

































































































































superior conj	7600 May 07 03:26	19°♄49'17	-1°52'25	morning set	7601 Apr 03 04:22	6°♄02'36	
minimum elong	7600 May 07 08:59	20°♄13'55	1°52'01	max. Earth dist.	7601 Apr 11 14:26	19°♄24'30	1.43128 AU
	7600 May 12 18:38	0°♄					
evening rise	7600 May 17 15:13	9°♄00'02		superior conj	7601 Apr 18 08:56	0°♄34'50	-2°08'44
asc. node	7600 May 21 15:23	16°♄24'07		minimum elong	7601 Apr 18 11:57	0°♄47'30	2°08'42
	7600 May 29 20:08	0°♄			7601 Apr 18 00:38	0°♄	
evening max el	7600 Jun 02 18:49	4°♄44'36	18°15'33	evening rise	7601 Apr 30 09:30	21°♄25'40	
retrograde	7600 Jun 09 21:53	8°♄19'16			7601 May 05 06:03	0°♄	
evening set	7600 Jun 12 06:17	7°♄56'43		asc. node	7601 May 08 12:27	5°♄35'20	
inferior conj	7600 Jun 19 10:33	3°♄14'43	1°45'03	evening max el	7601 May 17 06:56	17°♄48'47	18°05'35
minimum elong	7600 Jun 19 13:32	3°♄08'18	1°44'01	retrograde	7601 May 23 19:53	21°♄10'39	
min. Earth dist.	7600 Jun 22 20:13	0°♄20'21	0.59188 AU	evening set	7601 May 26 11:37	20°♄37'03	
	7600 Jun 23 06:19	30°♄		inferior conj	7601 Jun 01 23:40	15°♄34'47	2°41'19
desc. node	7600 Jun 25 16:57	28°♄13'33		minimum elong	7601 Jun 02 02:34	15°♄27'35	2°40'33
morning rise	7600 Jun 26 17:42	27°♄36'01		min. Earth dist.	7601 Jun 05 02:08	12°♄31'06	0.61432 AU
direct	7600 Jul 03 00:55	25°♄47'30		morning rise	7601 Jun 08 15:23	9°♄34'49	
	7600 Jul 13 07:06	0°♄		desc. node	7601 Jun 12 13:59	7°♄39'50	
morning max el	7600 Jul 17 09:52	3°♄36'38	27°27'31	direct	7601 Jun 15 08:13	7°♄16'44	
	7600 Aug 05 17:16	0°♄		morning max el	7601 Jun 29 13:34	15°♄16'22	27°54'23
morning set	7600 Aug 17 15:53	22°♄46'43			7601 Jul 11 13:00	0°♄	
asc. node	7600 Aug 17 14:44	22°♄40'41			7601 Jul 29 06:30	0°♄	
	7600 Aug 21 00:53	0°♄		morning set	7601 Aug 01 18:58	7°♄03'23	
max. Earth dist.	7600 Aug 24 05:11	6°♄59'31	1.31710 AU	asc. node	7601 Aug 04 11:45	12°♄41'49	
				max. Earth dist.	7601 Aug 07 13:52	19°♄20'49	1.31985 AU
superior conj	7600 Aug 24 17:56	8°♄10'10	1°07'28				
minimum elong	7600 Aug 24 15:41	7°♄57'42	1°07'03	superior conj	7601 Aug 09 04:18	22°♄51'12	0°46'30
evening rise	7600 Aug 31 12:18	22°♄59'33		minimum elong	7601 Aug 09 02:24	22°♄40'48	0°46'04
	7600 Sep 03 21:04	0°♄			7601 Aug 12 10:13	0°♄	
desc. node	7600 Sep 21 15:59	29°♄52'06		evening rise	7601 Aug 15 23:21	7°♄42'45	
	7600 Sep 21 18:24	0°♄			7601 Aug 27 11:27	0°♄	
evening max el	7600 Sep 29 05:13	8°♄25'56	26°11'53	desc. node	7601 Sep 08 13:04	16°♄51'19	
retrograde	7600 Oct 13 03:36	15°♄31'01		evening max el	7601 Sep 10 20:32	19°♄13'11	24°48'41
evening set	7600 Oct 19 15:34	13°♄49'06		retrograde	7601 Sep 24 16:46	26°♄11'34	
min. Earth dist.	7600 Oct 23 18:19	11°♄14'30	0.58882 AU	evening set	7601 Sep 30 03:16	25°♄05'12	
inferior conj	7600 Oct 26 22:44	8°♄51'56	-4°52'05	min. Earth dist.	7601 Oct 05 07:43	22°♄20'09	0.56940 AU
minimum elong	7600 Oct 27 05:20	8°♄39'34	4°50'42	inferior conj	7601 Oct 08 02:05	20°♄32'31	-5°27'44
morning rise	7600 Nov 03 21:22	4°♄22'26		minimum elong	7601 Oct 08 04:45	20°♄28'11	5°27'32
direct	7600 Nov 06 04:24	4°♄04'38		morning rise	7601 Oct 16 08:27	16°♄25'44	
asc. node	7600 Nov 13 14:11	7°♄22'59		direct	7601 Oct 18 21:43	16°♄07'26	
morning max el	7600 Nov 14 06:15	8°♄00'16	18°28'12	morning max el	7601 Oct 28 05:23	20°♄32'11	19°20'02
	7600 Nov 28 09:31	0°♄		asc. node	7601 Oct 31 11:13	24°♄07'22	
morning set	7600 Nov 30 06:15	3°♄34'07			7601 Nov 04 13:41	0°♄	
				morning set	7601 Nov 14 07:28	17°♄59'41	
superior conj	7600 Dec 09 05:36	20°♄38'15	1°05'45		7601 Nov 20 07:39	0°♄	
minimum elong	7600 Dec 09 09:07	20°♄54'31	1°05'24				
	7600 Dec 14 09:46	0°♄		superior conj	7601 Nov 22 09:45	4°♄05'58	1°26'00
max. Earth dist.	7600 Dec 16 16:28	3°♄58'59	1.40365 AU	minimum elong	7601 Nov 22 12:33	4°♄19'36	1°25'51
desc. node	7600 Dec 18 15:04	7°♄18'31		max. Earth dist.	7601 Nov 28 22:16	16°♄24'38	1.38202 AU
evening rise	7600 Dec 21 00:12	11°♄18'17		evening rise	7601 Dec 02 16:00	23°♄05'29	
	7601 Jan 01 20:55	0°♄		desc. node	7601 Dec 05 12:06	27°♄58'45	
evening max el	7601 Jan 24 15:22	29°♄46'12	23°40'43		7601 Dec 06 16:54	0°♄	
	7601 Jan 24 20:56	0°♄			7601 Dec 26 16:41	0°♄	
retrograde	7601 Feb 04 10:18	6°♄07'53		evening max el	7602 Jan 07 04:34	13°♄32'26	24°58'22
evening set	7601 Feb 09 13:24	3°♄59'57		retrograde	7602 Jan 19 00:08	20°♄24'09	
asc. node	7601 Feb 09 13:23	4°♄00'01		evening set	7602 Jan 24 16:07	18°♄02'49	
	7601 Feb 13 04:17	30°♄		asc. node	7602 Jan 27 10:26	15°♄11'32	
inferior conj	7601 Feb 14 23:53	27°♄33'01	1°42'46	min. Earth dist.	7602 Jan 29 04:18	12°♄59'55	0.67716 AU
minimum elong	7601 Feb 14 21:51	27°♄39'59	1°42'07	inferior conj	7602 Jan 30 06:09	11°♄35'00	0°55'31
min. Earth dist.	7601 Feb 14 09:22	28°♄22'35	0.68228 AU	minimum elong	7602 Jan 30 04:51	11°♄39'16	0°55'05
morning rise	7601 Feb 20 06:15	21°♄28'33		morning rise	7602 Feb 04 17:51	5°♄37'45	
direct	7601 Feb 24 09:34	19°♄52'15		direct	7602 Feb 08 08:27	4°♄22'57	
morning max el	7601 Mar 04 13:20	24°♄32'14	20°44'51	morning max el	7602 Feb 15 15:10	8°♄26'33	19°37'18
	7601 Mar 09 08:47	0°♄		greatest brilliancy	7602 Feb 28 10:06	25°♄10'58	-0.7m
desc. node	7601 Mar 16 14:32	9°♄44'31		desc. node	7602 Mar 03 11:31	29°♄44'19	
	7601 Mar 30 06:27	0°♄			7602 Mar 03 15:41	0°♄	

morning set	7602 Mar 13 01:38	14° $\text{H}$ 21'21		asc. node	7603 Jan 14 07:30	25° $\text{Z}$ 36'55	
	7602 Mar 23 02:48	0° $\text{Y}$		morning rise	7603 Jan 20 03:47	19° $\text{Z}$ 45'47	
max. Earth dist.	7602 Mar 25 02:54	3° $\text{Y}$ 10'01	1.44577 AU	direct	7603 Jan 23 07:10	18° $\text{Z}$ 49'37	
				morning max el	7603 Jan 30 00:23	22° $\text{Z}$ 29'15	18°45'06
superior conj	7602 Mar 29 13:28	10° $\text{Y}$ 15'12	-2°09'18		7603 Feb 05 03:48	0° $\approx$	
minimum elong	7602 Mar 29 10:16	10° $\text{Y}$ 02'19	2°09'14	desc. node	7603 Feb 18 08:29	20° $\approx$ 02'14	
	7602 Apr 10 13:38	0° $\text{Z}$		morning set	7603 Feb 20 13:24	23° $\approx$ 29'38	
evening rise	7602 Apr 12 07:55	2° $\text{Z}$ 57'46			7603 Feb 24 17:00	0° $\text{H}$	
asc. node	7602 Apr 25 09:30	24° $\text{Z}$ 18'19		max. Earth dist.	7603 Mar 07 20:01	17° $\text{H}$ 24'54	1.45361 AU
	7602 Apr 29 17:54	0° $\text{II}$					
evening max el	7602 Apr 30 20:10	1° $\text{II}$ 09'34	18°14'32	superior conj	7603 Mar 08 22:24	19° $\text{H}$ 08'19	-1°49'53
retrograde	7602 May 07 05:30	4° $\text{II}$ 33'22		minimum elong	7603 Mar 08 13:25	18° $\text{H}$ 33'05	1°49'10
evening set	7602 May 10 04:11	3° $\text{II}$ 47'07			7603 Mar 15 19:49	0° $\text{Y}$	
	7602 May 14 17:53	30° $\text{R}$ $\text{Z}$		evening rise	7603 Mar 24 07:02	13° $\text{Y}$ 31'10	
inferior conj	7602 May 16 04:06	28° $\text{Z}$ 26'15	3°12'53	greatest brilliancy	7603 Mar 31 07:17	24° $\text{Y}$ 47'30	-0.9m
minimum elong	7602 May 16 05:50	28° $\text{Z}$ 21'25	3°12'33		7603 Apr 03 14:11	0° $\text{Z}$	
min. Earth dist.	7602 May 18 17:24	25° $\text{Z}$ 35'36	0.63550 AU	asc. node	7603 Apr 12 06:33	12° $\text{Z}$ 23'56	
morning rise	7602 May 22 06:14	22° $\text{Z}$ 14'30		evening max el	7603 Apr 14 07:44	14° $\text{Z}$ 40'12	18°41'44
direct	7602 May 29 00:44	19° $\text{Z}$ 35'38		retrograde	7603 Apr 20 22:25	18° $\text{Z}$ 18'46	
desc. node	7602 May 30 11:00	19° $\text{Z}$ 42'06		evening set	7603 Apr 24 04:14	17° $\text{Z}$ 18'50	
morning max el	7602 Jun 11 22:03	27° $\text{Z}$ 37'19	27°43'26	inferior conj	7603 Apr 29 19:49	11° $\text{Z}$ 41'10	3°24'57
	7602 Jun 14 04:13	0° $\text{II}$		minimum elong	7603 Apr 29 20:09	11° $\text{Z}$ 40'10	3°24'52
	7602 Jul 05 06:37	0° $\text{S}$		min. Earth dist.	7603 May 01 17:54	9° $\text{Z}$ 20'13	0.65356 AU
morning set	7602 Jul 16 15:03	20° $\text{S}$ 57'10		morning rise	7603 May 05 11:24	5° $\text{Z}$ 24'32	
	7602 Jul 21 01:03	0° $\Omega$		direct	7603 May 12 01:01	2° $\text{Z}$ 37'01	
max. Earth dist.	7602 Jul 21 16:46	1° $\Omega$ 22'46	1.32719 AU	desc. node	7603 May 17 08:00	4° $\text{Z}$ 06'17	
asc. node	7602 Jul 22 08:46	2° $\Omega$ 47'30		morning max el	7603 May 25 08:26	10° $\text{Z}$ 28'52	26°59'16
					7603 Jun 09 18:10	0° $\text{II}$	
superior conj	7602 Jul 24 11:24	7° $\Omega$ 18'31	0°21'26		7603 Jun 27 18:22	0° $\text{S}$	
minimum elong	7602 Jul 24 10:23	7° $\Omega$ 13'03	0°21'08	morning set	7603 Jun 30 01:13	4° $\text{S}$ 19'46	
evening rise	7602 Jul 31 11:03	22° $\Omega$ 24'33		max. Earth dist.	7603 Jul 04 10:10	12° $\text{S}$ 56'52	1.33930 AU
	7602 Aug 04 02:35	0° $\text{H}$					
evening max el	7602 Aug 23 07:56	29° $\text{H}$ 29'44	23°10'49	superior conj	7603 Jul 08 13:06	21° $\text{S}$ 26'16	-0°07'04
	7602 Aug 23 20:37	0° $\underline{\text{Z}}$		minimum elong	7603 Jul 08 13:29	21° $\text{S}$ 28'16	0°07'05
desc. node	7602 Aug 26 10:08	2° $\underline{\text{Z}}$ 11'03		behind sun begin	7603 Jul 08 08:22	21° $\text{S}$ 01'28	
retrograde	7602 Sep 05 17:54	6° $\underline{\text{Z}}$ 12'28		behind sun end	7603 Jul 08 18:36	21° $\text{S}$ 55'05	
evening set	7602 Sep 09 16:27	5° $\underline{\text{Z}}$ 38'29		asc. node	7603 Jul 09 05:46	22° $\text{S}$ 53'45	
min. Earth dist.	7602 Sep 16 16:59	2° $\underline{\text{Z}}$ 25'03	0.55454 AU		7603 Jul 12 14:16	0° $\Omega$	
inferior conj	7602 Sep 18 09:44	1° $\underline{\text{Z}}$ 25'44	-5°22'06	evening rise	7603 Jul 15 21:30	6° $\Omega$ 59'14	
minimum elong	7602 Sep 18 05:12	1° $\underline{\text{Z}}$ 32'20	5°21'39		7603 Jul 28 05:14	0° $\text{H}$	
	7602 Sep 20 22:05	30° $\text{R}$ $\text{H}$		evening max el	7603 Aug 05 00:18	9° $\text{H}$ 51'35	21°35'00
morning rise	7602 Sep 26 20:09	27° $\text{H}$ 35'03		desc. node	7603 Aug 13 07:11	15° $\text{H}$ 19'22	
direct	7602 Sep 29 19:39	27° $\text{H}$ 13'55		retrograde	7603 Aug 17 08:43	15° $\text{H}$ 58'56	
	7602 Oct 07 20:23	0° $\underline{\text{Z}}$		evening set	7603 Aug 19 22:37	15° $\text{H}$ 43'49	
morning max el	7602 Oct 10 16:15	2° $\underline{\text{Z}}$ 18'18	20°34'06	inferior conj	7603 Aug 29 04:20	11° $\text{H}$ 44'46	-4°22'16
asc. node	7602 Oct 18 08:14	11° $\underline{\text{Z}}$ 50'30		minimum elong	7603 Aug 28 19:01	11° $\text{H}$ 57'48	4°19'57
	7602 Oct 28 07:03	0° $\text{H}$		min. Earth dist.	7603 Aug 29 02:05	11° $\text{H}$ 47'55	0.54737 AU
morning set	7602 Oct 29 14:16	2° $\text{H}$ 39'28		morning rise	7603 Sep 06 16:29	7° $\text{H}$ 53'53	
				direct	7603 Sep 10 05:22	7° $\text{H}$ 26'39	
superior conj	7602 Nov 06 02:17	18° $\text{H}$ 08'46	1°37'41	morning max el	7603 Sep 22 14:51	13° $\text{H}$ 17'58	22°07'40
minimum elong	7602 Nov 06 03:47	18° $\text{H}$ 16'24	1°37'41	asc. node	7603 Oct 05 05:14	0° $\underline{\text{Z}}$ 19'06	
max. Earth dist.	7602 Nov 11 05:39	28° $\text{H}$ 21'48	1.36153 AU		7603 Oct 05 00:50	0° $\underline{\text{Z}}$	
	7602 Nov 12 02:04	0° $\text{Z}$		morning set	7603 Oct 14 00:24	17° $\underline{\text{Z}}$ 27'33	
evening rise	7602 Nov 15 03:28	5° $\text{Z}$ 44'57			7603 Oct 19 21:59	0° $\text{H}$	
desc. node	7602 Nov 22 09:08	18° $\text{Z}$ 29'45					
	7602 Nov 29 13:04	0° $\text{Z}$		superior conj	7603 Oct 21 03:27	2° $\text{H}$ 36'00	1°41'49
evening max el	7602 Dec 20 17:27	27° $\text{Z}$ 17'56	26°06'42	minimum elong	7603 Oct 21 03:36	2° $\text{H}$ 36'44	1°41'52
	7602 Dec 23 17:29	0° $\approx$		max. Earth dist.	7603 Oct 24 19:44	10° $\text{H}$ 14'51	1.34418 AU
retrograde	7603 Jan 02 09:09	4° $\approx$ 29'09		evening rise	7603 Oct 29 06:49	19° $\text{H}$ 07'33	
evening set	7603 Jan 08 13:48	1° $\approx$ 57'31			7603 Nov 04 03:22	0° $\text{Z}$	
	7603 Jan 10 15:04	30° $\text{R}$ $\text{Z}$		desc. node	7603 Nov 09 06:11	8° $\text{Z}$ 46'36	
min. Earth dist.	7603 Jan 12 19:13	27° $\text{Z}$ 29'17	0.66827 AU		7603 Nov 23 15:40	0° $\text{Z}$	
inferior conj	7603 Jan 14 08:29	25° $\text{Z}$ 33'50	0°00'50	evening max el	7603 Dec 03 06:33	10° $\text{Z}$ 56'30	26°58'14
minimum elong	7603 Jan 14 08:28	25° $\text{Z}$ 33'55	0°00'55	retrograde	7603 Dec 16 12:34	18° $\text{Z}$ 15'51	
transit middle	7603 Jan 14 08:28	25° $\text{Z}$ 33'55	0°00'55	evening set	7603 Dec 23 04:29	15° $\text{Z}$ 39'06	
transit begin	7603 Jan 14 05:36	25° $\text{Z}$ 42'46		min. Earth dist.	7603 Dec 27 03:57	11° $\text{Z}$ 45'12	0.65582 AU
transit end	7603 Jan 14 11:19	25° $\text{Z}$ 25'04		inferior conj	7603 Dec 29 04:47	9° $\text{Z}$ 25'19	-1°00'27

minimum elong	7603 Dec 29 06:32	9°  20'17	0°59'36	min. Earth dist.	7604 Dec 09 04:14	25°  40'09	0.64002 AU
asc. node	7604 Jan 01 04:32	6°  12'18		inferior conj	7604 Dec 11 16:34	23°  03'31	-2°06'50
morning rise	7604 Jan 04 09:44	3°  48'50		minimum elong	7604 Dec 11 20:28	22°  53'22	2°05'10
direct	7604 Jan 07 03:50	3°  07'35		morning rise	7604 Dec 18 08:53	17°  41'43	
morning max el	7604 Jan 13 14:53	6°  34'20	18°09'23	asc. node	7604 Dec 18 01:34	17°  49'33	
	7604 Jan 29 17:35	0° 		direct	7604 Dec 20 19:58	17°  11'25	
morning set	7604 Feb 01 05:48	4°  05'01		morning max el	7604 Dec 27 07:56	20°  34'50	17°50'49
desc. node	7604 Feb 05 05:28	10°  33'07			7605 Jan 03 11:05	0° 	
				morning set	7605 Jan 13 02:17	16°  03'01	
superior conj	7604 Feb 16 03:53	27°  59'32	-1°12'58		7605 Jan 21 08:53	0° 	
minimum elong	7604 Feb 15 19:30	27°  26'34	1°11'53	desc. node	7605 Jan 22 02:28	1°  12'47	
	7604 Feb 17 10:30	0° 					
max. Earth dist.	7604 Feb 18 15:16	1°  52'51	1.45411 AU	superior conj	7605 Jan 26 00:45	7°  38'56	-0°28'03
evening rise	7604 Mar 03 08:07	23°  13'56		minimum elong	7605 Jan 25 21:35	7°  26'05	0°27'30
	7604 Mar 07 16:46	0° 		max. Earth dist.	7605 Jan 31 10:19	16°  18'38	1.44726 AU
greatest brilliancy	7604 Mar 15 17:13	12°  18'13	-0.7m		7605 Feb 09 04:34	0° 	
evening max el	7604 Mar 27 15:31	28°  15'46	19°25'56	evening rise	7605 Feb 10 20:14	2°  32'35	
asc. node	7604 Mar 29 03:36	29°  40'48			7605 Mar 01 06:54	0° 	
	7604 Mar 29 12:43	0° 		evening max el	7605 Mar 10 18:12	11°  53'42	20°25'06
retrograde	7604 Apr 03 19:20	2°  20'20		asc. node	7605 Mar 16 00:39	15°  55'26	
evening set	7604 Apr 07 08:58	1°  05'56		retrograde	7605 Mar 18 17:44	16°  33'16	
	7604 Apr 08 17:22	30°  08'19		evening set	7605 Mar 22 16:16	15°  03'51	
inferior conj	7604 Apr 12 19:26	25°  13'00	3°21'48	inferior conj	7605 Mar 28 00:13	8°  57'36	3°06'29
minimum elong	7604 Apr 12 18:32	25°  15'57	3°21'42	minimum elong	7605 Mar 27 22:27	9°  03'37	3°06'12
min. Earth dist.	7604 Apr 14 02:21	23°  31'48	0.66760 AU	min. Earth dist.	7605 Mar 28 17:01	8°  00'13	0.67721 AU
morning rise	7604 Apr 18 03:45	18°  55'47		morning rise	7605 Apr 02 04:25	2°  42'05	
direct	7604 Apr 24 07:41	16°  11'44		direct	7605 Apr 07 19:39	0° 	
desc. node	7604 May 03 05:00	20°  09'46		morning max el	7605 Apr 19 03:11	6°  57'29	24°25'27
morning max el	7604 May 06 18:15	23°  38'10	25°49'57	desc. node	7605 Apr 20 01:58	7°  56'24	
	7604 May 12 10:10	0° 			7605 May 07 01:25	0° 	
	7604 Jun 02 03:06	0° 		morning set	7605 May 24 22:57	28°  42'57	
morning set	7604 Jun 11 21:29	16°  59'17			7605 May 25 16:32	0° 	
max. Earth dist.	7604 Jun 15 16:18	24°  04'57	1.35616 AU	max. Earth dist.	7605 May 28 14:19	5°  11'09	1.37682 AU
	7604 Jun 18 17:22	0° 					
				superior conj	7605 Jun 04 13:13	18°  11'08	-1°09'12
superior conj	7604 Jun 21 06:46	5°  06'23	-0°37'51	minimum elong	7605 Jun 04 17:24	18°  11'15	1°08'38
minimum elong	7604 Jun 21 08:59	5°  17'32	0°37'32		7605 Jun 10 13:33	0° 	
asc. node	7604 Jun 25 02:46	12°  05'55		asc. node	7605 Jun 11 23:47	2°  50'23	
evening rise	7604 Jun 29 04:35	21°  09'46		evening rise	7605 Jun 13 05:53	5°  19'57	
	7604 Jul 03 12:26	0° 			7605 Jun 27 16:16	0° 	
evening max el	7604 Jul 17 04:22	20°  46'39	20°13'20	evening max el	7605 Jun 29 21:20	2°  25'40	19°11'16
retrograde	7604 Jul 27 21:36	26°  03'29		retrograde	7605 Jul 08 22:03	6°  52'54	
evening set	7604 Jul 29 20:01	25°  53'56		evening set	7605 Jul 10 20:01	6°  41'43	
desc. node	7604 Jul 30 04:14	25°  50'19		desc. node	7605 Jul 17 01:16	3°  58'26	
inferior conj	7604 Aug 07 22:49	21°  55'51	-2°37'54	inferior conj	7605 Jul 19 07:04	2°  30'37	-0°40'53
minimum elong	7604 Aug 07 15:37	22°  06'29	2°35'25	minimum elong	7605 Jul 19 05:17	2°  33'36	0°40'18
min. Earth dist.	7604 Aug 09 12:46	20°  59'54	0.54970 AU	min. Earth dist.	7605 Jul 22 02:25	0°  37'59	0.56118 AU
morning rise	7604 Aug 16 10:02	17°  44'47			7605 Jul 23 02:20	30°  08'56	
direct	7604 Aug 20 16:11	17°  05'33		morning rise	7605 Jul 27 11:36	27°  04'45	
morning max el	7604 Sep 03 05:02	23°  42'05	23°52'29	direct	7605 Aug 01 13:59	26°  04'45	
	7604 Sep 08 21:45	0° 			7605 Aug 10 21:38	0° 	
asc. node	7604 Sep 21 02:13	19°  09'21		morning max el	7605 Aug 15 17:57	3°  57'49	25°33'56
	7604 Sep 26 09:51	0° 			7605 Sep 03 08:22	0° 	
morning set	7604 Sep 27 12:00	2°  17'54		asc. node	7605 Sep 07 23:13	8°  48'37	
				morning set	7605 Sep 11 23:27	17°  05'57	
superior conj	7604 Oct 04 10:21	17°  18'04	1°39'21		7605 Sep 17 21:26	0° 	
minimum elong	7604 Oct 04 09:20	17°  12'33	1°39'20				
max. Earth dist.	7604 Oct 06 18:27	22°  19'57	1.33091 AU	superior conj	7605 Sep 18 20:40	2°  08'04	1°31'03
	7604 Oct 10 10:16	0° 		minimum elong	7605 Sep 18 18:50	1°  57'59	1°30'52
evening rise	7604 Oct 11 22:09	3°  02'19		max. Earth dist.	7605 Sep 20 00:25	4°  40'41	1.32203 AU
desc. node	7604 Oct 26 03:14	28°  42'17		evening rise	7605 Sep 25 22:11	17°  20'20	
	7604 Oct 26 22:48	0° 			7605 Oct 02 07:54	0° 	
evening max el	7604 Nov 14 18:52	24°  17'14	27°25'52	desc. node	7605 Oct 13 00:17	18°  08'00	
	7604 Nov 22 10:41	0° 			7605 Oct 21 15:23	0° 	
retrograde	7604 Nov 28 09:34	1°  35'52		evening max el	7605 Oct 28 04:05	7°  06'33	27°23'24
	7604 Dec 03 22:12	30°  08'17		retrograde	7605 Nov 10 23:20	14°  17'20	
evening set	7604 Dec 05 09:42	29°  01'22		evening set	7605 Nov 18 02:15	11°  57'25	

min. Earth dist.	7605 Nov 21 18:15	9°♄03'51	0.62136 AU	evening set	7606 Oct 31 02:04	24°♌20'38	
inferior conj	7605 Nov 24 16:51	6°♄20'53	-3°15'20	min. Earth dist.	7606 Nov 03 21:29	21°♌43'55	0.60080 AU
minimum elong	7605 Nov 24 22:52	6°♄06'58	3°13'09	inferior conj	7606 Nov 07 02:16	19°♌08'41	-4°20'11
morning rise	7605 Dec 01 21:32	1°♄17'14		minimum elong	7606 Nov 07 09:22	18°♌54'18	4°18'15
direct	7605 Dec 04 04:15	0°♄54'18		morning rise	7606 Nov 14 18:58	14°♌26'30	
asc. node	7605 Dec 04 22:37	0°♄56'58		direct	7606 Nov 17 00:39	14°♌07'44	
morning max el	7605 Dec 11 00:29	4°♄23'04	17°50'08	asc. node	7606 Nov 21 19:40	15°♌38'35	
morning set	7605 Dec 26 20:34	29°♄03'05		morning max el	7606 Nov 24 13:13	17°♌50'41	18°08'28
	7605 Dec 27 09:17	0°♄			7606 Dec 03 06:05	0°♄	
				morning set	7606 Dec 10 06:28	12°♄47'09	
superior conj	7606 Jan 06 22:47	18°♄31'34	0°14'47	superior conj	7606 Dec 19 21:40	0°♄36'01	0°49'49
minimum elong	7606 Jan 07 00:09	18°♄37'24	0°14'41	minimum elong	7606 Dec 20 01:01	0°♄51'02	0°49'27
behind sun begin	7606 Jan 06 20:36	18°♄22'19			7606 Dec 19 13:40	0°♄	
behind sun end	7606 Jan 07 03:42	18°♄52'29		desc. node	7606 Dec 26 20:29	12°♄43'12	
desc. node	7606 Jan 08 23:27	21°♄57'11		max. Earth dist.	7606 Dec 27 13:18	13°♄54'12	1.41555 AU
	7606 Jan 13 20:22	0°♄		evening rise	7607 Jan 01 15:42	22°♄18'38	
max. Earth dist.	7606 Jan 14 02:23	0°♄24'28	1.43388 AU		7607 Jan 06 12:04	0°♄	
evening rise	7606 Jan 21 10:15	12°♄03'21			7607 Jan 27 09:43	0°♄	
	7606 Feb 02 06:57	0°♄		evening max el	7607 Feb 04 07:51	9°♄12'49	22°54'31
evening max el	7606 Feb 21 15:20	25°♄32'15	21°36'09	retrograde	7607 Feb 14 11:30	15°♄14'08	
	7606 Feb 27 07:26	0°♄		asc. node	7607 Feb 17 18:48	14°♄19'06	
retrograde	7606 Mar 02 15:40	0°♄52'34		evening set	7607 Feb 19 07:30	13°♄14'25	
asc. node	7606 Mar 02 21:44	0°♄52'14		inferior conj	7607 Feb 24 16:29	6°♄49'41	2°06'28
	7606 Mar 05 18:13	30°♄		minimum elong	7607 Feb 24 14:14	6°♄57'27	2°05'48
evening set	7606 Mar 07 00:19	29°♄07'51		min. Earth dist.	7607 Feb 24 08:29	7°♄17'21	0.68344 AU
inferior conj	7606 Mar 12 07:53	22°♄50'42	2°40'58	morning rise	7607 Mar 01 20:52	0°♄41'50	
minimum elong	7606 Mar 12 05:40	22°♄58'26	2°40'27		7607 Mar 02 19:34	30°♄	
min. Earth dist.	7606 Mar 12 11:47	22°♄37'10	0.68240 AU	direct	7607 Mar 06 07:52	28°♄52'47	
morning rise	7606 Mar 17 10:51	16°♄38'24			7607 Mar 10 03:24	0°♄	
direct	7606 Mar 22 12:00	14°♄27'08		morning max el	7607 Mar 15 03:06	3°♄59'19	21°29'48
morning max el	7606 Apr 01 13:03	20°♄23'52	22°55'46	desc. node	7607 Mar 24 19:58	15°♄45'46	
desc. node	7606 Apr 06 22:58	26°♄30'05			7607 Apr 03 19:12	0°♄	
	7606 Apr 09 17:21	0°♄		morning set	7607 Apr 15 21:04	18°♄31'51	
	7606 Apr 30 06:45	0°♄		max. Earth dist.	7607 Apr 22 11:26	29°♄11'45	1.42047 AU
morning set	7606 May 05 23:56	9°♄16'03			7607 Apr 22 23:07	0°♄	
max. Earth dist.	7606 May 10 10:44	16°♄46'42	1.39916 AU	superior conj	7607 Apr 29 23:20	11°♄51'57	-2°00'53
	7606 May 17 21:46	0°♄		minimum elong	7607 Apr 30 04:16	12°♄13'23	2°00'38
superior conj	7606 May 18 04:20	0°♄29'57	-1°38'18		7607 May 10 03:11	0°♄	
minimum elong	7606 May 18 09:52	0°♄55'21	1°37'44	evening rise	7607 May 11 01:57	1°♄43'46	
evening rise	7606 May 27 22:18	18°♄51'12		asc. node	7607 May 16 17:52	11°♄56'45	
asc. node	7606 May 29 20:49	22°♄32'24		evening max el	7607 May 27 10:34	27°♄35'35	18°08'58
	7606 Jun 02 21:31	0°♄			7607 May 30 12:50	0°♄	
evening max el	7606 Jun 13 00:37	14°♄44'55	18°30'01	retrograde	7607 Jun 03 06:30	1°♄03'14	
retrograde	7606 Jun 20 17:15	18°♄34'37		evening set	7607 Jun 05 17:54	0°♄36'25	
evening set	7606 Jun 22 21:13	18°♄17'21			7607 Jun 07 02:47	30°♄	
inferior conj	7606 Jun 30 12:22	13°♄46'57	0°59'43	inferior conj	7607 Jun 12 14:49	25°♄45'47	2°12'14
minimum elong	7606 Jun 30 14:25	13°♄42'54	0°58'54	minimum elong	7607 Jun 12 17:58	25°♄38'33	2°11'16
desc. node	7606 Jul 03 22:18	11°♄06'48		min. Earth dist.	7607 Jun 15 22:33	22°♄44'10	0.60135 AU
min. Earth dist.	7606 Jul 03 21:00	11°♄09'12	0.57946 AU	morning rise	7607 Jun 19 15:15	19°♄56'24	
morning rise	7606 Jul 08 04:14	8°♄25'01		desc. node	7607 Jun 20 19:21	19°♄16'37	
direct	7606 Jul 14 02:06	6°♄55'30		direct	7607 Jun 26 03:25	17°♄54'26	
morning max el	7606 Jul 28 11:32	14°♄34'40	26°55'15	morning max el	7607 Jul 10 11:43	25°♄50'02	27°43'41
	7606 Aug 09 20:34	0°♄			7607 Jul 14 08:41	0°♄	
asc. node	7606 Aug 25 20:14	28°♄33'56		morning set	7607 Aug 03 07:53	0°♄	
	7606 Aug 26 12:47	0°♄		asc. node	7607 Aug 11 15:10	16°♄14'20	
morning set	7606 Aug 27 09:07	1°♄46'52		max. Earth dist.	7607 Aug 12 17:13	18°♄30'53	
					7607 Aug 17 20:26	29°♄37'31	1.31764 AU
superior conj	7606 Sep 03 08:27	16°♄59'51	1°17'29		7607 Aug 18 00:31	0°♄	
minimum elong	7606 Sep 03 06:14	16°♄47'30	1°17'09	superior conj	7607 Aug 18 19:51	1°♄46'46	0°59'07
max. Earth dist.	7606 Sep 03 10:20	17°♄10'19	1.31758 AU	minimum elong	7607 Aug 18 17:42	1°♄34'50	0°58'41
	7606 Sep 09 06:51	0°♄		evening rise	7607 Aug 25 14:02	16°♄35'30	
evening rise	7606 Sep 10 04:16	1°♄53'57			7607 Sep 01 04:14	0°♄	
	7606 Sep 25 06:56	0°♄		desc. node	7607 Sep 16 18:25	24°♄35'58	
desc. node	7606 Sep 29 21:20	6°♄51'47			7607 Sep 21 15:55	0°♄	
evening max el	7606 Oct 10 07:27	19°♄12'04	26°47'23				
retrograde	7606 Oct 24 05:11	26°♄20'53					

evening max el	7607 Sep 22 03:02	0° $\mathbb{M}$ 26'46	25°39'18	evening max el	7608 Sep 02 16:02	10° $\mathbb{A}$ 58'40	24°07'58
retrograde	7607 Oct 06 01:30	7° $\mathbb{M}$ 30'21		desc. node	7608 Sep 02 15:27	10° $\mathbb{A}$ 57'15	
evening set	7607 Oct 12 04:06	6° $\mathbb{M}$ 03'06		retrograde	7608 Sep 16 09:39	17° $\mathbb{A}$ 51'54	
min. Earth dist.	7607 Oct 16 15:20	3° $\mathbb{M}$ 26'19	0.58018 AU	evening set	7608 Sep 21 05:20	17° $\mathbb{A}$ 00'43	
inferior conj	7607 Oct 19 17:18	1° $\mathbb{M}$ 16'20	-5°11'02	min. Earth dist.	7608 Sep 27 02:49	14° $\mathbb{A}$ 05'18	0.56238 AU
minimum elong	7607 Oct 19 22:45	1° $\mathbb{M}$ 06'42	5°10'12	inferior conj	7608 Sep 29 12:00	12° $\mathbb{A}$ 37'07	-5°31'30
	7607 Oct 21 13:29	30° $\mathbb{R}$ $\mathbb{A}$		minimum elong	7608 Sep 29 11:48	12° $\mathbb{A}$ 37'27	5°31'28
morning rise	7607 Oct 27 19:45	26° $\mathbb{A}$ 56'58		morning rise	7608 Oct 07 20:26	8° $\mathbb{A}$ 38'03	
direct	7607 Oct 30 04:38	26° $\mathbb{A}$ 39'26		direct	7608 Oct 10 13:31	8° $\mathbb{A}$ 18'52	
	7607 Nov 06 22:04	0° $\mathbb{M}$		morning max el	7608 Oct 20 12:29	12° $\mathbb{A}$ 59'46	19°48'42
morning max el	7607 Nov 07 18:23	0° $\mathbb{M}$ 46'23	18°47'30	asc. node	7608 Oct 25 13:42	18° $\mathbb{A}$ 53'59	
asc. node	7607 Nov 08 16:42	1° $\mathbb{M}$ 42'39			7608 Nov 01 08:57	0° $\mathbb{M}$	
morning set	7607 Nov 24 03:08	27° $\mathbb{M}$ 00'26		morning set	7608 Nov 07 07:01	11° $\mathbb{M}$ 33'01	
	7607 Nov 25 15:47	0° $\mathbb{X}$					
superior conj	7607 Dec 02 16:37	13° $\mathbb{X}$ 37'29	1°15'26	superior conj	7608 Nov 15 02:31	27° $\mathbb{M}$ 21'29	1°31'56
minimum elong	7607 Dec 02 19:57	13° $\mathbb{X}$ 53'14	1°15'09	minimum elong	7608 Nov 15 04:48	27° $\mathbb{M}$ 32'49	1°31'51
max. Earth dist.	7607 Dec 09 19:38	26° $\mathbb{X}$ 40'18	1.39445 AU		7608 Nov 16 10:37	0° $\mathbb{X}$	
	7607 Dec 11 17:18	0° $\mathbb{Z}$		max. Earth dist.	7608 Nov 21 01:22	8° $\mathbb{X}$ 51'02	1.37312 AU
evening rise	7607 Dec 13 18:53	3° $\mathbb{Z}$ 32'30		evening rise	7608 Nov 24 19:31	15° $\mathbb{X}$ 43'31	
desc. node	7607 Dec 13 17:30	3° $\mathbb{Z}$ 26'38		desc. node	7608 Nov 29 14:31	24° $\mathbb{X}$ 03'38	
	7607 Dec 30 16:46	0° $\mathbb{A}$			7608 Dec 03 04:37	0° $\mathbb{Z}$	
evening max el	7608 Jan 17 21:43	22° $\mathbb{A}$ 57'08	24°14'27	evening max el	7608 Dec 24 07:04	0° $\mathbb{A}$	
retrograde	7608 Jan 29 03:53	29° $\mathbb{A}$ 33'27			7608 Dec 30 10:50	6° $\mathbb{A}$ 44'20	25°29'04
evening set	7608 Feb 03 12:17	27° $\mathbb{A}$ 19'41		retrograde	7609 Jan 11 15:42	13° $\mathbb{A}$ 45'23	
asc. node	7608 Feb 04 15:53	26° $\mathbb{A}$ 14'58		evening set	7609 Jan 17 13:02	11° $\mathbb{A}$ 19'31	
min. Earth dist.	7608 Feb 08 04:48	21° $\mathbb{A}$ 56'41	0.68052 AU	asc. node	7609 Jan 21 12:56	7° $\mathbb{A}$ 00'54	
inferior conj	7608 Feb 09 00:07	20° $\mathbb{A}$ 51'34	1°23'42	min. Earth dist.	7609 Jan 21 22:22	6° $\mathbb{A}$ 31'05	0.67384 AU
minimum elong	7608 Feb 08 22:20	20° $\mathbb{A}$ 57'35	1°23'05	inferior conj	7609 Jan 23 04:57	4° $\mathbb{A}$ 52'51	0°33'12
morning rise	7608 Feb 14 08:27	14° $\mathbb{A}$ 49'42		minimum elong	7609 Jan 23 04:08	4° $\mathbb{A}$ 55'30	0°32'57
direct	7608 Feb 18 06:07	13° $\mathbb{A}$ 22'50			7609 Jan 27 11:52	30° $\mathbb{R}$ $\mathbb{Z}$	
morning max el	7608 Feb 26 00:12	17° $\mathbb{A}$ 46'21	20°14'16	morning rise	7609 Jan 28 19:35	28° $\mathbb{Z}$ 58'59	
	7608 Mar 06 20:05	0° $\mathbb{X}$		direct	7609 Feb 01 05:16	27° $\mathbb{Z}$ 52'22	
desc. node	7608 Mar 10 16:57	5° $\mathbb{X}$ 32'01			7609 Feb 06 06:25	0° $\mathbb{A}$	
morning set	7608 Mar 24 21:06	26° $\mathbb{X}$ 53'16		morning max el	7609 Feb 08 05:12	1° $\mathbb{A}$ 44'16	19°13'01
	7608 Mar 26 21:17	0° $\mathbb{Y}$		greatest brilliancy	7609 Feb 21 12:48	19° $\mathbb{A}$ 31'18	-0.7m
max. Earth dist.	7608 Apr 03 19:21	12° $\mathbb{Y}$ 29'44	1.43810 AU	desc. node	7609 Feb 25 13:55	25° $\mathbb{A}$ 40'21	
					7609 Feb 28 09:31	0° $\mathbb{X}$	
superior conj	7608 Apr 09 18:12	22° $\mathbb{Y}$ 09'36	-2°11'15	morning set	7609 Mar 03 21:41	5° $\mathbb{X}$ 24'56	
minimum elong	7608 Apr 09 18:55	22° $\mathbb{Y}$ 12'37	2°11'17	max. Earth dist.	7609 Mar 17 10:07	26° $\mathbb{X}$ 29'48	1.44999 AU
	7608 Apr 14 11:09	0° $\mathbb{B}$			7609 Mar 19 15:21	0° $\mathbb{Y}$	
evening rise	7608 Apr 22 12:18	13° $\mathbb{B}$ 47'36		superior conj	7609 Mar 20 13:04	1° $\mathbb{Y}$ 26'02	-2°03'33
	7608 May 02 00:35	0° $\mathbb{I}$		minimum elong	7609 Mar 20 06:54	1° $\mathbb{Y}$ 01'37	2°03'16
asc. node	7608 May 02 14:55	0° $\mathbb{I}$ 57'20		evening rise	7609 Apr 04 00:56	24° $\mathbb{Y}$ 54'12	
evening max el	7608 May 09 23:36	10° $\mathbb{I}$ 48'30	18°07'14		7609 Apr 07 02:58	0° $\mathbb{B}$	
retrograde	7608 May 16 09:50	14° $\mathbb{I}$ 09'23		asc. node	7609 Apr 19 11:58	19° $\mathbb{B}$ 25'36	
evening set	7608 May 19 04:33	13° $\mathbb{I}$ 30'36		evening max el	7609 Apr 23 12:28	24° $\mathbb{B}$ 14'21	18°24'02
inferior conj	7608 May 25 10:58	8° $\mathbb{I}$ 20'36	2°57'22	retrograde	7609 Apr 29 22:53	27° $\mathbb{B}$ 42'33	
minimum elong	7608 May 25 13:26	8° $\mathbb{I}$ 14'06	2°56'49	evening set	7609 May 03 00:39	26° $\mathbb{B}$ 50'27	
min. Earth dist.	7608 May 28 08:28	5° $\mathbb{I}$ 19'42	0.62357 AU	inferior conj	7609 May 08 20:35	21° $\mathbb{B}$ 22'18	3°20'04
morning rise	7608 May 31 20:35	2° $\mathbb{I}$ 14'41		minimum elong	7609 May 08 21:43	21° $\mathbb{B}$ 19'00	3°19'53
	7608 Jun 05 12:42	30° $\mathbb{R}$ $\mathbb{B}$		min. Earth dist.	7609 May 11 03:29	18° $\mathbb{B}$ 42'49	0.64365 AU
desc. node	7608 Jun 06 16:22	29° $\mathbb{B}$ 48'51		morning rise	7609 May 14 17:51	15° $\mathbb{B}$ 08'09	
direct	7608 Jun 07 15:12	29° $\mathbb{B}$ 46'02		direct	7609 May 21 11:08	12° $\mathbb{B}$ 24'05	
	7608 Jun 09 19:09	0° $\mathbb{I}$		desc. node	7609 May 24 13:23	12° $\mathbb{B}$ 54'34	
morning max el	7608 Jun 21 17:37	7° $\mathbb{I}$ 48'13	27°54'10	morning max el	7609 Jun 04 02:57	20° $\mathbb{B}$ 22'29	27°28'20
	7608 Jul 08 17:32	0° $\mathbb{E}$			7609 Jun 12 09:14	0° $\mathbb{I}$	
	7608 Jul 25 11:06	0° $\mathbb{Q}$			7609 Jul 01 19:23	0° $\mathbb{E}$	
morning set	7608 Jul 25 15:35	0° $\mathbb{Q}$ 22'44		morning set	7609 Jul 09 07:47	14° $\mathbb{E}$ 03'49	
asc. node	7608 Jul 29 14:13	8° $\mathbb{Q}$ 34'58		max. Earth dist.	7609 Jul 14 02:06	23° $\mathbb{E}$ 41'44	1.33177 AU
max. Earth dist.	7608 Jul 31 02:57	11° $\mathbb{Q}$ 51'36	1.32235 AU	asc. node	7609 Jul 16 11:12	28° $\mathbb{E}$ 41'14	
superior conj	7608 Aug 02 05:06	16° $\mathbb{Q}$ 23'30	0°36'21	superior conj	7609 Jul 17 10:08	0° $\mathbb{Q}$ 43'07	0°09'45
minimum elong	7608 Aug 02 03:30	16° $\mathbb{Q}$ 14'51	0°35'58	minimum elong	7609 Jul 17 09:39	0° $\mathbb{Q}$ 40'32	0°09'33
	7608 Aug 08 10:48	0° $\mathbb{P}$		behind sun begin	7609 Jul 17 05:15	0° $\mathbb{Q}$ 17'02	
evening rise	7608 Aug 09 01:35	1° $\mathbb{P}$ 19'22		behind sun end	7609 Jul 17 14:04	1° $\mathbb{Q}$ 04'04	
	7608 Aug 24 16:06	0° $\mathbb{A}$			7609 Jul 17 02:03	0° $\mathbb{Q}$	

evening rise	7609 Jul 24 12:58	15°♌58'46		evening rise	7610 Jul 08 22:14	0°♌27'59	
	7609 Jul 31 12:13	0°♍			7610 Jul 08 16:51	0°♌	
evening max el	7609 Aug 15 04:31	21°♍13'10	22°28'59		7610 Jul 26 09:04	0°♍	
desc. node	7609 Aug 20 12:30	25°♍25'16		evening max el	7610 Jul 28 01:08	1°♍45'27	20°58'00
retrograde	7609 Aug 28 05:13	27°♍42'39		desc. node	7610 Aug 07 09:33	7°♍28'19	
evening set	7609 Aug 31 12:43	27°♍18'32		retrograde	7610 Aug 08 17:50	7°♍32'47	
min. Earth dist.	7609 Sep 08 11:24	23°♍49'02	0.55048 AU	evening set	7610 Aug 10 22:58	7°♍21'09	
inferior conj	7609 Sep 09 12:48	23°♍13'07	-5°03'26	inferior conj	7610 Aug 20 05:23	3°♍23'59	-3°41'50
minimum elong	7609 Sep 09 05:31	23°♍23'26	5°02'14	minimum elong	7610 Aug 19 20:11	3°♍37'00	3°39'04
morning rise	7609 Sep 18 00:10	19°♍24'49		min. Earth dist.	7610 Aug 20 20:36	3°♍02'26	0.54714 AU
direct	7609 Sep 21 05:19	19°♍01'22			7610 Aug 27 00:38	30°♌	
morning max el	7609 Oct 02 17:43	24°♍24'56	21°11'46	morning rise	7610 Aug 28 17:42	29°♌27'19	
	7609 Oct 07 17:11	0°♎		direct	7610 Sep 01 13:22	28°♌56'05	
asc. node	7609 Oct 12 10:42	6°♎57'59			7610 Sep 06 21:20	0°♍	
morning set	7609 Oct 22 15:30	26°♎17'27		morning max el	7610 Sep 14 11:59	5°♍06'45	22°51'46
	7609 Oct 24 10:08	0°♏		asc. node	7610 Sep 29 07:41	25°♍42'03	
					7610 Oct 01 14:52	0°♎	
superior conj	7609 Oct 29 23:06	11°♏35'56	1°40'18	morning set	7610 Oct 07 02:28	11°♎07'26	
minimum elong	7609 Oct 30 00:01	11°♏40'40	1°40'20				
max. Earth dist.	7609 Nov 03 11:31	20°♏45'43	1.35376 AU	superior conj	7610 Oct 14 03:01	26°♎10'37	1°41'32
evening rise	7609 Nov 07 14:14	28°♏42'50		minimum elong	7610 Oct 14 02:38	26°♎08'33	1°41'34
	7609 Nov 08 06:42	0°♐			7610 Oct 15 22:13	0°♏	
desc. node	7609 Nov 16 11:32	14°♐29'40		max. Earth dist.	7610 Oct 17 05:25	2°♏43'31	1.33797 AU
	7609 Nov 26 10:11	0°♑		evening rise	7610 Oct 21 23:04	12°♏20'06	
evening max el	7609 Dec 13 00:01	20°♑29'05	26°31'05		7610 Oct 31 13:48	0°♐	
retrograde	7609 Dec 25 22:13	27°♑44'07		desc. node	7610 Nov 03 08:33	4°♐38'35	
evening set	7610 Jan 01 08:01	25°♑09'40			7610 Nov 21 15:40	0°♑	
min. Earth dist.	7610 Jan 05 10:53	20°♑56'13	0.66346 AU	evening max el	7610 Nov 25 12:50	4°♑01'14	27°13'13
inferior conj	7610 Jan 07 05:01	18°♑49'47	-0°24'24	retrograde	7610 Dec 08 22:55	11°♑21'07	
minimum elong	7610 Jan 07 05:41	18°♑47'47	0°24'00	evening set	7610 Dec 15 19:01	8°♑43'59	
asc. node	7610 Jan 08 09:59	17°♑24'00		min. Earth dist.	7610 Dec 19 16:06	5°♑04'41	0.64954 AU
morning rise	7610 Jan 13 04:10	13°♑06'20		inferior conj	7610 Dec 21 22:01	2°♑36'26	-1°28'06
direct	7610 Jan 16 03:28	12°♑16'50		minimum elong	7610 Dec 22 00:39	2°♑29'10	1°26'53
morning max el	7610 Jan 22 16:59	15°♑49'19	18°27'52		7610 Dec 24 09:28	30°♌♐	
	7610 Feb 02 06:24	0°♒		asc. node	7610 Dec 26 07:02	28°♐20'32	
morning set	7610 Feb 11 21:05	15°♒09'57		morning rise	7610 Dec 28 07:39	27°♐06'06	
desc. node	7610 Feb 12 10:54	16°♒04'53		direct	7610 Dec 30 22:30	26°♐30'00	
	7610 Feb 21 06:05	0°♓			7611 Jan 06 11:27	0°♑	
				morning max el	7611 Jan 06 09:01	29°♐53'58	17°59'24
superior conj	7610 Feb 27 18:05	10°♓11'54	-1°35'55	morning set	7611 Jan 24 02:00	26°♑22'36	
minimum elong	7610 Feb 27 08:29	9°♓34'16	1°34'55		7611 Jan 26 06:30	0°♒	
max. Earth dist.	7610 Feb 28 05:10	10°♓55'17	1.45480 AU	desc. node	7611 Jan 30 07:52	6°♒40'04	
	7610 Mar 12 08:57	0°♔					
evening rise	7610 Mar 15 14:14	5°♔04'59		superior conj	7611 Feb 07 04:12	19°♒18'49	-0°54'13
greatest brilliancy	7610 Mar 25 03:21	20°♔07'56	-0.8m	minimum elong	7611 Feb 06 21:50	18°♒53'29	0°53'18
	7610 Mar 31 16:54	0°♕		max. Earth dist.	7611 Feb 11 00:50	25°♒25'08	1.45208 AU
asc. node	7610 Apr 06 09:01	7°♕12'08			7611 Feb 13 22:57	0°♓	
evening max el	7610 Apr 06 22:39	7°♕47'37	18°58'28	evening rise	7611 Feb 23 08:17	14°♓33'36	
retrograde	7610 Apr 13 17:53	11°♕35'50			7611 Mar 05 10:39	0°♔	
evening set	7610 Apr 17 03:00	10°♕29'38		greatest brilliancy	7611 Mar 09 10:03	5°♔56'21	-0.6m
inferior conj	7610 Apr 22 16:01	4°♕45'01	3°25'14	evening max el	7611 Mar 21 04:18	21°♔24'02	19°49'20
minimum elong	7610 Apr 22 15:48	4°♕45'44	3°25'11	asc. node	7611 Mar 24 06:05	24°♔04'27	
min. Earth dist.	7610 Apr 24 07:27	2°♕40'28	0.66010 AU	retrograde	7611 Mar 28 15:52	25°♔42'57	
	7610 Apr 26 14:24	30°♌♔		evening set	7611 Apr 01 09:06	24°♔22'13	
morning rise	7610 Apr 28 04:08	28°♔27'49		inferior conj	7611 Apr 06 18:10	18°♔23'05	3°16'39
direct	7610 May 04 14:01	25°♔40'46		minimum elong	7611 Apr 06 16:52	18°♔27'28	3°16'29
desc. node	7610 May 11 10:25	28°♔09'37		min. Earth dist.	7611 Apr 07 18:53	17°♔00'23	0.67222 AU
	7610 May 13 21:27	0°♕		morning rise	7611 Apr 12 00:21	12°♔06'09	
morning max el	7610 May 17 13:23	3°♕23'05	26°32'21	direct	7611 Apr 17 23:01	9°♔26'57	
	7610 Jun 06 16:55	0°♖		desc. node	7611 Apr 28 07:25	15°♔01'57	
morning set	7610 Jun 22 12:31	27°♖08'55		morning max el	7611 Apr 29 23:03	16°♔38'26	25°15'15
	7610 Jun 24 00:29	0°♗			7611 May 11 01:06	0°♕	
max. Earth dist.	7610 Jun 26 14:59	5°♗04'19	1.34597 AU		7611 May 30 15:44	0°♖	
				morning set	7611 Jun 05 01:30	9°♖26'49	
superior conj	7610 Jul 01 08:44	14°♗39'26	-0°19'55	max. Earth dist.	7611 Jun 08 17:10	16°♖08'27	1.36455 AU
minimum elong	7610 Jul 01 09:51	14°♗45'12	0°19'48				
asc. node	7610 Jul 03 08:12	18°♗45'56		superior conj	7611 Jun 14 22:04	28°♖05'28	-0°51'14

