




































































































































superior conj	8600 May 09 14:25	22°♄25'39	-2°03'09	morning set	8601 Apr 03 22:29	6°♄54'57	
minimum elong	8600 May 09 19:21	22°♄46'44	2°03'01	max. Earth dist.	8601 Apr 14 19:50	23°♄57'27	1.44249 AU
	8600 May 13 23:29	0°♄			8601 Apr 18 14:16	0°♄	
evening rise	8600 May 21 03:45	12°♄46'45					
asc. node	8600 May 27 05:23	23°♄34'48		superior conj	8601 Apr 20 02:41	2°♄27'34	-2°12'07
	8600 May 31 01:41	0°♄		minimum elong	8601 Apr 20 02:45	2°♄27'51	2°12'13
evening max el	8600 Jun 06 16:47	8°♄46'16	18°06'15	evening rise	8601 May 03 08:51	24°♄37'35	
retrograde	8600 Jun 13 09:14	12°♄11'02			8601 May 06 12:14	0°♄	
evening set	8600 Jun 15 21:58	11°♄41'50		asc. node	8601 May 14 02:27	12°♄35'32	
inferior conj	8600 Jun 22 15:04	6°♄45'39	2°12'41	evening max el	8601 May 21 06:13	22°♄03'58	18°09'20
minimum elong	8600 Jun 22 18:05	6°♄38'27	2°11'40	retrograde	8601 May 27 15:29	25°♄25'03	
min. Earth dist.	8600 Jun 25 20:36	3°♄42'15	0.60708 AU	evening set	8601 May 30 11:42	24°♄43'18	
morning rise	8600 Jun 29 11:35	0°♄50'40		inferior conj	8601 Jun 05 15:09	19°♄28'23	2°55'37
desc. node	8600 Jun 30 20:09	0°♄03'00		minimum elong	8601 Jun 05 17:31	19°♄22'00	2°55'00
	8600 Jun 30 22:29	30°♄		min. Earth dist.	8601 Jun 08 09:14	16°♄30'54	0.62914 AU
direct	8600 Jul 06 01:50	28°♄41'24		morning rise	8601 Jun 11 21:43	13°♄18'36	
	8600 Jul 11 11:48	0°♄		desc. node	8601 Jun 17 17:11	10°♄48'36	
morning max el	8600 Jul 20 09:10	6°♄39'45	27°51'17	direct	8601 Jun 18 16:02	10°♄45'42	
	8600 Aug 06 23:47	0°♄		morning max el	8601 Jul 02 16:25	18°♄48'43	27°51'04
morning set	8600 Aug 22 01:51	27°♄48'58			8601 Jul 12 03:03	0°♄	
asc. node	8600 Aug 23 04:48	0°♄09'39			8601 Jul 30 21:29	0°♄	
	8600 Aug 23 02:58	0°♄		morning set	8601 Aug 06 00:05	11°♄48'32	
max. Earth dist.	8600 Aug 28 01:52	10°♄40'18	1.31763 AU	asc. node	8601 Aug 10 01:46	20°♄13'17	
				max. Earth dist.	8601 Aug 11 06:21	22°♄45'11	1.32371 AU
superior conj	8600 Aug 29 08:21	13°♄28'10	0°58'58				
minimum elong	8600 Aug 29 06:11	13°♄16'15	0°58'30	superior conj	8601 Aug 13 16:39	27°♄59'31	0°36'02
evening rise	8600 Sep 05 02:24	28°♄16'52		minimum elong	8601 Aug 13 15:04	27°♄50'53	0°35'35
	8600 Sep 05 21:44	0°♄			8601 Aug 14 14:47	0°♄	
	8600 Sep 22 14:10	0°♄		evening rise	8601 Aug 20 13:59	12°♄58'06	
desc. node	8600 Sep 26 18:54	5°♄34'12			8601 Aug 29 02:39	0°♄	
evening max el	8600 Oct 01 22:33	11°♄11'29	25°18'31	evening max el	8601 Sep 13 10:21	21°♄33'39	23°43'17
retrograde	8600 Oct 15 20:08	18°♄12'25		desc. node	8601 Sep 13 16:01	21°♄47'15	
evening set	8600 Oct 21 16:41	16°♄53'45		retrograde	8601 Sep 27 00:48	28°♄21'50	
min. Earth dist.	8600 Oct 26 10:26	14°♄14'16	0.57463 AU	evening set	8601 Oct 01 12:30	27°♄37'48	
inferior conj	8600 Oct 29 09:00	12°♄14'47	-5°19'33	min. Earth dist.	8601 Oct 07 20:39	24°♄35'29	0.55810 AU
minimum elong	8600 Oct 29 14:18	12°♄05'47	5°18'43	inferior conj	8601 Oct 09 22:17	23°♄21'06	-5°36'07
morning rise	8600 Nov 06 14:14	8°♄01'08		minimum elong	8601 Oct 09 21:11	23°♄22'46	5°36'02
direct	8600 Nov 08 23:51	7°♄44'00		morning rise	8601 Oct 18 07:55	19°♄26'09	
morning max el	8600 Nov 17 22:12	12°♄00'20	19°01'19	direct	8601 Oct 21 03:28	19°♄06'20	
asc. node	8600 Nov 19 04:29	13°♄17'43		morning max el	8601 Oct 31 12:54	23°♄59'37	20°08'37
	8600 Nov 30 01:09	0°♄			8601 Nov 05 16:44	0°♄	
morning set	8600 Dec 04 13:33	8°♄44'30		asc. node	8601 Nov 06 01:28	0°♄30'25	
				morning set	8601 Nov 18 18:59	23°♄20'55	
superior conj	8600 Dec 12 21:50	25°♄07'21	1°15'10		8601 Nov 22 00:47	0°♄	
minimum elong	8600 Dec 13 01:01	25°♄22'35	1°14'59				
	8600 Dec 15 11:37	0°♄		superior conj	8601 Nov 26 10:45	8°♄59'38	1°31'17
max. Earth dist.	8600 Dec 19 19:05	7°♄53'49	1.38897 AU	minimum elong	8601 Nov 26 12:57	9°♄10'41	1°31'17
evening rise	8600 Dec 23 15:06	14°♄37'28		max. Earth dist.	8601 Dec 02 01:30	19°♄58'41	1.36776 AU
desc. node	8600 Dec 23 17:48	14°♄49'03		evening rise	8601 Dec 05 20:48	27°♄02'15	
	8601 Jan 02 00:22	0°♄			8601 Dec 07 12:24	0°♄	
	8601 Jan 23 18:08	0°♄		desc. node	8601 Dec 10 14:48	5°♄24'17	
evening max el	8601 Jan 27 22:24	4°♄29'05	24°34'11		8601 Dec 26 10:48	0°♄	
retrograde	8601 Feb 08 11:09	11°♄13'33		evening max el	8602 Jan 10 11:36	18°♄17'00	25°46'29
evening set	8601 Feb 13 22:58	8°♄56'10		retrograde	8602 Jan 22 21:55	25°♄23'44	
asc. node	8601 Feb 15 03:38	7°♄48'53		evening set	8602 Jan 28 22:20	22°♄55'37	
min. Earth dist.	8601 Feb 18 13:16	3°♄42'39	0.67993 AU	min. Earth dist.	8602 Feb 02 05:48	18°♄16'43	0.67203 AU
inferior conj	8601 Feb 19 11:51	2°♄27'16	1°22'59	asc. node	8602 Feb 02 00:43	18°♄32'35	
minimum elong	8601 Feb 19 10:05	2°♄33'12	1°22'27	inferior conj	8602 Feb 03 15:48	16°♄29'08	0°32'12
	8601 Feb 21 09:10	30°♄		minimum elong	8602 Feb 03 15:00	16°♄31'42	0°32'02
morning rise	8601 Feb 24 21:21	26°♄27'36		morning rise	8602 Feb 09 08:09	10°♄38'04	
direct	8601 Feb 28 16:04	25°♄05'43		direct	8602 Feb 12 15:15	9°♄35'47	
morning max el	8601 Mar 08 04:24	29°♄18'50	19°55'45	morning max el	8602 Feb 19 11:22	13°♄20'23	18°58'42
	8601 Mar 08 20:36	0°♄			8602 Mar 03 22:50	0°♄	
desc. node	8601 Mar 21 17:31	16°♄58'29		greatest brilliancy	8602 Mar 05 14:31	2°♄30'44	-0.8m
	8601 Mar 30 10:08	0°♄		desc. node	8602 Mar 08 14:24	7°♄06'45	

morning set	8602 Mar 14 03:35	15° H 42'56		morning rise	8603 Jan 24 15:53	24° Z 44'55	
	8602 Mar 23 07:39	0° Y		direct	8603 Jan 27 12:59	23° Z 59'01	
max. Earth dist.	8602 Mar 28 11:58	8° Y 06'32	1.45258 AU	morning max el	8603 Feb 03 00:33	27° Z 27'01	18°17'57
					8603 Feb 05 08:07	0° \approx	
superior conj	8602 Mar 30 16:49	11° Y 34'25	-2°02'10	morning set	8603 Feb 22 10:32	25° \approx 51'17	
minimum elong	8602 Mar 30 09:51	11° Y 06'59	2°01'48	desc. node	8603 Feb 23 11:20	27° \approx 30'45	
	8602 Apr 11 05:58	0° Z			8603 Feb 25 00:37	0° H	
evening rise	8602 Apr 14 15:11	5° Z 29'32					
	8602 Apr 30 04:38	0° II		superior conj	8603 Mar 09 21:43	20° H 23'05	-1°32'35
asc. node	8602 Apr 30 23:32	1° II 04'07		minimum elong	8603 Mar 09 12:11	19° H 45'42	1°31'34
evening max el	8602 May 04 18:47	5° II 33'46	18°30'47	max. Earth dist.	8603 Mar 11 07:31	22° H 35'26	1.45540 AU
retrograde	8602 May 11 06:24	9° II 05'00			8603 Mar 16 01:15	0° Y	
evening set	8602 May 14 10:02	8° II 09'18		evening rise	8603 Mar 25 22:23	15° Y 26'49	
inferior conj	8602 May 20 03:47	2° II 36'56	3°17'24		8603 Apr 04 06:11	0° Z	
minimum elong	8602 May 20 04:53	2° II 33'39	3°17'08	greatest brilliancy	8603 Apr 05 20:50	2° Z 28'36	-0.8m
	8602 May 22 08:33	30° RZ		asc. node	8603 Apr 17 20:38	18° Z 50'37	
min. Earth dist.	8602 May 22 06:59	0° II 04'33	0.64863 AU	evening max el	8603 Apr 18 04:05	19° Z 09'44	19°09'38
morning rise	8602 May 25 22:53	26° Z 20'22		retrograde	8603 Apr 25 02:29	23° Z 03'40	
direct	8602 Jun 01 14:08	23° Z 35'24		evening set	8603 Apr 28 13:54	21° Z 53'18	
desc. node	8602 Jun 04 14:11	24° Z 04'49		inferior conj	8603 May 04 01:24	16° Z 05'04	3°22'32
	8602 Jun 13 12:49	0° II		minimum elong	8603 May 04 01:12	16° Z 05'41	3°22'23
morning max el	8602 Jun 15 02:22	1° II 31'30	27°15'56	min. Earth dist.	8603 May 05 13:14	14° Z 09'51	0.66420 AU
	8602 Jul 06 06:45	0° Z		morning rise	8603 May 09 12:06	9° Z 46'36	
morning set	8602 Jul 20 13:20	25° Z 19'18		direct	8603 May 15 18:53	7° Z 01'35	
	8602 Jul 22 22:14	0° Ω		desc. node	8603 May 22 11:10	9° Z 26'39	
max. Earth dist.	8602 Jul 25 02:35	4° Ω 25'17	1.33467 AU	morning max el	8603 May 28 12:47	14° Z 37'30	26°13'06
asc. node	8602 Jul 27 22:46	10° Ω 19'30			8603 Jun 10 01:51	0° II	
					8603 Jun 29 01:39	0° Z	
superior conj	8602 Jul 28 20:15	12° Ω 12'51	0°09'02	morning set	8603 Jul 03 14:05	8° Z 11'45	
minimum elong	8602 Jul 28 19:47	12° Ω 10'27	0°08'47	max. Earth dist.	8603 Jul 07 12:25	15° Z 40'50	1.35045 AU
behind sun begin	8602 Jul 28 15:07	11° Ω 45'43					
behind sun end	8602 Jul 29 00:28	12° Ω 35'13		superior conj	8603 Jul 12 16:40	26° Z 01'16	-0°21'11
evening rise	8602 Aug 05 01:01	27° Ω 34'27		minimum elong	8603 Jul 12 17:53	26° Z 07'32	0°21'07
	8602 Aug 06 04:44	0° H		asc. node	8603 Jul 14 19:46	0° Ω 24'11	
	8602 Aug 24 06:32	0° $\underline{\text{Z}}$			8603 Jul 14 15:05	0° Ω	
evening max el	8602 Aug 25 23:50	1° $\underline{\text{Z}}$ 47'34	22°04'32	evening rise	8603 Jul 20 09:30	11° Ω 59'39	
desc. node	8602 Aug 31 13:08	6° $\underline{\text{Z}}$ 06'01			8603 Jul 29 18:46	0° H	
retrograde	8602 Sep 07 17:26	8° $\underline{\text{Z}}$ 07'31		evening max el	8603 Aug 07 23:13	12° H 26'27	20°36'53
evening set	8602 Sep 10 17:56	7° $\underline{\text{Z}}$ 47'15		desc. node	8603 Aug 18 10:15	17° H 59'32	
min. Earth dist.	8602 Sep 19 04:49	4° $\underline{\text{Z}}$ 06'59	0.54833 AU	retrograde	8603 Aug 19 05:36	18° H 01'11	
inferior conj	8602 Sep 19 19:34	3° $\underline{\text{Z}}$ 46'18	-5°00'51	evening set	8603 Aug 21 07:28	17° H 50'36	
minimum elong	8602 Sep 19 11:26	3° $\underline{\text{Z}}$ 57'42	4°59'19	inferior conj	8603 Aug 30 12:13	13° H 53'38	-3°32'57
morning rise	8602 Sep 28 06:27	29° H 58'21		minimum elong	8603 Aug 30 03:08	14° H 06'41	3°30'06
	8602 Sep 28 03:47	30° RH		min. Earth dist.	8603 Aug 31 13:57	13° H 16'37	0.54759 AU
direct	8602 Oct 01 16:02	29° H 32'44		morning rise	8603 Sep 07 22:32	9° H 52'23	
	8602 Oct 05 01:48	0° $\underline{\text{Z}}$		direct	8603 Sep 12 00:27	9° H 16'45	
morning max el	8602 Oct 13 14:31	5° $\underline{\text{Z}}$ 09'51	21°37'17	morning max el	8603 Sep 25 06:07	15° H 39'25	23°20'48
asc. node	8602 Oct 23 22:28	18° $\underline{\text{Z}}$ 35'44			8603 Oct 06 12:27	0° $\underline{\text{Z}}$	
	8602 Oct 30 04:46	0° H		asc. node	8603 Oct 10 19:27	7° $\underline{\text{Z}}$ 20'19	
morning set	8602 Nov 03 04:28	8° H 07'32		morning set	8603 Oct 18 15:55	22° $\underline{\text{Z}}$ 57'21	
					8603 Oct 21 22:39	0° H	
superior conj	8602 Nov 10 09:30	23° H 19'43	1°39'33				
minimum elong	8602 Nov 10 10:24	23° H 24'25	1°39'41	superior conj	8603 Oct 25 14:51	7° H 57'09	1°40'55
	8602 Nov 13 15:10	0° Z		minimum elong	8603 Oct 25 14:30	7° H 55'14	1°41'02
max. Earth dist.	8602 Nov 14 13:34	1° Z 53'08	1.34902 AU	max. Earth dist.	8603 Oct 28 09:36	13° H 53'03	1.33404 AU
evening rise	8602 Nov 18 19:29	10° Z 12'16		evening rise	8603 Nov 02 07:12	23° H 56'22	
desc. node	8602 Nov 27 11:52	25° Z 48'18			8603 Nov 05 09:55	0° Z	
	8602 Nov 30 00:33	0° Z		desc. node	8603 Nov 14 08:57	15° Z 54'26	
	8602 Dec 22 01:07	0° \approx			8603 Nov 23 14:46	0° Z	
evening max el	8602 Dec 24 01:01	2° \approx 00'22	26°44'14	evening max el	8603 Dec 06 13:46	15° Z 28'00	27°20'23
retrograde	8603 Jan 06 03:10	9° \approx 18'12		retrograde	8603 Dec 20 02:20	22° Z 48'25	
evening set	8603 Jan 12 15:23	6° \approx 43'25		evening set	8603 Dec 26 23:51	20° Z 13'12	
min. Earth dist.	8603 Jan 16 16:45	2° \approx 39'10	0.66048 AU	min. Earth dist.	8603 Dec 30 19:53	16° Z 42'20	0.64539 AU
inferior conj	8603 Jan 18 14:25	0° \approx 24'58	-0°26'16	inferior conj	8604 Jan 02 05:14	14° Z 08'40	-1°31'30
minimum elong	8603 Jan 18 15:09	0° \approx 22'48	0°25'47	minimum elong	8604 Jan 02 08:03	14° Z 01'08	1°30'09
	8603 Jan 18 22:54	30° RZ		asc. node	8604 Jan 06 18:52	9° Z 50'34	
asc. node	8603 Jan 19 21:47	28° Z 54'06		morning rise	8604 Jan 08 17:49	8° Z 42'29	

direct	8604 Jan 11 06:49	8°  09'15		morning rise	8604 Dec 22 10:30	22°  24'05	
morning max el	8604 Jan 17 17:20	11°  31'30	17°54'10	asc. node	8604 Dec 23 15:55	22°  05'06	
	8604 Jan 30 12:17	0°  ≈		direct	8604 Dec 24 17:44	21°  59'43	
morning set	8604 Feb 03 22:42	7°  ≈25'44		morning max el	8604 Dec 31 10:37	25°  25'41	17°47'54
desc. node	8604 Feb 10 08:18	18°  ≈05'27			8605 Jan 04 06:25	0°  ≈	
				morning set	8605 Jan 16 10:51	20°  ≈09'05	
superior conj	8604 Feb 17 12:43	29°  ≈46'14	-0°50'36		8605 Jan 22 01:50	0°  ≈	
minimum elong	8604 Feb 17 06:56	29°  ≈23'03	0°49'41	desc. node	8605 Jan 27 05:14	8°  ≈46'48	
	8604 Feb 17 16:09	0°  ≈					
max. Earth dist.	8604 Feb 22 03:09	7°  ≈05'09	1.45072 AU	superior conj	8605 Jan 28 02:49	10°  ≈17'18	-0°06'38
evening rise	8604 Mar 04 13:05	24°  ≈49'58		minimum elong	8605 Jan 28 02:10	10°  ≈14'34	0°06'22
	8604 Mar 07 22:04	0°  ≈		behind sun begin	8605 Jan 27 17:44	9°  ≈39'18	
greatest brilliancy	8604 Mar 19 09:12	17°  ≈12'33	-0.6m	behind sun end	8605 Jan 28 10:35	10°  ≈49'46	
	8604 Mar 28 19:38	0°  ≈		max. Earth dist.	8605 Feb 03 19:55	21°  ≈17'52	1.43920 AU
evening max el	8604 Mar 31 08:22	2°  ≈48'07	20°04'19		8605 Feb 09 07:36	0°  ≈	
asc. node	8604 Apr 03 17:44	5°  ≈42'37		evening rise	8605 Feb 12 01:04	4°  ≈14'32	
retrograde	8604 Apr 08 00:54	7°  ≈15'12			8605 Mar 01 08:27	0°  ≈	
evening set	8604 Apr 11 20:51	5°  ≈49'50		evening max el	8605 Mar 14 07:05	16°  ≈27'25	21°12'06
inferior conj	8604 Apr 17 05:01	29°  ≈47'37	3°14'23	asc. node	8605 Mar 21 14:50	21°  ≈24'58	
minimum elong	8604 Apr 17 03:46	29°  ≈51'49	3°14'09	retrograde	8605 Mar 22 23:18	21°  ≈34'16	
	8604 Apr 17 01:21	30°  ≈ 		evening set	8605 Mar 27 04:58	19°  ≈53'46	
min. Earth dist.	8604 Apr 18 02:22	28°  ≈35'21	0.67537 AU	inferior conj	8605 Apr 01 12:11	13°  ≈39'57	2°55'09
morning rise	8604 Apr 22 10:27	23°  ≈30'18		minimum elong	8605 Apr 01 10:15	13°  ≈46'42	2°54'44
direct	8604 Apr 28 05:29	20°  ≈55'12		min. Earth dist.	8605 Apr 01 20:16	13°  ≈11'56	0.68213 AU
desc. node	8604 May 08 08:09	26°  ≈23'06		morning rise	8605 Apr 06 15:18	7°  ≈25'42	
morning max el	8604 May 09 22:23	27°  ≈56'14	24°51'58	direct	8605 Apr 11 20:54	5°  ≈07'41	
	8604 May 11 21:15	0°  ≈		morning max el	8605 Apr 22 07:43	11°  ≈21'02	23°22'33
	8604 Jun 02 18:38	0°  ≈		desc. node	8605 Apr 25 05:05	14°  ≈27'47	
morning set	8604 Jun 14 21:48	20°  ≈14'05			8605 May 07 04:06	0°  ≈	
max. Earth dist.	8604 Jun 18 12:36	26°  ≈45'46	1.37029 AU		8605 May 26 13:58	0°  ≈	
	8604 Jun 20 06:29	0°  ≈		morning set	8605 May 27 06:50	1°  ≈10'43	
				max. Earth dist.	8605 May 31 08:20	8°  ≈108'00	1.39258 AU
superior conj	8604 Jun 25 02:52	9°  ≈17'03	-0°53'08				
minimum elong	8604 Jun 25 06:09	9°  ≈33'08	0°52'45	superior conj	8605 Jun 07 22:57	21°  ≈50'06	-1°24'31
asc. node	8604 Jun 30 16:47	20°  ≈23'33		minimum elong	8605 Jun 08 04:10	22°  ≈14'22	1°23'59
evening rise	8604 Jul 03 13:03	26°  ≈07'09			8605 Jun 12 06:45	0°  ≈	
	8604 Jul 05 11:46	0°  ≈		evening rise	8605 Jun 17 08:41	9°  ≈48'08	
evening max el	8604 Jul 20 12:02	23°  ≈49'23	19°28'12	asc. node	8605 Jun 17 13:47	10°  ≈12'47	
retrograde	8604 Jul 30 01:32	28°  ≈32'55			8605 Jun 28 17:31	0°  ≈	
evening set	8604 Jul 31 21:54	28°  ≈23'05		evening max el	8605 Jul 03 12:30	5°  ≈55'38	18°40'28
desc. node	8604 Aug 04 07:21	27°  ≈18'46		retrograde	8605 Jul 11 14:17	9°  ≈56'16	
inferior conj	8604 Aug 09 14:58	24°  ≈17'00	-1°37'55	evening set	8605 Jul 13 15:18	9°  ≈41'46	
minimum elong	8604 Aug 09 10:33	24°  ≈24'06	1°36'21	inferior conj	8605 Jul 21 13:18	5°  ≈17'49	0°11'24
min. Earth dist.	8604 Aug 12 02:23	22°  ≈41'44	0.55636 AU	minimum elong	8605 Jul 21 13:44	5°  ≈17'01	0°11'04
morning rise	8604 Aug 17 20:38	19°  ≈43'52		transit middle	8605 Jul 21 13:44	5°  ≈17'01	0°11'04
direct	8604 Aug 22 17:50	18°  ≈50'07		transit begin	8605 Jul 21 11:04	5°  ≈21'59	
morning max el	8604 Sep 05 18:31	25°  ≈52'53	25°05'33	transit end	8605 Jul 21 16:23	5°  ≈12'01	
	8604 Sep 09 16:14	0°  ≈		desc. node	8605 Jul 22 04:26	4°  ≈49'20	
asc. node	8604 Sep 26 16:26	26°  ≈34'24		min. Earth dist.	8605 Jul 24 19:17	2°  ≈52'43	0.57292 AU
	8604 Sep 28 09:57	0°  ≈		morning rise	8605 Jul 29 08:39	0°  ≈	
morning set	8604 Oct 02 03:36	7°  ≈45'21			8605 Jul 29 15:22	30°  ≈ 	
				direct	8605 Aug 04 01:50	28°  ≈46'39	
superior conj	8604 Oct 09 00:19	22°  ≈44'18	1°36'06		8605 Aug 09 14:20	0°  ≈	
minimum elong	8604 Oct 08 22:57	22°  ≈36'48	1°36'05	morning max el	8605 Aug 18 09:58	6°  ≈18'36	26°34'42
max. Earth dist.	8604 Oct 10 13:05	26°  ≈05'34	1.32352 AU		8605 Sep 04 22:06	0°  ≈	
	8604 Oct 12 08:22	0°  ≈		asc. node	8605 Sep 13 13:23	16°  ≈09'53	
evening rise	8604 Oct 16 04:34	8°  ≈105'50		morning set	8605 Sep 16 13:52	22°  ≈26'41	
	8604 Oct 27 20:21	0°  ≈			8605 Sep 20 01:38	0°  ≈	
desc. node	8604 Oct 31 06:02	5°  ≈35'01					
evening max el	8604 Nov 18 00:07	28°  ≈27'47	27°28'27	superior conj	8605 Sep 23 11:49	7°  ≈34'37	1°25'42
	8604 Nov 19 16:52	0°  ≈		minimum elong	8605 Sep 23 09:47	7°  ≈23'25	1°25'29
retrograde	8604 Dec 01 18:48	5°  ≈344'58		max. Earth dist.	8605 Sep 23 21:36	8°  ≈28'57	1.31760 AU
evening set	8604 Dec 08 20:51	3°  ≈318'14		evening rise	8605 Sep 30 08:46	22°  ≈32'57	
min. Earth dist.	8604 Dec 12 13:27	0°  ≈			8605 Oct 03 23:50	0°  ≈	
	8604 Dec 12 20:32	30°  ≈ 		desc. node	8605 Oct 18 03:08	24°  ≈140'00	
inferior conj	8604 Dec 15 09:27	27°  ≈33'23	-2°41'26		8605 Oct 21 21:19	0°  ≈	
minimum elong	8604 Dec 15 14:36	27°  ≈20'59	2°39'16	evening max el	8605 Oct 31 05:50	10°  ≈248'06	27°03'42

retrograde	8605 Nov 14 03:29	17° ♄ 58'45		evening set	8606 Nov 02 12:27	27° ♄ 43'59	
evening set	8605 Nov 21 02:39	15° ♄ 51'10		min. Earth dist.	8606 Nov 06 17:10	25° ♄ 09'11	0.58600 AU
min. Earth dist.	8605 Nov 24 20:30	13° ♄ 09'55	0.60684 AU	inferior conj	8606 Nov 09 20:40	22° ♄ 50'43	-4°53'17
inferior conj	8605 Nov 27 23:47	10° ♄ 30'56	-3°51'34	minimum elong	8606 Nov 10 03:41	22° ♄ 37'49	4°51'40
minimum elong	8605 Nov 28 06:51	10° ♄ 15'59	3°49'10	morning rise	8606 Nov 17 21:13	18° ♄ 23'38	
morning rise	8605 Dec 05 13:26	5° ♄ 41'27		direct	8606 Nov 20 03:41	18° ♄ 06'33	
direct	8605 Dec 07 18:06	5° ♄ 22'21		asc. node	8606 Nov 27 09:58	21° ♄ 13'44	
asc. node	8605 Dec 10 12:57	5° ♄ 54'28		morning max el	8606 Nov 28 08:56	22° ♄ 06'10	18°32'46
morning max el	8605 Dec 15 01:02	9° ♄ 00'51	18°00'15		8606 Dec 04 13:07	0° ♄	
	8605 Dec 28 16:21	0° ♄		morning set	8606 Dec 14 10:24	17° ♄ 48'15	
morning set	8605 Dec 30 16:34	3° ♄ 42'13			8606 Dec 20 18:32	0° ♄	
superior conj	8606 Jan 09 18:18	22° ♄ 01'07	0°31'57	superior conj	8606 Dec 23 07:20	4° ♄ 45'45	1°01'59
minimum elong	8606 Jan 09 20:47	22° ♄ 12'05	0°31'45	minimum elong	8606 Dec 23 10:42	5° ♄ 01'26	1°01'44
desc. node	8606 Jan 14 02:12	29° ♄ 31'33		max. Earth dist.	8606 Dec 30 16:47	18° ♄ 04'12	1.40157 AU
	8606 Jan 14 08:53	0° ♄		desc. node	8606 Dec 31 23:11	20° ♄ 15'25	
max. Earth dist.	8606 Jan 17 08:33	5° ♄ 01'08	1.42217 AU	evening rise	8607 Jan 03 21:47	25° ♄ 14'03	
evening rise	8606 Jan 23 01:16	14° ♄ 16'59			8607 Jan 06 19:16	0° ♄	
	8606 Feb 02 06:13	0° ♄			8607 Jan 27 00:29	0° ♄	
	8606 Feb 24 21:16	0° ♄		evening max el	8607 Feb 07 15:41	13° ♄ 54'22	23°48'56
evening max el	8606 Feb 25 01:02	0° ♄ 09'30	22°28'45	retrograde	8607 Feb 18 13:36	20° ♄ 19'57	
retrograde	8606 Mar 06 20:00	5° ♄ 57'33		asc. node	8607 Feb 23 09:00	18° ♄ 29'05	
asc. node	8606 Mar 08 11:55	5° ♄ 43'38		evening set	8607 Feb 23 18:20	18° ♄ 09'59	
evening set	8606 Mar 11 12:38	4° ♄ 02'00		min. Earth dist.	8607 Feb 28 13:10	12° ♄ 36'49	0.68287 AU
	8606 Mar 15 03:50	30° ♄		inferior conj	8607 Mar 01 05:10	11° ♄ 42'20	1°48'33
inferior conj	8606 Mar 16 20:52	27° ♄ 39'28	2°26'16	minimum elong	8607 Mar 01 03:04	11° ♄ 49'28	1°47'55
minimum elong	8606 Mar 16 18:38	27° ♄ 47'16	2°25'41	morning rise	8607 Mar 06 11:48	5° ♄ 38'46	
min. Earth dist.	8606 Mar 16 16:37	27° ♄ 54'16	0.68461 AU	direct	8607 Mar 10 13:58	4° ♄ 04'22	
morning rise	8606 Mar 22 00:27	21° ♄ 29'50		morning max el	8607 Mar 18 14:43	8° ♄ 38'45	20°35'21
direct	8606 Mar 26 16:10	19° ♄ 32'59		desc. node	8607 Mar 29 22:56	22° ♄ 52'47	
morning max el	8606 Apr 04 20:00	24° ♄ 54'05	21°54'31		8607 Apr 03 21:26	0° ♄	
	8606 Apr 09 09:31	0° ♄		morning set	8607 Apr 16 18:20	19° ♄ 28'03	
desc. node	8606 Apr 12 02:01	3° ♄ 22'21			8607 Apr 23 10:55	0° ♄	
	8606 Apr 30 14:49	0° ♄		max. Earth dist.	8607 Apr 25 13:59	3° ♄ 24'59	1.43388 AU
morning set	8606 May 07 12:46	10° ♄ 51'32		superior conj	8607 May 02 03:00	14° ♄ 09'14	-2°08'57
max. Earth dist.	8606 May 13 07:26	20° ♄ 18'16	1.41476 AU	minimum elong	8607 May 02 06:23	14° ♄ 23'22	2°08'58
	8606 May 19 00:15	0° ♄			8607 May 11 09:18	0° ♄	
superior conj	8606 May 21 00:28	3° ♄ 30'39	-1°51'33	evening rise	8607 May 14 09:10	5° ♄ 15'17	
minimum elong	8606 May 21 06:20	3° ♄ 56'28	1°51'13	asc. node	8607 May 22 07:50	19° ♄ 02'27	
evening rise	8606 May 31 16:50	22° ♄ 54'07			8607 May 29 19:11	0° ♄	
asc. node	8606 Jun 04 10:48	29° ♄ 47'31		evening max el	8607 May 31 09:25	1° ♄ 43'25	18°05'15
	8606 Jun 04 13:33	0° ♄		retrograde	8607 Jun 06 21:27	5° ♄ 04'48	
evening max el	8606 Jun 16 20:54	18° ♄ 36'49	18°13'06	evening set	8607 Jun 09 13:29	4° ♄ 30'20	
retrograde	8606 Jun 23 21:58	22° ♄ 09'50			8607 Jun 15 10:32	30° ♄	
evening set	8606 Jun 26 06:30	21° ♄ 46'43		inferior conj	8607 Jun 16 00:14	29° ♄ 25'41	2°33'50
inferior conj	8606 Jul 03 09:14	17° ♄ 02'00	1°36'26	minimum elong	8607 Jun 16 03:06	29° ♄ 18'27	2°32'57
minimum elong	8606 Jul 03 11:59	16° ♄ 55'58	1°35'22	min. Earth dist.	8607 Jun 19 01:25	26° ♄ 22'26	0.61667 AU
min. Earth dist.	8606 Jul 06 18:14	14° ♄ 05'59	0.59415 AU	morning rise	8607 Jun 22 14:36	23° ♄ 23'23	
desc. node	8606 Jul 09 01:29	12° ♄ 19'49		desc. node	8607 Jun 25 22:31	21° ♄ 38'19	
morning rise	8606 Jul 10 14:25	11° ♄ 20'41		direct	8607 Jun 29 07:28	21° ♄ 03'13	
direct	8606 Jul 16 23:09	9° ♄ 28'33		morning max el	8607 Jul 13 12:19	29° ♄ 03'57	27°55'56
morning max el	8606 Jul 31 07:49	17° ♄ 18'59	27°34'01		8607 Jul 14 10:21	0° ♄	
	8606 Aug 10 20:12	0° ♄			8607 Aug 04 18:25	0° ♄	
	8606 Aug 28 11:40	0° ♄		morning set	8607 Aug 15 23:12	21° ♄ 08'48	
asc. node	8606 Aug 31 10:19	6° ♄ 00'17		asc. node	8607 Aug 18 07:16	26° ♄ 00'28	
morning set	8606 Aug 31 21:02	6° ♄ 56'16			8607 Aug 20 04:13	0° ♄	
				max. Earth dist.	8607 Aug 21 15:36	3° ♄ 11'25	1.31963 AU
superior conj	8606 Sep 07 23:28	22° ♄ 21'52	1°10'08	superior conj	8607 Aug 23 09:32	7° ♄ 00'39	0°49'47
minimum elong	8606 Sep 07 21:13	22° ♄ 09'24	1°09'45	minimum elong	8607 Aug 23 07:32	6° ♄ 49'45	0°49'18
max. Earth dist.	8606 Sep 07 07:44	20° ♄ 54'39	1.31630 AU	evening rise	8607 Aug 30 04:29	21° ♄ 52'14	
	8606 Sep 11 10:11	0° ♄			8607 Sep 03 01:54	0° ♄	
evening rise	8606 Sep 14 17:25	7° ♄ 10'29		desc. node	8607 Sep 21 21:20	29° ♄ 59'43	
	8606 Sep 26 12:47	0° ♄			8607 Sep 21 21:26	0° ♄	
desc. node	8606 Oct 05 00:14	12° ♄ 54'45		evening max el	8607 Sep 24 18:41	3° ♄ 00'12	24°39'35
evening max el	8606 Oct 13 04:14	22° ♄ 18'37	26°05'18	retrograde	8607 Oct 08 13:57	9° ♄ 56'40	
retrograde	8606 Oct 27 02:21	29° ♄ 22'25					

evening set	8607 Oct 13 22:06	8°♄53'05		evening set	8608 Sep 22 09:35	19°♄19'59	
min. Earth dist.	8607 Oct 19 05:45	6°♄06'18	0.56700 AU	min. Earth dist.	8608 Sep 29 14:28	16°♄03'08	0.55291 AU
inferior conj	8607 Oct 21 21:28	4°♄24'29	-5°31'56	inferior conj	8608 Oct 01 02:52	15°♄10'35	-5°28'10
minimum elong	8607 Oct 22 00:31	4°♄19'36	5°31'37	minimum elong	8608 Sep 30 22:26	15°♄17'00	5°27'42
morning rise	8607 Oct 30 05:08	0°♄19'52		morning rise	8608 Oct 09 13:20	11°♄20'59	
direct	8607 Nov 01 18:35	0°♄01'51		direct	8608 Oct 12 14:19	10°♄59'15	
morning max el	8607 Nov 11 06:47	4°♄32'14	19°27'11	morning max el	8608 Oct 23 15:56	16°♄10'24	20°44'06
asc. node	8607 Nov 14 06:58	7°♄49'34		asc. node	8608 Oct 31 03:57	25°♄25'50	
	8607 Nov 27 09:11	0°♄			8608 Nov 02 23:54	0°♄	
morning set	8607 Nov 28 12:29	2°♄16'13		morning set	8608 Nov 11 19:54	16°♄57'22	
					8608 Nov 18 02:38	0°♄	
superior conj	8607 Dec 06 12:55	18°♄17'30	1°23'00	superior conj	8608 Nov 19 06:28	2°♄22'53	1°35'41
minimum elong	8607 Dec 06 15:45	18°♄31'22	1°22'55	minimum elong	8608 Nov 19 08:08	2°♄31'22	1°35'46
	8607 Dec 12 16:48	0°♄			8608 Nov 24 06:38	12°♄23'05	1.35933 AU
max. Earth dist.	8607 Dec 12 22:37	0°♄26'43	1.37982 AU	max. Earth dist.	8608 Nov 28 05:24	19°♄53'09	
evening rise	8607 Dec 16 16:02	7°♄08'18		evening rise	8608 Dec 03 21:12	0°♄	
desc. node	8607 Dec 18 20:12	10°♄54'55		desc. node	8608 Dec 04 17:15	1°♄25'50	
	8607 Dec 30 17:06	0°♄			8608 Dec 23 18:03	0°♄	
evening max el	8608 Jan 21 04:52	27°♄41'26	25°06'06	evening max el	8609 Jan 02 17:57	11°♄27'45	26°13'12
	8608 Jan 23 16:57	0°♄			8609 Jan 15 11:52	18°♄41'16	
retrograde	8608 Feb 02 03:09	4°♄36'28		retrograde	8609 Jan 21 17:30	16°♄09'25	
evening set	8608 Feb 07 20:31	2°♄13'51		evening set	8609 Jan 25 22:10	11°♄45'26	0.66753 AU
asc. node	8608 Feb 10 06:06	29°♄48'42		min. Earth dist.	8609 Jan 27 03:12	10°♄16'17	
	8608 Feb 10 02:09	30°♄		asc. node	8609 Jan 27 13:13	9°♄45'24	0°08'19
min. Earth dist.	8608 Feb 12 07:44	27°♄15'19	0.67711 AU	inferior conj	8609 Jan 27 12:59	9°♄46'06	0°08'23
inferior conj	8608 Feb 13 11:14	25°♄45'24	1°02'26	minimum elong	8609 Jan 27 12:59	9°♄46'06	0°08'23
minimum elong	8608 Feb 13 09:48	25°♄50'06	1°02'00	transit middle	8609 Jan 27 10:32	9°♄53'39	
morning rise	8608 Feb 18 23:23	19°♄49'26		transit begin	8609 Jan 27 15:26	9°♄38'34	
direct	8608 Feb 22 13:00	18°♄36'19		transit end	8609 Feb 02 09:12	3°♄58'53	
morning max el	8608 Feb 29 17:26	22°♄35'26	19°29'32	morning rise	8609 Feb 05 11:43	3°♄04'12	
	8608 Mar 06 22:26	0°♄		direct	8609 Feb 12 03:26	6°♄40'34	18°39'19
greatest brilliancy	8608 Mar 13 11:49	9°♄20'21	-0.7m	morning max el	8609 Feb 28 17:38	0°♄	
desc. node	8608 Mar 15 19:52	12°♄49'19		desc. node	8609 Mar 02 16:47	3°♄05'02	
morning set	8608 Mar 25 16:28	27°♄51'34		morning set	8609 Mar 05 07:12	7°♄10'20	
	8608 Mar 27 01:45	0°♄			8609 Mar 19 20:39	0°♄	
max. Earth dist.	8608 Apr 07 03:16	17°♄16'08	1.44764 AU	max. Earth dist.	8609 Mar 20 20:53	1°♄34'50	1.45464 AU
superior conj	8608 Apr 11 04:56	23°♄44'24	-2°10'24	superior conj	8609 Mar 21 13:02	2°♄38'06	-1°51'45
minimum elong	8608 Apr 11 01:56	23°♄32'26	2°10'25	minimum elong	8609 Mar 21 04:06	2°♄03'06	1°51'04
	8608 Apr 15 02:11	0°♄			8609 Apr 06 01:15	27°♄09'25	
evening rise	8608 Apr 25 04:59	16°♄41'40		evening rise	8609 Apr 07 19:54	0°♄	
	8608 May 03 04:42	0°♄			8609 Apr 13 21:56	9°♄42'55	-0.9m
asc. node	8608 May 08 04:54	7°♄50'25		greatest brilliancy	8609 Apr 25 02:01	26°♄02'54	
evening max el	8608 May 13 22:45	15°♄06'32	18°16'13	asc. node	8609 Apr 27 10:11	28°♄39'48	18°45'15
retrograde	8608 May 20 08:02	18°♄30'43		evening max el	8609 Apr 28 20:52	0°♄	
evening set	8608 May 23 07:19	17°♄43'12			8609 May 04 01:37	2°♄19'34	
inferior conj	8608 May 29 06:10	12°♄20'25	3°07'12	retrograde	8609 May 07 08:22	1°♄17'54	
minimum elong	8608 May 29 08:01	12°♄15'10	3°06'43	evening set	8609 May 09 01:05	30°♄	
min. Earth dist.	8608 May 31 18:02	9°♄31'43	0.63779 AU		8609 May 12 23:05	25°♄38'42	3°21'23
morning rise	8608 Jun 04 07:27	6°♄06'42		inferior conj	8609 May 12 23:37	25°♄37'03	3°21'11
direct	8608 Jun 11 01:02	3°♄27'23		minimum elong	8609 May 14 19:46	23°♄20'45	0.65574 AU
desc. node	8608 Jun 11 19:33	3°♄29'19		min. Earth dist.	8609 May 18 14:11	19°♄20'34	
morning max el	8608 Jun 24 21:18	11°♄29'21	27°40'08	morning rise	8609 May 25 02:21	16°♄33'58	
	8608 Jul 09 12:48	0°♄		direct	8609 May 29 16:33	17°♄42'58	
	8608 Jul 27 05:12	0°♄		desc. node	8609 Jun 07 07:49	24°♄24'13	26°51'59
morning set	8608 Jul 29 17:59	4°♄56'58		morning max el	8609 Jun 12 08:41	0°♄	
max. Earth dist.	8608 Aug 03 17:09	15°♄07'00	1.32776 AU		8609 Jun 02 22:52	0°♄	
asc. node	8608 Aug 04 04:13	16°♄05'22		morning set	8609 Jul 13 02:24	18°♄12'54	
superior conj	8608 Aug 06 16:04	21°♄24'31	0°25'01	max. Earth dist.	8609 Jul 17 08:53	26°♄34'57	1.34081 AU
minimum elong	8608 Aug 06 14:53	21°♄18'11	0°24'38		8609 Jul 19 01:24	0°♄	
	8608 Aug 10 15:17	0°♄					
evening rise	8608 Aug 13 16:04	6°♄31'38		superior conj	8609 Jul 21 16:55	5°♄28'01	-0°03'30
	8608 Aug 26 00:24	0°♄		minimum elong	8609 Jul 21 17:07	5°♄29'03	0°03'37
evening max el	8608 Sep 05 05:47	13°♄12'53	23°00'39	behind sun begin	8609 Jul 21 11:32	4°♄59'53	
desc. node	8608 Sep 07 18:27	15°♄27'39		behind sun end	8609 Jul 21 22:42	5°♄58'15	
retrograde	8608 Sep 18 13:30	19°♄52'12		asc. node	8609 Jul 22 01:13	6°♄11'22	

































































































































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	8609 Aug 02 11:19	0°♎		evening rise	8610 Jul 13 08:55	5°♎22'00	
evening max el	8609 Aug 17 22:39	23°♎33'39	21°25'13		8610 Jul 27 06:32	0°♎	
desc. node	8609 Aug 25 15:34	28°♎47'24		evening max el	8610 Jul 31 03:51	4°♎31'06	20°05'10
retrograde	8609 Aug 30 03:05	29°♎36'05		retrograde	8610 Aug 10 16:32	9°♎43'09	
evening set	8609 Sep 01 15:24	29°♎21'36		evening set	8610 Aug 12 14:24	9°♎33'38	
inferior conj	8609 Sep 10 20:23	25°♎24'07	-4°28'59	desc. node	8610 Aug 12 12:38	9°♎34'20	
minimum elong	8609 Sep 10 10:55	25°♎37'24	4°26'38	inferior conj	8610 Aug 21 15:42	5°♎34'41	-2°45'19
min. Earth dist.	8609 Sep 10 23:06	25°♎20'19	0.54681 AU	minimum elong	8610 Aug 21 08:14	5°♎45'50	2°42'44
morning rise	8609 Sep 19 07:14	21°♎32'42		min. Earth dist.	8610 Aug 23 09:30	4°♎32'20	0.55025 AU
direct	8609 Sep 22 23:16	21°♎03'33		morning rise	8610 Aug 30 00:42	1°♎21'33	
morning max el	8609 Oct 05 12:39	27°♎01'06	22°20'13	direct	8610 Sep 03 10:51	0°♎39'05	
	8609 Oct 08 10:02	0°♎		morning max el	8610 Sep 17 01:48	7°♎19'56	24°06'11
asc. node	8609 Oct 18 00:56	13°♎48'49			8610 Oct 03 09:36	0°♎	
	8609 Oct 26 10:17	0°♎		asc. node	8610 Oct 04 21:54	2°♎47'25	
morning set	8609 Oct 27 06:23	1°♎45'17		morning set	8610 Oct 11 18:07	16°♎35'07	
					8610 Oct 17 22:31	0°♎	
superior conj	8609 Nov 03 08:20	16°♎50'57	1°40'56	superior conj	8610 Oct 18 15:42	1°♎33'34	1°39'36
minimum elong	8609 Nov 03 08:41	16°♎52'48	1°41'04	minimum elong	8610 Oct 18 14:53	1°♎29'07	1°39'39
max. Earth dist.	8609 Nov 06 21:35	24°♎16'12	1.34207 AU	max. Earth dist.	8610 Oct 20 21:07	6°♎22'06	1.32901 AU
	8609 Nov 09 17:37	0°♎		evening rise	8610 Oct 26 02:16	17°♎15'08	
evening rise	8609 Nov 11 10:02	3°♎18'35			8610 Nov 01 17:15	0°♎	
desc. node	8609 Nov 21 14:18	21°♎42'48		desc. node	8610 Nov 08 11:23	11°♎39'28	
	8609 Nov 26 17:43	0°♎			8610 Nov 21 04:55	0°♎	
evening max el	8609 Dec 16 07:13	25°♎05'46	27°02'49	evening max el	8610 Nov 28 19:29	8°♎24'25	27°27'45
	8609 Dec 22 09:40	0°♎		retrograde	8610 Dec 12 11:09	15°♎43'25	
retrograde	8609 Dec 29 14:50	2°♎26'19		evening set	8610 Dec 19 11:11	13°♎11'00	
evening set	8610 Jan 05 07:14	29°♎50'35		min. Earth dist.	8610 Dec 23 05:34	9°♎53'01	0.63795 AU
	8610 Jan 05 02:21	30°♎		inferior conj	8610 Dec 25 19:32	7°♎14'13	-2°00'47
min. Earth dist.	8610 Jan 09 06:11	26°♎00'36	0.65437 AU	minimum elong	8610 Dec 25 23:20	7°♎04'28	1°59'03
inferior conj	8610 Jan 11 08:50	23°♎37'01	-0°53'13	asc. node	8610 Dec 31 21:21	2°♎12'11	
minimum elong	8610 Jan 11 10:23	23°♎32'36	0°52'22	morning rise	8611 Jan 01 13:16	1°♎54'29	
asc. node	8610 Jan 14 00:18	20°♎45'55		direct	8611 Jan 03 23:32	1°♎25'23	
morning rise	8610 Jan 17 14:49	18°♎02'22		morning max el	8611 Jan 10 11:48	4°♎48'13	17°49'18
direct	8610 Jan 20 08:06	17°♎22'25		morning set	8611 Jan 27 02:11	0°♎03'45	
morning max el	8610 Jan 26 18:29	20°♎47'09	18°05'42		8611 Jan 27 01:18	0°♎	
	8610 Feb 02 21:56	0°♎		desc. node	8611 Feb 04 10:42	14°♎12'26	
morning set	8610 Feb 14 02:55	17°♎56'41		superior conj	8611 Feb 08 19:56	21°♎25'46	-0°31'39
desc. node	8610 Feb 17 13:43	23°♎34'05		minimum elong	8611 Feb 08 16:27	21°♎11'33	0°31'00
	8610 Feb 21 13:13	0°♎			8611 Feb 14 03:43	0°♎	
superior conj	8610 Feb 28 20:03	11°♎35'57	-1°15'41	max. Earth dist.	8611 Feb 14 11:26	0°♎30'41	1.44667 AU
minimum elong	8610 Feb 28 11:34	11°♎02'29	1°14'35	evening rise	8611 Feb 24 11:47	16°♎08'04	
max. Earth dist.	8610 Mar 03 16:23	16°♎04'43	1.45430 AU		8611 Mar 05 15:26	0°♎	
	8610 Mar 12 14:43	0°♎		evening max el	8611 Mar 24 19:35	25°♎56'54	20°31'44
evening rise	8610 Mar 17 00:05	6°♎48'18		asc. node	8611 Mar 29 20:13	29°♎52'43	
greatest brilliancy	8610 Mar 29 22:18	26°♎37'05	-0.7m		8611 Mar 30 02:22	0°♎	
	8610 Apr 01 05:12	0°♎		retrograde	8611 Apr 01 21:24	0°♎39'43	
evening max el	8610 Apr 10 17:33	12°♎17'25	19°31'08		8611 Apr 04 12:49	30°♎	
asc. node	8610 Apr 11 23:08	13°♎28'06		evening set	8611 Apr 05 21:26	29°♎07'49	
retrograde	8610 Apr 17 22:52	16°♎24'11		inferior conj	8611 Apr 11 04:57	23°♎00'29	3°07'25
evening set	8610 Apr 21 13:47	15°♎07'34		minimum elong	8611 Apr 11 03:22	23°♎05'55	3°07'07
inferior conj	8610 Apr 26 23:34	9°♎13'26	3°20'29	min. Earth dist.	8611 Apr 11 20:30	22°♎07'10	0.67890 AU
minimum elong	8610 Apr 26 22:54	9°♎15'39	3°20'20	morning rise	8611 Apr 16 09:05	16°♎44'31	
min. Earth dist.	8610 Apr 28 05:12	7°♎35'49	0.66957 AU	direct	8611 Apr 21 22:37	14°♎16'00	
morning rise	8610 May 02 07:40	2°♎55'12		morning max el	8611 May 03 02:49	20°♎57'00	24°14'14
direct	8610 May 08 09:53	0°♎13'01		desc. node	8611 May 03 10:30	21°♎16'37	
desc. node	8610 May 16 13:32	3°♎48'23			8611 May 10 21:51	0°♎	
morning max el	8610 May 20 17:42	7°♎35'48	25°40'03		8611 May 31 10:06	0°♎	
	8610 Jun 07 04:38	0°♎		morning set	8611 Jun 07 19:11	12°♎21'22	
	8610 Jun 25 10:28	0°♎		max. Earth dist.	8611 Jun 11 11:26	18°♎50'40	1.37969 AU
morning set	8610 Jun 25 20:29	0°♎45'34			8611 Jun 17 12:21	0°♎	
max. Earth dist.	8610 Jun 29 13:48	7°♎41'19	1.35848 AU	superior conj	8611 Jun 18 14:07	2°♎02'52	-1°06'43
				minimum elong	8611 Jun 18 18:17	2°♎22'51	1°06'14
superior conj	8610 Jul 05 09:24	19°♎03'47	-0°34'39	asc. node	8611 Jun 25 19:14	16°♎10'07	
minimum elong	8610 Jul 05 11:29	19°♎14'11	0°34'26				
asc. node	8610 Jul 08 22:14	26°♎14'24					

evening rise	8611 Jun 27 09:29	19°☿19'25			8612 Jun 08 13:27	0°☿	
	8611 Jul 02 22:27	0°♊		evening rise	8612 Jun 10 00:48	2°☿47'49	
evening max el	8611 Jul 13 21:59	16°♊13'06	19°05'17	asc. node	8612 Jun 11 16:14	5°☿54'25	
retrograde	8611 Jul 22 18:56	20°♊36'44		evening max el	8612 Jun 26 02:16	28°☿35'39	18°26'17
evening set	8611 Jul 24 16:45	20°♊25'22			8612 Jun 27 16:13	0°♊	
desc. node	8611 Jul 30 09:44	17°♊57'45		retrograde	8612 Jul 03 16:16	2°♊23'02	
inferior conj	8611 Aug 02 02:02	16°♊12'01	-0°49'16	evening set	8612 Jul 05 20:14	2°♊05'21	
minimum elong	8611 Aug 01 23:54	16°♊15'39	0°48'35		8612 Jul 10 03:11	30°☿☿	
min. Earth dist.	8611 Aug 04 23:15	14°♊14'10	0.56263 AU	inferior conj	8612 Jul 13 09:46	27°☿32'22	0°50'53
morning rise	8611 Aug 10 04:01	11°♊23'22		minimum elong	8612 Jul 13 11:31	27°☿28'52	0°50'04
direct	8611 Aug 15 10:00	10°♊19'10		desc. node	8612 Jul 16 06:48	25°☿14'03	
morning max el	8611 Aug 29 14:44	17°♊34'50	25°46'29	min. Earth dist.	8612 Jul 16 18:33	24°☿51'26	0.58155 AU
	8611 Sep 08 21:13	0°♊		morning rise	8612 Jul 20 23:20	22°☿07'31	
asc. node	8611 Sep 21 18:51	22°♊11'43		direct	8612 Jul 26 23:36	20°☿33'40	
	8611 Sep 25 14:07	0°♊		morning max el	8612 Aug 10 09:01	28°☿14'45	27°04'17
morning set	8611 Sep 26 05:23	1°♊21'03			8612 Aug 12 02:26	0°♊	
					8612 Sep 01 13:27	0°♊	
superior conj	8611 Oct 03 02:13	16°♊22'42	1°32'21	asc. node	8612 Sep 07 15:49	11°♊54'39	
minimum elong	8611 Oct 03 00:32	16°♊13'22	1°32'15	morning set	8612 Sep 09 14:34	15°♊58'30	
max. Earth dist.	8611 Oct 04 03:21	18°♊41'21	1.32046 AU		8612 Sep 16 00:55	0°♊	
	8611 Oct 09 09:03	0°♊		superior conj	8612 Sep 16 13:59	1°♊12'34	1°19'42
evening rise	8611 Oct 10 02:50	1°♊33'03		minimum elong	8612 Sep 16 11:49	1°♊00'30	1°19'24
	8611 Oct 25 15:25	0°♊		max. Earth dist.	8612 Sep 16 13:03	1°♊07'23	1.31649 AU
desc. node	8611 Oct 26 08:26	1°♊06'27		evening rise	8612 Sep 23 09:11	16°♊05'19	
evening max el	8611 Nov 11 04:13	21°♊08'54	27°22'06		8612 Sep 30 07:00	0°♊	
retrograde	8611 Nov 25 00:03	28°♊22'41		desc. node	8612 Oct 12 05:31	19°♊52'09	
evening set	8611 Dec 02 02:09	26°♊02'46			8612 Oct 20 05:15	0°♊	
min. Earth dist.	8611 Dec 05 18:32	23°♊11'17	0.61876 AU	evening max el	8612 Oct 23 06:47	3°♊07'39	26°42'37
inferior conj	8611 Dec 08 18:13	20°♊28'16	-3°11'32	retrograde	8612 Nov 06 04:45	10°♊15'48	
minimum elong	8611 Dec 09 00:18	20°♊14'24	3°09'11	evening set	8612 Nov 13 00:01	8°♊19'07	
morning rise	8611 Dec 16 00:41	15°♊27'00		min. Earth dist.	8612 Nov 16 20:43	5°♊42'58	0.59793 AU
direct	8611 Dec 18 06:32	15°♊05'10		inferior conj	8612 Nov 20 01:28	3°♊10'20	-4°19'30
asc. node	8611 Dec 18 18:23	15°♊06'15		minimum elong	8612 Nov 20 08:51	2°♊55'35	4°17'19
morning max el	8611 Dec 25 04:12	18°♊35'03	17°50'52		8612 Nov 24 10:55	30°☿♊	
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morning set	8612 Jan 09 22:30	13°♊10'23		direct	8612 Nov 30 01:00	28°♊12'45	
	8612 Jan 19 10:27	0°♊		asc. node	8612 Dec 04 15:24	29°♊34'58	
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minimum elong	8612 Jan 20 21:59	2°♊32'35	0°10'42	morning set	8612 Dec 23 09:50	26°♊58'32	
behind sun begin	8612 Jan 20 15:32	2°♊04'57			8612 Dec 25 00:19	0°♊	
behind sun end	8612 Jan 21 04:27	3°♊00'09		superior conj	8613 Jan 01 22:13	14°♊39'40	0°45'48
desc. node	8612 Jan 22 07:39	4°♊55'42		minimum elong	8613 Jan 02 01:18	14°♊53'37	0°45'33
max. Earth dist.	8612 Jan 28 03:03	14°♊34'12	1.43255 AU	desc. node	8613 Jan 08 04:35	25°♊40'23	
evening rise	8612 Feb 04 03:24	25°♊45'10		max. Earth dist.	8613 Jan 09 13:25	27°♊59'55	1.41363 AU
	8612 Feb 06 21:09	0°♊			8613 Jan 10 17:59	0°♊	
	8612 Feb 27 14:14	0°♊		evening rise	8613 Jan 14 11:30	6°♊08'44	
evening max el	8612 Mar 06 16:05	9°♊37'22	21°43'51		8613 Jan 30 01:48	0°♊	
retrograde	8612 Mar 15 19:17	15°♊01'47		evening max el	8613 Feb 17 08:11	23°♊19'44	23°02'50
asc. node	8612 Mar 15 17:17	15°♊01'45		retrograde	8613 Feb 27 14:57	29°♊25'16	
evening set	8612 Mar 20 05:35	13°♊14'34		asc. node	8613 Mar 02 14:23	28°♊41'21	
inferior conj	8612 Mar 25 13:00	6°♊56'32	2°44'02	evening set	8613 Mar 04 12:36	27°♊23'21	
minimum elong	8612 Mar 25 10:52	7°♊03'55	2°43'31	inferior conj	8613 Mar 09 21:43	20°♊57'52	2°11'21
min. Earth dist.	8612 Mar 25 15:38	6°♊47'21	0.68372 AU	minimum elong	8613 Mar 09 19:29	21°♊05'36	2°10'43
morning rise	8612 Mar 30 16:01	0°♊44'17		min. Earth dist.	8613 Mar 09 12:22	21°♊30'15	0.68427 AU
	8612 Mar 31 14:18	30°☿♊		morning rise	8613 Mar 15 02:17	14°♊50'36	
direct	8612 Apr 04 15:39	28°♊35'12		direct	8613 Mar 19 12:02	13°♊03'31	
	8612 Apr 09 03:12	0°♊		morning max el	8613 Mar 28 03:55	18°♊04'10	21°19'31
morning max el	8612 Apr 14 13:09	4°♊26'02	22°44'32	desc. node	8613 Apr 06 04:24	28°♊56'24	
desc. node	8612 Apr 19 07:28	9°♊45'00			8613 Apr 06 23:11	0°♊	
	8612 May 04 02:51	0°♊			8613 Apr 27 05:41	0°♊	
morning set	8612 May 18 17:09	22°♊47'24		morning set	8613 Apr 28 11:44	1°♊58'08	
	8612 May 23 00:29	0°♊		max. Earth dist.	8613 May 05 10:14	13°♊07'44	1.42335 AU
max. Earth dist.	8612 May 23 08:26	0°♊33'54	1.40223 AU				
				superior conj	8613 May 12 19:08	25°♊30'43	-2°00'29
superior conj	8612 May 31 02:56	14°♊15'32	-1°36'47				
minimum elong	8612 May 31 08:41	14°♊41'39	1°36'17				

minimum elong	8613 May 13 00:26	25°♄53'33	2°00'17	minimum elong	8614 Apr 23 12:10	5°♄46'28	2°11'58
	8613 May 15 09:14	0°♄		evening rise	8614 May 06 10:58	27°♄35'20	
evening rise	8613 May 24 02:50	15°♄36'28			8614 May 07 20:33	0°♄	
asc. node	8613 May 29 13:15	25°♄21'50		asc. node	8614 May 16 10:18	14°♄26'32	
	8613 Jun 01 05:58	0°♄		evening max el	8614 May 24 02:12	24°♄44'25	18°07'41
evening max el	8613 Jun 09 12:51	11°♄29'08	18°07'24	retrograde	8614 May 30 11:48	28°♄04'59	
retrograde	8613 Jun 16 07:12	14°♄55'29		evening set	8614 Jun 02 06:59	27°♄25'08	
evening set	8613 Jun 18 18:50	14°♄27'58		inferior conj	8614 Jun 08 12:12	22°♄12'50	2°50'35
inferior conj	8613 Jun 25 14:20	9°♄34'51	2°03'59	minimum elong	8614 Jun 08 14:43	22°♄06'09	2°49'52
minimum elong	8613 Jun 25 17:20	9°♄27'49	2°02'55	min. Earth dist.	8614 Jun 11 08:16	19°♄13'15	0.62603 AU
min. Earth dist.	8613 Jun 28 21:07	6°♄32'29	0.60375 AU	morning rise	8614 Jun 14 20:44	16°♄04'50	
morning rise	8613 Jul 02 13:06	3°♄43'01		desc. node	8614 Jun 20 00:56	13°♄42'49	
desc. node	8613 Jul 03 03:53	3°♄20'42		direct	8614 Jun 21 14:58	13°♄34'51	
direct	8613 Jul 09 02:12	1°♄37'54		morning max el	8614 Jul 05 16:32	21°♄37'21	27°53'25
morning max el	8613 Jul 23 10:00	9°♄34'40	27°47'58		8614 Jul 12 23:42	0°♄	
	8613 Aug 08 04:06	0°♄			8614 Aug 01 07:13	0°♄	
morning set	8613 Aug 24 19:53	0°♄21'50		morning set	8614 Aug 08 19:14	14°♄25'02	
	8613 Aug 24 15:40	0°♄		asc. node	8614 Aug 12 09:43	21°♄52'48	
asc. node	8613 Aug 25 12:45	1°♄49'57		max. Earth dist.	8614 Aug 14 04:01	25°♄38'13	1.32251 AU
max. Earth dist.	8613 Aug 30 22:32	13°♄30'00	1.31711 AU				
				superior conj	8614 Aug 16 10:04	0°♄30'53	0°39'47
superior conj	8613 Sep 01 01:13	15°♄57'13	1°02'03	minimum elong	8614 Aug 16 08:22	0°♄21'33	0°39'20
minimum elong	8613 Aug 31 23:01	15°♄45'03	1°01'37		8614 Aug 16 04:24	0°♄	
	8613 Sep 07 10:39	0°♄		evening rise	8614 Aug 23 06:39	15°♄27'09	
evening rise	8613 Sep 07 19:06	0°♄45'21			8614 Aug 30 10:56	0°♄	
	8613 Sep 23 13:58	0°♄		desc. node	8614 Sep 15 23:44	24°♄08'06	
desc. node	8613 Sep 29 02:37	7°♄40'20		evening max el	8614 Sep 16 13:55	24°♄42'56	23°58'08
evening max el	8613 Oct 05 01:34	14°♄16'14	25°31'28		8614 Sep 23 19:56	0°♄	
retrograde	8613 Oct 18 23:36	21°♄18'08		retrograde	8614 Sep 30 05:56	1°♄33'26	
evening set	8613 Oct 24 23:59	19°♄54'18		evening set	8614 Oct 04 23:11	0°♄44'39	
min. Earth dist.	8613 Oct 29 13:47	17°♄16'33	0.57745 AU		8614 Oct 06 20:44	30°♄	
inferior conj	8613 Nov 01 14:01	15°♄11'39	-5°13'40	min. Earth dist.	8614 Oct 11 00:31	27°♄46'54	0.56020 AU
minimum elong	8613 Nov 01 19:55	15°♄01'26	5°12'37	inferior conj	8614 Oct 13 06:14	26°♄25'14	-5°36'42
morning rise	8613 Nov 09 18:10	10°♄54'31		minimum elong	8614 Oct 13 06:17	26°♄25'08	5°36'37
direct	8613 Nov 12 02:43	10°♄37'32		morning rise	8614 Oct 21 15:27	22°♄28'01	
morning max el	8613 Nov 20 20:28	14°♄49'26	18°53'12	direct	8614 Oct 24 09:20	22°♄08'43	
asc. node	8613 Nov 21 12:26	15°♄29'08		morning max el	8614 Nov 03 13:05	26°♄55'51	19°57'11
	8613 Dec 01 09:51	0°♄			8614 Nov 06 09:46	0°♄	
morning set	8613 Dec 07 07:37	11°♄15'21		asc. node	8614 Nov 08 09:27	2°♄32'49	
				morning set	8614 Nov 21 12:18	25°♄50'09	
superior conj	8613 Dec 15 18:56	27°♄46'34	1°11'57		8614 Nov 23 13:19	0°♄	
minimum elong	8613 Dec 15 22:12	28°♄02'06	1°11'46				
	8613 Dec 16 23:08	0°♄		superior conj	8614 Nov 29 06:07	11°♄34'03	1°29'20
max. Earth dist.	8613 Dec 22 19:45	10°♄43'28	1.39223 AU	minimum elong	8614 Nov 29 08:30	11°♄45'55	1°29'20
desc. node	8613 Dec 26 01:34	16°♄23'15		max. Earth dist.	8614 Dec 05 01:59	22°♄52'54	1.37083 AU
evening rise	8613 Dec 26 17:29	17°♄31'21		evening rise	8614 Dec 08 20:22	29°♄48'48	
	8614 Jan 03 07:54	0°♄			8614 Dec 08 22:52	0°♄	
	8614 Jan 24 12:53	0°♄		desc. node	8614 Dec 12 22:35	6°♄59'50	
evening max el	8614 Jan 30 22:01	7°♄06'11	24°22'39		8614 Dec 27 14:09	0°♄	
retrograde	8614 Feb 11 07:05	13°♄46'06		evening max el	8615 Jan 13 11:15	20°♄54'23	25°36'25
evening set	8614 Feb 16 17:01	11°♄30'39		retrograde	8615 Jan 25 18:33	27°♄58'09	
asc. node	8614 Feb 17 11:29	10°♄48'39		evening set	8615 Jan 31 17:11	25°♄31'25	
min. Earth dist.	8614 Feb 21 08:29	6°♄11'57	0.68081 AU	asc. node	8615 Feb 04 08:37	21°♄40'26	
inferior conj	8614 Feb 22 05:20	5°♄01'56	1°30'03	min. Earth dist.	8615 Feb 05 01:37	20°♄47'26	0.67350 AU
minimum elong	8614 Feb 22 03:27	5°♄08'15	1°29'27	inferior conj	8615 Feb 06 09:55	19°♄04'20	0°40'27
	8614 Feb 26 10:03	30°♄		minimum elong	8615 Feb 06 08:56	19°♄07'30	0°40'11
morning rise	8614 Feb 27 13:59	29°♄01'07		morning rise	8615 Feb 12 01:06	13°♄11'55	
direct	8614 Mar 03 10:37	27°♄35'58		direct	8615 Feb 15 09:53	12°♄06'51	
	8614 Mar 08 23:04	0°♄		morning max el	8615 Feb 22 07:49	15°♄54'38	19°06'09
morning max el	8614 Mar 11 01:56	1°♄54'16	20°05'32		8615 Mar 05 03:22	0°♄	
desc. node	8614 Mar 24 01:20	18°♄39'21		greatest brilliancy	8615 Mar 07 19:40	4°♄00'42	-0.7m
	8614 Mar 31 16:38	0°♄		desc. node	8615 Mar 10 22:15	8°♄44'47	
morning set	8614 Apr 07 11:09	10°♄20'28		morning set	8615 Mar 17 13:44	19°♄00'06	
max. Earth dist.	8614 Apr 17 19:20	26°♄33'30	1.44048 AU		8615 Mar 24 15:36	0°♄	
	8614 Apr 19 22:49	0°♄		max. Earth dist.	8615 Mar 31 10:56	10°♄38'59	1.45153 AU
superior conj	8614 Apr 23 11:06	5°♄42'07	-2°11'52	superior conj	8615 Apr 03 03:58	14°♄55'19	-2°04'59

minimum elong	8615 Apr 02 21:56	14° Υ 31'31	2°04'45	superior conj	8616 Mar 12 08:59	23° X 43'13	-1°38'07
	8615 Apr 12 14:10	0° B		minimum elong	8616 Mar 11 23:22	23° X 05'33	1°37'08
evening rise	8615 Apr 17 20:52	8° B 36'19		max. Earth dist.	8616 Mar 13 06:12	25° X 06'16	1.45542 AU
	8615 May 01 04:46	0° Π			8616 Mar 16 09:18	0° Υ	
asc. node	8615 May 03 07:24	3° Π 00'47		evening rise	8616 Mar 28 07:16	18° Υ 40'52	
evening max el	8615 May 07 15:05	8° Π 13'03	18°26'28		8616 Apr 04 12:05	0° B	
retrograde	8615 May 14 01:46	11° Π 42'01		greatest brilliancy	8616 Apr 07 11:57	4° B 39'28	-0.8m
evening set	8615 May 17 04:18	10° Π 48'24		asc. node	8616 Apr 19 04:30	20° B 54'30	
inferior conj	8615 May 22 23:14	5° Π 18'26	3°15'15	evening max el	8616 Apr 20 00:56	21° B 48'11	19°02'50
minimum elong	8615 May 23 00:32	5° Π 14'35	3°14'56	retrograde	8616 Apr 26 21:19	25° B 38'15	
min. Earth dist.	8615 May 25 04:41	2° Π 41'29	0.64591 AU	evening set	8616 Apr 30 07:29	24° B 30'08	
	8615 May 27 17:52	30° R B		inferior conj	8616 May 05 19:42	18° B 44'06	3°22'39
morning rise	8615 May 28 19:51	29° B 02'28		minimum elong	8616 May 05 19:42	18° B 44'08	3°22'30
direct	8615 Jun 04 11:52	26° B 18'44		min. Earth dist.	8616 May 07 09:47	16° B 42'49	0.66209 AU
desc. node	8615 Jun 06 21:58	26° B 37'50		morning rise	8616 May 11 07:27	12° B 25'34	
	8615 Jun 13 07:15	0° Π		direct	8616 May 17 15:40	9° B 39'54	
morning max el	8615 Jun 18 02:21	4° Π 16'32	27°23'13	desc. node	8616 May 23 18:58	11° B 42'40	
	8615 Jul 07 12:32	0° E		morning max el	8616 May 30 12:55	17° B 20'14	26°23'56
morning set	8615 Jul 23 10:05	28° E 01'16			8616 Jun 10 02:26	0° Π	
	8615 Jul 24 10:12	0° Ω			8616 Jun 29 10:55	0° E	
max. Earth dist.	8615 Jul 28 01:55	7° Ω 23'55	1.33275 AU	morning set	8616 Jul 05 12:56	11° E 00'16	
asc. node	8615 Jul 30 06:41	11° Ω 59'10		max. Earth dist.	8616 Jul 09 13:20	18° E 42'46	1.34780 AU
superior conj	8615 Jul 31 14:33	14° Ω 47'50	0°13'23	superior conj	8616 Jul 14 12:10	28° E 40'21	-0°16'25
minimum elong	8615 Jul 31 13:53	14° Ω 44'18	0°13'05	minimum elong	8616 Jul 14 13:07	28° E 45'11	0°16'26
behind sun begin	8615 Jul 31 10:42	14° Ω 27'19			8616 Jul 15 03:38	0° Ω	
behind sun end	8615 Jul 31 17:05	15° Ω 01'18		asc. node	8616 Jul 16 03:39	2° Ω 04'19	
evening rise	8615 Aug 07 17:57	0° Π 05'16		evening rise	8616 Jul 22 02:55	14° Ω 32'30	
	8615 Aug 07 16:58	0° Π			8616 Jul 30 00:17	0° Π	
	8615 Aug 24 17:43	0° E		evening max el	8616 Aug 09 23:59	15° Π 29'10	20°48'49
evening max el	8615 Aug 29 02:30	4° E 55'41	22°18'44	desc. node	8616 Aug 19 18:00	21° Π 03'43	
desc. node	8615 Sep 02 20:52	8° E 46'35		retrograde	8616 Aug 21 12:29	21° Π 11'35	
retrograde	8615 Sep 11 00:08	11° E 21'14		evening set	8616 Aug 23 16:23	21° Π 00'19	
evening set	8615 Sep 14 05:31	10° E 58'17		inferior conj	8616 Sep 01 21:43	17° Π 03'32	-3°48'48
min. Earth dist.	8615 Sep 22 08:36	7° E 24'36	0.54927 AU	minimum elong	8616 Sep 01 12:18	17° Π 16'57	3°46'00
inferior conj	8615 Sep 23 05:18	6° E 55'27	-5°09'52	min. Earth dist.	8616 Sep 02 17:32	16° Π 35'16	0.54711 AU
minimum elong	8615 Sep 22 21:59	7° E 05'47	5°08'39	morning rise	8616 Sep 10 08:16	13° Π 05'29	
morning rise	8615 Oct 01 16:09	3° E 07'49		direct	8616 Sep 14 07:27	12° Π 31'48	
direct	8615 Oct 04 23:30	2° E 43'19		morning max el	8616 Sep 27 09:22	18° Π 48'05	23°04'53
morning max el	8615 Oct 16 16:36	8° E 13'21	21°22'57		8616 Oct 06 13:52	0° E	
asc. node	8615 Oct 26 06:27	20° E 31'02		asc. node	8616 Oct 12 03:24	9° E 10'17	
	8615 Oct 31 14:51	0° M		morning set	8616 Oct 20 08:34	25° E 25'17	
morning set	8615 Nov 05 21:20	10° M 35'42			8616 Oct 22 12:01	0° M	
superior conj	8615 Nov 13 03:38	25° M 50'43	1°38'45	superior conj	8616 Oct 27 08:09	10° M 26'07	1°41'07
minimum elong	8615 Nov 13 04:44	25° M 56'26	1°38'52	minimum elong	8616 Oct 27 07:59	10° M 25'11	1°41'14
	8615 Nov 15 04:00	0° X		max. Earth dist.	8616 Oct 30 07:35	16° M 45'06	1.33598 AU
max. Earth dist.	8615 Nov 17 12:58	4° X 47'34	1.35160 AU	evening rise	8616 Nov 04 02:44	26° M 32'05	
evening rise	8615 Nov 21 16:46	12° X 52'29			8616 Nov 05 21:18	0° X	
desc. node	8615 Nov 29 19:37	27° X 25'44		desc. node	8616 Nov 15 16:41	17° X 35'02	
	8615 Dec 01 08:26	0° B			8616 Nov 23 16:41	0° B	
	8615 Dec 22 14:43	0° \approx		evening max el	8616 Dec 08 13:24	18° B 09'13	27°16'40
evening max el	8615 Dec 27 00:34	4° \approx 38'37	26°36'47	retrograde	8616 Dec 22 00:54	25° B 30'14	
retrograde	8616 Jan 09 00:39	11° \approx 55'31		evening set	8616 Dec 28 21:13	22° B 54'32	
evening set	8616 Jan 15 11:18	9° \approx 21'12		min. Earth dist.	8617 Jan 01 17:55	19° B 18'53	0.64780 AU
min. Earth dist.	8616 Jan 19 13:28	5° \approx 12'00	0.66245 AU	inferior conj	8617 Jan 04 01:36	16° B 47'24	-1°21'17
inferior conj	8616 Jan 21 09:27	3° \approx 01'12	-0°16'57	minimum elong	8617 Jan 04 04:04	16° B 40'41	1°20'03
minimum elong	8616 Jan 21 09:55	2° \approx 59'49	0°16'34	asc. node	8617 Jan 08 02:48	12° B 49'23	
asc. node	8616 Jan 22 05:44	2° \approx 01'18		morning rise	8617 Jan 10 12:26	11° B 19'03	
	8616 Jan 24 01:37	30° R B		direct	8617 Jan 13 02:26	10° B 44'15	
morning rise	8616 Jan 27 09:27	27° B 19'29		morning max el	8617 Jan 19 12:44	14° B 06'52	17°56'37
direct	8616 Jan 30 07:55	26° B 31'25			8617 Jan 30 19:20	0° \approx	
	8616 Feb 05 19:49	0° \approx		morning set	8617 Feb 06 00:17	10° \approx 17'48	
morning max el	8616 Feb 05 20:17	0° \approx 01'07	18°22'57	desc. node	8617 Feb 11 16:05	19° \approx 40'15	
morning set	8616 Feb 25 16:14	28° \approx 54'59			8617 Feb 18 00:42	0° X	
desc. node	8616 Feb 25 19:09	29° \approx 06'38		superior conj	8617 Feb 19 21:28	2° X 59'06	-0°57'19
	8616 Feb 26 08:32	0° X					

minimum elong	8617 Feb 19 14:54	2° X 32'53	0°56'20		8618 Jan 23 11:26	0° \approx	
max. Earth dist.	8617 Feb 24 01:44	9° X 36'19	1.45185 AU	desc. node	8618 Jan 29 13:01	10° \approx 21'01	
evening rise	8617 Mar 07 23:40	28° X 07'14					
	8617 Mar 09 05:01	0° Y		superior conj	8618 Jan 31 07:46	13° \approx 19'27	-0°13'04
greatest brilliancy	8617 Mar 22 11:52	20° Y 04'28	-0.6m	minimum elong	8618 Jan 31 06:26	13° \approx 13'54	0°12'42
	8617 Mar 29 14:31	0° Z		behind sun begin	8618 Jan 31 00:42	12° \approx 50'05	
evening max el	8617 Apr 03 05:59	5° Z 26'22	19°55'17	behind sun end	8618 Jan 31 12:10	13° \approx 37'42	
asc. node	8617 Apr 06 01:36	7° Z 55'50		max. Earth dist.	8618 Feb 06 19:03	23° \approx 52'45	1.44132 AU
retrograde	8617 Apr 10 19:30	9° Z 48'05			8618 Feb 10 15:34	0° X	
evening set	8617 Apr 14 14:05	8° Z 25'04		evening rise	8618 Feb 15 11:06	7° X 29'41	
inferior conj	8617 Apr 19 22:35	2° Z 24'52	3°16'19		8618 Mar 02 12:01	0° Y	
minimum elong	8617 Apr 19 21:28	2° Z 28'34	3°16'08	evening max el	8618 Mar 17 05:35	19° Y 06'03	21°01'18
min. Earth dist.	8617 Apr 20 22:04	1° Z 05'51	0.67399 AU	asc. node	8618 Mar 23 22:42	23° Y 50'00	
	8617 Apr 21 18:01	30° R Y		retrograde	8618 Mar 25 17:56	24° Y 06'29	
morning rise	8617 Apr 25 04:35	26° Y 07'08		evening set	8618 Mar 29 22:06	22° Y 28'17	
direct	8617 May 01 01:32	23° Y 29'53		inferior conj	8618 Apr 04 05:21	16° Y 16'09	2°58'41
desc. node	8617 May 10 15:55	28° Y 26'30		minimum elong	8618 Apr 04 03:29	16° Y 22'36	2°58'18
	8617 May 12 07:37	0° Z		min. Earth dist.	8618 Apr 04 15:21	15° Y 41'29	0.68147 AU
morning max el	8617 May 12 22:33	0° Z 37'18	25°04'44	morning rise	8618 Apr 09 08:38	10° Y 01'22	
	8617 Jun 04 00:59	0° II		direct	8618 Apr 14 16:21	7° Y 40'21	
morning set	8617 Jun 17 23:26	23° II 10'36		morning max el	8618 Apr 25 07:40	14° Y 01'04	23°35'54
max. Earth dist.	8617 Jun 21 14:22	29° II 46'06	1.36711 AU	desc. node	8618 Apr 27 12:53	16° Y 22'22	
	8617 Jun 21 17:22	0° E			8618 May 08 06:41	0° Z	
					8618 May 27 22:40	0° II	
superior conj	8617 Jun 28 00:03	12° E 01'11	-0°48'16	morning set	8618 May 30 12:09	4° II 17'47	
minimum elong	8617 Jun 28 03:01	12° E 15'48	0°47'56	max. Earth dist.	8618 Jun 03 10:12	11° II 03'20	1.38922 AU
asc. node	8617 Jul 03 00:38	22° E 04'34					
evening rise	8617 Jul 06 07:17	28° E 42'37		superior conj	8618 Jun 10 22:30	24° II 41'23	-1°19'57
	8617 Jul 06 22:40	0° O		minimum elong	8618 Jun 11 03:28	25° II 04'41	1°19'25
evening max el	8617 Jul 23 10:49	26° O 45'13	19°37'10		8618 Jun 13 17:49	0° E	
	8617 Jul 27 14:26	0° P		asc. node	8618 Jun 19 21:38	11° E 55'44	
retrograde	8617 Aug 02 06:17	1° P 35'57		evening rise	8618 Jun 20 04:17	12° E 28'01	
evening set	8617 Aug 04 02:36	1° P 26'25			8618 Jun 29 18:23	0° O	
desc. node	8617 Aug 06 15:04	0° P 44'55		evening max el	8618 Jul 06 09:46	8° O 45'37	18°46'18
	8617 Aug 08 08:51	30° R O		retrograde	8618 Jul 14 16:06	12° O 51'38	
inferior conj	8617 Aug 12 22:07	27° O 22'37	-1°55'39	evening set	8618 Jul 16 16:14	12° O 38'03	
minimum elong	8617 Aug 12 16:52	27° O 30'54	1°53'46	inferior conj	8618 Jul 24 17:12	8° O 17'04	-0°03'50
min. Earth dist.	8617 Aug 15 05:29	25° O 55'38	0.55450 AU	minimum elong	8618 Jul 24 17:02	8° O 17'21	0°03'56
morning rise	8617 Aug 21 04:48	22° O 54'52		transit middle	8618 Jul 24 17:02	8° O 17'21	0°03'56
direct	8617 Aug 25 23:05	22° O 04'16		transit begin	8618 Jul 24 13:27	8° O 23'54	
morning max el	8617 Sep 08 21:41	29° O 01'56	24°50'30	transit end	8618 Jul 24 20:37	8° O 10'48	
	8617 Sep 09 21:30	0° P		desc. node	8618 Jul 24 12:08	8° O 26'19	
asc. node	8617 Sep 29 00:20	28° P 20'28		min. Earth dist.	8618 Jul 27 21:28	5° O 58'30	0.57004 AU
	8617 Sep 29 20:46	0° U		morning rise	8618 Aug 01 14:24	3° O 12'27	
morning set	8617 Oct 04 20:16	10° U 13'51		direct	8618 Aug 07 04:53	1° O 55'59	
				morning max el	8618 Aug 21 12:16	9° O 24'00	26°23'08
superior conj	8617 Oct 11 17:07	25° U 12'27	1°37'13		8618 Sep 06 03:14	0° P	
minimum elong	8617 Oct 11 15:53	25° U 05'43	1°37'13	asc. node	8618 Sep 15 21:16	17° P 53'34	
max. Earth dist.	8617 Oct 13 10:01	28° U 55'40	1.32479 AU	morning set	8618 Sep 19 06:52	24° P 57'02	
	8617 Oct 13 21:53	0° M			8618 Sep 21 15:06	0° U	
evening rise	8617 Oct 18 22:50	10° M 38'36					
	8617 Oct 29 04:07	0° X		superior conj	8618 Sep 26 04:25	10° U 03'10	1°27'38
desc. node	8617 Nov 02 13:46	7° X 20'14		minimum elong	8618 Sep 26 02:29	9° U 52'23	1°27'27
	8617 Nov 19 17:47	0° Z		max. Earth dist.	8618 Sep 26 18:08	11° U 19'06	1.31819 AU
evening max el	8617 Nov 21 00:20	1° Z 14'32	27°29'19	evening rise	8618 Oct 03 02:12	25° U 04'14	
retrograde	8617 Dec 04 18:30	8° Z 32'30			8618 Oct 05 11:26	0° M	
evening set	8617 Dec 11 20:08	6° Z 04'02		desc. node	8618 Oct 20 10:50	26° M 31'49	
min. Earth dist.	8617 Dec 15 13:05	2° Z 58'15	0.63002 AU		8618 Oct 22 19:42	0° X	
inferior conj	8617 Dec 18 07:35	0° Z 15'48	-2°30'43	evening max el	8618 Nov 03 07:02	13° X 42'20	27°09'35
minimum elong	8617 Dec 18 12:23	0° Z 04'03	2°28'39	retrograde	8618 Nov 17 04:14	20° X 53'30	
	8617 Dec 18 14:03	30° R X		evening set	8618 Nov 24 04:28	18° X 42'31	
morning rise	8617 Dec 25 06:43	25° X 03'40		min. Earth dist.	8618 Nov 27 21:46	15° X 58'54	0.61000 AU
asc. node	8617 Dec 25 23:50	24° X 50'33		inferior conj	8618 Dec 01 00:14	13° X 18'29	-3°41'11
direct	8617 Dec 27 14:35	24° X 38'14		minimum elong	8618 Dec 01 07:05	13° X 03'42	3°38'47
morning max el	8618 Jan 03 06:07	28° X 03'17	17°47'41	morning rise	8618 Dec 08 12:03	8° X 25'43	
	8618 Jan 05 00:56	0° Z		direct	8618 Dec 10 16:55	8° X 05'59	
morning set	8618 Jan 19 09:20	22° Z 52'39		asc. node	8618 Dec 12 20:52	8° X 25'47	

morning max el	8618 Dec 17 21:09	11°  41'58	17°57'08	asc. node	8619 Nov 29 17:54	23°  32'19	
	8618 Dec 30 01:33	0° 		morning max el	8619 Dec 01 06:17	24°  52'31	18°26'33
morning set	8619 Jan 02 12:48	6°  19'42			8619 Dec 05 13:09	0° 	
				morning set	8619 Dec 17 05:07	20°  21'43	
superior conj	8619 Jan 12 19:36	24°  52'53	0°26'36		8619 Dec 22 05:51	0° 	
minimum elong	8619 Jan 12 21:47	25°  02'23	0°26'28				
	8619 Jan 15 18:38	0° 		superior conj	8619 Dec 26 05:46	7°  29'33	0°57'59
desc. node	8619 Jan 16 09:59	1°  05'31		minimum elong	8619 Dec 26 09:07	7°  45'00	0°57'44
max. Earth dist.	8619 Jan 20 08:34	7°  42'01	1.42505 AU	max. Earth dist.	8620 Jan 02 17:29	20°  51'44	1.40480 AU
evening rise	8619 Jan 26 08:46	17°  25'01		desc. node	8620 Jan 03 06:58	21°  34'42	
	8619 Feb 03 12:25	0° 		evening rise	8620 Jan 07 02:00	28°  13'18	
	8619 Feb 25 09:45	0° 			8620 Jan 08 03:54	0° 	
evening max el	8619 Feb 28 00:11	2°  47'51	22°16'56		8620 Jan 28 02:05	0° 	
retrograde	8619 Mar 09 14:57	8°  29'35		evening max el	8620 Feb 10 15:10	16°  32'10	23°37'00
asc. node	8619 Mar 10 19:48	8°  22'18		retrograde	8620 Feb 21 09:09	22°  52'46	
evening set	8619 Mar 14 05:57	6°  36'10		asc. node	8620 Feb 25 16:55	21°  42'14	
inferior conj	8619 Mar 19 13:55	0°  14'47	2°31'15	evening set	8620 Feb 26 12:05	20°  44'44	
minimum elong	8619 Mar 19 11:42	0°  22'31	2°30'40	inferior conj	8620 Mar 02 22:25	14°  17'31	1°54'51
min. Earth dist.	8619 Mar 19 11:26	0°  23'26	0.68456 AU	minimum elong	8620 Mar 02 20:17	14°  24'52	1°54'12
	8619 Mar 19 18:10	30°  11'11		min. Earth dist.	8620 Mar 02 08:06	15°  06'30	0.68337 AU
morning rise	8619 Mar 24 17:17	24°  04'30		morning rise	8620 Mar 08 04:27	8°  13'02	
direct	8619 Mar 29 11:05	22°  04'23		direct	8620 Mar 12 08:32	6°  35'26	
morning max el	8619 Apr 07 19:18	27°  32'50	22°07'13	morning max el	8620 Mar 20 13:01	11°  16'12	20°46'25
	8619 Apr 10 02:35	0° 		desc. node	8620 Mar 31 06:46	24°  36'28	
desc. node	8619 Apr 14 09:50	5°  10'31			8620 Apr 04 01:46	0° 	
	8619 May 01 21:22	0° 		morning set	8620 Apr 19 06:52	22°  54'53	
morning set	8619 May 10 22:16	14°  10'12			8620 Apr 23 18:57	0° 	
max. Earth dist.	8619 May 16 08:44	23°  06'50	1.41162 AU	max. Earth dist.	8620 Apr 27 14:18	6°  06'31	1.43131 AU
	8619 May 20 09:52	0° 					
				superior conj	8620 May 04 09:20	17°  19'18	-2°07'12
superior conj	8619 May 24 03:07	6°  11'30'42	-1°47'58	minimum elong	8620 May 04 13:22	17°  36'17	2°07'10
minimum elong	8619 May 24 09:02	6°  56'59	1°47'33		8620 May 11 18:31	0° 	
evening rise	8619 Jun 03 14:27	25°  11'40'13		evening rise	8620 May 16 09:31	8°  09'27	
	8619 Jun 05 22:26	0° 		asc. node	8620 May 23 15:44	20°  15'02	
asc. node	8619 Jun 06 18:40	1°  03'33'13			8620 May 29 12:16	0° 	
evening max el	8619 Jun 19 17:14	21°  02'22'11	18°15'53	evening max el	8620 Jun 02 05:23	4°  02'55'55	18°05'10
retrograde	8619 Jun 26 21:14	24°  08'58'25		retrograde	8620 Jun 08 18:46	7°  04'48'15	
evening set	8619 Jun 29 04:36	24°  03'36'46		evening set	8620 Jun 11 09:38	7°  05'15'41	
inferior conj	8619 Jul 06 10:01	19°  05'54'58	1°25'24	inferior conj	8620 Jun 17 22:31	2°  03'13'53	2°26'45
minimum elong	8619 Jul 06 12:35	19°  04'49'27	1°24'20	minimum elong	8620 Jun 18 01:28	2°  06'06'35	2°25'48
min. Earth dist.	8619 Jul 09 19:18	17°  02'02'12	0.59080 AU		8620 Jun 20 04:31	30°  11'11'11	
desc. node	8619 Jul 11 09:14	15°  04'48'55		min. Earth dist.	8620 Jun 21 01:19	29°  10'10'07	0.61334 AU
morning rise	8619 Jul 13 17:25	14°  01'17'41		morning rise	8620 Jun 24 15:00	26°  13'13'50	
direct	8619 Jul 20 00:11	12°  03'30'20		desc. node	8620 Jun 27 06:19	24°  11'46'58	
morning max el	8619 Aug 03 09:09	20°  05'18'22	27°27'37	direct	8620 Jul 01 07:03	23°  11'57'23	
	8619 Aug 11 17:03	0° 			8620 Jul 13 11:16	0° 	
	8619 Aug 29 22:38	0° 		morning max el	8620 Jul 15 12:57	1°  05'57'28	27°55'07
asc. node	8619 Sep 02 18:12	7°  04'42'01			8620 Aug 05 01:22	0° 	
morning set	8619 Sep 03 14:37	9°  09'28'41		morning set	8620 Aug 17 17:41	23°  09'44'05	
max. Earth dist.	8619 Sep 10 04:18	23°  09'45'20	1.31617 AU	asc. node	8620 Aug 19 15:10	27°  09'40'58	
					8620 Aug 20 17:24	0° 	
superior conj	8619 Sep 10 16:09	24°  09'51'06	1°12'49	max. Earth dist.	8620 Aug 23 12:46	6°  03'49	1.31882 AU
minimum elong	8619 Sep 10 13:55	24°  09'38'38	1°12'27				
	8619 Sep 12 23:50	0° 		superior conj	8620 Aug 25 02:36	9°  09'31'16	0°53'09
evening rise	8619 Sep 17 10:18	9°  04'40'29		minimum elong	8620 Aug 25 00:32	9°  09'19'56	0°52'42
	8619 Sep 27 19:17	0° 		evening rise	8620 Aug 31 21:09	24°  09'21'39	
desc. node	8619 Oct 07 07:56	14°  09'55'21			8620 Sep 03 13:21	0° 	
evening max el	8619 Oct 16 06:35	25°  09'20'22	26°15'58		8620 Sep 21 09:19	0° 	
	8619 Oct 22 06:56	0° 		desc. node	8620 Sep 23 05:03	2°  09'12'06	
retrograde	8619 Oct 30 04:35	2°  09'25'07		evening max el	8620 Sep 26 21:58	6°  09'07'41	24°53'34
evening set	8619 Nov 05 17:35	0°  09'41'39		retrograde	8620 Oct 10 18:10	13°  09'13'06'00	
	8619 Nov 06 23:41	30°  09'11'11		evening set	8620 Oct 16 06:57	11°  09'11'57'04	
min. Earth dist.	8619 Nov 09 19:43	28°  09'11'10	0.58909 AU	min. Earth dist.	8620 Oct 21 09:15	9°  09'13'18	0.56955 AU
inferior conj	8619 Nov 12 23:56	25°  09'44'30	-4°45'00	inferior conj	8620 Oct 24 03:44	7°  09'24'57	-5°28'26
minimum elong	8619 Nov 13 07:09	25°  09'30'55	4°43'13	minimum elong	8620 Oct 24 07:41	7°  09'18'30	5°27'57
morning rise	8619 Nov 20 23:05	21°  09'11'40'06		morning rise	8620 Nov 01 10:40	3°  09'11'72'23	
direct	8619 Nov 23 05:01	20°  09'11'56'53		direct	8620 Nov 03 22:39	2°  09'11'59'46	

morning max el	8620 Nov 13 05:52	7° \mathbb{M} 24'58	19°17'42	morning max el	8621 Oct 26 17:00	19° $\underline{\mathfrak{A}}$ 10'40	20°31'20
asc. node	8620 Nov 15 14:54	9° \mathbb{M} 57'24		asc. node	8621 Nov 02 11:53	27° $\underline{\mathfrak{A}}$ 25'33	
	8620 Nov 27 20:06	0° \mathfrak{A}			8621 Nov 04 04:01	0° \mathbb{M}	
morning set	8620 Nov 30 06:10	4° \mathfrak{A} 46'53		morning set	8621 Nov 14 12:58	19° \mathbb{M} 26'39	
					8621 Nov 19 15:23	0° \mathfrak{A}	
superior conj	8620 Dec 08 09:13	20° \mathfrak{A} 55'17	1°20'21	superior conj	8621 Nov 22 01:15	4° \mathfrak{A} 56'33	1°34'15
minimum elong	8620 Dec 08 12:11	21° \mathfrak{A} 09'43	1°20'14	minimum elong	8621 Nov 22 03:07	5° \mathfrak{A} 06'00	1°34'18
	8620 Dec 13 03:53	0° \mathfrak{B}			8621 Nov 27 06:32	15° \mathfrak{A} 17'52	1.36218 AU
max. Earth dist.	8620 Dec 14 23:16	3° \mathfrak{B} 19'14	1.38299 AU	max. Earth dist.	8621 Dec 01 03:55	22° \mathfrak{A} 37'46	
evening rise	8620 Dec 18 17:07	9° \mathfrak{B} 59'25		evening rise	8621 Dec 05 06:37	0° \mathfrak{B}	
desc. node	8620 Dec 20 03:57	12° \mathfrak{B} 30'06		desc. node	8621 Dec 07 00:58	3° \mathfrak{B} 02'44	
	8620 Dec 30 23:07	0° \approx			8621 Dec 24 17:36	0° \approx	
	8621 Jan 22 20:46	0° \mathfrak{H}		evening max el	8622 Jan 05 17:32	14° \approx 06'18	26°04'10
evening max el	8621 Jan 23 04:25	0° \mathfrak{H} 18'59	24°55'06	retrograde	8622 Jan 18 09:00	21° \approx 17'52	
retrograde	8621 Feb 03 23:30	7° \mathfrak{H} 10'44		evening set	8622 Jan 24 12:48	18° \approx 47'15	
evening set	8621 Feb 09 14:56	4° \mathfrak{H} 49'48		min. Earth dist.	8622 Jan 28 18:25	14° \approx 18'00	0.66920 AU
asc. node	8621 Feb 11 14:03	2° \mathfrak{H} 53'40		asc. node	8622 Jan 29 11:08	13° \approx 26'18	
	8621 Feb 13 22:54	30° \mathfrak{R} \approx		inferior conj	8622 Jan 30 07:42	12° \approx 22'09	0°17'03
min. Earth dist.	8621 Feb 14 03:10	29° \approx 46'04	0.67819 AU	minimum elong	8622 Jan 30 07:15	12° \approx 23'33	0°17'02
inferior conj	8621 Feb 15 04:59	28° \approx 21'01	1°09'59	morning rise	8622 Feb 05 02:22	6° \approx 33'56	
minimum elong	8621 Feb 15 03:25	28° \approx 26'12	1°09'30	direct	8622 Feb 08 06:26	5° \approx 36'41	
morning rise	8621 Feb 20 16:09	22° \approx 23'46		morning max el	8622 Feb 14 23:34	9° \approx 15'44	18°45'43
direct	8621 Feb 24 07:30	21° \approx 07'41			8622 Mar 01 23:56	0° \mathfrak{H}	
morning max el	8621 Mar 03 14:35	25° \approx 11'29	19°38'20	desc. node	8622 Mar 05 00:36	4° \mathfrak{H} 42'48	
	8621 Mar 07 20:02	0° \mathfrak{H}		morning set	8622 Mar 08 15:33	10° \mathfrak{H} 22'52	
greatest brilliancy	8621 Mar 16 07:44	11° \mathfrak{H} 46'51	-0.7m		8622 Mar 21 04:33	0° \mathfrak{Y}	
desc. node	8621 Mar 18 03:41	14° \mathfrak{H} 29'33		max. Earth dist.	8622 Mar 23 19:25	4° \mathfrak{Y} 06'05	1.45412 AU
	8621 Mar 28 08:51	0° \mathfrak{Y}					
morning set	8621 Mar 29 04:29	1° \mathfrak{Y} 15'35		superior conj	8622 Mar 25 00:41	6° \mathfrak{Y} 00'50	-1°55'52
max. Earth dist.	8621 Apr 10 02:27	19° \mathfrak{Y} 51'03	1.44598 AU	minimum elong	8622 Mar 24 16:19	5° \mathfrak{Y} 28'01	1°55'17
				evening rise	8622 Apr 09 08:26	0° \mathfrak{B} 20'19	
superior conj	8621 Apr 14 14:46	27° \mathfrak{Y} 03'15	-2°11'26		8622 Apr 09 03:22	0° \mathfrak{B}	
minimum elong	8621 Apr 14 12:53	26° \mathfrak{Y} 55'42	2°11'30	greatest brilliancy	8622 Apr 16 04:20	11° \mathfrak{B} 19'30	-0.9m
	8621 Apr 16 10:33	0° \mathfrak{B}		asc. node	8622 Apr 27 09:55	28° \mathfrak{B} 03'07	
evening rise	8621 Apr 28 08:40	19° \mathfrak{B} 44'24			8622 Apr 29 01:01	0° \mathfrak{B}	
	8621 May 04 10:57	0° \mathfrak{B}		evening max el	8622 Apr 30 06:41	1° \mathfrak{B} 19'11	18°39'50
asc. node	8621 May 10 12:49	9° \mathfrak{B} 44'46		retrograde	8622 May 06 20:37	4° \mathfrak{B} 55'41	
evening max el	8621 May 16 18:49	17° \mathfrak{B} 47'12	18°13'25	evening set	8622 May 10 02:16	3° \mathfrak{B} 56'08	
retrograde	8621 May 23 03:58	21° \mathfrak{B} 10'04			8622 May 14 08:24	30° \mathfrak{R} \mathfrak{B}	
evening set	8621 May 26 02:08	20° \mathfrak{B} 24'39		inferior conj	8622 May 15 17:59	28° \mathfrak{B} 19'22	3°20'12
inferior conj	8621 Jun 01 02:31	15° \mathfrak{B} 04'37	3°03'23	minimum elong	8622 May 15 18:43	28° \mathfrak{B} 17'07	3°19'59
minimum elong	8621 Jun 01 04:33	14° \mathfrak{B} 58'55	3°02'52	min. Earth dist.	8622 May 17 16:59	25° \mathfrak{B} 56'04	0.65337 AU
min. Earth dist.	8621 Jun 03 16:36	12° \mathfrak{B} 12'26	0.63484 AU	morning rise	8622 May 21 10:26	22° \mathfrak{B} 01'41	
morning rise	8621 Jun 07 05:35	8° \mathfrak{B} 52'02		direct	8622 May 27 23:47	19° \mathfrak{B} 15'21	
direct	8621 Jun 13 23:32	6° \mathfrak{B} 14'41		desc. node	8622 Jun 01 00:23	20° \mathfrak{B} 08'22	
desc. node	8621 Jun 14 03:21	6° \mathfrak{B} 14'46		morning max el	8622 Jun 10 07:43	27° \mathfrak{B} 07'58	27°00'50
morning max el	8621 Jun 27 21:25	14° \mathfrak{B} 17'28	27°44'36		8622 Jun 13 00:10	0° \mathfrak{B}	
	8621 Jul 10 14:27	0° \mathfrak{B}			8622 Jul 04 06:25	0° \mathfrak{B}	
	8621 Jul 28 15:57	0° \mathfrak{B}		morning set	8622 Jul 15 23:55	20° \mathfrak{B} 57'36	
morning set	8621 Aug 01 13:45	7° \mathfrak{B} 36'23		max. Earth dist.	8622 Jul 20 08:38	29° \mathfrak{B} 34'16	1.33856 AU
max. Earth dist.	8621 Aug 06 15:22	18° \mathfrak{B} 02'27	1.32623 AU		8622 Jul 20 13:43	0° \mathfrak{B}	
asc. node	8621 Aug 06 12:08	17° \mathfrak{B} 45'27					
				superior conj	8622 Jul 24 11:40	8° \mathfrak{B} 04'53	0°01'05
superior conj	8621 Aug 09 09:49	23° \mathfrak{B} 57'51	0°29'03	minimum elong	8622 Jul 24 11:37	8° \mathfrak{B} 04'38	0°00'53
minimum elong	8621 Aug 09 08:28	23° \mathfrak{B} 50'38	0°28'38	behind sun begin	8622 Jul 24 05:59	7° \mathfrak{B} 35'04	
	8621 Aug 12 04:34	0° \mathfrak{B}		behind sun end	8622 Jul 24 17:16	8° \mathfrak{B} 34'15	
evening rise	8621 Aug 16 08:47	9° \mathfrak{B} 01'42		asc. node	8622 Jul 24 09:06	7° \mathfrak{B} 51'25	
	8621 Aug 27 03:57	0° $\underline{\mathfrak{B}}$		evening rise	8622 Jul 31 19:18	23° \mathfrak{B} 35'13	
evening max el	8621 Sep 08 09:05	16° $\underline{\mathfrak{B}}$ 22'46	23°15'33		8622 Aug 03 21:47	0° \mathfrak{B}	
desc. node	8621 Sep 10 02:10	17° $\underline{\mathfrak{B}}$ 56'42		evening max el	8622 Aug 21 00:37	26° \mathfrak{B} 40'28	21°38'40
retrograde	8621 Sep 21 19:35	23° $\underline{\mathfrak{B}}$ 05'44			8622 Aug 25 00:48	0° $\underline{\mathfrak{B}}$	
evening set	8621 Sep 25 21:04	22° $\underline{\mathfrak{B}}$ 29'40		desc. node	8622 Aug 27 23:18	1° $\underline{\mathfrak{B}}$ 38'07	
min. Earth dist.	8621 Oct 02 18:30	19° $\underline{\mathfrak{B}}$ 18'09	0.55451 AU	retrograde	8622 Sep 02 09:57	2° $\underline{\mathfrak{B}}$ 49'14	
inferior conj	8621 Oct 04 11:46	18° $\underline{\mathfrak{B}}$ 17'51	-5°32'16	evening set	8622 Sep 05 02:10	2° $\underline{\mathfrak{B}}$ 33'02	
minimum elong	8621 Oct 04 08:29	18° $\underline{\mathfrak{B}}$ 22'39	5°31'59		8622 Sep 11 16:08	30° \mathfrak{R} \mathfrak{B}	
morning rise	8621 Oct 12 21:59	14° $\underline{\mathfrak{B}}$ 26'41		inferior conj	8622 Sep 14 06:18	28° \mathfrak{B} 34'43	-4°41'24
direct	8621 Oct 15 20:55	14° $\underline{\mathfrak{B}}$ 05'43					

minimum elong	8622 Sep 13 21:08	28° \mathbb{M} 47'32	4°39'19	inferior conj	8623 Aug 25 00:25	8° \mathbb{M} 43'36	-3°02'41
min. Earth dist.	8622 Sep 14 02:55	28° \mathbb{M} 39'26	0.54712 AU	minimum elong	8623 Aug 24 16:16	8° \mathbb{M} 55'34	2°59'57
morning rise	8622 Sep 22 17:09	24° \mathbb{M} 44'54		min. Earth dist.	8623 Aug 26 12:45	7° \mathbb{M} 50'10	0.54915 AU
direct	8622 Sep 26 06:57	24° \mathbb{M} 17'02		morning rise	8623 Sep 02 09:58	4° \mathbb{M} 35'04	
morning max el	8622 Oct 08 15:18	0° \mathbb{L} 07'37	22°05'00	direct	8623 Sep 06 17:15	3° \mathbb{M} 55'08	
	8622 Oct 08 12:01	0° \mathbb{L}		morning max el	8623 Sep 20 05:06	10° \mathbb{M} 29'34	23°50'19
asc. node	8622 Oct 20 08:51	15° \mathbb{L} 42'15			8623 Oct 04 16:23	0° \mathbb{L}	
	8622 Oct 27 22:12	0° \mathbb{M}		asc. node	8623 Oct 07 05:48	4° \mathbb{L} 35'56	
morning set	8622 Oct 29 23:06	4° \mathbb{M} 13'52		morning set	8623 Oct 14 10:45	19° \mathbb{L} 03'35	
					8623 Oct 19 12:09	0° \mathbb{M}	
superior conj	8622 Nov 06 02:02	19° \mathbb{M} 21'36	1°40'34	superior conj	8623 Oct 21 08:43	4° \mathbb{M} 02'13	1°40'10
minimum elong	8622 Nov 06 02:35	19° \mathbb{M} 24'29	1°40'42	minimum elong	8623 Oct 21 08:03	3° \mathbb{M} 58'39	1°40'16
max. Earth dist.	8622 Nov 09 20:22	27° \mathbb{M} 10'38	1.34439 AU	max. Earth dist.	8623 Oct 23 18:45	9° \mathbb{M} 14'23	1.33070 AU
	8622 Nov 11 05:51	0° \mathbb{X}		evening rise	8623 Oct 28 21:12	19° \mathbb{M} 49'45	
evening rise	8622 Nov 14 06:31	5° \mathbb{X} 57'42			8623 Nov 03 03:21	0° \mathbb{X}	
desc. node	8622 Nov 23 22:00	23° \mathbb{X} 22'04		desc. node	8623 Nov 10 19:04	13° \mathbb{X} 22'01	
	8622 Nov 27 23:34	0° \mathbb{Z}			8623 Nov 22 01:32	0° \mathbb{Z}	
evening max el	8622 Dec 19 06:54	27° \mathbb{Z} 46'23	26°56'50	evening max el	8623 Dec 01 19:22	11° \mathbb{Z} 08'01	27°25'48
	8622 Dec 21 18:08	0° \mathbb{Z}		retrograde	8623 Dec 15 09:56	18° \mathbb{Z} 27'25	
retrograde	8623 Jan 01 12:45	5° \mathbb{Z} 06'04		evening set	8623 Dec 22 09:14	15° \mathbb{Z} 53'53	
evening set	8623 Jan 08 03:42	2° \mathbb{Z} 30'38		min. Earth dist.	8623 Dec 26 04:11	12° \mathbb{Z} 31'29	0.64061 AU
	8623 Jan 10 20:33	30° \mathbb{R} \mathbb{Z}		inferior conj	8623 Dec 28 16:33	9° \mathbb{Z} 54'20	-1°50'16
min. Earth dist.	8623 Jan 12 03:30	28° \mathbb{Z} 35'38	0.65658 AU	minimum elong	8623 Dec 28 19:59	9° \mathbb{Z} 45'21	1°48'39
inferior conj	8623 Jan 14 04:23	26° \mathbb{Z} 15'12	-0°43'26	asc. node	8624 Jan 03 05:15	5° \mathbb{Z} 05'46	
minimum elong	8623 Jan 14 05:38	26° \mathbb{Z} 11'37	0°42'42	morning rise	8624 Jan 04 08:27	4° \mathbb{Z} 32'16	
asc. node	8623 Jan 16 08:12	23° \mathbb{Z} 51'31		direct	8624 Jan 06 19:38	4° \mathbb{Z} 01'46	
morning rise	8623 Jan 20 08:44	20° \mathbb{Z} 38'32		morning max el	8624 Jan 13 07:06	7° \mathbb{Z} 24'06	17°50'39
direct	8623 Jan 23 03:21	19° \mathbb{Z} 56'32			8624 Jan 28 09:53	0° \mathbb{Z}	
morning max el	8623 Jan 29 13:57	23° \mathbb{Z} 22'12	18°09'38	morning set	8624 Jan 30 02:16	2° \mathbb{Z} 51'46	
	8623 Feb 03 23:25	0° \mathbb{Z}		desc. node	8624 Feb 06 18:24	15° \mathbb{Z} 46'44	
morning set	8623 Feb 17 06:50	20° \mathbb{Z} 56'05					
desc. node	8623 Feb 19 21:30	25° \mathbb{Z} 09'59		superior conj	8624 Feb 12 03:03	24° \mathbb{Z} 33'57	-0°38'23
	8623 Feb 22 21:27	0° \mathbb{X}		minimum elong	8624 Feb 11 22:45	24° \mathbb{Z} 16'31	0°37'38
superior conj	8623 Mar 04 06:33	14° \mathbb{X} 54'26	-1°21'55		8624 Feb 15 12:10	0° \mathbb{X}	
minimum elong	8623 Mar 03 21:35	14° \mathbb{X} 19'07	1°20'50	max. Earth dist.	8624 Feb 17 10:28	3° \mathbb{X} 04'06	1.44822 AU
max. Earth dist.	8623 Mar 06 15:04	18° \mathbb{X} 36'15	1.45487 AU	evening rise	8624 Feb 27 22:22	19° \mathbb{X} 25'06	
	8623 Mar 13 22:17	0° \mathbb{Y}			8624 Mar 05 21:19	0° \mathbb{Y}	
evening rise	8623 Mar 20 09:59	10° \mathbb{Y} 05'08		evening max el	8624 Mar 26 17:34	28° \mathbb{Y} 35'28	20°21'52
greatest brilliancy	8623 Apr 01 16:06	28° \mathbb{Y} 58'09	-0.7m		8624 Mar 28 04:53	0° \mathbb{X}	
	8623 Apr 02 08:35	0° \mathbb{X}		asc. node	8624 Mar 31 04:05	2° \mathbb{X} 11'01	
evening max el	8623 Apr 13 14:46	14° \mathbb{X} 56'30	19°23'18	retrograde	8624 Apr 03 15:58	3° \mathbb{X} 12'37	
asc. node	8623 Apr 14 07:00	15° \mathbb{X} 36'20		evening set	8624 Apr 07 14:36	1° \mathbb{X} 42'55	
retrograde	8623 Apr 20 17:28	18° \mathbb{X} 58'24			8624 Apr 09 11:04	30° \mathbb{R} \mathbb{Y}	
evening set	8623 Apr 24 07:10	17° \mathbb{X} 43'58		inferior conj	8624 Apr 12 22:17	25° \mathbb{Y} 37'18	3°10'08
inferior conj	8623 Apr 29 17:30	11° \mathbb{X} 51'53	3°21'27	minimum elong	8624 Apr 12 20:49	25° \mathbb{Y} 42'19	3°09'51
minimum elong	8623 Apr 29 16:59	11° \mathbb{X} 53'32	3°21'18	min. Earth dist.	8624 Apr 13 15:49	24° \mathbb{Y} 37'26	0.67777 AU
min. Earth dist.	8623 May 01 01:17	10° \mathbb{X} 08'02	0.66780 AU	morning rise	8624 Apr 18 02:49	19° \mathbb{Y} 20'51	
morning rise	8623 May 05 02:27	5° \mathbb{X} 33'35		direct	8624 Apr 23 18:17	16° \mathbb{Y} 49'58	
direct	8623 May 11 06:22	2° \mathbb{X} 50'14		desc. node	8624 May 04 18:19	23° \mathbb{Y} 16'16	
desc. node	8623 May 18 21:22	5° \mathbb{X} 58'59		morning max el	8624 May 05 03:00	23° \mathbb{Y} 38'05	24°27'33
morning max el	8623 May 23 17:46	10° \mathbb{X} 17'47	25°51'56		8624 May 10 18:40	0° \mathbb{X}	
	8623 Jun 08 08:13	0° \mathbb{I}			8624 May 31 17:33	0° \mathbb{I}	
	8623 Jun 26 20:32	0° \mathbb{L}		morning set	8624 Jun 09 22:20	15° \mathbb{I} 22'34	
morning set	8623 Jun 28 20:25	3° \mathbb{L} 37'32		max. Earth dist.	8624 Jun 13 13:42	21° \mathbb{I} 51'03	1.37638 AU
max. Earth dist.	8623 Jul 02 15:16	10° \mathbb{L} 43'51	1.35559 AU		8624 Jun 17 23:27	0° \mathbb{L}	
superior conj	8623 Jul 08 05:35	21° \mathbb{L} 45'28	-0°29'47	superior conj	8624 Jun 20 12:15	4° \mathbb{L} 50'13	-1°01'54
minimum elong	8623 Jul 08 07:21	21° \mathbb{L} 54'22	0°29'38	minimum elong	8624 Jun 20 16:07	5° \mathbb{L} 08'52	1°01'26
asc. node	8623 Jul 11 06:05	27° \mathbb{L} 55'17		asc. node	8624 Jun 27 03:04	17° \mathbb{L} 52'11	
	8623 Jul 12 06:18	0° \mathbb{O}		evening rise	8624 Jun 29 04:17	21° \mathbb{L} 57'12	
evening rise	8623 Jul 16 02:38	7° \mathbb{O} 56'20			8624 Jul 03 07:05	0° \mathbb{O}	
	8623 Jul 28 02:56	0° \mathbb{M}		evening max el	8624 Jul 15 20:03	19° \mathbb{O} 06'21	19°12'51
evening max el	8623 Aug 03 03:47	7° \mathbb{M} 31'25	20°15'51	retrograde	8624 Jul 24 22:40	23° \mathbb{O} 36'52	
retrograde	8623 Aug 13 22:37	12° \mathbb{M} 51'22		evening set	8624 Jul 26 19:47	23° \mathbb{O} 26'08	
desc. node	8623 Aug 14 20:25	12° \mathbb{M} 49'14		desc. node	8624 Jul 31 17:32	21° \mathbb{O} 31'03	
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
































































































































minimum elong	8624 Aug 04 04:59	19° Ω 20'15	1°05'19	inferior conj	8625 Jul 16 12:20	0° Ω 28'43	0°37'23
min. Earth dist.	8624 Aug 07 01:58	17° Ω 25'16	0.56029 AU	minimum elong	8625 Jul 16 13:40	0° Ω 26'06	0°36'42
morning rise	8624 Aug 12 11:17	14° Ω 32'14			8625 Jul 17 02:55	30° \mathbb{R} \mathfrak{E}	
direct	8624 Aug 17 14:09	13° Ω 31'55		desc. node	8625 Jul 18 14:37	28° \mathfrak{E} 49'46	
morning max el	8624 Aug 31 17:44	20° Ω 43'11	25°32'34	min. Earth dist.	8625 Jul 19 20:28	27° \mathfrak{E} 52'48	0.57846 AU
	8624 Sep 08 18:08	0° \mathbb{M}		morning rise	8625 Jul 24 03:58	25° \mathfrak{E} 08'43	
asc. node	8624 Sep 23 02:44	23° \mathbb{M} 56'30		direct	8625 Jul 30 01:51	23° \mathfrak{E} 39'24	
	8624 Sep 26 02:28	0° $\underline{\mathfrak{A}}$			8625 Aug 12 01:52	0° Ω	
morning set	8624 Sep 27 22:11	3° $\underline{\mathfrak{A}}$ 50'13		morning max el	8625 Aug 13 11:02	1° Ω 17'41	26°54'38
					8625 Sep 02 21:55	0° \mathbb{M}	
superior conj	8624 Oct 04 18:54	18° $\underline{\mathfrak{A}}$ 50'37	1°33'48	asc. node	8625 Sep 09 23:41	13° \mathbb{M} 36'40	
minimum elong	8624 Oct 04 17:19	18° $\underline{\mathfrak{A}}$ 41'54	1°33'44	morning set	8625 Sep 12 07:48	18° \mathbb{M} 29'04	
max. Earth dist.	8624 Oct 06 00:06	21° $\underline{\mathfrak{A}}$ 31'15	1.32144 AU		8625 Sep 17 14:51	0° $\underline{\mathfrak{A}}$	
	8624 Oct 09 22:07	0° \mathbb{M}					
evening rise	8624 Oct 11 20:42	4° \mathbb{M} 04'37		superior conj	8625 Sep 19 06:38	3° $\underline{\mathfrak{A}}$ 40'44	1°21'57
	8624 Oct 25 20:29	0° \mathfrak{A}		minimum elong	8625 Sep 19 04:30	3° $\underline{\mathfrak{A}}$ 28'55	1°21'42
desc. node	8624 Oct 27 16:10	2° \mathfrak{A} 54'04		max. Earth dist.	8625 Sep 19 09:26	3° $\underline{\mathfrak{A}}$ 56'19	1.31676 AU
evening max el	8624 Nov 13 04:42	23° \mathfrak{A} 57'50	27°25'01	evening rise	8625 Sep 26 02:21	18° $\underline{\mathfrak{A}}$ 35'07	
	8624 Nov 21 16:29	0° \mathfrak{Z}			8625 Oct 01 17:13	0° \mathbb{M}	
retrograde	8624 Nov 27 00:08	1° \mathfrak{Z} 12'55		desc. node	8625 Oct 14 13:17	21° \mathbb{M} 47'00	
	8624 Dec 02 01:47	30° \mathbb{R} \mathfrak{A}			8625 Oct 20 17:20	0° \mathfrak{A}	
evening set	8624 Dec 04 02:24	28° \mathfrak{A} 50'19		evening max el	8625 Oct 26 08:23	6° \mathfrak{A} 04'08	26°50'42
min. Earth dist.	8624 Dec 07 18:43	25° \mathfrak{A} 55'32	0.62172 AU	retrograde	8625 Nov 09 06:21	13° \mathfrak{A} 13'22	
inferior conj	8624 Dec 10 17:14	23° \mathfrak{A} 12'08	-3°00'50	evening set	8625 Nov 16 03:11	11° \mathfrak{A} 12'37	
minimum elong	8624 Dec 10 23:00	22° \mathfrak{A} 58'44	2°58'33	min. Earth dist.	8625 Nov 19 22:38	8° \mathfrak{A} 34'59	0.60102 AU
morning rise	8624 Dec 17 21:49	18° \mathfrak{A} 08'06		inferior conj	8625 Nov 23 03:03	5° \mathfrak{A} 59'45	-4°09'50
direct	8624 Dec 20 04:05	17° \mathfrak{A} 45'26		minimum elong	8625 Nov 23 10:23	5° \mathfrak{A} 44'48	4°07'33
asc. node	8624 Dec 20 02:17	17° \mathfrak{A} 45'28		morning rise	8625 Nov 30 20:02	1° \mathfrak{A} 16'35	
morning max el	8624 Dec 26 23:55	21° \mathfrak{A} 13'44	17°49'29	direct	8625 Dec 03 00:40	0° \mathfrak{A} 58'25	
	8625 Jan 02 15:26	0° \mathfrak{Z}		asc. node	8625 Dec 06 23:20	2° \mathfrak{A} 00'13	
morning set	8625 Jan 11 19:53	15° \mathfrak{Z} 50'38		morning max el	8625 Dec 10 12:57	4° \mathfrak{A} 41'43	18°07'12
	8625 Jan 19 20:18	0° \approx		morning set	8625 Dec 26 05:22	29° \mathfrak{A} 33'36	
					8625 Dec 26 11:01	0° \mathfrak{Z}	
superior conj	8625 Jan 23 00:19	5° \approx 25'44	0°04'39				
minimum elong	8625 Jan 23 00:47	5° \approx 27'40	0°04'46	superior conj	8626 Jan 04 22:14	17° \mathfrak{Z} 27'32	0°41'01
behind sun begin	8625 Jan 22 16:21	4° \approx 51'52		minimum elong	8626 Jan 05 01:10	17° \mathfrak{Z} 40'35	0°40'47
behind sun end	8625 Jan 23 09:12	6° \approx 03'23		desc. node	8626 Jan 10 12:19	27° \mathfrak{Z} 13'55	
desc. node	8625 Jan 23 15:21	6° \approx 29'21			8626 Jan 12 03:28	0° \approx	
max. Earth dist.	8625 Jan 30 02:32	17° \approx 11'14	1.43494 AU	max. Earth dist.	8626 Jan 12 13:34	0° \approx 42'32	1.41666 AU
evening rise	8625 Feb 06 12:28	28° \approx 57'14		evening rise	8626 Jan 17 17:40	9° \approx 12'52	
	8625 Feb 07 04:38	0° \mathfrak{H}			8626 Jan 31 06:44	0° \mathfrak{H}	
	8625 Feb 27 14:35	0° \mathbb{Y}		evening max el	8626 Feb 20 07:32	25° \mathfrak{H} 57'35	22°50'54
evening max el	8625 Mar 09 14:49	12° \mathbb{Y} 15'35	21°32'32		8626 Feb 25 01:19	0° \mathbb{Y}	
asc. node	8625 Mar 18 01:12	17° \mathbb{Y} 32'28		retrograde	8626 Mar 02 10:15	1° \mathbb{Y} 57'16	
retrograde	8625 Mar 18 14:09	17° \mathbb{Y} 33'57		asc. node	8626 Mar 04 22:20	1° \mathbb{Y} 26'01	
evening set	8625 Mar 22 22:47	15° \mathbb{Y} 49'04		evening set	8626 Mar 07 06:06	29° \mathfrak{H} 57'35	
inferior conj	8625 Mar 28 06:05	9° \mathbb{Y} 32'21	2°48'13		8626 Mar 07 04:57	30° \mathbb{R} \mathfrak{H}	
minimum elong	8625 Mar 28 04:01	9° \mathbb{Y} 39'33	2°47'44	inferior conj	8626 Mar 12 14:52	23° \mathfrak{H} 33'03	2°16'53
min. Earth dist.	8625 Mar 28 10:36	9° \mathbb{Y} 16'40	0.68325 AU	minimum elong	8626 Mar 12 12:37	23° \mathfrak{H} 40'50	2°16'16
morning rise	8625 Apr 02 09:05	3° \mathbb{Y} 19'20		min. Earth dist.	8626 Mar 12 07:18	23° \mathfrak{H} 59'18	0.68445 AU
direct	8625 Apr 07 10:46	1° \mathbb{Y} 07'06		morning rise	8626 Mar 17 19:02	17° \mathfrak{H} 24'50	
morning max el	8625 Apr 17 13:00	7° \mathbb{Y} 05'58	22°57'46	direct	8626 Mar 22 06:50	15° \mathfrak{H} 34'17	
desc. node	8625 Apr 21 15:15	11° \mathbb{Y} 36'38		morning max el	8626 Mar 31 02:51	20° \mathfrak{H} 42'07	21°31'33
	8625 May 05 07:38	0° \mathfrak{B}			8626 Apr 07 23:26	0° \mathbb{Y}	
morning set	8625 May 22 00:18	25° \mathfrak{B} 59'44		desc. node	8626 Apr 08 12:10	0° \mathbb{Y} 42'05	
	8625 May 24 09:42	0° \mathbb{I}			8626 Apr 28 13:10	0° \mathfrak{B}	
max. Earth dist.	8625 May 26 10:11	3° \mathbb{I} 26'41	1.39890 AU	morning set	8626 May 01 22:49	5° \mathfrak{B} 20'47	
				max. Earth dist.	8626 May 08 10:51	15° \mathfrak{B} 51'39	1.42042 AU
superior conj	8625 Jun 03 03:44	17° \mathbb{I} 10'14	-1°32'32				
minimum elong	8625 Jun 03 09:20	17° \mathbb{I} 35'52	1°32'00	superior conj	8626 May 15 23:20	28° \mathfrak{B} 34'37	-1°57'32
	8625 Jun 10 00:04	0° \mathfrak{E}		minimum elong	8626 May 16 04:55	28° \mathfrak{B} 58'50	1°57'17
evening rise	8625 Jun 12 21:13	5° \mathfrak{E} 30'15			8626 May 16 18:59	0° \mathbb{I}	
asc. node	8625 Jun 14 00:06	7° \mathfrak{E} 38'24		evening rise	8626 May 27 01:32	18° \mathbb{I} 25'15	
	8625 Jun 27 15:39	0° Ω		asc. node	8626 May 31 21:10	27° \mathbb{I} 08'44	
evening max el	8625 Jun 28 23:04	1° Ω 23'12	18°30'48		8626 Jun 02 12:05	0° \mathfrak{E}	
retrograde	8625 Jul 06 17:00	5° Ω 14'56		evening max el	8626 Jun 12 09:01	14° \mathfrak{E} 12'52	18°09'00
evening set	8625 Jul 08 19:51	4° Ω 58'29		retrograde	8626 Jun 19 05:28	17° \mathfrak{E} 41'10	

evening set	8626 Jun 21 16:01	17°☿15'14		inferior conj	8627 Jun 11 09:33	24°♊58'09	2°44'59
inferior conj	8626 Jun 28 14:00	12°☿25'08	1°54'40	minimum elong	8627 Jun 11 12:13	24°♊51'12	2°44'13
minimum elong	8626 Jun 28 16:57	12°☿18'22	1°53'35	min. Earth dist.	8627 Jun 14 07:30	21°♊56'54	0.62278 AU
min. Earth dist.	8626 Jul 01 21:47	9°☿24'26	0.60038 AU	morning rise	8627 Jun 17 20:06	18°♊52'02	
desc. node	8626 Jul 05 11:41	6°☿41'54		desc. node	8627 Jun 22 08:44	16°♊40'49	
morning rise	8626 Jul 05 15:00	6°☿36'46		direct	8627 Jun 24 14:02	16°♊25'18	
direct	8626 Jul 12 02:48	4°☿36'00		morning max el	8627 Jul 08 16:45	24°♊27'10	27°55'06
morning max el	8626 Jul 26 10:57	12°☿30'50	27°43'54		8627 Jul 13 17:13	0°☿	
	8626 Aug 09 06:47	0°♊			8627 Aug 02 16:15	0°♊	
	8626 Aug 26 03:58	0°♊		morning set	8627 Aug 11 14:14	17°♊01'26	
morning set	8626 Aug 27 13:52	2°♊55'01		asc. node	8627 Aug 14 17:37	23°♊32'27	
asc. node	8626 Aug 27 20:40	3°♊30'33		max. Earth dist.	8627 Aug 17 01:38	28°♊31'46	1.32140 AU
max. Earth dist.	8626 Sep 02 19:14	16°♊20'20	1.31670 AU		8627 Aug 17 17:57	0°♊	
superior conj	8626 Sep 03 18:07	18°♊26'51	1°05'04	superior conj	8627 Aug 19 03:25	3°♊02'16	0°43'29
minimum elong	8626 Sep 03 15:53	18°♊14'30	1°04'38	minimum elong	8627 Aug 19 01:36	2°♊52'18	0°43'00
	8626 Sep 08 23:50	0°♋		evening rise	8627 Aug 25 23:20	17°♊56'36	
evening rise	8626 Sep 10 11:55	3°♋14'45			8627 Aug 31 20:18	0°♋	
	8626 Sep 24 16:12	0°♌		desc. node	8627 Sep 18 07:32	26°♋26'52	
desc. node	8626 Oct 01 10:24	9°♌45'23		evening max el	8627 Sep 19 17:31	27°♋52'10	24°12'51
evening max el	8626 Oct 08 04:30	17°♌20'51	25°43'53		8627 Sep 22 03:06	0°♌	
retrograde	8626 Oct 22 02:42	24°♌23'26		retrograde	8627 Oct 03 10:50	4°♌44'49	
evening set	8626 Oct 28 06:45	22°♌54'28		evening set	8627 Oct 08 09:30	3°♌51'00	
min. Earth dist.	8626 Nov 01 17:03	20°♌18'05	0.58039 AU	min. Earth dist.	8627 Oct 14 04:17	0°♌57'29	0.56247 AU
inferior conj	8626 Nov 04 18:39	18°♌08'09	-5°07'02		8627 Oct 15 17:38	30°♌♋	
minimum elong	8626 Nov 05 01:02	17°♌56'50	5°05'47	inferior conj	8627 Oct 16 13:49	29°♋28'36	-5°36'02
morning rise	8626 Nov 12 21:38	13°♌47'29		minimum elong	8627 Oct 16 15:00	29°♋26'45	5°35'55
direct	8626 Nov 15 05:19	13°♌30'33		morning rise	8627 Oct 24 22:35	25°♋28'57	
asc. node	8626 Nov 23 20:21	17°♌42'26		direct	8627 Oct 27 14:52	25°♋10'07	
morning max el	8626 Nov 23 18:32	17°♌38'03	18°45'32	morning max el	8627 Nov 06 13:00	29°♋51'12	19°46'12
	8626 Dec 02 17:04	0°♌			8627 Nov 06 16:42	0°♌	
morning set	8626 Dec 10 01:53	13°♌47'05		asc. node	8627 Nov 10 17:21	4°♌36'12	
	8626 Dec 18 10:42	0°♍		morning set	8627 Nov 24 05:44	28°♌19'38	
superior conj	8626 Dec 18 16:24	0°♍26'59	1°08'33		8627 Nov 25 01:33	0°♌	
minimum elong	8626 Dec 18 19:44	0°♍42'41	1°08'20	superior conj	8627 Dec 02 01:43	14°♌09'07	1°27'14
max. Earth dist.	8626 Dec 25 20:30	13°♍32'43	1.39555 AU	minimum elong	8627 Dec 02 04:16	14°♌21'46	1°27'11
desc. node	8626 Dec 28 09:19	17°♍57'14		max. Earth dist.	8627 Dec 08 02:37	25°♌46'52	1.37397 AU
evening rise	8626 Dec 29 20:24	20°♍26'44			8627 Dec 10 09:38	0°♍	
	8627 Jan 04 15:49	0°♎		evening rise	8627 Dec 11 20:20	2°♍36'12	
	8627 Jan 25 10:19	0°♏		desc. node	8627 Dec 15 06:20	8°♍34'54	
evening max el	8627 Feb 02 21:39	9°♏43'25	24°10'58		8627 Dec 28 18:27	0°♎	
retrograde	8627 Feb 14 02:54	16°♏18'23		evening max el	8628 Jan 16 10:54	23°♎31'27	25°26'03
evening set	8627 Feb 19 11:00	14°♏04'53			8628 Jan 25 15:10	0°♏	
asc. node	8627 Feb 19 19:27	13°♏46'21		retrograde	8628 Jan 28 15:04	0°♏32'11	
min. Earth dist.	8627 Feb 24 03:39	8°♏41'05	0.68163 AU		8628 Jan 31 10:34	30°♏♎	
inferior conj	8627 Feb 24 22:47	7°♏36'29	1°36'50	evening set	8628 Feb 03 11:54	28°♎06'48	
minimum elong	8627 Feb 24 20:49	7°♏43'08	1°36'14	asc. node	8628 Feb 06 16:32	24°♎47'18	
morning rise	8627 Mar 02 06:40	1°♏34'38		min. Earth dist.	8628 Feb 07 21:18	23°♎17'48	0.67487 AU
direct	8627 Mar 06 05:14	0°♏06'13		inferior conj	8628 Feb 09 03:56	21°♎39'12	0°48'29
morning max el	8627 Mar 13 23:39	4°♏29'49	20°15'37	minimum elong	8628 Feb 09 02:46	21°♎42'57	0°48'10
desc. node	8627 Mar 26 09:05	20°♏20'24		morning rise	8628 Feb 14 18:00	15°♎45'33	
	8627 Apr 01 22:43	0°♐		direct	8628 Feb 18 04:28	14°♎37'42	
morning set	8627 Apr 10 23:54	13°♐46'14		morning max el	8628 Feb 25 04:27	18°♎29'03	19°13'58
max. Earth dist.	8627 Apr 20 19:02	29°♐10'34	1.43828 AU		8628 Mar 05 06:46	0°♏	
	8627 Apr 21 07:21	0°♑		greatest brilliancy	8628 Mar 09 07:46	5°♏57'14	-0.7m
superior conj	8627 Apr 26 18:59	8°♑55'12	-2°11'12	desc. node	8628 Mar 12 06:00	10°♏22'45	
minimum elong	8627 Apr 26 20:57	9°♑03'19	2°11'18	morning set	8628 Mar 20 00:26	22°♏18'56	
	8627 May 09 05:16	0°♒			8628 Mar 24 23:25	0°♐	
evening rise	8627 May 09 12:36	0°♒31'48		max. Earth dist.	8628 Apr 02 10:05	13°♐12'11	1.45031 AU
asc. node	8627 May 18 18:15	16°♒17'11		superior conj	8628 Apr 05 14:48	18°♐15'28	-2°07'22
evening max el	8627 May 26 22:10	27°♒25'18	18°06'29	minimum elong	8628 Apr 05 09:49	17°♐55'40	2°07'13
	8627 May 30 08:08	0°♓			8628 Apr 12 22:33	0°♓	
retrograde	8627 Jun 02 08:23	0°♓45'47		evening rise	8628 Apr 20 02:01	11°♓41'46	
evening set	8627 Jun 05 02:29	0°♓07'49			8628 May 01 07:32	0°♒	
	8627 Jun 05 09:06	30°♓♒		asc. node	8628 May 04 15:20	4°♒56'31	

evening max el	8628 May 09 11:16	10° Π 52'08	18°22'31		8629 Mar 17 17:27	0° Υ	
retrograde	8628 May 15 21:16	14° Π 19'09		evening rise	8629 Mar 31 15:46	21° Υ 53'54	
evening set	8628 May 18 22:40	13° Π 27'40			8629 Apr 05 18:39	0° \mathcal{B}	
inferior conj	8628 May 24 18:53	8° Π 00'06	3°12'40	greatest brilliancy	8629 Apr 10 01:58	6° \mathcal{B} 45'48	-0.8m
minimum elong	8628 May 24 20:23	7° Π 55'43	3°12'18	asc. node	8629 Apr 21 12:24	22° \mathcal{B} 56'51	
min. Earth dist.	8628 May 27 02:33	5° Π 18'50	0.64312 AU	evening max el	8629 Apr 22 21:38	24° \mathcal{B} 26'08	18°56'19
morning rise	8628 May 30 17:04	1° Π 44'46		retrograde	8629 Apr 29 16:10	28° \mathcal{B} 12'29	
	8628 Jun 02 09:14	30° \mathcal{R} \mathcal{B}		evening set	8629 May 03 01:06	27° \mathcal{B} 06'39	
direct	8628 Jun 06 09:42	29° \mathcal{B} 02'28		inferior conj	8629 May 08 14:07	21° \mathcal{B} 22'55	3°22'27
desc. node	8628 Jun 08 05:44	29° \mathcal{B} 13'25		minimum elong	8629 May 08 14:18	21° \mathcal{B} 22'20	3°22'18
	8628 Jun 10 17:08	0° Π		min. Earth dist.	8629 May 10 06:30	19° \mathcal{B} 15'37	0.65995 AU
morning max el	8628 Jun 20 02:22	7° Π 01'53	27°29'48	morning rise	8629 May 14 02:58	15° \mathcal{B} 04'23	
	8628 Jul 07 17:29	0° \mathcal{E}		direct	8629 May 20 12:37	12° \mathcal{B} 18'11	
	8628 Jul 24 21:58	0° Ω		desc. node	8629 May 26 02:43	14° \mathcal{B} 00'11	
morning set	8628 Jul 25 06:29	0° Ω 41'50		morning max el	8629 Jun 02 12:58	20° \mathcal{B} 02'29	26°34'12
max. Earth dist.	8628 Jul 30 00:56	10° Ω 21'14	1.33093 AU		8629 Jun 11 01:28	0° Π	
asc. node	8628 Jul 31 14:35	13° Ω 38'22			8629 Jun 30 19:56	0° \mathcal{E}	
				morning set	8629 Jul 08 11:20	13° \mathcal{E} 46'44	
superior conj	8628 Aug 02 08:38	17° Ω 21'35	0°17'38	max. Earth dist.	8629 Jul 12 13:49	21° \mathcal{E} 42'40	1.34524 AU
minimum elong	8628 Aug 02 07:46	17° Ω 16'59	0°17'18		8629 Jul 16 16:20	0° Ω	
	8628 Aug 08 05:39	0° \mathcal{H}					
evening rise	8628 Aug 09 10:45	2° \mathcal{H} 35'09		superior conj	8629 Jul 17 07:24	1° Ω 17'42	-0°11'45
	8628 Aug 24 12:01	0° \mathcal{A}		minimum elong	8629 Jul 17 08:04	1° Ω 21'08	0°11'48
evening max el	8628 Aug 31 05:18	8° \mathcal{A} 03'40	22°33'11	behind sun begin	8629 Jul 17 04:04	1° Ω 00'29	
desc. node	8628 Sep 04 04:38	11° \mathcal{A} 23'21		behind sun end	8629 Jul 17 12:04	1° Ω 41'48	
retrograde	8628 Sep 13 06:43	14° \mathcal{A} 34'27		asc. node	8629 Jul 18 11:33	3° Ω 43'44	
evening set	8628 Sep 16 17:09	14° \mathcal{A} 08'30		evening rise	8629 Jul 24 20:09	17° Ω 03'52	
min. Earth dist.	8628 Sep 24 12:23	10° \mathcal{A} 40'58	0.55039 AU		8629 Jul 31 07:49	0° \mathcal{H}	
inferior conj	8628 Sep 25 14:50	10° \mathcal{A} 03'30	-5°17'35	evening max el	8629 Aug 13 00:59	18° \mathcal{H} 31'58	21°01'12
minimum elong	8628 Sep 25 08:26	10° \mathcal{A} 12'35	5°16'41	desc. node	8629 Aug 22 01:44	24° \mathcal{H} 03'15	
morning rise	8628 Oct 04 01:35	6° \mathcal{A} 15'37		retrograde	8629 Aug 24 19:21	24° \mathcal{H} 21'47	
direct	8628 Oct 07 06:39	5° \mathcal{A} 52'10		evening set	8629 Aug 27 01:47	24° \mathcal{H} 09'38	
morning max el	8628 Oct 18 18:23	11° \mathcal{A} 15'21	21°09'00	inferior conj	8629 Sep 05 07:19	20° \mathcal{H} 12'52	-4°04'00
asc. node	8628 Oct 27 14:18	22° \mathcal{A} 26'28		minimum elong	8629 Sep 04 21:43	20° \mathcal{H} 26'26	4°01'16
	8628 Oct 31 23:53	0° \mathcal{M}		min. Earth dist.	8629 Sep 05 21:13	19° \mathcal{H} 53'11	0.54677 AU
morning set	8628 Nov 07 14:11	13° \mathcal{M} 03'29		morning rise	8629 Sep 13 18:00	16° \mathcal{H} 17'31	
				direct	8629 Sep 17 14:33	15° \mathcal{H} 45'36	
superior conj	8628 Nov 14 21:52	28° \mathcal{M} 21'46	1°37'47	morning max el	8629 Sep 30 12:27	21° \mathcal{H} 55'32	22°49'09
minimum elong	8628 Nov 14 23:11	28° \mathcal{M} 28'30	1°37'54		8629 Oct 07 11:56	0° \mathcal{A}	
	8628 Nov 15 16:57	0° \mathcal{J}		asc. node	8629 Oct 14 11:15	11° \mathcal{A} 00'12	
max. Earth dist.	8628 Nov 19 12:27	7° \mathcal{J} 41'28	1.35422 AU	morning set	8629 Oct 23 01:11	27° \mathcal{A} 52'44	
evening rise	8628 Nov 23 14:18	15° \mathcal{J} 33'10			8629 Oct 24 01:10	0° \mathcal{M}	
desc. node	8628 Dec 01 03:22	29° \mathcal{J} 02'32					
	8628 Dec 01 16:57	0° \mathcal{Z}		superior conj	8629 Oct 30 01:31	12° \mathcal{M} 55'01	1°41'10
	8628 Dec 22 08:24	0° \approx		minimum elong	8629 Oct 30 01:32	12° \mathcal{M} 55'05	1°41'19
evening max el	8628 Dec 29 00:03	7° \approx 16'16	26°28'55	max. Earth dist.	8629 Nov 02 05:42	19° \mathcal{M} 37'05	1.33800 AU
retrograde	8629 Jan 10 22:04	14° \approx 32'17		evening rise	8629 Nov 06 22:28	29° \mathcal{M} 08'11	
evening set	8629 Jan 17 07:02	11° \approx 58'39			8629 Nov 07 09:03	0° \mathcal{J}	
min. Earth dist.	8629 Jan 21 10:02	7° \approx 44'22	0.66431 AU	desc. node	8629 Nov 18 00:25	19° \mathcal{J} 14'48	
inferior conj	8629 Jan 23 04:19	5° \approx 37'07	-0°07'45		8629 Nov 24 20:05	0° \mathcal{Z}	
minimum elong	8629 Jan 23 04:31	5° \approx 36'30	0°07'29	evening max el	8629 Dec 11 13:02	20° \mathcal{Z} 49'49	27°12'21
transit middle	8629 Jan 23 04:31	5° \approx 36'30	0°07'29	retrograde	8629 Dec 24 23:21	28° \mathcal{Z} 11'03	
transit begin	8629 Jan 23 01:57	5° \approx 44'14		evening set	8629 Dec 31 18:20	25° \mathcal{Z} 35'09	
transit end	8629 Jan 23 07:05	5° \approx 28'46		min. Earth dist.	8630 Jan 04 15:46	21° \mathcal{Z} 54'34	0.65015 AU
asc. node	8629 Jan 23 13:37	5° \approx 09'11		inferior conj	8630 Jan 06 21:44	19° \mathcal{Z} 25'33	-1°11'06
	8629 Jan 28 22:31	30° \mathcal{R} \mathcal{Z}		minimum elong	8630 Jan 06 23:51	19° \mathcal{Z} 19'39	1°10'01
morning rise	8629 Jan 29 02:53	29° \mathcal{Z} 53'46		asc. node	8630 Jan 10 10:39	15° \mathcal{Z} 49'46	
direct	8629 Feb 01 02:43	29° \mathcal{Z} 03'28		morning rise	8630 Jan 13 06:50	13° \mathcal{Z} 54'58	
	8629 Feb 04 09:01	0° \approx		direct	8630 Jan 15 21:54	13° \mathcal{Z} 18'29	
morning max el	8629 Feb 07 16:06	2° \approx 35'13	18°28'19	morning max el	8630 Jan 22 08:08	16° \mathcal{Z} 41'43	17°59'27
	8629 Feb 26 16:13	0° \mathcal{H}			8630 Feb 01 01:29	0° \approx	
desc. node	8629 Feb 27 02:54	0° \mathcal{H} 42'23		morning set	8630 Feb 09 02:29	13° \approx 11'17	
morning set	8629 Feb 27 22:38	2° \mathcal{H} 00'40		desc. node	8630 Feb 13 23:50	21° \approx 14'35	
					8630 Feb 19 09:21	0° \mathcal{H}	
superior conj	8629 Mar 15 20:30	27° \mathcal{H} 04'07	-1°43'18				
minimum elong	8629 Mar 15 10:58	26° \mathcal{H} 26'48	1°42'25	superior conj	8630 Feb 23 06:47	6° \mathcal{H} 13'16	-1°03'58
max. Earth dist.	8629 Mar 16 04:48	27° \mathcal{H} 36'35	1.45531 AU	minimum elong	8630 Feb 22 23:28	5° \mathcal{H} 44'12	1°02'57

max. Earth dist.	8630 Feb 27 00:16	12° K 06'42	1.45288 AU	desc. node	8631 Jan 31 20:46	11° \approx 54'23	
	8630 Mar 10 12:21	0° Y					
evening rise	8630 Mar 11 10:11	1° Y 24'12		superior conj	8631 Feb 03 13:18	16° \approx 22'29	-0°19'38
greatest brilliancy	8630 Mar 25 10:44	22° Y 42'31	-0.6m	minimum elong	8631 Feb 03 11:14	16° \approx 13'57	0°19'09
	8630 Mar 30 13:07	0° B		max. Earth dist.	8631 Feb 09 18:10	26° \approx 26'31	1.44334 AU
evening max el	8630 Apr 06 03:31	8° B 04'12	19°46'29		8631 Feb 11 23:54	0° K	
asc. node	8630 Apr 08 09:29	10° B 06'58		evening rise	8631 Feb 18 21:22	10° K 44'50	
retrograde	8630 Apr 13 14:02	12° B 20'29			8631 Mar 03 16:36	0° Y	
evening set	8630 Apr 17 07:18	10° B 59'47		evening max el	8631 Mar 20 04:00	21° Y 44'09	20°50'44
inferior conj	8630 Apr 22 16:13	5° B 01'42	3°18'03	asc. node	8631 Mar 26 06:36	26° Y 12'36	
minimum elong	8630 Apr 22 15:15	5° B 04'54	3°17'51	retrograde	8631 Mar 28 12:35	26° Y 38'15	
min. Earth dist.	8630 Apr 23 17:52	3° B 36'01	0.67258 AU	evening set	8631 Apr 01 15:17	25° Y 02'16	
	8630 Apr 26 16:15	30° R Y		inferior conj	8631 Apr 06 22:34	18° Y 51'50	3°02'02
morning rise	8630 Apr 27 22:54	28° Y 43'40		minimum elong	8631 Apr 06 20:48	18° Y 57'56	3°01'39
direct	8630 May 03 21:43	26° Y 04'28		min. Earth dist.	8631 Apr 07 10:31	18° Y 10'36	0.68069 AU
	8630 May 12 09:03	0° B		morning rise	8631 Apr 12 02:06	12° Y 36'39	
desc. node	8630 May 12 23:42	0° B 30'48		direct	8631 Apr 17 11:55	10° Y 12'49	
morning max el	8630 May 15 22:40	3° B 17'41	25°17'15	morning max el	8631 Apr 28 07:43	16° Y 40'43	23°49'19
	8630 Jun 05 06:57	0° II		desc. node	8631 Apr 29 20:40	18° Y 17'26	
morning set	8630 Jun 21 00:34	26° II 04'54			8631 May 09 08:18	0° B	
	8630 Jun 23 04:15	0° B			8631 May 29 07:15	0° II	
max. Earth dist.	8630 Jun 24 15:58	2° B 45'41	1.36401 AU	morning set	8631 Jun 02 16:57	7° II 22'46	
				max. Earth dist.	8631 Jun 06 12:19	13° II 59'54	1.38589 AU
superior conj	8630 Jun 30 20:56	14° B 43'40	-0°43'25				
minimum elong	8630 Jun 30 23:35	14° B 56'48	0°43'06	superior conj	8631 Jun 13 21:44	27° II 31'12	-1°15'17
asc. node	8630 Jul 05 08:32	23° B 44'53		minimum elong	8631 Jun 14 02:26	27° II 53'25	1°14'46
	8630 Jul 08 10:14	0° B			8631 Jun 15 05:06	0° B	
evening rise	8630 Jul 09 01:21	1° B 16'39		asc. node	8631 Jun 22 05:34	13° B 38'02	
evening max el	8630 Jul 26 09:52	29° B 41'20	19°46'35	evening rise	8631 Jun 22 23:43	15° B 06'51	
	8630 Jul 26 17:32	0° B			8631 Jun 30 22:41	0° B	
retrograde	8630 Aug 05 11:21	4° B 39'22		evening max el	8631 Jul 09 07:17	11° B 35'47	18°52'31
evening set	8630 Aug 07 07:54	4° B 29'58		retrograde	8631 Jul 17 18:27	15° B 47'36	
desc. node	8630 Aug 08 22:51	4° B 07'16		evening set	8631 Jul 19 17:43	15° B 34'51	
inferior conj	8630 Aug 16 05:41	0° B 28'14	-2°13'25	desc. node	8631 Jul 26 19:57	12° B 01'58	
minimum elong	8630 Aug 15 23:36	0° B 37'38	2°11'15	inferior conj	8631 Jul 27 21:38	11° B 16'36	-0°19'34
	8630 Aug 16 23:55	30° R B		minimum elong	8631 Jul 27 20:49	11° B 18'03	0°19'25
min. Earth dist.	8630 Aug 18 08:37	29° B 09'44	0.55279 AU	min. Earth dist.	8631 Jul 30 23:47	9° B 05'02	0.56733 AU
morning rise	8630 Aug 24 13:15	26° B 05'50		morning rise	8631 Aug 04 20:37	6° B 17'38	
direct	8630 Aug 29 04:43	25° B 18'11		direct	8631 Aug 10 08:15	5° B 05'34	
	8630 Sep 09 13:05	0° B		morning max el	8631 Aug 24 14:46	12° B 29'17	26°10'53
morning max el	8630 Sep 12 00:53	2° B 10'23	24°35'14		8631 Sep 07 06:58	0° B	
asc. node	8630 Oct 01 08:13	0° B 06'26		asc. node	8631 Sep 18 05:11	19° B 36'31	
	8630 Oct 01 06:52	0° B		morning set	8631 Sep 21 23:49	27° B 25'58	
morning set	8630 Oct 07 12:56	12° B 41'45			8631 Sep 23 04:33	0° B	
superior conj	8630 Oct 14 09:57	27° B 40'09	1°38'10	superior conj	8631 Sep 28 21:03	12° B 30'24	1°29'26
minimum elong	8630 Oct 14 08:52	27° B 34'12	1°38'13	minimum elong	8631 Sep 28 19:11	12° B 20'05	1°29'17
	8630 Oct 15 11:36	0° B		max. Earth dist.	8631 Sep 29 14:42	14° B 08'05	1.31889 AU
max. Earth dist.	8630 Oct 16 07:09	1° B 45'59	1.32615 AU	evening rise	8631 Oct 05 19:44	27° B 34'30	
evening rise	8630 Oct 21 17:16	13° B 11'22			8631 Oct 06 23:44	0° B	
	8630 Oct 30 12:45	0° B		desc. node	8631 Oct 22 18:37	28° B 21'40	
desc. node	8630 Nov 04 21:30	9° B 04'17			8631 Oct 23 20:46	0° B	
	8630 Nov 20 03:28	0° B		evening max el	8631 Nov 06 08:02	16° B 34'06	27°14'41
evening max el	8630 Nov 24 00:30	4° B 00'07	27°29'28	retrograde	8631 Nov 20 04:44	23° B 45'58	
retrograde	8630 Dec 07 17:57	11° B 18'33		evening set	8631 Nov 27 05:50	21° B 31'43	
evening set	8630 Dec 14 19:05	8° B 48'35		min. Earth dist.	8631 Nov 30 22:42	18° B 45'34	0.61311 AU
min. Earth dist.	8630 Dec 18 12:31	5° B 38'33	0.63284 AU	inferior conj	8631 Dec 04 00:17	16° B 03'59	-3°30'45
inferior conj	8630 Dec 21 05:26	2° B 57'10	-2°19'58	minimum elong	8631 Dec 04 06:54	15° B 49'26	3°28'20
minimum elong	8630 Dec 21 09:53	2° B 46'06	2°18'01	morning rise	8631 Dec 11 10:15	11° B 08'06	
	8630 Dec 24 09:26	30° R B		direct	8631 Dec 13 15:24	10° B 47'41	
morning rise	8630 Dec 28 02:39	27° B 42'14		asc. node	8631 Dec 15 04:46	10° B 58'07	
asc. node	8630 Dec 28 07:43	27° B 37'44		morning max el	8631 Dec 20 17:07	14° B 21'17	17°54'29
direct	8630 Dec 30 11:17	27° B 15'36			8631 Dec 31 10:11	0° B	
	8631 Jan 05 08:39	0° B		morning set	8632 Jan 05 09:18	8° B 56'49	
morning max el	8631 Jan 06 01:33	0° B 39'47	17°47'51				
morning set	8631 Jan 22 08:14	25° B 36'43		superior conj	8632 Jan 15 21:23	27° B 44'57	0°21'05
	8631 Jan 24 21:00	0° \approx		minimum elong	8632 Jan 15 23:11	27° B 52'45	0°21'00

	8632 Jan 17 04:40	0°♊		superior conj	8632 Dec 28 04:36	10°♊13'38	0°53'48
desc. node	8632 Jan 18 17:44	2°♊38'18		minimum elong	8632 Dec 28 07:53	10°♊28'41	0°53'32
max. Earth dist.	8632 Jan 23 08:31	10°♊21'08	1.42779 AU	desc. node	8633 Jan 04 14:43	23°♊23'06	
evening rise	8632 Jan 29 16:40	20°♊33'01		max. Earth dist.	8633 Jan 04 18:06	23°♊37'36	1.40792 AU
	8632 Feb 04 19:16	0°♋			8633 Jan 08 13:00	0°♋	
	8632 Feb 26 03:40	0°♋		evening rise	8633 Jan 09 06:42	1°♋13'02	
evening max el	8632 Mar 01 23:16	5°♋25'25	22°05'17		8633 Jan 28 04:57	0°♋	
retrograde	8632 Mar 11 09:55	11°♋01'01		evening max el	8633 Feb 12 14:37	19°♋09'20	23°25'03
asc. node	8632 Mar 12 03:44	10°♋58'13		retrograde	8633 Feb 23 04:41	25°♋24'51	
evening set	8632 Mar 15 23:17	9°♋09'42		asc. node	8633 Feb 27 00:50	24°♋12'46	
inferior conj	8632 Mar 21 07:01	2°♋49'27	2°35'59	evening set	8633 Feb 28 05:47	23°♋18'50	
minimum elong	8632 Mar 21 04:50	2°♋57'07	2°35'26	min. Earth dist.	8633 Mar 05 03:02	17°♋35'27	0.68378 AU
min. Earth dist.	8632 Mar 21 06:18	2°♋51'59	0.68436 AU	inferior conj	8633 Mar 05 15:39	16°♋52'05	2°00'55
	8632 Mar 23 08:53	30°♋♋		minimum elong	8633 Mar 05 13:28	16°♋59'36	2°00'17
morning rise	8632 Mar 26 10:13	26°♋38'32		morning rise	8633 Mar 10 21:07	10°♋46'39	
direct	8632 Mar 31 06:03	24°♋35'16		direct	8633 Mar 15 03:09	9°♋05'47	
	8632 Apr 09 14:17	0°♌		morning max el	8633 Mar 23 11:32	13°♋53'19	20°57'44
morning max el	8632 Apr 09 18:49	0°♌11'19	22°20'07	desc. node	8633 Apr 02 14:30	26°♋19'41	
desc. node	8632 Apr 15 17:36	6°♌58'39			8633 Apr 05 05:28	0°♌	
	8632 May 02 03:41	0°♍		morning set	8633 Apr 22 19:08	26°♌20'19	
morning set	8632 May 13 07:14	17°♍26'58			8633 Apr 25 03:01	0°♍	
max. Earth dist.	8632 May 18 10:23	25°♍56'44	1.40840 AU	max. Earth dist.	8633 Apr 30 14:41	8°♍47'54	1.42863 AU
	8632 May 20 19:33	0°♎					
superior conj	8632 May 26 05:20	9°♎28'59	-1°44'07	superior conj	8633 May 07 15:06	20°♍27'04	-2°05'06
minimum elong	8632 May 26 11:15	9°♎55'28	1°43'42	minimum elong	8633 May 07 19:41	20°♍46'29	2°05'01
evening rise	8632 Jun 05 11:49	28°♎25'05			8633 May 13 04:07	0°♎	
	8632 Jun 06 08:05	0°♏		evening rise	8633 May 19 09:26	11°♎01'35	
asc. node	8632 Jun 08 02:37	3°♏18'14		asc. node	8633 May 25 23:41	22°♎40'29	
evening max el	8632 Jun 21 13:43	24°♏07'35	18°19'04		8633 May 30 11:32	0°♏	
retrograde	8632 Jun 28 20:57	27°♏47'26		evening max el	8633 Jun 05 01:23	7°♏07'58	18°05'31
evening set	8632 Jul 01 03:07	27°♏27'15		retrograde	8633 Jun 11 16:19	10°♏31'30	
inferior conj	8632 Jul 08 11:19	22°♏48'25	1°13'39	evening set	8633 Jun 14 06:01	10°♏00'47	
minimum elong	8632 Jul 08 13:39	22°♏43'32	1°12'39	inferior conj	8633 Jun 20 21:09	5°♏01'57	2°19'04
min. Earth dist.	8632 Jul 11 20:39	19°♏59'22	0.58754 AU	minimum elong	8633 Jun 21 00:08	4°♏54'41	2°18'05
desc. node	8632 Jul 12 17:03	19°♏19'51		min. Earth dist.	8633 Jun 24 01:28	1°♏58'10	0.61001 AU
morning rise	8632 Jul 15 20:55	17°♏15'16			8633 Jun 26 08:52	30°♋♎	
direct	8632 Jul 22 01:30	15°♏32'43		morning rise	8633 Jun 27 15:47	29°♎04'28	
morning max el	8632 Aug 05 10:45	23°♏18'20	27°20'15	desc. node	8633 Jun 29 14:05	27°♎58'26	
	8632 Aug 11 10:48	0°♐		direct	8633 Jul 04 06:55	26°♎51'50	
	8632 Aug 30 09:13	0°♑			8633 Jul 12 20:09	0°♏	
asc. node	8632 Sep 04 02:08	9°♑23'05		morning max el	8633 Jul 18 13:41	4°♏51'07	27°53'25
morning set	8632 Sep 05 08:08	11°♑59'44			8633 Aug 06 07:33	0°♐	
				morning set	8633 Aug 20 12:02	26°♐18'07	
superior conj	8632 Sep 12 08:52	27°♑19'02	1°15'24	asc. node	8633 Aug 21 23:06	29°♐20'58	
minimum elong	8632 Sep 12 06:38	27°♑06'39	1°15'03		8633 Aug 22 06:31	0°♑	
max. Earth dist.	8632 Sep 12 00:52	26°♑34'36	1.31619 AU	max. Earth dist.	8633 Aug 26 09:44	8°♑54'42	1.31812 AU
	8632 Sep 13 13:51	0°♒					
evening rise	8632 Sep 19 03:17	12°♒09'24		superior conj	8633 Aug 27 19:36	12°♑00'54	0°56'27
	8632 Sep 28 03:17	0°♓		minimum elong	8633 Aug 27 17:29	11°♑49'12	0°55'59
desc. node	8632 Oct 08 15:44	16°♓53'28		evening rise	8633 Sep 03 13:51	26°♑50'15	
evening max el	8632 Oct 18 08:42	28°♓19'26	26°25'56		8633 Sep 05 01:34	0°♒	
	8632 Oct 20 05:37	0°♈			8633 Sep 22 03:10	0°♓	
retrograde	8632 Nov 01 06:39	5°♈25'18		desc. node	8633 Sep 25 12:51	4°♓21'57	
evening set	8632 Nov 07 22:08	3°♈37'00		evening max el	8633 Sep 30 01:07	9°♓13'39	25°07'12
min. Earth dist.	8632 Nov 11 22:03	1°♈02'23	0.59214 AU	retrograde	8633 Oct 13 22:09	16°♓13'33	
	8632 Nov 13 07:08	30°♓♓		evening set	8633 Oct 19 15:14	14°♓59'20	
inferior conj	8632 Nov 15 02:42	28°♓35'53	-4°36'21	min. Earth dist.	8633 Oct 24 12:43	12°♓18'05	0.57220 AU
minimum elong	8632 Nov 15 10:03	28°♓21'46	4°34'23	inferior conj	8633 Oct 27 09:33	10°♓23'38	-5°23'59
morning rise	8632 Nov 23 00:22	24°♓02'16		minimum elong	8633 Oct 27 14:17	10°♓15'44	5°23'19
direct	8632 Nov 25 05:51	23°♓44'52		morning rise	8633 Nov 04 15:38	6°♓12'53	
asc. node	8632 Dec 01 01:47	25°♓51'31		direct	8633 Nov 07 02:13	5°♓55'36	
morning max el	8632 Dec 03 03:24	27°♓36'54	18°20'55	morning max el	8633 Nov 16 04:40	10°♓15'59	19°08'43
	8632 Dec 05 07:50	0°♉		asc. node	8633 Nov 17 22:47	12°♓05'51	
morning set	8632 Dec 19 00:01	22°♉54'42			8633 Nov 29 06:28	0°♉	
	8632 Dec 22 17:14	0°♊		morning set	8633 Dec 02 23:59	7°♉17'07	
				superior conj	8633 Dec 11 05:47	23°♉33'09	1°17'31

minimum elong	8633 Dec 11 08:52	23°  48'03	1°17'22	superior conj	8634 Nov 24 20:11	7°  30'01	1°32'37
	8633 Dec 14 15:14	0° 		minimum elong	8634 Nov 24 22:14	7°  40'23	1°32'40
max. Earth dist.	8633 Dec 17 23:52	6°  10'03	1.38618 AU	max. Earth dist.	8634 Nov 30 06:34	18°  11'54	1.36516 AU
evening rise	8633 Dec 21 18:39	12°  51'05		evening rise	8634 Dec 04 02:46	25°  22'38	
desc. node	8633 Dec 22 11:43	14°  04'38			8634 Dec 06 16:32	0° 	
	8634 Jan 01 05:52	0° 		desc. node	8634 Dec 09 08:45	4°  39'05	
	8634 Jan 23 08:39	0° 			8634 Dec 25 18:58	0° 	
evening max el	8634 Jan 26 03:56	2°  55'58	24°43'54	evening max el	8635 Jan 08 17:07	16°  43'56	25°54'45
retrograde	8634 Feb 06 19:41	9°  44'02		retrograde	8635 Jan 21 05:55	23°  53'00	
evening set	8634 Feb 12 09:11	7°  24'57		evening set	8635 Jan 27 07:52	21°  23'44	
asc. node	8634 Feb 13 21:55	5°  56'43		min. Earth dist.	8635 Jan 31 14:29	16°  49'16	0.67080 AU
min. Earth dist.	8634 Feb 16 22:31	2°  15'57	0.67919 AU	asc. node	8635 Jan 31 18:59	16°  35'17	
inferior conj	8634 Feb 17 22:36	0°  56'00	1°17'20	inferior conj	8635 Feb 02 02:00	14°  57'47	0°25'37
minimum elong	8634 Feb 17 20:55	1°  01'37	1°16'49	minimum elong	8635 Feb 02 01:21	14°  59'50	0°25'30
	8634 Feb 18 15:34	30° 		morning rise	8635 Feb 07 19:23	9°  07'58	
morning rise	8634 Feb 23 08:51	24°  57'25		direct	8635 Feb 11 01:05	8°  08'02	
direct	8634 Feb 27 01:59	23°  38'16		morning max el	8635 Feb 17 19:43	11°  49'55	18°52'28
morning max el	8634 Mar 06 11:50	27°  46'58	19°47'30		8635 Mar 03 05:45	0° 	
	8634 Mar 08 13:39	0° 		desc. node	8635 Mar 07 08:19	6°  20'03	
greatest brilliancy	8634 Mar 19 08:20	14°  29'49	-0.6m	morning set	8635 Mar 12 00:29	13°  36'29	
desc. node	8634 Mar 20 11:24	16°  09'19			8635 Mar 22 12:32	0° 	
	8634 Mar 29 15:51	0° 		max. Earth dist.	8635 Mar 26 18:02	6°  37'16	1.45339 AU
morning set	8634 Apr 01 16:48	4°  39'58					
max. Earth dist.	8634 Apr 13 01:34	22°  25'21	1.44420 AU	superior conj	8635 Mar 28 12:08	9°  22'34	-1°59'31
	8634 Apr 17 19:05	0° 		minimum elong	8635 Mar 28 04:29	8°  52'29	1°59'05
					8635 Apr 10 11:11	0° 	
superior conj	8634 Apr 18 00:06	0°  20'15	-2°12'01	evening rise	8635 Apr 12 15:00	3°  29'16	
minimum elong	8634 Apr 17 23:19	0°  17'04	2°12'06	asc. node	8635 Apr 29 17:48	0°  01'53	
evening rise	8634 May 01 11:44	22°  44'49			8635 Apr 29 17:13	0° 	
	8634 May 05 18:12	0° 		evening max el	8635 May 03 03:04	3°  58'16	18°34'50
asc. node	8634 May 12 20:44	11°  37'41		retrograde	8635 May 09 15:40	7°  31'46	
evening max el	8634 May 19 14:49	20°  27'16	18°11'04	evening set	8635 May 12 20:14	6°  34'17	
retrograde	8634 May 25 23:57	23°  49'05		inferior conj	8635 May 18 13:00	0°  59'56	3°18'44
evening set	8634 May 28 21:03	23°  05'41		minimum elong	8635 May 18 13:57	0°  57'06	3°18'29
inferior conj	8634 Jun 03 23:04	17°  48'24	2°59'10		8635 May 19 08:47	30° 	
minimum elong	8634 Jun 04 01:17	17°  42'18	2°58'36	min. Earth dist.	8635 May 20 14:17	28°  31'35	0.65085 AU
min. Earth dist.	8634 Jun 06 15:20	14°  53'08	0.63180 AU	morning rise	8635 May 24 06:52	24°  42'48	
morning rise	8634 Jun 10 03:59	11°  37'13		direct	8635 May 30 21:17	21°  57'06	
desc. node	8634 Jun 16 11:05	9°  02'49		desc. node	8635 Jun 03 08:05	22°  36'02	
direct	8634 Jun 16 22:11	9°  02'08			8635 Jun 13 10:49	0° 	
morning max el	8634 Jun 30 21:29	17°  05'17	27°48'26	morning max el	8635 Jun 13 07:34	29°  51'45	27°09'13
	8634 Jul 11 14:34	0° 			8635 Jul 05 13:21	0° 	
	8634 Jul 30 02:21	0° 		morning set	8635 Jul 18 21:06	23°  41'12	
morning set	8634 Aug 04 09:18	10°  01'45			8635 Jul 22 01:54	0° 	
asc. node	8634 Aug 08 20:05	19°  02'56		max. Earth dist.	8635 Jul 23 08:14	2°  33'27	1.33640 AU
max. Earth dist.	8634 Aug 09 13:22	20°  05'04	1.32479 AU	asc. node	8635 Jul 26 17:02	9°  31'42	
superior conj	8634 Aug 12 03:26	26°  03'29	0°32'59	superior conj	8635 Jul 27 06:13	10°  41'04	0°05'33
minimum elong	8634 Aug 12 01:57	26°  02'27	0°32'34	minimum elong	8635 Jul 27 05:56	10°  39'35	0°05'20
	8634 Aug 13 17:59	0° 		behind sun begin	8635 Jul 27 00:37	10°  11'37	
evening rise	8634 Aug 19 01:28	11°  03'12		behind sun end	8635 Jul 27 11:14	11°  07'35	
	8634 Aug 28 09:40	0° 		evening rise	8635 Aug 03 12:16	26°  06'30	
evening max el	8634 Sep 11 12:33	19°  32'45	23°30'33		8635 Aug 05 08:59	0° 	
desc. node	8634 Sep 12 09:57	20°  32'01		evening max el	8635 Aug 24 02:54	29°  48'07	21°52'29
retrograde	8634 Sep 25 01:21	26°  18'45			8635 Aug 24 07:46	0° 	
evening set	8634 Sep 29 08:23	25°  38'31		desc. node	8635 Aug 30 07:04	4°  25'31	
min. Earth dist.	8634 Oct 05 22:32	22°  32'06	0.55634 AU	retrograde	8635 Sep 05 16:48	6°  02'59	
inferior conj	8634 Oct 07 20:24	21°  24'10	-5°35'02	evening set	8635 Sep 08 13:21	5°  44'44	
minimum elong	8634 Oct 07 18:19	21°  27'16	5°34'53	inferior conj	8635 Sep 17 16:15	1°  45'09	-4°52'43
morning rise	8634 Oct 16 06:20	17°  31'06		minimum elong	8635 Sep 17 07:35	1°  57'16	4°50'55
direct	8634 Oct 19 03:23	17°  10'48		min. Earth dist.	8635 Sep 17 06:43	1°  58'29	0.54769 AU
morning max el	8634 Oct 29 17:46	22°  09'32	20°18'54		8635 Sep 20 21:48	30° 	
asc. node	8634 Nov 04 19:46	29°  25'52		morning rise	8635 Sep 26 03:07	27°  56'33	
	8634 Nov 05 05:09	0° 		direct	8635 Sep 29 14:41	27°  29'53	
morning set	8634 Nov 17 06:05	21°  55'30			8635 Oct 07 14:43	0° 	
	8634 Nov 21 04:08	0° 		morning max el	8635 Oct 11 17:45	3°  13'15	21°49'56
				asc. node	8635 Oct 22 16:44	17°  36'15	

	8635 Oct 29 09:31	0°♍		asc. node	8636 Oct 08 13:43	6°♌25'01	
morning set	8635 Nov 01 15:51	6°♍42'13		morning set	8636 Oct 16 03:23	21°♌31'56	
					8636 Oct 20 01:44	0°♍	
superior conj	8635 Nov 08 19:52	21°♍52'13	1°40'02				
minimum elong	8635 Nov 08 20:37	21°♍56'07	1°40'11	superior conj	8636 Oct 23 01:50	6°♍31'01	1°40'38
	8635 Nov 12 18:23	0°♌		minimum elong	8636 Oct 23 01:21	6°♍28'23	1°40'44
max. Earth dist.	8635 Nov 12 19:25	0°♌05'15	1.34686 AU	max. Earth dist.	8636 Oct 25 16:32	12°♍06'43	1.33246 AU
evening rise	8635 Nov 17 03:16	8°♌37'06		evening rise	8636 Oct 30 16:21	22°♍24'46	
desc. node	8635 Nov 26 05:48	25°♌00'58			8636 Nov 03 14:00	0°♌	
	8635 Nov 29 06:18	0°♍		desc. node	8636 Nov 12 02:52	15°♌04'20	
	8635 Dec 21 19:53	0°♍			8636 Nov 22 00:32	0°♍	
evening max el	8635 Dec 22 06:33	0°♍25'54	26°50'16	evening max el	8636 Dec 03 19:10	13°♍50'50	27°23'11
retrograde	8636 Jan 04 10:26	7°♍44'36		retrograde	8636 Dec 17 08:40	21°♍10'51	
evening set	8636 Jan 10 23:56	5°♍09'31		evening set	8636 Dec 24 07:04	18°♍36'21	
min. Earth dist.	8636 Jan 15 00:35	1°♍09'32	0.65871 AU	min. Earth dist.	8636 Dec 28 02:35	15°♍09'29	0.64318 AU
	8636 Jan 16 00:37	30°♌♌		inferior conj	8636 Dec 30 13:21	12°♍34'05	-1°39'48
inferior conj	8636 Jan 16 23:44	28°♍52'25	-0°33'46	minimum elong	8636 Dec 30 16:26	12°♍25'54	1°38'20
minimum elong	8636 Jan 17 00:41	28°♍49'37	0°33'11	asc. node	8637 Jan 04 13:07	8°♍01'40	
asc. node	8636 Jan 18 16:02	26°♍57'49		morning rise	8637 Jan 06 03:27	7°♍09'49	
morning rise	8636 Jan 23 02:30	23°♍13'53		direct	8637 Jan 08 15:36	6°♍37'52	
direct	8636 Jan 25 22:27	22°♍29'48		morning max el	8637 Jan 15 02:28	10°♍00'02	17°52'25
morning max el	8636 Feb 01 09:29	25°♍56'36	18°13'57		8637 Jan 28 17:59	0°♍	
	8636 Feb 04 21:48	0°♍		morning set	8637 Feb 01 02:55	5°♍41'25	
morning set	8636 Feb 20 11:20	23°♍56'50		desc. node	8637 Feb 08 02:13	17°♍21'35	
desc. node	8636 Feb 22 05:16	26°♍45'48					
	8636 Feb 24 05:36	0°♌		superior conj	8637 Feb 14 10:49	27°♍44'12	-0°45'10
				minimum elong	8637 Feb 14 05:42	27°♍23'34	0°44'19
superior conj	8636 Mar 06 17:22	18°♌13'35	-1°27'55		8637 Feb 15 20:39	0°♌	
minimum elong	8636 Mar 06 08:02	17°♌36'54	1°26'52	max. Earth dist.	8637 Feb 19 09:24	5°♌37'02	1.44962 AU
max. Earth dist.	8636 Mar 08 13:48	21°♌07'44	1.45523 AU	evening rise	8637 Mar 02 09:05	22°♌42'44	
	8636 Mar 14 06:03	0°♍			8637 Mar 07 03:37	0°♍	
evening rise	8636 Mar 22 19:35	13°♍21'13		greatest brilliancy	8637 Mar 17 04:06	14°♍58'32	-0.6m
	8636 Apr 02 13:05	0°♌			8637 Mar 28 11:27	0°♌	
greatest brilliancy	8636 Apr 03 08:52	1°♌15'20	-0.7m	evening max el	8637 Mar 29 15:27	1°♌14'13	20°12'15
evening max el	8636 Apr 15 11:50	17°♌35'26	19°15'46	asc. node	8637 Apr 02 11:58	4°♌27'44	
asc. node	8636 Apr 15 14:52	17°♌43'03		retrograde	8637 Apr 06 10:37	5°♌45'53	
retrograde	8636 Apr 22 12:08	21°♌32'52		evening set	8637 Apr 10 07:49	4°♌18'29	
evening set	8636 Apr 26 00:36	20°♌20'35			8637 Apr 14 08:18	30°♌♍	
inferior conj	8636 May 01 11:31	14°♌30'34	3°22'07	inferior conj	8637 Apr 15 15:44	28°♍14'39	3°12'33
minimum elong	8636 May 01 11:12	14°♌31'38	3°21'58	minimum elong	8637 Apr 15 14:23	28°♍19'13	3°12'18
min. Earth dist.	8636 May 02 21:29	12°♌40'34	0.66592 AU	min. Earth dist.	8637 Apr 16 11:18	27°♍08'06	0.67655 AU
morning rise	8636 May 06 21:25	8°♌12'10		morning rise	8637 Apr 20 20:43	21°♍57'41	
direct	8636 May 13 02:55	5°♌27'52		direct	8637 Apr 26 14:06	19°♍24'31	
desc. node	8636 May 20 05:04	8°♌11'21		desc. node	8637 May 07 02:03	25°♍17'24	
morning max el	8636 May 25 17:50	12°♌59'59	26°03'29	morning max el	8637 May 08 03:17	26°♍19'39	24°40'43
	8636 Jun 08 10:48	0°♌			8637 May 11 12:32	0°♌	
	8636 Jun 27 06:20	0°♍			8637 Jun 02 00:35	0°♌	
morning set	8636 Jun 30 19:55	6°♍28'02		morning set	8637 Jun 13 00:59	18°♌22'26	
max. Earth dist.	8636 Jul 04 16:33	13°♍46'11	1.35280 AU	max. Earth dist.	8637 Jun 16 15:54	24°♌51'56	1.37312 AU
					8637 Jun 19 10:29	0°♍	
superior conj	8636 Jul 10 01:29	24°♍26'00	-0°24'59				
minimum elong	8636 Jul 10 02:57	24°♍33'26	0°24'53	superior conj	8637 Jun 23 10:05	7°♍36'38	-0°57'03
asc. node	8636 Jul 12 14:01	29°♍36'11		minimum elong	8637 Jun 23 13:38	7°♍53'53	0°56'38
	8636 Jul 12 18:38	0°♌		asc. node	8637 Jun 29 11:01	19°♍34'25	
evening rise	8636 Jul 17 20:13	10°♌29'59		evening rise	8637 Jul 01 22:54	24°♍34'22	
	8636 Jul 28 03:56	0°♍			8637 Jul 04 16:44	0°♌	
evening max el	8636 Aug 05 03:57	10°♍32'19	20°26'57	evening max el	8637 Jul 18 18:20	22°♌00'31	19°20'53
retrograde	8636 Aug 16 05:01	16°♍00'14		retrograde	8637 Jul 28 02:47	26°♌38'03	
desc. node	8636 Aug 16 04:09	16°♍00'14		evening set	8637 Jul 29 23:24	26°♌27'51	
evening set	8636 Aug 18 05:25	15°♍50'05		desc. node	8637 Aug 03 01:16	25°♌02'15	
inferior conj	8636 Aug 27 09:24	11°♍52'43	-3°19'37	inferior conj	8637 Aug 07 14:14	22°♌19'40	-1°23'41
minimum elong	8636 Aug 27 00:41	12°♍05'22	3°16'47	minimum elong	8637 Aug 07 10:29	22°♌25'47	1°22'22
min. Earth dist.	8636 Aug 28 16:06	11°♍08'09	0.54825 AU	min. Earth dist.	8637 Aug 10 04:52	20°♌37'25	0.55809 AU
morning rise	8636 Sep 04 19:23	7°♍48'19		morning rise	8637 Aug 15 18:51	17°♌41'56	
direct	8636 Sep 08 23:47	7°♍10'45		direct	8637 Aug 20 18:40	16°♌45'15	
morning max el	8636 Sep 22 08:24	13°♍38'47	23°34'28	morning max el	8637 Sep 03 20:52	23°♌52'07	25°18'19
	8636 Oct 04 21:32	0°♌			8637 Sep 09 10:52	0°♍	

asc. node	8637 Sep 25 10:42	25° \mathbb{M} 42'17	direct	8638 Aug 02 04:28	26° \mathbb{S} 46'46	
	8637 Sep 27 14:16	0° \mathbb{Q}		8638 Aug 11 06:33	0° \mathbb{Q}	
morning set	8637 Sep 30 15:00	6° \mathbb{Q} 19'42	morning max el	8638 Aug 16 13:09	4° \mathbb{Q} 21'53	26°44'19
				8638 Sep 04 05:14	0° \mathbb{M}	
superior conj	8637 Oct 07 11:40	21° \mathbb{Q} 19'10	asc. node	8638 Sep 12 07:39	15° \mathbb{M} 20'00	
minimum elong	8637 Oct 07 10:13	21° \mathbb{Q} 11'08	morning set	8638 Sep 15 00:59	21° \mathbb{M} 00'02	
max. Earth dist.	8637 Oct 08 20:57	24° \mathbb{Q} 21'46		8638 Sep 19 04:34	0° \mathbb{Q}	
	8637 Oct 11 11:21	0° \mathbb{M}				
evening rise	8637 Oct 14 14:44	6° \mathbb{M} 37'08	superior conj	8638 Sep 21 23:18	6° \mathbb{Q} 09'35	1°24'07
	8637 Oct 27 02:36	0° \mathbb{M}	minimum elong	8638 Sep 21 21:13	5° \mathbb{Q} 58'05	1°23'52
desc. node	8637 Oct 29 23:57	4° \mathbb{M} 41'33	max. Earth dist.	8638 Sep 22 05:51	6° \mathbb{Q} 45'58	1.31711 AU
evening max el	8637 Nov 16 05:06	26° \mathbb{M} 46'40	evening rise	8638 Sep 28 19:38	21° \mathbb{Q} 05'56	
	8637 Nov 20 00:03	0° \mathbb{S}		8638 Oct 03 03:59	0° \mathbb{M}	
retrograde	8637 Nov 30 00:11	4° \mathbb{S} 03'01	desc. node	8638 Oct 16 21:03	23° \mathbb{M} 41'21	
evening set	8637 Dec 07 02:24	1° \mathbb{S} 38'04		8638 Oct 21 10:12	0° \mathbb{M}	
	8637 Dec 09 06:08	30° \mathbb{R} \mathbb{M}	evening max el	8638 Oct 29 09:53	9° \mathbb{M} 00'35	26°58'05
min. Earth dist.	8637 Dec 10 18:47	28° \mathbb{M} 39'41	retrograde	8638 Nov 12 07:45	16° \mathbb{M} 10'41	
inferior conj	8637 Dec 13 16:01	25° \mathbb{M} 56'14	evening set	8638 Nov 19 05:56	14° \mathbb{M} 06'11	
minimum elong	8637 Dec 13 21:28	25° \mathbb{M} 43'22	min. Earth dist.	8638 Nov 23 00:25	11° \mathbb{M} 26'43	0.60414 AU
morning rise	8637 Dec 20 18:42	20° \mathbb{M} 49'23	inferior conj	8638 Nov 26 04:18	8° \mathbb{M} 49'17	-3°59'52
asc. node	8637 Dec 22 10:12	20° \mathbb{M} 27'42	minimum elong	8638 Nov 26 11:30	8° \mathbb{M} 34'17	3°57'30
direct	8637 Dec 23 01:27	20° \mathbb{M} 25'51	morning rise	8638 Dec 03 19:32	4° \mathbb{M} 02'42	
morning max el	8637 Dec 29 19:37	23° \mathbb{M} 52'49	direct	8638 Dec 06 00:06	3° \mathbb{M} 44'06	
	8638 Jan 03 17:30	0° \mathbb{S}	asc. node	8638 Dec 09 07:16	4° \mathbb{M} 28'18	
morning set	8638 Jan 14 17:41	18° \mathbb{S} 32'32	morning max el	8638 Dec 13 09:27	7° \mathbb{M} 24'45	18°03'14
	8638 Jan 21 06:02	0° \mathbb{Q}		8638 Dec 27 21:08	0° \mathbb{S}	
desc. node	8638 Jan 25 23:10	8° \mathbb{Q} 03'48	morning set	8638 Dec 29 01:10	2° \mathbb{S} 10'09	
superior conj	8638 Jan 26 04:17	8° \mathbb{Q} 25'21	superior conj	8639 Jan 07 22:44	20° \mathbb{S} 17'18	0°36'02
minimum elong	8638 Jan 26 04:08	8° \mathbb{Q} 24'45	minimum elong	8639 Jan 08 01:25	20° \mathbb{S} 29'16	0°35'49
behind sun begin	8638 Jan 25 19:13	7° \mathbb{Q} 47'09	desc. node	8639 Jan 12 20:08	28° \mathbb{S} 48'22	
behind sun end	8638 Jan 26 13:03	9° \mathbb{Q} 02'15		8639 Jan 13 12:58	0° \mathbb{Q}	
max. Earth dist.	8638 Feb 02 01:55	19° \mathbb{Q} 47'49	max. Earth dist.	8639 Jan 15 13:40	3° \mathbb{Q} 24'57	1.41968 AU
	8638 Feb 08 12:18	0° \mathbb{M}	evening rise	8639 Jan 21 00:21	12° \mathbb{Q} 18'59	
evening rise	8638 Feb 09 21:58	2° \mathbb{M} 10'54		8639 Feb 01 12:08	0° \mathbb{M}	
	8638 Feb 28 16:19	0° \mathbb{Y}	evening max el	8639 Feb 23 06:51	28° \mathbb{M} 36'03	22°38'58
evening max el	8638 Mar 12 13:31	14° \mathbb{Y} 54'13		8639 Feb 24 17:40	0° \mathbb{Y}	
asc. node	8638 Mar 20 09:05	20° \mathbb{Y} 01'21	retrograde	8639 Mar 05 05:26	4° \mathbb{Y} 29'34	
retrograde	8638 Mar 21 09:00	20° \mathbb{Y} 06'24	asc. node	8639 Mar 07 06:13	4° \mathbb{Y} 08'52	
evening set	8638 Mar 25 16:01	18° \mathbb{Y} 23'53	evening set	8639 Mar 09 23:33	2° \mathbb{Y} 32'07	
inferior conj	8638 Mar 30 23:15	12° \mathbb{Y} 08'39		8639 Mar 12 10:23	30° \mathbb{R} \mathbb{M}	
minimum elong	8638 Mar 30 21:15	12° \mathbb{Y} 15'37	inferior conj	8639 Mar 15 08:00	26° \mathbb{M} 08'38	2°22'12
min. Earth dist.	8638 Mar 31 05:40	11° \mathbb{Y} 46'21	minimum elong	8639 Mar 15 05:45	26° \mathbb{M} 16'27	2°21'36
morning rise	8638 Apr 05 02:17	5° \mathbb{Y} 54'55	min. Earth dist.	8639 Mar 15 02:14	26° \mathbb{M} 28'42	0.68459 AU
direct	8638 Apr 10 06:05	3° \mathbb{Y} 39'33	morning rise	8639 Mar 20 11:49	19° \mathbb{M} 59'38	
morning max el	8638 Apr 20 12:57	9° \mathbb{Y} 46'18	direct	8639 Mar 25 01:43	18° \mathbb{M} 05'39	
desc. node	8638 Apr 23 23:01	13° \mathbb{Y} 29'30	morning max el	8639 Apr 03 01:54	23° \mathbb{M} 20'36	21°43'48
	8638 May 06 11:39	0° \mathbb{S}		8639 Apr 08 21:32	0° \mathbb{Y}	
morning set	8638 May 25 06:51	29° \mathbb{S} 10'32	desc. node	8639 Apr 10 19:56	2° \mathbb{Y} 28'55	
	8638 May 25 18:40	0° \mathbb{I}		8639 Apr 29 20:15	0° \mathbb{S}	
max. Earth dist.	8638 May 29 11:55	6° \mathbb{I} 20'18	morning set	8639 May 05 09:22	8° \mathbb{S} 42'31	
			max. Earth dist.	8639 May 11 11:41	18° \mathbb{S} 37'26	1.41740 AU
superior conj	8638 Jun 06 04:07	20° \mathbb{I} 04'02		8639 May 18 04:34	0° \mathbb{I}	
minimum elong	8638 Jun 06 09:31	20° \mathbb{I} 28'59				
	8638 Jun 11 10:53	0° \mathbb{S}	superior conj	8639 May 19 03:00	1° \mathbb{I} 37'42	-1°54'20
evening rise	8638 Jun 15 17:23	8° \mathbb{S} 12'05	minimum elong	8639 May 19 08:46	2° \mathbb{I} 02'57	1°54'02
asc. node	8638 Jun 16 08:02	9° \mathbb{S} 22'29	evening rise	8639 May 29 23:51	21° \mathbb{I} 13'37	
	8638 Jun 28 06:31	0° \mathbb{Q}	asc. node	8639 Jun 03 05:05	28° \mathbb{I} 55'41	
evening max el	8638 Jul 01 20:03	4° \mathbb{Q} 12'00		8639 Jun 03 19:25	0° \mathbb{S}	
retrograde	8638 Jul 09 18:07	8° \mathbb{Q} 08'22	evening max el	8639 Jun 15 05:16	16° \mathbb{S} 57'53	18°11'00
evening set	8638 Jul 11 19:56	7° \mathbb{Q} 53'01	retrograde	8639 Jun 22 04:05	20° \mathbb{S} 28'33	
inferior conj	8638 Jul 19 15:23	3° \mathbb{Q} 26'26	evening set	8639 Jun 24 13:32	20° \mathbb{S} 04'09	
minimum elong	8638 Jul 19 16:15	3° \mathbb{Q} 24'47	inferior conj	8639 Jul 01 14:03	15° \mathbb{S} 16'57	1°44'43
desc. node	8638 Jul 20 22:21	2° \mathbb{Q} 26'50	minimum elong	8639 Jul 01 16:55	15° \mathbb{S} 10'33	1°43'37
min. Earth dist.	8638 Jul 22 22:31	0° \mathbb{Q} 56'06	min. Earth dist.	8639 Jul 04 22:36	12° \mathbb{S} 18'34	0.59702 AU
	8638 Jul 24 06:29	30° \mathbb{R} \mathbb{S}	desc. node	8639 Jul 07 19:25	10° \mathbb{S} 06'58	
morning rise	8638 Jul 27 09:02	28° \mathbb{S} 11'37	morning rise	8639 Jul 08 17:19	9° \mathbb{S} 32'20	

direct	8639 Jul 15 03:33	7°☿36'08		morning max el	8640 Jul 10 17:05	27°♄18'45	27°55'54
morning max el	8639 Jul 29 11:58	15°☿28'35	27°38'57		8640 Jul 13 06:16	0°☿	
	8639 Aug 10 07:27	0°♂			8640 Aug 03 00:26	0°♂	
	8639 Aug 27 15:43	0°♄		morning set	8640 Aug 13 09:00	19°♂37'43	
morning set	8639 Aug 30 07:39	5°♄28'11		asc. node	8640 Aug 16 01:31	25°♂12'59	
asc. node	8639 Aug 30 04:35	5°♄12'09			8640 Aug 18 07:17	0°♄	
max. Earth dist.	8639 Sep 05 15:50	19°♄11'05	1.31644 AU	max. Earth dist.	8640 Aug 18 23:05	1°♄25'25	1.32043 AU
superior conj	8639 Sep 06 10:54	20°♄56'36	1°07'57	superior conj	8640 Aug 20 20:37	5°♄33'39	0°47'02
minimum elong	8639 Sep 06 08:39	20°♄44'09	1°07'33	minimum elong	8640 Aug 20 18:41	5°♄23'09	0°46'34
	8639 Sep 10 13:09	0°♂		evening rise	8640 Aug 27 15:58	20°♄26'22	
evening rise	8639 Sep 13 04:44	5°♂44'42			8640 Sep 01 06:29	0°♂	
	8639 Sep 25 20:18	0°♄		desc. node	8640 Sep 19 15:15	28°♂43'19	
desc. node	8639 Oct 03 18:09	11°♄48'57			8640 Sep 20 20:20	0°♄	
evening max el	8639 Oct 11 07:14	20°♄24'40	25°55'40	evening max el	8640 Sep 21 20:57	1°♄00'56	24°27'16
retrograde	8639 Oct 25 05:25	27°♄27'49		retrograde	8640 Oct 05 15:20	7°♄55'34	
evening set	8639 Oct 31 12:51	25°♄53'45		evening set	8640 Oct 10 19:13	6°♄56'31	
min. Earth dist.	8639 Nov 04 20:00	23°♄18'23	0.58339 AU	min. Earth dist.	8640 Oct 16 07:51	4°♄06'47	0.56486 AU
inferior conj	8639 Nov 07 22:43	21°♄03'44	-4°59'45	inferior conj	8640 Oct 18 20:50	2°♄30'55	-5°34'18
minimum elong	8639 Nov 08 05:29	20°♄51'28	4°58'17	minimum elong	8640 Oct 18 23:04	2°♄27'22	5°34'06
morning rise	8639 Nov 16 00:27	16°♄39'35			8640 Oct 23 04:08	30°♄	
direct	8639 Nov 18 07:25	16°♄22'35		morning rise	8640 Oct 27 05:04	28°♄28'39	
asc. node	8639 Nov 26 04:16	19°♄57'40		direct	8640 Oct 29 19:47	28°♄10'17	
morning max el	8639 Nov 26 16:16	20°♄25'49	18°38'26		8640 Nov 04 23:14	0°♄	
	8639 Dec 03 22:10	0°♄		morning max el	8640 Nov 08 12:31	2°♄45'32	19°35'49
morning set	8639 Dec 12 20:16	16°♄19'39		asc. node	8640 Nov 12 01:14	6°♄41'16	
	8639 Dec 19 22:09	0°♄		morning set	8640 Nov 25 23:11	0°♄49'45	
					8640 Nov 25 13:17	0°♄	
superior conj	8639 Dec 21 14:10	3°♄08'45	1°04'56	superior conj	8640 Dec 03 21:30	16°♄45'23	1°24'55
minimum elong	8639 Dec 21 17:31	3°♄24'28	1°04'43	minimum elong	8640 Dec 04 00:12	16°♄58'44	1°24'51
max. Earth dist.	8639 Dec 28 21:15	16°♄21'55	1.39882 AU	max. Earth dist.	8640 Dec 10 03:16	28°♄40'52	1.37707 AU
desc. node	8639 Dec 30 17:07	19°♄31'54			8640 Dec 10 20:27	0°♄	
evening rise	8640 Jan 01 23:43	23°♄23'43		evening rise	8640 Dec 13 20:37	5°♄25'08	
	8640 Jan 05 23:56	0°♄		desc. node	8640 Dec 16 14:07	10°♄10'41	
	8640 Jan 26 09:34	0°♄			8640 Dec 28 23:20	0°♄	
evening max el	8640 Feb 05 21:15	12°♄21'19	23°59'11	evening max el	8641 Jan 18 10:26	26°♄09'09	25°15'26
retrograde	8640 Feb 16 22:34	18°♄51'15		retrograde	8641 Jan 22 20:52	0°♄	
evening set	8640 Feb 22 04:52	16°♄39'39		evening set	8641 Jan 30 11:28	3°♄06'56	
asc. node	8640 Feb 22 03:19	16°♄42'55		asc. node	8641 Feb 05 06:28	0°♄42'58	
min. Earth dist.	8640 Feb 26 22:40	11°♄10'49	0.68234 AU	min. Earth dist.	8641 Feb 06 01:33	30°♄	
inferior conj	8640 Feb 27 16:07	10°♄11'37	1°43'28	inferior conj	8641 Feb 08 00:23	27°♄54'18	
minimum elong	8640 Feb 27 14:05	10°♄18'33	1°42'50	minimum elong	8641 Feb 09 16:49	25°♄48'54	0.67612 AU
morning rise	8640 Mar 03 23:18	4°♄08'51		morning rise	8641 Feb 10 21:47	24°♄14'53	0°56'23
direct	8640 Mar 07 23:49	2°♄37'11		direct	8641 Feb 10 20:28	24°♄19'10	0°55'59
morning max el	8640 Mar 15 21:32	7°♄06'25	20°26'05	morning max el	8641 Feb 16 10:48	18°♄19'59	
desc. node	8640 Mar 27 16:51	22°♄02'46		desc. node	8641 Feb 19 22:57	17°♄09'19	
	8640 Apr 02 04:05	0°♄			8641 Feb 27 01:15	21°♄04'40	19°22'12
morning set	8640 Apr 13 12:38	17°♄13'04		morning set	8641 Mar 06 08:20	0°♄	
	8640 Apr 21 15:36	0°♄		greatest brilliancy	8641 Mar 11 22:54	8°♄06'14	-0.7m
max. Earth dist.	8640 Apr 22 19:03	1°♄50'03	1.43596 AU	desc. node	8641 Mar 14 13:47	12°♄02'07	
				morning set	8641 Mar 23 11:40	25°♄40'25	
superior conj	8640 Apr 29 02:18	12°♄07'43	-2°10'08		8641 Mar 26 06:50	0°♄	
minimum elong	8640 Apr 29 05:06	12°♄19'19	2°10'11	max. Earth dist.	8641 Apr 05 09:14	15°♄46'30	1.44896 AU
	8640 May 09 14:07	0°♄		superior conj	8641 Apr 09 01:20	21°♄35'46	-2°09'15
evening rise	8640 May 11 13:45	3°♄27'54		minimum elong	8641 Apr 08 21:26	21°♄20'14	2°09'12
asc. node	8640 May 20 02:07	18°♄07'43			8641 Apr 14 06:50	0°♄	
	8640 May 28 15:14	0°♄		evening rise	8641 Apr 23 06:37	14°♄46'42	
evening max el	8640 May 28 18:07	0°♄07'09	18°05'38		8641 May 02 11:53	0°♄	
retrograde	8640 Jun 04 05:11	3°♄27'58		asc. node	8641 May 06 23:11	6°♄51'51	
evening set	8640 Jun 06 22:11	2°♄51'54		evening max el	8641 May 12 07:20	13°♄31'49	18°18'57
	8640 Jun 11 00:08	30°♄		retrograde	8641 May 18 16:52	16°♄57'12	
inferior conj	8640 Jun 13 07:12	27°♄44'53	2°38'55	evening set	8641 May 21 17:08	16°♄07'52	
minimum elong	8640 Jun 13 09:58	27°♄37'45	2°38'05	inferior conj	8641 May 27 14:43	10°♄42'50	3°09'42
min. Earth dist.	8640 Jun 16 06:54	24°♄42'24	0.61951 AU	minimum elong	8641 May 27 16:25	10°♄37'57	3°09'17
morning rise	8640 Jun 19 19:47	21°♄40'45		min. Earth dist.	8641 May 30 00:38	7°♄57'27	0.64029 AU
desc. node	8640 Jun 23 16:27	19°♄43'05					
direct	8640 Jun 26 13:12	19°♄17'31					

morning rise	8641 Jun 02 14:34	4°♊28'16		inferior conj	8642 May 11 08:43	24°♎02'56	3°21'55
direct	8641 Jun 09 07:44	1°♊47'31		minimum elong	8642 May 11 09:06	24°♎01'45	3°21'44
desc. node	8641 Jun 10 13:28	1°♊52'30		min. Earth dist.	8642 May 13 03:26	21°♎49'44	0.65774 AU
morning max el	8641 Jun 23 02:24	9°♊48'26	27°35'39	morning rise	8642 May 16 22:46	17°♎44'31	
	8641 Jul 08 21:18	0°♋		direct	8642 May 23 09:46	14°♎58'00	
	8641 Jul 26 09:17	0°♌		desc. node	8642 May 28 10:29	16°♎20'46	
morning set	8641 Jul 28 02:37	3°♌22'12		morning max el	8642 Jun 05 12:59	22°♎45'46	26°43'58
max. Earth dist.	8641 Aug 01 23:36	13°♌18'04	1.32918 AU		8642 Jun 11 22:06	0°♊	
asc. node	8641 Aug 02 22:29	15°♌18'16			8642 Jul 02 04:22	0°♋	
				morning set	8642 Jul 11 09:26	16°♋33'04	
superior conj	8641 Aug 05 02:32	19°♌55'19	0°21'48	max. Earth dist.	8642 Jul 15 14:02	24°♋42'49	1.34275 AU
minimum elong	8641 Aug 05 01:30	19°♌49'44	0°21'26		8642 Jul 18 04:49	0°♌	
	8641 Aug 09 18:33	0°♍					
evening rise	8641 Aug 12 03:29	5°♍05'18		superior conj	8642 Jul 20 02:28	3°♌55'25	-0°07'08
	8641 Aug 25 10:41	0°♎		minimum elong	8642 Jul 20 02:52	3°♌57'29	0°07'13
evening max el	8641 Sep 03 08:15	11°♎12'42	22°47'54	behind sun begin	8642 Jul 19 21:40	3°♌30'30	
desc. node	8641 Sep 06 12:21	13°♎57'35		behind sun end	8642 Jul 20 08:03	4°♌24'29	
retrograde	8641 Sep 16 13:11	17°♎48'19		asc. node	8642 Jul 20 19:28	5°♌23'59	
evening set	8641 Sep 20 04:49	17°♎19'04		evening rise	8642 Jul 27 13:19	19°♌35'47	
min. Earth dist.	8641 Sep 27 16:15	13°♎57'25	0.55166 AU		8642 Aug 01 16:37	0°♍	
inferior conj	8641 Sep 29 00:09	13°♎11'47	-5°24'04	evening max el	8642 Aug 16 02:25	21°♍37'04	21°14'05
minimum elong	8641 Sep 28 18:48	13°♎19'28	5°23'25	desc. node	8642 Aug 24 09:27	27°♍00'19	
morning rise	8641 Oct 07 10:46	9°♏23'10		retrograde	8642 Aug 28 02:22	27°♍33'57	
direct	8641 Oct 10 13:36	9°♏00'42		evening set	8642 Aug 30 11:48	27°♍20'39	
morning max el	8641 Oct 21 19:56	14°♏17'20	20°55'26	inferior conj	8642 Sep 08 17:10	23°♍23'40	-4°18'17
asc. node	8641 Oct 29 22:13	24°♏23'57		minimum elong	8642 Sep 08 07:34	23°♍37'10	4°15'44
	8641 Nov 02 07:19	0°♐		min. Earth dist.	8642 Sep 09 01:02	23°♍12'35	0.54666 AU
morning set	8641 Nov 10 07:05	15°♐32'10		morning rise	8642 Sep 17 03:55	19°♍30'39	
	8641 Nov 17 05:44	0°♑		direct	8642 Sep 20 22:02	19°♍00'17	
				morning max el	8642 Oct 03 15:29	25°♍03'41	22°33'28
superior conj	8641 Nov 17 16:16	0°♑54'09	1°36'39		8642 Oct 08 04:48	0°♒	
minimum elong	8641 Nov 17 17:46	1°♑01'52	1°36'45	asc. node	8642 Oct 16 19:12	12°♒52'12	
max. Earth dist.	8641 Nov 22 12:01	10°♑35'55	1.35692 AU	morning set	8642 Oct 25 17:51	0°♓21'08	
evening rise	8641 Nov 26 12:07	18°♑15'33			8642 Oct 25 13:51	0°♓	
desc. node	8641 Dec 03 11:08	0°♊40'00					
	8641 Dec 03 01:46	0°♋		superior conj	8642 Nov 01 19:01	15°♓25'08	1°41'05
	8641 Dec 23 04:39	0°♌		minimum elong	8642 Nov 01 19:13	15°♓26'12	1°41'13
evening max el	8641 Dec 31 23:31	9°♌54'37	26°20'38	max. Earth dist.	8642 Nov 05 04:05	22°♓30'33	1.34016 AU
retrograde	8642 Jan 13 19:25	17°♌09'32			8642 Nov 08 20:56	0°♑	
evening set	8642 Jan 20 02:36	14°♌36'48		evening rise	8642 Nov 09 18:29	1°♑45'56	
min. Earth dist.	8642 Jan 24 06:27	10°♌17'20	0.66607 AU	desc. node	8642 Nov 20 08:12	20°♑55'00	
inferior conj	8642 Jan 25 23:01	8°♌13'49	0°01'18		8642 Nov 26 00:29	0°♒	
minimum elong	8642 Jan 25 22:59	8°♌13'56	0°01'27	evening max el	8642 Dec 14 12:41	23°♒30'42	27°07'24
transit middle	8642 Jan 25 22:59	8°♌13'56	0°01'27		8642 Dec 23 17:24	0°♓	
transit begin	8642 Jan 25 20:07	8°♌22'42		retrograde	8642 Dec 27 21:37	0°♓51'39	
transit end	8642 Jan 26 01:51	8°♌05'11			8642 Dec 31 19:30	30°♒	
asc. node	8642 Jan 25 21:28	8°♌18'33		evening set	8643 Jan 03 15:13	28°♒15'47	
morning rise	8642 Jan 31 20:11	2°♌28'48		min. Earth dist.	8643 Jan 07 13:29	24°♒30'07	0.65248 AU
direct	8642 Feb 03 21:27	1°♌36'11		inferior conj	8643 Jan 09 17:39	22°♒03'55	-1°01'05
morning max el	8642 Feb 10 12:01	5°♌10'17	18°34'06	minimum elong	8643 Jan 09 19:28	21°♒58'51	1°00'08
	8642 Feb 27 23:20	0°♍		asc. node	8643 Jan 12 18:33	18°♒52'20	
desc. node	8642 Mar 01 10:42	2°♍19'32		morning rise	8643 Jan 16 01:03	16°♒31'05	
morning set	8642 Mar 03 05:45	5°♍09'27		direct	8643 Jan 18 17:18	15°♒52'47	
				morning max el	8643 Jan 25 03:33	19°♒16'46	18°02'37
superior conj	8642 Mar 19 08:09	0°♎26'35	-1°48'08		8643 Feb 02 06:14	0°♋	
minimum elong	8642 Mar 18 22:52	29°♎50'16	1°47'21	morning set	8643 Feb 12 05:14	16°♋06'49	
max. Earth dist.	8642 Mar 19 03:19	0°♎07'40	1.45505 AU	desc. node	8643 Feb 16 07:40	22°♋49'53	
	8642 Mar 19 01:22	0°♏			8643 Feb 20 17:50	0°♌	
evening rise	8642 Apr 03 23:50	25°♏06'55					
	8642 Apr 07 01:29	0°♐		superior conj	8643 Feb 26 16:31	9°♐29'05	-1°10'31
greatest brilliancy	8642 Apr 12 14:32	8°♐47'20	-0.8m	minimum elong	8643 Feb 26 08:31	8°♐57'28	1°09'26
asc. node	8642 Apr 23 20:16	24°♐58'47		max. Earth dist.	8643 Mar 01 22:47	14°♐37'27	1.45373 AU
evening max el	8642 Apr 25 18:15	27°♐05'06	18°50'11		8643 Mar 11 19:44	0°♑	
	8642 Apr 29 11:49	0°♊		evening rise	8643 Mar 14 20:31	4°♑41'20	
retrograde	8642 May 02 11:04	0°♊47'50		greatest brilliancy	8643 Mar 28 07:32	25°♑13'51	-0.7m
	8642 May 05 08:11	30°♒			8643 Mar 31 13:57	0°♐	
evening set	8642 May 05 18:49	29°♐44'15		evening max el	8643 Apr 09 00:58	10°♐43'00	19°38'05

asc. node	8643 Apr 10 17:22	12°♄17'27	evening rise	8644 Feb 22 07:48	14°♄00'57	
retrograde	8643 Apr 16 08:38	14°♄54'02		8644 Mar 03 21:44	0°♄	
evening set	8643 Apr 20 00:38	13°♄35'33	evening max el	8644 Mar 22 02:19	24°♄22'50	20°40'26
inferior conj	8643 Apr 25 09:59	7°♄39'36 3°19'27	asc. node	8644 Mar 27 14:28	28°♄33'58	
minimum elong	8643 Apr 25 09:11	7°♄42'15 3°19'17	retrograde	8644 Mar 30 07:12	29°♄10'47	
min. Earth dist.	8643 Apr 26 13:47	6°♄07'24 0.67102 AU	evening set	8644 Apr 03 08:28	27°♄36'57	
morning rise	8643 Apr 30 17:24	1°♄21'24	inferior conj	8644 Apr 08 15:52	21°♄28'13 3°05'06	
	8643 May 02 11:34	30°♄	minimum elong	8644 Apr 08 14:11	21°♄33'58 3°04'47	
direct	8643 May 06 18:06	28°♄40'29	min. Earth dist.	8644 Apr 09 05:45	20°♄40'28 0.67976 AU	
	8643 May 11 11:09	0°♄	morning rise	8644 Apr 13 19:41	15°♄12'37	
desc. node	8643 May 15 07:29	2°♄37'39	direct	8644 Apr 19 07:31	12°♄46'12	
morning max el	8643 May 18 22:47	5°♄59'03 25°29'36	morning max el	8644 Apr 30 07:50	19°♄21'10 24°02'46	
	8643 Jun 06 11:59	0°♄	desc. node	8644 May 01 04:28	20°♄14'23	
morning set	8643 Jun 24 01:20	28°♄58'57		8644 May 09 08:21	0°♄	
	8643 Jun 24 14:45	0°♄		8644 May 29 15:23	0°♄	
max. Earth dist.	8643 Jun 27 17:34	5°♄46'52 1.36099 AU	morning set	8644 Jun 04 21:11	10°♄26'46	
			max. Earth dist.	8644 Jun 08 14:37	16°♄58'34 1.38257 AU	
superior conj	8643 Jul 03 17:38	17°♄26'32 -0°38'31	superior conj	8644 Jun 15 20:37	0°♄20'32 -1°10'32	
minimum elong	8643 Jul 03 19:58	17°♄38'10 0°38'17	minimum elong	8644 Jun 16 01:02	0°♄41'33 1°10'03	
asc. node	8643 Jul 07 16:28	25°♄25'55		8644 Jun 15 16:18	0°♄	
	8643 Jul 09 22:03	0°♄	asc. node	8644 Jun 23 13:29	15°♄20'32	
evening rise	8643 Jul 11 19:21	3°♄51'24	evening rise	8644 Jun 24 18:58	17°♄45'41	
	8643 Jul 26 23:18	0°♄		8644 Jul 01 05:04	0°♄	
evening max el	8643 Jul 29 09:18	2°♄39'31 19°56'24	evening max el	8644 Jul 11 04:59	14°♄27'07 18°59'07	
retrograde	8643 Aug 08 16:49	7°♄45'02	retrograde	8644 Jul 19 21:17	18°♄45'07	
evening set	8643 Aug 10 13:56	7°♄35'39	evening set	8644 Jul 21 19:43	18°♄33'09	
desc. node	8643 Aug 11 06:35	7°♄27'37	desc. node	8644 Jul 28 03:40	15°♄37'18	
inferior conj	8643 Aug 19 13:43	3°♄35'34 -2°31'08	inferior conj	8644 Jul 30 02:33	14°♄17'31 -0°35'51	
minimum elong	8643 Aug 19 06:50	3°♄45'59 2°28'43	minimum elong	8644 Jul 30 01:02	14°♄20'10 0°35'25	
min. Earth dist.	8643 Aug 21 11:51	2°♄25'44 0.55132 AU	min. Earth dist.	8644 Aug 02 02:13	12°♄13'12 0.56478 AU	
	8643 Aug 26 02:00	30°♄	morning rise	8644 Aug 07 03:11	9°♄24'08	
morning rise	8643 Aug 27 22:04	29°♄18'21	direct	8644 Aug 12 11:50	8°♄16'19	
direct	8643 Sep 01 10:43	28°♄33'30	morning max el	8644 Aug 26 17:26	15°♄35'39 25°58'02	
	8643 Sep 07 15:43	0°♄		8644 Sep 07 08:38	0°♄	
morning max el	8643 Sep 15 04:09	5°♄19'43 24°19'42	asc. node	8644 Sep 19 13:09	21°♄20'27	
	8643 Oct 02 15:51	0°♄	morning set	8644 Sep 23 16:44	29°♄55'01	
asc. node	8643 Oct 03 16:11	1°♄53'53		8644 Sep 23 17:41	0°♄	
morning set	8643 Oct 10 05:38	15°♄10'18				
superior conj	8643 Oct 17 02:54	0°♄08'36 1°39'01	superior conj	8644 Sep 30 13:43	14°♄57'50 1°31'06	
minimum elong	8643 Oct 17 01:58	0°♄03'29 1°39'04	minimum elong	8644 Sep 30 11:56	14°♄48'03 1°30'59	
	8643 Oct 17 01:20	0°♄	max. Earth dist.	8644 Oct 01 11:22	16°♄57'27 1.31968 AU	
max. Earth dist.	8643 Oct 19 04:30	4°♄37'25 1.32765 AU	evening rise	8644 Oct 07 13:23	0°♄05'11	
evening rise	8643 Oct 24 11:56	15°♄45'18		8644 Oct 07 12:24	0°♄	
	8643 Oct 31 21:58	0°♄		8644 Oct 23 23:36	0°♄	
desc. node	8643 Nov 07 05:16	10°♄48'10	desc. node	8644 Oct 24 02:21	0°♄10'35	
	8643 Nov 20 18:28	0°♄	evening max el	8644 Nov 08 08:52	19°♄24'58 27°19'02	
evening max el	8643 Nov 27 00:38	6°♄45'23 27°28'49	retrograde	8644 Nov 22 05:06	26°♄37'48	
retrograde	8643 Dec 10 17:10	14°♄04'05	evening set	8644 Nov 29 06:48	24°♄20'26	
evening set	8643 Dec 17 17:44	11°♄32'48	min. Earth dist.	8644 Dec 02 23:21	21°♄31'33 0.61615 AU	
min. Earth dist.	8643 Dec 21 11:42	8°♄18'28 0.63564 AU	inferior conj	8644 Dec 05 23:59	18°♄49'04 -3°20'10	
inferior conj	8643 Dec 24 03:02	5°♄38'23 -2°09'19	minimum elong	8644 Dec 06 06:19	18°♄34'51 3°17'47	
minimum elong	8643 Dec 24 07:07	5°♄28'01 2°07'28	morning rise	8644 Dec 13 08:05	13°♄50'15	
morning rise	8643 Dec 30 22:22	0°♄20'47	direct	8644 Dec 15 13:34	13°♄29'05	
asc. node	8643 Dec 30 15:38	0°♄27'35	asc. node	8644 Dec 16 12:42	13°♄33'10	
	8644 Jan 01 02:57	30°♄	morning max el	8644 Dec 22 13:01	17°♄00'35 17°52'20	
direct	8644 Jan 02 07:50	29°♄52'52		8644 Dec 31 17:39	0°♄	
	8644 Jan 03 12:38	0°♄	morning set	8645 Jan 07 06:08	11°♄35'20	
morning max el	8644 Jan 08 20:56	3°♄16'12 17°48'25				
morning set	8644 Jan 25 07:32	28°♄22'18	superior conj	8645 Jan 17 23:43	0°♄39'12 0°15'23	
	8644 Jan 26 06:13	0°♄	minimum elong	8645 Jan 18 01:05	0°♄45'06 0°15'21	
desc. node	8644 Feb 03 04:36	13°♄28'37	behind sun begin	8645 Jan 17 22:40	0°♄34'39	
			behind sun end	8645 Jan 18 03:31	0°♄55'32	
superior conj	8644 Feb 06 19:23	19°♄27'24 -0°26'15		8645 Jan 17 14:37	0°♄	
minimum elong	8644 Feb 06 16:32	19°♄15'46 0°25'41	desc. node	8645 Jan 20 01:32	4°♄11'59	
max. Earth dist.	8644 Feb 12 17:16	29°♄00'18 1.44519 AU	max. Earth dist.	8645 Jan 25 08:26	13°♄00'17 1.43039 AU	
	8644 Feb 13 08:16	0°♄	evening rise	8645 Feb 01 01:01	23°♄42'49	

	8645 Feb 05 02:21	0°♄		desc. node	8646 Jan 06 22:29	24°♄56'50	
	8645 Feb 26 00:42	0°♄		max. Earth dist.	8646 Jan 07 18:33	26°♄22'23	1.41103 AU
evening max el	8645 Mar 04 22:14	8°♄03'24	21°53'42		8646 Jan 09 22:14	0°♄	
retrograde	8645 Mar 14 04:50	13°♄32'56		evening rise	8646 Jan 12 11:55	4°♄14'24	
asc. node	8645 Mar 14 11:35	13°♄32'32			8646 Jan 29 08:42	0°♄	
evening set	8645 Mar 18 16:34	11°♄43'46		evening max el	8646 Feb 15 13:57	21°♄46'31	23°13'01
inferior conj	8645 Mar 24 00:06	5°♄24'41	2°40'33	retrograde	8646 Feb 26 00:07	27°♄56'45	
minimum elong	8645 Mar 23 21:56	5°♄32'12	2°40'01	asc. node	8646 Mar 01 08:41	27°♄01'13	
min. Earth dist.	8645 Mar 24 01:10	5°♄20'58	0.68407 AU	evening set	8646 Mar 02 23:21	25°♄52'53	
	8645 Mar 28 07:12	30°♄		inferior conj	8646 Mar 08 08:49	19°♄26'44	2°06'50
morning rise	8645 Mar 29 03:10	29°♄13'04		minimum elong	8646 Mar 08 06:36	19°♄34'23	2°06'11
direct	8645 Apr 03 01:03	27°♄06'40		min. Earth dist.	8646 Mar 07 21:56	20°♄04'16	0.68414 AU
	8645 Apr 09 14:59	0°♄		morning rise	8646 Mar 13 13:46	13°♄20'17	
morning max el	8645 Apr 12 18:29	2°♄50'36	22°33'10	direct	8646 Mar 17 21:47	11°♄36'06	
desc. node	8645 Apr 18 01:24	8°♄48'14		morning max el	8646 Mar 26 10:09	16°♄30'35	21°09'15
	8645 May 03 09:26	0°♄		desc. node	8646 Apr 04 22:19	28°♄03'54	
morning set	8645 May 16 15:35	20°♄42'20			8646 Apr 06 08:07	0°♄	
max. Earth dist.	8645 May 21 12:08	28°♄48'01	1.40512 AU	morning set	8646 Apr 26 06:56	29°♄44'25	
	8645 May 22 05:03	0°♄			8646 Apr 26 10:54	0°♄	
				max. Earth dist.	8646 May 03 14:57	11°♄29'10	1.42586 AU
superior conj	8645 May 29 07:01	12°♄26'01	-1°40'08				
minimum elong	8645 May 29 12:52	12°♄52'24	1°39'40	superior conj	8646 May 10 20:13	23°♄32'53	-2°02'42
	8645 Jun 07 18:09	0°♄		minimum elong	8646 May 11 01:14	23°♄54'21	2°02'33
evening rise	8645 Jun 08 08:48	1°♄09'09			8646 May 14 13:49	0°♄	
asc. node	8645 Jun 10 10:30	5°♄02'49		evening rise	8646 May 22 08:48	13°♄51'56	
evening max el	8645 Jun 24 10:16	26°♄53'41	18°22'43	asc. node	8646 May 28 07:31	24°♄27'45	
	8645 Jun 28 20:00	0°♄			8646 May 31 14:19	0°♄	
retrograde	8645 Jul 01 21:01	0°♄37'28		evening max el	8646 Jun 07 21:22	9°♄50'09	18°06'21
evening set	8645 Jul 04 02:00	0°♄18'39		retrograde	8646 Jun 14 14:04	13°♄15'05	
	8645 Jul 05 00:23	30°♄		evening set	8646 Jun 17 02:37	12°♄46'09	
inferior conj	8645 Jul 11 13:02	25°♄42'55	1°01'15	inferior conj	8646 Jun 23 20:04	7°♄50'22	2°10'54
minimum elong	8645 Jul 11 15:04	25°♄38'45	1°00'21	minimum elong	8646 Jun 23 23:04	7°♄43'12	2°09'50
min. Earth dist.	8645 Jul 14 22:10	22°♄58'01	0.58431 AU	min. Earth dist.	8646 Jun 27 01:46	4°♄47'06	0.60663 AU
desc. node	8645 Jul 15 00:45	22°♄53'01		morning rise	8646 Jun 30 16:54	1°♄55'47	
morning rise	8645 Jul 19 00:47	20°♄14'05		desc. node	8646 Jul 01 21:49	1°♄13'06	
direct	8645 Jul 25 03:06	18°♄36'14			8646 Jul 05 04:36	30°♄	
morning max el	8645 Aug 08 12:31	26°♄19'28	27°12'04	direct	8646 Jul 07 07:01	29°♄47'05	
	8645 Aug 11 23:51	0°♄			8646 Jul 09 10:34	0°♄	
	8645 Aug 31 19:04	0°♄		morning max el	8646 Jul 21 14:24	7°♄45'13	27°50'54
asc. node	8645 Sep 06 10:05	11°♄04'48			8646 Aug 07 12:38	0°♄	
morning set	8645 Sep 08 01:32	14°♄30'37		morning set	8646 Aug 23 06:11	28°♄51'36	
					8646 Aug 23 19:20	0°♄	
superior conj	8645 Sep 15 01:31	29°♄46'59	1°17'51	asc. node	8646 Aug 24 07:00	1°♄01'08	
minimum elong	8645 Sep 14 23:19	29°♄34'45	1°17'32	max. Earth dist.	8646 Aug 29 06:31	11°♄45'00	1.31750 AU
max. Earth dist.	8645 Sep 14 21:19	29°♄23'42	1.31626 AU				
	8645 Sep 15 03:51	0°♄		superior conj	8646 Aug 30 12:31	14°♄30'17	0°59'38
evening rise	8645 Sep 21 20:18	14°♄38'33		minimum elong	8646 Aug 30 10:20	14°♄18'18	0°59'11
	8645 Sep 29 12:15	0°♄		evening rise	8646 Sep 06 06:31	29°♄18'51	
desc. node	8645 Oct 10 23:26	18°♄50'13			8646 Sep 06 14:13	0°♄	
	8645 Oct 20 02:51	0°♄			8646 Sep 23 00:58	0°♄	
evening max el	8645 Oct 21 10:35	1°♄17'39	26°35'18	desc. node	8646 Sep 27 20:32	6°♄29'41	
retrograde	8645 Nov 04 08:32	8°♄24'50		evening max el	8646 Oct 03 04:11	12°♄19'06	25°20'30
evening set	8645 Nov 11 02:12	6°♄31'54		retrograde	8646 Oct 17 01:51	19°♄20'14	
min. Earth dist.	8645 Nov 15 00:14	3°♄56'41	0.59521 AU	evening set	8646 Oct 22 23:00	18°♄00'49	
inferior conj	8645 Nov 18 05:03	1°♄26'42	-4°27'14	min. Earth dist.	8646 Oct 27 16:08	15°♄21'36	0.57496 AU
minimum elong	8645 Nov 18 12:28	1°♄12'10	4°25'08	inferior conj	8646 Oct 30 14:56	13°♄21'24	-5°18'44
	8645 Nov 20 02:23	30°♄		minimum elong	8646 Oct 30 20:21	13°♄12'09	5°17'51
morning rise	8645 Nov 26 01:09	26°♄49'50		morning rise	8646 Nov 07 20:03	9°♄07'17	
direct	8645 Nov 28 06:14	26°♄32'15		direct	8646 Nov 10 05:27	8°♄50'13	
asc. node	8645 Dec 03 09:44	28°♄13'09		morning max el	8646 Nov 19 03:11	13°♄06'01	19°00'10
	8645 Dec 05 15:33	0°♄		asc. node	8646 Nov 20 06:43	14°♄16'02	
morning max el	8645 Dec 06 00:21	0°♄20'57	18°15'43		8646 Nov 30 15:53	0°♄	
morning set	8645 Dec 21 19:07	25°♄28'28		morning set	8646 Dec 05 17:55	9°♄47'36	
	8645 Dec 24 04:23	0°♄					
				superior conj	8646 Dec 14 02:37	26°♄11'38	1°14'27
superior conj	8645 Dec 31 03:49	12°♄59'09	0°49'23	minimum elong	8646 Dec 14 05:49	26°♄26'56	1°14'18
minimum elong	8645 Dec 31 07:01	13°♄13'39	0°49'09		8646 Dec 16 02:45	0°♄	

max. Earth dist.	8646 Dec 21 00:26	8° Z 59'51	1.38944 AU	evening rise	8647 Dec 07 01:58	28° Z 07'39	
evening rise	8646 Dec 24 20:39	15° Z 43'52			8647 Dec 08 02:56	0° Z	
desc. node	8646 Dec 24 19:28	15° Z 38'50		desc. node	8647 Dec 11 16:29	6° Z 14'12	
	8647 Jan 02 13:11	0° \approx			8647 Dec 26 21:49	0° \approx	
	8647 Jan 24 01:21	0° X		evening max el	8648 Jan 11 16:45	19° \approx 20'52	25°45'02
evening max el	8647 Jan 29 03:30	5° X 32'45	24°32'29	retrograde	8648 Jan 24 02:39	26° \approx 27'09	
retrograde	8647 Feb 09 15:44	12° X 16'35		evening set	8648 Jan 30 02:48	23° \approx 59'14	
evening set	8647 Feb 15 03:18	9° X 59'27		asc. node	8648 Feb 03 02:54	19° \approx 42'59	
asc. node	8647 Feb 16 05:48	8° X 57'41		min. Earth dist.	8648 Feb 03 10:24	19° \approx 19'38	0.67229 AU
min. Earth dist.	8647 Feb 19 17:46	4° X 45'12	0.68014 AU	inferior conj	8648 Feb 04 20:11	17° \approx 32'37	0°33'58
inferior conj	8647 Feb 20 16:07	3° X 30'32	1°24'31	minimum elong	8648 Feb 04 19:20	17° \approx 35'19	0°33'47
minimum elong	8647 Feb 20 14:19	3° X 36'33	1°23'57	morning rise	8648 Feb 10 12:21	11° \approx 41'22	
	8647 Feb 23 10:34	30° R \approx		direct	8648 Feb 13 19:42	10° \approx 38'40	
morning rise	8647 Feb 26 01:29	27° \approx 30'42		morning max el	8648 Feb 20 16:02	14° \approx 23'37	18°59'40
direct	8647 Mar 01 20:29	26° \approx 08'21			8648 Mar 03 10:56	0° X	
	8647 Mar 09 00:08	0° X		greatest brilliancy	8648 Mar 05 15:54	3° X 20'28	-0.8m
morning max el	8647 Mar 09 09:12	0° X 22'05	19°56'59	desc. node	8648 Mar 08 16:09	7° X 57'30	
desc. node	8647 Mar 22 19:14	17° X 49'42		morning set	8648 Mar 14 10:08	16° X 51'53	
	8647 Mar 30 22:37	0° Y			8648 Mar 22 20:35	0° Y	
morning set	8647 Apr 05 05:20	8° Y 04'46		max. Earth dist.	8648 Mar 28 16:58	9° Y 09'13	1.45248 AU
max. Earth dist.	8647 Apr 16 00:47	25° Y 00'04	1.44226 AU				
	8647 Apr 19 03:40	0° Z		superior conj	8648 Mar 30 23:30	12° Y 43'48	-2°02'45
				minimum elong	8648 Mar 30 16:42	12° Y 16'59	2°02'25
superior conj	8647 Apr 21 08:57	3° Z 35'46	-2°12'07		8648 Apr 10 19:19	0° Z	
minimum elong	8647 Apr 21 09:12	3° Z 36'50	2°12'14	evening rise	8648 Apr 14 21:08	6° Z 37'01	
evening rise	8647 May 04 14:17	25° Z 43'35			8648 Apr 29 15:10	0° II	
	8647 May 07 02:10	0° II		asc. node	8648 May 01 01:39	1° II 59'09	
asc. node	8647 May 15 04:34	13° II 29'15		evening max el	8648 May 04 23:25	6° II 37'17	18°30'09
evening max el	8647 May 22 10:46	23° II 07'28	18°09'06	retrograde	8648 May 11 10:53	10° II 08'08	
retrograde	8647 May 28 20:05	26° II 28'29		evening set	8648 May 14 14:22	9° II 12'44	
evening set	8647 May 31 16:08	25° II 47'01		inferior conj	8648 May 20 08:16	3° II 40'43	3°16'52
inferior conj	8647 Jun 06 19:51	20° II 32'27	2°54'31	minimum elong	8648 May 20 09:24	3° II 37'19	3°16'35
minimum elong	8647 Jun 06 22:14	20° II 26'01	2°53'52	min. Earth dist.	8648 May 22 11:47	1° II 07'39	0.64824 AU
min. Earth dist.	8647 Jun 09 14:13	17° II 34'39	0.62868 AU		8648 May 23 11:43	30° R Z	
morning rise	8647 Jun 13 02:41	14° II 22'55		morning rise	8648 May 26 03:36	27° Z 24'11	
desc. node	8647 Jun 18 18:51	11° II 54'14		direct	8648 Jun 01 18:56	24° Z 39'27	
direct	8647 Jun 19 20:58	11° II 50'27		desc. node	8648 Jun 04 15:54	25° Z 06'26	
morning max el	8647 Jul 03 21:32	19° II 53'26	27°51'30		8648 Jun 12 13:36	0° II	
	8647 Jul 12 12:41	0° Z		morning max el	8648 Jun 15 07:29	2° II 35'52	27°17'00
	8647 Jul 31 12:19	0° Z			8648 Jul 05 19:41	0° Z	
morning set	8647 Aug 07 04:36	12° Z 52'01		morning set	8648 Jul 20 18:02	26° Z 23'20	
asc. node	8647 Aug 11 03:57	21° Z 04'49			8648 Jul 22 14:03	0° Z	
max. Earth dist.	8647 Aug 12 11:11	23° Z 50'56	1.32350 AU	max. Earth dist.	8648 Jul 25 07:39	5° Z 31'42	1.33439 AU
				asc. node	8648 Jul 28 00:54	11° Z 10'52	
superior conj	8647 Aug 14 20:55	29° Z 02'21	0°36'50				
minimum elong	8647 Aug 14 19:18	28° Z 53'33	0°36'24	superior conj	8648 Jul 29 00:36	13° Z 16'00	0°09'58
	8647 Aug 15 07:31	0° Z		minimum elong	8648 Jul 29 00:06	13° Z 13'21	0°09'41
evening rise	8647 Aug 21 18:07	14° Z 00'34		behind sun begin	8648 Jul 28 19:39	12° Z 49'48	
	8647 Aug 29 17:06	0° Z		behind sun end	8648 Jul 29 04:33	13° Z 36'56	
evening max el	8647 Sep 14 16:04	22° Z 42'07	23°45'27	evening rise	8648 Aug 05 05:10	28° Z 36'57	
desc. node	8647 Sep 14 17:39	22° Z 45'56			8648 Aug 05 20:57	0° Z	
retrograde	8647 Sep 28 06:44	29° Z 30'34			8648 Aug 23 12:11	0° Z	
evening set	8647 Oct 02 19:19	28° Z 45'50		evening max el	8648 Aug 26 05:21	2° Z 55'21	22°06'30
min. Earth dist.	8647 Oct 09 02:25	25° Z 44'12	0.55837 AU	desc. node	8648 Aug 31 14:48	7° Z 08'24	
inferior conj	8647 Oct 11 04:37	24° Z 28'50	-5°36'34	retrograde	8648 Sep 07 23:30	9° Z 16'02	
minimum elong	8647 Oct 11 03:44	24° Z 30'10	5°36'27	evening set	8648 Sep 11 00:45	8° Z 55'21	
morning rise	8647 Oct 19 14:12	20° Z 33'34		min. Earth dist.	8648 Sep 19 10:29	5° Z 16'00	0.54847 AU
direct	8647 Oct 22 09:31	20° Z 13'49		inferior conj	8648 Sep 20 02:04	4° Z 54'10	-5°02'44
morning max el	8647 Nov 01 18:10	25° Z 06'19	20°07'00	minimum elong	8648 Sep 19 18:04	5° Z 05'23	5°01'16
	8647 Nov 06 02:05	0° Z		morning rise	8648 Sep 28 12:55	1° Z 06'16	
asc. node	8647 Nov 07 03:42	1° Z 26'53		direct	8648 Oct 01 22:15	0° Z 40'47	
morning set	8647 Nov 19 23:16	24° Z 23'49		morning max el	8648 Oct 13 19:58	6° Z 16'54	21°35'18
	8647 Nov 22 16:53	0° Z		asc. node	8648 Oct 24 00:41	19° Z 30'22	
					8648 Oct 29 20:13	0° Z	
superior conj	8647 Nov 27 15:18	10° Z 03'14	1°30'50	morning set	8648 Nov 03 08:39	9° Z 09'47	
minimum elong	8647 Nov 27 17:33	10° Z 14'27	1°30'51				
max. Earth dist.	8647 Dec 03 06:48	21° Z 05'13	1.36821 AU	superior conj	8648 Nov 10 13:50	24° Z 22'18	1°39'22

minimum elong	8648 Nov 10 14:47	24°♄27'13	1°39'30	superior conj	8649 Oct 25 19:03	8°♄59'27	1°40'57
	8648 Nov 13 07:15	0°♄		minimum elong	8649 Oct 25 18:44	8°♄57'46	1°41'04
max. Earth dist.	8648 Nov 14 18:39	2°♄59'04	1.34936 AU	max. Earth dist.	8649 Oct 28 14:28	14°♄58'37	1.33428 AU
evening rise	8648 Nov 19 00:16	11°♄16'13		evening rise	8649 Nov 02 11:42	24°♄59'40	
desc. node	8648 Nov 27 13:32	26°♄38'18			8649 Nov 05 01:14	0°♄	
	8648 Nov 29 13:55	0°♄		desc. node	8649 Nov 14 10:36	16°♄45'04	
	8648 Dec 21 06:14	0°♄			8649 Nov 23 01:35	0°♄	
evening max el	8648 Dec 24 06:09	3°♄04'19	26°43'17	evening max el	8649 Dec 06 18:54	16°♄32'26	27°20'00
retrograde	8649 Jan 06 08:02	10°♄22'08		retrograde	8649 Dec 20 07:22	23°♄53'05	
evening set	8649 Jan 12 20:01	7°♄47'27		evening set	8649 Dec 27 04:41	21°♄17'50	
min. Earth dist.	8649 Jan 16 21:29	3°♄42'33	0.66073 AU	min. Earth dist.	8649 Dec 31 00:48	17°♄46'20	0.64568 AU
inferior conj	8649 Jan 18 18:56	1°♄28'45	-0°24'20	inferior conj	8650 Jan 02 09:57	15°♄12'53	-1°29'28
minimum elong	8649 Jan 18 19:37	1°♄26'45	0°23'51	minimum elong	8650 Jan 02 12:41	15°♄05'30	1°28'07
asc. node	8649 Jan 20 00:00	0°♄04'16		asc. node	8650 Jan 06 21:06	10°♄58'48	
	8649 Jan 20 01:31	30°♄		morning rise	8650 Jan 08 22:17	9°♄46'26	
morning rise	8649 Jan 24 20:11	25°♄48'30		direct	8650 Jan 11 11:24	9°♄12'59	
direct	8649 Jan 27 17:29	25°♄02'17		morning max el	8650 Jan 17 21:53	12°♄35'17	17°54'30
morning max el	8649 Feb 03 05:08	28°♄30'29	18°18'40		8650 Jan 30 01:39	0°♄	
	8649 Feb 04 14:58	0°♄		morning set	8650 Feb 04 04:05	8°♄31'48	
morning set	8649 Feb 22 16:32	26°♄58'58		desc. node	8650 Feb 10 09:59	18°♄55'41	
desc. node	8649 Feb 23 13:04	28°♄21'16			8650 Feb 17 05:21	0°♄	
	8649 Feb 24 13:44	0°♄		superior conj	8650 Feb 17 19:09	0°♄55'21	-0°51'55
superior conj	8649 Mar 10 04:32	21°♄33'09	-1°33'42	minimum elong	8650 Feb 17 13:13	0°♄31'35	0°51'00
minimum elong	8649 Mar 09 18:58	20°♄55'40	1°32'40	max. Earth dist.	8650 Feb 22 08:12	8°♄08'34	1.45089 AU
max. Earth dist.	8649 Mar 11 12:36	23°♄38'43	1.45542 AU	evening rise	8650 Mar 05 19:47	25°♄59'41	
	8649 Mar 15 14:07	0°♄			8650 Mar 08 10:30	0°♄	
evening rise	8649 Mar 26 04:52	16°♄36'04		greatest brilliancy	8650 Mar 20 15:14	18°♄20'16	-0.6m
	8649 Apr 03 18:37	0°♄			8650 Mar 29 03:21	0°♄	
greatest brilliancy	8649 Apr 06 00:46	3°♄28'44	-0.8m	evening max el	8650 Apr 01 13:14	3°♄52'09	20°02'56
asc. node	8649 Apr 17 22:46	19°♄47'44		asc. node	8650 Apr 04 19:54	6°♄41'56	
evening max el	8649 Apr 18 08:49	20°♄13'39	19°08'35	retrograde	8650 Apr 09 05:18	8°♄18'23	
retrograde	8649 Apr 25 06:55	24°♄06'59		evening set	8650 Apr 13 01:04	6°♄53'20	
evening set	8649 Apr 28 18:09	22°♄56'55		inferior conj	8650 Apr 18 09:16	0°♄51'24	3°14'43
inferior conj	8649 May 04 05:45	17°♄09'00	3°22'27	minimum elong	8650 Apr 18 08:04	0°♄55'30	3°14'29
minimum elong	8649 May 04 05:36	17°♄09'29	3°22'18		8650 Apr 19 00:27	30°♄	
min. Earth dist.	8649 May 05 17:55	15°♄12'53	0.66395 AU	min. Earth dist.	8650 Apr 19 06:56	29°♄38'08	0.67525 AU
morning rise	8649 May 09 16:37	10°♄50'28		morning rise	8650 Apr 23 14:48	24°♄33'58	
direct	8649 May 15 23:35	8°♄05'24		direct	8650 Apr 29 10:05	21°♄58'34	
desc. node	8649 May 22 12:54	10°♄25'21		desc. node	8650 May 09 09:52	27°♄19'18	
morning max el	8649 May 28 17:58	15°♄41'56	26°14'35	morning max el	8650 May 11 03:34	29°♄00'30	24°53'40
	8649 Jun 09 12:25	0°♄			8650 May 12 02:34	0°♄	
	8649 Jun 28 15:58	0°♄			8650 Jun 03 07:21	0°♄	
morning set	8649 Jul 03 19:03	9°♄16'39		morning set	8650 Jun 16 03:09	21°♄20'08	
max. Earth dist.	8649 Jul 07 17:39	16°♄47'29	1.35010 AU	max. Earth dist.	8650 Jun 19 17:55	27°♄52'06	1.36987 AU
					8650 Jun 20 21:33	0°♄	
superior conj	8649 Jul 12 21:11	27°♄04'55	-0°20'12	superior conj	8650 Jun 26 07:37	10°♄21'27	-0°52'10
minimum elong	8649 Jul 12 22:21	27°♄10'53	0°20'10	minimum elong	8650 Jun 26 10:51	10°♄37'15	0°51'48
	8649 Jul 14 07:16	0°♄		asc. node	8650 Jul 01 18:55	21°♄15'21	
asc. node	8649 Jul 14 21:54	1°♄15'39		evening rise	8650 Jul 04 17:23	27°♄10'18	
evening rise	8649 Jul 20 13:43	13°♄02'22			8650 Jul 06 03:20	0°♄	
	8649 Jul 29 08:11	0°♄		evening max el	8650 Jul 21 16:57	24°♄55'20	19°29'26
evening max el	8649 Aug 08 04:26	13°♄33'16	20°38'30	retrograde	8650 Jul 31 07:19	29°♄39'58	
desc. node	8649 Aug 18 11:55	19°♄06'38		evening set	8650 Aug 02 03:38	29°♄30'11	
retrograde	8649 Aug 19 11:41	19°♄09'08		desc. node	8650 Aug 05 09:01	28°♄30'35	
evening set	8649 Aug 21 13:50	18°♄58'27		inferior conj	8650 Aug 10 21:04	25°♄24'29	-1°41'21
inferior conj	8649 Aug 30 18:39	15°♄01'30	-3°36'00	minimum elong	8650 Aug 10 16:29	25°♄31'50	1°39'42
minimum elong	8649 Aug 30 09:29	15°♄14'39	3°33'09	min. Earth dist.	8650 Aug 13 07:56	23°♄50'22	0.55604 AU
min. Earth dist.	8649 Aug 31 19:35	14°♄25'42	0.54752 AU	morning rise	8650 Aug 19 02:48	20°♄52'12	
morning rise	8649 Sep 08 04:57	11°♄00'45		direct	8650 Aug 23 23:39	19°♄58'52	
direct	8649 Sep 12 06:31	10°♄25'22		morning max el	8650 Sep 07 00:05	27°♄01'01	25°03'34
morning max el	8649 Sep 25 11:42	16°♄47'07	23°18'37		8650 Sep 09 21:42	0°♄	
	8649 Oct 06 00:43	0°♄		asc. node	8650 Sep 27 18:36	27°♄27'39	
asc. node	8649 Oct 10 21:39	8°♄13'56			8650 Sep 29 01:33	0°♄	
morning set	8649 Oct 18 20:03	23°♄59'36		morning set	8650 Oct 03 07:46	8°♄48'22	
	8649 Oct 21 15:18	0°♄					

superior conj	8650 Oct 10 04:28	23° Ω 47'12	1°36'20		8651 Aug 06 17:43	0° Ω	
minimum elong	8650 Oct 10 03:08	23° Ω 39'53	1°36'20	morning max el	8651 Aug 19 15:23	7° Ω 26'19	26°33'13
max. Earth dist.	8650 Oct 11 17:52	27° Ω 11'50	1.32364 AU		8651 Sep 05 11:24	0° Π	
	8650 Oct 13 00:52	0° Π		asc. node	8651 Sep 14 15:32	17° Π 02'39	
evening rise	8650 Oct 17 08:55	9° Π 09'27		morning set	8651 Sep 17 18:04	23° Π 29'59	
	8650 Oct 28 09:55	0° Σ			8651 Sep 20 18:16	0° Ω	
desc. node	8650 Nov 01 07:40	6° Σ 27'07					
evening max el	8650 Nov 19 05:22	29° Σ 33'41	27°28'41	superior conj	8651 Sep 24 15:56	8° Ω 37'37	1°26'07
	8650 Nov 19 16:38	0° Σ		minimum elong	8651 Sep 24 13:55	8° Ω 26'30	1°25'55
retrograde	8650 Dec 03 00:01	6° Σ 51'01		max. Earth dist.	8651 Sep 25 02:17	9° Ω 35'03	1.31764 AU
evening set	8650 Dec 10 01:58	4° Σ 24'04		evening rise	8651 Oct 01 12:59	23° Ω 36'19	
min. Earth dist.	8650 Dec 13 18:38	1° Σ 21'46	0.62758 AU		8651 Oct 04 15:26	0° Π	
	8650 Dec 15 04:57	30° Σ 38'40	-2°39'19	desc. node	8651 Oct 19 04:45	25° Π 33'21	
inferior conj	8650 Dec 16 14:26	28° Σ 38'40	-2°39'19		8651 Oct 22 07:00	0° Σ	
minimum elong	8650 Dec 16 19:32	28° Σ 26'24	2°37'11	evening max el	8651 Nov 01 11:10	11° Σ 54'52	27°04'36
morning rise	8650 Dec 23 15:13	23° Σ 28'57		retrograde	8651 Nov 15 08:46	19° Σ 05'34	
asc. node	8650 Dec 24 18:08	23° Σ 10'59		evening set	8651 Nov 22 08:05	16° Σ 57'33	
direct	8650 Dec 25 22:30	23° Σ 04'28		min. Earth dist.	8651 Nov 26 01:53	14° Σ 15'56	0.60730 AU
morning max el	8651 Jan 01 15:12	26° Σ 30'17	17°47'49	inferior conj	8651 Nov 29 05:03	11° Σ 36'44	-3°49'38
	8651 Jan 04 15:47	0° Σ		minimum elong	8651 Nov 29 12:05	11° Σ 21'49	3°47'15
morning set	8651 Jan 17 15:48	21° Σ 14'13		morning rise	8651 Dec 06 18:29	6° Σ 46'47	
	8651 Jan 22 15:54	0° \approx		direct	8651 Dec 08 23:09	6° Σ 27'37	
desc. node	8651 Jan 28 06:56	9° \approx 37'07		asc. node	8651 Dec 11 15:09	6° Σ 57'08	
				morning max el	8651 Dec 16 05:40	10° Σ 05'44	17°59'44
superior conj	8651 Jan 29 08:42	11° \approx 25'08	-0°07'55		8651 Dec 29 06:54	0° Σ	
minimum elong	8651 Jan 29 07:55	11° \approx 21'53	0°07'38	morning set	8651 Dec 31 21:10	4° Σ 46'15	
behind sun begin	8651 Jan 28 23:49	10° \approx 47'59					
behind sun end	8651 Jan 29 16:01	11° \approx 55'42		superior conj	8652 Jan 10 23:36	23° Σ 07'08	0°30'51
max. Earth dist.	8651 Feb 05 01:00	22° \approx 21'54	1.43954 AU	minimum elong	8652 Jan 11 02:02	23° Σ 17'48	0°30'41
	8651 Feb 09 20:24	0° H			8652 Jan 14 22:49	0° \approx	
evening rise	8651 Feb 13 07:41	5° H 24'07		desc. node	8652 Jan 15 03:53	0° \approx 21'36	
	8651 Mar 01 19:31	0° Υ		max. Earth dist.	8652 Jan 18 13:38	6° \approx 05'25	1.42261 AU
evening max el	8651 Mar 15 12:05	17° Υ 31'47	21°10'30	evening rise	8652 Jan 24 07:25	15° \approx 25'09	
asc. node	8651 Mar 22 17:01	22° Υ 27'03			8652 Feb 02 18:15	0° H	
retrograde	8651 Mar 24 03:44	22° Υ 37'41			8652 Feb 25 01:41	0° Υ	
evening set	8651 Mar 28 09:12	20° Υ 57'29		evening max el	8652 Feb 26 06:04	1° Υ 13'44	22°27'08
inferior conj	8651 Apr 02 16:24	14° Υ 43'54	2°55'53	retrograde	8652 Mar 07 00:27	7° Υ 00'55	
minimum elong	8651 Apr 02 14:29	14° Υ 50'35	2°55'27	asc. node	8652 Mar 08 14:06	6° Υ 48'33	
min. Earth dist.	8651 Apr 03 00:45	14° Υ 14'54	0.68209 AU	evening set	8652 Mar 11 16:53	5° Υ 05'38	
morning rise	8651 Apr 07 19:33	8° Υ 29'33			8652 Mar 16 02:55	30° Σ 38'40	
direct	8651 Apr 13 01:26	6° Υ 11'05		inferior conj	8652 Mar 17 01:04	28° H 43'18	2°27'21
morning max el	8651 Apr 23 12:54	12° Υ 25'30	23°24'23	minimum elong	8652 Mar 16 22:50	28° H 51'04	2°26'45
desc. node	8651 Apr 26 06:49	15° Υ 22'28		min. Earth dist.	8652 Mar 16 21:04	28° H 57'12	0.68460 AU
	8651 May 07 15:03	0° B		morning rise	8652 Mar 22 04:36	22° H 33'35	
	8651 May 27 03:35	0° Π		direct	8652 Mar 26 20:37	20° H 36'15	
morning set	8651 May 28 12:46	2° Π 18'51		morning max el	8652 Apr 05 01:04	25° H 58'24	21°56'19
max. Earth dist.	8651 Jun 01 13:43	9° Π 14'12	1.39213 AU		8652 Apr 08 17:05	0° Υ	
				desc. node	8652 Apr 12 03:45	4° Υ 15'49	
superior conj	8651 Jun 09 04:05	22° Π 56'03	-1°23'38		8652 Apr 30 03:11	0° B	
minimum elong	8651 Jun 09 09:16	23° Π 20'10	1°23'06	morning set	8652 May 07 19:21	12° B 01'56	
	8651 Jun 12 21:59	0° B		max. Earth dist.	8652 May 13 12:49	21° B 24'17	1.41430 AU
evening rise	8651 Jun 18 13:16	10° B 52'28			8652 May 18 14:17	0° Π	
asc. node	8651 Jun 18 15:56	11° B 05'22					
	8651 Jun 29 04:43	0° Ω		superior conj	8652 May 21 06:05	4° Π 38'28	-1°50'54
evening max el	8651 Jul 04 17:14	7° Ω 01'09	18°41'13	minimum elong	8652 May 21 11:58	5° Π 04'26	1°50'32
retrograde	8651 Jul 12 19:39	11° Ω 02'31		evening rise	8652 May 31 21:45	24° Π 00'02	
evening set	8651 Jul 14 20:29	10° Ω 48'11			8652 Jun 04 03:54	0° B	
inferior conj	8651 Jul 22 18:56	6° Ω 24'40	0°08'26	asc. node	8652 Jun 04 12:57	0° B 41'17	
minimum elong	8651 Jul 22 19:15	6° Ω 24'04	0°08'08	evening max el	8652 Jun 17 01:34	19° B 42'27	18°13'27
transit middle	8651 Jul 22 19:15	6° Ω 24'04	0°08'08	retrograde	8652 Jun 24 03:02	23° B 15'57	
transit begin	8651 Jul 22 16:06	6° Ω 29'58		evening set	8652 Jun 26 11:22	22° B 53'04	
transit end	8651 Jul 22 22:25	6° Ω 18'09		inferior conj	8652 Jul 03 14:31	18° B 08'44	1°34'10
desc. node	8651 Jul 23 06:06	6° Ω 03'43		minimum elong	8652 Jul 03 17:14	18° B 02'48	1°33'04
min. Earth dist.	8651 Jul 26 00:42	4° Ω 00'29	0.57249 AU	min. Earth dist.	8652 Jul 06 23:33	15° B 13'13	0.59367 AU
morning rise	8651 Jul 30 14:31	1° Ω 15'18		desc. node	8652 Jul 09 03:10	13° B 33'43	
	8651 Aug 03 21:12	30° Σ 38'40		morning rise	8652 Jul 10 20:01	12° B 28'01	
direct	8651 Aug 05 07:22	29° B 54'56		direct	8652 Jul 17 04:27	10° B 36'34	

morning max el	8652 Jul 31 13:10	18°☿26'34	27°33'10	direct	8653 Jun 29 12:34	22°♊09'56	
	8652 Aug 10 06:07	0°♊		morning max el	8653 Jul 13 17:34	0°☿10'36	27°55'52
	8652 Aug 28 03:08	0°♊			8653 Jul 13 13:18	0°☿	
asc. node	8652 Aug 31 12:28	6°♊52'56			8653 Aug 04 08:00	0°♊	
morning set	8652 Sep 01 01:19	8°♊00'06		morning set	8653 Aug 16 03:36	22°♊12'53	
max. Earth dist.	8652 Sep 07 12:26	22°♊00'59	1.31628 AU	asc. node	8653 Aug 18 09:25	26°♊52'51	
					8653 Aug 19 20:38	0°♊	
superior conj	8652 Sep 08 03:37	23°♊25'12	1°10'43	max. Earth dist.	8653 Aug 21 20:22	4°♊17'50	1.31950 AU
minimum elong	8652 Sep 08 01:22	23°♊12'43	1°10'20				
	8652 Sep 11 02:51	0°♊		superior conj	8653 Aug 23 13:44	8°♊04'06	0°50'30
evening rise	8652 Sep 14 21:34	8°♊13'52		minimum elong	8653 Aug 23 11:43	7°♊53'06	0°50'03
	8652 Sep 26 02:11	0°♊		evening rise	8653 Aug 30 08:37	22°♊55'27	
desc. node	8652 Oct 05 01:51	13°♊49'51			8653 Sep 02 17:35	0°♊	
evening max el	8652 Oct 13 09:45	23°♊26'29	26°06'49		8653 Sep 21 03:06	0°♊	
	8652 Oct 23 18:19	0°♊		desc. node	8653 Sep 21 22:59	0°♊57'18	
retrograde	8652 Oct 27 07:50	0°♊30'20		evening max el	8653 Sep 25 00:21	4°♊08'59	24°41'36
	8652 Oct 30 20:37	30°♊		retrograde	8653 Oct 08 19:44	11°♊05'41	
evening set	8652 Nov 02 18:22	28°♊51'11		evening set	8653 Oct 14 04:35	10°♊01'18	
min. Earth dist.	8652 Nov 06 22:42	26°♊16'27	0.58643 AU	min. Earth dist.	8653 Oct 19 11:27	7°♊14'59	0.56733 AU
inferior conj	8652 Nov 10 02:18	23°♊57'26	-4°51'55	inferior conj	8653 Oct 22 03:32	5°♊32'18	-5°31'36
minimum elong	8652 Nov 10 09:22	23°♊44'22	4°50'16	minimum elong	8653 Oct 22 06:45	5°♊27'07	5°31'14
morning rise	8652 Nov 18 02:42	19°♊29'53		morning rise	8653 Oct 30 11:08	1°♊27'17	
direct	8652 Nov 20 09:03	19°♊12'48		direct	8653 Nov 02 00:19	1°♊09'22	
asc. node	8652 Nov 27 12:09	22°♊13'50		morning max el	8653 Nov 11 11:52	5°♊39'05	19°25'52
morning max el	8652 Nov 28 13:44	23°♊11'54	18°31'51	asc. node	8653 Nov 14 09:09	8°♊47'44	
	8652 Dec 04 00:39	0°♊			8653 Nov 27 00:34	0°♊	
morning set	8652 Dec 14 14:48	18°♊51'59		morning set	8653 Nov 28 16:47	3°♊20'05	
	8652 Dec 20 09:39	0°♊					
superior conj	8652 Dec 23 12:15	5°♊50'56	1°01'08	superior conj	8653 Dec 06 17:35	19°♊22'23	1°22'26
minimum elong	8652 Dec 23 15:36	6°♊06'33	1°00'54	minimum elong	8653 Dec 06 20:26	19°♊36'22	1°22'20
max. Earth dist.	8652 Dec 30 22:03	19°♊10'01	1.40204 AU		8653 Dec 12 07:31	0°♊	
desc. node	8653 Jan 01 00:50	21°♊05'36		max. Earth dist.	8653 Dec 13 03:57	1°♊33'59	1.38025 AU
evening rise	8653 Jan 04 03:30	26°♊21'20		evening rise	8653 Dec 16 21:23	8°♊15'11	
	8653 Jan 06 08:31	0°♊		desc. node	8653 Dec 18 21:51	11°♊45'39	
	8653 Jan 26 10:31	0°♊			8653 Dec 30 05:02	0°♊	
evening max el	8653 Feb 07 20:46	14°♊58'41	23°47'17	evening max el	8654 Jan 21 09:59	28°♊46'25	25°04'31
retrograde	8653 Feb 18 18:08	21°♊23'35			8654 Jan 22 16:51	0°♊	
asc. node	8653 Feb 23 11:12	19°♊37'02		retrograde	8654 Feb 02 07:50	5°♊41'05	
evening set	8653 Feb 23 22:38	19°♊13'52		evening set	8654 Feb 08 00:56	3°♊18'41	
min. Earth dist.	8653 Feb 28 17:37	13°♊40'01	0.68296 AU	asc. node	8654 Feb 10 08:18	0°♊59'49	
inferior conj	8653 Mar 01 09:23	12°♊46'15	1°49'55		8654 Feb 11 04:29	30°♊	
minimum elong	8653 Mar 01 07:17	12°♊53'26	1°49'16	min. Earth dist.	8654 Feb 12 12:16	28°♊19'27	0.67731 AU
morning rise	8653 Mar 06 15:56	6°♊42'35		inferior conj	8654 Feb 13 15:34	26°♊50'09	1°04'04
direct	8653 Mar 10 18:22	5°♊07'43		minimum elong	8654 Feb 13 14:06	26°♊54'58	1°03'38
morning max el	8653 Mar 18 19:38	9°♊42'57	20°36'52	morning rise	8654 Feb 19 03:34	20°♊54'00	
desc. node	8653 Mar 30 00:39	23°♊45'18		direct	8654 Feb 22 17:26	19°♊40'27	
	8653 Apr 03 08:59	0°♊		morning max el	8654 Mar 01 22:13	23°♊40'11	19°30'43
morning set	8653 Apr 17 01:15	20°♊39'16			8654 Mar 07 07:49	0°♊	
	8653 Apr 22 23:53	0°♊		greatest brilliancy	8654 Mar 14 16:29	10°♊23'50	-0.7m
max. Earth dist.	8653 Apr 25 19:13	4°♊30'00	1.43352 AU	desc. node	8654 Mar 16 21:35	13°♊41'33	
				morning set	8654 Mar 26 23:20	29°♊02'49	
superior conj	8653 May 02 09:02	15°♊18'04	-2°08'40		8654 Mar 27 14:10	0°♊	
minimum elong	8653 May 02 12:34	15°♊32'48	2°08'42	max. Earth dist.	8654 Apr 08 08:19	18°♊20'19	1.44748 AU
	8653 May 10 23:20	0°♊					
evening rise	8653 May 14 14:25	6°♊22'04		superior conj	8654 Apr 12 11:28	24°♊54'42	-2°10'39
asc. node	8653 May 22 10:00	19°♊57'00		minimum elong	8654 Apr 12 08:41	24°♊43'32	2°10'41
	8653 May 29 02:26	0°♊			8654 Apr 15 15:19	0°♊	
evening max el	8653 May 31 14:02	2°♊48'29	18°05'14	evening rise	8654 Apr 26 10:42	17°♊49'46	
retrograde	8653 Jun 07 02:15	6°♊10'00			8654 May 03 17:39	0°♊	
evening set	8653 Jun 09 18:06	5°♊35'49		asc. node	8654 May 09 07:05	8°♊46'01	
inferior conj	8653 Jun 16 05:09	0°♊31'34	2°32'17	evening max el	8654 May 15 03:22	16°♊11'13	18°15'47
minimum elong	8653 Jun 16 08:02	0°♊24'19	2°31'24	retrograde	8654 May 21 12:37	19°♊35'11	
	8653 Jun 16 17:39	30°♊		evening set	8654 May 24 11:44	18°♊47'59	
min. Earth dist.	8653 Jun 19 06:33	27°♊28'15	0.61619 AU	inferior conj	8654 May 30 10:48	13°♊25'35	3°06'17
morning rise	8653 Jun 22 19:50	24°♊29'31		minimum elong	8654 May 30 12:41	13°♊20'14	3°05'49
desc. node	8653 Jun 26 00:14	22°♊47'59		min. Earth dist.	8654 Jun 01 22:59	10°♊36'20	0.63739 AU
				morning rise	8654 Jun 05 12:21	7°♊11'58	

direct	8654 Jun 12 05:58	4° Π 32'56		minimum elong	8655 May 14 04:04	26° \mathcal{B} 41'35	3°20'50
desc. node	8654 Jun 12 21:18	4° Π 34'16		min. Earth dist.	8655 May 16 00:31	24° \mathcal{B} 24'34	0.65542 AU
morning max el	8654 Jun 26 02:28	12° Π 35'05	27°40'49	morning rise	8655 May 19 18:48	20° \mathcal{B} 25'15	
	8654 Jul 10 00:01	0° \mathcal{E}		direct	8655 May 26 07:06	17° \mathcal{B} 38'43	
	8654 Jul 27 20:20	0° Ω		desc. node	8655 May 30 18:19	18° \mathcal{B} 44'05	
morning set	8654 Jul 30 22:35	6° Ω 01'44		morning max el	8655 Jun 08 12:58	25° \mathcal{B} 29'25	26°53'18
max. Earth dist.	8654 Aug 04 22:03	16° Ω 13'51	1.32749 AU		8655 Jun 12 15:49	0° Π	
asc. node	8654 Aug 05 06:23	16° Ω 57'48			8655 Jul 03 12:16	0° \mathcal{E}	
				morning set	8655 Jul 14 07:16	19° \mathcal{E} 18'38	
superior conj	8654 Aug 07 20:22	22° Ω 28'30	0°25'53	max. Earth dist.	8655 Jul 18 14:01	27° \mathcal{E} 42'32	1.34042 AU
minimum elong	8654 Aug 07 19:10	22° Ω 21'58	0°25'30		8655 Jul 19 17:13	0° Ω	
	8654 Aug 11 07:46	0° \mathcal{N}					
evening rise	8654 Aug 14 20:13	7° \mathcal{N} 35'07		superior conj	8655 Jul 22 21:23	6° Ω 32'44	-0°02'31
	8654 Aug 26 12:41	0° \mathcal{E}		minimum elong	8655 Jul 22 21:32	6° Ω 33'31	0°02'41
evening max el	8654 Sep 06 11:27	14° \mathcal{E} 22'21	23°02'50	behind sun begin	8655 Jul 22 15:54	6° Ω 04'04	
desc. node	8654 Sep 08 20:07	16° \mathcal{E} 29'00		behind sun end	8655 Jul 23 03:11	7° Ω 03'00	
retrograde	8654 Sep 19 19:35	21° \mathcal{E} 02'15		asc. node	8655 Jul 23 03:23	7° Ω 04'03	
evening set	8654 Sep 23 16:31	20° \mathcal{E} 29'26		evening rise	8655 Jul 30 06:28	22° Ω 07'33	
min. Earth dist.	8654 Sep 30 20:16	17° \mathcal{E} 13'24	0.55309 AU		8655 Aug 03 02:34	0° \mathcal{N}	
inferior conj	8654 Oct 02 09:21	16° \mathcal{E} 19'46	-5°29'14	evening max el	8655 Aug 19 04:09	24° \mathcal{N} 43'01	21°27'13
minimum elong	8654 Oct 02 05:07	16° \mathcal{E} 25'55	5°28'49	desc. node	8655 Aug 26 17:16	29° \mathcal{N} 53'38	
morning rise	8654 Oct 10 19:47	12° \mathcal{E} 29'59			8655 Aug 27 00:11	0° \mathcal{E}	
direct	8654 Oct 13 20:28	12° \mathcal{E} 08'22		retrograde	8655 Aug 31 09:20	0° \mathcal{E} 46'26	
morning max el	8654 Oct 24 21:19	17° \mathcal{E} 18'43	20°42'15	evening set	8655 Sep 02 22:14	0° \mathcal{E} 31'42	
asc. node	8654 Nov 01 06:09	26° \mathcal{E} 22'40			8655 Sep 04 23:09	30° \mathcal{R} \mathcal{N}	
	8654 Nov 03 12:52	0° \mathcal{M}		inferior conj	8655 Sep 12 03:03	26° \mathcal{N} 34'10	-4°31'34
morning set	8654 Nov 13 00:07	18° \mathcal{M} 01'17		minimum elong	8655 Sep 11 17:37	26° \mathcal{N} 47'23	4°29'15
	8654 Nov 18 18:33	0° \mathcal{X}		min. Earth dist.	8655 Sep 12 04:52	26° \mathcal{N} 31'38	0.54680 AU
				morning rise	8655 Sep 20 13:51	22° \mathcal{N} 43'05	
superior conj	8654 Nov 20 10:55	3° \mathcal{X} 27'23	1°35'21	direct	8655 Sep 24 05:37	22° \mathcal{N} 14'05	
minimum elong	8654 Nov 20 12:37	3° \mathcal{X} 36'05	1°35'26	morning max el	8655 Oct 06 18:18	28° \mathcal{N} 10'41	22°18'01
max. Earth dist.	8654 Nov 25 11:50	13° \mathcal{X} 30'44	1.35974 AU		8655 Oct 08 14:12	0° \mathcal{E}	
evening rise	8654 Nov 29 10:24	20° \mathcal{X} 59'17		asc. node	8655 Oct 19 03:08	14° \mathcal{E} 44'40	
	8654 Dec 04 11:02	0° \mathcal{Z}			8655 Oct 27 02:08	0° \mathcal{M}	
desc. node	8654 Dec 05 18:52	2° \mathcal{Z} 16'52		morning set	8655 Oct 28 10:35	2° \mathcal{M} 49'25	
	8654 Dec 24 03:12	0° \approx					
evening max el	8655 Jan 03 23:05	12° \approx 32'51	26°11'53	superior conj	8655 Nov 04 12:39	17° \mathcal{M} 55'18	1°40'49
retrograde	8655 Jan 16 16:40	19° \approx 46'07		minimum elong	8655 Nov 04 13:02	17° \mathcal{M} 57'23	1°40'58
evening set	8655 Jan 22 22:01	17° \approx 14'29		max. Earth dist.	8655 Nov 08 02:41	25° \mathcal{M} 24'15	1.34242 AU
min. Earth dist.	8655 Jan 27 02:49	12° \approx 49'46	0.66782 AU		8655 Nov 10 09:07	0° \mathcal{X}	
asc. node	8655 Jan 28 05:25	11° \approx 28'02		evening rise	8655 Nov 12 14:46	4° \mathcal{X} 24'11	
inferior conj	8655 Jan 28 17:38	10° \approx 50'15	0°10'09	desc. node	8655 Nov 22 15:55	22° \mathcal{X} 34'22	
minimum elong	8655 Jan 28 17:21	10° \approx 51'05	0°10'13		8655 Nov 27 05:55	0° \mathcal{Z}	
transit middle	8655 Jan 28 17:21	10° \approx 51'05	0°10'13	evening max el	8655 Dec 17 12:22	26° \mathcal{Z} 11'14	27°01'55
transit begin	8655 Jan 28 15:09	10° \approx 57'55			8655 Dec 22 00:10	0° \approx	
transit end	8655 Jan 28 19:34	10° \approx 44'16		retrograde	8655 Dec 30 19:43	3° \approx 31'36	
morning rise	8655 Feb 03 13:25	5° \approx 03'30		evening set	8656 Jan 06 11:54	0° \approx 55'56	
direct	8655 Feb 06 16:11	4° \approx 08'26			8656 Jan 07 14:26	30° \mathcal{R} \mathcal{Z}	
morning max el	8655 Feb 13 08:03	7° \approx 45'06	18°40'09	min. Earth dist.	8656 Jan 10 11:00	27° \mathcal{Z} 05'13	0.65474 AU
	8655 Mar 01 06:05	0° \mathcal{H}		inferior conj	8656 Jan 12 13:25	24° \mathcal{Z} 42'03	-0°51'12
desc. node	8655 Mar 03 18:30	3° \mathcal{H} 56'38		minimum elong	8656 Jan 12 14:54	24° \mathcal{Z} 37'48	0°50'22
morning set	8655 Mar 06 13:31	8° \mathcal{H} 19'52		asc. node	8656 Jan 15 02:30	21° \mathcal{Z} 56'29	
	8655 Mar 20 09:20	0° \mathcal{Y}		morning rise	8656 Jan 18 19:09	19° \mathcal{Z} 07'05	
max. Earth dist.	8655 Mar 22 01:48	2° \mathcal{Y} 38'25	1.45463 AU	direct	8656 Jan 21 12:37	18° \mathcal{Z} 26'51	
				morning max el	8656 Jan 27 23:00	21° \mathcal{Z} 51'38	18°06'09
superior conj	8655 Mar 22 19:50	3° \mathcal{Y} 49'01	-1°52'35		8656 Feb 03 09:11	0° \approx	
minimum elong	8655 Mar 22 10:59	3° \mathcal{Y} 14'22	1°51'55	morning set	8656 Feb 15 08:34	19° \approx 04'12	
evening rise	8655 Apr 07 07:27	28° \mathcal{Y} 18'38		desc. node	8656 Feb 18 15:23	24° \approx 25'09	
	8655 Apr 08 08:47	0° \mathcal{B}			8656 Feb 22 02:13	0° \mathcal{H}	
greatest brilliancy	8655 Apr 15 01:02	10° \mathcal{B} 40'26	-0.9m				
asc. node	8655 Apr 26 04:10	26° \mathcal{B} 59'49		superior conj	8656 Mar 01 02:38	12° \mathcal{H} 46'11	-1°16'53
evening max el	8655 Apr 28 14:51	29° \mathcal{B} 44'20	18°44'27	minimum elong	8656 Feb 29 18:04	12° \mathcal{H} 12'21	1°15'48
	8655 Apr 28 21:10	0° Π		max. Earth dist.	8656 Mar 03 21:20	17° \mathcal{H} 08'23	1.45442 AU
retrograde	8655 May 05 06:02	3° Π 23'35			8656 Mar 12 03:15	0° \mathcal{Y}	
evening set	8655 May 08 12:38	2° Π 22'12		evening rise	8656 Mar 17 06:36	7° \mathcal{Y} 58'18	
	8655 May 11 07:52	30° \mathcal{R} \mathcal{B}		greatest brilliancy	8656 Mar 30 02:41	27° \mathcal{Y} 39'40	-0.7m
inferior conj	8655 May 14 03:29	26° \mathcal{B} 43'22	3°21'02		8656 Mar 31 16:28	0° \mathcal{B}	

evening max el	8656 Apr 10 22:18	13°♄22'06	19°29'59	retrograde	8657 Apr 02 01:47	1°♄43'48	
asc. node	8656 Apr 12 01:17	14°♄26'54		evening set	8657 Apr 06 01:38	0°♄12'10	
retrograde	8656 Apr 18 03:14	17°♄28'06			8657 Apr 06 07:47	30°♄	
evening set	8656 Apr 21 17:59	16°♄11'47		inferior conj	8657 Apr 11 09:10	24°♄05'06	3°07'58
inferior conj	8656 Apr 27 03:50	10°♄17'56	3°20'38	minimum elong	8657 Apr 11 07:36	24°♄10'27	3°07'39
minimum elong	8656 Apr 27 03:12	10°♄20'02	3°20'28	min. Earth dist.	8657 Apr 12 01:00	23°♄10'50	0.67877 AU
min. Earth dist.	8656 Apr 28 09:47	8°♄39'24	0.66934 AU	morning rise	8657 Apr 16 13:21	17°♄49'02	
morning rise	8656 May 02 12:04	3°♄59'41		direct	8657 Apr 22 03:08	15°♄20'12	
direct	8656 May 08 14:31	1°♄17'20		morning max el	8657 May 03 07:59	22°♄02'13	24°16'05
desc. node	8656 May 16 15:18	4°♄46'45		desc. node	8657 May 03 12:13	22°♄12'57	
morning max el	8656 May 20 22:51	8°♄40'50	25°41'44		8657 May 10 06:29	0°♄	
	8656 Jun 06 16:05	0°♄			8657 May 30 23:01	0°♄	
	8656 Jun 25 00:57	0°♄		morning set	8657 Jun 08 00:46	13°♄29'12	
morning set	8656 Jun 26 01:37	1°♄51'59		max. Earth dist.	8657 Jun 11 16:54	19°♄58'25	1.37928 AU
max. Earth dist.	8656 Jun 29 19:06	8°♄48'59	1.35807 AU		8657 Jun 17 03:22	0°♄	
superior conj	8656 Jul 05 14:02	20°♄08'52	-0°33'39	superior conj	8657 Jun 18 19:01	3°♄08'48	-1°05'46
minimum elong	8656 Jul 05 16:03	20°♄18'59	0°33'28	minimum elong	8657 Jun 18 23:08	3°♄28'32	1°05'17
asc. node	8656 Jul 09 00:21	27°♄06'58		asc. node	8657 Jun 25 21:21	17°♄03'05	
	8656 Jul 10 10:03	0°♄		evening rise	8657 Jun 27 13:55	20°♄23'58	
evening rise	8656 Jul 13 13:11	6°♄25'59			8657 Jul 02 12:55	0°♄	
	8656 Jul 26 15:45	0°♄		evening max el	8657 Jul 14 02:49	17°♄19'29	19°06'15
evening max el	8656 Jul 31 08:58	5°♄38'44	20°06'38	retrograde	8657 Jul 23 00:33	21°♄44'06	
retrograde	8656 Aug 10 22:32	10°♄51'56		evening set	8657 Jul 24 22:14	21°♄32'51	
evening set	8656 Aug 12 20:32	10°♄42'23		desc. node	8657 Jul 30 11:28	19°♄11'35	
desc. node	8656 Aug 12 14:23	10°♄44'44		inferior conj	8657 Aug 02 07:56	17°♄19'48	-0°52'30
inferior conj	8656 Aug 21 22:03	6°♄43'35	-2°48'40	minimum elong	8657 Aug 02 05:39	17°♄23'42	0°51'47
minimum elong	8656 Aug 21 14:27	6°♄54'55	2°46'03	min. Earth dist.	8657 Aug 05 04:43	15°♄23'01	0.56232 AU
min. Earth dist.	8656 Aug 23 15:05	5°♄42'30	0.55007 AU	morning rise	8657 Aug 10 10:03	12°♄31'57	
morning rise	8656 Aug 30 07:04	2°♄31'12		direct	8657 Aug 15 15:40	11°♄28'14	
direct	8656 Sep 03 16:53	1°♄49'02		morning max el	8657 Aug 29 20:15	18°♄43'15	25°44'40
morning max el	8656 Sep 17 07:24	8°♄28'56	24°04'01		8657 Sep 08 07:32	0°♄	
	8656 Oct 02 23:34	0°♄		asc. node	8657 Sep 21 21:00	23°♄04'55	
asc. node	8656 Oct 05 00:05	3°♄41'41			8657 Sep 25 06:15	0°♄	
morning set	8656 Oct 11 22:17	17°♄38'40		morning set	8657 Sep 26 09:34	2°♄24'26	
	8656 Oct 17 15:03	0°♄		superior conj	8657 Oct 03 06:21	17°♄25'50	1°32'39
superior conj	8656 Oct 18 19:53	2°♄37'02	1°39'42	minimum elong	8657 Oct 03 04:41	17°♄16'38	1°32'34
minimum elong	8656 Oct 18 19:06	2°♄32'47	1°39'47	max. Earth dist.	8657 Oct 04 08:03	19°♄47'34	1.32053 AU
max. Earth dist.	8656 Oct 21 01:58	7°♄29'01	1.32921 AU		8657 Oct 09 01:15	0°♄	
evening rise	8656 Oct 26 06:43	18°♄19'29		evening rise	8657 Oct 10 07:08	2°♄36'43	
	8656 Nov 01 07:46	0°♄			8657 Oct 25 03:46	0°♄	
desc. node	8656 Nov 08 13:00	12°♄31'30		desc. node	8657 Oct 26 10:06	1°♄59'28	
	8656 Nov 20 13:12	0°♄		evening max el	8657 Nov 11 09:30	22°♄15'26	27°22'39
evening max el	8656 Nov 29 00:39	9°♄30'10	27°27'34	retrograde	8657 Nov 25 05:18	29°♄29'28	
retrograde	8656 Dec 12 16:11	16°♄49'16		evening set	8657 Dec 02 07:24	27°♄09'10	
evening set	8656 Dec 19 16:06	14°♄16'45		min. Earth dist.	8657 Dec 05 23:45	24°♄17'17	0.61913 AU
min. Earth dist.	8656 Dec 23 10:35	10°♄58'09	0.63831 AU	inferior conj	8657 Dec 08 23:19	21°♄34'10	-3°09'30
inferior conj	8656 Dec 26 00:20	8°♄19'31	-1°58'40	minimum elong	8657 Dec 09 05:21	21°♄20'22	3°07'09
minimum elong	8656 Dec 26 04:04	8°♄09'55	1°56'58	morning rise	8657 Dec 16 05:32	16°♄32'30	
asc. node	8656 Dec 31 23:33	3°♄20'10		direct	8657 Dec 18 11:24	16°♄10'35	
morning rise	8657 Jan 01 17:48	2°♄59'29		asc. node	8657 Dec 18 20:35	16°♄11'14	
direct	8657 Jan 04 04:12	2°♄30'11		morning max el	8657 Dec 25 08:48	19°♄40'14	17°50'38
morning max el	8657 Jan 10 16:18	5°♄52'53	17°49'25		8658 Jan 01 23:28	0°♄	
	8657 Jan 26 14:58	0°♄		morning set	8658 Jan 10 03:17	14°♄15'34	
morning set	8657 Jan 27 07:18	1°♄09'51			8658 Jan 19 00:23	0°♄	
desc. node	8657 Feb 04 12:18	15°♄03'04		superior conj	8658 Jan 21 02:38	3°♄36'00	0°09'27
superior conj	8657 Feb 09 02:04	22°♄34'45	-0°32'58	minimum elong	8658 Jan 21 03:31	3°♄39'46	0°09'31
minimum elong	8657 Feb 08 22:25	22°♄19'55	0°32'18	behind sun begin	8658 Jan 20 20:30	3°♄09'51	
	8657 Feb 13 16:36	0°♄		behind sun end	8658 Jan 21 10:31	4°♄09'38	
max. Earth dist.	8657 Feb 14 16:27	1°♄34'53	1.44690 AU	desc. node	8658 Jan 22 09:14	5°♄46'07	
evening rise	8657 Feb 24 18:24	17°♄18'16		max. Earth dist.	8658 Jan 28 08:13	15°♄39'17	1.43291 AU
	8657 Mar 05 03:15	0°♄		evening rise	8658 Feb 04 09:49	26°♄54'44	
evening max el	8657 Mar 25 00:28	27°♄01'49	20°30'18		8658 Feb 06 09:33	0°♄	
	8657 Mar 28 10:35	0°♄			8658 Feb 26 23:49	0°♄	
asc. node	8657 Mar 29 22:24	0°♄54'00		evening max el	8658 Mar 07 21:04	10°♄42'03	21°42'11

retrograde	8658 Mar 16 23:43	16° Υ 05'33		evening rise	8659 Jan 15 17:37	7° \approx 17'42	
asc. node	8658 Mar 16 19:30	16° Υ 05'24			8659 Jan 30 13:05	0° H	
evening set	8658 Mar 21 09:47	14° Υ 18'38		evening max el	8659 Feb 18 13:16	24° H 24'28	23°01'03
inferior conj	8658 Mar 26 17:11	8° Υ 00'46	2°44'53		8659 Feb 26 05:25	0° Υ	
minimum elong	8658 Mar 26 15:04	8° Υ 08'06	2°44'23	retrograde	8659 Feb 28 19:28	0° Υ 29'08	
min. Earth dist.	8658 Mar 26 20:04	7° Υ 50'41	0.68372 AU		8659 Mar 03 05:51	30° R H	
morning rise	8658 Mar 31 20:11	1° Υ 48'23		asc. node	8659 Mar 03 16:36	29° H 47'59	
	8658 Apr 03 18:43	30° R H		evening set	8659 Mar 05 16:53	28° H 27'30	
direct	8658 Apr 05 20:07	29° H 38'51		min. Earth dist.	8659 Mar 10 16:51	22° H 33'38	0.68439 AU
	8658 Apr 08 00:05	0° Υ		inferior conj	8659 Mar 11 01:57	22° H 02'08	2°12'31
morning max el	8658 Apr 15 18:16	5° Υ 30'48	22°46'16	minimum elong	8659 Mar 10 23:42	22° H 09'53	2°11'53
desc. node	8658 Apr 20 09:08	10° Υ 39'17		morning rise	8659 Mar 16 06:27	15° H 54'41	
	8658 May 04 14:30	0° B		direct	8659 Mar 20 16:29	14° H 07'06	
morning set	8658 May 19 23:14	23° B 56'20		morning max el	8659 Mar 29 08:56	19° H 08'41	21°21'04
	8658 May 23 14:15	0° II		desc. node	8659 Apr 07 06:04	29° H 49'21	
max. Earth dist.	8658 May 24 13:46	1° II 40'01	1.40180 AU		8659 Apr 07 09:14	0° Υ	
					8659 Apr 27 18:23	0° B	
superior conj	8658 Jun 01 08:10	15° II 22'02	-1°36'00	morning set	8659 Apr 29 18:23	3° B 08'28	
minimum elong	8658 Jun 01 13:54	15° II 48'07	1°35'29	max. Earth dist.	8659 May 06 15:21	14° B 12'18	1.42298 AU
	8658 Jun 09 04:28	0° B					
evening rise	8658 Jun 11 05:27	3° B 52'40		superior conj	8659 May 14 00:50	26° B 38'21	-1°59'58
asc. node	8658 Jun 12 18:24	6° B 47'44		minimum elong	8659 May 14 06:13	27° B 01'31	1°59'47
evening max el	8658 Jun 27 06:54	29° B 41'03	18°26'52		8659 May 15 23:24	0° II	
	8658 Jun 27 14:46	0° Ω		evening rise	8659 May 25 07:49	16° II 42'07	
retrograde	8658 Jul 04 21:27	3° Ω 29'02		asc. node	8659 May 30 15:26	26° II 15'42	
evening set	8658 Jul 07 01:14	3° Ω 11'34			8659 Jun 01 19:12	0° B	
	8658 Jul 12 21:43	30° R B		evening max el	8659 Jun 10 17:26	12° B 33'55	18°07'36
inferior conj	8658 Jul 14 15:12	28° B 39'02	0°48'14	retrograde	8659 Jun 17 12:04	16° B 00'34	
minimum elong	8658 Jul 14 16:52	28° B 35'41	0°47'26	evening set	8659 Jun 19 23:31	15° B 33'17	
desc. node	8658 Jul 17 08:31	26° B 28'22		inferior conj	8659 Jun 26 19:23	10° B 40'35	2°02'03
min. Earth dist.	8658 Jul 17 23:53	25° B 58'47	0.58110 AU	minimum elong	8659 Jun 26 22:23	10° B 33'37	2°00'59
morning rise	8658 Jul 22 05:02	23° B 14'51		min. Earth dist.	8659 Jun 30 02:19	7° B 38'26	0.60325 AU
direct	8658 Jul 28 05:00	21° B 41'37		morning rise	8659 Jul 03 18:27	4° B 49'15	
morning max el	8658 Aug 11 14:24	29° B 22'22	27°03'07	desc. node	8659 Jul 04 05:36	4° B 32'18	
	8658 Aug 12 05:36	0° Ω		direct	8659 Jul 10 07:23	2° B 44'44	
	8658 Sep 02 03:53	0° H		morning max el	8659 Jul 24 15:14	10° B 41'15	27°47'32
asc. node	8658 Sep 08 17:56	12° H 47'22			8659 Aug 08 16:06	0° Ω	
morning set	8658 Sep 10 18:49	17° H 02'14			8659 Aug 25 07:40	0° H	
	8658 Sep 16 17:39	0° B		morning set	8659 Aug 26 00:13	1° H 25'41	
				asc. node	8659 Aug 26 14:53	2° H 42'18	
superior conj	8658 Sep 17 18:08	2° B 15'56	1°20'12	max. Earth dist.	8659 Sep 01 03:14	14° H 36'12	1.31701 AU
minimum elong	8658 Sep 17 15:59	2° B 03'55	1°19'55				
max. Earth dist.	8658 Sep 17 17:44	2° B 13'38	1.31644 AU	superior conj	8659 Sep 02 05:23	17° H 00'34	1°02'44
evening rise	8658 Sep 24 13:23	17° B 08'55		minimum elong	8659 Sep 02 03:11	16° H 48'22	1°02'17
	8658 Sep 30 21:52	0° H			8659 Sep 08 03:04	0° B	
desc. node	8658 Oct 13 07:12	20° H 46'51		evening rise	8659 Sep 08 23:14	1° B 48'37	
	8658 Oct 20 10:23	0° H			8659 Sep 24 01:32	0° H	
evening max el	8658 Oct 24 12:15	4° H 15'34	26°43'56	desc. node	8659 Sep 30 04:20	8° H 36'46	
retrograde	8658 Nov 07 10:15	11° H 23'57		evening max el	8659 Oct 06 07:11	15° H 24'46	25°33'18
evening set	8658 Nov 14 05:44	9° H 26'42		retrograde	8659 Oct 20 05:14	22° H 26'43	
min. Earth dist.	8658 Nov 18 02:15	6° H 50'21	0.59832 AU	evening set	8659 Oct 26 06:11	21° H 02'08	
inferior conj	8658 Nov 21 06:57	4° H 17'20	-4°17'48	min. Earth dist.	8659 Oct 30 19:28	18° H 24'36	0.57784 AU
minimum elong	8658 Nov 21 14:21	4° H 02'31	4°15'35	inferior conj	8659 Nov 02 19:53	16° H 19'01	-5°12'40
	8658 Nov 27 21:41	30° R H		minimum elong	8659 Nov 03 01:53	16° H 08'34	5°11'34
morning rise	8658 Nov 29 01:26	29° H 37'07		morning rise	8659 Nov 10 23:55	12° H 01'22	
direct	8658 Dec 01 06:12	29° H 19'16		direct	8659 Nov 13 08:18	11° H 44'25	
	8658 Dec 04 11:56	0° H		morning max el	8659 Nov 22 01:26	15° H 55'46	18°52'06
asc. node	8658 Dec 05 17:35	0° H 37'16		asc. node	8659 Nov 22 14:36	16° H 28'19	
morning max el	8658 Dec 08 21:07	3° H 04'57	18°10'57		8659 Dec 01 23:55	0° H	
morning set	8658 Dec 24 14:26	28° H 03'25		morning set	8659 Dec 08 12:00	12° H 19'10	
	8658 Dec 25 15:11	0° B					
				superior conj	8659 Dec 16 23:47	28° H 51'36	1°11'14
superior conj	8659 Jan 03 03:28	15° B 46'25	0°44'47	minimum elong	8659 Dec 17 03:03	29° H 07'09	1°11'02
minimum elong	8659 Jan 03 06:31	16° B 00'10	0°44'33		8659 Dec 17 14:13	0° B	
desc. node	8659 Jan 09 06:14	26° B 30'59		max. Earth dist.	8659 Dec 24 01:03	11° B 49'43	1.39272 AU
max. Earth dist.	8659 Jan 10 18:43	29° B 06'00	1.41411 AU	desc. node	8659 Dec 27 03:15	17° B 13'34	
	8659 Jan 11 07:32	0° \approx		evening rise	8659 Dec 27 23:06	18° B 38'30	

	8660 Jan 03 20:45	0°♊		evening rise	8660 Dec 09 01:32	0°♊54'27	
	8660 Jan 24 21:03	0°♋		desc. node	8660 Dec 13 00:16	7°♊50'06	
evening max el	8660 Feb 01 03:09	8°♋10'39	24°21'00		8660 Dec 27 01:27	0°♋	
retrograde	8660 Feb 12 11:42	14°♋49'52		evening max el	8661 Jan 13 16:24	21°♋58'42	25°35'00
evening set	8660 Feb 17 21:23	12°♋34'41		retrograde	8661 Jan 25 23:16	29°♋02'06	
asc. node	8660 Feb 18 13:42	11°♋57'51		evening set	8661 Jan 31 21:39	26°♋35'33	
min. Earth dist.	8660 Feb 22 13:00	7°♋15'17	0.68096 AU	asc. node	8661 Feb 04 10:49	22°♋51'19	
inferior conj	8660 Feb 23 09:37	6°♋05'59	1°31'30	min. Earth dist.	8661 Feb 05 06:13	21°♋50'54	0.67369 AU
minimum elong	8660 Feb 23 07:43	6°♋12'23	1°30'55	inferior conj	8661 Feb 06 14:18	20°♋08'22	0°42'10
morning rise	8660 Feb 28 18:09	0°♋05'02		minimum elong	8661 Feb 06 13:16	20°♋11'40	0°41'54
	8660 Feb 28 20:55	30°♋		morning rise	8661 Feb 12 05:18	14°♋15'48	
direct	8660 Mar 03 15:05	28°♋39'24		direct	8661 Feb 15 14:20	13°♋10'19	
	8660 Mar 07 16:05	0°♌		morning max el	8661 Feb 22 12:32	16°♋58'33	19°07'13
morning max el	8660 Mar 11 06:47	2°♌58'22	20°06'53		8661 Mar 04 14:54	0°♌	
desc. node	8660 Mar 24 03:00	19°♌31'16		greatest brilliancy	8661 Mar 07 22:46	4°♌57'41	-0.7m
	8660 Mar 31 04:46	0°♍		desc. node	8661 Mar 10 23:54	9°♌35'57	
morning set	8660 Apr 07 18:07	11°♍31'31		morning set	8661 Mar 17 20:25	20°♌10'14	
max. Earth dist.	8660 Apr 18 00:27	27°♍37'37	1.44019 AU		8661 Mar 24 04:19	0°♍	
	8660 Apr 19 11:59	0°♎		max. Earth dist.	8661 Mar 31 16:04	11°♍42'52	1.45140 AU
superior conj	8660 Apr 23 17:22	6°♎51'18	-2°11'48	superior conj	8661 Apr 03 10:41	16°♍05'33	-2°05'30
minimum elong	8660 Apr 23 18:37	6°♎56'22	2°11'55	minimum elong	8661 Apr 03 04:50	15°♍42'28	2°05'17
evening rise	8660 May 06 16:24	28°♎42'17			8661 Apr 12 03:24	0°♏	
	8660 May 07 10:25	0°♐		evening rise	8661 Apr 18 02:49	9°♏44'33	
asc. node	8660 May 16 12:31	15°♐21'21			8661 Apr 30 16:17	0°♐	
evening max el	8660 May 24 06:48	25°♐49'01	18°07'30	asc. node	8661 May 03 09:36	3°♐56'29	
retrograde	8660 May 30 16:28	29°♐09'33		evening max el	8661 May 07 19:43	9°♐17'08	18°25'49
evening set	8660 Jun 02 11:29	28°♐29'58		retrograde	8661 May 14 06:16	12°♐45'44	
inferior conj	8660 Jun 08 16:58	23°♐18'03	2°49'19	evening set	8661 May 17 08:38	11°♐52'26	
minimum elong	8660 Jun 08 19:31	23°♐11'19	2°48'36	inferior conj	8661 May 23 03:45	6°♐22'45	3°14'36
min. Earth dist.	8660 Jun 11 13:18	20°♐18'13	0.62555 AU	minimum elong	8661 May 23 05:06	6°♐18'48	3°14'16
morning rise	8660 Jun 15 01:48	17°♐10'17		min. Earth dist.	8661 May 25 09:30	3°♐45'11	0.64557 AU
desc. node	8660 Jun 20 02:39	14°♐50'13		morning rise	8661 May 29 00:37	0°♐06'49	
direct	8660 Jun 21 19:59	14°♐40'49			8661 May 29 03:58	30°♑	
morning max el	8660 Jul 05 21:42	22°♐43'14	27°53'44	direct	8661 Jun 04 16:42	27°♑23'19	
	8660 Jul 12 08:01	0°♑		desc. node	8661 Jun 06 23:40	27°♑40'26	
	8660 Jul 31 21:37	0°♒			8661 Jun 11 23:53	0°♒	
morning set	8660 Aug 08 23:43	15°♒29'11		morning max el	8661 Jun 18 07:28	5°♒21'18	27°24'06
asc. node	8660 Aug 12 11:52	22°♒45'01			8661 Jul 07 01:04	0°♑	
max. Earth dist.	8660 Aug 14 08:51	26°♒44'49	1.32234 AU	morning set	8661 Jul 23 14:42	29°♑05'08	
	8660 Aug 15 20:58	0°♓			8661 Jul 24 01:52	0°♒	
superior conj	8660 Aug 16 14:19	1°♓34'21	0°40'35	max. Earth dist.	8661 Jul 28 06:51	8°♒29'52	1.33249 AU
minimum elong	8660 Aug 16 12:34	1°♓24'52	0°40'08	asc. node	8661 Jul 30 08:51	12°♒50'50	
evening rise	8660 Aug 23 10:46	16°♓30'16		superior conj	8661 Jul 31 18:51	15°♒50'50	0°14'16
	8660 Aug 30 01:44	0°♔		minimum elong	8661 Jul 31 18:09	15°♒47'04	0°13'58
desc. node	8660 Sep 16 01:27	25°♔06'58		behind sun begin	8661 Jul 31 15:26	15°♒32'39	
evening max el	8660 Sep 16 19:38	25°♔51'48	24°00'14	behind sun end	8661 Jul 31 20:51	16°♒01'29	
	8660 Sep 21 23:58	0°♕			8661 Aug 07 09:18	0°♓	
retrograde	8660 Sep 30 11:48	2°♕42'29		evening rise	8661 Aug 07 22:03	1°♓07'39	
evening set	8660 Oct 05 05:53	1°♕52'55			8661 Aug 24 02:19	0°♔	
	8660 Oct 09 09:39	30°♕		evening max el	8661 Aug 29 08:01	6°♔03'33	22°20'46
min. Earth dist.	8660 Oct 11 06:15	28°♔55'48	0.56053 AU	desc. node	8661 Sep 02 22:34	9°♔48'28	
inferior conj	8660 Oct 13 12:28	27°♔33'09	-5°36'50	retrograde	8661 Sep 11 06:10	12°♔29'54	
minimum elong	8660 Oct 13 12:45	27°♔32'44	5°36'45	evening set	8661 Sep 14 12:20	12°♔06'30	
morning rise	8660 Oct 21 21:40	23°♔35'33		min. Earth dist.	8661 Sep 22 14:16	8°♔33'42	0.54938 AU
direct	8660 Oct 24 15:18	23°♔16'19		inferior conj	8661 Sep 23 11:46	8°♔03'26	-5°11'34
morning max el	8660 Nov 03 18:16	28°♔02'38	19°55'37	minimum elong	8661 Sep 23 04:35	8°♔13'33	5°10'24
	8660 Nov 05 15:49	0°♖		morning rise	8661 Oct 01 22:34	4°♔15'49	
asc. node	8660 Nov 08 11:36	3°♖29'34		direct	8661 Oct 05 05:36	3°♔51'28	
morning set	8660 Nov 21 16:33	26°♖53'15		morning max el	8661 Oct 16 22:00	9°♔20'36	21°21'02
	8660 Nov 23 05:14	0°♗		asc. node	8661 Oct 26 08:35	21°♔26'00	
superior conj	8660 Nov 29 10:39	12°♗37'54	1°28'52		8661 Oct 31 05:47	0°♕	
minimum elong	8660 Nov 29 13:04	12°♗49'56	1°28'52	morning set	8661 Nov 06 01:29	11°♕38'26	
max. Earth dist.	8660 Dec 05 07:15	23°♗59'32	1.37127 AU	superior conj	8661 Nov 13 07:58	26°♕53'51	1°38'31
	8660 Dec 08 13:28	0°♘		minimum elong	8661 Nov 13 09:07	26°♕59'48	1°38'39

	8661 Nov 14 20:02	0°♊		asc. node	8662 Oct 13 05:33	10°♊04'06	
max. Earth dist.	8661 Nov 17 18:05	5°♊54'09	1.35192 AU	morning set	8662 Oct 21 12:42	26°♊27'53	
evening rise	8661 Nov 21 21:34	13°♊57'06			8662 Oct 23 04:30	0°♊	
desc. node	8661 Nov 29 21:18	28°♊16'18					
	8661 Nov 30 21:56	0°♋		superior conj	8662 Oct 28 12:21	11°♊28'52	1°41'06
	8661 Dec 21 21:25	0°♋		minimum elong	8662 Oct 28 12:13	11°♊28'09	1°41'15
evening max el	8661 Dec 27 05:42	5°♋43'06	26°35'45	max. Earth dist.	8662 Oct 31 12:31	17°♊51'25	1.33621 AU
retrograde	8662 Jan 09 05:31	13°♋00'01		evening rise	8662 Nov 05 07:16	27°♊35'54	
evening set	8662 Jan 15 15:55	10°♋25'50			8662 Nov 06 12:41	0°♊	
min. Earth dist.	8662 Jan 19 18:11	6°♋15'56	0.66270 AU	desc. node	8662 Nov 16 18:21	18°♊25'59	
inferior conj	8662 Jan 21 13:57	4°♋05'32	-0°14'59		8662 Nov 24 04:00	0°♋	
minimum elong	8662 Jan 21 14:22	4°♋04'19	0°14'38	evening max el	8662 Dec 09 18:31	19°♋13'48	27°16'07
transit middle	8662 Jan 21 14:22	4°♋04'19	0°14'38	retrograde	8662 Dec 23 05:53	26°♋34'54	
transit begin	8662 Jan 21 13:10	4°♋07'55		evening set	8662 Dec 30 01:59	23°♋59'12	
transit end	8662 Jan 21 15:34	4°♋00'44		min. Earth dist.	8663 Jan 02 22:48	20°♋22'51	0.64814 AU
asc. node	8662 Jan 22 07:54	3°♋12'23		inferior conj	8663 Jan 05 06:16	17°♋51'38	-1°19'11
	8662 Jan 25 08:40	30°♋3		minimum elong	8663 Jan 05 08:39	17°♋45'06	1°17'59
morning rise	8662 Jan 27 13:44	28°♋23'38		asc. node	8663 Jan 09 04:57	13°♋58'09	
direct	8662 Jan 30 12:24	27°♋35'14		morning rise	8663 Jan 11 16:50	12°♋22'59	
	8662 Feb 04 20:30	0°♋		direct	8663 Jan 14 06:59	11°♋47'57	
morning max el	8662 Feb 06 00:53	1°♋05'10	18°23'42	morning max el	8663 Jan 20 17:15	15°♋10'37	17°56'57
morning set	8662 Feb 25 22:21	0°♌03'30			8663 Jan 31 08:23	0°♋	
desc. node	8662 Feb 25 20:49	29°♋57'24		morning set	8663 Feb 07 05:43	11°♋23'52	
	8662 Feb 25 21:29	0°♌		desc. node	8663 Feb 12 17:44	20°♋30'11	
					8663 Feb 18 13:56	0°♌	
superior conj	8662 Mar 13 15:52	24°♌53'56	-1°39'08				
minimum elong	8662 Mar 13 06:15	24°♌16'17	1°38'12	superior conj	8663 Feb 21 03:56	4°♌08'08	-0°58'37
max. Earth dist.	8662 Mar 14 11:17	26°♌09'52	1.45545 AU	minimum elong	8663 Feb 20 21:13	3°♌41'23	0°57'37
	8662 Mar 16 22:07	0°♍		max. Earth dist.	8663 Feb 25 06:42	10°♌39'13	1.45203 AU
evening rise	8662 Mar 29 13:45	19°♍50'26		evening rise	8663 Mar 09 06:18	29°♌16'36	
	8662 Apr 05 00:41	0°♍			8663 Mar 09 17:35	0°♍	
greatest brilliancy	8662 Apr 08 15:50	5°♍39'34	-0.8m	greatest brilliancy	8663 Mar 23 17:09	21°♍09'23	-0.6m
asc. node	8662 Apr 20 06:42	21°♍51'38			8663 Mar 29 23:53	0°♍	
evening max el	8662 Apr 21 05:39	22°♍52'14	19°01'46	evening max el	8663 Apr 04 10:50	6°♍30'15	19°54'00
retrograde	8662 Apr 28 01:45	26°♍41'40		asc. node	8663 Apr 07 03:47	8°♍54'40	
evening set	8662 May 01 11:44	25°♍33'52		retrograde	8663 Apr 11 23:54	10°♍51'09	
inferior conj	8662 May 07 00:04	19°♍48'09	3°22'32	evening set	8663 Apr 15 18:18	9°♍28'27	
minimum elong	8662 May 07 00:06	19°♍48'02	3°22'21	inferior conj	8663 Apr 21 02:50	3°♍28'34	3°16'39
min. Earth dist.	8662 May 08 14:30	17°♍45'56	0.66187 AU	minimum elong	8663 Apr 21 01:46	3°♍32'10	3°16'26
morning rise	8662 May 12 11:59	13°♍29'31		min. Earth dist.	8663 Apr 22 02:39	2°♍08'33	0.67381 AU
direct	8662 May 18 20:23	10°♍43'48			8663 Apr 23 18:25	30°♌♍	
desc. node	8662 May 24 20:40	12°♍41'44		morning rise	8663 Apr 26 08:57	27°♍10'44	
morning max el	8662 May 31 18:05	18°♍24'39	26°25'18	direct	8663 May 02 06:09	24°♍33'14	
	8662 Jun 10 12:23	0°♎		desc. node	8663 May 11 17:37	29°♍22'52	
	8662 Jun 30 01:05	0°♏			8663 May 12 09:58	0°♍	
morning set	8662 Jul 06 17:50	12°♏04'52		morning max el	8663 May 14 03:45	1°♍41'34	25°06'30
max. Earth dist.	8662 Jul 10 18:29	19°♏48'57	1.34744 AU		8663 Jun 04 13:28	0°♎	
				morning set	8663 Jun 19 04:47	24°♎16'49	
superior conj	8662 Jul 15 16:39	29°♏43'44	-0°15'29		8663 Jun 22 08:20	0°♏	
minimum elong	8662 Jul 15 17:32	29°♏48'17	0°15'29	max. Earth dist.	8663 Jun 22 19:45	0°♏52'49	1.36667 AU
behind sun begin	8662 Jul 15 15:56	29°♏40'03					
behind sun end	8662 Jul 15 19:09	29°♏56'31		superior conj	8663 Jun 29 04:49	13°♏05'48	-0°47'17
	8662 Jul 15 19:49	0°♏		minimum elong	8663 Jun 29 07:44	13°♏20'07	0°46'57
asc. node	8662 Jul 17 05:50	2°♏55'57		asc. node	8663 Jul 04 02:50	22°♏56'39	
evening rise	8662 Jul 23 07:06	15°♏34'58		evening rise	8663 Jul 07 11:39	29°♏45'58	
	8662 Jul 30 14:30	0°♐			8663 Jul 07 14:26	0°♏	
evening max el	8662 Aug 11 05:12	16°♐35'59	20°50'31	evening max el	8663 Jul 24 15:49	27°♏51'35	19°38'26
desc. node	8662 Aug 20 19:41	22°♐09'58			8663 Jul 27 03:02	0°♐	
retrograde	8662 Aug 22 18:33	22°♐19'31		retrograde	8663 Aug 03 12:10	2°♐43'21	
evening set	8662 Aug 24 22:48	22°♐08'08		evening set	8663 Aug 05 08:28	2°♐33'51	
inferior conj	8662 Sep 03 04:08	18°♐11'25	-3°51'49	desc. node	8663 Aug 07 16:47	1°♐56'18	
minimum elong	8662 Sep 02 18:40	18°♐24'54	3°49'00		8663 Aug 11 17:29	30°♌♏	
min. Earth dist.	8662 Sep 03 23:10	17°♐44'19	0.54700 AU	inferior conj	8663 Aug 14 04:20	28°♏30'22	-1°59'04
morning rise	8662 Sep 11 14:38	14°♐13'50		minimum elong	8663 Aug 13 22:55	28°♏38'53	1°57'08
direct	8662 Sep 15 13:30	13°♐40'23		min. Earth dist.	8663 Aug 16 11:04	27°♏04'36	0.55423 AU
morning max el	8662 Sep 28 14:56	19°♐55'53	23°02'47	morning rise	8663 Aug 22 11:04	24°♏03'27	
	8662 Oct 07 00:52	0°♑		direct	8663 Aug 27 05:02	23°♏13'12	

