jul 17 12:03	27° Z 26'44	
conjunction	14601 Jan 31 04:49	23° \approx 09'42	0°33'58		14606 Jul 29 00:32	0° Z	
minimum elong	14601 Jan 31 04:49	23° \approx 09'42	0°34'40		14606 Oct 31 21:56	15° Z	
max. Earth dist.	14601 Feb 02 11:21	23° \approx 40'30	6.22513 AU	retrograde	14606 Nov 19 03:39	15° Z 31'21	
morning rise	14601 Feb 13 15:52	26° \approx 11'37			14606 Dec 07 09:43	15° R Z	
	14601 Mar 02 22:41	0° X		opposition	14607 Jan 18 16:05	10° Z 37'07	-0°49'32
retrograde	14601 Jun 18 14:08	14° X 20'46		min. Earth dist.	14607 Jan 20 07:09	10° Z 24'28	4.21199 AU
min. Earth dist.	14601 Aug 16 18:57	9° X 29'16	4.31109 AU	direct	14607 Mar 20 18:33	5° Z 37'44	
opposition	14601 Aug 18 00:48	9° X 19'23	0°47'55		14607 Jun 11 19:16	15° Z	
direct	14601 Oct 17 12:25	4° X 19'44		evening set	14607 Jul 24 15:33	24° Z 21'01	
evening set	14602 Feb 20 01:11	22° X 06'19		max. Earth dist.	14607 Aug 04 11:09	26° Z 52'20	6.12226 AU
conjunction	14602 Mar 05 08:38	25° X 00'20	0°28'47	conjunction	14607 Aug 06 13:54	27° Z 22'02	-0°33'50
minimum elong	14602 Mar 05 08:38	25° X 00'21	0°29'00	minimum elong	14607 Aug 06 13:55	27° Z 22'02	0°34'29
max. Earth dist.	14602 Mar 06 15:57	25° X 17'26	6.38823 AU		14607 Aug 17 20:09	0° Z	
morning rise	14602 Mar 18 15:15	27° X 53'41		morning rise	14607 Aug 19 12:38	0° Z 23'34	
	14602 Mar 28 10:38	0° Y		retrograde	14607 Dec 25 09:25	19° Z 43'08	
retrograde	14602 Jul 19 02:12	15° Y 04'14		opposition	14608 Feb 23 06:10	14° Z 47'28	-0°47'02
opposition	14602 Sep 17 23:12	10° Y 05'37	0°33'23	min. Earth dist.	14608 Feb 24 09:52	14° Z 38'20	4.03638 AU
min. Earth dist.	14602 Sep 17 11:22	10° Y 09'28	4.44911 AU	direct	14608 Apr 23 01:19	9° Z 49'54	
direct	14602 Nov 18 14:27	5° Y 05'15		evening set	14608 Aug 27 20:41	29° Z 29'56	
evening set	14603 Mar 23 09:48	22° Y 16'52			14608 Aug 29 22:41	0° Z	
conjunction	14603 Apr 05 13:18	25° Y 05'18	0°15'47	conjunction	14608 Sep 09 23:48	2° Z 40'10	-0°25'49
minimum elong	14603 Apr 05 13:18	25° Y 05'18	0°15'26	minimum elong	14608 Sep 09 23:49	2° Z 40'11	0°25'54
behind sun begin	14603 Apr 05 11:15	25° Y 04'13		max. Earth dist.	14608 Sep 08 22:46	2° Z 25'01	5.96513 AU
behind sun end	14603 Apr 05 15:21	25° Y 06'24		morning rise	14608 Sep 23 03:58	5° Z 51'18	
max. Earth dist.	14603 Apr 05 16:41	25° Y 07'06	6.49173 AU	retrograde	14609 Jan 31 19:43	26° Z 18'45	
morning rise	14603 Apr 18 15:17	27° Y 52'55		opposition	14609 Apr 01 03:41	21° Z 20'47	-0°26'14
	14603 Apr 28 16:31	0° Z		min. Earth dist.	14609 Apr 01 08:52	21° Z 19'03	3.91402 AU
retrograde	14603 Aug 17 15:15	14° Z 31'58		direct	14609 May 29 17:20	16° Z 25'05	
opposition	14603 Oct 17 20:03	9° Z 35'55	0°10'47		14609 Sep 06 02:03	0° Z	
min. Earth dist.	14603 Oct 18 03:03	9° Z 33'40	4.51268 AU	evening set	14609 Oct 04 06:59	6° Z 41'31	
direct	14603 Dec 19 03:37	4° Z 35'16					
	14604 Mar 20 07:51	15° Z		conjunction	14609 Oct 17 15:38	9° Z 58'05	-0°07'23
desc. node	14604 Apr 08 00:24	18° Z 43'54		minimum elong	14609 Oct 17 15:38	9° Z 58'05	0°06'48
evening set	14604 Apr 21 15:51	21° Z 35'22		behind sun begin	14609 Oct 17 07:54	9° Z 53'21	
				behind sun end	14609 Oct 17 23:23	10° Z 02'49	
conjunction	14604 May 04 15:40	24° Z 21'36	-0°01'11	max. Earth dist.	14609 Oct 18 02:53	10° Z 04'58	5.89024 AU
minimum elong	14604 May 04 15:40	24° Z 21'36	0°01'56	morning rise	14609 Oct 31 02:14	13° Z 15'43	
behind sun begin	14604 May 04 07:39	24° Z 17'20			14609 Nov 07 06:08	15° Z	
behind sun end	14604 May 04 23:42	24° Z 25'51			14610 Jan 18 23:25	0° Z	
max. Earth dist.	14604 May 03 15:30	24° Z 08'41	6.51105 AU	asc. node	14610 Feb 27 08:05	3° Z 54'24	
morning rise	14604 May 17 13:45	27° Z 07'06		retrograde	14610 Mar 11 18:40	4° Z 09'59	
	14604 May 31 07:10	0° Z			14610 May 03 15:41	30° R Z	
retrograde	14604 Sep 15 12:09	13° Z 45'03		opposition	14610 May 09 22:49	29° Z 09'06	0°06'16
opposition	14604 Nov 15 17:24	8° Z 50'43	-0°14'22	min. Earth dist.	14610 May 09 01:49	29° Z 16'12	3.89655 AU
min. Earth dist.	14604 Nov 16 18:53	8° Z 42'34	4.48725 AU	direct	14610 Jul 06 23:23	24° Z 13'44	
direct	14605 Jan 17 06:09	3° Z 50'01			14610 Sep 05 21:40	0° Z	
evening set	14605 May 21 19:09	21° Z 03'13		evening set	14610 Nov 11 16:09	14° Z 25'59	
max. Earth dist.	14605 Jun 01 17:13	23° Z 25'20	6.44191 AU				
				conjunction	14610 Nov 25 04:48	17° Z 42'26	0°14'19
conjunction	14605 Jun 03 16:18	23° Z 50'57	-0°17'51	minimum elong	14610 Nov 25 04:47	17° Z 42'26	0°15'19
minimum elong	14605 Jun 03 16:17	23° Z 50'56	0°18'52	behind sun begin	14610 Nov 25 02:21	17° Z 40'58	
morning rise	14605 Jun 16 12:14	26° Z 38'15		behind sun end	14610 Nov 25 07:12	17° Z 43'53	
	14605 Jul 02 06:09	0° Z		max. Earth dist.	14610 Nov 27 02:34	18° Z 10'11	5.93186 AU
retrograde	14605 Oct 16 17:11	13° Z 45'38		morning rise	14610 Dec 08 19:04	20° Z 59'33	

	14611 Jan 17 02:34	0°♁		retrograde	14616 Sep 19 16:42	17°♊58'19	
retrograde	14611 Apr 18 05:37	11°♁22'49		opposition	14616 Nov 19 21:49	13°♊04'04	-0°17'44
min. Earth dist.	14611 Jun 15 03:19	6°♁32'04	3.99247 AU	min. Earth dist.	14616 Nov 21 01:18	12°♊55'17	4.47735 AU
opposition	14611 Jun 16 15:36	6°♁19'46	0°35'30	direct	14617 Jan 21 09:20	8°♊03'17	
direct	14611 Aug 14 01:41	1°♁23'04		evening set	14617 May 25 23:56	25°♊20'05	
evening set	14611 Dec 19 04:58	20°♁52'41		max. Earth dist.	14617 Jun 05 20:37	27°♊41'55	6.42559 AU
conjunction	14612 Jan 01 18:12	24°♁02'45	0°29'41	conjunction	14617 Jun 07 21:03	28°♊08'22	-0°19'54
minimum elong	14612 Jan 01 18:12	24°♁02'45	0°30'41	minimum elong	14617 Jun 07 21:02	28°♊08'22	0°20'56
max. Earth dist.	14612 Jan 04 07:28	24°♁38'36	6.07146 AU		14617 Jun 16 09:24	0°♊	
morning rise	14612 Jan 15 08:04	27°♁12'49		morning rise	14617 Jun 20 16:41	0°♊56'12	
	14612 Jan 27 11:29	0°♊		retrograde	14617 Oct 21 04:18	18°♊10'12	
	14612 Apr 21 22:25	15°♊		opposition	14617 Dec 21 02:29	13°♊16'25	-0°39'01
retrograde	14612 May 21 22:43	16°♊26'08		min. Earth dist.	14617 Dec 22 17:25	13°♊03'55	4.35630 AU
	14612 Jun 20 18:45	15°♊		direct	14618 Feb 21 02:18	8°♊16'00	
min. Earth dist.	14612 Jul 19 06:29	11°♊36'04	4.16001 AU	evening set	14618 Jun 26 05:49	26°♊12'49	
opposition	14612 Jul 20 21:03	11°♊23'08	0°49'36	max. Earth dist.	14618 Jul 06 16:28	28°♊34'00	6.27395 AU
direct	14612 Sep 18 07:25	6°♊24'36					
	14612 Dec 06 08:11	15°♊		conjunction	14618 Jul 09 02:26	29°♊06'47	-0°31'17
evening set	14613 Jan 22 14:07	24°♊55'47		minimum elong	14618 Jul 09 02:25	29°♊06'47	0°32'14
					14618 Jul 13 00:30	0°♊	
conjunction	14613 Feb 05 00:44	27°♊56'45	0°33'50	morning rise	14618 Jul 21 22:36	2°♊00'48	
minimum elong	14613 Feb 05 00:45	27°♊56'46	0°34'28		14618 Sep 24 13:15	15°♊	
max. Earth dist.	14613 Feb 07 03:57	28°♊25'31	6.25131 AU	retrograde	14618 Nov 24 01:27	20°♊16'08	
	14613 Feb 14 04:32	0°♊		opposition	14619 Jan 23 11:01	15°♊21'43	-0°50'15
morning rise	14613 Feb 18 11:19	0°♊57'19		min. Earth dist.	14619 Jan 25 01:38	15°♊09'10	4.18349 AU
retrograde	14613 Jun 23 00:10	18°♊56'20			14619 Jan 26 05:51	15°♊	
min. Earth dist.	14613 Aug 21 08:46	14°♊04'16	4.33577 AU	direct	14619 Mar 25 09:24	10°♊22'27	
opposition	14613 Aug 22 11:59	13°♊55'16	0°46'33		14619 May 20 09:06	15°♊	
direct	14613 Oct 22 04:31	8°♊55'26		evening set	14619 Jul 29 10:05	29°♊15'14	
evening set	14614 Feb 24 13:12	26°♊35'02			14619 Aug 01 14:41	0°♊	
				max. Earth dist.	14619 Aug 09 09:32	1°♊49'43	6.09388 AU
conjunction	14614 Mar 09 20:13	29°♊28'00	0°27'20				
minimum elong	14614 Mar 09 20:13	29°♊28'00	0°27'27	conjunction	14619 Aug 11 09:12	2°♊17'47	-0°33'27
max. Earth dist.	14614 Mar 11 01:22	29°♊43'51	6.40961 AU	minimum elong	14619 Aug 11 09:12	2°♊17'47	0°34'01
	14614 Mar 12 07:06	0°♊		morning rise	14619 Aug 24 08:29	5°♊20'50	
morning rise	14614 Mar 23 02:01	2°♊20'12		retrograde	14619 Dec 30 17:08	24°♊52'29	
retrograde	14614 Jul 23 04:59	19°♊23'42		opposition	14620 Feb 28 11:09	19°♊56'34	-0°45'11
opposition	14614 Sep 22 04:25	14°♊25'27	0°30'34	min. Earth dist.	14620 Feb 29 12:33	19°♊48'11	4.01085 AU
min. Earth dist.	14614 Sep 21 18:16	14°♊28'45	4.46577 AU	direct	14620 Apr 28 00:50	14°♊59'19	
direct	14614 Nov 22 21:53	9°♊25'02			14620 Aug 12 18:43	0°♊	
evening set	14615 Mar 27 16:02	26°♊32'38		evening set	14620 Sep 02 00:57	4°♊47'46	
				max. Earth dist.	14620 Sep 14 07:22	7°♊46'19	5.94493 AU
conjunction	14615 Apr 09 18:50	29°♊20'23	0°13'34				
minimum elong	14615 Apr 09 18:51	29°♊20'23	0°13'09	conjunction	14620 Sep 15 04:47	7°♊59'20	-0°23'44
behind sun begin	14615 Apr 09 14:09	29°♊17'53		minimum elong	14620 Sep 15 04:48	7°♊59'21	0°23'42
behind sun end	14615 Apr 09 23:33	29°♊22'53		morning rise	14620 Sep 28 10:08	11°♊11'56	
max. Earth dist.	14615 Apr 09 17:30	29°♊19'40	6.50245 AU		14621 Jan 03 22:50	0°♊	
	14615 Apr 12 20:59	0°♊		retrograde	14621 Feb 06 08:24	1°♊47'41	
morning rise	14615 Apr 22 20:13	2°♊07'22			14621 Mar 11 19:44	30°♊	
	14615 Jul 01 17:42	15°♊		opposition	14621 Apr 06 15:46	26°♊49'16	-0°22'02
retrograde	14615 Aug 21 18:29	18°♊43'35		min. Earth dist.	14621 Apr 06 16:03	26°♊49'11	3.90166 AU
	14615 Oct 12 11:53	15°♊		direct	14621 Jun 04 01:56	21°♊53'43	
opposition	14615 Oct 21 23:00	13°♊47'51	0°07'19		14621 Aug 16 15:17	0°♊	
min. Earth dist.	14615 Oct 22 09:45	13°♊44'23	4.51679 AU	evening set	14621 Oct 09 17:52	12°♊13'13	
direct	14615 Dec 23 09:17	8°♊47'08			14621 Oct 21 02:01	15°♊	
desc. node	14616 Feb 14 05:32	12°♊38'13					
	14616 Mar 01 00:23	15°♊		conjunction	14621 Oct 23 03:22	15°♊30'19	-0°04'16
evening set	14616 Apr 25 19:33	25°♊46'53		minimum elong	14621 Oct 23 03:20	15°♊30'18	0°03'37
				behind sun begin	14621 Oct 22 19:05	15°♊25'16	
conjunction	14616 May 08 18:52	28°♊33'02	-0°03'36	behind sun end	14621 Oct 23 11:36	15°♊35'21	
minimum elong	14616 May 08 18:53	28°♊33'02	0°04'25	max. Earth dist.	14621 Oct 23 21:25	15°♊41'25	5.88721 AU
behind sun begin	14616 May 08 11:01	28°♊28'51		morning rise	14621 Nov 05 14:36	18°♊48'23	
behind sun end	14616 May 09 02:44	28°♊37'13			14621 Dec 24 14:22	0°♊	
max. Earth dist.	14616 May 07 13:46	28°♊17'27	6.50808 AU	asc. node	14622 Jan 08 03:37	2°♊49'04	
	14616 May 15 13:25	0°♊		retrograde	14622 Mar 17 06:42	9°♊42'12	
morning rise	14616 May 21 16:37	1°♊18'30		min. Earth dist.	14622 May 14 11:10	4°♊48'50	3.90321 AU

opposition	14622 May 15 10:47	4°♌40'50	0°11'00		14628 Feb 02 21:32	15°♏	
	14622 Jun 30 14:40	30°♍♌			14628 Apr 29 22:09	0°♐	
direct	14622 Jul 12 12:09	29°♍45'20		evening set	14628 Apr 30 00:30	0°♐01'15	
	14622 Jul 24 09:16	0°♌					
evening set	14622 Nov 17 03:03	19°♌53'21		conjunction	14628 May 12 23:24	2°♐47'30	-0°06'03
				minimum elong	14628 May 12 23:24	2°♐47'30	0°06'55
conjunction	14622 Nov 30 16:03	23°♌09'12	0°17'05	behind sun begin	14628 May 12 15:59	2°♐43'33	
minimum elong	14622 Nov 30 16:02	23°♌09'12	0°18'05	behind sun end	14628 May 13 06:49	2°♐51'28	
max. Earth dist.	14622 Dec 02 19:05	23°♌40'00	5.94731 AU	max. Earth dist.	14628 May 11 15:05	2°♐30'10	6.50077 AU
morning rise	14622 Dec 14 06:26	26°♌25'34		morning rise	14628 May 25 20:44	5°♐33'06	
	14622 Dec 29 09:40	0°♌		retrograde	14628 Sep 24 01:17	22°♐16'20	
retrograde	14623 Apr 23 08:40	16°♌39'51		opposition	14628 Nov 24 04:45	17°♐22'17	-0°21'07
min. Earth dist.	14623 Jun 20 05:48	11°♌49'34	4.01477 AU	min. Earth dist.	14628 Nov 25 11:18	17°♐12'31	4.46343 AU
opposition	14623 Jun 21 20:03	11°♌36'38	0°38'34	direct	14629 Jan 25 16:04	12°♐21'32	
direct	14623 Aug 19 08:37	6°♌39'39		evening set	14629 May 30 07:31	29°♐43'16	
evening set	14623 Dec 24 09:21	26°♌00'32			14629 May 31 14:16	0°♑	
				max. Earth dist.	14629 Jun 10 00:23	2°♑03'41	6.40589 AU
conjunction	14624 Jan 06 22:09	29°♌09'14	0°30'59				
minimum elong	14624 Jan 06 22:08	29°♌09'13	0°31'57	conjunction	14629 Jun 12 04:23	2°♑32'13	-0°21'55
max. Earth dist.	14624 Jan 09 10:17	29°♌44'11	6.09799 AU	minimum elong	14629 Jun 12 04:22	2°♑32'12	0°22'56
	14624 Jan 10 13:30	0°♌		morning rise	14629 Jun 25 00:05	5°♑20'49	
morning rise	14624 Jan 20 11:47	2°♌17'54		retrograde	14629 Oct 25 19:26	22°♑42'41	
	14624 Mar 21 11:34	15°♌		opposition	14629 Dec 25 15:51	17°♑48'52	-0°41'22
retrograde	14624 May 26 14:42	21°♌19'26		min. Earth dist.	14629 Dec 27 07:09	17°♑36'13	4.33198 AU
min. Earth dist.	14624 Jul 24 02:15	16°♌29'04	4.18791 AU	direct	14630 Feb 25 11:57	12°♑48'34	
opposition	14624 Jul 25 15:37	16°♌16'32	0°50'07		14630 Jun 26 20:10	0°♒	
	14624 Aug 04 06:52	15°♌		evening set	14630 Jun 30 19:23	0°♒53'29	
direct	14624 Sep 23 06:37	11°♌17'44		max. Earth dist.	14630 Jul 11 07:50	3°♒16'30	6.24690 AU
	14624 Nov 12 00:39	15°♌					
evening set	14625 Jan 27 09:03	29°♌39'59		conjunction	14630 Jul 13 16:21	3°♒48'40	-0°32'13
	14625 Jan 28 21:05	0°♌		minimum elong	14630 Jul 13 16:21	3°♒48'40	0°33'09
				morning rise	14630 Jul 26 12:40	6°♒43'55	
conjunction	14625 Feb 09 19:18	2°♌39'37	0°33'28		14630 Sep 02 18:27	15°♒	
minimum elong	14625 Feb 09 19:18	2°♌39'38	0°34'03	retrograde	14630 Nov 29 03:27	25°♒10'23	
max. Earth dist.	14625 Feb 11 21:08	3°♌07'28	6.27829 AU	opposition	14631 Jan 28 09:53	20°♒15'55	-0°50'37
morning rise	14625 Feb 23 05:02	5°♌38'44		min. Earth dist.	14631 Jan 29 23:52	20°♒03'33	4.15576 AU
retrograde	14625 Jun 27 08:14	23°♌27'48		direct	14631 Mar 30 03:21	15°♒17'01	
opposition	14625 Aug 26 22:01	18°♌27'09	0°44'54		14631 Jul 15 14:50	0°♓	
min. Earth dist.	14625 Aug 25 20:39	18°♌35'31	4.35968 AU	evening set	14631 Aug 03 08:18	4°♓18'58	
direct	14625 Oct 26 18:23	13°♌27'16		max. Earth dist.	14631 Aug 14 09:58	6°♓55'44	6.06798 AU
	14626 Feb 24 07:39	0°♑					
evening set	14626 Mar 01 00:29	1°♑00'28		conjunction	14631 Aug 16 07:51	7°♓22'54	-0°32'47
				minimum elong	14631 Aug 16 07:51	7°♓22'55	0°33'17
conjunction	14626 Mar 14 06:42	3°♑52'24	0°25'43	morning rise	14631 Aug 29 08:03	10°♓27'29	
minimum elong	14626 Mar 14 06:42	3°♑52'25	0°25'45		14631 Dec 25 20:40	0°♑	
max. Earth dist.	14626 Mar 15 06:10	4°♑05'07	6.42870 AU	retrograde	14632 Jan 05 02:15	0°♑10'19	
morning rise	14626 Mar 27 11:58	6°♑43'38			14632 Jan 15 08:45	30°♑♌	
retrograde	14626 Jul 27 09:40	23°♑41'12		opposition	14632 Mar 04 19:21	25°♓14'08	-0°42'53
opposition	14626 Sep 26 09:24	18°♑43'21	0°27'33	min. Earth dist.	14632 Mar 05 16:37	25°♓07'06	3.98951 AU
min. Earth dist.	14626 Sep 26 03:03	18°♑45'25	4.47901 AU	direct	14632 May 03 04:02	20°♓17'15	
direct	14626 Nov 27 06:25	13°♑42'51			14632 Jul 24 13:10	0°♑	
	14627 Mar 28 03:50	0°♏		evening set	14632 Sep 07 07:42	10°♑12'21	
evening set	14627 Mar 31 22:13	0°♏47'44					
				conjunction	14632 Sep 20 12:27	13°♑25'01	-0°21'24
conjunction	14627 Apr 14 00:38	3°♏35'04	0°11'15	minimum elong	14632 Sep 20 12:28	13°♑25'01	0°21'16
minimum elong	14627 Apr 14 00:38	3°♏35'04	0°10'47	max. Earth dist.	14632 Sep 19 22:06	13°♑16'16	5.93068 AU
behind sun begin	14627 Apr 13 18:31	3°♏31'49		morning rise	14632 Oct 03 18:32	16°♑38'40	
behind sun end	14627 Apr 14 06:46	3°♏38'19			14632 Dec 03 04:29	0°♍	
max. Earth dist.	14627 Apr 13 19:45	3°♏32'29	6.50899 AU	retrograde	14633 Feb 11 23:27	7°♍19'58	
morning rise	14627 Apr 27 01:20	6°♏21'35		opposition	14633 Apr 12 04:44	2°♍21'09	-0°17'34
	14627 Jun 09 10:09	15°♏		min. Earth dist.	14633 Apr 12 01:47	2°♍22'08	3.89638 AU
retrograde	14627 Aug 25 21:08	22°♏56'30			14633 Apr 30 11:38	30°♑♑	
opposition	14627 Oct 26 02:51	18°♏01'04	0°03'45	direct	14633 Jun 09 13:28	27°♑25'45	
min. Earth dist.	14627 Oct 26 15:33	17°♏56'59	4.51643 AU		14633 Jul 19 02:00	0°♍	
	14627 Nov 20 10:20	15°♏♏			14633 Oct 03 19:25	15°♍	
desc. node	14627 Dec 22 14:37	13°♏02'34		evening set	14633 Oct 15 04:54	17°♍45'21	
direct	14627 Dec 27 12:44	13°♏00'22					





























































































































conjunction	14633 Oct 28 15:01	21° \mathbb{M} 02'33	-0°01'04	retrograde	14639 Aug 30 01:39	27° \mathcal{S} 07'09	
minimum elong	14633 Oct 28 15:01	21° \mathbb{M} 02'33	0°00'20	opposition	14639 Oct 30 05:59	22° \mathcal{S} 11'58	0°00'14
behind sun begin	14633 Oct 28 06:41	20° \mathbb{M} 57'28		min. Earth dist.	14639 Oct 30 22:22	22° \mathcal{S} 06'43	4.51168 AU
behind sun end	14633 Oct 28 23:21	21° \mathbb{M} 07'38		desc. node	14639 Nov 02 20:07	21° \mathcal{S} 44'22	
max. Earth dist.	14633 Oct 29 15:25	21° \mathbb{M} 17'31	5.89146 AU	direct	14639 Dec 31 17:28	17° \mathcal{S} 11'12	
morning rise	14633 Nov 11 02:53	24° \mathbb{M} 20'41			14640 Apr 13 21:20	0° \mathbb{I}	
asc. node	14633 Nov 17 09:17	25° \mathbb{M} 51'48		evening set	14640 May 04 04:53	4° \mathbb{I} 14'28	
	14633 Dec 04 21:09	0° \mathcal{Z}		max. Earth dist.	14640 May 15 16:06	6° \mathbb{I} 41'57	6.48957 AU
retrograde	14634 Mar 22 15:19	15° \mathcal{Z} 10'33					
opposition	14634 May 20 20:31	10° \mathcal{Z} 08'50	0°15'33	conjunction	14640 May 17 03:35	7° \mathbb{I} 01'02	-0°08'25
min. Earth dist.	14634 May 19 17:14	10° \mathcal{Z} 18'04	3.91670 AU	minimum elong	14640 May 17 03:34	7° \mathbb{I} 01'01	0°09'19
direct	14634 Jul 17 21:41	5° \mathcal{Z} 13'13		behind sun begin	14640 May 16 20:51	6° \mathbb{I} 57'26	
evening set	14634 Nov 22 11:18	25° \mathcal{Z} 14'36		behind sun end	14640 May 17 10:17	7° \mathbb{I} 04'37	
				morning rise	14640 May 30 00:35	9° \mathbb{I} 46'56	
conjunction	14634 Dec 06 00:14	28° \mathcal{Z} 29'26	0°19'37	retrograde	14640 Sep 28 08:30	26° \mathbb{I} 34'40	
minimum elong	14634 Dec 06 00:13	28° \mathcal{Z} 29'26	0°20'38	opposition	14640 Nov 28 11:48	21° \mathbb{I} 40'42	-0°24'20
max. Earth dist.	14634 Dec 08 04:44	29° \mathcal{Z} 00'57	5.96823 AU	min. Earth dist.	14640 Nov 29 19:07	21° \mathbb{I} 30'40	4.44665 AU
	14634 Dec 12 07:14	0° \mathcal{S}		direct	14641 Jan 29 20:21	16° \mathbb{I} 39'59	
morning rise	14634 Dec 19 14:46	1° \mathcal{S} 44'47			14641 May 15 09:28	0° \mathcal{S}	
retrograde	14635 Apr 28 06:23	21° \mathcal{S} 48'22		evening set	14641 Jun 03 15:24	4° \mathcal{S} 07'21	
min. Earth dist.	14635 Jun 25 05:48	16° \mathcal{S} 58'10	4.04058 AU	max. Earth dist.	14641 Jun 14 07:52	6° \mathcal{S} 28'12	6.38470 AU
opposition	14635 Jun 26 20:40	16° \mathcal{S} 45'00	0°41'12				
direct	14635 Aug 24 13:08	11° \mathcal{S} 47'41		conjunction	14641 Jun 16 12:12	6° \mathcal{S} 57'04	-0°23'46
	14635 Dec 25 02:28	0° \approx		minimum elong	14641 Jun 16 12:11	6° \mathcal{S} 57'04	0°24'48
evening set	14635 Dec 29 09:24	0° \approx 59'01		morning rise	14641 Jun 29 07:49	9° \mathcal{S} 46'29	
				retrograde	14641 Oct 30 12:31	27° \mathcal{S} 16'37	
conjunction	14636 Jan 11 22:01	4° \approx 06'17	0°32'00	opposition	14641 Dec 30 06:24	22° \mathcal{S} 22'48	-0°43'27
minimum elong	14636 Jan 11 22:01	4° \approx 06'17	0°32'54	min. Earth dist.	14641 Dec 31 22:42	22° \mathcal{S} 09'49	4.30769 AU
max. Earth dist.	14636 Jan 14 10:15	4° \approx 41'05	6.12629 AU	direct	14642 Mar 01 23:46	17° \mathcal{S} 22'40	
morning rise	14636 Jan 25 10:58	7° \approx 13'24			14642 Jun 10 00:52	0° \mathcal{Q}	
	14636 Feb 29 22:09	15° \approx		evening set	14642 Jul 05 09:34	5° \mathcal{Q} 35'18	
retrograde	14636 May 31 03:28	26° \approx 03'01		max. Earth dist.	14642 Jul 15 21:48	7° \mathcal{Q} 59'04	6.22136 AU
min. Earth dist.	14636 Jul 28 18:12	21° \approx 12'19	4.21590 AU				
opposition	14636 Jul 30 05:56	21° \approx 00'23	0°50'15	conjunction	14642 Jul 18 06:40	8° \mathcal{Q} 31'37	-0°32'57
direct	14636 Sep 28 01:32	16° \approx 01'24		minimum elong	14642 Jul 18 06:40	8° \mathcal{Q} 31'36	0°33'49
	14637 Jan 12 10:20	0° \mathcal{H}		morning rise	14642 Jul 31 03:29	11° \mathcal{Q} 28'05	
evening set	14637 Feb 01 00:08	4° \mathcal{H} 15'05			14642 Aug 15 20:26	15° \mathcal{Q}	
					14642 Nov 26 22:08	0° \mathbb{P}	
conjunction	14637 Feb 14 09:42	7° \mathcal{H} 13'25	0°32'55	retrograde	14642 Dec 04 03:31	0° \mathbb{P} 05'03	
minimum elong	14637 Feb 14 09:43	7° \mathcal{H} 13'26	0°33'25		14642 Dec 11 09:10	30° \mathcal{R} \mathcal{Q}	
max. Earth dist.	14637 Feb 16 07:10	7° \mathcal{H} 38'40	6.30364 AU	opposition	14643 Feb 02 09:13	25° \mathcal{Q} 10'20	-0°50'36
morning rise	14637 Feb 27 18:57	10° \mathcal{H} 11'14		min. Earth dist.	14643 Feb 03 20:29	24° \mathcal{Q} 58'49	4.13098 AU
retrograde	14637 Jul 01 12:24	27° \mathcal{H} 51'17		direct	14643 Apr 03 21:42	20° \mathcal{Q} 11'40	
min. Earth dist.	14637 Aug 30 05:55	22° \mathcal{H} 58'26	4.38072 AU		14643 Jun 27 06:04	0° \mathbb{P}	
opposition	14637 Aug 31 04:33	22° \mathcal{H} 50'59	0°43'03	evening set	14643 Aug 08 06:25	9° \mathbb{P} 21'29	
direct	14637 Oct 31 04:40	17° \mathcal{H} 50'57		max. Earth dist.	14643 Aug 19 13:38	12° \mathbb{P} 02'17	6.04617 AU
	14638 Feb 07 21:55	0° \mathcal{Y}					
evening set	14638 Mar 05 08:16	5° \mathcal{Y} 18'51		conjunction	14643 Aug 21 06:37	12° \mathbb{P} 26'40	-0°31'52
				minimum elong	14643 Aug 21 06:38	12° \mathbb{P} 26'40	0°32'17
conjunction	14638 Mar 18 14:07	8° \mathcal{Y} 10'00	0°24'01	morning rise	14643 Sep 03 07:23	15° \mathbb{P} 32'31	
minimum elong	14638 Mar 18 14:08	8° \mathcal{Y} 10'00	0°23'57		14643 Nov 11 02:43	0° \mathcal{L}	
max. Earth dist.	14638 Mar 19 10:19	8° \mathcal{Y} 20'54	6.44410 AU	retrograde	14644 Jan 10 12:13	5° \mathcal{L} 24'41	
morning rise	14638 Mar 31 18:35	11° \mathcal{Y} 00'22		opposition	14644 Mar 10 02:31	0° \mathcal{L} 28'10	-0°40'13
retrograde	14638 Jul 31 11:03	27° \mathcal{Y} 53'21		min. Earth dist.	14644 Mar 10 21:31	0° \mathcal{L} 21'52	3.97270 AU
opposition	14638 Sep 30 12:12	22° \mathcal{Y} 55'55	0°24'31		14644 Mar 13 15:35	30° \mathcal{R} \mathbb{P}	
min. Earth dist.	14638 Sep 30 08:23	22° \mathcal{Y} 57'09	4.48803 AU	direct	14644 May 08 08:24	25° \mathbb{P} 31'33	
direct	14638 Dec 01 11:14	17° \mathcal{Y} 55'25			14644 Jun 30 21:00	0° \mathcal{L}	
	14639 Mar 11 23:37	0° \mathcal{S}		evening set	14644 Sep 12 12:47	15° \mathcal{L} 31'25	
evening set	14639 Apr 05 02:36	4° \mathcal{S} 58'48					
				conjunction	14644 Sep 25 18:16	18° \mathcal{L} 44'57	-0°18'54
conjunction	14639 Apr 18 04:22	7° \mathcal{S} 45'51	0°08'57	minimum elong	14644 Sep 25 18:17	18° \mathcal{L} 44'58	0°18'41
minimum elong	14639 Apr 18 04:22	7° \mathcal{S} 45'50	0°08'24	max. Earth dist.	14644 Sep 25 08:44	18° \mathcal{L} 39'08	5.92039 AU
behind sun begin	14639 Apr 17 21:19	7° \mathcal{S} 42'06		morning rise	14644 Oct 09 01:17	21° \mathcal{L} 59'30	
behind sun end	14639 Apr 18 11:25	7° \mathcal{S} 49'35			14644 Nov 12 06:29	0° \mathbb{M}	
max. Earth dist.	14639 Apr 17 17:49	7° \mathcal{S} 40'13	6.51106 AU	retrograde	14645 Feb 17 09:24	12° \mathbb{M} 44'36	
morning rise	14639 May 01 04:42	10° \mathcal{S} 32'07		opposition	14645 Apr 17 14:49	7° \mathbb{M} 45'23	-0°13'01
	14639 May 22 17:17	15° \mathcal{S}		min. Earth dist.	14645 Apr 17 07:35	7° \mathbb{M} 47'48	3.89401 AU

direct	14645 Jun 14 20:18	2°♄50'05			14651 Feb 21 13:00	0°♄	
	14645 Sep 15 18:54	15°♄		evening set	14651 Apr 09 08:43	9°♄15'21	
asc. node	14645 Sep 24 19:40	17°♄02'10					
evening set	14645 Oct 20 13:04	23°♄09'01		conjunction	14651 Apr 22 10:11	12°♄02'10	0°06'32
				minimum elong	14651 Apr 22 10:11	12°♄02'10	0°05'55
conjunction	14645 Nov 02 23:35	26°♄26'10	0°02'07	behind sun begin	14651 Apr 22 02:32	11°♄58'06	
minimum elong	14645 Nov 02 23:36	26°♄26'11	0°02'55	behind sun end	14651 Apr 22 17:50	12°♄06'14	
behind sun begin	14645 Nov 02 15:17	26°♄21'06		max. Earth dist.	14651 Apr 21 21:46	11°♄55'33	6.51304 AU
behind sun end	14645 Nov 03 07:55	26°♄31'15		morning rise	14651 May 05 09:51	14°♄48'11	
max. Earth dist.	14645 Nov 04 03:36	26°♄43'19	5.89702 AU		14651 May 06 08:10	15°♄	
morning rise	14645 Nov 16 12:07	29°♄44'18			14651 Aug 03 20:07	0°♄	
	14645 Nov 17 14:00	0°♄		retrograde	14651 Sep 03 05:40	1°♄23'15	
retrograde	14646 Mar 27 20:27	20°♄30'12		desc. node	14651 Sep 14 10:35	1°♄11'36	
min. Earth dist.	14646 May 24 21:27	15°♄38'09	3.92949 AU		14651 Oct 03 14:10	30°♄	
opposition	14646 May 26 02:56	15°♄28'09	0°19'54	opposition	14651 Nov 03 11:04	26°♄28'22	-0°03'22
direct	14646 Jul 23 05:59	10°♄32'21		min. Earth dist.	14651 Nov 04 04:47	26°♄22'42	4.50860 AU
	14646 Nov 25 17:38	0°♄		direct	14652 Jan 04 22:30	21°♄27'45	
evening set	14646 Nov 27 16:45	0°♄27'58			14652 Mar 26 22:38	0°♄	
				evening set	14652 May 08 10:45	8°♄32'33	
conjunction	14646 Dec 11 05:57	3°♄42'00	0°21'58	max. Earth dist.	14652 May 19 18:44	10°♄58'39	6.48182 AU
minimum elong	14646 Dec 11 05:56	3°♄42'00	0°23'00				
max. Earth dist.	14646 Dec 13 13:32	4°♄15'13	5.98695 AU	conjunction	14652 May 21 08:55	11°♄19'14	-0°10'48
morning rise	14646 Dec 24 20:19	6°♄56'23		minimum elong	14652 May 21 08:54	11°♄19'13	0°11'44
retrograde	14647 May 03 04:11	26°♄50'38		behind sun begin	14652 May 21 03:16	11°♄16'12	
min. Earth dist.	14647 Jun 30 04:22	22°♄00'21	4.06303 AU	behind sun end	14652 May 21 14:32	11°♄22'14	
opposition	14647 Jul 01 18:58	21°♄47'19	0°43'30	morning rise	14652 Jun 03 05:40	14°♄05'20	
direct	14647 Aug 29 14:41	16°♄49'48			14652 Sep 07 20:28	0°♄	
	14647 Dec 07 22:56	0°♄		retrograde	14652 Oct 02 18:20	0°♄56'26	
evening set	14648 Jan 03 08:07	5°♄53'19			14652 Oct 27 13:25	30°♄	
				opposition	14652 Dec 02 20:14	26°♄02'34	-0°27'30
conjunction	14648 Jan 16 20:22	8°♄59'23	0°32'47	min. Earth dist.	14652 Dec 04 05:35	25°♄51'53	4.43476 AU
minimum elong	14648 Jan 16 20:22	8°♄59'23	0°33'39	direct	14653 Feb 03 04:48	21°♄01'57	
max. Earth dist.	14648 Jan 19 07:13	9°♄33'11	6.15023 AU		14653 Apr 27 14:20	0°♄	
morning rise	14648 Jan 30 09:03	12°♄05'17		evening set	14653 Jun 07 23:21	8°♄33'02	
	14648 Feb 12 07:28	15°♄		max. Earth dist.	14653 Jun 18 14:22	10°♄53'35	6.36957 AU
	14648 May 14 00:08	0°♄					
retrograde	14648 Jun 04 14:09	0°♄44'57		conjunction	14653 Jun 20 20:01	11°♄23'16	-0°25'32
	14648 Jun 26 02:47	30°♄		minimum elong	14653 Jun 20 20:00	11°♄23'15	0°26'34
min. Earth dist.	14648 Aug 02 08:46	25°♄54'15	4.23926 AU	morning rise	14653 Jul 03 15:33	14°♄13'14	
opposition	14648 Aug 03 19:40	25°♄42'36	0°50'06		14653 Sep 30 08:28	0°♄	
direct	14648 Oct 02 18:23	20°♄43'28		retrograde	14653 Nov 04 01:45	1°♄49'30	
	14648 Dec 25 06:05	0°♄			14653 Dec 08 22:04	30°♄	
evening set	14649 Feb 05 15:05	8°♄50'25		opposition	14654 Jan 03 19:52	26°♄55'33	-0°45'17
				min. Earth dist.	14654 Jan 05 11:02	26°♄42'55	4.29033 AU
conjunction	14649 Feb 19 00:15	11°♄47'42	0°32'09	direct	14654 Mar 06 09:45	21°♄55'35	
minimum elong	14649 Feb 19 00:16	11°♄47'43	0°32'34		14654 May 22 12:32	0°♄	
max. Earth dist.	14649 Feb 20 18:43	12°♄11'11	6.32473 AU	evening set	14654 Jul 09 21:52	10°♄13'29	
morning rise	14649 Mar 04 08:48	14°♄44'24		max. Earth dist.	14654 Jul 20 12:23	12°♄39'08	6.20309 AU
	14649 May 27 21:33	0°♄					
retrograde	14649 Jul 05 19:19	2°♄17'06		conjunction	14654 Jul 22 19:06	13°♄10'35	-0°33'29
	14649 Aug 13 15:04	30°♄		minimum elong	14654 Jul 22 19:07	13°♄10'35	0°34'17
opposition	14649 Sep 04 12:13	27°♄17'17	0°40'58		14654 Jul 30 17:31	15°♄	
min. Earth dist.	14649 Sep 03 16:20	27°♄23'48	4.39807 AU	morning rise	14654 Aug 04 16:07	16°♄07'55	
direct	14649 Nov 04 16:24	22°♄17'15			14654 Oct 12 07:31	0°♄	
	14650 Jan 20 04:53	0°♄		retrograde	14654 Dec 09 01:48	4°♄52'45	
evening set	14650 Mar 09 17:36	9°♄41'02			14655 Feb 06 22:42	30°♄	
				opposition	14655 Feb 07 05:22	29°♄57'49	-0°50'15
conjunction	14650 Mar 22 22:47	12°♄31'29	0°22'08	min. Earth dist.	14655 Feb 08 16:11	29°♄46'27	4.11301 AU
minimum elong	14650 Mar 22 22:48	12°♄31'30	0°22'01	direct	14655 Apr 08 15:32	24°♄59'22	
max. Earth dist.	14650 Mar 23 14:07	12°♄39'44	6.45660 AU		14655 Jun 05 13:34	0°♄	
morning rise	14650 Apr 05 02:49	15°♄21'12		evening set	14655 Aug 13 00:17	14°♄14'31	
	14650 Jun 27 09:21	0°♄		max. Earth dist.	14655 Aug 24 10:03	16°♄57'25	6.03010 AU
retrograde	14650 Aug 04 15:09	2°♄10'32					
	14650 Sep 11 20:30	30°♄		conjunction	14655 Aug 26 00:59	17°♄20'39	-0°30'47
opposition	14650 Oct 04 16:51	27°♄13'29	0°21'16	minimum elong	14655 Aug 26 01:00	17°♄20'39	0°31'07
min. Earth dist.	14650 Oct 04 15:43	27°♄13'51	4.49533 AU	morning rise	14655 Sep 08 02:29	20°♄27'32	
direct	14650 Dec 05 18:07	22°♄13'00			14655 Oct 20 09:54	0°♄	

retrograde	14656 Jan 15 14:22	10° Ω 26'51		retrograde	14661 Jul 10 00:31	6° Υ 41'42	
opposition	14656 Mar 15 04:08	5° Ω 30'00	-0°37'23	opposition	14661 Sep 08 19:32	1° Υ 42'10	0°38'41
min. Earth dist.	14656 Mar 15 19:43	5° Ω 24'49	3.96017 AU	min. Earth dist.	14661 Sep 08 00:52	1° Υ 48'17	4.41225 AU
direct	14656 May 13 05:35	0° Ω 33'33			14661 Sep 22 02:35	30° \Re \mathfrak{H}	
evening set	14656 Sep 17 12:23	20° Ω 36'54		direct	14661 Nov 09 02:01	26° \mathfrak{H} 42'02	
					14661 Dec 27 04:17	0° Υ	
conjunction	14656 Sep 30 18:29	23° Ω 51'07	-0°16'24	evening set	14662 Mar 14 02:51	14° Υ 02'21	
minimum elong	14656 Sep 30 18:29	23° Ω 51'07	0°16'06				
max. Earth dist.	14656 Sep 30 12:23	23° Ω 47'24	5.91264 AU	conjunction	14662 Mar 27 07:35	16° Υ 52'12	0°20'09
morning rise	14656 Oct 14 02:19	27° Ω 06'24		minimum elong	14662 Mar 27 07:36	16° Υ 52'12	0°19'58
	14656 Oct 26 02:30	0° \mathbb{L}		max. Earth dist.	14662 Mar 27 20:12	16° Υ 58'58	6.46729 AU
	14657 Jan 10 16:21	15° \mathbb{L}		morning rise	14662 Apr 09 10:56	19° Υ 41'15	
retrograde	14657 Feb 22 13:03	17° \mathbb{L} 54'29			14662 Jun 01 01:53	0° \mathfrak{B}	
	14657 Apr 06 18:30	15° \Re \mathbb{L}		retrograde	14662 Aug 08 19:28	6° \mathfrak{B} 27'10	
opposition	14657 Apr 22 18:24	12° \mathbb{L} 54'50	-0°08'37	opposition	14662 Oct 08 21:55	1° \mathfrak{B} 30'25	0°17'56
min. Earth dist.	14657 Apr 22 08:49	12° \mathbb{L} 58'04	3.89187 AU	min. Earth dist.	14662 Oct 08 23:19	1° \mathfrak{B} 29'58	4.50173 AU
direct	14657 Jun 19 23:05	7° \mathbb{L} 59'29			14662 Oct 20 18:37	30° \Re Υ	
asc. node	14657 Aug 04 08:52	11° \mathbb{L} 20'28		direct	14662 Dec 10 02:03	26° Υ 29'54	
	14657 Aug 26 16:42	15° \mathbb{L}			14663 Jan 29 05:13	0° \mathfrak{B}	
evening set	14657 Oct 25 15:28	28° \mathbb{L} 18'07		evening set	14663 Apr 13 14:57	13° \mathfrak{B} 31'03	
	14657 Nov 01 14:41	0° \mathfrak{A}			14663 Apr 20 14:20	15° \mathfrak{B}	
conjunction	14657 Nov 08 02:46	1° \mathfrak{A} 35'25	0°05'03	conjunction	14663 Apr 26 15:44	16° \mathfrak{B} 17'35	0°04'05
minimum elong	14657 Nov 08 02:45	1° \mathfrak{A} 35'24	0°05'54	minimum elong	14663 Apr 26 15:44	16° \mathfrak{B} 17'35	0°03'25
behind sun begin	14657 Nov 07 18:47	1° \mathfrak{A} 30'33		behind sun begin	14663 Apr 26 07:46	16° \mathfrak{B} 13'21	
behind sun end	14657 Nov 08 10:43	1° \mathfrak{A} 40'15		behind sun end	14663 Apr 26 23:43	16° \mathfrak{B} 21'49	
max. Earth dist.	14657 Nov 09 11:39	1° \mathfrak{A} 55'31	5.90088 AU	max. Earth dist.	14663 Apr 25 22:47	16° \mathfrak{B} 08'32	6.51434 AU
morning rise	14657 Nov 21 15:39	4° \mathfrak{A} 53'31		morning rise	14663 May 09 15:03	19° \mathfrak{B} 03'23	
retrograde	14658 Apr 01 22:13	25° \mathfrak{A} 36'21			14663 Jul 05 11:57	0° \mathbb{I}	
min. Earth dist.	14658 May 29 21:16	20° \mathfrak{A} 44'24	3.93888 AU	desc. node	14663 Jul 27 03:06	3° \mathbb{I} 01'23	
opposition	14658 May 31 03:46	20° \mathfrak{A} 34'04	0°23'54	retrograde	14663 Sep 07 11:02	5° \mathbb{I} 38'32	
direct	14658 Jul 28 07:43	15° \mathfrak{A} 38'04		opposition	14663 Nov 07 16:20	0° \mathbb{I} 43'46	-0°06'58
	14658 Nov 09 01:46	0° \mathfrak{B}		min. Earth dist.	14663 Nov 08 12:29	0° \mathbb{I} 37'19	4.50454 AU
evening set	14658 Dec 02 17:46	5° \mathfrak{B} 29'41			14663 Nov 13 09:25	30° \Re \mathfrak{B}	
				direct	14664 Jan 09 04:41	25° \mathfrak{B} 43'04	
conjunction	14658 Dec 16 07:03	8° \mathfrak{B} 43'06	0°24'04		14664 Mar 05 02:00	0° \mathbb{I}	
minimum elong	14658 Dec 16 07:02	8° \mathfrak{B} 43'06	0°25'06	evening set	14664 May 12 16:29	12° \mathbb{I} 49'38	
max. Earth dist.	14658 Dec 18 15:35	9° \mathfrak{B} 16'45	6.00072 AU	max. Earth dist.	14664 May 23 22:35	15° \mathbb{I} 15'00	6.47233 AU
morning rise	14658 Dec 29 21:39	11° \mathfrak{B} 56'53					
	14659 Apr 04 23:36	0° \approx		conjunction	14664 May 25 14:27	15° \mathbb{I} 36'32	-0°13'08
retrograde	14659 May 07 20:40	1° \approx 43'55		minimum elong	14664 May 25 14:27	15° \mathbb{I} 36'32	0°14'06
	14659 Jun 09 15:23	30° \Re \mathfrak{B}		behind sun begin	14664 May 25 10:29	15° \mathbb{I} 34'24	
min. Earth dist.	14659 Jul 04 22:10	26° \mathfrak{B} 53'55	4.07977 AU	behind sun end	14664 May 25 18:24	15° \mathbb{I} 38'40	
opposition	14659 Jul 06 13:39	26° \mathfrak{B} 40'35	0°45'28	morning rise	14664 Jun 07 10:44	18° \mathbb{I} 22'51	
direct	14659 Sep 03 10:57	21° \mathfrak{B} 42'49			14664 Aug 06 12:57	0° \mathfrak{B}	
	14659 Nov 19 01:24	0° \approx		retrograde	14664 Oct 07 02:25	5° \mathfrak{B} 17'55	
evening set	14660 Jan 08 04:19	10° \approx 40'46		opposition	14664 Dec 07 04:44	0° \mathfrak{B} 24'04	-0°30'31
				min. Earth dist.	14664 Dec 08 14:48	0° \mathfrak{B} 13'10	4.42020 AU
conjunction	14660 Jan 21 16:21	13° \approx 45'56	0°33'21		14664 Dec 10 07:59	30° \Re \mathbb{I}	
minimum elong	14660 Jan 21 16:21	13° \approx 45'56	0°34'10	direct	14665 Feb 07 11:09	25° \mathbb{I} 23'32	
max. Earth dist.	14660 Jan 24 01:30	14° \approx 18'37	6.16855 AU		14665 Apr 06 00:26	0° \mathfrak{B}	
	14660 Jan 27 01:53	15° \approx		evening set	14665 Jun 12 07:55	12° \mathfrak{B} 59'26	
morning rise	14660 Feb 04 04:39	16° \approx 50'50		max. Earth dist.	14665 Jun 22 21:26	15° \mathfrak{B} 19'47	6.35065 AU
	14660 Apr 09 07:04	0° \mathfrak{H}					
retrograde	14660 Jun 09 02:25	5° \mathfrak{H} 22'37		conjunction	14665 Jun 25 04:23	15° \mathfrak{B} 50'21	-0°27'08
min. Earth dist.	14660 Aug 06 23:14	0° \mathfrak{H} 31'26	4.25745 AU	minimum elong	14665 Jun 25 04:23	15° \mathfrak{B} 50'20	0°28'10
opposition	14660 Aug 08 08:02	0° \mathfrak{H} 20'31	0°49'40	morning rise	14665 Jul 08 00:00	18° \mathfrak{B} 41'04	
	14660 Aug 10 21:40	30° \Re \approx			14665 Sep 01 22:57	0° \mathbb{Q}	
direct	14660 Oct 07 11:18	25° \approx 21'12		retrograde	14665 Nov 08 19:25	6° \mathbb{Q} 25'11	
	14660 Dec 03 04:34	0° \mathfrak{H}		opposition	14666 Jan 08 11:06	1° \mathbb{Q} 31'11	-0°46'52
evening set	14661 Feb 10 05:27	13° \mathfrak{H} 23'01		min. Earth dist.	14666 Jan 10 03:22	1° \mathbb{Q} 18'10	4.26798 AU
					14666 Jan 20 09:39	30° \Re \mathfrak{B}	
conjunction	14661 Feb 23 14:13	16° \mathfrak{H} 19'27	0°31'13	direct	14666 Mar 10 22:56	26° \mathfrak{B} 31'20	
minimum elong	14661 Feb 23 14:14	16° \mathfrak{H} 19'27	0°31'33		14666 Apr 28 12:17	0° \mathbb{Q}	
max. Earth dist.	14661 Feb 25 06:32	16° \mathfrak{H} 41'39	6.34145 AU	evening set	14666 Jul 14 12:06	14° \mathbb{Q} 56'29	
morning rise	14661 Mar 08 22:16	19° \mathfrak{H} 15'15			14666 Jul 14 18:14	15° \mathbb{Q}	
	14661 May 01 12:23	0° Υ		max. Earth dist.	14666 Jul 25 03:21	17° \mathbb{Q} 23'21	6.17906 AU