minimum elong	7611 Jun 15 01:08	28° $\Pi$ 20'37	0°50'47	superior conj	7612 May 27 22:32	10° $\Pi$ 51'54	-1°22'03
	7611 Jun 15 21:07	0° $\mathfrak{D}$		minimum elong	7612 May 28 03:26	11° $\Pi$ 14'59	1°21'27
asc. node	7611 Jun 20 05:13	8° $\mathfrak{D}$ 45'23		evening rise	7612 Jun 06 01:09	28° $\Pi$ 29'36	
evening rise	7611 Jun 23 03:13	14° $\mathfrak{D}$ 40'57		asc. node	7612 Jun 06 02:15	28° $\Pi$ 35'00	
	7611 Jul 01 02:59	0° $\Omega$			7612 Jun 06 19:41	0° $\mathfrak{D}$	
evening max el	7611 Jul 10 10:47	12° $\Omega$ 58'58	19°44'26	evening max el	7612 Jun 22 08:39	24° $\mathfrak{D}$ 56'16	18°51'16
retrograde	7611 Jul 20 10:38	17° $\Omega$ 54'17		retrograde	7612 Jun 30 18:22	29° $\mathfrak{D}$ 05'25	
evening set	7611 Jul 22 07:14	17° $\Omega$ 44'48		evening set	7612 Jul 02 18:29	28° $\mathfrak{D}$ 52'09	
desc. node	7611 Jul 25 06:37	16° $\Omega$ 53'35		inferior conj	7612 Jul 10 21:11	24° $\mathfrak{D}$ 33'41	0°04'54
inferior conj	7611 Jul 31 04:24	13° $\Omega$ 42'29	-1°47'49	minimum elong	7612 Jul 10 21:23	24° $\mathfrak{D}$ 33'20	0°04'43
minimum elong	7611 Jul 30 23:27	13° $\Omega$ 50'10	1°46'01	transit middle	7612 Jul 10 21:23	24° $\mathfrak{D}$ 33'20	0°04'43
min. Earth dist.	7611 Aug 02 08:39	12° $\Omega$ 21'34	0.55344 AU	transit begin	7612 Jul 10 17:49	24° $\mathfrak{D}$ 39'43	
morning rise	7611 Aug 08 13:31	9° $\Omega$ 17'24		transit end	7612 Jul 11 00:56	24° $\mathfrak{D}$ 26'56	
direct	7611 Aug 13 03:45	8° $\Omega$ 30'41		desc. node	7612 Jul 11 03:42	24° $\mathfrak{D}$ 21'57	
morning max el	7611 Aug 27 01:00	15° $\Omega$ 24'42	24°37'11	min. Earth dist.	7612 Jul 14 00:25	22° $\mathfrak{D}$ 19'26	0.56827 AU
	7611 Sep 07 15:58	0° $\mathfrak{M}$		morning rise	7612 Jul 18 20:52	19° $\mathfrak{D}$ 31'54	
asc. node	7611 Sep 16 04:41	14° $\mathfrak{M}$ 56'03		direct	7612 Jul 24 08:08	18° $\mathfrak{D}$ 19'49	
morning set	7611 Sep 21 14:15	25° $\mathfrak{M}$ 57'51		morning max el	7612 Aug 07 15:17	25° $\mathfrak{D}$ 45'47	26°11'52
	7611 Sep 23 11:20	0° $\mathfrak{L}$			7612 Aug 11 14:56	0° $\Omega$	
					7612 Aug 30 19:13	0° $\mathfrak{M}$	
superior conj	7611 Sep 28 11:41	10° $\mathfrak{L}$ 57'33	1°36'31	asc. node	7612 Sep 02 01:41	4° $\mathfrak{M}$ 31'17	
minimum elong	7611 Sep 28 10:16	10° $\mathfrak{L}$ 49'51	1°36'26	morning set	7612 Sep 05 01:06	10° $\mathfrak{M}$ 42'53	
max. Earth dist.	7611 Sep 30 07:21	14° $\mathfrak{L}$ 55'03	1.32649 AU				
evening rise	7611 Oct 05 18:29	26° $\mathfrak{L}$ 26'07		superior conj	7612 Sep 11 22:51	25° $\mathfrak{M}$ 48'47	1°25'55
	7611 Oct 07 12:56	0° $\mathfrak{M}$		minimum elong	7612 Sep 11 20:48	25° $\mathfrak{M}$ 37'26	1°25'40
desc. node	7611 Oct 21 05:36	24° $\mathfrak{M}$ 23'06		max. Earth dist.	7612 Sep 12 15:12	27° $\mathfrak{M}$ 19'11	1.31954 AU
	7611 Oct 24 22:32	0° $\mathfrak{J}$			7612 Sep 13 20:23	0° $\mathfrak{L}$	
evening max el	7611 Nov 07 23:57	17° $\mathfrak{J}$ 09'53	27°28'43	evening rise	7612 Sep 18 21:23	10° $\mathfrak{L}$ 51'25	
retrograde	7611 Nov 21 17:13	24° $\mathfrak{J}$ 27'41			7612 Sep 28 18:33	0° $\mathfrak{M}$	
evening set	7611 Nov 28 19:21	21° $\mathfrak{J}$ 56'32		desc. node	7612 Oct 07 02:41	13° $\mathfrak{M}$ 32'27	
min. Earth dist.	7611 Dec 02 12:13	18° $\mathfrak{J}$ 48'05	0.63240 AU	evening max el	7612 Oct 20 07:06	29° $\mathfrak{M}$ 41'59	27°12'21
inferior conj	7611 Dec 05 05:19	16° $\mathfrak{J}$ 06'54	-2°35'52		7612 Oct 20 14:48	0° $\mathfrak{J}$	
minimum elong	7611 Dec 05 10:09	15° $\mathfrak{J}$ 54'52	2°33'55	retrograde	7612 Nov 03 04:00	6° $\mathfrak{J}$ 53'50	
morning rise	7611 Dec 12 02:52	10° $\mathfrak{J}$ 52'37		evening set	7612 Nov 10 05:21	4° $\mathfrak{J}$ 39'27	
asc. node	7611 Dec 13 04:05	10° $\mathfrak{J}$ 34'19		min. Earth dist.	7612 Nov 13 21:51	1° $\mathfrak{J}$ 54'25	0.61271 AU
direct	7611 Dec 14 11:36	10° $\mathfrak{J}$ 26'02			7612 Nov 16 02:22	30° $\mathfrak{R}$ $\mathfrak{M}$	
morning max el	7611 Dec 21 02:20	13° $\mathfrak{J}$ 50'48	17°48'14	inferior conj	7612 Nov 16 23:42	29° $\mathfrak{M}$ 12'49	-3°43'47
	7612 Jan 01 06:16	0° $\mathfrak{Z}$		minimum elong	7612 Nov 17 06:23	28° $\mathfrak{M}$ 58'10	3°41'35
morning set	7612 Jan 06 08:33	8° $\mathfrak{Z}$ 49'13		morning rise	7612 Nov 24 09:37	24° $\mathfrak{M}$ 17'45	
desc. node	7612 Jan 17 04:51	27° $\mathfrak{Z}$ 22'06		direct	7612 Nov 26 15:19	23° $\mathfrak{M}$ 57'02	
				asc. node	7612 Nov 29 01:08	24° $\mathfrak{M}$ 21'58	
superior conj	7612 Jan 18 11:18	29° $\mathfrak{Z}$ 28'28	-0°09'12	morning max el	7612 Dec 03 17:39	27° $\mathfrak{M}$ 31'10	17°55'27
minimum elong	7612 Jan 18 10:21	29° $\mathfrak{Z}$ 24'30	0°08'58		7612 Dec 05 23:15	0° $\mathfrak{J}$	
behind sun begin	7612 Jan 18 02:27	28° $\mathfrak{Z}$ 51'49		morning set	7612 Dec 19 10:12	22° $\mathfrak{J}$ 10'11	
behind sun end	7612 Jan 18 18:15	29° $\mathfrak{Z}$ 57'08			7612 Dec 23 17:21	0° $\mathfrak{Z}$	
	7612 Jan 18 18:56	0° $\approx$					
max. Earth dist.	7612 Jan 24 18:16	9° $\approx$ 42'02	1.44230 AU	superior conj	7612 Dec 29 20:19	10° $\mathfrak{Z}$ 52'47	0°30'44
evening rise	7612 Feb 02 19:10	23° $\approx$ 52'13		minimum elong	7612 Dec 29 22:50	11° $\mathfrak{Z}$ 03'44	0°30'29
	7612 Feb 06 19:24	0° $\mathfrak{H}$		desc. node	7613 Jan 03 01:51	18° $\mathfrak{Z}$ 07'37	
	7612 Feb 27 18:55	0° $\mathfrak{Y}$		max. Earth dist.	7613 Jan 06 08:04	23° $\mathfrak{Z}$ 33'24	1.42660 AU
evening max el	7612 Mar 03 04:31	5° $\mathfrak{Y}$ 01'54	20°54'07		7613 Jan 10 07:18	0° $\approx$	
asc. node	7612 Mar 10 03:11	9° $\mathfrak{Y}$ 47'44		evening rise	7613 Jan 12 14:31	3° $\approx$ 39'30	
retrograde	7612 Mar 11 14:21	9° $\mathfrak{Y}$ 58'51			7613 Jan 30 04:51	0° $\mathfrak{H}$	
evening set	7612 Mar 15 16:55	8° $\mathfrak{Y}$ 23'08		evening max el	7613 Feb 13 23:39	18° $\mathfrak{H}$ 41'59	22°08'58
inferior conj	7612 Mar 21 00:29	2° $\mathfrak{Y}$ 11'53	2°56'51	retrograde	7613 Feb 23 11:30	24° $\mathfrak{H}$ 19'44	
minimum elong	7612 Mar 20 22:28	2° $\mathfrak{Y}$ 18'49	2°56'26	asc. node	7613 Feb 25 00:16	24° $\mathfrak{H}$ 07'41	
min. Earth dist.	7612 Mar 21 11:43	1° $\mathfrak{Y}$ 33'05	0.67994 AU	evening set	7613 Feb 28 00:47	22° $\mathfrak{H}$ 28'48	
	7612 Mar 22 15:04	30° $\mathfrak{R}$ $\mathfrak{H}$		inferior conj	7613 Mar 05 08:47	16° $\mathfrak{H}$ 08'12	2°27'24
morning rise	7612 Mar 26 03:47	25° $\mathfrak{H}$ 57'18		minimum elong	7613 Mar 05 06:30	16° $\mathfrak{H}$ 16'10	2°26'47
direct	7612 Mar 31 13:05	23° $\mathfrak{H}$ 34'07		min. Earth dist.	7613 Mar 05 07:36	16° $\mathfrak{H}$ 12'18	0.68338 AU
	7612 Apr 11 07:45	0° $\mathfrak{Y}$		morning rise	7613 Mar 10 12:02	9° $\mathfrak{H}$ 57'35	
morning max el	7612 Apr 11 07:59	0° $\mathfrak{Y}$ 00'35	23°47'12	direct	7613 Mar 15 07:15	7° $\mathfrak{H}$ 55'20	
desc. node	7612 Apr 14 04:24	3° $\mathfrak{Y}$ 04'33		morning max el	7613 Mar 24 19:02	13° $\mathfrak{H}$ 30'03	22°18'11
	7612 May 03 21:33	0° $\mathfrak{B}$		desc. node	7613 Apr 01 01:23	21° $\mathfrak{H}$ 57'54	
morning set	7612 May 16 17:13	20° $\mathfrak{B}$ 42'16			7613 Apr 07 00:24	0° $\mathfrak{Y}$	
max. Earth dist.	7612 May 20 13:04	27° $\mathfrak{B}$ 21'06	1.38623 AU		7613 Apr 26 19:59	0° $\mathfrak{B}$	
	7612 May 22 00:47	0° $\Pi$		morning set	7613 Apr 27 06:24	0° $\mathfrak{B}$ 42'15	

max. Earth dist.	7613 May 02 10:40	9°♄16'22	1.40857 AU	morning set	7614 Apr 06 16:48	9°♄29'18	
				max. Earth dist.	7614 Apr 14 14:55	22°♄06'52	1.42866 AU
					7614 Apr 19 09:40	0°♄	
superior conj	7613 May 10 05:45	22°♄48'33	-1°48'59				
minimum elong	7613 May 10 11:23	23°♄13'45	1°48'31				
	7613 May 14 04:58	0°♄		superior conj	7614 Apr 21 14:49	3°♄43'38	-2°07'09
evening rise	7613 May 20 12:40	11°♄45'46		minimum elong	7614 Apr 21 18:28	3°♄59'07	2°07'03
asc. node	7613 May 23 23:19	18°♄10'23		evening rise	7614 May 03 09:30	24°♄18'43	
	7613 May 30 19:41	0°♄			7614 May 06 14:05	0°♄	
evening max el	7613 Jun 05 15:20	7°♄30'34	18°18'37	asc. node	7614 May 10 20:22	7°♄25'20	
retrograde	7613 Jun 12 21:28	11°♄08'31		evening max el	7614 May 20 02:57	20°♄31'21	18°05'50
evening set	7613 Jun 15 04:45	10°♄47'24		retrograde	7614 May 26 17:24	23°♄54'22	
inferior conj	7613 Jun 22 11:45	6°♄08'18	1°34'04	evening set	7614 May 29 08:00	23°♄22'36	
minimum elong	7613 Jun 22 14:33	6°♄02'21	1°33'02	inferior conj	7614 Jun 04 22:12	18°♄23'11	2°34'28
min. Earth dist.	7613 Jun 25 21:30	3°♄17'35	0.58863 AU	minimum elong	7614 Jun 05 01:13	18°♄15'51	2°33'39
desc. node	7613 Jun 28 00:45	1°♄42'18		min. Earth dist.	7614 Jun 08 02:13	15°♄19'19	0.61098 AU
morning rise	7613 Jun 29 21:12	0°♄33'42		morning rise	7614 Jun 11 16:08	12°♄25'34	
	7613 Jul 01 00:04	30°♄		desc. node	7614 Jun 14 21:46	10°♄46'42	
direct	7613 Jul 06 02:16	28°♄50'09		direct	7614 Jun 18 07:56	10°♄11'32	
	7613 Jul 11 08:25	0°♄		morning max el	7614 Jul 02 14:17	18°♄10'22	27°52'53
morning max el	7613 Jul 20 11:23	6°♄36'37	27°20'17		7614 Jul 12 12:00	0°♄	
	7613 Aug 06 23:09	0°♄			7614 Jul 30 17:16	0°♄	
asc. node	7613 Aug 19 22:41	24°♄21'47		morning set	7614 Aug 04 13:20	9°♄38'06	
morning set	7613 Aug 20 09:25	25°♄18'03		asc. node	7614 Aug 06 19:41	14°♄22'16	
	7613 Aug 22 14:20	0°♄		max. Earth dist.	7614 Aug 10 10:56	22°♄12'45	1.31911 AU
superior conj	7613 Aug 27 10:40	10°♄38'37	1°10'15	superior conj	7614 Aug 11 21:21	25°♄21'36	0°49'57
minimum elong	7613 Aug 27 08:24	10°♄26'05	1°09'52	minimum elong	7614 Aug 11 19:22	25°♄10'42	0°49'31
max. Earth dist.	7613 Aug 27 01:41	9°♄48'48	1.31710 AU		7614 Aug 13 23:50	0°♄	
evening rise	7613 Sep 03 05:17	25°♄28'54		evening rise	7614 Aug 18 16:03	10°♄12'09	
	7613 Sep 05 08:58	0°♄			7614 Aug 28 17:24	0°♄	
	7613 Sep 22 14:44	0°♄		desc. node	7614 Sep 10 20:48	19°♄04'57	
desc. node	7613 Sep 23 23:45	1°♄52'45		evening max el	7614 Sep 13 23:46	22°♄20'20	25°02'25
evening max el	7613 Oct 02 07:28	11°♄26'11	26°22'04	retrograde	7614 Sep 27 20:43	29°♄20'25	
retrograde	7613 Oct 16 05:37	18°♄31'58		evening set	7614 Oct 03 11:54	28°♄08'31	
evening set	7613 Oct 22 20:22	16°♄45'03		min. Earth dist.	7614 Oct 08 11:09	25°♄26'18	0.57206 AU
min. Earth dist.	7613 Oct 26 20:49	14°♄10'30	0.59187 AU	inferior conj	7614 Oct 11 08:03	23°♄32'18	-5°24'37
inferior conj	7613 Oct 30 01:37	11°♄44'15	-4°44'21	minimum elong	7614 Oct 11 11:35	23°♄26'25	5°24'16
minimum elong	7613 Oct 30 08:28	11°♄31'10	4°42'49	morning rise	7614 Oct 19 13:33	19°♄22'31	
morning rise	7613 Nov 06 22:48	7°♄11'23		direct	7614 Oct 22 01:33	19°♄04'31	
direct	7613 Nov 09 05:23	6°♄53'23		morning max el	7614 Oct 31 04:17	23°♄24'11	19°10'54
asc. node	7613 Nov 15 22:09	9°♄39'37		asc. node	7614 Nov 02 19:10	26°♄14'11	
morning max el	7613 Nov 17 03:27	10°♄45'22	18°22'28		7614 Nov 05 14:49	0°♄	
	7613 Nov 29 19:28	0°♄		morning set	7614 Nov 17 01:18	20°♄30'50	
morning set	7613 Dec 03 01:11	6°♄08'01			7614 Nov 21 19:41	0°♄	
superior conj	7613 Dec 12 04:20	23°♄22'47	1°01'50	superior conj	7614 Nov 25 06:16	6°♄44'23	1°23'30
minimum elong	7613 Dec 12 07:52	23°♄38'57	1°01'29	minimum elong	7614 Nov 25 09:13	6°♄58'41	1°23'18
	7613 Dec 15 20:13	0°♄		max. Earth dist.	7614 Dec 01 23:02	19°♄17'07	1.38520 AU
max. Earth dist.	7613 Dec 19 17:17	6°♄46'31	1.40677 AU	evening rise	7614 Dec 05 17:28	25°♄57'39	
desc. node	7613 Dec 20 22:51	8°♄52'39		desc. node	7614 Dec 07 19:51	29°♄33'53	
evening rise	7613 Dec 24 04:53	14°♄18'56			7614 Dec 08 02:01	0°♄	
	7614 Jan 03 03:07	0°♄			7614 Dec 27 17:45	0°♄	
	7614 Jan 25 07:58	0°♄		evening max el	7615 Jan 10 04:08	16°♄10'04	24°47'11
evening max el	7614 Jan 27 14:54	2°♄24'31	23°28'44	retrograde	7615 Jan 21 20:23	22°♄58'18	
retrograde	7614 Feb 07 05:49	8°♄41'01		evening set	7615 Jan 27 10:24	20°♄38'45	
asc. node	7614 Feb 11 21:20	6°♄54'57		asc. node	7615 Jan 29 18:23	18°♄17'08	
evening set	7614 Feb 12 07:07	6°♄35'06		min. Earth dist.	7615 Jan 31 23:37	15°♄30'41	0.67817 AU
min. Earth dist.	7614 Feb 17 04:18	0°♄52'45	0.68273 AU	inferior conj	7615 Feb 01 23:49	14°♄10'36	1°03'11
inferior conj	7614 Feb 17 17:10	0°♄08'39	1°49'18	minimum elong	7615 Feb 01 22:23	14°♄15'22	1°02'42
minimum elong	7614 Feb 17 15:03	0°♄15'53	1°48'38	morning rise	7615 Feb 07 10:35	8°♄12'09	
	7614 Feb 17 19:41	30°♄		direct	7615 Feb 11 02:56	6°♄54'22	
morning rise	7614 Feb 22 22:57	24°♄03'20		morning max el	7615 Feb 18 12:25	11°♄02'47	19°46'22
direct	7614 Feb 27 04:15	22°♄23'47		greatest brilliancy	7615 Mar 03 08:30	27°♄46'23	-0.6m
morning max el	7614 Mar 07 11:48	27°♄10'10	20°56'08		7615 Mar 04 20:44	0°♄	
	7614 Mar 10 02:49	0°♄		desc. node	7615 Mar 05 19:19	1°♄23'57	
desc. node	7614 Mar 18 22:21	11°♄27'34		morning set	7615 Mar 16 13:55	17°♄46'15	
	7614 Mar 31 13:05	0°♄			7615 Mar 24 10:41	0°♄	



max. Earth dist.	7615 Mar 28 02:10	5°♈45'19	1.44400 AU		7616 Feb 06 02:25	0°♏	
				desc. node	7616 Feb 20 16:17	21°♏39'32	
superior conj	7615 Apr 01 22:56	13°♈33'05	-2°10'27	morning set	7616 Feb 23 22:13	26°♏43'36	
minimum elong	7615 Apr 01 20:48	13°♈24'28	2°10'27		7616 Feb 26 00:31	0°♏	
	7615 Apr 11 22:08	0°♏		max. Earth dist.	7616 Mar 09 18:35	19°♏56'29	1.45288 AU
evening rise	7615 Apr 15 11:06	5°♏59'08					
asc. node	7615 Apr 27 17:24	26°♏13'09		superior conj	7616 Mar 11 10:04	22°♏31'31	-1°54'07
	7615 Apr 30 09:29	0°♏		minimum elong	7616 Mar 11 01:38	21°♏58'22	1°53'30
evening max el	7615 May 03 16:10	3°♏50'05	18°12'04		7616 Mar 16 03:46	0°♏	
retrograde	7615 May 10 01:30	7°♏12'48		evening rise	7616 Mar 26 13:47	16°♏41'22	
evening set	7615 May 12 23:06	6°♏28'35			7616 Apr 03 19:28	0°♏	
inferior conj	7615 May 19 00:35	1°♏10'32	3°09'24	asc. node	7616 Apr 13 14:27	14°♏25'26	
minimum elong	7615 May 19 02:32	1°♏05'11	3°09'03	evening max el	7616 Apr 16 04:11	17°♏20'07	18°36'35
	7615 May 20 02:05	30°♏8		retrograde	7616 Apr 22 17:30	20°♏55'34	
min. Earth dist.	7615 May 21 16:08	28°♏16'30	0.63247 AU	evening set	7616 Apr 25 22:14	19°♏57'43	
morning rise	7615 May 25 04:34	24°♏59'56		inferior conj	7616 May 01 14:51	14°♏22'35	3°24'07
direct	7615 May 31 23:17	22°♏23'17		minimum elong	7616 May 01 15:23	14°♏20'58	3°24'02
desc. node	7615 Jun 01 18:48	22°♏25'23		min. Earth dist.	7616 May 03 15:16	11°♏56'21	0.65113 AU
	7615 Jun 14 11:49	0°♏		morning rise	7616 May 07 07:49	8°♏06'27	
morning max el	7615 Jun 14 22:13	0°♏25'51	27°47'21	direct	7616 May 13 22:35	5°♏19'17	
	7615 Jul 06 13:41	0°♏		desc. node	7616 May 18 15:49	6°♏30'19	
morning set	7615 Jul 19 10:36	23°♏35'55		morning max el	7616 May 27 08:21	13°♏13'24	27°07'38
	7615 Jul 22 13:47	0°♏			7616 Jun 09 20:27	0°♏	
max. Earth dist.	7615 Jul 24 14:50	4°♏18'00	1.32574 AU		7616 Jun 28 04:41	0°♏	
asc. node	7615 Jul 24 16:39	4°♏27'37		morning set	7616 Jul 01 22:26	7°♏03'37	
				max. Earth dist.	7616 Jul 06 09:41	15°♏55'41	1.33720 AU
superior conj	7615 Jul 27 05:01	9°♏51'29	0°25'29				
minimum elong	7615 Jul 27 03:50	9°♏45'05	0°25'09	superior conj	7616 Jul 10 07:41	24°♏02'34	-0°02'33
evening rise	7615 Aug 03 03:44	24°♏54'31		minimum elong	7616 Jul 10 07:49	24°♏03'19	0°02'38
	7615 Aug 05 13:51	0°♏		behind sun begin	7616 Jul 10 02:16	23°♏34'09	
	7615 Aug 23 22:21	0°♏		behind sun end	7616 Jul 10 13:21	24°♏32'30	
evening max el	7615 Aug 26 11:17	2°♏39'45	23°25'45	asc. node	7616 Jul 10 13:39	24°♏34'02	
desc. node	7615 Aug 28 17:52	4°♏42'02			7616 Jul 13 03:07	0°♏	
retrograde	7615 Sep 08 23:52	9°♏26'01		evening rise	7616 Jul 17 14:29	9°♏30'32	
evening set	7615 Sep 13 03:52	8°♏48'00			7616 Jul 28 07:15	0°♏	
min. Earth dist.	7615 Sep 19 20:55	5°♏39'39	0.55633 AU	evening max el	7616 Aug 07 02:24	12°♏58'31	21°48'37
inferior conj	7615 Sep 21 18:26	4°♏32'29	-5°26'22	desc. node	7616 Aug 14 14:55	18°♏12'04	
minimum elong	7615 Sep 21 15:01	4°♏37'32	5°26'06	retrograde	7616 Aug 19 15:32	19°♏12'01	
morning rise	7615 Sep 30 04:25	0°♏40'03		evening set	7616 Aug 22 09:28	18°♏55'04	
direct	7615 Oct 03 02:03	0°♏19'34		min. Earth dist.	7616 Aug 31 05:53	15°♏06'30	0.54790 AU
morning max el	7615 Oct 13 17:06	5°♏17'43	20°21'37	inferior conj	7616 Aug 31 14:13	14°♏54'51	-4°34'44
asc. node	7615 Oct 20 16:09	13°♏49'23		minimum elong	7616 Aug 31 05:12	15°♏07'28	4°32'41
	7615 Oct 29 18:20	0°♏		morning rise	7616 Sep 09 02:11	11°♏05'10	
morning set	7615 Nov 01 07:23	5°♏08'47		direct	7616 Sep 12 13:00	10°♏39'01	
				morning max el	7616 Sep 24 17:15	16°♏23'14	21°52'41
superior conj	7615 Nov 08 21:11	20°♏42'38	1°36'25		7616 Oct 05 05:45	0°♏	
minimum elong	7615 Nov 08 22:53	20°♏51'17	1°36'23	asc. node	7616 Oct 06 13:09	2°♏11'38	
	7615 Nov 13 13:47	0°♏		morning set	7616 Oct 15 17:08	19°♏55'43	
max. Earth dist.	7615 Nov 14 05:39	1°♏16'19	1.36445 AU		7616 Oct 20 11:16	0°♏	
evening rise	7615 Nov 18 02:14	8°♏30'01					
desc. node	7615 Nov 24 16:53	20°♏06'31		superior conj	7616 Oct 22 21:15	5°♏06'24	1°41'37
	7615 Nov 30 19:17	0°♏		minimum elong	7616 Oct 22 21:35	5°♏08'11	1°41'41
evening max el	7615 Dec 23 17:01	29°♏55'58	25°57'25	max. Earth dist.	7616 Oct 26 18:34	13°♏08'35	1.34656 AU
	7615 Dec 23 18:41	0°♏		evening rise	7616 Oct 31 03:28	21°♏46'38	
retrograde	7616 Jan 05 06:12	7°♏05'10			7616 Nov 04 13:20	0°♏	
evening set	7616 Jan 11 08:56	4°♏34'54		desc. node	7616 Nov 10 13:54	10°♏25'39	
min. Earth dist.	7616 Jan 15 15:21	0°♏01'21	0.66981 AU		7616 Nov 23 14:47	0°♏	
	7616 Jan 15 15:47	30°♏3		evening max el	7616 Dec 05 06:13	13°♏36'24	26°51'58
asc. node	7616 Jan 16 15:25	28°♏46'07		retrograde	7616 Dec 18 10:27	20°♏54'49	
inferior conj	7616 Jan 17 02:52	28°♏10'10	0°09'35	evening set	7616 Dec 25 00:48	18°♏18'36	
minimum elong	7616 Jan 17 02:37	28°♏10'58	0°09'34	min. Earth dist.	7616 Dec 29 01:10	14°♏19'33	0.65788 AU
transit middle	7616 Jan 17 02:37	28°♏10'58	0°09'34	inferior conj	7616 Dec 31 00:13	12°♏03'02	-0°50'48
transit begin	7616 Jan 17 00:20	28°♏18'08		minimum elong	7616 Dec 31 01:41	11°♏58'48	0°50'04
transit end	7616 Jan 17 04:54	28°♏03'48		asc. node	7617 Jan 02 12:29	9°♏316'05	
morning rise	7616 Jan 22 20:52	22°♏20'28		morning rise	7617 Jan 06 03:36	6°♏24'33	
direct	7616 Jan 26 01:48	21°♏21'45		direct	7617 Jan 08 23:00	5°♏41'14	
morning max el	7616 Feb 01 20:35	25°♏04'21	18°51'48	morning max el	7617 Jan 15 10:26	9°♏09'12	18°13'38

	7617 Jan 30 00:50	0°♊	direct	7617 Dec 23 16:03	19°♊48'04	
morning set	7617 Feb 03 10:10	7°♊05'42	morning max el	7617 Dec 30 03:22	23°♊11'13	17°52'30
desc. node	7617 Feb 06 13:15	12°♊08'37		7618 Jan 04 13:33	0°♊	
	7617 Feb 17 18:35	0°♊	morning set	7618 Jan 16 02:53	18°♊52'48	
				7618 Jan 22 17:48	0°♊	
superior conj	7617 Feb 18 14:46	1°♊19'19 -1°19'20	desc. node	7618 Jan 24 10:14	2°♊47'09	
minimum elong	7617 Feb 18 05:52	0°♊44'22 1°18'15				
max. Earth dist.	7617 Feb 20 13:53	4°♊24'11 1.45450 AU	superior conj	7618 Jan 29 08:28	10°♊49'12 -0°34'55	
evening rise	7617 Mar 06 17:48	26°♊30'29	minimum elong	7618 Jan 29 04:27	10°♊33'02 0°34'15	
	7617 Mar 08 23:33	0°♊	max. Earth dist.	7618 Feb 03 09:28	18°♊52'30 1.44873 AU	
greatest brilliancy	7617 Mar 18 10:29	14°♊37'35 -0.7m		7618 Feb 10 12:05	0°♊	
	7617 Mar 29 15:42	0°♊	evening rise	7618 Feb 14 07:02	5°♊50'39	
evening max el	7617 Mar 30 12:42	0°♊55'22 19°18'20		7618 Mar 02 09:19	0°♊	
asc. node	7617 Mar 31 11:31	1°♊50'38	evening max el	7618 Mar 13 16:12	14°♊32'52 20°15'25	
retrograde	7617 Apr 06 14:00	4°♊55'12	asc. node	7618 Mar 18 08:37	18°♊15'39	
evening set	7617 Apr 10 02:28	3°♊42'54	retrograde	7618 Mar 21 12:24	19°♊06'48	
	7617 Apr 13 21:11	30°♊♊	evening set	7618 Mar 25 09:33	17°♊39'32	
inferior conj	7617 Apr 15 13:30	27°♊52'09 3°23'06	inferior conj	7618 Mar 30 17:43	11°♊34'59 3°09'31	
minimum elong	7617 Apr 15 12:46	27°♊54'31 3°23'00	minimum elong	7618 Mar 30 16:03	11°♊40'37 3°09'14	
min. Earth dist.	7617 Apr 16 22:36	26°♊04'44 0.66581 AU	min. Earth dist.	7618 Mar 31 12:29	10°♊31'10 0.67607 AU	
morning rise	7617 Apr 20 22:43	21°♊34'56	morning rise	7618 Apr 04 22:20	5°♊19'07	
direct	7617 Apr 27 04:21	18°♊49'46	direct	7618 Apr 10 15:32	2°♊46'04	
desc. node	7617 May 05 12:50	22°♊30'14	morning max el	7618 Apr 22 03:29	9°♊38'57 24°38'36	
morning max el	7617 May 09 18:19	26°♊20'31 26°01'30	desc. node	7618 Apr 22 09:49	9°♊55'07	
	7617 May 13 03:24	0°♊		7618 May 08 05:20	0°♊	
	7617 Jun 03 10:28	0°♊		7618 May 27 02:12	0°♊	
morning set	7617 Jun 14 21:04	19°♊50'07	morning set	7618 May 28 01:42	1°♊42'54	
max. Earth dist.	7617 Jun 18 17:35	27°♊07'09 1.35343 AU	max. Earth dist.	7618 May 31 16:39	8°♊12'16 1.37360 AU	
	7617 Jun 20 05:08	0°♊				
			superior conj	7618 Jun 07 11:08	20°♊57'37 -1°04'31	
superior conj	7617 Jun 24 02:45	7°♊47'13 -0°33'05	minimum elong	7618 Jun 07 15:01	21°♊16'31 1°03'58	
minimum elong	7617 Jun 24 04:40	7°♊56'57 0°32'49		7618 Jun 12 01:10	0°♊	
asc. node	7617 Jun 27 10:39	14°♊36'58	asc. node	7618 Jun 14 07:42	4°♊32'45	
evening rise	7617 Jul 01 22:14	23°♊53'33	evening rise	7618 Jun 16 00:36	7°♊57'14	
	7617 Jul 04 22:30	0°♊		7618 Jun 28 09:19	0°♊	
evening max el	7617 Jul 20 04:28	23°♊47'05 20°24'14	evening max el	7618 Jul 02 19:35	5°♊19'15 19°19'08	
retrograde	7617 Jul 31 03:46	29°♊11'45	retrograde	7618 Jul 12 02:05	9°♊53'32	
desc. node	7617 Aug 01 12:00	29°♊07'12	evening set	7618 Jul 13 23:25	9°♊42'57	
evening set	7617 Aug 02 03:29	29°♊01'53	desc. node	7618 Jul 19 09:05	7°♊33'26	
inferior conj	7617 Aug 11 07:42	25°♊04'32 -2°55'23	inferior conj	7618 Jul 22 13:16	5°♊34'14 -0°58'03	
minimum elong	7617 Aug 10 23:49	25°♊16'00 2°52'42	minimum elong	7618 Jul 22 10:42	5°♊38'28 0°57'09	
min. Earth dist.	7617 Aug 12 16:03	24°♊17'30 0.54876 AU	min. Earth dist.	7618 Jul 25 05:09	3°♊49'36 0.55893 AU	
morning rise	7617 Aug 19 19:22	20°♊57'52	morning rise	7618 Jul 30 19:12	0°♊54'04	
direct	7617 Aug 23 22:48	20°♊20'56		7618 Aug 03 19:37	30°♊♊	
morning max el	7617 Sep 06 08:13	26°♊50'48 23°36'46	direct	7618 Aug 04 18:23	29°♊57'55	
	7617 Sep 09 09:41	0°♊		7618 Aug 05 17:08	0°♊	
asc. node	7617 Sep 23 10:09	21°♊09'21	morning max el	7618 Aug 18 21:01	7°♊06'06 25°19'50	
	7617 Sep 27 21:54	0°♊		7618 Sep 04 15:41	0°♊	
morning set	7617 Sep 30 04:41	4°♊46'15	asc. node	7618 Sep 10 07:08	10°♊33'12	
			morning set	7618 Sep 14 16:17	19°♊35'03	
				7618 Sep 19 11:17	0°♊	
superior conj	7617 Oct 07 03:28	19°♊46'50 1°40'06				
minimum elong	7617 Oct 07 02:37	19°♊42'11 1°40'07				
max. Earth dist.	7617 Oct 09 16:14	25°♊12'19 1.33260 AU	superior conj	7618 Sep 21 13:26	4°♊36'06 1°32'39	
	7617 Oct 11 23:04	0°♊	minimum elong	7618 Sep 21 11:42	4°♊26'35 1°32'31	
evening rise	7617 Oct 14 17:15	5°♊37'16	max. Earth dist.	7618 Sep 22 21:17	7°♊30'52 1.32302 AU	
desc. node	7617 Oct 28 10:57	0°♊25'10	evening rise	7618 Sep 28 16:10	19°♊52'14	
	7617 Oct 28 04:43	0°♊		7618 Oct 03 18:19	0°♊	
evening max el	7617 Nov 17 18:51	27°♊01'00 27°23'32	desc. node	7618 Oct 15 08:02	19°♊56'13	
	7617 Nov 21 05:25	0°♊		7618 Oct 22 10:09	0°♊	
retrograde	7617 Dec 01 08:22	4°♊19'49	evening max el	7618 Oct 31 04:35	9°♊55'24 27°25'51	
evening set	7617 Dec 08 07:39	1°♊44'23	retrograde	7618 Nov 13 23:19	17°♊10'22	
	7617 Dec 10 09:27	30°♊♊	evening set	7618 Nov 21 02:22	14°♊44'52	
min. Earth dist.	7617 Dec 12 02:49	28°♊18'39 0.64258 AU	min. Earth dist.	7618 Nov 24 18:23	11°♊47'51 0.62429 AU	
inferior conj	7617 Dec 14 13:30	25°♊43'58 -1°56'31	inferior conj	7618 Nov 27 15:43	9°♊04'51 -3°05'00	
minimum elong	7617 Dec 14 17:04	25°♊34'32 1°54'58	minimum elong	7618 Nov 27 21:27	8°♊51'20 3°02'51	
asc. node	7617 Dec 20 09:33	20°♊41'51	morning rise	7618 Dec 04 18:34	3°♊58'28	
morning rise	7617 Dec 21 04:02	20°♊19'48	direct	7618 Dec 07 01:44	3°♊34'42	

asc. node	7618 Dec 07 06:37	3° $\text{♊}$ 34'53		direct	7619 Nov 20 00:02	16° $\text{♍}$ 52'32	
morning max el	7618 Dec 13 20:15	7° $\text{♊}$ 02'01	17°49'03	asc. node	7619 Nov 24 03:36	18° $\text{♍}$ 02'09	
	7618 Dec 28 18:46	0° $\text{♊}$		morning max el	7619 Nov 27 09:45	20° $\text{♍}$ 32'58	18°04'26
morning set	7618 Dec 29 18:19	1° $\text{♊}$ 44'40			7619 Dec 04 11:35	0° $\text{♊}$	
				morning set	7619 Dec 13 02:12	15° $\text{♊}$ 22'38	
superior conj	7619 Jan 10 02:36	21° $\text{♊}$ 30'39	0°08'42		7619 Dec 21 00:22	0° $\text{♊}$	
minimum elong	7619 Jan 10 03:27	21° $\text{♊}$ 34'12	0°08'41				
behind sun begin	7619 Jan 09 19:53	21° $\text{♊}$ 02'16		superior conj	7619 Dec 22 22:01	3° $\text{♊}$ 24'39	0°45'05
behind sun end	7619 Jan 10 11:01	22° $\text{♊}$ 06'04		minimum elong	7619 Dec 23 01:13	3° $\text{♊}$ 38'53	0°44'44
desc. node	7619 Jan 11 07:12	23° $\text{♊}$ 30'51		desc. node	7619 Dec 29 04:12	14° $\text{♊}$ 16'29	
	7619 Jan 15 05:16	0° $\text{♊}$		max. Earth dist.	7619 Dec 30 13:22	16° $\text{♊}$ 35'57	1.41853 AU
max. Earth dist.	7619 Jan 17 01:58	3° $\text{♊}$ 01'36	1.43625 AU	evening rise	7620 Jan 04 22:16	25° $\text{♊}$ 23'44	
evening rise	7619 Jan 24 19:44	15° $\text{♊}$ 16'51			7620 Jan 07 19:52	0° $\text{♊}$	
	7619 Feb 03 12:29	0° $\text{♊}$			7620 Jan 28 09:17	0° $\text{♊}$	
evening max el	7619 Feb 24 14:04	28° $\text{♊}$ 10'43	21°24'58	evening max el	7620 Feb 07 07:08	11° $\text{♊}$ 50'32	22°42'38
	7619 Feb 26 12:05	0° $\text{♊}$		retrograde	7620 Feb 17 06:47	17° $\text{♊}$ 46'04	
retrograde	7619 Mar 05 10:34	3° $\text{♊}$ 25'06		asc. node	7620 Feb 20 02:48	17° $\text{♊}$ 05'21	
asc. node	7619 Mar 05 05:44	3° $\text{♊}$ 24'53		evening set	7620 Feb 22 00:59	15° $\text{♊}$ 48'40	
evening set	7619 Mar 09 17:36	1° $\text{♊}$ 42'40		inferior conj	7620 Feb 27 09:38	9° $\text{♊}$ 24'51	2°12'14
	7619 Mar 11 12:24	30° $\text{♊}$		minimum elong	7620 Feb 27 07:22	9° $\text{♊}$ 32'43	2°11'35
inferior conj	7619 Mar 15 01:06	25° $\text{♊}$ 26'51	2°45'28	min. Earth dist.	7620 Feb 27 03:25	9° $\text{♊}$ 46'28	0.68354 AU
minimum elong	7619 Mar 14 22:55	25° $\text{♊}$ 34'25	2°44'58	morning rise	7620 Mar 03 13:39	3° $\text{♊}$ 16'07	
min. Earth dist.	7619 Mar 15 06:51	25° $\text{♊}$ 06'52	0.68190 AU	direct	7620 Mar 08 02:44	1° $\text{♊}$ 23'37	
morning rise	7619 Mar 20 04:04	19° $\text{♊}$ 13'52		morning max el	7620 Mar 17 02:10	6° $\text{♊}$ 37'27	21°42'00
direct	7619 Mar 25 07:17	16° $\text{♊}$ 59'28		desc. node	7620 Mar 26 03:44	17° $\text{♊}$ 30'39	
morning max el	7619 Apr 04 13:04	23° $\text{♊}$ 04'11	23°09'02		7620 Apr 04 00:24	0° $\text{♊}$	
desc. node	7619 Apr 09 06:47	28° $\text{♊}$ 20'52		morning set	7620 Apr 18 07:52	21° $\text{♊}$ 53'54	
	7619 Apr 10 15:11	0° $\text{♊}$			7620 Apr 23 07:56	0° $\text{♊}$	
	7619 May 01 14:07	0° $\text{♊}$		max. Earth dist.	7620 Apr 24 12:13	1° $\text{♊}$ 56'48	1.41744 AU
morning set	7619 May 09 06:42	12° $\text{♊}$ 27'29					
max. Earth dist.	7619 May 13 12:42	19° $\text{♊}$ 40'56	1.39578 AU	superior conj	7620 May 02 03:05	14° $\text{♊}$ 54'43	-1°58'07
	7619 May 19 08:17	0° $\text{♊}$		minimum elong	7620 May 02 08:19	15° $\text{♊}$ 17'36	1°57'49
					7620 May 10 13:05	0° $\text{♊}$	
superior conj	7619 May 21 04:49	3° $\text{♊}$ 23'52	-1°34'12	evening rise	7620 May 13 00:23	4° $\text{♊}$ 31'58	
minimum elong	7619 May 21 10:15	3° $\text{♊}$ 48'56	1°33'36	asc. node	7620 May 18 01:49	13° $\text{♊}$ 44'19	
evening rise	7619 May 30 18:36	21° $\text{♊}$ 33'29			7620 May 28 22:54	0° $\text{♊}$	
asc. node	7619 Jun 01 04:46	24° $\text{♊}$ 17'06		evening max el	7620 May 29 06:50	0° $\text{♊}$ 19'53	18°10'55
	7619 Jun 04 05:32	0° $\text{♊}$		retrograde	7620 Jun 05 05:02	3° $\text{♊}$ 49'38	
evening max el	7619 Jun 15 21:37	17° $\text{♊}$ 33'21	18°34'54	evening set	7620 Jun 07 15:23	3° $\text{♊}$ 24'23	
retrograde	7619 Jun 23 18:25	21° $\text{♊}$ 27'45			7620 Jun 13 00:53	30° $\text{♊}$	
evening set	7619 Jun 25 21:14	21° $\text{♊}$ 11'41		inferior conj	7620 Jun 14 14:48	28° $\text{♊}$ 36'53	2°03'04
inferior conj	7619 Jul 03 15:23	16° $\text{♊}$ 44'27	0°46'10	minimum elong	7620 Jun 14 17:56	28° $\text{♊}$ 29'51	2°02'03
minimum elong	7619 Jul 03 17:02	16° $\text{♊}$ 41'15	0°45'27	min. Earth dist.	7620 Jun 17 23:27	25° $\text{♊}$ 37'14	0.59799 AU
desc. node	7619 Jul 06 06:08	14° $\text{♊}$ 43'37		morning rise	7620 Jun 21 17:34	22° $\text{♊}$ 50'59	
min. Earth dist.	7619 Jul 06 23:06	14° $\text{♊}$ 12'06	0.57639 AU	desc. node	7620 Jun 22 03:10	22° $\text{♊}$ 37'00	
morning rise	7619 Jul 11 09:21	11° $\text{♊}$ 27'23		direct	7620 Jun 28 04:13	20° $\text{♊}$ 53'34	
direct	7619 Jul 17 04:33	10° $\text{♊}$ 02'30		morning max el	7620 Jul 12 12:48	28° $\text{♊}$ 47'15	27°38'48
morning max el	7619 Jul 31 13:44	17° $\text{♊}$ 38'48	26°44'58		7620 Jul 13 17:28	0° $\text{♊}$	
	7619 Aug 10 20:01	0° $\text{♊}$			7620 Aug 03 16:26	0° $\text{♊}$	
asc. node	7619 Aug 28 04:08	0° $\text{♊}$ 16'02		morning set	7620 Aug 13 08:59	18° $\text{♊}$ 46'47	
	7619 Aug 28 01:01	0° $\text{♊}$		asc. node	7620 Aug 14 01:06	20° $\text{♊}$ 11'17	
morning set	7619 Aug 30 02:19	4° $\text{♊}$ 17'18			7620 Aug 18 14:18	0° $\text{♊}$	
				max. Earth dist.	7620 Aug 19 16:59	2° $\text{♊}$ 27'00	1.31737 AU
superior conj	7619 Sep 06 01:07	19° $\text{♊}$ 28'05	1°19'53				
minimum elong	7619 Sep 05 22:56	19° $\text{♊}$ 15'54	1°19'34	superior conj	7620 Aug 20 12:41	4° $\text{♊}$ 15'52	1°02'13
max. Earth dist.	7619 Sep 06 06:44	19° $\text{♊}$ 59'12	1.31794 AU	minimum elong	7620 Aug 20 10:28	4° $\text{♊}$ 03'41	1°01'47
	7619 Sep 10 20:08	0° $\text{♊}$		evening rise	7620 Aug 27 06:50	19° $\text{♊}$ 04'27	
evening rise	7619 Sep 12 21:30	4° $\text{♊}$ 23'53			7620 Sep 01 14:27	0° $\text{♊}$	
	7619 Sep 26 11:29	0° $\text{♊}$		desc. node	7620 Sep 18 02:11	26° $\text{♊}$ 41'24	
desc. node	7619 Oct 02 05:07	8° $\text{♊}$ 47'12			7620 Sep 20 20:53	0° $\text{♊}$	
evening max el	7619 Oct 13 08:54	22° $\text{♊}$ 07'34	26°54'52	evening max el	7620 Sep 24 05:45	3° $\text{♊}$ 29'46	25°51'11
retrograde	7619 Oct 27 06:34	29° $\text{♊}$ 17'26		retrograde	7620 Oct 08 04:20	10° $\text{♊}$ 33'53	
evening set	7619 Nov 03 04:56	27° $\text{♊}$ 13'05		evening set	7620 Oct 14 10:26	9° $\text{♊}$ 01'27	
min. Earth dist.	7619 Nov 06 23:13	24° $\text{♊}$ 34'42	0.60391 AU	min. Earth dist.	7620 Oct 18 18:23	6° $\text{♊}$ 25'42	0.58316 AU
inferior conj	7619 Nov 10 03:31	21° $\text{♊}$ 57'11	-4°11'00	inferior conj	7620 Oct 21 21:25	4° $\text{♊}$ 11'02	-5°04'56
minimum elong	7619 Nov 10 10:34	21° $\text{♊}$ 42'34	4°08'58	minimum elong	7620 Oct 22 03:22	4° $\text{♊}$ 00'18	5°03'53
morning rise	7619 Nov 17 18:33	17° $\text{♊}$ 11'39			7620 Oct 29 05:34	30° $\text{♊}$	

morning rise	7620 Oct 29 22:37	29°♄48'04		morning rise	7621 Oct 11 02:55	11°♄37'06	
direct	7620 Nov 01 06:42	29°♄30'32		direct	7621 Oct 13 18:38	11°♄18'15	
	7620 Nov 04 05:22	0°♄		morning max el	7621 Oct 23 12:03	15°♄53'18	19°38'11
morning max el	7620 Nov 09 16:11	3°♄33'27	18°40'18	asc. node	7621 Oct 27 21:35	20°♄55'57	
asc. node	7620 Nov 10 00:35	3°♄54'04			7621 Nov 02 16:40	0°♄	
morning set	7620 Nov 25 21:29	29°♄32'07		morning set	7621 Nov 10 00:28	14°♄02'16	
	7620 Nov 26 03:13	0°♄					
superior conj	7620 Dec 04 14:16	16°♄18'13	1°12'09	superior conj	7621 Nov 17 22:12	29°♄56'30	1°29'59
minimum elong	7620 Dec 04 17:41	16°♄34'16	1°11'50	minimum elong	7621 Nov 18 00:41	0°♄08'42	1°29'52
max. Earth dist.	7620 Dec 11 20:18	29°♄28'39	1.39768 AU		7621 Nov 17 22:55	0°♄	
	7620 Dec 12 03:28	0°♄		max. Earth dist.	7621 Nov 24 01:59	11°♄44'20	1.37621 AU
desc. node	7620 Dec 15 01:14	5°♄00'28		evening rise	7621 Nov 27 19:42	18°♄31'23	
evening rise	7620 Dec 15 22:07	6°♄28'45		desc. node	7621 Dec 01 22:14	25°♄38'35	
	7620 Dec 30 21:37	0°♄			7621 Dec 04 12:56	0°♄	
evening max el	7621 Jan 19 21:20	25°♄34'39	24°02'45	evening max el	7621 Dec 25 03:39	0°♄	
	7621 Jan 25 03:26	0°♄		retrograde	7622 Jan 02 10:28	9°♄21'33	25°18'35
retrograde	7621 Jan 30 23:40	2°♄06'02		evening set	7622 Jan 14 12:08	16°♄19'24	
evening set	7621 Feb 05 06:11	29°♄54'20		asc. node	7622 Jan 20 07:37	13°♄55'05	
	7621 Feb 05 03:29	30°♄		min. Earth dist.	7622 Jan 23 20:52	10°♄08'16	
asc. node	7621 Feb 05 23:49	29°♄14'20		inferior conj	7622 Jan 24 17:57	9°♄01'38	0.67509 AU
min. Earth dist.	7621 Feb 09 23:54	24°♄26'15	0.68122 AU	minimum elong	7622 Jan 25 22:52	7°♄27'59	0°41'19
inferior conj	7621 Feb 10 17:31	23°♄26'34	1°30'41	morning rise	7622 Jan 25 21:52	7°♄31'14	0°41'01
minimum elong	7621 Feb 10 15:38	23°♄32'58	1°30'04	direct	7622 Jan 31 12:26	1°♄32'54	
morning rise	7621 Feb 16 01:06	17°♄23'42		morning max el	7622 Feb 03 23:49	0°♄23'27	
direct	7621 Feb 20 00:45	15°♄53'30		greatest brilliancy	7622 Feb 11 01:56	4°♄19'03	19°21'11
morning max el	7621 Feb 27 22:03	20°♄22'32	20°24'40	desc. node	7622 Feb 24 03:04	21°♄36'17	-0.7m
	7621 Mar 07 21:19	0°♄			7622 Feb 27 21:39	27°♄18'02	
desc. node	7621 Mar 13 00:42	7°♄12'47		morning set	7622 Mar 01 16:08	0°♄	
morning set	7621 Mar 28 09:57	0°♄19'53		max. Earth dist.	7622 Mar 07 08:50	8°♄45'30	
	7621 Mar 28 04:49	0°♄			7622 Mar 20 09:21	29°♄03'44	1.44870 AU
max. Earth dist.	7621 Apr 06 19:12	15°♄07'52	1.43585 AU		7622 Mar 20 23:36	0°♄	
superior conj	7621 Apr 13 01:41	25°♄22'02	-2°10'44	superior conj	7622 Mar 23 23:45	4°♄46'10	-2°06'03
minimum elong	7621 Apr 13 03:18	25°♄28'45	2°10'45	minimum elong	7622 Mar 23 18:35	4°♄25'39	2°05'50
	7621 Apr 15 20:15	0°♄		evening rise	7622 Apr 07 05:39	27°♄58'42	
evening rise	7621 Apr 25 13:34	16°♄43'16			7622 Apr 08 10:50	0°♄	
	7621 May 03 05:53	0°♄		asc. node	7622 Apr 21 19:55	21°♄22'10	
asc. node	7621 May 04 22:52	2°♄48'39		evening max el	7622 Apr 26 08:37	26°♄53'33	18°20'19
evening max el	7621 May 12 19:35	13°♄29'35	18°06'17		7622 Apr 30 20:23	0°♄	
retrograde	7621 May 19 06:32	16°♄50'25		retrograde	7622 May 02 18:26	0°♄19'55	
evening set	7621 May 22 00:13	16°♄13'28			7622 May 04 16:07	30°♄	
inferior conj	7621 May 28 08:31	11°♄06'08	2°52'02	evening set	7622 May 05 19:09	29°♄29'49	
minimum elong	7621 May 28 11:10	10°♄59'20	2°51'26	inferior conj	7622 May 11 16:23	24°♄04'08	3°17'49
min. Earth dist.	7621 May 31 07:52	8°♄03'51	0.62037 AU	minimum elong	7622 May 11 17:44	24°♄00'16	3°17'36
morning rise	7621 Jun 03 20:14	5°♄02'13		min. Earth dist.	7622 May 14 01:32	21°♄20'29	0.64088 AU
desc. node	7621 Jun 09 00:11	2°♄44'53		morning rise	7622 May 17 15:18	17°♄50'42	
direct	7621 Jun 10 14:27	2°♄37'02		direct	7622 May 24 09:06	15°♄08'18	
morning max el	7621 Jun 24 17:52	10°♄38'21	27°55'02	desc. node	7622 May 26 21:11	15°♄28'13	
	7621 Jul 09 21:10	0°♄		morning max el	7622 Jun 07 02:59	23°♄07'57	27°34'19
	7621 Jul 26 23:08	0°♄			7622 Jun 13 05:07	0°♄	
morning set	7621 Jul 28 10:20	2°♄57'47		morning set	7622 Jul 03 04:21	0°♄	
asc. node	7621 Jul 31 22:06	10°♄14'14		max. Earth dist.	7622 Jul 12 03:58	16°♄43'20	
max. Earth dist.	7621 Aug 03 00:17	14°♄43'23	1.32137 AU	asc. node	7622 Jul 17 00:52	26°♄37'58	1.33003 AU
					7622 Jul 18 19:08	0°♄20'26	
superior conj	7621 Aug 04 22:19	18°♄53'54	0°40'05		7622 Jul 18 15:17	0°♄	
minimum elong	7621 Aug 04 20:36	18°♄44'34	0°39'40	superior conj	7622 Jul 20 04:07	3°♄16'15	0°14'00
	7621 Aug 09 23:57	0°♄		minimum elong	7622 Jul 20 03:26	3°♄12'35	0°13'46
evening rise	7621 Aug 11 18:13	3°♄47'56		behind sun begin	7622 Jul 20 00:40	2°♄57'43	
	7621 Aug 25 16:42	0°♄		behind sun end	7622 Jul 20 06:13	3°♄27'27	
desc. node	7621 Sep 04 23:15	13°♄16'47		evening rise	7622 Jul 27 05:45	18°♄28'19	
evening max el	7621 Sep 05 19:30	14°♄06'41	24°22'27		7622 Aug 01 21:17	0°♄	
retrograde	7621 Sep 19 14:11	21°♄01'44		evening max el	7622 Aug 18 07:28	24°♄21'30	22°43'36
evening set	7621 Sep 24 15:16	20°♄05'24		desc. node	7622 Aug 22 20:18	28°♄04'16	
min. Earth dist.	7621 Sep 30 06:27	17°♄13'57	0.56474 AU		7622 Aug 26 13:18	0°♄	
inferior conj	7621 Oct 02 19:08	15°♄38'47	-5°31'10	retrograde	7622 Aug 31 11:41	0°♄56'07	
minimum elong	7621 Oct 02 20:00	15°♄37'26	5°31'08	evening set	7622 Sep 04 00:25	0°♄28'47	