	8663 Sep 09 23:00	0°♎		transit end	8664 Jul 25 02:01	9°♏18'12	
morning max el	8663 Sep 10 03:18	0°♎10'07	24°48'25	desc. node	8664 Jul 24 13:53	9°♏40'17	
asc. node	8663 Sep 30 02:30	29°♎13'34		min. Earth dist.	8664 Jul 28 02:56	7°♏06'13	0.56968 AU
	8663 Sep 30 12:06	0°♏		morning rise	8664 Aug 01 20:24	4°♏19'58	
morning set	8663 Oct 06 00:26	11°♏16'37		direct	8664 Aug 07 10:31	3°♏04'04	
				morning max el	8664 Aug 21 17:44	10°♏31'20	26°21'27
superior conj	8663 Oct 12 21:16	26°♏15'06	1°37'24		8664 Sep 05 16:07	0°♎	
minimum elong	8663 Oct 12 20:04	26°♏08'31	1°37'25	asc. node	8664 Sep 15 23:26	18°♎45'36	
max. Earth dist.	8663 Oct 14 14:49	0°♎01'41	1.32495 AU	morning set	8664 Sep 19 11:03	25°♎59'19	
	8663 Oct 14 14:30	0°♎			8664 Sep 21 07:50	0°♏	
evening rise	8663 Oct 20 03:13	11°♎41'59					
	8663 Oct 29 18:06	0°♎		superior conj	8664 Sep 26 08:33	11°♏05'10	1°28'01
desc. node	8663 Nov 03 15:26	8°♎11'56		minimum elong	8664 Sep 26 06:37	10°♏54'28	1°27'50
	8663 Nov 19 21:37	0°♎		max. Earth dist.	8664 Sep 26 22:47	12°♏24'01	1.31828 AU
evening max el	8663 Nov 22 05:31	2°♎19'41	27°29'23	evening rise	8664 Oct 03 06:26	26°♏06'38	
retrograde	8663 Dec 05 23:37	9°♎37'43			8664 Oct 05 03:27	0°♎	
evening set	8663 Dec 13 01:09	7°♎09'05		desc. node	8664 Oct 20 12:33	27°♎24'13	
min. Earth dist.	8663 Dec 16 18:12	4°♎02'40	0.63044 AU		8664 Oct 22 06:39	0°♎	
inferior conj	8663 Dec 19 12:29	1°♎20'20	-2°28'36	evening max el	8664 Nov 03 12:21	14°♎47'52	27°10'23
minimum elong	8663 Dec 19 17:13	1°♎08'42	2°26'33	retrograde	8664 Nov 17 09:30	21°♎59'08	
	8663 Dec 20 21:47	30°♎		evening set	8664 Nov 24 09:49	19°♎47'44	
morning rise	8663 Dec 26 11:21	26°♎07'47		min. Earth dist.	8664 Nov 28 03:04	17°♎03'46	0.61040 AU
asc. node	8663 Dec 27 01:59	25°♎56'15		inferior conj	8664 Dec 01 05:25	14°♎23'12	-3°39'18
direct	8663 Dec 28 19:19	25°♎42'12		minimum elong	8664 Dec 01 12:14	14°♎08'26	3°36'53
morning max el	8664 Jan 04 10:38	29°♎07'03	17°47'36	morning rise	8664 Dec 08 17:00	9°♎30'00	
	8664 Jan 05 07:03	0°♎		direct	8664 Dec 10 21:52	9°♎10'12	
morning set	8664 Jan 20 14:16	23°♎57'01		asc. node	8664 Dec 12 23:01	9°♎27'58	
	8664 Jan 24 01:36	0°♎		morning max el	8664 Dec 18 01:45	12°♎45'53	17°56'45
desc. node	8664 Jan 30 14:39	11°♎10'28			8664 Dec 29 15:59	0°♎	
				morning set	8665 Jan 02 17:27	7°♎23'13	
superior conj	8664 Feb 01 13:38	14°♎26'28	-0°14'21				
minimum elong	8664 Feb 01 12:10	14°♎20'21	0°13'58	superior conj	8665 Jan 13 01:00	25°♎58'32	0°25'29
behind sun begin	8664 Feb 01 07:31	14°♎01'04		minimum elong	8665 Jan 13 03:06	26°♎07'41	0°25'21
behind sun end	8664 Feb 01 16:48	14°♎39'36			8665 Jan 15 08:46	0°♎	
max. Earth dist.	8664 Feb 07 23:59	24°♎55'28	1.44165 AU	desc. node	8665 Jan 16 11:38	1°♎54'52	
	8664 Feb 11 04:37	0°♎		max. Earth dist.	8665 Jan 20 13:45	8°♎46'00	1.42543 AU
evening rise	8664 Feb 16 17:36	8°♎38'13		evening rise	8665 Jan 26 15:00	18°♎32'49	
	8664 Mar 01 23:35	0°♎			8665 Feb 03 00:46	0°♎	
evening max el	8664 Mar 17 10:31	20°♎09'37	20°59'50		8665 Feb 24 16:44	0°♎	
asc. node	8664 Mar 24 00:52	24°♎50'57		evening max el	8665 Feb 28 05:14	3°♎51'35	22°15'18
retrograde	8664 Mar 25 22:20	25°♎09'10		retrograde	8665 Mar 09 19:25	9°♎32'25	
evening set	8664 Mar 30 02:19	23°♎31'14		asc. node	8665 Mar 10 21:58	9°♎26'14	
inferior conj	8664 Apr 04 09:33	17°♎19'22	2°59'22	evening set	8665 Mar 14 10:12	7°♎39'16	
minimum elong	8664 Apr 04 07:42	17°♎25'44	2°58'59	inferior conj	8665 Mar 19 18:07	1°♎18'02	2°32'14
min. Earth dist.	8664 Apr 04 19:51	16°♎43'44	0.68136 AU	minimum elong	8665 Mar 19 15:54	1°♎25'45	2°31'40
morning rise	8664 Apr 09 12:52	11°♎04'31		min. Earth dist.	8665 Mar 19 15:53	1°♎25'50	0.68455 AU
direct	8664 Apr 14 20:52	8°♎43'06			8665 Mar 20 16:39	30°♎	
morning max el	8664 Apr 25 12:50	15°♎04'52	23°37'47	morning rise	8665 Mar 24 21:27	25°♎07'40	
desc. node	8664 Apr 27 14:33	17°♎16'31		direct	8665 Mar 29 15:33	23°♎07'06	
	8664 May 07 17:21	0°♎		morning max el	8665 Apr 08 00:24	28°♎36'37	22°09'01
	8664 May 27 12:15	0°♎			8665 Apr 09 08:28	0°♎	
morning set	8664 May 30 18:01	5°♎25'22		desc. node	8665 Apr 14 11:29	6°♎03'14	
max. Earth dist.	8664 Jun 03 15:40	12°♎09'41	1.38875 AU		8665 May 01 09:45	0°♎	
				morning set	8665 May 11 04:43	15°♎19'30	
superior conj	8664 Jun 11 03:36	25°♎46'55	-1°19'02	max. Earth dist.	8665 May 16 14:12	24°♎12'27	1.41117 AU
minimum elong	8664 Jun 11 08:32	26°♎10'02	1°18'31		8665 May 20 00:00	0°♎	
	8664 Jun 13 09:08	0°♎					
asc. node	8664 Jun 19 23:50	12°♎48'07		superior conj	8665 May 24 08:38	7°♎37'25	-1°47'14
evening rise	8664 Jun 20 08:51	13°♎32'01		minimum elong	8665 May 24 14:34	8°♎03'47	1°46'50
	8664 Jun 29 07:07	0°♎		evening rise	8665 Jun 03 19:18	26°♎45'07	
evening max el	8664 Jul 06 14:35	9°♎51'02	18°47'07		8665 Jun 05 13:13	0°♎	
retrograde	8664 Jul 14 21:35	13°♎57'52		asc. node	8665 Jun 06 20:52	2°♎26'16	
evening set	8664 Jul 16 21:33	13°♎44'25		evening max el	8665 Jun 19 21:55	22°♎27'01	18°16'18
inferior conj	8664 Jul 24 22:58	9°♎23'46	-0°06'54	retrograde	8665 Jun 27 02:22	26°♎03'47	
minimum elong	8664 Jul 24 22:41	9°♎24'17	0°06'58	evening set	8665 Jun 29 09:33	25°♎42'22	
transit middle	8664 Jul 24 22:41	9°♎24'17	0°06'58	inferior conj	8665 Jul 06 15:23	21°♎00'56	1°22'57
transit begin	8664 Jul 24 19:21	9°♎30'21		minimum elong	8665 Jul 06 17:54	20°♎55'33	1°21'55

min. Earth dist.	8665 Jul 10 00:39	18°☿08'45	0.59034 AU	min. Earth dist.	8666 Jun 22 06:28	0°☿14'43	0.61284 AU
desc. node	8665 Jul 11 10:56	17°☿02'20			8666 Jun 22 12:47	30°♊II	
morning rise	8665 Jul 13 23:05	15°☿24'14		morning rise	8666 Jun 25 20:14	27°♊18'49	
direct	8665 Jul 20 05:33	13°☿37'34		desc. node	8666 Jun 28 07:59	25°♊56'00	
morning max el	8665 Aug 03 14:33	21°☿25'11	27°26'37	direct	8666 Jul 02 12:08	25°♊02'55	
	8665 Aug 11 02:08	0°♊			8666 Jul 13 10:04	0°☿	
	8665 Aug 29 14:05	0°♊		morning max el	8666 Jul 16 18:12	3°☿03'00	27°55'02
asc. node	8665 Sep 02 20:24	8°♊33'52			8666 Aug 05 14:49	0°♊	
morning set	8665 Sep 03 18:55	10°♊31'25		morning set	8666 Aug 18 22:07	24°♊47'27	
				asc. node	8666 Aug 20 17:23	28°♊32'50	
superior conj	8665 Sep 10 20:20	25°♊53'21	1°13'24		8666 Aug 21 09:53	0°♊	
minimum elong	8665 Sep 10 18:05	25°♊40'54	1°13'01	max. Earth dist.	8666 Aug 24 17:32	7°♊09'31	1.31864 AU
max. Earth dist.	8665 Sep 10 09:01	24°♊50'33	1.31618 AU				
	8665 Sep 12 16:46	0°♊		superior conj	8666 Aug 26 06:49	10°♊34'02	0°53'53
evening rise	8665 Sep 17 14:30	10°♊42'51		minimum elong	8666 Aug 26 04:45	10°♊22'37	0°53'25
	8665 Sep 27 09:27	0°♊		evening rise	8666 Sep 02 01:19	25°♊24'14	
desc. node	8665 Oct 07 09:40	15°♊49'23			8666 Sep 04 05:26	0°♊	
evening max el	8665 Oct 16 12:05	26°♊27'01	26°17'25		8666 Sep 21 17:33	0°♊	
	8665 Oct 20 19:11	0°♊		desc. node	8666 Sep 24 06:46	3°♊08'59	
retrograde	8665 Oct 30 10:03	3°♊31'51		evening max el	8666 Sep 28 03:40	7°♊16'03	24°55'38
evening set	8665 Nov 05 23:24	1°♊47'41		retrograde	8666 Oct 11 24:00	14°♊14'37	
	8665 Nov 08 22:39	30°♊		evening set	8666 Oct 17 13:28	13°♊04'53	
min. Earth dist.	8665 Nov 10 01:15	29°♊13'11	0.58948 AU	min. Earth dist.	8666 Oct 22 15:00	10°♊21'31	0.56990 AU
inferior conj	8665 Nov 13 05:30	26°♊50'03	-4°43'35	inferior conj	8666 Oct 25 09:50	8°♊32'18	-5°27'50
minimum elong	8665 Nov 13 12:46	26°♊36'20	4°41'44	minimum elong	8666 Oct 25 13:57	8°♊25'34	5°27'20
morning rise	8665 Nov 21 04:28	22°♊19'12		morning rise	8666 Nov 02 16:42	4°♊24'17	
direct	8665 Nov 23 10:19	22°♊01'58		direct	8666 Nov 05 04:25	4°♊06'45	
asc. node	8665 Nov 29 20:03	24°♊31'45		morning max el	8666 Nov 14 10:58	8°♊31'19	19°16'22
morning max el	8665 Dec 01 11:04	25°♊57'09	18°25'47	asc. node	8666 Nov 16 17:04	10°♊55'12	
	8665 Dec 04 23:01	0°♊			8666 Nov 28 11:24	0°♊	
morning set	8665 Dec 17 09:34	21°♊24'47		morning set	8666 Dec 01 10:30	5°♊50'04	
	8665 Dec 21 21:08	0°♊					
superior conj	8665 Dec 26 10:47	8°♊34'15	0°57'07	superior conj	8666 Dec 09 13:56	21°♊59'32	1°19'43
minimum elong	8665 Dec 26 14:07	8°♊49'37	0°56'51	minimum elong	8666 Dec 09 16:56	22°♊14'04	1°19'36
max. Earth dist.	8666 Jan 02 22:49	21°♊57'01	1.40522 AU		8666 Dec 13 18:54	0°♊	
desc. node	8666 Jan 03 08:38	22°♊39'14		max. Earth dist.	8666 Dec 16 04:35	4°♊25'24	1.38347 AU
evening rise	8666 Jan 07 07:50	29°♊20'14		evening rise	8666 Dec 19 22:34	11°♊05'39	
	8666 Jan 07 17:29	0°♊		desc. node	8666 Dec 21 05:40	13°♊20'09	
	8666 Jan 27 12:46	0°♊			8666 Dec 31 11:34	0°♊	
evening max el	8666 Feb 10 20:15	17°♊35'53	23°35'16		8667 Jan 23 00:53	0°♊	
retrograde	8666 Feb 21 13:41	23°♊55'46		evening max el	8667 Jan 24 09:31	1°♊22'51	24°53'27
asc. node	8666 Feb 25 19:05	22°♊29'14		retrograde	8667 Feb 05 04:09	8°♊14'06	
evening set	8666 Feb 26 16:23	21°♊47'59		evening set	8667 Feb 10 19:18	5°♊53'26	
min. Earth dist.	8666 Mar 03 12:33	16°♊09'03	0.68349 AU	asc. node	8667 Feb 12 16:11	4°♊03'26	
inferior conj	8666 Mar 04 02:39	15°♊20'49	1°56'08	min. Earth dist.	8667 Feb 15 07:41	0°♊48'57	0.67840 AU
minimum elong	8666 Mar 04 00:29	15°♊28'12	1°55'30		8667 Feb 15 22:33	30°♊	
morning rise	8666 Mar 09 08:35	9°♊16'12		inferior conj	8667 Feb 16 09:16	29°♊24'34	1°11'34
direct	8666 Mar 13 12:58	7°♊38'07		minimum elong	8667 Feb 16 07:41	29°♊29'51	1°11'05
morning max el	8666 Mar 21 17:58	12°♊19'47	20°47'56	morning rise	8667 Feb 21 20:18	23°♊27'08	
desc. node	8666 Apr 01 08:25	25°♊28'02		direct	8667 Feb 25 11:55	22°♊10'36	
	8666 Apr 04 13:16	0°♊		morning max el	8667 Mar 04 19:21	26°♊15'01	19°39'33
morning set	8666 Apr 20 13:43	24°♊04'55			8667 Mar 08 04:19	0°♊	
	8666 Apr 24 08:06	0°♊		greatest brilliancy	8667 Mar 17 12:40	12°♊50'12	-0.7m
max. Earth dist.	8666 Apr 28 19:28	7°♊10'11	1.43099 AU	desc. node	8667 Mar 19 05:21	15°♊20'34	
					8667 Mar 28 21:28	0°♊	
superior conj	8666 May 05 15:16	18°♊26'41	-2°06'52	morning set	8667 Mar 30 11:22	2°♊25'42	
minimum elong	8666 May 05 19:25	18°♊44'09	2°06'49	max. Earth dist.	8667 Apr 11 07:26	20°♊53'55	1.44579 AU
	8666 May 12 08:51	0°♊					
evening rise	8666 May 17 14:40	9°♊14'45		superior conj	8667 Apr 15 21:13	28°♊12'11	-2°11'37
asc. node	8666 May 24 17:56	21°♊45'25		minimum elong	8667 Apr 15 19:32	28°♊05'27	2°11'40
	8666 May 29 22:41	0°☿			8667 Apr 16 23:57	0°♊	
evening max el	8666 Jun 03 09:58	5°☿29'38	18°05'13	evening rise	8667 Apr 29 14:16	20°♊51'02	
retrograde	8666 Jun 09 23:34	8°☿52'10			8667 May 05 00:29	0°♊	
evening set	8666 Jun 12 14:14	8°☿19'54		asc. node	8667 May 11 14:59	10°♊39'06	
inferior conj	8666 Jun 19 03:27	3°☿18'31	2°25'07	evening max el	8667 May 17 23:23	18°♊50'40	18°13'03
minimum elong	8666 Jun 19 06:24	3°☿11'13	2°24'10	retrograde	8667 May 24 08:30	22°♊13'21	
				evening set	8667 May 27 06:31	21°♊28'14	

inferior conj	8667 Jun 02 07:07	16° Π 08'36	3°02'27	inferior conj	8668 May 15 22:24	29° \mathcal{B} 23'26	3°19'49
minimum elong	8667 Jun 02 09:12	16° Π 02'49	3°01'55	minimum elong	8668 May 15 23:10	29° \mathcal{B} 21'03	3°19'35
min. Earth dist.	8667 Jun 04 21:33	13° Π 15'52	0.63440 AU	min. Earth dist.	8668 May 17 21:44	26° \mathcal{B} 59'22	0.65302 AU
morning rise	8667 Jun 08 10:28	9° Π 56'10		morning rise	8668 May 21 15:04	23° \mathcal{B} 05'47	
direct	8667 Jun 15 04:26	7° Π 19'09		direct	8668 May 28 04:33	20° \mathcal{B} 19'33	
desc. node	8667 Jun 15 05:01	7° Π 19'09		desc. node	8668 Jun 01 02:01	21° \mathcal{B} 09'15	
morning max el	8667 Jun 29 02:33	15° Π 22'06	27°45'16	morning max el	8668 Jun 10 12:50	28° \mathcal{B} 12'32	27°02'03
	8667 Jul 11 01:20	0° \mathcal{E}			8668 Jun 12 05:51	0° Π	
	8667 Jul 29 07:04	0° \mathcal{O}			8668 Jul 03 19:44	0° \mathcal{E}	
morning set	8667 Aug 02 18:19	8° \mathcal{O} 40'12		morning set	8668 Jul 16 04:41	22° \mathcal{E} 02'13	
asc. node	8667 Aug 07 14:20	18° \mathcal{O} 37'15			8668 Jul 20 05:37	0° \mathcal{O}	
max. Earth dist.	8667 Aug 07 20:15	19° \mathcal{O} 08'32	1.32595 AU	max. Earth dist.	8668 Jul 20 13:43	0° \mathcal{O} 40'54	1.33824 AU
				asc. node	8668 Jul 24 11:18	8° \mathcal{O} 43'32	
superior conj	8667 Aug 10 14:05	25° \mathcal{O} 00'55	0°29'54	superior conj	8668 Jul 24 16:05	9° \mathcal{O} 08'34	0°02'01
minimum elong	8667 Aug 10 12:43	24° \mathcal{O} 53'31	0°29'29	minimum elong	8668 Jul 24 15:59	9° \mathcal{O} 08'03	0°01'50
	8667 Aug 12 21:13	0° \mathcal{O}		behind sun begin	8668 Jul 24 10:22	8° \mathcal{O} 38'36	
evening rise	8667 Aug 17 12:55	10° \mathcal{O} 04'18		behind sun end	8668 Jul 24 21:35	9° \mathcal{O} 37'33	
	8667 Aug 27 17:18	0° \mathcal{O}		evening rise	8668 Jul 31 23:28	24° \mathcal{O} 38'06	
evening max el	8667 Sep 09 14:49	17° \mathcal{O} 31'38	23°17'48		8668 Aug 03 13:32	0° \mathcal{O}	
desc. node	8667 Sep 11 03:54	18° \mathcal{O} 56'55		evening max el	8668 Aug 21 06:06	27° \mathcal{O} 48'40	21°40'38
retrograde	8667 Sep 23 01:41	24° \mathcal{O} 15'04			8668 Aug 23 17:08	0° \mathcal{O}	
evening set	8667 Sep 27 04:02	23° \mathcal{O} 38'22		desc. node	8668 Aug 28 00:59	2° \mathcal{O} 42'21	
min. Earth dist.	8667 Oct 04 00:18	20° \mathcal{O} 27'40	0.55475 AU	retrograde	8668 Sep 02 16:06	3° \mathcal{O} 58'18	
inferior conj	8667 Oct 05 18:15	19° \mathcal{O} 26'15	-5°33'05	evening set	8668 Sep 05 08:58	3° \mathcal{O} 41'48	
minimum elong	8667 Oct 05 15:12	19° \mathcal{O} 30'45	5°32'50		8668 Sep 14 00:58	30° \mathcal{R}	
morning rise	8667 Oct 14 04:27	15° \mathcal{O} 34'50		inferior conj	8668 Sep 14 12:53	29° \mathcal{O} 43'21	-4°43'45
direct	8667 Oct 17 03:06	15° \mathcal{O} 13'59		minimum elong	8668 Sep 14 03:47	29° \mathcal{O} 56'04	4°41'42
morning max el	8667 Oct 27 22:22	20° \mathcal{O} 18'06	20°29'28	min. Earth dist.	8668 Sep 14 08:38	29° \mathcal{O} 49'17	0.54719 AU
asc. node	8667 Nov 03 14:04	28° \mathcal{O} 21'41		morning rise	8668 Sep 22 23:42	25° \mathcal{O} 53'46	
	8667 Nov 04 16:06	0° \mathcal{O}		direct	8668 Sep 26 13:13	25° \mathcal{O} 26'03	
morning set	8667 Nov 15 17:11	20° \mathcal{O} 29'31			8668 Oct 07 10:33	0° \mathcal{O}	
	8667 Nov 20 07:30	0° \mathcal{O}		morning max el	8668 Oct 08 20:50	1° \mathcal{O} 15'36	22°02'51
superior conj	8667 Nov 23 05:43	6° \mathcal{O} 00'01	1°33'52	asc. node	8668 Oct 20 11:02	16° \mathcal{O} 37'02	
minimum elong	8667 Nov 23 07:37	6° \mathcal{O} 09'39	1°33'56		8668 Oct 27 14:02	0° \mathcal{O}	
max. Earth dist.	8667 Nov 28 11:45	16° \mathcal{O} 24'23	1.36264 AU	morning set	8668 Oct 30 03:16	5° \mathcal{O} 16'41	
evening rise	8667 Dec 02 08:57	23° \mathcal{O} 42'52		superior conj	8668 Nov 06 06:20	20° \mathcal{O} 24'38	1°40'25
	8667 Dec 05 20:53	0° \mathcal{O}		minimum elong	8668 Nov 06 06:56	20° \mathcal{O} 27'44	1°40'34
desc. node	8667 Dec 08 02:41	3° \mathcal{O} 53'02		max. Earth dist.	8668 Nov 10 01:26	28° \mathcal{O} 17'14	1.34474 AU
	8667 Dec 25 03:48	0° \mathcal{O}			8668 Nov 10 21:43	0° \mathcal{O}	
evening max el	8668 Jan 06 22:39	15° \mathcal{O} 10'05	26°02'49	evening rise	8668 Nov 14 11:14	7° \mathcal{O} 02'03	
retrograde	8668 Jan 19 13:45	22° \mathcal{O} 21'18		desc. node	8668 Nov 23 23:43	24° \mathcal{O} 12'54	
evening set	8668 Jan 25 17:17	19° \mathcal{O} 50'54			8668 Nov 27 12:23	0° \mathcal{O}	
min. Earth dist.	8668 Jan 29 23:03	15° \mathcal{O} 20'55	0.66946 AU	evening max el	8668 Dec 19 12:02	28° \mathcal{O} 50'38	26°55'56
asc. node	8668 Jan 30 13:17	14° \mathcal{O} 36'52			8668 Dec 20 17:48	0° \mathcal{O}	
inferior conj	8668 Jan 31 12:05	13° \mathcal{O} 25'38	0°18'53	retrograde	8669 Jan 01 17:37	6° \mathcal{O} 10'11	
minimum elong	8668 Jan 31 11:36	13° \mathcal{O} 27'10	0°18'50	evening set	8669 Jan 08 08:21	3° \mathcal{O} 34'51	
morning rise	8668 Feb 06 06:33	7° \mathcal{O} 37'11			8669 Jan 12 00:50	30° \mathcal{R}	
direct	8668 Feb 09 10:51	6° \mathcal{O} 39'33		min. Earth dist.	8669 Jan 12 08:17	29° \mathcal{O} 39'09	0.65690 AU
morning max el	8668 Feb 16 04:10	10° \mathcal{O} 18'57	18°46'35	inferior conj	8669 Jan 14 08:56	27° \mathcal{O} 19'07	-0°41'25
	8668 Mar 01 12:27	0° \mathcal{O}		minimum elong	8669 Jan 14 10:08	27° \mathcal{O} 15'42	0°40'43
desc. node	8668 Mar 05 02:16	5° \mathcal{O} 33'18		asc. node	8669 Jan 16 10:21	25° \mathcal{O} 01'28	
morning set	8668 Mar 08 21:55	11° \mathcal{O} 31'27		morning rise	8669 Jan 20 13:03	21° \mathcal{O} 42'12	
	8668 Mar 20 17:27	0° \mathcal{O}		direct	8669 Jan 23 07:51	20° \mathcal{O} 59'54	
max. Earth dist.	8668 Mar 24 00:22	5° \mathcal{O} 08'51	1.45402 AU	morning max el	8669 Jan 29 18:29	24° \mathcal{O} 25'38	18°10'09
superior conj	8668 Mar 25 07:26	7° \mathcal{O} 10'41	-1°56'36		8669 Feb 03 09:48	0° \mathcal{O}	
minimum elong	8668 Mar 24 23:11	6° \mathcal{O} 38'18	1°56'04	morning set	8669 Feb 17 12:33	22° \mathcal{O} 02'56	
	8668 Apr 08 16:31	0° \mathcal{O}		desc. node	8669 Feb 19 23:11	26° \mathcal{O} 00'18	
evening rise	8668 Apr 09 14:32	1° \mathcal{O} 28'31			8669 Feb 22 10:39	0° \mathcal{O}	
greatest brilliancy	8668 Apr 16 06:28	12° \mathcal{O} 12'23	-0.9m	superior conj	8669 Mar 04 13:11	16° \mathcal{O} 03'55	-1°23'05
asc. node	8668 Apr 27 12:04	28° \mathcal{O} 59'06		minimum elong	8669 Mar 04 04:07	15° \mathcal{O} 28'18	1°21'59
	8668 Apr 28 07:46	0° \mathcal{O}		max. Earth dist.	8669 Mar 06 20:01	19° \mathcal{O} 39'07	1.45494 AU
evening max el	8668 Apr 30 11:20	2° \mathcal{O} 23'05	18°39'05		8669 Mar 13 11:04	0° \mathcal{O}	
retrograde	8668 May 07 01:03	5° \mathcal{O} 59'06		evening rise	8669 Mar 20 16:28	11° \mathcal{O} 14'17	
evening set	8668 May 10 06:33	4° \mathcal{O} 59'50			8669 Apr 01 20:30	0° \mathcal{O}	
	8668 May 15 10:21	30° \mathcal{R}					

greatest brilliancy	8669 Apr 01 20:27	29° Υ 59'48	-0.7m	asc. node	8670 Apr 01 06:14	3° \mathcal{B} 11'12	
evening max el	8669 Apr 13 19:30	16° \mathcal{B} 00'24	19°22'11	retrograde	8670 Apr 04 20:23	4° \mathcal{B} 16'04	
asc. node	8669 Apr 14 09:09	16° \mathcal{B} 34'02		evening set	8670 Apr 08 18:49	2° \mathcal{B} 46'40	
retrograde	8669 Apr 20 21:51	20° \mathcal{B} 01'38			8670 Apr 11 13:40	30° $\mathcal{R}\Upsilon$	
evening set	8669 Apr 24 11:23	18° \mathcal{B} 47'28		inferior conj	8670 Apr 14 02:31	26° Υ 41'18	3°10'34
inferior conj	8669 Apr 29 21:47	12° \mathcal{B} 55'41	3°21'30	minimum elong	8670 Apr 14 01:05	26° Υ 46'12	3°10'17
minimum elong	8669 Apr 29 21:18	12° \mathcal{B} 57'13	3°21'21	min. Earth dist.	8670 Apr 14 20:21	25° Υ 40'27	0.67767 AU
min. Earth dist.	8669 May 01 05:53	11° \mathcal{B} 10'56	0.66758 AU	morning rise	8670 Apr 19 07:08	20° Υ 24'43	
morning rise	8669 May 05 06:53	6° \mathcal{B} 37'20		direct	8670 Apr 24 22:51	17° Υ 53'33	
direct	8669 May 11 10:59	3° \mathcal{B} 53'53		desc. node	8670 May 05 19:59	24° Υ 12'04	
desc. node	8669 May 18 22:59	6° \mathcal{B} 56'47		morning max el	8670 May 06 08:13	24° Υ 42'39	24°29'19
morning max el	8669 May 23 22:53	11° \mathcal{B} 22'02	25°53'31		8670 May 11 02:31	0° \mathcal{B}	
	8669 Jun 07 19:29	0° \mathcal{B}			8670 Jun 01 06:30	0° \mathcal{B}	
	8669 Jun 26 11:04	0° \mathcal{B}		morning set	8670 Jun 11 03:49	16° \mathcal{B} 29'19	
morning set	8669 Jun 29 01:27	4° \mathcal{B} 42'45		max. Earth dist.	8670 Jun 14 19:07	22° \mathcal{B} 57'52	1.37596 AU
max. Earth dist.	8669 Jul 02 20:31	11° \mathcal{B} 50'32	1.35523 AU		8670 Jun 18 14:34	0° \mathcal{B}	
superior conj	8669 Jul 08 10:09	22° \mathcal{B} 49'22	-0°28'49	superior conj	8670 Jun 21 17:06	5° \mathcal{B} 55'11	-1°00'56
minimum elong	8669 Jul 08 11:51	22° \mathcal{B} 58'00	0°28'41	minimum elong	8670 Jun 21 20:54	6° \mathcal{B} 13'35	1°00'30
asc. node	8669 Jul 11 08:16	28° \mathcal{B} 47'17		asc. node	8670 Jun 28 05:16	18° \mathcal{B} 44'40	
	8669 Jul 11 22:23	0° \mathcal{B}		evening rise	8670 Jun 30 08:40	23° \mathcal{B} 00'51	
evening rise	8669 Jul 16 06:52	8° \mathcal{B} 59'13			8670 Jul 03 22:07	0° \mathcal{B}	
	8669 Jul 27 14:25	0° \mathcal{B}		evening max el	8670 Jul 17 00:53	20° \mathcal{B} 12'13	19°13'55
evening max el	8669 Aug 03 08:52	8° \mathcal{B} 37'57	20°17'19	retrograde	8670 Jul 26 04:19	24° \mathcal{B} 43'44	
retrograde	8669 Aug 14 04:34	13° \mathcal{B} 59'03		evening set	8670 Jul 28 01:20	24° \mathcal{B} 33'06	
desc. node	8669 Aug 14 22:04	13° \mathcal{B} 57'41		desc. node	8670 Aug 01 19:10	22° \mathcal{B} 43'57	
evening set	8669 Aug 16 03:45	13° \mathcal{B} 49'14		inferior conj	8670 Aug 05 13:51	20° \mathcal{B} 22'41	-1°09'38
inferior conj	8669 Aug 25 06:43	9° \mathcal{B} 51'21	-3°05'54	minimum elong	8670 Aug 05 10:47	20° \mathcal{B} 27'49	1°08'35
minimum elong	8669 Aug 24 22:27	10° \mathcal{B} 03'29	3°03'08	min. Earth dist.	8670 Aug 08 07:27	18° \mathcal{B} 33'40	0.55996 AU
min. Earth dist.	8669 Aug 26 18:19	8° \mathcal{B} 59'07	0.54899 AU	morning rise	8670 Aug 13 17:20	15° \mathcal{B} 40'21	
morning rise	8669 Sep 02 16:15	5° \mathcal{B} 43'29		direct	8670 Aug 18 19:51	14° \mathcal{B} 40'29	
direct	8669 Sep 06 23:11	5° \mathcal{B} 03'51		morning max el	8670 Sep 01 23:16	21° \mathcal{B} 51'12	25°30'46
morning max el	8669 Sep 20 10:39	11° \mathcal{B} 37'27	23°48'16		8670 Sep 09 03:12	0° \mathcal{B}	
	8669 Oct 04 05:54	0° \mathcal{B}		asc. node	8670 Sep 24 04:57	24° \mathcal{B} 49'50	
asc. node	8669 Oct 07 08:00	5° \mathcal{B} 29'43			8670 Sep 26 18:27	0° \mathcal{B}	
morning set	8669 Oct 14 14:55	20° \mathcal{B} 06'27		morning set	8670 Sep 29 02:22	4° \mathcal{B} 53'23	
	8669 Oct 19 04:47	0° \mathcal{B}		superior conj	8670 Oct 05 23:03	19° \mathcal{B} 53'35	1°34'06
superior conj	8669 Oct 21 12:55	5° \mathcal{B} 05'06	1°40'16	minimum elong	8670 Oct 05 21:29	19° \mathcal{B} 45'01	1°34'02
minimum elong	8669 Oct 21 12:18	5° \mathcal{B} 01'45	1°40'22	max. Earth dist.	8670 Oct 07 04:50	22° \mathcal{B} 37'28	1.32150 AU
max. Earth dist.	8669 Oct 23 23:38	10° \mathcal{B} 20'45	1.33086 AU		8670 Oct 10 14:28	0° \mathcal{B}	
evening rise	8669 Oct 29 01:41	20° \mathcal{B} 53'35		evening rise	8670 Oct 13 01:01	5° \mathcal{B} 08'12	
	8669 Nov 02 18:13	0° \mathcal{B}			8670 Oct 26 09:21	0° \mathcal{B}	
desc. node	8669 Nov 10 20:46	14° \mathcal{B} 13'45		desc. node	8670 Oct 28 17:51	3° \mathcal{B} 46'53	
	8669 Nov 21 10:57	0° \mathcal{B}		evening max el	8670 Nov 14 09:58	25° \mathcal{B} 04'12	27°25'28
evening max el	8669 Dec 02 00:34	12° \mathcal{B} 13'27	27°25'33		8670 Nov 20 18:14	0° \mathcal{B}	
retrograde	8669 Dec 15 15:01	19° \mathcal{B} 33'02		retrograde	8670 Nov 28 05:23	2° \mathcal{B} 19'34	
evening set	8669 Dec 22 14:10	16° \mathcal{B} 59'23		evening set	8670 Dec 05 07:38	29° \mathcal{B} 56'41	
min. Earth dist.	8669 Dec 26 09:11	13° \mathcal{B} 36'25	0.64095 AU		8670 Dec 05 05:37	30° \mathcal{B} 11'12	
inferior conj	8669 Dec 28 21:21	10° \mathcal{B} 59'25	-1°48'08	min. Earth dist.	8670 Dec 08 23:57	27° \mathcal{B} 01'24	0.62211 AU
minimum elong	8669 Dec 29 00:43	10° \mathcal{B} 50'36	1°46'33	inferior conj	8670 Dec 11 22:19	24° \mathcal{B} 17'57	-2°58'48
asc. node	8670 Jan 03 07:25	6° \mathcal{B} 14'12		minimum elong	8670 Dec 12 04:02	24° \mathcal{B} 04'38	2°56'29
morning rise	8670 Jan 04 12:59	5° \mathcal{B} 37'04		morning rise	8670 Dec 19 02:38	19° \mathcal{B} 13'31	
direct	8670 Jan 07 00:19	5° \mathcal{B} 06'22		direct	8670 Dec 21 08:57	18° \mathcal{B} 50'47	
morning max el	8670 Jan 13 11:40	8° \mathcal{B} 28'38	17°50'52	asc. node	8670 Dec 21 04:28	18° \mathcal{B} 50'56	
	8670 Jan 27 23:30	0° \mathcal{B}		morning max el	8670 Dec 28 04:32	22° \mathcal{B} 18'51	17°49'18
morning set	8670 Jan 30 07:33	3° \mathcal{B} 58'01			8671 Jan 03 03:22	0° \mathcal{B}	
desc. node	8670 Feb 06 20:07	16° \mathcal{B} 37'25		morning set	8671 Jan 13 00:46	16° \mathcal{B} 55'54	
					8671 Jan 20 10:19	0° \mathcal{B}	
superior conj	8670 Feb 12 09:22	25° \mathcal{B} 43'08	-0°39'44	superior conj	8671 Jan 24 06:06	6° \mathcal{B} 33'33	0°03'24
minimum elong	8670 Feb 12 04:54	25° \mathcal{B} 25'06	0°38'57	minimum elong	8671 Jan 24 06:26	6° \mathcal{B} 34'59	0°03'32
	8670 Feb 15 01:13	0° \mathcal{B}		behind sun begin	8671 Jan 23 21:48	5° \mathcal{B} 58'24	
max. Earth dist.	8670 Feb 17 15:35	4° \mathcal{B} 08'11	1.44848 AU	behind sun end	8671 Jan 24 15:03	7° \mathcal{B} 11'28	
evening rise	8670 Feb 28 05:05	20° \mathcal{B} 35'11		desc. node	8671 Jan 24 17:05	7° \mathcal{B} 20'02	
	8670 Mar 06 09:27	0° \mathcal{B}		max. Earth dist.	8671 Jan 31 07:41	18° \mathcal{B} 15'50	1.43534 AU
evening max el	8670 Mar 27 22:27	29° \mathcal{B} 39'47	20°20'25	evening rise	8671 Feb 07 19:00	0° \mathcal{B} 06'48	
	8670 Mar 28 06:31	0° \mathcal{B}					

	8671 Feb 07 17:15	0° H			8672 Jan 31 18:19	0° H		
	8671 Feb 28 00:52	0° Y		evening max el	8672 Feb 21 12:37	27° H 02'14	22°49'10	
evening max el	8671 Mar 10 19:49	13° Y 19'56	21°30'55		8672 Feb 24 19:07	0° Y		
asc. node	8671 Mar 19 03:21	18° Y 35'21		retrograde	8672 Mar 02 14:45	3° Y 01'00		
retrograde	8671 Mar 19 18:36	18° Y 37'24		asc. node	8672 Mar 05 00:29	2° Y 32'10		
evening set	8671 Mar 24 03:02	16° Y 52'49		evening set	8672 Mar 07 10:23	1° Y 01'38		
inferior conj	8671 Mar 29 10:18	10° Y 36'19	2°49'01		8672 Mar 08 12:49	30° R H		
minimum elong	8671 Mar 29 08:15	10° Y 43'27	2°48'33	inferior conj	8672 Mar 12 19:06	24° H 37'14	2°18'02	
min. Earth dist.	8671 Mar 29 15:05	10° Y 19'39	0.68324 AU	minimum elong	8672 Mar 12 16:51	24° H 45'02	2°17'24	
morning rise	8671 Apr 03 13:19	4° Y 23'10		min. Earth dist.	8672 Mar 12 11:47	25° H 02'37	0.68453 AU	
direct	8671 Apr 08 15:18	2° Y 10'29		morning rise	8672 Mar 17 23:12	18° H 28'54		
morning max el	8671 Apr 18 18:10	8° Y 10'28	22°59'32	direct	8672 Mar 22 11:19	16° H 37'51		
desc. node	8671 Apr 22 16:56	12° Y 30'51		morning max el	8672 Mar 31 07:53	21° H 46'37	21°33'11	
	8671 May 05 19:07	0° B			8672 Apr 07 08:45	0° Y		
morning set	8671 May 23 06:21	27° B 08'19		desc. node	8672 Apr 08 13:53	1° Y 35'22		
	8671 May 24 23:26	0° II			8672 Apr 28 01:45	0° B		
max. Earth dist.	8671 May 27 15:29	4° II 32'33	1.39843 AU	morning set	8672 May 02 05:27	6° B 31'10		
				max. Earth dist.	8672 May 08 16:05	16° B 56'51	1.42003 AU	
superior conj	8671 Jun 04 08:57	18° II 16'30	-1°31'42					
minimum elong	8671 Jun 04 14:31	18° II 42'04	1°31'11	superior conj	8672 May 16 05:00	29° B 42'22	-1°56'59	
	8671 Jun 10 15:12	0° B		minimum elong	8672 May 16 10:38	0° II 06'50	1°56'43	
evening rise	8671 Jun 14 01:51	6° B 34'57			8672 May 16 09:04	0° II		
asc. node	8671 Jun 15 02:17	8° B 31'33		evening rise	8672 May 27 06:29	19° II 31'03		
	8671 Jun 27 22:09	0° Ω		asc. node	8672 May 31 23:20	28° II 02'32		
evening max el	8671 Jun 30 03:47	2° Ω 28'54	18°31'30		8672 Jun 02 01:51	0° B		
retrograde	8671 Jul 07 22:19	6° Ω 21'21		evening max el	8672 Jun 12 13:39	15° B 18'01	18°09'14	
evening set	8671 Jul 10 00:59	6° Ω 05'05		retrograde	8672 Jun 19 10:24	18° B 46'39		
inferior conj	8671 Jul 17 17:54	1° Ω 35'46	0°34'32	evening set	8672 Jun 21 20:47	18° B 20'57		
minimum elong	8671 Jul 17 19:09	1° Ω 33'20	0°33'54	inferior conj	8672 Jun 28 19:08	13° B 31'15	1°52'38	
desc. node	8671 Jul 19 16:16	0° Ω 04'47		minimum elong	8672 Jun 28 22:04	13° B 24'34	1°51'31	
	8671 Jul 19 18:43	30° R B		min. Earth dist.	8672 Jul 02 03:01	10° B 30'52	0.59990 AU	
min. Earth dist.	8671 Jul 21 01:53	29° B 00'40	0.57799 AU	morning rise	8672 Jul 05 20:27	7° B 43'25		
morning rise	8671 Jul 25 09:47	26° B 16'33		desc. node	8672 Jul 05 13:21	7° B 54'28		
direct	8671 Jul 31 07:21	24° B 47'49		direct	8672 Jul 12 08:01	5° B 43'18		
	8671 Aug 11 23:52	0° Ω		morning max el	8672 Jul 26 16:12	13° B 37'46	27°43'17	
morning max el	8671 Aug 14 16:27	2° Ω 25'41	26°53'19		8672 Aug 08 18:06	0° Ω		
	8671 Sep 03 11:56	0° H			8672 Aug 25 19:46	0° H		
asc. node	8671 Sep 11 01:54	14° H 29'57		morning set	8672 Aug 27 18:09	3° H 58'42		
morning set	8671 Sep 13 12:03	19° H 32'49		asc. node	8672 Aug 27 22:51	4° H 23'18		
	8671 Sep 18 07:32	0° Ω		max. Earth dist.	8672 Sep 02 23:54	17° H 26'27	1.31665 AU	
superior conj	8671 Sep 20 10:47	4° Ω 44'09	1°22'26	superior conj	8672 Sep 03 22:14	19° H 30'02	1°05'41	
minimum elong	8671 Sep 20 08:40	4° Ω 32'25	1°22'10	minimum elong	8672 Sep 03 20:00	19° H 17'40	1°05'16	
max. Earth dist.	8671 Sep 20 14:07	5° Ω 02'43	1.31676 AU		8672 Sep 08 16:21	0° Ω		
evening rise	8671 Sep 27 06:35	19° Ω 38'48		evening rise	8672 Sep 10 16:02	4° Ω 17'55		
	8671 Oct 02 08:24	0° L			8672 Sep 24 04:37	0° L		
desc. node	8671 Oct 15 14:57	22° L 41'15		desc. node	8672 Oct 01 12:04	10° L 41'06		
	8671 Oct 21 00:40	0° J		evening max el	8672 Oct 08 10:04	18° L 28'54	25°45'35	
evening max el	8671 Oct 27 13:49	7° J 11'41	26°51'50	retrograde	8672 Oct 22 08:15	25° L 31'29		
retrograde	8671 Nov 10 11:47	14° J 21'02		evening set	8672 Oct 28 12:47	24° L 01'48		
evening set	8671 Nov 17 08:48	12° J 19'47		min. Earth dist.	8672 Nov 01 22:38	21° L 25'33	0.58078 AU	
min. Earth dist.	8671 Nov 21 04:07	9° J 41'54	0.60146 AU	inferior conj	8672 Nov 05 00:22	19° L 15'01	-5°05'54	
inferior conj	8671 Nov 24 08:27	7° J 06'19	-4°08'02	minimum elong	8672 Nov 05 06:50	19° L 03'31	5°04'36	
minimum elong	8671 Nov 24 15:47	6° J 51'21	4°05'44	morning rise	8672 Nov 13 03:13	14° L 53'51		
morning rise	8671 Dec 02 01:14	2° J 22'40		direct	8672 Nov 15 10:45	14° L 36'56		
direct	8671 Dec 04 05:49	2° J 04'28		asc. node	8672 Nov 23 22:32	18° L 41'53		
asc. node	8671 Dec 08 01:31	3° J 02'40		morning max el	8672 Nov 23 23:23	18° L 43'55	18°44'33	
morning max el	8671 Dec 11 17:41	5° J 47'25	18°06'36		8672 Dec 02 06:22	0° J		
morning set	8671 Dec 27 09:57	0° B 38'11		morning set	8672 Dec 10 06:15	14° J 50'53		
	8671 Dec 27 01:47	0° B			8672 Dec 18 01:46	0° B		
superior conj	8672 Jan 06 03:30	18° B 34'01	0°39'59	superior conj	8672 Dec 18 21:14	1° B 32'08	1°07'47	
minimum elong	8672 Jan 06 06:23	18° B 46'51	0°39'46	minimum elong	8672 Dec 19 00:34	1° B 47'49	1°07'35	
desc. node	8672 Jan 11 14:03	28° B 04'40		max. Earth dist.	8672 Dec 26 01:47	14° B 39'07	1.39598 AU	
	8672 Jan 12 17:10	0° \approx		desc. node	8672 Dec 28 11:02	18° B 48'00		
max. Earth dist.	8672 Jan 13 18:46	1° \approx 47'52	1.41712 AU	evening rise	8672 Dec 30 02:01	21° B 34'06		
evening rise	8672 Jan 18 23:48	10° \approx 21'35			8673 Jan 04 04:45	0° \approx		

	8673 Jan 24 19:13	0°♄		desc. node	8673 Dec 15 08:01	9°♄25'49	
evening max el	8673 Feb 03 02:47	10°♄48'25	24°09'20		8673 Dec 28 05:55	0°♄	
retrograde	8673 Feb 14 07:30	17°♄22'45		evening max el	8674 Jan 16 15:59	24°♄36'22	25°24'36
evening set	8673 Feb 19 15:20	15°♄09'29			8674 Jan 23 11:23	0°♄	
asc. node	8673 Feb 19 21:35	14°♄55'53		retrograde	8674 Jan 28 19:45	1°♄36'48	
min. Earth dist.	8673 Feb 24 08:08	9°♄45'01	0.68175 AU		8674 Feb 02 15:03	30°♄	
inferior conj	8673 Feb 25 03:02	8°♄41'09	1°38'18	evening set	8674 Feb 03 16:19	29°♄11'38	
minimum elong	8673 Feb 25 01:03	8°♄47'51	1°37'41	asc. node	8674 Feb 06 18:42	25°♄58'44	
morning rise	8673 Mar 02 10:49	2°♄39'11		min. Earth dist.	8674 Feb 08 01:50	24°♄21'57	0.67505 AU
direct	8673 Mar 06 09:41	1°♄10'16		inferior conj	8674 Feb 09 08:15	22°♄43'55	0°50'12
morning max el	8673 Mar 14 04:33	5°♄34'39	20°17'06	minimum elong	8674 Feb 09 07:03	22°♄47'47	0°49'51
desc. node	8673 Mar 26 10:49	21°♄13'15		morning rise	8674 Feb 14 22:09	16°♄50'07	
	8673 Apr 01 10:30	0°♄		direct	8674 Feb 18 08:52	15°♄41'51	
morning set	8673 Apr 11 06:57	14°♄58'17		morning max el	8674 Feb 25 09:10	19°♄33'42	19°15'07
	8673 Apr 20 20:19	0°♄			8674 Mar 05 17:32	0°♄	
max. Earth dist.	8673 Apr 21 00:18	0°♄15'58	1.43801 AU	greatest brilliancy	8674 Mar 10 11:20	6°♄56'46	-0.7m
				desc. node	8674 Mar 13 07:42	11°♄14'54	
superior conj	8673 Apr 27 01:15	10°♄05'05	-2°11'03	morning set	8674 Mar 21 07:12	23°♄30'06	
minimum elong	8673 Apr 27 03:23	10°♄13'54	2°11'09		8674 Mar 25 11:53	0°♄	
	8673 May 08 19:08	0°♄		max. Earth dist.	8674 Apr 03 15:10	14°♄16'42	1.45018 AU
evening rise	8673 May 09 18:02	1°♄39'22					
asc. node	8673 May 18 20:24	17°♄12'04		superior conj	8674 Apr 06 21:29	19°♄26'21	-2°07'46
evening max el	8673 May 27 02:46	28°♄30'21	18°06'15	minimum elong	8674 Apr 06 16:41	19°♄07'19	2°07'39
	8673 May 28 19:40	0°♄			8674 Apr 13 11:37	0°♄	
retrograde	8673 Jun 02 13:04	1°♄50'49		evening rise	8674 Apr 21 07:54	12°♄50'32	
evening set	8673 Jun 05 07:00	1°♄13'08			8674 May 01 19:38	0°♄	
	8673 Jun 07 08:03	30°♄		asc. node	8674 May 05 17:27	5°♄52'27	
inferior conj	8673 Jun 11 14:21	26°♄03'48	2°43'40	evening max el	8674 May 10 15:52	11°♄56'49	18°21'55
minimum elong	8673 Jun 11 17:02	25°♄56'49	2°42'52	retrograde	8674 May 17 01:46	15°♄23'34	
min. Earth dist.	8673 Jun 14 12:32	23°♄02'22	0.62237 AU	evening set	8674 May 20 03:00	14°♄32'23	
morning rise	8673 Jun 18 01:12	19°♄57'55		inferior conj	8674 May 25 23:25	9°♄05'10	3°11'57
desc. node	8673 Jun 22 10:24	17°♄49'13		minimum elong	8674 May 26 00:57	9°♄00'41	3°11'34
direct	8673 Jun 24 19:04	17°♄31'42		min. Earth dist.	8674 May 28 07:25	6°♄23'15	0.64277 AU
morning max el	8673 Jul 08 21:56	25°♄33'26	27°55'14	morning rise	8674 May 31 21:52	2°♄49'52	
	8673 Jul 13 00:03	0°♄		direct	8674 Jun 07 14:32	0°♄07'49	
	8673 Aug 02 06:21	0°♄		desc. node	8674 Jun 09 07:25	0°♄17'15	
morning set	8673 Aug 11 18:39	18°♄05'30		morning max el	8674 Jun 21 07:30	8°♄07'27	27°30'38
asc. node	8673 Aug 14 19:48	24°♄25'01			8674 Jul 08 05:28	0°♄	
	8673 Aug 17 10:27	0°♄			8674 Jul 25 13:20	0°♄	
max. Earth dist.	8673 Aug 17 06:23	29°♄38'02	1.32125 AU	morning set	8674 Jul 26 11:07	1°♄46'35	
				max. Earth dist.	8674 Jul 31 05:52	11°♄28'03	1.33063 AU
superior conj	8673 Aug 19 07:37	4°♄05'40	0°44'14	asc. node	8674 Aug 01 16:46	14°♄30'53	
minimum elong	8673 Aug 19 05:46	3°♄55'35	0°43'46				
evening rise	8673 Aug 26 03:26	18°♄59'41		superior conj	8674 Aug 03 12:56	18°♄25'28	0°18'31
	8673 Aug 31 11:28	0°♄		minimum elong	8674 Aug 03 12:02	18°♄20'39	0°18'11
desc. node	8673 Sep 18 09:10	27°♄25'10			8674 Aug 08 21:58	0°♄	
evening max el	8673 Sep 19 23:09	29°♄00'55	24°14'55	evening rise	8674 Aug 10 14:52	3°♄38'29	
	8673 Sep 21 00:35	0°♄			8674 Aug 24 22:15	0°♄	
retrograde	8673 Oct 03 16:35	5°♄53'47		evening max el	8674 Sep 01 10:53	9°♄12'49	22°35'20
evening set	8673 Oct 08 16:04	4°♄59'11		desc. node	8674 Sep 05 06:17	12°♄25'40	
min. Earth dist.	8673 Oct 14 09:57	2°♄06'14	0.56277 AU	retrograde	8674 Sep 14 12:51	15°♄44'24	
inferior conj	8673 Oct 16 19:56	0°♄36'26	-5°36'02	evening set	8674 Sep 18 00:04	15°♄17'59	
minimum elong	8673 Oct 16 21:19	0°♄34'16	5°35'54	min. Earth dist.	8674 Sep 25 18:07	11°♄51'22	0.55050 AU
	8673 Oct 17 19:31	30°♄		inferior conj	8674 Sep 26 21:20	11°♄12'44	-5°19'07
morning rise	8673 Oct 25 04:39	26°♄36'26		minimum elong	8674 Sep 26 15:07	11°♄21'35	5°18'14
direct	8673 Oct 27 20:41	26°♄17'41		morning rise	8674 Oct 05 08:04	7°♄24'51	
	8673 Nov 05 16:13	0°♄		direct	8674 Oct 08 12:49	7°♄01'33	
morning max el	8673 Nov 06 18:05	0°♄58'00	19°44'45	morning max el	8674 Oct 19 23:50	12°♄23'55	21°07'05
asc. node	8673 Nov 10 19:33	5°♄33'46		asc. node	8674 Oct 28 16:31	23°♄23'02	
morning set	8673 Nov 24 09:56	29°♄23'08			8674 Nov 01 14:02	0°♄	
	8673 Nov 24 17:14	0°♄		morning set	8674 Nov 08 18:22	14°♄07'24	
superior conj	8673 Dec 02 06:14	15°♄13'27	1°26'43	superior conj	8674 Nov 16 02:14	29°♄26'08	1°37'32
minimum elong	8673 Dec 02 08:49	15°♄26'15	1°26'41	minimum elong	8674 Nov 16 03:35	29°♄33'05	1°37'38
max. Earth dist.	8673 Dec 08 07:51	26°♄53'56	1.37437 AU		8674 Nov 16 08:48	0°♄	
	8673 Dec 10 00:12	0°♄		max. Earth dist.	8674 Nov 20 17:37	8°♄49'18	1.35459 AU
evening rise	8673 Dec 12 01:29	3°♄42'24		evening rise	8674 Nov 24 19:10	16°♄39'00	

desc. node	8674 Dec 02 05:02	29°♄54'03		minimum elong	8675 Oct 31 05:49	13°♍59'08	1°41'16
	8674 Dec 02 06:26	0°♂		max. Earth dist.	8675 Nov 03 10:41	20°♍44'25	1.33829 AU
	8674 Dec 22 16:04	0°♌		evening rise	8675 Nov 08 03:05	0°♄13'08	
evening max el	8674 Dec 30 05:09	8°♌21'29	26°27'45		8675 Nov 08 00:24	0°♄	
retrograde	8675 Jan 12 02:54	15°♌37'23		desc. node	8675 Nov 19 02:06	20°♄06'33	
evening set	8675 Jan 18 11:35	13°♌03'52			8675 Nov 25 07:41	0°♂	
min. Earth dist.	8675 Jan 22 14:42	8°♌48'53	0.66460 AU	evening max el	8675 Dec 12 18:08	21°♂55'01	27°11'40
inferior conj	8675 Jan 24 08:46	6°♌42'04	-0°05'50	retrograde	8675 Dec 26 04:17	29°♂16'15	
minimum elong	8675 Jan 24 08:55	6°♌41'36	0°05'36	evening set	8676 Jan 01 23:04	26°♂40'24	
transit middle	8675 Jan 24 08:55	6°♌41'36	0°05'36	min. Earth dist.	8676 Jan 05 20:37	22°♂59'04	0.65050 AU
transit begin	8675 Jan 24 06:12	6°♌49'49		inferior conj	8676 Jan 08 02:21	20°♂30'24	-1°09'05
transit end	8675 Jan 24 11:38	6°♌33'24		minimum elong	8676 Jan 08 04:25	20°♂24'40	1°08'00
asc. node	8675 Jan 24 15:46	6°♌20'57		asc. node	8676 Jan 11 12:50	16°♂59'29	
morning rise	8675 Jan 30 07:07	0°♌58'29		morning rise	8676 Jan 14 11:12	14°♂59'30	
direct	8675 Feb 02 07:10	0°♌07'52		direct	8676 Jan 17 02:26	14°♂22'46	
morning max el	8675 Feb 08 20:41	3°♌39'52	18°29'04	morning max el	8676 Jan 23 12:38	17°♂46'02	17°59'48
	8675 Feb 27 04:53	0°♋			8676 Feb 01 13:55	0°♌	
desc. node	8675 Feb 28 04:36	1°♋34'03		morning set	8676 Feb 10 07:57	14°♌18'08	
morning set	8675 Mar 01 04:45	3°♋09'48		desc. node	8676 Feb 15 01:33	22°♌05'37	
					8676 Feb 19 22:24	0°♋	
superior conj	8675 Mar 17 03:17	28°♋15'12	-1°44'15	superior conj	8676 Feb 24 13:14	7°♋23'00	-1°05'14
minimum elong	8675 Mar 16 17:47	27°♋38'01	1°43'23	minimum elong	8676 Feb 24 05:48	6°♋53'27	1°04'11
max. Earth dist.	8675 Mar 17 09:45	28°♋40'32	1.45531 AU	max. Earth dist.	8676 Feb 28 05:09	13°♋10'05	1.45300 AU
	8675 Mar 18 06:04	0°♎			8676 Mar 10 00:46	0°♎	
evening rise	8675 Apr 01 22:05	23°♎03'44		evening rise	8676 Mar 11 16:44	2°♎34'08	
	8675 Apr 06 07:14	0°♏		greatest brilliancy	8676 Mar 25 15:46	23°♎47'30	-0.7m
greatest brilliancy	8675 Apr 11 05:42	7°♏46'13	-0.8m		8676 Mar 29 23:15	0°♏	
asc. node	8675 Apr 22 14:32	23°♏54'25		evening max el	8676 Apr 06 08:20	9°♏09'06	19°45'20
evening max el	8675 Apr 24 02:20	25°♏31'01	18°55'24	asc. node	8676 Apr 08 11:38	11°♏06'28	
retrograde	8675 Apr 30 20:36	29°♏16'47		retrograde	8676 Apr 13 18:27	13°♏24'39	
evening set	8675 May 04 05:22	28°♏11'17		evening set	8676 Apr 17 11:33	12°♏04'14	
inferior conj	8675 May 09 18:30	22°♏27'54	3°22'14	inferior conj	8676 Apr 22 20:30	6°♏06'29	3°18'16
minimum elong	8675 May 09 18:44	22°♏27'11	3°22'04	minimum elong	8676 Apr 22 19:34	6°♏09'34	3°18'05
min. Earth dist.	8675 May 11 11:14	20°♏19'42	0.65966 AU	min. Earth dist.	8676 Apr 23 22:27	4°♏39'49	0.67233 AU
morning rise	8675 May 15 07:33	16°♏09'18			8676 Apr 27 22:15	30°♎♎	
direct	8675 May 21 17:22	13°♏23'06		morning rise	8676 Apr 28 03:17	29°♎48'24	
desc. node	8675 May 27 04:24	15°♏00'38		direct	8676 May 04 02:22	27°♎08'58	
morning max el	8675 Jun 03 18:08	21°♏07'59	26°35'35		8676 May 11 04:35	0°♏	
	8675 Jun 11 10:19	0°♐		desc. node	8676 May 13 01:23	1°♏28'38	
	8675 Jul 01 09:39	0°♑		morning max el	8676 May 16 03:52	4°♏23'03	25°19'03
morning set	8675 Jul 09 16:15	14°♑52'35			8676 Jun 04 18:50	0°♐	
max. Earth dist.	8675 Jul 13 19:00	22°♑50'19	1.34488 AU	morning set	8676 Jun 21 05:53	27°♐12'17	
	8675 Jul 17 08:14	0°♒			8676 Jun 22 18:50	0°♑	
superior conj	8675 Jul 18 11:54	2°♒22'26	-0°10'47	max. Earth dist.	8676 Jun 24 21:24	3°♑54'02	1.36359 AU
minimum elong	8675 Jul 18 12:31	2°♒25'35	0°10'51	superior conj	8676 Jul 01 01:42	15°♑49'34	-0°42'24
behind sun begin	8675 Jul 18 08:10	2°♒03'10		minimum elong	8676 Jul 01 04:17	16°♑02'24	0°42'07
behind sun end	8675 Jul 18 16:51	2°♒48'02		asc. node	8676 Jul 05 10:42	24°♑38'00	
asc. node	8675 Jul 19 13:43	4°♒36'25			8676 Jul 08 01:55	0°♒	
evening rise	8675 Jul 26 00:22	18°♒07'43		evening rise	8676 Jul 09 05:44	2°♒21'21	
	8675 Jul 31 22:23	0°♓			8676 Jul 25 19:49	0°♓	
evening max el	8675 Aug 14 06:21	19°♓40'31	21°03'00	evening max el	8676 Jul 26 14:58	0°♓49'09	19°47'54
desc. node	8675 Aug 23 03:24	25°♓10'13		retrograde	8676 Aug 05 17:17	5°♓48'14	
retrograde	8675 Aug 26 01:32	25°♓31'22		evening set	8676 Aug 07 13:55	5°♓38'50	
evening set	8675 Aug 28 08:23	25°♓19'03		desc. node	8676 Aug 09 00:30	5°♓19'19	
inferior conj	8675 Sep 06 13:51	21°♓22'18	-4°06'47	inferior conj	8676 Aug 16 11:59	1°♓37'18	-2°16'52
minimum elong	8675 Sep 06 04:15	21°♓35'53	4°04'07	minimum elong	8676 Aug 16 05:45	1°♓46'54	2°14'38
min. Earth dist.	8675 Sep 07 02:55	21°♓03'49	0.54673 AU	min. Earth dist.	8676 Aug 18 14:16	0°♓20'02	0.55262 AU
morning rise	8675 Sep 15 00:29	17°♓27'21			8676 Aug 19 03:37	30°♎♒	
direct	8675 Sep 18 20:46	16°♓55'36		morning rise	8676 Aug 24 19:36	27°♒15'39	
morning max el	8675 Oct 01 18:04	23°♓04'40	22°46'58	direct	8676 Aug 29 10:45	26°♒28'20	
	8675 Oct 07 20:58	0°♑			8676 Sep 08 05:42	0°♓	
asc. node	8675 Oct 15 13:28	11°♑55'27		morning max el	8676 Sep 12 06:31	3°♓19'34	24°33'03
morning set	8675 Oct 24 05:21	28°♑56'25			8676 Sep 30 21:39	0°♑	
	8675 Oct 24 17:21	0°♒		asc. node	8676 Oct 01 10:26	1°♑00'37	
superior conj	8675 Oct 31 05:46	13°♒58'51	1°41'08	morning set	8676 Oct 07 17:07	13°♑45'15	

superior conj	8676 Oct 14 14:09	28° <u>♄</u> 43'33	1°38'21	superior conj	8677 Sep 29 01:13	13° <u>♄</u> 33'33	1°29'47
minimum elong	8676 Oct 14 13:06	28° <u>♄</u> 37'47	1°38'23	minimum elong	8677 Sep 28 23:22	13° <u>♄</u> 23'21	1°29'39
	8676 Oct 15 04:10	0° <u>♄</u>		max. Earth dist.	8677 Sep 29 19:26	15° <u>♄</u> 14'22	1.31897 AU
max. Earth dist.	8676 Oct 16 11:56	2° <u>♄</u> 52'30	1.32637 AU	evening rise	8677 Oct 06 00:01	28° <u>♄</u> 38'08	
evening rise	8676 Oct 21 21:42	14° <u>♄</u> 15'34			8677 Oct 06 15:44	0° <u>♄</u>	
	8676 Oct 30 02:55	0° <u>♄</u>		desc. node	8677 Oct 22 20:15	29° <u>♄</u> 14'44	
desc. node	8676 Nov 04 23:10	9° <u>♄</u> 56'26			8677 Oct 23 08:11	0° <u>♄</u>	
	8676 Nov 19 09:26	0° <u>♄</u>		evening max el	8677 Nov 06 13:24	17° <u>♄</u> 40'53	27°15'24
evening max el	8676 Nov 24 05:42	5° <u>♄</u> 05'51	27°29'25	retrograde	8677 Nov 20 10:02	24° <u>♄</u> 52'53	
retrograde	8676 Dec 07 23:03	12° <u>♄</u> 24'19		evening set	8677 Nov 27 11:12	22° <u>♄</u> 38'14	
evening set	8676 Dec 15 00:04	9° <u>♄</u> 54'14		min. Earth dist.	8677 Dec 01 04:02	19° <u>♄</u> 51'42	0.61349 AU
min. Earth dist.	8676 Dec 18 17:35	6° <u>♄</u> 43'36	0.63322 AU	inferior conj	8677 Dec 04 05:29	17° <u>♄</u> 10'00	-3°28'46
inferior conj	8676 Dec 21 10:18	4° <u>♄</u> 02'21	-2°17'54	minimum elong	8677 Dec 04 12:03	16° <u>♄</u> 55'31	3°26'21
minimum elong	8676 Dec 21 14:41	3° <u>♄</u> 51'25	2°15'57	morning rise	8677 Dec 11 15:12	12° <u>♄</u> 13'42	
	8676 Dec 26 00:28	30° <u>♄</u>		direct	8677 Dec 13 20:22	11° <u>♄</u> 53'13	
morning rise	8676 Dec 28 07:15	28° <u>♄</u> 47'02		asc. node	8677 Dec 15 06:59	12° <u>♄</u> 02'12	
asc. node	8676 Dec 28 09:55	28° <u>♄</u> 44'37		morning max el	8677 Dec 20 21:46	15° <u>♄</u> 26'32	17°54'12
direct	8676 Dec 30 16:00	28° <u>♄</u> 20'14			8677 Dec 30 23:58	0° <u>♄</u>	
	8677 Jan 04 05:15	0° <u>♄</u>		morning set	8678 Jan 05 14:04	10° <u>♄</u> 01'56	
morning max el	8677 Jan 06 06:04	1° <u>♄</u> 44'16	17°47'53				
morning set	8677 Jan 22 13:15	26° <u>♄</u> 42'15		superior conj	8678 Jan 16 02:56	28° <u>♄</u> 52'22	0°19'55
	8677 Jan 24 10:55	0° <u>♄</u>		minimum elong	8678 Jan 16 04:39	28° <u>♄</u> 59'47	0°19'50
desc. node	8677 Jan 31 22:29	12° <u>♄</u> 45'06			8678 Jan 16 18:35	0° <u>♄</u>	
				desc. node	8678 Jan 18 19:26	3° <u>♄</u> 29'06	
superior conj	8677 Feb 03 19:17	17° <u>♄</u> 30'45	-0°20'55	max. Earth dist.	8678 Jan 23 13:49	11° <u>♄</u> 26'44	1.42817 AU
minimum elong	8677 Feb 03 17:04	17° <u>♄</u> 21'37	0°20'26	evening rise	8678 Jan 29 23:04	21° <u>♄</u> 42'34	
max. Earth dist.	8677 Feb 09 23:11	27° <u>♄</u> 30'27	1.44361 AU		8678 Feb 04 07:28	0° <u>♄</u>	
	8677 Feb 11 12:47	0° <u>♄</u>			8678 Feb 25 11:45	0° <u>♄</u>	
evening rise	8677 Feb 19 03:56	11° <u>♄</u> 54'32		evening max el	8678 Mar 03 04:19	6° <u>♄</u> 30'15	22°03'33
	8677 Mar 03 04:10	0° <u>♄</u>		retrograde	8678 Mar 12 14:21	12° <u>♄</u> 04'55	
evening max el	8677 Mar 20 08:56	22° <u>♄</u> 48'46	20°49'17	asc. node	8678 Mar 13 05:52	12° <u>♄</u> 02'48	
asc. node	8677 Mar 26 08:45	27° <u>♄</u> 14'08		evening set	8678 Mar 17 03:31	10° <u>♄</u> 13'52	
retrograde	8677 Mar 28 16:58	27° <u>♄</u> 41'56		inferior conj	8678 Mar 22 11:13	3° <u>♄</u> 53'46	2°36'58
evening set	8677 Apr 01 19:29	26° <u>♄</u> 06'12		minimum elong	8678 Mar 22 09:02	4° <u>♄</u> 01'23	2°36'25
inferior conj	8677 Apr 07 02:47	19° <u>♄</u> 56'02	3°02'38	min. Earth dist.	8678 Mar 22 10:45	3° <u>♄</u> 55'25	0.68440 AU
minimum elong	8677 Apr 07 01:02	20° <u>♄</u> 02'04	3°02'17		8678 Mar 25 09:40	30° <u>♄</u>	
min. Earth dist.	8677 Apr 07 15:00	19° <u>♄</u> 13'51	0.68057 AU	morning rise	8678 Mar 27 14:24	27° <u>♄</u> 42'44	
morning rise	8677 Apr 12 06:21	13° <u>♄</u> 40'46		direct	8678 Apr 01 10:32	25° <u>♄</u> 39'00	
direct	8677 Apr 17 16:27	11° <u>♄</u> 16'35			8678 Apr 09 16:22	0° <u>♄</u>	
morning max el	8677 Apr 28 12:53	17° <u>♄</u> 45'29	23°51'11	morning max el	8678 Apr 10 23:57	1° <u>♄</u> 16'06	22°21'53
desc. node	8677 Apr 29 22:22	19° <u>♄</u> 12'54		desc. node	8678 Apr 16 19:20	7° <u>♄</u> 52'43	
	8677 May 08 18:11	0° <u>♄</u>			8678 May 02 15:42	0° <u>♄</u>	
	8677 May 28 20:29	0° <u>♄</u>		morning set	8678 May 14 13:32	18° <u>♄</u> 36'23	
morning set	8677 Jun 02 22:41	8° <u>♄</u> 30'51		max. Earth dist.	8678 May 19 15:44	27° <u>♄</u> 02'37	1.40798 AU
max. Earth dist.	8677 Jun 06 17:48	15° <u>♄</u> 07'18	1.38543 AU		8678 May 21 09:29	0° <u>♄</u>	
superior conj	8677 Jun 14 02:45	28° <u>♄</u> 37'18	-1°14'22	superior conj	8678 May 27 10:43	10° <u>♄</u> 35'47	-1°43'24
minimum elong	8677 Jun 14 07:24	28° <u>♄</u> 59'19	1°13'51	minimum elong	8678 May 27 16:37	11° <u>♄</u> 02'17	1°42'57
	8677 Jun 14 20:12	0° <u>♄</u>		evening rise	8678 Jun 06 16:32	29° <u>♄</u> 30'06	
asc. node	8677 Jun 22 07:43	14° <u>♄</u> 31'03			8678 Jun 06 22:55	0° <u>♄</u>	
evening rise	8677 Jun 23 04:13	16° <u>♄</u> 11'29		asc. node	8678 Jun 09 04:44	4° <u>♄</u> 11'22	
	8677 Jun 30 12:09	0° <u>♄</u>		evening max el	8678 Jun 22 18:21	25° <u>♄</u> 12'46	18°19'34
evening max el	8677 Jul 09 12:06	12° <u>♄</u> 42'05	18°53'24	retrograde	8678 Jun 30 02:06	28° <u>♄</u> 53'12	
retrograde	8677 Jul 17 23:59	16° <u>♄</u> 54'48		evening set	8678 Jul 02 08:04	28° <u>♄</u> 33'14	
evening set	8677 Jul 19 23:07	16° <u>♄</u> 42'10		inferior conj	8678 Jul 09 16:40	23° <u>♄</u> 54'49	1°11'10
desc. node	8677 Jul 26 21:36	13° <u>♄</u> 16'43		minimum elong	8678 Jul 09 18:57	23° <u>♄</u> 50'04	1°10'11
inferior conj	8677 Jul 28 03:28	12° <u>♄</u> 24'16	-0°22'46	min. Earth dist.	8678 Jul 13 01:58	21° <u>♄</u> 06'22	0.58704 AU
minimum elong	8677 Jul 28 02:31	12° <u>♄</u> 25'57	0°22'34	desc. node	8678 Jul 13 18:43	20° <u>♄</u> 33'52	
min. Earth dist.	8677 Jul 31 05:15	10° <u>♄</u> 13'45	0.56697 AU	morning rise	8678 Jul 17 02:33	18° <u>♄</u> 22'18	
morning rise	8677 Aug 05 02:38	7° <u>♄</u> 26'07		direct	8678 Jul 23 06:51	16° <u>♄</u> 40'23	
direct	8677 Aug 10 13:54	6° <u>♄</u> 14'37		morning max el	8678 Aug 06 16:07	24° <u>♄</u> 25'41	27°19'15
morning max el	8677 Aug 24 20:17	13° <u>♄</u> 37'39	26°09'10		8678 Aug 11 18:10	0° <u>♄</u>	
	8677 Sep 06 18:53	0° <u>♄</u>			8678 Aug 31 00:12	0° <u>♄</u>	
asc. node	8677 Sep 18 07:24	20° <u>♄</u> 29'53		asc. node	8678 Sep 05 04:20	10° <u>♄</u> 15'54	
morning set	8677 Sep 22 04:02	28° <u>♄</u> 29'25		morning set	8678 Sep 06 12:24	13° <u>♄</u> 03'20	
	8677 Sep 22 20:59	0° <u>♄</u>		max. Earth dist.	8678 Sep 13 05:33	27° <u>♄</u> 40'48	1.31614 AU

superior conj	8678 Sep 13 13:00	28° \cap 22'12	1°15'55	max. Earth dist.	8679 Aug 27 14:29	10° \cap 01'06	1.31796 AU
minimum elong	8678 Sep 13 10:47	28° \cap 09'51	1°15'36				
	8678 Sep 14 06:36	0° $\underline{\cap}$		superior conj	8679 Aug 28 23:47	13° \cap 04'15	0°57'09
evening rise	8678 Sep 20 07:28	13° $\underline{\cap}$ 12'44		minimum elong	8679 Aug 28 21:39	12° \cap 52'30	0°56'42
	8678 Sep 28 17:38	0° \cap		evening rise	8679 Sep 04 17:58	27° \cap 53'28	
desc. node	8678 Oct 09 17:22	17° \cap 48'06			8679 Sep 05 17:42	0° $\underline{\cap}$	
evening max el	8678 Oct 19 14:12	29° \cap 27'14	26°27'22		8679 Sep 22 12:51	0° \cap	
	8678 Oct 20 04:17	0° \mathcal{A}		desc. node	8679 Sep 26 14:28	5° \cap 18'47	
retrograde	8678 Nov 02 12:08	6° \mathcal{A} 33'18		evening max el	8679 Oct 01 06:48	10° \cap 22'32	25°09'12
evening set	8678 Nov 09 03:58	4° \mathcal{A} 44'19		retrograde	8679 Oct 15 03:56	17° \cap 22'34	
min. Earth dist.	8678 Nov 13 03:36	2° \mathcal{A} 09'38	0.59257 AU	evening set	8679 Oct 20 21:39	16° \cap 07'34	
	8678 Nov 15 23:18	30° $\mathcal{R}\cap$		min. Earth dist.	8679 Oct 25 18:26	13° \cap 26'39	0.57260 AU
inferior conj	8678 Nov 16 08:17	29° \cap 42'37	-4°34'45	inferior conj	8679 Oct 28 15:34	11° \cap 31'21	-5°23'16
minimum elong	8678 Nov 16 15:40	29° \cap 28'24	4°32'46	minimum elong	8679 Oct 28 20:27	11° \cap 23'10	5°22'32
morning rise	8678 Nov 24 05:46	25° \cap 08'32		morning rise	8679 Nov 05 21:34	7° \cap 20'05	
direct	8678 Nov 26 11:09	24° \cap 51'09		direct	8679 Nov 08 07:56	7° \cap 02'52	
asc. node	8678 Dec 02 04:01	26° \cap 52'42		morning max el	8679 Nov 17 09:43	11° \cap 22'38	19°07'24
morning max el	8678 Dec 04 08:13	28° \cap 42'42	18°20'06	asc. node	8679 Nov 19 01:01	13° \cap 04'36	
	8678 Dec 05 13:55	0° \mathcal{A}			8679 Nov 29 21:20	0° \mathcal{A}	
morning set	8678 Dec 20 04:30	23° \mathcal{A} 58'45		morning set	8679 Dec 04 04:18	8° \mathcal{A} 20'34	
	8678 Dec 23 08:18	0° \mathcal{B}					
superior conj	8678 Dec 29 09:40	11° \mathcal{B} 19'21	0°52'52	superior conj	8679 Dec 12 10:31	24° \mathcal{A} 37'42	1°16'50
minimum elong	8678 Dec 29 12:56	11° \mathcal{B} 34'17	0°52'38	minimum elong	8679 Dec 12 13:37	24° \mathcal{A} 52'41	1°16'42
desc. node	8679 Jan 05 16:24	24° \mathcal{B} 13'24			8679 Dec 15 06:16	0° \mathcal{B}	
max. Earth dist.	8679 Jan 05 23:22	24° \mathcal{B} 43'15	1.40840 AU	max. Earth dist.	8679 Dec 19 05:08	7° \mathcal{B} 16'12	1.38670 AU
	8679 Jan 09 02:31	0° \approx		evening rise	8679 Dec 23 00:07	13° \mathcal{B} 57'37	
evening rise	8679 Jan 10 12:37	2° \approx 20'55		desc. node	8679 Dec 23 13:22	14° \mathcal{B} 54'42	
	8679 Jan 28 15:51	0° \mathcal{H}			8680 Jan 01 18:29	0° \approx	
evening max el	8679 Feb 13 19:41	20° \mathcal{H} 13'33	23°23'17	evening max el	8680 Jan 23 14:52	0° \mathcal{H}	
retrograde	8679 Feb 24 09:12	26° \mathcal{H} 28'20		retrograde	8680 Jan 27 09:03	3° \mathcal{H} 59'53	24°42'15
asc. node	8679 Feb 28 03:00	25° \mathcal{H} 19'50			8680 Feb 08 00:19	10° \mathcal{H} 47'20	
evening set	8679 Mar 01 10:03	24° \mathcal{H} 22'35		evening set	8680 Feb 13 13:32	8° \mathcal{H} 28'32	
inferior conj	8679 Mar 06 19:52	17° \mathcal{H} 55'54	2°02'12	asc. node	8680 Feb 15 00:07	7° \mathcal{H} 05'59	
minimum elong	8679 Mar 06 17:40	18° \mathcal{H} 03'27	2°01'33	min. Earth dist.	8680 Feb 18 03:00	3° \mathcal{H} 18'47	0.67938 AU
min. Earth dist.	8679 Mar 06 07:29	18° \mathcal{H} 38'27	0.68390 AU	inferior conj	8680 Feb 19 02:52	1° \mathcal{H} 59'32	1°18'52
morning rise	8679 Mar 12 01:15	11° \mathcal{H} 50'19		minimum elong	8680 Feb 19 01:09	2° \mathcal{H} 05'15	1°18'21
direct	8679 Mar 16 07:34	10° \mathcal{H} 08'58			8680 Feb 20 15:31	30° $\mathcal{R}\approx$	
morning max el	8679 Mar 24 16:28	14° \mathcal{H} 57'25	20°59'15	morning rise	8680 Feb 24 12:58	26° \approx 00'48	
desc. node	8679 Apr 03 16:15	27° \mathcal{H} 12'21		direct	8680 Feb 28 06:23	24° \approx 41'09	
	8679 Apr 05 16:26	0° \mathcal{Y}		morning max el	8680 Mar 06 16:36	28° \approx 50'31	19°48'45
morning set	8679 Apr 24 01:55	27° \mathcal{Y} 30'47			8680 Mar 07 19:29	0° \mathcal{H}	
	8679 Apr 25 15:55	0° \mathcal{B}		greatest brilliancy	8680 Mar 19 13:50	15° \mathcal{H} 35'23	-0.6m
max. Earth dist.	8679 May 01 19:47	9° \mathcal{B} 52'03	1.42827 AU	desc. node	8680 Mar 20 13:08	17° \mathcal{H} 00'57	
					8680 Mar 29 04:17	0° \mathcal{Y}	
superior conj	8679 May 08 20:57	21° \mathcal{B} 34'52	-2°04'42	morning set	8680 Apr 01 23:41	5° \mathcal{Y} 50'23	
minimum elong	8679 May 09 01:38	21° \mathcal{B} 54'44	2°04'37	max. Earth dist.	8680 Apr 13 06:35	23° \mathcal{Y} 28'45	1.44394 AU
	8679 May 13 18:18	0° \cap			8680 Apr 17 08:22	0° \mathcal{B}	
evening rise	8679 May 20 14:30	12° \cap 07'19		superior conj	8680 Apr 18 06:29	1° \mathcal{B} 29'24	-2°12'05
asc. node	8679 May 27 01:47	23° \cap 34'03		minimum elong	8680 Apr 18 05:54	1° \mathcal{B} 27'01	2°12'12
	8679 May 30 23:21	0° \mathcal{B}		evening rise	8680 May 01 17:17	23° \mathcal{B} 51'46	
evening max el	8679 Jun 06 05:56	8° \mathcal{B} 12'23	18°05'37		8680 May 05 07:52	0° \cap	
retrograde	8679 Jun 12 21:07	11° \mathcal{B} 36'08		asc. node	8680 May 12 22:51	12° \cap 32'07	
evening set	8679 Jun 15 10:37	11° \mathcal{B} 05'42		evening max el	8680 May 19 19:23	21° \cap 31'22	18°10'44
inferior conj	8679 Jun 22 02:05	6° \mathcal{B} 07'19	2°17'23	retrograde	8680 May 26 04:31	24° \cap 53'00	
minimum elong	8679 Jun 22 05:05	6° \mathcal{B} 00'03	2°16'22	evening set	8680 May 29 01:28	24° \cap 09'53	
min. Earth dist.	8679 Jun 25 06:37	3° \mathcal{B} 03'32	0.60948 AU	inferior conj	8680 Jun 04 03:42	18° \cap 53'00	2°58'08
morning rise	8679 Jun 28 21:02	0° \mathcal{B} 10'13		minimum elong	8680 Jun 04 05:57	18° \cap 46'50	2°57'32
	8679 Jun 29 03:20	30° $\mathcal{R}\cap$		min. Earth dist.	8680 Jun 06 20:17	15° \cap 57'20	0.63136 AU
desc. node	8679 Jun 30 15:46	29° \cap 08'42		morning rise	8680 Jun 10 08:55	12° \cap 42'00	
direct	8679 Jul 05 12:00	27° \cap 58'08		desc. node	8680 Jun 16 12:49	10° \cap 08'26	
	8679 Jul 12 07:00	0° \mathcal{B}		direct	8680 Jun 17 03:07	10° \cap 07'18	
morning max el	8679 Jul 19 18:53	5° \mathcal{B} 57'21	27°53'14	morning max el	8680 Jul 01 02:36	18° \cap 10'28	27°48'56
	8679 Aug 06 20:25	0° \mathcal{B}			8680 Jul 11 00:36	0° \mathcal{B}	
morning set	8679 Aug 21 16:24	27° \mathcal{B} 22'04			8680 Jul 29 17:12	0° \mathcal{B}	
	8679 Aug 22 22:43	0° \cap		morning set	8680 Aug 04 13:47	11° \mathcal{B} 18'32	
asc. node	8679 Aug 23 01:15	0° \cap 13'20		asc. node	8680 Aug 08 22:11	20° \mathcal{B} 17'01	

max. Earth dist.	8680 Aug 09 18:11	22° Ω 03'01	1.32458 AU	asc. node	8681 Jul 26 19:09	10° Ω 23'01	
superior conj	8680 Aug 12 07:40	27° Ω 33'32	0°33'49	superior conj	8681 Jul 27 10:35	11° Ω 44'13	0°06'29
minimum elong	8680 Aug 12 06:09	27° Ω 25'20	0°33'23	minimum elong	8681 Jul 27 10:15	11° Ω 42'30	0°06'14
	8680 Aug 13 10:37	0° Π		behind sun begin	8681 Jul 27 05:05	11° Ω 15'11	
evening rise	8680 Aug 19 05:34	12° Π 33'56		behind sun end	8681 Jul 27 15:26	12° Ω 09'51	
	8680 Aug 27 23:42	0° Ω		evening rise	8681 Aug 03 16:24	27° Ω 08'56	
evening max el	8680 Sep 11 18:12	20° Ω 41'09	23°32'40		8681 Aug 05 01:04	0° Π	
desc. node	8680 Sep 12 11:35	21° Ω 22'13			8681 Aug 23 10:25	0° Ω	
retrograde	8680 Sep 25 07:16	27° Ω 27'26		evening max el	8681 Aug 24 08:20	0° Ω 55'37	21°54'24
evening set	8680 Sep 29 15:08	26° Ω 46'32		desc. node	8681 Aug 30 08:43	5° Ω 28'19	
min. Earth dist.	8680 Oct 06 04:15	23° Ω 40'49	0.55660 AU	retrograde	8681 Sep 05 22:49	7° Ω 11'18	
inferior conj	8680 Oct 08 02:42	22° Ω 31'55	-5°35'37	evening set	8681 Sep 08 20:05	6° Ω 52'40	
minimum elong	8680 Oct 08 00:50	22° Ω 34'42	5°35'28	inferior conj	8681 Sep 17 22:43	2° Ω 52'57	-4°54'46
morning rise	8680 Oct 16 12:35	18° Ω 38'31		minimum elong	8681 Sep 17 14:09	3° Ω 04'56	4°53'02
direct	8680 Oct 19 09:23	18° Ω 18'18		min. Earth dist.	8681 Sep 17 12:23	3° Ω 07'24	0.54777 AU
morning max el	8680 Oct 29 23:00	23° Ω 16'14	20°17'14		8681 Sep 23 14:49	30° Ω	
asc. node	8680 Nov 04 21:58	0° Π 22'07		morning rise	8681 Sep 26 09:32	29° Π 04'30	
	8680 Nov 04 15:45	0° Π		direct	8681 Sep 29 20:51	28° Π 37'58	
morning set	8680 Nov 17 10:17	22° Π 58'14			8681 Oct 05 18:46	0° Ω	
	8680 Nov 20 20:13	0° Ω		morning max el	8681 Oct 11 23:11	4° Ω 20'23	21°47'58
				asc. node	8681 Oct 22 18:55	18° Ω 30'47	
superior conj	8680 Nov 25 00:39	8° Ω 33'24	1°32'14		8681 Oct 29 01:07	0° Π	
minimum elong	8680 Nov 25 02:44	8° Ω 43'56	1°32'15	morning set	8681 Nov 01 20:00	7° Π 44'40	
max. Earth dist.	8680 Nov 30 11:47	19° Ω 18'15	1.36559 AU				
evening rise	8680 Dec 04 07:49	26° Ω 27'45		superior conj	8681 Nov 09 00:10	22° Π 54'56	1°39'53
	8680 Dec 06 06:57	0° Ω		minimum elong	8681 Nov 09 00:57	22° Π 59'04	1°40'01
desc. node	8680 Dec 09 10:23	5° Ω 29'00			8681 Nov 12 10:23	0° Ω	
	8680 Dec 25 05:40	0° \approx		max. Earth dist.	8681 Nov 13 00:29	1° Ω 11'31	1.34716 AU
evening max el	8681 Jan 08 22:14	17° \approx 47'55	25°53'25	evening rise	8681 Nov 17 07:59	9° Ω 41'11	
retrograde	8681 Jan 21 10:39	24° \approx 56'40		desc. node	8681 Nov 26 07:25	25° Ω 51'09	
evening set	8681 Jan 27 12:21	22° \approx 27'37			8681 Nov 28 19:27	0° Ω	
asc. node	8681 Jan 31 21:12	17° \approx 45'53			8681 Dec 20 23:24	0° \approx	
min. Earth dist.	8681 Jan 31 19:06	17° \approx 52'26	0.67102 AU	evening max el	8681 Dec 22 11:41	1° \approx 30'09	26°49'21
inferior conj	8681 Feb 02 06:23	16° \approx 01'31	0°27'23	retrograde	8682 Jan 04 15:19	8° \approx 48'46	
minimum elong	8681 Feb 02 05:41	16° \approx 03'43	0°27'16	evening set	8682 Jan 11 04:34	6° \approx 13'47	
morning rise	8681 Feb 07 23:35	10° \approx 11'31		min. Earth dist.	8682 Jan 15 05:20	2° \approx 13'09	0.65901 AU
direct	8681 Feb 11 05:31	9° \approx 11'10		inferior conj	8682 Jan 17 04:17	29° Ω 56'23	-0°31'49
morning max el	8681 Feb 18 00:22	12° \approx 53'25	18°53'26	minimum elong	8682 Jan 17 05:10	29° Ω 53'46	0°31'14
	8681 Mar 02 17:58	0° Π			8682 Jan 17 03:02	30° Ω	
desc. node	8681 Mar 07 10:02	7° Π 10'58		asc. node	8682 Jan 18 18:17	28° Ω 07'55	
morning set	8681 Mar 12 07:00	14° Π 45'47		morning rise	8682 Jan 23 06:49	24° Ω 17'38	
	8681 Mar 22 01:23	0° Π		direct	8682 Jan 26 02:58	23° Ω 33'14	
max. Earth dist.	8681 Mar 26 23:04	7° Π 40'29	1.45329 AU	morning max el	8682 Feb 01 14:03	27° Ω 00'09	18°14'33
					8682 Feb 04 06:21	0° \approx	
superior conj	8681 Mar 28 18:55	10° Π 32'42	-2°00'12	morning set	8682 Feb 20 17:12	25° \approx 04'03	
minimum elong	8681 Mar 28 11:25	10° Π 03'11	1°59'46	desc. node	8682 Feb 22 06:57	27° \approx 35'59	
	8681 Apr 10 00:22	0° Ω			8682 Feb 23 18:47	0° Π	
evening rise	8681 Apr 12 21:05	4° Ω 37'38					
	8681 Apr 29 02:36	0° Π		superior conj	8682 Mar 08 00:05	19° Π 23'09	-1°29'03
asc. node	8681 Apr 29 19:57	0° Π 57'42		minimum elong	8682 Mar 07 14:41	18° Π 46'17	1°27'59
evening max el	8681 May 03 07:44	5° Π 02'19	18°34'06	max. Earth dist.	8682 Mar 09 18:50	22° Π 10'42	1.45532 AU
retrograde	8681 May 09 20:08	8° Π 35'23			8682 Mar 14 18:57	0° Π	
evening set	8681 May 13 00:33	7° Π 38'11		evening rise	8682 Mar 24 02:02	14° Π 30'04	
inferior conj	8681 May 18 17:29	2° Π 04'09	3°18'13		8682 Apr 03 01:25	0° Ω	
minimum elong	8681 May 18 18:28	2° Π 01'11	3°17'58	greatest brilliancy	8682 Apr 04 12:56	2° Ω 15'40	-0.7m
	8681 May 20 10:40	30° Ω		evening max el	8682 Apr 16 16:35	18° Ω 38'57	19°14'43
min. Earth dist.	8681 May 20 19:05	29° Ω 35'07	0.65051 AU	asc. node	8682 Apr 16 17:03	18° Ω 40'08	
morning rise	8681 May 24 11:34	25° Ω 47'04		retrograde	8682 Apr 23 16:32	22° Ω 35'44	
direct	8681 May 31 02:06	23° Ω 01'31		evening set	8682 Apr 27 04:51	21° Ω 23'45	
desc. node	8681 Jun 03 09:49	23° Ω 37'39		inferior conj	8682 May 02 15:52	15° Ω 34'01	3°22'05
	8681 Jun 12 13:55	0° Π		minimum elong	8682 May 02 15:35	15° Ω 34'56	3°21'56
morning max el	8681 Jun 13 12:41	0° Π 56'21	27°10'18	min. Earth dist.	8682 May 04 02:09	13° Ω 43'06	0.66569 AU
	8681 Jul 05 02:25	0° Ω		morning rise	8682 May 08 01:54	9° Ω 15'32	
morning set	8681 Jul 19 01:49	24° Ω 45'19		direct	8682 May 14 07:35	6° Ω 31'11	
	8681 Jul 21 17:46	0° Ω		desc. node	8682 May 21 06:49	9° Ω 09'17	
max. Earth dist.	8681 Jul 23 13:15	3° Ω 39'34	1.33613 AU	morning max el	8682 May 26 23:00	14° Ω 03'56	26°05'00

	8682 Jun 08 21:46	0°♄		8683 May 11 19:13	0°♄	
	8682 Jun 27 20:48	0°♄		8683 Jun 02 13:30	0°♄	
morning set	8682 Jul 02 00:56	7°♄32'51		8683 Jun 14 06:25	19°♄28'25	
max. Earth dist.	8682 Jul 05 21:49	14°♄52'37	1.35240 AU	8683 Jun 17 21:16	25°♄58'01	1.37265 AU
				8683 Jun 20 01:40	0°♄	
superior conj	8682 Jul 11 06:03	25°♄29'36	-0°24'00			
minimum elong	8682 Jul 11 07:28	25°♄36'45	0°23'55	superior conj	8683 Jun 24 14:55	8°♄40'58 -0°56'05
	8682 Jul 13 10:49	0°♄		minimum elong	8683 Jun 24 18:24	8°♄57'57 0°55'40
asc. node	8682 Jul 13 16:09	0°♄27'32		asc. node	8683 Jun 30 13:10	20°♄26'03
evening rise	8682 Jul 19 00:27	11°♄32'37		evening rise	8683 Jul 03 03:18	25°♄37'30
	8682 Jul 28 16:46	0°♄			8683 Jul 05 08:12	0°♄
evening max el	8682 Aug 06 09:10	11°♄39'06	20°28'35	evening max el	8683 Jul 19 23:17	23°♄06'22 19°22'05
retrograde	8682 Aug 17 11:07	17°♄08'13		retrograde	8683 Jul 29 08:35	27°♄44'57
desc. node	8682 Aug 17 05:50	17°♄08'06		evening set	8683 Jul 31 05:07	27°♄34'50
evening set	8682 Aug 19 11:45	16°♄58'00		desc. node	8683 Aug 04 02:58	26°♄14'33
inferior conj	8682 Aug 28 15:50	13°♄00'43	-3°22'50	inferior conj	8683 Aug 08 20:20	23°♄27'00 -1°27'06
minimum elong	8682 Aug 28 07:01	13°♄13'29	3°19'59	minimum elong	8683 Aug 08 16:26	23°♄33'22 1°25'44
min. Earth dist.	8682 Aug 29 21:43	12°♄17'24	0.54808 AU	min. Earth dist.	8683 Aug 11 10:26	21°♄45'56 0.55776 AU
morning rise	8682 Sep 06 01:47	8°♄56'57		morning rise	8683 Aug 17 01:02	18°♄50'06
direct	8682 Sep 10 05:52	8°♄19'38		direct	8683 Aug 22 00:29	17°♄53'50
morning max el	8682 Sep 23 14:01	14°♄46'51	23°32'21	morning max el	8683 Sep 05 02:27	25°♄00'02 25°16'20
	8682 Oct 05 10:17	0°♄			8683 Sep 09 18:07	0°♄
asc. node	8682 Oct 09 15:53	7°♄18'37		asc. node	8683 Sep 26 12:51	26°♄34'54
morning set	8682 Oct 17 07:34	22°♄34'46			8683 Sep 28 06:07	0°♄
	8682 Oct 20 18:21	0°♄		morning set	8683 Oct 01 19:11	7°♄22'18
superior conj	8682 Oct 24 06:04	7°♄33'53	1°40'41	superior conj	8683 Oct 08 15:50	22°♄21'36 1°35'23
minimum elong	8682 Oct 24 05:37	7°♄31'28	1°40'48	minimum elong	8683 Oct 08 14:24	22°♄13'43 1°35'22
max. Earth dist.	8682 Oct 26 21:30	13°♄13'17	1.33266 AU	max. Earth dist.	8683 Oct 10 01:42	25°♄27'24 1.32260 AU
evening rise	8682 Oct 31 20:54	23°♄28'39			8683 Oct 12 03:55	0°♄
	8682 Nov 04 05:08	0°♄		evening rise	8683 Oct 15 19:06	7°♄40'11
desc. node	8682 Nov 13 04:30	15°♄55'25			8683 Oct 27 16:06	0°♄
	8682 Nov 22 10:50	0°♄		desc. node	8683 Oct 31 01:36	5°♄33'11
evening max el	8682 Dec 05 00:21	14°♄55'50	27°22'47	evening max el	8683 Nov 17 10:19	27°♄51'46 27°27'29
retrograde	8682 Dec 18 13:44	22°♄15'59			8683 Nov 19 20:10	0°♄
evening set	8682 Dec 25 11:57	19°♄41'24		retrograde	8683 Dec 01 05:21	5°♄08'19
min. Earth dist.	8682 Dec 29 07:33	16°♄13'53	0.64356 AU	evening set	8683 Dec 08 07:30	2°♄43'08
inferior conj	8682 Dec 31 18:07	13°♄38'42	-1°37'41		8683 Dec 11 16:59	30°♄
minimum elong	8682 Dec 31 21:08	13°♄30'41	1°36'13	min. Earth dist.	8683 Dec 11 23:57	29°♄44'10 0.62507 AU
asc. node	8683 Jan 05 15:20	9°♄10'00		inferior conj	8683 Dec 14 21:00	27°♄00'43 -2°48'00
morning rise	8683 Jan 07 07:58	8°♄14'07		minimum elong	8683 Dec 15 02:22	26°♄47'58 2°45'47
direct	8683 Jan 09 20:15	7°♄41'58		morning rise	8683 Dec 21 23:25	21°♄53'29
morning max el	8683 Jan 16 07:02	11°♄04'04	17°52'39	asc. node	8683 Dec 23 12:23	21°♄32'23
	8683 Jan 29 07:33	0°♄		direct	8683 Dec 24 06:13	21°♄29'50
morning set	8683 Feb 02 08:16	6°♄47'13		morning max el	8683 Dec 31 00:10	24°♄56'37 17°48'21
desc. node	8683 Feb 09 03:53	18°♄11'32			8684 Jan 04 04:18	0°♄
				morning set	8684 Jan 15 22:34	19°♄36'43
superior conj	8683 Feb 15 17:12	28°♄52'54	-0°46'29		8684 Jan 21 20:17	0°♄
minimum elong	8683 Feb 15 11:55	28°♄31'41	0°45'38			
	8683 Feb 16 09:54	0°♄		superior conj	8684 Jan 27 10:04	9°♄32'08 -0°02'51
max. Earth dist.	8683 Feb 20 14:27	6°♄40'11	1.44988 AU	minimum elong	8684 Jan 27 09:48	9°♄31'03 0°02'38
evening rise	8683 Mar 03 15:46	23°♄52'02		behind sun begin	8684 Jan 27 00:55	8°♄53'41
	8683 Mar 07 16:04	0°♄		behind sun end	8684 Jan 27 18:41	10°♄08'21
greatest brilliancy	8683 Mar 18 11:52	16°♄12'05	-0.6m	desc. node	8684 Jan 27 00:50	8°♄53'20
	8683 Mar 28 17:52	0°♄		max. Earth dist.	8684 Feb 03 06:56	20°♄50'52 1.43763 AU
evening max el	8683 Mar 30 20:19	2°♄17'43	20°10'53		8684 Feb 09 01:14	0°♄
asc. node	8683 Apr 03 14:10	5°♄26'50		evening rise	8684 Feb 11 04:28	3°♄19'28
retrograde	8683 Apr 07 15:02	6°♄48'33			8684 Feb 29 03:19	0°♄
evening set	8683 Apr 11 12:03	5°♄21'27		evening max el	8684 Mar 12 18:29	15°♄57'48 21°19'50
	8683 Apr 16 07:33	30°♄		asc. node	8684 Mar 20 11:16	21°♄03'02
inferior conj	8683 Apr 16 19:59	29°♄17'52	3°12'57	retrograde	8684 Mar 21 13:25	21°♄09'04
minimum elong	8683 Apr 16 18:40	29°♄22'20	3°12'42	evening set	8684 Mar 25 20:14	19°♄26'50
min. Earth dist.	8683 Apr 17 15:52	28°♄10'20	0.67643 AU	inferior conj	8684 Mar 31 03:27	13°♄11'52 2°52'57
morning rise	8683 Apr 22 01:04	23°♄00'48		minimum elong	8684 Mar 31 01:28	13°♄18'46 2°52'29
direct	8683 Apr 27 18:42	20°♄27'20		min. Earth dist.	8684 Mar 31 10:09	12°♄48'34 0.68267 AU
desc. node	8683 May 08 03:48	26°♄12'53		morning rise	8684 Apr 05 06:30	6°♄58'01
morning max el	8683 May 09 08:30	27°♄23'27	24°42'27	direct	8684 Apr 10 10:36	4°♄42'12

morning max el	8684 Apr 20 18:07	10° Υ 50'03	23°12'52	direct	8685 Mar 25 06:10	19° X 08'20	
desc. node	8684 Apr 24 00:45	14° Υ 23'21		morning max el	8685 Apr 03 06:57	24° X 24'17	21°45'31
	8684 May 05 23:00	0° B			8685 Apr 08 06:06	0° Υ	
	8684 May 25 08:27	0° Π		desc. node	8685 Apr 10 21:40	3° Υ 21'35	
morning set	8684 May 25 12:51	0° Π 18'23			8685 Apr 29 08:54	0° B	
max. Earth dist.	8684 May 29 17:18	7° Π 25'55	1.39507 AU	morning set	8685 May 05 15:56	9° B 51'53	
				max. Earth dist.	8685 May 11 17:00	19° B 42'16	1.41703 AU
					8685 May 17 18:48	0° Π	
superior conj	8684 Jun 06 09:18	21° Π 09'37	-1°27'17				
minimum elong	8684 Jun 06 14:41	21° Π 34'27	1°26'45				
	8684 Jun 11 02:12	0° E		superior conj	8685 May 19 08:35	2° Π 44'20	-1°53'43
evening rise	8684 Jun 15 22:00	9° E 16'03		minimum elong	8685 May 19 14:24	3° Π 09'47	1°53'24
asc. node	8684 Jun 16 10:12	10° E 14'45		evening rise	8685 May 30 04:44	22° Π 18'15	
	8684 Jun 27 16:36	0° Ω		asc. node	8685 Jun 03 07:14	29° Π 48'22	
evening max el	8684 Jul 02 00:48	5° Ω 17'06	18°36'30		8685 Jun 03 09:49	0° E	
retrograde	8684 Jul 09 23:29	9° Ω 14'12		evening max el	8685 Jun 15 09:52	18° E 01'54	18°11'16
evening set	8684 Jul 12 01:07	8° Ω 59'02		retrograde	8685 Jun 22 09:01	21° E 32'55	
inferior conj	8684 Jul 19 21:02	4° Ω 32'53	0°20'17	evening set	8685 Jun 24 18:18	21° E 08'46	
minimum elong	8684 Jul 19 21:47	4° Ω 31'26	0°19'49	inferior conj	8685 Jul 01 19:13	16° E 21'56	1°42'35
desc. node	8684 Jul 21 00:04	3° Ω 41'03		minimum elong	8685 Jul 01 22:02	16° E 15'38	1°41'29
min. Earth dist.	8684 Jul 23 03:59	2° Ω 03'26	0.57500 AU	min. Earth dist.	8685 Jul 05 03:49	13° E 23'56	0.59657 AU
	8684 Jul 26 07:24	30° R E		desc. node	8685 Jul 07 21:08	11° E 18'37	
morning rise	8684 Jul 27 14:55	29° E 18'53		morning rise	8685 Jul 08 22:47	10° E 37'51	
direct	8684 Aug 02 10:01	27° E 54'38		direct	8685 Jul 15 08:47	8° E 42'19	
	8684 Aug 09 16:08	0° Ω		morning max el	8685 Jul 29 17:15	16° E 34'25	27°38'15
morning max el	8684 Aug 16 18:36	5° Ω 29'10	26°42'49		8685 Aug 09 18:20	0° Ω	
	8684 Sep 03 18:59	0° M			8685 Aug 27 07:33	0° M	
asc. node	8684 Sep 12 09:49	16° M 12'04		morning set	8685 Aug 30 11:56	6° M 30'43	
morning set	8684 Sep 15 05:12	22° M 02'39		asc. node	8685 Aug 30 06:45	6° M 03'39	
	8684 Sep 18 21:24	0° E		max. Earth dist.	8685 Sep 05 20:29	20° M 16'00	1.31636 AU
superior conj	8684 Sep 22 03:25	7° E 11'52	1°24'32	superior conj	8685 Sep 06 15:01	21° M 58'40	1°08'33
minimum elong	8684 Sep 22 01:22	7° E 00'27	1°24'19	minimum elong	8685 Sep 06 12:46	21° M 46'13	1°08'09
max. Earth dist.	8684 Sep 22 10:31	7° E 51'15	1.31717 AU		8685 Sep 10 05:58	0° E	
evening rise	8684 Sep 28 23:51	22° E 08'31		evening rise	8685 Sep 13 08:51	6° E 46'49	
	8684 Oct 02 19:37	0° M			8685 Sep 25 09:36	0° M	
desc. node	8684 Oct 16 22:41	24° M 34'02		desc. node	8685 Oct 03 19:48	12° M 43'28	
	8684 Oct 20 19:26	0° X		evening max el	8685 Oct 11 12:48	21° M 31'57	25°57'24
evening max el	8684 Oct 29 15:14	10° X 06'35	26°59'04	retrograde	8685 Oct 25 10:58	28° M 35'13	
retrograde	8684 Nov 12 13:05	17° X 16'42		evening set	8685 Oct 31 18:53	27° M 00'24	
evening set	8684 Nov 19 11:24	15° X 11'43		min. Earth dist.	8685 Nov 05 01:36	24° M 25'10	0.58376 AU
min. Earth dist.	8684 Nov 23 05:49	12° X 31'56	0.60457 AU	inferior conj	8685 Nov 08 04:27	22° M 09'56	-4°58'32
inferior conj	8684 Nov 26 09:35	9° X 54'16	-3°58'01	minimum elong	8685 Nov 08 11:18	21° M 57'30	4°57'01
minimum elong	8684 Nov 26 16:46	9° X 39'16	3°55'39	morning rise	8685 Nov 16 06:01	17° M 45'18	
morning rise	8684 Dec 04 00:35	5° X 07'11		direct	8685 Nov 18 12:51	17° M 28'20	
direct	8684 Dec 06 05:07	4° X 48'32		asc. node	8685 Nov 26 06:26	20° M 56'50	
asc. node	8684 Dec 09 09:26	5° X 29'44		morning max el	8685 Nov 26 21:07	21° M 31'02	18°37'29
morning max el	8684 Dec 13 14:05	8° X 28'52	18°02'43		8685 Dec 03 10:38	0° X	
	8684 Dec 27 11:59	0° Z		morning set	8685 Dec 13 00:39	17° X 22'52	
morning set	8684 Dec 29 05:44	3° Z 13'27			8685 Dec 19 13:23	0° Z	
superior conj	8685 Jan 08 03:59	21° Z 22'36	0°34'58	superior conj	8685 Dec 21 19:03	4° Z 13'24	1°04'08
minimum elong	8685 Jan 08 06:37	21° Z 34'18	0°34'47	minimum elong	8685 Dec 21 22:24	4° Z 29'05	1°03'54
desc. node	8685 Jan 12 21:46	29° Z 37'43		max. Earth dist.	8685 Dec 29 02:35	17° Z 27'43	1.39926 AU
	8685 Jan 13 03:00	0° \approx		desc. node	8685 Dec 30 18:44	20° Z 21'33	
max. Earth dist.	8685 Jan 15 18:49	4° \approx 29'02	1.42008 AU	evening rise	8686 Jan 02 05:25	24° Z 30'38	
evening rise	8685 Jan 21 06:28	13° \approx 26'33			8686 Jan 05 13:13	0° \approx	
	8685 Feb 01 00:11	0° X			8686 Jan 25 19:22	0° X	
evening max el	8685 Feb 23 11:54	29° X 39'48	22°37'17	evening max el	8686 Feb 06 02:22	13° X 25'29	23°57'28
	8685 Feb 23 20:00	0° Υ		retrograde	8686 Feb 17 03:07	19° X 54'44	
retrograde	8685 Mar 05 09:53	5° Υ 32'25		evening set	8686 Feb 22 09:11	17° X 43'22	
asc. node	8685 Mar 07 08:23	5° Υ 13'36		asc. node	8686 Feb 22 05:29	17° X 51'06	
evening set	8685 Mar 10 03:47	3° Υ 35'14		min. Earth dist.	8686 Feb 27 03:08	12° X 13'51	0.68248 AU
	8685 Mar 13 10:44	30° R X		inferior conj	8686 Feb 27 20:21	11° X 15'24	1°44'52
inferior conj	8685 Mar 15 12:11	27° X 11'56	2°23'19	minimum elong	8686 Feb 27 18:18	11° X 22'23	1°44'14
minimum elong	8685 Mar 15 09:56	27° X 19'44	2°22'43	morning rise	8686 Mar 05 03:26	5° X 12'30	
min. Earth dist.	8685 Mar 15 06:39	27° X 31'09	0.68462 AU	direct	8686 Mar 09 04:14	3° X 40'21	
morning rise	8685 Mar 20 15:57	21° X 02'49		morning max el	8686 Mar 17 02:26	8° X 10'22	20°27'33

desc. node	8686 Mar 28 18:33	22° H 54'47		morning rise	8687 Feb 17 14:57	19° \approx 23'27	
	8686 Apr 02 15:53	0° Y		direct	8687 Feb 21 03:21	18° \approx 12'21	
morning set	8686 Apr 14 19:36	18° Y 23'56		morning max el	8687 Feb 28 05:58	22° \approx 08'15	19°23'19
	8686 Apr 22 04:45	0° B			8687 Mar 06 18:38	0° H	
max. Earth dist.	8686 Apr 24 00:15	2° B 54'16	1.43569 AU	greatest brilliancy	8687 Mar 13 02:43	9° H 05'35	-0.7m
				desc. node	8687 Mar 15 15:27	12° H 53'11	
superior conj	8686 Apr 30 08:26	13° B 16'09	-2°09'54	morning set	8687 Mar 24 18:26	26° H 50'30	
minimum elong	8686 Apr 30 11:23	13° B 28'22	2°09'58		8687 Mar 26 19:30	0° Y	
	8686 May 10 04:16	0° II		max. Earth dist.	8687 Apr 06 14:15	16° Y 49'46	1.44877 AU
evening rise	8686 May 12 19:03	4° II 34'04					
asc. node	8686 May 21 04:16	19° II 01'26		superior conj	8687 Apr 10 07:55	22° Y 45'23	-2°09'35
	8686 May 28 19:45	0° B		minimum elong	8687 Apr 10 04:13	22° Y 30'37	2°09'32
evening max el	8686 May 29 22:40	1° B 10'59	18°05'29		8687 Apr 14 20:08	0° B	
retrograde	8686 Jun 05 09:53	4° B 31'51		evening rise	8687 Apr 24 12:24	15° B 54'15	
evening set	8686 Jun 08 02:41	3° B 56'04			8687 May 03 00:43	0° II	
	8686 Jun 13 07:56	30° R II		asc. node	8687 May 08 01:21	7° II 46'58	
inferior conj	8686 Jun 14 12:00	28° II 49'25	2°37'28	evening max el	8687 May 13 11:56	14° II 35'52	18°18'28
minimum elong	8686 Jun 14 14:48	28° II 42'15	2°36'37	retrograde	8687 May 19 21:25	18° II 01'01	
min. Earth dist.	8686 Jun 17 11:57	25° II 46'47	0.61908 AU	evening set	8687 May 22 21:30	17° II 12'00	
morning rise	8686 Jun 21 00:54	22° II 45'31		inferior conj	8687 May 28 19:17	11° II 47'21	3°08'53
desc. node	8686 Jun 24 18:11	20° II 50'50		minimum elong	8687 May 28 21:02	11° II 42'22	3°08'28
direct	8686 Jun 27 18:13	20° II 22'49		min. Earth dist.	8687 May 31 05:33	9° II 01'22	0.63987 AU
morning max el	8686 Jul 11 22:16	28° II 23'55	27°55'57	morning rise	8687 Jun 03 19:24	5° II 32'52	
	8686 Jul 13 11:28	0° B		direct	8687 Jun 10 12:35	2° II 52'24	
	8686 Aug 03 14:27	0° Q		desc. node	8687 Jun 11 15:12	2° II 56'24	
morning set	8686 Aug 14 13:24	20° Q 40'47		morning max el	8687 Jun 24 07:34	10° II 53'35	27°36'27
asc. node	8686 Aug 17 03:41	26° Q 04'22			8687 Jul 09 08:57	0° B	
	8686 Aug 18 23:55	0° M			8687 Jul 27 00:36	0° Q	
max. Earth dist.	8686 Aug 20 03:49	2° M 30'40	1.32024 AU	morning set	8687 Jul 29 07:15	4° Q 26'33	
				max. Earth dist.	8687 Aug 03 04:35	14° Q 24'38	1.32891 AU
superior conj	8686 Aug 22 00:48	6° M 36'05	0°47'47	asc. node	8687 Aug 04 00:38	16° Q 10'03	
minimum elong	8686 Aug 21 22:52	6° M 25'28	0°47'19				
evening rise	8686 Aug 28 20:04	21° M 28'34		superior conj	8687 Aug 06 06:53	20° Q 58'50	0°22'41
	8686 Sep 01 22:10	0° Q		minimum elong	8687 Aug 06 05:48	20° Q 53'02	0°22'18
desc. node	8686 Sep 20 16:56	29° Q 40'40			8687 Aug 10 11:05	0° M	
	8686 Sep 21 00:01	0° M		evening rise	8687 Aug 13 07:38	6° M 08'16	
evening max el	8686 Sep 23 02:38	2° M 09'11	24°29'26		8687 Aug 25 22:28	0° Q	
retrograde	8686 Oct 06 21:11	9° M 04'11		evening max el	8687 Sep 04 13:54	12° Q 21'29	22°50'01
evening set	8686 Oct 12 01:51	8° M 04'21		desc. node	8687 Sep 07 14:03	14° Q 58'49	
min. Earth dist.	8686 Oct 17 13:34	5° M 15'13	0.56515 AU	retrograde	8687 Sep 17 19:20	18° Q 57'43	
inferior conj	8686 Oct 20 03:00	3° M 38'22	-5°34'07	evening set	8687 Sep 21 11:45	18° Q 27'57	
minimum elong	8686 Oct 20 05:26	3° M 34'31	5°33'52	min. Earth dist.	8687 Sep 28 22:02	15° Q 07'08	0.55184 AU
	8686 Oct 27 01:15	30° R Q		inferior conj	8687 Sep 30 06:40	14° Q 20'23	-5°25'18
morning rise	8686 Oct 28 11:11	29° Q 35'47		minimum elong	8687 Sep 30 01:30	14° Q 27'48	5°24'42
direct	8686 Oct 31 01:39	29° Q 17'30		morning rise	8687 Oct 08 17:15	10° Q 31'38	
	8686 Nov 03 21:44	0° M		direct	8687 Oct 11 19:46	10° Q 09'18	
morning max el	8686 Nov 09 17:40	3° M 52'03	19°34'22	morning max el	8687 Oct 23 01:23	15° Q 25'07	20°53'34
asc. node	8686 Nov 13 03:25	7° M 38'37		asc. node	8687 Oct 31 00:24	25° Q 19'50	
	8686 Nov 26 04:55	0° X			8687 Nov 02 20:58	0° M	
morning set	8686 Nov 27 03:27	1° X 52'53		morning set	8687 Nov 11 11:19	16° M 35'24	
					8687 Nov 17 21:49	0° X	
superior conj	8686 Dec 05 02:06	17° X 49'25	1°24'22				
minimum elong	8686 Dec 05 04:51	18° X 02'53	1°24'18	superior conj	8687 Nov 18 20:43	1° X 57'55	1°36'21
	8686 Dec 11 11:18	0° B		minimum elong	8687 Nov 18 22:16	2° X 05'51	1°36'27
max. Earth dist.	8686 Dec 11 08:35	29° X 47'27	1.37753 AU	max. Earth dist.	8687 Nov 23 17:15	11° X 42'58	1.35733 AU
evening rise	8686 Dec 15 01:54	6° B 31'02		evening rise	8687 Nov 27 17:06	19° X 20'51	
desc. node	8686 Dec 17 15:44	11° B 00'29			8687 Dec 03 15:42	0° B	
	8686 Dec 29 11:20	0° \approx		desc. node	8687 Dec 04 12:47	1° B 30'19	
evening max el	8687 Jan 19 15:33	27° \approx 13'06	25°13'52		8687 Dec 23 13:37	0° \approx	
	8687 Jan 22 17:13	0° H		evening max el	8688 Jan 02 04:38	10° \approx 58'48	26°19'23
retrograde	8687 Jan 31 16:08	4° H 10'27		retrograde	8688 Jan 15 00:13	18° \approx 13'30	
evening set	8687 Feb 06 10:52	1° H 46'41		evening set	8688 Jan 21 07:08	15° \approx 40'56	
	8687 Feb 08 06:53	30° R \approx		min. Earth dist.	8688 Jan 25 11:08	11° \approx 20'44	0.66637 AU
asc. node	8687 Feb 09 02:35	29° \approx 04'19		asc. node	8688 Jan 26 23:41	9° \approx 29'17	
min. Earth dist.	8687 Feb 10 21:20	26° \approx 51'55	0.67634 AU	inferior conj	8688 Jan 27 03:28	9° \approx 17'42	0°03'09
inferior conj	8687 Feb 12 02:05	25° \approx 18'30	0°58'00	minimum elong	8688 Jan 27 03:23	9° \approx 17'59	0°03'18
minimum elong	8687 Feb 12 00:44	25° \approx 22'54	0°57'37	transit middle	8688 Jan 27 03:23	9° \approx 17'59	0°03'18

transit begin	8688 Jan 27 00:34	9°≈26'36			8689 Jan 02 22:20	30°R3	
transit end	8688 Jan 27 06:12	9°≈09'22		evening set	8689 Jan 03 19:58	29°320'39	
morning rise	8688 Feb 02 00:25	3°≈32'26		min. Earth dist.	8689 Jan 07 18:20	25°334'19	0.65278 AU
direct	8688 Feb 05 01:54	2°≈39'29		inferior conj	8689 Jan 09 22:17	23°308'27	-0°59'02
morning max el	8688 Feb 11 16:37	6°≈13'52	18°34'51	minimum elong	8689 Jan 10 00:02	23°303'33	0°58'06
	8688 Feb 28 12:08	0°H		asc. node	8689 Jan 12 20:46	20°302'11	
desc. node	8688 Mar 01 12:21	3°H10'02		morning rise	8689 Jan 16 05:27	17°335'21	
morning set	8688 Mar 03 11:55	6°H17'40		direct	8689 Jan 18 21:51	16°356'46	
	8688 Mar 18 14:14	0°Y		morning max el	8689 Jan 25 08:06	20°320'49	18°03'05
					8689 Feb 01 18:07	0°≈	
superior conj	8688 Mar 19 14:54	1°Y36'32	-1°49'01	morning set	8689 Feb 12 10:51	17°≈13'54	
minimum elong	8688 Mar 19 05:41	1°Y00'29	1°48'15	desc. node	8689 Feb 16 09:17	23°≈40'18	
max. Earth dist.	8688 Mar 19 08:12	1°Y10'21	1.45500 AU		8689 Feb 20 06:59	0°H	
evening rise	8688 Apr 04 06:03	26°Y15'31					
	8688 Apr 06 14:25	0°B		superior conj	8689 Feb 26 23:06	10°H38'58	-1°11'45
greatest brilliancy	8688 Apr 12 18:09	9°B46'25	-0.8m	minimum elong	8689 Feb 26 15:00	10°H06'54	1°10'41
asc. node	8688 Apr 23 22:27	25°B55'32		max. Earth dist.	8689 Mar 02 03:45	15°H40'50	1.45384 AU
evening max el	8688 Apr 25 22:57	28°B09'17	18°49'23		8689 Mar 11 08:19	0°Y	
	8688 Apr 28 00:45	0°II		evening rise	8689 Mar 15 03:06	5°Y51'10	
retrograde	8688 May 02 15:32	1°II51'29		greatest brilliancy	8689 Mar 28 12:11	26°Y17'04	-0.7m
evening set	8688 May 05 23:07	0°II48'14			8689 Mar 31 00:56	0°B	
	8688 May 07 01:38	30°R8		evening max el	8689 Apr 09 05:47	11°B47'30	19°36'54
inferior conj	8688 May 11 13:07	25°B07'18	3°21'39	asc. node	8689 Apr 10 19:34	13°B16'19	
minimum elong	8688 May 11 13:33	25°B05'58	3°21'28	retrograde	8689 Apr 16 13:02	15°B57'45	
min. Earth dist.	8688 May 13 08:11	22°B53'15	0.65739 AU	evening set	8689 Apr 20 04:52	14°B39'32	
morning rise	8688 May 17 03:22	18°B48'52		inferior conj	8689 Apr 25 14:17	8°B43'56	3°19'40
direct	8688 May 23 14:32	16°B02'23		minimum elong	8689 Apr 25 13:31	8°B46'27	3°19'28
desc. node	8688 May 28 12:13	17°B21'10		min. Earth dist.	8689 Apr 26 18:24	7°B10'46	0.67080 AU
morning max el	8688 Jun 05 18:08	23°B50'40	26°45'20	morning rise	8689 Apr 30 21:49	2°B25'41	
	8688 Jun 11 06:06	0°II			8689 May 05 00:41	30°R9	
	8688 Jul 01 17:58	0°B		direct	8689 May 06 22:45	29°Y44'35	
morning set	8688 Jul 11 14:19	17°B38'20			8689 May 08 22:53	0°B	
max. Earth dist.	8688 Jul 15 19:12	25°B50'01	1.34244 AU	desc. node	8689 May 15 09:11	3°B35'21	
	8688 Jul 17 20:46	0°Q		morning max el	8689 May 19 03:57	7°B03'52	25°31'19
					8689 Jun 05 23:42	0°II	
superior conj	8688 Jul 20 06:57	4°Q59'34	-0°06'09	morning set	8689 Jun 24 06:32	0°B05'19	
minimum elong	8688 Jul 20 07:18	5°Q01'22	0°06'16		8689 Jun 24 05:21	0°B	
behind sun begin	8688 Jul 20 01:57	4°Q33'36		max. Earth dist.	8689 Jun 27 22:57	6°B54'31	1.36058 AU
behind sun end	8688 Jul 20 12:38	5°Q29'09					
asc. node	8688 Jul 20 21:37	6°Q15'58		superior conj	8689 Jul 03 22:18	18°B31'29	-0°37'32
evening rise	8688 Jul 27 17:32	20°Q39'05		minimum elong	8689 Jul 04 00:34	18°B42'49	0°37'18
	8688 Aug 01 07:47	0°P		asc. node	8689 Jul 07 18:37	26°B18'24	
evening max el	8688 Aug 16 07:48	22°P45'00	21°15'51		8689 Jul 09 13:55	0°Q	
desc. node	8688 Aug 24 11:12	28°P05'47		evening rise	8689 Jul 11 23:39	4°Q55'11	
retrograde	8688 Aug 28 08:28	28°P42'44			8689 Jul 26 06:49	0°P	
evening set	8688 Aug 30 18:25	28°P29'13		evening max el	8689 Jul 29 14:23	3°P46'44	19°57'49
inferior conj	8688 Sep 08 23:41	24°P32'11	-4°20'55	retrograde	8689 Aug 08 22:44	8°P53'21	
minimum elong	8688 Sep 08 14:05	24°P45'40	4°18'24	evening set	8689 Aug 10 19:59	8°P43'55	
min. Earth dist.	8688 Sep 09 06:45	24°P22'15	0.54671 AU	desc. node	8689 Aug 11 08:19	8°P38'13	
morning rise	8688 Sep 17 10:24	20°P39'27		inferior conj	8689 Aug 19 20:02	4°P44'02	-2°34'32
direct	8688 Sep 21 04:14	20°P09'14		minimum elong	8689 Aug 19 13:00	4°P54'38	2°32'04
morning max el	8688 Oct 03 21:02	26°P11'41	22°31'20	min. Earth dist.	8689 Aug 21 17:27	3°P35'27	0.55115 AU
	8688 Oct 07 11:42	0°Q		morning rise	8689 Aug 28 04:24	0°P27'32	
asc. node	8688 Oct 16 21:22	13°Q46'27			8689 Aug 29 22:21	30°RQ	
	8688 Oct 25 06:03	0°P		direct	8689 Sep 01 16:45	29°Q43'00	
morning set	8688 Oct 25 22:02	1°P23'55			8689 Sep 04 10:35	0°P	
				morning max el	8689 Sep 15 09:45	6°P28'16	24°17'32
					8689 Oct 02 06:14	0°Q	
superior conj	8688 Nov 01 23:18	16°P28'07	1°41'00	asc. node	8689 Oct 03 18:19	2°Q47'26	
minimum elong	8688 Nov 01 23:33	16°P29'24	1°41'09	morning set	8689 Oct 10 09:46	16°Q13'16	
max. Earth dist.	8688 Nov 05 09:02	23°P36'43	1.34045 AU		8689 Oct 16 17:58	0°P	
	8688 Nov 08 12:37	0°P					
evening rise	8688 Nov 09 23:08	2°P50'07					
desc. node	8688 Nov 20 09:52	21°P45'49		superior conj	8689 Oct 17 07:05	1°P11'32	1°39'08
	8688 Nov 25 12:42	0°B		minimum elong	8689 Oct 17 06:10	1°P06'36	1°39'13
evening max el	8688 Dec 14 17:50	24°B35'25	27°06'43	max. Earth dist.	8689 Oct 19 09:18	5°P43'38	1.32785 AU
	8688 Dec 21 16:51	0°≈		evening rise	8689 Oct 24 16:22	16°P49'06	
retrograde	8688 Dec 28 02:36	1°≈56'26			8689 Oct 31 12:28	0°P	

desc. node	8689 Nov 07 06:57	11°♊40'00		desc. node	8690 Oct 25 04:03	1°♊04'11	
	8689 Nov 20 02:08	0°♊		evening max el	8690 Nov 09 14:12	20°♊32'01	27°19'37
evening max el	8689 Nov 27 05:51	7°♊50'57	27°28'44	retrograde	8690 Nov 23 10:21	27°♊45'01	
retrograde	8689 Dec 10 22:16	15°♊09'46		evening set	8690 Nov 30 12:07	25°♊27'15	
evening set	8689 Dec 17 22:43	12°♊38'22		min. Earth dist.	8690 Dec 04 04:39	22°♊37'56	0.61659 AU
min. Earth dist.	8689 Dec 21 16:45	9°♊23'27	0.63598 AU	inferior conj	8690 Dec 07 05:08	19°♊55'19	-3°18'08
inferior conj	8689 Dec 24 07:53	6°♊43'32	-2°07'11	minimum elong	8690 Dec 07 11:25	19°♊41'11	3°15'44
minimum elong	8689 Dec 24 11:54	6°♊33'19	2°05'22	morning rise	8690 Dec 14 12:59	14°♊56'06	
asc. node	8689 Dec 30 17:50	1°♊35'02		direct	8690 Dec 16 18:31	14°♊34'51	
morning rise	8689 Dec 31 02:56	1°♊25'37		asc. node	8690 Dec 17 14:51	14°♊38'01	
direct	8690 Jan 02 12:32	0°♊57'31		morning max el	8690 Dec 23 17:38	18°♊06'02	17°52'02
morning max el	8690 Jan 09 01:29	4°♊20'45	17°48'32		8691 Jan 01 06:52	0°♊	
morning set	8690 Jan 25 12:40	29°♊28'17		morning set	8691 Jan 08 10:54	12°♊40'34	
	8690 Jan 25 20:03	0°♊			8691 Jan 18 04:33	0°♊	
desc. node	8690 Feb 03 06:13	14°♊18'59					
				superior conj	8691 Jan 19 05:20	1°♊46'52	0°14'10
superior conj	8690 Feb 07 01:31	20°♊36'14	-0°27'35	minimum elong	8691 Jan 19 06:36	1°♊52'20	0°14'10
minimum elong	8690 Feb 06 22:31	20°♊23'59	0°26'59	behind sun begin	8691 Jan 19 02:37	1°♊35'11	
	8690 Feb 12 21:13	0°♊		behind sun end	8691 Jan 19 10:36	2°♊09'27	
max. Earth dist.	8690 Feb 12 22:26	0°♊04'50	1.44547 AU	desc. node	8691 Jan 21 03:11	5°♊02'34	
evening rise	8690 Feb 22 14:28	15°♊11'05		max. Earth dist.	8691 Jan 26 13:37	14°♊05'23	1.43081 AU
	8690 Mar 04 09:32	0°♊		evening rise	8691 Feb 02 07:27	24°♊52'30	
evening max el	8690 Mar 23 07:14	25°♊27'21	20°38'54		8691 Feb 05 14:42	0°♊	
asc. node	8690 Mar 28 16:41	29°♊35'04			8691 Feb 26 09:48	0°♊	
	8690 Mar 29 19:46	0°♊		evening max el	8691 Mar 06 03:14	9°♊08'06	21°51'58
retrograde	8690 Mar 31 11:35	0°♊14'20		retrograde	8691 Mar 15 09:15	14°♊36'45	
	8690 Apr 02 02:02	30°♊		asc. node	8691 Mar 15 13:47	14°♊36'34	
evening set	8690 Apr 04 12:40	28°♊40'47		evening set	8691 Mar 19 20:47	12°♊47'52	
inferior conj	8690 Apr 09 20:04	22°♊32'16	3°05'40	inferior conj	8691 Mar 25 04:17	6°♊28'57	2°41'26
minimum elong	8690 Apr 09 18:25	22°♊37'55	3°05'20	minimum elong	8691 Mar 25 02:08	6°♊36'25	2°40'55
min. Earth dist.	8690 Apr 10 10:14	21°♊43'35	0.67971 AU	min. Earth dist.	8691 Mar 25 05:37	6°♊24'19	0.68410 AU
morning rise	8690 Apr 14 23:57	16°♊16'35		morning rise	8691 Mar 30 07:21	0°♊17'11	
direct	8690 Apr 20 12:04	13°♊49'50			8691 Mar 30 15:31	30°♊	
morning max el	8690 May 01 13:00	20°♊25'45	24°04'32	direct	8691 Apr 04 05:30	28°♊10'21	
desc. node	8690 May 02 06:08	21°♊09'47			8691 Apr 09 08:29	0°♊	
	8690 May 09 17:40	0°♊		morning max el	8691 Apr 13 23:36	3°♊55'21	22°34'55
	8690 May 30 04:32	0°♊		desc. node	8691 Apr 19 03:03	9°♊42'19	
morning set	8690 Jun 06 02:47	11°♊34'03			8691 May 03 21:13	0°♊	
max. Earth dist.	8690 Jun 09 19:59	18°♊05'12	1.38211 AU	morning set	8691 May 17 21:47	21°♊51'32	
	8690 Jun 16 07:24	0°♊		max. Earth dist.	8691 May 22 17:25	29°♊53'47	1.40468 AU
					8691 May 22 18:53	0°♊	
superior conj	8690 Jun 17 01:31	1°♊25'59	-1°09'37				
minimum elong	8690 Jun 17 05:53	1°♊46'47	1°09'07	superior conj	8691 May 30 12:19	13°♊32'42	-1°39'22
asc. node	8690 Jun 24 15:39	16°♊13'23		minimum elong	8691 May 30 18:10	13°♊59'06	1°38'54
evening rise	8690 Jun 25 23:23	18°♊49'45			8691 Jun 08 09:05	0°♊	
	8690 Jul 01 19:16	0°♊		evening rise	8691 Jun 09 13:29	2°♊14'09	
evening max el	8690 Jul 12 09:47	15°♊33'19	19°00'09	asc. node	8691 Jun 11 12:40	5°♊56'17	
retrograde	8690 Jul 21 02:53	19°♊52'21		evening max el	8691 Jun 25 14:53	27°♊59'03	18°23'16
evening set	8690 Jul 23 01:11	19°♊40'30			8691 Jun 28 00:48	0°♊	
desc. node	8690 Jul 29 05:23	16°♊51'34		retrograde	8691 Jul 03 02:11	1°♊43'29	
inferior conj	8690 Jul 31 08:26	15°♊25'15	-0°39'04	evening set	8691 Jul 05 06:57	1°♊24'54	
minimum elong	8690 Jul 31 06:46	15°♊28'09	0°38'35		8691 Jul 08 10:43	30°♊	
min. Earth dist.	8690 Aug 03 07:40	13°♊22'04	0.56435 AU	inferior conj	8691 Jul 12 18:25	26°♊49'37	0°58'40
morning rise	8690 Aug 08 09:13	10°♊32'46		minimum elong	8691 Jul 12 20:23	26°♊45'37	0°57'47
direct	8690 Aug 13 17:29	9°♊25'30		min. Earth dist.	8691 Jul 16 03:30	24°♊05'21	0.58380 AU
morning max el	8690 Aug 27 22:57	16°♊44'16	25°56'18	desc. node	8691 Jul 16 02:28	24°♊07'22	
	8690 Sep 07 19:33	0°♊		morning rise	8691 Jul 20 06:25	21°♊21'29	
asc. node	8690 Sep 20 15:17	22°♊13'53		direct	8691 Jul 26 08:25	19°♊44'16	
	8690 Sep 24 09:51	0°♊		morning max el	8691 Aug 09 17:52	27°♊27'13	27°11'00
morning set	8690 Sep 24 20:56	0°♊58'51			8691 Aug 12 04:54	0°♊	
					8691 Sep 01 09:37	0°♊	
superior conj	8690 Oct 01 17:51	16°♊01'25	1°31'26	asc. node	8691 Sep 07 12:13	11°♊57'50	
minimum elong	8690 Oct 01 16:06	15°♊51'45	1°31'20	morning set	8691 Sep 09 05:46	15°♊34'38	
max. Earth dist.	8690 Oct 02 16:08	18°♊04'27	1.31975 AU		8691 Sep 15 20:31	0°♊	
	8690 Oct 08 04:27	0°♊					
evening rise	8690 Oct 08 17:41	1°♊09'20		superior conj	8691 Sep 16 05:38	0°♊50'34	1°18'22
	8690 Oct 24 11:32	0°♊		minimum elong	8691 Sep 16 03:26	0°♊38'23	1°18'03

max. Earth dist.	8691 Sep 16 02:00	0°♄30'24	1.31622 AU	evening rise	8692 Sep 06 10:38	0°♄22'22	
evening rise	8691 Sep 23 00:28	15°♄42'19			8692 Sep 06 06:28	0°♄	
	8691 Sep 30 02:51	0°♄			8692 Sep 22 11:49	0°♄	
desc. node	8691 Oct 12 01:08	19°♄45'19		desc. node	8692 Sep 27 22:15	7°♄26'40	
	8691 Oct 20 06:08	0°♄		evening max el	8692 Oct 03 09:48	13°♄27'57	25°22'23
evening max el	8691 Oct 22 16:00	2°♄25'32	26°36'36	retrograde	8692 Oct 17 07:31	20°♄29'08	
retrograde	8691 Nov 05 13:58	9°♄32'52		evening set	8692 Oct 23 05:14	19°♄08'57	
evening set	8691 Nov 12 07:54	7°♄39'18		min. Earth dist.	8692 Oct 27 21:48	16°♄30'01	0.57534 AU
min. Earth dist.	8691 Nov 16 05:42	5°♄03'56	0.59567 AU	inferior conj	8692 Oct 30 20:49	14°♄29'05	-5°17'50
inferior conj	8691 Nov 19 10:31	2°♄33'30	-4°25'35	minimum elong	8692 Oct 31 02:22	14°♄19'36	5°16'55
minimum elong	8691 Nov 19 17:57	2°♄18'53	4°23'27	morning rise	8692 Nov 08 01:50	10°♄14'26	
	8691 Nov 22 21:58	30°♄		direct	8692 Nov 10 11:00	9°♄57'26	
morning rise	8691 Nov 27 06:27	27°♄56'08		morning max el	8692 Nov 19 08:08	14°♄12'39	18°58'59
direct	8691 Nov 29 11:26	27°♄38'32		asc. node	8692 Nov 20 08:51	15°♄15'10	
asc. node	8691 Dec 04 11:51	29°♄14'47			8692 Nov 30 06:12	0°♄	
	8691 Dec 05 13:24	0°♄		morning set	8692 Dec 05 22:13	10°♄51'28	
morning max el	8691 Dec 07 05:06	1°♄26'49	18°14'57				
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					8692 Dec 15 17:43	0°♄	
superior conj	8692 Jan 01 08:54	14°♄05'06	0°48'27	max. Earth dist.	8692 Dec 21 05:40	10°♄06'23	1.38992 AU
minimum elong	8692 Jan 01 12:04	14°♄19'26	0°48'11	desc. node	8692 Dec 24 21:08	16°♄29'33	
desc. node	8692 Jan 08 00:09	25°♄47'19		evening rise	8692 Dec 25 02:07	16°♄50'57	
max. Earth dist.	8692 Jan 08 23:41	27°♄27'42	1.41150 AU		8693 Jan 02 01:50	0°♄	
	8692 Jan 10 11:48	0°♄			8693 Jan 23 08:43	0°♄	
evening rise	8692 Jan 13 17:51	5°♄22'30		evening max el	8693 Jan 29 08:36	6°♄37'29	24°30'54
	8692 Jan 29 19:51	0°♄		retrograde	8693 Feb 09 20:20	13°♄20'43	
evening max el	8692 Feb 16 19:01	22°♄51'05	23°11'21	evening set	8693 Feb 15 07:39	11°♄03'51	
retrograde	8692 Feb 27 04:38	29°♄00'35		asc. node	8693 Feb 16 07:58	10°♄07'33	
asc. node	8692 Mar 01 10:52	28°♄08'12		min. Earth dist.	8693 Feb 19 22:17	5°♄48'54	0.68028 AU
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min. Earth dist.	8692 Mar 08 02:23	21°♄07'40	0.68419 AU	minimum elong	8693 Feb 20 18:34	4°♄41'03	1°25'27
inferior conj	8692 Mar 08 13:01	20°♄30'58	2°08'02		8693 Feb 24 14:38	30°♄	
minimum elong	8692 Mar 08 10:47	20°♄38'38	2°07'24	morning rise	8693 Feb 26 05:37	28°♄34'57	
morning rise	8692 Mar 13 17:54	14°♄24'23		direct	8693 Mar 02 00:54	27°♄12'07	
direct	8692 Mar 18 02:12	12°♄39'42			8693 Mar 08 00:30	0°♄	
morning max el	8692 Mar 26 15:08	17°♄35'13	21°10'53	morning max el	8693 Mar 09 14:01	1°♄26'32	19°58'19
desc. node	8692 Apr 04 23:58	28°♄56'57		desc. node	8693 Mar 22 20:52	18°♄41'55	
	8692 Apr 05 18:27	0°♄			8693 Mar 30 10:43	0°♄	
	8692 Apr 25 23:33	0°♄		morning set	8693 Apr 05 12:16	9°♄16'14	
morning set	8692 Apr 26 13:45	0°♄55'44		max. Earth dist.	8693 Apr 16 05:55	26°♄04'44	1.44201 AU
max. Earth dist.	8692 May 03 20:12	12°♄34'41	1.42547 AU		8693 Apr 18 16:42	0°♄	
superior conj	8692 May 11 02:04	24°♄41'32	-2°02'13	superior conj	8693 Apr 21 15:17	4°♄45'37	-2°12'08
minimum elong	8692 May 11 07:10	25°♄03'23	2°02'05	minimum elong	8693 Apr 21 15:43	4°♄47'26	2°12'14
	8692 May 14 03:51	0°♄		evening rise	8693 May 04 19:47	26°♄51'14	
evening rise	8692 May 22 13:53	14°♄58'32			8693 May 06 15:50	0°♄	
asc. node	8692 May 28 09:43	25°♄22'21		asc. node	8693 May 15 06:47	14°♄24'39	
	8692 May 31 02:58	0°♄		evening max el	8693 May 22 15:23	24°♄12'25	18°08'49
evening max el	8692 Jun 08 01:58	10°♄55'32	18°06'28	retrograde	8693 May 29 00:43	27°♄33'18	
retrograde	8692 Jun 14 18:55	14°♄20'41		evening set	8693 May 31 20:37	26°♄52'07	
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inferior conj	8692 Jun 24 01:05	8°♄56'41	2°09'00	minimum elong	8693 Jun 07 02:59	21°♄31'23	2°52'40
minimum elong	8692 Jun 24 04:06	8°♄49'33	2°07'58	min. Earth dist.	8693 Jun 09 19:13	18°♄39'48	0.62829 AU
min. Earth dist.	8692 Jun 27 06:59	5°♄53'32	0.60615 AU	morning rise	8693 Jun 13 07:43	15°♄28'33	
morning rise	8692 Jun 30 22:15	3°♄02'31		desc. node	8693 Jun 18 20:33	13°♄01'21	
desc. node	8692 Jul 01 23:31	2°♄24'55		direct	8693 Jun 20 01:59	12°♄56'32	
direct	8692 Jul 07 12:12	0°♄54'25		morning max el	8693 Jul 04 02:41	20°♄59'23	27°51'48
morning max el	8692 Jul 21 19:39	8°♄52'21	27°50'31		8693 Jul 11 21:39	0°♄	
	8692 Aug 07 00:52	0°♄			8693 Jul 31 02:50	0°♄	
morning set	8692 Aug 23 10:31	29°♄55'50		morning set	8693 Aug 07 09:04	13°♄56'10	
	8692 Aug 23 11:20	0°♄		asc. node	8693 Aug 11 06:09	21°♄57'19	
asc. node	8692 Aug 24 09:10	1°♄54'00		max. Earth dist.	8693 Aug 12 15:56	24°♄57'02	1.32331 AU
max. Earth dist.	8692 Aug 29 11:12	12°♄51'34	1.31739 AU				
				superior conj	8693 Aug 15 01:09	0°♄05'50	0°37'38
superior conj	8692 Aug 30 16:40	15°♄33'58	1°00'19	minimum elong	8693 Aug 14 23:30	29°♄56'54	0°37'11
minimum elong	8692 Aug 30 14:30	15°♄21'56	0°59'51		8693 Aug 15 00:04	0°♄	

































































































































evening rise	8693 Aug 21 22:13	15° \mathbb{M} 03'39		superior conj	8694 Jul 30 04:59	14° Ω 19'57	0°10'51
	8693 Aug 29 07:35	0° Ω		minimum elong	8694 Jul 30 04:26	14° Ω 17'04	0°10'35
desc. node	8693 Sep 14 19:22	23° Ω 45'25		behind sun begin	8694 Jul 30 00:15	13° Ω 54'53	
evening max el	8693 Sep 14 21:44	23° Ω 51'09	23°47'35	behind sun end	8694 Jul 30 08:37	14° Ω 39'16	
	8693 Sep 24 08:07	0° \mathbb{M}		evening rise	8694 Aug 06 09:20	29° Ω 40'16	
retrograde	8693 Sep 28 12:37	0° \mathbb{M} 39'56			8694 Aug 06 13:04	0° \mathbb{M}	
	8693 Oct 02 19:02	30° \mathbb{R} Ω			8694 Aug 23 18:50	0° Ω	
evening set	8693 Oct 03 02:02	29° Ω 54'30		evening max el	8694 Aug 27 10:53	4° Ω 04'04	22°08'30
min. Earth dist.	8693 Oct 09 08:09	26° Ω 53'35	0.55859 AU	desc. node	8694 Sep 01 16:30	8° Ω 11'41	
inferior conj	8693 Oct 11 10:53	25° Ω 37'15	-5°36'55	retrograde	8694 Sep 09 05:36	10° Ω 25'35	
minimum elong	8693 Oct 11 10:12	25° Ω 38'17	5°36'50	evening set	8694 Sep 12 07:34	10° Ω 04'31	
morning rise	8693 Oct 19 20:25	21° Ω 41'43		min. Earth dist.	8694 Sep 20 16:10	6° Ω 26'07	0.54854 AU
direct	8693 Oct 22 15:29	21° Ω 22'03		inferior conj	8694 Sep 21 08:34	6° Ω 03'08	-5°04'40
morning max el	8693 Nov 01 23:23	26° Ω 13'50	20°05'27	minimum elong	8694 Sep 21 00:41	6° Ω 14'10	5°03'14
	8693 Nov 05 10:04	0° \mathbb{M}		morning rise	8694 Sep 29 19:22	2° Ω 15'22	
asc. node	8693 Nov 07 05:51	2° \mathbb{M} 24'08		direct	8694 Oct 03 04:25	1° Ω 50'01	
morning set	8693 Nov 20 03:31	25° \mathbb{M} 27'48		morning max el	8694 Oct 15 01:26	7° Ω 25'16	21°33'22
	8693 Nov 22 08:42	0° \mathbb{X}		asc. node	8694 Oct 25 02:51	20° Ω 26'09	
					8694 Oct 30 11:14	0° \mathbb{M}	
superior conj	8693 Nov 27 19:50	11° \mathbb{X} 07'56	1°30'24	morning set	8694 Nov 04 12:50	10° \mathbb{M} 13'35	
minimum elong	8693 Nov 27 22:06	11° \mathbb{X} 19'19	1°30'25				
max. Earth dist.	8693 Dec 03 12:06	22° \mathbb{X} 13'01	1.36860 AU	superior conj	8694 Nov 11 18:12	25° \mathbb{M} 26'28	1°39'09
evening rise	8693 Dec 07 07:06	29° \mathbb{X} 14'10		minimum elong	8694 Nov 11 19:11	25° \mathbb{M} 31'36	1°39'18
	8693 Dec 07 17:15	0° \mathbb{Z}			8694 Nov 13 23:06	0° \mathbb{X}	
desc. node	8693 Dec 11 18:10	7° \mathbb{Z} 05'31		max. Earth dist.	8694 Nov 15 23:49	4° \mathbb{X} 06'56	1.34968 AU
	8693 Dec 26 08:37	0° \approx		evening rise	8694 Nov 20 05:05	12° \mathbb{X} 21'48	
evening max el	8694 Jan 11 21:54	20° \approx 26'11	25°43'36	desc. node	8694 Nov 28 15:13	27° \mathbb{X} 29'53	
retrograde	8694 Jan 24 07:23	27° \approx 32'05			8694 Nov 30 03:04	0° \mathbb{Z}	
evening set	8694 Jan 30 07:17	25° \approx 04'23			8694 Dec 21 11:39	0° \approx	
asc. node	8694 Feb 03 05:03	20° \approx 55'05		evening max el	8694 Dec 25 11:17	4° \approx 09'36	26°42'13
min. Earth dist.	8694 Feb 03 15:00	20° \approx 24'05	0.67254 AU	retrograde	8695 Jan 07 12:52	11° \approx 27'19	
inferior conj	8694 Feb 05 00:34	18° \approx 37'37	0°35'45	evening set	8695 Jan 14 00:37	8° \approx 52'43	
minimum elong	8694 Feb 04 23:41	18° \approx 40'27	0°35'33	min. Earth dist.	8695 Jan 18 02:12	4° \approx 47'08	0.66105 AU
morning rise	8694 Feb 10 16:34	12° \approx 46'11		inferior conj	8695 Jan 19 23:26	2° \approx 33'43	-0°22'20
direct	8694 Feb 14 00:11	11° \approx 43'04		minimum elong	8695 Jan 20 00:04	2° \approx 31'54	0°21'53
morning max el	8694 Feb 20 20:43	15° \approx 28'22	19°00'39	asc. node	8695 Jan 21 02:09	1° \approx 15'51	
	8694 Mar 03 22:32	0° \mathbb{X}			8695 Jan 22 05:36	30° \mathbb{R} \mathbb{Z}	
greatest brilliancy	8694 Mar 06 17:51	4° \mathbb{X} 13'45	-0.8m	morning rise	8695 Jan 26 00:28	26° \mathbb{Z} 53'15	
desc. node	8694 Mar 09 17:49	8° \mathbb{X} 49'21		direct	8695 Jan 28 21:58	26° \mathbb{Z} 06'43	
morning set	8694 Mar 15 16:44	18° \mathbb{X} 02'25		morning max el	8695 Feb 04 09:43	29° \mathbb{Z} 35'04	18°19'18
	8694 Mar 23 09:10	0° \mathbb{Y}			8695 Feb 04 19:37	0° \approx	
max. Earth dist.	8694 Mar 29 22:00	10° \mathbb{Y} 13'26	1.45240 AU	morning set	8695 Feb 23 22:29	28° \approx 07'22	
				desc. node	8695 Feb 24 14:45	29° \approx 12'28	
					8695 Feb 25 02:37	0° \mathbb{X}	
superior conj	8694 Apr 01 06:14	13° \mathbb{Y} 54'39	-2°03'19				
minimum elong	8694 Mar 31 23:36	13° \mathbb{Y} 28'30	2°03'01				
	8694 Apr 11 08:20	0° \mathbb{Z}		superior conj	8695 Mar 11 11:15	22° \mathbb{X} 43'43	-1°34'44
evening rise	8694 Apr 16 03:08	7° \mathbb{Z} 45'54		minimum elong	8695 Mar 11 01:40	22° \mathbb{X} 06'10	1°33'45
	8694 Apr 30 01:53	0° \mathbb{II}		max. Earth dist.	8695 Mar 12 17:35	24° \mathbb{X} 42'27	1.45548 AU
asc. node	8694 May 02 03:51	2° \mathbb{II} 55'36			8695 Mar 16 02:48	0° \mathbb{Y}	
evening max el	8694 May 06 04:05	7° \mathbb{II} 41'58	18°29'29	evening rise	8695 Mar 27 11:16	17° \mathbb{Y} 45'41	
retrograde	8694 May 12 15:23	11° \mathbb{II} 12'26			8695 Apr 04 06:57	0° \mathbb{Z}	
evening set	8694 May 15 18:42	10° \mathbb{II} 17'20		greatest brilliancy	8695 Apr 07 04:40	4° \mathbb{Z} 29'26	-0.8m
inferior conj	8694 May 21 12:46	4° \mathbb{II} 45'38	3°16'18	asc. node	8695 Apr 19 00:56	20° \mathbb{Z} 45'30	
minimum elong	8694 May 21 13:57	4° \mathbb{II} 42'06	3°15'59	evening max el	8695 Apr 19 13:32	21° \mathbb{Z} 18'08	19°07'36
min. Earth dist.	8694 May 23 16:37	2° \mathbb{II} 11'53	0.64791 AU	retrograde	8695 Apr 26 11:20	25° \mathbb{Z} 10'51	
	8694 May 25 16:59	30° \mathbb{R} \mathbb{Z}		evening set	8695 Apr 29 22:24	24° \mathbb{Z} 01'05	
morning rise	8694 May 27 08:20	28° \mathbb{Z} 29'06		inferior conj	8695 May 05 10:05	18° \mathbb{Z} 13'29	3°22'25
direct	8694 Jun 02 23:45	25° \mathbb{Z} 44'36		minimum elong	8695 May 05 09:59	18° \mathbb{Z} 13'50	3°22'15
desc. node	8694 Jun 05 17:34	26° \mathbb{Z} 09'12		min. Earth dist.	8695 May 06 22:35	16° \mathbb{Z} 16'27	0.66367 AU
	8694 Jun 12 11:40	0° \mathbb{II}		morning rise	8695 May 10 21:07	11° \mathbb{Z} 54'53	
morning max el	8694 Jun 16 12:37	3° \mathbb{II} 41'12	27°17'58	direct	8695 May 17 04:17	9° \mathbb{Z} 09'46	
	8694 Jul 06 08:16	0° \mathbb{Z}		desc. node	8695 May 23 14:35	11° \mathbb{Z} 24'38	
morning set	8694 Jul 21 22:43	27° \mathbb{Z} 28'08		morning max el	8695 May 29 23:09	16° \mathbb{Z} 47'01	26°16'07
	8694 Jul 23 05:39	0° Ω			8695 Jun 09 22:31	0° \mathbb{II}	
max. Earth dist.	8694 Jul 26 12:40	6° Ω 38'36	1.33411 AU		8695 Jun 29 06:00	0° \mathbb{Z}	
asc. node	8694 Jul 29 03:07	12° Ω 03'27		morning set	8695 Jul 05 00:04	10° \mathbb{Z} 22'42	
				max. Earth dist.	8695 Jul 08 22:56	17° \mathbb{Z} 55'17	1.34969 AU

superior conj	8695 Jul 14 01:45	28° Ω 09'46	-0°19'14	superior conj	8696 Jun 26 12:22	11° Ω 26'31	-0°51'12
minimum elong	8695 Jul 14 02:52	28° Ω 15'27	0°19'11	minimum elong	8696 Jun 26 15:32	11° Ω 42'03	0°50'50
	8695 Jul 14 23:13	0° Ω		asc. node	8696 Jul 01 21:05	22° Ω 08'00	
asc. node	8695 Jul 16 00:07	2° Ω 08'33		evening rise	8696 Jul 04 21:43	28° Ω 14'08	
evening rise	8695 Jul 21 17:58	14° Ω 06'19			8696 Jul 05 18:50	0° Ω	
	8695 Jul 29 21:41	0° Π		evening max el	8696 Jul 21 21:54	26° Ω 02'00	19°30'40
evening max el	8695 Aug 09 09:43	14° Π 41'35	20°40'12		8696 Jul 27 13:54	0° Π	
desc. node	8695 Aug 19 13:37	20° Π 15'04		retrograde	8696 Jul 31 13:06	0° Π 47'40	
retrograde	8695 Aug 20 17:52	20° Π 18'35		evening set	8696 Aug 02 09:24	0° Π 37'56	
evening set	8695 Aug 22 20:18	20° Π 07'48			8696 Aug 04 17:12	30° κ Ω	
inferior conj	8695 Sep 01 01:10	16° Π 10'54	-3°39'08	desc. node	8696 Aug 05 10:43	29° Ω 42'52	
minimum elong	8695 Aug 31 15:56	16° Π 24'08	3°36'17	inferior conj	8696 Aug 11 03:12	26° Ω 32'33	-1°44'42
min. Earth dist.	8695 Sep 02 01:15	15° Π 36'21	0.54743 AU	minimum elong	8696 Aug 10 22:28	26° Ω 40'08	1°43'01
morning rise	8695 Sep 09 11:26	12° Π 10'39		min. Earth dist.	8696 Aug 13 13:30	24° Ω 59'37	0.55579 AU
direct	8695 Sep 13 12:41	11° Π 35'30		morning rise	8696 Aug 19 09:01	22° Ω 01'03	
morning max el	8695 Sep 26 17:20	17° Π 56'21	23°16'24	direct	8696 Aug 24 05:31	21° Ω 08'06	
	8695 Oct 06 12:12	0° Ω		morning max el	8696 Sep 07 05:39	28° Ω 09'29	25°01'30
asc. node	8695 Oct 11 23:50	9° Ω 08'44			8696 Sep 09 01:52	0° Π	
morning set	8695 Oct 20 00:13	25° Ω 03'16		asc. node	8696 Sep 27 20:47	28° Π 21'07	
	8695 Oct 22 07:41	0° Π			8696 Sep 28 17:00	0° Ω	
				morning set	8696 Oct 03 11:53	9° Ω 51'15	
superior conj	8695 Oct 26 23:18	10° Π 03'11	1°40'57	superior conj	8696 Oct 10 08:36	24° Ω 49'59	1°36'34
minimum elong	8695 Oct 26 23:01	10° Π 01'43	1°41'06	minimum elong	8696 Oct 10 07:18	24° Ω 42'49	1°36'34
max. Earth dist.	8695 Oct 29 19:24	16° Π 05'49	1.33454 AU	max. Earth dist.	8696 Oct 11 22:33	28° Ω 17'37	1.32379 AU
evening rise	8695 Nov 03 16:16	26° Π 04'25			8696 Oct 12 17:24	0° Π	
	8695 Nov 05 16:23	0° Σ		evening rise	8696 Oct 17 13:15	10° Π 12'52	
desc. node	8695 Nov 15 12:17	17° Σ 36'59			8696 Oct 27 23:40	0° Σ	
	8695 Nov 23 12:21	0° Σ		desc. node	8696 Nov 01 09:22	7° Σ 19'20	
evening max el	8695 Dec 08 00:01	17° Σ 37'45	27°19'27		8696 Nov 18 18:15	0° Σ	
retrograde	8695 Dec 21 12:21	24° Σ 58'32		evening max el	8696 Nov 19 10:34	0° Σ 39'14	27°28'53
evening set	8695 Dec 28 09:28	22° Σ 23'15		retrograde	8696 Dec 03 05:10	7° Σ 56'44	
min. Earth dist.	8696 Jan 01 05:41	18° Σ 51'04	0.64604 AU	evening set	8696 Dec 10 07:02	5° Σ 29'36	
inferior conj	8696 Jan 03 14:37	16° Σ 17'52	-1°27'22	min. Earth dist.	8696 Dec 13 23:45	2° Σ 26'43	0.62793 AU
minimum elong	8696 Jan 03 17:18	16° Σ 10'39	1°26'03	inferior conj	8696 Dec 16 19:21	29° Σ 43'42	-2°37'17
asc. node	8696 Jan 07 23:14	12° Σ 08'01		minimum elong	8696 Dec 17 00:23	29° Σ 31'32	2°35'08
morning rise	8696 Jan 10 02:42	10° Σ 51'08			8696 Dec 16 12:38	30° κ Σ	
direct	8696 Jan 12 15:58	10° Σ 17'27		morning rise	8696 Dec 23 19:51	24° Σ 33'36	
morning max el	8696 Jan 19 02:23	13° Σ 39'44	17°54'48	asc. node	8696 Dec 24 20:17	24° Σ 16'45	
	8696 Jan 30 14:46	0° \approx		direct	8696 Dec 26 03:13	24° Σ 08'58	
morning set	8696 Feb 05 09:26	9° \approx 38'19		morning max el	8697 Jan 01 19:43	27° Σ 34'41	17°47'47
desc. node	8696 Feb 11 11:39	19° \approx 46'26			8697 Jan 04 00:01	0° Σ	
	8696 Feb 17 18:24	0° H		morning set	8697 Jan 17 20:43	22° Σ 19'26	
					8697 Jan 22 05:55	0° \approx	
superior conj	8696 Feb 19 01:31	2° H 04'48	-0°53'14	desc. node	8697 Jan 28 08:36	10° \approx 27'34	
minimum elong	8696 Feb 18 19:27	1° H 40'28	0°52'17				
max. Earth dist.	8696 Feb 23 13:07	9° H 12'00	1.45108 AU	superior conj	8697 Jan 29 14:34	12° \approx 33'08	-0°09'12
evening rise	8696 Mar 06 02:23	27° H 09'34		minimum elong	8697 Jan 29 13:39	12° \approx 29'18	0°08'53
	8696 Mar 07 22:49	0° Υ		behind sun begin	8697 Jan 29 05:57	11° \approx 57'09	
greatest brilliancy	8696 Mar 20 20:54	19° Υ 27'11	-0.6m	behind sun end	8697 Jan 29 21:20	13° \approx 01'23	
	8696 Mar 28 11:38	0° B		max. Earth dist.	8697 Feb 05 06:04	23° \approx 26'07	1.43982 AU
evening max el	8696 Apr 01 18:01	4° B 56'27	20°01'39		8697 Feb 09 09:09	0° H	
asc. node	8696 Apr 04 22:02	7° B 41'29		evening rise	8697 Feb 13 14:14	6° H 33'52	
retrograde	8696 Apr 09 09:39	9° B 21'54			8697 Mar 01 06:35	0° Υ	
evening set	8696 Apr 13 05:15	7° B 57'09		evening max el	8697 Mar 15 17:02	18° Υ 36'30	21°08'56
inferior conj	8696 Apr 18 13:29	1° B 55'32	3°15'04	asc. node	8697 Mar 22 19:08	23° Υ 29'23	
minimum elong	8696 Apr 18 12:19	1° B 59'30	3°14'51	retrograde	8697 Mar 24 08:07	23° Υ 41'27	
min. Earth dist.	8696 Apr 19 11:29	0° B 41'14	0.67507 AU	evening set	8697 Mar 28 13:23	22° Υ 01'33	
	8696 Apr 19 23:50	30° κ Υ		inferior conj	8697 Apr 02 20:35	15° Υ 48'13	2°56'35
morning rise	8696 Apr 23 19:06	25° Υ 37'58		minimum elong	8697 Apr 02 18:41	15° Υ 54'49	2°56'11
direct	8696 Apr 29 14:39	23° Υ 02'18		min. Earth dist.	8697 Apr 03 05:13	15° Υ 18'15	0.68204 AU
desc. node	8696 May 09 11:33	28° Υ 15'54		morning rise	8697 Apr 07 23:45	9° Υ 33'46	
	8696 May 11 06:41	0° B		direct	8697 Apr 13 05:58	7° Υ 14'51	
morning max el	8696 May 11 08:43	0° B 05'09	24°55'27	morning max el	8697 Apr 23 18:03	13° Υ 30'19	23°26'14
	8696 Jun 02 19:48	0° Π		desc. node	8697 Apr 26 08:28	16° Υ 17'23	
morning set	8696 Jun 16 08:29	22° Π 26'50			8697 May 07 01:44	0° B	
max. Earth dist.	8696 Jun 19 23:16	28° Π 59'17	1.36943 AU		8697 May 26 17:04	0° Π	
	8696 Jun 20 12:25	0° Ω					

morning set	8697 May 28 18:38	3°♊27'06		desc. node	8698 Apr 13 05:23	5°♍09'03	
max. Earth dist.	8697 Jun 01 19:07	10°♊20'52	1.39172 AU		8698 Apr 30 15:32	0°♋	
				morning set	8698 May 09 01:49	13°♋11'35	
superior conj	8697 Jun 09 09:10	24°♊02'04	-1°22'44	max. Earth dist.	8698 May 14 18:06	22°♋29'34	1.41392 AU
minimum elong	8697 Jun 09 14:18	24°♊26'02	1°22'14		8698 May 19 04:21	0°♊	
	8697 Jun 12 13:08	0°♌					
evening rise	8697 Jun 18 17:48	11°♌56'50		superior conj	8698 May 22 11:36	5°♊45'25	-1°50'14
asc. node	8697 Jun 18 18:05	11°♌58'15		minimum elong	8698 May 22 17:30	6°♊11'31	1°49'52
	8697 Jun 28 16:31	0°♎		evening rise	8698 Jun 02 02:34	25°♊05'02	
evening max el	8697 Jul 04 21:58	8°♎06'42	18°41'58		8698 Jun 04 18:28	0°♌	
retrograde	8697 Jul 13 00:59	12°♎08'49		asc. node	8698 Jun 05 15:07	1°♌34'28	
evening set	8697 Jul 15 01:42	11°♎54'37		evening max el	8698 Jun 18 06:09	20°♌47'02	18°13'46
inferior conj	8697 Jul 23 00:35	7°♎31'29	0°05'27	retrograde	8698 Jun 25 08:02	24°♌20'59	
minimum elong	8697 Jul 23 00:47	7°♎31'06	0°05'11	evening set	8698 Jun 27 16:10	23°♌58'20	
transit middle	8697 Jul 23 00:47	7°♎31'06	0°05'11	inferior conj	8698 Jul 04 19:42	19°♌14'22	1°31'53
transit begin	8697 Jul 22 21:19	7°♎37'33		minimum elong	8698 Jul 04 22:23	19°♌08'32	1°30'49
transit end	8697 Jul 23 04:15	7°♎24'38		min. Earth dist.	8698 Jul 08 04:46	16°♌19'18	0.59320 AU
desc. node	8697 Jul 23 07:48	7°♎18'01		desc. node	8698 Jul 10 04:50	14°♌46'26	
min. Earth dist.	8697 Jul 26 06:06	5°♎08'13	0.57211 AU	morning rise	8698 Jul 12 01:30	13°♌34'13	
morning rise	8697 Jul 30 20:23	2°♎22'55		direct	8698 Jul 18 09:41	11°♌43'25	
direct	8697 Aug 05 12:56	1°♎03'08		morning max el	8698 Aug 01 18:26	19°♌33'04	27°32'25
morning max el	8697 Aug 19 20:48	8°♎33'53	26°31'40		8698 Aug 10 15:52	0°♎	
	8697 Sep 05 00:31	0°♏			8698 Aug 28 18:37	0°♏	
asc. node	8697 Sep 14 17:43	17°♏55'24		asc. node	8698 Sep 01 14:40	7°♏45'18	
morning set	8697 Sep 17 22:14	24°♏32'52		morning set	8698 Sep 02 05:37	9°♏03'23	
	8697 Sep 20 10:56	0°♐		max. Earth dist.	8698 Sep 08 17:07	23°♏06'46	1.31619 AU
superior conj	8697 Sep 24 20:02	9°♐40'12	1°26'32	superior conj	8698 Sep 09 07:46	24°♏28'02	1°11'19
minimum elong	8697 Sep 24 18:03	9°♐29'10	1°26'20	minimum elong	8698 Sep 09 05:31	24°♏15'34	1°10'56
max. Earth dist.	8697 Sep 25 06:56	10°♐40'38	1.31769 AU		8698 Sep 11 19:37	0°♐	
evening rise	8697 Oct 01 17:11	24°♐39'18		evening rise	8698 Sep 16 01:44	9°♐16'48	
	8697 Oct 04 07:12	0°♑			8698 Sep 26 15:53	0°♑	
desc. node	8697 Oct 19 06:28	26°♑26'37		desc. node	8698 Oct 06 03:34	14°♑45'01	
	8697 Oct 21 17:12	0°♒		evening max el	8698 Oct 14 15:20	24°♑34'26	26°08'29
evening max el	8697 Nov 01 16:32	13°♒01'22	27°05'33		8698 Oct 22 01:48	0°♒	
retrograde	8697 Nov 15 14:04	20°♒12'09		retrograde	8698 Oct 28 13:23	1°♒38'26	
evening set	8697 Nov 22 13:32	18°♒03'41			8698 Nov 03 23:11	30°♑♑	
min. Earth dist.	8697 Nov 26 07:15	15°♒21'44	0.60769 AU	evening set	8698 Nov 04 00:21	29°♑58'33	
inferior conj	8697 Nov 29 10:19	12°♒42'22	-3°47'48	min. Earth dist.	8698 Nov 08 04:18	27°♑23'54	0.58683 AU
minimum elong	8697 Nov 29 17:19	12°♒27'27	3°45'23	inferior conj	8698 Nov 11 08:01	25°♑04'16	-4°50'31
morning rise	8697 Dec 06 23:29	7°♒51'56		minimum elong	8698 Nov 11 15:09	24°♑51'04	4°48'49
direct	8697 Dec 09 04:09	7°♒32'43		morning rise	8698 Nov 19 08:15	20°♑36'15	
asc. node	8697 Dec 11 17:19	7°♒59'46		direct	8698 Nov 21 14:29	20°♑19'10	
morning max el	8697 Dec 16 10:18	11°♒10'30	17°59'17	asc. node	8698 Nov 28 14:20	23°♑14'02	
	8697 Dec 28 21:21	0°♓		morning max el	8698 Nov 29 18:37	24°♑17'44	18°30'56
morning set	8698 Jan 01 01:46	5°♓50'27			8698 Dec 04 11:31	0°♒	
				morning set	8698 Dec 15 19:15	19°♒55'49	
					8698 Dec 21 00:50	0°♓	
superior conj	8698 Jan 11 04:57	24°♓13'28	0°29'46				
minimum elong	8698 Jan 11 07:18	24°♓23'49	0°29'36				
	8698 Jan 14 12:45	0°♈		superior conj	8698 Dec 24 17:14	6°♓56'14	1°00'17
desc. node	8698 Jan 15 05:33	1°♈11'46		minimum elong	8698 Dec 24 20:35	7°♓11'47	1°00'02
max. Earth dist.	8698 Jan 18 18:52	7°♈10'29	1.42301 AU	max. Earth dist.	8699 Jan 01 03:23	20°♓15'56	1.40253 AU
evening rise	8698 Jan 24 13:38	16°♈33'46		desc. node	8699 Jan 02 02:33	21°♓55'50	
	8698 Feb 02 06:18	0°♉		evening rise	8699 Jan 05 09:19	27°♓28'47	
	8698 Feb 24 07:08	0°♊			8699 Jan 06 21:54	0°♈	
evening max el	8698 Feb 26 11:08	2°♊18'12	22°25'24		8699 Jan 26 20:49	0°♉	
retrograde	8698 Mar 08 04:54	8°♊04'29		evening max el	8699 Feb 09 01:53	16°♉02'52	23°45'32
asc. node	8698 Mar 09 16:15	7°♊53'34		retrograde	8699 Feb 19 22:41	22°♉27'02	
evening set	8698 Mar 12 21:07	6°♊09'27		asc. node	8699 Feb 24 13:21	20°♉44'50	
inferior conj	8698 Mar 18 05:15	29°♉47'16	2°28'22	evening set	8699 Feb 25 02:57	20°♉17'33	
minimum elong	8698 Mar 18 03:01	29°♉55'02	2°27'47	min. Earth dist.	8699 Mar 01 22:05	14°♉43'00	0.68309 AU
min. Earth dist.	8698 Mar 18 01:30	0°♊00'19	0.68465 AU	inferior conj	8699 Mar 02 13:37	13°♉49'59	1°51'14
	8698 Mar 18 01:35	30°♊♊		minimum elong	8699 Mar 02 11:31	13°♉57'12	1°50'36
morning rise	8698 Mar 23 08:45	23°♉37'28		morning rise	8699 Mar 07 20:04	7°♉46'11	
direct	8698 Mar 28 01:04	21°♉39'39		direct	8699 Mar 11 22:48	6°♉10'50	
morning max el	8698 Apr 06 06:07	27°♉02'47	21°58'03	morning max el	8699 Mar 20 00:33	10°♉46'55	20°38'21
	8698 Apr 08 24:00	0°♋		desc. node	8699 Mar 31 02:19	24°♉37'19	

	8699 Apr 03 20:33	0°♿				8700 Mar 07 17:04	0°♿	
morning set	8699 Apr 18 08:11	21°♿50'05			greatest brilliancy	8700 Mar 15 20:47	11°♿24'48	-0.7m
	8699 Apr 23 12:57	0°♿			desc. node	8700 Mar 17 23:16	14°♿32'33	
max. Earth dist.	8699 Apr 27 00:25	5°♿34'18	1.43319 AU		morning set	8700 Mar 28 06:10	0°♿12'57	
						8700 Mar 28 02:49	0°♿	
superior conj	8699 May 03 15:06	16°♿26'25	-2°08'24		max. Earth dist.	8700 Apr 09 13:22	19°♿23'38	1.44722 AU
minimum elong	8699 May 03 18:45	16°♿41'42	2°08'24					
	8699 May 11 13:30	0°♿			superior conj	8700 Apr 13 18:01	26°♿04'09	-2°10'54
evening rise	8699 May 15 19:40	7°♿28'17			minimum elong	8700 Apr 13 15:26	25°♿53'49	2°10'56
asc. node	8699 May 23 12:10	20°♿50'55				8700 Apr 16 04:38	0°♿	
	8699 May 29 11:14	0°♿			evening rise	8700 Apr 27 16:25	18°♿57'10	
evening max el	8699 Jun 01 18:36	3°♿52'47	18°05'11			8700 May 04 06:51	0°♿	
retrograde	8699 Jun 08 07:00	7°♿14'26			asc. node	8700 May 10 09:15	9°♿41'02	
evening set	8699 Jun 10 22:40	6°♿40'33			evening max el	8700 May 16 08:00	17°♿15'32	18°15'24
inferior conj	8699 Jun 17 10:02	1°♿36'40	2°30'46		retrograde	8700 May 22 17:14	20°♿39'18	
minimum elong	8699 Jun 17 12:55	1°♿29'25	2°29'51		evening set	8700 May 25 16:11	19°♿52'25	
	8699 Jun 19 00:21	30°♿			inferior conj	8700 May 31 15:27	14°♿30'25	3°05'24
min. Earth dist.	8699 Jun 20 11:40	28°♿33'15	0.61571 AU		minimum elong	8700 May 31 17:23	14°♿24'59	3°04'54
morning rise	8699 Jun 24 01:00	25°♿34'55			min. Earth dist.	8700 Jun 03 03:58	11°♿40'40	0.63693 AU
desc. node	8699 Jun 27 01:54	23°♿56'59			morning rise	8700 Jun 06 17:17	8°♿16'56	
direct	8699 Jun 30 17:36	23°♿15'52			direct	8700 Jun 13 10:55	5°♿38'14	
	8699 Jul 13 15:07	0°♿			desc. node	8700 Jun 13 22:56	5°♿39'02	
morning max el	8699 Jul 14 22:48	1°♿16'28	27°55'51		morning max el	8700 Jun 27 07:40	13°♿40'34	27°41'31
	8699 Aug 04 21:35	0°♿				8700 Jul 10 11:07	0°♿	
morning set	8699 Aug 17 08:01	23°♿16'30				8700 Jul 28 11:28	0°♿	
asc. node	8699 Aug 19 11:37	27°♿44'52			morning set	8700 Aug 01 03:11	7°♿05'58	
	8699 Aug 20 13:06	0°♿			max. Earth dist.	8700 Aug 06 03:00	17°♿20'21	1.32728 AU
max. Earth dist.	8699 Aug 23 01:09	5°♿23'50	1.31935 AU		asc. node	8700 Aug 06 08:35	17°♿49'51	
superior conj	8699 Aug 24 17:56	9°♿07'02	0°51'15		superior conj	8700 Aug 09 00:41	23°♿01'53	0°26'45
minimum elong	8699 Aug 24 15:55	8°♿55'56	0°50'47		minimum elong	8700 Aug 08 23:26	23°♿25'09	0°26'22
evening rise	8699 Aug 31 12:45	23°♿58'10				8700 Aug 12 00:22	0°♿	
	8699 Sep 03 09:29	0°♿			evening rise	8700 Aug 16 00:22	8°♿37'56	
	8699 Sep 21 09:56	0°♿				8700 Aug 27 01:34	0°♿	
desc. node	8699 Sep 23 00:41	1°♿54'29			evening max el	8700 Sep 07 17:06	15°♿30'42	23°04'54
evening max el	8699 Sep 26 06:01	5°♿17'19	24°43'38		desc. node	8700 Sep 09 21:47	17°♿29'10	
retrograde	8699 Oct 10 01:32	12°♿14'14			retrograde	8700 Sep 21 01:35	22°♿11'00	
evening set	8699 Oct 15 11:06	11°♿09'02			evening set	8700 Sep 24 23:22	21°♿37'36	
min. Earth dist.	8699 Oct 20 17:09	8°♿23'11	0.56768 AU		min. Earth dist.	8700 Oct 02 02:03	18°♿22'17	0.55335 AU
inferior conj	8699 Oct 23 09:38	6°♿39'36	-5°31'08		inferior conj	8700 Oct 03 15:46	17°♿27'37	-5°30'14
minimum elong	8699 Oct 23 13:02	6°♿34'07	5°30'45		minimum elong	8700 Oct 03 11:44	17°♿33'29	5°29'50
morning rise	8699 Oct 31 17:10	2°♿34'10			morning rise	8700 Oct 12 02:10	13°♿37'34	
direct	8699 Nov 03 06:06	2°♿16'20			direct	8700 Oct 15 02:34	13°♿16'04	
morning max el	8699 Nov 12 16:58	6°♿45'23	19°24'29		morning max el	8700 Oct 26 02:40	18°♿25'34	20°40'26
asc. node	8699 Nov 15 11:20	9°♿45'16			asc. node	8700 Nov 02 08:20	27°♿18'10	
	8699 Nov 27 16:04	0°♿				8700 Nov 04 01:45	0°♿	
morning set	8699 Nov 29 21:05	4°♿23'04			morning set	8700 Nov 14 04:19	19°♿03'43	
						8700 Nov 19 10:46	0°♿	
superior conj	8699 Dec 07 22:15	20°♿26'21	1°21'50					
minimum elong	8699 Dec 08 01:08	20°♿40'26	1°21'44		superior conj	8700 Nov 21 15:21	4°♿30'23	1°35'01
	8699 Dec 12 22:32	0°♿			minimum elong	8700 Nov 21 17:05	4°♿39'17	1°35'06
max. Earth dist.	8699 Dec 14 09:15	2°♿40'04	1.38072 AU		max. Earth dist.	8700 Nov 26 16:58	14°♿36'39	1.36014 AU
evening rise	8699 Dec 18 02:43	9°♿20'58			evening rise	8700 Nov 30 15:22	22°♿03'53	
desc. node	8699 Dec 19 23:34	12°♿35'41				8700 Dec 05 01:17	0°♿	
	8699 Dec 30 17:22	0°♿			desc. node	8700 Dec 06 20:36	3°♿07'02	
evening max el	8700 Jan 22 15:05	29°♿50'05	25°02'59			8700 Dec 24 13:04	0°♿	
	8700 Jan 22 19:08	0°♿			evening max el	8701 Jan 05 04:11	13°♿36'34	26°10'39
retrograde	8700 Feb 03 12:31	6°♿44'20			retrograde	8701 Jan 17 21:28	20°♿49'39	
evening set	8700 Feb 09 05:20	4°♿22'09			evening set	8701 Jan 24 02:33	18°♿18'13	
asc. node	8700 Feb 11 10:27	2°♿09'34			min. Earth dist.	8701 Jan 28 07:28	13°♿52'47	0.66806 AU
	8700 Feb 13 05:06	30°♿			asc. node	8701 Jan 29 07:34	12°♿38'40	
min. Earth dist.	8700 Feb 13 16:49	29°♿22'12	0.67749 AU		inferior conj	8701 Jan 29 22:04	11°♿53'46	0°12'02
inferior conj	8700 Feb 14 19:53	27°♿53'32	1°05'42		minimum elong	8701 Jan 29 21:44	11°♿54'46	0°12'03
minimum elong	8700 Feb 14 18:23	27°♿58'27	1°05'14		transit middle	8701 Jan 29 21:44	11°♿54'46	0°12'03
morning rise	8700 Feb 20 07:44	21°♿57'14			transit begin	8701 Jan 29 19:51	12°♿00'38	
direct	8700 Feb 23 21:51	20°♿43'14			transit end	8701 Jan 29 23:38	11°♿48'54	
morning max el	8700 Mar 03 03:00	24°♿43'36	19°31'53		morning rise	8701 Feb 04 17:39	6°♿06'48	

direct	8701 Feb 07 20:38	5° \approx 11'22			8702 Jan 09 22:07	30° \approx 3	
morning max el	8701 Feb 14 12:41	8° \approx 48'21	18°40'59	min. Earth dist.	8702 Jan 11 15:49	28° \approx 09'01	0.65504 AU
	8701 Mar 01 18:47	0° \approx		inferior conj	8702 Jan 13 18:00	25° \approx 46'14	-0°49'09
desc. node	8701 Mar 04 20:12	4° \approx 47'05		minimum elong	8702 Jan 13 19:26	25° \approx 42'09	0°48'20
morning set	8701 Mar 07 19:49	9° \approx 28'10		asc. node	8702 Jan 16 04:38	23° \approx 06'30	
	8701 Mar 20 22:17	0° \approx		morning rise	8702 Jan 19 23:29	20° \approx 11'00	
max. Earth dist.	8701 Mar 23 06:44	3° \approx 40'56	1.45457 AU	direct	8702 Jan 22 17:10	19° \approx 30'27	
				morning max el	8702 Jan 29 03:34	22° \approx 55'20	18°06'43
superior conj	8701 Mar 24 02:36	4° \approx 58'42	-1°53'23		8702 Feb 03 20:17	0° \approx	
minimum elong	8701 Mar 23 17:50	4° \approx 24'25	1°52'44	morning set	8702 Feb 16 14:19	20° \approx 11'18	
evening rise	8701 Apr 08 13:37	29° \approx 26'45		desc. node	8702 Feb 19 17:08	25° \approx 15'37	
	8701 Apr 08 21:55	0° \approx			8702 Feb 22 15:28	0° \approx	
greatest brilliancy	8701 Apr 16 04:07	11° \approx 36'56	-0.9m				
asc. node	8701 Apr 27 06:20	27° \approx 55'42		superior conj	8702 Mar 03 09:21	13° \approx 55'58	-1°18'06
	8701 Apr 29 01:09	0° \approx		minimum elong	8702 Mar 03 00:41	13° \approx 21'46	1°17'01
evening max el	8701 Apr 29 19:31	0° \approx 47'58	18°43'39	max. Earth dist.	8702 Mar 06 02:24	18° \approx 11'37	1.45456 AU
retrograde	8701 May 06 10:28	4° \approx 26'42			8702 Mar 13 16:02	0° \approx	
evening set	8701 May 09 16:56	3° \approx 25'36		evening rise	8702 Mar 19 13:14	9° \approx 07'42	
	8701 May 13 11:30	30° \approx 8		greatest brilliancy	8702 Apr 01 06:59	28° \approx 40'52	-0.7m
inferior conj	8701 May 15 07:54	27° \approx 47'08	3°20'41		8702 Apr 02 04:12	0° \approx	
minimum elong	8701 May 15 08:32	27° \approx 45'13	3°20'29	evening max el	8702 Apr 13 03:06	14° \approx 25'44	19°28'46
min. Earth dist.	8701 May 17 05:17	25° \approx 27'32	0.65510 AU	asc. node	8702 Apr 14 03:25	15° \approx 24'26	
morning rise	8701 May 20 23:26	21° \approx 29'02		retrograde	8702 Apr 20 07:37	18° \approx 30'54	
direct	8701 May 27 11:52	18° \approx 42'34		evening set	8702 Apr 23 22:12	17° \approx 14'53	
desc. node	8701 May 31 19:57	19° \approx 44'14		inferior conj	8702 Apr 29 08:07	11° \approx 21'19	3°20'43
morning max el	8701 Jun 09 18:04	26° \approx 33'36	26°54'31	minimum elong	8702 Apr 29 07:31	11° \approx 23'17	3°20'33
	8701 Jun 12 22:41	0° \approx		min. Earth dist.	8702 Apr 30 14:23	9° \approx 41'51	0.66917 AU
	8701 Jul 04 01:48	0° \approx		morning rise	8702 May 04 16:29	5° \approx 02'59	
morning set	8701 Jul 15 12:02	20° \approx 22'53		direct	8702 May 10 19:11	2° \approx 20'31	
max. Earth dist.	8701 Jul 19 19:05	28° \approx 48'42	1.34010 AU	desc. node	8702 May 18 16:57	5° \approx 43'47	
	8701 Jul 20 09:13	0° \approx		morning max el	8702 May 23 04:00	9° \approx 44'40	25°43'20
					8702 Jun 08 03:44	0° \approx	
superior conj	8701 Jul 24 01:48	7° \approx 36'02	-0°01'35		8702 Jun 26 15:39	0° \approx	
minimum elong	8701 Jul 24 01:54	7° \approx 36'29	0°01'44	morning set	8702 Jun 28 06:43	2° \approx 56'57	
behind sun begin	8701 Jul 23 20:14	7° \approx 06'52		max. Earth dist.	8702 Jul 02 00:22	9° \approx 55'08	1.35766 AU
behind sun end	8701 Jul 24 07:34	8° \approx 06'09					
asc. node	8701 Jul 24 05:35	7° \approx 55'46		superior conj	8702 Jul 07 18:39	21° \approx 12'32	-0°32'40
evening rise	8701 Jul 31 10:37	23° \approx 09'59		minimum elong	8702 Jul 07 20:36	21° \approx 22'21	0°32'30
	8701 Aug 03 18:13	0° \approx		asc. node	8702 Jul 11 02:32	27° \approx 58'35	
evening max el	8701 Aug 20 09:34	25° \approx 50'31	21°29'06		8702 Jul 12 02:10	0° \approx	
	8701 Aug 25 18:27	0° \approx		evening rise	8702 Jul 15 17:26	7° \approx 28'34	
desc. node	8701 Aug 27 18:53	0° \approx 57'48			8702 Jul 28 02:12	0° \approx	
retrograde	8701 Sep 01 15:25	1° \approx 54'49		evening max el	8702 Aug 02 14:04	6° \approx 45'09	20°08'09
evening set	8701 Sep 04 04:55	1° \approx 39'49		retrograde	8702 Aug 13 04:31	11° \approx 59'32	
	8701 Sep 09 01:28	30° \approx 8		desc. node	8702 Aug 14 16:00	11° \approx 53'50	
inferior conj	8701 Sep 13 09:35	27° \approx 42'13	-4°34'03	evening set	8702 Aug 15 02:41	11° \approx 49'57	
minimum elong	8701 Sep 13 00:11	27° \approx 55'23	4°31'47	inferior conj	8702 Aug 24 04:24	7° \approx 51'19	-2°52'01
min. Earth dist.	8701 Sep 13 10:33	27° \approx 40'51	0.54683 AU	minimum elong	8702 Aug 23 20:39	8° \approx 02'49	2°49'22
morning rise	8701 Sep 21 20:19	23° \approx 51'23		min. Earth dist.	8702 Aug 25 20:39	6° \approx 51'32	0.54986 AU
direct	8701 Sep 25 11:51	23° \approx 22'32		morning rise	8702 Sep 01 13:24	3° \approx 39'42	
morning max el	8701 Oct 07 23:49	29° \approx 18'12	22°15'55	direct	8702 Sep 05 22:53	2° \approx 57'51	
	8701 Oct 08 17:15	0° \approx		morning max el	8702 Sep 19 12:59	9° \approx 36'54	24°01'54
asc. node	8701 Oct 20 05:19	15° \approx 38'57			8702 Oct 04 13:29	0° \approx	
	8701 Oct 27 18:11	0° \approx		asc. node	8702 Oct 07 02:16	4° \approx 35'15	
morning set	8701 Oct 29 14:44	3° \approx 51'51		morning set	8702 Oct 14 02:25	18° \approx 41'18	
					8702 Oct 19 07:44	0° \approx	
superior conj	8701 Nov 05 16:55	18° \approx 58'00	1°40'43				
minimum elong	8701 Nov 05 17:21	19° \approx 00'18	1°40'53	superior conj	8702 Oct 21 00:03	3° \approx 39'37	1°39'49
max. Earth dist.	8701 Nov 09 07:41	26° \approx 30'24	1.34271 AU	minimum elong	8702 Oct 20 23:18	3° \approx 35'34	1°39'54
	8701 Nov 11 00:59	0° \approx		max. Earth dist.	8702 Oct 23 06:51	8° \approx 35'20	1.32941 AU
evening rise	8701 Nov 13 19:27	5° \approx 28'11		evening rise	8702 Oct 28 11:10	19° \approx 23'01	
desc. node	8701 Nov 23 17:38	23° \approx 25'02			8702 Nov 02 22:35	0° \approx	
	8701 Nov 27 18:35	0° \approx		desc. node	8702 Nov 10 14:40	13° \approx 22'44	
evening max el	8701 Dec 18 17:32	27° \approx 15'41	27°01'08		8702 Nov 21 22:13	0° \approx	
	8701 Dec 21 19:45	0° \approx		evening max el	8702 Dec 01 05:50	10° \approx 34'59	27°27'18
retrograde	8702 Jan 01 00:40	4° \approx 36'00		retrograde	8702 Dec 14 21:11	17° \approx 54'09	
evening set	8702 Jan 07 16:36	2° \approx 00'26		evening set	8702 Dec 21 21:00	15° \approx 21'32	

min. Earth dist.	8702 Dec 25 15:34	12°  02'17	0.63872 AU	evening set	8703 Dec 04 12:37	28°  14'41	
inferior conj	8702 Dec 28 05:07	9°  23'50	-1°56'35	min. Earth dist.	8703 Dec 08 04:59	25°  22'18	0.61959 AU
minimum elong	8702 Dec 28 08:47	9°  14'23	1°54'52	inferior conj	8703 Dec 11 04:23	22°  39'04	-3°07'28
asc. node	8703 Jan 03 01:43	4°  27'18		minimum elong	8703 Dec 11 10:22	22°  25'22	3°05'06
morning rise	8703 Jan 03 22:20	4°  03'28		morning rise	8703 Dec 18 10:21	17°  27'01	
direct	8703 Jan 06 08:50	3°  33'59		direct	8703 Dec 20 16:16	17°  27'15'00	
morning max el	8703 Jan 12 20:49	6°  56'31	17°49'34	asc. node	8703 Dec 20 22:46	17°  27'15'20	
	8703 Jan 28 04:53	0° 		morning max el	8703 Dec 27 13:23	20°  27'44'22	17°50'20
morning set	8703 Jan 29 12:28	2°  14'57			8704 Jan 03 12:13	0° 	
desc. node	8703 Feb 06 14:02	15°  53'02		morning set	8704 Jan 12 08:01	15°  27'19'28	
					8704 Jan 20 14:37	0° 	
superior conj	8703 Feb 11 08:15	23°  42'43	-0°34'17				
minimum elong	8703 Feb 11 04:27	23°  42'17	0°33'36	superior conj	8704 Jan 23 08:13	4°  42'19	0°08'16
	8703 Feb 15 05:50	0° 		minimum elong	8704 Jan 23 09:00	4°  45'38	0°08'19
max. Earth dist.	8703 Feb 16 21:29	2°  37'54	1.44717 AU	behind sun begin	8704 Jan 23 01:33	4°  13'49	
evening rise	8703 Feb 27 01:02	18°  27'19		behind sun end	8704 Jan 23 16:28	5°  17'24	
	8703 Mar 06 15:28	0° 		desc. node	8704 Jan 24 10:57	6°  35'50	
evening max el	8703 Mar 27 05:21	28°  05'19	20°28'51	max. Earth dist.	8704 Jan 30 13:15	16°  42'32	1.43330 AU
	8703 Mar 29 06:31	0° 		evening rise	8704 Feb 06 16:12	28°  02'55	
asc. node	8703 Apr 01 00:31	1°  53'41			8704 Feb 07 22:19	0° 	
retrograde	8703 Apr 04 06:09	2°  46'28			8704 Feb 28 09:59	0° 	
evening set	8703 Apr 08 05:50	1°  15'06		evening max el	8704 Mar 09 02:02	11°  45'32	21°40'36
	8703 Apr 09 15:26	30° 		asc. node	8704 Mar 17 21:38	17°  47'07'49	
inferior conj	8703 Apr 13 13:22	25°  08'17	3°08'27	retrograde	8704 Mar 18 04:09	17°  47'08'11	
minimum elong	8703 Apr 13 11:50	25°  13'32	3°08'10	evening set	8704 Mar 22 14:00	15°  47'21'34	
min. Earth dist.	8703 Apr 14 05:30	24°  13'03	0.67866 AU	inferior conj	8704 Mar 27 21:22	9°  03'53	2°45'45
morning rise	8703 Apr 18 17:37	18°  05'27'07		minimum elong	8704 Mar 27 19:16	9°  11'11	2°45'15
direct	8703 Apr 24 07:41	16°  05'27'58		min. Earth dist.	8704 Mar 28 00:32	8°  05'25'51	0.68368 AU
morning max el	8703 May 05 13:10	23°  05'59	24°17'55	morning rise	8704 Apr 02 00:22	2°  05'12'23	
desc. node	8703 May 05 13:55	23°  07'54		direct	8704 Apr 07 00:34	0° 	
	8703 May 11 15:13	0° 		morning max el	8704 Apr 16 23:24	6°  34'31	22°48'06
	8703 Jun 01 12:13	0° 		desc. node	8704 Apr 21 10:51	11°  32'46	
morning set	8703 Jun 10 06:21	14°  35'44			8704 May 05 02:18	0° 	
max. Earth dist.	8703 Jun 13 22:19	21°  32'04'32	1.37880 AU	morning set	8704 May 21 05:24	25°  04'39	
	8703 Jun 18 18:36	0° 			8704 May 24 04:11	0° 	
				max. Earth dist.	8704 May 25 19:11	2°  45'40	1.40135 AU
superior conj	8703 Jun 20 23:56	4°  13'30	-1°04'48	superior conj	8704 Jun 02 13:27	16°  27'54	-1°35'11
minimum elong	8703 Jun 21 04:00	4°  33'00	1°04'21	minimum elong	8704 Jun 02 19:10	16°  53'56	1°34'41
asc. node	8703 Jun 27 23:31	17°  54'59			8704 Jun 09 19:40	0° 	
evening rise	8703 Jun 29 18:21	21°  52'7'20		evening rise	8704 Jun 12 10:08	4°  56'53	
	8703 Jul 04 03:47	0° 		asc. node	8704 Jun 13 20:32	7°  54'40'00	
evening max el	8703 Jul 16 07:40	18°  25'06	19°07'19		8704 Jun 27 17:47	0° 	
retrograde	8703 Jul 25 06:15	22°  50'48		evening max el	8704 Jun 28 11:36	0°  45'46	18°27'27
evening set	8703 Jul 27 03:47	22°  39'39		retrograde	8704 Jul 06 02:42	4°  34'24	
desc. node	8703 Aug 01 13:06	20°  24'57		evening set	8704 Jul 08 06:17	4°  17'07	
inferior conj	8703 Aug 04 13:54	18°  27'00	-0°55'52	inferior conj	8704 Jul 15 20:41	29°  45'01	0°45'32
minimum elong	8703 Aug 04 11:29	18°  31'08	0°55'04	minimum elong	8704 Jul 15 22:16	29°  41'52	0°44'45
min. Earth dist.	8703 Aug 07 10:15	16°  31'20	0.56192 AU		8704 Jul 15 13:10	30° 	
morning rise	8703 Aug 12 16:10	13°  40'01		desc. node	8704 Jul 18 10:12	27°  42'13	
direct	8703 Aug 17 21:22	12°  36'50		min. Earth dist.	8704 Jul 19 05:17	27°  40'52'29	0.58067 AU
morning max el	8703 Sep 01 01:49	19°  51'15	25°42'49	morning rise	8704 Jul 23 10:47	24°  42'21'33	
	8703 Sep 09 17:33	0° 		direct	8704 Jul 29 10:27	22°  48'54	
asc. node	8703 Sep 23 23:13	23°  58'01			8704 Aug 12 07:38	0° 	
	8703 Sep 26 22:25	0° 		morning max el	8704 Aug 12 19:48	0°  29'15	27°01'50
morning set	8703 Sep 28 13:45	3°  27'23			8704 Sep 02 18:22	0° 	
superior conj	8703 Oct 05 10:29	18°  28'31	1°32'58	asc. node	8704 Sep 09 20:09	13°  39'29	
minimum elong	8703 Oct 05 08:51	18°  19'28	1°32'53	morning set	8704 Sep 11 23:03	18°  39'04'48	
max. Earth dist.	8703 Oct 06 12:49	20°  53'39	1.32063 AU		8704 Sep 17 10:34	0° 	
	8703 Oct 10 17:37	0° 		superior conj	8704 Sep 18 22:16	3°  18'06	1°20'41
evening rise	8703 Oct 12 11:26	3°  39'56		minimum elong	8704 Sep 18 20:07	3°  06'09	1°20'24
	8703 Oct 26 16:29	0° 		max. Earth dist.	8704 Sep 18 22:22	3°  18'43	1.31645 AU
desc. node	8703 Oct 28 11:44	2°  27'51'40		evening rise	8704 Sep 25 17:34	18°  11'18	
evening max el	8703 Nov 13 14:46	23°  21'07	27°23'05		8704 Oct 01 13:06	0° 	
	8703 Nov 23 18:18	0° 		desc. node	8704 Oct 14 08:51	21°  14'40'05	
retrograde	8703 Nov 27 10:30	0° 			8704 Oct 20 16:55	0° 	
	8703 Nov 30 23:50	30° 					

evening max el	8704 Oct 25 17:40	5°♂21'57	26°45'09	retrograde	8705 Oct 21 10:51	23°♂34'17	
retrograde	8704 Nov 08 15:40	12°♂30'30		evening set	8705 Oct 27 12:20	22°♂09'01	
evening set	8704 Nov 15 11:22	10°♂32'42		min. Earth dist.	8705 Nov 01 01:07	19°♂31'40	0.57819 AU
min. Earth dist.	8704 Nov 19 07:43	7°♂56'09	0.59872 AU	inferior conj	8705 Nov 04 01:41	17°♂25'28	-5°11'39
inferior conj	8704 Nov 22 12:22	5°♂22'47	-4°16'04	minimum elong	8705 Nov 04 07:48	17°♂14'48	5°10'31
minimum elong	8704 Nov 22 19:46	5°♂07'55	4°13'50	morning rise	8705 Nov 12 05:36	13°♂07'21	
morning rise	8704 Nov 30 06:38	0°♂42'05		direct	8705 Nov 14 13:49	12°♂50'26	
direct	8704 Dec 02 11:19	0°♂24'14		morning max el	8705 Nov 23 06:21	17°♂01'17	18°51'03
asc. node	8704 Dec 06 19:48	1°♂38'18		asc. node	8705 Nov 23 16:49	17°♂27'03	
morning max el	8704 Dec 10 01:49	4°♂09'35	18°10'18		8705 Dec 02 13:50	0°♂	
morning set	8704 Dec 25 18:56	29°♂06'47		morning set	8705 Dec 09 16:22	13°♂22'27	
	8704 Dec 26 06:15	0°♂					
superior conj	8705 Jan 04 08:37	16°♂51'39	0°43'47	superior conj	8705 Dec 18 04:36	29°♂56'08	1°10'29
minimum elong	8705 Jan 04 11:38	17°♂05'12	0°43'34	minimum elong	8705 Dec 18 07:53	0°♂11'42	1°10'18
desc. node	8705 Jan 10 07:55	27°♂20'44			8705 Dec 18 05:25	0°♂	
	8705 Jan 11 21:24	0°♂		max. Earth dist.	8705 Dec 25 06:22	12°♂55'44	1.39317 AU
max. Earth dist.	8705 Jan 11 23:55	0°♂10'36	1.41453 AU	desc. node	8705 Dec 28 04:55	18°♂03'33	
evening rise	8705 Jan 16 23:38	8°♂25'11		evening rise	8705 Dec 29 04:41	19°♂45'12	
	8705 Jan 31 00:44	0°♂			8706 Jan 04 09:46	0°♂	
evening max el	8705 Feb 19 18:21	25°♂28'23	22°59'22	evening max el	8706 Jan 25 05:40	0°♂	
	8705 Feb 25 06:09	0°♂		retrograde	8706 Feb 02 08:16	9°♂14'46	24°19'19
retrograde	8705 Mar 01 23:59	1°♂32'16		evening set	8706 Feb 13 16:17	15°♂53'17	
asc. node	8705 Mar 04 18:45	0°♂53'52		asc. node	8706 Feb 19 01:43	13°♂38'23	
	8705 Mar 06 06:26	30°♂		min. Earth dist.	8706 Feb 19 15:53	13°♂06'39	
evening set	8705 Mar 06 21:09	29°♂30'55		inferior conj	8706 Feb 23 17:29	8°♂18'17	0.68114 AU
inferior conj	8705 Mar 12 06:10	23°♂05'41	2°13'43	minimum elong	8706 Feb 24 13:53	7°♂09'42	1°32'58
minimum elong	8705 Mar 12 03:55	23°♂13'26	2°13'05	morning rise	8706 Feb 24 11:58	7°♂16'10	1°32'23
min. Earth dist.	8705 Mar 11 21:19	23°♂36'20	0.68444 AU		8706 Mar 01 22:18	1°♂08'36	
morning rise	8705 Mar 17 10:36	16°♂58'06		direct	8706 Mar 04 01:07	30°♂	
direct	8705 Mar 21 20:56	15°♂10'00			8706 Mar 05 19:31	29°♂42'28	
morning max el	8705 Mar 30 13:58	20°♂12'37	21°22'44	morning max el	8706 Mar 07 15:27	0°♂	
	8705 Apr 07 19:11	0°♂		desc. node	8706 Mar 13 11:38	4°♂02'06	20°08'13
desc. node	8705 Apr 08 07:47	0°♂41'59			8706 Mar 26 04:42	20°♂23'01	
	8705 Apr 28 07:10	0°♂		morning set	8706 Apr 01 16:55	0°♂	
morning set	8705 May 01 01:08	4°♂18'42		max. Earth dist.	8706 Apr 10 01:02	12°♂41'58	
max. Earth dist.	8705 May 07 20:39	15°♂17'11	1.42261 AU		8706 Apr 20 05:30	28°♂41'08	1.43994 AU
					8706 Apr 21 01:12	0°♂	
superior conj	8705 May 15 06:37	27°♂45'54	-1°59'27	superior conj	8706 Apr 25 23:35	7°♂59'49	-2°11'43
minimum elong	8705 May 15 12:04	28°♂09'22	1°59'14	minimum elong	8706 Apr 26 01:00	8°♂05'37	2°11'50
	8705 May 16 13:37	0°♂		evening rise	8706 May 08 21:47	29°♂48'35	
evening rise	8705 May 26 12:51	17°♂47'38			8706 May 09 00:26	0°♂	
asc. node	8705 May 31 17:35	27°♂08'53		asc. node	8706 May 18 14:39	16°♂15'19	
	8705 Jun 02 08:48	0°♂		evening max el	8706 May 26 11:22	26°♂52'56	18°07'18
evening max el	8705 Jun 11 22:04	13°♂38'24	18°07'46		8706 May 31 06:18	0°♂	
retrograde	8705 Jun 18 16:59	17°♂05'16		retrograde	8706 Jun 01 21:07	0°♂13'27	
evening set	8705 Jun 21 04:15	16°♂38'14			8706 Jun 03 12:00	30°♂	
inferior conj	8705 Jun 28 00:29	11°♂45'56	2°00'06	evening set	8706 Jun 04 15:58	29°♂34'09	
minimum elong	8705 Jun 28 03:27	11°♂39'01	1°59'00	inferior conj	8706 Jun 10 21:43	24°♂22'35	2°48'05
min. Earth dist.	8705 Jul 01 07:32	8°♂44'02	0.60282 AU	minimum elong	8706 Jun 11 00:17	24°♂15'47	2°47'21
morning rise	8705 Jul 04 23:52	5°♂55'03		min. Earth dist.	8706 Jun 13 18:19	21°♂22'29	0.62510 AU
desc. node	8705 Jul 05 07:17	5°♂43'41		morning rise	8706 Jun 17 06:50	18°♂15'03	
direct	8705 Jul 11 12:38	3°♂51'08		desc. node	8706 Jun 22 04:20	15°♂57'01	
morning max el	8705 Jul 25 20:30	11°♂47'18	27°46'59	direct	8706 Jun 24 00:57	15°♂46'04	
	8705 Aug 09 04:05	0°♂		morning max el	8706 Jul 08 02:51	23°♂48'25	27°54'03
	8705 Aug 25 23:46	0°♂			8706 Jul 13 16:04	0°♂	
morning set	8705 Aug 27 04:33	2°♂28'33			8706 Aug 02 12:02	0°♂	
asc. node	8705 Aug 27 17:06	3°♂34'03		morning set	8706 Aug 11 04:12	16°♂32'53	
max. Earth dist.	8705 Sep 02 07:53	15°♂41'09	1.31693 AU	asc. node	8706 Aug 14 14:04	23°♂36'52	
				max. Earth dist.	8706 Aug 16 13:40	27°♂50'44	1.32212 AU
superior conj	8705 Sep 03 09:34	18°♂02'57	1°03'21		8706 Aug 17 13:37	0°♂	
minimum elong	8705 Sep 03 07:21	17°♂50'43	1°02'56				
	8705 Sep 08 19:43	0°♂		superior conj	8706 Aug 18 18:34	2°♂37'25	0°41'22
evening rise	8705 Sep 10 03:23	2°♂50'55		minimum elong	8706 Aug 18 16:48	2°♂27'48	0°40'55
	8705 Sep 24 13:42	0°♂		evening rise	8706 Aug 25 14:55	17°♂33'01	
desc. node	8705 Oct 01 05:59	9°♂31'55			8706 Aug 31 16:47	0°♂	
evening max el	8705 Oct 07 12:47	16°♂32'15	25°35'07	desc. node	8706 Sep 18 03:06	26°♂05'25	

evening max el	8706 Sep 19 01:22	27° Ω 00'36	24°02'24	minimum elong	8707 Aug 02 22:26	16° Ω 50'29	0°14'51
	8706 Sep 22 13:28	0° \mathbb{M}		behind sun begin	8707 Aug 02 20:23	16° Ω 39'29	
retrograde	8706 Oct 02 17:43	3° \mathbb{M} 51'35		behind sun end	8707 Aug 03 00:30	17° Ω 01'28	
evening set	8706 Oct 07 12:38	3° \mathbb{M} 01'17			8707 Aug 09 01:37	0° \mathbb{M}	
min. Earth dist.	8706 Oct 13 11:59	0° \mathbb{M} 04'50	0.56079 AU	evening rise	8707 Aug 10 02:11	2° \mathbb{M} 10'42	
	8706 Oct 13 15:13	30° \mathbb{R} Ω			8707 Aug 25 11:33	0° Ω	
inferior conj	8706 Oct 15 18:45	28° Ω 41'12	-5°37'02	evening max el	8707 Aug 31 13:36	7° Ω 12'18	22°22'52
minimum elong	8706 Oct 15 19:14	28° Ω 40'27	5°36'55	desc. node	8707 Sep 05 00:14	10° Ω 50'53	
morning rise	8706 Oct 24 03:54	24° Ω 43'18		retrograde	8707 Sep 13 12:18	13° Ω 39'24	
direct	8706 Oct 26 21:16	24° Ω 24'10		evening set	8707 Sep 16 19:14	13° Ω 15'31	
morning max el	8706 Nov 05 23:30	29° Ω 09'44	19°54'04	min. Earth dist.	8707 Sep 24 19:59	9° Ω 43'39	0.54953 AU
	8706 Nov 06 19:55	0° \mathbb{M}		inferior conj	8707 Sep 25 18:18	9° Ω 12'11	-5°13'13
asc. node	8706 Nov 10 13:49	4° \mathbb{M} 26'50		minimum elong	8707 Sep 25 11:16	9° Ω 22'06	5°12'07
morning set	8706 Nov 23 20:50	27° \mathbb{M} 56'49		morning rise	8707 Oct 04 05:04	5° Ω 24'34	
	8706 Nov 24 21:04	0° \mathbb{X}		direct	8707 Oct 07 11:48	5° Ω 00'21	
superior conj	8706 Dec 01 15:15	13° \mathbb{X} 42'15	1°28'23	morning max el	8707 Oct 19 03:27	10° Ω 28'33	21°19'03
minimum elong	8706 Dec 01 17:41	13° \mathbb{X} 54'26	1°28'22	asc. node	8707 Oct 28 10:47	22° Ω 21'39	
max. Earth dist.	8706 Dec 07 12:37	25° \mathbb{X} 06'54	1.37171 AU		8707 Nov 01 20:25	0° \mathbb{M}	
	8706 Dec 10 04:04	0° \mathbb{Z}		morning set	8707 Nov 08 05:40	12° \mathbb{M} 41'35	
evening rise	8706 Dec 11 06:46	2° \mathbb{Z} 00'38		superior conj	8707 Nov 15 12:19	27° \mathbb{M} 57'23	1°38'18
desc. node	8706 Dec 15 01:56	8° \mathbb{Z} 40'38		minimum elong	8707 Nov 15 13:31	28° \mathbb{M} 03'32	1°38'25
	8706 Dec 28 12:50	0° \approx			8707 Nov 16 12:03	0° \mathbb{X}	
evening max el	8707 Jan 15 21:32	23° \approx 03'13	25°33'28	max. Earth dist.	8707 Nov 19 23:12	7° \mathbb{X} 01'02	1.35229 AU
	8707 Jan 26 21:00	0° \mathbb{X}		evening rise	8707 Nov 24 02:24	15° \mathbb{X} 02'02	
retrograde	8707 Jan 28 03:58	0° \mathbb{X} 06'09		desc. node	8707 Dec 01 22:58	29° \mathbb{X} 07'01	
	8707 Jan 29 10:05	30° \mathbb{R} \approx			8707 Dec 02 11:29	0° \mathbb{Z}	
evening set	8707 Feb 03 02:05	27° \approx 39'48			8707 Dec 23 04:39	0° \approx	
asc. node	8707 Feb 06 12:59	24° \approx 02'17		evening max el	8707 Dec 29 10:47	6° \approx 47'30	26°34'38
min. Earth dist.	8707 Feb 07 10:46	22° \approx 54'28	0.67396 AU	retrograde	8708 Jan 11 10:20	14° \approx 04'22	
inferior conj	8707 Feb 08 18:38	21° \approx 12'29	0°43'55	evening set	8708 Jan 17 20:29	11° \approx 30'19	
minimum elong	8707 Feb 08 17:34	21° \approx 15'55	0°43'38	min. Earth dist.	8708 Jan 21 22:52	7° \approx 19'44	0.66298 AU
morning rise	8707 Feb 14 09:29	15° \approx 19'46		inferior conj	8708 Jan 23 18:25	5° \approx 09'45	-0°13'04
direct	8707 Feb 17 18:46	14° \approx 13'52		minimum elong	8708 Jan 23 18:46	5° \approx 08'42	0°12'44
morning max el	8707 Feb 24 17:14	18° \approx 02'30	19°08'14	transit middle	8708 Jan 23 18:46	5° \approx 08'42	0°12'44
	8707 Mar 06 02:14	0° \mathbb{X}		transit begin	8708 Jan 23 16:59	5° \approx 14'01	
greatest brilliancy	8707 Mar 10 02:18	5° \mathbb{X} 56'17	-0.7m	transit end	8708 Jan 23 20:33	5° \approx 03'23	
desc. node	8707 Mar 13 01:37	10° \mathbb{X} 27'19		asc. node	8708 Jan 24 10:04	4° \approx 23'15	
morning set	8707 Mar 20 03:02	21° \mathbb{X} 20'01			8708 Jan 28 21:08	30° \mathbb{R} \mathbb{Z}	
	8707 Mar 25 17:03	0° \mathbb{Y}		morning rise	8708 Jan 29 17:58	29° \mathbb{Z} 27'39	
max. Earth dist.	8707 Apr 02 21:04	12° \mathbb{Y} 46'11	1.45130 AU	direct	8708 Feb 01 16:50	28° \mathbb{Z} 38'56	
					8708 Feb 05 15:15	0° \approx	
superior conj	8707 Apr 05 17:18	17° \mathbb{Y} 15'18	-2°05'59	morning max el	8708 Feb 08 05:27	2° \approx 09'06	18°24'25
minimum elong	8707 Apr 05 11:38	16° \mathbb{Y} 52'55	2°05'47		8708 Feb 27 10:22	0° \mathbb{X}	
	8707 Apr 13 16:37	0° \mathbb{Z}		desc. node	8708 Feb 27 22:32	0° \mathbb{X} 48'28	
evening rise	8707 Apr 20 08:40	10° \mathbb{Z} 52'17		morning set	8708 Feb 28 04:23	1° \mathbb{X} 11'43	
	8707 May 02 04:09	0° \mathbb{I}					
asc. node	8707 May 05 11:43	4° \mathbb{I} 51'44		superior conj	8708 Mar 14 22:37	26° \mathbb{X} 04'19	-1°40'09
evening max el	8707 May 10 00:18	10° \mathbb{I} 21'01	18°25'15	minimum elong	8708 Mar 14 13:01	25° \mathbb{X} 26'42	1°39'13
retrograde	8707 May 16 10:45	13° \mathbb{I} 49'18		max. Earth dist.	8708 Mar 15 16:13	27° \mathbb{X} 13'11	1.45545 AU
evening set	8707 May 19 12:58	12° \mathbb{I} 56'18			8708 Mar 17 10:52	0° \mathbb{Y}	
inferior conj	8707 May 25 08:15	7° \mathbb{I} 26'58	3°13'57	evening rise	8708 Mar 30 20:05	20° \mathbb{Y} 59'45	
minimum elong	8707 May 25 09:38	7° \mathbb{I} 22'54	3°13'37		8708 Apr 05 13:16	0° \mathbb{Z}	
min. Earth dist.	8707 May 27 14:20	4° \mathbb{I} 48'45	0.64517 AU	greatest brilliancy	8708 Apr 09 19:37	6° \mathbb{Z} 39'42	-0.8m
morning rise	8707 May 31 05:21	1° \mathbb{I} 11'04		asc. node	8708 Apr 21 08:49	22° \mathbb{Z} 48'52	
	8707 Jun 01 20:39	30° \mathbb{R} \mathbb{Z}		evening max el	8708 Apr 22 10:20	23° \mathbb{Z} 56'31	19°00'50
direct	8707 Jun 06 21:30	28° \mathbb{Z} 27'50		retrograde	8708 Apr 29 06:09	27° \mathbb{Z} 45'25	
desc. node	8707 Jun 09 01:22	28° \mathbb{Z} 43'05		evening set	8708 May 02 15:59	26° \mathbb{Z} 37'56	
	8707 Jun 12 09:26	0° \mathbb{I}		inferior conj	8708 May 08 04:24	20° \mathbb{Z} 52'33	3°22'21
morning max el	8707 Jun 20 12:36	6° \mathbb{I} 26'09	27°25'06	minimum elong	8708 May 08 04:29	20° \mathbb{Z} 52'18	3°22'12
	8707 Jul 08 13:23	0° \mathbb{Z}		min. Earth dist.	8708 May 09 19:10	18° \mathbb{Z} 49'26	0.66157 AU
morning set	8707 Jul 25 19:21	0° Ω 09'37		morning rise	8708 May 13 16:30	14° \mathbb{Z} 33'52	
	8707 Jul 25 17:23	0° Ω		direct	8708 May 20 01:05	11° \mathbb{Z} 48'07	
max. Earth dist.	8707 Jul 30 11:52	9° Ω 36'42	1.33218 AU	desc. node	8708 May 25 22:21	13° \mathbb{Z} 41'23	
asc. node	8707 Aug 01 11:00	13° Ω 42'48		morning max el	8708 Jun 01 23:14	19° \mathbb{Z} 29'36	26°26'45
					8708 Jun 10 21:50	0° \mathbb{I}	
superior conj	8707 Aug 02 23:11	16° Ω 54'28	0°15'10		8708 Jun 30 14:58	0° \mathbb{Z}	

morning set	8708 Jul 07 22:45	13°☿10'25		morning max el	8709 May 15 08:54	2°♄46'22	25°08'12
max. Earth dist.	8708 Jul 11 23:41	20°♄56'21	1.34708 AU		8709 Jun 05 01:40	0°♄	
	8708 Jul 16 11:47	0°♄		morning set	8709 Jun 20 10:02	25°♄23'09	
					8709 Jun 22 23:06	0°♄	
superior conj	8708 Jul 16 21:08	0°♄48'05	-0°14'30	max. Earth dist.	8709 Jun 24 01:02	1°♄59'46	1.36628 AU
minimum elong	8708 Jul 16 21:58	0°♄52'21	0°14'32				
behind sun begin	8708 Jul 16 19:25	0°♄39'15		superior conj	8709 Jun 30 09:30	14°♄10'33	-0°46'19
behind sun end	8708 Jul 17 00:31	1°♄05'27		minimum elong	8709 Jun 30 12:21	14°♄24'36	0°46'00
asc. node	8708 Jul 18 07:58	3°♄48'13		asc. node	8709 Jul 05 04:57	23°♄48'57	
evening rise	8708 Jul 24 11:17	16°♄38'27			8709 Jul 08 06:08	0°♄	
	8708 Jul 31 04:46	0°♄		evening rise	8709 Jul 08 15:56	0°♄49'29	
evening max el	8708 Aug 12 10:29	17°♄43'59	20°52'16	evening max el	8709 Jul 25 20:46	28°♄58'05	19°39'42
desc. node	8708 Aug 21 21:19	23°♄17'08			8709 Jul 26 23:14	0°♄	
retrograde	8708 Aug 24 00:40	23°♄28'35		retrograde	8709 Aug 04 17:56	3°♄50'54	
evening set	8708 Aug 26 05:19	23°♄17'04		evening set	8709 Aug 06 14:15	3°♄41'26	
inferior conj	8708 Sep 04 10:39	19°♄20'21	-3°54'44	desc. node	8709 Aug 08 18:25	3°♄07'40	
minimum elong	8708 Sep 04 01:08	19°♄33'52	3°51'57		8709 Aug 14 20:32	30°♄♄	
min. Earth dist.	8708 Sep 05 04:51	18°♄54'27	0.54696 AU	inferior conj	8709 Aug 15 10:27	29°♄38'16	-2°02'29
morning rise	8708 Sep 12 21:06	15°♄23'09		minimum elong	8709 Aug 15 04:52	29°♄47'00	2°00'28
direct	8708 Sep 16 19:40	14°♄49'54		min. Earth dist.	8709 Aug 17 16:36	28°♄13'40	0.55397 AU
morning max el	8708 Sep 29 20:31	21°♄04'29	23°00'34	morning rise	8709 Aug 23 17:15	25°♄12'10	
	8708 Oct 07 11:08	0°♄		direct	8709 Aug 28 10:54	24°♄22'16	
asc. node	8708 Oct 14 07:44	10°♄58'38			8709 Sep 09 22:09	0°♄	
morning set	8708 Oct 22 16:49	27°♄30'54		morning max el	8709 Sep 11 08:49	1°♄18'28	24°46'26
	8708 Oct 23 20:51	0°♄		asc. node	8709 Oct 01 04:41	0°♄07'20	
					8709 Oct 01 03:09	0°♄	
superior conj	8708 Oct 29 16:35	12°♄32'00	1°41'06	morning set	8709 Oct 07 04:35	12°♄19'52	
minimum elong	8708 Oct 29 16:29	12°♄31'31	1°41'14				
max. Earth dist.	8708 Nov 01 17:23	18°♄57'44	1.33650 AU	superior conj	8709 Oct 14 01:25	27°♄18'16	1°37'36
evening rise	8708 Nov 06 11:50	28°♄40'06		minimum elong	8709 Oct 14 00:15	27°♄11'53	1°37'38
	8708 Nov 07 04:05	0°♄			8709 Oct 15 07:02	0°♄	
desc. node	8708 Nov 17 20:00	19°♄17'11		max. Earth dist.	8709 Oct 15 19:35	1°♄08'09	1.32508 AU
	8708 Nov 24 15:27	0°♄		evening rise	8709 Oct 21 07:35	12°♄45'57	
evening max el	8708 Dec 10 23:38	20°♄18'38	27°15'34		8709 Oct 30 08:05	0°♄	
retrograde	8708 Dec 24 10:52	27°♄39'51		desc. node	8709 Nov 04 17:04	9°♄04'12	
evening set	8708 Dec 31 06:45	25°♄04'11			8709 Nov 20 02:09	0°♄	
min. Earth dist.	8709 Jan 04 03:39	21°♄27'09	0.64845 AU	evening max el	8709 Nov 23 10:46	3°♄25'52	27°29'32
inferior conj	8709 Jan 06 10:54	18°♄56'13	-1°17'10	retrograde	8709 Dec 07 04:46	10°♄34'03	
minimum elong	8709 Jan 06 13:14	18°♄49'50	1°15'58	evening set	8709 Dec 14 06:13	8°♄15'15	
asc. node	8709 Jan 10 07:09	15°♄07'15		min. Earth dist.	8709 Dec 17 23:20	5°♄08'14	0.63079 AU
morning rise	8709 Jan 12 21:13	13°♄27'16		inferior conj	8709 Dec 20 17:25	2°♄26'01	-2°26'30
direct	8709 Jan 15 11:31	12°♄52'00		minimum elong	8709 Dec 20 22:05	2°♄14'31	2°24'28
morning max el	8709 Jan 21 21:45	16°♄14'44	17°57'20		8709 Dec 23 07:38	30°♄♄	
	8709 Jan 31 21:10	0°♄		morning rise	8709 Dec 27 16:01	27°♄13'04	
morning set	8709 Feb 08 11:10	12°♄30'35		asc. node	8709 Dec 28 04:12	27°♄03'10	
desc. node	8709 Feb 13 19:26	21°♄21'05		direct	8709 Dec 30 00:03	26°♄47'20	
	8709 Feb 19 03:02	0°♄			8710 Jan 05 10:14	0°♄	
				morning max el	8710 Jan 05 15:12	0°♄12'04	17°47'38
superior conj	8709 Feb 22 10:24	5°♄17'54	-0°59'54	morning set	8710 Jan 21 19:18	25°♄03'05	
minimum elong	8709 Feb 22 03:33	4°♄50'36	0°58'54		8710 Jan 24 15:30	0°♄	
max. Earth dist.	8709 Feb 26 11:41	11°♄42'55	1.45217 AU	desc. node	8710 Jan 31 16:22	12°♄01'31	
	8709 Mar 10 05:59	0°♄					
evening rise	8709 Mar 10 12:56	0°♄26'44		superior conj	8710 Feb 02 19:39	15°♄35'22	-0°15'40
greatest brilliancy	8709 Mar 24 22:22	22°♄14'51	-0.6m	minimum elong	8710 Feb 02 18:02	15°♄28'39	0°15'16
	8709 Mar 30 09:28	0°♄		behind sun begin	8710 Feb 02 15:06	15°♄16'29	
evening max el	8709 Apr 05 15:38	7°♄34'49	19°52'41	behind sun end	8710 Feb 02 20:58	15°♄40'48	
asc. node	8709 Apr 08 05:55	9°♄54'06		max. Earth dist.	8710 Feb 09 05:08	26°♄00'22	1.44194 AU
retrograde	8709 Apr 13 04:15	11°♄54'52			8710 Feb 11 17:22	0°♄	
evening set	8709 Apr 16 22:29	10°♄32'29		evening rise	8710 Feb 18 00:17	9°♄48'46	
inferior conj	8709 Apr 22 07:04	4°♄32'55	3°16'55		8710 Mar 03 10:53	0°♄	
minimum elong	8709 Apr 22 06:02	4°♄36'24	3°16'42	evening max el	8710 Mar 19 15:30	21°♄14'49	20°58'15
min. Earth dist.	8709 Apr 23 07:12	3°♄11'55	0.67367 AU	asc. node	8710 Mar 26 03:02	25°♄53'20	
	8709 Apr 25 20:23	30°♄♄		retrograde	8710 Mar 28 02:46	26°♄13'23	
morning rise	8709 Apr 27 13:18	28°♄15'00		evening set	8710 Apr 01 06:33	24°♄35'43	
direct	8709 May 03 10:45	25°♄37'14		inferior conj	8710 Apr 06 13:46	18°♄24'07	3°00'02
	8709 May 12 10:06	0°♄		minimum elong	8710 Apr 06 11:57	18°♄30'24	2°59'39
desc. node	8709 May 12 19:19	0°♄20'03		min. Earth dist.	8710 Apr 07 00:21	17°♄47'31	0.68133 AU

morning rise	8710 Apr 11 17:08	12° Υ 09'11		min. Earth dist.	8711 Mar 21 20:21	2° Υ 29'20	0.68456 AU
direct	8710 Apr 17 01:26	9° Υ 47'21			8711 Mar 23 15:58	30° \Re	
morning max el	8710 Apr 27 18:01	16° Υ 10'07	23°39'37	morning rise	8711 Mar 27 01:38	26° \Re 11'58	
desc. node	8710 Apr 29 16:17	18° Υ 12'15		direct	8711 Mar 31 20:01	24° \Re 10'56	
	8710 May 09 03:29	0° \mathcal{B}		morning max el	8711 Apr 10 05:31	29° \Re 41'31	22°10'47
	8710 May 29 01:32	0° Π			8711 Apr 10 12:49	0° Υ	
morning set	8710 Jun 01 23:49	6° Π 33'41		desc. node	8711 Apr 16 13:14	6° Υ 57'26	
max. Earth dist.	8710 Jun 05 21:04	13° Π 16'39	1.38835 AU		8711 May 02 21:47	0° \mathcal{B}	
				morning set	8711 May 13 11:10	16° \mathcal{B} 29'51	
superior conj	8710 Jun 13 08:39	26° Π 53'08	-1°18'08	max. Earth dist.	8711 May 18 19:35	25° \mathcal{B} 18'55	1.41072 AU
minimum elong	8710 Jun 13 13:32	27° Π 16'04	1°17'37		8711 May 21 13:51	0° Π	
	8710 Jun 15 00:13	0° \mathcal{B}					
asc. node	8710 Jun 22 01:58	13° \mathcal{B} 41'04		superior conj	8711 May 26 14:08	8° Π 45'11	-1°46'32
evening rise	8710 Jun 22 13:22	14° \mathcal{B} 36'38		minimum elong	8711 May 26 20:05	9° Π 11'39	1°46'07
	8710 Jun 30 20:04	0° Ω		evening rise	8711 Jun 06 00:08	27° Π 51'04	
evening max el	8710 Jul 08 19:19	10° Ω 56'58	18°47'54		8711 Jun 07 03:49	0° \mathcal{B}	
retrograde	8710 Jul 17 02:59	15° Ω 04'36		asc. node	8711 Jun 08 23:00	3° \mathcal{B} 20'05	
evening set	8710 Jul 19 02:49	14° Ω 51'17		evening max el	8711 Jun 22 02:34	23° \mathcal{B} 32'53	18°16'43
desc. node	8710 Jul 26 15:33	10° Ω 54'42		retrograde	8711 Jun 29 07:30	27° \mathcal{B} 10'13	
inferior conj	8710 Jul 27 04:40	10° Ω 31'00	-0°09'58	evening set	8711 Jul 01 14:28	26° \mathcal{B} 49'02	
minimum elong	8710 Jul 27 04:15	10° Ω 31'45	0°09'59	inferior conj	8711 Jul 08 20:43	22° \mathcal{B} 08'00	1°20'35
transit middle	8710 Jul 27 04:15	10° Ω 31'45	0°09'59	minimum elong	8711 Jul 08 23:11	22° \mathcal{B} 02'45	1°19'32
transit begin	8710 Jul 27 01:21	10° Ω 37'01		min. Earth dist.	8711 Jul 12 05:58	19° \mathcal{B} 16'21	0.58986 AU
transit end	8710 Jul 27 07:09	10° Ω 26'28		desc. node	8711 Jul 13 12:39	18° \mathcal{B} 16'50	
min. Earth dist.	8710 Jul 30 08:21	8° Ω 14'26	0.56929 AU	morning rise	8711 Jul 16 04:43	16° \mathcal{B} 31'54	
morning rise	8710 Aug 04 02:17	5° Ω 28'04		direct	8711 Jul 22 10:52	14° \mathcal{B} 45'55	
direct	8710 Aug 09 16:05	4° Ω 12'44		morning max el	8711 Aug 05 19:55	22° \mathcal{B} 33'10	27°25'40
morning max el	8710 Aug 23 23:10	11° Ω 39'22	26°19'54		8711 Aug 12 10:18	0° Ω	
	8710 Sep 07 04:28	0° \mathcal{M}			8711 Aug 31 05:06	0° \mathcal{M}	
asc. node	8710 Sep 18 01:37	19° \mathcal{M} 38'55		asc. node	8711 Sep 04 22:34	9° \mathcal{M} 26'59	
morning set	8710 Sep 21 15:15	27° \mathcal{M} 02'55		morning set	8711 Sep 05 23:12	11° \mathcal{M} 35'38	
	8710 Sep 23 00:16	0° Ω		max. Earth dist.	8711 Sep 12 13:43	25° \mathcal{M} 57'22	1.31614 AU
superior conj	8710 Sep 28 12:40	12° Ω 08'29	1°28'24	superior conj	8711 Sep 13 00:29	26° \mathcal{M} 57'04	1°13'56
minimum elong	8710 Sep 28 10:45	11° Ω 57'54	1°28'14	minimum elong	8711 Sep 12 22:14	26° \mathcal{M} 44'39	1°13'35
max. Earth dist.	8710 Sep 29 03:28	13° Ω 30'29	1.31830 AU		8711 Sep 14 09:25	0° Ω	
evening rise	8710 Oct 05 10:40	27° Ω 10'25		evening rise	8711 Sep 19 18:41	11° Ω 46'42	
	8710 Oct 06 19:16	0° \mathcal{M}			8711 Sep 28 23:27	0° \mathcal{M}	
desc. node	8710 Oct 22 14:10	28° \mathcal{M} 17'47		desc. node	8711 Oct 09 11:17	16° \mathcal{M} 44'40	
	8710 Oct 23 17:31	0° \mathcal{A}		evening max el	8711 Oct 18 17:37	27° \mathcal{M} 35'21	26°18'53
evening max el	8710 Nov 05 17:42	15° \mathcal{A} 55'07	27°11'13		8711 Oct 21 12:05	0° \mathcal{A}	
retrograde	8710 Nov 19 14:48	23° \mathcal{A} 06'31		retrograde	8711 Nov 01 15:34	4° \mathcal{A} 40'18	
evening set	8710 Nov 26 15:14	20° \mathcal{A} 54'42		evening set	8711 Nov 08 05:17	2° \mathcal{A} 55'26	
min. Earth dist.	8710 Nov 30 08:26	18° \mathcal{A} 10'23	0.61082 AU	min. Earth dist.	8711 Nov 12 06:47	0° \mathcal{A} 20'57	0.58992 AU
inferior conj	8710 Dec 03 10:40	15° \mathcal{A} 29'37	-3°37'20		8711 Nov 12 18:14	30° \Re \mathcal{M}	
minimum elong	8710 Dec 03 17:27	15° \mathcal{A} 14'53	3°34'54	inferior conj	8711 Nov 15 11:07	27° \mathcal{M} 57'16	-4°42'04
morning rise	8710 Dec 10 22:01	10° \mathcal{A} 35'58		minimum elong	8711 Nov 15 18:26	27° \mathcal{M} 43'26	4°40'12
direct	8710 Dec 13 02:54	10° \mathcal{A} 16'06		morning rise	8711 Nov 23 09:56	23° \mathcal{M} 25'57	
asc. node	8710 Dec 15 01:15	10° \mathcal{A} 31'57		direct	8711 Nov 25 15:39	23° \mathcal{M} 08'44	
morning max el	8710 Dec 20 06:25	13° \mathcal{A} 51'25	17°56'19	asc. node	8711 Dec 01 22:16	25° \mathcal{M} 32'59	
	8710 Dec 31 06:00	0° \mathcal{B}		morning max el	8711 Dec 03 15:53	27° \mathcal{M} 03'25	18°24'55
morning set	8711 Jan 04 22:07	8° \mathcal{B} 28'09			8711 Dec 06 07:19	0° \mathcal{A}	
				morning set	8711 Dec 19 14:01	22° \mathcal{A} 29'07	
superior conj	8711 Jan 15 06:26	27° \mathcal{B} 05'35	0°24'21		8711 Dec 23 12:10	0° \mathcal{B}	
minimum elong	8711 Jan 15 08:27	27° \mathcal{B} 14'23	0°24'15				
	8711 Jan 16 22:40	0° \approx		superior conj	8711 Dec 28 15:47	9° \mathcal{B} 40'09	0°56'13
desc. node	8711 Jan 18 13:19	2° \approx 45'31		minimum elong	8711 Dec 28 19:06	9° \mathcal{B} 55'24	0°55'58
max. Earth dist.	8711 Jan 22 18:55	9° \approx 51'10	1.42586 AU	max. Earth dist.	8712 Jan 05 04:05	23° \mathcal{B} 03'09	1.40571 AU
evening rise	8711 Jan 28 21:16	19° \approx 41'57		desc. node	8712 Jan 05 10:17	23° \mathcal{B} 29'46	
	8711 Feb 04 12:53	0° \Re			8712 Jan 09 06:51	0° \approx	
	8711 Feb 25 24:00	0° Υ		evening rise	8712 Jan 09 13:40	0° \approx 28'11	
evening max el	8711 Mar 02 10:17	4° Υ 56'24	22°13'38		8712 Jan 28 23:20	0° \Re	
retrograde	8711 Mar 11 23:53	10° Υ 36'22		evening max el	8712 Feb 13 01:21	18° \Re 40'30	23°33'36
asc. node	8711 Mar 13 00:10	10° Υ 31'12		retrograde	8712 Feb 23 18:14	24° \Re 59'40	
evening set	8711 Mar 16 14:28	8° Υ 43'28		asc. node	8712 Feb 27 21:18	23° \Re 36'59	
inferior conj	8711 Mar 21 22:20	2° Υ 22'25	2°33'15	evening set	8712 Feb 28 20:41	22° \Re 52'08	
minimum elong	8711 Mar 21 20:08	2° Υ 30'06	2°32'41	min. Earth dist.	8712 Mar 04 17:01	17° \Re 12'29	0.68358 AU

inferior conj	8712 Mar 05 06:53	16° K 25'00	1°57'27	inferior conj	8713 Feb 17 13:34	0° K 29'11	1°13'09
minimum elong	8712 Mar 05 04:43	16° K 32'25	1°56'48	minimum elong	8713 Feb 17 11:56	0° K 34'33	1°12'39
morning rise	8712 Mar 10 12:44	10° K 20'16			8713 Feb 17 22:25	30° R \approx	
direct	8712 Mar 14 17:23	8° K 41'42		morning rise	8713 Feb 23 00:27	24° \approx 31'33	
morning max el	8712 Mar 22 22:55	13° K 24'18	20°49'27	direct	8713 Feb 26 16:20	23° \approx 14'34	
desc. node	8712 Apr 02 10:09	26° K 21'01		morning max el	8713 Mar 06 00:09	27° \approx 19'38	19°40'49
	8712 Apr 05 00:19	0° Y			8713 Mar 08 11:25	0° K	
morning set	8712 Apr 21 20:36	25° Y 16'20		greatest brilliancy	8713 Mar 18 17:49	13° K 55'24	-0.6m
	8712 Apr 24 20:53	0° Z		desc. node	8713 Mar 20 07:03	16° K 12'54	
max. Earth dist.	8712 Apr 30 00:41	8° Z 15'29	1.43058 AU		8713 Mar 29 09:44	0° Y	
				morning set	8713 Mar 31 18:17	3° Y 37'14	
superior conj	8712 May 06 21:14	19° Z 35'39	-2°06'30	max. Earth dist.	8713 Apr 12 12:28	21° Y 58'14	1.44555 AU
minimum elong	8712 May 07 01:30	19° Z 53'39	2°06'28				
	8712 May 12 22:51	0° II		superior conj	8713 Apr 17 03:42	29° Y 22'32	-2°11'45
evening rise	8712 May 18 19:52	10° II 21'45		minimum elong	8713 Apr 17 02:14	29° Y 16'36	2°11'51
asc. node	8712 May 25 20:04	22° II 40'04			8713 Apr 17 13:00	0° Z	
	8712 May 30 09:24	0° E		evening rise	8713 Apr 30 19:55	21° Z 59'11	
evening max el	8712 Jun 04 14:35	6° E 35'10	18°05'15		8713 May 05 13:46	0° II	
retrograde	8712 Jun 11 04:24	9° E 57'52		asc. node	8713 May 12 17:09	11° II 34'43	
evening set	8712 Jun 13 18:53	9° E 25'53		evening max el	8713 May 19 04:00	19° II 55'43	18°12'41
inferior conj	8712 Jun 20 08:25	4° E 24'55	2°23'28	retrograde	8713 May 25 13:06	23° II 18'13	
minimum elong	8712 Jun 20 11:22	4° E 17'38	2°22'29	evening set	8713 May 28 10:57	22° II 33'25	
min. Earth dist.	8712 Jun 23 11:38	1° E 21'09	0.61235 AU	inferior conj	8713 Jun 03 11:47	17° II 14'10	3°01'26
	8712 Jun 24 23:59	30° R II		minimum elong	8713 Jun 03 13:54	17° II 08'17	3°00'54
morning rise	8712 Jun 27 01:31	28° II 25'33		min. Earth dist.	8713 Jun 06 02:32	14° II 20'59	0.63398 AU
desc. node	8712 Jun 29 09:43	27° II 06'53		morning rise	8713 Jun 09 15:25	11° II 01'53	
direct	8712 Jul 03 17:17	26° II 10'14		direct	8713 Jun 16 09:24	8° II 25'12	
	8712 Jul 13 05:05	0° E		desc. node	8713 Jun 16 06:46	8° II 25'15	
morning max el	8712 Jul 17 23:27	4° E 10'13	27°54'49	morning max el	8713 Jun 30 07:42	16° II 28'13	27°45'49
	8712 Aug 06 03:46	0° O			8713 Jul 11 11:35	0° E	
morning set	8712 Aug 20 02:29	25° O 51'48			8713 Jul 29 21:51	0° O	
asc. node	8712 Aug 21 19:31	29° O 25'26		morning set	8713 Aug 03 22:51	9° O 44'56	
	8712 Aug 22 02:04	0° P		asc. node	8713 Aug 08 16:28	19° O 29'42	
max. Earth dist.	8712 Aug 25 22:16	8° P 16'12	1.31857 AU	max. Earth dist.	8713 Aug 09 01:06	20° O 15'26	1.32574 AU
superior conj	8712 Aug 27 11:00	11° P 37'45	0°54'36	superior conj	8713 Aug 11 18:22	26° O 04'52	0°30'45
minimum elong	8712 Aug 27 08:55	11° P 26'15	0°54'08	minimum elong	8713 Aug 11 16:57	25° O 57'17	0°30'19
evening rise	8712 Sep 03 05:26	26° P 27'43			8713 Aug 13 13:42	0° P	
	8712 Sep 04 21:26	0° A		evening rise	8713 Aug 18 17:02	11° P 07'45	
	8712 Sep 22 02:16	0° M			8713 Aug 28 06:47	0° A	
desc. node	8712 Sep 25 08:25	4° M 06'10		evening max el	8713 Sep 10 20:26	18° A 40'44	23°19'53
evening max el	8712 Sep 29 09:16	8° M 24'39	24°57'31	desc. node	8713 Sep 12 05:32	19° A 57'17	
retrograde	8712 Oct 13 05:40	15° M 23'21		retrograde	8713 Sep 24 07:36	25° A 24'30	
evening set	8712 Oct 18 19:48	14° M 12'51		evening set	8713 Sep 28 10:48	24° A 47'11	
min. Earth dist.	8712 Oct 23 20:40	11° M 29'48	0.57027 AU	min. Earth dist.	8713 Oct 05 06:02	21° A 37'12	0.55500 AU
inferior conj	8712 Oct 26 15:46	9° M 39'50	-5°27'17	inferior conj	8713 Oct 07 00:35	20° A 34'47	-5°33'50
minimum elong	8712 Oct 26 20:02	9° M 32'49	5°26'43	minimum elong	8713 Oct 06 21:44	20° A 38'58	5°33'36
morning rise	8712 Nov 03 22:33	5° M 31'22		morning rise	8713 Oct 15 10:44	16° A 43'05	
direct	8712 Nov 06 10:02	5° M 13'54		direct	8713 Oct 18 09:08	16° A 22'18	
morning max el	8712 Nov 15 15:58	9° M 37'52	19°15'07	morning max el	8713 Oct 29 03:38	21° A 25'39	20°27'44
asc. node	8712 Nov 17 19:15	11° M 53'39		asc. node	8713 Nov 04 16:14	29° A 18'21	
	8712 Nov 29 02:26	0° X			8713 Nov 05 03:29	0° M	
morning set	8712 Dec 02 14:47	6° X 53'46		morning set	8713 Nov 16 21:21	21° M 32'56	
					8713 Nov 20 23:28	0° X	
superior conj	8712 Dec 10 18:37	23° X 04'20	1°19'06	superior conj	8713 Nov 24 10:08	7° X 04'03	1°33'30
minimum elong	8712 Dec 10 21:38	23° X 18'57	1°18'59	minimum elong	8713 Nov 24 12:04	7° X 13'53	1°33'33
	8712 Dec 14 09:47	0° Z		max. Earth dist.	8713 Nov 29 16:53	17° X 31'20	1.36304 AU
max. Earth dist.	8712 Dec 17 09:50	5° Z 32'03	1.38390 AU	evening rise	8713 Dec 03 13:56	24° X 48'37	
evening rise	8712 Dec 21 03:56	12° Z 12'27			8713 Dec 06 11:02	0° Z	
desc. node	8712 Dec 22 07:17	14° Z 10'43		desc. node	8713 Dec 09 04:17	4° Z 43'42	
	8712 Dec 31 23:53	0° \approx			8713 Dec 25 13:55	0° \approx	
	8713 Jan 23 05:36	0° K		evening max el	8714 Jan 08 03:45	16° \approx 14'57	26°01'32
evening max el	8713 Jan 25 14:37	2° K 27'41	24°51'54	retrograde	8714 Jan 20 18:30	23° \approx 25'53	
retrograde	8713 Feb 06 08:48	9° K 18'30		evening set	8714 Jan 26 21:45	20° \approx 55'42	
evening set	8713 Feb 11 23:41	6° K 58'06		min. Earth dist.	8714 Jan 31 03:38	16° \approx 25'01	0.66970 AU
asc. node	8713 Feb 13 18:23	5° K 14'00		asc. node	8714 Jan 31 15:28	15° \approx 48'23	
min. Earth dist.	8713 Feb 16 12:12	1° K 52'53	0.67855 AU				

inferior conj	8714 Feb 01 16:28	14° \approx 30'16	0°20'40			8714 Dec 21 18:53	0° \approx
minimum elong	8714 Feb 01 15:55	14° \approx 31'57	0°20'37	retrograde		8715 Jan 03 22:28	7° \approx 15'16
morning rise	8714 Feb 07 10:44	8° \approx 41'37		evening set		8715 Jan 10 12:59	4° \approx 40'01
direct	8714 Feb 10 15:17	7° \approx 43'34		min. Earth dist.		8715 Jan 14 13:03	0° \approx 43'36 0.65726 AU
morning max el	8714 Feb 17 08:47	11° \approx 23'19	18°47'30			8715 Jan 15 04:20	30° \approx 3
	8714 Mar 03 00:38	0° \approx		inferior conj		8715 Jan 16 13:28	28° \approx 24'00 -0°39'25
desc. node	8714 Mar 07 03:56	6° \approx 24'50		minimum elong		8715 Jan 16 14:36	28° \approx 20'44 0°38'44
morning set	8714 Mar 11 04:20	12° \approx 41'16		asc. node		8715 Jan 18 12:33	26° \approx 12'18
	8714 Mar 22 06:07	0° \approx		morning rise		8715 Jan 22 17:21	22° \approx 34'48
max. Earth dist.	8714 Mar 26 05:21	6° \approx 12'39	1.45399 AU	direct		8715 Jan 25 12:21	22° \approx 04'12
				morning max el		8715 Jan 31 23:00	25° \approx 30'00 18°10'41
superior conj	8714 Mar 27 14:12	8° \approx 21'26	-1°57'20			8715 Feb 04 19:18	0° \approx
minimum elong	8714 Mar 27 06:04	7° \approx 49'33	1°56'48	morning set		8715 Feb 19 18:18	23° \approx 10'41
	8714 Apr 10 05:30	0° \approx		desc. node		8715 Feb 22 00:50	26° \approx 51'14
evening rise	8714 Apr 11 20:37	2° \approx 37'24				8715 Feb 23 23:39	0° \approx
greatest brilliancy	8714 Apr 18 07:50	13° \approx 02'49	-0.9m				
asc. node	8714 Apr 29 14:13	29° \approx 55'36		superior conj		8715 Mar 06 19:51	17° \approx 14'12 -1°24'14
	8714 Apr 29 15:36	0° \approx		minimum elong		8715 Mar 06 10:43	16° \approx 38'20 1°23'09
evening max el	8714 May 02 15:59	3° \approx 27'28	18°38'20	max. Earth dist.		8715 Mar 09 00:59	20° \approx 42'44 1.45506 AU
retrograde	8714 May 09 05:28	7° \approx 02'58				8715 Mar 14 23:43	0° \approx
evening set	8714 May 12 10:49	6° \approx 03'59		evening rise		8715 Mar 22 22:58	12° \approx 24'02
inferior conj	8714 May 18 02:49	0° \approx 27'56	3°19'23			8715 Apr 03 08:24	0° \approx
minimum elong	8714 May 18 03:38	0° \approx 25'25	3°19'09	greatest brilliancy		8715 Apr 04 00:32	1° \approx 01'04 -0.7m
	8714 May 18 11:57	30° \approx 8		evening max el		8715 Apr 16 00:15	17° \approx 04'44 19°21'05
min. Earth dist.	8714 May 20 02:30	28° \approx 03'05	0.65268 AU	asc. node		8715 Apr 16 11:19	17° \approx 32'11
morning rise	8714 May 23 19:42	24° \approx 10'18		retrograde		8715 Apr 23 02:13	21° \approx 05'15
direct	8714 May 30 09:19	21° \approx 24'12		evening set		8715 Apr 26 15:36	19° \approx 51'22
desc. node	8714 Jun 03 03:45	22° \approx 10'46		inferior conj		8715 May 02 02:04	13° \approx 59'52 3°21'33
morning max el	8714 Jun 12 17:57	29° \approx 17'30	27°03'16	minimum elong		8715 May 02 01:38	14° \approx 01'16 3°21'23
	8714 Jun 13 10:30	0° \approx		min. Earth dist.		8715 May 03 10:29	12° \approx 14'12 0.66735 AU
	8714 Jul 05 08:48	0° \approx		morning rise		8715 May 07 11:19	7° \approx 41'27
morning set	8714 Jul 18 09:27	23° \approx 07'24		direct		8715 May 13 15:38	4° \approx 57'53
	8714 Jul 21 21:20	0° \approx		desc. node		8715 May 21 00:44	7° \approx 55'11
max. Earth dist.	8714 Jul 22 18:46	1° \approx 48'04	1.33786 AU	morning max el		8715 May 26 04:02	12° \approx 26'42 25°55'08
						8715 Jun 09 06:29	0° \approx
superior conj	8714 Jul 26 20:28	10° \approx 12'49	0°02'58			8715 Jun 28 01:25	0° \approx
minimum elong	8714 Jul 26 20:20	10° \approx 12'03	0°02'45	morning set		8715 Jul 01 06:32	5° \approx 48'37
behind sun begin	8714 Jul 26 14:46	9° \approx 42'49		max. Earth dist.		8715 Jul 05 01:47	12° \approx 57'46 1.35480 AU
behind sun end	8714 Jul 27 01:54	10° \approx 41'20					
asc. node	8714 Jul 26 13:26	9° \approx 35'52		superior conj		8715 Jul 10 14:45	23° \approx 54'00 -0°27'50
evening rise	8714 Aug 03 03:37	25° \approx 41'37		minimum elong		8715 Jul 10 16:23	24° \approx 02'19 0°27'43
	8714 Aug 05 05:15	0° \approx		asc. node		8715 Jul 13 10:25	29° \approx 39'34
evening max el	8714 Aug 23 11:37	28° \approx 57'50	21°42'41			8715 Jul 13 14:23	0° \approx
	8714 Aug 24 14:02	0° \approx		evening rise		8715 Jul 18 11:07	10° \approx 02'51
desc. node	8714 Aug 30 02:40	3° \approx 47'24				8715 Jul 29 02:15	0° \approx
retrograde	8714 Sep 04 22:18	5° \approx 08'25		evening max el		8715 Aug 05 14:04	9° \approx 45'43 20°18'56
evening set	8714 Sep 07 15:50	4° \approx 51'35		retrograde		8715 Aug 16 10:41	15° \approx 08'03
inferior conj	8714 Sep 16 19:31	0° \approx 53'02	-4°46'04	desc. node		8715 Aug 16 23:48	15° \approx 07'16
minimum elong	8714 Sep 16 10:30	1° \approx 05'39	4°44'05	evening set		8715 Aug 18 10:04	14° \approx 58'10
min. Earth dist.	8714 Sep 16 14:22	1° \approx 00'14	0.54721 AU	inferior conj		8715 Aug 27 13:10	11° \approx 00'24 -3°09'14
	8714 Sep 18 09:43	30° \approx 8		minimum elong		8715 Aug 27 04:48	11° \approx 12'40 3°06'26
morning rise	8714 Sep 25 06:17	27° \approx 03'43		min. Earth dist.		8715 Aug 28 23:57	10° \approx 09'29 0.54881 AU
direct	8714 Sep 28 19:31	26° \approx 36'08		morning rise		8715 Sep 04 22:42	6° \approx 53'13
	8714 Oct 08 04:29	0° \approx		direct		8715 Sep 09 05:17	6° \approx 13'53
morning max el	8714 Oct 11 02:24	2° \approx 24'43	22°00'42	morning max el		8715 Sep 22 16:18	12° \approx 46'34 23°46'04
asc. node	8714 Oct 22 13:11	17° \approx 32'46				8715 Oct 05 18:57	0° \approx
	8714 Oct 29 05:33	0° \approx		asc. node		8715 Oct 09 10:08	6° \approx 23'59
morning set	8714 Nov 01 07:26	6° \approx 20'34		morning set		8715 Oct 16 19:04	21° \approx 09'59
						8715 Oct 20 21:19	0° \approx
superior conj	8714 Nov 08 10:38	21° \approx 28'46	1°40'17				
minimum elong	8714 Nov 08 11:16	21° \approx 32'06	1°40'26	superior conj		8715 Oct 23 17:07	6° \approx 08'35 1°40'20
max. Earth dist.	8714 Nov 12 06:34	29° \approx 25'12	1.34510 AU	minimum elong		8715 Oct 23 16:32	6° \approx 05'26 1°40'27
	8714 Nov 12 13:25	0° \approx		max. Earth dist.		8715 Oct 26 04:33	11° \approx 27'52 1.33112 AU
evening rise	8714 Nov 16 15:59	8° \approx 07'32		evening rise		8715 Oct 31 06:12	21° \approx 58'00
desc. node	8714 Nov 26 01:20	25° \approx 04'16				8715 Nov 04 09:07	0° \approx
	8714 Nov 29 01:05	0° \approx		desc. node		8715 Nov 12 22:25	15° \approx 05'28
evening max el	8714 Dec 21 17:10	29° \approx 55'54	26°54'57			8715 Nov 22 20:41	0° \approx

evening max el	8715 Dec 04 05:43	13°♁18'39	27°25'08		8716 Nov 20 06:34	0°♁	
retrograde	8715 Dec 17 20:01	20°♁38'18		retrograde	8716 Nov 29 10:35	3°♁25'35	
evening set	8715 Dec 24 19:01	18°♁04'34		evening set	8716 Dec 06 12:48	1°♁02'23	
min. Earth dist.	8715 Dec 28 14:07	14°♁40'57	0.64136 AU		8716 Dec 07 23:23	30°♁♂	
inferior conj	8715 Dec 31 02:06	12°♁04'08	-1°46'01	min. Earth dist.	8716 Dec 10 05:09	28°♁06'36	0.62252 AU
minimum elong	8715 Dec 31 05:24	11°♁55'29	1°44'28	inferior conj	8716 Dec 13 03:21	25°♁23'06	-2°56'42
asc. node	8716 Jan 05 09:36	7°♁22'13		minimum elong	8716 Dec 13 09:00	25°♁09'53	2°54'25
morning rise	8716 Jan 06 17:29	6°♁41'29		morning rise	8716 Dec 20 07:25	20°♁18'16	
direct	8716 Jan 09 04:56	6°♁10'35		asc. node	8716 Dec 22 06:40	19°♁55'50	
morning max el	8716 Jan 15 16:10	9°♁32'44	17°51'01	direct	8716 Dec 22 13:46	19°♁55'26	
	8716 Jan 29 13:07	0°♁		morning max el	8716 Dec 29 09:07	23°♁23'18	17°49'06
morning set	8716 Feb 01 12:44	5°♁03'39			8717 Jan 03 14:57	0°♁	
desc. node	8716 Feb 08 21:46	17°♁27'39		morning set	8717 Jan 14 05:34	18°♁00'25	
					8717 Jan 21 00:28	0°♁	
superior conj	8716 Feb 14 15:34	26°♁51'42	-0°41'02	superior conj	8717 Jan 25 11:47	7°♁40'35	0°02'09
minimum elong	8716 Feb 14 10:57	26°♁33'03	0°40'15	minimum elong	8717 Jan 25 12:00	7°♁41'32	0°02'19
	8716 Feb 16 14:20	0°♁		behind sun begin	8717 Jan 25 03:15	7°♁04'28	
max. Earth dist.	8716 Feb 19 20:31	5°♁11'24	1.44870 AU	behind sun end	8717 Jan 25 20:45	8°♁18'32	
evening rise	8716 Mar 01 11:41	21°♁44'41		desc. node	8717 Jan 25 18:45	8°♁10'05	
	8716 Mar 06 21:38	0°♁		max. Earth dist.	8717 Feb 01 12:46	19°♁19'42	1.43569 AU
	8716 Mar 28 10:26	0°♁			8717 Feb 08 05:59	0°♁	
evening max el	8716 Mar 29 03:19	0°♁44'02	20°19'04	evening rise	8717 Feb 09 01:26	1°♁15'40	
asc. node	8716 Apr 02 08:26	4°♁11'25			8717 Feb 28 11:26	0°♁	
retrograde	8716 Apr 06 00:46	5°♁19'32		evening max el	8717 Mar 12 00:46	14°♁23'57	21°29'19
evening set	8716 Apr 09 23:01	3°♁50'26		asc. node	8717 Mar 20 05:34	19°♁37'51	
	8716 Apr 13 14:25	30°♁♂		retrograde	8717 Mar 20 23:01	19°♁40'32	
inferior conj	8716 Apr 15 06:45	27°♁45'19	3°11'02	evening set	8717 Mar 25 07:14	17°♁56'15	
minimum elong	8716 Apr 15 05:20	27°♁50'08	3°10'45	inferior conj	8717 Mar 30 14:30	11°♁39'58	2°49'49
min. Earth dist.	8716 Apr 16 00:53	26°♁43'29	0.67750 AU	minimum elong	8717 Mar 30 12:28	11°♁47'02	2°49'21
morning rise	8716 Apr 20 11:25	21°♁28'39		min. Earth dist.	8717 Mar 30 19:33	11°♁22'22	0.68321 AU
direct	8716 Apr 26 03:23	18°♁57'10		morning rise	8717 Apr 04 17:30	5°♁26'41	
desc. node	8716 May 06 21:41	25°♁08'10		direct	8717 Apr 09 19:47	3°♁13'33	
morning max el	8716 May 07 13:24	25°♁47'19	24°31'11	morning max el	8717 Apr 19 23:19	9°♁14'41	23°01'20
	8716 May 11 09:49	0°♁		desc. node	8717 Apr 23 18:38	13°♁24'54	
	8716 Jun 01 19:17	0°♁			8717 May 06 06:31	0°♁	
morning set	8716 Jun 12 09:22	17°♁36'38		morning set	8717 May 24 12:24	28°♁16'35	
max. Earth dist.	8716 Jun 16 00:37	24°♁05'21	1.37550 AU		8717 May 25 13:11	0°♁	
	8716 Jun 19 05:35	0°♁		max. Earth dist.	8717 May 28 20:52	5°♁38'28	1.39800 AU
superior conj	8716 Jun 22 22:00	7°♁00'41	-0°59'59	superior conj	8717 Jun 05 14:09	19°♁22'24	-1°30'52
minimum elong	8716 Jun 23 01:45	7°♁18'50	0°59'32	minimum elong	8717 Jun 05 19:41	19°♁47'52	1°30'21
asc. node	8716 Jun 29 07:26	19°♁37'17			8717 Jun 11 06:24	0°♁	
evening rise	8716 Jul 01 13:07	24°♁05'02		evening rise	8717 Jun 15 06:29	7°♁39'12	
	8716 Jul 04 13:13	0°♁		asc. node	8717 Jun 16 04:28	9°♁24'12	
evening max el	8716 Jul 18 05:48	21°♁18'39	19°15'00		8717 Jun 28 06:26	0°♁	
retrograde	8716 Jul 27 10:03	25°♁51'13		evening max el	8717 Jul 01 08:28	3°♁33'51	18°32'08
evening set	8716 Jul 29 06:59	25°♁40'40		retrograde	8717 Jul 09 03:34	7°♁26'55	
desc. node	8716 Aug 02 20:54	23°♁57'20		evening set	8717 Jul 11 06:03	7°♁10'50	
inferior conj	8716 Aug 06 19:54	21°♁30'36	-1°13'00	inferior conj	8717 Jul 18 23:25	2°♁41'56	0°31'46
minimum elong	8716 Aug 06 16:40	21°♁35'59	1°11'54	minimum elong	8717 Jul 19 00:34	2°♁39'42	0°31'09
min. Earth dist.	8716 Aug 09 13:01	19°♁42'41	0.55964 AU	desc. node	8717 Jul 20 18:00	1°♁18'37	
morning rise	8716 Aug 14 23:29	16°♁49'03			8717 Jul 22 11:23	30°♁♂	
direct	8716 Aug 20 01:38	15°♁49'39		min. Earth dist.	8717 Jul 22 07:16	0°♁07'36	0.57757 AU
morning max el	8716 Sep 03 04:52	22°♁59'43	25°28'50	morning rise	8717 Jul 26 15:33	27°♁23'27	
	8716 Sep 09 11:34	0°♁		direct	8717 Aug 01 12:51	25°♁55'17	
asc. node	8716 Sep 25 07:06	25°♁42'57			8717 Aug 11 19:16	0°♁	
	8716 Sep 27 10:21	0°♁		morning max el	8717 Aug 15 21:51	3°♁32'42	26°52'01
morning set	8716 Sep 30 06:34	5°♁56'37			8717 Sep 04 01:58	0°♁	
superior conj	8716 Oct 07 03:13	20°♁56'36	1°34'22	asc. node	8717 Sep 12 04:04	15°♁22'07	
minimum elong	8716 Oct 07 01:42	20°♁48'11	1°34'19	morning set	8717 Sep 14 16:18	20°♁35'44	
max. Earth dist.	8716 Oct 08 09:36	23°♁43'39	1.32162 AU		8717 Sep 19 00:22	0°♁	
	8716 Oct 11 06:54	0°♁		superior conj	8717 Sep 21 14:56	5°♁46'44	1°22'53
evening rise	8716 Oct 14 05:22	6°♁11'47		minimum elong	8717 Sep 21 12:50	5°♁35'04	1°22'39
	8716 Oct 26 22:29	0°♁		max. Earth dist.	8717 Sep 21 18:47	6°♁08'04	1.31673 AU
desc. node	8716 Oct 29 19:31	4°♁39'16		evening rise	8717 Sep 28 10:48	20°♁41'39	
evening max el	8716 Nov 15 15:13	26°♁10'02	27°25'49				

	8717 Oct 02 23:51	0°♍			8718 Sep 25 17:27	0°♍	
desc. node	8717 Oct 16 16:38	23°♍34'50		desc. node	8718 Oct 03 13:45	11°♍36'26	
	8717 Oct 21 08:50	0°♌		evening max el	8718 Oct 10 15:42	19°♍36'49	25°47'25
evening max el	8717 Oct 28 19:15	8°♌18'41	26°53'03	retrograde	8718 Oct 24 13:54	26°♍39'29	
retrograde	8717 Nov 11 17:15	15°♌28'15		evening set	8718 Oct 30 18:56	25°♍09'04	
evening set	8717 Nov 18 14:26	13°♌26'30		min. Earth dist.	8718 Nov 04 04:17	22°♍33'02	0.58114 AU
min. Earth dist.	8717 Nov 22 09:37	10°♌48'22	0.60182 AU	inferior conj	8718 Nov 07 06:11	20°♍21'50	-5°04'46
inferior conj	8717 Nov 25 13:53	8°♌12'29	-4°06'15	minimum elong	8718 Nov 07 12:45	20°♍10'08	5°03'24
minimum elong	8717 Nov 25 21:12	7°♌57'29	4°03'55	morning rise	8718 Nov 15 08:54	16°♍00'10	
morning rise	8717 Dec 03 06:26	3°♌28'22		direct	8718 Nov 17 16:16	15°♍43'16	
direct	8717 Dec 05 10:57	3°♌10'08		morning max el	8718 Nov 26 04:19	19°♍49'44	18°43'32
asc. node	8717 Dec 09 03:42	4°♌04'48		asc. node	8718 Nov 26 00:43	19°♍41'08	
morning max el	8717 Dec 12 22:26	6°♌52'45	18°06'02		8718 Dec 03 19:25	0°♌	
	8717 Dec 27 16:36	0°♋		morning set	8718 Dec 12 10:39	15°♌54'28	
morning set	8717 Dec 28 14:34	1°♋42'30			8718 Dec 19 17:00	0°♋	
superior conj	8718 Jan 07 08:48	19°♋40'16	0°38'56	superior conj	8718 Dec 21 02:08	2°♋37'01	1°07'00
minimum elong	8718 Jan 07 11:37	19°♋52'51	0°38'43	minimum elong	8718 Dec 21 05:28	2°♋52'42	1°06'47
desc. node	8718 Jan 12 15:41	28°♋54'41		max. Earth dist.	8718 Dec 28 07:10	15°♋45'18	1.39647 AU
	8718 Jan 13 07:00	0°♊		desc. node	8718 Dec 30 12:40	19°♋37'48	
max. Earth dist.	8718 Jan 15 00:03	2°♊53'14	1.41757 AU	evening rise	8719 Jan 01 07:43	22°♋41'10	
evening rise	8718 Jan 20 05:58	11°♊30'05			8719 Jan 05 17:57	0°♊	
	8718 Feb 01 06:05	0°♏			8719 Jan 26 04:40	0°♏	
evening max el	8718 Feb 22 17:42	28°♏06'29	22°47'23	evening max el	8719 Feb 05 07:55	11°♏52'23	24°07'34
	8718 Feb 24 17:37	0°♏		retrograde	8719 Feb 16 12:03	18°♏25'55	
retrograde	8718 Mar 04 19:14	4°♏04'20		evening set	8719 Feb 21 19:39	16°♏12'55	
asc. node	8718 Mar 07 02:40	3°♏37'44		asc. node	8719 Feb 21 23:46	16°♏04'01	
evening set	8718 Mar 09 14:38	2°♏05'14		min. Earth dist.	8719 Feb 26 12:36	10°♏47'44	0.68194 AU
	8718 Mar 11 16:20	30°♏		inferior conj	8719 Feb 27 07:17	9°♏44'35	1°39'42
inferior conj	8718 Mar 14 23:18	25°♏41'00	2°19'09	minimum elong	8719 Feb 27 05:17	9°♏51'21	1°39'06
minimum elong	8718 Mar 14 21:04	25°♏48'47	2°18'32	morning rise	8719 Mar 04 14:57	3°♏42'30	
min. Earth dist.	8718 Mar 14 16:15	26°♏05'29	0.68464 AU	direct	8719 Mar 08 14:07	2°♏13'06	
morning rise	8718 Mar 20 03:22	19°♏32'30		morning max el	8719 Mar 16 09:24	6°♏38'10	20°18'26
direct	8718 Mar 24 15:47	17°♏40'57		desc. node	8719 Mar 28 12:28	22°♏04'41	
morning max el	8718 Apr 02 12:55	22°♏50'38	21°34'47		8719 Apr 02 22:32	0°♏	
	8718 Apr 08 17:52	0°♏		morning set	8719 Apr 13 13:49	16°♏08'25	
desc. node	8718 Apr 10 15:33	2°♏28'03			8719 Apr 22 09:33	0°♏	
	8718 Apr 29 14:25	0°♏		max. Earth dist.	8719 Apr 23 05:23	1°♏19'23	1.43773 AU
morning set	8718 May 04 12:01	7°♏40'42		superior conj	8719 Apr 29 07:21	11°♏13'05	-2°10'54
max. Earth dist.	8718 May 10 21:15	18°♏01'10	1.41967 AU	minimum elong	8719 Apr 29 09:39	11°♏22'34	2°10'59
	8718 May 17 23:16	0°♏			8719 May 10 09:16	0°♏	
superior conj	8718 May 18 10:37	0°♏49'12	-1°56'24	evening rise	8719 May 11 23:19	2°♏45'12	
minimum elong	8718 May 18 16:18	1°♏13'56	1°56'08	asc. node	8719 May 20 22:33	18°♏05'50	
evening rise	8718 May 29 11:23	20°♏35'53		evening max el	8719 May 29 07:19	29°♏34'06	18°06'08
asc. node	8718 Jun 03 01:30	28°♏55'34			8719 May 29 18:06	0°♏	
	8718 Jun 03 15:58	0°♏		retrograde	8719 Jun 04 17:44	2°♏54'37	
evening max el	8718 Jun 14 18:13	16°♏22'11	18°09'29	evening set	8719 Jun 07 11:29	2°♏17'13	
retrograde	8718 Jun 21 15:18	19°♏51'08			8719 Jun 10 20:34	30°♏	
evening set	8718 Jun 24 01:30	19°♏25'41		inferior conj	8719 Jun 13 19:07	27°♏08'16	2°42'18
inferior conj	8718 Jul 01 00:13	14°♏36'21	1°50'33	minimum elong	8719 Jun 13 21:49	27°♏01'14	2°41'30
minimum elong	8718 Jul 01 03:08	14°♏29'44	1°49'28	min. Earth dist.	8719 Jun 16 17:33	24°♏06'38	0.62188 AU
min. Earth dist.	8718 Jul 04 08:14	11°♏36'17	0.59943 AU	morning rise	8719 Jun 20 06:16	21°♏02'37	
desc. node	8718 Jul 07 15:04	9°♏05'56		desc. node	8719 Jun 24 12:06	18°♏56'32	
morning rise	8718 Jul 08 01:51	8°♏49'03		direct	8719 Jun 27 00:02	18°♏36'58	
direct	8718 Jul 14 13:13	6°♏49'33		morning max el	8719 Jul 11 03:05	26°♏38'40	27°55'27
morning max el	8718 Jul 28 21:25	14°♏43'38	27°42'43		8719 Jul 14 06:31	0°♏	
	8718 Aug 10 05:24	0°♏			8719 Aug 03 20:28	0°♏	
	8718 Aug 27 11:39	0°♏		morning set	8719 Aug 13 23:05	19°♏08'58	
morning set	8718 Aug 29 22:27	5°♏01'39		asc. node	8719 Aug 16 21:57	25°♏16'39	
asc. node	8718 Aug 30 01:00	5°♏14'58			8719 Aug 19 03:02	0°♏	
max. Earth dist.	8718 Sep 05 04:33	18°♏31'42	1.31654 AU	max. Earth dist.	8719 Aug 19 11:12	0°♏44'01	1.32107 AU
superior conj	8718 Sep 06 02:23	20°♏32'31	1°06'19	superior conj	8719 Aug 21 11:49	5°♏08'31	0°45'01
minimum elong	8718 Sep 06 00:09	20°♏20'07	1°05'54	minimum elong	8719 Aug 21 09:57	4°♏58'18	0°44'32
	8718 Sep 10 09:04	0°♏		evening rise	8719 Aug 28 07:32	20°♏02'17	
evening rise	8718 Sep 12 20:10	5°♏20'25			8719 Sep 02 02:54	0°♏	

























































































































desc. node	8719 Sep 20 10:52	28°♄23'02		evening rise	8720 Aug 09 14:32	0°♄	
evening max el	8719 Sep 22 04:52	0°♄09'24	24°17'02	evening rise	8720 Aug 11 18:57	4°♄40'34	
	8719 Sep 22 00:58	0°♄			8720 Aug 25 09:26	0°♄	
retrograde	8719 Oct 05 22:25	7°♄02'29		evening max el	8720 Sep 02 16:24	10°♄20'22	22°37'23
evening set	8719 Oct 10 22:44	6°♄07'04		desc. node	8720 Sep 06 07:59	13°♄26'24	
min. Earth dist.	8719 Oct 16 15:40	3°♄14'42	0.56310 AU	retrograde	8720 Sep 15 18:50	16°♄52'36	
inferior conj	8719 Oct 19 02:08	1°♄43'56	-5°35'58	evening set	8720 Sep 19 06:52	16°♄25'40	
minimum elong	8719 Oct 19 03:43	1°♄41'28	5°35'48	min. Earth dist.	8720 Sep 26 23:47	12°♄59'52	0.55068 AU
	8719 Oct 21 23:24	30°♄		inferior conj	8720 Sep 28 03:44	12°♄20'09	-5°20'31
morning rise	8719 Oct 27 10:49	27°♄43'33		minimum elong	8720 Sep 27 21:41	12°♄28'46	5°19'41
direct	8719 Oct 30 02:35	27°♄24'53		morning rise	8720 Oct 06 14:26	8°♄32'10	
	8719 Nov 06 11:12	0°♄		direct	8720 Oct 09 18:53	8°♄09'00	
morning max el	8719 Nov 08 23:14	2°♄04'24	19°43'15	morning max el	8720 Oct 21 05:11	13°♄30'30	21°05'13
asc. node	8719 Nov 12 21:41	6°♄30'35		asc. node	8720 Oct 29 18:39	24°♄17'41	
	8719 Nov 26 09:02	0°♄			8720 Nov 02 04:18	0°♄	
morning set	8719 Nov 26 14:12	0°♄26'03		morning set	8720 Nov 09 22:31	15°♄09'32	
superior conj	8719 Dec 04 10:50	16°♄17'14	1°26'12	superior conj	8720 Nov 17 06:36	0°♄28'46	1°37'15
minimum elong	8719 Dec 04 13:27	16°♄30'10	1°26'10	minimum elong	8720 Nov 17 07:59	0°♄35'55	1°37'22
max. Earth dist.	8719 Dec 10 13:12	28°♄00'24	1.37483 AU		8720 Nov 17 01:02	0°♄	
	8719 Dec 11 15:04	0°♄		max. Earth dist.	8720 Nov 21 22:42	9°♄55'00	1.35493 AU
evening rise	8719 Dec 14 06:45	4°♄48'02		evening rise	8720 Nov 26 00:01	17°♄43'07	
desc. node	8719 Dec 17 09:40	10°♄15'35			8720 Dec 02 20:25	0°♄	
	8719 Dec 29 17:48	0°♄		desc. node	8720 Dec 03 06:42	0°♄43'52	
evening max el	8720 Jan 18 21:06	25°♄40'08	25°23'04		8720 Dec 23 00:38	0°♄	
	8720 Jan 23 23:52	0°♄		evening max el	8720 Dec 31 10:15	9°♄25'19	26°26'40
retrograde	8720 Jan 31 00:25	2°♄40'10		retrograde	8721 Jan 13 07:45	16°♄41'13	
evening set	8720 Feb 05 20:44	0°♄15'10		evening set	8721 Jan 19 16:10	14°♄07'52	
	8720 Feb 06 03:46	30°♄		min. Earth dist.	8721 Jan 23 19:23	9°♄52'11	0.66481 AU
asc. node	8720 Feb 08 20:52	27°♄08'50		inferior conj	8721 Jan 25 13:14	7°♄45'48	-0°03'56
min. Earth dist.	8720 Feb 10 06:22	25°♄24'48	0.67528 AU	minimum elong	8721 Jan 25 13:20	7°♄45'30	0°03'42
inferior conj	8720 Feb 11 12:34	23°♄47'22	0°51'52	transit middle	8721 Jan 25 13:20	7°♄45'30	0°03'42
minimum elong	8720 Feb 11 11:20	23°♄51'21	0°51'32	transit begin	8721 Jan 25 10:31	7°♄54'01	
morning rise	8720 Feb 17 02:18	17°♄53'23		transit end	8721 Jan 25 16:09	7°♄36'59	
direct	8720 Feb 20 13:16	16°♄44'42		asc. node	8721 Jan 25 17:57	7°♄31'33	
morning max el	8720 Feb 27 13:52	20°♄37'03	19°16'12	morning rise	8721 Jan 31 11:21	2°♄02'02	
	8720 Mar 06 04:24	0°♄		direct	8721 Feb 03 11:37	1°♄11'04	
greatest brilliancy	8720 Mar 11 15:06	7°♄55'45	-0.7m	morning max el	8721 Feb 10 01:18	4°♄43'22	18°29'54
desc. node	8720 Mar 14 09:22	12°♄05'37			8721 Feb 27 17:49	0°♄	
morning set	8720 Mar 22 13:55	24°♄39'42		desc. node	8721 Mar 01 06:16	2°♄24'24	
	8720 Mar 26 00:41	0°♄		morning set	8721 Mar 02 10:59	4°♄18'14	
max. Earth dist.	8720 Apr 04 20:12	15°♄19'39	1.45003 AU	superior conj	8721 Mar 18 10:11	29°♄25'37	-1°45'12
superior conj	8720 Apr 08 04:06	20°♄35'40	-2°08'11	minimum elong	8721 Mar 18 00:43	28°♄48'36	1°44'22
minimum elong	8720 Apr 07 23:30	20°♄17'24	2°08'04	max. Earth dist.	8721 Mar 18 14:48	29°♄43'42	1.45529 AU
	8720 Apr 14 00:58	0°♄			8721 Mar 18 18:58	0°♄	
evening rise	8720 Apr 22 13:43	13°♄57'48		evening rise	8721 Apr 03 04:29	24°♄12'49	
	8720 May 02 08:15	0°♄			8721 Apr 06 20:07	0°♄	
asc. node	8720 May 06 19:37	6°♄47'16		greatest brilliancy	8721 Apr 12 09:23	8°♄45'18	-0.8m
evening max el	8720 May 11 20:26	13°♄00'16	18°21'22	asc. node	8721 Apr 23 16:43	24°♄51'00	
retrograde	8720 May 18 06:16	16°♄26'45		evening max el	8721 Apr 25 07:02	26°♄34'52	18°54'26
evening set	8720 May 21 07:20	15°♄35'54			8721 Apr 30 03:24	0°♄	
inferior conj	8720 May 27 03:56	10°♄09'01	3°11'14	retrograde	8721 May 02 01:02	0°♄20'02	
minimum elong	8720 May 27 05:31	10°♄04'25	3°10'50		8721 May 03 21:43	30°♄	
min. Earth dist.	8720 May 29 12:15	7°♄26'30	0.64239 AU	evening set	8721 May 05 09:38	29°♄14'51	
morning rise	8720 Jun 02 02:38	3°♄53'47		inferior conj	8721 May 10 22:54	23°♄31'49	3°22'02
direct	8720 Jun 08 19:22	1°♄11'59		minimum elong	8721 May 10 23:10	23°♄30'58	3°21'51
desc. node	8720 Jun 10 09:07	1°♄20'03		min. Earth dist.	8721 May 12 15:58	21°♄22'42	0.65940 AU
morning max el	8720 Jun 22 12:37	9°♄11'52	27°31'28	morning rise	8721 May 16 12:08	17°♄13'09	
	8720 Jul 08 17:31	0°♄		direct	8721 May 22 22:07	14°♄26'56	
	8720 Jul 26 04:50	0°♄		desc. node	8721 May 28 06:07	16°♄00'07	
morning set	8720 Jul 27 15:41	2°♄50'06		morning max el	8721 Jun 04 23:18	22°♄12'16	26°36'53
max. Earth dist.	8720 Aug 01 10:46	12°♄33'47	1.33039 AU		8721 Jun 11 19:10	0°♄	
asc. node	8720 Aug 02 18:54	15°♄22'06			8721 Jul 01 23:34	0°♄	
superior conj	8720 Aug 04 17:13	19°♄28'07	0°19'24	morning set	8721 Jul 10 21:06	15°♄56'50	
minimum elong	8720 Aug 04 16:16	19°♄23'05	0°19'02	max. Earth dist.	8721 Jul 15 00:07	23°♄56'20	1.34456 AU
					8721 Jul 18 00:22	0°♄	

superior conj	8721 Jul 19 16:21	3°Ω25'32	-0°09'50	morning set	8722 Jun 23 11:08	28°Π17'48	
minimum elong	8721 Jul 19 16:54	3°Ω28'24	0°09'54		8722 Jun 24 09:42	0°Ϣ	
behind sun begin	8721 Jul 19 12:17	3°Ω04'30		max. Earth dist.	8722 Jun 27 02:43	5°Ϣ00'15	1.36318 AU
behind sun end	8721 Jul 19 21:31	3°Ω52'20					
asc. node	8721 Jul 20 15:52	5°Ω27'43		superior conj	8722 Jul 03 06:24	16°Ϣ53'37	-0°41'25
evening rise	8721 Jul 27 04:32	19°Ω09'54		minimum elong	8722 Jul 03 08:56	17°Ϣ06'09	0°41'09
	8721 Aug 01 13:27	0°Π		asc. node	8722 Jul 07 12:54	25°Ϣ29'44	
evening max el	8721 Aug 15 11:37	20°Π47'15	21°04'44		8722 Jul 09 17:55	0°Ω	
desc. node	8721 Aug 24 05:07	26°Π15'16		evening rise	8722 Jul 11 10:02	3°Ω24'11	
retrograde	8721 Aug 27 07:35	26°Π39'04			8722 Jul 27 01:02	0°Π	
evening set	8721 Aug 29 14:52	26°Π26'36		evening max el	8722 Jul 28 20:00	1°Π55'17	19°49'15
inferior conj	8721 Sep 07 20:18	22°Π29'52	-4°09'35	retrograde	8722 Aug 07 23:11	6°Π55'27	
minimum elong	8721 Sep 07 10:40	22°Π43'28	4°06'55	evening set	8722 Aug 09 19:52	6°Π46'04	
min. Earth dist.	8721 Sep 08 08:33	22°Π12'33	0.54670 AU	desc. node	8722 Aug 11 02:13	6°Π29'31	
morning rise	8721 Sep 16 06:53	18°Π35'17		inferior conj	8722 Aug 18 18:14	2°Π44'48	-2°20'14
direct	8721 Sep 20 02:54	18°Π03'43		minimum elong	8722 Aug 18 11:50	2°Π54'37	2°17'59
morning max el	8721 Oct 02 23:36	24°Π11'58	22°44'51	min. Earth dist.	8722 Aug 20 19:51	1°Π28'45	0.55237 AU
	8721 Oct 08 05:41	0°Ϣ			8722 Aug 23 09:59	30°ϢΩ	
asc. node	8721 Oct 16 15:37	12°Ϣ48'59		morning rise	8722 Aug 27 01:53	28°Ω24'00	
morning set	8721 Oct 25 09:28	29°Ϣ58'28		direct	8722 Aug 31 16:43	27°Ω37'01	
	8721 Oct 25 09:45	0°Π			8722 Sep 08 16:53	0°Π	
				morning max el	8722 Sep 14 12:06	4°Π27'27	24°30'59
superior conj	8721 Nov 01 09:59	15°Π01'06	1°41'05		8722 Oct 02 12:26	0°Ϣ	
minimum elong	8721 Nov 01 10:04	15°Π01'36	1°41'14	asc. node	8722 Oct 03 12:35	1°Ϣ53'39	
max. Earth dist.	8721 Nov 04 15:35	21°Π50'03	1.33854 AU	morning set	8722 Oct 09 21:17	14°Ϣ47'57	
	8721 Nov 08 16:07	0°Ϣ					
evening rise	8721 Nov 09 07:39	1°Ϣ16'31		superior conj	8722 Oct 16 18:20	29°Ϣ46'11	1°38'31
desc. node	8721 Nov 20 03:46	20°Ϣ56'58		minimum elong	8722 Oct 16 17:18	29°Ϣ40'36	1°38'34
	8721 Nov 25 19:48	0°Ϣ			8722 Oct 16 20:51	0°Π	
evening max el	8721 Dec 13 23:16	22°Ϣ59'15	27°11'06	max. Earth dist.	8722 Oct 18 16:47	3°Π58'39	1.32652 AU
	8721 Dec 24 18:41	0°≈		evening rise	8722 Oct 24 02:08	15°Π19'03	
retrograde	8721 Dec 27 09:16	0°≈20'35			8722 Oct 31 17:20	0°Ϣ	
	8721 Dec 29 21:20	30°ϢϢ		desc. node	8722 Nov 07 00:52	10°Ϣ48'10	
evening set	8722 Jan 03 03:49	27°Ϣ44'46			8722 Nov 20 16:17	0°Ϣ	
min. Earth dist.	8722 Jan 07 01:30	24°Ϣ02'45	0.65079 AU	evening max el	8722 Nov 26 10:56	6°Ϣ11'09	27°29'23
inferior conj	8722 Jan 09 07:00	21°Ϣ34'24	-1°07'01	retrograde	8722 Dec 10 04:10	13°Ϣ29'42	
minimum elong	8722 Jan 09 09:00	21°Ϣ28'50	1°05'58	evening set	8722 Dec 17 05:05	10°Ϣ59'29	
asc. node	8722 Jan 12 15:02	18°Ϣ08'30		min. Earth dist.	8722 Dec 20 22:42	7°Ϣ48'13	0.63363 AU
morning rise	8722 Jan 15 15:36	16°Ϣ03'12		inferior conj	8722 Dec 23 15:12	5°Ϣ07'06	-2°15'45
direct	8722 Jan 18 06:59	15°Ϣ26'13		minimum elong	8722 Dec 23 19:31	4°Ϣ56'18	2°13'50
morning max el	8722 Jan 24 17:11	18°Ϣ49'34	18°00'15	morning rise	8722 Dec 30 11:53	29°Ϣ51'25	
	8722 Feb 02 02:22	0°≈			8722 Dec 30 03:19	30°ϢϢ	
morning set	8722 Feb 11 13:31	15°≈24'30		asc. node	8722 Dec 30 12:05	29°Ϣ51'14	
desc. node	8722 Feb 16 03:10	22°≈55'25		direct	8723 Jan 01 20:45	29°Ϣ24'26	
	8722 Feb 20 11:42	0°Ϣ			8723 Jan 04 13:30	0°Ϣ	
				morning max el	8723 Jan 08 10:37	2°Ϣ48'17	17°47'54
superior conj	8722 Feb 25 19:49	8°Ϣ32'19	-1°06'31	morning set	8723 Jan 24 18:19	27°Ϣ47'15	
minimum elong	8722 Feb 25 12:15	8°Ϣ02'16	1°05'27		8723 Jan 26 00:59	0°≈	
max. Earth dist.	8722 Mar 01 10:12	14°Ϣ13'13	1.45314 AU	desc. node	8723 Feb 03 00:08	13°≈34'48	
	8722 Mar 11 13:28	0°Υ					
evening rise	8722 Mar 13 23:24	3°Υ43'34		superior conj	8723 Feb 06 01:19	18°≈38'29	-0°22'14
greatest brilliancy	8722 Mar 27 20:35	24°Υ50'36	-0.7m	minimum elong	8723 Feb 05 22:57	18°≈28'46	0°21'43
	8722 Mar 31 09:59	0°Ϣ		max. Earth dist.	8723 Feb 12 04:13	28°≈33'42	1.44392 AU
evening max el	8722 Apr 08 13:10	10°Ϣ12'58	19°44'04		8723 Feb 13 01:53	0°Ϣ	
asc. node	8722 Apr 10 13:51	12°Ϣ04'54		evening rise	8723 Feb 21 10:33	13°Ϣ03'41	
retrograde	8722 Apr 15 22:52	14°Ϣ27'40			8723 Mar 04 16:03	0°Υ	
evening set	8722 Apr 19 15:47	13°Ϣ07'33		evening max el	8723 Mar 22 13:53	23°Υ52'39	20°47'48
inferior conj	8722 Apr 25 00:47	7°Ϣ10'07	3°18'30	asc. node	8723 Mar 28 10:58	28°Υ14'56	
minimum elong	8722 Apr 24 23:54	7°Ϣ13'04	3°18'18	retrograde	8723 Mar 30 21:23	28°Υ44'55	
min. Earth dist.	8722 Apr 26 03:04	5°Ϣ42'29	0.67217 AU	evening set	8723 Apr 03 23:44	27°Υ09'27	
morning rise	8722 Apr 30 07:42	0°Ϣ51'57		inferior conj	8723 Apr 09 07:01	20°Υ59'32	3°03'14
	8722 May 01 08:50	30°ϢΥ		minimum elong	8723 Apr 09 05:18	21°Υ05'29	3°02'53
direct	8722 May 06 07:02	28°Υ12'17		min. Earth dist.	8723 Apr 09 19:32	20°Υ16'23	0.68048 AU
	8722 May 11 19:25	0°Ϣ		morning rise	8723 Apr 14 10:38	14°Υ44'11	
desc. node	8722 May 15 03:04	2°Ϣ25'14		direct	8723 Apr 19 21:00	12°Υ19'38	
morning max el	8722 May 18 09:03	5°Ϣ27'08	25°20'44	morning max el	8723 Apr 30 18:04	18°Υ49'31	23°53'02
	8722 Jun 06 06:59	0°Π		desc. node	8723 May 02 00:01	20°Υ07'28	