conjunction	14666 Jul 27 09:43	17°Ω54'45	-0°33'47			14672 Jan 10 11:45	15°≈	
minimum elong	14666 Jul 27 09:43	17°Ω54'45	0°34'33	evening set		14672 Jan 13 03:14	15°≈35'52	
morning rise	14666 Aug 09 07:09	20°Ω53'17						
	14666 Sep 20 01:27	0°൬		conjunction		14672 Jan 26 15:00	18°≈39'46	0°33'43
retrograde	14666 Dec 14 02:18	9°൬48'26		minimum elong		14672 Jan 26 15:00	18°≈39'46	0°34'29
opposition	14667 Feb 12 04:46	4°൬53'19	-0°49'32	max. Earth dist.		14672 Jan 29 00:23	19°≈12'24	6.19407 AU
min. Earth dist.	14667 Feb 13 13:10	4°൬42'43	4.08928 AU	morning rise		14672 Feb 09 02:44	21°≈43'19	
	14667 Apr 06 09:00	30°℞Ω				14672 Mar 18 16:47	0°℥	
direct	14667 Apr 13 09:34	29°Ω55'09		retrograde		14672 Jun 13 13:02	10°℥04'30	
	14667 Apr 20 10:10	0°൬		opposition		14672 Aug 12 21:32	5°℥02'40	0°48'55
evening set	14667 Aug 17 22:41	19°൬18'11		min. Earth dist.		14672 Aug 11 13:07	5°℥13'26	4.28289 AU
				direct		14672 Oct 12 04:12	0°℥03'12	
conjunction	14667 Aug 30 23:59	22°൬25'35	-0°29'24	evening set		14673 Feb 14 19:59	17°℥57'23	
minimum elong	14667 Aug 30 24:00	22°൬25'35	0°29'39					
max. Earth dist.	14667 Aug 29 12:24	22°൬04'14	6.00885 AU	conjunction		14673 Feb 28 04:04	20°℥52'36	0°30'07
morning rise	14667 Sep 13 02:19	25°൬33'49		minimum elong		14673 Feb 28 04:05	20°℥52'36	0°30'23
	14667 Oct 01 23:41	0°Ω		max. Earth dist.		14673 Mar 01 16:17	21°℥12'27	6.36488 AU
retrograde	14668 Jan 20 23:28	15°Ω42'33		morning rise		14673 Mar 13 11:28	23°℥47'10	
opposition	14668 Mar 20 11:08	10°Ω45'21	-0°34'06			14673 Apr 12 01:15	0°℣	
min. Earth dist.	14668 Mar 21 00:04	10°Ω41'03	3.94351 AU	retrograde		14673 Jul 14 06:45	11°℣05'26	
direct	14668 May 18 09:23	5°Ω49'07		min. Earth dist.		14673 Sep 12 11:10	6°℣11'17	4.43193 AU
evening set	14668 Sep 22 18:01	25°Ω57'39		opposition		14673 Sep 13 02:29	6°℣06'17	0°36'13
				direct		14673 Nov 13 13:55	1°℣05'59	
conjunction	14668 Oct 06 01:06	29°Ω12'48	-0°13'38	evening set		14674 Mar 18 10:37	18°℣21'09	
minimum elong	14668 Oct 06 01:07	29°Ω12'48	0°13'14					
behind sun begin	14668 Oct 05 20:14	29°Ω09'50		conjunction		14674 Mar 31 14:45	21°℣10'12	0°18'07
behind sun end	14668 Oct 06 05:59	29°Ω15'47		minimum elong		14674 Mar 31 14:46	21°℣10'12	0°17'51
max. Earth dist.	14668 Oct 06 01:14	29°Ω12'52	5.90246 AU	max. Earth dist.		14674 Mar 31 23:30	21°℣14'52	6.48176 AU
	14668 Oct 09 06:05	0°ℒ		morning rise		14674 Apr 13 17:27	23°℣58'26	
morning rise	14668 Oct 19 09:42	2°ℒ28'58				14674 May 13 00:40	0°℥	
	14668 Dec 14 01:45	15°ℒ		retrograde		14674 Aug 12 20:38	10°℥40'03	
retrograde	14669 Feb 28 00:53	23°ℒ20'40		opposition		14674 Oct 13 01:03	5°℥43'33	0°14'35
opposition	14669 Apr 28 04:21	18°ℒ20'41	-0°03'53	min. Earth dist.		14674 Oct 13 04:39	5°℥42'23	4.51019 AU
min. Earth dist.	14669 Apr 27 15:48	18°ℒ24'55	3.88959 AU	direct		14674 Dec 14 06:44	0°℥42'54	
	14669 May 25 13:21	15°℞ℒ				14675 Apr 04 20:36	15°℥	
asc. node	14669 Jun 12 17:38	13°ℒ41'44		evening set		14675 Apr 17 19:00	17°℥42'25	
direct	14669 Jun 25 07:23	13°ℒ25'25						
	14669 Jul 25 22:33	15°ℒ		conjunction		14675 Apr 30 19:22	20°℥28'40	0°01'39
	14669 Oct 15 11:31	0°℣		minimum elong		14675 Apr 30 19:23	20°℥28'40	0°00'56
evening set	14669 Oct 31 00:27	3°℣43'35		behind sun begin		14675 Apr 30 11:21	20°℥24'25	
				behind sun end		14675 May 01 03:24	20°℥32'56	
conjunction	14669 Nov 13 12:08	7°℣00'50	0°08'05	max. Earth dist.		14675 Apr 29 23:27	20°℥18'02	6.51617 AU
minimum elong	14669 Nov 13 12:08	7°℣00'50	0°08'59	morning rise		14675 May 13 18:01	23°℥14'11	
behind sun begin	14669 Nov 13 05:00	6°℣56'30		desc. node		14675 Jun 07 14:01	28°℥21'59	
behind sun end	14669 Nov 13 19:15	7°℣05'10				14675 Jun 15 22:58	0°ℒ	
max. Earth dist.	14669 Nov 15 00:36	7°℣23'05	5.90653 AU	retrograde		14675 Sep 11 14:07	9°ℒ49'30	
morning rise	14669 Nov 27 01:42	10°℣18'55		opposition		14675 Nov 11 19:50	4°ℒ54'56	-0°10'24
	14670 Mar 14 00:42	0°℣		min. Earth dist.		14675 Nov 12 18:45	4°ℒ47'36	4.49948 AU
retrograde	14670 Apr 07 02:26	0°℣57'25				14676 Jan 05 07:52	30°℞℥	
	14670 May 01 02:26	30°℞℣		direct		14676 Jan 13 09:02	29°℥54'11	
min. Earth dist.	14670 Jun 04 00:27	26°℣06'14	3.95198 AU			14676 Jan 21 09:55	0°ℒ	
opposition	14670 Jun 05 09:57	25°℣54'52	0°27'52	evening set		14676 May 16 20:28	17°ℒ02'53	
direct	14670 Aug 02 14:11	20°℣58'41		max. Earth dist.		14676 May 27 21:31	19°ℒ25'59	6.46047 AU
	14670 Oct 20 13:19	0°℣						
evening set	14670 Dec 08 00:03	10°℣44'42		conjunction		14676 May 29 17:57	19°ℒ50'03	-0°15'20
				minimum elong		14676 May 29 17:57	19°ℒ50'03	0°16'19
conjunction	14670 Dec 21 13:22	13°℣57'14	0°26'05	morning rise		14676 Jun 11 14:10	22°ℒ36'45	
minimum elong	14670 Dec 21 13:21	13°℣57'14	0°27'05			14676 Jul 17 10:17	0°℥	
max. Earth dist.	14670 Dec 23 23:17	14°℣31'33	6.02005 AU	retrograde		14676 Oct 11 11:50	9°℥36'49	
morning rise	14671 Jan 04 03:48	17°℣10'00		opposition		14676 Dec 11 12:29	4°℥42'57	-0°33'20
	14671 Mar 05 08:56	0°≈		min. Earth dist.		14676 Dec 13 00:48	4°℥31'18	4.40200 AU
retrograde	14671 May 12 17:56	6°≈47'22				14677 Jan 28 20:57	30°℞ℒ	
min. Earth dist.	14671 Jul 09 21:08	1°≈57'09	4.10316 AU	direct		14677 Feb 11 17:46	29°ℒ42'21	
opposition	14671 Jul 11 11:55	1°≈44'04	0°47'08			14677 Feb 25 14:53	0°℥	
	14671 Jul 24 15:50	30°℞℣		evening set		14677 Jun 16 15:39	17°℥24'16	
direct	14671 Sep 08 14:12	26°℣46'03		max. Earth dist.		14677 Jun 27 04:25	19°℥44'53	6.32736 AU
	14671 Oct 24 08:02	0°≈						

conjunction	14677 Jun 29 12:18	20°☿16'06	-0°28'35	morning rise	14683 Jan 09 10:26	22°♄23'02	
minimum elong	14677 Jun 29 12:17	20°☿16'06	0°29'34		14683 Feb 12 09:05	0°♄	
morning rise	14677 Jul 12 07:54	23°☿07'47		retrograde	14683 May 17 13:28	11°♄48'59	
	14677 Aug 13 08:33	0°♄		min. Earth dist.	14683 Jul 14 18:22	6°♄59'03	4.13032 AU
retrograde	14677 Nov 13 11:54	11°♄01'16		opposition	14683 Jul 16 09:48	6°♄45'47	0°48'24
opposition	14678 Jan 13 02:25	6°♄07'10	-0°48'11	direct	14683 Sep 13 15:25	1°♄47'33	
min. Earth dist.	14678 Jan 14 18:24	5°♄54'14	4.24108 AU		14683 Dec 24 04:34	15°♄	
direct	14678 Mar 15 09:30	1°♄07'28		evening set	14684 Jan 18 01:29	20°♄28'10	
	14678 Jun 28 07:54	15°♄					
evening set	14678 Jul 19 03:29	19°♄41'35		conjunction	14684 Jan 31 12:35	23°♄30'37	0°33'49
max. Earth dist.	14678 Jul 29 19:51	22°♄10'03	6.15065 AU	minimum elong	14684 Jan 31 12:36	23°♄30'37	0°34'30
				max. Earth dist.	14684 Feb 02 18:36	24°♄01'09	6.22191 AU
conjunction	14678 Aug 01 01:24	22°♄41'11	-0°33'53	morning rise	14684 Feb 13 23:50	26°♄32'43	
minimum elong	14678 Aug 01 01:24	22°♄41'12	0°34'36		14684 Feb 29 15:13	0°♄	
morning rise	14678 Aug 13 23:30	25°♄41'13		retrograde	14684 Jun 18 00:14	14°♄43'05	
	14678 Sep 01 22:10	0°♄		min. Earth dist.	14684 Aug 16 04:30	9°♄51'26	4.30896 AU
retrograde	14678 Dec 19 07:24	14°♄48'27		opposition	14684 Aug 17 10:09	9°♄41'36	0°47'50
opposition	14679 Feb 17 06:19	9°♄53'07	-0°48'31	direct	14684 Oct 16 21:58	4°♄41'58	
min. Earth dist.	14679 Feb 18 13:13	9°♄42'57	4.06159 AU	evening set	14685 Feb 19 09:29	22°♄28'48	
direct	14679 Apr 18 06:56	4°♄55'10					
evening set	14679 Aug 22 23:22	24°♄27'28		conjunction	14685 Mar 04 17:07	25°♄22'55	0°28'48
max. Earth dist.	14679 Sep 03 19:02	27°♄17'56	5.98471 AU	minimum elong	14685 Mar 04 17:08	25°♄22'55	0°29'00
				max. Earth dist.	14685 Mar 06 02:52	25°♄41'20	6.38729 AU
conjunction	14679 Sep 05 01:40	27°♄36'24	-0°27'49	morning rise	14685 Mar 17 23:40	28°♄16'17	
minimum elong	14679 Sep 05 01:40	27°♄36'25	0°27'58		14685 Mar 26 00:35	0°♄	
	14679 Sep 14 23:56	0°♄		retrograde	14685 Jul 18 10:36	15°♄27'11	
morning rise	14679 Sep 18 04:50	0°♄46'10		opposition	14685 Sep 17 08:37	10°♄28'29	0°33'31
retrograde	14680 Jan 26 12:02	21°♄05'13		min. Earth dist.	14685 Sep 16 19:11	10°♄32'51	4.44930 AU
opposition	14680 Mar 25 21:18	16°♄07'43	-0°30'31	direct	14685 Nov 17 22:22	5°♄28'11	
min. Earth dist.	14680 Mar 26 06:42	16°♄04'35	3.92572 AU	evening set	14686 Mar 22 18:07	22°♄39'20	
direct	14680 May 23 14:34	11°♄11'47					
	14680 Sep 22 06:13	0°♄		conjunction	14686 Apr 04 21:35	25°♄27'43	0°15'57
evening set	14680 Sep 28 03:14	1°♄25'40		minimum elong	14686 Apr 04 21:36	25°♄27'43	0°15'36
				behind sun begin	14686 Apr 04 19:55	25°♄26'50	
conjunction	14680 Oct 11 11:01	4°♄41'41	-0°10'43	behind sun end	14686 Apr 04 23:17	25°♄28'37	
minimum elong	14680 Oct 11 11:01	4°♄41'41	0°10'13	max. Earth dist.	14686 Apr 05 01:12	25°♄29'39	6.49293 AU
behind sun begin	14680 Oct 11 04:24	4°♄37'38		morning rise	14686 Apr 17 23:42	28°♄15'20	
behind sun end	14680 Oct 11 17:38	4°♄45'44			14686 Apr 26 06:10	0°♄	
max. Earth dist.	14680 Oct 11 15:42	4°♄44'33	5.89284 AU	retrograde	14686 Aug 17 01:05	14°♄54'04	
morning rise	14680 Oct 24 20:41	7°♄58'46		opposition	14686 Oct 17 05:02	9°♄57'58	0°11'07
	14680 Nov 23 12:32	15°♄		min. Earth dist.	14686 Oct 17 12:29	9°♄55'34	4.51460 AU
retrograde	14681 Mar 05 12:56	28°♄53'16		direct	14686 Dec 18 13:26	4°♄57'18	
asc. node	14681 Apr 23 00:10	25°♄18'25			14687 Mar 18 18:55	15°♄	
opposition	14681 May 03 16:53	23°♄52'51	0°00'56	desc. node	14687 Apr 14 22:49	20°♄27'32	
min. Earth dist.	14681 May 02 23:34	23°♄58'42	3.88956 AU	evening set	14687 Apr 21 23:52	21°♄56'35	
direct	14681 Jun 30 18:12	18°♄57'34					
	14681 Sep 26 14:03	0°♄		conjunction	14687 May 04 23:45	24°♄42'46	-0°00'54
evening set	14681 Nov 05 12:12	9°♄14'08		minimum elong	14687 May 04 23:45	24°♄42'46	0°01'40
				behind sun begin	14687 May 04 15:43	24°♄38'30	
conjunction	14681 Nov 19 00:24	12°♄31'09	0°11'05	behind sun end	14687 May 05 07:47	24°♄47'02	
minimum elong	14681 Nov 19 00:23	12°♄31'08	0°12'02	max. Earth dist.	14687 May 03 22:59	24°♄29'32	6.51342 AU
behind sun begin	14681 Nov 18 18:42	12°♄27'42		morning rise	14687 May 17 22:02	27°♄28'14	
behind sun end	14681 Nov 19 06:04	12°♄34'35			14687 May 29 22:47	0°♄	
max. Earth dist.	14681 Nov 20 17:59	12°♄56'28	5.91610 AU	retrograde	14687 Sep 15 19:36	14°♄05'26	
morning rise	14681 Dec 02 14:15	15°♄48'52		opposition	14687 Nov 16 01:14	9°♄11'01	-0°13'55
	14682 Feb 06 01:44	0°♄		min. Earth dist.	14687 Nov 17 02:09	9°♄03'03	4.48987 AU
retrograde	14682 Apr 12 09:09	6°♄20'58		direct	14688 Jan 17 13:14	4°♄10'14	
min. Earth dist.	14682 Jun 09 06:44	1°♄29'54	3.96970 AU	evening set	14688 May 21 02:39	21°♄22'38	
opposition	14682 Jun 10 17:28	1°♄18'08	0°31'36	max. Earth dist.	14688 Jun 01 02:14	23°♄45'24	6.44457 AU
	14682 Jun 20 10:49	30°♄					
direct	14682 Aug 08 00:42	26°♄21'42		conjunction	14688 Jun 03 00:02	24°♄10'19	-0°17'31
	14682 Sep 24 22:40	0°♄		minimum elong	14688 Jun 03 00:02	24°♄10'19	0°18'32
evening set	14682 Dec 13 06:58	16°♄00'08		morning rise	14688 Jun 15 19:54	26°♄57'31	
					14688 Jun 30 01:29	0°♄	
conjunction	14682 Dec 26 20:17	19°♄11'32	0°27'52	retrograde	14688 Oct 15 23:37	14°♄03'57	
minimum elong	14682 Dec 26 20:17	19°♄11'32	0°28'52	opposition	14688 Dec 15 23:16	9°♄10'10	-0°36'04
max. Earth dist.	14682 Dec 29 09:07	19°♄47'21	6.04387 AU	min. Earth dist.	14688 Dec 17 13:04	8°♄58'03	4.38070 AU

direct	14689 Feb 16 02:01	4°  09'39		direct	14694 Aug 13 07:24	1°  37'50	
evening set	14689 Jun 21 02:52	21°  58'39		evening set	14694 Dec 18 10:33	21°  07'03	
max. Earth dist.	14689 Jul 01 13:40	24°  19'02	6.30203 AU				
conjunction	14689 Jul 03 23:25	24°  51'29	-0°29'54	conjunction	14694 Dec 31 23:28	24°  17'01	0°29'23
minimum elong	14689 Jul 03 23:25	24°  51'29	0°30'52	minimum elong	14694 Dec 31 23:27	24°  17'01	0°30'21
morning rise	14689 Jul 16 19:24	27°  44'18		max. Earth dist.	14695 Jan 03 11:15	24°  52'00	6.07105 AU
	14689 Jul 26 23:56	0°  ♏		morning rise	14695 Jan 14 13:24	27°  327'05	
	14689 Oct 26 17:58	15°  ♏			14695 Jan 25 15:33	0°  ♏	
retrograde	14689 Nov 18 10:24	15°  ♏48'07		retrograde	14695 Apr 19 15:22	15°  ♏	
	14689 Dec 11 01:53	15°  ♏♏			14695 May 22 04:40	16°  ♏40'51	
opposition	14690 Jan 17 22:05	10°  ♏53'53	-0°49'14		14695 Jun 23 14:25	15°  ♏♏	
min. Earth dist.	14690 Jan 19 13:42	10°  ♏41'02	4.21335 AU	min. Earth dist.	14695 Jul 19 13:26	11°  ♏50'34	4.15891 AU
direct	14690 Mar 20 01:18	5°  ♏54'21		opposition	14695 Jul 21 03:37	11°  ♏37'44	0°49'15
	14690 Jun 09 16:17	15°  ♏		direct	14695 Sep 18 14:08	6°  ♏39'12	
evening set	14690 Jul 23 22:30	24°  ♏37'36			14695 Dec 05 06:48	15°  ♏	
max. Earth dist.	14690 Aug 03 18:33	27°  ♏09'06	6.12300 AU	evening set	14696 Jan 22 19:31	25°  ♏10'30	
conjunction	14690 Aug 05 21:04	27°  ♏38'38	-0°33'44	conjunction	14696 Feb 05 06:18	28°  ♏11'34	0°33'42
minimum elong	14690 Aug 05 21:04	27°  ♏38'39	0°34'22	minimum elong	14696 Feb 05 06:19	28°  ♏11'34	0°34'19
	14690 Aug 15 22:47	0°  ♏		max. Earth dist.	14696 Feb 07 10:56	28°  ♏41'09	6.24958 AU
morning rise	14690 Aug 18 19:38	0°  ♏40'07			14696 Feb 13 07:28	0°  ♏	
retrograde	14690 Dec 24 15:27	19°  ♏59'07		morning rise	14696 Feb 18 16:45	1°  ♏12'11	
opposition	14691 Feb 22 11:48	15°  ♏03'34	-0°47'02	retrograde	14696 Jun 22 07:16	19°  ♏12'11	
min. Earth dist.	14691 Feb 23 16:14	14°  ♏54'13	4.03672 AU	opposition	14696 Aug 21 19:07	14°  ♏11'06	0°46'29
direct	14691 Apr 23 06:49	10°  ♏06'01		min. Earth dist.	14696 Aug 20 15:21	14°  ♏20'17	4.33347 AU
evening set	14691 Aug 28 03:49	29°  ♏46'21		direct	14696 Oct 21 10:41	9°  ♏11'22	
	14691 Aug 29 02:31	0°  ♏		evening set	14697 Feb 23 19:30	26°  ♏51'32	
max. Earth dist.	14691 Sep 09 03:50	2°  ♏40'16	5.96515 AU	conjunction	14697 Mar 09 02:23	29°  ♏44'36	0°27'23
conjunction	14691 Sep 10 06:42	2°  ♏56'32	-0°25'56	minimum elong	14697 Mar 09 02:24	29°  ♏44'36	0°27'29
minimum elong	14691 Sep 10 06:43	2°  ♏56'33	0°26'00	max. Earth dist.	14697 Mar 10 06:22	29°  ♏59'48	6.40684 AU
morning rise	14691 Sep 23 10:57	6°  ♏07'40			14697 Mar 10 06:43	0°  ♏	
retrograde	14692 Feb 01 00:39	26°  ♏34'49		morning rise	14697 Mar 22 08:28	2°  ♏36'59	
opposition	14692 Mar 31 09:35	21°  ♏36'53	-0°26'34	retrograde	14697 Jul 22 14:03	19°  ♏41'47	
min. Earth dist.	14692 Mar 31 14:07	21°  ♏35'23	3.91399 AU	opposition	14697 Sep 21 12:28	14°  ♏43'27	0°30'45
direct	14692 May 28 23:35	16°  ♏41'09		min. Earth dist.	14697 Sep 21 02:50	14°  ♏46'35	4.46284 AU
	14692 Sep 04 04:19	0°  ♏		direct	14697 Nov 22 05:45	9°  ♏43'04	
evening set	14692 Oct 03 13:49	6°  ♏57'43		evening set	14698 Mar 26 23:11	26°  ♏51'25	
conjunction	14692 Oct 16 22:25	10°  ♏14'13	-0°07'41	conjunction	14698 Apr 09 02:18	29°  ♏39'23	0°13'45
minimum elong	14692 Oct 16 22:25	10°  ♏14'13	0°07'06	minimum elong	14698 Apr 09 02:18	29°  ♏39'23	0°13'21
behind sun begin	14692 Oct 16 14:46	10°  ♏09'32		behind sun begin	14698 Apr 08 21:45	29°  ♏36'58	
behind sun end	14692 Oct 17 06:05	10°  ♏18'55		behind sun end	14698 Apr 09 06:51	29°  ♏41'48	
max. Earth dist.	14692 Oct 17 10:27	10°  ♏21'36	5.89046 AU	max. Earth dist.	14698 Apr 09 02:22	29°  ♏39'25	6.49968 AU
morning rise	14692 Oct 30 08:43	13°  ♏31'44			14698 Apr 10 16:52	0°  ♏	
	14692 Nov 05 10:10	15°  ♏		morning rise	14698 Apr 22 03:44	2°  ♏26'32	
	14693 Jan 16 11:53	0°  ♏			14698 Jun 28 16:32	15°  ♏	
asc. node	14693 Mar 04 12:57	4°  ♏21'21		retrograde	14698 Aug 21 02:23	19°  ♏03'50	
retrograde	14693 Mar 11 01:10	4°  ♏25'40			14698 Oct 14 13:03	15°  ♏♏	
	14693 May 04 20:38	30°  ♏♏		opposition	14698 Oct 21 07:30	14°  ♏08'03	0°07'40
min. Earth dist.	14693 May 08 09:01	29°  ♏31'32	3.89688 AU	min. Earth dist.	14698 Oct 21 16:56	14°  ♏05'01	4.51447 AU
opposition	14693 May 09 05:02	29°  ♏24'45	0°05'43	direct	14698 Dec 22 15:38	9°  ♏07'24	
direct	14693 Jul 06 06:58	24°  ♏29'23		desc. node	14699 Feb 19 22:49	13°  ♏52'59	
	14693 Sep 03 16:01	0°  ♏			14699 Feb 27 05:24	15°  ♏	
evening set	14693 Nov 10 22:19	14°  ♏41'14		evening set	14699 Apr 26 03:56	26°  ♏07'52	
conjunction	14693 Nov 24 10:51	17°  ♏57'35	0°13'56	max. Earth dist.	14699 May 07 23:13	28°  ♏39'03	6.50649 AU
minimum elong	14693 Nov 24 10:50	17°  ♏57'35	0°14'55	conjunction	14699 May 09 03:26	28°  ♏54'09	-0°03'19
behind sun begin	14693 Nov 24 07:46	17°  ♏55'44		minimum elong	14699 May 09 03:24	28°  ♏54'08	0°04'09
behind sun end	14693 Nov 24 13:53	17°  ♏59'26		behind sun begin	14699 May 08 19:31	28°  ♏49'56	
max. Earth dist.	14693 Nov 26 09:40	18°  ♏25'57	5.93215 AU	behind sun end	14699 May 09 11:18	28°  ♏58'21	
morning rise	14693 Dec 08 00:54	21°  ♏14'35			14699 May 14 06:22	0°  ♏	
	14694 Jan 15 04:13	0°  ♏		morning rise	14699 May 22 01:18	1°  ♏39'45	
retrograde	14694 Apr 17 11:35	11°  ♏37'34		retrograde	14699 Sep 20 02:56	18°  ♏20'06	
min. Earth dist.	14694 Jun 14 08:53	6°  ♏47'01	3.99262 AU	opposition	14699 Nov 20 06:49	13°  ♏25'56	-0°17'18
opposition	14694 Jun 15 21:50	6°  ♏34'31	0°34'57	min. Earth dist.	14699 Nov 21 10:46	13°  ♏16'59	4.47661 AU
				direct	14700 Jan 21 18:47	8°  ♏25'12	

evening set	14700 May 26 09:02	25° Π 42'17		evening set	14705 Nov 17 05:46	20° X 00'39	
max. Earth dist.	14700 Jun 06 05:00	28° Π 03'45	6.42588 AU				
conjunction	14700 Jun 08 06:11	28° Π 30'36	-0°19'36	conjunction	14705 Nov 30 18:23	23° X 16'20	0°16'39
minimum elong	14700 Jun 08 06:10	28° Π 30'36	0°20'37	minimum elong	14705 Nov 30 18:22	23° X 16'20	0°17'38
	14700 Jun 15 01:52	0° \mathfrak{D}		max. Earth dist.	14705 Dec 02 18:43	23° X 45'30	5.94771 AU
morning rise	14700 Jun 21 02:05	1° \mathfrak{D} 18'31		morning rise	14705 Dec 14 08:43	26° X 32'38	
retrograde	14700 Oct 21 13:08	18° \mathfrak{D} 32'20			14705 Dec 28 23:40	0° \mathfrak{Z}	
opposition	14700 Dec 21 11:12	13° \mathfrak{D} 38'33	-0°38'35	retrograde	14706 Apr 23 10:58	16° \mathfrak{Z} 47'18	
min. Earth dist.	14700 Dec 23 01:15	13° \mathfrak{D} 26'19	4.35777 AU	min. Earth dist.	14706 Jun 20 09:27	11° \mathfrak{Z} 56'51	4.01320 AU
direct	14701 Feb 21 10:30	8° \mathfrak{D} 38'09		opposition	14706 Jun 21 23:05	11° \mathfrak{Z} 44'06	0°37'59
evening set	14701 Jun 26 14:50	26° \mathfrak{D} 34'37		direct	14706 Aug 19 11:57	6° \mathfrak{Z} 47'07	
max. Earth dist.	14701 Jul 07 03:28	28° \mathfrak{D} 56'46	6.27669 AU	evening set	14706 Dec 24 11:45	26° \mathfrak{Z} 08'41	
conjunction	14701 Jul 09 11:40	29° \mathfrak{D} 28'32	-0°31'01	conjunction	14707 Jan 07 00:40	29° \mathfrak{Z} 17'32	0°30'40
minimum elong	14701 Jul 09 11:40	29° \mathfrak{D} 28'32	0°31'58	minimum elong	14707 Jan 07 00:40	29° \mathfrak{Z} 17'31	0°31'37
	14701 Jul 11 19:18	0° \mathfrak{Q}		max. Earth dist.	14707 Jan 09 13:18	29° \mathfrak{Z} 52'49	6.09474 AU
morning rise	14701 Jul 22 07:42	2° \mathfrak{Q} 22'27			14707 Jan 10 01:38	0° \approx	
	14701 Sep 22 18:18	15° \mathfrak{Q}		morning rise	14707 Jan 20 14:06	2° \approx 26'19	
retrograde	14701 Nov 24 09:37	20° \mathfrak{Q} 36'28			14707 Mar 21 16:41	15° \approx	
opposition	14702 Jan 23 18:41	15° \mathfrak{Q} 42'11	-0°49'56	retrograde	14707 May 27 20:13	21° \approx 29'42	
min. Earth dist.	14702 Jan 25 09:37	15° \mathfrak{Q} 29'32	4.18746 AU	min. Earth dist.	14707 Jul 25 07:03	16° \approx 39'15	4.18328 AU
	14702 Jan 29 04:55	15° \mathfrak{R} \mathfrak{Q}		opposition	14707 Jul 26 20:07	16° \approx 26'50	0°49'49
direct	14702 Mar 25 17:25	10° \mathfrak{Q} 42'58			14707 Aug 06 19:21	15° \mathfrak{R} \approx	
	14702 May 18 11:46	15° \mathfrak{Q}		direct	14707 Sep 24 10:17	11° \approx 28'08	
evening set	14702 Jul 29 18:23	29° \mathfrak{Q} 34'32			14707 Nov 11 21:19	15° \approx	
	14702 Jul 31 14:01	0° \mathfrak{P}		evening set	14708 Jan 28 13:02	29° \approx 51'55	
max. Earth dist.	14702 Aug 09 16:13	2° \mathfrak{P} 07'59	6.09870 AU		14708 Jan 29 03:34	0° \mathfrak{H}	
conjunction	14702 Aug 11 17:17	2° \mathfrak{P} 36'50	-0°33'20	conjunction	14708 Feb 10 23:13	2° \mathfrak{H} 51'48	0°33'21
minimum elong	14702 Aug 11 17:17	2° \mathfrak{P} 36'50	0°33'53	minimum elong	14708 Feb 10 23:14	2° \mathfrak{H} 51'49	0°33'55
morning rise	14702 Aug 24 16:39	5° \mathfrak{P} 39'41		max. Earth dist.	14708 Feb 13 00:10	3° \mathfrak{H} 19'10	6.27250 AU
retrograde	14702 Dec 30 21:27	25° \mathfrak{P} 09'02		morning rise	14708 Feb 24 09:15	5° \mathfrak{H} 51'14	
opposition	14703 Feb 28 17:03	20° \mathfrak{P} 13'11	-0°45'10	retrograde	14708 Jun 27 14:17	23° \mathfrak{H} 42'45	
min. Earth dist.	14703 Mar 01 17:51	20° \mathfrak{P} 05'00	4.01617 AU	min. Earth dist.	14708 Aug 26 02:47	18° \mathfrak{H} 50'25	4.35338 AU
direct	14703 Apr 29 07:23	15° \mathfrak{P} 15'55		opposition	14708 Aug 27 04:16	18° \mathfrak{H} 42'00	0°44'53
	14703 Aug 12 22:46	0° \mathfrak{L}		direct	14708 Oct 26 23:23	13° \mathfrak{H} 42'07	
evening set	14703 Sep 03 07:14	5° \mathfrak{L} 02'33			14709 Feb 23 06:17	0° \mathfrak{Y}	
				evening set	14709 Mar 01 06:20	1° \mathfrak{Y} 17'14	
conjunction	14703 Sep 16 10:59	8° \mathfrak{L} 13'48	-0°23'51	conjunction	14709 Mar 14 12:52	4° \mathfrak{Y} 09'30	0°25'47
minimum elong	14703 Sep 16 11:00	8° \mathfrak{L} 13'49	0°23'49	minimum elong	14709 Mar 14 12:53	4° \mathfrak{Y} 09'31	0°25'49
max. Earth dist.	14703 Sep 15 14:30	8° \mathfrak{L} 01'22	5.95038 AU	max. Earth dist.	14709 Mar 15 14:10	4° \mathfrak{Y} 23'13	6.42250 AU
morning rise	14703 Sep 29 15:56	11° \mathfrak{L} 26'00		morning rise	14709 Mar 27 18:09	7° \mathfrak{Y} 01'02	
	14704 Jan 03 06:29	0° \mathfrak{M}		retrograde	14709 Jul 27 17:51	24° \mathfrak{Y} 00'49	
retrograde	14704 Feb 07 13:27	1° \mathfrak{M} 59'16		opposition	14709 Sep 26 17:34	19° \mathfrak{Y} 02'56	0°27'46
	14704 Mar 13 20:21	30° \mathfrak{R} \mathfrak{L}		min. Earth dist.	14709 Sep 26 10:07	19° \mathfrak{Y} 05'21	4.47348 AU
opposition	14704 Apr 06 19:55	27° \mathfrak{L} 00'58	-0°22'24	direct	14709 Nov 27 13:03	14° \mathfrak{Y} 02'34	
min. Earth dist.	14704 Apr 06 21:43	27° \mathfrak{L} 00'22	3.90657 AU		14710 Mar 26 19:33	0° \mathfrak{B}	
direct	14704 Jun 04 08:11	22° \mathfrak{L} 05'24		evening set	14710 Apr 01 06:09	1° \mathfrak{B} 08'55	
	14704 Aug 15 21:32	0° \mathfrak{M}					
evening set	14704 Oct 09 21:59	12° \mathfrak{M} 23'08					
	14704 Oct 20 14:10	15° \mathfrak{M}					
conjunction	14704 Oct 23 07:15	15° \mathfrak{M} 39'57	-0°04'37	conjunction	14710 Apr 14 08:36	3° \mathfrak{B} 56'28	0°11'27
minimum elong	14704 Oct 23 07:15	15° \mathfrak{M} 39'56	0°03'58	minimum elong	14710 Apr 14 08:36	3° \mathfrak{B} 56'28	0°10'58
behind sun begin	14704 Oct 22 23:01	15° \mathfrak{M} 34'55		behind sun begin	14710 Apr 14 02:34	3° \mathfrak{B} 53'16	
behind sun end	14704 Oct 23 15:28	15° \mathfrak{M} 44'58		behind sun end	14710 Apr 14 14:38	3° \mathfrak{B} 59'41	
max. Earth dist.	14704 Oct 24 00:32	15° \mathfrak{M} 50'33	5.89099 AU	max. Earth dist.	14710 Apr 14 03:32	3° \mathfrak{B} 53'47	6.50470 AU
morning rise	14704 Nov 05 18:16	18° \mathfrak{M} 57'44		morning rise	14710 Apr 27 09:40	6° \mathfrak{B} 43'16	
	14704 Dec 24 00:51	0° X			14710 Jun 07 17:26	15° \mathfrak{B}	
asc. node	14705 Jan 15 04:21	4° X 10'12		retrograde	14710 Aug 26 08:17	23° \mathfrak{B} 19'34	
retrograde	14705 Mar 17 08:46	9° X 49'56		opposition	14710 Oct 26 12:19	18° \mathfrak{B} 24'05	0°04'05
opposition	14705 May 15 13:30	4° X 48'42	0°10'22	min. Earth dist.	14710 Oct 27 00:59	18° \mathfrak{B} 20'01	4.51398 AU
min. Earth dist.	14705 May 14 13:53	4° X 56'42	3.90551 AU		14710 Nov 24 18:20	15° \mathfrak{R} \mathfrak{B}	
	14705 Jul 04 13:27	30° \mathfrak{R} \mathfrak{M}		direct	14710 Dec 27 22:24	13° \mathfrak{B} 23'26	
				desc. node	14710 Dec 28 15:58	13° \mathfrak{B} 23'29	
direct	14705 Jul 12 14:05	29° \mathfrak{M} 53'16			14711 Jan 30 07:30	15° \mathfrak{B}	
	14705 Jul 20 16:17	0° X			14711 Apr 29 10:52	0° \mathfrak{I}	
				evening set	14711 May 01 09:40	0° \mathfrak{I} 24'51	
				max. Earth dist.	14711 May 13 02:17	2° \mathfrak{I} 54'50	6.50077 AU









































































































































































conjunction	14711 May 14 08:50	3° Π 11'12	-0°05'47	morning rise	14716 Nov 10 21:33	24° \mathbb{M} 06'56	
minimum elong	14711 May 14 08:50	3° Π 11'12	0°06'39	asc. node	14716 Nov 27 19:40	28° \mathbb{M} 10'37	
behind sun begin	14711 May 14 01:21	3° Π 07'13			14716 Dec 05 15:33	0° \mathbb{X}	
behind sun end	14711 May 14 16:19	3° Π 15'12		retrograde	14717 Mar 22 10:05	14° \mathbb{X} 57'29	
morning rise	14711 May 27 06:17	5° Π 56'52		opposition	14717 May 20 15:23	9° \mathbb{X} 55'56	0°14'41
retrograde	14711 Sep 25 09:33	22° Π 39'49		min. Earth dist.	14717 May 19 14:08	10° \mathbb{X} 04'29	3.91257 AU
opposition	14711 Nov 25 14:01	17° Π 45'43	-0°20'41	direct	14717 Jul 17 17:14	5° \mathbb{X} 00'19	
min. Earth dist.	14711 Nov 26 18:24	17° Π 36'38	4.46641 AU	evening set	14717 Nov 22 07:02	25° \mathbb{X} 04'18	
direct	14712 Jan 27 00:06	12° Π 45'04					
evening set	14712 May 30 16:36	0° \mathbb{S} 05'34		conjunction	14717 Dec 05 20:08	28° \mathbb{X} 19'34	0°19'06
	14712 May 30 06:21	0° \mathbb{S}		minimum elong	14717 Dec 05 20:07	28° \mathbb{X} 19'34	0°20'06
max. Earth dist.	14712 Jun 10 12:08	2° \mathbb{S} 27'14	6.41203 AU	max. Earth dist.	14717 Dec 07 23:45	28° \mathbb{X} 50'37	5.95982 AU
					14717 Dec 12 19:11	0° \mathbb{Z}	
conjunction	14712 Jun 12 13:31	2° \mathbb{S} 54'18	-0°21'37	morning rise	14717 Dec 19 10:30	1° \mathbb{Z} 35'19	
minimum elong	14712 Jun 12 13:30	2° \mathbb{S} 54'17	0°22'38	retrograde	14718 Apr 28 07:27	21° \mathbb{Z} 43'29	
morning rise	14712 Jun 25 09:09	5° \mathbb{S} 42'39		min. Earth dist.	14718 Jun 25 05:40	16° \mathbb{Z} 53'01	4.02895 AU
retrograde	14712 Oct 26 02:56	23° \mathbb{S} 01'57		opposition	14718 Jun 26 19:20	16° \mathbb{Z} 40'17	0°40'37
opposition	14712 Dec 25 23:26	18° \mathbb{S} 08'10	-0°40'56	direct	14718 Aug 24 10:24	11° \mathbb{Z} 43'07	
min. Earth dist.	14712 Dec 27 14:34	17° \mathbb{S} 55'35	4.34117 AU		14718 Dec 25 02:07	0° \mathbb{Z}	
direct	14713 Feb 25 21:12	13° \mathbb{S} 07'54		evening set	14718 Dec 29 09:01	0° \mathbb{Z} 59'12	
	14713 Jun 25 22:17	0° \mathbb{Q}					
evening set	14713 Jul 01 02:13	1° \mathbb{Q} 09'23		conjunction	14719 Jan 11 21:42	4° \mathbb{Z} 07'09	0°31'43
max. Earth dist.	14713 Jul 11 13:58	3° \mathbb{Q} 31'40	6.25852 AU	minimum elong	14719 Jan 11 21:42	4° \mathbb{Z} 07'09	0°32'37
				max. Earth dist.	14719 Jan 14 09:18	4° \mathbb{Z} 41'42	6.11255 AU
conjunction	14713 Jul 13 23:00	4° \mathbb{Q} 04'02	-0°31'59	morning rise	14719 Jan 25 11:03	7° \mathbb{Z} 15'04	
minimum elong	14713 Jul 13 22:59	4° \mathbb{Q} 04'02	0°32'54		14719 Mar 01 15:52	15° \mathbb{Z}	
morning rise	14713 Jul 26 19:21	6° \mathbb{Q} 58'46		retrograde	14719 Jun 01 07:12	26° \mathbb{Z} 10'27	
	14713 Sep 01 22:12	15° \mathbb{Q}		min. Earth dist.	14719 Jul 29 20:49	21° \mathbb{Z} 20'03	4.20159 AU
retrograde	14713 Nov 29 04:26	25° \mathbb{Q} 20'24		opposition	14719 Jul 31 09:28	21° \mathbb{Z} 07'46	0°50'05
opposition	14714 Jan 28 13:20	20° \mathbb{Q} 25'51	-0°50'20	direct	14719 Sep 29 02:10	16° \mathbb{Z} 08'54	
min. Earth dist.	14714 Jan 30 02:14	20° \mathbb{Q} 13'50	4.16901 AU		14720 Jan 12 17:04	0° \mathbb{H}	
direct	14714 Mar 30 08:13	15° \mathbb{Q} 26'48		evening set	14720 Feb 02 04:27	4° \mathbb{H} 27'26	
	14714 Jul 15 07:24	0° \mathbb{P}					
evening set	14714 Aug 03 11:03	4° \mathbb{P} 23'54		conjunction	14720 Feb 15 14:23	7° \mathbb{H} 26'28	0°32'51
max. Earth dist.	14714 Aug 14 13:16	7° \mathbb{P} 00'27	6.08161 AU	minimum elong	14720 Feb 15 14:23	7° \mathbb{H} 26'28	0°33'21
				max. Earth dist.	14720 Feb 17 13:10	7° \mathbb{H} 52'32	6.29008 AU
conjunction	14714 Aug 16 10:26	7° \mathbb{P} 27'08	-0°32'46	morning rise	14720 Feb 28 23:49	10° \mathbb{H} 24'57	
minimum elong	14714 Aug 16 10:27	7° \mathbb{P} 27'08	0°33'15	retrograde	14720 Jul 01 22:08	28° \mathbb{H} 09'45	
morning rise	14714 Aug 29 10:11	10° \mathbb{P} 30'55		opposition	14720 Aug 31 12:31	23° \mathbb{H} 09'24	0°43'07
	14714 Dec 27 01:05	0° \mathbb{U}		min. Earth dist.	14720 Aug 30 13:12	23° \mathbb{H} 17'05	4.36884 AU
retrograde	14715 Jan 05 00:28	0° \mathbb{U} 07'52		direct	14720 Oct 31 11:21	18° \mathbb{H} 09'30	
	14715 Jan 13 23:16	30° \mathbb{R} \mathbb{P}			14721 Feb 06 11:59	0° \mathbb{Y}	
opposition	14715 Mar 05 17:52	25° \mathbb{P} 11'44	-0°43'04	evening set	14721 Mar 05 16:28	5° \mathbb{Y} 40'43	
min. Earth dist.	14715 Mar 06 17:16	25° \mathbb{P} 04'00	4.00192 AU				
direct	14715 May 04 05:47	20° \mathbb{P} 14'41		conjunction	14721 Mar 18 22:25	8° \mathbb{Y} 32'20	0°24'05
	14715 Jul 25 21:43	0° \mathbb{U}		minimum elong	14721 Mar 18 22:26	8° \mathbb{Y} 32'20	0°24'02
evening set	14715 Sep 08 05:43	10° \mathbb{U} 05'19		max. Earth dist.	14721 Mar 19 19:42	8° \mathbb{Y} 43'50	6.43474 AU
				morning rise	14721 Apr 01 03:18	11° \mathbb{Y} 23'12	
conjunction	14715 Sep 21 10:05	13° \mathbb{U} 17'21	-0°21'43	retrograde	14721 Jul 31 22:14	28° \mathbb{Y} 18'59	
minimum elong	14715 Sep 21 10:05	13° \mathbb{U} 17'21	0°21'35	opposition	14721 Sep 30 22:47	23° \mathbb{Y} 21'23	0°24'41
max. Earth dist.	14715 Sep 20 16:36	13° \mathbb{U} 06'43	5.94031 AU	min. Earth dist.	14721 Sep 30 17:34	23° \mathbb{Y} 23'04	4.48181 AU
morning rise	14715 Oct 04 15:53	16° \mathbb{U} 30'23		direct	14721 Dec 01 20:38	18° \mathbb{Y} 20'57	
	14715 Dec 04 23:31	0° \mathbb{M}			14722 Mar 10 04:03	0° \mathbb{Z}	
retrograde	14716 Feb 12 16:52	7° \mathbb{M} 07'46		evening set	14722 Apr 05 12:45	5° \mathbb{Z} 25'39	
opposition	14716 Apr 11 23:29	2° \mathbb{M} 09'06	-0°18'17				
min. Earth dist.	14716 Apr 11 21:43	2° \mathbb{M} 09'41	3.90204 AU	conjunction	14722 Apr 18 14:52	8° \mathbb{Z} 12'53	0°09'06
	14716 Apr 28 14:16	30° \mathbb{R} \mathbb{U}		minimum elong	14722 Apr 18 14:52	8° \mathbb{Z} 12'54	0°08'33
direct	14716 Jun 09 08:27	27° \mathbb{U} 13'36		behind sun begin	14722 Apr 18 07:52	8° \mathbb{Z} 09'11	
	14716 Jul 20 13:11	0° \mathbb{M}		behind sun end	14722 Apr 18 21:52	8° \mathbb{Z} 16'37	
	14716 Oct 04 12:52	15° \mathbb{M}		max. Earth dist.	14722 Apr 18 08:05	8° \mathbb{Z} 09'17	6.50853 AU
evening set	14716 Oct 15 00:03	17° \mathbb{M} 31'55		morning rise	14722 May 01 15:12	10° \mathbb{Z} 59'19	
					14722 May 20 21:53	15° \mathbb{Z}	
conjunction	14716 Oct 28 09:50	20° \mathbb{M} 48'55	-0°01'39	retrograde	14722 Aug 30 11:40	27° \mathbb{Z} 34'45	
minimum elong	14716 Oct 28 09:50	20° \mathbb{M} 48'55	0°00'56	opposition	14722 Oct 30 16:58	22° \mathbb{Z} 39'29	0°00'31
behind sun begin	14716 Oct 28 01:29	20° \mathbb{M} 43'49		min. Earth dist.	14722 Oct 31 07:10	22° \mathbb{Z} 34'56	4.51289 AU
behind sun end	14716 Oct 28 18:10	20° \mathbb{M} 54'00		desc. node	14722 Nov 07 10:53	21° \mathbb{Z} 40'16	
max. Earth dist.	14716 Oct 29 06:03	21° \mathbb{M} 01'19	5.89236 AU	direct	14723 Jan 01 03:37	17° \mathbb{Z} 38'51	