	7622 Sep 05 14:30	30° $\mathbb{R}$ $\mathbb{M}$		behind sun end	7623 Jul 04 06:35	17° $\mathbb{G}$ 30'35	
min. Earth dist.	7622 Sep 11 15:10	27° $\mathbb{M}$ 05'19	0.55171 AU	asc. node	7623 Jul 05 16:09	20° $\mathbb{G}$ 25'39	
inferior conj	7622 Sep 12 22:15	26° $\mathbb{M}$ 20'59	-5°11'19		7623 Jul 10 05:15	0° $\mathbb{Q}$	
minimum elong	7622 Sep 12 15:52	26° $\mathbb{M}$ 30'07	5°10'25	evening rise	7623 Jul 11 15:30	2° $\mathbb{Q}$ 59'26	
morning rise	7622 Sep 21 09:20	22° $\mathbb{M}$ 32'19			7623 Jul 26 21:38	0° $\mathbb{M}$	
direct	7622 Sep 24 12:28	22° $\mathbb{M}$ 09'45		evening max el	7623 Jul 31 02:25	4° $\mathbb{M}$ 49'01	21°10'38
morning max el	7622 Oct 05 19:19	27° $\mathbb{M}$ 26'19	20°58'09	desc. node	7623 Aug 09 17:23	10° $\mathbb{M}$ 30'45	
	7622 Oct 08 06:56	0° $\mathbb{L}$		retrograde	7623 Aug 12 00:56	10° $\mathbb{M}$ 43'50	
asc. node	7622 Oct 14 18:35	8° $\mathbb{L}$ 53'07		evening set	7623 Aug 14 08:43	10° $\mathbb{M}$ 31'13	
morning set	7622 Oct 25 08:27	28° $\mathbb{L}$ 45'48		inferior conj	7623 Aug 23 15:12	6° $\mathbb{M}$ 33'39	-3°57'08
	7622 Oct 25 22:46	0° $\mathbb{M}$		minimum elong	7623 Aug 23 05:48	6° $\mathbb{M}$ 46'52	3°54'27
				min. Earth dist.	7623 Aug 24 00:18	6° $\mathbb{M}$ 20'50	0.54697 AU
superior conj	7622 Nov 01 17:30	14° $\mathbb{M}$ 07'37	1°39'30	morning rise	7623 Sep 01 03:29	2° $\mathbb{M}$ 39'29	
minimum elong	7622 Nov 01 18:37	14° $\mathbb{M}$ 13'24	1°39'32	direct	7623 Sep 04 20:39	2° $\mathbb{M}$ 09'49	
max. Earth dist.	7622 Nov 06 11:17	23° $\mathbb{M}$ 40'33	1.35644 AU	morning max el	7623 Sep 17 15:01	8° $\mathbb{M}$ 13'52	22°36'12
	7622 Nov 09 18:03	0° $\mathbb{X}$		asc. node	7623 Oct 01 15:37	27° $\mathbb{M}$ 31'39	
evening rise	7622 Nov 10 12:02	1° $\mathbb{X}$ 24'26			7623 Oct 03 00:08	0° $\mathbb{L}$	
desc. node	7622 Nov 18 19:17	16° $\mathbb{X}$ 06'44		morning set	7623 Oct 09 19:13	13° $\mathbb{L}$ 35'13	
	7622 Nov 27 14:26	0° $\mathbb{Z}$					
evening max el	7622 Dec 15 23:35	23° $\mathbb{Z}$ 06'49	26°22'51	superior conj	7623 Oct 16 20:33	28° $\mathbb{L}$ 39'57	1°41'45
	7622 Dec 26 07:52	0° $\mathbb{A}$		minimum elong	7623 Oct 16 20:21	28° $\mathbb{L}$ 38'52	1°41'48
retrograde	7622 Dec 28 19:33	0° $\mathbb{A}$ 20'37			7623 Oct 17 11:38	0° $\mathbb{M}$	
	7622 Dec 31 04:28	30° $\mathbb{R}$ $\mathbb{Z}$		max. Earth dist.	7623 Oct 20 03:46	5° $\mathbb{M}$ 36'05	1.34004 AU
evening set	7623 Jan 04 03:36	27° $\mathbb{Z}$ 46'58		evening rise	7623 Oct 24 19:03	14° $\mathbb{M}$ 56'46	
min. Earth dist.	7623 Jan 08 07:20	23° $\mathbb{Z}$ 28'24	0.66527 AU		7623 Nov 01 22:39	0° $\mathbb{X}$	
inferior conj	7623 Jan 09 23:47	21° $\mathbb{Z}$ 25'39	-0°15'14	desc. node	7623 Nov 05 16:21	6° $\mathbb{X}$ 18'38	
minimum elong	7623 Jan 10 00:12	21° $\mathbb{Z}$ 24'24	0°14'57		7623 Nov 22 07:44	0° $\mathbb{Z}$	
transit middle	7623 Jan 10 00:12	21° $\mathbb{Z}$ 24'24	0°14'57	evening max el	7623 Nov 28 12:29	6° $\mathbb{Z}$ 41'21	27°08'26
transit begin	7623 Jan 09 23:08	21° $\mathbb{Z}$ 27'38		retrograde	7623 Dec 11 21:17	14° $\mathbb{Z}$ 01'24	
transit end	7623 Jan 10 01:16	21° $\mathbb{Z}$ 21'10		evening set	7623 Dec 18 16:00	11° $\mathbb{Z}$ 24'11	
asc. node	7623 Jan 10 17:54	20° $\mathbb{Z}$ 31'01		min. Earth dist.	7623 Dec 22 13:52	7° $\mathbb{Z}$ 39'50	0.65183 AU
morning rise	7623 Jan 15 21:33	15° $\mathbb{Z}$ 40'36		inferior conj	7623 Dec 24 18:02	5° $\mathbb{Z}$ 14'13	-1°18'05
direct	7623 Jan 18 22:16	14° $\mathbb{Z}$ 48'51		minimum elong	7623 Dec 24 20:21	5° $\mathbb{Z}$ 07'45	1°17'01
morning max el	7623 Jan 25 12:54	18° $\mathbb{Z}$ 23'30	18°33'31	asc. node	7623 Dec 28 14:58	1° $\mathbb{Z}$ 19'06	
	7623 Feb 03 10:49	0° $\mathbb{A}$			7623 Dec 30 11:52	30° $\mathbb{R}$ $\mathbb{X}$	
desc. node	7623 Feb 14 18:39	17° $\mathbb{A}$ 40'14		morning rise	7623 Dec 31 02:01	29° $\mathbb{X}$ 41'44	
morning set	7623 Feb 15 03:57	18° $\mathbb{A}$ 17'03		direct	7624 Jan 02 17:55	29° $\mathbb{X}$ 03'57	
	7623 Feb 22 14:13	0° $\mathbb{H}$			7624 Jan 06 00:37	0° $\mathbb{Z}$	
				morning max el	7624 Jan 09 04:31	2° $\mathbb{Z}$ 28'41	18°02'30
superior conj	7623 Mar 03 05:45	13° $\mathbb{H}$ 33'22	-1°41'13	morning set	7624 Jan 27 04:36	29° $\mathbb{Z}$ 16'59	
minimum elong	7623 Mar 02 20:12	12° $\mathbb{H}$ 56'00	1°40'19		7624 Jan 27 15:03	0° $\mathbb{A}$	
max. Earth dist.	7623 Mar 03 03:52	13° $\mathbb{H}$ 25'59	1.45455 AU	desc. node	7624 Feb 01 15:38	8° $\mathbb{A}$ 13'59	
	7623 Mar 13 16:53	0° $\mathbb{Y}$					
evening rise	7623 Mar 18 22:21	8° $\mathbb{Y}$ 17'12		superior conj	7624 Feb 10 13:55	22° $\mathbb{A}$ 34'03	-1°00'59
greatest brilliancy	7623 Mar 27 16:06	22° $\mathbb{Y}$ 09'23	-0.8m	minimum elong	7624 Feb 10 06:46	22° $\mathbb{A}$ 05'45	1°00'01
	7623 Apr 01 18:38	0° $\mathbb{B}$		max. Earth dist.	7624 Feb 13 23:18	27° $\mathbb{A}$ 54'59	1.45292 AU
asc. node	7623 Apr 08 16:59	9° $\mathbb{B}$ 15'46			7624 Feb 15 07:10	0° $\mathbb{H}$	
evening max el	7623 Apr 09 19:20	10° $\mathbb{B}$ 25'56	18°52'15	evening rise	7624 Feb 26 18:39	17° $\mathbb{H}$ 50'14	
retrograde	7623 Apr 16 12:51	14° $\mathbb{B}$ 10'38			7624 Mar 05 16:29	0° $\mathbb{Y}$	
evening set	7623 Apr 19 20:46	13° $\mathbb{B}$ 06'39		greatest brilliancy	7624 Mar 11 07:41	8° $\mathbb{Y}$ 30'13	-0.7m
inferior conj	7623 Apr 25 10:37	7° $\mathbb{B}$ 24'20	3°25'24	evening max el	7624 Mar 23 01:46	24° $\mathbb{Y}$ 02'20	19°40'51
minimum elong	7623 Apr 25 10:35	7° $\mathbb{B}$ 24'27	3°25'20	asc. node	7624 Mar 25 14:03	26° $\mathbb{Y}$ 17'21	
min. Earth dist.	7623 Apr 27 04:20	5° $\mathbb{B}$ 13'54	0.65790 AU	retrograde	7624 Mar 30 10:33	28° $\mathbb{Y}$ 16'09	
morning rise	7623 Apr 30 23:52	1° $\mathbb{B}$ 07'12		evening set	7624 Apr 03 02:28	26° $\mathbb{Y}$ 57'41	
	7623 May 02 10:26	30° $\mathbb{R}$ $\mathbb{Y}$		inferior conj	7624 Apr 08 11:59	21° $\mathbb{Y}$ 00'43	3°18'44
direct	7623 May 07 11:07	28° $\mathbb{Y}$ 19'48		minimum elong	7624 Apr 08 10:49	21° $\mathbb{Y}$ 04'36	3°18'34
	7623 May 13 00:41	0° $\mathbb{B}$		min. Earth dist.	7624 Apr 09 14:52	19° $\mathbb{Y}$ 31'23	0.67068 AU
desc. node	7623 May 13 18:12	0° $\mathbb{B}$ 25'50		morning rise	7624 Apr 13 18:50	14° $\mathbb{Y}$ 43'32	
morning max el	7623 May 20 13:31	6° $\mathbb{B}$ 05'54	26°42'14	direct	7624 Apr 19 19:22	12° $\mathbb{Y}$ 02'26	
	7623 Jun 07 22:12	0° $\mathbb{I}$		desc. node	7624 Apr 29 15:13	17° $\mathbb{Y}$ 05'28	
morning set	7623 Jun 25 10:42	29° $\mathbb{I}$ 54'41		morning max el	7624 May 01 23:17	19° $\mathbb{Y}$ 19'39	25°27'39
	7623 Jun 25 11:49	0° $\mathbb{G}$			7624 May 11 00:54	0° $\mathbb{B}$	
max. Earth dist.	7623 Jun 29 15:23	8° $\mathbb{G}$ 04'19	1.34352 AU		7624 May 31 00:27	0° $\mathbb{I}$	
				morning set	7624 Jun 07 02:23	12° $\mathbb{I}$ 20'47	
superior conj	7623 Jul 04 03:52	17° $\mathbb{G}$ 16'30	-0°15'17	max. Earth dist.	7624 Jun 10 18:53	19° $\mathbb{I}$ 09'29	1.36155 AU
minimum elong	7623 Jul 04 04:43	17° $\mathbb{G}$ 20'53	0°15'13		7624 Jun 16 09:13	0° $\mathbb{G}$	
behind sun begin	7623 Jul 04 02:51	17° $\mathbb{G}$ 11'12					

superior conj	7624 Jun 16 18:50	0°☿47'52	-0°46'28	superior conj	7625 May 30 21:28	13°♄40'50	-1°17'32
minimum elong	7624 Jun 16 21:36	1°☿01'37	0°46'02	minimum elong	7625 May 31 02:07	14°♄02'58	1°16'56
asc. node	7624 Jun 21 13:12	10°☿26'19		asc. node	7625 Jun 08 10:14	0°☿17'44	
evening rise	7624 Jun 24 21:19	17°☿15'19			7625 Jun 08 06:37	0°☿	
	7624 Jul 01 09:52	0°♌		evening rise	7625 Jun 08 20:27	1°☿08'01	
evening max el	7624 Jul 12 10:07	15°♌55'52	19°54'05	evening max el	7625 Jun 25 06:21	27°☿47'01	18°57'50
retrograde	7624 Jul 22 16:03	20°♌58'35			7625 Jun 27 21:55	0°♌	
evening set	7624 Jul 24 12:57	20°♌49'14		retrograde	7625 Jul 03 21:02	2°♌02'04	
desc. node	7624 Jul 26 14:27	20°♌18'40		evening set	7625 Jul 05 20:20	1°♌49'36	
inferior conj	7624 Aug 02 12:20	16°♌48'43	-2°05'44		7625 Jul 10 08:24	30°☿☿	
minimum elong	7624 Aug 02 06:33	16°♌57'32	2°03'39	desc. node	7625 Jul 13 11:30	27°☿59'10	
min. Earth dist.	7624 Aug 04 11:55	15°♌36'21	0.55195 AU	inferior conj	7625 Jul 14 02:01	27°☿33'50	-0°10'58
morning rise	7624 Aug 10 22:16	12°♌28'42		minimum elong	7625 Jul 14 01:34	27°☿34'38	0°10'54
direct	7624 Aug 15 09:39	11°♌44'44		transit middle	7625 Jul 14 01:34	27°☿34'38	0°10'54
morning max el	7624 Aug 29 04:17	18°♌33'02	24°21'45	transit begin	7625 Jul 13 22:48	27°☿39'28	
	7624 Sep 07 16:26	0°♍		transit end	7625 Jul 14 04:19	27°☿29'47	
asc. node	7624 Sep 17 12:38	16°♍41'23		min. Earth dist.	7625 Jul 17 02:52	25°☿26'52	0.56569 AU
morning set	7624 Sep 23 06:58	28°♍25'18		morning rise	7625 Jul 22 03:31	22°☿37'42	
	7624 Sep 24 00:42	0°♎		direct	7625 Jul 27 11:48	21°☿29'58	
				morning max el	7625 Aug 10 17:55	28°☿51'28	25°59'08
superior conj	7624 Sep 30 04:38	13°♎25'00	1°37'38		7625 Aug 11 21:35	0°♎	
minimum elong	7624 Sep 30 03:22	13°♎18'03	1°37'36		7625 Sep 01 05:25	0°♍	
max. Earth dist.	7624 Oct 02 04:31	17°♎44'32	1.32792 AU	asc. node	7625 Sep 04 09:38	6°♍13'55	
evening rise	7624 Oct 07 13:04	28°♎58'41		morning set	7625 Sep 07 18:03	13°♍11'23	
	7624 Oct 08 01:11	0°♏					
desc. node	7624 Oct 22 13:24	26°♏07'04		superior conj	7625 Sep 14 15:32	28°♍15'51	1°27'52
	7624 Oct 25 01:40	0°♐		minimum elong	7625 Sep 14 13:33	28°♍04'54	1°27'39
evening max el	7624 Nov 10 00:05	19°♐54'30	27°28'24		7625 Sep 15 10:24	0°♎	
retrograde	7624 Nov 23 16:39	27°♐12'47		max. Earth dist.	7625 Sep 15 11:47	0°♎07'40	1.32029 AU
evening set	7624 Nov 30 18:07	24°♐40'19		evening rise	7625 Sep 21 15:01	13°♎21'38	
min. Earth dist.	7624 Dec 04 11:31	21°♐27'28	0.63510 AU		7625 Sep 30 03:20	0°♏	
inferior conj	7624 Dec 07 02:59	18°♐47'37	-2°25'28	desc. node	7625 Oct 09 10:29	15°♏22'37	
minimum elong	7624 Dec 07 07:30	18°♐36'13	2°23'37		7625 Oct 20 19:01	0°♐	
morning rise	7624 Dec 13 22:41	13°♐30'35		evening max el	7625 Oct 23 08:06	2°♐33'18	27°17'02
asc. node	7624 Dec 14 12:01	13°♐19'18		retrograde	7625 Nov 06 04:27	9°♐45'43	
direct	7624 Dec 16 08:10	13°♐02'48		evening set	7625 Nov 13 06:32	7°♐28'13	
morning max el	7624 Dec 22 21:49	16°♐27'03	17°48'44	min. Earth dist.	7625 Nov 16 22:45	4°♐40'24	0.61574 AU
	7625 Jan 01 13:25	0°♑		inferior conj	7625 Nov 19 23:32	1°♐58'05	-3°33'47
morning set	7625 Jan 08 07:48	11°♑34'10		minimum elong	7625 Nov 20 06:00	1°♐43'36	3°31'34
desc. node	7625 Jan 18 12:36	28°♑55'11			7625 Nov 22 06:14	30°♑♏	
	7625 Jan 19 04:14	0°♒		morning rise	7625 Nov 27 07:37	26°♏59'52	
				direct	7625 Nov 29 13:36	26°♏38'27	
superior conj	7625 Jan 20 17:20	2°♒32'54	-0°15'51	asc. node	7625 Dec 01 09:03	26°♏52'49	
minimum elong	7625 Jan 20 15:37	2°♒25'53	0°15'29		7625 Dec 06 09:17	0°♐	
behind sun begin	7625 Jan 20 13:00	2°♒15'08		morning max el	7625 Dec 06 13:37	0°♐10'31	17°53'11
behind sun end	7625 Jan 20 18:14	2°♒36'38		morning set	7625 Dec 22 07:02	24°♐48'41	
max. Earth dist.	7625 Jan 26 17:20	12°♒15'20	1.44418 AU		7625 Dec 25 03:45	0°♑	
evening rise	7625 Feb 05 05:38	27°♒08'01					
	7625 Feb 07 02:32	0°♒		superior conj	7626 Jan 01 22:35	13°♑46'41	0°25'12
	7625 Feb 27 16:23	0°♓		minimum elong	7626 Jan 02 00:44	13°♑56'00	0°24'59
evening max el	7625 Mar 06 02:52	7°♓40'13	20°43'46	desc. node	7626 Jan 05 09:36	19°♑40'34	
asc. node	7625 Mar 12 11:08	12°♓12'03		max. Earth dist.	7626 Jan 09 08:05	26°♑12'53	1.42928 AU
retrograde	7625 Mar 14 09:01	12°♓30'55			7626 Jan 11 15:59	0°♒	
evening set	7625 Mar 18 10:09	10°♓57'27		evening rise	7626 Jan 15 22:57	6°♒49'37	
inferior conj	7625 Mar 23 17:48	4°♓47'57	3°00'30		7626 Jan 31 08:51	0°♒	
minimum elong	7625 Mar 23 15:52	4°♓54'36	3°00'07	evening max el	7626 Feb 16 22:43	21°♒20'06	21°57'18
min. Earth dist.	7625 Mar 24 06:58	4°♓02'36	0.67909 AU	retrograde	7626 Feb 26 06:25	26°♒51'34	
	7625 Mar 27 11:01	30°♒♒		asc. node	7626 Feb 27 08:11	26°♒45'38	
morning rise	7625 Mar 28 21:22	28°♒33'01		evening set	7626 Mar 02 18:06	25°♒02'47	
direct	7625 Apr 03 08:47	26°♒07'00		inferior conj	7626 Mar 08 01:55	18°♒43'23	2°32'25
	7625 Apr 11 11:18	0°♓		minimum elong	7626 Mar 07 23:38	18°♒51'17	2°31'51
morning max el	7625 Apr 14 08:07	2°♓40'31	24°00'36	min. Earth dist.	7626 Mar 08 02:30	18°♒41'21	0.68320 AU
desc. node	7625 Apr 16 12:11	4°♓58'38		morning rise	7626 Mar 13 05:01	12°♒32'11	
	7625 May 05 03:28	0°♔		direct	7626 Mar 18 02:20	10°♒26'42	
morning set	7625 May 19 21:35	23°♔46'12		morning max el	7626 Mar 27 18:38	16°♒08'50	22°31'08
	7625 May 23 11:03	0°♕		desc. node	7626 Apr 03 09:08	23°♒45'13	
max. Earth dist.	7625 May 23 15:16	0°♕18'46	1.38292 AU		7626 Apr 08 02:40	0°♓	

	7626 Apr 28 04:16	0°♄		morning set	7627 Apr 10 04:53	12°♄54'23	
morning set	7626 Apr 30 14:52	3°♄57'30		max. Earth dist.	7627 Apr 17 15:26	24°♄49'04	1.42589 AU
max. Earth dist.	7626 May 05 12:20	12°♄06'40	1.40536 AU		7627 Apr 20 18:50	0°♄	
superior conj	7626 May 13 07:28	25°♄45'13	-1°45'20	superior conj	7627 Apr 24 20:07	6°♄50'05	-2°05'12
minimum elong	7626 May 13 13:08	26°♄10'44	1°44'51	minimum elong	7627 Apr 25 00:19	7°♄08'01	2°05'04
	7626 May 15 15:33	0°♄		evening rise	7627 May 06 09:03	27°♄09'48	
evening rise	7626 May 23 09:43	14°♄29'26			7627 May 07 22:55	0°♄	
asc. node	7626 May 26 07:15	19°♄55'28		asc. node	7627 May 13 04:17	9°♄14'09	
	7626 May 31 23:02	0°♄		evening max el	7627 May 22 22:58	23°♄13'34	18°06'31
evening max el	7626 Jun 08 11:53	10°♄16'01	18°22'12	retrograde	7627 May 29 15:09	26°♄38'02	
retrograde	7626 Jun 15 21:25	13°♄57'45		evening set	7627 Jun 01 04:37	26°♄08'04	
evening set	7626 Jun 18 03:33	13°♄38'02		inferior conj	7627 Jun 07 21:04	21°♄11'40	2°27'01
inferior conj	7626 Jun 25 13:20	9°♄01'52	1°22'24	minimum elong	7627 Jun 08 00:09	21°♄04'17	2°26'09
minimum elong	7626 Jun 25 15:56	8°♄56'31	1°21'26	min. Earth dist.	7627 Jun 11 02:32	18°♄08'04	0.60758 AU
min. Earth dist.	7626 Jun 28 22:56	6°♄15'18	0.58537 AU	morning rise	7627 Jun 14 17:15	15°♄16'38	
desc. node	7626 Jun 30 08:32	5°♄12'29		desc. node	7627 Jun 17 05:32	13°♄56'31	
morning rise	7626 Jul 03 01:04	3°♄31'33		direct	7627 Jun 21 07:51	13°♄06'43	
direct	7626 Jul 09 03:45	1°♄52'59		morning max el	7627 Jul 05 15:06	21°♄04'45	27°50'31
morning max el	7626 Jul 23 13:02	9°♄36'51	27°12'19		7627 Jul 13 08:38	0°♄	
	7626 Aug 08 03:50	0°♄			7627 Aug 01 03:37	0°♄	
asc. node	7626 Aug 22 06:36	26°♄02'38		morning set	7627 Aug 07 07:32	12°♄11'41	
morning set	7626 Aug 23 02:49	27°♄48'31		asc. node	7627 Aug 09 03:35	16°♄02'16	
	7626 Aug 24 03:37	0°♄		max. Earth dist.	7627 Aug 13 07:50	25°♄03'31	1.31849 AU
superior conj	7626 Aug 30 03:19	13°♄06'18	1°12'57	superior conj	7627 Aug 14 14:17	27°♄51'02	0°53'21
minimum elong	7626 Aug 30 01:04	12°♄53'47	1°12'34	minimum elong	7627 Aug 14 12:14	27°♄39'42	0°52'54
max. Earth dist.	7626 Aug 29 22:09	12°♄37'38	1.31717 AU		7627 Aug 15 13:39	0°♄	
evening rise	7626 Sep 05 22:17	27°♄57'45		evening rise	7627 Aug 21 08:45	12°♄40'46	
	7626 Sep 06 21:26	0°♄			7627 Aug 30 00:57	0°♄	
	7626 Sep 23 14:11	0°♄		desc. node	7627 Sep 13 04:37	21°♄15'54	
desc. node	7626 Sep 26 07:33	3°♄51'39		evening max el	7627 Sep 17 02:51	25°♄25'47	25°15'43
evening max el	7626 Oct 05 09:31	14°♄24'47	26°31'37		7627 Sep 22 23:34	0°♄	
retrograde	7626 Oct 19 07:29	21°♄31'32		retrograde	7627 Oct 01 00:26	2°♄27'18	
evening set	7626 Oct 26 00:41	19°♄39'45		evening set	7627 Oct 06 19:55	1°♄09'53	
min. Earth dist.	7626 Oct 29 23:04	17°♄04'52	0.59497 AU		7627 Oct 09 03:49	30°♄	
inferior conj	7626 Nov 02 04:05	14°♄35'08	-4°36'11	min. Earth dist.	7627 Oct 11 14:29	28°♄29'59	0.57485 AU
minimum elong	7626 Nov 02 11:05	14°♄21'28	4°34'28	inferior conj	7627 Oct 14 13:31	26°♄30'01	-5°20'33
morning rise	7626 Nov 09 23:46	9°♄59'01		minimum elong	7627 Oct 14 17:49	26°♄22'42	5°20'03
direct	7626 Nov 12 05:59	9°♄40'47		morning rise	7627 Oct 22 18:03	22°♄17'01	
asc. node	7626 Nov 18 06:03	11°♄57'32		direct	7627 Oct 25 04:50	21°♄59'16	
morning max el	7626 Nov 20 00:29	13°♄29'22	18°17'10	morning max el	7627 Nov 03 02:53	26°♄14'12	19°02'16
	7626 Dec 01 04:43	0°♄		asc. node	7627 Nov 05 03:03	28°♄21'22	
morning set	7626 Dec 05 20:17	8°♄41'49			7627 Nov 06 11:23	0°♄	
superior conj	7626 Dec 15 03:29	26°♄07'55	0°57'44	morning set	7627 Nov 19 19:13	23°♄01'10	
minimum elong	7626 Dec 15 06:58	26°♄23'50	0°57'21		7627 Nov 23 07:47	0°♄	
	7626 Dec 17 06:53	0°♄		superior conj	7627 Nov 28 03:02	9°♄22'34	1°20'47
max. Earth dist.	7626 Dec 22 17:57	9°♄32'10	1.40990 AU	minimum elong	7627 Nov 28 06:08	9°♄37'28	1°20'33
desc. node	7626 Dec 23 06:36	10°♄26'00		max. Earth dist.	7627 Dec 04 23:42	22°♄07'24	1.38843 AU
evening rise	7626 Dec 27 10:05	17°♄20'15		evening rise	7627 Dec 08 19:21	28°♄50'01	
	7627 Jan 04 09:59	0°♄			7627 Dec 09 11:40	0°♄	
	7627 Jan 26 00:37	0°♄		desc. node	7627 Dec 10 03:38	1°♄08'01	
evening max el	7627 Jan 30 14:20	5°♄01'56	23°16'41		7627 Dec 28 20:21	0°♄	
retrograde	7627 Feb 10 01:17	11°♄13'12		evening max el	7628 Jan 13 03:41	18°♄46'43	24°35'51
asc. node	7627 Feb 14 05:14	9°♄47'10		retrograde	7628 Jan 24 16:33	25°♄31'12	
evening set	7627 Feb 15 00:45	9°♄09'21		evening set	7628 Jan 30 04:34	23°♄13'36	
inferior conj	7627 Feb 20 10:23	2°♄43'23	1°55'36	asc. node	7628 Feb 01 02:17	21°♄20'43	
minimum elong	7627 Feb 20 08:13	2°♄50'51	1°54'56	min. Earth dist.	7628 Feb 03 18:54	18°♄00'18	0.67906 AU
min. Earth dist.	7627 Feb 19 23:12	3°♄21'54	0.68311 AU	inferior conj	7628 Feb 04 17:25	16°♄45'17	1°10'41
	7627 Feb 22 11:10	30°♄		minimum elong	7628 Feb 04 15:50	16°♄50'32	1°10'09
morning rise	7627 Feb 25 15:38	26°♄37'14		morning rise	7628 Feb 10 03:16	10°♄45'37	
direct	7627 Mar 01 22:55	24°♄54'24		direct	7628 Feb 13 21:26	9°♄24'45	
morning max el	7627 Mar 10 10:25	29°♄47'34	21°07'39	morning max el	7628 Feb 21 09:49	13°♄38'18	19°55'50
	7627 Mar 10 15:23	0°♄			7628 Mar 05 01:12	0°♄	
desc. node	7627 Mar 21 06:05	13°♄10'08		desc. node	7628 Mar 07 03:04	3°♄03'01	
	7627 Apr 01 19:34	0°♄		morning set	7628 Mar 19 02:32	21°♄11'34	

	7628 Mar 24 18:39	0° $\Upsilon$		morning set	7629 Feb 26 07:46	29° $\approx$ 59'09	
max. Earth dist.	7628 Mar 30 01:30	8° $\Upsilon$ 20'32	1.44206 AU		7629 Feb 26 07:59	0° $\text{H}$	
				max. Earth dist.	7629 Mar 12 17:20	22° $\text{H}$ 28'12	1.45202 AU
superior conj	7628 Apr 04 07:58	16° $\Upsilon$ 49'23	-2°11'10				
minimum elong	7628 Apr 04 06:54	16° $\Upsilon$ 45'03	2°11'10	superior conj	7629 Mar 14 21:38	25° $\text{H}$ 53'57	-1°57'54
	7628 Apr 12 07:00	0° $\text{B}$		minimum elong	7629 Mar 14 13:53	25° $\text{H}$ 23'28	1°57'24
evening rise	7628 Apr 17 13:49	8° $\text{B}$ 58'43			7629 Mar 17 11:55	0° $\Upsilon$	
asc. node	7628 Apr 29 01:20	28° $\text{B}$ 06'48		evening rise	7629 Mar 29 20:04	19° $\Upsilon$ 49'51	
	7628 Apr 30 07:36	0° $\text{II}$			7629 Apr 05 01:48	0° $\text{B}$	
evening max el	7628 May 05 12:10	6° $\text{II}$ 30'28	18°09'59	asc. node	7629 Apr 15 22:24	16° $\text{B}$ 25'25	
retrograde	7628 May 11 21:40	9° $\text{II}$ 52'16		evening max el	7629 Apr 19 00:37	19° $\text{B}$ 59'41	18°31'48
evening set	7628 May 14 18:14	9° $\text{II}$ 10'03		retrograde	7629 Apr 25 12:43	23° $\text{B}$ 32'15	
inferior conj	7628 May 20 21:22	3° $\text{II}$ 54'50	3°05'30	evening set	7629 Apr 28 16:25	22° $\text{B}$ 36'26	
minimum elong	7628 May 20 23:30	3° $\text{II}$ 49'03	3°05'04	inferior conj	7629 May 04 10:08	17° $\text{B}$ 03'46	3°22'58
min. Earth dist.	7628 May 23 15:05	0° $\text{II}$ 57'55	0.62941 AU	minimum elong	7629 May 04 10:53	17° $\text{B}$ 01'32	3°22'50
	7628 May 24 13:59	30° $\text{R}$ $\text{B}$		min. Earth dist.	7629 May 06 12:52	14° $\text{B}$ 32'37	0.64863 AU
morning rise	7628 May 27 03:15	27° $\text{B}$ 45'39		morning rise	7629 May 10 04:33	10° $\text{B}$ 48'16	
direct	7628 Jun 02 22:06	25° $\text{B}$ 11'30		direct	7629 May 16 20:21	8° $\text{B}$ 01'51	
desc. node	7628 Jun 03 02:34	25° $\text{B}$ 11'37		desc. node	7629 May 20 23:34	8° $\text{B}$ 56'26	
	7628 Jun 13 09:45	0° $\text{II}$		morning max el	7629 May 30 08:18	15° $\text{B}$ 57'39	27°15'23
morning max el	7628 Jun 16 22:24	3° $\text{II}$ 14'24	27°50'28		7629 Jun 10 21:33	0° $\text{II}$	
	7628 Jul 06 20:06	0° $\text{B}$			7629 Jun 29 14:50	0° $\text{B}$	
morning set	7628 Jul 21 05:57	26° $\text{B}$ 13'16		morning set	7629 Jul 04 19:24	9° $\text{B}$ 45'52	
	7628 Jul 23 02:27	0° $\Omega$		max. Earth dist.	7629 Jul 09 09:01	18° $\text{B}$ 53'21	1.33521 AU
asc. node	7628 Jul 26 00:35	6° $\Omega$ 07'17		asc. node	7629 Jul 12 21:37	26° $\text{B}$ 13'50	
max. Earth dist.	7628 Jul 26 12:39	7° $\Omega$ 11'33	1.32443 AU				
				superior conj	7629 Jul 13 02:08	26° $\text{B}$ 37'42	0°01'56
superior conj	7628 Jul 28 22:33	12° $\Omega$ 23'22	0°29'28	minimum elong	7629 Jul 13 02:02	26° $\text{B}$ 37'10	0°01'49
minimum elong	7628 Jul 28 21:13	12° $\Omega$ 16'07	0°29'06	behind sun begin	7629 Jul 12 20:31	26° $\text{B}$ 08'01	
evening rise	7628 Aug 04 20:24	27° $\Omega$ 23'35		behind sun end	7629 Jul 13 07:33	27° $\text{B}$ 06'23	
	7628 Aug 06 01:54	0° $\text{H}$			7629 Jul 14 16:14	0° $\Omega$	
	7628 Aug 23 10:28	0° $\Omega$		evening rise	7629 Jul 20 07:26	12° $\Omega$ 00'56	
evening max el	7628 Aug 28 14:42	5° $\Omega$ 48'50	23°40'37		7629 Jul 29 12:04	0° $\text{H}$	
desc. node	7628 Aug 30 01:41	7° $\Omega$ 09'23		evening max el	7629 Aug 10 04:46	16° $\text{H}$ 05'30	22°02'30
retrograde	7628 Sep 11 05:25	12° $\Omega$ 37'59		desc. node	7629 Aug 16 22:45	21° $\text{H}$ 00'44	
evening set	7628 Sep 15 14:56	11° $\Omega$ 55'37		retrograde	7629 Aug 22 22:16	22° $\text{H}$ 24'50	
min. Earth dist.	7628 Sep 22 00:52	8° $\Omega$ 52'02	0.55830 AU	evening set	7629 Aug 25 20:39	22° $\text{H}$ 05'43	
inferior conj	7628 Sep 24 02:44	7° $\Omega$ 37'20	-5°29'21	min. Earth dist.	7629 Sep 03 09:41	18° $\text{H}$ 24'11	0.54860 AU
minimum elong	7628 Sep 24 00:28	7° $\Omega$ 40'45	5°29'13	inferior conj	7629 Sep 04 00:03	18° $\text{H}$ 04'02	-4°46'06
morning rise	7628 Oct 02 12:14	3° $\Omega$ 42'47		minimum elong	7629 Sep 03 15:30	18° $\text{H}$ 16'02	4°44'20
direct	7628 Oct 05 08:10	3° $\Omega$ 22'50		morning rise	7629 Sep 12 11:49	14° $\text{H}$ 15'14	
morning max el	7628 Oct 15 17:36	8° $\Omega$ 14'55	20°09'40	direct	7629 Sep 15 20:40	13° $\text{H}$ 50'04	
asc. node	7628 Oct 22 00:04	15° $\Omega$ 48'24		morning max el	7629 Sep 27 19:27	19° $\text{H}$ 27'06	21°38'04
	7628 Oct 30 05:05	0° $\text{H}$			7629 Oct 06 08:16	0° $\Omega$	
morning set	7628 Nov 03 00:36	7° $\text{H}$ 37'23		asc. node	7629 Oct 08 21:05	4° $\Omega$ 04'33	
				morning set	7629 Oct 18 09:58	22° $\Omega$ 23'43	
superior conj	7628 Nov 10 16:16	23° $\text{H}$ 16'04	1°34'57		7629 Oct 22 00:31	0° $\text{H}$	
minimum elong	7628 Nov 10 18:12	23° $\text{H}$ 25'43	1°34'55				
	7628 Nov 14 01:52	0° $\text{H}$		superior conj	7629 Oct 25 15:12	7° $\text{H}$ 36'52	1°41'16
max. Earth dist.	7628 Nov 16 05:46	4° $\text{H}$ 09'39	1.36742 AU	minimum elong	7629 Oct 25 15:44	7° $\text{H}$ 39'42	1°41'20
evening rise	7628 Nov 20 01:21	11° $\text{H}$ 15'11		max. Earth dist.	7629 Oct 29 17:45	16° $\text{H}$ 02'51	1.34900 AU
desc. node	7628 Nov 26 00:41	21° $\text{H}$ 42'30		evening rise	7629 Nov 03 00:24	24° $\text{H}$ 26'10	
	7628 Dec 01 02:21	0° $\text{B}$			7629 Nov 05 23:48	0° $\text{H}$	
	7628 Dec 23 04:49	0° $\approx$		desc. node	7629 Nov 12 21:44	12° $\text{H}$ 04'26	
evening max el	7628 Dec 25 16:39	2° $\approx$ 33'26	25°47'51		7629 Nov 24 15:45	0° $\text{B}$	
retrograde	7629 Jan 07 03:09	9° $\approx$ 40'12		evening max el	7629 Dec 08 05:57	16° $\text{B}$ 15'55	26°45'10
evening set	7629 Jan 13 03:58	7° $\approx$ 11'28		retrograde	7629 Dec 21 08:12	23° $\text{B}$ 33'12	
min. Earth dist.	7629 Jan 17 11:23	2° $\approx$ 32'38	0.67126 AU	evening set	7629 Dec 27 20:58	20° $\text{B}$ 57'34	
asc. node	7629 Jan 17 23:20	1° $\approx$ 55'02		min. Earth dist.	7629 Dec 31 22:14	16° $\text{B}$ 53'27	0.65990 AU
inferior conj	7629 Jan 18 21:10	0° $\approx$ 45'53	0°18'12	inferior conj	7630 Jan 02 19:33	14° $\text{B}$ 40'22	-0°41'12
minimum elong	7629 Jan 18 20:42	0° $\approx$ 47'22	0°18'06	minimum elong	7630 Jan 02 20:42	14° $\text{B}$ 36'57	0°40'36
	7629 Jan 19 11:44	30° $\text{R}$ $\text{B}$		asc. node	7630 Jan 04 20:25	12° $\text{B}$ 21'22	
morning rise	7629 Jan 24 13:56	24° $\text{B}$ 54'37		morning rise	7630 Jan 08 21:23	9° $\text{B}$ 00'03	
direct	7629 Jan 27 20:28	23° $\text{B}$ 53'13		direct	7630 Jan 11 18:08	8° $\text{B}$ 14'37	
morning max el	7629 Feb 03 16:56	27° $\text{B}$ 38'55	18°58'54	morning max el	7630 Jan 18 06:07	11° $\text{B}$ 43'54	18°18'14
	7629 Feb 05 20:59	0° $\approx$			7630 Jan 31 07:33	0° $\approx$	
desc. node	7629 Feb 22 00:03	23° $\approx$ 16'21		morning set	7630 Feb 06 15:14	10° $\approx$ 08'04	



desc. node	7630 Feb 08 21:01	13° $\approx$ 43'55	direct	7630 Dec 26 11:58	22° $\approx$ 24'06	
	7630 Feb 19 02:47	0° $\mathbb{H}$	morning max el	7631 Jan 01 22:47	25° $\approx$ 47'13	17°54'31
				7631 Jan 05 12:46	0° $\mathbb{Z}$	
superior conj	7630 Feb 22 01:58	4° $\mathbb{H}$ 39'43 -1°25'29	morning set	7631 Jan 19 03:55	21° $\approx$ 43'32	
minimum elong	7630 Feb 21 16:41	4° $\mathbb{H}$ 03'16 1°24'25		7631 Jan 24 02:41	0° $\approx$	
max. Earth dist.	7630 Feb 23 12:42	6° $\mathbb{H}$ 55'50 1.45477 AU	desc. node	7631 Jan 26 18:02	4° $\approx$ 21'33	
evening rise	7630 Mar 10 03:10	29° $\mathbb{H}$ 46'03				
	7630 Mar 10 06:44	0° $\mathbb{Y}$	superior conj	7631 Feb 01 16:42	14° $\approx$ 00'40 -0°41'48	
greatest brilliancy	7630 Mar 21 02:29	16° $\mathbb{Y}$ 51'50 -0.8m	minimum elong	7631 Feb 01 11:50	13° $\approx$ 41'11 0°41'02	
	7630 Mar 30 06:48	0° $\mathbb{B}$	max. Earth dist.	7631 Feb 06 08:25	21° $\approx$ 25'10 1.45008 AU	
evening max el	7630 Apr 02 09:48	3° $\mathbb{B}$ 34'34 19°11'03		7631 Feb 11 19:52	0° $\mathbb{H}$	
asc. node	7630 Apr 02 19:30	3° $\mathbb{B}$ 58'41	evening rise	7631 Feb 17 17:46	9° $\mathbb{H}$ 08'17	
retrograde	7630 Apr 09 08:46	7° $\mathbb{B}$ 29'59		7631 Mar 03 12:59	0° $\mathbb{Y}$	
evening set	7630 Apr 12 20:04	6° $\mathbb{B}$ 19'48	greatest brilliancy	7631 Mar 04 12:55	1° $\mathbb{Y}$ 27'45 -0.6m	
inferior conj	7630 Apr 18 07:44	0° $\mathbb{B}$ 31'09 3°24'05	evening max el	7631 Mar 16 14:01	17° $\mathbb{Y}$ 11'24 20°06'00	
minimum elong	7630 Apr 18 07:11	0° $\mathbb{B}$ 32'57 3°24'00	asc. node	7631 Mar 20 16:34	20° $\mathbb{Y}$ 33'34	
	7630 Apr 18 17:23	30° $\mathbb{R}$ $\mathbb{Y}$	retrograde	7631 Mar 24 07:04	21° $\mathbb{Y}$ 39'59	
min. Earth dist.	7630 Apr 19 19:01	28° $\mathbb{Y}$ 37'41 0.66393 AU	evening set	7631 Mar 28 02:50	20° $\mathbb{Y}$ 14'56	
morning rise	7630 Apr 23 17:55	24° $\mathbb{Y}$ 13'56	inferior conj	7631 Apr 02 11:15	14° $\mathbb{Y}$ 12'11 3°12'15	
direct	7630 Apr 30 01:07	21° $\mathbb{Y}$ 27'58	minimum elong	7631 Apr 02 09:43	14° $\mathbb{Y}$ 17'23 3°12'01	
desc. node	7630 May 07 20:34	24° $\mathbb{Y}$ 41'03	min. Earth dist.	7631 Apr 03 08:03	13° $\mathbb{Y}$ 01'48 0.67482 AU	
morning max el	7630 May 12 18:27	29° $\mathbb{Y}$ 02'52 26°12'39	morning rise	7631 Apr 07 16:22	7° $\mathbb{Y}$ 55'54	
	7630 May 13 16:34	0° $\mathbb{B}$	direct	7631 Apr 13 11:28	5° $\mathbb{Y}$ 20'38	
	7630 Jun 04 17:23	0° $\mathbb{II}$	desc. node	7631 Apr 24 17:33	11° $\mathbb{Y}$ 54'40	
morning set	7630 Jun 17 20:17	22° $\mathbb{II}$ 39'25	morning max el	7631 Apr 25 03:47	12° $\mathbb{Y}$ 20'17 24°51'37	
	7630 Jun 21 16:52	0° $\mathbb{E}$		7631 May 09 08:25	0° $\mathbb{B}$	
max. Earth dist.	7630 Jun 21 18:43	0° $\mathbb{E}$ 08'59 1.35075 AU		7631 May 28 11:36	0° $\mathbb{II}$	
			morning set	7631 May 31 03:57	4° $\mathbb{II}$ 41'21	
superior conj	7630 Jun 26 22:32	10° $\mathbb{E}$ 27'01 -0°28'21	max. Earth dist.	7631 Jun 03 18:50	11° $\mathbb{II}$ 13'36 1.37037 AU	
minimum elong	7630 Jun 27 00:10	10° $\mathbb{E}$ 35'18 0°28'08				
asc. node	7630 Jun 29 18:40	16° $\mathbb{E}$ 17'55	superior conj	7631 Jun 10 08:43	23° $\mathbb{II}$ 43'05 -0°59'48	
evening rise	7630 Jul 04 15:48	26° $\mathbb{E}$ 26'45	minimum elong	7631 Jun 10 12:19	24° $\mathbb{II}$ 00'41 0°59'17	
	7630 Jul 06 09:25	0° $\mathbb{Q}$		7631 Jun 13 12:57	0° $\mathbb{E}$	
evening max el	7630 Jul 23 04:55	26° $\mathbb{Q}$ 48'28 20°35'38	asc. node	7631 Jun 16 15:41	6° $\mathbb{E}$ 15'13	
	7630 Jul 27 02:32	0° $\mathbb{M}$	evening rise	7631 Jun 18 19:09	10° $\mathbb{E}$ 34'00	
retrograde	7630 Aug 03 10:22	2° $\mathbb{M}$ 21'09		7631 Jun 29 08:22	0° $\mathbb{Q}$	
desc. node	7630 Aug 03 19:47	2° $\mathbb{M}$ 20'46	evening max el	7631 Jul 05 18:07	8° $\mathbb{Q}$ 14'00 19°27'31	
evening set	7630 Aug 05 11:38	2° $\mathbb{M}$ 10'48	retrograde	7631 Jul 15 06:36	12° $\mathbb{Q}$ 55'36	
	7630 Aug 11 12:15	30° $\mathbb{R}$ $\mathbb{Q}$	evening set	7631 Jul 17 03:27	12° $\mathbb{Q}$ 45'32	
inferior conj	7630 Aug 14 16:56	28° $\mathbb{Q}$ 13'49 -3°12'27	desc. node	7631 Jul 21 16:50	11° $\mathbb{Q}$ 07'04	
minimum elong	7630 Aug 14 08:28	28° $\mathbb{Q}$ 25'59 3°09'41	inferior conj	7631 Jul 25 20:00	8° $\mathbb{Q}$ 39'10 -1°15'35	
min. Earth dist.	7630 Aug 15 19:24	27° $\mathbb{Q}$ 35'46 0.54798 AU	minimum elong	7631 Jul 25 16:35	8° $\mathbb{Q}$ 44'39 1°14'22	
morning rise	7630 Aug 23 04:55	24° $\mathbb{Q}$ 11'10	min. Earth dist.	7631 Jul 28 08:05	7° $\mathbb{Q}$ 02'41 0.55684 AU	
direct	7630 Aug 27 05:36	23° $\mathbb{Q}$ 36'23	morning rise	7631 Aug 03 03:09	4° $\mathbb{Q}$ 04'23	
	7630 Sep 09 11:40	0° $\mathbb{M}$	direct	7631 Aug 07 23:07	3° $\mathbb{Q}$ 11'47	
morning max el	7630 Sep 09 11:27	29° $\mathbb{Q}$ 59'30 23°21'02	morning max el	7631 Aug 22 00:12	10° $\mathbb{Q}$ 15'14 25°05'17	
asc. node	7630 Sep 25 18:06	22° $\mathbb{M}$ 58'02		7631 Sep 05 21:31	0° $\mathbb{M}$	
	7630 Sep 29 09:20	0° $\mathbb{E}$	asc. node	7631 Sep 12 15:06	12° $\mathbb{M}$ 18'33	
morning set	7630 Oct 02 21:24	7° $\mathbb{E}$ 14'46	morning set	7631 Sep 17 09:04	22° $\mathbb{M}$ 04'13	
				7631 Sep 21 00:58	0° $\mathbb{E}$	
superior conj	7630 Oct 09 20:42	22° $\mathbb{E}$ 15'57 1°40'44				
minimum elong	7630 Oct 09 20:01	22° $\mathbb{E}$ 12'12 1°40'45	superior conj	7631 Sep 24 06:14	7° $\mathbb{E}$ 04'29 1°34'10	
max. Earth dist.	7630 Oct 12 14:14	28° $\mathbb{E}$ 05'22 1.33438 AU	minimum elong	7631 Sep 24 04:37	6° $\mathbb{E}$ 55'35 1°34'02	
	7630 Oct 13 12:04	0° $\mathbb{M}$	max. Earth dist.	7631 Sep 25 18:12	10° $\mathbb{E}$ 21'13 1.32412 AU	
evening rise	7630 Oct 17 12:35	8° $\mathbb{M}$ 12'50	evening rise	7631 Oct 01 10:18	22° $\mathbb{E}$ 24'40	
	7630 Oct 29 11:32	0° $\mathbb{X}$		7631 Oct 05 05:16	0° $\mathbb{M}$	
desc. node	7630 Oct 30 18:48	2° $\mathbb{X}$ 07'53	desc. node	7631 Oct 17 15:51	21° $\mathbb{M}$ 43'53	
evening max el	7630 Nov 20 18:42	29° $\mathbb{X}$ 43'46 27°20'29		7631 Oct 23 07:49	0° $\mathbb{X}$	
	7630 Nov 21 01:34	0° $\mathbb{Z}$	evening max el	7631 Nov 03 04:53	12° $\mathbb{X}$ 43'10 27°27'30	
retrograde	7630 Dec 04 07:01	7° $\mathbb{Z}$ 02'54	retrograde	7631 Nov 16 23:10	19° $\mathbb{X}$ 59'17	
evening set	7630 Dec 11 05:19	4° $\mathbb{Z}$ 26'41	evening set	7631 Nov 24 02:03	17° $\mathbb{X}$ 31'31	
min. Earth dist.	7630 Dec 15 01:09	0° $\mathbb{Z}$ 56'19 0.64512 AU	min. Earth dist.	7631 Nov 27 18:14	14° $\mathbb{X}$ 30'45 0.62719 AU	
	7630 Dec 15 22:26	30° $\mathbb{R}$ $\mathbb{X}$	inferior conj	7631 Nov 30 14:12	11° $\mathbb{X}$ 48'01 -2°54'39	
inferior conj	7630 Dec 17 10:11	28° $\mathbb{X}$ 23'42 -1°46'16	minimum elong	7631 Nov 30 19:38	11° $\mathbb{X}$ 34'59 2°52'33	
minimum elong	7630 Dec 17 13:25	28° $\mathbb{X}$ 15'02 1°44'50	morning rise	7631 Dec 07 15:13	6° $\mathbb{X}$ 38'55	
asc. node	7630 Dec 22 17:27	23° $\mathbb{X}$ 36'09	direct	7631 Dec 09 22:51	6° $\mathbb{X}$ 14'14	
morning rise	7630 Dec 23 22:59	22° $\mathbb{X}$ 57'19	asc. node	7631 Dec 09 14:29	6° $\mathbb{X}$ 14'48	