	8723 May 10 04:05	0°♄			8724 May 03 03:46	0°♄	
	8723 May 30 09:51	0°♄		morning set	8724 May 15 19:56	19°♄45'48	
morning set	8723 Jun 05 04:27	9°♄38'11		max. Earth dist.	8724 May 20 21:13	28°♄08'44	1.40749 AU
max. Earth dist.	8723 Jun 08 23:15	16°♄13'42	1.38497 AU		8724 May 21 23:26	0°♄	
superior conj	8723 Jun 16 07:47	29°♄42'42	-1°13'25	superior conj	8724 May 28 16:10	11°♄42'41	-1°42'38
minimum elong	8723 Jun 16 12:24	0°♄04'31	1°12'55	minimum elong	8724 May 28 22:05	12°♄09'14	1°42'12
	8723 Jun 16 11:27	0°♄		evening rise	8724 Jun 07 21:21	0°♄35'16	
asc. node	8723 Jun 24 09:55	15°♄23'29			8724 Jun 07 13:50	0°♄	
evening rise	8723 Jun 25 08:45	17°♄15'24		asc. node	8724 Jun 10 06:57	5°♄04'46	
	8723 Jul 02 02:07	0°♄		evening max el	8724 Jun 23 23:03	26°♄18'08	18°20'04
evening max el	8723 Jul 11 16:55	13°♄47'38	18°54'17	retrograde	8724 Jul 01 07:18	29°♄59'09	
retrograde	8723 Jul 20 05:32	18°♄01'17		evening set	8724 Jul 03 13:03	29°♄39'25	
evening set	8723 Jul 22 04:30	17°♄48'47		inferior conj	8724 Jul 10 22:06	25°♄01'26	1°08'35
desc. node	8723 Jul 28 23:19	14°♄30'32		minimum elong	8724 Jul 11 00:18	24°♄56'50	1°07'37
inferior conj	8723 Jul 30 09:18	13°♄31'13	-0°25'56	min. Earth dist.	8724 Jul 14 07:20	22°♄13'36	0.58658 AU
minimum elong	8723 Jul 30 08:13	13°♄33'09	0°25'41	desc. node	8724 Jul 14 20:23	21°♄48'15	
min. Earth dist.	8723 Aug 02 10:43	11°♄21'45	0.56660 AU	morning rise	8724 Jul 18 08:16	19°♄29'31	
morning rise	8723 Aug 07 08:39	8°♄33'56		direct	8724 Jul 24 12:15	17°♄48'17	
direct	8723 Aug 12 19:32	7°♄22'59		morning max el	8724 Aug 07 21:32	25°♄33'12	27°18'07
morning max el	8723 Aug 27 01:47	14°♄45'20	26°07'26		8724 Aug 12 00:51	0°♄	
	8723 Sep 08 06:38	0°♄			8724 Aug 31 15:07	0°♄	
asc. node	8723 Sep 20 09:32	21°♄22'17		asc. node	8724 Sep 06 06:30	11°♄08'15	
morning set	8723 Sep 24 08:14	29°♄32'08		morning set	8724 Sep 07 16:40	14°♄06'31	
	8723 Sep 24 13:27	0°♄					
superior conj	8723 Oct 01 05:20	14°♄35'59	1°30'09	superior conj	8724 Sep 14 17:09	29°♄24'53	1°16'28
minimum elong	8723 Oct 01 03:31	14°♄25'54	1°30'00	minimum elong	8724 Sep 14 14:55	29°♄12'34	1°16'08
max. Earth dist.	8723 Oct 02 00:08	16°♄19'59	1.31906 AU	max. Earth dist.	8724 Sep 14 10:14	28°♄46'31	1.31616 AU
evening rise	8723 Oct 08 04:17	29°♄41'02			8724 Sep 14 23:28	0°♄	
	8723 Oct 08 07:55	0°♄		evening rise	8724 Sep 21 11:39	14°♄15'32	
desc. node	8723 Oct 24 21:59	0°♄07'23			8724 Sep 29 08:17	0°♄	
	8723 Oct 24 20:03	0°♄		desc. node	8724 Oct 10 19:05	18°♄42'13	
evening max el	8723 Nov 08 18:41	18°♄46'38	27°16'02		8724 Oct 20 05:29	0°♄	
retrograde	8723 Nov 22 15:15	25°♄58'45		evening max el	8724 Oct 20 19:37	0°♄33'56	26°28'40
evening set	8723 Nov 29 16:29	23°♄43'42		retrograde	8724 Nov 03 17:32	7°♄40'07	
min. Earth dist.	8723 Dec 03 09:17	20°♄56'46	0.61393 AU	evening set	8724 Nov 10 09:40	5°♄50'30	
inferior conj	8723 Dec 06 10:37	18°♄14'57	-3°26'48	min. Earth dist.	8724 Nov 14 09:04	3°♄15'41	0.59299 AU
minimum elong	8723 Dec 06 17:09	18°♄00'30	3°24'22	inferior conj	8724 Nov 17 13:44	0°♄48'16	-4°33'12
morning rise	8723 Dec 13 20:06	13°♄18'14		minimum elong	8724 Nov 17 21:09	0°♄33'57	4°31'10
direct	8723 Dec 16 01:17	12°♄57'39			8724 Nov 18 14:58	30°♄	
asc. node	8723 Dec 17 09:06	13°♄05'16		morning rise	8724 Nov 25 11:03	26°♄13'44	
morning max el	8723 Dec 23 02:22	16°♄30'40	17°53'51	direct	8724 Nov 27 16:20	25°♄56'21	
	8724 Jan 01 13:48	0°♄		asc. node	8724 Dec 03 06:08	27°♄52'52	
morning set	8724 Jan 07 18:44	11°♄05'41		morning max el	8724 Dec 05 12:56	29°♄47'28	18°19'23
					8724 Dec 05 18:02	0°♄	
superior conj	8724 Jan 18 08:24	29°♄58'22	0°18'46	morning set	8724 Dec 21 08:56	25°♄02'01	
minimum elong	8724 Jan 18 10:02	0°♄05'23	0°18'42		8724 Dec 23 23:30	0°♄	
	8724 Jan 18 08:47	0°♄		superior conj	8724 Dec 30 14:41	12°♄24'20	0°51'58
desc. node	8724 Jan 20 21:07	4°♄18'42		minimum elong	8724 Dec 30 17:56	12°♄39'08	0°51'42
max. Earth dist.	8724 Jan 25 18:55	12°♄30'31	1.42856 AU	desc. node	8725 Jan 06 18:04	25°♄03'16	
evening rise	8724 Feb 01 05:20	22°♄50'35		max. Earth dist.	8725 Jan 07 04:34	25°♄48'10	1.40883 AU
	8724 Feb 05 20:01	0°♄			8725 Jan 09 16:12	0°♄	
	8724 Feb 26 20:35	0°♄		evening rise	8725 Jan 11 18:28	3°♄28'05	
evening max el	8724 Mar 04 09:20	7°♄34'00	22°01'57		8725 Jan 29 02:58	0°♄	
retrograde	8724 Mar 13 18:48	13°♄07'49		evening max el	8725 Feb 15 00:42	21°♄17'25	23°21'36
asc. node	8724 Mar 14 08:03	13°♄06'17		retrograde	8725 Feb 25 13:42	27°♄31'32	
evening set	8724 Mar 18 07:45	11°♄17'02		asc. node	8725 Mar 01 05:08	26°♄26'33	
inferior conj	8724 Mar 23 15:25	4°♄57'06	2°37'54	evening set	8725 Mar 02 14:18	25°♄26'03	
minimum elong	8724 Mar 23 13:14	5°♄04'41	2°37'22	min. Earth dist.	8725 Mar 07 11:54	19°♄41'12	0.68397 AU
min. Earth dist.	8724 Mar 23 15:12	4°♄57'52	0.68435 AU	inferior conj	8725 Mar 08 00:03	18°♄59'27	2°03'26
	8724 Mar 27 12:05	30°♄		minimum elong	8725 Mar 07 21:51	19°♄07'01	2°02'48
morning rise	8724 Mar 28 18:34	28°♄45'59		morning rise	8725 Mar 13 05:21	12°♄53'43	
direct	8724 Apr 02 14:59	26°♄41'48		direct	8725 Mar 17 11:57	11°♄11'53	
	8724 Apr 09 16:24	0°♄		morning max el	8725 Mar 25 21:26	16°♄01'19	21°00'51
morning max el	8724 Apr 12 05:04	2°♄20'05	22°23'44	desc. node	8725 Apr 04 17:53	28°♄04'30	
desc. node	8724 Apr 17 20:58	8°♄45'49			8725 Apr 06 03:16	0°♄	

morning set	8725 Apr 25 08:43	28° Υ 41'11		greatest brilliancy	8726 Mar 21 20:18	16° H 44'57	-0.6m
	8725 Apr 26 04:49	0° B		desc. node	8726 Mar 22 14:48	17° H 52'47	
max. Earth dist.	8725 May 03 00:58	10° B 56'26	1.42790 AU		8726 Mar 30 16:35	0° Υ	
				morning set	8726 Apr 04 06:36	7° Υ 01'17	
superior conj	8725 May 10 02:47	22° B 42'35	-2°04'17	max. Earth dist.	8726 Apr 15 11:36	24° Υ 32'27	1.44375 AU
minimum elong	8725 May 10 07:34	23° B 02'52	2°04'11		8726 Apr 18 21:32	0° B	
	8725 May 14 08:29	0° II					
evening rise	8725 May 21 19:35	13° II 13'00		superior conj	8726 Apr 20 12:51	2° B 38'44	-2°12'10
asc. node	8725 May 28 03:58	24° II 27'51		minimum elong	8726 Apr 20 12:27	2° B 37'09	2°12'16
	8725 May 31 11:37	0° B		evening rise	8726 May 03 22:48	24° B 58'46	
evening max el	8725 Jun 07 10:31	9° B 16'47	18°05'44		8726 May 06 21:33	0° II	
retrograde	8725 Jun 14 01:57	12° B 40'45		asc. node	8726 May 15 01:01	13° II 26'48	
evening set	8725 Jun 16 15:16	12° B 10'35		evening max el	8726 May 21 23:56	22° II 35'27	18°10'25
inferior conj	8725 Jun 23 07:04	7° B 12'37	2°15'36	retrograde	8726 May 28 09:04	25° II 56'55	
minimum elong	8725 Jun 23 10:04	7° B 05'23	2°14'35	evening set	8726 May 31 05:52	25° II 14'05	
min. Earth dist.	8725 Jun 26 11:48	4° B 08'56	0.60900 AU	inferior conj	8726 Jun 06 08:21	19° II 57'35	2°57'05
morning rise	8725 Jun 30 02:20	1° B 15'55		minimum elong	8726 Jun 06 10:39	19° II 51'20	2°56'27
desc. node	8725 Jul 01 17:26	0° B 19'07		min. Earth dist.	8726 Jun 09 01:15	17° II 01'30	0.63094 AU
	8725 Jul 02 09:46	30° R II		morning rise	8726 Jun 12 13:51	13° II 46'45	
direct	8725 Jul 06 17:10	29° II 04'23		desc. node	8726 Jun 18 14:28	11° II 14'11	
	8725 Jul 11 05:26	0° B		direct	8726 Jun 19 08:03	11° II 12'27	
morning max el	8725 Jul 21 00:07	7° B 03'28	27°52'57	morning max el	8726 Jul 03 07:44	19° II 15'39	27°49'25
	8725 Aug 07 09:10	0° Ω			8726 Jul 12 10:18	0° B	
morning set	8725 Aug 22 20:45	28° Ω 25'31			8726 Jul 31 07:55	0° Ω	
	8725 Aug 23 14:56	0° M		morning set	8726 Aug 06 18:17	12° Ω 22'32	
asc. node	8725 Aug 24 03:28	1° M 05'35		asc. node	8726 Aug 11 00:24	21° Ω 09'20	
max. Earth dist.	8725 Aug 28 19:10	11° M 06'46	1.31782 AU	max. Earth dist.	8726 Aug 11 23:00	23° Ω 09'11	1.32432 AU
superior conj	8725 Aug 30 03:57	14° M 07'08	0°57'50	superior conj	8726 Aug 14 11:55	28° Ω 36'52	0°34'38
minimum elong	8725 Aug 30 01:48	13° M 55'19	0°57'23	minimum elong	8726 Aug 14 10:22	28° Ω 28'30	0°34'12
evening rise	8725 Sep 05 22:05	28° M 56'10			8726 Aug 15 03:13	0° M	
	8725 Sep 06 10:01	0° Ω		evening rise	8726 Aug 21 09:40	13° M 36'51	
	8725 Sep 22 23:11	0° M			8726 Aug 29 13:54	0° Ω	
desc. node	8725 Sep 27 16:10	6° M 15'19		evening max el	8726 Sep 13 23:56	21° Ω 50'25	23°34'56
evening max el	8725 Oct 02 12:25	11° M 30'46	25°11'10	desc. node	8726 Sep 14 13:17	22° Ω 22'08	
retrograde	8725 Oct 16 09:39	18° M 30'59		retrograde	8726 Sep 27 13:17	28° Ω 37'05	
evening set	8725 Oct 22 03:59	17° M 15'13		evening set	8726 Oct 01 22:01	27° Ω 55'30	
min. Earth dist.	8725 Oct 27 00:08	14° M 34'37	0.57295 AU	min. Earth dist.	8726 Oct 08 10:01	24° Ω 50'34	0.55684 AU
inferior conj	8725 Oct 29 21:31	12° M 38'33	-5°22'29	inferior conj	8726 Oct 10 09:06	23° Ω 40'35	-5°36'12
minimum elong	8725 Oct 30 02:32	12° M 30'06	5°21'44	minimum elong	8726 Oct 10 07:27	23° Ω 43'03	5°36'03
morning rise	8725 Nov 07 03:25	8° M 26'49		morning rise	8726 Oct 18 18:57	19° Ω 46'55	
direct	8725 Nov 09 13:33	8° M 09'39		direct	8726 Oct 21 15:28	19° Ω 26'47	
morning max el	8725 Nov 18 14:42	12° M 28'52	19°06'11	morning max el	8726 Nov 01 04:18	24° Ω 23'56	20°15'30
asc. node	8725 Nov 20 03:09	14° M 02'58			8726 Nov 06 01:19	0° M	
	8725 Nov 30 12:02	0° A		asc. node	8726 Nov 07 00:09	1° M 19'07	
morning set	8725 Dec 05 08:36	9° A 24'02		morning set	8726 Nov 19 14:30	24° M 01'48	
					8726 Nov 22 12:10	0° A	
superior conj	8725 Dec 13 15:14	25° A 42'20	1°16'10				
minimum elong	8725 Dec 13 18:21	25° A 57'23	1°16'02	superior conj	8726 Nov 27 05:08	9° A 37'38	1°31'48
	8725 Dec 15 21:18	0° B		minimum elong	8726 Nov 27 07:16	9° A 48'21	1°31'51
max. Earth dist.	8725 Dec 20 10:23	8° B 22'32	1.38715 AU	max. Earth dist.	8726 Dec 02 17:04	20° A 25'39	1.36604 AU
evening rise	8725 Dec 24 05:35	15° B 04'22		evening rise	8726 Dec 06 12:55	27° A 33'44	
desc. node	8725 Dec 24 15:04	15° B 45'12			8726 Dec 07 21:18	0° B	
	8726 Jan 02 07:07	0° \approx		desc. node	8726 Dec 11 12:05	6° B 19'53	
	8726 Jan 23 21:32	0° H			8726 Dec 26 16:23	0° \approx	
evening max el	8726 Jan 28 14:09	5° H 04'22	24°40'36	evening max el	8727 Jan 11 03:21	18° \approx 52'27	25°51'59
retrograde	8726 Feb 09 04:56	11° H 51'16		retrograde	8727 Jan 23 15:21	26° \approx 00'46	
evening set	8726 Feb 14 17:52	9° H 32'45		evening set	8727 Jan 29 16:47	23° \approx 31'55	
asc. node	8726 Feb 16 02:13	8° H 16'02		asc. node	8727 Feb 02 23:19	18° \approx 57'08	
min. Earth dist.	8726 Feb 19 07:30	4° H 22'17	0.67956 AU	min. Earth dist.	8727 Feb 02 23:41	18° \approx 56'01	0.67130 AU
inferior conj	8726 Feb 20 07:08	3° H 03'43	1°20'26	inferior conj	8727 Feb 04 10:44	17° \approx 05'42	0°29'11
minimum elong	8726 Feb 20 05:23	3° H 09'31	1°19'53	minimum elong	8727 Feb 04 10:00	17° \approx 08'01	0°29'02
	8726 Feb 22 16:42	30° R \approx		morning rise	8727 Feb 10 03:45	11° \approx 15'29	
morning rise	8726 Feb 25 17:05	27° \approx 04'48		direct	8727 Feb 13 09:56	10° \approx 14'43	
direct	8726 Mar 01 10:47	25° \approx 44'41		morning max el	8727 Feb 20 05:00	13° \approx 57'21	18°54'21
	8726 Mar 08 23:32	0° H			8727 Mar 04 05:57	0° H	
morning max el	8726 Mar 08 21:23	29° \approx 54'41	19°50'01	desc. node	8727 Mar 09 11:43	8° H 02'16	

morning set	8727 Mar 14 13:28	15° X 55'21		morning rise	8728 Jan 25 11:07	25° Z 21'57	
	8727 Mar 23 14:07	0° Y		direct	8728 Jan 28 07:28	24° Z 37'14	
max. Earth dist.	8727 Mar 29 04:03	8° Y 43'58	1.45320 AU	morning max el	8728 Feb 03 18:36	28° Z 04'14	18°15'07
					8728 Feb 05 13:34	0° \approx	
superior conj	8727 Mar 31 01:38	11° Y 43'03	-2°00'49	morning set	8728 Feb 22 23:01	26° \approx 11'45	
minimum elong	8727 Mar 30 18:17	11° Y 14'05	2°00'26	desc. node	8728 Feb 24 08:38	28° \approx 27'00	
	8727 Apr 11 13:27	0° Z			8728 Feb 25 07:48	0° X	
evening rise	8727 Apr 15 03:06	5° Z 46'10					
	8727 Apr 30 12:34	0° II		superior conj	8728 Mar 09 06:45	20° X 33'17	-1°30'09
asc. node	8727 May 01 22:05	1° II 53'50		minimum elong	8728 Mar 08 21:18	19° X 56'15	1°29'06
evening max el	8727 May 05 12:22	6° II 06'40	18°33'24	max. Earth dist.	8728 Mar 10 23:46	23° X 14'00	1.45537 AU
retrograde	8727 May 12 00:35	9° II 39'18			8728 Mar 15 07:39	0° Y	
evening set	8727 May 15 04:51	8° II 42'24		evening rise	8728 Mar 25 08:28	15° Y 39'36	
inferior conj	8727 May 20 21:55	3° II 08'42	3°17'45		8728 Apr 03 13:37	0° Z	
minimum elong	8727 May 20 22:57	3° II 05'37	3°17'28	greatest brilliancy	8728 Apr 05 17:07	3° Z 17'21	-0.7m
min. Earth dist.	8727 May 22 23:51	0° II 38'57	0.65015 AU	asc. node	8728 Apr 17 19:12	19° Z 38'01	
	8727 May 23 13:19	30° RZ		evening max el	8728 Apr 17 21:19	19° Z 43'24	19°13'40
morning rise	8727 May 26 16:14	26° Z 51'39		retrograde	8728 Apr 24 20:56	23° Z 39'34	
direct	8727 Jun 02 06:53	24° Z 06'18		evening set	8728 Apr 28 09:05	22° Z 27'52	
desc. node	8727 Jun 05 11:29	24° Z 39'41		inferior conj	8728 May 03 20:10	16° Z 38'28	3°22'05
	8727 Jun 13 15:21	0° II		minimum elong	8728 May 03 19:55	16° Z 39'17	3°21'55
morning max el	8727 Jun 15 17:49	2° II 01'28	27°11'27	min. Earth dist.	8728 May 05 06:46	14° Z 46'39	0.66542 AU
	8727 Jul 06 15:11	0° Z		morning rise	8728 May 09 06:22	10° Z 19'55	
morning set	8727 Jul 21 06:34	25° Z 50'29		direct	8728 May 15 12:13	7° Z 35'30	
	8727 Jul 23 09:24	0° Z		desc. node	8728 May 22 08:29	10° Z 08'17	
max. Earth dist.	8727 Jul 25 18:19	4° Z 46'48	1.33580 AU	morning max el	8728 May 28 04:09	15° Z 08'54	26°06'34
asc. node	8727 Jul 28 21:22	11° Z 15'42			8728 Jun 09 08:12	0° II	
					8728 Jun 28 10:56	0° Z	
superior conj	8727 Jul 29 15:00	12° Z 48'31	0°07'24	morning set	8728 Jul 03 05:57	8° Z 38'43	
minimum elong	8727 Jul 29 14:37	12° Z 46'32	0°07'10	max. Earth dist.	8728 Jul 07 03:07	16° Z 00'14	1.35204 AU
behind sun begin	8727 Jul 29 09:36	12° Z 20'00					
behind sun end	8727 Jul 29 19:39	13° Z 13'05		superior conj	8728 Jul 12 10:37	26° Z 34'12	-0°23'01
evening rise	8727 Aug 05 20:35	28° Z 12'32		minimum elong	8728 Jul 12 11:58	26° Z 41'03	0°22'57
	8727 Aug 06 17:02	0° II			8728 Jul 14 02:48	0° Z	
	8727 Aug 24 14:29	0° Z		asc. node	8728 Jul 14 18:21	1° Z 20'07	
evening max el	8727 Aug 26 13:55	2° Z 04'50	21°56'28	evening rise	8728 Jul 20 04:42	12° Z 36'16	
desc. node	8727 Sep 01 10:24	6° Z 32'34			8728 Jul 29 05:47	0° II	
retrograde	8727 Sep 08 05:00	8° Z 21'24		evening max el	8728 Aug 07 14:20	12° II 46'36	20°30'08
evening set	8727 Sep 11 03:00	8° Z 02'24		desc. node	8728 Aug 18 07:32	18° II 16'27	
inferior conj	8727 Sep 20 05:20	4° Z 02'30	-4°56'55	retrograde	8728 Aug 18 17:09	18° II 16'52	
minimum elong	8727 Sep 19 20:53	4° Z 14'21	4°55'13	evening set	8728 Aug 20 18:02	18° II 06'33	
min. Earth dist.	8727 Sep 19 18:08	4° Z 18'11	0.54784 AU	inferior conj	8728 Aug 29 22:14	14° II 09'21	-3°25'56
morning rise	8727 Sep 28 16:07	0° Z 14'13		minimum elong	8728 Aug 29 13:19	14° II 22'14	3°23'05
	8727 Sep 29 19:12	30° RZ		min. Earth dist.	8728 Aug 31 03:20	13° II 27'14	0.54798 AU
direct	8727 Oct 02 03:08	29° II 47'51		morning rise	8728 Sep 07 08:09	10° II 06'07	
	8727 Oct 04 10:02	0° Z		direct	8728 Sep 11 11:54	9° II 29'05	
morning max el	8727 Oct 14 04:45	5° Z 29'15	21°45'52	morning max el	8728 Sep 24 19:37	15° II 55'27	23°30'14
asc. node	8727 Oct 24 21:08	19° Z 26'42			8728 Oct 05 22:33	0° Z	
	8727 Oct 30 16:22	0° II		asc. node	8728 Oct 10 18:06	8° Z 13'05	
morning set	8727 Nov 04 00:13	8° II 48'27		morning set	8728 Oct 18 11:44	23° Z 38'04	
					8728 Oct 21 10:52	0° II	
superior conj	8727 Nov 11 04:31	23° II 59'00	1°39'41				
minimum elong	8727 Nov 11 05:21	24° II 03'21	1°39'51	superior conj	8728 Oct 25 10:17	8° II 37'13	1°40'44
	8727 Nov 14 02:14	0° Z		minimum elong	8728 Oct 25 09:53	8° II 35'01	1°40'51
max. Earth dist.	8727 Nov 15 05:38	2° Z 19'12	1.34754 AU	max. Earth dist.	8728 Oct 28 02:23	14° II 19'57	1.33286 AU
evening rise	8727 Nov 19 12:48	10° Z 46'36		evening rise	8728 Nov 02 01:25	24° II 32'55	
desc. node	8727 Nov 28 09:07	26° Z 42'33			8728 Nov 04 20:14	0° Z	
	8727 Nov 30 08:31	0° Z		desc. node	8728 Nov 14 06:12	16° Z 47'18	
	8727 Dec 22 03:43	0° \approx			8728 Nov 22 21:16	0° Z	
evening max el	8727 Dec 24 16:48	2° \approx 35'02	26°48'18	evening max el	8728 Dec 06 05:31	16° Z 01'20	27°22'26
retrograde	8728 Jan 06 20:09	9° \approx 53'31		retrograde	8728 Dec 19 18:47	23° Z 21'40	
evening set	8728 Jan 13 09:11	7° \approx 18'37		evening set	8728 Dec 26 16:49	20° Z 47'00	
min. Earth dist.	8728 Jan 17 10:04	3° \approx 17'17	0.65935 AU	min. Earth dist.	8728 Dec 30 12:29	17° Z 18'53	0.64388 AU
inferior conj	8728 Jan 19 08:48	1° \approx 00'55	-0°29'49	inferior conj	8729 Jan 01 22:52	14° Z 43'53	-1°35'36
minimum elong	8728 Jan 19 09:38	0° \approx 58'28	0°29'17	minimum elong	8729 Jan 02 01:49	14° Z 36'02	1°34'09
	8728 Jan 20 05:49	30° RZ		asc. node	8729 Jan 06 17:31	10° Z 19'03	
asc. node	8728 Jan 20 20:26	29° Z 18'49		morning rise	8729 Jan 08 12:27	9° Z 19'02	

direct	8729 Jan 11 00:52	8°  46'40		morning rise	8729 Dec 23 04:10	22°  59'01	
morning max el	8729 Jan 17 11:35	12°  08'46	17°52'54	asc. node	8729 Dec 24 14:35	22°  38'37	
	8729 Jan 29 20:49	0° 		direct	8729 Dec 25 11:01	22°  35'16	
morning set	8729 Feb 03 13:34	7°  53'50		morning max el	8730 Jan 01 04:46	26°  01'53	17°48'14
desc. node	8729 Feb 10 05:35	19°  02'32			8730 Jan 04 13:55	0° 	
				morning set	8730 Jan 17 03:28	20°  42'25	
superior conj	8729 Feb 16 23:32	0°  02'31	-0°47'49		8730 Jan 22 10:14	0° 	
minimum elong	8729 Feb 16 18:06	29°  40'42	0°46'56	desc. node	8730 Jan 28 02:31	9°  44'16	
	8729 Feb 16 22:54	0° 					
max. Earth dist.	8729 Feb 21 19:30	7°  44'24	1.45007 AU	superior conj	8730 Jan 28 15:53	10°  40'31	-0°04'08
evening rise	8729 Mar 04 22:25	25°  02'21		minimum elong	8730 Jan 28 15:29	10°  38'51	0°03'54
	8729 Mar 08 04:14	0° 		behind sun begin	8730 Jan 28 06:43	10°  01'57	
greatest brilliancy	8729 Mar 19 19:32	17°  06'31	-0.6m	behind sun end	8730 Jan 29 00:16	11°  15'41	
	8729 Mar 29 00:50	0° 		max. Earth dist.	8730 Feb 04 12:02	21°  55'43	1.43798 AU
evening max el	8729 Apr 01 01:10	3°  22'34	20°09'31		8730 Feb 09 13:51	0° 	
asc. node	8729 Apr 04 16:19	6°  27'09		evening rise	8730 Feb 12 11:01	4°  29'31	
retrograde	8729 Apr 08 19:27	7°  52'36			8730 Mar 01 14:05	0° 	
evening set	8729 Apr 12 16:16	6°  25'49		evening max el	8730 Mar 14 23:26	17°  02'35	21°18'13
inferior conj	8729 Apr 18 00:14	0°  22'31	3°13'19	asc. node	8730 Mar 22 13:26	22°  05'48	
minimum elong	8729 Apr 17 22:57	0°  26'52	3°13'05	retrograde	8730 Mar 23 17:49	22°  09'12'54	
	8729 Apr 18 06:51	30°  06'00		evening set	8730 Mar 28 00:26	20°  09'30'58	
min. Earth dist.	8729 Apr 18 20:25	29°  09'14'00	0.67628 AU	inferior conj	8730 Apr 02 07:39	14°  09'16'14	2°53'39
morning rise	8729 Apr 23 05:24	24°  05'19		minimum elong	8730 Apr 02 05:41	14°  09'23'03	2°53'13
direct	8729 Apr 28 23:17	21°  09'31'34		min. Earth dist.	8730 Apr 02 14:38	13°  09'51'57	0.68267 AU
desc. node	8729 May 09 05:27	27°  09'42		morning rise	8730 Apr 07 10:43	8°  02'15	
morning max el	8729 May 10 13:42	28°  09'28'42	24°44'14	direct	8730 Apr 12 15:06	5°  04'55'59	
	8729 May 12 00:37	0° 		morning max el	8730 Apr 22 23:15	11°  04'54'53	23°14'37
	8729 Jun 03 01:59	0° 		desc. node	8730 Apr 26 02:24	15°  04'18'08	
morning set	8729 Jun 15 11:51	20°  03'35'41			8730 May 07 09:53	0° 	
max. Earth dist.	8729 Jun 19 02:41	27°  05'41	1.37224 AU		8730 May 26 21:56	0° 	
	8729 Jun 20 16:30	0° 		morning set	8730 May 27 18:45	1°  02'26'50	
				max. Earth dist.	8730 May 31 22:34	8°  02'32'06	1.39462 AU
superior conj	8729 Jun 25 19:43	9°  04'29	-0°55'06				
minimum elong	8729 Jun 25 23:09	10°  03'12	0°54'43	superior conj	8730 Jun 08 14:24	22°  02'15'53	-1°26'25
asc. node	8729 Jul 01 15:20	21°  05'18'58		minimum elong	8730 Jun 08 19:44	22°  02'40'36	1°25'54
evening rise	8729 Jul 04 07:41	26°  05'41'43			8730 Jun 12 17:16	0° 	
	8729 Jul 05 23:31	0° 		evening rise	8730 Jun 18 02:32	10°  02'20'45	
evening max el	8729 Jul 21 04:11	24°  01'12'59	19°23'12	asc. node	8730 Jun 18 12:21	11°  02'08'00	
retrograde	8729 Jul 30 14:18	28°  01'52'33			8730 Jun 29 03:15	0° 	
evening set	8729 Aug 01 10:46	28°  01'42'30		evening max el	8730 Jul 04 05:30	6°  02'22'59	18°37'15
desc. node	8729 Aug 05 04:38	27°  01'27'20		retrograde	8730 Jul 12 04:48	10°  02'01'20'50	
inferior conj	8729 Aug 10 02:22	24°  01'35'00	-1°30'26	evening set	8730 Jul 14 06:16	10°  02'01'05'50	
minimum elong	8729 Aug 09 22:18	24°  01'41'36	1°29'01	inferior conj	8730 Jul 22 02:37	5°  02'40'06	0°17'21
min. Earth dist.	8729 Aug 12 15:57	22°  01'55'03	0.55749 AU	minimum elong	8730 Jul 22 03:16	5°  02'38'52	0°16'56
morning rise	8729 Aug 18 07:10	19°  01'58'53		desc. node	8730 Jul 23 01:42	4°  02'56'00	
direct	8729 Aug 23 06:18	19°  01'03'00		min. Earth dist.	8730 Jul 25 09:22	3°  02'11'31	0.57456 AU
morning max el	8729 Sep 06 07:59	26°  01'08'33	25°14'24	morning rise	8730 Jul 29 20:43	0° 	
	8729 Sep 10 00:14	0° 			8730 Jul 30 21:32	30°  01'00'00	
asc. node	8729 Sep 27 15:03	27°  01'00'28'37		direct	8730 Aug 04 15:30	29°  01'03'15	
	8729 Sep 28 21:41	0° 			8730 Aug 09 11:23	0° 	
morning set	8729 Oct 02 23:20	8°  01'25'38		morning max el	8730 Aug 18 23:59	6°  01'37'16	26°41'25
					8730 Sep 05 08:16	0° 	
superior conj	8729 Oct 09 19:58	23°  01'24'48	1°35'39	asc. node	8730 Sep 14 11:59	17°  01'00'05'30	
minimum elong	8729 Oct 09 18:34	23°  01'17'05	1°35'37	morning set	8730 Sep 17 09:24	23°  01'00'06'31	
max. Earth dist.	8729 Oct 11 06:25	26°  01'33'40	1.32270 AU		8730 Sep 20 13:57	0° 	
	8729 Oct 12 20:22	0° 					
evening rise	8729 Oct 16 23:25	8°  01'00'44'01		superior conj	8730 Sep 24 07:33	8°  01'15'28	1°24'59
	8729 Oct 28 05:32	0° 		minimum elong	8730 Sep 24 05:30	8°  01'04'08	1°24'45
desc. node	8729 Nov 01 03:18	6°  01'26'03		max. Earth dist.	8730 Sep 24 15:10	8°  01'57'47	1.31718 AU
evening max el	8729 Nov 18 15:33	28°  01'58'11	27°27'51	evening rise	8730 Oct 01 04:04	23°  01'12'28	
	8729 Nov 19 18:27	0° 			8730 Oct 04 11:06	0° 	
retrograde	8729 Dec 02 10:35	6°  01'15'00		desc. node	8730 Oct 19 00:23	25°  01'00'28'24	
evening set	8729 Dec 09 12:40	3°  01'23'49'35			8730 Oct 22 04:40	0° 	
min. Earth dist.	8729 Dec 13 05:09	0° 01'23'50'05	0.62542 AU	evening max el	8730 Oct 31 20:39	11° 01'14'20	27°00'07
	8729 Dec 14 02:37	30° 01'00'00'00		retrograde	8730 Nov 14 18:28	18° 01'24'35	
inferior conj	8729 Dec 16 02:00	28° 01'06'39	-2°45'58	evening set	8730 Nov 21 16:56	16° 01'19'09	
minimum elong	8729 Dec 16 07:19	27° 01'53'59	2°43'44	min. Earth dist.	8730 Nov 25 11:15	13° 01'39'03	0.60498 AU

inferior conj	8730 Nov 28 14:55	11° ♄ 01'07	-3°56'09	minimum elong	8731 Nov 10 17:01	23° ♄ 04'25	4°55'39
minimum elong	8730 Nov 28 22:05	10° ♄ 46'07	3°53'46	morning rise	8731 Nov 18 11:32	18° ♄ 51'53	
morning rise	8730 Dec 06 05:41	6° ♄ 13'33		direct	8731 Nov 20 18:14	18° ♄ 34'55	
direct	8730 Dec 08 10:12	5° ♄ 54'51		asc. node	8731 Nov 28 08:36	21° ♄ 56'55	
asc. node	8730 Dec 11 11:36	6° ♄ 33'04		morning max el	8731 Nov 29 01:56	22° ♄ 37'04	18°36'33
morning max el	8730 Dec 15 18:46	9° ♄ 34'51	18°02'13		8731 Dec 04 22:22	0° ♄	
	8730 Dec 29 02:25	0° ♄		morning set	8731 Dec 15 05:02	18° ♄ 26'54	
morning set	8730 Dec 31 10:22	4° ♄ 18'36			8731 Dec 21 04:29	0° ♄	
superior conj	8731 Jan 10 09:20	22° ♄ 29'46	0°33'54	superior conj	8731 Dec 23 23:57	5° ♄ 18'50	1°03'19
minimum elong	8731 Jan 10 11:55	22° ♄ 41'11	0°33'42	minimum elong	8731 Dec 24 03:18	5° ♄ 34'30	1°03'06
desc. node	8731 Jan 14 23:29	0° ♄ 28'49		max. Earth dist.	8731 Dec 31 07:53	18° ♄ 34'00	1.39973 AU
	8731 Jan 14 16:45	0° ♄		desc. node	8732 Jan 01 20:28	21° ♄ 12'23	
max. Earth dist.	8731 Jan 18 00:03	5° ♄ 34'52	1.42055 AU	evening rise	8732 Jan 04 11:07	25° ♄ 38'14	
evening rise	8731 Jan 23 12:41	14° ♄ 35'56			8732 Jan 07 02:24	0° ♄	
	8731 Feb 02 11:58	0° ♄			8732 Jan 27 05:11	0° ♄	
	8731 Feb 24 23:31	0° ♄		evening max el	8732 Feb 08 07:28	14° ♄ 30'15	23°55'48
evening max el	8731 Feb 25 16:58	0° ♄ 44'45	22°35'31	retrograde	8732 Feb 19 07:40	20° ♄ 58'49	
retrograde	8731 Mar 07 14:20	6° ♄ 36'21		asc. node	8732 Feb 24 07:37	18° ♄ 59'51	
asc. node	8731 Mar 09 10:31	6° ♄ 19'23		evening set	8732 Feb 24 13:29	18° ♄ 47'41	
evening set	8731 Mar 12 08:01	4° ♄ 39'28		min. Earth dist.	8732 Feb 29 07:36	13° ♄ 17'30	0.68258 AU
	8731 Mar 16 10:18	30° ♄		inferior conj	8732 Mar 01 00:35	12° ♄ 19'47	1°46'16
inferior conj	8731 Mar 17 16:23	28° ♄ 16'18	2°24'23	minimum elong	8732 Feb 29 22:31	12° ♄ 26'48	1°45'38
minimum elong	8731 Mar 17 14:08	28° ♄ 24'06	2°23'47	morning rise	8732 Mar 06 07:34	6° ♄ 16'46	
min. Earth dist.	8731 Mar 17 11:06	28° ♄ 34'39	0.68471 AU	direct	8732 Mar 10 08:39	4° ♄ 44'08	
morning rise	8731 Mar 22 20:06	22° ♄ 07'04		morning max el	8732 Mar 18 07:20	9° ♄ 14'59	20°29'04
direct	8731 Mar 27 10:38	20° ♄ 12'05		desc. node	8732 Mar 29 20:16	23° ♄ 47'33	
morning max el	8731 Apr 05 11:58	25° ♄ 28'57	21°47'10		8732 Apr 03 03:25	0° ♄	
	8731 Apr 09 13:50	0° ♄		morning set	8732 Apr 16 02:35	19° ♄ 35'39	
desc. node	8731 Apr 12 23:20	4° ♄ 15'09			8732 Apr 22 17:39	0° ♄	
	8731 Apr 30 21:14	0° ♄		max. Earth dist.	8732 Apr 25 05:29	3° ♄ 59'27	1.43536 AU
morning set	8731 May 07 22:25	11° ♄ 02'00		superior conj	8732 May 01 14:34	14° ♄ 25'29	-2°09'41
max. Earth dist.	8731 May 13 22:13	20° ♄ 47'37	1.41662 AU	minimum elong	8732 May 01 17:39	14° ♄ 38'21	2°09'44
	8731 May 19 08:46	0° ♄			8732 May 10 18:12	0° ♄	
superior conj	8731 May 21 14:07	3° ♄ 51'50	-1°53'06	evening rise	8732 May 14 00:21	5° ♄ 41'13	
minimum elong	8731 May 21 19:58	4° ♄ 17'28	1°52'47	asc. node	8732 May 22 06:25	19° ♄ 56'11	
evening rise	8731 Jun 01 09:34	23° ♄ 23'49			8732 May 29 02:05	0° ♄	
asc. node	8731 Jun 05 09:22	0° ♄ 42'09		evening max el	8732 May 31 03:15	2° ♄ 16'06	18°05'23
	8731 Jun 05 00:04	0° ♄		retrograde	8732 Jun 06 14:37	5° ♄ 37'02	
evening max el	8731 Jun 17 14:27	19° ♄ 07'09	18°11'36	evening set	8732 Jun 09 07:14	5° ♄ 01'33	
retrograde	8731 Jun 24 13:59	22° ♄ 38'37		inferior conj	8732 Jun 15 16:51	29° ♄ 55'16	2°36'02
evening set	8731 Jun 26 23:04	22° ♄ 14'41		minimum elong	8732 Jun 15 19:40	29° ♄ 48'05	2°35'09
inferior conj	8731 Jul 04 00:22	17° ♄ 28'16	1°40'24		8732 Jun 15 14:59	30° ♄	
minimum elong	8731 Jul 04 03:09	17° ♄ 22'03	1°39'19	min. Earth dist.	8732 Jun 18 17:02	26° ♄ 52'31	0.61861 AU
min. Earth dist.	8731 Jul 07 09:02	14° ♄ 30'40	0.59606 AU	morning rise	8732 Jun 22 06:03	23° ♄ 51'38	
desc. node	8731 Jul 09 22:46	12° ♄ 31'51		desc. node	8732 Jun 25 19:50	22° ♄ 00'11	
morning rise	8731 Jul 11 04:14	11° ♄ 44'45		direct	8732 Jun 28 23:16	21° ♄ 29'29	
direct	8731 Jul 17 13:59	9° ♄ 49'54		morning max el	8732 Jul 13 03:28	29° ♄ 30'31	27°56'00
morning max el	8731 Jul 31 22:29	17° ♄ 41'40	27°37'34		8732 Jul 13 15:10	0° ♄	
	8731 Aug 11 04:26	0° ♄			8732 Aug 04 04:03	0° ♄	
	8731 Aug 28 22:59	0° ♄		morning set	8732 Aug 15 17:48	21° ♄ 45'04	
asc. node	8731 Sep 01 08:55	6° ♄ 56'40		asc. node	8732 Aug 18 05:52	26° ♄ 57'10	
morning set	8731 Sep 01 16:12	7° ♄ 34'44			8732 Aug 19 16:16	0° ♄	
max. Earth dist.	8731 Sep 08 01:10	21° ♄ 22'38	1.31630 AU	max. Earth dist.	8732 Aug 21 08:35	3° ♄ 37'22	1.32010 AU
superior conj	8731 Sep 08 19:08	23° ♄ 02'11	1°09'09	superior conj	8732 Aug 23 04:59	7° ♄ 39'42	0°48'31
minimum elong	8731 Sep 08 16:53	22° ♄ 49'44	1°08'45	minimum elong	8732 Aug 23 03:01	7° ♄ 28'58	0°48'04
	8731 Sep 11 22:33	0° ♄		evening rise	8732 Aug 30 00:10	22° ♄ 31'55	
evening rise	8731 Sep 15 12:58	7° ♄ 50'25			8732 Sep 02 13:45	0° ♄	
	8731 Sep 26 22:49	0° ♄			8732 Sep 21 04:49	0° ♄	
desc. node	8731 Oct 05 21:28	13° ♄ 39'14		desc. node	8732 Sep 21 18:34	0° ♄ 38'37	
evening max el	8731 Oct 13 18:20	22° ♄ 40'16	25°59'00	evening max el	8732 Sep 24 08:16	3° ♄ 18'01	24°31'27
retrograde	8731 Oct 27 16:27	29° ♄ 43'31		retrograde	8732 Oct 08 02:55	10° ♄ 13'14	
evening set	8731 Nov 03 00:49	28° ♄ 07'58		evening set	8732 Oct 13 08:21	9° ♄ 12'34	
min. Earth dist.	8731 Nov 07 07:09	25° ♄ 32'49	0.58419 AU	min. Earth dist.	8732 Oct 18 19:14	6° ♄ 23'54	0.56550 AU
inferior conj	8731 Nov 10 10:06	23° ♄ 17'01	-4°57'12	inferior conj	8732 Oct 21 09:05	4° ♄ 46'10	-5°33'51

minimum elong	8732 Oct 21 11:42	4°♄42'00	5°33'34	minimum elong	8733 Oct 01 08:08	15°♄36'08	5°25'58
morning rise	8732 Oct 29 17:13	0°♄43'10		morning rise	8733 Oct 09 23:39	11°♄40'07	
direct	8732 Nov 01 07:26	0°♄24'58		direct	8733 Oct 13 01:52	11°♄17'54	
morning max el	8732 Nov 10 22:44	4°♄58'45	19°32'56	morning max el	8733 Oct 24 06:46	16°♄32'59	20°51'44
asc. node	8732 Nov 14 05:36	8°♄36'27		asc. node	8733 Nov 01 02:37	26°♄16'12	
	8732 Nov 26 20:24	0°♄			8733 Nov 03 10:11	0°♄	
morning set	8732 Nov 28 07:41	2°♄56'15		morning set	8733 Nov 12 15:30	17°♄38'51	
					8733 Nov 18 13:50	0°♄	
superior conj	8732 Dec 06 06:40	18°♄53'42	1°23'49	superior conj	8733 Nov 20 01:07	3°♄01'55	1°36'03
minimum elong	8732 Dec 06 09:27	19°♄07'18	1°23'45	minimum elong	8733 Nov 20 02:42	3°♄10'03	1°36'09
	8732 Dec 12 02:07	0°♄			8733 Nov 24 22:25	12°♄50'18	1.35769 AU
max. Earth dist.	8732 Dec 12 13:47	0°♄53'58	1.37797 AU	max. Earth dist.	8733 Nov 28 22:01	20°♄26'26	
evening rise	8732 Dec 16 07:08	7°♄37'11		evening rise	8733 Dec 04 05:35	0°♄	
desc. node	8732 Dec 18 17:27	11°♄51'13		desc. node	8733 Dec 05 14:28	2°♄21'27	
	8732 Dec 29 23:19	0°♄			8733 Dec 23 22:41	0°♄	
evening max el	8733 Jan 20 20:38	28°♄17'40	25°12'24	evening max el	8734 Jan 03 09:46	12°♄03'47	26°18'11
	8733 Jan 22 16:13	0°♄		retrograde	8734 Jan 16 05:04	19°♄18'21	
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evening set	8733 Feb 07 15:16	2°♄51'11		evening set	8734 Jan 26 15:49	12°♄25'02	0.66662 AU
asc. node	8733 Feb 10 04:45	0°♄15'15		min. Earth dist.	8734 Jan 28 07:56	10°♄22'29	0°05'04
	8733 Feb 10 09:56	30°♄		inferior conj	8734 Jan 28 07:47	10°♄22'55	0°05'10
min. Earth dist.	8733 Feb 12 01:52	27°♄55'43	0.67649 AU	minimum elong	8734 Jan 28 07:47	10°♄22'55	0°05'10
inferior conj	8733 Feb 13 06:24	26°♄22'53	0°59'41	transit middle	8734 Jan 28 05:04	10°♄31'16	
minimum elong	8733 Feb 13 05:01	26°♄27'24	0°59'16	transit begin	8734 Jan 28 10:31	10°♄14'35	
morning rise	8733 Feb 18 19:06	20°♄27'42		transit end	8734 Jan 28 01:51	10°♄41'08	
direct	8733 Feb 22 07:45	19°♄16'10		asc. node	8734 Feb 03 04:40	4°♄36'59	
morning max el	8733 Mar 01 10:43	23°♄12'40	19°24'31	morning rise	8734 Feb 06 06:22	3°♄43'40	
	8733 Mar 07 04:19	0°♄		direct	8734 Feb 12 21:15	7°♄18'22	18°35'40
greatest brilliancy	8733 Mar 14 06:41	10°♄06'22	-0.7m	morning max el	8734 Mar 01 00:41	0°♄	
desc. node	8733 Mar 16 17:10	13°♄45'14		desc. node	8734 Mar 03 14:06	4°♄01'40	
morning set	8733 Mar 26 01:17	28°♄01'37		morning set	8734 Mar 05 18:13	7°♄27'08	
	8733 Mar 27 07:58	0°♄			8734 Mar 20 02:55	0°♄	
max. Earth dist.	8733 Apr 07 19:21	17°♄54'07	1.44859 AU				
superior conj	8733 Apr 11 14:32	23°♄55'52	-2°09'53	superior conj	8734 Mar 21 21:46	2°♄47'41	-1°49'53
minimum elong	8733 Apr 11 11:02	23°♄41'56	2°09'52	minimum elong	8734 Mar 21 12:38	2°♄11'53	1°49'09
	8733 Apr 15 09:15	0°♄		max. Earth dist.	8734 Mar 21 13:15	2°♄14'18	1.45499 AU
evening rise	8733 Apr 25 18:12	17°♄02'36		evening rise	8734 Apr 06 12:23	27°♄25'08	
	8733 May 03 13:32	0°♄			8734 Apr 08 03:15	0°♄	
asc. node	8733 May 09 03:30	8°♄42'33		greatest brilliancy	8734 Apr 14 21:37	10°♄45'25	-0.8m
evening max el	8733 May 14 16:33	15°♄40'27	18°17'56	asc. node	8734 Apr 26 00:36	26°♄52'30	
retrograde	8733 May 21 01:58	19°♄05'21		evening max el	8734 Apr 28 03:40	29°♄13'54	18°48'28
evening set	8733 May 24 01:53	18°♄16'39			8734 Apr 28 22:48	0°♄	
inferior conj	8733 May 29 23:53	12°♄52'21	3°08'04	retrograde	8734 May 04 19:59	2°♄55'31	
minimum elong	8733 May 30 01:40	12°♄47'16	3°07'37	evening set	8734 May 08 03:24	1°♄52'34	
min. Earth dist.	8733 Jun 01 10:28	10°♄05'46	0.63951 AU		8734 May 10 10:19	30°♄	
morning rise	8733 Jun 05 00:15	6°♄37'54		inferior conj	8734 May 13 17:33	26°♄11'58	3°21'20
direct	8733 Jun 11 17:29	3°♄57'42		minimum elong	8734 May 13 18:01	26°♄10'31	3°21'08
desc. node	8733 Jun 12 16:52	4°♄00'48		min. Earth dist.	8734 May 15 12:57	23°♄57'05	0.65713 AU
morning max el	8733 Jun 25 12:43	11°♄59'02	27°37'08	morning rise	8734 May 19 08:00	19°♄53'31	
	8733 Jul 09 20:20	0°♄		direct	8734 May 25 19:20	17°♄07'03	
	8733 Jul 27 15:47	0°♄		desc. node	8734 May 30 13:54	18°♄21'49	
morning set	8733 Jul 30 11:50	5°♄30'47		morning max el	8734 Jun 07 23:19	24°♄55'44	26°46'35
max. Earth dist.	8733 Aug 04 09:27	15°♄30'54	1.32865 AU		8734 Jun 12 13:35	0°♄	
asc. node	8733 Aug 05 02:50	17°♄02'20			8734 Jul 03 07:30	0°♄	
superior conj	8733 Aug 07 11:09	22°♄02'13	0°23'32	morning set	8734 Jul 13 19:10	18°♄43'21	
minimum elong	8733 Aug 07 10:02	21°♄56'13	0°23'10	max. Earth dist.	8734 Jul 18 00:17	26°♄56'37	1.34210 AU
	8733 Aug 11 03:35	0°♄			8734 Jul 19 12:42	0°♄	
evening rise	8733 Aug 14 11:44	7°♄11'07		superior conj	8734 Jul 22 11:25	6°♄03'32	-0°05'12
	8733 Aug 26 10:38	0°♄		minimum elong	8734 Jul 22 11:42	6°♄05'04	0°05'20
evening max el	8733 Sep 05 19:30	13°♄30'12	22°52'11	behind sun begin	8734 Jul 22 06:15	5°♄36'40	
desc. node	8733 Sep 08 15:42	15°♄59'53		behind sun end	8734 Jul 22 17:10	6°♄33'30	
retrograde	8733 Sep 19 01:24	20°♄07'05		asc. node	8734 Jul 22 23:49	7°♄08'09	
evening set	8733 Sep 22 18:37	19°♄36'48		evening rise	8734 Jul 29 21:44	21°♄42'10	
min. Earth dist.	8733 Sep 30 03:45	16°♄16'50	0.55199 AU		8734 Aug 02 23:07	0°♄	
inferior conj	8733 Oct 01 13:06	15°♄28'59	-5°26'33	evening max el	8734 Aug 18 13:11	23°♄53'01	21°17'41




































































































































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retrograde	8734 Aug 30 14:37	29° \mathbb{M} 51'41		retrograde	8735 Aug 11 04:42	10° \mathbb{M} 01'48	
evening set	8734 Sep 02 01:03	29° \mathbb{M} 37'58		evening set	8735 Aug 13 02:05	9° \mathbb{M} 52'21	
inferior conj	8734 Sep 11 06:12	25° \mathbb{M} 40'56	-4°23'32	desc. node	8735 Aug 13 09:57	9° \mathbb{M} 48'52	
minimum elong	8734 Sep 10 20:37	25° \mathbb{M} 54'24	4°21'04	inferior conj	8735 Aug 22 02:23	5° \mathbb{M} 52'38	-2°37'56
min. Earth dist.	8734 Sep 11 12:26	25° \mathbb{M} 32'10	0.54666 AU	minimum elong	8735 Aug 21 19:13	6° \mathbb{M} 03'26	2°35'26
morning rise	8734 Sep 19 16:51	21° \mathbb{M} 48'33		min. Earth dist.	8735 Aug 23 23:05	4° \mathbb{M} 45'18	0.55097 AU
direct	8734 Sep 23 10:25	21° \mathbb{M} 18'29		morning rise	8735 Aug 30 10:47	1° \mathbb{M} 36'54	
morning max el	8734 Oct 06 02:35	27° \mathbb{M} 20'06	22°29'14	direct	8735 Sep 03 22:48	0° \mathbb{M} 52'42	
	8734 Oct 08 17:14	0° \mathbb{L}		morning max el	8735 Sep 17 15:22	7° \mathbb{M} 37'00	24°15'22
asc. node	8734 Oct 18 23:35	14° \mathbb{L} 41'32			8735 Oct 03 20:24	0° \mathbb{L}	
	8734 Oct 26 22:05	0° \mathbb{M}		asc. node	8735 Oct 05 20:33	3° \mathbb{L} 41'29	
morning set	8734 Oct 28 02:12	2° \mathbb{M} 27'15		morning set	8735 Oct 12 13:57	17° \mathbb{L} 16'27	
					8735 Oct 18 10:36	0° \mathbb{M}	
superior conj	8734 Nov 04 03:34	17° \mathbb{M} 31'39	1°40'56	superior conj	8735 Oct 19 11:16	2° \mathbb{M} 14'38	1°39'17
minimum elong	8734 Nov 04 03:51	17° \mathbb{M} 33'10	1°41'04	minimum elong	8735 Oct 19 10:24	2° \mathbb{M} 09'54	1°39'21
max. Earth dist.	8734 Nov 07 14:04	24° \mathbb{M} 43'58	1.34074 AU	max. Earth dist.	8735 Oct 21 14:09	6° \mathbb{M} 50'08	1.32805 AU
	8734 Nov 10 04:15	0° \mathbb{L}		evening rise	8735 Oct 26 20:49	17° \mathbb{M} 53'03	
evening rise	8734 Nov 12 03:48	3° \mathbb{L} 54'53			8735 Nov 02 03:05	0° \mathbb{L}	
desc. node	8734 Nov 22 11:31	22° \mathbb{L} 37'06		desc. node	8735 Nov 09 08:35	12° \mathbb{L} 31'36	
	8734 Nov 27 00:59	0° \mathbb{Z}			8735 Nov 21 10:20	0° \mathbb{Z}	
evening max el	8734 Dec 16 22:57	25° \mathbb{Z} 40'23	27°05'57	evening max el	8735 Nov 29 11:01	8° \mathbb{Z} 56'15	27°28'34
	8734 Dec 22 04:24	0° \mathbb{Z}		retrograde	8735 Dec 13 03:18	16° \mathbb{Z} 15'05	
retrograde	8734 Dec 30 07:31	3° \mathbb{Z} 01'19		evening set	8735 Dec 20 03:38	13° \mathbb{Z} 43'34	
evening set	8735 Jan 06 00:40	0° \mathbb{Z} 25'37		min. Earth dist.	8735 Dec 23 21:45	10° \mathbb{Z} 28'02	0.63639 AU
	8735 Jan 06 13:21	30° \mathbb{R} \mathbb{Z}		inferior conj	8735 Dec 26 12:41	7° \mathbb{Z} 48'16	-2°05'06
min. Earth dist.	8735 Jan 09 23:10	26° \mathbb{Z} 38'31	0.65314 AU	minimum elong	8735 Dec 26 16:38	7° \mathbb{Z} 38'12	2°03'17
inferior conj	8735 Jan 12 02:53	24° \mathbb{Z} 13'02	-0°57'01	asc. node	8736 Jan 01 20:01	2° \mathbb{Z} 42'07	
minimum elong	8735 Jan 12 04:34	24° \mathbb{Z} 08'18	0°56'05	morning rise	8736 Jan 02 07:29	2° \mathbb{Z} 29'59	
asc. node	8735 Jan 14 22:56	21° \mathbb{Z} 12'10		direct	8736 Jan 04 17:13	2° \mathbb{Z} 01'41	
morning rise	8735 Jan 18 09:48	18° \mathbb{Z} 39'37		morning max el	8736 Jan 11 05:59	5° \mathbb{Z} 24'46	17°48'36
direct	8735 Jan 21 02:24	18° \mathbb{Z} 00'46			8736 Jan 27 09:57	0° \mathbb{Z}	
morning max el	8735 Jan 27 12:37	21° \mathbb{Z} 24'50	18°03'30	morning set	8736 Jan 27 17:44	0° \mathbb{Z} 33'25	
	8735 Feb 03 05:42	0° \mathbb{Z}		desc. node	8736 Feb 05 07:56	15° \mathbb{Z} 09'12	
morning set	8735 Feb 14 16:26	18° \mathbb{Z} 20'43		superior conj	8736 Feb 09 07:33	21° \mathbb{Z} 44'06	-0°28'53
desc. node	8735 Feb 18 11:01	24° \mathbb{Z} 31'03		minimum elong	8736 Feb 09 04:24	21° \mathbb{Z} 31'15	0°28'16
	8735 Feb 21 20:09	0° \mathbb{H}			8736 Feb 14 10:20	0° \mathbb{H}	
superior conj	8735 Mar 01 05:39	11° \mathbb{H} 48'33	-1°12'59	max. Earth dist.	8736 Feb 15 03:24	1° \mathbb{H} 08'00	1.44574 AU
minimum elong	8735 Feb 28 21:27	11° \mathbb{H} 16'04	1°11'54	evening rise	8736 Feb 24 21:01	16° \mathbb{H} 20'08	
max. Earth dist.	8735 Mar 04 08:39	16° \mathbb{H} 43'48	1.45398 AU		8736 Mar 04 21:32	0° \mathbb{Y}	
	8735 Mar 12 20:57	0° \mathbb{Y}		evening max el	8736 Mar 24 12:07	26° \mathbb{Y} 31'13	20°37'31
evening rise	8735 Mar 17 09:39	7° \mathbb{Y} 00'40			8736 Mar 28 16:32	0° \mathbb{Z}	
greatest brilliancy	8735 Mar 30 16:50	27° \mathbb{Y} 20'10	-0.7m	asc. node	8736 Mar 29 18:48	0° \mathbb{Z} 35'26	
	8735 Apr 01 12:11	0° \mathbb{Z}		retrograde	8736 Apr 01 15:56	1° \mathbb{Z} 17'20	
evening max el	8735 Apr 11 10:35	12° \mathbb{Z} 51'48	19°35'46		8736 Apr 05 08:16	30° \mathbb{R} \mathbb{Y}	
asc. node	8735 Apr 12 21:42	14° \mathbb{Z} 14'47		evening set	8736 Apr 05 16:52	29° \mathbb{Y} 44'03	
retrograde	8735 Apr 18 17:26	17° \mathbb{Z} 01'18		inferior conj	8736 Apr 11 00:15	23° \mathbb{Y} 35'49	3°06'13
evening set	8735 Apr 22 09:07	15° \mathbb{Z} 43'22		minimum elong	8736 Apr 10 22:38	23° \mathbb{Y} 41'22	3°05'53
inferior conj	8735 Apr 27 18:34	9° \mathbb{Z} 48'05	3°19'48	min. Earth dist.	8736 Apr 11 14:42	22° \mathbb{Y} 46'09	0.67956 AU
minimum elong	8735 Apr 27 17:51	9° \mathbb{Z} 50'29	3°19'38	morning rise	8736 Apr 16 04:12	17° \mathbb{Y} 20'01	
min. Earth dist.	8735 Apr 28 23:01	8° \mathbb{Z} 13'58	0.67056 AU	direct	8736 Apr 21 16:34	14° \mathbb{Y} 52'57	
morning rise	8735 May 03 02:14	3° \mathbb{Z} 29'48		morning max el	8736 May 02 18:10	21° \mathbb{Y} 29'56	24°06'26
direct	8735 May 09 03:24	0° \mathbb{Z} 48'31		desc. node	8736 May 03 07:51	22° \mathbb{Y} 05'00	
desc. node	8735 May 17 10:54	4° \mathbb{Z} 33'01			8736 May 10 02:47	0° \mathbb{Z}	
morning max el	8735 May 21 09:08	8° \mathbb{Z} 08'34	25°33'04		8736 May 30 17:39	0° \mathbb{H}	
	8735 Jun 07 11:19	0° \mathbb{H}		morning set	8736 Jun 07 08:27	12° \mathbb{H} 41'26	
	8735 Jun 25 19:55	0° \mathbb{L}		max. Earth dist.	8736 Jun 11 01:30	19° \mathbb{H} 12'26	1.38164 AU
morning set	8735 Jun 26 11:47	1° \mathbb{L} 11'48			8736 Jun 16 22:32	0° \mathbb{L}	
max. Earth dist.	8735 Jun 30 04:21	8° \mathbb{L} 02'06	1.36016 AU	superior conj	8736 Jun 18 06:29	2° \mathbb{L} 31'28	-1°08'40
superior conj	8735 Jul 06 03:02	19° \mathbb{L} 36'34	-0°36'31	minimum elong	8736 Jun 18 10:47	2° \mathbb{L} 52'03	1°08'11
minimum elong	8735 Jul 06 05:14	19° \mathbb{L} 47'35	0°36'19	asc. node	8736 Jun 25 17:46	17° \mathbb{L} 05'43	
asc. node	8735 Jul 09 20:48	27° \mathbb{L} 10'51		evening rise	8736 Jun 27 03:51	19° \mathbb{L} 53'50	
	8735 Jul 11 05:50	0° \mathbb{Q}			8736 Jul 02 09:44	0° \mathbb{Q}	
evening rise	8735 Jul 14 03:59	5° \mathbb{Q} 59'06		evening max el	8736 Jul 13 14:38	16° \mathbb{Q} 39'18	19°01'07
	8735 Jul 27 15:32	0° \mathbb{M}					

































































































































retrograde	8736 Jul 22 08:30	20° Ω 59'18	evening max el	8737 Jun 26 19:33	29° \mathfrak{C} 03'56	18°23'51
evening set	8736 Jul 24 06:40	20° Ω 47'34		8737 Jun 27 19:50	0° Ω	
desc. node	8736 Jul 30 07:04	18° Ω 05'31	retrograde	8737 Jul 04 07:24	2° Ω 49'00	
inferior conj	8736 Aug 01 14:21	16° Ω 32'39 -0°42'22	evening set	8737 Jul 06 11:57	2° Ω 30'38	
minimum elong	8736 Aug 01 12:33	16° Ω 35'47 0°41'49		8737 Jul 11 07:48	30° \mathfrak{R} \mathfrak{C}	
min. Earth dist.	8736 Aug 04 13:09	14° Ω 30'34 0.56403 AU	inferior conj	8737 Jul 13 23:52	27° \mathfrak{C} 55'46	0°56'03
morning rise	8736 Aug 09 15:18	11° Ω 40'57	minimum elong	8737 Jul 14 01:45	27° \mathfrak{C} 51'55	0°55'10
direct	8736 Aug 14 23:12	10° Ω 34'14	desc. node	8737 Jul 17 04:08	25° \mathfrak{C} 21'21	
morning max el	8736 Aug 29 04:30	17° Ω 52'16 25°54'26	min. Earth dist.	8737 Jul 17 08:52	25° \mathfrak{C} 12'11	0.58335 AU
	8736 Sep 08 06:18	0° \mathfrak{M}	morning rise	8737 Jul 21 12:08	22° \mathfrak{C} 28'17	
asc. node	8736 Sep 21 17:28	23° \mathfrak{M} 06'38	direct	8737 Jul 27 13:50	20° \mathfrak{C} 51'41	
	8736 Sep 25 02:09	0° \mathfrak{L}	morning max el	8737 Aug 10 23:16	28° \mathfrak{C} 34'15	27°09'48
morning set	8736 Sep 26 01:06	2° \mathfrak{L} 01'27		8737 Aug 12 09:13	0° Ω	
				8737 Sep 02 00:16	0° \mathfrak{M}	
superior conj	8736 Oct 02 21:58	17° \mathfrak{L} 03'43 1°31'46	asc. node	8737 Sep 08 14:23	12° \mathfrak{M} 49'57	
minimum elong	8736 Oct 02 20:15	16° \mathfrak{L} 54'12 1°31'40	morning set	8737 Sep 10 10:00	16° \mathfrak{M} 37'24	
max. Earth dist.	8736 Oct 03 20:49	19° \mathfrak{L} 09'53 1.31986 AU		8737 Sep 16 13:25	0° \mathfrak{L}	
	8736 Oct 08 20:48	0° \mathfrak{M}				
evening rise	8736 Oct 09 21:57	2° \mathfrak{M} 12'08	superior conj	8737 Sep 17 09:45	1° \mathfrak{L} 52'55	1°18'52
	8736 Oct 25 00:01	0° \mathfrak{J}	minimum elong	8737 Sep 17 07:34	1° \mathfrak{L} 40'47	1°18'34
desc. node	8736 Oct 26 05:40	1° \mathfrak{J} 56'14	max. Earth dist.	8737 Sep 17 06:39	1° \mathfrak{L} 35'38	1.31623 AU
evening max el	8736 Nov 10 19:27	21° \mathfrak{J} 37'34 27°20'12	evening rise	8737 Sep 24 04:39	16° \mathfrak{L} 44'51	
retrograde	8736 Nov 24 15:33	28° \mathfrak{J} 50'46		8737 Sep 30 17:54	0° \mathfrak{M}	
evening set	8736 Dec 01 17:21	26° \mathfrak{J} 32'38	desc. node	8737 Oct 13 02:46	20° \mathfrak{M} 38'45	
min. Earth dist.	8736 Dec 05 09:53	23° \mathfrak{J} 42'53 0.61696 AU		8737 Oct 20 11:05	0° \mathfrak{J}	
inferior conj	8736 Dec 08 10:13	21° \mathfrak{J} 00'12 -3°16'08	evening max el	8737 Oct 23 21:26	3° \mathfrak{J} 32'07	26°37'54
minimum elong	8736 Dec 08 16:27	20° \mathfrak{J} 46'08 3°13'45	retrograde	8737 Nov 06 19:25	10° \mathfrak{J} 39'38	
morning rise	8736 Dec 15 17:49	16° \mathfrak{J} 00'36	evening set	8737 Nov 13 13:36	8° \mathfrak{J} 45'29	
direct	8736 Dec 17 23:22	15° \mathfrak{J} 39'16	min. Earth dist.	8737 Nov 17 11:12	6° \mathfrak{J} 09'56	0.59606 AU
asc. node	8736 Dec 18 17:03	15° \mathfrak{J} 41'40	inferior conj	8737 Nov 20 15:59	3° \mathfrak{J} 39'06	-4°23'56
morning max el	8736 Dec 24 22:12	19° \mathfrak{J} 10'12 17°51'48	minimum elong	8737 Nov 20 23:25	3° \mathfrak{J} 24'25	4°21'46
	8737 Jan 01 20:03	0° \mathfrak{Z}		8737 Nov 25 23:48	30° \mathfrak{R} \mathfrak{M}	
morning set	8737 Jan 09 15:38	13° \mathfrak{Z} 44'48	morning rise	8737 Nov 28 11:42	29° \mathfrak{M} 01'16	
	8737 Jan 18 18:42	0° \approx	direct	8737 Nov 30 16:36	28° \mathfrak{M} 43'40	
				8737 Dec 05 03:43	0° \mathfrak{J}	
superior conj	8737 Jan 20 10:54	2° \approx 53'31 0°12'58	asc. node	8737 Dec 05 14:05	0° \mathfrak{J} 15'33	
minimum elong	8737 Jan 20 12:04	2° \approx 58'33 0°12'59	morning max el	8737 Dec 08 09:50	2° \mathfrak{J} 31'34	18°14'17
behind sun begin	8737 Jan 20 07:03	2° \approx 36'59	morning set	8737 Dec 24 04:05	27° \mathfrak{J} 36'07	
behind sun end	8737 Jan 20 17:06	3° \approx 20'06		8737 Dec 25 10:29	0° \mathfrak{Z}	
desc. node	8737 Jan 22 04:52	5° \approx 52'34				
max. Earth dist.	8737 Jan 27 18:48	15° \approx 09'46 1.43115 AU	superior conj	8738 Jan 02 14:02	15° \mathfrak{Z} 10'22	0°47'28
evening rise	8737 Feb 03 13:50	26° \approx 01'12	minimum elong	8738 Jan 02 17:10	15° \mathfrak{Z} 24'32	0°47'14
	8737 Feb 06 03:16	0° \mathfrak{H}	desc. node	8738 Jan 09 01:48	26° \mathfrak{Z} 37'00	
	8737 Feb 26 19:24	0° \mathfrak{Y}	max. Earth dist.	8738 Jan 10 04:54	28° \mathfrak{Z} 32'31	1.41193 AU
evening max el	8737 Mar 07 08:13	10° \mathfrak{Y} 12'08 21°50'19		8738 Jan 11 01:37	0° \approx	
retrograde	8737 Mar 16 13:41	15° \mathfrak{Y} 39'56	evening rise	8738 Jan 14 23:49	6° \approx 30'01	
asc. node	8737 Mar 16 15:54	15° \mathfrak{Y} 39'53		8738 Jan 30 07:18	0° \mathfrak{H}	
evening set	8737 Mar 21 00:59	13° \mathfrak{Y} 51'18	evening max el	8738 Feb 18 00:04	23° \mathfrak{H} 54'55	23°09'35
inferior conj	8737 Mar 26 08:27	7° \mathfrak{Y} 32'33 2°42'22		8738 Feb 27 11:38	0° \mathfrak{Y}	
minimum elong	8737 Mar 26 06:19	7° \mathfrak{Y} 39'59 2°41'50	retrograde	8738 Feb 28 09:08	0° \mathfrak{Y} 03'38	
min. Earth dist.	8737 Mar 26 10:03	7° \mathfrak{Y} 27'01 0.68409 AU		8738 Mar 01 06:11	30° \mathfrak{R} \mathfrak{H}	
morning rise	8737 Mar 31 11:31	1° \mathfrak{Y} 20'40	asc. node	8738 Mar 03 13:02	29° \mathfrak{H} 14'17	
	8737 Apr 02 09:32	30° \mathfrak{R} \mathfrak{H}	evening set	8738 Mar 05 07:52	28° \mathfrak{H} 00'21	
direct	8737 Apr 05 09:58	29° \mathfrak{H} 13'22	inferior conj	8738 Mar 10 17:12	21° \mathfrak{H} 34'23	2°09'16
	8737 Apr 08 16:01	0° \mathfrak{Y}	minimum elong	8738 Mar 10 14:59	21° \mathfrak{H} 42'05	2°08'37
morning max el	8737 Apr 15 04:44	4° \mathfrak{Y} 59'32 22°36'44	min. Earth dist.	8738 Mar 10 06:49	22° \mathfrak{H} 10'15	0.68430 AU
desc. node	8737 Apr 20 04:46	10° \mathfrak{Y} 36'01	morning rise	8738 Mar 15 22:01	15° \mathfrak{H} 27'39	
	8737 May 04 09:05	0° \mathfrak{B}	direct	8738 Mar 20 06:37	13° \mathfrak{H} 42'28	
morning set	8737 May 19 03:59	23° \mathfrak{B} 00'14	morning max el	8738 Mar 28 20:07	18° \mathfrak{H} 38'54	21°12'27
	8737 May 23 08:46	0° \mathfrak{I}	desc. node	8738 Apr 07 01:42	29° \mathfrak{H} 49'18	
max. Earth dist.	8737 May 23 22:47	0° \mathfrak{I} 59'26 1.40425 AU		8738 Apr 07 04:51	0° \mathfrak{Y}	
				8738 Apr 27 12:27	0° \mathfrak{B}	
superior conj	8737 May 31 17:37	14° \mathfrak{I} 38'51 -1°38'35	morning set	8738 Apr 28 20:28	2° \mathfrak{B} 05'26	
minimum elong	8737 May 31 23:27	15° \mathfrak{I} 05'13 1°38'06	max. Earth dist.	8738 May 06 01:18	13° \mathfrak{B} 38'24	1.42512 AU
	8737 Jun 09 00:09	0° \mathfrak{C}				
evening rise	8737 Jun 10 18:10	3° \mathfrak{C} 18'37	superior conj	8738 May 13 07:49	25° \mathfrak{B} 48'30	-2°01'45
asc. node	8737 Jun 12 14:46	6° \mathfrak{C} 48'47	minimum elong	8738 May 13 13:00	26° \mathfrak{B} 10'43	2°01'35

	8738 May 15 18:08	0°♂		evening rise	8739 May 07 01:15	27°♂57'28	
evening rise	8738 May 24 18:53	16°♂03'26			8739 May 08 05:49	0°♂	
asc. node	8738 May 30 11:49	26°♂15'09		asc. node	8739 May 17 08:54	15°♂18'24	
	8738 Jun 01 16:14	0°♂		evening max el	8739 May 24 19:57	25°♂16'00	18°08'34
evening max el	8738 Jun 10 06:31	11°♂59'22	18°06'38	retrograde	8739 May 31 05:19	28°♂36'47	
retrograde	8738 Jun 16 23:44	15°♂24'47		evening set	8739 Jun 03 01:03	27°♂55'53	
evening set	8738 Jun 19 11:55	14°♂56'21		inferior conj	8739 Jun 09 05:16	22°♂42'02	2°52'11
inferior conj	8738 Jun 26 06:05	10°♂01'27	2°07'12	minimum elong	8739 Jun 09 07:42	22°♂35'28	2°51'30
minimum elong	8738 Jun 26 09:05	9°♂54'22	2°06'07	min. Earth dist.	8739 Jun 12 00:11	19°♂43'37	0.62783 AU
min. Earth dist.	8738 Jun 29 12:10	6°♂58'25	0.60564 AU	morning rise	8739 Jun 15 12:42	16°♂32'55	
morning rise	8738 Jul 03 03:33	4°♂07'46		desc. node	8739 Jun 20 22:16	14°♂07'15	
desc. node	8738 Jul 04 01:12	3°♂35'17		direct	8739 Jun 22 06:56	14°♂01'20	
direct	8738 Jul 09 17:19	2°♂00'14		morning max el	8739 Jul 06 07:49	22°♂04'11	27°52'15
morning max el	8738 Jul 24 00:53	9°♂58'02	27°50'12		8739 Jul 13 06:31	0°♂	
	8738 Aug 08 13:11	0°♂			8739 Aug 01 17:27	0°♂	
	8738 Aug 25 03:27	0°♂		morning set	8739 Aug 09 13:34	14°♂59'39	
morning set	8738 Aug 25 14:53	0°♂59'07		asc. node	8739 Aug 13 08:16	22°♂48'39	
asc. node	8738 Aug 26 11:20	2°♂45'46		max. Earth dist.	8739 Aug 14 20:46	26°♂02'48	1.32309 AU
max. Earth dist.	8738 Aug 31 15:56	13°♂57'15	1.31724 AU		8739 Aug 16 16:45	0°♂	
superior conj	8738 Sep 01 20:52	16°♂36'44	1°00'58	superior conj	8739 Aug 17 05:24	1°♂08'39	0°38'27
minimum elong	8738 Sep 01 18:40	16°♂24'39	1°00'32	minimum elong	8739 Aug 17 03:43	0°♂59'33	0°37'59
	8738 Sep 07 22:58	0°♂		evening rise	8739 Aug 24 02:20	16°♂06'04	
evening rise	8738 Sep 08 14:47	1°♂25'03			8739 Aug 30 22:26	0°♂	
	8738 Sep 23 23:18	0°♂		desc. node	8739 Sep 16 21:02	24°♂44'00	
desc. node	8738 Sep 29 23:53	8°♂22'35		evening max el	8739 Sep 17 03:28	24°♂59'39	23°49'46
evening max el	8738 Oct 05 15:30	14°♂36'16	25°24'21		8739 Sep 23 20:19	0°♂	
retrograde	8738 Oct 19 13:17	21°♂37'33		retrograde	8739 Sep 30 18:33	1°♂48'42	
evening set	8738 Oct 25 11:34	20°♂16'36		evening set	8739 Oct 05 08:50	1°♂02'31	
min. Earth dist.	8738 Oct 30 03:33	17°♂37'57	0.57574 AU		8739 Oct 07 23:01	30°♂	
inferior conj	8738 Nov 02 02:47	15°♂36'15	-5°16'55	min. Earth dist.	8739 Oct 11 13:55	28°♂02'18	0.55889 AU
minimum elong	8738 Nov 02 08:28	15°♂26'31	5°15'56	inferior conj	8739 Oct 13 17:13	26°♂44'58	-5°37'15
morning rise	8738 Nov 10 07:41	11°♂21'04		minimum elong	8739 Oct 13 16:45	26°♂45'40	5°37'09
direct	8738 Nov 12 16:40	11°♂04'06		morning rise	8739 Oct 22 02:44	22°♂49'05	
morning max el	8738 Nov 21 13:09	15°♂18'45	18°57'47	direct	8739 Oct 24 21:31	22°♂29'31	
asc. node	8738 Nov 22 11:05	16°♂13'56		morning max el	8739 Nov 04 04:38	27°♂20'26	20°03'46
	8738 Dec 01 20:29	0°♂			8739 Nov 06 17:08	0°♂	
morning set	8738 Dec 08 02:35	11°♂54'44		asc. node	8739 Nov 09 08:05	3°♂20'36	
				morning set	8739 Nov 22 07:45	26°♂30'26	
					8739 Nov 24 00:46	0°♂	
superior conj	8738 Dec 16 12:10	28°♂21'09	1°13'03				
minimum elong	8738 Dec 16 15:24	28°♂36'31	1°12'53				
	8738 Dec 17 08:56	0°♂		superior conj	8739 Nov 30 00:21	12°♂11'14	1°29'57
max. Earth dist.	8738 Dec 23 11:01	11°♂12'20	1.39043 AU	minimum elong	8739 Nov 30 02:40	12°♂22'47	1°29'57
desc. node	8738 Dec 26 22:48	17°♂19'17		max. Earth dist.	8739 Dec 05 17:22	23°♂19'10	1.36907 AU
evening rise	8738 Dec 27 07:42	17°♂57'31			8739 Dec 09 07:59	0°♂	
	8739 Jan 03 14:49	0°♂		evening rise	8739 Dec 09 12:14	0°♂19'13	
	8739 Jan 24 16:53	0°♂		desc. node	8739 Dec 13 19:50	7°♂55'08	
evening max el	8739 Jan 31 13:45	7°♂41'16	24°29'12		8739 Dec 27 20:03	0°♂	
retrograde	8739 Feb 12 00:57	14°♂23'47		evening max el	8740 Jan 14 03:01	21°♂29'43	25°42'12
evening set	8739 Feb 17 12:00	12°♂07'11		retrograde	8740 Jan 26 12:05	28°♂35'14	
asc. node	8739 Feb 18 10:10	11°♂16'12		evening set	8740 Feb 01 11:44	26°♂07'44	
min. Earth dist.	8739 Feb 22 02:47	6°♂51'30	0.68047 AU	asc. node	8740 Feb 05 07:17	22°♂05'06	
inferior conj	8739 Feb 23 00:39	5°♂38'17	1°27'30	min. Earth dist.	8740 Feb 05 19:36	21°♂26'45	0.67276 AU
minimum elong	8739 Feb 22 22:49	5°♂44'27	1°26'56	inferior conj	8740 Feb 07 04:57	19°♂40'51	0°37'29
	8739 Feb 27 22:27	30°♂		minimum elong	8740 Feb 07 04:01	19°♂43'49	0°37'16
morning rise	8739 Feb 28 09:45	29°♂38'08		morning rise	8740 Feb 12 20:45	13°♂49'16	
direct	8739 Mar 04 05:20	28°♂14'47		direct	8740 Feb 16 04:37	12°♂45'45	
	8739 Mar 08 20:49	0°♂		morning max el	8740 Feb 23 01:23	16°♂31'25	19°01'38
morning max el	8739 Mar 11 18:50	2°♂29'53	19°59'37		8740 Mar 04 10:22	0°♂	
desc. node	8739 Mar 24 22:36	19°♂33'19		greatest brilliancy	8740 Mar 07 19:52	5°♂05'53	-0.8m
	8739 Mar 31 23:04	0°♂		desc. node	8740 Mar 10 19:31	9°♂39'57	
morning set	8739 Apr 07 19:12	10°♂26'26		morning set	8740 Mar 16 23:18	19°♂11'30	
max. Earth dist.	8739 Apr 18 10:59	27°♂07'55	1.44176 AU		8740 Mar 23 22:05	0°♂	
	8739 Apr 20 06:01	0°♂		max. Earth dist.	8740 Mar 31 03:01	11°♂16'16	1.45225 AU
superior conj	8739 Apr 23 21:36	5°♂54'08	-2°12'06	superior conj	8740 Apr 02 12:56	15°♂04'14	-2°03'53
minimum elong	8739 Apr 23 22:14	5°♂56'43	2°12'14	minimum elong	8740 Apr 02 06:28	14°♂38'43	2°03'35

	8740 Apr 11 21:38	0°♄		superior conj	8741 Mar 12 17:57	23°♄53'05	-1°35'48
evening rise	8740 Apr 17 09:07	8°♄53'40		minimum elong	8741 Mar 12 08:21	23°♄15'29	1°34'48
	8740 Apr 30 13:16	0°♄		max. Earth dist.	8741 Mar 13 22:35	25°♄45'08	1.45551 AU
asc. node	8740 May 03 06:00	3°♄50'54			8741 Mar 16 15:45	0°♄	
evening max el	8740 May 07 08:43	8°♄45'46	18°28'51	evening rise	8741 Mar 28 17:39	18°♄54'12	
retrograde	8740 May 13 19:53	12°♄15'53			8741 Apr 04 19:37	0°♄	
evening set	8740 May 16 23:03	11°♄21'05		greatest brilliancy	8741 Apr 08 08:44	5°♄29'42	-0.8m
inferior conj	8740 May 22 17:16	5°♄49'42	3°15'41	asc. node	8741 Apr 20 03:07	21°♄42'12	
minimum elong	8740 May 22 18:30	5°♄46'03	3°15'23	evening max el	8741 Apr 20 18:15	22°♄21'34	19°06'36
min. Earth dist.	8740 May 24 21:26	3°♄15'18	0.64753 AU	retrograde	8741 Apr 27 15:44	26°♄13'41	
	8740 May 28 00:38	30°♄		evening set	8741 May 01 02:39	25°♄04'14	
morning rise	8740 May 28 13:04	29°♄33'14		inferior conj	8741 May 06 14:25	19°♄16'57	3°22'17
direct	8740 Jun 04 04:34	26°♄48'57		minimum elong	8741 May 06 14:21	19°♄17'09	3°22'08
desc. node	8740 Jun 06 19:17	27°♄11'18		min. Earth dist.	8741 May 08 03:14	17°♄19'01	0.66341 AU
	8740 Jun 12 06:54	0°♄		morning rise	8741 May 12 01:37	12°♄58'15	
morning max el	8740 Jun 17 17:45	4°♄45'46	27°19'01	direct	8741 May 18 08:56	10°♄13'06	
	8740 Jul 06 20:53	0°♄		desc. node	8741 May 24 16:17	12°♄23'02	
morning set	8740 Jul 23 03:25	28°♄32'12		morning max el	8741 May 31 04:17	17°♄50'58	26°17'34
	8740 Jul 23 21:20	0°♄			8741 Jun 10 08:41	0°♄	
max. Earth dist.	8740 Jul 27 17:42	7°♄44'53	1.33384 AU		8741 Jun 29 20:13	0°♄	
asc. node	8740 Jul 30 05:15	12°♄54'45		morning set	8741 Jul 06 04:59	11°♄27'08	
				max. Earth dist.	8741 Jul 10 04:07	19°♄01'27	1.34934 AU
superior conj	8740 Jul 31 09:20	15°♄23'05	0°11'47				
minimum elong	8740 Jul 31 08:45	15°♄19'57	0°11'29	superior conj	8741 Jul 15 06:14	29°♄13'01	-0°18'15
behind sun begin	8740 Jul 31 04:52	14°♄59'22		minimum elong	8741 Jul 15 07:17	29°♄18'24	0°18'15
behind sun end	8740 Jul 31 12:38	15°♄40'34			8741 Jul 15 15:24	0°♄	
	8740 Aug 07 05:25	0°♄		asc. node	8741 Jul 17 02:14	2°♄59'45	
evening rise	8740 Aug 07 13:29	0°♄42'44		evening rise	8741 Jul 22 22:09	15°♄08'38	
	8740 Aug 24 02:51	0°♄			8741 Jul 30 11:48	0°♄	
evening max el	8740 Aug 28 16:24	5°♄11'49	22°10'29	evening max el	8741 Aug 10 14:54	15°♄48'06	20°41'50
desc. node	8740 Sep 02 18:10	9°♄13'47		desc. node	8741 Aug 20 15:16	21°♄21'31	
retrograde	8740 Sep 10 11:40	11°♄34'07		retrograde	8741 Aug 21 23:55	21°♄26'12	
evening set	8740 Sep 13 14:24	11°♄12'38		evening set	8741 Aug 24 02:38	21°♄15'19	
min. Earth dist.	8740 Sep 21 21:52	7°♄35'11	0.54867 AU	inferior conj	8741 Sep 02 07:34	17°♄18'29	-3°42'10
inferior conj	8740 Sep 22 15:04	7°♄11'02	-5°06'27	minimum elong	8741 Sep 01 22:15	17°♄31'48	3°39'19
minimum elong	8740 Sep 22 07:20	7°♄21'54	5°05'06	min. Earth dist.	8741 Sep 03 06:50	16°♄45'07	0.54731 AU
morning rise	8740 Oct 01 01:50	3°♄23'20		morning rise	8741 Sep 10 17:46	13°♄18'45	
direct	8740 Oct 04 10:37	2°♄58'08		direct	8741 Sep 14 18:43	12°♄43'49	
morning max el	8740 Oct 16 06:53	8°♄32'26	21°31'22	morning max el	8741 Sep 27 22:54	19°♄03'54	23°14'20
asc. node	8740 Oct 26 05:02	21°♄20'49			8741 Oct 06 23:34	0°♄	
	8740 Oct 31 02:19	0°♄		asc. node	8741 Oct 13 01:59	10°♄02'16	
morning set	8740 Nov 05 17:01	11°♄15'55		morning set	8741 Oct 21 04:22	26°♄05'47	
					8741 Oct 23 00:13	0°♄	
superior conj	8740 Nov 12 22:31	26°♄29'08	1°38'58				
minimum elong	8740 Nov 12 23:33	26°♄34'29	1°39'06	superior conj	8741 Oct 28 03:31	11°♄05'49	1°40'59
	8740 Nov 14 15:15	0°♄		minimum elong	8741 Oct 28 03:17	11°♄04'33	1°41'07
max. Earth dist.	8740 Nov 17 04:54	5°♄12'58	1.35003 AU	max. Earth dist.	8741 Oct 31 00:19	17°♄11'58	1.33474 AU
evening rise	8740 Nov 21 09:52	13°♄25'49		evening rise	8741 Nov 04 20:49	27°♄08'07	
desc. node	8740 Nov 29 16:52	28°♄19'49			8741 Nov 06 07:48	0°♄	
	8740 Nov 30 16:41	0°♄		desc. node	8741 Nov 16 13:55	18°♄27'48	
	8740 Dec 21 18:18	0°♄			8741 Nov 23 23:34	0°♄	
evening max el	8740 Dec 26 16:23	5°♄13'22	26°41'12	evening max el	8741 Dec 09 05:10	18°♄42'31	27°19'00
retrograde	8741 Jan 08 17:43	12°♄31'00		retrograde	8741 Dec 22 17:23	26°♄03'30	
evening set	8741 Jan 15 05:14	9°♄56'30		evening set	8741 Dec 29 14:18	23°♄28'12	
min. Earth dist.	8741 Jan 19 06:55	5°♄50'16	0.66133 AU	min. Earth dist.	8742 Jan 02 10:37	19°♄55'20	0.64638 AU
inferior conj	8741 Jan 21 03:57	3°♄37'14	-0°20'25	inferior conj	8742 Jan 04 19:20	17°♄22'22	-1°25'15
minimum elong	8741 Jan 21 04:31	3°♄35'34	0°19'58	minimum elong	8742 Jan 04 21:56	17°♄15'20	1°23'57
asc. node	8741 Jan 22 04:22	2°♄25'47		asc. node	8742 Jan 09 01:25	13°♄16'48	
	8741 Jan 24 11:13	30°♄		morning rise	8742 Jan 11 07:09	11°♄55'20	
morning rise	8741 Jan 27 04:46	27°♄56'34		direct	8742 Jan 13 20:34	11°♄21'27	
direct	8741 Jan 30 02:27	27°♄09'43		morning max el	8742 Jan 20 06:57	14°♄43'45	17°55'08
	8741 Feb 04 22:08	0°♄			8742 Jan 31 03:55	0°♄	
morning max el	8741 Feb 05 14:17	0°♄38'14	18°19'56	morning set	8742 Feb 06 14:52	10°♄44'30	
morning set	8741 Feb 25 04:24	29°♄14'29		desc. node	8742 Feb 12 13:21	20°♄36'41	
desc. node	8741 Feb 25 16:26	0°♄02'35			8742 Feb 18 07:39	0°♄	
	8741 Feb 25 15:47	0°♄					
				superior conj	8742 Feb 20 07:59	3°♄13'57	-0°54'32

minimum elong	8742 Feb 20 01:45	2° H 49'03	0°53'35		8743 Jan 23 20:05	0° \approx	
max. Earth dist.	8742 Feb 24 18:09	10° H 15'15	1.45131 AU	desc. node	8743 Jan 30 10:16	11° \approx 17'29	
evening rise	8742 Mar 08 09:04	28° H 19'06					
	8742 Mar 09 11:21	0° Y		superior conj	8743 Jan 31 20:27	13° \approx 40'37	-0°10'29
greatest brilliancy	8742 Mar 23 02:25	20° Y 32'51	-0.6m	minimum elong	8743 Jan 31 19:24	13° \approx 36'14	0°10'09
	8742 Mar 29 20:45	0° B		behind sun begin	8743 Jan 31 12:13	13° \approx 06'17	
evening max el	8742 Apr 03 22:51	6° B 00'09	20°00'17	behind sun end	8743 Feb 01 02:34	14° \approx 06'08	
asc. node	8742 Apr 07 00:12	8° B 40'20		max. Earth dist.	8743 Feb 07 11:04	24° \approx 29'28	1.44018 AU
retrograde	8742 Apr 11 14:03	10° B 24'46			8743 Feb 10 22:07	0° H	
evening set	8742 Apr 15 09:28	9° B 00'20		evening rise	8743 Feb 15 20:47	7° H 42'56	
inferior conj	8742 Apr 20 17:44	2° B 58'59	3°15'24		8743 Mar 02 18:00	0° Y	
minimum elong	8742 Apr 20 16:35	3° B 02'51	3°15'10	evening max el	8743 Mar 17 21:58	19° Y 40'15	21°07'23
min. Earth dist.	8742 Apr 21 16:02	1° B 43'42	0.67495 AU	asc. node	8743 Mar 24 21:18	24° Y 30'42	
	8742 Apr 22 23:39	30° R Y		retrograde	8743 Mar 26 12:30	24° Y 44'14	
morning rise	8742 Apr 25 23:27	26° Y 41'20		evening set	8743 Mar 30 17:35	23° Y 04'37	
direct	8742 May 01 19:15	24° Y 05'21		inferior conj	8743 Apr 05 00:46	16° Y 51'34	2°57'19
desc. node	8742 May 11 13:16	29° Y 11'58		minimum elong	8743 Apr 04 22:53	16° Y 58'06	2°56'53
	8742 May 12 09:50	0° B		min. Earth dist.	8743 Apr 05 09:42	16° Y 20'37	0.68199 AU
morning max el	8742 May 13 13:54	1° B 09'07	24°57'09	morning rise	8743 Apr 10 03:59	10° Y 37'00	
	8742 Jun 04 08:21	0° II		direct	8743 Apr 15 10:29	8° Y 17'41	
morning set	8742 Jun 18 13:49	23° II 32'39		morning max el	8743 Apr 25 23:11	14° Y 34'09	23°28'02
max. Earth dist.	8742 Jun 22 04:33	0° E 05'18	1.36899 AU	desc. node	8743 Apr 28 10:13	17° Y 11'43	
	8742 Jun 22 03:24	0° E			8743 May 08 12:28	0° B	
					8743 May 28 06:38	0° II	
superior conj	8742 Jun 28 17:06	12° E 30'43	-0°50'14	morning set	8743 May 31 00:30	4° II 34'40	
minimum elong	8742 Jun 28 20:13	12° E 45'58	0°49'53	max. Earth dist.	8743 Jun 04 00:28	11° II 26'40	1.39124 AU
asc. node	8742 Jul 03 23:13	22° E 59'40					
evening rise	8742 Jul 07 02:02	29° E 17'06		superior conj	8743 Jun 11 14:15	25° II 07'33	-1°21'52
	8742 Jul 07 10:34	0° O		minimum elong	8743 Jun 11 19:21	25° II 31'21	1°21'20
evening max el	8742 Jul 24 02:49	27° O 07'51	19°31'54		8743 Jun 14 04:22	0° E	
	8742 Jul 27 15:44	0° H		evening rise	8743 Jun 20 22:19	13° E 00'46	
retrograde	8742 Aug 02 18:53	1° H 54'34		asc. node	8743 Jun 20 20:13	12° E 50'36	
evening set	8742 Aug 04 15:09	1° H 44'54			8743 Jun 30 04:55	0° O	
desc. node	8742 Aug 07 12:23	0° H 54'13		evening max el	8743 Jul 07 02:43	9° O 12'10	18°42'49
	8742 Aug 09 10:58	30° R O		retrograde	8743 Jul 15 06:24	13° O 15'08	
inferior conj	8742 Aug 13 09:17	27° O 39'50	-1°48'08	evening set	8743 Jul 17 06:58	13° O 01'05	
minimum elong	8742 Aug 13 04:23	27° O 47'39	1°46'23	inferior conj	8743 Jul 25 06:17	8° O 38'22	0°02'25
min. Earth dist.	8742 Aug 15 19:01	26° O 08'03	0.55549 AU	minimum elong	8743 Jul 25 06:22	8° O 38'12	0°02'12
morning rise	8742 Aug 21 15:10	23° O 09'10		transit middle	8743 Jul 25 06:22	8° O 38'12	0°02'12
direct	8742 Aug 26 11:20	22° O 16'34		transit begin	8743 Jul 25 02:44	8° O 44'57	
morning max el	8742 Sep 09 11:10	29° O 17'15	24°59'32	transit end	8743 Jul 25 10:00	8° O 31'27	
	8742 Sep 10 04:49	0° H		desc. node	8743 Jul 25 09:29	8° O 32'26	
asc. node	8742 Sep 29 22:55	29° H 14'01		min. Earth dist.	8743 Jul 28 11:32	6° O 16'05	0.57166 AU
	8742 Sep 30 08:23	0° E		morning rise	8743 Aug 02 02:18	3° O 30'41	
morning set	8742 Oct 05 16:02	10° E 53'57		direct	8743 Aug 07 18:30	2° O 11'30	
				morning max el	8743 Aug 22 02:15	9° O 41'39	26°30'07
superior conj	8742 Oct 12 12:44	25° E 52'35	1°36'46		8743 Sep 06 13:22	0° H	
minimum elong	8742 Oct 12 11:28	25° E 45'36	1°36'48	asc. node	8743 Sep 16 19:52	18° H 48'04	
max. Earth dist.	8742 Oct 14 03:18	29° E 23'27	1.32392 AU	morning set	8743 Sep 20 02:26	25° H 36'00	
	8742 Oct 14 10:01	0° H			8743 Sep 22 03:31	0° E	
evening rise	8742 Oct 19 17:36	11° H 16'12					
	8742 Oct 29 13:36	0° A		superior conj	8743 Sep 27 00:09	10° E 43'01	1°26'55
desc. node	8742 Nov 03 10:59	8° A 11'01		minimum elong	8743 Sep 26 22:11	10° E 32'05	1°26'45
	8742 Nov 19 21:20	0° B		max. Earth dist.	8743 Sep 27 11:37	11° E 46'39	1.31774 AU
evening max el	8742 Nov 21 15:46	1° B 44'42	27°29'03	evening rise	8743 Oct 03 21:25	25° E 42'32	
retrograde	8742 Dec 05 10:20	9° B 02'22			8743 Oct 05 23:02	0° H	
evening set	8742 Dec 12 12:05	6° B 35'04		desc. node	8743 Oct 21 08:04	27° H 19'35	
min. Earth dist.	8742 Dec 16 04:52	3° B 31'36	0.62834 AU		8743 Oct 23 03:45	0° A	
inferior conj	8742 Dec 19 00:16	0° B 48'37	-2°35'09	evening max el	8743 Nov 03 21:53	14° A 07'54	27°06'25
minimum elong	8742 Dec 19 05:14	0° B 36'35	2°33'02	retrograde	8743 Nov 17 19:21	21° A 18'42	
	8742 Dec 19 20:30	30° R A		evening set	8743 Nov 24 18:56	19° A 09'48	
morning rise	8742 Dec 26 00:31	25° A 38'07		min. Earth dist.	8743 Nov 28 12:37	16° A 27'29	0.60813 AU
asc. node	8742 Dec 26 22:27	25° A 22'30		inferior conj	8743 Dec 01 15:33	13° A 47'56	-3°45'52
direct	8742 Dec 28 07:58	25° A 13'21		minimum elong	8743 Dec 01 22:31	13° A 33'02	3°43'27
morning max el	8743 Jan 04 00:16	28° A 38'55	17°47'44	morning rise	8743 Dec 09 04:30	8° A 57'01	
	8743 Jan 05 06:50	0° B		direct	8743 Dec 11 09:09	8° A 37'44	
morning set	8743 Jan 20 01:40	23° B 24'16		asc. node	8743 Dec 13 19:30	9° A 02'25	

morning max el	8743 Dec 18 14:55	12°  15'10	17°58'50	asc. node	8744 Nov 29 16:31	24°  13'56	
	8743 Dec 30 11:45	0°  3		morning max el	8744 Nov 30 23:24	25°  23'02	18°30'05
morning set	8744 Jan 03 06:23	6°  54'28			8744 Dec 04 21:38	0°  7	
				morning set	8744 Dec 16 23:39	20°  59'23	
superior conj	8744 Jan 13 10:18	25°  19'33	0°28'39		8744 Dec 21 16:01	0°  3	
minimum elong	8744 Jan 13 12:35	25°  29'36	0°28'31				
	8744 Jan 16 02:48	0°  ≈		superior conj	8744 Dec 25 22:10	8°  30'122	0°59'25
desc. node	8744 Jan 17 07:12	2°  ≈01'37		minimum elong	8744 Dec 26 01:31	8°  316'51	0°59'11
max. Earth dist.	8744 Jan 21 00:02	8°  ≈15'02	1.42344 AU	max. Earth dist.	8745 Jan 02 08:40	21°  321'45	1.40295 AU
evening rise	8744 Jan 26 19:50	17°  ≈42'03		desc. node	8745 Jan 03 04:10	22°  345'50	
	8744 Feb 03 18:30	0°  H		evening rise	8745 Jan 06 15:04	28°  336'10	
	8744 Feb 25 13:34	0°  Y			8745 Jan 07 11:19	0°  ≈	
evening max el	8744 Feb 28 16:10	3°  Y22'18	22°23'44		8745 Jan 27 07:12	0°  H	
retrograde	8744 Mar 09 09:21	9°  Y07'39		evening max el	8745 Feb 10 06:59	17°  H07'28	23°43'51
asc. node	8744 Mar 10 18:25	8°  Y58'06		retrograde	8745 Feb 21 03:15	23°  H31'02	
evening set	8744 Mar 14 01:21	7°  Y12'54		asc. node	8745 Feb 25 15:33	21°  H53'03	
inferior conj	8744 Mar 19 09:26	0°  Y50'52	2°29'26	evening set	8745 Feb 26 07:16	21°  H21'48	
minimum elong	8744 Mar 19 07:13	0°  Y58'37	2°28'50	min. Earth dist.	8745 Mar 03 02:33	15°  H46'34	0.68318 AU
min. Earth dist.	8744 Mar 19 05:56	1°  Y03'04	0.68468 AU	inferior conj	8745 Mar 03 17:52	14°  H54'17	1°52'36
	8744 Mar 20 00:06	30°  R  H		minimum elong	8745 Mar 03 15:44	15°  H01'33	1°51'58
morning rise	8744 Mar 24 12:54	24°  H40'59		morning rise	8745 Mar 09 00:12	8°  H50'22	
direct	8744 Mar 29 05:32	22°  H42'42		direct	8745 Mar 13 03:13	7°  H14'33	
morning max el	8744 Apr 07 11:12	28°  H06'52	21°59'47	morning max el	8745 Mar 21 05:31	11°  H51'32	20°39'55
	8744 Apr 09 06:12	0°  Y		desc. node	8745 Apr 01 04:02	25°  H30'06	
desc. node	8744 Apr 14 07:08	6°  Y02'20			8745 Apr 04 07:50	0°  Y	
	8744 May 01 03:52	0°  8		morning set	8745 Apr 19 15:11	23°  Y01'41	
morning set	8744 May 10 08:17	14°  821'07			8745 Apr 24 01:50	0°  8	
max. Earth dist.	8744 May 15 23:28	23°  835'05	1.41351 AU	max. Earth dist.	8745 Apr 28 05:41	6°  839'28	1.43289 AU
	8744 May 19 18:23	0°  II					
superior conj	8744 May 23 17:06	6°  II52'19	-1°49'33	superior conj	8745 May 04 21:11	17°  835'25	-2°08'04
minimum elong	8744 May 23 23:02	7°  II18'33	1°49'12	minimum elong	8745 May 05 00:59	17°  851'17	2°08'06
evening rise	8744 Jun 03 07:24	26°  II10'05			8745 May 12 03:32	0°  II	
	8744 Jun 05 09:07	0°  ☿		evening rise	8745 May 17 00:57	8°  II35'06	
asc. node	8744 Jun 06 17:16	2°  ☿27'32		asc. node	8745 May 24 14:20	21°  II45'12	
evening max el	8744 Jun 19 10:47	21°  ☿51'51	18°14'09		8745 May 29 20:58	0°  ☿	
retrograde	8744 Jun 26 13:05	25°  ☿26'16		evening max el	8745 Jun 02 23:12	4°  ☿57'26	18°05'04
evening set	8744 Jun 28 21:01	25°  ☿03'51		retrograde	8745 Jun 09 11:46	8°  ☿19'12	
inferior conj	8744 Jul 06 00:57	20°  ☿20'17	1°29'37	evening set	8745 Jun 12 03:14	7°  ☿45'37	
minimum elong	8744 Jul 06 03:35	20°  ☿14'33	1°28'32	inferior conj	8745 Jun 18 14:56	2°  ☿42'07	2°29'11
min. Earth dist.	8744 Jul 09 10:02	17°  ☿25'43	0.59273 AU	minimum elong	8745 Jun 18 17:50	2°  ☿34'50	2°28'15
desc. node	8744 Jul 11 06:35	15°  ☿59'24			8745 Jun 21 07:53	30°  R  II	
morning rise	8744 Jul 13 07:03	14°  ☿40'42		min. Earth dist.	8745 Jun 21 16:47	29°  II38'36	0.61529 AU
direct	8744 Jul 19 14:59	12°  ☿50'35		morning rise	8745 Jun 25 06:13	26°  II40'38	
morning max el	8744 Aug 02 23:46	20°  ☿39'51	27°31'33	desc. node	8745 Jun 28 03:39	25°  II06'21	
	8744 Aug 11 01:09	0°  Ω		direct	8745 Jul 01 22:41	24°  II22'07	
	8744 Aug 29 09:59	0°  ♍			8745 Jul 13 15:02	0°  ☿	
asc. node	8744 Sep 02 16:49	8°  ♍37'23		morning max el	8745 Jul 16 04:01	2°  ☿22'35	27°55'44
morning set	8744 Sep 03 09:52	10°  ♍06'28			8745 Aug 05 10:59	0°  Ω	
				morning set	8745 Aug 18 12:25	24°  Ω20'03	
superior conj	8744 Sep 10 11:53	25°  ♍30'39	1°11'52	asc. node	8745 Aug 20 13:46	28°  Ω36'49	
minimum elong	8744 Sep 10 09:38	25°  ♍18'11	1°11'30		8745 Aug 21 05:30	0°  ♍	
max. Earth dist.	8744 Sep 09 21:46	24°  ♍12'21	1.31616 AU	max. Earth dist.	8745 Aug 24 05:52	6°  ♍29'33	1.31920 AU
	8744 Sep 12 12:25	0°  ♌		superior conj	8745 Aug 25 22:07	10°  ♍09'57	0°51'58
evening rise	8744 Sep 17 05:52	10°  ♌19'31		minimum elong	8745 Aug 25 20:05	9°  ♍58'46	0°51'30
	8744 Sep 27 05:49	0°  ♌		evening rise	8745 Sep 01 16:51	25°  ♍00'53	
desc. node	8744 Oct 07 05:13	15°  ♌39'35			8745 Sep 04 01:28	0°  ♌	
evening max el	8744 Oct 15 20:49	25°  ♌41'46	26°10'02		8745 Sep 21 17:36	0°  ♌	
	8744 Oct 21 07:15	0°  ♌		desc. node	8745 Sep 24 02:22	2°  ♌51'37	
retrograde	8744 Oct 29 18:51	2°  ♌45'53		evening max el	8745 Sep 27 11:39	6°  ♌25'39	24°45'40
evening set	8744 Nov 05 06:15	1°  ♌05'17		retrograde	8745 Oct 11 07:19	13°  ♌22'51	
	8744 Nov 07 04:33	30°  R  ♌		evening set	8745 Oct 16 17:34	12°  ♌16'53	
min. Earth dist.	8744 Nov 09 09:51	28°  ♌30'40	0.58723 AU	min. Earth dist.	8745 Oct 21 22:48	9°  ♌31'30	0.56798 AU
inferior conj	8744 Nov 12 13:37	26°  ♌10'32	-4°49'10	inferior conj	8745 Oct 24 15:40	7°  ♌47'02	-5°30'45
minimum elong	8744 Nov 12 20:48	25°  ♌57'11	4°47'25	minimum elong	8745 Oct 24 19:14	7°  ♌41'15	5°30'19
morning rise	8744 Nov 20 13:42	21°  ♌42'03		morning rise	8745 Nov 01 23:08	3°  ♌41'13	
direct	8744 Nov 22 19:49	21°  ♌24'59		direct	8745 Nov 04 11:49	3°  ♌23'27	

morning max el	8745 Nov 13 22:01	7°  51'54	19°23'10	morning max el	8746 Oct 27 08:03	19°  33'51	20°38'37
asc. node	8745 Nov 16 13:32	10°  43'16		asc. node	8746 Nov 03 10:30	28°  14'59	
	8745 Nov 28 07:19	0°  27			8746 Nov 04 13:52	0°  18	
morning set	8745 Dec 01 01:21	5°  26'32		morning set	8746 Nov 15 08:32	20°  10'38	
					8746 Nov 20 02:43	0°  27	
superior conj	8745 Dec 09 02:52	21°  30'49	1°21'14	superior conj	8746 Nov 22 19:48	5°  34'53	1°34'40
minimum elong	8745 Dec 09 05:47	21°  45'00	1°21'09	minimum elong	8746 Nov 22 21:35	5°  43'58	1°34'44
	8745 Dec 13 13:26	0°  38			8746 Nov 27 22:13	15°  44'28	1.36055 AU
max. Earth dist.	8745 Dec 15 14:31	3°  46'46	1.38114 AU	max. Earth dist.	8746 Dec 01 20:21	23°  10'00	
evening rise	8745 Dec 19 08:02	10°  32'22		evening rise	8746 Dec 05 15:18	0°  38	
desc. node	8745 Dec 21 01:10	13°  35'54		desc. node	8746 Dec 07 22:13	3°  57'59	
	8745 Dec 31 05:37	0°  38			8746 Dec 24 22:48	0°  38	
	8746 Jan 22 22:24	0°  38			8747 Jan 06 09:17	14°  41'29	26°09'21
evening max el	8746 Jan 23 20:11	0°  38'44	25°01'26	evening max el	8747 Jan 19 02:13	21°  54'18	
retrograde	8746 Feb 04 17:11	7°  48'32		retrograde	8747 Jan 25 07:03	19°  23'03	
evening set	8746 Feb 10 09:44	5°  26'36		evening set	8747 Jan 29 12:07	14°  56'52	0.66834 AU
asc. node	8746 Feb 12 12:41	3°  20'02		min. Earth dist.	8747 Jan 30 09:46	13°  50'12	
min. Earth dist.	8746 Feb 14 21:20	0°  25'56	0.67767 AU	asc. node	8747 Jan 31 02:28	12°  58'24	0°13'51
	8746 Feb 15 05:16	30°  00		inferior conj	8747 Jan 31 02:06	12°  59'32	0°13'52
inferior conj	8746 Feb 16 00:11	28°  57'54	1°07'16	minimum elong	8747 Jan 31 02:06	12°  59'32	0°13'52
minimum elong	8746 Feb 15 22:39	29°  02'54	1°06'49	transit middle	8747 Jan 31 00:39	13°  04'01	
morning rise	8746 Feb 21 11:52	23°  01'25		transit begin	8747 Jan 31 03:33	12°  55'03	
direct	8746 Feb 25 02:15	21°  46'58		transit end	8747 Feb 05 21:51	7°  11'10	
morning max el	8746 Mar 04 07:45	25°  47'58	19°33'06	morning rise	8747 Feb 09 01:03	6°  15'22	
	8746 Mar 08 01:25	0°  38		direct	8747 Feb 15 17:17	9°  52'39	18°41'48
greatest brilliancy	8746 Mar 17 01:05	12°  26'43	-0.7m	morning max el	8747 Mar 02 07:09	0°  38	
desc. node	8746 Mar 19 00:55	15°  24'25		desc. node	8747 Mar 05 21:49	5°  38'18	
	8746 Mar 28 15:13	0°  37		morning set	8747 Mar 09 02:06	10°  37'27	
morning set	8746 Mar 29 13:03	1°  24'03			8747 Mar 21 10:57	0°  37	
max. Earth dist.	8746 Apr 10 18:26	20°  27'47	1.44703 AU	max. Earth dist.	8747 Mar 24 11:38	4°  44'23	1.45452 AU
superior conj	8746 Apr 15 00:33	27°  09'42	-2°11'08	superior conj	8747 Mar 25 09:20	6°  09'22	-1°54'10
minimum elong	8746 Apr 14 22:11	27°  04'50	2°11'10	minimum elong	8747 Mar 25 00:41	5°  35'29	1°53'33
	8746 Apr 16 17:45	0°  38			8747 Apr 09 10:48	0°  38	
evening rise	8746 Apr 28 22:08	20°  30'11		evening rise	8747 Apr 09 19:45	0°  35'50	
	8746 May 04 20:02	0°  38		greatest brilliancy	8747 Apr 17 07:06	12°  34'06	-0.9m
asc. node	8746 May 11 11:26	10°  36'31		asc. node	8747 Apr 28 08:31	28°  52'44	
evening max el	8746 May 17 12:36	18°  20'07	18°14'57		8747 Apr 29 06:50	0°  38	
retrograde	8746 May 23 21:47	21°  43'38		evening max el	8747 May 01 00:11	1°  52'41	18°42'54
evening set	8746 May 26 20:34	20°  57'04		retrograde	8747 May 07 14:55	5°  30'56	
inferior conj	8746 Jun 01 20:04	15°  35'29	3°04'28	evening set	8747 May 10 21:13	4°  30'08	
minimum elong	8746 Jun 01 22:02	15°  29'56	3°03'58		8747 May 15 14:00	30°  00	
min. Earth dist.	8746 Jun 04 08:54	12°  45'10	0.63654 AU	inferior conj	8747 May 16 12:19	28°  52'01	3°20'20
morning rise	8746 Jun 07 22:10	9°  22'05		minimum elong	8747 May 16 12:59	28°  49'58	3°20'06
direct	8746 Jun 14 15:50	6°  43'42		min. Earth dist.	8747 May 18 10:02	26°  31'38	0.65475 AU
desc. node	8746 Jun 15 00:41	6°  44'09		morning rise	8747 May 22 04:03	22°  33'57	
morning max el	8746 Jun 28 12:50	14°  46'14	27°42'10	direct	8747 May 28 16:39	19°  47'34	
	8746 Jul 10 21:53	0°  38		desc. node	8747 Jun 01 21:40	20°  45'45	
	8746 Jul 29 02:26	0°  38		morning max el	8747 Jun 10 23:12	27°  38'59	26°55'49
morning set	8746 Aug 02 07:46	8°  10'35			8747 Jun 13 04:28	0°  38	
asc. node	8746 Aug 07 10:44	18°  14'04			8747 Jul 04 14:56	0°  38	
max. Earth dist.	8746 Aug 07 07:53	18°  12'00	1.32702 AU	morning set	8747 Jul 16 16:51	21°  28'34	
				max. Earth dist.	8747 Jul 21 00:12	29°  56'21	1.33977 AU
superior conj	8746 Aug 10 05:00	24°  35'43	0°27'37		8747 Jul 21 00:56	0°  38	
minimum elong	8746 Aug 10 03:43	24°  28'48	0°27'12				
	8746 Aug 12 16:54	0°  38		superior conj	8747 Jul 25 06:15	8°  40'41	-0°00'37
evening rise	8746 Aug 17 04:30	9°  41'14		minimum elong	8747 Jul 25 06:18	8°  40'54	0°00'48
	8746 Aug 27 14:36	0°  38		behind sun begin	8747 Jul 25 00:37	8°  11'14	
evening max el	8746 Sep 08 22:47	16°  40'04	23°07'05	behind sun end	8747 Jul 25 11:58	9°  10'38	
desc. node	8746 Sep 10 23:30	18°  30'15		asc. node	8747 Jul 25 07:42	8°  48'15	
retrograde	8746 Sep 22 07:43	23°  20'54		evening rise	8747 Aug 01 14:48	24°  13'51	
evening set	8746 Sep 26 06:17	22°  46'56			8747 Aug 04 09:45	0°  38	
min. Earth dist.	8746 Oct 03 07:50	19°  32'27	0.55352 AU	evening max el	8747 Aug 21 15:01	26°  59'25	21°30'59
inferior conj	8746 Oct 04 22:14	18°  36'43	-5°31'11		8747 Aug 25 04:20	0°  38	
minimum elong	8746 Oct 04 18:25	18°  42'17	5°30'50	desc. node	8747 Aug 28 20:38	2°  03'17	
morning rise	8746 Oct 13 08:36	14°  46'29		retrograde	8747 Sep 02 21:32	3°  04'35	
direct	8746 Oct 16 08:40	14°  25'06					

evening set	8747 Sep 05 11:39	2°♎49'18		retrograde	8748 Aug 13 10:32	13°♏08'50	
	8747 Sep 12 14:41	30°♎		desc. node	8748 Aug 14 17:43	13°♏04'26	
inferior conj	8747 Sep 14 16:08	28°♏51'38	-4°36'29	evening set	8748 Aug 15 08:53	12°♏59'12	
minimum elong	8747 Sep 14 06:48	29°♏04'43	4°34'15	inferior conj	8748 Aug 24 10:48	9°♏00'40	-2°55'23
min. Earth dist.	8747 Sep 14 16:17	28°♏51'25	0.54690 AU	minimum elong	8748 Aug 24 02:56	9°♏12'20	2°52'41
morning rise	8747 Sep 23 02:51	25°♏01'02		min. Earth dist.	8748 Aug 26 02:16	8°♏02'10	0.54974 AU
direct	8747 Sep 26 18:06	24°♏32'20		morning rise	8748 Sep 01 19:50	4°♏49'43	
	8747 Oct 08 17:34	0°♎		direct	8748 Sep 06 05:00	4°♏08'10	
morning max el	8747 Oct 09 05:22	0°♎27'00	22°13'45	morning max el	8748 Sep 19 18:37	10°♏46'12	23°59'39
asc. node	8747 Oct 21 07:27	16°♎34'08			8748 Oct 04 02:56	0°♎	
	8747 Oct 28 09:56	0°♎		asc. node	8748 Oct 07 04:24	5°♎29'27	
morning set	8747 Oct 30 18:53	4°♎55'22		morning set	8748 Oct 14 06:34	19°♎44'49	
					8748 Oct 19 00:16	0°♎	
superior conj	8747 Nov 06 21:12	20°♎01'43	1°40'36	superior conj	8748 Oct 21 04:14	4°♎43'06	1°39'55
minimum elong	8747 Nov 06 21:41	20°♎04'15	1°40'46	minimum elong	8748 Oct 21 03:32	4°♎39'14	1°40'01
max. Earth dist.	8747 Nov 10 12:41	27°♎37'31	1.34305 AU	max. Earth dist.	8748 Oct 23 11:42	9°♎42'08	1.32967 AU
	8747 Nov 11 16:42	0°♎		evening rise	8748 Oct 28 15:39	20°♎27'23	
evening rise	8747 Nov 15 00:07	6°♎33'10			8748 Nov 02 13:21	0°♎	
desc. node	8747 Nov 24 19:17	24°♎16'25		desc. node	8748 Nov 10 16:21	14°♎14'50	
	8747 Nov 28 07:10	0°♎			8748 Nov 21 07:23	0°♎	
evening max el	8747 Dec 19 22:38	28°♎20'43	27°00'18	evening max el	8748 Dec 01 11:00	11°♎40'35	27°27'03
	8747 Dec 21 17:55	0°♎		retrograde	8748 Dec 15 02:13	18°♎59'50	
retrograde	8748 Jan 02 05:33	5°♎40'56		evening set	8748 Dec 22 01:52	16°♎27'06	
evening set	8748 Jan 08 21:15	3°♎05'28		min. Earth dist.	8748 Dec 25 20:32	13°♎07'14	0.63907 AU
	8748 Jan 12 03:37	30°♎		inferior conj	8748 Dec 28 09:53	10°♎29'00	-1°54'28
min. Earth dist.	8748 Jan 12 20:36	29°♎13'22	0.65536 AU	minimum elong	8748 Dec 28 13:28	10°♎19'42	1°52'47
inferior conj	8748 Jan 14 22:33	26°♎50'57	-0°47'07	asc. node	8749 Jan 03 03:52	5°♎35'24	
minimum elong	8748 Jan 14 23:55	26°♎47'02	0°46'21	morning rise	8749 Jan 04 02:50	5°♎08'19	
asc. node	8748 Jan 17 06:49	24°♎16'57		direct	8749 Jan 06 13:28	4°♎38'39	
morning rise	8748 Jan 21 03:48	21°♎15'27		morning max el	8749 Jan 13 01:19	8°♎01'07	17°49'46
direct	8748 Jan 23 21:41	20°♎34'36			8749 Jan 27 18:30	0°♎	
morning max el	8748 Jan 30 08:04	23°♎59'33	18°07'12	morning set	8749 Jan 29 17:38	3°♎21'11	
	8748 Feb 04 06:43	0°♎		desc. node	8749 Feb 06 15:40	16°♎43'46	
morning set	8748 Feb 17 19:58	21°♎18'42		superior conj	8749 Feb 11 14:25	24°♎51'52	-0°35'37
desc. node	8748 Feb 20 18:44	26°♎06'24		minimum elong	8749 Feb 11 10:28	24°♎35'49	0°34'54
	8748 Feb 23 04:30	0°♎			8749 Feb 14 18:48	0°♎	
superior conj	8748 Mar 03 15:54	15°♎06'01	-1°19'17	max. Earth dist.	8749 Feb 17 02:34	3°♎42'20	1.44740 AU
minimum elong	8748 Mar 03 07:09	14°♎31'28	1°18'12	evening rise	8749 Feb 27 07:40	19°♎37'32	
max. Earth dist.	8748 Mar 06 07:17	19°♎15'04	1.45463 AU		8749 Mar 06 03:24	0°♎	
	8748 Mar 13 04:35	0°♎		evening max el	8749 Mar 27 10:12	29°♎10'02	20°27'25
evening rise	8748 Mar 19 19:41	10°♎17'31			8749 Mar 28 06:31	0°♎	
greatest brilliancy	8748 Apr 01 11:25	29°♎43'46	-0.7m	asc. node	8749 Apr 01 02:42	2°♎54'35	
	8748 Apr 01 15:45	0°♎		retrograde	8749 Apr 04 10:31	3°♎50'18	
evening max el	8748 Apr 13 07:51	15°♎30'33	19°27'42	evening set	8749 Apr 08 10:01	2°♎19'13	
asc. node	8748 Apr 14 05:36	16°♎23'19			8749 Apr 10 19:14	30°♎	
retrograde	8748 Apr 20 11:59	19°♎35'02		inferior conj	8749 Apr 13 17:33	26°♎12'38	3°08'58
evening set	8748 Apr 24 02:25	18°♎19'17		minimum elong	8749 Apr 13 16:03	26°♎17'47	3°08'39
inferior conj	8748 Apr 29 12:24	12°♎26'04	3°20'51	min. Earth dist.	8749 Apr 14 09:58	25°♎16'27	0.67855 AU
minimum elong	8748 Apr 29 11:50	12°♎27'54	3°20'40	morning rise	8749 Apr 18 21:53	19°♎56'22	
min. Earth dist.	8748 Apr 30 18:59	10°♎45'39	0.66889 AU	direct	8749 Apr 24 12:12	17°♎26'54	
morning rise	8748 May 04 20:54	6°♎07'40		desc. node	8749 May 05 15:35	24°♎04'00	
direct	8748 May 10 23:48	3°♎25'05		morning max el	8749 May 05 18:20	24°♎10'56	24°19'44
desc. node	8748 May 18 18:37	6°♎42'23			8749 May 10 23:09	0°♎	
morning max el	8748 May 23 09:09	10°♎49'58	25°45'03		8749 Jun 01 01:00	0°♎	
	8748 Jun 07 14:46	0°♎		morning set	8749 Jun 10 11:52	15°♎43'11	
morning set	8748 Jun 28 11:52	4°♎03'50		max. Earth dist.	8749 Jun 14 03:42	22°♎11'51	1.37834 AU
max. Earth dist.	8748 Jul 02 05:47	11°♎03'45	1.35725 AU		8749 Jun 18 09:33	0°♎	
superior conj	8748 Jul 07 23:17	22°♎18'05	-0°31'41	superior conj	8749 Jun 21 04:47	5°♎19'08	-1°03'52
minimum elong	8748 Jul 08 01:10	22°♎27'37	0°31'30	minimum elong	8749 Jun 21 08:47	5°♎38'24	1°03'25
asc. node	8748 Jul 11 04:41	28°♎51'41		asc. node	8749 Jun 28 01:41	18°♎48'07	
	8748 Jul 11 17:59	0°♎		evening rise	8749 Jun 29 22:44	22°♎31'39	
evening rise	8748 Jul 15 21:43	8°♎33'03			8749 Jul 03 18:34	0°♎	
	8748 Jul 27 12:55	0°♎		evening max el	8749 Jul 16 12:30	19°♎31'41	19°08'24
evening max el	8748 Aug 02 19:13	7°♎53'18	20°09'38	retrograde	8749 Jul 25 11:55	23°♎58'25	

evening set	8749 Jul 27 09:19	23° Ω 47'22	evening max el	8750 Jun 29 16:15	1° Ω 51'18	18°28'06
desc. node	8749 Aug 01 14:48	21° Ω 38'58	retrograde	8750 Jul 07 07:55	5° Ω 40'37	
inferior conj	8749 Aug 04 19:51	19° Ω 35'06 -0°59'10	evening set	8750 Jul 09 11:19	5° Ω 23'32	
minimum elong	8749 Aug 04 17:16	19° Ω 39'28 0°58'19	inferior conj	8750 Jul 17 02:09	0° Ω 51'53	0°42'49
min. Earth dist.	8749 Aug 07 15:44	17° Ω 40'34 0.56156 AU	minimum elong	8750 Jul 17 03:39	0° Ω 48'54	0°42'04
morning rise	8749 Aug 12 22:14	14° Ω 48'58		8750 Jul 18 04:06	30° \mathbb{R} \mathfrak{E}	
direct	8749 Aug 18 03:03	13° Ω 46'15	desc. node	8750 Jul 19 11:55	28° \mathfrak{E} 56'50	
morning max el	8749 Sep 01 07:21	21° Ω 00'05 25°41'00	min. Earth dist.	8750 Jul 20 10:40	28° \mathfrak{E} 13'02	0.58017 AU
	8749 Sep 09 02:46	0° \mathfrak{M}	morning rise	8750 Jul 24 16:29	25° \mathfrak{E} 29'09	
asc. node	8749 Sep 24 01:21	24° \mathfrak{M} 51'40	direct	8750 Jul 30 15:50	23° \mathfrak{E} 57'05	
	8749 Sep 26 14:18	0° \mathfrak{L}		8750 Aug 12 07:23	0° Ω	
morning set	8749 Sep 28 17:56	4° \mathfrak{L} 31'15	morning max el	8750 Aug 14 01:11	1° Ω 37'07	27°00'40
				8750 Sep 03 08:25	0° \mathfrak{M}	
superior conj	8749 Oct 05 14:39	19° \mathfrak{L} 32'10 1°33'16	asc. node	8750 Sep 10 22:19	14° \mathfrak{M} 32'43	
minimum elong	8749 Oct 05 13:02	19° \mathfrak{L} 23'15 1°33'12	morning set	8750 Sep 13 03:18	19° \mathfrak{M} 08'51	
max. Earth dist.	8749 Oct 06 17:34	22° \mathfrak{L} 00'31 1.32073 AU		8750 Sep 18 03:12	0° \mathfrak{L}	
	8749 Oct 10 09:52	0° \mathfrak{M}				
evening rise	8749 Oct 12 15:45	4° \mathfrak{M} 44'09	superior conj	8750 Sep 20 02:24	4° \mathfrak{L} 21'48	1°21'10
	8749 Oct 26 05:10	0° \mathfrak{X}	minimum elong	8750 Sep 20 00:15	4° \mathfrak{L} 09'54	1°20'54
desc. node	8749 Oct 28 13:26	3° \mathfrak{X} 45'05	max. Earth dist.	8750 Sep 20 03:04	4° \mathfrak{L} 25'30	1.31640 AU
evening max el	8749 Nov 13 20:03	24° \mathfrak{X} 28'00 27°23'34	evening rise	8750 Sep 26 21:46	19° \mathfrak{L} 15'14	
	8749 Nov 21 06:57	0° \mathfrak{Z}		8750 Oct 02 04:10	0° \mathfrak{M}	
retrograde	8749 Nov 27 15:45	1° \mathfrak{Z} 42'29	desc. node	8750 Oct 15 10:33	22° \mathfrak{M} 35'00	
	8749 Dec 03 16:36	30° \mathfrak{R} \mathfrak{X}		8750 Oct 20 23:41	0° \mathfrak{X}	
evening set	8749 Dec 04 17:52	29° \mathfrak{X} 21'30	evening max el	8750 Oct 26 23:08	6° \mathfrak{X} 30'05	26°46'25
min. Earth dist.	8749 Dec 08 10:14	26° \mathfrak{X} 28'37 0.61999 AU	retrograde	8750 Nov 09 21:10	13° \mathfrak{X} 38'48	
inferior conj	8749 Dec 11 09:29	23° \mathfrak{X} 45'20 -3°05'23	evening set	8750 Nov 16 17:04	11° \mathfrak{X} 40'25	
minimum elong	8749 Dec 11 15:25	23° \mathfrak{X} 31'42 3°03'02	min. Earth dist.	8750 Nov 20 13:13	9° \mathfrak{X} 03'40	0.59917 AU
morning rise	8749 Dec 18 15:12	18° \mathfrak{X} 42'54	inferior conj	8750 Nov 23 17:51	6° \mathfrak{X} 29'54	-4°14'20
direct	8749 Dec 20 21:09	18° \mathfrak{X} 20'47	minimum elong	8750 Nov 24 01:15	6° \mathfrak{X} 14'59	4°12'03
asc. node	8749 Dec 21 00:55	18° \mathfrak{X} 20'54	morning rise	8750 Dec 01 11:55	1° \mathfrak{X} 48'41	
morning max el	8749 Dec 27 18:00	21° \mathfrak{X} 49'56 17°50'09	direct	8750 Dec 03 16:31	1° \mathfrak{X} 30'49	
	8750 Jan 03 00:15	0° \mathfrak{Z}	asc. node	8750 Dec 07 21:58	2° \mathfrak{X} 40'52	
morning set	8750 Jan 12 12:52	16° \mathfrak{Z} 25'09	morning max el	8750 Dec 11 06:36	5° \mathfrak{X} 15'47	18°09'36
	8750 Jan 20 04:34	0° \mathfrak{A}	morning set	8750 Dec 26 23:29	0° \mathfrak{Z} 11'29	
				8750 Dec 26 21:03	0° \mathfrak{Z}	
superior conj	8750 Jan 23 13:58	5° \mathfrak{A} 50'36 0°07'01	superior conj	8751 Jan 05 13:49	17° \mathfrak{Z} 58'11	0°42'47
minimum elong	8750 Jan 23 14:37	5° \mathfrak{A} 53'25 0°07'06	minimum elong	8751 Jan 05 16:48	18° \mathfrak{Z} 11'32	0°42'33
behind sun begin	8750 Jan 23 06:47	5° \mathfrak{A} 20'00	desc. node	8751 Jan 11 09:35	28° \mathfrak{Z} 11'22	
behind sun end	8750 Jan 23 22:28	6° \mathfrak{A} 26'46		8751 Jan 12 11:05	0° \mathfrak{A}	
desc. node	8750 Jan 24 12:37	7° \mathfrak{A} 26'48	max. Earth dist.	8751 Jan 13 05:07	1° \mathfrak{A} 16'14	1.41503 AU
max. Earth dist.	8750 Jan 30 18:26	17° \mathfrak{A} 47'50 1.43367 AU	evening rise	8751 Jan 18 05:42	9° \mathfrak{A} 33'53	
evening rise	8750 Feb 06 22:43	29° \mathfrak{A} 13'07		8751 Jan 31 12:14	0° \mathfrak{X}	
	8750 Feb 07 10:46	0° \mathfrak{X}		8751 Feb 20 23:26	26° \mathfrak{X} 33'06	22°57'39
	8750 Feb 27 19:57	0° \mathfrak{Y}	evening max el	8751 Feb 24 21:00	0° \mathfrak{Y}	
evening max el	8750 Mar 10 07:02	12° \mathfrak{Y} 50'33 21°38'53	retrograde	8751 Mar 03 04:30	2° \mathfrak{Y} 36'06	
asc. node	8750 Mar 18 23:49	18° \mathfrak{Y} 11'37	asc. node	8751 Mar 05 20:57	2° \mathfrak{Y} 00'19	
retrograde	8750 Mar 19 08:35	18° \mathfrak{Y} 12'18	evening set	8751 Mar 08 01:26	0° \mathfrak{Y} 35'04	
evening set	8750 Mar 23 18:13	16° \mathfrak{Y} 25'58		8751 Mar 08 17:03	30° \mathfrak{R} \mathfrak{X}	
inferior conj	8750 Mar 29 01:33	10° \mathfrak{Y} 08'29 2°46'35	inferior conj	8751 Mar 13 10:23	24° \mathfrak{X} 09'57	2°14'51
minimum elong	8750 Mar 28 23:29	10° \mathfrak{Y} 15'43 2°46'06	minimum elong	8751 Mar 13 08:08	24° \mathfrak{X} 17'43	2°14'14
min. Earth dist.	8750 Mar 29 05:00	9° \mathfrak{Y} 56'29 0.68370 AU	min. Earth dist.	8751 Mar 13 01:47	24° \mathfrak{X} 39'44	0.68452 AU
morning rise	8750 Apr 03 04:34	3° \mathfrak{Y} 55'49	morning rise	8751 Mar 18 14:45	18° \mathfrak{X} 02'15	
direct	8750 Apr 08 05:04	1° \mathfrak{Y} 45'23	direct	8751 Mar 23 01:24	16° \mathfrak{X} 13'37	
morning max el	8750 Apr 18 04:33	7° \mathfrak{Y} 39'34 22°49'52	morning max el	8751 Mar 31 18:59	21° \mathfrak{X} 17'13	21°24'21
desc. node	8750 Apr 22 12:32	12° \mathfrak{Y} 27'23		8751 Apr 08 04:38	0° \mathfrak{Y}	
	8750 May 05 13:42	0° \mathfrak{B}	desc. node	8751 Apr 09 09:27	1° \mathfrak{Y} 35'11	
morning set	8750 May 22 11:30	26° \mathfrak{B} 13'41		8751 Apr 28 19:42	0° \mathfrak{B}	
	8750 May 24 17:50	0° \mathfrak{I}	morning set	8751 May 02 07:50	5° \mathfrak{B} 29'26	
max. Earth dist.	8750 May 27 00:27	3° \mathfrak{I} 51'37 1.40092 AU	max. Earth dist.	8751 May 09 01:52	16° \mathfrak{B} 22'24	1.42222 AU
superior conj	8750 Jun 03 18:41	17° \mathfrak{I} 34'27 -1°34'22	superior conj	8751 May 16 12:21	28° \mathfrak{B} 53'58	-1°58'54
minimum elong	8750 Jun 04 00:23	18° \mathfrak{I} 00'26 1°33'53	minimum elong	8751 May 16 17:51	29° \mathfrak{B} 17'44	1°58'42
	8750 Jun 10 10:41	0° \mathfrak{E}		8751 May 17 03:38	0° \mathfrak{I}	
evening rise	8750 Jun 13 14:45	6° \mathfrak{E} 01'45	evening rise	8751 May 27 17:51	18° \mathfrak{I} 53'40	
asc. node	8750 Jun 14 22:43	8° \mathfrak{E} 33'27	asc. node	8751 Jun 01 19:46	28° \mathfrak{I} 03'03	
	8750 Jun 27 23:08	0° Ω				

	8751 Jun 02 22:24	0°☿		retrograde	8752 Jun 02 01:46	1°☿18'05	
evening max el	8751 Jun 13 02:40	14°☿43'37	18°07'58	evening set	8752 Jun 04 20:26	0°☿39'04	
retrograde	8751 Jun 19 21:51	18°☿10'45			8752 Jun 06 00:54	30°☿II	
evening set	8751 Jun 22 08:58	17°☿43'59		inferior conj	8752 Jun 11 02:27	25°☿II27'50	2°46'49
inferior conj	8751 Jun 29 05:33	12°☿52'06	1°58'06	minimum elong	8752 Jun 11 05:03	25°☿II20'59	2°46'03
minimum elong	8751 Jun 29 08:31	12°☿45'15	1°57'01	min. Earth dist.	8752 Jun 13 23:19	22°☿II27'31	0.62467 AU
min. Earth dist.	8751 Jul 02 12:45	9°☿50'26	0.60230 AU	morning rise	8752 Jun 17 11:52	19°☿II20'32	
morning rise	8751 Jul 06 05:15	7°☿01'43		desc. node	8752 Jun 22 06:02	17°☿II04'39	
desc. node	8751 Jul 06 08:59	6°☿55'57		direct	8752 Jun 24 05:56	16°☿II52'02	
direct	8751 Jul 12 17:50	4°☿58'25		morning max el	8752 Jul 08 07:59	24°☿II54'13	27°54'17
morning max el	8751 Jul 27 01:45	12°☿54'22	27°46'33		8752 Jul 12 23:21	0°☿	
	8751 Aug 09 15:30	0°☿			8752 Aug 02 02:12	0°☿	
	8751 Aug 26 15:31	0°☿		morning set	8752 Aug 11 08:38	17°☿II36'44	
morning set	8751 Aug 28 08:54	3°☿II32'50		asc. node	8752 Aug 14 16:13	24°☿II29'02	
asc. node	8751 Aug 28 19:16	4°☿II26'59		max. Earth dist.	8752 Aug 16 18:25	28°☿II56'45	1.32196 AU
max. Earth dist.	8751 Sep 03 12:36	16°☿II47'54	1.31681 AU		8752 Aug 17 06:09	0°☿	
superior conj	8751 Sep 04 13:44	19°☿II06'43	1°04'01	superior conj	8752 Aug 18 22:46	3°☿II40'36	0°42'09
minimum elong	8751 Sep 04 11:31	18°☿II54'26	1°03'35	minimum elong	8752 Aug 18 20:59	3°☿II30'51	0°41'41
	8751 Sep 09 12:09	0°☿		evening rise	8752 Aug 25 19:00	18°☿II35'52	
evening rise	8751 Sep 11 07:32	3°☿II54'37			8752 Aug 31 07:56	0°☿	
	8751 Sep 25 01:48	0°☿		desc. node	8752 Sep 18 04:48	27°☿II03'56	
desc. node	8751 Oct 02 07:41	10°☿II28'37		evening max el	8752 Sep 19 06:59	28°☿II09'08	24°04'29
evening max el	8751 Oct 08 18:26	17°☿II41'21	25°37'00		8752 Sep 21 08:18	0°☿	
retrograde	8751 Oct 22 16:31	24°☿II43'25		retrograde	8752 Oct 02 23:30	5°☿II00'24	
evening set	8751 Oct 28 18:33	23°☿II17'22		evening set	8752 Oct 07 19:15	4°☿II09'21	
min. Earth dist.	8751 Nov 02 06:49	20°☿II40'15	0.57861 AU	min. Earth dist.	8752 Oct 13 17:40	1°☿II13'31	0.56105 AU
inferior conj	8751 Nov 05 07:35	18°☿II33'20	-5°10'35		8752 Oct 15 17:45	30°☿II	
minimum elong	8751 Nov 05 13:48	18°☿II22'27	5°09'24	inferior conj	8752 Oct 16 00:55	29°☿II48'58	-5°37'07
morning rise	8751 Nov 13 11:22	14°☿II14'40		minimum elong	8752 Oct 16 01:36	29°☿II47'54	5°37'01
direct	8751 Nov 15 19:24	13°☿II57'48		morning rise	8752 Oct 24 10:01	25°☿II50'45	
morning max el	8751 Nov 24 11:18	18°☿II08'02	18°49'54	direct	8752 Oct 27 03:09	25°☿II31'41	
asc. node	8751 Nov 24 18:59	18°☿II26'49			8752 Nov 05 21:32	0°☿	
	8751 Dec 03 03:14	0°☿		morning max el	8752 Nov 06 04:38	0°☿II16'31	19°52'36
morning set	8751 Dec 10 20:44	14°☿II26'31		asc. node	8752 Nov 10 15:57	5°☿II23'53	
	8751 Dec 18 20:30	0°☿		morning set	8752 Nov 24 01:04	29°☿II00'14	
					8752 Nov 24 12:51	0°☿	
superior conj	8751 Dec 19 09:25	1°☿II01'25	1°09'44				
minimum elong	8751 Dec 19 12:43	1°☿II17'00	1°09'33	superior conj	8752 Dec 01 19:47	14°☿II46'26	1°27'54
max. Earth dist.	8751 Dec 26 11:41	14°☿II02'18	1.39369 AU	minimum elong	8752 Dec 01 22:16	14°☿II58'47	1°27'53
desc. node	8751 Dec 29 06:35	18°☿II54'07		max. Earth dist.	8752 Dec 07 17:54	26°☿II13'57	1.37212 AU
evening rise	8751 Dec 30 10:18	20°☿II52'36			8752 Dec 09 18:43	0°☿	
	8752 Jan 04 22:43	0°☿		evening rise	8752 Dec 11 11:55	3°☿II06'39	
	8752 Jan 25 14:30	0°☿		desc. node	8752 Dec 15 03:36	9°☿II31'16	
evening max el	8752 Feb 03 13:23	10°☿II19'17	24°17'39		8752 Dec 28 00:19	0°☿	
retrograde	8752 Feb 14 20:51	16°☿II57'06		evening max el	8753 Jan 16 02:40	24°☿II07'54	25°32'01
evening set	8752 Feb 20 06:03	14°☿II42'26			8753 Jan 23 19:43	0°☿	
asc. node	8752 Feb 20 18:04	14°☿II15'43		retrograde	8753 Jan 28 08:40	1°☿II10'29	
min. Earth dist.	8752 Feb 24 22:00	9°☿II21'37	0.68131 AU		8753 Feb 01 12:02	30°☿II	
inferior conj	8752 Feb 25 18:09	8°☿II13'48	1°34'24	evening set	8753 Feb 03 06:31	28°☿II44'19	
minimum elong	8752 Feb 25 16:13	8°☿II20'19	1°33'49	asc. node	8753 Feb 06 15:08	25°☿II13'33	
morning rise	8752 Mar 02 02:26	2°☿II12'33		min. Earth dist.	8753 Feb 07 15:20	23°☿II58'20	0.67418 AU
direct	8752 Mar 05 23:56	0°☿II45'56		inferior conj	8753 Feb 08 23:00	22°☿II16'54	0°45'38
morning max el	8752 Mar 13 16:28	5°☿II06'16	20°09'33	minimum elong	8753 Feb 08 21:53	22°☿II20'27	0°45'20
desc. node	8752 Mar 26 06:22	21°☿II15'06		morning rise	8753 Feb 14 13:40	16°☿II24'01	
	8752 Apr 01 04:53	0°☿		direct	8753 Feb 17 23:13	15°☿II17'42	
morning set	8752 Apr 10 07:57	13°☿II53'06		morning max el	8753 Feb 24 21:56	19°☿II06'46	19°09'18
max. Earth dist.	8752 Apr 20 10:38	29°☿II45'30	1.43966 AU		8753 Mar 05 13:16	0°☿	
	8752 Apr 20 14:15	0°☿		greatest brilliancy	8753 Mar 10 05:32	6°☿II54'08	-0.7m
				desc. node	8753 Mar 13 03:16	11°☿II18'47	
superior conj	8752 Apr 26 05:50	9°☿II09'07	-2°11'38	morning set	8753 Mar 20 09:45	22°☿II30'30	
minimum elong	8752 Apr 26 07:25	9°☿II15'38	2°11'44		8753 Mar 25 05:39	0°☿	
	8752 May 08 14:18	0°☿		max. Earth dist.	8753 Apr 03 02:10	13°☿II50'14	1.45117 AU
evening rise	8752 May 09 03:13	0°☿II55'43					
asc. node	8752 May 18 16:50	17°☿II10'10		superior conj	8753 Apr 05 24:00	18°☿II25'47	-2°06'27
evening max el	8752 May 26 15:57	27°☿II57'37	18°07'04	minimum elong	8753 Apr 05 18:32	18°☿II04'09	2°06'16
	8752 May 29 03:21	0°☿			8753 Apr 13 05:45	0°☿	

evening rise	8753 Apr 20 14:37	12°♄00'46		desc. node	8754 Feb 28 00:10	1°♄39'10	
	8753 May 01 16:10	0°♄					
asc. node	8753 May 05 13:54	5°♄47'36		superior conj	8754 Mar 16 05:23	27°♄14'34	-1°41'08
evening max el	8753 May 10 04:56	11°♄25'25	18°24'37	minimum elong	8754 Mar 15 19:47	26°♄37'02	1°40'13
retrograde	8753 May 16 15:16	14°♄53'24		max. Earth dist.	8754 Mar 16 21:12	28°♄16'30	1.45551 AU
evening set	8753 May 19 17:18	14°♄00'42			8754 Mar 17 23:40	0°♄	
inferior conj	8753 May 25 12:46	8°♄31'42	3°13'18	evening rise	8754 Apr 01 02:25	22°♄08'46	
minimum elong	8753 May 25 14:12	8°♄27'30	3°12'55		8754 Apr 06 01:58	0°♄	
min. Earth dist.	8753 May 27 19:11	5°♄52'49	0.64483 AU	greatest brilliancy	8754 Apr 10 23:18	7°♄39'01	-0.8m
morning rise	8753 May 31 10:07	2°♄15'48		asc. node	8754 Apr 22 10:59	23°♄45'45	
	8753 Jun 04 07:49	30°♄		evening max el	8754 Apr 23 15:01	25°♄00'22	18°59'53
direct	8753 Jun 07 02:19	29°♄32'49		retrograde	8754 Apr 30 10:34	28°♄48'40	
desc. node	8753 Jun 09 03:02	29°♄46'17		evening set	8754 May 03 20:13	27°♄41'31	
	8753 Jun 10 00:09	0°♄		inferior conj	8754 May 09 08:45	21°♄56'27	3°22'13
morning max el	8753 Jun 20 17:44	7°♄31'19	27°25'57	minimum elong	8754 May 09 08:53	21°♄56'05	3°22'02
	8753 Jul 08 01:31	0°♄		min. Earth dist.	8754 May 10 23:51	19°♄52'27	0.66130 AU
	8753 Jul 25 08:51	0°♄		morning rise	8754 May 14 21:02	15°♄37'43	
morning set	8753 Jul 25 23:58	1°♄13'49		direct	8754 May 21 05:48	12°♄51'56	
max. Earth dist.	8753 Jul 30 16:49	10°♄43'02	1.33194 AU	desc. node	8754 May 27 00:01	14°♄40'32	
asc. node	8753 Aug 01 13:11	14°♄34'44		morning max el	8754 Jun 03 04:23	20°♄34'03	26°28'09
					8754 Jun 11 07:08	0°♄	
superior conj	8753 Aug 03 03:30	17°♄57'46	0°16'04		8754 Jul 01 04:53	0°♄	
minimum elong	8753 Aug 03 02:42	17°♄53'33	0°15'44	morning set	8754 Jul 09 03:39	14°♄15'23	
behind sun begin	8753 Aug 03 01:41	17°♄48'05		max. Earth dist.	8754 Jul 13 04:50	22°♄02'59	1.34669 AU
behind sun end	8753 Aug 03 03:44	17°♄59'01			8754 Jul 17 03:49	0°♄	
	8753 Aug 08 18:01	0°♄					
evening rise	8753 Aug 10 06:18	3°♄13'23		superior conj	8754 Jul 18 01:37	1°♄51'55	-0°13'33
	8753 Aug 24 21:37	0°♄		minimum elong	8754 Jul 18 02:24	1°♄55'54	0°13'34
evening max el	8753 Aug 31 19:05	8°♄20'18	22°24'51	behind sun begin	8754 Jul 17 23:13	1°♄39'31	
desc. node	8753 Sep 05 01:55	11°♄52'38		behind sun end	8754 Jul 18 05:34	2°♄12'17	
retrograde	8753 Sep 13 18:19	14°♄48'06		asc. node	8754 Jul 19 10:09	4°♄40'14	
evening set	8753 Sep 17 02:00	14°♄23'48		evening rise	8754 Jul 25 15:29	17°♄41'24	
min. Earth dist.	8753 Sep 25 01:37	10°♄52'45	0.54964 AU		8754 Jul 31 19:23	0°♄	
inferior conj	8753 Sep 26 00:41	10°♄20'12	-5°14'51	evening max el	8754 Aug 13 15:47	18°♄51'36	20°54'02
minimum elong	8753 Sep 25 17:49	10°♄29'54	5°13'47	desc. node	8754 Aug 22 23:02	24°♄23'47	
morning rise	8753 Oct 04 11:25	6°♄32'36		retrograde	8754 Aug 25 06:49	24°♄37'18	
direct	8753 Oct 07 17:52	6°♄08'31		evening set	8754 Aug 27 11:50	24°♄25'39	
morning max el	8753 Oct 19 08:49	11°♄35'53	21°17'13	inferior conj	8754 Sep 05 17:09	20°♄28'58	-3°57'42
asc. node	8753 Oct 28 12:55	23°♄16'53		minimum elong	8754 Sep 05 07:36	20°♄42'32	3°54'55
	8753 Nov 01 10:53	0°♄		min. Earth dist.	8754 Sep 06 10:31	20°♄04'17	0.54688 AU
morning set	8753 Nov 08 09:50	13°♄44'35		morning rise	8754 Sep 14 03:33	16°♄32'12	
				direct	8754 Sep 18 01:48	15°♄59'09	
superior conj	8753 Nov 15 16:39	29°♄00'49	1°38'03	morning max el	8754 Oct 01 02:07	22°♄12'54	22°58'25
minimum elong	8753 Nov 15 17:53	29°♄07'12	1°38'11		8754 Oct 07 20:49	0°♄	
	8753 Nov 16 04:06	0°♄		asc. node	8754 Oct 15 09:53	11°♄52'53	
max. Earth dist.	8753 Nov 20 04:20	8°♄08'00	1.35259 AU	morning set	8754 Oct 23 20:59	28°♄34'00	
evening rise	8753 Nov 24 07:13	16°♄06'56			8754 Oct 24 13:11	0°♄	
desc. node	8753 Dec 02 00:37	29°♄57'50					
	8753 Dec 02 01:08	0°♄		superior conj	8754 Oct 30 20:49	13°♄35'16	1°41'05
	8753 Dec 22 12:18	0°♄		minimum elong	8754 Oct 30 20:46	13°♄34'59	1°41'14
evening max el	8753 Dec 29 15:52	7°♄52'09	26°33'34	max. Earth dist.	8754 Nov 02 22:20	20°♄04'29	1.33674 AU
retrograde	8754 Jan 11 15:09	15°♄08'59		evening rise	8754 Nov 07 16:25	29°♄44'28	
evening set	8754 Jan 18 01:03	12°♄35'01			8754 Nov 07 19:34	0°♄	
min. Earth dist.	8754 Jan 22 03:32	8°♄23'46	0.66326 AU	desc. node	8754 Nov 18 21:42	20°♄08'36	
inferior conj	8754 Jan 23 22:53	6°♄14'12	-0°11'07		8754 Nov 25 03:05	0°♄	
minimum elong	8754 Jan 23 23:11	6°♄13'18	0°10'48	evening max el	8754 Dec 12 04:45	21°♄23'38	27°14'58
transit middle	8754 Jan 23 23:11	6°♄13'18	0°10'48	retrograde	8754 Dec 25 15:51	28°♄44'57	
transit begin	8754 Jan 23 21:02	6°♄19'46		evening set	8755 Jan 01 11:31	26°♄09'18	
transit end	8754 Jan 24 01:20	6°♄06'51		min. Earth dist.	8755 Jan 05 08:32	22°♄31'33	0.64880 AU
asc. node	8754 Jan 24 12:12	5°♄34'30		inferior conj	8755 Jan 07 15:33	20°♄00'54	-1°15'03
morning rise	8754 Jan 29 22:14	0°♄31'52		minimum elong	8755 Jan 07 17:49	19°♄54'41	1°13'53
	8754 Jan 31 03:18	30°♄		asc. node	8755 Jan 11 09:16	16°♄16'44	
direct	8754 Feb 01 21:18	29°♄42'50		morning rise	8755 Jan 14 01:37	14°♄31'38	
	8754 Feb 03 15:55	0°♄		direct	8755 Jan 16 16:05	13°♄56'08	
morning max el	8754 Feb 08 10:02	3°♄13'14	18°25'08	morning max el	8755 Jan 23 02:17	17°♄18'53	17°57'42
	8754 Feb 26 23:15	0°♄			8755 Feb 01 09:49	0°♄	
morning set	8754 Feb 28 10:26	2°♄20'03		morning set	8755 Feb 09 16:38	13°♄37'06	

desc. node	8755 Feb 14 21:06	22° \approx 11'24	direct	8755 Dec 31 04:45	27° \approx 51'08	
	8755 Feb 19 16:14	0° \mathbb{H}		8756 Jan 05 09:53	0° \mathbb{Z}	
superior conj	8755 Feb 23 16:53	6° \mathbb{H} 27'18 -1°01'12	morning max el	8756 Jan 06 19:42	1° \mathbb{Z} 15'45	17°47'40
minimum elong	8755 Feb 23 09:54	5° \mathbb{H} 59'28 1°00'11	morning set	8756 Jan 23 00:18	26° \mathbb{Z} 07'47	
max. Earth dist.	8755 Feb 27 16:36	12° \mathbb{H} 45'56 1.45237 AU	desc. node	8756 Jan 25 05:38	0° \approx	
	8755 Mar 10 18:34	0° \mathbb{Y}		8756 Feb 01 18:03	12° \approx 51'22	
evening rise	8755 Mar 11 19:34	1° \mathbb{Y} 36'16	superior conj	8756 Feb 04 01:36	16° \approx 42'51 -0°16'58	
greatest brilliancy	8755 Mar 26 03:17	23° \mathbb{Y} 18'33 -0.6m	minimum elong	8756 Feb 03 23:50	16° \approx 35'34 0°16'32	
	8755 Mar 30 19:38	0° \mathbb{B}	max. Earth dist.	8756 Feb 10 10:11	27° \approx 03'44 1.44222 AU	
evening max el	8755 Apr 06 20:26	8° \mathbb{B} 38'38 19°51'25		8756 Feb 12 06:25	0° \mathbb{H}	
asc. node	8755 Apr 09 08:04	10° \mathbb{B} 52'44	evening rise	8756 Feb 19 06:52	10° \mathbb{H} 57'52	
retrograde	8755 Apr 14 08:37	12° \mathbb{B} 57'51		8756 Mar 02 22:33	0° \mathbb{Y}	
evening set	8755 Apr 18 02:41	11° \mathbb{B} 35'45	evening max el	8756 Mar 19 20:27	22° \mathbb{Y} 18'49 20°56'44	
inferior conj	8755 Apr 23 11:20	5° \mathbb{B} 36'31 3°17'11	asc. node	8756 Mar 26 05:11	26° \mathbb{Y} 54'28	
minimum elong	8755 Apr 23 10:20	5° \mathbb{B} 39'53 3°16'59	retrograde	8756 Mar 28 07:09	27° \mathbb{Y} 16'26	
min. Earth dist.	8755 Apr 24 11:47	4° \mathbb{B} 14'30 0.67351 AU	evening set	8756 Apr 01 10:45	25° \mathbb{Y} 39'03	
	8755 Apr 28 00:22	30° \mathbb{R} \mathbb{Y}	inferior conj	8756 Apr 06 17:58	19° \mathbb{Y} 27'42 3°00'40	
morning rise	8755 Apr 28 17:40	29° \mathbb{Y} 18'30	minimum elong	8756 Apr 06 16:10	19° \mathbb{Y} 33'55 3°00'18	
direct	8755 May 04 15:22	26° \mathbb{Y} 40'29	min. Earth dist.	8756 Apr 07 04:50	18° \mathbb{Y} 50'09 0.68123 AU	
	8755 May 12 07:58	0° \mathbb{B}	morning rise	8756 Apr 11 21:22	13° \mathbb{Y} 12'42	
desc. node	8755 May 13 20:59	1° \mathbb{B} 16'24	direct	8756 Apr 17 05:59	10° \mathbb{Y} 50'28	
morning max el	8755 May 16 14:03	3° \mathbb{B} 50'24 25°09'53	morning max el	8756 Apr 27 23:12	17° \mathbb{Y} 14'15 23°41'30	
	8755 Jun 05 13:55	0° \mathbb{I}	desc. node	8756 Apr 29 17:57	19° \mathbb{Y} 06'45	
morning set	8755 Jun 21 15:18	26° \mathbb{I} 29'01		8756 May 08 13:42	0° \mathbb{B}	
	8755 Jun 23 13:57	0° \mathbb{E}		8756 May 28 14:58	0° \mathbb{I}	
max. Earth dist.	8755 Jun 25 06:21	3° \mathbb{E} 06'16 1.36584 AU	morning set	8756 Jun 02 05:38	7° \mathbb{I} 41'13	
			max. Earth dist.	8756 Jun 06 02:32	14° \mathbb{I} 23'08 1.38791 AU	
superior conj	8755 Jul 01 14:13	15° \mathbb{E} 14'56 -0°45'20				
minimum elong	8755 Jul 01 17:00	15° \mathbb{E} 28'42 0°45'02	superior conj	8756 Jun 13 13:43	27° \mathbb{I} 58'36 -1°17'12	
asc. node	8755 Jul 06 07:08	24° \mathbb{E} 41'02	minimum elong	8756 Jun 13 18:33	28° \mathbb{I} 21'22 1°16'42	
	8755 Jul 08 21:59	0° \mathbb{Q}		8756 Jun 14 15:27	0° \mathbb{E}	
evening rise	8755 Jul 09 20:15	1° \mathbb{Q} 52'42	asc. node	8756 Jun 22 04:10	14° \mathbb{E} 33'34	
	8755 Jul 26 23:57	0° \mathbb{P}	evening rise	8756 Jun 22 17:55	15° \mathbb{E} 40'34	
evening max el	8755 Jul 27 01:47	0° \mathbb{P} 04'33 19°41'03		8756 Jun 30 09:33	0° \mathbb{Q}	
retrograde	8755 Aug 05 23:48	4° \mathbb{P} 58'28	evening max el	8756 Jul 09 00:08	12° \mathbb{Q} 02'22 18°48'44	
evening set	8755 Aug 07 20:10	4° \mathbb{P} 49'00	retrograde	8756 Jul 17 08:28	16° \mathbb{Q} 10'51	
desc. node	8755 Aug 09 20:09	4° \mathbb{P} 18'52	evening set	8756 Jul 19 08:09	15° \mathbb{Q} 57'40	
inferior conj	8755 Aug 16 16:41	0° \mathbb{P} 46'08 -2°05'52	desc. node	8756 Jul 26 17:14	12° \mathbb{Q} 08'43	
minimum elong	8755 Aug 16 10:57	0° \mathbb{P} 55'05 2°03'50	inferior conj	8756 Jul 27 10:26	11° \mathbb{Q} 37'45 -0°13'06	
	8755 Aug 17 22:08	30° \mathbb{R} \mathbb{Q}	minimum elong	8756 Jul 27 09:54	11° \mathbb{Q} 38'43 0°13'04	
min. Earth dist.	8755 Aug 18 22:12	29° \mathbb{Q} 22'45 0.55373 AU	transit middle	8756 Jul 27 09:54	11° \mathbb{Q} 38'43 0°13'04	
morning rise	8755 Aug 24 23:32	26° \mathbb{Q} 20'50	transit begin	8756 Jul 27 07:44	11° \mathbb{Q} 42'38	
direct	8755 Aug 29 16:52	25° \mathbb{Q} 31'18	transit end	8756 Jul 27 12:04	11° \mathbb{Q} 34'48	
	8755 Sep 09 18:31	0° \mathbb{P}	min. Earth dist.	8756 Jul 30 13:48	9° \mathbb{Q} 22'13 0.56892 AU	
morning max el	8755 Sep 12 14:25	2° \mathbb{P} 26'39 24°44'18	morning rise	8756 Aug 04 08:17	6° \mathbb{Q} 35'39	
	8755 Oct 01 18:11	0° \mathbb{E}	direct	8756 Aug 09 21:44	5° \mathbb{Q} 20'54	
asc. node	8755 Oct 02 06:51	1° \mathbb{E} 00'26	morning max el	8756 Aug 24 04:40	12° \mathbb{Q} 46'51 26°18'13	
morning set	8755 Oct 08 08:43	13° \mathbb{E} 22'26		8756 Sep 06 16:45	0° \mathbb{P}	
			asc. node	8756 Sep 18 03:49	20° \mathbb{P} 31'21	
superior conj	8755 Oct 15 05:34	28° \mathbb{E} 20'45 1°37'48	morning set	8756 Sep 21 19:27	28° \mathbb{P} 05'25	
minimum elong	8755 Oct 15 04:26	28° \mathbb{E} 14'32 1°37'49		8756 Sep 22 16:52	0° \mathbb{E}	
	8755 Oct 15 23:44	0° \mathbb{M}				
max. Earth dist.	8755 Oct 17 00:20	2° \mathbb{M} 13'52 1.32528 AU	superior conj	8756 Sep 28 16:48	13° \mathbb{E} 10'40 1°28'47	
evening rise	8755 Oct 22 11:58	13° \mathbb{M} 49'10	minimum elong	8756 Sep 28 14:55	13° \mathbb{E} 00'11 1°28'37	
	8755 Oct 30 22:24	0° \mathbb{A}	max. Earth dist.	8756 Sep 29 08:10	14° \mathbb{E} 35'47 1.31840 AU	
desc. node	8755 Nov 05 18:47	9° \mathbb{A} 55'52	evening rise	8756 Oct 05 14:56	28° \mathbb{E} 13'02	
	8755 Nov 20 07:59	0° \mathbb{Z}		8756 Oct 06 11:26	0° \mathbb{M}	
evening max el	8755 Nov 24 15:58	4° \mathbb{Z} 30'49 27°29'34	desc. node	8756 Oct 22 15:53	29° \mathbb{M} 10'13	
retrograde	8755 Dec 08 09:53	11° \mathbb{Z} 49'02		8756 Oct 23 05:04	0° \mathbb{A}	
evening set	8755 Dec 15 11:12	9° \mathbb{Z} 20'06	evening max el	8756 Nov 05 23:01	17° \mathbb{A} 00'43 27°11'58	
min. Earth dist.	8755 Dec 19 04:25	6° \mathbb{Z} 12'27 0.63117 AU	retrograde	8756 Nov 19 20:01	24° \mathbb{A} 12'10	
inferior conj	8755 Dec 21 22:17	3° \mathbb{Z} 30'22 -2°24'25	evening set	8756 Nov 26 20:34	21° \mathbb{A} 59'56	
minimum elong	8755 Dec 22 02:53	3° \mathbb{Z} 19'00 2°22'24	min. Earth dist.	8756 Nov 30 13:44	19° \mathbb{A} 15'13 0.61122 AU	
	8755 Dec 25 20:03	30° \mathbb{R} \mathbb{A}	inferior conj	8756 Dec 03 15:50	16° \mathbb{A} 34'19 -3°35'26	
morning rise	8755 Dec 28 20:36	28° \mathbb{A} 17'02	minimum elong	8756 Dec 03 22:35	16° \mathbb{A} 19'38 3°32'59	
asc. node	8755 Dec 29 06:20	28° \mathbb{A} 08'55	morning rise	8756 Dec 11 02:56	11° \mathbb{A} 40'14	

direct	8756 Dec 13 07:50	11° ♊ 20'17		morning rise	8757 Nov 23 15:22	24° ♍ 31'27	
asc. node	8756 Dec 15 03:24	11° ♊ 34'19		direct	8757 Nov 25 20:58	24° ♍ 14'15	
morning max el	8756 Dec 20 11:00	14° ♊ 55'16	17°55'58	asc. node	8757 Dec 02 00:27	26° ♍ 33'00	
	8756 Dec 30 20:09	0° ♊		morning max el	8757 Dec 03 20:42	28° ♍ 08'28	18°24'06
morning set	8757 Jan 05 02:46	9° ♊ 31'42			8757 Dec 05 14:32	0° ♊	
				morning set	8757 Dec 19 18:27	23° ♊ 32'25	
superior conj	8757 Jan 15 11:50	28° ♊ 11'21	0°23'14		8757 Dec 23 03:26	0° ♊	
minimum elong	8757 Jan 15 13:46	28° ♊ 19'47	0°23'08				
	8757 Jan 16 12:52	0° ♋		superior conj	8757 Dec 28 20:48	10° ♊ 45'03	0°55'19
desc. node	8757 Jan 18 15:00	3° ♋ 35'08		minimum elong	8757 Dec 29 00:06	11° ♊ 00'12	0°55'04
max. Earth dist.	8757 Jan 23 00:05	10° ♋ 55'13	1.42621 AU	desc. node	8758 Jan 05 11:59	24° ♊ 19'37	
evening rise	8757 Jan 29 03:31	20° ♋ 49'57		max. Earth dist.	8758 Jan 05 09:23	24° ♊ 08'24	1.40615 AU
	8757 Feb 04 01:20	0° ♋			8758 Jan 08 20:31	0° ♋	
	8757 Feb 25 08:06	0° ♌		evening rise	8758 Jan 09 19:30	1° ♋ 35'16	
evening max el	8757 Mar 02 15:19	6° ♌ 00'19	22°11'58		8758 Jan 28 10:17	0° ♋	
retrograde	8757 Mar 12 04:19	11° ♌ 39'26		evening max el	8758 Feb 13 06:26	19° ♋ 44'22	23°31'52
asc. node	8757 Mar 13 02:19	11° ♌ 35'12		retrograde	8758 Feb 23 22:47	26° ♋ 02'50	
evening set	8757 Mar 16 18:42	9° ♌ 46'46		asc. node	8758 Feb 27 23:25	24° ♋ 44'04	
inferior conj	8757 Mar 22 02:31	3° ♌ 25'54	2°34'13	evening set	8758 Mar 01 00:58	23° ♋ 55'33	
minimum elong	8757 Mar 22 00:19	3° ♌ 33'34	2°33'40	inferior conj	8758 Mar 06 11:06	17° ♋ 28'28	1°58'44
min. Earth dist.	8757 Mar 22 00:47	3° ♌ 31'57	0.68456 AU	minimum elong	8758 Mar 06 08:55	17° ♋ 35'55	1°58'06
	8757 Mar 24 15:55	30° ♌		min. Earth dist.	8758 Mar 05 21:28	18° ♋ 15'11	0.68368 AU
morning rise	8757 Mar 27 05:48	27° ♌ 15'20		morning rise	8758 Mar 11 16:51	11° ♋ 23'36	
direct	8757 Apr 01 00:28	25° ♌ 13'51		direct	8758 Mar 15 21:48	9° ♋ 44'33	
	8757 Apr 09 16:03	0° ♌		morning max el	8758 Mar 24 03:53	14° ♋ 28'04	20°51'00
morning max el	8757 Apr 10 10:37	0° ♌ 45'29	22°12'36	desc. node	8758 Apr 03 11:48	27° ♋ 12'57	
desc. node	8757 Apr 16 14:53	7° ♌ 50'25			8758 Apr 05 11:29	0° ♌	
	8757 May 02 10:01	0° ♍		morning set	8758 Apr 23 03:30	26° ♌ 26'45	
morning set	8757 May 13 17:35	17° ♍ 38'55			8758 Apr 25 09:54	0° ♍	
max. Earth dist.	8757 May 19 00:59	26° ♍ 24'16	1.41034 AU	max. Earth dist.	8758 May 01 05:54	9° ♍ 19'40	1.43026 AU
	8757 May 21 03:55	0° ♍					
superior conj	8757 May 26 19:36	9° ♍ 51'32	-1°45'48	superior conj	8758 May 08 03:11	20° ♍ 43'24	-2°06'08
minimum elong	8757 May 27 01:33	10° ♍ 18'04	1°45'24	minimum elong	8758 May 08 07:34	21° ♍ 01'53	2°06'05
evening rise	8757 Jun 06 04:55	28° ♍ 55'32			8758 May 13 13:05	0° ♍	
	8757 Jun 06 18:45	0° ♎		evening rise	8758 May 20 01:02	11° ♍ 27'21	
asc. node	8757 Jun 09 01:12	4° ♎ 12'47		asc. node	8758 May 26 22:14	23° ♍ 33'26	
evening max el	8757 Jun 22 07:11	24° ♎ 37'02	18°17'05		8758 May 30 21:04	0° ♎	
retrograde	8757 Jun 29 12:33	28° ♎ 14'51		evening max el	8758 Jun 05 19:08	7° ♎ 38'59	18°05'15
evening set	8757 Jul 01 19:19	27° ♎ 53'54		retrograde	8758 Jun 12 09:09	11° ♎ 01'50	
inferior conj	8757 Jul 09 01:59	23° ♎ 13'16	1°18'09	evening set	8758 Jun 14 23:27	10° ♎ 30'08	
minimum elong	8757 Jul 09 04:24	23° ♎ 08'08	1°17'08	inferior conj	8758 Jun 21 13:19	5° ♎ 29'34	2°21'48
min. Earth dist.	8757 Jul 12 11:15	20° ♎ 22'07	0.58943 AU	minimum elong	8758 Jun 21 16:17	5° ♎ 22'17	2°20'49
desc. node	8757 Jul 13 14:18	19° ♎ 29'31		min. Earth dist.	8758 Jun 24 16:46	2° ♎ 25'46	0.61189 AU
morning rise	8757 Jul 16 10:16	17° ♎ 37'44			8758 Jun 27 13:57	30° ♎	
direct	8757 Jul 22 16:09	15° ♎ 52'24		morning rise	8758 Jun 28 06:44	29° ♎ 30'31	
morning max el	8757 Aug 06 01:14	23° ♎ 39'17	27°24'45	desc. node	8758 Jun 30 11:22	28° ♎ 16'07	
	8757 Aug 11 18:27	0° ♏		direct	8758 Jul 04 22:21	27° ♎ 15'43	
	8757 Aug 30 20:21	0° ♏			8758 Jul 12 20:41	0° ♏	
asc. node	8757 Sep 05 00:48	10° ♏ 18'52		morning max el	8758 Jul 19 04:40	5° ♏ 15'36	27°54'39
morning set	8757 Sep 06 03:28	12° ♏ 38'09			8758 Aug 06 16:56	0° ♏	
				morning set	8758 Aug 21 06:51	26° ♏ 54'42	
superior conj	8757 Sep 13 04:37	27° ♏ 59'08	1°14'30	asc. node	8758 Aug 22 21:43	0° ♏ 17'06	
minimum elong	8757 Sep 13 02:23	27° ♏ 46'44	1°14'08		8758 Aug 22 18:28	0° ♏	
max. Earth dist.	8757 Sep 12 18:23	27° ♏ 02'19	1.31607 AU	max. Earth dist.	8758 Aug 27 02:58	9° ♏ 21'20	1.31841 AU
	8757 Sep 14 02:22	0° ♐					
evening rise	8757 Sep 19 22:50	12° ♐ 48'53		superior conj	8758 Aug 28 15:10	12° ♏ 40'03	0°55'18
	8757 Sep 28 13:57	0° ♐		minimum elong	8758 Aug 28 13:04	12° ♏ 28'28	0°54'50
desc. node	8757 Oct 09 12:59	17° ♐ 38'43		evening rise	8758 Sep 04 09:32	27° ♏ 29'51	
evening max el	8757 Oct 18 23:07	28° ♐ 42'16	26°20'26		8758 Sep 05 13:44	0° ♐	
	8757 Oct 20 09:22	0° ♑			8758 Sep 22 11:53	0° ♐	
retrograde	8757 Nov 01 21:05	5° ♑ 47'28		desc. node	8758 Sep 26 10:06	5° ♐ 02'29	
evening set	8757 Nov 08 11:09	4° ♑ 01'55		evening max el	8758 Sep 30 14:56	9° ♐ 32'35	24°59'34
min. Earth dist.	8757 Nov 12 12:20	1° ♑ 27'26	0.59030 AU	retrograde	8758 Oct 14 11:29	16° ♐ 31'32	
	8757 Nov 14 10:59	30° ♑		evening set	8758 Oct 20 02:14	15° ♐ 20'14	
inferior conj	8757 Nov 15 16:43	29° ♑ 03'12	-4°40'34	min. Earth dist.	8758 Oct 25 02:22	12° ♐ 37'38	0.57060 AU
minimum elong	8757 Nov 16 00:05	28° ♑ 49'15	4°38'39	inferior conj	8758 Oct 27 21:49	10° ♐ 46'48	-5°26'38
				minimum elong	8758 Oct 28 02:14	10° ♐ 39'30	5°26'03

morning rise	8758 Nov 05 04:31	6° \mathbb{M} 37'53		morning rise	8759 Oct 16 17:06	17° \mathbb{Q} 50'44	
direct	8758 Nov 07 15:43	6° \mathbb{M} 20'30		direct	8759 Oct 19 15:14	17° \mathbb{Q} 30'04	
morning max el	8758 Nov 16 21:02	10° \mathbb{M} 43'52	19°13'48	morning max el	8759 Oct 30 08:57	22° \mathbb{Q} 32'35	20°25'58
asc. node	8758 Nov 18 21:27	12° \mathbb{M} 51'27		asc. node	8759 Nov 05 18:25	0° \mathbb{M} 14'21	
	8758 Nov 29 17:31	0° \mathbb{A}			8759 Nov 05 14:28	0° \mathbb{M}	
morning set	8758 Dec 03 19:05	7° \mathbb{A} 56'38		morning set	8759 Nov 18 01:34	22° \mathbb{M} 35'37	
					8759 Nov 21 15:37	0° \mathbb{A}	
superior conj	8758 Dec 11 23:18	24° \mathbb{A} 08'16	1°18'27	superior conj	8759 Nov 25 14:36	8° \mathbb{A} 07'22	1°33'06
minimum elong	8758 Dec 12 02:20	24° \mathbb{A} 22'58	1°18'21	minimum elong	8759 Nov 25 16:35	8° \mathbb{A} 17'22	1°33'11
	8758 Dec 15 00:57	0° \mathbb{B}			8759 Nov 30 22:05	18° \mathbb{A} 37'33	1.36349 AU
max. Earth dist.	8758 Dec 18 15:08	6° \mathbb{B} 38'01	1.38439 AU	max. Earth dist.	8759 Dec 04 18:59	25° \mathbb{A} 53'36	
evening rise	8758 Dec 22 09:20	13° \mathbb{B} 18'19		evening rise	8759 Dec 07 01:31	0° \mathbb{B}	
desc. node	8758 Dec 23 08:59	15° \mathbb{B} 00'33		desc. node	8759 Dec 10 06:00	5° \mathbb{B} 33'49	
	8759 Jan 01 12:36	0° \mathbb{A}			8759 Dec 26 00:36	0° \mathbb{A}	
	8759 Jan 23 11:38	0° \mathbb{H}			8760 Jan 09 08:50	17° \mathbb{A} 18'36	26°00'10
evening max el	8759 Jan 26 19:41	3° \mathbb{H} 31'06	24°50'17	evening max el	8760 Jan 21 23:14	24° \mathbb{A} 29'11	
retrograde	8759 Feb 07 13:25	10° \mathbb{H} 21'24		retrograde	8760 Jan 28 02:13	21° \mathbb{A} 59'13	
evening set	8759 Feb 13 04:02	8° \mathbb{H} 01'15		evening set	8760 Feb 01 08:15	17° \mathbb{A} 27'48	0.66996 AU
asc. node	8759 Feb 14 20:31	6° \mathbb{H} 23'07		min. Earth dist.	8760 Feb 01 17:36	16° \mathbb{A} 58'49	
min. Earth dist.	8759 Feb 17 16:42	2° \mathbb{H} 55'18	0.67874 AU	asc. node	8760 Feb 02 20:50	15° \mathbb{A} 33'36	0°22'30
inferior conj	8759 Feb 18 17:50	1° \mathbb{H} 32'15	1°14'43	inferior conj	8760 Feb 02 20:15	15° \mathbb{A} 35'26	0°22'25
minimum elong	8759 Feb 18 16:11	1° \mathbb{H} 37'43	1°14'13	minimum elong	8760 Feb 08 14:55	9° \mathbb{A} 44'44	
	8759 Feb 19 22:05	30° \mathbb{R}		morning rise	8760 Feb 11 19:43	8° \mathbb{A} 46'18	
morning rise	8759 Feb 24 04:34	25° \mathbb{A} 34'27		direct	8760 Feb 18 13:23	12° \mathbb{A} 26'21	18°48'22
direct	8759 Feb 27 20:42	24° \mathbb{A} 17'01		morning max el	8760 Mar 02 13:02	0° \mathbb{H}	
morning max el	8759 Mar 07 04:53	28° \mathbb{A} 22'44	19°42'01		8760 Mar 07 05:38	7° \mathbb{H} 15'18	
	8759 Mar 08 17:58	0° \mathbb{H}		desc. node	8760 Mar 11 10:42	13° \mathbb{H} 49'36	
greatest brilliancy	8759 Mar 19 22:39	14° \mathbb{H} 58'10	-0.6m	morning set	8760 Mar 21 19:04	0° \mathbb{Y}	
desc. node	8759 Mar 21 08:43	17° \mathbb{H} 03'49		max. Earth dist.	8760 Mar 26 10:14	7° \mathbb{Y} 14'54	1.45389 AU
	8759 Mar 29 22:19	0° \mathbb{Y}					
morning set	8759 Apr 02 01:07	4° \mathbb{Y} 47'07		superior conj	8760 Mar 27 20:53	9° \mathbb{Y} 30'50	-1°58'01
max. Earth dist.	8759 Apr 13 17:26	23° \mathbb{Y} 01'05	1.44529 AU	minimum elong	8760 Mar 27 12:53	8° \mathbb{Y} 59'25	1°57'32
					8760 Apr 09 18:43	0° \mathbb{B}	
superior conj	8759 Apr 18 10:07	0° \mathbb{B} 31'24	-2°11'54	evening rise	8760 Apr 12 02:40	3° \mathbb{B} 45'08	
minimum elong	8759 Apr 18 08:51	0° \mathbb{B} 26'18	2°12'00	greatest brilliancy	8760 Apr 18 08:59	13° \mathbb{B} 51'28	-0.9m
	8759 Apr 18 02:19	0° \mathbb{B}			8760 Apr 29 00:39	0° \mathbb{I}	
evening rise	8759 May 02 01:30	23° \mathbb{B} 05'57		asc. node	8760 Apr 29 16:20	0° \mathbb{I} 51'10	
	8759 May 06 03:24	0° \mathbb{I}		evening max el	8760 May 02 20:37	4° \mathbb{I} 31'08	18°37'38
asc. node	8759 May 13 19:17	12° \mathbb{I} 29'09		retrograde	8760 May 09 09:54	8° \mathbb{I} 06'12	
evening max el	8759 May 20 08:35	20° \mathbb{I} 59'42	18°12'23	evening set	8760 May 12 15:07	7° \mathbb{I} 07'30	
retrograde	8759 May 26 17:42	24° \mathbb{I} 22'03		inferior conj	8760 May 18 07:15	1° \mathbb{I} 31'48	3°18'58
evening set	8759 May 29 15:22	23° \mathbb{I} 37'32		minimum elong	8760 May 18 08:06	1° \mathbb{I} 29'10	3°18'43
inferior conj	8759 Jun 04 16:26	18° \mathbb{I} 18'41	3°00'28		8760 May 19 13:21	30° \mathbb{R}	
minimum elong	8759 Jun 04 18:35	18° \mathbb{I} 12'44	2°59'53	min. Earth dist.	8760 May 20 07:15	29° \mathbb{B} 06'13	0.65231 AU
min. Earth dist.	8759 Jun 07 07:30	15° \mathbb{I} 25'05	0.63351 AU	morning rise	8760 May 24 00:20	25° \mathbb{B} 14'13	
morning rise	8759 Jun 10 20:21	12° \mathbb{I} 06'35		direct	8760 May 30 14:05	22° \mathbb{B} 28'16	
desc. node	8759 Jun 17 08:23	9° \mathbb{I} 30'29		desc. node	8760 Jun 03 05:24	23° \mathbb{B} 11'44	
direct	8759 Jun 17 14:21	9° \mathbb{I} 30'17			8760 Jun 12 14:20	0° \mathbb{I}	
morning max el	8759 Jul 01 12:52	17° \mathbb{I} 33'24	27°46'26	morning max el	8760 Jun 12 23:02	0° \mathbb{I} 21'52	27°04'28
	8759 Jul 11 21:48	0° \mathbb{B}			8760 Jul 04 21:53	0° \mathbb{B}	
	8759 Jul 30 12:43	0° \mathbb{Q}		morning set	8760 Jul 18 14:12	24° \mathbb{B} 11'48	
morning set	8759 Aug 05 03:24	10° \mathbb{Q} 48'57			8760 Jul 21 13:09	0° \mathbb{Q}	
asc. node	8759 Aug 09 18:39	20° \mathbb{Q} 21'38		max. Earth dist.	8760 Jul 22 23:52	2° \mathbb{Q} 54'42	1.33757 AU
max. Earth dist.	8759 Aug 10 05:59	21° \mathbb{Q} 21'39	1.32553 AU	asc. node	8760 Jul 26 15:35	10° \mathbb{Q} 27'33	
superior conj	8759 Aug 12 22:39	27° \mathbb{Q} 08'08	0°31'35	superior conj	8760 Jul 27 00:52	11° \mathbb{Q} 16'16	0°03'54
minimum elong	8759 Aug 12 21:13	27° \mathbb{Q} 00'22	0°31'10	minimum elong	8760 Jul 27 00:40	11° \mathbb{Q} 15'13	0°03'41
	8759 Aug 14 06:21	0° \mathbb{P}		behind sun begin	8760 Jul 26 19:10	10° \mathbb{Q} 46'19	
evening rise	8759 Aug 19 21:10	12° \mathbb{P} 10'31		behind sun end	8760 Jul 27 06:10	11° \mathbb{Q} 44'09	
	8759 Aug 28 20:43	0° \mathbb{Q}		evening rise	8760 Aug 03 07:46	26° \mathbb{Q} 44'17	
evening max el	8759 Sep 12 02:08	19° \mathbb{Q} 49'18	23°22'01		8760 Aug 04 21:14	0° \mathbb{P}	
desc. node	8759 Sep 13 07:12	20° \mathbb{Q} 56'54		evening max el	8760 Aug 23 17:04	0° \mathbb{Q} 05'29	21°44'34
retrograde	8759 Sep 25 13:34	26° \mathbb{Q} 33'24			8760 Aug 23 14:50	0° \mathbb{Q}	
evening set	8759 Sep 29 17:39	25° \mathbb{Q} 55'26		desc. node	8760 Aug 30 04:18	4° \mathbb{Q} 50'47	
min. Earth dist.	8759 Oct 06 11:49	22° \mathbb{Q} 46'10	0.55527 AU	retrograde	8760 Sep 05 04:20	6° \mathbb{Q} 16'51	
inferior conj	8759 Oct 08 06:59	21° \mathbb{Q} 42'45	-5°34'35	evening set	8760 Sep 07 22:33	5° \mathbb{Q} 59'42	
minimum elong	8759 Oct 08 04:21	21° \mathbb{Q} 46'37	5°34'21				

inferior conj	8760 Sep 17 02:00	2°♊00'59	-4°48'18	desc. node	8761 Aug 17 01:26	16°♏15'46	
minimum elong	8760 Sep 16 17:03	2°♊13'29	4°46'21	evening set	8761 Aug 18 16:19	16°♏06'11	
min. Earth dist.	8760 Sep 16 20:01	2°♊09'21	0.54732 AU	inferior conj	8761 Aug 27 19:34	12°♏08'29	-3°12'27
	8760 Sep 20 20:08	30°♏		minimum elong	8761 Aug 27 11:05	12°♏20'54	3°09'40
morning rise	8760 Sep 25 12:44	28°♏11'51		min. Earth dist.	8761 Aug 29 05:32	11°♏18'51	0.54866 AU
direct	8760 Sep 29 01:45	27°♏44'23		morning rise	8761 Sep 05 05:05	8°♏01'58	
	8760 Oct 06 16:56	0°♊		direct	8761 Sep 09 11:21	7°♏22'54	
morning max el	8760 Oct 11 07:52	3°♊31'59	21°58'39	morning max el	8761 Sep 22 21:54	13°♏54'40	23°43'53
asc. node	8760 Oct 22 15:23	18°♊27'10			8761 Oct 05 07:52	0°♊	
	8760 Oct 28 21:15	0°♏		asc. node	8761 Oct 09 12:21	7°♊17'48	
morning set	8760 Nov 01 11:35	7°♏22'51		morning set	8761 Oct 16 23:13	22°♊12'39	
					8761 Oct 20 13:57	0°♏	
superior conj	8760 Nov 08 14:56	22°♏31'21	1°40'09	superior conj	8761 Oct 23 21:18	7°♏11'15	1°40'25
minimum elong	8760 Nov 08 15:36	22°♏34'54	1°40'18	minimum elong	8761 Oct 23 20:46	7°♏08'18	1°40'32
	8760 Nov 12 05:28	0°♊		max. Earth dist.	8761 Oct 26 09:26	12°♏34'04	1.33133 AU
max. Earth dist.	8760 Nov 12 11:34	0°♊31'07	1.34542 AU	evening rise	8761 Oct 31 10:40	23°♏01'38	
evening rise	8760 Nov 16 20:42	9°♊11'27			8761 Nov 04 00:15	0°♊	
desc. node	8760 Nov 26 03:02	25°♊54'42		desc. node	8761 Nov 13 00:05	15°♊56'43	
	8760 Nov 28 14:15	0°♊			8761 Nov 22 06:53	0°♊	
	8760 Dec 20 21:50	0°♏		evening max el	8761 Dec 04 10:52	14°♊23'34	27°24'50
evening max el	8760 Dec 21 22:19	1°♏00'07	26°54'06	retrograde	8761 Dec 18 01:03	21°♊43'24	
retrograde	8761 Jan 04 03:21	8°♏19'27		evening set	8761 Dec 24 23:54	19°♊09'35	
evening set	8761 Jan 10 17:38	5°♏44'18		min. Earth dist.	8761 Dec 28 19:05	15°♊45'20	0.64171 AU
min. Earth dist.	8761 Jan 14 17:49	1°♏47'14	0.65753 AU	inferior conj	8761 Dec 31 06:52	13°♊08'43	-1°43'57
	8761 Jan 16 07:00	30°♏		minimum elong	8761 Dec 31 10:06	13°♊00'13	1°42'23
inferior conj	8761 Jan 16 18:01	29°♊28'01	-0°37'25	asc. node	8762 Jan 05 11:48	8°♊30'15	
minimum elong	8761 Jan 16 19:05	29°♊24'55	0°36'45	morning rise	8762 Jan 06 22:00	7°♊45'47	
asc. node	8761 Jan 18 14:42	27°♊22'30		direct	8762 Jan 09 09:34	7°♊14'41	
morning rise	8761 Jan 22 21:40	23°♊50'36		morning max el	8762 Jan 15 20:43	10°♊36'46	17°51'16
direct	8761 Jan 25 16:52	23°♊07'41			8762 Jan 29 02:43	0°♏	
morning max el	8761 Feb 01 03:34	26°♊33'38	18°11'19	morning set	8762 Feb 01 18:01	6°♏09'31	
	8761 Feb 04 04:15	0°♏		desc. node	8762 Feb 08 23:29	18°♏18'00	
morning set	8761 Feb 20 00:10	24°♏18'06		superior conj	8762 Feb 14 21:52	28°♏00'33	-0°42'22
desc. node	8761 Feb 22 02:34	27°♏41'48		minimum elong	8762 Feb 14 17:06	27°♏41'18	0°41'33
	8761 Feb 23 12:51	0°♊			8762 Feb 16 03:31	0°♊	
superior conj	8761 Mar 07 02:35	18°♊24'10	-1°25'24	max. Earth dist.	8762 Feb 20 01:36	6°♊15'03	1.44893 AU
minimum elong	8761 Mar 06 17:24	17°♊48'02	1°24'19	evening rise	8762 Mar 02 18:23	22°♊54'24	
max. Earth dist.	8761 Mar 09 06:05	21°♊46'11	1.45514 AU		8762 Mar 07 09:55	0°♏	
	8761 Mar 14 12:31	0°♏			8762 Mar 28 16:03	0°♊	
evening rise	8761 Mar 23 05:31	13°♏33'27		evening max el	8762 Mar 30 08:11	1°♊48'00	20°17'37
	8761 Apr 02 20:33	0°♊		asc. node	8762 Apr 03 10:35	5°♊11'07	
greatest brilliancy	8761 Apr 04 04:39	2°♊01'53	-0.7m	retrograde	8762 Apr 07 05:10	6°♊22'41	
evening max el	8761 Apr 16 05:01	18°♊08'41	19°19'57	evening set	8762 Apr 11 03:14	4°♊53'51	
asc. node	8761 Apr 16 13:26	18°♊29'39			8762 Apr 15 14:01	30°♏	
retrograde	8761 Apr 23 06:37	22°♊08'28		inferior conj	8762 Apr 16 10:59	28°♏49'01	3°11'26
evening set	8761 Apr 26 19:50	20°♊54'53		minimum elong	8762 Apr 16 09:36	28°♏53'43	3°11'10
inferior conj	8761 May 02 06:23	15°♊03'40	3°21'34	min. Earth dist.	8762 Apr 17 05:25	27°♏46'11	0.67740 AU
minimum elong	8761 May 02 05:59	15°♊04'56	3°21'25	morning rise	8762 Apr 21 15:44	22°♏32'12	
min. Earth dist.	8761 May 03 15:07	13°♊17'05	0.66712 AU	direct	8762 Apr 27 07:58	20°♏00'25	
morning rise	8761 May 07 15:47	8°♊45'10		desc. node	8762 May 07 23:23	26°♏03'51	
direct	8761 May 13 20:19	6°♊01'33		morning max el	8762 May 08 18:36	26°♏51'33	24°32'56
desc. node	8761 May 21 02:25	8°♊53'09			8762 May 11 16:40	0°♊	
morning max el	8761 May 26 09:13	13°♊31'01	25°56'43		8762 Jun 02 08:07	0°♏	
	8761 Jun 08 17:26	0°♏		morning set	8762 Jun 13 14:51	18°♏43'08	
	8761 Jun 27 15:48	0°♊		max. Earth dist.	8762 Jun 17 05:57	25°♏11'36	1.37504 AU
morning set	8761 Jul 01 11:35	6°♏53'51			8762 Jun 19 20:39	0°♏	
max. Earth dist.	8761 Jul 05 07:05	14°♏04'35	1.35441 AU	superior conj	8762 Jun 24 02:50	8°♏05'26	-0°59'00
superior conj	8761 Jul 10 19:19	24°♏57'58	-0°26'51	minimum elong	8762 Jun 24 06:31	8°♏23'19	0°58'36
minimum elong	8761 Jul 10 20:54	25°♏06'00	0°26'45	asc. node	8762 Jun 30 09:35	20°♏29'27	
	8761 Jul 13 06:28	0°♏		evening rise	8762 Jul 02 17:30	25°♏08'31	
asc. node	8761 Jul 13 12:34	0°♏31'25			8762 Jul 05 04:30	0°♏	
evening rise	8761 Jul 18 15:20	11°♏05'47		evening max el	8762 Jul 19 10:42	22°♏24'43	19°16'11
	8761 Jul 28 14:46	0°♏		retrograde	8762 Jul 28 15:49	26°♏58'24	
evening max el	8761 Aug 05 19:13	10°♏52'37	20°20'31	evening set	8762 Jul 30 12:38	26°♏47'56	
retrograde	8761 Aug 16 16:45	16°♏16'07					


































































































































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inferior conj	8762 Aug 08 01:56	22°Ω38'17	-1°16'24	evening set	8763 Jul 12 11:09	8°Ω17'05	
minimum elong	8762 Aug 07 22:33	22°Ω43'55	1°15'13	inferior conj	8763 Jul 20 04:58	3°Ω48'39	0°28'55
min. Earth dist.	8762 Aug 10 18:34	20°Ω51'30	0.55925 AU	minimum elong	8763 Jul 20 06:01	3°Ω46'37	0°28'20
morning rise	8762 Aug 16 05:38	17°Ω57'36		desc. node	8763 Jul 21 19:39	2°Ω33'10	
direct	8762 Aug 21 07:23	16°Ω58'40		min. Earth dist.	8763 Jul 23 12:40	1°Ω15'07	0.57711 AU
morning max el	8762 Sep 04 10:26	24°Ω08'10	25°26'57		8763 Jul 25 07:34	30°R☿	
	8762 Sep 09 19:13	0°♊		morning rise	8763 Jul 27 21:20	28°☿30'58	
asc. node	8762 Sep 26 09:19	26°♊36'31		direct	8763 Aug 02 18:19	27°☿03'23	
	8762 Sep 28 02:06	0°♊			8763 Aug 11 09:53	0°Ω	
morning set	8762 Oct 01 10:46	7°♊00'03		morning max el	8763 Aug 17 03:16	4°Ω40'23	26°50'41
					8763 Sep 04 15:40	0°♊	
superior conj	8762 Oct 08 07:23	21°♊59'51	1°34'39	asc. node	8763 Sep 13 06:15	16°♊15'02	
minimum elong	8762 Oct 08 05:53	21°♊51'35	1°34'36	morning set	8763 Sep 15 20:31	21°♊39'10	
max. Earth dist.	8762 Oct 09 14:23	24°♊50'16	1.32171 AU		8763 Sep 19 17:03	0°♊	
	8762 Oct 11 23:20	0°♊					
evening rise	8762 Oct 15 09:42	7°♊15'38		superior conj	8763 Sep 22 19:03	6°♊49'48	1°23'21
	8762 Oct 27 11:44	0°♊		minimum elong	8763 Sep 22 16:58	6°♊38'13	1°23'06
desc. node	8762 Oct 30 21:11	5°♊31'56		max. Earth dist.	8763 Sep 22 23:27	7°♊14'12	1.31675 AU
evening max el	8762 Nov 16 20:29	27°♊16'17	27°26'10	evening rise	8763 Sep 29 15:00	21°♊44'59	
	8762 Nov 20 00:03	0°♊			8763 Oct 03 15:18	0°♊	
retrograde	8762 Nov 30 15:50	4°♊32'03		desc. node	8763 Oct 17 18:17	24°♊28'39	
evening set	8762 Dec 07 18:00	2°♊08'33			8763 Oct 21 17:29	0°♊	
	8762 Dec 10 12:44	30°R♊		evening max el	8763 Oct 30 00:38	9°♊25'42	26°54'07
min. Earth dist.	8762 Dec 11 10:22	29°♊12'13	0.62297 AU	retrograde	8763 Nov 12 22:36	16°♊35'21	
inferior conj	8762 Dec 14 08:25	26°♊28'39	-2°54'38	evening set	8763 Nov 19 19:58	14°♊33'05	
minimum elong	8762 Dec 14 14:00	26°♊15'33	2°52'20	min. Earth dist.	8763 Nov 23 15:03	11°♊54'39	0.60227 AU
morning rise	8762 Dec 21 12:14	21°♊23'26		inferior conj	8763 Nov 26 19:14	9°♊18'29	-4°04'25
asc. node	8762 Dec 23 08:52	21°♊01'14		minimum elong	8763 Nov 27 02:32	9°♊03'28	4°02'04
direct	8762 Dec 23 18:37	21°♊00'29		morning rise	8763 Dec 04 11:33	4°♊33'51	
morning max el	8762 Dec 30 13:43	24°♊28'07	17°48'53	direct	8763 Dec 06 16:01	4°♊15'36	
	8763 Jan 04 01:51	0°♊		asc. node	8763 Dec 10 05:53	5°♊06'55	
morning set	8763 Jan 15 10:25	19°♊05'16		morning max el	8763 Dec 14 03:06	7°♊57'51	18°05'26
	8763 Jan 21 14:36	0°♊			8763 Dec 28 07:21	0°♊	
				morning set	8763 Dec 29 19:06	2°♊46'26	
superior conj	8763 Jan 26 17:32	8°♊48'01	0°00'54				
minimum elong	8763 Jan 26 17:38	8°♊48'27	0°01'04	superior conj	8764 Jan 08 14:00	20°♊46'07	0°37'54
behind sun begin	8763 Jan 26 08:48	8°♊11'06		minimum elong	8764 Jan 08 16:46	20°♊58'28	0°37'42
behind sun end	8763 Jan 27 02:27	9°♊25'42		desc. node	8764 Jan 13 17:23	29°♊44'59	
desc. node	8763 Jan 26 20:26	9°♊00'18			8764 Jan 13 20:54	0°♊	
max. Earth dist.	8763 Feb 02 17:49	20°♊23'39	1.43607 AU	max. Earth dist.	8764 Jan 16 05:11	3°♊57'58	1.41802 AU
	8763 Feb 08 18:46	0°♊		evening rise	8764 Jan 21 12:01	12°♊38'08	
evening rise	8763 Feb 10 07:56	2°♊24'53			8764 Feb 01 17:56	0°♊	
	8763 Feb 28 22:09	0°♊		evening max el	8764 Feb 23 22:45	29°♊10'46	22°45'44
evening max el	8763 Mar 13 05:46	15°♊28'07	21°27'42		8764 Feb 24 18:48	0°♊	
asc. node	8763 Mar 21 07:43	20°♊40'20		retrograde	8764 Mar 04 23:43	5°♊07'47	
retrograde	8763 Mar 22 03:28	20°♊43'46		asc. node	8764 Mar 07 04:49	4°♊43'22	
evening set	8763 Mar 26 11:28	18°♊59'48		evening set	8764 Mar 09 18:53	3°♊08'58	
inferior conj	8763 Mar 31 18:42	12°♊43'43	2°50'36		8764 Mar 12 17:35	30°R♊	
minimum elong	8763 Mar 31 16:41	12°♊50'44	2°50'08	inferior conj	8764 Mar 15 03:30	26°♊44'53	2°20'17
min. Earth dist.	8763 Apr 01 00:02	12°♊25'10	0.68318 AU	minimum elong	8764 Mar 15 01:15	26°♊52'40	2°19'39
morning rise	8763 Apr 05 21:43	6°♊30'20		min. Earth dist.	8764 Mar 14 20:41	27°♊08'30	0.68467 AU
direct	8763 Apr 11 00:17	4°♊16'45		morning rise	8764 Mar 20 07:30	20°♊36'18	
morning max el	8763 Apr 21 04:28	10°♊18'59	23°03'08	direct	8764 Mar 24 20:13	18°♊44'14	
desc. node	8763 Apr 24 20:20	14°♊19'08		morning max el	8764 Apr 02 17:56	23°♊54'57	21°36'30
	8763 May 06 17:47	0°♊			8764 Apr 08 02:28	0°♊	
morning set	8763 May 25 18:26	29°♊25'00		desc. node	8764 Apr 10 17:16	3°♊21'19	
	8763 May 26 02:50	0°♊			8764 Apr 29 02:52	0°♊	
max. Earth dist.	8763 May 30 02:13	6°♊44'21	1.39754 AU	morning set	8764 May 04 18:41	8°♊51'19	
				max. Earth dist.	8764 May 11 02:34	19°♊06'48	1.41926 AU
superior conj	8763 Jun 06 19:22	20°♊28'32	-1°30'01		8764 May 17 13:16	0°♊	
minimum elong	8763 Jun 07 00:53	20°♊53'54	1°29'30				
	8763 Jun 11 21:34	0°♊		superior conj	8764 May 18 16:19	1°♊57'12	-1°55'49
evening rise	8763 Jun 16 11:07	8°♊43'41		minimum elong	8764 May 18 22:03	2°♊22'09	1°55'32
asc. node	8763 Jun 17 06:37	10°♊16'57		evening rise	8764 May 29 16:22	21°♊41'54	
	8763 Jun 28 15:48	0°♊		asc. node	8764 Jun 03 03:39	29°♊49'22	
evening max el	8763 Jul 02 13:11	4°♊39'13	18°32'48		8764 Jun 03 06:02	0°♊	

evening max el	8764 Jun 14 22:51	17°☿27'29	18°09'43	evening set	8765 Jun 07 15:59	3°☿22'09	
retrograde	8764 Jun 21 20:15	20°☿56'45			8765 Jun 12 05:35	30°☿II	
evening set	8764 Jun 24 06:16	20°☿31'32		inferior conj	8765 Jun 13 23:54	28°☿13'33	2°40'57
inferior conj	8764 Jul 01 05:22	15°☿42'35	1°48'28	minimum elong	8765 Jun 14 02:38	28°☿II06'29	2°40'07
minimum elong	8764 Jul 01 08:15	15°☿36'03	1°47'21	min. Earth dist.	8765 Jun 16 22:35	25°☿II11'45	0.62144 AU
min. Earth dist.	8764 Jul 04 13:27	12°☿42'54	0.59898 AU	morning rise	8765 Jun 20 11:21	22°☿II08'09	
desc. node	8764 Jul 07 16:43	10°☿18'50		desc. node	8765 Jun 24 13:46	20°☿II04'48	
morning rise	8764 Jul 08 07:19	9°☿55'49		direct	8765 Jun 27 05:01	19°☿II43'01	
direct	8764 Jul 14 18:28	7°☿56'58		morning max el	8765 Jul 11 08:15	27°☿II44'36	27°55'34
morning max el	8764 Jul 29 02:42	15°☿50'39	27°42'04		8765 Jul 13 11:59	0°☿	
	8764 Aug 09 16:08	0°☿			8765 Aug 03 10:20	0°☿	
	8764 Aug 27 03:18	0°☿		morning set	8765 Aug 14 03:30	20°☿II12'55	
morning set	8764 Aug 30 02:45	6°☿05'18		asc. node	8765 Aug 17 00:07	26°☿II09'00	
asc. node	8764 Aug 30 03:11	6°☿07'35			8765 Aug 18 19:30	0°☿	
max. Earth dist.	8764 Sep 05 09:12	19°☿37'39	1.31648 AU	max. Earth dist.	8765 Aug 19 15:57	1°☿50'11	1.32089 AU
superior conj	8764 Sep 06 06:32	21°☿35'41	1°06'56	superior conj	8765 Aug 21 16:01	6°☿11'48	0°45'45
minimum elong	8764 Sep 06 04:18	21°☿23'16	1°06'31	minimum elong	8765 Aug 21 14:07	6°☿01'28	0°45'18
	8764 Sep 10 01:41	0°☿		evening rise	8765 Aug 28 11:38	21°☿05'19	
evening rise	8764 Sep 13 00:18	6°☿23'33			8765 Sep 01 18:22	0°☿	
	8764 Sep 25 06:25	0°☿		desc. node	8765 Sep 20 12:29	29°☿II21'13	
desc. node	8764 Oct 03 15:23	12°☿31'55			8765 Sep 21 03:11	0°☿	
evening max el	8764 Oct 10 21:14	20°☿44'49	25°49'07	evening max el	8765 Sep 22 10:32	1°☿18'22	24°19'10
retrograde	8764 Oct 24 19:24	27°☿47'31		retrograde	8765 Oct 06 04:15	8°☿11'48	
evening set	8764 Oct 31 00:56	26°☿16'23		evening set	8765 Oct 11 05:21	7°☿15'36	
min. Earth dist.	8764 Nov 04 09:52	23°☿40'29	0.58153 AU	min. Earth dist.	8765 Oct 16 21:21	4°☿23'51	0.56336 AU
inferior conj	8764 Nov 07 11:53	21°☿28'42	-5°03'33	inferior conj	8765 Oct 19 08:17	2°☿52'08	-5°35'54
minimum elong	8764 Nov 07 18:33	21°☿16'48	5°02'10	minimum elong	8765 Oct 19 10:05	2°☿49'20	5°35'43
morning rise	8764 Nov 15 14:28	17°☿06'32			8765 Oct 24 10:28	30°☿II	
direct	8764 Nov 17 21:43	16°☿49'39		morning rise	8765 Oct 27 16:55	28°☿II51'26	
asc. node	8764 Nov 26 02:53	20°☿40'43		direct	8765 Oct 30 08:26	28°☿II32'51	
morning max el	8764 Nov 26 09:09	20°☿55'35	18°42'32		8765 Nov 04 20:57	0°☿	
	8764 Dec 03 07:58	0°☿		morning max el	8765 Nov 09 04:23	3°☿11'41	19°41'50
morning set	8764 Dec 12 15:00	16°☿58'08		asc. node	8765 Nov 12 23:53	7°☿28'33	
	8764 Dec 19 08:09	0°☿			8765 Nov 26 00:34	0°☿	
superior conj	8764 Dec 21 06:57	3°☿41'59	1°06'13	morning set	8765 Nov 26 18:29	1°☿30'07	
minimum elong	8764 Dec 21 10:17	3°☿57'39	1°06'01	superior conj	8765 Dec 04 15:26	17°☿22'11	1°25'40
max. Earth dist.	8764 Dec 28 12:24	16°☿51'20	1.39693 AU	minimum elong	8765 Dec 04 18:04	17°☿35'14	1°25'38
desc. node	8764 Dec 30 14:21	20°☿28'19		max. Earth dist.	8765 Dec 10 18:33	29°☿II08'14	1.37524 AU
evening rise	8765 Jan 01 13:18	23°☿48'16			8765 Dec 11 05:44	0°☿	
	8765 Jan 05 07:05	0°☿		evening rise	8765 Dec 14 12:00	5°☿54'51	
	8765 Jan 25 14:11	0°☿		desc. node	8765 Dec 17 11:21	11°☿II06'45	
evening max el	8765 Feb 05 12:59	12°☿56'52	24°05'56		8765 Dec 29 05:29	0°☿	
retrograde	8765 Feb 16 16:35	19°☿29'43		evening max el	8766 Jan 19 02:13	26°☿II45'16	25°21'31
evening set	8765 Feb 21 23:57	17°☿16'58			8766 Jan 22 17:48	0°☿	
asc. node	8765 Feb 22 01:55	17°☿12'45		retrograde	8766 Jan 31 05:05	3°☿II44'53	
min. Earth dist.	8765 Feb 26 17:03	11°☿51'07	0.68206 AU	evening set	8766 Feb 06 01:08	1°☿II20'04	
inferior conj	8765 Feb 27 11:30	10°☿48'41	1°41'08		8766 Feb 07 11:14	30°☿II	
minimum elong	8765 Feb 27 09:29	10°☿55'30	1°40'30	asc. node	8766 Feb 08 23:00	28°☿II20'21	
morning rise	8765 Mar 04 19:04	4°☿46'29		min. Earth dist.	8766 Feb 10 10:54	26°☿II29'02	0.67552 AU
direct	8765 Mar 08 18:31	3°☿16'36		inferior conj	8766 Feb 11 16:54	24°☿II52'09	0°53'35
morning max el	8765 Mar 16 14:14	7°☿42'24	20°19'52	minimum elong	8766 Feb 11 15:37	24°☿II56'15	0°53'13
desc. node	8765 Mar 28 14:10	22°☿57'08		morning rise	8766 Feb 17 06:28	18°☿II58'01	
	8765 Apr 02 10:16	0°☿		direct	8766 Feb 20 17:42	17°☿II48'54	
morning set	8765 Apr 13 20:43	17°☿19'34		morning max el	8766 Feb 27 18:36	21°☿II41'45	19°17'17
	8765 Apr 21 22:32	0°☿			8766 Mar 06 14:37	0°☿	
max. Earth dist.	8765 Apr 23 10:32	2°☿23'58	1.43745 AU	greatest brilliancy	8766 Mar 12 19:05	8°☿II56'46	-0.7m
superior conj	8765 Apr 29 13:29	12°☿22'04	-2°10'44	desc. node	8766 Mar 15 11:05	12°☿II57'47	
minimum elong	8765 Apr 29 15:56	12°☿32'13	2°10'49	morning set	8766 Mar 23 20:38	25°☿II50'29	
	8765 May 09 23:11	0°☿			8766 Mar 26 13:09	0°☿	
evening rise	8765 May 12 04:37	3°☿II52'02		max. Earth dist.	8766 Apr 06 01:15	16°☿II23'49	1.44990 AU
asc. node	8765 May 21 00:41	19°☿II00'19		superior conj	8766 Apr 09 10:40	21°☿II46'00	-2°08'32
	8765 May 28 20:47	0°☿		minimum elong	8766 Apr 09 06:16	21°☿II28'30	2°08'28
evening max el	8765 May 29 11:52	0°☿38'43	18°05'59		8766 Apr 14 14:03	0°☿	
retrograde	8765 Jun 04 22:24	3°☿59'16		evening rise	8766 Apr 23 19:30	15°☿II06'01	

	8766 May 02 20:47	0°♊			8767 Apr 07 08:48	0°♄	
asc. node	8766 May 07 21:44	7°♊42'53		greatest brilliancy	8767 Apr 13 12:58	9°♄44'56	-0.8m
evening max el	8766 May 13 01:02	14°♊04'46	18°20'51	asc. node	8767 Apr 24 18:50	25°♄48'11	
retrograde	8766 May 19 10:47	17°♊30'58		evening max el	8767 Apr 26 11:42	27°♄39'26	18°53'34
evening set	8766 May 22 11:41	16°♊40'26			8767 Apr 29 05:55	0°♊	
inferior conj	8766 May 28 08:28	11°♊13'54	3°10'28	retrograde	8767 May 03 05:27	1°♊24'04	
minimum elong	8766 May 28 10:06	11°♊09'12	3°10'04	evening set	8767 May 06 13:53	0°♊19'11	
min. Earth dist.	8766 May 30 17:07	8°♊30'47	0.64200 AU		8767 May 07 01:08	30°♄	
morning rise	8766 Jun 03 07:26	4°♊58'42		inferior conj	8767 May 12 03:16	24°♄36'31	3°21'47
direct	8766 Jun 10 00:12	2°♊17'11		minimum elong	8767 May 12 03:34	24°♄35'32	3°21'36
desc. node	8766 Jun 11 10:48	2°♊23'58		min. Earth dist.	8767 May 13 20:41	22°♄26'31	0.65909 AU
morning max el	8766 Jun 23 17:45	10°♊17'21	27°32'17	morning rise	8767 May 17 16:41	18°♄17'50	
	8766 Jul 09 05:08	0°♅		direct	8767 May 24 02:50	15°♄31'36	
	8766 Jul 26 20:02	0°♌		desc. node	8767 May 29 07:50	17°♄00'36	
morning set	8766 Jul 28 20:17	3°♌54'49		morning max el	8767 Jun 06 04:26	23°♄17'30	26°38'17
max. Earth dist.	8766 Aug 02 15:42	13°♌40'39	1.33010 AU		8767 Jun 12 03:15	0°♊	
asc. node	8766 Aug 03 21:04	16°♌14'33			8767 Jul 02 13:04	0°♅	
				morning set	8767 Jul 12 02:00	17°♅02'44	
superior conj	8766 Aug 05 21:31	20°♌32'01	0°20'16	max. Earth dist.	8767 Jul 16 05:17	25°♅04'04	1.34418 AU
minimum elong	8766 Aug 05 20:33	20°♌26'47	0°19'55		8767 Jul 18 16:11	0°♌	
	8766 Aug 10 06:56	0°♎					
evening rise	8766 Aug 12 23:05	5°♎43'55		superior conj	8767 Jul 20 20:50	4°♌30'20	-0°08'51
	8766 Aug 25 20:47	0°♏		minimum elong	8767 Jul 20 21:20	4°♌32'56	0°08'57
evening max el	8766 Sep 03 22:01	11°♏29'37	22°39'31	behind sun begin	8767 Jul 20 16:28	4°♌07'45	
desc. node	8766 Sep 07 09:37	14°♏28'27		behind sun end	8767 Jul 21 02:12	4°♌58'09	
retrograde	8766 Sep 17 00:58	18°♏02'34		asc. node	8767 Jul 21 18:02	6°♌20'27	
evening set	8766 Sep 20 13:47	17°♏35'08		evening rise	8767 Jul 28 08:44	20°♌13'52	
min. Earth dist.	8766 Sep 28 05:32	14°♏10'12	0.55081 AU		8767 Aug 02 04:23	0°♎	
inferior conj	8766 Sep 29 10:14	13°♏29'22	-5°21'56	evening max el	8767 Aug 16 17:01	21°♎56'08	21°06'35
minimum elong	8766 Sep 29 04:22	13°♏37'43	5°21'09	desc. node	8767 Aug 25 06:45	27°♎22'13	
morning rise	8766 Oct 07 20:53	9°♏41'17		retrograde	8767 Aug 28 13:46	27°♎48'59	
direct	8766 Oct 11 01:00	9°♏18'16		evening set	8767 Aug 30 21:32	27°♎36'19	
morning max el	8766 Oct 22 10:36	14°♏38'56	21°03'20	inferior conj	8767 Sep 09 02:54	23°♎39'35	-4°12'23
asc. node	8766 Oct 30 20:51	25°♏14'14		minimum elong	8767 Sep 08 17:15	23°♎53'12	4°09'45
	8766 Nov 02 17:56	0°♐		min. Earth dist.	8767 Sep 09 14:18	23°♎23'29	0.54668 AU
morning set	8766 Nov 11 02:44	16°♐13'28		morning rise	8767 Sep 17 13:26	19°♎45'22	
	8766 Nov 17 16:59	0°♑		direct	8767 Sep 21 09:09	19°♎13'58	
				morning max el	8767 Oct 04 05:14	25°♎21'17	22°42'38
superior conj	8766 Nov 18 11:00	1°♑33'11	1°36'59		8767 Oct 08 12:57	0°♏	
minimum elong	8766 Nov 18 12:26	1°♑40'33	1°37'05	asc. node	8767 Oct 17 17:51	13°♏44'27	
max. Earth dist.	8766 Nov 23 03:53	11°♑02'50	1.35531 AU		8767 Oct 26 01:49	0°♐	
evening rise	8766 Nov 27 04:56	18°♑49'03		morning set	8767 Oct 26 13:39	1°♐02'15	
	8766 Dec 03 10:09	0°♒					
desc. node	8766 Dec 04 08:22	1°♒35'13		superior conj	8767 Nov 02 14:16	16°♐05'05	1°41'02
	8766 Dec 23 09:09	0°♓		minimum elong	8767 Nov 02 14:24	16°♐05'48	1°41'11
evening max el	8767 Jan 01 15:21	10°♓30'23	26°25'26	max. Earth dist.	8767 Nov 05 20:34	22°♐57'20	1.33886 AU
retrograde	8767 Jan 14 12:33	17°♓46'10			8767 Nov 09 07:38	0°♑	
evening set	8767 Jan 20 20:42	15°♓12'59		evening rise	8767 Nov 10 12:18	2°♑21'39	
min. Earth dist.	8767 Jan 25 00:03	10°♓56'33	0.66511 AU	desc. node	8767 Nov 21 05:24	21°♑48'34	
inferior conj	8767 Jan 26 17:40	8°♓50'38	-0°02'01		8767 Nov 26 07:46	0°♒	
minimum elong	8767 Jan 26 17:43	8°♓50'29	0°01'49	evening max el	8767 Dec 15 04:25	24°♒04'39	27°10'23
transit middle	8767 Jan 26 17:43	8°♓50'29	0°01'49		8767 Dec 23 02:52	0°♓	
transit begin	8767 Jan 26 14:51	8°♓59'13		retrograde	8767 Dec 28 14:14	1°♓25'57	
transit end	8767 Jan 26 20:36	8°♓41'47			8768 Jan 02 15:17	30°♄	
asc. node	8767 Jan 26 20:06	8°♓43'16		evening set	8768 Jan 04 08:33	28°♄50'12	
morning rise	8767 Feb 01 15:35	3°♓06'38		min. Earth dist.	8768 Jan 08 06:21	25°♄07'28	0.65113 AU
direct	8767 Feb 04 16:04	2°♓15'20		inferior conj	8768 Jan 10 11:37	22°♄39'27	-1°04'59
morning max el	8767 Feb 11 05:53	5°♓47'54	18°30'38	minimum elong	8768 Jan 10 13:33	22°♄34'04	1°03'56
	8767 Feb 28 06:27	0°♋		asc. node	8768 Jan 13 17:13	19°♄18'36	
desc. node	8767 Mar 02 08:00	3°♋16'05		morning rise	8768 Jan 16 19:58	17°♄07'57	
morning set	8767 Mar 03 17:07	5°♋27'13		direct	8768 Jan 19 11:31	16°♄30'41	
	8767 Mar 19 07:38	0°♌		morning max el	8768 Jan 25 21:42	19°♄54'07	18°00'40
					8768 Feb 02 14:17	0°♓	
superior conj	8767 Mar 19 16:56	0°♌36'25	-1°46'08	morning set	8768 Feb 12 19:04	16°♓31'48	
minimum elong	8767 Mar 19 07:31	29°♋59'34	1°45'18	desc. node	8768 Feb 17 04:54	23°♓46'43	
max. Earth dist.	8767 Mar 19 19:41	0°♌47'09	1.45529 AU		8768 Feb 21 00:45	0°♋	
evening rise	8767 Apr 04 10:45	25°♌22'13					

superior conj	8768 Feb 27 02:21	9° H 42'31	-1°07'46	desc. node	8769 Feb 03 01:49	14° \approx 25'50	
minimum elong	8768 Feb 26 18:40	9° H 12'00	1°06'43				
max. Earth dist.	8768 Mar 01 15:08	15° H 16'59	1.45328 AU	superior conj	8769 Feb 06 07:23	19° \approx 47'32	-0°23'33
	8768 Mar 11 01:55	0° Y		minimum elong	8769 Feb 06 04:52	19° \approx 37'12	0°23'01
evening rise	8768 Mar 14 06:00	4° Y 53'49		max. Earth dist.	8769 Feb 12 09:21	29° \approx 38'34	1.44417 AU
greatest brilliancy	8768 Mar 28 01:20	25° Y 54'39	-0.7m		8769 Feb 12 14:44	0° H	
	8768 Mar 30 20:41	0° B		evening rise	8769 Feb 21 17:13	14° H 14'18	
evening max el	8768 Apr 08 17:58	11° B 17'45	19°42'50		8769 Mar 04 03:37	0° Y	
asc. node	8768 Apr 10 15:57	13° B 04'06		evening max el	8769 Mar 22 18:50	24° Y 57'56	20°46'15
retrograde	8768 Apr 16 03:14	15° B 31'38		asc. node	8769 Mar 28 13:06	29° Y 16'56	
evening set	8768 Apr 19 19:59	14° B 11'48		retrograde	8769 Mar 31 01:47	29° Y 49'14	
inferior conj	8768 Apr 25 05:02	8° B 14'42	3°18'42	evening set	8769 Apr 04 03:56	28° Y 14'03	
minimum elong	8768 Apr 25 04:12	8° B 17'31	3°18'31	inferior conj	8769 Apr 09 11:14	22° Y 04'23	3°03'50
min. Earth dist.	8768 Apr 26 07:38	6° B 46'06	0.67198 AU	minimum elong	8769 Apr 09 09:32	22° Y 10'14	3°03'29
morning rise	8768 Apr 30 12:04	1° B 56'28		min. Earth dist.	8769 Apr 10 00:01	21° Y 20'17	0.68041 AU
	8768 May 03 07:39	30° K Y		morning rise	8769 Apr 14 14:54	15° Y 48'57	
direct	8768 May 06 11:40	29° Y 16'36		direct	8769 Apr 20 01:33	13° Y 24'02	
	8768 May 09 21:28	0° B		morning max el	8769 Apr 30 23:16	19° Y 54'53	23°54'53
desc. node	8768 May 15 04:50	3° B 23'08		desc. node	8769 May 02 01:46	21° Y 03'39	
morning max el	8768 May 18 14:12	6° B 32'11	25°22'26		8769 May 09 13:20	0° B	
	8768 Jun 05 18:41	0° II			8769 May 29 22:53	0° II	
morning set	8768 Jun 23 16:21	29° II 24'22		morning set	8769 Jun 05 10:09	10° II 46'18	
	8768 Jun 24 00:14	0° B		max. Earth dist.	8769 Jun 09 04:41	17° II 21'01	1.38457 AU
max. Earth dist.	8768 Jun 27 08:03	6° B 07'51	1.36278 AU		8769 Jun 16 02:27	0° B	
superior conj	8768 Jul 03 11:05	17° B 58'43	-0°40'25	superior conj	8769 Jun 16 12:46	0° B 48'47	-1°12'30
minimum elong	8768 Jul 03 13:32	18° B 10'58	0°40'11	minimum elong	8769 Jun 16 17:19	1° B 10'22	1°12'00
asc. node	8768 Jul 07 15:01	26° B 22'17		asc. node	8769 Jun 24 12:01	16° B 16'19	
	8768 Jul 09 09:42	0° B		evening rise	8769 Jun 25 13:13	18° B 19'57	
evening rise	8768 Jul 11 14:19	4° B 28'05			8769 Jul 01 16:09	0° B	
	8768 Jul 26 07:37	0° B		evening max el	8769 Jul 11 21:41	14° B 53'41	18°55'09
evening max el	8768 Jul 29 01:02	3° B 02'28	19°50'35	retrograde	8769 Jul 20 11:01	19° B 08'11	
retrograde	8768 Aug 08 05:03	8° B 03'41		evening set	8769 Jul 22 09:50	18° B 55'49	
evening set	8768 Aug 10 01:49	7° B 54'18		desc. node	8769 Jul 29 01:01	15° B 44'37	
desc. node	8768 Aug 11 03:54	7° B 40'35		inferior conj	8769 Jul 30 15:04	14° B 38'35	-0°29'05
inferior conj	8768 Aug 19 00:28	3° B 53'16	-2°23'38	minimum elong	8769 Jul 30 13:50	14° B 40'44	0°28'47
minimum elong	8768 Aug 18 17:55	4° B 03'17	2°21'19	min. Earth dist.	8769 Aug 02 16:08	12° B 30'08	0.56625 AU
min. Earth dist.	8768 Aug 21 01:24	2° B 38'27	0.55217 AU	morning rise	8769 Aug 07 14:35	9° B 42'07	
	8768 Aug 26 03:02	30° K B		direct	8769 Aug 13 01:08	8° B 31'42	
morning rise	8768 Aug 27 08:10	29° B 33'15		morning max el	8769 Aug 27 07:13	15° B 53'22	26°05'45
direct	8768 Aug 31 22:42	28° B 46'35			8769 Sep 07 17:53	0° B	
	8768 Sep 06 15:43	0° B		asc. node	8769 Sep 20 11:43	22° B 15'33	
morning max el	8768 Sep 14 17:40	5° B 36'09	24°28'53		8769 Sep 24 05:43	0° B	
	8768 Oct 02 02:52	0° B		morning set	8769 Sep 24 12:23	0° B 35'25	
asc. node	8768 Oct 03 14:48	2° B 47'47					
morning set	8768 Oct 10 01:25	15° B 51'14		superior conj	8769 Oct 01 09:27	15° B 39'00	1°30'29
superior conj	8768 Oct 16 22:29	0° B 49'23	1°38'40	minimum elong	8769 Oct 01 07:39	15° B 29'03	1°30'22
minimum elong	8768 Oct 16 21:30	0° B 44'00	1°38'44	max. Earth dist.	8769 Oct 02 04:49	17° B 26'07	1.31911 AU
	8768 Oct 16 13:27	0° B		evening rise	8769 Oct 08 08:31	0° B 44'33	
max. Earth dist.	8768 Oct 18 21:34	5° B 05'09	1.32670 AU		8769 Oct 08 00:02	0° B	
evening rise	8768 Oct 24 06:31	16° B 23'05			8769 Oct 24 07:57	0° B	
	8768 Oct 31 07:44	0° B		desc. node	8769 Oct 24 23:35	1° B 00'27	
desc. node	8768 Nov 07 02:29	11° B 40'09		evening max el	8769 Nov 08 24:00	19° B 53'26	27°16'47
	8768 Nov 19 23:32	0° B		retrograde	8769 Nov 22 20:31	27° B 05'45	
evening max el	8768 Nov 26 16:09	7° B 17'05	27°29'25	evening set	8769 Nov 29 21:49	24° B 50'18	
retrograde	8768 Dec 10 09:16	14° B 35'45		min. Earth dist.	8769 Dec 03 14:35	22° B 03'01	0.61431 AU
evening set	8768 Dec 17 10:05	12° B 05'24		inferior conj	8769 Dec 06 15:48	19° B 21'00	-3°24'48
min. Earth dist.	8768 Dec 21 03:47	8° B 53'32	0.63397 AU	minimum elong	8769 Dec 06 22:17	19° B 06'37	3°22'22
inferior conj	8768 Dec 23 20:04	6° B 12'35	-2°13'40	morning rise	8769 Dec 14 01:02	14° B 23'54	
minimum elong	8768 Dec 24 00:19	6° B 01'55	2°11'45	direct	8769 Dec 16 06:14	14° B 03'14	
morning rise	8768 Dec 30 16:29	0° B 56'32		asc. node	8769 Dec 17 11:22	14° B 09'38	
asc. node	8768 Dec 30 14:19	0° B 58'37		morning max el	8769 Dec 23 06:59	17° B 35'56	17°53'30
direct	8769 Jan 02 01:27	0° B 29'24			8770 Jan 01 03:11	0° B	
morning max el	8769 Jan 08 15:09	3° B 53'07	17°48'00	morning set	8770 Jan 07 23:26	12° B 10'40	
morning set	8769 Jan 24 23:23	28° B 53'24			8770 Jan 17 22:45	0° B	
	8769 Jan 25 14:47	0° B		superior conj	8770 Jan 18 13:54	1° B 05'39	0°17'35

minimum elong	8770 Jan 18 15:26	1° \approx 12'17	0°17'33		8770 Dec 24 14:30	0° \approx	
desc. node	8770 Jan 20 22:44	5° \approx 09'14					
max. Earth dist.	8770 Jan 26 00:07	13° \approx 35'45	1.42894 AU	superior conj	8770 Dec 31 19:47	13° \approx 30'24	0°51'00
evening rise	8770 Feb 01 11:40	23° \approx 59'57		minimum elong	8770 Dec 31 22:59	13° \approx 45'04	0°50'46
	8770 Feb 05 08:19	0° \approx		desc. node	8771 Jan 07 19:43	25° \approx 53'41	
	8770 Feb 26 05:27	0° \approx		max. Earth dist.	8771 Jan 08 09:50	26° \approx 54'07	1.40932 AU
evening max el	8770 Mar 05 14:21	8° \approx 38'50	22°00'15		8771 Jan 10 05:46	0° \approx	
retrograde	8770 Mar 14 23:15	14° \approx 11'47		evening rise	8771 Jan 13 00:24	4° \approx 36'17	
asc. node	8770 Mar 15 10:14	14° \approx 10'44			8771 Jan 29 14:03	0° \approx	
evening set	8770 Mar 19 11:59	12° \approx 21'15		evening max el	8771 Feb 16 05:46	22° \approx 21'52	23°19'53
inferior conj	8770 Mar 24 19:36	6° \approx 01'30	2°38'50	retrograde	8771 Feb 26 18:14	28° \approx 35'13	
minimum elong	8770 Mar 24 17:26	6° \approx 09'02	2°38'18	asc. node	8771 Mar 02 07:20	27° \approx 33'35	
min. Earth dist.	8770 Mar 24 19:38	6° \approx 01'22	0.68437 AU	evening set	8771 Mar 03 18:34	26° \approx 30'00	
morning rise	8770 Mar 29 22:44	29° \approx 50'14		min. Earth dist.	8771 Mar 08 16:21	20° \approx 44'25	0.68407 AU
	8770 Mar 29 18:18	30° \approx 38'38		inferior conj	8771 Mar 09 04:15	20° \approx 03'27	2°04'41
direct	8770 Apr 03 19:26	27° \approx 45'38		minimum elong	8771 Mar 09 02:03	20° \approx 11'03	2°04'03
	8770 Apr 09 12:10	0° \approx		morning rise	8771 Mar 14 09:29	13° \approx 57'35	
morning max el	8770 Apr 13 10:11	3° \approx 24'59	22°25'29	direct	8771 Mar 18 16:22	12° \approx 15'15	
desc. node	8770 Apr 18 22:41	9° \approx 40'07		morning max el	8771 Mar 27 02:24	17° \approx 05'40	21°02'24
	8770 May 03 15:32	0° \approx		desc. node	8771 Apr 05 19:35	28° \approx 57'22	
morning set	8770 May 17 02:13	20° \approx 55'30			8771 Apr 06 13:49	0° \approx	
max. Earth dist.	8770 May 22 02:34	29° \approx 14'58	1.40706 AU	morning set	8771 Apr 26 15:31	29° \approx 52'05	
	8770 May 22 13:12	0° \approx			8771 Apr 26 17:32	0° \approx	
				max. Earth dist.	8771 May 04 06:08	12° \approx 01'16	1.42751 AU
superior conj	8770 May 29 21:32	12° \approx 49'47	-1°41'53				
minimum elong	8770 May 30 03:27	13° \approx 16'22	1°41'26	superior conj	8771 May 11 08:39	23° \approx 50'54	-2°03'51
	8770 Jun 08 04:40	0° \approx		minimum elong	8771 May 11 13:31	24° \approx 11'37	2°03'45
evening rise	8770 Jun 09 02:04	1° \approx 40'36			8771 May 14 22:32	0° \approx	
asc. node	8770 Jun 11 09:04	5° \approx 58'06		evening rise	8771 May 23 00:40	14° \approx 19'18	
evening max el	8770 Jun 25 03:39	27° \approx 23'31	18°20'32	asc. node	8771 May 29 06:06	25° \approx 12'55	
	8770 Jun 28 12:55	0° \approx			8771 Jun 01 00:08	0° \approx	
retrograde	8770 Jul 02 12:24	1° \approx 05'09		evening max el	8771 Jun 08 15:06	10° \approx 21'50	18°05'50
evening set	8770 Jul 04 17:58	0° \approx 45'37		retrograde	8771 Jun 15 06:47	13° \approx 46'00	
	8770 Jul 06 15:58	30° \approx 38'38		evening set	8771 Jun 17 19:54	13° \approx 16'08	
inferior conj	8770 Jul 12 03:26	26° \approx 08'03	1°06'06	inferior conj	8771 Jun 24 12:03	8° \approx 18'36	2°13'50
minimum elong	8770 Jul 12 05:34	26° \approx 03'36	1°05'08	minimum elong	8771 Jun 24 15:02	8° \approx 11'24	2°12'48
min. Earth dist.	8770 Jul 15 12:39	23° \approx 20'48	0.58611 AU	min. Earth dist.	8771 Jun 27 16:58	5° \approx 15'01	0.60850 AU
desc. node	8770 Jul 15 22:05	23° \approx 02'27		morning rise	8771 Jul 01 07:37	2° \approx 22'18	
morning rise	8770 Jul 19 13:52	20° \approx 36'46		desc. node	8771 Jul 02 19:09	1° \approx 30'16	
direct	8770 Jul 25 17:33	18° \approx 56'10		direct	8771 Jul 07 22:18	0° \approx 11'21	
morning max el	8770 Aug 09 02:53	26° \approx 40'47	27°17'06	morning max el	8771 Jul 22 05:21	8° \approx 10'17	27°52'39
	8770 Aug 12 06:37	0° \approx			8771 Aug 07 21:33	0° \approx	
	8770 Sep 01 05:46	0° \approx		morning set	8771 Aug 24 01:06	29° \approx 02'30	
asc. node	8770 Sep 07 08:38	12° \approx 01'02			8771 Aug 24 06:59	0° \approx	
morning set	8770 Sep 08 20:55	15° \approx 10'19		asc. node	8771 Aug 25 05:33	1° \approx 57'50	
				max. Earth dist.	8771 Aug 29 23:52	12° \approx 13'04	1.31774 AU
superior conj	8770 Sep 15 21:16	0° \approx 28'14	1°16'59				
minimum elong	8770 Sep 15 19:03	0° \approx 15'57	1°16'40	superior conj	8771 Aug 31 08:07	15° \approx 10'32	0°58'32
max. Earth dist.	8770 Sep 15 14:54	29° \approx 52'54	1.31611 AU	minimum elong	8771 Aug 31 05:57	14° \approx 58'39	0°58'04
	8770 Sep 15 16:11	0° \approx		evening rise	8771 Sep 07 02:12	29° \approx 59'23	
evening rise	8770 Sep 22 15:49	15° \approx 19'05			8771 Sep 07 02:19	0° \approx	
	8770 Sep 29 22:53	0° \approx			8771 Sep 23 09:54	0° \approx	
desc. node	8770 Oct 11 20:42	19° \approx 37'03		desc. node	8771 Sep 28 17:49	7° \approx 11'54	
	8770 Oct 20 07:52	0° \approx		evening max el	8771 Oct 03 18:00	12° \approx 39'05	25°13'02
evening max el	8770 Oct 22 01:06	1° \approx 41'59	26°30'06	retrograde	8771 Oct 17 15:17	19° \approx 39'22	
retrograde	8770 Nov 04 23:02	8° \approx 48'23		evening set	8771 Oct 23 10:14	18° \approx 22'51	
evening set	8770 Nov 11 15:28	6° \approx 58'05		min. Earth dist.	8771 Oct 28 05:48	15° \approx 42'28	0.57334 AU
min. Earth dist.	8770 Nov 15 14:35	4° \approx 23'13	0.59341 AU	inferior conj	8771 Oct 31 03:24	13° \approx 45'42	-5°21'43
inferior conj	8770 Nov 18 19:18	1° \approx 55'17	-4°31'34	minimum elong	8771 Oct 31 08:33	13° \approx 37'00	5°20'54
minimum elong	8770 Nov 19 02:44	1° \approx 40'52	4°29'31	morning rise	8771 Nov 08 09:13	9° \approx 33'27	
	8770 Nov 21 09:16	30° \approx 38'38		direct	8771 Nov 10 19:08	9° \approx 16'21	
morning rise	8770 Nov 26 16:26	27° \approx 20'16		morning max el	8771 Nov 19 19:40	13° \approx 34'59	19°05'00
direct	8770 Nov 28 21:35	27° \approx 02'53		asc. node	8771 Nov 21 05:19	15° \approx 01'26	
asc. node	8770 Dec 04 08:20	28° \approx 15'43			8771 Dec 01 02:35	0° \approx	
	8770 Dec 05 18:18	0° \approx		morning set	8771 Dec 06 12:54	10° \approx 27'23	
morning max el	8770 Dec 06 17:43	0° \approx 53'34	18°18'36				
morning set	8770 Dec 22 13:25	26° \approx 06'24		superior conj	8771 Dec 14 19:57	26° \approx 46'50	1°15'31

minimum elong	8771 Dec 14 23:06	27°  01'56	1°15'21	superior conj	8772 Nov 27 09:36	10°  41'02	1°31'24
	8771 Dec 16 12:26	0°  3		minimum elong	8772 Nov 27 11:45	10°  51'56	1°31'26
max. Earth dist.	8771 Dec 21 15:37	9°  28'30	1.38761 AU	max. Earth dist.	8772 Dec 02 22:13	21°  31'47	1.36646 AU
evening rise	8771 Dec 25 11:02	16°  310'52		evening rise	8772 Dec 06 17:57	28°  38'52	
desc. node	8771 Dec 25 16:42	16°  35'20			8772 Dec 07 11:52	0°  3	
	8772 Jan 02 19:54	0°  ≈		desc. node	8772 Dec 11 13:43	7°  309'57	
	8772 Jan 24 04:48	0°  ✕			8772 Dec 26 03:26	0°  ≈	
evening max el	8772 Jan 29 19:14	6°  ✕08'34	24°39'02	evening max el	8773 Jan 11 08:28	19°  ≈56'37	25°50'40
retrograde	8772 Feb 10 09:32	12°  ✕54'55		retrograde	8773 Jan 23 20:05	27°  ≈04'35	
evening set	8772 Feb 15 22:13	10°  ✕36'40		evening set	8773 Jan 29 21:15	24°  ≈35'57	
asc. node	8772 Feb 17 04:25	9°  ✕25'30		min. Earth dist.	8773 Feb 03 04:16	19°  ≈59'23	0.67150 AU
min. Earth dist.	8772 Feb 20 12:00	5°  ✕25'29	0.67970 AU	asc. node	8773 Feb 03 01:32	20°  ≈07'54	
inferior conj	8772 Feb 21 11:24	4°  ✕07'38	1°21'57	inferior conj	8773 Feb 04 15:07	18°  ≈09'36	0°30'56
minimum elong	8772 Feb 21 09:38	4°  ✕13'31	1°21'25	minimum elong	8773 Feb 04 14:20	18°  ≈12'04	0°30'47
	8772 Feb 24 19:37	30°  R≈		morning rise	8773 Feb 10 07:56	12°  ≈19'13	
morning rise	8772 Feb 26 21:13	28°  ≈08'33		direct	8773 Feb 13 14:23	11°  ≈18'02	
direct	8772 Mar 01 15:12	26°  ≈47'57		morning max el	8773 Feb 20 09:39	15°  ≈01'01	18°55'21
	8772 Mar 08 01:23	0°  ✕			8773 Mar 03 17:53	0°  ✕	
morning max el	8772 Mar 09 02:11	0°  ✕58'37	19°51'20	desc. node	8773 Mar 09 13:24	8°  ✕53'18	
greatest brilliancy	8772 Mar 22 03:15	17°  ✕56'04	-0.6m	morning set	8773 Mar 14 20:00	17°  ✕04'50	
desc. node	8772 Mar 22 16:30	18°  ✕44'38			8773 Mar 23 02:55	0°  Y	
	8772 Mar 30 04:51	0°  Y		max. Earth dist.	8773 Mar 29 09:06	9°  Y47'26	1.45311 AU
morning set	8772 Apr 04 13:32	8°  Y12'17					
max. Earth dist.	8772 Apr 15 16:38	25°  Y36'16	1.44346 AU	superior conj	8773 Mar 31 08:22	12°  Y53'06	-2°01'28
	8772 Apr 18 10:39	0°  8		minimum elong	8773 Mar 31 01:09	12°  Y24'44	2°01'04
					8773 Apr 11 02:37	0°  8	
superior conj	8772 Apr 20 19:15	3°  848'21	-2°12'13	evening rise	8773 Apr 15 09:08	6°  854'20	
minimum elong	8772 Apr 20 19:03	3°  847'33	2°12'20		8773 Apr 29 23:12	0°  II	
evening rise	8772 May 04 04:21	26°  806'11		asc. node	8773 May 02 00:16	2°  II49'37	
	8772 May 06 11:12	0°  II		evening max el	8773 May 05 17:01	7°  II10'36	18°32'43
asc. node	8772 May 15 03:10	14°  II21'51		retrograde	8773 May 12 05:03	10°  II42'47	
evening max el	8772 May 22 04:33	23°  II40'14	18°10'09	evening set	8773 May 15 09:10	9°  II46'11	
retrograde	8772 May 28 13:43	27°  II01'36		inferior conj	8773 May 21 02:24	4°  II12'48	3°17'12
evening set	8772 May 31 10:21	26°  II19'03		minimum elong	8773 May 21 03:28	4°  II09'35	3°16'55
inferior conj	8772 Jun 06 13:05	21°  II02'56	2°55'56	min. Earth dist.	8773 May 23 04:39	1°  II42'21	0.64981 AU
minimum elong	8772 Jun 06 15:24	20°  II56'37	2°55'19		8773 May 24 17:07	30°  R8	
min. Earth dist.	8772 Jun 09 06:16	18°  II06'30	0.63047 AU	morning rise	8773 May 26 20:56	27°  855'45	
morning rise	8772 Jun 12 18:52	14°  II52'20		direct	8773 Jun 02 11:41	25°  810'36	
desc. node	8772 Jun 18 16:11	12°  II20'53		desc. node	8773 Jun 05 13:13	25°  841'24	
direct	8772 Jun 19 13:03	12°  II18'27			8773 Jun 12 15:07	0°  II	
morning max el	8772 Jul 03 12:53	20°  II21'35	27°49'52	morning max el	8773 Jun 15 22:56	3°  II06'02	27°12'31
	8772 Jul 11 19:29	0°  ☾			8773 Jul 06 03:59	0°  ☾	
	8772 Jul 30 22:28	0°  Ω		morning set	8773 Jul 21 11:16	26°  ☾54'44	
morning set	8772 Aug 06 22:48	13°  Ω26'54			8773 Jul 23 01:06	0°  Ω	
asc. node	8772 Aug 11 02:31	22°  Ω01'24		max. Earth dist.	8773 Jul 25 23:20	5°  Ω53'10	1.33548 AU
max. Earth dist.	8772 Aug 12 03:51	24°  Ω15'52	1.32415 AU	asc. node	8773 Jul 28 23:30	12°  Ω07'20	
superior conj	8772 Aug 14 16:10	29°  Ω40'29	0°35'28	superior conj	8773 Jul 29 19:21	13°  Ω51'53	0°08'20
minimum elong	8772 Aug 14 14:36	29°  Ω31'57	0°35'01	minimum elong	8773 Jul 29 18:56	13°  Ω49'39	0°08'04
	8772 Aug 14 19:46	0°  ൬		behind sun begin	8773 Jul 29 14:05	13°  Ω24'02	
evening rise	8772 Aug 21 13:47	14°  ൬40'00		behind sun end	8773 Jul 29 23:47	14°  Ω15'18	
	8772 Aug 29 04:19	0°  ♌		evening rise	8773 Aug 06 00:42	29°  Ω15'12	
evening max el	8772 Sep 14 05:35	22°  ♌59'07	23°36'59		8773 Aug 06 09:13	0°  ൬	
desc. node	8772 Sep 14 14:57	23°  ♌21'28			8773 Aug 23 20:24	0°  ♌	
retrograde	8772 Sep 27 19:09	29°  ♌45'58		evening max el	8773 Aug 26 19:26	3°  ♌13'06	21°58'31
evening set	8772 Oct 02 04:44	29°  ♌03'42		desc. node	8773 Sep 01 12:05	7°  ♌35'48	
min. Earth dist.	8772 Oct 08 15:44	25°  ♌59'25	0.55715 AU	retrograde	8773 Sep 08 11:09	9°  ♌30'32	
inferior conj	8772 Oct 10 15:23	24°  ♌48'28	-5°36'39	evening set	8773 Sep 11 09:52	9°  ♌11'09	
minimum elong	8772 Oct 10 13:57	24°  ♌50'36	5°36'31	inferior conj	8773 Sep 20 11:54	5°  ♌11'05	-4°58'57
morning rise	8772 Oct 19 01:13	20°  ♌54'26		minimum elong	8773 Sep 20 03:33	5°  ♌22'46	4°57'19
direct	8772 Oct 21 21:30	20°  ♌34'23		min. Earth dist.	8773 Sep 19 23:50	5°  ♌27'58	0.54791 AU
morning max el	8772 Nov 01 09:31	25°  ♌30'41	20°13'49	morning rise	8773 Sep 28 22:38	1°  ♌22'58	
	8772 Nov 05 10:10	0°  ♌		direct	8773 Oct 02 09:22	0°  ♌56'44	
asc. node	8772 Nov 07 02:18	2°  ♌15'24		morning max el	8773 Oct 14 10:14	6°  ♌37'10	21°43'49
morning set	8772 Nov 19 18:41	25°  ♌04'33		asc. node	8773 Oct 24 23:17	20°  ♌21'44	
	8772 Nov 22 04:13	0°  ♌			8773 Oct 30 07:34	0°  ♌	
				morning set	8773 Nov 04 04:23	9°  ♌51'28	

superior conj	8773 Nov 11 08:51	25° \mathbb{M} 02'19	1°39'31	superior conj	8774 Oct 26 14:30	9° \mathbb{M} 40'15	1°40'46
minimum elong	8773 Nov 11 09:43	25° \mathbb{M} 06'53	1°39'40	minimum elong	8774 Oct 26 14:08	9° \mathbb{M} 38'15	1°40'54
	8773 Nov 13 18:14	0° \mathbb{X}		max. Earth dist.	8774 Oct 29 07:19	15° \mathbb{M} 26'39	1.33311 AU
max. Earth dist.	8773 Nov 15 10:47	3° \mathbb{X} 26'14	1.34788 AU	evening rise	8774 Nov 03 05:56	25° \mathbb{M} 36'56	
evening rise	8773 Nov 19 17:35	11° \mathbb{X} 51'19			8774 Nov 05 11:31	0° \mathbb{X}	
desc. node	8773 Nov 28 10:46	27° \mathbb{X} 33'11		desc. node	8774 Nov 15 07:49	17° \mathbb{X} 38'21	
	8773 Nov 29 21:50	0° \mathbb{Z}			8774 Nov 23 08:07	0° \mathbb{Z}	
	8773 Dec 21 09:02	0° \approx		evening max el	8774 Dec 07 10:38	17° \mathbb{Z} 05'59	27°21'55
evening max el	8773 Dec 24 21:57	3° \approx 39'37	26°47'18	retrograde	8774 Dec 20 23:46	24° \mathbb{Z} 26'25	
retrograde	8774 Jan 07 01:00	10° \approx 58'00		evening set	8774 Dec 27 21:37	21° \mathbb{Z} 51'42	
evening set	8774 Jan 13 13:49	8° \approx 23'11		min. Earth dist.	8774 Dec 31 17:23	18° \mathbb{Z} 22'53	0.64429 AU
min. Earth dist.	8774 Jan 17 14:50	4° \approx 21'10	0.65965 AU	inferior conj	8775 Jan 03 03:34	15° \mathbb{Z} 48'05	-1°33'29
inferior conj	8774 Jan 19 13:19	2° \approx 05'13	-0°27'51	minimum elong	8775 Jan 03 06:27	15° \mathbb{Z} 40'24	1°32'04
minimum elong	8774 Jan 19 14:06	2° \approx 02'56	0°27'19	asc. node	8775 Jan 07 19:42	11° \mathbb{Z} 27'07	
asc. node	8774 Jan 20 22:37	0° \approx 29'28		morning rise	8775 Jan 09 16:55	10° \mathbb{Z} 22'56	
	8774 Jan 21 09:19	30° \mathbb{R} \mathbb{Z}		direct	8775 Jan 12 05:28	9° \mathbb{Z} 50'22	
morning rise	8774 Jan 25 15:25	26° \mathbb{Z} 26'00		morning max el	8775 Jan 18 16:05	13° \mathbb{Z} 12'23	17°53'07
direct	8774 Jan 28 11:58	25° \mathbb{Z} 40'59			8775 Jan 30 10:15	0° \approx	
morning max el	8774 Feb 03 23:10	29° \mathbb{Z} 08'07	18°15'46	morning set	8775 Feb 04 18:50	8° \approx 59'13	
	8774 Feb 04 19:19	0° \approx		desc. node	8775 Feb 11 07:14	19° \approx 52'19	
morning set	8774 Feb 23 04:57	27° \approx 19'32			8775 Feb 17 12:13	0° \mathbb{H}	
desc. node	8774 Feb 24 10:20	29° \approx 17'37					
	8774 Feb 24 20:53	0° \mathbb{H}		superior conj	8775 Feb 18 05:49	1° \mathbb{H} 10'49	-0°49'06
				minimum elong	8775 Feb 18 00:15	0° \mathbb{H} 48'25	0°48'13
superior conj	8774 Mar 10 13:32	21° \mathbb{H} 43'27	-1°31'15	max. Earth dist.	8775 Feb 23 00:24	8° \mathbb{H} 46'53	1.45029 AU
minimum elong	8774 Mar 10 04:03	21° \mathbb{H} 06'17	1°30'13	evening rise	8775 Mar 06 05:01	26° \mathbb{H} 11'18	
max. Earth dist.	8774 Mar 12 04:50	24° \mathbb{H} 17'26	1.45545 AU		8775 Mar 08 16:45	0° \mathbb{Y}	
	8774 Mar 15 20:28	0° \mathbb{Y}		greatest brilliancy	8775 Mar 21 02:43	18° \mathbb{Y} 38'00	-0.6m
evening rise	8774 Mar 26 14:59	16° \mathbb{Y} 49'00			8775 Mar 29 09:02	0° \mathbb{B}	
	8774 Apr 04 02:02	0° \mathbb{B}		evening max el	8775 Apr 02 06:00	4° \mathbb{B} 26'05	20°08'11
greatest brilliancy	8774 Apr 06 21:07	4° \mathbb{B} 17'43	-0.8m	asc. node	8775 Apr 05 18:29	7° \mathbb{B} 26'10	
asc. node	8774 Apr 18 21:23	20° \mathbb{B} 35'19		retrograde	8775 Apr 09 23:49	8° \mathbb{B} 55'19	
evening max el	8774 Apr 19 02:03	20° \mathbb{B} 47'14	19°12'35	evening set	8775 Apr 13 20:28	7° \mathbb{B} 28'50	
retrograde	8774 Apr 26 01:21	24° \mathbb{B} 42'45		inferior conj	8775 Apr 19 04:27	1° \mathbb{B} 25'50	3°13'44
evening set	8774 Apr 29 13:20	23° \mathbb{B} 31'21		minimum elong	8775 Apr 19 03:12	1° \mathbb{B} 30'05	3°13'28
inferior conj	8774 May 05 00:30	17° \mathbb{B} 42'13	3°22'02	min. Earth dist.	8775 Apr 20 00:57	0° \mathbb{B} 16'17	0.67611 AU
minimum elong	8774 May 05 00:18	17° \mathbb{B} 42'53	3°21'52		8775 Apr 20 05:47	30° \mathbb{R} \mathbb{Y}	
min. Earth dist.	8774 May 06 11:26	15° \mathbb{B} 49'29	0.66520 AU	morning rise	8775 Apr 24 09:42	25° \mathbb{Y} 08'32	
morning rise	8774 May 10 10:51	11° \mathbb{B} 23'34		direct	8775 Apr 30 03:50	22° \mathbb{Y} 34'29	
direct	8774 May 16 16:54	8° \mathbb{B} 39'04		desc. node	8775 May 10 07:11	28° \mathbb{Y} 05'30	
desc. node	8774 May 23 10:13	11° \mathbb{B} 06'39		morning max el	8775 May 11 18:52	29° \mathbb{Y} 32'37	24°46'03
morning max el	8774 May 29 09:19	16° \mathbb{B} 13'06	26°08'04		8775 May 12 05:34	0° \mathbb{B}	
	8774 Jun 09 18:41	0° \mathbb{I}			8775 Jun 03 14:39	0° \mathbb{I}	
	8774 Jun 29 01:12	0° \mathbb{E}		morning set	8775 Jun 16 17:18	21° \mathbb{I} 42'03	
morning set	8774 Jul 04 10:58	9° \mathbb{E} 43'42		max. Earth dist.	8775 Jun 20 08:06	28° \mathbb{I} 12'15	1.37177 AU
max. Earth dist.	8774 Jul 08 08:19	17° \mathbb{E} 06'36	1.35163 AU		8775 Jun 21 07:31	0° \mathbb{E}	
superior conj	8774 Jul 13 15:10	27° \mathbb{E} 37'58	-0°22'03	superior conj	8775 Jun 27 00:33	10° \mathbb{E} 51'08	-0°54'08
minimum elong	8774 Jul 13 16:28	27° \mathbb{E} 44'31	0°22'00	minimum elong	8775 Jun 27 03:55	11° \mathbb{E} 07'35	0°53'45
	8774 Jul 14 18:56	0° \mathbb{Q}		asc. node	8775 Jul 02 17:30	22° \mathbb{E} 10'53	
asc. node	8774 Jul 15 20:30	2° \mathbb{Q} 11'43		evening rise	8775 Jul 05 12:04	27° \mathbb{E} 45'06	
evening rise	8774 Jul 21 08:56	13° \mathbb{Q} 39'04			8775 Jul 06 15:06	0° \mathbb{Q}	
	8774 Jul 29 19:20	0° \mathbb{P}		evening max el	8775 Jul 22 09:07	25° \mathbb{Q} 19'02	19°24'23
evening max el	8774 Aug 08 19:32	13° \mathbb{P} 53'42	20°31'48	retrograde	8775 Jul 31 20:05	29° \mathbb{Q} 59'40	
desc. node	8774 Aug 19 09:13	19° \mathbb{P} 24'19		evening set	8775 Aug 02 16:29	29° \mathbb{Q} 49'42	
retrograde	8774 Aug 19 23:18	19° \mathbb{P} 25'12		desc. node	8775 Aug 06 06:20	28° \mathbb{Q} 39'34	
evening set	8774 Aug 22 00:25	19° \mathbb{P} 14'49		inferior conj	8775 Aug 11 08:28	25° \mathbb{Q} 42'35	-1°33'53
inferior conj	8774 Aug 31 04:42	15° \mathbb{P} 17'43	-3°29'10	minimum elong	8775 Aug 11 04:15	25° \mathbb{Q} 49'26	1°32'23
minimum elong	8774 Aug 30 19:42	15° \mathbb{P} 30'43	3°26'18	min. Earth dist.	8775 Aug 13 21:31	24° \mathbb{Q} 03'47	0.55716 AU
min. Earth dist.	8774 Sep 01 08:59	14° \mathbb{P} 36'51	0.54781 AU	morning rise	8775 Aug 19 13:21	21° \mathbb{Q} 07'18	
morning rise	8774 Sep 08 14:35	11° \mathbb{P} 15'06		direct	8775 Aug 24 12:08	20° \mathbb{Q} 11'50	
direct	8774 Sep 12 17:58	10° \mathbb{P} 38'20		morning max el	8775 Sep 07 13:36	27° \mathbb{Q} 16'45	25°12'24
morning max el	8774 Sep 26 01:15	17° \mathbb{P} 03'52	23°28'03		8775 Sep 10 05:28	0° \mathbb{P}	
	8774 Oct 06 10:29	0° \mathbb{U}		asc. node	8775 Sep 28 17:13	28° \mathbb{P} 21'34	
asc. node	8774 Oct 11 20:16	9° \mathbb{U} 07'00			8775 Sep 29 13:15	0° \mathbb{U}	
morning set	8774 Oct 19 15:54	24° \mathbb{U} 41'04		morning set	8775 Oct 04 03:31	9° \mathbb{U} 28'30	
	8774 Oct 22 03:23	0° \mathbb{M}					

superior conj	8775 Oct 11 00:07	24° Ω 27'29	1°35'52		8776 Sep 04 21:40	0° Υ	
minimum elong	8775 Oct 10 22:45	24° Ω 19'56	1°35'52	asc. node	8776 Sep 14 14:08	17° Υ 57'18	
max. Earth dist.	8775 Oct 12 11:11	27° Ω 39'42	1.32283 AU	morning set	8776 Sep 17 13:36	24° Υ 08'50	
	8775 Oct 13 12:58	0° Υ			8776 Sep 20 06:44	0° Ω	
evening rise	8775 Oct 18 03:46	9° Υ 47'20					
	8775 Oct 28 19:18	0° Υ		superior conj	8776 Sep 24 11:40	9° Ω 17'27	1°25'24
desc. node	8775 Nov 02 04:54	7° Υ 17'44		minimum elong	8776 Sep 24 09:38	9° Ω 06'13	1°25'11
	8775 Nov 19 19:18	0° Ω		max. Earth dist.	8776 Sep 24 19:48	10° Ω 02'37	1.31721 AU
evening max el	8775 Nov 19 20:46	0° Ω 03'28	27°28'03	evening rise	8776 Oct 01 08:16	24° Ω 14'48	
retrograde	8775 Dec 03 15:44	7° Ω 20'24			8776 Oct 04 02:58	0° Υ	
evening set	8775 Dec 10 17:45	4° Ω 54'44		desc. node	8776 Oct 19 02:01	26° Υ 21'02	
min. Earth dist.	8775 Dec 14 10:17	1° Ω 54'40	0.62586 AU		8776 Oct 21 14:48	0° Υ	
	8775 Dec 16 10:40	30° Υ 47'20		evening max el	8776 Nov 01 02:00	12° Υ 20'23	27°01'09
inferior conj	8775 Dec 17 06:58	29° Υ 11'14	-2°43'50	retrograde	8776 Nov 14 23:49	19° Υ 30'47	
minimum elong	8775 Dec 17 12:13	28° Υ 58'42	2°41'38	evening set	8776 Nov 21 22:25	17° Υ 24'54	
morning rise	8775 Dec 24 08:52	24° Υ 03'11		min. Earth dist.	8776 Nov 25 16:39	14° Υ 44'30	0.60537 AU
asc. node	8775 Dec 25 16:45	23° Υ 43'35		inferior conj	8776 Nov 28 20:13	12° Υ 06'21	-3°54'18
direct	8775 Dec 26 15:46	23° Υ 39'19		minimum elong	8776 Nov 29 03:22	11° Υ 51'21	3°51'53
morning max el	8776 Jan 02 09:18	27° Υ 05'44	17°48'04	morning rise	8776 Dec 06 10:45	7° Υ 18'20	
	8776 Jan 04 22:53	0° Ω		direct	8776 Dec 08 15:15	6° Υ 59'34	
morning set	8776 Jan 18 08:18	21° Ω 46'27		asc. node	8776 Dec 11 13:46	7° Υ 34'57	
	8776 Jan 23 00:30	0° \approx		morning max el	8776 Dec 15 23:25	10° Υ 39'15	18°01'42
desc. node	8776 Jan 29 04:08	10° \approx 33'37			8776 Dec 28 17:04	0° Ω	
				morning set	8776 Dec 31 14:57	5° Ω 22'14	
superior conj	8776 Jan 29 21:36	11° \approx 47'04	-0°05'23				
minimum elong	8776 Jan 29 21:06	11° \approx 44'55	0°05'07	superior conj	8777 Jan 10 14:38	23° Ω 35'24	0°32'48
behind sun begin	8776 Jan 29 12:29	11° \approx 08'45		minimum elong	8777 Jan 10 17:09	23° Ω 46'32	0°32'38
behind sun end	8776 Jan 30 05:42	12° \approx 21'00			8777 Jan 14 06:50	0° \approx	
max. Earth dist.	8776 Feb 05 16:59	22° \approx 58'33	1.43833 AU	desc. node	8777 Jan 15 01:05	1° \approx 18'11	
	8776 Feb 10 02:52	0° Υ		max. Earth dist.	8777 Jan 18 05:15	6° \approx 39'17	1.42097 AU
evening rise	8776 Feb 13 17:26	5° Υ 37'46		evening rise	8777 Jan 23 18:50	15° \approx 43'51	
	8776 Mar 01 01:23	0° Υ			8777 Feb 02 00:08	0° Υ	
evening max el	8776 Mar 15 04:21	18° Υ 05'56	21°16'42		8777 Feb 24 04:41	0° Υ	
asc. node	8776 Mar 22 15:36	23° Υ 07'06		evening max el	8777 Feb 25 22:01	1° Υ 48'35	22°33'48
retrograde	8776 Mar 23 22:12	23° Υ 15'21		retrograde	8777 Mar 07 18:47	7° Υ 39'16	
evening set	8776 Mar 28 04:37	21° Υ 33'43		asc. node	8777 Mar 09 12:42	7° Υ 24'00	
inferior conj	8776 Apr 02 11:48	15° Υ 19'14	2°54'25	evening set	8777 Mar 12 12:14	5° Υ 42'39	
minimum elong	8776 Apr 02 09:52	15° Υ 25'59	2°53'58		8777 Mar 17 08:56	30° Υ 47'20	
min. Earth dist.	8776 Apr 02 19:04	14° Υ 53'59	0.68259 AU	inferior conj	8777 Mar 17 20:34	29° Υ 19'39	2°25'27
morning rise	8776 Apr 07 14:53	9° Υ 05'09		minimum elong	8777 Mar 17 18:19	29° Υ 27'26	2°24'51
direct	8776 Apr 12 19:34	6° Υ 48'26		min. Earth dist.	8777 Mar 17 15:32	29° Υ 37'07	0.68477 AU
morning max el	8776 Apr 23 04:22	12° Υ 58'28	23°16'29	morning rise	8777 Mar 23 00:15	23° Υ 10'19	
desc. node	8776 Apr 26 04:06	16° Υ 11'59		direct	8777 Mar 27 15:05	21° Υ 14'51	
	8776 May 06 20:56	0° Ω		morning max el	8777 Apr 05 17:00	26° Υ 32'40	21°48'52
	8776 May 26 11:36	0° Υ			8777 Apr 08 21:18	0° Υ	
morning set	8776 May 28 00:41	2° Υ 34'26		desc. node	8777 Apr 13 01:00	5° Υ 07'48	
max. Earth dist.	8776 Jun 01 03:58	9° Υ 37'50	1.39417 AU		8777 Apr 30 09:44	0° Ω	
				morning set	8777 May 08 04:55	12° Ω 11'13	
superior conj	8776 Jun 08 19:32	23° Υ 21'16	-1°25'33	max. Earth dist.	8777 May 14 03:30	21° Ω 52'20	1.41624 AU
minimum elong	8776 Jun 09 00:50	23° Υ 45'51	1°25'02		8777 May 18 22:55	0° Υ	
	8776 Jun 12 08:33	0° Ω					
evening rise	8776 Jun 18 07:07	11° Ω 24'32		superior conj	8777 May 21 19:40	4° Υ 58'24	-1°52'27
asc. node	8776 Jun 18 14:30	12° Ω 00'05		minimum elong	8777 May 22 01:33	5° Υ 24'13	1°52'08
	8776 Jun 28 14:54	0° Ω		evening rise	8777 Jun 01 14:26	24° Υ 28'27	
evening max el	8776 Jul 04 10:14	7° Ω 27'50	18°37'58		8777 Jun 04 14:39	0° Ω	
retrograde	8776 Jul 12 10:07	11° Ω 26'22		asc. node	8777 Jun 05 11:31	1° Ω 34'51	
evening set	8776 Jul 14 11:26	11° Ω 11'31		evening max el	8777 Jun 17 19:03	20° Ω 11'18	18°11'55
inferior conj	8776 Jul 22 08:13	6° Ω 46'11	0°14'28	retrograde	8777 Jun 24 18:57	23° Ω 43'10	
minimum elong	8776 Jul 22 08:45	6° Ω 45'09	0°14'04	evening set	8777 Jun 27 03:52	23° Ω 19'29	
transit middle	8776 Jul 22 08:45	6° Ω 45'09	0°14'04	inferior conj	8777 Jul 04 05:32	18° Ω 33'23	1°38'12
transit begin	8776 Jul 22 06:59	6° Ω 48'30		minimum elong	8777 Jul 04 08:18	18° Ω 27'16	1°37'06
transit end	8776 Jul 22 10:32	6° Ω 41'47		min. Earth dist.	8777 Jul 07 14:16	15° Ω 36'14	0.59562 AU
desc. node	8776 Jul 23 03:26	6° Ω 09'35		desc. node	8777 Jul 10 00:30	13° Ω 43'48	
min. Earth dist.	8776 Jul 25 14:45	4° Ω 18'29	0.57417 AU	morning rise	8777 Jul 11 09:43	12° Ω 50'25	
morning rise	8776 Jul 30 02:33	1° Ω 33'48		direct	8777 Jul 17 19:14	10° Ω 56'12	
direct	8776 Aug 04 21:04	0° Ω 10'41		morning max el	8777 Aug 01 03:45	18° Ω 47'31	27°36'48
morning max el	8776 Aug 19 05:24	7° Ω 44'06	26°39'57		8777 Aug 10 14:37	0° Ω	

	8777 Aug 28 14:38	0°♎		morning max el	8778 Jul 14 08:40	0°♊35'43	27°56'06
asc. node	8777 Sep 01 11:03	7°♎48'00			8778 Aug 04 17:46	0°♎	
morning set	8777 Sep 01 20:28	8°♎37'11		morning set	8778 Aug 16 22:14	22°♎48'23	
max. Earth dist.	8777 Sep 08 05:49	22°♎27'24	1.31624 AU	asc. node	8778 Aug 19 08:01	27°♎48'37	
					8778 Aug 20 08:48	0°♎	
superior conj	8777 Sep 08 23:16	24°♎04'11	1°09'45	max. Earth dist.	8778 Aug 22 13:23	4°♎43'05	1.31991 AU
minimum elong	8777 Sep 08 21:02	23°♎51'43	1°09'21				
	8777 Sep 11 15:27	0°♏		superior conj	8778 Aug 24 09:12	8°♎42'25	0°49'17
evening rise	8777 Sep 15 17:07	8°♏52'29		minimum elong	8778 Aug 24 07:14	8°♎31'34	0°48'49
	8777 Sep 26 12:37	0°♏		evening rise	8778 Aug 31 04:18	23°♎34'25	
desc. node	8777 Oct 05 23:09	14°♏33'38			8778 Sep 03 05:40	0°♏	
evening max el	8777 Oct 13 23:54	23°♏47'22	26°00'41		8778 Sep 21 11:00	0°♏	
	8777 Oct 23 06:48	0°♐		desc. node	8778 Sep 22 20:17	1°♏36'00	
retrograde	8777 Oct 27 22:01	0°♐50'45		evening max el	8778 Sep 25 13:59	4°♏26'28	24°33'34
	8777 Nov 01 12:16	30°♏♏		retrograde	8778 Oct 09 08:45	11°♏21'56	
evening set	8777 Nov 03 06:49	29°♏14'29		evening set	8778 Oct 14 14:58	10°♏20'28	
min. Earth dist.	8777 Nov 07 12:44	26°♏39'28	0.58454 AU	min. Earth dist.	8778 Oct 20 00:58	7°♏32'20	0.56581 AU
inferior conj	8777 Nov 10 15:48	24°♏23'05	-4°55'57	inferior conj	8778 Oct 22 15:15	5°♏53'40	-5°33'33
minimum elong	8777 Nov 10 22:47	24°♏10'20	4°54'20	minimum elong	8778 Oct 22 18:03	5°♏49'11	5°33'15
morning rise	8777 Nov 18 17:04	19°♏57'29		morning rise	8778 Oct 30 23:19	1°♏50'16	
direct	8777 Nov 20 23:38	19°♏40'33		direct	8778 Nov 02 13:16	1°♏32'10	
asc. node	8777 Nov 28 10:46	22°♏56'10		morning max el	8778 Nov 12 03:53	6°♏05'15	19°31'33
morning max el	8777 Nov 29 06:47	23°♏42'13	18°35'39	asc. node	8778 Nov 15 07:46	9°♏33'47	
	8777 Dec 04 09:44	0°♐			8778 Nov 27 11:56	0°♐	
morning set	8777 Dec 15 09:28	19°♐30'12		morning set	8778 Nov 29 12:00	3°♐59'32	
	8777 Dec 20 19:47	0°♑					
superior conj	8777 Dec 24 04:53	6°♑23'35	1°02'29	superior conj	8778 Dec 07 11:22	19°♐57'57	1°23'15
minimum elong	8777 Dec 24 08:14	6°♑39'12	1°02'16	minimum elong	8778 Dec 07 14:09	20°♐11'40	1°23'11
max. Earth dist.	8777 Dec 31 13:16	19°♑39'53	1.40019 AU		8778 Dec 12 17:07	0°♑	
desc. node	8778 Jan 01 22:04	22°♑01'51		max. Earth dist.	8778 Dec 13 19:11	2°♑00'42	1.37843 AU
evening rise	8778 Jan 04 16:52	26°♑45'11		evening rise	8778 Dec 17 12:30	8°♑43'20	
	8778 Jan 06 15:52	0°♒		desc. node	8778 Dec 19 19:06	12°♑41'08	
	8778 Jan 26 15:28	0°♒			8778 Dec 30 11:35	0°♒	
evening max el	8778 Feb 08 12:34	15°♒34'05	23°54'02	evening max el	8779 Jan 22 01:45	29°♒21'37	25°10'47
retrograde	8778 Feb 19 12:12	22°♒01'52			8779 Jan 22 17:37	0°♒	
asc. node	8778 Feb 24 09:48	20°♒07'23		retrograde	8779 Feb 03 01:29	6°♒18'15	
evening set	8778 Feb 24 17:46	19°♒50'59		evening set	8779 Feb 08 19:40	3°♒54'55	
min. Earth dist.	8778 Mar 01 12:02	14°♒20'07	0.68276 AU	asc. node	8779 Feb 11 06:55	1°♒25'20	
inferior conj	8778 Mar 02 04:48	13°♒23'06	1°47'36		8779 Feb 12 11:11	30°♒♒	
minimum elong	8778 Mar 02 02:44	13°♒30'11	1°46'59	min. Earth dist.	8779 Feb 13 06:25	28°♒58'44	0.67673 AU
morning rise	8778 Mar 07 11:41	7°♒19'58		inferior conj	8779 Feb 14 10:43	27°♒26'31	1°01'18
direct	8778 Mar 11 13:04	5°♒46'52		minimum elong	8779 Feb 14 09:18	27°♒31'09	1°00'54
morning max el	8778 Mar 19 12:14	10°♒18'28	20°30'28	morning rise	8779 Feb 19 23:16	21°♒31'09	
desc. node	8778 Mar 30 21:55	24°♒39'00		direct	8779 Feb 23 12:11	20°♒19'12	
	8778 Apr 03 15:10	0°♓		morning max el	8779 Mar 02 15:28	24°♒16'15	19°25'38
morning set	8778 Apr 17 09:26	20°♓45'35			8779 Mar 07 13:49	0°♓	
	8778 Apr 23 06:50	0°♓		greatest brilliancy	8779 Mar 15 11:05	11°♓07'47	-0.7m
max. Earth dist.	8778 Apr 26 10:36	5°♓02'55	1.43508 AU	desc. node	8779 Mar 17 18:49	14°♓36'07	
				morning set	8779 Mar 27 08:04	29°♓11'28	
superior conj	8778 May 02 20:35	15°♓33'04	-2°09'26		8779 Mar 27 20:39	0°♓	
minimum elong	8778 May 02 23:49	15°♓46'31	2°09'29	max. Earth dist.	8779 Apr 09 00:20	18°♓56'58	1.44843 AU
	8778 May 11 08:25	0°♔					
evening rise	8778 May 15 05:34	6°♔46'40		superior conj	8779 Apr 12 21:04	25°♓05'01	-2°10'11
asc. node	8778 May 23 08:35	20°♔49'37		minimum elong	8779 Apr 12 17:46	24°♓51'52	2°10'10
	8778 May 29 10:27	0°♕			8779 Apr 15 22:35	0°♓	
evening max el	8778 Jun 01 07:47	3°♕19'39	18°05'20	evening rise	8779 Apr 26 23:55	18°♓09'35	
retrograde	8778 Jun 07 19:19	6°♕40'43			8779 May 04 02:44	0°♔	
evening set	8778 Jun 10 11:45	6°♕05'31		asc. node	8779 May 10 05:40	9°♔37'12	
inferior conj	8778 Jun 16 21:40	0°♕59'37	2°34'33	evening max el	8779 May 15 21:07	16°♔43'56	18°17'29
minimum elong	8778 Jun 17 00:30	0°♕52'25	2°33'40	retrograde	8779 May 22 06:30	20°♔08'37	
	8778 Jun 17 20:59	30°♔♔		evening set	8779 May 25 06:14	19°♔20'14	
min. Earth dist.	8778 Jun 19 22:05	27°♔56'44	0.61811 AU	inferior conj	8779 May 31 04:27	13°♔56'19	3°07'14
morning rise	8778 Jun 23 11:10	24°♔56'14		minimum elong	8779 May 31 06:16	13°♔51'08	3°06'46
desc. node	8778 Jun 26 21:33	23°♔08'02		min. Earth dist.	8779 Jun 02 15:22	11°♔09'09	0.63909 AU
direct	8778 Jun 30 04:15	22°♔34'39		morning rise	8779 Jun 06 05:04	7°♔41'59	
	8778 Jul 13 18:09	0°♕		direct	8779 Jun 12 22:21	5°♔02'03	
				desc. node	8779 Jun 13 18:35	5°♔04'22	

morning max el	8779 Jun 26 17:51	13° Π 03'39	27°37'55	morning rise	8780 May 19 12:36	20° \mathcal{B} 57'40	
	8779 Jul 10 07:41	0° \mathcal{B}		direct	8780 May 26 00:05	18° \mathcal{B} 11'15	
	8779 Jul 28 07:00	0° \mathcal{O}		desc. node	8780 May 30 15:35	19° \mathcal{B} 22'08	
morning set	8779 Jul 31 16:25	6° \mathcal{O} 34'40		morning max el	8780 Jun 08 04:27	26° \mathcal{B} 00'21	26°47'52
max. Earth dist.	8779 Aug 05 14:22	16° \mathcal{O} 37'00	1.32838 AU		8780 Jun 11 20:38	0° Π	
asc. node	8779 Aug 06 04:59	17° \mathcal{O} 53'50			8780 Jul 02 20:59	0° \mathcal{B}	
				morning set	8780 Jul 13 23:58	19° \mathcal{B} 48'03	
superior conj	8779 Aug 08 15:27	23° \mathcal{O} 05'15	0°24'25	max. Earth dist.	8780 Jul 18 05:23	28° \mathcal{B} 03'15	1.34178 AU
minimum elong	8779 Aug 08 14:17	22° \mathcal{O} 59'03	0°24'01		8780 Jul 19 04:37	0° \mathcal{O}	
	8779 Aug 11 20:12	0° \mathcal{M}					
evening rise	8779 Aug 15 15:51	8° \mathcal{M} 13'38		superior conj	8780 Jul 22 15:50	7° \mathcal{O} 07'10	-0°04'15
	8779 Aug 26 23:19	0° \mathcal{B}		minimum elong	8780 Jul 22 16:05	7° \mathcal{O} 08'25	0°04'23
evening max el	8779 Sep 07 01:07	14° \mathcal{B} 38'31	22°54'19	behind sun begin	8780 Jul 22 10:31	6° \mathcal{O} 39'31	
desc. node	8779 Sep 09 17:26	17° \mathcal{B} 00'35		behind sun end	8780 Jul 22 21:38	7° \mathcal{O} 37'21	
retrograde	8779 Sep 20 07:27	21° \mathcal{B} 15'58		asc. node	8780 Jul 23 01:58	7° \mathcal{O} 59'59	
evening set	8779 Sep 24 01:31	20° \mathcal{B} 45'08		evening rise	8780 Jul 30 01:53	22° \mathcal{O} 44'55	
min. Earth dist.	8779 Oct 01 09:31	17° \mathcal{B} 25'56	0.55220 AU		8780 Aug 02 14:38	0° \mathcal{M}	
inferior conj	8779 Oct 02 19:34	16° \mathcal{B} 37'00	-5°27'40	evening max el	8780 Aug 18 18:33	25° \mathcal{M} 00'42	21°19'32
minimum elong	8779 Oct 02 14:48	16° \mathcal{B} 43'53	5°27'08		8780 Aug 25 21:34	0° \mathcal{B}	
morning rise	8779 Oct 11 06:05	12° \mathcal{B} 47'58		desc. node	8780 Aug 26 14:33	0° \mathcal{B} 16'04	
direct	8779 Oct 14 08:00	12° \mathcal{B} 25'52		retrograde	8780 Aug 30 20:43	1° \mathcal{B} 00'16	
morning max el	8779 Oct 25 12:09	17° \mathcal{B} 40'06	20°49'51	evening set	8780 Sep 02 07:41	0° \mathcal{B} 46'20	
asc. node	8779 Nov 02 04:46	27° \mathcal{B} 11'31			8780 Sep 05 02:10	30° \mathcal{R} \mathcal{M}	
	8779 Nov 03 23:15	0° \mathcal{M}		inferior conj	8780 Sep 11 12:43	26° \mathcal{M} 49'15	-4°26'09
morning set	8779 Nov 13 19:42	18° \mathcal{M} 41'25		minimum elong	8780 Sep 11 03:09	27° \mathcal{M} 02'40	4°23'42
	8779 Nov 19 06:02	0° \mathcal{X}		min. Earth dist.	8780 Sep 11 18:06	26° \mathcal{M} 41'41	0.54669 AU
				morning rise	8780 Sep 19 23:20	22° \mathcal{M} 57'09	
superior conj	8779 Nov 21 05:31	4° \mathcal{X} 05'01	1°35'43	direct	8780 Sep 23 16:38	22° \mathcal{M} 27'14	
minimum elong	8779 Nov 21 07:09	4° \mathcal{X} 13'21	1°35'50	morning max el	8780 Oct 06 08:08	28° \mathcal{M} 27'55	22°27'04
max. Earth dist.	8779 Nov 26 03:32	13° \mathcal{X} 56'17	1.35808 AU		8780 Oct 07 21:29	0° \mathcal{B}	
evening rise	8779 Nov 30 02:57	21° \mathcal{X} 31'03		asc. node	8780 Oct 19 01:44	15° \mathcal{B} 35'40	
	8779 Dec 04 19:49	0° \mathcal{B}			8780 Oct 26 14:09	0° \mathcal{M}	
desc. node	8779 Dec 06 16:09	3° \mathcal{B} 11'30		morning set	8780 Oct 28 06:19	3° \mathcal{M} 29'42	
	8779 Dec 24 08:22	0° \approx					
evening max el	8780 Jan 04 14:52	13° \approx 07'42	26°17'00	superior conj	8780 Nov 04 07:48	18° \mathcal{M} 34'19	1°40'50
retrograde	8780 Jan 17 09:53	20° \approx 22'09		minimum elong	8780 Nov 04 08:08	18° \mathcal{M} 36'03	1°41'00
evening set	8780 Jan 23 16:14	17° \approx 49'56		max. Earth dist.	8780 Nov 07 19:01	25° \mathcal{M} 50'01	1.34104 AU
min. Earth dist.	8780 Jan 27 20:28	13° \approx 28'19	0.66686 AU		8780 Nov 09 20:05	0° \mathcal{X}	
asc. node	8780 Jan 29 04:01	11° \approx 51'52		evening rise	8780 Nov 12 08:25	4° \mathcal{X} 58'46	
inferior conj	8780 Jan 29 12:22	11° \approx 26'15	0°06'56	desc. node	8780 Nov 22 13:12	23° \mathcal{X} 27'49	
minimum elong	8780 Jan 29 12:10	11° \approx 26'50	0°07'01		8780 Nov 26 13:36	0° \mathcal{B}	
transit middle	8780 Jan 29 12:10	11° \approx 26'50	0°07'01	evening max el	8780 Dec 17 04:06	26° \mathcal{B} 44'47	27°05'16
transit begin	8780 Jan 29 09:35	11° \approx 34'46			8780 Dec 20 22:04	0° \approx	
transit end	8780 Jan 29 14:46	11° \approx 18'54		retrograde	8780 Dec 30 12:27	4° \approx 05'42	
morning rise	8780 Feb 04 08:53	5° \approx 40'33		evening set	8781 Jan 06 05:22	1° \approx 30'04	
direct	8780 Feb 07 10:49	4° \approx 46'52			8781 Jan 07 22:49	30° \mathcal{R} \mathcal{B}	
morning max el	8780 Feb 14 01:52	8° \approx 21'54	18°36'30	min. Earth dist.	8781 Jan 10 04:00	27° \mathcal{B} 42'18	0.65342 AU
	8780 Feb 29 13:23	0° \mathcal{X}		inferior conj	8781 Jan 12 07:29	25° \mathcal{B} 17'11	-0°54'58
desc. node	8780 Mar 03 15:44	4° \mathcal{X} 52'09		minimum elong	8781 Jan 12 09:06	25° \mathcal{B} 12'37	0°54'04
morning set	8780 Mar 06 00:30	8° \mathcal{X} 35'45		asc. node	8781 Jan 15 01:07	22° \mathcal{B} 21'48	
	8780 Mar 19 15:46	0° \mathcal{Y}		morning rise	8781 Jan 18 14:09	19° \mathcal{B} 43'29	
				direct	8781 Jan 21 06:55	19° \mathcal{B} 04'21	
superior conj	8780 Mar 22 04:36	3° \mathcal{Y} 57'58	-1°50'45	morning max el	8781 Jan 27 17:09	22° \mathcal{B} 28'31	18°04'00
minimum elong	8780 Mar 21 19:32	3° \mathcal{Y} 22'29	1°50'02		8781 Feb 02 16:59	0° \approx	
max. Earth dist.	8780 Mar 21 18:13	3° \mathcal{Y} 17'20	1.45493 AU	morning set	8781 Feb 14 22:04	19° \approx 27'38	
evening rise	8780 Apr 06 18:39	28° \mathcal{Y} 33'57		desc. node	8781 Feb 18 12:38	25° \approx 21'18	
	8780 Apr 07 16:14	0° \mathcal{B}			8781 Feb 21 09:21	0° \mathcal{X}	
greatest brilliancy	8780 Apr 15 01:01	11° \mathcal{B} 43'34	-0.8m				
asc. node	8780 Apr 26 02:47	27° \mathcal{B} 49'03		superior conj	8781 Mar 01 12:16	12° \mathcal{X} 58'20	-1°14'13
	8780 Apr 28 01:19	0° Π		minimum elong	8781 Mar 01 03:57	12° \mathcal{X} 25'26	1°13'08
evening max el	8780 Apr 28 08:21	0° Π 17'57	18°47'37	max. Earth dist.	8781 Mar 04 13:41	17° \mathcal{X} 47'19	1.45408 AU
retrograde	8780 May 05 00:24	3° Π 58'59			8781 Mar 12 09:37	0° \mathcal{Y}	
evening set	8780 May 08 07:40	2° Π 56'21		evening rise	8781 Mar 17 16:16	8° \mathcal{Y} 10'26	
	8780 May 11 14:58	30° \mathcal{R} \mathcal{B}		greatest brilliancy	8781 Mar 30 21:23	28° \mathcal{Y} 22'50	-0.7m
inferior conj	8780 May 13 21:57	27° \mathcal{B} 16'09	3°21'02		8781 Mar 31 23:37	0° \mathcal{B}	
minimum elong	8780 May 13 22:27	27° \mathcal{B} 14'34	3°20'50	evening max el	8781 Apr 11 15:23	13° \mathcal{B} 56'02	19°34'31
min. Earth dist.	8780 May 15 17:42	25° \mathcal{B} 00'24	0.65682 AU	asc. node	8781 Apr 12 23:54	15° \mathcal{B} 13'17	

retrograde	8781 Apr 18 21:49	18°♄04'44			8782 Apr 07 19:26	30°♄♂	
evening set	8781 Apr 22 13:19	16°♄47'06		inferior conj	8782 Apr 12 04:28	24°♄40'00	3°06'45
inferior conj	8781 Apr 27 22:50	10°♄52'06	3°19'57	minimum elong	8782 Apr 12 02:53	24°♄45'27	3°06'25
minimum elong	8781 Apr 27 22:09	10°♄54'22	3°19'46	min. Earth dist.	8782 Apr 12 19:13	23°♄49'22	0.67948 AU
min. Earth dist.	8781 Apr 29 03:35	9°♄17'04	0.67040 AU	morning rise	8782 Apr 17 08:29	18°♄24'06	
morning rise	8781 May 03 06:38	4°♄33'46		direct	8782 Apr 22 21:07	15°♄56'43	
direct	8781 May 09 08:02	1°♄52'19		morning max el	8782 May 03 23:21	22°♄34'40	24°08'15
desc. node	8781 May 17 12:32	5°♄30'29		desc. node	8782 May 04 09:29	23°♄00'34	
morning max el	8781 May 21 14:16	9°♄13'01	25°34'40		8782 May 10 11:25	0°♄	
	8781 Jun 06 22:51	0°♄			8782 May 31 06:38	0°♄	
	8781 Jun 25 10:29	0°♄		morning set	8782 Jun 08 14:05	13°♄48'52	
morning set	8781 Jun 26 16:53	2°♄17'17		max. Earth dist.	8782 Jun 12 06:56	20°♄19'21	1.38121 AU
max. Earth dist.	8781 Jun 30 09:34	9°♄08'33	1.35979 AU		8782 Jun 17 13:35	0°♄	
superior conj	8781 Jul 06 07:38	20°♄40'41	-0°35'33	superior conj	8782 Jun 19 11:25	3°♄36'59	-1°07'43
minimum elong	8781 Jul 06 09:47	20°♄51'25	0°35'21	minimum elong	8782 Jun 19 15:40	3°♄57'20	1°07'15
asc. node	8781 Jul 09 22:58	28°♄02'55		asc. node	8782 Jun 26 19:57	17°♄58'31	
	8781 Jul 10 21:50	0°♄		evening rise	8782 Jun 28 08:18	20°♄57'56	
evening rise	8781 Jul 14 08:13	7°♄02'05			8782 Jul 03 00:22	0°♄	
	8781 Jul 27 01:24	0°♄		evening max el	8782 Jul 14 19:25	17°♄45'09	19°02'03
evening max el	8781 Aug 01 00:32	6°♄00'29	20°00'36	retrograde	8782 Jul 23 14:04	22°♄06'09	
retrograde	8781 Aug 11 10:35	11°♄09'20		evening set	8782 Jul 25 12:05	21°♄54'32	
evening set	8781 Aug 13 08:05	10°♄59'52		desc. node	8782 Jul 31 08:44	19°♄19'07	
desc. node	8781 Aug 13 11:38	10°♄58'21		inferior conj	8782 Aug 02 20:11	17°♄39'58	-0°45'35
inferior conj	8781 Aug 22 08:36	7°♄00'22	-2°41'15	minimum elong	8782 Aug 02 18:14	17°♄43'20	0°44'59
minimum elong	8781 Aug 22 01:18	7°♄11'20	2°38'43	min. Earth dist.	8782 Aug 05 18:36	15°♄38'55	0.56366 AU
min. Earth dist.	8781 Aug 24 04:37	5°♄54'14	0.55075 AU	morning rise	8782 Aug 10 21:17	12°♄49'06	
morning rise	8781 Aug 30 17:01	2°♄45'24		direct	8782 Aug 16 04:47	11°♄42'54	
direct	8781 Sep 04 04:43	2°♄01'31		morning max el	8782 Aug 30 09:59	19°♄00'21	25°52'43
morning max el	8781 Sep 17 20:54	8°♄45'00	24°13'19		8782 Sep 08 16:30	0°♄	
	8781 Oct 03 10:23	0°♄		asc. node	8782 Sep 22 19:37	23°♄59'47	
asc. node	8781 Oct 05 22:41	4°♄34'59			8782 Sep 25 18:15	0°♄	
morning set	8781 Oct 12 18:05	18°♄19'26		morning set	8782 Sep 27 05:16	3°♄04'48	
	8781 Oct 18 03:14	0°♄		superior conj	8782 Oct 04 02:05	18°♄06'49	1°32'06
superior conj	8781 Oct 19 15:26	3°♄17'34	1°39'24	minimum elong	8782 Oct 04 00:23	17°♄57'25	1°32'00
minimum elong	8781 Oct 19 14:36	3°♄13'01	1°39'30	max. Earth dist.	8782 Oct 05 01:32	20°♄16'14	1.31992 AU
max. Earth dist.	8781 Oct 21 18:59	7°♄56'35	1.32821 AU		8782 Oct 09 13:03	0°♄	
evening rise	8781 Oct 27 01:14	18°♄56'53		evening rise	8782 Oct 11 02:13	3°♄15'45	
	8781 Nov 01 17:46	0°♄			8782 Oct 25 12:29	0°♄	
desc. node	8781 Nov 09 10:16	13°♄23'38		desc. node	8782 Oct 27 07:21	2°♄49'26	
	8781 Nov 20 18:56	0°♄		evening max el	8782 Nov 12 00:43	22°♄44'07	27°20'46
evening max el	8781 Nov 29 16:13	10°♄01'54	27°28'28	retrograde	8782 Nov 25 20:47	29°♄57'31	
retrograde	8781 Dec 13 08:22	17°♄20'51		evening set	8782 Dec 02 22:36	27°♄39'00	
evening set	8781 Dec 20 08:35	14°♄49'13		min. Earth dist.	8782 Dec 06 15:06	24°♄48'50	0.61739 AU
min. Earth dist.	8781 Dec 24 02:48	11°♄33'04	0.63675 AU	inferior conj	8782 Dec 09 15:19	22°♄06'01	-3°14'06
inferior conj	8781 Dec 26 17:31	8°♄53'27	-2°02'57	minimum elong	8782 Dec 09 21:30	21°♄52'01	3°11'42
minimum elong	8781 Dec 26 21:24	8°♄43'32	2°01'10	morning rise	8782 Dec 16 22:41	17°♄06'00	
asc. node	8782 Jan 01 22:09	3°♄49'53		direct	8782 Dec 19 04:15	16°♄44'36	
morning rise	8782 Jan 02 12:04	3°♄34'51		asc. node	8782 Dec 19 19:10	16°♄46'18	
direct	8782 Jan 04 21:55	3°♄06'22		morning max el	8782 Dec 26 02:48	20°♄15'15	17°51'31
morning max el	8782 Jan 11 10:31	6°♄29'17	17°48'44		8783 Jan 02 08:47	0°♄	
	8782 Jan 26 23:45	0°♄		morning set	8783 Jan 10 20:22	14°♄49'35	
morning set	8782 Jan 27 22:52	1°♄39'20			8783 Jan 19 08:47	0°♄	
desc. node	8782 Feb 05 09:35	15°♄59'39		superior conj	8783 Jan 21 16:28	4°♄00'39	0°11'47
superior conj	8782 Feb 09 13:42	22°♄52'55	-0°30'13	minimum elong	8783 Jan 21 17:33	4°♄05'15	0°11'48
minimum elong	8782 Feb 09 10:24	22°♄39'27	0°29'35	behind sun begin	8783 Jan 21 11:44	3°♄40'17	
	8782 Feb 13 23:22	0°♄		behind sun end	8783 Jan 21 23:22	4°♄30'10	
max. Earth dist.	8782 Feb 15 08:29	2°♄12'08	1.44602 AU	desc. node	8783 Jan 23 06:32	6°♄42'55	
evening rise	8782 Feb 25 03:42	17°♄30'14		max. Earth dist.	8783 Jan 28 23:55	16°♄14'13	1.43155 AU
	8782 Mar 05 09:28	0°♄		evening rise	8783 Feb 04 20:11	27°♄10'11	
evening max el	8782 Mar 25 17:02	27°♄35'47	20°36'00		8783 Feb 06 15:49	0°♄	
	8782 Mar 28 08:38	0°♄			8783 Feb 27 05:10	0°♄	
asc. node	8782 Mar 30 20:59	1°♄36'25		evening max el	8783 Mar 08 13:13	11°♄16'30	21°48'43
retrograde	8782 Apr 02 20:20	2°♄21'00		retrograde	8783 Mar 17 18:08	16°♄43'26	
evening set	8782 Apr 06 21:05	0°♄48'00		asc. node	8783 Mar 17 18:04	16°♄43'26	

evening set	8783 Mar 22 05:13	14°♈55'06		retrograde	8784 Feb 29 13:38	1°♈07'20	
inferior conj	8783 Mar 27 12:39	8°♈36'32	2°43'14	asc. node	8784 Mar 03 15:10	0°♈21'00	
minimum elong	8783 Mar 27 10:32	8°♈43'55	2°42'43		8784 Mar 04 05:54	30°♈	
min. Earth dist.	8783 Mar 27 14:30	8°♈30'05	0.68405 AU	evening set	8784 Mar 05 12:08	29°♈04'20	
morning rise	8783 Apr 01 15:42	2°♈24'32		inferior conj	8784 Mar 10 21:25	22°♈38'29	2°10'27
direct	8783 Apr 06 14:26	0°♈16'48		minimum elong	8784 Mar 10 19:11	22°♈46'11	2°09'49
morning max el	8783 Apr 16 09:53	6°♈04'09	22°38'34	min. Earth dist.	8784 Mar 10 11:17	23°♈13'30	0.68436 AU
desc. node	8783 Apr 21 06:26	11°♈30'01		morning rise	8784 Mar 16 02:09	16°♈31'35	
	8783 May 04 20:41	0°♈		direct	8784 Mar 20 11:03	14°♈45'54	
morning set	8783 May 20 10:15	24°♈09'51		morning max el	8784 Mar 29 01:06	19°♈43'20	21°14'04
	8783 May 23 22:27	0°♈			8784 Apr 06 14:47	0°♈	
max. Earth dist.	8783 May 25 04:12	2°♈06'01	1.40375 AU	desc. node	8784 Apr 07 03:22	0°♈42'16	
					8784 Apr 27 01:03	0°♈	
superior conj	8783 Jun 01 22:58	15°♈46'00	-1°37'47	morning set	8784 Apr 29 03:12	3°♈16'18	
minimum elong	8783 Jun 02 04:48	16°♈12'22	1°37'19	max. Earth dist.	8784 May 06 06:29	14°♈43'31	1.42472 AU
	8783 Jun 09 15:04	0°♈					
evening rise	8783 Jun 11 22:54	4°♈24'05		superior conj	8784 May 13 13:35	26°♈56'44	-2°01'15
asc. node	8783 Jun 13 16:58	7°♈42'34		minimum elong	8784 May 13 18:51	27°♈19'19	2°01'06
	8783 Jun 27 20:15	0°♈			8784 May 15 08:08	0°♈	
evening max el	8783 Jun 28 00:15	0°♈09'58	18°24'26	evening rise	8784 May 24 23:55	17°♈09'42	
retrograde	8783 Jul 05 12:39	3°♈55'39		asc. node	8784 May 30 14:00	27°♈09'29	
evening set	8783 Jul 07 17:00	3°♈37'30			8784 Jun 01 05:27	0°♈	
	8783 Jul 14 00:54	30°♈		evening max el	8784 Jun 10 11:08	13°♈04'45	18°06'49
inferior conj	8783 Jul 15 05:21	29°♈03'07	0°53'20	retrograde	8784 Jun 17 04:39	16°♈30'25	
minimum elong	8783 Jul 15 07:10	28°♈59'26	0°52'30	evening set	8784 Jun 19 16:39	16°♈02'16	
desc. node	8783 Jul 18 05:49	26°♈36'38		inferior conj	8784 Jun 26 11:10	11°♈07'47	2°05'16
min. Earth dist.	8783 Jul 18 14:16	26°♈20'15	0.58288 AU	minimum elong	8784 Jun 26 14:09	11°♈00'44	2°04'12
morning rise	8783 Jul 22 17:54	23°♈36'20		min. Earth dist.	8784 Jun 29 17:24	8°♈04'58	0.60516 AU
direct	8783 Jul 28 19:18	22°♈00'22		morning rise	8784 Jul 03 08:57	5°♈14'33	
morning max el	8783 Aug 12 04:42	29°♈42'34	27°08'34	desc. node	8784 Jul 04 02:54	4°♈47'25	
	8783 Aug 12 11:48	0°♈		direct	8784 Jul 09 22:33	3°♈07'38	
	8783 Sep 02 14:32	0°♈		morning max el	8784 Jul 24 06:08	11°♈05'08	27°49'44
asc. node	8783 Sep 09 16:34	13°♈43'09			8784 Aug 08 00:59	0°♈	
morning set	8783 Sep 11 14:15	17°♈41'21			8784 Aug 24 19:20	0°♈	
	8783 Sep 17 06:06	0°♈		morning set	8784 Aug 25 19:13	2°♈03'07	
				asc. node	8784 Aug 26 13:31	3°♈38'36	
superior conj	8783 Sep 18 13:54	2°♈56'26	1°19'23	max. Earth dist.	8784 Aug 31 20:37	15°♈03'30	1.31717 AU
minimum elong	8783 Sep 18 11:43	2°♈44'21	1°19'05				
max. Earth dist.	8783 Sep 18 11:20	2°♈42'11	1.31625 AU	superior conj	8784 Sep 02 01:01	17°♈40'11	1°01'39
evening rise	8783 Sep 25 08:51	17°♈48'33		minimum elong	8784 Sep 01 22:50	17°♈28'03	1°01'12
	8783 Oct 01 08:52	0°♈			8784 Sep 07 15:24	0°♈	
desc. node	8783 Oct 14 04:28	21°♈33'26		evening rise	8784 Sep 08 18:54	2°♈28'23	
	8783 Oct 20 16:40	0°♈			8784 Sep 23 11:01	0°♈	
evening max el	8783 Oct 25 02:51	4°♈39'41	26°39'07	desc. node	8784 Sep 30 01:36	9°♈19'05	
retrograde	8783 Nov 08 00:50	11°♈47'21		evening max el	8784 Oct 05 21:05	15°♈44'41	25°26'10
evening set	8783 Nov 14 19:16	9°♈52'36		retrograde	8784 Oct 19 18:55	22°♈46'02	
min. Earth dist.	8783 Nov 18 16:40	7°♈16'51	0.59650 AU	evening set	8784 Oct 25 17:45	21°♈24'22	
inferior conj	8783 Nov 21 21:25	4°♈45'38	-4°22'16	min. Earth dist.	8784 Oct 30 09:12	18°♈45'55	0.57611 AU
minimum elong	8783 Nov 22 04:53	4°♈30'53	4°20'03	inferior conj	8784 Nov 02 08:37	16°♈43'33	-5°15'58
morning rise	8783 Nov 29 16:57	0°♈07'20		minimum elong	8784 Nov 02 14:25	16°♈33'35	5°14'57
	8783 Nov 30 05:36	30°♈		morning rise	8784 Nov 10 13:24	12°♈27'52	
direct	8783 Dec 01 21:46	29°♈49'44		direct	8784 Nov 12 22:13	12°♈10'56	
	8783 Dec 03 13:14	0°♈		morning max el	8784 Nov 21 18:04	16°♈25'05	18°56'40
asc. node	8783 Dec 06 16:12	1°♈17'11		asc. node	8784 Nov 22 13:13	17°♈13'00	
morning max el	8783 Dec 09 14:33	3°♈37'14	18°13'35		8784 Dec 01 10:22	0°♈	
morning set	8783 Dec 25 08:34	28°♈40'19		morning set	8784 Dec 08 06:55	12°♈58'38	
	8783 Dec 26 01:25	0°♈					
superior conj	8784 Jan 03 19:09	16°♈16'21	0°46'30	superior conj	8784 Dec 16 16:57	29°♈26'17	1°12'20
minimum elong	8784 Jan 03 22:14	16°♈30'21	0°46'16	minimum elong	8784 Dec 16 20:10	29°♈41'42	1°12'10
desc. node	8784 Jan 10 03:30	27°♈27'34			8784 Dec 17 00:01	0°♈	
max. Earth dist.	8784 Jan 11 10:05	29°♈37'54	1.41239 AU	max. Earth dist.	8784 Dec 23 16:16	12°♈18'54	1.39086 AU
	8784 Jan 11 15:18	0°♈		desc. node	8784 Dec 27 00:30	18°♈10'10	
evening rise	8784 Jan 16 05:47	7°♈38'10		evening rise	8784 Dec 27 13:14	19°♈04'49	
	8784 Jan 30 18:41	0°♈			8785 Jan 03 03:38	0°♈	
evening max el	8784 Feb 19 05:07	24°♈59'23	23°07'55		8785 Jan 24 01:02	0°♈	
	8784 Feb 25 12:56	0°♈		evening max el	8785 Jan 31 18:53	8°♈46'22	24°27'34
				retrograde	8785 Feb 12 05:34	15°♈28'17	

evening set	8785 Feb 17 16:21	13° H 11'58		retrograde	8786 Jan 26 16:47	29° \approx 39'54	
asc. node	8785 Feb 18 12:17	12° H 26'26		evening set	8786 Feb 01 16:10	27° \approx 12'36	
min. Earth dist.	8785 Feb 22 07:17	7° H 55'35	0.68061 AU	asc. node	8786 Feb 05 09:25	23° \approx 16'48	
inferior conj	8785 Feb 23 04:56	6° H 43'04	1°29'01	min. Earth dist.	8786 Feb 06 00:10	22° \approx 30'55	0.67301 AU
minimum elong	8785 Feb 23 03:04	6° H 49'19	1°28'27	inferior conj	8786 Feb 07 09:17	20° \approx 45'37	0°39'14
morning rise	8785 Feb 28 13:54	0° H 42'46		minimum elong	8786 Feb 07 08:19	20° \approx 48'42	0°39'00
	8785 Mar 01 17:17	30° R \approx		morning rise	8786 Feb 13 00:55	14° \approx 53'51	
direct	8785 Mar 04 09:47	29° \approx 18'56		direct	8786 Feb 16 09:02	13° \approx 49'54	
	8785 Mar 07 05:43	0° H		morning max el	8786 Feb 23 06:03	17° \approx 35'59	19°02'40
morning max el	8785 Mar 11 23:41	3° H 34'43	20°00'59		8786 Mar 04 21:39	0° H	
desc. node	8785 Mar 25 00:17	20° H 25'55		greatest brilliancy	8786 Mar 08 22:37	6° H 02'16	-0.8m
	8785 Mar 31 11:01	0° Y		desc. node	8786 Mar 11 21:11	10° H 31'49	
morning set	8785 Apr 08 02:12	11° Y 38'16		morning set	8786 Mar 18 05:55	20° H 22'02	
max. Earth dist.	8785 Apr 18 16:08	28° Y 12'46	1.44153 AU		8786 Mar 24 10:38	0° Y	
	8785 Apr 19 18:58	0° B		max. Earth dist.	8786 Apr 01 08:04	12° Y 20'29	1.45216 AU
superior conj	8785 Apr 24 03:56	7° B 04'08	-2°12'05	superior conj	8786 Apr 03 19:39	16° Y 15'02	-2°04'24
minimum elong	8785 Apr 24 04:46	7° B 07'29	2°12'12	minimum elong	8786 Apr 03 13:21	15° Y 50'12	2°04'09
evening rise	8785 May 07 06:45	29° B 05'08			8786 Apr 12 10:38	0° B	
	8785 May 07 19:32	0° II		evening rise	8786 Apr 18 15:05	10° B 02'28	
asc. node	8785 May 17 11:05	16° II 13'36			8786 May 01 00:44	0° II	
evening max el	8785 May 25 00:33	26° II 20'57	18°08'17	asc. node	8786 May 04 08:10	4° II 47'07	
retrograde	8785 May 31 09:56	29° II 41'37		evening max el	8786 May 08 13:20	9° II 50'21	18°28'11
evening set	8785 Jun 03 05:31	29° II 01'00		retrograde	8786 May 15 00:21	13° II 20'06	
inferior conj	8785 Jun 09 10:00	23° II 47'31	2°51'00	evening set	8786 May 18 03:21	12° II 25'36	
minimum elong	8785 Jun 09 12:28	23° II 40'53	2°50'17	inferior conj	8786 May 23 21:45	6° II 54'32	3°15'07
min. Earth dist.	8785 Jun 12 05:13	20° II 48'46	0.62741 AU	minimum elong	8786 May 23 23:01	6° II 50'46	3°14'47
morning rise	8785 Jun 15 17:44	17° II 38'36		min. Earth dist.	8786 May 26 02:14	4° II 19'27	0.64717 AU
desc. node	8785 Jun 20 23:57	15° II 14'39		morning rise	8786 May 29 17:47	0° II 38'05	
direct	8785 Jun 22 11:55	15° II 07'29			8786 May 30 13:18	30° R B	
morning max el	8785 Jul 06 12:59	23° II 10'14	27°52'35	direct	8786 Jun 05 09:22	27° B 54'01	
	8785 Jul 12 14:35	0° B		desc. node	8786 Jun 07 20:58	28° B 14'13	
	8785 Aug 01 07:43	0° Q			8786 Jun 11 20:33	0° II	
morning set	8785 Aug 09 18:02	16° Q 04'03		morning max el	8786 Jun 18 22:53	5° II 51'09	27°20'03
asc. node	8785 Aug 13 10:29	23° Q 41'24			8786 Jul 07 09:08	0° B	
max. Earth dist.	8785 Aug 15 01:35	27° Q 09'25	1.32288 AU	morning set	8786 Jul 24 08:07	29° B 37'22	
	8785 Aug 16 09:15	0° M			8786 Jul 24 12:45	0° Q	
superior conj	8785 Aug 17 09:38	2° M 12'23	0°39'14	max. Earth dist.	8786 Jul 28 22:42	8° Q 52'06	1.33350 AU
minimum elong	8785 Aug 17 07:56	2° M 03'09	0°38'47	asc. node	8786 Jul 31 07:27	13° Q 47'33	
evening rise	8785 Aug 24 06:27	17° M 09'26		superior conj	8786 Aug 01 13:42	16° Q 27'23	0°12'41
	8785 Aug 30 13:15	0° A		minimum elong	8786 Aug 01 13:04	16° Q 24'01	0°12'23
desc. node	8785 Sep 16 22:43	25° A 43'26		behind sun begin	8786 Aug 01 09:32	16° Q 05'18	
evening max el	8785 Sep 17 09:10	26° A 08'58	23°51'55	behind sun end	8786 Aug 01 16:36	16° Q 42'45	
	8785 Sep 22 02:49	0° M			8786 Aug 07 21:34	0° M	
retrograde	8785 Oct 01 00:26	2° M 58'18		evening rise	8786 Aug 08 17:37	1° M 46'24	
evening set	8785 Oct 05 15:34	2° M 11'23			8786 Aug 24 11:20	0° A	
	8785 Oct 10 10:21	30° R A		evening max el	8786 Aug 29 21:59	6° A 21'19	22°12'37
min. Earth dist.	8785 Oct 11 19:38	29° A 11'51	0.55916 AU	desc. node	8786 Sep 03 19:51	10° A 17'27	
inferior conj	8785 Oct 13 23:29	27° A 53'32	-5°37'32	retrograde	8786 Sep 11 17:50	12° A 44'31	
minimum elong	8785 Oct 13 23:15	27° A 53'54	5°37'26	evening set	8786 Sep 14 21:21	12° A 22'36	
morning rise	8785 Oct 22 08:58	23° A 57'19		min. Earth dist.	8786 Sep 23 03:36	8° A 46'10	0.54874 AU
direct	8785 Oct 25 03:29	23° A 37'51		inferior conj	8786 Sep 23 21:40	8° A 20'48	-5°08'21
morning max el	8785 Nov 04 09:50	28° A 27'58	20°02'10	minimum elong	8786 Sep 23 14:04	8° A 31'29	5°07'02
	8785 Nov 05 22:12	0° M		morning rise	8786 Oct 02 08:24	4° A 33'12	
asc. node	8785 Nov 09 10:15	4° M 18'04		direct	8786 Oct 05 16:51	4° A 08'10	
morning set	8785 Nov 22 11:58	27° M 34'15		morning max el	8786 Oct 17 12:24	9° A 41'31	21°29'19
	8785 Nov 23 16:32	0° A		asc. node	8786 Oct 27 07:14	22° A 17'16	
superior conj	8785 Nov 30 04:52	13° A 15'48	1°29'29		8786 Oct 31 16:52	0° M	
minimum elong	8785 Nov 30 07:12	13° A 27'31	1°29'30	morning set	8786 Nov 06 21:12	12° M 20'05	
max. Earth dist.	8785 Dec 05 22:40	24° A 26'51	1.36950 AU	superior conj	8786 Nov 14 02:52	27° M 33'37	1°38'44
	8785 Dec 08 22:29	0° B		minimum elong	8786 Nov 14 03:57	27° M 39'12	1°38'53
evening rise	8785 Dec 09 17:22	1° B 25'36			8786 Nov 15 07:06	0° A	
desc. node	8785 Dec 13 21:30	8° B 46'16		max. Earth dist.	8786 Nov 18 10:05	6° A 21'09	1.35040 AU
	8785 Dec 27 07:14	0° \approx		evening rise	8786 Nov 22 14:42	14° A 31'43	
evening max el	8786 Jan 14 08:08	22° \approx 34'47	25°40'45	desc. node	8786 Nov 30 18:33	29° A 11'32	