	14723 Apr 13 02:19	0°♂		conjunction	14728 Nov 02 18:43	26°♏13'58	0°01'32
evening set	14723 May 05 15:22	4°♂41'13		minimum elong	14728 Nov 02 18:43	26°♏13'59	0°02'20
max. Earth dist.	14723 May 17 03:51	7°♂09'16	6.49445 AU	behind sun begin	14728 Nov 02 10:23	26°♏08'53	
				behind sun end	14728 Nov 03 03:04	26°♏19'04	
conjunction	14723 May 18 13:58	7°♂27'35	-0°08'11	max. Earth dist.	14728 Nov 03 21:18	26°♏30'16	5.89309 AU
minimum elong	14723 May 18 13:57	7°♂27'35	0°09'05	morning rise	14728 Nov 16 06:57	29°♏32'12	
behind sun begin	14723 May 18 07:10	7°♂23'57			14728 Nov 18 04:44	0°♂	
behind sun end	14723 May 18 20:45	7°♂31'13		retrograde	14729 Mar 27 18:47	20°♂20'44	
morning rise	14723 May 31 11:08	10°♂13'22		opposition	14729 May 25 23:05	15°♂18'52	0°19'05
retrograde	14723 Sep 29 18:23	26°♂59'06		min. Earth dist.	14729 May 24 19:34	15°♂28'11	3.92119 AU
opposition	14723 Nov 29 21:22	22°♂05'06	-0°23'57	direct	14729 Jul 23 01:24	10°♂23'07	
min. Earth dist.	14723 Dec 01 04:25	21°♂55'10	4.45482 AU		14729 Nov 26 00:11	0°♂	
direct	14724 Jan 31 07:37	17°♂04'26		evening set	14729 Nov 27 14:29	0°♂22'48	
	14724 May 13 23:22	0°♂					
evening set	14724 Jun 03 23:48	4°♂28'47		conjunction	14729 Dec 11 03:37	3°♂37'24	0°21'30
max. Earth dist.	14724 Jun 14 16:58	6°♂49'40	6.39566 AU	minimum elong	14729 Dec 11 03:36	3°♂37'23	0°22'32
				max. Earth dist.	14729 Dec 13 09:21	4°♂09'35	5.97525 AU
conjunction	14724 Jun 16 20:36	7°♂18'04	-0°23'30	morning rise	14729 Dec 24 18:14	6°♂52'26	
minimum elong	14724 Jun 16 20:35	7°♂18'04	0°24'31	retrograde	14730 May 03 05:14	26°♂52'08	
morning rise	14724 Jun 29 16:09	10°♂07'02		min. Earth dist.	14730 Jun 30 04:38	22°♂02'07	4.04961 AU
retrograde	14724 Oct 30 16:02	27°♂33'00		opposition	14730 Jul 01 19:55	21°♂48'49	0°43'03
opposition	14724 Dec 30 12:12	22°♂39'07	-0°43'01	direct	14730 Aug 29 12:54	16°♂51'24	
min. Earth dist.	14725 Jan 01 02:56	22°♂26'39	4.32084 AU		14730 Dec 07 14:59	0°♂	
direct	14725 Mar 02 06:09	17°♂38'59		evening set	14731 Jan 03 10:14	5°♂59'54	
	14725 Jun 09 05:23	0°♂					
evening set	14725 Jul 05 14:23	5°♂47'00		conjunction	14731 Jan 16 22:41	9°♂06'39	0°32'35
max. Earth dist.	14725 Jul 16 03:34	8°♂10'49	6.23565 AU	minimum elong	14731 Jan 16 22:41	9°♂06'39	0°33'26
				max. Earth dist.	14731 Jan 19 09:44	9°♂40'41	6.13671 AU
conjunction	14725 Jul 18 11:20	8°♂42'39	-0°32'44	morning rise	14731 Jan 30 11:33	12°♂13'15	
minimum elong	14725 Jul 18 11:20	8°♂42'39	0°33'35		14731 Feb 11 18:46	15°♂	
morning rise	14725 Jul 31 07:52	11°♂38'25			14731 May 12 06:56	0°♂	
	14725 Aug 15 07:23	15°♂		retrograde	14731 Jun 05 22:19	0°♂58'06	
	14725 Nov 24 01:55	0°♂			14731 Jun 30 09:06	30°♂	
retrograde	14725 Dec 04 03:51	0°♂09'43		min. Earth dist.	14731 Aug 03 14:43	26°♂07'17	4.22689 AU
	14725 Dec 14 05:00	30°♂		opposition	14731 Aug 05 01:40	25°♂55'37	0°49'59
opposition	14726 Feb 02 10:03	25°♂15'02	-0°50'23	direct	14731 Oct 03 23:45	20°♂56'32	
min. Earth dist.	14726 Feb 03 22:58	25°♂03'00	4.14511 AU		14731 Dec 25 04:08	0°♂	
direct	14726 Apr 04 01:52	20°♂16'14		evening set	14732 Feb 06 21:22	9°♂07'04	
	14726 Jun 27 03:27	0°♂					
evening set	14726 Aug 08 06:38	9°♂21'06		conjunction	14732 Feb 20 06:45	12°♂04'51	0°32'08
max. Earth dist.	14726 Aug 19 10:55	11°♂59'43	6.05879 AU	minimum elong	14732 Feb 20 06:45	12°♂04'51	0°32'33
				max. Earth dist.	14732 Feb 22 03:34	12°♂29'41	6.31454 AU
conjunction	14726 Aug 21 06:34	12°♂25'36	-0°31'54	morning rise	14732 Mar 04 15:33	15°♂02'03	
minimum elong	14726 Aug 21 06:34	12°♂25'36	0°32'19		14732 May 25 07:59	0°♂	
morning rise	14726 Sep 03 07:06	15°♂30'45		retrograde	14732 Jul 06 03:34	2°♂37'49	
	14726 Nov 11 13:22	0°♂			14732 Aug 17 01:19	30°♂	
retrograde	14727 Jan 10 06:20	5°♂17'38		opposition	14732 Sep 04 21:03	27°♂37'45	0°41'04
opposition	14727 Mar 10 22:31	0°♂21'12	-0°40'31	min. Earth dist.	14732 Sep 03 23:04	27°♂44'58	4.39073 AU
min. Earth dist.	14727 Mar 11 18:16	0°♂14'40	3.98249 AU	direct	14732 Nov 04 23:15	22°♂37'42	
	14727 Mar 13 14:37	30°♂			14733 Jan 18 12:51	0°♂	
direct	14727 May 09 05:14	25°♂24'24		evening set	14733 Mar 10 02:06	10°♂02'57	
	14727 Jul 02 14:48	0°♂					
evening set	14727 Sep 13 09:04	15°♂21'13		conjunction	14733 Mar 23 07:28	12°♂53'36	0°22'16
				minimum elong	14733 Mar 23 07:28	12°♂53'36	0°22'09
conjunction	14727 Sep 26 14:12	18°♂34'18	-0°19'18	max. Earth dist.	14733 Mar 24 01:20	13°♂03'14	6.45255 AU
minimum elong	14727 Sep 26 14:13	18°♂34'18	0°19'04	morning rise	14733 Apr 05 11:31	15°♂43'29	
max. Earth dist.	14727 Sep 26 01:19	18°♂26'27	5.92624 AU		14733 Jun 24 08:57	0°♂	
morning rise	14727 Oct 09 20:55	21°♂48'25		retrograde	14733 Aug 05 00:57	2°♂33'37	
	14727 Nov 13 23:14	0°♂			14733 Sep 15 18:25	30°♂	
retrograde	14728 Feb 18 03:05	12°♂31'36		opposition	14733 Oct 05 02:43	27°♂36'22	0°21'32
opposition	14728 Apr 17 08:54	7°♂32'29	-0°13'49	min. Earth dist.	14733 Oct 05 00:36	27°♂37'03	4.49436 AU
min. Earth dist.	14728 Apr 17 04:09	7°♂34'05	3.89492 AU	direct	14733 Dec 06 04:21	22°♂35'51	
direct	14728 Jun 14 16:05	2°♂37'03			14734 Feb 19 17:56	0°♂	
	14728 Sep 16 13:02	15°♂		evening set	14734 Apr 09 17:35	9°♂37'41	
asc. node	14728 Oct 05 13:51	19°♂23'14					
evening set	14728 Oct 20 08:08	22°♂56'39		conjunction	14734 Apr 22 18:58	12°♂24'25	0°06'46
				minimum elong	14734 Apr 22 18:59	12°♂24'26	0°06'09





























































































































behind sun begin	14734 Apr 22 11:22	12° ♁ 20'23		conjunction	14739 Oct 01 21:41	23° ♁ 58'01	-0°16'42
behind sun end	14734 Apr 23 02:36	12° ♁ 28'28		minimum elong	14739 Oct 01 21:42	23° ♁ 58'02	0°16'24
max. Earth dist.	14734 Apr 22 06:52	12° ♁ 17'59	6.51475 AU	max. Earth dist.	14739 Oct 01 15:18	23° ♁ 54'08	5.91069 AU
	14734 May 04 23:14	15° ♁		morning rise	14739 Oct 15 05:17	27° ♁ 13'20	
morning rise	14734 May 05 18:54	15° ♁ 10'25			14739 Oct 26 17:43	0° ♁	
	14734 Jul 31 09:08	0° ♁			14740 Jan 10 19:24	15° ♁	
retrograde	14734 Sep 03 14:22	1° ♁ 44'34		retrograde	14740 Feb 23 17:17	18° ♁ 02'25	
desc. node	14734 Sep 20 15:23	1° ♁ 17'36			14740 Apr 07 23:45	15° ♁	
	14734 Oct 07 18:46	30° ♁		opposition	14740 Apr 22 21:14	13° ♁ 02'59	-0°09'11
opposition	14734 Nov 03 19:58	26° ♁ 49'28	-0°02'57	min. Earth dist.	14740 Apr 22 12:40	13° ♁ 05'52	3.88829 AU
min. Earth dist.	14734 Nov 04 13:09	26° ♁ 43'58	4.51244 AU	direct	14740 Jun 20 01:31	8° ♁ 07'42	
direct	14735 Jan 05 07:56	21° ♁ 48'44		asc. node	14740 Aug 11 22:40	12° ♁ 35'07	
	14735 Mar 26 10:09	0° ♁			14740 Aug 26 01:12	15° ♁	
evening set	14735 May 09 18:35	8° ♁ 51'55		evening set	14740 Oct 25 19:41	28° ♁ 28'18	
max. Earth dist.	14735 May 21 04:26	11° ♁ 18'46	6.48718 AU		14740 Nov 01 01:57	0° ♁	
conjunction	14735 May 22 16:57	11° ♁ 38'26	-0°10'29	conjunction	14740 Nov 08 06:46	1° ♁ 45'47	0°04'39
minimum elong	14735 May 22 16:57	11° ♁ 38'26	0°11'25	minimum elong	14740 Nov 08 06:45	1° ♁ 45'47	0°05'30
behind sun begin	14735 May 22 11:09	11° ♁ 35'19		behind sun begin	14740 Nov 07 22:43	1° ♁ 40'53	
behind sun end	14735 May 22 22:45	11° ♁ 41'32		behind sun end	14740 Nov 08 14:48	1° ♁ 50'41	
morning rise	14735 Jun 04 13:36	14° ♁ 24'19		max. Earth dist.	14740 Nov 09 13:46	2° ♁ 04'46	5.89592 AU
	14735 Sep 05 12:27	0° ♁		morning rise	14740 Nov 21 19:47	5° ♁ 04'10	
retrograde	14735 Oct 03 23:28	1° ♁ 13'25		retrograde	14741 Apr 02 02:34	25° ♁ 49'18	
	14735 Nov 01 10:22	30° ♁		min. Earth dist.	14741 May 30 01:33	20° ♁ 57'40	3.93320 AU
opposition	14735 Dec 04 02:58	26° ♁ 19'28	-0°27'00	opposition	14741 May 31 08:45	20° ♁ 47'05	0°23'20
min. Earth dist.	14735 Dec 05 11:22	26° ♁ 09'06	4.44106 AU	direct	14741 Jul 28 11:22	15° ♁ 51'10	
direct	14736 Feb 04 11:27	21° ♁ 18'50			14741 Nov 08 05:09	0° ♁	
	14736 Apr 26 11:04	0° ♁		evening set	14741 Dec 02 23:32	5° ♁ 45'05	
evening set	14736 Jun 08 05:45	8° ♁ 47'53					
max. Earth dist.	14736 Jun 18 20:25	11° ♁ 08'03	6.37612 AU	conjunction	14741 Dec 16 12:48	8° ♁ 58'46	0°23'45
conjunction	14736 Jun 21 02:18	11° ♁ 37'50	-0°25'13	minimum elong	14741 Dec 16 12:47	8° ♁ 58'45	0°24'46
minimum elong	14736 Jun 21 02:18	11° ♁ 37'50	0°26'14	max. Earth dist.	14741 Dec 18 21:12	9° ♁ 32'24	5.99504 AU
morning rise	14736 Jul 03 21:54	14° ♁ 27'33		morning rise	14741 Dec 30 03:18	12° ♁ 12'47	
	14736 Sep 28 14:14	0° ♁			14742 Apr 02 10:11	0° ♁	
retrograde	14736 Nov 04 07:00	2° ♁ 01'30		retrograde	14742 May 08 05:13	2° ♁ 02'17	
	14736 Dec 11 02:03	30° ♁			14742 Jun 12 21:32	30° ♁	
opposition	14737 Jan 04 00:28	27° ♁ 07'34	-0°44'51	min. Earth dist.	14742 Jul 05 06:17	27° ♁ 12'05	4.07451 AU
min. Earth dist.	14737 Jan 05 16:59	26° ♁ 54'30	4.29646 AU	opposition	14742 Jul 06 21:14	26° ♁ 58'55	0°45'06
direct	14737 Mar 06 16:24	22° ♁ 07'29		direct	14742 Sep 03 19:09	22° ♁ 01'14	
	14737 May 21 17:18	0° ♁			14742 Nov 17 15:46	0° ♁	
evening set	14737 Jul 10 02:27	10° ♁ 23'38		evening set	14743 Jan 08 11:27	11° ♁ 00'39	
max. Earth dist.	14737 Jul 20 15:31	12° ♁ 48'16	6.20828 AU				
conjunction	14737 Jul 22 23:46	13° ♁ 20'33	-0°33'17	conjunction	14743 Jan 21 23:36	14° ♁ 06'02	0°33'10
minimum elong	14737 Jul 22 23:46	13° ♁ 20'33	0°34'05	minimum elong	14743 Jan 21 23:36	14° ♁ 06'02	0°33'59
	14737 Jul 30 05:05	15° ♁		max. Earth dist.	14743 Jan 24 10:56	14° ♁ 40'00	6.16419 AU
morning rise	14737 Aug 04 20:45	16° ♁ 17'40			14743 Jan 25 21:53	15° ♁	
	14737 Oct 11 13:55	0° ♁		morning rise	14743 Feb 04 11:54	17° ♁ 11'09	
retrograde	14737 Dec 09 03:01	5° ♁ 00'27			14743 Apr 08 10:32	0° ♁	
opposition	14738 Feb 07 07:44	0° ♁ 05'36	-0°50'07	retrograde	14743 Jun 10 10:30	5° ♁ 44'30	
	14738 Feb 08 00:52	30° ♁		min. Earth dist.	14743 Aug 08 06:28	0° ♁ 53'47	4.25429 AU
min. Earth dist.	14738 Feb 08 18:36	29° ♁ 54'13	4.11686 AU	opposition	14743 Aug 09 16:56	0° ♁ 42'18	0°49'32
direct	14738 Apr 08 17:40	25° ♁ 07'04			14743 Aug 15 00:30	30° ♁	
	14738 Jun 04 22:06	0° ♁		direct	14743 Oct 08 18:40	25° ♁ 43'03	
evening set	14738 Aug 13 03:50	14° ♁ 21'31			14743 Dec 02 01:17	0° ♁	
max. Earth dist.	14738 Aug 24 12:08	17° ♁ 03'29	6.03221 AU	evening set	14744 Feb 11 13:39	13° ♁ 45'23	
conjunction	14738 Aug 26 04:24	17° ♁ 27'31	-0°30'50	conjunction	14744 Feb 24 22:21	16° ♁ 41'53	0°31'12
minimum elong	14738 Aug 26 04:25	17° ♁ 27'32	0°31'09	minimum elong	14744 Feb 24 22:22	16° ♁ 41'53	0°31'31
morning rise	14738 Sep 08 05:48	20° ♁ 34'16		max. Earth dist.	14744 Feb 26 14:42	17° ♁ 04'07	6.33964 AU
	14738 Oct 20 00:32	0° ♁		morning rise	14744 Mar 09 06:31	19° ♁ 37'46	
retrograde	14739 Jan 15 16:57	10° ♁ 32'51			14744 Apr 29 16:10	0° ♁	
opposition	14739 Mar 16 05:56	5° ♁ 36'07	-0°37'40	retrograde	14744 Jul 10 11:00	7° ♁ 04'49	
min. Earth dist.	14739 Mar 16 23:05	5° ♁ 30'25	3.96016 AU	min. Earth dist.	14744 Sep 08 10:42	2° ♁ 11'13	4.41167 AU
direct	14739 May 14 08:49	0° ♁ 39'36		opposition	14744 Sep 05 05:07	2° ♁ 05'11	0°38'45
evening set	14739 Sep 18 15:31	20° ♁ 43'43			14744 Sep 25 16:13	30° ♁	
				direct	14744 Nov 09 12:21	27° ♁ 05'02	
					14744 Dec 24 11:40	0° ♁	

evening set	14745 Mar 14 11:04	14° Υ 24'57		opposition	14750 Feb 12 09:54	5° Υ 07'23	-0°49'27
				min. Earth dist.	14750 Feb 13 19:25	4° Υ 56'25	4.08976 AU
conjunction	14745 Mar 27 15:52	17° Υ 14'48	0°20'17	direct	14750 Apr 13 16:01	0° Υ 09'06	
minimum elong	14745 Mar 27 15:53	17° Υ 14'48	0°20'06	evening set	14750 Aug 18 05:04	19° Υ 32'28	
max. Earth dist.	14745 Mar 28 05:42	17° Υ 22'13	6.46786 AU	max. Earth dist.	14750 Aug 29 18:57	22° Υ 18'35	6.00860 AU
morning rise	14745 Apr 09 19:19	20° Υ 03'51					
	14745 May 30 05:26	0° \mathcal{B}		conjunction	14750 Aug 31 06:31	22° Υ 39'54	-0°29'28
retrograde	14745 Aug 09 03:16	6° \mathcal{B} 49'35		minimum elong	14750 Aug 31 06:31	22° Υ 39'55	0°29'41
opposition	14745 Oct 09 06:57	1° \mathcal{B} 52'40	0°18'13	morning rise	14750 Sep 13 08:41	25° Υ 48'06	
min. Earth dist.	14745 Oct 09 07:06	1° \mathcal{B} 52'37	4.50333 AU		14750 Oct 01 05:16	0° \mathcal{B}	
	14745 Oct 24 05:17	30° $\mathcal{R}\Upsilon$		retrograde	14751 Jan 21 05:24	15° \mathcal{B} 56'41	
direct	14745 Dec 10 10:03	26° Υ 52'05		opposition	14751 Mar 21 16:30	10° \mathcal{B} 59'38	-0°34'22
	14746 Jan 26 16:40	0° \mathcal{B}		min. Earth dist.	14751 Mar 22 05:53	10° \mathcal{B} 55'11	3.94291 AU
evening set	14746 Apr 13 22:52	13° \mathcal{B} 52'21		direct	14751 May 19 14:17	6° \mathcal{B} 03'26	
	14746 Apr 19 06:26	15° \mathcal{B}		evening set	14751 Sep 24 00:41	26° \mathcal{B} 12'31	
conjunction	14746 Apr 26 23:50	16° \mathcal{B} 38'49	0°04'21	conjunction	14751 Oct 07 07:31	29° \mathcal{B} 27'38	-0°13'54
minimum elong	14746 Apr 26 23:51	16° \mathcal{B} 38'49	0°03'40	minimum elong	14751 Oct 07 07:31	29° \mathcal{B} 27'38	0°13'29
behind sun begin	14746 Apr 26 15:53	16° \mathcal{B} 34'36		behind sun begin	14751 Oct 07 02:51	29° \mathcal{B} 24'47	
behind sun end	14746 Apr 27 07:48	16° \mathcal{B} 43'02		behind sun end	14751 Oct 07 12:11	29° \mathcal{B} 30'30	
max. Earth dist.	14746 Apr 26 08:28	16° \mathcal{B} 30'37	6.51685 AU	max. Earth dist.	14751 Oct 07 05:54	29° \mathcal{B} 26'40	5.90166 AU
morning rise	14746 May 09 23:07	19° \mathcal{B} 24'32			14751 Oct 09 12:17	0° \mathcal{M}	
	14746 Jul 03 16:49	0° \mathcal{I}		morning rise	14751 Oct 20 16:10	2° \mathcal{M} 43'50	
desc. node	14746 Aug 02 14:27	4° \mathcal{I} 02'30			14751 Dec 14 01:27	15° \mathcal{M}	
retrograde	14746 Sep 07 18:32	5° \mathcal{I} 58'50		retrograde	14752 Feb 29 05:43	23° \mathcal{M} 35'38	
opposition	14746 Nov 08 00:23	1° \mathcal{I} 04'00	-0°06'31	opposition	14752 Apr 28 10:18	18° \mathcal{M} 35'42	-0°04'23
min. Earth dist.	14746 Nov 08 20:26	0° \mathcal{I} 57'35	4.50758 AU	min. Earth dist.	14752 Apr 27 20:55	18° \mathcal{M} 40'13	3.88888 AU
	14746 Nov 16 09:46	30° $\mathcal{R}\mathcal{B}$			14752 May 28 11:05	15° $\mathcal{R}\mathcal{M}$	
direct	14747 Jan 09 13:23	26° \mathcal{B} 03'15		asc. node	14752 Jun 19 08:05	13° \mathcal{M} 44'27	
	14747 Mar 04 00:44	0° \mathcal{I}		direct	14752 Jun 25 13:12	13° \mathcal{M} 40'25	
evening set	14747 May 14 00:01	13° \mathcal{I} 08'42			14752 Jul 23 14:22	15° \mathcal{M}	
max. Earth dist.	14747 May 25 04:40	15° \mathcal{I} 33'13	6.47556 AU		14752 Oct 14 16:19	0° \mathcal{J}	
				evening set	14752 Oct 31 06:59	3° \mathcal{J} 58'52	
conjunction	14747 May 26 21:54	15° \mathcal{I} 55'29	-0°12'48	conjunction	14752 Nov 13 18:35	7° \mathcal{J} 16'04	0°07'43
minimum elong	14747 May 26 21:54	15° \mathcal{I} 55'29	0°13'46	minimum elong	14752 Nov 13 18:35	7° \mathcal{J} 16'04	0°08'37
behind sun begin	14747 May 26 17:39	15° \mathcal{I} 53'12		behind sun begin	14752 Nov 13 11:20	7° \mathcal{J} 11'39	
behind sun end	14747 May 27 02:09	15° \mathcal{I} 57'46		behind sun end	14752 Nov 14 01:50	7° \mathcal{J} 20'28	
morning rise	14747 Jun 08 18:28	18° \mathcal{I} 41'44		max. Earth dist.	14752 Nov 15 07:22	7° \mathcal{J} 38'31	5.90611 AU
	14747 Aug 05 22:40	0° \mathcal{B}		morning rise	14752 Nov 27 07:53	10° \mathcal{J} 34'04	
retrograde	14747 Oct 08 09:49	5° \mathcal{B} 35'40			14753 Mar 11 04:38	0° \mathcal{Z}	
opposition	14747 Dec 08 11:39	0° \mathcal{B} 41'45	-0°30'02	retrograde	14753 Apr 07 09:22	1° \mathcal{Z} 12'39	
min. Earth dist.	14747 Dec 09 22:17	0° \mathcal{B} 30'39	4.42326 AU		14753 May 04 10:34	30° $\mathcal{R}\mathcal{J}$	
	14747 Dec 13 22:14	30° $\mathcal{R}\mathcal{I}$		min. Earth dist.	14753 Jun 04 07:53	26° \mathcal{J} 21'08	3.95162 AU
direct	14748 Feb 08 19:06	25° \mathcal{I} 41'03		opposition	14753 Jun 05 16:28	26° \mathcal{J} 10'05	0°27'18
	14748 Apr 04 08:11	0° \mathcal{B}		direct	14753 Aug 02 21:53	21° \mathcal{J} 13'56	
evening set	14748 Jun 12 14:37	13° \mathcal{B} 16'01			14753 Oct 19 13:01	0° \mathcal{Z}	
max. Earth dist.	14748 Jun 23 04:35	15° \mathcal{B} 36'28	6.35335 AU	evening set	14753 Dec 08 06:04	10° \mathcal{Z} 59'46	
conjunction	14748 Jun 25 11:20	16° \mathcal{B} 06'52	-0°26'51	conjunction	14753 Dec 21 19:19	14° \mathcal{Z} 12'16	0°25'44
minimum elong	14748 Jun 25 11:19	16° \mathcal{B} 06'52	0°27'51	minimum elong	14753 Dec 21 19:18	14° \mathcal{Z} 12'15	0°26'45
morning rise	14748 Jul 08 06:53	18° \mathcal{B} 57'30		max. Earth dist.	14753 Dec 24 06:39	14° \mathcal{Z} 47'25	6.01959 AU
	14748 Aug 31 16:45	0° \mathcal{Q}		morning rise	14754 Jan 04 09:34	17° \mathcal{Z} 24'59	
retrograde	14748 Nov 09 00:10	6° \mathcal{Q} 40'30			14754 Mar 04 04:56	0° \approx	
opposition	14749 Jan 08 16:46	1° \mathcal{Q} 46'29	-0°46'30	retrograde	14754 May 13 00:08	7° \approx 02'38	
min. Earth dist.	14749 Jan 10 08:55	1° \mathcal{Q} 33'31	4.27017 AU	min. Earth dist.	14754 Jul 10 03:01	2° \approx 12'42	4.10251 AU
	14749 Jan 22 17:46	30° $\mathcal{R}\mathcal{B}$		opposition	14754 Jul 11 18:43	1° \approx 59'19	0°46'43
direct	14749 Mar 11 04:07	26° \mathcal{B} 46'34			14754 Jul 26 23:58	30° $\mathcal{R}\mathcal{Z}$	
	14749 Apr 26 21:05	0° \mathcal{Q}		direct	14754 Sep 08 19:55	27° \mathcal{Z} 01'23	
	14749 Jul 13 22:52	15° \mathcal{Q}			14754 Oct 22 15:37	0° \approx	
evening set	14749 Jul 14 18:38	15° \mathcal{Q} 11'18			14755 Jan 09 14:27	15° \approx	
max. Earth dist.	14749 Jul 25 08:49	17° \mathcal{Q} 37'31	6.18049 AU	evening set	14755 Jan 13 09:04	15° \approx 51'09	
conjunction	14749 Jul 27 16:10	18° \mathcal{Q} 09'29	-0°33'37	conjunction	14755 Jan 26 20:36	18° \approx 55'02	0°33'31
minimum elong	14749 Jul 27 16:10	18° \mathcal{Q} 09'29	0°34'22	minimum elong	14755 Jan 26 20:37	18° \approx 55'02	0°34'17
morning rise	14749 Aug 09 13:43	21° \mathcal{Q} 08'00		max. Earth dist.	14755 Jan 29 04:39	19° \approx 26'55	6.19293 AU
	14749 Sep 19 03:00	0° \mathcal{M}		morning rise	14755 Feb 09 08:28	21° \approx 58'39	
retrograde	14749 Dec 14 08:36	10° \mathcal{M} 02'27					

	14755 Mar 18 15:21	0°♏		evening set	14761 Jul 19 11:53	20°♏02'17	
retrograde	14755 Jun 14 20:54	10°♏20'43		max. Earth dist.	14761 Jul 30 05:28	22°♏31'17	6.15448 AU
min. Earth dist.	14755 Aug 12 21:11	5°♏29'21	4.28124 AU				
opposition	14755 Aug 14 04:50	5°♏18'50	0°48'46	conjunction	14761 Aug 01 09:59	23°♏01'47	-0°33'43
direct	14755 Oct 13 11:52	0°♏19'23		minimum elong	14761 Aug 01 10:00	23°♏01'47	0°34'26
evening set	14756 Feb 16 02:06	18°♏13'57		morning rise	14761 Aug 14 07:55	26°♏01'37	
					14761 Aug 31 18:31	0°♐	
conjunction	14756 Feb 29 10:24	21°♏09'19	0°30'06	retrograde	14761 Dec 19 13:54	15°♐06'56	
minimum elong	14756 Feb 29 10:24	21°♏09'19	0°30'22	opposition	14762 Feb 17 12:50	10°♐11'41	-0°48'24
max. Earth dist.	14756 Mar 02 00:15	21°♏30'04	6.36279 AU	min. Earth dist.	14762 Feb 18 19:58	10°♐01'28	4.06629 AU
morning rise	14756 Mar 13 17:45	24°♏03'59		direct	14762 Apr 18 13:35	5°♐13'45	
	14756 Apr 10 21:35	0°♑		evening set	14762 Aug 23 06:36	24°♐44'30	
retrograde	14756 Jul 14 13:48	11°♑23'21		max. Earth dist.	14762 Sep 04 00:19	27°♐33'40	5.98971 AU
opposition	14756 Sep 13 10:12	6°♑24'11	0°36'19				
min. Earth dist.	14756 Sep 12 17:46	6°♑29'33	4.42963 AU	conjunction	14762 Sep 05 08:33	27°♐53'06	-0°27'52
direct	14756 Nov 13 19:51	1°♑24'00		minimum elong	14762 Sep 05 08:34	27°♐53'06	0°28'00
evening set	14757 Mar 18 17:38	18°♑39'49			14762 Sep 14 03:24	0°♒	
				morning rise	14762 Sep 18 11:43	1°♒02'35	
conjunction	14757 Mar 31 21:47	21°♑28'59	0°18'16	retrograde	14763 Jan 26 15:09	21°♒19'09	
minimum elong	14757 Mar 31 21:48	21°♑28'59	0°18'00	opposition	14763 Mar 27 02:03	16°♒21'41	-0°30'46
max. Earth dist.	14757 Apr 01 06:12	21°♑33'29	6.47944 AU	min. Earth dist.	14763 Mar 27 11:10	16°♒18'39	3.93056 AU
morning rise	14757 Apr 14 00:40	24°♑17'23		direct	14763 May 24 20:31	11°♒25'41	
	14757 May 11 16:55	0°♓			14763 Sep 22 14:57	0°♓	
retrograde	14757 Aug 13 06:31	11°♓00'04		evening set	14763 Sep 29 08:15	1°♓37'49	
opposition	14757 Oct 13 09:31	6°♓03'35	0°14'53				
min. Earth dist.	14757 Oct 13 13:41	6°♓02'15	4.50806 AU	conjunction	14763 Oct 12 15:55	4°♓53'32	-0°11'00
direct	14757 Dec 14 15:27	1°♓03'00		minimum elong	14763 Oct 12 15:55	4°♓53'32	0°10'30
	14758 Apr 03 12:17	15°♓		behind sun begin	14763 Oct 12 09:26	4°♓49'34	
evening set	14758 Apr 18 02:50	18°♓03'08		behind sun end	14763 Oct 12 22:24	4°♓57'30	
max. Earth dist.	14758 Apr 30 07:10	20°♓38'46	6.51439 AU	max. Earth dist.	14763 Oct 12 21:07	4°♓56'42	5.89716 AU
				morning rise	14763 Oct 26 01:11	8°♓10'15	
conjunction	14758 May 01 03:24	20°♓49'33	0°01'55		14763 Nov 23 21:26	15°♓	
minimum elong	14758 May 01 03:22	20°♓49'33	0°01'12	retrograde	14764 Mar 05 16:38	29°♓02'51	
behind sun begin	14758 Apr 30 19:20	20°♓45'17		asc. node	14764 Apr 29 15:51	24°♓36'22	
behind sun end	14758 May 01 11:24	20°♓53'48		opposition	14764 May 03 20:22	24°♓02'30	0°00'22
morning rise	14758 May 14 02:18	23°♓35'14		min. Earth dist.	14764 May 03 04:39	24°♓07'48	3.89270 AU
desc. node	14758 Jun 13 20:01	29°♓52'43		direct	14764 Jun 30 23:19	19°♓07'10	
	14758 Jun 14 11:05	0°♔			14764 Sep 26 01:06	0°♔	
retrograde	14758 Sep 11 22:50	10°♔11'18		evening set	14764 Nov 05 15:28	9°♔22'37	
opposition	14758 Nov 12 04:30	5°♔16'41	-0°10'00				
min. Earth dist.	14758 Nov 13 02:33	5°♔09'37	4.49834 AU	conjunction	14764 Nov 19 03:30	12°♔39'27	0°10'40
direct	14759 Jan 13 16:15	0°♔15'57		minimum elong	14764 Nov 19 03:29	12°♔39'26	0°11'36
evening set	14759 May 18 05:07	17°♔25'06		behind sun begin	14764 Nov 18 21:33	12°♔35'51	
max. Earth dist.	14759 May 29 08:22	19°♔49'20	6.46020 AU	behind sun end	14764 Nov 19 09:25	12°♔43'02	
				max. Earth dist.	14764 Nov 20 20:47	13°♔04'34	5.91766 AU
conjunction	14759 May 31 02:54	20°♔12'23	-0°15'02	morning rise	14764 Dec 02 17:09	15°♔57'00	
minimum elong	14759 May 31 02:54	20°♔12'23	0°16'02		14765 Feb 05 10:37	0°♕	
behind sun begin	14759 May 31 02:20	20°♔12'04		retrograde	14765 Apr 12 11:48	6°♕28'38	
behind sun end	14759 May 31 03:27	20°♔12'41		min. Earth dist.	14765 Jun 09 09:34	1°♕37'43	3.96961 AU
morning rise	14759 Jun 12 23:06	22°♔59'07		opposition	14765 Jun 10 20:31	1°♕25'53	0°30'59
	14759 Jul 16 20:52	0°♖			14765 Jun 21 14:03	30°♖♎	
retrograde	14759 Oct 12 20:12	9°♖59'13		direct	14765 Aug 08 03:11	26°♖29'30	
opposition	14759 Dec 12 21:04	5°♖05'26	-0°32'54		14765 Sep 24 03:56	0°♗	
min. Earth dist.	14759 Dec 14 09:08	4°♖53'53	4.40278 AU	evening set	14765 Dec 13 09:43	16°♗08'01	
direct	14760 Feb 13 02:13	0°♖04'54					
evening set	14760 Jun 17 00:42	17°♖46'42		conjunction	14765 Dec 26 22:44	19°♗19'24	0°27'31
max. Earth dist.	14760 Jun 27 12:43	20°♖06'54	6.32919 AU	minimum elong	14765 Dec 26 22:44	19°♗19'23	0°28'30
				max. Earth dist.	14765 Dec 29 09:21	19°♗53'56	6.04197 AU
conjunction	14760 Jun 29 21:15	20°♖38'28	-0°28'19	morning rise	14766 Jan 09 12:57	22°♗30'58	
minimum elong	14760 Jun 29 21:15	20°♖38'28	0°29'17		14766 Feb 11 20:05	0°♘	
morning rise	14760 Jul 12 17:06	23°♖30'09		retrograde	14766 May 17 17:24	11°♘58'13	
	14760 Aug 11 22:11	0°♙		min. Earth dist.	14766 Jul 14 23:12	7°♘08'00	4.12685 AU
retrograde	14760 Nov 13 20:32	11°♙22'49		opposition	14766 Jul 16 13:55	6°♘54'57	0°48'00
opposition	14761 Jan 13 10:27	6°♙28'44	-0°47'50	direct	14766 Sep 13 19:34	1°♘56'43	
min. Earth dist.	14761 Jan 15 02:19	6°♙15'50	4.24394 AU		14766 Dec 23 13:14	15°♘	
direct	14761 Mar 15 18:24	1°♙29'00		evening set	14767 Jan 18 04:51	20°♘38'28	
	14761 Jun 27 01:55	15°♙					

conjunction	14767 Jan 31 16:12	23°  41'09	0°33'39			14772 Jul 25 22:48	0° 	
minimum elong	14767 Jan 31 16:12	23°  41'09	0°34'20			14772 Oct 23 14:26	15° 	
max. Earth dist.	14767 Feb 02 23:27	24°  12'26	6.21726 AU	retrograde		14772 Nov 18 15:12	16°  02'52	
morning rise	14767 Feb 14 03:20	26°  43'27				14772 Dec 14 14:45	15°  R 	
	14767 Feb 28 22:41	0° 		opposition		14773 Jan 18 03:43	11°  08'42	-0°48'55
retrograde	14767 Jun 19 06:20	14°  55'55		min. Earth dist.		14773 Jan 19 19:08	10°  05'56	4.22509 AU
min. Earth dist.	14767 Aug 17 09:38	10°  04'24	4.30351 AU	direct		14773 Mar 20 08:18	6°  09'14	
opposition	14767 Aug 18 15:50	9°  54'23	0°47'44			14773 Jun 08 19:45	15° 	
direct	14767 Oct 18 02:13	4°  54'49		evening set		14773 Jul 24 03:33	24°  048'11	
evening set	14768 Feb 20 14:50	22°  43'18		max. Earth dist.		14773 Aug 03 21:58	27°  018'21	6.13623 AU
conjunction	14768 Mar 04 22:26	25°  37'40	0°28'49	conjunction		14773 Aug 06 01:45	27°  048'32	-0°33'39
minimum elong	14768 Mar 04 22:26	25°  37'40	0°29'01	minimum elong		14773 Aug 06 01:45	27°  048'33	0°34'16
max. Earth dist.	14768 Mar 06 07:02	25°  55'29	6.38137 AU			14773 Aug 15 11:17	0°  M 	
morning rise	14768 Mar 18 05:20	28°  31'23		morning rise		14773 Aug 19 00:15	0°  M  49'21	
	14768 Mar 25 01:47	0° 		retrograde		14773 Dec 24 13:46	20°  M  02'41	
retrograde	14768 Jul 18 19:27	15°  04'31		opposition		14774 Feb 22 12:29	15°  M  07'08	-0°47'04
opposition	14768 Sep 17 16:13	10°  04'52	0°33'40	min. Earth dist.		14774 Feb 23 16:51	14°  M  57'48	4.05017 AU
min. Earth dist.	14768 Sep 17 03:09	10°  04'58	4.44346 AU	direct		14774 Apr 23 09:35	10°  M  09'26	
direct	14768 Nov 18 05:25	5°  04'52		evening set		14774 Aug 28 03:57	29°  M  44'55	
evening set	14769 Mar 23 01:12	22°  04'58'12				14774 Aug 29 05:09	0°  A 	
				max. Earth dist.		14774 Sep 09 03:33	2°  038'01	5.97738 AU
conjunction	14769 Apr 05 05:01	25°  04'53	0°16'07	conjunction		14774 Sep 10 06:38	2°  054'23	-0°26'09
minimum elong	14769 Apr 05 05:02	25°  04'54	0°15'45	minimum elong		14774 Sep 10 06:39	2°  054'23	0°26'13
behind sun begin	14769 Apr 05 03:49	25°  04'15		morning rise		14774 Sep 23 10:19	6°  004'43	
behind sun end	14769 Apr 05 06:15	25°  04'32		retrograde		14775 Jan 31 21:09	26°  026'43	
max. Earth dist.	14769 Apr 05 10:33	25°  04'50	6.48775 AU	opposition		14775 Apr 01 05:49	21°  028'56	-0°27'08
morning rise	14769 Apr 18 07:14	28°  03'46		min. Earth dist.		14775 Apr 01 13:02	21°  026'32	3.92337 AU
	14769 Apr 25 00:28	0° 		direct		14775 May 29 22:39	16°  033'06	
	14769 Aug 04 14:27	15° 				14775 Sep 05 18:53	0°  M 	
retrograde	14769 Aug 17 09:31	15°  08'15'15		evening set		14775 Oct 04 09:46	6°  M  46'37	
	14769 Aug 30 04:39	15°  08'08						
opposition	14769 Oct 17 13:57	10°  08'19'06	0°11'25	conjunction		14775 Oct 17 18:01	10°  M  02'43	-0°08'12
min. Earth dist.	14769 Oct 17 19:40	10°  08'17'15	4.51070 AU	minimum elong		14775 Oct 17 18:02	10°  M  02'43	0°07'38
direct	14769 Dec 18 19:57	5°  08'18'33		behind sun begin		14775 Oct 17 10:30	9°  M  58'07	
	14770 Mar 17 05:03	15° 		behind sun end		14775 Oct 18 01:34	10°  M  07'19	
desc. node	14770 Apr 21 01:05	22°  08'02'06		max. Earth dist.		14775 Oct 18 02:54	10°  M  08'08	5.89574 AU
evening set	14770 Apr 22 08:46	22°  08'18'52		morning rise		14775 Oct 31 04:05	13°  M  19'50	
max. Earth dist.	14770 May 04 09:32	24°  08'52'46	6.51143 AU			14775 Nov 07 01:16	15°  M 	
conjunction	14770 May 05 08:49	25°  08'05'13	-0°00'39	retrograde		14776 Jan 18 17:04	0°  A 	
minimum elong	14770 May 05 08:48	25°  08'05'12	0°01'25	asc. node		14776 Mar 10 19:01	4°  A  12'14	
behind sun begin	14770 May 05 00:46	25°  08'00'56				14776 Mar 14 06:05	4°  A  11'01	
behind sun end	14770 May 05 16:49	25°  08'09'28				14776 May 02 23:30	30°  R  M 	
morning rise	14770 May 18 07:16	27°  08'50'50		opposition		14776 May 08 23:23	29°  M  11'34	0°04'49
	14770 May 28 12:33	0° 		min. Earth dist.		14776 May 08 04:28	29°  M  17'58	3.89745 AU
retrograde	14770 Sep 16 06:23	14°  02'28'33		direct		14776 Jul 06 00:22	24°  M  16'13	
opposition	14770 Nov 16 10:50	9°  02'34'12	-0°13'32			14776 Sep 04 17:29	0°  A 	
min. Earth dist.	14770 Nov 17 11:34	9°  02'26'17	4.49024 AU	evening set		14776 Nov 10 17:23	14°  A  28'56	
direct	14771 Jan 17 23:21	4°  02'33'32						
evening set	14771 May 22 12:12	21°  02'45'39		conjunction		14776 Nov 24 05:38	17°  A  45'25	0°13'23
max. Earth dist.	14771 Jun 02 12:08	24°  02'08'34	6.44772 AU	minimum elong		14776 Nov 24 05:38	17°  A  45'25	0°14'21
				behind sun begin		14776 Nov 24 01:51	17°  A  43'08	
conjunction	14771 Jun 04 09:37	24°  02'33'16	-0°17'15	behind sun end		14776 Nov 24 09:24	17°  A  47'42	
minimum elong	14771 Jun 04 09:36	24°  02'33'16	0°18'16	max. Earth dist.		14776 Nov 26 00:13	18°  A  11'16	5.92789 AU
morning rise	14771 Jun 17 05:42	27°  02'20'25		morning rise		14776 Dec 07 19:41	21°  A  02'37	
	14771 Jun 29 15:59	0° 				14777 Jan 15 19:53	0°  Z 	
retrograde	14771 Oct 17 07:49	14°  02'25'29		retrograde		14777 Apr 17 08:40	11°  Z  28'36	
opposition	14771 Dec 17 07:55	9°  02'31'42	-0°35'40	min. Earth dist.		14777 Jun 14 06:57	6°  Z  37'43	3.98410 AU
min. Earth dist.	14771 Dec 18 20:06	9°  02'20'05	4.38690 AU	opposition		14777 Jun 15 18:22	6°  Z  25'43	0°34'15
direct	14772 Feb 17 10:38	4°  02'31'15		direct		14777 Aug 13 03:39	1°  Z  29'06	
evening set	14772 Jun 21 11:01	22°  02'17'59		evening set		14777 Dec 18 07:55	21°  Z  02'17	
max. Earth dist.	14772 Jul 02 00:39	24°  02'39'36	6.31119 AU					
conjunction	14772 Jul 04 07:42	25°  02'10'28	-0°29'40	conjunction		14777 Dec 31 21:07	24°  Z  12'53	0°29'02
minimum elong	14772 Jul 04 07:41	25°  02'10'28	0°30'37	minimum elong		14777 Dec 31 21:06	24°  Z  12'53	0°30'00
morning rise	14772 Jul 17 03:25	28°  02'02'51		max. Earth dist.		14778 Jan 03 09:02	24°  Z  48'03	6.05944 AU
				morning rise		14778 Jan 14 10:59	27°  Z  23'32	

	14778 Jan 25 18:41	0°♊		retrograde	14783 Oct 21 20:15	18°♊52'03	
	14778 Apr 19 11:18	15°♊		opposition	14783 Dec 21 18:41	13°♊58'15	-0°38'11
retrograde	14778 May 22 08:09	16°♊42'43		min. Earth dist.	14783 Dec 23 08:40	13°♊46'04	4.36902 AU
	14778 Jun 23 23:59	15°♋		direct	14784 Feb 21 19:54	8°♊57'52	
min. Earth dist.	14778 Jul 19 14:49	11°♋52'27	4.14552 AU	evening set	14784 Jun 25 21:18	26°♊50'14	
opposition	14778 Jul 21 04:48	11°♋39'41	0°49'00	max. Earth dist.	14784 Jul 06 08:58	29°♊11'28	6.28996 AU
direct	14778 Sep 18 13:04	6°♋41'18					
	14778 Dec 04 22:21	15°♋		conjunction	14784 Jul 08 17:55	29°♊43'33	-0°30'48
evening set	14779 Jan 22 21:28	25°♋17'26		minimum elong	14784 Jul 08 17:54	29°♊43'33	0°31'44
					14784 Jul 09 23:06	0°♌	
conjunction	14779 Feb 05 08:21	28°♋19'12	0°33'36	morning rise	14784 Jul 21 13:56	2°♌36'52	
minimum elong	14779 Feb 05 08:22	28°♋19'12	0°34'13		14784 Sep 20 19:41	15°♌	
max. Earth dist.	14779 Feb 07 12:36	28°♋48'38	6.23553 AU	retrograde	14784 Nov 23 10:04	20°♌45'37	
	14779 Feb 12 19:27	0°♍		opposition	14785 Jan 22 21:31	15°♌51'14	-0°49'39
morning rise	14779 Feb 18 19:16	1°♍20'34		min. Earth dist.	14785 Jan 24 11:40	15°♌38'51	4.20182 AU
retrograde	14779 Jun 23 13:46	19°♍25'53			14785 Jan 29 12:04	15°♍	
min. Earth dist.	14779 Aug 21 20:26	14°♍34'05	4.32008 AU	direct	14785 Mar 24 21:50	10°♌51'53	
opposition	14779 Aug 23 00:53	14°♍24'39	0°46'32		14785 May 16 18:41	15°♌	
direct	14779 Oct 22 14:12	9°♍24'58		evening set	14785 Jul 28 20:24	29°♌38'20	
evening set	14780 Feb 25 01:43	27°♍09'13			14785 Jul 30 09:40	0°♎	
				max. Earth dist.	14785 Aug 08 18:36	2°♎11'26	6.11292 AU
conjunction	14780 Mar 09 09:02	0°♎02'53	0°27'27				
minimum elong	14780 Mar 09 09:03	0°♎02'53	0°27'33	conjunction	14785 Aug 10 19:10	2°♎39'55	-0°33'18
	14780 Mar 09 03:45	0°♎		minimum elong	14785 Aug 10 19:11	2°♎39'55	0°33'51
max. Earth dist.	14780 Mar 10 15:51	0°♎19'40	6.39525 AU	morning rise	14785 Aug 23 18:06	5°♎41'58	
morning rise	14780 Mar 22 15:12	2°♎55'49		retrograde	14785 Dec 29 18:53	25°♎05'22	
retrograde	14780 Jul 22 23:40	20°♎04'13		opposition	14786 Feb 27 14:46	20°♎09'34	-0°45'18
opposition	14780 Sep 21 21:36	15°♎05'48	0°30'56	min. Earth dist.	14786 Feb 28 17:50	20°♎00'40	4.02878 AU
min. Earth dist.	14780 Sep 21 10:12	15°♎09'31	4.45378 AU	direct	14786 Apr 28 08:17	15°♎12'08	
direct	14780 Nov 22 12:55	10°♎05'31			14786 Aug 12 09:07	0°♏	
evening set	14781 Mar 27 08:28	27°♎16'08		evening set	14786 Sep 02 04:40	4°♏54'22	
				max. Earth dist.	14786 Sep 14 07:56	7°♏50'24	5.95998 AU
conjunction	14781 Apr 09 11:36	0°♏04'21	0°13'55				
minimum elong	14781 Apr 09 11:36	0°♏04'22	0°13'30	conjunction	14786 Sep 15 08:02	8°♏05'00	-0°24'09
behind sun begin	14781 Apr 09 07:11	0°♏02'00		minimum elong	14786 Sep 15 08:03	8°♏05'00	0°24'07
behind sun end	14781 Apr 09 16:02	0°♏06'43		morning rise	14786 Sep 28 12:44	11°♏16'35	
	14781 Apr 09 03:26	0°♏			14787 Jan 04 01:33	0°♐	
max. Earth dist.	14781 Apr 09 12:30	0°♏04'50	6.49377 AU	retrograde	14787 Feb 06 05:49	1°♐45'56	
morning rise	14781 Apr 22 13:25	2°♏51'50			14787 Mar 11 10:48	30°♐	
	14781 Jun 26 01:33	15°♏		opposition	14787 Apr 06 13:57	26°♏47'45	-0°23'06
retrograde	14781 Aug 21 14:45	19°♏30'38		min. Earth dist.	14787 Apr 06 16:53	26°♏46'46	3.91207 AU
	14781 Oct 18 11:35	15°♏		direct	14787 Jun 04 02:30	21°♏52'03	
opposition	14781 Oct 21 18:18	14°♏34'42	0°07'56		14787 Aug 16 21:26	0°♑	
min. Earth dist.	14781 Oct 22 03:06	14°♏31'53	4.51205 AU	evening set	14787 Oct 09 16:39	12°♐08'32	
direct	14781 Dec 23 02:36	9°♏34'05			14787 Oct 21 08:37	15°♐	
	14782 Feb 24 19:19	15°♏					
desc. node	14782 Feb 25 07:36	15°♏04'47		conjunction	14787 Oct 23 01:36	15°♐25'10	-0°05'11
evening set	14782 Apr 26 14:08	26°♏34'39		minimum elong	14787 Oct 23 01:35	15°♐25'10	0°04'33
				behind sun begin	14787 Oct 22 17:27	15°♐20'11	
conjunction	14782 May 09 13:50	29°♏20'58	-0°03'07	behind sun end	14787 Oct 23 09:44	15°♐30'08	
minimum elong	14782 May 09 13:50	29°♏20'58	0°03'56	max. Earth dist.	14787 Oct 23 15:03	15°♐33'24	5.89174 AU
behind sun begin	14782 May 09 05:55	29°♏16'45		morning rise	14787 Nov 05 12:25	18°♐42'49	
behind sun end	14782 May 09 21:45	29°♏25'11			14787 Dec 24 23:47	0°♑	
max. Earth dist.	14782 May 08 12:13	29°♏07'15	6.50777 AU	asc. node	14788 Jan 25 09:14	5°♑35'02	
	14782 May 12 14:46	0°♒		retrograde	14788 Mar 16 03:11	9°♑35'38	
morning rise	14782 May 22 11:48	2°♒06'33		min. Earth dist.	14788 May 13 10:25	4°♑41'48	3.90122 AU
retrograde	14782 Sep 20 11:39	18°♒46'00		opposition	14788 May 14 07:47	4°♑34'34	0°09'28
opposition	14782 Nov 20 16:50	13°♒51'41	-0°16'56		14788 Jun 27 04:25	30°♒	
min. Earth dist.	14782 Nov 21 18:24	13°♒43'30	4.48158 AU	direct	14788 Jul 11 09:23	29°♒39'05	
direct	14783 Jan 22 03:48	8°♒51'00			14788 Jul 25 14:30	0°♑	
evening set	14783 May 26 18:26	26°♒06'02		evening set	14788 Nov 16 01:08	19°♑49'08	
max. Earth dist.	14783 Jun 06 16:59	28°♒28'37	6.43425 AU				
				conjunction	14788 Nov 29 13:56	23°♑05'16	0°16'07
conjunction	14783 Jun 08 15:35	28°♒54'01	-0°19'21	minimum elong	14788 Nov 29 13:55	23°♑05'16	0°17'05
minimum elong	14783 Jun 08 15:34	28°♒54'01	0°20'21	max. Earth dist.	14788 Dec 01 13:33	23°♑34'04	5.93916 AU
	14783 Jun 13 16:32	0°♓		morning rise	14788 Dec 13 04:06	26°♑21'58	
morning rise	14783 Jun 21 11:23	1°♓41'35			14788 Dec 28 12:38	0°♓	