morning max el	7631 Dec 16 15:53	9° $\text{♁}$ 40'26	17°48'23	morning rise	7632 Nov 19 17:37	19° $\text{♁}$ 56'10	
	7631 Dec 30 03:46	0° $\text{♁}$		direct	7632 Nov 21 23:02	19° $\text{♁}$ 36'36	
morning set	7632 Jan 01 16:22	4° $\text{♁}$ 27'04		asc. node	7632 Nov 25 11:30	20° $\text{♁}$ 27'47	
				morning max el	7632 Nov 29 06:04	23° $\text{♁}$ 14'45	18°00'53
superior conj	7632 Jan 13 06:57	24° $\text{♁}$ 31'12	0°02'28		7632 Dec 04 14:26	0° $\text{♁}$	
minimum elong	7632 Jan 13 07:13	24° $\text{♁}$ 32'16	0°02'31	morning set	7632 Dec 14 22:09	17° $\text{♁}$ 59'17	
behind sun begin	7632 Jan 12 22:13	23° $\text{♁}$ 54'31			7632 Dec 21 10:56	0° $\text{♁}$	
behind sun end	7632 Jan 13 16:13	25° $\text{♁}$ 09'55					
desc. node	7632 Jan 13 15:02	25° $\text{♁}$ 04'59		superior conj	7632 Dec 24 22:47	6° $\text{♁}$ 15'01	0°40'09
	7632 Jan 16 14:15	0° $\text{♁}$		minimum elong	7632 Dec 25 01:47	6° $\text{♁}$ 28'17	0°39'49
max. Earth dist.	7632 Jan 20 01:14	5° $\text{♁}$ 37'19	1.43848 AU	desc. node	7632 Dec 30 12:01	15° $\text{♁}$ 50'37	
evening rise	7632 Jan 28 05:30	18° $\text{♁}$ 31'09		max. Earth dist.	7633 Jan 01 13:22	19° $\text{♁}$ 17'28	1.42141 AU
	7632 Feb 04 18:28	0° $\text{♁}$		evening rise	7633 Jan 07 05:18	28° $\text{♁}$ 30'48	
	7632 Feb 26 17:44	0° $\text{♁}$			7633 Jan 08 03:45	0° $\text{♁}$	
evening max el	7632 Feb 27 12:38	0° $\text{♁}$ 49'15	21°13'59		7633 Jan 28 10:14	0° $\text{♁}$	
asc. node	7632 Mar 06 13:36	5° $\text{♁}$ 55'23		evening max el	7633 Feb 09 06:22	14° $\text{♁}$ 29'09	22°30'48
retrograde	7632 Mar 07 05:23	5° $\text{♁}$ 57'38		retrograde	7633 Feb 19 01:55	20° $\text{♁}$ 18'37	
evening set	7632 Mar 11 10:49	4° $\text{♁}$ 17'34		asc. node	7633 Feb 21 10:38	19° $\text{♁}$ 50'10	
	7632 Mar 15 08:10	30° $\text{♁}$		evening set	7633 Feb 23 18:22	18° $\text{♁}$ 23'31	
inferior conj	7632 Mar 16 18:17	28° $\text{♁}$ 03'12	2°49'43	inferior conj	7633 Mar 01 02:46	12° $\text{♁}$ 00'45	2°17'51
minimum elong	7632 Mar 16 16:09	28° $\text{♁}$ 10'35	2°49'15	minimum elong	7633 Mar 01 00:29	12° $\text{♁}$ 08'41	2°17'12
min. Earth dist.	7632 Mar 17 01:56	27° $\text{♁}$ 36'41	0.68128 AU	min. Earth dist.	7633 Feb 28 22:18	12° $\text{♁}$ 16'15	0.68357 AU
morning rise	7632 Mar 21 21:18	21° $\text{♁}$ 49'35		morning rise	7633 Mar 06 06:27	5° $\text{♁}$ 51'15	
direct	7632 Mar 27 02:38	19° $\text{♁}$ 32'04		direct	7633 Mar 10 21:40	3° $\text{♁}$ 55'15	
morning max el	7632 Apr 06 13:06	25° $\text{♁}$ 44'41	23°22'23	morning max el	7633 Mar 20 01:21	9° $\text{♁}$ 16'23	21°54'26
	7632 Apr 10 10:13	0° $\text{♁}$		desc. node	7633 Mar 28 11:31	19° $\text{♁}$ 16'53	
desc. node	7632 Apr 10 14:32	0° $\text{♁}$ 12'42			7633 Apr 05 04:47	0° $\text{♁}$	
	7632 May 01 21:04	0° $\text{♁}$		morning set	7633 Apr 21 18:04	25° $\text{♁}$ 14'50	
morning set	7632 May 11 12:48	15° $\text{♁}$ 37'11			7633 Apr 24 16:29	0° $\text{♁}$	
max. Earth dist.	7632 May 15 14:39	22° $\text{♁}$ 36'09	1.39241 AU	max. Earth dist.	7633 Apr 27 13:12	4° $\text{♁}$ 43'40	1.41441 AU
	7632 May 19 18:41	0° $\text{♁}$					
superior conj	7632 May 23 04:50	6° $\text{♁}$ 16'38	-1°29'58	superior conj	7633 May 05 06:16	17° $\text{♁}$ 56'22	-1°55'05
minimum elong	7632 May 23 10:06	6° $\text{♁}$ 41'08	1°29'22	minimum elong	7633 May 05 11:42	18° $\text{♁}$ 20'22	1°54'43
evening rise	7632 Jun 01 14:35	24° $\text{♁}$ 14'50			7633 May 11 23:07	0° $\text{♁}$	
asc. node	7632 Jun 02 12:42	26° $\text{♁}$ 01'35		evening rise	7633 May 15 22:24	7° $\text{♁}$ 19'17	
	7632 Jun 04 14:34	0° $\text{♁}$		asc. node	7633 May 20 09:43	15° $\text{♁}$ 31'31	
evening max el	7632 Jun 17 18:45	20° $\text{♁}$ 22'33	18°40'13		7633 May 29 10:13	0° $\text{♁}$	
retrograde	7632 Jun 25 19:54	24° $\text{♁}$ 21'51		evening max el	7633 Jun 01 03:08	3° $\text{♁}$ 04'48	18°13'15
evening set	7632 Jun 27 21:40	24° $\text{♁}$ 06'53		retrograde	7633 Jun 08 03:51	6° $\text{♁}$ 37'02	
inferior conj	7632 Jul 05 18:49	19° $\text{♁}$ 42'49	0°31'55	evening set	7633 Jun 10 13:09	6° $\text{♁}$ 13'16	
minimum elong	7632 Jul 05 20:01	19° $\text{♁}$ 40'35	0°31'23	inferior conj	7633 Jun 17 15:09	1° $\text{♁}$ 28'45	1°53'15
desc. node	7632 Jul 07 13:52	18° $\text{♁}$ 21'34		minimum elong	7633 Jun 17 18:13	1° $\text{♁}$ 22'02	1°52'13
min. Earth dist.	7632 Jul 09 01:18	17° $\text{♁}$ 16'23	0.57345 AU		7633 Jun 19 07:21	30° $\text{♁}$	
morning rise	7632 Jul 13 14:51	14° $\text{♁}$ 30'54		min. Earth dist.	7633 Jun 21 00:26	28° $\text{♁}$ 31'44	0.59469 AU
direct	7632 Jul 19 07:21	13° $\text{♁}$ 10'34		desc. node	7633 Jun 24 10:54	26° $\text{♁}$ 00'41	
morning max el	7632 Aug 02 16:02	20° $\text{♁}$ 43'39	26°33'57	morning rise	7633 Jun 24 20:17	25° $\text{♁}$ 46'40	
	7632 Aug 10 16:29	0° $\text{♁}$		direct	7633 Jul 01 05:11	23° $\text{♁}$ 53'58	
	7632 Aug 28 12:43	0° $\text{♁}$			7633 Jul 13 17:07	0° $\text{♁}$	
asc. node	7632 Aug 29 12:06	1° $\text{♁}$ 58'54		morning max el	7633 Jul 15 13:58	1° $\text{♁}$ 45'18	27°33'05
morning set	7632 Aug 31 19:23	6° $\text{♁}$ 47'23			7633 Aug 05 00:03	0° $\text{♁}$	
				morning set	7633 Aug 16 02:39	21° $\text{♁}$ 18'52	
superior conj	7632 Sep 07 17:45	21° $\text{♁}$ 56'14	1°22'09	asc. node	7633 Aug 16 09:05	21° $\text{♁}$ 52'34	
minimum elong	7632 Sep 07 15:36	21° $\text{♁}$ 44'18	1°21'51		7633 Aug 20 03:56	0° $\text{♁}$	
max. Earth dist.	7632 Sep 08 03:05	22° $\text{♁}$ 47'53	1.31841 AU	max. Earth dist.	7633 Aug 22 13:26	5° $\text{♁}$ 16'22	1.31717 AU
	7632 Sep 11 09:36	0° $\text{♁}$					
evening rise	7632 Sep 14 14:47	6° $\text{♁}$ 54'03		superior conj	7633 Aug 23 05:26	6° $\text{♁}$ 44'53	1°05'12
	7632 Sep 26 17:25	0° $\text{♁}$		minimum elong	7633 Aug 23 03:12	6° $\text{♁}$ 32'31	1°04'47
desc. node	7632 Oct 03 12:53	10° $\text{♁}$ 41'28		evening rise	7633 Aug 29 23:40	21° $\text{♁}$ 33'44	
evening max el	7632 Oct 15 10:12	25° $\text{♁}$ 02'12	27°01'41		7633 Sep 03 01:20	0° $\text{♁}$	
	7632 Oct 21 21:43	0° $\text{♁}$		desc. node	7633 Sep 20 09:57	28° $\text{♁}$ 45'32	
retrograde	7632 Oct 29 07:43	2° $\text{♁}$ 12'55			7633 Sep 21 09:29	0° $\text{♁}$	
evening set	7632 Nov 05 07:18	0° $\text{♁}$ 04'50		evening max el	7633 Sep 27 08:22	6° $\text{♁}$ 32'35	26°02'38
	7632 Nov 05 10:30	30° $\text{♁}$		retrograde	7633 Oct 11 06:54	13° $\text{♁}$ 37'13	
min. Earth dist.	7632 Nov 09 00:46	27° $\text{♁}$ 24'23	0.60698 AU	evening set	7633 Oct 17 16:17	11° $\text{♁}$ 59'40	
inferior conj	7632 Nov 12 04:20	24° $\text{♁}$ 45'04	-4°01'34	min. Earth dist.	7633 Oct 21 21:19	9° $\text{♁}$ 24'40	0.58616 AU
minimum elong	7632 Nov 12 11:18	24° $\text{♁}$ 30'20	3°59'27	inferior conj	7633 Oct 25 01:09	7° $\text{♁}$ 05'39	-4°58'10
				minimum elong	7633 Oct 25 07:30	6° $\text{♁}$ 53'57	4°56'56

morning rise	7633 Nov 02 01:01	2° $\mathbb{M}$ 39'09		direct	7634 Oct 16 23:22	14° $\underline{\mathfrak{A}}$ 17'36	
direct	7633 Nov 04 08:28	2° $\mathbb{M}$ 21'30		morning max el	7634 Oct 26 11:26	18° $\underline{\mathfrak{A}}$ 47'02	19°28'10
asc. node	7633 Nov 12 08:31	6° $\mathbb{M}$ 08'00		asc. node	7634 Oct 30 05:34	23° $\underline{\mathfrak{A}}$ 00'26	
morning max el	7633 Nov 12 13:46	6° $\mathbb{M}$ 20'29	18°33'36		7634 Nov 03 22:21	0° $\mathbb{M}$	
	7633 Nov 27 14:04	0° $\mathbb{A}$		morning set	7634 Nov 12 18:07	16° $\mathbb{M}$ 33'04	
morning set	7633 Nov 28 16:03	2° $\mathbb{A}$ 05'16			7634 Nov 19 11:03	0° $\mathbb{A}$	
superior conj	7633 Dec 07 12:17	19° $\mathbb{A}$ 00'52	1°08'38	superior conj	7634 Nov 20 18:14	2° $\mathbb{A}$ 33'33	1°27'48
minimum elong	7633 Dec 07 15:46	19° $\mathbb{A}$ 17'06	1°08'19	minimum elong	7634 Nov 20 20:54	2° $\mathbb{A}$ 46'34	1°27'41
	7633 Dec 13 13:38	0° $\mathbb{B}$		max. Earth dist.	7634 Nov 27 02:51	14° $\mathbb{A}$ 38'43	1.37935 AU
max. Earth dist.	7633 Dec 14 21:04	2° $\mathbb{B}$ 17'36	1.40089 AU	evening rise	7634 Nov 30 20:23	21° $\mathbb{A}$ 21'35	
desc. node	7633 Dec 17 09:02	6° $\mathbb{B}$ 35'15		desc. node	7634 Dec 04 06:03	27° $\mathbb{A}$ 14'25	
evening rise	7633 Dec 19 01:53	9° $\mathbb{B}$ 27'17			7634 Dec 05 21:29	0° $\mathbb{B}$	
	7634 Jan 01 02:54	0° $\approx$			7634 Dec 26 02:11	0° $\approx$	
evening max el	7634 Jan 22 20:58	28° $\approx$ 13'12	23°50'53	evening max el	7635 Jan 05 10:09	11° $\approx$ 59'38	25°07'46
	7634 Jan 24 18:05	0° $\mathbb{H}$		retrograde	7635 Jan 17 08:32	18° $\approx$ 54'11	
retrograde	7634 Feb 02 19:20	4° $\mathbb{H}$ 39'22		evening set	7635 Jan 23 02:09	16° $\approx$ 31'26	
evening set	7634 Feb 07 24:00	2° $\mathbb{H}$ 29'44		asc. node	7635 Jan 26 04:47	13° $\approx$ 15'57	
asc. node	7634 Feb 08 07:42	2° $\mathbb{H}$ 12'55		min. Earth dist.	7635 Jan 27 13:27	11° $\approx$ 32'56	0.67628 AU
	7634 Feb 10 10:10	30° $\mathbb{R}$ $\approx$		inferior conj	7635 Jan 28 16:44	10° $\approx$ 03'54	0°49'20
inferior conj	7634 Feb 13 10:52	26° $\approx$ 02'23	1°37'33	minimum elong	7635 Jan 28 15:34	10° $\approx$ 07'44	0°48'57
minimum elong	7634 Feb 13 08:53	26° $\approx$ 09'06	1°36'54	morning rise	7635 Feb 03 05:16	4° $\approx$ 07'41	
min. Earth dist.	7634 Feb 12 18:56	26° $\approx$ 56'38	0.68187 AU	direct	7635 Feb 06 18:24	2° $\approx$ 55'20	
morning rise	7634 Feb 18 17:46	19° $\approx$ 58'37		morning max el	7635 Feb 13 22:53	6° $\approx$ 55'03	19°29'41
direct	7634 Feb 22 19:25	18° $\approx$ 25'05		greatest brilliancy	7635 Feb 26 19:32	23° $\approx$ 50'13	-0.7m
morning max el	7634 Mar 02 20:05	22° $\approx$ 59'49	20°35'22	desc. node	7635 Mar 02 05:29	28° $\approx$ 57'08	
	7634 Mar 08 20:22	0° $\mathbb{H}$			7635 Mar 02 22:06	0° $\mathbb{H}$	
desc. node	7634 Mar 15 08:30	8° $\mathbb{H}$ 54'58		morning set	7635 Mar 10 20:31	12° $\mathbb{H}$ 08'31	
	7634 Mar 29 11:54	0° $\mathbb{Y}$			7635 Mar 22 07:38	0° $\mathbb{Y}$	
morning set	7634 Mar 31 22:43	3° $\mathbb{Y}$ 47'12		max. Earth dist.	7635 Mar 23 08:43	1° $\mathbb{Y}$ 39'02	1.44720 AU
max. Earth dist.	7634 Apr 09 19:18	17° $\mathbb{Y}$ 48'05	1.43350 AU				
superior conj	7634 Apr 16 08:36	28° $\mathbb{Y}$ 33'36	-2°09'48	superior conj	7635 Mar 27 10:07	8° $\mathbb{Y}$ 06'27	-2°08'03
minimum elong	7634 Apr 16 11:01	28° $\mathbb{Y}$ 43'45	2°09'48	minimum elong	7635 Mar 27 06:01	7° $\mathbb{Y}$ 50'04	2°07'56
	7634 Apr 17 05:14	0° $\mathbb{B}$			7635 Apr 09 18:51	0° $\mathbb{B}$	
evening rise	7634 Apr 28 14:22	19° $\mathbb{B}$ 38'20		evening rise	7635 Apr 10 09:55	1° $\mathbb{B}$ 03'01	
	7634 May 04 12:25	0° $\mathbb{I}$		asc. node	7635 Apr 24 03:49	23° $\mathbb{B}$ 18'39	
asc. node	7634 May 07 06:45	4° $\mathbb{I}$ 39'35		evening max el	7635 Apr 29 04:45	29° $\mathbb{B}$ 34'02	18°17'02
evening max el	7634 May 15 15:34	16° $\mathbb{I}$ 11'24	18°05'43		7635 Apr 29 15:27	0° $\mathbb{I}$	
retrograde	7634 May 22 03:28	19° $\mathbb{I}$ 32'37		retrograde	7635 May 05 14:13	2° $\mathbb{I}$ 58'53	
evening set	7634 May 24 20:07	18° $\mathbb{I}$ 57'29		evening set	7635 May 08 13:50	2° $\mathbb{I}$ 10'52	
inferior conj	7634 May 31 06:24	13° $\mathbb{I}$ 52'49	2°46'15	inferior conj	7635 May 14 12:28	26° $\mathbb{B}$ 47'44	3°15'11
minimum elong	7634 May 31 09:11	13° $\mathbb{I}$ 45'46	2°45'33	minimum elong	7635 May 14 14:02	26° $\mathbb{B}$ 43'18	3°14'54
min. Earth dist.	7634 Jun 03 07:29	10° $\mathbb{I}$ 49'35	0.61715 AU	min. Earth dist.	7635 May 16 23:52	24° $\mathbb{B}$ 00'10	0.63799 AU
morning rise	7634 Jun 06 20:15	7° $\mathbb{I}$ 50'58		morning rise	7635 May 20 13:06	20° $\mathbb{B}$ 35'06	
desc. node	7634 Jun 11 07:56	5° $\mathbb{I}$ 44'57		direct	7635 May 27 07:18	17° $\mathbb{B}$ 54'34	
direct	7634 Jun 13 13:48	5° $\mathbb{I}$ 29'32		desc. node	7635 May 29 04:58	18° $\mathbb{B}$ 06'03	
morning max el	7634 Jun 27 18:16	13° $\mathbb{I}$ 29'56	27°55'05	morning max el	7635 Jun 10 03:08	25° $\mathbb{B}$ 55'28	27°39'35
	7634 Jul 10 23:13	0° $\mathfrak{E}$			7635 Jun 13 21:22	0° $\mathbb{I}$	
	7634 Jul 28 10:42	0° $\mathbb{Q}$			7635 Jul 04 12:32	0° $\mathfrak{E}$	
morning set	7634 Jul 31 04:57	5° $\mathbb{Q}$ 32'56		morning set	7635 Jul 14 23:58	19° $\mathfrak{E}$ 23'16	
asc. node	7634 Aug 03 06:05	11° $\mathbb{Q}$ 54'30		max. Earth dist.	7635 Jul 19 23:28	29° $\mathfrak{E}$ 34'37	1.32843 AU
max. Earth dist.	7634 Aug 05 21:32	17° $\mathbb{Q}$ 35'36	1.32046 AU		7635 Jul 20 04:18	0° $\mathbb{Q}$	
				asc. node	7635 Jul 21 03:06	2° $\mathbb{Q}$ 00'32	
superior conj	7634 Aug 07 15:28	21° $\mathbb{Q}$ 24'34	0°43'42	superior conj	7635 Jul 22 22:02	5° $\mathbb{Q}$ 49'55	0°18'11
minimum elong	7634 Aug 07 13:39	21° $\mathbb{Q}$ 14'37	0°43'17	minimum elong	7635 Jul 22 21:09	5° $\mathbb{Q}$ 45'13	0°17'55
	7634 Aug 11 13:18	0° $\mathbb{P}$		evening rise	7635 Jul 29 22:33	20° $\mathbb{Q}$ 58'37	
evening rise	7634 Aug 14 10:52	6° $\mathbb{P}$ 17'10			7635 Aug 03 07:18	0° $\mathbb{P}$	
	7634 Aug 26 19:40	0° $\underline{\mathfrak{A}}$		evening max el	7635 Aug 21 10:33	27° $\mathbb{P}$ 30'36	22°58'15
desc. node	7634 Sep 07 07:01	15° $\underline{\mathfrak{A}}$ 34'31			7635 Aug 24 06:34	0° $\underline{\mathfrak{A}}$	
evening max el	7634 Sep 08 22:58	17° $\underline{\mathfrak{A}}$ 15'08	24°36'46	desc. node	7635 Aug 25 04:05	0° $\underline{\mathfrak{A}}$ 40'22	
retrograde	7634 Sep 22 18:33	24° $\underline{\mathfrak{A}}$ 12'00		retrograde	7635 Sep 03 18:00	4° $\underline{\mathfrak{A}}$ 09'48	
evening set	7634 Sep 28 00:50	23° $\underline{\mathfrak{A}}$ 10'17		evening set	7635 Sep 07 12:01	3° $\underline{\mathfrak{A}}$ 38'59	
min. Earth dist.	7634 Oct 03 10:01	20° $\underline{\mathfrak{A}}$ 22'30	0.56719 AU	min. Earth dist.	7635 Sep 14 18:59	0° $\underline{\mathfrak{A}}$ 21'06	0.55316 AU
inferior conj	7634 Oct 06 01:56	18° $\underline{\mathfrak{A}}$ 40'31	-5°29'49		7635 Sep 15 09:41	30° $\mathbb{R}$ $\mathbb{P}$	
minimum elong	7634 Oct 06 03:49	18° $\underline{\mathfrak{A}}$ 37'29	5°29'42	inferior conj	7635 Sep 16 07:26	29° $\mathbb{P}$ 28'35	-5°17'55
morning rise	7634 Oct 14 08:59	14° $\underline{\mathfrak{A}}$ 36'08					

minimum elong	7635 Sep 16 02:02	29° $\mathbb{M}$ 36'23	5°17'16	evening max el	7636 Aug 02 03:57	7° $\mathbb{M}$ 54'03	21°23'34
morning rise	7635 Sep 24 18:11	25° $\mathbb{M}$ 39'02		desc. node	7636 Aug 11 01:10	13° $\mathbb{M}$ 29'45	
direct	7635 Sep 27 19:19	25° $\mathbb{M}$ 17'17		retrograde	7636 Aug 14 07:56	13° $\mathbb{M}$ 55'48	
	7635 Oct 08 08:46	0° $\mathbb{L}$		evening set	7636 Aug 16 18:50	13° $\mathbb{M}$ 41'57	
morning max el	7635 Oct 08 20:40	0° $\mathbb{L}$ 27'10	20°44'59	inferior conj	7636 Aug 26 01:02	9° $\mathbb{M}$ 43'43	-4°11'25
asc. node	7635 Oct 17 02:36	10° $\mathbb{L}$ 49'58		minimum elong	7636 Aug 25 15:37	9° $\mathbb{M}$ 56'56	4°08'55
	7635 Oct 27 10:58	0° $\mathbb{M}$		min. Earth dist.	7636 Aug 26 04:04	9° $\mathbb{M}$ 39'28	0.54710 AU
morning set	7635 Oct 28 01:30	1° $\mathbb{M}$ 14'42		morning rise	7636 Sep 03 13:15	5° $\mathbb{M}$ 51'30	
				direct	7636 Sep 07 04:05	5° $\mathbb{M}$ 23'12	
superior conj	7635 Nov 04 12:05	16° $\mathbb{M}$ 40'19	1°38'31	morning max el	7636 Sep 19 17:50	11° $\mathbb{M}$ 20'30	22°20'48
minimum elong	7635 Nov 04 13:25	16° $\mathbb{M}$ 47'09	1°38'33	asc. node	7636 Oct 02 23:36	29° $\mathbb{M}$ 22'36	
max. Earth dist.	7635 Nov 09 11:06	26° $\mathbb{M}$ 35'19	1.35918 AU		7636 Oct 03 08:02	0° $\mathbb{L}$	
	7635 Nov 11 05:34	0° $\mathbb{M}$		morning set	7636 Oct 11 11:56	16° $\mathbb{L}$ 03'02	
evening rise	7635 Nov 13 10:09	4° $\mathbb{M}$ 07'23			7636 Oct 18 01:01	0° $\mathbb{M}$	
desc. node	7635 Nov 21 03:05	17° $\mathbb{M}$ 44'04					
	7635 Nov 28 19:28	0° $\mathbb{L}$		superior conj	7636 Oct 18 14:09	1° $\mathbb{M}$ 09'38	1°41'50
evening max el	7635 Dec 18 23:06	25° $\mathbb{L}$ 44'49	26°14'17	minimum elong	7636 Oct 18 14:08	1° $\mathbb{M}$ 09'34	1°41'53
	7635 Dec 24 00:11	0° $\mathbb{M}$		max. Earth dist.	7636 Oct 22 02:11	8° $\mathbb{M}$ 28'36	1.34220 AU
retrograde	7635 Dec 31 16:50	2° $\mathbb{M}$ 57'21		evening rise	7636 Oct 26 15:12	17° $\mathbb{M}$ 34'11	
evening set	7636 Jan 06 23:04	0° $\mathbb{M}$ 24'42			7636 Nov 02 07:58	0° $\mathbb{M}$	
	7636 Jan 07 10:37	30° $\mathbb{R}$ $\mathbb{L}$		desc. node	7636 Nov 07 00:09	7° $\mathbb{M}$ 58'35	
min. Earth dist.	7636 Jan 11 03:42	26° $\mathbb{L}$ 00'57	0.66695 AU		7636 Nov 22 03:02	0° $\mathbb{L}$	
inferior conj	7636 Jan 12 18:28	24° $\mathbb{L}$ 02'02	-0°06'13	evening max el	7636 Nov 30 12:07	9° $\mathbb{L}$ 21'39	27°03'13
minimum elong	7636 Jan 12 18:37	24° $\mathbb{L}$ 01'32	0°06'03	retrograde	7636 Dec 13 19:33	16° $\mathbb{L}$ 41'32	
transit middle	7636 Jan 12 18:37	24° $\mathbb{L}$ 01'32	0°06'03	evening set	7636 Dec 20 12:45	14° $\mathbb{L}$ 04'30	
transit begin	7636 Jan 12 15:58	24° $\mathbb{L}$ 09'43		min. Earth dist.	7636 Dec 24 11:27	10° $\mathbb{L}$ 15'04	0.65399 AU
transit end	7636 Jan 12 21:17	23° $\mathbb{L}$ 53'22		inferior conj	7636 Dec 26 13:52	7° $\mathbb{L}$ 52'22	-1°08'14
asc. node	7636 Jan 13 01:52	23° $\mathbb{L}$ 39'20		minimum elong	7636 Dec 26 15:51	7° $\mathbb{L}$ 46'42	1°07'16
morning rise	7636 Jan 18 14:53	18° $\mathbb{L}$ 15'23		asc. node	7636 Dec 29 22:55	4° $\mathbb{L}$ 20'00	
direct	7636 Jan 21 17:00	17° $\mathbb{L}$ 21'19		morning rise	7637 Jan 01 20:11	2° $\mathbb{L}$ 17'45	
morning max el	7636 Jan 28 08:57	20° $\mathbb{L}$ 58'28	18°39'33	direct	7637 Jan 04 13:14	1° $\mathbb{L}$ 38'09	
	7636 Feb 04 13:29	0° $\mathbb{M}$		morning max el	7637 Jan 11 00:01	5° $\mathbb{L}$ 03'53	18°06'00
desc. node	7636 Feb 17 02:27	19° $\mathbb{M}$ 16'46			7637 Jan 27 23:04	0° $\mathbb{M}$	
morning set	7636 Feb 18 11:32	21° $\mathbb{M}$ 26'57		morning set	7637 Jan 29 07:48	2° $\mathbb{M}$ 13'59	
	7636 Feb 23 22:03	0° $\mathbb{M}$		desc. node	7637 Feb 02 23:26	9° $\mathbb{M}$ 49'00	
max. Earth dist.	7636 Mar 05 02:26	15° $\mathbb{M}$ 57'09	1.45410 AU				
				superior conj	7637 Feb 13 00:05	25° $\mathbb{M}$ 51'28	-1°07'41
superior conj	7636 Mar 05 17:29	16° $\mathbb{M}$ 56'05	-1°46'10	minimum elong	7637 Feb 12 16:13	25° $\mathbb{M}$ 20'28	1°06'37
minimum elong	7636 Mar 05 08:10	16° $\mathbb{M}$ 19'36	1°45'21		7637 Feb 15 15:13	0° $\mathbb{M}$	
	7636 Mar 14 00:45	0° $\mathbb{Y}$		max. Earth dist.	7637 Feb 15 21:47	0° $\mathbb{M}$ 25'46	1.45363 AU
evening rise	7636 Mar 21 06:02	11° $\mathbb{Y}$ 29'18		evening rise	7637 Mar 01 04:49	21° $\mathbb{M}$ 07'20	
greatest brilliancy	7636 Mar 29 03:07	24° $\mathbb{Y}$ 04'43	-0.9m		7637 Mar 06 22:39	0° $\mathbb{Y}$	
	7636 Apr 01 21:56	0° $\mathbb{L}$		greatest brilliancy	7637 Mar 14 03:30	10° $\mathbb{Y}$ 58'30	-0.7m
asc. node	7636 Apr 10 00:53	11° $\mathbb{L}$ 19'05		evening max el	7637 Mar 25 23:09	26° $\mathbb{Y}$ 41'27	19°32'41
evening max el	7636 Apr 11 15:57	13° $\mathbb{L}$ 05'26	18°46'26	asc. node	7637 Mar 27 21:58	28° $\mathbb{Y}$ 29'23	
retrograde	7636 Apr 18 07:54	16° $\mathbb{L}$ 46'47			7637 Mar 30 03:28	0° $\mathbb{L}$	
evening set	7636 Apr 21 14:39	15° $\mathbb{L}$ 45'00		retrograde	7637 Apr 02 05:11	0° $\mathbb{L}$ 50'11	
inferior conj	7636 Apr 27 05:24	10° $\mathbb{L}$ 05'08	3°25'13		7637 Apr 05 03:32	30° $\mathbb{R}$ $\mathbb{Y}$	
minimum elong	7636 Apr 27 05:34	10° $\mathbb{L}$ 04'38	3°25'08	evening set	7637 Apr 05 19:52	29° $\mathbb{Y}$ 33'55	
min. Earth dist.	7636 Apr 29 01:28	7° $\mathbb{L}$ 48'56	0.65559 AU	inferior conj	7637 Apr 11 05:52	23° $\mathbb{Y}$ 39'09	3°20'28
morning rise	7636 May 02 19:53	3° $\mathbb{L}$ 48'11		minimum elong	7637 Apr 11 04:51	23° $\mathbb{Y}$ 42'31	3°20'21
direct	7636 May 09 08:25	1° $\mathbb{L}$ 00'37		min. Earth dist.	7637 Apr 12 10:56	22° $\mathbb{Y}$ 03'20	0.66908 AU
desc. node	7636 May 15 01:59	2° $\mathbb{L}$ 45'21		morning rise	7637 Apr 16 13:29	17° $\mathbb{Y}$ 21'52	
morning max el	7636 May 22 13:36	8° $\mathbb{L}$ 50'03	26°51'38	direct	7637 Apr 22 15:52	14° $\mathbb{Y}$ 39'05	
	7636 Jun 08 02:21	0° $\mathbb{I}$		desc. node	7637 May 01 22:58	19° $\mathbb{Y}$ 11'10	
	7636 Jun 25 22:40	0° $\mathbb{L}$		morning max el	7637 May 04 23:25	22° $\mathbb{Y}$ 01'28	25°39'44
morning set	7636 Jun 27 08:33	2° $\mathbb{L}$ 40'26			7637 May 11 22:35	0° $\mathbb{L}$	
max. Earth dist.	7636 Jul 01 15:31	11° $\mathbb{L}$ 04'41	1.34122 AU		7637 Jun 01 08:37	0° $\mathbb{I}$	
				morning set	7637 Jun 10 02:44	15° $\mathbb{I}$ 13'45	
superior conj	7636 Jul 05 22:50	19° $\mathbb{L}$ 53'51	-0°10'40	max. Earth dist.	7637 Jun 13 20:22	22° $\mathbb{I}$ 11'00	1.35864 AU
minimum elong	7636 Jul 05 23:25	19° $\mathbb{L}$ 56'54	0°10'40		7637 Jun 17 21:07	0° $\mathbb{L}$	
behind sun begin	7636 Jul 05 19:06	19° $\mathbb{L}$ 34'27					
behind sun end	7636 Jul 06 03:43	20° $\mathbb{L}$ 19'23		superior conj	7637 Jun 19 15:16	3° $\mathbb{L}$ 29'54	-0°41'40
asc. node	7636 Jul 07 00:05	22° $\mathbb{L}$ 06'01		minimum elong	7637 Jun 19 17:43	3° $\mathbb{L}$ 42'13	0°41'19
	7636 Jul 10 17:49	0° $\mathbb{L}$		asc. node	7637 Jun 23 21:06	12° $\mathbb{L}$ 07'29	
evening rise	7636 Jul 13 08:41	5° $\mathbb{L}$ 31'20		evening rise	7637 Jun 27 15:11	19° $\mathbb{L}$ 49'36	
	7636 Jul 26 17:02	0° $\mathbb{M}$			7637 Jul 02 18:10	0° $\mathbb{L}$	





























































































































evening max el	7637 Jul 15 09:41	18° $\Omega$ 54'21	20°04'12	evening max el	7638 Jun 28 04:12	0° $\Omega$ 39'02	19°04'53
retrograde	7637 Jul 25 21:40	24° $\Omega$ 04'33		retrograde	7638 Jul 07 00:11	5° $\Omega$ 00'31	
evening set	7637 Jul 27 19:15	23° $\Omega$ 55'09		evening set	7638 Jul 08 22:43	4° $\Omega$ 48'47	
desc. node	7637 Jul 28 22:11	23° $\Omega$ 41'10		desc. node	7638 Jul 15 19:12	1° $\Omega$ 36'26	
inferior conj	7637 Aug 05 20:36	19° $\Omega$ 56'06	-2°23'34	inferior conj	7638 Jul 17 07:19	0° $\Omega$ 35'33	-0°27'23
minimum elong	7637 Aug 05 14:00	20° $\Omega$ 05'58	2°21'14	minimum elong	7638 Jul 17 06:09	0° $\Omega$ 37'34	0°27'01
min. Earth dist.	7637 Aug 07 15:09	18° $\Omega$ 52'29	0.55066 AU	min. Earth dist.	7638 Jul 18 03:58	30° $\mathbb{R}$ $\mathbb{S}$	
morning rise	7637 Aug 14 07:14	15° $\Omega$ 41'00		morning rise	7638 Jul 20 05:21	28° $\mathbb{S}$ 36'13	0.56317 AU
direct	7637 Aug 18 15:52	14° $\Omega$ 59'36		direct	7638 Jul 25 10:28	25° $\mathbb{S}$ 45'10	
morning max el	7637 Sep 01 07:28	21° $\Omega$ 41'44	24°06'08	morning max el	7638 Jul 30 15:39	24° $\mathbb{S}$ 41'37	
asc. node	7637 Sep 08 13:17	0° $\mathbb{P}$		asc. node	7638 Aug 11 15:52	0° $\Omega$	
morning set	7637 Sep 19 20:34	18° $\mathbb{P}$ 27'59		morning set	7638 Aug 13 20:38	1° $\Omega$ 58'29	25°45'53
	7637 Sep 25 23:36	0° $\mathbb{S}$ 53'07			7638 Sep 02 14:30	0° $\mathbb{P}$	
	7637 Sep 25 13:35	0° $\mathbb{S}$		asc. node	7638 Sep 06 17:33	7° $\mathbb{P}$ 57'50	
				morning set	7638 Sep 10 10:54	15° $\mathbb{P}$ 40'31	
superior conj	7637 Oct 02 21:36	15° $\mathbb{S}$ 53'00	1°38'39	superior conj	7638 Sep 17 08:12	0° $\mathbb{S}$ 43'39	1°29'42
minimum elong	7637 Oct 02 20:28	15° $\mathbb{S}$ 46'51	1°38'36	minimum elong	7638 Sep 17 06:18	0° $\mathbb{S}$ 33'10	1°29'30
max. Earth dist.	7637 Oct 05 01:51	20° $\mathbb{S}$ 35'10	1.32945 AU		7638 Sep 17 00:17	0° $\mathbb{S}$	
	7637 Oct 09 13:38	0° $\mathbb{M}$		max. Earth dist.	7638 Sep 18 08:28	2° $\mathbb{S}$ 57'25	1.32116 AU
evening rise	7637 Oct 10 07:47	1° $\mathbb{M}$ 32'15		evening rise	7638 Sep 24 08:44	15° $\mathbb{S}$ 52'52	
desc. node	7637 Oct 24 21:12	27° $\mathbb{M}$ 50'59			7638 Oct 01 12:42	0° $\mathbb{M}$	
	7637 Oct 26 05:59	0° $\mathbb{J}$		desc. node	7638 Oct 11 18:14	17° $\mathbb{M}$ 12'20	
evening max el	7637 Nov 13 00:09	22° $\mathbb{J}$ 39'03	27°27'24		7638 Oct 21 06:38	0° $\mathbb{J}$	
retrograde	7637 Nov 26 15:47	29° $\mathbb{J}$ 57'37		evening max el	7638 Oct 26 08:52	5° $\mathbb{J}$ 23'51	27°20'49
evening set	7637 Dec 03 16:34	27° $\mathbb{J}$ 24'01		retrograde	7638 Nov 09 04:37	12° $\mathbb{J}$ 36'57	
min. Earth dist.	7637 Dec 07 10:34	24° $\mathbb{J}$ 06'41	0.63775 AU	evening set	7638 Nov 16 07:14	10° $\mathbb{J}$ 16'28	
inferior conj	7637 Dec 10 00:21	21° $\mathbb{J}$ 28'28	-2°15'07	min. Earth dist.	7638 Nov 19 23:18	7° $\mathbb{J}$ 25'39	0.61878 AU
minimum elong	7637 Dec 10 04:32	21° $\mathbb{J}$ 17'44	2°13'21	inferior conj	7638 Nov 22 22:57	4° $\mathbb{J}$ 42'52	-3°23'36
morning rise	7637 Dec 16 18:13	16° $\mathbb{J}$ 08'48		minimum elong	7638 Nov 23 05:10	4° $\mathbb{J}$ 28'40	3°21'24
asc. node	7637 Dec 16 19:57	16° $\mathbb{J}$ 07'07			7638 Nov 29 09:39	30° $\mathbb{R}$ $\mathbb{M}$	
direct	7637 Dec 19 04:31	15° $\mathbb{J}$ 39'43		morning rise	7638 Nov 30 05:12	29° $\mathbb{M}$ 41'39	
morning max el	7637 Dec 25 17:13	19° $\mathbb{J}$ 03'27	17°49'41	direct	7638 Dec 02 11:34	29° $\mathbb{M}$ 19'27	
	7638 Jan 02 19:05	0° $\mathbb{Z}$		asc. node	7638 Dec 03 16:58	29° $\mathbb{M}$ 26'09	
morning set	7638 Jan 11 07:29	14° $\mathbb{Z}$ 21'07			7638 Dec 05 11:46	0° $\mathbb{J}$	
desc. node	7638 Jan 20 20:25	0° $\approx$ 29'17		morning max el	7638 Dec 09 09:27	2° $\mathbb{J}$ 49'37	17°51'21
	7638 Jan 20 13:21	0° $\approx$		morning set	7638 Dec 25 04:07	27° $\mathbb{J}$ 28'09	
superior conj	7638 Jan 23 23:55	5° $\approx$ 39'43	-0°22'35		7638 Dec 26 13:50	0° $\mathbb{Z}$	
minimum elong	7638 Jan 23 21:25	5° $\approx$ 29'31	0°22'07	superior conj	7639 Jan 05 01:20	16° $\mathbb{Z}$ 42'16	0°19'28
max. Earth dist.	7638 Jan 29 16:26	14° $\approx$ 49'16	1.44593 AU	minimum elong	7639 Jan 05 03:05	16° $\mathbb{Z}$ 49'44	0°19'18
	7638 Feb 08 09:43	0° $\mathbb{H}$		desc. node	7639 Jan 07 17:26	21° $\mathbb{Z}$ 14'10	
evening rise	7638 Feb 08 16:17	0° $\mathbb{H}$ 25'12		max. Earth dist.	7639 Jan 12 07:56	28° $\mathbb{Z}$ 51'28	1.43185 AU
	7638 Feb 28 16:09	0° $\mathbb{Y}$			7639 Jan 13 00:47	0° $\approx$	
evening max el	7638 Mar 09 01:05	10° $\mathbb{Y}$ 19'12	20°33'35	evening rise	7639 Jan 19 07:44	10° $\approx$ 00'51	
asc. node	7638 Mar 14 19:02	14° $\mathbb{Y}$ 35'08			7639 Feb 01 13:30	0° $\mathbb{H}$	
retrograde	7638 Mar 17 03:37	15° $\mathbb{Y}$ 03'47		evening max el	7639 Feb 19 21:37	23° $\mathbb{H}$ 58'15	21°45'47
evening set	7638 Mar 21 03:21	13° $\mathbb{Y}$ 32'29		retrograde	7639 Mar 01 01:16	29° $\mathbb{H}$ 23'36	
inferior conj	7638 Mar 26 11:08	7° $\mathbb{Y}$ 24'43	3°03'52	asc. node	7639 Mar 01 16:04	29° $\mathbb{H}$ 21'39	
minimum elong	7638 Mar 26 09:18	7° $\mathbb{Y}$ 31'01	3°03'33	evening set	7639 Mar 05 11:21	27° $\mathbb{H}$ 36'58	
min. Earth dist.	7638 Mar 27 02:15	6° $\mathbb{Y}$ 32'52	0.67817 AU	inferior conj	7639 Mar 10 19:01	21° $\mathbb{H}$ 18'45	2°37'16
morning rise	7638 Mar 31 15:01	1° $\mathbb{Y}$ 09'28		minimum elong	7639 Mar 10 16:46	21° $\mathbb{H}$ 26'35	2°36'43
	7638 Apr 02 02:24	30° $\mathbb{R}$ $\mathbb{H}$		min. Earth dist.	7639 Mar 10 21:23	21° $\mathbb{H}$ 10'34	0.68287 AU
direct	7638 Apr 06 04:32	28° $\mathbb{H}$ 40'49		morning rise	7639 Mar 15 22:02	15° $\mathbb{H}$ 06'57	
	7638 Apr 10 16:55	0° $\mathbb{Y}$		direct	7639 Mar 20 21:25	12° $\mathbb{H}$ 58'22	
morning max el	7638 Apr 17 08:15	5° $\mathbb{Y}$ 21'09	24°13'55	morning max el	7639 Mar 30 18:22	18° $\mathbb{H}$ 48'11	22°44'16
desc. node	7638 Apr 18 19:57	6° $\mathbb{Y}$ 54'30		desc. node	7639 Apr 05 16:57	25° $\mathbb{H}$ 33'55	
	7638 May 06 08:37	0° $\mathbb{B}$			7639 Apr 09 03:33	0° $\mathbb{Y}$	
morning set	7638 May 23 01:19	26° $\mathbb{B}$ 48'47			7639 Apr 29 12:12	0° $\mathbb{B}$	
	7638 May 24 21:03	0° $\mathbb{I}$		morning set	7639 May 03 22:45	7° $\mathbb{B}$ 11'36	
max. Earth dist.	7638 May 26 17:27	3° $\mathbb{I}$ 17'37	1.37963 AU	max. Earth dist.	7639 May 08 14:10	14° $\mathbb{B}$ 58'48	1.40205 AU
superior conj	7638 Jun 02 19:58	16° $\mathbb{I}$ 29'03	-1°12'57	superior conj	7639 May 16 08:45	28° $\mathbb{B}$ 41'01	-1°41'32
minimum elong	7638 Jun 03 00:22	16° $\mathbb{I}$ 50'07	1°12'21	minimum elong	7639 May 16 14:22	29° $\mathbb{B}$ 06'35	1°40'59
	7638 Jun 09 17:47	0° $\mathbb{S}$			7639 May 17 02:05	0° $\mathbb{I}$	
asc. node	7638 Jun 10 18:08	2° $\mathbb{S}$ 00'31		evening rise	7639 May 26 06:29	17° $\mathbb{I}$ 12'46	
evening rise	7638 Jun 11 15:30	3° $\mathbb{S}$ 46'11		asc. node	7639 May 28 15:09	21° $\mathbb{I}$ 40'28	
	7638 Jun 27 12:52	0° $\Omega$					




































































































