	8786 Dec 01 06:01	0°♄		desc. node	8787 Nov 17 15:37	19°♄19'44	
	8786 Dec 22 01:00	0°♄			8787 Nov 24 10:49	0°♄	
evening max el	8786 Dec 27 21:29	6°♄18'36	26°40'04	evening max el	8787 Dec 10 10:16	19°♄47'45	27°18'28
retrograde	8787 Jan 09 22:32	13°♄36'08		retrograde	8787 Dec 23 22:21	27°♄08'49	
evening set	8787 Jan 16 09:48	11°♄01'43		evening set	8787 Dec 30 19:04	24°♄33'30	
min. Earth dist.	8787 Jan 20 11:36	6°♄54'46	0.66167 AU	min. Earth dist.	8788 Jan 03 15:29	20°♄59'58	0.64673 AU
inferior conj	8787 Jan 22 08:25	4°♄42'09	-0°18'27	inferior conj	8788 Jan 05 23:59	18°♄27'15	-1°23'11
minimum elong	8787 Jan 22 08:56	4°♄40'39	0°18'02	minimum elong	8788 Jan 06 02:32	18°♄20'23	1°21'55
asc. node	8787 Jan 23 06:30	3°♄37'20		asc. node	8788 Jan 10 03:34	14°♄26'03	
	8787 Jan 26 21:27	30°♄♂		morning rise	8788 Jan 12 11:34	12°♄59'55	
morning rise	8787 Jan 28 09:01	29°♄01'15		direct	8788 Jan 15 01:06	12°♄25'49	
direct	8787 Jan 31 06:55	28°♄14'06		morning max el	8788 Jan 21 11:26	15°♄48'08	17°55'24
	8787 Feb 04 19:30	0°♄			8788 Jan 31 16:45	0°♄	
morning max el	8787 Feb 06 18:50	1°♄42'46	18°20'34	morning set	8788 Feb 07 20:10	11°♄50'58	
morning set	8787 Feb 26 10:20	0°♄♂22'54		desc. node	8788 Feb 13 15:01	21°♄27'31	
	8787 Feb 26 04:36	0°♄♂			8788 Feb 18 20:43	0°♄♂	
desc. node	8787 Feb 26 18:05	0°♄♂53'54					
				superior conj	8788 Feb 21 14:19	4°♄23'23	-0°55'50
superior conj	8787 Mar 14 00:40	25°♄03'44	-1°36'50	minimum elong	8788 Feb 21 07:57	3°♄57'55	0°54'51
minimum elong	8787 Mar 13 15:03	24°♄26'05	1°35'51	max. Earth dist.	8788 Feb 25 23:03	11°♄18'51	1.45147 AU
max. Earth dist.	8787 Mar 15 03:29	26°♄48'42	1.45556 AU	evening rise	8788 Mar 08 15:37	29°♄29'01	
	8787 Mar 17 04:23	0°♄♀			8788 Mar 08 23:41	0°♄♀	
evening rise	8787 Mar 30 00:01	20°♄03'55		greatest brilliancy	8788 Mar 23 08:07	21°♄40'09	-0.6m
	8787 Apr 05 08:01	0°♄			8788 Mar 29 06:01	0°♄	
greatest brilliancy	8787 Apr 09 12:41	6°♄30'47	-0.8m	evening max el	8788 Apr 04 03:40	7°♄04'51	19°59'01
asc. node	8787 Apr 21 05:15	22°♄39'55		asc. node	8788 Apr 07 02:20	9°♄40'07	
evening max el	8787 Apr 21 22:56	23°♄26'08	19°05'37	retrograde	8788 Apr 11 18:25	11°♄28'40	
retrograde	8787 Apr 28 20:07	27°♄17'40		evening set	8788 Apr 15 13:39	10°♄04'33	
evening set	8787 May 02 06:52	26°♄08'31		inferior conj	8788 Apr 20 21:57	4°♄03'31	3°15'42
inferior conj	8787 May 07 18:44	20°♄21'33	3°22'12	minimum elong	8788 Apr 20 20:51	4°♄07'16	3°15'29
minimum elong	8787 May 07 18:42	20°♄21'38	3°22'02	min. Earth dist.	8788 Apr 21 20:34	2°♄47'14	0.67476 AU
min. Earth dist.	8787 May 09 07:53	18°♄22'42	0.66313 AU		8788 Apr 24 00:53	30°♄♀	
morning rise	8787 May 13 06:05	14°♄02'47		morning rise	8788 Apr 26 03:46	27°♄45'46	
direct	8787 May 19 13:35	11°♄17'35		direct	8788 May 01 23:49	25°♄09'31	
desc. node	8787 May 25 17:56	13°♄22'36			8788 May 11 10:52	0°♄	
morning max el	8787 Jun 01 09:25	18°♄56'06	26°19'04	desc. node	8788 May 11 14:53	0°♄09'02	
	8787 Jun 10 18:13	0°♄♂		morning max el	8788 May 13 19:04	2°♄14'15	24°58'56
	8787 Jun 30 10:02	0°♄♂			8788 Jun 03 20:29	0°♄♂	
morning set	8787 Jul 07 09:57	12°♄33'03		morning set	8788 Jun 18 19:10	24°♄39'49	
max. Earth dist.	8787 Jul 11 09:21	20°♄09'09	1.34895 AU	max. Earth dist.	8788 Jun 21 18:03	0°♄♂	
					8788 Jun 22 09:57	1°♄13'07	1.36857 AU
superior conj	8787 Jul 16 10:45	0°♄♂17'42	-0°17'17				
minimum elong	8787 Jul 16 11:45	0°♄♂22'49	0°17'17	superior conj	8788 Jun 28 21:52	13°♄36'14	-0°49'14
	8787 Jul 16 07:18	0°♄♂		minimum elong	8788 Jun 29 00:55	13°♄51'12	0°48'55
asc. node	8787 Jul 18 04:24	3°♄52'28		asc. node	8788 Jul 04 01:23	23°♄52'38	
evening rise	8787 Jul 24 02:21	16°♄12'25		evening rise	8788 Jul 07 06:23	0°♄♂21'23	
	8787 Jul 31 01:52	0°♄♂			8788 Jul 07 02:08	0°♄♂	
evening max el	8787 Aug 11 20:08	16°♄56'14	20°43'32	evening max el	8788 Jul 24 07:47	28°♄14'53	19°33'07
desc. node	8787 Aug 21 16:58	22°♄29'27			8788 Jul 26 06:57	0°♄♂	
retrograde	8787 Aug 23 06:01	22°♄35'29		retrograde	8788 Aug 03 00:40	3°♄02'34	
evening set	8787 Aug 25 09:04	22°♄24'30		evening set	8788 Aug 04 20:55	2°♄52'56	
inferior conj	8787 Sep 03 14:02	18°♄27'43	-3°45'11	desc. node	8788 Aug 07 14:03	2°♄06'32	
minimum elong	8787 Sep 03 04:41	18°♄41'07	3°42'21		8788 Aug 11 17:16	30°♄♂	
min. Earth dist.	8787 Sep 04 12:30	17°♄55'34	0.54722 AU	inferior conj	8788 Aug 13 15:25	28°♄48'10	-1°51'30
morning rise	8787 Sep 12 00:13	14°♄28'28		minimum elong	8788 Aug 13 10:22	28°♄56'12	1°49'42
direct	8787 Sep 16 00:50	13°♄53'46		min. Earth dist.	8788 Aug 16 00:34	27°♄17'33	0.55526 AU
morning max el	8787 Sep 29 04:31	20°♄13'01	23°12'08	morning rise	8788 Aug 21 21:22	24°♄18'17	
	8787 Oct 07 10:05	0°♄♂		direct	8788 Aug 26 17:15	23°♄26'00	
asc. node	8787 Oct 14 04:10	10°♄57'07			8788 Sep 09 05:39	0°♄♂	
morning set	8787 Oct 22 08:30	27°♄09'19		morning max el	8788 Sep 09 16:44	0°♄25'55	24°57'29
	8787 Oct 23 16:32	0°♄♂			8788 Sep 29 23:30	0°♄♂	
				asc. node	8788 Sep 30 01:07	0°♄07'45	
superior conj	8787 Oct 29 07:43	12°♄09'25	1°40'59	morning set	8788 Oct 05 20:11	11°♄57'13	
minimum elong	8787 Oct 29 07:32	12°♄08'23	1°41'08				
max. Earth dist.	8787 Nov 01 05:13	18°♄18'58	1.33501 AU	superior conj	8788 Oct 12 16:53	26°♄55'44	1°37'00
evening rise	8787 Nov 06 01:21	28°♄12'42		minimum elong	8788 Oct 12 15:39	26°♄48'55	1°37'00
	8787 Nov 06 23:07	0°♄♂			8788 Oct 14 02:35	0°♄♂	

max. Earth dist.	8788 Oct 14 08:02	0°♄29'41	1.32407 AU		8789 Sep 21 20:03	0°♄	
evening rise	8788 Oct 19 21:57	12°♄20'02					
	8788 Oct 29 03:35	0°♄		superior conj	8789 Sep 27 04:17	11°♄46'05	1°27'21
desc. node	8788 Nov 03 12:42	9°♄03'32		minimum elong	8789 Sep 27 02:20	11°♄35'15	1°27'10
	8788 Nov 19 01:25	0°♄		max. Earth dist.	8789 Sep 27 16:17	12°♄52'38	1.31776 AU
evening max el	8788 Nov 21 20:57	2°♄50'33	27°29'14	evening rise	8789 Oct 04 01:40	26°♄46'00	
retrograde	8788 Dec 05 15:28	10°♄08'23			8789 Oct 05 14:56	0°♄	
evening set	8788 Dec 12 17:08	7°♄40'54		desc. node	8789 Oct 21 09:47	28°♄13'15	
min. Earth dist.	8788 Dec 16 10:00	4°♄36'50	0.62870 AU		8789 Oct 22 14:32	0°♄	
inferior conj	8788 Dec 19 05:12	1°♄53'57	-2°33'06	evening max el	8789 Nov 04 03:17	15°♄15'04	27°07'22
minimum elong	8788 Dec 19 10:06	1°♄42'02	2°30'58	retrograde	8789 Nov 18 00:43	22°♄26'00	
	8788 Dec 21 05:35	30°♄		evening set	8789 Nov 25 00:24	20°♄16'40	
morning rise	8788 Dec 26 05:11	26°♄43'03		min. Earth dist.	8789 Nov 28 18:00	17°♄34'02	0.60851 AU
asc. node	8788 Dec 27 00:37	26°♄28'46		inferior conj	8789 Dec 01 20:50	14°♄54'16	-3°43'57
direct	8788 Dec 28 12:42	26°♄18'09		minimum elong	8789 Dec 02 03:47	14°♄39'24	3°41'30
morning max el	8789 Jan 04 04:47	29°♄43'34	17°47'41	morning rise	8789 Dec 09 09:32	10°♄02'54	
	8789 Jan 04 11:21	0°♄		direct	8789 Dec 11 14:12	9°♄43'33	
morning set	8789 Jan 20 06:36	24°♄29'39		asc. node	8789 Dec 13 21:40	10°♄05'55	
	8789 Jan 23 10:05	0°♄		morning max el	8789 Dec 18 19:36	13°♄20'41	17°58'26
desc. node	8789 Jan 30 11:57	12°♄08'10			8789 Dec 30 01:53	0°♄	
				morning set	8790 Jan 03 11:05	7°♄59'29	
superior conj	8789 Feb 01 02:18	14°♄48'41	-0°11'46				
minimum elong	8789 Feb 01 01:07	14°♄43'44	0°11'25	superior conj	8790 Jan 13 15:45	26°♄26'41	0°27'32
behind sun begin	8789 Jan 31 18:35	14°♄16'29		minimum elong	8790 Jan 13 17:58	26°♄36'23	0°27'24
behind sun end	8789 Feb 01 07:39	15°♄10'55			8790 Jan 15 16:45	0°♄	
max. Earth dist.	8789 Feb 07 16:06	25°♄33'42	1.44048 AU	desc. node	8790 Jan 17 08:56	2°♄52'28	
	8789 Feb 10 10:56	0°♄		max. Earth dist.	8790 Jan 21 05:20	9°♄20'41	1.42387 AU
evening rise	8789 Feb 16 03:19	8°♄52'39		evening rise	8790 Jan 27 02:09	18°♄51'22	
	8789 Mar 02 05:17	0°♄			8790 Feb 03 06:36	0°♄	
evening max el	8789 Mar 18 02:54	20°♄44'50	21°05'50		8790 Feb 24 20:33	0°♄	
asc. node	8789 Mar 24 23:26	25°♄32'46		evening max el	8790 Feb 28 21:14	4°♄27'01	22°21'57
retrograde	8789 Mar 26 16:53	25°♄47'53		retrograde	8790 Mar 10 13:48	10°♄11'22	
evening set	8789 Mar 30 21:46	24°♄08'32		asc. node	8790 Mar 11 20:33	10°♄03'07	
inferior conj	8789 Apr 05 04:57	17°♄55'44	2°57'57	evening set	8790 Mar 15 05:35	8°♄16'52	
minimum elong	8789 Apr 05 03:05	18°♄02'12	2°57'34	inferior conj	8790 Mar 20 13:38	1°♄55'00	2°30'26
min. Earth dist.	8789 Apr 05 14:10	17°♄23'49	0.68194 AU	minimum elong	8790 Mar 20 11:25	2°♄02'43	2°29'51
morning rise	8789 Apr 10 08:11	11°♄41'05		min. Earth dist.	8790 Mar 20 10:23	2°♄06'20	0.68476 AU
direct	8789 Apr 15 14:59	9°♄21'21			8790 Mar 21 23:04	30°♄	
morning max el	8789 Apr 26 04:19	15°♄38'49	23°29'51	morning rise	8790 Mar 25 17:05	25°♄44'59	
desc. node	8789 Apr 28 11:51	18°♄06'37		direct	8790 Mar 30 10:01	23°♄46'14	
	8789 May 07 22:48	0°♄		morning max el	8790 Apr 08 16:16	29°♄11'21	22°01'28
	8789 May 27 19:58	0°♄			8790 Apr 09 11:15	0°♄	
morning set	8789 May 31 06:18	5°♄42'42		desc. node	8790 Apr 15 08:49	6°♄55'49	
max. Earth dist.	8789 Jun 04 05:48	12°♄33'04	1.39082 AU		8790 May 01 16:03	0°♄	
				morning set	8790 May 11 14:40	15°♄30'34	
superior conj	8789 Jun 11 19:17	26°♄13'29	-1°20'58	max. Earth dist.	8790 May 17 04:46	24°♄40'26	1.41312 AU
minimum elong	8789 Jun 12 00:21	26°♄37'08	1°20'28		8790 May 20 08:21	0°♄	
	8789 Jun 13 19:28	0°♄					
asc. node	8789 Jun 20 22:23	13°♄43'34		superior conj	8790 May 24 22:34	7°♄59'09	-1°48'53
evening rise	8789 Jun 21 02:50	14°♄05'08		minimum elong	8790 May 25 04:31	8°♄25'30	1°48'30
	8789 Jun 29 17:41	0°♄		evening rise	8790 Jun 04 12:12	27°♄15'02	
evening max el	8789 Jul 07 07:26	10°♄17'49	18°43'35		8790 Jun 05 23:48	0°♄	
retrograde	8789 Jul 15 11:46	14°♄21'34		asc. node	8790 Jun 07 19:25	3°♄20'45	
evening set	8789 Jul 17 12:10	14°♄07'39		evening max el	8790 Jun 20 15:22	22°♄56'37	18°14'32
inferior conj	8789 Jul 25 11:56	9°♄45'18	-0°00'37	retrograde	8790 Jun 27 18:05	26°♄31'32	
minimum elong	8789 Jul 25 11:54	9°♄45'21	0°00'46	evening set	8790 Jun 30 01:51	26°♄09'21	
transit middle	8789 Jul 25 11:54	9°♄45'21	0°00'46	inferior conj	8790 Jul 07 06:11	21°♄26'10	1°27'18
transit begin	8789 Jul 25 08:14	9°♄52'08		minimum elong	8790 Jul 07 08:46	21°♄20'33	1°26'14
transit end	8789 Jul 25 15:34	9°♄38'34		min. Earth dist.	8790 Jul 10 15:17	18°♄32'04	0.59224 AU
desc. node	8789 Jul 25 11:07	9°♄46'47		desc. node	8790 Jul 12 08:13	17°♄12'33	
min. Earth dist.	8789 Jul 28 16:56	7°♄23'57	0.57127 AU	morning rise	8790 Jul 14 12:34	15°♄47'09	
morning rise	8789 Aug 02 08:09	4°♄38'26		direct	8790 Jul 20 20:13	13°♄57'43	
direct	8789 Aug 08 00:02	3°♄19'48		morning max el	8790 Aug 04 05:03	21°♄46'40	27°30'46
morning max el	8789 Aug 22 07:39	10°♄49'20	26°28'37		8790 Aug 11 09:57	0°♄	
	8789 Sep 06 01:56	0°♄			8790 Aug 30 01:11	0°♄	
asc. node	8789 Sep 16 22:04	19°♄41'08		asc. node	8790 Sep 03 19:01	9°♄30'02	
morning set	8789 Sep 20 06:39	26°♄39'19		morning set	8790 Sep 04 14:08	11°♄09'56	

max. Earth dist.	8790 Sep 11 02:27	25° \mathbb{M} 18'26	1.31608 AU	asc. node	8791 Aug 21 15:58	29° Ω 29'18	
					8791 Aug 21 21:47	0° \mathbb{M}	
superior conj	8790 Sep 11 16:01	26° \mathbb{M} 33'39	1°12'27	max. Earth dist.	8791 Aug 25 10:38	7° \mathbb{M} 35'54	1.31905 AU
minimum elong	8790 Sep 11 13:46	26° \mathbb{M} 21'11	1°12'05				
	8790 Sep 13 05:11	0° Ω		superior conj	8791 Aug 27 02:18	11° \mathbb{M} 13'13	0°52'41
evening rise	8790 Sep 18 10:01	11° Ω 22'38		minimum elong	8791 Aug 27 00:15	11° \mathbb{M} 01'56	0°52'14
	8790 Sep 27 19:53	0° \mathbb{M}		evening rise	8791 Sep 02 20:58	26° \mathbb{M} 03'56	
desc. node	8790 Oct 08 06:53	16° \mathbb{M} 34'38			8791 Sep 04 17:30	0° Ω	
evening max el	8790 Oct 17 02:22	26° \mathbb{M} 49'42	26°11'38		8791 Sep 22 01:57	0° \mathbb{M}	
	8790 Oct 20 20:49	0° \mathbb{M}		desc. node	8791 Sep 25 04:00	3° \mathbb{M} 48'47	
retrograde	8790 Oct 31 00:22	3° \mathbb{M} 53'56		evening max el	8791 Sep 28 17:19	7° \mathbb{M} 34'15	24°47'41
evening set	8790 Nov 06 12:11	2° \mathbb{M} 12'36		retrograde	8791 Oct 12 13:04	14° \mathbb{M} 31'39	
	8790 Nov 10 02:59	30° \mathbb{M}		evening set	8791 Oct 18 00:03	13° \mathbb{M} 24'52	
min. Earth dist.	8790 Nov 10 15:25	29° \mathbb{M} 38'02	0.58763 AU	min. Earth dist.	8791 Oct 23 04:31	10° \mathbb{M} 39'52	0.56836 AU
inferior conj	8790 Nov 13 19:17	27° \mathbb{M} 17'20	-4°47'42	inferior conj	8791 Oct 25 21:44	8° \mathbb{M} 54'32	-5°30'15
minimum elong	8790 Nov 14 02:31	27° \mathbb{M} 03'52	4°45'56	minimum elong	8791 Oct 26 01:29	8° \mathbb{M} 48'27	5°29'47
morning rise	8790 Nov 21 19:12	22° \mathbb{M} 48'23		morning rise	8791 Nov 03 05:09	4° \mathbb{M} 48'15	
direct	8790 Nov 24 01:12	22° \mathbb{M} 31'20		direct	8791 Nov 05 17:35	4° \mathbb{M} 30'34	
asc. node	8790 Nov 30 18:43	25° \mathbb{M} 14'21		morning max el	8791 Nov 15 03:05	8° \mathbb{M} 58'18	19°21'47
morning max el	8790 Dec 02 04:14	26° \mathbb{M} 28'52	18°29'13	asc. node	8791 Nov 17 15:44	11° \mathbb{M} 41'12	
	8790 Dec 05 06:40	0° \mathbb{M}			8791 Nov 28 22:32	0° \mathbb{M}	
morning set	8790 Dec 18 04:06	22° \mathbb{M} 03'21		morning set	8791 Dec 02 05:37	6° \mathbb{M} 29'39	
	8790 Dec 22 07:12	0° Ω					
superior conj	8790 Dec 27 03:10	9° Ω 06'49	0°58'33	superior conj	8791 Dec 10 07:31	22° \mathbb{M} 34'57	1°20'37
minimum elong	8790 Dec 27 06:30	9° Ω 22'14	0°58'19	minimum elong	8791 Dec 10 10:27	22° \mathbb{M} 49'15	1°20'33
max. Earth dist.	8791 Jan 03 14:01	22° Ω 27'49	1.40343 AU		8791 Dec 14 04:30	0° Ω	
desc. node	8791 Jan 04 05:54	23° Ω 36'18		max. Earth dist.	8791 Dec 16 19:45	4° Ω 52'47	1.38161 AU
evening rise	8791 Jan 07 20:53	29° Ω 43'45		evening rise	8791 Dec 20 13:23	11° Ω 33'25	
	8791 Jan 08 00:48	0° \approx		desc. node	8791 Dec 22 02:53	14° Ω 16'09	
	8791 Jan 27 17:48	0° \mathbb{M}			8791 Dec 31 18:07	0° \approx	
evening max el	8791 Feb 11 12:05	18° \mathbb{M} 11'44	23°42'07	evening max el	8792 Jan 23 03:00	0° \mathbb{M}	
retrograde	8791 Feb 22 07:47	24° \mathbb{M} 34'34		retrograde	8792 Jan 25 01:17	1° \mathbb{M} 58'40	24°59'53
asc. node	8791 Feb 26 17:41	23° \mathbb{M} 00'48		evening set	8792 Feb 05 21:51	8° \mathbb{M} 52'06	
evening set	8791 Feb 27 11:34	22° \mathbb{M} 25'34		asc. node	8792 Feb 11 14:07	6° \mathbb{M} 30'24	
inferior conj	8791 Mar 04 22:06	15° \mathbb{M} 58'06	1°53'56	min. Earth dist.	8792 Feb 13 14:49	4° \mathbb{M} 30'04	
minimum elong	8791 Mar 04 19:58	16° \mathbb{M} 05'24	1°53'17	inferior conj	8792 Feb 16 01:51	1° \mathbb{M} 29'01	0.67783 AU
min. Earth dist.	8791 Mar 04 07:01	16° \mathbb{M} 49'38	0.68330 AU	minimum elong	8792 Feb 17 04:29	0° \mathbb{M} 01'36	1°08'54
morning rise	8791 Mar 10 04:21	9° \mathbb{M} 54'03			8792 Feb 17 02:55	0° \mathbb{M} 06'42	1°08'26
direct	8791 Mar 14 07:38	8° \mathbb{M} 17'46		morning rise	8792 Feb 17 04:58	30° \mathbb{M}	
morning max el	8791 Mar 22 10:27	12° \mathbb{M} 55'37	20°41'24	direct	8792 Feb 22 16:01	24° \approx 04'58	
desc. node	8791 Apr 02 05:45	26° \mathbb{M} 22'27		morning max el	8792 Feb 26 06:39	22° \approx 50'05	
	8791 Apr 04 19:08	0° \mathbb{Y}			8792 Mar 04 12:31	26° \approx 51'40	19°34'18
morning set	8791 Apr 20 22:04	24° \mathbb{Y} 12'26		greatest brilliancy	8792 Mar 07 09:13	0° \mathbb{M}	
	8791 Apr 24 14:46	0° Ω		desc. node	8792 Mar 17 05:24	13° \mathbb{M} 28'05	-0.7m
max. Earth dist.	8791 Apr 29 10:51	7° Ω 43'47	1.43254 AU		8792 Mar 19 02:39	16° \mathbb{M} 15'58	
					8792 Mar 28 03:44	0° \mathbb{Y}	
superior conj	8791 May 06 03:11	18° Ω 43'39	-2°07'46	morning set	8792 Mar 29 19:55	2° \mathbb{Y} 34'34	
minimum elong	8791 May 06 07:05	19° Ω 00'04	2°07'46	max. Earth dist.	8792 Mar 29 19:55	2° \mathbb{Y} 34'34	
	8791 May 12 17:38	0° \mathbb{M}			8792 Apr 10 23:28	21° \mathbb{Y} 31'15	1.44681 AU
evening rise	8791 May 18 06:08	9° \mathbb{M} 41'15		superior conj	8792 Apr 15 07:05	28° \mathbb{Y} 23'57	-2°11'20
asc. node	8791 May 25 16:28	22° \mathbb{M} 39'06		minimum elong	8792 Apr 15 04:55	28° \mathbb{Y} 15'15	2°11'24
	8791 May 30 07:32	0° Ω			8792 Apr 16 06:59	0° Ω	
evening max el	8791 Jun 04 03:46	6° Ω 01'54	18°05'05	evening rise	8792 Apr 29 03:50	21° Ω 12'36	
retrograde	8791 Jun 10 16:33	9° Ω 23'50			8792 May 04 09:26	0° \mathbb{M}	
evening set	8791 Jun 13 07:49	8° Ω 50'33		asc. node	8792 May 11 13:33	11° \mathbb{M} 31'12	
inferior conj	8791 Jun 19 19:49	3° Ω 47'27	2°27'38	evening max el	8792 May 17 17:10	19° \mathbb{M} 24'06	18°14'29
minimum elong	8791 Jun 19 22:44	3° Ω 40'10	2°26'40	retrograde	8792 May 24 02:19	22° \mathbb{M} 47'24	
min. Earth dist.	8791 Jun 22 21:54	0° Ω 43'53	0.61478 AU	evening set	8792 May 27 00:56	22° \mathbb{M} 01'08	
	8791 Jun 23 16:49	30° \mathbb{M}		inferior conj	8792 Jun 02 00:39	16° \mathbb{M} 39'56	3°03'34
morning rise	8791 Jun 26 11:25	27° \mathbb{M} 46'18		minimum elong	8792 Jun 02 02:39	16° \mathbb{M} 34'18	3°03'01
desc. node	8791 Jun 29 05:18	26° \mathbb{M} 15'54		min. Earth dist.	8792 Jun 04 13:49	13° \mathbb{M} 49'05	0.63615 AU
direct	8791 Jul 03 03:45	25° \mathbb{M} 28'19		morning rise	8792 Jun 08 03:02	10° \mathbb{M} 26'39	
	8791 Jul 13 12:32	0° Ω		direct	8792 Jun 14 20:43	7° \mathbb{M} 48'35	
morning max el	8791 Jul 17 09:14	3° Ω 28'46	27°55'42	desc. node	8792 Jun 15 02:20	7° \mathbb{M} 48'45	
	8791 Aug 06 00:10	0° Ω		morning max el	8792 Jun 28 17:57	15° \mathbb{M} 51'10	27°42'46
morning set	8791 Aug 19 16:48	25° Ω 23'58			8792 Jul 10 08:33	0° Ω	
					8792 Jul 28 17:27	0° Ω	

morning set	8792 Aug 02 12:16	9°Ω14'09		morning max el	8793 Jun 11 04:20	28°8'43"32	26°56'59
max. Earth dist.	8792 Aug 07 12:42	19°Ω32'41	1.32680 AU		8793 Jun 12 09:47	0°Π	
asc. node	8792 Aug 07 12:54	19°Ω33'45			8793 Jul 04 04:13	0°Ϣ	
				morning set	8793 Jul 16 21:37	22°Ϣ32'44	
superior conj	8792 Aug 10 09:14	25°Ω38'28	0°28'27		8793 Jul 20 16:50	0°Ω	
minimum elong	8792 Aug 10 07:55	25°Ω31'22	0°28'02	max. Earth dist.	8793 Jul 21 05:13	1°Ω02'14	1.33948 AU
	8792 Aug 12 09:32	0°Π					
evening rise	8792 Aug 17 08:34	10°Π43'28		superior conj	8793 Jul 25 10:38	9°Ω43'48	0°00'20
	8792 Aug 27 04:09	0°Ω		minimum elong	8793 Jul 25 10:38	9°Ω43'47	0°00'08
evening max el	8792 Sep 09 04:21	17°Ω48'00	23°09'11	behind sun begin	8793 Jul 25 04:59	9°Ω14'14	
desc. node	8792 Sep 11 01:07	19°Ω29'49		behind sun end	8793 Jul 25 16:17	10°Ω13'23	
retrograde	8792 Sep 22 13:39	24°Ω29'16		asc. node	8793 Jul 25 09:51	9°Ω39'39	
evening set	8792 Sep 26 13:03	23°Ω54'45		evening rise	8793 Aug 01 18:56	25°Ω16'09	
min. Earth dist.	8792 Oct 03 13:30	20°Ω41'02	0.55373 AU		8793 Aug 04 01:38	0°Π	
inferior conj	8792 Oct 05 04:34	19°Ω44'15	-5°32'09	evening max el	8793 Aug 21 20:23	28°Π06'39	21°32'50
minimum elong	8792 Oct 05 00:57	19°Ω49'32	5°31'48		8793 Aug 23 22:33	0°Ω	
morning rise	8792 Oct 13 14:53	15°Ω53'48		desc. node	8793 Aug 28 22:14	3°Ω06'53	
direct	8792 Oct 16 14:42	15°Ω32'31		retrograde	8793 Sep 03 03:34	4°Ω12'40	
morning max el	8792 Oct 27 13:19	20°Ω40'31	20°36'52	evening set	8793 Sep 05 18:16	3°Ω57'08	
asc. node	8792 Nov 03 12:42	29°Ω10'44		inferior conj	8793 Sep 14 22:35	29°Π59'23	-4°38'51
	8792 Nov 04 01:46	0°Π		minimum elong	8793 Sep 14 13:17	0°Ω12'24	4°36'41
morning set	8792 Nov 15 12:41	21°Π10'05			8793 Sep 14 22:09	30°RΠ	
	8792 Nov 19 18:53	0°♂		min. Earth dist.	8793 Sep 14 21:55	0°Ω00'19	0.54691 AU
				morning rise	8793 Sep 23 09:15	26°Π09'05	
superior conj	8792 Nov 23 00:11	6°♂37'57	1°34'18	direct	8793 Sep 27 00:14	25°Π40'31	
minimum elong	8792 Nov 23 02:00	6°♂47'14	1°34'24		8793 Oct 07 15:27	0°Ω	
max. Earth dist.	8792 Nov 28 03:20	16°♂50'34	1.36092 AU	morning max el	8793 Oct 09 10:49	1°Ω34'17	22°11'43
evening rise	8792 Dec 02 01:17	24°♂14'42		asc. node	8793 Oct 21 09:39	17°Ω28'36	
	8792 Dec 05 05:40	0°Ϣ			8793 Oct 28 01:46	0°Π	
desc. node	8792 Dec 07 23:53	4°Ϣ48'08		morning set	8793 Oct 30 23:00	5°Π57'47	
	8792 Dec 24 09:04	0°≈					
evening max el	8793 Jan 06 14:24	15°≈45'38	26°08'09	superior conj	8793 Nov 07 01:26	21°Π04'21	1°40'30
retrograde	8793 Jan 19 07:01	22°≈58'15		minimum elong	8793 Nov 07 01:57	21°Π07'06	1°40'39
evening set	8793 Jan 25 11:34	20°≈27'11		max. Earth dist.	8793 Nov 10 17:41	28°Π43'49	1.34333 AU
min. Earth dist.	8793 Jan 29 16:45	16°≈00'17	0.66855 AU		8793 Nov 11 08:38	0°♂	
asc. node	8793 Jan 30 11:55	15°≈01'15		evening rise	8793 Nov 15 04:46	7°♂37'07	
inferior conj	8793 Jan 31 06:53	14°≈02'21	0°15'42	desc. node	8793 Nov 24 20:54	25°♂06'50	
minimum elong	8793 Jan 31 06:28	14°≈03'38	0°15'42		8793 Nov 27 20:06	0°Ϣ	
transit middle	8793 Jan 31 06:28	14°≈03'38	0°15'42	evening max el	8793 Dec 20 03:45	29°Ϣ24'59	26°59'30
transit begin	8793 Jan 31 05:50	14°≈05'34			8793 Dec 20 18:33	0°≈	
transit end	8793 Jan 31 07:05	14°≈01'43		retrograde	8794 Jan 02 10:25	6°≈45'08	
morning rise	8793 Feb 06 02:03	8°≈14'54		evening set	8794 Jan 09 01:55	4°≈09'46	
direct	8793 Feb 09 05:29	7°≈18'42		min. Earth dist.	8794 Jan 13 01:23	0°≈16'58	0.65568 AU
morning max el	8793 Feb 15 21:55	10°≈56'22	18°42'44		8794 Jan 13 07:25	30°RϢ	
	8793 Mar 01 19:34	0°♂		inferior conj	8794 Jan 15 03:06	27°Ϣ54'55	-0°45'08
desc. node	8793 Mar 05 23:33	6°♂29'24		minimum elong	8794 Jan 15 04:25	27°Ϣ51'11	0°44'22
morning set	8793 Mar 09 08:31	11°♂46'43		asc. node	8794 Jan 17 09:00	25°Ϣ26'43	
	8793 Mar 20 23:46	0°♀		morning rise	8794 Jan 21 08:07	22°Ϣ19'10	
max. Earth dist.	8793 Mar 24 16:42	5°♀47'57	1.45445 AU	direct	8794 Jan 24 02:11	21°Ϣ38'01	
				morning max el	8794 Jan 30 12:35	25°Ϣ03'01	18°07'43
superior conj	8793 Mar 25 16:13	7°♀20'02	-1°54'57		8794 Feb 03 16:47	0°≈	
minimum elong	8793 Mar 25 07:40	6°♀46'32	1°54'22	morning set	8794 Feb 18 01:40	22°≈25'31	
	8793 Apr 08 23:51	0°8		desc. node	8794 Feb 20 20:26	26°≈56'41	
evening rise	8793 Apr 10 02:00	1°844'49			8794 Feb 22 17:46	0°♂	
greatest brilliancy	8793 Apr 17 09:56	13°830'00	-0.9m				
asc. node	8793 Apr 28 10:38	29°848'51		superior conj	8794 Mar 04 22:33	16°♂15'28	-1°20'29
	8793 Apr 28 14:13	0°Π		minimum elong	8794 Mar 04 13:42	15°♂40'37	1°19'23
evening max el	8793 May 01 04:52	2°Π56'49	18°42'02	max. Earth dist.	8794 Mar 07 12:16	20°♂17'54	1.45474 AU
retrograde	8793 May 07 19:21	6°Π34'29			8794 Mar 13 17:24	0°♀	
evening set	8793 May 11 01:30	5°Π34'00		evening rise	8794 Mar 21 02:14	11°♀26'39	
inferior conj	8793 May 16 16:45	29°856'13	3°19'56		8794 Apr 02 03:43	0°8	
minimum elong	8793 May 16 17:27	29°854'03	3°19'42	greatest brilliancy	8794 Apr 02 15:47	0°845'20	-0.7m
	8793 May 16 15:31	30°R8		evening max el	8794 Apr 14 12:38	16°834'22	19°26'35
min. Earth dist.	8793 May 18 14:48	27°835'03	0.65447 AU	asc. node	8794 Apr 15 07:44	17°820'56	
morning rise	8793 May 22 08:42	23°838'08		retrograde	8794 Apr 21 16:23	20°838'08	
direct	8793 May 28 21:27	20°851'50		evening set	8794 Apr 25 06:40	19°822'38	
desc. node	8793 Jun 01 23:21	21°846'33		inferior conj	8794 Apr 30 16:42	13°829'43	3°20'54

minimum elong	8794 Apr 30 16:11	13°♄31'26	3°20'44	min. Earth dist.	8795 Apr 15 14:30	26°♄18'42	0.67839 AU
min. Earth dist.	8794 May 01 23:37	11°♄48'23	0.66866 AU	morning rise	8795 Apr 20 02:10	20°♄59'29	
morning rise	8794 May 06 01:21	7°♄11'17		direct	8795 Apr 25 16:45	18°♄29'43	
direct	8794 May 12 04:27	4°♄28'35		desc. node	8795 May 06 17:18	24°♄59'09	
desc. node	8794 May 19 20:20	7°♄39'58		morning max el	8795 May 06 23:32	25°♄14'50	24°21'35
morning max el	8794 May 24 14:18	11°♄54'07	25°46'42		8795 May 11 06:58	0°♄	
	8794 Jun 08 02:00	0°♄			8795 Jun 01 13:59	0°♄	
	8794 Jun 26 20:23	0°♄		morning set	8795 Jun 11 17:28	16°♄50'01	
morning set	8794 Jun 29 17:00	5°♄09'18		max. Earth dist.	8795 Jun 15 09:13	23°♄18'46	1.37785 AU
max. Earth dist.	8794 Jul 03 11:06	12°♄10'31	1.35684 AU		8795 Jun 19 00:39	0°♄	
superior conj	8794 Jul 09 03:56	23°♄22'13	-0°30'40	superior conj	8795 Jun 22 09:43	6°♄24'11	-1°02'53
minimum elong	8794 Jul 09 05:45	23°♄31'27	0°30'32	minimum elong	8795 Jun 22 13:40	6°♄43'12	1°02'28
asc. node	8794 Jul 12 06:49	29°♄43'21		asc. node	8795 Jun 29 03:49	19°♄40'04	
	8794 Jul 12 10:04	0°♄		evening rise	8795 Jul 01 03:12	23°♄35'22	
evening rise	8794 Jul 17 02:00	9°♄36'06			8795 Jul 04 09:41	0°♄	
	8794 Jul 28 00:39	0°♄		evening max el	8795 Jul 17 17:25	20°♄37'40	19°09'29
evening max el	8794 Aug 04 00:21	9°♄00'03	20°11'08	retrograde	8795 Jul 26 17:38	25°♄05'26	
retrograde	8794 Aug 14 16:32	14°♄16'45		evening set	8795 Jul 28 14:56	24°♄54'29	
desc. node	8794 Aug 15 19:22	14°♄13'30		desc. node	8795 Aug 02 16:29	22°♄52'23	
evening set	8794 Aug 16 15:04	14°♄07'05		inferior conj	8795 Aug 06 01:53	20°♄42'34	-1°02'33
inferior conj	8794 Aug 25 17:11	10°♄08'41	-2°58'41	minimum elong	8795 Aug 05 23:09	20°♄47'11	1°01'38
minimum elong	8794 Aug 25 09:11	10°♄20'31	2°55'59	min. Earth dist.	8795 Aug 08 21:16	18°♄49'11	0.56123 AU
min. Earth dist.	8794 Aug 27 07:53	9°♄11'26	0.54956 AU	morning rise	8795 Aug 14 04:24	15°♄57'14	
morning rise	8794 Sep 03 02:12	5°♄58'27		direct	8795 Aug 19 08:51	14°♄55'01	
direct	8794 Sep 07 11:01	5°♄17'13		morning max el	8795 Sep 02 12:57	22°♄08'10	25°39'02
morning max el	8794 Sep 21 00:14	11°♄54'22	23°57'29		8795 Sep 09 11:44	0°♄	
	8794 Oct 04 16:19	0°♄		asc. node	8795 Sep 25 03:32	25°♄44'17	
asc. node	8794 Oct 08 06:35	6°♄23'06			8795 Sep 27 06:20	0°♄	
morning set	8794 Oct 15 10:43	20°♄47'34		morning set	8795 Sep 29 22:07	5°♄33'48	
	8794 Oct 19 16:56	0°♄		superior conj	8795 Oct 06 18:47	20°♄34'27	1°33'34
superior conj	8794 Oct 22 08:26	5°♄45'49	1°40'01	minimum elong	8795 Oct 06 17:12	20°♄25'41	1°33'30
minimum elong	8794 Oct 22 07:45	5°♄42'10	1°40'07	max. Earth dist.	8795 Oct 07 22:18	23°♄06'01	1.32088 AU
max. Earth dist.	8794 Oct 24 16:35	10°♄48'27	1.32987 AU		8795 Oct 11 02:25	0°♄	
evening rise	8794 Oct 29 20:07	21°♄31'01		evening rise	8795 Oct 13 20:04	5°♄47'00	
	8794 Nov 03 04:22	0°♄			8795 Oct 26 18:24	0°♄	
desc. node	8794 Nov 11 17:59	15°♄06'02		desc. node	8795 Oct 29 15:05	4°♄36'50	
	8794 Nov 21 17:07	0°♄		evening max el	8795 Nov 15 01:16	25°♄33'05	27°23'57
evening max el	8794 Dec 02 16:10	12°♄45'30	27°26'45		8795 Nov 20 14:58	0°♄	
retrograde	8794 Dec 16 07:14	20°♄04'49		retrograde	8795 Nov 28 20:56	2°♄47'45	
evening set	8794 Dec 23 06:46	17°♄31'58		evening set	8795 Dec 05 23:01	0°♄26'29	
min. Earth dist.	8794 Dec 27 01:31	14°♄11'30	0.63948 AU		8795 Dec 06 14:34	30°♄	
inferior conj	8794 Dec 29 14:40	11°♄33'24	-1°52'22	min. Earth dist.	8795 Dec 09 15:25	27°♄33'05	0.62039 AU
minimum elong	8794 Dec 29 18:11	11°♄24'16	1°50'41	inferior conj	8795 Dec 12 14:30	24°♄49'45	-3°03'21
asc. node	8795 Jan 04 06:03	6°♄42'50		minimum elong	8795 Dec 12 20:22	24°♄36'13	3°01'00
morning rise	8795 Jan 05 07:22	6°♄12'24		morning rise	8795 Dec 19 19:58	19°♄46'58	
direct	8795 Jan 07 18:08	5°♄42'33		direct	8795 Dec 22 01:57	19°♄24'46	
morning max el	8795 Jan 14 05:51	9°♄04'52	17°49'53	asc. node	8795 Dec 22 03:06	19°♄24'46	
	8795 Jan 28 08:19	0°♄		morning max el	8795 Dec 28 22:34	22°♄53'41	17°49'57
morning set	8795 Jan 30 22:47	4°♄26'15			8796 Jan 03 12:14	0°♄	
desc. node	8795 Feb 07 17:22	17°♄33'38		morning set	8796 Jan 13 17:39	17°♄29'00	
					8796 Jan 20 18:52	0°♄	
superior conj	8795 Feb 12 20:34	25°♄59'45	-0°36'55	superior conj	8796 Jan 24 19:36	6°♄56'56	0°05'48
minimum elong	8795 Feb 12 16:28	25°♄43'06	0°36'12	minimum elong	8796 Jan 24 20:09	6°♄59'19	0°05'54
	8795 Feb 15 08:05	0°♄		behind sun begin	8796 Jan 24 12:00	6°♄24'37	
max. Earth dist.	8795 Feb 18 07:33	4°♄45'09	1.44767 AU	behind sun end	8796 Jan 25 04:18	7°♄33'56	
evening rise	8795 Feb 28 14:15	20°♄46'22		desc. node	8796 Jan 25 14:19	8°♄16'25	
	8795 Mar 06 15:44	0°♄		max. Earth dist.	8796 Jan 31 23:30	18°♄51'14	1.43402 AU
	8795 Mar 28 09:47	0°♄			8796 Feb 07 23:39	0°♄	
evening max el	8795 Mar 28 15:05	0°♄13'33	20°26'03	evening rise	8796 Feb 08 05:07	0°♄21'21	
asc. node	8795 Apr 02 04:50	3°♄54'10			8796 Feb 28 06:31	0°♄	
retrograde	8795 Apr 05 14:55	4°♄53'00		evening max el	8796 Mar 10 12:00	13°♄54'06	21°37'18
evening set	8795 Apr 09 14:14	3°♄22'11		asc. node	8796 Mar 19 01:57	19°♄13'56	
	8795 Apr 12 20:21	30°♄		retrograde	8796 Mar 19 13:01	19°♄15'01	
inferior conj	8795 Apr 14 21:47	27°♄15'52	3°09'26	evening set	8796 Mar 23 22:27	17°♄28'59	
minimum elong	8795 Apr 14 20:19	27°♄20'54	3°09'09				

inferior conj	8796 Mar 29 05:45	11°♈11'41	2°47'26		8797 Mar 09 21:47	30°♏♏	
minimum elong	8796 Mar 29 03:41	11°♈18'53	2°46'57	inferior conj	8797 Mar 13 14:34	25°♏13'15	2°16'02
min. Earth dist.	8796 Mar 29 09:28	10°♈58'45	0.68364 AU	minimum elong	8797 Mar 13 12:19	25°♏21'01	2°15'24
morning rise	8796 Apr 03 08:45	4°♈58'55		min. Earth dist.	8797 Mar 13 06:13	25°♏42'11	0.68459 AU
direct	8796 Apr 08 09:33	2°♈48'01		morning rise	8797 Mar 18 18:52	19°♏05'24	
morning max el	8796 Apr 18 09:42	8°♈43'25	22°51'44	direct	8797 Mar 23 05:49	17°♏16'16	
desc. node	8796 Apr 22 14:15	13°♈20'59		morning max el	8797 Mar 31 23:58	22°♏20'49	21°26'00
	8796 May 05 01:16	0°♏			8797 Apr 07 14:03	0°♈	
morning set	8796 May 22 17:40	27°♏22'11		desc. node	8797 Apr 09 11:11	2°♈27'39	
	8796 May 24 07:37	0°♏			8797 Apr 28 08:28	0°♏	
max. Earth dist.	8796 May 27 05:51	4°♏57'23	1.40043 AU	morning set	8797 May 02 14:29	6°♏38'59	
				max. Earth dist.	8797 May 09 07:02	17°♏26'29	1.42186 AU
superior conj	8796 Jun 03 23:58	18°♏40'33	-1°33'33	superior conj	8797 May 16 18:01	0°♏00'47	-1°58'22
minimum elong	8796 Jun 04 05:39	19°♏06'28	1°33'03	minimum elong	8797 May 16 23:36	0°♏24'50	1°58'09
	8796 Jun 10 01:51	0°♏			8797 May 16 17:51	0°♏	
evening rise	8796 Jun 13 19:27	7°♏06'14		evening rise	8797 May 27 22:47	19°♏58'25	
asc. node	8796 Jun 15 00:51	9°♏25'57		asc. node	8797 Jun 01 21:53	28°♏55'47	
	8796 Jun 27 06:33	0°♏			8797 Jun 02 12:26	0°♏	
evening max el	8796 Jun 29 21:00	2°♏56'34	18°28'45	evening max el	8797 Jun 13 07:15	15°♏47'34	18°08'11
retrograde	8796 Jul 07 13:15	6°♏46'33		retrograde	8797 Jun 20 02:44	19°♏15'01	
evening set	8796 Jul 09 16:27	6°♏29'40		evening set	8797 Jun 22 13:40	18°♏48'29	
inferior conj	8796 Jul 17 07:44	1°♏58'27	0°40'01	inferior conj	8797 Jun 29 10:37	13°♏57'01	1°56'09
minimum elong	8796 Jul 17 09:08	1°♏55'39	0°39'18	minimum elong	8797 Jun 29 13:34	13°♏50'13	1°55'03
desc. node	8796 Jul 19 13:35	0°♏11'26		min. Earth dist.	8797 Jul 02 17:58	10°♏55'35	0.60181 AU
	8796 Jul 19 19:26	30°♏♏		morning rise	8797 Jul 06 10:37	8°♏07'09	
min. Earth dist.	8796 Jul 20 16:07	29°♏20'24	0.57973 AU	desc. node	8797 Jul 06 10:40	8°♏07'05	
morning rise	8796 Jul 24 22:20	26°♏36'28		direct	8797 Jul 12 23:01	6°♏04'28	
direct	8796 Jul 30 21:23	25°♏04'59		morning max el	8797 Jul 27 07:00	14°♏00'10	27°46'05
	8796 Aug 11 05:00	0°♏			8797 Aug 09 02:58	0°♏	
morning max el	8796 Aug 14 06:39	2°♏44'32	26°59'18		8797 Aug 26 07:26	0°♏	
	8796 Sep 02 22:31	0°♏		morning set	8797 Aug 28 13:14	4°♏35'56	
asc. node	8796 Sep 11 00:30	15°♏24'54		asc. node	8797 Aug 28 21:27	5°♏18'50	
morning set	8796 Sep 13 07:33	20°♏11'41		max. Earth dist.	8797 Sep 03 17:19	17°♏53'24	1.31667 AU
	8796 Sep 17 20:04	0°♏					
superior conj	8796 Sep 20 06:33	5°♏24'14	1°21'38	superior conj	8797 Sep 04 17:54	20°♏09'19	1°04'39
minimum elong	8796 Sep 20 04:25	5°♏12'24	1°21'23	minimum elong	8797 Sep 04 15:41	19°♏57'00	1°04'14
max. Earth dist.	8796 Sep 20 07:44	5°♏30'47	1.31645 AU		8797 Sep 09 04:50	0°♏	
evening rise	8796 Sep 27 02:00	20°♏17'52		evening rise	8797 Sep 11 11:40	4°♏57'10	
	8796 Oct 01 19:40	0°♏			8797 Sep 24 14:29	0°♏	
desc. node	8796 Oct 15 12:12	23°♏28'01		desc. node	8797 Oct 02 09:18	11°♏23'58	
	8796 Oct 20 07:42	0°♏		evening max el	8797 Oct 09 00:06	18°♏49'26	25°38'53
evening max el	8796 Oct 27 04:31	7°♏36'13	26°47'30	retrograde	8797 Oct 22 22:13	25°♏51'34	
retrograde	8796 Nov 10 02:33	14°♏45'01		evening set	8797 Oct 29 00:46	24°♏24'46	
evening set	8796 Nov 16 22:38	12°♏46'08		min. Earth dist.	8797 Nov 02 12:30	21°♏47'53	0.57899 AU
min. Earth dist.	8796 Nov 20 18:40	10°♏09'06	0.59959 AU	inferior conj	8797 Nov 05 13:28	19°♏40'17	-5°09'29
inferior conj	8796 Nov 23 23:12	7°♏35'01	-4°12'33	minimum elong	8797 Nov 05 19:47	19°♏29'10	5°08'15
minimum elong	8796 Nov 24 06:36	7°♏20'04	4°10'16	morning rise	8797 Nov 13 17:07	15°♏21'06	
morning rise	8796 Dec 01 17:04	2°♏53'20		direct	8797 Nov 16 00:58	15°♏04'15	
direct	8796 Dec 03 21:36	2°♏35'26		morning max el	8797 Nov 24 16:15	19°♏13'56	18°48'47
asc. node	8796 Dec 08 00:09	3°♏41'45		asc. node	8797 Nov 24 21:11	19°♏25'57	
morning max el	8796 Dec 11 11:16	6°♏20'03	18°09'00		8797 Dec 02 16:27	0°♏	
	8796 Dec 26 12:05	0°♏		morning set	8797 Dec 11 01:06	15°♏29'55	
morning set	8796 Dec 27 04:00	1°♏14'39			8797 Dec 18 11:45	0°♏	
superior conj	8797 Jan 05 18:59	19°♏03'15	0°41'46	superior conj	8797 Dec 19 14:15	2°♏06'06	1°08'58
minimum elong	8797 Jan 05 21:55	19°♏16'23	0°41'34	minimum elong	8797 Dec 19 17:33	2°♏21'42	1°08'47
desc. node	8797 Jan 11 11:16	29°♏00'56		max. Earth dist.	8797 Dec 26 17:02	15°♏08'26	1.39418 AU
	8797 Jan 12 01:06	0°♏		desc. node	8797 Dec 29 08:14	19°♏44'04	
max. Earth dist.	8797 Jan 13 10:16	2°♏20'25	1.41544 AU	evening rise	8797 Dec 30 15:55	21°♏59'27	
evening rise	8797 Jan 18 11:43	10°♏41'13			8798 Jan 04 11:54	0°♏	
	8797 Jan 31 00:07	0°♏			8798 Jan 24 23:47	0°♏	
evening max el	8797 Feb 21 04:29	27°♏36'47	22°55'56	evening max el	8798 Feb 03 18:30	11°♏23'21	24°15'55
	8797 Feb 23 18:06	0°♈		retrograde	8798 Feb 15 01:25	18°♏00'26	
retrograde	8797 Mar 03 08:58	3°♈38'57		evening set	8798 Feb 20 10:21	15°♏46'02	
asc. node	8797 Mar 05 23:05	3°♈05'42		asc. node	8798 Feb 20 20:13	15°♏24'18	
evening set	8797 Mar 08 05:40	1°♈38'13		min. Earth dist.	8798 Feb 25 02:27	10°♏24'32	0.68149 AU

inferior conj	8798 Feb 25 22:23	9° K 17'26	1°35'52		8799 Feb 04 05:05	30° R	
minimum elong	8798 Feb 25 20:25	9° K 24'01	1°35'16	asc. node	8799 Feb 07 17:19	26° R 23'44	
morning rise	8798 Mar 03 06:33	3° K 16'04		min. Earth dist.	8799 Feb 08 19:52	25° R 01'16	0.67443 AU
direct	8798 Mar 07 04:21	1° K 48'57		inferior conj	8799 Feb 10 03:18	23° R 20'26	0°47'19
morning max el	8798 Mar 14 21:18	6° K 09'59	20°10'55	minimum elong	8799 Feb 10 02:10	23° R 24'06	0°47'01
desc. node	8798 Mar 27 08:05	22° K 06'56		morning rise	8799 Feb 15 17:48	17° R 27'23	
	8798 Apr 01 16:55	0° Y		direct	8799 Feb 19 03:36	16° R 20'40	
morning set	8798 Apr 11 14:53	15° Y 03'37		morning max el	8799 Feb 26 02:35	20° R 10'10	19°10'19
	8798 Apr 21 03:26	0° Z			8799 Mar 06 00:15	0° K	
max. Earth dist.	8798 Apr 21 15:45	0° Z 49'12	1.43942 AU	greatest brilliancy	8799 Mar 11 08:49	7° K 51'32	-0.7m
				desc. node	8799 Mar 14 04:59	12° K 09'52	
superior conj	8798 Apr 27 12:02	10° Z 17'35	-2°11'31	morning set	8799 Mar 21 16:21	23° K 40'00	
minimum elong	8798 Apr 27 13:48	10° Z 24'49	2°11'38		8799 Mar 25 18:24	0° Y	
	8798 May 09 04:21	0° II		max. Earth dist.	8799 Apr 04 07:07	14° Y 53'13	1.45102 AU
evening rise	8798 May 10 08:35	2° II 01'54					
asc. node	8798 May 19 18:57	18° II 03'49		superior conj	8799 Apr 07 06:36	19° Y 35'21	-2°06'54
evening max el	8798 May 27 20:29	29° II 01'18	18°06'52	minimum elong	8799 Apr 07 01:19	19° Y 14'25	2°06'45
	8798 May 28 21:59	0° S			8799 Apr 13 18:59	0° Z	
retrograde	8798 Jun 03 06:22	2° S 21'43		evening rise	8799 Apr 21 20:27	13° Z 08'26	
evening set	8798 Jun 06 00:53	1° S 42'59			8799 May 02 04:31	0° II	
	8798 Jun 08 16:37	30° R II		asc. node	8799 May 06 16:01	6° II 42'46	
inferior conj	8798 Jun 12 07:10	26° II 32'06	2°45'32	evening max el	8799 May 11 09:31	12° II 29'19	18°24'03
minimum elong	8798 Jun 12 09:47	26° II 25'12	2°44'46	retrograde	8799 May 17 19:45	15° II 57'01	
min. Earth dist.	8798 Jun 15 04:18	23° II 31'32	0.62422 AU	evening set	8799 May 20 21:37	15° II 04'38	
morning rise	8798 Jun 18 16:53	20° II 25'01		inferior conj	8799 May 26 17:16	9° II 35'59	3°12'36
desc. node	8798 Jun 23 07:43	18° II 11'24		minimum elong	8799 May 26 18:44	9° II 31'41	3°12'13
direct	8798 Jun 25 10:53	17° II 57'01		min. Earth dist.	8799 May 28 24:00	6° II 56'28	0.64442 AU
morning max el	8798 Jul 09 13:07	25° II 59'11	27°54'35	morning rise	8799 Jun 01 14:51	3° II 20'08	
	8798 Jul 13 06:18	0° S		direct	8799 Jun 08 07:05	0° II 37'24	
	8798 Aug 02 16:23	0° Q		desc. node	8799 Jun 10 04:44	0° II 49'14	
morning set	8798 Aug 12 13:05	18° Q 40'14		morning max el	8799 Jun 21 22:51	8° II 36'12	27°26'56
asc. node	8798 Aug 15 18:22	25° Q 20'40			8799 Jul 08 13:30	0° S	
	8798 Aug 17 22:44	0° np			8799 Jul 26 00:13	0° Q	
max. Earth dist.	8798 Aug 17 23:12	0° np 02'30	1.32172 AU	morning set	8799 Jul 27 04:37	2° Q 18'15	
				max. Earth dist.	8799 Jul 31 21:49	11° Q 49'44	1.33165 AU
superior conj	8798 Aug 20 02:59	4° np 43'28	0°42'56	asc. node	8799 Aug 02 15:18	15° Q 26'34	
minimum elong	8798 Aug 20 01:10	4° np 33'35	0°42'28				
evening rise	8798 Aug 26 23:06	19° np 38'26		superior conj	8799 Aug 04 07:50	19° Q 01'20	0°16'58
	8798 Aug 31 23:17	0° Q		minimum elong	8799 Aug 04 07:00	18° Q 56'53	0°16'37
desc. node	8798 Sep 19 06:26	28° Q 02'15			8799 Aug 09 10:25	0° np	
evening max el	8798 Sep 20 12:44	29° Q 18'03	24°06'44	evening rise	8799 Aug 11 10:26	4° np 16'23	
	8798 Sep 21 06:35	0° ml			8799 Aug 25 08:13	0° Q	
retrograde	8798 Oct 04 05:25	6° ml 09'39		evening max el	8799 Sep 02 00:40	9° Q 29'00	22°26'58
evening set	8798 Oct 09 02:02	5° ml 17'49		desc. node	8799 Sep 06 03:33	12° Q 54'42	
min. Earth dist.	8798 Oct 14 23:26	2° ml 22'41	0.56134 AU	retrograde	8799 Sep 15 00:27	15° Q 57'35	
inferior conj	8798 Oct 17 07:13	0° ml 57'05	-5°37'14	evening set	8799 Sep 18 08:56	15° Q 32'48	
minimum elong	8798 Oct 17 08:08	0° ml 55'42	5°37'06	min. Earth dist.	8799 Sep 26 07:21	12° Q 02'42	0.54978 AU
	8798 Oct 18 20:49	30° R Q		inferior conj	8799 Sep 27 07:13	11° Q 28'58	-5°16'26
morning rise	8798 Oct 25 16:18	26° Q 58'32		minimum elong	8799 Sep 27 00:31	11° Q 38'27	5°15'25
direct	8798 Oct 28 09:09	26° Q 39'34		morning rise	8799 Oct 05 17:55	7° Q 41'21	
	8798 Nov 05 19:31	0° ml		direct	8799 Oct 09 00:04	7° Q 17'25	
morning max el	8798 Nov 07 09:51	1° ml 23'35	19°50'59	morning max el	8799 Oct 20 14:18	12° Q 43'54	21°15'14
asc. node	8798 Nov 11 18:10	6° ml 21'13		asc. node	8799 Oct 29 15:07	24° Q 12'37	
morning set	8798 Nov 25 05:19	0° Z 03'29			8799 Nov 02 01:04	0° ml	
	8798 Nov 25 04:38	0° Z		morning set	8799 Nov 09 14:01	14° ml 47'46	
superior conj	8798 Dec 03 00:20	15° Z 50'27	1°27'24	superior conj	8799 Nov 16 21:02	0° Z 04'26	1°37'48
minimum elong	8798 Dec 03 02:51	16° Z 02'56	1°27'23	minimum elong	8799 Nov 16 22:19	0° Z 11'02	1°37'56
max. Earth dist.	8798 Dec 08 23:14	27° Z 20'52	1.37260 AU		8799 Nov 16 20:11	0° Z	
	8798 Dec 10 09:31	0° Z		max. Earth dist.	8799 Nov 21 09:29	9° Z 14'58	1.35299 AU
evening rise	8798 Dec 12 17:07	4° Z 12'29		evening rise	8799 Nov 25 12:05	17° Z 11'58	
desc. node	8798 Dec 16 05:14	10° Z 21'20			8799 Dec 02 14:56	0° Z	
	8798 Dec 28 12:06	0° R		desc. node	8799 Dec 03 02:15	0° Z 48'17	
evening max el	8799 Jan 17 07:45	25° R 11'47	25°30'29		8799 Dec 22 20:31	0° R	
	8799 Jan 23 03:40	0° K		evening max el	8799 Dec 30 20:58	8° R 56'26	26°32'24
retrograde	8799 Jan 29 13:19	2° K 13'56		retrograde	8800 Jan 12 19:59	16° R 13'07	
evening set	8799 Feb 04 10:55	29° R 47'58		evening set	8800 Jan 19 05:36	13° R 39'16	

min. Earth dist.	8800 Jan 23 08:12	9°≈27'18	0.66356 AU	evening max el	8800 Dec 12 09:54	22°≈28'44	27°14'26
inferior conj	8800 Jan 25 03:21	7°≈18'09	-0°09'13	retrograde	8800 Dec 25 20:51	29°≈30'13	
minimum elong	8800 Jan 25 03:35	7°≈17'25	0°08'55	evening set	8801 Jan 01 16:18	27°≈31'436	
transit middle	8800 Jan 25 03:35	7°≈17'25	0°08'55	min. Earth dist.	8801 Jan 05 13:26	23°≈36'10	0.64910 AU
transit begin	8800 Jan 25 01:10	7°≈24'41		inferior conj	8801 Jan 07 20:14	21°≈05'48	-1°12'58
transit end	8800 Jan 25 06:00	7°≈10'10		minimum elong	8801 Jan 07 22:26	20°≈35'45	1°11'50
asc. node	8800 Jan 25 14:24	6°≈45'06		asc. node	8801 Jan 11 11:29	17°≈26'23	
morning rise	8800 Jan 31 02:28	1°≈35'37		morning rise	8801 Jan 14 06:03	15°≈36'15	
direct	8800 Feb 03 01:45	0°≈46'15		direct	8801 Jan 16 20:39	15°≈30'31	
morning max el	8800 Feb 09 14:36	4°≈16'52	18°25'48	morning max el	8801 Jan 23 06:51	18°≈23'19	17°58'06
	8800 Feb 27 12:11	0°≈			8801 Jan 31 22:13	0°≈	
desc. node	8800 Feb 29 01:52	2°≈29'54		morning set	8801 Feb 09 22:10	14°≈44'07	
morning set	8800 Feb 29 16:27	3°≈27'52		desc. node	8801 Feb 14 22:47	23°≈02'13	
					8801 Feb 19 05:23	0°≈	
superior conj	8800 Mar 16 12:05	28°≈24'27	-1°42'07	superior conj	8801 Feb 23 23:26	7°≈37'15	-1°02'29
minimum elong	8800 Mar 16 02:31	27°≈46'59	1°41'12	minimum elong	8801 Feb 23 16:18	7°≈08'54	1°01'28
max. Earth dist.	8800 Mar 17 02:07	29°≈19'22	1.45550 AU	max. Earth dist.	8801 Feb 27 21:38	13°≈49'44	1.45254 AU
	8800 Mar 17 12:31	0°≈			8801 Mar 10 07:02	0°≈	
evening rise	8800 Apr 01 08:43	23°≈17'35		evening rise	8801 Mar 12 02:14	2°≈46'26	
	8800 Apr 05 14:43	0°≈		greatest brilliancy	8801 Mar 26 08:17	24°≈23'04	-0.6m
greatest brilliancy	8800 Apr 11 03:13	8°≈39'20	-0.8m		8801 Mar 30 05:58	0°≈	
asc. node	8800 Apr 22 13:07	24°≈42'36		evening max el	8801 Apr 07 01:16	9°≈43'09	19°50'08
evening max el	8800 Apr 23 19:41	26°≈04'21	18°58'57	asc. node	8801 Apr 09 10:14	11°≈51'58	
retrograde	8800 Apr 30 14:58	29°≈52'05		retrograde	8801 Apr 14 13:01	14°≈01'33	
evening set	8800 May 04 00:27	28°≈45'15		evening set	8801 Apr 18 06:55	12°≈39'45	
inferior conj	8800 May 09 13:05	23°≈00'33	3°22'02	inferior conj	8801 Apr 23 15:36	6°≈40'49	3°17'26
minimum elong	8800 May 09 13:15	23°≈00'02	3°21'51	minimum elong	8801 Apr 23 14:38	6°≈44'03	3°17'13
min. Earth dist.	8800 May 11 04:32	20°≈55'38	0.66101 AU	min. Earth dist.	8801 Apr 24 16:22	5°≈17'49	0.67336 AU
morning rise	8800 May 15 01:32	16°≈41'45		morning rise	8801 Apr 28 22:03	0°≈22'43	
direct	8800 May 21 10:28	13°≈55'57			8801 Apr 29 08:26	30°≈	
desc. node	8800 May 27 01:45	15°≈40'07		direct	8801 May 04 20:00	27°≈44'27	
morning max el	8800 Jun 03 09:31	21°≈38'41	26°29'34		8801 May 11 01:16	0°≈	
	8800 Jun 10 16:01	0°≈		desc. node	8801 May 13 22:44	2°≈13'41	
	8800 Jun 30 18:39	0°≈		morning max el	8801 May 16 19:14	4°≈55'11	25°11'35
morning set	8800 Jul 09 08:32	15°≈20'24			8801 Jun 05 01:54	0°≈	
max. Earth dist.	8800 Jul 13 10:00	23°≈09'51	1.34636 AU	morning set	8801 Jun 21 20:33	27°≈35'20	
	8800 Jul 16 19:48	0°≈			8801 Jun 23 04:37	0°≈	
superior conj	8800 Jul 18 06:05	2°≈55'47	-0°12'34	max. Earth dist.	8801 Jun 25 11:39	4°≈13'11	1.36544 AU
minimum elong	8800 Jul 18 06:48	2°≈59'28	0°12'38	superior conj	8801 Jul 01 18:55	16°≈19'43	-0°44'21
behind sun begin	8800 Jul 18 03:08	2°≈40'35		minimum elong	8801 Jul 01 21:38	16°≈33'11	0°44'04
behind sun end	8800 Jul 18 10:28	3°≈18'23		asc. node	8801 Jul 06 09:15	25°≈33'12	
asc. node	8800 Jul 19 12:15	5°≈31'58			8801 Jul 08 13:47	0°≈	
evening rise	8800 Jul 25 19:39	18°≈44'21		evening rise	8801 Jul 10 00:33	2°≈56'15	
	8800 Jul 31 10:12	0°≈			8801 Jul 26 03:30	0°≈	
evening max el	8800 Aug 13 21:02	19°≈58'54	20°55'43	evening max el	8801 Jul 27 06:46	1°≈11'07	19°42'19
desc. node	8800 Aug 23 00:41	25°≈29'52		retrograde	8801 Aug 06 05:37	6°≈06'03	
retrograde	8800 Aug 25 12:52	25°≈45'34		evening set	8801 Aug 08 02:01	5°≈56'36	
evening set	8800 Aug 27 18:15	25°≈33'47		desc. node	8801 Aug 09 21:50	5°≈29'55	
inferior conj	8800 Sep 05 23:34	21°≈37'08	-4°00'33	inferior conj	8801 Aug 16 22:50	1°≈54'00	-2°09'17
minimum elong	8800 Sep 05 13:59	21°≈50'45	3°57'47	minimum elong	8801 Aug 16 16:57	2°≈03'09	2°07'10
min. Earth dist.	8800 Sep 06 16:08	21°≈13'36	0.54683 AU	min. Earth dist.	8801 Aug 19 03:45	0°≈31'46	0.55350 AU
morning rise	8800 Sep 14 09:55	17°≈40'47			8801 Aug 20 00:52	30°≈	
direct	8800 Sep 18 07:54	17°≈07'55		morning rise	8801 Aug 25 05:44	27°≈29'30	
morning max el	8800 Oct 01 07:40	23°≈20'52	22°56'20	direct	8801 Aug 29 22:45	26°≈40'17	
	8800 Oct 07 05:52	0°≈			8801 Sep 08 10:39	0°≈	
asc. node	8800 Oct 15 12:04	12°≈47'05		morning max el	8801 Sep 12 19:57	3°≈34'48	24°42'16
morning set	8800 Oct 24 01:08	29°≈36'54			8801 Oct 01 08:57	0°≈	
	8800 Oct 24 05:30	0°≈		asc. node	8801 Oct 02 09:00	1°≈53'55	
superior conj	8800 Oct 31 01:03	14°≈38'20	1°41'04	morning set	8801 Oct 08 12:52	14°≈25'29	
minimum elong	8800 Oct 31 01:03	14°≈38'17	1°41'13	superior conj	8801 Oct 15 09:43	29°≈23'45	1°37'58
max. Earth dist.	8800 Nov 03 03:16	21°≈10'54	1.33697 AU	minimum elong	8801 Oct 15 08:37	29°≈17'43	1°38'01
	8800 Nov 07 11:09	0°≈			8801 Oct 15 16:21	0°≈	
evening rise	8800 Nov 07 21:00	0°≈48'40		max. Earth dist.	8801 Oct 17 05:05	3°≈20'02	1.32540 AU
desc. node	8800 Nov 18 23:19	20°≈59'37		evening rise	8801 Oct 22 16:21	14°≈52'58	
	8800 Nov 24 14:56	0°≈					

	8801 Oct 30 12:41	0°♊		desc. node	8802 Oct 23 17:31	0°♊03'47	
desc. node	8801 Nov 05 20:24	10°♊47'53			8802 Oct 23 16:32	0°♊	
	8801 Nov 19 14:14	0°♊		evening max el	8802 Nov 07 04:23	18°♊07'59	27°12'45
evening max el	8801 Nov 24 21:11	5°♊36'53	27°29'42	retrograde	8802 Nov 21 01:18	25°♊19'31	
retrograde	8801 Dec 08 15:04	12°♊55'17		evening set	8802 Nov 28 01:57	23°♊06'51	
evening set	8801 Dec 15 16:16	10°♊26'13		min. Earth dist.	8802 Dec 01 19:05	20°♊21'46	0.61166 AU
min. Earth dist.	8801 Dec 19 09:33	7°♊18'00	0.63153 AU	inferior conj	8802 Dec 04 21:04	17°♊40'43	-3°33'25
inferior conj	8801 Dec 22 03:12	4°♊36'00	-2°22'17	minimum elong	8802 Dec 05 03:46	17°♊26'04	3°30'59
minimum elong	8801 Dec 22 07:45	4°♊24'47	2°20'17	morning rise	8802 Dec 12 07:55	12°♊46'11	
	8801 Dec 27 16:39	30°♊♊		direct	8802 Dec 14 12:50	12°♊26'09	
morning rise	8801 Dec 29 01:16	29°♊22'18		asc. node	8802 Dec 16 05:36	12°♊38'28	
asc. node	8801 Dec 29 08:33	29°♊16'02		morning max el	8802 Dec 21 15:38	16°♊00'48	17°55'35
direct	8801 Dec 31 09:31	28°♊56'14			8802 Dec 31 09:50	0°♊	
	8802 Jan 04 00:54	0°♊		morning set	8803 Jan 06 07:28	10°♊36'48	
morning max el	8802 Jan 07 00:17	2°♊20'44	17°47'42				
morning set	8802 Jan 23 05:21	27°♊13'46		superior conj	8803 Jan 16 17:20	29°♊18'41	0°22'03
	8802 Jan 24 19:34	0°♊		minimum elong	8803 Jan 16 19:11	29°♊26'46	0°21'59
desc. node	8802 Feb 01 19:42	13°♊41'59			8803 Jan 17 02:50	0°♊	
				desc. node	8803 Jan 19 16:39	4°♊25'44	
superior conj	8802 Feb 04 07:37	17°♊51'33	-0°18'17	max. Earth dist.	8803 Jan 24 05:20	12°♊00'44	1.42665 AU
minimum elong	8802 Feb 04 05:43	17°♊43'40	0°17'50	evening rise	8803 Jan 30 09:52	21°♊59'24	
max. Earth dist.	8802 Feb 10 15:18	28°♊08'18	1.44255 AU		8803 Feb 04 13:34	0°♊	
	8802 Feb 11 19:19	0°♊			8803 Feb 25 16:23	0°♊	
evening rise	8802 Feb 19 13:31	12°♊08'02		evening max el	8803 Mar 03 20:22	7°♊05'06	22°10'15
	8802 Mar 03 10:07	0°♊		retrograde	8803 Mar 13 08:46	12°♊43'17	
evening max el	8802 Mar 21 01:24	23°♊23'27	20°55'10	asc. node	8803 Mar 14 04:30	12°♊39'52	
asc. node	8802 Mar 27 07:22	27°♊56'09		evening set	8803 Mar 17 22:56	10°♊50'53	
retrograde	8802 Mar 29 11:33	28°♊20'03		inferior conj	8803 Mar 23 06:43	4°♊30'09	2°35'13
evening set	8802 Apr 02 14:58	26°♊42'57		minimum elong	8803 Mar 23 04:32	4°♊37'47	2°34'39
inferior conj	8802 Apr 07 22:11	20°♊31'51	3°01'19	min. Earth dist.	8803 Mar 23 05:14	4°♊35'21	0.68460 AU
minimum elong	8802 Apr 07 20:25	20°♊37'59	3°00'56		8803 Mar 26 17:44	30°♊♊	
min. Earth dist.	8802 Apr 08 09:20	19°♊53'20	0.68120 AU	morning rise	8803 Mar 28 09:58	28°♊19'30	
morning rise	8802 Apr 13 01:38	14°♊16'44		direct	8803 Apr 02 04:57	26°♊17'33	
direct	8802 Apr 18 10:32	11°♊54'09			8803 Apr 09 16:52	0°♊	
morning max el	8802 Apr 29 04:21	18°♊18'51	23°43'16	morning max el	8803 Apr 11 15:43	1°♊50'14	22°14'19
desc. node	8802 Apr 30 19:41	20°♊02'02		desc. node	8803 Apr 17 16:36	8°♊44'26	
	8802 May 08 23:32	0°♊			8803 May 02 21:57	0°♊	
	8802 May 29 04:11	0°♊		morning set	8803 May 14 23:55	18°♊48'36	
morning set	8802 Jun 03 11:23	8°♊48'59		max. Earth dist.	8803 May 20 06:18	27°♊30'11	1.40991 AU
max. Earth dist.	8802 Jun 07 07:54	15°♊29'39	1.38745 AU		8803 May 21 17:44	0°♊	
superior conj	8802 Jun 14 18:43	29°♊04'24	-1°16'19	superior conj	8803 May 28 01:01	10°♊58'40	-1°45'06
minimum elong	8802 Jun 14 23:31	29°♊26'58	1°15'48	minimum elong	8803 May 28 06:58	11°♊25'16	1°44'40
	8802 Jun 15 06:31	0°♊		evening rise	8803 Jun 07 09:41	0°♊00'53	
asc. node	8802 Jun 23 06:17	15°♊26'18			8803 Jun 07 09:30	0°♊	
evening rise	8802 Jun 23 22:23	16°♊44'52		asc. node	8803 Jun 10 03:20	5°♊06'16	
	8802 Jun 30 23:11	0°♊		evening max el	8803 Jun 23 11:48	25°♊42'27	18°17'32
evening max el	8802 Jul 10 04:54	13°♊08'25	18°49'39	retrograde	8803 Jun 30 17:39	29°♊20'50	
retrograde	8802 Jul 18 13:57	17°♊17'50		evening set	8803 Jul 03 00:12	29°♊00'07	
evening set	8802 Jul 20 13:29	17°♊04'47		inferior conj	8803 Jul 10 07:17	24°♊19'54	1°15'46
desc. node	8802 Jul 27 18:56	13°♊23'18		minimum elong	8803 Jul 10 09:38	24°♊14'53	1°14'44
inferior conj	8802 Jul 28 16:12	12°♊45'15	-0°16'12	min. Earth dist.	8803 Jul 13 16:31	21°♊29'19	0.58893 AU
minimum elong	8802 Jul 28 15:32	12°♊46'27	0°16'08	desc. node	8803 Jul 14 16:02	20°♊43'31	
min. Earth dist.	8802 Jul 31 19:14	10°♊30'45	0.56850 AU	morning rise	8803 Jul 17 15:51	18°♊44'59	
morning rise	8802 Aug 05 14:14	7°♊44'02		direct	8803 Jul 23 21:26	17°♊00'19	
direct	8802 Aug 11 03:18	6°♊29'52		morning max el	8803 Aug 07 06:34	24°♊46'53	27°23'48
morning max el	8802 Aug 25 10:08	13°♊55'14	26°16'36		8803 Aug 12 01:29	0°♊	
	8802 Sep 07 04:28	0°♊			8803 Aug 31 11:09	0°♊	
asc. node	8802 Sep 19 05:57	21°♊24'37		asc. node	8803 Sep 06 02:53	11°♊11'36	
morning set	8802 Sep 22 23:38	29°♊09'10		morning set	8803 Sep 07 07:42	13°♊41'58	
	8802 Sep 23 09:10	0°♊					
superior conj	8802 Sep 29 20:56	14°♊14'07	1°29'09	superior conj	8803 Sep 14 08:43	29°♊02'29	1°15'02
minimum elong	8802 Sep 29 19:04	14°♊03'45	1°29'00	minimum elong	8803 Sep 14 06:29	28°♊50'06	1°14'42
max. Earth dist.	8802 Sep 30 12:54	15°♊42'33	1.31845 AU	max. Earth dist.	8803 Sep 13 23:02	28°♊08'45	1.31606 AU
evening rise	8802 Oct 06 19:11	29°♊17'00			8803 Sep 14 19:04	0°♊	
	8802 Oct 07 03:24	0°♊		evening rise	8803 Sep 21 02:58	13°♊52'21	
					8803 Sep 29 04:21	0°♊	

desc. node	8803 Oct 10 14:38	18°♌33'40		8804 Sep 05 05:53	0°♎	
evening max el	8803 Oct 20 04:32	29°♌49'55 26°21'50		8804 Sep 21 21:46	0°♌	
	8803 Oct 20 08:49	0°♌		8804 Sep 26 11:45	5°♌59'34	
retrograde	8803 Nov 03 02:29	6°♌55'14		evening max el	8804 Sep 30 20:29	10°♌41'07 25°01'30
evening set	8803 Nov 09 16:55	5°♌09'01		retrograde	8804 Oct 14 17:09	17°♌40'12
min. Earth dist.	8803 Nov 13 17:48	2°♌34'28 0.59073 AU		evening set	8804 Oct 20 08:32	16°♌28'09
inferior conj	8803 Nov 16 22:14	0°♌09'45 -4°39'04		min. Earth dist.	8804 Oct 25 07:58	13°♌45'53 0.57097 AU
minimum elong	8803 Nov 17 05:37	29°♌55'42 4°37'06		inferior conj	8804 Oct 28 03:43	11°♌54'14 -5°26'01
	8803 Nov 17 03:21	30°♌		minimum elong	8804 Oct 28 08:18	11°♌46'40 5°25'22
morning rise	8803 Nov 24 20:42	25°♌37'33		morning rise	8804 Nov 05 10:21	7°♌44'51
direct	8803 Nov 27 02:13	25°♌20'21		direct	8804 Nov 07 21:20	7°♌27'33
asc. node	8803 Dec 03 02:36	27°♌33'48		morning max el	8804 Nov 17 01:59	11°♌50'19 19°12'32
morning max el	8803 Dec 05 01:25	29°♌14'05 18°23'18		asc. node	8804 Nov 18 23:35	13°♌49'55
	8803 Dec 05 19:34	0°♌			8804 Nov 29 08:15	0°♌
morning set	8803 Dec 20 22:52	24°♌36'24		morning set	8804 Dec 03 23:19	9°♌00'06
	8803 Dec 23 18:30	0°♌				
superior conj	8803 Dec 30 01:47	11°♍50'41 0°54'25		superior conj	8804 Dec 12 03:55	25°♌12'49 1°17'50
minimum elong	8803 Dec 30 05:03	12°♍05'44 0°54'11		minimum elong	8804 Dec 12 06:58	25°♌27'36 1°17'42
max. Earth dist.	8804 Jan 06 14:34	25°♍14'06 1.40658 AU			8804 Dec 14 15:56	0°♍
desc. node	8804 Jan 06 13:37	25°♍10'01		max. Earth dist.	8804 Dec 18 20:18	7°♍44'19 1.38482 AU
	8804 Jan 09 10:02	0°♍		evening rise	8804 Dec 22 14:39	14°♍24'50
evening rise	8804 Jan 11 01:19	2°♍43'07		desc. node	8804 Dec 23 10:35	15°♍50'58
	8804 Jan 28 21:07	0°♌			8805 Jan 01 01:09	0°♍
evening max el	8804 Feb 14 11:30	20°♌49'12 23°30'12			8805 Jan 22 17:52	0°♌
retrograde	8804 Feb 25 03:19	27°♌07'03		evening max el	8805 Jan 27 00:45	4°♌35'49 24°48'46
asc. node	8804 Feb 29 01:37	25°♌51'59		retrograde	8805 Feb 07 18:03	11°♌25'41
evening set	8804 Mar 01 05:15	25°♌00'02		evening set	8805 Feb 13 08:23	9°♌05'47
min. Earth dist.	8804 Mar 06 01:55	19°♌18'57 0.68374 AU		asc. node	8805 Feb 14 22:43	7°♌33'24
inferior conj	8804 Mar 06 15:18	18°♌33'01 2°00'02		min. Earth dist.	8805 Feb 17 21:11	3°♌59'09 0.67887 AU
minimum elong	8804 Mar 06 13:07	18°♌40'30 1°59'24		inferior conj	8805 Feb 18 22:05	2°♌36'46 1°16'15
morning rise	8804 Mar 11 20:58	12°♌28'01		minimum elong	8805 Feb 18 20:25	2°♌42'19 1°15'45
direct	8804 Mar 16 02:12	10°♌48'29			8805 Feb 20 22:58	30°♌
morning max el	8804 Mar 24 08:51	15°♌33'00 20°52'37		morning rise	8805 Feb 24 08:40	26°♌38'48
desc. node	8804 Apr 03 13:30	28°♌06'11		direct	8805 Feb 28 01:05	25°♌20'53
	8804 Apr 04 22:10	0°♌		morning max el	8805 Mar 07 09:39	29°♌27'18 19°43'18
morning set	8804 Apr 23 10:26	27°♌38'39			8805 Mar 07 22:36	0°♌
	8804 Apr 24 22:32	0°♌		greatest brilliancy	8805 Mar 20 03:33	16°♌02'32 -0.6m
max. Earth dist.	8804 May 01 11:09	10°♌25'14 1.42990 AU		desc. node	8805 Mar 21 10:22	17°♌56'05
					8805 Mar 29 10:29	0°♌
superior conj	8804 May 08 09:11	21°♌52'37 -2°05'44		morning set	8805 Apr 02 08:03	5°♌58'43
minimum elong	8804 May 08 13:41	22°♌11'35 2°05'42		max. Earth dist.	8805 Apr 13 22:32	24°♌05'46 1.44507 AU
	8804 May 13 03:01	0°♌			8805 Apr 17 15:18	0°♌
evening rise	8804 May 20 06:13	12°♌34'26		superior conj	8805 Apr 18 16:34	1°♌41'45 -2°12'02
asc. node	8804 May 27 00:23	24°♌28'07		minimum elong	8805 Apr 18 15:30	1°♌37'27 2°12'07
	8804 May 30 08:52	0°♌		evening rise	8805 May 02 07:07	24°♌14'02
evening max el	8804 Jun 05 23:42	8°♌44'16 18°05'14			8805 May 05 16:49	0°♌
retrograde	8804 Jun 12 13:57	12°♌07'18		asc. node	8805 May 13 21:27	13°♌24'44
evening set	8804 Jun 15 04:03	11°♌35'53		evening max el	8805 May 20 13:10	22°♌04'34 18°11'59
inferior conj	8804 Jun 21 18:15	6°♌35'43 2°20'06		retrograde	8805 May 26 22:15	25°♌26'41
minimum elong	8804 Jun 21 21:13	6°♌28'27 2°19'06		evening set	8805 May 29 19:46	24°♌42'28
min. Earth dist.	8804 Jun 24 21:55	3°♌31'55 0.61144 AU		inferior conj	8805 Jun 04 21:05	19°♌24'00 2°59'24
morning rise	8804 Jun 28 11:59	0°♌37'01		minimum elong	8805 Jun 04 23:15	19°♌17'58 2°58'49
	8804 Jun 29 11:46	30°♌		min. Earth dist.	8805 Jun 07 12:26	16°♌29'57 0.63313 AU
desc. node	8804 Jun 30 13:05	29°♌26'57		morning rise	8805 Jun 11 01:16	13°♌12'02
direct	8804 Jul 05 03:27	28°♌22'46		desc. node	8805 Jun 17 10:07	10°♌36'34
	8804 Jul 11 03:47	0°♌		direct	8805 Jun 17 19:18	10°♌36'05
morning max el	8804 Jul 19 09:53	6°♌22'29 27°54'24		morning max el	8805 Jul 01 18:00	18°♌39'13 27°46'55
	8804 Aug 06 05:34	0°♌			8805 Jul 11 07:30	0°♌
morning set	8804 Aug 21 11:12	27°♌58'48			8805 Jul 30 03:22	0°♌
	8804 Aug 22 10:33	0°♌		morning set	8805 Aug 05 07:54	11°♌53'19
asc. node	8804 Aug 22 23:50	1°♌09'36		asc. node	8805 Aug 09 20:48	21°♌13'58
max. Earth dist.	8804 Aug 27 07:40	10°♌27'40 1.31829 AU		max. Earth dist.	8805 Aug 10 10:46	22°♌27'58 1.32529 AU
superior conj	8804 Aug 28 19:19	13°♌43'29 0°56'00		superior conj	8805 Aug 13 02:53	28°♌11'46 0°32'25
minimum elong	8804 Aug 28 17:12	13°♌31'50 0°55'32		minimum elong	8805 Aug 13 01:25	28°♌03'50 0°31'59
evening rise	8804 Sep 04 13:37	28°♌33'04			8805 Aug 13 22:51	0°♌

evening rise	8805 Aug 20 01:15	13° \mathbb{M} 13'38		behind sun begin	8806 Jul 27 23:38	11° Ω 50'59	
	8805 Aug 28 10:44	0° $\underline{\Omega}$		behind sun end	8806 Jul 28 10:27	12° Ω 47'55	
evening max el	8805 Sep 12 07:47	20° $\underline{\Omega}$ 58'33	23°24'13	evening rise	8806 Aug 04 11:56	27° Ω 48'00	
desc. node	8805 Sep 13 08:53	21° $\underline{\Omega}$ 57'14			8806 Aug 05 13:08	0° \mathbb{M}	
retrograde	8805 Sep 25 19:35	27° $\underline{\Omega}$ 43'04			8806 Aug 23 17:33	0° $\underline{\Omega}$	
evening set	8805 Sep 30 00:28	27° $\underline{\Omega}$ 04'29		evening max el	8806 Aug 24 22:34	1° $\underline{\Omega}$ 14'30	21°46'32
min. Earth dist.	8805 Oct 06 17:33	23° $\underline{\Omega}$ 56'01	0.55546 AU	desc. node	8806 Aug 31 06:02	5° $\underline{\Omega}$ 55'26	
inferior conj	8805 Oct 08 13:20	22° $\underline{\Omega}$ 51'34	-5°35'16	retrograde	8806 Sep 06 10:26	7° $\underline{\Omega}$ 26'44	
minimum elong	8805 Oct 08 10:55	22° $\underline{\Omega}$ 55'08	5°35'04	evening set	8806 Sep 09 05:22	7° $\underline{\Omega}$ 09'15	
morning rise	8805 Oct 16 23:25	18° $\underline{\Omega}$ 59'19		inferior conj	8806 Sep 18 08:34	3° $\underline{\Omega}$ 10'26	-4°50'30
direct	8805 Oct 19 21:15	18° $\underline{\Omega}$ 38'46		minimum elong	8806 Sep 17 23:43	3° $\underline{\Omega}$ 22'48	4°48'37
morning max el	8805 Oct 30 14:13	23° $\underline{\Omega}$ 40'31	20°24'15	min. Earth dist.	8806 Sep 18 01:45	3° $\underline{\Omega}$ 19'57	0.54737 AU
	8805 Nov 05 00:24	0° \mathbb{M}			8806 Sep 24 18:15	30° \mathbb{R} \mathbb{M}	
asc. node	8805 Nov 05 20:34	1° \mathbb{M} 11'25		morning rise	8806 Sep 26 19:15	29° \mathbb{M} 21'29	
morning set	8805 Nov 18 05:46	23° \mathbb{M} 39'32		direct	8806 Sep 30 08:00	28° \mathbb{M} 54'11	
	8805 Nov 21 07:31	0° \mathbb{X}			8806 Oct 05 15:37	0° $\underline{\Omega}$	
				morning max el	8806 Oct 12 13:24	4° $\underline{\Omega}$ 40'49	21°56'34
superior conj	8805 Nov 25 19:03	9° \mathbb{X} 11'54	1°32'44	asc. node	8806 Oct 23 17:31	19° $\underline{\Omega}$ 22'47	
minimum elong	8805 Nov 25 21:04	9° \mathbb{X} 22'06	1°32'47		8806 Oct 29 12:32	0° \mathbb{M}	
max. Earth dist.	8805 Dec 01 03:20	19° \mathbb{X} 45'23	1.36389 AU	morning set	8806 Nov 02 15:46	8° \mathbb{M} 26'42	
evening rise	8805 Dec 04 24:00	26° \mathbb{X} 59'52					
	8805 Dec 06 15:45	0° \mathbb{Z}		superior conj	8806 Nov 09 19:15	23° \mathbb{M} 35'27	1°39'59
desc. node	8805 Dec 10 07:37	6° \mathbb{Z} 24'56		minimum elong	8806 Nov 09 19:58	23° \mathbb{M} 39'14	1°40'09
	8805 Dec 25 11:05	0° \approx			8806 Nov 12 21:17	0° \mathbb{X}	
evening max el	8806 Jan 09 13:57	18° \approx 23'45	25°58'50	max. Earth dist.	8806 Nov 13 16:41	1° \mathbb{X} 38'52	1.34575 AU
retrograde	8806 Jan 22 03:58	25° \approx 34'00		evening rise	8806 Nov 18 01:26	10° \mathbb{X} 16'53	
evening set	8806 Jan 28 06:41	23° \approx 04'15		desc. node	8806 Nov 27 04:41	26° \mathbb{X} 46'10	
min. Earth dist.	8806 Feb 01 12:52	18° \approx 32'06	0.67022 AU		8806 Nov 29 03:14	0° \mathbb{Z}	
asc. node	8806 Feb 01 19:47	18° \approx 10'40			8806 Dec 21 01:33	0° \approx	
inferior conj	8806 Feb 03 01:13	16° \approx 38'29	0°24'17	evening max el	8806 Dec 23 03:26	2° \approx 05'17	26°53'07
minimum elong	8806 Feb 03 00:36	16° \approx 40'26	0°24'12	retrograde	8807 Jan 05 08:12	9° \approx 24'27	
morning rise	8806 Feb 08 19:06	10° \approx 49'23		evening set	8807 Jan 11 22:15	6° \approx 49'23	
direct	8806 Feb 12 00:09	9° \approx 50'32		min. Earth dist.	8807 Jan 15 22:33	2° \approx 51'37	0.65788 AU
morning max el	8806 Feb 18 18:01	13° \approx 30'55	18°49'17	inferior conj	8807 Jan 17 22:33	0° \approx 32'47	-0°35'24
	8806 Mar 03 00:58	0° \mathbb{X}		minimum elong	8807 Jan 17 23:34	0° \approx 29'52	0°34'47
desc. node	8806 Mar 08 07:16	8° \mathbb{X} 06'58			8807 Jan 18 09:54	30° \mathbb{R} \mathbb{Z}	
morning set	8806 Mar 12 17:07	14° \mathbb{X} 59'40		asc. node	8807 Jan 19 16:52	28° \mathbb{Z} 33'24	
	8806 Mar 22 07:40	0° \mathbb{Y}		morning rise	8807 Jan 24 01:58	24° \mathbb{Z} 55'07	
max. Earth dist.	8806 Mar 27 15:12	8° \mathbb{Y} 18'55	1.45382 AU	direct	8807 Jan 26 21:22	24° \mathbb{Z} 11'54	
				morning max el	8807 Feb 02 08:06	27° \mathbb{Z} 37'54	18°11'50
superior conj	8806 Mar 29 03:39	10° \mathbb{Y} 41'53	-1°58'44		8807 Feb 04 11:57	0° \approx	
minimum elong	8806 Mar 28 19:47	10° \mathbb{Y} 11'00	1°58'15	morning set	8807 Feb 21 05:54	25° \approx 25'44	
	8806 Apr 10 07:36	0° \mathbb{Z}		desc. node	8807 Feb 23 04:12	28° \approx 32'43	
evening rise	8806 Apr 13 08:46	4° \mathbb{Z} 54'26			8807 Feb 24 01:52	0° \mathbb{X}	
greatest brilliancy	8806 Apr 19 08:06	14° \mathbb{Z} 33'11	-0.9m				
	8806 Apr 29 10:06	0° \mathbb{I}		superior conj	8807 Mar 08 09:12	19° \mathbb{X} 34'15	-1°26'31
asc. node	8806 Apr 30 18:32	1° \mathbb{I} 48'07		minimum elong	8807 Mar 07 23:57	18° \mathbb{X} 57'54	1°25'28
evening max el	8806 May 04 01:17	5° \mathbb{I} 36'05	18°36'55	max. Earth dist.	8807 Mar 10 10:59	22° \mathbb{X} 49'32	1.45521 AU
retrograde	8806 May 10 14:22	9° \mathbb{I} 10'41			8807 Mar 15 01:10	0° \mathbb{Y}	
evening set	8806 May 13 19:26	8° \mathbb{I} 12'17		evening rise	8807 Mar 24 11:57	14° \mathbb{Y} 43'02	
inferior conj	8806 May 19 11:42	2° \mathbb{I} 36'54	3°18'29		8807 Apr 03 08:36	0° \mathbb{Z}	
minimum elong	8806 May 19 12:37	2° \mathbb{I} 34'08	3°18'14	greatest brilliancy	8807 Apr 05 08:55	3° \mathbb{Z} 03'58	-0.7m
min. Earth dist.	8806 May 21 12:03	0° \mathbb{I} 10'35	0.65198 AU	evening max el	8807 Apr 17 09:46	19° \mathbb{Z} 13'18	19°18'56
	8806 May 21 15:38	30° \mathbb{R} \mathbb{Z}		asc. node	8807 Apr 17 15:37	19° \mathbb{Z} 27'59	
morning rise	8806 May 25 05:02	26° \mathbb{Z} 19'21		retrograde	8807 Apr 24 11:01	23° \mathbb{Z} 12'28	
direct	8806 May 31 18:53	23° \mathbb{Z} 33'32		evening set	8807 Apr 28 00:05	21° \mathbb{Z} 59'09	
desc. node	8806 Jun 04 07:07	24° \mathbb{Z} 14'01		inferior conj	8807 May 03 10:41	16° \mathbb{Z} 08'17	3°21'37
	8806 Jun 12 16:26	0° \mathbb{I}		minimum elong	8807 May 03 10:21	16° \mathbb{Z} 09'24	3°21'27
morning max el	8806 Jun 14 04:10	1° \mathbb{I} 27'23	27°05'37	min. Earth dist.	8807 May 04 19:45	14° \mathbb{Z} 20'45	0.66682 AU
	8806 Jul 05 10:37	0° \mathbb{D}		morning rise	8807 May 08 20:14	9° \mathbb{Z} 49'43	
morning set	8806 Jul 19 18:58	25° \mathbb{D} 17'12		direct	8807 May 15 00:57	7° \mathbb{Z} 06'01	
	8806 Jul 22 04:44	0° Ω		desc. node	8807 May 22 04:07	9° \mathbb{Z} 52'07	
max. Earth dist.	8806 Jul 24 04:55	4° Ω 02'01	1.33726 AU	morning max el	8807 May 27 14:23	14° \mathbb{Z} 36'15	25°58'24
asc. node	8806 Jul 27 17:45	11° Ω 20'08			8807 Jun 09 03:54	0° \mathbb{I}	
					8807 Jun 28 05:52	0° \mathbb{D}	
superior conj	8806 Jul 28 05:17	12° Ω 20'43	0°04'51	morning set	8807 Jul 02 16:42	8° \mathbb{D} 00'32	
minimum elong	8806 Jul 28 05:02	12° Ω 19'26	0°04'37	max. Earth dist.	8807 Jul 06 12:30	15° \mathbb{D} 13'07	1.35399 AU

































































































































superior conj	8807 Jul 11 23:58	26°☿03'23	-0°25'51	superior conj	8808 Jun 24 07:40	9°☿10'54	-0°58'03
minimum elong	8807 Jul 12 01:29	26°☿11'07	0°25'45	minimum elong	8808 Jun 24 11:18	9°☿28'31	0°57'38
	8807 Jul 13 22:20	0°♌		asc. node	8808 Jun 30 11:45	21°☿22'13	
asc. node	8807 Jul 14 14:45	1°♌24'24		evening rise	8808 Jul 02 21:53	26°☿12'42	
evening rise	8807 Jul 19 19:39	12°♌10'12			8808 Jul 04 19:46	0°♌	
	8807 Jul 29 03:27	0°♍		evening max el	8808 Jul 19 15:36	23°♌31'24	19°17'19
evening max el	8807 Aug 07 00:27	12°♍00'57	20°22'05	retrograde	8808 Jul 28 21:35	28°♌06'06	
retrograde	8807 Aug 17 22:51	17°♍25'37		evening set	8808 Jul 30 18:18	27°♌55'44	
desc. node	8807 Aug 18 03:09	17°♍25'32		desc. node	8808 Aug 04 00:17	26°♌23'45	
evening set	8807 Aug 19 22:40	17°♍15'36		inferior conj	8808 Aug 08 08:00	23°♌46'25	-1°19'46
inferior conj	8807 Aug 29 02:04	13°♍17'59	-3°15'46	minimum elong	8808 Aug 08 04:27	23°♌52'17	1°18'32
minimum elong	8807 Aug 28 17:28	13°♍30'31	3°12'56	min. Earth dist.	8808 Aug 11 00:07	22°♌00'48	0.55895 AU
min. Earth dist.	8807 Aug 30 11:12	12°♍29'37	0.54856 AU	morning rise	8808 Aug 16 11:48	19°♌06'32	
morning rise	8807 Sep 06 11:34	9°♍12'03		direct	8808 Aug 21 13:12	18°♌08'02	
direct	8807 Sep 10 17:31	8°♍33'16		morning max el	8808 Sep 04 16:02	25°♌16'51	25°24'58
morning max el	8807 Sep 24 03:34	15°♍04'04	23°41'39		8808 Sep 09 02:00	0°♍	
	8807 Oct 05 20:14	0°♎		asc. node	8808 Sep 26 11:28	27°♍29'50	
asc. node	8807 Oct 10 14:30	8°♎12'15			8808 Sep 27 17:44	0°♎	
morning set	8807 Oct 18 03:24	23°♎16'19		morning set	8808 Oct 01 14:56	8°♎03'19	
	8807 Oct 21 06:26	0°♏					
superior conj	8807 Oct 25 01:32	8°♏14'53	1°40'28	superior conj	8808 Oct 08 11:32	23°♎02'54	1°34'54
minimum elong	8807 Oct 25 01:02	8°♏12'09	1°40'36	minimum elong	8808 Oct 08 10:03	22°♎54'48	1°34'53
max. Earth dist.	8807 Oct 27 14:21	13°♏41'09	1.33159 AU	max. Earth dist.	8808 Oct 09 19:06	25°♎56'23	1.32184 AU
evening rise	8807 Nov 01 15:13	24°♏06'12			8808 Oct 11 15:50	0°♏	
	8807 Nov 04 15:20	0°♐		evening rise	8808 Oct 15 14:02	8°♏19'16	
desc. node	8807 Nov 14 01:45	16°♐48'35			8808 Oct 27 01:11	0°♐	
	8807 Nov 22 17:13	0°♑		desc. node	8808 Oct 30 22:51	6°♐24'26	
evening max el	8807 Dec 05 16:01	15°♑28'57	27°24'26	evening max el	8808 Nov 17 01:43	28°♐22'16	27°26'32
retrograde	8807 Dec 19 06:02	22°♑48'52			8808 Nov 18 21:05	0°♑	
evening set	8807 Dec 26 04:44	20°♑14'58		retrograde	8808 Nov 30 21:03	5°♑38'17	
min. Earth dist.	8807 Dec 30 00:01	16°♑50'04	0.64208 AU	evening set	8808 Dec 07 23:10	3°♑14'32	
inferior conj	8808 Jan 01 11:35	14°♑13'40	-1°41'49	min. Earth dist.	8808 Dec 11 15:34	0°♑17'40	0.62333 AU
minimum elong	8808 Jan 01 14:45	14°♑05'19	1°40'18		8808 Dec 11 23:20	30°♑♐	
asc. node	8808 Jan 06 13:57	9°♑38'43		inferior conj	8808 Dec 14 13:25	27°♐34'05	-2°52'33
morning rise	8808 Jan 08 02:28	8°♑50'25		minimum elong	8808 Dec 14 18:58	27°♐21'05	2°50'16
direct	8808 Jan 10 14:11	8°♑19'07		morning rise	8808 Dec 21 16:59	22°♐28'30	
morning max el	8808 Jan 17 01:13	11°♑41'09	17°51'29	asc. node	8808 Dec 23 11:01	22°♐06'39	
	8808 Jan 29 16:09	0°♒		direct	8808 Dec 23 23:25	22°♐05'26	
morning set	8808 Feb 02 23:14	7°♒15'35		morning max el	8808 Dec 30 18:17	25°♐32'54	17°48'46
desc. node	8808 Feb 10 01:08	19°♒08'32			8809 Jan 03 11:58	0°♑	
				morning set	8809 Jan 15 15:17	20°♑10'28	
superior conj	8808 Feb 16 04:06	29°♒09'29	-0°43'40		8809 Jan 21 04:41	0°♒	
minimum elong	8808 Feb 15 23:11	28°♒49'38	0°42'51	superior conj	8809 Jan 26 23:17	9°♒55'50	-0°00'23
	8808 Feb 16 16:38	0°♓		minimum elong	8809 Jan 26 23:16	9°♒55'47	0°00'11
max. Earth dist.	8808 Feb 21 06:35	7°♓18'42	1.44915 AU	behind sun begin	8809 Jan 26 14:26	9°♒18'27	
evening rise	8808 Mar 03 00:58	24°♓04'06		behind sun end	8809 Jan 27 08:06	10°♒33'02	
	8808 Mar 06 22:09	0°♈		desc. node	8809 Jan 26 22:03	9°♒50'36	
	8808 Mar 27 22:41	0°♉		max. Earth dist.	8809 Feb 02 22:55	21°♒28'09	1.43639 AU
evening max el	8808 Mar 30 13:01	2°♉52'18	20°16'17		8809 Feb 08 07:28	0°♉	
asc. node	8808 Apr 03 12:44	6°♉11'12		evening rise	8809 Feb 10 14:27	3°♉34'36	
retrograde	8808 Apr 07 09:33	7°♉26'11			8809 Feb 28 08:52	0°♈	
evening set	8808 Apr 11 07:26	5°♉57'39		evening max el	8809 Mar 13 10:44	16°♈32'46	21°26'03
inferior conj	8808 Apr 16 15:11	29°♈53'04	3°11'54	asc. node	8809 Mar 21 09:52	21°♈43'14	
minimum elong	8808 Apr 16 13:50	29°♈57'40	3°11'37	retrograde	8809 Mar 22 07:52	21°♈47'29	
	8808 Apr 16 13:09	30°♈♈		evening set	8809 Mar 26 15:40	20°♈03'49	
min. Earth dist.	8808 Apr 17 09:55	28°♈49'16	0.67723 AU	inferior conj	8809 Mar 31 22:52	13°♈47'58	2°51'24
morning rise	8808 Apr 21 20:01	23°♈36'10		minimum elong	8809 Mar 31 20:53	13°♈54'55	2°50'56
direct	8808 Apr 27 12:31	21°♈04'04		min. Earth dist.	8809 Apr 01 04:29	13°♈28'25	0.68317 AU
desc. node	8808 May 08 01:05	27°♈00'07		morning rise	8809 Apr 06 01:54	7°♈34'25	
morning max el	8808 May 08 23:47	27°♈56'16	24°34'47	direct	8809 Apr 11 04:47	5°♈20'23	
	8808 May 10 22:39	0°♉		morning max el	8809 Apr 21 09:36	11°♈23'40	23°04'56
	8808 Jun 01 20:41	0°♊		desc. node	8809 Apr 24 22:01	15°♈13'42	
morning set	8808 Jun 13 20:19	19°♊50'21			8809 May 06 04:49	0°♉	
max. Earth dist.	8808 Jun 17 11:23	26°♊19'03	1.37457 AU		8809 May 25 16:23	0°♊	
	8808 Jun 19 11:30	0°♋		morning set	8809 May 26 00:26	0°♊33'27	
				max. Earth dist.	8809 May 30 07:31	7°♊50'19	1.39712 AU

superior conj	8809 Jun 07 00:30	21° Π 34'35	-1°29'10		8810 May 18 03:20	0° Π	
minimum elong	8809 Jun 07 06:00	21° Π 59'51	1°28'40				
	8809 Jun 11 12:40	0° \mathfrak{E}		superior conj	8810 May 19 21:54	3° Π 04'13	-1°55'12
evening rise	8809 Jun 16 15:41	9° \mathfrak{E} 48'04		minimum elong	8810 May 20 03:41	3° Π 29'24	1°54'56
asc. node	8809 Jun 17 08:46	11° \mathfrak{E} 09'49		evening rise	8810 May 30 21:14	22° Π 46'55	
	8809 Jun 28 02:08	0° Ω			8810 Jun 03 20:20	0° \mathfrak{E}	
evening max el	8809 Jul 02 17:51	5° Ω 44'31	18°33'29	asc. node	8810 Jun 04 05:48	0° \mathfrak{E} 42'36	
retrograde	8809 Jul 10 14:07	9° Ω 38'59		evening max el	8810 Jun 16 03:24	18° \mathfrak{E} 31'55	18°09'59
evening set	8809 Jul 12 16:15	9° Ω 23'15		retrograde	8810 Jun 23 01:09	22° \mathfrak{E} 01'32	
inferior conj	8809 Jul 20 10:30	4° Ω 55'15	0°26'06	evening set	8810 Jun 25 10:58	21° \mathfrak{E} 36'34	
minimum elong	8809 Jul 20 11:27	4° Ω 53'24	0°25'33	inferior conj	8810 Jul 02 10:27	16° \mathfrak{E} 48'01	1°46'22
desc. node	8809 Jul 21 21:22	3° Ω 47'26		minimum elong	8810 Jul 02 13:18	16° \mathfrak{E} 41'34	1°45'16
min. Earth dist.	8809 Jul 23 18:04	2° Ω 22'30	0.57668 AU	min. Earth dist.	8810 Jul 05 18:38	13° \mathfrak{E} 48'39	0.59846 AU
	8809 Jul 27 10:10	30° \mathfrak{R} \mathfrak{E}		desc. node	8810 Jul 08 18:25	11° \mathfrak{E} 30'48	
morning rise	8809 Jul 28 03:07	29° \mathfrak{E} 38'20		morning rise	8810 Jul 09 12:42	11° \mathfrak{E} 01'47	
direct	8809 Aug 02 23:47	28° \mathfrak{E} 11'20		direct	8810 Jul 15 23:39	9° \mathfrak{E} 03'35	
	8809 Aug 09 17:02	0° Ω		morning max el	8810 Jul 30 07:55	16° \mathfrak{E} 57'01	27°41'31
morning max el	8809 Aug 17 08:39	5° Ω 47'50	26°49'19		8810 Aug 10 02:40	0° Ω	
	8809 Sep 04 05:12	0° \mathfrak{M}			8810 Aug 27 18:53	0° \mathfrak{M}	
asc. node	8809 Sep 13 08:24	17° \mathfrak{M} 07'38		morning set	8810 Aug 31 07:03	7° \mathfrak{M} 08'51	
morning set	8809 Sep 16 00:43	22° \mathfrak{M} 42'20		asc. node	8810 Aug 31 05:19	6° \mathfrak{M} 59'48	
	8809 Sep 19 09:43	0° \mathfrak{L}		max. Earth dist.	8810 Sep 06 13:54	20° \mathfrak{M} 43'45	1.31636 AU
superior conj	8809 Sep 22 23:10	7° \mathfrak{L} 52'40	1°23'48	superior conj	8810 Sep 07 10:41	22° \mathfrak{M} 38'45	1°07'34
minimum elong	8809 Sep 22 21:06	7° \mathfrak{L} 41'09	1°23'34	minimum elong	8810 Sep 07 08:26	22° \mathfrak{M} 26'20	1°07'09
max. Earth dist.	8809 Sep 23 04:06	8° \mathfrak{L} 20'02	1.31675 AU		8810 Sep 10 18:21	0° \mathfrak{L}	
evening rise	8809 Sep 29 19:11	22° \mathfrak{L} 48'10		evening rise	8810 Sep 14 04:26	7° \mathfrak{L} 26'41	
	8809 Oct 03 06:53	0° \mathfrak{M}			8810 Sep 25 19:38	0° \mathfrak{M}	
desc. node	8809 Oct 17 19:58	25° \mathfrak{M} 22'26		desc. node	8810 Oct 04 17:05	13° \mathfrak{M} 27'42	
	8809 Oct 21 02:40	0° \mathfrak{J}		evening max el	8810 Oct 12 02:52	21° \mathfrak{M} 53'18	25°50'55
evening max el	8809 Oct 30 06:03	10° \mathfrak{J} 32'51	26°55'16	retrograde	8810 Oct 26 01:01	28° \mathfrak{M} 56'03	
retrograde	8809 Nov 13 04:02	17° \mathfrak{J} 42'36		evening set	8810 Nov 01 07:04	27° \mathfrak{M} 24'08	
evening set	8809 Nov 20 01:33	15° \mathfrak{J} 39'50		min. Earth dist.	8810 Nov 05 15:32	24° \mathfrak{M} 48'25	0.58196 AU
min. Earth dist.	8809 Nov 23 20:30	13° \mathfrak{J} 01'08	0.60269 AU	inferior conj	8810 Nov 08 17:43	22° \mathfrak{M} 35'58	-5°02'19
inferior conj	8809 Nov 27 00:36	10° \mathfrak{J} 24'40	-4°02'38	minimum elong	8810 Nov 09 00:27	22° \mathfrak{M} 23'53	5°00'53
minimum elong	8809 Nov 27 07:54	10° \mathfrak{J} 09'38	4°00'14	morning rise	8810 Nov 16 20:09	18° \mathfrak{M} 13'17	
morning rise	8809 Dec 04 16:43	5° \mathfrak{J} 39'32		direct	8810 Nov 19 03:15	17° \mathfrak{M} 56'26	
direct	8809 Dec 06 21:08	5° \mathfrak{J} 21'14		asc. node	8810 Nov 27 05:03	21° \mathfrak{M} 40'27	
asc. node	8809 Dec 10 08:03	6° \mathfrak{J} 09'15		morning max el	8810 Nov 27 14:04	22° \mathfrak{M} 01'44	18°41'28
morning max el	8809 Dec 14 07:47	9° \mathfrak{J} 03'08	18°04'51		8810 Dec 03 20:01	0° \mathfrak{J}	
	8809 Dec 27 22:01	0° \mathfrak{Z}		morning set	8810 Dec 13 19:23	18° \mathfrak{J} 01'54	
morning set	8809 Dec 29 23:39	3° \mathfrak{Z} 50'38			8810 Dec 19 23:23	0° \mathfrak{Z}	
superior conj	8810 Jan 08 19:15	21° \mathfrak{Z} 52'16	0°36'50	superior conj	8810 Dec 22 11:51	4° \mathfrak{Z} 47'04	1°05'25
minimum elong	8810 Jan 08 21:58	22° \mathfrak{Z} 04'21	0°36'39	minimum elong	8810 Dec 22 15:11	5° \mathfrak{Z} 02'43	1°05'12
	8810 Jan 13 10:50	0° \approx		max. Earth dist.	8810 Dec 29 17:45	17° \mathfrak{Z} 57'28	1.39746 AU
desc. node	8810 Jan 13 19:00	0° \approx 34'59		desc. node	8810 Dec 31 15:59	21° \mathfrak{Z} 18'17	
max. Earth dist.	8810 Jan 16 10:24	5° \approx 03'09	1.41847 AU	evening rise	8811 Jan 02 19:01	24° \mathfrak{Z} 55'30	
evening rise	8810 Jan 21 18:08	13° \approx 46'32			8811 Jan 05 20:24	0° \approx	
	8810 Feb 01 05:52	0° \mathfrak{H}			8811 Jan 26 00:05	0° \mathfrak{H}	
	8810 Feb 23 21:51	0° \mathfrak{Y}		evening max el	8811 Feb 06 18:05	14° \mathfrak{H} 00'51	24°04'11
evening max el	8810 Feb 24 03:48	0° \mathfrak{Y} 15'03	22°43'58	retrograde	8811 Feb 17 21:06	20° \mathfrak{H} 32'56	
retrograde	8810 Mar 06 04:10	6° \mathfrak{Y} 11'06		evening set	8811 Feb 23 04:14	18° \mathfrak{H} 20'25	
asc. node	8810 Mar 08 06:59	5° \mathfrak{Y} 48'44		asc. node	8811 Feb 23 04:06	18° \mathfrak{H} 20'44	
evening set	8810 Mar 10 23:06	4° \mathfrak{Y} 12'35		min. Earth dist.	8811 Feb 27 21:30	12° \mathfrak{H} 53'51	0.68223 AU
	8810 Mar 14 17:21	30° \mathfrak{R} \mathfrak{H}		inferior conj	8811 Feb 28 15:43	11° \mathfrak{H} 52'10	1°42'29
inferior conj	8810 Mar 16 07:40	27° \mathfrak{H} 48'38	2°21'21	minimum elong	8811 Feb 28 13:42	11° \mathfrak{H} 59'03	1°41'53
minimum elong	8810 Mar 16 05:26	27° \mathfrak{H} 56'25	2°20'45	morning rise	8811 Mar 05 23:11	5° \mathfrak{H} 49'50	
min. Earth dist.	8810 Mar 16 01:07	28° \mathfrak{H} 11'24	0.68476 AU	direct	8811 Mar 09 22:54	4° \mathfrak{H} 19'29	
morning rise	8810 Mar 21 11:37	21° \mathfrak{H} 39'56		morning max el	8811 Mar 17 19:05	8° \mathfrak{H} 45'59	20°21'15
direct	8810 Mar 26 00:39	19° \mathfrak{H} 47'21		desc. node	8811 Mar 29 15:48	23° \mathfrak{H} 48'42	
morning max el	8810 Apr 03 22:56	24° \mathfrak{H} 59'01	21°38'08		8811 Apr 02 22:06	0° \mathfrak{Y}	
	8810 Apr 08 10:39	0° \mathfrak{Y}		morning set	8811 Apr 15 03:37	18° \mathfrak{Y} 30'01	
desc. node	8810 Apr 11 18:54	4° \mathfrak{Y} 14'07			8811 Apr 22 11:39	0° \mathfrak{B}	
	8810 Apr 29 15:22	0° \mathfrak{B}		max. Earth dist.	8811 Apr 24 15:38	3° \mathfrak{B} 27'40	1.43714 AU
morning set	8810 May 06 01:14	10° \mathfrak{B} 01'00		superior conj	8811 Apr 30 19:36	13° \mathfrak{B} 30'23	-2°10'33
max. Earth dist.	8810 May 12 07:46	20° \mathfrak{B} 11'28	1.41888 AU				

minimum elong	8811 Apr 30 22:13	13°♄41'12	2°10'38		8812 Mar 26 01:52	0°♄	
	8811 May 10 13:17	0°♄		max. Earth dist.	8812 Apr 06 06:18	17°♄27'06	1.44971 AU
evening rise	8811 May 13 09:56	4°♄58'12					
asc. node	8811 May 22 02:51	19°♄54'18		superior conj	8812 Apr 09 17:17	22°♄55'34	-2°08'55
	8811 May 29 02:26	0°♄		minimum elong	8812 Apr 09 13:05	22°♄38'52	2°08'51
evening max el	8811 May 30 16:25	1°♄42'43	18°05'51		8812 Apr 14 03:19	0°♄	
retrograde	8811 Jun 06 03:04	5°♄03'19		evening rise	8812 Apr 24 01:20	16°♄13'36	
evening set	8811 Jun 08 20:28	4°♄26'30			8812 May 02 09:39	0°♄	
	8811 Jun 14 12:22	30°♄12'11		asc. node	8812 May 07 23:56	8°♄38'04	
inferior conj	8811 Jun 15 04:40	29°♄18'14	2°39'34	evening max el	8812 May 13 05:39	15°♄08'44	18°20'20
minimum elong	8811 Jun 15 07:25	29°♄11'09	2°38'43	retrograde	8812 May 19 15:20	18°♄34'41	
min. Earth dist.	8811 Jun 18 03:36	26°♄16'16	0.62096 AU	evening set	8812 May 22 16:03	17°♄44'27	
morning rise	8811 Jun 21 16:25	23°♄13'06		inferior conj	8812 May 28 13:02	12°♄18'18	3°09'42
desc. node	8811 Jun 25 15:28	21°♄12'33		minimum elong	8812 May 28 14:42	12°♄13'29	3°09'16
direct	8811 Jun 28 09:59	20°♄48'28		min. Earth dist.	8812 May 30 22:01	9°♄34'33	0.64159 AU
morning max el	8811 Jul 12 13:23	28°♄49'59	27°55'45	morning rise	8812 Jun 03 12:15	6°♄03'08	
	8811 Jul 13 16:43	0°♄		direct	8812 Jun 10 05:04	3°♄21'54	
	8811 Aug 04 00:10	0°♄		desc. node	8812 Jun 11 12:29	3°♄27'29	
morning set	8811 Aug 15 07:55	21°♄16'24		morning max el	8812 Jun 23 22:55	11°♄22'17	27°33'06
asc. node	8811 Aug 18 02:15	27°♄00'40			8812 Jul 08 16:44	0°♄	
	8811 Aug 19 12:01	0°♄			8812 Jul 26 11:20	0°♄	
max. Earth dist.	8811 Aug 20 20:43	2°♄56'02	1.32071 AU	morning set	8812 Jul 29 00:54	4°♄58'42	
				max. Earth dist.	8812 Aug 02 20:39	14°♄46'46	1.32987 AU
superior conj	8811 Aug 22 20:12	7°♄14'37	0°46'32	asc. node	8812 Aug 03 23:14	17°♄06'07	
minimum elong	8811 Aug 22 18:18	7°♄04'11	0°46'03				
evening rise	8811 Aug 29 15:44	22°♄07'52		superior conj	8812 Aug 06 01:50	21°♄35'00	0°21'09
	8811 Sep 02 10:03	0°♄		minimum elong	8812 Aug 06 00:49	21°♄29'33	0°20'47
	8811 Sep 21 07:16	0°♄			8812 Aug 09 23:31	0°♄	
desc. node	8811 Sep 21 14:12	0°♄18'56		evening rise	8812 Aug 13 03:13	6°♄46'19	
evening max el	8811 Sep 23 16:10	2°♄26'35	24°21'14		8812 Aug 25 08:53	0°♄	
retrograde	8811 Oct 07 10:02	9°♄20'16		evening max el	8812 Sep 04 03:34	12°♄37'27	22°41'34
evening set	8811 Oct 12 11:55	8°♄23'18		desc. node	8812 Sep 07 11:20	15°♄29'11	
min. Earth dist.	8811 Oct 18 03:01	5°♄32'05	0.56369 AU	retrograde	8812 Sep 17 07:01	19°♄11'00	
inferior conj	8811 Oct 20 14:25	3°♄59'25	-5°35'43	evening set	8812 Sep 20 20:36	18°♄43'04	
minimum elong	8811 Oct 20 16:25	3°♄56'18	5°35'31	min. Earth dist.	8812 Sep 28 11:13	15°♄18'56	0.55099 AU
morning rise	8811 Oct 28 23:01	29°♄58'22		inferior conj	8812 Sep 29 16:39	14°♄37'00	-5°23'15
	8811 Oct 28 20:13	30°♄39'52		minimum elong	8812 Sep 29 10:58	14°♄45'07	5°22'31
direct	8811 Oct 31 14:18	29°♄39'52		morning rise	8812 Oct 08 03:16	10°♄48'49	
	8811 Nov 03 06:23	0°♄		direct	8812 Oct 11 07:06	10°♄25'55	
morning max el	8811 Nov 10 09:30	4°♄17'57	19°40'22	morning max el	8812 Oct 22 15:59	15°♄45'47	21°01'29
asc. node	8811 Nov 14 02:01	8°♄25'25		asc. node	8812 Oct 30 22:59	26°♄09'09	
	8811 Nov 26 16:15	0°♄			8812 Nov 02 07:34	0°♄	
morning set	8811 Nov 27 22:44	2°♄32'57		morning set	8812 Nov 11 06:54	17°♄15'51	
					8812 Nov 17 09:13	0°♄	
superior conj	8811 Dec 05 20:01	18°♄25'51	1°25'08				
minimum elong	8811 Dec 05 22:41	18°♄39'03	1°25'05	superior conj	8812 Nov 18 15:23	2°♄36'04	1°36'41
	8811 Dec 11 20:43	0°♄		minimum elong	8812 Nov 18 16:51	2°♄43'39	1°36'48
max. Earth dist.	8811 Dec 11 23:48	0°♄14'18	1.37570 AU	max. Earth dist.	8812 Nov 23 09:01	12°♄08'58	1.35566 AU
evening rise	8811 Dec 15 17:14	7°♄00'20		evening rise	8812 Nov 27 09:48	19°♄53'26	
desc. node	8811 Dec 18 13:01	11°♄56'35			8812 Dec 03 00:17	0°♄	
	8811 Dec 29 17:38	0°♄		desc. node	8812 Dec 04 10:04	2°♄25'21	
evening max el	8812 Jan 20 07:19	27°♄49'01	25°20'01		8812 Dec 22 18:23	0°♄	
	8812 Jan 22 16:01	0°♄		evening max el	8813 Jan 01 20:27	11°♄34'17	26°24'19
retrograde	8812 Feb 01 09:46	4°♄48'15		retrograde	8813 Jan 14 17:23	18°♄50'00	
evening set	8812 Feb 07 05:33	2°♄23'39		evening set	8813 Jan 21 01:16	16°♄16'57	
	8812 Feb 09 14:59	30°♄30'24		min. Earth dist.	8813 Jan 25 04:44	11°♄59'51	0.66536 AU
asc. node	8812 Feb 10 01:10	29°♄30'24		inferior conj	8813 Jan 26 22:09	9°♄54'22	-0°00'06
min. Earth dist.	8812 Feb 11 15:26	27°♄31'55	0.67571 AU	minimum elong	8813 Jan 26 22:08	9°♄54'23	0°00'04
inferior conj	8812 Feb 12 21:13	25°♄55'36	0°55'14	transit middle	8813 Jan 26 22:08	9°♄54'23	0°00'04
minimum elong	8812 Feb 12 19:55	25°♄59'49	0°54'52	transit begin	8813 Jan 26 19:15	10°♄03'09	
morning rise	8812 Feb 18 10:38	20°♄01'20		transit end	8813 Jan 27 01:02	9°♄45'37	
direct	8812 Feb 21 22:07	18°♄51'48		asc. node	8813 Jan 26 22:16	9°♄53'58	
morning max el	8812 Feb 28 23:19	22°♄45'10	19°18'24	morning rise	8813 Feb 01 19:51	4°♄10'09	
	8812 Mar 06 00:49	0°♄		direct	8813 Feb 04 20:32	3°♄18'30	
greatest brilliancy	8812 Mar 12 22:48	9°♄55'36	-0.7m	morning max el	8813 Feb 11 10:30	6°♄51'22	18°31'25
desc. node	8812 Mar 15 12:43	13°♄48'32			8813 Feb 27 19:20	0°♄	
morning set	8812 Mar 24 03:23	27°♄00'22		desc. node	8813 Mar 02 09:38	4°♄06'15	

morning set	8813 Mar 03 23:17	6° X 35'14	direct	8814 Jan 19 16:06	17° Z 34'33	
	8813 Mar 18 20:34	0° Y	morning max el	8814 Jan 26 02:16	20° Z 58'01	18°01'06
				8814 Feb 02 02:08	0° \approx	
superior conj	8813 Mar 19 23:42	1° Y 46'10 -1°47'02	morning set	8814 Feb 13 00:40	17° \approx 38'28	
minimum elong	8813 Mar 19 14:20	1° Y 09'31 1°46'14	desc. node	8814 Feb 17 06:35	24° \approx 36'54	
max. Earth dist.	8813 Mar 20 00:40	1° Y 49'57 1.45529 AU		8814 Feb 20 14:04	0° X	
evening rise	8813 Apr 04 17:02	26° Y 30'36				
	8813 Apr 06 21:48	0° Z	superior conj	8814 Feb 27 08:58	10° X 51'59 -1°09'02	
greatest brilliancy	8813 Apr 13 16:33	10° Z 43'22 -0.8m	minimum elong	8814 Feb 27 01:09	10° X 21'00 1°07'58	
asc. node	8813 Apr 24 21:02	26° Z 44'26	max. Earth dist.	8814 Mar 02 20:07	16° X 19'54 1.45347 AU	
evening max el	8813 Apr 26 16:24	28° Z 42'54 18°52'41		8814 Mar 11 14:39	0° Y	
	8813 Apr 28 01:28	0° II	evening rise	8814 Mar 15 12:39	6° Y 03'12	
retrograde	8813 May 03 09:53	2° II 26'58	greatest brilliancy	8814 Mar 29 06:00	26° Y 57'04 -0.7m	
evening set	8813 May 06 18:10	1° II 22'25		8814 Mar 31 07:57	0° Z	
	8813 May 08 11:59	30° R Z	evening max el	8814 Apr 09 22:47	12° Z 21'18 19°41'34	
inferior conj	8813 May 12 07:39	25° Z 40'05 3°21'33	asc. node	8814 Apr 11 18:08	14° Z 02'06	
minimum elong	8813 May 12 08:01	25° Z 38'58 3°21'20	retrograde	8814 Apr 17 07:36	16° Z 34'20	
min. Earth dist.	8813 May 14 01:25	23° Z 29'13 0.65882 AU	evening set	8814 Apr 21 00:12	15° Z 14'47	
morning rise	8813 May 17 21:16	19° Z 21'21	inferior conj	8814 Apr 26 09:19	9° Z 18'00 3°18'53	
direct	8813 May 24 07:36	16° Z 35'07	minimum elong	8814 Apr 26 08:30	9° Z 20'42 3°18'42	
desc. node	8813 May 29 09:29	17° Z 59'52	min. Earth dist.	8814 Apr 27 12:14	7° Z 48'25 0.67184 AU	
morning max el	8813 Jun 06 09:34	24° Z 21'30 26°39'35	morning rise	8814 May 01 16:29	2° Z 59'41	
	8813 Jun 11 11:19	0° II	direct	8814 May 07 16:18	0° Z 19'36	
	8813 Jul 02 02:48	0° S	desc. node	8814 May 16 06:28	4° Z 19'32	
morning set	8813 Jul 12 06:50	18° S 06'55	morning max el	8814 May 19 19:21	7° Z 35'52 25°24'03	
max. Earth dist.	8813 Jul 16 10:21	26° S 09'52 1.34383 AU		8814 Jun 06 06:36	0° II	
	8813 Jul 18 08:14	0° Q	morning set	8814 Jun 24 21:32	0° S 29'33	
				8814 Jun 24 14:59	0° S	
superior conj	8813 Jul 21 01:17	5° Q 33'27 -0°07'55	max. Earth dist.	8814 Jun 28 13:19	7° S 13'47 1.36235 AU	
minimum elong	8813 Jul 21 01:43	5° Q 35'45 0°08'00				
behind sun begin	8813 Jul 20 20:39	5° Q 09'30	superior conj	8814 Jul 04 15:45	19° S 02'31 -0°39'28	
behind sun end	8813 Jul 21 06:47	6° Q 02'03	minimum elong	8814 Jul 04 18:09	19° S 14'28 0°39'13	
asc. node	8813 Jul 21 20:14	7° Q 11'57	asc. node	8814 Jul 08 17:13	27° S 14'01	
evening rise	8813 Jul 28 12:54	21° Q 16'07		8814 Jul 10 01:45	0° Q	
	8813 Aug 01 19:46	0° P	evening rise	8814 Jul 12 18:36	5° Q 30'44	
evening max el	8813 Aug 16 22:21	23° P 03'14 21°08'25		8814 Jul 26 15:56	0° P	
desc. node	8813 Aug 25 08:27	28° P 27'16	evening max el	8814 Jul 30 06:04	4° P 08'35 19°52'00	
retrograde	8813 Aug 28 19:53	28° P 57'04	retrograde	8814 Aug 09 10:55	9° P 10'57	
evening set	8813 Aug 31 04:06	28° P 44'14	evening set	8814 Aug 11 07:48	9° P 01'33	
inferior conj	8813 Sep 09 09:23	24° P 47'30 -4°15'09	desc. node	8814 Aug 12 05:34	8° P 50'31	
minimum elong	8813 Sep 08 23:44	25° P 01'07 4°12'32	inferior conj	8814 Aug 20 06:43	5° P 00'47 -2°27'01	
min. Earth dist.	8813 Sep 09 19:59	24° P 32'34 0.54663 AU	minimum elong	8814 Aug 20 00:01	5° P 11'00 2°24'40	
morning rise	8813 Sep 17 19:51	20° P 53'38	min. Earth dist.	8814 Aug 22 06:58	3° P 47'11 0.55192 AU	
direct	8813 Sep 21 15:17	20° P 22'25	morning rise	8814 Aug 28 14:26	0° P 41'34	
morning max el	8813 Oct 04 10:46	26° P 28'54 22°40'33		8814 Aug 31 17:46	30° R Q	
	8813 Oct 07 19:36	0° Q	direct	8814 Sep 02 04:39	29° Q 55'15	
asc. node	8813 Oct 17 19:59	14° Q 38'17		8814 Sep 03 15:25	0° P	
	8813 Oct 25 18:02	0° M	morning max el	8814 Sep 15 23:14	6° P 43'58 24°26'48	
morning set	8813 Oct 26 17:48	2° M 04'51		8814 Oct 02 17:16	0° Q	
			asc. node	8814 Oct 04 16:57	3° Q 40'52	
superior conj	8813 Nov 02 18:32	17° M 07'54 1°40'58	morning set	8814 Oct 11 05:34	16° Q 53'47	
minimum elong	8813 Nov 02 18:42	17° M 08'50 1°41'09		8814 Oct 17 06:11	0° M	
max. Earth dist.	8813 Nov 06 01:33	24° M 03'40 1.33910 AU				
	8813 Nov 08 23:25	0° X	superior conj	8814 Oct 18 02:38	1° M 51'51 1°38'49	
evening rise	8813 Nov 10 16:56	3° X 25'41	minimum elong	8814 Oct 18 01:41	1° M 46'39 1°38'53	
desc. node	8813 Nov 21 07:08	22° X 39'34	max. Earth dist.	8814 Oct 20 02:23	6° M 11'07 1.32687 AU	
	8813 Nov 25 20:09	0° Z	evening rise	8814 Oct 25 10:56	17° M 26'24	
evening max el	8813 Dec 15 09:34	25° Z 09'21 27°09'43		8814 Oct 31 22:26	0° X	
	8813 Dec 21 10:05	0° \approx	desc. node	8814 Nov 08 04:12	12° X 31'42	
retrograde	8813 Dec 28 19:14	2° \approx 30'42		8814 Nov 20 07:37	0° Z	
	8814 Jan 04 10:43	30° R Z	evening max el	8814 Nov 27 21:20	8° Z 22'05 27°29'20	
evening set	8814 Jan 04 13:19	29° Z 55'01	retrograde	8814 Dec 11 14:20	15° Z 40'47	
min. Earth dist.	8814 Jan 08 11:13	26° Z 11'35 0.65147 AU	evening set	8814 Dec 12 15:02	13° Z 10'18	
inferior conj	8814 Jan 10 16:16	23° Z 43'53 -1°02'51	min. Earth dist.	8814 Dec 22 08:49	9° Z 57'49 0.63437 AU	
minimum elong	8814 Jan 10 18:08	23° Z 38'40 1°01'51	inferior conj	8814 Dec 25 00:54	7° Z 17'01 -2°11'33	
asc. node	8814 Jan 13 19:20	20° Z 28'26	minimum elong	8814 Dec 25 05:05	7° Z 06'30 2°09'39	
morning rise	8814 Jan 17 00:22	18° Z 12'04	morning rise	8814 Dec 31 21:03	2° Z 00'36	

asc. node	8814 Dec 31 16:25	2°♄05'09		asc. node	8815 Dec 18 13:28	15°♄12'46	
direct	8815 Jan 03 06:08	1°♄33'16		morning max el	8815 Dec 24 11:32	18°♄39'53	17°53'11
morning max el	8815 Jan 09 19:40	4°♄56'51	17°48'04		8816 Jan 01 16:34	0°♄	
morning set	8815 Jan 26 04:27	29°♄58'19		morning set	8816 Jan 09 04:06	13°♄14'23	
	8815 Jan 26 04:50	0°♄			8816 Jan 18 13:00	0°♄	
desc. node	8815 Feb 04 03:31	15°♄15'41		superior conj	8816 Jan 19 19:23	2°♄11'42	0°16'25
superior conj	8815 Feb 07 13:26	20°♄55'15	-0°24'52	minimum elong	8816 Jan 19 20:49	2°♄17'55	0°16'24
minimum elong	8815 Feb 07 10:47	20°♄44'18	0°24'19	desc. node	8816 Jan 22 00:26	5°♄58'57	
	8815 Feb 13 03:56	0°♄		max. Earth dist.	8816 Jan 27 05:13	14°♄39'32	1.42931 AU
max. Earth dist.	8815 Feb 13 14:25	0°♄41'49	1.44447 AU	evening rise	8816 Feb 02 17:58	25°♄08'05	
evening rise	8815 Feb 22 23:51	15°♄23'22			8816 Feb 05 20:58	0°♄	
	8815 Mar 04 15:39	0°♄			8816 Feb 26 14:58	0°♄	
evening max el	8815 Mar 23 23:45	26°♄01'33	20°44'45	evening max el	8816 Mar 05 19:20	9°♄42'33	21°58'36
	8815 Mar 29 00:31	0°♄		retrograde	8816 Mar 15 03:39	15°♄14'41	
asc. node	8815 Mar 29 15:13	0°♄17'12		asc. node	8816 Mar 15 12:20	15°♄14'02	
retrograde	8815 Apr 01 06:09	0°♄51'55		evening set	8816 Mar 19 16:11	13°♄24'25	
	8815 Apr 04 06:52	30°♄♂		inferior conj	8816 Mar 24 23:45	7°♄04'52	2°39'45
evening set	8815 Apr 05 08:08	29°♄17'00		minimum elong	8816 Mar 24 21:36	7°♄12'21	2°39'14
inferior conj	8815 Apr 10 15:25	23°♄07'35	3°04'25	min. Earth dist.	8816 Mar 25 00:03	7°♄03'49	0.68435 AU
minimum elong	8815 Apr 10 13:45	23°♄13'21	3°04'04	morning rise	8816 Mar 30 02:52	0°♄53'29	
min. Earth dist.	8815 Apr 11 04:30	22°♄22'32	0.68032 AU		8816 Mar 31 06:53	30°♄♂	
morning rise	8815 Apr 15 19:09	16°♄52'04		direct	8816 Apr 03 23:52	28°♄48'25	
direct	8815 Apr 21 06:05	14°♄26'49			8816 Apr 08 01:18	0°♄	
morning max el	8815 May 02 04:26	20°♄58'42	23°56'44	morning max el	8816 Apr 13 15:17	4°♄28'54	22°27'19
desc. node	8815 May 03 03:26	21°♄58'10		desc. node	8816 Apr 19 00:21	10°♄33'23	
	8815 May 09 22:45	0°♄			8816 May 03 03:28	0°♄	
	8815 May 30 12:09	0°♄		morning set	8816 May 17 08:30	22°♄04'15	
morning set	8815 Jun 06 15:52	11°♄53'14			8816 May 22 03:07	0°♄	
max. Earth dist.	8815 Jun 10 10:07	18°♄27'13	1.38410 AU	max. Earth dist.	8816 May 22 07:56	0°♄20'25	1.40665 AU
	8815 Jun 16 17:39	0°♄		superior conj	8816 May 30 02:53	13°♄55'55	-1°41'07
superior conj	8815 Jun 17 17:45	1°♄53'47	-1°11'33	minimum elong	8816 May 30 08:48	14°♄22'30	1°40'40
minimum elong	8815 Jun 17 22:15	2°♄15'10	1°11'05		8816 Jun 07 19:43	0°♄	
asc. node	8815 Jun 25 14:13	17°♄08'35		evening rise	8816 Jun 09 06:48	2°♄44'58	
evening rise	8815 Jun 26 17:42	19°♄23'31		asc. node	8816 Jun 11 11:13	6°♄50'42	
	8815 Jul 02 06:36	0°♄		evening max el	8816 Jun 25 08:16	28°♄27'54	18°20'59
evening max el	8815 Jul 13 02:30	15°♄59'07	18°56'06		8816 Jun 27 02:18	0°♄	
retrograde	8815 Jul 21 16:35	20°♄14'35		retrograde	8816 Jul 02 17:32	2°♄10'07	
evening set	8815 Jul 23 15:15	20°♄02'21		evening set	8816 Jul 04 22:53	1°♄50'49	
desc. node	8815 Jul 30 02:39	16°♄58'22			8816 Jul 08 17:42	30°♄♂	
inferior conj	8815 Jul 31 20:55	15°♄45'29	-0°32'19	inferior conj	8816 Jul 12 08:47	27°♄13'39	1°03'33
minimum elong	8815 Jul 31 19:33	15°♄47'53	0°31'57	minimum elong	8816 Jul 12 10:51	27°♄09'21	1°02'37
min. Earth dist.	8815 Aug 03 21:35	13°♄38'08	0.56585 AU	min. Earth dist.	8816 Jul 15 17:57	24°♄27'01	0.58568 AU
morning rise	8815 Aug 08 20:37	10°♄49'54		desc. node	8816 Jul 15 23:45	24°♄15'44	
direct	8815 Aug 14 06:47	9°♄40'03		morning rise	8816 Jul 19 19:30	21°♄43'00	
morning max el	8815 Aug 28 12:44	17°♄01'05	26°04'01	direct	8816 Jul 25 22:52	20°♄03'01	
	8815 Sep 08 04:55	0°♄		morning max el	8816 Aug 09 08:14	27°♄47'15	27°15'59
asc. node	8815 Sep 21 13:55	23°♄08'16			8816 Aug 11 11:50	0°♄	
	8815 Sep 24 22:03	0°♄			8816 Aug 31 20:32	0°♄	
morning set	8815 Sep 25 16:34	1°♄38'07		asc. node	8816 Sep 07 10:50	12°♄53'03	
				morning set	8816 Sep 09 01:07	16°♄12'45	
superior conj	8815 Oct 02 13:33	16°♄41'22	1°30'50		8816 Sep 15 09:06	0°♄	
minimum elong	8815 Oct 02 11:47	16°♄31'32	1°30'43	superior conj	8816 Sep 16 01:21	1°♄30'13	1°17'30
max. Earth dist.	8815 Oct 03 09:31	18°♄31'48	1.31920 AU	minimum elong	8816 Sep 15 23:09	1°♄17'59	1°17'11
	8815 Oct 08 16:21	0°♄		max. Earth dist.	8816 Sep 15 19:31	0°♄57'45	1.31607 AU
evening rise	8815 Oct 09 12:46	1°♄47'24		evening rise	8816 Sep 22 19:56	16°♄21'13	
	8815 Oct 24 20:20	0°♄			8816 Sep 29 13:54	0°♄	
desc. node	8815 Oct 26 01:16	1°♄52'50		desc. node	8816 Oct 11 22:22	20°♄30'43	
evening max el	8815 Nov 10 05:16	20°♄59'02	27°17'24		8816 Oct 19 12:07	0°♄	
retrograde	8815 Nov 24 01:42	28°♄11'29		evening max el	8816 Oct 22 06:31	2°♄48'32	26°31'31
evening set	8815 Dec 01 03:04	25°♄55'37		retrograde	8816 Nov 05 04:29	9°♄55'10	
min. Earth dist.	8815 Dec 04 19:49	23°♄07'54	0.61474 AU	evening set	8816 Nov 11 21:12	8°♄04'15	
inferior conj	8815 Dec 07 20:54	20°♄25'47	-3°22'50	min. Earth dist.	8816 Nov 15 20:02	5°♄29'18	0.59378 AU
minimum elong	8815 Dec 08 03:20	20°♄11'27	3°20'23	inferior conj	8816 Nov 19 00:47	3°♄00'53	-4°30'00
morning rise	8815 Dec 15 05:53	15°♄28'16		minimum elong	8816 Nov 19 08:15	2°♄46'23	4°27'54
direct	8815 Dec 17 11:07	15°♄07'31					

	8816 Nov 23 07:02	30° 	direct	8817 Nov 11 00:43	10° 	22'49"
morning rise	8816 Nov 26 21:43	28°  25'26"	morning max el	8817 Nov 20 00:39	14°  40'55"	19°03'49"
direct	8816 Nov 29 02:47	28°  08'04"	asc. node	8817 Nov 21 07:31	15°  59'50"	
asc. node	8816 Dec 04 10:30	29°  15'54"		8817 Nov 30 16:58	0° 	
	8816 Dec 04 13:30	0° 	morning set	8817 Dec 06 17:13	11°  30'37"	
morning max el	8816 Dec 06 22:27	1°  58'21"				18°17'53"
morning set	8816 Dec 22 17:51	27°  09'44"	superior conj	8817 Dec 15 00:41	27°  51'14"	1°14'49"
	8816 Dec 24 05:40	0° 	minimum elong	8817 Dec 15 03:50	28°  06'24"	1°14'41"
				8817 Dec 16 03:37	0° 	
superior conj	8817 Jan 01 00:49	14°  35'30"	max. Earth dist.	8817 Dec 21 20:56	10°  34'47"	1.38807 AU
minimum elong	8817 Jan 01 04:00	14°  50'01"	evening rise	8817 Dec 25 16:30	17°  31'720"	
desc. node	8817 Jan 07 21:23	26°  43'36"	desc. node	8817 Dec 25 18:23	17°  35'28"	
max. Earth dist.	8817 Jan 08 15:03	27°  59'09"		8818 Jan 02 08:48	0° 	1.40972 AU
	8817 Jan 09 19:34	0° 		8818 Jan 23 12:37	0° 	
evening rise	8817 Jan 13 06:17	5°  43'38"	evening max el	8818 Jan 30 00:20	7°  12'41"	24°37'24"
	8817 Jan 29 01:24	0° 	retrograde	8818 Feb 10 14:09	13°  58'28"	
evening max el	8817 Feb 16 10:51	23°  26'06"	evening set	8818 Feb 16 02:34	11°  40'28"	23°18'10"
retrograde	8817 Feb 26 22:46	29°  38'44"	asc. node	8818 Feb 17 06:34	10°  34'56"	
asc. node	8817 Mar 02 09:27	28°  40'33"	min. Earth dist.	8818 Feb 20 16:31	6°  28'33"	0.67988 AU
evening set	8817 Mar 03 22:51	27°  33'49"	inferior conj	8818 Feb 21 15:40	5°  11'25"	1°23'29"
inferior conj	8817 Mar 09 08:28	21°  07'21"	minimum elong	8818 Feb 21 13:53	5°  17'23"	1°22'56"
minimum elong	8817 Mar 09 06:15	21°  14'58"		8818 Feb 26 01:43	30° 	
min. Earth dist.	8817 Mar 08 20:48	21°  47'30"	morning rise	8818 Feb 27 01:21	29° 	0.68414 AU
morning rise	8817 Mar 14 13:36	15°  01'21"	direct	8818 Mar 02 19:36	27° 	12'09"
direct	8817 Mar 18 20:48	13°  18'31"		8818 Mar 07 23:37	0° 	
morning max el	8817 Mar 27 07:23	18°  09'55"	morning max el	8818 Mar 10 06:59	2°  02'25"	19°52'37"
desc. node	8817 Apr 05 21:15	29°  49'55"	greatest brilliancy	8818 Mar 23 10:54	19°  09'36"	-0.6m
	8817 Apr 06 00:12	0° 	desc. node	8818 Mar 23 18:10	19°  36'14"	
	8817 Apr 26 06:18	0° 		8818 Mar 30 17:07	0° 	
morning set	8817 Apr 26 22:23	1°  02'55"	morning set	8818 Apr 05 20:28	9°  23'02"	
max. Earth dist.	8817 May 04 11:25	13°  06'14"	max. Earth dist.	8818 Apr 16 21:41	26°  39'56"	1.44321 AU
		1.42718 AU		8818 Apr 18 23:48	0° 	
superior conj	8817 May 11 14:33	24°  58'57"				-2°03'24"
minimum elong	8817 May 11 19:30	25°  20'05"	superior conj	8818 Apr 22 01:37	4°  57'39"	-2°12'15"
	8817 May 14 12:40	0° 	minimum elong	8818 Apr 22 01:37	4°  57'39"	2°12'22"
evening rise	8817 May 23 05:48	15°  25'13"	evening rise	8818 May 05 09:53	27°  13'17"	
asc. node	8817 May 29 08:15	26°  15'26"		8818 May 07 00:58	0° 	
	8817 May 31 13:06	0° 	asc. node	8818 May 16 05:19	15°  16'28"	
evening max el	8817 Jun 08 19:40	11°  26'08"	evening max el	8818 May 23 09:09	24°  44'35"	18°09'52"
retrograde	8817 Jun 15 11:35	14°  50'27"	retrograde	8818 May 29 18:20	28°  05'49"	
evening set	8817 Jun 18 00:31	14°  20'51"	evening set	8818 Jun 01 14:47	27°  23'34"	
inferior conj	8817 Jun 24 17:02	9°  23'43"	inferior conj	8818 Jun 07 17:46	22°  07'49"	2°54'51"
minimum elong	8817 Jun 24 20:01	9°  16'33"	minimum elong	8818 Jun 07 20:07	22°  01'26"	2°54'11"
min. Earth dist.	8817 Jun 27 22:08	6°  20'12"	min. Earth dist.	8818 Jun 10 11:15	19°  11'03"	0.63004 AU
morning rise	8817 Jul 01 12:55	3°  27'48"	morning rise	8818 Jun 13 23:51	15°  25'727"	
desc. node	8817 Jul 02 20:48	2°  54'04"	desc. node	8818 Jun 19 17:51	13°  27'15"	
direct	8817 Jul 08 03:28	1°  51'724"	direct	8818 Jun 20 18:01	13°  23'59"	
morning max el	8817 Jul 22 10:35	9°  26'07"	morning max el	8818 Jul 04 18:02	21°  27'06"	27°50'20"
	8817 Aug 07 09:59	0° 		8818 Jul 12 04:22	0° 	
	8817 Aug 23 23:09	0° 		8818 Jul 31 12:58	0° 	
morning set	8817 Aug 24 05:26	0°  32'25"	morning set	8818 Aug 08 03:20	14°  31'03"	
asc. node	8817 Aug 25 07:46	2°  49'42"	asc. node	8818 Aug 12 04:43	22°  53'37"	
max. Earth dist.	8817 Aug 30 04:31	13°  18'04"	max. Earth dist.	8818 Aug 13 08:42	25°  22'08"	1.32395 AU
		1.31762 AU				
superior conj	8817 Aug 31 12:16	16°  12'53"	superior conj	8818 Aug 15 20:27	0°  43'58"	0°36'17"
minimum elong	8817 Aug 31 10:06	16°  00'56"	minimum elong	8818 Aug 15 18:51	0°  35'17"	0°35'50"
	8817 Sep 06 18:51	0° 		8818 Aug 15 12:21	0° 	
evening rise	8817 Sep 07 06:18	1°  01'36"	evening rise	8818 Aug 22 17:57	15°  17'43'04"	
	8817 Sep 22 21:15	0° 		8818 Aug 29 18:59	0° 	
desc. node	8817 Sep 28 19:30	8°  07'48"	evening max el	8818 Sep 15 11:19	24°  08'07"	23°39'08"
evening max el	8817 Oct 03 23:38	13°  46'55"	desc. node	8818 Sep 15 16:38	24°  02'05'3"	
retrograde	8817 Oct 17 21:01	20°  47'23"		8818 Sep 24 02:49	0° 	
evening set	8817 Oct 23 16:32	19°  30'07"	retrograde	8818 Sep 29 01:06	0°  55'17"	
min. Earth dist.	8817 Oct 28 11:28	16°  50'05"	evening set	8818 Oct 03 11:33	0° 	0.57365 AU
inferior conj	8817 Oct 31 09:19	14°  52'33"		8818 Oct 04 02:20	30° 	
minimum elong	8817 Oct 31 14:37	14°  43'36"	min. Earth dist.	8818 Oct 09 21:32	27°  08'46"	0.55741 AU
morning rise	8817 Nov 08 15:02	10°  39'51"	inferior conj	8818 Oct 11 21:45	25°  05'50"	-5°37'07"

minimum elong	8818 Oct 11 20:32	25°♄58'39	5°37'00	min. Earth dist.	8819 Sep 21 05:31	6°♄37'56	0.54807 AU
morning rise	8818 Oct 20 07:33	22°♄02'31		inferior conj	8819 Sep 21 18:26	6°♄19'51	-5°00'54
direct	8818 Oct 23 03:33	21°♄42'33		minimum elong	8819 Sep 21 10:12	6°♄31'23	4°59'19
morning max el	8818 Nov 02 14:48	26°♄38'05	20°12'09	morning rise	8819 Sep 30 05:09	2°♄31'51	
	8818 Nov 05 17:46	0°♄		direct	8819 Oct 03 15:38	2°♄05'45	
asc. node	8818 Nov 08 04:30	3°♄12'21		morning max el	8819 Oct 15 15:44	7°♄45'11	21°41'45
morning set	8818 Nov 20 22:58	26°♄08'03		asc. node	8819 Oct 26 01:29	21°♄17'00	
	8818 Nov 22 20:11	0°♄			8819 Oct 30 22:37	0°♄	
				morning set	8819 Nov 05 08:33	10°♄54'24	
superior conj	8818 Nov 28 14:08	11°♄45'13	1°30'57				
minimum elong	8818 Nov 28 16:20	11°♄56'16	1°31'00	superior conj	8819 Nov 12 13:10	26°♄05'34	1°39'20
max. Earth dist.	8818 Dec 04 03:31	22°♄38'59	1.36690 AU	minimum elong	8819 Nov 12 14:05	26°♄10'21	1°39'29
evening rise	8818 Dec 07 23:05	29°♄44'48			8819 Nov 14 10:18	0°♄	
	8818 Dec 08 02:26	0°♄		max. Earth dist.	8819 Nov 16 15:49	4°♄32'46	1.34823 AU
desc. node	8818 Dec 12 15:25	8°♄00'38		evening rise	8819 Nov 20 22:20	12°♄55'53	
	8818 Dec 26 14:34	0°♄		desc. node	8819 Nov 29 12:29	28°♄24'06	
evening max el	8819 Jan 12 13:36	21°♄01'02	25°49'14		8819 Nov 30 11:17	0°♄	
retrograde	8819 Jan 25 00:48	28°♄08'35			8819 Dec 21 15:06	0°♄	
evening set	8819 Jan 31 01:43	25°♄40'10		evening max el	8819 Dec 26 03:03	4°♄44'06	26°46'22
asc. node	8819 Feb 04 03:40	21°♄19'01		retrograde	8820 Jan 08 05:50	12°♄02'27	
min. Earth dist.	8819 Feb 04 08:52	21°♄02'53	0.67177 AU	evening set	8820 Jan 14 18:26	9°♄27'43	
inferior conj	8819 Feb 05 19:29	19°♄13'39	0°32'44	min. Earth dist.	8820 Jan 18 19:32	5°♄25'03	0.65993 AU
minimum elong	8819 Feb 05 18:40	19°♄16'15	0°32'33	inferior conj	8820 Jan 20 17:50	3°♄09'29	-0°25'52
morning rise	8819 Feb 11 12:08	13°♄23'05		minimum elong	8820 Jan 20 18:33	3°♄07'22	0°25'22
direct	8819 Feb 14 18:50	12°♄21'30		asc. node	8820 Jan 22 00:46	1°♄40'12	
morning max el	8819 Feb 21 14:17	16°♄04'48	18°56'17		8820 Jan 23 14:23	30°♄	
	8819 Mar 04 05:40	0°♄		morning rise	8820 Jan 26 19:42	27°♄30'04	
desc. node	8819 Mar 10 15:06	9°♄44'27		direct	8820 Jan 29 16:26	26°♄44'45	
morning set	8819 Mar 16 02:29	18°♄14'13			8820 Feb 04 22:46	0°♄	
	8819 Mar 23 15:41	0°♄		morning max el	8820 Feb 05 03:43	0°♄12'03	18°16'24
max. Earth dist.	8819 Mar 30 14:02	10°♄50'30	1.45300 AU	morning set	8820 Feb 24 10:50	28°♄27'22	
					8820 Feb 25 09:53	0°♄	
superior conj	8819 Apr 01 15:03	14°♄03'08	-2°02'03	desc. node	8820 Feb 25 12:01	0°♄08'34	
minimum elong	8819 Apr 01 08:00	13°♄35'22	2°01'43				
	8819 Apr 11 15:44	0°♄		superior conj	8820 Mar 10 20:13	22°♄53'41	-1°32'21
evening rise	8819 Apr 16 15:07	8°♄02'34		minimum elong	8820 Mar 10 10:42	22°♄16'22	1°31'19
	8819 Apr 30 10:11	0°♄		max. Earth dist.	8820 Mar 12 09:50	25°♄21'02	1.45547 AU
asc. node	8819 May 03 02:24	3°♄45'31			8820 Mar 15 09:11	0°♄	
evening max el	8819 May 06 21:39	8°♄14'55	18°32'06	evening rise	8820 Mar 26 21:24	17°♄58'31	
retrograde	8819 May 13 09:32	11°♄46'45			8820 Apr 03 14:21	0°♄	
evening set	8819 May 16 13:29	10°♄50'26		greatest brilliancy	8820 Apr 07 01:08	5°♄18'48	-0.8m
inferior conj	8819 May 22 06:53	5°♄17'23	3°16'42	asc. node	8820 Apr 18 23:30	21°♄33'03	
minimum elong	8819 May 22 07:59	5°♄14'04	3°16'24	evening max el	8820 Apr 19 06:47	21°♄51'43	19°11'35
min. Earth dist.	8819 May 24 09:28	2°♄46'14	0.64940 AU	retrograde	8820 Apr 26 05:45	25°♄46'37	
	8819 May 26 23:12	30°♄		evening set	8820 Apr 29 17:34	24°♄35'31	
morning rise	8819 May 28 01:39	29°♄00'25		inferior conj	8820 May 05 04:49	18°♄46'42	3°21'59
direct	8819 Jun 03 16:28	26°♄15'28		minimum elong	8820 May 05 04:39	18°♄47'15	3°21'49
desc. node	8819 Jun 06 14:53	26°♄43'43		min. Earth dist.	8820 May 06 16:04	16°♄53'03	0.66490 AU
	8819 Jun 12 11:58	0°♄		morning rise	8820 May 10 15:20	12°♄27'59	
morning max el	8819 Jun 17 04:04	4°♄11'12	27°13'40	direct	8820 May 16 21:33	9°♄43'27	
	8819 Jul 06 16:27	0°♄		desc. node	8820 May 23 11:52	12°♄05'46	
morning set	8819 Jul 22 16:01	27°♄59'49		morning max el	8820 May 29 14:29	17°♄18'12	26°09'40
	8819 Jul 23 16:37	0°♄			8820 Jun 09 04:39	0°♄	
max. Earth dist.	8819 Jul 27 04:27	7°♄00'42	1.33519 AU		8820 Jun 28 15:08	0°♄	
asc. node	8819 Jul 30 01:40	12°♄59'41		morning set	8820 Jul 04 15:58	10°♄49'44	
				max. Earth dist.	8820 Jul 08 13:38	18°♄14'33	1.35125 AU
superior conj	8819 Jul 30 23:45	14°♄56'02	0°09'16				
minimum elong	8819 Jul 30 23:17	14°♄53'34	0°08'59	superior conj	8820 Jul 13 19:43	28°♄42'44	-0°21'03
behind sun begin	8819 Jul 30 18:38	14°♄29'02		minimum elong	8820 Jul 13 20:56	28°♄49'00	0°21'01
behind sun end	8819 Jul 31 03:55	15°♄18'07			8820 Jul 14 10:50	0°♄	
evening rise	8819 Aug 07 04:53	0°♄18'42		asc. node	8820 Jul 15 22:39	3°♄04'21	
	8819 Aug 07 01:21	0°♄		evening rise	8820 Jul 21 13:09	14°♄42'53	
	8819 Aug 24 03:26	0°♄			8820 Jul 29 08:59	0°♄	
evening max el	8819 Aug 28 00:57	4°♄21'45	22°00'27	evening max el	8820 Aug 09 00:46	15°♄01'39	20°33'27
desc. node	8819 Sep 02 13:46	8°♄39'15		desc. node	8820 Aug 19 10:52	20°♄32'45	
retrograde	8819 Sep 09 17:14	10°♄39'55		retrograde	8820 Aug 20 05:24	20°♄34'16	
evening set	8819 Sep 12 16:41	10°♄20'10		evening set	8820 Aug 22 06:48	20°♄23'49	

inferior conj	8820 Aug 31 11:10	16° \cap 26'44	-3°32'16	desc. node	8821 Aug 06 07:57	29° Ω 52'19	
minimum elong	8820 Aug 31 02:05	16° \cap 39'50	3°29'24		8821 Aug 06 00:56	30° κ Ω	
min. Earth dist.	8820 Sep 01 14:37	15° \cap 47'08	0.54775 AU	inferior conj	8821 Aug 11 14:32	26° Ω 50'47	-1°37'17
morning rise	8820 Sep 08 21:02	12° \cap 24'38		minimum elong	8821 Aug 11 10:09	26° Ω 57'52	1°35'44
direct	8820 Sep 13 00:06	11° \cap 48'07		min. Earth dist.	8821 Aug 14 03:04	25° Ω 13'07	0.55683 AU
morning max el	8820 Sep 26 06:51	18° \cap 12'41	23°25'47	morning rise	8821 Aug 19 19:30	22° Ω 16'21	
	8820 Oct 05 21:53	0° $\underline{\Omega}$		direct	8821 Aug 24 17:55	21° Ω 21'18	
asc. node	8820 Oct 11 22:26	10° $\underline{\Omega}$ 01'26		morning max el	8821 Sep 07 19:08	28° Ω 25'35	25°10'27
morning set	8820 Oct 19 20:01	25° $\underline{\Omega}$ 44'09			8821 Sep 09 09:09	0° \cap	
	8820 Oct 21 19:50	0° \cap		asc. node	8821 Sep 28 19:23	29° \cap 15'36	
					8821 Sep 29 04:29	0° $\underline{\Omega}$	
superior conj	8820 Oct 26 18:41	10° \cap 43'22	1°40'49	morning set	8821 Oct 04 07:40	10° $\underline{\Omega}$ 32'13	
minimum elong	8820 Oct 26 18:21	10° \cap 41'35	1°40'56				
max. Earth dist.	8820 Oct 29 12:10	16° \cap 33'04	1.33338 AU	superior conj	8821 Oct 11 04:16	25° $\underline{\Omega}$ 31'05	1°36'07
evening rise	8820 Nov 03 10:27	26° \cap 41'02		minimum elong	8821 Oct 11 02:55	25° $\underline{\Omega}$ 23'42	1°36'07
	8820 Nov 05 02:51	0° \times		max. Earth dist.	8821 Oct 12 15:56	28° $\underline{\Omega}$ 46'34	1.32296 AU
desc. node	8820 Nov 15 09:32	18° \times 29'57			8821 Oct 13 05:24	0° \cap	
	8820 Nov 22 19:10	0° $\overline{\Omega}$		evening rise	8821 Oct 18 08:06	10° \cap 51'37	
evening max el	8820 Dec 07 15:44	18° $\overline{\Omega}$ 10'57	27°21'30		8821 Oct 28 08:59	0° \times	
retrograde	8820 Dec 21 04:45	25° $\overline{\Omega}$ 31'35		desc. node	8821 Nov 02 06:35	8° \times 10'41	
evening set	8820 Dec 28 02:25	22° $\overline{\Omega}$ 56'49			8821 Nov 18 21:14	0° $\overline{\Omega}$	
min. Earth dist.	8820 Dec 31 22:17	19° $\overline{\Omega}$ 27'21	0.64461 AU	evening max el	8821 Nov 20 02:00	1° $\overline{\Omega}$ 10'01	27°28'18
inferior conj	8821 Jan 03 08:15	16° $\overline{\Omega}$ 52'47	-1°31'26	retrograde	8821 Dec 03 20:56	8° $\overline{\Omega}$ 27'07	
minimum elong	8821 Jan 03 11:04	16° $\overline{\Omega}$ 45'16	1°30'02	evening set	8821 Dec 10 22:52	6° $\overline{\Omega}$ 01'14	
asc. node	8821 Jan 07 21:52	12° $\overline{\Omega}$ 35'49		min. Earth dist.	8821 Dec 14 15:27	3° $\overline{\Omega}$ 00'35	0.62628 AU
morning rise	8821 Jan 09 21:20	11° $\overline{\Omega}$ 27'23		inferior conj	8821 Dec 17 11:57	0° $\overline{\Omega}$ 17'11	-2°41'45
direct	8821 Jan 12 10:01	10° $\overline{\Omega}$ 54'36		minimum elong	8821 Dec 17 17:08	0° $\overline{\Omega}$ 04'45	2°39'32
morning max el	8821 Jan 18 20:35	14° $\overline{\Omega}$ 16'39	17°53'25		8821 Dec 17 19:08	30° κ \times	
	8821 Jan 29 23:22	0° \approx		morning rise	8821 Dec 24 13:35	25° \times 108'43	
morning set	8821 Feb 05 00:09	10° \approx 05'37		asc. node	8821 Dec 25 18:55	24° \times 150'01	
desc. node	8821 Feb 11 08:56	20° \approx 43'13		direct	8821 Dec 26 20:33	24° \times 44'43	
	8821 Feb 17 01:18	0° H		morning max el	8822 Jan 02 13:52	28° \times 10'59	17°47'57
					8822 Jan 04 06:07	0° $\overline{\Omega}$	
superior conj	8821 Feb 18 12:10	2° H 20'17	-0°50'25	morning set	8822 Jan 18 13:12	22° $\overline{\Omega}$ 52'07	
minimum elong	8821 Feb 18 06:26	1° H 57'17	0°49'30		8822 Jan 22 14:29	0° \approx	
max. Earth dist.	8821 Feb 23 05:24	9° H 50'48	1.45046 AU	desc. node	8822 Jan 29 05:52	11° \approx 24'42	
evening rise	8821 Mar 06 11:40	27° H 21'27					
	8821 Mar 08 05:02	0° Υ		superior conj	8822 Jan 30 03:27	12° \approx 55'26	-0°06'39
greatest brilliancy	8821 Mar 21 09:16	19° Υ 48'14	-0.6m	minimum elong	8822 Jan 30 02:48	12° \approx 52'42	0°06'23
	8821 Mar 28 17:33	0° B		behind sun begin	8822 Jan 29 18:26	12° \approx 17'36	
evening max el	8821 Apr 02 10:49	5° B 30'37	20°06'49	behind sun end	8822 Jan 30 11:10	13° \approx 27'45	
asc. node	8821 Apr 05 20:37	8° B 26'02		max. Earth dist.	8822 Feb 05 22:03	24° \approx 03'07	1.43869 AU
retrograde	8821 Apr 10 04:11	9° B 59'02			8822 Feb 09 15:36	0° H	
evening set	8821 Apr 14 00:38	8° B 32'51		evening rise	8822 Feb 14 00:00	6° H 47'51	
inferior conj	8821 Apr 19 08:39	2° B 30'08	3°14'03		8822 Mar 01 12:25	0° Υ	
minimum elong	8821 Apr 19 07:26	2° B 34'16	3°13'49	evening max el	8822 Mar 16 09:19	19° Υ 10'43	21°15'04
min. Earth dist.	8821 Apr 20 05:28	1° B 19'35	0.67598 AU	asc. node	8822 Mar 23 17:43	24° Υ 09'39	
	8821 Apr 21 05:26	30° κ Υ		retrograde	8822 Mar 25 02:36	24° Υ 19'10	
morning rise	8821 Apr 24 13:59	26° Υ 12'42		evening set	8822 Mar 29 08:49	22° Υ 37'50	
direct	8821 Apr 30 08:23	23° Υ 38'21		inferior conj	8822 Apr 03 15:59	16° Υ 23'35	2°55'07
desc. node	8821 May 10 08:50	29° Υ 02'06		minimum elong	8822 Apr 03 14:03	16° Υ 30'16	2°54'41
	8821 May 11 09:02	0° B		min. Earth dist.	8822 Apr 03 23:32	15° Υ 57'22	0.68257 AU
morning max el	8821 May 12 00:01	0° B 37'24	24°47'47	morning rise	8822 Apr 08 19:05	10° Υ 09'23	
	8821 Jun 03 02:59	0° II		direct	8822 Apr 14 00:04	7° Υ 52'14	
morning set	8821 Jun 16 22:39	22° II 48'49		morning max el	8822 Apr 24 09:30	14° Υ 03'18	23°18'16
max. Earth dist.	8821 Jun 20 13:22	29° II 19'05	1.37133 AU	desc. node	8822 Apr 27 05:47	17° Υ 06'59	
	8821 Jun 20 22:17	0° $\overline{\Omega}$			8822 May 07 07:30	0° B	
					8822 May 27 00:58	0° II	
superior conj	8821 Jun 27 05:17	11° $\overline{\Omega}$ 56'14	-0°53'10	morning set	8822 May 29 06:35	3° II 42'52	
minimum elong	8821 Jun 27 08:36	12° $\overline{\Omega}$ 12'24	0°52'48	max. Earth dist.	8822 Jun 02 09:16	10° II 44'07	1.39373 AU
asc. node	8821 Jul 02 19:39	23° $\overline{\Omega}$ 03'34					
evening rise	8821 Jul 05 16:22	28° $\overline{\Omega}$ 48'57		superior conj	8822 Jun 10 00:38	24° II 27'29	-1°24'41
	8821 Jul 06 06:35	0° Ω		minimum elong	8822 Jun 10 05:54	24° II 51'56	1°24'10
evening max el	8821 Jul 22 14:01	26° Ω 25'41	19°25'37		8822 Jun 12 23:35	0° $\overline{\Omega}$	
	8821 Jul 27 09:45	0° \cap		evening rise	8822 Jun 19 11:39	12° $\overline{\Omega}$ 29'07	
retrograde	8821 Aug 01 01:50	1° \cap 07'25		asc. node	8822 Jun 19 16:38	12° $\overline{\Omega}$ 53'10	
evening set	8821 Aug 02 22:11	0° \cap 57'31			8822 Jun 29 02:51	0° Ω	

evening max el	8822 Jul 05 14:55	8°Ω33'36	18°38'43		8823 Jun 05 05:02	0°☿	
retrograde	8822 Jul 13 15:24	12°Ω32'53		asc. node	8823 Jun 06 13:40	2°☿28'48	
evening set	8822 Jul 15 16:34	12°Ω18'11		evening max el	8823 Jun 18 23:41	21°☿17'00	18°12'15
inferior conj	8822 Jul 23 13:47	7°Ω53'18	0°11'31	retrograde	8823 Jun 25 23:58	24°☿49'19	
minimum elong	8822 Jul 23 14:13	7°Ω52'29	0°11'10	evening set	8823 Jun 28 08:41	24°☿25'52	
transit middle	8822 Jul 23 14:13	7°Ω52'29	0°11'10	inferior conj	8823 Jul 05 10:45	19°☿40'09	1°35'59
transit begin	8822 Jul 23 11:35	7°Ω57'26		minimum elong	8823 Jul 05 13:29	19°☿34'08	1°34'53
transit end	8822 Jul 23 16:50	7°Ω47'31		min. Earth dist.	8823 Jul 08 19:32	16°☿43'27	0.59512 AU
desc. node	8822 Jul 24 05:03	7°Ω24'21		desc. node	8823 Jul 11 02:09	14°☿57'41	
min. Earth dist.	8822 Jul 26 20:08	5°Ω26'28	0.57370 AU	morning rise	8823 Jul 12 15:14	13°☿57'46	
morning rise	8822 Jul 31 08:21	2°Ω41'45		direct	8823 Jul 19 00:30	12°☿04'13	
direct	8822 Aug 06 02:32	1°Ω19'13		morning max el	8823 Aug 02 09:03	19°☿55'09	27°36'05
morning max el	8822 Aug 20 10:47	8°Ω52'11	26°38'35		8823 Aug 10 23:54	0°Ω	
	8822 Sep 05 10:30	0°♍			8823 Aug 29 05:50	0°♍	
asc. node	8822 Sep 15 16:19	18°♍50'52		asc. node	8823 Sep 02 13:15	8°♍41'18	
morning set	8822 Sep 18 17:48	25°♍12'47		morning set	8823 Sep 03 00:47	9°♍41'30	
	8822 Sep 20 23:11	0°♌		max. Earth dist.	8823 Sep 09 10:31	23°♍34'15	1.31617 AU
superior conj	8822 Sep 25 15:46	10°♌21'06	1°25'49	superior conj	8823 Sep 10 03:26	25°♍08'01	1°10'20
minimum elong	8822 Sep 25 13:46	10°♌09'57	1°25'37	minimum elong	8823 Sep 10 01:11	24°♍55'33	1°09'57
max. Earth dist.	8822 Sep 26 00:29	11°♌09'29	1.31721 AU		8823 Sep 12 08:03	0°♌	
evening rise	8822 Oct 02 12:28	25°♌18'49		evening rise	8823 Sep 16 21:16	9°♌56'22	
	8822 Oct 04 18:37	0°♍			8823 Sep 27 02:14	0°♍	
desc. node	8822 Oct 20 03:40	27°♍15'13		desc. node	8823 Oct 07 00:47	15°♍29'25	
	8822 Oct 22 00:52	0°♊		evening max el	8823 Oct 15 05:27	24°♍56'02	26°02'20
evening max el	8822 Nov 02 07:23	13°♊28'03	27°02'08		8823 Oct 21 23:21	0°♊	
retrograde	8822 Nov 16 05:08	20°♊38'30		retrograde	8823 Oct 29 03:32	1°♊59'29	
evening set	8822 Nov 23 03:54	18°♊32'09		evening set	8823 Nov 04 12:48	0°♊22'29	
min. Earth dist.	8822 Nov 26 22:03	15°♊51'25	0.60583 AU		8823 Nov 05 06:15	30°♍	
inferior conj	8822 Nov 30 01:32	13°♊13'01	-3°52'23	min. Earth dist.	8823 Nov 08 18:19	27°♍47'33	0.58498 AU
minimum elong	8822 Nov 30 08:39	12°♊58'01	3°49'58	inferior conj	8823 Nov 11 21:30	25°♍30'34	-4°54'33
morning rise	8822 Dec 07 15:50	8°♊24'29		minimum elong	8823 Nov 12 04:33	25°♍17'39	4°52'55
direct	8822 Dec 09 20:19	8°♊05'41		morning rise	8823 Nov 19 22:38	21°♍04'29	
asc. node	8822 Dec 12 15:57	8°♊38'20		direct	8823 Nov 22 05:04	20°♍47'33	
morning max el	8822 Dec 17 04:05	11°♊44'57	18°01'09	asc. node	8823 Nov 29 12:58	23°♍56'50	
	8822 Dec 29 07:22	0°♊		morning max el	8823 Nov 30 11:38	24°♍48'39	18°34'40
morning set	8823 Jan 01 19:32	6°♊26'56			8823 Dec 04 20:01	0°♊	
				morning set	8823 Dec 16 13:51	20°♊34'26	
superior conj	8823 Jan 11 19:55	24°♊42'04	0°31'44		8823 Dec 21 10:53	0°♊	
minimum elong	8823 Jan 11 22:23	24°♊52'54	0°31'34				
	8823 Jan 14 20:45	0°♋		superior conj	8823 Dec 25 09:47	7°♊29'13	1°01'39
desc. node	8823 Jan 16 02:48	2°♋09'01		minimum elong	8823 Dec 25 13:07	7°♊44'47	1°01'26
max. Earth dist.	8823 Jan 19 10:23	7°♋44'26	1.42144 AU	max. Earth dist.	8824 Jan 01 18:32	20°♊46'12	1.40068 AU
evening rise	8823 Jan 25 00:59	16°♋52'38		desc. node	8824 Jan 02 23:46	22°♊52'42	
	8823 Feb 02 12:08	0°♋		evening rise	8824 Jan 05 22:35	27°♊52'54	
	8823 Feb 24 10:30	0°♌			8824 Jan 07 05:10	0°♋	
evening max el	8823 Feb 27 03:03	2°♌53'11	22°32'08		8824 Jan 27 01:41	0°♋	
retrograde	8823 Mar 08 23:14	8°♌43'00		evening max el	8824 Feb 09 17:39	16°♋38'45	23°52'21
asc. node	8823 Mar 10 14:50	8°♌29'22		retrograde	8824 Feb 20 16:45	23°♋05'51	
evening set	8823 Mar 13 16:28	6°♌46'38		asc. node	8824 Feb 25 11:58	21°♋15'51	
inferior conj	8823 Mar 19 00:44	0°♌23'49	2°26'31	evening set	8824 Feb 25 22:05	20°♋55'13	
minimum elong	8823 Mar 18 22:31	0°♌31'35	2°25'55	min. Earth dist.	8824 Mar 01 16:30	15°♋23'39	0.68288 AU
min. Earth dist.	8823 Mar 18 19:58	0°♌40'24	0.68480 AU	inferior conj	8824 Mar 02 09:03	14°♋27'21	1°48'59
	8823 Mar 19 07:36	30°♋		minimum elong	8824 Mar 02 06:57	14°♋34'29	1°48'21
morning rise	8823 Mar 24 04:23	24°♋14'23		morning rise	8824 Mar 07 15:50	8°♋24'07	
direct	8823 Mar 28 19:31	22°♋18'26		direct	8824 Mar 11 17:29	6°♋50'34	
morning max el	8823 Apr 06 22:03	27°♋37'18	21°50'35	morning max el	8824 Mar 19 17:08	11°♋22'57	20°31'55
	8823 Apr 09 03:42	0°♌		desc. node	8824 Mar 30 23:39	25°♋31'51	
desc. node	8823 Apr 14 02:43	6°♌01'33			8824 Apr 03 02:31	0°♌	
	8823 Apr 30 21:55	0°♍		morning set	8824 Apr 17 16:20	21°♌56'57	
morning set	8823 May 09 11:28	13°♍21'44			8824 Apr 22 19:39	0°♍	
max. Earth dist.	8823 May 15 08:48	22°♍58'16	1.41580 AU	max. Earth dist.	8824 Apr 26 15:47	6°♍07'57	1.43475 AU
	8823 May 19 12:45	0°♎					
superior conj	8823 May 23 01:15	6°♎06'20	-1°51'49	superior conj	8824 May 03 02:38	16°♍42'08	-2°09'11
minimum elong	8823 May 23 07:10	6°♎32'19	1°51'29	minimum elong	8824 May 03 06:01	16°♍56'12	2°09'13
evening rise	8823 Jun 02 19:19	25°♎34'29			8824 May 10 22:20	0°♎	
				evening rise	8824 May 15 10:51	7°♎53'41	

asc. node	8824 May 23 10:43	21° Π 44'12			8825 Apr 15 11:37	0° \mathcal{B}	
	8824 May 28 19:33	0° \mathcal{B}		evening rise	8825 Apr 27 05:41	19° \mathcal{B} 17'57	
evening max el	8824 Jun 01 12:23	4° \mathcal{B} 24'42	18°05'15		8825 May 03 15:45	0° Π	
retrograde	8824 Jun 08 00:04	7° \mathcal{B} 45'53		asc. node	8825 May 10 07:48	10° Π 32'46	
evening set	8824 Jun 10 16:19	7° \mathcal{B} 10'58		evening max el	8825 May 16 01:44	17° Π 48'41	18°16'59
inferior conj	8824 Jun 17 02:32	2° \mathcal{B} 05'26	2°33'05	retrograde	8825 May 22 11:03	21° Π 13'07	
minimum elong	8824 Jun 17 05:23	1° \mathcal{B} 58'13	2°32'10	evening set	8825 May 25 10:37	20° Π 25'03	
	8824 Jun 19 03:51	30° \mathcal{R} Π		inferior conj	8825 May 31 09:03	15° Π 01'29	3°06'22
min. Earth dist.	8824 Jun 20 03:11	29° Π 02'27	0.61767 AU	minimum elong	8825 May 31 10:54	14° Π 56'13	3°05'53
morning rise	8824 Jun 23 16:20	26° Π 02'19		min. Earth dist.	8825 Jun 02 20:17	12° Π 13'47	0.63871 AU
desc. node	8824 Jun 26 23:14	24° Π 17'31		morning rise	8825 Jun 06 09:56	8° Π 47'13	
direct	8824 Jun 30 09:18	23° Π 41'16		direct	8825 Jun 13 03:15	6° Π 07'36	
	8824 Jul 12 19:04	0° \mathcal{B}		desc. node	8825 Jun 13 20:17	6° Π 09'14	
morning max el	8824 Jul 14 13:52	1° \mathcal{B} 42'12	27°56'04	morning max el	8825 Jun 26 23:01	14° Π 09'22	27°38'35
	8824 Aug 04 07:06	0° \mathcal{Q}			8825 Jul 09 18:33	0° \mathcal{B}	
morning set	8824 Aug 17 02:37	23° \mathcal{Q} 52'25			8825 Jul 27 21:58	0° \mathcal{Q}	
asc. node	8824 Aug 19 10:11	28° \mathcal{Q} 41'09		morning set	8825 Jul 31 20:59	7° \mathcal{Q} 39'10	
	8824 Aug 20 01:06	0° \mathcal{M}		max. Earth dist.	8825 Aug 05 19:14	17° \mathcal{Q} 43'30	1.32814 AU
max. Earth dist.	8824 Aug 22 18:07	5° \mathcal{M} 49'22	1.31977 AU	asc. node	8825 Aug 06 07:09	18° \mathcal{Q} 46'10	
superior conj	8824 Aug 24 13:23	9° \mathcal{M} 45'47	0°50'00	superior conj	8825 Aug 08 19:44	24° \mathcal{Q} 08'57	0°25'16
minimum elong	8824 Aug 24 11:23	9° \mathcal{M} 34'50	0°49'33	minimum elong	8825 Aug 08 18:33	24° \mathcal{Q} 02'32	0°24'52
evening rise	8824 Aug 31 08:24	24° \mathcal{M} 37'33			8825 Aug 11 12:42	0° \mathcal{M}	
	8824 Sep 02 21:31	0° \mathcal{A}		evening rise	8825 Aug 15 19:58	9° \mathcal{M} 16'46	
	8824 Sep 20 17:57	0° \mathcal{M}			8825 Aug 26 12:12	0° \mathcal{A}	
desc. node	8824 Sep 22 21:55	2° \mathcal{M} 33'37		evening max el	8825 Sep 07 06:43	15° \mathcal{A} 47'21	22°56'25
evening max el	8824 Sep 25 19:37	5° \mathcal{M} 35'14	24°35'37	desc. node	8825 Sep 09 19:03	18° \mathcal{A} 01'27	
retrograde	8824 Oct 09 14:33	12° \mathcal{M} 30'59		retrograde	8825 Sep 20 13:28	22° \mathcal{A} 25'21	
evening set	8824 Oct 14 21:27	11° \mathcal{M} 28'44		evening set	8825 Sep 24 08:20	21° \mathcal{A} 53'58	
min. Earth dist.	8824 Oct 20 06:37	8° \mathcal{M} 41'05	0.56610 AU	min. Earth dist.	8825 Oct 01 15:14	18° \mathcal{A} 35'34	0.55235 AU
inferior conj	8824 Oct 22 21:18	7° \mathcal{M} 01'32	-5°33'16	inferior conj	8825 Oct 03 01:57	17° \mathcal{A} 45'36	-5°28'49
minimum elong	8824 Oct 23 00:18	6° \mathcal{M} 56'45	5°32'55	minimum elong	8825 Oct 02 21:22	17° \mathcal{A} 52'13	5°28'19
morning rise	8824 Oct 31 05:19	2° \mathcal{M} 57'46		morning rise	8825 Oct 11 12:25	13° \mathcal{A} 56'23	
direct	8824 Nov 02 19:00	2° \mathcal{M} 39'45		direct	8825 Oct 14 14:01	13° \mathcal{A} 34'25	
morning max el	8824 Nov 12 08:57	7° \mathcal{M} 12'13	19°30'14	morning max el	8825 Oct 25 17:28	18° \mathcal{A} 47'54	20°48'06
asc. node	8824 Nov 15 09:58	10° \mathcal{M} 32'02		asc. node	8825 Nov 02 06:58	28° \mathcal{A} 08'04	
	8824 Nov 27 03:11	0° \mathcal{X}			8825 Nov 03 11:40	0° \mathcal{M}	
morning set	8824 Nov 29 16:17	5° \mathcal{X} 03'28		morning set	8825 Nov 13 23:53	19° \mathcal{M} 45'05	
					8825 Nov 18 22:02	0° \mathcal{X}	
superior conj	8824 Dec 07 15:59	21° \mathcal{X} 02'53	1°22'40	superior conj	8825 Nov 21 09:56	5° \mathcal{X} 09'16	1°35'24
minimum elong	8824 Dec 07 18:49	21° \mathcal{X} 16'42	1°22'36	minimum elong	8825 Nov 21 11:36	5° \mathcal{X} 17'48	1°35'30
	8824 Dec 12 07:58	0° \mathcal{Z}		max. Earth dist.	8825 Nov 26 08:42	15° \mathcal{X} 03'49	1.35843 AU
max. Earth dist.	8824 Dec 14 00:30	3° \mathcal{Z} 08'09	1.37884 AU	evening rise	8825 Nov 30 07:53	22° \mathcal{X} 36'55	
evening rise	8824 Dec 17 17:48	9° \mathcal{Z} 50'11			8825 Dec 04 09:51	0° \mathcal{Z}	
desc. node	8824 Dec 19 20:46	13° \mathcal{Z} 32'09		desc. node	8825 Dec 06 17:47	4° \mathcal{Z} 02'35	
	8824 Dec 29 23:41	0° \mathcal{A}			8825 Dec 23 17:58	0° \mathcal{A}	
	8825 Jan 21 20:06	0° \mathcal{X}		evening max el	8826 Jan 04 19:58	14° \mathcal{A} 12'47	26°15'45
evening max el	8825 Jan 22 06:52	0° \mathcal{X} 26'44	25°09'14	retrograde	8826 Jan 17 14:40	21° \mathcal{A} 27'04	
retrograde	8825 Feb 03 06:10	7° \mathcal{X} 22'59		evening set	8826 Jan 23 20:45	18° \mathcal{A} 55'03	
evening set	8825 Feb 09 00:06	4° \mathcal{X} 59'51		min. Earth dist.	8826 Jan 28 01:07	14° \mathcal{A} 32'41	0.66713 AU
asc. node	8825 Feb 11 09:05	2° \mathcal{X} 36'40		asc. node	8826 Jan 29 06:11	13° \mathcal{A} 03'43	
	8825 Feb 13 11:53	30° \mathcal{R} \mathcal{A}		inferior conj	8826 Jan 29 16:47	12° \mathcal{A} 31'07	0°08'48
min. Earth dist.	8825 Feb 13 10:57	0° \mathcal{X} 02'59	0.67693 AU	minimum elong	8826 Jan 29 16:33	12° \mathcal{A} 31'51	0°08'53
inferior conj	8825 Feb 14 15:03	28° \mathcal{A} 31'22	1°02'59	transit middle	8826 Jan 29 16:33	12° \mathcal{A} 31'51	0°08'53
minimum elong	8825 Feb 14 13:36	28° \mathcal{A} 36'05	1°02'33	transit begin	8826 Jan 29 14:09	12° \mathcal{A} 39'13	
morning rise	8825 Feb 20 03:26	22° \mathcal{A} 35'49		transit end	8826 Jan 29 18:56	12° \mathcal{A} 24'30	
direct	8825 Feb 23 16:36	21° \mathcal{A} 23'26		morning rise	8826 Feb 04 13:06	6° \mathcal{A} 45'10	
morning max el	8825 Mar 02 20:15	25° \mathcal{A} 21'04	19°26'47	direct	8826 Feb 07 15:15	5° \mathcal{A} 51'07	
	8825 Mar 06 22:23	0° \mathcal{X}		morning max el	8826 Feb 14 06:29	9° \mathcal{A} 26'26	18°37'19
greatest brilliancy	8825 Mar 15 15:24	12° \mathcal{X} 10'06	-0.7m		8826 Mar 01 01:48	0° \mathcal{X}	
desc. node	8825 Mar 17 20:34	15° \mathcal{X} 28'32		desc. node	8826 Mar 04 17:28	5° \mathcal{X} 43'49	
	8825 Mar 27 09:00	0° \mathcal{Y}		morning set	8826 Mar 07 06:46	9° \mathcal{X} 45'05	
morning set	8825 Mar 27 14:54	0° \mathcal{Y} 22'44			8826 Mar 20 04:27	0° \mathcal{Y}	
max. Earth dist.	8825 Apr 09 05:26	20° \mathcal{Y} 01'27	1.44827 AU				
superior conj	8825 Apr 13 03:38	26° \mathcal{Y} 15'32	-2°10'27	superior conj	8826 Mar 23 11:22	5° \mathcal{Y} 08'44	-1°51'35
minimum elong	8825 Apr 13 00:33	26° \mathcal{Y} 03'13	2°10'28	minimum elong	8826 Mar 23 02:23	4° \mathcal{Y} 33'34	1°50'54

max. Earth dist.	8826 Mar 22 23:06	4°♂20'46	1.45494 AU	morning set	8827 Feb 16 03:42	20°♂35'00	
evening rise	8826 Apr 08 00:50	29°♂43'04		desc. node	8827 Feb 19 14:20	26°♂12'21	
	8826 Apr 08 05:05	0°♂			8827 Feb 21 22:27	0°♂	
greatest brilliancy	8826 Apr 16 04:11	12°♂41'21	-0.8m				
asc. node	8826 Apr 27 04:53	28°♂45'41		superior conj	8827 Mar 02 18:51	14°♂08'24	-1°15'26
	8826 Apr 28 06:13	0°♂		minimum elong	8827 Mar 02 10:26	13°♂35'08	1°14'21
evening max el	8826 Apr 29 13:00	1°♂22'16	18°46'47	max. Earth dist.	8827 Mar 05 18:38	18°♂50'51	1.45422 AU
retrograde	8826 May 06 04:48	5°♂02'47			8827 Mar 12 22:12	0°♂	
evening set	8826 May 09 11:55	4°♂00'27		evening rise	8827 Mar 18 22:48	9°♂20'15	
	8826 May 13 17:43	30°♂		greatest brilliancy	8827 Apr 01 01:44	29°♂25'03	-0.7m
inferior conj	8826 May 15 02:20	28°♂20'36	3°20'42		8827 Apr 01 11:08	0°♂	
minimum elong	8826 May 15 02:53	28°♂18'53	3°20'29	evening max el	8827 Apr 12 20:08	15°♂00'20	19°33'21
min. Earth dist.	8826 May 16 22:26	26°♂04'00	0.65652 AU	asc. node	8827 Apr 14 01:59	16°♂11'38	
morning rise	8826 May 20 17:11	22°♂02'07		retrograde	8827 Apr 20 02:09	19°♂08'14	
direct	8826 May 27 04:50	19°♂15'45		evening set	8827 Apr 23 17:30	17°♂50'52	
desc. node	8826 May 31 17:18	20°♂22'56		inferior conj	8827 Apr 29 03:05	11°♂56'11	3°20'04
morning max el	8826 Jun 09 09:33	27°♂05'16	26°49'10	minimum elong	8827 Apr 29 02:26	11°♂58'20	3°19'53
	8826 Jun 12 02:56	0°♂		min. Earth dist.	8827 Apr 30 08:09	10°♂20'13	0.67019 AU
	8826 Jul 03 10:14	0°♂		morning rise	8827 May 04 11:01	5°♂37'47	
morning set	8826 Jul 15 04:48	20°♂53'24		direct	8827 May 10 12:39	2°♂56'11	
max. Earth dist.	8826 Jul 19 10:29	29°♂10'24	1.34141 AU	desc. node	8827 May 18 14:16	6°♂28'19	
	8826 Jul 19 20:22	0°♂		morning max el	8827 May 22 19:24	10°♂17'35	25°36'20
					8827 Jun 07 10:09	0°♂	
superior conj	8826 Jul 23 20:17	8°♂11'29	-0°03'17		8827 Jun 26 00:53	0°♂	
minimum elong	8826 Jul 23 20:28	8°♂12'29	0°03'27	morning set	8827 Jun 27 22:01	3°♂23'18	
behind sun begin	8826 Jul 23 14:51	7°♂43'12		max. Earth dist.	8827 Jul 01 14:53	10°♂15'53	1.35937 AU
behind sun end	8826 Jul 24 02:05	8°♂41'48					
asc. node	8826 Jul 24 04:07	8°♂52'21		superior conj	8827 Jul 07 12:15	21°♂45'22	-0°34'33
evening rise	8826 Jul 31 06:03	23°♂48'27		minimum elong	8827 Jul 07 14:20	21°♂55'49	0°34'23
	8826 Aug 03 06:09	0°♂		asc. node	8827 Jul 11 01:04	28°♂55'04	
evening max el	8826 Aug 19 23:58	26°♂09'23	21°21'27		8827 Jul 11 13:45	0°♂	
	8826 Aug 24 20:13	0°♂		evening rise	8827 Jul 15 12:29	8°♂05'39	
desc. node	8826 Aug 27 16:11	1°♂21'48			8827 Jul 27 11:54	0°♂	
retrograde	8826 Sep 01 02:51	2°♂09'55		evening max el	8827 Aug 02 05:38	7°♂07'45	20°02'05
evening set	8826 Sep 03 14:24	1°♂55'45		retrograde	8827 Aug 12 16:33	12°♂17'44	
	8826 Sep 09 00:56	30°♂		evening set	8827 Aug 14 14:11	12°♂08'15	
inferior conj	8826 Sep 12 19:18	27°♂58'38	-4°28'43	desc. node	8827 Aug 14 13:19	12°♂08'36	
minimum elong	8826 Sep 12 09:46	28°♂12'01	4°26'20	inferior conj	8827 Aug 23 14:56	8°♂08'54	-2°44'37
min. Earth dist.	8826 Sep 12 23:50	27°♂52'16	0.54668 AU	minimum elong	8827 Aug 23 07:30	8°♂20'03	2°42'03
morning rise	8826 Sep 21 05:51	24°♂06'52		min. Earth dist.	8827 Aug 25 10:11	7°♂04'05	0.55058 AU
direct	8826 Sep 24 22:54	23°♂37'06		morning rise	8827 Aug 31 23:23	3°♂54'42	
morning max el	8826 Oct 07 13:42	29°♂36'51	22°24'54	direct	8827 Sep 05 10:45	3°♂11'09	
	8826 Oct 07 23:29	0°♂		morning max el	8827 Sep 19 02:30	9°♂53'40	24°11'07
asc. node	8826 Oct 20 03:55	16°♂31'05			8827 Oct 04 00:04	0°♂	
	8826 Oct 27 05:55	0°♂		asc. node	8827 Oct 07 00:51	5°♂28'55	
morning set	8826 Oct 29 10:28	4°♂33'19		morning set	8827 Oct 13 22:12	19°♂22'23	
					8827 Oct 18 19:51	0°♂	
superior conj	8826 Nov 05 12:04	19°♂38'09	1°40'45				
minimum elong	8826 Nov 05 12:26	19°♂40'06	1°40'54	superior conj	8827 Oct 20 19:34	4°♂20'26	1°39'32
max. Earth dist.	8826 Nov 09 00:01	26°♂57'23	1.34135 AU	minimum elong	8827 Oct 20 18:46	4°♂16'05	1°39'37
	8826 Nov 10 11:48	0°♂		max. Earth dist.	8827 Oct 22 23:48	9°♂02'55	1.32844 AU
evening rise	8826 Nov 13 13:04	6°♂03'50		evening rise	8827 Oct 28 05:38	20°♂00'38	
desc. node	8826 Nov 23 14:49	24°♂19'10			8827 Nov 02 08:37	0°♂	
	8826 Nov 27 02:08	0°♂		desc. node	8827 Nov 10 11:54	14°♂15'05	
evening max el	8826 Dec 18 09:14	27°♂50'04	27°04'27		8827 Nov 21 04:03	0°♂	
	8826 Dec 20 18:50	0°♂		evening max el	8827 Nov 30 21:22	11°♂07'00	27°28'18
retrograde	8826 Dec 31 17:22	5°♂10'52		retrograde	8827 Dec 14 13:22	18°♂26'02	
evening set	8827 Jan 07 10:03	2°♂35'19		evening set	8827 Dec 21 13:29	15°♂54'17	
	8827 Jan 10 05:33	30°♂		min. Earth dist.	8827 Dec 25 07:47	12°♂37'31	0.63711 AU
min. Earth dist.	8827 Jan 11 08:47	28°♂46'49	0.65377 AU	inferior conj	8827 Dec 27 22:17	9°♂58'05	-2°00'52
inferior conj	8827 Jan 13 12:03	26°♂22'05	-0°52'57	minimum elong	8827 Dec 28 02:06	9°♂48'20	1°59'06
minimum elong	8827 Jan 13 13:36	26°♂17'41	0°52'04	asc. node	8828 Jan 03 00:20	4°♂57'03	
asc. node	8827 Jan 16 03:17	23°♂32'13		morning rise	8828 Jan 03 16:34	4°♂39'09	
morning rise	8827 Jan 19 18:28	20°♂48'04		direct	8828 Jan 06 02:32	4°♂10'29	
direct	8827 Jan 22 11:26	20°♂08'38		morning max el	8828 Jan 12 14:59	7°♂33'17	17°48'52
morning max el	8827 Jan 28 21:39	23°♂32'52	18°04'28		8828 Jan 27 13:32	0°♂	
	8827 Feb 03 03:39	0°♂		morning set	8828 Jan 29 03:58	2°♂44'52	

desc. node	8828 Feb 06 11:15	16° \approx 50'05		morning set	8829 Jan 11 01:06	15° \approx 53'50	
					8829 Jan 18 22:59	0° \approx	
superior conj	8828 Feb 10 19:48	24° \approx 01'23	-0°31'32				
minimum elong	8828 Feb 10 16:21	23° \approx 47'18	0°30'53	superior conj	8829 Jan 21 22:02	5° \approx 07'20	0°10'34
	8828 Feb 14 12:26	0° \approx		minimum elong	8829 Jan 21 23:00	5° \approx 11'31	0°10'38
max. Earth dist.	8828 Feb 16 13:31	3° \approx 15'59	1.44623 AU	behind sun begin	8829 Jan 21 16:33	4° \approx 43'50	
evening rise	8828 Feb 26 10:19	18° \approx 40'02		behind sun end	8829 Jan 22 05:28	5° \approx 39'08	
	8828 Mar 04 21:26	0° \approx		desc. node	8829 Jan 23 08:10	7° \approx 32'52	
evening max el	8828 Mar 25 21:56	28° \approx 40'19	20°34'33	max. Earth dist.	8829 Jan 29 05:01	17° \approx 18'23	1.43188 AU
	8828 Mar 27 07:02	0° \approx		evening rise	8829 Feb 05 02:33	28° \approx 18'56	
asc. node	8828 Mar 30 23:07	2° \approx 37'19			8829 Feb 06 04:28	0° \approx	
retrograde	8828 Apr 03 00:43	3° \approx 24'41			8829 Feb 26 15:13	0° \approx	
evening set	8828 Apr 07 01:16	1° \approx 51'57		evening max el	8829 Mar 08 18:13	12° \approx 20'45	21°47'04
	8828 Apr 09 00:35	30° \approx 8'19		retrograde	8829 Mar 17 22:34	17° \approx 46'50	
inferior conj	8828 Apr 12 08:40	25° \approx 44'12	3°07'17	asc. node	8829 Mar 17 20:15	17° \approx 46'47	
minimum elong	8828 Apr 12 07:06	25° \approx 49'34	3°06'58	evening set	8829 Mar 22 09:26	15° \approx 58'47	
min. Earth dist.	8828 Apr 12 23:41	24° \approx 52'37	0.67935 AU	inferior conj	8829 Mar 27 16:50	9° \approx 40'23	2°44'07
morning rise	8828 Apr 17 12:44	19° \approx 28'13		minimum elong	8829 Mar 27 14:43	9° \approx 47'44	2°43'37
direct	8828 Apr 23 01:38	17° \approx 00'29		min. Earth dist.	8829 Mar 27 18:57	9° \approx 33'01	0.68402 AU
morning max el	8828 May 04 04:32	23° \approx 39'27	24°10'08	morning rise	8829 Apr 01 19:52	3° \approx 28'15	
desc. node	8828 May 04 11:12	23° \approx 56'28		direct	8829 Apr 06 18:53	1° \approx 20'04	
	8828 May 09 19:38	0° \approx		morning max el	8829 Apr 16 15:00	7° \approx 08'34	22°40'23
	8828 May 30 19:31	0° \approx		desc. node	8829 Apr 21 08:08	12° \approx 24'02	
morning set	8828 Jun 08 19:42	14° \approx 56'23			8829 May 04 08:16	0° \approx	
max. Earth dist.	8828 Jun 12 12:24	21° \approx 26'37	1.38079 AU	morning set	8829 May 20 16:26	25° \approx 18'43	
	8828 Jun 17 04:34	0° \approx			8829 May 23 12:12	0° \approx	
				max. Earth dist.	8829 May 25 09:35	3° \approx 11'54	1.40334 AU
superior conj	8828 Jun 19 16:20	4° \approx 42'34	-1°06'46				
minimum elong	8828 Jun 19 20:33	5° \approx 02'40	1°06'18	superior conj	8829 Jun 02 04:16	16° \approx 52'18	-1°37'00
asc. node	8828 Jun 26 22:04	18° \approx 50'57		minimum elong	8829 Jun 02 10:05	17° \approx 18'37	1°36'30
evening rise	8828 Jun 28 12:45	22° \approx 02'04			8829 Jun 09 06:09	0° \approx	
	8828 Jul 02 15:08	0° \approx		evening rise	8829 Jun 12 03:35	5° \approx 28'38	
evening max el	8828 Jul 15 00:14	18° \approx 51'08	19°03'01	asc. node	8829 Jun 13 19:06	8° \approx 35'13	
retrograde	8828 Jul 23 19:40	23° \approx 13'06			8829 Jun 27 00:31	0° \approx	
evening set	8828 Jul 25 17:33	23° \approx 01'35		evening max el	8829 Jun 28 04:53	1° \approx 14'44	18°24'57
desc. node	8828 Jul 31 10:25	20° \approx 32'48		retrograde	8829 Jul 05 17:49	5° \approx 01'02	
inferior conj	8828 Aug 03 02:05	18° \approx 47'21	-0°48'52	evening set	8829 Jul 07 21:58	4° \approx 43'05	
minimum elong	8828 Aug 02 23:59	18° \approx 50'58	0°48'12	inferior conj	8829 Jul 15 10:45	0° \approx 09'08	0°50'44
min. Earth dist.	8828 Aug 06 00:04	16° \approx 47'23	0.56334 AU	minimum elong	8829 Jul 15 12:29	0° \approx 05'37	0°49'53
morning rise	8828 Aug 11 03:20	13° \approx 57'18			8829 Jul 15 15:16	30° \approx 8'26	
direct	8828 Aug 16 10:28	12° \approx 51'37		desc. node	8829 Jul 18 07:30	27° \approx 50'23	
morning max el	8828 Aug 30 15:30	20° \approx 08'22	25°50'52	min. Earth dist.	8829 Jul 18 19:37	27° \approx 26'53	0.58244 AU
	8828 Sep 08 02:19	0° \approx		morning rise	8829 Jul 22 23:34	24° \approx 43'00	
asc. node	8828 Sep 22 21:47	24° \approx 52'41		direct	8829 Jul 29 00:40	23° \approx 07'38	
	8828 Sep 25 10:20	0° \approx			8829 Aug 11 13:19	0° \approx	
morning set	8828 Sep 27 09:25	4° \approx 07'38		morning max el	8829 Aug 12 10:05	0° \approx 49'30	27°07'25
					8829 Sep 02 04:52	0° \approx	
superior conj	8828 Oct 04 06:12	19° \approx 09'23	1°32'24	asc. node	8829 Sep 09 18:43	14° \approx 35'20	
minimum elong	8828 Oct 04 04:32	19° \approx 00'08	1°32'19	morning set	8829 Sep 11 18:30	18° \approx 44'24	
max. Earth dist.	8828 Oct 05 06:13	21° \approx 21'54	1.32003 AU		8829 Sep 16 22:57	0° \approx	
	8828 Oct 09 05:28	0° \approx					
evening rise	8828 Oct 11 06:29	4° \approx 18'50		superior conj	8829 Sep 18 18:02	3° \approx 59'05	1°19'52
	8828 Oct 25 01:20	0° \approx		minimum elong	8829 Sep 18 15:52	3° \approx 47'03	1°19'35
desc. node	8828 Oct 27 08:59	3° \approx 41'40		max. Earth dist.	8829 Sep 18 16:00	3° \approx 47'45	1.31620 AU
evening max el	8828 Nov 12 05:58	23° \approx 49'49	27°21'18	evening rise	8829 Sep 25 13:02	18° \approx 51'24	
	8828 Nov 21 02:28	0° \approx			8829 Oct 01 00:06	0° \approx	
retrograde	8828 Nov 26 01:59	1° \approx 30'32		desc. node	8829 Oct 14 06:06	22° \approx 16'27	
	8828 Nov 30 20:36	30° \approx 8'47			8829 Oct 19 23:18	0° \approx	
evening set	8828 Dec 03 03:50	28° \approx 44'33		evening max el	8829 Oct 25 08:20	5° \approx 46'57	26°40'29
min. Earth dist.	8828 Dec 06 20:19	25° \approx 53'56	0.61778 AU	retrograde	8829 Nov 08 06:21	12° \approx 54'50	
inferior conj	8828 Dec 09 20:23	23° \approx 11'00	-3°12'05	evening set	8829 Nov 15 01:00	10° \approx 59'30	
minimum elong	8828 Dec 10 02:32	22° \approx 57'05	3°09'41	min. Earth dist.	8829 Nov 18 22:12	8° \approx 23'37	0.59689 AU
morning rise	8828 Dec 17 03:30	18° \approx 10'37		inferior conj	8829 Nov 22 02:56	5° \approx 51'57	-4°20'31
direct	8828 Dec 19 09:06	17° \approx 49'07		minimum elong	8829 Nov 22 10:24	5° \approx 37'09	4°18'18
asc. node	8828 Dec 19 21:24	17° \approx 50'17		morning rise	8829 Nov 29 22:16	1° \approx 13'10	
morning max el	8828 Dec 26 07:22	21° \approx 19'31	17°51'16	direct	8829 Dec 02 02:58	0° \approx 55'34	
	8829 Jan 01 21:18	0° \approx		asc. node	8829 Dec 06 18:25	2° \approx 18'46	

morning max el	8829 Dec 09 19:20	4° ♊ 42'42	18°12'54			8830 Dec 02 00:07	0° ♊	
morning set	8829 Dec 25 13:07	29° ♊ 44'19		morning set		8830 Dec 09 11:17	14° ♊ 01'53	
	8829 Dec 25 16:26	0° ♋						
superior conj	8830 Jan 04 00:19	17° ♋ 22'10	0°45'30	superior conj		8830 Dec 17 21:45	0° ♋ 30'43	1°11'37
minimum elong	8830 Jan 04 03:23	17° ♋ 35'58	0°45'17	minimum elong		8830 Dec 18 00:59	0° ♋ 46'09	1°11'26
desc. node	8830 Jan 10 05:09	28° ♋ 17'33				8830 Dec 17 15:19	0° ♋	
	8830 Jan 11 05:10	0° ♌		max. Earth dist.		8830 Dec 24 21:34	13° ♋ 24'42	1.39137 AU
max. Earth dist.	8830 Jan 11 15:21	0° ♌ 43'14	1.41286 AU	desc. node		8830 Dec 28 02:09	18° ♋ 59'53	
evening rise	8830 Jan 16 11:48	8° ♌ 46'09		evening rise		8830 Dec 28 18:48	20° ♋ 11'18	
	8830 Jan 30 06:19	0° ♍				8831 Jan 03 16:48	0° ♌	
evening max el	8830 Feb 19 10:12	26° ♍ 03'30	23°06'10	evening max el		8831 Jan 24 09:56	0° ♍	
	8830 Feb 24 00:06	0° ♎		retrograde		8831 Feb 01 23:59	9° ♍ 50'03	24°25'54
retrograde	8830 Mar 01 18:09	2° ♎ 10'37		evening set		8831 Feb 13 10:09	16° ♍ 31'16	
asc. node	8830 Mar 04 17:22	1° ♎ 27'09		asc. node		8831 Feb 18 20:41	14° ♍ 15'13	
evening set	8830 Mar 06 16:25	0° ♎ 07'54		min. Earth dist.		8831 Feb 19 14:29	13° ♍ 34'52	
	8830 Mar 06 20:06	30° ♏		inferior conj		8831 Feb 23 11:47	8° ♍ 58'07	0.68079 AU
min. Earth dist.	8830 Mar 11 15:45	24° ♏ 16'19	0.68445 AU	minimum elong		8831 Feb 24 09:12	7° ♍ 46'20	1°30'30
inferior conj	8830 Mar 12 01:37	23° ♏ 42'10	2°11'40	morning rise		8831 Feb 24 07:19	7° ♍ 52'40	1°29'55
minimum elong	8830 Mar 11 23:24	23° ♏ 49'52	2°11'01	direct		8831 Mar 01 18:02	1° ♏ 45'53	
morning rise	8830 Mar 17 06:18	17° ♏ 35'07		morning max el		8831 Mar 05 14:12	0° ♏ 21'34	
direct	8830 Mar 21 15:29	15° ♏ 48'54		desc. node		8831 Mar 13 04:29	4° ♏ 38'00	20°02'17
morning max el	8830 Mar 30 06:07	20° ♏ 47'20	21°15'41			8831 Mar 26 02:00	21° ♏ 17'18	
	8830 Apr 07 00:36	0° ♐		morning set		8831 Mar 31 23:15	0° ♎	
desc. node	8830 Apr 08 05:04	1° ♐ 34'52		max. Earth dist.		8831 Apr 09 09:06	12° ♎ 48'29	
	8830 Apr 27 13:46	0° ♑				8831 Apr 19 21:08	29° ♎ 15'54	1.44122 AU
morning set	8830 Apr 30 09:57	4° ♑ 26'33				8831 Apr 20 08:11	0° ♑	
max. Earth dist.	8830 May 07 11:42	15° ♑ 48'00	1.42434 AU	superior conj		8831 Apr 25 10:12	8° ♑ 12'43	-2°12'02
				minimum elong		8831 Apr 25 11:12	8° ♑ 16'48	2°12'10
superior conj	8830 May 14 19:23	28° ♒ 04'18	-2°00'45			8831 May 08 09:29	0° ♒	
minimum elong	8830 May 15 00:43	28° ♒ 27'13	2°00'35	evening rise		8831 May 08 12:11	0° ♒ 11'34	
	8830 May 15 22:16	0° ♓		asc. node		8831 May 18 13:13	17° ♒ 07'45	
evening rise	8830 May 26 04:57	18° ♓ 15'13		evening max el		8831 May 26 05:08	27° ♒ 25'09	18°08'07
asc. node	8830 May 31 16:09	28° ♓ 02'46				8831 May 29 14:53	0° ♓	
	8830 Jun 01 19:05	0° ♈		retrograde		8831 Jun 01 14:36	0° ♓ 45'48	
evening max el	8830 Jun 11 15:44	14° ♈ 09'12	18°06'59	evening set		8831 Jun 04 10:01	0° ♈ 05'27	
retrograde	8830 Jun 18 09:30	17° ♈ 35'05				8831 Jun 04 14:30	30° ♒	
evening set	8830 Jun 20 21:20	17° ♈ 07'12		inferior conj		8831 Jun 10 14:45	24° ♓ 52'21	2°49'46
inferior conj	8830 Jun 27 16:12	12° ♈ 13'08	2°03'22	minimum elong		8831 Jun 10 17:15	24° ♓ 45'39	2°49'03
minimum elong	8830 Jun 27 19:11	12° ♈ 06'08	2°02'17	min. Earth dist.		8831 Jun 13 10:14	21° ♓ 53'20	0.62690 AU
min. Earth dist.	8830 Jun 30 22:35	9° ♈ 10'30	0.60467 AU	morning rise		8831 Jun 16 22:46	18° ♓ 43'41	
morning rise	8830 Jul 04 14:18	6° ♈ 20'22		desc. node		8831 Jun 22 01:39	16° ♓ 21'35	
desc. node	8830 Jul 05 04:36	5° ♈ 58'35		direct		8831 Jun 23 16:55	16° ♓ 13'03	
direct	8830 Jul 11 03:45	4° ♈ 14'01		morning max el		8831 Jul 07 18:08	24° ♓ 15'44	27°52'59
morning max el	8830 Jul 25 11:23	12° ♈ 11'17	27°49'20			8831 Jul 12 22:18	0° ♈	
	8830 Aug 08 12:47	0° ♉				8831 Aug 01 21:58	0° ♉	
	8830 Aug 25 11:17	0° ♊		morning set		8831 Aug 10 22:32	17° ♉ 08'03	
morning set	8830 Aug 26 23:34	3° ♊ 06'28		asc. node		8831 Aug 14 12:36	24° ♉ 33'09	
asc. node	8830 Aug 27 15:39	4° ♊ 30'23		max. Earth dist.		8831 Aug 16 06:27	28° ♉ 15'53	1.32270 AU
max. Earth dist.	8830 Sep 02 01:19	16° ♊ 09'09	1.31706 AU			8831 Aug 17 01:48	0° ♊	
superior conj	8830 Sep 03 05:12	18° ♊ 43'01	1°02'18	superior conj		8831 Aug 18 13:53	3° ♊ 15'39	0°40'03
minimum elong	8830 Sep 03 03:00	18° ♊ 30'50	1°01'52	minimum elong		8831 Aug 18 12:10	3° ♊ 06'16	0°39'36
	8830 Sep 08 08:00	0° ♋		evening rise		8831 Aug 25 10:35	18° ♊ 12'21	
evening rise	8830 Sep 09 23:03	3° ♋ 31'06				8831 Aug 31 04:23	0° ♋	
	8830 Sep 23 23:13	0° ♌		desc. node		8831 Sep 18 00:22	26° ♋ 41'58	
desc. node	8830 Oct 01 03:15	10° ♌ 14'52		evening max el		8831 Sep 18 14:53	27° ♋ 17'37	23°54'01
evening max el	8830 Oct 07 02:43	16° ♌ 52'47	25°28'03			8831 Sep 21 17:55	0° ♌	
retrograde	8830 Oct 21 00:36	23° ♌ 54'13		retrograde		8831 Oct 02 06:19	4° ♌ 07'07	
evening set	8830 Oct 27 00:01	22° ♌ 31'49		evening set		8831 Oct 06 22:18	3° ♌ 19'28	
min. Earth dist.	8830 Oct 31 14:55	19° ♌ 53'36	0.57650 AU	min. Earth dist.		8831 Oct 13 01:23	0° ♌ 20'33	0.55950 AU
inferior conj	8830 Nov 03 14:32	17° ♌ 50'32	-5°15'00			8831 Oct 13 15:06	30° ♒	
minimum elong	8830 Nov 03 20:27	17° ♌ 40'20	5°13'56	inferior conj		8831 Oct 15 05:47	29° ♋ 01'14	-5°37'45
morning rise	8830 Nov 11 19:13	13° ♌ 34'21		minimum elong		8831 Oct 15 05:45	29° ♋ 01'17	5°37'38
direct	8830 Nov 14 03:50	13° ♌ 17'28		morning rise		8831 Oct 23 15:14	25° ♋ 04'40	
morning max el	8830 Nov 22 23:04	17° ♌ 31'03	18°55'30	direct		8831 Oct 26 09:30	24° ♋ 45'15	
asc. node	8830 Nov 23 15:26	18° ♌ 11'47		morning max el		8831 Nov 05 15:02	29° ♋ 34'33	20°00'32

	8831 Nov 06 01:36	0°♍		inferior conj	8832 Sep 24 04:08	9°♌28'39	-5°10'06
asc. node	8831 Nov 10 12:24	5°♍14'29		minimum elong	8832 Sep 23 20:41	9°♌39'08	5°08'50
morning set	8831 Nov 23 16:12	28°♍36'56		morning rise	8832 Oct 02 14:51	5°♌41'06	
	8831 Nov 24 08:31	0°♌		direct	8832 Oct 05 22:59	5°♌16'12	
				morning max el	8832 Oct 17 17:49	10°♌48'37	21°27'21
superior conj	8831 Dec 01 09:23	14°♌19'12	1°29'02	asc. node	8832 Oct 27 09:22	23°♌11'57	
minimum elong	8831 Dec 01 11:46	14°♌31'05	1°29'02		8832 Oct 31 07:32	0°♍	
max. Earth dist.	8831 Dec 07 03:55	25°♌32'58	1.36996 AU	morning set	8832 Nov 07 01:20	13°♍22'27	
	8831 Dec 09 13:20	0°♎					
evening rise	8831 Dec 10 22:30	2°♎30'46		superior conj	8832 Nov 14 07:12	28°♍36'23	1°38'31
desc. node	8831 Dec 14 23:09	9°♎35'58		minimum elong	8832 Nov 14 08:19	28°♍42'11	1°38'40
	8831 Dec 27 18:56	0°♏			8832 Nov 14 23:18	0°♌	
evening max el	8832 Jan 15 13:16	23°♏38'29	25°39'18	max. Earth dist.	8832 Nov 18 15:10	7°♌27'22	1.35075 AU
	8832 Jan 24 08:51	0°♐		evening rise	8832 Nov 22 19:29	15°♌35'55	
retrograde	8832 Jan 27 21:28	0°♐43'10		desc. node	8832 Nov 30 20:10	0°♎01'29	
	8832 Jan 31 04:11	30°♐			8832 Nov 30 19:49	0°♎	
evening set	8832 Feb 02 20:36	28°♐16'04			8832 Dec 21 08:40	0°♏	
asc. node	8832 Feb 06 11:35	24°♐26'57		evening max el	8832 Dec 28 02:35	7°♏22'38	26°39'02
min. Earth dist.	8832 Feb 07 04:43	23°♐33'44	0.67324 AU	retrograde	8833 Jan 10 03:22	14°♏40'09	
inferior conj	8832 Feb 08 13:38	21°♐48'58	0°40'57	evening set	8833 Jan 16 14:24	12°♏05'51	
minimum elong	8832 Feb 08 12:37	21°♐52'11	0°40'43	min. Earth dist.	8833 Jan 20 16:18	7°♏58'13	0.66193 AU
morning rise	8832 Feb 14 05:05	15°♐57'03		inferior conj	8833 Jan 22 12:54	5°♏46'01	-0°16'30
direct	8832 Feb 17 13:27	14°♐52'41		minimum elong	8833 Jan 22 13:21	5°♏44'41	0°16'06
morning max el	8832 Feb 24 10:43	18°♐39'10	19°03'40	asc. node	8833 Jan 23 08:41	4°♏47'47	
	8832 Mar 04 09:06	0°♑		morning rise	8833 Jan 28 13:16	0°♏04'55	
greatest brilliancy	8832 Mar 09 01:25	6°♑57'26	-0.8m		8833 Jan 28 17:02	30°♑	
desc. node	8832 Mar 11 22:53	11°♑22'31		direct	8833 Jan 31 11:23	29°♑17'27	
morning set	8832 Mar 18 12:30	21°♑31'09			8833 Feb 03 07:06	0°♒	
	8832 Mar 23 23:30	0°♒		morning max el	8833 Feb 06 23:24	2°♒46'20	18°21'18
max. Earth dist.	8832 Apr 01 13:06	13°♒23'23	1.45203 AU		8833 Feb 25 17:39	0°♑	
				morning set	8833 Feb 26 16:23	1°♑30'50	
superior conj	8832 Apr 04 02:18	17°♒24'24	-2°04'56	desc. node	8833 Feb 26 19:46	1°♑44'21	
minimum elong	8832 Apr 03 20:11	17°♒00'15	2°04'42				
	8832 Apr 11 23:56	0°♓		superior conj	8833 Mar 14 07:30	26°♑13'56	-1°37'53
evening rise	8832 Apr 18 21:00	11°♓09'56		minimum elong	8833 Mar 13 21:53	25°♑36'17	1°36'55
	8832 Apr 30 12:47	0°♔		max. Earth dist.	8833 Mar 15 08:32	27°♑51'56	1.45560 AU
asc. node	8832 May 04 10:18	5°♔42'06			8833 Mar 16 17:17	0°♒	
evening max el	8832 May 08 17:56	10°♔53'52	18°27'34	evening rise	8833 Mar 30 06:30	21°♒13'06	
retrograde	8832 May 15 04:48	14°♔23'16			8833 Apr 04 20:44	0°♓	
evening set	8832 May 18 07:39	13°♔29'03		greatest brilliancy	8833 Apr 09 16:31	7°♓30'24	-0.8m
inferior conj	8832 May 24 02:13	7°♔58'20	3°14'29	asc. node	8833 Apr 21 07:24	23°♓36'37	
minimum elong	8832 May 24 03:32	7°♔54'27	3°14'09	evening max el	8833 Apr 22 03:38	24°♓29'45	19°04'33
min. Earth dist.	8832 May 26 07:02	5°♔22'35	0.64678 AU	retrograde	8833 Apr 29 00:31	28°♓20'40	
morning rise	8832 May 29 22:29	1°♔41'54		evening set	8833 May 02 11:05	27°♓11'50	
	8832 Jun 01 11:10	30°♓		inferior conj	8833 May 07 23:03	21°♓25'10	3°22'04
direct	8832 Jun 05 14:08	28°♓58'06		minimum elong	8833 May 07 23:04	21°♓25'07	3°21'53
desc. node	8832 Jun 07 22:41	29°♓16'17		min. Earth dist.	8833 May 09 12:33	19°♓25'24	0.66290 AU
	8832 Jun 10 00:42	0°♔		morning rise	8833 May 13 10:35	15°♓06'20	
morning max el	8832 Jun 19 04:00	6°♔55'30	27°21'04	direct	8833 May 19 18:16	12°♓21'03	
	8832 Jul 06 21:28	0°♕		desc. node	8833 May 25 19:41	14°♓21'20	
	8832 Jul 24 04:18	0°♌		morning max el	8833 Jun 01 14:34	20°♓00'10	26°20'30
morning set	8832 Jul 24 12:45	0°♌41'11			8833 Jun 10 03:48	0°♔	
max. Earth dist.	8832 Jul 29 03:41	9°♌58'13	1.33322 AU		8833 Jun 30 00:04	0°♕	
asc. node	8832 Jul 31 09:33	14°♌38'47		morning set	8833 Jul 07 14:52	13°♕37'31	
				max. Earth dist.	8833 Jul 11 14:29	21°♕15'08	1.34857 AU
superior conj	8832 Aug 01 18:01	17°♌30'20	0°13'36		8833 Jul 15 23:24	0°♌	
minimum elong	8832 Aug 01 17:20	17°♌26'44	0°13'17				
behind sun begin	8832 Aug 01 14:13	17°♌10'13		superior conj	8833 Jul 16 15:14	1°♌20'57	-0°16'19
behind sun end	8832 Aug 01 20:27	17°♌43'15		minimum elong	8833 Jul 16 16:10	1°♌25'46	0°16'20
	8832 Aug 07 14:00	0°♎		asc. node	8833 Jul 18 06:31	4°♌43'40	
evening rise	8832 Aug 08 21:43	2°♎48'42		evening rise	8833 Jul 24 06:31	17°♌14'45	
	8832 Aug 23 21:03	0°♏			8833 Jul 30 16:28	0°♎	
evening max el	8832 Aug 30 03:29	7°♏29'07	22°14'39	evening max el	8833 Aug 12 01:21	18°♎02'58	20°45'15
desc. node	8832 Sep 03 21:29	11°♏19'17		desc. node	8833 Aug 21 18:38	23°♎35'50	
retrograde	8832 Sep 11 23:54	13°♏53'04		retrograde	8833 Aug 23 12:06	23°♎43'23	
evening set	8832 Sep 15 04:11	13°♏30'42		evening set	8833 Aug 25 15:29	23°♎32'17	
min. Earth dist.	8832 Sep 23 09:15	9°♏55'11	0.54887 AU	inferior conj	8833 Sep 03 20:29	19°♎35'35	-3°48'14

minimum elong	8833 Sep 03 11:03	19° \mathbb{M} 49'03	3°45'24	inferior conj	8834 Aug 14 21:35	29° \mathcal{Q} 55'45	-1°54'57
min. Earth dist.	8833 Sep 04 18:08	19° \mathbb{M} 04'38	0.54710 AU	minimum elong	8834 Aug 14 16:22	0° \mathbb{M} 04'01	1°53'06
morning rise	8833 Sep 12 06:36	15° \mathbb{M} 36'49			8834 Aug 14 18:54	30° \mathbb{R} \mathcal{Q}	
direct	8833 Sep 16 06:54	15° \mathbb{M} 02'21		min. Earth dist.	8834 Aug 17 06:09	28° \mathcal{Q} 26'20	0.55494 AU
morning max el	8833 Sep 29 10:05	21° \mathbb{M} 20'48	23°09'59	morning rise	8834 Aug 23 03:36	25° \mathcal{Q} 26'44	
	8833 Oct 06 20:19	0° \mathcal{Q}		direct	8834 Aug 27 23:09	24° \mathcal{Q} 34'51	
asc. node	8833 Oct 14 06:19	11° \mathcal{Q} 50'48			8834 Sep 09 04:25	0° \mathbb{M}	
morning set	8833 Oct 22 12:37	28° \mathcal{Q} 11'50		morning max el	8834 Sep 10 22:20	1° \mathbb{M} 34'06	24°55'28
	8833 Oct 23 08:58	0° \mathbb{M}			8834 Sep 30 14:34	0° \mathcal{Q}	
				asc. node	8834 Oct 01 03:15	1° \mathcal{Q} 00'49	
superior conj	8833 Oct 29 11:55	13° \mathbb{M} 12'03	1°40'59	morning set	8834 Oct 07 00:21	13° \mathcal{Q} 00'10	
minimum elong	8833 Oct 29 11:46	13° \mathbb{M} 11'14	1°41'09				
max. Earth dist.	8833 Nov 01 10:07	19° \mathbb{M} 25'06	1.33523 AU	superior conj	8834 Oct 13 21:03	27° \mathcal{Q} 58'33	1°37'11
evening rise	8833 Nov 06 05:52	29° \mathbb{M} 16'24		minimum elong	8834 Oct 13 19:50	27° \mathcal{Q} 51'55	1°37'14
	8833 Nov 06 14:42	0° \mathcal{Q}			8834 Oct 14 19:14	0° \mathbb{M}	
desc. node	8833 Nov 17 17:12	20° \mathcal{Q} 10'19		max. Earth dist.	8834 Oct 15 12:50	1° \mathbb{M} 36'00	1.32421 AU
	8833 Nov 23 22:31	0° \mathcal{Q}		evening rise	8834 Oct 21 02:20	13° \mathbb{M} 23'36	
evening max el	8833 Dec 10 15:23	20° \mathcal{Q} 52'17	27°17'57		8834 Oct 29 17:47	0° \mathcal{Q}	
retrograde	8833 Dec 24 03:20	28° \mathcal{Q} 13'29		desc. node	8834 Nov 04 14:18	9° \mathcal{Q} 55'15	
evening set	8833 Dec 30 23:51	25° \mathcal{Q} 38'10			8834 Nov 19 06:37	0° \mathcal{Q}	
min. Earth dist.	8834 Jan 03 20:22	22° \mathcal{Q} 03'57	0.64709 AU	evening max el	8834 Nov 23 02:12	3° \mathcal{Q} 56'07	27°29'21
inferior conj	8834 Jan 06 04:40	19° \mathcal{Q} 31'27	-1°21'06	retrograde	8834 Dec 06 20:37	11° \mathcal{Q} 14'02	
minimum elong	8834 Jan 06 07:08	19° \mathcal{Q} 24'45	1°19'50	evening set	8834 Dec 13 22:12	8° \mathcal{Q} 46'21	
asc. node	8834 Jan 10 05:45	15° \mathcal{Q} 34'38		min. Earth dist.	8834 Dec 17 15:09	5° \mathcal{Q} 41'40	0.62914 AU
morning rise	8834 Jan 12 15:59	14° \mathcal{Q} 03'50		inferior conj	8834 Dec 20 10:08	2° \mathcal{Q} 58'51	-2°30'56
direct	8834 Jan 15 05:40	13° \mathcal{Q} 29'30		minimum elong	8834 Dec 20 14:59	2° \mathcal{Q} 47'04	2°28'51
morning max el	8834 Jan 21 15:58	16° \mathcal{Q} 51'49	17°55'43		8834 Dec 23 16:53	30° \mathbb{R} \mathcal{Q}	
	8834 Jan 31 05:39	0° \mathcal{Q}		morning rise	8834 Dec 27 09:52	27° \mathcal{Q} 47'31	
morning set	8834 Feb 08 01:35	12° \mathcal{Q} 56'53		asc. node	8834 Dec 28 02:48	27° \mathcal{Q} 34'41	
desc. node	8834 Feb 13 16:39	22° \mathcal{Q} 17'20		direct	8834 Dec 29 17:27	27° \mathcal{Q} 22'29	
	8834 Feb 18 10:03	0° \mathcal{Q}			8835 Jan 04 12:52	0° \mathcal{Q}	
				morning max el	8835 Jan 05 09:20	0° \mathcal{Q} 47'42	17°47'35
superior conj	8834 Feb 21 20:45	5° \mathcal{Q} 32'15	-0°57'07	morning set	8835 Jan 21 11:32	25° \mathcal{Q} 34'16	
minimum elong	8834 Feb 21 14:14	5° \mathcal{Q} 06'14	0°56'09		8835 Jan 24 00:16	0° \mathcal{Q}	
max. Earth dist.	8834 Feb 26 04:01	12° \mathcal{Q} 21'39	1.45167 AU	desc. node	8835 Jan 31 13:34	12° \mathcal{Q} 57'44	
evening rise	8834 Mar 09 22:16	0° \mathcal{Q} 38'16					
	8834 Mar 09 12:19	0° \mathcal{Q}		superior conj	8835 Feb 02 08:11	15° \mathcal{Q} 55'56	-0°13'04
greatest brilliancy	8834 Mar 24 13:33	22° \mathcal{Q} 45'23	-0.6m	minimum elong	8835 Feb 02 06:51	15° \mathcal{Q} 50'26	0°12'41
	8834 Mar 29 16:03	0° \mathcal{Q}		behind sun begin	8835 Feb 02 01:08	15° \mathcal{Q} 26'37	
evening max el	8834 Apr 05 08:29	8° \mathcal{Q} 08'26	19°57'42	behind sun end	8835 Feb 02 12:34	16° \mathcal{Q} 14'13	
asc. node	8834 Apr 08 04:31	10° \mathcal{Q} 38'45		max. Earth dist.	8835 Feb 08 21:07	26° \mathcal{Q} 36'54	1.44084 AU
retrograde	8834 Apr 12 22:48	12° \mathcal{Q} 31'24			8835 Feb 11 00:01	0° \mathcal{Q}	
evening set	8834 Apr 16 17:51	11° \mathcal{Q} 07'36		evening rise	8835 Feb 17 09:51	10° \mathcal{Q} 01'28	
inferior conj	8834 Apr 22 02:12	5° \mathcal{Q} 06'54	3°16'01		8835 Mar 02 16:57	0° \mathcal{Q}	
minimum elong	8834 Apr 22 01:07	5° \mathcal{Q} 10'32	3°15'47	evening max el	8835 Mar 19 07:50	21° \mathcal{Q} 48'30	21°04'19
min. Earth dist.	8834 Apr 23 01:08	3° \mathcal{Q} 49'35	0.67461 AU	asc. node	8835 Mar 26 01:38	26° \mathcal{Q} 33'52	
	8834 Apr 26 03:32	30° \mathbb{R} \mathcal{Q}		retrograde	8835 Mar 27 21:17	26° \mathcal{Q} 50'36	
morning rise	8834 Apr 27 08:07	28° \mathcal{Q} 49'02		evening set	8835 Apr 01 01:59	25° \mathcal{Q} 11'32	
direct	8834 May 03 04:25	26° \mathcal{Q} 12'32		inferior conj	8835 Apr 06 09:09	18° \mathcal{Q} 59'00	2°58'39
	8834 May 11 10:12	0° \mathcal{Q}		minimum elong	8835 Apr 06 07:19	19° \mathcal{Q} 05'22	2°58'15
desc. node	8834 May 12 16:38	1° \mathcal{Q} 05'11		min. Earth dist.	8835 Apr 06 18:38	18° \mathcal{Q} 26'07	0.68188 AU
morning max el	8834 May 15 00:14	3° \mathcal{Q} 18'09	25°00'40	morning rise	8835 Apr 11 12:25	12° \mathcal{Q} 44'16	
	8834 Jun 04 08:50	0° \mathbb{I}		direct	8835 Apr 16 19:30	10° \mathcal{Q} 24'07	
morning set	8834 Jun 20 00:30	25° \mathbb{I} 45'38		morning max el	8835 Apr 27 09:28	16° \mathcal{Q} 42'38	23°31'41
	8834 Jun 22 08:56	0° \mathcal{Q}		desc. node	8835 Apr 29 13:34	19° \mathcal{Q} 00'53	
max. Earth dist.	8834 Jun 23 15:16	2° \mathcal{Q} 19'16	1.36812 AU		8835 May 08 09:11	0° \mathcal{Q}	
					8835 May 28 09:25	0° \mathbb{I}	
superior conj	8834 Jun 30 02:37	14° \mathcal{Q} 40'28	-0°48'16	morning set	8835 Jun 01 12:09	6° \mathbb{I} 50'12	
minimum elong	8834 Jun 30 05:36	14° \mathcal{Q} 55'10	0°47'57	max. Earth dist.	8835 Jun 05 11:12	13° \mathbb{I} 39'03	1.39036 AU
asc. node	8834 Jul 05 03:31	24° \mathcal{Q} 44'14					
	8834 Jul 07 17:59	0° \mathcal{Q}		superior conj	8835 Jun 13 00:23	27° \mathbb{I} 18'57	-1°20'05
evening rise	8834 Jul 08 10:43	1° \mathcal{Q} 24'21		minimum elong	8835 Jun 13 05:24	27° \mathbb{I} 42'25	1°19'34
evening max el	8834 Jul 25 12:45	29° \mathcal{Q} 20'57	19°34'24		8835 Jun 14 10:40	0° \mathcal{Q}	
	8834 Jul 26 05:06	0° \mathbb{M}		evening rise	8835 Jun 22 07:24	15° \mathcal{Q} 09'03	
retrograde	8834 Aug 04 06:31	4° \mathbb{M} 09'44		asc. node	8835 Jun 22 00:33	14° \mathcal{Q} 35'47	
evening set	8834 Aug 06 02:45	4° \mathbb{M} 00'09			8835 Jun 30 06:59	0° \mathcal{Q}	
desc. node	8834 Aug 08 15:45	3° \mathbb{M} 17'52		evening max el	8835 Jul 08 12:13	11° \mathcal{Q} 23'07	18°44'23

retrograde	8835 Jul 16 17:11	15°Ω27'40		asc. node	8836 Jun 07 21:36	4°♄14'00	
evening set	8835 Jul 18 17:26	15°Ω13'53		evening max el	8836 Jun 20 20:02	24°♄01'33	18°14'52
inferior conj	8835 Jul 26 17:38	10°Ω51'54	-0°03'37	retrograde	8836 Jun 27 23:11	27°♄36'58	
minimum elong	8835 Jul 26 17:29	10°Ω52'11	0°03'45	evening set	8836 Jun 30 06:43	27°♄15'00	
transit middle	8835 Jul 26 17:29	10°Ω52'11	0°03'45	inferior conj	8836 Jul 07 11:28	22°♄32'12	1°24'57
transit begin	8835 Jul 26 13:54	10°Ω58'46		minimum elong	8836 Jul 07 14:01	22°♄26'42	1°23'53
transit end	8835 Jul 26 21:03	10°Ω45'35		min. Earth dist.	8836 Jul 10 20:35	19°♄38'36	0.59181 AU
desc. node	8835 Jul 26 12:53	11°Ω00'39		desc. node	8836 Jul 12 09:58	18°♄25'50	
min. Earth dist.	8835 Jul 29 22:21	8°Ω31'33	0.57088 AU	morning rise	8836 Jul 14 18:09	16°♄53'45	
morning rise	8835 Aug 03 14:05	5°Ω45'54		direct	8836 Jul 21 01:31	15°♄04'58	
direct	8835 Aug 09 05:37	4°Ω27'50		morning max el	8836 Aug 04 10:23	22°♄53'29	27°29'50
morning max el	8835 Aug 23 13:06	11°Ω56'43	26°27'03		8836 Aug 10 18:16	0°Ω	
	8835 Sep 06 14:22	0°♐			8836 Aug 29 16:22	0°♐	
asc. node	8835 Sep 18 00:12	20°♐33'17		asc. node	8836 Sep 03 21:09	10°♐21'52	
morning set	8835 Sep 21 10:50	27°♐42'01		morning set	8836 Sep 04 18:25	12°♐12'54	
	8835 Sep 22 12:37	0°♑					
superior conj	8835 Sep 28 08:25	12°♑48'28	1°27'44	superior conj	8836 Sep 11 20:09	27°♐36'07	1°13'01
minimum elong	8835 Sep 28 06:29	12°♑37'45	1°27'34	minimum elong	8836 Sep 11 17:55	27°♐23'40	1°12'39
max. Earth dist.	8835 Sep 28 20:58	13°♑58'04	1.31783 AU	max. Earth dist.	8836 Sep 11 07:07	26°♐23'47	1.31606 AU
evening rise	8835 Oct 05 05:54	27°♑48'48			8836 Sep 12 22:04	0°♑	
	8835 Oct 06 07:01	0°♒		evening rise	8836 Sep 18 14:11	12°♑25'12	
desc. node	8835 Oct 22 11:27	29°♒05'57			8836 Sep 27 10:15	0°♒	
	8835 Oct 23 01:52	0°♓		desc. node	8836 Oct 08 08:35	17°♒29'00	
evening max el	8835 Nov 05 08:37	16°♓21'07	27°08'12	evening max el	8836 Oct 17 07:51	27°♒56'43	26°13'07
retrograde	8835 Nov 19 05:59	23°♓32'08			8836 Oct 19 15:43	0°♓	
evening set	8835 Nov 26 05:48	21°♓22'24		retrograde	8836 Oct 31 05:50	5°♓01'04	
min. Earth dist.	8835 Nov 29 23:20	18°♓39'24	0.60893 AU	evening set	8836 Nov 06 18:01	3°♓19'03	
inferior conj	8835 Dec 03 02:03	15°♓59'27	-3°42'01	min. Earth dist.	8836 Nov 10 20:54	0°♓44'31	0.58801 AU
minimum elong	8835 Dec 03 08:58	15°♓44'37	3°39'34		8836 Nov 11 21:18	30°♒♒	
morning rise	8835 Dec 10 14:31	11°♓07'39		inferior conj	8836 Nov 14 00:51	28°♒23'18	-4°46'19
direct	8835 Dec 12 19:11	10°♓48'13		minimum elong	8836 Nov 14 08:08	28°♒09'42	4°44'28
asc. node	8835 Dec 14 23:50	11°♓08'25		morning rise	8836 Nov 22 00:36	23°♒53'54	
morning max el	8835 Dec 20 00:13	14°♓25'00	17°57'59	direct	8836 Nov 24 06:29	23°♒36'52	
	8835 Dec 30 16:04	0°♈		asc. node	8836 Nov 30 20:51	26°♒14'08	
morning set	8836 Jan 04 15:42	9°♈03'15		morning max el	8836 Dec 02 09:01	27°♒33'56	18°28'24
					8836 Dec 04 14:36	0°♈	
superior conj	8836 Jan 14 21:06	27°♈32'32	0°26'25	morning set	8836 Dec 18 08:31	23°♈06'44	
minimum elong	8836 Jan 14 23:15	27°♈41'55	0°26'18		8836 Dec 21 22:27	0°♈	
	8836 Jan 16 06:56	0°♉		superior conj	8836 Dec 27 08:07	10°♈11'46	0°57'41
desc. node	8836 Jan 18 10:33	3°♉41'59		minimum elong	8836 Dec 27 11:26	10°♈27'05	0°57'27
max. Earth dist.	8836 Jan 22 10:28	10°♉24'52	1.42427 AU	max. Earth dist.	8837 Jan 03 19:19	23°♈33'25	1.40385 AU
evening rise	8836 Jan 28 08:21	19°♉59'24		desc. node	8837 Jan 04 07:31	24°♈26'02	
	8836 Feb 03 18:58	0°♊			8837 Jan 07 14:25	0°♉	
	8836 Feb 25 04:20	0°♋		evening rise	8837 Jan 08 02:38	0°♉50'51	
evening max el	8836 Mar 01 02:17	5°♋31'01	22°20'18		8837 Jan 27 04:35	0°♊	
retrograde	8836 Mar 10 18:15	11°♋14'30		evening max el	8837 Feb 11 17:09	19°♊15'48	23°40'26
asc. node	8836 Mar 11 22:45	11°♋07'25		retrograde	8837 Feb 22 12:19	25°♊37'57	
evening set	8836 Mar 15 09:50	9°♋20'16		asc. node	8837 Feb 26 19:52	24°♊08'10	
inferior conj	8836 Mar 20 17:50	2°♋58'34	2°31'27	evening set	8837 Feb 27 15:50	23°♊29'12	
minimum elong	8836 Mar 20 15:37	3°♋06'16	2°30'52	min. Earth dist.	8837 Mar 04 11:26	17°♊52'34	0.68342 AU
min. Earth dist.	8836 Mar 20 14:49	3°♋09'02	0.68476 AU	inferior conj	8837 Mar 05 02:18	17°♊01'46	1°55'13
	8836 Mar 22 22:37	30°♋♋		minimum elong	8837 Mar 05 00:09	17°♋09'06	1°54'36
morning rise	8836 Mar 25 21:15	26°♋48'29		morning rise	8837 Mar 10 08:28	10°♋57'36	
direct	8836 Mar 30 14:28	24°♋49'16		direct	8837 Mar 14 12:02	9°♋20'50	
	8836 Apr 08 15:09	0°♌		morning max el	8837 Mar 22 15:22	13°♋59'34	20°42'53
morning max el	8836 Apr 08 21:21	0°♌15'25	22°03'15	desc. node	8837 Apr 02 07:23	27°♋14'29	
desc. node	8836 Apr 15 10:29	7°♌48'57			8837 Apr 04 06:20	0°♌	
	8836 May 01 04:14	0°♍		morning set	8837 Apr 21 04:54	25°♌22'55	
morning set	8836 May 11 21:10	16°♍40'16			8837 Apr 24 03:42	0°♍	
max. Earth dist.	8836 May 17 10:10	25°♍46'10	1.41269 AU	max. Earth dist.	8837 Apr 29 16:02	8°♍48'06	1.43223 AU
	8836 May 19 22:18	0°♎					
superior conj	8836 May 25 04:06	9°♎06'15	-1°48'11	superior conj	8837 May 06 09:07	19°♍51'35	-2°07'26
minimum elong	8836 May 25 10:05	9°♎32'43	1°47'48	minimum elong	8837 May 06 13:09	20°♍08'31	2°07'26
evening rise	8836 Jun 04 17:04	28°♎20'17			8837 May 12 07:46	0°♎	
	8836 Jun 05 14:33	0°♏		evening rise	8837 May 18 11:18	10°♎47'06	
				asc. node	8837 May 25 18:39	23°♎32'57	

	8837 May 29 18:49	0°☿		evening rise	8838 Apr 30 09:26	22°♄19'54	
evening max el	8837 Jun 04 08:18	7°☿06'00	18°05'04		8838 May 04 22:50	0°♄	
retrograde	8837 Jun 10 21:17	10°☿28'04		asc. node	8838 May 12 15:42	12°♄26'14	
evening set	8837 Jun 13 12:22	9°☿55'05		evening max el	8838 May 18 21:43	20°♄28'10	18°14'07
inferior conj	8837 Jun 20 00:41	4°☿52'23	2°26'00	retrograde	8838 May 25 06:51	23°♄51'17	
minimum elong	8837 Jun 20 03:37	4°☿45'06	2°25'03	evening set	8838 May 28 05:18	23°♄05'20	
min. Earth dist.	8837 Jun 23 03:00	1°☿48'46	0.61431 AU	inferior conj	8838 Jun 03 05:14	17°♄44'30	3°02'36
	8837 Jun 25 04:06	30°♄		minimum elong	8838 Jun 03 07:17	17°♄38'47	3°02'04
morning rise	8837 Jun 26 16:35	28°♄51'32		min. Earth dist.	8838 Jun 05 18:44	14°♄53'09	0.63572 AU
desc. node	8837 Jun 29 07:01	27°♄25'01		morning rise	8838 Jun 09 07:53	11°♄31'21	
direct	8837 Jul 03 08:48	26°♄34'06		direct	8838 Jun 16 01:37	8°♄53'35	
	8837 Jul 12 06:56	0°☿		desc. node	8838 Jun 16 04:02	8°♄53'37	
morning max el	8837 Jul 17 14:27	4°☿34'32	27°55'37	morning max el	8838 Jun 29 23:03	16°♄56'21	27°43'25
	8837 Aug 05 13:16	0°♄			8838 Jul 10 18:51	0°☿	
morning set	8837 Aug 19 21:12	26°♄27'28			8838 Jul 29 08:15	0°♄	
asc. node	8837 Aug 21 18:07	0°♄21'09		morning set	8838 Aug 03 16:49	10°♄18'29	
	8837 Aug 21 14:05	0°♄		max. Earth dist.	8838 Aug 08 17:33	20°♄39'10	1.32652 AU
max. Earth dist.	8837 Aug 25 15:21	8°♄41'38	1.31889 AU	asc. node	8838 Aug 08 15:03	20°♄25'54	
superior conj	8837 Aug 27 06:30	12°♄16'07	0°53'25	superior conj	8838 Aug 11 13:29	26°♄42'02	0°29'18
minimum elong	8837 Aug 27 04:26	12°♄04'45	0°52'56	minimum elong	8838 Aug 11 12:08	26°♄34'45	0°28'53
evening rise	8837 Sep 03 01:05	27°♄06'37			8838 Aug 13 02:04	0°♄	
	8837 Sep 04 09:40	0°♄		evening rise	8838 Aug 18 12:40	11°♄46'34	
	8837 Sep 21 11:01	0°♄			8838 Aug 27 17:48	0°♄	
desc. node	8837 Sep 25 05:42	4°♄45'56		evening max el	8838 Sep 10 10:01	18°♄57'14	23°11'24
evening max el	8837 Sep 28 22:58	8°♄42'45	24°49'46	desc. node	8838 Sep 12 02:50	20°♄30'36	
retrograde	8837 Oct 12 18:52	15°♄40'27		retrograde	8838 Sep 23 19:42	25°♄38'59	
evening set	8837 Oct 18 06:31	14°♄32'52		evening set	8838 Sep 27 19:57	25°♄03'51	
min. Earth dist.	8837 Oct 23 10:13	11°♄48'20	0.56866 AU	min. Earth dist.	8838 Oct 04 19:17	21°♄50'56	0.55395 AU
inferior conj	8837 Oct 26 03:47	10°♄02'08	-5°29'44	inferior conj	8838 Oct 06 11:01	20°♄53'06	-5°33'00
minimum elong	8837 Oct 26 07:42	9°♄55'46	5°29'14	minimum elong	8838 Oct 06 07:37	20°♄58'03	5°32'42
morning rise	8837 Nov 03 11:07	5°♄55'27		morning rise	8838 Oct 14 21:18	17°♄02'24	
direct	8837 Nov 05 23:16	5°♄37'52		direct	8838 Oct 17 20:50	16°♄41'14	
morning max el	8837 Nov 15 08:09	10°♄05'00	19°20'29	morning max el	8838 Oct 28 18:40	21°♄48'26	20°35'02
asc. node	8837 Nov 17 17:51	12°♄39'17		asc. node	8838 Nov 04 14:50	0°♄07'14	
	8837 Nov 28 13:32	0°♄			8838 Nov 04 12:52	0°♄	
morning set	8837 Dec 02 09:55	7°♄33'21		morning set	8838 Nov 16 16:53	22°♄13'35	
					8838 Nov 20 10:54	0°♄	
superior conj	8837 Dec 10 12:12	23°♄39'44	1°20'01	superior conj	8838 Nov 24 04:37	7°♄42'03	1°33'57
minimum elong	8837 Dec 10 15:09	23°♄54'07	1°19'55	minimum elong	8838 Nov 24 06:29	7°♄51'31	1°34'02
	8837 Dec 13 19:30	0°♄		max. Earth dist.	8838 Nov 29 08:30	17°♄57'41	1.36135 AU
max. Earth dist.	8837 Dec 17 01:05	5°♄59'51	1.38205 AU	evening rise	8838 Dec 03 06:17	25°♄20'27	
evening rise	8837 Dec 20 18:46	12°♄40'11			8838 Dec 05 19:57	0°♄	
desc. node	8837 Dec 22 04:32	15°♄06'39		desc. node	8838 Dec 09 01:33	5°♄38'58	
	8837 Dec 31 06:35	0°♄			8838 Dec 24 19:23	0°♄	
	8838 Jan 22 08:16	0°♄		evening max el	8839 Jan 07 19:30	16°♄50'13	26°06'48
evening max el	8838 Jan 25 06:22	3°♄03'12	24°58'15	retrograde	8839 Jan 20 11:46	24°♄02'33	
retrograde	8838 Feb 06 02:29	9°♄56'11		evening set	8839 Jan 26 16:02	21°♄31'43	
evening set	8838 Feb 11 18:28	7°♄34'44		min. Earth dist.	8839 Jan 30 21:21	17°♄04'05	0.66882 AU
asc. node	8838 Feb 13 16:58	5°♄40'29		asc. node	8839 Jan 31 14:03	16°♄12'38	
min. Earth dist.	8838 Feb 16 06:22	2°♄32'36	0.67805 AU	inferior conj	8839 Feb 01 11:15	15°♄06'41	0°17'32
inferior conj	8838 Feb 17 08:45	1°♄05'50	1°10'29	minimum elong	8839 Feb 01 10:47	15°♄08'07	0°17'31
minimum elong	8838 Feb 17 07:10	1°♄11'03	1°10'01	morning rise	8839 Feb 07 06:13	9°♄19'01	
	8838 Feb 18 04:55	30°♄		direct	8839 Feb 10 09:54	8°♄22'25	
morning rise	8838 Feb 22 20:08	25°♄09'01		morning max el	8839 Feb 17 02:30	12°♄00'25	18°43'35
direct	8838 Feb 26 11:03	23°♄53'41			8839 Mar 02 07:49	0°♄	
morning max el	8838 Mar 05 17:16	27°♄55'53	19°35'29	desc. node	8839 Mar 07 01:11	7°♄20'35	
	8838 Mar 07 15:54	0°♄		morning set	8839 Mar 10 14:51	12°♄55'59	
greatest brilliancy	8838 Mar 18 10:19	14°♄32'03	-0.7m		8839 Mar 21 12:29	0°♄	
desc. node	8838 Mar 20 04:17	17°♄07'35		max. Earth dist.	8839 Mar 25 21:37	6°♄51'17	1.45440 AU
	8838 Mar 28 16:08	0°♄					
morning set	8838 Mar 31 02:44	3°♄45'11		superior conj	8839 Mar 26 22:57	8°♄30'34	-1°55'43
max. Earth dist.	8838 Apr 12 04:25	22°♄34'41	1.44664 AU	minimum elong	8839 Mar 26 14:31	7°♄57'30	1°55'09
					8839 Apr 09 12:47	0°♄	
superior conj	8838 Apr 16 13:30	29°♄33'29	-2°11'32	evening rise	8839 Apr 11 08:07	2°♄53'41	
minimum elong	8838 Apr 16 11:33	29°♄25'35	2°11'36	greatest brilliancy	8839 Apr 18 12:36	14°♄25'46	-0.9m
	8838 Apr 16 20:07	0°♄					

	8839 Apr 28 22:32	0°♂		superior conj	8840 Mar 05 05:11	17°♂25'49	-1°21'39
asc. node	8839 Apr 29 12:47	0°♂45'30		minimum elong	8840 Mar 04 20:15	16°♂50'38	1°20'34
evening max el	8839 May 02 09:30	4°♂01'15	18°41'16	max. Earth dist.	8840 Mar 07 17:16	21°♂21'46	1.45481 AU
retrograde	8839 May 08 23:45	7°♂38'24			8840 Mar 13 05:59	0°♂	
evening set	8839 May 12 05:45	6°♂38'12		evening rise	8840 Mar 21 08:46	12°♂36'45	
inferior conj	8839 May 17 21:08	1°♂00'48	3°19'33		8840 Apr 01 15:32	0°♂	
minimum elong	8839 May 17 21:53	0°♂58'30	3°19'18	greatest brilliancy	8840 Apr 02 20:04	1°♂47'36	-0.7m
	8839 May 18 16:53	30°♂		evening max el	8840 Apr 14 17:23	17°♂39'05	19°25'25
min. Earth dist.	8839 May 19 19:32	28°♂38'49	0.65412 AU	asc. node	8840 Apr 15 09:53	18°♂19'32	
morning rise	8839 May 23 13:18	24°♂42'44		retrograde	8840 Apr 21 20:45	21°♂42'07	
direct	8839 May 30 02:11	21°♂56'33		evening set	8840 Apr 25 10:52	20°♂26'55	
desc. node	8839 Jun 03 01:01	22°♂47'55		inferior conj	8840 Apr 30 20:58	14°♂34'17	3°21'00
morning max el	8839 Jun 12 09:25	29°♂48'36	26°58'14	minimum elong	8840 Apr 30 20:29	14°♂35'52	3°20'49
	8839 Jun 12 13:55	0°♂		min. Earth dist.	8840 May 02 04:11	12°♂52'03	0.66844 AU
	8839 Jul 04 17:09	0°♂		morning rise	8840 May 06 05:45	8°♂15'48	
morning set	8839 Jul 18 02:23	23°♂38'02		direct	8840 May 12 09:05	5°♂32'59	
	8839 Jul 21 08:27	0°♂		desc. node	8840 May 19 22:00	8°♂38'33	
max. Earth dist.	8839 Jul 22 10:18	2°♂09'38	1.33914 AU	morning max el	8840 May 24 19:26	12°♂59'10	25°48'19
					8840 Jun 07 12:47	0°♂	
superior conj	8839 Jul 26 15:03	10°♂48'11	0°01'17		8840 Jun 26 10:35	0°♂	
minimum elong	8839 Jul 26 14:59	10°♂47'52	0°01'05	morning set	8840 Jun 29 22:04	6°♂15'19	
behind sun begin	8839 Jul 26 09:19	10°♂18'15		max. Earth dist.	8840 Jul 03 16:22	13°♂17'54	1.35648 AU
behind sun end	8839 Jul 26 20:38	11°♂17'32					
asc. node	8839 Jul 26 12:00	10°♂32'16		superior conj	8840 Jul 09 08:30	24°♂26'55	-0°29'42
evening rise	8839 Aug 02 23:05	26°♂19'42		minimum elong	8840 Jul 09 10:16	24°♂35'50	0°29'34
	8839 Aug 04 17:23	0°♂		asc. node	8840 Jul 12 08:59	0°♂35'59	
evening max el	8839 Aug 23 01:51	29°♂15'32	21°34'48		8840 Jul 12 01:58	0°♂	
	8839 Aug 23 20:29	0°♂		evening rise	8840 Jul 17 06:13	10°♂39'43	
desc. node	8839 Aug 29 23:56	4°♂12'00			8840 Jul 27 12:44	0°♂	
retrograde	8839 Sep 04 09:43	5°♂22'26		evening max el	8840 Aug 04 05:26	10°♂07'15	20°12'35
evening set	8839 Sep 07 01:03	5°♂06'37		retrograde	8840 Aug 14 22:30	15°♂25'06	
inferior conj	8839 Sep 16 05:10	1°♂08'45	-4°41'17	desc. node	8840 Aug 15 21:04	15°♂22'48	
minimum elong	8839 Sep 15 19:56	1°♂21'40	4°39'08	evening set	8840 Aug 16 21:11	15°♂15'23	
min. Earth dist.	8839 Sep 16 03:37	1°♂10'55	0.54697 AU	inferior conj	8840 Aug 25 23:28	11°♂17'07	-3°01'57
	8839 Sep 18 06:52	30°♂		minimum elong	8840 Aug 25 15:21	11°♂29'06	2°59'12
morning rise	8839 Sep 24 15:47	27°♂18'41		min. Earth dist.	8840 Aug 27 13:25	10°♂21'05	0.54940 AU
direct	8839 Sep 28 06:31	26°♂50'15		morning rise	8840 Sep 03 08:30	7°♂07'34	
	8839 Oct 07 08:17	0°♂		direct	8840 Sep 07 16:59	6°♂26'38	
morning max el	8839 Oct 10 16:22	2°♂43'01	22°09'33	morning max el	8840 Sep 21 05:47	13°♂02'54	23°55'24
asc. node	8839 Oct 22 11:48	18°♂23'51			8840 Oct 04 05:15	0°♂	
	8839 Oct 28 17:17	0°♂		asc. node	8840 Oct 08 08:45	7°♂17'18	
morning set	8839 Nov 01 03:09	7°♂01'12		morning set	8840 Oct 15 14:52	21°♂50'57	
					8840 Oct 19 09:28	0°♂	
superior conj	8839 Nov 08 05:43	22°♂08'00	1°40'21				
minimum elong	8839 Nov 08 06:17	22°♂10'58	1°40'32	superior conj	8840 Oct 22 12:36	6°♂49'10	1°40'06
max. Earth dist.	8839 Nov 11 22:44	29°♂50'59	1.34368 AU	minimum elong	8840 Oct 22 11:58	6°♂45'44	1°40'13
	8839 Nov 12 00:30	0°♂		max. Earth dist.	8840 Oct 24 21:26	11°♂55'15	1.33005 AU
evening rise	8839 Nov 16 09:28	8°♂42'04		evening rise	8840 Oct 30 00:34	22°♂35'18	
desc. node	8839 Nov 25 22:35	25°♂58'09			8840 Nov 02 19:20	0°♂	
	8839 Nov 28 09:01	0°♂		desc. node	8840 Nov 11 19:40	15°♂58'09	
	8839 Dec 20 20:32	0°♂			8840 Nov 21 02:56	0°♂	
evening max el	8839 Dec 21 08:52	0°♂29'57	26°58'38	evening max el	8840 Dec 02 21:21	13°♂51'20	27°26'33
retrograde	8840 Jan 03 15:17	7°♂49'59		retrograde	8840 Dec 16 12:18	21°♂10'51	
evening set	8840 Jan 10 06:33	5°♂14'41		evening set	8840 Dec 23 11:41	18°♂37'53	
min. Earth dist.	8840 Jan 14 06:09	1°♂21'11	0.65599 AU	min. Earth dist.	8840 Dec 27 06:30	15°♂16'50	0.63981 AU
	8840 Jan 15 10:40	30°♂		inferior conj	8840 Dec 29 19:28	12°♂38'54	-1°50'14
inferior conj	8840 Jan 16 07:39	28°♂59'34	-0°43'06	minimum elong	8840 Dec 29 22:55	12°♂29'55	1°48'35
minimum elong	8840 Jan 16 08:54	28°♂56'00	0°42'22	asc. node	8841 Jan 04 08:13	7°♂51'31	
asc. node	8840 Jan 18 11:08	26°♂37'17		morning rise	8841 Jan 05 11:54	7°♂17'37	
morning rise	8840 Jan 22 12:25	23°♂23'32		direct	8841 Jan 07 22:48	6°♂47'33	
direct	8840 Jan 25 06:41	22°♂42'06		morning max el	8841 Jan 14 10:23	10°♂09'47	17°50'05
morning max el	8840 Jan 31 17:06	26°♂07'11	18°08'16		8841 Jan 27 21:47	0°♂	
	8840 Feb 04 01:55	0°♂		morning set	8841 Jan 31 04:01	5°♂32'57	
morning set	8840 Feb 19 07:23	23°♂33'09		desc. node	8841 Feb 07 19:00	18°♂24'39	
desc. node	8840 Feb 21 22:05	27°♂47'38					
	8840 Feb 23 06:49	0°♂		superior conj	8841 Feb 13 02:50	27°♂09'27	-0°38'16
				minimum elong	8841 Feb 12 22:35	26°♂52'10	0°37'30

	8841 Feb 14 21:03	0°♄		minimum elong	8842 Jan 25 01:44	8°♄06'50	0°04'41
max. Earth dist.	8841 Feb 18 12:40	5°♄49'52	1.44789 AU	behind sun begin	8842 Jan 24 17:20	7°♄31'07	
evening rise	8841 Feb 28 20:58	21°♄57'12		behind sun end	8842 Jan 25 10:07	8°♄42'27	
	8841 Mar 06 03:42	0°♅		desc. node	8842 Jan 25 15:57	9°♄07'10	
	8841 Mar 27 14:17	0°♄		max. Earth dist.	8842 Feb 01 04:39	19°♄56'18	1.43440 AU
evening max el	8841 Mar 28 20:00	1°♄18'48	20°24'34		8842 Feb 07 12:13	0°♄	
asc. node	8841 Apr 02 07:01	4°♄55'23		evening rise	8842 Feb 08 11:35	1°♄31'10	
retrograde	8841 Apr 05 19:20	5°♄57'24			8842 Feb 27 16:54	0°♅	
evening set	8841 Apr 09 18:28	4°♄26'53		evening max el	8842 Mar 11 17:00	14°♅59'01	21°35'41
	8841 Apr 13 20:41	30°♄♅		asc. node	8842 Mar 20 04:09	20°♅17'28	
inferior conj	8841 Apr 15 02:02	28°♅20'50	3°09'55	retrograde	8842 Mar 20 17:28	20°♅19'02	
minimum elong	8841 Apr 15 00:35	28°♅25'46	3°09'37	evening set	8842 Mar 25 02:41	18°♅33'18	
min. Earth dist.	8841 Apr 15 19:02	27°♅22'40	0.67828 AU	inferior conj	8842 Mar 30 09:57	12°♅16'13	2°48'14
morning rise	8841 Apr 20 06:29	22°♅04'19		minimum elong	8842 Mar 30 07:54	12°♅23'21	2°47'46
direct	8841 Apr 25 21:19	19°♅34'14		min. Earth dist.	8842 Mar 30 13:56	12°♅02'20	0.68362 AU
desc. node	8841 May 06 18:58	25°♅55'50		morning rise	8842 Apr 04 12:58	6°♅03'18	
morning max el	8841 May 07 04:45	26°♅20'21	24°23'24	direct	8842 Apr 09 14:03	3°♅51'58	
	8841 May 10 13:44	0°♄		morning max el	8842 Apr 19 14:52	9°♅48'32	22°53'32
	8841 Jun 01 02:33	0°♅		desc. node	8842 Apr 23 15:54	14°♅15'39	
morning set	8841 Jun 11 23:01	17°♅57'46			8842 May 05 12:23	0°♄	
max. Earth dist.	8841 Jun 15 14:40	24°♅26'27	1.37745 AU	morning set	8842 May 23 23:47	28°♄31'38	
	8841 Jun 18 15:29	0°♄			8842 May 24 21:04	0°♅	
				max. Earth dist.	8842 May 28 11:14	6°♅04'08	1.39997 AU
superior conj	8841 Jun 22 14:36	7°♄30'02	-1°01'56				
minimum elong	8841 Jun 22 18:29	7°♄48'48	1°01'30	superior conj	8842 Jun 05 05:14	19°♅47'39	-1°32'42
asc. node	8841 Jun 29 06:00	20°♄33'12		minimum elong	8842 Jun 05 10:53	20°♅13'29	1°32'13
evening rise	8841 Jul 01 07:37	24°♄39'50			8842 Jun 10 16:47	0°♄	
	8841 Jul 04 00:44	0°♄		evening rise	8842 Jun 15 00:07	8°♄11'39	
evening max el	8841 Jul 17 22:14	21°♄44'02	19°10'28	asc. node	8842 Jun 16 03:02	10°♄19'45	
retrograde	8841 Jul 26 23:15	26°♄12'47			8842 Jun 27 15:03	0°♄	
evening set	8841 Jul 28 20:26	26°♄01'56		evening max el	8842 Jul 01 01:42	4°♄02'46	18°29'24
desc. node	8841 Aug 02 18:11	24°♄05'48		retrograde	8842 Jul 08 18:31	7°♄53'24	
inferior conj	8841 Aug 06 07:48	21°♄50'22	-1°05'48	evening set	8842 Jul 10 21:32	7°♄36'42	
minimum elong	8841 Aug 06 04:55	21°♄55'14	1°04'51	inferior conj	8842 Jul 18 13:15	3°♄05'58	0°37'13
min. Earth dist.	8841 Aug 09 02:45	19°♄58'01	0.56091 AU	minimum elong	8842 Jul 18 14:34	3°♄03'21	0°36'32
morning rise	8841 Aug 14 10:26	17°♄05'49		desc. node	8842 Jul 20 15:16	1°♄26'49	
direct	8841 Aug 19 14:32	16°♄04'04		min. Earth dist.	8842 Jul 21 21:31	0°♄28'41	0.57927 AU
morning max el	8841 Sep 02 18:28	23°♄16'37	25°37'13		8842 Jul 22 13:05	30°♄♅	
	8841 Sep 08 19:50	0°♄		morning rise	8842 Jul 26 04:06	27°♄44'44	
asc. node	8841 Sep 25 05:42	26°♄37'52		direct	8842 Aug 01 02:52	26°♄13'51	
	8841 Sep 26 22:04	0°♄			8842 Aug 10 22:43	0°♄	
morning set	8841 Sep 30 02:17	6°♄37'20		morning max el	8842 Aug 15 12:04	3°♄52'58	26°58'00
					8842 Sep 03 12:09	0°♄	
superior conj	8841 Oct 06 22:55	21°♄37'47	1°33'51	asc. node	8842 Sep 12 02:38	16°♄18'17	
minimum elong	8841 Oct 06 21:21	21°♄29'10	1°33'48	morning set	8842 Sep 14 11:47	21°♄15'50	
max. Earth dist.	8841 Oct 08 03:00	24°♄12'30	1.32093 AU		8842 Sep 18 12:38	0°♄	
	8841 Oct 10 18:47	0°♄					
evening rise	8841 Oct 14 00:21	6°♄50'53		superior conj	8842 Sep 21 10:41	6°♄28'02	1°22'08
	8841 Oct 26 07:29	0°♄		minimum elong	8842 Sep 21 08:34	6°♄16'16	1°21'52
desc. node	8841 Oct 29 16:47	5°♄30'07		max. Earth dist.	8842 Sep 21 12:24	6°♄37'33	1.31646 AU
evening max el	8841 Nov 15 06:33	26°♄39'55	27°24'28	evening rise	8842 Sep 28 06:12	21°♄21'54	
	8841 Nov 19 05:20	0°♄			8842 Oct 02 10:57	0°♄	
retrograde	8841 Nov 29 02:12	3°♄54'53		desc. node	8842 Oct 16 13:54	24°♄22'51	
evening set	8841 Dec 06 04:16	1°♄33'16			8842 Oct 20 15:47	0°♄	
	8841 Dec 08 06:52	30°♄♅		evening max el	8842 Oct 28 09:57	8°♄44'12	26°48'42
min. Earth dist.	8841 Dec 09 20:39	28°♄39'26	0.62078 AU	retrograde	8842 Nov 11 07:58	15°♄53'10	
inferior conj	8841 Dec 12 19:36	25°♄55'59	-3°01'18	evening set	8842 Nov 18 04:16	13°♄53'45	
minimum elong	8841 Dec 13 01:25	25°♄42'33	2°58'56	min. Earth dist.	8842 Nov 22 00:09	11°♄16'27	0.60001 AU
morning rise	8841 Dec 20 00:49	20°♄52'48		inferior conj	8842 Nov 25 04:38	8°♄42'02	-4°10'48
direct	8841 Dec 22 06:50	20°♄30'31		minimum elong	8842 Nov 25 12:02	8°♄27'03	4°08'27
asc. node	8841 Dec 22 05:17	20°♄30'32		morning rise	8842 Dec 02 22:17	3°♄59'51	
morning max el	8841 Dec 29 03:11	23°♄59'12	17°49'44	direct	8842 Dec 05 02:45	3°♄41'56	
	8842 Jan 02 23:16	0°♄		asc. node	8842 Dec 09 02:18	4°♄44'27	
morning set	8842 Jan 13 22:28	18°♄34'31		morning max el	8842 Dec 12 16:00	7°♄26'11	18°08'22
	8842 Jan 20 08:53	0°♄			8842 Dec 27 02:45	0°♄	
				morning set	8842 Dec 28 08:33	2°♄19'31	
superior conj	8842 Jan 25 01:17	8°♄04'57	0°04'33				

superior conj	8843 Jan 07 00:13	20° Z 09'59	0°40'45	superior conj	8843 Dec 20 19:03	3° Z 11'11	1°08'13
minimum elong	8843 Jan 07 03:06	20° Z 22'54	0°40'32	minimum elong	8843 Dec 20 22:21	3° Z 26'47	1°08'02
desc. node	8843 Jan 12 12:57	29° Z 51'47		max. Earth dist.	8843 Dec 27 22:15	16° Z 14'37	1.39463 AU
	8843 Jan 12 14:52	0° \approx		desc. node	8843 Dec 30 09:56	20° Z 34'48	
max. Earth dist.	8843 Jan 14 15:28	3° \approx 26'11	1.41592 AU	evening rise	8843 Dec 31 21:29	23° Z 06'41	
evening rise	8843 Jan 19 17:48	11° \approx 50'07			8844 Jan 05 01:00	0° \approx	
	8843 Jan 31 11:46	0° X			8844 Jan 25 09:05	0° X	
evening max el	8843 Feb 22 09:32	28° X 41'34	22°54'12	evening max el	8844 Feb 04 23:36	12° X 28'11	24°14'17
	8843 Feb 23 18:00	0° Y		retrograde	8844 Feb 16 05:59	19° X 04'35	
retrograde	8843 Mar 04 13:27	4° Y 42'51		evening set	8844 Feb 21 14:40	16° X 50'26	
asc. node	8843 Mar 07 01:15	4° Y 12'02		asc. node	8844 Feb 21 22:20	16° X 33'39	
evening set	8843 Mar 09 09:55	2° Y 42'23		min. Earth dist.	8844 Feb 26 06:55	11° X 28'15	0.68161 AU
	8843 Mar 12 00:01	30° R X		inferior conj	8844 Feb 27 02:36	10° X 21'52	1°37'18
inferior conj	8843 Mar 14 18:46	26° X 17'33	2°17'09	minimum elong	8844 Feb 27 00:38	10° X 28'31	1°36'42
minimum elong	8843 Mar 14 16:31	26° X 25'19	2°16'32	morning rise	8844 Mar 03 10:40	4° X 20'23	
min. Earth dist.	8843 Mar 14 10:40	26° X 45'36	0.68467 AU	direct	8844 Mar 07 08:46	2° X 52'46	
morning rise	8843 Mar 19 23:01	20° X 09'33		morning max el	8844 Mar 15 02:09	7° X 14'31	20°12'21
direct	8843 Mar 24 10:16	18° X 19'56		desc. node	8844 Mar 27 09:44	22° X 59'25	
morning max el	8843 Apr 02 04:58	23° X 25'25	21°27'37		8844 Apr 01 04:38	0° Y	
	8843 Apr 07 22:47	0° Y		morning set	8844 Apr 11 21:52	16° Y 15'20	
desc. node	8843 Apr 10 12:49	3° Y 20'54			8844 Apr 20 16:20	0° B	
	8843 Apr 28 20:51	0° B		max. Earth dist.	8844 Apr 21 20:55	1° B 54'07	1.43913 AU
morning set	8843 May 03 21:07	7° B 49'42					
max. Earth dist.	8843 May 10 12:12	18° B 31'41	1.42143 AU	superior conj	8844 Apr 27 18:17	11° B 27'16	-2°11'24
	8843 May 17 07:44	0° II		minimum elong	8844 Apr 27 20:12	11° B 35'12	2°11'30
					8844 May 08 18:09	0° II	
superior conj	8843 May 17 23:43	1° II 08'57	-1°57'48	evening rise	8844 May 10 13:58	3° II 09'20	
minimum elong	8843 May 18 05:21	1° II 33'17	1°57'35	asc. node	8844 May 19 21:07	18° II 58'54	
evening rise	8843 May 29 03:45	21° II 04'39			8844 May 27 22:30	0° B	
asc. node	8843 Jun 03 00:04	29° II 50'06		evening max el	8844 May 28 01:04	0° B 06'24	18°06'40
	8843 Jun 03 02:18	0° B		retrograde	8844 Jun 03 11:02	3° B 26'48	
evening max el	8843 Jun 14 11:51	16° B 53'12	18°08'27	evening set	8844 Jun 06 05:23	2° B 48'22	
retrograde	8843 Jun 21 07:40	20° B 20'58			8844 Jun 10 03:13	30° R II	
evening set	8843 Jun 23 18:24	19° B 54'41		inferior conj	8844 Jun 12 11:57	27° II 37'51	2°44'14
inferior conj	8843 Jun 30 15:44	15° B 03'38	1°54'06	minimum elong	8844 Jun 12 14:35	27° II 30'54	2°43'26
minimum elong	8843 Jun 30 18:39	14° B 56'54	1°52'59	min. Earth dist.	8844 Jun 15 09:20	24° II 37'03	0.62376 AU
min. Earth dist.	8843 Jul 03 23:11	12° B 02'31	0.60131 AU	morning rise	8844 Jun 18 21:58	21° II 31'00	
morning rise	8843 Jul 07 16:03	9° B 14'18		desc. node	8844 Jun 23 09:22	19° II 19'50	
desc. node	8843 Jul 07 12:20	9° B 20'05		direct	8844 Jun 25 15:53	19° II 03'32	
direct	8843 Jul 14 04:14	7° B 12'15		morning max el	8844 Jul 09 18:17	27° II 05'35	27°54'49
morning max el	8843 Jul 28 12:14	15° B 07'35	27°45'31		8844 Jul 12 12:06	0° B	
	8843 Aug 09 13:43	0° Q			8844 Aug 02 06:12	0° Q	
	8843 Aug 26 22:58	0° P		morning set	8844 Aug 12 17:30	19° Q 44'39	
morning set	8843 Aug 29 17:32	5° P 40'08		asc. node	8844 Aug 15 20:32	26° Q 13'23	
asc. node	8843 Aug 29 23:35	6° P 11'44			8844 Aug 17 15:06	0° P	
max. Earth dist.	8843 Sep 04 21:59	19° P 00'03	1.31664 AU	max. Earth dist.	8844 Aug 18 04:00	1° P 09'22	1.32156 AU
superior conj	8843 Sep 05 22:02	21° P 13'01	1°05'18	superior conj	8844 Aug 20 07:10	5° P 47'11	0°43'43
minimum elong	8843 Sep 05 19:49	21° P 00'40	1°04'52	minimum elong	8844 Aug 20 05:20	5° P 37'11	0°43'15
	8843 Sep 09 21:21	0° Q		evening rise	8844 Aug 27 03:11	20° P 41'51	
evening rise	8843 Sep 12 15:48	6° Q 00'49			8844 Aug 31 14:37	0° Q	
	8843 Sep 25 03:15	0° M		desc. node	8844 Sep 19 08:07	29° Q 00'59	
desc. node	8843 Oct 03 11:01	12° M 20'16			8844 Sep 20 07:17	0° M	
evening max el	8843 Oct 10 05:38	19° M 57'47	25°40'34	evening max el	8844 Sep 20 18:23	0° M 27'05	24°08'48
retrograde	8843 Oct 24 03:44	26° M 59'52		retrograde	8844 Oct 04 11:11	7° M 18'51	
evening set	8843 Oct 30 06:48	25° M 32'21		evening set	8844 Oct 09 08:38	6° M 26'14	
min. Earth dist.	8843 Nov 03 18:06	22° M 55'35	0.57941 AU	min. Earth dist.	8844 Oct 15 05:05	3° M 31'40	0.56167 AU
inferior conj	8843 Nov 06 19:11	20° M 47'23	-5°08'21	inferior conj	8844 Oct 17 13:23	2° M 05'08	-5°37'12
minimum elong	8843 Nov 07 01:36	20° M 36'05	5°07'05	minimum elong	8844 Oct 17 14:29	2° M 03'25	5°37'04
morning rise	8843 Nov 14 22:43	16° M 27'40			8844 Oct 21 02:56	30° R Q	
direct	8843 Nov 17 06:26	16° M 10'50		morning rise	8844 Oct 25 22:25	28° Q 06'12	
asc. node	8843 Nov 25 23:17	20° M 25'18		direct	8844 Oct 28 15:01	27° Q 47'19	
morning max el	8843 Nov 25 21:06	20° M 19'59	18°47'45		8844 Nov 04 11:40	0° M	
	8843 Dec 03 05:10	0° X		morning max el	8844 Nov 07 14:57	2° M 30'30	19°49'27
morning set	8843 Dec 12 05:26	16° X 33'43		asc. node	8844 Nov 11 20:17	7° M 18'30	
	8843 Dec 19 02:55	0° Z			8844 Nov 24 20:17	0° X	
				morning set	8844 Nov 25 09:30	1° X 06'50	

superior conj	8844 Dec 03 04:50	16° ♄ 54'36	1°26'54	superior conj	8845 Nov 17 01:24	1° ♄ 08'36	1°37'32
minimum elong	8844 Dec 03 07:23	17° ♄ 07'14	1°26'53	minimum elong	8845 Nov 17 02:43	1° ♄ 15'24	1°37'40
max. Earth dist.	8844 Dec 09 04:27	28° ♄ 27'42	1.37303 AU	max. Earth dist.	8845 Nov 21 14:39	10° ♄ 22'39	1.35336 AU
	8844 Dec 10 00:17	0° ♄		evening rise	8845 Nov 25 16:57	18° ♄ 17'36	
evening rise	8844 Dec 12 22:15	5° ♄ 18'26			8845 Dec 02 04:42	0° ♄	
desc. node	8844 Dec 16 06:55	11° ♄ 12'06		desc. node	8845 Dec 03 03:57	1° ♄ 39'40	
	8844 Dec 27 23:52	0° ♄			8845 Dec 22 04:55	0° ♄	
evening max el	8845 Jan 17 12:50	26° ♄ 16'24	25°29'03	evening max el	8845 Dec 31 02:04	10° ♄ 01'22	26°31'13
	8845 Jan 21 19:32	0° ♄		retrograde	8846 Jan 13 00:48	17° ♄ 17'57	
retrograde	8845 Jan 29 17:58	3° ♄ 18'14		evening set	8846 Jan 19 10:10	14° ♄ 44'14	
evening set	8845 Feb 04 15:19	0° ♄ 52'26		min. Earth dist.	8846 Jan 23 12:53	10° ♄ 31'33	0.66387 AU
	8845 Feb 05 14:28	30° ♄		inferior conj	8846 Jan 25 07:48	8° ♄ 22'49	-0°07'16
asc. node	8845 Feb 07 19:26	27° ♄ 34'54		minimum elong	8846 Jan 25 08:00	8° ♄ 22'15	0°07'00
min. Earth dist.	8845 Feb 09 00:23	26° ♄ 05'04	0.67462 AU	transit middle	8846 Jan 25 08:00	8° ♄ 22'15	0°07'00
inferior conj	8845 Feb 10 07:37	24° ♄ 24'48	0°49'02	transit begin	8846 Jan 25 05:23	8° ♄ 30'07	
minimum elong	8845 Feb 10 06:26	24° ♄ 28'36	0°48'43	transit end	8846 Jan 25 10:37	8° ♄ 14'24	
morning rise	8845 Feb 15 21:56	18° ♄ 31'37		asc. node	8846 Jan 25 16:31	7° ♄ 56'41	
direct	8845 Feb 19 07:59	17° ♄ 24'29		morning rise	8846 Jan 31 06:43	2° ♄ 40'04	
morning max el	8845 Feb 26 07:16	21° ♄ 14'28	19°11'26	direct	8846 Feb 03 06:12	1° ♄ 50'22	
	8845 Mar 05 10:43	0° ♄		morning max el	8846 Feb 09 19:11	5° ♄ 21'12	18°26'31
greatest brilliancy	8845 Mar 11 12:23	8° ♄ 50'45	-0.7m		8846 Feb 27 00:57	0° ♄	
desc. node	8845 Mar 14 06:37	13° ♄ 01'32		desc. node	8846 Mar 01 03:32	3° ♄ 21'03	
morning set	8845 Mar 21 23:04	24° ♄ 50'40		morning set	8846 Mar 01 22:32	4° ♄ 36'31	
	8845 Mar 25 06:56	0° ♄					
max. Earth dist.	8845 Apr 04 12:13	15° ♄ 57'28	1.45089 AU	superior conj	8846 Mar 17 18:52	29° ♄ 35'06	-1°43'04
				minimum elong	8846 Mar 17 09:19	28° ♄ 57'44	1°42'12
superior conj	8845 Apr 07 13:15	20° ♄ 45'51	-2°07'20		8846 Mar 18 01:14	0° ♄	
minimum elong	8845 Apr 07 08:10	20° ♄ 25'41	2°07'12	max. Earth dist.	8846 Mar 18 07:03	0° ♄ 22'46	1.45553 AU
	8845 Apr 13 08:02	0° ♄		evening rise	8846 Apr 02 15:04	24° ♄ 27'00	
evening rise	8845 Apr 22 02:20	14° ♄ 16'51			8846 Apr 06 03:24	0° ♄	
	8845 May 01 16:56	0° ♄		greatest brilliancy	8846 Apr 12 07:00	9° ♄ 39'25	-0.8m
asc. node	8845 May 06 18:11	7° ♄ 38'32		asc. node	8846 Apr 23 15:16	25° ♄ 39'42	
evening max el	8845 May 11 14:06	13° ♄ 33'39	18°23'27	evening max el	8846 Apr 25 00:23	27° ♄ 08'36	18°58'00
retrograde	8845 May 18 00:14	17° ♄ 01'03			8846 Apr 28 14:12	0° ♄	
evening set	8845 May 21 01:56	16° ♄ 08'58		retrograde	8846 May 01 19:23	0° ♄ 55'45	
inferior conj	8845 May 26 21:46	10° ♄ 40'38	3°11'55		8846 May 04 21:48	30° ♄	
minimum elong	8845 May 26 23:17	10° ♄ 36'14	3°11'31	evening set	8846 May 05 04:42	29° ♄ 49'13	
min. Earth dist.	8845 May 29 04:50	8° ♄ 00'28	0.64406 AU	inferior conj	8846 May 10 17:27	24° ♄ 04'52	3°21'50
morning rise	8845 Jun 01 19:37	4° ♄ 24'49		minimum elong	8846 May 10 17:39	24° ♄ 04'13	3°21'39
direct	8845 Jun 08 11:55	1° ♄ 42'19		min. Earth dist.	8846 May 12 09:14	21° ♄ 59'02	0.66074 AU
desc. node	8845 Jun 10 06:23	1° ♄ 52'34		morning rise	8846 May 16 06:05	17° ♄ 45'59	
morning max el	8845 Jun 22 03:59	9° ♄ 41'22	27°27'49	direct	8846 May 22 15:11	15° ♄ 00'08	
	8845 Jul 08 01:15	0° ♄		desc. node	8846 May 28 03:24	16° ♄ 39'48	
	8845 Jul 25 15:29	0° ♄		morning max el	8846 Jun 04 14:39	22° ♄ 43'25	26°30'57
morning set	8845 Jul 27 09:14	3° ♄ 22'48			8846 Jun 11 00:30	0° ♄	
max. Earth dist.	8845 Aug 01 02:44	12° ♄ 56'20	1.33133 AU		8846 Jul 01 08:19	0° ♄	
asc. node	8845 Aug 02 17:30	16° ♄ 18'58		morning set	8846 Jul 10 13:27	16° ♄ 25'37	
				max. Earth dist.	8846 Jul 14 15:09	24° ♄ 16'41	1.34598 AU
					8846 Jul 17 11:44	0° ♄	
superior conj	8845 Aug 04 12:08	20° ♄ 05'00	0°17'50				
minimum elong	8845 Aug 04 11:16	20° ♄ 00'21	0°17'30	superior conj	8846 Jul 19 10:35	3° ♄ 59'52	-0°11'37
	8845 Aug 09 02:49	0° ♄		minimum elong	8846 Jul 19 11:15	4° ♄ 03'16	0°11'40
evening rise	8845 Aug 11 14:32	5° ♄ 19'29		behind sun begin	8846 Jul 19 07:11	3° ♄ 42'19	
	8845 Aug 24 19:18	0° ♄		behind sun end	8846 Jul 19 15:18	4° ♄ 24'16	
evening max el	8845 Sep 02 06:15	10° ♄ 38'02	22°29'08	asc. node	8846 Jul 20 14:28	6° ♄ 24'17	
desc. node	8845 Sep 06 05:14	13° ♄ 57'05		evening rise	8846 Jul 26 23:51	19° ♄ 47'33	
retrograde	8845 Sep 15 06:35	17° ♄ 07'27			8846 Aug 01 01:10	0° ♄	
evening set	8845 Sep 18 15:52	16° ♄ 42'12		evening max el	8846 Aug 15 02:22	21° ♄ 06'55	20°57'32
min. Earth dist.	8845 Sep 26 13:06	13° ♄ 13'02	0.54988 AU	desc. node	8846 Aug 24 02:22	26° ♄ 36'36	
inferior conj	8845 Sep 27 13:46	12° ♄ 38'08	-5°18'03	retrograde	8846 Aug 26 19:03	26° ♄ 54'42	
minimum elong	8845 Sep 27 07:14	12° ♄ 47'23	5°17'04	evening set	8846 Aug 29 00:50	26° ♄ 42'46	
morning rise	8845 Oct 06 00:26	8° ♄ 50'31		inferior conj	8846 Sep 07 06:07	22° ♄ 46'11	-4°03'28
direct	8845 Oct 09 06:14	8° ♄ 26'44		minimum elong	8846 Sep 06 20:30	22° ♄ 59'50	4°00'43
morning max el	8845 Oct 20 19:45	13° ♄ 52'21	21°13'16	min. Earth dist.	8846 Sep 07 21:51	22° ♄ 23'52	0.54673 AU
asc. node	8845 Oct 29 17:17	25° ♄ 08'46		morning rise	8846 Sep 15 16:25	18° ♄ 50'17	
	8845 Nov 01 14:51	0° ♄		direct	8846 Sep 19 14:05	18° ♄ 17'37	
morning set	8845 Nov 09 18:12	15° ♄ 51'30		morning max el	8846 Oct 02 13:18	24° ♄ 29'46	22°54'09
	8845 Nov 16 12:11	0° ♄					