retrograde	14789 Apr 22 11:23	16°  41'10		opposition	14794 Nov 24 21:07	18°  03'23	-0°20'10
min. Earth dist.	14789 Jun 19 08:38	11°  50'33	4.00154 AU	min. Earth dist.	14794 Nov 26 01:59	17°  54'08	4.47234 AU
opposition	14789 Jun 20 21:14	11°  38'09	0°37'22	direct	14795 Jan 26 08:40	13°  02'39	
direct	14789 Aug 18 08:36	6°  41'20			14795 May 29 07:51	0° 	
evening set	14789 Dec 23 11:02	26°  07'40		evening set	14795 May 30 22:51	0°  21'07	
				max. Earth dist.	14795 Jun 10 18:06	2°  42'24	6.41874 AU
conjunction	14790 Jan 05 23:57	29°  17'11	0°30'23	conjunction	14795 Jun 12 19:51	3°  09'37	-0°21'16
minimum elong	14790 Jan 05 23:57	29°  17'11	0°31'19	minimum elong	14795 Jun 12 19:50	3°  09'36	0°22'17
max. Earth dist.	14790 Jan 08 11:54	29°  52'11	6.08129 AU	morning rise	14795 Jun 25 15:31	5°  05'43	
	14790 Jan 09 01:19	0° 		retrograde	14795 Oct 26 06:11	23°  06'14	
morning rise	14790 Jan 19 13:45	2°  26'44		opposition	14795 Dec 26 04:00	18°  20'47	-0°40'26
	14790 Mar 20 09:18	15° 		min. Earth dist.	14795 Dec 27 18:18	18°  08'28	4.34807 AU
retrograde	14790 May 26 23:25	21°  35'46		direct	14796 Feb 26 01:27	13°  06'27	
min. Earth dist.	14790 Jul 24 09:04	16°  45'38	4.16976 AU		14796 Jun 24 07:37	0° 	
opposition	14790 Jul 25 23:14	16°  32'50	0°49'38	evening set	14796 Jun 30 06:36	1°  01'50	
	14790 Aug 06 17:15	15° 		max. Earth dist.	14796 Jul 10 18:48	3°  04'20	6.26497 AU
direct	14790 Sep 23 10:47	11°  34'14		conjunction	14796 Jul 13 03:24	4°  14'14	-0°31'44
	14790 Nov 10 02:44	15° 		minimum elong	14796 Jul 13 03:23	4°  14'14	0°32'38
evening set	14791 Jan 27 16:47	0°  02'27		morning rise	14796 Jul 25 23:37	7°  08'40	
	14791 Jan 27 12:22	0° 			14796 Aug 31 08:18	15° 	
conjunction	14791 Feb 10 03:17	3°  02'59	0°33'19	retrograde	14796 Nov 28 07:22	25°  02'55	
minimum elong	14791 Feb 10 03:17	3°  02'59	0°33'52	opposition	14797 Jan 27 15:39	20°  03'27	-0°50'05
max. Earth dist.	14791 Feb 12 05:57	3°  31'23	6.26038 AU	min. Earth dist.	14797 Jan 29 06:21	20°  02'51	4.17433 AU
morning rise	14791 Feb 23 13:26	6°  03'00		direct	14797 Mar 29 12:24	15°  03'41	
retrograde	14791 Jun 27 22:57	23°  05'41			14797 Jul 13 22:45	0° 	
min. Earth dist.	14791 Aug 26 09:02	19°  06'32	4.34349 AU	evening set	14797 Aug 02 13:53	4°  03'02	
opposition	14791 Aug 27 11:26	18°  05'49	0°44'59	max. Earth dist.	14797 Aug 13 13:27	7°  04'55	6.08525 AU
direct	14791 Oct 27 05:31	13°  05'02		conjunction	14797 Aug 15 13:12	7°  03'04	-0°32'44
	14792 Feb 22 03:04	0° 		minimum elong	14797 Aug 15 13:13	7°  03'05	0°33'13
evening set	14792 Feb 29 13:23	1°  03'53		morning rise	14797 Aug 28 12:58	10°  03'42	
conjunction	14792 Mar 13 19:58	4°  03'15	0°25'54		14797 Dec 23 21:02	0° 	
minimum elong	14792 Mar 13 19:59	4°  03'15	0°25'55	retrograde	14798 Jan 04 00:11	0°  12'08	
max. Earth dist.	14792 Mar 14 22:32	4°  04'40	6.41547 AU		14798 Jan 15 04:04	30°  04'00	
morning rise	14792 Mar 27 01:36	7°  02'09		opposition	14798 Mar 04 18:30	25°  06'06	-0°43'14
retrograde	14792 Jul 27 02:57	24°  02'15		min. Earth dist.	14798 Mar 05 18:03	25°  08'20	4.00359 AU
opposition	14792 Sep 26 02:34	19°  02'45	0°28'02	direct	14798 May 03 06:13	20°  08'58	
min. Earth dist.	14792 Sep 25 17:43	19°  02'37	4.46959 AU		14798 Jul 24 15:17	0° 	
direct	14792 Nov 26 21:09	14°  02'32		evening set	14798 Sep 07 07:51	10°  09'46	
	14793 Mar 24 11:13	0° 		conjunction	14798 Sep 20 12:06	13°  09'46	-0°21'58
evening set	14793 Mar 31 14:12	1°  03'07		minimum elong	14798 Sep 20 12:06	13°  09'46	0°21'50
conjunction	14793 Apr 13 16:55	4°  03'17	0°11'41	max. Earth dist.	14798 Sep 19 17:04	13°  10'11	5.93986 AU
minimum elong	14793 Apr 13 16:56	4°  03'17	0°11'12	morning rise	14798 Oct 03 17:45	16°  03'45	
behind sun begin	14793 Apr 13 11:01	4°  04'38			14798 Dec 03 15:17	0° 	
behind sun end	14793 Apr 13 22:50	4°  20'55		retrograde	14799 Feb 11 18:32	7°  12'36	
max. Earth dist.	14793 Apr 13 15:20	4°  16'55	6.50408 AU	opposition	14799 Apr 12 00:47	2°  14'02	-0°18'50
morning rise	14793 Apr 26 17:56	7°  04'35		min. Earth dist.	14799 Apr 12 00:30	2°  14'08	3.89933 AU
	14793 Jun 05 03:27	15° 			14799 Apr 29 08:03	30°  08'00	
retrograde	14793 Aug 25 15:49	23°  04'42		direct	14799 Jun 09 10:41	27°  08'29	
opposition	14793 Oct 25 21:05	18°  04'53	0°04'30		14799 Jul 19 22:54	0° 	
min. Earth dist.	14793 Oct 26 07:59	18°  04'13	4.51618 AU	evening set	14799 Oct 04 04:52	15°  08'00	
	14793 Nov 28 02:05	15° 			14799 Oct 15 02:35	17°  08'27	
direct	14793 Dec 27 06:38	13°  04'42		conjunction	14799 Oct 28 12:28	20°  08'54	-0°02'05
desc. node	14794 Jan 04 00:02	13°  04'49		minimum elong	14799 Oct 28 12:28	20°  08'54	0°01'21
	14794 Jan 25 17:02	15° 		behind sun begin	14799 Oct 28 04:07	20°  08'54	
	14794 Apr 27 05:16	0° 		behind sun end	14799 Oct 28 20:49	21°  08'54	
evening set	14794 Apr 30 17:30	0°  04'43		max. Earth dist.	14799 Oct 29 09:05	21°  08'21	5.88791 AU
max. Earth dist.	14794 May 12 10:20	3°  04'34	6.50522 AU	morning rise	14799 Nov 10 23:59	24°  08'53	
conjunction	14794 May 13 16:34	3°  04'46	-0°05'27	asc. node	14799 Dec 05 15:29	0° 	
minimum elong	14794 May 13 16:34	3°  04'46	0°06'20		14799 Dec 05 05:11	0° 	
behind sun begin	14794 May 13 09:01	3°  26'45		retrograde	14800 Mar 21 15:29	15°  07'34	
behind sun end	14794 May 14 00:07	3°  34'47		opposition	14800 May 19 18:49	10°  07'08	0°14'03
morning rise	14794 May 26 14:12	6°  02'16		min. Earth dist.	14800 May 18 18:12	10°  07'13	3.90696 AU
retrograde	14794 Sep 24 17:14	22°  05'33					

direct	14800 Jul 16 20:07	5°♌09'35		behind sun end	14806 May 18 04:00	7°♊48'51	
evening set	14800 Nov 21 11:28	25°♌15'57		max. Earth dist.	14806 May 16 12:21	7°♊27'35	6.49806 AU
				morning rise	14806 May 30 18:13	10°♊30'48	
conjunction	14800 Dec 05 00:23	28°♌31'30	0°18'43	retrograde	14806 Sep 28 23:25	27°♊15'17	
minimum elong	14800 Dec 05 00:22	28°♌31'29	0°19'43	opposition	14806 Nov 29 03:45	22°♊21'12	-0°23'26
max. Earth dist.	14800 Dec 07 03:07	29°♌02'03	5.95349 AU	min. Earth dist.	14806 Nov 30 10:04	22°♊11'30	4.45868 AU
	14800 Dec 11 03:24	0°♌		direct	14807 Jan 30 13:43	17°♊20'29	
morning rise	14800 Dec 18 14:55	1°♌47'35			14807 May 13 00:22	0°♌	
retrograde	14801 Apr 27 12:31	21°♌58'24		evening set	14807 Jun 04 06:05	4°♌43'36	
min. Earth dist.	14801 Jun 24 10:35	17°♌08'16	4.02271 AU	max. Earth dist.	14807 Jun 14 22:44	7°♌04'07	6.39936 AU
opposition	14801 Jun 26 01:18	16°♌55'09	0°40'10				
direct	14801 Aug 23 14:38	11°♌58'02		conjunction	14807 Jun 17 02:49	7°♌32'45	-0°23'10
	14801 Dec 23 02:53	0°♌		minimum elong	14807 Jun 17 02:49	7°♌32'45	0°24'11
evening set	14801 Dec 28 15:09	1°♌16'06		morning rise	14807 Jun 29 22:31	10°♌21'36	
				retrograde	14807 Oct 30 22:10	27°♌46'14	
conjunction	14802 Jan 11 03:53	4°♌24'19	0°31'29	opposition	14807 Dec 30 17:24	22°♌52'21	-0°42'34
minimum elong	14802 Jan 11 03:52	4°♌24'19	0°32'22	min. Earth dist.	14808 Jan 01 09:29	22°♌39'27	4.32394 AU
max. Earth dist.	14802 Jan 13 16:00	4°♌59'13	6.10708 AU	direct	14808 Mar 01 13:04	17°♌52'05	
morning rise	14802 Jan 24 17:10	7°♌32'27			14808 Jun 07 10:50	0°♌	
	14802 Feb 27 11:25	15°♌		evening set	14808 Jul 04 19:52	5°♌59'20	
retrograde	14802 May 31 16:29	26°♌29'55		max. Earth dist.	14808 Jul 15 07:50	8°♌22'23	6.23794 AU
min. Earth dist.	14802 Jul 29 05:12	21°♌39'21	4.19720 AU				
opposition	14802 Jul 30 17:42	21°♌27'08	0°49'52	conjunction	14808 Jul 17 16:57	8°♌54'56	-0°32'31
direct	14802 Sep 28 10:53	16°♌28'16		minimum elong	14808 Jul 17 16:57	8°♌54'56	0°33'22
	14803 Jan 10 10:34	0°♌		morning rise	14808 Jul 30 13:33	11°♌50'38	
evening set	14803 Feb 01 11:50	4°♌47'39			14808 Aug 13 15:09	15°♌	
					14808 Nov 18 11:53	0°♌	
conjunction	14803 Feb 14 21:48	7°♌46'49	0°32'47	retrograde	14808 Dec 03 06:59	0°♌20'56	
minimum elong	14803 Feb 14 21:49	7°♌46'50	0°33'17		14808 Dec 18 03:02	30°♌	
max. Earth dist.	14803 Feb 16 22:18	8°♌13'50	6.28699 AU	opposition	14809 Feb 01 14:04	25°♌26'18	-0°50'11
morning rise	14803 Feb 28 07:22	10°♌45'28		min. Earth dist.	14809 Feb 03 02:44	25°♌14'21	4.14647 AU
retrograde	14803 Jul 02 05:47	28°♌31'14		direct	14809 Apr 03 05:11	20°♌27'25	
opposition	14803 Aug 31 21:28	23°♌30'41	0°43'09		14809 Jun 25 10:11	0°♌	
min. Earth dist.	14803 Aug 30 20:39	23°♌38'51	4.36721 AU	evening set	14809 Aug 07 12:01	9°♌32'25	
direct	14803 Oct 31 19:07	18°♌30'45		max. Earth dist.	14809 Aug 18 15:42	12°♌10'40	6.05911 AU
	14804 Feb 05 01:30	0°♌					
evening set	14804 Mar 05 00:22	6°♌01'53		conjunction	14809 Aug 20 11:55	12°♌36'54	-0°31'54
				minimum elong	14809 Aug 20 11:56	12°♌36'54	0°32'19
conjunction	14804 Mar 18 06:24	8°♌53'29	0°24'11	morning rise	14809 Sep 02 12:27	15°♌42'02	
minimum elong	14804 Mar 18 06:24	8°♌53'30	0°24'08		14809 Nov 09 15:08	0°♌	
max. Earth dist.	14804 Mar 19 05:07	9°♌05'46	6.43463 AU	retrograde	14810 Jan 09 11:44	5°♌28'46	
morning rise	14804 Mar 31 11:14	11°♌44'21		opposition	14810 Mar 10 02:39	0°♌32'28	-0°40'42
retrograde	14804 Jul 31 06:56	28°♌40'03		min. Earth dist.	14810 Mar 10 23:40	0°♌25'30	3.98171 AU
opposition	14804 Sep 30 07:40	23°♌42'21	0°24'56		14810 Mar 14 04:46	30°♌	
min. Earth dist.	14804 Sep 30 02:11	23°♌44'07	4.48300 AU	direct	14810 May 08 10:41	25°♌35'38	
direct	14804 Dec 01 06:13	18°♌41'54			14810 Jun 30 14:23	0°♌	
	14805 Mar 07 18:32	0°♌		evening set	14810 Sep 12 14:36	15°♌33'20	
evening set	14805 Apr 04 20:24	5°♌45'42					
				conjunction	14810 Sep 25 19:49	18°♌46'30	-0°19'31
conjunction	14805 Apr 17 22:25	8°♌32'50	0°09'21	minimum elong	14810 Sep 25 19:50	18°♌46'30	0°19'18
minimum elong	14805 Apr 17 22:26	8°♌32'50	0°08'48	max. Earth dist.	14810 Sep 25 07:09	18°♌38'46	5.92480 AU
behind sun begin	14805 Apr 17 15:31	8°♌29'10		morning rise	14810 Oct 09 02:21	22°♌00'38	
behind sun end	14805 Apr 18 05:21	8°♌36'31			14810 Nov 12 06:01	0°♌	
max. Earth dist.	14805 Apr 17 15:16	8°♌29'02	6.51075 AU	retrograde	14811 Feb 17 08:54	12°♌44'17	
morning rise	14805 Apr 30 23:02	11°♌19'14		opposition	14811 Apr 17 13:55	7°♌45'21	-0°14'18
	14805 May 18 14:47	15°♌		min. Earth dist.	14811 Apr 17 09:24	7°♌46'52	3.89330 AU
retrograde	14805 Aug 29 19:24	27°♌53'54		direct	14811 Jun 14 20:23	2°♌50'01	
opposition	14805 Oct 30 00:56	22°♌58'28	0°00'57		14811 Sep 15 18:33	15°♌	
min. Earth dist.	14805 Oct 30 14:57	22°♌53'58	4.51594 AU	asc. node	14811 Oct 12 18:25	21°♌16'39	
desc. node	14805 Nov 13 09:06	21°♌10'35		evening set	14811 Oct 20 14:12	23°♌10'29	
direct	14805 Dec 31 11:55	17°♌57'44					
	14806 Apr 10 21:24	0°♌		conjunction	14811 Nov 03 00:32	26°♌27'49	0°01'10
evening set	14806 May 04 22:14	4°♌58'52		minimum elong	14811 Nov 03 00:31	26°♌27'49	0°01'57
				behind sun begin	14811 Nov 02 16:10	26°♌22'43	
conjunction	14806 May 17 21:06	7°♌45'10	-0°07'51	behind sun end	14811 Nov 03 08:52	26°♌32'55	
minimum elong	14806 May 17 21:06	7°♌45'10	0°08'45	max. Earth dist.	14811 Nov 04 01:37	26°♌43'12	5.89147 AU
behind sun begin	14806 May 17 14:11	7°♌41'28		morning rise	14811 Nov 16 12:48	29°♌46'06	

	14811 Nov 17 11:40	0°♏		retrograde	14817 Sep 02 22:37	2°♊05'07	
retrograde	14812 Mar 26 23:25	20°♏35'11		desc. node	14817 Sep 25 16:11	1°♊17'38	
min. Earth dist.	14812 May 24 00:31	15°♏42'59	3.91981 AU		14817 Oct 10 13:12	30°♏	
opposition	14812 May 25 04:53	15°♏33'22	0°18'30	opposition	14817 Nov 03 04:07	27°♏10'02	-0°02'34
direct	14812 Jul 22 06:50	10°♏37'38		min. Earth dist.	14817 Nov 03 21:08	27°♏04'35	4.51134 AU
	14812 Nov 24 05:03	0°♏		direct	14818 Jan 04 16:10	22°♏09'21	
evening set	14812 Nov 26 20:28	0°♏37'45			14818 Mar 23 19:11	0°♊	
				evening set	14818 May 09 02:41	9°♊12'52	
conjunction	14812 Dec 10 09:32	3°♏52'21	0°21'08	max. Earth dist.	14818 May 20 11:30	11°♊39'14	6.48667 AU
minimum elong	14812 Dec 10 09:32	3°♏52'20	0°22'10				
max. Earth dist.	14812 Dec 12 15:24	4°♏24'38	5.97421 AU	conjunction	14818 May 22 01:04	11°♊59'27	-0°10'11
morning rise	14812 Dec 23 23:56	7°♏07'21		minimum elong	14818 May 22 01:04	11°♊59'27	0°11'07
retrograde	14813 May 02 12:23	27°♏07'33		behind sun begin	14818 May 21 19:06	11°♊56'16	
min. Earth dist.	14813 Jun 29 12:04	22°♏17'15	4.04864 AU	behind sun end	14818 May 22 07:01	12°♊02'38	
opposition	14813 Jul 01 02:33	22°♏04'14	0°42'34	morning rise	14818 Jun 03 22:04	14°♊45'28	
direct	14813 Aug 28 20:36	17°♏06'52			14818 Aug 31 21:25	0°♏	
	14813 Dec 05 16:08	0°♏		retrograde	14818 Oct 03 08:30	1°♏34'42	
evening set	14814 Jan 02 15:53	6°♏15'21			14818 Nov 04 19:18	30°♏	
				opposition	14818 Dec 03 11:06	26°♊40'44	-0°26'34
conjunction	14814 Jan 16 04:19	9°♏22'08	0°32'20	min. Earth dist.	14818 Dec 04 19:39	26°♊30'18	4.44125 AU
minimum elong	14814 Jan 16 04:19	9°♏22'08	0°33'10	direct	14819 Feb 03 20:07	21°♊40'02	
max. Earth dist.	14814 Jan 18 16:42	9°♏56'56	6.13561 AU		14819 Apr 24 21:11	0°♏	
morning rise	14814 Jan 29 17:07	12°♏28'46		evening set	14819 Jun 08 14:08	9°♏09'07	
	14814 Feb 09 20:27	15°♏		max. Earth dist.	14819 Jun 19 06:08	11°♏29'56	6.37719 AU
	14814 May 08 06:18	0°♏					
retrograde	14814 Jun 05 04:06	1°♏14'16		conjunction	14819 Jun 21 10:59	11°♏59'08	-0°24'55
	14814 Jul 02 22:57	30°♏		minimum elong	14819 Jun 21 10:58	11°♏59'07	0°25'56
min. Earth dist.	14814 Aug 02 20:29	26°♏23'48	4.22564 AU	morning rise	14819 Jul 04 06:33	14°♏48'50	
opposition	14814 Aug 04 08:32	26°♏11'46	0°49'46		14819 Sep 25 18:49	0°♏	
direct	14814 Oct 03 05:16	21°♏12'45		retrograde	14819 Nov 04 13:33	2°♏22'08	
	14814 Dec 22 23:43	0°♏			14819 Dec 14 15:30	30°♏	
evening set	14815 Feb 06 03:18	9°♏23'30		opposition	14820 Jan 04 08:04	27°♏28'14	-0°44'28
				min. Earth dist.	14820 Jan 05 23:45	27°♏15'26	4.29860 AU
conjunction	14815 Feb 19 12:37	12°♏21'20	0°32'04	direct	14820 Mar 05 23:26	22°♏28'10	
minimum elong	14815 Feb 19 12:37	12°♏21'20	0°32'28		14820 May 19 04:46	0°♏	
max. Earth dist.	14815 Feb 21 08:34	12°♏45'42	6.31304 AU	evening set	14820 Jul 09 10:43	10°♏43'41	
morning rise	14815 Mar 04 21:31	15°♏18'38		max. Earth dist.	14820 Jul 19 23:50	13°♏08'16	6.21136 AU
	14815 May 23 06:01	0°♏					
retrograde	14815 Jul 06 12:08	2°♏55'18		conjunction	14820 Jul 22 07:58	13°♏40'28	-0°33'05
	14815 Aug 19 20:16	30°♏		minimum elong	14820 Jul 22 07:58	13°♏40'28	0°33'53
min. Earth dist.	14815 Sep 04 07:19	28°♏02'11	4.38897 AU		14820 Jul 28 02:37	15°♏	
opposition	14815 Sep 05 04:28	27°♏55'14	0°41'07	morning rise	14820 Aug 04 05:02	16°♏37'28	
direct	14815 Nov 05 07:18	22°♏55'12			14820 Oct 08 22:17	0°♏	
	14816 Jan 17 02:23	0°♏		retrograde	14820 Dec 08 10:29	5°♏18'44	
evening set	14816 Mar 09 08:33	10°♏20'54		opposition	14821 Feb 06 14:22	0°♏23'54	-0°49'55
				min. Earth dist.	14821 Feb 08 01:49	0°♏12'19	4.12068 AU
conjunction	14816 Mar 22 14:03	13°♏11'41	0°22'22		14821 Feb 09 15:33	30°♏	
minimum elong	14816 Mar 22 14:03	13°♏11'42	0°22'15	direct	14821 Apr 08 02:08	25°♏25'16	
max. Earth dist.	14816 Mar 23 08:33	13°♏21'39	6.45059 AU		14821 Jun 02 07:37	0°♏	
morning rise	14816 Apr 04 18:16	16°♏01'42		evening set	14821 Aug 12 11:00	14°♏38'28	
	14816 Jun 21 01:19	0°♏		max. Earth dist.	14821 Aug 23 19:42	17°♏20'28	6.03654 AU
retrograde	14816 Aug 04 08:00	2°♏52'47					
	14816 Sep 17 20:54	30°♏		conjunction	14821 Aug 25 11:39	17°♏44'16	-0°30'49
opposition	14816 Oct 04 10:31	27°♏55'28	0°21'47	minimum elong	14821 Aug 25 11:39	17°♏44'17	0°31'08
min. Earth dist.	14816 Oct 04 07:24	27°♏56'28	4.49247 AU	morning rise	14821 Sep 07 12:50	20°♏50'45	
direct	14816 Dec 05 10:34	22°♏54'59			14821 Oct 18 01:05	0°♏	
	14817 Feb 17 03:53	0°♏		retrograde	14822 Jan 14 21:16	10°♏46'58	
evening set	14817 Apr 09 00:44	9°♏57'19		opposition	14822 Mar 15 10:47	5°♏50'19	-0°37'48
				min. Earth dist.	14822 Mar 16 04:11	5°♏44'33	3.96480 AU
conjunction	14817 Apr 22 02:23	12°♏44'12	0°07'00	direct	14822 May 13 13:48	0°♏53'46	
minimum elong	14817 Apr 22 02:22	12°♏44'12	0°06'23	evening set	14822 Sep 17 21:05	20°♏56'14	
behind sun begin	14817 Apr 21 18:48	12°♏40'11					
behind sun end	14817 Apr 22 09:56	12°♏48'13		conjunction	14822 Oct 01 02:52	24°♏10'11	-0°16'55
max. Earth dist.	14817 Apr 21 15:36	12°♏38'28	6.51320 AU	minimum elong	14822 Oct 01 02:52	24°♏10'12	0°16'37
	14817 May 02 17:10	15°♏		max. Earth dist.	14822 Sep 30 18:28	24°♏05'04	5.91503 AU
morning rise	14817 May 05 02:20	15°♏30'18		morning rise	14822 Oct 14 10:23	27°♏25'13	
	14817 Jul 27 09:12	0°♊			14822 Oct 25 03:06	0°♊	





























































































































	14823 Jan 08 16:45	15°♌		morning rise	14828 Apr 09 01:49	20°♑20'27	
retrograde	14823 Feb 22 19:11	18°♌12'09			14828 May 27 19:39	0°♏	
	14823 Apr 09 10:33	15°♌		retrograde	14828 Aug 08 13:08	7°♏08'08	
opposition	14823 Apr 23 00:41	13°♌12'43 -0°09'40		opposition	14828 Oct 08 15:07	2°♏11'13 0°18'29	
min. Earth dist.	14823 Apr 22 15:55	13°♌15'41 3.89184 AU		min. Earth dist.	14828 Oct 08 15:37	2°♏11'04 4.49864 AU	
direct	14823 Jun 20 05:57	8°♌17'22			14828 Oct 26 04:16	30°♑	
asc. node	14823 Aug 19 05:10	13°♌54'19		direct	14828 Dec 09 18:11	27°♑10'45	
	14823 Aug 25 09:15	15°♌			14829 Jan 23 09:42	0°♏	
evening set	14823 Oct 25 23:13	28°♌36'39		evening set	14829 Apr 13 06:41	14°♏12'21	
	14823 Oct 31 15:57	0°♏			14829 Apr 17 00:30	15°♏	
conjunction	14823 Nov 08 10:11	1°♏53'55 0°04'16		conjunction	14829 Apr 26 07:51	16°♏59'03 0°04'35	
minimum elong	14823 Nov 08 10:10	1°♏53'55 0°05'06		minimum elong	14829 Apr 26 07:51	16°♏59'03 0°03'55	
behind sun begin	14823 Nov 08 02:05	1°♏48'59		behind sun begin	14829 Apr 25 23:55	16°♏54'50	
behind sun end	14823 Nov 08 18:16	1°♏58'51		behind sun end	14829 Apr 26 15:47	17°♏03'16	
max. Earth dist.	14823 Nov 09 16:57	2°♏12'45 5.89841 AU		max. Earth dist.	14829 Apr 25 16:58	16°♏51'07 6.51332 AU	
morning rise	14823 Nov 21 22:49	5°♏12'02		morning rise	14829 May 09 07:24	19°♏45'00	
retrograde	14824 Apr 01 05:58	25°♏56'18			14829 Jun 30 22:18	0°♐	
min. Earth dist.	14824 May 29 06:05	21°♏04'11 3.93417 AU		desc. node	14829 Aug 07 06:29	4°♐54'38	
opposition	14824 May 30 11:44	20°♏54'07 0°22'42		retrograde	14829 Sep 07 03:37	6°♐20'31	
direct	14824 Jul 27 15:39	15°♏58'11		opposition	14829 Nov 07 09:22	1°♐25'41 -0°06'09	
	14824 Nov 06 19:55	0°♐		min. Earth dist.	14829 Nov 08 03:59	1°♐19'43 4.50583 AU	
evening set	14824 Dec 02 02:07	5°♐51'46			14829 Nov 18 16:41	30°♑	
conjunction	14824 Dec 15 15:16	9°♐05'25 0°23'21		direct	14830 Jan 08 20:38	26°♏25'03	
minimum elong	14824 Dec 15 15:16	9°♐05'25 0°24'22			14830 Feb 28 15:58	0°♐	
max. Earth dist.	14824 Dec 17 23:59	9°♐39'14 5.99432 AU		evening set	14830 May 13 08:58	13°♐31'02	
morning rise	14824 Dec 29 05:37	12°♐19'25		max. Earth dist.	14830 May 24 16:45	15°♐57'11 6.47619 AU	
	14825 Mar 31 10:54	0°♐		conjunction	14830 May 26 07:09	16°♐17'54 -0°12'32	
retrograde	14825 May 07 08:13	2°♐09'33		minimum elong	14830 May 26 07:08	16°♐17'54 0°13'29	
	14825 Jun 13 03:55	30°♑		behind sun begin	14830 May 26 02:39	16°♐15'29	
min. Earth dist.	14825 Jul 04 09:11	27°♐19'33 4.07233 AU		behind sun end	14830 May 26 11:37	16°♐20'18	
opposition	14825 Jul 06 00:40	27°♐06'14 0°44'37		morning rise	14830 Jun 08 03:41	19°♐04'10	
direct	14825 Sep 02 21:21	22°♐08'36			14830 Aug 03 00:51	0°♑	
	14825 Nov 16 02:31	0°♐		retrograde	14830 Oct 07 18:10	5°♑57'44	
evening set	14826 Jan 07 14:25	11°♐08'46		opposition	14830 Dec 07 20:27	1°♑03'57 -0°29'38	
conjunction	14826 Jan 21 02:23	14°♐14'16 0°32'57		min. Earth dist.	14830 Dec 09 06:08	0°♑53'10 4.42668 AU	
minimum elong	14826 Jan 21 02:22	14°♐14'15 0°33'45			14830 Dec 16 05:38	30°♑	
max. Earth dist.	14826 Jan 23 11:59	14°♐47'16 6.16061 AU		direct	14831 Feb 08 03:58	26°♐03'27	
	14826 Jan 24 10:12	15°♐			14831 Apr 02 02:24	0°♑	
morning rise	14826 Feb 03 14:49	17°♐19'34		evening set	14831 Jun 12 23:28	13°♑37'13	
	14826 Apr 06 15:21	0°♑		max. Earth dist.	14831 Jun 23 13:38	15°♑57'40 6.35968 AU	
retrograde	14826 Jun 09 16:19	5°♑54'47		conjunction	14831 Jun 25 20:01	16°♑27'50 -0°26'36	
opposition	14826 Aug 08 21:54	0°♑52'31 0°49'22		minimum elong	14831 Jun 25 20:00	16°♑27'49 0°27'35	
min. Earth dist.	14826 Aug 07 12:21	1°♑03'42 4.24966 AU		morning rise	14831 Jul 08 15:44	19°♑18'15	
	14826 Aug 15 12:17	30°♑			14831 Aug 30 04:20	0°♒	
direct	14826 Oct 07 23:45	25°♑53'16		retrograde	14831 Nov 09 06:56	6°♒58'42	
	14826 Nov 30 00:07	0°♑		opposition	14832 Jan 08 23:44	2°♒04'44 -0°46'09	
evening set	14827 Feb 10 17:49	13°♑57'01		min. Earth dist.	14832 Jan 10 15:10	1°♒52'00 4.27933 AU	
conjunction	14827 Feb 24 02:47	16°♑53'49 0°31'10			14832 Jan 25 14:19	30°♑	
minimum elong	14827 Feb 24 02:48	16°♑53'49 0°31'30		direct	14832 Mar 10 12:45	27°♑04'52	
max. Earth dist.	14827 Feb 25 20:46	17°♑16'59 6.33433 AU			14832 Apr 23 20:45	0°♒	
morning rise	14827 Mar 09 10:58	19°♑49'58			14832 Jul 12 02:48	15°♒	
	14827 Apr 28 15:12	0°♑		evening set	14832 Jul 14 00:57	15°♒26'17	
retrograde	14827 Jul 10 17:06	7°♑19'10		max. Earth dist.	14832 Jul 24 16:48	17°♒53'03 6.19202 AU	
opposition	14827 Sep 09 11:34	2°♑19'30 0°38'52		conjunction	14832 Jul 26 22:32	18°♒23'59 -0°33'29	
min. Earth dist.	14827 Sep 08 16:00	2°♑25'55 4.40613 AU		minimum elong	14832 Jul 26 22:32	18°♒23'59 0°34'14	
	14827 Sep 27 23:39	30°♑		morning rise	14832 Aug 08 19:46	21°♒21'55	
direct	14827 Nov 09 16:41	27°♑19'25			14832 Sep 17 08:23	0°♒	
	14827 Dec 22 16:28	0°♑		retrograde	14832 Dec 13 10:11	10°♒11'25	
evening set	14828 Mar 13 17:16	14°♑41'01		opposition	14833 Feb 11 12:41	5°♒16'27 -0°49'22	
conjunction	14828 Mar 26 22:08	17°♑31'06 0°20'25		min. Earth dist.	14833 Feb 12 22:09	5°♒05'30 4.10292 AU	
minimum elong	14828 Mar 26 22:08	17°♑31'07 0°20'14		direct	14833 Apr 12 20:01	0°♒18'09	
max. Earth dist.	14828 Mar 27 11:43	17°♑38'25 6.46252 AU		evening set	14833 Aug 17 07:21	19°♒36'40	
				max. Earth dist.	14833 Aug 28 18:46	22°♒20'52 6.02190 AU	





























































































































conjunction	14833 Aug 30 08:18	22° \mathbb{M} 43'20	-0°29'35	conjunction	14839 Feb 28 14:12	21° \mathbb{K} 21'16	0°30'10
minimum elong	14833 Aug 30 08:19	22° \mathbb{M} 43'20	0°29'49	minimum elong	14839 Feb 28 14:13	21° \mathbb{K} 21'16	0°30'25
morning rise	14833 Sep 12 10:17	25° \mathbb{M} 50'47		max. Earth dist.	14839 Mar 02 03:45	21° \mathbb{K} 41'55	6.34984 AU
	14833 Sep 30 03:24	0° \mathbb{L}		morning rise	14839 Mar 13 22:01	24° \mathbb{K} 16'37	
retrograde	14834 Jan 20 00:50	15° \mathbb{L} 53'35			14839 Apr 09 22:57	0° \mathbb{Y}	
opposition	14834 Mar 20 14:18	10° \mathbb{L} 56'35	-0°34'47	retrograde	14839 Jul 14 22:40	11° \mathbb{Y} 40'19	
min. Earth dist.	14834 Mar 21 04:21	10° \mathbb{L} 51'54	3.95473 AU	opposition	14839 Sep 13 17:16	6° \mathbb{Y} 40'58	0°36'32
direct	14834 May 18 14:19	6° \mathbb{L} 00'14		min. Earth dist.	14839 Sep 13 00:31	6° \mathbb{Y} 46'27	4.41831 AU
evening set	14834 Sep 22 21:56	26° \mathbb{L} 05'07		direct	14839 Nov 14 01:40	1° \mathbb{Y} 40'46	
				evening set	14840 Mar 18 00:52	18° \mathbb{Y} 59'39	
conjunction	14834 Oct 06 04:31	29° \mathbb{L} 19'38	-0°14'21				
minimum elong	14834 Oct 06 04:32	29° \mathbb{L} 19'38	0°13'56	conjunction	14840 Mar 31 05:24	21° \mathbb{Y} 49'16	0°18'26
behind sun begin	14834 Oct 06 00:15	29° \mathbb{L} 17'02		minimum elong	14840 Mar 31 05:25	21° \mathbb{Y} 49'17	0°18'09
behind sun end	14834 Oct 06 08:48	29° \mathbb{L} 22'14		max. Earth dist.	14840 Mar 31 16:52	21° \mathbb{Y} 55'25	6.47065 AU
max. Earth dist.	14834 Oct 06 02:00	29° \mathbb{L} 18'05	5.91071 AU	morning rise	14840 Apr 13 08:25	24° \mathbb{Y} 38'05	
	14834 Oct 08 22:28	0° \mathbb{M}			14840 May 09 05:43	0° \mathbb{B}	
morning rise	14834 Oct 19 12:35	2° \mathbb{M} 35'09		retrograde	14840 Aug 12 15:30	11° \mathbb{B} 23'13	
	14834 Dec 13 18:29	15° \mathbb{M}		opposition	14840 Oct 12 18:56	6° \mathbb{B} 26'33	0°15'11
retrograde	14835 Feb 28 00:54	23° \mathbb{M} 23'34		min. Earth dist.	14840 Oct 12 20:39	6° \mathbb{B} 26'00	4.50237 AU
opposition	14835 Apr 28 04:59	18° \mathbb{M} 23'48	-0°05'15	direct	14840 Dec 13 22:18	1° \mathbb{B} 26'02	
min. Earth dist.	14835 Apr 27 18:26	18° \mathbb{M} 27'22	3.89380 AU		14841 Mar 31 22:39	15° \mathbb{B}	
	14835 May 26 03:31	15° \mathbb{R} \mathbb{M}		evening set	14841 Apr 17 12:07	18° \mathbb{B} 27'15	
direct	14835 Jun 25 09:54	13° \mathbb{M} 28'29					
asc. node	14835 Jun 29 20:07	13° \mathbb{M} 30'32		conjunction	14841 Apr 30 12:46	21° \mathbb{B} 13'48	0°02'09
	14835 Jul 25 12:39	15° \mathbb{M}		minimum elong	14841 Apr 30 12:46	21° \mathbb{B} 13'48	0°01'26
	14835 Oct 15 09:02	0° \mathbb{J}		behind sun begin	14841 Apr 30 04:44	21° \mathbb{B} 09'31	
evening set	14835 Oct 31 01:34	3° \mathbb{J} 45'48		behind sun end	14841 Apr 30 20:48	21° \mathbb{B} 18'04	
				max. Earth dist.	14841 Apr 29 18:49	21° \mathbb{B} 04'13	6.51228 AU
conjunction	14835 Nov 13 12:56	7° \mathbb{J} 02'53	0°07'08	morning rise	14841 May 13 11:51	23° \mathbb{B} 59'36	
minimum elong	14835 Nov 13 12:56	7° \mathbb{J} 02'53	0°08'00		14841 Jun 11 18:19	0° \mathbb{I}	
behind sun begin	14835 Nov 13 05:29	6° \mathbb{J} 58'21		desc. node	14841 Jun 18 10:43	1° \mathbb{I} 16'55	
behind sun end	14835 Nov 13 20:23	7° \mathbb{J} 07'24		retrograde	14841 Sep 11 09:42	10° \mathbb{I} 35'50	
max. Earth dist.	14835 Nov 14 23:03	7° \mathbb{J} 23'42	5.90629 AU	opposition	14841 Nov 11 14:30	5° \mathbb{I} 41'09	-0°09'39
morning rise	14835 Nov 27 02:04	10° \mathbb{J} 20'48		min. Earth dist.	14841 Nov 12 11:55	5° \mathbb{I} 34'17	4.49987 AU
	14836 Mar 12 11:20	0° \mathbb{Z}		direct	14842 Jan 13 03:00	0° \mathbb{I} 40'26	
retrograde	14836 Apr 06 04:06	1° \mathbb{Z} 00'19		evening set	14842 May 17 14:33	17° \mathbb{I} 48'32	
	14836 Apr 30 18:43	30° \mathbb{R} \mathbb{J}		max. Earth dist.	14842 May 28 18:32	20° \mathbb{I} 13'02	6.46529 AU
min. Earth dist.	14836 Jun 03 03:25	26° \mathbb{J} 08'47	3.94723 AU				
opposition	14836 Jun 04 11:19	25° \mathbb{J} 57'59	0°26'29	conjunction	14842 May 30 12:19	20° \mathbb{I} 35'38	-0°14'47
direct	14836 Aug 01 15:16	21° \mathbb{J} 01'54		minimum elong	14842 May 30 12:19	20° \mathbb{I} 35'38	0°15'46
	14836 Oct 19 06:27	0° \mathbb{Z}		behind sun begin	14842 May 30 10:44	20° \mathbb{I} 34'47	
evening set	14836 Dec 07 01:38	10° \mathbb{Z} 50'16		behind sun end	14842 May 30 13:53	20° \mathbb{I} 36'29	
				morning rise	14842 Jun 12 08:42	23° \mathbb{I} 22'13	
conjunction	14836 Dec 20 14:44	14° \mathbb{Z} 03'08	0°25'18		14842 Jul 14 08:10	0° \mathbb{E}	
minimum elong	14836 Dec 20 14:43	14° \mathbb{Z} 03'07	0°26'18	retrograde	14842 Oct 12 03:32	10° \mathbb{E} 20'04	
max. Earth dist.	14836 Dec 22 22:41	14° \mathbb{Z} 36'21	6.01111 AU	opposition	14842 Dec 12 05:15	5° \mathbb{E} 26'11	-0°32'30
morning rise	14837 Jan 03 05:08	17° \mathbb{Z} 16'18		min. Earth dist.	14842 Dec 13 15:40	5° \mathbb{E} 15'09	4.41122 AU
	14837 Mar 03 15:32	0° \mathbb{A}		direct	14843 Feb 12 10:41	0° \mathbb{E} 25'37	
retrograde	14837 May 11 23:48	6° \mathbb{A} 58'26		evening set	14843 Jun 17 08:05	18° \mathbb{E} 04'16	
min. Earth dist.	14837 Jul 09 02:42	2° \mathbb{A} 08'10	4.09103 AU	max. Earth dist.	14843 Jun 27 22:43	20° \mathbb{E} 25'31	6.34048 AU
opposition	14837 Jul 10 17:15	1° \mathbb{A} 55'10	0°46'19				
	14837 Jul 25 08:46	30° \mathbb{R} \mathbb{Z}		conjunction	14843 Jun 30 04:43	20° \mathbb{E} 55'36	-0°28'04
direct	14837 Sep 07 17:42	26° \mathbb{Z} 57'17		minimum elong	14843 Jun 30 04:42	20° \mathbb{E} 55'36	0°29'03
	14837 Oct 21 23:34	0° \mathbb{A}		morning rise	14843 Jul 13 00:16	23° \mathbb{E} 46'44	
	14838 Jan 08 13:14	15° \mathbb{A}			14843 Aug 10 22:59	0° \mathbb{Q}	
evening set	14838 Jan 12 08:03	15° \mathbb{A} 51'27		retrograde	14843 Nov 13 23:47	11° \mathbb{Q} 34'51	
				opposition	14844 Jan 13 14:57	6° \mathbb{Q} 40'47	-0°47'30
conjunction	14838 Jan 25 19:58	18° \mathbb{A} 56'02	0°33'22	min. Earth dist.	14844 Jan 15 06:44	6° \mathbb{Q} 27'56	4.25742 AU
minimum elong	14838 Jan 25 19:59	18° \mathbb{A} 56'02	0°34'07	direct	14844 Mar 15 00:31	1° \mathbb{Q} 41'02	
max. Earth dist.	14838 Jan 28 05:23	19° \mathbb{A} 28'48	6.17975 AU		14844 Jun 25 14:24	15° \mathbb{Q}	
morning rise	14838 Feb 08 07:54	22° \mathbb{A} 00'19		evening set	14844 Jul 18 15:28	20° \mathbb{Q} 09'26	
	14838 Mar 17 08:30	0° \mathbb{K}		max. Earth dist.	14844 Jul 29 07:13	22° \mathbb{Q} 36'56	6.16892 AU
retrograde	14838 Jun 14 01:31	10° \mathbb{K} 27'41					
min. Earth dist.	14838 Aug 11 23:23	5° \mathbb{K} 36'36	4.26765 AU	conjunction	14844 Jul 31 13:12	23° \mathbb{Q} 08'11	-0°33'37
opposition	14838 Aug 13 07:58	5° \mathbb{K} 25'46	0°48'46	minimum elong	14844 Jul 31 13:12	23° \mathbb{Q} 08'11	0°34'19
direct	14838 Oct 12 12:14	0° \mathbb{K} 26'26		morning rise	14844 Aug 13 11:03	26° \mathbb{Q} 07'19	
evening set	14839 Feb 15 05:50	18° \mathbb{K} 25'19			14844 Aug 30 12:44	0° \mathbb{M}	

retrograde	14844 Dec 18 10:53	15° \mathbb{M} 06'43		min. Earth dist.	14850 Aug 16 13:17	10° \mathbb{H} 14'41	4.29151 AU
opposition	14845 Feb 16 12:07	10° \mathbb{M} 11'25	-0°48'24	direct	14850 Oct 17 04:41	5° \mathbb{H} 04'51	
min. Earth dist.	14845 Feb 17 19:26	10° \mathbb{M} 01'09	4.08039 AU	evening set	14851 Feb 19 19:28	22° \mathbb{H} 56'50	
direct	14845 Apr 17 15:13	5° \mathbb{M} 13'18					
evening set	14845 Aug 22 05:15	24° \mathbb{M} 39'04		conjunction	14851 Mar 05 03:27	25° \mathbb{H} 51'42	0°28'57
max. Earth dist.	14845 Sep 02 22:23	27° \mathbb{M} 27'20	6.00217 AU	minimum elong	14851 Mar 05 03:28	25° \mathbb{H} 51'43	0°29'08
				max. Earth dist.	14851 Mar 06 15:16	26° \mathbb{H} 11'19	6.37183 AU
conjunction	14845 Sep 04 07:03	27° \mathbb{M} 46'57	-0°28'04	morning rise	14851 Mar 18 10:26	28° \mathbb{H} 45'53	
minimum elong	14845 Sep 04 07:03	27° \mathbb{M} 46'58	0°28'13		14851 Mar 24 03:38	0° \mathbb{Y}	
	14845 Sep 13 12:37	0° \mathbb{L}		retrograde	14851 Jul 19 03:04	16° \mathbb{Y} 01'58	
morning rise	14845 Sep 17 09:39	0° \mathbb{L} 55'39		opposition	14851 Sep 17 23:33	11° \mathbb{Y} 03'02	0°33'58
retrograde	14846 Jan 25 09:59	21° \mathbb{L} 07'02		min. Earth dist.	14851 Sep 17 08:38	11° \mathbb{Y} 07'54	4.43685 AU
opposition	14846 Mar 25 20:43	16° \mathbb{L} 09'43	-0°31'20	direct	14851 Nov 18 11:00	6° \mathbb{Y} 02'51	
min. Earth dist.	14846 Mar 26 08:35	16° \mathbb{L} 05'46	3.93991 AU	evening set	14852 Mar 22 08:08	23° \mathbb{Y} 16'58	
direct	14846 May 23 17:54	11° \mathbb{L} 13'35					
	14846 Sep 22 10:25	0° \mathbb{M}		conjunction	14852 Apr 04 11:54	26° \mathbb{Y} 05'49	0°16'22
evening set	14846 Sep 28 02:55	1° \mathbb{M} 22'46		minimum elong	14852 Apr 04 11:55	26° \mathbb{Y} 05'49	0°16'01
				max. Earth dist.	14852 Apr 04 18:12	26° \mathbb{Y} 09'10	6.48439 AU
conjunction	14846 Oct 11 10:12	4° \mathbb{M} 38'04	-0°11'32	morning rise	14852 Apr 17 14:26	28° \mathbb{Y} 53'54	
minimum elong	14846 Oct 11 10:12	4° \mathbb{M} 38'04	0°11'03		14852 Apr 22 19:16	0° \mathbb{B}	
behind sun begin	14846 Oct 11 03:59	4° \mathbb{M} 34'16			14852 Jul 28 05:43	15° \mathbb{B}	
behind sun end	14846 Oct 11 16:26	4° \mathbb{M} 41'51		retrograde	14852 Aug 16 18:50	15° \mathbb{B} 35'05	
max. Earth dist.	14846 Oct 11 11:41	4° \mathbb{M} 38'58	5.90227 AU		14852 Sep 05 04:07	15° \mathbb{R} \mathbb{B}	
morning rise	14846 Oct 24 19:14	7° \mathbb{M} 54'24		opposition	14852 Oct 16 22:06	10° \mathbb{B} 38'44	0°11'51
	14846 Nov 23 20:07	15° \mathbb{M}		min. Earth dist.	14852 Oct 17 03:20	10° \mathbb{B} 37'03	4.51048 AU
retrograde	14847 Mar 05 08:53	28° \mathbb{M} 45'28		direct	14852 Dec 18 04:29	5° \mathbb{B} 38'09	
opposition	14847 May 03 13:16	23° \mathbb{M} 45'20	-0°00'35		14853 Mar 14 18:58	15° \mathbb{B}	
min. Earth dist.	14847 May 02 22:38	23° \mathbb{M} 50'16	3.89302 AU	evening set	14853 Apr 21 15:42	22° \mathbb{B} 37'50	
asc. node	14847 May 10 07:54	22° \mathbb{M} 50'50		desc. node	14853 Apr 28 10:23	24° \mathbb{B} 04'17	
direct	14847 Jun 30 15:32	18° \mathbb{M} 50'00					
	14847 Sep 27 02:00	0° \mathbb{Z}		conjunction	14853 May 04 15:57	25° \mathbb{B} 24'07	-0°00'18
evening set	14847 Nov 05 09:11	9° \mathbb{Z} 06'24		minimum elong	14853 May 04 15:57	25° \mathbb{B} 24'07	0°01'03
				behind sun begin	14853 May 04 07:55	25° \mathbb{B} 19'52	
conjunction	14847 Nov 18 20:59	12° \mathbb{Z} 23'23	0°10'04	behind sun end	14853 May 04 23:58	25° \mathbb{B} 28'23	
minimum elong	14847 Nov 18 20:59	12° \mathbb{Z} 23'23	0°10'59	max. Earth dist.	14853 May 03 18:54	25° \mathbb{B} 12'53	6.51409 AU
behind sun begin	14847 Nov 18 14:43	12° \mathbb{Z} 19'35		morning rise	14853 May 17 14:27	28° \mathbb{B} 09'40	
behind sun end	14847 Nov 19 03:15	12° \mathbb{Z} 27'10			14853 May 26 07:51	0° \mathbb{I}	
max. Earth dist.	14847 Nov 20 10:18	12° \mathbb{Z} 46'07	5.91316 AU	retrograde	14853 Sep 15 11:45	14° \mathbb{I} 46'09	
morning rise	14847 Dec 02 10:37	15° \mathbb{Z} 41'09		opposition	14853 Nov 15 17:31	9° \mathbb{I} 51'37	-0°12'59
	14848 Feb 06 12:48	0° \mathbb{Z}		min. Earth dist.	14853 Nov 16 16:28	9° \mathbb{I} 44'17	4.49524 AU
retrograde	14848 Apr 11 07:49	6° \mathbb{Z} 15'56		direct	14854 Jan 17 05:03	4° \mathbb{I} 50'54	
min. Earth dist.	14848 Jun 08 06:35	1° \mathbb{Z} 24'37	3.96083 AU	evening set	14854 May 21 18:02	22° \mathbb{I} 01'05	
opposition	14848 Jun 09 15:48	1° \mathbb{Z} 13'21	0°30'13	max. Earth dist.	14854 Jun 01 19:25	24° \mathbb{I} 24'32	6.45433 AU
	14848 Jun 18 18:36	30° \mathbb{R} \mathbb{Z}					
direct	14848 Aug 06 22:17	26° \mathbb{Z} 17'02		conjunction	14854 Jun 03 15:30	24° \mathbb{I} 48'28	-0°16'52
	14848 Sep 24 07:54	0° \mathbb{Z}		minimum elong	14854 Jun 03 15:29	24° \mathbb{I} 48'27	0°17'52
evening set	14848 Dec 12 05:57	15° \mathbb{Z} 59'42		morning rise	14854 Jun 16 11:33	27° \mathbb{I} 35'21	
					14854 Jun 27 18:10	0° \mathbb{D}	
conjunction	14848 Dec 25 19:16	19° \mathbb{Z} 11'44	0°27'07	retrograde	14854 Oct 16 12:26	14° \mathbb{D} 37'57	
minimum elong	14848 Dec 25 19:15	19° \mathbb{Z} 11'43	0°28'06	opposition	14854 Dec 16 12:21	9° \mathbb{D} 44'08	-0°35'06
max. Earth dist.	14848 Dec 28 06:14	19° \mathbb{Z} 46'35	6.03020 AU	min. Earth dist.	14854 Dec 18 01:18	9° \mathbb{D} 32'18	4.39427 AU
morning rise	14849 Jan 08 09:25	22° \mathbb{Z} 23'54		direct	14855 Feb 16 16:29	4° \mathbb{D} 43'37	
	14849 Feb 11 03:15	0° \mathbb{Z}		evening set	14855 Jun 21 14:58	22° \mathbb{D} 27'55	
retrograde	14849 May 16 19:43	11° \mathbb{Z} 56'41		max. Earth dist.	14855 Jul 02 02:36	24° \mathbb{D} 48'13	6.31855 AU
min. Earth dist.	14849 Jul 13 23:12	7° \mathbb{Z} 06'36	4.11363 AU				
opposition	14849 Jul 15 13:59	6° \mathbb{Z} 53'33	0°47'42	conjunction	14855 Jul 04 11:32	25° \mathbb{D} 20'05	-0°29'21
direct	14849 Sep 12 17:21	1° \mathbb{Z} 55'31		minimum elong	14855 Jul 04 11:32	25° \mathbb{D} 20'05	0°30'18
	14849 Dec 22 09:22	15° \mathbb{Z}		morning rise	14855 Jul 17 07:24	28° \mathbb{D} 12'12	
evening set	14850 Jan 17 05:42	20° \mathbb{Z} 42'03			14855 Jul 25 10:04	0° \mathbb{O}	
					14855 Oct 22 06:51	15° \mathbb{O}	
conjunction	14850 Jan 30 17:05	23° \mathbb{Z} 45'24	0°33'33	retrograde	14855 Nov 18 15:58	16° \mathbb{O} 09'26	
minimum elong	14850 Jan 30 17:05	23° \mathbb{Z} 45'24	0°34'13		14855 Dec 16 01:01	15° \mathbb{R} \mathbb{O}	
max. Earth dist.	14850 Feb 02 00:17	24° \mathbb{Z} 16'44	6.20393 AU	opposition	14856 Jan 18 05:24	11° \mathbb{O} 15'13	-0°48'33
morning rise	14850 Feb 13 04:40	26° \mathbb{Z} 48'26		min. Earth dist.	14856 Jan 19 20:38	11° \mathbb{O} 02'30	4.23174 AU
	14850 Feb 27 13:40	0° \mathbb{H}		direct	14856 Mar 19 10:27	6° \mathbb{O} 15'35	
retrograde	14850 Jun 18 11:34	15° \mathbb{H} 05'59			14856 Jun 07 10:55	15° \mathbb{O}	
opposition	14850 Aug 17 20:26	10° \mathbb{H} 04'20	0°47'49	evening set	14856 Jul 23 05:28	24° \mathbb{O} 52'34	






























































































