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evening max el	7639 Jun 11 08:33	13°☿02'35	18°26'14	retrograde	7640 May 31 13:13	29°☿22'44	
retrograde	7639 Jun 18 21:48	16°☿48'33		evening set	7640 Jun 03 01:32	28°☿54'31	
evening set	7639 Jun 21 02:45	16°☿30'11		inferior conj	7640 Jun 09 20:22	24°☿01'13	2°18'59
inferior conj	7639 Jun 28 15:24	11°☿57'05	1°10'04	minimum elong	7640 Jun 09 23:30	23°☿53'53	2°18'03
minimum elong	7639 Jun 28 17:43	11°☿52'24	1°09'10	min. Earth dist.	7640 Jun 13 03:07	20°☿58'27	0.60422 AU
min. Earth dist.	7639 Jul 02 00:36	9°☿15'04	0.58212 AU	morning rise	7640 Jun 16 18:50	18°☿09'04	
desc. node	7639 Jul 02 16:15	8°☿45'44		desc. node	7640 Jun 18 13:19	17°☿10'26	
morning rise	7639 Jul 06 05:21	6°☿31'12		direct	7640 Jun 23 08:12	16°☿03'24	
direct	7639 Jul 12 05:29	4°☿57'33		morning max el	7640 Jul 07 16:04	24°☿00'17	27°47'13
morning max el	7639 Jul 26 14:55	12°☿38'57	27°03'32		7640 Jul 13 01:56	0°☿	
	7639 Aug 09 06:46	0°♌			7640 Aug 01 13:23	0°♌	
asc. node	7639 Aug 24 14:32	27°♌44'27		morning set	7640 Aug 09 01:36	14°♌44'45	
morning set	7639 Aug 25 20:08	0°♍19'24		asc. node	7640 Aug 10 11:32	17°♌42'30	
	7639 Aug 25 16:28	0°♍		max. Earth dist.	7640 Aug 15 04:34	27°♌53'26	1.31799 AU
superior conj	7639 Sep 01 19:59	15°♍34'29	1°15'32	superior conj	7640 Aug 16 07:12	0°♍20'14	0°56'36
minimum elong	7639 Sep 01 17:44	15°♍22'01	1°15'11	minimum elong	7640 Aug 16 05:05	0°♍08'32	0°56'11
max. Earth dist.	7639 Sep 01 18:39	15°♍27'05	1.31732 AU		7640 Aug 16 03:32	0°♍	
	7639 Sep 08 10:13	0°♎		evening rise	7640 Aug 23 01:28	15°♍09'17	
evening rise	7639 Sep 08 15:21	0°♎27'16			7640 Aug 30 09:43	0°♎	
	7639 Sep 24 15:51	0°♏		desc. node	7640 Sep 14 12:20	23°♎24'30	
desc. node	7639 Sep 28 15:17	5°♏49'20		evening max el	7640 Sep 19 05:49	28°♎30'17	25°28'37
evening max el	7639 Oct 08 11:20	17°♏22'28	26°40'25		7640 Sep 20 21:26	0°♏	
retrograde	7639 Oct 22 09:07	24°♏30'14		retrograde	7640 Oct 03 03:55	5°♏33'00	
evening set	7639 Oct 29 04:27	22°♏33'46		evening set	7640 Oct 09 03:23	4°♏10'12	
min. Earth dist.	7639 Nov 02 01:06	19°♏58'05	0.59811 AU	min. Earth dist.	7640 Oct 13 17:49	1°♏32'08	0.57769 AU
inferior conj	7639 Nov 05 06:06	17°♏25'14	-4°27'32		7640 Oct 15 23:24	30°♏♎	
minimum elong	7639 Nov 05 13:11	17°♏11'07	4°25'41	inferior conj	7640 Oct 16 18:32	29°♎26'38	-5°15'45
morning rise	7639 Nov 13 00:13	12°♏45'51		minimum elong	7640 Oct 16 23:32	29°♎17'59	5°15'03
direct	7639 Nov 15 06:06	12°♏27'21		morning rise	7640 Oct 24 22:01	25°♎10'14	
asc. node	7639 Nov 20 14:00	14°♏17'35		direct	7640 Oct 27 07:41	24°♎52'40	
morning max el	7639 Nov 22 21:19	16°♏12'47	18°12'18	morning max el	7640 Nov 05 01:13	29°♎03'12	18°54'07
	7639 Dec 02 12:52	0°♐			7640 Nov 05 23:49	0°♏	
morning set	7639 Dec 08 15:35	11°♐16'04		asc. node	7640 Nov 06 11:02	0°♏30'15	
				morning set	7640 Nov 21 13:18	25°♏31'51	
superior conj	7639 Dec 18 03:01	28°♐54'11	0°53'23		7640 Nov 23 19:45	0°♐	
minimum elong	7639 Dec 18 06:26	29°♐09'40	0°53'01	superior conj	7640 Nov 30 00:06	12°♐01'31	1°17'52
	7639 Dec 18 17:37	0°♑		minimum elong	7640 Nov 30 03:20	12°♐16'56	1°17'37
desc. node	7639 Dec 25 14:26	11°♑59'35		max. Earth dist.	7640 Dec 07 00:18	24°♐56'38	1.39165 AU
max. Earth dist.	7639 Dec 25 18:21	12°♑16'13	1.41297 AU		7640 Dec 09 21:33	0°♑	
evening rise	7639 Dec 30 15:44	20°♑22'43		evening rise	7640 Dec 10 21:42	1°♑43'39	
	7640 Jan 05 17:16	0°♒		desc. node	7640 Dec 11 11:26	2°♑42'07	
	7640 Jan 26 20:39	0°♓			7640 Dec 28 23:57	0°♒	
evening max el	7640 Feb 02 13:42	7°♓39'24	23°04'44	evening max el	7641 Jan 15 03:17	21°♒23'44	24°24'26
retrograde	7640 Feb 12 20:44	13°♓45'24		retrograde	7641 Jan 26 12:38	28°♒04'05	
asc. node	7640 Feb 16 13:08	12°♓37'30		evening set	7641 Jan 31 22:42	25°♒48'31	
evening set	7640 Feb 17 18:20	11°♓43'44		asc. node	7641 Feb 02 10:14	24°♒23'10	
inferior conj	7640 Feb 23 03:35	5°♓18'22	2°01'47	min. Earth dist.	7641 Feb 05 14:11	20°♒30'00	0.67986 AU
minimum elong	7640 Feb 23 01:23	5°♓26'00	2°01'06	inferior conj	7641 Feb 06 10:59	19°♒20'14	1°18'03
min. Earth dist.	7640 Feb 22 18:06	5°♓51'09	0.68333 AU	minimum elong	7641 Feb 06 09:17	19°♒25'56	1°17'28
	7640 Feb 27 10:36	30°♒♓		morning rise	7641 Feb 11 19:59	13°♒19'21	
morning rise	7640 Feb 28 08:22	29°♒11'19		direct	7641 Feb 15 16:01	11°♒55'17	
direct	7640 Mar 03 17:38	27°♒25'09		morning max el	7641 Feb 23 07:25	16°♒14'08	20°05'37
	7640 Mar 09 16:31	0°♈			7641 Mar 06 04:39	0°♈	
morning max el	7640 Mar 12 09:16	2°♈25'28	21°19'28	desc. node	7641 Mar 09 10:55	4°♈43'05	
desc. node	7640 Mar 22 13:57	14°♈53'58		morning set	7641 Mar 22 15:21	24°♈37'45	
	7640 Apr 02 01:36	0°♉			7641 Mar 26 02:28	0°♉	
morning set	7640 Apr 12 16:39	16°♉19'01		max. Earth dist.	7641 Apr 02 00:58	10°♉56'38	1.44001 AU
max. Earth dist.	7640 Apr 19 16:08	27°♉32'44	1.42302 AU	superior conj	7641 Apr 07 16:33	20°♉04'38	-2°11'24
	7640 Apr 21 03:50	0°♊		minimum elong	7641 Apr 07 16:30	20°♉04'26	2°11'27
superior conj	7640 Apr 27 00:54	9°♊55'34	-2°02'57		7641 Apr 13 15:59	0°♊	
minimum elong	7640 Apr 27 05:34	10°♊15'36	2°02'45	evening rise	7641 Apr 20 16:05	11°♊57'08	
evening rise	7640 May 08 08:15	0°♋00'12		asc. node	7641 May 01 09:15	29°♊59'32	
	7640 May 08 08:13	0°♋			7641 May 01 09:23	0°♋	
asc. node	7640 May 14 12:11	11°♋02'29					

evening max el	7641 May 08 08:14	9° $\Pi$ 11'17	18°08'16		7642 Apr 06 08:55	0° $\mathcal{B}$	
retrograde	7641 May 14 18:02	12° $\Pi$ 32'26		asc. node	7642 Apr 18 06:20	18° $\mathcal{B}$ 23'41	
evening set	7641 May 17 13:35	11° $\Pi$ 52'06		evening max el	7642 Apr 21 20:58	22° $\mathcal{B}$ 38'54	18°27'24
inferior conj	7641 May 23 18:28	6° $\Pi$ 39'41	3°01'05	retrograde	7642 Apr 28 08:03	26° $\mathcal{B}$ 08'53	
minimum elong	7641 May 23 20:48	6° $\Pi$ 33'29	3°00'35	evening set	7642 May 01 10:43	25° $\mathcal{B}$ 15'04	
min. Earth dist.	7641 May 26 14:16	3° $\Pi$ 40'25	0.62633 AU	inferior conj	7642 May 07 05:35	19° $\mathcal{B}$ 44'50	3°21'24
morning rise	7641 May 30 02:21	0° $\Pi$ 32'10		minimum elong	7642 May 07 06:33	19° $\mathcal{B}$ 42'00	3°21'15
	7641 May 30 20:38	30° $\mathcal{R}$ $\mathcal{B}$		min. Earth dist.	7642 May 09 10:35	17° $\mathcal{B}$ 09'03	0.64603 AU
desc. node	7641 Jun 05 10:22	28° $\mathcal{B}$ 01'28		morning rise	7642 May 13 01:32	13° $\mathcal{B}$ 30'00	
direct	7641 Jun 05 21:08	28° $\mathcal{B}$ 00'50		direct	7642 May 19 18:12	10° $\mathcal{B}$ 44'45	
	7641 Jun 12 09:50	0° $\Pi$		desc. node	7642 May 23 07:24	11° $\mathcal{B}$ 24'57	
morning max el	7641 Jun 19 22:37	6° $\Pi$ 03'27	27°52'45	morning max el	7642 Jun 02 08:15	18° $\mathcal{B}$ 41'59	27°22'35
	7641 Jul 08 01:38	0° $\mathcal{B}$			7642 Jun 11 21:04	0° $\Pi$	
morning set	7641 Jul 24 01:07	28° $\mathcal{B}$ 49'40			7642 Jul 01 00:38	0° $\mathcal{B}$	
	7641 Jul 24 14:58	0° $\mathcal{Q}$		morning set	7642 Jul 07 16:06	12° $\mathcal{B}$ 26'57	
asc. node	7641 Jul 28 08:33	7° $\mathcal{Q}$ 46'41		max. Earth dist.	7642 Jul 12 08:11	21° $\mathcal{B}$ 50'25	1.33332 AU
max. Earth dist.	7641 Jul 29 10:16	10° $\mathcal{Q}$ 04'03	1.32325 AU	asc. node	7642 Jul 15 05:33	27° $\mathcal{B}$ 53'02	
superior conj	7641 Jul 31 16:02	14° $\mathcal{Q}$ 54'40	0°33'21	superior conj	7642 Jul 15 20:26	29° $\mathcal{B}$ 11'58	0°06'20
minimum elong	7641 Jul 31 14:33	14° $\mathcal{Q}$ 46'36	0°32'58	minimum elong	7642 Jul 15 20:07	29° $\mathcal{B}$ 10'18	0°06'09
evening rise	7641 Aug 07 13:06	29° $\mathcal{Q}$ 52'20		behind sun begin	7642 Jul 15 15:01	28° $\mathcal{B}$ 43'11	
	7641 Aug 07 14:32	0° $\mathcal{P}$		behind sun end	7642 Jul 16 01:14	29° $\mathcal{B}$ 37'26	
	7641 Aug 24 04:52	0° $\mathcal{L}$			7642 Jul 16 05:28	0° $\mathcal{Q}$	
evening max el	7641 Aug 31 18:14	8° $\mathcal{L}$ 57'42	23°55'25	evening rise	7642 Jul 23 00:21	14° $\mathcal{Q}$ 30'56	
desc. node	7641 Sep 01 09:24	9° $\mathcal{L}$ 33'33			7642 Jul 30 18:55	0° $\mathcal{P}$	
retrograde	7641 Sep 14 10:41	15° $\mathcal{L}$ 49'14		evening max el	7642 Aug 13 07:24	19° $\mathcal{P}$ 12'53	22°16'39
evening set	7641 Sep 19 01:43	15° $\mathcal{L}$ 02'15		desc. node	7642 Aug 19 06:29	23° $\mathcal{P}$ 45'37	
min. Earth dist.	7641 Sep 25 04:47	12° $\mathcal{L}$ 03'13	0.56039 AU	retrograde	7642 Aug 26 04:55	25° $\mathcal{P}$ 37'48	
inferior conj	7641 Sep 27 10:43	10° $\mathcal{L}$ 41'13	-5°31'11	evening set	7642 Aug 29 08:05	25° $\mathcal{P}$ 16'09	
minimum elong	7641 Sep 27 09:35	10° $\mathcal{L}$ 42'56	5°31'07	min. Earth dist.	7642 Sep 06 13:26	21° $\mathcal{P}$ 41'17	0.54950 AU
morning rise	7641 Oct 05 19:40	6° $\mathcal{L}$ 44'20		inferior conj	7642 Sep 07 09:48	21° $\mathcal{P}$ 12'38	-4°56'15
direct	7641 Oct 08 14:01	6° $\mathcal{L}$ 24'49		minimum elong	7642 Sep 07 01:52	21° $\mathcal{P}$ 23'47	4°54'48
morning max el	7641 Oct 18 17:49	11° $\mathcal{L}$ 10'57	19°58'12	morning rise	7642 Sep 15 21:20	17° $\mathcal{P}$ 24'21	
asc. node	7641 Oct 24 08:04	17° $\mathcal{L}$ 48'49		direct	7642 Sep 19 04:14	17° $\mathcal{P}$ 00'07	
	7641 Oct 31 14:54	0° $\mathcal{M}$		morning max el	7642 Sep 30 21:28	22° $\mathcal{P}$ 29'56	21°23'47
morning set	7641 Nov 05 17:56	10° $\mathcal{M}$ 06'25			7642 Oct 07 07:26	0° $\mathcal{L}$	
				asc. node	7642 Oct 11 05:04	5° $\mathcal{L}$ 58'17	
superior conj	7641 Nov 13 11:37	25° $\mathcal{M}$ 50'13	1°33'19	morning set	7642 Oct 21 02:52	24° $\mathcal{L}$ 51'47	
minimum elong	7641 Nov 13 13:44	26° $\mathcal{M}$ 00'49	1°33'15		7642 Oct 23 13:39	0° $\mathcal{M}$	
	7641 Nov 15 14:05	0° $\mathcal{X}$					
max. Earth dist.	7641 Nov 19 06:10	7° $\mathcal{X}$ 03'32	1.37044 AU	superior conj	7642 Oct 28 09:19	10° $\mathcal{M}$ 07'38	1°40'46
evening rise	7641 Nov 23 00:53	14° $\mathcal{X}$ 01'33		minimum elong	7642 Oct 28 10:04	10° $\mathcal{M}$ 11'31	1°40'49
desc. node	7641 Nov 28 08:27	23° $\mathcal{X}$ 18'02		max. Earth dist.	7642 Nov 01 17:13	18° $\mathcal{M}$ 57'35	1.35152 AU
	7641 Dec 02 09:56	0° $\mathcal{Z}$		evening rise	7642 Nov 05 21:39	27° $\mathcal{M}$ 06'19	
	7641 Dec 23 20:12	0° $\approx$			7642 Nov 07 10:41	0° $\mathcal{X}$	
evening max el	7641 Dec 28 16:23	5° $\approx$ 11'00	25°37'54	desc. node	7642 Nov 15 05:27	13° $\mathcal{X}$ 42'07	
retrograde	7642 Jan 09 23:57	12° $\approx$ 14'49			7642 Nov 25 18:13	0° $\mathcal{Z}$	
evening set	7642 Jan 15 22:51	9° $\approx$ 47'37		evening max el	7642 Dec 11 05:37	18° $\mathcal{Z}$ 54'35	26°37'47
asc. node	7642 Jan 20 07:19	5° $\approx$ 03'33		retrograde	7642 Dec 24 05:42	26° $\mathcal{Z}$ 10'39	
min. Earth dist.	7642 Jan 20 07:17	5° $\approx$ 03'37	0.67268 AU	evening set	7642 Dec 30 16:54	23° $\mathcal{Z}$ 35'37	
inferior conj	7642 Jan 21 15:21	3° $\approx$ 21'22	0°26'39	min. Earth dist.	7643 Jan 03 19:03	19° $\mathcal{Z}$ 26'29	0.66188 AU
minimum elong	7642 Jan 21 14:41	3° $\approx$ 23'31	0°26'28	inferior conj	7643 Jan 05 14:39	17° $\mathcal{Z}$ 16'56	-0°31'47
	7642 Jan 24 10:04	30° $\mathcal{R}$ $\mathcal{Z}$		minimum elong	7643 Jan 05 15:32	17° $\mathcal{Z}$ 14'18	0°31'17
morning rise	7642 Jan 27 06:56	27° $\mathcal{Z}$ 28'40		asc. node	7643 Jan 07 04:23	15° $\mathcal{Z}$ 27'06	
direct	7642 Jan 30 15:10	26° $\mathcal{Z}$ 24'26		morning rise	7643 Jan 11 15:01	11° $\mathcal{Z}$ 34'52	
	7642 Feb 06 07:57	0° $\approx$		direct	7643 Jan 14 13:08	10° $\mathcal{Z}$ 47'16	
morning max el	7642 Feb 06 13:25	0° $\approx$ 13'22	19°06'21	morning max el	7643 Jan 21 01:50	14° $\mathcal{Z}$ 18'05	18°23'13
greatest brilliancy	7642 Feb 20 04:26	18° $\approx$ 33'25	-0.7m		7643 Feb 01 13:40	0° $\approx$	
desc. node	7642 Feb 24 07:53	24° $\approx$ 53'39		morning set	7643 Feb 09 20:54	13° $\approx$ 11'39	
	7642 Feb 27 15:15	0° $\mathcal{H}$		desc. node	7643 Feb 11 04:50	15° $\approx$ 19'09	
morning set	7642 Mar 01 17:54	3° $\mathcal{H}$ 16'14			7643 Feb 20 11:04	0° $\mathcal{H}$	
max. Earth dist.	7642 Mar 15 16:16	25° $\mathcal{H}$ 00'26	1.45103 AU				
superior conj	7642 Mar 18 08:56	29° $\mathcal{H}$ 15'24	-2°01'14	superior conj	7643 Feb 25 13:21	8° $\mathcal{H}$ 00'05	-1°31'22
minimum elong	7642 Mar 18 02:01	28° $\mathcal{H}$ 48'05	2°00'51	minimum elong	7643 Feb 25 03:49	7° $\mathcal{H}$ 22'44	1°30'20
	7642 Mar 18 20:13	0° $\mathcal{Y}$		max. Earth dist.	7643 Feb 26 11:27	9° $\mathcal{H}$ 26'38	1.45487 AU
evening rise	7642 Apr 02 01:48	22° $\mathcal{Y}$ 56'37			7643 Mar 11 14:19	0° $\mathcal{Y}$	
				evening rise	7643 Mar 13 12:05	2° $\mathcal{Y}$ 59'58	

greatest brilliancy	7643 Mar 23 17:23	19° $\Upsilon$ 01'26	-0.8m	minimum elong	7644 Feb 04 19:42	16° $\approx$ 50'05	0°47'49
	7643 Mar 31 03:46	0° $\text{B}$		max. Earth dist.	7644 Feb 09 07:08	23° $\approx$ 56'07	1.45122 AU
asc. node	7643 Apr 05 03:24	6° $\text{B}$ 04'28			7644 Feb 13 03:57	0° $\text{H}$	
evening max el	7643 Apr 05 06:42	6° $\text{B}$ 12'53	19°04'10	evening rise	7644 Feb 21 04:21	12° $\text{H}$ 24'56	
retrograde	7643 Apr 12 03:34	10° $\text{B}$ 04'19			7644 Mar 03 17:41	0° $\Upsilon$	
evening set	7643 Apr 15 13:42	8° $\text{B}$ 56'14		greatest brilliancy	7644 Mar 06 15:56	4° $\Upsilon$ 20'21	-0.6m
inferior conj	7643 Apr 21 02:03	3° $\text{B}$ 09'45	3°24'47	evening max el	7644 Mar 18 11:38	19° $\Upsilon$ 49'08	19°56'57
minimum elong	7643 Apr 21 01:41	3° $\text{B}$ 10'56	3°24'43	asc. node	7644 Mar 22 00:27	22° $\Upsilon$ 48'58	
min. Earth dist.	7643 Apr 22 15:33	1° $\text{B}$ 10'17	0.66188 AU	retrograde	7644 Mar 26 01:41	24° $\Upsilon$ 12'30	
	7643 Apr 23 14:23	30° $\text{R}\Upsilon$		evening set	7644 Mar 29 20:06	22° $\Upsilon$ 49'45	
morning rise	7643 Apr 26 13:15	26° $\Upsilon$ 52'32		inferior conj	7644 Apr 04 04:50	16° $\Upsilon$ 48'54	3°14'47
direct	7643 May 02 21:55	24° $\Upsilon$ 05'55		minimum elong	7644 Apr 04 03:25	16° $\Upsilon$ 53'39	3°14'35
desc. node	7643 May 10 04:24	26° $\Upsilon$ 53'31		min. Earth dist.	7644 Apr 05 03:44	15° $\Upsilon$ 31'52	0.67343 AU
	7643 May 13 23:21	0° $\text{B}$		morning rise	7644 Apr 09 10:29	10° $\Upsilon$ 32'13	
morning max el	7643 May 15 18:34	1° $\text{B}$ 44'57	26°23'30	direct	7644 Apr 15 07:29	7° $\Upsilon$ 54'49	
	7643 Jun 05 23:47	0° $\text{II}$		desc. node	7644 Apr 26 01:22	13° $\Upsilon$ 55'15	
morning set	7643 Jun 20 19:08	25° $\text{II}$ 27'19		morning max el	7644 Apr 27 04:02	15° $\Upsilon$ 01'02	25°04'27
	7643 Jun 23 04:30	0° $\text{E}$			7644 May 09 10:36	0° $\text{B}$	
max. Earth dist.	7643 Jun 24 19:41	3° $\text{E}$ 10'32	1.34813 AU		7644 May 28 20:49	0° $\text{II}$	
				morning set	7644 Jun 02 05:39	7° $\text{II}$ 37'39	
superior conj	7643 Jun 29 18:05	13° $\text{E}$ 05'39	-0°23'37	max. Earth dist.	7644 Jun 05 20:53	14° $\text{II}$ 14'35	1.36719 AU
minimum elong	7643 Jun 29 19:25	13° $\text{E}$ 12'32	0°23'28				
asc. node	7643 Jul 02 02:33	17° $\text{E}$ 57'48		superior conj	7644 Jun 12 05:56	26° $\text{II}$ 26'48	-0°55'02
evening rise	7643 Jul 07 09:16	28° $\text{E}$ 59'12		minimum elong	7644 Jun 12 09:14	26° $\text{II}$ 43'05	0°54'34
	7643 Jul 07 21:01	0° $\Omega$			7644 Jun 14 00:57	0° $\text{E}$	
evening max el	7643 Jul 26 05:37	29° $\Omega$ 50'19	20°47'28	asc. node	7644 Jun 17 23:33	7° $\text{E}$ 56'11	
	7643 Jul 26 09:35	0° $\text{H}$		evening rise	7644 Jun 20 13:29	13° $\text{E}$ 09'19	
desc. node	7643 Aug 06 03:33	5° $\text{H}$ 30'09			7644 Jun 29 11:22	0° $\Omega$	
retrograde	7643 Aug 06 17:11	5° $\text{H}$ 30'58		evening max el	7644 Jul 07 16:53	11° $\Omega$ 09'05	19°36'25
evening set	7643 Aug 08 20:23	5° $\text{H}$ 19'59		retrograde	7644 Jul 17 11:27	15° $\Omega$ 58'06	
inferior conj	7643 Aug 18 02:25	1° $\text{H}$ 23'00	-3°28'59	evening set	7644 Jul 19 08:04	15° $\Omega$ 48'24	
minimum elong	7643 Aug 17 17:29	1° $\text{H}$ 35'43	3°26'12	desc. node	7644 Jul 23 00:37	14° $\Omega$ 37'35	
min. Earth dist.	7643 Aug 18 22:52	0° $\text{H}$ 53'52	0.54746 AU	inferior conj	7644 Jul 28 03:11	11° $\Omega$ 44'16	-1°33'23
	7643 Aug 20 13:25	30° $\text{R}\Omega$		minimum elong	7644 Jul 27 22:55	11° $\Omega$ 50'59	1°31'51
morning rise	7643 Aug 26 14:36	27° $\Omega$ 23'48		min. Earth dist.	7644 Jul 30 11:10	10° $\Omega$ 16'08	0.55495 AU
direct	7643 Aug 30 12:34	26° $\Omega$ 50'59		morning rise	7644 Aug 05 11:25	7° $\Omega$ 14'44	
	7643 Sep 08 17:41	0° $\text{H}$		direct	7644 Aug 10 04:17	6° $\Omega$ 25'24	
morning max el	7643 Sep 12 14:37	3° $\text{H}$ 07'20	23°05'13	morning max el	7644 Aug 24 03:27	13° $\Omega$ 23'52	24°50'15
asc. node	7643 Sep 28 02:02	24° $\text{H}$ 46'31			7644 Sep 06 01:49	0° $\text{H}$	
	7643 Sep 30 20:09	0° $\text{E}$		asc. node	7644 Sep 13 23:00	14° $\text{H}$ 03'12	
morning set	7643 Oct 05 14:04	9° $\text{E}$ 42'19		morning set	7644 Sep 19 01:47	24° $\text{H}$ 32'02	
					7644 Sep 21 14:39	0° $\text{E}$	
superior conj	7643 Oct 12 14:00	24° $\text{E}$ 44'22	1°41'13				
minimum elong	7643 Oct 12 13:28	24° $\text{E}$ 41'34	1°41'15	superior conj	7644 Sep 25 23:03	9° $\text{E}$ 31'51	1°35'31
	7643 Oct 15 01:22	0° $\text{H}$		minimum elong	7644 Sep 25 21:33	9° $\text{E}$ 23'36	1°35'25
max. Earth dist.	7643 Oct 15 12:17	0° $\text{H}$ 57'17	1.33628 AU	max. Earth dist.	7644 Sep 27 15:08	13° $\text{E}$ 10'26	1.32537 AU
evening rise	7643 Oct 20 08:04	10° $\text{H}$ 47'56		evening rise	7644 Oct 03 04:33	24° $\text{E}$ 56'24	
	7643 Oct 30 19:21	0° $\text{H}$			7644 Oct 05 16:53	0° $\text{H}$	
desc. node	7643 Nov 02 02:30	3° $\text{H}$ 48'34		desc. node	7644 Oct 18 23:34	23° $\text{H}$ 29'14	
	7643 Nov 21 08:51	0° $\text{B}$			7644 Oct 23 08:07	0° $\text{H}$	
evening max el	7643 Nov 23 18:23	2° $\text{B}$ 24'38	27°16'47	evening max el	7644 Nov 05 05:05	15° $\text{H}$ 28'58	27°28'28
retrograde	7643 Dec 07 05:31	9° $\text{B}$ 44'11		retrograde	7644 Nov 18 22:52	22° $\text{H}$ 46'07	
evening set	7643 Dec 14 02:41	7° $\text{B}$ 07'24		evening set	7644 Nov 26 01:23	20° $\text{H}$ 16'26	
min. Earth dist.	7643 Dec 17 23:10	3° $\text{B}$ 32'17	0.64756 AU	min. Earth dist.	7644 Nov 29 17:54	17° $\text{H}$ 11'39	0.62998 AU
inferior conj	7643 Dec 20 06:33	1° $\text{B}$ 01'53	-1°36'08	inferior conj	7644 Dec 02 12:21	14° $\text{H}$ 29'35	-2°44'15
minimum elong	7643 Dec 20 09:27	0° $\text{B}$ 53'59	1°34'49	minimum elong	7644 Dec 02 17:28	14° $\text{H}$ 17'05	2°42'14
	7643 Dec 21 05:32	30° $\text{R}\text{H}$		morning rise	7644 Dec 09 11:31	9° $\text{H}$ 17'43	
asc. node	7643 Dec 25 01:24	26° $\text{H}$ 31'08		asc. node	7644 Dec 10 22:25	8° $\text{H}$ 55'48	
morning rise	7643 Dec 26 17:39	25° $\text{H}$ 33'24		direct	7644 Dec 11 19:41	8° $\text{H}$ 52'04	
direct	7643 Dec 29 07:37	24° $\text{H}$ 58'39		morning max el	7644 Dec 18 11:27	12° $\text{H}$ 17'28	17°48'09
morning max el	7644 Jan 04 18:11	28° $\text{H}$ 22'02	17°56'56		7644 Dec 30 12:20	0° $\text{B}$	
	7644 Jan 06 06:40	0° $\text{B}$		morning set	7645 Jan 03 14:49	7° $\text{B}$ 09'45	
morning set	7644 Jan 22 05:25	24° $\text{B}$ 34'44		desc. node	7645 Jan 14 22:47	26° $\text{B}$ 38'06	
	7644 Jan 25 11:35	0° $\approx$					
desc. node	7644 Jan 29 01:47	5° $\approx$ 55'12		superior conj	7645 Jan 15 11:53	27° $\text{B}$ 32'42	-0°03'59
				minimum elong	7645 Jan 15 11:29	27° $\text{B}$ 31'03	0°03'50
superior conj	7644 Feb 05 01:24	17° $\approx$ 12'50	-0°48'40	behind sun begin	7645 Jan 15 02:27	26° $\text{B}$ 53'22	



behind sun end	7645 Jan 15 20:32	28°  08'39		superior conj	7645 Dec 28 00:06	9°  06'10	0°34'59
	7645 Jan 16 23:28	0° 		minimum elong	7645 Dec 28 02:51	9°  18'13	0°34'41
max. Earth dist.	7645 Jan 22 00:24	8°  11'38	1.44058 AU	desc. node	7646 Jan 01 19:47	17°  23'41	
evening rise	7645 Jan 30 15:34	21°  45'44		max. Earth dist.	7646 Jan 04 13:21	21°  57'37	1.42425 AU
	7645 Feb 05 01:04	0° 			7646 Jan 09 12:06	0° 	
	7645 Feb 26 08:23	0° 		evening rise	7646 Jan 10 12:54	1°  38'39	
evening max el	7645 Mar 01 11:06	3°  27'13	21°03'11		7646 Jan 29 12:42	0° 	
asc. node	7645 Mar 08 21:31	8°  23'04		evening max el	7646 Feb 12 05:35	17°  07'19	22°18'58
retrograde	7645 Mar 10 00:07	8°  29'26		retrograde	7646 Feb 21 21:00	22°  15'30	
evening set	7645 Mar 14 04:00	6°  51'43		asc. node	7646 Feb 23 18:36	22°  13'20	
inferior conj	7645 Mar 19 11:29	0°  39'00	2°53'46	evening set	7646 Feb 26 11:44	20°  13'39	
minimum elong	7645 Mar 19 09:25	0°  46'08	2°53'20	inferior conj	7646 Mar 03 19:54	14°  13'03	2°23'16
	7645 Mar 19 22:45	30°  11'11		minimum elong	7646 Mar 03 17:37	14°  11'44	2°22'38
min. Earth dist.	7645 Mar 19 21:03	0°  05'51	0.68062 AU	min. Earth dist.	7646 Mar 03 17:13	14°  11'45	0.68356 AU
morning rise	7645 Mar 24 14:38	24°  12'47		morning rise	7646 Mar 08 23:20	8°  12'55	
direct	7645 Mar 29 22:06	22°  10'41		direct	7646 Mar 13 16:42	6°  12'29	
morning max el	7645 Apr 09 13:09	28°  12'23	23°35'43	morning max el	7646 Mar 23 00:42	11°  15'54	22°07'05
	7645 Apr 11 01:41	0° 		desc. node	7646 Mar 30 19:20	21°  13'03	
desc. node	7645 Apr 12 22:21	2°  04'56			7646 Apr 06 08:35	0° 	
	7645 May 03 03:49	0° 		morning set	7646 Apr 25 03:43	28°  13'33	
morning set	7645 May 14 18:13	18°  43'57			7646 Apr 26 01:05	0° 	
max. Earth dist.	7645 May 18 16:33	25°  30'55	1.38908 AU	max. Earth dist.	7646 Apr 30 14:26	7°  31'12	1.41133 AU
	7645 May 21 05:09	0° 					
superior conj	7645 May 26 04:24	9°  10'07	-1°25'38	superior conj	7646 May 08 08:58	20°  15'55	-1°51'49
minimum elong	7645 May 26 09:28	9°  13'30	1°25'01	minimum elong	7646 May 08 14:33	21°  18'20	1°51'24
evening rise	7645 Jun 04 10:15	26°  15'54			7646 May 13 09:31	0° 	
asc. node	7645 Jun 04 20:35	27°  14'44		evening rise	7646 May 18 20:05	10°  12'04	
	7645 Jun 06 00:37	0° 		asc. node	7646 May 22 17:38	17°  12'17	
evening max el	7645 Jun 20 16:03	23°  11'30	18°46'00		7646 May 30 06:47	0° 	
retrograde	7645 Jun 28 21:43	27°  15'56		evening max el	7646 Jun 03 23:32	5°  15'49	18°15'59
evening set	7645 Jun 30 22:33	27°  15'56		retrograde	7646 Jun 11 03:03	9°  15'24	
inferior conj	7645 Jul 08 22:42	22°  40'57	0°17'10	evening set	7646 Jun 13 11:15	9°  15'02	
minimum elong	7645 Jul 08 23:22	22°  39'44	0°16'48	inferior conj	7646 Jun 20 15:55	4°  15'20	1°42'50
desc. node	7645 Jul 09 21:40	21°  58'38		minimum elong	7646 Jun 20 18:51	4°  14'15	1°41'48
min. Earth dist.	7645 Jul 12 03:35	20°  20'55	0.57061 AU	min. Earth dist.	7646 Jun 24 01:36	1°  15'26	0.59137 AU
morning rise	7645 Jul 16 20:43	17°  34'26			7646 Jun 25 22:56	30°  11'48	
direct	7645 Jul 22 10:29	16°  18'33		desc. node	7646 Jun 26 18:42	29°  12'26	
morning max el	7645 Aug 05 18:23	23°  47'58	26°22'22	morning rise	7646 Jun 27 23:22	28°  12'42	
	7645 Aug 11 09:23	0° 		direct	7646 Jul 04 06:17	26°  12'54	
	7645 Aug 30 00:03	0° 			7646 Jul 12 23:12	0° 	
asc. node	7645 Aug 31 20:00	3°  11'40		morning max el	7646 Jul 18 15:16	4°  15'43	27°26'41
morning set	7645 Sep 03 12:24	9°  16'20			7646 Aug 06 06:46	0° 	
				morning set	7646 Aug 18 20:17	23°  15'50	
superior conj	7645 Sep 10 10:24	24°  11'23	1°24'18	asc. node	7646 Aug 18 17:01	23°  15'33	
minimum elong	7645 Sep 10 08:18	24°  11'53	1°24'02		7646 Aug 21 17:33	0° 	
max. Earth dist.	7645 Sep 10 23:29	25°  13'35	1.31896 AU	superior conj	7646 Aug 25 22:12	9°  13'17	1°08'04
	7645 Sep 12 23:24	0° 		minimum elong	7646 Aug 25 19:57	9°  13'00	1°07'41
evening rise	7645 Sep 17 08:12	9°  13'23		max. Earth dist.	7646 Aug 25 09:59	8°  13'05	1.31703 AU
	7645 Sep 28 00:42	0° 		evening rise	7646 Sep 01 16:35	24°  12'02	
desc. node	7645 Oct 05 20:38	12°  13'33			7646 Sep 04 12:57	0° 	
evening max el	7645 Oct 18 11:24	27°  15'55	27°07'46		7646 Sep 22 03:26	0° 	
	7645 Oct 20 19:54	0° 		desc. node	7646 Sep 22 17:42	0° 	
retrograde	7645 Nov 01 08:40	5°  12'06		evening max el	7646 Sep 30 10:53	9°  13'34	26°13'28
evening set	7645 Nov 08 09:15	2°  12'55		retrograde	7646 Oct 14 09:14	16°  13'39	
min. Earth dist.	7645 Nov 12 02:09	0° 	0.61005 AU	evening set	7646 Oct 20 21:38	14°  13'56	
	7645 Nov 12 08:03	30°  11'11		min. Earth dist.	7646 Oct 25 00:02	12°  13'21	0.58923 AU
inferior conj	7645 Nov 15 04:49	27°  13'31	-3°51'51	inferior conj	7646 Oct 28 04:31	9°  13'58	-4°50'49
minimum elong	7645 Nov 15 11:39	27°  13'16	3°49'41	minimum elong	7646 Oct 28 11:11	9°  13'46	4°49'24
morning rise	7645 Nov 22 16:19	22°  13'39		morning rise	7646 Nov 05 02:59	5°  13'28	
direct	7645 Nov 24 21:49	22°  13'19		direct	7646 Nov 07 09:54	5°  13'11	
asc. node	7645 Nov 27 19:28	22°  13'54		asc. node	7646 Nov 14 16:30	8°  13'23	
morning max el	7645 Dec 02 02:16	25°  13'55	17°57'47	morning max el	7646 Nov 15 11:12	9°  13'06	18°27'20
	7645 Dec 05 13:39	0° 			7646 Nov 29 00:31	0° 	
morning set	7645 Dec 17 18:26	20°  13'36		morning set	7646 Dec 01 10:50	4°  13'38	
	7645 Dec 22 21:38	0°					
				superior conj	7646 Dec 10 10:43	21°  13'43	1°04'55

minimum elong	7646 Dec 10 14:14	22°  00'12	1°04'34	minimum elong	7647 Nov 23 17:22	5°  24'31	1°25'17
	7646 Dec 15 00:11	0° 		max. Earth dist.	7647 Nov 30 03:42	17°  31'37	1.38253 AU
max. Earth dist.	7646 Dec 17 21:55	5°  05'14	1.40413 AU	evening rise	7647 Dec 03 21:30	24°  12'12	
desc. node	7646 Dec 19 16:48	8°  08'47		desc. node	7647 Dec 06 13:49	28°  49'06	
evening rise	7646 Dec 22 06:11	12°  26'18			7647 Dec 07 06:35	0° 	
	7647 Jan 02 09:01	0° 			7647 Dec 27 02:37	0° 	
	7647 Jan 25 00:38	0° 		evening max el	7648 Jan 08 09:46	14°  36'46	24°56'46
evening max el	7647 Jan 25 20:35	0°  50'46	23°38'56	retrograde	7648 Jan 20 04:53	21°  28'02	
retrograde	7647 Feb 05 14:56	7°  11'41		evening set	7648 Jan 25 20:34	19°  06'55	
evening set	7647 Feb 10 17:47	5°  04'02		asc. node	7648 Jan 28 12:45	16°  21'54	
asc. node	7647 Feb 10 15:41	5°  08'27		min. Earth dist.	7648 Jan 30 08:54	14°  03'20	0.67735 AU
	7647 Feb 15 03:54	30° 		inferior conj	7648 Jan 31 10:32	12°  39'02	0°57'08
min. Earth dist.	7647 Feb 15 13:55	29°  25'59	0.68242 AU	minimum elong	7648 Jan 31 09:12	12°  43'24	0°56'42
inferior conj	7647 Feb 16 04:12	28°  37'08	1°44'11	morning rise	7648 Feb 05 22:05	6°  41'38	
minimum elong	7647 Feb 16 02:09	28°  44'10	1°43'31	direct	7648 Feb 09 12:56	5°  26'24	
morning rise	7647 Feb 21 10:29	22°  32'33		morning max el	7648 Feb 16 20:01	9°  30'38	19°38'29
direct	7647 Feb 25 14:06	20°  55'47		greatest brilliancy	7648 Feb 29 14:34	26°  12'53	-0.7m
morning max el	7647 Mar 05 18:22	25°  36'35	20°46'21		7648 Mar 03 03:42	0° 	
	7647 Mar 09 16:57	0° 		desc. node	7648 Mar 03 13:17	0°  35'53	
desc. node	7647 Mar 17 16:19	10°  36'47		morning set	7648 Mar 13 08:34	15°  32'11	
	7647 Mar 30 18:56	0° 			7648 Mar 22 15:42	0° 	
morning set	7647 Apr 04 11:21	7°  13'30		max. Earth dist.	7648 Mar 25 08:02	4°  13'56	1.44554 AU
max. Earth dist.	7647 Apr 12 19:42	20°  28'58	1.43097 AU				
	7647 Apr 18 14:25	0° 		superior conj	7648 Mar 29 20:02	11°  25'06	-2°09'35
				minimum elong	7648 Mar 29 17:01	11°  12'58	2°09'32
superior conj	7647 Apr 19 14:59	1°  43'03	-2°08'29		7648 Apr 10 03:16	0° 	
minimum elong	7647 Apr 19 18:08	1°  56'18	2°08'27	evening rise	7648 Apr 12 13:39	4°  05'31	
evening rise	7647 May 01 14:45	22°  31'45		asc. node	7648 Apr 25 11:46	25°  13'59	
	7647 May 05 20:07	0° 			7648 Apr 29 00:24	0° 	
asc. node	7647 May 09 14:42	6°  29'29		evening max el	7648 May 01 00:50	2°  14'11	18°14'09
evening max el	7647 May 18 11:35	18°  53'06	18°05'35	retrograde	7648 May 07 10:10	5°  27'48	
retrograde	7647 May 25 00:44	22°  15'08		evening set	7648 May 10 08:40	4°  21'52	
evening set	7647 May 27 16:17	21°  41'49			7648 May 15 22:31	30°  R 	
inferior conj	7647 Jun 03 04:38	16°  39'56	2°39'51	inferior conj	7648 May 16 08:48	29°  31'24	3°12'02
minimum elong	7647 Jun 03 07:33	16°  32'43	2°39'05	minimum elong	7648 May 16 10:34	29°  26'27	3°11'43
min. Earth dist.	7647 Jun 06 07:21	13°  36'09	0.61382 AU	min. Earth dist.	7648 May 18 22:26	26°  40'14	0.63506 AU
morning rise	7647 Jun 09 20:40	10°  40'15		morning rise	7648 May 22 11:13	23°  19'46	
desc. node	7647 Jun 13 15:46	8°  48'14		direct	7648 May 29 05:43	20°  41'14	
direct	7647 Jun 16 13:20	8°  22'47		desc. node	7648 May 30 12:47	20°  46'33	
morning max el	7647 Jun 30 18:52	16°  22'24	27°54'21	morning max el	7648 Jun 12 03:18	28°  43'10	27°44'05
	7647 Jul 11 23:41	0° 			7648 Jun 13 09:05	0° 	
	7647 Jul 29 21:53	0° 			7648 Jul 04 20:08	0° 	
morning set	7647 Aug 02 23:28	8°  07'22		morning set	7648 Jul 16 19:42	22°  01'51	
asc. node	7647 Aug 05 14:00	13°  03'40			7648 Jul 20 17:15	0° 	
max. Earth dist.	7647 Aug 08 18:44	20°  02'19	1.31965 AU	max. Earth dist.	7648 Jul 21 21:44	2°  02'41	1.32695 AU
				asc. node	7648 Jul 22 11:00	3°  03'56	
superior conj	7647 Aug 10 08:35	23°  05'43	0°47'15				
minimum elong	7647 Aug 10 06:40	23°  04'40	0°46'49	superior conj	7648 Jul 24 15:46	8°  02'26	0°22'19
	7647 Aug 13 02:57	0° 		minimum elong	7648 Jul 24 14:43	8°  16'46	0°21'59
evening rise	7647 Aug 17 03:34	8°  07'46		evening rise	7648 Jul 31 15:16	23°  02'58	
	7647 Aug 28 00:46	0° 			7648 Aug 03 18:18	0° 	
desc. node	7647 Sep 09 14:48	17°  49'28			7648 Aug 22 21:55	0° 	
evening max el	7647 Sep 12 02:21	20°  22'26	24°50'48	evening max el	7648 Aug 23 13:41	0°  39'08	23°13'00
retrograde	7647 Sep 25 22:41	27°  21'03		desc. node	7648 Aug 26 11:51	3°  12'39	
evening set	7647 Oct 01 09:56	26°  13'50		retrograde	7648 Sep 06 00:02	7°  22'24	
min. Earth dist.	7647 Oct 06 13:32	23°  29'18	0.56977 AU	evening set	7648 Sep 09 23:27	6°  47'48	
inferior conj	7647 Oct 09 08:18	21°  40'42	-5°27'27	min. Earth dist.	7648 Sep 16 22:50	3°  35'09	0.55478 AU
minimum elong	7647 Oct 09 11:08	21°  36'04	5°27'13	inferior conj	7648 Sep 18 16:16	2°  34'43	-5°23'11
morning rise	7647 Oct 17 14:35	17°  33'29		minimum elong	7648 Sep 18 11:56	2°  41'03	5°22'47
direct	7647 Oct 20 03:38	17°  15'16			7648 Sep 23 11:25	30°  R 	
morning max el	7647 Oct 29 10:35	21°  39'18	19°18'38	morning rise	7648 Sep 27 02:38	28°  07'43	
asc. node	7647 Nov 01 13:31	25°  05'33		direct	7648 Sep 30 01:50	28°  07'22	
	7647 Nov 05 01:39	0° 			7648 Oct 06 05:25	0° 	
morning set	7647 Nov 15 11:52	19°  03'29		morning max el	7648 Oct 10 21:41	3°  26'18	20°32'17
	7647 Nov 20 23:17	0° 		asc. node	7648 Oct 18 10:30	12°  46'58	
					7648 Oct 27 22:46	0° 	
superior conj	7647 Nov 23 14:32	5°  10'45	1°25'28	morning set	7648 Oct 29 18:34	3°  07'43	

superior conj	7648 Nov 06 06:49	19° $\mathbb{M}$ 12'58	1°37'24	morning max el	7649 Sep 22 20:23	14° $\mathbb{M}$ 26'05	22°05'40
minimum elong	7648 Nov 06 08:22	19° $\mathbb{M}$ 20'50	1°37'23		7649 Oct 04 14:15	0° $\mathbb{A}$	
max. Earth dist.	7648 Nov 11 10:56	29° $\mathbb{M}$ 29'02	1.36196 AU	asc. node	7649 Oct 05 07:29	1° $\mathbb{A}$ 14'00	
	7648 Nov 11 17:21	0° $\mathbb{A}$		morning set	7649 Oct 14 04:39	18° $\mathbb{A}$ 30'56	
evening rise	7648 Nov 15 08:35	6° $\mathbb{A}$ 50'47			7649 Oct 19 14:22	0° $\mathbb{M}$	
desc. node	7648 Nov 22 10:50	19° $\mathbb{A}$ 20'29					
	7648 Nov 29 01:24	0° $\mathbb{B}$		superior conj	7649 Oct 21 07:50	3° $\mathbb{M}$ 39'40	1°41'45
evening max el	7648 Dec 20 22:38	28° $\mathbb{B}$ 22'30	26°05'23	minimum elong	7649 Oct 21 08:01	3° $\mathbb{M}$ 40'37	1°41'49
	7648 Dec 22 16:31	0° $\mathbb{A}$		max. Earth dist.	7649 Oct 25 00:50	11° $\mathbb{M}$ 21'57	1.34445 AU
retrograde	7649 Jan 02 14:01	5° $\mathbb{A}$ 33'30		evening rise	7649 Oct 29 11:36	20° $\mathbb{M}$ 12'31	
evening set	7649 Jan 08 18:23	3° $\mathbb{A}$ 02'04			7649 Nov 03 17:43	0° $\mathbb{A}$	
	7649 Jan 11 18:48	30° $\mathbb{R}$ $\mathbb{B}$		desc. node	7649 Nov 09 07:52	9° $\mathbb{A}$ 37'57	
min. Earth dist.	7649 Jan 12 23:56	28° $\mathbb{B}$ 33'05	0.66852 AU		7649 Nov 23 00:50	0° $\mathbb{B}$	
asc. node	7649 Jan 14 09:49	26° $\mathbb{B}$ 48'01		evening max el	7649 Dec 03 11:48	12° $\mathbb{B}$ 01'56	26°57'26
inferior conj	7649 Jan 14 12:59	26° $\mathbb{B}$ 38'10	0°02'39	retrograde	7649 Dec 16 17:36	19° $\mathbb{B}$ 21'14	
minimum elong	7649 Jan 14 12:54	26° $\mathbb{B}$ 38'24	0°02'44	evening set	7649 Dec 23 09:16	16° $\mathbb{B}$ 44'35	
transit middle	7649 Jan 14 12:54	26° $\mathbb{B}$ 38'24	0°02'44	min. Earth dist.	7649 Dec 27 08:51	12° $\mathbb{B}$ 50'00	0.65611 AU
transit begin	7649 Jan 14 10:06	26° $\mathbb{B}$ 47'09		inferior conj	7649 Dec 29 09:28	10° $\mathbb{B}$ 30'30	-0°58'26
transit end	7649 Jan 14 15:43	26° $\mathbb{B}$ 29'40		minimum elong	7649 Dec 29 11:09	10° $\mathbb{B}$ 25'39	0°57'36
morning rise	7649 Jan 20 08:05	20° $\mathbb{B}$ 49'54		asc. node	7650 Jan 01 06:50	7° $\mathbb{B}$ 22'50	
direct	7649 Jan 23 11:41	19° $\mathbb{B}$ 53'23		morning rise	7650 Jan 04 14:11	4° $\mathbb{B}$ 53'45	
morning max el	7649 Jan 30 05:05	23° $\mathbb{B}$ 33'20	18°45'56	direct	7650 Jan 07 08:27	4° $\mathbb{B}$ 12'11	
	7649 Feb 04 13:58	0° $\mathbb{A}$		morning max el	7650 Jan 13 19:33	7° $\mathbb{B}$ 39'05	18°09'56
desc. node	7649 Feb 18 10:13	20° $\mathbb{A}$ 53'19			7650 Jan 29 06:38	0° $\mathbb{A}$	
morning set	7649 Feb 20 19:48	24° $\mathbb{A}$ 38'52		morning set	7650 Feb 01 11:40	5° $\mathbb{A}$ 13'11	
	7649 Feb 24 05:47	0° $\mathbb{H}$		desc. node	7650 Feb 05 07:11	11° $\mathbb{A}$ 24'09	
max. Earth dist.	7649 Mar 08 01:01	18° $\mathbb{H}$ 28'15	1.45353 AU				
				superior conj	7650 Feb 16 10:42	29° $\mathbb{A}$ 10'24	-1°14'12
superior conj	7649 Mar 09 05:14	20° $\mathbb{H}$ 18'56	-1°50'45	minimum elong	7650 Feb 16 02:13	28° $\mathbb{A}$ 37'02	1°13'08
minimum elong	7649 Mar 08 20:20	19° $\mathbb{H}$ 44'02	1°50'01		7650 Feb 16 23:18	0° $\mathbb{H}$	
	7649 Mar 15 08:45	0° $\mathbb{Y}$		max. Earth dist.	7650 Feb 18 20:23	2° $\mathbb{H}$ 56'59	1.45421 AU
evening rise	7649 Mar 24 13:14	14° $\mathbb{Y}$ 40'06		evening rise	7650 Mar 04 14:46	24° $\mathbb{H}$ 24'14	
greatest brilliancy	7649 Mar 31 09:54	25° $\mathbb{Y}$ 42'42	-0.9m		7650 Mar 08 05:14	0° $\mathbb{Y}$	
	7649 Apr 03 02:38	0° $\mathbb{B}$		greatest brilliancy	7650 Mar 16 21:36	13° $\mathbb{Y}$ 20'37	-0.7m
asc. node	7649 Apr 12 08:50	13° $\mathbb{B}$ 21'07		evening max el	7650 Mar 28 20:24	29° $\mathbb{Y}$ 20'38	19°24'47
evening max el	7649 Apr 14 12:28	15° $\mathbb{B}$ 44'46	18°40'57		7650 Mar 29 12:24	0° $\mathbb{B}$	
retrograde	7649 Apr 21 02:57	19° $\mathbb{B}$ 22'50		asc. node	7650 Mar 30 05:54	0° $\mathbb{B}$ 40'00	
evening set	7649 Apr 24 08:36	18° $\mathbb{B}$ 23'12		retrograde	7650 Apr 04 23:49	3° $\mathbb{B}$ 24'24	
inferior conj	7649 Apr 30 00:19	12° $\mathbb{B}$ 45'55	3°24'40	evening set	7650 Apr 08 13:18	2° $\mathbb{B}$ 10'17	
minimum elong	7649 Apr 30 00:41	12° $\mathbb{B}$ 44'46	3°24'34		7650 Apr 10 23:17	30° $\mathbb{R}$ $\mathbb{Y}$	
min. Earth dist.	7649 May 01 22:44	10° $\mathbb{B}$ 24'09	0.65325 AU	inferior conj	7650 Apr 13 23:49	26° $\mathbb{Y}$ 17'42	3°22'00
morning rise	7649 May 05 16:06	6° $\mathbb{B}$ 29'17		minimum elong	7650 Apr 13 22:58	26° $\mathbb{Y}$ 20'30	3°21'53
direct	7649 May 12 05:51	3° $\mathbb{B}$ 41'50		min. Earth dist.	7650 Apr 15 07:04	24° $\mathbb{Y}$ 35'32	0.66741 AU
desc. node	7649 May 17 09:47	5° $\mathbb{B}$ 06'57		morning rise	7650 Apr 19 08:17	20° $\mathbb{Y}$ 00'23	
morning max el	7649 May 25 13:36	11° $\mathbb{B}$ 34'01	27°00'26	direct	7650 Apr 25 12:27	17° $\mathbb{Y}$ 16'13	
	7649 Jun 09 05:30	0° $\mathbb{I}$		desc. node	7650 May 04 06:47	21° $\mathbb{Y}$ 18'43	
	7649 Jun 27 09:16	0° $\mathbb{B}$		morning max el	7650 May 07 23:30	24° $\mathbb{Y}$ 43'15	25°51'31
morning set	7649 Jun 30 06:02	5° $\mathbb{B}$ 24'41			7650 May 12 17:50	0° $\mathbb{B}$	
max. Earth dist.	7649 Jul 04 15:16	14° $\mathbb{B}$ 03'40	1.33903 AU		7650 Jun 02 16:21	0° $\mathbb{I}$	
				morning set	7650 Jun 13 02:38	18° $\mathbb{I}$ 05'15	
superior conj	7649 Jul 08 17:34	22° $\mathbb{B}$ 30'12	-0°06'07	max. Earth dist.	7650 Jun 16 21:39	25° $\mathbb{I}$ 12'19	1.35581 AU
minimum elong	7649 Jul 08 17:54	22° $\mathbb{B}$ 31'56	0°06'10		7650 Jun 19 08:57	0° $\mathbb{B}$	
behind sun begin	7649 Jul 08 12:38	22° $\mathbb{B}$ 04'24					
behind sun end	7649 Jul 08 23:09	22° $\mathbb{B}$ 59'30		superior conj	7650 Jun 22 11:26	6° $\mathbb{B}$ 11'04	-0°36'54
asc. node	7649 Jul 09 08:00	23° $\mathbb{B}$ 46'00		minimum elong	7650 Jun 22 13:35	6° $\mathbb{B}$ 21'56	0°36'35
	7649 Jul 12 06:39	0° $\mathbb{Q}$		asc. node	7650 Jun 26 05:00	13° $\mathbb{B}$ 48'29	
evening rise	7649 Jul 16 01:44	8° $\mathbb{Q}$ 02'23		evening rise	7650 Jun 30 08:54	22° $\mathbb{B}$ 23'24	
	7649 Jul 27 17:05	0° $\mathbb{M}$			7650 Jul 04 03:40	0° $\mathbb{Q}$	
evening max el	7649 Aug 05 05:46	10° $\mathbb{M}$ 59'39	21°36'51	evening max el	7650 Jul 18 09:33	21° $\mathbb{Q}$ 53'54	20°14'47
desc. node	7649 Aug 13 08:55	16° $\mathbb{M}$ 24'43		retrograde	7650 Jul 29 03:38	27° $\mathbb{Q}$ 11'49	
retrograde	7649 Aug 17 14:50	17° $\mathbb{M}$ 07'53		evening set	7650 Jul 31 02:12	27° $\mathbb{Q}$ 02'14	
evening set	7649 Aug 20 05:19	16° $\mathbb{M}$ 52'30		desc. node	7650 Jul 31 05:59	27° $\mathbb{Q}$ 00'38	
inferior conj	7649 Aug 29 10:52	12° $\mathbb{M}$ 53'23	-4°24'47	inferior conj	7650 Aug 09 05:13	23° $\mathbb{Q}$ 04'16	-2°41'17
minimum elong	7649 Aug 29 01:36	13° $\mathbb{M}$ 06'22	4°22'30	minimum elong	7650 Aug 10 21:52	23° $\mathbb{Q}$ 15'05	2°38'44
min. Earth dist.	7649 Aug 29 07:49	12° $\mathbb{M}$ 57'39	0.54741 AU	min. Earth dist.	7650 Aug 10 18:24	22° $\mathbb{Q}$ 09'33	0.54954 AU
morning rise	7649 Sep 06 22:56	9° $\mathbb{M}$ 02'44		morning rise	7650 Aug 17 16:24	18° $\mathbb{Q}$ 53'54	
direct	7649 Sep 10 11:36	8° $\mathbb{M}$ 35'37		direct	7650 Aug 21 22:18	18° $\mathbb{Q}$ 14'55	