	8846 Oct 07 13:54	0°♄			8847 Aug 23 08:34	30°♄♄	
asc. node	8846 Oct 16 14:15	13°♄41'55		morning rise	8847 Aug 26 12:01	28°♄38'34	
	8846 Oct 24 21:39	0°♄		direct	8847 Aug 31 04:45	27°♄49'41	
morning set	8846 Oct 25 05:18	0°♄40'21			8847 Sep 07 19:53	0°♄	
				morning max el	8847 Sep 14 01:33	4°♄43'22	24°40'11
superior conj	8846 Nov 01 05:19	15°♄41'56	1°41'01		8847 Oct 01 23:33	0°♄	
minimum elong	8846 Nov 01 05:20	15°♄42'06	1°41'11	asc. node	8847 Oct 03 11:14	2°♄47'38	
max. Earth dist.	8846 Nov 04 08:15	22°♄18'07	1.33726 AU	morning set	8847 Oct 09 17:03	15°♄28'37	
	8846 Nov 08 02:44	0°♄			8847 Oct 16 09:01	0°♄	
evening rise	8846 Nov 09 01:37	1°♄53'21					
desc. node	8846 Nov 20 01:01	21°♄51'12		superior conj	8847 Oct 16 13:55	0°♄26'45	1°38'09
	8846 Nov 25 02:57	0°♄		minimum elong	8847 Oct 16 12:51	0°♄20'55	1°38'12
evening max el	8846 Dec 13 15:02	23°♄33'43	27°13'45	max. Earth dist.	8847 Oct 18 09:54	4°♄26'21	1.32559 AU
	8846 Dec 22 17:17	0°♄		evening rise	8847 Oct 23 20:46	15°♄56'46	
retrograde	8846 Dec 27 01:49	0°♄55'10			8847 Oct 31 03:09	0°♄	
	8846 Dec 31 03:45	30°♄♄		desc. node	8847 Nov 06 22:06	11°♄39'48	
evening set	8847 Jan 02 21:03	28°♄19'34			8847 Nov 19 21:20	0°♄	
min. Earth dist.	8847 Jan 06 18:18	24°♄40'25	0.64949 AU	evening max el	8847 Nov 26 02:23	6°♄42'16	27°29'41
inferior conj	8847 Jan 09 00:52	22°♄10'22	-1°10'53	retrograde	8847 Dec 09 20:09	14°♄00'42	
minimum elong	8847 Jan 09 03:00	22°♄04'29	1°09'46	evening set	8847 Dec 16 21:16	11°♄31'30	
asc. node	8847 Jan 12 13:37	18°♄35'52		min. Earth dist.	8847 Dec 20 14:38	8°♄22'39	0.63194 AU
morning rise	8847 Jan 15 10:27	16°♄40'28		inferior conj	8847 Dec 23 08:05	5°♄40'47	-2°20'11
direct	8847 Jan 18 01:12	16°♄04'29		minimum elong	8847 Dec 23 12:34	5°♄29'42	2°18'11
morning max el	8847 Jan 24 11:22	19°♄27'19	17°58'25	morning rise	8847 Dec 30 05:53	0°♄26'41	
	8847 Feb 01 10:27	0°♄		asc. node	8847 Dec 30 10:42	0°♄22'27	
morning set	8847 Feb 11 03:35	15°♄50'23		direct	8848 Jan 01 14:14	0°♄00'28	
desc. node	8847 Feb 16 00:29	23°♄52'41		morning max el	8848 Jan 08 04:48	3°♄24'46	17°47'40
	8847 Feb 19 18:37	0°♄		morning set	8848 Jan 24 10:20	28°♄18'37	
					8848 Jan 25 09:39	0°♄	
superior conj	8847 Feb 25 05:52	8°♄46'24	-1°03'45	desc. node	8848 Feb 02 21:25	14°♄32'07	
minimum elong	8847 Feb 24 22:36	8°♄17'33	1°02'43				
max. Earth dist.	8847 Mar 01 02:30	14°♄52'36	1.45270 AU	superior conj	8848 Feb 05 13:33	18°♄59'05	-0°19'34
	8847 Mar 10 19:38	0°♄		minimum elong	8848 Feb 05 11:30	18°♄50'37	0°19'06
evening rise	8847 Mar 13 08:47	3°♄55'47		max. Earth dist.	8848 Feb 11 20:17	29°♄11'32	1.44285 AU
greatest brilliancy	8847 Mar 27 13:23	25°♄27'38	-0.6m		8848 Feb 12 08:25	0°♄	
	8847 Mar 30 16:41	0°♄		evening rise	8848 Feb 20 20:03	13°♄17'03	
evening max el	8847 Apr 08 06:04	10°♄47'15	19°48'55		8848 Mar 02 21:56	0°♄	
asc. node	8847 Apr 10 12:22	12°♄50'43		evening max el	8848 Mar 21 06:19	24°♄27'20	20°53'41
retrograde	8847 Apr 15 17:24	15°♄04'50		asc. node	8848 Mar 27 09:29	28°♄57'02	
evening set	8847 Apr 19 11:07	13°♄43'21		retrograde	8848 Mar 29 15:55	29°♄23'01	
inferior conj	8847 Apr 24 19:51	7°♄44'44	3°17'41	evening set	8848 Apr 02 19:09	27°♄46'11	
minimum elong	8847 Apr 24 18:55	7°♄47'51	3°17'28	inferior conj	8848 Apr 08 02:22	21°♄35'21	3°01'55
min. Earth dist.	8847 Apr 25 20:56	6°♄20'45	0.67314 AU	minimum elong	8848 Apr 08 00:37	21°♄41'23	3°01'33
morning rise	8847 Apr 30 02:24	1°♄26'35		min. Earth dist.	8848 Apr 08 13:48	20°♄55'52	0.68111 AU
	8847 May 01 23:55	30°♄♄		morning rise	8848 Apr 13 05:52	15°♄20'09	
direct	8847 May 06 00:37	28°♄48'03		direct	8848 Apr 18 15:02	12°♄57'11	
	8847 May 10 10:52	0°♄		morning max el	8848 Apr 29 09:29	19°♄22'53	23°45'07
desc. node	8847 May 15 00:23	3°♄10'34		desc. node	8848 Apr 30 21:21	20°♄56'41	
morning max el	8847 May 18 00:24	5°♄59'41	25°13'22		8848 May 08 09:15	0°♄	
	8847 Jun 05 13:47	0°♄			8848 May 28 17:26	0°♄	
morning set	8847 Jun 23 01:53	28°♄41'51		morning set	8848 Jun 03 17:07	9°♄56'19	
	8847 Jun 23 19:14	0°♄		max. Earth dist.	8848 Jun 07 13:19	16°♄36'00	1.38701 AU
max. Earth dist.	8847 Jun 26 17:02	5°♄20'27	1.36500 AU				
				superior conj	8848 Jun 14 23:44	0°♄09'44	-1°15'23
superior conj	8847 Jul 02 23:41	17°♄24'44	-0°43'21	minimum elong	8848 Jun 15 04:29	0°♄32'06	1°14'54
minimum elong	8847 Jul 03 02:21	17°♄37'55	0°43'05		8848 Jun 14 21:40	0°♄	
asc. node	8847 Jul 07 11:28	26°♄25'45		asc. node	8848 Jun 23 08:27	16°♄18'40	
	8847 Jul 09 05:37	0°♄		evening rise	8848 Jun 24 02:53	17°♄48'41	
evening rise	8847 Jul 11 04:55	4°♄00'03			8848 Jun 30 13:15	0°♄	
	8847 Jul 26 09:08	0°♄		evening max el	8848 Jul 10 09:40	14°♄13'41	18°50'29
evening max el	8847 Jul 28 11:49	2°♄18'04	19°43'38	retrograde	8848 Jul 18 19:24	18°♄23'57	
retrograde	8847 Aug 07 11:31	7°♄14'02		evening set	8848 Jul 20 18:47	18°♄11'01	
evening set	8847 Aug 09 07:57	7°♄04'36		desc. node	8848 Jul 27 20:35	14°♄36'54	
desc. node	8847 Aug 10 23:29	6°♄41'18		inferior conj	8848 Jul 28 21:56	13°♄51'48	-0°19'20
inferior conj	8847 Aug 18 05:05	3°♄02'15	-2°12'41	minimum elong	8848 Jul 28 21:08	13°♄53'14	0°19'11
minimum elong	8847 Aug 17 23:02	3°♄11'38	2°10'32	min. Earth dist.	8848 Aug 01 00:39	11°♄38'17	0.56815 AU
min. Earth dist.	8847 Aug 20 09:21	1°♄41'15	0.55327 AU	morning rise	8848 Aug 05 20:09	8°♄51'23	

direct	8848 Aug 11 08:53	7°♎37'46		morning rise	8849 Jul 17 21:25	19°♊51'00	
morning max el	8848 Aug 25 15:34	15°♎02'25	26°14'58	direct	8849 Jul 24 02:43	18°♊06'58	
	8848 Sep 06 16:09	0°♎		morning max el	8849 Aug 07 11:52	25°♊53'12	27°22'49
asc. node	8848 Sep 19 08:11	22°♎17'10			8849 Aug 11 08:13	0°♎	
morning set	8848 Sep 23 03:50	0°♏11'41			8849 Aug 31 02:05	0°♎	
	8848 Sep 23 01:38	0°♏		asc. node	8849 Sep 06 05:05	12°♎03'34	
				morning set	8849 Sep 07 11:56	14°♎44'29	
superior conj	8848 Sep 30 01:03	15°♏16'21	1°29'31	max. Earth dist.	8849 Sep 14 03:40	29°♎13'46	1.31600 AU
minimum elong	8848 Sep 29 23:12	15°♏06'07	1°29'23		8849 Sep 14 12:00	0°♏	
max. Earth dist.	8848 Sep 30 17:33	16°♏47'46	1.31849 AU				
evening rise	8848 Oct 06 23:26	0°♐19'41		superior conj	8849 Sep 14 12:49	0°♏04'33	1°15'34
	8848 Oct 06 19:41	0°♐		minimum elong	8849 Sep 14 10:36	29°♐52'12	1°15'14
	8848 Oct 23 04:32	0°♑		evening rise	8849 Sep 21 07:06	14°♏54'36	
desc. node	8848 Oct 23 19:11	0°♑56'21			8849 Sep 28 19:09	0°♐	
evening max el	8848 Nov 07 09:44	19°♑14'07	27°13'34	desc. node	8849 Oct 10 16:18	19°♐27'36	
retrograde	8848 Nov 21 06:36	26°♑25'51			8849 Oct 19 10:36	0°♑	
evening set	8848 Nov 28 07:20	24°♑12'46		evening max el	8849 Oct 20 10:01	0°♑56'53	26°23'22
min. Earth dist.	8848 Dec 02 00:23	21°♑27'22	0.61203 AU	retrograde	8849 Nov 03 07:58	8°♑02'26	
inferior conj	8848 Dec 05 02:16	18°♑46'08	-3°31'29	evening set	8849 Nov 09 22:45	6°♑15'33	
minimum elong	8848 Dec 05 08:56	18°♑31'32	3°29'01	min. Earth dist.	8849 Nov 13 23:19	3°♑40'59	0.59109 AU
morning rise	8848 Dec 12 12:52	13°♑51'11		inferior conj	8849 Nov 17 03:48	1°♑15'45	-4°37'32
direct	8848 Dec 14 17:48	13°♑31'05		minimum elong	8849 Nov 17 11:13	1°♑01'35	4°35'32
asc. node	8848 Dec 16 07:45	13°♑41'48			8849 Nov 18 20:19	30°♐♐	
morning max el	8848 Dec 21 20:16	17°♑05'27	17°55'15	morning rise	8849 Nov 25 02:05	26°♐43'07	
	8848 Dec 30 23:29	0°♑		direct	8849 Nov 27 07:29	26°♐25'55	
morning set	8849 Jan 06 12:10	11°♑41'10		asc. node	8849 Dec 03 04:47	28°♐34'08	
					8849 Dec 04 22:08	0°♑	
superior conj	8849 Jan 16 22:48	0°♒25'18	0°20'55	morning max el	8849 Dec 05 06:13	0°♑19'13	18°22'33
minimum elong	8849 Jan 17 00:35	0°♒33'00	0°20'50	morning set	8849 Dec 21 03:20	25°♑39'57	
	8849 Jan 16 17:00	0°♒			8849 Dec 23 09:43	0°♑	
desc. node	8849 Jan 19 18:21	5°♒15'55					
max. Earth dist.	8849 Jan 24 10:35	13°♒05'39	1.42704 AU	superior conj	8849 Dec 30 06:50	12°♑55'55	0°53'30
evening rise	8849 Jan 30 16:11	23°♒08'10		minimum elong	8849 Dec 30 10:05	13°♑10'51	0°53'16
	8849 Feb 04 02:01	0°♒		desc. node	8850 Jan 06 15:18	25°♑59'59	
	8849 Feb 25 01:15	0°♑		max. Earth dist.	8850 Jan 06 19:54	26°♑19'43	1.40704 AU
evening max el	8849 Mar 04 01:24	8°♑09'17	22°08'30		8850 Jan 08 23:47	0°♒	
retrograde	8849 Mar 13 13:12	13°♑46'31		evening rise	8850 Jan 11 07:12	3°♒50'34	
asc. node	8849 Mar 14 06:36	13°♑43'52			8850 Jan 28 08:19	0°♒	
evening set	8849 Mar 18 03:09	11°♑54'23		evening max el	8850 Feb 14 16:33	21°♒53'00	23°28'24
inferior conj	8849 Mar 23 10:54	5°♑33'48	2°36'10	retrograde	8850 Feb 25 07:49	28°♒10'07	
minimum elong	8849 Mar 23 08:43	5°♑41'24	2°35'37	asc. node	8850 Mar 01 03:43	26°♒58'45	
min. Earth dist.	8849 Mar 23 09:39	5°♑38'07	0.68465 AU	evening set	8850 Mar 02 09:31	26°♒03'21	
	8849 Mar 27 22:02	30°♐♐		inferior conj	8850 Mar 07 19:30	19°♒36'23	2°01'19
morning rise	8849 Mar 28 14:08	29°♒23'01		minimum elong	8850 Mar 07 17:19	19°♒43'54	2°00'40
direct	8849 Apr 02 09:24	27°♒20'38		min. Earth dist.	8850 Mar 07 06:21	20°♒21'32	0.68388 AU
	8849 Apr 08 14:52	0°♑		morning rise	8850 Mar 13 01:05	13°♒31'14	
morning max el	8849 Apr 11 20:48	2°♑54'20	22°16'02	direct	8850 Mar 17 06:36	11°♒51'13	
desc. node	8849 Apr 17 18:17	9°♑37'44		morning max el	8850 Mar 25 13:47	16°♒36'38	20°54'06
	8849 May 02 09:59	0°♒		desc. node	8850 Apr 04 15:11	28°♒58'10	
morning set	8849 May 15 06:13	19°♒57'23			8850 Apr 05 09:02	0°♑	
max. Earth dist.	8849 May 20 11:39	28°♒35'28	1.40952 AU	morning set	8850 Apr 24 17:12	28°♑48'31	
	8849 May 21 07:40	0°♐			8850 Apr 25 11:29	0°♒	
				max. Earth dist.	8850 May 02 16:14	11°♒28'49	1.42957 AU
superior conj	8849 May 28 06:23	12°♐04'50	-1°44'21				
minimum elong	8849 May 28 12:21	12°♐31'29	1°43'56	superior conj	8850 May 09 15:01	22°♒59'50	-2°05'21
	8849 Jun 07 00:28	0°♑		minimum elong	8850 May 09 19:37	23°♒19'16	2°05'18
evening rise	8849 Jun 07 14:25	1°♑05'14			8850 May 13 17:14	0°♐	
asc. node	8849 Jun 10 05:27	5°♑58'48		evening rise	8850 May 21 11:17	13°♐39'36	
evening max el	8849 Jun 23 16:24	26°♑46'44	18°17'58	asc. node	8850 May 28 02:29	25°♐21'08	
	8849 Jun 28 11:13	0°♎			8850 May 30 21:25	0°♑	
retrograde	8849 Jun 30 22:43	0°♎25'39		evening max el	8850 Jun 07 04:14	9°♑48'00	18°05'18
evening set	8849 Jul 03 05:04	0°♎05'09		retrograde	8850 Jun 13 18:43	13°♑11'13	
	8849 Jul 03 11:39	30°♐♐		evening set	8850 Jun 16 08:37	12°♑40'06	
inferior conj	8849 Jul 10 12:34	25°♑25'20	1°13'19	inferior conj	8850 Jun 22 23:09	7°♑40'21	2°18'26
minimum elong	8849 Jul 10 14:52	25°♑20'28	1°12'18	minimum elong	8850 Jun 23 02:07	7°♑33'06	2°17'24
min. Earth dist.	8849 Jul 13 21:47	22°♑35'18	0.58848 AU	min. Earth dist.	8850 Jun 26 03:02	4°♑36'33	0.61094 AU
desc. node	8849 Jul 14 17:40	21°♑56'29		morning rise	8850 Jun 29 17:11	1°♑42'02	

desc. node	8850 Jul 01 14:43	0°☿36'27		min. Earth dist.	8851 Jun 08 17:23	17°♊33'35	0.63270 AU
	8850 Jul 03 02:38	30°♊11		morning rise	8851 Jun 12 06:10	14°♊16'18	
direct	8850 Jul 06 08:32	29°♊28'19		desc. node	8851 Jun 18 11:47	11°♊41'36	
	8850 Jul 09 17:20	0°☿		direct	8851 Jun 19 00:12	11°♊40'44	
morning max el	8850 Jul 20 15:04	7°☿27'59	27°54'15	morning max el	8851 Jul 02 23:06	19°♊43'53	27°47'27
	8850 Aug 06 18:18	0°♊			8851 Jul 11 17:11	0°☿	
morning set	8850 Aug 22 15:33	29°♊01'59			8851 Jul 30 18:07	0°♊	
	8850 Aug 23 02:45	0°♊		morning set	8851 Aug 06 12:23	12°♊56'40	
asc. node	8850 Aug 24 02:00	2°♊01'26		asc. node	8851 Aug 10 22:56	22°♊05'21	
max. Earth dist.	8850 Aug 28 12:22	11°♊33'12	1.31814 AU	max. Earth dist.	8851 Aug 11 15:36	23°♊33'33	1.32508 AU
superior conj	8850 Aug 29 23:28	14°♊46'06	0°56'41	superior conj	8851 Aug 14 07:06	29°♊14'22	0°33'14
minimum elong	8850 Aug 29 21:21	14°♊34'23	0°56'14	minimum elong	8851 Aug 14 05:37	29°♊06'16	0°32'48
evening rise	8850 Sep 05 17:43	29°♊35'32			8851 Aug 14 15:32	0°♊	
	8850 Sep 05 22:17	0°♊		evening rise	8851 Aug 21 05:19	14°♊15'46	
	8850 Sep 22 08:21	0°♊			8851 Aug 29 01:13	0°♊	
desc. node	8850 Sep 27 13:24	6°♊55'51		evening max el	8851 Sep 13 13:24	22°♊06'27	23°26'19
evening max el	8850 Oct 02 02:08	11°♊49'12	25°03'31	desc. node	8851 Sep 14 10:32	22°♊56'06	
retrograde	8850 Oct 15 22:54	18°♊48'29		retrograde	8851 Sep 27 01:28	28°♊51'15	
evening set	8850 Oct 21 14:56	17°♊35'39		evening set	8851 Oct 01 07:12	28°♊12'02	
min. Earth dist.	8850 Oct 26 13:42	14°♊53'42	0.57133 AU	min. Earth dist.	8851 Oct 07 23:15	25°♊04'16	0.55574 AU
inferior conj	8850 Oct 29 09:43	13°♊01'15	-5°25'18	inferior conj	8851 Oct 09 19:38	23°♊58'48	-5°35'55
minimum elong	8850 Oct 29 14:27	12°♊53'24	5°24'37	minimum elong	8851 Oct 09 17:26	24°♊02'04	5°35'43
morning rise	8850 Nov 06 16:16	8°♊51'23		morning rise	8851 Oct 18 05:42	20°♊06'15	
direct	8850 Nov 09 03:01	8°♊34'08		direct	8851 Oct 21 03:16	19°♊45'46	
morning max el	8850 Nov 18 07:01	12°♊56'19	19°11'16	morning max el	8851 Oct 31 19:28	24°♊46'44	20°22'32
asc. node	8850 Nov 20 01:47	14°♊47'55			8851 Nov 05 09:58	0°♊	
	8850 Nov 29 22:59	0°♊		asc. node	8851 Nov 06 22:46	2°♊07'05	
morning set	8850 Dec 05 03:38	10°♊03'08		morning set	8851 Nov 19 09:57	24°♊41'38	
					8851 Nov 21 23:43	0°♊	
superior conj	8850 Dec 13 08:38	26°♊16'59	1°17'10	superior conj	8851 Nov 26 23:29	10°♊14'39	1°32'19
minimum elong	8850 Dec 13 11:43	26°♊31'50	1°17'03	minimum elong	8851 Nov 27 01:32	10°♊25'01	1°32'23
	8850 Dec 15 07:11	0°♊		max. Earth dist.	8851 Dec 02 08:28	20°♊50'58	1.36429 AU
max. Earth dist.	8850 Dec 20 01:34	8°♊50'10	1.38529 AU	evening rise	8851 Dec 06 05:00	28°♊04'17	
evening rise	8850 Dec 23 20:07	15°♊31'01			8851 Dec 07 06:28	0°♊	
desc. node	8850 Dec 24 12:17	16°♊40'54		desc. node	8851 Dec 11 09:18	7°♊14'39	
	8851 Jan 01 14:02	0°♊			8851 Dec 25 22:13	0°♊	
	8851 Jan 23 01:04	0°♊		evening max el	8852 Jan 10 19:04	19°♊27'23	25°57'35
evening max el	8851 Jan 28 05:52	5°♊39'36	24°47'07	retrograde	8852 Jan 23 08:43	26°♊37'22	
retrograde	8851 Feb 08 22:41	12°♊28'54		evening set	8852 Jan 29 11:11	24°♊07'48	
evening set	8851 Feb 14 12:44	10°♊09'17		min. Earth dist.	8852 Feb 02 17:29	19°♊34'58	0.67041 AU
asc. node	8851 Feb 16 00:50	8°♊42'48		asc. node	8852 Feb 02 21:57	19°♊21'07	
min. Earth dist.	8851 Feb 19 01:41	5°♊01'54	0.67906 AU	inferior conj	8852 Feb 04 05:36	17°♊41'55	0°26'06
inferior conj	8851 Feb 20 02:21	3°♊40'12	1°17'50	minimum elong	8852 Feb 04 04:56	17°♊44'01	0°26'00
minimum elong	8851 Feb 20 00:39	3°♊45'51	1°17'19	morning rise	8852 Feb 09 23:17	11°♊52'38	
	8851 Feb 23 00:57	30°♊		direct	8852 Feb 13 04:34	10°♊53'23	
morning rise	8851 Feb 25 12:48	27°♊42'04		morning max el	8852 Feb 19 22:39	14°♊34'10	18°50'16
direct	8851 Mar 01 05:29	26°♊23'40			8852 Mar 02 13:06	0°♊	
	8851 Mar 08 01:43	0°♊		desc. node	8852 Mar 08 09:00	8°♊57'44	
morning max el	8851 Mar 08 14:26	0°♊30'43	19°44'33	morning set	8852 Mar 12 23:39	16°♊08'50	
greatest brilliancy	8851 Mar 21 08:47	17°♊06'54	-0.6m		8852 Mar 21 20:33	0°♊	
desc. node	8851 Mar 22 12:05	18°♊47'22		max. Earth dist.	8852 Mar 27 20:17	9°♊22'15	1.45371 AU
	8851 Mar 29 22:58	0°♊		superior conj	8852 Mar 29 10:29	11°♊52'06	-1°59'25
morning set	8851 Apr 03 14:56	7°♊08'53		minimum elong	8852 Mar 29 02:45	11°♊21'43	1°58'58
max. Earth dist.	8851 Apr 15 03:32	25°♊08'42	1.44485 AU		8852 Apr 09 20:46	0°♊	
	8851 Apr 18 04:35	0°♊		evening rise	8852 Apr 13 14:55	6°♊02'55	
superior conj	8851 Apr 19 23:00	2°♊50'39	-2°12'07		8852 Apr 28 20:26	0°♊	
minimum elong	8851 Apr 19 22:08	2°♊47'10	2°12'14	asc. node	8852 Apr 30 20:39	2°♊43'49	
evening rise	8851 May 03 12:42	25°♊20'40		evening max el	8852 May 04 05:58	6°♊40'05	18°36'08
	8851 May 06 06:35	0°♊		retrograde	8852 May 10 18:50	10°♊14'11	
asc. node	8851 May 14 23:33	14°♊18'45		evening set	8852 May 13 23:44	9°♊16'05	
evening max el	8851 May 21 17:43	23°♊08'08	18°11'37	inferior conj	8852 May 19 16:10	3°♊41'01	3°18'00
retrograde	8851 May 28 02:47	26°♊30'05		minimum elong	8852 May 19 17:07	3°♊38'08	3°17'44
evening set	8851 May 31 00:09	25°♊46'09		min. Earth dist.	8852 May 21 16:49	1°♊14'00	0.65166 AU
inferior conj	8851 Jun 06 01:42	20°♊28'06	2°58'25		8852 May 22 18:32	30°♊	
minimum elong	8851 Jun 06 03:55	20°♊21'59	2°57'47				

morning rise	8852 May 25 09:43	27° ♄ 23'30		inferior conj	8853 May 03 15:02	17° ♄ 12'08	3°21'35
direct	8852 May 31 23:43	24° ♄ 37'51		minimum elong	8853 May 03 14:43	17° ♄ 13'08	3°21'25
desc. node	8852 Jun 04 08:48	25° ♄ 15'24		min. Earth dist.	8853 May 05 00:24	15° ♄ 23'42	0.66659 AU
	8852 Jun 11 17:18	0° ♄		morning rise	8853 May 09 00:43	10° ♄ 53'30	
morning max el	8852 Jun 14 09:18	2° ♄ 31'56	27°06'43	direct	8853 May 15 05:37	8° ♄ 09'42	
	8852 Jul 04 23:29	0° ♄		desc. node	8853 May 22 05:47	10° ♄ 50'16	
morning set	8852 Jul 19 23:41	26° ♄ 21'13		morning max el	8853 May 27 19:33	15° ♄ 40'33	25°59'56
	8852 Jul 21 20:29	0° ♄			8853 Jun 08 14:27	0° ♄	
max. Earth dist.	8852 Jul 24 09:56	5° ♄ 08'03	1.33700 AU		8853 Jun 27 20:07	0° ♄	
asc. node	8852 Jul 27 19:54	12° ♄ 11'32		morning set	8853 Jul 02 21:45	9° ♄ 05'37	
				max. Earth dist.	8853 Jul 06 17:46	16° ♄ 19'44	1.35363 AU
superior conj	8852 Jul 28 09:39	13° ♄ 23'46	0°05'46				
minimum elong	8852 Jul 28 09:22	13° ♄ 22'14	0°05'32	superior conj	8853 Jul 12 04:32	27° ♄ 07'10	-0°24'51
behind sun begin	8852 Jul 28 04:04	12° ♄ 54'21		minimum elong	8853 Jul 12 06:00	27° ♄ 14'36	0°24'47
behind sun end	8852 Jul 28 14:40	13° ♄ 50'10			8853 Jul 13 14:26	0° ♄	
evening rise	8852 Aug 04 16:04	28° ♄ 50'18		asc. node	8853 Jul 14 16:54	2° ♄ 15'59	
	8852 Aug 05 05:21	0° ♄		evening rise	8853 Jul 19 23:53	13° ♄ 12'59	
	8852 Aug 22 22:39	0° ♄			8853 Jul 28 16:50	0° ♄	
evening max el	8852 Aug 25 04:00	2° ♄ 21'50	21°48'26	evening max el	8853 Aug 07 05:36	13° ♄ 07'32	20°23'37
desc. node	8852 Aug 31 07:40	6° ♄ 58'11		retrograde	8853 Aug 18 04:53	18° ♄ 33'23	
retrograde	8852 Sep 06 16:29	8° ♄ 34'51		desc. node	8853 Aug 18 04:47	18° ♄ 33'23	
evening set	8852 Sep 09 12:04	8° ♄ 17'03		evening set	8853 Aug 20 04:54	18° ♄ 23'20	
inferior conj	8852 Sep 18 15:02	4° ♄ 18'04	-4°52'38	inferior conj	8853 Aug 29 08:26	14° ♄ 25'49	-3°18'56
minimum elong	8852 Sep 18 06:16	4° ♄ 30'19	4°50'47	minimum elong	8853 Aug 28 23:44	14° ♄ 38'29	3°16'07
min. Earth dist.	8852 Sep 18 07:24	4° ♄ 28'44	0.54746 AU	min. Earth dist.	8853 Aug 30 16:48	13° ♄ 38'39	0.54841 AU
morning rise	8852 Sep 27 01:42	0° ♄ 29'19		morning rise	8853 Sep 06 17:55	10° ♄ 20'31	
direct	8852 Sep 30 14:09	0° ♄ 02'09		direct	8853 Sep 10 23:31	9° ♄ 42'01	
morning max el	8852 Oct 12 18:50	5° ♄ 47'47	21°54'31	morning max el	8853 Sep 24 09:10	16° ♄ 12'01	23°39'31
asc. node	8852 Oct 23 19:44	20° ♄ 17'10			8853 Oct 05 08:28	0° ♄	
	8852 Oct 29 03:58	0° ♄		asc. node	8853 Oct 10 16:42	9° ♄ 05'58	
morning set	8852 Nov 02 19:54	9° ♄ 28'45		morning set	8853 Oct 18 07:33	24° ♄ 19'01	
					8853 Oct 20 23:02	0° ♄	
superior conj	8852 Nov 09 23:30	24° ♄ 37'45	1°39'50				
minimum elong	8852 Nov 10 00:16	24° ♄ 41'44	1°39'59	superior conj	8853 Oct 25 05:44	9° ♄ 17'36	1°40'33
	8852 Nov 12 13:27	0° ♄		minimum elong	8853 Oct 25 05:16	9° ♄ 15'05	1°40'40
max. Earth dist.	8852 Nov 13 21:41	2° ♄ 44'37	1.34607 AU	max. Earth dist.	8853 Oct 27 19:15	14° ♄ 47'25	1.33179 AU
evening rise	8852 Nov 18 06:07	11° ♄ 20'30		evening rise	8853 Nov 01 19:42	25° ♄ 09'53	
desc. node	8852 Nov 27 06:21	27° ♄ 36'16			8853 Nov 04 06:39	0° ♄	
	8852 Nov 28 16:42	0° ♄		desc. node	8853 Nov 14 03:25	17° ♄ 39'48	
	8852 Dec 20 06:43	0° ♄			8853 Nov 22 03:58	0° ♄	
evening max el	8852 Dec 23 08:32	3° ♄ 09'08	26°52'17	evening max el	8853 Dec 05 21:11	16° ♄ 33'54	27°24'05
retrograde	8853 Jan 05 13:04	10° ♄ 28'18		retrograde	8853 Dec 19 11:05	23° ♄ 53'58	
evening set	8853 Jan 12 02:54	7° ♄ 53'18		evening set	8853 Dec 26 09:36	21° ♄ 19'57	
min. Earth dist.	8853 Jan 16 03:19	3° ♄ 54'53	0.65814 AU	min. Earth dist.	8853 Dec 30 04:58	17° ♄ 54'26	0.64246 AU
inferior conj	8853 Jan 18 03:06	1° ♄ 36'26	-0°33'27	inferior conj	8854 Jan 01 16:21	15° ♄ 18'12	-1°39'43
minimum elong	8853 Jan 18 04:03	1° ♄ 33'40	0°32'50	minimum elong	8854 Jan 01 19:27	15° ♄ 10'01	1°38'12
asc. node	8853 Jan 19 19:05	29° ♄ 43'10		asc. node	8854 Jan 06 16:08	10° ♄ 46'54	
	8853 Jan 19 12:56	30° ♄ 33'10		morning rise	8854 Jan 08 06:58	9° ♄ 54'39	
morning rise	8853 Jan 24 06:17	25° ♄ 58'33		direct	8854 Jan 10 18:49	9° ♄ 23'09	
direct	8853 Jan 27 01:53	25° ♄ 15'02		morning max el	8854 Jan 17 05:46	12° ♄ 45'07	17°51'41
morning max el	8853 Feb 02 12:39	28° ♄ 41'08	18°12'27		8854 Jan 29 05:37	0° ♄	
	8853 Feb 03 18:38	0° ♄		morning set	8854 Feb 03 04:30	8° ♄ 21'13	
morning set	8853 Feb 21 11:44	26° ♄ 32'48		desc. node	8854 Feb 10 02:51	19° ♄ 58'45	
desc. node	8853 Feb 23 05:54	29° ♄ 22'57					
	8853 Feb 23 15:05	0° ♄		superior conj	8854 Feb 16 10:23	0° ♄ 18'03	-0°44'59
				minimum elong	8854 Feb 16 05:19	29° ♄ 57'36	0°44'09
superior conj	8853 Mar 08 15:54	20° ♄ 43'54	-1°27'41		8854 Feb 16 05:55	0° ♄	
minimum elong	8853 Mar 08 06:36	20° ♄ 07'20	1°26'36	max. Earth dist.	8854 Feb 21 11:37	8° ♄ 21'55	1.44938 AU
max. Earth dist.	8853 Mar 10 16:02	23° ♄ 52'39	1.45525 AU	evening rise	8854 Mar 04 07:37	25° ♄ 13'26	
	8853 Mar 14 14:02	0° ♄			8854 Mar 07 10:34	0° ♄	
evening rise	8853 Mar 24 18:28	15° ♄ 52'15			8854 Mar 28 06:24	0° ♄	
	8853 Apr 02 20:57	0° ♄		evening max el	8854 Mar 31 17:53	3° ♄ 56'09	20°14'55
greatest brilliancy	8853 Apr 05 13:10	4° ♄ 05'13	-0.7m	asc. node	8854 Apr 04 14:54	7° ♄ 10'39	
evening max el	8853 Apr 17 14:32	20° ♄ 17'14	19°17'50	retrograde	8854 Apr 08 13:58	8° ♄ 29'13	
asc. node	8853 Apr 17 17:47	20° ♄ 25'24		evening set	8854 Apr 12 11:39	7° ♄ 00'59	
retrograde	8853 Apr 24 15:27	24° ♄ 15'44		inferior conj	8854 Apr 17 19:26	0° ♄ 56'40	3°12'16
evening set	8853 Apr 28 04:20	23° ♄ 02'43		minimum elong	8854 Apr 17 18:07	1° ♄ 01'09	3°12'01

min. Earth dist.	8854 Apr 18 14:28	29° Υ 51'52	0.67708 AU	evening set	8855 Mar 27 19:51	21° Υ 06'56	
	8854 Apr 18 12:04	30° Υ		inferior conj	8855 Apr 02 03:03	14° Υ 51'20	2°52'11
morning rise	8854 Apr 23 00:20	24° Υ 39'39		minimum elong	8855 Apr 02 01:04	14° Υ 58'14	2°51'43
direct	8854 Apr 28 17:05	22° Υ 07'15		min. Earth dist.	8855 Apr 02 08:57	14° Υ 30'48	0.68309 AU
desc. node	8854 May 09 02:46	27° Υ 55'53		morning rise	8855 Apr 07 06:05	8° Υ 37'40	
morning max el	8854 May 10 04:59	29° Υ 00'30	24°36'35	direct	8855 Apr 12 09:15	6° Υ 23'12	
	8854 May 11 03:59	0° 8		morning max el	8855 Apr 22 14:44	12° Υ 27'40	23°06'49
	8854 Jun 02 09:19	0° II		desc. node	8855 Apr 25 23:44	16° Υ 07'49	
morning set	8854 Jun 15 01:49	20° II 57'02			8855 May 06 15:50	0° 8	
max. Earth dist.	8854 Jun 18 16:48	27° II 25'50	1.37411 AU		8855 May 26 05:55	0° II	
	8854 Jun 20 02:27	0° 8		morning set	8855 May 27 06:29	1° II 42'00	
				max. Earth dist.	8855 May 31 12:53	8° II 56'24	1.39660 AU
superior conj	8854 Jun 25 12:31	10° 8 15'50	-0°57'04				
minimum elong	8854 Jun 25 16:06	10° 8 33'12	0°56'41	superior conj	8855 Jun 08 05:43	22° II 40'54	-1°28'19
asc. node	8854 Jul 01 13:53	22° 8 14'19		minimum elong	8855 Jun 08 11:11	23° II 06'03	1°27'48
evening rise	8854 Jul 04 02:18	27° 8 16'21			8855 Jun 12 03:45	0° 8	
	8854 Jul 05 11:14	0° 8		evening rise	8855 Jun 17 20:19	10° 8 52'48	
evening max el	8854 Jul 20 20:31	24° 8 37'29	19°18'26	asc. node	8855 Jun 18 10:53	12° 8 02'40	
retrograde	8854 Jul 30 03:19	29° 8 13'13			8855 Jun 28 13:10	0° 8	
evening set	8854 Jul 31 23:56	29° 8 02'56		evening max el	8855 Jul 03 22:36	6° 8 50'28	18°34'15
desc. node	8854 Aug 05 01:54	27° 8 36'30		retrograde	8855 Jul 11 19:30	10° 8 45'41	
inferior conj	8854 Aug 09 14:02	24° 8 54'00	-1°23'11	evening set	8855 Jul 13 21:27	10° 8 30'07	
minimum elong	8854 Aug 09 10:20	25° 8 00'07	1°21'53	inferior conj	8855 Jul 21 16:09	6° 8 02'34	0°23'09
min. Earth dist.	8854 Aug 12 05:38	23° 8 09'32	0.55863 AU	minimum elong	8855 Jul 21 17:00	6° 8 00'55	0°22'38
morning rise	8854 Aug 17 17:57	20° 8 14'57		desc. node	8855 Jul 22 23:00	5° 8 02'46	
direct	8854 Aug 22 19:00	19° 8 16'53		min. Earth dist.	8855 Jul 24 23:32	3° 8 30'43	0.57622 AU
morning max el	8854 Sep 05 21:36	26° 8 25'05	25°23'01	morning rise	8855 Jul 29 09:00	0° 8 46'29	
	8854 Sep 09 07:59	0° 8			8855 Jul 31 06:21	30° 8 56	
asc. node	8854 Sep 27 13:38	28° 8 22'55		direct	8855 Aug 04 05:21	29° 8 20'05	
	8854 Sep 28 09:19	0° 8			8855 Aug 08 05:55	0° 8	
morning set	8854 Oct 02 19:05	9° 8 06'14		morning max el	8855 Aug 18 14:07	6° 8 56'01	26°47'50
					8855 Sep 04 18:27	0° 8	
superior conj	8854 Oct 09 15:40	24° 8 05'38	1°35'10	asc. node	8855 Sep 14 10:34	18° 8 00'35	
minimum elong	8854 Oct 09 14:13	23° 8 57'42	1°35'09	morning set	8855 Sep 17 04:56	23° 8 45'48	
max. Earth dist.	8854 Oct 10 23:50	27° 8 02'22	1.32198 AU		8855 Sep 20 02:20	0° 8	
	8854 Oct 12 08:24	0° 8					
evening rise	8854 Oct 16 18:21	9° 8 22'37		superior conj	8855 Sep 24 03:18	8° 8 55'47	1°24'14
	8854 Oct 27 14:53	0° 8		minimum elong	8855 Sep 24 01:14	8° 8 44'21	1°24'01
desc. node	8854 Nov 01 00:30	7° 8 16'29		max. Earth dist.	8855 Sep 24 08:46	9° 8 26'09	1.31682 AU
evening max el	8854 Nov 18 06:54	29° 8 27'45	27°26'48	evening rise	8855 Sep 30 23:24	23° 8 51'33	
	8854 Nov 18 20:45	0° 8			8855 Oct 03 22:33	0° 8	
retrograde	8854 Dec 02 02:12	6° 8 43'58		desc. node	8855 Oct 18 21:34	26° 8 15'46	
evening set	8854 Dec 09 04:16	4° 8 19'58			8855 Oct 21 12:21	0° 8	
min. Earth dist.	8854 Dec 12 20:43	1° 8 22'32	0.62376 AU	evening max el	8855 Oct 31 11:24	11° 8 39'29	26°56'13
	8854 Dec 14 08:12	30° 8 17		retrograde	8855 Nov 14 09:21	18° 8 49'16	
inferior conj	8854 Dec 15 18:23	28° 8 38'57	-2°50'27	evening set	8855 Nov 21 07:01	16° 8 46'03	
minimum elong	8854 Dec 15 23:52	28° 8 26'03	2°48'11	min. Earth dist.	8855 Nov 25 01:53	14° 8 07'00	0.60314 AU
morning rise	8854 Dec 22 21:42	23° 8 32'58		inferior conj	8855 Nov 28 05:53	11° 8 30'17	-4°00'45
asc. node	8854 Dec 24 13:10	23° 8 11'35		minimum elong	8855 Nov 28 13:10	11° 8 15'15	3°58'21
direct	8854 Dec 25 04:11	23° 8 09'48		morning rise	8855 Dec 05 21:47	6° 8 44'39	
morning max el	8854 Dec 31 22:49	26° 8 37'04	17°48'36	direct	8855 Dec 08 02:10	6° 8 26'18	
	8855 Jan 03 21:21	0° 8		asc. node	8855 Dec 11 10:13	7° 8 11'11	
morning set	8855 Jan 16 20:06	21° 8 14'48		morning max el	8855 Dec 15 12:25	10° 8 07'53	18°04'17
	8855 Jan 21 18:56	0° 8			8855 Dec 28 12:40	0° 8	
desc. node	8855 Jan 27 23:47	10° 8 40'41		morning set	8855 Dec 31 04:11	4° 8 54'22	
superior conj	8855 Jan 28 05:00	11° 8 02'46	-0°01'38	superior conj	8856 Jan 10 00:27	22° 8 57'56	0°35'48
minimum elong	8855 Jan 28 04:52	11° 8 02'09	0°01'26	minimum elong	8856 Jan 10 03:07	23° 8 09'47	0°35'37
behind sun begin	8855 Jan 27 20:00	10° 8 24'43			8856 Jan 14 00:52	0° 8	
behind sun end	8855 Jan 28 13:43	11° 8 39'30		desc. node	8856 Jan 14 20:42	1° 8 25'05	
max. Earth dist.	8855 Feb 04 03:53	22° 8 31'26	1.43676 AU	max. Earth dist.	8856 Jan 17 15:29	6° 8 07'31	1.41890 AU
	8855 Feb 08 20:24	0° 8		evening rise	8856 Jan 23 00:12	14° 8 54'25	
evening rise	8855 Feb 11 20:52	4° 8 43'10			8856 Feb 01 17:55	0° 8	
	8855 Feb 28 19:58	0° 8			8856 Feb 24 02:21	0° 8	
evening max el	8855 Mar 14 15:39	17° 8 36'27	21°24'31	evening max el	8856 Feb 25 08:49	1° 8 19'06	22°42'18
asc. node	8855 Mar 22 11:59	22° 8 45'08		retrograde	8856 Mar 06 08:36	7° 8 14'16	
retrograde	8855 Mar 23 12:16	22° 8 50'19		asc. node	8856 Mar 08 09:06	6° 8 53'54	

evening set	8856 Mar 11 03:19	5°♄16'01		evening set	8857 Feb 23 08:32	19°♄24'40	
	8856 Mar 15 16:15	30°♄		asc. node	8857 Feb 23 06:13	19°♄29'32	
inferior conj	8856 Mar 16 11:49	28°♄52'15	2°22'29	min. Earth dist.	8857 Feb 28 01:57	13°♄57'25	0.68237 AU
minimum elong	8856 Mar 16 09:35	29°♄00'01	2°21'52	inferior conj	8857 Feb 28 19:57	12°♄56'27	1°43'56
min. Earth dist.	8856 Mar 16 05:31	29°♄14'08	0.68480 AU	minimum elong	8857 Feb 28 17:54	13°♄03'23	1°43'18
morning rise	8856 Mar 21 15:44	22°♄43'26		morning rise	8857 Mar 06 03:17	6°♄54'01	
direct	8856 Mar 26 05:04	20°♄50'21		direct	8857 Mar 10 03:19	5°♄23'10	
morning max el	8856 Apr 04 03:56	26°♄03'00	21°39'51	morning max el	8857 Mar 17 23:58	9°♄50'28	20°22'43
	8856 Apr 07 18:18	0°♄		desc. node	8857 Mar 29 17:32	24°♄41'27	
desc. node	8856 Apr 11 20:39	5°♄07'17			8857 Apr 02 09:38	0°♄	
	8856 Apr 29 03:47	0°♄		morning set	8857 Apr 15 10:35	19°♄41'24	
morning set	8856 May 06 07:47	11°♄10'53			8857 Apr 22 00:34	0°♄	
max. Earth dist.	8856 May 12 13:01	21°♄16'32	1.41847 AU	max. Earth dist.	8857 Apr 24 20:50	4°♄32'28	1.43688 AU
	8856 May 17 17:19	0°♄					
superior conj	8856 May 20 03:30	4°♄11'26	-1°54'36	superior conj	8857 May 01 01:45	14°♄39'25	-2°10'20
minimum elong	8856 May 20 09:19	4°♄36'50	1°54'19	minimum elong	8857 May 01 04:31	14°♄50'53	2°10'26
evening rise	8856 May 31 02:07	23°♄52'10			8857 May 10 03:13	0°♄	
	8856 Jun 03 10:40	0°♄		evening rise	8857 May 13 15:15	6°♄04'59	
asc. node	8856 Jun 04 07:54	1°♄35'48		asc. node	8857 May 22 04:57	20°♄48'28	
evening max el	8856 Jun 16 08:00	19°♄36'45	18°10'18		8857 May 28 09:46	0°♄	
retrograde	8856 Jun 23 06:06	23°♄06'46		evening max el	8857 May 30 20:59	2°♄47'11	18°05'42
evening set	8856 Jun 25 15:45	22°♄42'02		retrograde	8857 Jun 06 07:45	6°♄07'49	
inferior conj	8856 Jul 02 15:36	17°♄53'53	1°44'16	evening set	8857 Jun 09 00:58	5°♄31'18	
minimum elong	8856 Jul 02 18:26	17°♄47'30	1°43'08	inferior conj	8857 Jun 15 09:28	0°♄23'23	2°38'10
min. Earth dist.	8856 Jul 05 23:53	14°♄54'54	0.59798 AU	minimum elong	8857 Jun 15 12:13	0°♄16'15	2°37'18
desc. node	8856 Jul 08 20:06	12°♄43'25			8857 Jun 15 18:30	30°♄	
morning rise	8856 Jul 09 18:10	12°♄08'12		min. Earth dist.	8857 Jun 18 08:38	27°♄21'14	0.62052 AU
direct	8856 Jul 16 04:52	10°♄10'39		morning rise	8857 Jun 21 21:30	24°♄18'28	
morning max el	8856 Jul 30 13:11	18°♄03'43	27°40'51	desc. node	8857 Jun 25 17:10	22°♄20'52	
	8856 Aug 09 12:49	0°♄		direct	8857 Jun 28 15:00	21°♄54'22	
	8856 Aug 27 10:22	0°♄			8857 Jul 12 20:14	0°♄	
morning set	8856 Aug 31 11:20	8°♄12'18		morning max el	8857 Jul 12 18:34	29°♄55'49	27°55'53
asc. node	8856 Aug 31 07:29	7°♄52'13			8857 Aug 03 13:47	0°♄	
max. Earth dist.	8856 Sep 06 18:35	21°♄49'41	1.31629 AU	morning set	8857 Aug 15 12:20	22°♄20'19	
				asc. node	8857 Aug 18 04:25	27°♄52'53	
superior conj	8856 Sep 07 14:48	23°♄41'42	1°08'09		8857 Aug 19 04:24	0°♄	
minimum elong	8856 Sep 07 12:34	23°♄29'16	1°07'46	max. Earth dist.	8857 Aug 21 01:28	4°♄02'12	1.32051 AU
	8856 Sep 10 11:04	0°♄					
evening rise	8856 Sep 14 08:33	8°♄29'40		superior conj	8857 Aug 23 00:24	8°♄17'55	0°47'17
	8856 Sep 25 09:06	0°♄		minimum elong	8857 Aug 22 22:29	8°♄07'21	0°46'49
desc. node	8856 Oct 04 18:41	14°♄22'54		evening rise	8857 Aug 29 19:50	23°♄10'54	
evening max el	8856 Oct 12 08:26	23°♄01'21	25°52'39		8857 Sep 02 01:46	0°♄	
	8856 Oct 24 22:59	0°♄		desc. node	8857 Sep 20 12:24	0°♄	
retrograde	8856 Oct 26 06:34	0°♄04'08		evening max el	8857 Sep 21 15:50	1°♄17'02	
	8856 Oct 27 14:04	30°♄		retrograde	8857 Sep 23 21:53	3°♄35'44	24°23'25
evening set	8856 Nov 01 13:06	28°♄31'29			8857 Oct 07 15:54	10°♄29'46	
min. Earth dist.	8856 Nov 05 21:08	25°♄55'55	0.58236 AU	evening set	8857 Oct 12 18:35	9°♄31'59	
inferior conj	8856 Nov 08 23:27	23°♄42'52	-5°01'05	min. Earth dist.	8857 Oct 18 08:45	6°♄41'24	0.56397 AU
minimum elong	8856 Nov 09 06:16	23°♄30'36	4°59'35	inferior conj	8857 Oct 20 20:38	5°♄07'45	-5°35'37
morning rise	8856 Nov 17 01:44	19°♄19'41		minimum elong	8857 Oct 20 22:49	5°♄04'19	5°35'22
direct	8856 Nov 19 08:41	19°♄02'51		morning rise	8857 Oct 29 05:11	1°♄06'21	
asc. node	8856 Nov 27 07:14	22°♄40'13		direct	8857 Oct 31 20:11	0°♄47'57	
morning max el	8856 Nov 27 18:54	23°♄07'37	18°40'28	morning max el	8857 Nov 10 14:39	5°♄25'18	19°38'53
	8856 Dec 03 07:30	0°♄		asc. node	8857 Nov 14 04:14	9°♄23'37	
morning set	8856 Dec 13 23:45	19°♄05'38			8857 Nov 26 07:39	0°♄	
	8856 Dec 19 14:35	0°♄		morning set	8857 Nov 28 03:00	3°♄36'51	
superior conj	8856 Dec 22 16:42	5°♄52'13	1°04'36				
minimum elong	8856 Dec 22 20:02	6°♄07'50	1°04'25	superior conj	8857 Dec 06 00:37	19°♄30'38	1°24'35
max. Earth dist.	8856 Dec 29 23:04	19°♄03'49	1.39791 AU	minimum elong	8857 Dec 06 03:19	19°♄43'58	1°24'33
desc. node	8856 Dec 31 17:39	22°♄08'41			8857 Dec 11 11:34	0°♄	
evening rise	8857 Jan 03 00:41	26°♄02'51		max. Earth dist.	8857 Dec 12 05:09	1°♄21'48	1.37617 AU
	8857 Jan 05 09:42	0°♄		evening rise	8857 Dec 15 22:30	8°♄07'00	
	8857 Jan 25 10:03	0°♄		desc. node	8857 Dec 18 14:38	12°♄47'13	
evening max el	8857 Feb 06 23:12	15°♄05'32	24°02'28		8857 Dec 29 05:40	0°♄	
retrograde	8857 Feb 18 01:39	21°♄36'56		evening max el	8858 Jan 20 12:25	28°♄53'40	25°18'26
					8858 Jan 21 16:13	0°♄	
				retrograde	8858 Feb 01 14:25	5°♄52'30	

evening set	8858 Feb 07 09:57	3° H 28'06		evening set	8859 Jan 22 05:48	17° \approx 21'54	
asc. node	8858 Feb 10 03:22	0° H 41'13		min. Earth dist.	8859 Jan 26 09:23	13° \approx 04'03	0.66569 AU
	8858 Feb 10 17:07	30° \approx		inferior conj	8859 Jan 28 02:35	10° \approx 59'03	0°01'45
min. Earth dist.	8858 Feb 11 19:58	28° \approx 35'40	0.67595 AU	minimum elong	8859 Jan 28 02:32	10° \approx 59'13	0°01'56
inferior conj	8858 Feb 13 01:31	26° \approx 59'57	0°56'53	transit middle	8859 Jan 28 02:32	10° \approx 59'13	0°01'56
minimum elong	8858 Feb 13 00:11	27° \approx 04'17	0°56'31	transit begin	8859 Jan 27 23:40	11° \approx 07'56	
morning rise	8858 Feb 18 14:47	21° \approx 05'31		transit end	8859 Jan 28 05:24	10° \approx 50'30	
direct	8858 Feb 22 02:30	19° \approx 55'34		asc. node	8859 Jan 28 00:29	11° \approx 05'27	
morning max el	8858 Mar 01 04:02	23° \approx 49'26	19°19'29	morning rise	8859 Feb 03 00:05	5° \approx 14'35	
	8858 Mar 06 10:19	0° H		direct	8859 Feb 06 00:59	4° \approx 22'36	
greatest brilliancy	8858 Mar 14 02:42	10° H 56'03	-0.7m	morning max el	8859 Feb 12 15:06	7° \approx 55'43	18°32'07
desc. node	8858 Mar 16 14:26	14° H 40'26			8859 Feb 28 07:55	0° H	
morning set	8858 Mar 25 10:07	28° H 10'55		desc. node	8859 Mar 03 11:20	4° H 57'38	
	8858 Mar 26 14:22	0° Y		morning set	8859 Mar 05 05:24	7° H 43'58	
max. Earth dist.	8858 Apr 07 11:17	18° Y 30'47	1.44955 AU		8859 Mar 19 09:16	0° Y	
superior conj	8858 Apr 10 23:52	24° Y 05'43	-2°09'16	superior conj	8859 Mar 21 06:26	2° Y 56'40	-1°47'56
minimum elong	8858 Apr 10 19:51	23° Y 49'48	2°09'13	minimum elong	8859 Mar 20 21:07	2° Y 20'15	1°47'09
	8858 Apr 14 16:25	0° B		max. Earth dist.	8859 Mar 21 05:33	2° Y 53'15	1.45529 AU
evening rise	8858 Apr 25 07:07	17° B 21'43		evening rise	8859 Apr 05 23:15	27° Y 39'46	
	8858 May 02 22:30	0° II			8859 Apr 07 10:34	0° B	
asc. node	8858 May 09 02:03	9° II 33'32		greatest brilliancy	8859 Apr 14 20:15	11° B 43'19	-0.8m
evening max el	8858 May 14 10:14	16° II 13'08	18°19'49	asc. node	8859 Apr 25 23:10	27° B 41'29	
retrograde	8858 May 20 19:50	19° II 38'52		evening max el	8859 Apr 27 21:03	29° B 47'24	18°51'50
evening set	8858 May 23 20:23	18° II 48'57			8859 Apr 28 02:07	0° II	
inferior conj	8858 May 29 17:35	13° II 23'09	3°08'55	retrograde	8859 May 04 14:18	3° II 30'55	
minimum elong	8858 May 29 19:17	13° II 18'15	3°08'28	evening set	8859 May 07 22:25	2° II 26'41	
min. Earth dist.	8858 Jun 01 02:54	10° II 38'47	0.64119 AU		8859 May 10 18:03	30° R B	
morning rise	8858 Jun 04 17:02	7° II 08'04		inferior conj	8859 May 13 12:01	26° B 44'44	3°21'16
direct	8858 Jun 11 09:53	4° II 27'04		minimum elong	8859 May 13 12:25	26° B 43'29	3°21'04
desc. node	8858 Jun 12 14:12	4° II 31'37		min. Earth dist.	8859 May 15 06:07	24° B 33'00	0.65849 AU
morning max el	8858 Jun 25 04:03	12° II 27'45	27°33'58	morning rise	8859 May 19 01:49	20° B 25'59	
	8858 Jul 09 03:57	0° B		direct	8859 May 25 12:18	17° B 39'46	
	8858 Jul 27 02:22	0° Q		desc. node	8859 May 30 11:13	19° B 00'32	
morning set	8858 Jul 30 05:33	6° Q 03'39		morning max el	8859 Jun 07 14:42	25° B 26'42	26°40'58
max. Earth dist.	8858 Aug 04 01:38	15° Q 53'52	1.32955 AU		8859 Jun 11 18:27	0° II	
asc. node	8858 Aug 05 01:23	17° Q 58'28			8859 Jul 02 16:07	0° B	
superior conj	8858 Aug 07 06:10	22° Q 39'07	0°22'03	morning set	8859 Jul 13 11:42	19° B 12'35	
minimum elong	8858 Aug 07 05:07	22° Q 33'27	0°21'40	max. Earth dist.	8859 Jul 17 15:30	27° B 17'22	1.34348 AU
	8858 Aug 10 15:57	0° np			8859 Jul 18 23:59	0° Q	
evening rise	8858 Aug 14 07:22	7° np 49'54		superior conj	8859 Jul 22 05:45	6° Q 38'01	-0°06'56
	8858 Aug 25 21:05	0° Q		minimum elong	8859 Jul 22 06:08	6° Q 40'03	0°07'04
evening max el	8858 Sep 05 09:14	13° Q 47'02	22°43'45	behind sun begin	8859 Jul 22 00:54	6° Q 12'53	
desc. node	8858 Sep 08 12:59	16° Q 31'16		behind sun end	8859 Jul 22 11:22	7° Q 07'15	
retrograde	8858 Sep 18 13:11	20° Q 21'18		asc. node	8859 Jul 22 22:20	8° Q 04'16	
evening set	8858 Sep 22 03:35	19° Q 52'52		evening rise	8859 Jul 29 17:05	22° Q 19'48	
min. Earth dist.	8858 Sep 29 17:01	16° Q 29'38	0.55112 AU		8859 Aug 02 11:03	0° np	
inferior conj	8858 Sep 30 23:12	15° Q 46'33	-5°24'36	evening max el	8859 Aug 18 03:42	24° np 11'42	21°10'13
minimum elong	8858 Sep 30 17:43	15° Q 54'24	5°23'55	desc. node	8859 Aug 26 10:09	29° np 33'27	
morning rise	8858 Oct 09 09:48	11° Q 58'17			8859 Aug 28 10:55	0° Q	
direct	8858 Oct 12 13:18	11° Q 35'32		retrograde	8859 Aug 30 02:00	0° Q 06'27	
morning max el	8858 Oct 23 21:27	16° Q 54'35	20°59'34		8859 Aug 31 17:44	30° R np	
asc. node	8858 Nov 01 01:13	27° Q 06'01		evening set	8859 Sep 01 10:42	29° np 53'26	
	8858 Nov 02 20:30	0° ml		inferior conj	8859 Sep 10 15:54	25° np 56'41	-4°17'48
morning set	8858 Nov 12 11:08	18° ml 19'57		minimum elong	8859 Sep 10 06:15	26° np 10'17	4°15'14
	8858 Nov 18 01:12	0° Z		min. Earth dist.	8859 Sep 11 01:40	25° np 42'55	0.54662 AU
superior conj	8858 Nov 19 19:49	3° Z 40'41	1°36'23	morning rise	8859 Sep 19 02:19	22° np 03'09	
minimum elong	8858 Nov 19 21:20	3° Z 48'27	1°36'30	direct	8859 Sep 22 21:29	21° np 32'05	
max. Earth dist.	8858 Nov 24 14:14	13° Z 16'55	1.35607 AU	morning max el	8859 Oct 05 16:21	27° np 37'41	22°38'24
evening rise	8858 Nov 28 14:45	20° Z 59'33			8859 Oct 08 00:37	0° Q	
	8858 Dec 03 14:13	0° Z		asc. node	8859 Oct 18 22:10	15° Q 33'21	
desc. node	8858 Dec 05 11:40	3° Z 16'26			8859 Oct 26 09:59	0° ml	
	8858 Dec 23 03:35	0° \approx		morning set	8859 Oct 27 21:58	3° ml 08'21	
evening max el	8859 Jan 03 01:34	12° \approx 39'18	26°23'03	superior conj	8859 Nov 03 22:47	18° ml 11'34	1°40'55
retrograde	8859 Jan 15 22:11	19° \approx 54'48		minimum elong	8859 Nov 03 23:00	18° ml 12'44	1°41'04

max. Earth dist.	8859 Nov 07 06:30	25° \mathbb{M} 10'43	1.33939 AU	minimum elong	8860 Oct 18 05:52	2° \mathbb{M} 50'07	1°39'02
	8859 Nov 09 15:06	0° \mathbb{M}		max. Earth dist.	8860 Oct 20 07:09	7° \mathbb{M} 17'36	1.32704 AU
evening rise	8859 Nov 11 21:33	4° \mathbb{M} 30'31		evening rise	8860 Oct 25 15:20	18° \mathbb{M} 30'32	
desc. node	8859 Nov 22 08:45	23° \mathbb{M} 30'56			8860 Oct 31 13:03	0° \mathbb{M}	
	8859 Nov 26 08:29	0° \mathbb{B}		desc. node	8860 Nov 08 05:50	13° \mathbb{M} 23'49	
evening max el	8859 Dec 16 14:42	26° \mathbb{B} 14'39	27°09'03		8860 Nov 19 15:53	0° \mathbb{B}	
	8859 Dec 21 00:50	0° \mathbb{B}		evening max el	8860 Nov 28 02:32	9° \mathbb{B} 28'05	27°29'19
retrograde	8859 Dec 30 00:10	3° \mathbb{B} 36'01		retrograde	8860 Dec 11 19:26	16° \mathbb{B} 46'53	
evening set	8860 Jan 05 18:02	1° \mathbb{B} 00'25		evening set	8860 Dec 18 20:00	14° \mathbb{B} 16'18	
	8860 Jan 06 22:55	30° \mathbb{R} \mathbb{B}		min. Earth dist.	8860 Dec 22 13:51	11° \mathbb{B} 03'14	0.63471 AU
min. Earth dist.	8860 Jan 09 16:04	27° \mathbb{B} 16'17	0.65179 AU	inferior conj	8860 Dec 25 05:45	8° \mathbb{B} 22'34	-2°09'25
inferior conj	8860 Jan 11 20:53	24° \mathbb{B} 48'55	-1°00'49	minimum elong	8860 Dec 25 09:51	8° \mathbb{B} 12'12	2°07'33
minimum elong	8860 Jan 11 22:41	24° \mathbb{B} 43'52	0°59'50	asc. node	8860 Dec 31 18:37	3° \mathbb{B} 12'50	
asc. node	8860 Jan 14 21:34	21° \mathbb{B} 38'37		morning rise	8861 Jan 01 01:38	3° \mathbb{B} 05'48	
morning rise	8860 Jan 18 04:44	19° \mathbb{B} 16'49		direct	8861 Jan 03 10:49	2° \mathbb{B} 38'18	
direct	8860 Jan 20 20:39	18° \mathbb{B} 39'02		morning max el	8861 Jan 10 00:11	6° \mathbb{B} 01'45	17°48'09
morning max el	8860 Jan 27 06:47	22° \mathbb{B} 02'32	18°01'30		8861 Jan 25 18:35	0° \mathbb{B}	
	8860 Feb 02 13:25	0° \mathbb{B}		morning set	8861 Jan 26 09:32	1° \mathbb{B} 04'30	
morning set	8860 Feb 14 06:12	18° \mathbb{B} 45'47		desc. node	8861 Feb 04 05:09	16° \mathbb{B} 06'31	
desc. node	8860 Feb 18 08:14	25° \mathbb{B} 27'57					
	8860 Feb 21 03:07	0° \mathbb{H}		superior conj	8861 Feb 07 19:29	22° \mathbb{B} 04'13	-0°26'11
superior conj	8860 Feb 28 15:29	12° \mathbb{H} 02'07	-1°10'17	minimum elong	8861 Feb 07 16:41	21° \mathbb{B} 52'41	0°25'37
minimum elong	8860 Feb 28 07:33	11° \mathbb{H} 30'41	1°09'13		8861 Feb 12 16:51	0° \mathbb{H}	
max. Earth dist.	8860 Mar 03 01:03	17° \mathbb{H} 23'42	1.45360 AU	max. Earth dist.	8861 Feb 13 19:30	1° \mathbb{H} 46'30	1.44476 AU
	8860 Mar 11 03:06	0° \mathbb{Y}		evening rise	8861 Feb 23 06:28	16° \mathbb{H} 33'43	
evening rise	8860 Mar 15 19:13	7° \mathbb{Y} 13'25			8861 Mar 04 03:24	0° \mathbb{Y}	
greatest brilliancy	8860 Mar 29 10:42	28° \mathbb{Y} 01'02	-0.7m	evening max el	8861 Mar 24 04:39	27° \mathbb{Y} 06'22	20°43'14
	8860 Mar 30 19:02	0° \mathbb{B}			8861 Mar 27 11:40	0° \mathbb{B}	
evening max el	8860 Apr 10 03:34	13° \mathbb{B} 26'10	19°40'22	asc. node	8861 Mar 29 17:24	1° \mathbb{B} 18'40	
asc. node	8860 Apr 11 20:17	15° \mathbb{B} 01'21		retrograde	8861 Apr 01 10:30	1° \mathbb{B} 55'47	
retrograde	8860 Apr 17 11:58	17° \mathbb{B} 38'26		evening set	8861 Apr 05 12:18	0° \mathbb{B} 21'08	
evening set	8860 Apr 21 04:25	16° \mathbb{B} 19'10			8861 Apr 05 22:37	30° \mathbb{R} \mathbb{Y}	
inferior conj	8860 Apr 26 13:34	10° \mathbb{B} 22'42	3°19'04	inferior conj	8861 Apr 10 19:36	24° \mathbb{Y} 11'57	3°04'58
minimum elong	8860 Apr 26 12:48	10° \mathbb{B} 25'16	3°18'52	minimum elong	8861 Apr 10 17:57	24° \mathbb{Y} 17'37	3°04'37
min. Earth dist.	8860 Apr 27 16:49	8° \mathbb{B} 52'10	0.67164 AU	min. Earth dist.	8861 Apr 11 08:57	23° \mathbb{Y} 25'58	0.68027 AU
morning rise	8860 May 01 20:51	4° \mathbb{B} 04'21		morning rise	8861 Apr 15 23:23	17° \mathbb{Y} 56'20	
direct	8860 May 07 20:55	1° \mathbb{B} 24'04		direct	8861 Apr 21 10:36	15° \mathbb{Y} 30'45	
desc. node	8860 May 16 08:11	5° \mathbb{B} 17'40		morning max el	8861 May 02 09:33	22° \mathbb{Y} 03'34	23°58'30
morning max el	8860 May 20 00:29	8° \mathbb{B} 41'04	25°25'46	desc. node	8861 May 03 05:07	22° \mathbb{Y} 53'59	
	8860 Jun 05 17:57	0° \mathbb{II}			8861 May 09 07:29	0° \mathbb{B}	
morning set	8860 Jun 24 05:19	0° \mathbb{B}			8861 May 30 01:03	0° \mathbb{II}	
	8860 Jun 25 02:43	1° \mathbb{B} 36'18		morning set	8861 Jun 06 21:27	13° \mathbb{II} 00'48	
max. Earth dist.	8860 Jun 28 18:38	8° \mathbb{B} 21'35	1.36196 AU	max. Earth dist.	8861 Jun 10 15:28	19° \mathbb{II} 34'09	1.38367 AU
					8861 Jun 16 08:34	0° \mathbb{B}	
superior conj	8860 Jul 04 20:24	20° \mathbb{B} 07'49	-0°38'28	superior conj	8861 Jun 17 22:39	2° \mathbb{B} 59'29	-1°10'39
minimum elong	8860 Jul 04 22:44	20° \mathbb{B} 19'29	0°38'14	minimum elong	8861 Jun 18 03:06	3° \mathbb{B} 20'39	1°10'09
asc. node	8860 Jul 08 19:19	28° \mathbb{B} 06'39		asc. node	8861 Jun 25 16:19	18° \mathbb{B} 01'25	
	8860 Jul 09 17:32	0° \mathbb{Q}		evening rise	8861 Jun 26 22:06	20° \mathbb{B} 27'47	
evening rise	8860 Jul 12 22:53	6° \mathbb{Q} 34'51			8861 Jul 01 21:01	0° \mathbb{Q}	
	8860 Jul 26 00:56	0° \mathbb{M}		evening max el	8861 Jul 13 07:15	17° \mathbb{Q} 05'13	18°57'02
evening max el	8860 Jul 30 11:06	5° \mathbb{M} 15'57	19°53'20	retrograde	8861 Jul 21 22:05	21° \mathbb{Q} 21'41	
retrograde	8860 Aug 09 16:47	10° \mathbb{M} 19'21		evening set	8861 Jul 23 20:37	21° \mathbb{Q} 09'33	
evening set	8860 Aug 11 13:46	10° \mathbb{M} 09'57		desc. node	8861 Jul 30 04:20	18° \mathbb{Q} 12'31	
desc. node	8860 Aug 12 07:16	10° \mathbb{M} 01'25		inferior conj	8861 Aug 01 02:41	16° \mathbb{Q} 53'03	-0°35'30
inferior conj	8860 Aug 20 12:56	6° \mathbb{M} 09'22	-2°30'23	minimum elong	8861 Aug 01 01:11	16° \mathbb{Q} 55'42	0°35'05
minimum elong	8860 Aug 20 06:06	6° \mathbb{M} 19'46	2°27'59	min. Earth dist.	8861 Aug 04 02:59	14° \mathbb{Q} 46'45	0.56546 AU
min. Earth dist.	8860 Aug 22 12:32	4° \mathbb{M} 56'58	0.55174 AU	morning rise	8861 Aug 09 02:33	11° \mathbb{Q} 58'18	
morning rise	8860 Aug 28 20:42	1° \mathbb{M} 50'53		direct	8861 Aug 14 12:20	10° \mathbb{Q} 49'00	
direct	8860 Sep 02 10:37	1° \mathbb{M} 04'53		morning max el	8861 Aug 28 18:11	18° \mathbb{Q} 09'28	26°02'20
morning max el	8860 Sep 16 04:46	7° \mathbb{M} 52'40	24°24'42		8861 Sep 07 15:17	0° \mathbb{M}	
	8860 Oct 02 07:15	0° \mathbb{B}		asc. node	8861 Sep 21 16:01	24° \mathbb{M} 01'37	
asc. node	8860 Oct 04 19:05	4° \mathbb{B} 34'47			8861 Sep 24 14:05	0° \mathbb{B}	
morning set	8860 Oct 11 09:42	17° \mathbb{B} 57'06		morning set	8861 Sep 25 20:44	2° \mathbb{B} 41'51	
	8860 Oct 16 22:46	0° \mathbb{M}					
superior conj	8860 Oct 18 06:47	2° \mathbb{M} 55'08	1°38'58	superior conj	8861 Oct 02 17:40	17° \mathbb{B} 44'51	1°31'10
				minimum elong	8861 Oct 02 15:55	17° \mathbb{B} 35'09	1°31'05

max. Earth dist.	8861 Oct 03 14:14	19° Ω 38'33	1.31925 AU		8862 Sep 16 01:46	0° Ω	
	8861 Oct 08 08:32	0° \mathbb{M}					
evening rise	8861 Oct 09 17:02	2° \mathbb{M} 51'26		superior conj	8862 Sep 17 05:28	2° Ω 33'44	1°18'01
	8861 Oct 24 08:37	0° \mathcal{A}		minimum elong	8862 Sep 17 03:16	2° Ω 21'32	1°17'43
desc. node	8861 Oct 26 02:55	2° \mathcal{A} 46'22		max. Earth dist.	8862 Sep 17 00:10	2° Ω 04'20	1.31604 AU
evening max el	8861 Nov 10 10:35	22° \mathcal{A} 06'18	27°18'06	evening rise	8862 Sep 24 00:05	17° Ω 24'53	
retrograde	8861 Nov 24 06:58	29° \mathcal{A} 18'57			8862 Sep 30 04:46	0° \mathbb{M}	
evening set	8861 Dec 01 08:24	27° \mathcal{A} 02'41		desc. node	8862 Oct 13 00:01	21° \mathbb{M} 25'37	
min. Earth dist.	8861 Dec 05 01:07	24° \mathcal{A} 14'33	0.61514 AU		8862 Oct 19 17:00	0° \mathcal{A}	
inferior conj	8861 Dec 08 02:03	21° \mathcal{A} 32'18	-3°20'46	evening max el	8862 Oct 23 11:56	3° \mathcal{A} 56'25	26°32'53
minimum elong	8861 Dec 08 08:27	21° \mathcal{A} 18'03	3°18'20	retrograde	8862 Nov 06 09:55	11° \mathcal{A} 03'15	
morning rise	8861 Dec 15 10:47	16° \mathcal{A} 34'23		evening set	8862 Nov 13 02:56	9° \mathcal{A} 11'41	
direct	8861 Dec 17 16:03	16° \mathcal{A} 13'33		min. Earth dist.	8862 Nov 17 01:32	6° \mathcal{A} 36'36	0.59421 AU
asc. node	8861 Dec 18 15:38	16° \mathcal{A} 17'45		inferior conj	8862 Nov 20 06:16	4° \mathcal{A} 07'43	-4°28'22
morning max el	8861 Dec 24 16:09	19° \mathcal{A} 45'38	17°52'55	minimum elong	8862 Nov 20 13:45	3° \mathcal{A} 53'09	4°26'13
	8862 Jan 01 05:19	0° \mathcal{B}			8862 Nov 26 17:09	30° \mathbb{R} \mathbb{M}	
morning set	8862 Jan 09 08:52	14° \mathcal{B} 20'00		morning rise	8862 Nov 28 03:02	29° \mathbb{M} 31'48	
	8862 Jan 18 02:59	0° \approx		direct	8862 Nov 30 08:00	29° \mathbb{M} 14'25	
					8862 Dec 03 19:29	0° \mathcal{A}	
superior conj	8862 Jan 20 00:59	3° \approx 19'42	0°15'13	asc. node	8862 Dec 05 12:39	0° \mathcal{A} 56'31	
minimum elong	8862 Jan 20 02:20	3° \approx 25'30	0°15'13	morning max el	8862 Dec 08 03:12	3° \mathcal{A} 04'16	18°17'09
behind sun begin	8862 Jan 19 23:42	3° \approx 14'10		morning set	8862 Dec 23 22:20	28° \mathcal{A} 14'05	
behind sun end	8862 Jan 20 04:58	3° \approx 36'51			8862 Dec 24 20:38	0° \mathcal{B}	
desc. node	8862 Jan 22 02:05	6° \approx 49'55					
max. Earth dist.	8862 Jan 27 10:29	15° \approx 45'21	1.42973 AU	superior conj	8863 Jan 02 05:55	15° \mathcal{B} 41'36	0°49'07
evening rise	8862 Feb 03 00:24	26° \approx 18'07		minimum elong	8863 Jan 02 09:04	15° \mathcal{B} 55'58	0°48'53
	8862 Feb 05 09:19	0° \mathcal{H}		desc. node	8863 Jan 08 23:02	27° \mathcal{B} 34'09	
	8862 Feb 26 00:23	0° \mathcal{Y}		max. Earth dist.	8863 Jan 09 20:14	29° \mathcal{B} 04'46	1.41018 AU
evening max el	8862 Mar 07 00:21	10° \mathcal{Y} 47'32	21°56'51		8863 Jan 10 09:15	0° \approx	
retrograde	8862 Mar 16 08:05	16° \mathcal{Y} 18'43		evening rise	8863 Jan 14 12:13	6° \approx 51'54	
asc. node	8862 Mar 16 14:30	16° \mathcal{Y} 18'22			8863 Jan 29 12:41	0° \mathcal{H}	
evening set	8862 Mar 20 20:23	14° \mathcal{Y} 28'44		evening max el	8863 Feb 17 15:55	24° \mathcal{H} 30'49	23°16'28
inferior conj	8862 Mar 26 03:56	8° \mathcal{Y} 09'18	2°40'41		8863 Feb 24 22:49	0° \mathcal{Y}	
minimum elong	8862 Mar 26 01:47	8° \mathcal{Y} 16'46	2°40'09	retrograde	8863 Feb 28 03:17	0° \mathcal{Y} 42'43	
min. Earth dist.	8862 Mar 26 04:29	8° \mathcal{Y} 07'22	0.68440 AU	asc. node	8863 Mar 03 11:37	29° \mathcal{H} 47'45	
morning rise	8862 Mar 31 07:02	1° \mathcal{Y} 57'48			8863 Mar 03 02:19	30° \mathbb{R} \mathcal{H}	
	8862 Apr 03 22:29	30° \mathbb{R} \mathcal{H}		evening set	8863 Mar 05 03:08	28° \mathcal{H} 38'05	
direct	8862 Apr 05 04:20	29° \mathcal{H} 52'17		min. Earth dist.	8863 Mar 10 01:16	22° \mathcal{H} 51'01	0.68421 AU
	8862 Apr 06 11:07	0° \mathcal{Y}		inferior conj	8863 Mar 10 12:40	22° \mathcal{H} 11'43	2°07'11
morning max el	8862 Apr 14 20:24	5° \mathcal{Y} 33'51	22°29'02	minimum elong	8863 Mar 10 10:27	22° \mathcal{H} 19'21	2°06'32
desc. node	8862 Apr 20 02:03	11° \mathcal{Y} 27'45		morning rise	8863 Mar 15 17:44	16° \mathcal{H} 05'33	
	8862 May 03 15:04	0° \mathcal{B}		direct	8863 Mar 20 01:13	14° \mathcal{H} 22'13	
morning set	8862 May 18 14:42	23° \mathcal{B} 13'34		morning max el	8863 Mar 28 12:23	19° \mathcal{H} 14'36	21°05'38
	8862 May 22 16:46	0° \mathbb{I}			8863 Apr 06 10:14	0° \mathcal{Y}	
max. Earth dist.	8862 May 23 13:12	1° \mathbb{I} 26'17	1.40623 AU	desc. node	8863 Apr 06 22:58	0° \mathcal{Y} 43'10	
					8863 Apr 26 18:53	0° \mathcal{B}	
superior conj	8862 May 31 08:11	15° \mathbb{I} 02'42	-1°40'22	morning set	8863 Apr 28 05:12	2° \mathcal{B} 14'09	
minimum elong	8862 May 31 14:06	15° \mathbb{I} 29'17	1°39'54	max. Earth dist.	8863 May 05 16:35	14° \mathcal{B} 11'18	1.42680 AU
	8862 Jun 08 10:36	0° \mathcal{B}					
evening rise	8862 Jun 10 11:28	3° \mathcal{B} 50'01		superior conj	8863 May 12 20:24	26° \mathcal{B} 07'29	-2°02'56
asc. node	8862 Jun 12 13:20	7° \mathcal{B} 44'03		minimum elong	8863 May 13 01:28	26° \mathcal{B} 29'02	2°02'50
evening max el	8862 Jun 26 12:53	29° \mathcal{B} 33'16	18°21'31		8863 May 15 02:36	0° \mathbb{I}	
	8862 Jun 27 00:03	0° \mathcal{Q}		evening rise	8863 May 24 10:53	16° \mathbb{I} 31'40	
retrograde	8862 Jul 03 22:40	3° \mathcal{Q} 16'05		asc. node	8863 May 30 10:24	27° \mathbb{I} 09'44	
evening set	8862 Jul 06 03:48	2° \mathcal{Q} 57'01			8863 Jun 01 02:09	0° \mathcal{B}	
	8862 Jul 11 12:09	30° \mathbb{R} \mathcal{B}		evening max el	8863 Jun 10 00:15	12° \mathcal{B} 31'19	18°05'58
inferior conj	8862 Jul 13 14:07	28° \mathcal{B} 20'18	1°01'01	retrograde	8863 Jun 16 16:25	15° \mathcal{B} 55'52	
minimum elong	8862 Jul 13 16:08	28° \mathcal{B} 16'09	1°00'06	evening set	8863 Jun 19 05:10	15° \mathcal{B} 26'31	
min. Earth dist.	8862 Jul 16 23:15	25° \mathcal{B} 34'16	0.58518 AU	inferior conj	8863 Jun 25 22:02	10° \mathcal{B} 29'50	2°10'12
desc. node	8862 Jul 17 01:27	25° \mathcal{B} 30'00		minimum elong	8863 Jun 26 01:01	10° \mathcal{B} 22'41	2°09'08
morning rise	8862 Jul 21 01:06	22° \mathcal{B} 50'19		min. Earth dist.	8863 Jun 29 03:20	7° \mathcal{B} 26'24	0.60759 AU
direct	8862 Jul 27 04:11	21° \mathcal{B} 10'57		morning rise	8863 Jul 02 18:14	4° \mathcal{B} 34'21	
morning max el	8862 Aug 10 13:34	28° \mathcal{B} 54'55	27°14'57	desc. node	8863 Jul 03 22:31	3° \mathcal{B} 52'12	
	8862 Aug 11 15:30	0° \mathcal{Q}		direct	8863 Jul 09 08:37	2° \mathcal{B} 24'32	
	8862 Sep 01 10:51	0° \mathbb{P}		morning max el	8863 Jul 23 15:50	10° \mathcal{B} 23'03	27°51'56
asc. node	8862 Sep 08 12:57	13° \mathbb{P} 45'58			8863 Aug 07 21:55	0° \mathcal{Q}	
morning set	8862 Sep 10 05:21	17° \mathbb{P} 16'41			8863 Aug 24 15:01	0° \mathbb{P}	

morning set	8863 Aug 25 09:46	1° \cap 36'36		asc. node	8864 Aug 12 06:52	23° Ω 45'34	
asc. node	8863 Aug 26 09:54	3° \cap 42'21		max. Earth dist.	8864 Aug 13 13:27	26° Ω 27'59	1.32376 AU
max. Earth dist.	8863 Aug 31 09:13	14° \cap 24'40	1.31751 AU		8864 Aug 15 04:54	0° \cap	
superior conj	8863 Sep 01 16:25	17° \cap 16'29	0°59'52	superior conj	8864 Aug 16 00:40	1° \cap 47'06	0°37'06
minimum elong	8863 Sep 01 14:15	17° \cap 04'28	0°59'25	minimum elong	8864 Aug 15 23:02	1° \cap 38'16	0°36'38
	8863 Sep 07 11:13	0° $\underline{\cap}$		evening rise	8864 Aug 22 22:01	16° \cap 45'46	
evening rise	8863 Sep 08 10:24	2° $\underline{\cap}$ 05'02			8864 Aug 29 09:50	0° $\underline{\cap}$	
	8863 Sep 23 08:42	0° \cap		evening max el	8864 Sep 15 16:57	25° $\underline{\cap}$ 16'45	23°41'17
desc. node	8863 Sep 29 21:09	9° \cap 04'34		desc. node	8864 Sep 15 18:18	25° $\underline{\cap}$ 19'59	
evening max el	8863 Oct 05 05:15	14° \cap 55'41	25°16'55		8864 Sep 21 21:14	0° \cap	
retrograde	8863 Oct 19 02:43	21° \cap 56'12		retrograde	8864 Sep 29 06:59	2° \cap 04'14	
evening set	8863 Oct 24 22:49	20° \cap 38'11		evening set	8864 Oct 03 18:17	1° \cap 20'35	
min. Earth dist.	8863 Oct 29 17:08	17° \cap 58'25	0.57406 AU		8864 Oct 07 00:42	30° \cap	
inferior conj	8863 Nov 01 15:14	16° \cap 00'07	-5°20'04	min. Earth dist.	8864 Oct 10 03:14	28° $\underline{\cap}$ 17'45	0.55764 AU
minimum elong	8863 Nov 01 20:40	15° \cap 50'55	5°19'10	inferior conj	8864 Oct 12 04:01	27° $\underline{\cap}$ 04'51	-5°37'33
morning rise	8863 Nov 09 20:51	11° \cap 46'53		minimum elong	8864 Oct 12 03:01	27° $\underline{\cap}$ 06'22	5°37'26
direct	8863 Nov 12 06:20	11° \cap 29'53		morning rise	8864 Oct 20 13:46	23° $\underline{\cap}$ 10'15	
morning max el	8863 Nov 21 05:37	15° \cap 47'24	19°02'34	direct	8864 Oct 23 09:31	22° $\underline{\cap}$ 50'23	
asc. node	8863 Nov 22 09:40	16° \cap 58'47		morning max el	8864 Nov 02 20:00	27° $\underline{\cap}$ 45'08	20°10'32
	8863 Dec 01 07:00	0° \propto			8864 Nov 05 00:00	0° \cap	
morning set	8863 Dec 07 21:30	12° \propto 34'11		asc. node	8864 Nov 08 06:40	4° \cap 09'09	
				morning set	8864 Nov 21 03:10	27° \cap 11'22	
superior conj	8863 Dec 16 05:23	28° \propto 55'57	1°14'08		8864 Nov 22 12:06	0° \propto	
minimum elong	8863 Dec 16 08:33	29° \propto 11'09	1°13'59				
	8863 Dec 16 18:46	0° \propto		superior conj	8864 Nov 28 18:36	12° \propto 49'12	1°30'31
max. Earth dist.	8863 Dec 23 02:08	11° \propto 40'56	1.38854 AU	minimum elong	8864 Nov 28 20:50	13° \propto 00'26	1°30'34
evening rise	8863 Dec 26 21:57	18° \propto 24'05		max. Earth dist.	8864 Dec 04 08:46	23° \propto 46'06	1.36730 AU
desc. node	8863 Dec 26 20:01	18° \propto 15'47			8864 Dec 07 17:02	0° \propto	
	8864 Jan 02 21:42	0° \approx		evening rise	8864 Dec 08 04:09	0° \propto 50'35	
	8864 Jan 23 20:42	0° \propto		desc. node	8864 Dec 12 17:02	8° \propto 51'07	
evening max el	8864 Jan 31 05:27	8° \propto 17'17	24°35'50		8864 Dec 26 01:48	0° \approx	
retrograde	8864 Feb 11 18:47	15° \propto 02'29		evening max el	8865 Jan 12 18:44	22° \approx 05'49	25°47'53
evening set	8864 Feb 17 06:56	12° \propto 44'45		retrograde	8865 Jan 25 05:32	29° \approx 13'02	
asc. node	8864 Feb 18 08:46	11° \propto 44'40		evening set	8865 Jan 31 06:12	26° \approx 44'48	
min. Earth dist.	8864 Feb 21 21:01	7° \propto 32'08	0.68000 AU	asc. node	8865 Feb 04 05:52	22° \approx 30'27	
inferior conj	8864 Feb 22 19:57	6° \propto 15'42	1°24'59	min. Earth dist.	8865 Feb 04 13:29	22° \approx 06'49	0.67198 AU
minimum elong	8864 Feb 22 18:08	6° \propto 21'44	1°24'26	inferior conj	8865 Feb 05 23:52	20° \approx 18'11	0°34'29
morning rise	8864 Feb 28 05:29	0° \propto 16'16		minimum elong	8865 Feb 05 23:00	20° \approx 20'54	0°34'19
	8864 Feb 28 14:58	30° \propto		morning rise	8865 Feb 11 16:19	14° \approx 27'25	
direct	8864 Mar 03 00:02	28° \approx 54'42		direct	8865 Feb 14 23:16	13° \approx 25'24	
	8864 Mar 06 14:22	0° \propto		morning max el	8865 Feb 21 18:58	17° \approx 09'05	18°57'18
morning max el	8864 Mar 10 11:48	3° \propto 06'46	19°53'57		8865 Mar 03 17:09	0° \propto	
desc. node	8864 Mar 23 19:52	20° \propto 28'29		greatest brilliancy	8865 Mar 07 22:15	6° \propto 20'29	-0.8m
	8864 Mar 30 05:12	0° \propto		desc. node	8865 Mar 10 16:46	10° \propto 35'59	
morning set	8864 Apr 06 03:27	10° \propto 34'30		morning set	8865 Mar 16 09:06	19° \propto 24'34	
max. Earth dist.	8864 Apr 17 02:51	27° \propto 44'35	1.44296 AU		8865 Mar 23 04:19	0° \propto	
	8864 Apr 18 12:48	0° \propto		max. Earth dist.	8865 Mar 30 19:08	11° \propto 54'40	1.45290 AU
superior conj	8864 Apr 22 08:02	6° \propto 07'36	-2°12'16	superior conj	8865 Apr 01 21:52	15° \propto 14'06	-2°02'40
minimum elong	8864 Apr 22 08:14	6° \propto 08'23	2°12'24	minimum elong	8865 Apr 01 14:58	14° \propto 46'58	2°02'20
evening rise	8864 May 05 15:27	28° \propto 20'58			8865 Apr 11 04:45	0° \propto	
	8864 May 06 14:39	0° \cap		evening rise	8865 Apr 16 21:13	9° \propto 11'40	
asc. node	8864 May 16 07:29	16° \cap 11'34			8865 Apr 29 21:28	0° \cap	
evening max el	8864 May 23 13:45	25° \cap 49'19	18°09'31	asc. node	8865 May 03 04:35	4° \cap 41'51	
retrograde	8864 May 29 22:55	29° \cap 10'22		evening max el	8865 May 07 02:20	9° \cap 19'34	18°31'21
evening set	8864 Jun 01 19:14	28° \cap 28'24		retrograde	8865 May 13 14:01	12° \cap 50'58	
inferior conj	8864 Jun 07 22:28	23° \cap 13'01	2°53'41	evening set	8865 May 16 17:50	11° \cap 54'56	
minimum elong	8864 Jun 08 00:51	23° \cap 06'34	2°53'01	inferior conj	8865 May 22 11:22	6° \cap 22'12	3°16'07
min. Earth dist.	8864 Jun 10 16:14	20° \cap 15'54	0.62965 AU	minimum elong	8865 May 22 12:31	6° \cap 18'45	3°15'48
morning rise	8864 Jun 14 04:51	17° \cap 02'48		min. Earth dist.	8865 May 24 14:17	3° \cap 50'22	0.64909 AU
desc. node	8864 Jun 19 19:35	14° \cap 33'58		morning rise	8865 May 28 06:23	0° \cap 05'14	
direct	8864 Jun 20 23:01	14° \cap 29'46			8865 May 28 08:54	30° \cap	
morning max el	8864 Jul 04 23:11	22° \cap 32'46	27°50'41	direct	8865 Jun 03 21:18	27° \propto 20'29	
	8864 Jul 11 12:48	0° \propto		desc. node	8865 Jun 06 16:36	27° \propto 46'19	
	8864 Jul 31 03:21	0° Ω			8865 Jun 11 04:50	0° \cap	
morning set	8864 Aug 08 07:48	15° Ω 34'54		morning max el	8865 Jun 17 09:12	5° \cap 16'21	27°14'41

	8865 Jul 06 04:51	0°☿		desc. node	8866 May 24 13:35	13°☿04'41	
morning set	8865 Jul 22 20:43	29°☿04'19		morning max el	8866 May 30 19:40	18°☿22'54	26°11'14
	8865 Jul 23 08:08	0°♌			8866 Jun 09 14:29	0°♌	
max. Earth dist.	8865 Jul 27 09:27	8°♌07'07	1.33493 AU		8866 Jun 29 05:05	0°☿	
asc. node	8865 Jul 30 03:49	13°♌51'33		morning set	8866 Jul 05 21:01	11°☿55'26	
				max. Earth dist.	8866 Jul 09 18:57	19°☿22'05	1.35084 AU
superior conj	8865 Jul 31 04:07	15°♌59'36	0°10'11				
minimum elong	8865 Jul 31 03:36	15°♌56'53	0°09'53	superior conj	8866 Jul 15 00:18	29°☿47'12	-0°20'04
behind sun begin	8865 Jul 30 23:12	15°♌33'35		minimum elong	8866 Jul 15 01:28	29°☿53'10	0°20'02
behind sun end	8865 Jul 31 08:01	16°♌20'13			8866 Jul 15 02:48	0°♌	
	8865 Aug 06 17:37	0°♍		asc. node	8866 Jul 17 00:48	3°♌56'27	
evening rise	8865 Aug 07 09:02	1°♍21'33		evening rise	8866 Jul 22 17:24	15°♌46'23	
	8865 Aug 23 11:39	0°♎			8866 Jul 29 23:01	0°♍	
evening max el	8865 Aug 28 06:25	5°♎29'47	22°02'23	evening max el	8866 Aug 10 06:00	16°♍09'19	20°35'05
desc. node	8865 Sep 02 15:27	9°♎42'01		desc. node	8866 Aug 20 12:35	21°♍40'45	
retrograde	8865 Sep 09 23:16	11°♎48'46		retrograde	8866 Aug 21 11:31	21°♍43'05	
evening set	8865 Sep 12 23:26	11°♎28'39		evening set	8866 Aug 23 13:12	21°♍32'32	
min. Earth dist.	8865 Sep 21 11:11	7°♎47'23	0.54812 AU	inferior conj	8866 Sep 01 17:39	17°♍35'31	-3°35'27
inferior conj	8865 Sep 22 00:53	7°♎28'11	-5°02'51	minimum elong	8866 Sep 01 08:30	17°♍48'42	3°32'34
minimum elong	8865 Sep 21 16:46	7°♎39'33	5°01'20	min. Earth dist.	8866 Sep 02 20:16	16°♍57'10	0.54764 AU
morning rise	8865 Sep 30 11:34	3°♎40'19		morning rise	8866 Sep 10 03:29	13°♍33'57	
direct	8865 Oct 03 21:45	3°♎14'23		direct	8866 Sep 14 06:14	12°♍57'41	
morning max el	8865 Oct 15 21:10	8°♎52'55	21°39'48	morning max el	8866 Sep 27 12:30	19°♍21'23	23°23'34
asc. node	8865 Oct 26 03:38	22°♎12'09			8866 Oct 06 08:51	0°♎	
	8865 Oct 30 13:27	0°♏		asc. node	8866 Oct 13 00:34	10°♎55'26	
morning set	8865 Nov 05 12:42	11°♏57'33		morning set	8866 Oct 21 00:09	26°♎47'15	
					8866 Oct 22 12:15	0°♏	
superior conj	8865 Nov 12 17:28	27°♏09'02	1°39'08				
minimum elong	8865 Nov 12 18:25	27°♏14'03	1°39'18	superior conj	8866 Oct 27 22:54	11°♏46'30	1°40'49
	8865 Nov 14 02:20	0°♐		minimum elong	8866 Oct 27 22:36	11°♏44'56	1°40'59
max. Earth dist.	8865 Nov 16 20:56	5°♐39'56	1.34854 AU	max. Earth dist.	8866 Oct 30 17:05	17°♏39'43	1.33363 AU
evening rise	8865 Nov 21 03:05	14°♐00'45		evening rise	8866 Nov 04 14:58	27°♏45'10	
desc. node	8865 Nov 29 14:05	29°♐14'50			8866 Nov 05 18:16	0°♐	
	8865 Nov 30 00:46	0°♑		desc. node	8866 Nov 16 11:09	19°♐21'09	
	8865 Dec 20 21:44	0°♒			8866 Nov 23 06:27	0°♑	
evening max el	8865 Dec 26 08:09	5°♒48'48	26°45'20	evening max el	8866 Dec 08 20:51	19°♑15'47	27°21'00
retrograde	8866 Jan 08 10:40	13°♒07'02		retrograde	8866 Dec 22 09:43	26°♑36'32	
evening set	8866 Jan 14 23:02	10°♒32'23		evening set	8866 Dec 29 07:12	24°♑01'44	
min. Earth dist.	8866 Jan 19 00:15	6°♒29'03	0.66025 AU	min. Earth dist.	8867 Jan 02 03:11	20°♑31'36	0.64499 AU
inferior conj	8866 Jan 20 22:20	4°♒13'52	-0°23'55	inferior conj	8867 Jan 04 12:55	17°♑57'15	-1°29'19
minimum elong	8866 Jan 20 23:00	4°♒11'54	0°23'25	minimum elong	8867 Jan 04 15:40	17°♑49'53	1°27'57
asc. node	8866 Jan 22 02:57	2°♒50'58		asc. node	8867 Jan 09 00:00	13°♑44'22	
	8866 Jan 24 22:34	30°♑3		morning rise	8867 Jan 11 01:46	12°♑31'31	
morning rise	8866 Jan 26 23:59	28°♑34'13		direct	8867 Jan 13 14:34	11°♑58'33	
direct	8866 Jan 29 20:56	27°♑48'35		morning max el	8867 Jan 20 01:05	15°♑20'33	17°53'40
	8866 Feb 03 22:36	0°♒			8867 Jan 30 12:28	0°♒	
morning max el	8866 Feb 05 08:16	1°♒16'00	18°17'01	morning set	8867 Feb 06 05:26	11°♒11'21	
morning set	8866 Feb 24 16:42	29°♒35'02		desc. node	8867 Feb 12 10:33	21°♒33'08	
	8866 Feb 24 22:56	0°♓			8867 Feb 17 14:35	0°♓	
desc. node	8866 Feb 25 13:39	0°♓59'04					
				superior conj	8867 Feb 19 18:27	3°♓28'51	-0°51'43
superior conj	8866 Mar 12 02:54	24°♓03'38	-1°33'25	minimum elong	8867 Feb 19 12:35	3°♓05'18	0°50'47
minimum elong	8866 Mar 11 17:22	23°♓26'14	1°32'24	max. Earth dist.	8867 Feb 24 10:18	10°♓53'36	1.45069 AU
max. Earth dist.	8866 Mar 13 14:46	26°♓24'06	1.45553 AU	evening rise	8867 Mar 07 18:13	28°♓30'29	
	8866 Mar 15 21:59	0°♔			8867 Mar 08 17:33	0°♔	
evening rise	8866 Mar 28 03:48	19°♔07'41		greatest brilliancy	8867 Mar 22 15:20	20°♔55'55	-0.6m
	8866 Apr 04 02:50	0°♕			8867 Mar 29 02:51	0°♕	
greatest brilliancy	8866 Apr 08 05:13	6°♕19'45	-0.8m	evening max el	8867 Apr 03 15:36	6°♕34'13	20°05'32
asc. node	8866 Apr 20 01:41	22°♕30'29		asc. node	8867 Apr 06 22:46	9°♕25'00	
evening max el	8866 Apr 20 11:30	22°♕55'48	19°10'35	retrograde	8867 Apr 11 08:33	11°♕01'51	
retrograde	8866 Apr 27 10:10	26°♕50'05		evening set	8867 Apr 15 04:49	9°♕35'58	
evening set	8866 Apr 30 21:49	25°♕39'17		inferior conj	8867 Apr 20 12:52	3°♕33'33	3°14'27
inferior conj	8866 May 06 09:09	19°♕50'48	3°21'57	minimum elong	8867 Apr 20 11:41	3°♕37'34	3°14'11
minimum elong	8866 May 06 09:01	19°♕51'12	3°21'46	min. Earth dist.	8867 Apr 21 09:59	2°♕21'59	0.67579 AU
min. Earth dist.	8866 May 07 20:44	17°♕56'13	0.66461 AU		8867 Apr 23 05:39	30°♕♑	
morning rise	8866 May 11 19:49	13°♕32'01		morning rise	8867 Apr 25 18:17	27°♕16'01	
direct	8866 May 18 02:13	10°♕47'24		direct	8867 May 01 12:56	24°♕41'21	

desc. node	8867 May 11 10:32	29° Υ 58'05		minimum elong	8868 Apr 03 18:15	17° Υ 33'45	2°55'25
	8867 May 11 11:22	0° B		min. Earth dist.	8868 Apr 04 03:59	16° Υ 59'56	0.68251 AU
morning max el	8867 May 13 05:11	1° B 41'27	24°49'37	morning rise	8868 Apr 08 23:17	11° Υ 12'50	
	8867 Jun 03 15:23	0° II		direct	8868 Apr 14 04:34	8° Υ 55'14	
morning set	8867 Jun 18 04:03	23° II 55'20		morning max el	8868 Apr 24 14:38	15° Υ 07'20	23°20'08
	8867 Jun 21 13:05	0° E		desc. node	8868 Apr 27 07:27	18° Υ 01'12	
max. Earth dist.	8867 Jun 21 18:46	0° E 25'59	1.37084 AU		8868 May 06 18:07	0° B	
					8868 May 26 14:25	0° II	
superior conj	8867 Jun 28 10:04	13° E 01'04	-0°52'11	morning set	8868 May 29 12:30	4° II 50'45	
minimum elong	8867 Jun 28 13:19	13° E 16'58	0°51'50	max. Earth dist.	8868 Jun 02 14:39	11° II 50'08	1.39328 AU
asc. node	8867 Jul 03 21:46	23° E 55'40					
evening rise	8867 Jul 06 20:44	29° E 52'34		superior conj	8868 Jun 10 05:45	25° II 33'09	-1°23'47
	8867 Jul 06 22:13	0° Ω		minimum elong	8868 Jun 10 10:59	25° II 57'27	1°23'17
evening max el	8867 Jul 23 18:59	27° Ω 32'11	19°26'52		8868 Jun 12 14:45	0° E	
	8867 Jul 26 17:21	0° M		evening rise	8868 Jun 19 16:12	13° E 33'09	
retrograde	8867 Aug 02 07:40	2° M 14'58		asc. node	8868 Jun 19 18:47	13° E 45'36	
evening set	8867 Aug 04 03:59	2° M 05'07			8868 Jun 28 15:29	0° Ω	
desc. node	8867 Aug 07 09:42	1° M 04'38		evening max el	8868 Jul 05 19:40	9° Ω 38'54	18°39'30
	8867 Aug 09 13:27	30° R Ω		retrograde	8868 Jul 13 20:47	13° Ω 38'58	
inferior conj	8867 Aug 12 20:42	27° Ω 58'41	-1°40'42	evening set	8868 Jul 15 21:47	13° Ω 24'24	
minimum elong	8867 Aug 12 16:09	28° Ω 06'01	1°39'06	inferior conj	8868 Jul 23 19:28	8° Ω 59'55	0°08'33
min. Earth dist.	8867 Aug 15 08:38	26° Ω 22'15	0.55657 AU	minimum elong	8868 Jul 23 19:47	8° Ω 59'19	0°08'14
morning rise	8867 Aug 21 01:45	23° Ω 25'04		transit middle	8868 Jul 23 19:47	8° Ω 59'19	0°08'14
direct	8867 Aug 25 23:49	22° Ω 30'24		transit begin	8868 Jul 23 16:39	9° Ω 05'12	
morning max el	8867 Sep 09 00:44	29° Ω 33'53	25°08'20	transit end	8868 Jul 23 22:55	8° Ω 53'24	
	8867 Sep 09 11:35	0° M		desc. node	8868 Jul 24 06:47	8° Ω 38'32	
asc. node	8867 Sep 29 21:30	0° E 08'21		min. Earth dist.	8868 Jul 27 01:35	6° Ω 34'01	0.57330 AU
	8867 Sep 29 19:47	0° E		morning rise	8868 Jul 31 14:15	3° Ω 49'11	
morning set	8867 Oct 05 11:48	11° E 34'47		direct	8868 Aug 06 08:07	2° Ω 27'15	
				morning max el	8868 Aug 20 16:14	9° Ω 59'34	26°37'01
superior conj	8867 Oct 12 08:23	26° E 33'30	1°36'20		8868 Sep 04 23:20	0° M	
minimum elong	8867 Oct 12 07:05	26° E 26'16	1°36'21	asc. node	8868 Sep 15 18:27	19° M 42'57	
	8867 Oct 13 22:06	0° M		morning set	8868 Sep 18 22:00	26° M 15'24	
max. Earth dist.	8867 Oct 13 20:38	29° E 52'01	1.32314 AU		8868 Sep 20 15:51	0° E	
evening rise	8867 Oct 19 12:26	11° M 54'39					
	8867 Oct 28 23:07	0° A		superior conj	8868 Sep 25 19:54	11° E 23'24	1°26'14
desc. node	8867 Nov 03 08:15	9° A 02'18		minimum elong	8868 Sep 25 17:54	11° E 12'20	1°26'03
	8867 Nov 19 01:04	0° B		max. Earth dist.	8868 Sep 26 05:09	12° E 14'47	1.31728 AU
evening max el	8867 Nov 21 07:10	2° B 14'56	27°28'29	evening rise	8868 Oct 02 16:42	26° E 21'28	
retrograde	8867 Dec 05 02:04	9° B 32'11			8868 Oct 04 10:38	0° M	
evening set	8867 Dec 12 03:54	7° B 06'07		desc. node	8868 Oct 20 05:22	28° M 07'59	
min. Earth dist.	8867 Dec 15 20:34	4° B 04'53	0.62665 AU		8868 Oct 21 11:45	0° A	
inferior conj	8867 Dec 18 16:51	1° B 21'32	-2°39'39	evening max el	8868 Nov 02 12:45	14° A 34'03	27°03'03
minimum elong	8867 Dec 18 21:58	1° B 09'14	2°37'28	retrograde	8868 Nov 16 10:27	21° A 44'31	
	8867 Dec 20 03:28	30° R A		evening set	8868 Nov 23 09:20	19° A 37'43	
morning rise	8867 Dec 25 18:14	26° A 12'41		min. Earth dist.	8868 Nov 27 03:25	16° A 56'38	0.60625 AU
asc. node	8867 Dec 26 21:03	25° A 54'59		inferior conj	8868 Nov 30 06:47	14° A 18'02	-3°50'32
direct	8867 Dec 28 01:15	25° A 48'34		minimum elong	8868 Nov 30 13:53	14° A 03'03	3°48'05
morning max el	8868 Jan 03 18:22	29° A 14'41	17°47'53	morning rise	8868 Dec 07 20:51	9° A 29'01	
	8868 Jan 04 11:58	0° B		direct	8868 Dec 10 01:19	9° A 10'09	
morning set	8868 Jan 19 18:05	23° B 56'30		asc. node	8868 Dec 12 18:06	9° A 40'11	
	8868 Jan 23 04:44	0° \approx		morning max el	8868 Dec 17 08:42	12° A 49'06	18°00'41
desc. node	8868 Jan 30 07:29	12° \approx 14'16			8868 Dec 28 21:50	0° B	
				morning set	8869 Jan 02 00:07	7° B 30'23	
superior conj	8868 Jan 31 09:15	14° \approx 02'30	-0°07'56				
minimum elong	8868 Jan 31 08:28	13° \approx 59'15	0°07'38	superior conj	8869 Jan 12 01:13	25° B 47'35	0°30'39
behind sun begin	8868 Jan 31 00:25	13° \approx 25'30		minimum elong	8869 Jan 12 03:37	25° B 58'07	0°30'30
behind sun end	8868 Jan 31 16:31	14° \approx 32'57			8869 Jan 14 10:57	0° \approx	
max. Earth dist.	8868 Feb 07 03:03	25° \approx 06'26	1.43898 AU	desc. node	8869 Jan 16 04:26	2° \approx 58'23	
	8868 Feb 10 04:37	0° H		max. Earth dist.	8869 Jan 19 15:35	8° \approx 48'44	1.42184 AU
evening rise	8868 Feb 15 06:30	7° H 56'43		evening rise	8869 Jan 25 07:09	18° \approx 00'24	
	8868 Feb 29 23:49	0° Υ			8869 Feb 02 00:28	0° H	
evening max el	8868 Mar 16 14:15	20° Υ 14'39	21°13'31		8869 Feb 23 17:25	0° Υ	
asc. node	8868 Mar 23 19:52	25° Υ 11'20		evening max el	8869 Feb 27 08:05	3° Υ 56'57	22°30'25
retrograde	8868 Mar 25 06:58	25° Υ 22'09		retrograde	8869 Mar 09 03:40	9° Υ 45'50	
evening set	8868 Mar 29 13:00	23° Υ 41'07		asc. node	8869 Mar 10 17:01	9° Υ 33'43	
inferior conj	8868 Apr 03 20:09	17° Υ 27'08	2°55'51	evening set	8869 Mar 13 20:41	7° Υ 49'44	

inferior conj	8869 Mar 19 04:55	1°♿27'04	2°27'32	evening set	8870 Feb 26 02:22	21°♿58'27	
minimum elong	8869 Mar 19 02:41	1°♿34'49	2°26'57	min. Earth dist.	8870 Mar 02 20:57	16°♿26'10	0.68303 AU
min. Earth dist.	8869 Mar 19 00:23	1°♿42'49	0.68486 AU	inferior conj	8870 Mar 03 13:16	15°♿30'39	1°50'18
	8869 Mar 20 06:08	30°♿		minimum elong	8870 Mar 03 11:10	15°♿37'49	1°49'41
morning rise	8869 Mar 24 08:31	25°♿17'34		morning rise	8870 Mar 08 19:57	9°♿27'16	
direct	8869 Mar 28 23:58	23°♿21'07		direct	8870 Mar 12 21:53	7°♿53'14	
morning max el	8869 Apr 07 03:05	28°♿40'58	21°52'17	morning max el	8870 Mar 20 22:01	12°♿26'26	20°33'22
	8869 Apr 08 09:32	0°♿		desc. node	8870 Apr 01 01:17	26°♿23'21	
desc. node	8869 Apr 14 04:22	6°♿54'06			8870 Apr 03 14:03	0°♿	
	8869 Apr 30 10:19	0°♿		morning set	8870 Apr 18 23:14	23°♿07'09	
morning set	8869 May 09 17:56	14°♿30'42			8870 Apr 23 08:44	0°♿	
max. Earth dist.	8869 May 15 14:05	24°♿02'52	1.41543 AU	max. Earth dist.	8870 Apr 27 20:55	7°♿11'33	1.43444 AU
	8869 May 19 02:50	0°♿					
				superior conj	8870 May 04 08:41	17°♿49'54	-2°08'54
superior conj	8869 May 23 06:46	7°♿12'38	-1°51'09	minimum elong	8870 May 04 12:11	18°♿04'33	2°08'57
minimum elong	8869 May 23 12:43	7°♿38'46	1°50'49		8870 May 11 12:32	0°♿	
evening rise	8869 Jun 03 00:08	26°♿38'50		evening rise	8870 May 16 16:05	8°♿59'20	
	8869 Jun 04 19:47	0°♿		asc. node	8870 May 24 12:54	22°♿37'43	
asc. node	8869 Jun 06 15:50	3°♿21'28			8870 May 29 05:55	0°♿	
evening max el	8869 Jun 19 04:15	22°♿20'56	18°12'34	evening max el	8870 Jun 02 16:55	5°♿28'19	18°05'10
retrograde	8869 Jun 26 04:56	25°♿53'40		retrograde	8870 Jun 09 04:46	8°♿49'38	
evening set	8869 Jun 28 13:27	25°♿30'27		evening set	8870 Jun 11 20:51	8°♿15'01	
inferior conj	8869 Jul 05 15:54	20°♿45'08	1°33'45	inferior conj	8870 Jun 18 07:21	3°♿09'51	2°31'33
minimum elong	8869 Jul 05 18:36	20°♿39'13	1°32'39	minimum elong	8870 Jun 18 10:13	3°♿02'36	2°30'38
min. Earth dist.	8869 Jul 09 00:44	17°♿48'50	0.59463 AU		8870 Jun 21 11:03	30°♿	
desc. node	8869 Jul 11 03:51	16°♿09'35		min. Earth dist.	8870 Jun 21 08:15	0°♿06'43	0.61718 AU
morning rise	8869 Jul 12 20:41	15°♿03'19		morning rise	8870 Jun 24 21:27	27°♿07'01	
direct	8869 Jul 19 05:42	13°♿10'25		desc. node	8870 Jun 28 00:55	25°♿25'40	
morning max el	8869 Aug 02 14:19	21°♿01'05	27°35'25	direct	8870 Jul 01 14:17	24°♿46'28	
	8869 Aug 10 09:13	0°♿			8870 Jul 12 18:36	0°♿	
	8869 Aug 28 21:13	0°♿		morning max el	8870 Jul 15 19:02	2°♿47'23	27°56'09
asc. node	8869 Sep 02 15:25	9°♿33'02			8870 Aug 04 20:31	0°♿	
morning set	8869 Sep 03 05:05	10°♿44'25		morning set	8870 Aug 18 07:03	24°♿55'43	
max. Earth dist.	8869 Sep 09 15:13	24°♿39'41	1.31606 AU	asc. node	8870 Aug 20 12:21	29°♿32'45	
					8870 Aug 20 17:31	0°♿	
superior conj	8869 Sep 10 07:35	26°♿10'29	1°10'56	max. Earth dist.	8870 Aug 23 22:53	6°♿55'01	1.31957 AU
minimum elong	8869 Sep 10 05:20	25°♿58'00	1°10'33				
	8869 Sep 12 00:56	0°♿		superior conj	8870 Aug 25 17:35	10°♿48'26	0°50'46
evening rise	8869 Sep 17 01:26	10°♿58'55		minimum elong	8870 Aug 25 15:34	10°♿37'24	0°50'17
	8869 Sep 26 16:20	0°♿		evening rise	8870 Sep 01 12:31	25°♿40'00	
desc. node	8869 Oct 07 02:29	16°♿24'16			8870 Sep 03 13:37	0°♿	
evening max el	8869 Oct 15 11:03	26°♿03'45	26°04'03		8870 Sep 21 01:56	0°♿	
	8869 Oct 20 07:54	0°♿		desc. node	8870 Sep 23 23:38	3°♿30'54	
retrograde	8869 Oct 29 09:06	3°♿07'20		evening max el	8870 Sep 27 01:19	6°♿43'38	24°37'45
evening set	8869 Nov 04 18:51	1°♿29'36		retrograde	8870 Oct 10 20:24	13°♿39'41	
	8869 Nov 07 09:23	30°♿		evening set	8870 Oct 16 04:04	12°♿36'38	
min. Earth dist.	8869 Nov 08 23:57	28°♿54'47	0.58537 AU	min. Earth dist.	8870 Oct 21 12:21	9°♿49'31	0.56643 AU
inferior conj	8869 Nov 12 03:15	26°♿37'11	-4°53'12	inferior conj	8870 Oct 24 03:28	8°♿09'00	-5°32'51
minimum elong	8869 Nov 12 10:22	26°♿24'06	4°51'30	minimum elong	8870 Oct 24 06:39	8°♿03'55	5°32'30
morning rise	8869 Nov 20 04:14	22°♿10'37		morning rise	8870 Nov 01 11:26	4°♿04'52	
direct	8869 Nov 22 10:33	21°♿53'42		direct	8870 Nov 04 00:51	3°♿46'56	
asc. node	8869 Nov 29 15:07	24°♿56'34		morning max el	8870 Nov 13 14:06	8°♿18'41	19°28'47
morning max el	8869 Nov 30 16:31	25°♿54'13	18°33'43	asc. node	8870 Nov 16 12:08	11°♿29'26	
	8869 Dec 04 05:40	0°♿			8870 Nov 27 18:31	0°♿	
morning set	8869 Dec 16 18:17	21°♿37'56		morning set	8870 Nov 30 20:34	6°♿06'27	
	8869 Dec 21 02:13	0°♿					
				superior conj	8870 Dec 08 20:38	22°♿06'47	1°22'05
superior conj	8869 Dec 25 14:45	8°♿34'09	1°00'48	minimum elong	8870 Dec 08 23:29	22°♿20'43	1°22'01
minimum elong	8869 Dec 25 18:05	8°♿49'39	1°00'35		8870 Dec 12 23:07	0°♿	
max. Earth dist.	8870 Jan 01 23:54	21°♿51'58	1.40118 AU	max. Earth dist.	8870 Dec 15 05:48	4°♿14'16	1.37933 AU
desc. node	8870 Jan 03 01:26	23°♿42'23		evening rise	8870 Dec 18 23:08	10°♿55'55	
evening rise	8870 Jan 06 04:22	28°♿59'59		desc. node	8870 Dec 20 22:27	14°♿21'55	
	8870 Jan 06 18:47	0°♿			8870 Dec 30 12:15	0°♿	
	8870 Jan 26 12:21	0°♿			8871 Jan 22 00:23	0°♿	
evening max el	8870 Feb 09 22:45	17°♿42'29	23°50'35	evening max el	8871 Jan 23 11:58	1°♿30'15	25°07'40
retrograde	8870 Feb 20 21:16	24°♿08'52		retrograde	8871 Feb 04 10:50	8°♿26'02	
asc. node	8870 Feb 25 14:08	22°♿23'12		evening set	8871 Feb 10 04:29	6°♿03'09	

asc. node	8871 Feb 12 11:14	3° H 46'12		min. Earth dist.	8872 Jan 29 05:46	15° \approx 35'41	0.66740 AU
min. Earth dist.	8871 Feb 14 15:28	1° H 05'33	0.67714 AU	asc. node	8872 Jan 30 08:20	14° \approx 14'19	
	8871 Feb 15 11:34	30° \approx		inferior conj	8872 Jan 30 21:12	13° \approx 34'38	0°10'40
inferior conj	8871 Feb 15 19:21	29° \approx 34'32	1°04'35	minimum elong	8872 Jan 30 20:55	13° \approx 35'31	0°10'44
minimum elong	8871 Feb 15 17:52	29° \approx 39'22	1°04'09	transit middle	8872 Jan 30 20:55	13° \approx 35'31	0°10'44
morning rise	8871 Feb 21 07:35	23° \approx 38'50		transit begin	8872 Jan 30 18:46	13° \approx 42'06	
direct	8871 Feb 24 21:00	22° \approx 26'02		transit end	8872 Jan 30 23:03	13° \approx 28'56	
morning max el	8871 Mar 04 00:58	26° \approx 24'13	19°27'54	morning rise	8872 Feb 05 17:19	7° \approx 48'26	
	8871 Mar 07 06:43	0° H		direct	8872 Feb 08 19:41	6° \approx 54'02	
greatest brilliancy	8871 Mar 16 19:26	13° H 09'54	-0.7m	morning max el	8872 Feb 15 11:04	10° \approx 29'39	18°38'07
desc. node	8871 Mar 18 22:12	16° H 19'10			8872 Feb 29 14:26	0° H	
	8871 Mar 27 21:40	0° Y		desc. node	8872 Mar 04 19:06	6° H 34'04	
morning set	8871 Mar 28 21:39	1° Y 32'21		morning set	8872 Mar 07 12:59	10° H 53'09	
max. Earth dist.	8871 Apr 10 10:24	21° Y 04'14	1.44805 AU		8872 Mar 19 17:23	0° Y	
				max. Earth dist.	8872 Mar 23 04:02	5° Y 23'18	1.45490 AU
superior conj	8871 Apr 14 10:08	27° Y 24'32	-2°10'43	superior conj	8872 Mar 23 18:05	6° Y 18'20	-1°52'24
minimum elong	8871 Apr 14 07:15	27° Y 13'02	2°10'45	minimum elong	8872 Mar 23 09:11	5° Y 43'30	1°51'44
	8871 Apr 16 00:55	0° B			8872 Apr 07 18:10	0° B	
evening rise	8871 Apr 28 11:23	20° B 24'56		evening rise	8872 Apr 08 07:00	0° B 51'11	
	8871 May 04 05:07	0° II		greatest brilliancy	8872 Apr 16 07:29	13° B 38'47	-0.9m
asc. node	8871 May 11 09:59	11° II 27'31		asc. node	8872 Apr 27 07:03	29° B 41'41	
evening max el	8871 May 17 06:18	18° II 52'25	18°16'34		8872 Apr 27 13:05	0° II	
retrograde	8871 May 23 15:36	22° II 16'38		evening max el	8872 Apr 29 17:38	2° II 25'49	18°45'58
evening set	8871 May 26 14:59	21° II 28'54		retrograde	8872 May 06 09:13	6° II 05'48	
inferior conj	8871 Jun 01 13:37	16° II 05'45	3°05'30	evening set	8872 May 09 16:10	5° II 03'46	
minimum elong	8871 Jun 01 15:31	16° II 00'22	3°04'59		8872 May 14 19:08	30° K B	
min. Earth dist.	8871 Jun 04 01:12	13° II 17'28	0.63828 AU	inferior conj	8872 May 15 06:42	29° B 24'16	3°20'23
morning rise	8871 Jun 07 14:47	9° II 51'35		minimum elong	8872 May 15 07:18	29° B 22'25	3°20'09
direct	8871 Jun 14 08:07	7° II 12'15		min. Earth dist.	8872 May 17 03:08	27° B 06'53	0.65621 AU
desc. node	8871 Jun 14 21:56	7° II 13'20		morning rise	8872 May 20 21:45	23° B 05'48	
morning max el	8871 Jun 28 04:09	15° II 14'15	27°39'20	direct	8872 May 27 09:33	20° B 19'29	
	8871 Jul 10 05:22	0° B		desc. node	8872 May 31 18:56	21° B 22'59	
	8871 Jul 28 12:58	0° Q		morning max el	8872 Jun 09 14:38	28° B 09'23	26°50'25
morning set	8871 Aug 02 01:33	8° Q 43'05			8872 Jun 11 08:47	0° II	
max. Earth dist.	8871 Aug 07 00:09	18° Q 49'40	1.32790 AU		8872 Jul 02 23:33	0° B	
asc. node	8871 Aug 07 09:19	19° Q 37'53		morning set	8872 Jul 15 09:33	21° B 57'34	
				max. Earth dist.	8872 Jul 19 15:30	0° Q 16'21	1.34111 AU
superior conj	8871 Aug 10 00:01	25° Q 12'01	0°26'08		8872 Jul 19 12:14	0° Q	
minimum elong	8871 Aug 09 22:48	25° Q 05'25	0°25'44	superior conj	8872 Jul 24 00:40	9° Q 14'39	-0°02'21
	8871 Aug 12 05:20	0° H		minimum elong	8872 Jul 24 00:48	9° Q 15'21	0°02'31
evening rise	8871 Aug 17 00:05	10° H 19'18		behind sun begin	8872 Jul 23 19:08	8° Q 45'48	
	8871 Aug 27 01:34	0° Q		behind sun end	8872 Jul 24 06:28	9° Q 44'56	
evening max el	8871 Sep 08 12:21	16° Q 55'41	22°58'32	asc. node	8872 Jul 24 06:18	9° Q 44'02	
desc. node	8871 Sep 10 20:45	19° Q 01'48		evening rise	8872 Jul 31 10:11	24° Q 50'45	
retrograde	8871 Sep 21 19:32	23° Q 34'10			8872 Aug 02 21:58	0° H	
evening set	8871 Sep 25 15:12	23° Q 02'14		evening max el	8872 Aug 20 05:18	27° H 16'32	21°23'16
min. Earth dist.	8871 Oct 02 20:59	19° Q 44'37	0.55256 AU		8872 Aug 23 09:14	0° Q	
inferior conj	8871 Oct 04 08:23	18° Q 53'36	-5°29'52	desc. node	8872 Aug 27 17:51	2° Q 25'54	
minimum elong	8871 Oct 04 04:01	18° Q 59'54	5°29'24	retrograde	8872 Sep 01 08:53	3° Q 17'58	
morning rise	8871 Oct 12 18:50	15° Q 04'10		evening set	8872 Sep 03 20:59	3° Q 03'33	
direct	8871 Oct 15 20:08	14° Q 42'19			8872 Sep 11 11:12	30° K H	
morning max el	8871 Oct 26 22:50	19° Q 54'59	20°46'15	inferior conj	8872 Sep 13 01:44	29° H 06'25	-4°31'15
asc. node	8871 Nov 03 09:06	29° Q 03'31		minimum elong	8872 Sep 12 16:13	29° H 19'44	4°28'53
	8871 Nov 03 23:50	0° H		min. Earth dist.	8872 Sep 13 05:28	29° H 01'09	0.54669 AU
morning set	8871 Nov 15 04:04	20° H 47'41		morning rise	8872 Sep 21 12:14	25° H 14'55	
	8871 Nov 19 14:15	0° Z		direct	8872 Sep 25 05:00	24° H 45'19	
superior conj	8871 Nov 22 14:21	6° Z 12'25	1°35'04		8872 Oct 06 23:39	0° Q	
minimum elong	8871 Nov 22 16:03	6° Z 21'10	1°35'11	morning max el	8872 Oct 07 19:10	0° Q 44'10	22°22'52
max. Earth dist.	8871 Nov 27 13:52	16° Z 10'04	1.35885 AU	asc. node	8872 Oct 20 06:03	17° Q 25'08	
evening rise	8871 Dec 01 12:50	23° Z 41'39			8872 Oct 26 21:48	0° H	
	8871 Dec 05 00:15	0° Z		morning set	8872 Oct 29 14:37	5° H 35'50	
desc. node	8871 Dec 07 19:29	4° Z 52'45					
	8871 Dec 24 04:12	0° \approx		superior conj	8872 Nov 05 16:19	20° H 40'54	1°40'38
evening max el	8872 Jan 06 01:03	15° \approx 16'32	26°14'31	minimum elong	8872 Nov 05 16:44	20° H 43'05	1°40'49
retrograde	8872 Jan 18 19:27	22° \approx 30'37		max. Earth dist.	8872 Nov 09 04:59	28° H 03'34	1.34161 AU
evening set	8872 Jan 25 01:16	19° \approx 58'46					

	8872 Nov 10 03:45	0°♌		max. Earth dist.	8873 Oct 23 04:37	10°♍09'06	1.32860 AU
evening rise	8872 Nov 13 17:43	7°♌07'54		evening rise	8873 Oct 28 10:03	21°♍04'13	
desc. node	8872 Nov 23 16:31	25°♌10'02			8873 Nov 01 23:35	0°♌	
	8872 Nov 26 15:01	0°♍		desc. node	8873 Nov 10 13:34	15°♌06'46	
evening max el	8872 Dec 18 14:22	28°♍54'46	27°03'43		8873 Nov 20 13:32	0°♍	
	8872 Dec 19 18:22	0°♎		evening max el	8873 Dec 01 02:33	12°♍12'23	27°28'09
retrograde	8872 Dec 31 22:19	6°♎15'34		retrograde	8873 Dec 14 18:25	19°♍31'32	
evening set	8873 Jan 07 14:45	3°♎40'07		evening set	8873 Dec 21 18:24	16°♍59'39	
	8873 Jan 11 10:20	30°♎♌		min. Earth dist.	8873 Dec 25 12:47	13°♍42'18	0.63748 AU
min. Earth dist.	8873 Jan 11 13:37	29°♍50'57	0.65406 AU	inferior conj	8873 Dec 28 03:06	11°♍03'02	-1°58'44
inferior conj	8873 Jan 13 16:39	27°♍26'33	-0°50'51	minimum elong	8873 Dec 28 06:50	10°♍53'26	1°56'59
minimum elong	8873 Jan 13 18:08	27°♍22'20	0°50'01	asc. node	8874 Jan 03 02:27	6°♍04'47	
asc. node	8873 Jan 16 05:23	24°♍42'31		morning rise	8874 Jan 03 21:06	5°♍43'47	
morning rise	8873 Jan 19 22:49	21°♍52'16		direct	8874 Jan 06 07:12	5°♍14'55	
direct	8873 Jan 22 15:59	21°♍12'33		morning max el	8874 Jan 12 19:32	8°♍37'36	17°49'02
morning max el	8873 Jan 29 02:12	24°♍36'51	18°04'59		8874 Jan 27 03:18	0°♎	
	8873 Feb 02 13:55	0°♎		morning set	8874 Jan 29 09:08	3°♎50'41	
morning set	8873 Feb 16 09:24	21°♎42'15		desc. node	8874 Feb 06 12:56	17°♎40'26	
desc. node	8873 Feb 19 16:01	27°♎02'51					
	8873 Feb 21 11:41	0°♏		superior conj	8874 Feb 11 01:59	25°♎10'03	-0°32'52
				minimum elong	8874 Feb 10 22:23	24°♎55'21	0°32'11
superior conj	8873 Mar 03 01:32	15°♏18'23	-1°16'40		8874 Feb 14 01:36	0°♏	
minimum elong	8873 Mar 02 17:00	14°♏44'42	1°15'34	max. Earth dist.	8874 Feb 16 18:39	4°♏19'57	1.44653 AU
max. Earth dist.	8873 Mar 05 23:40	19°♏54'15	1.45436 AU	evening rise	8874 Feb 26 17:00	19°♏49'48	
	8873 Mar 12 10:54	0°♐			8874 Mar 05 09:33	0°♐	
evening rise	8873 Mar 19 05:25	10°♐29'57		evening max el	8874 Mar 27 02:49	29°♐44'22	20°33'04
	8873 Mar 31 22:55	0°♑			8874 Mar 27 09:02	0°♑	
greatest brilliancy	8873 Apr 01 06:07	0°♑26'55	-0.7m	asc. node	8874 Apr 01 01:14	3°♑37'35	
evening max el	8873 Apr 13 00:55	16°♑04'18	19°32'08	retrograde	8874 Apr 04 05:05	4°♑27'50	
asc. node	8873 Apr 14 04:08	17°♑09'38		evening set	8874 Apr 08 05:28	2°♑55'22	
retrograde	8873 Apr 20 06:31	20°♑11'23			8874 Apr 11 02:35	30°♑♐	
evening set	8873 Apr 23 21:42	18°♑54'18		inferior conj	8874 Apr 13 12:52	26°♐47'51	3°07'47
inferior conj	8873 Apr 29 07:21	12°♑59'55	3°20'12	minimum elong	8874 Apr 13 11:21	26°♐53'07	3°07'28
minimum elong	8873 Apr 29 06:45	13°♑01'56	3°20'00	min. Earth dist.	8874 Apr 14 04:11	25°♐55'20	0.67926 AU
min. Earth dist.	8873 Apr 30 12:45	11°♑23'00	0.67002 AU	morning rise	8874 Apr 18 17:01	20°♐31'46	
morning rise	8873 May 04 15:26	6°♑41'27		direct	8874 Apr 24 06:11	18°♐03'44	
direct	8873 May 10 17:18	3°♑59'42		morning max el	8874 May 05 09:43	24°♐43'43	24°11'56
desc. node	8873 May 18 15:55	7°♑25'38		desc. node	8874 May 05 12:53	24°♐51'44	
morning max el	8873 May 23 00:32	11°♑21'42	25°37'56		8874 May 10 03:35	0°♒	
	8873 Jun 06 21:26	0°♒			8874 May 31 08:26	0°♒	
	8873 Jun 25 15:20	0°♓		morning set	8874 Jun 10 01:17	16°♒03'17	
morning set	8873 Jun 28 03:07	4°♓28'34		max. Earth dist.	8874 Jun 13 17:47	22°♒33'05	1.38031 AU
max. Earth dist.	8873 Jul 01 20:08	11°♓22'20	1.35898 AU		8874 Jun 17 19:35	0°♓	
superior conj	8873 Jul 07 16:51	22°♓49'17	-0°33'35	superior conj	8874 Jun 20 21:14	5°♓47'39	-1°05'49
minimum elong	8873 Jul 07 18:52	22°♓59'25	0°33'25	minimum elong	8874 Jun 21 01:23	6°♓07'32	1°05'22
asc. node	8873 Jul 11 03:14	29°♓46'59		asc. node	8874 Jun 28 00:14	19°♓43'25	
	8873 Jul 11 05:47	0°♈		evening rise	8874 Jun 29 17:09	23°♓05'49	
evening rise	8873 Jul 15 16:42	9°♈08'28			8874 Jul 03 06:06	0°♈	
	8873 Jul 26 23:17	0°♉		evening max el	8874 Jul 16 05:05	19°♈57'06	19°04'05
evening max el	8873 Aug 02 10:40	8°♉14'05	20°03'31	retrograde	8874 Jul 25 01:19	24°♈20'06	
retrograde	8873 Aug 12 22:26	13°♉25'13		evening set	8874 Jul 26 23:03	24°♈08'43	
evening set	8873 Aug 14 20:13	13°♉15'42		desc. node	8874 Aug 01 12:05	21°♈46'32	
desc. node	8873 Aug 14 14:58	13°♉17'44		inferior conj	8874 Aug 04 08:01	19°♈54'52	-0°52'09
inferior conj	8873 Aug 23 21:11	9°♉16'32	-2°47'55	minimum elong	8874 Aug 04 05:46	19°♈58'44	0°51'26
minimum elong	8873 Aug 23 13:37	9°♉27'52	2°45'19	min. Earth dist.	8874 Aug 07 05:33	17°♈56'02	0.56294 AU
min. Earth dist.	8873 Aug 25 15:42	8°♉12'56	0.55038 AU	morning rise	8874 Aug 12 09:24	15°♈05'41	
morning rise	8873 Sep 01 05:38	5°♉03'04		direct	8874 Aug 17 16:09	14°♈00'32	
direct	8873 Sep 05 16:42	4°♉19'49		morning max el	8874 Aug 31 21:02	21°♈16'42	25°49'03
morning max el	8873 Sep 19 08:02	11°♉01'30	24°09'02		8874 Sep 08 11:30	0°♉	
	8873 Oct 03 13:35	0°♊		asc. node	8874 Sep 23 23:57	25°♉46'00	
asc. node	8873 Oct 07 03:00	6°♊22'20			8874 Sep 26 02:15	0°♊	
morning set	8873 Oct 14 02:19	20°♊25'05		morning set	8874 Sep 28 13:36	5°♊10'57	
	8873 Oct 18 12:31	0°♋					
				superior conj	8874 Oct 05 10:19	20°♊12'27	1°32'43
superior conj	8873 Oct 20 23:43	5°♋23'05	1°39'38	minimum elong	8874 Oct 05 08:41	20°♊03'20	1°32'39
minimum elong	8873 Oct 20 22:57	5°♋18'57	1°39'45	max. Earth dist.	8874 Oct 06 10:57	22°♊28'20	1.32012 AU

	8874 Oct 09 21:51	0°♍		superior conj	8875 Sep 19 22:08	5°♊01'56	1°20'22
evening rise	8874 Oct 12 10:46	5°♍22'26		minimum elong	8875 Sep 19 19:59	4°♊49'57	1°20'05
	8874 Oct 25 14:16	0°♊		max. Earth dist.	8875 Sep 19 20:38	4°♊53'33	1.31621 AU
desc. node	8874 Oct 28 10:41	4°♊34'36		evening rise	8875 Sep 26 17:12	19°♊54'27	
evening max el	8874 Nov 13 11:14	24°♊56'06	27°21'49		8875 Oct 01 15:25	0°♍	
	8874 Nov 20 01:42	0°♊		desc. node	8875 Oct 15 07:48	23°♍21'22	
retrograde	8874 Nov 27 07:12	2°♊09'56			8875 Oct 20 06:40	0°♊	
evening set	8874 Dec 04 09:04	29°♊50'42		evening max el	8875 Oct 26 13:43	6°♊53'52	26°41'42
	8874 Dec 04 03:14	30°♊♊		retrograde	8875 Nov 09 11:45	14°♊01'54	
min. Earth dist.	8874 Dec 08 01:34	26°♊59'36	0.61821 AU	evening set	8875 Nov 16 06:37	12°♊06'00	
inferior conj	8874 Dec 11 01:29	24°♊16'35	-3°10'03	min. Earth dist.	8875 Nov 20 03:38	9°♊29'55	0.59731 AU
minimum elong	8874 Dec 11 07:34	24°♊02'44	3°07'38	inferior conj	8875 Nov 23 08:20	6°♊57'53	-4°18'51
morning rise	8874 Dec 18 08:20	19°♊15'49		minimum elong	8875 Nov 23 15:48	6°♊43'02	4°16'35
direct	8874 Dec 20 13:59	18°♊54'13		morning rise	8875 Dec 01 03:28	2°♊18'37	
asc. node	8874 Dec 20 23:31	18°♊54'55		direct	8875 Dec 03 08:05	2°♊01'01	
morning max el	8874 Dec 27 11:57	22°♊24'20	17°51'00	asc. node	8875 Dec 07 20:34	3°♊20'05	
	8875 Jan 02 09:17	0°♊		morning max el	8875 Dec 11 00:02	5°♊47'47	18°12'14
morning set	8875 Jan 12 05:52	16°♊58'34			8875 Dec 26 07:22	0°♊	
	8875 Jan 19 13:09	0°♊		morning set	8875 Dec 26 17:35	0°♊48'07	
superior conj	8875 Jan 23 03:39	6°♊14'34	0°09'22	superior conj	8876 Jan 05 05:25	18°♊27'49	0°44'32
minimum elong	8875 Jan 23 04:31	6°♊18'16	0°09'26	minimum elong	8876 Jan 05 08:27	18°♊41'26	0°44'18
behind sun begin	8875 Jan 22 21:32	5°♊48'19		desc. node	8876 Jan 11 06:50	29°♊07'55	
behind sun end	8875 Jan 23 11:31	6°♊48'09			8876 Jan 11 19:01	0°♊	
desc. node	8875 Jan 24 09:52	8°♊23'14		max. Earth dist.	8876 Jan 12 20:30	1°♊48'18	1.41326 AU
max. Earth dist.	8875 Jan 30 10:08	18°♊22'46	1.43227 AU	evening rise	8876 Jan 17 17:45	9°♊54'04	
evening rise	8875 Feb 06 08:58	29°♊28'05			8876 Jan 30 17:56	0°♊	
	8875 Feb 06 17:09	0°♊		evening max el	8876 Feb 20 15:17	27°♊08'13	23°04'30
	8875 Feb 27 01:27	0°♊			8876 Feb 23 18:43	0°♊	
evening max el	8875 Mar 09 23:12	13°♊25'04	21°45'25	retrograde	8876 Mar 01 22:42	3°♊14'35	
asc. node	8875 Mar 18 22:23	18°♊50'07		asc. node	8876 Mar 04 19:30	2°♊33'59	
retrograde	8875 Mar 19 03:00	18°♊50'18		evening set	8876 Mar 06 20:42	1°♊12'10	
evening set	8875 Mar 23 13:39	17°♊02'32			8876 Mar 08 03:07	30°♊♊	
inferior conj	8875 Mar 28 21:01	10°♊44'20	2°44'58	inferior conj	8876 Mar 12 05:50	24°♊46'33	2°12'50
minimum elong	8875 Mar 28 18:56	10°♊51'37	2°44'28	minimum elong	8876 Mar 12 03:36	24°♊54'16	2°12'13
min. Earth dist.	8875 Mar 28 23:25	10°♊36'01	0.68401 AU	min. Earth dist.	8876 Mar 11 20:12	25°♊19'52	0.68448 AU
morning rise	8875 Apr 03 00:03	4°♊32'04		morning rise	8876 Mar 17 10:26	18°♊39'23	
direct	8875 Apr 07 23:22	2°♊23'26		direct	8876 Mar 21 19:56	16°♊52'40	
morning max el	8875 Apr 17 20:09	8°♊13'03	22°42'11	morning max el	8876 Mar 30 11:08	21°♊52'08	21°17'22
desc. node	8875 Apr 22 09:49	13°♊18'03			8876 Apr 06 09:53	0°♊	
	8875 May 04 19:44	0°♊		desc. node	8876 Apr 08 06:44	2°♊28'09	
morning set	8875 May 21 22:37	26°♊27'42			8876 Apr 27 02:14	0°♊	
	8875 May 24 01:51	0°♊		morning set	8876 Apr 30 16:48	5°♊37'57	
max. Earth dist.	8875 May 26 14:56	4°♊17'49	1.40289 AU	max. Earth dist.	8876 May 07 17:01	16°♊53'48	1.42397 AU
superior conj	8875 Jun 03 09:34	17°♊58'49	-1°36'10	superior conj	8876 May 15 01:14	29°♊12'57	-2°00'14
minimum elong	8875 Jun 03 15:22	18°♊25'06	1°35'43	minimum elong	8876 May 15 06:39	29°♊36'12	2°00'03
	8875 Jun 09 21:10	0°♊			8876 May 15 12:11	0°♊	
evening rise	8875 Jun 13 08:17	6°♊33'28		evening rise	8876 May 26 10:03	19°♊21'44	
asc. node	8875 Jun 14 21:16	9°♊28'19		asc. node	8876 May 31 18:19	28°♊56'59	
	8875 Jun 27 06:53	0°♊			8876 Jun 01 08:43	0°♊	
evening max el	8875 Jun 29 09:33	2°♊20'02	18°25'31	evening max el	8876 Jun 11 20:21	15°♊14'25	18°07'04
retrograde	8875 Jul 06 23:02	6°♊06'59		retrograde	8876 Jun 18 14:22	18°♊40'30	
evening set	8875 Jul 09 02:59	5°♊49'14		evening set	8876 Jun 21 02:01	18°♊12'52	
inferior conj	8875 Jul 16 16:13	1°♊15'43	0°48'02	inferior conj	8876 Jun 27 21:15	13°♊19'12	2°01'25
minimum elong	8875 Jul 16 17:52	1°♊12'23	0°47'14	minimum elong	8876 Jun 28 00:13	13°♊12'16	2°00'19
	8875 Jul 18 05:34	30°♊♊		min. Earth dist.	8876 Jul 01 03:48	10°♊16'46	0.60425 AU
desc. node	8875 Jul 19 09:12	29°♊04'49		morning rise	8876 Jul 04 19:40	7°♊26'53	
min. Earth dist.	8875 Jul 20 01:00	28°♊34'10	0.58199 AU	desc. node	8876 Jul 05 06:16	7°♊10'38	
morning rise	8875 Jul 24 05:17	25°♊50'18		direct	8876 Jul 11 08:59	5°♊21'08	
direct	8875 Jul 30 06:03	24°♊15'31		morning max el	8876 Jul 25 16:39	13°♊18'05	27°48'50
	8875 Aug 11 12:39	0°♊			8876 Aug 08 00:11	0°♊	
morning max el	8875 Aug 13 15:28	1°♊57'00	27°06'11		8876 Aug 25 03:05	0°♊	
	8875 Sep 02 18:55	0°♊		morning set	8876 Aug 27 03:53	4°♊10'04	
asc. node	8875 Sep 10 20:54	15°♊28'06		asc. node	8876 Aug 27 17:52	5°♊22'58	
morning set	8875 Sep 12 22:43	19°♊47'40		max. Earth dist.	8876 Sep 02 05:57	17°♊14'55	1.31697 AU
	8875 Sep 17 15:41	0°♊					

superior conj	8876 Sep 03 09:21	19° \cap 46'05	1°02'57	superior conj	8877 Aug 18 18:07	4° \cap 19'20	0°40'50
minimum elong	8876 Sep 03 07:08	19° \cap 33'52	1°02'31	minimum elong	8877 Aug 18 16:22	4° \cap 09'48	0°40'23
	8876 Sep 08 00:34	0° $\underline{\cap}$		evening rise	8877 Aug 25 14:42	19° \cap 15'39	
evening rise	8876 Sep 10 03:09	4° $\underline{\cap}$ 34'03			8877 Aug 30 19:32	0° $\underline{\cap}$	
	8876 Sep 23 11:39	0° \cap		desc. node	8877 Sep 18 02:02	27° $\underline{\cap}$ 41'10	
desc. node	8876 Oct 01 04:55	11° \cap 10'54		evening max el	8877 Sep 18 20:34	28° $\underline{\cap}$ 26'55	23°56'11
evening max el	8876 Oct 07 08:18	18° \cap 00'56	25°29'54		8877 Sep 20 13:26	0° \cap	
retrograde	8876 Oct 21 06:12	25° \cap 02'25		retrograde	8877 Oct 02 12:12	5° \cap 16'46	
evening set	8876 Oct 27 06:09	23° \cap 39'17		evening set	8877 Oct 07 05:02	4° \cap 28'23	
min. Earth dist.	8876 Oct 31 20:32	21° \cap 01'18	0.57686 AU	min. Earth dist.	8877 Oct 13 07:07	1° \cap 30'11	0.55974 AU
inferior conj	8876 Nov 03 20:20	18° \cap 57'34	-5°14'00	inferior conj	8877 Oct 15 12:03	0° \cap 09'54	-5°37'58
minimum elong	8876 Nov 04 02:22	18° \cap 47'09	5°12'54	minimum elong	8877 Oct 15 12:14	0° \cap 09'37	5°37'51
morning rise	8876 Nov 12 00:54	14° \cap 40'54			8877 Oct 15 18:33	30° \cap $\underline{\cap}$	
direct	8876 Nov 14 09:19	14° \cap 24'03		morning rise	8877 Oct 23 21:28	26° $\underline{\cap}$ 13'02	
morning max el	8876 Nov 23 03:57	18° \cap 37'05	18°54'24	direct	8877 Oct 26 15:29	25° $\underline{\cap}$ 53'43	
asc. node	8876 Nov 23 17:36	19° \cap 10'52			8877 Nov 05 01:40	0° \cap	
	8876 Dec 01 13:26	0° \times		morning max el	8877 Nov 05 20:15	0° \cap 42'15	19°58'57
morning set	8876 Dec 09 15:35	15° \times 05'27		asc. node	8877 Nov 10 14:34	6° \cap 12'13	
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					8877 Nov 24 00:10	0° \times	
superior conj	8876 Dec 18 02:29	1° $\underline{\times}$ 35'30	1°10'53	superior conj	8877 Dec 01 13:55	15° \times 24'00	1°28'32
minimum elong	8876 Dec 18 05:43	1° $\underline{\times}$ 50'58	1°10'43	minimum elong	8877 Dec 01 16:19	15° \times 36'03	1°28'33
max. Earth dist.	8876 Dec 25 02:49	14° $\underline{\times}$ 31'02	1.39181 AU	max. Earth dist.	8877 Dec 07 09:13	26° \times 40'53	1.37038 AU
desc. node	8876 Dec 28 03:49	19° $\underline{\times}$ 50'28			8877 Dec 09 03:57	0° $\underline{\times}$	
evening rise	8876 Dec 29 00:17	21° $\underline{\times}$ 18'12		evening rise	8877 Dec 11 03:39	3° $\underline{\times}$ 37'24	
	8877 Jan 03 05:50	0° \approx		desc. node	8877 Dec 15 00:50	10° $\underline{\times}$ 27'17	
	8877 Jan 23 18:51	0° \times			8877 Dec 27 06:23	0° \approx	
evening max el	8877 Feb 02 05:04	10° \times 54'44	24°24'18	evening max el	8878 Jan 15 18:22	24° \approx 43'32	25°37'49
retrograde	8877 Feb 13 14:44	17° \times 35'22			8878 Jan 22 08:49	0° \times	
evening set	8877 Feb 19 01:00	15° \times 19'33		retrograde	8878 Jan 28 02:08	1° \times 47'48	
asc. node	8877 Feb 19 16:37	14° \times 44'24			8878 Feb 02 04:56	30° \cap \approx	
min. Earth dist.	8877 Feb 23 16:15	10° \times 01'46	0.68092 AU	evening set	8878 Feb 03 01:01	29° \approx 20'53	
inferior conj	8877 Feb 24 13:26	8° \times 50'44	1°31'57	asc. node	8878 Feb 06 13:42	25° \approx 38'36	
minimum elong	8877 Feb 24 11:32	8° \times 57'07	1°31'23	min. Earth dist.	8878 Feb 07 09:16	24° \approx 37'51	0.67350 AU
morning rise	8877 Mar 01 22:09	2° \times 50'07		inferior conj	8878 Feb 08 17:57	22° \approx 53'39	0°42'43
direct	8877 Mar 05 18:35	1° \times 25'18		minimum elong	8878 Feb 08 16:55	22° \approx 56'59	0°42'27
morning max el	8877 Mar 13 09:18	5° \times 42'28	20°03'40	morning rise	8878 Feb 14 09:14	17° \approx 01'34	
desc. node	8877 Mar 26 03:38	22° \times 09'40		direct	8878 Feb 17 17:52	15° \approx 56'47	
	8877 Mar 31 11:06	0° \cap		morning max el	8878 Feb 24 15:22	19° \approx 43'39	19°04'39
morning set	8877 Apr 09 16:04	14° \cap 00'07			8878 Mar 04 19:57	0° \times	
	8877 Apr 19 21:06	0° \times		greatest brilliancy	8878 Mar 10 04:22	7° \times 54'34	-0.7m
max. Earth dist.	8877 Apr 20 02:17	0° \times 20'39	1.44097 AU	desc. node	8878 Mar 13 00:32	12° \times 14'21	
				morning set	8878 Mar 19 19:04	22° \times 41'31	
superior conj	8877 Apr 25 16:31	9° \times 22'33	-2°11'59		8878 Mar 24 12:01	0° \cap	
minimum elong	8877 Apr 25 17:42	9° \times 27'24	2°12'06	max. Earth dist.	8878 Apr 02 18:04	14° \cap 27'19	1.45191 AU
	8877 May 07 23:14	0° \cap					
evening rise	8877 May 08 17:39	1° \cap 19'08		superior conj	8878 Apr 05 08:56	18° \cap 34'58	-2°05'26
asc. node	8877 May 18 15:22	18° \cap 02'49		minimum elong	8878 Apr 05 02:59	18° \cap 11'30	2°05'14
evening max el	8877 May 26 09:43	28° \cap 30'02	18°07'50		8878 Apr 12 12:54	0° \times	
	8877 May 28 02:40	0° $\underline{\cap}$		evening rise	8878 Apr 20 02:53	12° \times 18'36	
retrograde	8877 Jun 01 19:13	1° $\underline{\cap}$ 50'36			8878 May 01 00:45	0° \cap	
evening set	8877 Jun 04 14:28	1° $\underline{\cap}$ 10'32		asc. node	8878 May 05 12:25	6° \cap 38'18	
	8877 Jun 06 12:40	30° \cap \cap		evening max el	8878 May 09 22:32	11° \cap 58'40	18°26'59
inferior conj	8877 Jun 10 19:28	25° \cap 57'46	2°48'33	retrograde	8878 May 16 09:18	15° \cap 27'46	
minimum elong	8877 Jun 10 22:00	25° \cap 51'02	2°47'48	evening set	8878 May 19 11:59	14° \cap 33'51	
min. Earth dist.	8877 Jun 13 15:13	22° \cap 58'30	0.62649 AU	inferior conj	8878 May 25 06:43	9° \cap 03'28	3°13'52
morning rise	8877 Jun 17 03:47	19° \cap 49'20		minimum elong	8878 May 25 08:04	8° \cap 59'29	3°13'30
desc. node	8877 Jun 22 03:17	17° \cap 29'13		min. Earth dist.	8878 May 27 11:51	6° \cap 27'03	0.64638 AU
direct	8877 Jun 23 21:54	17° \cap 19'10		morning rise	8878 May 31 03:13	2° \cap 47'05	
morning max el	8877 Jul 07 23:17	25° \cap 21'44	27°53'17	direct	8878 Jun 06 18:55	0° \cap 03'31	
	8877 Jul 12 05:17	0° $\underline{\cap}$		desc. node	8878 Jun 09 00:19	0° \cap 19'44	
	8877 Aug 01 12:00	0° \cap		morning max el	8878 Jun 20 09:07	8° \cap 01'13	27°22'05
morning set	8877 Aug 11 03:01	18° \cap 12'22			8878 Jul 07 09:18	0° $\underline{\cap}$	
asc. node	8877 Aug 14 14:48	25° \cap 25'48			8878 Jul 24 19:30	0° \cap	
max. Earth dist.	8877 Aug 16 11:14	29° \cap 22'18	1.32250 AU	morning set	8878 Jul 25 17:25	1° \cap 46'32	
	8877 Aug 16 18:15	0° \cap		max. Earth dist.	8878 Jul 30 08:44	11° \cap 05'56	1.33293 AU




































































































































asc. node	8878 Aug 01 11:44	15°♎31'38			8879 Jun 30 13:37	0°♏	
				morning set	8879 Jul 08 19:50	14°♏43'59	
superior conj	8878 Aug 02 22:22	18°♎34'47	0°14'30	max. Earth dist.	8879 Jul 12 19:46	22°♏23'33	1.34817 AU
minimum elong	8878 Aug 02 21:39	18°♎30'57	0°14'11		8879 Jul 16 15:09	0°♎	
behind sun begin	8878 Aug 02 19:04	18°♎17'15					
behind sun end	8878 Aug 03 00:14	18°♎44'40		superior conj	8879 Jul 17 19:45	2°♎26'13	-0°15'20
	8878 Aug 08 06:13	0°♎		minimum elong	8879 Jul 17 20:38	2°♎30'45	0°15'21
evening rise	8878 Aug 10 01:52	3°♎52'34		behind sun begin	8879 Jul 17 18:52	2°♎21'38	
	8878 Aug 24 07:04	0°♎		behind sun end	8879 Jul 17 22:25	2°♎39'52	
evening max el	8878 Aug 31 09:03	8°♎38'30	22°16'42	asc. node	8879 Jul 19 08:41	5°♎36'49	
desc. node	8878 Sep 04 23:10	12°♎22'33		evening rise	8879 Jul 25 10:45	18°♎19'07	
retrograde	8878 Sep 13 06:02	15°♎03'13			8879 Jul 31 06:54	0°♎	
evening set	8878 Sep 16 11:04	14°♎40'26		evening max el	8879 Aug 13 06:40	19°♎11'53	20°47'00
min. Earth dist.	8878 Sep 24 14:58	11°♎05'51	0.54901 AU	desc. node	8879 Aug 22 20:16	24°♎44'05	
inferior conj	8878 Sep 25 10:41	10°♎38'07	-5°11'50	retrograde	8879 Aug 24 18:18	24°♎53'22	
minimum elong	8878 Sep 25 03:22	10°♎48'24	5°10'37	evening set	8879 Aug 26 22:01	24°♎42'09	
morning rise	8878 Oct 03 21:22	6°♎50'36		inferior conj	8879 Sep 05 03:03	20°♎45'26	-3°51'15
direct	8878 Oct 07 05:12	6°♎25'51		minimum elong	8879 Sep 04 17:34	20°♎58'58	3°48'25
morning max el	8878 Oct 18 23:18	11°♎57'19	21°25'20	min. Earth dist.	8879 Sep 05 23:50	20°♎15'45	0.54707 AU
asc. node	8878 Oct 28 11:32	24°♎08'07		morning rise	8879 Sep 13 13:07	16°♎47'06	
	8878 Oct 31 21:41	0°♎		direct	8879 Sep 17 13:06	16°♎12'51	
morning set	8878 Nov 08 05:30	14°♎26'15		morning max el	8879 Sep 30 15:43	22°♎30'20	23°07'42
					8879 Oct 07 05:30	0°♎	
superior conj	8878 Nov 15 11:32	29°♎40'33	1°38'17	asc. node	8879 Oct 15 08:30	12°♎45'56	
minimum elong	8878 Nov 15 12:42	29°♎46'34	1°38'26	morning set	8879 Oct 23 16:46	29°♎15'32	
	8878 Nov 15 15:17	0°♎			8879 Oct 24 01:09	0°♎	
max. Earth dist.	8878 Nov 19 20:18	8°♎35'00	1.35112 AU				
evening rise	8878 Nov 24 00:18	16°♎41'28		superior conj	8879 Oct 30 16:09	14°♎15'52	1°40'59
	8878 Dec 01 09:26	0°♎		minimum elong	8879 Oct 30 16:02	14°♎15'16	1°41'08
desc. node	8878 Dec 01 21:52	0°♎53'03		max. Earth dist.	8879 Nov 02 15:01	20°♎32'10	1.33555 AU
	8878 Dec 21 16:26	0°♎		evening rise	8879 Nov 07 10:27	0°♎21'15	
evening max el	8878 Dec 29 07:40	8°♎27'37	26°37'56		8879 Nov 07 06:10	0°♎	
retrograde	8879 Jan 11 08:09	15°♎45'02		desc. node	8879 Nov 18 18:55	21°♎02'15	
evening set	8879 Jan 17 18:57	13°♎10'49			8879 Nov 24 10:12	0°♎	
min. Earth dist.	8879 Jan 21 20:58	9°♎02'30	0.66224 AU	evening max el	8879 Dec 11 20:29	21°♎57'31	27°17'22
inferior conj	8879 Jan 23 17:21	6°♎50'43	-0°14'32	retrograde	8879 Dec 25 08:18	29°♎18'50	
minimum elong	8879 Jan 23 17:45	6°♎49'32	0°14'11	evening set	8880 Jan 01 04:36	26°♎43'31	
transit middle	8879 Jan 23 17:45	6°♎49'32	0°14'11	min. Earth dist.	8880 Jan 05 01:14	23°♎08'35	0.64742 AU
transit begin	8879 Jan 23 16:23	6°♎53'37		inferior conj	8880 Jan 07 09:18	20°♎36'23	-1°19'02
transit end	8879 Jan 23 19:07	6°♎45'28		minimum elong	8880 Jan 07 11:42	20°♎29'51	1°17'48
asc. node	8879 Jan 24 10:47	5°♎59'15		asc. node	8880 Jan 11 07:53	16°♎44'07	
morning rise	8879 Jan 29 17:31	1°♎09'24		morning rise	8880 Jan 13 20:22	15°♎08'28	
direct	8879 Feb 01 15:49	0°♎21'37		direct	8880 Jan 16 10:12	14°♎33'55	
morning max el	8879 Feb 08 03:57	3°♎50'42	18°21'58	morning max el	8880 Jan 22 20:27	17°♎56'16	17°56'05
	8879 Feb 26 06:27	0°♎			8880 Jan 31 18:07	0°♎	
morning set	8879 Feb 27 22:19	2°♎39'12		morning set	8880 Feb 09 06:58	14°♎03'43	
desc. node	8879 Feb 27 21:28	2°♎35'47		desc. node	8880 Feb 14 18:23	23°♎08'36	
					8880 Feb 18 23:09	0°♎	
superior conj	8879 Mar 15 14:10	27°♎24'25	-1°38'53				
minimum elong	8879 Mar 15 04:33	26°♎46'46	1°37'57	superior conj	8880 Feb 23 03:10	6°♎42'05	-0°58'25
max. Earth dist.	8879 Mar 16 13:26	28°♎55'28	1.45561 AU	minimum elong	8880 Feb 22 20:31	6°♎15'31	0°57'25
	8879 Mar 17 05:56	0°♎		max. Earth dist.	8880 Feb 27 08:56	13°♎25'23	1.45183 AU
evening rise	8879 Mar 31 12:48	22°♎22'37			8880 Mar 09 00:40	0°♎	
	8879 Apr 05 09:12	0°♎		evening rise	8880 Mar 10 04:53	1°♎48'30	
greatest brilliancy	8879 Apr 10 20:25	8°♎31'24	-0.8m	greatest brilliancy	8880 Mar 24 18:55	23°♎51'36	-0.6m
asc. node	8879 Apr 22 09:29	24°♎34'17			8880 Mar 29 02:04	0°♎	
evening max el	8879 Apr 23 08:18	25°♎34'27	19°03'38	evening max el	8880 Apr 05 13:17	9°♎13'09	19°56'24
retrograde	8879 Apr 30 04:56	29°♎24'49		asc. node	8880 Apr 08 06:36	11°♎38'21	
evening set	8879 May 03 15:19	28°♎16'19		retrograde	8880 Apr 13 03:09	13°♎35'19	
inferior conj	8879 May 09 03:22	22°♎30'00	3°21'57	evening set	8880 Apr 16 22:02	12°♎11'48	
minimum elong	8879 May 09 03:26	22°♎29'48	3°21'46	inferior conj	8880 Apr 22 06:25	6°♎11'25	3°16'17
min. Earth dist.	8879 May 10 17:12	20°♎29'19	0.66257 AU	minimum elong	8880 Apr 22 05:22	6°♎14'56	3°16'04
morning rise	8879 May 14 15:05	16°♎11'06		min. Earth dist.	8880 Apr 23 05:41	4°♎53'06	0.67444 AU
direct	8879 May 20 22:56	13°♎25'47			8880 Apr 27 09:34	30°♎	
desc. node	8879 May 26 21:19	15°♎21'18		morning rise	8880 Apr 27 12:26	29°♎53'27	
morning max el	8879 Jun 02 19:44	21°♎05'39	26°22'03	direct	8880 May 03 09:00	27°♎16'40	
	8879 Jun 10 12:36	0°♎			8880 May 10 05:35	0°♎	

desc. node	8880 May 12 18:18	2°♄02'26		min. Earth dist.	8881 Apr 06 23:07	19°♄29'51	0.68184 AU
morning max el	8880 May 15 05:22	4°♄23'09	25°02'25	morning rise	8881 Apr 11 16:40	13°♄48'51	
	8880 Jun 03 20:44	0°♄		direct	8881 Apr 17 00:03	11°♄28'18	
morning set	8880 Jun 20 05:48	26°♄52'32		morning max el	8881 Apr 27 14:37	17°♄47'46	23°33'29
	8880 Jun 21 23:29	0°♄		desc. node	8881 Apr 29 15:16	19°♄56'28	
max. Earth dist.	8880 Jun 23 20:35	3°♄26'41	1.36770 AU		8881 May 07 19:00	0°♄	
					8881 May 27 22:33	0°♄	
superior conj	8880 Jun 30 07:20	15°♄45'47	-0°47'17	morning set	8881 Jun 01 17:58	7°♄58'28	
minimum elong	8880 Jun 30 10:15	16°♄00'11	0°46'59	max. Earth dist.	8881 Jun 05 16:34	14°♄45'50	1.38995 AU
asc. node	8880 Jul 05 05:40	25°♄37'05					
	8880 Jul 07 09:37	0°♄		superior conj	8881 Jun 13 05:26	28°♄25'05	-1°19'10
evening rise	8880 Jul 08 15:01	2°♄28'25		minimum elong	8881 Jun 13 10:24	28°♄48'22	1°18'40
	8880 Jul 25 06:39	0°♄			8881 Jun 14 01:40	0°♄	
evening max el	8880 Jul 25 17:43	0°♄28'00	19°35'41	evening rise	8881 Jun 22 11:54	16°♄13'34	
retrograde	8880 Aug 04 12:18	5°♄17'52		asc. node	8881 Jun 22 02:40	15°♄28'45	
evening set	8880 Aug 06 08:33	5°♄08'18			8881 Jun 29 20:26	0°♄	
desc. node	8880 Aug 08 17:23	4°♄30'02		evening max el	8881 Jul 08 16:56	12°♄28'57	18°45'10
inferior conj	8880 Aug 15 03:44	1°♄04'14	-1°58'22	retrograde	8881 Jul 16 22:34	16°♄34'17	
minimum elong	8880 Aug 14 22:22	1°♄12'43	1°56'27	evening set	8881 Jul 18 22:40	16°♄20'39	
	8880 Aug 16 20:19	30°♄		inferior conj	8881 Jul 26 23:17	11°♄59'04	-0°06'40
min. Earth dist.	8880 Aug 17 11:43	29°♄35'59	0.55468 AU	minimum elong	8881 Jul 26 23:01	11°♄59'34	0°06'45
morning rise	8880 Aug 23 09:48	26°♄36'01		transit middle	8881 Jul 26 23:01	11°♄59'34	0°06'45
direct	8880 Aug 28 05:02	25°♄44'31		transit begin	8881 Jul 26 19:40	12°♄05'42	
	8880 Sep 07 23:42	0°♄		transit end	8881 Jul 27 02:22	11°♄53'25	
morning max el	8880 Sep 11 03:54	2°♄43'00	24°53'26	desc. node	8881 Jul 26 14:31	12°♄15'08	
	8880 Sep 30 05:18	0°♄		min. Earth dist.	8881 Jul 30 03:45	9°♄39'38	0.57047 AU
asc. node	8880 Oct 01 05:28	1°♄55'02		morning rise	8881 Aug 03 19:56	6°♄53'54	
morning set	8880 Oct 07 04:31	14°♄03'47		direct	8881 Aug 09 11:10	5°♄36'25	
				morning max el	8881 Aug 23 18:31	13°♄04'43	26°25'33
superior conj	8880 Oct 14 01:12	29°♄02'05	1°37'24		8881 Sep 06 02:18	0°♄	
minimum elong	8880 Oct 14 00:02	28°♄55'38	1°37'26	asc. node	8881 Sep 18 02:24	21°♄26'48	
	8880 Oct 14 11:47	0°♄		morning set	8881 Sep 21 15:02	28°♄45'39	
max. Earth dist.	8880 Oct 15 17:36	2°♄42'43	1.32436 AU		8881 Sep 22 04:58	0°♄	
evening rise	8880 Oct 21 06:43	14°♄27'53					
	8880 Oct 29 07:58	0°♄		superior conj	8881 Sep 28 12:32	13°♄51'48	1°28'07
desc. node	8880 Nov 04 15:59	10°♄47'53		minimum elong	8881 Sep 28 10:37	13°♄41'11	1°27'58
	8880 Nov 18 12:22	0°♄		max. Earth dist.	8881 Sep 29 01:40	15°♄04'37	1.31784 AU
evening max el	8880 Nov 23 07:26	5°♄02'31	27°29'30	evening rise	8881 Oct 05 10:08	28°♄52'36	
retrograde	8880 Dec 07 01:48	12°♄20'33			8881 Oct 05 23:00	0°♄	
evening set	8880 Dec 14 03:17	9°♄52'42		desc. node	8881 Oct 22 13:05	29°♄59'39	
min. Earth dist.	8880 Dec 17 20:17	6°♄47'25	0.62951 AU		8881 Oct 22 13:11	0°♄	
inferior conj	8880 Dec 20 15:05	4°♄04'42	-2°28'51	evening max el	8881 Nov 05 14:00	17°♄28'34	27°09'07
minimum elong	8880 Dec 20 19:51	3°♄53'03	2°26'45	retrograde	8881 Nov 19 11:18	24°♄39'43	
	8880 Dec 25 09:43	30°♄		evening set	8881 Nov 26 11:16	22°♄29'31	
morning rise	8880 Dec 27 14:32	28°♄52'58		min. Earth dist.	8881 Nov 30 04:44	19°♄46'11	0.60936 AU
asc. node	8880 Dec 28 04:59	28°♄41'41		inferior conj	8881 Dec 03 07:21	17°♄06'02	-3°40'04
direct	8880 Dec 29 22:13	28°♄27'47		minimum elong	8881 Dec 03 14:14	16°♄51'13	3°37'35
	8881 Jan 03 08:07	0°♄		morning rise	8881 Dec 10 19:35	12°♄13'46	
morning max el	8881 Jan 05 13:54	1°♄52'52	17°47'35	direct	8881 Dec 13 00:14	11°♄54'16	
morning set	8881 Jan 21 16:32	26°♄40'19		asc. node	8881 Dec 15 02:04	12°♄12'25	
	8881 Jan 23 14:12	0°♄		morning max el	8881 Dec 20 04:53	15°♄30'40	17°57'31
desc. node	8881 Jan 31 15:18	13°♄48'57			8881 Dec 30 05:52	0°♄	
				morning set	8882 Jan 04 20:22	10°♄08'11	
superior conj	8881 Feb 02 14:08	17°♄04'45	-0°14'22				
minimum elong	8881 Feb 02 12:41	16°♄58'40	0°13'58	superior conj	8882 Jan 15 02:31	28°♄39'34	0°25'17
behind sun begin	8881 Feb 02 08:04	16°♄39'30		minimum elong	8882 Jan 15 04:35	28°♄48'36	0°25'11
behind sun end	8881 Feb 02 17:17	17°♄17'48			8882 Jan 15 20:56	0°♄	
max. Earth dist.	8881 Feb 09 02:15	27°♄41'49	1.44114 AU	desc. node	8882 Jan 18 12:14	4°♄32'43	
	8881 Feb 10 12:50	0°♄		max. Earth dist.	8882 Jan 22 15:41	11°♄30'17	1.42472 AU
evening rise	8881 Feb 17 16:29	11°♄11'59		evening rise	8882 Jan 28 14:36	21°♄08'33	
	8881 Mar 02 04:19	0°♄			8882 Feb 03 07:12	0°♄	
evening max el	8881 Mar 19 12:49	22°♄53'40	21°02'43		8882 Feb 24 12:23	0°♄	
asc. node	8881 Mar 26 03:45	27°♄36'14		evening max el	8882 Mar 02 07:19	6°♄35'40	22°18'35
retrograde	8881 Mar 28 01:41	27°♄54'45		retrograde	8882 Mar 11 22:41	12°♄18'14	
evening set	8881 Apr 01 06:11	26°♄15'59		asc. node	8882 Mar 13 00:54	12°♄12'14	
inferior conj	8881 Apr 06 13:21	20°♄03'42	2°59'18	evening set	8882 Mar 16 14:04	10°♄24'14	
minimum elong	8881 Apr 06 11:32	20°♄09'59	2°58'54	inferior conj	8882 Mar 21 22:01	4°♄02'42	2°32'26

minimum elong	8882 Mar 21 19:49	4°♂10'23	2°31'52	min. Earth dist.	8883 Mar 05 15:53	18°♂55'43	0.68354 AU
min. Earth dist.	8882 Mar 21 19:16	4°♂12'17	0.68481 AU	inferior conj	8883 Mar 06 06:31	18°♂05'40	1°56'32
	8882 Mar 24 23:38	30°♂♂		minimum elong	8883 Mar 06 04:22	18°♂13'03	1°55'54
morning rise	8882 Mar 27 01:24	27°♂52'30		morning rise	8883 Mar 11 12:35	12°♂01'22	
direct	8882 Mar 31 18:54	25°♂52'50		direct	8883 Mar 15 16:27	10°♂24'08	
	8882 Apr 08 17:01	0°♂		morning max el	8883 Mar 23 20:17	15°♂03'44	20°44'22
morning max el	8882 Apr 10 02:25	1°♂20'01	22°04'57	desc. node	8883 Apr 03 09:06	28°♂07'05	
desc. node	8882 Apr 16 12:12	8°♂42'46			8883 Apr 04 17:18	0°♂	
	8882 May 01 16:12	0°♂		morning set	8883 Apr 22 11:45	26°♂33'46	
morning set	8882 May 13 03:34	17°♂50'06			8883 Apr 24 16:30	0°♂	
max. Earth dist.	8882 May 18 15:28	26°♂51'53	1.41227 AU	max. Earth dist.	8883 Apr 30 21:11	9°♂52'39	1.43187 AU
	8882 May 20 12:05	0°♂					
				superior conj	8883 May 07 15:05	21°♂00'01	-2°07'06
superior conj	8882 May 26 09:34	10°♂13'31	-1°47'29	minimum elong	8883 May 07 19:14	21°♂17'29	2°07'06
minimum elong	8882 May 26 15:34	10°♂40'04	1°47'06		8883 May 12 21:46	0°♂	
evening rise	8882 Jun 05 21:52	29°♂25'42		evening rise	8883 May 19 16:29	11°♂53'31	
	8882 Jun 06 05:15	0°♂		asc. node	8883 May 26 20:45	24°♂26'57	
asc. node	8882 Jun 08 23:43	5°♂07'24			8883 May 30 06:29	0°♂	
evening max el	8882 Jun 22 00:38	25°♂06'49	18°15'16	evening max el	8883 Jun 05 12:52	8°♂10'42	18°05'03
retrograde	8882 Jun 29 04:13	28°♂42'45		retrograde	8883 Jun 12 02:02	11°♂32'56	
evening set	8882 Jul 01 11:34	28°♂21'01		evening set	8883 Jun 14 16:55	11°♂00'13	
inferior conj	8882 Jul 08 16:42	23°♂38'36	1°22'37	inferior conj	8883 Jun 21 05:34	5°♂57'56	2°24'25
minimum elong	8882 Jul 08 19:12	23°♂33'14	1°21'33	minimum elong	8883 Jun 21 08:30	5°♂50'39	2°23'25
min. Earth dist.	8882 Jul 12 01:50	20°♂45'30	0.59130 AU	min. Earth dist.	8883 Jun 24 08:05	2°♂54'16	0.61384 AU
desc. node	8882 Jul 13 11:36	19°♂39'38		morning rise	8883 Jun 27 21:46	29°♂57'23	
morning rise	8882 Jul 15 23:41	18°♂00'46			8883 Jun 27 20:14	30°♂♂	
direct	8882 Jul 22 06:46	16°♂12'37		desc. node	8883 Jun 30 08:40	28°♂34'54	
morning max el	8882 Aug 05 15:41	24°♂00'50	27°29'01	direct	8883 Jul 04 13:50	27°♂40'29	
	8882 Aug 11 01:48	0°♂			8883 Jul 11 19:50	0°♂	
	8882 Aug 30 07:14	0°♂		morning max el	8883 Jul 18 19:38	5°♂40'49	27°55'29
asc. node	8882 Sep 04 23:20	11°♂14'55			8883 Aug 06 02:05	0°♂	
morning set	8882 Sep 05 22:42	13°♂16'52		morning set	8883 Aug 21 01:32	27°♂31'10	
max. Earth dist.	8882 Sep 12 11:49	27°♂30'23	1.31599 AU		8883 Aug 22 06:15	0°♂	
				asc. node	8883 Aug 22 20:15	1°♂13'20	
superior conj	8882 Sep 13 00:17	28°♂39'37	1°13'34	max. Earth dist.	8883 Aug 26 20:03	9°♂47'39	1.31877 AU
minimum elong	8882 Sep 12 22:03	28°♂27'12	1°13'13				
	8882 Sep 13 14:46	0°♂		superior conj	8883 Aug 28 10:38	13°♂19'09	0°54'07
evening rise	8882 Sep 19 18:20	13°♂28'50		minimum elong	8883 Aug 28 08:33	13°♂07'43	0°53'39
	8882 Sep 28 00:34	0°♂		evening rise	8883 Sep 04 05:10	28°♂09'27	
desc. node	8882 Oct 09 10:12	18°♂24'16			8883 Sep 05 01:53	0°♂	
evening max el	8882 Oct 18 13:23	29°♂05'06	26°14'42		8883 Sep 21 20:41	0°♂	
	8882 Oct 19 13:16	0°♂		desc. node	8883 Sep 26 07:19	5°♂42'41	
retrograde	8882 Nov 01 11:22	6°♂09'37		evening max el	8883 Sep 30 04:32	9°♂50'53	24°51'42
evening set	8882 Nov 07 23:56	4°♂26'53		retrograde	8883 Oct 14 00:34	16°♂48'45	
min. Earth dist.	8882 Nov 12 02:28	1°♂52'23	0.58844 AU	evening set	8883 Oct 19 12:52	15°♂40'24	
	8882 Nov 14 14:53	30°♂♂		min. Earth dist.	8883 Oct 24 15:50	12°♂56'15	0.56900 AU
inferior conj	8882 Nov 15 06:31	29°♂30'34	-4°44'47	inferior conj	8883 Oct 27 09:43	11°♂09'15	-5°29'12
minimum elong	8882 Nov 15 13:51	29°♂16'50	4°42'55	minimum elong	8883 Oct 27 13:48	11°♂02'35	5°28'40
morning rise	8882 Nov 23 06:07	25°♂00'42		morning rise	8883 Nov 04 17:00	7°♂02'07	
direct	8882 Nov 25 11:52	24°♂43'40		direct	8883 Nov 07 04:53	6°♂44'36	
asc. node	8882 Dec 01 23:04	27°♂15'13		morning max el	8883 Nov 16 13:09	11°♂11'08	19°19'13
morning max el	8882 Dec 03 13:51	28°♂40'12	18°27'30	asc. node	8883 Nov 18 20:02	13°♂37'14	
	8882 Dec 04 20:33	0°♂			8883 Nov 29 04:27	0°♂	
morning set	8882 Dec 19 12:56	24°♂10'57		morning set	8883 Dec 03 14:10	8°♂36'30	
	8882 Dec 22 13:34	0°♂					
				superior conj	8883 Dec 11 16:50	24°♂43'57	1°19'24
superior conj	8882 Dec 28 13:06	11°♂17'30	0°56'47	minimum elong	8883 Dec 11 19:48	24°♂58'26	1°19'18
minimum elong	8882 Dec 28 16:24	11°♂32'44	0°56'35		8883 Dec 14 10:38	0°♂	
max. Earth dist.	8883 Jan 05 00:35	24°♂39'28	1.40436 AU	max. Earth dist.	8883 Dec 18 06:19	7°♂06'04	1.38249 AU
desc. node	8883 Jan 05 09:12	25°♂16'35		evening rise	8883 Dec 22 00:05	13°♂46'20	
	8883 Jan 08 03:58	0°♂		desc. node	8883 Dec 23 06:11	15°♂56'54	
evening rise	8883 Jan 09 08:27	1°♂58'41			8883 Dec 31 19:14	0°♂	
	8883 Jan 27 15:26	0°♂			8884 Jan 22 14:22	0°♂	
evening max el	8883 Feb 12 22:13	20°♂20'11	23°38'41	evening max el	8884 Jan 26 11:26	4°♂07'24	24°56'43
retrograde	8883 Feb 23 16:50	26°♂41'35		retrograde	8884 Feb 07 07:07	10°♂59'56	
asc. node	8883 Feb 27 22:02	25°♂15'47		evening set	8884 Feb 12 22:50	8°♂38'44	
evening set	8883 Feb 28 20:07	24°♂33'04		asc. node	8884 Feb 14 19:07	6°♂50'30	

min. Earth dist.	8884 Feb 17 10:52	3° H 35'54	0.67821 AU	asc. node	8885 Jan 31 16:13	17° \approx 23'38	
inferior conj	8884 Feb 18 13:02	2° H 09'47	1°12'05	inferior conj	8885 Feb 01 15:38	16° \approx 10'42	0°19'22
minimum elong	8884 Feb 18 11:25	2° H 15'05	1°11'36	minimum elong	8885 Feb 01 15:08	16° \approx 12'16	0°19'20
	8884 Feb 20 05:21	30° R \approx		morning rise	8885 Feb 07 10:25	10° \approx 22'49	
morning rise	8884 Feb 24 00:16	26° \approx 12'46		direct	8885 Feb 10 14:20	9° \approx 25'50	
direct	8884 Feb 27 15:26	24° \approx 57'00		morning max el	8885 Feb 17 07:06	13° \approx 04'08	18°44'29
morning max el	8884 Mar 05 22:01	28° \approx 59'51	19°36'42		8885 Mar 01 20:03	0° H	
	8884 Mar 06 21:26	0° H		desc. node	8885 Mar 07 02:53	8° H 11'37	
greatest brilliancy	8884 Mar 18 15:02	15° H 35'09	-0.7m	morning set	8885 Mar 10 21:13	14° H 05'01	
desc. node	8884 Mar 20 06:00	17° H 59'23			8885 Mar 21 01:18	0° Y	
	8884 Mar 28 04:31	0° Y		max. Earth dist.	8885 Mar 26 02:33	7° Y 54'21	1.45436 AU
morning set	8884 Mar 31 09:36	4° Y 55'56					
max. Earth dist.	8884 Apr 12 09:27	23° Y 38'29	1.44641 AU	superior conj	8885 Mar 27 05:41	9° Y 40'40	-1°56'28
	8884 Apr 16 09:13	0° B		minimum elong	8885 Mar 26 21:22	9° Y 08'03	1°55'55
					8885 Apr 09 01:51	0° B	
superior conj	8884 Apr 16 19:59	0° B 43'14	-2°11'41	evening rise	8885 Apr 11 14:13	4° B 02'02	
minimum elong	8884 Apr 16 18:14	0° B 36'10	2°11'47	greatest brilliancy	8885 Apr 18 14:52	15° B 19'18	-0.9m
evening rise	8884 Apr 30 15:06	23° B 27'29			8885 Apr 28 07:53	0° II	
	8884 May 04 12:18	0° II		asc. node	8885 Apr 29 14:54	1° II 41'22	
asc. node	8884 May 12 17:49	13° II 21'10		evening max el	8885 May 02 14:08	5° II 05'03	18°40'31
evening max el	8884 May 19 02:18	21° II 32'33	18°13'43	retrograde	8885 May 09 04:10	8° II 41'42	
retrograde	8884 May 25 11:25	24° II 55'26		evening set	8885 May 12 10:01	7° II 41'47	
evening set	8884 May 28 09:41	24° II 09'48		inferior conj	8885 May 18 01:33	2° II 04'43	3°19'07
inferior conj	8884 Jun 03 09:52	18° II 49'21	3°01'38	minimum elong	8885 May 18 02:21	2° II 02'17	3°18'52
minimum elong	8884 Jun 03 11:56	18° II 43'33	3°01'04		8885 May 19 18:17	30° R B	
min. Earth dist.	8884 Jun 05 23:40	15° II 57'32	0.63532 AU	min. Earth dist.	8885 May 20 00:17	29° B 41'58	0.65381 AU
morning rise	8884 Jun 09 12:47	12° II 36'20		morning rise	8885 May 23 17:56	25° B 46'40	
direct	8884 Jun 16 06:33	9° II 58'55		direct	8885 May 30 06:57	23° B 00'35	
desc. node	8884 Jun 16 05:43	9° II 58'55		desc. node	8885 Jun 03 02:43	23° B 48'45	
morning max el	8884 Jun 30 04:11	18° II 01'43	27°44'00		8885 Jun 11 17:12	0° II	
	8884 Jul 10 04:51	0° B		morning max el	8885 Jun 12 14:31	0° II 52'55	26°59'25
	8884 Jul 28 23:00	0° B			8885 Jul 04 06:10	0° B	
morning set	8884 Aug 03 21:19	11° B 22'24		morning set	8885 Jul 18 07:08	24° B 42'25	
asc. node	8884 Aug 08 17:11	21° B 17'42			8885 Jul 21 00:11	0° B	
max. Earth dist.	8884 Aug 08 22:22	21° B 45'06	1.32633 AU	max. Earth dist.	8885 Jul 22 15:20	3° B 15'57	1.33880 AU
superior conj	8884 Aug 11 17:44	27° B 45'10	0°30'08	superior conj	8885 Jul 26 19:26	11° B 51'36	0°02'14
minimum elong	8884 Aug 11 16:21	27° B 37'42	0°29'43	minimum elong	8885 Jul 26 19:19	11° B 51'02	0°02'01
	8884 Aug 12 18:39	0° H		behind sun begin	8885 Jul 26 13:42	11° B 21'34	
evening rise	8884 Aug 18 16:45	12° H 49'08		behind sun end	8885 Jul 27 00:57	12° B 20'34	
	8884 Aug 27 07:51	0° B		asc. node	8885 Jul 26 14:08	11° B 23'54	
evening max el	8884 Sep 10 15:36	20° B 05'21	23°13'28	evening rise	8885 Aug 03 03:13	27° B 22'22	
desc. node	8884 Sep 12 04:27	21° B 30'09			8885 Aug 04 09:24	0° H	
retrograde	8884 Sep 24 01:35	26° B 47'29			8885 Aug 22 21:52	0° B	
evening set	8884 Sep 28 02:40	26° B 11'44		evening max el	8885 Aug 23 07:17	0° B 23'32	21°36'46
min. Earth dist.	8884 Oct 05 00:58	22° B 59'32	0.55417 AU	desc. node	8885 Aug 30 01:34	5° B 16'04	
inferior conj	8884 Oct 06 17:17	22° B 00'43	-5°33'51	retrograde	8885 Sep 04 15:49	6° B 31'20	
minimum elong	8884 Oct 06 14:06	22° B 05'24	5°33'33	evening set	8885 Sep 07 07:49	6° B 15'13	
morning rise	8884 Oct 15 03:33	18° B 09'45		inferior conj	8885 Sep 16 11:43	2° B 17'16	-4°43'36
direct	8884 Oct 18 02:47	17° B 48'41		minimum elong	8885 Sep 16 02:32	2° B 30'06	4°41'31
morning max el	8884 Oct 28 23:54	22° B 55'07	20°33'20	min. Earth dist.	8885 Sep 16 09:19	2° B 20'38	0.54699 AU
	8884 Nov 03 23:32	0° B			8885 Sep 20 19:08	30° R H	
asc. node	8884 Nov 04 17:00	1° B 03'09		morning rise	8885 Sep 24 22:17	28° H 27'27	
morning set	8884 Nov 16 21:02	23° B 16'16		direct	8885 Sep 28 12:46	27° H 59'10	
	8884 Nov 20 03:01	0° A			8885 Oct 05 18:16	0° B	
				morning max el	8885 Oct 10 21:53	3° B 51'00	22°07'28
superior conj	8884 Nov 24 09:01	8° A 45'20	1°33'35	asc. node	8885 Oct 22 13:58	19° B 18'41	
minimum elong	8884 Nov 24 10:55	8° A 55'00	1°33'40		8885 Oct 28 08:48	0° B	
max. Earth dist.	8884 Nov 29 13:37	19° A 03'58	1.36172 AU	morning set	8885 Nov 01 07:18	8° B 04'10	
evening rise	8884 Dec 03 11:13	26° A 25'24					
	8884 Dec 05 10:25	0° B		superior conj	8885 Nov 08 10:00	23° B 11'14	1°40'14
desc. node	8884 Dec 09 03:11	6° B 29'14		minimum elong	8885 Nov 08 10:36	23° B 14'26	1°40'24
	8884 Dec 24 06:03	0° \approx			8885 Nov 11 16:29	0° A	
evening max el	8885 Jan 08 00:34	17° \approx 54'26	26°05'34	max. Earth dist.	8885 Nov 12 03:47	0° A 57'52	1.34399 AU
retrograde	8885 Jan 20 16:31	25° \approx 06'32		evening rise	8885 Nov 16 14:10	9° A 46'38	
evening set	8885 Jan 26 20:31	22° \approx 35'54		desc. node	8885 Nov 26 00:14	26° A 48'59	
min. Earth dist.	8885 Jan 31 01:58	18° \approx 07'35	0.66905 AU		8885 Nov 27 22:09	0° B	

	8885 Dec 19 23:54	0°♊			8886 Nov 21 13:22	0°♊	
evening max el	8885 Dec 21 14:02	1°♊34'43	26°57'45	evening max el	8886 Dec 04 02:29	14°♊55'57	27°26'14
retrograde	8886 Jan 03 20:10	8°♊54'39		retrograde	8886 Dec 17 17:17	22°♊15'32	
evening set	8886 Jan 10 11:13	6°♊19'26		evening set	8886 Dec 24 16:32	19°♊42'29	
min. Earth dist.	8886 Jan 14 10:56	2°♊25'14	0.65633 AU	min. Earth dist.	8886 Dec 28 11:27	16°♊20'46	0.64019 AU
inferior conj	8886 Jan 16 12:12	0°♊04'00	-0°41'05	inferior conj	8886 Dec 31 00:12	13°♊43'02	-1°48'08
minimum elong	8886 Jan 16 13:23	0°♊00'36	0°40'22	minimum elong	8886 Dec 31 03:35	13°♊34'13	1°46'31
	8886 Jan 16 13:36	30°♊♊		asc. node	8887 Jan 05 10:24	8°♊58'51	
asc. node	8886 Jan 18 13:18	27°♊47'44		morning rise	8887 Jan 06 16:23	8°♊21'26	
morning rise	8886 Jan 22 16:44	24°♊27'42		direct	8887 Jan 09 03:24	7°♊51'11	
direct	8886 Jan 25 11:12	23°♊45'57		morning max el	8887 Jan 15 14:53	11°♊13'19	17°50'17
morning max el	8886 Jan 31 21:38	27°♊11'07	18°08'48		8887 Jan 28 11:28	0°♊	
	8886 Feb 03 10:15	0°♊		morning set	8887 Feb 01 09:12	6°♊38'07	
morning set	8886 Feb 19 13:09	24°♊40'26		desc. node	8887 Feb 08 20:44	19°♊14'41	
desc. node	8886 Feb 21 23:48	28°♊38'19					
	8886 Feb 22 20:00	0°♊		superior conj	8887 Feb 14 09:02	28°♊17'34	-0°39'34
				minimum elong	8887 Feb 14 04:38	27°♊59'42	0°38'49
superior conj	8886 Mar 06 11:52	18°♊35'39	-1°22'50		8887 Feb 15 10:22	0°♊	
minimum elong	8886 Mar 06 02:52	18°♊00'11	1°21'45	max. Earth dist.	8887 Feb 19 17:40	6°♊52'52	1.44812 AU
max. Earth dist.	8886 Mar 08 22:18	22°♊25'03	1.45495 AU	evening rise	8887 Mar 02 03:37	23°♊06'21	
	8886 Mar 13 18:46	0°♊			8887 Mar 06 16:03	0°♊	
evening rise	8886 Mar 22 15:18	13°♊46'03			8887 Mar 27 20:36	0°♊	
	8886 Apr 02 03:42	0°♊		evening max el	8887 Mar 30 00:51	2°♊22'31	20°23'10
greatest brilliancy	8886 Apr 04 00:10	2°♊48'18	-0.7m	asc. node	8887 Apr 03 09:08	5°♊55'01	
evening max el	8886 Apr 15 22:08	18°♊42'49	19°24'17	retrograde	8887 Apr 06 23:43	7°♊00'19	
asc. node	8886 Apr 16 12:01	19°♊16'59		evening set	8887 Apr 10 22:40	5°♊30'05	
retrograde	8886 Apr 23 01:07	22°♊45'05			8887 Apr 15 19:46	30°♊♊	
evening set	8886 Apr 26 15:05	21°♊30'10		inferior conj	8887 Apr 16 06:14	29°♊24'17	3°10'22
inferior conj	8886 May 02 01:16	15°♊37'50	3°21'01	minimum elong	8887 Apr 16 04:49	29°♊29'07	3°10'05
minimum elong	8886 May 02 00:49	15°♊39'16	3°20'51	min. Earth dist.	8887 Apr 16 23:33	28°♊25'09	0.67813 AU
min. Earth dist.	8886 May 03 08:48	13°♊54'40	0.66824 AU	morning rise	8887 Apr 21 10:46	23°♊07'40	
morning rise	8886 May 07 10:12	9°♊19'15		direct	8887 Apr 27 01:51	20°♊37'16	
direct	8886 May 13 13:44	6°♊36'20		desc. node	8887 May 07 20:42	26°♊51'23	
desc. node	8886 May 20 23:44	9°♊36'11		morning max el	8887 May 08 09:57	27°♊24'26	24°25'16
morning max el	8886 May 26 00:36	14°♊03'10	25°49'54		8887 May 10 20:18	0°♊	
	8886 Jun 07 23:41	0°♊			8887 Jun 01 15:19	0°♊	
	8886 Jun 27 00:56	0°♊		morning set	8887 Jun 13 04:35	19°♊04'33	
morning set	8886 Jul 01 03:09	7°♊20'25		max. Earth dist.	8887 Jun 16 20:07	25°♊33'05	1.37699 AU
max. Earth dist.	8886 Jul 04 21:38	14°♊24'23	1.35606 AU		8887 Jun 19 06:29	0°♊	
superior conj	8886 Jul 10 13:06	25°♊30'47	-0°28'42	superior conj	8887 Jun 23 19:30	8°♊34'59	-1°00'58
minimum elong	8886 Jul 10 14:48	25°♊39'25	0°28'36	minimum elong	8887 Jun 23 23:20	8°♊53'30	1°00'33
	8886 Jul 12 18:03	0°♊		asc. node	8887 Jun 30 08:08	21°♊25'10	
asc. node	8886 Jul 13 11:07	1°♊27'33		evening rise	8887 Jul 02 12:03	25°♊43'27	
evening rise	8886 Jul 18 10:28	11°♊42'35			8887 Jul 04 16:05	0°♊	
	8886 Jul 28 01:28	0°♊		evening max el	8887 Jul 19 03:08	22°♊49'54	19°11'33
evening max el	8886 Aug 05 10:36	11°♊14'08	20°14'10	retrograde	8887 Jul 28 04:59	27°♊19'42	
retrograde	8886 Aug 16 04:34	16°♊33'11		evening set	8887 Jul 30 02:03	27°♊08'57	
desc. node	8886 Aug 16 22:43	16°♊31'42		desc. node	8887 Aug 03 19:51	25°♊18'53	
evening set	8886 Aug 18 03:25	16°♊23'26		inferior conj	8887 Aug 07 13:49	22°♊57'45	-1°09'13
inferior conj	8886 Aug 27 05:53	12°♊25'16	-3°05'16	minimum elong	8887 Aug 07 10:46	23°♊02'51	1°08'10
minimum elong	8886 Aug 26 21:39	12°♊37'24	3°02'30	min. Earth dist.	8887 Aug 10 08:18	21°♊06'31	0.56057 AU
min. Earth dist.	8886 Aug 28 19:01	11°♊30'33	0.54921 AU	morning rise	8887 Aug 15 16:35	18°♊14'01	
morning rise	8886 Sep 04 14:54	8°♊16'26		direct	8887 Aug 20 20:17	17°♊12'45	
direct	8886 Sep 08 23:03	7°♊35'48		morning max el	8887 Sep 04 00:03	24°♊24'40	25°35'18
morning max el	8886 Sep 22 11:24	14°♊11'10	23°53'13		8887 Sep 09 03:25	0°♊	
	8886 Oct 04 18:01	0°♊		asc. node	8887 Sep 26 07:54	27°♊30'43	
asc. node	8886 Oct 09 10:56	8°♊10'57			8887 Sep 27 13:52	0°♊	
morning set	8886 Oct 16 19:01	22°♊53'40		morning set	8887 Oct 01 06:28	7°♊40'02	
	8886 Oct 20 02:07	0°♊					
				superior conj	8887 Oct 08 03:03	22°♊40'13	1°34'07
superior conj	8886 Oct 23 16:47	7°♊51'50	1°40'11	minimum elong	8887 Oct 08 01:31	22°♊31'46	1°34'05
minimum elong	8886 Oct 23 16:12	7°♊48'35	1°40'18	max. Earth dist.	8887 Oct 09 07:44	25°♊18'08	1.32106 AU
max. Earth dist.	8886 Oct 26 02:19	13°♊01'33	1.33028 AU		8887 Oct 11 11:24	0°♊	
evening rise	8886 Oct 31 05:03	23°♊38'53		evening rise	8887 Oct 15 04:40	7°♊53'52	
	8886 Nov 03 10:34	0°♊			8887 Oct 26 21:03	0°♊	
desc. node	8886 Nov 12 21:18	16°♊49'12		desc. node	8887 Oct 30 18:23	6°♊21'47	

evening max el	8887 Nov 16 11:46	27°  45'05	27°24'51	evening rise	8888 Sep 28 10:22	22°  24'08	
	8887 Nov 19 00:58	0° 			8888 Oct 02 02:41	0° 	
retrograde	8887 Nov 30 07:22	5°  00'13		desc. node	8888 Oct 16 15:30	25°  15'43	
evening set	8887 Dec 07 09:25	2°  38'18			8888 Oct 20 00:54	0° 	
	8887 Dec 10 18:34	30°  R 		evening max el	8888 Oct 28 15:21	9°  50'36	26°49'57
min. Earth dist.	8887 Dec 11 01:49	29°  43'56	0.62119 AU	retrograde	8888 Nov 11 13:24	16°  59'45	
inferior conj	8887 Dec 14 00:36	27°  00'25	-2°59'13	evening set	8888 Nov 18 09:53	14°  59'48	
minimum elong	8887 Dec 14 06:22	26°  47'05	2°56'53	min. Earth dist.	8888 Nov 22 05:37	12°  22'18	0.60040 AU
morning rise	8887 Dec 21 05:34	21°  56'51		inferior conj	8888 Nov 25 10:02	9°  47'33	-4°09'00
direct	8887 Dec 23 11:37	21°  34'27		minimum elong	8888 Nov 25 17:25	9°  32'32	4°06'39
asc. node	8887 Dec 23 07:28	21°  34'36		morning rise	8888 Dec 03 03:28	5°  04'52	
morning max el	8887 Dec 30 07:43	25°  02'56	17°49'31	direct	8888 Dec 05 07:51	4°  46'56	
	8888 Jan 03 10:02	0° 		asc. node	8888 Dec 09 04:30	5°  45'55	
morning set	8888 Jan 15 03:13	19°  38'20		morning max el	8888 Dec 12 20:42	8°  30'51	18°07'45
	8888 Jan 20 23:14	0° 			8888 Dec 26 17:37	0° 	
				morning set	8888 Dec 28 13:04	3°  32'59	
superior conj	8888 Jan 26 06:54	9°  11'17	0°03'20	superior conj	8889 Jan 07 05:23	21°  31'52	0°39'42
minimum elong	8888 Jan 26 07:14	9°  12'42	0°03'29	minimum elong	8889 Jan 07 08:13	21°  38'04	0°39'31
behind sun begin	8888 Jan 25 22:40	8°  36'15			8889 Jan 12 04:56	0° 	
behind sun end	8888 Jan 26 15:49	9°  49'03		desc. node	8889 Jan 12 14:34	0°  41'21	
desc. node	8888 Jan 26 17:38	9°  56'46		max. Earth dist.	8889 Jan 14 20:40	4°  30'53	1.41634 AU
max. Earth dist.	8888 Feb 02 09:39	20°  59'29	1.43471 AU	evening rise	8889 Jan 19 23:50	12°  57'46	
	8888 Feb 08 01:10	0° 			8889 Jan 30 23:46	0° 	
evening rise	8888 Feb 09 17:58	2°  39'26		evening max el	8889 Feb 22 14:36	29°  45'31	22°52'30
	8888 Feb 28 03:46	0° 			8889 Feb 22 20:25	0° 	
evening max el	8888 Mar 11 21:58	16°  02'44	21°34'06	retrograde	8889 Mar 04 17:56	5°  45'57	
asc. node	8888 Mar 20 06:17	21°  01'45		asc. node	8889 Mar 07 03:24	5°  45'17	
retrograde	8888 Mar 20 21:53	21°  01'54		evening set	8889 Mar 09 14:10	3°  45'46	
evening set	8888 Mar 25 06:53	19°  03'28			8889 Mar 13 00:15	30°  R 	
inferior conj	8888 Mar 30 14:07	13°  01'36	2°49'05	inferior conj	8889 Mar 14 22:57	27°  41'21	2°18'19
minimum elong	8888 Mar 30 12:05	13°  02'40	2°48'36	minimum elong	8889 Mar 14 20:42	27°  48'51	2°17'41
min. Earth dist.	8888 Mar 30 18:23	13°  04'45	0.68356 AU	min. Earth dist.	8889 Mar 14 15:06	27°  48'16	0.68473 AU
morning rise	8888 Apr 04 17:08	7°  06'34		morning rise	8889 Mar 20 03:08	21°  41'25	
direct	8888 Apr 09 18:31	4°  05'46		direct	8889 Mar 24 14:41	19°  41'22	
morning max el	8888 Apr 19 20:00	10°  02'29	22°55'23	morning max el	8889 Apr 02 09:59	24°  41'29	21°29'17
desc. node	8888 Apr 23 17:38	15°  09'35			8889 Apr 07 07:18	0° 	
	8888 May 04 23:40	0° 		desc. node	8889 Apr 10 14:32	4°  01'39	
morning set	8888 May 24 05:53	29°  39'54			8889 Apr 28 09:25	0° 	
	8888 May 24 10:44	0° 		morning set	8889 May 04 03:48	8°  59'39	
max. Earth dist.	8888 May 28 16:39	7°  09'56	1.39955 AU	max. Earth dist.	8889 May 10 17:28	19°  36'26	1.42107 AU
					8889 May 16 21:49	0° 	
superior conj	8888 Jun 05 10:28	20°  05'26	-1°31'53	superior conj	8889 May 18 05:25	2°  16'10	-1°57'14
minimum elong	8888 Jun 05 16:06	21°  01'11	1°31'22	minimum elong	8889 May 18 11:06	2°  40'46	1°57'00
	8888 Jun 10 07:59	0° 		evening rise	8889 May 29 08:42	22°  09'48	
evening rise	8888 Jun 15 04:45	9°  15'43			8889 Jun 02 16:32	0° 	
asc. node	8888 Jun 16 05:09	11°  01'52		asc. node	8889 Jun 03 02:10	0° 	
	8888 Jun 27 01:05	0° 		evening max el	8889 Jun 14 16:26	17°  57'25	18°08'38
evening max el	8888 Jul 01 06:21	5°  07'18	18°29'58	retrograde	8889 Jun 21 12:32	21°  52'28	
retrograde	8888 Jul 08 23:43	8°  58'33		evening set	8889 Jun 23 23:06	20°  59'26	
evening set	8888 Jul 11 02:33	8°  42'03		inferior conj	8889 Jun 30 20:48	16°  58'44	1°52'04
inferior conj	8888 Jul 18 18:44	4°  01'14	0°34'29	minimum elong	8889 Jun 30 23:42	16°  52'04	1°50'57
minimum elong	8888 Jul 18 19:58	4°  09'19	0°33'48	min. Earth dist.	8889 Jul 04 04:22	13°  57'55	0.60087 AU
desc. node	8888 Jul 20 16:58	2°  04'21		morning rise	8889 Jul 07 21:26	10°  51'55	
min. Earth dist.	8888 Jul 22 02:53	1°  35'11	0.57887 AU	desc. node	8889 Jul 07 14:02	10°  51'33	
	8888 Jul 24 09:32	30°  R 		direct	8889 Jul 14 09:27	8°  51'29	
morning rise	8888 Jul 26 09:50	28°  51'13		morning max el	8889 Jul 28 17:28	16°  51'25	27°44'56
direct	8888 Aug 01 08:19	27°  52'05			8889 Aug 09 00:36	0° 	
	8888 Aug 09 12:23	0° 		morning set	8889 Aug 26 14:43	0° 	
morning max el	8888 Aug 15 17:27	4°  59'35	26°56'42	asc. node	8889 Aug 29 21:49	6°  42'50	
	8888 Sep 03 01:59	0° 		max. Earth dist.	8889 Aug 30 01:43	7°  43'12	
asc. node	8888 Sep 12 04:49	17°  01'10			8889 Sep 05 02:37	20°  04'56	1.31654 AU
morning set	8888 Sep 14 16:00	22°  01'18		superior conj	8889 Sep 06 02:11	22°  15'14	1°05'55
	8888 Sep 18 05:28	0° 		minimum elong	8889 Sep 05 23:57	22°  02'52	1°05'30
superior conj	8888 Sep 21 14:48	7°  30'01	1°22'34		8889 Sep 09 14:09	0° 	
minimum elong	8888 Sep 21 12:42	7°  18'20	1°22'20				
max. Earth dist.	8888 Sep 21 17:01	7°  42'23	1.31644 AU				

evening rise	8889 Sep 12 19:54	7°♄03'01			8890 Sep 01 06:14	0°♄	
	8889 Sep 24 16:32	0°♄		desc. node	8890 Sep 20 09:46	29°♄59'00	
desc. node	8889 Oct 03 12:38	13°♄15'09			8890 Sep 20 10:09	0°♄	
evening max el	8889 Oct 10 11:14	21°♄05'23	25°42'25	evening max el	8890 Sep 22 00:06	1°♄35'46	24°10'54
retrograde	8889 Oct 24 09:21	28°♄07'35		retrograde	8890 Oct 05 17:03	8°♄27'47	
evening set	8889 Oct 30 12:57	26°♄39'21		evening set	8890 Oct 10 15:19	7°♄34'22	
min. Earth dist.	8889 Nov 03 23:45	24°♄02'49	0.57976 AU	min. Earth dist.	8890 Oct 16 10:49	4°♄40'24	0.56201 AU
inferior conj	8889 Nov 07 01:00	21°♄53'57	-5°07'15	inferior conj	8890 Oct 18 19:37	3°♄12'53	-5°37'12
minimum elong	8889 Nov 07 07:31	21°♄42'27	5°05'55	minimum elong	8890 Oct 18 20:56	3°♄10'51	5°37'02
morning rise	8889 Nov 15 04:24	17°♄33'46			8890 Oct 24 18:28	30°♄	
direct	8889 Nov 17 11:57	17°♄16'58		morning rise	8890 Oct 27 04:37	29°♄13'36	
morning max el	8889 Nov 26 02:00	21°♄25'35	18°46'41	direct	8890 Oct 29 20:59	28°♄54'48	
asc. node	8889 Nov 26 01:30	21°♄24'21			8890 Nov 03 16:37	0°♄	
	8889 Dec 02 17:36	0°♄		morning max el	8890 Nov 08 20:08	3°♄37'12	19°47'55
morning set	8889 Dec 12 09:47	17°♄36'59		asc. node	8890 Nov 12 22:28	8°♄15'32	
	8889 Dec 18 18:16	0°♄			8890 Nov 25 11:59	0°♄	
				morning set	8890 Nov 26 13:47	2°♄09'55	
superior conj	8889 Dec 20 23:53	4°♄15'42	1°07'26				
minimum elong	8889 Dec 21 03:11	4°♄31'18	1°07'15	superior conj	8890 Dec 04 09:26	17°♄58'31	1°26'23
max. Earth dist.	8889 Dec 28 03:35	17°♄20'32	1.39512 AU	minimum elong	8890 Dec 04 12:00	18°♄11'18	1°26'22
desc. node	8889 Dec 30 11:32	21°♄24'21		max. Earth dist.	8890 Dec 10 09:46	29°♄34'18	1.37350 AU
evening rise	8890 Jan 01 03:07	24°♄13'21			8890 Dec 10 15:17	0°♄	
	8890 Jan 04 14:23	0°♄		evening rise	8890 Dec 14 03:30	6°♄24'10	
	8890 Jan 24 18:57	0°♄		desc. node	8890 Dec 17 08:32	12°♄01'54	
evening max el	8890 Feb 05 04:41	13°♄31'53	24°12'34		8890 Dec 28 11:57	0°♄	
retrograde	8890 Feb 16 10:31	20°♄07'32		evening max el	8891 Jan 18 17:56	27°♄20'15	25°27'30
evening set	8890 Feb 21 18:57	17°♄53'38			8891 Jan 21 16:18	0°♄	
asc. node	8890 Feb 22 00:30	17°♄41'35		retrograde	8891 Jan 30 22:37	4°♄21'38	
min. Earth dist.	8890 Feb 26 11:22	12°♄30'44	0.68179 AU	evening set	8891 Feb 05 19:43	1°♄56'01	
inferior conj	8890 Feb 27 06:50	11°♄25'05	1°38'44		8891 Feb 07 19:27	30°♄	
minimum elong	8890 Feb 27 04:50	11°♄31'48	1°38'07	asc. node	8891 Feb 08 21:37	28°♄44'58	
morning rise	8890 Mar 04 14:47	5°♄23'27		min. Earth dist.	8891 Feb 10 04:55	27°♄07'58	0.67487 AU
direct	8890 Mar 08 13:10	3°♄55'22		inferior conj	8891 Feb 11 11:55	25°♄28'17	0°50'42
morning max el	8890 Mar 16 06:57	8°♄17'48	20°13'42	minimum elong	8891 Feb 11 10:43	25°♄32'11	0°50'23
desc. node	8890 Mar 28 11:25	23°♄50'53		morning rise	8891 Feb 17 02:05	19°♄34'55	
	8890 Apr 01 16:36	0°♄		direct	8891 Feb 20 12:23	18°♄27'22	
morning set	8890 Apr 13 04:45	17°♄25'29		morning max el	8891 Feb 27 11:57	22°♄17'49	19°12'29
	8890 Apr 21 05:28	0°♄			8891 Mar 05 21:08	0°♄	
max. Earth dist.	8890 Apr 23 01:57	2°♄57'23	1.43882 AU	greatest brilliancy	8891 Mar 12 16:07	9°♄49'40	-0.7m
				desc. node	8891 Mar 15 08:19	13°♄52'26	
superior conj	8890 Apr 29 00:26	12°♄35'29	-2°11'15	morning set	8891 Mar 23 05:42	26°♄00'02	
minimum elong	8890 Apr 29 02:32	12°♄44'07	2°11'22		8891 Mar 25 19:42	0°♄	
	8890 May 09 08:12	0°♄		max. Earth dist.	8891 Apr 05 17:12	17°♄00'17	1.45073 AU
evening rise	8890 May 11 19:18	4°♄15'25					
asc. node	8890 May 20 23:13	19°♄52'41		superior conj	8891 Apr 08 19:49	21°♄55'04	-2°07'45
	8890 May 28 02:56	0°♄		minimum elong	8891 Apr 08 14:55	21°♄35'38	2°07'39
evening max el	8890 May 29 05:38	1°♄10'25	18°06'33		8891 Apr 13 21:19	0°♄	
retrograde	8890 Jun 04 15:43	4°♄30'53		evening rise	8891 Apr 23 08:08	15°♄24'07	
evening set	8890 Jun 07 09:52	3°♄52'44			8891 May 02 05:42	0°♄	
	8890 Jun 12 10:35	30°♄		asc. node	8891 May 07 20:18	8°♄33'25	
inferior conj	8890 Jun 13 16:43	28°♄42'35	2°42'53	evening max el	8891 May 12 18:41	14°♄37'21	18°22'57
minimum elong	8890 Jun 13 19:22	28°♄35'36	2°42'05	retrograde	8891 May 19 04:44	18°♄04'29	
min. Earth dist.	8890 Jun 16 14:21	25°♄41'35	0.62325 AU	evening set	8891 May 22 06:16	17°♄12'43	
morning rise	8890 Jun 20 03:01	22°♄36'00		inferior conj	8891 May 28 02:17	11°♄44'46	3°11'12
desc. node	8890 Jun 24 11:05	20°♄27'21		minimum elong	8891 May 28 03:50	11°♄40'15	3°10'48
direct	8890 Jun 26 20:51	20°♄09'03		min. Earth dist.	8891 May 30 09:40	9°♄03'58	0.64362 AU
morning max el	8890 Jul 10 23:26	28°♄11'04	27°55'05	morning rise	8891 Jun 03 00:22	5°♄29'00	
	8890 Jul 12 17:22	0°♄		direct	8891 Jun 09 16:42	2°♄46'47	
	8890 Aug 02 20:02	0°♄		desc. node	8891 Jun 11 08:08	2°♄55'36	
morning set	8890 Aug 13 21:58	20°♄48'29		morning max el	8891 Jun 23 09:07	10°♄46'11	27°28'47
asc. node	8890 Aug 16 22:38	27°♄05'02			8891 Jul 08 12:54	0°♄	
	8890 Aug 18 07:35	0°♄			8891 Jul 26 06:43	0°♄	
max. Earth dist.	8890 Aug 19 08:51	2°♄15'42	1.32139 AU	morning set	8891 Jul 28 13:52	4°♄27'06	
				max. Earth dist.	8891 Aug 02 07:45	14°♄03'05	1.33105 AU
superior conj	8890 Aug 21 11:24	6°♄50'21	0°44'30	asc. node	8891 Aug 03 19:35	17°♄10'29	
minimum elong	8890 Aug 21 09:33	6°♄40'13	0°44'02				
evening rise	8890 Aug 28 07:19	21°♄44'44		superior conj	8891 Aug 05 16:27	21°♄08'26	0°18'45

minimum elong	8891 Aug 05 15:32	21°Ω03'33	0°18'23		8892 Jul 17 03:38	0°Ω	
	8891 Aug 09 19:18	0°൬					
evening rise	8891 Aug 12 18:40	6°൬22'19		superior conj	8892 Jul 19 15:03	5°Ω03'43	-0°10'38
	8891 Aug 25 07:01	0°Ω		minimum elong	8892 Jul 19 15:39	5°Ω06'50	0°10'43
evening max el	8891 Sep 03 11:49	11°Ω46'24	22°31'12	behind sun begin	8892 Jul 19 11:16	4°Ω44'09	
desc. node	8891 Sep 07 06:55	14°Ω58'38		behind sun end	8892 Jul 19 20:03	5°Ω29'33	
retrograde	8891 Sep 16 12:40	18°Ω16'28		asc. node	8892 Jul 20 16:34	7°Ω15'58	
evening set	8891 Sep 19 22:44	17°Ω50'43		evening rise	8892 Jul 27 04:02	20°Ω50'31	
min. Earth dist.	8891 Sep 27 18:48	14°Ω22'23	0.55008 AU		8892 Jul 31 16:20	0°൬	
inferior conj	8891 Sep 28 20:15	13°Ω46'21	-5°19'28	evening max el	8892 Aug 15 07:40	22°൬14'32	20°59'19
minimum elong	8891 Sep 28 13:53	13°Ω55'22	5°18'34	desc. node	8892 Aug 24 04:04	27°൬42'44	
morning rise	8891 Oct 07 06:54	9°Ω58'38		retrograde	8892 Aug 27 01:10	28°൬03'23	
direct	8891 Oct 10 12:22	9°Ω35'00		evening set	8892 Aug 29 07:23	27°൬51'17	
morning max el	8891 Oct 22 01:10	14°Ω59'41	21°11'18	inferior conj	8892 Sep 07 12:38	23°൬54'44	-4°06'19
asc. node	8891 Oct 30 19:26	26°Ω03'54		minimum elong	8892 Sep 07 02:59	24°൬08'23	4°03'36
	8891 Nov 02 04:36	0°൬		min. Earth dist.	8892 Sep 08 03:32	23°൬33'36	0.54670 AU
morning set	8891 Nov 10 22:22	16°൬54'03		morning rise	8892 Sep 15 22:53	19°൬59'12	
	8891 Nov 17 04:25	0°𐍪		direct	8892 Sep 19 20:15	19°൬26'43	
				morning max el	8892 Oct 02 18:52	25°൬37'59	22°51'56
superior conj	8891 Nov 18 05:46	2°𐍪11'36	1°37'16		8892 Oct 06 21:10	0°Ω	
minimum elong	8891 Nov 18 07:07	2°𐍪18'37	1°37'24	asc. node	8892 Oct 16 16:24	14°Ω36'05	
max. Earth dist.	8891 Nov 22 19:44	11°𐍪28'46	1.35375 AU		8892 Oct 24 13:50	0°൬	
evening rise	8891 Nov 26 21:48	19°𐍪22'04		morning set	8892 Oct 25 09:25	1°൬43'04	
	8891 Dec 02 18:49	0°𐍪					
desc. node	8891 Dec 04 05:35	2°𐍪29'39		superior conj	8892 Nov 01 09:32	16°൬44'50	1°40'59
	8891 Dec 22 13:59	0°≈		minimum elong	8892 Nov 01 09:36	16°൬45'13	1°41'09
evening max el	8892 Jan 01 07:09	11°≈05'21	26°30'08	max. Earth dist.	8892 Nov 04 13:10	23°൬24'19	1.33754 AU
retrograde	8892 Jan 14 05:38	18°≈21'56			8892 Nov 07 18:29	0°𐍪	
evening set	8892 Jan 20 14:44	15°≈48'21		evening rise	8892 Nov 09 06:11	2°𐍪57'23	
min. Earth dist.	8892 Jan 24 17:34	11°≈34'58	0.66411 AU	desc. node	8892 Nov 20 02:39	22°𐍪41'59	
inferior conj	8892 Jan 26 12:16	9°≈26'42	-0°05'23		8892 Nov 24 15:15	0°𐍪	
minimum elong	8892 Jan 26 12:24	9°≈26'17	0°05'07	evening max el	8892 Dec 13 20:10	24°𐍪38'25	27°13'09
transit middle	8892 Jan 26 12:24	9°≈26'17	0°05'07		8892 Dec 20 17:31	0°≈	
transit begin	8892 Jan 26 09:39	9°≈34'34		retrograde	8892 Dec 27 06:49	1°≈59'56	
transit end	8892 Jan 26 15:09	9°≈18'00			8893 Jan 02 06:07	30°𐍪𐍪	
asc. node	8892 Jan 26 18:43	9°≈07'17		evening set	8893 Jan 03 01:49	29°𐍪24'24	
morning rise	8892 Feb 01 10:58	3°≈43'44		min. Earth dist.	8893 Jan 06 23:10	25°𐍪44'33	0.64980 AU
direct	8892 Feb 04 10:39	2°≈53'43		inferior conj	8893 Jan 09 05:31	23°𐍪14'47	-1°08'50
morning max el	8892 Feb 10 23:46	6°≈24'51	18°27'18	minimum elong	8893 Jan 09 07:35	23°𐍪09'05	1°07'44
	8892 Feb 27 13:49	0°𐍪		asc. node	8893 Jan 12 15:50	19°𐍪45'09	
desc. node	8892 Mar 01 05:13	4°𐍪11'42		morning rise	8893 Jan 15 14:50	17°𐍪44'36	
morning set	8892 Mar 02 04:40	5°𐍪44'50		direct	8893 Jan 18 05:45	17°𐍪08'22	
	8892 Mar 17 14:04	0°𐍪		morning max el	8893 Jan 24 15:54	20°𐍪31'16	17°58'48
					8893 Jan 31 22:26	0°≈	
superior conj	8892 Mar 18 01:41	0°𐍪45'27	-1°44'03	morning set	8893 Feb 11 09:05	16°≈56'59	
minimum elong	8892 Mar 17 16:10	0°𐍪08'13	1°43'11	desc. node	8893 Feb 16 02:07	24°≈42'58	
max. Earth dist.	8892 Mar 18 12:03	1°𐍪25'59	1.45551 AU		8893 Feb 19 07:52	0°𐍪	
evening rise	8892 Apr 02 21:26	25°𐍪36'08					
	8892 Apr 05 16:12	0°𐍪		superior conj	8893 Feb 25 12:22	9°𐍪55'57	-1°05'02
greatest brilliancy	8892 Apr 12 10:44	10°𐍪38'58	-0.8m	minimum elong	8893 Feb 25 04:59	9°𐍪26'36	1°03'59
asc. node	8892 Apr 23 17:25	26°𐍪36'31		max. Earth dist.	8893 Mar 01 07:30	15°𐍪56'00	1.45286 AU
evening max el	8892 Apr 25 05:04	28°𐍪12'38	18°57'04		8893 Mar 10 08:13	0°𐍪	
	8892 Apr 27 04:51	0°𐍪		evening rise	8893 Mar 13 15:26	5°𐍪05'35	
retrograde	8892 May 01 23:48	1°𐍪59'13		greatest brilliancy	8893 Mar 27 18:21	26°𐍪31'46	-0.6m
evening set	8892 May 05 08:57	0°𐍪53'01			8893 Mar 30 03:37	0°𐍪	
	8892 May 06 13:09	30°𐍪𐍪		evening max el	8893 Apr 08 10:53	11°𐍪51'24	19°47'37
inferior conj	8892 May 10 21:49	25°𐍪09'00	3°21'38	asc. node	8893 Apr 10 14:34	13°𐍪49'33	
minimum elong	8892 May 10 22:04	25°𐍪08'13	3°21'26	retrograde	8893 Apr 15 21:46	16°𐍪08'08	
min. Earth dist.	8892 May 12 13:57	23°𐍪02'15	0.66045 AU	evening set	8893 Apr 19 15:19	14°𐍪46'56	
morning rise	8892 May 16 10:38	18°𐍪50'04		inferior conj	8893 Apr 25 00:06	8°𐍪48'40	3°17'54
direct	8892 May 22 19:55	16°𐍪04'11		minimum elong	8893 Apr 24 23:12	8°𐍪51'39	3°17'41
desc. node	8892 May 28 05:08	17°𐍪39'33		min. Earth dist.	8893 Apr 26 01:30	7°𐍪23'41	0.67300 AU
morning max el	8892 Jun 04 19:48	23°𐍪48'01	26°32'22	morning rise	8893 Apr 30 06:46	2°𐍪30'24	
	8892 Jun 10 08:37	0°𐍪			8893 May 04 19:30	30°𐍪𐍪	
	8892 Jun 30 21:55	0°𐍪		direct	8893 May 06 05:14	29°𐍪51'39	
morning set	8892 Jul 10 18:20	17°𐍪30'39			8893 May 07 16:07	0°𐍪	
max. Earth dist.	8892 Jul 14 20:18	25°𐍪23'28	1.34561 AU	desc. node	8893 May 15 02:06	4°𐍪07'32	

morning max el	8893 May 18 05:33	7° C 04'01	25°15'01	morning max el	8894 Apr 30 14:38	20° Y 27'20	23°46'55
	8893 Jun 05 01:35	0° II		desc. node	8894 May 01 23:02	21° Y 51'49	
morning set	8893 Jun 23 07:06	29° II 47'44			8894 May 08 18:36	0° B	
	8893 Jun 23 09:50	0° C			8894 May 29 06:33	0° II	
max. Earth dist.	8893 Jun 26 22:17	6° C 26'52	1.36458 AU	morning set	8894 Jun 04 22:51	11° II 03'56	
				max. Earth dist.	8894 Jun 08 18:40	17° II 42'22	1.38656 AU
					8894 Jun 15 12:41	0° C	
superior conj	8893 Jul 03 04:21	18° C 29'09	-0°42'23				
minimum elong	8893 Jul 03 06:57	18° C 42'02	0°42'07				
asc. node	8893 Jul 07 13:35	27° C 17'44		superior conj	8894 Jun 16 04:44	1° C 15'24	-1°14'28
	8893 Jul 08 21:30	0° Q		minimum elong	8894 Jun 16 09:26	1° C 37'34	1°13'58
evening rise	8893 Jul 11 09:11	5° Q 03'14		asc. node	8894 Jun 24 10:36	17° C 11'21	
	8893 Jul 25 16:26	0° P		evening rise	8894 Jun 25 07:22	18° C 52'51	
evening max el	8893 Jul 28 16:49	3° P 24'38	19°45'00		8894 Jul 01 03:26	0° Q	
retrograde	8893 Aug 07 17:22	8° P 21'43		evening max el	8894 Jul 11 14:25	15° Q 19'28	18°51'21
evening set	8893 Aug 09 13:51	8° P 12'19		retrograde	8894 Jul 20 00:52	19° Q 30'38	
desc. node	8893 Aug 11 01:11	7° P 52'10		evening set	8894 Jul 22 00:05	19° Q 17'50	
inferior conj	8893 Aug 18 11:17	4° P 10'17	-2°16'07	desc. node	8894 Jul 28 22:18	15° Q 50'58	
minimum elong	8893 Aug 18 05:05	4° P 19'53	2°13'55	inferior conj	8894 Jul 30 03:40	14° Q 59'00	-0°22'26
min. Earth dist.	8893 Aug 20 14:54	2° P 50'30	0.55297 AU	minimum elong	8894 Jul 30 02:44	15° Q 00'40	0°22'15
	8893 Aug 26 04:10	30° R Q		min. Earth dist.	8894 Aug 02 06:03	12° Q 46'30	0.56772 AU
morning rise	8893 Aug 26 18:16	29° Q 47'28		morning rise	8894 Aug 07 02:03	9° Q 59'28	
direct	8893 Aug 31 10:41	28° Q 58'56		direct	8894 Aug 12 14:26	8° Q 46'24	
	8893 Sep 05 15:22	0° P		morning max el	8894 Aug 26 21:00	16° Q 10'28	26°13'23
morning max el	8893 Sep 14 07:08	5° P 51'54	24°38'10		8894 Sep 07 03:13	0° P	
	8893 Oct 01 13:53	0° A		asc. node	8894 Sep 20 10:16	23° P 10'11	
asc. node	8893 Oct 03 13:21	3° A 41'16			8894 Sep 23 17:49	0° A	
morning set	8893 Oct 09 21:13	16° A 32'03		morning set	8894 Sep 24 08:00	1° A 15'16	
	8893 Oct 16 01:37	0° M					
				superior conj	8894 Oct 01 05:10	16° A 19'38	1°29'52
superior conj	8893 Oct 16 18:04	1° M 30'07	1°38'19	minimum elong	8894 Oct 01 03:20	16° A 09'31	1°29'45
minimum elong	8893 Oct 16 17:02	1° M 24'28	1°38'23	max. Earth dist.	8894 Oct 01 22:16	17° A 54'19	1.31853 AU
max. Earth dist.	8893 Oct 18 14:45	5° M 33'19	1.32573 AU		8894 Oct 07 11:49	0° M	
evening rise	8893 Oct 24 01:10	17° M 00'58		evening rise	8894 Oct 08 03:40	1° M 23'26	
	8893 Oct 30 17:38	0° X			8894 Oct 23 16:33	0° X	
desc. node	8893 Nov 06 23:44	12° X 32'03		desc. node	8894 Oct 24 20:50	1° X 49'46	
	8893 Nov 19 04:50	0° Z		evening max el	8894 Nov 08 15:01	20° X 20'58	27°14'17
evening max el	8893 Nov 26 07:38	7° Z 48'26	27°29'42	retrograde	8894 Nov 22 11:50	27° X 32'50	
retrograde	8893 Dec 10 01:17	15° Z 06'57		evening set	8894 Nov 29 12:39	25° X 19'20	
evening set	8893 Dec 17 02:18	12° Z 37'36		min. Earth dist.	8894 Dec 03 05:40	22° X 33'32	0.61248 AU
min. Earth dist.	8893 Dec 20 19:46	9° Z 28'07	0.63236 AU	inferior conj	8894 Dec 06 07:26	19° X 52'07	-3°29'27
inferior conj	8893 Dec 23 13:00	6° Z 46'23	-2°18'00	minimum elong	8894 Dec 06 14:04	19° X 37'34	3°26'59
minimum elong	8893 Dec 23 17:25	6° Z 35'26	2°16'02	morning rise	8894 Dec 13 17:48	14° X 56'45	
morning rise	8893 Dec 30 10:32	1° Z 31'53		direct	8894 Dec 15 22:45	14° X 36'34	
asc. node	8893 Dec 30 12:53	1° Z 29'45		asc. node	8894 Dec 17 09:54	14° X 45'46	
direct	8894 Jan 01 18:59	1° Z 05'29		morning max el	8894 Dec 23 00:52	18° X 10'34	17°54'50
morning max el	8894 Jan 08 09:21	4° Z 29'36	17°47'39		8894 Dec 31 12:48	0° Z	
morning set	8894 Jan 24 15:21	29° Z 24'17		morning set	8895 Jan 07 16:49	12° Z 45'44	
	8894 Jan 24 23:34	0° A			8895 Jan 17 07:06	0° A	
desc. node	8894 Feb 02 23:03	15° A 22'28					
				superior conj	8895 Jan 18 04:14	1° A 32'03	0°19'45
superior conj	8894 Feb 05 19:33	20° A 07'29	-0°20'54	minimum elong	8895 Jan 18 05:55	1° A 39'23	0°19'42
minimum elong	8894 Feb 05 17:22	19° A 58'26	0°20'23	desc. node	8895 Jan 20 19:59	6° A 06'09	
	8894 Feb 11 21:26	0° X		max. Earth dist.	8895 Jan 25 15:42	14° A 10'16	1.42747 AU
max. Earth dist.	8894 Feb 12 01:21	0° X 15'40	1.44320 AU	evening rise	8895 Jan 31 22:26	24° A 16'57	
evening rise	8894 Feb 21 02:41	14° X 26'55			8895 Feb 04 14:27	0° X	
	8894 Mar 03 09:42	0° Y			8895 Feb 25 10:22	0° Y	
evening max el	8894 Mar 22 11:15	25° Y 31'41	20°52'08	evening max el	8895 Mar 05 06:23	9° Y 13'38	22°06'51
asc. node	8894 Mar 28 11:41	29° Y 58'21		retrograde	8895 Mar 14 17:37	14° Y 50'01	
	8894 Mar 28 13:26	0° B		asc. node	8895 Mar 15 08:47	14° Y 48'00	
retrograde	8894 Mar 30 20:18	0° B 26'25		evening set	8895 Mar 19 07:21	12° Y 58'09	
	8894 Apr 02 00:35	30° R Y		inferior conj	8895 Mar 24 15:04	6° Y 37'44	2°37'07
evening set	8894 Apr 03 23:21	28° Y 49'51		minimum elong	8895 Mar 24 12:54	6° Y 45'18	2°36'34
inferior conj	8894 Apr 09 06:34	22° Y 39'15	3°02'32	min. Earth dist.	8895 Mar 24 14:05	6° Y 41'10	0.68465 AU
minimum elong	8894 Apr 09 04:50	22° Y 45'13	3°02'09	morning rise	8895 Mar 29 18:17	0° Y 26'51	
min. Earth dist.	8894 Apr 09 18:16	21° Y 58'50	0.68106 AU		8895 Mar 30 07:29	30° R X	
morning rise	8894 Apr 14 10:06	16° Y 23'59		direct	8895 Apr 03 13:49	28° X 24'02	
direct	8894 Apr 19 19:34	14° Y 00'39			8895 Apr 08 07:17	0° Y	

morning max el	8895 Apr 13 01:53	3° Υ 58'51	22°17'50	direct	8896 Mar 17 10:59	12° Υ 54'47	
desc. node	8895 Apr 18 19:57	10° Υ 31'33		morning max el	8896 Mar 25 18:43	17° Υ 41'10	20°55'39
	8895 May 02 21:45	0° Υ		desc. node	8896 Apr 04 16:51	29° Υ 51'03	
morning set	8895 May 16 12:34	21° Υ 07'13			8896 Apr 04 19:27	0° Υ	
max. Earth dist.	8895 May 21 17:01	29° Υ 41'40	1.40905 AU	morning set	8896 Apr 24 23:59	29° Υ 59'32	
	8895 May 21 21:22	0° Υ			8896 Apr 25 00:07	0° Υ	
				max. Earth dist.	8896 May 02 21:26	12° Υ 33'56	1.42923 AU
superior conj	8895 May 29 11:49	13° Υ 12'09	-1°43'37				
minimum elong	8895 May 29 17:47	13° Υ 38'51	1°43'12	superior conj	8896 May 09 20:53	24° Υ 08'15	-2°04'56
	8895 Jun 07 15:15	0° Υ		minimum elong	8896 May 10 01:35	24° Υ 28'08	2°04'53
evening rise	8895 Jun 08 19:12	2° Υ 10'48			8896 May 13 07:10	0° Υ	
asc. node	8895 Jun 11 07:37	6° Υ 52'32		evening rise	8896 May 21 16:23	14° Υ 45'59	
evening max el	8895 Jun 24 21:02	27° Υ 52'20	18°18'25	asc. node	8896 May 28 04:39	26° Υ 15'29	
	8895 Jun 27 11:14	0° Υ			8896 May 30 10:03	0° Υ	
retrograde	8895 Jul 02 03:50	1° Υ 31'51		evening max el	8896 Jun 07 08:47	10° Υ 52'55	18°05'21
evening set	8895 Jul 04 09:59	1° Υ 11'35		retrograde	8896 Jun 13 23:30	14° Υ 16'17	
	8895 Jul 07 02:08	30° Υ		evening set	8896 Jun 16 13:13	13° Υ 45'27	
inferior conj	8895 Jul 11 17:54	26° Υ 32'10	1°10'49	inferior conj	8896 Jun 23 04:06	8° Υ 46'08	2°16'40
minimum elong	8895 Jul 11 20:08	26° Υ 27'26	1°09'50	minimum elong	8896 Jun 23 07:04	8° Υ 38'54	2°15'39
min. Earth dist.	8895 Jul 15 03:06	23° Υ 42'42	0.58801 AU	min. Earth dist.	8896 Jun 26 08:10	5° Υ 42'23	0.61049 AU
desc. node	8895 Jul 15 19:22	23° Υ 10'54		morning rise	8896 Jun 29 22:26	2° Υ 48'10	
morning rise	8895 Jul 19 03:01	20° Υ 58'26		desc. node	8896 Jul 01 16:26	1° Υ 47'07	
direct	8895 Jul 25 08:01	19° Υ 15'04		direct	8896 Jul 06 13:39	0° Υ 35'00	
morning max el	8895 Aug 08 17:14	27° Υ 00'57	27°21'49	morning max el	8896 Jul 20 20:17	8° Υ 34'31	27°53'58
	8895 Aug 11 13:40	0° Υ			8896 Aug 06 06:37	0° Υ	
	8895 Aug 31 16:38	0° Υ		morning set	8896 Aug 22 19:52	0° Υ 05'46	
asc. node	8895 Sep 07 07:13	12° Υ 56'21			8896 Aug 22 18:45	0° Υ	
morning set	8895 Sep 08 16:11	15° Υ 48'20		asc. node	8896 Aug 24 04:09	2° Υ 53'48	
	8895 Sep 15 04:42	0° Υ		max. Earth dist.	8896 Aug 28 17:01	12° Υ 39'05	1.31801 AU
superior conj	8895 Sep 15 16:56	1° Υ 07'54	1°16'06	superior conj	8896 Aug 30 03:37	15° Υ 49'17	0°57'23
minimum elong	8895 Sep 15 14:43	0° Υ 55'35	1°15'47	minimum elong	8896 Aug 30 01:29	15° Υ 37'30	0°56'55
max. Earth dist.	8895 Sep 15 08:20	0° Υ 20'10	1.31597 AU	evening rise	8896 Sep 05 21:48	0° Υ 38'32	
evening rise	8895 Sep 22 11:15	15° Υ 58'04			8896 Sep 05 14:38	0° Υ	
	8895 Sep 29 09:52	0° Υ			8896 Sep 21 19:13	0° Υ	
desc. node	8895 Oct 11 17:57	20° Υ 22'30		desc. node	8896 Sep 27 15:05	7° Υ 52'49	
	8895 Oct 19 13:34	0° Υ		evening max el	8896 Oct 02 07:44	12° Υ 57'49	25°05'31
evening max el	8895 Oct 21 15:28	2° Υ 04'40	26°24'46	retrograde	8896 Oct 16 04:37	19° Υ 57'20	
retrograde	8895 Nov 04 13:25	9° Υ 10'22		evening set	8896 Oct 21 21:16	18° Υ 43'44	
evening set	8895 Nov 11 04:30	7° Υ 22'48		min. Earth dist.	8896 Oct 26 19:22	16° Υ 02'09	0.57163 AU
min. Earth dist.	8895 Nov 15 04:47	4° Υ 48'11	0.59151 AU	inferior conj	8896 Oct 29 15:39	14° Υ 08'56	-5°24'38
inferior conj	8895 Nov 18 09:18	2° Υ 22'27	-4°35'59	minimum elong	8896 Oct 29 20:32	14° Υ 00'49	5°23'54
minimum elong	8895 Nov 18 16:46	2° Υ 08'11	4°33'56	morning rise	8896 Nov 06 22:06	9° Υ 58'37	
	8895 Nov 21 16:19	30° Υ		direct	8896 Nov 09 08:36	9° Υ 41'27	
morning rise	8895 Nov 26 07:26	27° Υ 49'21		morning max el	8896 Nov 18 12:00	14° Υ 03'06	19°10'05
direct	8895 Nov 28 12:42	27° Υ 32'10		asc. node	8896 Nov 20 03:54	15° Υ 46'44	
asc. node	8895 Dec 04 06:54	29° Υ 35'11			8896 Nov 29 13:17	0° Υ	
	8895 Dec 04 20:11	0° Υ		morning set	8896 Dec 05 07:56	11° Υ 07'16	
morning max el	8895 Dec 06 10:57	1° Υ 25'00	18°21'46				
morning set	8895 Dec 22 07:45	26° Υ 44'03		superior conj	8896 Dec 13 13:21	27° Υ 22'16	1°16'31
	8895 Dec 24 00:46	0° Υ		minimum elong	8896 Dec 13 16:26	27° Υ 37'11	1°16'23
					8896 Dec 14 22:13	0° Υ	
superior conj	8895 Dec 31 11:49	14° Υ 01'40	0°52'35	max. Earth dist.	8896 Dec 20 06:53	9° Υ 57'26	1.38572 AU
minimum elong	8895 Dec 31 15:03	14° Υ 16'28	0°52'21	evening rise	8896 Dec 24 01:33	16° Υ 38'24	
desc. node	8896 Jan 07 16:55	26° Υ 50'22		desc. node	8896 Dec 24 13:55	17° Υ 31'51	
max. Earth dist.	8896 Jan 08 01:07	27° Υ 25'31	1.40749 AU		8897 Jan 01 02:40	0° Υ	
	8896 Jan 09 13:26	0° Υ			8897 Jan 22 08:16	0° Υ	
evening rise	8896 Jan 12 13:01	4° Υ 58'25		evening max el	8897 Jan 28 10:58	6° Υ 44'49	24°45'29
	8896 Jan 28 19:25	0° Υ		retrograde	8897 Feb 09 03:19	13° Υ 33'36	
evening max el	8896 Feb 15 21:35	22° Υ 57'34	23°26'43	evening set	8897 Feb 14 17:06	11° Υ 14'15	
retrograde	8896 Feb 26 12:19	29° Υ 13'59		asc. node	8897 Feb 16 02:59	9° Υ 53'37	
asc. node	8896 Mar 01 05:53	28° Υ 06'09		min. Earth dist.	8897 Feb 19 06:12	6° Υ 06'08	0.67925 AU
evening set	8896 Mar 02 13:46	27° Υ 07'29		inferior conj	8897 Feb 20 06:38	4° Υ 45'08	1°19'23
inferior conj	8896 Mar 07 23:41	20° Υ 40'35	2°02'33	minimum elong	8897 Feb 20 04:55	4° Υ 50'52	1°18'52
minimum elong	8896 Mar 07 21:30	20° Υ 48'07	2°01'55		8897 Feb 24 06:05	30° Υ	
min. Earth dist.	8896 Mar 07 10:46	21° Υ 24'57	0.68397 AU	morning rise	8897 Feb 25 16:56	28° Υ 46'48	
morning rise	8896 Mar 13 05:12	14° Υ 35'17		direct	8897 Mar 01 09:54	27° Υ 27'56	

	8897 Mar 07 01:11	0°♄		direct	8898 Feb 13 09:01	11°♊57'44	
morning max el	8897 Mar 08 19:14	1°♄35'37	19°45'48	morning max el	8898 Feb 20 03:17	15°♊38'51	18°51'12
greatest brilliancy	8897 Mar 21 14:36	18°♄14'47	-0.6m		8898 Mar 03 00:47	0°♄	
desc. node	8897 Mar 22 13:45	19°♄39'51		desc. node	8898 Mar 09 10:39	9°♄49'31	
	8897 Mar 29 11:02	0°♄		morning set	8898 Mar 14 06:07	17°♄19'01	
morning set	8897 Apr 03 21:51	8°♄20'28			8898 Mar 22 09:08	0°♄	
max. Earth dist.	8897 Apr 15 08:33	26°♄13'05	1.44467 AU	max. Earth dist.	8898 Mar 29 01:16	10°♄26'15	1.45366 AU
	8897 Apr 17 17:30	0°♄					
				superior conj	8898 Mar 30 17:14	13°♄03'04	-2°00'05
superior conj	8897 Apr 20 05:24	4°♄00'46	-2°12'13	minimum elong	8898 Mar 30 09:39	12°♄33'15	1°59'39
minimum elong	8897 Apr 20 04:44	3°♄58'05	2°12'20		8898 Apr 10 09:41	0°♄	
evening rise	8897 May 03 18:15	26°♄28'29		evening rise	8898 Apr 14 20:59	7°♄12'00	
	8897 May 05 20:06	0°♄			8898 Apr 29 07:01	0°♄	
asc. node	8897 May 15 01:43	15°♄14'07		asc. node	8898 May 01 22:49	3°♄40'25	
evening max el	8897 May 21 22:17	24°♄12'53	18°11'16	evening max el	8898 May 05 10:35	7°♄44'45	18°35'25
retrograde	8897 May 28 07:21	27°♄34'39		retrograde	8898 May 11 23:16	11°♄18'23	
evening set	8897 May 31 04:34	26°♄51'01		evening set	8898 May 15 04:01	10°♄20'35	
inferior conj	8897 Jun 06 06:21	21°♄33'18	2°57'19	inferior conj	8898 May 20 20:36	4°♄45'52	3°17'32
minimum elong	8897 Jun 06 08:36	21°♄27'07	2°56'42	minimum elong	8898 May 20 21:35	4°♄42'52	3°17'14
min. Earth dist.	8897 Jun 08 22:20	18°♄38'24	0.63231 AU	min. Earth dist.	8898 May 22 21:35	2°♄18'06	0.65131 AU
morning rise	8897 Jun 12 11:07	15°♄21'41			8898 May 24 23:19	30°♄	
desc. node	8897 Jun 18 13:30	12°♄47'52		morning rise	8898 May 26 14:23	28°♄28'22	
direct	8897 Jun 19 05:09	12°♄46'30		direct	8898 Jun 02 04:29	25°♄42'54	
morning max el	8897 Jul 03 04:13	20°♄49'36	27°47'54	desc. node	8898 Jun 05 10:31	26°♄17'42	
	8897 Jul 11 02:11	0°♄			8898 Jun 11 15:34	0°♄	
	8897 Jul 30 08:33	0°♄		morning max el	8898 Jun 15 14:25	3°♄37'17	27°07'53
morning set	8897 Aug 06 16:53	14°♄01'02			8898 Jul 05 11:57	0°♄	
asc. node	8897 Aug 11 01:06	22°♄57'47		morning set	8898 Jul 21 04:26	27°♄26'36	
max. Earth dist.	8897 Aug 11 20:23	24°♄39'57	1.32486 AU		8898 Jul 22 11:55	0°♄	
				max. Earth dist.	8898 Jul 25 15:01	6°♄15'32	1.33667 AU
superior conj	8897 Aug 14 11:21	0°♄18'03	0°34'04	asc. node	8898 Jul 28 22:04	13°♄04'15	
minimum elong	8897 Aug 14 09:50	0°♄09'47	0°33'37				
	8897 Aug 14 08:01	0°♄		superior conj	8898 Jul 29 14:03	14°♄28'16	0°06'42
evening rise	8897 Aug 21 09:26	15°♄19'01		minimum elong	8898 Jul 29 13:43	14°♄26'28	0°06'27
	8897 Aug 28 15:41	0°♄		behind sun begin	8898 Jul 29 08:33	13°♄59'16	
evening max el	8897 Sep 13 19:04	23°♄15'42	23°28'30	behind sun end	8898 Jul 29 18:53	14°♄53'42	
desc. node	8897 Sep 14 12:14	23°♄56'15		evening rise	8898 Aug 05 20:14	29°♄54'04	
	8897 Sep 26 16:21	0°♄			8898 Aug 05 21:22	0°♄	
retrograde	8897 Sep 27 07:26	0°♄00'54			8898 Aug 23 04:39	0°♄	
	8897 Sep 27 22:33	30°♄		evening max el	8898 Aug 26 09:31	3°♄31'05	21°50'26
evening set	8897 Oct 01 14:01	29°♄21'02		desc. node	8898 Sep 01 09:23	8°♄02'44	
min. Earth dist.	8897 Oct 08 05:00	26°♄14'00	0.55594 AU	retrograde	8898 Sep 07 22:38	9°♄44'59	
inferior conj	8897 Oct 10 01:59	25°♄07'33	-5°36'31	evening set	8898 Sep 10 18:56	9°♄26'49	
minimum elong	8897 Oct 09 23:59	25°♄10'30	5°36'21	inferior conj	8898 Sep 19 21:37	5°♄27'41	-4°54'48
morning rise	8897 Oct 18 12:00	21°♄14'44		minimum elong	8898 Sep 19 12:57	5°♄39'48	4°53'00
direct	8897 Oct 21 09:18	20°♄54'21		min. Earth dist.	8898 Sep 19 13:07	5°♄39'34	0.54753 AU
morning max el	8897 Nov 01 00:44	25°♄54'35	20°20'53	morning rise	8898 Sep 28 08:15	1°♄39'07	
	8897 Nov 04 18:04	0°♄		direct	8898 Oct 01 20:26	1°♄12'06	
asc. node	8897 Nov 07 00:54	3°♄04'11		morning max el	8898 Oct 14 00:22	6°♄56'45	21°52'26
morning set	8897 Nov 19 14:10	25°♄45'36		asc. node	8898 Oct 24 21:53	21°♄13'01	
	8897 Nov 21 15:36	0°♄			8898 Oct 29 18:55	0°♄	
				morning set	8898 Nov 04 00:04	10°♄32'37	
superior conj	8897 Nov 27 03:57	11°♄19'18	1°31'55				
minimum elong	8897 Nov 27 06:03	11°♄29'51	1°31'59	superior conj	8898 Nov 11 03:49	25°♄41'52	1°39'39
max. Earth dist.	8897 Dec 02 13:43	21°♄58'48	1.36469 AU	minimum elong	8898 Nov 11 04:38	25°♄46'05	1°39'50
evening rise	8897 Dec 06 10:04	29°♄10'42			8898 Nov 13 05:22	0°♄	
	8897 Dec 06 20:53	0°♄		max. Earth dist.	8898 Nov 15 02:48	3°♄52'24	1.34642 AU
desc. node	8897 Dec 11 10:57	8°♄05'51		evening rise	8898 Nov 19 10:52	12°♄25'58	
	8897 Dec 25 09:04	0°♄		desc. node	8898 Nov 28 08:00	28°♄27'45	
evening max el	8898 Jan 11 00:12	20°♄32'43	25°56'11		8898 Nov 29 05:56	0°♄	
retrograde	8898 Jan 23 13:28	27°♄42'19			8898 Dec 20 12:10	0°♄	
evening set	8898 Jan 29 15:39	25°♄12'58		evening max el	8898 Dec 24 13:39	4°♄14'24	26°51'19
min. Earth dist.	8898 Feb 02 22:05	20°♄39'25	0.67068 AU	retrograde	8899 Jan 06 17:53	11°♄33'26	
asc. node	8898 Feb 03 00:06	20°♄33'11		evening set	8899 Jan 13 07:31	8°♄58'31	
inferior conj	8898 Feb 04 09:59	18°♄46'54	0°27'54	min. Earth dist.	8899 Jan 17 08:03	4°♄59'24	0.65846 AU
minimum elong	8898 Feb 04 09:16	18°♄49'08	0°27'47	inferior conj	8899 Jan 19 07:36	2°♄41'21	-0°31'27
morning rise	8898 Feb 10 03:29	12°♄57'25		minimum elong	8899 Jan 19 08:30	2°♄38'46	0°30'51

asc. node	8899 Jan 20 21:13	0°≈54'22		asc. node	8900 Jan 07 18:18	11°≈55'31	
	8899 Jan 21 17:38	30°≈3'		morning rise	8900 Jan 09 11:25	10°≈59'17	
morning rise	8899 Jan 25 10:33	27°≈30'14		direct	8900 Jan 11 23:23	10°≈27'35	
direct	8899 Jan 28 06:21	26°≈31'24		morning max el	8900 Jan 18 10:15	13°≈49'31	17°51'56
morning max el	8899 Feb 03 17:10	29°≈45'37	18°13'03		8900 Jan 29 18:47	0°≈	
	8899 Feb 03 22:56	0°≈		morning set	8900 Feb 04 09:44	9°≈27'37	
morning set	8899 Feb 22 17:33	27°≈40'57		desc. node	8900 Feb 11 04:27	20°≈49'27	
desc. node	8899 Feb 24 07:32	0°≈14'09			8900 Feb 16 18:58	0°≈	
	8899 Feb 24 04:02	0°≈					
superior conj	8899 Mar 09 22:35	21°≈54'32	-1°28'47	superior conj	8900 Feb 17 16:39	1°≈27'31	-0°46'19
minimum elong	8899 Mar 09 13:13	21°≈17'46	1°27'44	minimum elong	8900 Feb 17 11:26	1°≈06'28	0°45'27
max. Earth dist.	8899 Mar 11 21:01	24°≈56'34	1.45532 AU	max. Earth dist.	8900 Feb 22 16:36	9°≈26'01	1.44954 AU
	8899 Mar 15 02:38	0°≈		evening rise	8900 Mar 05 14:15	26°≈23'51	
evening rise	8899 Mar 26 00:57	17°≈02'18			8900 Mar 07 22:44	0°≈	
	8899 Apr 03 09:07	0°≈		greatest brilliancy	8900 Mar 20 07:06	18°≈31'08	-0.6m
greatest brilliancy	8899 Apr 06 17:14	5°≈06'46	-0.7m		8900 Mar 28 14:26	0°≈	
asc. node	8899 Apr 18 19:56	21°≈23'38		evening max el	8900 Apr 01 22:45	5°≈01'15	20°13'32
evening max el	8899 Apr 18 19:15	21°≈21'56	19°16'45	asc. node	8900 Apr 05 17:03	8°≈11'20	
retrograde	8899 Apr 25 19:49	25°≈19'46		retrograde	8900 Apr 09 18:21	9°≈33'30	
evening set	8899 Apr 29 08:32	24°≈07'02		evening set	8900 Apr 13 15:51	8°≈05'35	
inferior conj	8899 May 04 19:18	18°≈16'45	3°21'37	inferior conj	8900 Apr 18 23:39	2°≈01'33	3°12'42
minimum elong	8899 May 04 19:02	18°≈17'37	3°21'25	minimum elong	8900 Apr 18 22:22	2°≈05'56	3°12'26
min. Earth dist.	8899 May 06 05:00	16°≈27'25	0.66634 AU	min. Earth dist.	8900 Apr 19 19:00	0°≈55'44	0.67692 AU
morning rise	8899 May 10 05:09	11°≈58'03			8900 Apr 20 11:36	30°≈	
direct	8899 May 16 10:15	9°≈14'11		morning rise	8900 Apr 24 04:38	25°≈44'24	
desc. node	8899 May 23 07:29	11°≈49'25		direct	8900 Apr 29 21:38	23°≈11'42	
morning max el	8899 May 29 00:42	16°≈45'42	26°01'32	desc. node	8900 May 10 04:25	28°≈52'51	
	8899 Jun 09 00:29	0°≈			8900 May 11 07:49	0°≈	
	8899 Jun 28 10:02	0°≈		morning max el	8900 May 11 10:11	0°≈05'57	24°38'25
morning set	8899 Jul 04 02:46	10°≈11'40			8900 Jun 02 21:33	0°≈	
max. Earth dist.	8899 Jul 07 23:02	17°≈27'26	1.35325 AU	morning set	8900 Jun 16 07:17	22°≈04'37	
				max. Earth dist.	8900 Jun 19 22:15	28°≈33'47	1.37370 AU
					8900 Jun 20 17:06	0°≈	
superior conj	8899 Jul 13 09:05	28°≈11'57	-0°23'53	superior conj	8900 Jun 26 17:21	11°≈21'35	-0°56'05
minimum elong	8899 Jul 13 10:29	28°≈19'05	0°23'49	minimum elong	8900 Jun 26 20:52	11°≈38'40	0°55'42
	8899 Jul 14 06:18	0°≈		asc. node	8900 Jul 02 16:02	23°≈07'19	
asc. node	8899 Jul 15 19:03	3°≈08'37		evening rise	8900 Jul 05 06:40	28°≈20'45	
evening rise	8899 Jul 21 04:06	14°≈16'46			8900 Jul 06 02:36	0°≈	
	8899 Jul 29 06:19	0°≈		evening max el	8900 Jul 22 01:22	25°≈44'04	19°19'30
evening max el	8899 Aug 08 10:44	14°≈15'12	20°25'10		8900 Jul 28 19:00	0°≈	
retrograde	8899 Aug 19 10:55	19°≈42'13		retrograde	8900 Jul 31 08:59	0°≈20'46	
desc. node	8899 Aug 19 06:31	19°≈42'08		evening set	8900 Aug 02 05:32	0°≈10'33	
evening set	8899 Aug 21 11:10	19°≈32'05			8900 Aug 03 00:56	30°≈	
inferior conj	8899 Aug 30 14:49	15°≈34'39	-3°22'07	desc. node	8900 Aug 06 03:37	28°≈49'19	
minimum elong	8899 Aug 30 06:02	15°≈47'26	3°19'16	inferior conj	8900 Aug 10 20:02	26°≈01'57	-1°26'29
min. Earth dist.	8899 Aug 31 22:24	14°≈48'43	0.54830 AU	minimum elong	8900 Aug 10 16:11	26°≈08'18	1°25'09
morning rise	8899 Sep 08 00:18	11°≈29'56		min. Earth dist.	8900 Aug 13 11:08	24°≈18'35	0.55837 AU
direct	8899 Sep 12 05:32	10°≈51'43		morning rise	8900 Aug 19 00:03	21°≈23'40	
morning max el	8899 Sep 25 14:45	17°≈20'48	23°37'20	direct	8900 Aug 24 00:46	20°≈26'01	
	8899 Oct 05 20:07	0°≈		morning max el	8900 Sep 07 03:08	27°≈33'32	25°21'02
asc. node	8899 Oct 11 18:51	10°≈00'17			8900 Sep 09 12:46	0°≈	
morning set	8899 Oct 19 11:40	25°≈22'13		asc. node	8900 Sep 28 15:46	29°≈16'15	
	8899 Oct 21 15:28	0°≈			8900 Sep 29 00:42	0°≈	
superior conj	8899 Oct 26 09:54	10°≈20'48	1°40'34	morning set	8900 Oct 03 23:13	10°≈09'19	
minimum elong	8899 Oct 26 09:28	10°≈18'30	1°40'43				
max. Earth dist.	8899 Oct 29 00:04	15°≈53'56	1.33202 AU	superior conj	8900 Oct 10 19:46	25°≈08'33	1°35'25
evening rise	8899 Nov 03 00:10	26°≈14'00		minimum elong	8900 Oct 10 18:21	25°≈00'46	1°35'24
	8899 Nov 04 21:56	0°≈		max. Earth dist.	8900 Oct 12 04:30	28°≈08'21	1.32210 AU
desc. node	8899 Nov 15 05:05	18°≈31'33			8900 Oct 13 00:57	0°≈	
	8899 Nov 22 14:51	0°≈		evening rise	8900 Oct 17 22:38	10°≈26'08	
evening max el	8899 Dec 07 02:17	17°≈39'06	27°23'45		8900 Oct 28 04:39	0°≈	
retrograde	8899 Dec 20 16:04	24°≈59'22		desc. node	8900 Nov 02 02:11	8°≈09'05	
evening set	8899 Dec 27 14:26	22°≈25'17			8900 Nov 18 22:03	0°≈	
min. Earth dist.	8899 Dec 31 09:53	18°≈59'08	0.64278 AU	evening max el	8900 Nov 19 12:06	0°≈33'43	27°27'10
inferior conj	8900 Jan 02 21:03	16°≈23'05	-1°37'37	retrograde	8900 Dec 03 07:23	7°≈50'09	
minimum elong	8900 Jan 03 00:05	16°≈15'05	1°36'08	evening set	8900 Dec 10 09:23	5°≈25'53	

min. Earth dist.	8900 Dec 14 01:52	2°☾27'56	0.62413 AU	evening set	8901 Nov 22 12:34	17°♊53'06	
inferior conj	8900 Dec 16 23:22	29°♊44'20	-2°48'25	min. Earth dist.	8901 Nov 26 07:20	15°♊13'46	0.60355 AU
minimum elong	8900 Dec 17 04:47	29°♊31'32	2°46'08	inferior conj	8901 Nov 29 11:15	12°♊36'47	-3°58'54
	8900 Dec 16 16:45	30°♋♊		minimum elong	8901 Nov 29 18:30	12°♊21'44	3°56'29
morning rise	8900 Dec 24 02:25	24°♊37'57		morning rise	8901 Dec 07 02:54	7°♊50'40	
asc. node	8900 Dec 25 15:20	24°♊17'09		direct	8901 Dec 09 07:16	7°♊32'16	
direct	8900 Dec 26 08:56	24°♊14'41		asc. node	8901 Dec 12 12:20	8°♊14'00	
morning max el	8901 Jan 02 03:22	27°♊41'47	17°48'27	morning max el	8901 Dec 16 17:07	11°♊13'29	18°03'44
	8901 Jan 04 05:22	0°☾			8901 Dec 29 03:06	0°☾	
morning set	8901 Jan 18 00:55	22°☾19'49		morning set	8902 Jan 01 08:47	5°☾59'01	
	8901 Jan 22 09:02	0°♋					
superior conj	8901 Jan 29 10:42	12°♋10'20	-0°02'54	superior conj	8902 Jan 11 05:45	24°☾04'31	0°34'44
minimum elong	8901 Jan 29 10:27	12°♋09'16	0°02'39	minimum elong	8902 Jan 11 08:22	24°☾16'05	0°34'33
behind sun begin	8901 Jan 29 01:37	11°♋32'02			8902 Jan 14 14:50	0°♋	
behind sun end	8901 Jan 29 19:16	12°♋46'24		desc. node	8902 Jan 15 22:22	2°♋15'34	
desc. node	8901 Jan 29 01:22	11°♋30'59		max. Earth dist.	8902 Jan 18 20:41	7°♋12'51	1.41938 AU
max. Earth dist.	8901 Feb 05 08:57	23°♋35'48	1.43707 AU	evening rise	8902 Jan 24 06:21	16°♋03'11	
	8901 Feb 09 09:11	0°♋			8902 Feb 02 05:56	0°♋	
evening rise	8901 Feb 13 03:19	5°♋52'37			8902 Feb 24 07:47	0°♋	
	8901 Mar 01 06:57	0°♋		evening max el	8902 Feb 26 13:52	2°♋23'31	22°40'34
evening max el	8901 Mar 15 20:36	18°♋41'05	21°22'57	retrograde	8902 Mar 08 13:02	8°♋17'44	
asc. node	8901 Mar 23 14:10	23°♋47'51		asc. node	8902 Mar 10 11:15	7°♋59'15	
retrograde	8901 Mar 24 16:40	23°♋54'02		evening set	8902 Mar 13 07:32	6°♋19'45	
evening set	8901 Mar 29 00:03	22°♋10'57		inferior conj	8902 Mar 18 16:00	29°♋56'08	2°23'32
inferior conj	8901 Apr 03 07:13	15°♋55'34	2°52'54	minimum elong	8902 Mar 18 13:46	0°♋03'54	2°22'56
minimum elong	8901 Apr 03 05:15	16°♋02'24	2°52'28	min. Earth dist.	8902 Mar 18 09:58	0°♋17'08	0.68487 AU
min. Earth dist.	8901 Apr 03 13:23	15°♋34'05	0.68305 AU		8902 Mar 18 14:54	30°♋♋	
morning rise	8901 Apr 08 10:16	9°♋41'48		morning rise	8902 Mar 23 19:52	23°♋47'12	
direct	8901 Apr 13 13:44	7°♋26'51		direct	8902 Mar 28 09:30	21°♋53'37	
morning max el	8901 Apr 23 19:51	13°♋32'26	23°08'38	morning max el	8902 Apr 06 08:57	27°♋07'12	21°41'30
desc. node	8901 Apr 27 01:20	17°♋02'25			8902 Apr 09 01:13	0°♋	
	8901 May 07 02:30	0°♋		desc. node	8902 Apr 13 22:16	6°♋00'15	
	8901 May 26 19:15	0°♋			8902 Apr 30 16:05	0°♋	
morning set	8901 May 28 12:27	2°♋50'41		morning set	8902 May 08 14:20	12°♋20'52	
max. Earth dist.	8901 Jun 01 18:13	10°♋02'48	1.39616 AU	max. Earth dist.	8902 May 14 18:12	22°♋21'30	1.41804 AU
					8902 May 19 07:13	0°♋	
superior conj	8901 Jun 09 10:52	23°♋47'17	-1°27'26	superior conj	8902 May 22 09:05	5°♋18'51	-1°53'59
minimum elong	8901 Jun 09 16:17	24°♋12'19	1°26'56	minimum elong	8902 May 22 14:57	5°♋44'27	1°53'42
	8901 Jun 12 18:46	0°☾		evening rise	8902 Jun 02 06:59	24°♋57'39	
evening rise	8901 Jun 19 00:53	11°☾57'31			8902 Jun 05 01:04	0°☾	
asc. node	8901 Jun 19 13:03	12°☾55'55		asc. node	8902 Jun 06 10:04	2°☾29'30	
	8901 Jun 29 00:50	0°♌		evening max el	8902 Jun 18 12:36	20°☾41'53	18°10'38
evening max el	8901 Jul 05 03:17	7°♌56'07	18°34'56	retrograde	8902 Jun 25 11:04	24°☾12'19	
retrograde	8901 Jul 13 00:45	11°♌51'59		evening set	8902 Jun 27 20:32	23°☾47'49	
evening set	8901 Jul 15 02:32	11°♌36'36		inferior conj	8902 Jul 04 20:46	19°☾00'02	1°42'04
inferior conj	8901 Jul 22 21:41	7°♌09'28	0°20'17	minimum elong	8902 Jul 04 23:34	18°☾53'45	1°40'58
minimum elong	8901 Jul 22 22:26	7°♌08'02	0°19'48	min. Earth dist.	8902 Jul 08 05:07	16°☾01'27	0.59745 AU
desc. node	8901 Jul 24 00:40	6°♌17'21		desc. node	8902 Jul 10 21:45	13°☾56'27	
min. Earth dist.	8901 Jul 26 04:53	4°♌38'28	0.57580 AU	morning rise	8902 Jul 11 23:37	13°☾14'56	
morning rise	8901 Jul 30 14:46	1°♌54'10		direct	8902 Jul 18 10:06	11°☾18'03	
direct	8901 Aug 05 10:50	0°♌28'21		morning max el	8902 Aug 01 18:27	19°☾10'44	27°40'13
morning max el	8901 Aug 19 19:29	8°♌03'46	26°46'28		8902 Aug 10 22:29	0°♌	
	8901 Sep 05 07:29	0°♍			8902 Aug 29 01:41	0°♍	
asc. node	8901 Sep 15 12:42	18°♍53'25		asc. node	8902 Sep 02 09:38	8°♍44'48	
morning set	8901 Sep 18 09:08	24°♍49'17		morning set	8902 Sep 02 15:38	9°♍16'09	
	8901 Sep 20 18:53	0°♎		max. Earth dist.	8902 Sep 08 23:17	22°♍56'07	1.31624 AU
superior conj	8901 Sep 25 07:25	9°♎58'58	1°24'41	superior conj	8902 Sep 09 18:57	24°♍45'04	1°08'47
minimum elong	8901 Sep 25 05:22	9°♎47'36	1°24'28	minimum elong	8902 Sep 09 16:42	24°♍32'37	1°08'22
max. Earth dist.	8901 Sep 25 13:24	10°♎32'13	1.31683 AU		8902 Sep 12 03:45	0°♎	
evening rise	8901 Oct 02 03:36	24°♎55'03		evening rise	8902 Sep 16 12:42	9°♎33'03	
	8901 Oct 04 14:17	0°♏			8902 Sep 26 22:46	0°♏	
desc. node	8901 Oct 19 23:17	27°♏09'53		desc. node	8902 Oct 06 20:24	15°♏18'36	
	8901 Oct 21 22:21	0°♐		evening max el	8902 Oct 14 14:00	24°♏09'29	25°54'17
evening max el	8901 Nov 01 16:48	12°♐46'52	26°57'19		8902 Oct 22 22:43	0°♐	
retrograde	8901 Nov 15 14:44	19°♐56'47		retrograde	8902 Oct 28 12:05	1°♐12'16	

	8902 Nov 03 00:31	30° \mathbb{M}		retrograde	8903 Oct 09 21:40	11° \mathbb{M} 38'42	
evening set	8902 Nov 03 19:06	29° \mathbb{M} 38'53		evening set	8903 Oct 15 01:10	10° \mathbb{M} 40'05	
min. Earth dist.	8902 Nov 08 02:43	27° \mathbb{M} 03'24	0.58279 AU	min. Earth dist.	8903 Oct 20 14:27	7° \mathbb{M} 49'59	0.56435 AU
inferior conj	8902 Nov 11 05:10	24° \mathbb{M} 49'45	-4°59'46	inferior conj	8903 Oct 23 02:47	6° \mathbb{M} 15'24	-5°35'20
minimum elong	8902 Nov 11 12:03	24° \mathbb{M} 37'19	4°58'14	minimum elong	8903 Oct 23 05:10	6° \mathbb{M} 11'39	5°35'04
morning rise	8902 Nov 19 07:19	20° \mathbb{M} 26'04		morning rise	8903 Oct 31 11:17	2° \mathbb{M} 13'34	
direct	8902 Nov 21 14:08	20° \mathbb{M} 09'14		direct	8903 Nov 03 02:02	1° \mathbb{M} 55'15	
asc. node	8902 Nov 29 09:21	23° \mathbb{M} 39'49		morning max el	8903 Nov 12 19:46	6° \mathbb{M} 31'47	19°37'23
morning max el	8902 Nov 29 23:46	24° \mathbb{M} 13'26	18°39'29	asc. node	8903 Nov 16 06:22	10° \mathbb{M} 20'49	
	8902 Dec 04 18:20	0° \mathbb{A}			8903 Nov 27 23:08	0° \mathbb{A}	
morning set	8902 Dec 16 04:08	20° \mathbb{A} 09'17		morning set	8903 Nov 30 07:13	4° \mathbb{A} 39'46	
	8902 Dec 21 05:52	0° \mathbb{B}					
superior conj	8902 Dec 24 21:35	6° \mathbb{B} 57'12	1°03'48	superior conj	8903 Dec 08 05:11	20° \mathbb{A} 34'26	1°24'02
minimum elong	8902 Dec 25 00:55	7° \mathbb{B} 12'47	1°03'36	minimum elong	8903 Dec 08 07:55	20° \mathbb{A} 47'53	1°24'00
max. Earth dist.	8903 Jan 01 04:21	20° \mathbb{B} 09'40	1.39840 AU	max. Earth dist.	8903 Dec 13 02:38	0° \mathbb{B}	
desc. node	8903 Jan 02 19:21	22° \mathbb{B} 58'57		evening rise	8903 Dec 14 10:23	2° \mathbb{B} 27'54	1.37663 AU
evening rise	8903 Jan 05 06:21	27° \mathbb{B} 09'56		desc. node	8903 Dec 18 03:44	9° \mathbb{B} 12'37	
	8903 Jan 06 23:09	0° \mathbb{C}			8903 Dec 20 16:21	13° \mathbb{B} 37'25	
	8903 Jan 26 20:20	0° \mathbb{H}		evening max el	8903 Dec 30 18:01	0° \mathbb{C}	
evening max el	8903 Feb 09 04:17	16° \mathbb{H} 09'40	24°00'47		8904 Jan 22 17:30	29° \mathbb{C} 57'33	25°16'57
retrograde	8903 Feb 20 06:12	22° \mathbb{H} 40'20		retrograde	8904 Jan 22 18:30	0° \mathbb{H}	
asc. node	8903 Feb 25 08:21	20° \mathbb{H} 37'41		evening set	8904 Feb 03 19:05	6° \mathbb{H} 56'03	
evening set	8903 Feb 25 12:50	20° \mathbb{H} 28'18		asc. node	8904 Feb 09 14:21	4° \mathbb{H} 31'51	
min. Earth dist.	8903 Mar 02 06:24	15° \mathbb{H} 00'23	0.68251 AU		8904 Feb 12 05:29	1° \mathbb{H} 51'30	
inferior conj	8903 Mar 03 00:10	14° \mathbb{H} 00'09	1°45'18	min. Earth dist.	8904 Feb 13 17:51	30° \mathbb{R} \mathbb{C}	
minimum elong	8903 Mar 02 22:07	14° \mathbb{H} 07'07	1°44'41	inferior conj	8904 Feb 14 00:30	29° \mathbb{C} 38'43	0.67613 AU
morning rise	8903 Mar 08 07:25	7° \mathbb{H} 57'35		minimum elong	8904 Feb 15 05:50	28° \mathbb{C} 03'36	0°58'34
direct	8903 Mar 12 07:44	6° \mathbb{H} 26'16		morning rise	8904 Feb 15 04:28	28° \mathbb{C} 08'03	0°58'10
morning max el	8903 Mar 20 04:51	10° \mathbb{H} 54'20	20°24'09	morning rise	8904 Feb 20 18:56	22° \mathbb{C} \mathbb{H} 09'01	
desc. node	8903 Mar 31 19:12	25° \mathbb{H} 33'21		direct	8904 Feb 24 06:54	20° \mathbb{C} 58'39	
	8903 Apr 03 21:14	0° \mathbb{Y}		morning max el	8904 Mar 02 08:45	24° \mathbb{C} 53'05	19°20'38
morning set	8903 Apr 17 17:30	20° \mathbb{Y} 52'13			8904 Mar 06 19:30	0° \mathbb{H}	
	8903 Apr 23 13:32	0° \mathbb{B}		greatest brilliancy	8904 Mar 15 06:37	11° \mathbb{H} 55'54	-0.7m
max. Earth dist.	8903 Apr 27 01:59	5° \mathbb{B} 36'41	1.43654 AU	desc. node	8904 Mar 17 16:07	15° \mathbb{H} 31'38	
				morning set	8904 Mar 26 16:53	29° \mathbb{H} 21'03	
superior conj	8903 May 03 07:52	15° \mathbb{B} 48'02	-2°10'08		8904 Mar 27 02:59	0° \mathbb{Y}	
minimum elong	8903 May 03 10:47	16° \mathbb{B} 00'08	2°10'13	max. Earth dist.	8904 Apr 08 16:21	19° \mathbb{Y} 34'17	1.44938 AU
	8903 May 11 17:13	0° \mathbb{I}		superior conj	8904 Apr 12 06:27	25° \mathbb{Y} 15'23	-2°09'36
evening rise	8903 May 15 20:32	7° \mathbb{I} 11'29		minimum elong	8904 Apr 12 02:39	25° \mathbb{Y} 00'16	2°09'34
asc. node	8903 May 24 07:08	21° \mathbb{I} 42'49			8904 Apr 15 05:38	0° \mathbb{B}	
	8903 May 29 18:26	0° \mathbb{E}		evening rise	8904 Apr 26 12:55	18° \mathbb{B} 29'17	
evening max el	8903 Jun 02 01:34	3° \mathbb{E} 51'49	18°05'38		8904 May 03 11:37	0° \mathbb{I}	
retrograde	8903 Jun 08 12:29	7° \mathbb{E} 12'33		asc. node	8904 May 10 04:13	10° \mathbb{I} 28'30	
evening set	8903 Jun 11 05:32	6° \mathbb{E} 36'19		evening max el	8904 May 15 14:49	17° \mathbb{I} 16'57	18°19'17
inferior conj	8903 Jun 17 14:18	1° \mathbb{E} 28'47	2°36'44	retrograde	8904 May 22 00:22	20° \mathbb{I} 42'24	
minimum elong	8903 Jun 17 17:05	1° \mathbb{E} 21'38	2°35'51	evening set	8904 May 25 00:44	19° \mathbb{I} 52'49	
	8903 Jun 19 00:40	30° \mathbb{R} \mathbb{I}		inferior conj	8904 May 30 22:08	14° \mathbb{I} 27'22	3°08'08
min. Earth dist.	8903 Jun 20 13:43	28° \mathbb{I} 26'30	0.62000 AU	minimum elong	8904 May 30 23:52	14° \mathbb{I} 22'22	3°07'39
morning rise	8903 Jun 24 02:39	25° \mathbb{I} 24'09		min. Earth dist.	8904 Jun 02 07:46	11° \mathbb{I} 42'24	0.64081 AU
desc. node	8903 Jun 27 18:49	23° \mathbb{I} 29'42		morning rise	8904 Jun 05 21:51	8° \mathbb{I} 12'21	
direct	8903 Jun 30 20:01	23° \mathbb{I} 00'37		direct	8904 Jun 12 14:45	5° \mathbb{I} 31'36	
	8903 Jul 13 22:19	0° \mathbb{E}		desc. node	8904 Jun 13 15:52	5° \mathbb{I} 35'11	
morning max el	8903 Jul 14 23:47	1° \mathbb{E} 02'02	27°56'03	morning max el	8904 Jun 26 09:11	13° \mathbb{I} 32'30	27°34'44
	8903 Aug 05 03:12	0° \mathbb{Q}			8904 Jul 09 15:09	0° \mathbb{E}	
morning set	8903 Aug 17 16:46	23° \mathbb{Q} 24'28			8904 Jul 27 17:29	0° \mathbb{Q}	
asc. node	8903 Aug 20 06:36	28° \mathbb{Q} 45'19		morning set	8904 Jul 31 10:07	7° \mathbb{Q} 07'27	
	8903 Aug 20 20:43	0° \mathbb{P}		max. Earth dist.	8904 Aug 05 06:30	16° \mathbb{Q} 59'43	1.32928 AU
max. Earth dist.	8903 Aug 23 06:19	5° \mathbb{P} 08'56	1.32036 AU	asc. node	8904 Aug 06 03:34	18° \mathbb{Q} 50'17	
superior conj	8903 Aug 25 04:37	9° \mathbb{P} 21'23	0°48'02	superior conj	8904 Aug 08 10:26	23° \mathbb{Q} 42'02	0°22'54
minimum elong	8903 Aug 25 02:40	9° \mathbb{P} 10'42	0°47'34	minimum elong	8904 Aug 08 09:21	23° \mathbb{Q} 36'10	0°22'31
evening rise	8903 Aug 31 23:57	24° \mathbb{P} 14'06			8904 Aug 11 08:32	0° \mathbb{P}	
	8903 Sep 03 17:36	0° \mathbb{L}		evening rise	8904 Aug 15 11:26	8° \mathbb{P} 52'16	
	8903 Sep 21 18:45	0° \mathbb{M}			8904 Aug 26 09:55	0° \mathbb{L}	
desc. node	8903 Sep 23 17:32	2° \mathbb{M} 14'58		evening max el	8904 Sep 06 14:49	14° \mathbb{L} 55'17	22°45'55
evening max el	8903 Sep 26 03:34	4° \mathbb{M} 44'31	24°25'28	desc. node	8904 Sep 09 14:39	17° \mathbb{L} 32'03	

retrograde	8904 Sep 19 19:15	21°♄30'15		asc. node	8905 Jul 24 00:32	8°♄55'54	
evening set	8904 Sep 23 10:28	21°♄01'16		evening rise	8905 Jul 30 21:14	23°♄22'07	
min. Earth dist.	8904 Sep 30 22:45	17°♄38'54	0.55127 AU		8905 Aug 03 02:42	0°♄	
inferior conj	8904 Oct 02 05:40	16°♄54'43	-5°25'55	evening max el	8905 Aug 19 09:01	25°♄18'56	21°12'03
minimum elong	8904 Oct 02 00:22	17°♄02'18	5°25'15		8905 Aug 25 20:13	0°♄	
morning rise	8904 Oct 10 16:13	13°♄06'20		desc. node	8905 Aug 27 11:46	0°♄38'19	
direct	8904 Oct 13 19:25	12°♄43'43		retrograde	8905 Aug 31 08:07	1°♄14'42	
morning max el	8904 Oct 25 02:50	18°♄01'57	20°57'41	evening set	8905 Sep 02 17:17	1°♄01'29	
asc. node	8904 Nov 02 03:22	28°♄01'36			8905 Sep 06 04:08	30°♄♄	
	8904 Nov 03 09:18	0°♄		inferior conj	8905 Sep 11 22:23	27°♄04'47	-4°20'32
morning set	8904 Nov 13 15:18	19°♄22'49		minimum elong	8905 Sep 11 12:44	27°♄18'22	4°17'59
	8904 Nov 18 17:22	0°♄		min. Earth dist.	8905 Sep 12 07:19	26°♄52'12	0.54655 AU
				morning rise	8905 Sep 20 08:45	23°♄11'38	
superior conj	8904 Nov 21 00:12	4°♄44'04	1°36'04	direct	8905 Sep 24 03:38	22°♄40'44	
minimum elong	8904 Nov 21 01:45	4°♄52'03	1°36'12	morning max el	8905 Oct 06 21:53	28°♄45'32	22°36'18
max. Earth dist.	8904 Nov 25 19:22	14°♄23'32	1.35644 AU		8905 Oct 08 04:23	0°♄	
evening rise	8904 Nov 29 19:39	22°♄04'29		asc. node	8905 Oct 20 00:21	16°♄27'44	
	8904 Dec 04 04:27	0°♄			8905 Oct 27 01:58	0°♄	
desc. node	8904 Dec 06 13:22	4°♄07'00		morning set	8905 Oct 29 02:06	4°♄11'05	
	8904 Dec 23 13:20	0°♄					
evening max el	8905 Jan 04 06:40	13°♄43'36	26°21'51	superior conj	8905 Nov 05 03:01	19°♄14'31	1°40'50
retrograde	8905 Jan 17 03:01	20°♄58'59		minimum elong	8905 Nov 05 03:17	19°♄15'54	1°41'01
evening set	8905 Jan 23 10:22	18°♄26'16		max. Earth dist.	8905 Nov 08 11:30	26°♄17'23	1.33965 AU
min. Earth dist.	8905 Jan 27 14:04	14°♄07'41	0.66595 AU		8905 Nov 10 06:58	0°♄	
inferior conj	8905 Jan 29 07:02	12°♄03'08	0°03'41	evening rise	8905 Nov 13 02:10	5°♄34'40	
minimum elong	8905 Jan 29 06:55	12°♄03'28	0°03'49	desc. node	8905 Nov 23 10:24	24°♄21'48	
transit middle	8905 Jan 29 06:55	12°♄03'28	0°03'49		8905 Nov 26 21:10	0°♄	
transit begin	8905 Jan 29 04:07	12°♄12'00		evening max el	8905 Dec 17 19:49	27°♄19'12	27°08'19
transit end	8905 Jan 29 09:44	11°♄54'56			8905 Dec 20 20:26	0°♄	
asc. node	8905 Jan 29 02:35	12°♄16'41		retrograde	8905 Dec 31 05:06	4°♄40'30	
morning rise	8905 Feb 04 04:19	6°♄18'27		evening set	8906 Jan 06 22:45	2°♄04'57	
direct	8905 Feb 07 05:26	5°♄26'06			8906 Jan 09 06:48	30°♄♄	
morning max el	8905 Feb 13 19:42	8°♄59'31	18°32'55	min. Earth dist.	8906 Jan 10 20:54	28°♄20'05	0.65216 AU
	8905 Feb 28 20:36	0°♄		inferior conj	8906 Jan 13 01:29	25°♄53'05	-0°58'45
desc. node	8905 Mar 04 13:01	5°♄48'27		minimum elong	8906 Jan 13 03:13	25°♄48'12	0°57'47
morning set	8905 Mar 06 11:39	8°♄52'38		asc. node	8906 Jan 15 23:41	22°♄48'12	
	8905 Mar 19 22:07	0°♄		morning rise	8906 Jan 19 09:05	20°♄20'38	
				direct	8906 Jan 22 01:10	19°♄42'35	
superior conj	8905 Mar 22 13:17	4°♄07'06	-1°48'49	morning max el	8906 Jan 28 11:18	23°♄06'08	18°01'54
minimum elong	8905 Mar 22 04:02	3°♄30'56	1°48'04		8906 Feb 03 00:33	0°♄	
max. Earth dist.	8905 Mar 22 10:33	3°♄56'26	1.45529 AU	morning set	8906 Feb 15 11:45	19°♄52'01	
evening rise	8905 Apr 07 05:35	28°♄48'46		desc. node	8906 Feb 19 09:55	26°♄18'02	
	8905 Apr 07 23:31	0°♄			8906 Feb 21 16:28	0°♄	
greatest brilliancy	8905 Apr 15 23:49	12°♄42'03	-0.8m				
asc. node	8905 Apr 27 01:19	28°♄37'47		superior conj	8906 Mar 01 22:00	13°♄11'08	-1°11'31
	8905 Apr 28 06:11	0°♄		minimum elong	8906 Mar 01 13:57	12°♄39'16	1°10'26
evening max el	8905 Apr 29 01:45	0°♄51'13	18°50'53	max. Earth dist.	8906 Mar 05 05:58	18°♄26'15	1.45377 AU
retrograde	8905 May 05 18:42	4°♄34'07			8906 Mar 12 15:53	0°♄	
evening set	8905 May 09 02:39	3°♄30'11		evening rise	8906 Mar 18 01:46	8°♄22'21	
	8905 May 12 21:12	30°♄♄		greatest brilliancy	8906 Mar 31 15:20	29°♄03'24	-0.7m
inferior conj	8905 May 14 16:23	27°♄48'35	3°21'00		8906 Apr 01 06:39	0°♄	
minimum elong	8905 May 14 16:50	27°♄47'12	3°20'46	evening max el	8906 Apr 12 08:20	14°♄29'41	19°39'10
min. Earth dist.	8905 May 16 10:51	25°♄35'58	0.65825 AU	asc. node	8906 Apr 13 22:24	15°♄59'08	
morning rise	8905 May 20 06:23	21°♄29'46		retrograde	8906 Apr 19 16:20	18°♄41'09	
direct	8905 May 26 17:03	18°♄43'34		evening set	8906 Apr 23 08:36	17°♄22'11	
desc. node	8905 May 31 12:52	20°♄00'18		inferior conj	8906 Apr 28 17:49	11°♄26'01	3°19'14
morning max el	8905 Jun 08 19:49	26°♄30'54	26°42'14	minimum elong	8906 Apr 28 17:05	11°♄28'28	3°19'02
	8905 Jun 12 01:21	0°♄		min. Earth dist.	8906 Apr 29 21:22	9°♄54'32	0.67144 AU
	8905 Jul 03 05:37	0°♄		morning rise	8906 May 04 01:13	5°♄07'37	
morning set	8905 Jul 14 16:31	20°♄16'52		direct	8906 May 10 01:32	2°♄27'09	
max. Earth dist.	8905 Jul 18 20:33	28°♄23'14	1.34313 AU	desc. node	8906 May 18 09:51	6°♄14'25	
	8905 Jul 19 15:55	0°♄		morning max el	8906 May 22 05:38	9°♄44'55	25°27'28
					8906 Jun 07 05:32	0°♄	
superior conj	8905 Jul 23 10:10	7°♄41'12	-0°06'00		8906 Jun 25 19:53	0°♄	
minimum elong	8905 Jul 23 10:31	7°♄42'59	0°06'08	morning set	8906 Jun 27 07:56	2°♄41'50	
behind sun begin	8905 Jul 23 05:08	7°♄15'04		max. Earth dist.	8906 Jun 30 23:55	9°♄27'58	1.36153 AU
behind sun end	8905 Jul 23 15:54	8°♄10'57					

superior conj	8906 Jul 07 01:05	21°☿11'58	-0°37'28	superior conj	8907 Jun 20 03:36	4°☿04'24	-1°09'41
minimum elong	8906 Jul 07 03:22	21°☿23'20	0°37'16	minimum elong	8907 Jun 20 08:00	4°☿25'21	1°09'14
asc. node	8906 Jul 10 21:30	28°☿58'30		asc. node	8907 Jun 27 18:28	18°☿53'24	
	8906 Jul 11 09:33	0°♌		evening rise	8907 Jun 29 02:34	21°☿31'17	
evening rise	8906 Jul 15 03:10	7°♌37'50			8907 Jul 03 11:50	0°♌	
	8906 Jul 27 11:10	0°♍		evening max el	8907 Jul 15 12:03	18°♌10'30	18°57'58
evening max el	8906 Aug 01 16:10	6°♍22'25	19°54'45	retrograde	8907 Jul 24 03:38	22°♌27'55	
retrograde	8906 Aug 11 22:43	11°♍26'58		evening set	8907 Jul 26 02:02	22°♌15'54	
evening set	8906 Aug 13 19:47	11°♍17'33		desc. node	8907 Aug 01 06:01	19°♌25'46	
desc. node	8906 Aug 14 08:54	11°♍11'24		inferior conj	8907 Aug 03 08:32	17°♌59'44	-0°38'43
inferior conj	8906 Aug 22 19:13	7°♍17'11	-2°33'46	minimum elong	8907 Aug 03 06:53	18°♌02'37	0°38'15
minimum elong	8906 Aug 22 12:14	7°♍27'47	2°31'20	min. Earth dist.	8907 Aug 06 08:27	15°♌54'29	0.56512 AU
min. Earth dist.	8906 Aug 24 18:06	6°♍06'03	0.55150 AU	morning rise	8907 Aug 11 08:33	13°♌05'47	
morning rise	8906 Aug 31 03:00	2°♍59'32		direct	8907 Aug 16 17:58	11°♌57'02	
direct	8906 Sep 04 16:36	2°♍13'52		morning max el	8907 Aug 30 23:41	19°♌16'48	26°00'34
morning max el	8906 Sep 18 10:22	9°♍00'48	24°22'35		8907 Sep 09 01:35	0°♍	
	8906 Oct 03 21:09	0°♎		asc. node	8907 Sep 23 18:12	24°♍53'59	
asc. node	8906 Oct 06 21:17	5°♎28'20			8907 Sep 26 06:19	0°♎	
morning set	8906 Oct 13 13:51	18°♎59'55		morning set	8907 Sep 28 00:53	3°♎44'07	
	8906 Oct 18 15:28	0°♏					
superior conj	8906 Oct 20 10:57	3°♏57'50	1°39'06	superior conj	8907 Oct 04 21:46	18°♎46'49	1°31'31
minimum elong	8906 Oct 20 10:04	3°♏53'02	1°39'11	minimum elong	8907 Oct 04 20:03	18°♎37'15	1°31'25
max. Earth dist.	8906 Oct 22 12:00	8°♏23'53	1.32722 AU	max. Earth dist.	8907 Oct 05 18:54	20°♎43'37	1.31934 AU
evening rise	8906 Oct 27 19:45	19°♏34'06			8907 Oct 10 01:03	0°♏	
	8906 Nov 02 03:55	0°♐		evening rise	8907 Oct 11 21:17	3°♏53'53	
desc. node	8906 Nov 10 07:29	14°♐15'17			8907 Oct 25 21:31	0°♐	
	8906 Nov 21 00:52	0°♑		desc. node	8907 Oct 28 04:35	3°♐38'25	
evening max el	8906 Nov 30 07:42	10°♑33'09	27°29'11	evening max el	8907 Nov 12 15:51	23°♐11'40	27°18'43
retrograde	8906 Dec 14 00:27	17°♑51'59			8907 Nov 23 10:27	0°♑	
evening set	8906 Dec 21 00:56	15°♑21'16		retrograde	8907 Nov 26 12:11	0°♑24'32	
min. Earth dist.	8906 Dec 24 18:53	12°♑07'35	0.63514 AU		8907 Nov 29 12:02	30°♑♐	
inferior conj	8906 Dec 27 10:34	9°♑27'03	-2°07'19	evening set	8907 Dec 03 13:39	28°♐07'52	
minimum elong	8906 Dec 27 14:36	9°♑16'50	2°05'26	min. Earth dist.	8907 Dec 07 06:20	25°♐19'21	0.61553 AU
asc. node	8907 Jan 02 20:45	4°♑19'37		inferior conj	8907 Dec 10 07:09	22°♐36'59	-3°18'47
morning rise	8907 Jan 03 06:12	4°♑09'55		minimum elong	8907 Dec 10 13:30	22°♐22'48	3°16'20
direct	8907 Jan 05 15:31	3°♑42'14		morning rise	8907 Dec 17 15:38	17°♐38'40	
morning max el	8907 Jan 12 04:41	7°♑05'28	17°48'11	direct	8907 Dec 19 20:55	17°♐17'45	
	8907 Jan 27 08:35	0°♒		asc. node	8907 Dec 20 17:47	17°♐21'04	
morning set	8907 Jan 28 14:33	2°♒09'14		morning max el	8907 Dec 26 20:43	20°♐49'35	17°52'38
desc. node	8907 Feb 06 06:49	16°♒56'16			8908 Jan 02 18:07	0°♑	
				morning set	8908 Jan 11 13:34	15°♑23'49	
					8908 Jan 19 17:18	0°♒	
superior conj	8907 Feb 10 01:29	23°♒11'40	-0°27'30	superior conj	8908 Jan 22 06:29	4°♒25'53	0°14'02
minimum elong	8907 Feb 09 22:32	22°♒59'31	0°26'54	minimum elong	8908 Jan 22 07:45	4°♒31'17	0°14'03
	8907 Feb 14 06:08	0°♓		behind sun begin	8908 Jan 22 03:39	4°♒13'41	
max. Earth dist.	8907 Feb 16 00:28	2°♓49'18	1.44506 AU	behind sun end	8908 Jan 22 11:50	4°♒48'51	
evening rise	8907 Feb 25 13:01	17°♓42'24		desc. node	8908 Jan 24 03:46	7°♒39'37	
	8907 Mar 05 15:33	0°♈		max. Earth dist.	8908 Jan 29 15:38	16°♒49'20	1.43008 AU
evening max el	8907 Mar 26 09:31	28°♈09'46	20°41'47	evening rise	8908 Feb 05 06:43	27°♒26'21	
	8907 Mar 28 08:28	0°♉			8908 Feb 06 22:05	0°♓	
asc. node	8907 Mar 31 19:30	2°♉18'38			8908 Feb 27 10:25	0°♈	
retrograde	8907 Apr 03 14:51	2°♉58'18		evening max el	8908 Mar 08 05:20	11°♈51'18	21°55'13
evening set	8907 Apr 07 16:29	1°♉23'55		retrograde	8908 Mar 17 12:31	17°♈21'38	
	8907 Apr 09 05:09	30°♈♈		asc. node	8908 Mar 17 16:36	17°♈21'29	
inferior conj	8907 Apr 12 23:46	25°♈15'00	3°05'30	evening set	8908 Mar 22 00:36	15°♈31'54	
minimum elong	8907 Apr 12 22:09	25°♈20'34	3°05'11	inferior conj	8908 Mar 27 08:06	9°♈12'38	2°41'34
min. Earth dist.	8907 Apr 13 13:25	24°♈28'02	0.68015 AU	minimum elong	8908 Mar 27 05:59	9°♈20'04	2°41'03
morning rise	8907 Apr 18 03:37	18°♈59'16		min. Earth dist.	8908 Mar 27 08:55	9°♈09'50	0.68439 AU
direct	8907 Apr 23 15:05	16°♈33'22		morning rise	8908 Apr 01 11:12	3°♈01'01	
morning max el	8907 May 04 14:41	23°♈07'11	24°00'21	direct	8908 Apr 06 08:47	0°♈55'04	
desc. node	8907 May 05 06:47	23°♈48'33		morning max el	8908 Apr 16 01:31	6°♈37'46	22°30'50
	8907 May 10 16:13	0°♉		desc. node	8908 Apr 21 03:43	12°♈21'02	
	8907 May 31 14:08	0°♊			8908 May 04 02:49	0°♉	
morning set	8907 Jun 09 03:07	14°♊07'37		morning set	8908 May 19 20:56	24°♉22'13	
max. Earth dist.	8907 Jun 12 20:56	20°♊40'29	1.38321 AU		8908 May 23 06:35	0°♊	
	8907 Jun 17 23:41	0°♋		max. Earth dist.	8908 May 24 18:37	2°♊31'55	1.40581 AU

superior conj	8908 Jun 01 13:31	16° Π 08'48	-1°39'34	superior conj	8909 May 14 02:11	27° \mathcal{B} 14'33	-2°02'29
minimum elong	8908 Jun 01 19:25	16° Π 35'23	1°39'07	minimum elong	8909 May 14 07:19	27° \mathcal{B} 36'28	2°02'21
	8908 Jun 09 01:41	0° \mathfrak{S}			8909 May 15 16:47	0° Π	
evening rise	8908 Jun 11 16:12	4° \mathfrak{S} 54'25		evening rise	8909 May 25 15:54	17° Π 36'40	
asc. node	8908 Jun 13 15:29	8° \mathfrak{S} 36'33		asc. node	8909 May 31 12:31	28° Π 02'41	
	8908 Jun 27 02:43	0° Ω			8909 Jun 01 15:43	0° \mathfrak{S}	
evening max el	8908 Jun 27 17:32	0° Ω 37'52	18°22'02	evening max el	8909 Jun 11 04:48	13° \mathfrak{S} 35'08	18°06'06
retrograde	8908 Jul 05 03:50	4° Ω 21'16		retrograde	8909 Jun 17 21:14	16° \mathfrak{S} 59'54	
evening set	8908 Jul 07 08:46	4° Ω 02'24		evening set	8909 Jun 20 09:48	16° \mathfrak{S} 30'50	
	8908 Jul 14 02:55	30° \mathcal{R} \mathfrak{S}		inferior conj	8909 Jun 27 03:00	11° \mathfrak{S} 34'34	2°08'23
inferior conj	8908 Jul 14 19:31	29° \mathfrak{S} 26'06	0°58'24	minimum elong	8909 Jun 27 05:59	11° \mathfrak{S} 27'27	2°07'19
minimum elong	8908 Jul 14 21:28	29° \mathfrak{S} 22'07	0°57'30	min. Earth dist.	8909 Jun 30 08:29	8° \mathfrak{S} 31'15	0.60711 AU
min. Earth dist.	8908 Jul 18 04:35	26° \mathfrak{S} 40'44	0.58476 AU	morning rise	8909 Jul 03 23:31	5° \mathfrak{S} 39'31	
desc. node	8908 Jul 18 03:06	26° \mathfrak{S} 43'37		desc. node	8909 Jul 05 00:10	5° \mathfrak{S} 02'29	
morning rise	8908 Jul 22 06:46	23° \mathfrak{S} 56'44		direct	8909 Jul 10 13:45	3° \mathfrak{S} 30'15	
direct	8908 Jul 28 09:34	22° \mathfrak{S} 17'59		morning max el	8909 Jul 24 21:02	11° \mathfrak{S} 28'38	27°51'39
	8908 Aug 11 18:18	0° Ω			8909 Aug 08 09:55	0° Ω	
morning max el	8908 Aug 11 18:56	0° Ω 01'34	27°13'47		8909 Aug 25 07:02	0° \mathfrak{N}	
	8908 Sep 02 01:19	0° \mathfrak{N}		morning set	8909 Aug 26 14:08	2° \mathfrak{N} 39'43	
asc. node	8908 Sep 09 15:08	14° \mathfrak{N} 37'51		asc. node	8909 Aug 27 12:06	4° \mathfrak{N} 34'12	
morning set	8908 Sep 11 09:35	18° \mathfrak{N} 19'07		max. Earth dist.	8909 Sep 01 13:55	15° \mathfrak{N} 30'01	1.31736 AU
	8908 Sep 16 18:42	0° \mathfrak{U}					
superior conj	8908 Sep 18 09:35	3° \mathfrak{U} 35'44	1°18'32	superior conj	8909 Sep 02 20:36	18° \mathfrak{N} 19'05	1°00'32
minimum elong	8908 Sep 18 07:24	3° \mathfrak{U} 23'35	1°18'14	minimum elong	8909 Sep 02 18:25	18° \mathfrak{N} 07'02	1°00'06
max. Earth dist.	8908 Sep 18 04:48	3° \mathfrak{U} 09'09	1.31603 AU		8909 Sep 08 03:50	0° \mathfrak{U}	
evening rise	8908 Sep 25 04:16	18° \mathfrak{U} 27'04		evening rise	8909 Sep 09 14:32	3° \mathfrak{U} 07'31	
	8908 Sep 30 20:07	0° \mathfrak{M}			8909 Sep 23 20:45	0° \mathfrak{M}	
desc. node	8908 Oct 14 01:42	22° \mathfrak{M} 19'01		desc. node	8909 Sep 30 22:49	10° \mathfrak{M} 00'31	
	8908 Oct 19 23:22	0° \mathcal{J}		evening max el	8909 Oct 06 10:54	16° \mathfrak{M} 03'46	25°18'53
evening max el	8908 Oct 24 17:22	5° \mathcal{J} 02'47	26°34'13	retrograde	8909 Oct 20 08:27	23° \mathfrak{M} 04'27	
retrograde	8908 Nov 07 15:21	12° \mathcal{J} 09'49		evening set	8909 Oct 26 05:09	21° \mathfrak{M} 45'41	
evening set	8908 Nov 14 08:37	10° \mathcal{J} 17'40		min. Earth dist.	8909 Oct 30 22:51	19° \mathfrak{M} 06'13	0.57441 AU
min. Earth dist.	8908 Nov 18 07:01	7° \mathcal{J} 42'26	0.59458 AU	inferior conj	8909 Nov 02 21:11	17° \mathfrak{M} 07'11	-5°19'10
inferior conj	8908 Nov 21 11:43	5° \mathcal{J} 13'09	-4°26'44	minimum elong	8909 Nov 03 02:45	16° \mathfrak{M} 57'43	5°18'14
minimum elong	8908 Nov 21 19:14	4° \mathcal{J} 58'30	4°24'33	morning rise	8909 Nov 11 02:42	12° \mathfrak{M} 53'27	
morning rise	8908 Nov 29 08:17	0° \mathcal{J} 36'48		direct	8909 Nov 13 11:59	12° \mathfrak{M} 36'31	
direct	8908 Dec 01 13:09	0° \mathcal{J} 19'25		morning max el	8909 Nov 22 10:37	16° \mathfrak{M} 53'31	19°01'24
asc. node	8908 Dec 06 14:50	1° \mathcal{J} 56'59		asc. node	8909 Nov 23 11:51	17° \mathfrak{M} 57'22	
morning max el	8908 Dec 09 07:56	4° \mathcal{J} 08'54	18°16'29		8909 Dec 01 20:53	0° \mathcal{J}	
morning set	8908 Dec 25 02:49	29° \mathcal{J} 17'26		morning set	8909 Dec 09 01:52	13° \mathcal{J} 37'37	
	8908 Dec 25 11:48	0° \mathfrak{Z}					
superior conj	8909 Jan 03 11:00	16° \mathfrak{Z} 46'45	0°48'09	superior conj	8909 Dec 17 10:11	0° \mathfrak{Z} 00'35	1°13'25
minimum elong	8909 Jan 03 14:08	17° \mathfrak{Z} 00'58	0°47'56	minimum elong	8909 Dec 17 13:22	0° \mathfrak{Z} 15'50	1°13'17
desc. node	8909 Jan 10 00:44	28° \mathfrak{Z} 23'58			8909 Dec 17 10:03	0° \mathfrak{Z}	
	8909 Jan 10 23:12	0° \approx		max. Earth dist.	8909 Dec 24 07:28	12° \mathfrak{Z} 47'12	1.38901 AU
max. Earth dist.	8909 Jan 11 01:30	0° \approx 09'49	1.41060 AU	desc. node	8909 Dec 27 21:44	19° \mathfrak{Z} 06'03	
evening rise	8909 Jan 15 18:09	7° \approx 59'17		evening rise	8909 Dec 28 03:29	19° \mathfrak{Z} 30'51	
	8909 Jan 30 00:19	0° \mathcal{H}			8910 Jan 03 10:47	0° \approx	
evening max el	8909 Feb 18 20:58	25° \mathcal{H} 34'37	23°14'43		8910 Jan 24 05:18	0° \mathcal{H}	
	8909 Feb 24 04:04	0° \mathcal{Y}		evening max el	8910 Feb 01 10:35	9° \mathcal{H} 21'27	24°34'08
retrograde	8909 Mar 01 07:47	1° \mathcal{Y} 45'47		retrograde	8910 Feb 12 23:24	16° \mathcal{H} 06'00	
asc. node	8909 Mar 04 13:44	0° \mathcal{Y} 53'59		evening set	8910 Feb 18 11:17	13° \mathcal{H} 48'33	
	8909 Mar 05 22:16	30° \mathcal{R} \mathcal{H}		asc. node	8910 Feb 19 10:52	12° \mathcal{H} 54'02	
evening set	8909 Mar 06 07:23	29° \mathcal{H} 41'26		min. Earth dist.	8910 Feb 23 01:31	8° \mathcal{H} 35'12	0.68021 AU
min. Earth dist.	8909 Mar 11 05:42	23° \mathcal{H} 53'37	0.68432 AU	inferior conj	8910 Feb 24 00:12	7° \mathcal{H} 19'30	1°26'31
inferior conj	8909 Mar 11 16:52	23° \mathcal{H} 15'08	2°08'24	minimum elong	8910 Feb 23 22:22	7° \mathcal{H} 25'36	1°25'57
minimum elong	8909 Mar 11 14:39	23° \mathcal{H} 22'47	2°07'46	morning rise	8910 Mar 01 09:37	1° \mathcal{H} 19'53	
morning rise	8909 Mar 16 21:51	17° \mathcal{H} 08'48			8910 Mar 04 13:25	30° \mathcal{R} \approx	
direct	8909 Mar 21 05:38	15° \mathcal{H} 24'59		direct	8910 Mar 05 04:27	29° \approx 57'49	
morning max el	8909 Mar 29 17:21	20° \mathcal{H} 18'19	21°07'11		8910 Mar 05 19:39	0° \mathcal{H}	
	8909 Apr 06 20:17	0° \mathcal{Y}		morning max el	8910 Mar 12 16:36	4° \mathcal{H} 10'31	19°55'14
desc. node	8909 Apr 08 00:39	1° \mathcal{Y} 35'21		desc. node	8910 Mar 25 21:34	21° \mathcal{H} 20'09	
	8909 Apr 27 07:41	0° \mathcal{B}			8910 Mar 31 17:25	0° \mathcal{Y}	
morning set	8909 Apr 29 11:56	3° \mathcal{B} 23'56		morning set	8910 Apr 08 10:21	11° \mathcal{Y} 44'58	
max. Earth dist.	8909 May 06 21:42	15° \mathcal{B} 15'04	1.42647 AU	max. Earth dist.	8910 Apr 19 07:52	28° \mathcal{Y} 47'54	1.44275 AU
					8910 Apr 20 01:58	0° \mathcal{B}	

superior conj	8910 Apr 24 14:21	7°♄16'25	-2°12'16	morning set	8911 Mar 18 15:39	20°♄34'07	
minimum elong	8910 Apr 24 14:44	7°♄17'59	2°12'25		8911 Mar 24 17:04	0°♄	
evening rise	8910 May 07 20:55	29°♄27'27		max. Earth dist.	8911 Apr 02 00:10	12°♄58'07	1.45278 AU
	8910 May 08 04:32	0°♄					
asc. node	8910 May 18 09:36	17°♄05'33		superior conj	8911 Apr 04 04:35	16°♄24'16	-2°03'14
evening max el	8910 May 25 18:18	26°♄53'03	18°09'14	minimum elong	8911 Apr 03 21:51	15°♄57'46	2°02'57
	8910 May 30 12:12	0°♄			8911 Apr 12 17:51	0°♄	
retrograde	8910 Jun 01 03:29	0°♄13'59		evening rise	8911 Apr 19 03:13	10°♄20'01	
	8910 Jun 02 18:46	30°♄			8911 May 01 09:10	0°♄	
evening set	8910 Jun 03 23:38	29°♄32'18		asc. node	8911 May 05 06:41	5°♄37'30	
inferior conj	8910 Jun 10 03:08	24°♄17'18	2°52'34	evening max el	8911 May 09 06:57	10°♄23'44	18°30'40
minimum elong	8910 Jun 10 05:32	24°♄10'47	2°51'52	retrograde	8911 May 15 18:29	13°♄54'44	
min. Earth dist.	8910 Jun 12 21:12	21°♄19'49	0.62920 AU	evening set	8911 May 18 22:07	12°♄59'01	
morning rise	8910 Jun 16 09:47	18°♄07'17		inferior conj	8911 May 24 15:49	7°♄26'37	3°15'33
desc. node	8910 Jun 21 21:14	15°♄39'56		minimum elong	8911 May 24 17:01	7°♄23'03	3°15'13
direct	8910 Jun 23 03:56	15°♄34'41		min. Earth dist.	8911 May 26 19:03	4°♄54'07	0.64872 AU
morning max el	8910 Jul 07 04:18	23°♄37'40	27°51'09	morning rise	8911 May 30 11:04	1°♄09'41	
	8910 Jul 12 20:57	0°♄			8911 Jun 01 00:50	30°♄	
	8910 Aug 01 17:41	0°♄		direct	8911 Jun 06 02:05	28°♄25'09	
morning set	8910 Aug 10 12:17	16°♄38'36		desc. node	8911 Jun 08 18:15	28°♄48'39	
asc. node	8910 Aug 14 09:01	24°♄37'24			8911 Jun 11 14:57	0°♄	
max. Earth dist.	8910 Aug 15 18:17	27°♄34'03	1.32352 AU	morning max el	8911 Jun 19 14:19	6°♄21'18	27°15'45
	8910 Aug 16 21:28	0°♄			8911 Jul 07 17:06	0°♄	
					8911 Jul 24 23:34	0°♄	
superior conj	8910 Aug 18 04:54	2°♄50'08	0°37'53	morning set	8911 Jul 25 01:23	0°♄08'52	
minimum elong	8910 Aug 18 03:14	2°♄41'08	0°37'27	max. Earth dist.	8911 Jul 29 14:27	9°♄13'52	1.33464 AU
evening rise	8910 Aug 25 02:07	17°♄48'24		asc. node	8911 Aug 01 05:59	14°♄43'37	
	8910 Aug 31 00:53	0°♄					
desc. node	8910 Sep 17 19:58	26°♄18'58		superior conj	8911 Aug 02 08:27	17°♄03'14	0°11'05
evening max el	8910 Sep 17 22:40	26°♄25'31	23°43'28	minimum elong	8911 Aug 02 07:54	17°♄00'17	0°10'48
	8910 Sep 22 06:28	0°♄		behind sun begin	8911 Aug 02 03:46	16°♄38'25	
retrograde	8910 Oct 01 12:55	3°♄13'17		behind sun end	8911 Aug 02 12:02	17°♄22'11	
evening set	8910 Oct 06 01:05	2°♄28'55			8911 Aug 08 09:54	0°♄	
	8910 Oct 11 10:06	30°♄		evening rise	8911 Aug 09 13:09	2°♄24'31	
min. Earth dist.	8910 Oct 12 08:59	29°♄26'49	0.55793 AU		8911 Aug 24 20:41	0°♄	
inferior conj	8910 Oct 14 10:21	28°♄12'53	-5°37'56	evening max el	8911 Aug 30 11:55	6°♄38'10	22°04'25
minimum elong	8910 Oct 14 09:34	28°♄14'03	5°37'49	desc. node	8911 Sep 04 17:04	10°♄44'51	
morning rise	8910 Oct 22 20:06	24°♄17'57		retrograde	8911 Sep 12 05:20	12°♄57'59	
direct	8910 Oct 25 15:33	23°♄58'11		evening set	8911 Sep 15 06:17	12°♄37'27	
morning max el	8910 Nov 05 01:15	28°♄52'05	20°08'50	min. Earth dist.	8911 Sep 23 16:52	8°♄57'09	0.54825 AU
	8910 Nov 06 04:36	0°♄		inferior conj	8911 Sep 24 07:25	8°♄36'46	-5°04'46
asc. node	8910 Nov 10 08:52	5°♄05'50		minimum elong	8911 Sep 23 23:25	8°♄47'58	5°03'17
morning set	8910 Nov 23 07:22	28°♄14'16		morning rise	8911 Oct 02 18:04	4°♄49'00	
	8910 Nov 24 04:03	0°♄		direct	8911 Oct 06 03:57	4°♄23'13	
				morning max el	8911 Oct 18 02:38	10°♄00'45	21°37'44
superior conj	8910 Nov 30 23:05	13°♄52'46	1°30'04	asc. node	8911 Oct 28 05:49	23°♄07'28	
minimum elong	8910 Dec 01 01:21	14°♄04'10	1°30'07		8911 Nov 01 04:07	0°♄	
max. Earth dist.	8910 Dec 06 14:00	24°♄52'38	1.36775 AU	morning set	8911 Nov 07 16:50	13°♄00'22	
	8910 Dec 09 07:50	0°♄					
evening rise	8910 Dec 10 09:14	1°♄55'53		superior conj	8911 Nov 14 21:45	28°♄12'09	1°38'56
desc. node	8910 Dec 14 18:44	9°♄41'24		minimum elong	8911 Nov 14 22:45	28°♄17'22	1°39'05
	8910 Dec 27 13:22	0°♄			8911 Nov 15 18:28	0°♄	
evening max el	8911 Jan 14 23:51	23°♄09'51	25°46'30	max. Earth dist.	8911 Nov 19 01:59	6°♄46'27	1.34891 AU
	8911 Jan 25 06:13	0°♄		evening rise	8911 Nov 23 07:50	15°♄05'12	
retrograde	8911 Jan 27 10:14	0°♄16'42		desc. node	8911 Dec 01 15:45	0°♄05'27	
	8911 Jan 29 11:58	30°♄			8911 Dec 01 14:28	0°♄	
evening set	8911 Feb 02 10:39	27°♄48'40			8911 Dec 22 05:05	0°♄	
asc. node	8911 Feb 06 08:00	23°♄41'12		evening max el	8911 Dec 28 13:14	6°♄53'00	26°44'21
min. Earth dist.	8911 Feb 06 18:03	23°♄10'00	0.67222 AU	retrograde	8912 Jan 10 15:30	14°♄11'12	
inferior conj	8911 Feb 08 04:13	21°♄21'56	0°36'16	evening set	8912 Jan 17 03:37	11°♄36'38	
minimum elong	8911 Feb 08 03:19	21°♄24'48	0°36'04	min. Earth dist.	8912 Jan 21 04:56	7°♄32'38	0.66053 AU
morning rise	8911 Feb 13 20:29	15°♄31'01		inferior conj	8912 Jan 23 02:49	5°♄17'51	-0°21'58
direct	8911 Feb 17 03:41	14°♄28'35		minimum elong	8912 Jan 23 03:25	5°♄16'03	0°21'30
morning max el	8911 Feb 23 23:36	18°♄12'40	18°58'17	asc. node	8912 Jan 24 05:07	4°♄01'24	
	8911 Mar 05 04:36	0°♄			8912 Jan 28 13:06	30°♄	
greatest brilliancy	8911 Mar 10 01:05	7°♄16'19	-0.8m	morning rise	8912 Jan 29 04:14	29°♄38'00	
desc. node	8911 Mar 12 18:28	11°♄27'11		direct	8912 Feb 01 01:22	28°♄52'04	