max. Earth dist.	14856 Aug 03 00:06	27° Ω 22'36	6.14164 AU	conjunction	14862 Feb 04 14:34	28° \approx 35'51	0°33'29
				minimum elong	14862 Feb 04 14:35	28° \approx 35'51	0°34'06
conjunction	14856 Aug 05 03:46	27° Ω 52'42	-0°33'33	max. Earth dist.	14862 Feb 06 20:22	29° \approx 06'12	6.23109 AU
minimum elong	14856 Aug 05 03:46	27° Ω 52'42	0°34'10		14862 Feb 10 19:49	0° \mathcal{H}	
	14856 Aug 14 06:21	0° \mathcal{H}		morning rise	14862 Feb 18 01:25	1° \mathcal{H} 37'24	
morning rise	14856 Aug 18 02:02	0° \mathcal{H} 53'13		retrograde	14862 Jun 22 22:25	19° \mathcal{H} 44'12	
retrograde	14856 Dec 23 14:10	20° \mathcal{H} 04'19		min. Earth dist.	14862 Aug 21 04:00	14° \mathcal{H} 52'26	4.31719 AU
opposition	14857 Feb 21 12:08	15° \mathcal{H} 08'52	-0°47'07	opposition	14862 Aug 22 08:58	14° \mathcal{H} 42'51	0°46'30
min. Earth dist.	14857 Feb 22 18:33	14° \mathcal{H} 58'52	4.05369 AU	direct	14862 Oct 21 22:16	9° \mathcal{H} 43'12	
direct	14857 Apr 22 10:47	10° \mathcal{H} 11'02		evening set	14863 Feb 24 08:50	27° \mathcal{H} 27'43	
evening set	14857 Aug 27 04:45	29° \mathcal{H} 45'50			14863 Mar 08 00:46	0° \mathcal{Y}	
	14857 Aug 28 04:24	0° $\underline{\Omega}$					
max. Earth dist.	14857 Sep 08 01:02	2° $\underline{\Omega}$ 36'56	5.97860 AU	conjunction	14863 Mar 09 16:05	0° \mathcal{Y} 21'26	0°27'31
				minimum elong	14863 Mar 09 16:06	0° \mathcal{Y} 21'26	0°27'37
conjunction	14857 Sep 09 07:17	2° $\underline{\Omega}$ 55'12	-0°26'21	max. Earth dist.	14863 Mar 10 23:21	0° \mathcal{Y} 38'28	6.39390 AU
minimum elong	14857 Sep 09 07:17	2° $\underline{\Omega}$ 55'12	0°26'25	morning rise	14863 Mar 22 22:30	3° \mathcal{Y} 14'28	
morning rise	14857 Sep 22 10:59	6° $\underline{\Omega}$ 05'27		retrograde	14863 Jul 23 07:21	20° \mathcal{Y} 23'12	
retrograde	14858 Jan 30 19:44	26° $\underline{\Omega}$ 26'55		opposition	14863 Sep 22 05:46	15° \mathcal{Y} 24'35	0°31'09
opposition	14858 Mar 31 05:01	21° $\underline{\Omega}$ 29'15	-0°27'39	min. Earth dist.	14863 Sep 21 17:38	15° \mathcal{Y} 28'32	4.45399 AU
min. Earth dist.	14858 Mar 31 12:25	21° $\underline{\Omega}$ 26'47	3.92217 AU	direct	14863 Nov 22 20:46	10° \mathcal{Y} 24'16	
direct	14858 May 28 21:11	16° $\underline{\Omega}$ 33'20		evening set	14864 Mar 26 15:27	27° \mathcal{Y} 34'17	
	14858 Sep 04 17:46	0° \mathcal{M}			14864 Apr 07 00:45	0° \mathcal{B}	
evening set	14858 Oct 03 10:36	6° \mathcal{M} 48'03					
				conjunction	14864 Apr 08 18:47	0° \mathcal{B} 22'29	0°14'09
conjunction	14858 Oct 16 18:44	10° \mathcal{M} 04'14	-0°08'37	minimum elong	14864 Apr 08 18:48	0° \mathcal{B} 22'30	0°13'44
minimum elong	14858 Oct 16 18:44	10° \mathcal{M} 04'15	0°08'04	behind sun begin	14864 Apr 08 14:35	0° \mathcal{B} 20'15	
behind sun begin	14858 Oct 16 11:21	9° \mathcal{M} 59'43		behind sun end	14864 Apr 08 23:02	0° \mathcal{B} 24'44	
behind sun end	14858 Oct 17 02:08	10° \mathcal{M} 08'46		max. Earth dist.	14864 Apr 08 22:07	0° \mathcal{B} 24'15	6.49550 AU
max. Earth dist.	14858 Oct 17 01:53	10° \mathcal{M} 08'37	5.89233 AU	morning rise	14864 Apr 21 20:30	3° \mathcal{B} 09'53	
morning rise	14858 Oct 30 04:40	13° \mathcal{M} 21'29			14864 Jun 23 09:17	15° \mathcal{B}	
	14858 Nov 05 23:03	15° \mathcal{M}		retrograde	14864 Aug 20 20:55	19° \mathcal{B} 48'03	
	14859 Jan 17 10:12	0° \mathcal{Z}			14864 Oct 20 00:58	15° \mathcal{R} \mathcal{B}	
retrograde	14859 Mar 10 20:33	4° \mathcal{Z} 15'39		opposition	14864 Oct 21 01:44	14° \mathcal{B} 52'02	0°08'21
asc. node	14859 Mar 22 09:23	4° \mathcal{Z} 02'09		min. Earth dist.	14864 Oct 21 09:23	14° \mathcal{B} 49'35	4.51502 AU
	14859 May 03 11:07	30° \mathcal{R} \mathcal{M}		direct	14864 Dec 22 09:41	9° \mathcal{B} 51'26	
min. Earth dist.	14859 May 08 06:50	29° \mathcal{M} 21'01	3.89209 AU		14865 Feb 22 05:56	15° \mathcal{B}	
opposition	14859 May 09 00:31	29° \mathcal{M} 15'02	0°04'07	desc. node	14865 Mar 04 14:18	16° \mathcal{B} 39'25	
direct	14859 Jul 06 02:20	24° \mathcal{M} 19'40		evening set	14865 Apr 25 20:34	26° \mathcal{B} 50'46	
	14859 Sep 04 09:33	0° \mathcal{Z}					
evening set	14859 Nov 10 19:40	14° \mathcal{Z} 34'49		conjunction	14865 May 08 20:11	29° \mathcal{B} 36'55	-0°02'46
				minimum elong	14865 May 08 20:12	29° \mathcal{B} 36'55	0°03'35
conjunction	14859 Nov 24 08:05	17° \mathcal{Z} 51'39	0°12'56	behind sun begin	14865 May 08 12:15	29° \mathcal{B} 32'42	
minimum elong	14859 Nov 24 08:04	17° \mathcal{Z} 51'38	0°13'54	behind sun end	14865 May 09 04:09	29° \mathcal{B} 41'09	
behind sun begin	14859 Nov 24 03:49	17° \mathcal{Z} 49'04		max. Earth dist.	14865 May 07 18:08	29° \mathcal{B} 23'00	6.51164 AU
behind sun end	14859 Nov 24 12:20	17° \mathcal{Z} 54'13			14865 May 10 15:21	0° \mathcal{I}	
max. Earth dist.	14859 Nov 26 03:45	18° \mathcal{Z} 18'10	5.92141 AU	morning rise	14865 May 21 18:23	2° \mathcal{I} 22'25	
morning rise	14859 Dec 07 21:58	21° \mathcal{Z} 09'07		retrograde	14865 Sep 19 18:31	19° \mathcal{I} 00'37	
	14860 Jan 15 08:22	0° \mathcal{B}		opposition	14865 Nov 19 22:56	14° \mathcal{I} 06'15	-0°16'24
retrograde	14860 Apr 16 14:07	11° \mathcal{B} 37'57		min. Earth dist.	14865 Nov 21 01:17	13° \mathcal{I} 57'49	4.48594 AU
min. Earth dist.	14860 Jun 13 10:58	6° \mathcal{B} 47'04	3.97721 AU	direct	14866 Jan 21 11:11	9° \mathcal{I} 05'28	
opposition	14860 Jun 14 22:19	6° \mathcal{B} 35'05	0°33'41	evening set	14866 May 25 23:53	26° \mathcal{I} 19'08	
direct	14860 Aug 12 06:36	1° \mathcal{B} 38'33		max. Earth dist.	14866 Jun 05 22:00	28° \mathcal{I} 41'19	6.43869 AU
evening set	14860 Dec 17 12:29	21° \mathcal{B} 14'09					
				conjunction	14866 Jun 07 21:11	29° \mathcal{I} 07'01	-0°18'58
conjunction	14860 Dec 31 01:32	24° \mathcal{B} 25'02	0°28'43	minimum elong	14866 Jun 07 21:10	29° \mathcal{I} 07'00	0°19'58
minimum elong	14860 Dec 31 01:32	24° \mathcal{B} 25'02	0°29'41		14866 Jun 11 22:28	0° \mathcal{E}	
max. Earth dist.	14861 Jan 02 13:11	25° \mathcal{B} 00'05	6.05270 AU	morning rise	14866 Jun 20 17:03	1° \mathcal{E} 54'26	
morning rise	14861 Jan 13 15:38	27° \mathcal{B} 36'03		retrograde	14866 Oct 20 23:29	19° \mathcal{E} 03'21	
	14861 Jan 24 00:53	0° \approx		opposition	14866 Dec 20 22:52	14° \mathcal{E} 09'31	-0°37'39
	14861 Apr 16 08:14	15° \approx		min. Earth dist.	14866 Dec 22 12:10	13° \mathcal{E} 57'32	4.37323 AU
retrograde	14861 May 21 13:37	16° \approx 57'48		direct	14867 Feb 20 23:27	9° \mathcal{E} 09'03	
	14861 Jun 25 16:57	15° \mathcal{R} \approx		evening set	14867 Jun 26 01:52	27° \mathcal{E} 00'21	
min. Earth dist.	14861 Jul 18 20:10	12° \approx 07'47	4.13965 AU	max. Earth dist.	14867 Jul 06 13:59	29° \mathcal{E} 21'42	6.29355 AU
opposition	14861 Jul 20 11:19	11° \approx 54'37	0°48'42				
direct	14861 Sep 17 18:15	6° \approx 56'15		conjunction	14867 Jul 08 22:33	29° \mathcal{E} 53'33	-0°30'31
	14861 Dec 02 18:46	15° \approx		minimum elong	14867 Jul 08 22:33	29° \mathcal{E} 53'33	0°31'27
evening set	14862 Jan 22 03:33	25° \approx 33'52			14867 Jul 09 10:00	0° Ω	

morning rise	14867 Jul 21 18:31	2°♏46'44		morning rise	14873 Jan 18 18:43	2°♏41'19	
	14867 Sep 20 02:01	15°♏			14873 Mar 18 04:34	15°♏	
retrograde	14867 Nov 23 14:09	20°♏54'09		retrograde	14873 May 26 06:25	21°♏51'04	
opposition	14868 Jan 23 00:31	15°♏59'51 -0°49'21		min. Earth dist.	14873 Jul 23 16:05	17°♏00'40	4.16840 AU
min. Earth dist.	14868 Jan 24 16:22	15°♏46'55 4.20439 AU		opposition	14873 Jul 25 05:40	16°♏48'04	0°49'19
	14868 Jan 30 18:03	15°♏♏			14873 Aug 07 23:51	15°♏♏	
direct	14868 Mar 24 02:11	11°♏00'26		direct	14873 Sep 22 18:01	11°♏49'30	
	14868 May 14 22:56	15°♏			14873 Nov 07 10:24	15°♏	
evening set	14868 Jul 28 00:16	29°♏46'32			14874 Jan 25 14:09	0°♏	
	14868 Jul 28 23:26	0°♏		evening set	14874 Jan 26 22:00	0°♏17'45	
max. Earth dist.	14868 Aug 07 20:07	2°♏18'14 6.11418 AU					
				conjunction	14874 Feb 09 08:28	3°♏18'19	0°33'12
conjunction	14868 Aug 09 23:02	2°♏48'04 -0°33'14		minimum elong	14874 Feb 09 08:28	3°♏18'19	0°33'45
minimum elong	14868 Aug 09 23:02	2°♏48'05 0°33'47		max. Earth dist.	14874 Feb 11 11:58	3°♏47'11	6.25895 AU
morning rise	14868 Aug 22 22:04	5°♏50'07		morning rise	14874 Feb 22 18:43	6°♏18'26	
retrograde	14868 Dec 28 20:19	25°♏12'57		retrograde	14874 Jun 27 04:16	24°♏14'50	
opposition	14869 Feb 26 17:00	20°♏17'17 -0°45'24		opposition	14874 Aug 26 18:04	19°♏13'52	0°44'58
min. Earth dist.	14869 Feb 27 19:51	20°♏08'26 4.02872 AU		min. Earth dist.	14874 Aug 25 14:45	19°♏22'53	4.34203 AU
direct	14869 Apr 27 09:57	15°♏19'48		direct	14874 Oct 26 11:00	14°♏14'06	
	14869 Aug 10 22:30	0°♏			14875 Feb 20 02:11	0°♏	
evening set	14869 Sep 01 08:41	5°♏02'53		evening set	14875 Feb 28 19:02	1°♏51'54	
max. Earth dist.	14869 Sep 13 11:22	7°♏58'38 5.95873 AU					
				conjunction	14875 Mar 14 01:44	4°♏44'35	0°25'59
conjunction	14869 Sep 14 12:00	8°♏13'34 -0°24'21		minimum elong	14875 Mar 14 01:45	4°♏44'36	0°26'00
minimum elong	14869 Sep 14 12:01	8°♏13'35 0°24'18		max. Earth dist.	14875 Mar 15 04:52	4°♏59'19	6.41404 AU
morning rise	14869 Sep 27 16:35	11°♏25'11		morning rise	14875 Mar 27 07:23	7°♏36'34	
	14870 Jan 01 18:27	0°♏		retrograde	14875 Jul 27 10:21	24°♏38'59	
retrograde	14870 Feb 05 09:49	1°♏55'08		opposition	14875 Sep 26 09:41	19°♏40'51	0°28'15
	14870 Mar 12 02:04	30°♏♏		min. Earth dist.	14875 Sep 26 01:02	19°♏43'39	4.46816 AU
opposition	14870 Apr 05 17:04	26°♏57'07 -0°23'33		direct	14875 Nov 27 04:42	14°♏40'30	
min. Earth dist.	14870 Apr 05 21:11	26°♏55'44 3.90982 AU			14876 Mar 22 08:22	0°♏	
direct	14870 Jun 03 06:42	22°♏01'26		evening set	14876 Mar 30 20:30	1°♏47'29	
	14870 Aug 15 05:01	0°♏					
evening set	14870 Oct 08 21:08	12°♏19'18		conjunction	14876 Apr 12 23:12	4°♏35'11	0°11'54
	14870 Oct 19 19:26	15°♏		minimum elong	14876 Apr 12 23:13	4°♏35'12	0°11'26
				behind sun begin	14876 Apr 12 17:24	4°♏32'07	
conjunction	14870 Oct 22 06:08	15°♏36'04 -0°05'33		behind sun end	14876 Apr 13 05:01	4°♏38'17	
minimum elong	14870 Oct 22 06:08	15°♏36'04 0°04'56		max. Earth dist.	14876 Apr 12 20:50	4°♏33'56	6.50270 AU
behind sun begin	14870 Oct 21 22:02	15°♏31'07		morning rise	14876 Apr 26 00:32	7°♏22'09	
behind sun end	14870 Oct 22 14:14	15°♏41'01			14876 Jun 02 19:49	15°♏	
max. Earth dist.	14870 Oct 22 20:27	15°♏44'51 5.88909 AU		retrograde	14876 Aug 24 23:20	23°♏58'52	
morning rise	14870 Nov 04 16:45	18°♏53'48		opposition	14876 Oct 25 04:26	19°♏03'06	0°04'53
	14870 Dec 23 05:41	0°♏		min. Earth dist.	14876 Oct 25 15:14	18°♏59'38	4.51507 AU
asc. node	14871 Jan 31 11:31	6°♏44'49			14876 Dec 01 04:31	15°♏♏	
retrograde	14871 Mar 16 09:04	9°♏47'39		direct	14876 Dec 26 13:44	14°♏02'26	
opposition	14871 May 14 12:21	4°♏46'43 0°08'51		desc. node	14877 Jan 09 21:55	14°♏20'53	
min. Earth dist.	14871 May 13 15:01	4°♏53'56 3.89871 AU			14877 Jan 21 03:40	15°♏	
	14871 Jul 02 09:59	30°♏♏			14877 Apr 25 01:32	0°♏	
direct	14871 Jul 11 13:34	29°♏51'20		evening set	14877 Apr 30 00:17	1°♏02'49	
	14871 Jul 20 17:18	0°♏					
evening set	14871 Nov 16 06:18	20°♏02'21		conjunction	14877 May 12 23:42	3°♏49'06	-0°05'09
				minimum elong	14877 May 12 23:42	3°♏49'06	0°06'01
conjunction	14871 Nov 29 18:49	23°♏18'31 0°15'42		behind sun begin	14877 May 12 16:05	3°♏45'03	
minimum elong	14871 Nov 29 18:49	23°♏18'31 0°16'41		behind sun end	14877 May 13 07:19	3°♏53'10	
max. Earth dist.	14871 Dec 01 17:36	23°♏46'49 5.93686 AU		max. Earth dist.	14877 May 11 19:03	3°♏33'45	6.50463 AU
morning rise	14871 Dec 13 09:05	26°♏35'20		morning rise	14877 May 25 21:21	6°♏34'42	
	14871 Dec 27 18:22	0°♏		retrograde	14877 Sep 23 23:29	23°♏16'06	
retrograde	14872 Apr 21 15:41	16°♏55'23		opposition	14877 Nov 24 04:16	18°♏21'53	-0°19'43
min. Earth dist.	14872 Jun 18 13:20	12°♏05'01 3.99963 AU		min. Earth dist.	14877 Nov 25 08:07	18°♏12'58	4.47240 AU
opposition	14872 Jun 20 02:48	11°♏52'19 0°36'50		direct	14878 Jan 25 15:03	13°♏21'10	
direct	14872 Aug 17 13:16	6°♏55'31			14878 May 27 05:01	0°♏	
evening set	14872 Dec 22 16:14	26°♏22'14		evening set	14878 May 30 06:20	0°♏39'37	
				max. Earth dist.	14878 Jun 10 01:40	3°♏00'57	6.41953 AU
conjunction	14873 Jan 05 05:08	29°♏31'46 0°30'05		conjunction	14878 Jun 12 03:21	3°♏28'08	-0°20'58
minimum elong	14873 Jan 05 05:07	29°♏31'46 0°31'00		minimum elong	14878 Jun 12 03:20	3°♏28'07	0°21'58
	14873 Jan 07 05:26	0°♏		morning rise	14878 Jun 24 23:14	6°♏16'16	
max. Earth dist.	14873 Jan 07 17:22	0°♏06'58 6.07979 AU					

retrograde	14878 Oct 25 14:14	23°  32'42		opposition	14884 Jun 25 04:03	17°  00'40	0°39'38
opposition	14878 Dec 25 10:58	18°  38'52	-0°40'01	direct	14884 Aug 22 18:23	12°  03'37	
min. Earth dist.	14878 Dec 27 02:01	18°  26'18	4.34955 AU		14884 Dec 21 18:40	0° 	
direct	14879 Feb 25 09:55	13°  38'29		evening set	14884 Dec 27 17:16	1° 	22'07
	14879 Jun 23 07:14	0° 					
evening set	14879 Jun 30 13:57	1°  37'26		conjunction	14885 Jan 10 05:56	4° 	30'25 0°31'12
max. Earth dist.	14879 Jul 11 01:52	3°  59'31	6.26722 AU	minimum elong	14885 Jan 10 05:56	4° 	30'25 0°32'05
				max. Earth dist.	14885 Jan 12 18:35	5° 	05'38 6.10448 AU
conjunction	14879 Jul 13 10:52	4°  31'47	-0°31'30	morning rise	14885 Jan 23 19:12	7° 	38'40
minimum elong	14879 Jul 13 10:52	4°  31'46	0°32'23		14885 Feb 26 00:47	15° 	
morning rise	14879 Jul 26 07:09	7°  26'09		retrograde	14885 May 30 19:24	26° 	37'38
	14879 Aug 30 05:46	15° 		min. Earth dist.	14885 Jul 28 08:06	21° 	47'21 4.19353 AU
retrograde	14879 Nov 28 12:03	25°  44'10		opposition	14885 Jul 29 21:27	21° 	34'51 0°49'37
opposition	14880 Jan 27 21:36	20°  49'41	-0°49'50	direct	14885 Sep 27 12:50	16° 	36'05
min. Earth dist.	14880 Jan 29 11:17	20°  37'26	4.17745 AU		14886 Jan 08 21:12	0° 	
direct	14880 Mar 28 17:52	15°  50'32		evening set	14886 Jan 31 14:52	4° 	56'39
	14880 Jul 12 01:47	0° 					
evening set	14880 Aug 01 20:42	4°  45'17		conjunction	14886 Feb 14 00:48	7° 	56'01 0°32'43
max. Earth dist.	14880 Aug 12 20:43	7°  40'18	6.08903 AU	minimum elong	14886 Feb 14 00:49	7° 	56'01 0°33'12
				max. Earth dist.	14886 Feb 16 00:19	8° 	22'32 6.28249 AU
conjunction	14880 Aug 14 19:56	7°  48'08	-0°32'40	morning rise	14886 Feb 27 10:30	10° 	54'54
minimum elong	14880 Aug 14 19:56	7°  48'08	0°33'08	retrograde	14886 Jul 01 12:37	28° 	42'46
morning rise	14880 Aug 27 19:36	10°  49'51		min. Earth dist.	14886 Aug 30 02:50	23° 	50'07 4.36218 AU
	14880 Dec 18 03:58	0° 		opposition	14886 Aug 31 02:50	23° 	42'13 0°43'12
retrograde	14881 Jan 03 05:42	0°  25'03		direct	14886 Oct 31 00:42	18° 	42'20
	14881 Jan 19 05:30	30° 			14887 Feb 03 04:39	0° 	
opposition	14881 Mar 03 23:12	25°  49'03	-0°43'17	evening set	14887 Mar 05 05:03	6° 	15'00
min. Earth dist.	14881 Mar 04 23:45	25°  49'03	4.00764 AU				
direct	14881 May 02 12:57	20°  31'49		conjunction	14887 Mar 18 11:16	9° 	06'54 0°24'18
	14881 Jul 22 20:59	0° 		minimum elong	14887 Mar 18 11:16	9° 	06'54 0°24'14
evening set	14881 Sep 06 13:10	10°  21'14		max. Earth dist.	14887 Mar 19 10:49	9° 	19'39 6.42937 AU
				morning rise	14887 Mar 31 16:18	11° 	58'03
conjunction	14881 Sep 19 17:21	13°  23'00	-0°22'08	retrograde	14887 Jul 31 13:09	28° 	55'48
minimum elong	14881 Sep 19 17:22	13°  23'00	0°22'00	opposition	14887 Sep 30 14:19	23° 	58'03 0°25'12
max. Earth dist.	14881 Sep 18 22:20	13°  21'26	5.94388 AU	min. Earth dist.	14887 Sep 30 07:41	24° 	00'12 4.47801 AU
morning rise	14881 Oct 02 22:44	16°  45'41		direct	14887 Dec 01 10:52	18° 	57'41
	14881 Dec 01 22:20	0° 			14888 Mar 05 14:16	0° 	
retrograde	14882 Feb 10 21:36	7°  48'21		evening set	14888 Apr 04 02:51	6° 	03'00
opposition	14882 Apr 11 04:04	2°  48'21	-0°19'16				
min. Earth dist.	14882 Apr 11 04:02	2°  48'21	3.90305 AU	conjunction	14888 Apr 17 05:08	8° 	50'24 0°09'34
	14882 Apr 29 17:40	30° 		minimum elong	14888 Apr 17 05:07	8° 	50'24 0°09'02
direct	14882 Jun 08 13:52	27°  48'21		behind sun begin	14888 Apr 16 22:17	8° 	46'46
	14882 Jul 17 23:24	0° 		behind sun end	14888 Apr 17 11:58	8° 	54'02
	14882 Oct 02 19:37	15° 		max. Earth dist.	14888 Apr 16 23:30	8° 	47'25 6.50655 AU
evening set	14882 Oct 14 06:13	17°  46'01		morning rise	14888 Apr 30 05:47	11° 	37'01
					14888 May 16 10:25	15° 	
conjunction	14882 Oct 27 15:39	21°  46'01	-0°02'27	retrograde	14888 Aug 29 03:47	28° 	13'12
minimum elong	14882 Oct 27 15:40	21°  46'01	0°01'44	opposition	14888 Oct 29 08:51	23° 	17'50 0°01'19
behind sun begin	14882 Oct 27 07:19	20°  46'01		min. Earth dist.	14888 Oct 29 22:23	23° 	13'30 4.51295 AU
behind sun end	14882 Oct 28 00:00	21°  46'01		desc. node	14888 Nov 18 14:02	20° 	49'15
max. Earth dist.	14882 Oct 28 09:57	21°  46'01	5.89076 AU	direct	14888 Dec 30 19:32	18° 	17'16
morning rise	14882 Nov 10 03:06	24°  46'01			14889 Apr 08 12:26	0° 	
	14882 Dec 03 20:22	0° 		evening set	14889 May 04 06:07	5° 	19'18
asc. node	14882 Dec 11 18:38	1° 	48'18	max. Earth dist.	14889 May 15 20:00	7° 	48'01 6.49672 AU
retrograde	14883 Mar 21 16:13	15° 	12'25				
opposition	14883 May 19 21:16	10° 	11'02 0°13'25	conjunction	14889 May 17 05:02	8° 	05'45 -0°07'35
min. Earth dist.	14883 May 18 20:29	10° 	19'26 3.90859 AU	minimum elong	14889 May 17 05:01	8° 	05'44 0°08'28
direct	14883 Jul 16 22:54	5° 	15'28	behind sun begin	14889 May 16 22:01	8° 	02'00
evening set	14883 Nov 21 13:45	25° 	21'20	behind sun end	14889 May 17 12:01	8° 	09'29
				morning rise	14889 May 30 02:30	10° 	51'34
conjunction	14883 Dec 05 02:33	28° 	36'46 0°18'18	retrograde	14889 Sep 28 08:43	27° 	36'29
minimum elong	14883 Dec 05 02:32	28° 	36'46 0°19'18	opposition	14889 Nov 28 12:06	22° 	42'27 -0°23'01
max. Earth dist.	14883 Dec 07 04:48	29° 	07'03 5.95384 AU	min. Earth dist.	14889 Nov 29 17:51	22° 	32'56 4.45949 AU
	14883 Dec 10 20:42	0° 		direct	14890 Jan 29 22:19	17° 	41'50
morning rise	14883 Dec 18 16:45	1° 	52'44		14890 May 10 15:05	0° 	
retrograde	14884 Apr 26 16:03	22° 	30'52	evening set	14890 Jun 03 14:23	5° 	04'43
min. Earth dist.	14884 Jun 23 14:43	17° 	13'19 4.02156 AU	max. Earth dist.	14890 Jun 14 09:32	7° 	26'28 6.40278 AU

conjunction	14890 Jun 16 11:24	7°  53'50	-0°22'54	morning rise	14895 Dec 23 17:48	6°  54'00	
minimum elong	14890 Jun 16 11:23	7°  53'50	0°23'55	retrograde	14896 May 01 08:39	26°  57'05	
morning rise	14890 Jun 29 07:01	10°  42'35		min. Earth dist.	14896 Jun 28 08:13	22°  06'52	4.04032 AU
retrograde	14890 Oct 30 03:44	28°  05'43		opposition	14896 Jun 29 22:34	21°  53'54	0°42'01
opposition	14890 Dec 30 00:33	23°  11'55	-0°42'13	direct	14896 Aug 27 14:36	16°  56'37	
min. Earth dist.	14890 Dec 31 15:02	22°  59'33	4.33035 AU		14896 Dec 05 03:01	0° 	
direct	14891 Mar 01 20:01	18°  11'48		evening set	14897 Jan 01 12:27	6°  08'37	
	14891 Jun 06 07:05	0° 					
evening set	14891 Jul 05 03:04	6°  16'49		conjunction	14897 Jan 15 00:52	9°  15'55	0°32'06
max. Earth dist.	14891 Jul 15 15:59	8°  14'09	6.24708 AU	minimum elong	14897 Jan 15 00:52	9°  15'55	0°32'56
				max. Earth dist.	14897 Jan 17 11:03	9°  49'33	6.12445 AU
conjunction	14891 Jul 17 23:57	9°  12'00	-0°32'21	morning rise	14897 Jan 28 13:55	12°  23'08	
minimum elong	14891 Jul 17 23:57	9°  12'00	0°33'11		14897 Feb 09 02:31	15° 	
morning rise	14891 Jul 30 20:30	12°  10'18			14897 May 07 11:21	0° 	
	14891 Aug 12 16:38	15° 		retrograde	14897 Jun 04 06:22	1°  13'38	
	14891 Nov 14 13:53	0° 			14897 Jul 01 20:58	30° 	
retrograde	14891 Dec 03 11:14	0°  33'44		min. Earth dist.	14897 Aug 01 21:49	26°  22'49	4.21288 AU
	14891 Dec 22 06:59	30°  18'12		opposition	14897 Aug 03 08:55	26°  11'05	0°49'41
opposition	14892 Feb 01 18:25	25°  13'08	-0°50'01	direct	14897 Oct 02 04:50	21°  12'06	
min. Earth dist.	14892 Feb 03 07:18	25°  12'07	4.15787 AU		14897 Dec 21 20:21	0° 	
direct	14892 Apr 02 12:27	20°  14'01		evening set	14898 Feb 05 03:51	9°  27'06	
	14892 Jun 23 17:19	0° 					
evening set	14892 Aug 06 15:38	9°  14'56		conjunction	14898 Feb 18 13:34	12°  25'38	0°32'07
max. Earth dist.	14892 Aug 17 19:33	12°  18'50	6.07185 AU	minimum elong	14898 Feb 18 13:35	12°  25'38	0°32'30
				max. Earth dist.	14898 Feb 20 11:39	12°  51'14	6.29989 AU
conjunction	14892 Aug 19 15:25	12°  18'50	-0°31'57	morning rise	14898 Mar 03 22:41	15°  23'34	
minimum elong	14892 Aug 19 15:26	12°  18'50	0°32'21		14898 May 21 06:07	0° 	
morning rise	14892 Sep 01 15:36	15°  19'12		retrograde	14898 Jul 05 16:55	3°  04'58	
	14892 Nov 08 07:58	0° 			14898 Aug 20 09:07	30° 	
retrograde	14893 Jan 08 09:27	5°  30'11		min. Earth dist.	14898 Sep 03 09:58	28°  12'17	4.37656 AU
opposition	14893 Mar 09 02:06	0°  33'55	-0°40'58	opposition	14898 Sep 04 08:50	28°  12'17	0°41'20
min. Earth dist.	14893 Mar 09 23:29	0°  26'51	3.99467 AU	direct	14898 Nov 04 08:36	23°  12'17	
	14893 Mar 13 08:55	30°  18'12			14899 Jan 15 04:14	0° 	
direct	14893 May 07 11:18	25°  13'08		evening set	14899 Mar 09 13:21	10°  34'05	
	14893 Jun 29 14:34	0° 					
evening set	14893 Sep 11 13:35	15°  29'50		conjunction	14899 Mar 22 19:00	13°  25'22	0°22'34
				minimum elong	14899 Mar 22 19:01	13°  25'22	0°22'26
conjunction	14893 Sep 24 18:13	18°  42'13	-0°19'54	max. Earth dist.	14899 Mar 23 14:11	13°  35'43	6.43989 AU
minimum elong	14893 Sep 24 18:14	18°  42'13	0°19'41	morning rise	14899 Apr 04 23:35	16°  15'55	
max. Earth dist.	14893 Sep 24 02:42	18°  32'46	5.93630 AU		14899 Jun 19 02:34	0° 	
morning rise	14893 Oct 08 00:28	21°  15'55		retrograde	14899 Aug 04 17:39	3°  10'16	
	14893 Nov 11 15:30	0° 			14899 Sep 20 15:12	30° 	
retrograde	14894 Feb 16 01:55	12°  15'34		opposition	14899 Oct 04 18:09	28°  12'50	0°22'08
opposition	14894 Apr 16 09:03	7°  35'30	-0°15'05	min. Earth dist.	14899 Oct 04 14:40	28°  12'50	4.48413 AU
min. Earth dist.	14894 Apr 16 05:37	7°  36'39	3.90176 AU	direct	14899 Dec 05 17:45	23°  12'24	
direct	14894 Jun 13 17:50	2°  14'01			14900 Feb 15 15:21	0° 	
	14894 Sep 15 11:22	15° 		evening set	14900 Apr 09 08:10	10°  16'43	
evening set	14894 Oct 19 08:57	22°  15'40					
asc. node	14894 Oct 23 00:13	23°  15'52		conjunction	14900 Apr 22 10:01	13°  03'53	0°07'16
				minimum elong	14900 Apr 22 10:01	13°  03'53	0°06'39
conjunction	14894 Nov 01 19:04	26°  14'38	0°00'33	behind sun begin	14900 Apr 22 02:30	12°  03'53	
minimum elong	14894 Nov 01 19:04	26°  14'38	0°01'19	behind sun end	14900 Apr 22 17:32	13°  07'53	
behind sun begin	14894 Nov 01 10:44	26°  09'33		max. Earth dist.	14900 Apr 22 00:57	12°  03'53	6.50784 AU
behind sun end	14894 Nov 02 03:25	26°  19'44			14900 May 01 11:38	15° 	
max. Earth dist.	14894 Nov 02 18:33	26°  29'01	5.89603 AU	morning rise	14900 May 05 10:17	15°  50'17	
morning rise	14894 Nov 15 06:51	29°  13'21			14900 Jul 24 13:29	0° 	
	14894 Nov 17 04:09	0° 		retrograde	14900 Sep 03 07:16	2°  26'25	
retrograde	14895 Mar 26 18:11	20°  20'32		desc. node	14900 Oct 01 21:16	1°  26'25	
opposition	14895 May 24 22:53	15°  18'52	0°17'35		14900 Oct 14 05:20	30° 	
min. Earth dist.	14895 May 23 21:10	15°  27'34	3.91977 AU	opposition	14900 Nov 03 12:59	27°  31'11	-0°02'10
direct	14895 Jul 22 01:51	10°  23'09		min. Earth dist.	14900 Nov 04 03:54	27°  26'23	4.50940 AU
	14895 Nov 24 22:13	0° 		direct	14901 Jan 04 23:17	22°  30'31	
evening set	14895 Nov 26 14:26	0°  23'59			14901 Mar 22 03:00	0° 	
				evening set	14901 May 09 11:07	9°  34'06	
conjunction	14895 Dec 10 03:26	3°  38'46	0°20'37	max. Earth dist.	14901 May 20 23:41	12°  02'22	6.48842 AU
minimum elong	14895 Dec 10 03:25	3°  38'45	0°21'37				
max. Earth dist.	14895 Dec 12 07:44	4°  10'08	5.96961 AU	conjunction	14901 May 22 09:45	12°  02'41	-0°09'55

minimum elong	14901 May 22 09:45	12° Π 20'41	0°10'49	conjunction	14906 Nov 08 02:30	1° \mathcal{A} 35'08	0°03'37
behind sun begin	14901 May 22 03:39	12° Π 17'25		minimum elong	14906 Nov 08 02:28	1° \mathcal{A} 35'07	0°04'26
behind sun end	14901 May 22 15:50	12° Π 23'57		behind sun begin	14906 Nov 07 18:17	1° \mathcal{A} 30'08	
morning rise	14901 Jun 04 06:43	15° Π 06'39		behind sun end	14906 Nov 08 10:40	1° \mathcal{A} 40'07	
	14901 Aug 28 19:00	0° \mathfrak{E}		max. Earth dist.	14906 Nov 09 06:06	1° \mathcal{A} 52'01	5.89821 AU
retrograde	14901 Oct 03 15:46	1° \mathfrak{E} 54'49		morning rise	14906 Nov 21 14:59	4° \mathcal{A} 53'11	
	14901 Nov 08 14:39	30° $\mathcal{R}\Pi$		retrograde	14907 Apr 01 22:38	25° \mathcal{A} 38'38	
opposition	14901 Dec 03 19:13	27° Π 00'50	-0°26'08	min. Earth dist.	14907 May 29 23:35	20° \mathcal{A} 46'32	3.92933 AU
min. Earth dist.	14901 Dec 05 02:32	26° Π 50'49	4.44662 AU	opposition	14907 May 31 04:37	20° \mathcal{A} 36'42	0°21'47
direct	14902 Feb 04 04:38	22° Π 00'14		direct	14907 Jul 28 06:41	15° \mathcal{A} 40'53	
	14902 Apr 23 10:41	0° \mathfrak{E}			14907 Nov 08 16:45	0° \mathfrak{Z}	
evening set	14902 Jun 08 21:47	9° \mathfrak{E} 27'12		evening set	14907 Dec 02 19:55	5° \mathfrak{Z} 37'19	
max. Earth dist.	14902 Jun 19 13:59	11° \mathfrak{E} 47'56	6.38582 AU				
				conjunction	14907 Dec 16 08:58	8° \mathfrak{Z} 51'23	0°22'51
conjunction	14902 Jun 21 18:28	12° \mathfrak{E} 16'51	-0°24'39	minimum elong	14907 Dec 16 08:57	8° \mathfrak{Z} 51'23	0°23'52
minimum elong	14902 Jun 21 18:27	12° \mathfrak{E} 16'51	0°25'40	max. Earth dist.	14907 Dec 18 14:22	9° \mathfrak{Z} 23'18	5.98542 AU
morning rise	14902 Jul 04 14:11	15° \mathfrak{E} 06'14		morning rise	14907 Dec 29 23:25	12° \mathfrak{Z} 05'52	
	14902 Sep 23 22:31	0° Ω			14908 Apr 01 17:41	0° \approx	
retrograde	14902 Nov 04 18:31	2° Ω 36'07		retrograde	14908 May 07 06:20	2° \approx 00'46	
	14902 Dec 16 22:34	30° $\mathcal{R}\mathfrak{E}$			14908 Jun 11 16:44	30° $\mathcal{R}\mathfrak{Z}$	
opposition	14903 Jan 04 13:30	27° \mathfrak{E} 42'11	-0°44'06	min. Earth dist.	14908 Jul 04 07:08	27° \mathfrak{Z} 10'30	4.06056 AU
min. Earth dist.	14903 Jan 06 04:36	27° \mathfrak{E} 29'35	4.30994 AU	opposition	14908 Jul 05 21:25	26° \mathfrak{Z} 57'33	0°44'09
direct	14903 Mar 07 06:51	22° \mathfrak{E} 42'06		direct	14908 Sep 02 17:27	22° \mathfrak{Z} 00'03	
	14903 May 19 06:50	0° Ω			14908 Nov 16 12:57	0° \approx	
evening set	14903 Jul 10 15:07	10° Ω 53'32		evening set	14909 Jan 07 11:54	11° \approx 04'55	
max. Earth dist.	14903 Jul 21 05:30	13° Ω 18'22	6.22467 AU				
				conjunction	14909 Jan 21 00:13	14° \approx 11'07	0°32'46
conjunction	14903 Jul 23 12:22	13° Ω 49'44	-0°32'56	minimum elong	14909 Jan 21 00:13	14° \approx 11'07	0°33'34
minimum elong	14903 Jul 23 12:22	13° Ω 49'44	0°33'43	max. Earth dist.	14909 Jan 23 11:28	14° \approx 45'11	6.14749 AU
	14903 Jul 28 15:13	15° Ω			14909 Jan 24 13:15	15° \approx	
morning rise	14903 Aug 05 09:07	16° Ω 46'04		morning rise	14909 Feb 03 12:42	17° \approx 17'06	
	14903 Oct 09 11:53	0° \mathfrak{P}			14909 Apr 06 12:50	0° \mathfrak{H}	
retrograde	14903 Dec 09 09:28	5° \mathfrak{P} 21'54		retrograde	14909 Jun 09 19:24	5° \mathfrak{H} 57'42	
opposition	14904 Feb 07 15:04	0° \mathfrak{P} 27'08	-0°49'48	opposition	14909 Aug 08 23:26	0° \mathfrak{H} 55'28	0°49'22
min. Earth dist.	14904 Feb 09 02:32	0° \mathfrak{P} 15'34	4.13505 AU	min. Earth dist.	14909 Aug 07 12:39	1° \mathfrak{H} 07'04	4.23673 AU
	14904 Feb 11 02:22	30° $\mathcal{R}\Omega$			14909 Aug 15 22:53	30° $\mathcal{R}\approx$	
direct	14904 Apr 08 04:10	25° Ω 28'29		direct	14909 Oct 07 22:24	25° \approx 56'24	
	14904 Jun 02 04:14	0° \mathfrak{P}			14909 Nov 29 13:01	0° \mathfrak{H}	
evening set	14904 Aug 12 11:03	14° \mathfrak{P} 36'32		evening set	14910 Feb 10 19:45	14° \mathfrak{H} 04'14	
max. Earth dist.	14904 Aug 23 17:09	17° \mathfrak{P} 16'32	6.05052 AU				
				conjunction	14910 Feb 24 04:46	17° \mathfrak{H} 01'35	0°31'16
conjunction	14904 Aug 25 11:13	17° \mathfrak{P} 41'33	-0°30'56	minimum elong	14910 Feb 24 04:47	17° \mathfrak{H} 01'35	0°31'35
minimum elong	14904 Aug 25 11:14	17° \mathfrak{P} 41'33	0°31'14	max. Earth dist.	14910 Feb 25 22:57	17° \mathfrak{H} 24'55	6.32277 AU
morning rise	14904 Sep 07 12:14	20° \mathfrak{P} 47'16		morning rise	14910 Mar 09 13:24	19° \mathfrak{H} 58'21	
	14904 Oct 18 10:29	0° \mathfrak{L}			14910 Apr 27 19:13	0° \mathcal{Y}	
retrograde	14905 Jan 14 14:49	10° \mathfrak{L} 37'40		retrograde	14910 Jul 10 23:53	7° \mathcal{Y} 31'29	
opposition	14905 Mar 15 06:16	5° \mathfrak{L} 41'05	-0°38'14	opposition	14910 Sep 09 16:45	2° \mathcal{Y} 31'38	0°39'09
min. Earth dist.	14905 Mar 16 00:43	5° \mathfrak{L} 34'58	3.97684 AU	min. Earth dist.	14910 Sep 08 20:35	2° \mathcal{Y} 38'15	4.39691 AU
direct	14905 May 13 11:40	0° \mathfrak{L} 44'23			14910 Sep 29 23:08	30° $\mathcal{R}\mathfrak{H}$	
evening set	14905 Sep 17 16:15	20° \mathfrak{L} 42'47		direct	14910 Nov 09 20:45	27° \mathfrak{H} 31'34	
					14910 Dec 21 00:54	0° \mathcal{Y}	
conjunction	14905 Sep 30 21:50	23° \mathfrak{L} 56'11	-0°17'23	evening set	14911 Mar 14 22:07	14° \mathcal{Y} 55'26	
minimum elong	14905 Sep 30 21:51	23° \mathfrak{L} 56'11	0°17'05				
max. Earth dist.	14905 Sep 30 12:22	23° \mathfrak{L} 50'24	5.92398 AU	conjunction	14911 Mar 28 03:19	17° \mathcal{Y} 45'52	0°20'41
morning rise	14905 Oct 14 04:46	27° \mathfrak{L} 10'33		minimum elong	14911 Mar 28 03:20	17° \mathcal{Y} 45'53	0°20'29
	14905 Oct 25 22:40	0° \mathfrak{M}		max. Earth dist.	14911 Mar 28 20:17	17° \mathcal{Y} 55'00	6.45635 AU
	14906 Jan 10 14:28	15° \mathfrak{M}		morning rise	14911 Apr 10 07:05	20° \mathcal{Y} 35'31	
retrograde	14906 Feb 22 12:28	17° \mathfrak{M} .54'10			14911 May 27 13:10	0° \mathfrak{B}	
	14906 Apr 06 16:48	15° $\mathcal{R}\mathfrak{M}$.		retrograde	14911 Aug 09 18:54	7° \mathfrak{B} 24'44	
opposition	14906 Apr 22 17:07	12° \mathfrak{M} .54'58	-0°10'35	opposition	14911 Oct 09 21:39	2° \mathfrak{B} 27'38	0°18'57
min. Earth dist.	14906 Apr 22 11:15	12° \mathfrak{M} .56'57	3.89650 AU	min. Earth dist.	14911 Oct 09 19:43	2° \mathfrak{B} 28'15	4.49577 AU
direct	14906 Jun 20 00:13	7° \mathfrak{M} .59'35			14911 Oct 29 20:28	30° $\mathcal{R}\mathcal{Y}$	
	14906 Aug 26 18:03	15° \mathfrak{M} .		direct	14911 Dec 10 22:31	27° \mathcal{Y} 27'11	
asc. node	14906 Aug 31 11:23	15° \mathfrak{M} .53'50			14912 Jan 22 07:13	0° \mathfrak{B}	
evening set	14906 Oct 25 15:48	28° \mathfrak{M} .17'58		evening set	14912 Apr 13 12:41	14° \mathfrak{B} 28'54	
	14906 Nov 01 15:00	0° \mathcal{A}			14912 Apr 15 23:23	15° \mathfrak{B}	