morning max el	7650 Sep 04 10:39	24° $\Omega$ 50'33	23°50'26	direct	7651 Aug 02 19:49	27° $\Theta$ 54'36	
	7650 Sep 09 05:17	0° $\Pi$			7651 Aug 10 06:00	0° $\Omega$	
asc. node	7650 Sep 22 04:28	20° $\Pi$ 15'21		morning max el	7651 Aug 16 23:36	5° $\Omega$ 06'45	25°32'03
	7650 Sep 27 01:56	0° $\Omega$			7651 Sep 03 22:29	0° $\Pi$	
morning set	7650 Sep 28 16:14	3° $\Omega$ 21'20		asc. node	7651 Sep 09 01:27	9° $\Pi$ 42'13	
				morning set	7651 Sep 13 03:43	18° $\Pi$ 09'45	
superior conj	7650 Oct 05 14:37	18° $\Omega$ 21'29	1°39'30		7651 Sep 18 14:08	0° $\Omega$	
minimum elong	7650 Oct 05 13:38	18° $\Omega$ 16'09	1°39'30				
max. Earth dist.	7650 Oct 07 23:24	23° $\Omega$ 26'55	1.33107 AU	superior conj	7651 Sep 20 00:54	3° $\Omega$ 11'40	1°31'24
	7650 Oct 11 02:16	0° $\Pi$		minimum elong	7651 Sep 19 23:06	3° $\Omega$ 01'42	1°31'14
evening rise	7650 Oct 13 02:41	4° $\Pi$ 06'41		max. Earth dist.	7651 Sep 21 05:16	5° $\Omega$ 47'34	1.32213 AU
desc. node	7650 Oct 27 04:55	29° $\Pi$ 34'25		evening rise	7651 Sep 27 02:36	18° $\Omega$ 24'30	
	7650 Oct 27 11:19	0° $\Sigma$			7651 Oct 02 22:45	0° $\Pi$	
evening max el	7650 Nov 16 00:09	25° $\Sigma$ 23'16	27°25'39	desc. node	7651 Oct 14 02:00	19° $\Pi$ 01'18	
	7650 Nov 21 17:58	0° $\Sigma$			7651 Oct 21 23:11	0° $\Sigma$	
retrograde	7650 Nov 29 14:42	2° $\Sigma$ 41'59		evening max el	7651 Oct 29 09:28	8° $\Sigma$ 13'16	27°23'48
evening set	7650 Dec 06 14:42	0° $\Sigma$ 07'25		retrograde	7651 Nov 12 04:38	15° $\Sigma$ 27'14	
	7650 Dec 06 18:41	30° $\Sigma$ 07'25		evening set	7651 Nov 19 07:33	13° $\Sigma$ 03'58	
min. Earth dist.	7650 Dec 10 09:20	26° $\Sigma$ 45'34	0.64037 AU	min. Earth dist.	7651 Nov 22 23:34	10° $\Sigma$ 09'54	0.62178 AU
inferior conj	7650 Dec 12 21:27	24° $\Sigma$ 09'10	-2°04'45	inferior conj	7651 Nov 25 22:00	7° $\Sigma$ 26'54	-3°13'21
minimum elong	7650 Dec 13 01:17	23° $\Sigma$ 59'08	2°03'06	minimum elong	7651 Nov 26 03:58	7° $\Sigma$ 13'03	3°11'11
asc. node	7650 Dec 19 03:52	18° $\Sigma$ 57'34		morning rise	7651 Dec 03 02:26	2° $\Sigma$ 22'52	
morning rise	7650 Dec 19 13:31	18° $\Sigma$ 47'01		direct	7651 Dec 05 09:12	1° $\Sigma$ 59'50	
direct	7650 Dec 22 00:43	18° $\Sigma$ 16'32		asc. node	7651 Dec 06 00:54	2° $\Sigma$ 01'47	
morning max el	7650 Dec 28 12:35	21° $\Sigma$ 39'51	17°51'02	morning max el	7651 Dec 12 05:11	5° $\Sigma$ 28'22	17°49'56
	7651 Jan 03 22:56	0° $\Sigma$			7651 Dec 27 23:35	0° $\Sigma$	
morning set	7651 Jan 14 07:38	17° $\Sigma$ 09'42		morning set	7651 Dec 28 01:29	0° $\Sigma$ 08'30	
	7651 Jan 21 22:22	0° $\approx$					
desc. node	7651 Jan 23 04:10	2° $\approx$ 03'28		superior conj	7652 Jan 08 04:35	19° $\Sigma$ 39'30	0°13'33
				minimum elong	7652 Jan 08 05:51	19° $\Sigma$ 44'54	0°13'29
superior conj	7651 Jan 27 07:07	8° $\approx$ 48'29	-0°29'24	behind sun begin	7652 Jan 08 01:04	19° $\Sigma$ 24'32	
minimum elong	7651 Jan 27 03:48	8° $\approx$ 35'00	0°28'49	behind sun end	7652 Jan 08 10:39	20° $\Sigma$ 05'14	
max. Earth dist.	7651 Feb 01 15:30	17° $\approx$ 23'04	1.44754 AU	desc. node	7652 Jan 10 01:09	22° $\Sigma$ 47'39	
	7651 Feb 09 17:05	0° $\text{X}$			7652 Jan 14 09:40	0° $\approx$	
evening rise	7651 Feb 12 03:01	3° $\text{X}$ 43'01		max. Earth dist.	7652 Jan 15 07:36	1° $\approx$ 29'16	1.43426 AU
	7651 Mar 01 17:39	0° $\Upsilon$		evening rise	7652 Jan 22 16:50	13° $\approx$ 13'10	
evening max el	7651 Mar 11 23:11	12° $\Upsilon$ 58'24	20°23'41		7652 Feb 02 18:39	0° $\text{X}$	
asc. node	7651 Mar 17 02:58	16° $\Upsilon$ 56'45		evening max el	7652 Feb 22 20:25	26° $\text{X}$ 36'56	21°34'31
retrograde	7651 Mar 19 22:13	17° $\Upsilon$ 37'07			7652 Feb 26 17:42	0° $\Upsilon$	
evening set	7651 Mar 23 20:35	16° $\Upsilon$ 07'57		retrograde	7652 Mar 02 20:11	1° $\Upsilon$ 56'22	
inferior conj	7651 Mar 29 04:33	10° $\Upsilon$ 01'55	3°07'06	asc. node	7652 Mar 03 00:03	1° $\Upsilon$ 56'14	
minimum elong	7651 Mar 29 02:48	10° $\Upsilon$ 07'52	3°06'47	evening set	7652 Mar 07 04:38	0° $\Upsilon$ 11'56	
min. Earth dist.	7651 Mar 29 21:38	9° $\Upsilon$ 03'37	0.67711 AU		7652 Mar 07 10:23	30° $\Sigma$ 07'25	
morning rise	7651 Apr 03 08:49	3° $\Upsilon$ 46'20		inferior conj	7652 Mar 12 12:11	23° $\text{X}$ 54'58	2°41'55
direct	7651 Apr 09 00:19	1° $\Upsilon$ 15'16		minimum elong	7652 Mar 12 09:58	24° $\text{X}$ 02'39	2°41'23
morning max el	7651 Apr 20 08:28	8° $\Upsilon$ 02'22	24°27'13	min. Earth dist.	7652 Mar 12 16:21	23° $\text{X}$ 40'30	0.68239 AU
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	7651 May 07 12:58	0° $\text{B}$		direct	7652 Mar 22 16:36	15° $\text{X}$ 30'49	
morning set	7651 May 26 04:33	29° $\text{B}$ 50'20		morning max el	7652 Apr 01 18:18	21° $\text{X}$ 28'39	22°57'33
	7651 May 26 06:46	0° $\Pi$		desc. node	7652 Apr 07 00:44	27° $\text{X}$ 24'09	
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					7652 Apr 29 19:38	0° $\text{B}$	
superior conj	7651 Jun 05 18:10	19° $\Pi$ 16'45	-1°08'18	morning set	7652 May 06 06:06	10° $\text{B}$ 25'02	
minimum elong	7651 Jun 05 22:18	19° $\Pi$ 36'39	1°07'43	max. Earth dist.	7652 May 10 16:13	17° $\text{B}$ 53'12	1.39870 AU
	7651 Jun 11 05:10	0° $\Theta$			7652 May 17 12:30	0° $\Pi$	
asc. node	7651 Jun 13 02:03	3° $\Theta$ 43'29					
evening rise	7651 Jun 14 10:23	6° $\Theta$ 24'18		superior conj	7652 May 18 09:38	1° $\Pi$ 36'31	-1°37'32
	7651 Jun 27 23:53	0° $\Omega$		minimum elong	7652 May 18 15:11	2° $\Pi$ 01'54	1°36'58
evening max el	7651 Jul 01 02:18	3° $\Omega$ 32'23	19°12'23	evening rise	7652 May 28 03:02	19° $\Pi$ 56'13	
retrograde	7651 Jul 10 03:52	8° $\Omega$ 00'43		asc. node	7652 May 29 23:06	23° $\Pi$ 25'57	
evening set	7651 Jul 12 01:42	7° $\Omega$ 49'38			7652 Jun 02 11:45	0° $\Theta$	
desc. node	7651 Jul 18 03:03	5° $\Omega$ 13'05		evening max el	7652 Jun 13 05:25	15° $\Theta$ 50'42	18°30'41
inferior conj	7651 Jul 20 13:10	3° $\Omega$ 38'52	-0°44'13	retrograde	7652 Jun 20 22:39	19° $\Theta$ 41'07	
minimum elong	7651 Jul 20 11:14	3° $\Omega$ 42'06	0°43'34	evening set	7652 Jun 23 02:25	19° $\Theta$ 24'03	
min. Earth dist.	7651 Jul 23 08:01	1° $\Omega$ 47'24	0.56081 AU	inferior conj	7652 Jun 30 18:01	14° $\Theta$ 54'05	0°57'03
	7651 Jul 26 08:14	30° $\Sigma$ 07'25		minimum elong	7652 Jun 30 19:59	14° $\Theta$ 50'12	0°56'14
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































































































































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morning rise	7652 Jul 08 10:08	9°☾32'51		morning rise	7653 Jun 19 20:48	21°♊03'05	
direct	7652 Jul 14 07:39	8°☾03'59		desc. node	7653 Jun 20 21:09	20°♊28'20	
morning max el	7652 Jul 28 17:03	15°☾42'45	26°53'53	direct	7653 Jun 26 08:47	19°♊01'45	
	7652 Aug 09 07:39	0°♏		morning max el	7653 Jul 10 17:06	26°♊57'03	27°43'03
asc. node	7652 Aug 25 22:28	29°♏26'44			7653 Jul 13 14:31	0°☾	
	7652 Aug 26 04:53	0°♐			7653 Aug 02 22:21	0°♏	
morning set	7652 Aug 27 13:25	2°♐50'23		morning set	7653 Aug 11 19:33	17°♏17'56	
				asc. node	7653 Aug 12 19:29	19°♏23'16	
superior conj	7652 Sep 03 12:40	18°♐03'00	1°18'01		7653 Aug 17 17:18	0°♐	
minimum elong	7652 Sep 03 10:26	17°♐50'40	1°17'40	max. Earth dist.	7653 Aug 18 01:10	0°♐43'19	1.31758 AU
max. Earth dist.	7652 Sep 03 15:05	18°♐16'28	1.31762 AU				
	7652 Sep 08 23:18	0°♑		superior conj	7653 Aug 19 00:05	2°♐49'51	0°59'48
evening rise	7652 Sep 10 08:32	2°♑57'18		minimum elong	7653 Aug 18 21:55	2°♐37'52	0°59'21
	7652 Sep 24 19:22	0°♒		evening rise	7653 Aug 25 18:15	17°♐38'29	
desc. node	7652 Sep 29 23:05	7°♒46'06			7653 Aug 31 19:22	0°♑	
evening max el	7652 Oct 10 12:55	20°♒19'02	26°48'29	desc. node	7653 Sep 16 20:10	25°♑32'08	
retrograde	7652 Oct 24 10:37	27°♒27'58			7653 Sep 20 18:33	0°♒	
evening set	7652 Oct 31 07:43	25°♒27'08		evening max el	7653 Sep 22 08:39	1°♒34'38	25°41'01
min. Earth dist.	7652 Nov 04 02:59	22°♒50'09	0.60122 AU	retrograde	7653 Oct 06 07:07	8°♒38'13	
inferior conj	7652 Nov 07 07:42	20°♒14'39	-4°18'37	evening set	7653 Oct 12 10:16	7°♒10'13	
minimum elong	7652 Nov 07 14:48	20°♒00'12	4°16'39	min. Earth dist.	7653 Oct 16 21:01	4°♒33'35	0.58057 AU
morning rise	7652 Nov 15 00:11	15°♒31'59		inferior conj	7653 Oct 19 23:07	2°♒22'59	-5°10'11
direct	7652 Nov 17 05:47	15°♒13'13		minimum elong	7653 Oct 20 04:41	2°♒13'08	5°09'17
asc. node	7652 Nov 21 21:55	16°♒39'49			7653 Oct 23 13:16	30°♒♑	
morning max el	7652 Nov 24 17:59	18°♒55'51	18°07'53	morning rise	7653 Oct 28 01:26	28°♑03'06	
	7652 Dec 02 19:28	0°♓		direct	7653 Oct 30 10:10	27°♑45'36	
morning set	7652 Dec 10 11:05	13°♓51'16			7653 Nov 05 17:48	0°♒	
	7652 Dec 19 04:16	0°♑		morning max el	7653 Nov 07 23:19	1°♒52'02	18°46'28
				asc. node	7653 Nov 08 18:57	2°♒41'15	
superior conj	7652 Dec 20 02:57	1°♑42'05	0°48'51	morning set	7653 Nov 24 07:33	28°♒03'50	
minimum elong	7652 Dec 20 06:16	1°♑56'56	0°48'29		7653 Nov 25 07:17	0°♓	
desc. node	7652 Dec 26 22:10	13°♑33'22		superior conj	7653 Dec 02 21:29	14°♓42'09	1°14'45
max. Earth dist.	7652 Dec 27 18:34	14°♑59'26	1.41595 AU	minimum elong	7653 Dec 03 00:50	14°♓57'57	1°14'27
evening rise	7653 Jan 01 21:51	23°♑27'02		max. Earth dist.	7653 Dec 10 00:56	27°♓46'04	1.39488 AU
	7653 Jan 06 00:47	0°♒			7653 Dec 11 07:29	0°♑	
	7653 Jan 26 18:53	0°♒		desc. node	7653 Dec 13 19:10	4°♑16'41	
evening max el	7653 Feb 04 13:01	10°♒17'36	22°52'50	evening rise	7653 Dec 14 00:32	4°♑39'24	
retrograde	7653 Feb 14 16:07	16°♒18'10			7653 Dec 30 04:13	0°♒	
asc. node	7653 Feb 17 21:07	15°♒26'16		evening max el	7654 Jan 18 02:54	24°♒01'37	24°12'50
evening set	7653 Feb 19 11:52	14°♒18'46			7654 Jan 26 06:44	0°♒	
inferior conj	7653 Feb 24 20:47	7°♒54'09	2°07'42	retrograde	7654 Jan 29 08:33	0°♒37'19	
minimum elong	7653 Feb 24 18:32	8°♒01'56	2°07'02		7654 Feb 01 05:22	30°♒♒	
min. Earth dist.	7653 Feb 24 13:02	8°♒20'59	0.68347 AU	evening set	7654 Feb 03 16:41	28°♒23'51	
morning rise	7653 Mar 02 01:06	1°♒46'11		asc. node	7654 Feb 04 18:11	27°♒24'28	
	7653 Mar 05 17:02	30°♒♒		min. Earth dist.	7654 Feb 08 09:21	23°♒00'09	0.68063 AU
direct	7653 Mar 06 12:25	29°♒56'36		inferior conj	7654 Feb 09 04:27	21°♒55'45	1°25'10
	7653 Mar 07 08:11	0°♒		minimum elong	7654 Feb 09 02:38	22°♒01'52	1°24'35
morning max el	7653 Mar 15 08:15	5°♒04'12	21°31'32	morning rise	7654 Feb 14 12:39	15°♒53'46	
desc. node	7653 Mar 24 21:42	16°♒38'51		direct	7654 Feb 18 10:37	14°♒26'24	
	7653 Apr 03 06:59	0°♓		morning max el	7654 Feb 26 05:07	18°♒50'38	20°15'42
morning set	7653 Apr 16 03:56	19°♓43'03			7654 Mar 07 06:40	0°♒	
max. Earth dist.	7653 Apr 22 16:51	0°♓17'35	1.42008 AU	desc. node	7654 Mar 11 18:39	6°♒23'53	
	7653 Apr 22 12:35	0°♓		morning set	7654 Mar 26 04:11	28°♒04'41	
					7654 Mar 27 09:58	0°♓	
superior conj	7653 Apr 30 05:10	13°♓00'15	-2°00'24	max. Earth dist.	7654 Apr 05 00:35	13°♓34'11	1.43784 AU
minimum elong	7653 Apr 30 10:11	13°♓22'01	2°00'09				
	7653 May 09 17:47	0°♊		superior conj	7654 Apr 11 00:31	23°♓18'52	-2°11'13
evening rise	7653 May 11 07:04	2°♊50'03		minimum elong	7654 Apr 11 01:25	23°♓22'35	2°11'15
asc. node	7653 May 16 20:10	12°♊51'09			7654 Apr 15 00:54	0°♓	
evening max el	7653 May 27 15:18	28°♊40'53	18°09'09	evening rise	7654 Apr 23 17:47	14°♓54'32	
	7653 May 29 02:57	0°♋			7654 May 02 13:24	0°♊	
retrograde	7653 Jun 03 11:31	2°♋08'46		asc. node	7654 May 03 17:13	1°♊52'16	
evening set	7653 Jun 05 22:45	1°♋42'13		evening max el	7654 May 11 04:15	11°♊52'55	18°07'01
	7653 Jun 09 02:06	30°♒♊		retrograde	7654 May 17 14:33	15°♊13'43	
inferior conj	7653 Jun 12 20:02	26°♊52'01	2°10'18	evening set	7654 May 20 09:07	14°♊35'13	
minimum elong	7653 Jun 12 23:10	26°♊44'49	2°09'19				

inferior conj	7654 May 26 15:48	9° $\Pi$ 25'33	2°56'10	inferior conj	7655 May 10 01:12	22° $\text{8}$ 26'55	3°19'30
minimum elong	7654 May 26 18:18	9° $\Pi$ 19'00	2°55'36	minimum elong	7655 May 10 02:23	22° $\text{8}$ 23'29	3°19'18
min. Earth dist.	7654 May 29 13:35	6° $\Pi$ 24'24	0.62315 AU	min. Earth dist.	7655 May 12 08:26	19° $\text{8}$ 46'47	0.64326 AU
morning rise	7654 Jun 02 01:44	3° $\Pi$ 19'53		morning rise	7655 May 15 22:43	16° $\text{8}$ 12'47	
desc. node	7654 Jun 07 18:09	0° $\Pi$ 55'25		direct	7655 May 22 16:04	13° $\text{8}$ 29'00	
direct	7654 Jun 08 20:17	0° $\Pi$ 51'43		desc. node	7655 May 25 15:09	13° $\text{8}$ 56'57	
morning max el	7654 Jun 22 22:51	8° $\Pi$ 53'46	27°54'22	morning max el	7655 Jun 05 08:12	21° $\text{8}$ 27'36	27°29'14
	7654 Jul 09 05:50	0° $\text{☾}$			7655 Jun 12 18:15	0° $\Pi$	
	7654 Jul 26 03:01	0° $\Omega$			7655 Jul 02 09:42	0° $\text{☾}$	
morning set	7654 Jul 26 20:07	1° $\Omega$ 26'27		morning set	7655 Jul 10 12:31	15° $\text{☾}$ 08'12	
asc. node	7654 Jul 30 16:29	9° $\Omega$ 27'02		max. Earth dist.	7655 Jul 15 07:10	24° $\text{☾}$ 48'18	1.33149 AU
max. Earth dist.	7654 Aug 01 07:47	12° $\Omega$ 57'25	1.32214 AU	asc. node	7655 Jul 17 13:28	29° $\text{☾}$ 33'18	
					7655 Jul 17 18:31	0° $\Omega$	
superior conj	7654 Aug 03 09:24	17° $\Omega$ 26'35	0°37'10	superior conj	7655 Jul 18 14:34	1° $\Omega$ 46'42	0°10'39
minimum elong	7654 Aug 03 07:47	17° $\Omega$ 17'47	0°36'45	minimum elong	7655 Jul 18 14:02	1° $\Omega$ 43'53	0°10'26
	7654 Aug 09 03:20	0° $\text{☿}$		behind sun begin	7655 Jul 18 09:53	1° $\Omega$ 21'42	
evening rise	7654 Aug 10 05:46	2° $\text{☿}$ 22'07		behind sun end	7655 Jul 18 18:12	2° $\Omega$ 06'05	
	7654 Aug 25 03:11	0° $\text{☿}$		evening rise	7655 Jul 25 17:12	17° $\Omega$ 01'46	
desc. node	7654 Sep 03 17:14	11° $\text{☿}$ 56'26			7655 Aug 01 03:01	0° $\text{☿}$	
evening max el	7654 Sep 03 21:49	12° $\text{☿}$ 07'34	24°10'09	evening max el	7655 Aug 16 10:13	22° $\text{☿}$ 21'54	22°31'05
retrograde	7654 Sep 17 15:37	19° $\text{☿}$ 01'05		desc. node	7655 Aug 21 14:18	26° $\text{☿}$ 28'17	
evening set	7654 Sep 22 12:08	18° $\text{☿}$ 09'08		retrograde	7655 Aug 29 11:26	28° $\text{☿}$ 52'08	
min. Earth dist.	7654 Sep 28 08:37	15° $\text{☿}$ 14'24	0.56265 AU	evening set	7655 Sep 01 19:44	28° $\text{☿}$ 27'32	
inferior conj	7654 Sep 30 18:20	13° $\text{☿}$ 45'13	-5°31'45	min. Earth dist.	7655 Sep 09 17:13	24° $\text{☿}$ 58'58	0.55062 AU
minimum elong	7654 Sep 30 18:19	13° $\text{☿}$ 45'14	5°31'44	inferior conj	7655 Sep 10 19:26	24° $\text{☿}$ 21'51	-5°05'11
morning rise	7654 Oct 09 02:41	9° $\text{☿}$ 45'49		minimum elong	7655 Sep 10 12:18	24° $\text{☿}$ 31'58	5°04'02
direct	7654 Oct 11 19:33	9° $\text{☿}$ 26'41		morning rise	7655 Sep 19 06:44	20° $\text{☿}$ 33'33	
morning max el	7654 Oct 21 17:45	14° $\text{☿}$ 06'52	19°47'10	direct	7655 Sep 22 11:36	20° $\text{☿}$ 10'14	
asc. node	7654 Oct 26 15:57	19° $\text{☿}$ 51'01		morning max el	7655 Oct 03 23:15	25° $\text{☿}$ 32'49	21°09'49
	7654 Nov 01 23:17	0° $\text{☿}$			7655 Oct 08 01:21	0° $\text{☿}$	
morning set	7654 Nov 08 11:21	12° $\text{☿}$ 36'34		asc. node	7655 Oct 13 12:56	7° $\text{☿}$ 53'21	
superior conj	7654 Nov 16 07:09	28° $\text{☿}$ 25'48	1°31'30	morning set	7655 Oct 23 19:47	27° $\text{☿}$ 20'43	
minimum elong	7654 Nov 16 09:29	28° $\text{☿}$ 37'19	1°31'24		7655 Oct 25 02:22	0° $\text{☿}$	
	7654 Nov 17 02:12	0° $\text{☿}$		superior conj	7655 Oct 31 03:35	12° $\text{☿}$ 39'34	1°40'06
max. Earth dist.	7654 Nov 22 06:47	9° $\text{☿}$ 58'19	1.37356 AU	minimum elong	7655 Oct 31 04:32	12° $\text{☿}$ 44'31	1°40'08
evening rise	7654 Nov 26 00:48	16° $\text{☿}$ 49'42		max. Earth dist.	7655 Nov 04 16:49	21° $\text{☿}$ 53'00	1.35415 AU
desc. node	7654 Nov 30 16:13	24° $\text{☿}$ 54'09		evening rise	7655 Nov 08 19:12	29° $\text{☿}$ 47'56	
	7654 Dec 03 17:50	0° $\text{☿}$			7655 Nov 08 21:46	0° $\text{☿}$	
	7654 Dec 24 14:56	0° $\text{☿}$		desc. node	7655 Nov 17 13:16	15° $\text{☿}$ 20'21	
evening max el	7654 Dec 31 16:03	7° $\text{☿}$ 48'54	25°27'34		7655 Nov 26 21:41	0° $\text{☿}$	
retrograde	7655 Jan 12 20:28	14° $\text{☿}$ 49'28		evening max el	7655 Dec 14 05:12	21° $\text{☿}$ 33'16	26°29'53
evening set	7655 Jan 18 17:32	12° $\text{☿}$ 23'49		retrograde	7655 Dec 27 03:05	28° $\text{☿}$ 48'08	
asc. node	7655 Jan 22 15:13	8° $\text{☿}$ 11'56		evening set	7656 Jan 02 12:38	26° $\text{☿}$ 13'49	
min. Earth dist.	7655 Jan 23 03:00	7° $\text{☿}$ 34'42	0.67407 AU	min. Earth dist.	7656 Jan 06 15:38	21° $\text{☿}$ 59'38	0.66377 AU
inferior conj	7655 Jan 24 09:22	5° $\text{☿}$ 57'03	0°34'55	inferior conj	7656 Jan 08 09:33	19° $\text{☿}$ 53'40	-0°22'28
minimum elong	7655 Jan 24 08:30	5° $\text{☿}$ 59'49	0°34'40	minimum elong	7656 Jan 08 10:10	19° $\text{☿}$ 51'49	0°22'06
morning rise	7655 Jan 29 23:50	0° $\text{☿}$ 03'01		asc. node	7656 Jan 09 12:15	18° $\text{☿}$ 34'21	
	7655 Jan 30 01:42	30° $\text{☿}$ 3		morning rise	7656 Jan 14 08:30	14° $\text{☿}$ 09'59	
direct	7655 Feb 02 09:46	28° $\text{☿}$ 55'58		direct	7656 Jan 17 08:00	13° $\text{☿}$ 20'10	
	7655 Feb 05 21:53	0° $\text{☿}$		morning max el	7656 Jan 23 21:38	16° $\text{☿}$ 52'51	18°28'33
morning max el	7655 Feb 09 09:59	2° $\text{☿}$ 48'18	19°14'05		7656 Feb 02 18:40	0° $\text{☿}$	
greatest brilliancy	7655 Feb 22 16:17	20° $\text{☿}$ 29'37	-0.7m	morning set	7656 Feb 13 03:11	16° $\text{☿}$ 17'43	
desc. node	7655 Feb 26 15:36	26° $\text{☿}$ 31'21		desc. node	7656 Feb 13 12:35	16° $\text{☿}$ 55'01	
	7655 Feb 28 22:00	0° $\text{☿}$			7656 Feb 21 19:06	0° $\text{☿}$	
morning set	7655 Mar 05 04:28	6° $\text{☿}$ 35'13		superior conj	7656 Feb 29 00:54	11° $\text{☿}$ 21'44	-1°36'56
max. Earth dist.	7655 Mar 18 15:16	27° $\text{☿}$ 33'37	1.44985 AU	minimum elong	7656 Feb 28 15:17	10° $\text{☿}$ 44'05	1°35'58
	7655 Mar 20 04:21	0° $\text{☿}$		max. Earth dist.	7656 Feb 29 10:09	11° $\text{☿}$ 57'58	1.45477 AU
superior conj	7655 Mar 21 19:48	2° $\text{☿}$ 36'13	-2°04'06		7656 Mar 11 21:56	0° $\text{☿}$	
minimum elong	7655 Mar 21 13:49	2° $\text{☿}$ 12'30	2°03'48	evening rise	7656 Mar 15 20:35	6° $\text{☿}$ 13'40	
evening rise	7655 Apr 05 06:53	26° $\text{☿}$ 02'17		greatest brilliancy	7656 Mar 25 07:15	21° $\text{☿}$ 07'48	-0.8m
	7655 Apr 07 16:23	0° $\text{☿}$			7656 Mar 31 03:52	0° $\text{☿}$	
asc. node	7655 Apr 20 14:16	20° $\text{☿}$ 21'39		asc. node	7656 Apr 06 11:19	8° $\text{☿}$ 09'35	
evening max el	7655 Apr 24 17:10	25° $\text{☿}$ 18'40	18°23'28	evening max el	7656 Apr 07 03:26	8° $\text{☿}$ 51'43	18°57'37
retrograde	7655 May 01 03:28	28° $\text{☿}$ 46'32		retrograde	7656 Apr 13 22:26	12° $\text{☿}$ 39'27	
evening set	7655 May 04 05:06	27° $\text{☿}$ 54'42					

evening set	7656 Apr 17 07:22	11°♄33'33		asc. node	7657 Mar 24 08:22	25°♄03'27	
inferior conj	7656 Apr 22 20:29	5°♄49'16	3°25'13	retrograde	7657 Mar 28 20:21	26°♄45'54	
minimum elong	7656 Apr 22 20:18	5°♄49'51	3°25'08	evening set	7657 Apr 01 13:24	25°♄25'28	
min. Earth dist.	7656 Apr 24 12:15	3°♄43'50	0.65975 AU	inferior conj	7657 Apr 06 22:31	19°♄26'40	3°17'03
	7656 Apr 27 20:30	30°♄		minimum elong	7657 Apr 06 21:14	19°♄30'56	3°16'52
morning rise	7656 Apr 28 08:46	29°♄32'03		min. Earth dist.	7657 Apr 07 23:33	18°♄02'57	0.67201 AU
direct	7656 May 04 18:49	26°♄44'58		morning rise	7657 Apr 12 04:48	13°♄09'38	
desc. node	7656 May 11 12:08	29°♄08'32		direct	7657 Apr 18 03:42	10°♄30'11	
	7656 May 12 17:37	0°♄		desc. node	7657 Apr 28 09:08	15°♄57'49	
morning max el	7656 May 17 18:39	4°♄27'57	26°33'50	morning max el	7657 Apr 30 04:19	17°♄42'34	25°17'00
	7656 Jun 06 05:19	0°♄			7657 May 10 11:17	0°♄	
morning set	7656 Jun 22 17:33	28°♄14'27			7657 May 30 05:39	0°♄	
	7656 Jun 23 15:48	0°♄		morning set	7657 Jun 05 06:52	10°♄32'47	
max. Earth dist.	7656 Jun 26 20:21	6°♄11'56	1.34561 AU	max. Earth dist.	7657 Jun 08 22:39	17°♄15'29	1.36412 AU
superior conj	7656 Jul 01 13:21	15°♄43'48	-0°18'57	superior conj	7657 Jun 15 02:52	29°♄09'53	-0°50'17
minimum elong	7656 Jul 01 14:24	15°♄49'17	0°18'50	minimum elong	7657 Jun 15 05:52	29°♄24'46	0°49'50
asc. node	7656 Jul 03 10:29	19°♄38'20			7657 Jun 15 12:57	0°♄	
	7656 Jul 08 09:01	0°♄		asc. node	7657 Jun 20 07:31	9°♄37'37	
evening rise	7656 Jul 09 02:34	1°♄31'31		evening rise	7657 Jun 23 07:37	15°♄44'12	
	7656 Jul 25 15:00	0°♄			7657 Jun 30 16:55	0°♄	
evening max el	7656 Jul 28 06:35	2°♄53'27	20°59'45	evening max el	7657 Jul 10 15:55	14°♄05'21	19°45'46
desc. node	7656 Aug 07 11:20	8°♄36'05		retrograde	7657 Jul 20 16:37	19°♄01'43	
retrograde	7656 Aug 09 00:06	8°♄41'52		evening set	7657 Jul 22 13:15	18°♄52'17	
evening set	7656 Aug 11 05:39	8°♄30'04		desc. node	7657 Jul 25 08:24	18°♄05'22	
inferior conj	7656 Aug 20 12:03	4°♄32'50	-3°44'54	inferior conj	7657 Jul 31 10:45	14°♄50'13	-1°51'16
minimum elong	7656 Aug 20 02:48	4°♄45'55	3°42'08	minimum elong	7657 Jul 31 05:38	14°♄58'08	1°49'25
min. Earth dist.	7656 Aug 21 02:24	4°♄12'31	0.54714 AU	min. Earth dist.	7657 Aug 02 14:20	13°♄30'32	0.55323 AU
morning rise	7656 Aug 29 00:18	0°♄36'32		morning rise	7657 Aug 08 19:54	10°♄25'54	
direct	7656 Sep 01 19:41	0°♄05'28		direct	7657 Aug 13 09:50	9°♄39'30	
morning max el	7656 Sep 14 17:42	6°♄15'09	22°49'34	morning max el	7657 Aug 27 06:42	16°♄32'42	24°35'05
asc. node	7656 Sep 29 09:57	26°♄36'00			7657 Sep 07 03:48	0°♄	
	7656 Oct 01 05:57	0°♄		asc. node	7657 Sep 16 06:58	15°♄48'55	
morning set	7656 Oct 07 06:45	12°♄10'18		morning set	7657 Sep 21 18:30	27°♄00'21	
					7657 Sep 23 04:02	0°♄	
superior conj	7656 Oct 14 07:23	27°♄13'37	1°41'33	superior conj	7657 Sep 28 15:57	12°♄00'00	1°36'45
minimum elong	7656 Oct 14 07:03	27°♄11'46	1°41'36	minimum elong	7657 Sep 28 14:35	11°♄52'28	1°36'41
	7656 Oct 15 14:41	0°♄		max. Earth dist.	7657 Sep 30 12:13	16°♄00'36	1.32666 AU
max. Earth dist.	7656 Oct 17 10:27	3°♄49'45	1.33826 AU	evening rise	7657 Oct 05 22:59	27°♄29'19	
evening rise	7656 Oct 22 03:47	13°♄24'09			7657 Oct 07 04:48	0°♄	
	7656 Oct 31 03:46	0°♄		desc. node	7657 Oct 21 07:23	25°♄14'44	
desc. node	7656 Nov 03 10:19	5°♄29'35			7657 Oct 24 10:03	0°♄	
	7656 Nov 20 22:04	0°♄		evening max el	7657 Nov 08 05:17	18°♄15'02	27°28'47
evening max el	7656 Nov 25 18:03	5°♄05'37	27°12'33	retrograde	7657 Nov 21 22:28	25°♄32'59	
retrograde	7656 Dec 09 03:58	12°♄25'34		evening set	7657 Nov 29 00:29	23°♄01'41	
evening set	7656 Dec 15 23:51	9°♄48'27		min. Earth dist.	7657 Dec 02 17:26	19°♄52'36	0.63274 AU
min. Earth dist.	7656 Dec 19 21:03	6°♄08'27	0.64987 AU	inferior conj	7657 Dec 05 10:18	17°♄11'36	-2°33'50
inferior conj	7656 Dec 22 02:44	3°♄40'29	-1°26'03	minimum elong	7657 Dec 05 15:06	16°♄59'41	2°31'54
minimum elong	7656 Dec 22 05:19	3°♄33'22	1°24'52	morning rise	7657 Dec 12 07:36	11°♄56'55	
	7656 Dec 25 18:00	30°♄		asc. node	7657 Dec 13 06:21	11°♄39'54	
asc. node	7656 Dec 26 09:17	29°♄28'51		direct	7657 Dec 14 16:25	11°♄30'12	
morning rise	7656 Dec 28 12:08	28°♄09'52		morning max el	7657 Dec 21 07:00	14°♄54'54	17°48'19
direct	7656 Dec 31 03:08	27°♄33'32			7657 Dec 31 19:57	0°♄	
	7657 Jan 05 12:47	0°♄		morning set	7658 Jan 06 13:44	9°♄54'28	
morning max el	7657 Jan 06 13:38	0°♄57'32	17°59'47	desc. node	7658 Jan 17 06:34	28°♄11'54	
morning set	7657 Jan 24 07:34	27°♄28'35			7658 Jan 18 08:37	0°♄	
	7657 Jan 25 20:08	0°♄		superior conj	7658 Jan 18 17:29	0°♄36'37	-0°10'32
desc. node	7657 Jan 30 09:34	7°♄29'48		minimum elong	7658 Jan 18 16:22	0°♄32'03	0°10'16
superior conj	7657 Feb 07 10:46	20°♄27'44	-0°55'32	behind sun begin	7658 Jan 18 09:02	0°♄01'41	
minimum elong	7657 Feb 07 04:15	20°♄01'50	0°54'35	behind sun end	7658 Jan 18 23:43	1°♄02'21	
max. Earth dist.	7657 Feb 11 05:50	26°♄27'41	1.45222 AU	max. Earth dist.	7658 Jan 24 23:30	10°♄45'55	1.44259 AU
	7657 Feb 13 11:58	0°♄		evening rise	7658 Feb 03 01:57	25°♄01'50	
evening rise	7657 Feb 23 14:55	15°♄42'36			7658 Feb 06 07:53	0°♄	
	7657 Mar 04 22:57	0°♄			7658 Feb 27 03:41	0°♄	
greatest brilliancy	7657 Mar 09 15:10	7°♄00'18	-0.6m	evening max el	7658 Mar 04 09:33	6°♄05'56	20°52'33
evening max el	7657 Mar 21 09:10	22°♄27'45	19°48'07				

asc. node	7658 Mar 11 05:27	10° $\Upsilon$ 49'21		desc. node	7659 Jan 04 03:34	18° $\mathfrak{Z}$ 57'04	
retrograde	7658 Mar 12 18:50	11° $\Upsilon$ 01'54		max. Earth dist.	7659 Jan 07 13:22	24° $\mathfrak{Z}$ 37'39	1.42703 AU
evening set	7658 Mar 16 21:13	9° $\Upsilon$ 26'29			7659 Jan 10 20:38	0° $\approx$	
inferior conj	7658 Mar 22 04:47	3° $\Upsilon$ 15'28	2°57'34	evening rise	7659 Jan 13 20:59	4° $\approx$ 47'58	
minimum elong	7658 Mar 22 02:48	3° $\Upsilon$ 22'21	2°57'10		7659 Jan 30 16:09	0° $\mathfrak{H}$	
min. Earth dist.	7658 Mar 22 16:18	2° $\Upsilon$ 35'42	0.67990 AU	evening max el	7659 Feb 15 04:47	19° $\mathfrak{H}$ 45'44	22°07'14
	7658 Mar 24 14:55	30° $\mathfrak{R}\mathfrak{H}$		retrograde	7659 Feb 24 16:01	25° $\mathfrak{H}$ 22'32	
morning rise	7658 Mar 27 08:08	27° $\mathfrak{H}$ 00'48		asc. node	7659 Feb 26 02:32	25° $\mathfrak{H}$ 11'55	
direct	7658 Apr 01 17:45	24° $\mathfrak{H}$ 37'11		evening set	7659 Mar 01 05:07	23° $\mathfrak{H}$ 31'52	
	7658 Apr 11 10:57	0° $\Upsilon$		inferior conj	7659 Mar 06 13:04	17° $\mathfrak{H}$ 11'27	2°28'26
morning max el	7658 Apr 12 13:16	1° $\Upsilon$ 04'37	23°49'01	minimum elong	7659 Mar 06 10:47	17° $\mathfrak{H}$ 19'23	2°27'50
desc. node	7658 Apr 15 06:08	3° $\Upsilon$ 58'31		min. Earth dist.	7659 Mar 06 12:09	17° $\mathfrak{H}$ 14'40	0.68343 AU
	7658 May 04 10:02	0° $\mathfrak{B}$		morning rise	7659 Mar 11 16:18	11° $\mathfrak{H}$ 00'43	
morning set	7658 May 17 23:03	21° $\mathfrak{B}$ 49'16		direct	7659 Mar 16 11:48	8° $\mathfrak{H}$ 58'00	
max. Earth dist.	7658 May 21 18:31	28° $\mathfrak{B}$ 26'53	1.38579 AU	morning max el	7659 Mar 26 00:12	14° $\mathfrak{H}$ 33'40	22°19'55
	7658 May 22 15:29	0° $\mathfrak{I}$		desc. node	7659 Apr 02 03:06	22° $\mathfrak{H}$ 50'15	
					7659 Apr 07 11:25	0° $\Upsilon$	
superior conj	7658 May 29 03:37	11° $\mathfrak{I}$ 56'49	-1°21'11		7659 Apr 27 09:27	0° $\mathfrak{B}$	
minimum elong	7658 May 29 08:28	12° $\mathfrak{I}$ 19'45	1°20'35	morning set	7659 Apr 28 12:49	1° $\mathfrak{B}$ 50'46	
evening rise	7658 Jun 07 05:43	29° $\mathfrak{I}$ 33'03		max. Earth dist.	7659 May 03 16:03	10° $\mathfrak{B}$ 21'03	1.40815 AU
asc. node	7658 Jun 07 04:33	29° $\mathfrak{I}$ 27'19					
	7658 Jun 07 11:14	0° $\mathfrak{E}$		superior conj	7659 May 11 11:13	23° $\mathfrak{B}$ 54'27	-1°48'19
evening max el	7658 Jun 23 13:32	26° $\mathfrak{E}$ 01'24	18°52'11	minimum elong	7659 May 11 16:53	24° $\mathfrak{B}$ 19'47	1°47'52
	7658 Jun 30 04:16	0° $\mathfrak{O}$			7659 May 14 19:58	0° $\mathfrak{I}$	
retrograde	7658 Jul 01 23:58	0° $\mathfrak{O}$ 11'24		evening rise	7659 May 21 17:30	12° $\mathfrak{I}$ 49'54	
evening set	7658 Jul 03 23:55	29° $\mathfrak{E}$ 58'17		asc. node	7659 May 25 01:36	19° $\mathfrak{I}$ 03'06	
	7658 Jul 03 20:37	30° $\mathfrak{R}\mathfrak{E}$			7659 May 31 08:04	0° $\mathfrak{E}$	
inferior conj	7658 Jul 12 03:04	25° $\mathfrak{E}$ 40'11	0°01'48	evening max el	7659 Jun 06 20:03	8° $\mathfrak{E}$ 34'50	18°19'07
minimum elong	7658 Jul 12 03:08	25° $\mathfrak{E}$ 40'03	0°01'40	retrograde	7659 Jun 14 02:40	12° $\mathfrak{E}$ 13'22	
transit middle	7658 Jul 12 03:08	25° $\mathfrak{E}$ 40'03	0°01'40	evening set	7659 Jun 16 09:45	11° $\mathfrak{E}$ 52'29	
transit begin	7658 Jul 11 23:26	25° $\mathfrak{E}$ 46'41		inferior conj	7659 Jun 23 17:09	7° $\mathfrak{E}$ 13'47	1°31'42
transit end	7658 Jul 12 06:50	25° $\mathfrak{E}$ 33'25		minimum elong	7659 Jun 23 19:55	7° $\mathfrak{E}$ 07'58	1°30'42
desc. node	7658 Jul 12 05:28	25° $\mathfrak{E}$ 35'53		min. Earth dist.	7659 Jun 27 02:54	4° $\mathfrak{E}$ 23'39	0.58811 AU
min. Earth dist.	7658 Jul 15 05:58	23° $\mathfrak{E}$ 26'59	0.56787 AU	desc. node	7659 Jun 29 02:30	2° $\mathfrak{E}$ 54'54	
morning rise	7658 Jul 20 02:58	20° $\mathfrak{E}$ 39'16		morning rise	7659 Jul 01 02:55	1° $\mathfrak{E}$ 39'50	
direct	7658 Jul 25 13:51	19° $\mathfrak{E}$ 27'46			7659 Jul 06 06:10	30° $\mathfrak{R}\mathfrak{I}$	
morning max el	7658 Aug 08 20:51	26° $\mathfrak{E}$ 53'04	26°10'13	direct	7659 Jul 07 07:38	29° $\mathfrak{I}$ 57'00	
	7658 Aug 11 20:48	0° $\mathfrak{O}$			7659 Jul 08 09:17	0° $\mathfrak{E}$	
	7658 Aug 31 10:38	0° $\mathfrak{H}$		morning max el	7659 Jul 21 16:48	7° $\mathfrak{E}$ 43'10	27°19'22
asc. node	7658 Sep 03 03:58	5° $\mathfrak{H}$ 23'39			7659 Aug 07 12:15	0° $\mathfrak{O}$	
morning set	7658 Sep 06 05:23	11° $\mathfrak{H}$ 45'28		asc. node	7659 Aug 21 00:58	25° $\mathfrak{O}$ 13'54	
				morning set	7659 Aug 21 13:47	26° $\mathfrak{O}$ 21'05	
					7659 Aug 23 06:58	0° $\mathfrak{H}$	
superior conj	7658 Sep 13 03:04	26° $\mathfrak{H}$ 51'08	1°26'21				
minimum elong	7658 Sep 13 01:02	26° $\mathfrak{H}$ 39'51	1°26'06	superior conj	7659 Aug 28 14:54	11° $\mathfrak{H}$ 41'14	1°10'52
max. Earth dist.	7658 Sep 13 19:59	28° $\mathfrak{H}$ 24'37	1.31959 AU	minimum elong	7659 Aug 28 12:38	11° $\mathfrak{H}$ 28'42	1°10'28
	7658 Sep 14 13:17	0° $\mathfrak{L}$		max. Earth dist.	7659 Aug 28 06:29	10° $\mathfrak{H}$ 54'36	1.31704 AU
evening rise	7658 Sep 20 01:44	11° $\mathfrak{L}$ 54'13		evening rise	7659 Sep 04 09:33	26° $\mathfrak{H}$ 31'41	
	7658 Sep 29 08:52	0° $\mathfrak{M}$			7659 Sep 06 01:08	0° $\mathfrak{L}$	
desc. node	7658 Oct 08 04:27	14° $\mathfrak{M}$ 25'18			7659 Sep 23 01:08	0° $\mathfrak{M}$	
	7658 Oct 20 16:35	0° $\mathfrak{J}$		desc. node	7659 Sep 25 01:31	2° $\mathfrak{M}$ 47'31	
evening max el	7658 Oct 21 12:34	0° $\mathfrak{J}$ 48'08	27°13'08	evening max el	7659 Oct 03 13:07	12° $\mathfrak{M}$ 33'39	26°23'33
retrograde	7658 Nov 04 09:24	8° $\mathfrak{J}$ 00'04		retrograde	7659 Oct 17 11:13	19° $\mathfrak{M}$ 39'30	
evening set	7658 Nov 11 10:51	5° $\mathfrak{J}$ 45'17		evening set	7659 Oct 24 02:22	17° $\mathfrak{M}$ 51'51	
min. Earth dist.	7658 Nov 15 03:19	2° $\mathfrak{J}$ 59'50	0.61313 AU	min. Earth dist.	7659 Oct 28 02:28	15° $\mathfrak{M}$ 17'18	0.59233 AU
inferior conj	7658 Nov 18 05:01	0° $\mathfrak{J}$ 18'07	-3°41'58	inferior conj	7659 Oct 31 07:20	12° $\mathfrak{M}$ 50'31	-4°42'59
minimum elong	7658 Nov 18 11:40	0° $\mathfrak{J}$ 03'28	3°39'44	minimum elong	7659 Oct 31 14:13	12° $\mathfrak{M}$ 37'18	4°41'23
	7658 Nov 18 13:15	30° $\mathfrak{R}\mathfrak{M}$		morning rise	7659 Nov 08 04:21	8° $\mathfrak{M}$ 17'09	
morning rise	7658 Nov 25 14:42	25° $\mathfrak{M}$ 22'35		direct	7659 Nov 10 10:50	7° $\mathfrak{M}$ 59'09	
direct	7658 Nov 27 20:25	25° $\mathfrak{M}$ 01'47		asc. node	7659 Nov 17 00:25	10° $\mathfrak{M}$ 39'27	
asc. node	7658 Nov 30 03:25	25° $\mathfrak{M}$ 24'26		morning max el	7659 Nov 18 08:22	11° $\mathfrak{M}$ 50'38	18°21'37
morning max el	7658 Dec 04 22:24	28° $\mathfrak{M}$ 35'37	17°55'04		7659 Nov 30 10:20	0° $\mathfrak{J}$	
	7658 Dec 06 06:14	0° $\mathfrak{J}$		morning set	7659 Dec 04 05:45	7° $\mathfrak{J}$ 11'25	
morning set	7658 Dec 20 15:01	23° $\mathfrak{J}$ 14'14					
	7658 Dec 24 08:07	0° $\mathfrak{Z}$		superior conj	7659 Dec 13 09:29	24° $\mathfrak{J}$ 27'46	1°00'59
				minimum elong	7659 Dec 13 13:00	24° $\mathfrak{J}$ 43'52	1°00'37
superior conj	7658 Dec 31 01:55	11° $\mathfrak{Z}$ 59'02	0°29'37		7659 Dec 16 10:53	0° $\mathfrak{Z}$	
minimum elong	7658 Dec 31 04:22	12° $\mathfrak{Z}$ 09'39	0°29'21				