	8912 Feb 04 15:34	0°♊			8913 Jan 31 01:17	0°♊	
morning max el	8912 Feb 07 12:47	2°♊19'39	18°17'40	morning set	8913 Feb 07 10:48	12°♊18'02	
	8912 Feb 26 11:56	0°♋		desc. node	8913 Feb 13 12:16	22°♊24'09	
morning set	8912 Feb 26 22:36	0°♋42'47			8913 Feb 18 03:43	0°♋	
desc. node	8912 Feb 27 15:21	1°♋49'59					
				superior conj	8913 Feb 21 00:52	4°♋38'35	-0°53'02
superior conj	8912 Mar 13 09:37	25°♋13'51	-1°34'30	minimum elong	8913 Feb 20 18:51	4°♋14'27	0°52'06
minimum elong	8912 Mar 13 00:03	24°♋36'21	1°33'29	max. Earth dist.	8913 Feb 25 15:20	11°♋57'38	1.45087 AU
max. Earth dist.	8912 Mar 14 19:45	27°♋27'31	1.45554 AU	evening rise	8913 Mar 09 00:54	29°♋40'49	
	8912 Mar 16 10:44	0°♌			8913 Mar 09 05:54	0°♌	
evening rise	8912 Mar 29 10:15	20°♌17'15		greatest brilliancy	8913 Mar 23 21:33	22°♌04'57	-0.6m
	8912 Apr 04 15:19	0°♍			8913 Mar 29 12:19	0°♍	
greatest brilliancy	8912 Apr 09 09:21	7°♍21'07	-0.8m	evening max el	8913 Apr 04 20:28	7°♍38'58	20°04'10
asc. node	8912 Apr 21 03:47	23°♍27'58		asc. node	8913 Apr 08 00:53	10°♍24'50	
evening max el	8912 Apr 21 16:13	24°♍00'08	19°09'31	retrograde	8913 Apr 12 12:57	12°♍05'45	
retrograde	8912 Apr 28 14:33	27°♍53'49		evening set	8913 Apr 16 09:02	10°♍40'12	
evening set	8912 May 02 02:02	26°♍43'20		inferior conj	8913 Apr 21 17:07	4°♍38'04	3°14'45
inferior conj	8912 May 07 13:27	20°♍55'09	3°21'50	minimum elong	8913 Apr 21 15:57	4°♍41'58	3°14'31
minimum elong	8912 May 07 13:22	20°♍55'26	3°21'39	min. Earth dist.	8913 Apr 22 14:33	3°♍25'30	0.67565 AU
min. Earth dist.	8912 May 09 01:22	18°♍59'40	0.66437 AU		8913 Apr 25 07:44	30°♌♌	
morning rise	8912 May 13 00:17	14°♍36'17		morning rise	8913 Apr 26 22:37	28°♌20'25	
direct	8912 May 19 06:51	11°♍51'37		direct	8913 May 02 17:33	25°♌45'29	
desc. node	8912 May 25 15:14	14°♍03'51			8913 May 11 11:20	0°♍	
morning max el	8912 Jun 01 00:47	19°♍27'43	26°12'43	desc. node	8913 May 12 12:13	0°♍55'05	
	8912 Jun 09 23:57	0°♎		morning max el	8913 May 14 10:23	2°♍46'33	24°51'22
	8912 Jun 29 18:56	0°♏			8913 Jun 04 03:29	0°♎	
morning set	8912 Jul 07 01:57	13°♏00'44		morning set	8913 Jun 19 09:26	25°♎02'18	
max. Earth dist.	8912 Jul 11 00:09	20°♏29'02	1.35051 AU		8913 Jun 22 03:44	0°♏	
	8912 Jul 15 18:44	0°♐		max. Earth dist.	8913 Jun 23 00:08	1°♏33'19	1.37044 AU
superior conj	8912 Jul 16 04:47	0°♐51'13	-0°19'05	superior conj	8913 Jun 29 14:51	14°♏06'21	-0°51'11
minimum elong	8912 Jul 16 05:54	0°♐56'54	0°19'05	minimum elong	8913 Jun 29 18:02	14°♏21'58	0°50'52
asc. node	8912 Jul 18 02:56	4°♐48'29		asc. node	8913 Jul 04 23:54	24°♏48'11	
evening rise	8912 Jul 23 21:35	16°♐49'26			8913 Jul 07 13:49	0°♐	
	8912 Jul 30 13:21	0°♑		evening rise	8913 Jul 08 01:05	0°♐56'32	
evening max el	8912 Aug 11 11:08	17°♑16'18	20°36'40	evening max el	8913 Jul 24 23:53	28°♐38'42	19°28'01
desc. node	8912 Aug 21 14:10	22°♑47'53			8913 Jul 26 11:25	0°♑	
retrograde	8912 Aug 22 17:31	22°♑51'11		retrograde	8913 Aug 03 13:24	3°♑22'28	
evening set	8912 Aug 24 19:28	22°♑40'33		evening set	8913 Aug 05 09:39	3°♑12'40	
inferior conj	8912 Sep 02 23:59	18°♑43'37	-3°38'28	desc. node	8913 Aug 08 11:18	2°♑16'48	
minimum elong	8912 Sep 02 14:46	18°♑56'54	3°35'36		8913 Aug 12 17:06	30°♒♒	
min. Earth dist.	8912 Sep 04 01:50	18°♑06'25	0.54753 AU	inferior conj	8913 Aug 14 02:44	29°♒06'35	-1°44'06
morning rise	8912 Sep 11 09:47	14°♑42'35		minimum elong	8913 Aug 13 22:02	29°♒14'08	1°42'25
direct	8912 Sep 15 12:13	14°♑06'34		min. Earth dist.	8913 Aug 16 14:09	27°♒31'16	0.55629 AU
morning max el	8912 Sep 28 18:02	20°♑29'30	23°21'29	morning rise	8913 Aug 22 07:52	24°♒33'46	
	8912 Oct 06 19:20	0°♓		direct	8913 Aug 27 05:38	23°♒39'28	
asc. node	8912 Oct 14 02:45	11°♓49'43			8913 Sep 09 12:02	0°♑	
morning set	8912 Oct 22 04:17	27°♓50'15		morning max el	8913 Sep 10 06:15	0°♑42'17	25°06'23
	8912 Oct 23 04:38	0°♔			8913 Sep 30 10:48	0°♓	
				asc. node	8913 Sep 30 23:41	1°♓02'02	
superior conj	8912 Oct 29 03:05	12°♔49'37	1°40'51	morning set	8913 Oct 06 15:56	12°♓38'04	
minimum elong	8912 Oct 29 02:50	12°♔48'15	1°41'00				
max. Earth dist.	8912 Oct 31 21:57	18°♔46'15	1.33383 AU	superior conj	8913 Oct 13 12:31	27°♓36'40	1°36'34
evening rise	8912 Nov 05 19:28	28°♔49'17		minimum elong	8913 Oct 13 11:14	27°♓29'37	1°36'35
	8912 Nov 06 09:44	0°♕			8913 Oct 14 14:40	0°♔	
desc. node	8912 Nov 17 12:47	20°♕12'37		max. Earth dist.	8913 Oct 15 01:21	0°♔58'23	1.32325 AU
	8912 Nov 23 17:54	0°♖		evening rise	8913 Oct 20 16:46	12°♔58'31	
evening max el	8912 Dec 10 01:59	20°♖21'06	27°20'36		8913 Oct 29 13:10	0°♕	
retrograde	8912 Dec 23 14:44	27°♖42'03		desc. node	8913 Nov 04 09:52	9°♕54'44	
evening set	8912 Dec 30 12:02	25°♖07'12			8913 Nov 19 05:30	0°♖	
min. Earth dist.	8913 Jan 03 08:05	21°♖36'25	0.64532 AU	evening max el	8913 Nov 22 12:22	3°♖21'10	27°28'45
inferior conj	8913 Jan 05 17:38	19°♖02'17	-1°27'14	retrograde	8913 Dec 06 07:13	10°♖38'38	
minimum elong	8913 Jan 05 20:19	18°♖55'06	1°25'52	evening set	8913 Dec 17 09:00	8°♖12'23	
asc. node	8913 Jan 10 02:11	14°♖53'36		min. Earth dist.	8913 Dec 17 01:43	5°♖10'34	0.62704 AU
morning rise	8913 Jan 12 06:13	13°♖36'16		inferior conj	8913 Dec 19 21:48	2°♖27'15	-2°37'33
direct	8913 Jan 14 19:10	13°♖03'05		minimum elong	8913 Dec 20 02:52	2°♖15'04	2°35'22
morning max el	8913 Jan 21 05:37	16°♖25'06	17°53'59		8913 Dec 22 14:10	30°♒♕	

morning rise	8913 Dec 26 22:56	27°♌18'00		min. Earth dist.	8914 Nov 29 08:48	18°♌03'16	0.60669 AU
asc. node	8913 Dec 27 23:14	27°♌01'25		inferior conj	8914 Dec 02 12:03	15°♌24'27	-3°48'35
direct	8913 Dec 29 06:01	26°♌53'46		minimum elong	8914 Dec 02 19:07	15°♌09'29	3°46'08
	8914 Jan 04 14:45	0°♌		morning rise	8914 Dec 10 01:54	10°♌34'57	
morning max el	8914 Jan 04 22:55	0°♌19'42	17°47'48	direct	8914 Dec 12 06:22	10°♌16'00	
morning set	8914 Jan 20 23:00	25°♌02'00		asc. node	8914 Dec 14 20:17	10°♌43'32	
	8914 Jan 23 18:47	0°♌		morning max el	8914 Dec 19 13:21	13°♌54'37	18°00'11
desc. node	8914 Jan 31 09:11	13°♌05'03			8914 Dec 30 11:54	0°♌	
				morning set	8915 Jan 04 04:43	8°♌35'09	
superior conj	8914 Feb 01 15:05	15°♌10'36	-0°09'13				
minimum elong	8914 Feb 01 14:11	15°♌06'48	0°08'54	superior conj	8915 Jan 14 06:34	26°♌54'22	0°29'32
behind sun begin	8914 Feb 01 06:32	14°♌34'48		minimum elong	8915 Jan 14 08:53	27°♌04'37	0°29'25
behind sun end	8914 Feb 01 21:49	15°♌38'44			8915 Jan 16 00:58	0°♌	
max. Earth dist.	8914 Feb 08 08:05	26°♌10'38	1.43935 AU	desc. node	8915 Jan 18 06:08	3°♌49'09	
	8914 Feb 10 17:29	0°♌		max. Earth dist.	8915 Jan 21 20:45	9°♌54'00	1.42228 AU
evening rise	8914 Feb 16 13:01	9°♌06'23		evening rise	8915 Jan 27 13:20	19°♌09'22	
	8914 Mar 02 11:09	0°♌			8915 Feb 03 12:36	0°♌	
evening max el	8914 Mar 18 19:12	21°♌19'10	21°11'59		8915 Feb 25 00:38	0°♌	
asc. node	8914 Mar 25 22:00	26°♌13'29		evening max el	8915 Mar 01 13:08	5°♌01'42	22°28'44
retrograde	8914 Mar 27 11:22	26°♌25'44		retrograde	8915 Mar 11 08:07	10°♌49'38	
evening set	8914 Mar 31 17:12	24°♌44'59		asc. node	8915 Mar 12 19:09	10°♌38'58	
inferior conj	8914 Apr 06 00:21	18°♌31'17	2°56'33	evening set	8915 Mar 16 00:56	8°♌53'48	
minimum elong	8914 Apr 05 22:28	18°♌37'49	2°56'08	inferior conj	8915 Mar 21 09:06	2°♌31'17	2°28'36
min. Earth dist.	8914 Apr 06 08:28	18°♌03'04	0.68245 AU	minimum elong	8915 Mar 21 06:53	2°♌39'01	2°28'00
morning rise	8914 Apr 11 03:31	12°♌16'52		min. Earth dist.	8915 Mar 21 04:49	2°♌46'10	0.68490 AU
direct	8914 Apr 16 09:05	9°♌58'51			8915 Mar 23 05:31	30°♌	
morning max el	8914 Apr 26 19:47	16°♌12'02	23°21'58	morning rise	8915 Mar 26 12:41	26°♌21'41	
desc. node	8914 Apr 29 09:11	18°♌56'15		direct	8915 Mar 31 04:25	24°♌24'46	
	8914 May 08 04:21	0°♌		morning max el	8915 Apr 09 08:08	29°♌45'35	21°54'00
	8914 May 28 03:38	0°♌			8915 Apr 09 13:50	0°♌	
morning set	8914 May 31 18:26	5°♌59'28		desc. node	8915 Apr 16 06:07	7°♌48'00	
max. Earth dist.	8914 Jun 04 20:00	12°♌56'50	1.39278 AU		8915 May 01 22:22	0°♌	
				morning set	8915 May 12 00:25	15°♌40'59	
superior conj	8914 Jun 12 10:53	26°♌39'46	-1°22'54	max. Earth dist.	8915 May 17 19:24	25°♌08'50	1.41499 AU
minimum elong	8914 Jun 12 16:04	27°♌03'54	1°22'24		8915 May 20 16:36	0°♌	
	8914 Jun 14 05:42	0°♌					
evening rise	8914 Jun 21 20:47	14°♌38'12		superior conj	8915 May 25 12:19	8°♌20'22	-1°50'29
asc. node	8914 Jun 21 20:54	14°♌38'48		minimum elong	8915 May 25 18:17	8°♌46'38	1°50'09
	8914 Jun 30 04:17	0°♌		evening rise	8915 Jun 05 04:59	27°♌44'42	
evening max el	8914 Jul 08 00:26	10°♌45'25	18°40'19		8915 Jun 06 10:18	0°♌	
retrograde	8914 Jul 16 02:13	14°♌46'17		asc. node	8915 Jun 08 17:56	4°♌15'10	
evening set	8914 Jul 18 03:03	14°♌31'53		evening max el	8915 Jun 21 08:54	23°♌26'39	18°12'57
inferior conj	8914 Jul 26 01:10	10°♌07'49	0°05'30	retrograde	8915 Jun 28 09:59	26°♌59'53	
minimum elong	8914 Jul 26 01:22	10°♌07'25	0°05'14	evening set	8915 Jun 30 18:19	26°♌36'54	
transit middle	8914 Jul 26 01:22	10°♌07'25	0°05'14	inferior conj	8915 Jul 07 21:10	21°♌51'59	1°31'30
transit begin	8914 Jul 25 21:55	10°♌13'54		minimum elong	8915 Jul 07 23:49	21°♌46'10	1°30'23
transit end	8914 Jul 26 04:50	10°♌00'56		min. Earth dist.	8915 Jul 11 06:01	18°♌56'11	0.59413 AU
desc. node	8914 Jul 26 08:26	9°♌54'09		desc. node	8915 Jul 13 05:33	17°♌23'37	
min. Earth dist.	8914 Jul 29 07:02	7°♌42'53	0.57286 AU	morning rise	8915 Jul 15 02:14	16°♌10'44	
morning rise	8914 Aug 02 20:11	4°♌57'57		direct	8915 Jul 21 10:59	14°♌18'33	
direct	8914 Aug 08 13:42	3°♌36'37		morning max el	8915 Aug 04 19:38	22°♌08'51	27°34'35
morning max el	8914 Aug 22 21:42	11°♌08'18	26°35'28		8915 Aug 11 17:34	0°♌	
	8914 Sep 06 11:35	0°♌			8915 Aug 30 12:12	0°♌	
asc. node	8914 Sep 17 20:37	20°♌36'32		asc. node	8915 Sep 04 17:33	10°♌25'59	
morning set	8914 Sep 21 02:12	27°♌19'25		morning set	8915 Sep 05 09:21	11°♌48'27	
	8914 Sep 22 08:12	0°♌					
superior conj	8914 Sep 28 00:02	12°♌27'06	1°26'39	superior conj	8915 Sep 12 11:42	27°♌14'00	1°11'30
minimum elong	8914 Sep 27 22:03	12°♌16'09	1°26'28	minimum elong	8915 Sep 12 09:28	27°♌01'32	1°11'08
max. Earth dist.	8914 Sep 28 09:51	13°♌21'37	1.31735 AU	max. Earth dist.	8915 Sep 11 19:54	25°♌46'22	1.31605 AU
evening rise	8914 Oct 04 20:57	27°♌25'34			8915 Sep 13 17:36	0°♌	
	8914 Oct 06 02:29	0°♌		evening rise	8915 Sep 19 05:34	12°♌02'32	
desc. node	8914 Oct 22 06:59	29°♌01'48			8915 Sep 28 06:25	0°♌	
	8914 Oct 22 22:36	0°♌		desc. node	8915 Oct 09 04:07	17°♌19'31	
evening max el	8914 Nov 04 18:08	15°♌41'26	27°03'56	evening max el	8915 Oct 17 16:33	27°♌11'45	26°05'33
retrograde	8914 Nov 18 15:46	22°♌51'55			8915 Oct 20 23:13	0°♌	
evening set	8914 Nov 25 14:47	20°♌44'42		retrograde	8915 Oct 31 14:33	4°♌15'21	
				evening set	8915 Nov 07 00:43	2°♌36'53	

min. Earth dist.	8915 Nov 11 05:29	0°♄02'06	0.58581 AU	evening set	8916 Oct 17 10:31	13°♍45'00	
	8915 Nov 11 06:40	30°♍		min. Earth dist.	8916 Oct 22 18:00	10°♍58'20	0.56677 AU
inferior conj	8915 Nov 14 08:51	27°♍43'59	-4°51'48	inferior conj	8916 Oct 25 09:30	9°♍16'56	-5°32'30
minimum elong	8915 Nov 14 16:02	27°♍30'46	4°50'04	minimum elong	8916 Oct 25 12:52	9°♍11'32	5°32'05
morning rise	8915 Nov 22 09:41	23°♍16'56		morning rise	8916 Nov 02 17:25	5°♍12'23	
direct	8915 Nov 24 15:52	23°♍00'02		direct	8916 Nov 05 06:35	4°♍54'33	
asc. node	8915 Dec 01 17:18	25°♍56'53		morning max el	8916 Nov 14 19:08	9°♍25'37	19°27'24
morning max el	8915 Dec 02 21:18	27°♍00'00	18°32'49	asc. node	8916 Nov 17 14:19	12°♍27'50	
	8915 Dec 05 14:02	0°♄			8916 Nov 28 09:32	0°♄	
morning set	8915 Dec 18 22:39	22°♄41'49		morning set	8916 Dec 02 00:47	7°♄10'08	
	8915 Dec 22 17:22	0°♄					
superior conj	8915 Dec 27 19:38	9°♄39'32	0°59'57	superior conj	8916 Dec 10 01:13	23°♄11'26	1°21'29
minimum elong	8915 Dec 27 22:58	9°♄54'58	0°59'45	minimum elong	8916 Dec 10 04:05	23°♄25'29	1°21'26
max. Earth dist.	8916 Jan 04 05:08	22°♄58'04	1.40161 AU		8916 Dec 13 14:04	0°♄	
desc. node	8916 Jan 05 03:06	24°♄32'59		max. Earth dist.	8916 Dec 16 11:01	5°♄21'07	1.37977 AU
evening rise	8916 Jan 08 10:03	0°♄07'33		evening rise	8916 Dec 20 04:23	12°♄02'28	
	8916 Jan 08 08:15	0°♄		desc. node	8916 Dec 22 00:03	15°♄12'33	
	8916 Jan 27 22:52	0°♄			8916 Dec 31 00:37	0°♄	
evening max el	8916 Feb 12 03:50	18°♄47'22	23°48'56		8917 Jan 22 05:09	0°♄	
retrograde	8916 Feb 23 01:48	25°♄13'07		evening max el	8917 Jan 24 17:01	2°♄34'58	25°06'07
asc. node	8916 Feb 27 16:17	23°♄31'44		retrograde	8917 Feb 05 15:27	9°♄30'22	
evening set	8916 Feb 28 06:40	23°♄02'56		evening set	8917 Feb 11 08:50	7°♄07'42	
min. Earth dist.	8916 Mar 04 01:23	17°♄29'59	0.68312 AU	asc. node	8917 Feb 13 13:25	4°♄56'50	
inferior conj	8916 Mar 04 17:29	16°♄35'11	1°51'41	min. Earth dist.	8917 Feb 15 19:57	2°♄09'24	0.67731 AU
minimum elong	8916 Mar 04 15:22	16°♄42'24	1°51'02	inferior conj	8917 Feb 16 23:36	0°♄39'00	1°06'11
morning rise	8916 Mar 10 00:04	10°♄31'42		minimum elong	8917 Feb 16 22:06	0°♄43'56	1°05'45
direct	8916 Mar 14 02:17	8°♄57'11			8917 Feb 17 11:34	30°♄	
morning max el	8916 Mar 22 02:56	13°♄31'17	20°34'54	morning rise	8917 Feb 22 11:41	24°♄43'08	
desc. node	8916 Apr 02 03:01	27°♄16'34		direct	8917 Feb 26 01:22	23°♄29'54	
	8916 Apr 04 01:05	0°♄		morning max el	8917 Mar 05 05:41	27°♄28'41	19°29'06
morning set	8916 Apr 20 06:12	24°♄19'01			8917 Mar 07 13:46	0°♄	
	8916 Apr 23 21:26	0°♄		greatest brilliancy	8917 Mar 17 23:40	14°♄11'49	-0.7m
max. Earth dist.	8916 Apr 29 02:10	8°♄17'00	1.43413 AU	desc. node	8917 Mar 19 23:53	17°♄11'25	
					8917 Mar 28 09:58	0°♄	
superior conj	8916 May 05 14:46	18°♄59'17	-2°08'37	morning set	8917 Mar 30 04:28	2°♄43'29	
minimum elong	8916 May 05 18:25	19°♄14'32	2°08'39	max. Earth dist.	8917 Apr 11 15:24	22°♄08'22	1.44787 AU
	8916 May 12 02:23	0°♄					
evening rise	8916 May 17 21:21	10°♄06'32		superior conj	8917 Apr 15 16:39	28°♄34'52	-2°10'57
asc. node	8916 May 25 15:01	23°♄32'17		minimum elong	8917 Apr 15 13:58	28°♄24'10	2°11'00
	8916 May 29 16:36	0°♄			8917 Apr 16 13:54	0°♄	
evening max el	8916 Jun 03 21:29	6°♄33'27	18°05'04	evening rise	8917 Apr 29 17:05	21°♄33'06	
retrograde	8916 Jun 10 09:31	9°♄54'51			8917 May 04 18:18	0°♄	
evening set	8916 Jun 13 01:23	9°♄20'32		asc. node	8917 May 12 12:05	12°♄23'00	
inferior conj	8916 Jun 19 12:13	4°♄15'45	2°30'02	evening max el	8917 May 18 10:52	19°♄57'02	18°16'06
minimum elong	8916 Jun 19 15:05	4°♄08'30	2°29'05	retrograde	8917 May 24 20:06	23°♄21'02	
min. Earth dist.	8916 Jun 22 13:20	1°♄12'32	0.61673 AU	evening set	8917 May 27 19:20	22°♄33'36	
	8916 Jun 23 20:44	30°♄		inferior conj	8917 Jun 02 18:11	17°♄10'49	3°04'35
morning rise	8916 Jun 26 02:37	28°♄13'11		minimum elong	8917 Jun 02 20:07	17°♄05'21	3°04'05
desc. node	8916 Jun 29 02:37	26°♄35'28		min. Earth dist.	8917 Jun 05 06:05	14°♄21'58	0.63788 AU
direct	8916 Jul 02 19:21	25°♄53'10		morning rise	8917 Jun 08 19:36	10°♄56'45	
	8916 Jul 12 14:49	0°♄		direct	8917 Jun 15 12:59	8°♄17'42	
morning max el	8916 Jul 17 00:15	3°♄54'01	27°56'08	desc. node	8917 Jun 15 23:39	8°♄18'21	
	8916 Aug 05 09:29	0°♄		morning max el	8917 Jun 29 09:16	16°♄19'53	27°40'04
morning set	8916 Aug 19 11:26	25°♄59'59			8917 Jul 10 15:41	0°♄	
	8916 Aug 21 09:41	0°♄			8917 Jul 29 03:42	0°♄	
asc. node	8916 Aug 21 14:30	0°♄25'21		morning set	8917 Aug 03 06:08	9°♄47'55	
max. Earth dist.	8916 Aug 25 03:37	8°♄01'33	1.31942 AU	max. Earth dist.	8917 Aug 08 05:02	19°♄56'33	1.32760 AU
				asc. node	8917 Aug 08 11:27	20°♄30'20	
superior conj	8916 Aug 26 21:46	11°♄52'03	0°51'29				
minimum elong	8916 Aug 26 19:44	11°♄40'54	0°51'01	superior conj	8917 Aug 11 04:18	26°♄16'03	0°27'00
evening rise	8916 Sep 02 16:37	26°♄43'21		minimum elong	8917 Aug 11 03:02	26°♄09'15	0°26'35
	8916 Sep 04 05:37	0°♄			8917 Aug 12 21:46	0°♄	
	8916 Sep 21 10:25	0°♄		evening rise	8917 Aug 18 04:11	11°♄22'48	
desc. node	8916 Sep 25 01:15	4°♄28'33			8917 Aug 27 14:58	0°♄	
evening max el	8916 Sep 28 06:56	7°♄52'32	24°39'47	evening max el	8917 Sep 09 18:00	18°♄05'21	23°00'46
retrograde	8916 Oct 12 02:07	14°♄48'51		desc. node	8917 Sep 11 22:23	20°♄03'12	
				retrograde	8917 Sep 23 01:39	24°♄44'27	

evening set	8917 Sep 26 22:08	24°♄11'58		evening rise	8918 Aug 02 14:20	25°♄54'22	
min. Earth dist.	8917 Oct 04 02:45	20°♄55'14	0.55272 AU		8918 Aug 04 13:39	0°♄	
inferior conj	8917 Oct 05 14:52	20°♄03'05	-5°30'56	evening max el	8918 Aug 22 10:44	28°♄25'24	21°25'12
minimum elong	8917 Oct 05 10:42	20°♄09'06	5°30'30		8918 Aug 24 03:56	0°♄	
morning rise	8917 Oct 14 01:17	16°♄13'30		desc. node	8918 Aug 29 19:31	3°♄31'29	
direct	8917 Oct 17 02:17	15°♄51'46		retrograde	8918 Sep 03 15:02	4°♄27'45	
morning max el	8917 Oct 28 04:14	21°♄03'41	20°44'23	evening set	8918 Sep 06 03:42	4°♄13'06	
asc. node	8917 Nov 04 11:17	0°♄00'43		inferior conj	8918 Sep 15 08:17	0°♄15'54	-4°33'44
	8917 Nov 04 11:05	0°♄		minimum elong	8918 Sep 14 22:50	0°♄29'10	4°31'26
morning set	8917 Nov 16 08:16	21°♄51'50		min. Earth dist.	8918 Sep 15 11:10	0°♄11'52	0.54669 AU
	8917 Nov 20 06:10	0°♄			8918 Sep 15 19:38	30°♄	
				morning rise	8918 Sep 23 18:45	26°♄24'43	
superior conj	8917 Nov 23 18:46	7°♄17'08	1°34'44	direct	8918 Sep 27 11:15	25°♄55'16	
minimum elong	8917 Nov 23 20:30	7°♄26'05	1°34'50		8918 Oct 07 19:53	0°♄	
max. Earth dist.	8917 Nov 28 19:04	17°♄18'08	1.35926 AU	morning max el	8918 Oct 10 00:44	1°♄53'11	22°20'42
evening rise	8917 Dec 02 17:48	24°♄47'58		asc. node	8918 Oct 22 08:13	18°♄20'37	
	8917 Dec 05 14:23	0°♄			8918 Oct 28 13:21	0°♄	
desc. node	8917 Dec 08 21:04	5°♄43'58		morning set	8918 Oct 31 18:46	6°♄39'34	
	8917 Dec 24 14:15	0°♄					
evening max el	8918 Jan 07 06:09	16°♄21'42	26°13'11	superior conj	8918 Nov 07 20:35	21°♄44'50	1°40'32
retrograde	8918 Jan 20 00:12	23°♄35'29		minimum elong	8918 Nov 07 21:03	21°♄47'14	1°40'43
evening set	8918 Jan 26 05:45	21°♄03'49		max. Earth dist.	8918 Nov 11 10:01	29°♄11'08	1.34195 AU
min. Earth dist.	8918 Jan 30 10:23	16°♄39'59	0.66771 AU		8918 Nov 11 19:34	0°♄	
asc. node	8918 Jan 31 10:30	15°♄26'02		evening rise	8918 Nov 15 22:23	8°♄13'04	
inferior conj	8918 Feb 01 01:35	14°♄39'27	0°12'30	desc. node	8918 Nov 25 18:08	26°♄01'25	
minimum elong	8918 Feb 01 01:15	14°♄40'29	0°12'33		8918 Nov 28 03:49	0°♄	
transit middle	8918 Feb 01 01:15	14°♄40'29	0°12'33		8918 Dec 20 19:31	0°♄	
transit begin	8918 Jan 31 23:28	14°♄46'00		evening max el	8918 Dec 20 19:28	29°♄59'52	27°02'52
transit end	8918 Feb 01 03:03	14°♄34'57		retrograde	8919 Jan 03 03:10	7°♄20'33	
morning rise	8918 Feb 06 21:30	8°♄53'00		evening set	8919 Jan 09 19:24	4°♄45'11	
direct	8918 Feb 10 00:06	7°♄58'13		min. Earth dist.	8919 Jan 13 18:24	0°♄55'18	0.65443 AU
morning max el	8918 Feb 16 15:39	11°♄34'08	18°38'53		8919 Jan 14 14:05	30°♄	
	8918 Mar 02 02:40	0°♄		inferior conj	8919 Jan 15 21:12	28°♄31'17	-0°48'50
desc. node	8918 Mar 06 20:46	7°♄25'38		minimum elong	8919 Jan 15 22:38	28°♄27'14	0°48'01
morning set	8918 Mar 09 19:11	12°♄02'23		asc. node	8919 Jan 18 07:34	25°♄52'52	
	8918 Mar 21 06:01	0°♄		morning rise	8919 Jan 22 03:08	22°♄56'43	
max. Earth dist.	8918 Mar 25 08:54	6°♄26'47	1.45488 AU	direct	8919 Jan 24 20:29	22°♄16'43	
				morning max el	8919 Jan 31 06:41	25°♄41'02	18°05'25
superior conj	8918 Mar 26 00:47	7°♄28'59	-1°53'13		8919 Feb 03 23:24	0°♄	
minimum elong	8918 Mar 25 15:59	6°♄54'31	1°52'34	morning set	8919 Feb 18 14:59	22°♄49'23	
	8918 Apr 09 07:00	0°♄		desc. node	8919 Feb 21 17:41	27°♄53'47	
evening rise	8918 Apr 10 13:08	2°♄00'16			8919 Feb 23 00:47	0°♄	
greatest brilliancy	8918 Apr 18 10:40	14°♄36'44	-0.9m				
	8918 Apr 28 20:51	0°♄		superior conj	8919 Mar 05 08:02	16°♄28'10	-1°17'51
asc. node	8918 Apr 29 09:10	0°♄38'30		minimum elong	8919 Mar 04 23:25	15°♄54'09	1°16'46
evening max el	8918 May 01 22:16	3°♄30'21	18°45'10	max. Earth dist.	8919 Mar 08 04:32	20°♄57'29	1.45448 AU
retrograde	8918 May 08 13:36	7°♄09'47			8919 Mar 13 23:30	0°♄	
evening set	8918 May 11 20:25	6°♄08'03		evening rise	8919 Mar 21 11:53	11°♄39'34	
inferior conj	8918 May 17 11:04	0°♄28'54	3°20'00		8919 Apr 02 10:40	0°♄	
minimum elong	8918 May 17 11:43	0°♄26'56	3°19'46	greatest brilliancy	8919 Apr 03 10:36	1°♄29'44	-0.7m
	8918 May 17 20:23	30°♄		evening max el	8919 Apr 15 05:39	17°♄08'48	19°31'01
min. Earth dist.	8918 May 19 07:50	28°♄10'42	0.65588 AU	asc. node	8919 Apr 16 06:16	18°♄08'11	
morning rise	8918 May 23 02:20	24°♄10'26		retrograde	8919 Apr 22 10:52	21°♄15'10	
direct	8918 May 29 14:18	21°♄24'10		evening set	8919 Apr 26 01:54	19°♄58'22	
desc. node	8918 Jun 02 20:39	22°♄24'09		inferior conj	8919 May 01 11:36	14°♄04'18	3°20'17
morning max el	8918 Jun 11 19:43	29°♄14'29	26°51'42	minimum elong	8919 May 01 11:02	14°♄06'11	3°20'06
	8918 Jun 12 13:25	0°♄		min. Earth dist.	8919 May 02 17:19	12°♄26'25	0.66977 AU
	8918 Jul 04 12:30	0°♄		morning rise	8919 May 06 19:49	7°♄45'46	
morning set	8918 Jul 17 14:22	23°♄03'00		direct	8919 May 12 21:53	5°♄03'53	
	8918 Jul 21 03:51	0°♄		desc. node	8919 May 20 17:37	8°♄23'55	
max. Earth dist.	8918 Jul 21 20:34	1°♄23'35	1.34075 AU	morning max el	8919 May 25 05:38	12°♄26'36	25°39'39
					8919 Jun 08 08:17	0°♄	
superior conj	8918 Jul 26 05:05	10°♄19'05	-0°01'23		8919 Jun 27 05:30	0°♄	
minimum elong	8918 Jul 26 05:10	10°♄19'32	0°01'35	morning set	8919 Jun 30 08:16	5°♄35'07	
behind sun begin	8918 Jul 25 23:29	9°♄49'50		max. Earth dist.	8919 Jul 04 01:29	12°♄30'16	1.35857 AU
behind sun end	8918 Jul 26 10:52	10°♄49'16					
asc. node	8918 Jul 26 08:23	10°♄36'17		superior conj	8919 Jul 09 21:30	23°♄54'30	-0°32'35

minimum elong	8919 Jul 09 23:27	24°☿04'20	0°32'26	minimum elong	8920 Jun 22 06:12	7°☿12'36	1°04'26
	8919 Jul 12 21:36	0°♊		asc. node	8920 Jun 29 02:21	20°☿35'53	
asc. node	8919 Jul 13 05:21	0°♊39'38		evening rise	8920 Jun 30 21:34	24°☿09'46	
evening rise	8919 Jul 17 20:59	10°♊12'36			8920 Jul 03 21:09	0°♊	
	8919 Jul 28 10:59	0°♊		evening max el	8920 Jul 17 09:53	21°♊03'01	19°05'04
evening max el	8919 Aug 04 15:47	9°♊21'49	20°04'58	retrograde	8920 Jul 26 06:54	25°♊27'00	
retrograde	8919 Aug 15 04:25	14°♊34'05		evening set	8920 Jul 28 04:31	25°♊15'43	
desc. node	8919 Aug 16 16:39	14°♊28'06		desc. node	8920 Aug 02 13:46	22°♊59'54	
evening set	8919 Aug 17 02:22	14°♊24'31		inferior conj	8920 Aug 05 13:53	21°♊02'13	-0°55'26
inferior conj	8919 Aug 26 03:32	10°♊25'28	-2°51'18	minimum elong	8920 Aug 05 11:29	21°♊06'19	0°54'39
minimum elong	8919 Aug 25 19:50	10°♊36'59	2°48'39	min. Earth dist.	8920 Aug 08 11:00	19°♊04'26	0.56260 AU
min. Earth dist.	8919 Aug 27 21:19	9°♊23'07	0.55022 AU	morning rise	8920 Aug 13 15:24	16°♊13'49	
morning rise	8919 Sep 03 11:59	6°♊12'42		direct	8920 Aug 18 21:48	15°♊09'09	
direct	8919 Sep 07 22:44	5°♊29'46		morning max el	8920 Sep 02 02:33	22°♊24'45	25°47'18
morning max el	8919 Sep 21 13:38	12°♊10'29	24°06'53		8920 Sep 08 20:12	0°♊	
	8919 Oct 05 02:39	0°♊		asc. node	8920 Sep 25 02:06	26°♊39'01	
asc. node	8919 Oct 09 05:09	7°♊16'30			8920 Sep 26 18:07	0°♊	
morning set	8919 Oct 16 06:29	21°♊28'33		morning set	8920 Sep 29 17:47	6°♊14'08	
	8919 Oct 20 05:05	0°♊					
superior conj	8919 Oct 23 03:55	6°♊26'31	1°39'45	superior conj	8920 Oct 06 14:28	21°♊15'22	1°33'00
minimum elong	8919 Oct 23 03:11	6°♊22'34	1°39'51	minimum elong	8920 Oct 06 12:51	21°♊06'24	1°32'58
max. Earth dist.	8919 Oct 25 09:29	11°♊15'55	1.32882 AU	max. Earth dist.	8920 Oct 07 15:40	23°♊34'24	1.32018 AU
evening rise	8919 Oct 30 14:32	22°♊08'31			8920 Oct 10 14:20	0°♊	
	8919 Nov 03 14:34	0°♊		evening rise	8920 Oct 13 15:04	6°♊25'55	
desc. node	8919 Nov 12 15:12	15°♊58'35			8920 Oct 26 03:25	0°♊	
	8919 Nov 21 23:17	0°♊		desc. node	8920 Oct 29 12:18	5°♊27'15	
evening max el	8919 Dec 03 07:44	13°♊17'57	27°27'56	evening max el	8920 Nov 14 16:32	26°♊02'35	27°22'24
retrograde	8919 Dec 16 23:27	20°♊37'10			8920 Nov 19 12:31	0°♊	
evening set	8919 Dec 23 23:18	18°♊05'10		retrograde	8920 Nov 28 12:28	3°♊16'42	
min. Earth dist.	8919 Dec 27 17:46	14°♊47'13	0.63786 AU	evening set	8920 Dec 05 14:21	0°♊57'07	
inferior conj	8919 Dec 30 07:53	12°♊08'06	-1°56'36		8920 Dec 06 22:58	30°♊	
minimum elong	8919 Dec 30 11:33	11°♊58'39	1°54'53	min. Earth dist.	8920 Dec 09 06:49	28°♊05'35	0.61857 AU
asc. node	8920 Jan 05 04:39	7°♊12'39		inferior conj	8920 Dec 12 06:36	25°♊22'27	-3°07'58
morning rise	8920 Jan 06 01:38	6°♊48'32		minimum elong	8920 Dec 12 12:38	25°♊08'42	3°05'34
direct	8920 Jan 08 11:51	6°♊19'29		morning rise	8920 Dec 19 13:12	20°♊21'19	
morning max el	8920 Jan 15 00:02	9°♊42'02	17°49'10	direct	8920 Dec 21 18:52	19°♊59'38	
	8920 Jan 28 16:57	0°♊		asc. node	8920 Dec 22 01:43	20°♊00'00	
morning set	8920 Jan 31 14:16	4°♊56'31		morning max el	8920 Dec 28 16:34	23°♊29'31	17°50'48
desc. node	8920 Feb 08 14:36	18°♊31'01			8921 Jan 02 20:41	0°♊	
				morning set	8921 Jan 13 10:41	18°♊03'51	
superior conj	8920 Feb 13 08:06	26°♊18'42	-0°34'11		8921 Jan 20 03:16	0°♊	
minimum elong	8920 Feb 13 04:21	26°♊03'24	0°33'29	superior conj	8921 Jan 24 09:21	7°♊22'20	0°08'07
	8920 Feb 15 14:43	0°♊		minimum elong	8921 Jan 24 10:06	7°♊25'36	0°08'13
max. Earth dist.	8920 Feb 18 23:41	5°♊23'54	1.44678 AU	behind sun begin	8921 Jan 24 02:39	6°♊53'44	
evening rise	8920 Feb 28 23:36	20°♊59'36		behind sun end	8921 Jan 24 17:33	7°♊57'23	
	8920 Mar 05 21:37	0°♊		desc. node	8921 Jan 25 11:32	9°♊13'49	
	8920 Mar 27 13:00	0°♊		max. Earth dist.	8921 Jan 31 15:22	19°♊27'57	1.43265 AU
evening max el	8920 Mar 28 07:41	0°♊48'44	20°31'37		8921 Feb 07 05:47	0°♊	
asc. node	8920 Apr 02 03:24	4°♊38'11		evening rise	8921 Feb 07 15:28	0°♊37'50	
retrograde	8920 Apr 05 09:27	5°♊31'20			8921 Feb 27 11:47	0°♊	
evening set	8920 Apr 09 09:39	3°♊59'09		evening max el	8921 Mar 11 04:12	14°♊29'40	21°43'42
	8920 Apr 13 03:00	30°♊		retrograde	8921 Mar 20 07:26	19°♊53'58	
inferior conj	8920 Apr 14 17:04	27°♊51'52	3°08'18	asc. node	8921 Mar 20 00:32	19°♊53'33	
minimum elong	8920 Apr 14 15:33	27°♊57'02	3°07'58	evening set	8921 Mar 24 17:52	18°♊06'30	
min. Earth dist.	8920 Apr 15 08:40	26°♊58'23	0.67915 AU	inferior conj	8921 Mar 30 01:13	11°♊48'28	2°45'51
morning rise	8920 Apr 19 21:16	21°♊35'40		minimum elong	8921 Mar 29 23:08	11°♊55'42	2°45'20
direct	8920 Apr 25 10:42	19°♊07'20		min. Earth dist.	8921 Mar 30 03:52	11°♊39'13	0.68405 AU
morning max el	8920 May 06 14:52	25°♊48'18	24°13'44	morning rise	8921 Apr 04 04:14	5°♊36'03	
desc. node	8920 May 06 14:36	25°♊47'38		direct	8921 Apr 09 03:51	3°♊26'57	
	8920 May 10 10:53	0°♊		morning max el	8921 Apr 19 01:18	9°♊17'41	22°43'55
	8920 May 31 21:09	0°♊		desc. node	8921 Apr 23 11:33	14°♊12'22	
morning set	8920 Jun 11 06:50	17°♊10'28			8921 May 05 07:05	0°♊	
max. Earth dist.	8920 Jun 14 23:13	23°♊40'09	1.37988 AU	morning set	8921 May 23 04:43	27°♊36'17	
	8920 Jun 18 10:29	0°♊			8921 May 24 15:28	0°♊	
superior conj	8920 Jun 22 02:06	6°♊52'58	-1°04'53	max. Earth dist.	8921 May 27 20:13	5°♊23'22	1.40249 AU

superior conj	8921 Jun 04 14:48	19° Π 04'53	-1°35'23	superior conj	8922 May 17 06:57	0° Π 20'18	-1°59'41
minimum elong	8921 Jun 04 20:34	19° Π 31'07	1°34'54	minimum elong	8922 May 17 12:26	0° Π 43'53	1°59'31
	8921 Jun 10 12:13	0° \mathfrak{E}			8922 May 17 02:13	0° Π	
evening rise	8921 Jun 14 12:54	7° \mathfrak{E} 37'51		evening rise	8922 May 28 15:00	20° Π 27'02	
asc. node	8921 Jun 15 23:22	10° \mathfrak{E} 20'59		asc. node	8922 Jun 02 20:26	29° Π 50'12	
	8921 Jun 27 14:59	0° Ω			8922 Jun 02 22:39	0° \mathfrak{E}	
evening max el	8921 Jun 30 14:11	3° Ω 24'56	18°26'07	evening max el	8922 Jun 14 00:53	16° \mathfrak{E} 18'48	18°07'15
retrograde	8921 Jul 08 04:13	7° Ω 12'30		retrograde	8922 Jun 20 19:12	19° \mathfrak{E} 45'10	
evening set	8921 Jul 10 07:58	6° Ω 54'58		evening set	8922 Jun 23 06:40	19° \mathfrak{E} 17'47	
inferior conj	8921 Jul 17 21:38	2° Ω 21'53	0°45'23	inferior conj	8922 Jun 30 02:16	14° \mathfrak{E} 24'33	1°59'30
minimum elong	8921 Jul 17 23:12	2° Ω 18'43	0°44'36	minimum elong	8922 Jun 30 05:13	14° \mathfrak{E} 17'40	1°58'23
desc. node	8921 Jul 20 10:54	0° Ω 18'42		min. Earth dist.	8922 Jul 03 08:59	11° \mathfrak{E} 22'18	0.60374 AU
	8921 Jul 20 20:28	30° \mathfrak{R} \mathfrak{E}		morning rise	8922 Jul 07 01:00	8° \mathfrak{E} 32'43	
min. Earth dist.	8921 Jul 21 06:20	29° \mathfrak{E} 41'01	0.58152 AU	desc. node	8922 Jul 07 07:59	8° \mathfrak{E} 21'56	
morning rise	8921 Jul 25 10:57	26° \mathfrak{E} 57'10		direct	8922 Jul 13 14:07	6° \mathfrak{E} 27'35	
direct	8921 Jul 31 11:27	25° \mathfrak{E} 22'57		morning max el	8922 Jul 27 21:51	14° \mathfrak{E} 24'18	27°48'25
	8921 Aug 11 09:34	0° Ω			8922 Aug 09 11:22	0° Ω	
morning max el	8921 Aug 14 20:48	3° Ω 04'04	27°05'02		8922 Aug 26 18:47	0° \mathfrak{M}	
	8921 Sep 03 08:51	0° \mathfrak{M}		morning set	8922 Aug 29 08:12	5° \mathfrak{M} 13'36	
asc. node	8921 Sep 11 23:02	16° \mathfrak{M} 20'27		asc. node	8922 Aug 29 19:58	6° \mathfrak{M} 15'00	
morning set	8921 Sep 14 02:56	20° \mathfrak{M} 50'49		max. Earth dist.	8922 Sep 04 10:39	18° \mathfrak{M} 20'56	1.31686 AU
	8921 Sep 18 08:25	0° \mathfrak{U}					
superior conj	8921 Sep 21 02:15	6° \mathfrak{U} 04'43	1°20'50	superior conj	8922 Sep 05 13:29	20° \mathfrak{M} 49'05	1°03'36
minimum elong	8921 Sep 21 00:06	5° \mathfrak{U} 52'48	1°20'35	minimum elong	8922 Sep 05 11:16	20° \mathfrak{M} 36'50	1°03'10
max. Earth dist.	8921 Sep 21 01:15	5° \mathfrak{U} 59'13	1.31616 AU		8922 Sep 09 17:11	0° \mathfrak{U}	
evening rise	8921 Sep 27 21:22	20° \mathfrak{U} 57'26		evening rise	8922 Sep 12 07:16	5° \mathfrak{U} 36'59	
	8921 Oct 02 06:51	0° \mathfrak{M}			8922 Sep 25 00:22	0° \mathfrak{M}	
desc. node	8921 Oct 16 09:26	24° \mathfrak{M} 15'20		desc. node	8922 Oct 03 06:34	12° \mathfrak{M} 06'48	
	8921 Oct 20 14:38	0° \mathfrak{J}		evening max el	8922 Oct 09 13:56	19° \mathfrak{M} 09'17	25°31'47
evening max el	8921 Oct 27 19:09	8° \mathfrak{J} 01'12	26°43'02	retrograde	8922 Oct 23 11:52	26° \mathfrak{M} 10'47	
retrograde	8921 Nov 10 17:13	15° \mathfrak{J} 09'28		evening set	8922 Oct 29 12:22	24° \mathfrak{M} 46'53	
evening set	8921 Nov 17 12:20	13° \mathfrak{J} 13'00		min. Earth dist.	8922 Nov 03 02:12	22° \mathfrak{M} 09'08	0.57727 AU
min. Earth dist.	8921 Nov 21 09:08	10° \mathfrak{J} 36'44	0.59770 AU	inferior conj	8922 Nov 06 02:13	20° \mathfrak{M} 04'41	-5°12'59
inferior conj	8921 Nov 24 13:48	8° \mathfrak{J} 04'17	-4°17'07	minimum elong	8922 Nov 06 08:21	19° \mathfrak{M} 54'02	5°11'49
minimum elong	8921 Nov 24 21:17	7° \mathfrak{J} 49'23	4°14'49	morning rise	8922 Nov 14 06:39	15° \mathfrak{M} 47'27	
morning rise	8921 Dec 02 08:44	3° \mathfrak{J} 24'33		direct	8922 Nov 16 14:54	15° \mathfrak{M} 30'38	
direct	8921 Dec 04 13:16	3° \mathfrak{J} 06'56		morning max el	8922 Nov 25 08:53	19° \mathfrak{M} 43'05	18°53'14
asc. node	8921 Dec 08 22:46	4° \mathfrak{J} 21'56		asc. node	8922 Nov 25 19:46	20° \mathfrak{M} 09'52	
morning max el	8921 Dec 12 04:47	6° \mathfrak{J} 53'20	18°11'34		8922 Dec 03 02:27	0° \mathfrak{J}	
	8921 Dec 26 22:15	0° \mathfrak{Z}		morning set	8922 Dec 11 19:54	16° \mathfrak{J} 08'47	
morning set	8921 Dec 27 22:07	1° \mathfrak{Z} 52'20			8922 Dec 18 21:49	0° \mathfrak{Z}	
superior conj	8922 Jan 06 10:37	19° \mathfrak{Z} 33'53	0°43'30	superior conj	8922 Dec 20 07:16	2° \mathfrak{Z} 40'03	1°10'09
minimum elong	8922 Jan 06 13:35	19° \mathfrak{Z} 47'18	0°43'19	minimum elong	8922 Dec 20 10:31	2° \mathfrak{Z} 55'32	1°09'59
desc. node	8922 Jan 12 08:28	29° \mathfrak{Z} 58'01		max. Earth dist.	8922 Dec 27 08:06	15° \mathfrak{Z} 36'58	1.39230 AU
	8922 Jan 12 08:56	0° \approx		desc. node	8922 Dec 30 05:26	20° \mathfrak{Z} 40'15	
max. Earth dist.	8922 Jan 14 01:45	2° \approx 53'44	1.41373 AU	evening rise	8922 Dec 31 05:51	22° \mathfrak{Z} 45'53	
evening rise	8922 Jan 18 23:48	11° \approx 02'22			8923 Jan 04 19:06	0° \approx	
	8922 Jan 31 05:41	0° \mathfrak{H}			8923 Jan 25 04:16	0° \mathfrak{H}	
evening max el	8922 Feb 21 20:21	28° \mathfrak{H} 12'29	23°02'43	evening max el	8923 Feb 04 10:11	11° \mathfrak{H} 58'48	24°22'38
	8922 Feb 23 17:36	0° \mathfrak{Y}		retrograde	8923 Feb 15 19:19	18° \mathfrak{H} 38'43	
retrograde	8922 Mar 04 03:11	4° \mathfrak{Y} 17'59		evening set	8923 Feb 21 05:20	16° \mathfrak{H} 23'10	
asc. node	8922 Mar 06 21:41	3° \mathfrak{Y} 40'04		asc. node	8923 Feb 21 18:48	15° \mathfrak{H} 53'03	
evening set	8922 Mar 09 00:57	2° \mathfrak{Y} 15'53		min. Earth dist.	8923 Feb 25 20:44	11° \mathfrak{H} 04'40	0.68109 AU
	8922 Mar 11 06:12	30° \mathfrak{R} \mathfrak{H}		inferior conj	8923 Feb 26 17:40	9° \mathfrak{H} 54'20	1°33'24
inferior conj	8922 Mar 14 10:02	25° \mathfrak{H} 50'22	2°14'01	minimum elong	8923 Feb 26 15:45	10° \mathfrak{H} 00'48	1°32'50
minimum elong	8922 Mar 14 07:48	25° \mathfrak{H} 58'06	2°13'23	morning rise	8923 Mar 04 02:16	3° \mathfrak{H} 53'36	
min. Earth dist.	8922 Mar 14 00:39	26° \mathfrak{H} 22'49	0.68460 AU	direct	8923 Mar 07 23:00	2° \mathfrak{H} 28'17	
morning rise	8922 Mar 19 14:34	19° \mathfrak{H} 43'03		morning max el	8923 Mar 15 14:07	6° \mathfrak{H} 46'08	20°05'01
direct	8922 Mar 24 00:22	17° \mathfrak{H} 55'49		desc. node	8923 Mar 28 05:19	23° \mathfrak{H} 01'23	
morning max el	8922 Apr 01 16:07	22° \mathfrak{H} 56'13	21°18'57		8923 Apr 01 23:07	0° \mathfrak{Y}	
	8922 Apr 07 18:59	0° \mathfrak{Y}		morning set	8923 Apr 11 23:01	15° \mathfrak{Y} 10'49	
desc. node	8922 Apr 10 08:27	3° \mathfrak{Y} 20'59			8923 Apr 21 10:12	0° \mathfrak{B}	
	8922 Apr 28 14:50	0° \mathfrak{B}		max. Earth dist.	8923 Apr 22 07:24	1° \mathfrak{B} 24'29	1.44070 AU
morning set	8922 May 02 23:28	6° \mathfrak{B} 47'59		superior conj	8923 Apr 27 22:48	10° \mathfrak{B} 31'27	-2°11'54
max. Earth dist.	8922 May 09 22:08	17° \mathfrak{B} 58'02	1.42360 AU	minimum elong	8923 Apr 28 00:10	10° \mathfrak{B} 37'02	2°12'02

	8923 May 09 13:10	0°♂		max. Earth dist.	8924 Apr 03 23:11	15°♂31'02	1.45175 AU
evening rise	8923 May 10 23:05	2°♂25'47					
asc. node	8923 May 20 17:30	18°♂56'53		superior conj	8924 Apr 06 15:42	19°♂45'16	-2°05'57
evening max el	8923 May 28 14:16	29°♂34'02	18°07'34	minimum elong	8924 Apr 06 09:57	19°♂22'32	2°05'45
	8923 May 29 01:04	0°♂			8924 Apr 13 02:04	0°♂	
retrograde	8923 Jun 03 23:49	2°♂54'30		evening rise	8924 Apr 21 08:54	13°♂26'59	
evening set	8923 Jun 06 18:54	2°♂14'44			8924 May 01 13:07	0°♂	
	8923 Jun 10 00:41	30°♂♂		asc. node	8924 May 06 14:35	7°♂33'51	
inferior conj	8923 Jun 13 00:09	27°♂02'19	2°47'17	evening max el	8924 May 11 03:10	13°♂02'48	18°26'18
minimum elong	8923 Jun 13 02:42	26°♂55'31	2°46'32	retrograde	8924 May 17 13:47	16°♂31'33	
min. Earth dist.	8923 Jun 15 20:11	24°♂02'47	0.62606 AU	evening set	8924 May 20 16:18	15°♂37'57	
morning rise	8923 Jun 19 08:46	20°♂54'06		inferior conj	8924 May 26 11:13	10°♂07'54	3°13'11
desc. node	8923 Jun 24 05:02	18°♂36'02		minimum elong	8924 May 26 12:37	10°♂03'47	3°12'49
direct	8923 Jun 26 02:51	18°♂24'25		min. Earth dist.	8924 May 28 16:41	7°♂30'49	0.64604 AU
morning max el	8923 Jul 10 04:23	26°♂26'53	27°53'35	morning rise	8924 Jun 01 07:59	3°♂51'31	
	8923 Jul 13 11:53	0°♂		direct	8924 Jun 07 23:44	1°♂08'11	
	8923 Aug 03 02:04	0°♂		desc. node	8924 Jun 10 02:02	1°♂22'35	
morning set	8923 Aug 13 07:25	19°♂15'39		morning max el	8924 Jun 21 14:15	9°♂06'02	27°22'59
asc. node	8923 Aug 16 16:53	26°♂17'06			8924 Jul 07 21:15	0°♂	
	8923 Aug 18 10:47	0°♂			8924 Jul 25 10:53	0°♂	
max. Earth dist.	8923 Aug 18 15:58	0°♂27'48	1.32234 AU	morning set	8924 Jul 26 22:03	2°♂50'23	
				max. Earth dist.	8924 Jul 31 13:41	12°♂11'53	1.33269 AU
superior conj	8923 Aug 20 22:17	5°♂21'55	0°41'38	asc. node	8924 Aug 02 13:50	16°♂22'51	
minimum elong	8923 Aug 20 20:31	5°♂12'15	0°41'09				
evening rise	8923 Aug 27 18:45	20°♂17'53		superior conj	8924 Aug 04 02:41	19°♂37'41	0°15'25
	8923 Sep 01 11:01	0°♂		minimum elong	8924 Aug 04 01:55	19°♂33'37	0°15'04
desc. node	8923 Sep 20 03:42	28°♂39'06		behind sun begin	8924 Aug 04 00:02	19°♂23'36	
evening max el	8923 Sep 21 02:10	29°♂34'52	23°58'17	behind sun end	8924 Aug 04 03:48	19°♂43'39	
	8923 Sep 21 12:45	0°♂			8924 Aug 08 22:44	0°♂	
retrograde	8923 Oct 04 17:58	6°♂24'57		evening rise	8924 Aug 11 05:59	4°♂54'48	
evening set	8923 Oct 09 11:39	5°♂35'49			8924 Aug 24 18:07	0°♂	
min. Earth dist.	8923 Oct 15 12:46	2°♂38'15	0.56003 AU	evening max el	8924 Sep 01 14:31	9°♂45'54	22°18'40
inferior conj	8923 Oct 17 18:13	1°♂17'01	-5°38'07	desc. node	8924 Sep 06 00:51	13°♂23'52	
minimum elong	8923 Oct 17 18:36	1°♂16'25	5°38'00	retrograde	8924 Sep 14 12:01	16°♂11'22	
	8923 Oct 19 21:51	30°♂♂		evening set	8924 Sep 17 17:49	15°♂48'09	
morning rise	8923 Oct 26 03:36	27°♂19'49		min. Earth dist.	8924 Sep 25 20:36	12°♂14'26	0.54913 AU
direct	8923 Oct 28 21:22	27°♂00'35		inferior conj	8924 Sep 26 17:04	11°♂45'37	-5°13'29
	8923 Nov 05 22:16	0°♂		minimum elong	8924 Sep 26 09:55	11°♂55'42	5°12'19
morning max el	8923 Nov 08 01:22	1°♂48'19	19°57'24	morning rise	8924 Oct 05 03:44	7°♂58'09	
asc. node	8923 Nov 12 16:43	7°♂08'31		direct	8924 Oct 08 11:16	7°♂33'32	
	8923 Nov 25 16:03	0°♂		morning max el	8924 Oct 20 04:40	13°♂04'09	21°23'26
morning set	8923 Nov 26 00:37	0°♂43'28		asc. node	8924 Oct 29 13:40	25°♂02'43	
					8924 Nov 01 11:54	0°♂	
superior conj	8923 Dec 03 18:23	16°♂27'12	1°28'04	morning set	8924 Nov 09 09:38	15°♂28'31	
minimum elong	8923 Dec 03 20:50	16°♂39'23	1°28'05		8924 Nov 16 07:31	0°♂	
max. Earth dist.	8923 Dec 09 14:25	27°♂46'50	1.37080 AU				
	8923 Dec 10 18:56	0°♂		superior conj	8924 Nov 16 15:50	0°♂43'13	1°38'02
evening rise	8923 Dec 13 08:44	4°♂42'22		minimum elong	8924 Nov 16 17:02	0°♂49'27	1°38'12
desc. node	8923 Dec 17 02:26	11°♂16'51		max. Earth dist.	8924 Nov 21 01:21	9°♂41'03	1.35144 AU
	8923 Dec 28 18:20	0°♂		evening rise	8924 Nov 25 05:03	17°♂45'32	
evening max el	8924 Jan 17 23:27	25°♂47'22	25°36'27		8924 Dec 01 23:27	0°♂	
	8924 Jan 22 22:15	0°♂		desc. node	8924 Dec 02 23:28	1°♂42'56	
retrograde	8924 Jan 30 06:49	2°♂51'21			8924 Dec 22 00:59	0°♂	
evening set	8924 Feb 05 05:27	0°♂24'37		evening max el	8924 Dec 30 12:44	9°♂31'31	26°36'54
	8924 Feb 05 16:46	30°♂♂		retrograde	8925 Jan 12 12:59	16°♂48'54	
asc. node	8924 Feb 08 15:54	26°♂48'55		evening set	8925 Jan 18 23:31	14°♂14'47	
min. Earth dist.	8924 Feb 09 13:49	25°♂40'55	0.67367 AU	min. Earth dist.	8925 Jan 23 01:38	10°♂05'48	0.66250 AU
inferior conj	8924 Feb 10 22:17	23°♂57'17	0°44'24	inferior conj	8925 Jan 24 21:50	7°♂54'24	-0°12'38
minimum elong	8924 Feb 10 21:12	24°♂00'45	0°44'09	minimum elong	8925 Jan 24 22:10	7°♂53'23	0°12'17
morning rise	8924 Feb 16 13:23	18°♂05'03		transit middle	8925 Jan 24 22:10	7°♂53'23	0°12'17
direct	8924 Feb 19 22:16	16°♂59'51		transit begin	8925 Jan 24 20:17	7°♂58'59	
morning max el	8924 Feb 26 20:02	20°♂47'10	19°05'46	transit end	8925 Jan 25 00:03	7°♂47'47	
	8924 Mar 05 06:49	0°♂		asc. node	8925 Jan 25 12:59	7°♂09'30	
greatest brilliancy	8924 Mar 11 07:05	8°♂49'54	-0.7m	morning rise	8925 Jan 30 21:46	2°♂12'53	
desc. node	8924 Mar 14 02:11	13°♂05'16		direct	8925 Feb 02 20:16	1°♂24'46	
morning set	8924 Mar 21 01:46	23°♂51'34		morning max el	8925 Feb 09 08:31	4°♂54'05	18°22'40
	8924 Mar 25 00:44	0°♂			8925 Feb 26 19:29	0°♂	

desc. node	8925 Feb 28 23:04	3° K 25'49		morning rise	8926 Jan 15 00:48	16° Z 12'30	
morning set	8925 Mar 01 04:20	3° K 46'48		direct	8926 Jan 17 14:47	15° Z 37'43	
				morning max el	8926 Jan 24 00:59	19° Z 00'03	17°56'23
superior conj	8925 Mar 16 20:55	28° K 34'10	-1°39'54		8926 Feb 01 06:36	0° \approx	
minimum elong	8925 Mar 16 11:18	27° K 56'34	1°38'58	morning set	8926 Feb 10 12:23	15° \approx 09'38	
	8925 Mar 17 18:51	0° Y		desc. node	8926 Feb 15 20:00	23° \approx 58'22	
max. Earth dist.	8925 Mar 17 18:26	29° K 58'22	1.45562 AU		8926 Feb 19 12:31	0° K	
evening rise	8925 Apr 01 19:10	23° Y 31'22					
	8925 Apr 05 21:59	0° B		superior conj	8926 Feb 24 09:35	7° K 50'52	-0°59'42
greatest brilliancy	8925 Apr 12 00:21	9° B 31'23	-0.8m	minimum elong	8926 Feb 24 02:48	7° K 23'46	0°58'42
asc. node	8925 Apr 23 11:41	25° B 31'05		max. Earth dist.	8926 Feb 28 13:51	14° K 27'59	1.45204 AU
evening max el	8925 Apr 24 13:02	26° B 38'11	19°02'41		8926 Mar 10 13:22	0° Y	
	8925 Apr 29 03:13	0° II		evening rise	8926 Mar 12 11:29	2° Y 57'31	
retrograde	8925 May 01 09:22	0° II 27'58		greatest brilliancy	8926 Mar 27 00:08	24° Y 56'00	-0.6m
	8925 May 03 14:01	30° R B			8926 Mar 30 12:45	0° B	
evening set	8925 May 04 19:35	29° B 19'46		evening max el	8926 Apr 07 18:06	10° B 16'40	19°55'10
inferior conj	8925 May 10 07:45	23° B 33'46	3°21'47	asc. node	8926 Apr 10 08:48	12° B 36'49	
minimum elong	8925 May 10 07:51	23° B 33'27	3°21'36	retrograde	8926 Apr 15 07:33	14° B 38'01	
min. Earth dist.	8925 May 11 21:55	21° B 32'11	0.66229 AU	evening set	8926 Apr 19 02:15	13° B 14'49	
morning rise	8925 May 15 19:37	17° B 14'49		inferior conj	8926 Apr 24 10:41	7° B 14'44	3°16'35
direct	8925 May 22 03:39	14° B 29'27		minimum elong	8926 Apr 24 09:40	7° B 18'07	3°16'21
desc. node	8925 May 27 23:01	16° B 20'18		min. Earth dist.	8926 Apr 25 10:15	5° B 55'24	0.67426 AU
morning max el	8925 Jun 04 00:54	22° B 09'58	26°23'30	morning rise	8926 Apr 29 16:47	0° B 56'41	
	8925 Jun 10 21:27	0° II			8926 Apr 30 20:29	30° R Y	
	8925 Jul 01 03:24	0° E		direct	8926 May 05 13:37	28° Y 19'37	
morning set	8925 Jul 10 00:47	15° E 48'49			8926 May 10 19:58	0° B	
max. Earth dist.	8925 Jul 14 00:59	23° E 30'08	1.34781 AU	desc. node	8926 May 14 19:59	2° B 58'33	
	8925 Jul 17 07:09	0° O		morning max el	8926 May 17 10:33	5° B 27'01	25°04'11
					8926 Jun 05 08:50	0° II	
superior conj	8925 Jul 19 00:16	3° O 29'52	-0°14'21	morning set	8926 Jun 22 11:09	27° II 58'34	
minimum elong	8925 Jul 19 01:06	3° O 34'07	0°14'23		8926 Jun 23 14:12	0° E	
behind sun begin	8925 Jul 18 22:26	3° O 20'26		max. Earth dist.	8926 Jun 26 01:56	4° E 33'10	1.36722 AU
behind sun end	8925 Jul 19 03:45	3° O 47'47					
asc. node	8925 Jul 20 10:50	6° O 28'18		superior conj	8926 Jul 02 12:06	16° E 50'17	-0°46'18
evening rise	8925 Jul 26 14:58	19° O 21'50		minimum elong	8926 Jul 02 14:58	17° E 04'24	0°46'00
	8925 Jul 31 21:54	0° M		asc. node	8926 Jul 07 07:50	26° E 28'59	
evening max el	8925 Aug 14 11:56	20° M 19'01	20°48'43		8926 Jul 09 01:30	0° O	
desc. node	8925 Aug 23 21:59	25° M 50'27		evening rise	8926 Jul 10 19:22	3° O 31'44	
retrograde	8925 Aug 26 00:25	26° M 01'34			8926 Jul 26 11:07	0° M	
evening set	8925 Aug 28 04:29	25° M 50'14		evening max el	8926 Jul 27 22:45	1° M 34'32	19°37'00
inferior conj	8925 Sep 06 09:32	21° M 53'35	-3°54'14	retrograde	8926 Aug 06 18:12	6° M 25'28	
minimum elong	8925 Sep 05 24:00	22° M 07'10	3°51'25	evening set	8926 Aug 08 14:28	6° M 15'56	
min. Earth dist.	8925 Sep 07 05:30	21° M 25'06	0.54698 AU	desc. node	8926 Aug 10 19:07	5° M 41'30	
morning rise	8925 Sep 14 19:34	17° M 55'44		inferior conj	8926 Aug 17 09:58	2° M 12'10	-2°01'49
direct	8925 Sep 18 19:15	17° M 21'41		minimum elong	8926 Aug 17 04:26	2° M 20'53	1°59'51
morning max el	8925 Oct 01 21:20	23° M 38'22	23°05'32	min. Earth dist.	8926 Aug 19 17:20	0° M 45'10	0.55442 AU
	8925 Oct 07 14:20	0° E			8926 Aug 20 23:20	30° R O	
asc. node	8925 Oct 16 10:37	13° E 39'36		morning rise	8926 Aug 25 16:06	27° O 44'48	
morning set	8925 Oct 24 20:55	0° M 18'14		direct	8926 Aug 30 10:59	26° O 53'39	
	8925 Oct 24 17:29	0° M			8926 Sep 08 14:45	0° M	
				morning max el	8926 Sep 13 09:30	3° M 51'18	24°51'17
superior conj	8925 Oct 31 20:23	15° M 18'42	1°40'58		8926 Oct 01 20:03	0° E	
minimum elong	8925 Oct 31 20:19	15° M 18'19	1°41'08	asc. node	8926 Oct 03 07:34	2° E 47'52	
max. Earth dist.	8925 Nov 03 19:58	21° M 38'33	1.33579 AU	morning set	8926 Oct 09 08:40	15° E 06'26	
	8925 Nov 07 21:53	0° X					
evening rise	8925 Nov 08 15:02	1° X 25'11		superior conj	8926 Oct 16 05:22	0° M 04'39	1°37'35
desc. node	8925 Nov 19 20:34	21° X 53'07		minimum elong	8926 Oct 16 04:13	29° E 58'22	1°37'38
	8925 Nov 24 22:16	0° Z			8926 Oct 16 04:31	0° M	
evening max el	8925 Dec 13 01:37	23° Z 02'11	27°16'48	max. Earth dist.	8926 Oct 17 22:22	3° M 48'30	1.32456 AU
	8925 Dec 23 17:35	0° \approx		evening rise	8926 Oct 23 11:06	15° M 31'10	
retrograde	8925 Dec 26 13:17	0° \approx 23'37			8926 Oct 30 22:31	0° X	
	8925 Dec 29 06:12	30° R Z		desc. node	8926 Nov 06 17:40	11° X 39'24	
evening set	8926 Jan 02 09:23	27° Z 48'18			8926 Nov 19 19:18	0° Z	
min. Earth dist.	8926 Jan 06 06:07	24° Z 12'40	0.64778 AU	evening max el	8926 Nov 25 12:37	6° Z 07'25	27°29'32
inferior conj	8926 Jan 08 13:59	21° Z 40'44	-1°16'54	retrograde	8926 Dec 09 06:55	13° Z 25'30	
minimum elong	8926 Jan 08 16:19	21° Z 34'22	1°15'42	evening set	8926 Dec 16 08:17	10° Z 57'32	
asc. node	8926 Jan 12 10:02	17° Z 53'07		min. Earth dist.	8926 Dec 20 01:23	7° Z 51'37	0.62992 AU

inferior conj	8926 Dec 22 19:58	5°☿09'01	-2°26'42	evening max el	8927 Nov 07 19:20	18°♊34'30	27°09'51
minimum elong	8926 Dec 23 00:40	4°☿57'30	2°24'38	retrograde	8927 Nov 21 16:32	25°♊45'37	
morning rise	8926 Dec 29 19:09	29°♊56'54		evening set	8927 Nov 28 16:36	23°♊34'59	
	8926 Dec 29 15:47	30°♊57'18		min. Earth dist.	8927 Dec 02 10:03	20°♊51'16	0.60981 AU
asc. node	8926 Dec 30 07:06	29°♊47'18		inferior conj	8927 Dec 05 12:31	18°♊10'58	-3°38'07
direct	8927 Jan 01 02:55	29°♊31'33		minimum elong	8927 Dec 05 19:22	17°♊56'12	3°35'38
	8927 Jan 03 13:23	0°☿		morning rise	8927 Dec 13 00:31	13°♊18'15	
morning max el	8927 Jan 07 18:25	2°☿56'30	17°47'33	direct	8927 Dec 15 05:11	12°♊58'40	
morning set	8927 Jan 23 21:29	27°☿44'45		asc. node	8927 Dec 17 04:10	13°♊14'51	
	8927 Jan 25 04:26	0°♊		morning max el	8927 Dec 22 09:28	16°♊34'43	17°57'06
desc. node	8927 Feb 02 16:57	14°♊38'29			8927 Dec 31 19:45	0°☿	
				morning set	8928 Jan 07 00:57	11°☿11'42	
superior conj	8927 Feb 04 20:02	18°♊11'53	-0°15'39				
minimum elong	8927 Feb 04 18:26	18°♊05'14	0°15'14	superior conj	8928 Jan 17 07:52	29°☿45'14	0°24'10
behind sun begin	8927 Feb 04 15:28	17°♊52'57		minimum elong	8928 Jan 17 09:51	29°☿53'55	0°24'05
behind sun end	8927 Feb 04 21:23	18°♊17'31			8928 Jan 17 11:14	0°♊	
max. Earth dist.	8927 Feb 11 07:14	28°♊44'47	1.44145 AU	desc. node	8928 Jan 20 13:53	5°♊22'13	
	8927 Feb 12 02:02	0°♊		max. Earth dist.	8928 Jan 24 20:50	12°♊34'20	1.42511 AU
evening rise	8927 Feb 19 23:02	12°♊20'42		evening rise	8928 Jan 30 20:48	22°♊16'24	
	8927 Mar 03 16:09	0°♊			8928 Feb 04 19:45	0°♊	
evening max el	8927 Mar 21 17:44	23°♊57'17	21°01'12		8928 Feb 25 21:08	0°♊	
asc. node	8927 Mar 28 05:54	28°♊37'06		evening max el	8928 Mar 03 12:19	7°♊39'25	22°16'55
retrograde	8927 Mar 30 06:03	28°♊57'25		retrograde	8928 Mar 13 03:06	13°♊21'06	
evening set	8927 Apr 03 10:23	27°♊18'55		asc. node	8928 Mar 14 03:02	13°♊16'06	
inferior conj	8927 Apr 08 17:32	21°♊06'54	2°59'59	evening set	8928 Mar 17 18:16	11°♊27'22	
minimum elong	8927 Apr 08 15:44	21°♊13'07	2°59'34	inferior conj	8928 Mar 23 02:10	5°♊06'00	2°33'25
min. Earth dist.	8927 Apr 09 03:35	20°♊32'04	0.68175 AU	minimum elong	8928 Mar 22 23:58	5°♊13'39	2°32'51
morning rise	8927 Apr 13 20:52	14°♊51'59		min. Earth dist.	8928 Mar 22 23:39	5°♊14'44	0.68483 AU
direct	8927 Apr 19 04:34	12°♊31'01			8928 Mar 27 02:30	30°♊	
morning max el	8927 Apr 29 19:46	18°♊51'32	23°35'23	morning rise	8928 Mar 28 05:31	28°♊55'43	
desc. node	8927 May 01 16:57	20°♊50'42		direct	8928 Apr 01 23:20	26°♊55'35	
	8927 May 09 04:57	0°♊			8928 Apr 08 16:39	0°♊	
	8927 May 29 11:52	0°♊		morning max el	8928 Apr 11 07:28	2°♊23'49	22°06'44
morning set	8927 Jun 03 23:50	9°♊06'06		desc. node	8928 Apr 17 13:51	9°♊35'42	
max. Earth dist.	8927 Jun 07 22:00	15°♊52'02	1.38945 AU		8928 May 02 04:18	0°♊	
				morning set	8928 May 14 09:57	18°♊59'04	
superior conj	8927 Jun 15 10:31	29°♊30'39	-1°18'15	max. Earth dist.	8928 May 19 20:48	27°♊57'01	1.41187 AU
minimum elong	8927 Jun 15 15:27	29°♊53'46	1°17'45		8928 May 21 02:01	0°♊	
	8927 Jun 15 16:47	0°♊					
asc. node	8927 Jun 24 04:51	16°♊21'15		superior conj	8928 May 27 15:00	11°♊19'49	-1°46'46
evening rise	8927 Jun 24 16:27	17°♊17'36		minimum elong	8928 May 27 21:01	11°♊46'28	1°46'23
	8927 Jul 01 10:18	0°♊			8928 Jun 06 20:09	0°♊	
evening max el	8927 Jul 10 21:44	13°♊34'37	18°46'03	evening rise	8928 Jun 07 02:38	0°♊30'08	
retrograde	8927 Jul 19 04:03	17°♊40'51		asc. node	8928 Jun 10 01:52	6°♊00'09	
evening set	8927 Jul 21 04:00	17°♊27'21		evening max el	8928 Jun 23 05:13	26°♊11'03	18°15'40
desc. node	8927 Jul 28 16:13	13°♊29'34		retrograde	8928 Jun 30 09:15	29°♊47'29	
inferior conj	8927 Jul 29 05:05	13°♊06'09	-0°09'47	evening set	8928 Jul 02 16:23	29°♊25'59	
minimum elong	8927 Jul 29 04:41	13°♊06'53	0°09'50	inferior conj	8928 Jul 09 21:56	24°♊43'58	1°20'14
transit middle	8927 Jul 29 04:41	13°♊06'53	0°09'50	minimum elong	8928 Jul 10 00:23	24°♊38'43	1°19'11
transit begin	8927 Jul 29 01:45	13°♊12'13		min. Earth dist.	8928 Jul 13 07:05	21°♊51'22	0.59083 AU
transit end	8927 Jul 29 07:36	13°♊01'32		desc. node	8928 Jul 14 13:18	20°♊52'16	
min. Earth dist.	8927 Aug 01 09:14	10°♊47'46	0.57005 AU	morning rise	8928 Jul 17 05:12	19°♊06'42	
morning rise	8927 Aug 06 01:56	8°♊01'51		direct	8928 Jul 23 12:01	17°♊19'13	
direct	8927 Aug 11 16:47	6°♊44'58		morning max el	8928 Aug 06 20:59	25°♊07'07	27°28'11
morning max el	8927 Aug 26 00:02	14°♊12'37	26°23'53		8928 Aug 11 09:01	0°♊	
	8927 Sep 07 14:04	0°♊			8928 Aug 30 22:11	0°♊	
asc. node	8927 Sep 20 04:33	22°♊19'15		asc. node	8928 Sep 06 01:29	12°♊06'50	
morning set	8927 Sep 23 19:14	29°♊48'35		morning set	8928 Sep 07 02:57	14°♊19'43	
	8927 Sep 23 21:23	0°♊		max. Earth dist.	8928 Sep 13 16:28	28°♊35'45	1.31590 AU
superior conj	8927 Sep 30 16:40	14°♊54'24	1°28'30	superior conj	8928 Sep 14 04:24	29°♊42'00	1°14'08
minimum elong	8927 Sep 30 14:46	14°♊43'53	1°28'21	minimum elong	8928 Sep 14 02:10	29°♊29'36	1°13'47
max. Earth dist.	8927 Oct 01 06:23	16°♊10'27	1.31794 AU		8928 Sep 14 07:39	0°♊	
evening rise	8927 Oct 07 14:23	29°♊55'37		evening rise	8928 Sep 20 22:28	14°♊31'19	
	8927 Oct 07 15:13	0°♊			8928 Sep 28 15:14	0°♊	
	8927 Oct 24 01:05	0°♊		desc. node	8928 Oct 10 11:53	19°♊18'43	
desc. node	8927 Oct 24 14:46	0°♊52'19			8928 Oct 19 13:40	0°♊	

evening max el	8928 Oct 19 18:54	0°♊12'28	26°16'18	desc. node	8929 Sep 27 09:01	6°♋39'39	
retrograde	8928 Nov 02 16:52	7°♊17'12		evening max el	8929 Oct 01 10:12	10°♋59'24	24°53'50
evening set	8928 Nov 09 05:50	5°♊33'46		retrograde	8929 Oct 15 06:23	17°♋57'35	
min. Earth dist.	8928 Nov 13 08:01	2°♊59'19	0.58883 AU	evening set	8929 Oct 20 19:22	16°♋48'27	
inferior conj	8928 Nov 16 12:08	0°♊36'55	-4°43'20	min. Earth dist.	8929 Oct 25 21:32	14°♋04'47	0.56931 AU
minimum elong	8928 Nov 16 19:31	0°♊23'04	4°41'24	inferior conj	8929 Oct 28 15:48	12°♋16'51	-5°28'37
	8928 Nov 17 07:55	30°♋		minimum elong	8929 Oct 28 20:02	12°♋09'55	5°28'03
morning rise	8928 Nov 24 11:34	26°♋06'38		morning rise	8929 Nov 05 22:59	8°♋09'19	
direct	8928 Nov 26 17:12	25°♋49'36		direct	8929 Nov 08 10:38	7°♋51'53	
asc. node	8928 Dec 03 01:11	28°♋15'27		morning max el	8929 Nov 17 18:14	12°♋17'49	19°17'52
morning max el	8928 Dec 04 18:39	29°♋45'38	18°26'37	asc. node	8929 Nov 19 22:11	14°♋35'28	
	8928 Dec 05 00:30	0°♊			8929 Nov 29 19:10	0°♊	
morning set	8928 Dec 20 17:21	25°♊14'32		morning set	8929 Dec 04 18:27	9°♊40'02	
	8928 Dec 23 04:47	0°♋					
superior conj	8928 Dec 29 18:05	12°♋22'41	0°55'54	superior conj	8929 Dec 12 21:30	25°♊48'32	1°18'45
minimum elong	8928 Dec 29 21:21	12°♋37'49	0°55'41	minimum elong	8929 Dec 13 00:30	26°♊03'06	1°18'40
max. Earth dist.	8929 Jan 06 05:52	25°♋45'08	1.40483 AU		8929 Dec 15 01:46	0°♋	
desc. node	8929 Jan 06 10:50	26°♋06'31		max. Earth dist.	8929 Dec 19 11:38	8°♋12'49	1.38298 AU
	8929 Jan 08 17:42	0°♋		evening rise	8929 Dec 23 05:28	14°♋52'52	
evening rise	8929 Jan 10 14:15	3°♋06'04		desc. node	8929 Dec 24 07:49	16°♋47'06	
	8929 Jan 28 02:30	0°♋			8930 Jan 01 07:58	0°♋	
evening max el	8929 Feb 14 03:17	21°♋24'16	23°36'56	evening max el	8930 Jan 22 21:09	0°♋	
retrograde	8929 Feb 24 21:20	27°♋45'00			8930 Jan 27 16:31	5°♋11'31	24°55'03
asc. node	8929 Mar 01 00:09	26°♋23'07		retrograde	8930 Feb 08 11:45	12°♋03'31	
evening set	8929 Mar 02 00:23	25°♋36'44		evening set	8930 Feb 14 03:11	9°♋42'34	
inferior conj	8929 Mar 07 10:42	19°♋09'24	1°57'49	asc. node	8930 Feb 15 21:15	8°♋00'17	
minimum elong	8929 Mar 07 08:32	19°♋16'48	1°57'11	min. Earth dist.	8930 Feb 18 15:21	4°♋38'59	0.67844 AU
min. Earth dist.	8929 Mar 06 20:18	19°♋58'40	0.68367 AU	inferior conj	8930 Feb 19 17:17	3°♋13'32	1°13'38
morning rise	8929 Mar 12 16:41	13°♋04'57		minimum elong	8930 Feb 19 15:39	3°♋18'56	1°13'09
direct	8929 Mar 16 20:49	11°♋27'14			8930 Feb 22 06:52	30°♋	
morning max el	8929 Mar 25 01:12	16°♋07'44	20°45'52	morning rise	8930 Feb 25 04:23	27°♋16'21	
desc. node	8929 Apr 04 10:44	28°♋59'14		direct	8930 Feb 28 19:49	26°♋00'07	
	8929 Apr 05 04:10	0°♋		morning max el	8930 Mar 08 02:45	0°♋03'34	19°37'51
morning set	8929 Apr 23 18:36	27°♋44'21			8930 Mar 08 01:18	0°♋	
	8929 Apr 25 05:20	0°♋		greatest brilliancy	8930 Mar 20 19:43	16°♋37'57	-0.7m
max. Earth dist.	8929 May 02 02:19	10°♋56'51	1.43157 AU	desc. node	8930 Mar 22 07:37	18°♋50'41	
					8930 Mar 29 16:55	0°♋	
superior conj	8929 May 08 21:01	22°♋07'57	-2°06'44	morning set	8930 Apr 02 16:23	6°♋06'10	
minimum elong	8929 May 09 01:17	22°♋25'55	2°06'44	max. Earth dist.	8930 Apr 14 14:25	24°♋41'43	1.44621 AU
	8929 May 13 11:51	0°♋			8930 Apr 17 22:22	0°♋	
evening rise	8929 May 20 21:38	12°♋59'18		superior conj	8930 Apr 19 02:24	1°♋52'30	-2°11'51
asc. node	8929 May 27 22:54	25°♋20'35		minimum elong	8930 Apr 19 00:51	1°♋46'15	2°11'57
	8929 May 30 18:44	0°♋		evening rise	8930 May 02 20:41	24°♋34'37	
evening max el	8929 Jun 06 17:22	9°♋14'36	18°05'01		8930 May 06 01:51	0°♋	
retrograde	8929 Jun 13 06:45	12°♋36'59		asc. node	8930 May 14 19:58	14°♋16'00	
evening set	8929 Jun 15 21:27	12°♋04'34		evening max el	8930 May 21 06:51	22°♋36'37	18°13'20
inferior conj	8929 Jun 22 10:25	7°♋02'39	2°22'46	retrograde	8930 May 27 15:56	25°♋59'19	
minimum elong	8929 Jun 22 13:21	6°♋55'23	2°21'46	evening set	8930 May 30 14:03	25°♋13'58	
min. Earth dist.	8929 Jun 25 13:11	3°♋58'55	0.61338 AU	inferior conj	8930 Jun 05 14:27	19°♋53'56	3°00'40
morning rise	8929 Jun 29 02:55	1°♋02'25		minimum elong	8930 Jun 05 16:33	19°♋48'03	3°00'05
	8929 Jun 30 20:59	30°♋		min. Earth dist.	8930 Jun 08 04:35	17°♋01'38	0.63488 AU
desc. node	8929 Jul 01 10:21	29°♋44'03		morning rise	8930 Jun 11 17:39	13°♋41'04	
direct	8929 Jul 05 18:51	28°♋46'01		direct	8930 Jun 18 11:25	11°♋03'59	
	8929 Jul 10 23:35	0°♋		desc. node	8930 Jun 18 07:22	11°♋04'05	
morning max el	8929 Jul 20 00:48	6°♋46'17	27°55'23	morning max el	8930 Jul 02 09:17	19°♋06'57	27°44'38
	8929 Aug 06 14:53	0°♋			8930 Jul 11 14:32	0°♋	
morning set	8929 Aug 22 05:54	28°♋34'25			8930 Jul 30 13:37	0°♋	
	8929 Aug 22 22:27	0°♋		morning set	8930 Aug 06 01:51	12°♋26'37	
asc. node	8929 Aug 23 22:24	2°♋05'09		asc. node	8930 Aug 10 19:20	22°♋09'50	
max. Earth dist.	8929 Aug 28 00:45	10°♋53'05	1.31857 AU	max. Earth dist.	8930 Aug 11 03:13	22°♋51'27	1.32608 AU
superior conj	8929 Aug 29 14:48	14°♋21'48	0°54'50	superior conj	8930 Aug 13 22:00	28°♋48'39	0°30'59
minimum elong	8929 Aug 29 12:42	14°♋10'16	0°54'21	minimum elong	8930 Aug 13 20:35	28°♋41'00	0°30'33
evening rise	8929 Sep 05 09:15	29°♋11'55			8930 Aug 14 11:12	0°♋	
	8929 Sep 05 18:13	0°♋		evening rise	8930 Aug 20 20:52	13°♋52'08	
	8929 Sep 22 06:54	0°♋			8930 Aug 28 22:03	0°♋	

evening max el	8930 Sep 12 21:17	21° Ω 14'26	23°15'39	evening rise	8931 Aug 05 07:22	28° Ω 25'26	
desc. node	8930 Sep 14 06:09	22° Ω 30'28			8931 Aug 06 01:25	0° Π	
retrograde	8930 Sep 26 07:38	27° Ω 56'59			8931 Aug 24 01:26	0° Ω	
evening set	8930 Sep 30 09:33	27° Ω 20'37		evening max el	8931 Aug 25 12:41	1° Ω 31'32	21°38'37
min. Earth dist.	8930 Oct 07 06:44	24° Ω 09'12	0.55438 AU	desc. node	8931 Sep 01 03:17	6° Ω 20'04	
inferior conj	8930 Oct 08 23:42	23° Ω 09'21	-5°34'38	retrograde	8931 Sep 06 21:49	7° Ω 40'08	
minimum elong	8930 Oct 08 20:44	23° Ω 13'42	5°34'22	evening set	8931 Sep 09 14:28	7° Ω 23'43	
morning rise	8930 Oct 17 09:56	19° Ω 18'08		inferior conj	8931 Sep 18 18:10	3° Ω 25'39	-4°45'53
direct	8930 Oct 20 08:53	18° Ω 57'10		minimum elong	8931 Sep 18 09:03	3° Ω 38'23	4°43'50
morning max el	8930 Oct 31 05:14	24° Ω 02'49	20°31'34	min. Earth dist.	8931 Sep 18 14:58	3° Ω 30'08	0.54706 AU
	8930 Nov 05 09:15	0° Π			8931 Sep 25 20:24	30° \mathbb{R} Π	
asc. node	8930 Nov 06 19:09	1° Π 59'40		morning rise	8931 Sep 27 04:41	29° Π 36'03	
morning set	8930 Nov 19 01:16	24° Π 19'43		direct	8931 Sep 30 18:55	29° Π 07'54	
	8930 Nov 21 19:04	0° \mathbb{A}			8931 Oct 05 12:53	0° Ω	
				morning max el	8931 Oct 13 03:21	4° Ω 58'47	22°05'27
superior conj	8930 Nov 26 13:29	9° \mathbb{A} 49'25	1°33'12	asc. node	8931 Oct 24 16:07	20° Ω 13'28	
minimum elong	8930 Nov 26 15:26	9° \mathbb{A} 59'16	1°33'17		8931 Oct 30 00:10	0° Π	
max. Earth dist.	8930 Dec 01 18:52	20° \mathbb{A} 11'12	1.36216 AU	morning set	8931 Nov 03 11:28	9° Π 07'07	
evening rise	8930 Dec 05 16:16	27° \mathbb{A} 31'09					
	8930 Dec 07 00:55	0° \mathbb{Z}		superior conj	8931 Nov 10 14:17	24° Π 14'26	1°40'05
desc. node	8930 Dec 11 04:51	7° \mathbb{Z} 19'54		minimum elong	8931 Nov 10 14:56	24° Π 17'51	1°40'16
	8930 Dec 25 16:51	0° \approx			8931 Nov 13 08:31	0° \mathbb{A}	
evening max el	8931 Jan 10 05:40	18° \approx 58'51	26°04'13	max. Earth dist.	8931 Nov 14 08:47	2° \mathbb{A} 04'24	1.34428 AU
retrograde	8931 Jan 22 21:15	26° \approx 10'36		evening rise	8931 Nov 18 18:51	10° \mathbb{A} 51'09	
evening set	8931 Jan 29 00:59	23° \approx 40'10		desc. node	8931 Nov 28 01:56	27° \mathbb{A} 40'05	
min. Earth dist.	8931 Feb 02 06:35	19° \approx 11'06	0.66934 AU		8931 Nov 29 11:23	0° \mathbb{Z}	
asc. node	8931 Feb 02 18:21	18° \approx 34'47			8931 Dec 21 04:15	0° \approx	
inferior conj	8931 Feb 03 20:01	17° \approx 14'47	0°21'11	evening max el	8931 Dec 23 19:09	2° \approx 39'36	26°56'57
minimum elong	8931 Feb 03 19:28	17° \approx 16'30	0°21'08	retrograde	8932 Jan 06 01:05	9° \approx 59'30	
morning rise	8931 Feb 09 14:36	11° \approx 26'40		evening set	8932 Jan 12 15:53	7° \approx 24'23	
direct	8931 Feb 12 18:46	10° \approx 29'18		min. Earth dist.	8932 Jan 16 15:42	3° \approx 29'33	0.65660 AU
morning max el	8931 Feb 19 11:42	14° \approx 07'54	18°45'19	inferior conj	8932 Jan 18 16:46	1° \approx 08'39	-0°39'03
	8931 Mar 03 08:10	0° \mathbb{X}		minimum elong	8932 Jan 18 17:54	1° \approx 05'26	0°38'22
desc. node	8931 Mar 09 04:32	9° \mathbb{X} 02'30			8932 Jan 19 16:54	30° \mathbb{R} \mathbb{Z}	
morning set	8931 Mar 13 03:31	15° \mathbb{X} 13'52		asc. node	8932 Jan 20 15:27	28° \mathbb{Z} 58'31	
	8931 Mar 22 14:05	0° \mathbb{Y}		morning rise	8932 Jan 24 21:04	25° \mathbb{Z} 32'09	
max. Earth dist.	8931 Mar 28 07:26	8° \mathbb{Y} 57'15	1.45430 AU	direct	8932 Jan 27 15:44	24° \mathbb{Z} 50'05	
				morning max el	8932 Feb 03 02:11	28° \mathbb{Z} 15'21	18°09'23
superior conj	8931 Mar 29 12:23	10° \mathbb{Y} 50'40	-1°57'11		8932 Feb 04 17:15	0° \approx	
minimum elong	8931 Mar 29 04:11	10° \mathbb{Y} 18'31	1°56'40	morning set	8932 Feb 21 18:56	25° \approx 48'16	
	8931 Apr 10 14:53	0° \mathbb{B}		desc. node	8932 Feb 24 01:27	29° \approx 29'13	
evening rise	8931 Apr 13 20:17	5° \mathbb{B} 10'24			8932 Feb 24 09:04	0° \mathbb{X}	
greatest brilliancy	8931 Apr 20 17:15	16° \mathbb{B} 13'29	-0.9m				
	8931 Apr 29 17:49	0° Π		superior conj	8932 Mar 07 18:33	19° \mathbb{X} 46'05	-1°24'00
asc. node	8931 May 01 17:03	2° Π 37'35		minimum elong	8932 Mar 07 09:28	19° \mathbb{X} 10'20	1°22'55
evening max el	8931 May 04 18:46	6° Π 09'09	18°39'46	max. Earth dist.	8932 Mar 10 03:20	23° \mathbb{X} 28'57	1.45502 AU
retrograde	8931 May 11 08:35	9° Π 45'20			8932 Mar 14 07:24	0° \mathbb{Y}	
evening set	8931 May 14 14:17	8° Π 45'43		evening rise	8932 Mar 23 21:51	14° \mathbb{Y} 56'06	
inferior conj	8931 May 20 05:57	3° Π 08'59	3°18'43		8932 Apr 02 15:44	0° \mathbb{B}	
minimum elong	8931 May 20 06:47	3° Π 06'26	3°18'26	greatest brilliancy	8932 Apr 05 04:24	3° \mathbb{B} 50'16	-0.7m
min. Earth dist.	8931 May 22 05:01	0° Π 45'30	0.65347 AU	evening max el	8932 Apr 17 02:54	19° \mathbb{B} 47'29	19°23'09
	8931 May 22 20:28	30° \mathbb{R} \mathbb{B}		asc. node	8932 Apr 17 14:10	20° \mathbb{B} 15'21	
morning rise	8931 May 25 22:33	26° \mathbb{B} 51'00		retrograde	8932 Apr 24 05:31	23° \mathbb{B} 49'02	
direct	8931 Jun 01 11:42	24° \mathbb{B} 05'02		evening set	8932 Apr 27 19:19	22° \mathbb{B} 34'25	
desc. node	8931 Jun 05 04:24	24° \mathbb{B} 50'05		inferior conj	8932 May 03 05:34	16° \mathbb{B} 42'22	3°21'04
	8931 Jun 12 18:51	0° Π		minimum elong	8932 May 03 05:10	16° \mathbb{B} 43'41	3°20'53
morning max el	8931 Jun 14 19:36	1° Π 57'41	27°00'37	min. Earth dist.	8932 May 04 13:25	14° \mathbb{B} 58'17	0.66802 AU
	8931 Jul 05 18:55	0° \mathbb{D}		morning rise	8932 May 08 14:39	10° \mathbb{B} 23'43	
morning set	8931 Jul 20 11:52	25° \mathbb{D} 47'13		direct	8932 May 14 18:23	7° \mathbb{B} 40'44	
	8931 Jul 22 15:46	0° Ω		desc. node	8932 May 22 01:23	10° \mathbb{B} 34'50	
max. Earth dist.	8931 Jul 24 20:23	4° Ω 22'46	1.33851 AU	morning max el	8932 May 27 05:45	15° \mathbb{B} 08'12	25°51'29
					8932 Jun 08 10:05	0° Π	
superior conj	8931 Jul 28 23:49	12° Ω 55'26	0°03'10		8932 Jun 27 14:59	0° \mathbb{D}	
minimum elong	8931 Jul 28 23:39	12° Ω 54'37	0°02'56	morning set	8932 Jul 02 08:12	8° \mathbb{D} 26'24	
behind sun begin	8931 Jul 28 18:05	12° Ω 25'23		max. Earth dist.	8932 Jul 06 02:57	15° \mathbb{D} 32'04	1.35569 AU
behind sun end	8931 Jul 29 05:14	13° Ω 23'54					
asc. node	8931 Jul 28 16:17	12° Ω 15'59		superior conj	8932 Jul 11 17:40	26° \mathbb{D} 35'27	-0°27'44

minimum elong	8932 Jul 11 19:19	26° ☿ 43'47	0°27'37	minimum elong	8933 Jun 25 04:05	9° ☿ 58'28	0°59'36
	8932 Jul 13 09:56	0° ♊		asc. node	8933 Jul 01 10:18	22° ☿ 18'01	
asc. node	8932 Jul 14 13:17	2° ♊ 20'06		evening rise	8933 Jul 03 16:24	26° ☿ 47'24	
evening rise	8932 Jul 19 14:42	12° ♊ 46'12			8933 Jul 05 07:21	0° ♊	
	8932 Jul 28 14:27	0° ♋		evening max el	8933 Jul 20 07:58	23° ♊ 56'16	19°12'40
evening max el	8932 Aug 06 15:42	12° ♋ 21'22	20°15'38	retrograde	8933 Jul 29 10:39	28° ♊ 27'07	
retrograde	8932 Aug 17 10:30	17° ♋ 41'33		evening set	8933 Jul 31 07:36	28° ♊ 16'28	
desc. node	8932 Aug 18 00:25	17° ♋ 40'40		desc. node	8933 Aug 04 21:31	26° ♊ 32'14	
evening set	8932 Aug 19 09:34	17° ♋ 31'44		inferior conj	8933 Aug 08 19:46	24° ♊ 05'39	-1°12'31
inferior conj	8932 Aug 28 12:12	13° ♋ 33'39	-3°08'28	minimum elong	8933 Aug 08 16:34	24° ♊ 11'00	1°11'26
minimum elong	8932 Aug 28 03:51	13° ♋ 45'56	3°05'41	min. Earth dist.	8933 Aug 11 13:46	22° ♊ 15'33	0.56021 AU
min. Earth dist.	8932 Aug 30 00:34	12° ♋ 40'09	0.54909 AU	morning rise	8933 Aug 16 22:38	19° ♊ 22'47	
morning rise	8932 Sep 05 21:12	9° ♋ 25'26		direct	8933 Aug 22 01:58	18° ♊ 21'58	
direct	8932 Sep 10 05:03	8° ♋ 45'05		morning max el	8933 Sep 05 05:34	25° ♊ 33'19	25°33'26
morning max el	8932 Sep 23 16:57	15° ♋ 19'33	23°51'05		8933 Sep 09 09:53	0° ♋	
	8932 Oct 05 06:20	0° ♌		asc. node	8933 Sep 27 10:02	28° ♋ 24'25	
asc. node	8932 Oct 10 13:05	9° ♌ 04'55			8933 Sep 28 05:20	0° ♌	
morning set	8932 Oct 17 23:08	23° ♌ 56'41		morning set	8933 Oct 02 10:36	8° ♌ 43'41	
	8932 Oct 20 18:39	0° ♍					
superior conj	8932 Oct 24 20:57	8° ♍ 54'50	1°40'15	superior conj	8933 Oct 09 07:10	23° ♌ 43'41	1°34'25
minimum elong	8932 Oct 24 20:23	8° ♍ 51'48	1°40'23	minimum elong	8933 Oct 09 05:40	23° ♌ 35'23	1°34'22
max. Earth dist.	8932 Oct 27 07:09	14° ♍ 07'56	1.33047 AU	max. Earth dist.	8933 Oct 10 12:27	26° ♌ 24'51	1.32115 AU
evening rise	8932 Nov 01 09:29	24° ♍ 42'50			8933 Oct 12 03:50	0° ♍	
	8932 Nov 04 01:47	0° ♎		evening rise	8933 Oct 16 08:57	8° ♍ 57'56	
desc. node	8932 Nov 13 23:01	17° ♎ 41'08			8933 Oct 27 10:29	0° ♎	
	8932 Nov 21 23:52	0° ♏		desc. node	8933 Oct 31 20:06	7° ♎ 15'07	
evening max el	8932 Dec 05 07:39	16° ♏ 01'30	27°26'01	evening max el	8933 Nov 17 17:00	28° ♎ 51'46	27°25'17
retrograde	8932 Dec 18 22:20	23° ♏ 21'19			8933 Nov 18 22:49	0° ♏	
evening set	8932 Dec 25 21:26	20° ♏ 48'08		retrograde	8933 Dec 01 12:35	6° ♏ 07'11	
min. Earth dist.	8932 Dec 29 16:25	17° ♏ 25'50	0.64051 AU	evening set	8933 Dec 08 14:37	3° ♏ 44'58	
inferior conj	8933 Jan 01 04:58	14° ♏ 48'17	-1°46'01	min. Earth dist.	8933 Dec 12 07:02	0° ♏ 50'05	0.62159 AU
minimum elong	8933 Jan 01 08:17	14° ♏ 39'38	1°44'25		8933 Dec 13 05:02	30° ♎ ♌	
asc. node	8933 Jan 06 12:32	10° ♏ 07'29		inferior conj	8933 Dec 15 05:39	28° ♎ 06'30	-2°57'09
morning rise	8933 Jan 07 20:53	9° ♏ 26'24		minimum elong	8933 Dec 15 11:21	27° ♎ 53'16	2°54'48
direct	8933 Jan 10 08:02	8° ♏ 55'57		morning rise	8933 Dec 22 10:20	23° ♎ 02'34	
morning max el	8933 Jan 16 19:25	12° ♏ 18'02	17°50'31	asc. node	8933 Dec 24 09:35	22° ♎ 40'26	
	8933 Jan 29 00:50	0° ♐		direct	8933 Dec 24 16:27	22° ♎ 40'04	
morning set	8933 Feb 02 14:26	7° ♐ 44'37		morning max el	8933 Dec 31 12:17	26° ♎ 08'19	17°49'21
desc. node	8933 Feb 09 22:23	20° ♐ 05'31			8934 Jan 03 19:32	0° ♐	
				morning set	8934 Jan 16 08:03	20° ♏ 43'55	
superior conj	8933 Feb 15 15:18	29° ♐ 26'59	-0°40'55		8934 Jan 21 13:17	0° ♐	
minimum elong	8933 Feb 15 10:44	29° ♐ 08'30	0°40'07	superior conj	8934 Jan 27 12:39	10° ♐ 19'29	0°02'05
	8933 Feb 15 23:27	0° ♑		minimum elong	8934 Jan 27 12:51	10° ♐ 20'23	0°02'15
max. Earth dist.	8933 Feb 20 22:47	7° ♑ 57'26	1.44835 AU	behind sun begin	8934 Jan 27 04:09	9° ♐ 43'26	
evening rise	8933 Mar 03 10:17	24° ♑ 16'42		behind sun end	8934 Jan 27 21:34	10° ♐ 57'15	
	8933 Mar 07 04:11	0° ♒		desc. node	8934 Jan 27 19:22	10° ♐ 47'57	
	8933 Mar 28 03:37	0° ♓		max. Earth dist.	8934 Feb 03 14:45	22° ♐ 04'24	1.43509 AU
evening max el	8933 Mar 31 05:43	3° ♓ 27'08	20°21'43		8934 Feb 08 13:50	0° ♑	
asc. node	8933 Apr 04 11:18	6° ♓ 55'28		evening rise	8934 Feb 11 00:29	3° ♑ 49'29	
retrograde	8933 Apr 08 04:05	8° ♓ 04'04			8934 Feb 28 14:27	0° ♒	
evening set	8933 Apr 12 02:51	6° ♓ 34'07		evening max el	8934 Mar 14 02:56	17° ♒ 07'35	21°32'26
inferior conj	8933 Apr 17 10:27	0° ♓ 28'34	3°10'47	asc. node	8934 Mar 22 08:25	22° ♒ 23'00	
minimum elong	8933 Apr 17 09:04	0° ♓ 33'17	3°10'30	retrograde	8934 Mar 23 02:18	22° ♒ 25'49	
	8933 Apr 17 18:48	30° ♒ ♒		evening set	8934 Mar 27 11:05	20° ♒ 40'41	
min. Earth dist.	8933 Apr 18 04:03	29° ♒ 28'28	0.67805 AU	inferior conj	8934 Apr 01 18:18	14° ♒ 24'01	2°49'51
morning rise	8933 Apr 22 15:03	24° ♒ 11'49		minimum elong	8934 Apr 01 16:17	14° ♒ 31'02	2°49'23
direct	8933 Apr 28 06:24	21° ♒ 41'07		min. Earth dist.	8934 Apr 01 22:50	14° ♒ 08'12	0.68356 AU
desc. node	8933 May 08 22:20	27° ♒ 47'32		morning rise	8934 Apr 06 21:18	8° ♒ 10'50	
morning max el	8933 May 09 15:07	28° ♒ 29'16	24°27'00	direct	8934 Apr 11 22:59	5° ♒ 58'35	
	8933 May 11 01:50	0° ♓		morning max el	8934 Apr 22 01:07	11° ♒ 57'23	22°57'10
	8933 Jun 02 03:48	0° ♔		desc. node	8934 Apr 25 19:17	16° ♒ 04'15	
morning set	8933 Jun 14 10:02	20° ♔ 11'32			8934 May 06 10:33	0° ♓	
max. Earth dist.	8933 Jun 18 01:25	26° ♔ 39'52	1.37655 AU	morning set	8934 May 26 11:55	0° ♔ 48'48	
	8933 Jun 19 21:16	0° ☿			8934 May 26 00:07	0° ♔	
superior conj	8933 Jun 25 00:18	9° ☿ 40'13	-1°00'01	max. Earth dist.	8934 May 30 21:54	8° ♔ 15'57	1.39910 AU

superior conj	8934 Jun 07 15:39	21° Π 59'59	-1°31'02		8935 May 18 11:34	0° Π	
minimum elong	8934 Jun 07 21:15	22° Π 25'39	1°30'33				
	8934 Jun 11 22:56	0° \mathfrak{E}		superior conj	8935 May 20 11:09	3° Π 24'43	-1°56'39
evening rise	8934 Jun 17 09:21	10° \mathfrak{E} 20'37		minimum elong	8935 May 20 16:53	3° Π 49'34	1°56'25
asc. node	8934 Jun 18 07:18	12° \mathfrak{E} 05'17		evening rise	8935 May 31 13:41	23° Π 16'17	
	8934 Jun 28 11:38	0° Ω			8935 Jun 04 06:36	0° \mathfrak{E}	
evening max el	8934 Jul 03 11:00	6° Ω 13'02	18°30'38	asc. node	8935 Jun 05 04:20	1° \mathfrak{E} 37'20	
retrograde	8934 Jul 11 04:57	10° Ω 04'59		evening max el	8935 Jun 16 21:02	19° \mathfrak{E} 03'03	18°08'50
evening set	8934 Jul 13 07:36	9° Ω 48'40		retrograde	8935 Jun 23 17:26	22° \mathfrak{E} 31'24	
inferior conj	8934 Jul 21 00:12	5° Ω 18'49	0°31'40	evening set	8935 Jun 26 03:49	22° \mathfrak{E} 05'36	
minimum elong	8934 Jul 21 01:21	5° Ω 16'35	0°31'03	inferior conj	8935 Jul 03 01:54	17° \mathfrak{E} 15'19	1°49'59
desc. node	8934 Jul 22 18:36	3° Ω 55'16		minimum elong	8935 Jul 03 04:47	17° \mathfrak{E} 08'44	1°48'52
min. Earth dist.	8934 Jul 24 08:15	2° Ω 43'01	0.57840 AU	min. Earth dist.	8935 Jul 06 09:35	14° \mathfrak{E} 14'49	0.60040 AU
morning rise	8934 Jul 28 15:34	29° \mathfrak{E} 59'05		desc. node	8935 Jul 09 15:40	11° \mathfrak{E} 44'43	
	8934 Jul 28 14:49	30° \mathfrak{R} \mathfrak{E}		morning rise	8935 Jul 10 02:51	11° \mathfrak{E} 27'00	
direct	8934 Aug 03 13:43	28° \mathfrak{E} 29'23		direct	8935 Jul 16 14:40	9° \mathfrak{E} 26'13	
	8934 Aug 09 16:10	0° Ω		morning max el	8935 Jul 30 22:43	17° \mathfrak{E} 20'48	27°44'20
morning max el	8934 Aug 17 22:48	6° Ω 07'38	26°55'24		8935 Aug 10 10:45	0° Ω	
	8934 Sep 04 15:13	0° \mathfrak{M}			8935 Aug 28 06:05	0° \mathfrak{M}	
asc. node	8934 Sep 14 06:58	18° \mathfrak{M} 03'31		morning set	8935 Sep 01 02:06	7° \mathfrak{M} 46'56	
morning set	8934 Sep 16 20:10	23° \mathfrak{M} 22'06		asc. node	8935 Sep 01 03:54	7° \mathfrak{M} 56'21	
	8934 Sep 19 21:58	0° \mathfrak{L}		max. Earth dist.	8935 Sep 07 07:16	21° \mathfrak{M} 11'27	1.31648 AU
superior conj	8934 Sep 23 18:53	8° \mathfrak{L} 33'34	1°23'02	superior conj	8935 Sep 08 06:18	23° \mathfrak{M} 18'49	1°06'32
minimum elong	8934 Sep 23 16:47	8° \mathfrak{L} 21'56	1°22'48	minimum elong	8935 Sep 08 04:03	23° \mathfrak{M} 06'26	1°06'07
max. Earth dist.	8934 Sep 23 21:40	8° \mathfrak{L} 49'00	1.31645 AU		8935 Sep 11 06:44	0° \mathfrak{L}	
evening rise	8934 Sep 30 14:32	23° \mathfrak{L} 27'56		evening rise	8935 Sep 15 00:00	8° \mathfrak{L} 06'33	
	8934 Oct 03 18:12	0° \mathfrak{M}			8935 Sep 26 05:46	0° \mathfrak{M}	
desc. node	8934 Oct 18 17:11	26° \mathfrak{M} 10'14		desc. node	8935 Oct 05 14:17	14° \mathfrak{M} 11'15	
	8934 Oct 21 10:07	0° \mathfrak{J}		evening max el	8935 Oct 12 16:47	22° \mathfrak{M} 13'51	25°44'09
evening max el	8934 Oct 30 20:42	10° \mathfrak{J} 58'04	26°51'02	retrograde	8935 Oct 26 14:51	29° \mathfrak{M} 16'03	
retrograde	8934 Nov 13 18:45	18° \mathfrak{J} 07'17		evening set	8935 Nov 01 18:59	27° \mathfrak{M} 47'04	
evening set	8934 Nov 20 15:24	16° \mathfrak{J} 06'49		min. Earth dist.	8935 Nov 06 05:20	25° \mathfrak{M} 10'41	0.58019 AU
min. Earth dist.	8934 Nov 24 11:01	13° \mathfrak{J} 29'02	0.60085 AU	inferior conj	8935 Nov 09 06:44	23° \mathfrak{M} 01'12	-5°06'03
inferior conj	8934 Nov 27 15:21	10° \mathfrak{J} 53'58	-4°07'12	minimum elong	8935 Nov 09 13:20	22° \mathfrak{M} 49'30	5°04'41
minimum elong	8934 Nov 27 22:44	10° \mathfrak{J} 38'55	4°04'49	morning rise	8935 Nov 17 10:01	18° \mathfrak{M} 40'29	
morning rise	8934 Dec 05 08:34	6° \mathfrak{J} 10'46		direct	8935 Nov 19 17:24	18° \mathfrak{M} 23'43	
direct	8934 Dec 07 12:55	5° \mathfrak{J} 52'48		asc. node	8935 Nov 28 03:38	22° \mathfrak{M} 24'03	
asc. node	8934 Dec 11 06:37	6° \mathfrak{J} 48'15		morning max el	8935 Nov 28 06:50	22° \mathfrak{M} 31'43	18°45'37
morning max el	8934 Dec 15 01:20	9° \mathfrak{J} 36'21	18°07'08		8935 Dec 04 05:17	0° \mathfrak{J}	
	8934 Dec 28 08:12	0° \mathfrak{Z}		morning set	8935 Dec 14 14:05	18° \mathfrak{J} 40'42	
morning set	8934 Dec 30 17:34	4° \mathfrak{Z} 27'20			8935 Dec 20 09:27	0° \mathfrak{Z}	
superior conj	8935 Jan 09 10:33	22° \mathfrak{Z} 21'37	0°38'42	superior conj	8935 Dec 23 04:38	5° \mathfrak{Z} 20'42	1°06'40
minimum elong	8935 Jan 09 13:20	22° \mathfrak{Z} 34'04	0°38'30	minimum elong	8935 Dec 23 07:56	5° \mathfrak{Z} 36'17	1°06'29
	8935 Jan 13 18:50	0° \approx		max. Earth dist.	8935 Dec 30 08:46	18° \mathfrak{Z} 26'38	1.39558 AU
desc. node	8935 Jan 14 16:16	1° \approx 32'10		desc. node	8936 Jan 01 13:13	22° \mathfrak{Z} 15'07	
max. Earth dist.	8935 Jan 17 01:46	5° \approx 36'03	1.41677 AU	evening rise	8936 Jan 03 08:38	25° \mathfrak{Z} 20'26	
evening rise	8935 Jan 22 05:51	14° \approx 06'15			8936 Jan 06 03:38	0° \approx	
	8935 Feb 01 11:36	0° \mathfrak{H}			8936 Jan 26 04:45	0° \mathfrak{H}	
	8935 Feb 23 24:00	0° \mathfrak{Y}		evening max el	8936 Feb 07 09:46	14° \mathfrak{H} 36'36	24°10'59
evening max el	8935 Feb 24 19:39	0° \mathfrak{Y} 50'24	22°50'50	retrograde	8936 Feb 18 15:03	21° \mathfrak{H} 11'38	
retrograde	8935 Mar 06 22:25	6° \mathfrak{Y} 49'59		evening set	8936 Feb 23 23:15	18° \mathfrak{H} 57'59	
asc. node	8935 Mar 09 05:31	6° \mathfrak{Y} 23'49		asc. node	8936 Feb 24 02:37	18° \mathfrak{H} 50'43	
evening set	8935 Mar 11 18:24	4° \mathfrak{Y} 50'06		min. Earth dist.	8936 Feb 28 15:49	13° \mathfrak{H} 34'24	0.68188 AU
	8935 Mar 15 23:44	30° \mathfrak{R} \mathfrak{H}		inferior conj	8936 Feb 29 11:03	12° \mathfrak{H} 29'29	1°40'09
inferior conj	8935 Mar 17 03:07	28° \mathfrak{H} 25'34	2°19'26	minimum elong	8936 Feb 29 09:03	12° \mathfrak{H} 36'15	1°39'32
minimum elong	8935 Mar 17 00:53	28° \mathfrak{H} 33'20	2°18'49	morning rise	8936 Mar 05 18:53	6° \mathfrak{H} 27'45	
min. Earth dist.	8935 Mar 16 19:32	28° \mathfrak{H} 51'53	0.68476 AU	direct	8936 Mar 09 17:32	4° \mathfrak{H} 59'10	
morning rise	8935 Mar 22 07:15	22° \mathfrak{H} 17'21		morning max el	8936 Mar 17 11:47	9° \mathfrak{H} 22'22	20°15'10
direct	8935 Mar 26 19:07	20° \mathfrak{H} 26'40		desc. node	8936 Mar 29 13:05	24° \mathfrak{H} 43'34	
morning max el	8935 Apr 04 15:00	25° \mathfrak{H} 34'13	21°31'01		8936 Apr 02 04:07	0° \mathfrak{Y}	
	8935 Apr 08 14:58	0° \mathfrak{Y}		morning set	8936 Apr 14 11:44	18° \mathfrak{Y} 37'21	
desc. node	8935 Apr 12 16:11	5° \mathfrak{Y} 07'18			8936 Apr 21 18:16	0° \mathfrak{B}	
	8935 Apr 29 21:38	0° \mathfrak{B}		max. Earth dist.	8936 Apr 24 07:09	4° \mathfrak{B} 02'37	1.43852 AU
morning set	8935 May 06 10:30	10° \mathfrak{B} 10'55		superior conj	8936 Apr 30 06:39	13° \mathfrak{B} 45'17	-2°11'06
max. Earth dist.	8935 May 12 22:46	20° \mathfrak{B} 42'30	1.42066 AU				

minimum elong	8936 Apr 30 08:55	13°♄54'37	2°11'13	superior conj	8937 Apr 10 02:28	23°♄05'51	-2°08'09
	8936 May 09 21:57	0°♄		minimum elong	8937 Apr 09 21:46	22°♄47'13	2°08'04
evening rise	8936 May 13 00:41	5°♄23'01			8937 Apr 14 10:16	0°♄	
asc. node	8936 May 22 01:22	20°♄47'45		evening rise	8937 Apr 24 14:01	16°♄32'54	
	8936 May 28 09:13	0°♄			8937 May 02 18:20	0°♄	
evening max el	8936 May 30 10:12	2°♄15'33	18°06'21	asc. node	8937 May 08 22:26	9°♄29'29	
retrograde	8936 Jun 05 20:23	5°♄36'00		evening max el	8937 May 13 23:19	15°♄42'18	18°22'23
evening set	8936 Jun 08 14:22	4°♄58'08		retrograde	8937 May 20 09:16	19°♄09'09	
inferior conj	8936 Jun 14 21:29	29°♄48'18	2°41'33	evening set	8937 May 23 10:38	18°♄17'42	
minimum elong	8936 Jun 15 00:10	29°♄41'17	2°40'42	inferior conj	8937 May 29 06:51	12°♄50'05	3°10'28
	8936 Jun 14 17:00	30°♄		minimum elong	8937 May 29 08:26	12°♄45'28	3°10'02
min. Earth dist.	8936 Jun 17 19:22	26°♄47'09	0.62284 AU	min. Earth dist.	8937 May 31 14:33	10°♄08'39	0.64324 AU
morning rise	8936 Jun 21 08:06	23°♄41'57		morning rise	8937 Jun 04 05:11	6°♄34'21	
desc. node	8936 Jun 25 12:43	21°♄35'59		direct	8937 Jun 10 21:34	3°♄52'23	
direct	8936 Jun 28 01:52	21°♄15'30		desc. node	8937 Jun 12 09:46	3°♄59'50	
morning max el	8936 Jul 12 04:36	29°♄17'20	27°55'14	morning max el	8937 Jun 24 14:17	11°♄52'01	27°29'38
	8936 Jul 12 21:24	0°♄			8937 Jul 09 00:08	0°♄	
	8936 Aug 03 09:37	0°♄			8937 Jul 26 21:44	0°♄	
morning set	8936 Aug 15 02:23	21°♄52'36		morning set	8937 Jul 29 18:31	5°♄32'02	
asc. node	8936 Aug 18 00:50	27°♄57'43		max. Earth dist.	8937 Aug 03 12:43	15°♄10'11	1.33079 AU
	8936 Aug 18 23:55	0°♄		asc. node	8937 Aug 04 21:47	18°♄03'09	
max. Earth dist.	8936 Aug 20 13:34	3°♄21'56	1.32122 AU				
				superior conj	8937 Aug 06 20:47	22°♄12'29	0°19'38
superior conj	8936 Aug 22 15:36	7°♄53'48	0°45'15	minimum elong	8937 Aug 06 19:50	22°♄07'23	0°19'16
minimum elong	8936 Aug 22 13:43	7°♄43'32	0°44'47		8937 Aug 10 11:42	0°♄	
evening rise	8936 Aug 29 11:24	22°♄47'52		evening rise	8937 Aug 13 22:49	7°♄25'47	
	8936 Sep 01 21:52	0°♄			8937 Aug 25 19:02	0°♄	
	8936 Sep 20 14:22	0°♄		evening max el	8937 Sep 04 17:24	12°♄55'26	22°33'16
desc. node	8936 Sep 21 11:25	0°♄57'26		desc. node	8937 Sep 08 08:34	16°♄00'40	
evening max el	8936 Sep 23 05:45	2°♄44'45	24°13'02	retrograde	8937 Sep 17 18:46	19°♄26'12	
retrograde	8936 Oct 06 22:52	9°♄37'07		evening set	8937 Sep 21 05:37	18°♄59'59	
evening set	8936 Oct 11 21:56	8°♄42'57		min. Earth dist.	8937 Sep 29 00:31	15°♄32'31	0.55020 AU
min. Earth dist.	8936 Oct 17 16:29	5°♄49'36	0.56227 AU	inferior conj	8937 Sep 30 02:43	14°♄55'22	-5°20'59
inferior conj	8936 Oct 20 01:47	4°♄21'08	-5°37'10	minimum elong	8937 Sep 29 20:32	15°♄04'08	5°20'06
minimum elong	8936 Oct 20 03:18	4°♄18'47	5°36'59	morning rise	8937 Oct 08 13:20	11°♄07'36	
morning rise	8936 Oct 28 10:45	0°♄21'34		direct	8937 Oct 11 18:30	10°♄44'06	
direct	8936 Oct 31 02:50	0°♄02'51		morning max el	8937 Oct 23 06:35	16°♄07'59	21°09'25
morning max el	8936 Nov 10 01:16	4°♄44'33	19°46'27	asc. node	8937 Oct 31 21:37	27°♄00'14	
asc. node	8936 Nov 14 00:38	9°♄13'27			8937 Nov 02 17:46	0°♄	
	8936 Nov 26 03:25	0°♄		morning set	8937 Nov 12 02:33	17°♄57'49	
morning set	8936 Nov 27 18:01	3°♄13'54			8937 Nov 17 20:27	0°♄	
superior conj	8936 Dec 05 13:58	19°♄03'19	1°25'51	superior conj	8937 Nov 19 10:09	3°♄15'52	1°36'59
minimum elong	8936 Dec 05 16:35	19°♄16'14	1°25'51	minimum elong	8937 Nov 19 11:33	3°♄23'05	1°37'08
	8936 Dec 11 06:05	0°♄		max. Earth dist.	8937 Nov 24 00:55	12°♄36'31	1.35410 AU
max. Earth dist.	8936 Dec 11 15:04	0°♄41'58	1.37392 AU	evening rise	8937 Nov 28 02:41	20°♄27'48	
evening rise	8936 Dec 15 08:41	7°♄30'48			8937 Dec 03 08:46	0°♄	
desc. node	8936 Dec 18 10:14	12°♄53'08		desc. node	8937 Dec 05 07:16	3°♄21'02	
	8936 Dec 28 23:52	0°♄			8937 Dec 22 23:03	0°♄	
evening max el	8937 Jan 19 23:03	28°♄25'20	25°26'00	evening max el	8938 Jan 02 12:14	12°♄10'21	26°28'56
	8937 Jan 21 15:19	0°♄		retrograde	8938 Jan 15 10:26	19°♄26'48	
retrograde	8937 Feb 01 03:18	5°♄26'20		evening set	8938 Jan 21 19:16	16°♄53'21	
evening set	8937 Feb 07 00:09	3°♄00'55		min. Earth dist.	8938 Jan 25 22:14	12°♄39'15	0.66443 AU
asc. node	8937 Feb 09 23:44	29°♄56'34		inferior conj	8938 Jan 27 16:43	10°♄31'25	-0°03'26
	8937 Feb 09 22:34	30°♄		minimum elong	8938 Jan 27 16:48	10°♄31'10	0°03'13
min. Earth dist.	8937 Feb 11 09:27	28°♄12'11	0.67509 AU	transit middle	8938 Jan 27 16:48	10°♄31'10	0°03'13
inferior conj	8937 Feb 12 16:15	26°♄33'03	0°52'25	transit begin	8938 Jan 27 13:57	10°♄39'44	
minimum elong	8937 Feb 12 15:00	26°♄37'04	0°52'04	transit end	8938 Jan 27 19:38	10°♄22'36	
morning rise	8937 Feb 18 06:15	20°♄39'33		asc. node	8938 Jan 27 20:51	10°♄18'58	
direct	8937 Feb 21 16:48	19°♄31'34		morning rise	8938 Feb 02 15:12	4°♄48'12	
morning max el	8937 Feb 28 16:40	23°♄22'29	19°13'34	direct	8938 Feb 05 15:06	3°♄57'51	
	8937 Mar 06 06:47	0°♄		morning max el	8938 Feb 12 04:21	7°♄29'13	18°28'00
greatest brilliancy	8937 Mar 13 19:37	10°♄48'55	-0.7m		8938 Feb 28 02:29	0°♄	
desc. node	8937 Mar 16 10:00	14°♄44'32		desc. node	8938 Mar 03 06:56	5°♄03'02	
morning set	8937 Mar 24 12:25	27°♄11'00		morning set	8938 Mar 04 10:44	6°♄53'22	
	8937 Mar 26 08:07	0°♄			8938 Mar 19 02:48	0°♄	
max. Earth dist.	8937 Apr 06 22:15	18°♄04'40	1.45058 AU				

superior conj	8938 Mar 20 08:24	1° Υ 55'51	-1°44'58	morning set	8939 Feb 13 14:33	18° \approx 03'43	
minimum elong	8938 Mar 19 22:55	1° Υ 18'45	1°44'08	desc. node	8939 Feb 18 03:50	25° \approx 33'52	
max. Earth dist.	8938 Mar 20 16:56	2° Υ 29'12	1.45553 AU		8939 Feb 20 21:04	0° \mathbb{H}	
evening rise	8938 Apr 05 03:41	26° Υ 45'17					
	8938 Apr 07 04:56	0° \mathcal{B}		superior conj	8939 Feb 27 18:50	11° \mathbb{H} 05'30	-1°06'17
greatest brilliancy	8938 Apr 14 14:29	11° \mathcal{B} 39'03	-0.8m	minimum elong	8939 Feb 27 11:19	10° \mathbb{H} 35'40	1°05'14
asc. node	8938 Apr 25 19:31	27° \mathcal{B} 33'33		max. Earth dist.	8939 Mar 03 12:22	16° \mathbb{H} 59'06	1.45303 AU
evening max el	8938 Apr 27 09:45	29° \mathcal{B} 17'03	18°56'12		8939 Mar 11 20:47	0° Υ	
	8938 Apr 28 03:28	0° Π		evening rise	8939 Mar 15 21:59	6° Υ 15'13	
retrograde	8938 May 04 04:14	3° Π 03'06		greatest brilliancy	8939 Mar 29 23:13	27° Υ 35'40	-0.6m
evening set	8938 May 07 13:12	1° Π 57'13			8939 Mar 31 14:42	0° \mathcal{B}	
	8938 May 09 20:54	30° \mathbb{R} \mathcal{B}		evening max el	8939 Apr 10 15:39	12° \mathcal{B} 55'34	19°46'24
inferior conj	8938 May 13 02:11	26° \mathcal{B} 13'33	3°21'26	asc. node	8939 Apr 12 16:38	14° \mathcal{B} 48'11	
minimum elong	8938 May 13 02:28	26° \mathcal{B} 12'38	3°21'13	retrograde	8939 Apr 18 02:06	17° \mathcal{B} 11'29	
min. Earth dist.	8938 May 14 18:39	24° \mathcal{B} 05'55	0.66012 AU	evening set	8939 Apr 21 19:30	15° \mathcal{B} 50'34	
morning rise	8938 May 18 15:10	19° \mathcal{B} 54'36		inferior conj	8939 Apr 27 04:19	9° \mathcal{B} 52'37	3°18'07
direct	8938 May 25 00:38	17° \mathcal{B} 08'42		minimum elong	8939 Apr 27 03:28	9° \mathcal{B} 55'30	3°17'54
desc. node	8938 May 30 06:48	18° \mathcal{B} 39'45		min. Earth dist.	8939 Apr 28 06:03	8° \mathcal{B} 26'39	0.67280 AU
morning max el	8938 Jun 07 00:58	24° \mathcal{B} 53'11	26°33'50	morning rise	8939 May 02 11:06	3° \mathcal{B} 34'18	
	8938 Jun 11 16:04	0° Π		direct	8939 May 08 09:49	0° \mathcal{B} 55'19	
	8938 Jul 02 11:14	0° \mathcal{E}		desc. node	8939 May 17 03:47	5° \mathcal{B} 04'44	
morning set	8938 Jul 12 23:17	18° \mathcal{E} 36'42		morning max el	8939 May 20 10:40	8° \mathcal{B} 08'28	25°16'46
max. Earth dist.	8938 Jul 17 01:31	26° \mathcal{E} 31'20	1.34521 AU		8939 Jun 06 13:10	0° Π	
	8938 Jul 18 19:21	0° Ω			8939 Jun 25 00:16	0° \mathcal{E}	
				morning set	8939 Jun 25 12:21	0° \mathcal{E} 54'10	
superior conj	8938 Jul 21 19:35	6° Ω 08'38	-0°09'39	max. Earth dist.	8939 Jun 29 03:37	7° \mathcal{E} 34'11	1.36413 AU
minimum elong	8938 Jul 21 20:08	6° Ω 11'28	0°09'45				
behind sun begin	8938 Jul 21 15:27	5° Ω 47'17		superior conj	8939 Jul 05 09:02	19° \mathcal{E} 34'06	-0°41'23
behind sun end	8938 Jul 22 00:48	6° Ω 35'41		minimum elong	8939 Jul 05 11:35	19° \mathcal{E} 46'41	0°41'09
asc. node	8938 Jul 22 18:45	8° Ω 08'47		asc. node	8939 Jul 09 15:43	28° \mathcal{E} 10'08	
evening rise	8938 Jul 29 08:16	21° Ω 54'33			8939 Jul 10 13:19	0° Ω	
	8938 Aug 02 07:30	0° \mathbb{P}		evening rise	8939 Jul 13 13:28	6° Ω 06'59	
evening max el	8938 Aug 17 13:03	23° \mathbb{P} 23'24	21°01'09		8939 Jul 27 00:53	0° \mathbb{P}	
desc. node	8938 Aug 26 05:42	28° \mathbb{P} 49'49		evening max el	8939 Jul 30 21:50	4° \mathbb{P} 31'45	19°46'22
retrograde	8938 Aug 29 07:22	29° \mathbb{P} 13'14		retrograde	8939 Aug 09 23:14	9° \mathbb{P} 29'56	
evening set	8938 Aug 31 14:02	29° \mathbb{P} 00'59		evening set	8939 Aug 11 19:49	9° \mathbb{P} 20'31	
inferior conj	8938 Sep 09 19:14	25° \mathbb{P} 04'25	-4°09'10	desc. node	8939 Aug 13 02:50	9° \mathbb{P} 03'26	
minimum elong	8938 Sep 09 09:34	25° \mathbb{P} 18'05	4°06'29	inferior conj	8939 Aug 20 17:32	5° \mathbb{P} 18'45	-2°19'31
min. Earth dist.	8938 Sep 10 09:17	24° \mathbb{P} 44'31	0.54667 AU	minimum elong	8939 Aug 20 11:12	5° \mathbb{P} 28'32	2°17'16
morning rise	8938 Sep 18 05:26	21° \mathbb{P} 09'15		min. Earth dist.	8939 Aug 22 20:29	4° \mathbb{P} 00'13	0.55276 AU
direct	8938 Sep 22 02:30	20° \mathbb{P} 36'58		morning rise	8939 Aug 29 00:34	0° \mathbb{P} 56'42	
morning max el	8938 Oct 05 00:31	26° \mathbb{P} 47'17	22°49'41	direct	8939 Sep 02 16:40	0° \mathbb{P} 08'32	
	8938 Oct 08 03:00	0° $\underline{\mathcal{A}}$		morning max el	8939 Sep 16 12:43	7° \mathbb{P} 00'35	24°35'59
asc. node	8938 Oct 18 18:36	15° $\underline{\mathcal{A}}$ 31'19			8939 Oct 03 04:02	0° $\underline{\mathcal{A}}$	
	8938 Oct 26 05:49	0° \mathbb{M}		asc. node	8939 Oct 05 15:33	4° $\underline{\mathcal{A}}$ 35'07	
morning set	8938 Oct 27 13:35	2° \mathbb{M} 46'42		morning set	8939 Oct 12 01:20	17° $\underline{\mathcal{A}}$ 35'03	
					8939 Oct 17 18:17	0° \mathbb{M}	
superior conj	8938 Nov 03 13:47	17° \mathbb{M} 48'37	1°40'56				
minimum elong	8938 Nov 03 13:54	17° \mathbb{M} 49'13	1°41'06	superior conj	8939 Oct 18 22:13	2° \mathbb{M} 33'00	1°38'29
max. Earth dist.	8938 Nov 06 18:07	24° \mathbb{M} 31'27	1.33786 AU	minimum elong	8939 Oct 18 21:13	2° \mathbb{M} 27'33	1°38'33
	8938 Nov 09 10:11	0° \mathcal{A}		max. Earth dist.	8939 Oct 20 19:30	6° \mathbb{M} 39'28	1.32593 AU
evening rise	8938 Nov 11 10:49	4° \mathcal{A} 02'17		evening rise	8939 Oct 26 05:33	18° \mathbb{M} 04'39	
desc. node	8938 Nov 22 04:19	23° \mathcal{A} 33'33			8939 Nov 01 08:20	0° \mathcal{A}	
	8938 Nov 26 03:34	0° \mathcal{B}		desc. node	8939 Nov 09 01:24	13° \mathcal{A} 23'51	
evening max el	8938 Dec 16 01:16	25° \mathcal{B} 43'30	27°12'28		8939 Nov 20 13:03	0° \mathcal{B}	
	8938 Dec 21 05:10	0° \approx		evening max el	8939 Nov 28 12:49	8° \mathcal{B} 53'49	27°29'43
retrograde	8938 Dec 29 11:45	3° \approx 05'01		retrograde	8939 Dec 12 06:21	16° \mathcal{B} 12'22	
evening set	8939 Jan 05 06:32	0° \approx 29'32		evening set	8939 Dec 19 07:16	13° \mathcal{B} 42'53	
	8939 Jan 05 21:17	30° \mathbb{R} \mathcal{B}		min. Earth dist.	8939 Dec 23 00:48	10° \mathcal{B} 32'48	0.63273 AU
min. Earth dist.	8939 Jan 09 04:00	26° \mathcal{B} 48'58	0.65016 AU	inferior conj	8939 Dec 25 17:51	7° \mathcal{B} 51'12	-2°15'56
inferior conj	8939 Jan 11 10:08	24° \mathcal{B} 19'31	-1°06'46	minimum elong	8939 Dec 25 22:11	7° \mathcal{B} 40'23	2°13'58
minimum elong	8939 Jan 11 12:08	24° \mathcal{B} 13'59	1°05'41	morning rise	8940 Jan 01 15:06	2° \mathcal{B} 36'20	
asc. node	8939 Jan 14 17:57	20° \mathcal{B} 54'58		asc. node	8940 Jan 01 15:02	2° \mathcal{B} 36'23	
morning rise	8939 Jan 17 19:12	18° \mathcal{B} 49'02		direct	8940 Jan 03 23:39	2° \mathcal{B} 09'46	
direct	8939 Jan 20 10:17	18° \mathcal{B} 12'33		morning max el	8940 Jan 10 13:50	5° \mathcal{B} 33'45	17°47'42
morning max el	8939 Jan 26 20:23	21° \mathcal{B} 35'28	17°59'10	morning set	8940 Jan 26 20:21	0° \approx 29'35	
	8939 Feb 02 10:00	0° \approx			8940 Jan 26 13:32	0° \approx	

desc. node	8940 Feb 05 00:44	16° \approx 12'57		superior conj	8941 Jan 19 09:41	2° \approx 38'32	0°18'35
				minimum elong	8941 Jan 19 11:17	2° \approx 45'28	0°18'34
superior conj	8940 Feb 08 01:31	21° \approx 15'36 -0°22'12		desc. node	8941 Jan 21 21:39	6° \approx 56'13	
minimum elong	8940 Feb 07 23:11	21° \approx 05'57 0°21'41		max. Earth dist.	8941 Jan 26 20:52	15° \approx 14'52	1.42786 AU
	8940 Feb 13 10:30	0° \mathbb{H}		evening rise	8941 Feb 02 04:44	25° \approx 25'32	
max. Earth dist.	8940 Feb 14 06:25	1° \mathbb{H} 19'42 1.44346 AU			8941 Feb 05 03:02	0° \mathbb{H}	
evening rise	8940 Feb 23 09:16	15° \mathbb{H} 36'37			8941 Feb 25 19:53	0° \mathbb{Y}	
	8940 Mar 03 21:31	0° \mathbb{Y}		evening max el	8941 Mar 06 11:22	10° \mathbb{Y} 17'40	22°05'09
evening max el	8940 Mar 23 16:09	26° \mathbb{Y} 36'12 20°50'36		retrograde	8941 Mar 15 22:01	15° \mathbb{Y} 53'11	
	8940 Mar 27 16:28	0° \mathbb{B}		asc. node	8941 Mar 16 10:54	15° \mathbb{Y} 51'43	
asc. node	8940 Mar 29 13:46	0° \mathbb{B} 59'37		evening set	8941 Mar 20 11:33	14° \mathbb{Y} 01'33	
retrograde	8940 Apr 01 00:39	1° \mathbb{B} 29'58		inferior conj	8941 Mar 25 19:13	7° \mathbb{Y} 41'18	2°38'02
evening set	8940 Apr 05 03:31	29° \mathbb{Y} 53'40		minimum elong	8941 Mar 25 17:03	7° \mathbb{Y} 48'50	2°37'29
	8940 Apr 05 00:15	30° \mathbb{R} \mathbb{Y}		min. Earth dist.	8941 Mar 25 18:29	7° \mathbb{Y} 43'51	0.68468 AU
inferior conj	8940 Apr 10 10:44	23° \mathbb{Y} 43'19 3°03'07		morning rise	8941 Mar 30 22:24	1° \mathbb{Y} 30'18	
minimum elong	8940 Apr 10 09:02	23° \mathbb{Y} 49'11 3°02'45			8941 Apr 02 05:32	30° \mathbb{R} \mathbb{H}	
min. Earth dist.	8940 Apr 10 22:43	23° \mathbb{Y} 01'57 0.68099 AU		direct	8941 Apr 04 18:14	29° \mathbb{H} 27'02	
morning rise	8940 Apr 15 14:19	17° \mathbb{Y} 27'57			8941 Apr 07 10:49	0° \mathbb{Y}	
direct	8940 Apr 21 00:04	15° \mathbb{Y} 04'15		morning max el	8941 Apr 14 06:56	5° \mathbb{Y} 02'54	22°19'34
morning max el	8940 May 01 19:46	21° \mathbb{Y} 31'56 23°48'46		desc. node	8941 Apr 19 21:37	11° \mathbb{Y} 24'59	
desc. node	8940 May 03 00:43	22° \mathbb{Y} 47'09			8941 May 03 09:34	0° \mathbb{B}	
	8940 May 09 03:36	0° \mathbb{B}		morning set	8941 May 17 18:50	22° \mathbb{B} 16'01	
	8940 May 29 19:33	0° \mathbb{II}			8941 May 22 11:10	0° \mathbb{II}	
morning set	8940 Jun 06 04:33	12° \mathbb{II} 11'29		max. Earth dist.	8941 May 22 22:17	0° \mathbb{II} 46'47	1.40865 AU
max. Earth dist.	8940 Jun 10 00:04	18° \mathbb{II} 49'05 1.38615 AU					
	8940 Jun 16 03:41	0° \mathbb{E}		superior conj	8941 May 30 17:10	14° \mathbb{II} 18'21	-1°42'52
				minimum elong	8941 May 30 23:08	14° \mathbb{II} 45'05	1°42'27
superior conj	8940 Jun 17 09:42	2° \mathbb{E} 20'55 -1°13'32			8941 Jun 08 06:13	0° \mathbb{E}	
minimum elong	8940 Jun 17 14:21	2° \mathbb{E} 42'53 1°13'04		evening rise	8941 Jun 09 23:54	3° \mathbb{E} 15'13	
asc. node	8940 Jun 25 12:42	18° \mathbb{E} 03'43		asc. node	8941 Jun 12 09:43	7° \mathbb{E} 45'07	
evening rise	8940 Jun 26 11:49	19° \mathbb{E} 56'50		evening max el	8941 Jun 26 01:36	28° \mathbb{E} 56'45	18°18'52
	8940 Jul 01 17:51	0° \mathbb{Q}			8941 Jun 27 05:18	0° \mathbb{Q}	
evening max el	8940 Jul 12 19:10	16° \mathbb{Q} 25'02 18°52'13		retrograde	8941 Jul 03 08:54	2° \mathbb{Q} 36'50	
retrograde	8940 Jul 21 06:19	20° \mathbb{Q} 37'05		evening set	8941 Jul 05 14:50	2° \mathbb{Q} 16'48	
evening set	8940 Jul 23 05:24	20° \mathbb{Q} 24'25			8941 Jul 09 23:13	30° \mathbb{R} \mathbb{E}	
desc. node	8940 Jul 29 23:56	17° \mathbb{Q} 04'49		inferior conj	8941 Jul 12 23:09	27° \mathbb{E} 37'48	1°08'21
inferior conj	8940 Jul 31 09:25	16° \mathbb{Q} 05'55 -0°25'35		minimum elong	8941 Jul 13 01:20	27° \mathbb{E} 33'13	1°07'23
minimum elong	8940 Jul 31 08:21	16° \mathbb{Q} 07'49 0°25'21		min. Earth dist.	8941 Jul 16 08:22	24° \mathbb{E} 48'52	0.58752 AU
min. Earth dist.	8940 Aug 03 11:27	13° \mathbb{Q} 54'27 0.56735 AU		desc. node	8941 Jul 16 21:00	24° \mathbb{E} 24'09	
morning rise	8940 Aug 08 07:59	11° \mathbb{Q} 07'13		morning rise	8941 Jul 20 08:34	22° \mathbb{E} 04'42	
direct	8940 Aug 13 20:01	9° \mathbb{Q} 54'43		direct	8941 Jul 26 13:16	20° \mathbb{E} 21'56	
morning max el	8940 Aug 28 02:27	17° \mathbb{Q} 18'08 26°11'43		morning max el	8941 Aug 09 22:31	28° \mathbb{E} 07'33	27°20'54
	8940 Sep 07 14:04	0° \mathbb{P}			8941 Aug 11 18:30	0° \mathbb{Q}	
asc. node	8940 Sep 21 12:28	24° \mathbb{P} 03'05			8941 Sep 01 07:12	0° \mathbb{P}	
	8940 Sep 24 10:02	0° \mathbb{A}		asc. node	8941 Sep 08 09:22	13° \mathbb{P} 48'40	
morning set	8940 Sep 25 12:10	2° \mathbb{A} 18'06		morning set	8941 Sep 09 20:26	16° \mathbb{P} 51'32	
					8941 Sep 15 21:31	0° \mathbb{A}	
superior conj	8940 Oct 02 09:15	17° \mathbb{A} 22'11 1°30'14					
minimum elong	8940 Oct 02 07:27	17° \mathbb{A} 12'11 1°30'07		superior conj	8941 Sep 16 21:03	2° \mathbb{A} 10'39	1°16'38
max. Earth dist.	8940 Oct 03 02:56	19° \mathbb{A} 00'03 1.31860 AU		minimum elong	8941 Sep 16 18:51	1° \mathbb{A} 58'22	1°16'19
	8940 Oct 08 04:09	0° \mathbb{M}		max. Earth dist.	8941 Sep 16 13:00	1° \mathbb{A} 25'54	1.31589 AU
evening rise	8940 Oct 09 07:54	2° \mathbb{M} 26'28		evening rise	8941 Sep 23 15:24	17° \mathbb{A} 00'59	
	8940 Oct 24 04:59	0° \mathbb{J}			8941 Sep 30 00:50	0° \mathbb{M}	
desc. node	8940 Oct 25 22:29	2° \mathbb{J} 42'25		desc. node	8941 Oct 12 19:35	21° \mathbb{M} 16'52	
evening max el	8940 Nov 09 20:20	21° \mathbb{J} 27'12 27°15'03			8941 Oct 19 17:56	0° \mathbb{J}	
retrograde	8940 Nov 23 17:04	28° \mathbb{J} 39'13		evening max el	8941 Oct 22 20:58	3° \mathbb{J} 12'17	26°26'17
evening set	8940 Nov 30 17:59	26° \mathbb{J} 25'18		retrograde	8941 Nov 05 18:56	10° \mathbb{J} 18'13	
min. Earth dist.	8940 Dec 04 10:58	23° \mathbb{J} 39'07 0.61288 AU		evening set	8941 Nov 12 10:21	8° \mathbb{J} 29'58	
inferior conj	8940 Dec 07 12:36	20° \mathbb{J} 57'33 -3°27'29		min. Earth dist.	8941 Nov 16 10:20	5° \mathbb{J} 55'19	0.59191 AU
minimum elong	8940 Dec 07 19:11	20° \mathbb{J} 43'03 3°25'00		inferior conj	8941 Nov 19 14:54	3° \mathbb{J} 29'02	-4°34'21
morning rise	8940 Dec 14 22:44	16° \mathbb{J} 01'46		minimum elong	8941 Nov 19 22:23	3° \mathbb{J} 14'41	4°32'17
direct	8940 Dec 17 03:41	15° \mathbb{J} 41'30			8941 Nov 24 18:57	30° \mathbb{R} \mathbb{M}	
asc. node	8940 Dec 18 12:06	15° \mathbb{J} 49'21		morning rise	8941 Nov 27 12:51	28° \mathbb{M} 55'28	
morning max el	8940 Dec 24 05:27	19° \mathbb{J} 15'09 17°54'29		direct	8941 Nov 29 18:01	28° \mathbb{M} 38'18	
	8941 Jan 01 01:57	0° \mathbb{Z}			8941 Dec 04 10:33	0° \mathbb{J}	
morning set	8941 Jan 08 21:28	13° \mathbb{Z} 49'58		asc. node	8941 Dec 05 09:06	0° \mathbb{J} 36'13	
	8941 Jan 17 21:19	0° \approx		morning max el	8941 Dec 07 15:46	2° \mathbb{J} 30'40	18°20'57

morning set	8941 Dec 23 12:14	27° ♄ 47'56		morning set	8942 Dec 07 12:15	12° ♄ 10'12	
	8941 Dec 24 15:54	0° ♄					
superior conj	8942 Jan 01 16:54	15° ♄ 07'12	0°51'38	superior conj	8942 Dec 15 18:04	28° ♄ 26'20	1°15'50
minimum elong	8942 Jan 01 20:06	15° ♄ 21'52	0°51'25	minimum elong	8942 Dec 15 21:10	28° ♄ 41'19	1°15'43
desc. node	8942 Jan 08 18:37	27° ♄ 40'29			8942 Dec 16 13:33	0° ♄	
max. Earth dist.	8942 Jan 09 06:24	28° ♄ 31'01	1.40799 AU	max. Earth dist.	8942 Dec 22 12:08	11° ♄ 03'08	1.38620 AU
	8942 Jan 10 03:17	0° \approx		evening rise	8942 Dec 26 06:59	17° ♄ 44'25	
evening rise	8942 Jan 13 18:56	6° \approx 06'05		desc. node	8942 Dec 26 15:37	18° ♄ 21'40	
	8942 Jan 29 06:51	0° ♄			8943 Jan 02 15:46	0° \approx	
evening max el	8942 Feb 17 02:40	24° ♄ 01'27	23°24'57	evening max el	8943 Jan 23 16:26	0° ♄	
	8942 Feb 25 17:04	0° ♄		retrograde	8943 Jan 30 16:04	7° ♄ 48'26	24°43'55
retrograde	8942 Feb 27 16:50	0° ♄ 17'04		retrograde	8943 Feb 11 07:56	14° ♄ 36'41	
	8942 Mar 01 14:25	30° ♄		evening set	8943 Feb 16 21:28	12° ♄ 17'34	
asc. node	8942 Mar 03 08:01	29° ♄ 12'44		asc. node	8943 Feb 18 05:08	11° ♄ 02'38	
evening set	8942 Mar 04 18:02	28° ♄ 10'51		min. Earth dist.	8943 Feb 21 10:43	7° ♄ 08'44	0.67942 AU
min. Earth dist.	8942 Mar 09 15:12	22° ♄ 27'33	0.68410 AU	inferior conj	8943 Feb 22 10:55	5° ♄ 48'27	1°20'57
inferior conj	8942 Mar 10 03:53	21° ♄ 43'59	2°03'49	minimum elong	8943 Feb 22 09:10	5° ♄ 54'15	1°20'24
minimum elong	8942 Mar 10 01:41	21° ♄ 51'32	2°03'10	morning rise	8943 Feb 27 21:05	29° \approx 49'55	
morning rise	8942 Mar 15 09:19	15° ♄ 38'32			8943 Feb 27 15:35	30° ♄	
direct	8942 Mar 19 15:24	13° ♄ 57'34		direct	8943 Mar 03 14:19	28° \approx 30'35	
morning max el	8942 Mar 27 23:40	18° ♄ 44'51	20°57'09		8943 Mar 07 20:00	0° ♄	
	8942 Apr 06 05:53	0° ♄		morning max el	8943 Mar 11 00:01	2° ♄ 38'56	19°47'03
desc. node	8942 Apr 06 18:32	0° ♄ 43'13		greatest brilliancy	8943 Mar 23 20:19	19° ♄ 20'50	-0.6m
	8942 Apr 26 12:56	0° ♄		desc. node	8943 Mar 24 15:28	20° ♄ 31'08	
morning set	8942 Apr 27 06:46	1° ♄ 09'36			8943 Mar 30 23:26	0° ♄	
max. Earth dist.	8942 May 05 02:33	13° ♄ 37'50	1.42887 AU	morning set	8943 Apr 06 04:44	9° ♄ 30'36	
				max. Earth dist.	8943 Apr 17 13:35	27° ♄ 16'14	1.44441 AU
					8943 Apr 19 06:43	0° ♄	
superior conj	8942 May 12 02:45	25° ♄ 15'44	-2°04'32				
minimum elong	8942 May 12 07:32	25° ♄ 36'04	2°04'28	superior conj	8943 Apr 22 11:47	5° ♄ 09'39	-2°12'17
	8942 May 14 21:18	0° ♄		minimum elong	8943 Apr 22 11:19	5° ♄ 07'47	2°12'25
evening rise	8942 May 23 21:29	15° ♄ 51'25		evening rise	8943 May 05 23:49	27° ♄ 35'13	
asc. node	8942 May 30 06:46	27° ♄ 08'41			8943 May 07 09:54	0° ♄	
	8942 May 31 23:10	0° ♄		asc. node	8943 May 17 03:50	16° ♄ 08'22	
evening max el	8942 Jun 09 13:20	11° ♄ 56'55	18°05'25	evening max el	8943 May 24 02:53	25° ♄ 16'51	18°10'58
retrograde	8942 Jun 16 04:16	15° ♄ 20'29		retrograde	8943 May 30 11:57	28° ♄ 38'29	
evening set	8942 Jun 18 17:48	14° ♄ 49'56		evening set	8943 Jun 02 09:00	27° ♄ 55'08	
inferior conj	8942 Jun 25 09:01	9° ♄ 51'02	2°14'57	inferior conj	8943 Jun 08 11:01	22° ♄ 37'49	2°56'15
minimum elong	8942 Jun 25 11:59	9° ♄ 43'49	2°13'54	minimum elong	8943 Jun 08 13:18	22° ♄ 31'34	2°55'36
min. Earth dist.	8942 Jun 28 13:17	6° ♄ 47'18	0.61000 AU	min. Earth dist.	8943 Jun 11 03:18	19° ♄ 42'32	0.63186 AU
morning rise	8942 Jul 02 03:40	3° ♄ 53'26		morning rise	8943 Jun 14 16:04	16° ♄ 26'24	
desc. node	8942 Jul 03 18:05	2° ♄ 57'05		desc. node	8943 Jun 20 15:09	13° ♄ 53'37	
direct	8942 Jul 08 18:44	1° ♄ 40'50		direct	8943 Jun 21 10:06	13° ♄ 51'36	
morning max el	8942 Jul 23 01:29	9° ♄ 40'16	27°53'46	morning max el	8943 Jul 05 09:21	21° ♄ 54'42	27°48'25
	8942 Aug 07 18:54	0° ♄			8943 Jul 12 11:01	0° ♄	
	8942 Aug 24 10:49	0° ♄			8943 Jul 31 23:03	0° ♄	
morning set	8942 Aug 25 00:14	1° ♄ 09'04		morning set	8943 Aug 08 21:23	15° ♄ 04'42	
asc. node	8942 Aug 26 06:17	3° ♄ 45'36		asc. node	8943 Aug 13 03:14	23° ♄ 49'22	
max. Earth dist.	8942 Aug 30 21:43	13° ♄ 44'44	1.31787 AU	max. Earth dist.	8943 Aug 14 01:13	25° ♄ 45'47	1.32467 AU
					8943 Aug 16 00:38	0° ♄	
superior conj	8942 Sep 01 07:47	16° ♄ 52'00	0°58'04				
minimum elong	8942 Sep 01 05:38	16° ♄ 40'08	0°57'37	superior conj	8943 Aug 16 15:36	1° ♄ 20'58	0°34'53
	8942 Sep 07 07:09	0° ♄		minimum elong	8943 Aug 16 14:03	1° ♄ 12'32	0°34'27
evening rise	8942 Sep 08 01:55	1° ♄ 41'05		evening rise	8943 Aug 23 13:32	16° ♄ 21'27	
	8942 Sep 23 06:40	0° ♄			8943 Aug 30 06:33	0° ♄	
desc. node	8942 Sep 29 16:43	8° ♄ 48'58		evening max el	8943 Sep 16 00:43	24° ♄ 23'52	23°30'36
evening max el	8942 Oct 04 13:22	14° ♄ 05'52	25°07'29	desc. node	8943 Sep 16 13:51	24° ♄ 55'03	
retrograde	8942 Oct 18 10:21	21° ♄ 05'31			8943 Sep 24 00:53	0° ♄	
evening set	8942 Oct 24 03:36	19° ♄ 51'09		retrograde	8943 Sep 29 13:19	1° ♄ 09'20	
min. Earth dist.	8942 Oct 29 01:03	17° ♄ 09'54	0.57200 AU	evening set	8943 Oct 03 20:46	0° ♄ 28'47	
inferior conj	8942 Oct 31 21:37	15° ♄ 15'53	-5°23'51		8943 Oct 05 05:52	30° ♄	
minimum elong	8942 Nov 01 02:38	15° ♄ 07'30	5°23'05	min. Earth dist.	8943 Oct 10 10:44	27° ♄ 22'28	0.55622 AU
morning rise	8942 Nov 09 03:59	11° ♄ 05'04		inferior conj	8943 Oct 12 08:17	26° ♄ 15'02	-5°37'05
direct	8942 Nov 11 14:15	10° ♄ 47'58		minimum elong	8943 Oct 12 06:31	26° ♄ 17'40	5°36'55
morning max el	8942 Nov 20 17:01	15° ♄ 09'02	19°08'50	morning rise	8943 Oct 20 18:17	22° ♄ 21'54	
asc. node	8942 Nov 22 06:06	16° ♄ 44'52		direct	8943 Oct 23 15:19	22° ♄ 01'37	
	8942 Dec 01 03:37	0° ♄		morning max el	8943 Nov 03 05:58	27° ♄ 01'01	20°19'11

	8943 Nov 06 01:24	0°♍		direct	8944 Oct 03 02:35	2°♊20'07	
asc. node	8943 Nov 09 03:05	4°♍00'09		morning max el	8944 Oct 15 05:49	8°♊03'52	21°50'27
morning set	8943 Nov 21 18:22	26°♍48'03		asc. node	8944 Oct 26 00:03	22°♊07'31	
	8943 Nov 23 07:43	0°♊		morning set	8944 Oct 30 09:59	0°♍	
					8944 Nov 05 04:13	11°♍35'03	
superior conj	8943 Nov 29 08:25	12°♊22'22	1°31'31				
minimum elong	8943 Nov 29 10:32	12°♊33'06	1°31'34	superior conj	8944 Nov 12 08:07	26°♍44'39	1°39'29
max. Earth dist.	8943 Dec 04 18:54	23°♊04'44	1.36511 AU	minimum elong	8944 Nov 12 08:58	26°♍49'05	1°39'39
	8943 Dec 08 11:42	0°♊			8944 Nov 13 21:34	0°♊	
evening rise	8943 Dec 08 15:06	0°♊15'30		max. Earth dist.	8944 Nov 16 07:52	4°♊58'47	1.34671 AU
desc. node	8943 Dec 13 12:38	8°♊55'43		evening rise	8944 Nov 20 15:36	13°♊30'07	
	8943 Dec 26 20:31	0°♊		desc. node	8944 Nov 29 09:39	29°♊18'08	
evening max el	8944 Jan 13 05:19	21°♊36'26	25°54'53		8944 Nov 29 19:34	0°♊	
retrograde	8944 Jan 25 18:13	28°♊45'42			8944 Dec 20 18:39	0°♊	
evening set	8944 Jan 31 20:08	26°♊16'34		evening max el	8944 Dec 25 18:48	5°♊18'50	26°50'23
min. Earth dist.	8944 Feb 05 02:41	21°♊42'20	0.67091 AU	retrograde	8945 Jan 07 22:46	12°♊37'49	
asc. node	8944 Feb 05 02:16	21°♊43'39		evening set	8945 Jan 14 12:10	10°♊02'59	
inferior conj	8944 Feb 06 14:22	19°♊50'22	0°29'42	min. Earth dist.	8945 Jan 18 12:48	6°♊03'13	0.65876 AU
minimum elong	8944 Feb 06 13:37	19°♊52'44	0°29'34	inferior conj	8945 Jan 20 12:08	3°♊45'33	-0°29'26
morning rise	8944 Feb 12 07:40	14°♊00'42		minimum elong	8945 Jan 20 12:58	3°♊43'08	0°28'52
direct	8944 Feb 15 13:28	13°♊00'36		asc. node	8945 Jan 21 23:22	2°♊04'59	
morning max el	8944 Feb 22 07:56	16°♊42'03	18°52'08		8945 Jan 24 00:27	30°♊	
	8944 Mar 03 12:40	0°♊		morning rise	8945 Jan 26 14:52	28°♊07'12	
desc. node	8944 Mar 10 12:22	10°♊40'14		direct	8945 Jan 29 10:52	27°♊23'03	
morning set	8944 Mar 15 12:34	18°♊27'49			8945 Feb 04 00:35	0°♊	
	8944 Mar 22 22:02	0°♊		morning max el	8945 Feb 04 21:44	0°♊49'24	18°13'41
max. Earth dist.	8944 Mar 30 06:16	11°♊29'03	1.45358 AU	morning set	8945 Feb 23 23:27	28°♊48'33	
					8945 Feb 24 17:11	0°♊	
superior conj	8944 Mar 31 23:57	14°♊12'38	-2°00'43	desc. node	8945 Feb 25 09:17	1°♊04'50	
minimum elong	8944 Mar 31 16:30	13°♊43'22	2°00'20				
	8944 Apr 10 22:54	0°♊		superior conj	8945 Mar 11 05:22	23°♊04'33	-1°29'55
evening rise	8944 Apr 16 03:01	8°♊19'47		minimum elong	8945 Mar 10 19:57	22°♊27'37	1°28'52
	8944 Apr 29 18:21	0°♊		max. Earth dist.	8945 Mar 13 02:07	25°♊59'58	1.45542 AU
asc. node	8944 May 03 00:56	4°♊35'40			8945 Mar 15 15:30	0°♊	
evening max el	8944 May 06 15:14	8°♊48'15	18°34'42	evening rise	8945 Mar 27 07:29	18°♊11'35	
retrograde	8944 May 13 03:43	12°♊21'27			8945 Apr 03 21:36	0°♊	
evening set	8944 May 16 08:18	11°♊23'55		greatest brilliancy	8945 Apr 07 21:13	6°♊06'55	-0.7m
inferior conj	8944 May 22 01:03	5°♊49'32	3°17'00	asc. node	8945 Apr 19 22:02	22°♊20'34	
minimum elong	8944 May 22 02:05	5°♊46'24	3°16'42	evening max el	8945 Apr 19 23:59	22°♊25'32	19°15'37
min. Earth dist.	8944 May 24 02:22	3°♊21'04	0.65099 AU	retrograde	8945 Apr 27 00:12	26°♊22'39	
	8944 May 27 06:17	30°♊		evening set	8945 Apr 30 12:45	25°♊10'13	
morning rise	8944 May 27 19:03	29°♊32'03		inferior conj	8945 May 05 23:36	19°♊20'13	3°21'33
direct	8944 Jun 03 09:15	26°♊46'46		minimum elong	8945 May 05 23:23	19°♊20'57	3°21'22
desc. node	8944 Jun 06 12:11	27°♊18'53		min. Earth dist.	8945 May 07 09:38	17°♊29'59	0.66614 AU
	8944 Jun 11 11:19	0°♊		morning rise	8945 May 11 09:37	13°♊01'25	
morning max el	8944 Jun 16 19:30	4°♊41'20	27°08'57	direct	8945 May 17 14:55	10°♊17'29	
	8944 Jul 06 00:36	0°♊		desc. node	8945 May 24 09:12	12°♊47'26	
morning set	8944 Jul 22 09:06	28°♊30'18		morning max el	8945 May 30 05:50	17°♊49'37	26°03'01
	8944 Jul 23 03:34	0°♊			8945 Jun 09 10:39	0°♊	
max. Earth dist.	8944 Jul 26 20:00	7°♊21'19	1.33638 AU		8945 Jun 29 00:10	0°♊	
asc. node	8944 Jul 30 00:12	13°♊55'25		morning set	8945 Jul 05 07:45	11°♊16'15	
				max. Earth dist.	8945 Jul 09 04:14	18°♊33'29	1.35286 AU
superior conj	8944 Jul 30 18:23	15°♊31'02	0°07'37				
minimum elong	8944 Jul 30 18:00	15°♊29'00	0°07'21	superior conj	8945 Jul 14 13:36	29°♊15'17	-0°22'54
behind sun begin	8944 Jul 30 13:00	15°♊02'36		minimum elong	8945 Jul 14 14:57	29°♊22'08	0°22'52
behind sun end	8944 Jul 30 23:01	15°♊55'26			8945 Jul 14 22:23	0°♊	
	8944 Aug 06 13:42	0°♊		asc. node	8945 Jul 16 21:10	3°♊59'51	
evening rise	8944 Aug 07 00:21	0°♊56'09		evening rise	8945 Jul 22 08:18	15°♊19'08	
	8944 Aug 23 12:23	0°♊			8945 Jul 29 20:23	0°♊	
evening max el	8944 Aug 27 14:57	4°♊38'25	21°52'23	evening max el	8945 Aug 09 15:52	15°♊21'38	20°26'46
desc. node	8944 Sep 02 10:59	9°♊05'12		desc. node	8945 Aug 20 08:08	20°♊49'28	
retrograde	8944 Sep 09 04:40	10°♊53'09		retrograde	8945 Aug 20 16:57	20°♊49'49	
evening set	8944 Sep 12 01:39	10°♊34'39		evening set	8945 Aug 22 17:25	20°♊39'37	
inferior conj	8944 Sep 21 04:04	6°♊35'21	-4°56'52	inferior conj	8945 Aug 31 21:11	16°♊42'17	-3°25'18
minimum elong	8944 Sep 20 19:30	6°♊47'20	4°55'08	minimum elong	8945 Aug 31 12:18	16°♊55'11	3°22'26
min. Earth dist.	8944 Sep 20 18:44	6°♊48'25	0.54758 AU	min. Earth dist.	8945 Sep 02 03:57	15°♊57'35	0.54814 AU
morning rise	8944 Sep 29 14:39	2°♊46'59		morning rise	8945 Sep 09 06:37	12°♊38'10	

direct	8945 Sep 13 11:32	12° \cap 00'14		min. Earth dist.	8946 Aug 14 16:42	25° Ω 27'11	0.55803 AU
morning max el	8945 Sep 26 20:18	18° \cap 28'29	23°35'12	morning rise	8946 Aug 20 06:12	22° Ω 31'58	
	8945 Oct 06 07:32	0° $\underline{\Omega}$		direct	8946 Aug 25 06:32	21° Ω 34'45	
asc. node	8945 Oct 12 21:00	10° $\underline{\Omega}$ 53'50		morning max el	8946 Sep 08 08:41	28° Ω 41'38	25°19'03
morning set	8945 Oct 20 15:46	26° $\underline{\Omega}$ 24'40			8946 Sep 09 16:26	0° \cap	
	8945 Oct 22 08:01	0° \cap		asc. node	8946 Sep 29 17:56	0° $\underline{\Omega}$ 09'21	
					8946 Sep 29 16:01	0° $\underline{\Omega}$	
superior conj	8945 Oct 27 14:04	11° \cap 23'17	1°40'38	morning set	8946 Oct 05 03:21	11° $\underline{\Omega}$ 12'06	
minimum elong	8945 Oct 27 13:40	11° \cap 21'11	1°40'47				
max. Earth dist.	8945 Oct 30 04:56	17° \cap 00'00	1.33223 AU	superior conj	8946 Oct 11 23:53	26° $\underline{\Omega}$ 11'09	1°35'39
evening rise	8945 Nov 04 04:38	27° \cap 17'28		minimum elong	8946 Oct 11 22:30	26° $\underline{\Omega}$ 03'32	1°35'39
	8945 Nov 05 13:27	0° \mathcal{A}		max. Earth dist.	8946 Oct 13 09:14	29° $\underline{\Omega}$ 14'13	1.32223 AU
desc. node	8945 Nov 16 06:41	19° \mathcal{A} 22'20			8946 Oct 13 17:36	0° \cap	
	8945 Nov 23 02:09	0° \mathcal{B}		evening rise	8946 Oct 19 02:56	11° \cap 29'20	
evening max el	8945 Dec 08 07:23	18° \mathcal{B} 43'39	27°23'22		8946 Oct 28 18:40	0° \mathcal{A}	
retrograde	8945 Dec 21 21:03	26° \mathcal{B} 04'07		desc. node	8946 Nov 03 03:45	9° \mathcal{A} 00'43	
evening set	8945 Dec 28 19:14	23° \mathcal{B} 29'58			8946 Nov 19 01:04	0° \mathcal{B}	
min. Earth dist.	8946 Jan 01 14:47	20° \mathcal{B} 03'10	0.64314 AU	evening max el	8946 Nov 20 17:18	1° \mathcal{B} 39'01	27°27'26
inferior conj	8946 Jan 04 01:44	17° \mathcal{B} 27'19	-1°35'32	retrograde	8946 Dec 04 12:31	8° \mathcal{B} 55'36	
minimum elong	8946 Jan 04 04:42	17° \mathcal{B} 19'28	1°34'03	evening set	8946 Dec 11 14:28	6° \mathcal{B} 31'06	
asc. node	8946 Jan 08 20:27	13° \mathcal{B} 03'32		min. Earth dist.	8946 Dec 15 07:00	3° \mathcal{B} 32'35	0.62455 AU
morning rise	8946 Jan 10 15:51	12° \mathcal{B} 03'13		inferior conj	8946 Dec 18 04:19	0° \mathcal{B} 48'58	-2°46'19
direct	8946 Jan 13 03:57	11° \mathcal{B} 31'19		minimum elong	8946 Dec 18 09:40	0° \mathcal{B} 36'17	2°44'03
morning max el	8946 Jan 19 14:44	14° \mathcal{B} 53'12	17°52'12		8946 Dec 19 01:10	30° \mathcal{R} \mathcal{A}	
	8946 Jan 30 08:04	0° \approx		morning rise	8946 Dec 25 07:06	25° \mathcal{A} 42'10	
morning set	8946 Feb 05 15:00	10° \approx 33'11		asc. node	8946 Dec 26 17:31	25° \mathcal{A} 22'02	
desc. node	8946 Feb 12 06:09	21° \approx 39'35		direct	8946 Dec 27 13:41	25° \mathcal{A} 18'47	
	8946 Feb 17 08:20	0° \mathcal{H}		morning max el	8947 Jan 03 07:52	28° \mathcal{A} 45'42	17°48'18
					8947 Jan 04 12:03	0° \mathcal{B}	
superior conj	8946 Feb 18 22:58	2° \mathcal{H} 36'03	-0°47'37	morning set	8947 Jan 19 05:43	23° \mathcal{B} 24'02	
minimum elong	8946 Feb 18 17:36	2° \mathcal{H} 14'25	0°46'45		8947 Jan 22 23:19	0° \approx	
max. Earth dist.	8946 Feb 23 21:34	10° \mathcal{H} 28'56	1.44977 AU	desc. node	8947 Jan 30 03:02	12° \approx 20'46	
evening rise	8946 Mar 06 20:54	27° \mathcal{H} 33'04					
	8946 Mar 08 11:15	0° \mathcal{Y}		superior conj	8947 Jan 30 16:25	13° \approx 17'13	-0°04'09
greatest brilliancy	8946 Mar 21 16:40	19° \mathcal{Y} 51'21	-0.6m	minimum elong	8947 Jan 30 16:02	13° \approx 15'34	0°03'54
	8946 Mar 28 23:29	0° \mathcal{B}		behind sun begin	8947 Jan 30 07:19	12° \approx 38'49	
evening max el	8946 Apr 03 03:34	6° \mathcal{B} 04'46	20°12'09	behind sun end	8947 Jan 31 00:45	13° \approx 52'15	
asc. node	8946 Apr 06 19:09	9° \mathcal{B} 10'18		max. Earth dist.	8947 Feb 06 13:55	24° \approx 39'02	1.43741 AU
retrograde	8946 Apr 10 22:42	10° \mathcal{B} 36'13			8947 Feb 09 22:13	0° \mathcal{H}	
evening set	8946 Apr 14 20:02	9° \mathcal{B} 08'36		evening rise	8947 Feb 14 09:45	7° \mathcal{H} 01'15	
inferior conj	8946 Apr 20 03:51	3° \mathcal{B} 04'51	3°13'05		8947 Mar 01 18:17	0° \mathcal{Y}	
minimum elong	8946 Apr 20 02:36	3° \mathcal{B} 09'07	3°12'49	evening max el	8947 Mar 17 01:33	19° \mathcal{Y} 44'55	21°21'23
min. Earth dist.	8946 Apr 20 23:30	1° \mathcal{B} 58'01	0.67678 AU	asc. node	8947 Mar 24 16:17	24° \mathcal{Y} 49'41	
	8946 Apr 22 11:17	30° \mathcal{R} \mathcal{Y}		retrograde	8947 Mar 25 21:03	24° \mathcal{Y} 56'57	
morning rise	8946 Apr 25 08:55	26° \mathcal{Y} 47'35		evening set	8947 Mar 30 04:14	23° \mathcal{Y} 14'10	
direct	8946 May 01 02:11	24° \mathcal{Y} 14'34		inferior conj	8947 Apr 04 11:23	16° \mathcal{Y} 59'04	2°53'41
desc. node	8946 May 11 06:10	29° \mathcal{Y} 48'38		minimum elong	8947 Apr 04 09:26	17° \mathcal{Y} 05'49	2°53'14
	8946 May 11 10:57	0° \mathcal{B}		min. Earth dist.	8947 Apr 04 17:50	16° \mathcal{Y} 36'35	0.68298 AU
morning max el	8946 May 12 15:21	1° \mathcal{B} 09'50	24°40'13	morning rise	8947 Apr 09 14:26	10° \mathcal{Y} 45'10	
	8946 Jun 03 10:03	0° \cap		direct	8947 Apr 14 18:12	8° \mathcal{Y} 29'47	
morning set	8946 Jun 17 12:43	23° \cap 10'51		morning max el	8947 Apr 25 00:59	14° \mathcal{Y} 36'29	23°10'30
max. Earth dist.	8946 Jun 21 03:35	29° \cap 39'57	1.37323 AU	desc. node	8947 Apr 28 03:05	17° \mathcal{Y} 56'47	
	8946 Jun 21 07:59	0° \mathcal{B}			8947 May 07 13:12	0° \mathcal{B}	
					8947 May 27 08:42	0° \cap	
superior conj	8946 Jun 27 22:09	12° \mathcal{B} 26'04	-0°55'07	morning set	8947 May 29 18:27	3° \cap 58'50	
minimum elong	8946 Jun 28 01:36	12° \mathcal{B} 42'53	0°54'45	max. Earth dist.	8947 Jun 02 23:38	11° \cap 08'53	1.39572 AU
asc. node	8946 Jul 03 18:09	23° \mathcal{B} 59'00					
evening rise	8946 Jul 06 11:01	29° \mathcal{B} 23'58		superior conj	8947 Jun 10 16:02	24° \cap 53'08	-1°26'34
	8946 Jul 06 18:15	0° Ω		minimum elong	8947 Jun 10 21:25	25° \cap 18'02	1°26'04
evening max el	8946 Jul 23 06:16	26° Ω 49'57	19°20'42		8947 Jun 13 09:52	0° \mathcal{B}	
	8946 Jul 27 08:05	0° \cap		evening rise	8947 Jun 20 05:29	13° \mathcal{B} 01'42	
retrograde	8946 Aug 01 14:44	1° \cap 27'45		asc. node	8947 Jun 20 15:08	13° \mathcal{B} 48'06	
evening set	8946 Aug 03 11:13	1° \cap 17'37			8947 Jun 29 13:12	0° Ω	
desc. node	8946 Aug 07 05:15	0° \cap 01'38		evening max el	8947 Jul 06 07:59	9° Ω 01'13	18°35'36
	8946 Aug 07 06:37	30° \mathcal{R} Ω		retrograde	8947 Jul 14 06:02	12° Ω 57'46	
inferior conj	8946 Aug 12 02:06	27° Ω 09'25	-1°29'56	evening set	8947 Jul 16 07:40	12° Ω 42'32	
minimum elong	8946 Aug 11 22:05	27° Ω 16'00	1°28'31	inferior conj	8947 Jul 24 03:15	8° Ω 15'50	0°17'24

minimum elong	8947 Jul 24 03:54	8°Ω14'36	0°16'57	min. Earth dist.	8948 Jul 08 10:20	17°Ω07'39	0.59704 AU
desc. node	8947 Jul 25 02:23	7°Ω31'21		desc. node	8948 Jul 10 23:28	15°Ω09'04	
min. Earth dist.	8947 Jul 27 10:17	5°Ω45'41	0.57541 AU	morning rise	8948 Jul 12 05:06	14°Ω21'15	
morning rise	8947 Jul 31 20:36	3°Ω01'20		direct	8948 Jul 18 15:22	12°Ω25'00	
direct	8947 Aug 06 16:22	1°Ω36'05		morning max el	8948 Aug 01 23:43	20°Ω17'13	27°39'28
morning max el	8947 Aug 21 00:54	9°Ω10'57	26°44'59		8948 Aug 10 07:56	0°Ω	
	8947 Sep 05 20:28	0°Π			8948 Aug 28 17:03	0°Π	
asc. node	8947 Sep 16 14:51	19°Π45'36		asc. node	8948 Sep 02 11:46	9°Π36'36	
morning set	8947 Sep 19 13:18	25°Π51'49		morning set	8948 Sep 02 19:55	10°Π19'05	
	8947 Sep 21 11:32	0°Ω		max. Earth dist.	8948 Sep 09 03:55	24°Π01'16	1.31619 AU
superior conj	8947 Sep 26 11:30	11°Ω01'08	1°25'06	superior conj	8948 Sep 09 23:05	25°Π47'31	1°09'22
minimum elong	8947 Sep 26 09:28	10°Ω49'52	1°24'54	minimum elong	8948 Sep 09 20:51	25°Π35'04	1°08'58
max. Earth dist.	8947 Sep 26 18:01	11°Ω37'21	1.31687 AU		8948 Sep 11 20:36	0°Ω	
evening rise	8947 Oct 03 07:46	25°Ω57'32		evening rise	8948 Sep 16 16:50	10°Ω35'32	
	8947 Oct 05 06:16	0°Π			8948 Sep 26 12:47	0°Π	
desc. node	8947 Oct 21 00:53	28°Π02'34		desc. node	8948 Oct 06 22:02	16°Π13'12	
	8947 Oct 22 09:00	0°♂		evening max el	8948 Oct 14 19:32	25°Π16'51	25°55'58
evening max el	8947 Nov 02 22:08	13°♂52'59	26°58'22		8948 Oct 20 22:39	0°♂	
retrograde	8947 Nov 16 20:03	21°♂02'59		retrograde	8948 Oct 28 17:36	2°♂19'45	
evening set	8947 Nov 23 18:02	18°♂58'50		evening set	8948 Nov 04 01:05	0°♂45'40	
min. Earth dist.	8947 Nov 27 12:42	16°♂19'12	0.60396 AU		8948 Nov 05 11:41	30°Π	
inferior conj	8947 Nov 30 16:31	13°♂41'58	-3°57'03	min. Earth dist.	8948 Nov 08 08:17	28°Π10'20	0.58315 AU
minimum elong	8947 Nov 30 23:45	13°♂26'55	3°54'37	inferior conj	8948 Nov 11 10:51	25°Π56'06	-4°58'32
morning rise	8947 Dec 08 07:57	8°♂55'23		minimum elong	8948 Nov 11 17:49	25°Π43'29	4°56'56
direct	8947 Dec 10 12:17	8°♂36'57		morning rise	8948 Nov 19 12:52	21°Π31'58	
asc. node	8947 Dec 13 14:32	9°♂15'49		direct	8948 Nov 21 19:32	21°Π15'09	
morning max el	8947 Dec 17 21:44	12°♂17'49	18°03'12	asc. node	8948 Nov 29 11:33	24°Π39'21	
	8947 Dec 29 17:37	0°♂		morning max el	8948 Nov 30 04:36	25°Π18'50	18°38'33
morning set	8948 Jan 02 13:18	7°♂02'29			8948 Dec 04 04:27	0°♂	
				morning set	8948 Dec 16 08:30	21°♂12'42	
superior conj	8948 Jan 12 10:58	25°♂09'59	0°33'40		8948 Dec 20 21:10	0°♂	
minimum elong	8948 Jan 12 13:30	25°♂21'17	0°33'31				
	8948 Jan 15 05:01	0°≈		superior conj	8948 Dec 25 02:27	8°♂02'00	1°02'59
desc. node	8948 Jan 16 23:59	3°≈05'10		minimum elong	8948 Dec 25 05:46	8°♂17'32	1°02'47
max. Earth dist.	8948 Jan 20 01:49	8°≈17'15	1.41977 AU	max. Earth dist.	8949 Jan 01 09:39	21°♂15'35	1.39885 AU
evening rise	8948 Jan 25 12:25	17°≈10'55		desc. node	8949 Jan 02 20:57	23°♂48'45	
	8948 Feb 02 18:10	0°✕		evening rise	8949 Jan 05 12:00	28°♂16'53	
	8948 Feb 24 14:10	0°Υ			8949 Jan 06 12:41	0°≈	
evening max el	8948 Feb 27 18:55	3°Υ27'43	22°38'55		8949 Jan 26 06:47	0°✕	
retrograde	8948 Mar 08 17:30	9°Υ21'06		evening max el	8949 Feb 09 09:22	17°✕13'49	23°59'06
asc. node	8948 Mar 10 13:25	9°Υ04'25		retrograde	8949 Feb 20 10:44	23°✕43'48	
evening set	8948 Mar 13 11:47	7°Υ23'23		asc. node	8949 Feb 25 10:33	21°✕45'38	
inferior conj	8948 Mar 18 20:11	0°Υ59'57	2°24'38	evening set	8949 Feb 25 17:08	21°✕32'01	
minimum elong	8948 Mar 18 17:57	1°Υ07'42	2°24'02	min. Earth dist.	8949 Mar 02 10:51	16°✕03'24	0.68264 AU
min. Earth dist.	8948 Mar 18 14:24	1°Υ20'05	0.68489 AU	inferior conj	8949 Mar 03 04:23	15°✕03'52	1°46'40
	8948 Mar 19 13:30	30°Π		minimum elong	8949 Mar 03 02:19	15°✕10'55	1°46'02
morning rise	8948 Mar 23 23:59	24°✕50'56		morning rise	8949 Mar 08 11:32	9°✕01'12	
direct	8948 Mar 28 13:56	22°✕56'51		direct	8949 Mar 12 12:07	7°✕29'25	
morning max el	8948 Apr 06 13:59	28°✕11'29	21°43'16	morning max el	8949 Mar 20 09:42	11°✕58'16	20°25'35
	8948 Apr 08 07:18	0°Υ		desc. node	8949 Mar 31 20:53	26°✕25'30	
desc. node	8948 Apr 13 23:59	6°Υ53'35			8949 Apr 03 08:41	0°Υ	
	8948 Apr 30 04:20	0°♂		morning set	8949 Apr 18 00:25	22°Υ03'05	
morning set	8948 May 08 20:58	13°♂31'11			8949 Apr 23 02:27	0°♂	
max. Earth dist.	8948 May 14 23:35	23°♂27'12	1.41766 AU	max. Earth dist.	8949 Apr 27 07:07	6°♂40'56	1.43622 AU
	8948 May 18 21:06	0°Π					
superior conj	8948 May 22 14:45	6°Π26'28	-1°53'21	superior conj	8949 May 03 13:57	16°♂56'40	-2°09'54
minimum elong	8948 May 22 20:39	6°Π52'16	1°53'03	minimum elong	8949 May 03 17:02	17°♂09'25	2°09'59
evening rise	8948 Jun 02 11:56	26°Π03'16			8949 May 11 07:11	0°Π	
	8948 Jun 04 15:34	0°Ω		evening rise	8949 May 16 01:50	8°Π18'01	
asc. node	8948 Jun 06 12:11	3°Ω22'42		asc. node	8949 May 24 09:16	22°Π37'00	
evening max el	8948 Jun 18 17:14	21°Ω46'44	18°10'51		8949 May 29 04:08	0°Ω	
retrograde	8948 Jun 25 16:01	25°Ω17'31		evening max el	8949 Jun 02 06:08	4°Ω56'20	18°05'32
evening set	8948 Jun 28 01:18	24°Ω53'15		retrograde	8949 Jun 08 17:12	8°Ω17'11	
inferior conj	8948 Jul 05 01:56	20°Ω05'49	1°39'55	evening set	8949 Jun 11 10:04	7°Ω41'15	
minimum elong	8948 Jul 05 04:42	19°Ω59'38	1°38'47	inferior conj	8949 Jun 17 19:08	2°Ω34'06	2°35'16
				minimum elong	8949 Jun 17 21:56	2°Ω26'56	2°34'23

	8949 Jun 20 07:19	30° RII		inferior conj	8950 Jun 01 02:41	15° II 32'10	3°07'18
min. Earth dist.	8949 Jun 20 18:48	29° II 31'40	0.61951 AU	minimum elong	8950 Jun 01 04:28	15° II 27'03	3°06'49
morning rise	8949 Jun 24 07:46	26° II 29'43		min. Earth dist.	8950 Jun 03 12:39	12° II 46'37	0.64035 AU
desc. node	8949 Jun 27 20:32	24° II 38'28		morning rise	8950 Jun 07 02:39	9° II 17'14	
direct	8949 Jul 01 01:01	24° II 06'44		direct	8950 Jun 13 19:35	6° II 36'46	
	8949 Jul 12 22:45	0° S		desc. node	8950 Jun 14 17:35	6° II 39'31	
morning max el	8949 Jul 15 04:59	2° S 08'07	27°56'10	morning max el	8950 Jun 27 14:20	14° II 38'02	27°35'36
	8949 Aug 04 16:30	0° Q			8950 Jul 10 01:53	0° S	
morning set	8949 Aug 17 21:14	24° Q 28'37			8950 Jul 28 08:19	0° Q	
asc. node	8949 Aug 20 08:44	29° Q 37'24		morning set	8950 Aug 01 14:44	8° Q 12'25	
	8949 Aug 20 13:01	0° P		max. Earth dist.	8950 Aug 06 11:28	18° Q 07'03	1.32899 AU
max. Earth dist.	8949 Aug 23 11:08	6° P 15'28	1.32018 AU	asc. node	8950 Aug 07 05:39	19° Q 42'31	
superior conj	8949 Aug 25 08:51	10° P 24'52	0°48'48	superior conj	8950 Aug 09 14:45	24° Q 46'10	0°23'48
minimum elong	8949 Aug 25 06:53	10° P 14'05	0°48'20	minimum elong	8950 Aug 09 13:37	24° Q 40'05	0°23'24
evening rise	8949 Sep 01 04:06	25° P 17'21			8950 Aug 12 00:58	0° P	
	8949 Sep 03 09:33	0° L		evening rise	8950 Aug 16 15:34	9° P 55'51	
	8949 Sep 21 02:00	0° M			8950 Aug 26 22:52	0° L	
desc. node	8949 Sep 23 19:11	3° M 12'52		evening max el	8950 Sep 07 20:27	16° L 04'42	22°48'03
evening max el	8949 Sep 26 09:17	5° M 53'33	24°27'34	desc. node	8950 Sep 10 16:21	18° L 33'47	
retrograde	8949 Oct 10 03:32	12° M 48'01		retrograde	8950 Sep 21 01:21	22° L 40'14	
evening set	8949 Oct 15 07:47	11° M 48'37		evening set	8950 Sep 24 17:24	22° L 10'42	
min. Earth dist.	8949 Oct 20 20:10	8° M 59'04	0.56466 AU	min. Earth dist.	8950 Oct 02 04:31	18° L 49'09	0.55149 AU
inferior conj	8949 Oct 23 08:57	7° M 23'33	-5°35'06	inferior conj	8950 Oct 03 12:11	18° L 03'51	-5°27'05
minimum elong	8949 Oct 23 11:32	7° M 19'29	5°34'48	minimum elong	8950 Oct 03 07:04	18° L 11'10	5°26'29
morning rise	8949 Oct 31 17:25	3° M 21'21		morning rise	8950 Oct 11 22:43	14° L 15'17	
direct	8949 Nov 03 07:53	3° M 03'08		direct	8950 Oct 15 01:34	13° L 52'48	
morning max el	8949 Nov 13 00:55	7° M 38'58	19°35'57	morning max el	8950 Oct 26 08:15	19° L 10'09	20°55'43
asc. node	8949 Nov 16 08:32	11° M 18'48		asc. node	8950 Nov 03 05:31	28° L 57'49	
	8949 Nov 27 14:23	0° X			8950 Nov 03 21:30	0° M	
morning set	8949 Nov 30 11:31	5° X 43'35		morning set	8950 Nov 14 19:28	20° M 26'11	
					8950 Nov 19 09:27	0° X	
superior conj	8949 Dec 08 09:49	21° X 39'12	1°23'28				
minimum elong	8949 Dec 08 12:35	21° X 52'46	1°23'25	superior conj	8950 Nov 22 04:35	5° X 47'56	1°35'46
	8949 Dec 12 17:38	0° Z		minimum elong	8950 Nov 22 06:11	5° X 56'07	1°35'53
max. Earth dist.	8949 Dec 14 15:44	3° Z 35'17	1.37708 AU	max. Earth dist.	8950 Nov 27 00:28	15° X 30'23	1.35686 AU
evening rise	8949 Dec 18 09:02	10° Z 19'14		evening rise	8950 Dec 01 00:33	23° X 09'51	
desc. node	8949 Dec 20 17:58	14° Z 27'53			8950 Dec 04 18:41	0° Z	
	8949 Dec 30 06:19	0° \approx		desc. node	8950 Dec 07 15:00	4° Z 57'40	
	8950 Jan 21 21:51	0° H			8950 Dec 23 23:14	0° \approx	
evening max el	8950 Jan 22 22:35	1° H 02'06	25°15'21	evening max el	8951 Jan 05 11:44	14° \approx 48'02	26°20'39
retrograde	8950 Feb 03 23:44	8° H 00'08		retrograde	8951 Jan 18 07:47	22° \approx 03'18	
evening set	8950 Feb 09 18:44	5° H 36'08		evening set	8951 Jan 24 14:52	19° \approx 30'46	
asc. node	8950 Feb 12 07:40	3° H 02'03		min. Earth dist.	8951 Jan 28 18:41	15° \approx 11'28	0.66621 AU
min. Earth dist.	8950 Feb 14 05:00	0° H 42'18	0.67638 AU	inferior conj	8951 Jan 30 11:26	13° \approx 07'25	0°05'32
	8950 Feb 14 18:05	30° $\text{R}\approx$		minimum elong	8951 Jan 30 11:16	13° \approx 07'53	0°05'40
inferior conj	8950 Feb 15 10:08	29° \approx 07'46	1°00'11	transit middle	8951 Jan 30 11:16	13° \approx 07'53	0°05'40
minimum elong	8950 Feb 15 08:44	29° \approx 12'19	0°59'48	transit begin	8951 Jan 30 08:35	13° \approx 16'07	
morning rise	8950 Feb 20 23:04	23° \approx 13'00		transit end	8951 Jan 30 13:58	12° \approx 59'40	
direct	8950 Feb 24 11:18	22° \approx 02'13		asc. node	8951 Jan 30 04:46	13° \approx 27'48	
morning max el	8950 Mar 03 13:28	25° \approx 57'10	19°21'43	morning rise	8951 Feb 05 08:30	7° \approx 22'31	
	8950 Mar 07 03:56	0° H		direct	8951 Feb 08 09:50	6° \approx 29'49	
greatest brilliancy	8950 Mar 16 10:49	12° H 57'12	-0.7m	morning max el	8951 Feb 15 00:15	10° \approx 03'31	18°33'42
desc. node	8950 Mar 18 17:47	16° H 23'12			8951 Mar 01 09:05	0° H	
morning set	8950 Mar 27 23:35	0° Y 31'17		desc. node	8951 Mar 05 14:41	6° H 39'39	
	8950 Mar 27 15:29	0° Y		morning set	8951 Mar 07 17:48	10° H 01'25	
max. Earth dist.	8950 Apr 09 21:18	20° Y 37'41	1.44921 AU		8951 Mar 20 10:49	0° Y	
superior conj	8950 Apr 13 12:57	26° Y 25'05	-2°09'54	superior conj	8951 Mar 23 20:00	5° Y 17'37	-1°49'42
minimum elong	8950 Apr 13 09:21	26° Y 10'45	2°09'54	minimum elong	8951 Mar 23 10:50	4° Y 41'42	1°48'58
	8950 Apr 15 18:44	0° B		max. Earth dist.	8951 Mar 23 15:25	4° Y 59'38	1.45525 AU
evening rise	8950 Apr 27 18:37	19° B 36'56		evening rise	8951 Apr 08 11:47	29° Y 57'52	
	8950 May 04 00:43	0° II			8951 Apr 08 12:19	0° B	
asc. node	8950 May 11 06:20	11° II 23'48		greatest brilliancy	8951 Apr 17 03:18	13° B 41'10	-0.8m
evening max el	8950 May 16 19:23	18° II 21'14	18°18'51	asc. node	8951 Apr 28 03:26	29° B 34'47	
retrograde	8950 May 23 04:54	21° II 46'29			8951 Apr 28 11:58	0° II	
evening set	8950 May 26 05:06	20° II 57'13		evening max el	8951 Apr 30 06:23	1° II 55'41	18°50'03

retrograde	8951 May 06 23:06	5°♄38'04			8952 Mar 12 04:24	0°♄	
evening set	8951 May 10 06:53	4°♄34'26		evening rise	8952 Mar 18 08:20	9°♄32'29	
	8951 May 14 23:09	30°♄			8952 Mar 31 18:06	0°♄	
inferior conj	8951 May 15 20:44	28°♄53'12	3°20'42	greatest brilliancy	8952 Mar 31 19:58	0°♄06'54	-0.7m
minimum elong	8951 May 15 21:13	28°♄51'42	3°20'28	evening max el	8952 Apr 12 13:06	15°♄34'21	19°37'57
min. Earth dist.	8951 May 17 15:33	26°♄39'43	0.65790 AU	asc. node	8952 Apr 14 00:33	16°♄58'06	
morning rise	8951 May 21 10:56	22°♄34'24		retrograde	8952 Apr 19 20:39	19°♄44'59	
direct	8951 May 27 21:45	19°♄48'13		evening set	8952 Apr 23 12:46	18°♄26'18	
desc. node	8951 Jun 01 14:35	21°♄01'07		inferior conj	8952 Apr 28 22:02	12°♄30'27	3°19'23
morning max el	8951 Jun 10 00:55	27°♄36'04	26°43'38	minimum elong	8952 Apr 28 21:20	12°♄32'47	3°19'11
	8951 Jun 12 07:14	0°♄		min. Earth dist.	8952 Apr 30 01:54	10°♄58'01	0.67126 AU
	8951 Jul 03 18:40	0°♄		morning rise	8952 May 04 05:34	6°♄11'58	
morning set	8951 Jul 15 21:22	21°♄22'39		direct	8952 May 10 06:08	3°♄31'20	
max. Earth dist.	8951 Jul 20 01:42	29°♄30'59	1.34276 AU	desc. node	8952 May 18 11:32	7°♄12'25	
	8951 Jul 20 07:31	0°♄		morning max el	8952 May 22 10:43	10°♄49'46	25°29'07
					8952 Jun 06 16:38	0°♄	
superior conj	8951 Jul 24 14:37	8°♄45'55	-0°05'01		8952 Jun 25 10:08	0°♄	
minimum elong	8951 Jul 24 14:54	8°♄47'24	0°05'11	morning set	8952 Jun 27 13:03	3°♄48'01	
behind sun begin	8951 Jul 24 09:24	8°♄18'51		max. Earth dist.	8952 Jul 01 05:10	10°♄35'08	1.36113 AU
behind sun end	8951 Jul 24 20:23	9°♄15'59					
asc. node	8951 Jul 25 02:37	9°♄48'24		superior conj	8952 Jul 07 05:41	22°♄16'46	-0°36'30
evening rise	8951 Aug 01 01:24	24°♄25'57		minimum elong	8952 Jul 07 07:54	22°♄27'50	0°36'18
	8951 Aug 03 18:10	0°♄		asc. node	8952 Jul 10 23:36	29°♄50'57	
evening max el	8951 Aug 20 14:25	26°♄27'50	21°13'57		8952 Jul 11 01:22	0°♄	
	8951 Aug 24 22:58	0°♄		evening rise	8952 Jul 15 07:23	8°♄41'28	
desc. node	8951 Aug 28 13:27	1°♄44'38			8952 Jul 26 21:56	0°♄	
retrograde	8951 Sep 01 14:15	2°♄24'34		evening max el	8952 Aug 01 21:10	7°♄29'33	19°56'09
evening set	8951 Sep 03 23:58	2°♄11'07		retrograde	8952 Aug 12 04:35	12°♄35'13	
	8951 Sep 09 23:21	30°♄		evening set	8952 Aug 14 01:45	12°♄25'48	
inferior conj	8951 Sep 13 04:58	28°♄14'24	-4°23'12	desc. node	8952 Aug 14 10:34	12°♄21'50	
minimum elong	8951 Sep 12 19:20	28°♄27'57	4°20'41	inferior conj	8952 Aug 23 01:26	8°♄25'40	-2°37'10
min. Earth dist.	8951 Sep 13 13:03	28°♄03'02	0.54657 AU	minimum elong	8952 Aug 22 18:19	8°♄36'28	2°34'39
morning rise	8951 Sep 21 15:18	24°♄21'34		min. Earth dist.	8952 Aug 24 23:37	7°♄15'47	0.55127 AU
direct	8951 Sep 25 09:55	23°♄50'50		morning rise	8952 Aug 31 09:14	4°♄08'50	
morning max el	8951 Oct 08 03:28	29°♄54'39	22°34'02	direct	8952 Sep 04 22:32	3°♄23'30	
	8951 Oct 08 05:45	0°♄		morning max el	8952 Sep 18 15:54	10°♄09'38	24°20'32
asc. node	8951 Oct 21 02:28	17°♄22'50			8952 Oct 03 10:35	0°♄	
	8951 Oct 27 17:41	0°♄		asc. node	8952 Oct 06 23:24	6°♄22'30	
morning set	8951 Oct 30 06:13	5°♄14'32		morning set	8952 Oct 13 17:59	20°♄03'37	
					8952 Oct 18 07:58	0°♄	
superior conj	8951 Nov 06 07:15	20°♄18'09	1°40'45	superior conj	8952 Oct 20 15:06	5°♄01'29	1°39'13
minimum elong	8951 Nov 06 07:33	20°♄19'46	1°40'56	minimum elong	8952 Oct 20 14:16	4°♄56'52	1°39'20
max. Earth dist.	8951 Nov 09 16:27	27°♄24'21	1.34000 AU	max. Earth dist.	8952 Oct 22 16:50	9°♄31'08	1.32739 AU
	8951 Nov 10 22:46	0°♄		evening rise	8952 Oct 28 00:09	20°♄38'40	
evening rise	8951 Nov 14 06:48	6°♄39'31			8952 Nov 01 18:41	0°♄	
desc. node	8951 Nov 24 12:03	25°♄13'07		desc. node	8952 Nov 10 09:06	15°♄07'42	
	8951 Nov 27 09:52	0°♄			8952 Nov 20 09:54	0°♄	
evening max el	8951 Dec 19 00:56	28°♄24'14	27°07'35	evening max el	8952 Nov 30 12:55	11°♄39'30	27°29'06
	8951 Dec 20 18:41	0°♄		retrograde	8952 Dec 14 05:32	18°♄58'26	
retrograde	8952 Jan 01 10:00	5°♄45'27		evening set	8952 Dec 21 05:54	16°♄27'35	
evening set	8952 Jan 08 03:25	3°♄09'58		min. Earth dist.	8952 Dec 24 23:56	13°♄13'17	0.63553 AU
	8952 Jan 11 12:32	30°♄		inferior conj	8952 Dec 27 15:25	10°♄32'54	-2°05'08
min. Earth dist.	8952 Jan 12 01:42	29°♄24'24	0.65248 AU	minimum elong	8952 Dec 27 19:23	10°♄22'50	2°03'18
inferior conj	8952 Jan 14 06:03	26°♄57'45	-0°56'43	asc. node	8953 Jan 02 22:55	5°♄27'53	
minimum elong	8952 Jan 14 07:44	26°♄53'03	0°55'47	morning rise	8953 Jan 03 10:47	5°♄15'26	
asc. node	8952 Jan 17 01:51	23°♄58'13		direct	8953 Jan 05 20:13	4°♄47'33	
morning rise	8952 Jan 20 13:24	21°♄25'02		morning max el	8953 Jan 12 09:13	8°♄10'38	17°48'16
direct	8952 Jan 23 05:40	20°♄46'41			8953 Jan 26 22:14	0°♄	
morning max el	8952 Jan 29 15:47	24°♄10'19	18°02'21	morning set	8953 Jan 28 19:40	3°♄15'39	
	8952 Feb 03 10:58	0°♄		desc. node	8953 Feb 06 08:28	17°♄47'16	
morning set	8952 Feb 16 17:18	20°♄59'14					
desc. node	8952 Feb 20 11:33	27°♄08'56		superior conj	8953 Feb 10 07:36	24°♄20'56	-0°28'50
	8952 Feb 22 05:35	0°♄		minimum elong	8953 Feb 10 04:30	24°♄08'11	0°28'12
superior conj	8952 Mar 02 04:32	14°♄21'13	-1°12'44		8953 Feb 13 19:06	0°♄	
minimum elong	8952 Mar 01 20:22	13°♄48'55	1°11'40	max. Earth dist.	8953 Feb 16 05:33	3°♄54'02	1.44536 AU
max. Earth dist.	8952 Mar 05 10:56	19°♄30'04	1.45388 AU	evening rise	8953 Feb 25 19:41	18°♄53'00	

	8953 Mar 05 03:24	0°♿		desc. node	8954 Jan 24 05:23	8°♿30'18	
evening max el	8953 Mar 26 14:25	29°♿14'44	20°40'15	max. Earth dist.	8954 Jan 29 20:46	17°♿54'25	1.43052 AU
	8953 Mar 27 08:46	0°♿		evening rise	8954 Feb 05 13:05	28°♿35'55	
asc. node	8953 Mar 31 21:40	3°♿20'05			8954 Feb 06 10:36	0°♿	
retrograde	8953 Apr 03 19:13	4°♿02'20			8954 Feb 26 20:22	0°♿	
evening set	8953 Apr 07 20:40	2°♿28'14		evening max el	8954 Mar 09 10:20	12°♿56'01	21°53'33
	8953 Apr 10 08:28	30°♿		retrograde	8954 Mar 18 16:56	18°♿25'28	
inferior conj	8953 Apr 13 03:58	26°♿19'32	3°06'04	asc. node	8954 Mar 18 18:48	18°♿25'26	
minimum elong	8953 Apr 13 02:22	26°♿25'01	3°05'43	evening set	8954 Mar 23 04:49	16°♿36'01	
min. Earth dist.	8953 Apr 13 17:53	25°♿31'38	0.68009 AU	inferior conj	8954 Mar 28 12:17	10°♿16'56	2°42'28
morning rise	8953 Apr 18 07:51	20°♿03'43		minimum elong	8954 Mar 28 10:11	10°♿24'18	2°41'56
direct	8953 Apr 23 19:36	17°♿37'28		min. Earth dist.	8954 Mar 28 13:22	10°♿13'11	0.68439 AU
morning max el	8953 May 04 19:50	24°♿12'16	24°02'10	morning rise	8954 Apr 02 15:23	4°♿05'10	
desc. node	8953 May 05 08:29	24°♿44'38		direct	8954 Apr 07 13:14	1°♿58'47	
	8953 May 10 00:07	0°♿		morning max el	8954 Apr 17 06:37	7°♿42'37	22°32'36
	8953 May 31 02:52	0°♿		desc. node	8954 Apr 22 05:25	13°♿15'25	
morning set	8953 Jun 09 08:44	15°♿15'20			8954 May 04 14:12	0°♿	
max. Earth dist.	8953 Jun 13 02:17	21°♿47'27	1.38279 AU	morning set	8954 May 21 03:10	25°♿31'50	
	8953 Jun 17 14:31	0°♿		max. Earth dist.	8954 May 23 20:05	0°♿	
					8954 May 25 23:57	3°♿38'15	1.40534 AU
superior conj	8953 Jun 20 08:31	5°♿10'11	-1°08'46	superior conj	8954 Jun 02 18:52	17°♿15'58	-1°38'47
minimum elong	8953 Jun 20 12:52	5°♿30'54	1°08'18	minimum elong	8954 Jun 03 00:45	17°♿42'33	1°38'20
asc. node	8953 Jun 27 20:36	19°♿46'20			8954 Jun 09 16:31	0°♿	
evening rise	8953 Jun 29 06:59	22°♿35'38		evening rise	8954 Jun 12 20:54	5°♿59'53	
	8953 Jul 03 02:35	0°♿		asc. node	8954 Jun 14 17:38	9°♿30'15	
evening max el	8953 Jul 15 16:48	19°♿16'37	18°58'54		8954 Jun 27 07:43	0°♿	
retrograde	8953 Jul 24 09:09	23°♿34'59		evening max el	8954 Jun 28 22:11	1°♿43'42	18°22'34
evening set	8953 Jul 26 07:24	23°♿23'06		retrograde	8954 Jul 06 09:00	5°♿27'45	
desc. node	8953 Aug 01 07:42	20°♿39'40		evening set	8954 Jul 08 13:44	5°♿09'06	
inferior conj	8953 Aug 03 14:18	19°♿07'18	-0°41'54	inferior conj	8954 Jul 16 00:55	0°♿33'16	0°55'49
minimum elong	8953 Aug 03 12:31	19°♿10'24	0°41'23	minimum elong	8954 Jul 16 02:47	0°♿29'26	0°54'55
min. Earth dist.	8953 Aug 06 13:51	17°♿03'04	0.56472 AU		8954 Jul 16 17:04	30°♿	
morning rise	8953 Aug 11 14:29	14°♿14'12		desc. node	8954 Jul 19 04:49	27°♿58'30	
direct	8953 Aug 16 23:32	13°♿05'57		min. Earth dist.	8954 Jul 19 09:57	27°♿48'30	0.58426 AU
morning max el	8953 Aug 31 05:07	20°♿25'11	25°58'56	morning rise	8954 Jul 23 12:26	25°♿04'33	
	8953 Sep 08 11:02	0°♿		direct	8954 Jul 29 14:55	23°♿26'25	
asc. node	8953 Sep 23 20:20	25°♿47'33			8954 Aug 11 18:51	0°♿	
	8953 Sep 25 22:09	0°♿		morning max el	8954 Aug 13 00:19	1°♿09'42	27°12'42
morning set	8953 Sep 28 05:04	4°♿48'01			8954 Sep 02 15:17	0°♿	
				asc. node	8954 Sep 10 17:16	15°♿31'04	
superior conj	8953 Oct 05 01:53	19°♿50'28	1°31'49	morning set	8954 Sep 12 13:50	19°♿23'22	
minimum elong	8953 Oct 05 00:11	19°♿41'02	1°31'45		8954 Sep 17 11:18	0°♿	
max. Earth dist.	8953 Oct 05 23:37	21°♿50'33	1.31936 AU				
	8953 Oct 09 17:19	0°♿		superior conj	8954 Sep 19 13:43	4°♿39'32	1°19'02
evening rise	8953 Oct 12 01:32	4°♿58'03		minimum elong	8954 Sep 19 11:32	4°♿27'26	1°18'45
	8953 Oct 25 10:11	0°♿		max. Earth dist.	8954 Sep 19 09:29	4°♿16'03	1.31600 AU
desc. node	8953 Oct 28 06:12	4°♿31'59		evening rise	8954 Sep 26 08:26	19°♿31'04	
evening max el	8953 Nov 12 21:08	24°♿18'57	27°19'22		8954 Oct 01 11:13	0°♿	
	8953 Nov 20 16:05	0°♿		desc. node	8954 Oct 15 03:21	23°♿14'03	
retrograde	8953 Nov 26 17:26	1°♿32'04			8954 Oct 20 05:57	0°♿	
	8953 Dec 02 12:08	30°♿		evening max el	8954 Oct 25 22:50	6°♿11'02	26°35'34
evening set	8953 Dec 03 18:58	29°♿15'01		retrograde	8954 Nov 08 20:50	13°♿18'15	
min. Earth dist.	8953 Dec 07 11:36	26°♿26'06	0.61596 AU	evening set	8954 Nov 15 14:22	11°♿25'28	
inferior conj	8953 Dec 10 12:19	23°♿43'32	-3°16'43	min. Earth dist.	8954 Nov 19 12:31	8°♿50'06	0.59501 AU
minimum elong	8953 Dec 10 18:36	23°♿29'25	3°14'16	inferior conj	8954 Nov 22 17:14	6°♿20'21	-4°25'03
morning rise	8953 Dec 17 20:33	18°♿44'50		minimum elong	8954 Nov 23 00:45	6°♿05'38	4°22'50
direct	8953 Dec 20 01:52	18°♿23'50		morning rise	8954 Nov 30 13:37	1°♿43'30	
asc. node	8953 Dec 20 19:58	18°♿26'20		direct	8954 Dec 02 18:22	1°♿26'08	
morning max el	8953 Dec 27 01:21	21°♿55'20	17°52'18	asc. node	8954 Dec 07 16:59	2°♿59'08	
	8954 Jan 02 06:08	0°♿		morning max el	8954 Dec 10 12:42	5°♿15'12	18°15'44
morning set	8954 Jan 11 18:18	16°♿29'11		morning set	8954 Dec 26 07:18	0°♿22'03	
	8954 Jan 19 07:22	0°♿			8954 Dec 26 02:39	0°♿	
superior conj	8954 Jan 22 12:03	5°♿33'33	0°12'49	superior conj	8955 Jan 04 16:07	17°♿53'07	0°47'11
minimum elong	8954 Jan 22 13:12	5°♿38'31	0°12'52	minimum elong	8955 Jan 04 19:12	18°♿07'09	0°46'58
behind sun begin	8954 Jan 22 08:08	5°♿16'40		desc. node	8955 Jan 11 02:21	29°♿14'35	
behind sun end	8954 Jan 22 18:17	6°♿00'20					

	8955 Jan 11 12:57	0°♊		desc. node	8955 Dec 28 23:21	19°♊56'40	
max. Earth dist.	8955 Jan 12 06:44	1°♊15'48	1.41109 AU	evening rise	8955 Dec 29 08:59	20°♊38'03	
evening rise	8955 Jan 17 00:06	9°♊07'47			8956 Jan 03 23:46	0°♊	
	8955 Jan 30 11:48	0°♋			8956 Jan 24 13:58	0°♋	
evening max el	8955 Feb 20 02:02	26°♋39'20	23°13'00	evening max el	8956 Feb 02 15:41	10°♋26'25	24°32'31
	8955 Feb 23 20:09	0°♌		retrograde	8956 Feb 14 04:00	17°♋10'22	
retrograde	8955 Mar 02 12:18	2°♌49'41		evening set	8956 Feb 19 15:37	14°♋53'11	
asc. node	8955 Mar 05 15:56	2°♌00'55		asc. node	8956 Feb 20 13:02	14°♋04'04	
evening set	8955 Mar 07 11:39	0°♌45'37		min. Earth dist.	8956 Feb 24 06:01	9°♋39'08	0.68036 AU
	8955 Mar 08 07:35	30°♌		inferior conj	8956 Feb 25 04:28	8°♋24'08	1°28'00
inferior conj	8955 Mar 12 21:05	24°♌19'24	2°09'35	minimum elong	8956 Feb 25 02:37	8°♋30'20	1°27'27
minimum elong	8955 Mar 12 18:51	24°♌27'05	2°08'57	morning rise	8956 Mar 01 13:45	2°♌24'23	
min. Earth dist.	8955 Mar 12 10:10	24°♌57'04	0.68441 AU	direct	8956 Mar 05 08:52	1°♌01'50	
morning rise	8955 Mar 18 02:00	18°♌12'56		morning max el	8956 Mar 12 21:25	5°♌15'11	19°56'34
direct	8955 Mar 22 10:04	16°♌28'37		desc. node	8956 Mar 25 23:13	22°♌12'34	
morning max el	8955 Mar 30 22:20	21°♌22'54	21°08'44		8956 Mar 31 05:19	0°♌	
	8955 Apr 07 05:46	0°♌		morning set	8956 Apr 08 17:19	12°♌56'35	
desc. node	8955 Apr 09 02:19	2°♌28'29		max. Earth dist.	8956 Apr 19 12:57	29°♌52'26	1.44252 AU
	8955 Apr 27 20:09	0°♍			8956 Apr 19 14:51	0°♍	
morning set	8955 Apr 30 18:39	4°♍34'48					
max. Earth dist.	8955 May 08 02:52	16°♍20'10	1.42609 AU	superior conj	8956 Apr 24 20:42	8°♍26'21	-2°12'16
				minimum elong	8956 Apr 24 21:17	8°♍28'41	2°12'24
superior conj	8955 May 15 07:58	28°♍22'52	-2°01'59		8956 May 07 18:13	0°♎	
minimum elong	8955 May 15 13:12	28°♍45'10	2°01'53	evening rise	8956 May 08 02:26	0°♎35'06	
	8955 May 16 06:40	0°♎		asc. node	8956 May 18 11:46	18°♎00'43	
evening rise	8955 May 26 20:57	18°♎43'00		evening max el	8956 May 25 22:52	27°♎57'52	18°08'56
asc. node	8955 Jun 01 14:41	28°♎56'58			8956 May 28 09:55	0°♏	
	8955 Jun 02 05:13	0°♏		retrograde	8956 Jun 01 08:05	1°♏18'41	
evening max el	8955 Jun 12 09:23	14°♏40'21	18°06'14	evening set	8956 Jun 04 04:05	0°♏37'17	
retrograde	8955 Jun 19 02:04	18°♏05'18			8956 Jun 05 06:31	30°♏	
evening set	8955 Jun 21 14:27	17°♏36'31		inferior conj	8956 Jun 10 07:49	25°♏22'36	2°51'22
inferior conj	8955 Jun 28 08:00	12°♏40'39	2°06'31	minimum elong	8956 Jun 10 10:15	25°♏16'02	2°50'39
minimum elong	8955 Jun 28 10:58	12°♏33'35	2°05'26	min. Earth dist.	8956 Jun 13 02:10	22°♏24'49	0.62880 AU
min. Earth dist.	8955 Jul 01 13:39	9°♏37'30	0.60664 AU	morning rise	8956 Jun 16 14:47	19°♏12'49	
morning rise	8955 Jul 05 04:50	6°♏46'02		desc. node	8956 Jun 21 22:57	16°♏47'04	
desc. node	8955 Jul 06 01:54	6°♏14'08		direct	8956 Jun 23 08:54	16°♏40'39	
direct	8955 Jul 11 18:55	4°♏37'20		morning max el	8956 Jul 07 09:24	24°♏43'29	27°51'30
morning max el	8955 Jul 26 02:15	12°♏35'28	27°51'15		8956 Jul 12 04:17	0°♏	
	8955 Aug 08 21:23	0°♐			8956 Aug 01 07:46	0°♐	
	8955 Aug 25 22:46	0°♑		morning set	8956 Aug 10 16:43	17°♐42'42	
morning set	8955 Aug 27 18:26	3°♑43'35		asc. node	8956 Aug 14 11:09	25°♐29'34	
asc. node	8955 Aug 28 14:12	5°♑26'38		max. Earth dist.	8956 Aug 15 23:03	28°♐40'15	1.32334 AU
max. Earth dist.	8955 Sep 02 18:33	16°♑36'03	1.31727 AU		8956 Aug 16 13:55	0°♑	
superior conj	8955 Sep 04 00:44	19°♑22'24	1°01'13	superior conj	8956 Aug 18 09:06	3°♑53'31	0°38'42
minimum elong	8955 Sep 03 22:33	19°♑10'18	1°00'46	minimum elong	8956 Aug 18 07:25	3°♑44'22	0°38'14
	8955 Sep 08 20:20	0°♒		evening rise	8956 Aug 25 06:11	18°♑51'23	
evening rise	8955 Sep 10 18:38	4°♒10'41			8956 Aug 30 16:01	0°♒	
	8955 Sep 24 08:57	0°♓		desc. node	8956 Sep 17 21:39	27°♒18'02	
desc. node	8955 Oct 02 00:30	10°♓57'00		evening max el	8956 Sep 18 04:16	27°♒34'11	23°45'33
evening max el	8955 Oct 07 16:28	17°♓12'08	25°20'45		8956 Sep 20 22:45	0°♓	
retrograde	8955 Oct 21 14:04	24°♓12'55		retrograde	8956 Oct 01 18:44	4°♓22'12	
evening set	8955 Oct 27 11:19	22°♓53'26		evening set	8956 Oct 06 07:44	3°♓37'09	
min. Earth dist.	8955 Nov 01 04:29	20°♓14'12	0.57475 AU	min. Earth dist.	8956 Oct 12 14:38	0°♓35'42	0.55817 AU
inferior conj	8955 Nov 04 03:01	18°♓14'29	-5°18'18		8956 Oct 13 14:33	30°♓	
minimum elong	8955 Nov 04 08:42	18°♓04'48	5°17'18	inferior conj	8956 Oct 14 16:33	29°♓20'49	-5°38'16
morning rise	8955 Nov 12 08:25	14°♓00'17		minimum elong	8956 Oct 14 15:59	29°♓21'40	5°38'09
direct	8955 Nov 14 17:30	13°♓43'24		morning rise	8956 Oct 23 02:14	25°♓25'35	
morning max el	8955 Nov 23 15:32	17°♓59'52	19°00'17	direct	8956 Oct 25 21:28	25°♓05'53	
asc. node	8955 Nov 24 13:59	18°♓56'22			8956 Nov 05 06:48	0°♓	
	8955 Dec 02 10:19	0°♈		morning max el	8956 Nov 05 06:24	29°♓59'04	20°07'17
morning set	8955 Dec 10 06:11	14°♈41'30		asc. node	8956 Nov 10 10:58	6°♓02'39	
	8955 Dec 18 01:14	0°♉		morning set	8956 Nov 23 11:34	29°♓17'42	
					8956 Nov 23 19:51	0°♈	
superior conj	8955 Dec 18 14:55	1°♉05'40	1°12'43				
minimum elong	8955 Dec 18 18:07	1°♉20'58	1°12'34	superior conj	8956 Dec 01 03:33	14°♈56'56	1°29'38
max. Earth dist.	8955 Dec 25 12:43	13°♉53'51	1.38945 AU	minimum elong	8956 Dec 01 05:51	15°♈08'30	1°29'40

max. Earth dist.	8956 Dec 06 19:13	25°♄59'50	1.36813 AU	morning set	8957 Nov 07 20:59	14°♎03'53	
	8956 Dec 08 22:33	0°♄					
evening rise	8956 Dec 10 14:18	3°♄01'51		superior conj	8957 Nov 15 02:04	29°♎16'00	1°38'43
desc. node	8956 Dec 14 20:21	10°♄32'07		minimum elong	8957 Nov 15 03:06	29°♎21'27	1°38'53
	8956 Dec 27 00:51	0°♄			8957 Nov 15 10:30	0°♄	
evening max el	8957 Jan 15 04:57	24°♄14'46	25°45'06	max. Earth dist.	8957 Nov 19 07:07	7°♄54'02	1.34924 AU
	8957 Jan 22 16:19	0°♄		evening rise	8957 Nov 23 12:35	16°♄10'28	
retrograde	8957 Jan 27 14:55	1°♄21'15			8957 Dec 01 04:07	0°♄	
	8957 Feb 01 02:31	30°♄		desc. node	8957 Dec 01 17:24	0°♄56'39	
evening set	8957 Feb 02 15:04	28°♄53'24			8957 Dec 21 12:40	0°♄	
asc. node	8957 Feb 06 10:09	24°♄52'43		evening max el	8957 Dec 28 18:19	7°♄57'59	26°43'18
min. Earth dist.	8957 Feb 06 22:36	24°♄14'05	0.67245 AU	retrograde	8958 Jan 10 20:18	15°♄16'08	
inferior conj	8957 Feb 08 08:33	22°♄26'33	0°38'01	evening set	8958 Jan 17 08:12	12°♄41'38	
minimum elong	8957 Feb 08 07:36	22°♄29'33	0°37'48	min. Earth dist.	8958 Jan 21 09:38	8°♄36'56	0.66084 AU
morning rise	8957 Feb 14 00:38	16°♄35'28		inferior conj	8958 Jan 23 07:17	6°♄22'33	-0°19'59
direct	8957 Feb 17 08:06	15°♄32'37		minimum elong	8958 Jan 23 07:50	6°♄20'56	0°19'32
morning max el	8957 Feb 24 04:15	19°♄17'05	18°59'18	asc. node	8958 Jan 24 07:13	5°♄12'43	
	8957 Mar 04 15:39	0°♄		morning rise	8958 Jan 29 08:28	0°♄42'29	
greatest brilliancy	8957 Mar 10 02:52	8°♄08'50	-0.8m		8958 Jan 31 10:02	30°♄	
desc. node	8957 Mar 12 20:05	12°♄18'43		direct	8958 Feb 01 05:49	29°♄56'14	
morning set	8957 Mar 18 22:12	21°♄44'21			8958 Feb 02 01:44	0°♄	
	8957 Mar 24 05:39	0°♄		morning max el	8958 Feb 07 17:19	3°♄23'58	18°18'19
max. Earth dist.	8957 Apr 02 05:13	14°♄02'09	1.45271 AU		8958 Feb 26 00:50	0°♄	
				morning set	8958 Feb 27 04:31	1°♄51'01	
superior conj	8957 Apr 04 11:17	17°♄34'48	-2°03'48	desc. node	8958 Feb 27 16:58	2°♄40'54	
minimum elong	8957 Apr 04 04:43	17°♄08'58	2°03'31				
	8957 Apr 12 06:51	0°♄		superior conj	8958 Mar 14 16:21	26°♄24'22	-1°35'33
evening rise	8957 Apr 19 09:11	11°♄28'32		minimum elong	8958 Mar 14 06:46	25°♄46'48	1°34'34
	8957 Apr 30 21:04	0°♄		max. Earth dist.	8958 Mar 16 00:43	28°♄31'05	1.45561 AU
asc. node	8957 May 05 08:50	6°♄33'28			8958 Mar 16 23:27	0°♄	
evening max el	8957 May 09 11:32	11°♄27'57	18°30'00	evening rise	8958 Mar 30 16:40	21°♄26'50	
retrograde	8957 May 15 22:54	14°♄58'33			8958 Apr 05 03:48	0°♄	
evening set	8957 May 19 02:23	14°♄03'08		greatest brilliancy	8958 Apr 10 13:10	8°♄21'22	-0.8m
inferior conj	8957 May 24 20:16	8°♄31'03	3°14'58	asc. node	8958 Apr 22 05:56	24°♄25'22	
minimum elong	8957 May 24 21:30	8°♄27'22	3°14'37	evening max el	8958 Apr 22 20:53	25°♄04'15	19°08'29
min. Earth dist.	8957 May 26 23:49	5°♄57'50	0.64838 AU	retrograde	8958 Apr 29 18:55	28°♄57'19	
morning rise	8957 May 30 15:45	2°♄14'07		evening set	8958 May 03 06:14	27°♄47'09	
	8957 Jun 03 09:33	30°♄		inferior conj	8958 May 08 17:45	21°♄59'16	3°21'46
direct	8957 Jun 06 06:51	29°♄29'49		minimum elong	8958 May 08 17:42	21°♄59'24	3°21'34
desc. node	8957 Jun 08 19:57	29°♄51'08		min. Earth dist.	8958 May 10 05:59	20°♄02'52	0.66412 AU
	8957 Jun 09 07:55	0°♄		morning rise	8958 May 14 04:45	15°♄40'19	
morning max el	8957 Jun 19 19:25	7°♄26'14	27°16'47	direct	8958 May 20 11:31	12°♄55'35	
	8957 Jul 07 05:10	0°♄		desc. node	8958 May 26 16:55	15°♄02'54	
	8957 Jul 24 14:53	0°♄		morning max el	8958 Jun 02 05:55	20°♄32'19	26°14'13
morning set	8957 Jul 25 06:03	1°♄13'29			8958 Jun 10 09:11	0°♄	
max. Earth dist.	8957 Jul 29 19:26	10°♄20'35	1.33431 AU		8958 Jun 30 08:42	0°♄	
asc. node	8957 Aug 01 08:07	15°♄35'44		morning set	8958 Jul 08 06:54	14°♄06'03	
				max. Earth dist.	8958 Jul 12 05:20	21°♄35'58	1.35011 AU
					8958 Jul 16 10:38	0°♄	
superior conj	8957 Aug 02 12:47	18°♄06'59	0°12'00				
minimum elong	8957 Aug 02 12:11	18°♄03'47	0°11'42	superior conj	8958 Jul 17 09:17	1°♄55'20	-0°18'07
behind sun begin	8957 Aug 02 08:22	17°♄43'33		minimum elong	8958 Jul 17 10:20	2°♄00'43	0°18'07
behind sun end	8957 Aug 02 16:00	18°♄24'02		asc. node	8958 Jul 19 05:04	5°♄40'35	
	8957 Aug 08 02:11	0°♄		evening rise	8958 Jul 25 01:46	17°♄52'39	
evening rise	8957 Aug 09 17:15	3°♄27'37			8958 Jul 31 03:53	0°♄	
	8957 Aug 24 06:24	0°♄		evening max el	8958 Aug 12 16:22	18°♄23'55	20°38'22
evening max el	8957 Aug 30 17:26	7°♄46'56	22°06'30	desc. node	8958 Aug 22 15:55	23°♄55'32	
desc. node	8957 Sep 04 18:46	11°♄48'03		retrograde	8958 Aug 23 23:38	23°♄59'59	
retrograde	8957 Sep 12 11:28	14°♄07'36		evening set	8958 Aug 26 01:53	23°♄49'14	
evening set	8957 Sep 15 13:08	13°♄46'40		inferior conj	8958 Sep 04 06:28	19°♄52'23	-3°41'34
min. Earth dist.	8957 Sep 23 22:32	10°♄07'23	0.54831 AU	minimum elong	8958 Sep 03 21:10	20°♄05'45	3°38'42
inferior conj	8957 Sep 24 13:56	9°♄45'47	-5°06'40	min. Earth dist.	8958 Sep 05 07:29	19°♄16'25	0.54742 AU
minimum elong	8957 Sep 24 06:05	9°♄56'48	5°05'14	morning rise	8958 Sep 12 16:14	15°♄51'51	
morning rise	8957 Oct 03 00:34	5°♄58'08		direct	8958 Sep 16 18:19	15°♄16'05	
direct	8957 Oct 06 10:07	5°♄32'30		morning max el	8958 Sep 29 23:38	21°♄38'09	23°19'15
morning max el	8957 Oct 18 08:05	11°♄09'06	21°35'44		8958 Oct 07 05:09	0°♄	
asc. node	8957 Oct 28 07:56	24°♄03'01		asc. node	8958 Oct 15 04:53	12°♄43'50	
	8957 Oct 31 18:26	0°♄					

morning set	8958 Oct 23 08:24	28° Ω 53'15		morning max el	8959 Sep 11 11:50	1° Π 50'34	25°04'19
	8958 Oct 23 20:57	0° \mathbb{M}			8959 Oct 01 01:47	0° Ω	
superior conj	8958 Oct 30 07:16	13° \mathbb{M} 52'39	1°40'51	asc. node	8959 Oct 02 01:50	1° Ω 55'07	
minimum elong	8958 Oct 30 07:03	13° \mathbb{M} 51'31	1°41'01	morning set	8959 Oct 07 20:05	13° Ω 40'51	
max. Earth dist.	8958 Nov 02 02:49	19° \mathbb{M} 52'41	1.33410 AU	superior conj	8959 Oct 14 16:40	28° Ω 39'18	1°36'47
evening rise	8958 Nov 06 23:58	29° \mathbb{M} 53'18		minimum elong	8959 Oct 14 15:24	28° Ω 32'25	1°36'49
	8958 Nov 07 01:19	0° \mathbb{A}			8959 Oct 15 07:22	0° \mathbb{M}	
desc. node	8958 Nov 18 14:28	21° \mathbb{A} 03'57		max. Earth dist.	8959 Oct 16 06:05	2° \mathbb{M} 04'10	1.32341 AU
	8958 Nov 24 05:39	0° \mathbb{B}		evening rise	8959 Oct 21 21:07	14° \mathbb{M} 01'49	
evening max el	8958 Dec 11 07:04	21° \mathbb{B} 25'46	27°20'06		8959 Oct 30 03:31	0° \mathbb{A}	
retrograde	8958 Dec 24 19:42	28° \mathbb{B} 46'49		desc. node	8959 Nov 05 11:34	10° \mathbb{A} 46'37	
evening set	8958 Dec 31 16:48	26° \mathbb{B} 11'57			8959 Nov 19 11:11	0° \mathbb{B}	
min. Earth dist.	8959 Jan 04 12:57	22° \mathbb{B} 40'29	0.64566 AU	evening max el	8959 Nov 23 17:34	4° \mathbb{B} 26'24	27°28'56
inferior conj	8959 Jan 06 22:17	20° \mathbb{B} 06'35	-1°25'07	retrograde	8959 Dec 07 12:21	11° \mathbb{B} 43'59	
minimum elong	8959 Jan 07 00:53	19° \mathbb{B} 59'33	1°23'48	evening set	8959 Dec 14 14:03	9° \mathbb{B} 17'31	
asc. node	8959 Jan 11 04:18	16° \mathbb{B} 02'11		min. Earth dist.	8959 Dec 18 06:50	6° \mathbb{B} 15'05	0.62742 AU
morning rise	8959 Jan 13 10:36	14° \mathbb{B} 40'17		inferior conj	8959 Dec 21 02:43	3° \mathbb{B} 31'51	-2°35'28
direct	8959 Jan 15 23:42	14° \mathbb{B} 06'52		minimum elong	8959 Dec 21 07:44	3° \mathbb{B} 19'47	2°33'18
morning max el	8959 Jan 22 10:05	17° \mathbb{B} 28'53	17°54'17		8959 Dec 25 03:49	30° \mathbb{R} \mathbb{A}	
	8959 Jan 31 14:03	0° \approx		morning rise	8959 Dec 28 03:35	28° \mathbb{A} 22'11	
morning set	8959 Feb 08 16:06	13° \approx 24'01		asc. node	8959 Dec 29 01:22	28° \mathbb{A} 06'49	
desc. node	8959 Feb 14 13:53	23° \approx 14'22		direct	8959 Dec 30 10:44	27° \mathbb{A} 57'49	
	8959 Feb 18 16:59	0° \mathbb{H}			8960 Jan 04 13:36	0° \mathbb{B}	
superior conj	8959 Feb 22 07:12	5° \mathbb{H} 47'36	-0°54'20	morning max el	8960 Jan 06 03:26	1° \mathbb{B} 23'36	17°47'43
minimum elong	8959 Feb 22 01:02	5° \mathbb{H} 22'54	0°53'22	morning set	8960 Jan 22 03:53	26° \mathbb{B} 06'29	
max. Earth dist.	8959 Feb 26 20:15	13° \mathbb{H} 00'46	1.45103 AU		8960 Jan 24 09:01	0° \approx	
	8959 Mar 09 18:22	0° \mathbb{Y}		desc. node	8960 Feb 01 10:49	13° \approx 54'49	
evening rise	8959 Mar 10 07:31	0° \mathbb{Y} 50'29		superior conj	8960 Feb 02 20:53	16° \approx 17'45	-0°10'29
greatest brilliancy	8959 Mar 25 03:42	23° \mathbb{Y} 13'29	-0.6m	minimum elong	8960 Feb 02 19:50	16° \approx 13'25	0°10'08
	8959 Mar 29 22:15	0° \mathbb{B}		behind sun begin	8960 Feb 02 12:42	15° \approx 43'32	
evening max el	8959 Apr 06 01:17	8° \mathbb{B} 43'18	20°02'52	behind sun end	8960 Feb 03 02:59	16° \approx 43'14	
asc. node	8959 Apr 09 03:02	11° \mathbb{B} 24'20		max. Earth dist.	8960 Feb 09 13:06	27° \approx 14'08	1.43963 AU
retrograde	8959 Apr 13 17:19	13° \mathbb{B} 09'16			8960 Feb 11 06:33	0° \mathbb{H}	
evening set	8959 Apr 17 13:13	11° \mathbb{B} 44'02		evening rise	8960 Feb 17 19:30	10° \mathbb{H} 15'18	
inferior conj	8959 Apr 22 21:20	5° \mathbb{B} 42'14	3°15'06		8960 Mar 01 22:42	0° \mathbb{Y}	
minimum elong	8959 Apr 22 20:13	5° \mathbb{B} 46'01	3°14'51	evening max el	8960 Mar 19 00:09	22° \mathbb{Y} 23'19	21°10'27
min. Earth dist.	8959 Apr 23 19:05	4° \mathbb{B} 28'38	0.67546 AU	asc. node	8960 Mar 26 00:10	27° \mathbb{Y} 15'13	
	8959 Apr 27 12:02	30° \mathbb{R} \mathbb{Y}		retrograde	8960 Mar 27 15:47	27° \mathbb{Y} 28'59	
morning rise	8959 Apr 28 02:56	29° \mathbb{Y} 24'28		evening set	8960 Mar 31 21:24	25° \mathbb{Y} 48'30	
direct	8959 May 03 22:07	26° \mathbb{Y} 49'14		inferior conj	8960 Apr 06 04:32	19° \mathbb{Y} 35'03	2°57'14
	8959 May 11 08:40	0° \mathbb{B}		minimum elong	8960 Apr 06 02:40	19° \mathbb{Y} 41'31	2°56'50
desc. node	8959 May 13 13:52	1° \mathbb{B} 51'43		min. Earth dist.	8960 Apr 06 12:56	19° \mathbb{Y} 05'54	0.68237 AU
morning max el	8959 May 15 15:33	3° \mathbb{B} 51'16	24°53'12	morning rise	8960 Apr 11 07:43	13° \mathbb{Y} 20'33	
	8959 Jun 04 15:33	0° \mathbb{II}		direct	8960 Apr 16 13:35	11° \mathbb{Y} 02'06	
morning set	8959 Jun 20 14:50	26° \mathbb{II} 09'08		morning max el	8960 Apr 27 00:56	17° \mathbb{Y} 16'21	23°23'51
	8959 Jun 22 18:22	0° \mathbb{E}		desc. node	8960 Apr 29 10:48	19° \mathbb{Y} 50'43	
max. Earth dist.	8959 Jun 24 05:34	2° \mathbb{E} 40'42	1.37002 AU		8960 May 07 14:30	0° \mathbb{B}	
superior conj	8959 Jun 30 19:38	15° \mathbb{E} 11'29	-0°50'13		8960 May 27 16:56	0° \mathbb{II}	
minimum elong	8959 Jun 30 22:46	15° \mathbb{E} 26'49	0°49'53	morning set	8960 Jun 01 00:20	7° \mathbb{II} 07'27	
asc. node	8959 Jul 06 02:04	25° \mathbb{E} 40'41		max. Earth dist.	8960 Jun 05 01:25	14° \mathbb{II} 03'10	1.39237 AU
	8959 Jul 08 05:31	0° \mathbb{Q}		superior conj	8960 Jun 12 16:00	27° \mathbb{II} 45'31	-1°22'00
evening rise	8959 Jul 09 05:27	2° \mathbb{Q} 00'22		minimum elong	8960 Jun 12 21:09	28° \mathbb{II} 09'30	1°21'30
evening max el	8959 Jul 26 04:50	29° \mathbb{Q} 45'11	19°29'12		8960 Jun 13 20:47	0° \mathbb{E}	
	8959 Jul 26 10:54	0° \mathbb{P}		asc. node	8960 Jun 21 23:05	15° \mathbb{E} 31'24	
retrograde	8959 Aug 04 19:10	4° \mathbb{P} 29'57		evening rise	8960 Jun 22 01:20	15° \mathbb{E} 42'18	
evening set	8959 Aug 06 15:25	4° \mathbb{P} 20'12			8960 Jun 29 17:42	0° \mathbb{Q}	
desc. node	8959 Aug 09 13:01	3° \mathbb{P} 28'45		evening max el	8960 Jul 08 05:09	11° \mathbb{Q} 50'30	18°41'01
inferior conj	8959 Aug 15 08:52	0° \mathbb{P} 14'27	-1°47'29	retrograde	8960 Jul 16 07:32	15° \mathbb{Q} 52'05	
minimum elong	8959 Aug 15 04:00	0° \mathbb{P} 22'14	1°45'46	evening set	8960 Jul 18 08:13	15° \mathbb{Q} 37'50	
	8959 Aug 15 17:50	30° \mathbb{R} \mathbb{Q}		inferior conj	8960 Jul 26 06:47	11° \mathbb{Q} 14'07	0°02'32
min. Earth dist.	8959 Aug 17 19:43	28° \mathbb{Q} 40'17	0.55605 AU	minimum elong	8960 Jul 26 06:52	11° \mathbb{Q} 13'57	0°02'18
morning rise	8959 Aug 23 14:04	25° \mathbb{Q} 42'26		transit middle	8960 Jul 26 06:52	11° \mathbb{Q} 13'57	0°02'18
direct	8959 Aug 28 11:32	24° \mathbb{Q} 48'30		transit begin	8960 Jul 26 03:15	11° \mathbb{Q} 20'42	
	8959 Sep 09 10:10	0° \mathbb{P}		transit end	8960 Jul 26 10:29	11° \mathbb{Q} 07'10	

desc. node	8960 Jul 26 10:07	11° Ω 07'52		desc. node	8961 Jul 13 07:13	18° Ω 36'26	
min. Earth dist.	8960 Jul 29 12:25	8° Ω 50'06	0.57250 AU	morning rise	8961 Jul 15 07:45	17° Ω 16'53	
morning rise	8960 Aug 03 02:01	6° Ω 05'04		direct	8961 Jul 21 16:14	15° Ω 25'21	
direct	8960 Aug 08 19:15	4° Ω 44'17		morning max el	8961 Aug 05 00:56	23° Ω 15'14	27°33'47
morning max el	8960 Aug 23 03:06	12° Ω 15'20	26°33'58		8961 Aug 11 01:46	0° Ω	
	8960 Sep 05 23:57	0° Π			8961 Aug 30 03:18	0° Π	
asc. node	8960 Sep 17 22:48	21° Π 28'47		asc. node	8961 Sep 04 19:43	11° Π 17'57	
morning set	8960 Sep 21 06:25	28° Π 22'01		morning set	8961 Sep 05 13:37	12° Π 51'23	
	8960 Sep 22 00:46	0° Ξ		max. Earth dist.	8961 Sep 12 00:35	26° Π 51'48	1.31599 AU
superior conj	8960 Sep 28 04:09	13° Ξ 29'25	1°27'03	superior conj	8961 Sep 12 15:50	28° Π 16'27	1°12'05
minimum elong	8960 Sep 28 02:12	13° Ξ 18'33	1°26'53	minimum elong	8961 Sep 12 13:36	28° Π 04'00	1°11'43
max. Earth dist.	8960 Sep 28 14:30	14° Ξ 26'46	1.31737 AU		8961 Sep 13 10:29	0° Ξ	
evening rise	8960 Oct 05 01:10	28° Ξ 28'16		evening rise	8961 Sep 19 09:43	13° Ξ 05'05	
	8960 Oct 05 18:40	0° Π			8961 Sep 27 20:53	0° Π	
desc. node	8960 Oct 22 08:41	29° Π 54'47		desc. node	8961 Oct 09 05:49	18° Π 14'08	
	8960 Oct 22 10:04	0° Ξ		evening max el	8961 Oct 17 22:06	28° Π 19'10	26°07'10
evening max el	8960 Nov 04 23:30	16° Ξ 47'54	27°04'57		8961 Oct 19 19:09	0° Ξ	
retrograde	8960 Nov 18 21:07	23° Ξ 58'33		retrograde	8961 Oct 31 20:06	5° Ξ 22'54	
evening set	8960 Nov 25 20:16	21° Ξ 50'53		evening set	8961 Nov 07 06:40	3° Ξ 43'44	
min. Earth dist.	8960 Nov 29 14:12	19° Ξ 09'10	0.60707 AU	min. Earth dist.	8961 Nov 11 11:02	1° Ξ 09'02	0.58620 AU
inferior conj	8960 Dec 02 17:21	16° Ξ 30'07	-3°46'41		8961 Nov 13 01:01	30° Π	
minimum elong	8960 Dec 03 00:24	16° Ξ 15'10	3°44'12	inferior conj	8961 Nov 14 14:32	28° Π 50'19	-4°50'24
morning rise	8960 Dec 10 06:58	11° Ξ 40'11		minimum elong	8961 Nov 14 21:46	28° Π 36'58	4°48'37
direct	8960 Dec 12 11:25	11° Ξ 21'10		morning rise	8961 Nov 22 15:13	24° Π 22'49	
asc. node	8960 Dec 14 22:25	11° Ξ 46'15		direct	8961 Nov 24 21:16	24° Π 05'55	
morning max el	8960 Dec 19 18:01	14° Ξ 59'26	17°59'44	asc. node	8961 Dec 01 19:27	26° Π 56'39	
	8960 Dec 30 02:00	0° Ξ		morning max el	8961 Dec 03 02:08	28° Π 05'24	18°31'55
morning set	8961 Jan 04 09:22	9° Ξ 39'19			8961 Dec 04 21:10	0° Ξ	
superior conj	8961 Jan 14 11:56	28° Ξ 00'34	0°28'26	morning set	8961 Dec 19 03:04	23° Ξ 45'15	
minimum elong	8961 Jan 14 14:11	28° Ξ 10'29	0°28'19		8961 Dec 22 08:42	0° Ξ	
	8961 Jan 15 15:10	0° \approx		superior conj	8961 Dec 28 00:36	10° Ξ 44'26	0°59'06
desc. node	8961 Jan 18 07:47	4° \approx 39'04		minimum elong	8961 Dec 28 03:54	10° Ξ 59'48	0°58'53
max. Earth dist.	8961 Jan 22 01:58	10° \approx 58'49	1.42271 AU	max. Earth dist.	8962 Jan 04 10:29	24° Ξ 03'47	1.40210 AU
evening rise	8961 Jan 27 19:33	20° \approx 17'44		desc. node	8962 Jan 05 04:46	25° Ξ 22'47	
	8961 Feb 03 00:59	0° H			8962 Jan 07 21:59	0° \approx	
	8961 Feb 24 08:37	0° Υ		evening rise	8962 Jan 08 15:49	1° \approx 14'34	
evening max el	8961 Mar 01 18:12	6° Υ 05'47	22°27'00		8962 Jan 27 09:50	0° H	
retrograde	8961 Mar 11 12:33	11° Υ 52'46		evening max el	8962 Feb 12 08:54	19° H 51'03	23°47'11
asc. node	8961 Mar 12 21:17	11° Υ 43'28		retrograde	8962 Feb 23 06:19	26° H 16'03	
evening set	8961 Mar 16 05:10	9° Υ 57'12		asc. node	8962 Feb 27 18:24	24° H 38'55	
inferior conj	8961 Mar 21 13:17	3° Υ 34'52	2°29'36	evening set	8962 Feb 28 10:56	24° H 06'06	
minimum elong	8961 Mar 21 11:04	3° Υ 42'34	2°29'02	min. Earth dist.	8962 Mar 05 05:49	18° H 32'26	0.68326 AU
min. Earth dist.	8961 Mar 21 09:16	3° Υ 48'51	0.68495 AU	inferior conj	8962 Mar 05 21:41	17° H 38'22	1°52'59
	8961 Mar 24 05:44	30° H		minimum elong	8962 Mar 05 19:33	17° H 45'37	1°52'21
morning rise	8961 Mar 26 16:50	27° H 25'08		morning rise	8962 Mar 11 04:10	11° H 34'45	
direct	8961 Mar 31 08:52	25° H 27'44		direct	8962 Mar 15 06:41	9° H 59'46	
	8961 Apr 08 16:51	0° Υ		morning max el	8962 Mar 23 07:50	14° H 34'42	20°36'21
morning max el	8961 Apr 09 13:11	0° Υ 49'32	21°55'44	desc. node	8962 Apr 03 04:40	28° H 08'06	
desc. node	8961 Apr 16 07:45	8° Υ 40'51			8962 Apr 04 12:21	0° Υ	
	8961 May 01 10:32	0° B		morning set	8962 Apr 21 13:02	25° Υ 29'06	
morning set	8961 May 12 06:54	16° B 50'23			8962 Apr 24 10:25	0° B	
max. Earth dist.	8961 May 18 00:42	26° B 13'53	1.41458 AU	max. Earth dist.	8962 Apr 30 07:17	9° B 20'39	1.43377 AU
	8961 May 20 06:31	0° Π		superior conj	8962 May 06 20:45	20° B 06'59	-2°08'19
superior conj	8961 May 25 17:50	9° Π 27'08	-1°49'48	minimum elong	8962 May 07 00:31	20° B 22'47	2°08'21
minimum elong	8961 May 25 23:50	9° Π 53'32	1°49'28		8962 May 12 16:30	0° Π	
evening rise	8961 Jun 05 09:49	28° Π 49'33		evening rise	8962 May 19 02:32	11° Π 12'11	
	8961 Jun 06 01:04	0° Ω		asc. node	8962 May 26 17:09	24° Π 25'52	
asc. node	8961 Jun 08 20:07	5° Ω 08'12			8962 May 30 04:09	0° Ω	
evening max el	8961 Jun 21 13:30	24° Ω 31'10	18°13'18	evening max el	8962 Jun 05 02:02	7° Ω 37'30	18°05'06
retrograde	8961 Jun 28 15:00	28° Ω 04'52		retrograde	8962 Jun 11 14:15	10° Ω 59'04	
evening set	8961 Jun 30 23:08	27° Ω 42'06		evening set	8962 Jun 14 05:57	10° Ω 25'03	
inferior conj	8961 Jul 08 02:22	22° Ω 57'34	1°29'10	inferior conj	8962 Jun 20 17:04	5° Ω 20'41	2°28'28
minimum elong	8961 Jul 08 04:59	22° Ω 51'52	1°28'05	minimum elong	8962 Jun 20 19:57	5° Ω 13'25	2°27'31
min. Earth dist.	8961 Jul 11 11:16	20° Ω 02'13	0.59366 AU	min. Earth dist.	8962 Jun 23 18:25	2° Ω 17'23	0.61619 AU

	8962 Jun 26 09:10	30° \mathbb{R} II		minimum elong	8963 Jun 04 00:42	18° \mathbb{I} 09'10	3°03'11
morning rise	8962 Jun 27 07:47	29° \mathbb{I} 18'26		min. Earth dist.	8963 Jun 06 10:58	15° \mathbb{I} 25'20	0.63745 AU
desc. node	8962 Jun 30 04:16	27° \mathbb{I} 44'30		morning rise	8963 Jun 10 00:25	12° \mathbb{I} 00'47	
direct	8962 Jul 04 00:22	26° \mathbb{I} 58'59		direct	8963 Jun 16 17:50	9° \mathbb{I} 22'01	
	8962 Jul 12 07:37	0° \mathfrak{S}		desc. node	8963 Jun 17 01:18	9° \mathbb{I} 22'20	
morning max el	8962 Jul 18 05:27	4° \mathfrak{S} 59'50	27°56'10	morning max el	8963 Jun 30 14:21	17° \mathbb{I} 24'24	27°40'47
	8962 Aug 05 22:28	0° \mathcal{Q}			8963 Jul 11 02:01	0° \mathfrak{S}	
morning set	8962 Aug 20 15:50	27° \mathcal{Q} 03'38			8963 Jul 29 18:33	0° \mathcal{Q}	
	8962 Aug 22 01:54	0° \mathbb{P}		morning set	8963 Aug 04 10:39	10° \mathcal{Q} 51'28	
asc. node	8962 Aug 22 16:39	1° \mathbb{P} 17'21		max. Earth dist.	8963 Aug 09 09:52	21° \mathcal{Q} 02'17	1.32735 AU
max. Earth dist.	8962 Aug 26 08:24	9° \mathbb{P} 07'45	1.31927 AU	asc. node	8963 Aug 09 13:35	21° \mathcal{Q} 21'50	
superior conj	8962 Aug 28 01:57	12° \mathbb{P} 55'02	0°52'13	superior conj	8963 Aug 12 08:32	27° \mathcal{Q} 18'45	0°27'50
minimum elong	8962 Aug 27 23:54	12° \mathbb{P} 43'48	0°51'45	minimum elong	8963 Aug 12 07:14	27° \mathcal{Q} 11'47	0°27'26
evening rise	8962 Sep 03 20:43	27° \mathbb{P} 46'08			8963 Aug 13 14:24	0° \mathbb{P}	
	8962 Sep 04 21:50	0° \mathfrak{L}		evening rise	8963 Aug 19 08:15	12° \mathbb{P} 24'59	
	8962 Sep 21 19:45	0° \mathbb{L}			8963 Aug 28 04:56	0° \mathfrak{L}	
desc. node	8962 Sep 26 02:56	5° \mathbb{L} 25'36		evening max el	8963 Sep 10 23:34	19° \mathfrak{L} 13'15	23°02'53
evening max el	8962 Sep 29 12:36	9° \mathbb{L} 00'52	24°41'48	desc. node	8963 Sep 13 00:03	21° \mathfrak{L} 02'58	
retrograde	8962 Oct 13 07:53	15° \mathbb{L} 57'22		retrograde	8963 Sep 24 07:36	25° \mathfrak{L} 52'50	
evening set	8962 Oct 18 17:01	14° \mathbb{L} 52'41		evening set	8963 Sep 28 04:56	25° \mathfrak{L} 19'46	
min. Earth dist.	8962 Oct 23 23:43	12° \mathbb{L} 06'27	0.56716 AU	min. Earth dist.	8963 Oct 05 08:27	22° \mathfrak{L} 03'48	0.55295 AU
inferior conj	8962 Oct 26 15:35	10° \mathbb{L} 24'09	-5°32'00	inferior conj	8963 Oct 06 21:14	21° \mathfrak{L} 10'36	-5°31'55
minimum elong	8962 Oct 26 19:07	10° \mathbb{L} 18'28	5°31'33	minimum elong	8963 Oct 06 17:16	21° \mathfrak{L} 16'20	5°31'30
morning rise	8962 Nov 03 23:27	6° \mathbb{L} 19'09		morning rise	8963 Oct 15 07:38	17° \mathfrak{L} 20'48	
direct	8962 Nov 06 12:20	6° \mathbb{L} 01'24		direct	8963 Oct 18 08:20	16° \mathfrak{L} 59'10	
morning max el	8962 Nov 16 00:12	10° \mathbb{L} 31'43	19°25'59	morning max el	8963 Oct 29 09:31	22° \mathfrak{L} 10'17	20°42'33
asc. node	8962 Nov 18 16:26	13° \mathbb{L} 25'09			8963 Nov 04 22:12	0° \mathbb{L}	
	8962 Nov 29 00:38	0° \mathfrak{L}		asc. node	8963 Nov 05 13:24	0° \mathbb{L} 56'00	
morning set	8962 Dec 03 05:02	8° \mathfrak{L} 12'51		morning set	8963 Nov 17 12:24	22° \mathbb{L} 54'00	
					8963 Nov 20 22:25	0° \mathfrak{L}	
superior conj	8962 Dec 11 05:50	24° \mathfrak{L} 15'10	1°20'53	superior conj	8963 Nov 24 23:08	8° \mathfrak{L} 19'55	1°34'22
minimum elong	8962 Dec 11 08:44	24° \mathfrak{L} 29'18	1°20'50	minimum elong	8963 Nov 25 00:55	8° \mathfrak{L} 29'03	1°34'29
	8962 Dec 14 05:21	0° \mathfrak{Z}		max. Earth dist.	8963 Nov 30 00:08	18° \mathfrak{L} 23'46	1.35966 AU
max. Earth dist.	8962 Dec 17 16:15	6° \mathfrak{Z} 26'52	1.38026 AU	evening rise	8963 Dec 03 22:42	25° \mathfrak{L} 52'20	
evening rise	8962 Dec 21 09:42	13° \mathfrak{Z} 08'05			8963 Dec 06 05:00	0° \mathfrak{Z}	
desc. node	8962 Dec 23 01:45	16° \mathfrak{Z} 02'22		desc. node	8963 Dec 09 22:46	6° \mathfrak{Z} 33'54	
	8962 Dec 31 13:25	0° \approx			8963 Dec 25 00:59	0° \approx	
	8963 Jan 22 11:11	0° \mathfrak{H}		evening max el	8964 Jan 08 11:13	17° \approx 25'22	26°11'59
evening max el	8963 Jan 25 22:04	3° \mathfrak{H} 38'23	25°04'33	retrograde	8964 Jan 21 04:58	24° \approx 38'57	
retrograde	8963 Feb 06 20:05	10° \mathfrak{H} 33'23		evening set	8964 Jan 27 10:14	22° \approx 07'31	
evening set	8963 Feb 12 13:11	8° \mathfrak{H} 10'57		min. Earth dist.	8964 Jan 31 15:00	17° \approx 42'58	0.66792 AU
asc. node	8963 Feb 14 15:31	6° \mathfrak{H} 06'19		asc. node	8964 Feb 01 12:37	16° \approx 36'39	
min. Earth dist.	8963 Feb 17 00:27	3° \mathfrak{H} 11'55	0.67751 AU	inferior conj	8964 Feb 02 05:59	15° \approx 42'56	0°14'22
inferior conj	8963 Feb 18 03:52	1° \mathfrak{H} 42'09	1°07'48	minimum elong	8964 Feb 02 05:36	15° \approx 44'07	0°14'23
minimum elong	8963 Feb 18 02:20	1° \mathfrak{H} 47'11	1°07'20	transit middle	8964 Feb 02 05:36	15° \approx 44'07	0°14'23
	8963 Feb 19 11:33	30° \mathbb{R} \approx		transit begin	8964 Feb 02 04:19	15° \approx 48'04	
morning rise	8963 Feb 23 15:48	25° \approx 46'07		transit end	8964 Feb 02 06:52	15° \approx 40'10	
direct	8963 Feb 27 05:44	24° \approx 32'26		morning rise	8964 Feb 08 01:41	9° \approx 56'18	
morning max el	8963 Mar 06 10:24	28° \approx 31'49	19°30'15	direct	8964 Feb 11 04:31	9° \approx 01'07	
	8963 Mar 07 20:09	0° \mathfrak{H}		morning max el	8964 Feb 17 20:14	12° \approx 37'24	18°39'48
greatest brilliancy	8963 Mar 19 04:04	15° \mathfrak{H} 13'03	-0.7m		8964 Mar 01 15:07	0° \mathfrak{H}	
desc. node	8963 Mar 21 01:34	18° \mathfrak{H} 02'15		desc. node	8964 Mar 06 22:27	8° \mathfrak{H} 16'12	
	8963 Mar 28 22:35	0° \mathbb{Y}		morning set	8964 Mar 10 01:32	13° \mathfrak{H} 11'04	
morning set	8963 Mar 31 11:14	3° \mathbb{Y} 53'08			8964 Mar 20 18:55	0° \mathbb{Y}	
max. Earth dist.	8963 Apr 12 20:21	23° \mathbb{Y} 11'00	1.44766 AU	max. Earth dist.	8964 Mar 25 13:54	7° \mathbb{Y} 29'48	1.45482 AU
superior conj	8963 Apr 16 23:07	29° \mathbb{Y} 43'44	-2°11'11	superior conj	8964 Mar 26 07:37	8° \mathbb{Y} 39'11	-1°54'00
minimum elong	8963 Apr 16 20:39	29° \mathbb{Y} 33'51	2°11'15	minimum elong	8964 Mar 25 22:55	8° \mathbb{Y} 05'05	1°53'24
	8963 Apr 17 03:11	0° \mathfrak{B}			8964 Apr 08 20:04	0° \mathfrak{B}	
evening rise	8963 Apr 30 22:44	22° \mathfrak{B} 39'50		evening rise	8964 Apr 10 19:22	3° \mathfrak{B} 08'53	
	8963 May 05 07:50	0° \mathbb{I}		greatest brilliancy	8964 Apr 18 13:45	15° \mathfrak{B} 33'30	-0.9m
asc. node	8963 May 13 14:12	13° \mathbb{I} 17'18			8964 Apr 28 05:48	0° \mathbb{I}	
evening max el	8963 May 19 15:24	21° \mathbb{I} 00'27	18°15'41	asc. node	8964 Apr 29 11:18	1° \mathbb{I} 34'27	
retrograde	8963 May 26 00:37	24° \mathbb{I} 24'15		evening max el	8964 May 02 02:56	4° \mathbb{I} 34'08	18°44'19
evening set	8963 May 28 23:40	23° \mathbb{I} 37'07		retrograde	8964 May 08 18:00	8° \mathbb{I} 13'00	
inferior conj	8963 Jun 03 22:44	18° \mathbb{I} 14'44	3°03'44				

evening set	8964 May 12 00:40	7° Π 11'34		evening rise	8965 Mar 21 18:26	12° Υ 48'40	
inferior conj	8964 May 17 15:28	1° Π 32'47	3°19'40		8965 Apr 01 22:45	0° \mathcal{B}	
minimum elong	8964 May 17 16:09	1° Π 30'41	3°19'24	greatest brilliancy	8965 Apr 03 14:55	2° \mathcal{B} 31'03	-0.7m
	8964 May 18 21:26	30° $\mathcal{R}\mathcal{B}$		evening max el	8965 Apr 15 10:25	18° \mathcal{B} 12'26	19°29'51
min. Earth dist.	8964 May 19 12:34	29° \mathcal{B} 13'45	0.65559 AU	asc. node	8965 Apr 16 08:25	19° \mathcal{B} 05'46	
morning rise	8964 May 23 06:56	25° \mathcal{B} 14'18		retrograde	8965 Apr 22 15:15	22° \mathcal{B} 18'02	
direct	8964 May 29 19:03	22° \mathcal{B} 28'06		evening set	8965 Apr 26 06:07	21° \mathcal{B} 01'31	
desc. node	8964 Jun 02 22:18	23° \mathcal{B} 24'34		inferior conj	8965 May 01 15:53	15° \mathcal{B} 07'44	3°20'22
	8964 Jun 11 17:23	0° Π		minimum elong	8965 May 01 15:21	15° \mathcal{B} 09'29	3°20'10
morning max el	8964 Jun 12 00:50	0° Π 18'44	26°52'56	min. Earth dist.	8965 May 02 21:54	13° \mathcal{B} 28'58	0.66958 AU
	8964 Jul 04 01:36	0° \mathcal{B}		morning rise	8965 May 07 00:14	8° \mathcal{B} 49'09	
morning set	8964 Jul 17 19:08	24° \mathcal{B} 07'10		direct	8965 May 13 02:32	6° \mathcal{B} 07'09	
	8964 Jul 20 19:37	0° Ω		desc. node	8965 May 20 19:16	9° \mathcal{B} 21'11	
max. Earth dist.	8964 Jul 22 01:37	2° Ω 29'35	1.34043 AU	morning max el	8965 May 25 10:47	13° \mathcal{B} 30'32	25°41'16
					8965 Jun 07 19:16	0° Π	
superior conj	8964 Jul 26 09:28	11° Ω 22'12	-0°00'27		8965 Jun 26 19:51	0° \mathcal{B}	
minimum elong	8964 Jul 26 09:30	11° Ω 22'24	0°00'38	morning set	8965 Jun 30 13:23	6° \mathcal{B} 40'16	
behind sun begin	8964 Jul 26 03:48	10° Ω 52'39		max. Earth dist.	8965 Jul 04 06:44	13° \mathcal{B} 36'28	1.35815 AU
behind sun end	8964 Jul 26 15:12	11° Ω 52'11					
asc. node	8964 Jul 26 10:32	11° Ω 27'46		superior conj	8965 Jul 10 02:06	24° \mathcal{B} 58'20	-0°31'36
evening rise	8964 Aug 02 18:27	26° Ω 56'38		minimum elong	8965 Jul 10 04:00	25° \mathcal{B} 07'53	0°31'27
	8964 Aug 04 05:40	0° \mathcal{M}			8965 Jul 12 13:39	0° Ω	
evening max el	8964 Aug 22 16:06	29° \mathcal{M} 32'42	21°27'04	asc. node	8965 Jul 13 07:32	1° Ω 31'22	
	8964 Aug 23 03:23	0° \mathcal{A}		evening rise	8965 Jul 18 01:14	11° Ω 15'21	
desc. node	8964 Aug 29 21:11	4° \mathcal{A} 35'23			8965 Jul 27 23:29	0° \mathcal{M}	
retrograde	8964 Sep 03 21:06	5° \mathcal{A} 35'57		evening max el	8965 Aug 04 20:53	10° \mathcal{M} 28'20	20°06'28
evening set	8964 Sep 06 10:20	5° \mathcal{A} 21'02		retrograde	8965 Aug 15 10:24	15° \mathcal{M} 41'47	
inferior conj	8964 Sep 15 14:46	1° \mathcal{A} 23'48	-4°36'13	desc. node	8965 Aug 16 18:18	15° \mathcal{M} 37'09	
minimum elong	8964 Sep 15 05:20	1° \mathcal{A} 37'00	4°33'56	evening set	8965 Aug 17 08:29	15° \mathcal{M} 32'12	
min. Earth dist.	8964 Sep 15 16:48	1° \mathcal{A} 20'56	0.54670 AU	inferior conj	8965 Aug 26 09:51	11° \mathcal{M} 33'20	-2°54'36
	8964 Sep 18 03:35	30° $\mathcal{R}\mathcal{M}$		minimum elong	8965 Aug 26 02:01	11° \mathcal{M} 45'00	2°51'56
morning rise	8964 Sep 24 01:11	27° \mathcal{M} 32'55		min. Earth dist.	8965 Aug 28 02:53	10° \mathcal{M} 32'14	0.54999 AU
direct	8964 Sep 27 17:25	27° \mathcal{M} 03'36		morning rise	8965 Sep 03 18:19	7° \mathcal{M} 21'20	
	8964 Oct 06 12:03	0° \mathcal{A}		direct	8965 Sep 08 04:42	6° \mathcal{M} 38'44	
morning max el	8964 Oct 10 06:13	3° \mathcal{A} 00'37	22°18'37	morning max el	8965 Sep 21 19:13	13° \mathcal{M} 18'36	24°04'47
asc. node	8964 Oct 22 10:22	19° \mathcal{A} 14'53			8965 Oct 04 15:34	0° \mathcal{A}	
	8964 Oct 28 05:00	0° \mathcal{M}		asc. node	8965 Oct 09 07:20	8° \mathcal{A} 10'12	
morning set	8964 Oct 31 22:52	7° \mathcal{M} 41'54		morning set	8965 Oct 16 10:39	22° \mathcal{A} 31'31	
					8965 Oct 19 21:42	0° \mathcal{M}	
superior conj	8964 Nov 08 00:49	22° \mathcal{M} 47'24	1°40'25	superior conj	8965 Oct 23 08:06	7° \mathcal{M} 29'25	1°39'51
minimum elong	8964 Nov 08 01:19	22° \mathcal{M} 50'02	1°40'36	minimum elong	8965 Oct 23 07:24	7° \mathcal{M} 25'41	1°39'58
	8964 Nov 11 11:38	0° \mathcal{A}		max. Earth dist.	8965 Oct 25 14:22	12° \mathcal{M} 22'31	1.32900 AU
max. Earth dist.	8964 Nov 11 15:01	0° \mathcal{A} 17'19	1.34224 AU	evening rise	8965 Oct 30 18:59	23° \mathcal{M} 12'22	
evening rise	8964 Nov 16 03:01	9° \mathcal{A} 16'56			8965 Nov 03 05:44	0° \mathcal{A}	
desc. node	8964 Nov 25 19:48	26° \mathcal{A} 51'58		desc. node	8965 Nov 12 16:54	16° \mathcal{A} 50'18	
	8964 Nov 27 17:02	0° \mathcal{B}			8965 Nov 21 09:27	0° \mathcal{B}	
	8964 Dec 19 22:28	0° \approx		evening max el	8965 Dec 03 12:55	14° \mathcal{B} 23'15	27°27'42
evening max el	8964 Dec 21 00:35	1° \approx 04'07	27°02'06	retrograde	8965 Dec 17 04:30	21° \mathcal{B} 42'34	
retrograde	8965 Jan 03 08:03	8° \approx 24'45		evening set	8965 Dec 24 04:14	19° \mathcal{B} 10'27	
evening set	8965 Jan 10 00:04	5° \approx 49'27		min. Earth dist.	8965 Dec 27 22:46	15° \mathcal{B} 51'53	0.63827 AU
min. Earth dist.	8965 Jan 13 23:12	1° \approx 58'52	0.65475 AU	inferior conj	8965 Dec 30 12:42	13° \mathcal{B} 12'54	-1°54'29
	8965 Jan 15 17:06	30° $\mathcal{R}\mathcal{B}$		minimum elong	8965 Dec 30 16:18	13° \mathcal{B} 03'37	1°52'45
inferior conj	8965 Jan 16 01:46	29° \mathcal{B} 35'15	-0°46'49	asc. node	8966 Jan 05 06:47	8° \mathcal{B} 20'26	
minimum elong	8965 Jan 16 03:08	29° \mathcal{B} 31'22	0°46'00	morning rise	8966 Jan 06 06:12	7° \mathcal{B} 53'00	
asc. node	8965 Jan 18 09:43	27° \mathcal{B} 02'39		direct	8966 Jan 08 16:32	7° \mathcal{B} 23'46	
morning rise	8965 Jan 22 07:28	24° \mathcal{B} 00'25		morning max el	8966 Jan 15 04:34	10° \mathcal{B} 46'09	17°49'15
direct	8965 Jan 25 00:59	23° \mathcal{B} 20'07			8966 Jan 28 06:39	0° \approx	
morning max el	8965 Jan 31 11:13	26° \mathcal{B} 44'30	18°05'55	morning set	8966 Jan 31 19:24	6° \approx 01'53	
	8965 Feb 03 08:18	0° \approx		desc. node	8966 Feb 08 16:16	19° \approx 21'07	
morning set	8965 Feb 18 20:39	23° \approx 56'02					
desc. node	8965 Feb 21 19:20	28° \approx 43'52		superior conj	8966 Feb 13 14:15	27° \approx 26'53	-0°35'30
	8965 Feb 22 14:06	0° \mathcal{H}		minimum elong	8966 Feb 13 10:20	27° \approx 10'59	0°34'47
superior conj	8965 Mar 05 14:38	17° \mathcal{H} 37'29	-1°19'03		8966 Feb 15 04:00	0° \mathcal{H}	
minimum elong	8965 Mar 05 05:55	17° \mathcal{H} 03'07	1°17'57	max. Earth dist.	8966 Feb 19 04:41	6° \mathcal{H} 27'08	1.44708 AU
max. Earth dist.	8965 Mar 08 09:32	22° \mathcal{H} 00'28	1.45461 AU	evening rise	8966 Mar 01 06:13	22° \mathcal{H} 08'50	
	8965 Mar 13 12:20	0° Υ			8966 Mar 06 09:55	0° Υ	

	8966 Mar 27 18:45	0°♄		max. Earth dist.	8967 Feb 01 20:26	20°♊31'48	1.43302 AU
evening max el	8966 Mar 29 12:34	1°♄52'26	20°30'11		8967 Feb 07 18:39	0°♋	
asc. node	8966 Apr 03 05:32	5°♄38'01		evening rise	8967 Feb 08 21:50	1°♋46'24	
retrograde	8966 Apr 06 13:50	6°♄34'11			8967 Feb 27 22:28	0°♌	
evening set	8966 Apr 10 13:51	5°♄02'16		evening max el	8967 Mar 12 09:10	15°♌33'36	21°42'06
	8966 Apr 15 02:17	30°♌♍		retrograde	8967 Mar 21 11:52	20°♌57'03	
inferior conj	8966 Apr 15 21:17	28°♌55'15	3°08'44	asc. node	8967 Mar 21 02:39	20°♌56'19	
minimum elong	8966 Apr 15 19:48	29°♌00'19	3°08'26	evening set	8967 Mar 25 22:04	19°♌09'53	
min. Earth dist.	8966 Apr 16 13:10	28°♌00'47	0.67904 AU	inferior conj	8967 Mar 31 05:23	12°♌52'02	2°46'40
morning rise	8966 Apr 21 01:32	22°♌38'56		minimum elong	8967 Mar 31 03:19	12°♌59'14	2°46'10
direct	8966 Apr 26 15:13	20°♌10'17		min. Earth dist.	8967 Mar 31 08:18	12°♌41'52	0.68400 AU
desc. node	8966 May 07 16:15	26°♌42'45		morning rise	8967 Apr 05 08:25	6°♌39'31	
morning max el	8966 May 07 20:02	26°♌52'17	24°15'32	direct	8967 Apr 10 08:19	4°♌29'58	
	8966 May 10 17:49	0°♄		morning max el	8967 Apr 20 06:26	10°♌21'54	22°45'45
	8966 Jun 01 09:56	0°♅		desc. node	8967 Apr 24 13:12	15°♌06'11	
morning set	8966 Jun 12 12:24	18°♅17'15			8967 May 05 18:20	0°♄	
max. Earth dist.	8966 Jun 16 04:38	24°♅46'35	1.37941 AU	morning set	8967 May 24 10:54	28°♄45'12	
	8966 Jun 19 01:27	0°♅			8967 May 25 05:01	0°♅	
				max. Earth dist.	8967 May 29 01:37	6°♅29'30	1.40202 AU
superior conj	8966 Jun 23 07:01	7°♅57'58	-1°03'55				
minimum elong	8966 Jun 23 11:04	8°♅17'22	1°03'29	superior conj	8967 Jun 05 20:06	20°♅11'24	-1°34'33
asc. node	8966 Jun 30 04:32	21°♅28'09		minimum elong	8967 Jun 06 01:51	20°♅37'35	1°34'05
evening rise	8966 Jul 02 02:00	25°♅13'26			8967 Jun 11 03:15	0°♅	
	8966 Jul 04 12:24	0°♄		evening rise	8967 Jun 15 17:36	8°♅42'43	
evening max el	8966 Jul 18 14:43	22°♄08'47	19°06'06	asc. node	8967 Jun 17 01:33	11°♅14'04	
retrograde	8966 Jul 27 12:33	26°♄33'48			8967 Jun 28 00:14	0°♄	
evening set	8966 Jul 29 10:02	26°♄22'37		evening max el	8967 Jul 01 18:53	4°♄30'20	18°26'42
desc. node	8966 Aug 03 15:26	24°♄13'10		retrograde	8967 Jul 09 09:28	8°♄18'32	
inferior conj	8966 Aug 06 19:48	22°♄09'29	-0°58'43	evening set	8967 Jul 11 13:01	8°♄01'12	
minimum elong	8966 Aug 06 17:15	22°♄13'51	0°57'54	inferior conj	8967 Jul 19 03:07	3°♄28'34	0°42'37
min. Earth dist.	8966 Aug 09 16:30	20°♄12'47	0.56223 AU	minimum elong	8967 Jul 19 04:36	3°♄25'35	0°41'52
morning rise	8966 Aug 14 21:27	17°♄21'55		desc. node	8967 Jul 21 12:31	1°♄33'23	
direct	8966 Aug 20 03:28	16°♄17'46		min. Earth dist.	8967 Jul 22 11:43	0°♄48'26	0.58109 AU
morning max el	8966 Sep 03 08:04	23°♄32'45	25°45'29		8967 Jul 23 13:59	30°♌♍	
	8966 Sep 09 04:15	0°♎		morning rise	8967 Jul 26 16:42	28°♍04'33	
asc. node	8966 Sep 26 04:17	27°♎32'01		direct	8967 Aug 01 16:54	26°♍30'56	
	8966 Sep 27 09:53	0°♎			8967 Aug 11 02:40	0°♄	
morning set	8966 Sep 30 21:57	7°♎17'06		morning max el	8967 Aug 16 02:13	4°♄11'38	27°03'45
					8967 Sep 03 22:35	0°♎	
superior conj	8966 Oct 07 18:36	22°♎18'05	1°33'19	asc. node	8967 Sep 13 01:14	17°♎13'08	
minimum elong	8966 Oct 07 17:00	22°♎09'16	1°33'16	morning set	8967 Sep 15 07:09	21°♎53'59	
max. Earth dist.	8966 Oct 08 20:24	24°♎40'24	1.32027 AU		8967 Sep 19 01:08	0°♎	
	8966 Oct 11 06:53	0°♍					
evening rise	8966 Oct 14 19:21	7°♍29'11		superior conj	8967 Sep 22 06:22	7°♎07'28	1°21'19
	8966 Oct 26 16:49	0°♌		minimum elong	8967 Sep 22 04:14	6°♎55'37	1°21'03
desc. node	8966 Oct 30 14:00	6°♌19'46		max. Earth dist.	8967 Sep 22 05:53	7°♎04'49	1.31618 AU
evening max el	8966 Nov 15 21:46	27°♌08'22	27°22'52	evening rise	8967 Sep 29 01:32	22°♎00'23	
	8966 Nov 19 05:33	0°♄			8967 Oct 02 22:26	0°♍	
retrograde	8966 Nov 29 17:40	4°♄22'40		desc. node	8967 Oct 17 11:06	25°♍09'03	
evening set	8966 Dec 06 19:32	2°♄02'44			8967 Oct 20 23:19	0°♌	
	8966 Dec 09 13:04	30°♌♍		evening max el	8967 Oct 29 00:31	9°♌07'54	26°44'14
min. Earth dist.	8966 Dec 10 12:01	29°♌10'44	0.61899 AU	retrograde	8967 Nov 11 22:35	16°♌16'20	
inferior conj	8966 Dec 13 11:39	26°♌27'31	-3°05'55	evening set	8967 Nov 18 17:54	14°♌19'20	
minimum elong	8966 Dec 13 17:37	26°♌13'51	3°03'31	min. Earth dist.	8967 Nov 22 14:33	11°♌42'49	0.59810 AU
morning rise	8966 Dec 20 18:00	21°♌25'59		inferior conj	8967 Nov 25 19:10	9°♌10'02	-4°15'22
direct	8966 Dec 22 23:42	21°♌04'13		minimum elong	8967 Nov 26 02:38	8°♌55'05	4°13'03
asc. node	8966 Dec 23 03:50	21°♌04'21		morning rise	8967 Dec 03 13:53	4°♌29'50	
morning max el	8966 Dec 29 21:08	24°♌33'51	17°50'33	direct	8967 Dec 05 18:21	4°♌12'12	
	8967 Jan 03 07:39	0°♄		asc. node	8967 Dec 10 00:53	5°♌23'16	
morning set	8967 Jan 14 15:26	19°♄08'05		morning max el	8967 Dec 13 09:27	7°♌58'14	18°10'57
	8967 Jan 20 17:34	0°♊			8967 Dec 27 13:06	0°♄	
				morning set	8967 Dec 29 02:36	2°♄56'01	
superior conj	8967 Jan 25 14:56	8°♊29'02	0°06'55				
minimum elong	8967 Jan 25 15:35	8°♊31'49	0°07'01	superior conj	8968 Jan 07 15:43	20°♄39'25	0°42'31
behind sun begin	8967 Jan 25 07:46	7°♊58'25		minimum elong	8968 Jan 07 18:40	20°♄52'39	0°42'19
behind sun end	8967 Jan 25 23:24	9°♊05'08			8968 Jan 12 22:56	0°♊	
desc. node	8967 Jan 26 13:14	10°♊03'55		desc. node	8968 Jan 13 10:10	0°♊48'18	

max. Earth dist.	8968 Jan 15 06:53	3° \approx 58'35	1.41415 AU	evening rise	8968 Dec 31 11:25	23° \approx 32'18	
evening rise	8968 Jan 20 05:45	12° \approx 10'07			8969 Jan 04 08:15	0° \approx	
	8968 Jan 31 17:32	0° \approx			8969 Jan 24 13:41	0° \approx	
evening max el	8968 Feb 23 01:22	29° \approx 16'39	23°01'02	evening max el	8969 Feb 04 15:17	13° \approx 03'42	24°20'56
	8968 Feb 23 18:59	0° \approx		retrograde	8969 Feb 15 23:52	19° \approx 42'54	
retrograde	8968 Mar 04 07:38	5° \approx 21'22		evening set	8969 Feb 21 09:38	17° \approx 27'37	
asc. node	8968 Mar 06 23:46	4° \approx 46'06		asc. node	8969 Feb 21 20:52	17° \approx 02'41	
evening set	8968 Mar 09 05:10	3° \approx 19'32		min. Earth dist.	8969 Feb 26 01:11	12° \approx 08'25	0.68127 AU
	8968 Mar 12 07:07	30° \approx 19'32		inferior conj	8969 Feb 26 21:54	10° \approx 58'48	1°34'55
min. Earth dist.	8968 Mar 14 05:04	27° \approx 25'46	0.68466 AU	minimum elong	8969 Feb 26 19:58	11° \approx 05'20	1°34'18
inferior conj	8968 Mar 14 14:12	26° \approx 54'11	2°15'11	morning rise	8969 Mar 04 06:22	4° \approx 57'56	
minimum elong	8968 Mar 14 11:58	27° \approx 01'54	2°14'33	direct	8969 Mar 08 03:24	3° \approx 32'07	
morning rise	8968 Mar 19 18:40	20° \approx 46'42		morning max el	8969 Mar 15 18:56	7° \approx 50'38	20°06'22
direct	8968 Mar 24 04:46	18° \approx 58'58		desc. node	8969 Mar 28 07:01	23° \approx 53'56	
morning max el	8968 Apr 01 21:05	24° \approx 00'20	21°20'34		8969 Apr 01 10:51	0° \approx	
	8968 Apr 07 03:38	0° \approx		morning set	8969 Apr 12 05:56	16° \approx 22'03	
desc. node	8968 Apr 10 10:07	4° \approx 13'52			8969 Apr 20 23:06	0° \approx	
	8968 Apr 28 03:18	0° \approx		max. Earth dist.	8969 Apr 22 12:29	2° \approx 28'49	1.44048 AU
morning set	8968 May 03 06:06	7° \approx 58'09					
max. Earth dist.	8968 May 10 03:17	19° \approx 02'42	1.42325 AU	superior conj	8969 Apr 28 05:01	11° \approx 40'41	-2°11'48
	8968 May 16 16:10	0° \approx		minimum elong	8969 Apr 28 06:33	11° \approx 47'00	2°11'56
					8969 May 09 02:59	0° \approx	
superior conj	8968 May 17 12:38	1° \approx 27'47	-1°59'10	evening rise	8969 May 11 04:27	3° \approx 32'42	
minimum elong	8968 May 17 18:10	1° \approx 51'40	1°58'59	asc. node	8969 May 20 19:35	19° \approx 51'17	
evening rise	8968 May 28 19:57	21° \approx 32'29			8969 May 28 03:50	0° \approx	
asc. node	8968 Jun 02 22:33	0° \approx 43'39		evening max el	8969 May 28 18:47	0° \approx 38'23	18°07'20
	8968 Jun 02 12:41	0° \approx		retrograde	8969 Jun 04 04:24	3° \approx 58'48	
evening max el	8968 Jun 14 05:26	17° \approx 23'18	18°07'26	evening set	8969 Jun 06 23:19	3° \approx 19'19	
retrograde	8968 Jun 21 00:02	20° \approx 49'57			8969 Jun 11 08:58	30° \approx 19'19	
evening set	8968 Jun 23 11:20	20° \approx 22'48		inferior conj	8969 Jun 13 04:51	28° \approx 07'15	2°46'03
inferior conj	8968 Jun 30 07:18	15° \approx 29'58	1°57'32	minimum elong	8969 Jun 13 07:26	28° \approx 00'24	2°45'16
minimum elong	8968 Jun 30 10:14	15° \approx 23'08	1°56'25	min. Earth dist.	8969 Jun 16 01:09	25° \approx 07'27	0.62563 AU
min. Earth dist.	8968 Jul 03 14:09	12° \approx 27'57	0.60329 AU	morning rise	8969 Jun 19 13:46	21° \approx 59'14	
morning rise	8968 Jul 07 06:20	9° \approx 38'38		desc. node	8969 Jun 24 06:40	19° \approx 43'23	
desc. node	8968 Jul 07 09:36	9° \approx 33'33		direct	8969 Jun 26 07:47	19° \approx 30'03	
direct	8968 Jul 13 19:17	7° \approx 34'05		morning max el	8969 Jul 10 09:30	27° \approx 32'27	27°53'52
morning max el	8968 Jul 28 03:02	15° \approx 30'29	27°47'56		8969 Jul 12 17:35	0° \approx	
	8968 Aug 08 22:17	0° \approx			8969 Aug 02 15:53	0° \approx	
	8968 Aug 26 10:26	0° \approx		morning set	8969 Aug 13 11:50	20° \approx 19'37	
morning set	8968 Aug 29 12:29	6° \approx 16'55		asc. node	8969 Aug 16 19:04	27° \approx 09'30	
asc. node	8968 Aug 29 22:09	7° \approx 07'23			8969 Aug 18 03:11	0° \approx	
max. Earth dist.	8968 Sep 04 15:16	19° \approx 26'27	1.31674 AU	max. Earth dist.	8969 Aug 18 20:44	1° \approx 34'05	1.32212 AU
superior conj	8968 Sep 05 17:37	21° \approx 51'56	1°04'14	superior conj	8969 Aug 21 02:29	6° \approx 25'15	0°42'24
minimum elong	8968 Sep 05 15:23	21° \approx 39'38	1°03'49	minimum elong	8969 Aug 21 00:41	6° \approx 15'27	0°41'56
	8968 Sep 09 09:51	0° \approx		evening rise	8969 Aug 27 22:49	21° \approx 20'55	
evening rise	8968 Sep 12 11:21	6° \approx 39'45			8969 Sep 01 02:29	0° \approx	
	8968 Sep 24 13:23	0° \approx		desc. node	8969 Sep 20 05:20	29° \approx 37'55	
desc. node	8968 Oct 03 08:12	13° \approx 02'35			8969 Sep 20 14:00	0° \approx	
evening max el	8968 Oct 09 19:31	20° \approx 17'30	25°33'40	evening max el	8969 Sep 21 07:52	0° \approx 44'05	24°00'29
retrograde	8968 Oct 23 17:30	27° \approx 19'07		retrograde	8969 Oct 04 23:51	7° \approx 34'28	
evening set	8968 Oct 29 18:32	25° \approx 54'30		evening set	8969 Oct 09 18:22	6° \approx 44'34	
min. Earth dist.	8968 Nov 03 07:50	23° \approx 17'00	0.57760 AU	min. Earth dist.	8969 Oct 15 18:28	3° \approx 47'41	0.56031 AU
inferior conj	8968 Nov 06 08:02	21° \approx 11'52	-5°11'55	inferior conj	8969 Oct 18 00:28	2° \approx 25'27	-5°38'16
minimum elong	8968 Nov 06 14:16	21° \approx 01'00	5°10'43	minimum elong	8969 Oct 18 01:05	2° \approx 24'31	5°38'08
morning rise	8968 Nov 14 12:21	16° \approx 54'10			8969 Oct 22 06:48	30° \approx 19'19	
direct	8968 Nov 16 20:25	16° \approx 37'23		morning rise	8969 Oct 26 09:49	28° \approx 27'56	
morning max el	8968 Nov 25 13:47	20° \approx 49'20	18°52'10	direct	8969 Oct 29 03:18	28° \approx 08'48	
asc. node	8968 Nov 25 21:54	21° \approx 09'13			8969 Nov 04 11:14	0° \approx	
	8968 Dec 02 14:56	0° \approx		morning max el	8969 Nov 08 06:33	2° \approx 55'44	19°55'50
morning set	8968 Dec 12 00:15	17° \approx 12'44		asc. node	8969 Nov 12 18:54	8° \approx 06'11	
	8968 Dec 18 13:01	0° \approx			8969 Nov 25 07:39	0° \approx	
				morning set	8969 Nov 26 04:51	1° \approx 47'14	
superior conj	8968 Dec 20 12:03	3° \approx 45'17	1°09'23				
minimum elong	8968 Dec 20 15:19	4° \approx 00'47	1°09'14	superior conj	8969 Dec 03 22:54	17° \approx 31'44	1°27'34
max. Earth dist.	8968 Dec 27 13:25	16° \approx 43'47	1.39275 AU	minimum elong	8969 Dec 04 01:23	17° \approx 44'04	1°27'36
desc. node	8968 Dec 30 07:08	21° \approx 31'08		max. Earth dist.	8969 Dec 09 19:44	28° \approx 54'25	1.37124 AU

	8969 Dec 10 09:44	0°♄		superior conj	8970 Nov 17 20:11	1°♄47'21	1°37'47
evening rise	8969 Dec 13 13:54	5°♄48'44		minimum elong	8970 Nov 17 21:26	1°♄53'47	1°37'57
desc. node	8969 Dec 17 04:07	12°♄07'52		max. Earth dist.	8970 Nov 22 06:28	10°♄48'30	1.35183 AU
	8969 Dec 28 06:09	0°♄		evening rise	8970 Nov 26 09:53	18°♄51'03	
evening max el	8970 Jan 18 04:33	26°♄52'09	25°34'57		8970 Dec 02 13:19	0°♄	
	8970 Jan 21 16:50	0°♄		desc. node	8970 Dec 04 01:08	2°♄34'11	
retrograde	8970 Jan 30 11:28	3°♄55'44			8970 Dec 22 09:37	0°♄	
evening set	8970 Feb 05 09:52	1°♄29'11		evening max el	8970 Dec 31 17:49	10°♄36'22	26°35'47
	8970 Feb 06 23:41	30°♄		retrograde	8971 Jan 13 17:47	17°♄53'41	
asc. node	8970 Feb 08 18:00	28°♄00'16		evening set	8971 Jan 20 04:05	15°♄19'40	
min. Earth dist.	8970 Feb 09 18:21	26°♄44'47	0.67392 AU	min. Earth dist.	8971 Jan 24 06:18	11°♄09'59	0.66279 AU
inferior conj	8970 Feb 11 02:36	25°♄01'45	0°46'09	inferior conj	8971 Jan 26 02:17	8°♄59'00	-0°10'43
minimum elong	8970 Feb 11 01:29	25°♄05'19	0°45'52	minimum elong	8971 Jan 26 02:34	8°♄58'09	0°10'23
morning rise	8970 Feb 16 17:32	19°♄09'20		transit middle	8971 Jan 26 02:34	8°♄58'09	0°10'23
direct	8970 Feb 20 02:39	18°♄03'44		transit begin	8971 Jan 26 00:20	9°♄04'47	
morning max el	8970 Feb 27 00:41	21°♄51'29	19°06'48	transit end	8971 Jan 26 04:47	8°♄51'30	
	8970 Mar 05 17:08	0°♄		asc. node	8971 Jan 26 15:08	8°♄20'48	
greatest brilliancy	8970 Mar 12 10:20	9°♄47'58	-0.7m	morning rise	8971 Feb 01 02:00	3°♄17'17	
desc. node	8970 Mar 15 03:54	13°♄57'15		direct	8971 Feb 04 00:42	2°♄28'50	
morning set	8970 Mar 22 08:23	25°♄01'56		morning max el	8971 Feb 10 13:03	5°♄58'22	18°23'22
	8970 Mar 25 13:16	0°♄			8971 Feb 27 08:14	0°♄	
max. Earth dist.	8970 Apr 05 04:12	16°♄34'59	1.45163 AU	morning set	8971 Mar 02 10:20	4°♄55'23	
				desc. node	8971 Mar 02 00:48	4°♄17'22	
superior conj	8970 Apr 07 22:21	20°♄55'46	-2°06'24				
minimum elong	8970 Apr 07 16:46	20°♄33'45	2°06'15	superior conj	8971 Mar 18 03:39	29°♄44'58	-1°40'54
	8970 Apr 13 15:03	0°♄		minimum elong	8971 Mar 17 18:04	29°♄07'24	1°39'59
evening rise	8970 Apr 22 14:47	14°♄35'30			8971 Mar 18 07:30	0°♄	
	8970 May 02 01:31	0°♄		max. Earth dist.	8971 Mar 18 23:21	1°♄02'00	1.45561 AU
asc. node	8970 May 07 16:40	8°♄29'37		evening rise	8971 Apr 03 01:32	24°♄41'12	
evening max el	8970 May 12 07:45	14°♄07'19	18°25'42		8971 Apr 06 10:32	0°♄	
retrograde	8970 May 18 18:15	17°♄35'45		greatest brilliancy	8971 Apr 13 04:20	10°♄32'43	-0.8m
evening set	8970 May 21 20:36	16°♄42'28		asc. node	8971 Apr 24 13:47	26°♄28'39	
inferior conj	8970 May 27 15:41	11°♄12'45	3°12'33	evening max el	8971 Apr 25 17:43	27°♄42'58	19°01'42
minimum elong	8970 May 27 17:07	11°♄08'32	3°12'09		8971 Apr 28 09:20	0°♄	
min. Earth dist.	8970 May 29 21:29	8°♄35'01	0.64565 AU	retrograde	8971 May 02 13:45	1°♄32'11	
morning rise	8970 Jun 02 12:41	4°♄56'25		evening set	8971 May 05 23:48	0°♄24'18	
direct	8970 Jun 09 04:31	2°♄13'19			8971 May 06 13:31	30°♄	
desc. node	8970 Jun 11 03:41	2°♄26'00		inferior conj	8971 May 11 12:04	24°♄38'40	3°21'37
morning max el	8970 Jun 22 19:22	10°♄11'30	27°23'59	minimum elong	8971 May 11 12:13	24°♄38'12	3°21'25
	8970 Jul 08 08:47	0°♄		min. Earth dist.	8971 May 13 02:35	22°♄36'08	0.66200 AU
	8970 Jul 26 01:59	0°♄		morning rise	8971 May 17 00:07	18°♄19'38	
morning set	8970 Jul 28 02:42	3°♄55'27		direct	8971 May 23 08:19	15°♄34'13	
max. Earth dist.	8970 Aug 01 18:41	13°♄19'11	1.33239 AU	desc. node	8971 May 29 00:42	17°♄20'33	
asc. node	8970 Aug 03 16:00	17°♄15'29		morning max el	8971 Jun 05 06:02	23°♄15'20	26°24'57
					8971 Jun 11 05:31	0°♄	
superior conj	8970 Aug 05 07:00	20°♄41'52	0°16'18		8971 Jul 01 16:49	0°♄	
minimum elong	8970 Aug 05 06:12	20°♄37'35	0°15'58	morning set	8971 Jul 11 05:42	16°♄54'40	
behind sun begin	8970 Aug 05 05:44	20°♄35'09		max. Earth dist.	8971 Jul 15 06:11	24°♄37'49	1.34747 AU
behind sun end	8970 Aug 05 06:39	20°♄40'02			8971 Jul 17 22:54	0°♄	
	8970 Aug 09 15:03	0°♄					
evening rise	8970 Aug 12 10:06	5°♄58'25		superior conj	8971 Jul 20 04:45	4°♄34'29	-0°13'22
	8970 Aug 25 05:19	0°♄		minimum elong	8971 Jul 20 05:31	4°♄38'26	0°13'26
evening max el	8970 Sep 02 20:05	10°♄55'14	22°20'46	behind sun begin	8971 Jul 20 02:15	4°♄21'38	
desc. node	8970 Sep 07 02:28	14°♄26'42		behind sun end	8971 Jul 20 08:48	4°♄55'16	
retrograde	8970 Sep 15 18:08	17°♄21'31		asc. node	8971 Jul 21 12:57	7°♄20'48	
evening set	8970 Sep 19 00:44	16°♄57'50		evening rise	8971 Jul 27 19:09	20°♄25'31	
min. Earth dist.	8970 Sep 27 02:20	13°♄25'04	0.54926 AU		8971 Aug 01 12:50	0°♄	
inferior conj	8970 Sep 27 23:37	12°♄55'04	-5°15'10	evening max el	8971 Aug 15 17:10	21°♄26'56	20°50'22
minimum elong	8970 Sep 27 16:38	13°♄04'56	5°14'03	desc. node	8971 Aug 24 23:37	26°♄57'22	
morning rise	8970 Oct 06 10:16	9°♄07'35		retrograde	8971 Aug 27 06:28	27°♄10'29	
direct	8970 Oct 09 17:27	8°♄43'09		evening set	8971 Aug 29 10:54	26°♄59'02	
morning max el	8970 Oct 21 10:09	14°♄12'49	21°21'25	inferior conj	8971 Sep 07 15:57	23°♄02'26	-3°57'06
asc. node	8970 Oct 30 15:53	25°♄59'07		minimum elong	8971 Sep 07 06:23	23°♄16'04	3°54'18
	8970 Nov 02 01:32	0°♄		min. Earth dist.	8971 Sep 08 11:07	22°♄35'06	0.54694 AU
morning set	8970 Nov 10 13:48	16°♄32'15		morning rise	8971 Sep 16 01:57	19°♄05'00	
	8970 Nov 16 23:34	0°♄		direct	8971 Sep 20 01:21	18°♄31'09	
				morning max el	8971 Oct 03 02:54	24°♄47'02	23°03'24