conjunction	14912 Apr 26 13:53	17°  15'36	0°04'57	conjunction	14917 Oct 06 03:11	29°  15'12	-0°14'46
minimum elong	14912 Apr 26 13:53	17°  15'36	0°04'17	minimum elong	14917 Oct 06 03:12	29°  15'13	0°14'22
behind sun begin	14912 Apr 26 05:59	17°  11'24		behind sun begin	14917 Oct 05 23:21	29°  12'52	
behind sun end	14912 Apr 26 21:47	17°  19'47		behind sun end	14917 Oct 06 07:03	29°  17'34	
max. Earth dist.	14912 Apr 26 00:49	17°  08'38	6.51379 AU	max. Earth dist.	14917 Oct 05 21:39	29°  11'50	5.90864 AU
morning rise	14912 May 09 13:34	20°  01'33			14917 Oct 09 04:21	0°  11	
	14912 Jun 29 13:37	0°  11		morning rise	14917 Oct 19 11:16	2°  13'04	
desc. node	14912 Aug 15 20:28	5°  15'00			14917 Dec 14 01:00	15°  11	
retrograde	14912 Sep 07 10:27	6°  13'24		retrograde	14918 Feb 27 22:45	23°  12'01	
opposition	14912 Nov 07 15:35	1°  41'25	-0°05'34	opposition	14918 Apr 28 03:15	18°  12'03	-0°06'01
min. Earth dist.	14912 Nov 08 09:59	1°  35'32	4.50920 AU	min. Earth dist.	14918 Apr 27 16:43	18°  12'08	3.88935 AU
	14912 Nov 21 02:27	30°  18			14918 May 25 12:26	15°  18	
direct	14913 Jan 09 03:54	26°  40'42		direct	14918 Jun 25 06:58	13°  12'15	
	14913 Feb 26 22:26	0°  11		asc. node	14918 Jul 09 12:31	13°  12'06	
evening set	14913 May 13 14:09	13°  14'51			14918 Jul 25 23:40	15°  11	
max. Earth dist.	14913 May 24 21:56	16°  10'59	6.48182 AU		14918 Oct 15 11:01	0°  11	
				evening set	14918 Oct 31 01:33	3°  14'45	
conjunction	14913 May 26 12:20	16°  13'40	-0°12'07	conjunction	14918 Nov 13 12:49	7°  12'18	0°06'37
minimum elong	14913 May 26 12:20	16°  13'40	0°13'04	minimum elong	14918 Nov 13 12:48	7°  12'17	0°07'29
behind sun begin	14913 May 26 07:32	16°  12'06		behind sun begin	14918 Nov 13 05:13	6°  17'40	
behind sun end	14913 May 26 17:08	16°  13'41		behind sun end	14918 Nov 13 20:24	7°  12'55	
morning rise	14913 Jun 08 09:04	19°  11'45		max. Earth dist.	14918 Nov 14 21:13	7°  12'07	5.90005 AU
	14913 Aug 01 23:55	0°  11		morning rise	14918 Nov 27 01:55	10°  12'31	
retrograde	14913 Oct 07 21:24	6°  10'03			14919 Mar 13 00:18	0°  11	
opposition	14913 Dec 08 00:23	1°  15'04	-0°29'01	retrograde	14919 Apr 07 06:06	1°  13'00	
min. Earth dist.	14913 Dec 09 09:12	1°  10'43	4.43386 AU		14919 May 02 09:49	30°  18	
	14913 Dec 17 21:10	30°  18		min. Earth dist.	14919 Jun 04 05:34	26°  11'14	3.93980 AU
direct	14914 Feb 08 08:08	26°  14'23		opposition	14919 Jun 05 12:37	26°  10'42	0°25'47
	14914 Apr 01 00:26	0°  11		direct	14919 Aug 02 16:56	21°  14'38	
evening set	14914 Jun 13 02:48	13°  14'54			14919 Oct 19 23:48	0°  11	
max. Earth dist.	14914 Jun 23 18:24	16°  10'34	6.36761 AU	evening set	14919 Dec 08 03:48	10°  15'56	
conjunction	14914 Jun 25 23:31	16°  13'58	-0°26'13	conjunction	14919 Dec 21 17:07	14°  13'09	0°24'55
minimum elong	14914 Jun 25 23:30	16°  13'58	0°27'12	minimum elong	14919 Dec 21 17:06	14°  13'09	0°25'54
morning rise	14914 Jul 08 19:02	19°  12'01		max. Earth dist.	14919 Dec 24 02:48	14°  13'32	6.00344 AU
	14914 Aug 29 16:58	0°  11		morning rise	14920 Jan 04 07:25	17°  12'45	
retrograde	14914 Nov 09 07:24	7°  10'32			14920 Mar 03 00:12	0°  11	
opposition	14915 Jan 09 00:46	2°  10'21	-0°45'41	retrograde	14920 May 12 05:24	7°  10'59	
min. Earth dist.	14915 Jan 10 16:55	1°  15'24	4.28722 AU	min. Earth dist.	14920 Jul 09 06:27	2°  17'57	4.08387 AU
	14915 Jan 26 07:08	30°  18		opposition	14920 Jul 10 21:41	2°  14'44	0°45'55
direct	14915 Mar 11 14:46	27°  10'21			14920 Jul 26 20:07	30°  18	
	14915 Apr 24 09:48	0°  11		direct	14920 Sep 07 20:45	27°  12'06	
	14915 Jul 13 00:31	15°  10			14920 Oct 20 20:17	0°  11	
evening set	14915 Jul 15 02:11	15°  12'28			14921 Jan 07 20:56	15°  11	
max. Earth dist.	14915 Jul 25 15:25	17°  15'31	6.19900 AU	evening set	14921 Jan 12 12:33	16°  13'17	
conjunction	14915 Jul 27 23:33	18°  12'53	-0°33'18	conjunction	14921 Jan 26 00:20	19°  13'08	0°33'11
minimum elong	14915 Jul 27 23:33	18°  12'53	0°34'03	minimum elong	14921 Jan 26 00:20	19°  13'08	0°33'55
morning rise	14915 Aug 09 20:52	21°  12'31		max. Earth dist.	14921 Jan 28 09:46	19°  14'05	6.17361 AU
	14915 Sep 18 08:32	0°  11		morning rise	14921 Feb 08 12:30	22°  12'44	
retrograde	14915 Dec 14 07:46	10°  10'09			14921 Mar 16 11:07	0°  11	
opposition	14916 Feb 12 11:06	5°  10'45	-0°49'17	retrograde	14921 Jun 14 07:38	10°  14'20	
min. Earth dist.	14916 Feb 13 21:16	5°  10'03	4.10823 AU	min. Earth dist.	14921 Aug 12 05:07	5°  15'21	4.26302 AU
direct	14916 Apr 12 19:45	0°  10'16		opposition	14921 Aug 13 14:31	5°  14'40	0°48'41
evening set	14916 Aug 17 06:36	19°  13'33		direct	14921 Oct 12 17:55	0°  14'40	
max. Earth dist.	14916 Aug 28 17:39	22°  17'16	6.02510 AU	evening set	14922 Feb 15 11:31	18°  14'40	
conjunction	14916 Aug 30 07:40	22°  19'39	-0°29'43	conjunction	14922 Feb 28 20:08	21°  16'52	0°30'11
minimum elong	14916 Aug 30 07:41	22°  19'40	0°29'57	minimum elong	14922 Feb 28 20:08	21°  16'53	0°30'26
morning rise	14916 Sep 12 09:21	25°  17'47		max. Earth dist.	14922 Mar 02 12:18	21°  18'58	6.34712 AU
	14916 Sep 30 09:07	0°  11		morning rise	14922 Mar 14 03:52	24°  18'32	
retrograde	14917 Jan 19 23:20	15°  14'48			14922 Apr 08 21:33	0°  11	
opposition	14917 Mar 20 11:34	10°  15'41	-0°35'13	retrograde	14922 Jul 15 05:32	11°  19'56	
min. Earth dist.	14917 Mar 21 03:52	10°  14'46	3.95538 AU	min. Earth dist.	14922 Sep 13 06:25	7°  19'03	4.41742 AU
direct	14917 May 18 12:55	5°  15'51		opposition	14922 Sep 14 00:30	6°  19'57	0°36'42
evening set	14917 Sep 22 20:49	26°  10'00		direct	14922 Nov 14 07:55	1°  19'57	






























































































































evening set	14923 Mar 19 07:06	19° Υ 15'56			14928 Sep 13 07:38	0° $\underline{\Omega}$	
				morning rise	14928 Sep 17 11:41	0° $\underline{\Omega}$ 59'52	
conjunction	14923 Apr 01 11:32	22° Υ 05'31	0°18'39	retrograde	14929 Jan 25 10:20	21° $\underline{\Omega}$ 11'25	
minimum elong	14923 Apr 01 11:32	22° Υ 05'31	0°18'22	opposition	14929 Mar 25 21:26	16° $\underline{\Omega}$ 14'15	-0°31'45
max. Earth dist.	14923 Apr 01 22:46	22° Υ 11'33	6.47150 AU	min. Earth dist.	14929 Mar 26 09:05	16° $\underline{\Omega}$ 10'23	3.93786 AU
morning rise	14923 Apr 14 14:48	24° Υ 54'22		direct	14929 May 23 17:59	11° $\underline{\Omega}$ 18'07	
	14923 May 09 03:41	0° \mathcal{B}			14929 Sep 22 03:04	0° \mathcal{M}	
retrograde	14923 Aug 13 23:15	11° \mathcal{B} 39'10		evening set	14929 Sep 28 05:33	1° \mathcal{M} 28'50	
opposition	14923 Oct 14 01:50	6° \mathcal{B} 42'25	0°15'36				
min. Earth dist.	14923 Oct 14 03:42	6° \mathcal{B} 41'49	4.50473 AU	conjunction	14929 Oct 11 12:45	4° \mathcal{M} 44'14	-0°11'54
direct	14923 Dec 15 05:51	1° \mathcal{B} 41'53		minimum elong	14929 Oct 11 12:45	4° \mathcal{M} 44'15	0°11'25
	14924 Mar 30 22:54	15° \mathcal{B}		behind sun begin	14929 Oct 11 06:44	4° \mathcal{M} 40'34	
evening set	14924 Apr 17 17:37	18° \mathcal{B} 42'00		behind sun end	14929 Oct 11 18:47	4° \mathcal{M} 47'55	
				max. Earth dist.	14929 Oct 11 13:35	4° \mathcal{M} 44'45	5.89917 AU
conjunction	14924 Apr 30 18:26	21° \mathcal{B} 28'27	0°02'30	morning rise	14929 Oct 24 21:38	8° \mathcal{M} 00'41	
minimum elong	14924 Apr 30 18:27	21° \mathcal{B} 28'28	0°01'48		14929 Nov 23 10:41	15° \mathcal{M}	
behind sun begin	14924 Apr 30 10:25	21° \mathcal{B} 24'12		retrograde	14930 Mar 05 11:57	28° \mathcal{M} 53'10	
behind sun end	14924 May 01 02:29	21° \mathcal{B} 32'44		opposition	14930 May 03 15:52	23° \mathcal{M} 53'07	-0°01'14
max. Earth dist.	14924 Apr 30 02:03	21° \mathcal{B} 19'43	6.51593 AU	min. Earth dist.	14930 May 03 02:10	23° \mathcal{M} 57'44	3.88928 AU
morning rise	14924 May 13 17:33	24° \mathcal{B} 14'09		asc. node	14930 May 18 06:02	21° \mathcal{M} 58'14	
	14924 Jun 10 18:56	0° \mathcal{I}		direct	14930 Jun 30 18:52	18° \mathcal{M} 57'49	
desc. node	14924 Jun 26 21:17	3° \mathcal{I} 01'19			14930 Sep 26 13:09	0° \mathcal{X}	
retrograde	14924 Sep 11 13:49	10° \mathcal{I} 49'14		evening set	14930 Nov 05 12:36	9° \mathcal{X} 15'46	
opposition	14924 Nov 11 19:52	5° \mathcal{I} 54'28	-0°09'04				
min. Earth dist.	14924 Nov 12 15:56	5° \mathcal{I} 48'02	4.50452 AU	conjunction	14930 Nov 19 00:28	12° \mathcal{X} 32'56	0°09'37
direct	14925 Jan 13 07:18	0° \mathcal{I} 53'46		minimum elong	14930 Nov 19 00:28	12° \mathcal{X} 32'55	0°10'33
evening set	14925 May 17 19:08	18° \mathcal{I} 00'19		behind sun begin	14930 Nov 18 17:59	12° \mathcal{X} 28'59	
max. Earth dist.	14925 May 29 00:01	20° \mathcal{I} 25'06	6.47054 AU	behind sun end	14930 Nov 19 06:57	12° \mathcal{X} 36'51	
				max. Earth dist.	14930 Nov 20 15:29	12° \mathcal{X} 56'43	5.90947 AU
conjunction	14925 May 30 16:59	20° \mathcal{I} 47'15	-0°14'22	morning rise	14930 Dec 02 13:53	15° \mathcal{X} 50'49	
minimum elong	14925 May 30 16:59	20° \mathcal{I} 47'15	0°15'20		14931 Feb 05 16:15	0° \mathcal{Z}	
behind sun begin	14925 May 30 14:33	20° \mathcal{I} 45'56		retrograde	14931 Apr 12 13:11	6° \mathcal{Z} 27'01	
behind sun end	14925 May 30 19:25	20° \mathcal{I} 48'33		min. Earth dist.	14931 Jun 09 10:36	1° \mathcal{Z} 35'49	3.95763 AU
morning rise	14925 Jun 12 13:23	23° \mathcal{I} 33'39		opposition	14931 Jun 10 20:09	1° \mathcal{Z} 24'27	0°29'36
	14925 Jul 13 14:36	0° \mathcal{E}			14931 Jun 21 09:05	30° \mathcal{R} \mathcal{X}	
retrograde	14925 Oct 12 07:36	10° \mathcal{E} 29'45		direct	14931 Aug 08 02:05	26° \mathcal{X} 28'12	
opposition	14925 Dec 12 08:46	5° \mathcal{E} 35'54	-0°31'54		14931 Sep 24 04:25	0° \mathcal{Z}	
min. Earth dist.	14925 Dec 13 20:10	5° \mathcal{E} 24'34	4.41653 AU	evening set	14931 Dec 13 10:19	16° \mathcal{Z} 11'41	
direct	14926 Feb 12 15:21	0° \mathcal{E} 35'18					
evening set	14926 Jun 17 11:29	18° \mathcal{E} 12'26		conjunction	14931 Dec 26 23:21	19° \mathcal{Z} 23'45	0°26'46
max. Earth dist.	14926 Jun 27 24:00	20° \mathcal{E} 32'23	6.34533 AU	minimum elong	14931 Dec 26 23:21	19° \mathcal{Z} 23'44	0°27'44
				max. Earth dist.	14931 Dec 29 09:46	19° \mathcal{Z} 58'17	6.02747 AU
conjunction	14926 Jun 30 08:06	21° \mathcal{E} 03'35	-0°27'43	morning rise	14932 Jan 09 13:36	22° \mathcal{Z} 36'03	
minimum elong	14926 Jun 30 08:05	21° \mathcal{E} 03'35	0°28'41		14932 Feb 11 08:04	0° \approx	
morning rise	14926 Jul 13 03:51	23° \mathcal{E} 54'35		retrograde	14932 May 16 23:34	12° \approx 09'46	
	14926 Aug 10 12:05	0° \mathcal{O}		min. Earth dist.	14932 Jul 14 03:44	7° \approx 19'48	4.11145 AU
retrograde	14926 Nov 14 01:14	11° \mathcal{O} 40'58		opposition	14932 Jul 15 19:18	7° \approx 06'28	0°47'19
opposition	14927 Jan 13 16:37	6° \mathcal{O} 46'53	-0°47'05	direct	14932 Sep 12 21:54	2° \approx 08'25	
min. Earth dist.	14927 Jan 15 08:16	6° \mathcal{O} 34'04	4.26135 AU		14932 Dec 21 13:25	15° \approx	
direct	14927 Mar 16 02:08	1° \mathcal{O} 47'01		evening set	14933 Jan 17 10:06	20° \approx 55'09	
	14927 Jun 26 06:49	15° \mathcal{O}					
evening set	14927 Jul 19 17:43	20° \mathcal{O} 14'33		conjunction	14933 Jan 30 21:32	23° \approx 58'32	0°33'23
max. Earth dist.	14927 Jul 30 09:53	22° \mathcal{O} 42'09	6.17164 AU	minimum elong	14933 Jan 30 21:32	23° \approx 58'33	0°34'03
				max. Earth dist.	14933 Feb 02 05:44	24° \approx 30'27	6.20228 AU
conjunction	14927 Aug 01 15:36	23° \mathcal{O} 13'14	-0°33'28	morning rise	14933 Feb 13 08:56	27° \approx 01'35	
minimum elong	14927 Aug 01 15:36	23° \mathcal{O} 13'14	0°34'10		14933 Feb 26 17:53	0° \mathcal{H}	
morning rise	14927 Aug 14 13:16	26° \mathcal{O} 12'12		retrograde	14933 Jun 18 17:48	15° \mathcal{H} 19'50	
	14927 Aug 31 06:31	0° \mathcal{P}		min. Earth dist.	14933 Aug 16 19:16	10° \mathcal{H} 28'25	4.29015 AU
retrograde	14927 Dec 19 12:29	15° \mathcal{P} 10'31		opposition	14933 Aug 18 02:26	10° \mathcal{H} 18'04	0°47'43
opposition	14928 Feb 17 12:46	10° \mathcal{P} 15'22	-0°48'23	direct	14933 Oct 17 10:53	5° \mathcal{H} 18'36	
min. Earth dist.	14928 Feb 18 21:49	10° \mathcal{P} 04'32	4.08157 AU	evening set	14934 Feb 20 00:10	23° \mathcal{H} 10'30	
direct	14928 Apr 17 16:36	5° \mathcal{P} 17'13					
evening set	14928 Aug 22 07:18	24° \mathcal{P} 43'14		conjunction	14934 Mar 05 08:04	26° \mathcal{H} 05'25	0°28'58
max. Earth dist.	14928 Sep 02 21:29	27° \mathcal{P} 29'49	6.00164 AU	minimum elong	14934 Mar 05 08:05	26° \mathcal{H} 05'26	0°29'09
				max. Earth dist.	14934 Mar 06 19:36	26° \mathcal{H} 24'52	6.37052 AU
conjunction	14928 Sep 04 08:58	27° \mathcal{P} 51'08	-0°28'13	morning rise	14934 Mar 18 15:17	28° \mathcal{H} 59'42	
minimum elong	14928 Sep 04 08:59	27° \mathcal{P} 51'08	0°28'21		14934 Mar 23 06:44	0° \mathcal{Y}	

retrograde	14934 Jul 19 08:46	16° Υ 16'25		direct	14940 Apr 22 14:32	10° \mathfrak{M} 22'03	
opposition	14934 Sep 18 05:44	11° Υ 17'18	0°34'08	evening set	14940 Aug 27 09:33	29° \mathfrak{M} 55'50	
min. Earth dist.	14934 Sep 17 14:34	11° Υ 22'16	4.43567 AU		14940 Aug 27 16:31	0° \mathfrak{A}	
direct	14934 Nov 18 16:45	6° Υ 17'04		max. Earth dist.	14940 Sep 08 06:12	2° \mathfrak{A} 47'01	5.98233 AU
evening set	14935 Mar 23 13:14	23° Υ 31'16					
conjunction	14935 Apr 05 17:16	26° Υ 20'12	0°16'34	conjunction	14940 Sep 09 11:59	3° \mathfrak{A} 04'58	-0°26'28
minimum elong	14935 Apr 05 17:17	26° Υ 20'12	0°16'13	minimum elong	14940 Sep 09 12:00	3° \mathfrak{A} 04'59	0°26'31
max. Earth dist.	14935 Apr 06 01:22	26° Υ 24'32	6.48343 AU	morning rise	14940 Sep 22 15:27	6° \mathfrak{A} 14'58	
morning rise	14935 Apr 18 19:44	29° Υ 08'19		retrograde	14941 Jan 30 22:51	26° \mathfrak{A} 34'37	
	14935 Apr 22 21:15	0° \mathfrak{B}		opposition	14941 Mar 31 07:46	21° \mathfrak{A} 37'02	-0°28'00
	14935 Jul 25 15:52	15° \mathfrak{B}		min. Earth dist.	14941 Mar 31 16:23	21° \mathfrak{A} 34'10	3.92561 AU
retrograde	14935 Aug 18 00:12	15° \mathfrak{B} 49'56		direct	14941 May 29 01:57	16° \mathfrak{A} 41'06	
	14935 Sep 10 06:17	15° \mathfrak{B}			14941 Sep 04 08:46	0° \mathfrak{M}	
opposition	14935 Oct 18 04:19	10° \mathfrak{B} 53'31	0°12'13	evening set	14941 Oct 03 13:46	6° \mathfrak{M} 54'42	
min. Earth dist.	14935 Oct 18 08:44	10° \mathfrak{B} 52'06	4.50978 AU	conjunction	14941 Oct 16 21:47	10° \mathfrak{M} 10'40	-0°08'58
direct	14935 Dec 19 10:03	5° \mathfrak{B} 52'59		minimum elong	14941 Oct 16 21:48	10° \mathfrak{M} 10'41	0°08'24
	14936 Mar 13 16:33	15° \mathfrak{B}		behind sun begin	14941 Oct 16 14:30	10° \mathfrak{M} 06'14	
evening set	14936 Apr 21 21:26	22° \mathfrak{B} 52'41		behind sun end	14941 Oct 17 05:05	10° \mathfrak{M} 15'08	
conjunction	14936 May 04 21:38	25° \mathfrak{B} 38'59	0°00'01	max. Earth dist.	14941 Oct 17 05:03	10° \mathfrak{M} 15'07	5.89520 AU
minimum elong	14936 May 04 21:39	25° \mathfrak{B} 39'00	0°00'44	morning rise	14941 Oct 30 07:25	13° \mathfrak{M} 27'39	
behind sun begin	14936 May 04 13:38	25° \mathfrak{B} 34'44			14941 Nov 05 15:36	15° \mathfrak{M}	
behind sun end	14936 May 05 05:40	25° \mathfrak{B} 43'15		retrograde	14942 Jan 16 22:31	0° \mathfrak{J}	
max. Earth dist.	14936 May 03 23:56	25° \mathfrak{B} 27'24	6.51373 AU	asc. node	14942 Mar 10 22:36	4° \mathfrak{J} 20'29	
desc. node	14936 May 06 00:22	25° \mathfrak{B} 53'16			14942 Mar 29 10:38	3° \mathfrak{J} 46'03	
morning rise	14936 May 17 20:26	28° \mathfrak{B} 24'38		min. Earth dist.	14942 May 04 03:41	30° \mathfrak{R} \mathfrak{M}	
	14936 May 25 09:14	0° \mathfrak{I}		opposition	14942 May 08 09:01	29° \mathfrak{M} 25'54	3.89418 AU
retrograde	14936 Sep 15 19:13	15° \mathfrak{I} 01'18		direct	14942 May 09 02:24	29° \mathfrak{M} 20'02	0°03'29
opposition	14936 Nov 15 23:50	10° \mathfrak{I} 06'43	-0°12'30		14942 Jul 06 04:08	24° \mathfrak{M} 24'45	
min. Earth dist.	14936 Nov 16 23:26	9° \mathfrak{I} 59'09	4.49530 AU	evening set	14942 Sep 04 00:32	0° \mathfrak{J}	
direct	14937 Jan 17 12:07	5° \mathfrak{I} 05'57			14942 Nov 10 21:35	14° \mathfrak{J} 39'13	
evening set	14937 May 22 00:03	22° \mathfrak{I} 16'05		conjunction	14942 Nov 24 09:37	17° \mathfrak{J} 55'53	0°12'30
max. Earth dist.	14937 Jun 02 01:40	24° \mathfrak{I} 39'36	6.45490 AU	minimum elong	14942 Nov 24 09:36	17° \mathfrak{J} 55'52	0°13'27
conjunction	14937 Jun 03 21:45	25° \mathfrak{I} 03'31	-0°16'32	behind sun begin	14942 Nov 24 04:56	17° \mathfrak{J} 53'03	
minimum elong	14937 Jun 03 21:45	25° \mathfrak{I} 03'31	0°17'31	behind sun end	14942 Nov 24 14:16	17° \mathfrak{J} 58'41	
morning rise	14937 Jun 16 17:58	27° \mathfrak{I} 50'27		max. Earth dist.	14942 Nov 26 03:14	18° \mathfrak{J} 21'10	5.92230 AU
	14937 Jun 26 20:06	0° \mathfrak{E}		morning rise	14942 Dec 07 23:29	21° \mathfrak{J} 13'16	
retrograde	14937 Oct 16 17:27	14° \mathfrak{E} 52'44		retrograde	14943 Jan 15 02:04	0° \mathfrak{Z}	
opposition	14937 Dec 16 18:04	9° \mathfrak{E} 58'53	-0°34'38	min. Earth dist.	14943 Apr 17 14:40	11° \mathfrak{Z} 42'03	
min. Earth dist.	14937 Dec 18 05:51	9° \mathfrak{E} 47'24	4.39551 AU	opposition	14943 Jun 14 12:39	6° \mathfrak{Z} 51'16	3.97681 AU
direct	14938 Feb 16 21:07	4° \mathfrak{E} 58'20		direct	14943 Jun 16 00:06	6° \mathfrak{Z} 39'15	0°33'04
evening set	14938 Jun 21 21:15	22° \mathfrak{E} 42'24		evening set	14943 Aug 13 08:07	1° \mathfrak{Z} 42'45	
max. Earth dist.	14938 Jul 02 10:18	25° \mathfrak{E} 03'24	6.32047 AU		14943 Dec 18 13:50	21° \mathfrak{Z} 18'37	
conjunction	14938 Jul 04 17:56	25° \mathfrak{E} 34'33	-0°29'04	conjunction	14944 Jan 01 02:52	24° \mathfrak{Z} 29'32	0°28'23
minimum elong	14938 Jul 04 17:55	25° \mathfrak{E} 34'32	0°30'01	minimum elong	14944 Jan 01 02:52	24° \mathfrak{Z} 29'32	0°29'20
morning rise	14938 Jul 17 13:46	28° \mathfrak{E} 26'35		max. Earth dist.	14944 Jan 03 14:15	25° \mathfrak{Z} 04'28	6.05112 AU
	14938 Jul 24 14:29	0° \mathfrak{O}		morning rise	14944 Jan 14 16:45	27° \mathfrak{Z} 40'34	
	14938 Oct 19 21:35	15° \mathfrak{O}			14944 Jan 24 18:04	0° \mathfrak{W}	
retrograde	14938 Nov 18 22:04	16° \mathfrak{O} 22'53		retrograde	14944 Apr 15 13:58	15° \mathfrak{W}	
	14938 Dec 18 21:21	15° \mathfrak{R} \mathfrak{O}			14944 May 21 17:24	17° \mathfrak{W} 03'31	
opposition	14939 Jan 18 10:34	11° \mathfrak{O} 28'44	-0°48'13	min. Earth dist.	14944 Jun 26 17:25	15° \mathfrak{R} \mathfrak{W}	
min. Earth dist.	14939 Jan 20 02:45	11° \mathfrak{O} 15'44	4.23431 AU	opposition	14944 Jul 18 23:57	12° \mathfrak{W} 13'14	4.13692 AU
direct	14939 Mar 20 16:54	6° \mathfrak{O} 29'06		direct	14944 Jul 20 14:08	12° \mathfrak{W} 00'23	0°48'21
	14939 Jun 07 13:03	15° \mathfrak{O}			14944 Sep 17 21:25	7° \mathfrak{W} 02'08	
evening set	14939 Jul 24 11:19	25° \mathfrak{O} 05'23		evening set	14944 Dec 02 07:15	15° \mathfrak{W}	
max. Earth dist.	14939 Aug 04 04:38	27° \mathfrak{O} 34'35	6.14472 AU		14945 Jan 22 05:24	25° \mathfrak{W} 40'36	
conjunction	14939 Aug 06 09:33	28° \mathfrak{O} 05'23	-0°33'25	conjunction	14945 Feb 04 16:24	28° \mathfrak{W} 42'45	0°33'21
minimum elong	14939 Aug 06 09:33	28° \mathfrak{O} 05'23	0°34'02	minimum elong	14945 Feb 04 16:24	28° \mathfrak{W} 42'45	0°33'57
	14939 Aug 14 14:33	0° \mathfrak{M}		max. Earth dist.	14945 Feb 06 22:31	29° \mathfrak{W} 13'18	6.22731 AU
morning rise	14939 Aug 19 07:55	1° \mathfrak{M} 05'47			14945 Feb 10 09:20	0° \mathfrak{H}	
retrograde	14939 Dec 24 16:45	20° \mathfrak{M} 15'18		morning rise	14945 Feb 18 03:22	1° \mathfrak{H} 44'31	
opposition	14940 Feb 22 16:01	15° \mathfrak{M} 19'54	-0°47'05	retrograde	14945 Jun 23 01:24	19° \mathfrak{H} 53'11	
min. Earth dist.	14940 Feb 23 21:33	15° \mathfrak{M} 10'12	4.05723 AU	min. Earth dist.	14945 Aug 21 07:08	15° \mathfrak{H} 01'38	4.31280 AU
				opposition	14945 Aug 22 12:55	14° \mathfrak{H} 51'46	0°46'29

direct	14945 Oct 22 00:29	9° X 52'12		evening set	14951 Jul 29 04:54	29° Ω 57'22	
evening set	14946 Feb 24 12:00	27° X 38'01			14951 Jul 29 09:26	0° M	
	14946 Mar 07 08:49	0° Y		max. Earth dist.	14951 Aug 09 02:01	2° M 29'26	6.12526 AU
conjunction	14946 Mar 09 19:26	0° Y 31'59	0°27'36	conjunction	14951 Aug 11 03:27	2° M 58'21	-0°33'12
minimum elong	14946 Mar 09 19:27	0° Y 32'00	0°27'41	minimum elong	14951 Aug 11 03:28	2° M 58'21	0°33'44
max. Earth dist.	14946 Mar 11 03:11	0° Y 49'19	6.38927 AU	morning rise	14951 Aug 24 02:15	5° M 59'48	
morning rise	14946 Mar 23 01:55	3° Y 25'16		retrograde	14951 Dec 29 21:20	25° M 17'41	
retrograde	14946 Jul 23 13:33	20° Y 35'55		opposition	14952 Feb 27 18:06	20° M 22'01	-0°45'32
opposition	14946 Sep 22 11:08	15° Y 37'18	0°31'23	min. Earth dist.	14952 Feb 28 21:53	20° M 12'52	4.04101 AU
min. Earth dist.	14946 Sep 21 23:11	15° Y 41'12	4.44933 AU	direct	14952 Apr 27 14:17	15° M 24'24	
direct	14946 Nov 23 02:07	10° Y 37'03			14952 Aug 10 21:38	0° Ω	
evening set	14947 Mar 27 20:21	27° Y 48'25		evening set	14952 Sep 01 09:02	5° Ω 02'41	
	14947 Apr 07 02:52	0° X		max. Earth dist.	14952 Sep 13 10:47	7° Ω 57'20	5.97097 AU
conjunction	14947 Apr 09 23:45	0° X 36'52	0°14'22	conjunction	14952 Sep 14 12:07	8° Ω 12'39	-0°24'38
minimum elong	14947 Apr 09 23:46	0° X 36'52	0°13'58	minimum elong	14952 Sep 14 12:08	8° Ω 12'39	0°24'35
behind sun begin	14947 Apr 09 19:45	0° X 34'44		morning rise	14952 Sep 27 16:16	11° Ω 23'29	
behind sun end	14947 Apr 10 03:47	0° X 39'00			14953 Jan 02 16:12	0° M	
max. Earth dist.	14947 Apr 10 02:34	0° X 38'21	6.49107 AU	retrograde	14953 Feb 05 04:30	1° M 47'46	
morning rise	14947 Apr 23 01:50	3° X 24'33			14953 Mar 10 17:22	30° R Ω	
	14947 Jun 22 22:04	15° X		opposition	14953 Apr 05 13:19	26° Ω 49'49	-0°24'13
retrograde	14947 Aug 22 03:58	20° X 04'21		min. Earth dist.	14953 Apr 05 18:12	26° Ω 48'11	3.92066 AU
opposition	14947 Oct 22 08:17	15° X 08'16	0°08'45	direct	14953 Jun 03 03:49	21° Ω 54'02	
min. Earth dist.	14947 Oct 22 15:33	15° X 05'55	4.51126 AU		14953 Aug 15 20:56	0° M	
	14947 Oct 23 09:57	15° R X		evening set	14953 Oct 08 17:00	12° M 07'54	
direct	14947 Dec 23 15:24	10° X 07'42			14953 Oct 20 10:14	15° M	
	14948 Feb 21 15:23	15° X		conjunction	14953 Oct 22 01:25	15° M 24'03	-0°06'08
desc. node	14948 Mar 11 23:35	18° X 10'21		minimum elong	14953 Oct 22 01:25	15° M 24'02	0°05'30
evening set	14948 Apr 26 02:44	27° X 08'07		behind sun begin	14953 Oct 21 17:25	15° M 19'09	
max. Earth dist.	14948 May 08 02:51	29° X 41'44	6.50906 AU	behind sun end	14953 Oct 22 09:25	15° M 28'55	
conjunction	14948 May 09 02:45	29° X 54'30	-0°02'28	max. Earth dist.	14953 Oct 22 11:53	15° M 30'26	5.89700 AU
minimum elong	14948 May 09 02:44	29° X 54'29	0°03'17	morning rise	14953 Nov 04 11:46	18° M 41'12	
behind sun begin	14948 May 08 18:46	29° X 50'15			14953 Dec 24 03:28	0° X	
behind sun end	14948 May 09 10:42	29° X 58'44		asc. node	14954 Feb 11 02:29	7° X 46'34	
	14948 May 09 13:04	0° II		retrograde	14954 Mar 16 00:46	9° X 32'07	
morning rise	14948 May 22 00:57	2° II 40'09		min. Earth dist.	14954 May 13 09:45	4° X 38'05	3.90260 AU
retrograde	14948 Sep 20 00:58	19° II 19'12		opposition	14954 May 14 05:53	4° X 31'16	0°07'53
opposition	14948 Nov 20 06:04	14° II 24'51	-0°15'57		14954 Jun 26 01:26	30° R M	
min. Earth dist.	14948 Nov 21 06:53	14° II 16'55	4.48502 AU	direct	14954 Jul 11 08:14	29° M 35'48	
direct	14949 Jan 21 17:09	9° II 24'15			14954 Jul 26 15:41	0° X	
evening set	14949 May 26 07:13	26° II 38'10		evening set	14954 Nov 15 23:32	19° X 45'55	
max. Earth dist.	14949 Jun 06 06:15	29° II 00'50	6.43986 AU	conjunction	14954 Nov 29 11:59	23° X 02'01	0°15'06
conjunction	14949 Jun 08 04:33	29° II 26'03	-0°18'41	minimum elong	14954 Nov 29 11:58	23° X 02'01	0°16'04
minimum elong	14949 Jun 08 04:32	29° II 26'03	0°19'39	max. Earth dist.	14954 Dec 01 08:59	23° X 29'16	5.93648 AU
	14949 Jun 10 18:53	0° Ω		morning rise	14954 Dec 13 01:53	26° X 18'45	
morning rise	14949 Jun 21 00:39	2° Ω 13'31			14954 Dec 28 15:33	0° Ω	
retrograde	14949 Oct 21 07:25	19° Ω 21'50		retrograde	14955 Apr 22 11:27	16° Ω 34'05	
opposition	14949 Dec 21 05:46	14° Ω 28'04	-0°37'15	min. Earth dist.	14955 Jun 19 09:57	11° Ω 49'05	3.99504 AU
min. Earth dist.	14949 Dec 22 19:07	14° Ω 16'04	4.37682 AU	opposition	14955 Jun 20 21:10	11° Ω 37'09	0°36'06
direct	14950 Feb 21 07:51	9° Ω 27'40		direct	14955 Aug 18 08:04	6° Ω 34'25	
evening set	14950 Jun 26 08:47	27° Ω 17'43		evening set	14955 Dec 23 10:39	26° Ω 09'25	
max. Earth dist.	14950 Jul 06 21:39	29° Ω 39'17	6.29976 AU	conjunction	14956 Jan 05 23:34	29° Ω 19'21	0°29'44
	14950 Jul 08 10:30	0° Ω		minimum elong	14956 Jan 05 23:34	29° Ω 19'21	0°30'40
conjunction	14950 Jul 09 05:33	0° Ω 10'42	-0°30'18	max. Earth dist.	14956 Jan 08 11:06	29° Ω 54'11	6.07149 AU
minimum elong	14950 Jul 09 05:33	0° Ω 10'42	0°31'13		14956 Jan 08 21:03	0° \approx	
morning rise	14950 Jul 22 01:31	3° Ω 03'38		morning rise	14956 Jan 19 13:17	2° \approx 29'20	
	14950 Sep 18 19:33	15° Ω			14956 Mar 18 22:10	15° \approx	
retrograde	14950 Nov 23 16:52	21° Ω 08'16		retrograde	14956 May 26 04:00	21° \approx 43'10	
opposition	14951 Jan 23 05:21	16° Ω 13'59	-0°49'07	min. Earth dist.	14956 Jul 23 13:05	16° \approx 52'59	4.15763 AU
min. Earth dist.	14951 Jan 24 19:27	16° Ω 01'38	4.21332 AU	opposition	14956 Jul 25 03:09	16° \approx 40'13	0°49'06
	14951 Feb 01 19:56	15° R Ω			14956 Aug 06 20:21	15° R \approx	
direct	14951 Mar 25 07:09	11° Ω 14'37		direct	14956 Sep 22 12:50	11° \approx 41'45	
	14951 May 14 14:36	15° Ω			14956 Nov 08 04:32	15° \approx	

	14957 Jan 25 18:55	0°♏		conjunction	14962 Jul 13 15:49	4°♎43'13	-0°31'18
evening set	14957 Jan 26 19:53	0°♏13'57		minimum elong	14962 Jul 13 15:49	4°♎43'12	0°32'10
				morning rise	14962 Jul 26 12:02	7°♎37'05	
conjunction	14957 Feb 09 06:30	3°♏15'06	0°33'11		14962 Aug 29 15:31	15°♎	
minimum elong	14957 Feb 09 06:30	3°♏15'07	0°33'43	retrograde	14962 Nov 28 13:33	25°♎50'30	
max. Earth dist.	14957 Feb 11 09:05	3°♏43'33	6.24676 AU	opposition	14963 Jan 27 23:26	20°♎56'05	-0°49'37
morning rise	14957 Feb 22 17:00	6°♏15'51		min. Earth dist.	14963 Jan 29 13:39	20°♎43'40	4.19066 AU
retrograde	14957 Jun 27 08:25	24°♏17'06		direct	14963 Mar 29 22:57	15°♎56'53	
opposition	14957 Aug 26 19:52	19°♏16'04	0°45'09		14963 Jul 12 22:10	0°♐	
min. Earth dist.	14957 Aug 25 17:06	19°♏24'55	4.32955 AU	evening set	14963 Aug 02 21:42	4°♐46'55	
direct	14957 Oct 26 12:02	14°♏16'21		max. Earth dist.	14963 Aug 13 21:21	7°♐21'12	6.10300 AU
	14958 Feb 19 17:12	0°♑					
evening set	14958 Feb 28 20:54	1°♑58'01		conjunction	14963 Aug 15 20:49	7°♐49'05	-0°32'42
				minimum elong	14963 Aug 15 20:49	7°♐49'05	0°33'10
conjunction	14958 Mar 14 03:57	4°♑51'19	0°26'10	morning rise	14963 Aug 28 20:09	10°♐51'45	
minimum elong	14958 Mar 14 03:57	4°♑51'19	0°26'11		14963 Dec 20 21:55	0°♑	
max. Earth dist.	14958 Mar 15 08:44	5°♑06'58	6.40223 AU	retrograde	14964 Jan 04 00:33	0°♑19'17	
morning rise	14958 Mar 27 09:56	7°♑43'53			14964 Jan 18 02:16	30°♑	
retrograde	14958 Jul 27 15:27	24°♑50'15		opposition	14964 Mar 03 19:45	25°♐23'24	-0°43'33
opposition	14958 Sep 26 14:43	19°♑51'58	0°28'38	min. Earth dist.	14964 Mar 04 20:46	25°♐15'10	4.02120 AU
min. Earth dist.	14958 Sep 26 04:20	19°♑55'21	4.45798 AU	direct	14964 May 02 10:42	20°♐26'07	
direct	14958 Nov 27 07:02	14°♑51'40			14964 Jul 23 10:13	0°♑	
	14959 Mar 22 11:13	0°♒		evening set	14964 Sep 06 09:28	10°♑10'47	
evening set	14959 Apr 01 01:49	2°♒01'29					
				conjunction	14964 Sep 19 13:08	13°♑21'47	-0°22'32
conjunction	14959 Apr 14 04:50	4°♒49'36	0°12'12	minimum elong	14964 Sep 19 13:09	13°♑21'47	0°22'24
minimum elong	14959 Apr 14 04:50	4°♒49'36	0°11'43	max. Earth dist.	14964 Sep 18 15:10	13°♑08'27	5.95550 AU
behind sun begin	14959 Apr 13 23:12	4°♒46'36		morning rise	14964 Oct 02 18:15	16°♑33'47	
behind sun end	14959 Apr 14 10:29	4°♒52'36			14964 Dec 03 00:23	0°♒	
max. Earth dist.	14959 Apr 14 04:56	4°♒49'39	6.49499 AU	retrograde	14965 Feb 10 12:01	7°♒04'42	
morning rise	14959 Apr 27 06:18	7°♒36'56		opposition	14965 Apr 10 20:20	2°♒06'22	-0°20'06
	14959 Jun 02 16:36	15°♒		min. Earth dist.	14965 Apr 10 21:50	2°♒05'52	3.91122 AU
retrograde	14959 Aug 26 07:12	24°♒15'50			14965 Apr 27 02:50	30°♒	
opposition	14959 Oct 26 11:38	19°♒20'03	0°05'20	direct	14965 Jun 08 08:29	27°♑10'44	
min. Earth dist.	14959 Oct 26 21:18	19°♒16'57	4.51029 AU		14965 Jul 19 22:51	0°♒	
	14959 Dec 06 14:33	15°♒			14965 Oct 03 19:38	15°♒	
direct	14959 Dec 27 20:29	14°♒19'31		evening set	14965 Oct 13 22:29	17°♒26'55	
desc. node	14960 Jan 18 19:16	15°♒02'18					
	14960 Jan 18 04:42	15°♒		conjunction	14965 Oct 27 07:48	20°♒43'33	-0°03'08
	14960 Apr 23 22:19	0°♓		minimum elong	14965 Oct 27 07:47	20°♒43'33	0°02'25
evening set	14960 Apr 30 07:29	1°♓20'55		behind sun begin	14965 Oct 26 23:28	20°♒38'28	
max. Earth dist.	14960 May 12 02:53	3°♓52'19	6.50312 AU	behind sun end	14965 Oct 27 16:06	20°♒48'37	
				max. Earth dist.	14965 Oct 28 00:31	20°♒53'48	5.89479 AU
conjunction	14960 May 13 06:56	4°♓07'20	-0°04'50	morning rise	14965 Nov 09 18:41	24°♒01'07	
minimum elong	14960 May 13 06:55	4°♓07'20	0°05'41		14965 Dec 04 22:42	0°♓	
behind sun begin	14960 May 12 23:14	4°♓03'14		asc. node	14965 Dec 23 21:53	4°♓11'10	
behind sun end	14960 May 13 14:36	4°♓11'25		retrograde	14966 Mar 21 08:45	14°♓51'48	
morning rise	14960 May 26 04:55	6°♓53'06		opposition	14966 Mar 19 12:38	9°♓50'39	0°12'23
retrograde	14960 Sep 24 07:41	23°♓34'37		min. Earth dist.	14966 May 18 14:32	9°♓58'07	3.90790 AU
opposition	14960 Nov 24 11:46	18°♓40'20	-0°19'15	direct	14966 Jul 16 15:10	4°♓55'07	
min. Earth dist.	14960 Nov 25 14:37	18°♓31'45	4.47437 AU	evening set	14966 Nov 21 05:31	25°♓02'08	
direct	14961 Jan 25 22:54	13°♓39'40					
	14961 May 26 03:22	0°♔		conjunction	14966 Dec 04 18:13	28°♓17'48	0°17'41
evening set	14961 May 30 13:22	0°♔57'10		minimum elong	14966 Dec 04 18:12	28°♓17'48	0°18'40
max. Earth dist.	14961 Jun 10 11:38	3°♔19'52	6.42497 AU	max. Earth dist.	14966 Dec 06 18:20	28°♓46'50	5.94853 AU
					14966 Dec 11 19:45	0°♕	
conjunction	14961 Jun 12 10:38	3°♔45'33	-0°20'40	morning rise	14966 Dec 18 08:26	1°♕34'02	
minimum elong	14961 Jun 12 10:38	3°♔45'33	0°21'39	retrograde	14967 Apr 27 09:52	21°♕48'26	
morning rise	14961 Jun 25 06:26	6°♔33'29		min. Earth dist.	14967 Jun 24 08:30	16°♕58'02	4.01258 AU
retrograde	14961 Oct 25 17:48	23°♔47'35		opposition	14967 Jun 25 21:48	16°♕45'25	0°38'57
opposition	14961 Dec 25 16:27	18°♔53'47	-0°39'35	direct	14967 Aug 23 09:57	11°♕48'30	
min. Earth dist.	14961 Dec 27 05:51	18°♔41'46	4.35831 AU		14967 Dec 23 09:04	0°♖	
direct	14962 Feb 25 15:27	13°♔53'30		evening set	14967 Dec 28 11:55	1°♖10'56	
	14962 Jun 22 14:13	0°♗					
evening set	14962 Jun 30 19:07	1°♗49'23		conjunction	14968 Jan 11 00:37	4°♖19'49	0°30'55
max. Earth dist.	14962 Jul 11 07:49	4°♗11'34	6.27862 AU	minimum elong	14968 Jan 11 00:37	4°♖19'49	0°31'46
				max. Earth dist.	14968 Jan 13 11:15	4°♖53'57	6.09286 AU

morning rise	14968 Jan 24 14:05	7°≈28'41			14974 Jun 06 06:40	0°♌	
	14968 Feb 27 12:18	15°≈		evening set	14974 Jul 05 03:23	6°♌16'24	
retrograde	14968 May 30 19:53	26°≈32'53		max. Earth dist.	14974 Jul 15 16:14	8°♌39'22	6.25537 AU
min. Earth dist.	14968 Jul 28 07:19	21°≈42'23	4.18071 AU				
opposition	14968 Jul 29 19:54	21°≈30'07	0°49'29	conjunction	14974 Jul 18 00:23	9°♌11'14	-0°32'04
direct	14968 Sep 27 10:38	16°≈31'28		minimum elong	14974 Jul 18 00:23	9°♌11'14	0°32'54
	14969 Jan 08 22:05	0°♋		morning rise	14974 Jul 30 20:44	12°♌06'08	
evening set	14969 Jan 31 13:35	4°♋56'21			14974 Aug 12 19:40	15°♌	
					14974 Nov 15 18:17	0°♍	
conjunction	14969 Feb 13 23:53	7°♋56'23	0°32'45	retrograde	14974 Dec 03 07:39	0°♍29'12	
minimum elong	14969 Feb 13 23:54	7°♋56'23	0°33'13		14974 Dec 20 20:51	30°♍♌	
max. Earth dist.	14969 Feb 16 01:57	8°♋24'24	6.26992 AU	opposition	14975 Feb 01 15:57	25°♌34'38	-0°49'47
morning rise	14969 Feb 27 09:44	10°♋55'54		min. Earth dist.	14975 Feb 03 05:26	25°♌22'26	4.16511 AU
retrograde	14969 Jul 01 15:21	28°♋48'17		direct	14975 Apr 03 10:26	20°♌35'35	
min. Earth dist.	14969 Aug 30 03:13	23°♋56'13	4.35116 AU		14975 Jun 25 03:17	0°♍	
opposition	14969 Aug 31 05:18	23°♋47'37	0°43'27	evening set	14975 Aug 07 13:45	9°♍34'09	
direct	14969 Oct 31 00:11	18°♋47'50		max. Earth dist.	14975 Aug 18 14:48	12°♍10'12	6.07718 AU
	14970 Feb 02 15:34	0°♎					
evening set	14970 Mar 05 07:37	6°♎23'29		conjunction	14975 Aug 20 13:16	12°♍37'40	-0°31'59
				minimum elong	14975 Aug 20 13:17	12°♍37'40	0°32'23
conjunction	14970 Mar 18 13:56	9°♎15'46	0°24'33	morning rise	14975 Sep 02 13:27	15°♍41'49	
minimum elong	14970 Mar 18 13:57	9°♎15'47	0°24'29		14975 Nov 10 02:17	0°♏	
max. Earth dist.	14970 Mar 19 14:33	9°♎29'07	6.42088 AU	retrograde	14976 Jan 09 04:34	5°♏20'40	
morning rise	14970 Mar 31 19:18	12°♎07'21		opposition	14976 Mar 08 21:39	0°♏24'28	-0°41'18
retrograde	14970 Jul 31 19:48	29°♎07'33		min. Earth dist.	14976 Mar 09 20:21	0°♏16'57	3.99734 AU
opposition	14970 Sep 30 19:17	24°♎09'37	0°25'41		14976 Mar 11 23:38	30°♍♍	
min. Earth dist.	14970 Sep 30 12:06	24°♎11'57	4.47252 AU	direct	14976 May 07 08:19	25°♍27'21	
direct	14970 Dec 01 15:46	19°♎09'14			14976 Jun 30 12:24	0°♏	
	14971 Mar 05 17:24	0°♐		evening set	14976 Sep 11 10:23	15°♏20'00	
evening set	14971 Apr 05 07:14	6°♐15'28					
				conjunction	14976 Sep 24 15:05	18°♏32'22	-0°20'17
conjunction	14971 Apr 18 09:41	9°♐03'00	0°09'57	minimum elong	14976 Sep 24 15:06	18°♏32'22	0°20'04
minimum elong	14971 Apr 18 09:41	9°♐03'00	0°09'25	max. Earth dist.	14976 Sep 23 22:51	18°♏22'29	5.93615 AU
behind sun begin	14971 Apr 18 02:59	8°♐59'26		morning rise	14976 Oct 07 21:00	21°♏45'41	
behind sun end	14971 Apr 18 16:24	9°♐06'34			14976 Nov 12 05:57	0°♑	
max. Earth dist.	14971 Apr 18 05:57	9°♐01'01	6.50438 AU	retrograde	14977 Feb 15 23:37	12°♑24'41	
morning rise	14971 May 01 10:35	11°♐49'45		opposition	14977 Apr 16 04:52	7°♑26'02	-0°15'52
	14971 May 16 14:18	15°♐		min. Earth dist.	14977 Apr 16 03:34	7°♑26'28	3.89874 AU
retrograde	14971 Aug 30 08:14	28°♐26'06		direct	14977 Jun 13 14:09	2°♑30'32	
opposition	14971 Oct 30 14:03	23°♐30'29	0°01'56		14977 Sep 15 23:29	15°♑	
min. Earth dist.	14971 Oct 31 01:36	23°♐26'47	4.51406 AU	evening set	14977 Oct 19 06:25	22°♑50'11	
desc. node	14971 Nov 29 13:58	20°♐02'17					
direct	14971 Dec 31 23:29	18°♐29'50		conjunction	14977 Nov 01 16:21	26°♑07'23	-0°00'02
	14972 Apr 07 16:48	0°♒		minimum elong	14977 Nov 01 16:21	26°♑07'23	0°00'44
evening set	14972 May 04 10:20	5°♒30'46		behind sun begin	14977 Nov 01 08:01	26°♑02'17	
max. Earth dist.	14972 May 16 03:25	8°♒00'59	6.50088 AU	behind sun end	14977 Nov 02 00:42	26°♑12'28	
				asc. node	14977 Nov 02 18:04	26°♑23'09	
conjunction	14972 May 17 09:27	8°♒17'05	-0°07'07	max. Earth dist.	14977 Nov 02 13:42	26°♑20'28	5.89039 AU
minimum elong	14972 May 17 09:26	8°♒17'05	0°08'00	morning rise	14977 Nov 15 04:11	29°♑25'32	
behind sun begin	14972 May 17 02:18	8°♒13'16			14977 Nov 17 12:52	0°♓	
behind sun end	14972 May 17 16:34	8°♒20'53		retrograde	14978 Mar 26 16:31	20°♓16'21	
morning rise	14972 May 30 06:51	11°♒02'43		opposition	14978 May 24 21:16	15°♓14'49	0°16'45
retrograde	14972 Sep 28 11:05	27°♒45'46		min. Earth dist.	14978 May 23 19:03	15°♓23'41	3.91234 AU
opposition	14972 Nov 28 15:40	22°♒51'36	-0°22'20	direct	14978 Jul 21 22:10	10°♓19'11	
min. Earth dist.	14972 Nov 29 20:45	22°♒42'18	4.46604 AU		14978 Nov 24 23:06	0°♔	
direct	14973 Jan 30 02:41	17°♒50'54		evening set	14978 Nov 26 14:07	0°♔23'19	
	14973 May 10 03:51	0°♕					
evening set	14973 Jun 03 17:13	5°♕11'16		conjunction	14978 Dec 10 03:03	3°♔38'29	0°20'08
max. Earth dist.	14973 Jun 14 11:24	7°♕32'15	6.41082 AU	minimum elong	14978 Dec 10 03:02	3°♔38'29	0°21'08
				max. Earth dist.	14978 Dec 12 05:59	4°♔09'07	5.96123 AU
conjunction	14973 Jun 16 14:05	8°♕00'02	-0°22'28	morning rise	14978 Dec 23 17:29	6°♔54'09	
minimum elong	14973 Jun 16 14:04	8°♕00'01	0°23'28	retrograde	14979 May 02 11:34	27°♔01'02	
morning rise	14973 Jun 29 09:54	10°♕48'28		min. Earth dist.	14979 Jun 29 10:39	22°♔10'41	4.03179 AU
retrograde	14973 Oct 30 04:17	28°♕08'28		opposition	14979 Jul 01 00:35	21°♔57'50	0°41'28
opposition	14973 Dec 30 01:12	23°♕14'33	-0°41'37	direct	14979 Aug 28 16:34	17°♔00'38	
min. Earth dist.	14973 Dec 31 16:06	23°♕02'02	4.33893 AU		14979 Dec 05 17:46	0°♕	
direct	14974 Mar 01 22:34	18°♕14'13		evening set	14980 Jan 02 14:42	6°♕15'33	