max. Earth dist.	7659 Dec 20 22:41	7°  51'38	1.40729 AU	minimum elong	7660 Nov 25 14:02	8°  02'28	1°22'42
desc. node	7659 Dec 22 00:35	9°  42'07		max. Earth dist.	7660 Dec 02 04:23	20°  22'35	1.38567 AU
evening rise	7659 Dec 25 10:54	15°  26'07		evening rise	7660 Dec 05 22:58	27°  03'20	
	7660 Jan 03 15:39	0°  ≈		desc. node	7660 Dec 07 21:36	0°  32'25	
	7660 Jan 25 14:28	0°  ✕			7660 Dec 07 16:06	0°  3	
evening max el	7660 Jan 28 20:05	3°  ✕28'02	23°26'59		7660 Dec 27 04:28	0°  ≈	
retrograde	7660 Feb 08 10:27	9°  ✕43'46		evening max el	7661 Jan 10 09:18	17°  ≈13'29	24°45'36
asc. node	7660 Feb 12 23:36	8°  ✕02'00		retrograde	7661 Jan 22 01:07	24°  ≈01'18	
evening set	7660 Feb 13 11:29	7°  ✕38'06		evening set	7661 Jan 27 14:51	21°  ≈42'01	
inferior conj	7660 Feb 18 21:28	1°  ✕11'41	1°50'37	asc. node	7661 Jan 29 20:39	19°  ≈26'38	
minimum elong	7660 Feb 18 19:21	1°  ✕18'58	1°49'58	min. Earth dist.	7661 Feb 01 04:13	16°  ≈33'14	0.67831 AU
min. Earth dist.	7660 Feb 18 08:50	1°  ✕55'02	0.68284 AU	inferior conj	7661 Feb 02 04:12	15°  ≈13'48	1°04'48
	7660 Feb 19 18:29	30°  ✕≈		minimum elong	7661 Feb 02 02:43	15°  ≈18'41	1°04'18
morning rise	7660 Feb 24 03:10	25°  ≈06'17		morning rise	7661 Feb 07 14:48	9°  ≈15'12	
direct	7660 Feb 28 08:45	23°  ≈26'14		direct	7661 Feb 11 07:26	7°  ≈56'59	
morning max el	7660 Mar 07 16:50	28°  ≈13'32	20°57'40	morning max el	7661 Feb 18 17:18	12°  ≈06'04	19°47'40
	7660 Mar 09 09:22	0°  ✕		greatest brilliancy	7661 Mar 03 13:52	28°  ≈50'43	-0.6m
desc. node	7660 Mar 19 00:04	12°  ✕18'49			7661 Mar 04 08:42	0°  ✕	
	7660 Mar 31 01:38	0°  ✕		desc. node	7661 Mar 05 21:01	2°  ✕14'33	
morning set	7660 Apr 06 23:45	10°  ✕39'20		morning set	7661 Mar 16 20:57	18°  ✕56'37	
max. Earth dist.	7660 Apr 14 20:14	23°  ✕10'52	1.42829 AU		7661 Mar 23 23:45	0°  ✕	
	7660 Apr 18 23:35	0°  ✕		max. Earth dist.	7661 Mar 28 07:19	6°  ✕48'34	1.44374 AU
superior conj	7660 Apr 21 20:49	4°  ✕51'01	-2°06'50	superior conj	7661 Apr 02 05:28	14°  ✕42'09	-2°10'40
minimum elong	7660 Apr 22 00:35	5°  ✕07'01	2°06'45	minimum elong	7661 Apr 02 03:33	14°  ✕34'21	2°10'39
evening rise	7660 May 03 14:44	25°  ✕24'04			7661 Apr 11 12:02	0°  ✕	
	7660 May 06 04:32	0°  ✕		evening rise	7661 Apr 15 16:48	7°  ✕06'01	
asc. node	7660 May 10 22:39	8°  ✕18'50		asc. node	7661 Apr 27 19:42	27°  ✕07'56	
evening max el	7660 May 20 07:36	21°  ✕35'10	18°05'51		7661 Apr 29 19:18	0°  ✕	
retrograde	7660 May 26 22:17	24°  ✕58'22		evening max el	7661 May 03 20:51	4°  ✕53'57	18°11'42
evening set	7660 May 29 12:42	24°  ✕26'53		retrograde	7661 May 10 06:12	8°  ✕16'30	
inferior conj	7660 Jun 05 03:13	19°  ✕27'53	2°32'53	evening set	7661 May 13 03:38	7°  ✕32'36	
minimum elong	7660 Jun 05 06:14	19°  ✕20'32	2°32'03	inferior conj	7661 May 19 05:21	2°  ✕14'56	3°08'30
min. Earth dist.	7660 Jun 08 07:27	16°  ✕24'01	0.61049 AU	minimum elong	7661 May 19 07:20	2°  ✕09'29	3°08'07
morning rise	7660 Jun 11 21:28	13°  ✕30'34			7661 May 21 06:25	30°  ✕✕	
desc. node	7660 Jun 14 23:31	11°  ✕55'15		min. Earth dist.	7661 May 21 21:13	29°  ✕20'28	0.63206 AU
direct	7660 Jun 18 13:05	11°  ✕17'08		morning rise	7661 May 25 09:37	26°  ✕04'28	
morning max el	7660 Jul 02 19:35	19°  ✕15'55	27°52'40	direct	7661 Jun 01 04:20	23°  ✕28'12	
	7660 Jul 11 22:00	0°  ✕		desc. node	7661 Jun 01 20:31	23°  ✕29'38	
	7660 Jul 30 08:37	0°  ✕			7661 Jun 13 13:57	0°  ✕	
morning set	7660 Aug 04 17:46	10°  ✕41'00		morning max el	7661 Jun 15 03:28	1°  ✕30'48	27°47'48
asc. node	7660 Aug 06 21:57	15°  ✕13'49			7661 Jul 06 03:09	0°  ✕	
max. Earth dist.	7660 Aug 10 15:43	23°  ✕17'59	1.31899 AU	morning set	7661 Jul 19 15:12	24°  ✕39'12	
					7661 Jul 22 06:08	0°  ✕	
superior conj	7660 Aug 12 01:35	26°  ✕23'55	0°50'42	asc. node	7661 Jul 24 18:56	5°  ✕19'07	
minimum elong	7660 Aug 11 23:36	26°  ✕12'55	0°50'15	max. Earth dist.	7661 Jul 24 19:44	5°  ✕23'20	1.32555 AU
	7660 Aug 13 16:47	0°  ✕					
evening rise	7660 Aug 18 20:14	11°  ✕14'17		superior conj	7661 Jul 27 09:22	10°  ✕54'01	0°26'20
	7660 Aug 28 07:33	0°  ✕		minimum elong	7661 Jul 27 08:09	10°  ✕47'26	0°25'59
desc. node	7660 Sep 10 22:34	20°  ✕01'31		evening rise	7661 Aug 03 07:56	25°  ✕56'34	
evening max el	7660 Sep 14 05:27	23°  ✕27'52	25°04'21		7661 Aug 05 06:05	0°  ✕	
	7660 Sep 24 15:01	0°  ✕			7661 Aug 23 04:34	0°  ✕	
retrograde	7660 Sep 28 02:29	0°  ✕28'08		evening max el	7661 Aug 26 16:58	3°  ✕47'26	23°27'49
	7660 Oct 01 14:13	30°  ✕✕		desc. node	7661 Aug 28 19:38	5°  ✕41'35	
evening set	7660 Oct 03 18:20	29°  ✕15'24		retrograde	7661 Sep 09 05:51	10°  ✕34'06	
min. Earth dist.	7660 Oct 08 16:53	26°  ✕33'33	0.57244 AU	evening set	7661 Sep 13 10:41	9°  ✕55'27	
inferior conj	7660 Oct 11 14:05	24°  ✕38'45	-5°24'06	min. Earth dist.	7661 Sep 20 02:43	6°  ✕47'47	0.55657 AU
minimum elong	7660 Oct 11 17:46	24°  ✕32'36	5°23'45	inferior conj	7661 Sep 22 00:48	5°  ✕39'38	-5°27'13
morning rise	7660 Oct 19 19:29	20°  ✕28'31		minimum elong	7661 Sep 21 21:36	5°  ✕44'23	5°27'00
direct	7660 Oct 22 07:15	20°  ✕10'35		morning rise	7661 Sep 30 10:43	1°  ✕46'57	
morning max el	7660 Oct 31 09:21	24°  ✕29'38	19°09'39	direct	7661 Oct 03 08:07	1°  ✕26'31	
asc. node	7660 Nov 02 21:25	27°  ✕11'14		morning max el	7661 Oct 13 22:25	6°  ✕23'58	20°19'58
	7660 Nov 05 01:27	0°  ✕		asc. node	7661 Oct 20 18:24	14°  ✕44'41	
morning set	7660 Nov 17 05:41	21°  ✕33'24			7661 Oct 29 10:01	0°  ✕	
	7660 Nov 21 11:31	0°  ✕		morning set	7661 Nov 01 11:40	6°  ✕11'09	
superior conj	7660 Nov 25 11:02	7°  ✕48'03	1°22'54	superior conj	7661 Nov 09 01:43	21°  ✕45'39	1°36'05

minimum elong	7661 Nov 09 03:28	21°♄54'31	1°36'04	asc. node	7662 Oct 07 15:25	3°♊06'07	
	7661 Nov 13 05:24	0°♊		morning set	7662 Oct 16 21:25	20°♊58'35	
max. Earth dist.	7661 Nov 14 10:54	2°♊22'15	1.36483 AU		7662 Oct 21 03:45	0°♄	
evening rise	7661 Nov 18 07:20	9°♊34'45					
desc. node	7661 Nov 24 18:38	20°♊56'30		superior conj	7662 Oct 24 01:40	6°♄09'34	1°41'32
	7661 Nov 30 08:08	0°♋		minimum elong	7662 Oct 24 02:03	6°♄11'35	1°41'36
	7661 Dec 22 22:10	0°♌		max. Earth dist.	7662 Oct 27 23:48	14°♄15'31	1.34686 AU
evening max el	7661 Dec 23 22:13	0°♌59'45	25°56'07	evening rise	7662 Nov 01 08:19	22°♄51'13	
retrograde	7662 Jan 05 11:04	8°♌08'41			7662 Nov 05 04:03	0°♊	
evening set	7662 Jan 11 13:30	5°♌38'40		desc. node	7662 Nov 11 15:42	11°♊16'39	
min. Earth dist.	7662 Jan 15 20:02	1°♌04'24	0.67003 AU		7662 Nov 24 00:55	0°♋	
asc. node	7662 Jan 16 17:41	29°♋56'43		evening max el	7662 Dec 06 11:29	14°♋41'05	26°51'00
	7662 Jan 16 16:39	30°♋		retrograde	7662 Dec 19 15:27	21°♋59'23	
inferior conj	7662 Jan 17 07:21	29°♋13'45	0°11'25	evening set	7662 Dec 26 05:33	19°♋23'17	
minimum elong	7662 Jan 17 07:03	29°♋14'41	0°11'24	min. Earth dist.	7662 Dec 30 06:03	15°♋23'31	0.65821 AU
transit middle	7662 Jan 17 07:03	29°♋14'41	0°11'24	inferior conj	7663 Jan 01 04:53	13°♋07'26	-0°48'45
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transit end	7662 Jan 17 09:03	29°♋08'23		asc. node	7663 Jan 03 14:43	10°♋26'23	
morning rise	7662 Jan 23 01:10	23°♋23'50		morning rise	7663 Jan 07 08:02	7°♋28'41	
direct	7662 Jan 26 06:20	22°♋24'43		direct	7663 Jan 10 03:37	6°♋45'04	
morning max el	7662 Feb 02 01:19	26°♋07'42	18°52'44	morning max el	7663 Jan 16 15:06	10°♋13'08	18°14'13
	7662 Feb 05 11:22	0°♌			7663 Jan 30 13:54	0°♌	
desc. node	7662 Feb 20 17:59	22°♌29'40		morning set	7663 Feb 04 16:08	8°♌13'09	
morning set	7662 Feb 24 04:46	27°♌52'23		desc. node	7663 Feb 07 15:00	12°♌58'52	
	7662 Feb 25 13:28	0°♍			7663 Feb 18 07:39	0°♍	
max. Earth dist.	7662 Mar 10 23:39	20°♍59'12	1.45282 AU				
				superior conj	7663 Feb 19 21:36	2°♍29'14	-1°20'32
superior conj	7662 Mar 12 16:54	23°♍41'11	-1°54'53	minimum elong	7663 Feb 19 12:37	1°♍53'57	1°19'27
minimum elong	7662 Mar 12 08:35	23°♍08'28	1°54'17	max. Earth dist.	7663 Feb 21 19:00	5°♍27'16	1.45463 AU
	7662 Mar 16 16:57	0°♎		evening rise	7663 Mar 08 00:23	27°♍39'33	
evening rise	7662 Mar 27 19:55	17°♎49'06			7663 Mar 09 12:23	0°♎	
	7662 Apr 04 08:31	0°♏		greatest brilliancy	7663 Mar 19 14:32	15°♎37'40	-0.7m
asc. node	7662 Apr 14 16:45	15°♏21'19			7663 Mar 29 22:00	0°♏	
evening max el	7662 Apr 17 08:56	18°♏23'37	18°35'53	evening max el	7663 Mar 31 17:33	1°♏59'04	19°17'15
retrograde	7662 Apr 23 22:03	21°♏58'35		asc. node	7663 Apr 01 13:48	2°♏48'21	
evening set	7662 Apr 27 02:39	21°♏01'01		retrograde	7663 Apr 07 18:30	5°♏58'11	
inferior conj	7662 May 02 19:25	15°♏26'15	3°23'47	evening set	7663 Apr 11 06:49	4°♏46'09	
minimum elong	7662 May 02 20:00	15°♏24'30	3°23'40		7663 Apr 15 21:57	30°♎♎	
min. Earth dist.	7662 May 04 20:10	12°♏59'16	0.65081 AU	inferior conj	7663 Apr 16 17:55	28°♎55'41	3°23'12
morning rise	7662 May 08 12:35	9°♏10'08		minimum elong	7663 Apr 16 17:14	28°♎57'56	3°23'07
direct	7662 May 15 03:30	6°♏23'07		min. Earth dist.	7663 Apr 18 03:21	27°♎07'22	0.66560 AU
desc. node	7662 May 19 17:30	7°♏30'16		morning rise	7663 Apr 22 03:17	22°♎38'26	
morning max el	7662 May 28 13:34	14°♏17'31	27°08'43	direct	7663 Apr 28 09:08	19°♎53'11	
	7662 Jun 10 07:35	0°♐		desc. node	7663 May 06 14:31	23°♎27'15	
	7662 Jun 28 19:40	0°♑		morning max el	7663 May 10 23:34	27°♎24'31	26°03'01
morning set	7662 Jul 03 03:15	8°♑07'29			7663 May 13 09:59	0°♏	
max. Earth dist.	7662 Jul 07 14:46	17°♑01'28	1.33689 AU		7663 Jun 03 23:45	0°♐	
				morning set	7663 Jun 16 02:11	20°♐55'05	
superior conj	7662 Jul 11 12:09	25°♑05'34	-0°01'38	max. Earth dist.	7663 Jun 19 22:54	28°♐13'36	1.35303 AU
minimum elong	7662 Jul 11 12:14	25°♑06'02	0°01'42		7663 Jun 20 20:50	0°♑	
behind sun begin	7662 Jul 11 06:40	24°♑36'43					
behind sun end	7662 Jul 11 17:48	25°♑35'23		superior conj	7663 Jun 25 07:25	8°♑51'02	-0°32'08
asc. node	7662 Jul 11 16:00	25°♑25'50		minimum elong	7663 Jun 25 09:17	9°♑00'28	0°31'52
	7662 Jul 13 19:43	0°♒		asc. node	7663 Jun 28 12:59	15°♑29'01	
evening rise	7662 Jul 18 18:43	10°♒32'46		evening rise	7663 Jul 03 02:34	24°♑56'26	
	7662 Jul 28 20:25	0°♓			7663 Jul 05 14:13	0°♒	
evening max el	7662 Aug 08 07:58	14°♓06'11	21°50'36	evening max el	7663 Jul 21 09:46	24°♒54'07	20°25'52
desc. node	7662 Aug 15 16:41	19°♓16'11			7663 Jul 29 15:40	0°♓	
retrograde	7662 Aug 20 21:45	20°♓20'33		retrograde	7663 Aug 01 09:58	0°♓20'01	
evening set	7662 Aug 23 16:20	20°♓03'18		desc. node	7663 Aug 02 13:45	0°♓16'38	
inferior conj	7662 Sep 01 20:50	16°♓02'58	-4°37'08	evening set	7663 Aug 03 09:53	0°♓10'04	
minimum elong	7662 Sep 01 11:53	16°♓15'30	4°35'06		7663 Aug 04 06:22	30°♎♒	
min. Earth dist.	7662 Sep 01 11:40	16°♓15'48	0.54794 AU	inferior conj	7663 Aug 12 14:15	26°♒12'48	-2°58'42
morning rise	7662 Sep 10 08:43	12°♓13'29		minimum elong	7663 Aug 12 06:14	26°♒24'25	2°56'01
direct	7662 Sep 13 19:19	11°♓47'26		min. Earth dist.	7663 Aug 13 21:45	25°♒27'03	0.54861 AU
morning max el	7662 Sep 25 22:49	17°♓30'46	21°50'41	morning rise	7663 Aug 21 01:52	22°♒06'47	
	7662 Oct 05 18:25	0°♓		direct	7663 Aug 25 04:59	21°♒30'07	


































































































































morning max el	7663 Sep 07 13:55	27°♎59'00	23°34'37	direct	7664 Aug 05 00:17	1°♎07'05	
	7663 Sep 09 14:21	0°♎		morning max el	7664 Aug 19 02:42	8°♎14'34	25°17'51
asc. node	7663 Sep 24 12:26	22°♎03'05			7664 Sep 04 05:26	0°♎	
	7663 Sep 28 13:52	0°♎		asc. node	7664 Sep 10 09:28	11°♎26'33	
morning set	7663 Oct 01 08:57	5°♎49'09		morning set	7664 Sep 14 20:33	20°♎38'04	
					7664 Sep 19 04:06	0°♎	
superior conj	7663 Oct 08 07:47	20°♎49'44	1°40'14				
minimum elong	7663 Oct 08 06:57	20°♎45'17	1°40'15	superior conj	7664 Sep 21 17:40	5°♎38'55	1°32'59
max. Earth dist.	7663 Oct 10 21:15	26°♎18'49	1.33282 AU	minimum elong	7664 Sep 21 15:58	5°♎29'32	1°32'50
	7663 Oct 12 15:19	0°♎		max. Earth dist.	7664 Sep 23 02:08	8°♎36'55	1.32316 AU
evening rise	7663 Oct 15 21:52	6°♎41'09		evening rise	7664 Sep 28 20:36	20°♎55'37	
	7663 Oct 28 17:50	0°♎			7664 Oct 03 09:36	0°♎	
desc. node	7663 Oct 29 12:45	1°♎16'48		desc. node	7664 Oct 15 09:47	20°♎48'38	
evening max el	7663 Nov 19 00:06	28°♎05'54	27°23'07		7664 Oct 21 19:27	0°♎	
	7663 Nov 21 02:45	0°♎		evening max el	7664 Oct 31 09:54	11°♎00'58	27°26'08
retrograde	7663 Dec 02 13:27	5°♎24'47		retrograde	7664 Nov 14 04:34	18°♎16'05	
evening set	7663 Dec 09 12:35	2°♎49'18		evening set	7664 Nov 21 07:34	15°♎50'17	
	7663 Dec 12 17:13	30°♎49'18		min. Earth dist.	7664 Nov 24 23:38	12°♎52'44	0.62469 AU
min. Earth dist.	7663 Dec 13 07:51	29°♎22'54	0.64296 AU	inferior conj	7664 Nov 27 20:47	10°♎09'45	-3°03'04
inferior conj	7663 Dec 15 18:19	26°♎48'27	-1°54'28	minimum elong	7664 Nov 28 02:28	9°♎56'19	3°00'54
minimum elong	7663 Dec 15 21:50	26°♎39'11	1°52'55	morning rise	7664 Dec 04 23:22	5°♎02'59	
asc. node	7663 Dec 21 11:47	21°♎49'21		direct	7664 Dec 07 06:35	4°♎39'07	
morning rise	7663 Dec 22 08:37	21°♎24'00		asc. node	7664 Dec 07 08:51	4°♎39'09	
direct	7663 Dec 24 20:46	20°♎52'04		morning max el	7664 Dec 14 00:53	8°♎06'17	17°48'56
morning max el	7663 Dec 31 07:59	24°♎15'09	17°52'44		7664 Dec 28 09:06	0°♎	
	7664 Jan 05 00:29	0°♎		morning set	7664 Dec 29 23:15	2°♎49'19	
morning set	7664 Jan 17 08:15	19°♎58'35					
	7664 Jan 23 07:30	0°♎		superior conj	7665 Jan 10 08:27	22°♎37'57	0°07'28
desc. node	7664 Jan 25 12:01	3°♎37'19		minimum elong	7665 Jan 10 09:11	22°♎41'02	0°07'27
				behind sun begin	7665 Jan 10 01:12	22°♎07'21	
superior conj	7664 Jan 30 14:53	11°♎57'58	-0°36'16	behind sun end	7665 Jan 10 17:09	23°♎14'38	
minimum elong	7664 Jan 30 10:43	11°♎41'10	0°35'35	desc. node	7665 Jan 11 08:59	24°♎21'04	
max. Earth dist.	7664 Feb 04 14:34	19°♎55'44	1.44897 AU		7665 Jan 14 18:47	0°♎	
	7664 Feb 11 00:54	0°♎		max. Earth dist.	7665 Jan 17 07:08	4°♎05'34	1.43656 AU
evening rise	7664 Feb 15 13:48	7°♎00'11		evening rise	7665 Jan 25 02:20	16°♎26'03	
greatest brilliancy	7664 Mar 01 04:34	29°♎01'01	-0.6m		7665 Feb 03 00:31	0°♎	
	7664 Mar 01 20:45	0°♎		evening max el	7665 Feb 24 19:06	29°♎14'59	21°23'22
evening max el	7664 Mar 13 21:09	15°♎36'49	20°14'02		7665 Feb 25 13:16	0°♎	
asc. node	7664 Mar 18 10:52	19°♎15'48		asc. node	7665 Mar 05 07:56	4°♎28'03	
retrograde	7664 Mar 21 16:52	20°♎09'56		retrograde	7665 Mar 05 15:05	4°♎28'31	
evening set	7664 Mar 25 13:51	18°♎42'57		evening set	7665 Mar 09 21:54	2°♎46'24	
inferior conj	7664 Mar 30 22:02	12°♎38'41	3°10'02		7665 Mar 12 14:34	30°♎46'24	
minimum elong	7664 Mar 30 20:24	12°♎44'13	3°09'46	inferior conj	7665 Mar 15 05:22	26°♎30'46	2°46'20
min. Earth dist.	7664 Mar 31 17:07	11°♎33'53	0.67593 AU	minimum elong	7665 Mar 15 03:12	26°♎38'18	2°45'51
morning rise	7664 Apr 05 02:44	6°♎22'43		min. Earth dist.	7665 Mar 15 11:23	26°♎09'53	0.68185 AU
direct	7664 Apr 10 20:11	3°♎49'22		morning rise	7665 Mar 20 08:21	20°♎17'42	
desc. node	7664 Apr 22 11:33	10°♎50'17		direct	7665 Mar 25 11:53	18°♎02'51	
morning max el	7664 Apr 22 08:46	10°♎43'15	24°40'25	morning max el	7665 Apr 04 18:19	24°♎08'43	23°10'53
	7664 May 07 16:43	0°♎		desc. node	7665 Apr 09 08:31	29°♎14'48	
	7664 May 26 16:26	0°♎			7665 Apr 09 23:29	0°♎	
morning set	7664 May 28 07:17	2°♎49'39			7665 May 01 02:55	0°♎	
max. Earth dist.	7664 May 31 22:12	9°♎19'20	1.37314 AU	morning set	7665 May 09 12:47	13°♎35'51	
				max. Earth dist.	7665 May 13 18:12	20°♎47'17	1.39536 AU
superior conj	7664 Jun 07 16:04	22°♎02'38	-1°03'35		7665 May 18 23:02	0°♎	
minimum elong	7664 Jun 07 19:54	22°♎21'19	1°03'03				
	7664 Jun 11 16:58	0°♎		superior conj	7665 May 21 10:03	4°♎29'49	-1°33'24
asc. node	7664 Jun 14 10:01	5°♎25'27		minimum elong	7665 May 21 15:28	4°♎54'49	1°32'49
evening rise	7664 Jun 16 05:07	9°♎01'03		evening rise	7665 May 30 23:17	22°♎37'51	
	7664 Jun 27 19:52	0°♎		asc. node	7665 Jun 01 07:02	25°♎10'04	
evening max el	7664 Jul 03 00:37	6°♎25'34	19°20'18		7665 Jun 03 20:18	0°♎	
retrograde	7664 Jul 12 07:59	11°♎00'59		evening max el	7665 Jun 16 02:24	18°♎38'29	18°35'34
evening set	7664 Jul 14 05:13	10°♎50'29		retrograde	7665 Jun 23 23:49	22°♎33'34	
desc. node	7664 Jul 19 10:48	8°♎47'21		evening set	7665 Jun 26 02:26	22°♎17'41	
inferior conj	7664 Jul 22 19:28	6°♎42'06	-1°01'29	inferior conj	7665 Jul 03 21:02	17°♎50'53	0°43'21
minimum elong	7664 Jul 22 16:44	6°♎46'36	1°00'31	minimum elong	7665 Jul 03 22:36	17°♎47'53	0°42'41
min. Earth dist.	7664 Jul 25 10:48	4°♎58'40	0.55861 AU	desc. node	7665 Jul 06 07:51	15°♎57'53	
morning rise	7664 Jul 31 01:31	2°♎02'46		min. Earth dist.	7665 Jul 07 04:35	15°♎19'22	0.57599 AU

morning rise	7665 Jul 11 15:16	12°☿34'33		morning rise	7666 Jun 22 23:07	23°♄57'16	
direct	7665 Jul 17 10:08	11°☿10'16		desc. node	7666 Jun 23 04:53	23°♄48'49	
morning max el	7665 Jul 31 19:15	18°☿46'09	26°43'33	direct	7666 Jun 29 09:32	22°♄00'29	
	7665 Aug 10 06:19	0°♄			7666 Jul 13 20:39	0°☿	
	7665 Aug 27 17:02	0°♄		morning max el	7666 Jul 13 18:08	29°♄53'47	27°38'05
asc. node	7665 Aug 28 06:28	1°♄08'48			7666 Aug 04 06:37	0°♄	
morning set	7665 Aug 30 06:36	5°♄20'11		morning set	7666 Aug 14 13:20	19°♄50'00	
				asc. node	7666 Aug 15 03:26	21°♄03'50	
superior conj	7665 Sep 06 05:19	20°♄30'38	1°20'22		7666 Aug 19 07:04	0°♄	
minimum elong	7665 Sep 06 03:08	20°♄18'30	1°20'03	max. Earth dist.	7666 Aug 20 21:40	3°♄32'26	1.31728 AU
max. Earth dist.	7665 Sep 06 11:26	21°♄04'33	1.31794 AU				
	7665 Sep 10 12:47	0°♄		superior conj	7666 Aug 21 16:53	5°♄18'40	1°02'51
evening rise	7665 Sep 13 01:46	5°♄26'41		minimum elong	7666 Aug 21 14:41	5°♄06'27	1°02'26
	7665 Sep 26 00:36	0°♄		evening rise	7666 Aug 28 11:02	20°♄07'15	
desc. node	7665 Oct 02 06:50	9°♄40'56			7666 Sep 02 05:55	0°♄	
evening max el	7665 Oct 13 14:22	23°♄14'18	26°56'00	desc. node	7666 Sep 19 03:54	27°♄37'16	
	7665 Oct 24 09:19	0°♄			7666 Sep 21 02:46	0°♄	
retrograde	7665 Oct 27 12:02	0°♄24'23		evening max el	7666 Sep 25 11:25	4°♄37'55	25°52'59
	7665 Oct 30 13:21	30°♄		retrograde	7666 Oct 09 10:02	11°♄42'08	
evening set	7665 Nov 03 10:35	28°♄19'31		evening set	7666 Oct 15 16:37	10°♄08'58	
min. Earth dist.	7665 Nov 07 04:44	25°♄40'51	0.60428 AU	min. Earth dist.	7666 Oct 20 00:06	7°♄33'24	0.58353 AU
inferior conj	7665 Nov 10 08:56	23°♄03'05	-4°09'21	inferior conj	7666 Oct 23 03:15	5°♄18'07	-5°03'54
minimum elong	7665 Nov 10 15:59	22°♄48'25	4°07'17	minimum elong	7666 Oct 23 09:18	5°♄07'11	5°02'49
morning rise	7665 Nov 17 23:44	18°♄17'06		morning rise	7666 Oct 31 04:18	0°♄54'39	
direct	7665 Nov 20 05:10	17°♄57'58		direct	7666 Nov 02 12:15	0°♄37'08	
asc. node	7665 Nov 24 05:54	19°♄03'50		morning max el	7666 Nov 10 21:09	4°♄39'35	18°39'19
morning max el	7665 Nov 27 14:31	21°♄38'06	18°03'55	asc. node	7666 Nov 11 02:54	4°♄53'38	
	7665 Dec 04 00:03	0°♄			7666 Nov 26 18:31	0°♄	
morning set	7665 Dec 13 06:51	16°♄26'58		morning set	7666 Nov 27 01:58	0°♄36'07	
	7665 Dec 20 14:59	0°♄					
superior conj	7665 Dec 23 03:22	4°♄31'01	0°44'04	superior conj	7666 Dec 05 19:13	17°♄23'32	1°11'23
minimum elong	7665 Dec 23 06:31	4°♄45'03	0°43'43	minimum elong	7666 Dec 05 22:39	17°♄39'36	1°11'06
desc. node	7665 Dec 29 05:58	15°♄07'01			7666 Dec 12 17:42	0°♄	
max. Earth dist.	7665 Dec 30 18:40	17°♄41'16	1.41892 AU	max. Earth dist.	7666 Dec 13 01:42	0°♄35'07	1.39814 AU
evening rise	7666 Jan 05 04:30	26°♄32'31		desc. node	7666 Dec 16 02:58	5°♄51'03	
	7666 Jan 07 08:41	0°♄		evening rise	7666 Dec 17 03:53	7°♄36'20	
	7666 Jan 27 19:07	0°♄			7666 Dec 31 09:18	0°♄	
evening max el	7666 Feb 07 12:18	12°♄55'26	22°40'55	evening max el	7667 Jan 21 02:32	26°♄39'22	24°01'03
retrograde	7666 Feb 17 11:22	18°♄50'08			7667 Jan 24 20:36	0°♄	
asc. node	7666 Feb 20 05:00	18°♄12'12		retrograde	7667 Feb 01 04:19	3°♄09'59	
evening set	7666 Feb 22 05:19	16°♄53'03		evening set	7667 Feb 06 10:34	0°♄58'35	
inferior conj	7666 Feb 27 13:56	10°♄29'23	2°13'27	asc. node	7667 Feb 07 02:04	0°♄23'42	
minimum elong	7666 Feb 27 11:40	10°♄37'16	2°12'48		7667 Feb 07 11:44	30°♄	
min. Earth dist.	7666 Feb 27 07:57	10°♄50'08	0.68359 AU	min. Earth dist.	7667 Feb 11 04:27	25°♄29'48	0.68136 AU
morning rise	7666 Mar 04 17:53	4°♄20'31		inferior conj	7667 Feb 11 21:50	24°♄30'50	1°32'10
direct	7666 Mar 09 07:17	2°♄27'30		minimum elong	7667 Feb 11 19:56	24°♄37'18	1°31'32
morning max el	7666 Mar 18 07:19	7°♄42'20	21°43'43	morning rise	7667 Feb 17 05:19	18°♄27'52	
desc. node	7666 Mar 27 05:29	18°♄23'56		direct	7667 Feb 21 05:16	16°♄57'09	
	7666 Apr 04 11:57	0°♄		morning max el	7667 Mar 01 03:00	21°♄26'56	20°26'05
morning set	7666 Apr 19 14:35	23°♄04'32			7667 Mar 08 07:10	0°♄	
	7666 Apr 23 21:21	0°♄		desc. node	7667 Mar 14 02:27	8°♄05'03	
max. Earth dist.	7666 Apr 25 17:35	3°♄02'24	1.41709 AU		7667 Mar 28 17:22	0°♄	
				morning set	7667 Mar 29 17:00	1°♄31'22	
superior conj	7666 May 03 08:47	16°♄02'26	-1°57'35	max. Earth dist.	7667 Apr 08 00:26	16°♄12'37	1.43554 AU
minimum elong	7666 May 03 14:05	16°♄25'36	1°57'16				
	7666 May 11 03:47	0°♄		superior conj	7667 Apr 14 07:54	26°♄31'16	-2°10'37
evening rise	7666 May 14 05:23	5°♄37'40		minimum elong	7667 Apr 14 09:41	26°♄38'40	2°10'38
asc. node	7666 May 19 04:03	14°♄38'04			7667 Apr 16 09:56	0°♄	
	7666 May 29 03:36	0°♄		evening rise	7667 Apr 26 18:58	17°♄50'19	
evening max el	7666 May 30 11:30	1°♄24'44	18°11'08		7667 May 03 19:12	0°♄	
retrograde	7666 Jun 06 10:02	4°♄54'47		asc. node	7667 May 06 01:05	3°♄43'30	
evening set	7666 Jun 08 20:12	4°♄29'46		evening max el	7667 May 14 00:15	14°♄34'33	18°06'10
inferior conj	7666 Jun 15 20:01	29°♄42'38	2°01'03	retrograde	7667 May 20 11:18	17°♄55'24	
minimum elong	7666 Jun 15 23:07	29°♄35'40	2°00'01	evening set	7667 May 23 04:50	17°♄18'43	
	7666 Jun 15 12:14	30°♄		inferior conj	7667 May 29 13:25	12°♄11'46	2°50'47
min. Earth dist.	7666 Jun 19 04:46	26°♄43'20	0.59757 AU	minimum elong	7667 May 29 16:05	12°♄04'55	2°50'08
				min. Earth dist.	7667 Jun 01 13:02	9°♄09'19	0.61991 AU

morning rise	7667 Jun 05 01:27	6° $\Pi$ 08'06		morning rise	7668 May 17 20:14	18° $\mathcal{B}$ 56'12	
desc. node	7667 Jun 10 01:53	3° $\Pi$ 52'48		direct	7668 May 24 14:04	16° $\mathcal{B}$ 14'07	
direct	7667 Jun 11 19:33	3° $\Pi$ 43'30		desc. node	7668 May 26 22:55	16° $\mathcal{B}$ 31'58	
morning max el	7667 Jun 25 23:09	11° $\Pi$ 44'44	27°55'08	morning max el	7668 Jun 07 08:14	24° $\mathcal{B}$ 14'00	27°35'08
	7667 Jul 10 08:46	0° $\mathcal{E}$			7668 Jun 12 12:45	0° $\Pi$	
	7667 Jul 27 14:46	0° $\Omega$			7668 Jul 02 18:15	0° $\mathcal{E}$	
morning set	7667 Jul 29 14:52	4° $\Omega$ 02'06		morning set	7668 Jul 12 08:40	17° $\mathcal{E}$ 48'24	
asc. node	7667 Aug 02 00:24	11° $\Omega$ 06'58		max. Earth dist.	7668 Jul 17 05:57	27° $\mathcal{E}$ 45'27	1.32982 AU
max. Earth dist.	7667 Aug 04 05:09	15° $\Omega$ 50'03	1.32121 AU		7668 Jul 18 07:34	0° $\Omega$	
				asc. node	7668 Jul 18 21:23	1° $\Omega$ 13'06	
superior conj	7667 Aug 06 02:38	19° $\Omega$ 57'38	0°40'52	superior conj	7668 Jul 20 08:32	4° $\Omega$ 20'29	0°14'54
minimum elong	7667 Aug 06 00:54	19° $\Omega$ 48'09	0°40'27	minimum elong	7668 Jul 20 07:49	4° $\Omega$ 16'35	0°14'39
	7667 Aug 10 16:31	0° $\Pi$		behind sun begin	7668 Jul 20 05:38	4° $\Omega$ 04'54	
evening rise	7667 Aug 12 22:26	4° $\Pi$ 51'25		behind sun end	7668 Jul 20 10:00	4° $\Omega$ 28'17	
	7667 Aug 26 04:44	0° $\mathcal{E}$		evening rise	7668 Jul 27 09:59	19° $\Omega$ 32'00	
desc. node	7667 Sep 06 00:58	14° $\mathcal{E}$ 15'45			7668 Aug 01 12:26	0° $\Pi$	
evening max el	7667 Sep 07 01:19	15° $\mathcal{E}$ 16'03	24°24'33	evening max el	7668 Aug 18 13:08	25° $\Pi$ 30'27	22°45'35
retrograde	7667 Sep 20 20:06	22° $\mathcal{E}$ 11'18		desc. node	7668 Aug 22 22:02	29° $\Pi$ 06'43	
evening set	7667 Sep 25 22:00	21° $\mathcal{E}$ 14'09			7668 Aug 24 08:32	0° $\mathcal{E}$	
min. Earth dist.	7667 Oct 01 12:16	18° $\mathcal{E}$ 23'17	0.56507 AU	retrograde	7668 Aug 31 17:45	2° $\mathcal{E}$ 05'39	
inferior conj	7667 Oct 04 01:25	16° $\mathcal{E}$ 47'12	-5°31'14	evening set	7668 Sep 04 07:19	1° $\mathcal{E}$ 37'48	
minimum elong	7667 Oct 04 02:29	16° $\mathcal{E}$ 45'31	5°31'10		7668 Sep 08 14:25	30° $\mathcal{R}$ $\Pi$	
morning rise	7667 Oct 12 09:07	12° $\mathcal{E}$ 45'08		min. Earth dist.	7668 Sep 11 20:57	28° $\Pi$ 15'05	0.55195 AU
direct	7667 Oct 15 00:36	12° $\mathcal{E}$ 26'20		inferior conj	7668 Sep 13 04:46	27° $\Pi$ 29'39	-5°12'48
morning max el	7667 Oct 24 17:18	17° $\mathcal{E}$ 00'39	19°36'44	minimum elong	7668 Sep 12 22:32	27° $\Pi$ 38'34	5°11'56
asc. node	7667 Oct 28 23:54	21° $\mathcal{E}$ 53'50		morning rise	7668 Sep 21 15:47	23° $\Pi$ 40'52	
	7667 Nov 03 06:16	0° $\mathcal{M}$		direct	7668 Sep 24 18:40	23° $\Pi$ 18'24	
morning set	7667 Nov 11 04:52	15° $\mathcal{M}$ 06'18		morning max el	7668 Oct 06 00:46	28° $\Pi$ 34'02	20°56'18
	7667 Nov 18 14:30	0° $\mathcal{X}$			7668 Oct 07 11:28	0° $\mathcal{E}$	
superior conj	7667 Nov 19 02:56	1° $\mathcal{X}$ 01'21	1°29'29	asc. node	7668 Oct 14 20:54	9° $\mathcal{E}$ 49'01	
minimum elong	7667 Nov 19 05:26	1° $\mathcal{X}$ 13'44	1°29'23	morning set	7668 Oct 25 12:44	29° $\mathcal{E}$ 49'06	
max. Earth dist.	7667 Nov 25 07:27	12° $\mathcal{X}$ 51'56	1.37668 AU		7668 Oct 25 14:51	0° $\mathcal{M}$	
evening rise	7667 Nov 29 01:06	19° $\mathcal{X}$ 38'09		superior conj	7668 Nov 01 21:59	15° $\mathcal{M}$ 11'24	1°39'16
desc. node	7667 Dec 03 00:00	26° $\mathcal{X}$ 29'30		minimum elong	7668 Nov 01 23:09	15° $\mathcal{M}$ 17'24	1°39'18
	7667 Dec 05 02:18	0° $\mathcal{Z}$		max. Earth dist.	7668 Nov 06 16:28	24° $\mathcal{M}$ 47'20	1.35681 AU
	7667 Dec 25 12:25	0° $\approx$			7668 Nov 09 09:14	0° $\mathcal{X}$	
evening max el	7668 Jan 03 15:41	10° $\approx$ 26'17	25°17'02	evening rise	7668 Nov 10 17:01	2° $\mathcal{X}$ 29'42	
retrograde	7668 Jan 15 16:53	17° $\approx$ 23'38		desc. node	7668 Nov 18 21:03	16° $\mathcal{X}$ 57'44	
evening set	7668 Jan 21 12:07	14° $\approx$ 59'32			7668 Nov 27 02:14	0° $\mathcal{Z}$	
asc. node	7668 Jan 24 23:08	11° $\approx$ 19'24		evening max el	7668 Dec 16 04:46	24° $\mathcal{Z}$ 11'30	26°21'43
min. Earth dist.	7668 Jan 25 22:35	10° $\approx$ 05'23	0.67531 AU		7668 Dec 23 19:25	0° $\approx$	
inferior conj	7668 Jan 27 03:17	8° $\approx$ 32'20	0°43'03	retrograde	7668 Dec 29 00:27	1° $\approx$ 25'15	
minimum elong	7668 Jan 27 02:15	8° $\approx$ 35'42	0°42'42		7669 Jan 02 18:15	30° $\mathcal{R}$ $\mathcal{Z}$	
morning rise	7668 Feb 01 16:41	2° $\approx$ 37'06		evening set	7669 Jan 04 08:14	28° $\mathcal{Z}$ 51'46	
direct	7668 Feb 05 04:20	1° $\approx$ 27'13		min. Earth dist.	7669 Jan 08 12:05	24° $\mathcal{Z}$ 32'31	0.66549 AU
morning max el	7668 Feb 12 06:44	5° $\approx$ 23'18	19°22'18	inferior conj	7669 Jan 10 04:20	22° $\mathcal{Z}$ 30'12	-0°13'20
greatest brilliancy	7668 Feb 25 07:03	22° $\approx$ 36'42	-0.7m	minimum elong	7669 Jan 10 04:41	22° $\mathcal{Z}$ 29'07	0°13'05
desc. node	7668 Feb 28 23:25	28° $\approx$ 09'40		transit middle	7669 Jan 10 04:41	22° $\mathcal{Z}$ 29'07	0°13'05
	7668 Mar 01 04:24	0° $\mathcal{H}$		transit begin	7669 Jan 10 03:01	22° $\mathcal{Z}$ 34'14	
morning set	7668 Mar 07 15:41	9° $\mathcal{H}$ 56'12		transit end	7669 Jan 10 06:22	22° $\mathcal{Z}$ 24'01	
max. Earth dist.	7668 Mar 20 14:28	0° $\Upsilon$ 07'43	1.44849 AU	asc. node	7669 Jan 10 20:12	21° $\mathcal{Z}$ 42'12	
	7668 Mar 20 12:31	0° $\Upsilon$		morning rise	7669 Jan 16 01:54	16° $\mathcal{Z}$ 44'59	
superior conj	7668 Mar 24 06:25	5° $\Upsilon$ 56'32	-2°06'29	direct	7669 Jan 19 02:48	15° $\mathcal{Z}$ 52'53	
minimum elong	7668 Mar 24 01:27	5° $\Upsilon$ 36'44	2°06'18	morning max el	7669 Jan 25 17:36	19° $\mathcal{Z}$ 27'50	18°34'20
evening rise	7668 Apr 07 11:31	29° $\Upsilon$ 07'00			7669 Feb 02 22:21	0° $\approx$	
	7668 Apr 08 00:15	0° $\mathcal{B}$		desc. node	7669 Feb 14 20:25	18° $\approx$ 31'31	
asc. node	7668 Apr 21 22:09	22° $\mathcal{B}$ 18'22		morning set	7669 Feb 15 10:15	19° $\approx$ 26'11	
evening max el	7668 Apr 26 13:20	27° $\mathcal{B}$ 58'32	18°19'52		7669 Feb 22 03:01	0° $\mathcal{H}$	
	7668 Apr 28 22:46	0° $\Pi$		superior conj	7669 Mar 03 12:38	14° $\mathcal{H}$ 44'19	-1°42'12
retrograde	7668 May 02 23:05	1° $\Pi$ 24'40		minimum elong	7669 Mar 03 03:07	14° $\mathcal{H}$ 07'03	1°41'18
evening set	7668 May 05 23:38	0° $\Pi$ 34'53		max. Earth dist.	7669 Mar 03 08:55	14° $\mathcal{H}$ 29'43	1.45449 AU
	7668 May 06 22:12	30° $\mathcal{R}$ $\mathcal{B}$			7669 Mar 13 05:43	0° $\Upsilon$	
inferior conj	7668 May 11 21:04	25° $\mathcal{B}$ 09'34	3°17'11	evening rise	7669 Mar 19 04:42	9° $\Upsilon$ 26'43	
minimum elong	7668 May 11 22:27	25° $\mathcal{B}$ 05'34	3°16'57	greatest brilliancy	7669 Mar 27 19:48	23° $\Upsilon$ 09'09	-0.8m
min. Earth dist.	7668 May 14 06:32	22° $\mathcal{B}$ 25'20	0.64044 AU				

	7669 Apr 01 06:10	0°♄	evening rise	7670 Feb 27 01:21	19°♄00'26	
asc. node	7669 Apr 08 19:13	10°♄13'34		7670 Mar 06 04:44	0°♄	
evening max el	7669 Apr 10 00:08	11°♄30'51 18°51'25	greatest brilliancy	7670 Mar 12 12:25	9°♄33'44	-0.7m
retrograde	7669 Apr 16 17:24	15°♄15'03	evening max el	7670 Mar 24 06:40	25°♄07'00	19°39'38
evening set	7669 Apr 20 01:10	14°♄11'21	asc. node	7670 Mar 26 16:19	27°♄16'53	
inferior conj	7669 Apr 25 15:07	8°♄29'25 3°25'15	retrograde	7670 Mar 31 15:02	29°♄20'00	
minimum elong	7669 Apr 25 15:08	8°♄29'23 3°25'11	evening set	7670 Apr 04 06:47	28°♄01'50	
min. Earth dist.	7669 Apr 27 09:12	6°♄18'05 0.65756 AU	inferior conj	7670 Apr 09 16:21	22°♄05'10	3°19'00
morning rise	7669 May 01 04:34	2°♄12'15	minimum elong	7670 Apr 09 15:13	22°♄08'56	3°18'51
	7669 May 04 15:31	30°♄	min. Earth dist.	7670 Apr 10 19:33	20°♄34'52	0.67051 AU
direct	7669 May 07 15:57	29°♄24'51	morning rise	7670 Apr 14 23:20	15°♄47'55	
	7669 May 10 21:00	0°♄	direct	7670 Apr 21 00:07	13°♄06'34	
desc. node	7669 May 13 19:56	1°♄25'57	desc. node	7670 Apr 30 16:57	18°♄02'30	
morning max el	7669 May 20 18:47	7°♄11'31 26°43'37	morning max el	7670 May 03 04:32	20°♄24'34	25°29'18
	7669 Jun 07 10:07	0°♄		7670 May 11 10:10	0°♄	
	7669 Jun 25 02:52	0°♄		7670 May 31 14:02	0°♄	
morning set	7669 Jun 25 15:39	1°♄00'32	morning set	7670 Jun 08 07:39	13°♄27'07	
max. Earth dist.	7669 Jun 29 20:41	9°♄12'22 1.34319 AU	max. Earth dist.	7670 Jun 12 00:13	20°♄16'38	1.36111 AU
				7670 Jun 17 00:52	0°♄	
superior conj	7669 Jul 04 08:26	18°♄21'13 -0°14'19	superior conj	7670 Jun 17 23:34	1°♄52'48	-0°45'30
minimum elong	7669 Jul 04 09:13	18°♄25'20 0°14'16	minimum elong	7670 Jun 18 02:16	2°♄06'16	0°45'06
behind sun begin	7669 Jul 04 06:33	18°♄11'28	asc. node	7670 Jun 22 15:27	11°♄19'03	
behind sun end	7669 Jul 04 11:54	18°♄39'14	evening rise	7670 Jun 26 01:40	18°♄19'08	
asc. node	7669 Jul 05 18:25	21°♄18'27		7670 Jul 02 00:18	0°♄	
	7669 Jul 09 21:25	0°♄	evening max el	7670 Jul 13 15:16	17°♄03'21	19°55'33
evening rise	7669 Jul 11 19:47	4°♄03'19	retrograde	7670 Jul 23 22:06	22°♄07'13	
	7669 Jul 26 06:30	0°♄	evening set	7670 Jul 25 19:04	21°♄57'52	
evening max el	7669 Jul 31 07:51	5°♄57'31 21°12'25	desc. node	7670 Jul 27 16:09	21°♄30'54	
desc. node	7669 Aug 09 19:06	11°♄38'02	inferior conj	7670 Aug 03 18:45	17°♄57'37	-2°09'14
retrograde	7669 Aug 12 07:09	11°♄53'18	minimum elong	7670 Aug 03 12:48	18°♄06'39	2°07'06
evening set	7669 Aug 14 15:24	11°♄40'31	min. Earth dist.	7670 Aug 05 17:37	16°♄46'33	0.55170 AU
inferior conj	7669 Aug 23 21:49	7°♄42'51 -3°59'56	morning rise	7670 Aug 12 04:42	13°♄38'25	
minimum elong	7669 Aug 23 12:24	7°♄56'06 3°57'18	direct	7670 Aug 16 15:45	12°♄54'46	
min. Earth dist.	7669 Aug 24 06:04	7°♄31'15 0.54701 AU	morning max el	7670 Aug 30 09:58	19°♄42'14	24°19'37
morning rise	7669 Sep 01 10:03	3°♄48'59		7670 Sep 08 02:44	0°♄	
direct	7669 Sep 05 02:58	3°♄19'27	asc. node	7670 Sep 18 14:55	17°♄35'46	
morning max el	7669 Sep 17 20:40	9°♄22'32 22°34'01	morning set	7670 Sep 24 11:12	29°♄29'06	
asc. node	7669 Oct 01 17:55	28°♄26'30		7670 Sep 24 17:00	0°♄	
	7669 Oct 02 14:36	0°♄	superior conj	7670 Oct 01 08:54	14°♄28'47	1°37'51
morning set	7669 Oct 09 23:26	14°♄38'23	minimum elong	7670 Oct 01 07:40	14°♄22'01	1°37'49
			max. Earth dist.	7670 Oct 03 09:28	18°♄51'48	1.32811 AU
superior conj	7669 Oct 17 00:53	29°♄43'20 1°41'46	evening rise	7670 Oct 08 17:36	0°♄03'19	
minimum elong	7669 Oct 17 00:44	29°♄42'29 1°41'48		7670 Oct 08 16:57	0°♄	
	7669 Oct 17 04:01	0°♄	desc. node	7670 Oct 23 15:08	26°♄59'42	
max. Earth dist.	7669 Oct 20 08:47	6°♄42'41 1.34034 AU		7670 Oct 25 13:26	0°♄	
evening rise	7669 Oct 24 23:45	16°♄01'17	evening max el	7670 Nov 11 05:24	21°♄00'43	27°28'18
	7669 Nov 01 12:44	0°♄	retrograde	7670 Nov 24 21:51	28°♄19'04	
desc. node	7669 Nov 05 18:06	7°♄10'05	evening set	7670 Dec 01 23:12	25°♄46'29	
	7669 Nov 21 15:21	0°♄	min. Earth dist.	7670 Dec 05 16:42	22°♄32'58	0.63550 AU
evening max el	7669 Nov 28 17:42	7°♄46'26 27°07'47	inferior conj	7670 Dec 08 07:56	19°♄53'19	-2°23'25
retrograde	7669 Dec 12 02:21	15°♄06'33	minimum elong	7670 Dec 08 12:23	19°♄42'03	2°21'34
evening set	7669 Dec 18 20:49	12°♄29'24	morning rise	7670 Dec 15 03:23	14°♄35'54	
min. Earth dist.	7669 Dec 22 18:48	8°♄44'22 0.65211 AU	asc. node	7670 Dec 15 14:19	14°♄26'23	
inferior conj	7669 Dec 24 22:45	6°♄19'06 -1°16'06	direct	7670 Dec 17 12:58	14°♄07'57	
minimum elong	7669 Dec 25 01:00	6°♄12'47 1°15'02	morning max el	7670 Dec 24 02:27	17°♄32'03	17°48'48
asc. node	7669 Dec 28 17:17	2°♄28'33		7671 Jan 02 02:24	0°♄	
morning rise	7669 Dec 31 06:29	0°♄46'20	morning set	7671 Jan 09 13:00	12°♄40'20	
direct	7670 Jan 02 22:32	0°♄08'18	desc. node	7671 Jan 19 14:24	29°♄46'06	
morning max el	7670 Jan 09 09:09	3°♄33'10 18°02'59		7671 Jan 19 17:45	0°♄	
morning set	7670 Jan 27 10:17	0°♄24'23	superior conj	7671 Jan 21 23:32	3°♄41'57	-0°17'10
	7670 Jan 27 04:22	0°♄	minimum elong	7671 Jan 21 21:41	3°♄34'19	0°16'48
desc. node	7670 Feb 01 17:24	9°♄04'58	max. Earth dist.	7671 Jan 27 22:28	13°♄19'37	1.44449 AU
			evening rise	7671 Feb 06 12:25	28°♄18'25	
superior conj	7670 Feb 10 20:36	23°♄44'24 -1°02'18		7671 Feb 07 14:55	0°♄	
minimum elong	7670 Feb 10 13:19	23°♄15'34 1°01'18				
max. Earth dist.	7670 Feb 14 04:24	28°♄58'59 1.45305 AU				
	7670 Feb 14 19:57	0°♄				