	8971 Oct 07 22:06	0°♄			8972 Aug 23 08:04	30°♄♄	
asc. node	8971 Oct 17 12:50	14°♄34'31		morning rise	8972 Aug 25 22:17	28°♄53'54	
	8971 Oct 25 09:36	0°♄		direct	8972 Aug 30 16:54	28°♄03'05	
morning set	8971 Oct 26 01:04	1°♄21'33			8972 Sep 06 22:00	0°♄	
				morning max el	8972 Sep 13 15:02	4°♄59'55	24°49'15
superior conj	8971 Nov 02 00:36	16°♄22'10	1°40'57		8972 Oct 01 10:27	0°♄	
minimum elong	8971 Nov 02 00:34	16°♄22'00	1°41'07	asc. node	8972 Oct 03 09:46	3°♄41'51	
max. Earth dist.	8971 Nov 05 00:51	22°♄45'18	1.33603 AU	morning set	8972 Oct 09 12:48	16°♄09'46	
	8971 Nov 08 13:32	0°♄			8972 Oct 15 21:07	0°♄	
evening rise	8971 Nov 09 19:34	2°♄29'41					
desc. node	8971 Nov 20 22:12	22°♄44'39		superior conj	8972 Oct 16 09:30	1°♄07'53	1°37'47
	8971 Nov 25 10:20	0°♄		minimum elong	8972 Oct 16 08:23	1°♄01'47	1°37'50
evening max el	8971 Dec 14 06:44	24°♄07'33	27°16'18	max. Earth dist.	8972 Oct 18 03:05	4°♄54'53	1.32470 AU
	8971 Dec 22 03:26	0°♄		evening rise	8972 Oct 23 15:27	16°♄35'10	
retrograde	8971 Dec 27 18:18	1°♄29'06			8972 Oct 30 12:58	0°♄	
	8972 Jan 01 22:49	30°♄♄		desc. node	8972 Nov 06 19:18	12°♄31'46	
evening set	8972 Jan 03 14:10	28°♄53'48			8972 Nov 19 02:26	0°♄	
min. Earth dist.	8972 Jan 07 11:00	25°♄17'30	0.64809 AU	evening max el	8972 Nov 25 17:49	7°♄13'39	27°29'42
inferior conj	8972 Jan 09 18:39	22°♄45'50	-1°14'52	retrograde	8972 Dec 09 12:03	14°♄31'56	
minimum elong	8972 Jan 09 20:55	22°♄39'39	1°13'40	evening set	8972 Dec 16 13:20	12°♄03'48	
asc. node	8972 Jan 13 12:14	19°♄02'52		min. Earth dist.	8972 Dec 20 06:30	8°♄57'20	0.63028 AU
morning rise	8972 Jan 16 05:12	17°♄17'18		inferior conj	8972 Dec 23 00:53	6°♄14'48	-2°24'37
direct	8972 Jan 18 19:20	16°♄42'18		minimum elong	8972 Dec 23 05:31	6°♄03'25	2°22'33
morning max el	8972 Jan 25 05:31	20°♄04'42	17°56'45	morning rise	8972 Dec 29 23:48	1°♄02'19	
	8972 Feb 01 18:35	0°♄		asc. node	8972 Dec 30 09:19	0°♄54'27	
morning set	8972 Feb 11 17:49	16°♄16'46		direct	8973 Jan 01 07:40	0°♄36'49	
desc. node	8972 Feb 16 21:42	24°♄49'38		morning max el	8973 Jan 07 22:57	4°♄01'35	17°47'31
	8972 Feb 20 01:37	0°♄		morning set	8973 Jan 24 02:27	28°♄50'38	
					8973 Jan 24 18:20	0°♄	
superior conj	8972 Feb 25 16:02	9°♄01'01	-1°01'00	desc. node	8973 Feb 02 18:37	15°♄29'24	
minimum elong	8972 Feb 25 09:07	8°♄33'23	0°59'58				
max. Earth dist.	8972 Feb 29 18:51	15°♄32'12	1.45217 AU	superior conj	8973 Feb 05 01:56	19°♄20'25	-0°16'57
	8972 Mar 10 01:43	0°♄		minimum elong	8973 Feb 05 00:12	19°♄13'11	0°16'30
evening rise	8972 Mar 12 18:07	4°♄08'07		max. Earth dist.	8973 Feb 11 12:16	29°♄49'20	1.44178 AU
greatest brilliancy	8972 Mar 27 05:32	26°♄02'38	-0.6m		8973 Feb 11 14:56	0°♄	
	8972 Mar 29 23:14	0°♄		evening rise	8973 Feb 20 05:35	13°♄30'47	
evening max el	8972 Apr 07 22:57	11°♄21'56	19°53'53		8973 Mar 03 03:43	0°♄	
asc. node	8972 Apr 10 10:55	13°♄36'45		evening max el	8973 Mar 21 22:40	25°♄02'08	20°59'40
retrograde	8972 Apr 15 11:57	15°♄42'28		asc. node	8973 Mar 28 08:03	29°♄39'06	
evening set	8972 Apr 19 06:29	14°♄19'34			8973 Mar 29 22:25	0°♄	
inferior conj	8972 Apr 24 14:56	8°♄19'49	3°16'49	retrograde	8973 Mar 30 10:25	0°♄01'19	
minimum elong	8972 Apr 24 13:58	8°♄23'05	3°16'36		8973 Mar 30 22:18	30°♄♄	
min. Earth dist.	8972 Apr 25 14:50	6°♄59'30	0.67408 AU	evening set	8973 Apr 03 14:34	28°♄23'05	
morning rise	8972 Apr 29 21:09	2°♄01'40		inferior conj	8973 Apr 08 21:43	22°♄11'19	3°00'35
	8972 May 02 21:51	30°♄♄		minimum elong	8973 Apr 08 19:57	22°♄17'27	3°00'12
direct	8972 May 05 18:15	29°♄24'21		min. Earth dist.	8973 Apr 09 08:04	21°♄35'31	0.68170 AU
	8972 May 08 19:24	0°♄		morning rise	8973 Apr 14 01:06	15°♄56'19	
desc. node	8972 May 14 21:41	3°♄56'28		direct	8973 Apr 19 09:04	13°♄34'58	
morning max el	8972 May 17 15:45	6°♄32'37	25°05'56	morning max el	8973 Apr 30 00:54	19°♄56'28	23°37'12
	8972 Jun 04 20:24	0°♄		desc. node	8973 May 01 18:37	21°♄46'12	
morning set	8972 Jun 22 16:28	29°♄05'50			8973 May 08 14:16	0°♄	
	8972 Jun 23 04:33	0°♄			8973 May 29 00:49	0°♄	
max. Earth dist.	8972 Jun 26 07:18	5°♄41'07	1.36684 AU	morning set	8973 Jun 04 05:37	10°♄14'31	
				max. Earth dist.	8973 Jun 08 03:21	16°♄59'01	1.38898 AU
superior conj	8972 Jul 02 16:50	17°♄55'56	-0°45'17		8973 Jun 15 07:38	0°♄	
minimum elong	8972 Jul 02 19:38	18°♄09'45	0°45'01				
asc. node	8972 Jul 07 09:56	27°♄21'48		superior conj	8973 Jun 15 15:33	0°♄37'04	-1°17'20
	8972 Jul 08 17:10	0°♄		minimum elong	8973 Jun 15 20:26	0°♄59'59	1°16'51
evening rise	8972 Jul 10 23:42	4°♄36'04		asc. node	8973 Jun 24 06:57	17°♄14'24	
	8972 Jul 25 17:16	0°♄		evening rise	8973 Jun 24 20:56	18°♄22'28	
evening max el	8972 Jul 28 03:42	2°♄41'37	19°38'13		8973 Jul 01 00:12	0°♄	
retrograde	8972 Aug 06 23:58	7°♄33'30		evening max el	8973 Jul 11 02:29	14°♄41'05	18°46'55
evening set	8972 Aug 08 20:15	7°♄24'00		retrograde	8973 Jul 19 09:30	18°♄48'12	
desc. node	8972 Aug 10 20:45	6°♄53'13		evening set	8973 Jul 21 09:18	18°♄34'49	
inferior conj	8972 Aug 17 16:05	3°♄20'29	-2°05'11	desc. node	8973 Jul 28 17:51	14°♄44'41	
minimum elong	8972 Aug 17 10:24	3°♄29'25	2°03'10	inferior conj	8973 Jul 29 10:48	14°♄13'59	-0°12'55
min. Earth dist.	8972 Aug 19 22:52	1°♄54'39	0.55421 AU	minimum elong	8973 Jul 29 10:16	14°♄14'57	0°12'54

transit middle	8973 Jul 29 10:16	14°Ω14'57	0°12'54		8974 Jul 05 06:41	30°R☿	
transit begin	8973 Jul 29 08:04	14°Ω18'59		inferior conj	8974 Jul 11 03:13	25°☿50'50	1°17'51
transit end	8973 Jul 29 12:29	14°Ω10'55		minimum elong	8974 Jul 11 05:36	25°☿45'42	1°16'48
min. Earth dist.	8973 Aug 01 14:39	11°Ω56'36	0.56964 AU	min. Earth dist.	8974 Jul 14 12:21	22°☿58'47	0.59030 AU
morning rise	8973 Aug 06 07:51	9°Ω10'33		desc. node	8974 Jul 15 14:57	22°☿06'39	
direct	8973 Aug 11 22:21	7°Ω54'15		morning rise	8974 Jul 18 10:45	20°☿14'11	
morning max el	8973 Aug 26 05:28	15°Ω21'14	26°22'17	direct	8974 Jul 24 17:17	18°☿27'23	
	8973 Sep 07 01:13	0°♊		morning max el	8974 Aug 08 02:18	26°☿15'00	27°27'17
asc. node	8973 Sep 20 06:41	23°♊12'50			8974 Aug 11 14:59	0°Ω	
morning set	8973 Sep 23 23:25	0°♊52'33			8974 Aug 31 12:41	0°♊	
	8973 Sep 23 13:31	0°♊		asc. node	8974 Sep 07 03:36	12°♊59'53	
				morning set	8974 Sep 08 07:11	15°♊23'53	
superior conj	8973 Sep 30 20:47	15°♊58'05	1°28'53				
minimum elong	8973 Sep 30 18:54	15°♊47'41	1°28'44	superior conj	8974 Sep 15 08:30	0°♊45'40	1°14'41
max. Earth dist.	8973 Oct 01 11:04	17°♊17'17	1.31800 AU	minimum elong	8974 Sep 15 06:17	0°♊33'17	1°14'21
	8973 Oct 07 07:18	0°♊		max. Earth dist.	8974 Sep 14 21:10	29°♊42'40	1.31589 AU
evening rise	8973 Oct 07 18:38	0°♊59'46			8974 Sep 15 00:17	0°♊	
	8973 Oct 23 12:54	0°♊		evening rise	8974 Sep 22 02:36	15°♊35'07	
desc. node	8973 Oct 24 16:24	1°♊46'07			8974 Sep 29 05:51	0°♊	
evening max el	8973 Nov 08 00:41	19°♊41'57	27°10'40	desc. node	8974 Oct 11 13:30	20°♊13'50	
retrograde	8973 Nov 21 21:49	26°♊53'11			8974 Oct 19 15:34	0°♊	
evening set	8973 Nov 28 21:59	24°♊42'08		evening max el	8974 Oct 21 00:21	1°♊20'27	26°17'43
min. Earth dist.	8973 Dec 02 15:22	21°♊58'04	0.61024 AU	retrograde	8974 Nov 03 22:16	8°♊25'14	
inferior conj	8973 Dec 05 17:45	19°♊17'34	-3°36'06	evening set	8974 Nov 10 11:37	6°♊41'05	
minimum elong	8973 Dec 06 00:33	19°♊02'50	3°33'37	min. Earth dist.	8974 Nov 14 13:30	4°♊06'34	0.58929 AU
morning rise	8973 Dec 13 05:30	14°♊24'23		inferior conj	8974 Nov 17 17:40	1°♊43'40	-4°41'46
direct	8973 Dec 15 10:11	14°♊04'45		minimum elong	8974 Nov 18 01:05	1°♊29'42	4°39'49
asc. node	8973 Dec 17 06:20	14°♊19'04			8974 Nov 20 02:35	30°R♊	
morning max el	8973 Dec 22 14:06	17°♊40'28	17°56'42	morning rise	8974 Nov 25 16:56	27°♊12'53	
	8973 Dec 31 09:05	0°♊		direct	8974 Nov 27 22:28	26°♊55'52	
morning set	8974 Jan 07 05:38	12°♊16'56		asc. node	8974 Dec 04 03:20	29°♊16'14	
	8974 Jan 17 01:17	0°♊			8974 Dec 05 00:58	0°♊	
				morning max el	8974 Dec 05 23:23	0°♊51'22	18°25'48
superior conj	8974 Jan 17 13:18	0°♊52'37	0°23'01	morning set	8974 Dec 21 21:44	26°♊18'27	
minimum elong	8974 Jan 17 15:13	1°♊00'57	0°22'57		8974 Dec 23 19:54	0°♊	
desc. node	8974 Jan 20 15:34	6°♊13'10		superior conj	8974 Dec 30 23:02	13°♊28'13	0°55'00
max. Earth dist.	8974 Jan 25 02:03	13°♊39'58	1.42556 AU	minimum elong	8974 Dec 31 02:18	13°♊43'14	0°54'48
evening rise	8974 Jan 31 03:05	23°♊25'52		max. Earth dist.	8975 Jan 07 11:04	26°♊50'49	1.40528 AU
	8974 Feb 04 08:03	0°♊		desc. node	8975 Jan 07 12:31	26°♊57'05	
	8974 Feb 25 05:56	0°♊			8975 Jan 09 07:23	0°♊	
evening max el	8974 Mar 04 17:20	8°♊44'11	22°15'11	evening rise	8975 Jan 11 20:02	4°♊13'44	
retrograde	8974 Mar 14 07:30	14°♊24'54			8975 Jan 28 13:34	0°♊	
asc. node	8974 Mar 15 05:10	14°♊20'48		evening max el	8975 Feb 15 08:19	22°♊28'46	23°35'15
evening set	8974 Mar 18 22:28	12°♊31'25		retrograde	8975 Feb 26 01:51	28°♊48'52	
inferior conj	8974 Mar 24 06:20	6°♊10'11	2°34'24	asc. node	8975 Mar 02 02:16	27°♊30'47	
minimum elong	8974 Mar 24 04:08	6°♊17'49	2°33'50	evening set	8975 Mar 03 04:38	26°♊40'51	
min. Earth dist.	8974 Mar 24 04:04	6°♊18'03	0.68488 AU	min. Earth dist.	8975 Mar 08 00:44	21°♊02'04	0.68375 AU
morning rise	8974 Mar 29 09:40	29°♊59'47		inferior conj	8975 Mar 08 14:53	20°♊13'35	1°59'09
	8974 Mar 29 09:34	30°R♊		minimum elong	8975 Mar 08 12:43	20°♊21'01	1°58'30
direct	8974 Apr 03 03:46	27°♊59'12		morning rise	8975 Mar 13 20:47	14°♊08'59	
	8974 Apr 08 11:40	0°♊		direct	8975 Mar 18 01:12	12°♊30'48	
morning max el	8974 Apr 12 12:31	3°♊28'27	22°08'26	morning max el	8975 Mar 26 06:08	17°♊12'15	20°47'26
desc. node	8974 Apr 18 15:34	10°♊29'41		desc. node	8975 Apr 05 12:28	29°♊52'17	
	8974 May 02 16:05	0°♊			8975 Apr 05 14:42	0°♊	
morning set	8974 May 15 16:18	20°♊08'51		morning set	8975 Apr 25 01:29	28°♊55'42	
max. Earth dist.	8974 May 21 02:04	29°♊02'50	1.41142 AU		8975 Apr 25 17:58	0°♊	
	8974 May 21 15:40	0°♊		max. Earth dist.	8975 May 03 07:30	12°♊01'49	1.43121 AU
superior conj	8974 May 28 20:26	12°♊27'05	-1°46'04				
minimum elong	8974 May 29 02:27	12°♊53'49	1°45'40	superior conj	8975 May 10 02:59	23°♊16'43	-2°06'22
	8974 Jun 07 10:51	0°♊		minimum elong	8975 May 10 07:22	23°♊35'12	2°06'22
evening rise	8974 Jun 08 07:23	1°♊35'38			8975 May 14 01:44	0°♊	
asc. node	8974 Jun 11 03:58	6°♊53'41		evening rise	8975 May 22 02:47	14°♊05'58	
evening max el	8974 Jun 24 09:49	27°♊16'41	18°16'08	asc. node	8975 May 29 01:00	26°♊14'51	
	8974 Jun 28 00:57	0°♊			8975 May 31 07:07	0°♊	
retrograde	8974 Jul 01 14:19	0°♊53'41		evening max el	8975 Jun 07 21:56	10°♊19'39	18°05'02
evening set	8974 Jul 03 21:16	0°♊32'25		retrograde	8975 Jun 14 11:32	13°♊42'12	

evening set	8975 Jun 17 02:02	13°☿10'05		evening max el	8976 May 21 11:25	23°♊40'59	18°12'56
inferior conj	8975 Jun 23 15:20	8°☿08'36	2°21'07	retrograde	8976 May 27 20:28	27°♊03'27	
minimum elong	8975 Jun 23 18:16	8°☿01'20	2°20'06	evening set	8976 May 30 18:26	26°♊18'25	
min. Earth dist.	8975 Jun 26 18:18	5°☿04'51	0.61288 AU	inferior conj	8976 Jun 05 19:04	20°♊58'45	2°59'39
morning rise	8975 Jun 30 08:09	2°☿08'43		minimum elong	8976 Jun 05 21:12	20°♊52'47	2°59'03
desc. node	8975 Jul 02 12:02	0°☿54'39		min. Earth dist.	8976 Jun 08 09:31	18°♊05'58	0.63450 AU
	8975 Jul 05 10:53	30°♋♊		morning rise	8976 Jun 11 22:32	14°♊46'01	
direct	8975 Jul 06 23:57	29°♊52'52		desc. node	8976 Jun 18 09:05	12°♊09'34	
	8975 Jul 08 13:42	0°☿		direct	8976 Jun 18 16:20	12°♊09'16	
morning max el	8975 Jul 21 06:01	7°☿53'03	27°55'16	morning max el	8976 Jul 02 14:24	20°♊12'14	27°45'10
	8975 Aug 07 03:13	0°♊			8976 Jul 10 23:53	0°☿	
morning set	8975 Aug 23 10:15	29°♊38'41			8976 Jul 30 04:10	0°♊	
	8975 Aug 23 14:24	0°♊		morning set	8976 Aug 06 06:22	13°♊30'39	
asc. node	8975 Aug 25 00:31	2°♊57'46		asc. node	8976 Aug 10 21:28	23°♊01'48	
max. Earth dist.	8975 Aug 29 05:28	11°♊59'43	1.31844 AU	max. Earth dist.	8976 Aug 11 08:01	23°♊57'29	1.32582 AU
superior conj	8975 Aug 30 18:57	15°♊25'24	0°55'32	superior conj	8976 Aug 14 02:14	29°♊51'55	0°31'49
minimum elong	8975 Aug 30 16:50	15°♊13'48	0°55'04	minimum elong	8976 Aug 14 00:47	29°♊44'06	0°31'23
	8975 Sep 06 10:29	0°♊			8976 Aug 14 03:44	0°♊	
evening rise	8975 Sep 06 13:20	0°♊15'18		evening rise	8976 Aug 21 00:56	14°♊54'54	
	8975 Sep 22 17:26	0°♊			8976 Aug 28 12:29	0°♊	
desc. node	8975 Sep 28 10:37	7°♊36'47		evening max el	8976 Sep 13 02:56	22°♊23'22	23°17'53
evening max el	8975 Oct 02 15:48	12°♊08'09	24°55'49	desc. node	8976 Sep 14 07:45	23°♊30'28	
retrograde	8975 Oct 16 12:05	19°♊06'30		retrograde	8976 Sep 26 13:39	29°♊06'23	
evening set	8975 Oct 22 01:44	17°♊56'35		evening set	8976 Sep 30 16:24	28°♊29'25	
min. Earth dist.	8975 Oct 27 03:12	15°♊13'14	0.56969 AU	min. Earth dist.	8976 Oct 07 12:29	25°♊18'49	0.55457 AU
inferior conj	8975 Oct 29 21:46	13°♊24'29	-5°28'00	inferior conj	8976 Oct 09 06:06	24°♊17'54	-5°35'26
minimum elong	8975 Oct 30 02:10	13°♊17'15	5°27'23	minimum elong	8976 Oct 09 03:20	24°♊21'57	5°35'11
morning rise	8975 Nov 07 04:54	9°♊16'27		morning rise	8976 Oct 17 16:18	20°♊26'27	
direct	8975 Nov 09 16:18	8°♊59'06		direct	8976 Oct 20 14:57	20°♊05'36	
morning max el	8975 Nov 18 23:13	13°♊24'22	19°16'32	morning max el	8976 Oct 31 10:33	25°♊10'30	20°29'49
asc. node	8975 Nov 21 00:20	15°♊33'54			8976 Nov 04 18:02	0°♊	
	8975 Nov 30 09:40	0°♋		asc. node	8976 Nov 06 21:20	2°♊56'28	
morning set	8975 Dec 05 22:41	10°♋43'21		morning set	8976 Nov 19 05:28	25°♊23'14	
					8976 Nov 21 11:03	0°♋	
superior conj	8975 Dec 14 02:07	26°♋52'54	1°18'08	superior conj	8976 Nov 26 17:55	10°♋53'34	1°32'49
minimum elong	8975 Dec 14 05:08	27°♋07'32	1°18'02	minimum elong	8976 Nov 26 19:54	11°♋03'36	1°32'54
	8975 Dec 15 16:56	0°♋		max. Earth dist.	8976 Dec 02 00:06	21°♋18'40	1.36256 AU
max. Earth dist.	8975 Dec 20 16:46	9°♋18'49	1.38344 AU	evening rise	8976 Dec 05 21:16	28°♋37'00	
evening rise	8975 Dec 24 10:47	15°♋59'10			8976 Dec 06 15:25	0°♋	
desc. node	8975 Dec 25 09:28	17°♋37'28		desc. node	8976 Dec 11 06:29	8°♋10'39	
	8976 Jan 01 20:46	0°♋			8976 Dec 25 03:45	0°♋	
	8976 Jan 23 04:22	0°♋		evening max el	8977 Jan 10 10:48	20°♋03'42	26°02'53
evening max el	8976 Jan 28 21:34	6°♋15'49	24°53'32	retrograde	8977 Jan 23 02:01	27°♋15'06	
retrograde	8976 Feb 09 16:21	13°♋07'23		evening set	8977 Jan 29 05:29	24°♋44'52	
evening set	8976 Feb 15 07:32	10°♋46'41		min. Earth dist.	8977 Feb 02 11:13	20°♋15'04	0.66961 AU
asc. node	8976 Feb 16 23:24	9°♋10'18		asc. node	8977 Feb 02 20:32	19°♋46'20	
min. Earth dist.	8976 Feb 19 19:50	5°♋42'24	0.67858 AU	inferior conj	8977 Feb 04 00:25	18°♋19'19	0°23'00
inferior conj	8976 Feb 20 21:32	4°♋17'36	1°15'13	minimum elong	8977 Feb 03 23:49	18°♋21'10	0°22'57
minimum elong	8976 Feb 20 19:53	4°♋23'05	1°14'43	morning rise	8977 Feb 09 18:48	12°♋30'58	
	8976 Feb 24 10:32	30°♋♋		direct	8977 Feb 12 23:12	11°♋33'10	
morning rise	8976 Feb 26 08:29	28°♋20'15		morning max el	8977 Feb 19 16:20	15°♋12'06	18°46'12
direct	8976 Mar 01 00:11	27°♋03'34			8977 Mar 02 20:05	0°♋	
	8976 Mar 07 02:30	0°♋		desc. node	8977 Mar 09 06:15	9°♋54'00	
morning max el	8976 Mar 08 07:30	1°♋07'40	19°39'07	morning set	8977 Mar 13 09:55	16°♋23'23	
greatest brilliancy	8976 Mar 21 00:27	17°♋41'19	-0.7m		8977 Mar 22 02:48	0°♋	
desc. node	8976 Mar 22 09:21	19°♋42'47		max. Earth dist.	8977 Mar 28 12:27	10°♋00'54	1.45427 AU
	8976 Mar 29 05:09	0°♋		superior conj	8977 Mar 29 19:10	12°♋01'16	-1°57'54
morning set	8976 Apr 02 23:16	7°♋17'11		minimum elong	8977 Mar 29 11:05	11°♋29'36	1°57'24
max. Earth dist.	8976 Apr 14 19:27	25°♋45'46	1.44600 AU		8977 Apr 10 03:52	0°♋	
	8976 Apr 17 11:22	0°♋		evening rise	8977 Apr 14 02:26	6°♋19'16	
superior conj	8976 Apr 19 08:52	3°♋02'23	-2°11'59	greatest brilliancy	8977 Apr 20 19:13	17°♋06'10	-0.9m
minimum elong	8976 Apr 19 07:30	2°♋56'57	2°12'07		8977 Apr 29 04:16	0°♋	
evening rise	8976 May 03 02:19	25°♋42'16		asc. node	8977 May 01 19:11	3°♋33'46	
	8976 May 05 15:23	0°♋		evening max el	8977 May 04 23:26	7°♋13'24	18°38'59
asc. node	8976 May 14 22:05	15°♋10'58					

retrograde	8977 May 11 13:02	10° Π 49'03		8978 Apr 03 04:02	0° \mathcal{B}	
evening set	8977 May 14 18:34	9° Π 49'44		greatest brilliancy	8978 Apr 06 08:39	4° \mathcal{B} 51'37 -0.7m
inferior conj	8977 May 20 10:23	4° Π 13'19 3°18'14		evening max el	8978 Apr 18 07:38	20° \mathcal{B} 51'16 19°22'05
minimum elong	8977 May 20 11:16	4° Π 10'38 3°17'57		asc. node	8978 Apr 18 16:18	21° \mathcal{B} 12'49
min. Earth dist.	8977 May 22 09:46	1° Π 49'06 0.65318 AU		retrograde	8978 Apr 25 09:53	24° \mathcal{B} 52'09
	8977 May 23 23:58	30° \mathcal{R} \mathcal{B}		evening set	8978 Apr 28 23:31	23° \mathcal{B} 37'49
morning rise	8977 May 26 03:12	27° \mathcal{B} 55'20		inferior conj	8978 May 04 09:51	17° \mathcal{B} 46'04 3°21'06
direct	8977 Jun 01 16:29	25° \mathcal{B} 09'30		minimum elong	8978 May 04 09:29	17° \mathcal{B} 47'15 3°20'54
desc. node	8977 Jun 05 06:07	25° \mathcal{B} 51'31		min. Earth dist.	8978 May 05 18:01	16° \mathcal{B} 01'04 0.66776 AU
	8977 Jun 11 18:41	0° Π		morning rise	8978 May 09 19:04	11° \mathcal{B} 27'22
morning max el	8977 Jun 15 00:42	3° Π 02'24 27°01'45		direct	8978 May 15 22:59	8° \mathcal{B} 44'16
	8977 Jul 05 07:36	0° \mathcal{B}		desc. node	8978 May 23 03:07	11° \mathcal{B} 32'56
morning set	8977 Jul 20 16:37	26° \mathcal{B} 51'44		morning max el	8978 May 28 10:53	16° \mathcal{B} 12'27 25°53'08
	8977 Jul 22 07:22	0° Ω			8978 Jun 08 20:28	0° Π
max. Earth dist.	8977 Jul 25 01:23	5° Ω 29'00 1.33819 AU			8978 Jun 28 05:04	0° \mathcal{B}
asc. node	8977 Jul 28 18:26	13° Ω 07'46		morning set	8978 Jul 03 13:18	9° \mathcal{B} 32'04
				max. Earth dist.	8978 Jul 07 08:17	16° \mathcal{B} 39'14 1.35528 AU
superior conj	8977 Jul 29 04:13	13° Ω 59'03 0°04'06		superior conj	8978 Jul 12 22:17	27° \mathcal{B} 39'51 -0°26'44
minimum elong	8977 Jul 29 04:00	13° Ω 57'57 0°03'52		minimum elong	8978 Jul 12 23:53	27° \mathcal{B} 47'53 0°26'39
behind sun begin	8977 Jul 28 22:30	13° Ω 29'04			8978 Jul 14 01:54	0° Ω
behind sun end	8977 Jul 29 09:31	14° Ω 26'53		asc. node	8978 Jul 15 15:25	3° Ω 12'01
evening rise	8977 Aug 05 11:31	29° Ω 28'15		evening rise	8978 Jul 20 18:59	13° Ω 49'35
	8977 Aug 05 17:33	0° \mathcal{H}			8978 Jul 29 03:53	0° \mathcal{H}
	8977 Aug 23 06:45	0° $\underline{\mathcal{A}}$		evening max el	8978 Aug 07 20:51	13° \mathcal{H} 28'33 20°17'10
evening max el	8977 Aug 25 18:09	2° $\underline{\mathcal{A}}$ 39'39 21°40'34		retrograde	8978 Aug 18 16:33	18° \mathcal{H} 49'55
desc. node	8977 Sep 01 04:55	7° $\underline{\mathcal{A}}$ 23'56		desc. node	8978 Aug 19 02:04	18° \mathcal{H} 49'31
retrograde	8977 Sep 07 03:56	8° $\underline{\mathcal{A}}$ 49'10		evening set	8978 Aug 20 15:49	18° \mathcal{H} 40'03
evening set	8977 Sep 09 21:14	8° $\underline{\mathcal{A}}$ 32'27		inferior conj	8978 Aug 29 18:36	14° \mathcal{H} 42'06 -3°11'46
inferior conj	8977 Sep 19 00:41	4° $\underline{\mathcal{A}}$ 34'19 -4°48'09		minimum elong	8978 Aug 29 10:08	14° \mathcal{H} 54'31 3°08'57
minimum elong	8977 Sep 18 15:39	4° $\underline{\mathcal{A}}$ 46'56 4°46'09		min. Earth dist.	8978 Aug 31 06:12	13° \mathcal{H} 49'50 0.54893 AU
min. Earth dist.	8977 Sep 18 20:39	4° $\underline{\mathcal{A}}$ 39'58 0.54706 AU		morning rise	8978 Sep 07 03:36	10° \mathcal{H} 34'32
morning rise	8977 Sep 27 11:10	0° $\underline{\mathcal{A}}$ 44'58		direct	8978 Sep 11 11:05	9° \mathcal{H} 54'29
direct	8977 Oct 01 01:06	0° $\underline{\mathcal{A}}$ 16'59		morning max el	8978 Sep 24 22:35	16° \mathcal{H} 28'04 23°48'55
morning max el	8977 Oct 13 08:51	6° $\underline{\mathcal{A}}$ 06'57 22°03'24			8978 Oct 05 18:19	0° $\underline{\mathcal{A}}$
asc. node	8977 Oct 24 18:18	21° $\underline{\mathcal{A}}$ 08'40		asc. node	8978 Oct 11 15:15	9° $\underline{\mathcal{A}}$ 58'51
	8977 Oct 29 15:19	0° \mathcal{M}		morning set	8978 Oct 19 03:17	24° $\underline{\mathcal{A}}$ 59'43
morning set	8977 Nov 03 15:38	10° \mathcal{M} 10'24			8978 Oct 21 11:12	0° \mathcal{M}
superior conj	8977 Nov 10 18:34	25° \mathcal{M} 17'57 1°39'56		superior conj	8978 Oct 26 01:09	9° \mathcal{M} 57'51 1°40'19
minimum elong	8977 Nov 10 19:16	25° \mathcal{M} 21'36 1°40'07		minimum elong	8978 Oct 26 00:38	9° \mathcal{M} 55'01 1°40'28
	8977 Nov 13 00:33	0° \mathcal{X}		max. Earth dist.	8978 Oct 28 12:02	15° \mathcal{M} 14'26 1.33070 AU
max. Earth dist.	8977 Nov 14 13:53	3° \mathcal{X} 11'43 1.34460 AU		evening rise	8978 Nov 02 13:58	25° \mathcal{M} 46'45
evening rise	8977 Nov 18 23:34	11° \mathcal{X} 55'59			8978 Nov 04 17:09	0° \mathcal{X}
desc. node	8977 Nov 28 03:32	28° \mathcal{X} 30'54		desc. node	8978 Nov 15 00:36	18° \mathcal{X} 32'13
	8977 Nov 29 00:44	0° \mathcal{Z}			8978 Nov 22 10:45	0° \mathcal{Z}
	8977 Dec 20 09:31	0° \approx		evening max el	8978 Dec 06 12:47	17° \mathcal{Z} 06'23 27°25'40
evening max el	8977 Dec 24 00:16	3° \approx 44'19 26°56'00		retrograde	8978 Dec 20 03:19	24° \mathcal{Z} 26'16
retrograde	8978 Jan 06 05:55	11° \approx 04'04		evening set	8978 Dec 27 02:16	21° \mathcal{Z} 52'59
evening set	8978 Jan 12 20:31	8° \approx 29'02		min. Earth dist.	8978 Dec 30 21:20	18° \mathcal{Z} 30'04 0.64091 AU
min. Earth dist.	8978 Jan 16 20:28	4° \approx 33'30 0.65696 AU		inferior conj	8979 Jan 02 09:42	15° \mathcal{Z} 52'41 -1°43'54
inferior conj	8978 Jan 18 21:19	2° \approx 12'58 -0°37'04		minimum elong	8979 Jan 02 12:57	15° \mathcal{Z} 44'11 1°42'19
minimum elong	8978 Jan 18 22:22	2° \approx 09'55 0°36'23		asc. node	8979 Jan 07 14:43	11° \mathcal{Z} 15'16
asc. node	8978 Jan 20 17:38	0° \approx 08'51		morning rise	8979 Jan 09 01:21	10° \mathcal{Z} 30'29
	8978 Jan 20 20:58	30° \mathcal{R} \mathcal{Z}		direct	8979 Jan 11 12:38	9° \mathcal{Z} 59'50
morning rise	8978 Jan 25 01:22	26° \mathcal{Z} 36'12		morning max el	8979 Jan 17 23:54	13° \mathcal{Z} 21'49 17°50'40
direct	8978 Jan 27 20:14	25° \mathcal{Z} 53'50			8979 Jan 29 14:18	0° \approx
morning max el	8978 Feb 03 06:42	29° \mathcal{Z} 19'07 18°09'53		morning set	8979 Feb 03 19:35	8° \approx 49'53
	8978 Feb 03 22:42	0° \approx		desc. node	8979 Feb 11 00:02	20° \approx 55'28
morning set	8978 Feb 22 00:38	26° \approx 55'15				
	8978 Feb 23 22:15	0° \mathcal{H}		superior conj	8979 Feb 16 21:27	0° \mathcal{H} 35'06 -0°42'12
desc. node	8978 Feb 24 03:08	0° \mathcal{H} 19'45		minimum elong	8979 Feb 16 16:44	0° \mathcal{H} 16'01 0°41'24
superior conj	8978 Mar 09 01:08	20° \mathcal{H} 55'32 -1°25'08			8979 Feb 16 12:47	0° \mathcal{H}
minimum elong	8978 Mar 08 15:59	20° \mathcal{H} 19'33 1°24'04		max. Earth dist.	8979 Feb 22 03:44	9° \mathcal{H} 00'22 1.44859 AU
max. Earth dist.	8978 Mar 11 08:13	24° \mathcal{H} 31'41 1.45514 AU		evening rise	8979 Mar 04 16:50	25° \mathcal{H} 25'40
	8978 Mar 14 20:13	0° \mathcal{Y}			8979 Mar 07 16:36	0° \mathcal{Y}
evening rise	8978 Mar 25 04:17	16° \mathcal{Y} 05'06			8979 Mar 28 11:43	0° \mathcal{B}

evening max el	8979 Apr 01 10:32	4°♄30'44	20°20'22		8980 Feb 09 02:48	0°♄	
asc. node	8979 Apr 05 13:25	7°♄54'52		evening rise	8980 Feb 12 06:54	4°♄58'14	
retrograde	8979 Apr 09 08:27	9°♄06'50			8980 Feb 29 01:32	0°♄	
evening set	8979 Apr 13 07:01	7°♄37'12		evening max el	8980 Mar 14 07:52	18°♄11'25	21°30'48
inferior conj	8979 Apr 18 14:38	1°♄31'53	3°11'15	asc. node	8980 Mar 22 10:32	23°♄25'12	
minimum elong	8979 Apr 18 13:16	1°♄36'31	3°10'57	retrograde	8980 Mar 23 06:41	23°♄28'45	
min. Earth dist.	8979 Apr 19 08:31	0°♄30'48	0.67789 AU	evening set	8980 Mar 27 15:15	21°♄43'55	
	8979 Apr 19 17:37	30°♄		inferior conj	8980 Apr 01 22:27	15°♄27'29	2°50'40
morning rise	8979 Apr 23 19:18	25°♄15'02		minimum elong	8980 Apr 01 20:27	15°♄34'26	2°50'11
direct	8979 Apr 29 10:55	22°♄44'02		min. Earth dist.	8980 Apr 02 03:16	15°♄10'41	0.68354 AU
desc. node	8979 May 10 00:04	28°♄43'11		morning rise	8980 Apr 07 01:28	9°♄14'09	
morning max el	8979 May 10 20:16	29°♄33'15	24°28'50	direct	8980 Apr 12 03:26	7°♄01'27	
	8979 May 11 06:43	0°♄		morning max el	8980 Apr 22 06:14	13°♄01'20	22°58'58
	8979 Jun 02 16:22	0°♄		desc. node	8980 Apr 25 20:59	16°♄58'14	
morning set	8979 Jun 15 15:31	21°♄18'05			8980 May 05 21:32	0°♄	
max. Earth dist.	8979 Jun 19 06:52	27°♄46'40	1.37609 AU		8980 May 25 13:39	0°♄	
	8979 Jun 20 12:08	0°♄		morning set	8980 May 26 17:55	1°♄56'40	
				max. Earth dist.	8980 May 31 03:11	9°♄21'16	1.39868 AU
superior conj	8979 Jun 26 05:08	10°♄44'59	-0°59'03	superior conj	8980 Jun 07 20:48	23°♄05'28	-1°30'12
minimum elong	8979 Jun 26 08:51	11°♄02'59	0°58'39	minimum elong	8980 Jun 08 02:22	23°♄31'02	1°29'42
asc. node	8979 Jul 02 12:23	23°♄09'48			8980 Jun 11 14:04	0°♄	
evening rise	8979 Jul 04 20:47	27°♄50'52		evening rise	8980 Jun 17 13:55	11°♄24'26	
	8979 Jul 05 22:50	0°♄		asc. node	8980 Jun 18 09:23	12°♄57'18	
evening max el	8979 Jul 21 12:49	25°♄01'59	19°13'44		8980 Jun 27 23:12	0°♄	
retrograde	8979 Jul 30 16:18	29°♄33'48		evening max el	8980 Jul 03 15:39	7°♄17'39	18°31'17
evening set	8979 Aug 01 13:10	29°♄23'15		retrograde	8980 Jul 11 10:11	11°♄10'15	
desc. node	8979 Aug 05 23:13	27°♄44'40		evening set	8980 Jul 13 12:39	10°♄54'06	
inferior conj	8979 Aug 10 01:44	25°♄12'46	-1°15'52	inferior conj	8980 Jul 21 05:42	6°♄24'40	0°28'54
minimum elong	8979 Aug 09 22:23	25°♄18'22	1°14'43	minimum elong	8980 Jul 21 06:44	6°♄22'37	0°28'17
min. Earth dist.	8979 Aug 12 19:15	23°♄23'47	0.55992 AU	desc. node	8980 Jul 22 20:19	5°♄08'46	
morning rise	8979 Aug 18 04:43	20°♄30'40		min. Earth dist.	8980 Jul 24 13:36	3°♄49'39	0.57799 AU
direct	8979 Aug 23 07:43	19°♄30'18		morning rise	8980 Jul 28 21:18	1°♄05'40	
morning max el	8979 Sep 06 11:06	26°♄40'59	25°31'30		8980 Jul 31 18:40	30°♄	
	8979 Sep 09 15:48	0°♄		direct	8980 Aug 03 19:10	29°♄36'31	
asc. node	8979 Sep 28 12:10	29°♄16'52			8980 Aug 06 20:42	0°♄	
	8979 Sep 28 20:56	0°♄		morning max el	8980 Aug 18 04:09	7°♄14'15	26°54'03
morning set	8979 Oct 03 14:44	9°♄46'01			8980 Sep 04 04:37	0°♄	
superior conj	8979 Oct 10 11:16	24°♄45'47	1°34'39	asc. node	8980 Sep 14 09:05	18°♄55'11	
minimum elong	8979 Oct 10 09:48	24°♄37'38	1°34'39	morning set	8980 Sep 17 00:20	24°♄24'20	
max. Earth dist.	8979 Oct 11 17:07	27°♄30'00	1.32126 AU		8980 Sep 19 14:43	0°♄	
	8979 Oct 12 20:32	0°♄		superior conj	8980 Sep 23 22:58	9°♄35'29	1°23'28
evening rise	8979 Oct 17 13:14	10°♄00'35		minimum elong	8980 Sep 23 20:53	9°♄23'57	1°23'15
	8979 Oct 28 00:23	0°♄		max. Earth dist.	8980 Sep 24 02:14	9°♄53'41	1.31647 AU
desc. node	8979 Nov 01 21:42	8°♄06'39		evening rise	8980 Sep 30 18:41	24°♄30'08	
	8979 Nov 18 23:29	0°♄			8980 Oct 03 10:07	0°♄	
evening max el	8979 Nov 18 22:11	29°♄56'57	27°25'42	desc. node	8980 Oct 18 18:49	27°♄03'00	
retrograde	8979 Dec 02 17:45	7°♄12'39			8980 Oct 20 20:13	0°♄	
evening set	8979 Dec 09 19:45	4°♄50'09		evening max el	8980 Oct 31 02:04	12°♄04'13	26°52'12
min. Earth dist.	8979 Dec 13 12:11	1°♄54'46	0.62195 AU	retrograde	8980 Nov 14 00:08	19°♄13'35	
	8979 Dec 15 13:48	30°♄		evening set	8980 Nov 20 20:57	17°♄12'39	
inferior conj	8979 Dec 16 10:38	29°♄11'09	-2°55'04	min. Earth dist.	8980 Nov 24 16:25	14°♄34'37	0.60122 AU
minimum elong	8979 Dec 16 16:17	28°♄58'00	2°52'45	inferior conj	8980 Nov 27 20:42	11°♄59'14	-4°05'25
morning rise	8979 Dec 23 15:04	24°♄06'50		minimum elong	8980 Nov 28 04:04	11°♄44'11	4°03'00
asc. node	8979 Dec 25 11:46	23°♄44'57		morning rise	8980 Dec 05 13:41	7°♄15'35	
direct	8979 Dec 25 21:12	23°♄44'15		direct	8980 Dec 07 17:59	6°♄57'35	
morning max el	8980 Jan 01 16:49	27°♄12'19	17°49'12	asc. node	8980 Dec 11 08:47	7°♄49'41	
	8980 Jan 04 04:21	0°♄		morning max el	8980 Dec 15 06:00	10°♄40'50	18°06'35
morning set	8980 Jan 17 12:51	21°♄48'12			8980 Dec 27 22:55	0°♄	
	8980 Jan 22 03:35	0°♄		morning set	8980 Dec 30 22:06	5°♄30'53	
superior conj	8980 Jan 28 18:19	11°♄26'21	0°00'49	superior conj	8981 Jan 09 15:46	23°♄27'06	0°37'39
minimum elong	8980 Jan 28 18:25	11°♄26'46	0°01'01	minimum elong	8981 Jan 09 18:30	23°♄39'19	0°37'29
behind sun begin	8980 Jan 28 09:39	10°♄49'33			8981 Jan 13 09:01	0°♄	
behind sun end	8980 Jan 29 03:11	12°♄03'53		desc. node	8981 Jan 14 17:52	2°♄21'36	
desc. node	8980 Jan 28 20:57	11°♄37'29		max. Earth dist.	8981 Jan 17 06:58	6°♄40'42	1.41720 AU
max. Earth dist.	8980 Feb 04 19:50	23°♄08'12	1.43542 AU				

evening rise	8981 Jan 22 11:55	15° \approx 14'02		desc. node	8982 Jan 01 14:51	23° \approx 04'41	
	8981 Jan 31 23:47	0° \approx		evening rise	8982 Jan 03 14:19	26° \approx 27'16	
	8981 Feb 23 05:11	0° \approx			8982 Jan 05 17:11	0° \approx	
evening max el	8981 Feb 25 00:41	1° \approx 54'10	22°49'04		8982 Jan 25 15:02	0° \approx	
retrograde	8981 Mar 07 02:51	7° \approx 52'50		evening max el	8982 Feb 07 14:53	15° \approx 40'29	24°09'14
asc. node	8981 Mar 09 07:40	7° \approx 28'46		retrograde	8982 Feb 18 19:36	22° \approx 14'46	
evening set	8981 Mar 11 22:36	5° \approx 53'14		evening set	8982 Feb 24 03:33	20° \approx 01'21	
	8981 Mar 16 22:18	30° \approx		asc. node	8982 Feb 24 04:48	19° \approx 58'41	
inferior conj	8981 Mar 17 07:17	29° \approx 28'50	2°20'33	min. Earth dist.	8982 Feb 28 20:16	14° \approx 37'04	0.68206 AU
minimum elong	8981 Mar 17 05:03	29° \approx 36'36	2°19'55	inferior conj	8982 Mar 01 15:16	13° \approx 32'53	1°41'33
min. Earth dist.	8981 Mar 16 23:57	29° \approx 54'17	0.68486 AU	minimum elong	8982 Mar 01 13:15	13° \approx 39'43	1°40'56
morning rise	8981 Mar 22 11:22	23° \approx 20'29		morning rise	8982 Mar 06 23:00	7° \approx 31'01	
direct	8981 Mar 26 23:32	21° \approx 29'17		direct	8982 Mar 10 21:57	6° \approx 01'58	
morning max el	8981 Apr 04 19:58	26° \approx 37'45	21°32'38	morning max el	8982 Mar 18 16:38	10° \approx 25'53	20°16'33
	8981 Apr 07 22:26	0° \approx		desc. node	8982 Mar 30 14:46	25° \approx 35'09	
desc. node	8981 Apr 12 17:53	5° \approx 59'47			8982 Apr 02 15:53	0° \approx	
	8981 Apr 29 10:09	0° \approx		morning set	8982 Apr 15 18:39	19° \approx 47'42	
morning set	8981 May 06 17:03	11° \approx 20'03			8982 Apr 22 07:22	0° \approx	
max. Earth dist.	8981 May 13 03:54	21° \approx 46'25	1.42029 AU	max. Earth dist.	8982 Apr 25 12:16	5° \approx 06'11	1.43825 AU
	8981 May 18 01:38	0° \approx					
superior conj	8981 May 20 16:44	4° \approx 31'11	-1°56'03	superior conj	8982 May 01 12:49	14° \approx 53'29	-2°10'55
minimum elong	8981 May 20 22:31	4° \approx 56'17	1°55'49	minimum elong	8982 May 01 15:15	15° \approx 03'29	2°11'03
evening rise	8981 May 31 18:32	24° \approx 20'44			8982 May 10 12:02	0° \approx	
	8981 Jun 03 21:06	0° \approx		evening rise	8982 May 14 06:01	6° \approx 28'58	
asc. node	8981 Jun 05 06:25	2° \approx 29'51		asc. node	8982 May 23 03:30	21° \approx 41'17	
evening max el	8981 Jun 17 01:34	20° \approx 06'53	18°09'06		8982 May 28 17:30	0° \approx	
retrograde	8981 Jun 23 22:18	23° \approx 35'35		evening max el	8982 May 31 14:44	3° \approx 19'09	18°06'10
evening set	8981 Jun 26 08:30	23° \approx 10'01		retrograde	8982 Jun 07 01:01	6° \approx 39'37	
inferior conj	8981 Jul 03 06:57	18° \approx 20'08	1°47'57	evening set	8982 Jun 09 18:49	6° \approx 02'03	
minimum elong	8981 Jul 03 09:49	18° \approx 13'37	1°46'49	inferior conj	8982 Jun 16 02:13	0° \approx 52'35	2°40'11
min. Earth dist.	8981 Jul 06 14:45	15° \approx 19'55	0.59989 AU	minimum elong	8982 Jun 16 04:56	0° \approx 45'32	2°39'20
desc. node	8981 Jul 09 17:23	12° \approx 55'58			8982 Jun 16 22:19	30° \approx 11	
morning rise	8981 Jul 10 08:13	12° \approx 32'22		min. Earth dist.	8982 Jun 19 00:21	27° \approx 51'12	0.62237 AU
direct	8981 Jul 16 19:48	10° \approx 32'12		morning rise	8982 Jun 22 13:08	24° \approx 46'28	
morning max el	8981 Jul 31 03:55	18° \approx 26'31	27°43'49	desc. node	8982 Jun 26 14:27	22° \approx 43'12	
	8981 Aug 09 20:57	0° \approx		direct	8982 Jun 29 06:49	22° \approx 20'32	
	8981 Aug 27 21:36	0° \approx			8982 Jul 13 00:44	0° \approx	
morning set	8981 Sep 01 06:24	8° \approx 49'55		morning max el	8982 Jul 13 09:44	0° \approx 22'20	27°55'28
asc. node	8981 Sep 01 06:00	8° \approx 47'52			8982 Aug 03 23:17	0° \approx	
max. Earth dist.	8981 Sep 07 11:57	22° \approx 16'58	1.31637 AU	morning set	8982 Aug 16 06:48	22° \approx 55'52	
				asc. node	8982 Aug 19 02:56	28° \approx 48'58	
superior conj	8981 Sep 08 10:26	24° \approx 21'19	1°07'09		8982 Aug 19 16:22	0° \approx	
minimum elong	8981 Sep 08 08:11	24° \approx 08'54	1°06'45	max. Earth dist.	8982 Aug 21 18:21	4° \approx 27'35	1.32103 AU
evening rise	8981 Sep 15 04:07	9° \approx 09'06		superior conj	8982 Aug 23 19:47	8° \approx 56'24	0°46'02
	8981 Sep 25 19:28	0° \approx		minimum elong	8982 Aug 23 17:53	8° \approx 46'02	0°45'33
desc. node	8981 Oct 05 15:57	15° \approx 06'23		evening rise	8982 Aug 30 15:29	23° \approx 15'12	
evening max el	8981 Oct 12 22:24	23° \approx 21'44	25°45'58		8982 Sep 02 13:47	0° \approx	
	8981 Oct 23 16:02	0° \approx			8982 Sep 20 20:10	0° \approx	
retrograde	8981 Oct 26 20:28	0° \approx 23'58		desc. node	8982 Sep 22 13:06	1° \approx 55'02	
	8981 Oct 30 00:34	30° \approx 11		evening max el	8982 Sep 24 11:24	3° \approx 52'56	24°15'09
evening set	8981 Nov 02 01:06	28° \approx 54'13		retrograde	8982 Oct 08 04:40	10° \approx 45'33	
min. Earth dist.	8981 Nov 06 10:58	26° \approx 18'02	0.58059 AU	evening set	8982 Oct 13 04:33	9° \approx 50'35	
inferior conj	8981 Nov 09 12:32	24° \approx 07'53	-5°04'52	min. Earth dist.	8982 Oct 18 22:11	6° \approx 57'50	0.56260 AU
minimum elong	8981 Nov 09 19:14	23° \approx 55'59	5°03'26	inferior conj	8982 Oct 21 07:58	5° \approx 28'24	-5°37'03
morning rise	8981 Nov 17 15:41	19° \approx 46'39		minimum elong	8982 Oct 21 09:41	5° \approx 25'43	5°36'51
direct	8981 Nov 19 22:55	19° \approx 29'55		morning rise	8982 Oct 29 16:54	1° \approx 28'27	
asc. node	8981 Nov 28 05:47	23° \approx 23'12		direct	8982 Nov 01 08:44	1° \approx 09'49	
morning max el	8981 Nov 28 11:44	23° \approx 37'20	18°44'34	morning max el	8982 Nov 11 06:25	5° \approx 50'42	19°44'55
	8981 Dec 03 16:34	0° \approx		asc. node	8982 Nov 15 02:47	10° \approx 10'08	
morning set	8981 Dec 14 18:28	19° \approx 44'01			8982 Nov 26 19:02	0° \approx	
	8981 Dec 20 00:51	0° \approx		morning set	8982 Nov 28 22:14	4° \approx 16'24	
superior conj	8981 Dec 23 09:31	6° \approx 25'21	1°05'53	superior conj	8982 Dec 06 18:31	20° \approx 106'38	1°25'20
minimum elong	8981 Dec 23 12:49	6° \approx 40'55	1°05'42	minimum elong	8982 Dec 06 21:09	20° \approx 19'41	1°25'19
max. Earth dist.	8981 Dec 30 14:08	19° \approx 32'35	1.39607 AU		8982 Dec 11 21:17	0° \approx	
				max. Earth dist.	8982 Dec 12 20:17	1° \approx 347'44	1.37438 AU

evening rise	8982 Dec 16 13:52	8° Z 35'53		evening rise	8983 Nov 29 07:30	21° Z 32'04	
desc. node	8982 Dec 19 11:52	13° Z 42'35			8983 Dec 03 23:06	0° Z	
	8982 Dec 29 12:18	0° \approx		desc. node	8983 Dec 06 08:54	4° Z 10'56	
evening max el	8983 Jan 21 04:08	29° \approx 28'51	25°24'34		8983 Dec 23 08:48	0° \approx	
	8983 Jan 21 17:00	0° X		evening max el	8984 Jan 03 17:19	13° \approx 14'06	26°27'51
retrograde	8983 Feb 02 07:58	6° X 29'33		retrograde	8984 Jan 16 15:15	20° \approx 30'29	
evening set	8983 Feb 08 04:34	4° X 04'20		evening set	8984 Jan 22 23:50	17° \approx 57'10	
asc. node	8983 Feb 11 01:56	1° X 06'24		min. Earth dist.	8984 Jan 27 02:54	13° \approx 42'59	0.66467 AU
	8983 Feb 11 23:43	30° R \approx		inferior conj	8984 Jan 28 21:10	11° \approx 34'59	-0°01'34
min. Earth dist.	8983 Feb 12 14:00	29° \approx 14'55	0.67527 AU	minimum elong	8984 Jan 28 21:12	11° \approx 34'53	0°01'21
inferior conj	8983 Feb 13 20:35	27° \approx 36'22	0°54'04	transit middle	8984 Jan 28 21:12	11° \approx 34'53	0°01'21
minimum elong	8983 Feb 13 19:18	27° \approx 40'30	0°53'43	transit begin	8984 Jan 28 18:18	11° \approx 43'37	
morning rise	8983 Feb 19 10:24	21° \approx 42'43		transit end	8984 Jan 29 00:05	11° \approx 26'10	
direct	8983 Feb 22 21:12	20° \approx 34'20		asc. node	8984 Jan 28 23:03	11° \approx 29'18	
morning max el	8983 Mar 01 21:21	24° \approx 25'46	19°14'41	morning rise	8984 Feb 03 19:26	5° \approx 51'34	
	8983 Mar 06 16:21	0° X		direct	8984 Feb 06 19:32	5° \approx 00'53	
greatest brilliancy	8983 Mar 14 22:59	11° X 46'29	-0.7m	morning max el	8984 Feb 13 08:56	8° \approx 32'32	18°28'44
desc. node	8983 Mar 17 11:39	15° X 35'20			8984 Feb 28 15:19	0° X	
morning set	8983 Mar 25 19:10	28° X 20'53		desc. node	8984 Mar 03 08:33	5° X 53'15	
	8983 Mar 26 20:48	0° Y		morning set	8984 Mar 04 16:50	8° X 01'16	
max. Earth dist.	8983 Apr 08 03:18	19° Y 07'58	1.45038 AU		8984 Mar 18 15:41	0° Y	
superior conj	8983 Apr 11 09:09	24° Y 15'39	-2°08'34	superior conj	8984 Mar 20 15:09	3° Y 05'45	-1°45'55
minimum elong	8983 Apr 11 04:38	23° Y 57'47	2°08'29	minimum elong	8984 Mar 20 05:43	2° Y 28'50	1°45'05
	8983 Apr 14 23:29	0° Z		max. Earth dist.	8984 Mar 20 21:55	3° Y 32'11	1.45549 AU
evening rise	8983 Apr 25 19:54	17° Z 40'45		evening rise	8984 Apr 05 10:01	27° Y 54'04	
	8983 May 03 07:19	0° II			8984 Apr 06 17:50	0° Z	
asc. node	8983 May 10 00:36	10° II 24'41		greatest brilliancy	8984 Apr 14 18:20	12° Z 38'57	-0.8m
evening max el	8983 May 15 03:56	16° II 46'17	18°21'49	asc. node	8984 Apr 25 21:44	28° Z 30'17	
retrograde	8983 May 21 13:48	20° II 12'53			8984 Apr 27 06:15	0° II	
evening set	8983 May 24 14:59	19° II 21'45		evening max el	8984 Apr 27 14:27	0° II 21'00	18°55'17
inferior conj	8983 May 30 11:23	13° II 54'30	3°09'41	retrograde	8984 May 04 08:39	4° II 06'27	
minimum elong	8983 May 30 13:01	13° II 49'46	3°09'15	evening set	8984 May 07 17:28	3° II 00'53	
min. Earth dist.	8983 Jun 01 19:25	11° II 12'26	0.64285 AU		8984 May 11 00:57	30° R Z	
morning rise	8983 Jun 05 09:58	7° II 38'48		inferior conj	8984 May 13 06:33	27° Z 17'35	3°21'10
direct	8983 Jun 12 02:24	4° II 57'05		minimum elong	8984 May 13 06:53	27° Z 16'33	3°20'57
desc. node	8983 Jun 13 11:29	5° II 03'19		min. Earth dist.	8984 May 14 23:22	25° Z 09'05	0.65984 AU
morning max el	8983 Jun 25 19:25	12° II 56'57	27°30'30	morning rise	8984 May 18 19:44	20° Z 58'35	
	8983 Jul 09 11:24	0° Z		direct	8984 May 25 05:21	18° Z 12'41	
	8983 Jul 27 12:51	0° Ω		desc. node	8984 May 30 08:28	19° Z 39'30	
morning set	8983 Jul 30 23:08	6° Ω 36'03		morning max el	8984 Jun 07 06:06	25° Z 57'42	26°35'10
max. Earth dist.	8983 Aug 04 17:41	16° Ω 16'25	1.33054 AU		8984 Jun 10 23:11	0° II	
asc. node	8983 Aug 05 23:54	18° Ω 54'34			8984 Jul 02 00:40	0° Z	
superior conj	8983 Aug 08 01:06	23° Ω 15'34	0°20'32	morning set	8984 Jul 13 04:08	19° Z 41'20	
minimum elong	8983 Aug 08 00:06	23° Ω 10'15	0°20'09	max. Earth dist.	8984 Jul 17 06:38	27° Z 37'40	1.34488 AU
	8983 Aug 11 04:17	0° P			8984 Jul 18 11:13	0° Ω	
evening rise	8983 Aug 15 02:55	8° P 28'16		superior conj	8984 Jul 22 00:01	7° Ω 12'07	-0°08'42
	8983 Aug 26 07:41	0° Ω		minimum elong	8984 Jul 22 00:31	7° Ω 14'41	0°08'48
evening max el	8983 Sep 05 22:57	14° Ω 03'24	22°35'19	behind sun begin	8984 Jul 21 19:36	6° Ω 49'16	
desc. node	8983 Sep 09 10:15	17° Ω 01'38		behind sun end	8984 Jul 22 05:26	7° Ω 40'08	
retrograde	8983 Sep 19 00:49	20° Ω 34'50		asc. node	8984 Jul 22 20:53	9° Ω 00'20	
evening set	8983 Sep 22 12:27	20° Ω 08'08		evening rise	8984 Jul 29 12:25	22° Ω 57'07	
min. Earth dist.	8983 Sep 30 06:13	16° Ω 41'30	0.55037 AU		8984 Aug 01 23:02	0° P	
inferior conj	8983 Oct 01 09:10	16° Ω 03'14	-5°22'21	evening max el	8984 Aug 17 18:19	24° P 30'31	21°02'53
minimum elong	8983 Oct 01 03:10	16° Ω 11'46	5°21'32	desc. node	8984 Aug 26 07:23	29° P 55'05	
morning rise	8983 Oct 09 19:46	12° Ω 15'25			8984 Aug 26 15:01	0° Ω	
direct	8983 Oct 13 00:37	11° Ω 52'03		retrograde	8984 Aug 29 13:26	0° Ω 21'20	
morning max el	8983 Oct 24 11:59	17° Ω 15'05	21°07'29	evening set	8984 Aug 31 20:30	0° Ω 08'55	
asc. node	8983 Nov 01 23:45	27° Ω 55'15			8984 Sep 01 14:00	30° R P	
	8983 Nov 03 06:51	0° P		inferior conj	8984 Sep 10 01:40	26° P 12'23	-4°11'58
morning set	8983 Nov 13 06:42	19° P 00'13		minimum elong	8984 Sep 09 15:59	26° P 26'04	4°09'17
	8983 Nov 18 12:43	0° Z		min. Earth dist.	8984 Sep 10 14:55	25° P 53'38	0.54662 AU
superior conj	8983 Nov 20 14:29	4° Z 18'42	1°36'42	morning rise	8984 Sep 18 11:49	22° P 17'36	
minimum elong	8983 Nov 20 15:56	4° Z 26'08	1°36'51	direct	8984 Sep 22 08:36	21° P 45'30	
max. Earth dist.	8983 Nov 25 05:59	13° Z 42'31	1.35448 AU	morning max el	8984 Oct 05 06:02	27° P 55'01	22°47'36
					8984 Oct 07 07:55	0° Ω	

asc. node	8984 Oct 18 20:42	16°♄25'12			8985 Oct 02 17:59	0°♄	
	8984 Oct 25 21:51	0°♄		asc. node	8985 Oct 05 17:38	5°♄28'26	
morning set	8984 Oct 27 17:43	3°♄49'25		morning set	8985 Oct 12 05:28	18°♄38'02	
					8985 Oct 17 10:56	0°♄	
superior conj	8984 Nov 03 18:01	18°♄51'31	1°40'52	superior conj	8985 Oct 19 02:21	3°♄35'56	1°38'37
minimum elong	8984 Nov 03 18:10	18°♄52'21	1°41'04	minimum elong	8985 Oct 19 01:23	3°♄30'40	1°38'43
max. Earth dist.	8984 Nov 06 23:04	25°♄37'53	1.33809 AU	max. Earth dist.	8985 Oct 21 00:17	7°♄45'46	1.32610 AU
	8984 Nov 09 02:04	0°♄		evening rise	8985 Oct 26 09:56	19°♄08'25	
evening rise	8984 Nov 11 15:24	5°♄06'22			8985 Oct 31 23:08	0°♄	
desc. node	8984 Nov 22 05:58	24°♄24'29		desc. node	8985 Nov 09 03:02	14°♄15'42	
	8984 Nov 25 16:11	0°♄			8985 Nov 19 21:41	0°♄	
evening max el	8984 Dec 16 06:24	26°♄48'22	27°11'51	evening max el	8985 Nov 28 18:00	9°♄59'21	27°29'40
	8984 Dec 19 22:42	0°♄		retrograde	8985 Dec 12 11:26	17°♄17'59	
retrograde	8984 Dec 29 16:43	4°♄09'58		evening set	8985 Dec 19 12:13	14°♄48'22	
evening set	8985 Jan 05 11:17	1°♄34'31		min. Earth dist.	8985 Dec 23 05:50	11°♄37'41	0.63313 AU
	8985 Jan 07 07:11	30°♄3		inferior conj	8985 Dec 25 22:41	8°♄56'12	-2°13'46
min. Earth dist.	8985 Jan 09 08:53	27°♄53'15	0.65049 AU	minimum elong	8985 Dec 26 02:57	8°♄45'32	2°11'50
inferior conj	8985 Jan 11 14:46	25°♄24'07	-1°04'39	morning rise	8986 Jan 01 19:40	3°♄40'58	
minimum elong	8985 Jan 11 16:42	25°♄18'46	1°03'37	asc. node	8986 Jan 01 17:09	3°♄43'22	
asc. node	8985 Jan 14 20:06	22°♄04'44		direct	8986 Jan 04 04:21	3°♄14'13	
morning rise	8985 Jan 17 23:35	19°♄53'19		morning max el	8986 Jan 10 18:20	6°♄38'02	17°47'44
direct	8985 Jan 20 14:50	19°♄16'34			8986 Jan 26 03:29	0°♄	
morning max el	8985 Jan 27 00:55	22°♄39'31	17°59'34	morning set	8986 Jan 27 01:22	1°♄34'55	
	8985 Feb 01 21:15	0°♄		desc. node	8986 Feb 05 02:22	17°♄03'04	
morning set	8985 Feb 13 20:05	19°♄10'22					
desc. node	8985 Feb 18 05:28	26°♄24'09		superior conj	8986 Feb 08 07:31	22°♄23'39	-0°23'30
	8985 Feb 20 10:21	0°♄		minimum elong	8986 Feb 08 05:02	22°♄13'24	0°22'58
superior conj	8985 Feb 28 01:22	12°♄14'59	-1°07'32		8986 Feb 12 23:40	0°♄	
minimum elong	8985 Feb 27 17:43	11°♄44'40	1°06'29	max. Earth dist.	8986 Feb 14 11:25	2°♄23'16	1.44378 AU
max. Earth dist.	8985 Mar 03 17:19	18°♄02'14	1.45321 AU	evening rise	8986 Feb 23 15:50	16°♄46'00	
	8985 Mar 11 09:26	0°♄			8986 Mar 04 09:29	0°♄	
evening rise	8985 Mar 16 04:36	7°♄24'48		evening max el	8986 Mar 24 21:03	27°♄40'09	20°49'07
greatest brilliancy	8985 Mar 30 04:04	28°♄39'14	-0.6m		8986 Mar 27 10:12	0°♄	
	8985 Mar 31 02:03	0°♄		asc. node	8986 Mar 30 15:55	2°♄00'21	
evening max el	8985 Apr 10 20:27	13°♄59'33	19°45'09	retrograde	8986 Apr 02 05:00	2°♄32'58	
asc. node	8985 Apr 12 18:49	15°♄46'44		evening set	8986 Apr 06 07:41	0°♄56'57	
retrograde	8985 Apr 18 06:28	18°♄14'40			8986 Apr 07 09:32	30°♄	
evening set	8985 Apr 21 23:42	16°♄54'03		inferior conj	8986 Apr 11 14:54	24°♄46'52	3°03'43
inferior conj	8985 Apr 27 08:34	10°♄56'24	3°18'19	minimum elong	8986 Apr 11 13:13	24°♄52'38	3°03'21
minimum elong	8985 Apr 27 07:45	10°♄59'09	3°18'06	min. Earth dist.	8986 Apr 12 03:10	24°♄04'31	0.68089 AU
min. Earth dist.	8985 Apr 28 10:37	9°♄29'28	0.67263 AU	morning rise	8986 Apr 16 18:32	18°♄31'24	
morning rise	8985 May 02 15:28	4°♄38'01		direct	8986 Apr 22 04:34	16°♄07'22	
direct	8985 May 08 14:26	1°♄58'49		morning max el	8986 May 03 00:55	22°♄36'04	23°50'37
desc. node	8985 May 17 05:27	6°♄01'42		desc. node	8986 May 04 02:24	23°♄42'06	
morning max el	8985 May 20 15:49	9°♄12'45	25°18'28		8986 May 09 12:23	0°♄	
	8985 Jun 06 00:41	0°♄			8986 May 30 08:31	0°♄	
	8985 Jun 24 14:43	0°♄		morning set	8986 Jun 07 10:17	13°♄19'08	
morning set	8985 Jun 25 17:35	2°♄00'10		max. Earth dist.	8986 Jun 11 05:30	19°♄55'49	1.38564 AU
max. Earth dist.	8985 Jun 29 08:54	8°♄40'50	1.36370 AU		8986 Jun 16 18:37	0°♄	
superior conj	8985 Jul 05 13:43	20°♄38'39	-0°40'24	superior conj	8986 Jun 18 14:41	3°♄26'39	-1°12'36
minimum elong	8985 Jul 05 16:12	20°♄50'56	0°40'10	minimum elong	8986 Jun 18 19:18	3°♄48'24	1°12'08
asc. node	8985 Jul 09 17:52	29°♄02'15		asc. node	8986 Jun 26 14:51	18°♄56'32	
	8985 Jul 10 05:13	0°♄		evening rise	8986 Jun 27 16:17	21°♄01'07	
evening rise	8985 Jul 13 17:45	7°♄10'20			8986 Jul 02 08:23	0°♄	
	8985 Jul 26 10:29	0°♄		evening max el	8986 Jul 13 23:58	17°♄31'17	18°53'11
evening max el	8985 Jul 31 02:51	5°♄38'22	19°47'43	retrograde	8986 Jul 22 11:53	21°♄44'21	
retrograde	8985 Aug 10 05:06	10°♄37'38		evening set	8986 Jul 24 10:49	21°♄31'48	
evening set	8985 Aug 12 01:44	10°♄28'14		desc. node	8986 Jul 31 01:38	18°♄19'31	
desc. node	8985 Aug 13 04:31	10°♄14'00		inferior conj	8986 Aug 01 15:16	17°♄13'43	-0°28'48
inferior conj	8985 Aug 20 23:45	6°♄26'43	-2°22'56	minimum elong	8986 Aug 01 14:04	17°♄15'51	0°28'31
minimum elong	8985 Aug 20 17:15	6°♄36'43	2°20'38	min. Earth dist.	8986 Aug 04 16:55	15°♄03'21	0.56692 AU
min. Earth dist.	8985 Aug 23 02:02	5°♄09'24	0.55252 AU	morning rise	8986 Aug 09 14:01	12°♄15'54	
morning rise	8985 Aug 29 06:48	2°♄05'30		direct	8986 Aug 15 01:39	11°♄04'00	
direct	8985 Sep 02 22:35	1°♄17'39		morning max el	8986 Aug 29 07:59	18°♄26'48	26°09'58
morning max el	8985 Sep 16 18:15	8°♄08'52	24°33'54		8986 Sep 08 00:18	0°♄	

asc. node	8986 Sep 22 14:34	24° \cap 56'18		asc. node	8987 Sep 09 11:30	14° \cap 41'16	
	8986 Sep 25 02:03	0° Ω		morning set	8987 Sep 11 00:39	17° \cap 54'58	
morning set	8986 Sep 26 16:20	3° Ω 21'42			8987 Sep 16 14:16	0° Ω	
				max. Earth dist.	8987 Sep 17 17:38	2° Ω 31'52	1.31587 AU
superior conj	8986 Oct 03 13:22	18° Ω 25'27	1°30'34	superior conj	8987 Sep 18 01:09	3° Ω 13'38	1°17'10
minimum elong	8986 Oct 03 11:35	18° Ω 15'35	1°30'28	minimum elong	8987 Sep 17 22:57	3° Ω 01'23	1°16'51
max. Earth dist.	8986 Oct 04 07:40	20° Ω 06'45	1.31870 AU	evening rise	8987 Sep 24 19:33	18° Ω 04'06	
	8986 Oct 08 20:26	0° \cap			8987 Sep 30 15:54	0° \cap	
evening rise	8986 Oct 10 12:09	3° \cap 30'14		desc. node	8987 Oct 13 21:16	22° \cap 11'29	
	8986 Oct 24 17:31	0° \nearrow			8987 Oct 19 23:22	0° \nearrow	
desc. node	8986 Oct 27 00:08	3° \nearrow 35'35		evening max el	8987 Oct 24 02:23	4° \nearrow 19'41	26°27'41
evening max el	8986 Nov 11 01:37	22° \nearrow 33'42	27°15'40	retrograde	8987 Nov 07 00:22	11° \nearrow 25'51	
retrograde	8986 Nov 24 22:15	29° \nearrow 45'47		evening set	8987 Nov 13 16:06	9° \nearrow 36'58	
evening set	8986 Dec 01 23:15	27° \nearrow 31'27		min. Earth dist.	8987 Nov 17 15:49	7° \nearrow 02'13	0.59232 AU
min. Earth dist.	8986 Dec 05 16:14	24° \nearrow 44'50	0.61334 AU	inferior conj	8987 Nov 20 20:25	4° \nearrow 35'27	-4°32'47
inferior conj	8986 Dec 08 17:44	22° \nearrow 03'08	-3°25'28	minimum elong	8987 Nov 21 03:55	4° \nearrow 21'00	4°30'39
minimum elong	8986 Dec 09 00:16	21° \nearrow 48'43	3°22'58	morning rise	8987 Nov 28 18:10	0° \nearrow 01'27	
morning rise	8986 Dec 16 03:36	17° \nearrow 06'56			8987 Nov 28 20:30	30° \cap	
direct	8986 Dec 18 08:35	16° \nearrow 46'35		direct	8987 Nov 30 23:14	29° \cap 44'16	
asc. node	8986 Dec 19 14:11	16° \nearrow 53'09			8987 Dec 03 00:49	0° \nearrow	
morning max el	8986 Dec 25 10:01	20° \nearrow 19'53	17°54'07	asc. node	8987 Dec 06 11:13	1° \nearrow 37'14	
	8987 Jan 01 14:44	0° \beth		morning max el	8987 Dec 08 20:30	3° \nearrow 36'13	18°20'11
morning set	8987 Jan 10 02:07	14° \beth 54'18		morning set	8987 Dec 24 16:39	28° \nearrow 51'51	
	8987 Jan 18 11:32	0° \approx			8987 Dec 25 06:57	0° \beth	
superior conj	8987 Jan 20 15:08	3° \approx 45'09	0°17'26	superior conj	8988 Jan 02 21:54	16° \beth 12'51	0°50'43
minimum elong	8987 Jan 20 16:38	3° \approx 51'41	0°17'25	minimum elong	8988 Jan 03 01:05	16° \beth 27'23	0°50'30
desc. node	8987 Jan 22 23:17	7° \approx 46'20		desc. node	8988 Jan 09 20:15	28° \beth 30'48	
max. Earth dist.	8987 Jan 28 01:59	16° \approx 19'22	1.42826 AU	max. Earth dist.	8988 Jan 10 11:35	29° \beth 36'34	1.40842 AU
evening rise	8987 Feb 03 10:59	26° \approx 34'12			8988 Jan 10 17:04	0° \approx	
	8987 Feb 05 15:37	0° H		evening rise	8988 Jan 15 00:47	7° \approx 13'57	
	8987 Feb 26 05:35	0° Υ			8988 Jan 29 18:13	0° H	
evening max el	8987 Mar 07 16:21	11° Υ 21'53	22°03'30	evening max el	8988 Feb 18 07:43	25° H 06'07	23°23'15
retrograde	8987 Mar 17 02:25	16° Υ 56'32			8988 Feb 24 09:33	0° Υ	
asc. node	8987 Mar 17 13:02	16° Υ 55'33		retrograde	8988 Feb 28 21:21	1° Υ 21'05	
evening set	8987 Mar 21 15:44	15° Υ 05'10		asc. node	8988 Mar 03 10:10	0° Υ 20'10	
inferior conj	8987 Mar 26 23:22	8° Υ 45'05	2°38'58		8988 Mar 03 22:51	30° \cap	
minimum elong	8987 Mar 26 21:13	8° Υ 52'35	2°38'26	evening set	8988 Mar 04 22:18	29° H 15'08	
min. Earth dist.	8987 Mar 26 22:53	8° Υ 46'45	0.68468 AU	inferior conj	8988 Mar 10 08:05	22° H 48'21	2°05'03
morning rise	8987 Apr 01 02:32	2° Υ 33'58		minimum elong	8988 Mar 10 05:53	22° H 55'56	2°04'25
direct	8987 Apr 05 22:40	0° Υ 30'15		min. Earth dist.	8988 Mar 09 19:39	23° H 31'06	0.68417 AU
morning max el	8987 Apr 15 12:01	6° Υ 07'15	22°21'21	morning rise	8988 Mar 15 13:25	16° H 42'46	
desc. node	8987 Apr 20 23:18	12° Υ 18'44		direct	8988 Mar 19 19:47	15° H 01'18	
	8987 May 03 21:13	0° B		morning max el	8988 Mar 28 04:37	19° H 49'34	20°58'46
morning set	8987 May 19 01:07	23° B 25'18			8988 Apr 05 15:48	0° Υ	
	8987 May 23 00:49	0° Π		desc. node	8988 Apr 06 20:12	1° Υ 36'17	
max. Earth dist.	8987 May 24 03:38	1° Π 52'39	1.40821 AU		8988 Apr 26 01:27	0° B	
superior conj	8987 May 31 22:31	15° Π 25'05	-1°42'06	morning set	8988 Apr 27 13:37	2° B 20'57	
minimum elong	8987 Jun 01 04:30	15° Π 51'52	1°41'42	max. Earth dist.	8988 May 05 07:46	14° B 43'03	1.42854 AU
	8987 Jun 08 21:06	0° E		superior conj	8988 May 12 08:39	26° B 24'21	-2°04'05
evening rise	8987 Jun 11 04:38	4° E 20'14		minimum elong	8988 May 12 13:32	26° B 45'07	2°04'02
asc. node	8987 Jun 13 11:52	8° E 38'20			8988 May 14 11:11	0° Π	
	8987 Jun 27 05:27	0° Ω		evening rise	8988 May 24 02:36	16° Π 57'55	
evening max el	8987 Jun 27 06:14	0° Ω 01'57	18°19'22	asc. node	8988 May 30 08:56	28° Π 02'55	
retrograde	8987 Jul 04 14:02	3° Ω 42'37			8988 May 31 12:20	0° E	
evening set	8987 Jul 06 19:45	3° Ω 22'49		evening max el	8988 Jun 09 17:54	13° E 01'47	18°05'26
	8987 Jul 12 15:29	30° \cap		retrograde	8988 Jun 16 09:04	16° E 25'31	
inferior conj	8987 Jul 14 04:30	28° E 44'15	1°05'51	evening set	8988 Jun 18 22:24	15° E 55'14	
minimum elong	8987 Jul 14 06:37	28° E 39'49	1°04'53	inferior conj	8988 Jun 25 13:58	10° E 56'44	2°13'10
min. Earth dist.	8987 Jul 17 13:40	25° E 55'56	0.58705 AU	minimum elong	8988 Jun 25 16:56	10° E 49'33	2°12'07
desc. node	8987 Jul 17 22:44	25° E 38'10		min. Earth dist.	8988 Jun 28 18:27	7° E 53'02	0.60956 AU
morning rise	8987 Jul 21 14:11	23° E 11'47		morning rise	8988 Jul 02 08:55	4° E 59'31	
direct	8987 Jul 27 18:36	21° E 29'40		desc. node	8988 Jul 03 19:48	4° E 07'55	
morning max el	8987 Aug 11 03:52	29° E 14'57	27°19'51	direct	8988 Jul 08 23:51	2° E 47'26	
	8987 Aug 11 21:57	0° Ω		morning max el	8988 Jul 23 06:41	10° E 46'41	27°53'29
	8987 Sep 01 21:31	0° \cap					

	8988 Aug 07 06:50	0°♊		8989 Jul 11 19:11	0°♊	
	8988 Aug 24 02:41	0°♊		8989 Jul 31 13:15	0°♊	
morning set	8988 Aug 25 04:35	2°♊12'51	morning set	8989 Aug 09 01:55	16°♊09'18	
asc. node	8988 Aug 26 08:27	4°♊38'01	asc. node	8989 Aug 13 05:25	24°♊41'58	
max. Earth dist.	8988 Aug 31 02:24	14°♊50'40 1.31773 AU	max. Earth dist.	8989 Aug 14 06:02	26°♊52'25 1.32441 AU	
				8989 Aug 15 17:04	0°♊	
superior conj	8988 Sep 01 11:57	17°♊55'12 0°58'45				
minimum elong	8988 Sep 01 09:47	17°♊43'17 0°58'18	superior conj	8989 Aug 16 19:52	2°♊24'53 0°35'43	
	8988 Sep 06 23:37	0°♊	minimum elong	8989 Aug 16 18:17	2°♊16'17 0°35'15	
evening rise	8988 Sep 08 06:01	2°♊44'08	evening rise	8989 Aug 23 17:39	17°♊24'55	
	8988 Sep 22 18:20	0°♊		8989 Aug 29 21:21	0°♊	
desc. node	8988 Sep 29 18:25	9°♊45'50	evening max el	8989 Sep 16 06:26	25°♊33'34 23°32'49	
evening max el	8988 Oct 04 19:00	15°♊14'33 25°09'28	desc. node	8989 Sep 16 15:34	25°♊55'21	
retrograde	8988 Oct 18 16:07	22°♊14'22		8989 Sep 21 23:02	0°♊	
evening set	8988 Oct 24 09:57	20°♊59'17	retrograde	8989 Sep 29 19:19	2°♊19'25	
min. Earth dist.	8988 Oct 29 06:42	18°♊18'23 0.57232 AU	evening set	8989 Oct 04 03:38	1°♊38'12	
inferior conj	8988 Nov 01 03:34	16°♊23'34 -5°23'06		8989 Oct 08 01:28	30°♊	
minimum elong	8988 Nov 01 08:44	16°♊14'56 5°22'17	min. Earth dist.	8989 Oct 10 16:31	28°♊32'40 0.55643 AU	
morning rise	8988 Nov 09 09:50	12°♊12'18	inferior conj	8989 Oct 12 14:41	27°♊24'14 -5°37'37	
direct	8988 Nov 11 19:52	11°♊55'16	minimum elong	8989 Oct 12 13:08	27°♊26'32 5°37'28	
morning max el	8988 Nov 20 22:01	16°♊15'48 19°07'36	morning rise	8989 Oct 21 00:38	23°♊30'50	
asc. node	8988 Nov 22 08:15	17°♊43'50	direct	8989 Oct 23 21:23	23°♊10'39	
	8988 Nov 30 17:29	0°♊	morning max el	8989 Nov 03 11:16	28°♊09'16 20°17'29	
morning set	8988 Dec 07 16:33	13°♊14'08		8989 Nov 05 06:42	0°♊	
			asc. node	8989 Nov 09 05:14	4°♊57'39	
superior conj	8988 Dec 15 22:46	29°♊31'24 1°15'09	morning set	8989 Nov 21 22:37	27°♊52'18	
minimum elong	8988 Dec 16 01:53	29°♊46'26 1°15'02		8989 Nov 22 23:30	0°♊	
	8988 Dec 16 04:42	0°♊				
max. Earth dist.	8988 Dec 22 17:25	12°♊10'06 1.38666 AU	superior conj	8989 Nov 29 12:55	13°♊27'15 1°31'04	
evening rise	8988 Dec 26 12:25	18°♊51'32	minimum elong	8989 Nov 29 15:05	13°♊38'10 1°31'08	
desc. node	8988 Dec 26 17:14	19°♊12'19	max. Earth dist.	8989 Dec 05 00:13	24°♊12'55 1.36555 AU	
	8989 Jan 02 04:39	0°♊		8989 Dec 08 02:15	0°♊	
	8989 Jan 23 00:37	0°♊	evening rise	8989 Dec 08 20:12	1°♊22'08	
evening max el	8989 Jan 30 21:09	8°♊53'14 24°42'16	desc. node	8989 Dec 13 14:17	9°♊47'01	
retrograde	8989 Feb 11 12:33	15°♊40'53		8989 Dec 26 07:43	0°♊	
evening set	8989 Feb 17 01:48	13°♊22'03	evening max el	8990 Jan 13 10:25	22°♊41'35 25°53'26	
asc. node	8989 Feb 18 07:18	12°♊12'42	retrograde	8990 Jan 25 22:54	29°♊50'26	
min. Earth dist.	8989 Feb 21 15:13	8°♊12'29 0.67961 AU	evening set	8990 Feb 01 00:35	27°♊21'29	
inferior conj	8989 Feb 22 15:10	6°♊52'53 1°22'26	asc. node	8990 Feb 05 04:24	22°♊55'27	
minimum elong	8989 Feb 22 13:24	6°♊58'46 1°21'55	min. Earth dist.	8990 Feb 05 07:17	22°♊46'32 0.67121 AU	
morning rise	8989 Feb 28 01:12	0°♊54'11	inferior conj	8990 Feb 06 18:44	20°♊55'08 0°31'29	
	8989 Mar 01 15:45	30°♊	minimum elong	8990 Feb 06 17:56	20°♊57'39 0°31'20	
direct	8989 Mar 03 18:43	29°♊34'22	morning rise	8990 Feb 12 11:51	15°♊05'16	
	8989 Mar 05 23:44	0°♊	direct	8990 Feb 15 17:54	14°♊04'46	
morning max el	8989 Mar 11 04:47	3°♊43'22 19°48'18	morning max el	8990 Feb 22 12:33	17°♊46'31 18°53'01	
greatest brilliancy	8989 Mar 24 02:11	20°♊28'33 -0.6m		8990 Mar 04 00:02	0°♊	
desc. node	8989 Mar 24 17:05	21°♊23'13	desc. node	8990 Mar 11 13:59	11°♊31'45	
	8989 Mar 30 11:29	0°♊	morning set	8990 Mar 16 18:59	19°♊37'37	
morning set	8989 Apr 06 11:36	10°♊41'45		8990 Mar 23 10:37	0°♊	
max. Earth dist.	8989 Apr 17 18:36	28°♊20'22 1.44420 AU	max. Earth dist.	8990 Mar 31 11:10	12°♊32'38 1.45351 AU	
	8989 Apr 18 19:39	0°♊				
superior conj	8989 Apr 22 18:09	6°♊19'26 -2°12'21	superior conj	8990 Apr 02 06:36	15°♊23'08 -2°01'21	
minimum elong	8989 Apr 22 17:53	6°♊18'21 2°12'28	minimum elong	8990 Apr 01 23:18	14°♊54'28 2°00'58	
evening rise	8989 May 06 05:21	28°♊42'45		8990 Apr 11 11:49	0°♊	
	8989 May 06 23:31	0°♊	evening rise	8990 Apr 17 09:00	9°♊28'30	
asc. node	8989 May 17 06:01	17°♊03'35		8990 Apr 30 05:42	0°♊	
evening max el	8989 May 24 07:26	26°♊21'28 18°10'38	asc. node	8990 May 04 03:05	5°♊32'06	
retrograde	8989 May 30 16:30	29°♊42'55	evening max el	8990 May 07 19:49	9°♊52'47 18°34'01	
evening set	8989 Jun 02 13:23	28°♊59'52	retrograde	8990 May 14 08:08	13°♊25'35	
inferior conj	8989 Jun 08 15:40	23°♊42'56 2°55'09	evening set	8990 May 17 12:34	12°♊28'20	
minimum elong	8989 Jun 08 17:58	23°♊36'36 2°54'29	inferior conj	8990 May 23 05:28	6°♊54'16 3°16'30	
min. Earth dist.	8989 Jun 11 08:15	20°♊47'15 0.63144 AU	minimum elong	8990 May 23 06:32	6°♊51'01 3°16'11	
morning rise	8989 Jun 14 21:00	17°♊31'41	min. Earth dist.	8990 May 25 07:06	4°♊25'06 0.65062 AU	
desc. node	8989 Jun 20 16:50	15°♊00'02	morning rise	8990 May 28 23:41	0°♊36'50	
direct	8989 Jun 21 15:02	14°♊57'17		8990 May 29 18:14	30°♊	
morning max el	8989 Jul 05 14:28	23°♊00'26 27°48'56	direct	8990 Jun 04 14:00	27°♊51'43	
			desc. node	8990 Jun 07 13:51	28°♊21'16	





































































































































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morning max el	8990 Jun 18 00:34	5°♂46'35	27°10'06	direct	8991 May 18 19:31	11°♂22'05	
	8990 Jul 06 12:45	0°♂		desc. node	8991 May 25 10:49	13°♂46'46	
morning set	8990 Jul 23 13:49	29°♂35'34		morning max el	8991 May 31 10:58	18°♂54'56	26°04'36
	8990 Jul 23 18:51	0°♂			8991 Jun 09 20:06	0°♂	
max. Earth dist.	8990 Jul 28 01:02	8°♂28'42	1.33606 AU		8991 Jun 29 13:51	0°♂	
asc. node	8990 Jul 31 02:21	14°♂48'06		morning set	8991 Jul 06 12:44	12°♂22'30	
				max. Earth dist.	8991 Jul 10 09:32	19°♂41'40	1.35248 AU
superior conj	8990 Jul 31 22:45	16°♂35'23	0°08'32				
minimum elong	8990 Jul 31 22:19	16°♂33'06	0°08'16	superior conj	8991 Jul 15 18:08	0°♂20'18	-0°21'55
behind sun begin	8990 Jul 31 17:30	16°♂07'40		minimum elong	8991 Jul 15 19:25	0°♂26'51	0°21'53
behind sun end	8990 Aug 01 03:09	16°♂58'35			8991 Jul 15 14:08	0°♂	
	8990 Aug 07 05:50	0°♂		asc. node	8991 Jul 17 23:19	4°♂52'49	
evening rise	8990 Aug 08 04:29	1°♂59'49		evening rise	8991 Jul 23 12:30	16°♂23'10	
	8990 Aug 23 20:39	0°♂			8991 Jul 30 10:23	0°♂	
evening max el	8990 Aug 28 20:26	5°♂47'25	21°54'22	evening max el	8991 Aug 10 21:02	16°♂29'38	20°28'21
desc. node	8990 Sep 03 12:42	10°♂09'16		desc. node	8991 Aug 21 09:49	21°♂58'08	
retrograde	8990 Sep 10 10:45	12°♂03'00		retrograde	8991 Aug 21 22:58	21°♂58'55	
evening set	8990 Sep 13 08:28	11°♂44'07		evening set	8991 Aug 23 23:42	21°♂48'38	
inferior conj	8990 Sep 22 10:36	7°♂44'40	-4°58'56	inferior conj	8991 Sep 02 03:34	17°♂51'20	-3°28'26
minimum elong	8990 Sep 22 02:08	7°♂56'30	4°57'14	minimum elong	8991 Sep 01 18:36	18°♂04'21	3°25'33
min. Earth dist.	8990 Sep 22 00:26	7°♂58'53	0.54767 AU	min. Earth dist.	8991 Sep 03 09:32	17°♂07'52	0.54805 AU
morning rise	8990 Sep 30 21:09	3°♂56'27		morning rise	8991 Sep 10 12:59	13°♂47'46	
direct	8990 Oct 04 08:48	3°♂29'44		direct	8991 Sep 14 17:36	13°♂10'04	
morning max el	8990 Oct 16 11:18	9°♂12'31	21°48'23	morning max el	8991 Sep 28 01:52	19°♂37'25	23°33'01
asc. node	8990 Oct 27 02:11	23°♂03'12			8991 Oct 06 18:11	0°♂	
	8990 Oct 31 00:36	0°♂		asc. node	8991 Oct 13 23:08	11°♂48'16	
morning set	8990 Nov 06 08:22	12°♂38'43		morning set	8991 Oct 21 19:53	27°♂28'04	
					8991 Oct 23 00:21	0°♂	
superior conj	8990 Nov 13 12:25	27°♂48'34	1°39'17				
minimum elong	8990 Nov 13 13:18	27°♂53'14	1°39'28	superior conj	8991 Oct 28 18:14	12°♂26'43	1°40'40
	8990 Nov 14 13:34	0°♂		minimum elong	8991 Oct 28 17:53	12°♂24'50	1°40'49
max. Earth dist.	8990 Nov 17 12:56	6°♂06'12	1.34706 AU	max. Earth dist.	8991 Oct 31 09:47	18°♂06'47	1.33246 AU
evening rise	8990 Nov 21 20:20	14°♂35'22		evening rise	8991 Nov 05 09:07	28°♂21'52	
desc. node	8990 Nov 30 11:20	0°♂09'41			8991 Nov 06 04:52	0°♂	
	8990 Nov 30 09:03	0°♂		desc. node	8991 Nov 17 08:24	20°♂14'25	
	8990 Dec 21 01:27	0°♂			8991 Nov 23 13:27	0°♂	
evening max el	8990 Dec 26 23:53	6°♂23'54	26°49'26	evening max el	8991 Dec 09 12:30	19°♂49'07	27°22'59
retrograde	8991 Jan 09 03:36	13°♂42'49		retrograde	8991 Dec 23 02:02	27°♂09'46	
evening set	8991 Jan 15 16:45	11°♂08'03		evening set	8991 Dec 30 00:03	24°♂35'32	
min. Earth dist.	8991 Jan 19 17:30	7°♂07'38	0.65907 AU	min. Earth dist.	8992 Jan 02 19:40	21°♂08'07	0.64346 AU
inferior conj	8991 Jan 21 16:38	4°♂50'20	-0°27'26	inferior conj	8992 Jan 05 06:26	18°♂32'28	-1°33'25
minimum elong	8991 Jan 21 17:25	4°♂48'05	0°26'54	minimum elong	8992 Jan 05 09:19	18°♂24'47	1°31'59
asc. node	8991 Jan 23 01:29	3°♂16'13		asc. node	8992 Jan 09 22:33	14°♂12'40	
	8991 Jan 26 12:15	30°♂		morning rise	8992 Jan 11 20:17	13°♂08'05	
morning rise	8991 Jan 27 19:08	29°♂11'47		direct	8992 Jan 14 08:31	12°♂35'59	
direct	8991 Jan 30 15:20	28°♂27'20		morning max el	8992 Jan 20 19:14	15°♂57'52	17°52'28
	8991 Feb 03 20:39	0°♂			8992 Jan 30 20:56	0°♂	
morning max el	8991 Feb 06 02:15	1°♂53'48	18°14'16	morning set	8992 Feb 06 20:17	11°♂39'50	
morning set	8991 Feb 25 05:15	29°♂56'36		desc. node	8992 Feb 13 07:48	22°♂30'37	
	8991 Feb 25 06:05	0°♂			8992 Feb 17 21:25	0°♂	
desc. node	8991 Feb 26 10:54	1°♂55'59					
				superior conj	8992 Feb 20 05:16	3°♂45'41	-0°48'57
superior conj	8991 Mar 12 11:59	24°♂15'01	-1°31'01	minimum elong	8992 Feb 19 23:44	3°♂23'28	0°48'03
minimum elong	8991 Mar 12 02:32	23°♂37'55	1°29'59	max. Earth dist.	8992 Feb 25 02:35	11°♂33'14	1.44998 AU
max. Earth dist.	8991 Mar 14 07:02	27°♂03'44	1.45547 AU	evening rise	8992 Mar 07 03:31	28°♂43'27	
	8991 Mar 16 04:06	0°♂			8992 Mar 07 23:29	0°♂	
evening rise	8991 Mar 28 13:53	19°♂21'27		greatest brilliancy	8992 Mar 22 00:32	21°♂06'35	-0.6m
	8991 Apr 04 09:51	0°♂			8992 Mar 28 08:39	0°♂	
greatest brilliancy	8991 Apr 09 01:19	7°♂08'44	-0.7m	evening max el	8992 Apr 03 08:22	7°♂09'28	20°10'45
evening max el	8991 Apr 21 04:41	23°♂30'17	19°14'35	asc. node	8992 Apr 06 21:17	10°♂10'26	
asc. node	8991 Apr 21 00:11	23°♂18'47		retrograde	8992 Apr 11 03:04	11°♂40'05	
retrograde	8991 Apr 28 04:34	27°♂26'47		evening set	8992 Apr 15 00:11	10°♂12'47	
evening set	8991 May 01 16:57	26°♂14'39		inferior conj	8992 Apr 20 08:02	4°♂09'18	3°13'26
inferior conj	8991 May 07 03:53	20°♂24'57	3°21'31	minimum elong	8992 Apr 20 06:49	4°♂13'27	3°13'10
minimum elong	8991 May 07 03:42	20°♂25'33	3°21'19	min. Earth dist.	8992 Apr 21 04:00	3°♂01'29	0.67667 AU
min. Earth dist.	8991 May 08 14:14	18°♂33'47	0.66586 AU		8992 Apr 23 12:30	30°♂	

morning rise	8992 Apr 25 13:12	27° Υ 51'54		evening set	8993 Mar 30 08:25	24° Υ 18'29	
direct	8992 May 01 06:43	25° Υ 18'36		inferior conj	8993 Apr 04 15:33	18° Υ 03'37	2°54'24
	8992 May 10 11:55	0° \mathcal{B}		minimum elong	8993 Apr 04 13:38	18° Υ 10'18	2°53'58
desc. node	8992 May 11 07:46	0° \mathcal{B} 45'19		min. Earth dist.	8993 Apr 04 22:18	17° Υ 40'08	0.68299 AU
morning max el	8992 May 12 20:29	2° \mathcal{B} 14'49	24°41'56	morning rise	8993 Apr 09 18:39	11° Υ 49'34	
	8992 Jun 02 22:09	0° Π		direct	8993 Apr 14 22:43	9° Υ 33'45	
morning set	8992 Jun 17 18:04	24° Π 17'41		morning max el	8993 Apr 25 06:07	15° Υ 41'26	23°12'16
	8992 Jun 20 22:34	0° \mathcal{E}		desc. node	8993 Apr 28 04:44	18° Υ 51'45	
max. Earth dist.	8992 Jun 21 08:52	0° \mathcal{E} 46'55	1.37282 AU		8993 May 06 23:29	0° \mathcal{B}	
					8993 May 26 21:55	0° Π	
superior conj	8992 Jun 28 02:52	13° \mathcal{E} 31'12	-0°54'09	morning set	8993 May 30 00:21	5° Π 07'15	
minimum elong	8992 Jun 28 06:16	13° \mathcal{E} 47'45	0°53'48	max. Earth dist.	8993 Jun 03 04:53	12° Π 14'57	1.39530 AU
asc. node	8992 Jul 03 20:18	24° \mathcal{E} 51'52					
	8992 Jul 06 09:45	0° Ω		superior conj	8993 Jun 10 21:08	25° Π 59'17	-1°25'42
evening rise	8992 Jul 06 15:19	0° Ω 27'50		minimum elong	8993 Jun 11 02:29	26° Π 24'03	1°25'13
evening max el	8992 Jul 23 11:06	27° Ω 56'23	19°21'51		8993 Jun 13 00:50	0° \mathcal{E}	
	8992 Jul 25 20:06	0° \mathcal{M}		evening rise	8993 Jun 20 10:00	14° \mathcal{E} 06'10	
retrograde	8992 Aug 01 20:25	2° \mathcal{M} 35'11		asc. node	8993 Jun 20 17:18	14° \mathcal{E} 41'14	
evening set	8992 Aug 03 16:49	2° \mathcal{M} 25'07			8993 Jun 29 01:52	0° Ω	
desc. node	8992 Aug 07 06:54	1° \mathcal{M} 14'08		evening max el	8993 Jul 06 12:39	10° Ω 06'45	18°36'19
	8992 Aug 09 14:43	30° \mathcal{R} Ω		retrograde	8993 Jul 14 11:18	14° Ω 04'02	
inferior conj	8992 Aug 12 08:04	28° Ω 17'16	-1°33'15	evening set	8993 Jul 16 12:46	13° Ω 48'57	
minimum elong	8992 Aug 12 03:54	28° Ω 24'05	1°31'47	inferior conj	8993 Jul 24 08:47	9° Ω 22'40	0°14'30
min. Earth dist.	8992 Aug 14 22:10	26° Ω 36'09	0.55772 AU	minimum elong	8993 Jul 24 09:20	9° Ω 21'39	0°14'05
morning rise	8992 Aug 20 12:15	23° Ω 40'39		transit middle	8993 Jul 24 09:20	9° Ω 21'39	0°14'05
direct	8992 Aug 25 12:15	22° Ω 43'48		transit begin	8993 Jul 24 07:34	9° Ω 25'00	
morning max el	8992 Sep 08 14:10	29° Ω 50'03	25°17'09	transit end	8993 Jul 24 11:05	9° Ω 18'17	
	8992 Sep 08 18:20	0° \mathcal{M}		desc. node	8993 Jul 25 04:01	8° Ω 45'49	
	8992 Sep 29 07:04	0° \mathcal{E}		min. Earth dist.	8993 Jul 27 15:39	6° Ω 53'21	0.57496 AU
asc. node	8992 Sep 29 20:05	1° \mathcal{E} 02'59		morning rise	8993 Aug 01 02:21	4° Ω 08'59	
morning set	8992 Oct 05 07:29	12° \mathcal{E} 15'32		direct	8993 Aug 06 21:49	2° Ω 44'19	
				morning max el	8993 Aug 21 06:15	10° Ω 18'40	26°43'37
superior conj	8992 Oct 12 04:00	27° \mathcal{E} 14'27	1°35'54		8993 Sep 05 08:59	0° \mathcal{M}	
minimum elong	8992 Oct 12 02:38	27° \mathcal{E} 07'00	1°35'55	asc. node	8993 Sep 16 17:01	20° \mathcal{M} 38'49	
	8992 Oct 13 10:09	0° \mathcal{M}		morning set	8993 Sep 19 17:29	26° \mathcal{M} 55'23	
max. Earth dist.	8992 Oct 13 13:55	0° \mathcal{M} 20'35	1.32233 AU		8993 Sep 21 03:57	0° \mathcal{E}	
evening rise	8992 Oct 19 07:15	12° \mathcal{M} 33'18					
	8992 Oct 28 08:38	0° \mathcal{X}		superior conj	8993 Sep 26 15:35	12° \mathcal{E} 04'24	1°25'32
desc. node	8992 Nov 03 05:28	9° \mathcal{X} 53'45		minimum elong	8993 Sep 26 13:34	11° \mathcal{E} 53'13	1°25'20
	8992 Nov 18 04:51	0° \mathcal{B}		max. Earth dist.	8993 Sep 26 22:40	12° \mathcal{E} 43'43	1.31687 AU
evening max el	8992 Nov 20 22:31	2° \mathcal{B} 45'32	27°27'48	evening rise	8993 Oct 03 11:57	27° \mathcal{E} 01'09	
retrograde	8992 Dec 04 17:44	10° \mathcal{B} 02'24			8993 Oct 04 22:08	0° \mathcal{M}	
evening set	8992 Dec 11 19:36	7° \mathcal{B} 37'40		desc. node	8993 Oct 21 02:34	28° \mathcal{M} 56'41	
min. Earth dist.	8992 Dec 15 12:10	4° \mathcal{B} 38'36	0.62490 AU		8993 Oct 21 19:42	0° \mathcal{X}	
inferior conj	8992 Dec 18 09:18	1° \mathcal{B} 54'59	-2°44'13	evening max el	8993 Nov 03 03:31	15° \mathcal{X} 00'25	26°59'26
minimum elong	8992 Dec 18 14:36	1° \mathcal{B} 42'25	2°41'58	retrograde	8993 Nov 17 01:24	22° \mathcal{X} 10'30	
	8992 Dec 20 11:22	30° \mathcal{R} \mathcal{X}		evening set	8993 Nov 23 23:32	20° \mathcal{X} 05'52	
morning rise	8992 Dec 25 11:49	26° \mathcal{X} 47'49		min. Earth dist.	8993 Nov 27 18:07	17° \mathcal{X} 25'56	0.60437 AU
asc. node	8992 Dec 26 19:37	26° \mathcal{X} 28'28		inferior conj	8993 Nov 30 21:50	14° \mathcal{X} 48'26	-3°55'12
direct	8992 Dec 27 18:28	26° \mathcal{X} 24'18		minimum elong	8993 Dec 01 05:03	14° \mathcal{X} 33'23	3°52'43
morning max el	8993 Jan 03 12:26	29° \mathcal{X} 51'04	17°48'14	morning rise	8993 Dec 08 13:02	10° \mathcal{X} 01'20	
	8993 Jan 03 16:02	0° \mathcal{B}		direct	8993 Dec 10 17:20	9° \mathcal{X} 42'51	
morning set	8993 Jan 19 10:39	24° \mathcal{B} 30'00		asc. node	8993 Dec 13 16:40	10° \mathcal{X} 18'49	
	8993 Jan 22 13:20	0° \approx		morning max el	8993 Dec 18 02:24	13° \mathcal{X} 23'23	18°02'41
desc. node	8993 Jan 30 04:45	13° \approx 11'59			8993 Dec 29 07:48	0° \mathcal{B}	
				morning set	8994 Jan 02 17:53	8° \mathcal{B} 07'10	
superior conj	8993 Jan 30 22:16	14° \approx 25'50	-0°05'26				
minimum elong	8993 Jan 30 21:46	14° \approx 23'41	0°05'10	superior conj	8994 Jan 12 16:16	26° \mathcal{B} 16'39	0°32'36
behind sun begin	8993 Jan 30 13:13	13° \approx 47'41		minimum elong	8994 Jan 12 18:45	26° \mathcal{B} 27'39	0°32'27
behind sun end	8993 Jan 31 06:19	14° \approx 59'36			8994 Jan 14 19:04	0° \approx	
max. Earth dist.	8993 Feb 06 19:02	25° \approx 44'05	1.43776 AU	desc. node	8994 Jan 17 01:41	3° \approx 55'56	
	8993 Feb 09 10:58	0° \mathcal{X}		max. Earth dist.	8994 Jan 20 07:02	9° \approx 22'42	1.42020 AU
evening rise	8993 Feb 14 16:21	8° \mathcal{X} 11'42		evening rise	8994 Jan 25 18:34	18° \approx 19'48	
	8993 Mar 01 05:23	0° Υ			8994 Feb 02 06:17	0° \mathcal{X}	
evening max el	8993 Mar 17 06:31	20° Υ 49'56	21°19'42		8994 Feb 23 21:03	0° Υ	
asc. node	8993 Mar 24 18:23	25° Υ 52'30		evening max el	8994 Feb 27 23:59	4° Υ 32'32	22°37'12
retrograde	8993 Mar 26 01:27	26° Υ 00'57		retrograde	8994 Mar 09 21:58	10° Υ 24'59	

asc. node	8994 Mar 11 15:32	10°♿10'03		retrograde	8995 Feb 21 15:16	24°♿47'29	
evening set	8994 Mar 14 16:02	8°♿27'33		evening set	8995 Feb 26 21:26	22°♿35'55	
inferior conj	8994 Mar 20 00:23	2°♿04'16	2°25'42	asc. node	8995 Feb 26 12:41	22°♿53'54	
minimum elong	8994 Mar 19 22:09	2°♿12'01	2°25'06	min. Earth dist.	8995 Mar 03 15:18	17°♿06'37	0.68274 AU
min. Earth dist.	8994 Mar 19 18:50	2°♿23'32	0.68494 AU	inferior conj	8995 Mar 04 08:37	16°♿07'50	1°48'02
	8994 Mar 21 12:40	30°♿♿		minimum elong	8995 Mar 04 06:32	16°♿14'55	1°47'24
morning rise	8994 Mar 25 04:08	25°♿55'09		morning rise	8995 Mar 09 15:39	10°♿05'02	
direct	8994 Mar 29 18:24	24°♿00'34		direct	8995 Mar 13 16:31	8°♿32'47	
morning max el	8994 Apr 07 19:02	29°♿16'12	21°44'59	morning max el	8995 Mar 21 14:35	13°♿02'26	20°27'04
	8994 Apr 08 12:10	0°♿		desc. node	8995 Apr 01 22:34	27°♿17'54	
desc. node	8994 Apr 15 01:40	7°♿47'12			8995 Apr 03 19:57	0°♿	
	8994 Apr 30 16:25	0°♿		morning set	8995 Apr 19 07:23	23°♿14'25	
morning set	8994 May 10 03:32	14°♿41'40			8995 Apr 23 15:16	0°♿	
max. Earth dist.	8994 May 16 04:53	24°♿32'58	1.41726 AU	max. Earth dist.	8995 Apr 28 12:20	7°♿45'49	1.43590 AU
	8994 May 19 10:52	0°♿					
superior conj	8994 May 23 20:21	7°♿34'17	-1°52'42	superior conj	8995 May 04 20:06	18°♿05'46	-2°09'39
minimum elong	8994 May 24 02:17	8°♿00'15	1°52'24	minimum elong	8995 May 04 23:19	18°♿19'08	2°09'44
evening rise	8994 Jun 03 16:49	27°♿09'04			8995 May 11 21:05	0°♿	
	8994 Jun 05 06:03	0°♿		evening rise	8995 May 17 07:09	9°♿24'58	
asc. node	8994 Jun 07 14:20	4°♿16'29		asc. node	8995 May 25 11:24	23°♿31'22	
evening max el	8994 Jun 19 21:50	22°♿52'01	18°11'08		8995 May 29 14:34	0°♿	
retrograde	8994 Jun 26 20:59	26°♿23'11		evening max el	8995 Jun 03 10:42	6°♿01'01	18°05'23
evening set	8994 Jun 29 06:04	25°♿59'10		retrograde	8995 Jun 09 21:54	9°♿21'56	
inferior conj	8994 Jul 06 07:05	21°♿12'08	1°37'42	evening set	8995 Jun 12 14:34	8°♿46'17	
minimum elong	8994 Jul 06 09:49	21°♿06'02	1°36'35	inferior conj	8995 Jun 18 23:56	3°♿39'30	2°33'49
min. Earth dist.	8994 Jul 09 15:34	18°♿14'22	0.59655 AU	minimum elong	8995 Jun 19 02:45	3°♿32'18	2°32'53
desc. node	8994 Jul 12 01:07	16°♿22'23		min. Earth dist.	8995 Jun 21 23:50	0°♿36'56	0.61909 AU
morning rise	8994 Jul 13 10:34	15°♿28'07			8995 Jun 22 15:16	30°♿♿	
direct	8994 Jul 19 20:36	13°♿32'33		morning rise	8995 Jun 25 12:53	27°♿35'22	
morning max el	8994 Aug 03 05:00	21°♿24'26	27°38'46	desc. node	8995 Jun 28 22:11	25°♿47'26	
	8994 Aug 10 16:43	0°♿		direct	8995 Jul 02 06:02	25°♿12'53	
	8994 Aug 29 08:07	0°♿			8995 Jul 12 20:59	0°♿	
asc. node	8994 Sep 03 13:58	10°♿29'35		morning max el	8995 Jul 16 10:08	3°♿14'07	27°56'10
morning set	8994 Sep 04 00:11	11°♿22'57			8995 Aug 05 05:40	0°♿	
max. Earth dist.	8994 Sep 10 08:36	25°♿07'43	1.31613 AU	morning set	8995 Aug 19 01:36	25°♿32'08	
				asc. node	8995 Aug 21 10:54	0°♿29'33	
superior conj	8994 Sep 11 03:13	26°♿50'53	1°09'57		8995 Aug 21 05:17	0°♿	
minimum elong	8994 Sep 11 00:58	26°♿38'26	1°09'34	max. Earth dist.	8995 Aug 24 15:50	7°♿21'11	1.32006 AU
	8994 Sep 12 13:17	0°♿					
evening rise	8994 Sep 17 20:57	11°♿38'57		superior conj	8995 Aug 26 13:00	11°♿27'42	0°49'32
	8994 Sep 27 02:48	0°♿		minimum elong	8995 Aug 26 11:01	11°♿16'49	0°49'03
desc. node	8994 Oct 07 23:42	17°♿08'47		evening rise	8995 Sep 02 08:10	26°♿19'55	
evening max el	8994 Oct 16 01:05	26°♿25'07	25°57'38		8995 Sep 04 01:38	0°♿	
	8994 Oct 20 09:23	0°♿		desc. node	8995 Sep 21 10:15	0°♿	
retrograde	8994 Oct 29 23:06	3°♿28'03		evening max el	8995 Sep 24 20:50	4°♿10'04	
evening set	8994 Nov 05 07:05	1°♿53'13		retrograde	8995 Sep 27 14:51	7°♿01'34	24°29'34
	8994 Nov 08 13:09	30°♿♿		evening set	8995 Oct 11 09:15	13°♿56'19	
min. Earth dist.	8994 Nov 09 13:52	29°♿17'58	0.58359 AU	min. Earth dist.	8995 Oct 16 14:14	12°♿56'10	
inferior conj	8994 Nov 12 16:33	27°♿03'07	-4°57'11	inferior conj	8995 Oct 22 01:47	10°♿07'07	0.56496 AU
minimum elong	8994 Nov 12 23:36	26°♿50'21	4°55'33	minimum elong	8995 Oct 24 14:59	8°♿30'42	-5°34'49
morning rise	8994 Nov 20 18:26	22°♿38'29		morning rise	8995 Oct 24 17:45	8°♿26'19	5°34'30
direct	8994 Nov 23 00:59	22°♿21'41		direct	8995 Nov 01 23:24	4°♿28'09	
asc. node	8994 Nov 30 13:43	25°♿39'22		morning max el	8995 Nov 04 13:37	4°♿10'01	
morning max el	8994 Dec 01 09:26	26°♿24'45	18°37'32	asc. node	8995 Nov 14 05:58	8°♿45'11	19°34'34
	8994 Dec 04 13:25	0°♿			8995 Nov 17 10:43	12°♿16'12	
morning set	8994 Dec 17 12:51	22°♿16'20			8995 Nov 28 05:36	0°♿	
	8994 Dec 21 12:26	0°♿		morning set	8995 Dec 01 15:44	6°♿46'35	
superior conj	8994 Dec 26 07:18	9°♿07'00	1°02'09				
minimum elong	8994 Dec 26 10:37	9°♿22'29	1°01'58	superior conj	8995 Dec 09 14:22	22°♿43'06	1°22'54
max. Earth dist.	8995 Jan 02 14:53	22°♿21'22	1.39933 AU	minimum elong	8995 Dec 09 17:09	22°♿56'47	1°22'52
desc. node	8995 Jan 03 22:39	24°♿39'10			8995 Dec 13 08:46	0°♿	
evening rise	8995 Jan 06 17:39	29°♿23'59		max. Earth dist.	8995 Dec 15 20:57	4°♿41'33	1.37750 AU
	8995 Jan 07 02:15	0°♿		evening rise	8995 Dec 19 14:14	11°♿24'58	
	8995 Jan 26 17:22	0°♿		desc. node	8995 Dec 21 19:39	15°♿18'10	
evening max el	8995 Feb 10 14:27	18°♿18'09	23°57'28		8995 Dec 30 18:50	0°♿	
					8996 Jan 22 02:23	0°♿	
				evening max el	8996 Jan 24 03:40	2°♿06'20	25°13'54

retrograde	8996 Feb 05 04:24	9° ✕ 04'02		retrograde	8997 Jan 18 12:32	23° ≈ 07'22	
evening set	8996 Feb 10 23:08	6° ✕ 40'14		evening set	8997 Jan 24 19:21	20° ≈ 35'00	
asc. node	8996 Feb 13 09:47	4° ✕ 12'33		min. Earth dist.	8997 Jan 28 23:19	16° ≈ 14'58	0.66648 AU
min. Earth dist.	8996 Feb 15 09:31	1° ✕ 45'42	0.67653 AU	asc. node	8997 Jan 30 06:53	14° ≈ 38'47	
inferior conj	8996 Feb 16 14:26	0° ✕ 11'46	1°01'51	inferior conj	8997 Jan 30 15:50	14° ≈ 11'24	0°07'25
minimum elong	8996 Feb 16 13:00	0° ✕ 16'24	1°01'26	minimum elong	8997 Jan 30 15:37	14° ≈ 12'02	0°07'32
	8996 Feb 16 18:03	30° ≈		transit middle	8997 Jan 30 15:37	14° ≈ 12'02	0°07'32
morning rise	8996 Feb 22 03:12	24° ≈ 16'51		transit begin	8997 Jan 30 13:05	14° ≈ 19'49	
direct	8996 Feb 25 15:41	23° ≈ 05'38		transit end	8997 Jan 30 18:10	14° ≈ 04'15	
morning max el	8996 Mar 03 18:11	27° ≈ 01'11	19°22'54	morning rise	8997 Feb 05 12:42	8° ≈ 26'14	
	8996 Mar 06 11:34	0° ✕		direct	8997 Feb 08 14:15	7° ≈ 33'12	
greatest brilliancy	8996 Mar 16 14:31	13° ✕ 56'39	-0.7m	morning max el	8997 Feb 15 04:50	11° ≈ 07'12	18°34'30
desc. node	8996 Mar 18 19:28	17° ✕ 14'49			8997 Feb 28 21:38	0° ✕	
	8996 Mar 27 03:56	0° Υ		desc. node	8997 Mar 05 16:21	7° ✕ 30'22	
morning set	8996 Mar 28 06:25	1° Υ 42'05		morning set	8997 Mar 07 23:58	11° ✕ 09'45	
max. Earth dist.	8996 Apr 10 02:24	21° Υ 41'48	1.44900 AU		8997 Mar 19 23:40	0° Υ	
superior conj	8996 Apr 13 19:36	27° Υ 35'27	-2°10'12	superior conj	8997 Mar 24 02:43	6° Υ 27'32	-1°50'33
minimum elong	8996 Apr 13 16:12	27° Υ 21'56	2°10'14	minimum elong	8997 Mar 23 17:37	5° Υ 51'54	1°49'50
	8996 Apr 15 07:47	0° ♄		max. Earth dist.	8997 Mar 23 20:17	6° Υ 02'23	1.45523 AU
evening rise	8996 Apr 28 00:27	20° ♄ 45'14			8997 Apr 08 01:17	0° ♄	
	8996 May 03 13:52	0° ♅		evening rise	8997 Apr 08 17:58	1° ♄ 06'19	
asc. node	8996 May 11 08:28	12° ♅ 19'15		greatest brilliancy	8997 Apr 17 06:42	14° ♄ 39'22	-0.8m
evening max el	8996 May 17 00:00	19° ♅ 25'51	18°18'20		8997 Apr 27 19:23	0° ♅	
retrograde	8996 May 23 09:26	22° ♅ 50'49		asc. node	8997 Apr 28 05:33	0° ♅ 31'00	
evening set	8996 May 26 09:28	22° ♅ 01'52		evening max el	8997 Apr 30 11:02	2° ♅ 59'32	18°49'15
inferior conj	8996 Jun 01 07:16	16° ♅ 37'11	3°06'28	retrograde	8997 May 07 03:31	6° ♅ 41'23	
minimum elong	8996 Jun 01 09:05	16° ♅ 31'59	3°05'57	evening set	8997 May 10 11:09	5° ♅ 38'03	
min. Earth dist.	8996 Jun 03 17:34	13° ♅ 51'03	0.63998 AU	inferior conj	8997 May 16 01:07	29° ♄ 57'12	3°20'24
morning rise	8996 Jun 07 07:30	10° ♅ 22'19		minimum elong	8997 May 16 01:39	29° ♄ 55'33	3°20'09
direct	8996 Jun 14 00:29	7° ♅ 42'08			8997 May 16 00:13	30° ♄	
desc. node	8996 Jun 14 19:13	7° ♅ 44'08		min. Earth dist.	8997 May 17 20:15	27° ♄ 42'52	0.65757 AU
morning max el	8996 Jun 27 19:29	15° ♅ 43'32	27°36'19	morning rise	8997 May 21 15:30	23° ♄ 38'23	
	8996 Jul 09 12:26	0° ♆		direct	8997 May 28 02:29	20° ♄ 52'13	
	8996 Jul 27 23:11	0° ♇		desc. node	8997 Jun 01 16:13	22° ♄ 01'16	
morning set	8996 Aug 01 19:18	9° ♇ 16'35		morning max el	8997 Jun 10 06:03	28° ♄ 40'34	26°44'59
max. Earth dist.	8996 Aug 06 16:22	19° ♇ 13'18	1.32878 AU		8997 Jun 11 12:35	0° ♅	
asc. node	8996 Aug 07 07:50	20° ♇ 34'31			8997 Jul 03 07:49	0° ♆	
superior conj	8996 Aug 09 19:02	25° ♇ 49'26	0°24'39	morning set	8997 Jul 16 02:13	22° ♆ 27'40	
minimum elong	8996 Aug 09 17:52	25° ♇ 43'10	0°24'15		8997 Jul 19 23:14	0° ♇	
	8996 Aug 11 17:31	0° ♈		max. Earth dist.	8997 Jul 20 06:49	0° ♇ 37'47	1.34238 AU
evening rise	8996 Aug 16 19:41	10° ♈ 58'31		superior conj	8997 Jul 24 19:04	9° ♇ 49'51	-0°04'04
	8996 Aug 26 12:21	0° ♁		minimum elong	8997 Jul 24 19:18	9° ♇ 51'04	0°04'13
evening max el	8996 Sep 08 01:59	17° ♁ 12'46	22°50'04	behind sun begin	8997 Jul 24 13:42	9° ♇ 22'01	
desc. node	8996 Sep 10 17:58	19° ♁ 34'08		behind sun end	8997 Jul 25 00:53	10° ♇ 20'09	
retrograde	8996 Sep 21 07:21	23° ♁ 48'47		asc. node	8997 Jul 25 04:47	10° ♇ 40'27	
evening set	8996 Sep 25 00:09	23° ♁ 18'46		evening rise	8997 Aug 01 05:34	25° ♇ 29'03	
min. Earth dist.	8996 Oct 02 10:10	19° ♁ 58'00	0.55166 AU		8997 Aug 03 09:56	0° ♈	
inferior conj	8996 Oct 03 18:31	19° ♁ 11'40	-5°28'17	evening max el	8997 Aug 20 19:48	27° ♈ 35'56	21°15'49
minimum elong	8996 Oct 03 13:36	19° ♁ 18'43	5°27'42		8997 Aug 23 13:29	0° ♁	
morning rise	8996 Oct 12 05:01	15° ♁ 22'57		desc. node	8997 Aug 28 15:05	2° ♁ 49'57	
direct	8996 Oct 15 07:35	15° ♁ 00'35		retrograde	8997 Sep 01 20:23	3° ♁ 33'37	
morning max el	8996 Oct 26 13:33	20° ♁ 17'11	20°53'56	evening set	8997 Sep 04 06:38	3° ♁ 19'57	
asc. node	8996 Nov 03 07:41	29° ♁ 53'30			8997 Sep 12 09:15	30° ♈	
	8996 Nov 03 09:23	0° ♊		inferior conj	8997 Sep 13 11:32	29° ♈ 23'12	-4°25'50
morning set	8996 Nov 14 23:37	21° ♊ 28'56		minimum elong	8997 Sep 13 01:55	29° ♈ 36'43	4°23'21
	8996 Nov 19 01:37	0° ♋		min. Earth dist.	8997 Sep 13 18:46	29° ♈ 13'02	0.54657 AU
superior conj	8996 Nov 22 08:56	6° ♋ 51'15	1°35'26	morning rise	8997 Sep 21 21:48	25° ♈ 30'41	
minimum elong	8996 Nov 22 10:34	6° ♋ 59'38	1°35'35	direct	8997 Sep 25 16:08	25° ♈ 00'08	
max. Earth dist.	8996 Nov 27 05:35	16° ♋ 36'59	1.35721 AU		8997 Oct 07 04:51	0° ♁	
evening rise	8996 Dec 01 05:25	24° ♋ 14'43		morning max el	8997 Oct 08 09:02	1° ♁ 02'59	22°31'50
	8996 Dec 04 09:04	0° ♌		asc. node	8997 Oct 21 04:37	18° ♁ 17'29	
desc. node	8996 Dec 07 16:39	5° ♌ 48'08			8997 Oct 27 09:25	0° ♊	
	8996 Dec 23 09:27	0° ♍		morning set	8997 Oct 30 10:21	6° ♊ 17'28	
evening max el	8997 Jan 05 16:46	15° ≈ 52'15	26°19'28	superior conj	8997 Nov 06 11:30	21° ♊ 21'17	1°40'40

minimum elong	8997 Nov 06 11:50	21° \mathbb{M} 23'07	1°40'51	superior conj	8998 Oct 21 19:16	6° \mathbb{M} 04'06	1°39'21
max. Earth dist.	8997 Nov 09 21:25	28° \mathbb{M} 30'57	1.34032 AU	minimum elong	8998 Oct 21 18:27	5° \mathbb{M} 59'41	1°39'27
	8997 Nov 10 14:43	0° \mathbb{M}		max. Earth dist.	8998 Oct 23 21:40	10° \mathbb{M} 37'14	1.32764 AU
evening rise	8997 Nov 14 11:25	7° \mathbb{M} 43'53		evening rise	8998 Oct 29 04:35	21° \mathbb{M} 42'08	
desc. node	8997 Nov 24 13:42	26° \mathbb{M} 04'06			8998 Nov 02 09:49	0° \mathbb{M}	
	8997 Nov 26 22:49	0° \mathbb{M}		desc. node	8998 Nov 11 10:47	15° \mathbb{M} 59'00	
evening max el	8997 Dec 19 06:01	29° \mathbb{M} 28'48	27°06'48		8998 Nov 20 19:45	0° \mathbb{M}	
	8997 Dec 19 19:14	0° \mathbb{M}		evening max el	8998 Dec 01 18:05	12° \mathbb{M} 44'08	27°28'53
retrograde	8998 Jan 01 14:54	6° \mathbb{M} 49'58		retrograde	8998 Dec 15 10:32	20° \mathbb{M} 03'04	
evening set	8998 Jan 08 08:05	4° \mathbb{M} 14'34		evening set	8998 Dec 22 10:47	17° \mathbb{M} 32'05	
min. Earth dist.	8998 Jan 12 06:30	0° \mathbb{M} 28'17	0.65283 AU	min. Earth dist.	8998 Dec 26 04:55	14° \mathbb{M} 17'09	0.63593 AU
	8998 Jan 12 16:44	30° \mathbb{M}		inferior conj	8998 Dec 28 20:11	11° \mathbb{M} 36'58	-2°03'03
inferior conj	8998 Jan 14 10:37	28° \mathbb{M} 01'59	-0°54'40	minimum elong	8998 Dec 29 00:05	11° \mathbb{M} 27'03	2°01'13
minimum elong	8998 Jan 14 12:14	27° \mathbb{M} 57'27	0°53'45	asc. node	8999 Jan 04 01:02	6° \mathbb{M} 34'26	
asc. node	8998 Jan 17 03:57	25° \mathbb{M} 08'01		morning rise	8999 Jan 04 15:17	6° \mathbb{M} 19'09	
morning rise	8998 Jan 20 17:44	22° \mathbb{M} 28'58		direct	8999 Jan 07 00:50	5° \mathbb{M} 51'05	
direct	8998 Jan 23 10:11	21° \mathbb{M} 50'21		morning max el	8999 Jan 13 13:41	9° \mathbb{M} 14'02	17°48'22
morning max el	8998 Jan 29 20:16	25° \mathbb{M} 13'59	18°02'47		8999 Jan 27 12:10	0° \mathbb{M}	
	8998 Feb 02 20:57	0° \mathbb{M}		morning set	8999 Jan 30 00:42	4° \mathbb{M} 20'23	
morning set	8998 Feb 16 22:51	22° \mathbb{M} 05'43		desc. node	8999 Feb 07 10:10	18° \mathbb{M} 37'12	
desc. node	8998 Feb 20 13:15	27° \mathbb{M} 59'17					
	8998 Feb 21 18:54	0° \mathbb{M}		superior conj	8999 Feb 11 13:38	25° \mathbb{M} 28'31	-0°30'07
superior conj	8998 Mar 03 11:03	15° \mathbb{M} 30'21	-1°13'58	minimum elong	8999 Feb 11 10:23	25° \mathbb{M} 15'10	0°29'29
minimum elong	8998 Mar 03 02:47	14° \mathbb{M} 57'40	1°12'53		8999 Feb 14 08:26	0° \mathbb{M}	
max. Earth dist.	8998 Mar 06 15:48	20° \mathbb{M} 32'40	1.45405 AU	max. Earth dist.	8999 Feb 17 10:35	4° \mathbb{M} 57'10	1.44560 AU
	8998 Mar 12 17:11	0° \mathbb{M}		evening rise	8999 Feb 27 02:16	20° \mathbb{M} 01'57	
evening rise	8998 Mar 19 14:50	10° \mathbb{M} 41'27			8999 Mar 05 15:37	0° \mathbb{M}	
	8998 Apr 01 05:57	0° \mathbb{M}		evening max el	8999 Mar 27 12:06	0° \mathbb{M}	
greatest brilliancy	8998 Apr 02 00:25	1° \mathbb{M} 08'46	-0.7m	asc. node	8999 Apr 01 23:45	4° \mathbb{M} 20'11	
evening max el	8998 Apr 13 17:50	16° \mathbb{M} 37'53	19°36'48	retrograde	8999 Apr 04 23:35	5° \mathbb{M} 05'11	
asc. node	8998 Apr 15 02:38	17° \mathbb{M} 55'45		evening set	8999 Apr 09 00:50	3° \mathbb{M} 31'21	
retrograde	8998 Apr 21 00:59	20° \mathbb{M} 47'43			8999 Apr 12 09:13	30° \mathbb{M}	
evening set	8998 Apr 24 16:57	19° \mathbb{M} 29'18		inferior conj	8999 Apr 14 08:08	27° \mathbb{M} 22'54	3°06'35
inferior conj	8998 Apr 30 02:16	13° \mathbb{M} 33'47	3°19'31	minimum elong	8999 Apr 14 06:34	27° \mathbb{M} 28'17	3°06'15
minimum elong	8998 Apr 30 01:37	13° \mathbb{M} 35'58	3°19'19	min. Earth dist.	8999 Apr 14 22:21	26° \mathbb{M} 34'03	0.67996 AU
min. Earth dist.	8998 May 01 06:28	12° \mathbb{M} 00'22	0.67103 AU	morning rise	8999 Apr 19 12:05	21° \mathbb{M} 07'00	
morning rise	8998 May 05 09:56	7° \mathbb{M} 15'14		direct	8999 Apr 25 00:07	18° \mathbb{M} 40'25	
direct	8998 May 11 10:43	4° \mathbb{M} 34'25		morning max el	8999 May 06 01:00	25° \mathbb{M} 16'15	24°04'03
desc. node	8998 May 19 13:12	8° \mathbb{M} 09'20		desc. node	8999 May 06 10:10	25° \mathbb{M} 39'38	
morning max el	8998 May 23 15:50	11° \mathbb{M} 53'35	25°30'50		8999 May 10 07:54	0° \mathbb{M}	
	8998 Jun 07 03:51	0° \mathbb{M}			8999 May 31 15:45	0° \mathbb{M}	
morning set	8998 Jun 26 00:30	0° \mathbb{M}		morning set	8999 Jun 10 14:23	16° \mathbb{M} 22'22	
max. Earth dist.	8998 Jun 28 18:14	4° \mathbb{M} 53'44		max. Earth dist.	8999 Jun 14 07:45	22° \mathbb{M} 54'03	1.38232 AU
	8998 Jul 02 10:30	11° \mathbb{M} 42'01	1.36066 AU		8999 Jun 18 05:30	0° \mathbb{M}	
superior conj	8998 Jul 08 10:20	23° \mathbb{M} 21'08	-0°35'29	superior conj	8999 Jun 21 13:28	6° \mathbb{M} 15'20	-1°07'48
minimum elong	8998 Jul 08 12:29	23° \mathbb{M} 31'54	0°35'19	minimum elong	8999 Jun 21 17:46	6° \mathbb{M} 35'49	1°07'21
	8998 Jul 11 17:19	0° \mathbb{M}		asc. node	8999 Jun 28 22:44	20° \mathbb{M} 38'27	
asc. node	8998 Jul 12 01:44	0° \mathbb{M} 42'53		evening rise	8999 Jun 30 11:27	23° \mathbb{M} 39'21	
evening rise	8998 Jul 16 11:40	9° \mathbb{M} 44'43			8999 Jul 03 17:38	0° \mathbb{M}	
	8998 Jul 27 09:28	0° \mathbb{M}		evening max el	8999 Jul 16 21:38	20° \mathbb{M} 22'19	18°59'54
evening max el	8998 Aug 03 02:17	8° \mathbb{M} 36'36	19°57'40	retrograde	8999 Jul 25 14:46	24° \mathbb{M} 41'40	
retrograde	8998 Aug 13 10:34	13° \mathbb{M} 43'27		evening set	8999 Jul 27 12:53	24° \mathbb{M} 29'54	
evening set	8998 Aug 15 07:53	13° \mathbb{M} 34'00		desc. node	8999 Aug 02 09:20	21° \mathbb{M} 53'23	
desc. node	8998 Aug 15 12:14	13° \mathbb{M} 32'08		inferior conj	8999 Aug 04 20:13	20° \mathbb{M} 14'27	-0°45'12
inferior conj	8998 Aug 24 07:49	9° \mathbb{M} 34'04	-2°40'33	minimum elong	8999 Aug 04 18:17	20° \mathbb{M} 17'48	0°44'37
minimum elong	8998 Aug 24 00:33	9° \mathbb{M} 45'03	2°38'01	min. Earth dist.	8999 Aug 07 19:20	18° \mathbb{M} 11'20	0.56435 AU
min. Earth dist.	8998 Aug 26 05:14	8° \mathbb{M} 25'30	0.55106 AU	morning rise	8999 Aug 12 20:33	15° \mathbb{M} 22'12	
morning rise	8998 Sep 01 15:38	5° \mathbb{M} 18'00		direct	8999 Aug 18 05:14	14° \mathbb{M} 14'29	
direct	8998 Sep 06 04:35	4° \mathbb{M} 33'01		morning max el	8999 Sep 01 10:40	21° \mathbb{M} 33'04	25°57'07
morning max el	8998 Sep 19 21:32	11° \mathbb{M} 18'12	24°18'17		8999 Sep 08 20:13	0° \mathbb{M}	
	8998 Oct 03 23:56	0° \mathbb{M}		asc. node	8999 Sep 24 22:31	26° \mathbb{M} 40'18	
asc. node	8998 Oct 08 01:34	7° \mathbb{M} 16'04			8999 Sep 26 14:08	0° \mathbb{M}	
morning set	8998 Oct 14 22:07	21° \mathbb{M} 06'19		morning set	8999 Sep 29 09:15	5° \mathbb{M} 50'43	
	8998 Oct 19 00:40	0° \mathbb{M}		superior conj	8999 Oct 06 06:01	20° \mathbb{M} 52'52	1°32'09













































































































































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max. Earth dist.	8999 Oct 07 04:21	22°  56'14	1.31948 AU		9000 Sep 18 04:09	0° 	
	8999 Oct 10 09:53	0° 					
evening rise	8999 Oct 13 05:50	6°  00'58		superior conj	9000 Sep 20 17:51	5°  41'51	1°19'32
	8999 Oct 25 23:26	0° 		minimum elong	9000 Sep 20 15:41	5°  29'48	1°19'15
desc. node	8999 Oct 29 07:53	5°  24'06		max. Earth dist.	9000 Sep 20 14:09	5°  21'15	1.31592 AU
evening max el	8999 Nov 14 02:24	25°  24'22	27°19'54	evening rise	9000 Sep 27 12:37	20°  33'33	
	8999 Nov 19 22:04	0° 			9000 Oct 02 02:43	0° 	
retrograde	8999 Nov 27 22:38	2°  33'38		desc. node	9000 Oct 16 04:59	24°  07'41	
evening set	8999 Dec 05 00:11	0°  32'0'13			9000 Oct 20 13:41	0° 	
	8999 Dec 05 12:29	30°  R 		evening max el	9000 Oct 27 04:18	7°  21'8'05	26°36'59
min. Earth dist.	8999 Dec 08 16:50	27°  23'0'50	0.61639 AU	retrograde	9000 Nov 10 02:21	14°  25'33	
inferior conj	8999 Dec 11 17:24	24°  24'8'10	-3°14'41	evening set	9000 Nov 16 20:09	12°  23'2'10	
minimum elong	8999 Dec 11 23:38	24°  23'4'08	3°12'14	min. Earth dist.	9000 Nov 20 18:02	9°  25'6'43	0.59540 AU
morning rise	8999 Dec 19 01:24	19°  24'9'05		inferior conj	9000 Nov 23 22:47	7°  26'2'28	-4°23'19
direct	8999 Dec 21 06:44	19°  27'5'59		minimum elong	9000 Nov 24 06:18	7°  21'1'41	4°21'05
asc. node	8999 Dec 21 22:07	19°  29'4'48		morning rise	9000 Dec 01 18:57	2°  24'9'10	
morning max el	8999 Dec 28 05:54	22°  25'9'11	17°52'00	direct	9000 Dec 03 23:37	2°  23'1'48	
	9000 Jan 02 18:05	0° 		asc. node	9000 Dec 08 19:11	4°  20'0'22	
morning set	9000 Jan 12 22:59	17°  32'2'49		morning max el	9000 Dec 11 17:29	6°  20'2'27	18°15'00
	9000 Jan 19 21:46	0° 			9000 Dec 26 17:41	0° 	
				morning set	9000 Dec 27 11:49	1°  32'5'44	
superior conj	9000 Jan 23 17:34	6°  39'3'35	0°11'39				
minimum elong	9000 Jan 23 18:37	6°  44'0'07	0°11'42	superior conj	9001 Jan 05 21:14	18°  35'8'35	0°46'11
behind sun begin	9000 Jan 23 12:46	6°  19'0'00		minimum elong	9001 Jan 06 00:18	19°  31'2'27	0°46'00
behind sun end	9000 Jan 24 00:28	7°  09'1'12		desc. node	9001 Jan 12 04:03	0°  04'4'34	
desc. node	9000 Jan 25 07:06	9°  19'5'59			9001 Jan 12 02:59	0° 	
max. Earth dist.	9000 Jan 31 01:50	18°  05'7'57	1.43088 AU	max. Earth dist.	9001 Jan 13 12:00	2°  00'2'58	1.41157 AU
evening rise	9000 Feb 06 19:24	29°  04'3'57		evening rise	9001 Jan 18 06:05	10°  01'5'27	
	9000 Feb 06 23:30	0° 			9001 Jan 30 23:37	0° 	
	9000 Feb 27 06:51	0° 		evening max el	9001 Feb 21 07:06	27°  24'3'09	23°11'14
evening max el	9000 Mar 10 15:17	13°  05'9'34	21°51'54		9001 Feb 23 17:45	0° 	
retrograde	9000 Mar 19 21:21	19°  02'8'13		retrograde	9001 Mar 03 16:48	3°  05'2'40	
asc. node	9000 Mar 19 20:55	19°  02'8'13		asc. node	9001 Mar 06 18:03	3°  06'5'54	
evening set	9000 Mar 24 09:01	17°  03'9'02		evening set	9001 Mar 08 15:54	1°  04'8'54	
inferior conj	9000 Mar 29 16:27	11°  02'0'08	2°43'20		9001 Mar 10 11:47	30°  R 	
minimum elong	9000 Mar 29 14:21	11°  02'7'27	2°42'49	min. Earth dist.	9001 Mar 13 14:36	25°  25'3'37	0.68453 AU
min. Earth dist.	9000 Mar 29 17:47	11°  01'5'28	0.68438 AU	inferior conj	9001 Mar 14 01:16	25°  22'4'47	2°10'48
morning rise	9000 Apr 03 19:31	5°  08'1'14		minimum elong	9001 Mar 13 23:02	25°  23'0'27	2°10'09
direct	9000 Apr 08 17:39	3°  01'1'24		morning rise	9001 Mar 19 06:07	19°  24'1'6'09	
morning max el	9000 Apr 18 11:43	8°  04'6'22	22°34'24	direct	9001 Mar 23 14:28	17°  23'1'20	
desc. node	9000 Apr 23 07:06	14°  08'4'47		morning max el	9001 Apr 01 03:17	22°  26'3'4	21°10'17
	9000 May 05 01:47	0° 			9001 Apr 07 15:12	0° 	
morning set	9000 May 22 09:22	26°  04'0'08		desc. node	9001 Apr 10 04:01	3°  02'0'48	
	9000 May 24 09:50	0° 			9001 Apr 28 08:51	0° 	
max. Earth dist.	9000 May 27 05:17	4°  02'4'19	1.40493 AU	morning set	9001 May 02 01:22	5°  04'4'36	
				max. Earth dist.	9001 May 09 08:01	17°  02'4'01	1.42575 AU
superior conj	9000 Jun 04 00:09	18°  02'1'41	-1°38'00				
minimum elong	9000 Jun 04 06:02	18°  02'4'8'14	1°37'33	superior conj	9001 May 16 13:44	29°  02'9'59	-2°01'31
	9000 Jun 10 07:39	0° 		minimum elong	9001 May 16 19:02	29°  02'5'2'39	2°01'22
evening rise	9000 Jun 14 01:35	7°  03'5'1			9001 May 16 20:45	0° 	
asc. node	9000 Jun 15 19:45	10°  02'2'25		evening rise	9001 May 28 01:58	19°  02'4'8'03	
	9000 Jun 27 15:11	0° 		asc. node	9001 Jun 02 16:48	29°  02'4'9'48	
evening max el	9000 Jun 30 02:47	2°  02'4'7'53	18°23'05		9001 Jun 02 19:08	0° 	
retrograde	9000 Jul 07 14:08	6°  03'2'32		evening max el	9001 Jun 13 13:55	15°  02'4'4'09	18°06'21
evening set	9000 Jul 09 18:40	6°  03'1'4'06		retrograde	9001 Jun 20 06:51	19°  02'0'9'19	
inferior conj	9000 Jul 17 06:17	1°  03'8'4'0	0°53'12	evening set	9001 Jun 22 19:04	18°  02'4'0'47	
minimum elong	9000 Jul 17 08:04	1°  03'5'0'1	0°52'21	inferior conj	9001 Jun 29 12:58	13°  02'4'5'20	2°04'41
	9000 Jul 19 06:21	30°  R 		minimum elong	9001 Jun 29 15:55	13°  02'3'8'19	2°03'34
desc. node	9000 Jul 20 06:27	29°  02'1'1'44		min. Earth dist.	9001 Jul 02 18:48	10°  02'4'2'17	0.60617 AU
min. Earth dist.	9000 Jul 20 15:16	28°  02'5'4'30	0.58381 AU	morning rise	9001 Jul 06 10:06	7°  02'5'1'09	
morning rise	9000 Jul 24 18:03	26°  02'1'0'38		desc. node	9001 Jul 07 03:32	7°  02'2'4'32	
direct	9000 Jul 30 20:14	24°  02'3'3'05		direct	9001 Jul 13 00:03	5°  02'4'3'01	
	9000 Aug 11 18:03	0° 		morning max el	9001 Jul 27 07:26	13°  02'4'0'57	27°50'56
morning max el	9000 Aug 14 05:39	2°  02'1'6'03	27°11'40		9001 Aug 09 08:54	0° 	
	9000 Sep 03 05:26	0° 			9001 Aug 26 14:37	0° 	
asc. node	9000 Sep 11 19:28	16°  02'2'3'09		morning set	9001 Aug 28 22:46	4°  02'2'4'6'33	

asc. node	9001 Aug 29 16:23	6°♎18'21		max. Earth dist.	9002 Aug 18 03:51	29°♎46'11	1.32314 AU
max. Earth dist.	9001 Sep 03 23:13	17°♎41'17	1.31711 AU		9002 Aug 18 06:26	0°♎	
superior conj	9001 Sep 05 04:53	20°♎24'51	1°01'51	superior conj	9002 Aug 20 13:19	4°♎56'31	0°39'29
minimum elong	9001 Sep 05 02:41	20°♎12'42	1°01'26	minimum elong	9002 Aug 20 11:37	4°♎47'13	0°39'02
	9001 Sep 09 13:03	0°♎		evening rise	9002 Aug 27 10:17	19°♎54'00	
evening rise	9001 Sep 11 22:44	5°♎13'01			9002 Sep 01 07:24	0°♎	
	9001 Sep 24 21:38	0°♎		desc. node	9002 Sep 19 23:14	28°♎16'32	
desc. node	9001 Oct 03 02:07	11°♎52'40		evening max el	9002 Sep 20 09:58	28°♎42'46	23°47'43
evening max el	9001 Oct 08 22:08	18°♎20'17	25°22'45		9002 Sep 21 19:30	0°♎	
retrograde	9001 Oct 22 19:48	25°♎21'12		retrograde	9002 Oct 04 00:36	5°♎31'05	
evening set	9001 Oct 28 17:38	24°♎00'57		evening set	9002 Oct 08 14:28	4°♎45'18	
min. Earth dist.	9001 Nov 02 10:12	21°♎22'02	0.57511 AU	min. Earth dist.	9002 Oct 14 20:22	1°♎44'32	0.55846 AU
inferior conj	9001 Nov 05 08:58	19°♎21'33	-5°17'21	inferior conj	9002 Oct 16 22:50	0°♎28'40	-5°38'35
minimum elong	9001 Nov 05 14:47	19°♎11'37	5°16'18	minimum elong	9002 Oct 16 22:29	0°♎29'11	5°38'27
morning rise	9001 Nov 13 14:15	15°♎06'51			9002 Oct 17 17:55	30°♎	
direct	9001 Nov 15 23:07	14°♎50'02		morning rise	9002 Oct 25 08:30	26°♎33'06	
morning max el	9001 Nov 24 20:31	19°♎05'55	18°59'05	direct	9002 Oct 28 03:29	26°♎13'30	
asc. node	9001 Nov 25 16:11	19°♎55'10			9002 Nov 06 05:59	0°♎	
	9001 Dec 02 23:34	0°♎		morning max el	9002 Nov 07 11:37	1°♎05'51	20°05'39
morning set	9001 Dec 11 10:31	15°♎44'46		asc. node	9002 Nov 12 13:09	6°♎59'21	
	9001 Dec 18 16:37	0°♎			9002 Nov 25 11:44	0°♎	
				morning set	9002 Nov 25 15:47	0°♎20'39	
superior conj	9001 Dec 19 19:41	2°♎10'06	1°11'59	superior conj	9002 Dec 03 08:03	16°♎00'35	1°29'10
minimum elong	9001 Dec 19 22:53	2°♎25'25	1°11'51	minimum elong	9002 Dec 03 10:24	16°♎12'18	1°29'13
max. Earth dist.	9001 Dec 26 18:03	15°♎00'00	1.38996 AU	max. Earth dist.	9002 Dec 09 00:28	27°♎06'21	1.36858 AU
desc. node	9001 Dec 30 01:01	20°♎46'33			9002 Dec 10 13:30	0°♎	
evening rise	9001 Dec 30 14:30	21°♎44'32		evening rise	9002 Dec 12 19:25	4°♎07'16	
	9002 Jan 04 13:04	0°♎		desc. node	9002 Dec 16 22:01	11°♎22'10	
	9002 Jan 24 23:19	0°♎			9002 Dec 28 12:44	0°♎	
evening max el	9002 Feb 03 20:46	11°♎30'06	24°30'50	evening max el	9003 Jan 17 10:03	25°♎18'38	25°43'39
retrograde	9002 Feb 15 08:34	18°♎13'21			9003 Jan 23 01:52	0°♎	
evening set	9002 Feb 20 19:56	15°♎56'25		retrograde	9003 Jan 29 19:36	2°♎24'42	
asc. node	9002 Feb 21 15:11	15°♎12'36		evening set	9003 Feb 04 19:29	29°♎57'03	
min. Earth dist.	9002 Feb 25 10:30	10°♎41'39	0.68057 AU		9003 Feb 04 18:04	30°♎	
inferior conj	9002 Feb 26 08:43	9°♎27'23	1°29'31	asc. node	9003 Feb 08 12:17	26°♎03'08	
minimum elong	9002 Feb 26 06:50	9°♎33'39	1°28'56	min. Earth dist.	9003 Feb 09 03:09	25°♎17'02	0.67271 AU
morning rise	9002 Mar 03 17:52	3°♎27'27		inferior conj	9003 Feb 10 12:53	23°♎30'04	0°39'46
direct	9002 Mar 07 13:15	2°♎04'26		minimum elong	9003 Feb 10 11:54	23°♎33'11	0°39'32
morning max el	9002 Mar 15 02:11	6°♎18'25	19°57'48	morning rise	9003 Feb 16 04:48	17°♎38'48	
desc. node	9002 Mar 28 00:55	23°♎03'58		direct	9003 Feb 19 12:30	16°♎35'33	
	9002 Apr 01 17:28	0°♎		morning max el	9003 Feb 26 08:52	20°♎20'22	19°00'15
morning set	9002 Apr 11 00:08	14°♎06'31			9003 Mar 06 02:44	0°♎	
	9002 Apr 21 04:00	0°♎		greatest brilliancy	9003 Mar 12 04:52	9°♎01'10	-0.8m
max. Earth dist.	9002 Apr 21 17:55	0°♎55'22	1.44226 AU	desc. node	9003 Mar 14 21:49	13°♎09'41	
				morning set	9003 Mar 21 04:42	22°♎53'24	
superior conj	9002 Apr 27 02:57	9°♎34'44	-2°12'14		9003 Mar 25 18:27	0°♎	
minimum elong	9002 Apr 27 03:43	9°♎37'51	2°12'23	max. Earth dist.	9003 Apr 04 10:10	15°♎04'57	1.45260 AU
	9002 May 09 08:09	0°♎					
evening rise	9002 May 10 07:51	1°♎41'21		superior conj	9003 Apr 06 17:54	18°♎44'15	-2°04'20
asc. node	9002 May 20 13:51	18°♎54'32		minimum elong	9003 Apr 06 11:31	18°♎19'04	2°04'06
evening max el	9002 May 28 03:25	29°♎01'39	18°08'42		9003 Apr 13 20:02	0°♎	
	9002 May 29 04:41	0°♎		evening rise	9003 Apr 21 15:05	12°♎36'10	
retrograde	9002 Jun 03 12:40	2°♎22'24			9003 May 02 09:21	0°♎	
evening set	9002 Jun 06 08:30	1°♎41'17		asc. node	9003 May 07 10:55	7°♎28'31	
	9002 Jun 08 21:39	30°♎		evening max el	9003 May 11 16:07	12°♎31'35	18°29'21
inferior conj	9002 Jun 12 12:29	26°♎26'59	2°50'12	retrograde	9003 May 18 03:20	16°♎01'50	
minimum elong	9002 Jun 12 14:57	26°♎20'21	2°49'28	evening set	9003 May 21 06:40	15°♎06'43	
min. Earth dist.	9002 Jun 15 07:07	23°♎28'54	0.62833 AU	inferior conj	9003 May 27 00:42	9°♎34'58	3°14'22
morning rise	9002 Jun 18 19:44	20°♎17'26		minimum elong	9003 May 27 01:59	9°♎31'10	3°14'00
desc. node	9002 Jun 24 00:35	17°♎53'26		min. Earth dist.	9003 May 29 04:35	7°♎01'05	0.64801 AU
direct	9002 Jun 25 13:49	17°♎45'42		morning rise	9003 Jun 01 20:25	3°♎18'04	
morning max el	9002 Jul 09 14:30	25°♎48'31	27°51'56	direct	9003 Jun 08 11:34	0°♎34'00	
	9002 Jul 13 11:17	0°♎		desc. node	9003 Jun 10 21:37	0°♎53'15	
	9002 Aug 02 21:51	0°♎		morning max el	9003 Jun 22 00:29	8°♎30'41	27°17'48
morning set	9002 Aug 12 21:11	18°♎46'22			9003 Jul 08 17:09	0°♎	
asc. node	9002 Aug 16 13:17	26°♎21'19					




































































































































	9003 Jul 26 06:14	0°♎		morning max el	9004 Jun 03 11:04	21°♊36'53	26°15'39
morning set	9003 Jul 27 10:40	2°♎17'27			9004 Jun 10 18:07	0°♊	
max. Earth dist.	9003 Aug 01 00:25	11°♎26'53	1.33405 AU		9004 Jun 30 22:25	0°♊	
asc. node	9003 Aug 03 10:13	16°♎27'09		morning set	9004 Jul 09 11:49	15°♊11'00	
				max. Earth dist.	9004 Jul 13 10:30	22°♊42'34	1.34976 AU
superior conj	9003 Aug 04 17:05	19°♎10'02	0°12'54		9004 Jul 17 02:33	0°♎	
minimum elong	9003 Aug 04 16:26	19°♎06'37	0°12'35				
behind sun begin	9003 Aug 04 12:59	18°♎48'18		superior conj	9004 Jul 18 13:45	2°♎59'03	-0°17'08
behind sun end	9003 Aug 04 19:53	19°♎24'56		minimum elong	9004 Jul 18 14:45	3°♎04'09	0°17'10
	9003 Aug 09 18:37	0°♎		asc. node	9004 Jul 20 07:10	6°♎32'11	
evening rise	9003 Aug 11 21:20	4°♎30'02		evening rise	9004 Jul 26 05:56	18°♎55'26	
	9003 Aug 25 17:01	0°♎			9004 Jul 31 18:42	0°♎	
evening max el	9003 Sep 01 22:52	8°♎54'32	22°08'26	evening max el	9004 Aug 13 21:32	19°♎30'53	20°40'00
desc. node	9003 Sep 06 20:22	12°♎49'53		desc. node	9004 Aug 23 17:32	25°♎02'14	
retrograde	9003 Sep 14 17:27	15°♎15'57		retrograde	9004 Aug 25 05:41	25°♎08'00	
evening set	9003 Sep 17 19:52	14°♎54'37		evening set	9004 Aug 27 08:13	24°♎57'11	
min. Earth dist.	9003 Sep 26 04:08	11°♎16'14	0.54843 AU	inferior conj	9004 Sep 05 12:50	21°♎00'22	-3°44'33
inferior conj	9003 Sep 26 20:20	10°♎53'31	-5°08'27	minimum elong	9004 Sep 05 03:28	21°♎13'48	3°41'42
minimum elong	9003 Sep 26 12:37	11°♎04'21	5°07'05	min. Earth dist.	9004 Sep 06 13:04	20°♎25'35	0.54733 AU
morning rise	9003 Oct 05 06:56	7°♎05'56		morning rise	9004 Sep 13 22:34	17°♎00'19	
direct	9003 Oct 08 16:13	6°♎40'27		direct	9004 Sep 18 00:20	16°♎24'46	
morning max el	9003 Oct 20 13:29	12°♎16'09	21°33'49	morning max el	9004 Oct 01 05:10	22°♎46'01	23°17'08
asc. node	9003 Oct 30 10:06	24°♎57'53			9004 Oct 07 14:28	0°♎	
	9003 Nov 02 08:43	0°♎		asc. node	9004 Oct 16 07:02	13°♎37'48	
morning set	9003 Nov 10 01:07	15°♎06'24		morning set	9004 Oct 24 12:30	29°♎55'52	
					9004 Oct 24 13:16	0°♎	
superior conj	9003 Nov 17 06:22	0°♎18'55	1°38'31				
minimum elong	9003 Nov 17 07:27	0°♎24'34	1°38'40	superior conj	9004 Oct 31 11:26	14°♎55'23	1°40'52
	9003 Nov 17 02:45	0°♎		minimum elong	9004 Oct 31 11:16	14°♎54'28	1°41'02
max. Earth dist.	9003 Nov 21 12:10	9°♎00'20	1.34954 AU	max. Earth dist.	9004 Nov 03 07:40	20°♎58'46	1.33431 AU
evening rise	9003 Nov 25 17:21	17°♎14'46			9004 Nov 07 17:00	0°♎	
	9003 Dec 02 18:04	0°♎		evening rise	9004 Nov 08 04:28	0°♎57'05	
desc. node	9003 Dec 03 19:02	1°♎47'00		desc. node	9004 Nov 19 16:05	21°♎54'57	
	9003 Dec 22 20:56	0°♎			9004 Nov 24 17:35	0°♎	
evening max el	9003 Dec 30 23:25	9°♎02'23	26°42'21	evening max el	9004 Dec 12 12:10	22°♎30'42	27°19'41
retrograde	9004 Jan 13 01:08	16°♎20'32		retrograde	9004 Dec 26 00:42	29°♎52'01	
evening set	9004 Jan 19 12:48	13°♎46'07		evening set	9005 Jan 01 21:36	27°♎17'08	
min. Earth dist.	9004 Jan 23 14:20	9°♎40'47	0.66109 AU	min. Earth dist.	9005 Jan 05 17:50	23°♎45'00	0.64596 AU
inferior conj	9004 Jan 25 11:46	7°♎26'48	-0°18'02	inferior conj	9005 Jan 08 02:58	21°♎11'20	-1°23'03
minimum elong	9004 Jan 25 12:16	7°♎25'20	0°17'36	minimum elong	9005 Jan 08 05:30	21°♎04'28	1°21'44
asc. node	9004 Jan 26 09:23	6°♎23'34		asc. node	9005 Jan 12 06:29	17°♎11'15	
morning rise	9004 Jan 31 12:44	1°♎46'31		morning rise	9005 Jan 14 15:01	15°♎44'45	
direct	9004 Feb 03 10:17	0°♎59'56		direct	9005 Jan 17 04:16	15°♎11'07	
morning max el	9004 Feb 09 21:54	4°♎27'54	18°19'02	morning max el	9005 Jan 23 14:37	18°♎33'10	17°54'38
	9004 Feb 27 13:48	0°♎			9005 Feb 01 02:33	0°♎	
morning set	9004 Feb 29 10:32	2°♎59'10		morning set	9005 Feb 09 21:31	14°♎30'36	
desc. node	9004 Feb 29 18:42	3°♎31'53		desc. node	9005 Feb 15 15:35	24°♎05'04	
					9005 Feb 19 06:14	0°♎	
superior conj	9004 Mar 15 23:09	27°♎34'47	-1°36'37				
minimum elong	9004 Mar 15 13:33	26°♎57'11	1°35'38	superior conj	9005 Feb 23 13:38	6°♎57'10	-0°55'38
max. Earth dist.	9004 Mar 17 05:48	29°♎34'46	1.45565 AU	minimum elong	9005 Feb 23 07:20	6°♎31'54	0°54'41
	9004 Mar 17 12:15	0°♎		max. Earth dist.	9005 Feb 28 01:15	14°♎04'26	1.45123 AU
evening rise	9004 Mar 31 23:08	22°♎36'20			9005 Mar 10 06:51	0°♎	
	9004 Apr 05 16:24	0°♎		evening rise	9005 Mar 11 14:11	2°♎00'30	
greatest brilliancy	9004 Apr 11 17:02	9°♎21'33	-0.8m	greatest brilliancy	9005 Mar 26 09:15	24°♎19'48	-0.6m
asc. node	9004 Apr 23 08:01	25°♎22'26			9005 Mar 30 08:32	0°♎	
evening max el	9004 Apr 24 01:36	26°♎08'20	19°07'26	evening max el	9005 Apr 07 06:07	9°♎47'29	20°01'30
retrograde	9004 Apr 30 23:19	0°♎00'46		asc. node	9005 Apr 10 05:10	12°♎23'33	
	9004 Apr 30 14:32	0°♎		retrograde	9005 Apr 14 21:42	14°♎12'37	
	9004 May 01 08:04	30°♎		evening set	9005 Apr 18 17:25	12°♎47'41	
evening set	9004 May 04 10:27	28°♎50'54		inferior conj	9005 Apr 24 01:34	6°♎46'11	3°15'24
inferior conj	9004 May 09 22:04	23°♎03'20	3°21'37	minimum elong	9005 Apr 24 00:29	6°♎49'50	3°15'09
minimum elong	9004 May 09 22:04	23°♎03'20	3°21'26	min. Earth dist.	9005 Apr 24 23:39	5°♎31'34	0.67534 AU
min. Earth dist.	9004 May 11 10:38	21°♎06'02	0.66388 AU	morning rise	9005 Apr 29 07:16	0°♎28'18	
morning rise	9004 May 15 09:14	16°♎44'18			9005 Apr 29 20:21	30°♎	
direct	9004 May 21 16:11	13°♎59'31		direct	9005 May 05 02:42	27°♎52'48	
desc. node	9004 May 27 18:38	16°♎02'02			9005 May 11 01:41	0°♎	

desc. node	9005 May 14 15:36	2°♄48'23		min. Earth dist.	9006 Apr 08 17:25	20°♄09'04	0.68233 AU
morning max el	9005 May 16 20:43	4°♄55'41	24°54'54	morning rise	9006 Apr 13 11:56	14°♄24'36	
	9005 Jun 05 03:33	0°♄		direct	9006 Apr 18 18:07	12°♄05'44	
morning set	9005 Jun 21 20:10	27°♄15'26		morning max el	9006 Apr 29 06:05	18°♄21'00	23°25'40
	9005 Jun 23 08:58	0°♄		desc. node	9006 May 01 12:33	20°♄45'51	
max. Earth dist.	9005 Jun 25 10:50	3°♄47'09	1.36957 AU		9006 May 09 00:20	0°♄	
					9006 May 29 06:04	0°♄	
superior conj	9005 Jul 02 00:22	16°♄16'11	-0°49'14	morning set	9006 Jun 03 06:14	8°♄15'43	
minimum elong	9005 Jul 02 03:26	16°♄31'13	0°48'55	max. Earth dist.	9006 Jun 07 06:48	15°♄09'42	1.39191 AU
asc. node	9005 Jul 07 04:10	26°♄32'43					
	9005 Jul 08 21:15	0°♄		superior conj	9006 Jun 14 21:06	28°♄51'41	-1°21'06
evening rise	9005 Jul 10 09:45	3°♄03'49		minimum elong	9006 Jun 15 02:13	29°♄15'29	1°20'36
	9005 Jul 26 13:43	0°♄			9006 Jun 15 11:45	0°♄	
evening max el	9005 Jul 27 09:46	0°♄51'40	19°30'28	evening rise	9006 Jun 24 05:53	16°♄46'51	
retrograde	9005 Aug 06 00:58	5°♄37'32		asc. node	9006 Jun 24 01:11	16°♄24'07	
evening set	9005 Aug 07 21:11	5°♄27'50			9006 Jul 01 07:17	0°♄	
desc. node	9005 Aug 10 14:40	4°♄40'43		evening max el	9006 Jul 10 09:53	12°♄56'21	18°41'47
inferior conj	9005 Aug 16 14:59	1°♄22'27	-1°50'56	retrograde	9006 Jul 18 12:54	16°♄58'43	
minimum elong	9005 Aug 16 09:58	1°♄30'28	1°49'08	evening set	9006 Jul 20 13:26	16°♄44'37	
	9005 Aug 18 18:34	30°♄		desc. node	9006 Jul 28 11:48	12°♄22'28	
min. Earth dist.	9005 Aug 19 01:17	29°♄49'28	0.55573 AU	inferior conj	9006 Jul 28 12:26	12°♄21'19	-0°00'28
morning rise	9005 Aug 24 20:16	26°♄51'18		minimum elong	9006 Jul 28 12:24	12°♄21'22	0°00'40
direct	9005 Aug 29 17:21	25°♄57'47		transit middle	9006 Jul 28 12:24	12°♄21'22	0°00'40
	9005 Sep 09 04:48	0°♄		transit begin	9006 Jul 28 08:44	12°♄28'10	
morning max el	9005 Sep 12 17:24	2°♄59'10	25°02'18	transit end	9006 Jul 28 16:03	12°♄14'33	
	9005 Oct 01 16:27	0°♄		min. Earth dist.	9006 Jul 31 17:49	9°♄58'15	0.57208 AU
asc. node	9005 Oct 03 03:59	2°♄48'47		morning rise	9006 Aug 05 07:53	7°♄13'07	
morning set	9005 Oct 09 00:13	14°♄44'11		direct	9006 Aug 11 00:47	5°♄52'56	
				morning max el	9006 Aug 25 08:31	13°♄23'24	26°32'27
superior conj	9005 Oct 15 20:47	29°♄42'33	1°36'59		9006 Sep 07 11:45	0°♄	
minimum elong	9005 Oct 15 19:34	29°♄35'51	1°37'02	asc. node	9006 Sep 20 00:55	22°♄21'48	
	9005 Oct 15 23:58	0°♄		morning set	9006 Sep 23 10:35	29°♄25'28	
max. Earth dist.	9005 Oct 17 10:50	3°♄10'45	1.32355 AU		9006 Sep 23 17:04	0°♄	
evening rise	9005 Oct 23 01:27	15°♄05'47					
	9005 Oct 30 17:51	0°♄		superior conj	9006 Sep 30 08:15	14°♄32'32	1°27'26
desc. node	9005 Nov 06 13:11	11°♄38'52		minimum elong	9006 Sep 30 06:18	14°♄21'47	1°27'17
	9005 Nov 19 17:23	0°♄		max. Earth dist.	9006 Sep 30 19:10	15°♄33'07	1.31743 AU
evening max el	9005 Nov 24 22:47	5°♄32'31	27°29'06	evening rise	9006 Oct 07 05:22	29°♄31'48	
retrograde	9005 Dec 08 17:32	12°♄50'13			9006 Oct 07 10:44	0°♄	
evening set	9005 Dec 15 19:07	10°♄23'34			9006 Oct 23 21:38	0°♄	
min. Earth dist.	9005 Dec 19 11:59	7°♄20'33	0.62783 AU	desc. node	9006 Oct 24 10:18	0°♄48'07	
inferior conj	9005 Dec 22 07:40	4°♄37'21	-2°33'20	evening max el	9006 Nov 07 04:49	17°♄54'39	27°05'48
minimum elong	9005 Dec 22 12:36	4°♄25'26	2°31'11	retrograde	9006 Nov 21 02:21	25°♄05'20	
	9005 Dec 28 02:18	30°♄		evening set	9006 Nov 28 01:38	22°♄57'14	
morning rise	9005 Dec 29 08:15	29°♄27'17		min. Earth dist.	9006 Dec 01 19:32	20°♄15'08	0.60752 AU
asc. node	9005 Dec 30 03:33	29°♄13'14		inferior conj	9006 Dec 04 22:34	17°♄35'55	-3°44'44
direct	9005 Dec 31 15:30	29°♄02'46		minimum elong	9006 Dec 05 05:35	17°♄20'59	3°42'15
	9006 Jan 04 03:03	0°♄		morning rise	9006 Dec 12 11:56	12°♄45'30	
morning max el	9006 Jan 07 07:59	2°♄28'23	17°47'39	direct	9006 Dec 14 16:24	12°♄26'26	
morning set	9006 Jan 23 08:48	27°♄11'54		asc. node	9006 Dec 17 00:36	12°♄49'14	
	9006 Jan 24 23:05	0°♄		morning max el	9006 Dec 21 22:36	16°♄04'19	17°59'15
desc. node	9006 Feb 02 12:30	14°♄45'26			9006 Dec 31 15:49	0°♄	
				morning set	9007 Jan 06 13:55	10°♄43'29	
superior conj	9006 Feb 04 02:46	17°♄25'53	-0°11'46				
minimum elong	9006 Feb 04 01:35	17°♄20'58	0°11'24	superior conj	9007 Jan 16 17:13	29°♄06'49	0°27'20
behind sun begin	9006 Feb 03 19:05	16°♄53'49		minimum elong	9007 Jan 16 19:24	29°♄16'25	0°27'14
behind sun end	9006 Feb 04 08:05	17°♄48'04			9007 Jan 17 05:20	0°♄	
max. Earth dist.	9006 Feb 10 18:09	28°♄18'21	1.43997 AU	desc. node	9007 Jan 20 09:26	5°♄29'21	
	9006 Feb 11 19:31	0°♄		max. Earth dist.	9007 Jan 24 07:05	12°♄03'33	1.42310 AU
evening rise	9006 Feb 19 02:05	11°♄25'07		evening rise	9007 Jan 30 01:41	21°♄26'12	
	9006 Mar 03 10:14	0°♄			9007 Feb 04 13:18	0°♄	
evening max el	9006 Mar 21 05:07	23°♄27'55	21°08'52		9007 Feb 25 16:51	0°♄	
asc. node	9006 Mar 28 02:19	28°♄17'14		evening max el	9007 Mar 03 23:14	7°♄10'30	22°25'22
retrograde	9006 Mar 29 20:11	28°♄32'35		retrograde	9007 Mar 13 17:00	12°♄56'40	
evening set	9006 Apr 03 01:37	26°♄52'24		asc. node	9007 Mar 14 23:27	12°♄48'37	
inferior conj	9006 Apr 08 08:44	20°♄39'12	2°57'56	evening set	9007 Mar 18 09:24	11°♄01'20	
minimum elong	9006 Apr 08 06:53	20°♄45'35	2°57'31	inferior conj	9007 Mar 23 17:28	4°♄39'11	2°30'39

minimum elong	9007 Mar 23 15:15	4°♄46'52	2°30'04	min. Earth dist.	9008 Mar 06 10:14	19°♄35'55	0.68334 AU
min. Earth dist.	9007 Mar 23 13:42	4°♄52'18	0.68493 AU	inferior conj	9008 Mar 07 01:52	18°♄42'35	1°54'19
	9007 Mar 27 07:58	30°♄		minimum elong	9008 Mar 06 23:44	18°♄49'53	1°53'41
morning rise	9007 Mar 28 20:57	28°♄29'23		morning rise	9008 Mar 12 08:15	12°♄38'51	
direct	9007 Apr 02 13:18	26°♄31'30		direct	9008 Mar 16 11:02	11°♄03'25	
	9007 Apr 09 17:17	0°♄		morning max el	9008 Mar 24 12:42	15°♄39'14	20°37'53
morning max el	9007 Apr 11 18:15	1°♄54'24	21°57'33	desc. node	9008 Apr 04 06:20	29°♄01'00	
desc. node	9007 Apr 18 09:28	9°♄34'54			9008 Apr 04 23:08	0°♄	
	9007 May 02 22:23	0°♄		morning set	9008 Apr 22 19:56	26°♄40'40	
morning set	9007 May 14 13:28	18°♄01'10			9008 Apr 24 23:03	0°♄	
max. Earth dist.	9007 May 20 06:06	27°♄20'25	1.41415 AU	max. Earth dist.	9008 May 01 12:29	10°♄25'55	1.43343 AU
	9007 May 21 20:09	0°♄					
				superior conj	9008 May 08 02:46	21°♄16'07	-2°08'00
superior conj	9007 May 27 23:26	10°♄35'15	-1°49'07	minimum elong	9008 May 08 06:41	21°♄32'29	2°08'02
minimum elong	9007 May 28 05:27	11°♄01'47	1°48'45		9008 May 13 06:18	0°♄	
evening rise	9007 Jun 07 14:43	29°♄55'44		evening rise	9008 May 20 07:45	12°♄19'13	
	9007 Jun 07 15:38	0°♄		asc. node	9008 May 27 19:16	25°♄20'30	
asc. node	9007 Jun 10 22:14	6°♄02'03			9008 May 30 15:54	0°♄	
evening max el	9007 Jun 23 18:07	25°♄36'50	18°13'35	evening max el	9008 Jun 06 06:35	8°♄42'37	18°05'02
retrograde	9007 Jun 30 20:02	29°♄10'58		retrograde	9008 Jun 12 18:59	12°♄04'18	
evening set	9007 Jul 03 03:57	28°♄48'28		evening set	9008 Jun 15 10:29	11°♄30'34	
inferior conj	9007 Jul 10 07:36	24°♄04'17	1°26'52	inferior conj	9008 Jun 21 21:56	6°♄26'35	2°26'53
minimum elong	9007 Jul 10 10:10	23°♄58'42	1°25'46	minimum elong	9008 Jun 22 00:50	6°♄19'20	2°25'55
min. Earth dist.	9007 Jul 13 16:31	21°♄09'26	0.59322 AU	min. Earth dist.	9008 Jun 24 23:31	3°♄23'12	0.61574 AU
desc. node	9007 Jul 15 08:54	19°♄50'25		morning rise	9008 Jun 28 12:57	0°♄24'37	
morning rise	9007 Jul 17 13:17	18°♄24'11			9008 Jun 29 03:52	30°♄	
direct	9007 Jul 23 21:31	16°♄33'17		desc. node	9008 Jul 01 05:58	28°♄54'31	
morning max el	9007 Aug 07 06:14	24°♄22'44	27°32'55	direct	9008 Jul 05 05:24	28°♄05'41	
	9007 Aug 12 09:03	0°♄			9008 Jul 11 17:31	0°♄	
	9007 Aug 31 18:05	0°♄		morning max el	9008 Jul 19 10:39	6°♄06'28	27°56'05
asc. node	9007 Sep 06 21:51	12°♄10'37			9008 Aug 06 11:06	0°♄	
morning set	9007 Sep 07 17:53	13°♄55'07		morning set	9008 Aug 21 20:12	28°♄07'49	
max. Earth dist.	9007 Sep 14 05:13	27°♄57'56	1.31596 AU		9008 Aug 22 17:56	0°♄	
				asc. node	9008 Aug 23 18:46	2°♄09'49	
superior conj	9007 Sep 14 19:57	29°♄19'40	1°12'38	max. Earth dist.	9008 Aug 27 13:07	10°♄14'10	1.31912 AU
minimum elong	9007 Sep 14 17:42	29°♄07'14	1°12'17				
	9007 Sep 15 03:13	0°♄		superior conj	9008 Aug 29 06:07	13°♄58'33	0°52'56
evening rise	9007 Sep 21 13:50	14°♄08'21		minimum elong	9008 Aug 29 04:03	13°♄47'14	0°52'28
	9007 Sep 29 11:21	0°♄		evening rise	9008 Sep 05 00:48	28°♄49'25	
desc. node	9007 Oct 11 07:25	19°♄09'05			9008 Sep 05 14:00	0°♄	
evening max el	9007 Oct 20 03:33	29°♄26'55	26°08'42		9008 Sep 22 05:28	0°♄	
	9007 Oct 20 17:46	0°♄		desc. node	9008 Sep 27 04:33	6°♄23'10	
retrograde	9007 Nov 03 01:32	6°♄30'46		evening max el	9008 Sep 30 18:14	10°♄09'53	24°43'52
evening set	9007 Nov 09 12:30	4°♄50'55		retrograde	9008 Oct 14 13:41	17°♄06'39	
min. Earth dist.	9007 Nov 13 16:31	2°♄16'16	0.58661 AU	evening set	9008 Oct 19 23:29	16°♄01'12	
inferior conj	9007 Nov 16 20:06	29°♄56'59	-4°48'58	min. Earth dist.	9008 Oct 25 05:22	13°♄15'27	0.56745 AU
minimum elong	9007 Nov 17 03:24	29°♄43'29	4°47'09	inferior conj	9008 Oct 27 21:38	11°♄32'17	-5°31'34
	9007 Nov 16 18:29	30°♄		minimum elong	9008 Oct 28 01:20	11°♄26'17	5°31'05
morning rise	9007 Nov 24 20:39	25°♄29'02		morning rise	9008 Nov 05 05:25	7°♄26'53	
direct	9007 Nov 27 02:34	25°♄12'10		direct	9008 Nov 07 18:02	7°♄09'14	
asc. node	9007 Dec 03 21:37	27°♄57'04		morning max el	9008 Nov 17 05:16	11°♄38'57	19°24'39
morning max el	9007 Dec 05 06:54	29°♄11'07	18°31'01	asc. node	9008 Nov 19 18:35	14°♄23'48	
	9007 Dec 06 02:12	0°♄			9008 Nov 29 15:17	0°♄	
morning set	9007 Dec 21 07:25	24°♄49'01		morning set	9008 Dec 04 09:18	9°♄17'01	
	9007 Dec 23 23:52	0°♄					
				superior conj	9008 Dec 12 10:28	25°♄20'22	1°20'17
superior conj	9007 Dec 30 05:27	11°♄49'40	0°58'14	minimum elong	9008 Dec 12 13:23	25°♄34'36	1°20'13
minimum elong	9007 Dec 30 08:45	12°♄04'57	0°58'02		9008 Dec 14 20:21	0°♄	
max. Earth dist.	9008 Jan 06 15:40	25°♄09'33	1.40254 AU	max. Earth dist.	9008 Dec 18 21:34	7°♄34'31	1.38070 AU
desc. node	9008 Jan 07 06:22	26°♄13'06		evening rise	9008 Dec 22 15:01	14°♄15'14	
	9008 Jan 09 11:36	0°♄		desc. node	9008 Dec 24 03:21	16°♄53'18	
evening rise	9008 Jan 10 21:28	2°♄21'54			9009 Jan 01 01:55	0°♄	
	9008 Jan 28 20:41	0°♄			9009 Jan 22 17:19	0°♄	
evening max el	9008 Feb 14 13:56	20°♄55'36	23°45'32	evening max el	9009 Jan 27 03:08	4°♄43'27	25°02'56
retrograde	9008 Feb 25 10:49	27°♄19'58		retrograde	9009 Feb 08 00:43	11°♄38'00	
asc. node	9008 Feb 29 20:34	25°♄46'53		evening set	9009 Feb 13 17:32	9°♄15'47	
evening set	9008 Mar 01 15:12	25°♄10'16		asc. node	9009 Feb 15 17:39	7°♄17'14	

min. Earth dist.	9009 Feb 18 04:56	4°  16'02	0.67773 AU	asc. node	9010 Feb 02 14:46	17°  48'17	
inferior conj	9009 Feb 19 08:09	2°  46'54	1°09'24	inferior conj	9010 Feb 03 10:21	16°  47'37	0°16'11
minimum elong	9009 Feb 19 06:35	2°  52'02	1°08'56	minimum elong	9010 Feb 03 09:55	16°  48'57	0°16'12
	9009 Feb 21 12:57	30°  R 		morning rise	9010 Feb 09 05:51	11°  00'45	
morning rise	9009 Feb 24 19:55	26°  05'40		direct	9010 Feb 12 08:55	10°  05'12	
direct	9009 Feb 28 10:07	25°  36'33		morning max el	9010 Feb 19 00:48	13°  41'45	18°40'36
morning max el	9009 Mar 07 15:07	29°  36'32	19°31'24		9010 Mar 03 03:10	0°  H	
	9009 Mar 08 00:28	0°  H		desc. node	9010 Mar 09 00:08	9°  H07'50	
greatest brilliancy	9009 Mar 20 08:41	16°  H16'33	-0.7m	morning set	9010 Mar 12 07:47	14°  H20'21	
desc. node	9009 Mar 22 03:14	18°  H54'34			9010 Mar 22 07:34	0°  Y	
	9009 Mar 29 10:48	0°  Y		max. Earth dist.	9010 Mar 27 18:43	8°  Y33'04	1.45479 AU
morning set	9009 Apr 01 18:01	5°  Y04'15					
max. Earth dist.	9009 Apr 14 01:19	24°  Y15'07	1.44748 AU	superior conj	9010 Mar 28 14:19	9°  Y49'46	-1°54'47
	9009 Apr 17 16:05	0°  B		minimum elong	9010 Mar 28 05:42	9°  Y16'04	1°54'11
					9010 Apr 10 08:54	0°  B	
superior conj	9009 Apr 18 05:34	0°  B53'57	-2°11'24	evening rise	9010 Apr 13 01:28	4°  B17'51	
minimum elong	9009 Apr 18 03:18	0°  B44'53	2°11'29	greatest brilliancy	9010 Apr 20 16:44	16°  B30'44	-0.9m
evening rise	9009 May 02 04:22	23°  B47'54			9010 Apr 29 15:13	0°  II	
	9009 May 05 21:07	0°  II		asc. node	9010 May 01 13:24	2°  II31'12	
asc. node	9009 May 14 16:19	14°  II12'55		evening max el	9010 May 04 07:33	5°  II38'42	18°43'34
evening max el	9009 May 20 19:58	22°  II05'19	18°15'18	retrograde	9010 May 10 22:24	9°  II17'05	
retrograde	9009 May 27 05:09	25°  II28'54		evening set	9010 May 14 04:54	8°  II15'56	
evening set	9009 May 30 04:02	24°  II42'05		inferior conj	9010 May 19 19:50	2°  II37'30	3°19'17
inferior conj	9009 Jun 05 03:19	19°  II20'05	3°02'46	minimum elong	9010 May 19 20:33	2°  II35'17	3°19'01
minimum elong	9009 Jun 05 05:19	19°  II14'26	3°02'13	min. Earth dist.	9010 May 21 17:17	0°  II17'40	0.65523 AU
min. Earth dist.	9009 Jun 07 15:52	16°  II30'11	0.63702 AU		9010 May 21 23:11	30°  R 	
morning rise	9009 Jun 11 05:16	13°  II06'15		morning rise	9010 May 25 11:30	26°  B19'04	
direct	9009 Jun 17 22:44	10°  II27'49		direct	9010 May 31 23:46	23°  B32'57	
desc. node	9009 Jun 18 03:00	10°  II27'55		desc. node	9010 Jun 05 00:02	24°  B26'07	
morning max el	9009 Jul 01 19:29	18°  II30'21	27°41'28		9010 Jun 12 19:39	0°  II	
	9009 Jul 11 11:40	0°  B		morning max el	9010 Jun 14 05:55	1°  II24'00	26°54'16
	9009 Jul 30 09:02	0°  Q			9010 Jul 05 14:13	0°  B	
morning set	9009 Aug 05 15:12	11°  Q56'27		morning set	9010 Jul 19 23:56	25°  B13'03	
max. Earth dist.	9009 Aug 10 14:44	22°  Q09'23	1.32709 AU		9010 Jul 22 11:02	0°  Q	
asc. node	9009 Aug 10 15:41	22°  Q14'24		max. Earth dist.	9010 Jul 24 06:44	3°  Q37'33	1.34005 AU
superior conj	9009 Aug 13 12:48	28°  Q22'57	0°28'42	superior conj	9010 Jul 28 13:55	12°  Q27'09	0°00'32
minimum elong	9009 Aug 13 11:29	28°  Q15'48	0°28'17	minimum elong	9010 Jul 28 13:53	12°  Q27'02	0°00'19
	9009 Aug 14 06:47	0°  P 		behind sun begin	9010 Jul 28 08:12	11°  Q57'19	
evening rise	9009 Aug 20 12:22	13°  P28'40		behind sun end	9010 Jul 28 19:35	12°  Q56'48	
	9009 Aug 28 18:52	0°  Q		asc. node	9010 Jul 28 12:39	12°  Q20'32	
evening max el	9009 Sep 12 05:13	20°  Q22'56	23°05'04	evening rise	9010 Aug 04 22:38	28°  Q00'46	
desc. node	9009 Sep 14 01:42	22°  Q04'11			9010 Aug 05 21:27	0°  P 	
retrograde	9009 Sep 25 13:38	27°  Q02'59			9010 Aug 24 04:54	0°  Q	
evening set	9009 Sep 29 11:49	26°  Q29'19		evening max el	9010 Aug 24 21:34	0°  Q42'10	21°29'03
min. Earth dist.	9009 Oct 06 14:13	23°  Q14'08	0.55316 AU	desc. node	9010 Aug 31 22:51	5°  Q41'14	
inferior conj	9009 Oct 08 03:40	22°  Q19'53	-5°32'51	retrograde	9010 Sep 06 03:15	6°  Q46'19	
minimum elong	9009 Oct 07 23:55	22°  Q25'19	5°32'28	evening set	9010 Sep 08 17:09	6°  Q31'08	
morning rise	9009 Oct 16 14:02	18°  Q29'51		inferior conj	9010 Sep 17 21:23	2°  Q33'48	-4°38'41
direct	9009 Oct 19 14:26	18°  Q08'20		minimum elong	9010 Sep 17 12:01	2°  Q46'55	4°36'27
morning max el	9009 Oct 30 14:52	23°  Q18'38	20°40'43	min. Earth dist.	9010 Sep 17 22:33	2°  Q32'11	0.54675 AU
	9009 Nov 05 08:11	0°  M 			9010 Sep 22 18:46	30°  R 	
asc. node	9009 Nov 06 15:33	1°  M52'57		morning rise	9010 Sep 26 07:46	28°  P 	
morning set	9009 Nov 18 16:35	23°  M57'56		direct	9010 Sep 29 23:45	28°  P 	
	9009 Nov 21 14:22	0°  X 			9010 Oct 06 18:46	0°  Q	
				morning max el	9010 Oct 12 11:48	4°  Q10'00	22°16'24
superior conj	9009 Nov 26 03:33	9°  X24'25	1°34'01	asc. node	9010 Oct 24 12:32	20°  Q10'36	
minimum elong	9009 Nov 26 05:23	9°  X33'44	1°34'08		9010 Oct 29 20:14	0°  M 	
max. Earth dist.	9009 Dec 01 05:19	19°  X31'23	1.36009 AU	morning set	9010 Nov 03 03:02	8°  M45'47	
evening rise	9009 Dec 05 03:40	26°  X58'28					
	9009 Dec 06 19:22	0°  Z		superior conj	9010 Nov 10 05:06	23°  M51'30	1°40'17
desc. node	9009 Dec 11 00:23	7°  Z24'59		minimum elong	9010 Nov 10 05:39	23°  M54'21	1°40'29
	9009 Dec 25 11:32	0°  R 			9010 Nov 13 03:33	0°  X 	
evening max el	9010 Jan 09 16:17	18°  R30'19	26°10'39	max. Earth dist.	9010 Nov 13 20:02	1°  X24'51	1.34261 AU
retrograde	9010 Jan 22 09:42	25°  R43'38		evening rise	9010 Nov 18 07:43	10°  X22'16	
evening set	9010 Jan 28 14:42	23°  R12'24		desc. node	9010 Nov 27 21:25	27°  X43'21	
min. Earth dist.	9010 Feb 01 19:36	18°  R47'07	0.66822 AU		9010 Nov 29 06:07	0°  Z	

	9010 Dec 21 02:12	0°♊			9011 Nov 22 19:47	0°♊	
evening max el	9010 Dec 23 05:42	2°♊09'18 27°01'13		evening max el	9011 Dec 05 18:05	15°♊28'58 27°27'31	
retrograde	9011 Jan 05 12:55	9°♊29'46		retrograde	9011 Dec 19 09:32	22°♊48'26	
evening set	9011 Jan 12 04:42	6°♊54'33		evening set	9011 Dec 26 09:08	20°♊16'11	
min. Earth dist.	9011 Jan 16 03:57	3°♊03'15 0.65508 AU		min. Earth dist.	9011 Dec 30 03:46	16°♊57'01 0.63863 AU	
inferior conj	9011 Jan 18 06:18	0°♊40'01 -0°44'48		inferior conj	9012 Jan 01 17:29	14°♊18'12 -1°52'21	
minimum elong	9011 Jan 18 07:36	0°♊36'18 0°44'01		minimum elong	9012 Jan 01 21:02	14°♊09'05 1°50'39	
	9011 Jan 18 20:25	30°♊♊		asc. node	9012 Jan 07 08:59	9°♊28'45	
asc. node	9011 Jan 20 11:53	28°♊13'12		morning rise	9012 Jan 08 10:43	8°♊58'00	
morning rise	9011 Jan 24 11:45	25°♊04'54		direct	9012 Jan 10 21:11	8°♊28'34	
direct	9011 Jan 27 05:28	24°♊24'18		morning max el	9012 Jan 17 09:05	11°♊50'50 17°49'25	
morning max el	9011 Feb 02 15:42	27°♊48'46 18°06'25			9012 Jan 29 20:06	0°♊	
	9011 Feb 04 15:49	0°♊		morning set	9012 Feb 03 00:33	7°♊08'07	
morning set	9011 Feb 21 02:18	25°♊03'33		desc. node	9012 Feb 10 17:54	20°♊11'54	
desc. node	9011 Feb 23 21:01	29°♊35'00					
	9011 Feb 24 03:10	0°♊		superior conj	9012 Feb 15 20:24	28°♊36'03 -0°36'49	
superior conj	9011 Mar 07 21:13	18°♊47'41 -1°20'13		minimum elong	9012 Feb 15 16:21	28°♊19'33 0°36'05	
minimum elong	9011 Mar 07 12:25	18°♊12'59 1°19'08			9012 Feb 16 17:06	0°♊	
max. Earth dist.	9011 Mar 10 14:30	23°♊04'13 1.45470 AU		max. Earth dist.	9012 Feb 21 09:45	7°♊31'34 1.44730 AU	
	9011 Mar 15 00:55	0°♊		evening rise	9012 Mar 02 12:52	23°♊19'12	
evening rise	9011 Mar 24 00:56	13°♊58'39			9012 Mar 06 21:58	0°♊	
	9011 Apr 03 10:39	0°♊		evening max el	9012 Mar 28 01:12	0°♊	
greatest brilliancy	9011 Apr 05 19:15	3°♊33'31 -0.7m		asc. node	9012 Mar 30 17:26	2°♊57'19 20°28'43	
evening max el	9011 Apr 17 15:10	19°♊17'06 19°28'42		retrograde	9012 Apr 04 07:42	6°♊38'58	
asc. node	9011 Apr 18 10:32	20°♊04'19		evening set	9012 Apr 07 18:12	7°♊38'13	
retrograde	9011 Apr 24 19:35	23°♊21'56		inferior conj	9012 Apr 11 18:02	6°♊06'35	
evening set	9011 Apr 28 10:18	22°♊05'43		minimum elong	9012 Apr 17 01:28	29°♊59'49 3°09'15	
inferior conj	9011 May 03 20:08	16°♊12'13 3°20'28			9012 Apr 17 00:01	0°♊04'47 3°08'55	
minimum elong	9011 May 03 19:38	16°♊13'51 3°20'16		min. Earth dist.	9012 Apr 17 01:25	30°♊♊	
min. Earth dist.	9011 May 05 02:27	14°♊32'32 0.66935 AU		morning rise	9012 Apr 17 17:39	29°♊04'23 0.67894 AU	
morning rise	9011 May 09 04:37	9°♊53'34		direct	9012 Apr 22 05:48	23°♊43'22	
direct	9011 May 15 07:08	7°♊11'27		desc. node	9012 Apr 27 19:45	21°♊14'24	
desc. node	9011 May 22 21:02	10°♊19'48		morning max el	9012 May 08 17:58	27°♊39'14	
morning max el	9011 May 27 15:55	14°♊35'33 25°42'56			9012 May 09 01:12	27°♊57'23 24°17'21	
	9011 Jun 09 05:44	0°♊			9012 May 10 23:39	0°♊	
morning set	9011 Jun 28 09:51	0°♊		morning set	9012 Jun 01 22:22	0°♊	
max. Earth dist.	9011 Jul 02 18:28	7°♊46'34		max. Earth dist.	9012 Jun 13 17:56	19°♊24'41	
	9011 Jul 06 12:02	14°♊44'13 1.35775 AU			9012 Jun 17 10:00	25°♊53'44 1.37901 AU	
					9012 Jun 19 16:11	0°♊	
superior conj	9011 Jul 12 06:42	26°♊03'19 -0°30'36		superior conj	9012 Jun 24 11:53	9°♊03'30 -1°02'58	
minimum elong	9011 Jul 12 08:32	26°♊12'34 0°30'29		minimum elong	9012 Jun 24 15:52	9°♊22'38 1°02'32	
	9011 Jul 14 05:28	0°♊		asc. node	9012 Jul 01 06:38	22°♊20'46	
asc. node	9011 Jul 15 09:37	2°♊23'51		evening rise	9012 Jul 03 06:24	26°♊17'35	
evening rise	9011 Jul 20 05:28	12°♊19'14			9012 Jul 05 03:35	0°♊	
	9011 Jul 29 12:10	0°♊		evening max el	9012 Jul 19 19:30	23°♊14'50 19°07'05	
evening max el	9011 Aug 07 01:58	11°♊35'53 20°07'57		retrograde	9012 Jul 28 18:08	27°♊40'50	
retrograde	9011 Aug 17 16:22	16°♊50'30		evening set	9012 Jul 30 15:29	27°♊29'45	
desc. node	9011 Aug 18 20:01	16°♊47'01		desc. node	9012 Aug 04 17:09	25°♊26'22	
evening set	9011 Aug 19 14:36	16°♊40'52		inferior conj	9012 Aug 08 01:40	23°♊16'59 -1°01'58	
inferior conj	9011 Aug 28 16:11	12°♊42'08 -2°57'56		minimum elong	9012 Aug 07 22:58	23°♊21'34 1°01'05	
minimum elong	9011 Aug 28 08:13	12°♊53'58 2°55'13		min. Earth dist.	9012 Aug 10 21:56	21°♊21'19 0.56189 AU	
min. Earth dist.	9011 Aug 30 08:27	11°♊42'18 0.54982 AU		morning rise	9012 Aug 16 03:26	18°♊30'13	
morning rise	9011 Sep 06 00:39	8°♊30'51		direct	9012 Aug 21 09:06	17°♊26'31	
direct	9011 Sep 10 10:43	7°♊48'33		morning max el	9012 Sep 04 13:33	24°♊40'55 25°43'42	
morning max el	9011 Sep 24 00:48	14°♊27'32 24°02'39			9012 Sep 09 11:29	0°♊	
	9011 Oct 06 04:00	0°♊		asc. node	9012 Sep 27 06:24	28°♊25'15	
asc. node	9011 Oct 11 09:29	9°♊04'29			9012 Sep 28 01:28	0°♊	
morning set	9011 Oct 18 14:47	23°♊35'00		morning set	9012 Oct 02 02:06	8°♊20'25	
	9011 Oct 21 14:12	0°♊					
superior conj	9011 Oct 25 12:16	8°♊32'50 1°39'56		superior conj	9012 Oct 08 22:42	23°♊21'09 1°33'36	
minimum elong	9011 Oct 25 11:37	8°♊29'18 1°40'04		minimum elong	9012 Oct 08 21:08	23°♊12'29 1°33'34	
max. Earth dist.	9011 Oct 27 19:13	13°♊29'26 1.32920 AU		max. Earth dist.	9012 Oct 10 01:04	25°♊46'36 1.32033 AU	
evening rise	9011 Nov 01 23:26	24°♊16'41			9012 Oct 11 23:23	0°♊	
	9011 Nov 04 20:53	0°♊		evening rise	9012 Oct 15 23:37	8°♊32'47	
desc. node	9011 Nov 14 18:31	17°♊42'10		desc. node	9012 Oct 27 06:15	0°♊	
					9012 Oct 31 15:37	7°♊12'36	

evening max el	9012 Nov 17 03:01	28°  14'54	27°23'26	evening rise	9013 Sep 30 05:43	23°  03'58	
	9012 Nov 19 01:54	0° 			9013 Oct 03 13:59	0° 	
retrograde	9012 Nov 30 22:54	5°  29'31		desc. node	9013 Oct 18 12:45	26°  03'29	
evening set	9012 Dec 08 00:47	3°  09'14			9013 Oct 21 08:16	0° 	
min. Earth dist.	9012 Dec 11 17:14	0°  16'48	0.61938 AU	evening max el	9013 Oct 30 05:57	10°  15'44	26°45'30
	9012 Dec 12 00:48	30°  R 		retrograde	9013 Nov 13 04:02	17°  24'19	
inferior conj	9012 Dec 14 16:44	27°  33'25	-3°03'50	evening set	9013 Nov 19 23:34	15°  26'45	
minimum elong	9012 Dec 14 22:40	27°  19'51	3°01'26	min. Earth dist.	9013 Nov 23 20:03	12°  50'02	0.59853 AU
morning rise	9012 Dec 21 22:50	22°  31'31		inferior conj	9013 Nov 27 00:37	10°  16'51	-4°13'36
direct	9012 Dec 24 04:34	22°  09'39		minimum elong	9013 Nov 27 08:06	10°  01'51	4°11'14
asc. node	9012 Dec 24 06:03	22°  09'40		morning rise	9013 Dec 04 19:08	5°  36'08	
morning max el	9012 Dec 31 01:44	25°  39'03	17°50'18	direct	9013 Dec 06 23:31	5°  18'29	
	9013 Jan 03 17:39	0° 		asc. node	9013 Dec 11 03:02	6°  25'38	
morning set	9013 Jan 15 20:12	20°  13'10		morning max el	9013 Dec 14 14:11	9°  04'08	18°10'16
	9013 Jan 21 07:43	0° 			9013 Dec 28 03:47	0° 	
				morning set	9013 Dec 30 07:07	4°  00'29	
superior conj	9013 Jan 26 20:33	9°  36'32	0°05'41	superior conj	9014 Jan 08 20:55	21°  34'44	0°41'30
minimum elong	9013 Jan 26 21:06	9°  38'52	0°05'49	minimum elong	9014 Jan 08 23:48	21°  38'44	0°41'19
behind sun begin	9013 Jan 26 12:59	9°  04'14			9014 Jan 13 12:54	0° 	
behind sun end	9013 Jan 27 05:12	10°  13'25		desc. node	9014 Jan 14 11:46	1°  38'31	
desc. node	9013 Jan 27 14:49	10°  54'12		max. Earth dist.	9014 Jan 16 12:06	5°  04'08	1.41465 AU
max. Earth dist.	9013 Feb 03 01:32	21°  36'29	1.43340 AU	evening rise	9014 Jan 21 11:48	13°  18'35	
	9013 Feb 08 07:23	0° 			9014 Feb 01 05:26	0° 	
evening rise	9013 Feb 10 04:13	2°  55'47			9014 Feb 23 22:08	0° 	
	9013 Feb 28 09:08	0° 		evening max el	9014 Feb 24 06:25	0°  20'57	22°59'17
evening max el	9013 Mar 13 14:07	16°  Y38'01	21°40'26	retrograde	9014 Mar 06 12:06	6°  Y24'45	
asc. node	9013 Mar 22 04:50	21°  Y59'25		asc. node	9014 Mar 09 01:57	5°  Y51'56	
retrograde	9013 Mar 22 16:16	22°  Y00'34		evening set	9014 Mar 11 09:24	4°  Y23'12	
evening set	9013 Mar 27 02:16	20°  Y13'41			9014 Mar 15 06:46	30°  R 	
inferior conj	9013 Apr 01 09:33	13°  Y56'01	2°47'29	inferior conj	9014 Mar 16 18:22	27°  H57'57	2°16'18
minimum elong	9013 Apr 01 07:30	14°  Y03'09	2°46'59	minimum elong	9014 Mar 16 16:08	28°  H05'42	2°15'41
min. Earth dist.	9013 Apr 01 12:44	13°  Y44'54	0.68401 AU	min. Earth dist.	9014 Mar 16 09:30	28°  H28'41	0.68477 AU
morning rise	9013 Apr 06 12:34	7°  Y43'20		morning rise	9014 Mar 21 22:47	21°  H50'20	
direct	9013 Apr 11 12:45	5°  Y33'21		direct	9014 Mar 26 09:10	20°  H02'05	
morning max el	9013 Apr 21 11:31	11°  Y26'23	22°47'30	morning max el	9014 Apr 04 02:03	25°  H04'24	21°22'09
desc. node	9013 Apr 25 14:52	16°  Y00'27			9014 Apr 08 11:50	0°  Y	
	9013 May 06 05:22	0° 		desc. node	9014 Apr 12 11:45	5°  Y06'37	
morning set	9013 May 25 16:58	29°  B53'56			9014 Apr 29 15:44	0°  B	
	9013 May 25 18:27	0° 		morning set	9014 May 05 12:43	9°  B08'11	
max. Earth dist.	9013 May 30 06:54	7°  B35'20	1.40157 AU	max. Earth dist.	9014 May 12 08:25	20°  B07'12	1.42286 AU
					9014 May 18 06:05	0° 	
superior conj	9013 Jun 07 01:19	21°  B17'45	-1°33'44	superior conj	9014 May 19 18:18	2°  B35'14	-1°58'37
minimum elong	9013 Jun 07 07:03	21°  B43'52	1°33'16	minimum elong	9014 May 19 23:55	2°  B59'25	1°58'26
	9013 Jun 11 18:13	0° 		evening rise	9014 May 31 00:54	22°  B37'57	
evening rise	9013 Jun 16 22:13	9°  B47'23			9014 Jun 04 02:50	0°  B	
asc. node	9013 Jun 18 03:40	12°  B07'04		asc. node	9014 Jun 05 00:42	1°  B37'13	
	9013 Jun 28 10:26	0° 		evening max el	9014 Jun 16 10:00	18°  B27'59	18°07'38
evening max el	9013 Jul 02 23:30	5°  B35'38	18°27'18	retrograde	9014 Jun 23 04:53	21°  B54'54	
retrograde	9013 Jul 10 14:37	9°  B24'28		evening set	9014 Jun 25 15:59	21°  B28'01	
evening set	9013 Jul 12 18:00	9°  B07'19		inferior conj	9014 Jul 02 12:19	16°  B35'35	1°55'33
inferior conj	9013 Jul 20 08:32	4°  B35'09	0°39'56	minimum elong	9014 Jul 02 15:14	16°  B28'48	1°54'26
minimum elong	9013 Jul 20 09:56	4°  B32'21	0°39'12	min. Earth dist.	9014 Jul 05 19:17	13°  B33'50	0.60279 AU
desc. node	9013 Jul 22 14:14	2°  B47'40		morning rise	9014 Jul 09 11:39	10°  B44'45	
min. Earth dist.	9013 Jul 23 17:03	1°  B55'42	0.58062 AU	desc. node	9014 Jul 09 11:18	10°  B45'18	
	9013 Jul 26 12:01	30°  R 		direct	9014 Jul 16 00:26	8°  B40'48	
morning rise	9013 Jul 27 22:21	29°  B11'52		morning max el	9014 Jul 30 08:13	16°  B36'54	27°47'29
direct	9013 Aug 02 22:17	27°  B38'51			9014 Aug 10 08:48	0°  B	
	9013 Aug 10 14:01	0° 		morning set	9014 Aug 28 01:56	0°  B	
morning max el	9013 Aug 17 07:34	5°  B19'12	27°02'34	asc. node	9014 Aug 31 16:46	7°  B20'26	
	9013 Sep 04 12:01	0° 		max. Earth dist.	9014 Sep 01 00:14	7°  B59'22	
asc. node	9013 Sep 14 03:19	18°  B05'49			9014 Sep 06 19:54	20°  B32'17	1.31666 AU
morning set	9013 Sep 16 11:22	22°  B57'41		superior conj	9014 Sep 07 21:44	22°  B54'56	1°04'53
	9013 Sep 19 17:43	0° 		minimum elong	9014 Sep 07 19:30	22°  B42'36	1°04'27
superior conj	9013 Sep 23 10:28	8°  B10'47	1°21'48		9014 Sep 11 02:32	0° 	
minimum elong	9013 Sep 23 08:21	7°  B59'00	1°21'33				
max. Earth dist.	9013 Sep 23 10:33	8°  B11'11	1.31614 AU				

evening rise	9014 Sep 14 15:27	7° Ω 42'41		9015 Sep 02 18:10	0° Ω	
	9014 Sep 26 02:39	0° \mathbb{M}		9015 Sep 21 17:23	0° \mathbb{M}	
desc. node	9014 Oct 05 09:53	13° \mathbb{M} 58'24		9015 Sep 22 07:01	0° \mathbb{M} 36'00	
evening max el	9014 Oct 12 01:03	21° \mathbb{M} 25'27	25°35'27	evening max el	9015 Sep 23 13:30	1° \mathbb{M} 52'18 24°02'32
retrograde	9014 Oct 25 23:01	28° \mathbb{M} 27'06		retrograde	9015 Oct 07 05:37	8° \mathbb{M} 42'54
evening set	9014 Nov 01 00:37	27° \mathbb{M} 01'46		evening set	9015 Oct 12 00:58	7° \mathbb{M} 52'16
min. Earth dist.	9014 Nov 05 13:26	24° \mathbb{M} 24'26	0.57801 AU	min. Earth dist.	9015 Oct 18 00:06	4° \mathbb{M} 55'58 0.56061 AU
inferior conj	9014 Nov 08 13:47	22° \mathbb{M} 18'40	-5°10'51	inferior conj	9015 Oct 20 06:37	3° \mathbb{M} 32'46 -5°38'18
minimum elong	9014 Nov 08 20:08	22° \mathbb{M} 07'35	5°09'35	minimum elong	9015 Oct 20 07:26	3° \mathbb{M} 31'31 5°38'10
morning rise	9014 Nov 16 17:59	18° \mathbb{M} 00'26			9015 Oct 27 04:39	30° \mathbb{R} Ω
direct	9014 Nov 19 01:54	17° \mathbb{M} 43'42		morning rise	9015 Oct 28 15:56	29° Ω 34'55
morning max el	9014 Nov 27 18:39	21° \mathbb{M} 55'04	18°51'06	direct	9015 Oct 31 09:11	29° Ω 15'52
asc. node	9014 Nov 28 00:00	22° \mathbb{M} 08'06			9015 Nov 04 09:12	0° \mathbb{M}
	9014 Dec 04 03:02	0° \mathbb{X}		morning max el	9015 Nov 10 11:40	4° \mathbb{M} 02'02 19°54'19
morning set	9014 Dec 14 04:34	18° \mathbb{X} 16'04		asc. node	9015 Nov 14 20:59	9° \mathbb{M} 02'40
	9014 Dec 20 04:23	0° \mathbb{Z}			9015 Nov 26 23:20	0° \mathbb{X}
				morning set	9015 Nov 28 09:02	2° \mathbb{X} 50'00
superior conj	9014 Dec 22 16:50	4° \mathbb{Z} 49'51	1°08'39			
minimum elong	9014 Dec 22 20:06	5° \mathbb{Z} 05'21	1°08'29	superior conj	9015 Dec 06 03:24	18° \mathbb{X} 35'16 1°27'05
max. Earth dist.	9014 Dec 29 18:38	17° \mathbb{Z} 49'31	1.39322 AU	minimum elong	9015 Dec 06 05:55	18° \mathbb{X} 47'45 1°27'06
desc. node	9015 Jan 01 08:45	22° \mathbb{Z} 21'04		max. Earth dist.	9015 Dec 12 00:57	0° \mathbb{Z} 00'41 1.37165 AU
evening rise	9015 Jan 02 16:57	24° \mathbb{Z} 38'58			9015 Dec 12 00:48	0° \mathbb{Z}
	9015 Jan 05 21:39	0° \approx		evening rise	9015 Dec 15 19:01	6° \mathbb{Z} 54'03
	9015 Jan 25 23:32	0° \mathbb{H}		desc. node	9015 Dec 19 05:45	12° \mathbb{Z} 57'52
evening max el	9015 Feb 06 20:22	14° \mathbb{H} 07'47	24°19'18		9015 Dec 29 18:18	0° \approx
retrograde	9015 Feb 18 04:25	20° \mathbb{H} 46'19		evening max el	9016 Jan 20 09:38	27° \approx 56'13 25°33'32
evening set	9015 Feb 23 13:56	18° \mathbb{H} 31'17			9016 Jan 22 15:08	0° \mathbb{H}
asc. node	9015 Feb 23 23:02	18° \mathbb{H} 11'16		retrograde	9016 Feb 01 16:09	4° \mathbb{H} 59'27
min. Earth dist.	9015 Feb 28 05:39	13° \mathbb{H} 11'24	0.68140 AU	evening set	9016 Feb 07 14:17	2° \mathbb{H} 33'04
inferior conj	9015 Mar 01 02:08	12° \mathbb{H} 02'31	1°36'20		9016 Feb 10 03:24	30° \mathbb{R} \approx
minimum elong	9015 Mar 01 00:10	12° \mathbb{H} 09'06	1°35'44	asc. node	9016 Feb 10 20:09	29° \approx 10'48
morning rise	9015 Mar 06 10:29	6° \mathbb{H} 01'30		min. Earth dist.	9016 Feb 11 22:53	27° \approx 48'02 0.67412 AU
direct	9015 Mar 10 07:48	4° \mathbb{H} 35'12		inferior conj	9016 Feb 13 06:55	26° \approx 05'32 0°47'51
morning max el	9015 Mar 17 23:44	8° \mathbb{H} 54'24	20°07'45	minimum elong	9016 Feb 13 05:46	26° \approx 09'14 0°47'33
desc. node	9015 Mar 30 08:39	24° \mathbb{H} 45'39		morning rise	9016 Feb 18 21:41	20° \approx 12'59
	9015 Apr 02 22:40	0° \mathbb{Y}		direct	9016 Feb 22 07:04	19° \approx 06'57
morning set	9015 Apr 14 12:51	17° \mathbb{Y} 32'52		morning max el	9016 Feb 29 05:22	22° \approx 55'09 19°07'53
	9015 Apr 22 12:05	0° \mathbb{B}			9016 Mar 06 03:18	0° \mathbb{H}
max. Earth dist.	9015 Apr 24 17:34	3° \mathbb{B} 32'45	1.44019 AU	greatest brilliancy	9016 Mar 13 13:44	10° \mathbb{H} 45'56 -0.7m
				desc. node	9016 Mar 16 05:32	14° \mathbb{H} 48'11
superior conj	9015 Apr 30 11:14	12° \mathbb{B} 49'37	-2°11'42	morning set	9016 Mar 23 15:02	26° \mathbb{H} 11'45
minimum elong	9015 Apr 30 12:57	12° \mathbb{B} 56'39	2°11'50		9016 Mar 26 01:57	0° \mathbb{Y}
	9015 May 10 16:52	0° \mathbb{I}		max. Earth dist.	9016 Apr 06 09:17	17° \mathbb{Y} 38'33 1.45151 AU
evening rise	9015 May 13 09:51	4° \mathbb{I} 39'26				
asc. node	9015 May 22 21:45	20° \mathbb{I} 45'45		superior conj	9016 Apr 09 04:59	22° \mathbb{Y} 05'31 -2°06'53
	9015 May 29 09:21	0° \mathbb{E}		minimum elong	9016 Apr 08 23:36	21° \mathbb{Y} 44'15 2°06'43
evening max el	9015 May 30 23:21	1° \mathbb{E} 42'45	18°07'09		9016 Apr 14 04:13	0° \mathbb{B}
retrograde	9015 Jun 06 09:03	5° \mathbb{E} 03'09		evening rise	9016 Apr 23 20:40	15° \mathbb{B} 43'15
evening set	9015 Jun 09 03:48	4° \mathbb{E} 23'57			9016 May 02 14:17	0° \mathbb{I}
	9015 Jun 14 15:21	30° \mathbb{R} \mathbb{I}		asc. node	9016 May 08 18:50	9° \mathbb{I} 24'50
inferior conj	9015 Jun 15 09:35	29° \mathbb{I} 12'14	2°44'44	evening max el	9016 May 13 12:21	15° \mathbb{I} 11'02 18°25'06
minimum elong	9015 Jun 15 12:12	29° \mathbb{I} 05'20	2°43'56	retrograde	9016 May 19 22:44	18° \mathbb{I} 39'08
min. Earth dist.	9015 Jun 18 06:09	26° \mathbb{I} 12'12	0.62517 AU	evening set	9016 May 23 00:55	17° \mathbb{I} 46'09
morning rise	9015 Jun 21 18:48	23° \mathbb{I} 04'28		inferior conj	9016 May 28 20:12	12° \mathbb{I} 16'45 3°11'51
desc. node	9015 Jun 26 08:21	20° \mathbb{I} 50'56		minimum elong	9016 May 28 21:40	12° \mathbb{I} 12'25 3°11'26
direct	9015 Jun 28 12:45	20° \mathbb{I} 35'46		min. Earth dist.	9016 May 31 02:18	9° \mathbb{I} 38'23 0.64530 AU
morning max el	9015 Jul 12 14:38	28° \mathbb{I} 38'01	27°54'08	morning rise	9016 Jun 03 17:26	6° \mathbb{I} 00'25
	9015 Jul 13 22:26	0° \mathbb{E}		direct	9016 Jun 10 09:20	3° \mathbb{I} 17'35
	9015 Aug 04 05:37	0° \mathbb{Q}		desc. node	9016 Jun 12 05:23	3° \mathbb{I} 28'39
morning set	9015 Aug 15 16:16	21° \mathbb{Q} 23'19		morning max el	9016 Jun 24 00:29	11° \mathbb{I} 16'00 27°24'53
asc. node	9015 Aug 18 21:10	28° \mathbb{Q} 01'16			9016 Jul 08 20:24	0° \mathbb{E}
	9015 Aug 19 19:36	0° \mathbb{M}			9016 Jul 26 17:13	0° \mathbb{Q}
max. Earth dist.	9015 Aug 21 01:31	2° \mathbb{M} 40'08	1.32196 AU	morning set	9016 Jul 29 07:19	4° \mathbb{Q} 59'11
				max. Earth dist.	9016 Aug 02 23:36	14° \mathbb{Q} 25'03 1.33210 AU
superior conj	9015 Aug 23 06:40	7° \mathbb{M} 28'15	0°43'11	asc. node	9016 Aug 04 18:09	18° \mathbb{Q} 06'58
minimum elong	9015 Aug 23 04:51	7° \mathbb{M} 18'19	0°42'43			
evening rise	9015 Aug 30 02:54	22° \mathbb{M} 23'34		superior conj	9016 Aug 06 11:18	21° \mathbb{Q} 44'45 0°17'11

minimum elong	9016 Aug 06 10:27	21°Ω40'15	0°16'50		9017 Jul 18 14:51	0°Ω	
	9016 Aug 10 07:36	0°൬					
evening rise	9016 Aug 13 14:12	7°൬00'41		superior conj	9017 Jul 21 09:14	5°Ω37'47	-0°12'25
	9016 Aug 25 17:18	0°Ω		minimum elong	9017 Jul 21 09:57	5°Ω41'27	0°12'29
evening max el	9016 Sep 04 01:37	12°Ω03'13	22°22'52	behind sun begin	9017 Jul 21 06:12	5°Ω22'11	
desc. node	9016 Sep 08 04:10	15°Ω28'16		behind sun end	9017 Jul 21 13:41	6°Ω00'44	
retrograde	9016 Sep 17 00:15	18°Ω30'17		asc. node	9017 Jul 22 15:08	8°Ω12'19	
evening set	9016 Sep 20 07:36	18°Ω06'09		evening rise	9017 Jul 28 23:19	21°Ω27'56	
min. Earth dist.	9016 Sep 28 08:01	14°Ω34'17	0.54936 AU		9017 Aug 02 04:11	0°൬	
inferior conj	9016 Sep 29 06:06	14°Ω03'09	-5°16'47	evening max el	9017 Aug 16 22:26	22°൬34'02	20°52'09
minimum elong	9016 Sep 28 23:16	14°Ω12'47	5°15'43	desc. node	9017 Aug 26 01:19	28°൬03'25	
morning rise	9016 Oct 07 16:42	10°Ω15'40		retrograde	9017 Aug 28 12:35	28°൬18'44	
direct	9016 Oct 10 23:34	9°Ω51'23		evening set	9017 Aug 30 17:24	28°൬07'08	
morning max el	9016 Oct 22 15:33	15°Ω20'12	21°19'30	inferior conj	9017 Sep 08 22:26	24°൬10'37	-4°00'05
asc. node	9016 Oct 31 17:59	26°Ω54'08		minimum elong	9017 Sep 08 12:49	24°൬24'17	3°57'17
	9016 Nov 02 15:04	0°൬		min. Earth dist.	9017 Sep 09 16:48	23°൬44'29	0.54683 AU
morning set	9016 Nov 11 17:58	17°൬35'06		morning rise	9017 Sep 17 08:23	20°൬13'38	
	9016 Nov 17 15:47	0°♌		direct	9017 Sep 21 07:27	19°൬40'00	
				morning max el	9017 Oct 04 08:29	25°൬55'04	23°01'14
superior conj	9016 Nov 19 00:32	2°♌50'37	1°37'32		9017 Oct 08 05:06	0°Ω	
minimum elong	9016 Nov 19 01:49	2°♌57'17	1°37'42	asc. node	9017 Oct 18 14:58	15°Ω28'24	
max. Earth dist.	9016 Nov 23 11:36	11°♌55'19	1.35216 AU		9017 Oct 26 01:46	0°൬	
evening rise	9016 Nov 27 14:43	19°♌55'49		morning set	9017 Oct 27 05:11	2°൬24'13	
	9016 Dec 03 03:27	0°♍					
desc. node	9016 Dec 05 02:48	3°♍24'45		superior conj	9017 Nov 03 04:48	17°൬24'58	1°40'54
	9016 Dec 22 18:45	0°♍		minimum elong	9017 Nov 03 04:49	17°൬25'01	1°41'06
evening max el	9017 Jan 01 22:55	11°♍40'49	26°34'41	max. Earth dist.	9017 Nov 06 05:47	23°൬51'36	1.33630 AU
retrograde	9017 Jan 14 22:38	18°♍58'07			9017 Nov 09 05:23	0°♌	
evening set	9017 Jan 21 08:40	16°♍24'13		evening rise	9017 Nov 11 00:08	3°♌33'34	
min. Earth dist.	9017 Jan 25 11:00	12°♍13'50	0.66308 AU	desc. node	9017 Nov 21 23:52	23°♌35'32	
inferior conj	9017 Jan 27 06:45	10°♍03'16	-0°08'44		9017 Nov 25 22:48	0°♍	
minimum elong	9017 Jan 27 06:59	10°♍02'35	0°08'26	evening max el	9017 Dec 15 11:50	25°♍12'00	27°15'42
transit middle	9017 Jan 27 06:59	10°♍02'35	0°08'26		9017 Dec 21 11:04	0°♍	
transit begin	9017 Jan 27 04:31	10°♍10'00		retrograde	9017 Dec 28 23:15	2°♍33'36	
transit end	9017 Jan 27 09:28	9°♍55'10		evening set	9018 Jan 04 18:55	29°♍58'19	
asc. node	9017 Jan 27 17:15	9°♍32'00			9018 Jan 04 18:02	30°♌♍	
morning rise	9017 Feb 02 06:15	4°♍21'19		min. Earth dist.	9018 Jan 08 15:52	26°♍21'19	0.64845 AU
direct	9017 Feb 05 05:10	3°♍32'33		inferior conj	9018 Jan 10 23:17	23°♍49'55	-1°12'45
morning max el	9017 Feb 11 17:39	7°♍02'19	18°24'06	minimum elong	9018 Jan 11 01:29	23°♍43'54	1°11'35
	9017 Feb 27 21:06	0°♌		asc. node	9018 Jan 14 14:21	20°♍11'47	
desc. node	9017 Mar 03 02:27	5°♌08'00		morning rise	9018 Jan 17 09:35	18°♍21'04	
morning set	9017 Mar 03 16:25	6°♌03'38		direct	9018 Jan 19 23:52	17°♍45'49	
	9017 Mar 18 20:21	0°♌		morning max el	9018 Jan 26 10:01	21°♍08'15	17°57'05
					9018 Feb 02 06:31	0°♍	
superior conj	9017 Mar 19 10:29	0°♌55'16	-1°41'53	morning set	9018 Feb 12 23:15	17°♍22'43	
minimum elong	9017 Mar 19 00:54	0°♌17'46	1°41'00	desc. node	9018 Feb 17 23:21	25°♍39'35	
max. Earth dist.	9017 Mar 20 04:21	2°♌05'12	1.45567 AU		9018 Feb 20 15:01	0°♌	
evening rise	9017 Apr 04 07:57	25°♌50'18					
	9017 Apr 06 23:21	0°♌		superior conj	9018 Feb 26 22:30	10°♌09'55	-1°02'16
greatest brilliancy	9017 Apr 14 08:04	11°♌32'03	-0.8m	minimum elong	9018 Feb 26 15:26	9°♌41'46	1°01'14
asc. node	9017 Apr 25 15:57	27°♌25'14		max. Earth dist.	9018 Mar 02 23:46	16°♌34'50	1.45235 AU
evening max el	9017 Apr 26 22:24	28°♌46'36	19°00'42		9018 Mar 11 14:25	0°♌	
	9017 Apr 28 05:38	0°♌		evening rise	9018 Mar 15 00:44	5°♌17'21	
retrograde	9017 May 03 18:10	2°♌35'12		greatest brilliancy	9018 Mar 29 10:45	27°♌07'12	-0.6m
evening set	9017 May 07 04:03	1°♌27'38			9018 Mar 31 10:20	0°♌	
	9017 May 08 23:14	30°♌♌		evening max el	9018 Apr 10 03:45	12°♌25'36	19°52'35
inferior conj	9017 May 12 16:25	25°♌42'19	3°21'27	asc. node	9018 Apr 12 13:03	14°♌35'10	
minimum elong	9017 May 12 16:36	25°♌41'43	3°21'14	retrograde	9018 Apr 17 16:18	16°♌45'18	
min. Earth dist.	9017 May 14 07:16	23°♌38'53	0.66177 AU	evening set	9018 Apr 21 10:40	15°♌22'43	
morning rise	9017 May 18 04:39	19°♌23'12		inferior conj	9018 Apr 26 19:10	9°♌23'17	3°17'07
direct	9017 May 24 13:02	16°♌37'45		minimum elong	9018 Apr 26 18:14	9°♌26'27	3°16'52
desc. node	9017 May 30 02:23	18°♌19'34		min. Earth dist.	9018 Apr 27 19:23	8°♌01'58	0.67390 AU
morning max el	9017 Jun 06 11:10	24°♌19'23	26°26'19	morning rise	9018 May 02 01:29	3°♌05'04	
	9017 Jun 11 13:35	0°♌		direct	9018 May 07 22:50	0°♌27'29	
	9017 Jul 02 06:27	0°♌		desc. node	9018 May 16 23:22	4°♌52'54	
morning set	9017 Jul 12 10:36	17°♌59'08		morning max el	9018 May 19 20:54	7°♌36'37	25°07'42
max. Earth dist.	9017 Jul 16 11:17	25°♌43'44	1.34708 AU		9018 Jun 06 08:12	0°♌	

morning set	9018 Jun 24 21:47	0°☿11'49			9019 May 09 23:37	0°♄	
	9018 Jun 24 19:08	0°☿			9019 May 30 13:57	0°♄	
max. Earth dist.	9018 Jun 28 12:40	6°☿47'39	1.36639 AU	morning set	9019 Jun 06 11:25	11°♄21'54	
				max. Earth dist.	9019 Jun 10 08:48	18°♄05'19	1.38855 AU
					9019 Jun 16 22:41	0°☿	
superior conj	9018 Jul 04 21:35	19°☿00'22	-0°44'18				
minimum elong	9018 Jul 05 00:20	19°☿13'53	0°44'02				
asc. node	9018 Jul 09 12:07	28°☿13'46		superior conj	9019 Jun 17 20:36	1°☿42'23	-1°16'24
	9018 Jul 10 09:05	0°♁		minimum elong	9019 Jun 18 01:26	2°☿05'07	1°15'56
evening rise	9018 Jul 13 04:02	5°♁39'14		asc. node	9019 Jun 26 09:06	18°☿06'35	
	9018 Jul 27 01:12	0°♁		evening rise	9019 Jun 27 01:27	19°☿26'12	
evening max el	9018 Jul 30 08:42	3°♁47'53	19°39'30		9019 Jul 02 14:36	0°♁	
retrograde	9018 Aug 09 05:49	8°♁40'50		evening max el	9019 Jul 13 07:14	15°♁46'05	18°47'41
evening set	9018 Aug 11 02:07	8°♁31'21		retrograde	9019 Jul 21 14:54	19°♁54'00	
desc. node	9018 Aug 12 22:26	8°♁04'06		evening set	9019 Jul 23 14:32	19°♁40'46	
inferior conj	9018 Aug 19 22:17	4°♁28'10	-2°08'37	desc. node	9019 Jul 30 19:33	15°♁57'59	
minimum elong	9018 Aug 19 16:27	4°♁37'19	2°06'32	inferior conj	9019 Jul 31 16:29	15°♁20'15	-0°15'58
min. Earth dist.	9018 Aug 22 04:26	3°♁03'32	0.55394 AU	minimum elong	9019 Jul 31 15:50	15°♁21'26	0°15'55
morning rise	9018 Aug 28 04:32	0°♁02'26		transit middle	9019 Jul 31 15:50	15°♁21'26	0°15'55
	9018 Aug 28 07:24	30°♁♁		transit begin	9019 Jul 31 15:17	15°♁22'27	
direct	9018 Sep 01 22:51	29°♁11'58		transit end	9019 Jul 31 16:23	15°♁20'26	
	9018 Sep 06 13:10	0°♁		min. Earth dist.	9019 Aug 03 20:02	13°♁03'52	0.56930 AU
morning max el	9018 Sep 15 20:37	6°♁08'02	24°47'10	morning rise	9019 Aug 08 13:45	10°♁17'38	
	9018 Oct 03 00:49	0°♁		direct	9019 Aug 14 03:55	9°♁01'53	
asc. node	9018 Oct 05 11:55	4°♁34'57		morning max el	9019 Aug 28 10:53	16°♁28'09	26°20'39
morning set	9018 Oct 11 16:56	17°♁12'25			9019 Sep 08 12:28	0°♁	
	9018 Oct 17 13:52	0°♁		asc. node	9019 Sep 22 08:51	24°♁04'53	
					9019 Sep 25 05:53	0°♁	
superior conj	9018 Oct 18 13:38	2°♁10'24	1°37'56	morning set	9019 Sep 26 03:34	1°♁54'42	
minimum elong	9018 Oct 18 12:33	2°♁04'29	1°38'01				
max. Earth dist.	9018 Oct 20 07:52	6°♁00'49	1.32487 AU	superior conj	9019 Oct 03 00:51	16°♁59'55	1°29'14
evening rise	9018 Oct 25 19:49	17°♁38'26		minimum elong	9019 Oct 02 23:00	16°♁49'38	1°29'07
	9018 Nov 01 03:44	0°♁		max. Earth dist.	9019 Oct 03 15:41	18°♁22'04	1.31804 AU
desc. node	9018 Nov 08 20:57	13°♁23'13			9019 Oct 08 23:44	0°♁	
	9018 Nov 20 10:31	0°♁		evening rise	9019 Oct 09 22:49	2°♁02'02	
evening max el	9018 Nov 27 23:00	8°♁18'36	27°29'45		9019 Oct 25 01:23	0°♁	
retrograde	9018 Dec 11 17:07	15°♁36'53		desc. node	9019 Oct 26 18:04	2°♁38'24	
evening set	9018 Dec 18 18:18	13°♁08'36		evening max el	9019 Nov 10 05:58	20°♁47'38	27°11'32
min. Earth dist.	9018 Dec 22 11:34	10°♁01'29	0.63069 AU	retrograde	9019 Nov 24 03:03	27°♁59'04	
inferior conj	9018 Dec 25 05:44	7°♁19'05	-2°22'29	evening set	9019 Dec 01 03:20	25°♁47'36	
minimum elong	9018 Dec 25 10:19	7°♁07'50	2°20'26	min. Earth dist.	9019 Dec 04 20:39	23°♁03'12	0.61061 AU
morning rise	9019 Jan 01 04:24	2°♁06'11		inferior conj	9019 Dec 07 22:56	20°♁22'30	-3°34'11
asc. node	9019 Jan 01 11:26	2°♁00'12		minimum elong	9019 Dec 08 05:42	20°♁07'49	3°31'40
direct	9019 Jan 03 12:21	1°♁40'32		morning rise	9019 Dec 15 10:26	15°♁28'56	
morning max el	9019 Jan 10 03:26	5°♁05'07	17°47'29	direct	9019 Dec 17 15:08	15°♁09'12	
morning set	9019 Jan 26 07:22	29°♁54'56		asc. node	9019 Dec 19 08:28	15°♁21'48	
	9019 Jan 26 08:31	0°♁		morning max el	9019 Dec 24 18:41	18°♁44'35	17°56'18
desc. node	9019 Feb 04 20:15	16°♁18'54			9020 Jan 01 22:29	0°♁	
				morning set	9020 Jan 09 10:14	13°♁20'38	
					9020 Jan 18 15:37	0°♁	
superior conj	9019 Feb 07 07:48	20°♁27'25	-0°18'14				
minimum elong	9019 Feb 07 05:55	20°♁19'37	0°17'46				
	9019 Feb 13 04:12	0°♁		superior conj	9020 Jan 19 18:40	1°♁58'29	0°21'53
max. Earth dist.	9019 Feb 13 17:14	0°♁52'15	1.44207 AU	minimum elong	9020 Jan 19 20:30	2°♁06'27	0°21'50
evening rise	9019 Feb 22 12:04	14°♁39'23		desc. node	9020 Jan 22 17:11	7°♁02'41	
	9019 Mar 04 15:41	0°♁		max. Earth dist.	9020 Jan 27 07:12	14°♁44'11	1.42593 AU
evening max el	9019 Mar 24 03:35	26°♁05'49	20°58'11	evening rise	9020 Feb 02 09:18	24°♁33'54	
	9019 Mar 28 23:25	0°♁			9020 Feb 05 20:41	0°♁	
asc. node	9019 Mar 30 10:11	0°♁39'53			9020 Feb 26 15:20	0°♁	
retrograde	9019 Apr 01 14:47	1°♁04'06		evening max el	9020 Mar 05 22:21	9°♁48'06	22°13'31
	9019 Apr 04 23:51	30°♁♁		retrograde	9020 Mar 15 11:56	15°♁27'57	
evening set	9019 Apr 05 18:45	29°♁26'08		asc. node	9020 Mar 16 07:17	15°♁24'41	
inferior conj	9019 Apr 11 01:53	23°♁14'38	3°01'13	evening set	9020 Mar 20 02:40	13°♁34'44	
minimum elong	9019 Apr 11 00:08	23°♁20'41	3°00'50	inferior conj	9020 Mar 25 10:29	7°♁13'41	2°35'21
min. Earth dist.	9019 Apr 11 12:30	22°♁37'54	0.68159 AU	minimum elong	9020 Mar 25 08:19	7°♁21'16	2°34'48
morning rise	9019 Apr 16 05:18	16°♁59'34		min. Earth dist.	9020 Mar 25 08:29	7°♁20'40	0.68488 AU
direct	9019 Apr 21 13:34	14°♁37'49		morning rise	9020 Mar 30 13:47	1°♁03'10	
morning max el	9019 May 02 06:02	21°♁00'24	23°39'05		9020 Apr 01 00:33	30°♁♁	
desc. node	9019 May 03 20:17	22°♁40'40		direct	9020 Apr 04 08:11	29°♁02'08	

	2020 Apr 07 22:30	0°♿		morning rise	9021 Mar 15 00:53	15°♿12'10	
morning max el	2020 Apr 13 17:35	4°♿32'27	22°10'13	direct	9021 Mar 19 05:35	13°♿33'30	
desc. node	2020 Apr 19 17:10	11°♿22'47		morning max el	9021 Mar 27 11:02	18°♿15'52	20°48'56
	2020 May 03 03:57	0°♿			9021 Apr 06 01:17	0°♿	
morning set	2020 May 16 22:41	21°♿18'08		desc. node	9021 Apr 06 14:05	0°♿44'03	
	2020 May 22 05:27	0°♿		morning set	9021 Apr 26 08:16	0°♿05'45	
max. Earth dist.	2020 May 22 07:27	0°♿08'25	1.41101 AU		9021 Apr 26 06:48	0°♿	
				max. Earth dist.	9021 May 04 12:36	13°♿05'36	1.43086 AU
superior conj	2020 May 30 01:52	13°♿33'44	-1°45'19				
minimum elong	2020 May 30 07:54	14°♿00'32	1°44'56	superior conj	9021 May 11 08:51	24°♿24'14	-2°06'00
	2020 Jun 08 01:44	0°♿		minimum elong	9021 May 11 13:21	24°♿43'12	2°05'59
evening rise	2020 Jun 09 12:10	2°♿40'25			9021 May 14 15:48	0°♿	
asc. node	2020 Jun 12 06:06	7°♿46'33		evening rise	9021 May 23 07:53	15°♿11'29	
evening max el	2020 Jun 25 14:26	28°♿21'13	18°16'31	asc. node	9021 May 30 03:09	27°♿08'22	
	2020 Jun 27 12:06	0°♿			9021 May 31 20:02	0°♿	
retrograde	2020 Jul 02 19:23	1°♿58'45		evening max el	9021 Jun 09 02:28	11°♿23'45	18°05'07
evening set	2020 Jul 05 02:07	1°♿37'43		retrograde	9021 Jun 15 16:18	14°♿46'29	
	2020 Jul 08 09:58	30°♿		evening set	9021 Jun 18 06:37	14°♿14'40	
inferior conj	2020 Jul 12 08:29	26°♿56'30	1°15'24	inferior conj	9021 Jun 24 20:14	9°♿13'37	2°19'25
minimum elong	2020 Jul 12 10:50	26°♿51'31	1°14'22	minimum elong	9021 Jun 24 23:10	9°♿06'22	2°18'24
min. Earth dist.	2020 Jul 15 17:37	24°♿04'59	0.58988 AU	min. Earth dist.	9021 Jun 27 23:25	6°♿09'52	0.61237 AU
desc. node	2020 Jul 16 16:38	23°♿19'50		morning rise	9021 Jul 01 13:21	3°♿14'06	
morning rise	2020 Jul 19 16:19	21°♿20'25		desc. node	9021 Jul 03 13:41	2°♿04'27	
direct	2020 Jul 25 22:34	19°♿34'16		direct	9021 Jul 08 05:01	0°♿58'49	
morning max el	2020 Aug 09 07:37	27°♿21'27	27°26'17	morning max el	9021 Jul 22 11:14	8°♿59'00	27°55'09
	2020 Aug 11 20:35	0°♿			9021 Aug 07 15:33	0°♿	
	2020 Sep 01 03:24	0°♿			9021 Aug 24 06:24	0°♿	
asc. node	2020 Sep 08 05:45	13°♿51'38		morning set	9021 Aug 24 14:38	0°♿42'19	
morning set	2020 Sep 09 11:25	16°♿26'24		asc. node	9021 Aug 26 02:41	3°♿49'47	
	2020 Sep 15 17:12	0°♿		max. Earth dist.	9021 Aug 30 10:13	13°♿05'45	1.31830 AU
max. Earth dist.	2020 Sep 16 01:47	0°♿47'34	1.31586 AU				
				superior conj	9021 Aug 31 23:08	16°♿28'26	0°56'15
superior conj	2020 Sep 16 12:37	1°♿47'42	1°15'14	minimum elong	9021 Aug 31 21:01	16°♿16'45	0°55'47
minimum elong	2020 Sep 16 10:23	1°♿35'21	1°14'53		9021 Sep 07 02:56	0°♿	
evening rise	2020 Sep 23 06:44	16°♿37'18		evening rise	9021 Sep 07 17:28	1°♿18'10	
	2020 Sep 29 20:55	0°♿			9021 Sep 23 04:35	0°♿	
desc. node	2020 Oct 12 15:11	21°♿07'47		desc. node	9021 Sep 29 12:19	8°♿33'36	
	2020 Oct 19 19:26	0°♿		evening max el	9021 Oct 03 21:28	13°♿16'38	24°57'49
evening max el	2020 Oct 22 05:49	2°♿27'15	26°19'14	retrograde	9021 Oct 17 17:51	20°♿15'08	
retrograde	2020 Nov 05 03:45	9°♿32'15		evening set	9021 Oct 23 08:10	19°♿04'26	
evening set	2020 Nov 11 17:26	7°♿47'26		min. Earth dist.	9021 Oct 28 08:56	16°♿21'27	0.57006 AU
min. Earth dist.	2020 Nov 15 18:59	5°♿12'56	0.58965 AU	inferior conj	9021 Oct 31 03:48	14°♿31'52	-5°27'19
inferior conj	2020 Nov 18 23:14	2°♿49'31	-4°40'17	minimum elong	9021 Oct 31 08:22	14°♿24'22	5°26'39
minimum elong	2020 Nov 19 06:41	2°♿35'26	4°38'17	morning rise	9021 Nov 08 10:51	10°♿23'22	
	2020 Nov 23 00:47	30°♿		direct	9021 Nov 10 22:00	10°♿06'06	
morning rise	2020 Nov 26 22:19	28°♿18'18		morning max el	9021 Nov 20 04:16	14°♿30'44	19°15'14
direct	2020 Nov 29 03:43	28°♿01'18		asc. node	9021 Nov 22 02:28	16°♿31'58	
	2020 Dec 04 20:26	0°♿			9021 Dec 01 00:03	0°♿	
asc. node	2020 Dec 05 05:28	0°♿16'17		morning set	9021 Dec 07 03:00	11°♿46'41	
morning max el	2020 Dec 07 04:10	1°♿56'23	18°25'01				
morning set	2020 Dec 23 02:10	27°♿21'51		superior conj	9021 Dec 15 06:50	27°♿57'21	1°17'28
	2020 Dec 24 11:09	0°♿		minimum elong	9021 Dec 15 09:52	28°♿12'03	1°17'23
					9021 Dec 16 08:15	0°♿	
superior conj	2021 Jan 01 04:02	14°♿33'15	0°54'06	max. Earth dist.	9021 Dec 21 22:04	10°♿25'06	1.38392 AU
minimum elong	2021 Jan 01 07:16	14°♿48'09	0°53'54	evening rise	9021 Dec 25 16:13	17°♿05'36	
max. Earth dist.	2021 Jan 08 16:23	27°♿56'25	1.40573 AU	desc. node	9021 Dec 26 11:10	18°♿27'40	
desc. node	2021 Jan 08 14:09	27°♿46'48			9022 Jan 02 09:46	0°♿	
	2021 Jan 09 21:17	0°♿			9022 Jan 23 12:11	0°♿	
evening rise	2021 Jan 13 01:51	5°♿20'55		evening max el	9022 Jan 30 02:39	7°♿19'48	24°51'53
	2021 Jan 29 00:57	0°♿		retrograde	9022 Feb 10 20:58	14°♿10'51	
evening max el	2021 Feb 16 13:22	23°♿32'34	23°33'30	evening set	9022 Feb 16 11:52	11°♿50'25	
retrograde	2021 Feb 27 06:21	29°♿51'54		asc. node	9022 Feb 18 01:31	10°♿19'59	
asc. node	2021 Mar 03 04:24	28°♿37'33		min. Earth dist.	9022 Feb 21 00:20	6°♿45'23	0.67879 AU
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min. Earth dist.	2021 Mar 09 05:08	22°♿04'38	0.68388 AU	minimum elong	9022 Feb 22 00:07	5°♿26'51	1°16'16
inferior conj	2021 Mar 09 19:04	21°♿16'54	2°00'23		9022 Feb 26 17:52	30°♿	
minimum elong	2021 Mar 09 16:53	21°♿24'22	1°59'45	morning rise	9022 Feb 27 12:37	29°♿23'43	

































































































































direct	9022 Mar 03 04:35	28° \approx 06'35		morning rise	9023 Feb 11 22:59	13° \approx 34'34	
	9022 Mar 07 23:44	0° H		direct	9023 Feb 15 03:38	12° \approx 36'22	
morning max el	9022 Mar 10 12:15	2° H 11'18	19°40'19	morning max el	9023 Feb 21 20:57	16° \approx 15'40	18°47'08
greatest brilliancy	9022 Mar 23 05:43	18° H 46'04	-0.6m		9023 Mar 04 07:58	0° H	
desc. node	9022 Mar 24 11:00	20° H 34'02		desc. node	9023 Mar 11 07:54	10° H 44'57	
	9022 Mar 30 17:32	0° Y		morning set	9023 Mar 15 16:21	17° H 32'37	
morning set	9022 Apr 05 06:06	8° Y 27'21			9023 Mar 23 15:34	0° Y	
max. Earth dist.	9022 Apr 17 00:23	26° Y 48'37	1.44579 AU	max. Earth dist.	9023 Mar 30 17:27	11° Y 04'18	1.45417 AU
	9022 Apr 19 00:31	0° Z					
				superior conj	9023 Apr 01 01:56	13° Y 11'38	-1°58'36
superior conj	9022 Apr 21 15:15	4° Z 11'22	-2°12'07	minimum elong	9023 Mar 31 17:59	12° Y 40'29	1°58'08
minimum elong	9022 Apr 21 14:07	4° Z 06'44	2°12'14		9023 Apr 11 16:53	0° Z	
evening rise	9022 May 05 07:52	26° Z 49'01		evening rise	9023 Apr 16 08:33	7° Z 27'57	
	9022 May 07 05:05	0° II		greatest brilliancy	9023 Apr 22 20:55	17° Z 57'40	-0.9m
asc. node	9022 May 17 00:13	16° II 05'23			9023 Apr 30 15:08	0° II	
evening max el	9022 May 23 15:58	24° II 44'47	18°12'36	asc. node	9023 May 03 21:19	4° II 29'55	
retrograde	9022 May 30 01:01	28° II 07'06		evening max el	9023 May 07 04:04	8° II 17'39	18°38'13
evening set	9022 Jun 01 22:48	27° II 22'21		retrograde	9023 May 13 17:27	11° II 52'49	
inferior conj	9022 Jun 07 23:40	22° II 03'06	2°58'40	evening set	9023 May 16 22:50	10° II 53'47	
minimum elong	9022 Jun 08 01:50	21° II 57'03	2°58'02	inferior conj	9023 May 22 14:48	5° II 17'44	3°17'48
min. Earth dist.	9022 Jun 10 14:26	19° II 09'50	0.63404 AU	minimum elong	9023 May 22 15:43	5° II 14'55	3°17'29
morning rise	9022 Jun 14 03:25	15° II 50'33		min. Earth dist.	9023 May 24 14:31	2° II 52'44	0.65283 AU
desc. node	9022 Jun 20 10:45	13° II 14'46			9023 May 27 05:31	30° R Z	
direct	9022 Jun 20 21:13	13° II 14'09		morning rise	9023 May 28 07:50	28° Z 59'45	
morning max el	9022 Jul 04 19:30	21° II 17'15	27°45'49	direct	9023 Jun 03 21:15	26° Z 14'04	
	9022 Jul 12 08:53	0° Z		desc. node	9023 Jun 07 07:45	26° Z 53'07	
	9022 Jul 31 18:36	0° O			9023 Jun 12 15:53	0° II	
morning set	9022 Aug 08 10:54	14° O 34'47		morning max el	9023 Jun 17 05:49	4° II 07'16	27°02'57
asc. node	9022 Aug 12 23:37	23° O 53'48			9023 Jul 06 20:05	0° Z	
max. Earth dist.	9022 Aug 13 12:53	25° O 03'57	1.32558 AU	morning set	9023 Jul 22 21:22	27° Z 56'32	
	9022 Aug 15 20:15	0° P			9023 Jul 23 22:50	0° O	
				max. Earth dist.	9023 Jul 27 06:27	6° O 35'57	1.33788 AU
superior conj	9022 Aug 16 06:29	0° P 55'18	0°32'39	asc. node	9023 Jul 30 20:35	13° O 59'58	
minimum elong	9022 Aug 16 05:00	0° P 47'18	0°32'13				
evening rise	9022 Aug 23 05:02	15° P 57'49		superior conj	9023 Jul 31 08:35	15° O 02'52	0°05'02
	9022 Aug 30 03:08	0° U		minimum elong	9023 Jul 31 08:20	15° O 01'32	0°04'47
evening max el	9022 Sep 15 08:36	23° U 32'13	23°20'02	behind sun begin	9023 Jul 31 02:55	14° O 33'07	
desc. node	9022 Sep 16 09:28	24° U 30'25		behind sun end	9023 Jul 31 13:45	15° O 29'59	
	9022 Sep 26 04:52	0° M			9023 Aug 07 09:41	0° P	
retrograde	9022 Sep 28 19:36	0° M 15'34		evening rise	9023 Aug 07 15:38	0° P 31'19	
	9022 Oct 01 11:12	30° R U			9023 Aug 24 13:23	0° U	
evening set	9022 Oct 02 23:14	29° U 37'58		evening max el	9023 Aug 27 23:36	3° U 47'58	21°42'31
min. Earth dist.	9022 Oct 09 18:14	26° U 28'07	0.55485 AU	desc. node	9023 Sep 03 06:36	8° U 27'54	
inferior conj	9022 Oct 11 12:30	25° U 26'09	-5°36'06	retrograde	9023 Sep 09 10:03	9° U 58'20	
minimum elong	9022 Oct 11 09:57	25° U 29'53	5°35'52	evening set	9023 Sep 12 03:59	9° U 41'18	
morning rise	9022 Oct 19 22:41	21° U 34'25		inferior conj	9023 Sep 21 07:13	5° U 43'01	-4°50'23
direct	9022 Oct 22 21:04	21° U 13'39		minimum elong	9023 Sep 20 22:16	5° U 55'31	4°48'26
morning max el	9022 Nov 02 15:51	26° U 17'42	20°28'00	min. Earth dist.	9023 Sep 21 02:18	5° U 49'53	0.54714 AU
	9022 Nov 06 01:56	0° M		morning rise	9023 Sep 29 17:41	1° U 53'54	
asc. node	9022 Nov 08 23:28	3° M 52'37		direct	9023 Oct 03 07:21	1° U 26'04	
morning set	9022 Nov 21 09:39	26° M 26'01		morning max el	9023 Oct 15 14:21	7° U 15'01	22°01'16
	9022 Nov 23 03:08	0° X		asc. node	9023 Oct 26 20:27	22° U 03'40	
					9023 Oct 31 06:20	0° M	
superior conj	9022 Nov 28 22:21	11° X 56'57	1°32'25	morning set	9023 Nov 05 19:45	11° M 13'16	
minimum elong	9022 Nov 29 00:22	12° X 07'10	1°32'31				
max. Earth dist.	9022 Dec 04 05:14	22° X 24'48	1.36300 AU	superior conj	9023 Nov 12 22:50	26° M 21'04	1°39'46
evening rise	9022 Dec 08 02:16	29° X 42'02		minimum elong	9023 Nov 12 23:34	26° M 24'55	1°39'58
	9022 Dec 08 06:11	0° Z			9023 Nov 14 16:40	0° X	
desc. node	9022 Dec 13 08:12	9° Z 01'00		max. Earth dist.	9023 Nov 16 18:55	4° X 18'23	1.34494 AU
	9022 Dec 26 15:04	0° \approx		evening rise	9023 Nov 21 04:15	13° X 00'25	
evening max el	9023 Jan 12 15:54	21° \approx 07'43	26°01'36	desc. node	9023 Nov 30 05:14	29° X 21'53	
retrograde	9023 Jan 25 06:46	28° \approx 18'49			9023 Nov 30 14:16	0° Z	
evening set	9023 Jan 31 09:57	25° \approx 48'48			9023 Dec 21 15:37	0° \approx	
min. Earth dist.	9023 Feb 04 15:49	21° \approx 18'19	0.66983 AU	evening max el	9023 Dec 26 05:22	4° \approx 48'50	26°55'08
asc. node	9023 Feb 04 22:39	20° \approx 57'14		retrograde	9024 Jan 08 10:46	12° \approx 08'31	
inferior conj	9023 Feb 06 04:47	19° \approx 23'05	0°24'50	evening set	9024 Jan 15 01:10	9° \approx 33'33	
minimum elong	9023 Feb 06 04:09	19° \approx 25'05	0°24'44	min. Earth dist.	9024 Jan 19 01:13	5° \approx 37'21	0.65726 AU

inferior conj	9024 Jan 21 01:50	3° \approx 17'13	-0°35'03	inferior conj	9025 Jan 03 14:27	16° \approx 57'59	-1°41'46
minimum elong	9024 Jan 21 02:51	3° \approx 14'20	0°34'24	minimum elong	9025 Jan 03 17:38	16° \approx 49'40	1°40'12
asc. node	9024 Jan 22 19:46	1° \approx 19'19		asc. node	9025 Jan 08 16:50	12° \approx 24'14	
	9024 Jan 24 02:49	30° \approx 3		morning rise	9025 Jan 10 05:52	11° \approx 35'31	
morning rise	9024 Jan 27 05:40	27° \approx 40'13		direct	9025 Jan 12 17:16	11° \approx 04'40	
direct	9024 Jan 30 00:43	26° \approx 57'34		morning max el	9025 Jan 19 04:25	14° \approx 26'33	17°50'51
	9024 Feb 05 01:41	0° \approx			9025 Jan 30 03:28	0° \approx	
morning max el	9024 Feb 05 11:13	0° \approx 22'56	18°10'27	morning set	9025 Feb 05 00:49	9° \approx 56'13	
morning set	9024 Feb 24 06:23	28° \approx 02'40		desc. node	9025 Feb 12 01:43	21° \approx 46'24	
	9024 Feb 25 11:22	0° \approx			9025 Feb 17 01:57	0° \approx	
desc. node	9024 Feb 26 04:48	1° \approx 10'28					
				superior conj	9025 Feb 18 03:42	1° \approx 44'22	-0°43'32
superior conj	9024 Mar 10 07:47	22° \approx 05'33	-1°26'17	minimum elong	9025 Feb 17 22:50	1° \approx 24'41	0°42'42
minimum elong	9024 Mar 09 22:34	21° \approx 29'19	1°25'13	max. Earth dist.	9025 Feb 23 08:45	10° \approx 04'19	1.44885 AU
max. Earth dist.	9024 Mar 12 13:15	25° \approx 35'18	1.45520 AU	evening rise	9025 Mar 05 23:29	26° \approx 35'48	
	9024 Mar 15 08:56	0° \approx			9025 Mar 08 04:52	0° \approx	
evening rise	9024 Mar 26 10:48	17° \approx 14'48			9025 Mar 28 20:12	0° \approx	
	9024 Apr 03 16:17	0° \approx		evening max el	9025 Apr 02 15:23	5° \approx 35'08	20°18'55
greatest brilliancy	9024 Apr 07 12:53	5° \approx 53'19	-0.7m	asc. node	9025 Apr 06 15:32	8° \approx 54'57	
evening max el	9024 Apr 19 12:22	21° \approx 55'33	19°20'56	retrograde	9025 Apr 10 12:48	10° \approx 10'24	
asc. node	9024 Apr 19 18:27	22° \approx 10'44		evening set	9025 Apr 14 11:12	8° \approx 41'04	
retrograde	9024 Apr 26 14:15	25° \approx 55'44		inferior conj	9025 Apr 19 18:49	2° \approx 36'01	3°11'37
evening set	9024 Apr 30 03:44	24° \approx 41'41		minimum elong	9025 Apr 19 17:30	2° \approx 40'32	3°11'21
inferior conj	9024 May 05 14:07	18° \approx 50'14	3°21'05	min. Earth dist.	9025 Apr 20 13:01	1° \approx 33'55	0.67778 AU
minimum elong	9024 May 05 13:48	18° \approx 51'17	3°20'53		9025 Apr 21 17:09	30° \approx 1	
min. Earth dist.	9024 May 06 22:35	17° \approx 04'20	0.66755 AU	morning rise	9025 Apr 24 23:35	26° \approx 19'01	
morning rise	9024 May 10 23:29	12° \approx 31'26		direct	9025 Apr 30 15:25	23° \approx 47'43	
direct	9024 May 17 03:37	9° \approx 48'15		desc. node	9025 May 11 01:42	29° \approx 39'21	
desc. node	9024 May 24 04:44	12° \approx 31'20			9025 May 11 10:12	0° \approx	
morning max el	9024 May 29 16:00	17° \approx 17'04	25°54'41	morning max el	9025 May 12 01:24	0° \approx 37'55	24°30'36
	9024 Jun 09 06:31	0° \approx			9025 Jun 03 04:40	0° \approx	
	9024 Jun 28 19:02	0° \approx		morning set	9025 Jun 16 20:58	22° \approx 12'53	
morning set	9024 Jul 04 18:18	10° \approx 37'26		max. Earth dist.	9025 Jun 20 12:12	28° \approx 15'31	1.37565 AU
max. Earth dist.	9024 Jul 08 13:28	17° \approx 45'55	1.35490 AU		9025 Jun 21 02:50	0° \approx	
superior conj	9024 Jul 14 02:49	28° \approx 43'56	-0°25'46	superior conj	9025 Jun 27 09:57	11° \approx 50'11	-0°58'04
minimum elong	9024 Jul 14 04:21	28° \approx 51'41	0°25'41	minimum elong	9025 Jun 27 13:37	12° \approx 07'55	0°57'42
	9024 Jul 14 17:49	0° \approx		asc. node	9025 Jul 03 14:33	24° \approx 02'31	
asc. node	9024 Jul 16 17:34	4° \approx 04'14		evening rise	9025 Jul 06 01:08	28° \approx 54'45	
evening rise	9024 Jul 21 23:10	14° \approx 52'39			9025 Jul 06 14:16	0° \approx	
	9024 Jul 29 17:38	0° \approx		evening max el	9025 Jul 22 17:37	26° \approx 08'07	19°14'48
evening max el	9024 Aug 09 01:56	14° \approx 35'29	20°18'42		9025 Jul 28 07:53	0° \approx	
retrograde	9024 Aug 19 22:32	19° \approx 58'02		retrograde	9025 Jul 31 21:56	0° \approx 40'59	
desc. node	9024 Aug 20 03:42	19° \approx 57'55		evening set	9025 Aug 02 18:41	0° \approx 30'31	
evening set	9024 Aug 21 21:58	19° \approx 48'07			9025 Aug 04 15:56	30° \approx 1	
inferior conj	9024 Aug 31 00:54	15° \approx 50'19	-3°14'58	desc. node	9025 Aug 07 00:49	28° \approx 57'33	
minimum elong	9024 Aug 30 16:20	16° \approx 02'52	3°12'08	inferior conj	9025 Aug 11 07:39	26° \approx 02'26	-1°19'11
min. Earth dist.	9024 Sep 01 11:44	14° \approx 59'15	0.54875 AU	minimum elong	9025 Aug 11 04:09	26° \approx 02'16	1°17'58
morning rise	9024 Sep 08 09:53	11° \approx 43'25		min. Earth dist.	9025 Aug 14 00:43	24° \approx 03'30	0.55956 AU
direct	9024 Sep 12 17:00	11° \approx 03'40		morning rise	9025 Aug 19 10:44	21° \approx 03'09	
morning max el	9024 Sep 26 04:07	17° \approx 36'28	23°46'50	direct	9025 Aug 24 13:22	20° \approx 03'14	
	9024 Oct 06 05:49	0° \approx		morning max el	9025 Sep 07 16:35	27° \approx 04'23	25°29'41
asc. node	9024 Oct 12 17:24	10° \approx 53'06			9025 Sep 09 20:17	0° \approx	
morning set	9024 Oct 20 07:25	26° \approx 03'03		asc. node	9025 Sep 29 14:20	0° \approx 10'36	
	9024 Oct 22 03:37	0° \approx			9025 Sep 29 12:10	0° \approx	
				morning set	9025 Oct 04 18:53	10° \approx 49'34	
superior conj	9024 Oct 27 05:19	11° \approx 01'11	1°40'23				
minimum elong	9024 Oct 27 04:50	10° \approx 58'34	1°40'32	superior conj	9025 Oct 11 15:23	25° \approx 49'09	1°34'56
max. Earth dist.	9024 Oct 29 16:54	16° \approx 21'22	1.33088 AU	minimum elong	9025 Oct 11 13:56	25° \approx 41'09	1°34'55
evening rise	9024 Nov 03 18:26	26° \approx 51'03		max. Earth dist.	9025 Oct 12 21:50	28° \approx 36'40	1.32134 AU
	9024 Nov 05 08:29	0° \approx			9025 Oct 13 13:03	0° \approx	
desc. node	9024 Nov 16 02:17	19° \approx 24'20		evening rise	9025 Oct 18 17:31	11° \approx 04'34	
	9024 Nov 22 21:43	0° \approx			9025 Oct 28 14:09	0° \approx	
evening max el	9024 Dec 07 17:55	18° \approx 12'04	27°25'21	desc. node	9025 Nov 02 23:21	8° \approx 59'40	
retrograde	9024 Dec 21 08:21	25° \approx 32'09			9025 Nov 19 01:16	0° \approx	
evening set	9024 Dec 28 07:09	22° \approx 58'46		evening max el	9025 Nov 20 03:24	1° \approx 03'25	27°26'05
min. Earth dist.	9025 Jan 01 02:17	19° \approx 35'14	0.64129 AU	retrograde	9025 Dec 03 22:56	8° \approx 19'20	






















































































































evening set	9025 Dec 11 00:53	5° S 56'33		retrograde	9026 Nov 16 05:28	20° S 21'07	
min. Earth dist.	9025 Dec 14 17:21	3° S 00'39	0.62238 AU	evening set	9026 Nov 23 02:28	18° S 19'42	
inferior conj	9025 Dec 17 15:38	0° S 16'59	-2°53'00	min. Earth dist.	9026 Nov 26 21:50	15° S 41'21	0.60165 AU
minimum elong	9025 Dec 17 21:13	0° S 03'56	2°50'39	inferior conj	9026 Nov 30 02:01	13° S 05'42	-4°03'35
	9025 Dec 17 22:55	30° R 21		minimum elong	9026 Nov 30 09:22	12° S 50'37	4°01'09
morning rise	9025 Dec 24 19:49	25° S 12'15		morning rise	9026 Dec 07 18:47	8° S 21'33	
asc. node	9025 Dec 26 13:53	24° S 50'43		direct	9026 Dec 09 23:03	8° S 03'30	
direct	9025 Dec 27 02:00	24° S 49'34		asc. node	9026 Dec 13 10:55	8° S 52'17	
morning max el	9026 Jan 02 21:23	28° S 17'26	17°49'00	morning max el	9026 Dec 17 10:39	11° S 46'23	18°06'00
	9026 Jan 04 11:27	0° S			9026 Dec 29 13:18	0° S	
morning set	9026 Jan 18 17:39	22° S 53'21		morning set	9027 Jan 02 02:37	6° S 35'19	
	9026 Jan 22 17:44	0° S					
superior conj	9026 Jan 29 24:00	12° S 34'00	-0°00'25	superior conj	9027 Jan 11 20:57	24° S 33'25	0°36'37
minimum elong	9026 Jan 29 23:59	12° S 33'55	0°00'14	minimum elong	9027 Jan 11 23:38	24° S 45'23	0°36'27
behind sun begin	9026 Jan 29 15:12	11° S 56'42			9027 Jan 14 23:01	0° S	
behind sun end	9026 Jan 30 08:45	13° S 11'02		desc. node	9027 Jan 16 19:34	3° S 12'26	
desc. node	9026 Jan 29 22:38	12° S 28'12		max. Earth dist.	9027 Jan 19 12:05	7° S 45'51	1.41765 AU
max. Earth dist.	9026 Feb 06 00:51	24° S 12'30	1.43581 AU	evening rise	9027 Jan 24 17:57	16° S 22'31	
	9026 Feb 09 15:37	0° S			9027 Feb 02 11:47	0° S	
evening rise	9026 Feb 13 13:19	6° S 07'37			9027 Feb 24 10:58	0° S	
	9026 Mar 01 12:34	0° S		evening max el	9027 Feb 27 05:42	2° S 58'45	22°47'24
evening max el	9026 Mar 16 12:48	19° S 15'52	21°29'14	retrograde	9027 Mar 09 07:17	8° S 56'32	
asc. node	9026 Mar 24 12:38	24° S 27'53		asc. node	9027 Mar 11 09:45	8° S 34'35	
retrograde	9026 Mar 25 11:05	24° S 32'18		evening set	9027 Mar 14 02:49	6° S 57'13	
evening set	9026 Mar 29 19:26	22° S 47'46		inferior conj	9027 Mar 19 11:27	0° S 33'01	2°21'39
inferior conj	9026 Apr 04 02:37	16° S 31'33	2°51'25	minimum elong	9027 Mar 19 09:13	0° S 40'45	2°21'02
minimum elong	9026 Apr 04 00:38	16° S 38'26	2°50'57	min. Earth dist.	9027 Mar 19 04:22	0° S 57'34	0.68491 AU
min. Earth dist.	9026 Apr 04 07:43	16° S 13'48	0.68350 AU		9027 Mar 19 20:58	30° R 21	
morning rise	9026 Apr 09 05:39	10° S 18'06		morning rise	9027 Mar 24 15:29	24° S 24'31	
direct	9026 Apr 14 07:54	8° S 04'57		direct	9027 Mar 29 03:57	22° S 32'50	
morning max el	9026 Apr 24 11:21	14° S 06'01	23°00'47	morning max el	9027 Apr 07 00:57	27° S 42'15	21°34'17
desc. node	9026 Apr 27 22:39	17° S 52'51			9027 Apr 09 04:49	0° S	
	9026 May 07 08:07	0° S		desc. node	9027 Apr 14 19:34	6° S 53'18	
	9026 May 27 02:54	0° S			9027 Apr 30 22:19	0° S	
morning set	9026 May 28 23:57	3° S 05'43		morning set	9027 May 08 23:36	12° S 30'27	
max. Earth dist.	9026 Jun 02 08:31	10° S 27'47	1.39819 AU	max. Earth dist.	9027 May 15 09:07	22° S 51'51	1.41990 AU
					9027 May 19 15:23	0° S	
superior conj	9026 Jun 10 02:00	24° S 12'14	-1°29'20	superior conj	9027 May 22 22:20	5° S 39'00	-1°55'28
minimum elong	9026 Jun 10 07:33	24° S 37'42	1°28'51	minimum elong	9027 May 23 04:10	6° S 04'19	1°55'13
	9026 Jun 13 04:58	0° S		evening rise	9027 Jun 02 23:26	25° S 26'35	
evening rise	9026 Jun 19 18:32	12° S 29'35			9027 Jun 05 11:25	0° S	
asc. node	9026 Jun 20 11:32	13° S 50'48		asc. node	9027 Jun 07 08:33	3° S 23'41	
	9026 Jun 29 11:01	0° S		evening max el	9027 Jun 19 06:09	21° S 12'09	18°09'21
evening max el	9026 Jul 05 20:21	8° S 23'46	18°31'58	retrograde	9027 Jun 26 03:13	24° S 41'12	
retrograde	9026 Jul 13 15:28	12° S 17'02		evening set	9027 Jun 28 13:14	24° S 15'53	
evening set	9026 Jul 15 17:45	12° S 01'04		inferior conj	9027 Jul 05 12:04	19° S 26'22	1°45'51
inferior conj	9026 Jul 23 11:14	7° S 32'05	0°26'00	minimum elong	9027 Jul 05 14:54	19° S 19'56	1°44'43
minimum elong	9026 Jul 23 12:11	7° S 30'14	0°25'27	min. Earth dist.	9027 Jul 08 19:57	16° S 26'31	0.59944 AU
desc. node	9026 Jul 24 21:55	6° S 24'09		desc. node	9027 Jul 11 19:02	14° S 08'54	
min. Earth dist.	9026 Jul 26 18:59	4° S 57'55	0.57754 AU	morning rise	9027 Jul 12 13:38	13° S 39'07	
morning rise	9026 Jul 31 03:05	2° S 13'53		direct	9027 Jul 19 01:01	11° S 39'36	
direct	9026 Aug 06 00:41	0° S 45'19		morning max el	9027 Aug 02 09:08	19° S 33'28	27°43'10
morning max el	9026 Aug 20 09:33	8° S 22'34	26°52'41		9027 Aug 11 06:27	0° S	
	9026 Sep 05 17:26	0° S			9027 Aug 29 12:50	0° S	
asc. node	9026 Sep 16 11:15	19° S 48'41		morning set	9027 Sep 03 10:39	9° S 53'33	
morning set	9026 Sep 19 04:32	25° S 28'14		asc. node	9027 Sep 03 08:11	9° S 40'41	
	9026 Sep 21 07:10	0° S		max. Earth dist.	9027 Sep 09 16:34	23° S 22'54	1.31631 AU
superior conj	9026 Sep 26 03:04	10° S 39'01	1°23'55	superior conj	9027 Sep 10 14:32	25° S 24'28	1°07'45
minimum elong	9026 Sep 26 01:00	10° S 27'33	1°23'42	minimum elong	9027 Sep 10 12:17	25° S 12'02	1°07'22
max. Earth dist.	9026 Sep 26 06:53	11° S 00'12	1.31650 AU		9027 Sep 12 16:14	0° S	
evening rise	9026 Oct 02 22:52	25° S 33'56		evening rise	9027 Sep 17 08:13	10° S 12'14	
	9026 Oct 05 01:52	0° S			9027 Sep 27 09:14	0° S	
desc. node	9026 Oct 20 20:27	27° S 57'10		desc. node	9027 Oct 07 17:35	16° S 01'59	
	9026 Oct 22 06:19	0° S		evening max el	9027 Oct 15 03:56	24° S 29'51	25°47'41
evening max el	9026 Nov 02 07:25	13° S 11'39	26°53'17		9027 Oct 22 18:45	0° S	

retrograde	9027 Oct 29 01:59	1° ♊ 32'09		evening max el	9028 Sep 25 17:03	5° ♍ 01'56	24°17'14
evening set	9027 Nov 04 07:06	0° ♊ 01'42		retrograde	9028 Oct 09 10:27	11° ♍ 54'48	
	9027 Nov 04 08:33	30° ♍		evening set	9028 Oct 14 11:08	10° ♍ 59'03	
min. Earth dist.	9027 Nov 08 16:31	27° ♍ 25'40	0.58094 AU	min. Earth dist.	9028 Oct 20 03:50	8° ♍ 06'52	0.56287 AU
inferior conj	9027 Nov 11 18:14	25° ♍ 14'55	-5°03'39	inferior conj	9028 Oct 22 14:05	6° ♍ 36'31	-5°36'58
minimum elong	9027 Nov 12 01:01	25° ♍ 02'51	5°02'11	minimum elong	9028 Oct 22 16:00	6° ♍ 33'31	5°36'44
morning rise	9027 Nov 19 21:14	20° ♍ 53'13		morning rise	9028 Oct 30 22:58	2° ♍ 36'13	
direct	9027 Nov 22 04:19	20° ♍ 36'29		direct	9028 Nov 02 14:33	2° ♍ 17'41	
asc. node	9027 Nov 30 07:57	24° ♍ 23'04		morning max el	9028 Nov 12 11:30	6° ♍ 57'50	19°43'29
morning max el	9027 Nov 30 16:34	24° ♍ 43'26	18°43'37	asc. node	9028 Nov 16 04:58	11° ♍ 08'07	
	9027 Dec 05 02:53	0° ♊			9028 Nov 27 10:18	0° ♊	
morning set	9027 Dec 16 22:49	20° ♊ 48'07		morning set	9028 Nov 30 02:28	5° ♊ 20'17	
	9027 Dec 21 16:03	0° ♋					
superior conj	9027 Dec 25 14:20	7° ♋ 30'49	1°05'05	superior conj	9028 Dec 07 23:04	21° ♊ 11'24	1°24'47
minimum elong	9027 Dec 25 17:38	7° ♋ 46'22	1°04'55	minimum elong	9028 Dec 08 01:44	21° ♊ 24'34	1°24'48
max. Earth dist.	9028 Jan 01 19:26	20° ♋ 39'20	1.39650 AU		9028 Dec 12 12:13	0° ♋	
desc. node	9028 Jan 03 16:33	23° ♋ 55'42		max. Earth dist.	9028 Dec 14 01:36	2° ♋ 55'21	1.37478 AU
evening rise	9028 Jan 05 19:55	27° ♋ 34'56		evening rise	9028 Dec 17 19:04	9° ♋ 42'31	
	9028 Jan 07 06:32	0° ♌		desc. node	9028 Dec 20 13:32	14° ♋ 33'42	
	9028 Jan 27 01:09	0° ♌			9028 Dec 30 00:27	0° ♌	
evening max el	9028 Feb 09 19:59	16° ♌ 45'40	24°07'33	evening max el	9029 Jan 21 19:32	0° ♌	
retrograde	9028 Feb 21 00:10	23° ♌ 19'15			9029 Jan 22 09:13	0° ♌ 33'56	25°23'03
evening set	9028 Feb 26 07:52	21° ♌ 06'05		retrograde	9029 Feb 03 12:38	7° ♌ 34'17	
asc. node	9028 Feb 26 06:54	21° ♌ 08'08		evening set	9029 Feb 09 08:58	5° ♌ 09'15	
min. Earth dist.	9028 Mar 02 00:44	15° ♌ 41'08	0.68220 AU	asc. node	9029 Feb 12 04:03	2° ♌ 17'53	
inferior conj	9028 Mar 02 19:30	14° ♌ 37'39	1°42'59	min. Earth dist.	9029 Feb 13 18:31	0° ♌ 19'09	0.67549 AU
minimum elong	9028 Mar 02 17:28	14° ♌ 44'32	1°42'22		9029 Feb 14 00:29	30° ♌	
morning rise	9028 Mar 08 03:07	8° ♌ 35'41		inferior conj	9029 Feb 15 00:52	28° ♌ 41'11	0°55'46
direct	9028 Mar 12 02:22	7° ♌ 06'08		minimum elong	9029 Feb 14 23:34	28° ♌ 45'25	0°55'24
morning max el	9028 Mar 19 21:30	11° ♌ 30'48	20°18'00	morning rise	9029 Feb 20 14:32	22° ♌ 47'22	
desc. node	9028 Mar 31 16:29	26° ♌ 28'13		direct	9029 Feb 24 01:35	21° ♌ 38'33	
	9028 Apr 03 03:11	0° ♍		morning max el	9029 Mar 03 02:03	25° ♌ 30'30	19°15'47
morning set	9028 Apr 17 01:37	20° ♍ 59'32			9029 Mar 07 00:54	0° ♍	
	9028 Apr 22 20:04	0° ♎		greatest brilliancy	9029 Mar 16 02:50	12° ♍ 47'09	-0.7m
max. Earth dist.	9028 Apr 26 17:29	6° ♎ 11'28	1.43799 AU	desc. node	9029 Mar 18 13:22	16° ♍ 27'38	
				morning set	9029 Mar 27 01:54	29° ♍ 31'53	
superior conj	9028 May 02 19:00	16° ♎ 03'05	-2°10'44		9029 Mar 27 09:10	0° ♍	
minimum elong	9028 May 02 21:35	16° ♎ 13'46	2°10'51	max. Earth dist.	9029 Apr 09 08:20	20° ♍ 12'12	1.45026 AU
	9028 May 11 01:48	0° ♏					
evening rise	9028 May 15 11:22	7° ♏ 36'20		superior conj	9029 Apr 12 15:45	25° ♍ 26'16	-2°08'55
asc. node	9028 May 24 05:36	22° ♏ 35'59		minimum elong	9029 Apr 12 11:27	25° ♍ 09'11	2°08'53
	9028 May 29 02:33	0° ♐			9029 Apr 15 12:25	0° ♎	
evening max el	9028 Jun 01 19:18	4° ♐ 24'08	18°05'59	evening rise	9029 Apr 27 01:43	18° ♎ 49'15	
retrograde	9028 Jun 08 05:41	7° ♐ 44'36			9029 May 03 20:12	0° ♏	
evening set	9028 Jun 10 23:19	7° ♐ 07'19		asc. node	9029 May 11 02:42	11° ♏ 20'20	
inferior conj	9028 Jun 17 07:00	1° ♐ 58'12	2°38'49	evening max el	9029 May 16 08:30	17° ♏ 50'51	18°21'15
minimum elong	9028 Jun 17 09:44	1° ♐ 51'07	2°37'56	retrograde	9029 May 22 18:17	21° ♏ 17'11	
	9028 Jun 19 04:22	30° ♏		evening set	9029 May 25 19:18	20° ♏ 26'23	
min. Earth dist.	9028 Jun 20 05:23	28° ♏ 56'38	0.62194 AU	inferior conj	9029 May 31 15:54	14° ♏ 59'28	3°08'57
morning rise	9028 Jun 23 18:13	25° ♏ 52'18		minimum elong	9029 May 31 17:34	14° ♏ 54'38	3°08'28
desc. node	9028 Jun 27 16:07	23° ♏ 51'57		min. Earth dist.	9029 Jun 03 00:16	12° ♏ 16'47	0.64247 AU
direct	9028 Jun 30 11:49	23° ♏ 26'54		morning rise	9029 Jun 06 14:44	8° ♏ 43'50	
	9028 Jul 13 02:08	0° ♑		direct	9029 Jun 13 07:14	6° ♏ 02'22	
morning max el	9028 Jul 14 14:54	1° ♑ 28'36	27°55'36	desc. node	9029 Jun 14 13:09	6° ♏ 07'28	
	9028 Aug 04 12:34	0° ♒		morning max el	9029 Jun 27 00:33	14° ♏ 02'32	27°31'22
morning set	9028 Aug 17 11:13	24° ♒ 00'01			9029 Jul 09 22:14	0° ♑	
asc. node	9028 Aug 20 05:07	29° ♒ 41'37		morning set	9029 Jul 28 03:41	0° ♒	
	9028 Aug 20 08:36	0° ♓		max. Earth dist.	9029 Aug 01 03:45	7° ♒ 41'01	
max. Earth dist.	9028 Aug 22 23:06	5° ♓ 34'00	1.32086 AU	asc. node	9029 Aug 05 22:37	17° ♒ 23'28	1.33024 AU
					9029 Aug 07 02:04	19° ♒ 47'11	
superior conj	9028 Aug 24 23:58	9° ♓ 59'54	0°46'46	superior conj	9029 Aug 09 05:24	24° ♒ 19'40	0°21'24
minimum elong	9028 Aug 24 22:03	9° ♓ 49'25	0°46'18	minimum elong	9029 Aug 09 04:22	24° ♒ 14'09	0°21'01
evening rise	9028 Aug 31 19:35	24° ♓ 53'26			9029 Aug 11 20:41	0° ♓	
	9028 Sep 03 05:38	0° ♈		evening rise	9029 Aug 16 07:02	9° ♓ 31'49	
	9028 Sep 21 02:44	0° ♈			9029 Aug 26 20:25	0° ♈	
desc. node	9028 Sep 23 14:44	2° ♈ 53'14		evening max el	9029 Sep 07 04:33	15° ♈ 12'50	22°37'29

desc. node	9029 Sep 10 11:53	18°♄03'46		behind sun end	9030 Jul 24 10:02	8°♄45'28	
retrograde	9029 Sep 20 06:56	21°♄45'00		asc. node	9030 Jul 24 23:00	9°♄52'48	
evening set	9029 Sep 23 19:23	21°♄17'48		evening rise	9030 Jul 31 16:35	24°♄00'46	
min. Earth dist.	9029 Oct 01 11:58	17°♄52'05	0.55050 AU		9030 Aug 03 14:29	0°♄	
inferior conj	9029 Oct 02 15:41	17°♄12'41	-5°23'46	evening max el	9030 Aug 19 23:38	25°♄38'54	21°04'40
minimum elong	9029 Oct 02 09:52	17°♄20'57	5°22'59		9030 Aug 25 19:03	0°♄	
morning rise	9029 Oct 11 02:15	13°♄24'46		desc. node	9030 Aug 28 09:02	1°♄01'26	
direct	9029 Oct 14 06:47	13°♄01'34		retrograde	9030 Aug 31 19:32	1°♄30'42	
morning max el	9029 Oct 25 17:25	18°♄23'45	21°05'32	evening set	9030 Sep 03 03:04	1°♄18'07	
asc. node	9029 Nov 03 01:57	28°♄51'59			9030 Sep 07 06:17	30°♄♄	
	9029 Nov 03 19:11	0°♄		inferior conj	9030 Sep 12 08:10	27°♄21'37	-4°14'40
morning set	9029 Nov 14 10:52	20°♄04'06		minimum elong	9030 Sep 11 22:29	27°♄35'18	4°12'02
	9029 Nov 19 04:44	0°♄		min. Earth dist.	9030 Sep 12 20:35	27°♄04'04	0.54660 AU
				morning rise	9030 Sep 20 18:17	23°♄27'13	
superior conj	9029 Nov 21 18:51	5°♄23'04	1°36'25	direct	9030 Sep 24 14:48	22°♄55'17	
minimum elong	9029 Nov 21 20:20	5°♄30'42	1°36'33	morning max el	9030 Oct 07 11:37	29°♄03'55	22°45'23
max. Earth dist.	9029 Nov 26 11:07	14°♄50'09	1.35486 AU		9030 Oct 08 10:50	0°♄	
evening rise	9029 Nov 30 12:22	22°♄37'54		asc. node	9030 Oct 20 22:54	17°♄20'21	
	9029 Dec 04 13:12	0°♄			9030 Oct 27 13:39	0°♄	
desc. node	9029 Dec 07 10:33	5°♄02'17		morning set	9030 Oct 29 21:50	4°♄52'43	
	9029 Dec 23 18:25	0°♄					
evening max el	9030 Jan 04 22:23	14°♄19'09	26°26'40	superior conj	9030 Nov 05 22:13	19°♄54'58	1°40'49
retrograde	9030 Jan 17 20:02	21°♄35'24		minimum elong	9030 Nov 05 22:25	19°♄56'01	1°41'00
evening set	9030 Jan 24 04:21	19°♄02'14		max. Earth dist.	9030 Nov 09 03:58	26°♄44'43	1.33840 AU
min. Earth dist.	9030 Jan 28 07:32	14°♄46'43	0.66496 AU		9030 Nov 10 17:53	0°♄	
inferior conj	9030 Jan 30 01:34	12°♄39'46	0°00'20	evening rise	9030 Nov 13 19:58	6°♄10'56	
minimum elong	9030 Jan 30 01:33	12°♄39'49	0°00'32	desc. node	9030 Nov 24 07:36	25°♄15'51	
transit middle	9030 Jan 30 01:33	12°♄39'49	0°00'32		9030 Nov 27 04:50	0°♄	
transit begin	9030 Jan 29 22:40	12°♄48'35		evening max el	9030 Dec 18 11:29	27°♄53'19	27°11'12
transit end	9030 Jan 30 04:27	12°♄31'04			9030 Dec 20 19:40	0°♄	
asc. node	9030 Jan 30 01:10	12°♄40'59		retrograde	9030 Dec 31 21:37	5°♄14'53	
morning rise	9030 Feb 04 23:38	6°♄56'08		evening set	9031 Jan 07 15:58	2°♄39'29	
direct	9030 Feb 07 23:57	6°♄05'06			9031 Jan 10 14:04	30°♄♄	
morning max el	9030 Feb 14 13:29	9°♄37'00	18°29'29	min. Earth dist.	9031 Jan 11 13:41	28°♄57'30	0.65082 AU
	9030 Mar 01 03:48	0°♄		inferior conj	9031 Jan 13 19:21	26°♄28'43	-1°02'39
desc. node	9030 Mar 05 10:14	6°♄44'55		minimum elong	9031 Jan 13 21:13	26°♄23'31	1°01'36
morning set	9030 Mar 06 22:56	9°♄10'17		asc. node	9031 Jan 16 22:16	23°♄14'26	
	9030 Mar 20 04:19	0°♄		morning rise	9031 Jan 20 03:55	20°♄57'36	
				direct	9031 Jan 22 19:19	20°♄20'36	
superior conj	9030 Mar 22 21:55	4°♄16'40	-1°46'50	morning max el	9031 Jan 29 05:23	23°♄43'37	17°59'58
minimum elong	9030 Mar 22 12:31	3°♄39'55	1°46'01		9031 Feb 03 07:58	0°♄	
max. Earth dist.	9030 Mar 23 02:48	4°♄35'47	1.45549 AU	morning set	9031 Feb 16 01:32	20°♄17'12	
evening rise	9030 Apr 07 16:17	29°♄03'41		desc. node	9031 Feb 20 07:08	27°♄15'06	
	9030 Apr 08 06:31	0°♄			9031 Feb 21 23:31	0°♄	
greatest brilliancy	9030 Apr 16 22:02	13°♄39'08	-0.8m				
asc. node	9030 Apr 27 23:48	29°♄27'24		superior conj	9031 Mar 02 07:48	13°♄24'46	-1°08'48
	9030 Apr 28 11:08	0°♄		minimum elong	9031 Mar 02 00:03	12°♄53'59	1°07'43
evening max el	9030 Apr 29 19:06	1°♄25'37	18°54'22	max. Earth dist.	9031 Mar 05 22:14	19°♄05'51	1.45331 AU
retrograde	9030 May 06 13:02	5°♄10'30			9031 Mar 12 21:56	0°♄	
evening set	9030 May 09 21:41	4°♄05'15		evening rise	9031 Mar 18 11:08	8°♄34'50	
	9030 May 14 03:20	30°♄♄		greatest brilliancy	9031 Apr 01 09:00	29°♄44'00	-0.7m
inferior conj	9030 May 15 10:53	28°♄22'19	3°20'55		9031 Apr 01 13:20	0°♄	
minimum elong	9030 May 15 11:15	28°♄21'08	3°20'41	evening max el	9031 Apr 13 01:15	15°♄04'29	19°43'57
min. Earth dist.	9030 May 17 04:03	26°♄12'54	0.65954 AU	asc. node	9031 Apr 14 20:55	16°♄45'59	
morning rise	9030 May 21 00:14	22°♄03'16		retrograde	9031 Apr 20 10:50	19°♄18'48	
direct	9030 May 27 10:02	19°♄17'21		evening set	9031 Apr 24 03:54	17°♄58'28	
desc. node	9030 Jun 01 10:09	20°♄40'06		inferior conj	9031 Apr 29 12:48	12°♄01'10	3°18'29
morning max el	9030 Jun 09 11:13	27°♄02'54	26°36'34	minimum elong	9031 Apr 29 12:01	12°♄03'47	3°18'17
	9030 Jun 12 05:25	0°♄		min. Earth dist.	9031 Apr 30 15:10	10°♄33'16	0.67240 AU
	9030 Jul 03 13:46	0°♄		morning rise	9031 May 04 19:50	5°♄42'43	
morning set	9030 Jul 15 09:00	20°♄47'01		direct	9031 May 10 19:02	3°♄03'17	
max. Earth dist.	9030 Jul 19 11:47	28°♄45'12	1.34452 AU	desc. node	9031 May 19 07:06	6°♄59'44	
	9030 Jul 20 02:49	0°♄		morning max el	9031 May 22 20:57	10°♄18'02	25°20'15
					9031 Jun 07 11:46	0°♄	
superior conj	9030 Jul 24 04:28	8°♄16'41	-0°07'43		9031 Jun 26 04:54	0°♄	
minimum elong	9030 Jul 24 04:55	8°♄18'57	0°07'51	morning set	9031 Jun 27 22:49	3°♄07'07	
behind sun begin	9030 Jul 23 23:48	7°♄52'28		max. Earth dist.	9031 Jul 01 14:16	9°♄48'50	1.36331 AU

superior conj	9031 Jul 07 18:25	21°  44'05	-0°39'23	superior conj	9032 Jun 19 19:39	4°  32'28	-1°11'40
minimum elong	9031 Jul 07 20:50	21°  56'05	0°39'11	minimum elong	9032 Jun 20 00:12	4°  54'01	1°11'12
asc. node	9031 Jul 11 19:58	29°  54'57		asc. node	9032 Jun 27 16:57	19°  54'15	
	9031 Jul 11 20:57	0°  Ω		evening rise	9032 Jun 28 20:44	22°  50'27	
evening rise	9031 Jul 15 22:03	8°  Ω14'32			9032 Jul 02 23:03	0°  Ω	
	9031 Jul 27 20:46	0°  ♍		evening max el	9032 Jul 15 04:43	18°  Ω37'14	18°54'04
evening max el	9031 Aug 02 07:52	6°  ♍45'38	19°49'01	retrograde	9032 Jul 23 17:22	22°  Ω51'13	
retrograde	9031 Aug 12 10:56	11°  ♍45'55		evening set	9032 Jul 25 16:09	22°  Ω38'47	
evening set	9031 Aug 14 07:40	11°  ♍36'30		desc. node	9032 Aug 01 03:14	19°  Ω33'39	
desc. node	9031 Aug 15 06:08	11°  ♍24'59		inferior conj	9032 Aug 02 21:02	18°  Ω21'02	-0°32'01
inferior conj	9031 Aug 23 05:57	7°  ♍35'10	-2°26'18	minimum elong	9032 Aug 02 19:41	18°  Ω23'25	0°31'40
minimum elong	9031 Aug 22 23:19	7°  ♍45'22	2°23'57	min. Earth dist.	9032 Aug 05 22:20	16°  Ω11'41	0.56656 AU
min. Earth dist.	9031 Aug 25 07:35	6°  ♍19'05	0.55235 AU	morning rise	9032 Aug 10 19:57	13°  Ω24'03	
morning rise	9031 Aug 31 13:04	3°  ♍14'44		direct	9032 Aug 16 07:14	12°  Ω12'41	
direct	9031 Sep 05 04:33	2°  ♍27'12		morning max el	9032 Aug 30 13:26	19°  Ω34'50	26°08'18
morning max el	9031 Sep 18 23:48	9°  ♍17'28	24°31'46		9032 Sep 08 10:11	0°  ♍	
	9031 Oct 04 07:39	0°  ♌		asc. node	9032 Sep 23 16:44	25°  ♍49'25	
asc. node	9031 Oct 07 19:49	6°  ♌22'19			9032 Sep 25 18:03	0°  ♌	
morning set	9031 Oct 14 09:35	19°  ♌41'07		morning set	9032 Sep 27 20:31	4°  ♌24'59	
	9031 Oct 19 03:34	0°  ♌					
superior conj	9031 Oct 21 06:29	4°  ♌38'55	1°38'47	superior conj	9032 Oct 04 17:29	19°  ♌28'28	1°30'55
minimum elong	9031 Oct 21 05:33	4°  ♌33'50	1°38'52	minimum elong	9032 Oct 04 15:44	19°  ♌18'43	1°30'50
max. Earth dist.	9031 Oct 23 05:02	8°  ♌51'59	1.32630 AU	max. Earth dist.	9032 Oct 05 12:21	21°  ♌12'53	1.31876 AU
evening rise	9031 Oct 28 14:18	20°  ♌12'13			9032 Oct 09 12:50	0°  ♌	
	9031 Nov 02 14:01	0°  ♌		evening rise	9032 Oct 11 16:25	4°  ♌33'46	
desc. node	9031 Nov 11 04:40	15°  ♌07'33			9032 Oct 25 06:18	0°  ♌	
	9031 Nov 21 06:45	0°  ♌		desc. node	9032 Oct 28 01:46	4°  ♌28'33	
evening max el	9031 Nov 30 23:09	11°  ♌04'49	27°29'39	evening max el	9032 Nov 12 06:57	23°  ♌04'26	27°16'23
retrograde	9031 Dec 14 16:28	18°  ♌23'32			9032 Nov 21 14:13	0°  ♌	
evening set	9031 Dec 21 17:09	15°  ♌53'48		retrograde	9032 Nov 26 03:32	0°  ♌52'43	
min. Earth dist.	9031 Dec 25 10:52	12°  ♌42'31	0.63350 AU		9032 Nov 30 13:05	30°  ♌R♌	
inferior conj	9031 Dec 28 03:30	10°  ♌01'10	-2°11'41	evening set	9032 Dec 03 04:35	28°  ♌37'59	
minimum elong	9031 Dec 28 07:42	9°  ♌50'38	2°09'45	min. Earth dist.	9032 Dec 06 21:30	25°  ♌51'01	0.61373 AU
asc. node	9032 Jan 03 19:20	4°  ♌50'20		inferior conj	9032 Dec 09 22:54	23°  ♌09'09	-3°23'24
morning rise	9032 Jan 04 00:14	4°  ♌45'34		minimum elong	9032 Dec 10 05:23	22°  ♌54'47	3°20'56
direct	9032 Jan 06 09:01	4°  ♌18'39		morning rise	9032 Dec 17 08:32	18°  ♌12'32	
morning max el	9032 Jan 12 22:49	7°  ♌42'17	17°47'47	direct	9032 Dec 19 13:32	17°  ♌52'06	
	9032 Jan 27 17:21	0°  ♌		asc. node	9032 Dec 20 16:22	17°  ♌57'30	
morning set	9032 Jan 29 06:22	2°  ♌40'16		morning max el	9032 Dec 26 14:38	21°  ♌25'07	17°53'49
desc. node	9032 Feb 07 04:02	17°  ♌53'34			9033 Jan 02 03:06	0°  ♌	
				morning set	9033 Jan 11 06:52	15°  ♌59'17	
superior conj	9032 Feb 10 13:27	23°  ♌31'43	-0°24'48		9033 Jan 19 01:44	0°  ♌	
minimum elong	9032 Feb 10 10:49	23°  ♌20'53	0°24'14	superior conj	9033 Jan 21 20:40	4°  ♌52'25	0°16'15
	9032 Feb 14 12:47	0°  ♌		minimum elong	9033 Jan 21 22:06	4°  ♌58'34	0°16'15
max. Earth dist.	9032 Feb 16 16:25	3°  ♌27'06	1.44404 AU	desc. node	9033 Jan 24 00:59	8°  ♌36'58	
evening rise	9032 Feb 25 22:22	17°  ♌55'33		max. Earth dist.	9033 Jan 29 07:14	17°  ♌24'34	1.42868 AU
	9032 Mar 04 21:23	0°  ♌		evening rise	9033 Feb 04 17:22	27°  ♌43'29	
evening max el	9032 Mar 26 01:56	28°  ♌44'37	20°47'39		9033 Feb 06 04:14	0°  ♌	
	9032 Mar 27 09:07	0°  ♌			9033 Feb 26 15:31	0°  ♌	
asc. node	9032 Mar 31 18:02	3°  ♌01'33		evening max el	9033 Mar 08 21:21	12°  ♌26'16	22°01'46
retrograde	9032 Apr 03 09:21	3°  ♌36'33		retrograde	9033 Mar 18 06:50	17°  ♌59'58	
evening set	9032 Apr 07 11:52	2°  ♌00'47		asc. node	9033 Mar 18 15:09	17°  ♌59'21	
	9032 Apr 09 13:55	30°  ♌R♌		evening set	9033 Mar 22 19:56	16°  ♌08'52	
inferior conj	9032 Apr 12 19:04	25°  ♌50'57	3°04'16	inferior conj	9033 Mar 28 03:32	9°  ♌48'55	2°39'54
minimum elong	9032 Apr 12 17:25	25°  ♌56'38	3°03'55	minimum elong	9033 Mar 28 01:24	9°  ♌56'22	2°39'21
min. Earth dist.	9032 Apr 13 07:37	25°  ♌07'39	0.68079 AU	min. Earth dist.	9033 Mar 28 03:18	9°  ♌49'42	0.68471 AU
morning rise	9032 Apr 17 22:45	19°  ♌35'25		morning rise	9033 Apr 02 06:42	3°  ♌37'40	
direct	9032 Apr 23 09:03	17°  ♌11'00		direct	9033 Apr 07 03:07	1°  ♌33'30	
morning max el	9032 May 04 06:02	23°  ♌40'42	23°52'29	morning max el	9033 Apr 16 17:07	7°  ♌11'35	22°23'06
desc. node	9032 May 05 04:03	24°  ♌37'36		desc. node	9033 Apr 22 01:01	13°  ♌12'32	
	9032 May 09 20:36	0°  ♌			9033 May 04 08:48	0°  ♌	
	9032 May 30 21:18	0°  ♌		morning set	9033 May 20 07:23	24°  ♌34'24	
morning set	9032 Jun 08 15:58	14°  ♌26'55			9033 May 23 14:27	0°  ♌	
max. Earth dist.	9032 Jun 12 10:54	21°  ♌02'49	1.38519 AU	max. Earth dist.	9033 May 25 08:57	2°  ♌58'15	1.40776 AU
	9032 Jun 17 09:27	0°  ♌					
				superior conj	9033 Jun 02 03:52	16°  ♌31'39	-1°41'21

minimum elong	9033 Jun 02 09:50	16° Π 58'26	1°40'55	superior conj	9034 May 14 14:29	27° \mathcal{B} 32'01	-2°03'39
	9033 Jun 09 12:00	0° \mathfrak{D}		minimum elong	9034 May 14 19:28	27° \mathcal{B} 53'13	2°03'35
evening rise	9033 Jun 12 09:20	5° \mathfrak{D} 25'02			9034 May 16 01:12	0° Π	
asc. node	9033 Jun 14 13:58	9° \mathfrak{D} 31'17		evening rise	9034 May 26 07:40	18° Π 03'33	
	9033 Jun 27 09:15	0° Ω		asc. node	9034 Jun 01 11:01	28° Π 56'19	
evening max el	9033 Jun 28 10:51	1° Ω 07'05	18°19'54		9034 Jun 02 01:49	0° \mathfrak{D}	
retrograde	9033 Jul 05 19:10	4° Ω 48'22		evening max el	9034 Jun 11 22:28	14° \mathfrak{D} 06'17	18°05'36
evening set	9033 Jul 08 00:41	4° Ω 28'47		retrograde	9034 Jun 18 13:54	17° \mathfrak{D} 30'15	
inferior conj	9033 Jul 15 09:51	29° \mathfrak{D} 50'40	1°03'19	evening set	9034 Jun 21 03:02	17° \mathfrak{D} 00'15	
minimum elong	9033 Jul 15 11:55	29° \mathfrak{D} 46'22	1°02'21	inferior conj	9034 Jun 27 18:56	12° \mathfrak{D} 02'12	2°11'24
	9033 Jul 15 05:22	30° \mathcal{R} \mathfrak{D}		minimum elong	9034 Jun 27 21:54	11° \mathfrak{D} 55'02	2°10'19
min. Earth dist.	9033 Jul 18 18:59	27° \mathfrak{D} 02'56	0.58654 AU	min. Earth dist.	9034 Jun 30 23:37	8° \mathfrak{D} 58'34	0.60902 AU
desc. node	9033 Jul 19 00:22	26° \mathfrak{D} 52'23		morning rise	9034 Jul 04 14:12	6° \mathfrak{D} 05'25	
morning rise	9033 Jul 22 19:48	24° \mathfrak{D} 18'50		desc. node	9034 Jul 05 21:28	5° \mathfrak{D} 18'45	
direct	9033 Jul 28 23:55	22° \mathfrak{D} 37'21		direct	9034 Jul 11 04:59	3° \mathfrak{D} 53'53	
	9033 Aug 12 00:00	0° Ω		morning max el	9034 Jul 25 11:55	11° \mathfrak{D} 53'02	27°53'17
morning max el	9033 Aug 12 09:14	0° Ω 22'22	27°18'51		9034 Aug 08 18:31	0° Ω	
	9033 Sep 02 11:40	0° \mathfrak{M}			9034 Aug 25 18:29	0° \mathfrak{M}	
asc. node	9033 Sep 10 13:39	15° \mathfrak{M} 33'56		morning set	9034 Aug 27 08:56	3° \mathfrak{M} 16'45	
morning set	9033 Sep 12 04:54	18° \mathfrak{M} 58'35		asc. node	9034 Aug 28 10:35	5° \mathfrak{M} 30'19	
	9033 Sep 17 06:59	0° \mathfrak{L}		max. Earth dist.	9034 Sep 02 07:08	15° \mathfrak{M} 57'02	1.31759 AU
superior conj	9033 Sep 19 05:17	4° \mathfrak{L} 16'48	1°17'41	superior conj	9034 Sep 03 16:07	18° \mathfrak{M} 58'30	0°59'26
minimum elong	9033 Sep 19 03:05	4° \mathfrak{L} 04'35	1°17'23	minimum elong	9034 Sep 03 13:56	18° \mathfrak{M} 46'32	0°59'00
max. Earth dist.	9033 Sep 18 22:20	3° \mathfrak{L} 38'11	1.31583 AU		9034 Sep 08 16:09	0° \mathfrak{L}	
evening rise	9033 Sep 25 23:43	19° \mathfrak{L} 07'26		evening rise	9034 Sep 10 10:08	3° \mathfrak{L} 47'16	
	9033 Oct 01 07:06	0° \mathfrak{M}			9034 Sep 24 06:23	0° \mathfrak{M}	
desc. node	9033 Oct 14 22:53	23° \mathfrak{M} 05'51		desc. node	9034 Oct 01 20:01	10° \mathfrak{M} 42'13	
	9033 Oct 20 05:42	0° \mathcal{X}		evening max el	9034 Oct 07 00:39	16° \mathfrak{M} 23'07	25°11'26
evening max el	9033 Oct 25 07:51	5° \mathcal{X} 27'16	26°29'04	retrograde	9034 Oct 20 21:49	23° \mathfrak{M} 23'01	
retrograde	9033 Nov 08 05:49	12° \mathcal{X} 33'35		evening set	9034 Oct 26 16:18	22° \mathfrak{M} 07'08	
evening set	9033 Nov 14 21:53	10° \mathcal{X} 44'02		min. Earth dist.	9034 Oct 31 12:25	19° \mathfrak{M} 26'31	0.57275 AU
min. Earth dist.	9033 Nov 18 21:20	8° \mathcal{X} 09'10	0.59277 AU	inferior conj	9034 Nov 03 09:33	17° \mathfrak{M} 30'55	-5°22'16
inferior conj	9033 Nov 22 01:57	5° \mathcal{X} 41'56	-4°31'06	minimum elong	9034 Nov 03 14:51	17° \mathfrak{M} 22'00	5°21'23
minimum elong	9033 Nov 22 09:29	5° \mathcal{X} 27'24	4°28'57	morning rise	9034 Nov 11 15:44	13° \mathfrak{M} 19'06	
morning rise	9033 Nov 29 23:32	1° \mathcal{X} 07'27		direct	9034 Nov 14 01:33	13° \mathfrak{M} 02'07	
direct	9033 Dec 02 04:29	0° \mathcal{X} 50'17		morning max el	9034 Nov 23 03:01	17° \mathfrak{M} 22'00	19°06'18
asc. node	9033 Dec 07 13:24	2° \mathcal{X} 38'22		asc. node	9034 Nov 24 10:25	18° \mathfrak{M} 42'23	
morning max el	9033 Dec 10 01:17	4° \mathcal{X} 41'45	18°19'24		9034 Dec 02 07:12	0° \mathcal{X}	
morning set	9033 Dec 25 21:07	29° \mathcal{X} 55'41		morning set	9034 Dec 09 20:49	14° \mathcal{X} 17'11	
	9033 Dec 25 22:02	0° \mathfrak{Z}			9034 Dec 17 20:05	0° \mathfrak{Z}	
superior conj	9034 Jan 04 02:59	17° \mathfrak{Z} 18'23	0°49'45	superior conj	9034 Dec 18 03:28	0° \mathfrak{Z} 35'35	1°14'28
minimum elong	9034 Jan 04 06:08	17° \mathfrak{Z} 32'46	0°49'33	minimum elong	9034 Dec 18 06:36	0° \mathfrak{Z} 50'40	1°14'22
desc. node	9034 Jan 10 21:56	29° \mathfrak{Z} 20'59		max. Earth dist.	9034 Dec 24 22:37	13° \mathfrak{Z} 15'39	1.38717 AU
	9034 Jan 11 07:02	0° \approx		evening rise	9034 Dec 28 17:52	19° \mathfrak{Z} 57'43	
max. Earth dist.	9034 Jan 11 16:49	0° \approx 41'53	1.40891 AU	desc. node	9034 Dec 28 18:54	20° \mathfrak{Z} 02'12	
evening rise	9034 Jan 16 06:41	8° \approx 21'36			9035 Jan 03 17:53	0° \approx	
	9034 Jan 30 05:50	0° \mathcal{H}			9035 Jan 24 09:29	0° \mathcal{H}	
evening max el	9034 Feb 19 12:46	26° \mathcal{H} 10'05	23°21'31	evening max el	9035 Feb 02 02:15	9° \mathcal{H} 57'00	24°40'39
	9034 Feb 23 22:39	0° \mathcal{Y}		retrograde	9035 Feb 13 17:09	16° \mathcal{H} 44'03	
retrograde	9034 Mar 02 01:52	2° \mathcal{Y} 24'18		evening set	9035 Feb 19 06:08	14° \mathcal{H} 25'30	
asc. node	9034 Mar 05 12:17	1° \mathcal{Y} 26'43		asc. node	9035 Feb 20 09:27	13° \mathcal{H} 21'42	
evening set	9034 Mar 07 02:34	0° \mathcal{Y} 18'38		min. Earth dist.	9035 Feb 23 19:42	9° \mathcal{H} 15'13	0.67978 AU
	9034 Mar 07 11:03	30° \mathcal{R} \mathcal{H}		inferior conj	9035 Feb 24 19:26	7° \mathcal{H} 56'18	1°23'59
min. Earth dist.	9034 Mar 12 00:05	24° \mathcal{H} 33'52	0.68427 AU	minimum elong	9035 Feb 24 17:38	8° \mathcal{H} 02'17	1°23'26
inferior conj	9034 Mar 12 12:17	23° \mathcal{H} 51'56	2°06'19	morning rise	9035 Mar 02 05:19	1° \mathcal{H} 57'27	
minimum elong	9034 Mar 12 10:04	23° \mathcal{H} 59'32	2°05'40	direct	9035 Mar 05 23:06	0° \mathcal{H} 37'09	
morning rise	9034 Mar 17 17:33	17° \mathcal{H} 46'10		morning max el	9035 Mar 13 09:33	4° \mathcal{H} 46'48	19°49'34
direct	9034 Mar 22 00:12	16° \mathcal{H} 04'13		greatest brilliancy	9035 Mar 26 07:59	21° \mathcal{H} 35'09	-0.6m
morning max el	9034 Mar 30 09:35	20° \mathcal{H} 53'26	21°00'18	desc. node	9035 Mar 26 18:50	22° \mathcal{H} 14'52	
	9034 Apr 07 01:41	0° \mathcal{Y}			9035 Mar 31 23:42	0° \mathcal{Y}	
desc. node	9034 Apr 08 21:57	2° \mathcal{Y} 28'51		morning set	9035 Apr 08 18:29	11° \mathcal{Y} 52'07	
	9034 Apr 27 14:08	0° \mathcal{B}		max. Earth dist.	9035 Apr 19 23:39	29° \mathcal{Y} 23'45	1.44396 AU
morning set	9034 Apr 29 20:24	3° \mathcal{B} 31'12			9035 Apr 20 08:46	0° \mathcal{B}	
max. Earth dist.	9034 May 07 12:51	15° \mathcal{B} 47'01	1.42815 AU	superior conj	9035 Apr 25 00:32	7° \mathcal{B} 28'26	-2°12'22

minimum elong	9035 Apr 25 00:27	7°  28'08	2°12'32	max. Earth dist.	9036 Apr 01 16:15	13°  36'05	1.45343 AU
evening rise	9035 May 08 10:53	29°  49'30					
	9035 May 08 13:21	0°  II		superior conj	9036 Apr 03 13:23	16°  33'18	-2°01'58
asc. node	9035 May 19 08:06	17°  II57'38		minimum elong	9036 Apr 03 06:14	16°  05'13	2°01'37
evening max el	9035 May 26 12:00	27°  II25'17	18°10'17		9036 Apr 12 00:56	0°  8	
	9035 May 29 21:13	0°  ☿		evening rise	9036 Apr 18 15:05	10°  836'50	
retrograde	9035 Jun 01 21:03	0°  ☿46'34			9036 Apr 30 17:35	0°  II	
evening set	9035 Jun 04 17:47	0°  ☿03'48		asc. node	9036 May 05 05:12	6°  II27'30	
	9035 Jun 04 20:49	30°  R  II		evening max el	9036 May 09 00:28	10°  II56'35	18°33'15
inferior conj	9035 Jun 10 20:18	24°  II47'14	2°54'03	retrograde	9036 May 15 12:34	14°  II28'54	
minimum elong	9035 Jun 10 22:38	24°  II40'50	2°53'22	evening set	9036 May 18 16:51	13°  II31'58	
min. Earth dist.	9035 Jun 13 13:11	21°  II51'09	0.63102 AU	inferior conj	9036 May 24 09:54	7°  II58'12	3°15'56
morning rise	9035 Jun 17 01:54	18°  II36'10		minimum elong	9036 May 24 11:01	7°  II54'50	3°15'36
desc. node	9035 Jun 22 18:33	16°  II05'46		min. Earth dist.	9036 May 26 11:51	5°  II28'20	0.65032 AU
direct	9035 Jun 23 19:56	16°  II02'09		morning rise	9036 May 30 04:21	1°  II40'46	
morning max el	9035 Jul 07 19:33	24°  II05'15	27°49'24		9036 Jun 01 15:07	30°  R  8	
	9035 Jul 13 03:08	0°  ☿		direct	9036 Jun 05 18:47	28°  855'50	
	9035 Aug 02 03:32	0°  Ω		desc. node	9036 Jun 08 15:34	29°  822'57	
morning set	9035 Aug 11 06:23	17°  Ω12'42			9036 Jun 10 06:27	0°  II	
asc. node	9035 Aug 15 07:31	25°  Ω33'20		morning max el	9036 Jun 19 05:40	6°  II50'54	27°11'09
max. Earth dist.	9035 Aug 16 10:49	27°  Ω58'00	1.32420 AU		9036 Jul 07 01:03	0°  ☿	
	9035 Aug 17 09:37	0°  ♊			9036 Jul 24 10:21	0°  Ω	
				morning set	9036 Jul 24 18:29	0°  Ω39'20	
superior conj	9035 Aug 19 00:04	3°  ♊27'32	0°36'31	max. Earth dist.	9036 Jul 29 05:59	9°  Ω34'20	1.33577 AU
minimum elong	9035 Aug 18 22:27	3°  ♊18'48	0°36'04	asc. node	9036 Aug 01 04:28	15°  Ω39'11	
evening rise	9035 Aug 25 21:42	18°  ♊27'08					
	9035 Aug 31 12:33	0°  ♊		superior conj	9036 Aug 02 03:05	17°  Ω38'14	0°09'28
evening max el	9035 Sep 18 12:05	26°  ♊41'46	23°34'59	minimum elong	9036 Aug 02 02:36	17°  Ω35'42	0°09'10
desc. node	9035 Sep 18 17:10	26°  ♊53'59		behind sun begin	9036 Aug 01 21:59	17°  Ω11'21	
	9035 Sep 22 10:32	0°  ♊		behind sun end	9036 Aug 02 07:13	18°  Ω00'05	
retrograde	9035 Oct 02 01:13	3°  ♊27'56			9036 Aug 07 22:15	0°  ♊	
evening set	9035 Oct 06 10:22	2°  ♊46'03		evening rise	9036 Aug 09 08:35	3°  ♊01'56	
	9035 Oct 12 09:18	30°  R  ♊			9036 Aug 24 06:11	0°  ♊	
min. Earth dist.	9035 Oct 12 22:12	29°  ♊41'16	0.55667 AU	evening max el	9036 Aug 30 01:51	6°  ♊54'48	21°56'20
inferior conj	9035 Oct 14 20:58	28°  ♊31'48	-5°38'08	desc. node	9036 Sep 04 14:19	11°  ♊11'31	
minimum elong	9035 Oct 14 19:38	28°  ♊33'47	5°37'58	retrograde	9036 Sep 11 16:46	13°  ♊11'15	
morning rise	9035 Oct 23 06:54	24°  ♊38'07		evening set	9036 Sep 14 15:11	12°  ♊52'00	
direct	9035 Oct 26 03:22	24°  ♊18'01		inferior conj	9036 Sep 23 17:02	8°  ♊52'25	-5°00'55
morning max el	9035 Nov 05 16:29	29°  ♊15'52	20°15'48	minimum elong	9036 Sep 23 08:41	9°  ♊04'06	4°59'18
	9035 Nov 06 10:35	0°  ♊		min. Earth dist.	9036 Sep 23 06:03	9°  ♊07'47	0.54770 AU
asc. node	9035 Nov 11 07:24	5°  ♊53'57		morning rise	9036 Oct 02 03:33	5°  ♊04'22	
morning set	9035 Nov 24 02:47	28°  ♊54'57		direct	9036 Oct 05 14:53	4°  ♊37'49	
	9035 Nov 24 15:29	0°  ♊		morning max el	9036 Oct 17 16:43	10°  ♊19'41	21°46'26
				asc. node	9036 Oct 28 04:21	23°  ♊57'55	
superior conj	9035 Dec 01 17:21	14°  ♊30'35	1°30'39		9036 Oct 31 15:13	0°  ♊	
minimum elong	9035 Dec 01 19:33	14°  ♊41'40	1°30'43	morning set	9036 Nov 07 12:30	13°  ♊41'16	
max. Earth dist.	9035 Dec 07 05:25	25°  ♊19'21	1.36596 AU				
	9035 Dec 09 17:09	0°  ♊		superior conj	9036 Nov 14 16:41	28°  ♊51'26	1°39'06
evening rise	9035 Dec 11 01:13	2°  ♊27'13		minimum elong	9036 Nov 14 17:37	28°  ♊56'18	1°39'17
desc. node	9035 Dec 15 15:53	10°  ♊36'54			9036 Nov 15 05:47	0°  ♊	
	9035 Dec 27 19:24	0°  ♊		max. Earth dist.	9036 Nov 18 18:00	7°  ♊12'47	1.34735 AU
evening max el	9036 Jan 15 15:32	23°  ♊45'37	25°52'04	evening rise	9036 Nov 23 01:02	15°  ♊39'36	
	9036 Jan 24 03:28	0°  ♊			9036 Nov 30 22:53	0°  ♊	
retrograde	9036 Jan 28 03:37	0°  ♊54'07		desc. node	9036 Dec 01 12:54	0°  ♊59'48	
	9036 Jan 31 20:23	30°  R  ♊			9036 Dec 21 09:04	0°  ♊	
evening set	9036 Feb 03 05:02	28°  ♊25'22		evening max el	9036 Dec 28 04:58	7°  ♊28'06	26°48'27
asc. node	9036 Feb 07 06:34	24°  ♊06'07		retrograde	9037 Jan 10 08:25	14°  ♊46'58	
min. Earth dist.	9036 Feb 07 11:52	23°  ♊49'43	0.67144 AU	evening set	9037 Jan 16 21:21	12°  ♊12'16	
inferior conj	9036 Feb 08 23:05	21°  ♊58'54	0°33'15	min. Earth dist.	9037 Jan 20 22:12	8°  ♊11'11	0.65939 AU
minimum elong	9036 Feb 08 22:15	22° ♊01'32	0°33'06	inferior conj	9037 Jan 22 21:08	5° ♊54'15	-0°25'29
morning rise	9036 Feb 14 16:01	16° ♊08'50		minimum elong	9037 Jan 22 21:51	5° ♊52'10	0°24'57
direct	9036 Feb 17 22:19	15° ♊07'55		asc. node	9037 Jan 24 03:40	4° ♊26'25	
morning max el	9036 Feb 24 17:11	18° ♊50'03	18°54'00	morning rise	9037 Jan 28 23:24	0° ♊15'28	
	9036 Mar 04 11:27	0° ♊			9037 Jan 29 12:32	30° R ♊	
desc. node	9036 Mar 12 15:42	12° ♊22'50		direct	9037 Jan 31 19:48	29° ♊30'43	
morning set	9036 Mar 18 01:31	20° ♊47'02			9037 Feb 03 03:51	0° ♊	
	9036 Mar 23 23:25	0° ♊		morning max el	9037 Feb 07 06:47	2° ♊57'16	18°14'51