conjunction	14980 Jan 16 03:19	9°  23'16	0°31'50	min. Earth dist.	14984 Dec 04 04:49	26°  59'21	4.45271 AU
minimum elong	14980 Jan 16 03:19	9°  23'16	0°32'39	direct	14985 Feb 03 07:25	22°  08'28	
max. Earth dist.	14980 Jan 18 16:02	9°  58'26	6.11667 AU		14985 Apr 21 21:00	0° 	
morning rise	14980 Jan 29 16:18	12°  30'51		evening set	14985 Jun 08 00:03	9°  33'33	
	14980 Feb 09 14:44	15° 		max. Earth dist.	14985 Jun 18 17:28	11°  54'40	6.39194 AU
	14980 May 05 16:42	0° 					
retrograde	14980 Jun 04 11:36	1°  24'18		conjunction	14985 Jun 20 20:56	12°  23'00	-0°24'14
	14980 Jul 04 01:54	30° 		minimum elong	14985 Jun 20 20:56	12°  23'00	0°25'14
min. Earth dist.	14980 Aug 02 01:00	26°  33'58	4.20651 AU	morning rise	14985 Jul 03 16:32	15°  21'08	
opposition	14980 Aug 03 13:41	26°  21'42	0°49'29		14985 Sep 22 09:58	0° 	
direct	14980 Oct 02 07:44	21°  22'52		retrograde	14985 Nov 03 18:46	2°  39'45	
	14980 Dec 20 23:46	0° 			14985 Dec 16 12:14	30° 	
evening set	14981 Feb 05 08:10	9°  39'29		opposition	14986 Jan 03 14:03	27°  45'52	-0°43'33
				min. Earth dist.	14986 Jan 05 05:56	27°  33'02	4.31555 AU
conjunction	14981 Feb 18 17:46	12°  38'11	0°32'05	direct	14986 Mar 06 07:58	22°  45'41	
minimum elong	14981 Feb 18 17:46	12°  38'12	0°32'28		14986 May 18 01:31	0° 	
max. Earth dist.	14981 Feb 20 15:59	13°  03'55	6.29530 AU	evening set	14986 Jul 09 16:08	10°  55'33	
morning rise	14981 Mar 04 03:07	15°  36'23		max. Earth dist.	14986 Jul 20 03:58	13°  18'50	6.22914 AU
	14981 May 19 16:11	0° 					
retrograde	14981 Jul 05 23:55	3°  19'21		conjunction	14986 Jul 22 13:13	13°  51'32	-0°32'41
	14981 Aug 22 13:50	30° 		minimum elong	14986 Jul 22 13:13	13°  51'32	0°33'28
opposition	14981 Sep 04 15:05	28°  19'00	0°41'27		14986 Jul 27 13:03	15° 	
min. Earth dist.	14981 Sep 03 15:53	28°  26'38	4.37396 AU	morning rise	14986 Aug 04 10:06	16°  54'42	
direct	14981 Nov 04 14:40	23°  19'04			14986 Oct 08 10:54	0° 	
	14982 Jan 13 23:21	0° 		retrograde	14986 Dec 08 08:24	5°  11'47	
evening set	14982 Mar 09 18:17	10°  48'34		opposition	14987 Feb 06 13:58	0°  15'12	-0°49'38
				min. Earth dist.	14987 Feb 08 02:09	0°  15'12	4.13783 AU
conjunction	14982 Mar 23 00:11	13°  39'56	0°22'44		14987 Feb 10 00:47	30° 	
minimum elong	14982 Mar 23 00:12	13°  39'56	0°22'37	direct	14987 Apr 08 03:57	25°  28'11	
max. Earth dist.	14982 Mar 23 22:10	13°  51'48	6.43940 AU		14987 Jun 02 05:13	0° 	
morning rise	14982 Apr 05 04:44	16°  30'31		evening set	14987 Aug 12 11:00	14°  11'50	
	14982 Jun 17 11:04	0° 		max. Earth dist.	14987 Aug 23 17:00	17°  15'39	6.05146 AU
retrograde	14982 Aug 04 22:24	3°  24'56					
	14982 Sep 22 21:21	30° 		conjunction	14987 Aug 25 11:21	17°  40'49	-0°31'00
opposition	14982 Oct 05 00:07	28°  27'24	0°22'31	minimum elong	14987 Aug 25 11:22	17°  40'50	0°31'18
min. Earth dist.	14982 Oct 04 18:48	28°  29'07	4.48560 AU	morning rise	14987 Sep 07 12:08	20°  46'26	
direct	14982 Dec 05 22:00	23°  27'01			14987 Oct 18 12:14	0° 	
	14983 Feb 14 10:25	0° 		retrograde	14988 Jan 14 14:31	10°  36'22	
evening set	14983 Apr 09 13:04	10°  30'25		opposition	14988 Mar 14 04:48	5°  39'56	-0°38'34
				min. Earth dist.	14988 Mar 15 01:01	5°  33'13	3.97580 AU
conjunction	14983 Apr 22 14:52	13°  17'28	0°07'36	direct	14988 May 12 10:50	0°  43'10	
minimum elong	14983 Apr 22 14:53	13°  17'29	0°07'00	evening set	14988 Sep 16 16:38	20°  42'43	
behind sun begin	14983 Apr 22 07:27	13°  13'32					
behind sun end	14983 Apr 22 22:18	13°  21'25		conjunction	14988 Sep 29 22:03	23°  56'12	-0°17'45
max. Earth dist.	14983 Apr 22 06:36	13°  13'05	6.51109 AU	minimum elong	14988 Sep 29 22:04	23°  56'13	0°17'27
	14983 Apr 30 15:06	15° 		max. Earth dist.	14988 Sep 29 09:50	23°  48'45	5.92105 AU
morning rise	14983 May 05 15:13	16°  03'46		morning rise	14988 Oct 13 05:05	27°  10'43	
	14983 Jul 22 22:36	0° 			14988 Oct 24 22:20	0° 	
retrograde	14983 Sep 03 12:48	2°  38'49			14989 Jan 09 11:07	15° 	
desc. node	14983 Oct 10 15:27	0°  36'34		retrograde	14989 Feb 21 11:48	17°  55'32	
	14983 Oct 16 06:33	30° 			14989 Apr 05 21:54	15° 	
opposition	14983 Nov 03 17:57	27°  43'33	-0°01'35	opposition	14989 Apr 21 17:00	12°  56'28	-0°11'17
min. Earth dist.	14983 Nov 04 09:12	27°  38'39	4.51402 AU	min. Earth dist.	14989 Apr 21 10:42	12°  58'35	3.89223 AU
direct	14984 Jan 05 05:23	22°  42'53		direct	14989 Jun 18 23:04	8°  01'05	
	14984 Mar 20 04:18	0° 			14989 Aug 25 14:00	15° 	
evening set	14984 May 08 14:52	9°  44'45		asc. node	14989 Sep 08 20:23	17°  48'52	
max. Earth dist.	14984 May 20 02:56	12°  12'34	6.49398 AU	evening set	14989 Oct 24 17:20	28°  21'35	
					14989 Oct 31 10:30	0° 	
conjunction	14984 May 21 13:31	12°  31'09	-0°09'28				
minimum elong	14984 May 21 13:31	12°  31'09	0°10'22	conjunction	14989 Nov 07 03:56	1°  38'56	0°03'08
behind sun begin	14984 May 21 07:13	12°  27'47		minimum elong	14989 Nov 07 03:55	1°  38'55	0°03'56
behind sun end	14984 May 21 19:49	12°  34'31		behind sun begin	14989 Nov 06 19:41	1°  33'54	
morning rise	14984 Jun 03 10:41	15°  16'56		behind sun end	14989 Nov 07 12:09	1°  43'57	
	14984 Aug 26 12:52	0° 		max. Earth dist.	14989 Nov 08 06:58	1°  55'30	5.89336 AU
retrograde	14984 Oct 02 18:06	2°  30'16		morning rise	14989 Nov 20 16:19	4°  57'11	
	14984 Nov 09 02:12	30° 		retrograde	14990 Apr 01 01:29	25°  44'43	
opposition	14984 Dec 02 22:03	27°  09'12	-0°25'28	min. Earth dist.	14990 May 29 02:38	20°  52'25	3.92441 AU

opposition	14990 May 30 07:03	20° ♄ 42'46	0°21'04	retrograde	14995 Sep 07 14:45	6° ♄ 48'35	
direct	14990 Jul 27 10:06	15° ♄ 46'57		opposition	14995 Nov 07 20:43	1° ♄ 53'32	-0°05'04
	14990 Nov 07 06:36	0° ♄		min. Earth dist.	14995 Nov 08 13:51	1° ♄ 48'02	4.50956 AU
evening set	14990 Dec 01 22:43	5° ♄ 44'59			14995 Nov 23 00:21	30° ♄	
				direct	14996 Jan 09 07:28	26° ♄ 52'51	
conjunction	14990 Dec 15 11:53	8° ♄ 59'16	0°22'26		14996 Feb 25 12:48	0° ♄	
minimum elong	14990 Dec 15 11:52	8° ♄ 59'16	0°23'26	evening set	14996 May 12 18:54	13° ♄ 57'02	
max. Earth dist.	14990 Dec 17 19:22	9° ♄ 32'28	5.98111 AU	max. Earth dist.	14996 May 24 03:43	16° ♄ 23'30	6.48268 AU
morning rise	14990 Dec 29 02:10	12° ♄ 13'54					
	14991 Mar 31 11:15	0° ♄		conjunction	14996 May 25 17:14	16° ♄ 43'43	-0°11'45
retrograde	14991 May 07 10:59	2° ♄ 10'19		minimum elong	14996 May 25 17:14	16° ♄ 43'43	0°12'42
	14991 Jun 13 08:07	30° ♄		behind sun begin	14996 May 25 12:11	16° ♄ 41'00	
min. Earth dist.	14991 Jul 04 10:29	27° ♄ 20'14	4.05711 AU	behind sun end	14996 May 25 22:17	16° ♄ 46'25	
opposition	14991 Jul 06 01:35	27° ♄ 07'02	0°43'39	morning rise	14996 Jun 07 14:05	19° ♄ 29'50	
direct	14991 Sep 02 20:42	22° ♄ 09'33			14996 Jul 31 00:17	0° ♄	
	14991 Nov 15 19:54	0° ♄		retrograde	14996 Oct 07 03:09	6° ♄ 20'54	
evening set	14992 Jan 07 15:38	11° ♄ 15'04		opposition	14996 Dec 07 05:12	1° ♄ 26'58	-0°28'29
				min. Earth dist.	14996 Dec 08 14:38	1° ♄ 16'16	4.43520 AU
conjunction	14992 Jan 21 03:43	14° ♄ 21'18	0°32'32		14996 Dec 18 16:29	30° ♄	
minimum elong	14992 Jan 21 03:43	14° ♄ 21'18	0°33'19	direct	14997 Feb 07 13:30	26° ♄ 26'18	
	14992 Jan 23 22:59	15° ♄			14997 Mar 29 17:46	0° ♄	
max. Earth dist.	14992 Jan 23 14:27	14° ♄ 55'05	6.14479 AU	evening set	14997 Jun 12 07:46	13° ♄ 57'19	
morning rise	14992 Feb 03 16:22	17° ♄ 27'25		max. Earth dist.	14997 Jun 22 22:02	16° ♄ 17'28	6.36938 AU
	14992 Apr 04 15:05	0° ♄					
retrograde	14992 Jun 08 23:36	6° ♄ 08'58		conjunction	14997 Jun 25 04:31	16° ♄ 47'37	-0°25'54
min. Earth dist.	14992 Aug 06 17:24	1° ♄ 18'14	4.23472 AU	minimum elong	14997 Jun 25 04:31	16° ♄ 47'37	0°26'52
opposition	14992 Aug 08 04:32	1° ♄ 06'30	0°49'10	morning rise	14997 Jul 08 00:19	19° ♄ 37'41	
	14992 Aug 16 13:43	30° ♄			14997 Aug 27 20:31	0° ♄	
direct	14992 Oct 07 03:13	26° ♄ 07'23		retrograde	14997 Nov 08 11:26	7° ♄ 14'17	
	14992 Nov 27 10:16	0° ♄		opposition	14998 Jan 08 04:42	2° ♄ 20'19	-0°45'16
evening set	14993 Feb 09 23:29	14° ♄ 15'17		min. Earth dist.	14998 Jan 09 20:10	2° ♄ 07'35	4.28947 AU
					14998 Jan 27 01:28	30° ♄	
conjunction	14993 Feb 23 08:42	17° ♄ 12'42	0°31'14	direct	14998 Mar 10 18:19	27° ♄ 20'17	
minimum elong	14993 Feb 23 08:42	17° ♄ 12'42	0°31'33		14998 Apr 22 02:13	0° ♄	
max. Earth dist.	14993 Feb 25 04:47	17° ♄ 37'06	6.32140 AU		14998 Jul 11 10:35	15° ♄	
morning rise	14993 Mar 08 17:12	20° ♄ 09'31		evening set	14998 Jul 14 06:51	15° ♄ 38'47	
	14993 Apr 25 21:58	0° ♄		max. Earth dist.	14998 Jul 24 21:36	18° ♄ 04'34	6.20171 AU
retrograde	14993 Jul 10 04:47	7° ♄ 43'13					
opposition	14993 Sep 08 22:09	2° ♄ 43'15	0°39'16	conjunction	14998 Jul 27 04:24	18° ♄ 36'04	-0°33'07
min. Earth dist.	14993 Sep 08 01:08	2° ♄ 50'09	4.39598 AU	minimum elong	14998 Jul 27 04:24	18° ♄ 36'04	0°33'51
	14993 Sep 30 22:21	30° ♄		morning rise	14998 Aug 09 01:34	21° ♄ 33'33	
direct	14993 Nov 09 01:16	27° ♄ 43'15			14998 Sep 16 17:28	0° ♄	
	14993 Dec 18 12:09	0° ♄		retrograde	14998 Dec 13 11:35	10° ♄ 18'57	
evening set	14994 Mar 14 02:22	15° ♄ 07'00		opposition	14999 Feb 11 14:14	5° ♄ 24'04	-0°49'09
				min. Earth dist.	14999 Feb 13 01:14	5° ♄ 12'38	4.11135 AU
conjunction	14994 Mar 27 07:29	17° ♄ 57'27	0°20'52	direct	14999 Apr 12 23:29	0° ♄ 25'35	
minimum elong	14994 Mar 27 07:30	17° ♄ 57'28	0°20'39	evening set	14999 Aug 17 10:33	19° ♄ 41'55	
max. Earth dist.	14994 Mar 27 23:30	18° ♄ 06'04	6.45571 AU	max. Earth dist.	14999 Aug 28 19:36	22° ♄ 24'27	6.02831 AU
morning rise	14994 Apr 09 11:33	20° ♄ 47'12					
	14994 May 25 15:03	0° ♄		conjunction	14999 Aug 30 11:25	22° ♄ 48'14	-0°29'46
retrograde	14994 Aug 09 01:22	7° ♄ 36'47		minimum elong	14999 Aug 30 11:26	22° ♄ 48'14	0°29'59
opposition	14994 Oct 09 03:04	2° ♄ 39'36	0°19'19	morning rise	14999 Sep 12 13:10	25° ♄ 55'19	
min. Earth dist.	14994 Oct 09 01:43	2° ♄ 40'02	4.49539 AU		14999 Sep 29 23:02	0° ♄	
	14994 Oct 30 21:10	30° ♄		retrograde	15000 Jan 19 23:50	15° ♄ 55'05	
direct	14994 Dec 10 04:18	27° ♄ 39'06		opposition	15000 Mar 20 13:24	10° ♄ 58'19	-0°35'29
	14995 Jan 19 17:11	0° ♄		min. Earth dist.	15000 Mar 21 05:01	10° ♄ 53'08	3.95851 AU
evening set	14995 Apr 13 17:07	14° ♄ 40'46		direct	15000 May 18 14:54	6° ♄ 01'51	
	14995 Apr 15 05:25	15° ♄		evening set	15000 Sep 22 23:31	26° ♄ 06'25	
conjunction	14995 Apr 26 18:34	17° ♄ 27'33	0°05'15	conjunction	15000 Oct 06 05:45	29° ♄ 20'45	-0°15'04
minimum elong	14995 Apr 26 18:35	17° ♄ 27'33	0°04'36	minimum elong	15000 Oct 06 05:46	29° ♄ 20'45	0°14'40
behind sun begin	14995 Apr 26 10:43	17° ♄ 23'23		behind sun begin	15000 Oct 06 02:14	29° ♄ 18'36	
behind sun end	14995 Apr 27 02:27	17° ♄ 31'44		behind sun end	15000 Oct 06 09:17	29° ♄ 22'54	
max. Earth dist.	14995 Apr 26 06:44	17° ♄ 21'15	6.51372 AU	max. Earth dist.	15000 Oct 06 00:08	29° ♄ 17'19	5.91144 AU
morning rise	14995 May 09 18:20	20° ♄ 13'34			15000 Oct 08 21:51	0° ♄	
	14995 Jun 28 14:17	0° ♄		morning rise	15000 Oct 19 13:31	2° ♄ 36'05	
desc. node	14995 Aug 23 06:20	6° ♄ 26'47			15000 Dec 13 17:12	15° ♄	

retrograde	15001 Feb 28 00:08	23° \mathbb{M} 24'15		opposition	15006 Oct 14 06:54	6° \mathcal{B} 54'54	0°15'59
opposition	15001 Apr 28 04:24	18° \mathbb{M} 24'43	-0°06'37	min. Earth dist.	15006 Oct 14 07:52	6° \mathcal{B} 54'35	4.50098 AU
min. Earth dist.	15001 Apr 27 19:13	18° \mathbb{M} 27'49	3.89138 AU	direct	15006 Dec 15 09:54	1° \mathcal{B} 54'26	
	15001 May 26 07:06	15° $\mathcal{R}\mathbb{M}$			15007 Mar 31 01:21	15° \mathcal{B}	
direct	15001 Jun 25 09:43	13° \mathbb{M} 29'24		evening set	15007 Apr 18 22:31	18° \mathcal{B} 55'32	
asc. node	15001 Jul 17 13:17	14° \mathbb{M} 19'37					
	15001 Jul 25 08:55	15° \mathbb{M}		conjunction	15007 May 01 23:21	21° \mathcal{B} 42'09	0°02'49
	15001 Oct 15 06:20	0° \mathcal{Z}		minimum elong	15007 May 01 23:22	21° \mathcal{B} 42'09	0°02'07
evening set	15001 Oct 31 02:50	3° \mathcal{Z} 48'28		behind sun begin	15007 May 01 15:20	21° \mathcal{B} 37'53	
				behind sun end	15007 May 02 07:24	21° \mathcal{B} 46'25	
conjunction	15001 Nov 13 14:00	7° \mathcal{Z} 05'43	0°06'10	max. Earth dist.	15007 May 01 06:28	21° \mathcal{B} 33'08	6.51287 AU
minimum elong	15001 Nov 13 14:00	7° \mathcal{Z} 05'43	0°07'02	morning rise	15007 May 14 22:48	24° \mathcal{B} 28'04	
behind sun begin	15001 Nov 13 06:17	7° \mathcal{Z} 01'01			15007 Jun 10 19:31	0° \mathbb{I}	
behind sun end	15001 Nov 13 21:43	7° \mathcal{Z} 10'24		desc. node	15007 Jul 05 07:50	4° \mathbb{I} 30'47	
max. Earth dist.	15001 Nov 14 23:05	7° \mathcal{Z} 25'56	5.90117 AU	retrograde	15007 Sep 12 21:12	11° \mathbb{I} 04'09	
morning rise	15001 Nov 27 02:48	10° \mathcal{Z} 23'45		opposition	15007 Nov 13 01:52	6° \mathbb{I} 09'20	-0°08'35
	15002 Mar 12 10:34	0° \mathcal{B}		min. Earth dist.	15007 Nov 13 22:14	6° \mathbb{I} 02'48	4.50247 AU
retrograde	15002 Apr 07 07:45	1° \mathcal{B} 05'57		direct	15008 Jan 14 13:37	1° \mathbb{I} 08'39	
	15002 May 03 01:03	30° $\mathcal{R}\mathcal{Z}$		evening set	15008 May 18 01:00	18° \mathbb{I} 15'45	
min. Earth dist.	15002 Jun 04 06:46	26° \mathcal{Z} 14'14	3.93996 AU	max. Earth dist.	15008 May 29 06:56	20° \mathbb{I} 41'06	6.46996 AU
opposition	15002 Jun 05 13:42	26° \mathcal{Z} 03'46	0°25'07				
direct	15002 Aug 02 17:42	21° \mathcal{Z} 07'48		conjunction	15008 May 30 23:07	21° \mathbb{I} 02'49	-0°14'02
	15002 Oct 19 18:34	0° \mathcal{B}		minimum elong	15008 May 30 23:07	21° \mathbb{I} 02'49	0°15'00
evening set	15002 Dec 08 04:33	10° \mathcal{B} 59'03		behind sun begin	15008 May 30 20:10	21° \mathbb{I} 01'14	
				behind sun end	15008 May 31 02:04	21° \mathbb{I} 04'24	
conjunction	15002 Dec 21 17:33	14° \mathcal{B} 12'17	0°24'31	morning rise	15008 Jun 12 19:41	23° \mathbb{I} 49'19	
minimum elong	15002 Dec 21 17:32	14° \mathcal{B} 12'17	0°25'29		15008 Jul 12 13:03	0° \mathcal{B}	
max. Earth dist.	15002 Dec 24 01:30	14° \mathcal{B} 45'34	6.00240 AU	retrograde	15008 Oct 12 12:51	10° \mathcal{B} 45'26	
morning rise	15003 Jan 04 07:56	17° \mathcal{B} 25'52		opposition	15008 Dec 12 14:39	5° \mathcal{B} 51'34	-0°31'26
	15003 Mar 03 17:10	0° \approx		min. Earth dist.	15008 Dec 14 00:16	5° \mathcal{B} 40'48	4.41791 AU
retrograde	15003 May 13 06:04	7° \approx 11'58		direct	15009 Feb 12 19:55	0° \mathcal{B} 51'02	
min. Earth dist.	15003 Jul 10 08:02	2° \approx 21'57	4.08177 AU	evening set	15009 Jun 17 17:46	18° \mathcal{B} 27'44	
opposition	15003 Jul 11 23:20	2° \approx 08'40	0°45'28	max. Earth dist.	15009 Jun 28 08:42	20° \mathcal{B} 48'53	6.34901 AU
	15003 Jul 28 11:04	30° $\mathcal{R}\mathcal{B}$					
direct	15003 Sep 08 21:34	27° \mathcal{B} 10'56		conjunction	15009 Jun 30 14:30	21° \mathcal{B} 18'48	-0°27'28
	15003 Oct 21 08:26	0° \approx		minimum elong	15009 Jun 30 14:29	21° \mathcal{B} 18'48	0°28'24
	15004 Jan 08 13:42	15° \approx		morning rise	15009 Jul 13 10:14	24° \mathcal{B} 09'40	
evening set	15004 Jan 13 13:26	16° \approx 07'55			15009 Aug 09 13:48	0° \mathcal{Q}	
				retrograde	15009 Nov 14 06:33	11° \mathcal{Q} 54'19	
conjunction	15004 Jan 27 01:18	19° \approx 12'53	0°32'59	opposition	15010 Jan 13 21:30	7° \mathcal{Q} 00'19	-0°46'46
minimum elong	15004 Jan 27 01:19	19° \approx 12'53	0°33'43	min. Earth dist.	15010 Jan 15 13:21	6° \mathcal{Q} 47'27	4.26752 AU
max. Earth dist.	15004 Jan 29 11:14	19° \approx 46'01	6.17068 AU	direct	15010 Mar 16 08:40	2° \mathcal{Q} 00'32	
morning rise	15004 Feb 09 13:19	22° \approx 17'36			15010 Jun 25 13:46	15° \mathcal{Q}	
	15004 Mar 16 01:43	0° \mathcal{H}		evening set	15010 Jul 19 22:44	20° \mathcal{Q} 25'48	
retrograde	15004 Jun 14 11:10	10° \mathcal{H} 48'44		max. Earth dist.	15010 Jul 30 14:24	22° \mathcal{Q} 52'52	6.18013 AU
min. Earth dist.	15004 Aug 12 08:16	5° \mathcal{H} 57'40	4.25943 AU				
opposition	15004 Aug 13 17:26	5° \mathcal{H} 46'38	0°48'34	conjunction	15010 Aug 01 20:28	23° \mathcal{Q} 24'05	-0°33'23
direct	15004 Oct 12 20:30	0° \mathcal{H} 47'24		minimum elong	15010 Aug 01 20:28	23° \mathcal{Q} 24'05	0°34'03
evening set	15005 Feb 15 13:27	18° \mathcal{H} 48'10		morning rise	15010 Aug 14 18:09	26° \mathcal{Q} 22'40	
					15010 Aug 30 17:21	0° \mathbb{P}	
conjunction	15005 Feb 28 22:01	21° \mathcal{H} 44'28	0°30'13	retrograde	15010 Dec 19 12:11	15° \mathbb{P} 17'03	
minimum elong	15005 Feb 28 22:02	21° \mathcal{H} 44'28	0°30'28	opposition	15011 Feb 17 14:40	10° \mathbb{P} 21'54	-0°48'23
max. Earth dist.	15005 Mar 02 13:45	22° \mathcal{H} 06'21	6.34298 AU	min. Earth dist.	15011 Feb 18 22:22	10° \mathbb{P} 11'31	4.09208 AU
morning rise	15005 Mar 14 06:03	24° \mathcal{H} 40'11		direct	15011 Apr 18 19:26	5° \mathbb{P} 23'42	
	15005 Apr 08 07:49	0° \mathcal{Y}		evening set	15011 Aug 23 09:01	24° \mathbb{P} 45'41	
retrograde	15005 Jul 15 09:28	12° \mathcal{Y} 06'28		max. Earth dist.	15011 Sep 04 00:00	27° \mathbb{P} 32'18	6.01329 AU
min. Earth dist.	15005 Sep 13 10:15	7° \mathcal{Y} 12'53	4.41311 AU				
opposition	15005 Sep 14 04:33	7° \mathcal{Y} 06'53	0°36'54	conjunction	15011 Sep 05 10:28	27° \mathbb{P} 52'56	-0°28'24
direct	15005 Nov 14 11:02	2° \mathcal{Y} 06'46		minimum elong	15011 Sep 05 10:28	27° \mathbb{P} 52'57	0°28'32
evening set	15006 Mar 19 10:22	19° \mathcal{Y} 26'31			15011 Sep 14 06:34	0° \mathcal{A}	
				morning rise	15011 Sep 18 12:45	1° \mathcal{A} 00'58	
conjunction	15006 Apr 01 15:08	22° \mathcal{Y} 16'22	0°18'52	retrograde	15012 Jan 26 07:34	21° \mathcal{A} 07'08	
minimum elong	15006 Apr 01 15:09	22° \mathcal{Y} 16'22	0°18'35	opposition	15012 Mar 25 19:07	16° \mathcal{A} 10'00	-0°32'16
max. Earth dist.	15006 Apr 02 04:15	22° \mathcal{Y} 23'24	6.46736 AU	min. Earth dist.	15012 Mar 26 08:19	16° \mathcal{A} 05'36	3.94932 AU
morning rise	15006 Apr 14 18:26	25° \mathcal{Y} 05'25		direct	15012 May 23 18:52	11° \mathcal{A} 13'43	
	15006 May 08 08:48	0° \mathcal{B}			15012 Sep 22 14:31	0° \mathbb{M}	
retrograde	15006 Aug 14 03:57	11° \mathcal{B} 51'43		evening set	15012 Sep 28 02:39	1° \mathbb{M} 20'01	






























































































































conjunction	15012 Oct 11 09:33	4° \mathbb{M} 34'47	-0°12'25	morning rise	15018 Apr 18 23:19	29° Υ 18'03	
minimum elong	15012 Oct 11 09:33	4° \mathbb{M} 34'47	0°11'56		15018 Apr 22 06:16	0° \mathcal{B}	
behind sun begin	15012 Oct 11 03:49	4° \mathbb{M} 31'17			15018 Jul 23 01:52	15° \mathcal{B}	
behind sun end	15012 Oct 11 15:17	4° \mathbb{M} 38'16		retrograde	15018 Aug 18 06:21	16° \mathcal{B} 02'36	
max. Earth dist.	15012 Oct 11 09:04	4° \mathbb{M} 34'29	5.90907 AU		15018 Sep 13 08:25	15° \mathcal{R} \mathcal{B}	
morning rise	15012 Oct 24 17:59	7° \mathbb{M} 50'32		opposition	15018 Oct 18 09:34	11° \mathcal{B} 06'05	0°12'44
	15012 Nov 24 02:38	15° \mathbb{M}		min. Earth dist.	15018 Oct 18 12:58	11° \mathcal{B} 04'59	4.50263 AU
retrograde	15013 Mar 05 05:02	28° \mathbb{M} 38'43		direct	15018 Dec 19 13:57	6° \mathcal{B} 05'35	
opposition	15013 May 03 09:51	23° \mathbb{M} 38'50	-0°02'11		15019 Mar 13 15:36	15° \mathcal{B}	
min. Earth dist.	15013 May 02 21:10	23° \mathbb{M} 43'06	3.89639 AU	evening set	15019 Apr 23 02:46	23° \mathcal{B} 07'12	
asc. node	15013 May 29 08:49	20° \mathbb{M} 26'43		max. Earth dist.	15019 May 05 08:47	25° \mathcal{B} 43'53	6.50947 AU
direct	15013 Jun 30 13:24	18° \mathbb{M} 43'31					
	15013 Sep 27 12:37	0° \mathcal{A}		conjunction	15019 May 06 03:24	25° \mathcal{B} 53'49	0°00'24
evening set	15013 Nov 05 06:15	8° \mathcal{A} 59'10		minimum elong	15019 May 06 03:22	25° \mathcal{B} 53'49	0°00'21
				behind sun begin	15019 May 05 19:22	25° \mathcal{B} 49'33	
conjunction	15013 Nov 18 17:36	12° \mathcal{A} 15'57	0°08'58	behind sun end	15019 May 06 11:23	25° \mathcal{B} 58'04	
minimum elong	15013 Nov 18 17:36	12° \mathcal{A} 15'57	0°09'53	desc. node	15019 May 15 21:54	27° \mathcal{B} 59'05	
behind sun begin	15013 Nov 18 10:50	12° \mathcal{A} 11'51		morning rise	15019 May 19 02:12	28° \mathcal{B} 39'40	
behind sun end	15013 Nov 19 00:22	12° \mathcal{A} 20'04			15019 May 25 10:16	0° \mathbb{I}	
max. Earth dist.	15013 Nov 20 04:39	12° \mathcal{A} 37'18	5.91275 AU	retrograde	15019 Sep 17 00:50	15° \mathbb{I} 17'24	
morning rise	15013 Dec 02 06:53	15° \mathcal{A} 33'35		opposition	15019 Nov 17 06:07	10° \mathbb{I} 22'46	-0°11'58
	15014 Feb 07 01:12	0° \mathcal{B}		min. Earth dist.	15019 Nov 18 03:37	10° \mathbb{I} 15'53	4.49429 AU
retrograde	15014 Apr 12 05:14	6° \mathcal{B} 09'20		direct	15020 Jan 18 17:07	5° \mathbb{I} 22'09	
min. Earth dist.	15014 Jun 09 04:56	1° \mathcal{B} 17'54	3.95675 AU	evening set	15020 May 22 06:18	22° \mathbb{I} 32'15	
opposition	15014 Jun 10 13:22	1° \mathcal{B} 06'54	0°28'43	max. Earth dist.	15020 Jun 02 09:23	24° \mathbb{I} 56'32	6.45728 AU
	15014 Jun 18 20:44	30° \mathcal{R} \mathcal{A}					
direct	15014 Aug 07 19:27	26° \mathcal{A} 10'41		conjunction	15020 Jun 04 04:01	25° \mathbb{I} 19'39	-0°16'11
	15014 Sep 25 22:21	0° \mathcal{B}		minimum elong	15020 Jun 04 04:00	25° \mathbb{I} 19'39	0°17'10
evening set	15014 Dec 13 03:23	15° \mathcal{B} 55'10		morning rise	15020 Jun 17 00:25	28° \mathbb{I} 06'33	
					15020 Jun 25 20:21	0° \mathcal{B}	
conjunction	15014 Dec 26 16:29	19° \mathcal{B} 07'27	0°26'19	retrograde	15020 Oct 16 23:53	15° \mathcal{B} 07'40	
minimum elong	15014 Dec 26 16:28	19° \mathcal{B} 07'27	0°27'16	opposition	15020 Dec 16 23:38	10° \mathcal{B} 13'49	-0°34'09
max. Earth dist.	15014 Dec 29 01:38	19° \mathcal{B} 41'19	6.02277 AU	min. Earth dist.	15020 Dec 18 11:12	10° \mathcal{B} 02'24	4.40118 AU
morning rise	15015 Jan 09 06:32	22° \mathcal{B} 19'57		direct	15021 Feb 17 04:22	5° \mathcal{B} 13'19	
	15015 Feb 12 06:02	0° \approx		evening set	15021 Jun 22 02:24	22° \mathcal{B} 55'17	
retrograde	15015 May 17 20:54	11° \approx 56'41		max. Earth dist.	15021 Jul 02 16:13	25° \mathcal{B} 16'27	6.32910 AU
min. Earth dist.	15015 Jul 15 00:48	7° \approx 06'19	4.10352 AU				
opposition	15015 Jul 16 14:47	6° \approx 53'31	0°46'54	conjunction	15021 Jul 04 23:08	25° \mathcal{B} 47'07	-0°28'48
direct	15015 Sep 13 16:59	1° \approx 55'36		minimum elong	15021 Jul 04 23:07	25° \mathcal{B} 47'07	0°29'44
	15015 Dec 23 04:36	15° \approx		morning rise	15021 Jul 17 18:56	28° \mathcal{B} 38'48	
evening set	15016 Jan 18 05:41	20° \approx 45'34			15021 Jul 23 21:43	0° \mathcal{Q}	
					15021 Oct 18 09:05	15° \mathcal{Q}	
conjunction	15016 Jan 31 17:12	23° \approx 49'28	0°33'16	retrograde	15021 Nov 18 22:03	16° \mathcal{Q} 31'28	
minimum elong	15016 Jan 31 17:12	23° \approx 49'28	0°33'55		15021 Dec 20 13:09	15° \mathcal{R} \mathcal{Q}	
max. Earth dist.	15016 Feb 03 00:59	24° \approx 21'13	6.19189 AU	opposition	15022 Jan 18 12:59	11° \mathcal{Q} 37'19	-0°47'54
morning rise	15016 Feb 14 04:53	26° \approx 53'06		min. Earth dist.	15022 Jan 20 03:35	11° \mathcal{Q} 24'50	4.24556 AU
	15016 Feb 28 04:26	0° \mathcal{H}		direct	15022 Mar 20 19:43	6° \mathcal{Q} 37'41	
retrograde	15016 Jun 18 16:53	15° \mathcal{H} 15'51			15022 Jun 07 01:45	15° \mathcal{Q}	
min. Earth dist.	15016 Aug 16 17:38	10° \mathcal{H} 24'40	4.27857 AU	evening set	15022 Jul 24 13:26	25° \mathcal{Q} 09'59	
opposition	15016 Aug 18 01:30	10° \mathcal{H} 14'04	0°47'48	max. Earth dist.	15022 Aug 04 07:44	27° \mathcal{Q} 39'19	6.15767 AU
direct	15016 Oct 17 07:08	5° \mathcal{H} 14'43					
evening set	15017 Feb 19 23:22	23° \mathcal{H} 10'30		conjunction	15022 Aug 06 11:28	28° \mathcal{Q} 09'21	-0°33'22
				minimum elong	15022 Aug 06 11:28	28° \mathcal{Q} 09'21	0°33'58
conjunction	15017 Mar 05 07:35	26° \mathcal{H} 06'00	0°29'08		15022 Aug 14 10:07	0° \mathcal{P}	
minimum elong	15017 Mar 05 07:36	26° \mathcal{H} 06'01	0°29'19	morning rise	15022 Aug 19 09:31	1° \mathcal{P} 09'04	
max. Earth dist.	15017 Mar 06 19:59	26° \mathcal{H} 26'00	6.35883 AU	retrograde	15022 Dec 24 14:37	20° \mathcal{P} 13'06	
morning rise	15017 Mar 18 14:59	29° \mathcal{H} 00'52		opposition	15023 Feb 22 14:08	15° \mathcal{P} 17'46	-0°47'11
	15017 Mar 23 04:03	0° Υ		min. Earth dist.	15023 Feb 23 20:59	15° \mathcal{P} 07'38	4.07076 AU
retrograde	15017 Jul 19 13:12	16° Υ 21'50		direct	15023 Apr 23 16:12	10° \mathcal{P} 19'48	
opposition	15017 Sep 18 08:31	11° Υ 22'43	0°34'31	evening set	15023 Aug 28 06:56	29° \mathcal{P} 48'36	
min. Earth dist.	15017 Sep 17 17:02	11° Υ 27'46	4.42475 AU		15023 Aug 29 02:02	0° \mathcal{L}	
direct	15017 Nov 18 18:34	6° Υ 22'36		max. Earth dist.	15023 Sep 09 01:52	2° \mathcal{L} 38'14	5.99511 AU
evening set	15018 Mar 23 16:12	23° Υ 40'00					
				conjunction	15023 Sep 10 09:05	2° \mathcal{L} 57'01	-0°26'45
conjunction	15018 Apr 05 20:23	26° Υ 29'24	0°16'52	minimum elong	15023 Sep 10 09:06	2° \mathcal{L} 57'01	0°26'49
minimum elong	15018 Apr 05 20:24	26° Υ 29'24	0°16'31	morning rise	15023 Sep 23 12:11	6° \mathcal{L} 06'15	
max. Earth dist.	15018 Apr 06 04:53	26° Υ 33'57	6.47403 AU	retrograde	15024 Jan 31 14:16	26° \mathcal{L} 20'16	

opposition	15024 Mar 31 00:52	21°♏22'49	-0°28'42	opposition	15029 Sep 22 14:01	15°♑43'11	0°31'52
min. Earth dist.	15024 Mar 31 10:19	21°♏19'39	3.93640 AU	min. Earth dist.	15029 Sep 21 23:53	15°♑47'47	4.44147 AU
direct	15024 May 28 19:46	16°♏26'46		direct	15029 Nov 23 02:31	10°♑42'58	
	15024 Sep 05 08:16	0°♎		evening set	15030 Mar 27 22:56	27°♑56'07	
evening set	15024 Oct 03 06:48	6°♎36'41			15030 Apr 06 14:58	0°♎	
conjunction	15024 Oct 16 14:16	9°♎52'04	-0°09'35	conjunction	15030 Apr 10 02:36	0°♎44'48	0°14'45
minimum elong	15024 Oct 16 14:17	9°♎52'04	0°09'03	minimum elong	15030 Apr 10 02:36	0°♎44'49	0°14'21
behind sun begin	15024 Oct 16 07:13	9°♎47'46		behind sun begin	15030 Apr 09 22:59	0°♎42'53	
behind sun end	15024 Oct 16 21:21	9°♎56'23		behind sun end	15030 Apr 10 06:13	0°♎46'44	
max. Earth dist.	15024 Oct 16 17:41	9°♎54'08	5.90266 AU	max. Earth dist.	15030 Apr 10 08:11	0°♎47'47	6.48648 AU
morning rise	15024 Oct 29 23:36	13°♎08'31		morning rise	15030 Apr 23 04:47	3°♎32'43	
	15024 Nov 06 15:49	15°♎			15030 Jun 22 02:36	15°♎	
	15025 Jan 18 22:12	0°♎		retrograde	15030 Aug 22 08:13	20°♎13'33	
retrograde	15025 Mar 10 11:50	3°♎58'38		opposition	15030 Oct 22 12:24	15°♎17'20	0°09'23
asc. node	15025 Apr 10 11:54	2°♎24'42		min. Earth dist.	15030 Oct 22 18:26	15°♎15'23	4.51001 AU
	15025 May 01 01:04	30°♎			15030 Oct 24 18:17	15°♎	
opposition	15025 May 08 16:58	28°♎58'20	0°02'24	direct	15030 Dec 23 19:36	10°♎16'48	
min. Earth dist.	15025 May 08 01:09	29°♎03'40	3.89730 AU		15031 Feb 20 18:20	15°♎	
direct	15025 Jul 05 20:16	24°♎02'57		desc. node	15031 Mar 24 17:53	20°♎27'59	
	15025 Sep 05 18:55	0°♎		evening set	15031 Apr 27 06:06	27°♎16'50	
evening set	15025 Nov 10 12:16	14°♎16'58		max. Earth dist.	15031 May 09 06:42	29°♎50'40	6.51111 AU
conjunction	15025 Nov 24 00:14	17°♎33'36	0°11'48	conjunction	15031 May 10 06:04	0°♎03'09	-0°01'59
minimum elong	15025 Nov 24 00:13	17°♎33'36	0°12'44	minimum elong	15031 May 10 06:03	0°♎03'09	0°02'47
behind sun begin	15025 Nov 23 19:01	17°♎30'27		behind sun begin	15031 May 09 22:03	29°♎58'54	
behind sun end	15025 Nov 24 05:26	17°♎36'45		behind sun end	15031 May 10 14:04	0°♎07'24	
max. Earth dist.	15025 Nov 25 16:19	17°♎57'59	5.92097 AU		15031 May 10 00:06	0°♎	
morning rise	15025 Dec 07 13:42	20°♎50'56		morning rise	15031 May 23 04:34	2°♎48'47	
	15026 Jan 16 09:26	0°♎		retrograde	15031 Sep 21 04:15	19°♎26'43	
retrograde	15026 Apr 17 08:03	11°♎21'23		opposition	15031 Nov 21 09:17	14°♎32'10	-0°15'13
min. Earth dist.	15026 Jun 14 06:38	6°♎30'02	3.97124 AU	min. Earth dist.	15031 Nov 22 09:22	14°♎24'27	4.49000 AU
opposition	15026 Jun 15 15:56	6°♎18'45	0°32'12	direct	15032 Jan 22 21:12	9°♎31'27	
direct	15026 Aug 12 23:54	1°♎22'19		evening set	15032 May 26 09:17	26°♎43'16	
evening set	15026 Dec 18 05:57	21°♎00'52		max. Earth dist.	15032 Jun 06 10:33	29°♎06'51	6.44720 AU
conjunction	15026 Dec 31 19:00	24°♎12'15	0°27'57	conjunction	15032 Jun 08 06:51	29°♎30'55	-0°18'11
minimum elong	15026 Dec 31 18:59	24°♎12'14	0°28'54	minimum elong	15032 Jun 08 06:50	29°♎30'55	0°19'09
max. Earth dist.	15027 Jan 03 05:27	24°♎46'41	6.04193 AU		15032 Jun 10 12:21	0°♎	
morning rise	15027 Jan 14 09:02	27°♎23'47		morning rise	15032 Jun 21 02:51	2°♎18'04	
	15027 Jan 25 15:01	0°♎		retrograde	15032 Oct 21 05:39	19°♎23'29	
	15027 Apr 18 09:03	15°♎		opposition	15032 Dec 21 06:05	14°♎29'37	-0°36'34
retrograde	15027 May 22 12:52	16°♎51'12		min. Earth dist.	15032 Dec 22 18:29	14°♎17'56	4.38574 AU
	15027 Jun 25 14:35	15°♎		direct	15033 Feb 21 08:24	9°♎29'08	
min. Earth dist.	15027 Jul 19 18:46	12°♎01'10	4.12547 AU	evening set	15033 Jun 26 08:42	27°♎16'10	
opposition	15027 Jul 21 09:31	11°♎48'07	0°48'02	max. Earth dist.	15033 Jul 06 21:05	29°♎37'11	6.30917 AU
direct	15027 Sep 18 14:11	6°♎49'59			15033 Jul 08 13:45	0°♎	
	15027 Dec 04 00:33	15°♎		conjunction	15033 Jul 09 05:20	0°♎08'44	-0°29'56
evening set	15028 Jan 23 01:21	25°♎32'39		minimum elong	15033 Jul 09 05:19	0°♎08'44	0°30'50
conjunction	15028 Feb 05 12:29	28°♎35'24	0°33'17	morning rise	15033 Jul 22 01:18	3°♎01'16	
minimum elong	15028 Feb 05 12:29	28°♎35'24	0°33'53		15033 Sep 19 05:06	15°♎	
max. Earth dist.	15028 Feb 07 18:09	29°♎05'47	6.21493 AU	retrograde	15033 Nov 23 14:15	21°♎02'17	
	15028 Feb 11 17:59	0°♎		opposition	15034 Jan 23 02:25	16°♎08'00	-0°48'42
morning rise	15028 Feb 18 23:40	1°♎37'48		min. Earth dist.	15034 Jan 24 18:04	15°♎55'09	4.22210 AU
retrograde	15028 Jun 23 03:35	19°♎51'21			15034 Jan 31 21:50	15°♎	
min. Earth dist.	15028 Aug 21 07:18	14°♎59'41	4.30082 AU	direct	15034 Mar 25 07:03	11°♎08'28	
opposition	15028 Aug 22 12:52	14°♎49'53	0°46'39		15034 May 15 07:32	15°♎	
direct	15028 Oct 21 23:50	9°♎50'23		evening set	15034 Jul 29 01:57	29°♎48'29	
evening set	15029 Feb 24 11:50	27°♎39'43			15034 Jul 29 21:52	0°♎	
	15029 Mar 07 04:58	0°♑		max. Earth dist.	15034 Aug 08 21:19	2°♎19'15	6.13257 AU
conjunction	15029 Mar 09 19:32	0°♑34'12	0°27'49	conjunction	15034 Aug 11 00:31	2°♎49'07	-0°33'08
minimum elong	15029 Mar 09 19:33	0°♑34'13	0°27'54	minimum elong	15034 Aug 11 00:31	2°♎49'07	0°33'39
max. Earth dist.	15029 Mar 11 05:37	0°♑52'50	6.37887 AU	morning rise	15034 Aug 23 23:08	5°♎50'11	
morning rise	15029 Mar 23 02:20	3°♑28'01		retrograde	15034 Dec 29 14:34	25°♎05'06	
retrograde	15029 Jul 23 16:03	20°♑42'00		opposition	15035 Feb 27 12:15	20°♎09'33	-0°45'41