	9037 Feb 25 19:15	0°♄	desc. node	9038 Feb 14 09:26	23°♁20'25	
morning set	9037 Feb 26 11:04	1°♄03'41		9038 Feb 18 10:49	0°♄	
desc. node	9037 Feb 27 12:33	2°♄46'12				
			superior conj	9038 Feb 21 11:32	4°♄54'02	-0°50'14
superior conj	9037 Mar 13 18:39	25°♄24'27 -1°32'06	minimum elong	9038 Feb 21 05:52	4°♄31'14	0°49'20
minimum elong	9037 Mar 13 09:10	24°♄47'14 1°31'04	max. Earth dist.	9038 Feb 26 07:32	12°♄35'57	1.45022 AU
max. Earth dist.	9037 Mar 15 11:59	28°♄06'21 1.45557 AU	evening rise	9038 Mar 09 10:06	29°♄52'21	
	9037 Mar 16 17:02	0°♄		9038 Mar 09 12:05	0°♄	
evening rise	9037 Mar 29 20:18	20°♄30'09	greatest brilliancy	9038 Mar 24 07:42	22°♄18'00	-0.6m
	9037 Apr 04 22:30	0°♄		9038 Mar 29 18:36	0°♄	
greatest brilliancy	9037 Apr 10 05:22	8°♄09'00 -0.7m	evening max el	9038 Apr 05 13:10	8°♄12'50	20°09'26
asc. node	9037 Apr 22 02:18	24°♄15'30	asc. node	9038 Apr 08 23:25	11°♄09'09	
evening max el	9037 Apr 22 09:23	24°♄33'37 19°13'32	retrograde	9038 Apr 13 07:25	12°♄42'37	
retrograde	9037 Apr 29 08:56	28°♄29'31	evening set	9038 Apr 17 04:22	11°♄15'38	
evening set	9037 May 02 21:10	27°♄17'41	inferior conj	9038 Apr 22 12:14	5°♄12'26	3°13'48
inferior conj	9037 May 08 08:11	21°♄28'18 3°21'26	minimum elong	9038 Apr 22 11:03	5°♄16'28	3°13'32
minimum elong	9037 May 08 08:02	21°♄28'46 3°21'15	min. Earth dist.	9038 Apr 23 08:31	4°♄03'37	0.67651 AU
min. Earth dist.	9037 May 09 18:51	19°♄36'12 0.66562 AU		9038 Apr 26 15:09	30°♄	
morning rise	9037 May 13 18:30	15°♄09'20	morning rise	9038 Apr 27 17:29	28°♄54'55	
direct	9037 May 20 00:08	12°♄25'16	direct	9038 May 03 11:16	26°♄21'20	
desc. node	9037 May 26 12:32	14°♄44'57		9038 May 11 11:07	0°♄	
morning max el	9037 Jun 01 16:05	19°♄58'48 26°06'08	desc. node	9038 May 13 09:30	1°♄41'02	
	9037 Jun 10 05:42	0°♄	morning max el	9038 May 15 01:38	3°♄18'34	24°43'43
	9037 Jun 30 03:47	0°♄		9038 Jun 04 10:27	0°♄	
morning set	9037 Jul 07 17:44	13°♄27'21	morning set	9038 Jun 19 23:28	25°♄23'47	
max. Earth dist.	9037 Jul 11 14:45	20°♄48'01 1.35208 AU		9038 Jun 22 13:19	0°♄	
	9037 Jul 16 06:09	0°♄	max. Earth dist.	9038 Jun 23 14:15	1°♄53'21	1.37236 AU
superior conj	9037 Jul 16 22:40	1°♄23'53 -0°20'56	superior conj	9038 Jun 30 07:40	14°♄35'40	-0°53'10
minimum elong	9037 Jul 16 23:54	1°♄30'09 0°20'55	minimum elong	9038 Jun 30 11:00	14°♄51'55	0°52'50
asc. node	9037 Jul 19 01:25	5°♄44'05	asc. node	9038 Jul 05 22:23	25°♄43'25	
evening rise	9037 Jul 24 16:43	17°♄25'48		9038 Jul 08 01:30	0°♄	
	9037 Jul 31 00:56	0°♄	evening rise	9038 Jul 08 19:41	1°♄31'03	
evening max el	9037 Aug 12 02:12	17°♄36'25 20°29'59	evening max el	9038 Jul 25 16:02	29°♄02'17	19°23'02
desc. node	9037 Aug 22 11:28	23°♄05'32		9038 Jul 26 16:39	0°♄	
retrograde	9037 Aug 23 05:03	23°♄06'55	retrograde	9038 Aug 04 02:10	3°♄42'06	
evening set	9037 Aug 25 06:02	22°♄56'34	evening set	9038 Aug 05 22:31	3°♄32'06	
inferior conj	9037 Sep 03 09:59	18°♄59'23 -3°31'36	desc. node	9038 Aug 09 08:37	2°♄26'00	
minimum elong	9037 Sep 03 00:55	19°♄12'30 3°28'43		9038 Aug 13 16:16	30°♄	
min. Earth dist.	9037 Sep 04 15:10	18°♄17'08 0.54788 AU	inferior conj	9038 Aug 14 14:09	29°♄24'36	-1°36'40
morning rise	9037 Sep 11 19:23	14°♄56'24	minimum elong	9038 Aug 14 09:49	29°♄31'40	1°35'08
direct	9037 Sep 15 23:38	14°♄18'59	min. Earth dist.	9038 Aug 17 03:42	27°♄44'39	0.55744 AU
morning max el	9037 Sep 29 07:29	20°♄45'34 23°30'53	morning rise	9038 Aug 22 18:25	24°♄48'47	
	9037 Oct 07 04:32	0°♄	direct	9038 Aug 27 18:06	23°♄52'21	
asc. node	9037 Oct 15 01:16	12°♄42'01		9038 Sep 09 18:36	0°♄	
morning set	9037 Oct 23 00:01	28°♄30'52	morning max el	9038 Sep 10 19:44	0°♄57'54	25°15'09
	9037 Oct 23 16:45	0°♄		9038 Sep 30 22:10	0°♄	
			asc. node	9038 Oct 01 22:12	1°♄55'32	
superior conj	9037 Oct 29 22:26	13°♄29'34 1°40'41	morning set	9038 Oct 07 11:37	13°♄17'57	
minimum elong	9037 Oct 29 22:07	13°♄27'53 1°40'51				
max. Earth dist.	9037 Nov 01 14:41	19°♄13'14 1.33267 AU	superior conj	9038 Oct 14 08:07	28°♄16'43	1°36'07
evening rise	9037 Nov 06 13:36	29°♄25'42	minimum elong	9038 Oct 14 06:47	28°♄09'25	1°36'09
	9037 Nov 06 20:30	0°♄		9038 Oct 15 02:55	0°♄	
desc. node	9037 Nov 18 09:59	21°♄05'16	max. Earth dist.	9038 Oct 15 18:37	1°♄25'59	1.32248 AU
	9037 Nov 24 01:10	0°♄	evening rise	9038 Oct 21 11:34	13°♄36'11	
evening max el	9037 Dec 10 17:37	20°♄53'54 27°22'33		9038 Oct 29 23:02	0°♄	
retrograde	9037 Dec 24 07:02	28°♄14'39	desc. node	9038 Nov 05 07:05	10°♄45'09	
evening set	9037 Dec 31 04:52	25°♄40'21		9038 Nov 19 10:09	0°♄	
min. Earth dist.	9038 Jan 04 00:34	22°♄12'17 0.64386 AU	evening max el	9038 Nov 23 03:41	3°♄50'32	27°28'03
inferior conj	9038 Jan 06 11:08	19°♄36'49 -1°31'18	retrograde	9038 Dec 06 22:52	11°♄07'36	
minimum elong	9038 Jan 06 13:57	19°♄29'18 1°29'52	evening set	9038 Dec 14 00:40	8°♄42'39	
asc. node	9038 Jan 11 00:43	15°♄20'59	min. Earth dist.	9038 Dec 17 17:18	5°♄43'00	0.62529 AU
morning rise	9038 Jan 13 00:44	14°♄31'208	inferior conj	9038 Dec 20 14:14	2°♄59'25	-2°42'06
direct	9038 Jan 15 13:06	13°♄39'49	minimum elong	9038 Dec 20 19:28	2°♄46'58	2°39'52
morning max el	9038 Jan 21 23:44	17°♄01'38 17°52'41		9038 Dec 23 23:20	30°♄	
	9038 Jan 31 09:54	0°♄	morning rise	9038 Dec 27 16:29	27°♄51'51	
morning set	9038 Feb 08 01:32	12°♄45'19	asc. node	9038 Dec 28 21:46	27°♄33'24	

direct	9038 Dec 29 23:11	27° ♄ 28'14		minimum elong	9039 Dec 03 10:17	15° ♄ 38'27	3°50'50
	9039 Jan 04 17:10	0° ♄		morning rise	9039 Dec 10 18:03	11° ♄ 05'56	
morning max el	9039 Jan 05 16:57	0° ♄ 54'50	17°48'08	direct	9039 Dec 12 22:21	10° ♄ 47'23	
morning set	9039 Jan 21 15:30	25° ♄ 34'14		asc. node	9039 Dec 15 18:50	11° ♄ 20'38	
	9039 Jan 24 03:40	0° ♄		morning max el	9039 Dec 20 07:01	14° ♄ 27'37	18°02'13
desc. node	9039 Feb 01 06:23	14° ♄ 01'32			9039 Dec 30 22:04	0° ♄	
				morning set	9040 Jan 04 22:27	9° ♄ 10'45	
superior conj	9039 Feb 02 04:02	15° ♄ 32'45	-0°06'42				
minimum elong	9039 Feb 02 03:23	15° ♄ 30'02	0°06'24	superior conj	9040 Jan 14 21:32	27° ♄ 22'15	0°31'30
behind sun begin	9039 Feb 01 19:05	14° ♄ 55'04		minimum elong	9040 Jan 14 23:57	27° ♄ 32'58	0°31'23
behind sun end	9039 Feb 02 11:42	16° ♄ 04'55			9040 Jan 16 09:22	0° ♄	
max. Earth dist.	9039 Feb 09 00:03	26° ♄ 47'21	1.43808 AU	desc. node	9040 Jan 19 03:19	4° ♄ 45'30	
	9039 Feb 11 00:07	0° ♄		max. Earth dist.	9040 Jan 22 12:13	10° ♄ 27'10	1.42060 AU
evening rise	9039 Feb 16 22:49	9° ♄ 20'21		evening rise	9040 Jan 28 00:42	19° ♄ 27'40	
	9039 Mar 02 16:57	0° ♄			9040 Feb 03 18:41	0° ♄	
evening max el	9039 Mar 19 11:27	21° ♄ 53'41	21°18'09		9040 Feb 25 04:47	0° ♄	
asc. node	9039 Mar 26 20:32	26° ♄ 54'05		evening max el	9040 Mar 01 05:02	5° ♄ 36'30	22°35'29
retrograde	9039 Mar 28 05:50	27° ♄ 03'48		retrograde	9040 Mar 11 02:24	11° ♄ 28'00	
evening set	9039 Apr 01 12:36	25° ♄ 21'37		asc. node	9040 Mar 12 17:41	11° ♄ 14'39	
inferior conj	9039 Apr 06 19:44	19° ♄ 07'00	2°55'09	evening set	9040 Mar 15 20:14	9° ♄ 30'51	
minimum elong	9039 Apr 06 17:49	19° ♄ 13'37	2°54'42	inferior conj	9040 Mar 21 04:33	3° ♄ 07'43	2°26'46
min. Earth dist.	9039 Apr 07 02:46	18° ♄ 42'33	0.68293 AU	minimum elong	9040 Mar 21 02:19	3° ♄ 15'27	2°26'10
morning rise	9039 Apr 11 22:50	12° ♄ 52'51		min. Earth dist.	9040 Mar 20 23:15	3° ♄ 26'08	0.68499 AU
direct	9039 Apr 17 03:12	10° ♄ 36'36			9040 Mar 23 12:21	30° ♄	
morning max el	9039 Apr 27 11:15	16° ♄ 45'22	23°14'07	morning rise	9040 Mar 26 08:16	26° ♄ 58'30	
desc. node	9039 Apr 30 06:26	19° ♄ 45'57		direct	9040 Mar 30 22:50	25° ♄ 03'26	
	9039 May 08 09:51	0° ♄			9040 Apr 08 15:58	0° ♄	
	9039 May 28 11:16	0° ♄		morning max el	9040 Apr 09 00:03	0° ♄ 20'01	21°46'40
morning set	9039 Jun 01 06:18	6° ♄ 15'09		desc. node	9040 Apr 16 03:21	8° ♄ 40'06	
max. Earth dist.	9039 Jun 05 10:15	13° ♄ 20'47	1.39485 AU		9040 May 01 04:39	0° ♄	
				morning set	9040 May 11 10:01	15° ♄ 50'56	
superior conj	9039 Jun 13 02:16	27° ♄ 04'58	-1°24'49	max. Earth dist.	9040 May 17 10:09	25° ♄ 37'43	1.41689 AU
minimum elong	9039 Jun 13 07:36	27° ♄ 29'36	1°24'19		9040 May 20 00:47	0° ♄	
	9039 Jun 14 15:55	0° ♄					
evening rise	9039 Jun 22 14:35	15° ♄ 10'15		superior conj	9040 May 25 01:53	8° ♄ 40'52	-1°52'03
asc. node	9039 Jun 22 19:25	15° ♄ 33'28		minimum elong	9040 May 25 07:51	9° ♄ 07'00	1°51'45
	9039 Jun 30 15:06	0° ♄		evening rise	9040 Jun 04 21:39	28° ♄ 13'40	
evening max el	9039 Jul 08 17:23	11° ♄ 11'55	18°37'03		9040 Jun 05 20:46	0° ♄	
retrograde	9039 Jul 16 16:39	15° ♄ 09'56		asc. node	9040 Jun 08 16:27	5° ♄ 09'11	
evening set	9039 Jul 18 17:57	14° ♄ 55'00		evening max el	9040 Jun 21 02:23	23° ♄ 56'07	18°11'26
inferior conj	9039 Jul 26 14:25	10° ♄ 29'07	0°11'34	retrograde	9040 Jun 28 01:55	27° ♄ 27'42	
minimum elong	9039 Jul 26 14:51	10° ♄ 28'17	0°11'11	evening set	9040 Jun 30 10:49	27° ♄ 03'55	
transit middle	9039 Jul 26 14:51	10° ♄ 28'17	0°11'11	inferior conj	9040 Jul 07 12:13	22° ♄ 17'16	1°35'31
transit begin	9039 Jul 26 12:14	10° ♄ 33'15		minimum elong	9040 Jul 07 14:55	22° ♄ 11'16	1°34'24
transit end	9039 Jul 26 17:27	10° ♄ 23'19		min. Earth dist.	9040 Jul 10 20:46	19° ♄ 19'53	0.59608 AU
desc. node	9039 Jul 27 05:44	9° ♄ 59'52		desc. node	9040 Jul 13 02:50	17° ♄ 34'24	
min. Earth dist.	9039 Jul 29 21:03	8° ♄ 00'42	0.57458 AU	morning rise	9040 Jul 14 16:00	16° ♄ 33'48	
morning rise	9039 Aug 03 08:13	5° ♄ 16'14		direct	9040 Jul 21 01:47	14° ♄ 38'53	
direct	9039 Aug 09 03:22	3° ♄ 52'08		morning max el	9040 Aug 04 10:15	22° ♄ 30'28	27°38'06
morning max el	9039 Aug 23 11:40	11° ♄ 25'50	26°42'06		9040 Aug 11 01:20	0° ♄	
	9039 Sep 06 21:29	0° ♄			9040 Aug 29 23:16	0° ♄	
asc. node	9039 Sep 18 19:08	21° ♄ 30'45		asc. node	9040 Sep 04 16:05	11° ♄ 21'18	
morning set	9039 Sep 21 21:40	27° ♄ 57'52		morning set	9040 Sep 05 04:28	12° ♄ 25'53	
	9039 Sep 22 20:32	0° ♄		max. Earth dist.	9040 Sep 11 13:16	26° ♄ 13'09	1.31603 AU
superior conj	9039 Sep 28 19:42	13° ♄ 06'35	1°25'56	superior conj	9040 Sep 12 07:20	27° ♄ 53'20	1°10'32
minimum elong	9039 Sep 28 17:42	12° ♄ 55'30	1°25'45	minimum elong	9040 Sep 12 05:06	27° ♄ 40'52	1°10'10
max. Earth dist.	9039 Sep 29 03:17	13° ♄ 48'43	1.31694 AU		9040 Sep 13 06:10	0° ♄	
evening rise	9039 Oct 05 16:10	28° ♄ 03'40		evening rise	9040 Sep 19 01:05	12° ♄ 41'29	
	9039 Oct 06 14:20	0° ♄			9040 Sep 27 17:11	0° ♄	
desc. node	9039 Oct 23 04:13	29° ♄ 49'13		desc. node	9040 Oct 09 01:21	18° ♄ 03'31	
	9039 Oct 23 07:06	0° ♄		evening max el	9040 Oct 17 06:39	27° ♄ 32'48	25°59'21
evening max el	9039 Nov 05 08:51	16° ♄ 06'22	27°00'24		9040 Oct 20 02:26	0° ♄	
retrograde	9039 Nov 19 06:43	23° ♄ 16'32		retrograde	9040 Oct 31 04:40	4° ♄ 35'51	
evening set	9039 Nov 26 04:58	21° ♄ 11'28		evening set	9040 Nov 06 13:06	3° ♄ 00'17	
min. Earth dist.	9039 Nov 29 23:28	18° ♄ 31'13	0.60476 AU	min. Earth dist.	9040 Nov 10 19:27	0° ♄ 25'11	0.58396 AU
inferior conj	9039 Dec 03 03:05	15° ♄ 53'30	-3°53'18		9040 Nov 11 09:43	30° ♄	

inferior conj	9040 Nov 13 22:16	28° \mathbb{M} 09'44	-4°55'52	inferior conj	9041 Oct 25 21:08	9° \mathbb{M} 38'26	-5°34'30
minimum elong	9040 Nov 14 05:23	27° \mathbb{M} 56'48	4°54'11	minimum elong	9041 Oct 26 00:05	9° \mathbb{M} 33'45	5°34'09
morning rise	9040 Nov 21 24:00	23° \mathbb{M} 44'37		morning rise	9041 Nov 03 05:30	5° \mathbb{M} 35'31	
direct	9040 Nov 24 06:24	23° \mathbb{M} 27'51		direct	9041 Nov 05 19:27	5° \mathbb{M} 17'29	
asc. node	9040 Dec 01 15:52	26° \mathbb{M} 39'07		morning max el	9041 Nov 15 11:04	9° \mathbb{M} 51'55	19°33'06
morning max el	9040 Dec 02 14:17	27° \mathbb{M} 30'23	18°36'36	asc. node	9041 Nov 18 12:51	13° \mathbb{M} 13'54	
	9040 Dec 04 21:14	0° \mathbb{X}			9041 Nov 28 20:40	0° \mathbb{X}	
morning set	9040 Dec 18 17:15	23° \mathbb{X} 20'01		morning set	9041 Dec 02 19:58	7° \mathbb{X} 49'48	
	9040 Dec 22 03:44	0° \mathbb{Z}					
superior conj	9040 Dec 27 12:13	10° \mathbb{Z} 12'08	1°01'20	superior conj	9041 Dec 10 18:57	23° \mathbb{X} 47'14	1°22'20
minimum elong	9040 Dec 27 15:31	10° \mathbb{Z} 27'34	1°01'08	minimum elong	9041 Dec 10 21:45	24° \mathbb{X} 01'01	1°22'17
max. Earth dist.	9041 Jan 03 20:16	23° \mathbb{Z} 27'41	1.39978 AU		9041 Dec 13 23:57	0° \mathbb{Z}	
desc. node	9041 Jan 05 00:17	25° \mathbb{Z} 29'10		max. Earth dist.	9041 Dec 17 02:11	5° \mathbb{Z} 48'01	1.37797 AU
evening rise	9041 Jan 07 23:23	0° \approx 31'20		evening rise	9041 Dec 20 19:29	12° \mathbb{Z} 30'56	
	9041 Jan 07 15:54	0° \approx		desc. node	9041 Dec 22 21:15	16° \mathbb{Z} 08'12	
	9041 Jan 27 04:07	0° \mathbb{X}			9041 Dec 31 07:27	0° \approx	
evening max el	9041 Feb 11 19:33	19° \mathbb{X} 22'31	23°55'43		9042 Jan 22 07:51	0° \mathbb{X}	
retrograde	9041 Feb 22 19:47	25° \mathbb{X} 51'09		evening max el	9042 Jan 25 08:43	3° \mathbb{X} 10'19	25°12'21
asc. node	9041 Feb 27 14:49	24° \mathbb{X} 01'59		retrograde	9042 Feb 06 09:02	10° \mathbb{X} 07'39	
evening set	9041 Feb 28 01:43	23° \mathbb{X} 39'48		evening set	9042 Feb 12 03:30	7° \mathbb{X} 44'04	
min. Earth dist.	9041 Mar 04 19:45	18° \mathbb{X} 09'49	0.68289 AU	asc. node	9042 Feb 14 11:57	5° \mathbb{X} 22'36	
inferior conj	9041 Mar 05 12:49	17° \mathbb{X} 11'46	1°49'24	min. Earth dist.	9042 Feb 16 14:01	2° \mathbb{X} 48'49	0.67673 AU
minimum elong	9041 Mar 05 10:44	17° \mathbb{X} 18'53	1°48'46	inferior conj	9042 Feb 17 18:42	1° \mathbb{X} 15'29	1°03'27
morning rise	9041 Mar 10 19:45	11° \mathbb{X} 08'50		minimum elong	9042 Feb 17 17:14	1° \mathbb{X} 20'15	1°03'02
direct	9041 Mar 14 20:55	9° \mathbb{X} 36'06			9042 Feb 18 18:06	30° \mathbb{R} \approx	
morning max el	9041 Mar 22 19:28	14° \mathbb{X} 06'34	20°28'31	morning rise	9042 Feb 23 07:18	25° \approx 20'25	
desc. node	9041 Apr 03 00:15	28° \mathbb{X} 10'09		direct	9042 Feb 26 20:03	24° \approx 08'47	
	9041 Apr 04 07:09	0° \mathbb{Y}		morning max el	9042 Mar 05 22:52	28° \approx 04'54	19°24'02
morning set	9041 Apr 20 14:17	24° \mathbb{Y} 25'15			9042 Mar 07 18:16	0° \mathbb{X}	
	9041 Apr 24 04:08	0° \mathbb{B}		greatest brilliancy	9042 Mar 18 18:20	14° \mathbb{X} 56'25	-0.7m
max. Earth dist.	9041 Apr 29 17:30	8° \mathbb{B} 50'02	1.43562 AU	desc. node	9042 Mar 20 21:07	18° \mathbb{X} 06'14	
					9042 Mar 28 16:23	0° \mathbb{Y}	
superior conj	9041 May 06 02:10	19° \mathbb{B} 14'09	-2°09'23	morning set	9042 Mar 30 13:10	2° \mathbb{Y} 52'23	
minimum elong	9041 May 06 05:32	19° \mathbb{B} 28'07	2°09'29	max. Earth dist.	9042 Apr 12 07:21	22° \mathbb{Y} 45'10	1.44880 AU
	9041 May 12 11:04	0° \mathbb{I}					
evening rise	9041 May 18 12:24	10° \mathbb{I} 31'06		superior conj	9042 Apr 16 02:08	28° \mathbb{Y} 45'14	-2°10'30
asc. node	9041 May 26 13:31	24° \mathbb{I} 25'06		minimum elong	9042 Apr 15 22:56	28° \mathbb{Y} 32'32	2°10'32
	9041 May 30 01:47	0° \mathbb{E}			9042 Apr 16 20:51	0° \mathbb{B}	
evening max el	9041 Jun 04 15:12	7° \mathbb{E} 04'58	18°05'16	evening rise	9042 Apr 30 06:11	21° \mathbb{B} 52'59	
retrograde	9041 Jun 11 02:34	10° \mathbb{E} 25'57			9042 May 05 03:07	0° \mathbb{I}	
evening set	9041 Jun 13 19:03	9° \mathbb{E} 50'36		asc. node	9042 May 13 10:36	13° \mathbb{I} 14'27	
inferior conj	9041 Jun 20 04:43	4° \mathbb{E} 44'11	2°32'19	evening max el	9042 May 19 04:33	20° \mathbb{I} 30'03	18°17'51
minimum elong	9041 Jun 20 07:33	4° \mathbb{E} 36'58	2°31'23	retrograde	9042 May 25 13:56	23° \mathbb{I} 54'49	
min. Earth dist.	9041 Jun 23 04:51	1° \mathbb{E} 41'28	0.61863 AU	evening set	9042 May 28 13:47	23° \mathbb{I} 06'11	
	9041 Jun 25 01:07	30° \mathbb{R} \mathbb{I}		inferior conj	9042 Jun 03 11:47	17° \mathbb{I} 41'53	3°05'35
morning rise	9041 Jun 26 17:58	28° \mathbb{I} 40'18		minimum elong	9042 Jun 03 13:39	17° \mathbb{I} 36'35	3°05'04
desc. node	9041 Jun 29 23:54	26° \mathbb{I} 55'44		min. Earth dist.	9042 Jun 05 22:25	14° \mathbb{I} 55'09	0.63956 AU
direct	9041 Jul 03 11:01	26° \mathbb{I} 18'21		morning rise	9042 Jun 09 12:17	11° \mathbb{I} 27'06	
	9041 Jul 12 16:30	0° \mathbb{E}		direct	9042 Jun 16 05:18	8° \mathbb{I} 47'11	
morning max el	9041 Jul 17 15:18	4° \mathbb{E} 19'33	27°56'16	desc. node	9042 Jun 16 20:55	8° \mathbb{I} 48'35	
	9041 Aug 05 18:44	0° \mathbb{Q}		morning max el	9042 Jun 30 00:35	16° \mathbb{I} 48'49	27°37'06
morning set	9041 Aug 20 05:59	26° \mathbb{Q} 35'38			9042 Jul 10 22:42	0° \mathbb{E}	
	9041 Aug 21 21:30	0° \mathbb{P}			9042 Jul 29 13:53	0° \mathbb{Q}	
asc. node	9041 Aug 22 13:00	1° \mathbb{P} 21'15		morning set	9042 Aug 03 23:52	10° \mathbb{Q} 21'02	
max. Earth dist.	9041 Aug 25 20:33	8° \mathbb{P} 27'01	1.31986 AU	max. Earth dist.	9042 Aug 08 21:16	20° \mathbb{Q} 19'58	1.32852 AU
				asc. node	9042 Aug 09 09:56	21° \mathbb{Q} 26'31	
superior conj	9041 Aug 27 17:10	12° \mathbb{P} 30'33	0°50'16				
minimum elong	9041 Aug 27 15:10	12° \mathbb{P} 19'34	0°49'48	superior conj	9042 Aug 11 23:18	26° \mathbb{Q} 53'02	0°25'32
evening rise	9041 Sep 03 12:14	27° \mathbb{P} 22'32		minimum elong	9042 Aug 11 22:05	26° \mathbb{Q} 46'34	0°25'07
	9041 Sep 04 17:48	0° \mathbb{L}			9042 Aug 13 10:00	0° \mathbb{P}	
	9041 Sep 21 19:06	0° \mathbb{M}		evening rise	9042 Aug 18 23:46	12° \mathbb{P} 01'34	
desc. node	9041 Sep 25 22:30	5° \mathbb{M} 07'35			9042 Aug 28 01:59	0° \mathbb{L}	
evening max el	9041 Sep 28 20:31	8° \mathbb{M} 10'12	24°31'43	evening max el	9042 Sep 10 07:35	18° \mathbb{L} 21'39	22°52'13
retrograde	9041 Oct 12 15:04	15° \mathbb{M} 05'16		desc. node	9042 Sep 12 19:38	20° \mathbb{L} 35'10	
evening set	9041 Oct 17 20:49	14° \mathbb{M} 04'19		retrograde	9042 Sep 23 13:24	24° \mathbb{L} 58'16	
min. Earth dist.	9041 Oct 23 07:29	11° \mathbb{M} 15'49	0.56529 AU	evening set	9042 Sep 27 07:02	24° \mathbb{L} 27'43	
				min. Earth dist.	9042 Oct 04 15:54	21° \mathbb{L} 07'47	0.55186 AU

inferior conj	9042 Oct 06 00:58	20° Ω 20'20	-5°29'23	evening max el	9043 Aug 23 01:07	28° Π 43'47	21°17'34
minimum elong	9042 Oct 05 20:15	20° Ω 27'06	5°28'51		9043 Aug 24 09:49	0° Ω	
morning rise	9042 Oct 14 11:27	16° Ω 31'28		desc. node	9043 Aug 30 16:46	3° Ω 54'54	
direct	9042 Oct 17 13:42	16° Ω 09'13		retrograde	9043 Sep 04 02:24	4° Ω 42'18	
morning max el	9042 Oct 28 18:56	21° Ω 25'01	20°52'01	evening set	9043 Sep 06 13:10	4° Ω 28'26	
	9042 Nov 04 20:35	0° Π		inferior conj	9043 Sep 15 17:57	0° Ω 31'39	-4°28'23
asc. node	9042 Nov 05 09:49	0° Π 49'35		minimum elong	9043 Sep 15 08:21	0° Ω 45'08	4°25'56
morning set	9042 Nov 17 03:46	22° Π 32'03		min. Earth dist.	9043 Sep 16 00:23	0° Ω 22'37	0.54659 AU
	9042 Nov 20 17:45	0° \mathcal{A}			9043 Sep 16 16:30	30° \mathcal{R} Π	
				morning rise	9043 Sep 24 04:11	26° Π 39'27	
superior conj	9042 Nov 24 13:18	7° \mathcal{A} 54'54	1°35'07	direct	9043 Sep 27 22:15	26° Π 09'03	
minimum elong	9042 Nov 24 14:59	8° \mathcal{A} 03'29	1°35'15		9043 Oct 08 00:28	0° Ω	
max. Earth dist.	9042 Nov 29 10:41	17° \mathcal{A} 43'42	1.35763 AU	morning max el	9043 Oct 10 14:31	2° Ω 11'01	22°29'46
evening rise	9042 Dec 03 10:18	25° \mathcal{A} 19'53		asc. node	9043 Oct 23 06:45	19° Ω 12'06	
	9042 Dec 05 23:30	0° \mathcal{B}			9043 Oct 29 01:00	0° Π	
desc. node	9042 Dec 09 18:16	6° \mathcal{B} 38'33		morning set	9043 Nov 01 14:28	7° Π 20'32	
	9042 Dec 24 19:54	0° \approx					
evening max el	9043 Jan 07 21:50	16° \approx 56'28	26°18'15	superior conj	9043 Nov 08 15:43	22° Π 24'34	1°40'33
retrograde	9043 Jan 20 17:18	24° \approx 11'22		minimum elong	9043 Nov 08 16:07	22° Π 26'38	1°40'45
evening set	9043 Jan 26 23:51	21° \approx 39'10		max. Earth dist.	9043 Nov 12 02:21	29° Π 37'40	1.34059 AU
min. Earth dist.	9043 Jan 31 03:56	17° \approx 18'25	0.66674 AU		9043 Nov 12 06:41	0° \mathcal{A}	
asc. node	9043 Feb 01 09:03	15° \approx 49'36		evening rise	9043 Nov 16 16:02	8° \mathcal{A} 48'24	
inferior conj	9043 Feb 01 20:13	15° \approx 15'21	0°09'15	desc. node	9043 Nov 26 15:19	26° \mathcal{A} 55'12	
minimum elong	9043 Feb 01 19:58	15° \approx 16'07	0°09'21		9043 Nov 28 11:49	0° \mathcal{B}	
transit middle	9043 Feb 01 19:58	15° \approx 16'07	0°09'21		9043 Dec 20 21:09	0° \approx	
transit begin	9043 Feb 01 17:37	15° \approx 23'18		evening max el	9043 Dec 21 11:08	0° \approx 33'55	27°06'07
transit end	9043 Feb 01 22:18	15° \approx 08'57		retrograde	9044 Jan 03 19:49	7° \approx 55'06	
morning rise	9043 Feb 07 16:52	9° \approx 29'58		evening set	9044 Jan 10 12:47	5° \approx 19'47	
direct	9043 Feb 10 18:38	8° \approx 36'33		min. Earth dist.	9044 Jan 14 11:19	1° \approx 32'48	0.65313 AU
morning max el	9043 Feb 17 09:23	12° \approx 10'52	18°35'17		9044 Jan 15 20:27	30° \mathcal{R} \mathcal{B}	
	9043 Mar 02 10:01	0° \mathcal{H}		inferior conj	9044 Jan 16 15:13	29° \mathcal{B} 06'52	-0°52'36
desc. node	9043 Mar 07 17:59	8° \mathcal{H} 21'14		minimum elong	9044 Jan 16 16:45	29° \mathcal{B} 02'31	0°51'43
morning set	9043 Mar 10 06:08	12° \mathcal{H} 18'21		asc. node	9044 Jan 19 06:08	26° \mathcal{B} 18'28	
	9043 Mar 21 12:25	0° Υ		morning rise	9044 Jan 22 22:04	23° \mathcal{B} 33'34	
				direct	9044 Jan 25 14:42	22° \mathcal{B} 54'40	
superior conj	9043 Mar 26 09:27	7° Υ 37'54	-1°51'23	morning max el	9044 Feb 01 00:47	26° \mathcal{B} 18'22	18°03'16
minimum elong	9043 Mar 26 00:25	7° Υ 02'34	1°50'42		9044 Feb 04 05:59	0° \approx	
max. Earth dist.	9043 Mar 26 01:12	7° Υ 05'37	1.45516 AU	morning set	9044 Feb 19 04:28	23° \approx 13'12	
	9043 Apr 09 14:08	0° \mathcal{B}		desc. node	9044 Feb 22 14:52	28° \approx 50'08	
evening rise	9043 Apr 11 00:10	2° \mathcal{B} 15'23			9044 Feb 23 08:02	0° \mathcal{H}	
greatest brilliancy	9043 Apr 19 10:17	15° \mathcal{B} 38'47	-0.8m				
	9043 Apr 29 03:39	0° Π		superior conj	9044 Mar 04 17:38	16° \mathcal{H} 40'37	-1°15'11
asc. node	9043 Apr 30 07:41	1° Π 27'55		minimum elong	9044 Mar 04 09:15	16° \mathcal{H} 07'31	1°14'06
evening max el	9043 May 02 15:41	4° Π 04'03	18°48'24	max. Earth dist.	9044 Mar 07 20:47	21° \mathcal{H} 36'29	1.45416 AU
retrograde	9043 May 09 07:55	7° Π 45'20			9044 Mar 13 05:44	0° Υ	
evening set	9043 May 12 15:23	6° Π 42'20		evening rise	9044 Mar 20 21:25	11° Υ 51'41	
inferior conj	9043 May 18 05:29	1° Π 01'50	3°20'04		9044 Apr 01 17:39	0° \mathcal{B}	
minimum elong	9043 May 18 06:03	1° Π 00'04	3°19'49	greatest brilliancy	9044 Apr 03 05:00	2° \mathcal{B} 12'09	-0.7m
	9043 May 19 01:16	30° \mathcal{R} \mathcal{B}		evening max el	9044 Apr 14 22:38	17° \mathcal{B} 42'43	19°35'36
min. Earth dist.	9043 May 20 00:57	28° \mathcal{B} 46'42	0.65725 AU	asc. node	9044 Apr 16 04:48	18° \mathcal{B} 54'44	
morning rise	9043 May 23 20:03	24° \mathcal{B} 43'02		retrograde	9044 Apr 22 05:22	21° \mathcal{B} 51'48	
direct	9043 May 30 07:13	21° \mathcal{B} 56'54		evening set	9044 Apr 25 21:10	20° \mathcal{B} 33'39	
desc. node	9043 Jun 03 17:55	23° \mathcal{B} 02'17		inferior conj	9044 May 01 06:33	14° \mathcal{B} 38'26	3°19'40
morning max el	9043 Jun 12 11:09	29° \mathcal{B} 45'41	26°46'18	minimum elong	9044 May 01 05:56	14° \mathcal{B} 40'30	3°19'26
	9043 Jun 12 16:46	0° Π		min. Earth dist.	9044 May 02 11:04	13° \mathcal{B} 04'05	0.67083 AU
	9043 Jul 04 20:42	0° \mathcal{E}		morning rise	9044 May 06 14:20	8° \mathcal{B} 19'51	
morning set	9043 Jul 18 07:01	23° \mathcal{E} 32'52		direct	9044 May 12 15:21	5° \mathcal{B} 38'52	
	9043 Jul 21 14:48	0° Ω		desc. node	9044 May 20 14:53	9° \mathcal{B} 07'39	
max. Earth dist.	9043 Jul 22 11:53	1° Ω 44'50	1.34209 AU	morning max el	9044 May 24 20:59	12° \mathcal{B} 58'43	25°32'31
					9044 Jun 07 14:34	0° Π	
superior conj	9043 Jul 26 23:28	10° Ω 53'58	-0°03'06		9044 Jun 26 14:34	0° \mathcal{E}	
minimum elong	9043 Jul 26 23:39	10° Ω 54'55	0°03'17	morning set	9044 Jun 29 23:24	6° \mathcal{E} 00'13	
behind sun begin	9043 Jul 26 18:00	10° Ω 25'31		max. Earth dist.	9044 Jul 03 15:49	12° \mathcal{E} 49'41	1.36028 AU
behind sun end	9043 Jul 27 05:18	11° Ω 24'21					
asc. node	9043 Jul 27 06:54	11° Ω 32'42		superior conj	9044 Jul 09 14:58	24° \mathcal{E} 26'12	-0°34'30
evening rise	9043 Aug 03 09:42	26° Ω 32'16		minimum elong	9044 Jul 09 17:04	24° \mathcal{E} 36'40	0°34'20
	9043 Aug 05 01:43	0° Π			9044 Jul 12 09:07	0° Ω	

asc. node	9044 Jul 13 03:51	1°♊35'30	evening rise	9045 Jul 01 15:52	24°♊43'58	
evening rise	9044 Jul 17 15:56	10°♊48'38		9045 Jul 04 08:34	0°♊	
	9044 Jul 27 21:27	0°♊	evening max el	9045 Jul 18 02:28	21°♊29'09	19°00'57
evening max el	9044 Aug 04 07:19	9°♊43'48 19°59'02	retrograde	9045 Jul 26 20:25	25°♊49'34	
retrograde	9044 Aug 14 16:26	14°♊51'45	evening set	9045 Jul 28 18:23	25°♊37'54	
evening set	9044 Aug 16 13:53	14°♊42'16	desc. node	9045 Aug 03 11:03	23°♊08'05	
desc. node	9044 Aug 16 13:55	14°♊42'15	inferior conj	9045 Aug 06 02:08	21°♊22'51	-0°48'29
inferior conj	9044 Aug 25 14:03	10°♊42'29 -2°43'53	minimum elong	9045 Aug 06 00:04	21°♊26'27	0°47'51
minimum elong	9044 Aug 25 06:39	10°♊53'39 2°41'19	min. Earth dist.	9045 Aug 09 00:49	19°♊20'51	0.56394 AU
min. Earth dist.	9044 Aug 27 10:46	9°♊35'06 0.55089 AU	morning rise	9045 Aug 14 02:37	16°♊31'28	
morning rise	9044 Sep 02 21:54	6°♊27'08	direct	9045 Aug 19 10:54	15°♊24'19	
direct	9044 Sep 07 10:31	5°♊42'28	morning max el	9045 Sep 02 16:13	22°♊42'18	25°55'19
morning max el	9044 Sep 21 03:04	12°♊26'43 24°16'11		9045 Sep 09 04:23	0°♊	
	9044 Oct 04 12:54	0°♊	asc. node	9045 Sep 26 00:37	27°♊34'04	
asc. node	9044 Oct 09 03:41	8°♊09'56		9045 Sep 27 05:44	0°♊	
morning set	9044 Oct 16 02:14	22°♊09'36	morning set	9045 Sep 30 13:25	6°♊54'53	
	9044 Oct 19 17:13	0°♊				
superior conj	9044 Oct 22 23:24	7°♊07'20 1°39'28	superior conj	9045 Oct 07 10:09	21°♊56'45	1°32'28
minimum elong	9044 Oct 22 22:38	7°♊03'06 1°39'35	minimum elong	9045 Oct 07 08:30	21°♊47'36	1°32'25
max. Earth dist.	9044 Oct 25 02:27	11°♊43'47 1.32781 AU	max. Earth dist.	9045 Oct 08 09:06	24°♊03'33	1.31958 AU
evening rise	9044 Oct 30 08:59	22°♊46'15		9045 Oct 11 02:14	0°♊	
	9044 Nov 03 00:51	0°♊	evening rise	9045 Oct 14 10:07	7°♊05'24	
desc. node	9044 Nov 12 12:25	16°♊51'05		9045 Oct 26 12:31	0°♊	
	9044 Nov 21 05:36	0°♊	desc. node	9045 Oct 30 09:33	6°♊17'44	
evening max el	9044 Dec 02 23:15	13°♊50'06 27°28'49	evening max el	9045 Nov 15 07:42	26°♊31'30	27°20'26
retrograde	9044 Dec 16 15:36	21°♊09'12		9045 Nov 19 11:21	0°♊	
evening set	9044 Dec 23 15:44	18°♊38'06	retrograde	9045 Nov 29 03:51	3°♊44'56	
min. Earth dist.	9044 Dec 27 09:56	15°♊22'37 0.63628 AU	evening set	9045 Dec 06 05:27	1°♊27'07	
inferior conj	9044 Dec 30 01:01	12°♊42'32 -2°00'53		9045 Dec 08 06:10	30°♊	
minimum elong	9044 Dec 30 04:51	12°♊32'47 1°59'05	min. Earth dist.	9045 Dec 09 22:06	28°♊37'17	0.61683 AU
asc. node	9045 Jan 05 03:12	7°♊42'39	inferior conj	9045 Dec 12 22:31	25°♊54'30	-3°12'37
morning rise	9045 Jan 05 19:51	7°♊24'24	minimum elong	9045 Dec 13 04:42	25°♊40'33	3°10'09
direct	9045 Jan 08 05:31	6°♊56'10	morning rise	9045 Dec 20 06:15	20°♊55'00	
morning max el	9045 Jan 14 18:13	10°♊18'59 17°48'29	direct	9045 Dec 22 11:37	20°♊33'49	
	9045 Jan 28 01:45	0°♊	asc. node	9045 Dec 23 00:15	20°♊35'02	
morning set	9045 Jan 31 05:50	5°♊26'40	morning max el	9045 Dec 29 10:30	24°♊04'44	17°51'43
desc. node	9045 Feb 08 11:47	19°♊27'52		9046 Jan 03 05:04	0°♊	
superior conj	9045 Feb 12 19:45	26°♊37'34 -0°31'28	morning set	9046 Jan 14 03:44	18°♊38'10	
minimum elong	9045 Feb 12 16:20	26°♊23'36 0°30'47		9046 Jan 20 11:53	0°♊	
	9045 Feb 14 21:31	0°♊	superior conj	9046 Jan 24 23:09	7°♊47'21	0°10'26
max. Earth dist.	9045 Feb 18 15:40	6°♊01'40 1.44590 AU	minimum elong	9046 Jan 25 00:07	7°♊51'27	0°10'31
evening rise	9045 Feb 28 08:53	21°♊12'08	behind sun begin	9046 Jan 24 17:38	7°♊23'39	
	9045 Mar 06 03:37	0°♊	behind sun end	9046 Jan 25 06:35	8°♊19'12	
evening max el	9045 Mar 27 16:51	0°♊	desc. node	9046 Jan 26 08:44	10°♊10'45	
asc. node	9045 Mar 29 00:11	1°♊23'04 20°37'20	max. Earth dist.	9046 Feb 01 06:59	20°♊03'09	1.43129 AU
retrograde	9045 Apr 06 03:57	6°♊08'53		9046 Feb 07 12:07	0°♊	
evening set	9045 Apr 10 05:02	4°♊35'19	evening rise	9046 Feb 08 01:48	0°♊53'40	
	9045 Apr 14 09:02	30°♊		9046 Feb 27 17:10	0°♊	
inferior conj	9045 Apr 15 12:20	28°♊27'07 3°07'07	evening max el	9046 Mar 11 20:16	15°♊04'20	21°50'13
minimum elong	9045 Apr 15 10:48	28°♊32'24 3°06'46	asc. node	9046 Mar 20 23:04	20°♊32'01	
min. Earth dist.	9045 Apr 16 02:50	27°♊37'17 0.67987 AU	retrograde	9046 Mar 21 01:46	20°♊32'05	
morning rise	9045 Apr 20 16:21	22°♊11'05	evening set	9046 Mar 25 13:13	18°♊43'11	
direct	9045 Apr 26 04:38	19°♊44'13	inferior conj	9046 Mar 30 20:37	12°♊24'27	2°44'12
desc. node	9045 May 07 11:50	26°♊35'30	minimum elong	9046 Mar 30 18:32	12°♊31'44	2°43'41
morning max el	9045 May 07 06:10	26°♊21'04 24°05'51	min. Earth dist.	9046 Mar 30 22:13	12°♊18'52	0.68439 AU
	9045 May 10 14:51	0°♊	morning rise	9046 Apr 04 23:41	6°♊12'26	
	9045 Jun 01 04:19	0°♊	direct	9046 Apr 09 22:07	4°♊05'08	
morning set	9045 Jun 11 20:01	17°♊30'11	morning max el	9046 Apr 19 16:50	9°♊51'14	22°36'09
max. Earth dist.	9045 Jun 15 13:09	24°♊01'22 1.38182 AU	desc. node	9046 Apr 24 08:46	15°♊03'11	
	9045 Jun 18 20:13	0°♊	morning set	9046 May 05 12:56	0°♊	
superior conj	9045 Jun 22 18:23	7°♊21'19 -1°06'51	max. Earth dist.	9046 May 23 15:33	27°♊49'31	
minimum elong	9045 Jun 22 22:38	7°♊41'34 1°06'25		9046 May 24 23:14	0°♊	
asc. node	9045 Jun 30 00:52	21°♊31'37	superior conj	9046 May 28 10:33	5°♊49'23	1.40447 AU
			minimum elong	9046 Jun 05 05:27	19°♊28'39	-1°37'12
				9046 Jun 05 11:19	19°♊55'11	1°36'45

	9046 Jun 10 22:29	0°☿		superior conj	9047 May 17 19:34	0°♊38'44	-2°00'59
evening rise	9046 Jun 15 06:15	8°☿09'10		minimum elong	9047 May 18 00:57	1°♊01'45	2°00'52
asc. node	9046 Jun 16 21:54	11°☿16'03		evening rise	9047 May 29 07:01	20°♊54'41	
	9046 Jun 27 23:36	0°♊			9047 Jun 03 08:52	0°☿	
evening max el	9046 Jul 01 07:26	3°♊53'46	18°23'40	asc. node	9047 Jun 03 18:58	0°☿44'18	
retrograde	9046 Jul 08 19:21	7°♊39'03		evening max el	9047 Jun 14 18:29	16°☿49'32	18°06'27
evening set	9046 Jul 10 23:39	7°♊20'51		retrograde	9047 Jun 21 11:40	20°☿14'56	
inferior conj	9046 Jul 18 11:42	2°♊45'54	0°50'34	evening set	9047 Jun 23 23:42	19°☿46'39	
minimum elong	9046 Jul 18 13:25	2°♊42'24	0°49'43	inferior conj	9047 Jun 30 17:58	14°☿51'37	2°02'45
desc. node	9046 Jul 21 08:10	0°♊26'43		minimum elong	9047 Jun 30 20:55	14°☿44'39	2°01'39
	9046 Jul 21 21:52	30°♋☿		min. Earth dist.	9047 Jul 03 23:58	11°☿48'43	0.60570 AU
min. Earth dist.	9046 Jul 21 20:37	0°♊02'25	0.58331 AU	morning rise	9047 Jul 07 15:24	8°☿57'53	
morning rise	9046 Jul 25 23:44	27°☿18'34		desc. node	9047 Jul 08 05:14	8°☿36'39	
direct	9046 Aug 01 01:37	25°☿41'38		direct	9047 Jul 14 05:12	6°☿50'20	
	9046 Aug 11 13:37	0°♊		morning max el	9047 Jul 28 12:39	14°☿48'00	27°50'32
morning max el	9046 Aug 15 11:01	3°♊24'16	27°10'30		9047 Aug 09 19:46	0°♊	
	9046 Sep 03 19:01	0°♎			9047 Aug 27 06:07	0°♎	
asc. node	9046 Sep 12 21:34	17°♎16'19		morning set	9047 Aug 30 03:05	5°♎50'44	
morning set	9046 Sep 14 22:18	21°♎30'14		asc. node	9047 Aug 30 18:30	7°♎11'09	
	9046 Sep 18 20:41	0°♌		max. Earth dist.	9047 Sep 05 03:52	18°♎47'45	1.31701 AU
superior conj	9046 Sep 21 21:57	6°♌45'32	1°20'02	superior conj	9047 Sep 06 09:01	21°♎28'27	1°02'32
minimum elong	9046 Sep 21 19:47	6°♌33'33	1°19'45	minimum elong	9047 Sep 06 06:48	21°♎16'16	1°02'05
max. Earth dist.	9046 Sep 21 18:48	6°♌28'01	1.31593 AU		9047 Sep 10 05:34	0°♌	
evening rise	9046 Sep 28 16:46	21°♌37'25		evening rise	9047 Sep 13 02:49	6°♌16'30	
	9046 Oct 02 18:04	0°♍			9047 Sep 25 10:21	0°♍	
desc. node	9046 Oct 17 06:41	25°♍02'35		desc. node	9047 Oct 04 03:48	12°♍49'23	
	9046 Oct 20 21:43	0°♎		evening max el	9047 Oct 10 03:42	19°♍29'01	25°24'38
evening max el	9046 Oct 28 09:40	8°♎25'45	26°38'13	retrograde	9047 Oct 24 01:26	26°♍29'59	
retrograde	9046 Nov 11 07:44	15°♎33'21		evening set	9047 Oct 29 23:48	25°♍08'59	
evening set	9046 Nov 18 01:46	13°♎39'23		min. Earth dist.	9047 Nov 03 15:48	22°♍30'20	0.57549 AU
min. Earth dist.	9046 Nov 21 23:29	11°♎03'42	0.59585 AU	inferior conj	9047 Nov 06 14:48	20°♍29'08	-5°16'22
inferior conj	9046 Nov 25 04:11	8°♎33'04	-4°21'38	minimum elong	9047 Nov 06 20:44	20°♍18'58	5°15'17
minimum elong	9046 Nov 25 11:43	8°♎18'13	4°19'21	morning rise	9047 Nov 14 19:59	16°♍13'54	
morning rise	9046 Dec 03 00:10	3°♎55'16		direct	9047 Nov 17 04:39	15°♍57'07	
direct	9046 Dec 05 04:45	3°♎37'53		morning max el	9047 Nov 26 01:25	20°♍12'26	18°57'55
asc. node	9046 Dec 09 21:16	5°♎02'06		asc. node	9047 Nov 26 18:17	20°♍54'27	
morning max el	9046 Dec 12 22:10	7°♎26'08	18°14'16		9047 Dec 03 12:12	0°♎	
	9046 Dec 27 08:28	0°♏		morning set	9047 Dec 12 14:46	16°♎48'34	
morning set	9046 Dec 28 16:15	2°♏29'55			9047 Dec 19 07:49	0°♏	
superior conj	9047 Jan 07 02:18	20°♏04'33	0°45'14	superior conj	9047 Dec 21 00:22	3°♏15'06	1°11'17
minimum elong	9047 Jan 07 05:19	20°♏18'14	0°45'02	minimum elong	9047 Dec 21 03:35	3°♏30'27	1°11'08
	9047 Jan 12 16:53	0°♐		max. Earth dist.	9047 Dec 27 23:15	16°♏06'30	1.39042 AU
desc. node	9047 Jan 13 05:41	0°♐55'09		desc. node	9047 Dec 31 02:39	21°♏37'15	
max. Earth dist.	9047 Jan 14 17:05	3°♐26'12	1.41200 AU	evening rise	9047 Dec 31 19:56	22°♏51'36	
evening rise	9047 Jan 19 11:59	11°♐23'36			9048 Jan 05 02:12	0°♐	
	9047 Jan 31 11:18	0°♑			9048 Jan 25 08:35	0°♑	
evening max el	9047 Feb 22 12:08	28°♑47'58	23°09'33	evening max el	9048 Feb 05 01:50	12°♑34'53	24°29'13
	9047 Feb 23 17:52	0°♒		retrograde	9048 Feb 16 13:07	19°♑17'30	
retrograde	9047 Mar 04 21:18	4°♒56'44		evening set	9048 Feb 22 00:14	17°♑00'50	
asc. node	9047 Mar 07 20:11	4°♒13'51		asc. node	9048 Feb 22 17:18	16°♑22'12	
evening set	9047 Mar 09 20:08	2°♒53'16		min. Earth dist.	9048 Feb 26 14:56	11°♑45'21	0.68072 AU
	9047 Mar 12 13:43	30°♓♑		inferior conj	9048 Feb 27 12:55	10°♑31'49	1°30'57
inferior conj	9047 Mar 15 05:26	26°♑27'16	2°11'58	minimum elong	9048 Feb 27 11:02	10°♑38'08	1°30'23
minimum elong	9047 Mar 15 03:13	26°♑34'58	2°11'21	morning rise	9048 Mar 03 21:57	4°♑31'44	
min. Earth dist.	9047 Mar 14 19:01	27°♑03'15	0.68457 AU	direct	9048 Mar 07 17:38	3°♑08'12	
morning rise	9047 Mar 20 10:13	20°♑20'30		morning max el	9048 Mar 15 06:58	7°♑22'54	19°59'09
direct	9047 Mar 24 18:52	18°♑35'11		desc. node	9048 Mar 28 02:32	23°♑56'18	
morning max el	9047 Apr 02 08:15	23°♑31'25	21°11'57		9048 Apr 01 05:13	0°♒	
	9047 Apr 07 23:52	0°♒		morning set	9048 Apr 11 07:02	15°♒18'01	
desc. node	9047 Apr 11 05:40	4°♒14'14			9048 Apr 20 16:49	0°♓	
	9047 Apr 28 21:09	0°♔		max. Earth dist.	9048 Apr 21 23:02	2°♓00'07	1.44202 AU
morning set	9047 May 03 08:10	6°♔56'02		superior conj	9048 Apr 27 09:14	10°♔44'32	-2°12'12
max. Earth dist.	9047 May 10 13:14	18°♔29'42	1.42537 AU	minimum elong	9048 Apr 27 10:11	10°♔48'23	2°12'21
	9047 May 17 10:30	0°♕			9048 May 08 21:50	0°♕	

evening rise	9048 May 10 13:18	2° Π 48'52		superior conj	9049 Apr 07 00:33	19° Υ 54'47	-2°04'52
asc. node	9048 May 20 16:01	19° Π 49'42		minimum elong	9049 Apr 06 18:20	19° Υ 30'18	2°04'38
	9048 May 28 05:23	0° \mathfrak{S}			9049 Apr 13 08:58	0° \mathfrak{B}	
evening max el	9048 May 28 07:57	0° \mathfrak{S} 06'24	18°08'24	evening rise	9049 Apr 21 21:00	13° \mathfrak{B} 44'47	
retrograde	9048 Jun 03 17:14	3° \mathfrak{S} 27'01			9049 May 01 21:36	0° Π	
evening set	9048 Jun 06 12:54	2° \mathfrak{S} 46'11		asc. node	9049 May 07 13:04	8° Π 24'40	
	9048 Jun 10 07:24	30° \mathfrak{R} Π		evening max el	9049 May 11 20:42	13° Π 36'04	18°28'43
inferior conj	9048 Jun 12 17:09	27° Π 32'13	2°48'59	retrograde	9049 May 18 07:47	17° Π 05'58	
minimum elong	9048 Jun 12 19:39	27° Π 25'32	2°48'14	evening set	9049 May 21 10:57	16° Π 11'09	
min. Earth dist.	9048 Jun 15 12:03	24° Π 33'50	0.62792 AU	inferior conj	9049 May 27 05:10	10° Π 39'42	3°13'45
morning rise	9048 Jun 19 00:42	21° Π 22'51		minimum elong	9049 May 27 06:29	10° Π 35'47	3°13'22
desc. node	9048 Jun 24 02:15	19° Π 00'43		min. Earth dist.	9049 May 29 09:21	8° Π 05'10	0.64765 AU
direct	9048 Jun 25 18:46	18° Π 51'35		morning rise	9049 Jun 02 01:06	4° Π 22'50	
morning max el	9048 Jul 09 19:36	26° Π 54'19	27°52'17	direct	9049 Jun 08 16:21	1° Π 38'58	
	9048 Jul 12 17:21	0° \mathfrak{S}		desc. node	9049 Jun 10 23:16	1° Π 56'13	
	9048 Aug 02 11:40	0° \mathfrak{Q}		morning max el	9049 Jun 22 05:34	9° Π 35'53	27°18'48
morning set	9048 Aug 13 01:38	19° \mathfrak{Q} 50'37			9049 Jul 08 04:48	0° \mathfrak{S}	
asc. node	9048 Aug 16 15:27	27° \mathfrak{Q} 13'49			9049 Jul 25 21:22	0° \mathfrak{Q}	
	9048 Aug 17 22:46	0° \mathfrak{M}		morning set	9049 Jul 27 15:20	3° \mathfrak{Q} 22'17	
max. Earth dist.	9048 Aug 18 08:35	0° \mathfrak{M} 52'30	1.32291 AU	max. Earth dist.	9049 Aug 01 05:23	12° \mathfrak{Q} 33'47	1.33374 AU
				asc. node	9049 Aug 03 12:23	17° \mathfrak{Q} 19'38	
superior conj	9048 Aug 20 17:32	6° \mathfrak{M} 00'07	0°40'17	superior conj	9049 Aug 04 21:25	20° \mathfrak{Q} 13'59	0°13'48
minimum elong	9048 Aug 20 15:47	5° \mathfrak{M} 50'41	0°39'49	minimum elong	9049 Aug 04 20:43	20° \mathfrak{Q} 10'20	0°13'29
evening rise	9048 Aug 27 14:21	20° \mathfrak{M} 57'13		behind sun begin	9049 Aug 04 17:43	19° \mathfrak{Q} 54'22	
	9048 Aug 31 22:46	0° \mathfrak{L}		behind sun end	9049 Aug 04 23:44	20° \mathfrak{Q} 26'19	
desc. node	9048 Sep 20 00:56	29° \mathfrak{L} 16'02			9049 Aug 09 10:57	0° \mathfrak{M}	
evening max el	9048 Sep 20 15:38	29° \mathfrak{L} 52'12	23°49'56	evening rise	9049 Aug 12 01:28	5° \mathfrak{M} 33'23	
	9048 Sep 20 18:53	0° \mathfrak{M}			9049 Aug 25 03:57	0° \mathfrak{L}	
retrograde	9048 Oct 04 06:30	6° \mathfrak{M} 40'53		evening max el	9049 Sep 02 04:24	10° \mathfrak{L} 03'30	22°10'30
evening set	9048 Oct 08 21:14	5° \mathfrak{M} 54'22		desc. node	9049 Sep 06 22:04	13° \mathfrak{L} 53'00	
min. Earth dist.	9048 Oct 15 02:05	2° \mathfrak{M} 54'21	0.55868 AU	retrograde	9049 Sep 14 23:33	16° \mathfrak{L} 25'48	
inferior conj	9048 Oct 17 05:07	1° \mathfrak{M} 37'29	-5°38'50	evening set	9049 Sep 18 02:44	16° \mathfrak{L} 04'02	
minimum elong	9048 Oct 17 04:59	1° \mathfrak{M} 37'40	5°38'43	min. Earth dist.	9049 Sep 26 09:50	12° \mathfrak{L} 26'38	0.54850 AU
	9048 Oct 19 23:49	30° \mathfrak{R} \mathfrak{L}		inferior conj	9049 Sep 27 02:51	12° \mathfrak{L} 02'45	-5°10'18
morning rise	9048 Oct 25 14:46	27° \mathfrak{L} 41'38		minimum elong	9049 Sep 26 19:17	12° \mathfrak{L} 13'23	5°08'58
direct	9048 Oct 28 09:27	27° \mathfrak{L} 22'08		morning rise	9049 Oct 05 13:25	8° \mathfrak{L} 15'16	
	9048 Nov 04 23:46	0° \mathfrak{M}		direct	9049 Oct 08 22:24	7° \mathfrak{L} 49'57	
morning max el	9048 Nov 07 16:49	2° \mathfrak{M} 13'43	20°04'02	morning max el	9049 Oct 20 18:57	13° \mathfrak{L} 24'46	21°31'49
asc. node	9048 Nov 12 15:16	7° \mathfrak{M} 56'58		asc. node	9049 Oct 30 12:13	25° \mathfrak{L} 53'48	
	9048 Nov 25 03:18	0° \mathfrak{X}			9049 Nov 01 22:29	0° \mathfrak{M}	
morning set	9048 Nov 25 20:00	1° \mathfrak{X} 24'48		morning set	9049 Nov 10 05:18	16° \mathfrak{M} 10'13	
					9049 Nov 16 18:48	0° \mathfrak{X}	
superior conj	9048 Dec 03 12:33	17° \mathfrak{X} 05'26	1°28'41	superior conj	9049 Nov 17 10:42	1° \mathfrak{X} 23'05	1°38'16
minimum elong	9048 Dec 03 14:55	17° \mathfrak{X} 17'19	1°28'44	minimum elong	9049 Nov 17 11:50	1° \mathfrak{X} 28'58	1°38'27
max. Earth dist.	9048 Dec 09 05:47	28° \mathfrak{X} 14'27	1.36901 AU	max. Earth dist.	9049 Nov 21 17:18	10° \mathfrak{X} 08'06	1.34990 AU
	9048 Dec 10 04:14	0° \mathfrak{Z}		evening rise	9049 Nov 25 22:09	18° \mathfrak{X} 20'19	
evening rise	9048 Dec 13 00:32	5° \mathfrak{Z} 13'56			9049 Dec 02 07:54	0° \mathfrak{Z}	
desc. node	9048 Dec 16 23:39	12° \mathfrak{Z} 13'28		desc. node	9049 Dec 03 20:42	2° \mathfrak{Z} 38'27	
	9048 Dec 28 00:24	0° \mathfrak{A}			9049 Dec 22 05:21	0° \mathfrak{A}	
evening max el	9049 Jan 17 15:08	26° \mathfrak{A} 23'48	25°42'10	evening max el	9049 Dec 31 04:30	10° \mathfrak{A} 07'22	26°41'14
	9049 Jan 21 18:07	0° \mathfrak{H}		retrograde	9050 Jan 13 05:57	17° \mathfrak{A} 25'23	
retrograde	9049 Jan 30 00:15	3° \mathfrak{H} 29'27		evening set	9050 Jan 19 17:21	14° \mathfrak{A} 51'04	
evening set	9049 Feb 04 23:55	1° \mathfrak{H} 01'59		min. Earth dist.	9050 Jan 23 19:00	10° \mathfrak{A} 45'02	0.66143 AU
	9049 Feb 06 03:07	30° \mathfrak{R} \mathfrak{A}		inferior conj	9050 Jan 25 16:14	8° \mathfrak{A} 31'26	-0°16'02
asc. node	9049 Feb 08 14:23	27° \mathfrak{A} 14'54		minimum elong	9050 Jan 25 16:41	8° \mathfrak{A} 30'08	0°15'39
min. Earth dist.	9049 Feb 09 07:42	26° \mathfrak{A} 21'16	0.67298 AU	transit middle	9050 Jan 25 16:41	8° \mathfrak{A} 30'08	0°15'39
inferior conj	9049 Feb 10 17:13	24° \mathfrak{A} 34'52	0°41'31	transit begin	9050 Jan 25 16:02	8° \mathfrak{A} 32'03	
minimum elong	9049 Feb 10 16:12	24° \mathfrak{A} 38'07	0°41'16	transit end	9050 Jan 25 17:20	8° \mathfrak{A} 28'12	
morning rise	9049 Feb 16 08:57	18° \mathfrak{A} 43'25		asc. node	9050 Jan 26 11:29	7° \mathfrak{A} 34'57	
direct	9049 Feb 19 16:55	17° \mathfrak{A} 39'45		morning rise	9050 Jan 31 16:59	2° \mathfrak{A} 50'56	
morning max el	9049 Feb 26 13:30	21° \mathfrak{A} 24'54	19°01'13	direct	9050 Feb 03 14:44	2° \mathfrak{A} 04'02	
	9049 Mar 05 13:11	0° \mathfrak{H}		morning max el	9050 Feb 10 02:26	5° \mathfrak{A} 32'09	18°19'39
greatest brilliancy	9049 Mar 12 07:24	9° \mathfrak{H} 56'42	-0.8m		9050 Feb 27 02:39	0° \mathfrak{H}	
desc. node	9049 Mar 14 23:25	14° \mathfrak{H} 01'23		morning set	9050 Mar 01 16:25	4° \mathfrak{H} 07'12	
morning set	9049 Mar 21 11:14	24° \mathfrak{H} 03'39		desc. node	9050 Mar 01 20:20	4° \mathfrak{H} 22'53	
	9049 Mar 25 06:58	0° \mathfrak{Y}					
max. Earth dist.	9049 Apr 04 15:07	16° \mathfrak{Y} 08'50	1.45252 AU				

superior conj	9050 Mar 17 05:48	28° H 44'59	-1°37'38	desc. node	9051 Feb 16 17:15	24° \approx 55'41	
minimum elong	9050 Mar 16 20:12	28° H 07'21	1°36'41		9051 Feb 19 19:29	0° H	
	9050 Mar 18 00:58	0° Y					
max. Earth dist.	9050 Mar 18 10:41	0° Y 38'02	1.45570 AU	superior conj	9051 Feb 24 20:00	8° H 06'24	-0°56'56
evening rise	9050 Apr 02 05:28	23° Y 45'38		minimum elong	9051 Feb 24 13:33	7° H 40'35	0°55'57
	9050 Apr 06 04:58	0° B		max. Earth dist.	9051 Mar 01 06:10	15° H 07'45	1.45142 AU
greatest brilliancy	9050 Apr 12 21:02	10° B 22'33	-0.8m		9051 Mar 10 19:21	0° Y	
asc. node	9050 Apr 24 10:09	26° B 19'52		evening rise	9051 Mar 12 20:46	3° Y 10'10	
evening max el	9050 Apr 25 06:16	27° B 12'37	19°06'28	greatest brilliancy	9051 Mar 27 14:49	25° Y 26'12	-0.6m
	9050 Apr 28 16:19	0° II			9051 Mar 30 19:04	0° B	
retrograde	9050 May 02 03:42	1° II 04'28		evening max el	9051 Apr 08 10:54	10° B 51'39	20°00'13
	9050 May 05 11:34	30° R B		asc. node	9051 Apr 11 07:16	13° B 22'43	
evening set	9050 May 05 14:40	29° B 54'56		retrograde	9051 Apr 16 02:03	15° B 15'59	
inferior conj	9050 May 11 02:22	24° B 07'42	3°21'32	evening set	9051 Apr 19 21:35	13° B 51'21	
minimum elong	9050 May 11 02:25	24° B 07'34	3°21'19	inferior conj	9051 Apr 25 05:46	7° B 50'09	3°15'42
min. Earth dist.	9050 May 12 15:17	22° B 09'27	0.66358 AU	minimum elong	9051 Apr 25 04:43	7° B 53'42	3°15'27
morning rise	9050 May 16 13:42	17° B 48'35		min. Earth dist.	9051 Apr 26 04:10	6° B 34'33	0.67517 AU
direct	9050 May 22 20:50	15° B 03'45		morning rise	9051 Apr 30 11:35	1° B 32'11	
desc. node	9050 May 28 20:16	17° B 01'28			9051 May 02 13:03	30° R Y	
morning max el	9050 Jun 04 16:12	22° B 41'50	26°17'11	direct	9051 May 06 07:16	28° Y 56'23	
	9050 Jun 11 02:31	0° II			9051 May 10 09:57	0° B	
	9050 Jul 01 11:54	0° B		desc. node	9051 May 15 17:15	3° B 45'03	
morning set	9050 Jul 10 16:47	16° B 16'55		morning max el	9051 May 18 01:52	6° B 00'11	24°56'39
max. Earth dist.	9050 Jul 14 15:46	23° B 50'22	1.34936 AU		9051 Jun 05 15:23	0° II	
	9050 Jul 17 18:18	0° Q		morning set	9051 Jun 23 01:28	28° II 21'52	
					9051 Jun 23 23:28	0° B	
superior conj	9050 Jul 19 18:17	4° Q 03'47	-0°16'10	max. Earth dist.	9051 Jun 26 16:09	4° B 54'01	1.36914 AU
minimum elong	9050 Jul 19 19:14	4° Q 08'35	0°16'12				
asc. node	9050 Jul 21 09:21	7° Q 24'54		superior conj	9051 Jul 03 05:06	17° B 20'59	-0°48'15
evening rise	9050 Jul 27 10:10	19° Q 59'14		minimum elong	9051 Jul 03 08:06	17° B 35'44	0°47'57
	9050 Aug 01 09:33	0° H		asc. node	9051 Jul 08 06:19	27° B 25'08	
evening max el	9050 Aug 15 02:48	20° H 39'02	20°41'42		9051 Jul 09 13:00	0° Q	
desc. node	9050 Aug 24 19:12	26° H 09'59		evening rise	9051 Jul 11 14:04	4° Q 07'22	
retrograde	9050 Aug 26 11:48	26° H 17'14			9051 Jul 26 18:56	0° H	
evening set	9050 Aug 28 14:40	26° H 06'18		evening max el	9051 Jul 28 14:41	1° H 58'01	19°31'41
inferior conj	9050 Sep 06 19:20	22° H 09'31	-3°47'38	retrograde	9051 Aug 07 06:43	6° H 44'52	
minimum elong	9050 Sep 06 09:54	22° H 23'02	3°44'45	evening set	9051 Aug 09 02:55	6° H 35'12	
min. Earth dist.	9050 Sep 07 18:43	21° H 35'59	0.54725 AU	desc. node	9051 Aug 11 16:21	5° H 52'11	
morning rise	9050 Sep 15 05:01	18° H 09'57		inferior conj	9051 Aug 17 21:04	2° H 30'07	-1°54'16
direct	9050 Sep 19 06:30	17° H 34'37		minimum elong	9051 Aug 17 15:54	2° H 38'21	1°52'26
morning max el	9050 Oct 02 10:48	23° H 55'00	23°14'56	min. Earth dist.	9051 Aug 20 06:49	0° H 58'17	0.55548 AU
	9050 Oct 07 22:47	0° Q			9051 Aug 21 21:32	30° R Q	
asc. node	9050 Oct 17 09:12	14° Q 32'23		morning rise	9051 Aug 26 02:25	27° Q 59'45	
	9050 Oct 25 05:26	0° M		direct	9051 Aug 30 23:12	27° Q 06'34	
morning set	9050 Oct 25 16:39	0° M 59'19			9051 Sep 08 18:49	0° H	
				morning max el	9051 Sep 13 22:55	4° H 07'11	25°00'18
superior conj	9050 Nov 01 15:40	15° M 58'55	1°40'51		9051 Oct 02 07:05	0° Q	
minimum elong	9050 Nov 01 15:32	15° M 58'13	1°41'02	asc. node	9051 Oct 04 06:10	3° Q 42'02	
max. Earth dist.	9050 Nov 04 12:35	22° M 05'43	1.33457 AU	morning set	9051 Oct 10 04:22	15° Q 46'57	
	9050 Nov 08 08:41	0° J			9051 Oct 16 16:41	0° M	
evening rise	9050 Nov 09 09:02	2° J 01'39					
desc. node	9050 Nov 20 17:47	22° J 46'37		superior conj	9051 Oct 17 00:55	0° M 45'12	1°37'11
	9050 Nov 25 05:39	0° B		minimum elong	9051 Oct 16 23:44	0° M 38'41	1°37'14
evening max el	9050 Dec 13 17:17	23° B 35'50	27°19'09	max. Earth dist.	9051 Oct 18 15:32	4° M 16'24	1.32368 AU
	9050 Dec 22 18:18	0° \approx		evening rise	9051 Oct 24 05:47	16° M 09'08	
retrograde	9050 Dec 27 05:40	0° \approx 57'14			9051 Oct 31 08:25	0° J	
	9050 Dec 31 10:25	30° R B		desc. node	9051 Nov 07 14:52	12° J 30'55	
evening set	9051 Jan 03 02:22	28° B 22'19			9051 Nov 20 00:24	0° B	
min. Earth dist.	9051 Jan 06 22:43	24° B 49'30	0.64632 AU	evening max el	9051 Nov 26 04:00	6° B 38'12	27°29'21
inferior conj	9051 Jan 09 07:37	22° B 16'05	-1°20'56	retrograde	9051 Dec 09 22:43	13° B 56'06	
minimum elong	9051 Jan 09 10:06	22° B 09'24	1°19'39	evening set	9051 Dec 17 00:12	11° B 29'17	
asc. node	9051 Jan 13 08:35	18° B 20'31		min. Earth dist.	9051 Dec 20 17:07	8° B 25'43	0.62817 AU
morning rise	9051 Jan 15 19:26	16° B 49'12		inferior conj	9051 Dec 23 12:36	5° B 42'35	-2°31'14
direct	9051 Jan 18 08:48	16° B 15'21		minimum elong	9051 Dec 23 17:29	5° B 30'46	2°29'05
morning max el	9051 Jan 24 19:07	19° B 37'24	17°54'55	morning rise	9051 Dec 30 12:55	0° B 32'08	
	9051 Feb 01 14:48	0° \approx		asc. node	9051 Dec 31 05:41	0° B 19'32	
morning set	9051 Feb 11 02:51	15° \approx 36'55		direct	9052 Jan 01 20:15	0° B 07'28	

morning max el	9052 Jan 08 12:31	3° Z 32'58	17°47'38	direct	9052 Dec 14 21:24	13° Z 31'35	
morning set	9052 Jan 24 13:46	28° Z 17'20		asc. node	9052 Dec 17 02:45	13° Z 52'11	
	9052 Jan 25 13:10	0° \approx		morning max el	9052 Dec 22 03:14	17° Z 09'08	17°58'49
desc. node	9052 Feb 03 14:10	15° \approx 35'57			9052 Dec 31 05:28	0° Z	
				morning set	9053 Jan 06 18:33	11° Z 47'46	
superior conj	9052 Feb 05 08:40	18° \approx 34'03	-0°13'05				
minimum elong	9052 Feb 05 07:21	18° \approx 28'34	0°12'41	superior conj	9053 Jan 16 22:35	0° \approx 13'13	0°26'13
behind sun begin	9052 Feb 05 01:41	18° \approx 04'54		minimum elong	9053 Jan 17 00:41	0° \approx 22'29	0°26'08
behind sun end	9052 Feb 05 13:02	18° \approx 52'13			9053 Jan 16 19:34	0° \approx	
max. Earth dist.	9052 Feb 11 23:15	29° \approx 22'43	1.44028 AU	desc. node	9053 Jan 20 11:06	6° \approx 19'30	
	9052 Feb 12 08:32	0° X		max. Earth dist.	9053 Jan 24 12:21	13° \approx 08'45	1.42352 AU
evening rise	9052 Feb 20 08:41	12° X 35'02		evening rise	9053 Jan 30 07:55	22° \approx 34'51	
	9052 Mar 02 21:49	0° Y			9053 Feb 04 01:46	0° X	
evening max el	9052 Mar 21 10:04	24° Y 32'28	21°07'15		9053 Feb 25 01:38	0° Y	
asc. node	9052 Mar 28 04:24	29° Y 19'04		evening max el	9053 Mar 04 04:16	8° Y 14'45	22°23'36
retrograde	9052 Mar 30 00:33	29° Y 36'07		retrograde	9053 Mar 13 21:25	13° Y 59'56	
evening set	9052 Apr 03 05:48	27° Y 56'14		asc. node	9053 Mar 15 01:33	13° Y 53'04	
inferior conj	9052 Apr 08 12:54	21° Y 43'17	2°58'36	evening set	9053 Mar 18 13:36	12° Y 04'52	
minimum elong	9052 Apr 08 11:05	21° Y 49'35	2°58'11	inferior conj	9053 Mar 23 21:37	5° Y 42'52	2°31'38
min. Earth dist.	9052 Apr 08 21:52	21° Y 12'10	0.68230 AU	minimum elong	9053 Mar 23 19:25	5° Y 50'31	2°31'03
morning rise	9052 Apr 13 16:09	15° Y 28'33		min. Earth dist.	9053 Mar 23 18:06	5° Y 55'07	0.68501 AU
direct	9052 Apr 18 22:38	13° Y 09'16			9053 Mar 28 13:00	30° R X	
morning max el	9052 Apr 29 11:12	19° Y 25'29	23°27'28	morning rise	9053 Mar 29 01:05	29° X 32'57	
desc. node	9052 May 01 14:12	21° Y 40'41		direct	9053 Apr 02 17:44	27° X 34'36	
	9052 May 08 09:57	0° Z			9053 Apr 08 14:37	0° Y	
	9052 May 28 19:11	0° II		morning max el	9053 Apr 11 23:17	2° Y 58'29	21°59'14
morning set	9052 Jun 03 12:02	9° II 23'23		desc. node	9053 Apr 18 11:06	10° Y 28'02	
max. Earth dist.	9052 Jun 07 12:08	16° II 15'44	1.39151 AU		9053 May 02 10:22	0° Z	
				morning set	9053 May 14 19:51	19° Z 10'21	
superior conj	9052 Jun 15 02:08	29° II 57'10	-1°20'11	max. Earth dist.	9053 May 20 11:22	28° Z 25'22	1.41377 AU
minimum elong	9052 Jun 15 07:12	0° O 20'49	1°19'43		9053 May 21 09:57	0° II	
	9052 Jun 15 02:44	0° O					
evening rise	9052 Jun 24 10:22	17° O 50'42		superior conj	9053 May 28 04:53	11° II 41'48	-1°48'25
asc. node	9052 Jun 24 03:19	17° O 16'34		minimum elong	9053 May 28 10:55	12° II 08'26	1°48'04
	9052 Jun 30 21:15	0° O			9053 Jun 07 06:27	0° O	
evening max el	9052 Jul 10 14:34	14° O 01'27	18°42'33	evening rise	9053 Jun 07 19:29	1° O 00'21	
retrograde	9052 Jul 18 18:13	18° O 04'36		asc. node	9053 Jun 11 00:21	6° O 54'51	
evening set	9052 Jul 20 18:36	17° O 50'38		evening max el	9053 Jun 23 22:40	26° O 41'11	18°13'57
inferior conj	9052 Jul 28 18:02	13° O 27'42	-0°03'28		9053 Jun 29 02:58	0° O	
minimum elong	9052 Jul 28 17:53	13° O 27'58	0°03'37	retrograde	9053 Jul 01 01:00	0° O 15'48	
transit middle	9052 Jul 28 17:53	13° O 27'58	0°03'37		9053 Jul 02 23:48	30° R O	
transit begin	9052 Jul 28 14:19	13° O 34'36		evening set	9053 Jul 03 08:43	29° O 53'32	
transit end	9052 Jul 28 21:28	13° O 21'20		inferior conj	9053 Jul 10 12:46	25° O 09'45	1°24'33
desc. node	9052 Jul 28 13:28	13° O 36'10		minimum elong	9053 Jul 10 15:17	25° O 04'16	1°23'28
min. Earth dist.	9052 Jul 31 23:11	11° O 05'33	0.57168 AU	min. Earth dist.	9053 Jul 13 21:43	22° O 15'21	0.59272 AU
morning rise	9052 Aug 05 13:42	8° O 20'19		desc. node	9053 Jul 15 10:32	21° O 03'08	
direct	9052 Aug 11 06:17	7° O 00'42		morning rise	9053 Jul 17 18:44	19° O 30'13	
morning max el	9052 Aug 25 13:54	14° O 30'32	26°30'56	direct	9053 Jul 24 02:43	17° O 39'59	
	9052 Sep 06 23:26	0° P		morning max el	9053 Aug 07 11:29	25° O 29'10	27°32'10
asc. node	9052 Sep 20 03:05	23° P 14'21			9053 Aug 11 15:57	0° O	
	9052 Sep 23 09:26	0° O			9053 Aug 31 08:52	0° P	
morning set	9052 Sep 23 14:44	0° O 28'08		asc. node	9053 Sep 06 24:00	13° P 02'51	
				morning set	9053 Sep 07 22:07	14° P 58'15	
superior conj	9052 Sep 30 12:19	15° O 34'53	1°27'50	max. Earth dist.	9053 Sep 14 09:52	29° P 03'42	1.31588 AU
minimum elong	9052 Sep 30 10:24	15° O 24'14	1°27'41		9053 Sep 14 20:01	0° O	
max. Earth dist.	9052 Sep 30 23:47	16° O 38'31	1.31745 AU				
evening rise	9052 Oct 07 09:33	0° P 34'34		superior conj	9053 Sep 15 00:03	0° O 22'20	1°13'13
	9052 Oct 07 03:00	0° P		minimum elong	9053 Sep 14 21:48	0° O 09'54	1°12'51
	9052 Oct 23 09:37	0° Z		evening rise	9053 Sep 21 17:57	15° O 11'08	
desc. node	9052 Oct 24 11:59	1° Z 41'08			9053 Sep 29 02:04	0° P	
evening max el	9052 Nov 07 10:11	19° Z 01'10	27°06'47	desc. node	9053 Oct 11 09:05	20° P 03'52	
retrograde	9052 Nov 21 07:40	26° Z 11'59			9053 Oct 19 18:42	0° Z	
evening set	9052 Nov 28 07:04	24° Z 03'25		evening max el	9053 Oct 20 09:04	0° Z 34'35	26°10'20
min. Earth dist.	9052 Dec 02 00:53	21° Z 21'01	0.60790 AU	retrograde	9053 Nov 03 07:01	7° Z 38'34	
inferior conj	9052 Dec 05 03:50	18° Z 41'35	-3°42'50	evening set	9053 Nov 09 18:26	5° Z 57'58	
minimum elong	9052 Dec 05 10:48	18° Z 26'41	3°40'19	min. Earth dist.	9053 Nov 13 22:04	3° Z 23'22	0.58703 AU
morning rise	9052 Dec 12 16:57	13° Z 50'43		inferior conj	9053 Nov 17 01:45	1° Z 03'30	-4°47'30

minimum elong	9053 Nov 17 09:06	0°♄49'52	4°45'38	inferior conj	9054 Oct 29 03:36	12°♄38'57	-5°31'01
	9053 Nov 18 12:29	30°♄		minimum elong	9054 Oct 29 07:29	12°♄32'40	5°30'31
morning rise	9053 Nov 25 02:08	26°♄35'04		morning rise	9054 Nov 06 11:21	8°♄33'07	
direct	9053 Nov 27 07:57	26°♄18'11		direct	9054 Nov 08 23:43	8°♄15'32	
asc. node	9053 Dec 03 23:45	28°♄57'10		morning max el	9054 Nov 18 10:17	12°♄44'37	19°23'18
	9053 Dec 05 04:44	0°♄		asc. node	9054 Nov 20 20:44	15°♄21'02	
morning max el	9053 Dec 05 11:42	0°♄16'35	18°30'07		9054 Nov 30 06:05	0°♄	
morning set	9053 Dec 21 11:48	25°♄52'28		morning set	9054 Dec 05 13:31	10°♄19'27	
	9053 Dec 23 15:09	0°♄					
superior conj	9053 Dec 30 10:24	12°♄54'39	0°57'22	superior conj	9054 Dec 13 15:03	26°♄23'48	1°19'40
minimum elong	9053 Dec 30 13:41	13°♄09'51	0°57'10	minimum elong	9054 Dec 13 18:00	26°♄38'08	1°19'37
max. Earth dist.	9054 Jan 06 20:56	26°♄15'03	1.40302 AU		9054 Dec 15 11:44	0°♄	
desc. node	9054 Jan 07 08:03	27°♄03'05		max. Earth dist.	9054 Dec 20 02:44	8°♄39'50	1.38114 AU
	9054 Jan 09 01:27	0°♄		evening rise	9054 Dec 23 20:16	15°♄20'31	
evening rise	9054 Jan 11 03:15	3°♄29'02		desc. node	9054 Dec 25 05:03	17°♄43'01	
	9054 Jan 28 07:53	0°♄			9055 Jan 01 14:56	0°♄	
evening max el	9054 Feb 14 19:00	21°♄59'30	23°43'48		9055 Jan 23 00:34	0°♄	
retrograde	9054 Feb 25 15:20	28°♄23'11		evening max el	9055 Jan 28 08:12	5°♄46'58	25°01'28
asc. node	9054 Mar 01 22:41	26°♄54'12		retrograde	9055 Feb 09 05:21	12°♄41'08	
evening set	9054 Mar 02 19:28	26°♄13'43		evening set	9055 Feb 14 21:55	10°♄19'10	
min. Earth dist.	9054 Mar 07 14:40	20°♄38'38	0.68347 AU	asc. node	9055 Feb 16 19:47	8°♄26'44	
inferior conj	9054 Mar 08 06:04	19°♄46'04	1°55'37	min. Earth dist.	9055 Feb 19 09:26	5°♄18'42	0.67786 AU
minimum elong	9054 Mar 08 03:55	19°♄53'24	1°54'59	inferior conj	9055 Feb 20 12:25	3°♄50'13	1°11'00
morning rise	9054 Mar 13 12:21	13°♄42'12		minimum elong	9055 Feb 20 10:49	3°♄55'26	1°10'31
direct	9054 Mar 17 15:25	12°♄06'17			9055 Feb 23 15:31	30°♄	
morning max el	9054 Mar 25 17:36	16°♄42'59	20°39'22	morning rise	9055 Feb 26 00:02	27°♄53'49	
desc. node	9054 Apr 05 08:00	29°♄52'59		direct	9055 Mar 01 14:29	26°♄39'15	
	9054 Apr 05 10:00	0°♄			9055 Mar 08 03:10	0°♄	
morning set	9054 Apr 24 02:50	27°♄51'15		morning max el	9055 Mar 08 19:52	0°♄39'54	19°32'39
	9054 Apr 25 11:53	0°♄		greatest brilliancy	9055 Mar 21 12:50	17°♄17'05	-0.7m
max. Earth dist.	9054 May 02 17:37	11°♄29'55	1.43310 AU	desc. node	9055 Mar 23 04:53	19°♄45'40	
					9055 Mar 29 23:16	0°♄	
superior conj	9054 May 09 08:47	22°♄24'12	-2°07'41	morning set	9055 Apr 03 00:54	6°♄14'42	
minimum elong	9054 May 09 12:49	22°♄41'07	2°07'42	max. Earth dist.	9055 Apr 15 06:24	25°♄18'45	1.44723 AU
	9054 May 13 20:20	0°♄			9055 Apr 18 05:13	0°♄	
evening rise	9054 May 21 12:58	13°♄25'11		superior conj	9055 Apr 19 12:08	2°♄03'40	-2°11'36
asc. node	9054 May 28 21:23	26°♄14'01		minimum elong	9055 Apr 19 10:05	1°♄55'26	2°11'41
	9054 May 31 04:18	0°♄		evening rise	9055 May 03 10:07	24°♄55'30	
evening max el	9054 Jun 07 11:07	9°♄46'34	18°04'58		9055 May 06 10:38	0°♄	
retrograde	9054 Jun 13 23:42	13°♄08'24		asc. node	9055 May 15 18:28	15°♄07'45	
evening set	9054 Jun 16 15:00	12°♄34'58		evening max el	9055 May 22 00:35	23°♄09'34	18°14'51
inferior conj	9054 Jun 23 02:45	7°♄31'23	2°25'19	retrograde	9055 May 28 09:43	26°♄32'54	
minimum elong	9054 Jun 23 05:39	7°♄24'07	2°24'19	evening set	9055 May 31 08:26	25°♄46'24	
min. Earth dist.	9054 Jun 26 04:34	4°♄27'54	0.61528 AU	inferior conj	9055 Jun 06 07:57	20°♄24'48	3°01'50
morning rise	9054 Jun 29 18:05	1°♄29'42		minimum elong	9055 Jun 06 09:59	20°♄19'04	3°01'14
desc. node	9054 Jul 02 07:36	0°♄03'34		min. Earth dist.	9055 Jun 08 20:49	17°♄34'23	0.63662 AU
	9054 Jul 02 11:00	30°♄		morning rise	9055 Jun 12 10:10	14°♄11'05	
direct	9054 Jul 06 10:24	29°♄11'18		direct	9055 Jun 19 03:40	11°♄32'59	
	9054 Jul 10 14:30	0°♄		desc. node	9055 Jun 19 04:38	11°♄32'59	
morning max el	9054 Jul 20 15:48	7°♄11'59	27°56'02	morning max el	9055 Jul 03 00:38	19°♄35'36	27°42'04
	9054 Aug 06 23:46	0°♄			9055 Jul 11 21:16	0°♄	
morning set	9054 Aug 23 00:33	29°♄10'57			9055 Jul 30 23:40	0°♄	
	9054 Aug 23 10:04	0°♄		morning set	9055 Aug 06 19:44	13°♄00'09	
asc. node	9054 Aug 24 20:54	3°♄01'29		asc. node	9055 Aug 11 17:51	23°♄06'01	
max. Earth dist.	9054 Aug 28 17:49	11°♄19'36	1.31898 AU	max. Earth dist.	9055 Aug 11 19:36	23°♄15'13	1.32691 AU
superior conj	9054 Aug 30 10:14	15°♄01'00	0°53'39	superior conj	9055 Aug 14 17:04	29°♄25'50	0°29'33
minimum elong	9054 Aug 30 08:10	14°♄49'36	0°53'11	minimum elong	9055 Aug 14 15:42	29°♄18'28	0°29'07
evening rise	9054 Sep 06 04:52	29°♄51'40			9055 Aug 14 23:24	0°♄	
	9054 Sep 06 06:25	0°♄		evening rise	9055 Aug 21 16:27	14°♄30'57	
	9054 Sep 22 15:59	0°♄			9055 Aug 29 09:20	0°♄	
desc. node	9054 Sep 28 06:13	7°♄19'39		evening max el	9055 Sep 13 10:48	21°♄30'41	23°07'06
evening max el	9054 Oct 01 23:47	11°♄17'33	24°45'52	desc. node	9055 Sep 15 03:21	23°♄03'31	
retrograde	9054 Oct 15 19:23	18°♄14'33		retrograde	9055 Sep 26 19:34	28°♄11'06	
evening set	9054 Oct 21 05:52	17°♄08'20		evening set	9055 Sep 30 18:33	27°♄36'52	
min. Earth dist.	9054 Oct 26 10:59	14°♄23'00	0.56780 AU	min. Earth dist.	9055 Oct 07 19:54	24°♄22'26	0.55338 AU

inferior conj	9055 Oct 09 09:59	23° Ω 27'11	-5°33'44	retrograde	9056 Sep 06 09:19	7° Ω 54'42	
minimum elong	9055 Oct 09 06:26	23° Ω 32'20	5°33'23	evening set	9056 Sep 08 23:50	7° Ω 39'14	
morning rise	9055 Oct 17 20:19	19° Ω 36'54		inferior conj	9056 Sep 18 03:53	3° Ω 41'50	-4°41'04
direct	9055 Oct 20 20:25	19° Ω 15'30		minimum elong	9056 Sep 17 18:34	3° Ω 54'53	4°38'53
morning max el	9055 Oct 31 20:08	24° Ω 25'01	20°38'58	min. Earth dist.	9056 Sep 18 04:14	3° Ω 41'22	0.54678 AU
	9055 Nov 05 17:51	0° \mathbb{M}			9056 Sep 26 01:48	30° \mathbb{R} \mathbb{M}	
asc. node	9055 Nov 07 17:42	2° \mathbb{M} 48'21		morning rise	9056 Sep 26 14:13	29° \mathbb{M} 51'28	
morning set	9055 Nov 19 20:44	25° \mathbb{M} 00'06		direct	9056 Sep 30 05:57	29° \mathbb{M} 22'28	
	9055 Nov 22 06:36	0° \mathbb{X}			9056 Oct 04 07:01	0° Ω	
				morning max el	9056 Oct 12 17:18	5° Ω 17'32	22°14'18
superior conj	9055 Nov 27 07:55	10° \mathbb{X} 27'10	1°33'39	asc. node	9056 Oct 24 14:41	21° Ω 04'56	
minimum elong	9055 Nov 27 09:47	10° \mathbb{X} 36'41	1°33'46		9056 Oct 29 11:36	0° \mathbb{M}	
max. Earth dist.	9055 Dec 02 10:25	20° \mathbb{X} 37'12	1.36046 AU	morning set	9056 Nov 03 07:10	9° \mathbb{M} 48'18	
evening rise	9055 Dec 06 08:35	28° \mathbb{X} 02'49					
	9055 Dec 07 10:07	0° \mathbb{Z}		superior conj	9056 Nov 10 09:22	24° \mathbb{M} 54'16	1°40'10
desc. node	9055 Dec 12 02:04	8° \mathbb{Z} 14'57		minimum elong	9056 Nov 10 09:57	24° \mathbb{M} 57'20	1°40'21
	9055 Dec 25 22:40	0° \approx			9056 Nov 12 19:43	0° \mathbb{X}	
evening max el	9056 Jan 10 21:21	19° \approx 34'00	26°09'28	max. Earth dist.	9056 Nov 14 01:03	2° \mathbb{X} 31'09	1.34290 AU
retrograde	9056 Jan 23 14:27	26° \approx 47'07		evening rise	9056 Nov 18 12:23	11° \mathbb{X} 26'22	
evening set	9056 Jan 29 19:12	24° \approx 16'04		desc. node	9056 Nov 27 23:07	28° \mathbb{X} 34'05	
min. Earth dist.	9056 Feb 03 00:14	19° \approx 50'05	0.66844 AU		9056 Nov 28 19:35	0° \mathbb{Z}	
asc. node	9056 Feb 03 16:54	18° \approx 58'50			9056 Dec 20 07:12	0° \approx	
inferior conj	9056 Feb 04 14:45	17° \approx 51'07	0°18'02	evening max el	9056 Dec 23 10:50	3° \approx 13'45	27°00'24
minimum elong	9056 Feb 04 14:16	17° \approx 52'35	0°18'02	retrograde	9057 Jan 05 17:49	10° \approx 34'09	
morning rise	9056 Feb 10 10:03	12° \approx 04'00		evening set	9057 Jan 12 09:23	7° \approx 59'02	
direct	9056 Feb 13 13:20	11° \approx 08'04		min. Earth dist.	9057 Jan 16 08:44	4° \approx 07'04	0.65541 AU
morning max el	9056 Feb 20 05:24	14° \approx 44'57	18°41'29	inferior conj	9057 Jan 18 10:52	1° \approx 44'10	-0°42'44
	9056 Mar 02 15:25	0° \mathbb{H}		minimum elong	9057 Jan 18 12:07	1° \approx 40'38	0°41'59
desc. node	9056 Mar 09 01:47	9° \mathbb{H} 58'15			9057 Jan 20 00:10	30° \mathbb{R} \mathbb{Z}	
morning set	9056 Mar 12 14:05	15° \mathbb{H} 28'47		asc. node	9057 Jan 20 13:59	29° \mathbb{Z} 23'26	
	9056 Mar 21 20:28	0° \mathbb{Y}		morning rise	9057 Jan 24 16:05	26° \mathbb{Z} 08'48	
max. Earth dist.	9056 Mar 27 23:41	9° \mathbb{Y} 35'52	1.45472 AU	direct	9057 Jan 27 10:01	25° \mathbb{Z} 27'54	
				morning max el	9057 Feb 02 20:14	28° \mathbb{Z} 52'24	18°06'56
superior conj	9056 Mar 28 21:03	10° \mathbb{Y} 59'32	-1°55'33		9057 Feb 03 22:08	0° \approx	
minimum elong	9056 Mar 28 12:33	10° \mathbb{Y} 26'15	1°54'59	morning set	9057 Feb 21 08:00	26° \approx 10'25	
	9056 Apr 09 22:00	0° \mathbb{B}		desc. node	9057 Feb 23 22:43	0° \mathbb{H} 25'23	
evening rise	9056 Apr 13 07:37	5° \mathbb{B} 26'06			9057 Feb 23 16:28	0° \mathbb{H}	
greatest brilliancy	9056 Apr 20 19:38	17° \mathbb{B} 26'37	-0.9m				
	9056 Apr 29 01:30	0° \mathbb{I}		superior conj	9057 Mar 08 03:51	19° \mathbb{H} 57'06	-1°21'24
asc. node	9056 May 01 15:33	3° \mathbb{I} 27'05		minimum elong	9057 Mar 07 18:58	19° \mathbb{H} 22'06	1°20'19
evening max el	9056 May 04 12:14	6° \mathbb{I} 42'30	18°42'47	max. Earth dist.	9057 Mar 10 19:28	24° \mathbb{H} 07'03	1.45484 AU
retrograde	9056 May 11 02:51	10° \mathbb{I} 20'23			9057 Mar 14 13:46	0° \mathbb{Y}	
evening set	9056 May 14 09:12	9° \mathbb{I} 19'31		evening rise	9057 Mar 24 07:28	15° \mathbb{Y} 07'41	
inferior conj	9056 May 20 00:16	3° \mathbb{I} 41'26	3°18'52		9057 Apr 02 22:56	0° \mathbb{B}	
minimum elong	9056 May 20 01:02	3° \mathbb{I} 39'04	3°18'35	greatest brilliancy	9057 Apr 05 23:33	4° \mathbb{B} 34'44	-0.7m
min. Earth dist.	9056 May 21 22:03	1° \mathbb{I} 20'51	0.65492 AU	evening max el	9057 Apr 17 19:55	20° \mathbb{B} 20'38	19°27'34
	9056 May 23 01:40	30° \mathbb{R} \mathbb{B}		asc. node	9057 Apr 18 12:39	21° \mathbb{B} 01'37	
morning rise	9056 May 25 16:09	27° \mathbb{B} 23'01		retrograde	9057 Apr 24 23:57	24° \mathbb{B} 24'44	
direct	9056 Jun 01 04:33	24° \mathbb{B} 37'00		evening set	9057 Apr 28 14:31	23° \mathbb{B} 08'46	
desc. node	9056 Jun 05 01:39	25° \mathbb{B} 26'47		inferior conj	9057 May 04 00:25	17° \mathbb{B} 15'35	3°20'30
	9056 Jun 11 20:43	0° \mathbb{I}		minimum elong	9057 May 03 23:57	17° \mathbb{B} 17'05	3°20'18
morning max el	9056 Jun 14 11:02	2° \mathbb{I} 28'21	26°55'28	min. Earth dist.	9057 May 05 07:04	15° \mathbb{B} 34'57	0.66913 AU
	9056 Jul 05 03:02	0° \mathbb{E}		morning rise	9057 May 09 09:02	10° \mathbb{B} 56'51	
morning set	9056 Jul 20 04:43	26° \mathbb{E} 17'22		direct	9057 May 15 11:46	8° \mathbb{B} 14'38	
	9056 Jul 22 02:40	0° Ω		desc. node	9057 May 22 22:40	11° \mathbb{B} 17'07	
max. Earth dist.	9056 Jul 24 11:47	4° Ω 43'41	1.33974 AU	morning max el	9057 May 27 21:03	15° \mathbb{B} 39'24	25°44'33
					9057 Jun 08 16:19	0° \mathbb{I}	
superior conj	9056 Jul 28 18:19	13° Ω 30'27	0°01'28		9057 Jun 28 00:02	0° \mathbb{E}	
minimum elong	9056 Jul 28 18:15	13° Ω 30'05	0°01'16	morning set	9057 Jul 02 23:35	8° \mathbb{E} 51'51	
behind sun begin	9056 Jul 28 12:34	13° Ω 00'25		max. Earth dist.	9057 Jul 06 17:21	15° \mathbb{E} 50'53	1.35732 AU
behind sun end	9056 Jul 28 23:55	13° Ω 59'47					
asc. node	9056 Jul 28 14:49	13° Ω 12'08		superior conj	9057 Jul 12 11:19	27° \mathbb{E} 07'19	-0°29'37
evening rise	9056 Aug 05 02:47	29° Ω 03'16		minimum elong	9057 Jul 12 13:06	27° \mathbb{E} 16'16	0°29'30
	9056 Aug 05 13:37	0° \mathbb{M}			9057 Jul 13 21:28	0° Ω	
	9056 Aug 23 09:13	0° Ω		asc. node	9057 Jul 15 11:47	3° Ω 15'39	
evening max el	9056 Aug 25 02:59	1° Ω 49'41	21°30'55	evening rise	9057 Jul 20 09:44	13° Ω 22'11	
desc. node	9056 Sep 01 00:29	6° Ω 44'58			9057 Jul 29 01:28	0° \mathbb{M}	




























































































































evening max el	9057 Aug 07 07:06	12° \mathbb{M} 42'43	20°09'29	retrograde	9058 Jul 29 23:51	28° Ω 48'01	
retrograde	9057 Aug 17 22:23	17° \mathbb{M} 58'33		evening set	9058 Jul 31 21:04	28° Ω 37'03	
desc. node	9057 Aug 18 21:38	17° \mathbb{M} 56'06		desc. node	9058 Aug 05 18:45	26° Ω 39'59	
evening set	9057 Aug 19 20:48	17° \mathbb{M} 48'53		inferior conj	9058 Aug 09 07:40	24° Ω 24'40	-1°05'23
inferior conj	9057 Aug 28 22:34	13° \mathbb{M} 50'18	-3°01'15	minimum elong	9058 Aug 09 04:49	24° Ω 29'31	1°04'25
minimum elong	9057 Aug 28 14:29	14° \mathbb{M} 02'18	2°58'31	min. Earth dist.	9058 Aug 12 03:28	22° Ω 30'11	0.56152 AU
min. Earth dist.	9057 Aug 30 14:02	12° \mathbb{M} 51'46	0.54963 AU	morning rise	9058 Aug 17 09:34	19° Ω 38'47	
morning rise	9057 Sep 06 07:02	9° \mathbb{M} 39'45		direct	9058 Aug 22 14:51	18° Ω 35'36	
direct	9057 Sep 10 16:45	8° \mathbb{M} 57'47		morning max el	9058 Sep 05 19:08	25° Ω 49'22	25°41'46
morning max el	9057 Sep 24 06:25	15° \mathbb{M} 35'52	24°00'26		9058 Sep 09 17:53	0° \mathbb{M}	
	9057 Oct 05 16:14	0° \mathbb{L}		asc. node	9058 Sep 28 08:36	29° \mathbb{M} 18'33	
asc. node	9057 Oct 11 11:39	9° \mathbb{L} 58'09			9058 Sep 28 16:59	0° \mathbb{L}	
morning set	9057 Oct 18 18:55	24° \mathbb{L} 37'43		morning set	9058 Oct 03 06:16	9° \mathbb{L} 23'29	
	9057 Oct 21 06:48	0° \mathbb{M}					
superior conj	9057 Oct 25 16:26	9° \mathbb{M} 35'30	1°40'02	superior conj	9058 Oct 10 02:49	24° \mathbb{L} 23'57	1°33'53
minimum elong	9057 Oct 25 15:49	9° \mathbb{M} 32'11	1°40'10	minimum elong	9058 Oct 10 01:16	24° \mathbb{L} 15'25	1°33'52
max. Earth dist.	9057 Oct 28 00:05	14° \mathbb{M} 35'42	1.32944 AU	max. Earth dist.	9058 Oct 11 05:48	26° \mathbb{L} 52'44	1.32048 AU
evening rise	9057 Nov 02 03:53	25° \mathbb{M} 20'16			9058 Oct 12 15:59	0° \mathbb{M}	
	9057 Nov 04 12:17	0° \mathbb{X}		evening rise	9058 Oct 17 03:54	9° \mathbb{M} 36'07	
desc. node	9057 Nov 14 20:11	18° \mathbb{X} 33'25			9058 Oct 27 20:01	0° \mathbb{X}	
	9057 Nov 22 06:39	0° \mathbb{Z}		desc. node	9058 Nov 01 17:15	8° \mathbb{X} 04'43	
evening max el	9057 Dec 05 23:13	16° \mathbb{Z} 33'37	27°27'11	evening max el	9058 Nov 18 08:12	29° \mathbb{X} 20'19	27°23'47
retrograde	9057 Dec 19 14:30	23° \mathbb{Z} 53'08			9058 Nov 19 01:19	0° \mathbb{Z}	
evening set	9057 Dec 26 13:59	21° \mathbb{Z} 20'46		retrograde	9058 Dec 02 04:02	6° \mathbb{Z} 35'06	
min. Earth dist.	9057 Dec 30 08:42	18° \mathbb{Z} 00'57	0.63903 AU	evening set	9058 Dec 09 05:55	4° \mathbb{Z} 14'30	
inferior conj	9058 Jan 01 22:13	15° \mathbb{Z} 22'21	-1°50'14	min. Earth dist.	9058 Dec 12 22:23	1° \mathbb{Z} 21'32	0.61984 AU
minimum elong	9058 Jan 02 01:41	15° \mathbb{Z} 13'22	1°48'33		9058 Dec 14 10:20	30° \mathbb{X} \mathbb{X}	
asc. node	9058 Jan 07 11:05	10° \mathbb{Z} 36'02		inferior conj	9058 Dec 15 21:44	28° \mathbb{X} 38'05	-3°01'47
morning rise	9058 Jan 08 15:11	10° \mathbb{Z} 01'49		minimum elong	9058 Dec 16 03:36	28° \mathbb{X} 24'37	2°59'23
direct	9058 Jan 11 01:47	9° \mathbb{Z} 32'12		morning rise	9058 Dec 23 03:35	23° \mathbb{X} 35'48	
morning max el	9058 Jan 17 13:33	12° \mathbb{Z} 54'21	17°49'35	direct	9058 Dec 25 09:21	23° \mathbb{X} 13'50	
	9058 Jan 29 09:43	0° \mathbb{A}		asc. node	9058 Dec 25 08:10	23° \mathbb{X} 13'51	
morning set	9058 Feb 03 05:41	8° \mathbb{A} 13'09		morning max el	9059 Jan 01 06:14	26° \mathbb{X} 42'58	17°50'02
desc. node	9058 Feb 10 19:38	21° \mathbb{A} 01'59			9059 Jan 04 02:59	0° \mathbb{Z}	
				morning set	9059 Jan 17 00:53	21° \mathbb{Z} 16'57	
superior conj	9058 Feb 16 02:33	29° \mathbb{A} 43'58	-0°38'08		9059 Jan 21 22:07	0° \mathbb{A}	
minimum elong	9058 Feb 15 22:20	29° \mathbb{A} 26'51	0°37'23	superior conj	9059 Jan 28 02:06	10° \mathbb{A} 42'50	0°04'29
	9058 Feb 16 06:30	0° \mathbb{H}		minimum elong	9059 Jan 28 02:32	10° \mathbb{A} 44'40	0°04'38
max. Earth dist.	9058 Feb 21 14:46	8° \mathbb{H} 34'35	1.44755 AU	behind sun begin	9059 Jan 27 18:11	10° \mathbb{A} 09'03	
evening rise	9058 Mar 03 19:27	24° \mathbb{H} 28'09		behind sun end	9059 Jan 28 10:53	11° \mathbb{A} 20'11	
	9058 Mar 07 10:23	0° \mathbb{Y}		desc. node	9059 Jan 28 16:31	11° \mathbb{A} 44'05	
	9058 Mar 28 08:56	0° \mathbb{B}		max. Earth dist.	9059 Feb 04 06:29	22° \mathbb{A} 39'37	1.43376 AU
evening max el	9058 Mar 31 22:17	4° \mathbb{B} 00'53	20°27'18		9059 Feb 08 20:24	0° \mathbb{H}	
asc. node	9058 Apr 05 09:46	7° \mathbb{B} 38'27		evening rise	9059 Feb 11 10:32	4° \mathbb{H} 03'55	
retrograde	9058 Apr 08 22:34	8° \mathbb{B} 40'56			9059 Feb 28 20:09	0° \mathbb{Y}	
evening set	9058 Apr 12 22:12	7° \mathbb{B} 09'36		evening max el	9059 Mar 14 19:02	17° \mathbb{Y} 41'36	21°38'52
inferior conj	9058 Apr 18 05:39	1° \mathbb{B} 03'04	3°09'42	asc. node	9059 Mar 23 06:54	23° \mathbb{Y} 01'41	
minimum elong	9058 Apr 18 04:14	1° \mathbb{B} 07'56	3°09'23	retrograde	9059 Mar 23 20:38	23° \mathbb{Y} 03'20	
min. Earth dist.	9058 Apr 18 22:07	0° \mathbb{B} 06'40	0.67879 AU	evening set	9059 Mar 28 06:25	21° \mathbb{Y} 16'45	
	9058 Apr 19 00:05	30° \mathbb{R} \mathbb{Y}		inferior conj	9059 Apr 02 13:40	14° \mathbb{Y} 59'19	2°48'18
morning rise	9058 Apr 23 10:03	24° \mathbb{Y} 46'32		minimum elong	9059 Apr 02 11:38	15° \mathbb{Y} 06'23	2°47'49
direct	9058 Apr 29 00:15	22° \mathbb{Y} 17'15		min. Earth dist.	9059 Apr 02 17:08	14° \mathbb{Y} 47'13	0.68395 AU
desc. node	9058 May 09 19:39	28° \mathbb{Y} 34'31		morning rise	9059 Apr 07 16:41	8° \mathbb{Y} 46'29	
morning max el	9058 May 10 06:22	29° \mathbb{Y} 01'20	24°19'14	direct	9059 Apr 12 17:10	6° \mathbb{Y} 36'04	
	9058 May 11 05:04	0° \mathbb{B}		morning max el	9059 Apr 22 16:35	12° \mathbb{Y} 30'15	22°49'21
	9058 Jun 02 10:58	0° \mathbb{I}		desc. node	9059 Apr 26 16:34	16° \mathbb{Y} 54'20	
morning set	9058 Jun 14 23:32	20° \mathbb{I} 31'36			9059 May 06 16:26	0° \mathbb{B}	
max. Earth dist.	9058 Jun 18 15:26	27° \mathbb{I} 00'22	1.37850 AU	morning set	9059 May 26 07:56	0° \mathbb{I}	
	9058 Jun 20 07:01	0° \mathbb{E}		max. Earth dist.	9059 May 26 23:03	1° \mathbb{I} 02'14	
superior conj	9058 Jun 25 16:47	10° \mathbb{E} 08'36	-1°01'59		9059 May 31 12:12	8° \mathbb{I} 40'48	1.40113 AU
minimum elong	9058 Jun 25 20:43	10° \mathbb{E} 27'29	1°01'35	superior conj	9059 Jun 08 06:32	22° \mathbb{I} 23'36	-1°32'54
asc. node	9058 Jul 02 08:46	23° \mathbb{E} 12'59		minimum elong	9059 Jun 08 12:14	22° \mathbb{I} 49'38	1°32'26
evening rise	9058 Jul 04 10:49	27° \mathbb{E} 21'20			9059 Jun 12 09:16	0° \mathbb{E}	
	9058 Jul 05 18:58	0° \mathbb{Q}		evening rise	9059 Jun 18 02:50	10° \mathbb{E} 51'33	
evening max el	9058 Jul 21 00:23	24° \mathbb{Q} 20'57	19°08'11	asc. node	9059 Jun 19 05:45	12° \mathbb{E} 59'23	

	9059 Jun 28 21:34	0°♊				9060 Jun 03 17:05	0°♊	
evening max el	9059 Jul 04 04:08	6°♊40'22	18°27'54	asc. node		9060 Jun 05 02:46	2°♊30'22	
retrograde	9059 Jul 11 19:49	10°♊29'51		evening max el		9060 Jun 16 14:33	19°♊32'27	18°07'49
evening set	9059 Jul 13 22:59	10°♊12'54		retrograde		9060 Jun 23 09:42	22°♊59'36	
inferior conj	9059 Jul 21 13:58	5°♊41'09	0°37'11	evening set		9060 Jun 25 20:39	22°♊32'57	
minimum elong	9059 Jul 21 15:17	5°♊38'32	0°36'29	inferior conj		9060 Jul 02 17:20	17°♊40'55	1°53'34
desc. node	9059 Jul 23 15:52	4°♊01'31		minimum elong		9060 Jul 02 20:14	17°♊34'12	1°52'26
min. Earth dist.	9059 Jul 24 22:24	3°♊02'25	0.58019 AU	min. Earth dist.		9060 Jul 06 00:27	14°♊39'24	0.60234 AU
morning rise	9059 Jul 29 04:03	0°♊18'36		morning rise		9060 Jul 09 16:59	11°♊50'33	
	9059 Jul 29 19:31	30°♊		desc. node		9060 Jul 09 12:57	11°♊56'55	
direct	9059 Aug 04 03:40	28°♊46'09		direct		9060 Jul 16 05:36	9°♊47'12	
	9059 Aug 09 15:07	0°♊		morning max el		9060 Jul 30 13:26	17°♊42'59	27°46'59
morning max el	9059 Aug 18 12:55	6°♊26'04	27°01'19			9060 Aug 09 19:08	0°♊	
	9059 Sep 05 01:26	0°♊				9060 Aug 27 17:25	0°♊	
asc. node	9059 Sep 15 05:30	18°♊58'13		morning set		9060 Aug 31 21:03	8°♊23'36	
morning set	9059 Sep 17 15:34	24°♊00'25		asc. node		9060 Sep 01 02:24	8°♊51'29	
	9059 Sep 20 10:24	0°♊		max. Earth dist.		9060 Sep 07 00:32	21°♊37'42	1.31655 AU
superior conj	9059 Sep 24 14:33	9°♊13'09	1°22'15	superior conj		9060 Sep 08 01:51	23°♊57'37	1°05'29
minimum elong	9059 Sep 24 12:27	9°♊01'27	1°22'01	minimum elong		9060 Sep 07 23:37	23°♊45'16	1°05'05
max. Earth dist.	9059 Sep 24 15:09	9°♊16'26	1.31613 AU			9060 Sep 10 19:17	0°♊	
evening rise	9059 Oct 01 09:51	24°♊06'33		evening rise		9060 Sep 14 19:33	8°♊45'20	
	9059 Oct 04 05:47	0°♊				9060 Sep 25 16:11	0°♊	
desc. node	9059 Oct 19 14:21	26°♊56'49		desc. node		9060 Oct 05 11:29	14°♊53'50	
	9059 Oct 21 17:58	0°♊		evening max el		9060 Oct 12 06:40	22°♊33'38	25°37'20
evening max el	9059 Oct 31 11:20	11°♊22'27	26°46'45	retrograde		9060 Oct 26 04:39	29°♊35'24	
retrograde	9059 Nov 14 09:28	18°♊31'12		evening set		9060 Nov 01 06:47	28°♊09'19	
evening set	9059 Nov 21 05:10	16°♊33'07		min. Earth dist.		9060 Nov 05 19:05	25°♊32'14	0.57835 AU
min. Earth dist.	9059 Nov 25 01:28	13°♊56'13	0.59892 AU	inferior conj		9060 Nov 08 19:38	23°♊25'48	-5°09'44
inferior conj	9059 Nov 28 06:01	11°♊22'39	-4°11'48	minimum elong		9060 Nov 09 02:05	23°♊14'31	5°08'26
minimum elong	9059 Nov 28 13:29	11°♊07'37	4°09'26	morning rise		9060 Nov 16 23:42	19°♊07'06	
morning rise	9059 Dec 06 00:18	6°♊41'27		direct		9060 Nov 19 07:25	18°♊50'24	
direct	9059 Dec 08 04:36	6°♊23'47		morning max el		9060 Nov 27 23:34	23°♊01'13	18°50'01
asc. node	9059 Dec 12 05:13	7°♊27'16		asc. node		9060 Nov 28 02:13	23°♊07'38	
morning max el	9059 Dec 15 18:51	10°♊09'06	18°09'37			9060 Dec 03 14:29	0°♊	
	9059 Dec 28 18:29	0°♊		morning set		9060 Dec 14 08:55	19°♊19'50	
morning set	9059 Dec 31 11:35	5°♊04'09				9060 Dec 19 19:41	0°♊	
superior conj	9060 Jan 10 02:02	22°♊51'16	0°40'28	superior conj		9060 Dec 22 21:38	5°♊54'52	1°07'52
minimum elong	9060 Jan 10 04:52	23°♊04'04	0°40'18	minimum elong		9060 Dec 23 00:54	6°♊10'22	1°07'43
	9060 Jan 14 03:01	0°♊		max. Earth dist.		9060 Dec 29 23:59	18°♊56'09	1.39371 AU
desc. node	9060 Jan 15 13:26	2°♊28'38		desc. node		9061 Jan 01 10:24	23°♊11'23	
max. Earth dist.	9060 Jan 17 17:15	6°♊09'00	1.41508 AU	evening rise		9061 Jan 02 22:32	25°♊46'08	
evening rise	9060 Jan 22 17:46	14°♊26'22				9061 Jan 05 11:03	0°♊	
	9060 Feb 01 17:29	0°♊				9061 Jan 25 09:33	0°♊	
	9060 Feb 24 02:38	0°♊		evening max el		9061 Feb 07 01:27	15°♊12'06	24°17'34
evening max el	9060 Feb 25 11:27	1°♊25'07	22°57'34	retrograde		9061 Feb 18 08:57	21°♊49'54	
retrograde	9060 Mar 06 16:34	7°♊28'04		evening set		9061 Feb 23 18:13	19°♊35'06	
asc. node	9060 Mar 09 04:02	6°♊57'43		asc. node		9061 Feb 24 01:10	19°♊19'57	
evening set	9060 Mar 11 13:37	5°♊26'49		min. Earth dist.		9061 Feb 28 10:06	14°♊14'30	0.68161 AU
	9060 Mar 16 05:40	30°♊		inferior conj		9061 Mar 01 06:21	13°♊06'22	1°37'46
inferior conj	9060 Mar 16 22:32	29°♊01'43	2°17'28	minimum elong		9061 Mar 01 04:22	13°♊13'01	1°37'10
minimum elong	9060 Mar 16 20:18	29°♊09'27	2°16'50	morning rise		9061 Mar 06 14:35	7°♊05'13	
min. Earth dist.	9060 Mar 16 13:54	29°♊31'35	0.68484 AU	direct		9061 Mar 10 12:11	5°♊38'26	
morning rise	9060 Mar 22 02:52	22°♊53'57		morning max el		9061 Mar 18 04:32	9°♊58'18	20°09'04
direct	9060 Mar 26 13:34	21°♊05'12		desc. node		9061 Mar 30 10:21	25°♊37'45	
morning max el	9060 Apr 04 07:01	26°♊08'30	21°23'47			9061 Apr 02 10:21	0°♊	
	9060 Apr 07 19:26	0°♊		morning set		9061 Apr 14 19:42	18°♊43'28	
desc. node	9060 Apr 12 13:27	5°♊59'39				9061 Apr 22 01:02	0°♊	
	9060 Apr 29 04:07	0°♊		max. Earth dist.		9061 Apr 24 22:35	4°♊36'28	1.43993 AU
morning set	9060 May 05 19:22	10°♊18'24		superior conj		9061 Apr 30 17:24	13°♊58'20	-2°11'34
max. Earth dist.	9060 May 12 13:39	21°♊12'09	1.42250 AU	minimum elong		9061 Apr 30 19:17	14°♊06'05	2°11'43
	9060 May 17 19:58	0°♊				9061 May 10 06:45	0°♊	
superior conj	9060 May 19 24:00	3°♊42'46	-1°58'04	evening rise		9061 May 13 15:11	5°♊46'00	
minimum elong	9060 May 20 05:40	4°♊07'13	1°57'52	asc. node		9061 May 22 23:50	21°♊39'52	
evening rise	9060 May 31 05:51	23°♊43'24				9061 May 28 16:42	0°♊	

evening max el	9061 May 31 03:53	2°♄47'00	18°06'58		9062 May 03 03:02	0°♈	
retrograde	9061 Jun 06 13:40	6°♄07'25		asc. node	9062 May 09 20:55	10°♈20'14	
evening set	9061 Jun 09 08:14	5°♄28'30		evening max el	9062 May 14 16:55	16°♈15'14	18°24'33
inferior conj	9061 Jun 15 14:18	0°♄17'07	2°43'28	retrograde	9062 May 21 03:12	19°♈43'03	
minimum elong	9061 Jun 15 16:55	0°♄10'11	2°42'38	evening set	9062 May 24 05:13	18°♈50'23	
	9061 Jun 15 20:46	30°♈♈		inferior conj	9062 May 30 00:40	13°♈21'22	3°11'09
min. Earth dist.	9061 Jun 18 11:06	27°♈16'52	0.62470 AU	minimum elong	9062 May 30 02:11	13°♈16'55	3°10'44
morning rise	9061 Jun 21 23:48	24°♈09'36		min. Earth dist.	9062 Jun 01 07:07	10°♈42'19	0.64488 AU
desc. node	9061 Jun 26 10:00	21°♈58'30		morning rise	9062 Jun 04 22:09	7°♈05'04	
direct	9061 Jun 28 17:41	21°♈41'24		direct	9062 Jun 11 14:05	4°♈22'29	
morning max el	9061 Jul 12 19:44	29°♈43'36	27°54'28	desc. node	9062 Jun 13 07:04	4°♈32'04	
	9061 Jul 13 02:15	0°♄		morning max el	9062 Jun 25 05:35	12°♈21'14	27°25'52
	9061 Aug 03 19:10	0°♈			9062 Jul 09 07:35	0°♄	
morning set	9061 Aug 15 20:43	22°♈27'28			9062 Jul 27 08:10	0°♈	
asc. node	9061 Aug 18 23:19	28°♈53'29		morning set	9062 Jul 30 11:57	6°♈04'00	
	9061 Aug 19 11:55	0°♈		max. Earth dist.	9062 Aug 04 04:37	15°♈32'16	1.33181 AU
max. Earth dist.	9061 Aug 21 06:19	3°♈46'32	1.32175 AU	asc. node	9062 Aug 05 20:15	18°♈59'07	
superior conj	9061 Aug 23 10:54	8°♈31'45	0°43'58	superior conj	9062 Aug 07 15:37	22°♈48'41	0°18'05
minimum elong	9061 Aug 23 09:03	8°♈21'41	0°43'30	minimum elong	9062 Aug 07 14:43	22°♈43'57	0°17'44
evening rise	9061 Aug 30 07:01	23°♈26'47			9062 Aug 10 23:59	0°♈	
	9061 Sep 02 09:54	0°♈		evening rise	9062 Aug 14 18:19	8°♈04'02	
	9061 Sep 20 21:58	0°♈			9062 Aug 26 05:31	0°♈	
desc. node	9061 Sep 22 08:38	1°♈34'36		evening max el	9062 Sep 05 07:09	13°♈12'02	22°24'55
evening max el	9061 Sep 23 19:12	3°♈01'34	24°04'42	desc. node	9062 Sep 09 05:48	16°♈30'25	
retrograde	9061 Oct 07 11:31	9°♈52'30		retrograde	9062 Sep 18 06:19	19°♈39'48	
evening set	9061 Oct 12 07:41	9°♈01'05		evening set	9062 Sep 21 14:26	19°♈15'12	
min. Earth dist.	9061 Oct 18 05:51	6°♈05'26	0.56089 AU	min. Earth dist.	9062 Sep 29 13:42	15°♈44'13	0.54951 AU
inferior conj	9061 Oct 20 12:53	4°♈41'16	-5°38'23	inferior conj	9062 Sep 30 12:34	15°♈11'56	-5°18'18
minimum elong	9061 Oct 20 13:55	4°♈39'41	5°38'13	minimum elong	9062 Sep 30 05:54	15°♈21'21	5°17'18
morning rise	9061 Oct 28 22:10	0°♈43'06		morning rise	9062 Oct 08 23:08	11°♈24'26	
direct	9061 Oct 31 15:09	0°♈24'08		direct	9062 Oct 12 05:43	11°♈00'17	
morning max el	9061 Nov 10 16:52	5°♈09'32	19°52'46	morning max el	9062 Oct 23 20:59	16°♈28'13	21°17'34
asc. node	9061 Nov 14 23:12	10°♈00'29		asc. node	9062 Nov 01 20:10	27°♈50'02	
	9061 Nov 26 14:48	0°♈			9062 Nov 03 04:09	0°♈	
morning set	9061 Nov 28 13:19	3°♈53'54		morning set	9062 Nov 12 22:08	18°♈38'25	
					9062 Nov 18 07:57	0°♈	
superior conj	9061 Dec 06 07:59	19°♈39'58	1°26'34	superior conj	9062 Nov 20 04:53	3°♈54'22	1°37'17
minimum elong	9061 Dec 06 10:32	19°♈52'35	1°26'35	minimum elong	9062 Nov 20 06:13	4°♈01'14	1°37'26
	9061 Dec 11 15:46	0°♈		max. Earth dist.	9062 Nov 24 16:42	13°♈02'18	1.35252 AU
max. Earth dist.	9061 Dec 12 06:17	1°♈08'14	1.37212 AU	evening rise	9062 Nov 28 19:32	21°♈00'58	
evening rise	9061 Dec 16 00:14	8°♈00'32			9062 Dec 03 17:35	0°♈	
desc. node	9061 Dec 19 07:25	13°♈48'35		desc. node	9062 Dec 06 04:27	4°♈15'38	
	9061 Dec 29 06:25	0°♈			9062 Dec 23 04:05	0°♈	
evening max el	9062 Jan 20 14:44	29°♈00'49	25°31'59	evening max el	9063 Jan 03 04:00	12°♈45'34	26°33'37
	9062 Jan 21 15:32	0°♈		retrograde	9063 Jan 16 03:27	20°♈02'50	
retrograde	9062 Feb 01 20:48	6°♈03'36		evening set	9063 Jan 22 13:14	17°♈29'03	
evening set	9062 Feb 07 18:41	3°♈37'25		min. Earth dist.	9063 Jan 26 15:41	13°♈17'59	0.66334 AU
asc. node	9062 Feb 10 22:18	0°♈21'44		inferior conj	9063 Jan 28 11:13	11°♈07'51	-0°06'49
	9062 Feb 11 05:30	30°♈♈		minimum elong	9063 Jan 28 11:24	11°♈07'19	0°06'32
min. Earth dist.	9062 Feb 12 03:25	28°♈51'41	0.67439 AU	transit middle	9063 Jan 28 11:24	11°♈07'19	0°06'32
inferior conj	9062 Feb 13 11:15	27°♈09'45	0°49'33	transit begin	9063 Jan 28 08:44	11°♈15'17	
minimum elong	9062 Feb 13 10:03	27°♈13'34	0°49'15	transit end	9063 Jan 28 14:03	10°♈59'21	
morning rise	9062 Feb 19 01:50	21°♈17'02		asc. node	9063 Jan 28 19:25	10°♈43'21	
direct	9062 Feb 22 11:28	20°♈10'36		morning rise	9063 Feb 03 10:30	5°♈25'41	
morning max el	9062 Mar 01 10:02	23°♈59'13	19°08'52	direct	9063 Feb 06 09:37	4°♈36'36	
	9062 Mar 06 12:53	0°♈		morning max el	9063 Feb 12 22:13	8°♈06'38	18°24'49
greatest brilliancy	9062 Mar 14 17:11	11°♈44'29	-0.7m		9063 Feb 28 09:46	0°♈	
desc. node	9062 Mar 17 07:15	15°♈39'50		desc. node	9063 Mar 04 04:09	5°♈59'24	
morning set	9062 Mar 24 21:37	27°♈21'38		morning set	9063 Mar 04 22:28	7°♈12'17	
	9062 Mar 26 14:31	0°♈			9063 Mar 19 09:02	0°♈	
max. Earth dist.	9062 Apr 07 14:13	18°♈41'52	1.45138 AU	superior conj	9063 Mar 20 17:13	2°♈06'00	-1°42'52
superior conj	9062 Apr 10 11:33	23°♈15'23	-2°07'18	minimum elong	9063 Mar 20 07:40	1°♈28'36	1°41'59
minimum elong	9062 Apr 10 06:22	22°♈54'50	2°07'11	max. Earth dist.	9063 Mar 21 09:19	3°♈08'59	1.45567 AU
	9062 Apr 14 17:16	0°♈		evening rise	9063 Apr 05 14:17	26°♈59'57	
evening rise	9062 Apr 25 02:30	16°♈51'12					

	9063 Apr 07 11:58	0°♄		superior conj	9064 Feb 28 04:58	11°♄20'03	-1°03'33
greatest brilliancy	9063 Apr 15 11:50	12°♄32'28	-0.8m	minimum elong	9064 Feb 27 21:46	10°♄51'24	1°02'31
asc. node	9063 Apr 26 18:03	28°♄22'37		max. Earth dist.	9064 Mar 03 04:44	17°♄38'53	1.45251 AU
evening max el	9063 Apr 28 03:05	29°♄51'15	18°59'45		9064 Mar 11 02:51	0°♄	
	9063 Apr 28 06:35	0°♄		evening rise	9064 Mar 15 07:22	6°♄27'48	
retrograde	9063 May 04 22:34	3°♄39'16		greatest brilliancy	9064 Mar 29 15:47	28°♄12'17	-0.6m
evening set	9063 May 08 08:16	2°♄32'02			9064 Mar 30 21:18	0°♄	
	9063 May 11 04:40	30°♄8		evening max el	9064 Apr 10 08:32	13°♄30'19	19°51'16
inferior conj	9063 May 13 20:45	26°♄47'04	3°21'13	asc. node	9064 Apr 12 15:11	15°♄34'32	
minimum elong	9063 May 13 20:59	26°♄46'20	3°21'01	retrograde	9064 Apr 17 20:38	17°♄49'09	
min. Earth dist.	9063 May 15 11:56	24°♄42'44	0.66147 AU	evening set	9064 Apr 21 14:49	16°♄26'52	
morning rise	9063 May 19 09:10	20°♄27'54		inferior conj	9064 Apr 26 23:23	10°♄27'46	3°17'18
direct	9063 May 25 17:44	17°♄42'25		minimum elong	9064 Apr 26 22:29	10°♄30'47	3°17'05
desc. node	9063 May 31 04:05	19°♄19'50		min. Earth dist.	9064 Apr 27 23:55	9°♄05'26	0.67377 AU
morning max el	9063 Jun 07 16:19	25°♄24'41	26°27'45	morning rise	9064 May 02 05:49	4°♄09'26	
	9063 Jun 11 20:43	0°♄		direct	9064 May 08 03:25	1°♄31'37	
	9063 Jul 02 19:40	0°♄		desc. node	9064 May 17 01:03	5°♄50'24	
morning set	9063 Jul 13 15:29	19°♄04'52		morning max el	9064 May 20 02:00	8°♄41'28	25°09'21
max. Earth dist.	9063 Jul 17 16:27	26°♄51'18	1.34673 AU		9064 Jun 05 19:36	0°♄	
	9063 Jul 19 06:29	0°♄			9064 Jun 24 09:26	0°♄	
				morning set	9064 Jun 25 02:59	1°♄18'12	
superior conj	9063 Jul 22 13:41	6°♄42'20	-0°11'26	max. Earth dist.	9064 Jun 28 17:52	7°♄54'30	1.36598 AU
minimum elong	9063 Jul 22 14:21	6°♄45'43	0°11'32				
behind sun begin	9063 Jul 22 10:13	6°♄24'26		superior conj	9064 Jul 05 02:13	20°♄05'15	-0°43'19
behind sun end	9063 Jul 22 18:29	7°♄07'02		minimum elong	9064 Jul 05 04:54	20°♄18'28	0°43'05
asc. node	9063 Jul 23 17:13	9°♄04'41		asc. node	9064 Jul 09 14:12	29°♄06'11	
evening rise	9063 Jul 30 03:29	22°♄31'34			9064 Jul 10 00:49	0°♄	
	9063 Aug 02 19:26	0°♄		evening rise	9064 Jul 13 08:16	6°♄42'54	
evening max el	9063 Aug 18 03:41	23°♄42'08	20°53'52		9064 Jul 26 10:03	0°♄	
desc. node	9063 Aug 27 02:57	29°♄10'09		evening max el	9064 Jul 30 13:38	4°♄54'46	19°40'50
retrograde	9063 Aug 29 18:40	29°♄27'49		retrograde	9064 Aug 09 11:35	9°♄48'48	
evening set	9063 Aug 31 23:52	29°♄16'05		evening set	9064 Aug 11 07:56	9°♄39'21	
inferior conj	9063 Sep 10 04:53	25°♄19'34	-4°02'54	desc. node	9064 Aug 13 00:04	9°♄15'27	
minimum elong	9063 Sep 09 19:15	25°♄33'16	4°00'08	inferior conj	9064 Aug 20 04:25	5°♄36'29	-2°12'02
min. Earth dist.	9063 Sep 10 22:26	24°♄54'36	0.54680 AU	minimum elong	9064 Aug 19 22:25	5°♄45'50	2°09'53
morning rise	9063 Sep 18 14:48	21°♄22'57		min. Earth dist.	9064 Aug 22 09:57	4°♄13'02	0.55367 AU
direct	9063 Sep 22 13:34	20°♄49'30		morning rise	9064 Aug 28 10:42	1°♄11'35	
morning max el	9063 Oct 05 14:01	27°♄03'40	22°59'03	direct	9064 Sep 02 04:41	0°♄21'29	
	9063 Oct 08 10:43	0°♄		morning max el	9064 Sep 16 02:08	7°♄16'47	24°45'08
asc. node	9063 Oct 19 17:07	16°♄23'06			9064 Oct 02 14:44	0°♄	
	9063 Oct 26 17:43	0°♄		asc. node	9064 Oct 05 14:03	5°♄29'01	
morning set	9063 Oct 28 09:17	3°♄27'23		morning set	9064 Oct 11 21:03	18°♄16'02	
					9064 Oct 17 06:24	0°♄	
superior conj	9063 Nov 04 09:00	18°♄28'17	1°40'53				
minimum elong	9063 Nov 04 09:03	18°♄28'33	1°41'04	superior conj	9064 Oct 18 17:45	3°♄13'57	1°38'07
max. Earth dist.	9063 Nov 07 10:37	24°♄58'07	1.33656 AU	minimum elong	9064 Oct 18 16:42	3°♄08'13	1°38'12
	9063 Nov 09 21:10	0°♄		max. Earth dist.	9064 Oct 20 12:37	7°♄07'45	1.32501 AU
evening rise	9063 Nov 12 04:40	4°♄37'59		evening rise	9064 Oct 26 00:10	18°♄42'48	
desc. node	9063 Nov 23 01:31	24°♄26'58			9064 Oct 31 18:21	0°♄	
	9063 Nov 26 11:15	0°♄		desc. node	9064 Nov 08 22:34	14°♄15'48	
evening max el	9063 Dec 16 16:56	26°♄17'15	27°15'11		9064 Nov 19 18:40	0°♄	
	9063 Dec 21 01:54	0°♄		evening max el	9064 Nov 28 04:13	9°♄25'08	27°29'51
retrograde	9063 Dec 30 04:14	3°♄39'00		retrograde	9064 Dec 11 22:15	16°♄43'32	
evening set	9064 Jan 05 23:40	1°♄03'45		evening set	9064 Dec 18 23:20	14°♄15'05	
	9064 Jan 07 06:28	30°♄8		min. Earth dist.	9064 Dec 22 16:40	11°♄07'23	0.63107 AU
min. Earth dist.	9064 Jan 09 20:43	27°♄26'05	0.64874 AU	inferior conj	9064 Dec 25 10:38	8°♄25'05	-2°20'20
inferior conj	9064 Jan 12 03:55	24°♄54'58	-1°10'42	minimum elong	9064 Dec 25 15:08	8°♄13'58	2°18'18
minimum elong	9064 Jan 12 06:03	24°♄49'06	1°09'33	morning rise	9065 Jan 01 09:00	3°♄11'47	
asc. node	9064 Jan 15 16:32	21°♄21'39		asc. node	9065 Jan 01 13:35	3°♄07'47	
morning rise	9064 Jan 18 13:57	19°♄25'50		direct	9065 Jan 03 17:04	2°♄45'57	
direct	9064 Jan 21 04:24	18°♄50'20		morning max el	9065 Jan 10 07:58	6°♄10'24	17°47'30
morning max el	9064 Jan 27 14:31	22°♄12'49	17°57'29		9065 Jan 25 22:19	0°♄	
	9064 Feb 02 17:49	0°♄		morning set	9065 Jan 26 12:23	1°♄01'15	
morning set	9064 Feb 14 04:42	18°♄29'54		desc. node	9065 Feb 04 21:56	17°♄10'12	
desc. node	9064 Feb 19 01:02	26°♄30'47					
	9064 Feb 21 04:09	0°♄		superior conj	9065 Feb 07 13:48	21°♄36'32	-0°19'33
				minimum elong	9065 Feb 07 11:46	21°♄28'08	0°19'04

	9065 Feb 12 17:08	0° H		max. Earth dist.	9066 Jan 27 12:19	15° \approx 49'15	1.42634 AU
max. Earth dist.	9065 Feb 13 22:22	1° H 57'17	1.44239 AU	evening rise	9066 Feb 02 15:31	25° \approx 43'02	
evening rise	9065 Feb 22 18:44	15° H 50'05			9066 Feb 05 09:08	0° H	
	9065 Mar 04 03:19	0° Y			9066 Feb 26 00:43	0° Y	
evening max el	9065 Mar 24 08:31	27° Y 10'55	20°56'35	evening max el	9066 Mar 07 03:21	10° Y 52'59	22°11'51
	9065 Mar 27 12:36	0° B		retrograde	9066 Mar 16 16:21	16° Y 31'59	
asc. node	9065 Mar 30 12:18	1° B 41'52		asc. node	9066 Mar 17 09:25	16° Y 29'27	
retrograde	9065 Apr 01 19:09	2° B 08'10		evening set	9066 Mar 21 06:53	14° Y 39'01	
evening set	9065 Apr 05 22:55	0° B 30'30		inferior conj	9066 Mar 26 14:39	8° Y 18'09	2°36'21
	9065 Apr 06 13:21	30° R Y		minimum elong	9066 Mar 26 12:29	8° Y 25'42	2°35'47
inferior conj	9065 Apr 11 06:03	24° Y 19'14	3°01'50	min. Earth dist.	9066 Mar 26 12:54	8° Y 24'15	0.68488 AU
minimum elong	9065 Apr 11 04:20	24° Y 25'12	3°01'27	morning rise	9066 Mar 31 17:56	2° Y 07'32	
min. Earth dist.	9065 Apr 11 16:57	23° Y 41'31	0.68157 AU	direct	9066 Apr 05 12:36	0° Y 06'03	
morning rise	9065 Apr 16 09:31	18° Y 04'03		morning max el	9066 Apr 14 22:40	5° Y 37'29	22°12'02
direct	9065 Apr 21 18:04	15° Y 41'56		desc. node	9066 Apr 20 18:55	12° Y 17'15	
morning max el	9065 May 02 11:10	22° Y 05'28	23°40'53		9066 May 03 15:28	0° B	
desc. node	9065 May 03 22:00	23° Y 36'30		morning set	9066 May 18 05:06	22° B 28'35	
	9065 May 09 08:18	0° B			9066 May 22 18:55	0° II	
	9065 May 30 02:46	0° II		max. Earth dist.	9066 May 23 12:49	1° II 15'00	1.41056 AU
morning set	9065 Jun 06 17:09	12° II 30'01		superior conj	9066 May 31 07:21	14° II 41'34	-1°44'35
max. Earth dist.	9065 Jun 10 14:08	19° II 12'07	1.38812 AU	minimum elong	9066 May 31 13:23	15° II 08'25	1°44'11
	9065 Jun 16 13:29	0° E			9066 Jun 08 16:25	0° E	
superior conj	9065 Jun 18 01:35	2° E 48'27	-1°15'30	evening rise	9066 Jun 10 16:58	3° E 46'24	
minimum elong	9065 Jun 18 06:22	3° E 10'59	1°15'01	asc. node	9066 Jun 13 08:12	8° E 40'21	
asc. node	9065 Jun 26 11:11	18° E 59'29		evening max el	9066 Jun 26 19:02	29° E 27'04	18°16'55
evening rise	9065 Jun 27 05:54	20° E 30'43			9066 Jun 27 08:55	0° O	
	9065 Jul 02 04:57	0° O		retrograde	9066 Jul 04 00:28	3° O 05'09	
evening max el	9065 Jul 13 11:56	16° O 52'07	18°48'32	evening set	9066 Jul 06 06:59	2° O 44'22	
retrograde	9065 Jul 21 20:17	21° O 00'54			9066 Jul 11 04:39	30° R E	
evening set	9065 Jul 23 19:47	20° O 47'48		inferior conj	9066 Jul 13 13:47	28° E 03'33	1°12'58
desc. node	9065 Jul 30 21:12	17° O 12'26		minimum elong	9066 Jul 13 16:04	27° E 58'42	1°11'56
inferior conj	9065 Jul 31 22:09	16° O 27'42	-0°19'04	min. Earth dist.	9066 Jul 16 22:55	25° E 12'35	0.58941 AU
minimum elong	9065 Jul 31 21:22	16° O 29'07	0°18'58	desc. node	9066 Jul 17 18:18	24° E 34'28	
min. Earth dist.	9065 Aug 04 01:24	14° O 12'18	0.56887 AU	morning rise	9066 Jul 20 21:54	22° E 28'05	
morning rise	9065 Aug 08 19:36	11° O 25'57		direct	9066 Jul 27 03:51	20° E 42'34	
direct	9065 Aug 14 09:25	10° O 10'47		morning max el	9066 Aug 10 12:57	28° E 29'25	27°25'20
morning max el	9065 Aug 28 16:17	17° O 36'31	26°19'06		9066 Aug 12 00:37	0° O	
	9065 Sep 07 22:55	0° P			9066 Sep 01 17:38	0° P	
asc. node	9065 Sep 22 10:57	24° P 58'26		asc. node	9066 Sep 09 07:53	14° P 44'49	
	9065 Sep 24 21:51	0° A		morning set	9066 Sep 10 15:40	17° P 30'33	
morning set	9065 Sep 26 07:43	2° A 58'35			9066 Sep 16 09:50	0° A	
superior conj	9065 Oct 03 04:56	18° A 03'29	1°29'36	superior conj	9066 Sep 17 16:43	2° A 51'21	1°15'45
minimum elong	9065 Oct 03 03:06	17° A 53'19	1°29'29	minimum elong	9066 Sep 17 14:30	2° A 39'02	1°15'26
max. Earth dist.	9065 Oct 03 20:22	19° A 29'00	1.31809 AU	max. Earth dist.	9066 Sep 17 06:26	1° A 54'16	1.31582 AU
	9065 Oct 08 15:55	0° M		evening rise	9066 Sep 24 10:52	17° A 41'02	
evening rise	9065 Oct 10 03:01	3° M 06'04			9066 Sep 30 11:48	0° M	
	9065 Oct 24 13:41	0° J		desc. node	9066 Oct 13 16:47	22° M 02'50	
desc. node	9065 Oct 26 19:39	3° J 32'02			9066 Oct 19 23:59	0° J	
evening max el	9065 Nov 10 11:15	21° J 54'52	27°12'18	evening max el	9066 Oct 23 11:16	3° J 35'21	26°20'41
retrograde	9065 Nov 24 08:16	29° J 06'23		retrograde	9066 Nov 06 09:12	10° J 40'31	
evening set	9065 Dec 01 08:39	26° J 54'28		evening set	9066 Nov 12 23:14	8° J 55'01	
min. Earth dist.	9065 Dec 05 01:57	24° J 09'41	0.61106 AU	min. Earth dist.	9066 Nov 17 00:28	6° J 20'29	0.59009 AU
inferior conj	9065 Dec 08 04:06	21° J 28'49	-3°32'09	inferior conj	9066 Nov 20 04:47	3° J 56'31	-4°38'42
minimum elong	9065 Dec 08 10:49	21° J 14'11	3°29'38	minimum elong	9066 Nov 20 12:16	3° J 42'20	4°36'40
morning rise	9065 Dec 15 15:22	16° J 34'47			9066 Nov 26 10:11	30° R M	
direct	9065 Dec 17 20:05	16° J 14'59		morning rise	9066 Nov 28 03:42	29° M 24'50	
asc. node	9065 Dec 19 10:37	16° J 25'58		direct	9066 Nov 30 09:00	29° M 07'50	
morning max el	9065 Dec 24 23:15	19° J 49'59	17°55'54		9066 Dec 04 03:42	0° J	
	9066 Jan 01 11:18	0° Z		asc. node	9066 Dec 06 07:39	1° J 17'33	
morning set	9066 Jan 09 14:52	14° Z 25'29		morning max el	9066 Dec 08 08:55	3° J 02'24	18°24'09
	9066 Jan 18 05:45	0° \approx		morning set	9066 Dec 24 06:33	28° J 25'55	
					9066 Dec 25 02:12	0° Z	
superior conj	9066 Jan 20 00:04	3° \approx 05'31	0°20'44	superior conj	9067 Jan 02 08:58	15° Z 38'53	0°53'11
minimum elong	9066 Jan 20 01:49	3° \approx 13'08	0°20'42	minimum elong	9067 Jan 02 12:11	15° Z 53'41	0°53'00
desc. node	9066 Jan 22 18:50	7° \approx 53'27					

desc. node	9067 Jan 09 15:46	28°  37'17		max. Earth dist.	9067 Dec 23 03:21	11°  32'08	1.38435 AU
max. Earth dist.	9067 Jan 09 21:32	29°  02'02	1.40619 AU	evening rise	9067 Dec 26 21:36	18°  12'35	
	9067 Jan 10 11:03	0°  ≈		desc. node	9067 Dec 27 12:46	19°  18'18	
evening rise	9067 Jan 14 07:36	6°  ≈28'37			9068 Jan 02 22:39	0°  ≈	
	9067 Jan 29 12:14	0°  ✕			9068 Jan 23 20:08	0°  ✕	
evening max el	9067 Feb 17 18:24	24°  ✕37'11	23°31'52	evening max el	9068 Jan 31 07:45	8°  ✕24'44	24°50'18
	9067 Feb 24 17:56	0°  Υ		retrograde	9068 Feb 12 01:36	15°  ✕15'18	
retrograde	9067 Feb 28 10:52	0°  Υ55'52		evening set	9068 Feb 17 16:14	12°  ✕55'06	
	9067 Mar 03 20:36	30°  ✕✕		asc. node	9068 Feb 19 03:41	11°  ✕30'26	
asc. node	9067 Mar 04 06:34	29°  ✕45'08		min. Earth dist.	9068 Feb 22 04:51	7°  ✕49'20	0.67896 AU
evening set	9067 Mar 05 13:10	28°  ✕48'22		inferior conj	9068 Feb 23 06:05	6°  ✕25'55	1°18'20
inferior conj	9067 Mar 10 23:16	22°  ✕21'11	2°01'41	minimum elong	9068 Feb 23 04:22	6°  ✕31'35	1°17'50
minimum elong	9067 Mar 10 21:05	22°  ✕28'40	2°01'02	morning rise	9068 Feb 28 16:44	0°  ✕28'10	
min. Earth dist.	9067 Mar 10 09:34	23°  ✕08'08	0.68394 AU		9068 Feb 29 10:28	30°  ✕≈	
morning rise	9067 Mar 16 04:59	16°  ✕16'19		direct	9068 Mar 03 08:59	29°  ≈10'33	
direct	9067 Mar 20 09:58	14°  ✕37'11			9068 Mar 06 11:17	0°  ✕	
morning max el	9067 Mar 28 15:58	19°  ✕20'30	20°50'30	morning max el	9068 Mar 10 17:02	3°  ✕15'55	19°41'35
	9067 Apr 06 11:20	0°  Υ		greatest brilliancy	9068 Mar 23 10:53	19°  ✕51'25	-0.6m
desc. node	9067 Apr 07 15:48	1°  Υ37'18		desc. node	9068 Mar 24 12:42	21°  ✕26'28	
	9067 Apr 26 19:16	0°  ♁			9068 Mar 30 05:36	0°  Υ	
morning set	9067 Apr 27 15:09	1°  ♁17'22		morning set	9068 Apr 05 13:00	9°  Υ38'50	
max. Earth dist.	9067 May 05 17:50	14°  ♁11'08	1.43048 AU	max. Earth dist.	9068 Apr 17 05:26	27°  Υ53'05	1.44556 AU
					9068 Apr 18 13:24	0°  ♁	
superior conj	9067 May 12 14:49	25°  ♁33'19	-2°05'36				
minimum elong	9067 May 12 19:26	25°  ♁52'47	2°05'35	superior conj	9068 Apr 21 21:43	5°  ♁21'40	-2°12'13
	9067 May 15 05:35	0°  ♁		minimum elong	9068 Apr 21 20:47	5°  ♁17'51	2°12'22
evening rise	9067 May 24 13:04	16°  ♁18'30		evening rise	9068 May 05 13:30	27°  ♁57'07	
asc. node	9067 May 31 05:16	28°  ♁02'52			9068 May 06 18:34	0°  ♁	
	9067 Jun 01 08:56	0°  ♁		asc. node	9068 May 17 02:21	17°  ♁00'48	
evening max el	9067 Jun 10 07:03	12°  ♁29'06	18°05'07	evening max el	9068 May 23 20:35	25°  ♁49'49	18°12'14
retrograde	9067 Jun 16 21:06	15°  ♁52'00		retrograde	9068 May 30 05:37	29°  ♁11'56	
evening set	9067 Jun 19 11:13	15°  ♁20'27		evening set	9068 Jun 02 03:14	28°  ♁27'29	
inferior conj	9067 Jun 26 01:11	10°  ♁19'49	2°17'43	inferior conj	9068 Jun 08 04:20	23°  ♁08'35	2°57'35
minimum elong	9067 Jun 26 04:07	10°  ♁12'35	2°16'40	minimum elong	9068 Jun 08 06:32	23°  ♁02'28	2°56'57
min. Earth dist.	9067 Jun 29 04:34	7°  ♁16'05	0.61193 AU	min. Earth dist.	9068 Jun 10 19:24	20°  ♁14'56	0.63363 AU
morning rise	9067 Jul 02 18:36	4°  ♁20'37		morning rise	9068 Jun 14 08:22	16°  ♁56'12	
desc. node	9067 Jul 04 15:24	3°  ♁15'28		desc. node	9068 Jun 20 12:28	14°  ♁21'14	
direct	9067 Jul 09 10:09	2°  ♁05'53		direct	9068 Jun 21 02:12	14°  ♁20'10	
morning max el	9067 Jul 23 16:27	10°  ♁05'52	27°54'53	morning max el	9068 Jul 05 00:39	22°  ♁23'16	27°46'20
	9067 Aug 08 03:29	0°  ♁			9068 Jul 11 17:15	0°  ♁	
	9067 Aug 24 22:14	0°  ♁			9068 Jul 31 08:49	0°  ♁	
morning set	9067 Aug 25 18:59	1°  ♁46'17		morning set	9068 Aug 08 15:25	15°  ♁39'20	
asc. node	9067 Aug 27 04:48	4°  ♁42'13		asc. node	9068 Aug 13 01:45	24°  ♁46'05	
max. Earth dist.	9067 Aug 31 14:53	14°  ♁11'52	1.31820 AU	max. Earth dist.	9068 Aug 13 17:43	26°  ♁10'30	1.32537 AU
					9068 Aug 15 12:40	0°  ♁	
superior conj	9067 Sep 02 03:17	17°  ♁31'46	0°56'56				
minimum elong	9067 Sep 02 01:09	17°  ♁20'01	0°56'28	superior conj	9068 Aug 16 10:45	1°  ♁59'05	0°33'30
	9067 Sep 07 19:22	0°  ♁		minimum elong	9068 Aug 16 09:15	1°  ♁50'56	0°33'03
evening rise	9067 Sep 08 21:33	2°  ♁21'17		evening rise	9068 Aug 23 09:09	17°  ♁01'06	
	9067 Sep 23 16:02	0°  ♁			9068 Aug 29 17:55	0°  ♁	
desc. node	9067 Sep 30 13:56	9°  ♁30'23		evening max el	9068 Sep 15 14:14	24°  ♁41'13	23°22'08
evening max el	9067 Oct 05 03:04	14°  ♁25'11	24°59'47	desc. node	9068 Sep 16 11:06	25°  ♁30'18	
retrograde	9067 Oct 18 23:35	21°  ♁23'53			9068 Sep 22 23:00	0°  ♁	
evening set	9067 Oct 24 14:29	20°  ♁12'26		retrograde	9068 Sep 29 01:31	1°  ♁24'55	
min. Earth dist.	9067 Oct 29 14:34	17°  ♁29'50	0.57038 AU	evening set	9068 Oct 03 06:00	0°  ♁46'41	
inferior conj	9067 Nov 01 09:44	15°  ♁39'28	-5°26'41		9068 Oct 05 09:38	30°  ♁✕	
minimum elong	9067 Nov 01 14:27	15°  ♁31'41	5°25'58	min. Earth dist.	9068 Oct 09 23:59	27°  ♁37'33	0.55507 AU
morning rise	9067 Nov 09 16:43	11°  ♁30'31		inferior conj	9068 Oct 11 18:49	26°  ♁34'38	-5°36'47
direct	9067 Nov 12 03:36	11°  ♁13'20		minimum elong	9068 Oct 11 16:29	26°  ♁38'04	5°36'34
morning max el	9067 Nov 21 09:16	15°  ♁37'26	19°14'00	morning rise	9068 Oct 20 04:58	22°  ♁42'37	
asc. node	9067 Nov 23 04:39	17°  ♁30'44		direct	9068 Oct 23 03:04	22°  ♁21'58	
	9067 Dec 01 14:03	0°  ♁✕		morning max el	9068 Nov 02 21:06	27°  ♁25'15	20°26'18
morning set	9067 Dec 08 07:16	12°  ♁✕50'32			9068 Nov 05 08:21	0°  ♁	
				asc. node	9068 Nov 09 01:38	4°  ♁49'27	
superior conj	9067 Dec 16 11:30	29° ♁02'19	1°16'49	morning set	9068 Nov 21 13:50	27° ♁29'36	
minimum elong	9067 Dec 16 14:33	29° ♁17'06	1°16'44		9068 Nov 22 19:03	0° ♁✕	
	9067 Dec 16 23:26	0° ♁					

superior conj	9068 Nov 29 02:48	13° ♄ 01'10	1°32'01	morning set	9069 Nov 05 23:54	12° ♄ 16'52	
minimum elong	9068 Nov 29 04:51	13° ♄ 11'35	1°32'06				
max. Earth dist.	9068 Dec 04 10:26	23° ♄ 32'09	1.36339 AU	superior conj	9069 Nov 13 03:07	27° ♄ 24'55	1°39'36
	9068 Dec 07 20:50	0° ♄		minimum elong	9069 Nov 13 03:54	27° ♄ 29'00	1°39'48
evening rise	9068 Dec 08 07:17	0° ♄ 48'00			9069 Nov 14 08:43	0° ♄	
desc. node	9068 Dec 13 09:47	9° ♄ 51'42		max. Earth dist.	9069 Nov 16 23:59	5° ♄ 25'53	1.34531 AU
	9068 Dec 26 02:17	0° ♄		evening rise	9069 Nov 21 08:59	14° ♄ 05'35	
evening max el	9069 Jan 12 21:00	22° ♄ 12'36	26°00'14	desc. node	9069 Nov 30 06:49	0° ♄ 12'53	
retrograde	9069 Jan 25 11:29	29° ♄ 23'23			9069 Nov 30 03:47	0° ♄	
evening set	9069 Jan 31 14:25	26° ♄ 53'34			9069 Dec 20 22:13	0° ♄	
min. Earth dist.	9069 Feb 04 20:24	22° ♄ 22'22	0.67011 AU	evening max el	9069 Dec 26 10:29	5° ♄ 53'45	26°54'09
asc. node	9069 Feb 05 00:49	22° ♄ 08'47		retrograde	9070 Jan 08 15:35	13° ♄ 13'15	
inferior conj	9069 Feb 06 09:09	20° ♄ 27'41	0°26'37	evening set	9070 Jan 15 05:45	10° ♄ 38'22	
minimum elong	9069 Feb 06 08:28	20° ♄ 29'50	0°26'32	min. Earth dist.	9070 Jan 19 05:56	6° ♄ 41'28	0.65761 AU
morning rise	9069 Feb 12 03:09	14° ♄ 38'56		inferior conj	9070 Jan 21 06:20	4° ♄ 21'44	-0°33'04
direct	9069 Feb 15 08:03	13° ♄ 40'20		minimum elong	9070 Jan 21 07:17	4° ♄ 19'01	0°32'26
morning max el	9069 Feb 22 01:33	17° ♄ 19'56	18°48'01	asc. node	9070 Jan 22 21:55	2° ♄ 29'59	
	9069 Mar 03 19:32	0° ♄			9070 Jan 25 12:17	30° ♄	
desc. node	9069 Mar 11 09:35	11° ♄ 36'25		morning rise	9070 Jan 27 09:56	28° ♄ 44'29	
morning set	9069 Mar 15 22:44	18° ♄ 42'08		direct	9070 Jan 30 05:11	28° ♄ 01'31	
	9069 Mar 23 04:15	0° ♄			9070 Feb 04 00:29	0° ♄	
max. Earth dist.	9069 Mar 30 22:21	12° ♄ 07'34	1.45413 AU	morning max el	9070 Feb 05 15:43	1° ♄ 26'59	18°11'00
				morning set	9070 Feb 24 12:07	29° ♄ 10'09	
superior conj	9069 Apr 01 08:38	14° ♄ 22'00	-1°59'17		9070 Feb 25 00:26	0° ♄	
minimum elong	9069 Apr 01 00:49	13° ♄ 51'22	1°58'50	desc. node	9070 Feb 26 06:26	2° ♄ 01'15	
	9069 Apr 11 05:50	0° ♄					
evening rise	9069 Apr 16 14:35	8° ♄ 36'30		superior conj	9070 Mar 11 14:24	23° ♄ 15'31	-1°27'24
greatest brilliancy	9069 Apr 22 21:51	18° ♄ 46'16	-0.9m	minimum elong	9070 Mar 11 05:08	22° ♄ 39'04	1°26'21
	9069 Apr 30 02:21	0° ♄		max. Earth dist.	9070 Mar 13 18:12	26° ♄ 38'41	1.45531 AU
asc. node	9069 May 03 23:26	5° ♄ 26'04			9070 Mar 15 21:41	0° ♄	
evening max el	9069 May 07 08:41	9° ♄ 21'54	18°37'31	evening rise	9070 Mar 27 17:15	18° ♄ 24'12	
retrograde	9069 May 13 21:52	12° ♄ 56'37			9070 Apr 04 04:37	0° ♄	
evening set	9069 May 17 03:06	11° ♄ 57'52		greatest brilliancy	9070 Apr 08 16:56	6° ♄ 54'15	-0.7m
inferior conj	9069 May 22 19:13	6° ♄ 22'08	3°17'19	evening max el	9070 Apr 20 17:03	22° ♄ 59'32	19°19'51
minimum elong	9069 May 22 20:10	6° ♄ 19'12	3°17'00	asc. node	9070 Apr 20 20:33	23° ♄ 08'18	
min. Earth dist.	9069 May 24 19:16	3° ♄ 56'23	0.65246 AU	retrograde	9070 Apr 27 18:35	26° ♄ 59'02	
morning rise	9069 May 28 12:28	0° ♄ 04'13		evening set	9070 May 01 07:54	25° ♄ 45'16	
	9069 May 28 14:27	30° ♄		inferior conj	9070 May 06 18:22	19° ♄ 54'05	3°21'07
direct	9069 Jun 04 02:00	27° ♄ 18'40		minimum elong	9070 May 06 18:05	19° ♄ 55'01	3°20'54
desc. node	9069 Jun 07 09:29	27° ♄ 54'57		min. Earth dist.	9070 May 08 03:09	18° ♄ 07'16	0.66730 AU
	9069 Jun 11 09:12	0° ♄		morning rise	9070 May 12 03:53	13° ♄ 35'13	
morning max el	9069 Jun 17 10:54	5° ♄ 12'12	27°04'12	direct	9070 May 18 08:13	10° ♄ 51'57	
	9069 Jul 06 08:22	0° ♄		desc. node	9070 May 25 06:28	13° ♄ 29'47	
morning set	9069 Jul 23 02:08	29° ♄ 01'51		morning max el	9070 May 30 21:07	18° ♄ 21'29	25°56'19
	9069 Jul 23 14:10	0° ♄			9070 Jun 09 16:21	0° ♄	
max. Earth dist.	9069 Jul 27 11:33	7° ♄ 43'23	1.33751 AU		9070 Jun 29 08:53	0° ♄	
asc. node	9069 Jul 30 22:42	14° ♄ 52'14		morning set	9070 Jul 05 23:21	11° ♄ 43'08	
				max. Earth dist.	9070 Jul 09 18:44	18° ♄ 53'13	1.35447 AU
superior conj	9069 Jul 31 13:00	16° ♄ 07'15	0°05'59				
minimum elong	9069 Jul 31 12:42	16° ♄ 05'39	0°05'43	superior conj	9070 Jul 15 07:22	29° ♄ 48'23	-0°24'46
behind sun begin	9069 Jul 31 07:24	15° ♄ 37'50		minimum elong	9070 Jul 15 08:50	29° ♄ 55'49	0°24'43
behind sun end	9069 Jul 31 17:59	16° ♄ 33'30			9070 Jul 15 09:40	0° ♄	
	9069 Aug 07 01:48	0° ♄		asc. node	9070 Jul 17 19:39	4° ♄ 56'11	
evening rise	9069 Aug 07 19:48	1° ♄ 34'57		evening rise	9070 Jul 23 03:22	15° ♄ 56'05	
	9069 Aug 23 20:59	0° ♄			9070 Jul 30 07:36	0° ♄	
evening max el	9069 Aug 28 05:07	4° ♄ 57'07	21°44'32	evening max el	9070 Aug 10 07:06	15° ♄ 43'03	20°20'19
desc. node	9069 Sep 03 08:16	9° ♄ 32'28		retrograde	9070 Aug 21 04:36	21° ♄ 06'48	
retrograde	9069 Sep 09 16:12	11° ♄ 08'23		desc. node	9070 Aug 21 05:26	21° ♄ 06'48	
evening set	9069 Sep 12 10:51	10° ♄ 51'00		evening set	9070 Aug 23 04:16	20° ♄ 56'49	
inferior conj	9069 Sep 21 13:50	6° ♄ 52'35	-4°52'36	inferior conj	9070 Sep 01 07:20	16° ♄ 59'05	-3°18'14
minimum elong	9069 Sep 21 04:59	7° ♄ 04'58	4°50'43	minimum elong	9070 Aug 31 22:39	17° ♄ 11'47	3°15'23
min. Earth dist.	9069 Sep 21 08:02	7° ♄ 00'42	0.54720 AU	min. Earth dist.	9070 Sep 02 17:20	16° ♄ 09'21	0.54860 AU
morning rise	9069 Sep 30 00:16	3° ♄ 03'41		morning rise	9070 Sep 09 16:18	12° ♄ 52'51	
direct	9069 Oct 03 13:39	2° ♄ 36'00		direct	9070 Sep 13 23:06	12° ♄ 13'23	
morning max el	9069 Oct 15 19:54	8° ♄ 23'57	21°59'06	morning max el	9070 Sep 27 09:44	18° ♄ 45'15	23°44'35
asc. node	9069 Oct 26 22:35	22° ♄ 59'15			9070 Oct 06 16:51	0° ♄	
	9069 Oct 30 21:03	0° ♄		asc. node	9070 Oct 13 19:31	11° ♄ 47'03	

morning set	9070 Oct 21 11:31	27° Ω 06'03			9071 Sep 30 03:25	0° Ω	
	9070 Oct 22 20:03	0° \mathbb{M}		asc. node	9071 Sep 30 16:26	1° Ω 03'19	
				morning set	9071 Oct 05 23:01	11° Ω 52'17	
superior conj	9070 Oct 28 09:28	12° \mathbb{M} 04'09	1°40'26				
minimum elong	9070 Oct 28 09:02	12° \mathbb{M} 01'45	1°40'36	superior conj	9071 Oct 12 19:29	26° Ω 51'40	1°35'10
max. Earth dist.	9070 Oct 30 21:45	17° \mathbb{M} 27'51	1.33114 AU	minimum elong	9071 Oct 12 18:04	26° Ω 43'50	1°35'11
evening rise	9070 Nov 04 22:53	27° \mathbb{M} 54'57		max. Earth dist.	9071 Oct 14 02:31	29° Ω 42'16	1.32145 AU
	9070 Nov 05 24:00	0° \mathbb{X}			9071 Oct 14 05:45	0° \mathbb{M}	
desc. node	9070 Nov 17 03:54	20° \mathbb{X} 15'33		evening rise	9071 Oct 19 21:48	12° \mathbb{M} 07'39	
	9070 Nov 23 09:06	0° \mathbb{Z}			9071 Oct 29 04:17	0° \mathbb{X}	
evening max el	9070 Dec 08 23:01	19° \mathbb{Z} 16'49	27°24'59	desc. node	9071 Nov 04 01:00	9° \mathbb{X} 51'37	
retrograde	9070 Dec 22 13:18	26° \mathbb{Z} 37'03			9071 Nov 19 04:49	0° \mathbb{Z}	
evening set	9070 Dec 29 11:57	24° \mathbb{Z} 03'35		evening max el	9071 Nov 21 08:36	2° \mathbb{Z} 08'53	27°26'28
min. Earth dist.	9071 Jan 02 07:11	20° \mathbb{Z} 39'24	0.64165 AU	retrograde	9071 Dec 05 04:07	9° \mathbb{Z} 25'01	
inferior conj	9071 Jan 04 19:09	18° \mathbb{Z} 02'21	-1°39'39	evening set	9071 Dec 12 06:01	7° \mathbb{Z} 01'57	
minimum elong	9071 Jan 04 22:15	17° \mathbb{Z} 54'11	1°38'07	min. Earth dist.	9071 Dec 15 22:30	4° \mathbb{Z} 05'32	0.62277 AU
asc. node	9071 Jan 09 18:59	13° \mathbb{Z} 32'09		inferior conj	9071 Dec 18 20:37	1° \mathbb{Z} 21'49	-2°50'53
morning rise	9071 Jan 11 10:17	12° \mathbb{Z} 39'35		minimum elong	9071 Dec 19 02:09	1° \mathbb{Z} 08'53	2°48'34
direct	9071 Jan 13 21:50	12° \mathbb{Z} 08'33			9071 Dec 20 08:14	30° \mathbb{R} \mathbb{X}	
morning max el	9071 Jan 20 08:53	15° \mathbb{Z} 30'21	17°51'03	morning rise	9071 Dec 26 00:33	26° \mathbb{X} 16'42	
	9071 Jan 30 16:38	0° \approx		asc. node	9071 Dec 27 16:03	25° \mathbb{X} 55'37	
morning set	9071 Feb 06 05:59	11° \approx 01'46		direct	9071 Dec 28 06:46	25° \mathbb{X} 53'54	
desc. node	9071 Feb 13 03:19	22° \approx 36'29		morning max el	9072 Jan 04 01:54	29° \mathbb{X} 21'34	17°48'49
	9071 Feb 17 15:14	0° \mathbb{H}			9072 Jan 04 16:57	0° \mathbb{Z}	
				morning set	9072 Jan 19 22:26	23° \mathbb{Z} 57'41	
superior conj	9071 Feb 19 09:54	2° \mathbb{H} 52'55	-0°44'50		9072 Jan 23 08:02	0° \approx	
minimum elong	9071 Feb 19 04:53	2° \mathbb{H} 32'39	0°44'00				
max. Earth dist.	9071 Feb 24 13:41	11° \mathbb{H} 07'36	1.44904 AU	superior conj	9072 Jan 31 05:40	13° \approx 40'55	-0°01'42
evening rise	9071 Mar 07 06:05	27° \mathbb{H} 45'20		minimum elong	9072 Jan 31 05:31	13° \approx 40'18	0°01'27
	9071 Mar 08 17:14	0° \mathbb{Y}		behind sun begin	9072 Jan 30 20:43	13° \approx 03'00	
	9071 Mar 29 05:16	0° \mathbb{B}		behind sun end	9072 Jan 31 14:20	14° \approx 17'30	
evening max el	9071 Apr 03 20:12	6° \mathbb{B} 39'18	20°17'32	desc. node	9072 Jan 31 00:13	13° \approx 17'52	
asc. node	9071 Apr 07 17:41	9° \mathbb{B} 54'48		max. Earth dist.	9072 Feb 07 05:53	25° \approx 16'10	1.43615 AU
retrograde	9071 Apr 11 17:10	11° \mathbb{B} 13'47			9072 Feb 10 04:40	0° \mathbb{H}	
evening set	9071 Apr 15 15:21	9° \mathbb{B} 44'44		evening rise	9072 Feb 14 19:44	7° \mathbb{H} 16'22	
inferior conj	9071 Apr 20 23:00	3° \mathbb{B} 39'58	3°12'03		9072 Feb 29 23:53	0° \mathbb{Y}	
minimum elong	9071 Apr 20 21:42	3° \mathbb{B} 44'22	3°11'46	evening max el	9072 Mar 16 17:44	20° \mathbb{Y} 19'43	21°27'37
min. Earth dist.	9071 Apr 21 17:30	2° \mathbb{B} 36'53	0.67763 AU	asc. node	9072 Mar 24 14:49	25° \mathbb{Y} 29'54	
	9071 Apr 23 17:32	30° \mathbb{R} \mathbb{Y}		retrograde	9072 Mar 25 15:27	25° \mathbb{Y} 35'13	
morning rise	9071 Apr 26 03:50	27° \mathbb{Y} 22'51		evening set	9072 Mar 29 23:36	23° \mathbb{Y} 51'00	
direct	9071 May 01 19:56	24° \mathbb{Y} 51'14		inferior conj	9072 Apr 04 06:45	17° \mathbb{Y} 35'01	2°52'11
	9071 May 11 12:14	0° \mathbb{B}		minimum elong	9072 Apr 04 04:48	17° \mathbb{Y} 41'50	2°51'43
desc. node	9071 May 12 03:23	0° \mathbb{B} 35'34		min. Earth dist.	9072 Apr 04 12:08	17° \mathbb{Y} 16'18	0.68348 AU
morning max el	9071 May 13 06:33	1° \mathbb{B} 42'28	24°32'26	morning rise	9072 Apr 09 09:48	11° \mathbb{Y} 21'26	
	9071 Jun 03 16:55	0° \mathbb{I}		direct	9072 Apr 14 12:21	9° \mathbb{Y} 07'51	
morning set	9071 Jun 18 02:26	23° \mathbb{I} 31'54		morning max el	9072 Apr 24 16:26	15° \mathbb{Y} 09'59	23°02'34
max. Earth dist.	9071 Jun 21 17:35	0° \mathbb{E} 00'23	1.37522 AU	desc. node	9072 Apr 28 00:18	18° \mathbb{Y} 46'52	
	9071 Jun 21 17:30	0° \mathbb{E}			9072 May 06 18:45	0° \mathbb{B}	
					9072 May 26 16:18	0° \mathbb{I}	
superior conj	9071 Jun 28 14:45	12° \mathbb{E} 55'11	-0°57'06	morning set	9072 May 29 05:55	4° \mathbb{I} 13'34	
minimum elong	9071 Jun 28 18:21	13° \mathbb{E} 12'39	0°56'44	max. Earth dist.	9072 Jun 02 13:49	11° \mathbb{I} 33'13	1.39778 AU
asc. node	9071 Jul 04 16:38	24° \mathbb{E} 54'36					
evening rise	9071 Jul 07 05:30	29° \mathbb{E} 58'26		superior conj	9072 Jun 10 07:08	25° \mathbb{I} 17'46	-1°28'29
	9071 Jul 07 05:49	0° \mathbb{Q}		minimum elong	9072 Jun 10 12:39	25° \mathbb{I} 43'06	1°28'00
evening max el	9071 Jul 23 22:28	27° \mathbb{Q} 14'06	19°15'54		9072 Jun 12 20:02	0° \mathbb{E}	
	9071 Jul 27 08:24	0° \mathbb{P}		evening rise	9072 Jun 19 23:06	13° \mathbb{E} 33'25	
retrograde	9071 Aug 02 03:36	1° \mathbb{P} 47'59		asc. node	9072 Jun 20 13:39	14° \mathbb{E} 43'02	
evening set	9071 Aug 04 00:16	1° \mathbb{P} 37'35			9072 Jun 28 23:39	0° \mathbb{Q}	
desc. node	9071 Aug 08 02:32	0° \mathbb{P} 09'59		evening max el	9072 Jul 06 00:59	9° \mathbb{Q} 28'23	18°32'37
	9071 Aug 08 10:16	30° \mathbb{R} \mathbb{Q}		retrograde	9072 Jul 13 20:39	13° \mathbb{Q} 22'18	
inferior conj	9071 Aug 12 13:38	27° \mathbb{Q} 27'51	-1°22'31	evening set	9072 Jul 15 22:46	13° \mathbb{Q} 06'30	
minimum elong	9071 Aug 12 09:58	27° \mathbb{Q} 33'55	1°21'16	inferior conj	9072 Jul 23 16:42	8° \mathbb{Q} 37'58	0°23'13
min. Earth dist.	9071 Aug 15 06:14	25° \mathbb{Q} 41'01	0.55926 AU	minimum elong	9072 Jul 23 17:33	8° \mathbb{Q} 36'19	0°22'41
morning rise	9071 Aug 20 16:49	22° \mathbb{Q} 47'22		desc. node	9072 Jul 24 23:37	7° \mathbb{Q} 37'36	
direct	9071 Aug 25 19:06	21° \mathbb{Q} 47'52		min. Earth dist.	9072 Jul 27 00:19	6° \mathbb{Q} 04'33	0.57711 AU
morning max el	9071 Sep 08 22:06	28° \mathbb{Q} 57'21	25°27'45	morning rise	9072 Jul 31 08:47	3° \mathbb{Q} 20'31	
	9071 Sep 09 23:38	0° \mathbb{P}		direct	9072 Aug 06 06:06	1° \mathbb{Q} 52'32	

morning max el	9072 Aug 20 14:54	9°Ω29'21	26°51'25		9073 Aug 10 15:50	0°Ω	
	9072 Sep 05 06:19	0°♊			9073 Aug 29 04:08	0°♊	
asc. node	9072 Sep 16 13:22	20°♊40'41		asc. node	9073 Sep 03 10:18	10°♊32'17	
morning set	9072 Sep 19 08:45	26°♊31'05		morning set	9073 Sep 03 14:56	10°♊56'32	
	9072 Sep 20 23:46	0°♊		max. Earth dist.	9073 Sep 09 21:14	24°♊28'18	1.31621 AU
superior conj	9072 Sep 26 07:11	11°♊41'33	1°24'22	superior conj	9073 Sep 10 18:40	26°♊26'59	1°08'22
minimum elong	9072 Sep 26 05:08	11°♊30'09	1°24'10	minimum elong	9073 Sep 10 16:25	26°♊14'32	1°07'59
max. Earth dist.	9072 Sep 26 11:32	12°♊05'40	1.31646 AU		9073 Sep 12 09:05	0°♊	
evening rise	9072 Oct 03 03:04	26°♊36'46		evening rise	9073 Sep 17 12:21	11°♊14'46	
	9072 Oct 04 17:53	0°♊			9073 Sep 26 23:22	0°♊	
desc. node	9072 Oct 20 22:07	28°♊50'36		desc. node	9073 Oct 07 19:16	16°♊57'03	
	9072 Oct 21 17:02	0°♊		evening max el	9073 Oct 15 09:30	25°♊37'34	25°49'27
evening max el	9072 Nov 02 12:51	14°♊18'39	26°54'29		9073 Oct 20 22:50	0°♊	
retrograde	9072 Nov 16 10:54	21°♊28'17		retrograde	9073 Oct 29 07:33	2°♊39'57	
evening set	9072 Nov 23 08:04	19°♊26'21		evening set	9073 Nov 04 13:11	1°♊08'47	
min. Earth dist.	9072 Nov 27 03:18	16°♊47'45	0.60205 AU		9073 Nov 06 16:17	30°♊	
inferior conj	9072 Nov 30 07:25	14°♊11'47	-4°01'43	min. Earth dist.	9073 Nov 08 22:09	28°♊32'55	0.58134 AU
minimum elong	9072 Nov 30 14:46	13°♊56'42	3°59'15	inferior conj	9073 Nov 12 00:00	26°♊21'31	-5°02'25
morning rise	9072 Dec 07 23:58	9°♊27'08		minimum elong	9073 Nov 12 06:52	26°♊09'15	5°00'53
direct	9072 Dec 10 04:10	9°♊09'04		morning rise	9073 Nov 20 02:53	21°♊59'19	
asc. node	9072 Dec 13 13:04	9°♊54'35		direct	9073 Nov 22 09:50	21°♊42'37	
morning max el	9072 Dec 17 15:22	12°♊51'35	18°05'25	asc. node	9073 Nov 30 10:05	25°♊22'17	
	9072 Dec 29 03:42	0°♊		morning max el	9073 Nov 30 21:27	25°♊48'59	18°42'36
morning set	9073 Jan 02 07:13	7°♊39'27			9073 Dec 04 12:33	0°♊	
				morning set	9073 Dec 17 03:12	21°♊51'23	
superior conj	9073 Jan 12 02:14	25°♊39'30	0°35'32		9073 Dec 21 07:29	0°♊	
minimum elong	9073 Jan 12 04:51	25°♊51'12	0°35'23				
	9073 Jan 14 13:14	0°♊		superior conj	9073 Dec 25 19:13	8°♊35'22	1°04'17
desc. node	9073 Jan 16 21:11	4°♊02'13		minimum elong	9073 Dec 25 22:31	8°♊50'52	1°04'06
max. Earth dist.	9073 Jan 19 17:21	8°♊51'00	1.41812 AU	max. Earth dist.	9074 Jan 02 00:44	21°♊44'54	1.39700 AU
evening rise	9073 Jan 25 00:06	17°♊30'47		desc. node	9074 Jan 03 18:10	24°♊45'15	
	9073 Feb 02 00:04	0°♊		evening rise	9074 Jan 06 01:35	28°♊41'33	
	9073 Feb 23 17:46	0°♊			9074 Jan 06 20:15	0°♊	
evening max el	9073 Feb 27 10:46	4°♊02'44	22°45'38		9074 Jan 26 11:50	0°♊	
retrograde	9073 Mar 09 11:44	9°♊59'34		evening max el	9074 Feb 10 01:04	17°♊49'16	24°05'52
asc. node	9073 Mar 11 11:56	9°♊39'33		retrograde	9074 Feb 21 04:42	24°♊22'07	
evening set	9073 Mar 14 07:03	8°♊00'31		asc. node	9074 Feb 26 09:04	22°♊15'43	
inferior conj	9073 Mar 19 15:38	1°♊36'27	2°22'43	evening set	9074 Feb 26 12:10	22°♊09'11	
minimum elong	9073 Mar 19 13:24	1°♊44'11	2°22'07	min. Earth dist.	9074 Mar 03 05:11	16°♊43'33	0.68235 AU
min. Earth dist.	9073 Mar 19 08:48	2°♊00'08	0.68502 AU	inferior conj	9074 Mar 03 23:44	15°♊40'48	1°44'21
	9073 Mar 20 19:40	30°♊		minimum elong	9074 Mar 03 21:41	15°♊47'44	1°43'44
morning rise	9073 Mar 24 19:37	25°♊27'50		morning rise	9074 Mar 09 07:14	9°♊38'42	
direct	9073 Mar 29 08:23	23°♊35'39		direct	9074 Mar 13 06:46	8°♊08'41	
morning max el	9073 Apr 07 05:57	28°♊46'00	21°35'54	morning max el	9074 Mar 21 02:21	12°♊34'04	20°19'22
	9073 Apr 08 10:32	0°♊		desc. node	9074 Apr 01 18:08	27°♊19'34	
desc. node	9073 Apr 14 21:13	7°♊45'52			9074 Apr 03 14:47	0°♊	
	9073 Apr 30 10:40	0°♊		morning set	9074 Apr 18 08:29	22°♊09'35	
morning set	9073 May 09 06:09	13°♊39'50			9074 Apr 23 09:06	0°♊	
max. Earth dist.	9073 May 15 14:18	23°♊56'11	1.41953 AU	max. Earth dist.	9074 Apr 27 22:34	7°♊14'51	1.43768 AU
	9073 May 19 05:19	0°♊					
superior conj	9073 May 23 03:57	6°♊45'46	-1°54'51	superior conj	9074 May 04 01:06	17°♊11'04	-2°10'32
minimum elong	9073 May 23 09:49	7°♊11'19	1°54'36	minimum elong	9074 May 04 03:50	17°♊22'24	2°10'40
evening rise	9073 Jun 03 04:20	26°♊31'23			9074 May 11 15:50	0°♊	
	9073 Jun 05 02:01	0°♊		evening rise	9074 May 16 16:40	8°♊42'12	
asc. node	9073 Jun 07 10:42	4°♊16'34		asc. node	9074 May 25 07:46	23°♊29'44	
evening max el	9073 Jun 19 10:43	22°♊16'18	18°09'36		9074 May 29 12:48	0°♊	
retrograde	9073 Jun 26 08:07	25°♊45'41		evening max el	9074 Jun 02 23:51	5°♊27'59	18°05'53
evening set	9073 Jun 28 17:57	25°♊20'36		retrograde	9074 Jun 09 10:22	8°♊48'33	
inferior conj	9073 Jul 05 17:09	20°♊31'27	1°43'43	evening set	9074 Jun 12 03:49	8°♊11'33	
minimum elong	9073 Jul 05 19:57	20°♊25'06	1°42'36	inferior conj	9074 Jun 18 11:47	3°♊02'48	2°37'22
min. Earth dist.	9073 Jul 09 01:08	17°♊31'58	0.59895 AU	minimum elong	9074 Jun 18 14:32	2°♊55'41	2°36'30
desc. node	9073 Jul 11 20:44	15°♊20'38			9074 Jun 21 10:51	30°♊	
morning rise	9073 Jul 12 19:01	14°♊44'45		min. Earth dist.	9074 Jun 21 10:25	0°♊01'04	0.62145 AU
direct	9073 Jul 19 06:12	12°♊45'52		morning rise	9074 Jun 24 23:18	26°♊57'10	
morning max el	9073 Aug 02 14:21	20°♊39'24	27°42'36	desc. node	9074 Jun 28 17:48	24°♊59'49	
				direct	9074 Jul 01 16:46	24°♊32'17	

	9074 Jul 13 02:07	0°☿		desc. node	9075 Jun 15 14:50	7°♄10'39	
morning max el	9074 Jul 15 20:03	2°☿33'56	27°55'47	morning max el	9075 Jun 28 05:39	15°♄06'58	27°32'10
	9074 Aug 05 01:52	0°♄			9075 Jul 10 09:07	0°☿	
morning set	9074 Aug 18 15:37	25°♄03'26			9075 Jul 28 18:40	0°♄	
asc. node	9074 Aug 21 07:14	0°♄33'11		morning set	9075 Aug 02 08:18	8°♄44'28	
	9074 Aug 21 00:56	0°♄		max. Earth dist.	9075 Aug 07 03:29	18°♄29'05	1.32999 AU
max. Earth dist.	9074 Aug 24 03:54	6°♄39'56	1.32070 AU	asc. node	9075 Aug 08 04:11	20°♄38'25	
superior conj	9074 Aug 26 04:09	11°♄02'39	0°47'32	superior conj	9075 Aug 10 09:39	25°♄22'16	0°22'16
minimum elong	9074 Aug 26 02:13	10°♄52'02	0°47'04	minimum elong	9075 Aug 10 08:35	25°♄16'32	0°21'53
evening rise	9074 Sep 01 23:40	25°♄55'54			9075 Aug 12 13:18	0°♄	
	9074 Sep 03 21:44	0°♄		evening rise	9075 Aug 17 11:06	10°♄33'49	
	9074 Sep 21 10:29	0°♄			9075 Aug 27 09:50	0°♄	
desc. node	9074 Sep 24 16:25	3°♄50'36		evening max el	9075 Sep 08 10:03	16°♄20'25	22°39'32
evening max el	9074 Sep 26 22:43	6°♄10'04	24°19'19	desc. node	9075 Sep 11 13:33	19°♄04'07	
retrograde	9074 Oct 10 16:15	13°♄03'10		retrograde	9075 Sep 21 12:57	22°♄53'12	
evening set	9074 Oct 15 17:43	12°♄06'38		evening set	9075 Sep 25 02:09	22°♄25'30	
min. Earth dist.	9074 Oct 21 09:30	9°♄15'00	0.56321 AU	min. Earth dist.	9075 Oct 02 17:37	19°♄00'35	0.55066 AU
inferior conj	9074 Oct 23 20:13	7°♄43'40	-5°36'47	inferior conj	9075 Oct 03 22:03	18°♄20'08	-5°25'05
minimum elong	9074 Oct 23 22:21	7°♄40'22	5°36'32	minimum elong	9075 Oct 03 16:25	18°♄28'09	5°24'20
morning rise	9074 Nov 01 05:05	3°♄43'00		morning rise	9075 Oct 12 08:36	14°♄32'07	
direct	9074 Nov 03 20:23	3°♄24'34		direct	9075 Oct 15 12:47	14°♄09'03	
morning max el	9074 Nov 13 16:37	8°♄03'58	19°42'01	morning max el	9075 Oct 26 22:45	19°♄30'26	21°03'42
asc. node	9074 Nov 17 07:05	12°♄04'49		asc. node	9075 Nov 04 04:03	29°♄46'50	
	9074 Nov 28 01:42	0°♄			9075 Nov 04 07:26	0°♄	
morning set	9074 Dec 01 06:42	6°♄22'55		morning set	9075 Nov 15 15:00	21°♄06'26	
					9075 Nov 19 21:01	0°♄	
superior conj	9074 Dec 09 03:38	22°♄14'54	1°24'15	superior conj	9075 Nov 22 23:12	6°♄25'55	1°36'07
minimum elong	9074 Dec 09 06:20	22°♄28'12	1°24'15	minimum elong	9075 Nov 23 00:43	6°♄33'46	1°36'16
	9074 Dec 13 03:30	0°♄		max. Earth dist.	9075 Nov 27 16:12	15°♄56'14	1.35519 AU
max. Earth dist.	9074 Dec 15 06:52	4°♄01'22	1.37523 AU	evening rise	9075 Dec 01 17:13	23°♄42'18	
evening rise	9074 Dec 19 00:17	10°♄47'49			9075 Dec 05 03:42	0°♄	
desc. node	9074 Dec 21 15:11	15°♄23'20		desc. node	9075 Dec 08 12:12	5°♄52'20	
	9074 Dec 30 13:06	0°♄			9075 Dec 24 04:38	0°♄	
	9075 Jan 21 23:51	0°♄		evening max el	9076 Jan 06 03:28	15°♄23'12	26°25'32
evening max el	9075 Jan 23 14:18	1°♄37'31	25°21'33	retrograde	9076 Jan 19 00:51	22°♄39'27	
retrograde	9075 Feb 04 17:17	8°♄37'28		evening set	9076 Jan 25 08:54	20°♄06'27	
evening set	9075 Feb 10 13:21	6°♄12'37		min. Earth dist.	9076 Jan 29 12:12	15°♄50'13	0.66520 AU
asc. node	9075 Feb 13 06:11	3°♄27'41		inferior conj	9076 Jan 31 06:00	13°♄43'43	0°02'16
min. Earth dist.	9075 Feb 14 23:02	1°♄21'50	0.67569 AU	minimum elong	9076 Jan 31 05:56	13°♄43'56	0°02'26
inferior conj	9075 Feb 16 05:11	29°♄44'26	0°57'25	transit middle	9076 Jan 31 05:56	13°♄43'56	0°02'26
minimum elong	9075 Feb 16 03:50	29°♄48'47	0°57'03	transit begin	9076 Jan 31 03:05	13°♄52'36	
	9075 Feb 16 00:22	30°♄		transit end	9076 Jan 31 08:48	13°♄35'16	
morning rise	9075 Feb 21 18:41	23°♄50'28		asc. node	9076 Jan 31 03:17	13°♄52'00	
direct	9075 Feb 25 05:59	22°♄41'14		morning rise	9076 Feb 06 03:51	7°♄59'52	
morning max el	9075 Mar 04 06:45	26°♄33'43	19°16'53	direct	9076 Feb 09 04:23	7°♄08'29	
	9075 Mar 07 09:12	0°♄		morning max el	9076 Feb 15 18:04	10°♄40'41	18°30'19
greatest brilliancy	9075 Mar 17 06:34	13°♄45'55	-0.7m		9076 Feb 29 16:26	0°♄	
desc. node	9075 Mar 19 15:01	17°♄18'20		desc. node	9076 Mar 05 11:54	7°♄35'31	
	9075 Mar 27 21:52	0°♄		morning set	9076 Mar 07 05:09	10°♄18'49	
morning set	9075 Mar 28 08:35	0°♄41'21			9076 Mar 19 17:11	0°♄	
max. Earth dist.	9075 Apr 10 13:22	21°♄15'13	1.45009 AU				
superior conj	9075 Apr 13 22:19	26°♄35'27	-2°09'16	superior conj	9076 Mar 23 04:45	5°♄27'02	-1°47'44
minimum elong	9075 Apr 13 18:13	26°♄19'09	2°09'15	minimum elong	9076 Mar 22 19:25	4°♄50'31	1°46'58
	9075 Apr 16 01:39	0°♄		max. Earth dist.	9076 Mar 23 07:47	5°♄38'52	1.45550 AU
evening rise	9075 Apr 28 07:30	19°♄56'26		evening rise	9076 Apr 07 22:38	0°♄12'39	
	9075 May 04 09:28	0°♄			9076 Apr 07 19:27	0°♄	
asc. node	9075 May 12 04:51	12°♄15'02		greatest brilliancy	9076 Apr 17 01:33	14°♄37'40	-0.8m
evening max el	9075 May 17 13:04	18°♄54'19	18°20'44		9076 Apr 27 17:59	0°♄	
retrograde	9075 May 23 22:47	22°♄20'22		asc. node	9076 Apr 28 01:56	0°♄23'41	
evening set	9075 May 26 23:37	21°♄29'54		evening max el	9076 Apr 29 23:45	2°♄29'17	18°53'24
inferior conj	9075 Jun 01 20:24	16°♄03'21	3°08'09	retrograde	9076 May 06 17:25	6°♄13'34	
minimum elong	9075 Jun 01 22:07	15°♄58'24	3°07'40	evening set	9076 May 10 01:54	5°♄08'38	
min. Earth dist.	9075 Jun 04 05:06	13°♄20'04	0.64208 AU		9076 May 15 04:23	30°♄	
morning rise	9075 Jun 07 19:30	9°♄47'45		inferior conj	9076 May 15 15:13	29°♄26'02	3°20'40
direct	9075 Jun 14 12:02	7°♄06'34		minimum elong	9076 May 15 15:38	29°♄24'44	3°20'24

min. Earth dist.	9076 May 17 08:44	27° 8 15'44	0.65929 AU	asc. node	9077 Apr 14 23:03	17° 8 44'06	
morning rise	9076 May 21 04:47	23° 8 06'57		retrograde	9077 Apr 20 15:11	20° 8 21'43	
direct	9076 May 27 14:46	20° 8 21'01		evening set	9077 Apr 24 08:04	19° 8 01'41	
desc. node	9076 Jun 01 11:50	21° 8 39'45		inferior conj	9077 Apr 29 17:02	13° 8 04'42	3°18'41
morning max el	9076 Jun 09 16:19	28° 8 06'59	26°37'51	minimum elong	9077 Apr 29 16:18	13° 8 07'11	3°18'28
	9076 Jun 11 11:19	0° II		min. Earth dist.	9077 Apr 30 19:43	11° 8 35'49	0.67223 AU
	9076 Jul 03 03:03	0° ☾		morning rise	9077 May 05 00:11	6° 8 46'11	
morning set	9076 Jul 15 13:48	21° ☾ 51'11		direct	9077 May 10 23:39	4° 8 06'33	
max. Earth dist.	9076 Jul 19 16:49	29° ☾ 50'58	1.34418 AU	desc. node	9077 May 19 08:47	7° 8 56'38	
	9076 Jul 19 18:38	0° ♊		morning max el	9077 May 23 02:06	11° 8 22'02	25°21'56
					9077 Jun 06 23:03	0° II	
superior conj	9076 Jul 24 08:52	9° ♊ 19'43	-0°06'47		9077 Jun 25 19:16	0° ☾	
minimum elong	9076 Jul 24 09:15	9° ♊ 21'44	0°06'55	morning set	9077 Jun 28 04:01	4° ☾ 12'44	
behind sun begin	9076 Jul 24 03:58	8° ♊ 54'22		max. Earth dist.	9077 Jul 01 19:33	10° ☾ 55'15	1.36288 AU
behind sun end	9076 Jul 24 14:32	9° ♊ 49'07					
asc. node	9076 Jul 25 01:08	10° ♊ 44'08		superior conj	9077 Jul 07 23:04	22° ☾ 48'17	-0°38'24
evening rise	9076 Jul 31 20:42	25° ♊ 02'57		minimum elong	9077 Jul 08 01:26	22° ☾ 59'59	0°38'12
	9076 Aug 03 06:18	0° ♐		asc. node	9077 Jul 11 22:06	0° ♊ 46'48	
evening max el	9076 Aug 20 04:54	26° ♐ 45'48	21°06'28		9077 Jul 11 12:54	0° ♊	
	9076 Aug 24 02:38	0° ♊		evening rise	9077 Jul 16 02:19	9° ♊ 17'32	
desc. node	9076 Aug 28 10:42	2° ♊ 06'12			9077 Jul 27 08:01	0° ♐	
retrograde	9076 Sep 01 01:33	2° ♊ 38'36		evening max el	9077 Aug 02 12:53	7° ♐ 52'08	19°50'25
evening set	9076 Sep 03 09:34	2° ♊ 25'49		retrograde	9077 Aug 12 16:50	12° ♐ 53'34	
	9076 Sep 09 20:44	30° ♐ ♐		evening set	9077 Aug 14 13:38	12° ♐ 44'09	
inferior conj	9076 Sep 12 14:35	28° ♐ 29'22	-4°17'25	desc. node	9077 Aug 15 07:50	12° ♐ 35'11	
minimum elong	9076 Sep 12 04:54	28° ♐ 43'03	4°14'47	inferior conj	9077 Aug 23 12:12	8° ♐ 43'06	-2°29'41
min. Earth dist.	9076 Sep 13 02:12	28° ♐ 12'58	0.54655 AU	minimum elong	9077 Aug 23 05:25	8° ♐ 53'30	2°27'18
morning rise	9076 Sep 21 00:39	24° ♐ 35'20		min. Earth dist.	9077 Aug 25 13:08	7° ♐ 28'16	0.55209 AU
direct	9076 Sep 24 20:53	24° ♐ 03'35		morning rise	9077 Aug 31 19:21	4° ♐ 23'31	
morning max el	9076 Oct 07 17:06	0° ♊ 11'24	22°43'16	direct	9077 Sep 05 10:31	3° ♐ 36'21	
	9076 Oct 07 12:11	0° ♊		morning max el	9077 Sep 19 05:23	10° ♐ 25'49	24°29'39
asc. node	9076 Oct 21 01:00	18° ♊ 14'10			9077 Oct 03 21:06	0° ♊	
	9076 Oct 27 05:31	0° ♐		asc. node	9077 Oct 07 21:56	7° ♊ 15'46	
morning set	9076 Oct 30 01:55	5° ♐ 55'03		morning set	9077 Oct 14 13:42	20° ♊ 44'04	
					9077 Oct 18 20:13	0° ♐	
superior conj	9076 Nov 06 02:24	20° ♐ 57'31	1°40'44	superior conj	9077 Oct 21 10:37	5° ♐ 41'46	1°38'54
minimum elong	9076 Nov 06 02:38	20° ♐ 58'47	1°40'56	minimum elong	9077 Oct 21 09:43	5° ♐ 36'52	1°39'01
max. Earth dist.	9076 Nov 09 08:51	27° ♐ 50'41	1.33865 AU	max. Earth dist.	9077 Oct 23 09:51	9° ♐ 58'30	1.32648 AU
	9076 Nov 10 09:55	0° ♊		evening rise	9077 Oct 28 18:41	21° ♐ 15'56	
evening rise	9076 Nov 14 00:30	7° ♊ 14'39			9077 Nov 02 05:02	0° ♊	
desc. node	9076 Nov 24 09:14	26° ♊ 06'29		desc. node	9077 Nov 11 06:19	15° ♊ 59'18	
	9076 Nov 26 17:49	0° ♊			9077 Nov 20 16:16	0° ♊	
evening max el	9076 Dec 18 16:34	28° ♊ 57'47	27°10'34	evening max el	9077 Dec 01 04:19	12° ♊ 10'09	27°29'35
	9076 Dec 19 19:17	0° ♐		retrograde	9077 Dec 14 21:30	19° ♊ 28'54	
retrograde	9077 Jan 01 02:33	6° ♐ 19'24		evening set	9077 Dec 21 22:06	16° ♊ 59'01	
evening set	9077 Jan 07 20:40	3° ♐ 44'03		min. Earth dist.	9077 Dec 25 15:55	13° ♊ 47'06	0.63392 AU
	9077 Jan 11 19:01	30° ♐ ♐		inferior conj	9077 Dec 28 08:20	11° ♊ 05'55	-2°09'32
min. Earth dist.	9077 Jan 11 18:30	0° ♐ 01'23	0.65114 AU	minimum elong	9077 Dec 28 12:28	10° ♊ 55'32	2°07'37
inferior conj	9077 Jan 13 23:56	27° ♊ 32'56	-1°00'33	asc. node	9078 Jan 03 21:26	5° ♊ 57'16	
minimum elong	9077 Jan 14 01:44	27° ♊ 27'54	0°59'33	morning rise	9078 Jan 04 04:48	5° ♊ 49'56	
asc. node	9077 Jan 17 00:22	24° ♊ 23'58		direct	9078 Jan 06 13:42	5° ♊ 22'51	
morning rise	9077 Jan 20 08:15	22° ♊ 01'30		morning max el	9078 Jan 13 03:18	8° ♊ 46'18	17°47'48
direct	9077 Jan 22 23:49	21° ♊ 24'13			9078 Jan 27 07:15	0° ♐	
morning max el	9077 Jan 29 09:53	24° ♊ 47'19	18°00'25	morning set	9078 Jan 29 11:22	3° ♐ 45'20	
	9077 Feb 02 18:15	0° ♐		desc. node	9078 Feb 07 05:39	18° ♐ 43'29	
morning set	9077 Feb 16 07:05	21° ♐ 23'46					
desc. node	9077 Feb 20 08:46	28° ♐ 05'13		superior conj	9078 Feb 10 19:27	24° ♐ 39'34	-0°26'07
	9077 Feb 21 12:52	0° ♐		minimum elong	9078 Feb 10 16:40	24° ♐ 28'08	0°25'31
superior conj	9077 Mar 02 14:21	14° ♐ 34'11	-1°10'03		9078 Feb 14 02:02	0° ♐	
minimum elong	9077 Mar 02 06:28	14° ♐ 02'56	1°08'58	max. Earth dist.	9078 Feb 16 21:25	4° ♐ 30'33	1.44434 AU
max. Earth dist.	9077 Mar 06 03:12	20° ♐ 08'54	1.45348 AU	evening rise	9078 Feb 26 04:56	19° ♐ 04'49	
	9077 Mar 12 10:40	0° ♐			9078 Mar 05 09:29	0° ♐	
evening rise	9077 Mar 18 17:45	9° ♐ 44'17			9078 Mar 27 11:20	0° ♐	
	9077 Apr 01 01:02	0° ♐		evening max el	9078 Mar 27 06:50	29° ♐ 48'40	20°46'11
greatest brilliancy	9077 Apr 01 13:37	0° ♐ 46'38	-0.7m	asc. node	9078 Apr 01 20:10	4° ♐ 02'13	
evening max el	9077 Apr 13 06:01	16° ♐ 08'15	19°42'42	retrograde	9078 Apr 04 13:43	4° ♐ 39'42	

evening set	9078 Apr 08 16:03	3°♄04'12		evening max el	9079 Mar 10 02:21	13°♄30'30	22°00'10
	9078 Apr 11 15:30	30°♄		retrograde	9079 Mar 19 11:16	19°♄03'25	
inferior conj	9078 Apr 13 23:15	26°♄54'37	3°04'50	asc. node	9079 Mar 19 17:18	19°♄03'06	
minimum elong	9078 Apr 13 21:38	27°♄00'12	3°04'29	evening set	9079 Mar 24 00:10	17°♄12'35	
min. Earth dist.	9078 Apr 14 12:05	26°♄10'22	0.68068 AU	inferior conj	9079 Mar 29 07:42	10°♄52'50	2°40'47
morning rise	9078 Apr 19 02:59	20°♄39'00		minimum elong	9079 Mar 29 05:35	11°♄00'15	2°40'16
direct	9078 Apr 24 13:34	18°♄14'14		min. Earth dist.	9079 Mar 29 07:45	10°♄52'42	0.68466 AU
morning max el	9078 May 05 11:11	24°♄44'58	23°54'21	morning rise	9079 Apr 03 10:51	4°♄41'29	
desc. node	9078 May 06 05:43	25°♄32'40		direct	9079 Apr 08 07:32	2°♄36'52	
	9078 May 10 04:33	0°♄		morning max el	9079 Apr 17 22:14	8°♄16'08	22°24'58
	9078 May 31 10:07	0°♄		desc. node	9079 Apr 23 02:38	14°♄06'19	
morning set	9078 Jun 09 21:41	15°♄34'24			9079 May 04 20:12	0°♄	
max. Earth dist.	9078 Jun 13 16:21	22°♄09'32	1.38474 AU	morning set	9079 May 21 13:45	25°♄44'15	
	9078 Jun 18 00:20	0°♄			9079 May 24 03:57	0°♄	
				max. Earth dist.	9079 May 26 14:24	4°♄04'49	1.40731 AU
superior conj	9078 Jun 21 00:39	5°♄38'01	-1°10'43	superior conj	9079 Jun 03 09:18	17°♄38'55	-1°40'33
minimum elong	9078 Jun 21 05:09	5°♄59'20	1°10'16	minimum elong	9079 Jun 03 15:16	18°♄05'43	1°40'08
asc. node	9078 Jun 28 19:06	20°♄41'44			9079 Jun 10 02:52	0°♄	
evening rise	9078 Jun 30 01:14	23°♄09'31		evening rise	9079 Jun 13 14:07	6°♄30'32	
	9078 Jul 03 13:58	0°♄		asc. node	9079 Jun 15 16:09	10°♄24'48	
evening max el	9078 Jul 16 09:31	19°♄42'58	18°54'58		9079 Jun 27 15:23	0°♄	
retrograde	9078 Jul 24 22:54	23°♄57'51		evening max el	9079 Jun 29 15:31	2°♄12'34	18°20'21
evening set	9078 Jul 26 21:32	23°♄45'34		retrograde	9079 Jul 07 00:20	5°♄54'25	
desc. node	9078 Aug 02 04:58	20°♄47'21		evening set	9079 Jul 09 05:39	5°♄35'03	
inferior conj	9078 Aug 04 02:50	19°♄28'09	-0°35'10	inferior conj	9079 Jul 16 15:15	0°♄57'21	1°00'42
minimum elong	9078 Aug 04 01:22	19°♄30'46	0°34'48	minimum elong	9079 Jul 16 17:14	0°♄53'13	0°59'46
min. Earth dist.	9078 Aug 07 03:46	17°♄19'52	0.56620 AU		9079 Jul 17 18:41	30°♄	
morning rise	9078 Aug 12 01:57	14°♄32'00		min. Earth dist.	9079 Jul 20 00:20	28°♄10'13	0.58612 AU
direct	9078 Aug 17 12:51	13°♄21'11		desc. node	9079 Jul 20 02:03	28°♄06'52	
morning max el	9078 Aug 31 18:54	20°♄42'39	26°06'33	morning rise	9079 Jul 24 01:29	25°♄26'07	
	9078 Sep 08 19:41	0°♄		direct	9079 Jul 30 05:17	23°♄45'15	
asc. node	9078 Sep 24 18:52	26°♄42'04			9079 Aug 12 00:18	0°♄	
	9078 Sep 26 10:00	0°♄		morning max el	9079 Aug 13 14:37	1°♄29'51	27°17'42
morning set	9078 Sep 29 00:40	5°♄27'48			9079 Sep 03 01:44	0°♄	
superior conj	9078 Oct 05 21:35	20°♄30'59	1°31'15	asc. node	9079 Sep 11 15:49	16°♄26'22	
minimum elong	9078 Oct 05 19:51	20°♄21'22	1°31'10	morning set	9079 Sep 13 09:09	20°♄01'48	
max. Earth dist.	9078 Oct 06 17:02	22°♄18'34	1.31886 AU		9079 Sep 17 23:45	0°♄	
	9078 Oct 10 05:21	0°♄		superior conj	9079 Sep 20 09:24	5°♄19'32	1°18'12
evening rise	9078 Oct 12 20:39	5°♄36'45		minimum elong	9079 Sep 20 07:13	5°♄07'22	1°17'54
	9078 Oct 25 19:24	0°♄		max. Earth dist.	9079 Sep 20 02:58	4°♄43'47	1.31584 AU
desc. node	9078 Oct 29 03:27	5°♄21'13		evening rise	9079 Sep 27 03:53	20°♄10'19	
evening max el	9078 Nov 13 12:11	24°♄46'15	27°17'01		9079 Oct 01 22:31	0°♄	
	9078 Nov 20 10:20	0°♄		desc. node	9079 Oct 16 00:35	24°♄00'02	
retrograde	9078 Nov 27 08:44	1°♄58'44			9079 Oct 20 12:57	0°♄	
	9078 Dec 03 23:06	30°♄		evening max el	9079 Oct 26 13:16	6°♄34'16	26°30'25
evening set	9078 Dec 04 09:51	29°♄43'36		retrograde	9079 Nov 09 11:16	13°♄40'45	
min. Earth dist.	9078 Dec 08 02:44	26°♄56'14	0.61415 AU	evening set	9079 Nov 16 03:34	11°♄50'37	
inferior conj	9078 Dec 11 04:00	24°♄14'13	-3°21'25	min. Earth dist.	9079 Nov 20 02:47	9°♄15'39	0.59315 AU
minimum elong	9078 Dec 11 10:27	23°♄59'55	3°18'55	inferior conj	9079 Nov 23 07:24	6°♄47'58	-4°29'30
morning rise	9078 Dec 18 13:24	19°♄17'13		minimum elong	9079 Nov 23 14:58	6°♄33'21	4°27'19
direct	9078 Dec 20 18:25	18°♄56'42		morning rise	9079 Dec 01 04:48	2°♄13'02	
asc. node	9078 Dec 21 18:29	19°♄01'04		direct	9079 Dec 03 09:39	1°♄55'53	
morning max el	9078 Dec 27 19:12	22°♄29'25	17°53'28	asc. node	9079 Dec 08 15:31	3°♄39'14	
	9079 Jan 02 15:11	0°♄		morning max el	9079 Dec 11 06:00	5°♄46'58	18°18'41
morning set	9079 Jan 12 11:30	17°♄03'15			9079 Dec 26 13:03	0°♄	
	9079 Jan 19 16:05	0°♄		morning set	9079 Dec 27 01:33	0°♄59'25	
superior conj	9079 Jan 23 02:07	5°♄58'42	0°15'05	superior conj	9080 Jan 05 08:01	18°♄23'51	0°48'49
minimum elong	9079 Jan 23 03:26	6°♄04'26	0°15'06	minimum elong	9080 Jan 05 11:08	18°♄38'05	0°48'37
behind sun begin	9079 Jan 23 00:38	5°♄52'21		desc. node	9080 Jan 11 23:35	0°♄11'08	
behind sun end	9079 Jan 23 06:14	6°♄16'29			9080 Jan 11 20:59	0°♄	
desc. node	9079 Jan 25 02:37	9°♄26'47		max. Earth dist.	9080 Jan 12 22:03	1°♄47'23	1.40933 AU
max. Earth dist.	9079 Jan 30 12:17	18°♄28'35	1.42904 AU	evening rise	9080 Jan 17 12:32	9°♄29'15	
evening rise	9079 Feb 05 23:37	28°♄51'49			9080 Jan 30 17:29	0°♄	
	9079 Feb 06 17:00	0°♄		evening max el	9080 Feb 20 17:48	27°♄14'22	23°19'49
	9079 Feb 27 01:42	0°♄					

	9080 Feb 23 18:11	0°♿		retrograde	9081 Feb 13 21:43	17°♿48'14	
retrograde	9080 Mar 02 06:22	3°♿27'51		evening set	9081 Feb 19 10:27	15°♿29'57	
asc. node	9080 Mar 05 14:26	2°♿33'29		asc. node	9081 Feb 20 11:32	14°♿31'47	
evening set	9080 Mar 07 06:48	1°♿22'28		min. Earth dist.	9081 Feb 24 00:11	10°♿18'56	0.67999 AU
	9080 Mar 08 17:03	30°♿♿		inferior conj	9081 Feb 24 23:40	9°♿00'45	1°25'30
min. Earth dist.	9080 Mar 12 04:31	25°♿36'58	0.68436 AU	minimum elong	9081 Feb 24 21:51	9°♿06'48	1°24'56
inferior conj	9080 Mar 12 16:27	24°♿55'50	2°07'30	morning rise	9081 Mar 02 09:25	3°♿01'42	
minimum elong	9080 Mar 12 14:15	25°♿03'27	2°06'52	direct	9081 Mar 06 03:30	1°♿40'56	
morning rise	9080 Mar 17 21:39	18°♿49'56		morning max el	9081 Mar 13 14:19	5°♿51'10	19°50'49
direct	9080 Mar 22 04:35	17°♿07'29		greatest brilliancy	9081 Mar 26 15:25	22°♿48'31	-0.6m
morning max el	9080 Mar 30 14:32	21°♿57'41	21°01'53	desc. node	9081 Mar 26 20:27	23°♿06'57	
	9080 Apr 06 11:07	0°♿			9081 Mar 31 11:39	0°♿	
desc. node	9080 Apr 08 23:33	3°♿21'25		morning set	9081 Apr 09 01:20	13°♿03'04	
	9080 Apr 27 02:39	0°♿			9081 Apr 19 21:40	0°♿	
morning set	9080 Apr 30 03:10	4°♿41'57		max. Earth dist.	9081 Apr 20 04:34	0°♿27'25	1.44375 AU
max. Earth dist.	9080 May 07 18:01	16°♿51'48	1.42779 AU				
				superior conj	9081 Apr 25 06:49	8°♿37'50	-2°12'24
superior conj	9080 May 14 20:19	28°♿40'08	-2°03'12	minimum elong	9081 Apr 25 06:57	8°♿38'20	2°12'33
minimum elong	9080 May 15 01:23	29°♿01'43	2°03'07		9081 May 08 03:01	0°♿	
	9080 May 15 15:04	0°♿		evening rise	9081 May 08 16:20	0°♿56'39	
evening rise	9080 May 26 12:43	19°♿09'37		asc. node	9081 May 19 10:13	18°♿52'31	
asc. node	9080 Jun 01 13:11	29°♿50'24		evening max el	9081 May 26 16:31	28°♿29'44	18°10'01
	9080 Jun 01 15:24	0°♿			9081 May 28 09:31	0°♿	
evening max el	9080 Jun 12 03:02	15°♿11'07	18°05'42	retrograde	9081 Jun 02 01:36	1°♿50'54	
retrograde	9080 Jun 18 18:43	18°♿35'17		evening set	9081 Jun 04 22:10	1°♿08'25	
evening set	9080 Jun 21 07:40	18°♿05'33			9081 Jun 06 17:54	30°♿♿	
inferior conj	9080 Jun 27 23:54	13°♿07'56	2°09'33	inferior conj	9081 Jun 11 00:56	25°♿52'13	2°52'56
minimum elong	9080 Jun 28 02:52	13°♿00'48	2°08'29	minimum elong	9081 Jun 11 03:18	25°♿45'46	2°52'14
min. Earth dist.	9080 Jul 01 04:46	10°♿04'24	0.60853 AU	min. Earth dist.	9081 Jun 13 18:07	22°♿55'46	0.63056 AU
morning rise	9080 Jul 04 19:29	7°♿11'34		morning rise	9081 Jun 17 06:50	19°♿41'23	
desc. node	9080 Jul 05 23:07	6°♿29'59		desc. node	9081 Jun 22 20:10	17°♿12'23	
direct	9080 Jul 11 10:08	5°♿00'36		direct	9081 Jun 24 00:51	17°♿07'47	
morning max el	9080 Jul 25 17:09	12°♿59'36	27°53'00	morning max el	9081 Jul 08 00:39	25°♿10'53	27°49'56
	9080 Aug 08 05:56	0°♿			9081 Jul 12 10:14	0°♿	
	9080 Aug 25 10:10	0°♿			9081 Aug 01 17:28	0°♿	
morning set	9080 Aug 27 13:18	4°♿20'43		morning set	9081 Aug 11 10:52	18°♿17'20	
asc. node	9080 Aug 28 12:46	6°♿22'53		asc. node	9081 Aug 15 09:41	26°♿26'04	
max. Earth dist.	9080 Sep 02 11:49	17°♿03'13	1.31746 AU	max. Earth dist.	9081 Aug 16 15:39	29°♿04'58	1.32394 AU
					9081 Aug 17 01:57	0°♿	
superior conj	9080 Sep 03 20:17	20°♿01'55	1°00'07				
minimum elong	9080 Sep 03 18:06	19°♿49'53	0°59'40	superior conj	9081 Aug 19 04:18	4°♿31'30	0°37'20
	9080 Sep 08 08:42	0°♿		minimum elong	9081 Aug 19 02:39	4°♿22'35	0°36'53
evening rise	9080 Sep 10 14:15	4°♿50'31		evening rise	9081 Aug 26 01:48	19°♿30'41	
	9080 Sep 23 18:44	0°♿			9081 Aug 31 03:40	0°♿	
desc. node	9080 Oct 01 21:43	11°♿39'02		evening max el	9081 Sep 18 17:47	27°♿51'32	23°37'13
evening max el	9080 Oct 07 06:17	17°♿31'54	25°13'24	desc. node	9081 Sep 18 18:51	27°♿54'06	
retrograde	9080 Oct 21 03:33	24°♿31'58			9081 Sep 21 03:33	0°♿	
evening set	9080 Oct 26 22:37	23°♿15'20		retrograde	9081 Oct 02 07:10	4°♿38'01	
min. Earth dist.	9080 Oct 31 18:08	20°♿35'01	0.57309 AU	evening set	9081 Oct 06 17:13	3°♿55'26	
inferior conj	9080 Nov 03 15:30	18°♿38'40	-5°21'23	min. Earth dist.	9081 Oct 13 03:57	0°♿51'23	0.55695 AU
minimum elong	9080 Nov 03 20:56	18°♿29'31	5°20'29		9081 Oct 14 14:33	30°♿♿	
morning rise	9080 Nov 11 21:35	14°♿26'23		inferior conj	9081 Oct 15 03:20	29°♿40'52	-5°38'32
direct	9080 Nov 14 07:10	14°♿09'28		minimum elong	9081 Oct 15 02:14	29°♿42'31	5°38'24
morning max el	9080 Nov 23 08:00	18°♿28'48	19°05'06	morning rise	9081 Oct 23 13:15	25°♿46'52	
asc. node	9080 Nov 24 12:32	19°♿41'25		direct	9081 Oct 26 09:28	25°♿26'52	
	9080 Dec 01 20:26	0°♿			9081 Nov 05 11:26	0°♿	
morning set	9080 Dec 10 01:08	15°♿21'14		morning max el	9081 Nov 05 21:45	0°♿23'52	20°14'03
	9080 Dec 17 11:19	0°♿		asc. node	9081 Nov 11 09:32	6°♿51'16	
				morning set	9081 Nov 24 06:58	29°♿58'43	
superior conj	9080 Dec 18 08:12	1°♿40'49	1°13'46		9081 Nov 24 07:14	0°♿	
minimum elong	9080 Dec 18 11:21	1°♿55'57	1°13'39				
max. Earth dist.	9080 Dec 25 03:55	14°♿22'41	1.38764 AU	superior conj	9081 Dec 01 21:49	15°♿35'00	1°30'12
evening rise	9080 Dec 28 23:21	21°♿05'03		minimum elong	9081 Dec 02 00:03	15°♿46'15	1°30'16
desc. node	9080 Dec 28 20:35	20°♿53'07		max. Earth dist.	9081 Dec 07 10:38	26°♿26'42	1.36643 AU
	9081 Jan 03 06:57	0°♿			9081 Dec 09 07:56	0°♿	
	9081 Jan 23 18:19	0°♿		evening rise	9081 Dec 11 06:17	3°♿33'22	
evening max el	9081 Feb 02 07:20	11°♿01'48	24°38'57	desc. node	9081 Dec 15 17:35	11°♿28'01	

	9081 Dec 27 07:01	0°♊				9082 Dec 01 12:37	0°♊	
evening max el	9082 Jan 15 20:37	24°♊50'20	25°50'39	desc. node		9082 Dec 02 14:36	1°♊51'21	
	9082 Jan 22 06:32	0°♋				9082 Dec 21 16:55	0°♋	
retrograde	9082 Jan 28 08:18	1°♋58'25		evening max el		9082 Dec 29 10:02	8°♋33'01	26°47'26
	9082 Feb 02 18:11	30°♋		retrograde		9083 Jan 11 13:12	15°♋51'46	
evening set	9082 Feb 03 09:27	29°♋29'53		evening set		9083 Jan 18 01:55	13°♋17'10	
asc. node	9082 Feb 07 08:39	25°♋17'35		min. Earth dist.		9083 Jan 22 02:54	9°♋15'22	0.65970 AU
min. Earth dist.	9082 Feb 07 16:25	24°♋53'32	0.67170 AU	inferior conj		9083 Jan 24 01:36	6°♋58'52	-0°23'30
inferior conj	9082 Feb 09 03:24	23°♋03'17	0°35'03	minimum elong		9083 Jan 24 02:15	6°♋56'56	0°23'00
minimum elong	9082 Feb 09 02:32	23°♋06'03	0°34'51	asc. node		9083 Jan 25 05:45	5°♋37'34	
morning rise	9082 Feb 14 20:09	17°♋13'03		morning rise		9083 Jan 30 03:38	1°♋19'51	
direct	9082 Feb 18 02:42	16°♋11'43		direct		9083 Feb 02 00:14	0°♋34'47	
morning max el	9082 Feb 24 21:46	19°♋54'12	18°54'56	morning max el		9083 Feb 08 11:17	4°♋01'29	18°15'28
	9082 Mar 04 22:26	0°♌				9083 Feb 26 08:08	0°♌	
desc. node	9082 Mar 13 17:21	13°♌14'29		morning set		9083 Feb 27 16:53	2°♌11'45	
morning set	9082 Mar 19 07:58	21°♌56'54		desc. node		9083 Feb 28 14:14	3°♌37'33	
	9082 Mar 24 12:00	0°♍						
max. Earth dist.	9082 Apr 02 21:13	14°♍39'51	1.45334 AU	superior conj		9083 Mar 15 01:19	26°♌34'59	-1°33'10
				minimum elong		9083 Mar 14 15:48	25°♌57'38	1°32'10
superior conj	9082 Apr 04 20:03	17°♍43'50	-2°02'33	max. Earth dist.		9083 Mar 16 16:56	29°♌10'11	1.45560 AU
minimum elong	9082 Apr 04 13:04	17°♍16'23	2°02'15			9083 Mar 17 05:40	0°♍	
	9082 Apr 12 13:51	0°♎		evening rise		9083 Mar 31 02:44	21°♍40'07	
evening rise	9082 Apr 19 21:03	11°♎45'35				9083 Apr 05 10:51	0°♎	
	9082 May 01 05:27	0°♏		greatest brilliancy		9083 Apr 11 09:26	9°♎10'39	-0.7m
asc. node	9082 May 06 07:17	7°♏23'43		asc. node		9083 Apr 23 04:24	25°♎13'26	
evening max el	9082 May 10 05:02	12°♏01'10	18°32'34	evening max el		9083 Apr 23 14:04	25°♎38'18	19°12'27
retrograde	9082 May 16 16:58	15°♏33'04		retrograde		9083 Apr 30 13:17	29°♎33'34	
evening set	9082 May 19 21:06	14°♏36'26		evening set		9083 May 04 01:20	28°♎22'03	
inferior conj	9082 May 25 14:18	9°♏03'01	3°15'25	inferior conj		9083 May 09 12:26	22°♎32'58	3°21'23
minimum elong	9082 May 25 15:27	8°♏59'31	3°15'03	minimum elong		9083 May 09 12:20	22°♎33'18	3°21'11
min. Earth dist.	9082 May 27 16:35	6°♏32'25	0.64994 AU	min. Earth dist.		9083 May 10 23:26	20°♎39'58	0.66537 AU
morning rise	9082 May 31 08:59	2°♏45'36		morning rise		9083 May 14 22:55	16°♎13'56	
direct	9082 Jun 06 23:30	0°♏00'53		direct		9083 May 21 04:45	13°♎29'47	
desc. node	9082 Jun 09 17:11	0°♏25'37		desc. node		9083 May 27 14:11	15°♎44'24	
morning max el	9082 Jun 20 10:45	7°♏56'18	27°12'18	morning max el		9083 Jun 02 21:11	21°♎03'57	26°07'40
	9082 Jul 07 12:51	0°♐				9083 Jun 10 14:34	0°♐	
	9082 Jul 25 01:27	0°♑				9083 Jun 30 17:19	0°♐	
morning set	9082 Jul 25 23:10	1°♑44'44		morning set		9083 Jul 08 22:41	14°♐33'10	
max. Earth dist.	9082 Jul 30 11:01	10°♑42'03	1.33544 AU	max. Earth dist.		9083 Jul 12 19:56	21°♐55'24	1.35172 AU
asc. node	9082 Aug 02 06:37	16°♑32'06				9083 Jul 16 21:53	0°♑	
superior conj	9082 Aug 03 07:26	18°♑42'44	0°10'22	superior conj		9083 Jul 18 03:09	2°♑28'27	-0°19'58
minimum elong	9082 Aug 03 06:54	18°♑39'57	0°10'05	minimum elong		9083 Jul 18 04:20	2°♑34'24	0°19'58
behind sun begin	9082 Aug 03 02:32	18°♑16'53		asc. node		9083 Jul 20 03:33	6°♑36'44	
behind sun end	9082 Aug 03 11:16	19°♑03'03		evening rise		9083 Jul 25 20:53	18°♑29'23	
	9082 Aug 08 14:25	0°♒				9083 Jul 31 15:28	0°♒	
evening rise	9082 Aug 10 12:41	4°♒05'45		evening max el		9083 Aug 13 07:20	18°♒43'59	20°31'34
	9082 Aug 24 15:59	0°♓		desc. node		9083 Aug 23 13:06	24°♒13'29	
evening max el	9082 Aug 31 07:23	8°♓04'16	21°58'24	retrograde		9083 Aug 24 11:03	24°♒15'38	
desc. node	9082 Sep 05 15:58	12°♓15'36		evening set		9083 Aug 26 12:17	24°♒05'12	
retrograde	9082 Sep 12 22:55	14°♓21'33		inferior conj		9083 Sep 04 16:20	20°♒08'07	-3°34'41
evening set	9082 Sep 15 22:04	14°♓01'56		minimum elong		9083 Sep 04 07:11	20°♒21'20	3°31'47
inferior conj	9082 Sep 24 23:37	10°♓02'08	-5°02'58	min. Earth dist.		9083 Sep 05 20:44	19°♒27'03	0.54776 AU
minimum elong	9082 Sep 24 15:23	10°♓13'38	5°01'22	morning rise		9083 Sep 13 01:41	16°♒05'41	
min. Earth dist.	9082 Sep 24 11:45	10°♓18'44	0.54781 AU	direct		9083 Sep 17 05:36	15°♒28'32	
morning rise	9082 Oct 03 10:07	6°♓14'13		morning max el		9083 Sep 30 13:01	21°♒54'19	23°28'47
direct	9082 Oct 06 21:08	5°♓47'49				9083 Oct 07 14:02	0°♓	
morning max el	9082 Oct 18 22:13	11°♓28'39	21°44'18	asc. node		9083 Oct 16 03:27	13°♓36'45	
asc. node	9082 Oct 29 06:30	24°♓53'57		morning set		9083 Oct 24 04:09	29°♓34'27	
	9082 Nov 01 05:20	0°♔				9083 Oct 24 08:57	0°♔	
morning set	9082 Nov 08 16:38	14°♔45'01						
				superior conj		9083 Oct 31 02:37	14°♔33'12	1°40'43
superior conj	9082 Nov 15 20:59	29°♔55'28	1°38'54	minimum elong		9083 Oct 31 02:21	14°♔31'45	1°40'53
minimum elong	9082 Nov 15 21:57	0°♕00'34	1°39'06	max. Earth dist.		9083 Nov 02 19:33	20°♔20'16	1.33288 AU
	9082 Nov 15 21:51	0°♕		evening rise		9083 Nov 07 18:06	0°♕30'20	
max. Earth dist.	9082 Nov 19 23:06	8°♕20'23	1.34775 AU			9083 Nov 07 12:02	0°♕	
evening rise	9082 Nov 24 05:48	16°♕45'00		desc. node		9083 Nov 19 11:39	21°♕57'26	

	9083 Nov 24 12:50	0°♁		evening rise	9084 Oct 21 15:52	14°♎40'19	
evening max el	9083 Dec 11 22:45	21°♁59'43 27°22'10			9084 Oct 29 13:15	0°♎	
retrograde	9083 Dec 25 12:04	29°♁20'41		desc. node	9084 Nov 05 08:45	11°♎38'09	
evening set	9084 Jan 01 09:42	26°♁46'20			9084 Nov 18 15:44	0°♁	
min. Earth dist.	9084 Jan 05 05:29	23°♁17'37 0.64419 AU		evening max el	9084 Nov 23 08:55	4°♁57'17 27°28'23	
inferior conj	9084 Jan 07 15:51	20°♁42'20 -1°29'11		retrograde	9084 Dec 07 04:05	12°♁14'34	
minimum elong	9084 Jan 07 18:37	20°♁35'00 1°27'47		evening set	9084 Dec 14 05:49	9°♁49'23	
asc. node	9084 Jan 12 02:51	16°♁30'42		min. Earth dist.	9084 Dec 17 22:29	6°♁49'12 0.62567 AU	
morning rise	9084 Jan 14 05:11	15°♁17'22		inferior conj	9084 Dec 20 19:14	4°♁05'36 -2°40'00	
direct	9084 Jan 16 17:42	14°♁44'51		minimum elong	9084 Dec 21 00:24	3°♁53'16 2°37'45	
morning max el	9084 Jan 23 04:16	18°♁06'39 17°52'58			9084 Dec 25 17:47	30°♎	
	9084 Jan 31 22:22	0°♎		morning rise	9084 Dec 27 21:13	28°♎57'38	
morning set	9084 Feb 09 06:52	13°♎52'21		asc. node	9084 Dec 28 23:56	28°♎40'12	
desc. node	9084 Feb 15 11:08	24°♎11'47		direct	9084 Dec 30 03:59	28°♎33'54	
	9084 Feb 18 23:55	0°♎			9085 Jan 03 11:16	0°♁	
				morning max el	9085 Jan 05 21:32	2°♁00'18 17°48'00	
superior conj	9084 Feb 22 17:54	6°♎04'04 -0°51'34		morning set	9085 Jan 21 20:24	26°♁40'05	
minimum elong	9084 Feb 22 12:05	5°♎40'42 0°50'38			9085 Jan 23 17:41	0°♎	
max. Earth dist.	9084 Feb 27 12:32	13°♎40'18 1.45042 AU		desc. node	9085 Feb 01 08:03	14°♎52'35	
	9084 Mar 09 00:21	0°♎					
evening rise	9084 Mar 09 16:46	1°♎03'05		superior conj	9085 Feb 02 09:50	16°♎41'09 -0°07'58	
greatest brilliancy	9084 Mar 24 14:52	23°♎30'55 -0.6m		minimum elong	9085 Feb 02 09:04	16°♎37'54 0°07'40	
	9084 Mar 29 04:27	0°♎		behind sun begin	9085 Feb 02 01:05	16°♎04'20	
evening max el	9084 Apr 05 18:01	9°♎17'52 20°08'02		behind sun end	9085 Feb 02 17:04	17°♎11'25	
asc. node	9084 Apr 09 01:31	12°♎09'23		max. Earth dist.	9085 Feb 09 05:08	27°♎52'12 1.43845 AU	
retrograde	9084 Apr 13 11:48	13°♎46'49			9085 Feb 10 12:59	0°♎	
evening set	9084 Apr 17 08:33	12°♎20'08		evening rise	9085 Feb 17 05:20	10°♎30'25	
inferior conj	9084 Apr 22 16:28	6°♎17'14 3°14'08			9085 Mar 02 04:17	0°♎	
minimum elong	9084 Apr 22 15:18	6°♎21'10 3°13'52		evening max el	9085 Mar 19 16:25	22°♎58'30 21°16'34	
min. Earth dist.	9084 Apr 23 13:03	5°♎07'24 0.67639 AU		asc. node	9085 Mar 26 22:40	27°♎56'34	
morning rise	9084 Apr 27 21:48	29°♎59'35		retrograde	9085 Mar 28 10:14	28°♎07'39	
	9084 Apr 27 21:37	30°♎		evening set	9085 Apr 01 16:49	26°♎25'45	
direct	9084 May 03 15:50	27°♎25'42		inferior conj	9085 Apr 06 23:55	20°♎11'23 2°55'49	
	9084 May 10 06:00	0°♎		minimum elong	9085 Apr 06 22:02	20°♎17'55 2°55'24	
desc. node	9084 May 13 11:09	2°♎38'12		min. Earth dist.	9085 Apr 07 07:14	19°♎45'57 0.68291 AU	
morning max el	9084 May 15 06:48	4°♎23'52 24°45'27		morning rise	9085 Apr 12 03:03	13°♎57'07	
	9084 Jun 03 22:17	0°♎		direct	9085 Apr 17 07:42	11°♎40'25	
morning set	9084 Jun 20 04:50	26°♎30'57		morning max el	9085 Apr 27 16:23	17°♎50'16 23°15'54	
	9084 Jun 22 03:45	0°♎		desc. node	9085 Apr 30 08:05	20°♎41'00	
max. Earth dist.	9084 Jun 23 19:35	3°♎00'44 1.37196 AU			9085 May 07 19:42	0°♎	
					9085 May 28 00:18	0°♎	
superior conj	9084 Jun 30 12:26	15°♎41'06 -0°52'11		morning set	9085 Jun 01 12:13	7°♎23'49	
minimum elong	9084 Jun 30 15:42	15°♎57'05 0°51'52		max. Earth dist.	9085 Jun 05 15:34	14°♎27'21 1.39439 AU	
asc. node	9084 Jul 06 00:32	26°♎36'18					
	9084 Jul 07 17:05	0°♎		superior conj	9085 Jun 13 07:23	28°♎11'30 -1°23'55	
evening rise	9084 Jul 09 00:01	2°♎35'09		minimum elong	9085 Jun 13 12:40	28°♎35'58 1°23'27	
	9084 Jul 25 17:20	0°♎			9085 Jun 14 06:45	0°♎	
evening max el	9084 Jul 25 20:53	0°♎08'50 19°24'09		evening rise	9085 Jun 22 19:09	16°♎15'11	
retrograde	9084 Aug 04 07:50	4°♎49'39		asc. node	9085 Jun 22 21:33	16°♎26'47	
evening set	9084 Aug 06 04:08	4°♎39'42			9085 Jun 30 04:25	0°♎	
desc. node	9084 Aug 09 10:14	3°♎38'20		evening max el	9085 Jul 08 22:05	12°♎18'04 18°37'48	
inferior conj	9084 Aug 14 20:08	0°♎32'34 -1°39'59		retrograde	9085 Jul 16 21:58	16°♎16'49	
minimum elong	9084 Aug 14 15:39	0°♎39'52 1°38'24		evening set	9085 Jul 18 23:06	16°♎02'03	
	9084 Aug 15 16:06	30°♎		inferior conj	9085 Jul 26 20:00	11°♎36'34 0°08'35	
min. Earth dist.	9084 Aug 17 09:12	28°♎53'42 0.55714 AU		minimum elong	9085 Jul 26 20:20	11°♎35'58 0°08'15	
morning rise	9084 Aug 23 00:29	25°♎57'34		transit middle	9085 Jul 26 20:20	11°♎35'58 0°08'15	
direct	9084 Aug 27 23:51	25°♎01'31		transit begin	9085 Jul 26 17:12	11°♎41'52	
	9084 Sep 08 15:58	0°♎		transit end	9085 Jul 26 23:27	11°♎30'02	
morning max el	9084 Sep 11 01:14	2°♎06'27 25°13'15		desc. node	9085 Jul 27 07:22	11°♎14'59	
	9084 Sep 30 12:53	0°♎		min. Earth dist.	9085 Jul 30 02:26	9°♎09'03 0.57414 AU	
asc. node	9084 Oct 02 00:23	2°♎49'30		morning rise	9085 Aug 03 14:02	6°♎24'31	
morning set	9084 Oct 07 15:46	14°♎21'33		direct	9085 Aug 09 08:53	5°♎01'00	
				morning max el	9085 Aug 23 17:04	12°♎34'09 26°40'41	
superior conj	9084 Oct 14 12:14	29°♎20'11 1°36'21			9085 Sep 06 09:22	0°♎	
minimum elong	9084 Oct 14 10:56	29°♎13'04 1°36'23		asc. node	9085 Sep 18 21:19	22°♎24'21	
	9084 Oct 14 19:29	0°♎		morning set	9085 Sep 22 01:52	29°♎01'53	
max. Earth dist.	9084 Oct 15 23:20	2°♎32'40 1.32255 AU			9085 Sep 22 12:47	0°♎	

superior conj	9085 Sep 28 23:49	14° Ω 10'17	1°26'21	superior conj	9086 Sep 13 11:26	28° Π 56'33	1°11'07
minimum elong	9085 Sep 28 21:50	13° Ω 59'17	1°26'11	minimum elong	9086 Sep 13 09:11	28° Π 44'06	1°10'45
max. Earth dist.	9085 Sep 29 07:57	14° Ω 55'29	1.31696 AU		9086 Sep 13 22:52	0° Ω	
evening rise	9085 Oct 05 20:23	29° Ω 07'44		evening rise	9086 Sep 20 05:11	13° Ω 44'46	
	9085 Oct 06 06:18	0° Π			9086 Sep 28 07:35	0° Π	
	9085 Oct 22 18:22	0° \mathcal{A}		desc. node	9086 Oct 10 03:00	18° Π 58'46	
desc. node	9085 Oct 23 05:52	0° \mathcal{A} 43'26		evening max el	9086 Oct 18 12:08	28° Π 40'38	26°00'55
evening max el	9085 Nov 05 14:15	17° \mathcal{A} 14'08	27°01'25		9086 Oct 19 23:07	0° \mathcal{A}	
retrograde	9085 Nov 19 12:03	24° \mathcal{A} 24'23		retrograde	9086 Nov 01 10:07	5° \mathcal{A} 43'44	
evening set	9085 Nov 26 10:28	22° \mathcal{A} 18'52		evening set	9086 Nov 07 18:58	4° \mathcal{A} 07'28	
min. Earth dist.	9085 Nov 30 04:53	19° \mathcal{A} 38'18	0.60520 AU	min. Earth dist.	9086 Nov 12 00:57	1° \mathcal{A} 32'26	0.58436 AU
inferior conj	9085 Dec 03 08:25	17° \mathcal{A} 00'19	-3°51'23		9086 Nov 14 04:08	30° $\mathcal{R}\Pi$	
minimum elong	9085 Dec 03 15:34	16° \mathcal{A} 45'18	3°48'53	inferior conj	9086 Nov 15 03:52	29° Π 16'25	-4°54'29
morning rise	9085 Dec 10 23:09	12° \mathcal{A} 12'16		minimum elong	9086 Nov 15 11:03	29° Π 03'21	4°52'46
direct	9085 Dec 13 03:26	11° \mathcal{A} 53'40		morning rise	9086 Nov 23 05:27	24° Π 50'50	
asc. node	9085 Dec 15 20:59	12° \mathcal{A} 24'14		direct	9086 Nov 25 11:43	24° Π 34'05	
morning max el	9085 Dec 20 11:40	15° \mathcal{A} 33'30	18°01'41	asc. node	9086 Dec 02 18:00	27° Π 39'10	
	9085 Dec 30 11:52	0° \mathcal{B}		morning max el	9086 Dec 03 19:03	28° Π 36'07	18°35'42
morning set	9086 Jan 05 03:03	10° \mathcal{B} 15'44			9086 Dec 05 03:19	0° \mathcal{A}	
				morning set	9086 Dec 19 21:36	24° \mathcal{A} 23'51	
superior conj	9086 Jan 15 02:51	28° \mathcal{B} 29'13	0°30'25		9086 Dec 22 18:58	0° \mathcal{B}	
minimum elong	9086 Jan 15 05:12	28° \mathcal{B} 39'39	0°30'18	superior conj	9086 Dec 28 17:05	11° \mathcal{B} 17'24	1°00'29
	9086 Jan 15 23:26	0° \approx		minimum elong	9086 Dec 28 20:23	11° \mathcal{B} 32'48	1°00'18
desc. node	9086 Jan 19 05:00	5° \approx 36'27		max. Earth dist.	9087 Jan 05 01:30	24° \mathcal{B} 33'47	1.40022 AU
max. Earth dist.	9086 Jan 22 17:24	11° \approx 32'44	1.42107 AU	desc. node	9087 Jan 06 01:58	26° \mathcal{B} 19'50	
evening rise	9086 Jan 28 06:52	20° \approx 36'48			9087 Jan 08 05:33	0° \approx	
	9086 Feb 03 06:54	0° \mathcal{H}		evening rise	9087 Jan 09 05:02	1° \approx 38'44	
	9086 Feb 24 12:44	0° \mathcal{Y}			9087 Jan 27 14:54	0° \mathcal{H}	
evening max el	9086 Mar 02 10:04	6° \mathcal{Y} 41'17	22°33'46	evening max el	9087 Feb 13 00:37	20° \mathcal{H} 27'13	23°54'03
retrograde	9086 Mar 12 06:50	12° \mathcal{Y} 31'50		retrograde	9087 Feb 24 00:19	26° \mathcal{H} 55'10	
asc. node	9086 Mar 13 19:48	12° \mathcal{Y} 20'01		asc. node	9087 Feb 28 16:55	25° \mathcal{H} 10'26	
evening set	9086 Mar 17 00:28	10° \mathcal{Y} 34'56		evening set	9087 Mar 01 06:00	24° \mathcal{H} 44'03	
inferior conj	9086 Mar 22 08:44	4° \mathcal{Y} 11'58	2°27'47	min. Earth dist.	9087 Mar 06 00:10	19° \mathcal{H} 13'23	0.68299 AU
minimum elong	9086 Mar 22 06:31	4° \mathcal{Y} 19'40	2°27'11	inferior conj	9087 Mar 06 17:02	18° \mathcal{H} 16'03	1°50'46
min. Earth dist.	9086 Mar 22 03:41	4° \mathcal{Y} 29'30	0.68507 AU	minimum elong	9087 Mar 06 14:55	18° \mathcal{H} 23'14	1°50'08
	9086 Mar 25 13:44	30° $\mathcal{R}\mathcal{H}$		morning rise	9087 Mar 11 23:51	12° \mathcal{H} 13'01	
morning rise	9086 Mar 27 12:24	28° \mathcal{H} 02'37		direct	9087 Mar 16 01:18	10° \mathcal{H} 39'49	
direct	9086 Apr 01 03:17	26° \mathcal{H} 07'05		morning max el	9087 Mar 24 00:21	15° \mathcal{H} 11'07	20°30'02
	9086 Apr 08 17:32	0° \mathcal{Y}		desc. node	9087 Apr 04 01:56	29° \mathcal{H} 02'56	
morning max el	9086 Apr 10 05:04	1° \mathcal{Y} 24'36	21°48'20		9087 Apr 04 18:04	0° \mathcal{Y}	
desc. node	9086 Apr 17 05:01	9° \mathcal{Y} 33'44		morning set	9087 Apr 21 21:14	25° \mathcal{Y} 36'48	
	9086 May 01 16:35	0° \mathcal{B}			9087 Apr 24 16:48	0° \mathcal{B}	
morning set	9086 May 12 16:30	17° \mathcal{B} 01'03		max. Earth dist.	9087 Apr 30 22:43	9° \mathcal{B} 55'11	1.43530 AU
max. Earth dist.	9086 May 18 15:22	26° \mathcal{B} 43'12	1.41647 AU				
	9086 May 20 14:26	0° Π		superior conj	9087 May 07 08:15	20° \mathcal{B} 23'19	-2°09'07
superior conj	9086 May 26 07:26	9° Π 48'27	-1°51'24	minimum elong	9087 May 07 11:46	20° \mathcal{B} 37'54	2°09'12
minimum elong	9086 May 26 13:25	10° Π 14'45	1°51'05		9087 May 13 00:52	0° Π	
evening rise	9086 Jun 06 02:30	29° Π 19'22		evening rise	9087 May 19 17:40	11° Π 38'07	
	9086 Jun 06 11:19	0° \mathcal{E}		asc. node	9087 May 27 15:37	25° Π 19'33	
asc. node	9086 Jun 09 18:35	6° \mathcal{E} 02'53			9087 May 30 13:19	0° \mathcal{E}	
evening max el	9086 Jun 22 06:58	25° \mathcal{E} 01'28	18°11'45	evening max el	9087 Jun 05 19:46	8° \mathcal{E} 09'52	18°05'09
retrograde	9086 Jun 29 06:53	28° \mathcal{E} 33'30		retrograde	9087 Jun 12 07:16	11° \mathcal{E} 30'56	
evening set	9086 Jul 01 15:36	28° \mathcal{E} 09'57		evening set	9087 Jun 14 23:34	10° \mathcal{E} 55'53	
inferior conj	9086 Jul 08 17:23	23° \mathcal{E} 23'40	1°33'17	inferior conj	9087 Jun 21 09:33	5° \mathcal{E} 49'50	2°30'49
minimum elong	9086 Jul 08 20:03	23° \mathcal{E} 17'46	1°32'10	minimum elong	9087 Jun 21 12:23	5° \mathcal{E} 42'36	2°29'52
min. Earth dist.	9086 Jul 12 01:58	20° \mathcal{E} 26'44	0.59560 AU	min. Earth dist.	9087 Jun 24 09:54	2° \mathcal{E} 47'00	0.61817 AU
desc. node	9086 Jul 14 04:28	18° \mathcal{E} 47'55		morning rise	9087 Jun 27 23:06	29° Π 46'13	
morning rise	9086 Jul 15 21:27	17° \mathcal{E} 40'46			9087 Jun 27 15:23	30° $\mathcal{R}\Pi$	
direct	9086 Jul 22 06:59	15° \mathcal{E} 46'31		desc. node	9087 Jul 01 01:32	28° Π 05'14	
morning max el	9086 Aug 05 15:29	23° \mathcal{E} 37'40	27°37'21	direct	9087 Jul 04 16:02	27° Π 24'47	
	9086 Aug 11 09:01	0° \mathcal{Q}			9087 Jul 12 06:59	0° \mathcal{E}	
	9086 Aug 30 14:05	0° \mathcal{H}		morning max el	9087 Jul 18 20:29	5° \mathcal{E} 25'55	27°56'16
asc. node	9086 Sep 05 18:14	12° \mathcal{H} 14'06			9087 Aug 06 07:28	0° \mathcal{Q}	
morning set	9086 Sep 06 08:42	13° \mathcal{H} 29'37		morning set	9087 Aug 21 10:20	27° \mathcal{Q} 39'31	
max. Earth dist.	9086 Sep 12 17:54	27° \mathcal{H} 19'23	1.31600 AU		9087 Aug 22 13:35	0° \mathcal{H}	
				asc. node	9087 Aug 23 15:09	2° \mathcal{H} 13'40	

max. Earth dist.	9087 Aug 27 01:17	9° \cap 33'14	1.31973 AU	asc. node	9088 Aug 09 12:05	22° Ω 18'35	
superior conj	9087 Aug 28 21:18	13° \cap 33'45	0°50'59	superior conj	9088 Aug 12 03:32	27° Ω 56'18	0°26'22
minimum elong	9087 Aug 28 19:17	13° \cap 22'41	0°50'31	minimum elong	9088 Aug 12 02:18	27° Ω 49'39	0°25'58
evening rise	9087 Sep 04 16:18	28° \cap 25'29			9088 Aug 13 02:30	0° \cap	
	9087 Sep 05 09:59	0° Ω		evening rise	9088 Aug 19 03:50	13° \cap 04'19	
	9087 Sep 22 04:35	0° \cap			9088 Aug 27 15:57	0° Ω	
desc. node	9087 Sep 27 00:07	6° \cap 04'52		evening max el	9088 Sep 10 13:10	19° Ω 30'21	22°54'24
evening max el	9087 Sep 30 02:05	9° \cap 18'31	24°33'43	desc. node	9088 Sep 12 21:15	21° Ω 35'50	
retrograde	9087 Oct 13 20:45	16° \cap 13'47		retrograde	9088 Sep 23 19:26	26° Ω 07'35	
evening set	9087 Oct 19 03:14	15° \cap 12'03		evening set	9088 Sep 27 13:53	25° Ω 36'29	
min. Earth dist.	9087 Oct 24 13:05	12° \cap 23'59	0.56561 AU	min. Earth dist.	9088 Oct 04 21:37	22° Ω 17'23	0.55201 AU
inferior conj	9087 Oct 27 03:07	10° \cap 45'45	-5°34'08	inferior conj	9088 Oct 06 07:23	21° Ω 28'52	-5°30'32
minimum elong	9087 Oct 27 06:15	10° \cap 40'46	5°33'45	minimum elong	9088 Oct 06 02:53	21° Ω 35'21	5°30'01
morning rise	9087 Nov 04 11:26	6° \cap 42'25		morning rise	9088 Oct 14 17:51	17° Ω 39'50	
direct	9087 Nov 07 01:07	6° \cap 24'29		direct	9088 Oct 17 19:47	17° Ω 17'43	
morning max el	9087 Nov 16 16:04	10° \cap 58'13	19°31'45	morning max el	9088 Oct 29 00:16	22° Ω 32'44	20°50'10
asc. node	9087 Nov 19 14:59	14° \cap 11'34			9088 Nov 04 07:09	0° \cap	
	9087 Nov 29 11:34	0° Ω		asc. node	9088 Nov 05 11:58	1° \cap 45'51	
morning set	9087 Dec 04 00:09	8° Ω 52'58		morning set	9088 Nov 17 07:54	23° \cap 35'18	
					9088 Nov 20 09:49	0° Ω	
superior conj	9087 Dec 11 23:29	24° Ω 51'23	1°21'45				
minimum elong	9087 Dec 12 02:19	25° Ω 05'17	1°21'43	superior conj	9088 Nov 24 17:40	8° Ω 58'43	1°34'47
	9087 Dec 14 15:07	0° Ω		minimum elong	9088 Nov 24 19:23	9° Ω 07'30	1°34'55
max. Earth dist.	9087 Dec 18 07:23	6° Ω 54'30	1.37837 AU	max. Earth dist.	9088 Nov 29 15:49	18° Ω 50'43	1.35801 AU
evening rise	9087 Dec 22 00:41	13° Ω 36'59		evening rise	9088 Dec 03 15:12	26° Ω 25'17	
desc. node	9087 Dec 23 22:55	16° Ω 58'46			9088 Dec 05 13:59	0° Ω	
	9087 Dec 31 20:06	0° \approx		desc. node	9088 Dec 09 19:56	7° Ω 29'28	
	9088 Jan 22 13:51	0° \cap			9088 Dec 24 06:28	0° \approx	
evening max el	9088 Jan 26 13:45	4° \cap 14'47	25°10'51	evening max el	9089 Jan 08 02:55	18° \approx 01'08	26°17'01
retrograde	9088 Feb 07 13:39	11° \cap 11'49		retrograde	9089 Jan 20 22:05	25° \approx 15'51	
evening set	9088 Feb 13 07:51	8° \cap 48'27		evening set	9089 Jan 27 04:21	22° \approx 43'50	
asc. node	9088 Feb 15 14:02	6° \cap 33'18		min. Earth dist.	9089 Jan 31 08:33	18° \approx 22'22	0.66701 AU
min. Earth dist.	9088 Feb 17 18:30	3° \cap 52'30	0.67690 AU	asc. node	9089 Feb 01 11:09	17° \approx 01'09	
inferior conj	9088 Feb 18 22:57	2° \cap 19'47	1°05'06	inferior conj	9089 Feb 02 00:36	16° \approx 19'47	0°11'08
minimum elong	9088 Feb 18 21:28	2° \cap 24'39	1°04'40	minimum elong	9089 Feb 02 00:18	16° \approx 20'42	0°11'13
	9088 Feb 20 19:00	30° \cap		transit middle	9089 Feb 02 00:18	16° \approx 20'42	0°11'13
morning rise	9088 Feb 24 11:25	26° \approx 24'32		transit begin	9089 Feb 01 22:15	16° \approx 27'02	
direct	9088 Feb 28 00:24	25° \approx 12'28		transit end	9089 Feb 02 02:22	16° \approx 14'23	
morning max el	9088 Mar 06 03:35	29° \approx 09'11	19°25'14	morning rise	9089 Feb 07 21:03	10° \approx 34'10	
	9088 Mar 06 23:28	0° \cap		direct	9089 Feb 10 23:03	9° \approx 40'22	
greatest brilliancy	9088 Mar 18 22:37	15° \cap 58'17	-0.7m	morning max el	9089 Feb 17 13:57	13° \approx 14'59	18°36'06
desc. node	9088 Mar 20 22:48	18° \cap 58'11			9089 Mar 01 22:16	0° \cap	
	9088 Mar 28 04:44	0° \cap		desc. node	9089 Mar 07 19:41	9° \cap 12'38	
morning set	9088 Mar 30 19:58	4° \cap 03'16		morning set	9089 Mar 10 12:23	13° \cap 27'24	
max. Earth dist.	9088 Apr 12 12:23	23° \cap 49'11	1.44864 AU		9089 Mar 21 01:09	0° \cap	
superior conj	9088 Apr 16 08:40	29° \cap 55'23	-2°10'45	superior conj	9089 Mar 26 16:14	8° \cap 48'29	-1°52'13
minimum elong	9088 Apr 16 05:42	29° \cap 43'30	2°10'49	minimum elong	9089 Mar 26 07:17	8° \cap 13'29	1°51'33
	9088 Apr 16 09:50	0° Ω		max. Earth dist.	9089 Mar 26 06:07	8° \cap 08'55	1.45516 AU
evening rise	9088 Apr 30 11:54	23° Ω 00'55			9089 Apr 09 03:01	0° Ω	
	9088 May 04 16:24	0° \cap		evening rise	9089 Apr 11 06:24	3° Ω 24'24	
asc. node	9088 May 13 12:41	14° \cap 09'32		greatest brilliancy	9089 Apr 19 13:33	16° Ω 36'44	-0.8m
evening max el	9088 May 19 09:06	21° \cap 34'14	18°17'21		9089 Apr 28 12:51	0° \cap	
retrograde	9088 May 25 18:26	24° \cap 58'45		asc. node	9089 Apr 30 09:46	2° \cap 24'13	
evening set	9088 May 28 18:07	24° \cap 10'26		evening max el	9089 May 02 20:20	5° \cap 08'09	18°47'32
inferior conj	9088 Jun 03 16:20	18° \cap 46'30	3°04'43	retrograde	9089 May 09 12:17	8° \cap 48'51	
minimum elong	9088 Jun 03 18:13	18° \cap 41'06	3°04'11	evening set	9089 May 12 19:37	7° \cap 46'09	
min. Earth dist.	9088 Jun 06 03:18	15° \cap 59'11	0.63919 AU	inferior conj	9089 May 18 09:50	2° \cap 06'00	3°19'43
morning rise	9088 Jun 09 17:06	12° \cap 31'47		minimum elong	9089 May 18 10:27	2° \cap 04'06	3°19'27
direct	9088 Jun 16 10:10	9° \cap 52'09		min. Earth dist.	9089 May 20 05:40	29° Ω 50'01	0.65697 AU
desc. node	9088 Jun 16 22:34	9° \cap 53'01			9089 May 20 02:23	30° \cap	
morning max el	9088 Jun 30 05:41	17° \cap 53'56	27°37'49	morning rise	9089 May 24 00:38	25° Ω 47'10	
	9088 Jul 10 08:44	0° Ω		direct	9089 May 30 11:57	23° Ω 01'05	
	9088 Jul 29 04:33	0° Ω		desc. node	9089 Jun 03 19:35	24° Ω 02'50	
morning set	9088 Aug 04 04:24	11° Ω 25'09			9089 Jun 11 20:02	0° \cap	
max. Earth dist.	9088 Aug 09 02:05	21° Ω 26'04	1.32824 AU	morning max el	9089 Jun 12 16:14	0° \cap 50'14	26°47'34

	9089 Jul 04 09:36	0°☿		morning rise	9090 May 07 18:44	9°☿23'50	
morning set	9089 Jul 18 11:49	24°☿37'35		direct	9090 May 13 19:59	6°☿42'41	
	9089 Jul 21 06:24	0°♌		desc. node	9090 May 21 16:35	10°☿05'27	
max. Earth dist.	9089 Jul 22 16:57	2°♌51'18	1.34173 AU	morning max el	9090 May 26 02:08	14°☿03'19	25°34'16
					9090 Jun 08 01:16	0°♊	
superior conj	9089 Jul 27 03:53	11°♌57'42	-0°02'09		9090 Jun 27 04:41	0°☿	
minimum elong	9089 Jul 27 04:01	11°♌58'21	0°02'21	morning set	9090 Jul 01 04:36	7°☿06'26	
behind sun begin	9089 Jul 26 22:19	11°♌28'42		max. Earth dist.	9090 Jul 04 21:12	13°☿57'08	1.35987 AU
behind sun end	9089 Jul 27 09:43	12°♌28'02					
asc. node	9089 Jul 27 09:01	12°♌24'28		superior conj	9090 Jul 10 19:40	25°☿31'02	-0°33'28
evening rise	9089 Aug 03 13:51	27°♌35'07		minimum elong	9090 Jul 10 21:42	25°☿41'12	0°33'20
	9089 Aug 04 17:40	0°♍			9090 Jul 13 01:00	0°♌	
	9089 Aug 23 09:51	0°♊		asc. node	9090 Jul 14 06:00	2°♌27'42	
evening max el	9089 Aug 23 06:30	29°♍51'49	21°19'29	evening rise	9090 Jul 18 20:15	11°♌52'19	
desc. node	9089 Aug 30 18:24	4°♊59'51			9090 Jul 28 10:01	0°♍	
retrograde	9089 Sep 04 08:32	5°♊51'17		evening max el	9090 Aug 05 12:26	10°♍50'54	20°00'26
evening set	9089 Sep 06 19:51	5°♊37'12		retrograde	9090 Aug 15 22:24	15°♍59'57	
inferior conj	9089 Sep 16 00:29	1°♊40'24	-4°30'56	evening set	9090 Aug 17 19:59	15°♍50'26	
minimum elong	9089 Sep 15 14:55	1°♊53'50	4°28'32	desc. node	9090 Aug 17 15:32	15°♍52'11	
min. Earth dist.	9089 Sep 16 06:03	1°♊32'35	0.54657 AU	inferior conj	9090 Aug 26 20:23	11°♍50'49	-2°47'15
	9089 Sep 19 01:43	30°♋♍		minimum elong	9090 Aug 26 12:50	12°♍02'09	2°44'38
morning rise	9089 Sep 24 10:41	27°♍48'33		min. Earth dist.	9090 Aug 28 16:22	10°♍44'41	0.55072 AU
direct	9089 Sep 28 04:29	27°♍18'18		morning rise	9090 Sep 04 04:15	7°♍36'13	
	9089 Oct 06 14:41	0°♊		direct	9090 Sep 08 16:33	6°♍51'52	
morning max el	9089 Oct 10 20:04	3°♊19'22	22°27'36	morning max el	9090 Sep 22 08:40	13°♍35'09	24°14'01
asc. node	9089 Oct 23 08:56	20°♊07'01			9090 Oct 05 01:39	0°♊	
	9089 Oct 28 16:28	0°♋		asc. node	9090 Oct 10 05:53	9°♊03'44	
morning set	9089 Nov 01 18:36	8°♋23'31		morning set	9090 Oct 17 06:23	23°♊12'28	
					9090 Oct 20 09:52	0°♋	
superior conj	9089 Nov 08 19:57	23°♋27'44	1°40'28				
minimum elong	9089 Nov 08 20:23	23°♋30'01	1°40'39	superior conj	9090 Oct 24 03:35	8°♋10'05	1°39'34
	9089 Nov 11 22:44	0°♎		minimum elong	9090 Oct 24 02:51	8°♋06'04	1°39'42
max. Earth dist.	9089 Nov 12 07:21	0°♎44'28	1.34091 AU	max. Earth dist.	9090 Oct 26 07:17	12°♋49'58	1.32803 AU
evening rise	9089 Nov 16 20:40	9°♎52'47		evening rise	9090 Oct 31 13:26	23°♋49'52	
desc. node	9089 Nov 26 16:59	27°♎46'08			9090 Nov 03 16:09	0°♎	
	9089 Nov 28 01:03	0°♏		desc. node	9090 Nov 13 14:03	17°♎42'19	
	9089 Dec 20 00:37	0°♏			9090 Nov 21 16:03	0°♏	
evening max el	9089 Dec 21 16:14	1°♏38'22	27°05'19	evening max el	9090 Dec 04 04:23	14°♏54'54	27°28'37
retrograde	9090 Jan 04 00:41	8°♏59'25		retrograde	9090 Dec 17 20:35	22°♏14'02	
evening set	9090 Jan 10 17:26	6°♏24'10		evening set	9090 Dec 24 20:37	19°♏42'49	
min. Earth dist.	9090 Jan 14 16:06	2°♏36'28	0.65348 AU	min. Earth dist.	9090 Dec 28 14:54	16°♏26'42	0.63668 AU
inferior conj	9090 Jan 16 19:46	0°♏10'55	-0°50'35	inferior conj	9090 Dec 31 05:47	13°♏46'47	-1°58'48
minimum elong	9090 Jan 16 21:14	0°♏06'44	0°49'43	minimum elong	9090 Dec 31 09:33	13°♏37'10	1°57'00
	9090 Jan 16 23:38	30°♋♏		asc. node	9091 Jan 06 05:22	8°♏49'33	
asc. node	9090 Jan 19 08:16	27°♏28'07		morning rise	9091 Jan 07 00:22	8°♏28'18	
morning rise	9090 Jan 23 02:22	24°♏37'19		direct	9091 Jan 09 10:10	7°♏59'53	
direct	9090 Jan 25 19:11	23°♏58'08		morning max el	9091 Jan 15 22:41	11°♏22'31	17°48'34
morning max el	9090 Feb 01 05:16	27°♏21'53	18°03'43		9091 Jan 28 15:32	0°♏	
	9090 Feb 03 14:15	0°♏		morning set	9091 Feb 01 10:52	6°♏31'26	
morning set	9090 Feb 19 10:02	24°♏19'44		desc. node	9091 Feb 09 13:29	20°♏17'52	
desc. node	9090 Feb 22 16:35	29°♏40'42					
	9090 Feb 22 21:19	0°♐		superior conj	9091 Feb 14 01:46	27°♏45'07	-0°32'45
				minimum elong	9091 Feb 13 22:12	27°♏30'34	0°32'04
superior conj	9090 Mar 06 00:09	17°♐49'56	-1°16'24		9091 Feb 15 10:54	0°♐	
minimum elong	9090 Mar 05 15:41	17°♐16'28	1°15'18	max. Earth dist.	9091 Feb 19 20:37	7°♐04'34	1.44614 AU
max. Earth dist.	9090 Mar 09 01:42	22°♐39'25	1.45426 AU	evening rise	9091 Mar 01 15:24	22°♐20'57	
	9090 Mar 13 18:29	0°♑			9091 Mar 06 15:54	0°♑	
evening rise	9090 Mar 22 03:56	13°♑01'01			9091 Mar 27 23:08	0°♒	
	9090 Apr 02 05:37	0°♒		evening max el	9091 Mar 30 05:03	2°♒26'53	20°35'56
greatest brilliancy	9090 Apr 04 09:35	3°♒14'53	-0.7m	asc. node	9091 Apr 04 04:02	6°♒21'15	
evening max el	9090 Apr 16 03:24	18°♒46'54	19°34'27	retrograde	9091 Apr 07 08:19	7°♒11'53	
asc. node	9090 Apr 17 06:53	19°♒52'50		evening set	9091 Apr 11 09:13	5°♒38'35	
retrograde	9090 Apr 23 09:44	22°♒55'13			9091 Apr 16 07:58	30°♋♑	
evening set	9090 Apr 27 01:22	21°♒37'22		inferior conj	9091 Apr 16 16:31	29°♑30'39	3°07'37
inferior conj	9090 May 02 10:48	15°♒42'28	3°19'45	minimum elong	9091 Apr 16 15:01	29°♑35'50	3°07'17
minimum elong	9090 May 02 10:13	15°♒44'24	3°19'33	min. Earth dist.	9091 Apr 17 07:18	28°♑39'51	0.67972 AU
min. Earth dist.	9090 May 03 15:38	14°♒07'11	0.67058 AU	morning rise	9091 Apr 21 20:35	23°♑14'32	

direct	9091 Apr 27 09:07	20° Υ 47'19		min. Earth dist.	9092 Mar 31 02:39	13° Υ 21'23	0.68438 AU
morning max el	9091 May 08 11:19	27° Υ 25'14	24°07'45	morning rise	9092 Apr 05 03:50	7° Υ 15'43	
desc. node	9091 May 08 13:32	27° Υ 30'52		direct	9092 Apr 10 02:34	5° Υ 07'59	
	9091 May 10 21:23	0° \mathcal{B}		morning max el	9092 Apr 19 21:56	10° Υ 55'14	22°37'57
	9091 Jun 01 16:57	0° Π		desc. node	9092 Apr 24 10:28	15° Υ 56'53	
morning set	9091 Jun 13 01:39	18° Π 37'21			9092 May 05 00:12	0° \mathcal{B}	
max. Earth dist.	9091 Jun 16 18:39	25° Π 08'18	1.38139 AU	morning set	9092 May 23 21:43	28° \mathcal{B} 58'03	
	9091 Jun 19 11:04	0° \mathcal{E}			9092 May 24 12:47	0° Π	
				max. Earth dist.	9092 May 28 15:54	6° Π 54'55	1.40402 AU
superior conj	9091 Jun 23 23:20	8° \mathcal{E} 26'33	-1°05'53	superior conj	9092 Jun 05 10:43	20° Π 34'40	-1°36'24
minimum elong	9091 Jun 24 03:31	8° \mathcal{E} 46'34	1°05'28	minimum elong	9092 Jun 05 16:34	21° Π 01'09	1°35'56
asc. node	9091 Jul 01 02:59	22° \mathcal{E} 23'41			9092 Jun 10 13:31	0° \mathcal{E}	
evening rise	9091 Jul 02 20:19	25° \mathcal{E} 47'47		evening rise	9092 Jun 15 10:55	9° \mathcal{E} 13'29	
	9091 Jul 04 23:49	0° Ω		asc. node	9092 Jun 16 23:59	12° \mathcal{E} 08'22	
evening max el	9091 Jul 19 07:16	22° Ω 34'39	19°01'52		9092 Jun 27 09:27	0° Ω	
retrograde	9091 Jul 28 01:58	26° Ω 56'00		evening max el	9092 Jul 01 12:05	4° Ω 58'32	18°24'15
evening set	9091 Jul 29 23:49	26° Ω 44'27		retrograde	9092 Jul 09 00:31	8° Ω 44'26	
desc. node	9091 Aug 04 12:41	24° Ω 21'11		evening set	9092 Jul 11 04:38	8° Ω 26'26	
inferior conj	9091 Aug 07 07:59	22° Ω 29'43	-0°51'46	inferior conj	9092 Jul 18 17:07	3° Ω 51'55	0°47'53
minimum elong	9091 Aug 07 05:46	22° Ω 33'34	0°51'04	minimum elong	9092 Jul 18 18:45	3° Ω 48'36	0°47'04
min. Earth dist.	9091 Aug 10 06:17	20° Ω 28'46	0.56363 AU	desc. node	9092 Jul 21 09:48	1° Ω 40'40	
morning rise	9091 Aug 15 08:37	17° Ω 39'06		min. Earth dist.	9092 Jul 22 01:57	1° Ω 09'08	0.58286 AU
direct	9091 Aug 20 16:33	16° Ω 32'27			9092 Jul 23 15:34	30° \mathcal{R} \mathcal{E}	
morning max el	9091 Sep 03 21:43	23° Ω 49'46	25°53'31	morning rise	9092 Jul 26 05:25	28° \mathcal{E} 25'16	
	9091 Sep 09 12:24	0° \mathcal{M}		direct	9092 Aug 01 07:01	26° \mathcal{E} 48'56	
asc. node	9091 Sep 27 02:49	28° \mathcal{M} 26'39			9092 Aug 10 05:48	0° Ω	
	9091 Sep 27 21:32	0° $\underline{\mathcal{A}}$		morning max el	9092 Aug 15 16:24	4° Ω 31'12	27°09'18
morning set	9091 Oct 01 17:35	7° $\underline{\mathcal{A}}$ 57'18			9092 Sep 03 08:45	0° \mathcal{M}	
superior conj	9091 Oct 08 14:16	22° $\underline{\mathcal{A}}$ 58'54	1°32'46	asc. node	9092 Sep 12 23:43	18° \mathcal{M} 08'24	
minimum elong	9091 Oct 08 12:38	22° $\underline{\mathcal{A}}$ 49'53	1°32'43	morning set	9092 Sep 15 02:31	22° \mathcal{M} 32'58	
max. Earth dist.	9091 Oct 09 13:46	25° $\underline{\mathcal{A}}$ 08'42	1.31965 AU		9092 Sep 18 13:27	0° $\underline{\mathcal{A}}$	
	9091 Oct 11 18:55	0° \mathcal{M}		superior conj	9092 Sep 22 02:03	7° $\underline{\mathcal{A}}$ 47'52	1°20'31
evening rise	9091 Oct 15 14:23	8° \mathcal{M} 08'03		minimum elong	9092 Sep 21 23:54	7° $\underline{\mathcal{A}}$ 35'56	1°20'16
	9091 Oct 27 02:08	0° \mathcal{A}		max. Earth dist.	9092 Sep 21 23:25	7° $\underline{\mathcal{A}}$ 33'16	1.31592 AU
desc. node	9091 Oct 31 11:09	7° \mathcal{A} 09'36		evening rise	9092 Sep 28 20:56	22° $\underline{\mathcal{A}}$ 39'57	
evening max el	9091 Nov 16 12:57	27° \mathcal{A} 37'08	27°21'04		9092 Oct 02 09:48	0° \mathcal{M}	
	9091 Nov 19 06:12	0° \mathcal{Z}		desc. node	9092 Oct 17 08:17	25° \mathcal{M} 55'54	
retrograde	9091 Nov 30 09:06	4° \mathcal{Z} 50'50			9092 Oct 20 06:42	0° \mathcal{A}	
evening set	9091 Dec 07 10:42	2° \mathcal{Z} 32'40		evening max el	9092 Oct 28 15:06	9° \mathcal{A} 32'29	26°39'32
	9091 Dec 10 19:10	30° \mathcal{R} \mathcal{A}		retrograde	9092 Nov 11 13:11	16° \mathcal{A} 40'17	
min. Earth dist.	9091 Dec 11 03:18	29° \mathcal{A} 42'26	0.61719 AU	evening set	9092 Nov 18 07:27	14° \mathcal{A} 45'44	
inferior conj	9091 Dec 14 03:36	26° \mathcal{A} 59'30	-3°10'34	min. Earth dist.	9092 Nov 22 04:58	12° \mathcal{A} 09'53	0.59625 AU
minimum elong	9091 Dec 14 09:45	26° \mathcal{A} 45'38	3°08'07	inferior conj	9092 Nov 25 09:39	9° \mathcal{A} 38'51	-4°19'53
morning rise	9091 Dec 21 11:06	21° \mathcal{A} 59'38		minimum elong	9092 Nov 25 17:11	9° \mathcal{A} 23'57	4°17'35
direct	9091 Dec 23 16:29	21° \mathcal{A} 38'23		morning rise	9092 Dec 03 05:25	5° \mathcal{A} 00'35	
asc. node	9091 Dec 24 02:26	21° \mathcal{A} 39'08		direct	9092 Dec 05 09:55	4° \mathcal{A} 43'12	
morning max el	9091 Dec 30 15:05	25° \mathcal{A} 09'03	17°51'28	asc. node	9092 Dec 09 23:28	6° \mathcal{A} 03'17	
	9092 Jan 03 15:41	0° \mathcal{Z}		morning max el	9092 Dec 13 02:53	8° \mathcal{A} 31'04	18°13'36
morning set	9092 Jan 15 08:29	19° \mathcal{Z} 42'26			9092 Dec 26 23:24	0° \mathcal{Z}	
	9092 Jan 21 02:15	0° \approx		morning set	9092 Dec 28 20:44	3° \mathcal{Z} 33'28	
superior conj	9092 Jan 26 04:44	8° \approx 54'01	0°09'14	superior conj	9093 Jan 07 07:26	21° \mathcal{Z} 09'57	0°44'13
minimum elong	9092 Jan 26 05:35	8° \approx 57'40	0°09'19	minimum elong	9093 Jan 07 10:25	21° \mathcal{Z} 23'26	0°44'03
behind sun begin	9092 Jan 25 22:35	8° \approx 27'38			9093 Jan 12 07:02	0° \approx	
behind sun end	9092 Jan 26 12:34	9° \approx 27'38		desc. node	9093 Jan 13 07:20	1° \approx 44'52	
desc. node	9092 Jan 27 10:24	11° \approx 00'42		max. Earth dist.	9093 Jan 14 22:19	4° \approx 31'11	1.41246 AU
max. Earth dist.	9092 Feb 02 12:09	21° \approx 07'26	1.43165 AU	evening rise	9093 Jan 19 17:58	12° \approx 31'12	
	9092 Feb 08 01:01	0° \mathcal{H}			9093 Jan 30 23:19	0° \mathcal{H}	
evening rise	9092 Feb 09 08:10	2° \mathcal{H} 02'17		evening max el	9093 Feb 22 17:09	29° \mathcal{H} 51'36	23°07'47
	9092 Feb 28 03:54	0° Υ			9093 Feb 22 20:31	0° Υ	
evening max el	9092 Mar 12 01:15	16° Υ 08'13	21°48'34	retrograde	9093 Mar 05 01:45	5° Υ 59'32	
retrograde	9092 Mar 21 06:11	21° Υ 35'04		asc. node	9093 Mar 07 22:18	5° Υ 19'25	
asc. node	9092 Mar 21 01:10	21° Υ 34'51		evening set	9093 Mar 10 00:21	3° Υ 56'21	
evening set	9092 Mar 25 17:25	19° Υ 46'27			9093 Mar 13 13:40	30° \mathcal{R} \mathcal{H}	
inferior conj	9092 Mar 31 00:47	13° Υ 27'53	2°45'04	inferior conj	9093 Mar 15 09:36	27° \mathcal{H} 30'28	2°13'10
minimum elong	9092 Mar 30 22:42	13° Υ 35'07	2°44'33				

minimum elong	9093 Mar 15 07:22	27° K 38'10	2°12'31	morning rise	9094 Mar 05 02:02	5° K 34'48	
min. Earth dist.	9093 Mar 14 23:26	28° K 05'34	0.68470 AU	direct	9094 Mar 08 22:01	4° K 10'46	
morning rise	9093 Mar 20 14:18	21° K 23'31		morning max el	9094 Mar 16 11:44	8° K 26'07	20°00'28
direct	9093 Mar 24 23:15	19° K 37'41		desc. node	9094 Mar 29 04:15	24° K 47'49	
morning max el	9093 Apr 02 13:12	24° K 34'52	21°13'30		9094 Apr 01 17:14	0° Y	
	9093 Apr 07 08:31	0° Y		morning set	9094 Apr 12 13:55	16° Y 28'06	
desc. node	9093 Apr 11 07:22	5° Y 06'31			9094 Apr 21 05:56	0° B	
	9093 Apr 28 09:46	0° B		max. Earth dist.	9094 Apr 23 04:03	3° B 03'10	1.44176 AU
morning set	9093 May 03 14:48	8° B 05'30					
max. Earth dist.	9093 May 10 18:16	19° B 33'11	1.42499 AU	superior conj	9094 Apr 28 15:29	11° B 52'55	-2°12'08
	9093 May 17 00:31	0° II		minimum elong	9094 Apr 28 16:37	11° B 57'31	2°12'18
					9094 May 09 11:47	0° II	
superior conj	9093 May 18 01:16	1° II 45'36	-2°00'29	evening rise	9094 May 11 18:42	3° II 55'00	
minimum elong	9093 May 18 06:42	2° II 08'57	2°00'21	asc. node	9094 May 21 18:04	20° II 43'15	
evening rise	9093 May 29 11:57	21° II 59'32			9094 May 28 09:56	0° E	
	9093 Jun 02 23:01	0° E		evening max el	9094 May 29 12:28	1° E 09'59	18°08'10
asc. node	9093 Jun 03 21:01	1° E 37'01		retrograde	9094 Jun 04 21:48	4° E 30'33	
evening max el	9093 Jun 14 23:01	17° E 53'35	18°06'40	evening set	9094 Jun 07 17:18	3° E 50'00	
retrograde	9093 Jun 21 16:30	21° E 19'16			9094 Jun 12 13:57	30° R II	
evening set	9093 Jun 24 04:20	20° E 51'15		inferior conj	9094 Jun 13 21:48	28° II 36'24	2°47'47
inferior conj	9093 Jun 30 22:57	15° E 56'40	2°00'52	minimum elong	9094 Jun 14 00:19	28° II 29'39	2°47'00
minimum elong	9093 Jul 01 01:53	15° E 49'44	1°59'44	min. Earth dist.	9094 Jun 16 16:59	25° II 37'42	0.62745 AU
min. Earth dist.	9093 Jul 04 05:08	12° E 53'56	0.60517 AU	morning rise	9094 Jun 20 05:38	22° II 27'16	
morning rise	9093 Jul 07 20:42	10° E 03'26		desc. node	9094 Jun 25 03:57	20° II 07'05	
desc. node	9093 Jul 08 06:53	9° E 47'40		direct	9094 Jun 26 23:39	19° II 56'28	
direct	9093 Jul 14 10:19	7° E 56'28		morning max el	9094 Jul 11 00:42	27° II 59'10	27°52'43
morning max el	9093 Jul 28 17:50	15° E 53'57	27°50'12		9094 Jul 12 22:58	0° E	
	9093 Aug 09 06:35	0° O			9094 Aug 03 01:31	0° O	
	9093 Aug 26 21:42	0° O		morning set	9094 Aug 14 06:04	20° O 54'07	
morning set	9093 Aug 30 07:24	6° O 54'11		asc. node	9094 Aug 17 17:31	28° O 05'10	
asc. node	9093 Aug 30 20:37	8° O 03'04			9094 Aug 18 15:13	0° O	
max. Earth dist.	9093 Sep 05 08:34	19° O 53'41	1.31689 AU	max. Earth dist.	9094 Aug 19 13:24	1° O 58'25	1.32270 AU
superior conj	9093 Sep 06 13:09	22° O 31'23	1°03'10	superior conj	9094 Aug 21 21:43	7° O 02'54	0°41'05
minimum elong	9093 Sep 06 10:57	22° O 19'09	1°02'45	minimum elong	9094 Aug 21 19:57	6° O 53'20	0°40'37
	9093 Sep 09 22:16	0° A		evening rise	9094 Aug 28 18:25	21° O 59'39	
evening rise	9093 Sep 13 06:56	7° A 19'22			9094 Sep 01 14:25	0° A	
	9093 Sep 24 23:31	0° M			9094 Sep 20 20:58	0° M	
desc. node	9093 Oct 04 05:24	13° M 45'06		desc. node	9094 Sep 21 02:33	0° M 14'13	
evening max el	9093 Oct 10 09:20	20° M 37'16	25°26'31	evening max el	9094 Sep 21 21:18	1° M 00'33	23°52'05
retrograde	9093 Oct 24 07:05	27° M 38'16		retrograde	9094 Oct 05 12:21	7° M 49'28	
evening set	9093 Oct 30 06:03	26° M 16'31		evening set	9094 Oct 10 03:55	7° M 02'13	
min. Earth dist.	9093 Nov 03 21:30	23° M 38'05	0.57592 AU	min. Earth dist.	9094 Oct 16 07:46	4° M 02'51	0.55900 AU
inferior conj	9093 Nov 06 20:42	21° M 36'09	-5°15'20	inferior conj	9094 Oct 18 11:22	2° M 44'59	-5°39'03
minimum elong	9093 Nov 07 02:45	21° M 25'45	5°14'12	minimum elong	9094 Oct 18 11:27	2° M 44'51	5°38'55
morning rise	9093 Nov 15 01:46	17° M 20'23			9094 Oct 23 11:11	30° R A	
direct	9093 Nov 17 10:16	17° M 03'38		morning rise	9094 Oct 26 20:59	28° A 48'48	
morning max el	9093 Nov 26 06:22	21° M 18'21	18°56'42	direct	9094 Oct 29 15:24	28° A 29'23	
asc. node	9093 Nov 26 20:27	21° M 53'14			9094 Nov 04 09:40	0° M	
	9093 Dec 03 00:35	0° X		morning max el	9094 Nov 08 22:00	3° M 20'07	20°02'24
morning set	9093 Dec 12 19:05	17° X 51'40		asc. node	9094 Nov 13 17:25	8° M 53'26	
	9093 Dec 18 23:17	0° B			9094 Nov 25 19:06	0° X	
				morning set	9094 Nov 27 00:11	2° X 27'17	
superior conj	9093 Dec 21 05:09	4° B 19'23	1°10'32	superior conj	9094 Dec 04 17:02	18° X 08'40	1°28'13
minimum elong	9093 Dec 21 08:22	4° B 34'46	1°10'24	minimum elong	9094 Dec 04 19:26	18° X 20'42	1°28'16
max. Earth dist.	9093 Dec 28 04:30	17° B 12'05	1.39093 AU	max. Earth dist.	9094 Dec 10 11:00	29° X 20'29	1.36947 AU
desc. node	9093 Dec 31 04:17	22° B 26'55			9094 Dec 10 19:23	0° B	
evening rise	9094 Jan 01 01:29	23° B 57'59			9094 Dec 14 05:37	6° B 18'55	
	9094 Jan 04 15:42	0° A		evening rise	9094 Dec 18 01:17	13° B 03'05	
	9094 Jan 24 18:28	0° K		desc. node	9094 Dec 28 12:38	0° A	
evening max el	9094 Feb 05 06:55	13° K 38'32	24°27'32		9094 Dec 28 12:38	0° A	
retrograde	9094 Feb 16 17:40	20° K 20'26		evening max el	9095 Jan 18 20:14	27° A 27'27	25°40'46
evening set	9094 Feb 22 04:31	18° K 04'02			9095 Jan 21 15:18	0° K	
asc. node	9094 Feb 22 19:26	17° K 30'33		retrograde	9095 Jan 31 04:56	4° K 32'45	
min. Earth dist.	9094 Feb 26 19:23	12° K 47'51	0.68090 AU	evening set	9095 Feb 06 04:20	2° K 05'28	
inferior conj	9094 Feb 27 17:08	11° K 35'01	1°32'26		9095 Feb 08 07:51	30° R A	
minimum elong	9094 Feb 27 15:13	11° K 41'25	1°31'51	asc. node	9095 Feb 09 16:34	28° A 25'01	

min. Earth dist.	9095 Feb 10 12:15	27° \approx 24'04	0.67318 AU	min. Earth dist.	9096 Jan 24 23:41	11° \approx 48'29	0.66171 AU
inferior conj	9095 Feb 11 21:32	25° \approx 38'15	0°43'14	inferior conj	9096 Jan 26 20:43	9° \approx 35'16	-0°14'08
minimum elong	9095 Feb 11 20:29	25° \approx 41'37	0°42'59	minimum elong	9096 Jan 26 21:06	9° \approx 34'08	0°13'44
morning rise	9095 Feb 17 13:05	19° \approx 46'39		transit middle	9096 Jan 26 21:06	9° \approx 34'08	0°13'44
direct	9095 Feb 20 21:18	18° \approx 42'35		transit begin	9096 Jan 26 19:36	9° \approx 38'37	
morning max el	9095 Feb 27 18:09	22° \approx 28'11	19°02'17	transit end	9096 Jan 26 22:37	9° \approx 29'39	
	9095 Mar 05 23:38	0° \approx		asc. node	9096 Jan 27 13:41	8° \approx 45'19	
greatest brilliancy	9095 Mar 13 09:53	10° \approx 50'57	-0.8m	morning rise	9096 Feb 01 21:15	3° \approx 54'35	
desc. node	9095 Mar 16 01:08	14° \approx 52'21		direct	9096 Feb 04 19:12	3° \approx 07'22	
morning set	9095 Mar 22 17:51	25° \approx 13'12		morning max el	9096 Feb 11 07:00	6° \approx 35'40	18°20'18
	9095 Mar 25 19:44	0° \approx			9096 Feb 27 15:39	0° \approx	
max. Earth dist.	9095 Apr 05 20:12	17° \approx 12'14	1.45237 AU	morning set	9096 Mar 01 22:22	5° \approx 14'46	
				desc. node	9096 Mar 01 22:00	5° \approx 13'18	
superior conj	9095 Apr 08 07:16	21° \approx 04'44	-2°05'23	superior conj	9096 Mar 17 12:31	29° \approx 54'45	-1°38'40
minimum elong	9095 Apr 08 01:14	20° \approx 40'56	2°05'11	minimum elong	9096 Mar 17 02:55	29° \approx 17'08	1°37'42
	9095 Apr 13 22:06	0° \approx			9096 Mar 17 13:51	0° \approx	
evening rise	9095 Apr 23 03:00	14° \approx 52'53		max. Earth dist.	9096 Mar 18 15:39	1° \approx 40'57	1.45573 AU
	9095 May 02 10:12	0° \approx		evening rise	9096 Apr 02 11:51	24° \approx 54'32	
asc. node	9095 May 08 15:10	9° \approx 19'54			9096 Apr 05 17:43	0° \approx	
evening max el	9095 May 13 01:19	14° \approx 39'59	18°28'03	greatest brilliancy	9096 Apr 13 01:01	11° \approx 22'51	-0.8m
retrograde	9095 May 19 12:16	18° \approx 09'31		asc. node	9096 Apr 24 12:18	27° \approx 16'37	
evening set	9095 May 22 15:15	17° \approx 15'01		evening max el	9096 Apr 25 10:58	28° \approx 16'19	19°05'28
inferior conj	9095 May 28 09:38	11° \approx 43'54	3°13'05		9096 Apr 27 08:37	0° \approx	
minimum elong	9095 May 28 11:00	11° \approx 39'52	3°12'42	retrograde	9096 May 02 08:06	2° \approx 07'35	
min. Earth dist.	9095 May 30 14:09	9° \approx 08'42	0.64729 AU	evening set	9096 May 05 18:54	0° \approx 58'21	
morning rise	9095 Jun 03 05:49	5° \approx 27'02			9096 May 07 00:58	30° \approx	
direct	9095 Jun 09 21:09	2° \approx 43'24		inferior conj	9096 May 11 06:42	25° \approx 11'26	3°21'21
desc. node	9095 Jun 12 00:59	2° \approx 58'47		minimum elong	9096 May 11 06:47	25° \approx 11'10	3°21'08
morning max el	9095 Jun 23 10:41	10° \approx 40'34	27°19'49	min. Earth dist.	9096 May 12 19:57	23° \approx 12'17	0.66333 AU
	9095 Jul 08 16:28	0° \approx		morning rise	9096 May 16 18:12	18° \approx 52'15	
	9095 Jul 26 12:35	0° \approx		direct	9096 May 23 01:29	16° \approx 07'21	
morning set	9095 Jul 28 19:59	4° \approx 02'18		desc. node	9096 May 28 21:59	18° \approx 00'26	
max. Earth dist.	9095 Aug 02 10:22	13° \approx 09'57	1.33347 AU	morning max el	9096 Jun 04 21:20	23° \approx 46'02	26°18'37
asc. node	9095 Aug 04 14:28	18° \approx 10'55			9096 Jun 10 10:45	0° \approx	
superior conj	9095 Aug 06 01:44	21° \approx 01'05	0°14'43		9096 Jul 01 01:29	0° \approx	
minimum elong	9095 Aug 06 01:00	21° \approx 01'12	0°14'22	morning set	9096 Jul 10 21:43	17° \approx 02'14	
behind sun begin	9095 Aug 05 22:32	21° \approx 00'08		max. Earth dist.	9096 Jul 14 20:56	24° \approx 05'41	1.34898 AU
behind sun end	9095 Aug 06 03:27	21° \approx 02'16			9096 Jul 17 10:11	0° \approx	
	9095 Aug 10 03:26	0° \approx		superior conj	9096 Jul 19 22:47	5° \approx 07'20	-0°15'11
evening rise	9095 Aug 13 05:34	6° \approx 35'49		minimum elong	9096 Jul 19 23:39	5° \approx 11'50	0°15'14
	9095 Aug 25 15:40	0° \approx		behind sun begin	9096 Jul 19 21:45	5° \approx 02'02	
evening max el	9095 Sep 03 09:53	11° \approx 11'20	22°12'32	behind sun end	9096 Jul 20 01:34	5° \approx 02'14	
desc. node	9095 Sep 07 23:43	14° \approx 54'47		asc. node	9096 Jul 21 11:27	8° \approx 16'19	
retrograde	9095 Sep 16 05:36	17° \approx 34'25		evening rise	9096 Jul 27 14:20	21° \approx 01'52	
evening set	9095 Sep 19 09:32	17° \approx 12'14			9096 Aug 01 00:46	0° \approx	
min. Earth dist.	9095 Sep 27 15:30	13° \approx 35'46	0.54861 AU	evening max el	9096 Aug 15 08:00	21° \approx 46'04	20°43'24
inferior conj	9095 Sep 28 09:19	13° \approx 10'45	-5°12'00	desc. node	9096 Aug 24 20:51	27° \approx 16'31	
minimum elong	9095 Sep 28 01:53	13° \approx 02'11	5°10'44	retrograde	9096 Aug 26 17:53	27° \approx 25'27	
morning rise	9095 Oct 06 19:52	9° \approx 23'18		evening set	9096 Aug 28 21:04	27° \approx 14'24	
direct	9095 Oct 10 04:30	8° \approx 58'09		inferior conj	9096 Sep 07 01:46	23° \approx 17'44	-3°50'38
morning max el	9095 Oct 22 00:22	14° \approx 32'04	21°29'50	minimum elong	9096 Sep 06 16:17	23° \approx 31'19	3°47'46
asc. node	9095 Oct 31 14:23	26° \approx 04'45		min. Earth dist.	9096 Sep 08 00:22	22° \approx 45'22	0.54711 AU
	9095 Nov 02 12:13	0° \approx		morning rise	9096 Sep 15 11:24	19° \approx 18'41	
morning set	9095 Nov 11 09:25	17° \approx 12'44		direct	9096 Sep 19 12:33	18° \approx 43'36	
	9095 Nov 17 11:05	0° \approx		morning max el	9096 Oct 02 16:23	25° \approx 03'15	23°12'49
superior conj	9095 Nov 18 15:00	2° \approx 25'57	1°38'03		9096 Oct 07 06:24	0° \approx	
minimum elong	9095 Nov 18 16:10	2° \approx 32'03	1°38'13	asc. node	9096 Oct 17 11:20	15° \approx 26'29	
max. Earth dist.	9095 Nov 22 22:22	11° \approx 14'23	1.35025 AU		9096 Oct 24 21:35	0° \approx	
evening rise	9095 Nov 27 02:54	19° \approx 24'35		morning set	9096 Oct 25 20:48	2° \approx 02'24	
	9095 Dec 02 22:05	0° \approx		superior conj	9096 Nov 01 19:53	17° \approx 02'08	1°40'51
desc. node	9095 Dec 04 22:19	3° \approx 28'31		minimum elong	9096 Nov 01 19:48	17° \approx 01'39	1°41'02
	9095 Dec 22 14:26	0° \approx		max. Earth dist.	9096 Nov 04 17:32	23° \approx 12'32	1.33479 AU
evening max el	9096 Jan 01 09:35	11° \approx 11'24	26°40'12		9096 Nov 08 00:28	0° \approx	
retrograde	9096 Jan 14 10:46	18° \approx 29'25		evening rise	9096 Nov 09 13:35	3° \approx 05'56	
evening set	9096 Jan 20 21:57	15° \approx 55'11					

desc. node	9096 Nov 20 19:23	23° ♁ 37'48		superior conj	9097 Oct 17 05:03	1° ♁ 48'15	1°37'23
	9096 Nov 24 17:56	0° ♁		minimum elong	9097 Oct 17 03:54	1° ♁ 41'55	1°37'27
evening max el	9096 Dec 13 22:25	24° ♁ 41'02	27°18'38	max. Earth dist.	9097 Oct 18 20:18	5° ♁ 22'49	1.32382 AU
	9096 Dec 20 18:28	0° ♁		evening rise	9097 Oct 24 10:08	17° ♁ 12'56	
retrograde	9096 Dec 27 10:42	2° ♁ 02'34			9097 Oct 30 23:02	0° ♁	
	9097 Jan 02 13:07	30° ♁		desc. node	9097 Nov 07 16:29	13° ♁ 22'54	
evening set	9097 Jan 03 07:11	29° ♁ 27'38			9097 Nov 19 07:58	0° ♁	
min. Earth dist.	9097 Jan 07 03:38	25° ♁ 54'08	0.64670 AU	evening max el	9097 Nov 26 09:11	7° ♁ 43'56	27°29'28
inferior conj	9097 Jan 09 12:19	23° ♁ 20'57	-1°18'49	retrograde	9097 Dec 10 03:49	15° ♁ 01'57	
minimum elong	9097 Jan 09 14:44	23° ♁ 14'26	1°17'33	evening set	9097 Dec 17 05:13	12° ♁ 34'58	
asc. node	9097 Jan 13 10:46	19° ♁ 29'56		min. Earth dist.	9097 Dec 20 22:13	9° ♁ 30'47	0.62859 AU
morning rise	9097 Jan 15 23:53	17° ♁ 53'44		inferior conj	9097 Dec 23 17:30	6° ♁ 47'43	-2°29'04
direct	9097 Jan 18 13:24	17° ♁ 19'40		minimum elong	9097 Dec 23 22:18	6° ♁ 36'03	2°26'57
morning max el	9097 Jan 24 23:40	20° ♁ 41'43	17°55'12	morning rise	9097 Dec 30 17:33	1° ♁ 36'52	
	9097 Feb 01 02:47	0° ♁		asc. node	9097 Dec 31 07:49	1° ♁ 25'50	
morning set	9097 Feb 11 08:15	16° ♁ 43'16		direct	9098 Jan 02 00:58	1° ♁ 12'04	
desc. node	9097 Feb 16 18:55	25° ♁ 46'06		morning max el	9098 Jan 08 17:02	4° ♁ 37'22	17°47'33
	9097 Feb 19 08:49	0° ♁		morning set	9098 Jan 24 18:41	29° ♁ 22'20	
					9098 Jan 25 03:16	0° ♁	
superior conj	9097 Feb 25 02:25	9° ♁ 15'38	-0°58'13	desc. node	9098 Feb 03 15:50	16° ♁ 26'08	
minimum elong	9097 Feb 24 19:49	8° ♁ 49'17	0°57'14				
max. Earth dist.	9097 Mar 01 11:09	16° ♁ 11'02	1.45166 AU	superior conj	9098 Feb 05 14:31	19° ♁ 41'41	-0°14'21
	9097 Mar 10 07:56	0° ♁		minimum elong	9098 Feb 05 13:04	19° ♁ 35'39	0°13'57
evening rise	9097 Mar 13 03:24	4° ♁ 19'46		behind sun begin	9098 Feb 05 08:28	19° ♁ 16'30	
greatest brilliancy	9097 Mar 27 20:20	26° ♁ 32'03	-0.6m	behind sun end	9098 Feb 05 17:39	19° ♁ 54'46	
	9097 Mar 30 05:57	0° ♁			9098 Feb 11 21:40	0° ♁	
evening max el	9097 Apr 08 15:43	11° ♁ 55'32	19°58'53	max. Earth dist.	9098 Feb 12 04:13	0° ♁ 26'15	1.44063 AU
asc. node	9097 Apr 11 09:26	14° ♁ 21'33		evening rise	9098 Feb 20 15:11	13° ♁ 44'14	
retrograde	9097 Apr 16 06:25	16° ♁ 19'00			9098 Mar 03 09:35	0° ♁	
evening set	9097 Apr 20 01:47	14° ♁ 54'41		evening max el	9098 Mar 22 14:58	25° ♁ 36'31	21°05'44
inferior conj	9097 Apr 25 10:00	8° ♁ 53'47	3°15'58		9098 Mar 28 09:04	0° ♁	
minimum elong	9097 Apr 25 08:59	8° ♁ 57'13	3°15'43	asc. node	9098 Mar 29 06:33	0° ♁ 20'27	
min. Earth dist.	9097 Apr 26 08:43	7° ♁ 37'11	0.67503 AU	retrograde	9098 Mar 31 04:54	0° ♁ 39'14	
morning rise	9097 Apr 30 15:55	2° ♁ 35'42			9098 Apr 02 20:45	30° ♁	
direct	9097 May 06 11:52	29° ♁ 59'38		evening set	9098 Apr 04 09:58	28° ♁ 59'37	
	9097 May 06 04:50	30° ♁		inferior conj	9098 Apr 09 17:04	22° ♁ 46'56	2°59'17
	9097 May 06 18:56	0° ♁		minimum elong	9098 Apr 09 15:16	22° ♁ 53'10	2°58'51
desc. node	9097 May 15 18:58	4° ♁ 41'31		min. Earth dist.	9098 Apr 10 02:19	22° ♁ 14'51	0.68224 AU
morning max el	9097 May 18 07:01	7° ♁ 04'21	24°58'22	morning rise	9098 Apr 14 20:21	16° ♁ 32'08	
	9097 Jun 05 03:11	0° ♁		direct	9098 Apr 20 03:06	14° ♁ 12'27	
morning set	9097 Jun 23 06:48	29° ♁ 28'01		morning max el	9098 Apr 30 16:19	20° ♁ 29'43	23°29'19
	9097 Jun 23 13:59	0° ♁		desc. node	9098 May 02 15:55	22° ♁ 35'30	
max. Earth dist.	9097 Jun 26 21:26	6° ♁ 00'26	1.36869 AU		9098 May 08 19:20	0° ♁	
					9098 May 29 08:13	0° ♁	
superior conj	9097 Jul 03 09:50	18° ♁ 25'35	-0°47'16	morning set	9098 Jun 04 17:53	10° ♁ 31'27	
minimum elong	9097 Jul 03 12:47	18° ♁ 40'04	0°46'59	max. Earth dist.	9098 Jun 08 17:29	17° ♁ 22'07	1.39103 AU
asc. node	9097 Jul 08 08:27	28° ♁ 17'04			9098 Jun 15 17:38	0° ♁	
	9097 Jul 09 04:50	0° ♁					
evening rise	9097 Jul 11 18:23	5° ♁ 10'45		superior conj	9098 Jun 16 07:12	1° ♁ 03'12	-1°19'18
	9097 Jul 26 01:55	0° ♁		minimum elong	9098 Jun 16 12:14	1° ♁ 26'39	1°18'48
evening max el	9097 Jul 28 19:38	3° ♁ 04'23	19°32'57	asc. node	9098 Jun 25 05:27	18° ♁ 09'19	
retrograde	9097 Aug 07 12:30	7° ♁ 52'16		evening rise	9098 Jun 25 14:54	18° ♁ 55'10	
evening set	9097 Aug 09 08:42	7° ♁ 42'40			9098 Jul 01 11:21	0° ♁	
desc. node	9097 Aug 11 18:00	7° ♁ 03'39		evening max el	9098 Jul 11 19:19	15° ♁ 07'23	18°43'22
inferior conj	9097 Aug 18 03:10	3° ♁ 37'55	-1°57'42	retrograde	9098 Jul 19 23:38	19° ♁ 11'23	
minimum elong	9097 Aug 17 21:51	3° ♁ 46'23	1°55'48	evening set	9098 Jul 21 23:52	18° ♁ 57'32	
min. Earth dist.	9097 Aug 20 12:20	2° ♁ 07'16	0.55518 AU	inferior conj	9098 Jul 29 23:44	14° ♁ 35'00	-0°06'32
	9097 Aug 24 07:12	30° ♁		minimum elong	9098 Jul 29 23:28	14° ♁ 35'30	0°06'39
morning rise	9097 Aug 26 08:35	29° ♁ 08'25		transit middle	9098 Jul 29 23:28	14° ♁ 35'30	0°06'39
direct	9097 Aug 31 05:04	28° ♁ 15'35		transit begin	9098 Jul 29 20:07	14° ♁ 41'40	
	9097 Sep 07 00:17	0° ♁		transit end	9098 Jul 30 02:48	14° ♁ 29'18	
morning max el	9097 Sep 14 04:27	5° ♁ 15'30	24°58'18	desc. node	9098 Jul 29 15:08	14° ♁ 50'51	
	9097 Oct 01 21:26	0° ♁		min. Earth dist.	9098 Aug 02 04:36	12° ♁ 13'50	0.57127 AU
asc. node	9097 Oct 04 08:16	4° ♁ 35'21		morning rise	9098 Aug 06 19:36	9° ♁ 28'28	
morning set	9097 Oct 10 08:30	16° ♁ 50'07		direct	9098 Aug 12 11:50	8° ♁ 09'27	
	9097 Oct 16 09:21	0° ♁		morning max el	9098 Aug 26 19:19	15° ♁ 38'37	26°29'21
					9098 Sep 07 10:36	0° ♁	

asc. node	9098 Sep 21 05:12	24° \mathbb{M} 07'15		9099 Aug 11 21:57	0° \mathcal{Q}	
	9098 Sep 24 01:37	0° \mathcal{Q}		9099 Aug 31 23:28	0° \mathbb{M}	
morning set	9098 Sep 24 18:54	1° \mathcal{Q} 31'29		asc. node	9099 Sep 08 02:07	13° \mathbb{M} 55'10
				morning set	9099 Sep 09 02:20	16° \mathbb{M} 01'31
superior conj	9098 Oct 01 16:25	16° \mathcal{Q} 37'56	1°28'12	max. Earth dist.	9099 Sep 15 14:29	0° \mathcal{Q} 09'28 1.31582 AU
minimum elong	9098 Oct 01 14:31	16° \mathcal{Q} 27'23	1°28'05		9099 Sep 15 12:47	0° \mathcal{Q}
max. Earth dist.	9098 Oct 02 04:27	17° \mathcal{Q} 44'39	1.31752 AU			
	9098 Oct 07 19:14	0° \mathbb{M}		superior conj	9099 Sep 16 04:07	1° \mathcal{Q} 25'07 1°13'45
evening rise	9098 Oct 08 13:45	1° \mathbb{M} 38'00		minimum elong	9099 Sep 16 01:53	1° \mathcal{Q} 12'42 1°13'25
	9098 Oct 23 21:45	0° \mathcal{Q}		evening rise	9099 Sep 22 22:02	16° \mathcal{Q} 14'02
desc. node	9098 Oct 25 13:34	2° \mathcal{Q} 34'14			9099 Sep 29 16:54	0° \mathbb{M}
evening max el	9098 Nov 08 15:29	20° \mathcal{Q} 07'49	27°07'37	desc. node	9099 Oct 12 10:42	20° \mathbb{M} 58'36
retrograde	9098 Nov 22 12:54	27° \mathcal{Q} 18'41			9099 Oct 19 21:17	0° \mathcal{Q}
evening set	9098 Nov 29 12:25	25° \mathcal{Q} 09'42		evening max el	9099 Oct 21 14:33	1° \mathcal{Q} 42'18 26°11'56
min. Earth dist.	9098 Dec 03 06:11	22° \mathcal{Q} 26'57	0.60833 AU	retrograde	9099 Nov 04 12:30	8° \mathcal{Q} 46'29
inferior conj	9098 Dec 06 09:01	19° \mathcal{Q} 47'19	-3°40'51	evening set	9099 Nov 11 00:17	7° \mathcal{Q} 05'10
minimum elong	9098 Dec 06 15:57	19° \mathcal{Q} 32'27	3°38'20	min. Earth dist.	9099 Nov 15 03:34	4° \mathcal{Q} 30'37 0.58739 AU
morning rise	9098 Dec 13 21:54	14° \mathcal{Q} 56'00		inferior conj	9099 Nov 18 07:21	2° \mathcal{Q} 10'12 -4°46'04
direct	9098 Dec 16 02:21	14° \mathcal{Q} 36'47		minimum elong	9099 Nov 18 14:44	1° \mathcal{Q} 56'27 4°44'09
asc. node	9098 Dec 18 04:52	14° \mathcal{Q} 55'19			9099 Nov 21 08:58	30° \mathbb{M}
morning max el	9098 Dec 23 07:48	18° \mathcal{Q} 14'00	17°58'23	morning rise	9099 Nov 26 07:33	27° \mathbb{M} 41'20
	9098 Dec 31 18:51	0° \mathcal{Q}		direct	9099 Nov 28 13:14	27° \mathbb{M} 24'29
morning set	9099 Jan 07 23:07	12° \mathcal{Q} 52'03		asc. node	9099 Dec 05 01:53	29° \mathbb{M} 57'46
	9099 Jan 17 09:48	0° \mathcal{Q}			9099 Dec 05 03:01	0° \mathcal{Q}
				morning max el	9099 Dec 06 16:28	1° \mathcal{Q} 22'24 18°29'18
superior conj	9099 Jan 18 03:54	1° \mathcal{Q} 19'36	0°25'06	morning set	9099 Dec 22 16:12	26° \mathcal{Q} 56'38
minimum elong	9099 Jan 18 05:56	1° \mathcal{Q} 28'32	0°25'02		9099 Dec 24 06:16	0° \mathcal{Q}
desc. node	9099 Jan 21 12:43	7° \mathcal{Q} 09'41				
max. Earth dist.	9099 Jan 25 17:28	14° \mathcal{Q} 13'32	1.42393 AU	superior conj	9099 Dec 31 15:20	14° \mathcal{Q} 00'25 0°56'29
evening rise	9099 Jan 31 14:05	23° \mathcal{Q} 43'22		minimum elong	9099 Dec 31 18:36	14° \mathcal{Q} 15'32 0°56'17
	9099 Feb 04 14:14	0° \mathcal{H}		max. Earth dist.	9100 Jan 08 02:15	27° \mathcal{Q} 21'39 1.40344 AU
	9099 Feb 25 10:40	0° \mathcal{Y}		desc. node	9100 Jan 08 09:39	27° \mathcal{Q} 53'36
evening max el	9099 Mar 05 09:15	9° \mathcal{Y} 19'07	22°21'55		9100 Jan 09 15:09	0° \mathcal{Q}
retrograde	9099 Mar 15 01:49	15° \mathcal{Y} 03'24		evening rise	9100 Jan 12 09:00	4° \mathcal{Q} 37'02
asc. node	9099 Mar 16 03:40	14° \mathcal{Y} 57'35			9100 Jan 28 18:55	0° \mathcal{H}
evening set	9099 Mar 19 17:46	13° \mathcal{Y} 08'36		evening max el	9100 Feb 16 00:04	23° \mathcal{H} 04'30 23°42'03
inferior conj	9099 Mar 25 01:45	6° \mathcal{Y} 46'45	2°32'39	retrograde	9100 Feb 26 19:51	29° \mathcal{H} 27'31
minimum elong	9099 Mar 24 23:34	6° \mathcal{Y} 54'23	2°32'04	asc. node	9100 Mar 03 00:48	28° \mathcal{H} 02'30
min. Earth dist.	9099 Mar 24 22:29	6° \mathcal{Y} 58'09	0.68504 AU	evening set	9100 Mar 03 23:44	27° \mathcal{H} 18'17
morning rise	9099 Mar 30 05:12	0° \mathcal{Y} 36'44		inferior conj	9100 Mar 09 10:15	20° \mathcal{H} 50'42 1°56'57
	9099 Mar 30 23:59	30° \mathbb{R} \mathcal{H}		minimum elong	9100 Mar 09 08:06	20° \mathcal{H} 58'04 1°56'18
direct	9099 Apr 03 22:08	28° \mathcal{H} 37'57		min. Earth dist.	9100 Mar 08 19:05	21° \mathcal{H} 42'31 0.68359 AU
	9099 Apr 08 05:34	0° \mathcal{Y}		morning rise	9100 Mar 14 16:27	14° \mathcal{H} 46'41
morning max el	9099 Apr 13 04:18	4° \mathcal{Y} 02'51	22°00'58	direct	9100 Mar 18 19:48	13° \mathcal{H} 10'18
desc. node	9099 Apr 19 12:48	11° \mathcal{Y} 21'44		morning max el	9100 Mar 26 22:31	17° \mathcal{H} 47'53 20°40'54
	9099 May 02 22:09	0° \mathcal{B}			9100 Apr 05 20:23	0° \mathcal{Y}
morning set	9099 May 16 02:14	20° \mathcal{B} 19'59		desc. node	9100 Apr 06 09:41	0° \mathcal{Y} 46'10
max. Earth dist.	9099 May 21 16:41	29° \mathcal{B} 31'07	1.41337 AU	morning set	9100 Apr 25 09:43	29° \mathcal{Y} 02'44
	9099 May 21 23:35	0° \mathbb{I}			9100 Apr 26 00:26	0° \mathcal{B}
				max. Earth dist.	9100 May 03 22:48	12° \mathcal{B} 35'01 1.43282 AU
superior conj	9099 May 29 10:19	12° \mathbb{I} 48'48	-1°47'43			
minimum elong	9099 May 29 16:22	13° \mathbb{I} 15'33	1°47'22	superior conj	9100 May 10 14:45	23° \mathcal{B} 33'03 -2°07'19
	9099 Jun 07 21:11	0° \mathcal{Q}		minimum elong	9100 May 10 18:55	23° \mathcal{B} 50'30 2°07'22
evening rise	9099 Jun 09 00:15	2° \mathcal{Q} 05'30			9100 May 14 10:08	0° \mathbb{I}
asc. node	9099 Jun 12 02:27	7° \mathcal{Q} 48'03		evening rise	9100 May 22 18:08	14° \mathbb{I} 31'50
evening max el	9099 Jun 25 03:15	27° \mathcal{Q} 46'06	18°14'19	asc. node	9100 May 29 23:29	27° \mathbb{I} 08'13
	9099 Jun 27 21:39	0° \mathcal{Q}			9100 May 31 16:50	0° \mathcal{Q}
retrograde	9099 Jul 02 06:00	1° \mathcal{Q} 21'13		evening max el	9100 Jun 08 15:38	10° \mathcal{Q} 51'13 18°04'54
evening set	9099 Jul 04 13:31	0° \mathcal{Q} 59'10		retrograde	9100 Jun 15 04:25	14° \mathcal{Q} 13'10
	9099 Jul 06 18:49	30° \mathbb{R} \mathcal{Q}		evening set	9100 Jun 17 19:31	13° \mathcal{Q} 40'02
inferior conj	9099 Jul 11 17:59	26° \mathcal{Q} 15'46	1°22'14	inferior conj	9100 Jun 24 07:36	8° \mathcal{Q} 36'50 2°23'42
minimum elong	9099 Jul 11 20:27	26° \mathcal{Q} 10'25	1°21'09	minimum elong	9100 Jun 24 10:30	8° \mathcal{Q} 29'34 2°22'41
min. Earth dist.	9099 Jul 15 02:57	23° \mathcal{Q} 21'51	0.59227 AU	min. Earth dist.	9100 Jun 27 09:38	5° \mathcal{Q} 33'18 0.61484 AU
desc. node	9099 Jul 16 12:15	22° \mathcal{Q} 16'24		morning rise	9100 Jun 30 23:14	2° \mathcal{Q} 35'27
morning rise	9099 Jul 19 00:14	20° \mathcal{Q} 36'48		desc. node	9100 Jul 03 09:19	1° \mathcal{Q} 13'19
direct	9099 Jul 25 07:56	18° \mathcal{Q} 47'14		direct	9100 Jul 07 15:27	0° \mathcal{Q} 17'34
morning max el	9099 Aug 08 16:46	26° \mathcal{Q} 36'03	27°31'18	morning max el	9100 Jul 21 20:59	8° \mathcal{Q} 18'10 27°55'56

	9100 Aug 07 12:06	0°♌			9101 Jul 12 06:16	0°♏		
morning set	9100 Aug 24 04:53	0°♍14'45			9101 Jul 31 13:59	0°♌		
	9100 Aug 24 02:01	0°♍		morning set	9101 Aug 08 00:18	14°♌05'00		
asc. node	9100 Aug 25 23:01	3°♍53'42		asc. node	9101 Aug 12 19:58	23°♌58'28		
max. Earth dist.	9100 Aug 29 22:29	12°♍25'35	1.31881 AU	max. Earth dist.	9101 Aug 13 00:28	24°♌22'11	1.32664 AU	
superior conj	9100 Aug 31 14:23	16°♍04'12	0°54'22	superior conj	9101 Aug 15 21:20	0°♍29'54	0°30'25	
minimum elong	9100 Aug 31 12:18	15°♍52'43	0°53'53	minimum elong	9101 Aug 15 19:56	0°♍22'22	0°29'58	
	9100 Sep 06 22:46	0°♎			9101 Aug 15 15:47	0°♍		
evening rise	9100 Sep 07 08:56	0°♎54'40		evening rise	9101 Aug 22 20:34	15°♍34'32		
	9100 Sep 23 02:45	0°♎			9101 Aug 29 23:45	0°♎		
desc. node	9100 Sep 29 07:52	8°♎17'01		evening max el	9101 Sep 14 16:28	22°♎40'22	23°09'18	
evening max el	9100 Oct 03 05:25	12°♎26'25	24°47'58	desc. node	9101 Sep 16 05:02	24°♎04'34		
retrograde	9100 Oct 17 01:09	19°♎23'43		retrograde	9101 Sep 28 01:39	29°♎21'17		
evening set	9100 Oct 22 12:20	18°♎16'43		evening set	9101 Oct 02 01:27	28°♎46'28		
min. Earth dist.	9100 Oct 27 16:40	15°♎31'50	0.56809 AU	min. Earth dist.	9101 Oct 09 01:40	25°♎32'51	0.55358 AU	
inferior conj	9100 Oct 30 09:39	13°♎46'54	-5°30'32	inferior conj	9101 Oct 10 16:26	24°♎36'31	-5°34'35	
minimum elong	9100 Oct 30 13:42	13°♎40'20	5°29'58	minimum elong	9101 Oct 10 13:06	24°♎41'22	5°34'16	
morning rise	9100 Nov 07 17:19	9°♎40'41		morning rise	9101 Oct 19 02:45	20°♎46'01		
direct	9100 Nov 10 05:26	9°♎23'11		direct	9101 Oct 22 02:33	20°♎24'44		
morning max el	9100 Nov 19 15:19	13°♎51'39	19°21'59	morning max el	9101 Nov 02 01:30	25°♎33'29	20°37'08	
asc. node	9100 Nov 21 22:53	16°♎19'40			9101 Nov 06 02:03	0°♎		
	9100 Nov 30 20:24	0°♏		asc. node	9101 Nov 08 19:52	3°♎45'29		
morning set	9100 Dec 06 17:47	11°♏23'25		morning set	9101 Nov 21 00:56	26°♎04'05		
					9101 Nov 22 22:31	0°♏		
superior conj	9100 Dec 14 19:41	27°♏28'49	1°19'03	superior conj	9101 Nov 28 12:22	11°♏31'45	1°33'17	
minimum elong	9100 Dec 14 22:39	27°♏43'14	1°18'59	minimum elong	9101 Nov 28 14:16	11°♏41'28	1°33'24	
	9100 Dec 16 02:53	0°♐			9101 Dec 03 15:37	21°♏44'56	1.36089 AU	
max. Earth dist.	9100 Dec 21 08:00	9°♐47'01	1.38158 AU	max. Earth dist.	9101 Dec 07 13:34	29°♏09'01		
evening rise	9100 Dec 25 01:36	16°♐27'30		evening rise	9101 Dec 08 00:39	0°♐		
desc. node	9100 Dec 26 06:38	18°♐33'41		desc. node	9101 Dec 13 03:40	9°♐05'58		
	9101 Jan 02 03:41	0°♑			9101 Dec 26 09:36	0°♑		
	9101 Jan 23 07:51	0°♑		evening max el	9102 Jan 12 02:28	20°♑39'03	26°08'10	
evening max el	9101 Jan 29 13:16	6°♑51'55	24°59'51					
retrograde	9101 Feb 10 09:59	13°♑45'38						
evening set	9101 Feb 16 02:16	11°♑23'55						
asc. node	9101 Feb 17 21:57	9°♑37'27						
min. Earth dist.	9101 Feb 20 13:56	6°♑22'43	0.67807 AU					
inferior conj	9101 Feb 21 16:41	4°♑54'52	1°12'34					
minimum elong	9101 Feb 21 15:04	5°♑00'11	1°12'06					
	9101 Feb 25 21:33	30°♒						
morning rise	9101 Feb 27 04:08	28°♒58'18						
direct	9101 Mar 02 18:52	27°♒43'17						
	9101 Mar 08 01:53	0°♒						
morning max el	9101 Mar 10 00:36	1°♒44'32	19°33'51					
greatest brilliancy	9101 Mar 22 17:21	18°♒20'07	-0.7m					
desc. node	9101 Mar 24 06:33	20°♒37'58						
	9101 Mar 30 11:24	0°♓						
morning set	9101 Apr 04 07:45	7°♓25'59						
max. Earth dist.	9101 Apr 16 11:22	26°♓22'50	1.44705 AU					
	9101 Apr 18 18:05	0°♈						
superior conj	9101 Apr 20 18:38	3°♈13'59	-2°11'46					
minimum elong	9101 Apr 20 16:47	3°♈06'34	2°11'53					
evening rise	9101 May 04 15:46	26°♈03'36						
	9101 May 07 00:01	0°♉						
asc. node	9101 May 16 20:34	16°♉03'11						
evening max el	9101 May 23 05:07	24°♉14'15	18°14'24					
retrograde	9101 May 29 14:13	27°♉37'23						
evening set	9101 Jun 01 12:46	26°♉51'11						
inferior conj	9101 Jun 07 12:31	21°♉29'59	3°00'51					
minimum elong	9101 Jun 07 14:35	21°♉24'10	3°00'15					
min. Earth dist.	9101 Jun 10 01:43	18°♉39'02	0.63621 AU					
morning rise	9101 Jun 13 15:01	15°♉16'24						
direct	9101 Jun 20 08:32	12°♉38'36						
desc. node	9101 Jun 20 06:22	12°♉38'38						
morning max el	9101 Jul 04 05:44	20°♉41'21	27°42'44					