min. Earth dist.	15035 Feb 28 16:50	20° \mathbb{M} 00'09	4.04612 AU	retrograde	15040 Jun 27 12:42	24° \mathbb{H} 28'52	
direct	15035 Apr 28 08:35	15° \mathbb{M} 11'51		min. Earth dist.	15040 Aug 25 19:53	19° \mathbb{H} 37'16	4.32502 AU
	15035 Aug 12 16:31	0° \mathbb{L}		opposition	15040 Aug 27 00:48	19° \mathbb{H} 27'42	0°45'11
evening set	15035 Sep 02 04:21	4° \mathbb{L} 49'02		direct	15040 Oct 26 14:54	14° \mathbb{H} 28'05	
max. Earth dist.	15035 Sep 14 02:55	7° \mathbb{L} 41'44	5.97322 AU		15041 Feb 18 21:47	0° \mathbb{Y}	
				evening set	15041 Mar 01 00:54	2° \mathbb{Y} 10'29	
conjunction	15035 Sep 15 07:10	7° \mathbb{L} 58'48	-0°24'57				
minimum elong	15035 Sep 15 07:11	7° \mathbb{L} 58'48	0°24'54	conjunction	15041 Mar 14 07:55	5° \mathbb{Y} 03'52	0°26'18
morning rise	15035 Sep 28 11:15	11° \mathbb{L} 09'29		minimum elong	15041 Mar 14 07:55	5° \mathbb{Y} 03'53	0°26'18
	15036 Jan 05 20:29	0° \mathbb{M}		max. Earth dist.	15041 Mar 15 13:28	5° \mathbb{Y} 19'58	6.40006 AU
retrograde	15036 Feb 05 21:50	1° \mathbb{M} 33'08		morning rise	15041 Mar 27 14:04	7° \mathbb{Y} 56'35	
	15036 Mar 07 23:41	30° \mathbb{R} \mathbb{L}		retrograde	15041 Jul 27 22:01	25° \mathbb{Y} 03'32	
opposition	15036 Apr 05 06:44	26° \mathbb{L} 35'19	-0°24'57	opposition	15041 Sep 26 20:15	20° \mathbb{Y} 05'06	0°28'58
min. Earth dist.	15036 Apr 05 13:11	26° \mathbb{L} 33'10	3.91953 AU	min. Earth dist.	15041 Sep 26 09:39	20° \mathbb{Y} 08'33	4.45807 AU
direct	15036 Jun 02 22:16	21° \mathbb{L} 39'27		direct	15041 Nov 27 13:11	15° \mathbb{Y} 04'48	
	15036 Aug 16 20:10	0° \mathbb{M}			15042 Mar 21 15:20	0° \mathbb{B}	
evening set	15036 Oct 08 12:02	11° \mathbb{M} 54'46		evening set	15042 Apr 01 05:55	2° \mathbb{B} 13'56	
conjunction	15036 Oct 21 20:32	15° \mathbb{M} 11'06	-0°06'43	conjunction	15042 Apr 14 09:01	5° \mathbb{B} 02'00	0°12'31
minimum elong	15036 Oct 21 20:33	15° \mathbb{M} 11'06	0°06'06	minimum elong	15042 Apr 14 09:01	5° \mathbb{B} 02'00	0°12'02
behind sun begin	15036 Oct 21 12:40	15° \mathbb{M} 06'17		behind sun begin	15042 Apr 14 03:34	4° \mathbb{B} 59'06	
behind sun end	15036 Oct 22 04:26	15° \mathbb{M} 15'56		behind sun end	15042 Apr 14 14:29	5° \mathbb{B} 04'55	
	15036 Oct 21 02:27	15° \mathbb{M}		max. Earth dist.	15042 Apr 14 10:23	5° \mathbb{B} 02'44	6.49718 AU
max. Earth dist.	15036 Oct 22 06:33	15° \mathbb{M} 17'14	5.89284 AU	morning rise	15042 Apr 27 10:37	7° \mathbb{B} 49'17	
morning rise	15036 Nov 04 06:37	18° \mathbb{M} 28'24			15042 Jun 01 19:20	15° \mathbb{B}	
	15036 Dec 24 21:43	0° \mathbb{Z}		retrograde	15042 Aug 26 10:29	24° \mathbb{B} 27'19	
asc. node	15037 Feb 21 19:31	8° \mathbb{Z} 33'13		opposition	15042 Oct 26 16:02	19° \mathbb{B} 31'22	0°05'54
retrograde	15037 Mar 15 22:33	9° \mathbb{Z} 21'39		min. Earth dist.	15042 Oct 27 00:18	19° \mathbb{B} 28'43	4.51436 AU
min. Earth dist.	15037 May 13 07:01	4° \mathbb{Z} 27'16	3.89582 AU		15042 Dec 10 00:58	15° \mathbb{R} \mathbb{B}	
opposition	15037 May 14 01:32	4° \mathbb{Z} 21'01	0°06'57	direct	15042 Dec 27 23:56	14° \mathbb{B} 30'47	
	15037 Jun 22 20:43	30° \mathbb{R} \mathbb{M}			15043 Jan 15 03:08	15° \mathbb{B}	
direct	15037 Jul 11 03:42	29° \mathbb{M} 25'38		desc. node	15043 Jan 29 00:50	15° \mathbb{B} 59'54	
	15037 Jul 29 10:13	0° \mathbb{Z}			15043 Apr 24 07:00	0° \mathbb{I}	
evening set	15037 Nov 15 20:34	19° \mathbb{Z} 39'00		evening set	15043 May 01 10:39	1° \mathbb{I} 30'30	
				max. Earth dist.	15043 May 13 08:22	4° \mathbb{I} 02'53	6.50879 AU
conjunction	15037 Nov 29 08:56	22° \mathbb{Z} 55'32	0°14'32				
minimum elong	15037 Nov 29 08:55	22° \mathbb{Z} 55'31	0°15'29	conjunction	15043 May 14 10:15	4° \mathbb{I} 16'43	-0°04'24
behind sun begin	15037 Nov 29 06:48	22° \mathbb{Z} 54'15		minimum elong	15043 May 14 10:15	4° \mathbb{I} 16'43	0°05'14
behind sun end	15037 Nov 29 11:01	22° \mathbb{Z} 56'48		behind sun begin	15043 May 14 02:30	4° \mathbb{I} 12'36	
max. Earth dist.	15037 Dec 01 04:59	23° \mathbb{Z} 22'15	5.92779 AU	behind sun end	15043 May 14 17:59	4° \mathbb{I} 20'51	
morning rise	15037 Dec 12 22:58	26° \mathbb{Z} 12'44		morning rise	15043 May 27 08:09	7° \mathbb{I} 02'15	
	15037 Dec 28 22:01	0° \mathbb{B}		retrograde	15043 Sep 25 09:02	23° \mathbb{I} 41'48	
retrograde	15038 Apr 22 10:28	16° \mathbb{B} 38'07		opposition	15043 Nov 25 14:17	18° \mathbb{I} 47'28	-0°18'33
min. Earth dist.	15038 Jun 19 08:09	11° \mathbb{B} 47'33	3.98560 AU	min. Earth dist.	15043 Nov 26 16:54	18° \mathbb{I} 38'57	4.48112 AU
opposition	15038 Jun 20 20:28	11° \mathbb{B} 35'15	0°35'24	direct	15044 Jan 27 02:11	13° \mathbb{I} 46'45	
direct	15038 Aug 18 04:58	6° \mathbb{B} 38'39			15044 May 25 19:58	0° \mathbb{B}	
evening set	15038 Dec 23 10:48	26° \mathbb{B} 11'13		evening set	15044 May 30 15:00	1° \mathbb{B} 01'54	
				max. Earth dist.	15044 Jun 10 11:52	3° \mathbb{B} 23'39	6.43218 AU
conjunction	15039 Jan 05 23:43	29° \mathbb{B} 21'36	0°29'22				
minimum elong	15039 Jan 05 23:43	29° \mathbb{B} 21'35	0°30'17	conjunction	15044 Jun 12 12:09	3° \mathbb{B} 49'59	-0°20'11
max. Earth dist.	15039 Jan 08 10:49	29° \mathbb{B} 56'16	6.06225 AU	minimum elong	15044 Jun 12 12:09	3° \mathbb{B} 49'59	0°21'10
	15039 Jan 08 17:12	0° \mathbb{B}		morning rise	15044 Jun 25 08:11	6° \mathbb{B} 37'41	
morning rise	15039 Jan 19 13:33	2° \mathbb{B} 32'04		retrograde	15044 Oct 25 17:58	23° \mathbb{B} 49'15	
	15039 Mar 19 12:22	15° \mathbb{B}		opposition	15044 Dec 25 16:28	18° \mathbb{B} 55'21	-0°38'56
retrograde	15039 May 27 08:12	21° \mathbb{B} 49'39		min. Earth dist.	15044 Dec 27 06:31	18° \mathbb{B} 43'07	4.36532 AU
min. Earth dist.	15039 Jul 24 16:08	16° \mathbb{B} 59'21	4.14933 AU	direct	15045 Feb 25 17:08	13° \mathbb{B} 54'51	
opposition	15039 Jul 26 06:01	16° \mathbb{B} 46'37	0°48'47		15045 Jun 22 15:14	0° \mathbb{Q}	
	15039 Aug 08 19:17	15° \mathbb{R} \mathbb{B}		evening set	15045 Jun 30 18:54	1° \mathbb{Q} 48'34	
direct	15039 Sep 23 15:52	11° \mathbb{B} 48'14		max. Earth dist.	15045 Jul 11 07:22	4° \mathbb{Q} 10'21	6.28485 AU
	15039 Nov 08 09:21	15° \mathbb{B}					
	15040 Jan 26 05:43	0° \mathbb{H}		conjunction	15045 Jul 13 15:47	4° \mathbb{Q} 42'10	-0°30'57
evening set	15040 Jan 27 22:29	0° \mathbb{H} 22'49		minimum elong	15045 Jul 13 15:47	4° \mathbb{Q} 42'10	0°31'49
				morning rise	15045 Aug 26 11:52	7° \mathbb{Q} 35'45	
conjunction	15040 Feb 10 09:17	3° \mathbb{H} 24'19	0°33'04		15045 Aug 29 19:18	15° \mathbb{Q}	
minimum elong	15040 Feb 10 09:18	3° \mathbb{H} 24'19	0°33'37	retrograde	15045 Nov 28 10:09	25° \mathbb{Q} 46'39	
max. Earth dist.	15040 Feb 12 14:50	3° \mathbb{H} 54'28	6.24012 AU	opposition	15046 Jan 27 20:56	20° \mathbb{Q} 52'15	-0°49'17
morning rise	15040 Feb 23 19:49	6° \mathbb{H} 25'22		min. Earth dist.	15046 Jan 29 11:41	20° \mathbb{Q} 39'41	4.19558 AU

direct	15046 Mar 29 20:32	15°♏52'54		evening set	15052 Feb 01 16:52	5°♎05'32	
	15046 Jul 13 05:39	0°♎					
evening set	15046 Aug 02 20:14	4°♎41'41		conjunction	15052 Feb 15 02:59	8°♎05'36	0°32'40
max. Earth dist.	15046 Aug 13 17:20	7°♎14'25	6.10600 AU	minimum elong	15052 Feb 15 02:59	8°♎05'36	0°33'07
				max. Earth dist.	15052 Feb 17 04:31	8°♎33'20	6.26775 AU
conjunction	15046 Aug 15 19:09	7°♎43'40	-0°32'39	morning rise	15052 Feb 28 13:01	11°♎05'13	
minimum elong	15046 Aug 15 19:09	7°♎43'40	0°33'08	retrograde	15052 Jul 01 20:37	28°♎58'27	
morning rise	15046 Aug 28 18:31	10°♎46'11		min. Earth dist.	15052 Aug 30 08:14	24°♎06'10	4.34979 AU
	15046 Dec 23 13:35	0°♎		opposition	15052 Aug 31 10:08	23°♎57'37	0°43'29
retrograde	15047 Jan 03 21:05	0°♎12'30		direct	15052 Oct 31 05:13	18°♎57'48	
	15047 Jan 15 03:56	30°♎			15053 Feb 01 22:57	0°♎	
opposition	15047 Mar 04 16:15	25°♎16'38	-0°43'45	evening set	15053 Mar 05 10:57	6°♎33'25	
min. Earth dist.	15047 Mar 05 18:36	25°♎07'56	4.02177 AU				
direct	15047 May 03 08:27	20°♎19'09		conjunction	15053 Mar 18 17:31	9°♎25'47	0°24'40
	15047 Jul 24 21:11	0°♎		minimum elong	15053 Mar 18 17:32	9°♎25'47	0°24'37
evening set	15047 Sep 07 07:27	10°♎04'21		max. Earth dist.	15053 Mar 19 20:10	9°♎40'14	6.42022 AU
				morning rise	15053 Mar 31 22:52	12°♎17'25	
conjunction	15047 Sep 20 11:16	13°♎15'28	-0°22'50	retrograde	15053 Jul 31 23:21	29°♎18'00	
minimum elong	15047 Sep 20 11:17	13°♎15'28	0°22'42	opposition	15053 Sep 30 23:54	24°♎19'59	0°25'59
max. Earth dist.	15047 Sep 19 12:47	13°♎01'50	5.95372 AU	min. Earth dist.	15053 Sep 30 15:23	24°♎22'45	4.47242 AU
morning rise	15047 Oct 03 16:09	16°♎27'28		direct	15053 Dec 01 18:33	19°♎19'39	
	15047 Dec 04 10:58	0°♎			15054 Mar 04 23:51	0°♎	
retrograde	15048 Feb 11 11:15	6°♎59'11		evening set	15054 Apr 05 10:59	6°♎25'43	
opposition	15048 Apr 10 17:41	2°♎01'02	-0°20'47				
min. Earth dist.	15048 Apr 10 20:52	1°♎59'59	3.90734 AU	conjunction	15054 Apr 18 13:28	9°♎13'16	0°10'15
	15048 Apr 26 06:16	30°♎		minimum elong	15054 Apr 18 13:28	9°♎13'16	0°09'42
direct	15048 Jun 08 06:01	27°♎05'23		behind sun begin	15054 Apr 18 06:53	9°♎09'46	
	15048 Jul 20 12:36	0°♎		behind sun end	15054 Apr 18 20:04	9°♎16'46	
	15048 Oct 04 00:25	15°♎		max. Earth dist.	15054 Apr 18 09:46	9°♎11'19	6.50477 AU
evening set	15048 Oct 13 21:46	17°♎23'47		morning rise	15054 May 01 14:32	12°♎00'04	
					15054 May 15 22:15	15°♎	
conjunction	15048 Oct 27 06:54	20°♎40'38	-0°03'39	retrograde	15054 Aug 30 13:47	28°♎36'28	
minimum elong	15048 Oct 27 06:53	20°♎40'38	0°02'57	opposition	15054 Oct 30 18:33	23°♎40'53	0°02'27
behind sun begin	15048 Oct 26 22:35	20°♎35'33		min. Earth dist.	15054 Oct 31 06:45	23°♎36'58	4.51480 AU
behind sun end	15048 Oct 27 15:11	20°♎45'42		desc. node	15054 Dec 07 19:30	19°♎33'19	
max. Earth dist.	15048 Oct 27 21:41	20°♎49'43	5.88925 AU	direct	15055 Jan 01 04:37	18°♎40'16	
morning rise	15048 Nov 09 17:53	23°♎58'29			15055 Apr 07 23:45	0°♎	
	15048 Dec 05 01:32	0°♎		evening set	15055 May 05 14:09	5°♎40'57	
asc. node	15049 Jan 02 07:52	6°♎05'27		max. Earth dist.	15055 May 17 06:38	8°♎10'49	6.50196 AU
retrograde	15049 Mar 21 08:11	14°♎51'34					
opposition	15049 May 19 12:29	9°♎50'30	0°11'35	conjunction	15055 May 18 13:20	8°♎27'16	-0°06'45
min. Earth dist.	15049 May 18 13:32	9°♎58'16	3.90166 AU	minimum elong	15055 May 18 13:20	8°♎27'16	0°07'37
direct	15049 Jul 16 13:25	4°♎55'02		behind sun begin	15055 May 18 06:05	8°♎23'24	
evening set	15049 Nov 21 06:36	25°♎04'35		behind sun end	15055 May 18 20:35	8°♎31'08	
				morning rise	15055 May 31 11:00	11°♎12'58	
conjunction	15049 Dec 04 19:12	28°♎20'31	0°17'12	retrograde	15055 Sep 29 14:57	27°♎55'48	
minimum elong	15049 Dec 04 19:12	28°♎20'30	0°18'10	opposition	15055 Nov 29 19:31	23°♎01'36	-0°21'46
max. Earth dist.	15049 Dec 06 18:53	28°♎49'20	5.94246 AU	min. Earth dist.	15055 Nov 30 23:57	22°♎52'29	4.46752 AU
	15049 Dec 11 15:57	0°♎		direct	15056 Jan 31 05:46	18°♎00'53	
morning rise	15049 Dec 18 09:24	1°♎37'01			15056 May 09 12:13	0°♎	
retrograde	15050 Apr 27 13:09	21°♎53'55		evening set	15056 Jun 03 20:58	5°♎20'57	
min. Earth dist.	15050 Jun 24 11:30	17°♎03'21	4.00714 AU	max. Earth dist.	15056 Jun 14 16:51	7°♎42'44	6.41274 AU
opposition	15050 Jun 26 00:30	16°♎50'49	0°38'21				
direct	15050 Aug 23 13:10	11°♎53'54		conjunction	15056 Jun 16 18:08	8°♎09'44	-0°22'06
	15050 Dec 22 23:43	0°♎		minimum elong	15056 Jun 16 18:07	8°♎09'44	0°23'05
evening set	15050 Dec 28 14:23	1°♎17'51		morning rise	15056 Jun 29 13:54	10°♎58'08	
				retrograde	15056 Oct 30 07:16	28°♎17'25	
conjunction	15051 Jan 11 03:13	4°♎26'57	0°30'36	opposition	15056 Dec 30 04:08	23°♎23'36	-0°41'08
minimum elong	15051 Jan 11 03:13	4°♎26'57	0°31'27	min. Earth dist.	15056 Dec 31 19:12	23°♎11'03	4.34128 AU
max. Earth dist.	15051 Jan 13 16:20	5°♎02'34	6.08853 AU	direct	15057 Mar 02 01:27	18°♎23'18	
morning rise	15051 Jan 24 16:35	7°♎35'59			15057 Jun 05 17:12	0°♎	
	15051 Feb 27 00:01	15°♎		evening set	15057 Jul 05 07:06	6°♎25'03	
retrograde	15051 May 31 23:50	26°♎41'40		max. Earth dist.	15057 Jul 15 18:29	8°♎47'09	6.25798 AU
min. Earth dist.	15051 Jul 29 10:04	21°♎51'31	4.17755 AU				
opposition	15051 Jul 31 00:03	21°♎38'48	0°49'11	conjunction	15057 Jul 18 04:02	9°♎19'48	-0°31'49
direct	15051 Sep 28 13:27	16°♎40'11		minimum elong	15057 Jul 18 04:02	9°♎19'48	0°32'38
	15052 Jan 09 08:20	0°♎		morning rise	15057 Jul 31 00:36	12°♎14'39	

	15057 Aug 12 08:11	15°♏	retrograde	15063 Jun 05 13:01	1°♎28'18	
	15057 Nov 13 17:59	0°♎		15063 Jul 05 20:55	30°♎	
retrograde	15057 Dec 03 10:22	0°♎36'35	min. Earth dist.	15063 Aug 03 03:06	26°♎37'47	4.20341 AU
	15057 Dec 23 01:27	30°♎♏	opposition	15063 Aug 04 15:33	26°♎25'35	0°49'16
opposition	15058 Feb 01 18:00	25°♏42'04 -0°49'33	direct	15063 Oct 03 09:12	21°♎26'43	
min. Earth dist.	15058 Feb 03 07:33	25°♏29'50 4.16783 AU		15063 Dec 21 15:56	0°♎	
direct	15058 Apr 03 13:13	20°♏42'57	evening set	15064 Feb 06 09:07	9°♎44'06	
	15058 Jun 24 15:53	0°♎				
evening set	15058 Aug 07 16:40	9°♎40'57	conjunction	15064 Feb 19 18:54	12°♎42'59	0°32'03
max. Earth dist.	15058 Aug 18 18:40	12°♎17'24 6.07999 AU	minimum elong	15064 Feb 19 18:55	12°♎42'59	0°32'26
			max. Earth dist.	15064 Feb 21 18:35	13°♎09'32	6.29183 AU
conjunction	15058 Aug 20 16:20	12°♎44'22 -0°31'57	morning rise	15064 Mar 04 04:08	15°♎41'19	
minimum elong	15058 Aug 20 16:21	12°♎44'23 0°32'21		15064 May 19 00:02	0°♎	
morning rise	15058 Sep 02 16:16	15°♎48'20	retrograde	15064 Jul 06 02:46	3°♎25'45	
	15058 Nov 09 14:46	0°♏		15064 Aug 23 13:22	30°♎♎	
retrograde	15059 Jan 09 06:04	5°♏25'44	opposition	15064 Sep 04 18:07	28°♎25'19	0°41'34
opposition	15059 Mar 09 22:42	0°♏29'39 -0°41'27	min. Earth dist.	15064 Sep 03 18:14	28°♎33'10	4.37032 AU
min. Earth dist.	15059 Mar 10 22:17	0°♏21'52 4.00015 AU	direct	15064 Nov 04 16:27	23°♎25'26	
	15059 Mar 13 16:37	30°♎♎		15065 Jan 13 09:43	0°♎	
direct	15059 May 08 09:45	25°♎32'34	evening set	15065 Mar 09 20:28	10°♎55'45	
	15059 Jul 01 01:24	0°♏				
evening set	15059 Sep 12 12:32	15°♏24'30	conjunction	15065 Mar 23 02:19	13°♎47'16	0°22'55
			minimum elong	15065 Mar 23 02:20	13°♎47'17	0°22'48
conjunction	15059 Sep 25 16:57	18°♏36'40 -0°20'32	max. Earth dist.	15065 Mar 23 23:17	13°♎58'36	6.43569 AU
minimum elong	15059 Sep 25 16:58	18°♏36'41 0°20'19	morning rise	15065 Apr 05 07:13	16°♎38'06	
max. Earth dist.	15059 Sep 24 22:31	18°♏25'27 5.93857 AU		15065 Jun 16 12:31	0°♎	
morning rise	15059 Oct 08 22:53	21°♏49'50	retrograde	15065 Aug 05 03:43	3°♎33'55	
	15059 Nov 13 00:35	0°♎		15065 Sep 24 06:01	30°♎♎	
retrograde	15060 Feb 16 22:32	12°♎27'30	opposition	15065 Oct 05 04:10	28°♎36'15	0°22'53
opposition	15060 Apr 16 05:01	7°♎28'56 -0°16'25	min. Earth dist.	15065 Oct 04 23:23	28°♎37'48	4.48206 AU
min. Earth dist.	15060 Apr 16 03:15	7°♎29'31 3.90058 AU	direct	15065 Dec 06 02:04	23°♎35'48	
direct	15060 Jun 13 14:28	2°♎33'24		15066 Feb 13 15:22	0°♎	
	15060 Sep 15 19:53	15°♎	evening set	15066 Apr 09 16:28	10°♎40'06	
evening set	15060 Oct 19 07:26	22°♎52'39				
			conjunction	15066 Apr 22 18:35	13°♎27'22	0°07'55
conjunction	15060 Nov 01 17:11	26°♎09'40 -0°00'29	minimum elong	15066 Apr 22 18:36	13°♎27'22	0°07'19
minimum elong	15060 Nov 01 17:12	26°♎09'41 0°00'17	behind sun begin	15066 Apr 22 11:14	13°♎23'28	
behind sun begin	15060 Nov 01 08:54	26°♎04'37	behind sun end	15066 Apr 23 01:58	13°♎31'17	
behind sun end	15060 Nov 02 01:29	26°♎14'45	max. Earth dist.	15066 Apr 22 11:47	13°♎23'45	6.50795 AU
max. Earth dist.	15060 Nov 02 13:59	26°♎22'26 5.89155 AU		15066 Apr 30 00:10	15°♎	
asc. node	15060 Nov 11 03:20	28°♎28'16	morning rise	15066 May 05 19:03	16°♎13'51	
morning rise	15060 Nov 15 04:43	29°♎27'39		15066 Jul 21 14:58	0°♎	
	15060 Nov 17 09:56	0°♎♎	retrograde	15066 Sep 03 16:46	2°♎49'54	
retrograde	15061 Mar 26 16:48	20°♎18'02	desc. node	15066 Oct 18 08:40	29°♎58'04	
opposition	15061 May 24 21:36	15°♎16'33 0°16'03		15066 Oct 18 02:00	30°♎♎	
min. Earth dist.	15061 May 23 20:40	15°♎25'00 3.91251 AU	opposition	15066 Nov 03 22:29	27°♎54'32	-0°01'05
direct	15061 Jul 22 00:03	10°♎20'56	min. Earth dist.	15066 Nov 04 12:21	27°♎50'05	4.51160 AU
	15061 Nov 24 20:31	0°♎	direct	15067 Jan 05 08:07	22°♎53'55	
evening set	15061 Nov 26 14:14	0°♎24'56		15067 Mar 20 06:13	0°♎	
			evening set	15067 May 09 19:31	9°♎56'28	
conjunction	15061 Dec 10 03:08	3°♎40'06 0°19'41	max. Earth dist.	15067 May 21 08:53	12°♎25'01	6.49261 AU
minimum elong	15061 Dec 10 03:07	3°♎40'06 0°20'41				
max. Earth dist.	15061 Dec 12 07:07	4°♎11'22 5.96049 AU	conjunction	15067 May 22 18:19	12°♎42'59	-0°09'07
morning rise	15061 Dec 23 17:19	6°♎55'43	minimum elong	15067 May 22 18:19	12°♎42'59	0°10'00
retrograde	15062 May 02 12:48	27°♎03'08	behind sun begin	15067 May 22 11:52	12°♎39'32	
min. Earth dist.	15062 Jun 29 11:16	22°♎12'54 4.03024 AU	behind sun end	15067 May 23 00:46	12°♎46'26	
opposition	15062 Jul 01 01:31	21°♎59'58 0°40'55	morning rise	15067 Jun 04 15:36	15°♎28'53	
direct	15062 Aug 28 16:45	17°♎02'49		15067 Aug 25 20:38	0°♎	
	15062 Dec 05 13:50	0°♎	retrograde	15067 Oct 04 00:15	2°♎15'35	
evening set	15063 Jan 02 15:09	6°♎18'08		15067 Nov 12 06:33	30°♎♎	
			opposition	15067 Dec 04 03:06	27°♎21'34	-0°24'58
conjunction	15063 Jan 16 03:30	9°♎25'53 0°31'34	min. Earth dist.	15067 Dec 05 10:03	27°♎11'39	4.45267 AU
minimum elong	15063 Jan 16 03:30	9°♎25'53 0°32'23	direct	15068 Feb 04 12:48	22°♎20'55	
max. Earth dist.	15063 Jan 18 14:40	10°♎00'10 6.11423 AU		15068 Apr 20 21:51	0°♎	
morning rise	15063 Jan 29 16:37	12°♎33'36	evening set	15068 Jun 08 05:20	9°♎46'03	
	15063 Feb 09 09:56	15°♎	max. Earth dist.	15068 Jun 18 22:17	12°♎06'54	6.39352 AU
	15063 May 06 01:18	0°♎				

conjunction	15068 Jun 21 02:17	12°  35'30 -0°23'55	minimum elong	15073 Dec 15 04:16	8°  42'03 0°22'51
minimum elong	15068 Jun 21 02:16	12°  35'30 0°24'54	max. Earth dist.	15073 Dec 17 08:20	9°  13'13 5.97986 AU
morning rise	15068 Jul 03 22:09	15°  24'40	morning rise	15073 Dec 28 18:35	11°  56'45
	15068 Sep 20 23:58	0°  ♂		15074 Apr 02 14:24	0°  ♂
retrograde	15068 Nov 03 23:10	2°  ♂1'31	retrograde	15074 May 07 04:47	1°  ♂54'50
	15068 Dec 18 09:31	30°  ♂		15074 Jun 10 16:51	30°  ♂
opposition	15069 Jan 03 18:29	27°  ♂57'39 -0°43'10	min. Earth dist.	15074 Jul 04 05:31	27°  ♂04'35 4.05232 AU
min. Earth dist.	15069 Jan 05 09:02	27°  ♂45'14 4.31915 AU	opposition	15074 Jul 05 19:41	26°  ♂51'40 0°43'03
direct	15069 Mar 06 12:04	22°  ♂57'31	direct	15074 Sep 02 14:01	21°  ♂54'17
	15069 May 17 04:29	0°  ♂		15074 Nov 16 20:10	0°  ♂
evening set	15069 Jul 09 21:00	11°  ♂06'17	evening set	15075 Jan 07 09:28	11°  ♂02'03
max. Earth dist.	15069 Jul 20 11:22	13°  ♂30'46 6.23496 AU			
conjunction	15069 Jul 22 18:14	14°  ♂02'04 -0°32'31	conjunction	15075 Jan 20 21:46	14°  ♂08'42 0°32'18
minimum elong	15069 Jul 22 18:14	14°  ♂02'04 0°33'17	minimum elong	15075 Jan 20 21:46	14°  ♂08'42 0°33'04
	15069 Jul 26 23:43	15°  ♂	max. Earth dist.	15075 Jan 23 08:17	14°  ♂42'27 6.13715 AU
morning rise	15069 Aug 04 14:55	16°  ♂57'58		15075 Jan 24 14:45	15°  ♂
	15069 Oct 07 17:34	0°  ♂	morning rise	15075 Feb 03 10:20	17°  ♂15'11
retrograde	15069 Dec 08 10:54	5°  ♂29'20	retrograde	15075 Apr 06 10:00	0°  ♂
opposition	15070 Feb 06 16:34	0°  ♂34'42 -0°49'32	min. Earth dist.	15075 Jun 09 22:24	6°  ♂00'34
min. Earth dist.	15070 Feb 08 04:51	0°  ♂22'52 4.14591 AU	opposition	15075 Aug 07 15:04	1°  ♂09'45 4.22509 AU
	15070 Feb 11 03:13	30°  ♂		15075 Aug 09 01:41	0°  ♂58'12 0°49'07
direct	15070 Apr 08 07:45	25°  ♂35'56	direct	15075 Aug 16 09:18	30°  ♂
	15070 Jun 01 14:01	0°  ♂		15075 Oct 07 22:57	25°  ♂59'16
evening set	15070 Aug 12 13:48	14°  ♂40'38	evening set	15075 Nov 29 03:11	0°  ♂
max. Earth dist.	15070 Aug 23 18:26	17°  ♂19'22 6.06119 AU		15076 Feb 10 20:30	14°  ♂10'32
conjunction	15070 Aug 25 13:47	17°  ♂45'05 -0°31'05	conjunction	15076 Feb 24 05:46	17°  ♂08'27 0°31'20
minimum elong	15070 Aug 25 13:48	17°  ♂45'05 0°31'23	minimum elong	15076 Feb 24 05:47	17°  ♂08'28 0°31'38
morning rise	15070 Sep 07 14:29	20°  ♂50'12	max. Earth dist.	15076 Feb 26 01:16	17°  ♂32'35 6.31058 AU
	15070 Oct 18 09:43	0°  ♂	morning rise	15076 Mar 08 14:41	20°  ♂05'52
retrograde	15071 Jan 14 11:09	10°  ♂35'34		15076 Apr 26 00:04	0°  ♂
opposition	15071 Mar 15 03:51	5°  ♂39'10 -0°38'55	retrograde	15076 Jul 10 06:04	7°  ♂43'50
min. Earth dist.	15071 Mar 15 23:15	5°  ♂32'45 3.98648 AU	opposition	15076 Sep 08 22:42	2°  ♂43'47 0°39'36
direct	15071 May 13 11:14	0°  ♂42'21	min. Earth dist.	15076 Sep 08 01:17	2°  ♂50'49 4.38509 AU
evening set	15071 Sep 17 15:21	20°  ♂37'49		15076 Oct 01 00:35	30°  ♂
			direct	15076 Nov 08 23:45	27°  ♂43'51
conjunction	15071 Sep 30 20:30	23°  ♂50'39 -0°18'10		15076 Dec 18 07:10	0°  ♂
minimum elong	15071 Sep 30 20:31	23°  ♂50'40 0°17'53	evening set	15077 Mar 14 02:49	15°  ♂10'54
max. Earth dist.	15071 Sep 30 08:22	23°  ♂43'16 5.93156 AU	conjunction	15077 Mar 27 08:23	18°  ♂01'54 0°21'10
morning rise	15071 Oct 14 03:00	27°  ♂04'27	minimum elong	15077 Mar 27 08:24	18°  ♂01'55 0°20'57
	15071 Oct 26 07:33	0°  ♂	max. Earth dist.	15077 Mar 28 02:53	18°  ♂11'53 6.44573 AU
retrograde	15072 Jan 11 14:31	15°  ♂	morning rise	15077 Apr 09 12:35	20°  ♂52'08
	15072 Feb 22 06:43	17°  ♂44'38		15077 May 25 02:24	0°  ♂
opposition	15072 Apr 04 04:30	15°  ♂	retrograde	15077 Aug 09 05:06	7°  ♂45'03
min. Earth dist.	15072 Apr 21 12:15	12°  ♂45'40 -0°12'08	opposition	15077 Oct 09 06:24	2°  ♂47'47 0°19'51
direct	15072 Apr 21 08:01	12°  ♂47'05 3.90109 AU	min. Earth dist.	15077 Oct 09 03:35	2°  ♂48'42 4.48698 AU
	15072 Jun 18 21:10	7°  ♂50'14		15077 Nov 01 06:32	30°  ♂
asc. node	15072 Aug 26 11:53	15°  ♂	direct	15077 Dec 10 05:51	27°  ♂47'25
evening set	15072 Sep 20 23:08	20°  ♂15'03		15078 Jan 18 11:49	0°  ♂
	15072 Oct 24 11:56	28°  ♂07'31	evening set	15078 Apr 13 20:42	14°  ♂51'23
	15072 Nov 01 04:17	0°  ♂		15078 Apr 14 12:59	15°  ♂
conjunction	15072 Nov 06 22:12	1°  ♂24'24 0°02'29	conjunction	15078 Apr 26 22:14	17°  ♂38'28 0°05'38
minimum elong	15072 Nov 06 22:13	1°  ♂24'25 0°03'17	minimum elong	15078 Apr 26 22:15	17°  ♂38'29 0°05'00
behind sun begin	15072 Nov 06 13:55	1°  ♂19'21	behind sun begin	15078 Apr 26 14:27	17°  ♂34'19
behind sun end	15072 Nov 07 06:31	1°  ♂29'28	behind sun end	15078 Apr 27 06:04	17°  ♂42'38
max. Earth dist.	15072 Nov 08 00:07	1°  ♂40'16 5.89944 AU	max. Earth dist.	15078 Apr 26 10:46	17°  ♂32'21 6.50752 AU
morning rise	15072 Nov 20 10:11	4°  ♂42'11	morning rise	15078 May 09 22:25	20°  ♂24'51
retrograde	15073 Mar 31 18:32	25°  ♂27'41		15078 Jun 27 14:19	0°  ♂
min. Earth dist.	15073 May 28 20:47	20°  ♂35'15 3.92705 AU	desc. node	15078 Sep 01 05:52	6°  ♂57'31
opposition	15073 May 30 00:15	20°  ♂25'58 0°20'05	retrograde	15078 Sep 07 21:31	7°  ♂01'37
direct	15073 Jul 27 03:06	15°  ♂30'14	opposition	15078 Nov 08 01:52	2°  ♂06'30 -0°04'29
	15073 Nov 08 05:53	0°  ♂	min. Earth dist.	15078 Nov 08 18:39	2°  ♂01'07 4.50596 AU
evening set	15073 Dec 01 15:30	5°  ♂27'50		15078 Nov 25 01:24	30°  ♂
			direct	15079 Jan 09 12:34	27°  ♂05'52
conjunction	15073 Dec 15 04:17	8°  ♂42'03 0°21'53		15079 Feb 23 21:59	0°  ♂

evening set	15079 May 13 23:50	14° Π 10'47		asc. node	15084 Jul 29 21:40	15° Π 15'57	
max. Earth dist.	15079 May 25 10:40	16° Π 38'19	6.48208 AU		15084 Oct 15 11:56	0° \mathcal{A}	
				evening set	15084 Oct 29 17:50	3° \mathcal{A} 25'27	
conjunction	15079 May 26 22:26	16° Π 57'35	-0°11'22				
minimum elong	15079 May 26 22:25	16° Π 57'35	0°12'17	conjunction	15084 Nov 12 04:32	6° \mathcal{A} 42'23	0°05'27
behind sun begin	15079 May 26 17:07	16° Π 54'44		minimum elong	15084 Nov 12 04:31	6° \mathcal{A} 42'23	0°06'18
behind sun end	15079 May 27 03:44	17° Π 00'26		behind sun begin	15084 Nov 11 20:38	6° \mathcal{A} 37'35	
morning rise	15079 Jun 08 19:25	19° Π 43'47		behind sun end	15084 Nov 12 12:24	6° \mathcal{A} 47'10	
	15079 Jul 30 20:45	0° \mathcal{E}		max. Earth dist.	15084 Nov 13 09:23	7° \mathcal{A} 00'01	5.90345 AU
retrograde	15079 Oct 08 07:16	6° \mathcal{E} 34'38		morning rise	15084 Nov 25 17:08	10° \mathcal{A} 00'12	
opposition	15079 Dec 08 10:11	1° \mathcal{E} 40'37	-0°27'56		15085 Mar 16 07:00	0° \mathcal{Z}	
min. Earth dist.	15079 Dec 09 17:22	1° \mathcal{E} 30'37	4.43786 AU	retrograde	15085 Apr 05 21:26	0° \mathcal{Z} 42'19	
	15079 Dec 21 18:36	30° $\mathcal{R}\Pi$			15085 Apr 26 10:44	30° $\mathcal{R}\mathcal{A}$	
direct	15080 Feb 08 17:10	26° Π 40'01		min. Earth dist.	15085 Jun 02 22:47	25° \mathcal{A} 50'16	3.93789 AU
	15080 Mar 28 05:38	0° \mathcal{E}		opposition	15085 Jun 04 04:21	25° \mathcal{A} 40'14	0°24'05
evening set	15080 Jun 12 12:38	14° \mathcal{E} 09'51		direct	15085 Aug 01 08:43	20° \mathcal{A} 44'16	
max. Earth dist.	15080 Jun 23 05:40	16° \mathcal{E} 31'18	6.37522 AU		15085 Oct 20 07:21	0° \mathcal{Z}	
				evening set	15085 Dec 06 19:13	10° \mathcal{Z} 36'57	
conjunction	15080 Jun 25 09:29	16° \mathcal{E} 59'57	-0°25'34				
minimum elong	15080 Jun 25 09:28	16° \mathcal{E} 59'57	0°26'31	conjunction	15085 Dec 20 08:18	13° \mathcal{Z} 50'28	0°23'58
morning rise	15080 Jul 08 05:13	19° \mathcal{E} 49'47		minimum elong	15085 Dec 20 08:18	13° \mathcal{Z} 50'27	0°24'55
	15080 Aug 27 00:26	0° Ω		max. Earth dist.	15085 Dec 22 15:27	14° \mathcal{Z} 23'20	5.99646 AU
retrograde	15080 Nov 08 14:40	7° Ω 23'47		morning rise	15086 Jan 02 22:28	17° \mathcal{Z} 04'18	
opposition	15081 Jan 08 07:46	2° Ω 29'50	-0°44'51		15086 Mar 04 04:13	0° \approx	
min. Earth dist.	15081 Jan 09 23:21	2° Ω 17'05	4.29817 AU	retrograde	15086 May 12 01:27	6° \approx 53'54	
	15081 Jan 28 14:24	30° $\mathcal{R}\mathcal{E}$		min. Earth dist.	15086 Jul 09 02:54	2° \approx 03'31	4.07274 AU
direct	15081 Mar 10 23:19	27° \mathcal{E} 29'49		opposition	15086 Jul 10 16:51	1° \approx 50'43	0°44'56
	15081 Apr 20 23:18	0° Ω			15086 Jul 24 17:37	30° $\mathcal{R}\mathcal{Z}$	
	15081 Jul 11 02:00	15° Ω		direct	15086 Sep 07 14:28	26° \mathcal{Z} 53'06	
evening set	15081 Jul 14 09:38	15° Ω 45'07			15086 Oct 22 07:05	0° \approx	
max. Earth dist.	15081 Jul 24 23:35	18° Ω 10'08	6.21262 AU		15087 Jan 08 08:53	15° \approx	
				evening set	15087 Jan 12 07:10	15° \approx 53'40	
conjunction	15081 Jul 27 06:59	18° Ω 41'53	-0°32'58				
minimum elong	15081 Jul 27 06:59	18° Ω 41'53	0°33'41	conjunction	15087 Jan 25 19:05	18° \approx 59'11	0°32'48
morning rise	15081 Aug 09 04:08	21° Ω 38'52		minimum elong	15087 Jan 25 19:05	18° \approx 59'11	0°33'31
	15081 Sep 16 12:05	0° \mathcal{M}		max. Earth dist.	15087 Jan 28 04:41	19° \approx 32'13	6.15946 AU
retrograde	15081 Dec 13 08:19	10° \mathcal{M} 19'31		morning rise	15087 Feb 08 07:24	22° \approx 04'31	
opposition	15082 Feb 11 13:26	5° \mathcal{M} 24'36	-0°49'05		15087 Mar 16 18:56	0° \mathcal{H}	
min. Earth dist.	15082 Feb 12 23:24	5° \mathcal{M} 13'30	4.12375 AU	retrograde	15087 Jun 14 08:37	10° \mathcal{H} 40'27	
direct	15082 Apr 12 23:58	0° \mathcal{M} 26'02		min. Earth dist.	15087 Aug 12 04:46	5° \mathcal{H} 49'40	4.24754 AU
evening set	15082 Aug 17 09:17	19° \mathcal{M} 37'45		opposition	15087 Aug 13 14:50	5° \mathcal{H} 38'18	0°48'36
max. Earth dist.	15082 Aug 28 18:55	22° \mathcal{M} 20'08	6.04115 AU	direct	15087 Oct 12 15:10	0° \mathcal{H} 39'12	
				evening set	15088 Feb 15 11:01	18° \mathcal{H} 43'51	
conjunction	15082 Aug 30 09:56	22° \mathcal{M} 43'22	-0°29'56				
minimum elong	15082 Aug 30 09:56	22° \mathcal{M} 43'22	0°30'09	conjunction	15088 Feb 28 19:52	21° \mathcal{H} 40'43	0°30'22
morning rise	15082 Sep 12 11:12	25° \mathcal{M} 49'40		minimum elong	15088 Feb 28 19:53	21° \mathcal{H} 40'43	0°30'37
	15082 Sep 30 08:13	0° \mathcal{L}		max. Earth dist.	15088 Mar 01 13:03	22° \mathcal{H} 03'28	6.33177 AU
retrograde	15083 Jan 19 18:23	15° \mathcal{L} 43'49		morning rise	15088 Mar 13 04:03	24° \mathcal{H} 36'59	
opposition	15083 Mar 20 08:03	10° \mathcal{L} 47'05	-0°36'00		15088 Apr 07 10:28	0° \mathcal{Y}	
min. Earth dist.	15083 Mar 21 01:36	10° \mathcal{L} 41'16	3.97042 AU	retrograde	15088 Jul 14 12:05	12° \mathcal{Y} 07'17	
direct	15083 May 18 12:47	5° \mathcal{L} 50'28		min. Earth dist.	15088 Sep 12 10:38	7° \mathcal{Y} 13'52	4.40364 AU
evening set	15083 Sep 22 17:39	25° \mathcal{L} 50'38		opposition	15088 Sep 13 05:41	7° \mathcal{Y} 07'38	0°37'19
				direct	15088 Nov 13 11:17	2° \mathcal{Y} 07'39	
conjunction	15083 Oct 05 23:32	29° \mathcal{L} 04'19	-0°15'37	evening set	15089 Mar 18 11:09	19° \mathcal{Y} 29'52	
minimum elong	15083 Oct 05 23:33	29° \mathcal{L} 04'19	0°15'13				
behind sun begin	15083 Oct 05 20:45	29° \mathcal{L} 02'37		conjunction	15089 Mar 31 16:01	22° \mathcal{Y} 20'04	0°19'14
behind sun end	15083 Oct 06 02:20	29° \mathcal{L} 06'01		minimum elong	15089 Mar 31 16:02	22° \mathcal{Y} 20'04	0°18'57
max. Earth dist.	15083 Oct 05 15:48	28° \mathcal{L} 59'36	5.92111 AU	max. Earth dist.	15089 Apr 01 06:16	22° \mathcal{Y} 27'43	6.46044 AU
	15083 Oct 09 18:43	0° \mathcal{M}		morning rise	15089 Apr 13 19:44	25° \mathcal{Y} 09'31	
morning rise	15083 Oct 19 06:55	2° \mathcal{M} 19'00			15089 May 07 01:12	0° \mathcal{B}	
	15083 Dec 15 01:22	15° \mathcal{M}		retrograde	15089 Aug 13 07:13	11° \mathcal{B} 57'51	
retrograde	15084 Feb 27 13:49	23° \mathcal{M} 03'02		opposition	15089 Oct 13 09:50	7° \mathcal{B} 00'52	0°16'37
opposition	15084 Apr 26 19:18	18° \mathcal{M} 03'40	-0°07'39	min. Earth dist.	15089 Oct 13 09:25	7° \mathcal{B} 01'00	4.49720 AU
min. Earth dist.	15084 Apr 26 11:06	18° \mathcal{M} 06'25	3.89778 AU	direct	15089 Dec 14 11:46	2° \mathcal{B} 00'25	
	15084 May 21 10:23	15° $\mathcal{R}\mathcal{M}$			15090 Mar 29 14:46	15° \mathcal{B}	
direct	15084 Jun 24 00:53	13° \mathcal{M} 08'17		evening set	15090 Apr 18 00:44	19° \mathcal{B} 02'06	
	15084 Jul 27 12:08	15° \mathcal{M}					

conjunction	15090 May 01 01:56	21°♄48'49	0°03'19	morning rise	15095 Oct 24 11:01	7°♄33'08	
minimum elong	15090 May 01 01:55	21°♄48'49	0°02'37		15095 Nov 25 02:02	15°♄	
behind sun begin	15090 Apr 30 17:53	21°♄44'33		retrograde	15096 Mar 03 21:57	28°♄22'44	
behind sun end	15090 May 01 09:56	21°♄53'04		opposition	15096 May 02 02:42	23°♄22'59	-0°03'10
max. Earth dist.	15090 Apr 30 12:30	21°♄41'40	6.51257 AU	min. Earth dist.	15096 May 01 15:23	23°♄26'48	3.89087 AU
morning rise	15090 May 14 01:20	24°♄34'46		asc. node	15096 Jun 09 04:54	19°♄08'58	
	15090 Jun 09 08:37	0°♄		direct	15096 Jun 29 06:52	18°♄27'39	
desc. node	15090 Jul 15 15:55	6°♄24'47			15096 Sep 27 08:56	0°♄	
retrograde	15090 Sep 11 22:35	11°♄10'31		evening set	15096 Nov 04 00:47	8°♄46'19	
opposition	15090 Nov 12 04:27	6°♄15'36	-0°07'50				
min. Earth dist.	15090 Nov 12 22:47	6°♄09'43	4.50556 AU	conjunction	15096 Nov 17 12:18	12°♄03'32	0°08'19
direct	15091 Jan 13 15:30	1°♄14'59		minimum elong	15096 Nov 17 12:17	12°♄03'32	0°09'13
evening set	15091 May 18 02:51	18°♄20'35		behind sun begin	15096 Nov 17 05:15	11°♄59'15	
max. Earth dist.	15091 May 29 09:44	20°♄46'17	6.47604 AU	behind sun end	15096 Nov 17 19:19	12°♄07'49	
				max. Earth dist.	15096 Nov 18 23:20	12°♄24'56	5.90463 AU
conjunction	15091 May 31 00:53	21°♄07'25	-0°13'31	morning rise	15096 Dec 01 01:21	15°♄21'32	
minimum elong	15091 May 31 00:53	21°♄07'25	0°14'27		15097 Feb 06 18:45	0°♄	
behind sun begin	15091 May 30 21:18	21°♄05'29		retrograde	15097 Apr 11 04:07	6°♄01'17	
behind sun end	15091 May 31 04:28	21°♄09'20		min. Earth dist.	15097 Jun 08 02:34	1°♄09'37	3.94694 AU
morning rise	15091 Jun 12 21:36	23°♄53'43		opposition	15097 Jun 09 10:02	0°♄58'57	0°27'51
	15091 Jul 12 07:17	0°♄			15097 Jun 16 17:12	30°♄	
retrograde	15091 Oct 12 13:57	10°♄47'27		direct	15097 Aug 06 15:13	26°♄02'51	
opposition	15091 Dec 12 15:14	5°♄53'30	-0°30'41		15097 Sep 25 14:01	0°♄	
min. Earth dist.	15091 Dec 14 01:11	5°♄42'37	4.42625 AU	evening set	15097 Dec 12 01:08	15°♄51'15	
direct	15092 Feb 12 22:35	0°♄52'53					
evening set	15092 Jun 16 17:23	18°♄26'38		conjunction	15097 Dec 25 14:14	19°♄04'04	0°25'50
max. Earth dist.	15092 Jun 27 08:00	20°♄47'17	6.35868 AU	minimum elong	15097 Dec 25 14:13	19°♄04'03	0°26'47
				max. Earth dist.	15097 Dec 27 23:39	19°♄38'09	6.01224 AU
conjunction	15092 Jun 29 14:10	21°♄17'20	-0°27'00	morning rise	15098 Jan 08 04:32	22°♄17'08	
minimum elong	15092 Jun 29 14:10	21°♄17'19	0°27'56		15098 Feb 11 07:02	0°♄	
morning rise	15092 Jul 12 09:55	24°♄07'48		retrograde	15098 May 16 21:03	11°♄58'10	
	15092 Aug 08 18:43	0°♄		min. Earth dist.	15098 Jul 13 23:54	7°♄08'16	4.09347 AU
retrograde	15092 Nov 13 01:15	11°♄48'44		opposition	15098 Jul 15 15:23	6°♄54'57	0°46'26
opposition	15093 Jan 12 18:21	6°♄54'40	-0°46'13	direct	15098 Sep 12 15:17	1°♄57'06	
min. Earth dist.	15093 Jan 14 09:35	6°♄42'00	4.27757 AU		15098 Dec 21 22:12	15°♄	
direct	15093 Mar 15 05:48	1°♄54'45		evening set	15099 Jan 17 06:42	20°♄50'16	
	15093 Jun 25 01:59	15°♄					
evening set	15093 Jul 18 19:33	20°♄16'51		conjunction	15099 Jan 30 18:18	23°♄54'35	0°33'04
max. Earth dist.	15093 Jul 29 10:56	22°♄43'25	6.18942 AU	minimum elong	15099 Jan 30 18:19	23°♄54'36	0°33'43
				max. Earth dist.	15099 Feb 02 02:48	24°♄26'49	6.18323 AU
conjunction	15093 Jul 31 17:12	23°♄14'41	-0°33'11	morning rise	15099 Feb 13 06:06	26°♄58'38	
minimum elong	15093 Jul 31 17:12	23°♄14'41	0°33'51		15099 Feb 26 18:57	0°♄	
morning rise	15093 Aug 13 14:40	26°♄12'48		retrograde	15099 Jun 18 22:03	15°♄24'26	
	15093 Aug 30 08:27	0°♄		min. Earth dist.	15099 Aug 16 21:10	10°♄33'11	4.27180 AU
retrograde	15093 Dec 18 06:16	15°♄03'32		opposition	15099 Aug 18 05:16	10°♄22'31	0°47'43
opposition	15094 Feb 16 08:15	10°♄08'29	-0°48'20	direct	15099 Oct 17 11:17	5°♄23'11	
min. Earth dist.	15094 Feb 17 18:17	9°♄57'20	4.09947 AU	evening set	15100 Feb 20 02:22	23°♄20'24	
direct	15094 Apr 17 15:54	5°♄10'07					
evening set	15094 Aug 22 03:11	24°♄30'03		conjunction	15100 Mar 05 10:41	26°♄16'08	0°29'11
max. Earth dist.	15094 Sep 02 15:14	27°♄14'44	6.01800 AU	minimum elong	15100 Mar 05 10:42	26°♄16'08	0°29'21
				max. Earth dist.	15100 Mar 07 01:33	26°♄37'29	6.35441 AU
conjunction	15094 Sep 04 04:31	27°♄37'02	-0°28'36	morning rise	15100 Mar 18 18:15	29°♄11'13	
minimum elong	15094 Sep 04 04:31	27°♄37'02	0°28'45		15100 Mar 22 12:03	0°♄	
	15094 Sep 14 03:32	0°♄		retrograde	15100 Jul 19 16:45	16°♄33'24	
morning rise	15094 Sep 17 06:40	0°♄44'47		opposition	15100 Sep 18 13:20	11°♄34'03	0°34'46
retrograde	15095 Jan 24 22:46	20°♄49'06		min. Earth dist.	15100 Sep 17 19:48	11°♄39'47	4.42288 AU
opposition	15095 Mar 25 10:46	15°♄52'08	-0°32'53	direct	15100 Nov 18 21:50	6°♄33'55	
min. Earth dist.	15095 Mar 26 00:57	15°♄47'25	3.95079 AU	evening set	15101 Mar 23 19:52	23°♄51'07	
direct	15095 May 23 10:06	10°♄55'45					
	15095 Sep 23 12:47	0°♄		conjunction	15101 Apr 06 00:12	26°♄40'31	0°17'08
evening set	15095 Sep 27 19:59	1°♄02'33		minimum elong	15101 Apr 06 00:13	26°♄40'31	0°16'47
				max. Earth dist.	15101 Apr 06 10:56	26°♄46'16	6.47486 AU
conjunction	15095 Oct 11 02:38	4°♄17'20	-0°12'59	morning rise	15101 Apr 19 03:08	29°♄29'08	
minimum elong	15095 Oct 11 02:38	4°♄17'20	0°12'31		15101 Apr 21 13:14	0°♄	
behind sun begin	15095 Oct 10 21:16	4°♄14'03			15101 Jul 21 01:18	15°♄	
behind sun end	15095 Oct 11 08:01	4°♄20'37		retrograde	15101 Aug 18 10:21	16°♄13'08	
max. Earth dist.	15095 Oct 10 22:53	4°♄15'02	5.90704 AU		15101 Sep 15 16:30	15°♄	

opposition	15101 Oct 18 13:56	11°8'16"30	0°13'14
min. Earth dist.	15101 Oct 18 16:35	11°8'15"38	4.50580 AU
direct	15101 Dec 19 19:03	6°8'15"59	