	7671 Feb 28 02:00	0°♿		superior conj	7672 Jan 03 04:10	14°♿53'36	0°24'03
evening max el	7671 Mar 07 07:53	8°♿44'58	20°42'14	minimum elong	7672 Jan 03 06:15	15°♿02'34	0°23'51
asc. node	7671 Mar 13 13:23	13°♿14'00		desc. node	7672 Jan 06 11:22	20°♿30'58	
retrograde	7671 Mar 15 13:29	13°♿34'43		max. Earth dist.	7672 Jan 10 13:16	27°♿17'20	1.42969 AU
evening set	7671 Mar 19 14:26	12°♿01'31			7672 Jan 12 05:14	0°♿	
inferior conj	7671 Mar 24 22:06	5°♿52'16	3°01'09	evening rise	7672 Jan 17 05:23	7°♿58'35	
minimum elong	7671 Mar 24 20:11	5°♿58'50	3°00'47		7672 Jan 31 20:14	0°♿	
min. Earth dist.	7671 Mar 25 11:34	5°♿05'57	0.67904 AU	evening max el	7672 Feb 18 03:48	22°♿24'30	21°55'40
	7671 Mar 29 15:59	30°♿		retrograde	7672 Feb 27 10:55	27°♿55'06	
morning rise	7671 Mar 30 01:42	29°♿37'15		asc. node	7672 Feb 28 10:27	27°♿50'09	
direct	7671 Apr 04 13:26	27°♿10'51		evening set	7672 Mar 02 22:24	26°♿06'34	
	7671 Apr 11 08:10	0°♿		inferior conj	7672 Mar 08 06:11	19°♿47'20	2°33'28
morning max el	7671 Apr 15 13:21	3°♿45'16	24°02'24	minimum elong	7672 Mar 08 03:55	19°♿55'13	2°32'52
desc. node	7671 Apr 17 13:57	5°♿53'46		min. Earth dist.	7672 Mar 08 07:01	19°♿44'27	0.68317 AU
	7671 May 05 15:29	0°♿		morning rise	7672 Mar 13 09:16	13°♿36'04	
morning set	7671 May 21 03:20	24°♿53'49		direct	7672 Mar 18 06:52	11°♿30'09	
	7671 May 24 01:28	0°♿		morning max el	7672 Mar 27 23:50	17°♿13'24	22°32'58
max. Earth dist.	7671 May 24 20:42	1°♿25'23	1.38247 AU	desc. node	7672 Apr 03 10:55	24°♿38'55	
					7672 Apr 07 12:56	0°♿	
superior conj	7671 Jun 01 02:30	14°♿46'30	-1°16'39		7672 Apr 27 17:21	0°♿	
minimum elong	7671 Jun 01 07:06	15°♿08'28	1°16'03	morning set	7672 Apr 30 21:16	5°♿07'10	
	7671 Jun 08 22:07	0°♿		max. Earth dist.	7672 May 05 17:52	13°♿13'13	1.40489 AU
asc. node	7671 Jun 09 12:28	1°♿10'39					
evening rise	7671 Jun 10 01:00	2°♿12'16		superior conj	7672 May 13 12:57	26°♿52'19	-1°44'39
evening max el	7671 Jun 26 11:14	28°♿53'10	18°58'48	minimum elong	7672 May 13 18:37	27°♿17'54	1°44'08
	7671 Jun 27 16:22	0°♿			7672 May 15 06:17	0°♿	
retrograde	7671 Jul 05 02:40	3°♿09'12		evening rise	7672 May 23 14:34	15°♿34'49	
evening set	7671 Jul 07 01:50	2°♿56'51		asc. node	7672 May 26 09:30	20°♿49'03	
	7671 Jul 13 09:52	30°♿			7672 May 31 12:11	0°♿	
desc. node	7671 Jul 14 13:12	29°♿13'59		evening max el	7672 Jun 08 16:39	11°♿21'38	18°22'43
inferior conj	7671 Jul 15 07:56	28°♿41'28	-0°14'10	retrograde	7672 Jun 16 02:42	15°♿03'59	
minimum elong	7671 Jul 15 07:21	28°♿42'30	0°14'02	evening set	7672 Jun 18 08:37	14°♿44'29	
transit middle	7671 Jul 15 07:21	28°♿42'30	0°14'02	inferior conj	7672 Jun 25 18:50	10°♿08'44	1°19'55
transit begin	7671 Jul 15 05:31	28°♿45'42		minimum elong	7672 Jun 25 21:22	10°♿03'31	1°18'57
transit end	7671 Jul 15 09:11	28°♿39'18		min. Earth dist.	7672 Jun 29 04:22	7°♿22'49	0.58488 AU
min. Earth dist.	7671 Jul 18 08:24	26°♿35'34	0.56526 AU	desc. node	7672 Jun 30 10:15	6°♿26'50	
morning rise	7671 Jul 23 09:37	23°♿46'15		morning rise	7672 Jul 03 06:51	4°♿39'03	
direct	7671 Jul 28 17:30	22°♿39'04		direct	7672 Jul 09 09:13	3°♿01'10	
	7671 Aug 11 23:30	0°♿		morning max el	7672 Jul 23 18:32	10°♿44'43	27°11'13
morning max el	7671 Aug 11 23:28	29°♿59'56	25°57'27		7672 Aug 07 16:08	0°♿	
	7671 Sep 01 20:14	0°♿		asc. node	7672 Aug 22 08:53	26°♿55'38	
asc. node	7671 Sep 05 11:54	7°♿07'30		morning set	7672 Aug 23 07:10	28°♿52'18	
morning set	7671 Sep 08 22:19	14°♿15'10			7672 Aug 23 19:58	0°♿	
superior conj	7671 Sep 15 19:45	29°♿19'23	1°28'16	superior conj	7672 Aug 30 07:33	14°♿09'38	1°13'30
minimum elong	7671 Sep 15 17:47	29°♿08'31	1°28'03	minimum elong	7672 Aug 30 05:18	13°♿57'07	1°13'09
	7671 Sep 16 03:06	0°♿		max. Earth dist.	7672 Aug 30 02:56	13°♿44'04	1.31714 AU
max. Earth dist.	7671 Sep 16 16:37	1°♿14'32	1.32036 AU	evening rise	7672 Sep 06 02:33	29°♿01'13	
evening rise	7671 Sep 22 19:22	14°♿25'39			7672 Sep 06 13:38	0°♿	
	7671 Sep 30 17:43	0°♿			7672 Sep 23 01:23	0°♿	
desc. node	7671 Oct 10 12:10	16°♿16'09		desc. node	7672 Sep 26 09:13	4°♿46'25	
	7671 Oct 20 23:45	0°♿		evening max el	7672 Oct 05 15:04	15°♿32'26	26°32'57
evening max el	7671 Oct 24 13:30	3°♿40'10	27°17'37	retrograde	7672 Oct 19 12:58	22°♿39'16	
retrograde	7671 Nov 07 09:45	10°♿52'36		evening set	7672 Oct 26 06:31	20°♿46'46	
evening set	7671 Nov 14 11:54	8°♿34'41		min. Earth dist.	7672 Oct 30 04:38	18°♿11'48	0.59542 AU
min. Earth dist.	7671 Nov 18 04:07	5°♿46'26	0.61621 AU	inferior conj	7672 Nov 02 09:40	15°♿41'38	-4°34'41
inferior conj	7671 Nov 21 04:45	3°♿04'01	-3°31'51	minimum elong	7672 Nov 02 16:42	15°♿27'51	4°32'56
minimum elong	7671 Nov 21 11:11	2°♿49'35	3°29'38	morning rise	7672 Nov 10 05:10	11°♿05'02	
	7671 Nov 24 21:40	30°♿		direct	7672 Nov 12 11:17	10°♿46'48	
morning rise	7671 Nov 28 12:36	28°♿05'21		asc. node	7672 Nov 18 08:21	12°♿58'19	
direct	7671 Nov 30 18:37	27°♿43'50		morning max el	7672 Nov 20 05:18	14°♿34'54	18°16'24
asc. node	7671 Dec 02 11:20	27°♿56'29			7672 Nov 30 19:03	0°♿	
	7671 Dec 06 08:28	0°♿		morning set	7672 Dec 06 00:50	9°♿45'43	
morning max el	7671 Dec 07 18:18	1°♿15'36	17°52'49				
morning set	7671 Dec 23 11:49	25°♿53'21		superior conj	7672 Dec 15 08:37	27°♿13'30	0°56'49
	7671 Dec 25 18:17	0°♿		minimum elong	7672 Dec 15 12:06	27°♿29'19	0°56'28
					7672 Dec 16 21:27	0°♿	

max. Earth dist.	7672 Dec 22 23:14	10°  37'30	1.41037 AU	minimum elong	7673 Nov 28 11:01	10°  42'23	1°19'55
desc. node	7672 Dec 23 08:20	11°  16'11		max. Earth dist.	7673 Dec 05 05:06	23°  13'56	1.38886 AU
evening rise	7672 Dec 27 16:04	18°  28'01		evening rise	7673 Dec 09 00:57	29°  56'59	
	7673 Jan 03 22:30	0° 			7673 Dec 09 01:39	0° 	
	7673 Jan 25 08:22	0° 		desc. node	7673 Dec 10 05:21	1°  58'20	
evening max el	7673 Jan 30 19:28	6°  06'05	23°15'01		7673 Dec 28 07:12	0° 	
retrograde	7673 Feb 10 05:53	12°  16'41		evening max el	7674 Jan 13 08:53	19°  51'16	24°34'12
asc. node	7673 Feb 14 07:31	10°  54'30		retrograde	7674 Jan 24 21:17	26°  35'12	
evening set	7673 Feb 15 05:05	10°  13'06		evening set	7674 Jan 30 09:01	24°  17'53	
min. Earth dist.	7673 Feb 20 03:43	4°  24'57	0.68317 AU	asc. node	7674 Feb 01 04:34	22°  30'58	
inferior conj	7673 Feb 20 14:40	3°  47'12	1°56'56	min. Earth dist.	7674 Feb 03 23:30	19°  03'52	0.67923 AU
minimum elong	7673 Feb 20 12:30	3°  54'42	1°56'15	inferior conj	7674 Feb 04 21:47	17°  49'31	1°12'17
	7673 Feb 23 12:15	30° 		minimum elong	7674 Feb 04 20:11	17°  54'52	1°11'45
morning rise	7673 Feb 25 19:51	27°  40'55		morning rise	7674 Feb 10 07:31	11°  49'41	
direct	7673 Mar 02 03:24	25°  57'37		direct	7674 Feb 14 01:58	10°  28'20	
	7673 Mar 09 18:04	0° 		morning max el	7674 Feb 21 14:45	14°  42'33	19°57'07
morning max el	7673 Mar 10 15:29	0°  51'46	21°09'15		7674 Mar 05 12:37	0° 	
desc. node	7673 Mar 21 07:53	14°  02'38		desc. node	7674 Mar 08 04:51	3°  54'50	
	7673 Apr 01 07:45	0° 		morning set	7674 Mar 20 09:34	22°  22'33	
morning set	7673 Apr 10 11:46	14°  05'08			7674 Mar 25 07:30	0° 	
max. Earth dist.	7673 Apr 17 20:46	25°  54'06	1.42552 AU	max. Earth dist.	7674 Mar 31 06:39	9°  24'25	1.44184 AU
	7673 Apr 20 08:29	0° 					
superior conj	7673 Apr 25 02:01	7°  58'05	-2°04'50	superior conj	7674 Apr 05 14:24	17°  58'41	-2°11'15
minimum elong	7673 Apr 25 06:19	8°  16'29	2°04'41	minimum elong	7674 Apr 05 13:32	17°  55'07	2°11'18
evening rise	7673 May 06 14:13	28°  15'50			7674 Apr 12 20:48	0° 	
	7673 May 07 13:22	0° 		evening rise	7674 Apr 18 19:25	10°  05'45	
asc. node	7673 May 13 06:32	10°  08'10		asc. node	7674 Apr 30 03:35	29°  01'36	
evening max el	7673 May 23 03:39	24°  18'16	18°06'37		7674 Apr 30 18:58	0° 	
retrograde	7673 May 29 20:06	27°  42'56		evening max el	7674 May 06 16:52	7°  34'42	18°09'41
evening set	7673 Jun 01 09:22	27°  13'15		retrograde	7674 May 13 02:23	10°  56'21	
inferior conj	7673 Jun 08 02:11	22°  17'15	2°25'20	evening set	7674 May 15 22:47	10°  14'24	
minimum elong	7673 Jun 08 05:16	22°  09'53	2°24'26	inferior conj	7674 May 22 02:11	4°  59'35	3°04'28
min. Earth dist.	7673 Jun 11 07:49	19°  13'46	0.60713 AU	minimum elong	7674 May 22 04:21	4°  53'42	3°04'02
morning rise	7673 Jun 14 22:41	16°  22'34		min. Earth dist.	7674 May 24 20:12	2°  02'17	0.62901 AU
desc. node	7673 Jun 17 07:18	15°  06'34			7674 May 26 22:40	30°  R 	
direct	7673 Jun 21 13:07	14°  22'34		morning rise	7674 May 28 08:22	28°  50'34	
morning max el	7673 Jul 05 20:26	22°  11'05	27°50'07	direct	7674 Jun 04 03:11	26°  16'49	
	7673 Jul 12 17:21	0° 		desc. node	7674 Jun 04 04:20	26°  16'50	
	7673 Jul 31 18:37	0° 			7674 Jun 13 05:51	0° 	
morning set	7673 Aug 07 11:57	13°  01'45		morning max el	7674 Jun 18 03:39	4°  59'42	27°50'48
asc. node	7673 Aug 09 05:52	16°  05'42			7674 Jul 07 09:08	0° 	
max. Earth dist.	7673 Aug 13 12:34	26°  08'52	1.31838 AU	morning set	7674 Jul 22 10:32	27°  06'50	
					7674 Jul 23 18:38	0° 	
superior conj	7673 Aug 14 18:32	28°  05'46	0°54'02	asc. node	7674 Jul 27 02:52	6°  02'59	
minimum elong	7673 Aug 14 16:28	28°  04'21	0°53'36	max. Earth dist.	7674 Jul 27 17:31	8°  01'08	1.32423 AU
	7673 Aug 15 06:32	0° 					
evening rise	7673 Aug 21 12:56	13°  04'32		superior conj	7674 Jul 30 02:54	13°  02'17	0°30'18
	7673 Aug 29 15:30	0° 		minimum elong	7674 Jul 30 01:32	13°  01'51	0°29'55
desc. node	7673 Sep 13 06:18	22°  01'23		evening rise	7674 Aug 06 00:37	28°  02'04	
evening max el	7673 Sep 17 08:32	26°  03'48	25°17'39		7674 Aug 06 18:17	0° 	
	7673 Sep 21 11:29	0° 			7674 Aug 23 19:06	0° 	
retrograde	7673 Oct 01 06:13	3°  35'34		evening max el	7674 Aug 29 20:28	6°  57'17	23°42'46
evening set	7673 Oct 07 02:18	2°  17'22		desc. node	7674 Aug 31 03:23	8°  08'51	
	7673 Oct 11 06:32	30° 		retrograde	7674 Sep 12 11:27	13°  04'45	
min. Earth dist.	7673 Oct 11 20:14	29°  03'47	0.57517 AU	evening set	7674 Sep 16 21:48	13°  03'43	
inferior conj	7673 Oct 14 19:30	27°  03'04	-5°19'59	min. Earth dist.	7674 Sep 23 06:42	10°  00'49	0.55852 AU
minimum elong	7673 Oct 14 23:57	27°  02'29	5°19'25	inferior conj	7674 Sep 25 09:07	8°  45'09	-5°30'02
morning rise	7673 Oct 22 23:55	23°  02'37		minimum elong	7674 Sep 25 07:03	8°  48'16	5°29'56
direct	7673 Oct 25 10:29	23°  05'55		morning rise	7674 Oct 03 18:32	4°  50'18	
morning max el	7673 Nov 03 07:56	27°  02'22	19°01'08	direct	7674 Oct 06 14:13	4°  30'24	
asc. node	7673 Nov 05 05:22	29°  01'42		morning max el	7674 Oct 16 22:56	9°  21'47	20°08'05
	7673 Nov 05 19:06	0° 		asc. node	7674 Oct 23 02:23	16°  04'49	
morning set	7673 Nov 19 23:39	24°  04'49			7674 Oct 30 20:18	0° 	
	7673 Nov 22 23:25	0° 		morning set	7674 Nov 04 04:57	8°  40'40	
superior conj	7673 Nov 28 07:53	10°  27'23	1°20'09				
				superior conj	7674 Nov 11 20:54	24°  20'04	1°34'35
				minimum elong	7674 Nov 11 22:51	24°  29'55	1°34'33



	7674 Nov 14 17:26	0°♊		superior conj	7675 Oct 26 19:39	8°♎40'13	1°41'09
max. Earth dist.	7674 Nov 17 11:10	5°♊16'50	1.36782 AU	minimum elong	7675 Oct 26 20:14	8°♎43'16	1°41'12
evening rise	7674 Nov 21 06:35	12°♊21'01		max. Earth dist.	7675 Oct 30 22:59	17°♎09'47	1.34935 AU
desc. node	7674 Nov 27 02:23	22°♊32'47		evening rise	7675 Nov 04 05:19	25°♎30'56	
	7674 Dec 01 15:17	0°♋			7675 Nov 06 14:42	0°♊	
	7674 Dec 23 10:27	0°♋		desc. node	7675 Nov 13 23:25	12°♊54'51	
evening max el	7674 Dec 26 21:53	3°♋37'54	25°46'25		7675 Nov 25 02:32	0°♋	
retrograde	7675 Jan 08 07:59	10°♋44'15		evening max el	7675 Dec 09 11:11	17°♋20'17	26°44'06
evening set	7675 Jan 14 08:31	8°♋15'44		retrograde	7675 Dec 22 13:07	24°♋37'23	
min. Earth dist.	7675 Jan 18 16:05	3°♋36'12	0.67152 AU	evening set	7675 Dec 29 01:40	22°♋01'54	
asc. node	7675 Jan 19 01:39	3°♋06'06		min. Earth dist.	7676 Jan 02 03:03	17°♋57'04	0.66021 AU
inferior conj	7675 Jan 20 01:38	1°♋50'01	0°20'00	inferior conj	7676 Jan 04 00:08	15°♋44'26	-0°39'15
minimum elong	7675 Jan 20 01:07	1°♋51'38	0°19'53	minimum elong	7676 Jan 04 01:15	15°♋41'10	0°38'39
	7675 Jan 21 13:02	30°♌♋		asc. node	7676 Jan 05 22:43	13°♋31'23	
morning rise	7675 Jan 25 18:13	25°♋58'32		morning rise	7676 Jan 10 01:46	10°♋03'52	
direct	7675 Jan 29 01:01	24°♋56'41		direct	7676 Jan 12 22:43	9°♋18'06	
morning max el	7675 Feb 04 21:42	28°♋42'46	18°59'52	morning max el	7676 Jan 19 10:45	12°♋47'30	18°18'53
	7675 Feb 06 03:15	0°♌			7676 Jan 31 20:25	0°♌	
desc. node	7675 Feb 23 01:50	24°♌07'15		morning set	7676 Feb 07 21:15	11°♌15'32	
	7675 Feb 26 20:46	0°♌		desc. node	7676 Feb 09 22:47	14°♌34'10	
morning set	7675 Feb 27 14:23	1°♌08'32			7676 Feb 19 15:52	0°♌	
max. Earth dist.	7675 Mar 13 22:23	23°♌31'10	1.45195 AU				
				superior conj	7676 Feb 23 08:48	5°♌49'30	-1°26'38
superior conj	7675 Mar 16 04:26	27°♌03'50	-1°58'36	minimum elong	7676 Feb 22 23:28	5°♌12'51	1°25'34
minimum elong	7675 Mar 15 20:50	26°♌33'52	1°58'06	max. Earth dist.	7676 Feb 24 17:45	7°♌58'35	1.45483 AU
	7675 Mar 18 01:03	0°♍			7676 Mar 09 19:40	0°♍	
evening rise	7675 Mar 31 02:06	20°♍57'39		evening rise	7676 Mar 10 09:40	0°♍54'51	
	7675 Apr 05 15:02	0°♍		greatest brilliancy	7676 Mar 21 06:28	17°♍51'41	-0.8m
asc. node	7675 Apr 17 00:40	17°♍21'12			7676 Mar 29 15:45	0°♍	
evening max el	7675 Apr 20 05:20	21°♍03'27	18°31'10	evening max el	7676 Apr 02 14:35	4°♍38'10	19°10'02
retrograde	7675 Apr 26 17:17	24°♍35'36		asc. node	7676 Apr 02 21:44	4°♍56'02	
evening set	7675 Apr 29 20:50	23°♍40'04		retrograde	7676 Apr 09 13:14	8°♍32'57	
inferior conj	7675 May 05 14:42	18°♍07'45	3°22'31	evening set	7676 Apr 13 00:23	7°♍23'02	
minimum elong	7675 May 05 15:30	18°♍05'23	3°22'24	inferior conj	7676 Apr 18 12:08	1°♍34'43	3°24'09
min. Earth dist.	7675 May 07 17:46	15°♍35'53	0.64827 AU	minimum elong	7676 Apr 18 11:38	1°♍36'21	3°24'04
morning rise	7675 May 11 09:21	11°♍52'17			7676 Apr 19 17:34	30°♌♍	
direct	7675 May 18 01:16	9°♍06'06		min. Earth dist.	7676 Apr 19 23:45	29°♍40'19	0.66366 AU
desc. node	7675 May 22 01:22	9°♍57'21		morning rise	7676 Apr 23 22:28	25°♍17'26	
morning max el	7675 May 31 13:31	17°♍02'11	27°16'28	direct	7676 Apr 30 05:52	22°♍31'24	
	7675 Jun 11 07:58	0°♎		desc. node	7676 May 07 22:23	25°♍38'45	
	7675 Jun 30 05:32	0°♎			7676 May 12 20:57	0°♍	
morning set	7675 Jul 06 00:13	10°♎50'15		morning max el	7676 May 12 23:41	0°♍06'54	26°14'11
max. Earth dist.	7675 Jul 10 14:08	19°♎59'50	1.33490 AU		7676 Jun 04 06:24	0°♎	
asc. node	7675 Jul 13 23:53	27°♎05'37		morning set	7676 Jun 18 01:21	23°♎44'19	
					7676 Jun 21 08:28	0°♎	
superior conj	7675 Jul 14 06:37	27°♎41'15	0°02'53	max. Earth dist.	7676 Jun 22 00:04	1°♎15'47	1.35037 AU
minimum elong	7675 Jul 14 06:28	27°♎40'29	0°02'44				
behind sun begin	7675 Jul 14 01:00	27°♎11'33		superior conj	7676 Jun 27 03:09	11°♎30'43	-0°27'22
behind sun end	7675 Jul 14 11:57	28°♎09'29		minimum elong	7676 Jun 27 04:43	11°♎38'43	0°27'11
	7675 Jul 15 08:46	0°♏		asc. node	7676 Jun 29 20:53	17°♎09'26	
evening rise	7675 Jul 21 11:42	13°♏03'49		evening rise	7676 Jul 04 20:07	27°♎29'33	
	7675 Jul 30 01:57	0°♐			7676 Jul 06 01:23	0°♏	
evening max el	7675 Aug 11 10:26	17°♐13'58	22°04'33	evening max el	7676 Jul 23 10:14	27°♏55'25	20°37'17
desc. node	7675 Aug 18 00:28	22°♐04'43			7676 Jul 25 18:25	0°♐	
retrograde	7675 Aug 24 04:30	23°♐34'06		retrograde	7676 Aug 03 16:32	3°♐29'17	
evening set	7675 Aug 27 03:37	23°♐14'36		desc. node	7676 Aug 03 21:33	3°♐29'11	
min. Earth dist.	7675 Sep 04 15:31	19°♐34'03	0.54871 AU	evening set	7676 Aug 05 18:06	3°♐18'51	
inferior conj	7675 Sep 05 06:44	19°♐12'42	-4°48'15		7676 Aug 13 20:48	30°♌♏	
minimum elong	7675 Sep 04 22:16	19°♐24'34	4°46'33	inferior conj	7676 Aug 14 23:30	29°♏21'51	-3°15'41
morning rise	7675 Sep 13 18:25	15°♐24'01		minimum elong	7676 Aug 14 14:56	29°♏34'09	3°12'54
direct	7675 Sep 17 03:03	14°♐58'57		min. Earth dist.	7676 Aug 16 01:07	28°♏45'05	0.54791 AU
morning max el	7675 Sep 29 01:03	20°♐34'59	21°36'02	morning rise	7676 Aug 23 11:27	25°♏19'45	
	7675 Oct 06 19:40	0°♑		direct	7676 Aug 27 11:49	24°♏45'13	
asc. node	7675 Oct 09 23:24	4°♑59'34			7676 Sep 08 11:04	0°♐	
morning set	7675 Oct 19 14:16	23°♑26'46		morning max el	7676 Sep 09 17:08	1°♐07'19	23°18'48
	7675 Oct 22 16:57	0°♒		asc. node	7676 Sep 25 20:23	23°♐51'23	
					7676 Sep 29 01:06	0°♑	

morning set	7676 Oct 03 01:37	8° $\Omega$ 16'58		morning set	7677 Sep 17 13:17	23° $\Pi$ 06'16	
					7677 Sep 20 17:51	0° $\Omega$	
superior conj	7676 Oct 10 01:00	23° $\Omega$ 18'11	1°40'49	superior conj	7677 Sep 24 10:27	8° $\Omega$ 06'24	1°34'26
minimum elong	7676 Oct 10 00:20	23° $\Omega$ 14'39	1°40'51	minimum elong	7677 Sep 24 08:51	7° $\Omega$ 57'38	1°34'20
max. Earth dist.	7676 Oct 12 19:12	29° $\Omega$ 10'56	1.33463 AU	max. Earth dist.	7677 Sep 25 23:00	11° $\Omega$ 26'16	1.32426 AU
	7676 Oct 13 04:31	0° $\Pi$		evening rise	7677 Oct 01 14:42	23° $\Omega$ 27'12	
evening rise	7676 Oct 17 17:10	9° $\Pi$ 16'02			7677 Oct 04 20:54	0° $\Pi$	
	7676 Oct 29 01:08	0° $\Sigma$		desc. node	7677 Oct 17 17:32	22° $\Pi$ 35'12	
desc. node	7676 Oct 30 20:29	2° $\Sigma$ 58'23			7677 Oct 22 18:17	0° $\Sigma$	
	7676 Nov 20 04:10	0° $\Sigma$		evening max el	7677 Nov 03 10:10	13° $\Sigma$ 47'53	27°27'45
evening max el	7676 Nov 20 23:56	0° $\Sigma$ 47'58	27°20'03	retrograde	7677 Nov 17 04:24	21° $\Sigma$ 04'14	
retrograde	7676 Dec 04 12:06	8° $\Sigma$ 07'13		evening set	7677 Nov 24 07:13	18° $\Sigma$ 36'13	
evening set	7676 Dec 11 10:13	5° $\Sigma$ 30'57		min. Earth dist.	7677 Nov 27 23:28	15° $\Sigma$ 34'53	0.62754 AU
min. Earth dist.	7676 Dec 15 06:08	1° $\Sigma$ 59'56	0.64543 AU	inferior conj	7677 Nov 30 19:14	12° $\Sigma$ 52'13	-2°52'39
	7676 Dec 17 02:56	30° $\Sigma$ 47'13		minimum elong	7677 Dec 01 00:36	12° $\Sigma$ 39'16	2°50'35
inferior conj	7676 Dec 17 14:57	29° $\Sigma$ 27'35	-1°44'15	morning rise	7677 Dec 07 19:59	7° $\Sigma$ 42'44	
minimum elong	7676 Dec 17 18:07	29° $\Sigma$ 19'04	1°42'49	asc. node	7677 Dec 09 16:48	7° $\Sigma$ 18'55	
asc. node	7676 Dec 22 19:46	24° $\Sigma$ 43'22		direct	7677 Dec 10 03:40	7° $\Sigma$ 17'57	
morning rise	7676 Dec 24 03:30	24° $\Sigma$ 00'55		morning max el	7677 Dec 16 20:31	10° $\Sigma$ 44'02	17°48'20
direct	7676 Dec 26 16:37	23° $\Sigma$ 27'30			7677 Dec 29 18:02	0° $\Sigma$	
morning max el	7677 Jan 02 03:23	26° $\Sigma$ 50'38	17°54'51	morning set	7678 Jan 01 21:21	5° $\Sigma$ 31'18	
	7677 Jan 04 21:56	0° $\Sigma$					
morning set	7677 Jan 19 09:21	22° $\Sigma$ 49'13		superior conj	7678 Jan 13 12:53	25° $\Sigma$ 38'15	0°01'10
	7677 Jan 23 16:25	0° $\approx$		minimum elong	7678 Jan 13 13:00	25° $\Sigma$ 38'45	0°01'16
desc. node	7677 Jan 26 19:45	5° $\approx$ 11'16		behind sun begin	7678 Jan 13 03:55	25° $\Sigma$ 00'41	
				behind sun end	7678 Jan 13 22:05	26° $\Sigma$ 16'44	
superior conj	7677 Feb 01 23:11	15° $\approx$ 09'28	-0°43'09	desc. node	7678 Jan 13 16:45	25° $\Sigma$ 54'24	
minimum elong	7677 Feb 01 18:10	14° $\approx$ 49'20	0°42'22		7678 Jan 16 03:56	0° $\approx$	
max. Earth dist.	7677 Feb 06 13:33	22° $\approx$ 28'23	1.45023 AU	max. Earth dist.	7678 Jan 20 06:23	6° $\approx$ 40'41	1.43877 AU
	7677 Feb 11 08:47	0° $\text{H}$		evening rise	7678 Jan 28 12:08	19° $\approx$ 39'59	
evening rise	7677 Feb 18 00:31	10° $\text{H}$ 17'43			7678 Feb 04 06:49	0° $\text{H}$	
	7677 Mar 03 00:47	0° $\Upsilon$			7678 Feb 25 23:27	0° $\Upsilon$	
greatest brilliancy	7677 Mar 04 19:03	2° $\Upsilon$ 35'26	-0.6m	evening max el	7678 Feb 27 17:40	1° $\Upsilon$ 53'00	21°12'24
evening max el	7677 Mar 16 18:56	18° $\Upsilon$ 15'20	20°04'39	asc. node	7678 Mar 07 15:54	6° $\Upsilon$ 57'36	
asc. node	7677 Mar 20 18:50	21° $\Upsilon$ 33'21		retrograde	7678 Mar 08 09:53	7° $\Upsilon$ 00'31	
retrograde	7677 Mar 24 11:32	22° $\Upsilon$ 43'06		evening set	7678 Mar 12 15:06	5° $\Upsilon$ 20'45	
evening set	7677 Mar 28 07:08	21° $\Upsilon$ 18'22			7678 Mar 17 07:07	30° $\text{R}$ 11	
inferior conj	7677 Apr 02 15:34	15° $\Upsilon$ 15'52	3°12'45	inferior conj	7678 Mar 17 22:34	29° $\text{H}$ 06'37	2°50'33
minimum elong	7677 Apr 02 14:04	15° $\Upsilon$ 20'59	3°12'30	minimum elong	7678 Mar 17 20:27	29° $\text{H}$ 13'57	2°50'05
min. Earth dist.	7677 Apr 03 12:41	14° $\Upsilon$ 04'31	0.67466 AU	min. Earth dist.	7678 Mar 18 06:29	28° $\text{H}$ 39'08	0.68124 AU
morning rise	7677 Apr 07 20:47	8° $\Upsilon$ 59'30		morning rise	7678 Mar 23 01:36	22° $\text{H}$ 52'53	
direct	7677 Apr 13 16:08	6° $\Upsilon$ 23'56		direct	7678 Mar 28 07:14	20° $\text{H}$ 34'54	
desc. node	7677 Apr 24 19:20	12° $\Upsilon$ 50'14		morning max el	7678 Apr 07 18:21	26° $\text{H}$ 48'35	23°24'12
morning max el	7677 Apr 25 09:04	13° $\Upsilon$ 24'32	24°53'24		7678 Apr 10 17:22	0° $\Upsilon$	
	7677 May 08 19:26	0° $\text{B}$		desc. node	7678 Apr 11 16:18	1° $\Upsilon$ 06'19	
	7677 May 28 01:45	0° $\Pi$			7678 May 02 09:51	0° $\text{B}$	
morning set	7677 May 31 09:25	5° $\Pi$ 47'26		morning set	7678 May 12 18:47	16° $\text{B}$ 44'36	
max. Earth dist.	7677 Jun 04 00:21	12° $\Pi$ 20'22	1.36997 AU	max. Earth dist.	7678 May 16 20:04	23° $\text{B}$ 41'33	1.39199 AU
					7678 May 20 09:30	0° $\Pi$	
superior conj	7677 Jun 10 13:34	24° $\Pi$ 47'25	-0°58'51	superior conj	7678 May 24 10:00	7° $\Pi$ 21'43	-1°29'09
minimum elong	7677 Jun 10 17:06	25° $\Pi$ 04'47	0°58'20	minimum elong	7678 May 24 15:15	7° $\Pi$ 46'08	1°28'32
	7677 Jun 13 04:50	0° $\text{E}$		evening rise	7678 Jun 02 19:12	25° $\Pi$ 18'21	
asc. node	7677 Jun 16 17:54	7° $\text{E}$ 06'56		asc. node	7678 Jun 03 14:56	26° $\Pi$ 53'38	
evening rise	7677 Jun 18 23:35	11° $\text{E}$ 37'06			7678 Jun 05 05:47	0° $\text{E}$	
	7677 Jun 28 20:44	0° $\Omega$		evening max el	7678 Jun 18 23:32	21° $\text{E}$ 27'07	18°40'57
evening max el	7677 Jul 05 23:07	9° $\Omega$ 19'39	19°28'42	retrograde	7678 Jun 27 01:19	25° $\text{E}$ 27'08	
retrograde	7677 Jul 15 12:28	14° $\Omega$ 02'18		evening set	7678 Jun 29 02:54	25° $\text{E}$ 12'20	
evening set	7677 Jul 17 09:15	13° $\Omega$ 52'18		inferior conj	7678 Jul 07 00:30	20° $\text{E}$ 48'43	0°29'05
desc. node	7677 Jul 21 18:36	12° $\Omega$ 19'24		minimum elong	7678 Jul 07 01:36	20° $\text{E}$ 46'40	0°28'33
inferior conj	7677 Jul 26 02:11	9° $\Omega$ 46'15	-1°19'00	desc. node	7678 Jul 08 15:38	19° $\text{E}$ 35'04	
minimum elong	7677 Jul 25 22:37	9° $\Omega$ 51'59	1°17'43	min. Earth dist.	7678 Jul 10 06:48	18° $\text{E}$ 23'08	0.57303 AU
min. Earth dist.	7677 Jul 28 13:42	8° $\Omega$ 10'57	0.55658 AU	morning rise	7678 Jul 14 20:47	15° $\text{E}$ 37'35	
morning rise	7677 Aug 03 09:26	5° $\Omega$ 12'15		direct	7678 Jul 20 12:57	14° $\text{E}$ 17'49	
direct	7677 Aug 08 05:03	4° $\Omega$ 20'03		morning max el	7678 Aug 03 21:31	21° $\text{E}$ 50'25	26°32'30
morning max el	7677 Aug 22 05:51	11° $\Omega$ 22'47	25°03'15		7678 Aug 11 01:39	0° $\Omega$	
	7677 Sep 05 10:48	0° $\Pi$					
asc. node	7677 Sep 12 17:21	13° $\Pi$ 10'53					

	7678 Aug 29 04:37	0°♍		morning max el	7679 Jul 16 19:21	2°♊51'32	27°32'19
asc. node	7678 Aug 30 14:20	2°♍50'44			7679 Aug 05 13:56	0°♊	
morning set	7678 Sep 01 23:41	7°♍49'51		morning set	7679 Aug 17 07:02	22°♊21'43	
				asc. node	7679 Aug 17 11:18	22°♊44'08	
superior conj	7678 Sep 08 21:58	22°♍58'27	1°22'37		7679 Aug 20 20:45	0°♍	
minimum elong	7678 Sep 08 19:50	22°♍46'35	1°22'20				
max. Earth dist.	7678 Sep 09 07:49	23°♍53'00	1.31841 AU	superior conj	7679 Aug 24 09:40	7°♍47'18	1°05'50
	7678 Sep 12 02:26	0°♎		minimum elong	7679 Aug 24 07:26	7°♍34'54	1°05'25
evening rise	7678 Sep 15 19:06	7°♎56'36		max. Earth dist.	7679 Aug 23 18:13	6°♍21'43	1.31711 AU
	7678 Sep 27 07:07	0°♎		evening rise	7679 Aug 31 03:54	22°♍36'13	
desc. node	7678 Oct 04 14:36	11°♎34'32			7679 Sep 03 17:11	0°♎	
evening max el	7678 Oct 16 15:41	26°♎08'34	27°02'41	desc. node	7679 Sep 21 11:41	29°♎40'27	
	7678 Oct 21 08:53	0°♏			7679 Sep 21 17:45	0°♎	
retrograde	7678 Oct 30 13:13	3°♏19'25		evening max el	7679 Sep 28 14:02	7°♎39'57	26°04'15
evening set	7678 Nov 06 12:55	1°♏10'52		retrograde	7679 Oct 12 12:31	14°♎44'35	
	7678 Nov 08 07:40	30°♎		evening set	7679 Oct 18 22:22	13°♎06'17	
min. Earth dist.	7678 Nov 10 06:17	28°♎30'05	0.60740 AU	min. Earth dist.	7679 Oct 23 03:00	10°♎31'23	0.58659 AU
inferior conj	7678 Nov 13 09:45	25°♎50'33	-3°59'48	inferior conj	7679 Oct 26 06:56	8°♎11'50	-4°57'00
minimum elong	7678 Nov 13 16:42	25°♎35'47	3°57'39	minimum elong	7679 Oct 26 13:22	7°♎59'57	4°55'43
morning rise	7678 Nov 20 22:48	21°♎01'09		morning rise	7679 Nov 03 06:39	3°♎44'48	
direct	7678 Nov 23 04:12	20°♎41'32		direct	7679 Nov 05 13:58	3°♎27'10	
asc. node	7678 Nov 26 13:48	21°♎29'28		asc. node	7679 Nov 13 10:48	7°♎06'55	
morning max el	7678 Nov 30 10:51	24°♎19'24	18°00'23	morning max el	7679 Nov 13 18:43	7°♎25'38	18°32'39
	7678 Dec 05 01:43	0°♏			7679 Nov 28 05:24	0°♏	
morning set	7678 Dec 16 02:53	19°♏03'06		morning set	7679 Nov 29 20:34	3°♏08'23	
	7678 Dec 22 01:45	0°♐					
superior conj	7678 Dec 26 04:14	7°♐20'53	0°39'05	superior conj	7679 Dec 08 17:20	20°♏05'22	1°07'51
minimum elong	7678 Dec 26 07:11	7°♐33'54	0°38'46	minimum elong	7679 Dec 08 20:49	20°♏21'35	1°07'31
desc. node	7678 Dec 31 13:43	16°♐39'59			7679 Dec 14 04:14	0°♐	
max. Earth dist.	7679 Jan 02 18:38	20°♐21'44	1.42186 AU	max. Earth dist.	7679 Dec 16 02:29	3°♐22'49	1.40140 AU
evening rise	7679 Jan 08 11:39	29°♐38'56		desc. node	7679 Dec 18 10:44	7°♐24'30	
	7679 Jan 08 16:57	0°♑		evening rise	7679 Dec 20 07:45	10°♐33'58	
	7679 Jan 28 20:55	0°♑			7680 Jan 01 15:08	0°♑	
evening max el	7679 Feb 10 11:31	15°♑32'56	22°29'04	evening max el	7680 Jan 24 02:10	29°♑16'42	23°49'12
retrograde	7679 Feb 20 06:30	21°♑21'28			7680 Jan 24 19:53	0°♑	
asc. node	7679 Feb 22 12:58	20°♑55'14		retrograde	7680 Feb 03 23:59	5°♑42'07	
evening set	7679 Feb 24 22:42	19°♑26'40		evening set	7680 Feb 09 04:24	3°♑32'44	
inferior conj	7679 Mar 02 07:04	13°♑04'04	2°19'00	asc. node	7680 Feb 09 10:01	3°♑20'33	
minimum elong	7679 Mar 02 04:46	13°♑12'00	2°18'21		7680 Feb 12 10:57	30°♑	
min. Earth dist.	7679 Mar 02 02:51	13°♑18'41	0.68362 AU	min. Earth dist.	7680 Feb 13 23:29	27°♑58'57	0.68198 AU
morning rise	7679 Mar 07 10:42	6°♑54'28		inferior conj	7680 Feb 14 15:12	27°♑05'26	1°38'57
direct	7679 Mar 12 02:14	4°♑57'57		minimum elong	7680 Feb 14 13:13	27°♑12'14	1°38'19
morning max el	7679 Mar 21 06:30	10°♑20'04	21°56'09	morning rise	7680 Feb 19 22:01	21°♑01'35	
desc. node	7679 Mar 29 13:16	20°♑09'11		direct	7680 Feb 23 23:56	19°♑27'35	
	7679 Apr 05 16:20	0°♒		morning max el	7680 Mar 03 01:06	24°♑03'07	20°36'51
morning set	7679 Apr 23 00:41	26°♒24'10			7680 Mar 08 05:37	0°♒	
	7679 Apr 25 06:04	0°♒		desc. node	7680 Mar 15 10:15	9°♒46'11	
max. Earth dist.	7679 Apr 28 18:36	5°♒48'26	1.41399 AU		7680 Mar 29 00:38	0°♒	
				morning set	7680 Apr 01 05:46	4°♒57'39	
superior conj	7679 May 06 11:55	19°♒02'59	-1°54'30	max. Earth dist.	7680 Apr 10 00:36	18°♒52'04	1.43312 AU
minimum elong	7679 May 06 17:24	19°♒27'12	1°54'08				
	7679 May 12 14:03	0°♓		superior conj	7680 Apr 16 14:46	29°♒41'44	-2°09'37
evening rise	7679 May 17 03:22	8°♓23'59		minimum elong	7680 Apr 16 17:20	29°♒52'30	2°09'37
asc. node	7679 May 21 11:59	16°♓24'27			7680 Apr 16 19:08	0°♓	
	7679 May 29 19:29	0°♓		evening rise	7680 Apr 28 19:43	20°♓44'23	
evening max el	7679 Jun 02 07:51	4°♓09'08	18°13'35		7680 May 04 02:21	0°♓	
retrograde	7679 Jun 09 08:56	7°♓41'45		asc. node	7680 May 07 09:03	5°♓33'44	
evening set	7679 Jun 11 18:03	7°♓18'13		evening max el	7680 May 15 20:17	17°♓15'50	18°05'43
inferior conj	7679 Jun 18 20:27	2°♓34'06	1°51'07	retrograde	7680 May 22 08:22	20°♓37'11	
minimum elong	7679 Jun 18 23:29	2°♓27'28	1°50'05	evening set	7680 May 25 00:50	20°♓02'19	
	7679 Jun 21 19:04	30°♓		inferior conj	7680 May 31 11:24	14°♓58'03	2°44'48
min. Earth dist.	7679 Jun 22 05:48	29°♓37'31	0.59420 AU	minimum elong	7680 May 31 14:13	14°♓50'58	2°44'06
desc. node	7679 Jun 25 12:41	27°♓12'28		min. Earth dist.	7680 Jun 03 12:43	11°♓54'45	0.61663 AU
morning rise	7679 Jun 26 01:54	26°♓52'35		morning rise	7680 Jun 07 01:35	8°♓56'29	
direct	7679 Jul 02 10:32	25°♓00'34		desc. node	7680 Jun 11 09:43	6°♓53'05	
	7679 Jul 13 15:34	0°♓		direct	7680 Jun 13 18:59	6°♓35'40	
				morning max el	7680 Jun 27 23:36	14°♓35'59	27°55'04

	7680 Jul 10 10:23	0°☿			7681 Jun 13 03:50	0°♊		
	7680 Jul 28 02:17	0°♊			7681 Jul 04 02:26	0°☿		
morning set	7680 Jul 31 09:28	6°♊36'31		morning set	7681 Jul 15 04:37	20°☿26'57		
asc. node	7680 Aug 03 08:20	12°♊46'15			7681 Jul 19 20:44	0°♊		
max. Earth dist.	7680 Aug 06 02:26	18°♊41'39	1.32035 AU	max. Earth dist.	7681 Jul 20 04:28	0°♊40'36	1.32820 AU	
				asc. node	7681 Jul 21 05:21	2°♊52'05		
superior conj	7680 Aug 07 19:47	22°♊27'32	0°44'30					
minimum elong	7680 Aug 07 17:57	22°♊17'27	0°44'03	superior conj	7681 Jul 23 02:24	6°♊52'48	0°19'04	
	7680 Aug 11 06:06	0°♊		minimum elong	7681 Jul 23 01:29	6°♊47'53	0°18'47	
evening rise	7680 Aug 14 15:07	7°♊19'53		evening rise	7681 Jul 30 02:45	22°♊00'59		
	7680 Aug 26 08:46	0°♊			7681 Aug 02 23:02	0°♊		
desc. node	7680 Sep 07 08:45	16°♊32'03		evening max el	7681 Aug 21 16:14	28°♊38'39	23°00'21	
evening max el	7680 Sep 09 04:44	18°♊23'15	24°38'45		7681 Aug 23 03:25	0°♊		
retrograde	7680 Sep 23 00:22	25°♊20'15		desc. node	7681 Aug 25 05:50	1°♊41'18		
evening set	7680 Sep 28 07:27	24°♊17'42		retrograde	7681 Sep 04 00:06	5°♊18'28		
min. Earth dist.	7680 Oct 03 15:49	21°♊30'23	0.56758 AU	evening set	7681 Sep 07 18:58	4°♊47'05		
inferior conj	7680 Oct 06 08:06	19°♊47'31	-5°29'39	min. Earth dist.	7681 Sep 15 00:47	1°♊29'57	0.55337 AU	
minimum elong	7680 Oct 06 10:10	19°♊44'11	5°29'30	inferior conj	7681 Sep 16 13:55	0°♊36'21	-5°19'11	
morning rise	7680 Oct 14 15:05	15°♊42'43		minimum elong	7681 Sep 16 08:43	0°♊43'54	5°18'35	
direct	7680 Oct 17 05:16	15°♊24'14			7681 Sep 17 15:13	30°♊		
morning max el	7680 Oct 26 16:36	19°♊52'56	19°26'47	morning rise	7681 Sep 25 00:36	26°♊46'39		
asc. node	7680 Oct 30 07:49	23°♊57'07		direct	7681 Sep 28 01:29	26°♊24'59		
	7680 Nov 03 11:19	0°♊			7681 Oct 07 06:16	0°♊		
morning set	7680 Nov 12 22:29	17°♊35'47		morning max el	7681 Oct 09 02:05	1°♊34'03	20°43'12	
	7680 Nov 19 02:54	0°♊		asc. node	7681 Oct 17 04:50	11°♊45'06		
					7681 Oct 27 02:59	0°♊		
superior conj	7680 Nov 20 22:58	3°♊37'12	1°27'18	morning set	7681 Oct 28 05:47	2°♊17'22		
minimum elong	7680 Nov 21 01:39	3°♊50'22	1°27'09					
max. Earth dist.	7680 Nov 27 08:13	15°♊44'36	1.37981 AU	superior conj	7681 Nov 04 16:35	17°♊43'33	1°38'16	
evening rise	7680 Dec 01 01:48	22°♊27'10		minimum elong	7681 Nov 04 17:58	17°♊50'36	1°38'17	
desc. node	7680 Dec 04 07:46	28°♊03'57		max. Earth dist.	7681 Nov 09 16:21	27°♊41'41	1.35955 AU	
	7680 Dec 05 11:19	0°♊			7681 Nov 10 20:59	0°♊		
	7680 Dec 25 12:00	0°♊		evening rise	7681 Nov 13 15:12	5°♊12'15		
evening max el	7681 Jan 05 15:21	13°♊03'15	25°06'14	desc. node	7681 Nov 21 04:48	18°♊34'11		
retrograde	7681 Jan 17 13:17	19°♊57'24			7681 Nov 28 07:47	0°♊		
evening set	7681 Jan 23 06:38	17°♊34'52		evening max el	7681 Dec 19 04:19	26°♊49'03	26°13'03	
asc. node	7681 Jan 26 07:05	14°♊25'52			7681 Dec 22 18:49	0°♊		
min. Earth dist.	7681 Jan 27 18:05	12°♊35'42	0.67645 AU	retrograde	7681 Dec 31 21:45	4°♊01'29		
inferior conj	7681 Jan 28 21:09	11°♊07'15	0°50'59	evening set	7682 Jan 07 03:42	1°♊29'02		
minimum elong	7681 Jan 28 19:57	11°♊11'12	0°50'36		7682 Jan 08 18:15	30°♊		
morning rise	7681 Feb 03 09:32	5°♊10'53		min. Earth dist.	7682 Jan 11 08:27	27°♊04'35	0.66718 AU	
direct	7681 Feb 06 22:54	3°♊58'08		inferior conj	7682 Jan 12 22:59	25°♊06'08	-0°04'19	
morning max el	7681 Feb 14 03:44	7°♊58'24	19°30'51	minimum elong	7682 Jan 12 23:06	25°♊05'48	0°04'10	
greatest brilliancy	7681 Feb 26 23:55	24°♊51'02	-0.7m	transit middle	7682 Jan 12 23:06	25°♊05'48	0°04'10	
desc. node	7681 Mar 02 07:13	29°♊47'45		transit begin	7682 Jan 12 20:20	25°♊14'20		
	7681 Mar 02 10:28	0°♊		transit end	7682 Jan 13 01:52	24°♊57'16		
morning set	7681 Mar 11 03:26	13°♊18'27		asc. node	7682 Jan 13 04:08	24°♊50'17		
	7681 Mar 21 20:46	0°♊		morning rise	7682 Jan 18 19:12	19°♊19'17		
max. Earth dist.	7681 Mar 23 13:51	2°♊42'07	1.44699 AU	direct	7682 Jan 21 21:33	18°♊24'51		
				morning max el	7682 Jan 28 13:41	22°♊02'23	18°40'26	
superior conj	7681 Mar 27 16:44	9°♊15'36	-2°08'24		7682 Feb 04 00:23	0°♊		
minimum elong	7681 Mar 27 12:49	8°♊59'58	2°08'18	desc. node	7682 Feb 17 04:12	20°♊07'22		
	7681 Apr 09 08:37	0°♊		morning set	7682 Feb 18 17:59	22°♊36'00		
evening rise	7681 Apr 10 15:42	2°♊10'04			7682 Feb 23 10:59	0°♊		
asc. node	7681 Apr 24 06:08	24°♊13'46		max. Earth dist.	7682 Mar 06 07:35	17°♊00'33	1.45409 AU	
	7681 Apr 28 18:49	0°♊						
evening max el	7681 Apr 29 09:27	0°♊37'49	18°16'36	superior conj	7682 Mar 07 00:27	18°♊06'38	-1°47'05	
retrograde	7681 May 05 18:53	4°♊02'29		minimum elong	7682 Mar 06 15:13	17°♊30'24	1°46'18	
evening set	7681 May 08 18:20	3°♊14'45			7682 Mar 14 13:49	0°♊		
	7681 May 12 18:23	30°♊		evening rise	7682 Mar 22 12:23	12°♊38'05		
inferior conj	7681 May 14 17:11	27°♊52'00	3°14'24	greatest brilliancy	7682 Mar 30 06:18	25°♊01'32	-0.9m	
minimum elong	7681 May 14 18:47	27°♊47'28	3°14'08		7682 Apr 02 10:16	0°♊		
min. Earth dist.	7681 May 17 04:54	25°♊03'53	0.63758 AU	asc. node	7682 Apr 11 03:11	12°♊15'46		
morning rise	7681 May 20 18:05	21°♊39'28		evening max el	7682 Apr 12 20:43	14°♊09'17	18°45'33	
direct	7681 May 27 12:17	18°♊59'15		retrograde	7682 Apr 19 12:25	17°♊50'04		
desc. node	7681 May 29 06:45	19°♊09'11		evening set	7682 Apr 22 19:02	16°♊48'35		
morning max el	7681 Jun 10 08:23	27°♊00'21	27°40'16	inferior conj	7682 Apr 28 09:54	11°♊09'06	3°25'00	

minimum elong	7682 Apr 28 10:07	11°♄08'27	3°24'55		7683 Apr 07 19:30	30°♄♂	
min. Earth dist.	7682 Apr 30 06:19	8°♄52'02	0.65532 AU	inferior conj	7683 Apr 12 10:14	24°♄42'59	3°20'45
morning rise	7682 May 04 00:35	4°♄52'07		minimum elong	7683 Apr 12 09:15	24°♄46'13	3°20'36
direct	7682 May 10 13:17	2°♄04'35		min. Earth dist.	7683 Apr 13 15:37	23°♄06'12	0.66889 AU
desc. node	7682 May 16 03:46	3°♄44'48		morning rise	7683 Apr 17 17:59	18°♄25'40	
morning max el	7682 May 23 18:51	9°♄54'28	26°52'51	direct	7683 Apr 23 20:36	15°♄42'41	
	7682 Jun 08 14:11	0°♄		desc. node	7683 May 03 00:44	20°♄08'03	
	7682 Jun 26 13:50	0°♄		morning max el	7683 May 06 04:40	23°♄05'46	25°41'23
morning set	7682 Jun 28 13:26	3°♄44'49			7683 May 12 07:08	0°♄	
max. Earth dist.	7682 Jul 02 20:39	12°♄10'50	1.34087 AU		7683 Jun 01 22:09	0°♄	
				morning set	7683 Jun 11 07:58	16°♄19'31	
superior conj	7682 Jul 07 03:20	20°♄57'14	-0°09'44	max. Earth dist.	7683 Jun 15 01:43	23°♄17'43	1.35821 AU
minimum elong	7682 Jul 07 03:52	21°♄00'01	0°09'44		7683 Jun 18 12:50	0°♄	
behind sun begin	7682 Jul 06 23:17	20°♄36'09					
behind sun end	7682 Jul 07 08:26	21°♄23'55		superior conj	7683 Jun 20 20:00	4°♄34'19	-0°40'43
asc. node	7682 Jul 08 02:22	22°♄57'47		minimum elong	7683 Jun 20 22:24	4°♄46'21	0°40'21
	7682 Jul 11 10:17	0°♄		asc. node	7683 Jun 24 23:23	12°♄59'45	
evening rise	7682 Jul 14 12:55	6°♄33'53		evening rise	7683 Jun 28 19:33	20°♄52'56	
	7682 Jul 27 04:08	0°♄			7683 Jul 03 09:14	0°♄	
evening max el	7682 Aug 03 09:26	9°♄01'46	21°25'29	evening max el	7683 Jul 16 14:54	20°♄01'30	20°05'43
desc. node	7682 Aug 12 02:54	14°♄35'26		retrograde	7683 Jul 27 03:46	25°♄12'54	
retrograde	7682 Aug 15 14:11	15°♄04'31		evening set	7683 Jul 29 01:28	25°♄03'29	
evening set	7682 Aug 18 01:35	14°♄50'27		desc. node	7683 Jul 29 23:58	24°♄52'14	
inferior conj	7682 Aug 27 07:40	10°♄52'10	-4°14'10	inferior conj	7683 Aug 07 03:04	21°♄04'40	-2°27'03
minimum elong	7682 Aug 26 22:15	11°♄05'22	4°11'42	minimum elong	7683 Aug 06 20:19	21°♄14'44	2°24'40
min. Earth dist.	7682 Aug 27 09:50	10°♄49'08	0.54708 AU	min. Earth dist.	7683 Aug 08 20:52	20°♄02'20	0.55044 AU
morning rise	7682 Sep 04 19:47	7°♄00'14		morning rise	7683 Aug 15 13:42	16°♄50'22	
direct	7682 Sep 08 10:21	6°♄32'05		direct	7683 Aug 19 22:00	16°♄09'16	
morning max el	7682 Sep 20 23:26	12°♄28'30	22°18'42	morning max el	7683 Sep 02 13:10	22°♄50'31	24°03'59
	7682 Oct 03 21:59	0°♄			7683 Sep 08 22:07	0°♄	
asc. node	7682 Oct 04 01:50	0°♄16'56		asc. node	7683 Sep 20 22:49	19°♄21'51	
morning set	7682 Oct 12 16:10	17°♄05'58			7683 Sep 26 05:48	0°♄	
	7682 Oct 18 17:29	0°♄		morning set	7683 Sep 27 03:51	1°♄56'29	
superior conj	7682 Oct 19 18:30	2°♄12'48	1°41'47	superior conj	7683 Oct 04 01:52	16°♄56'19	1°38'48
minimum elong	7682 Oct 19 18:31	2°♄12'57	1°41'52	minimum elong	7683 Oct 04 00:46	16°♄50'21	1°38'48
max. Earth dist.	7682 Oct 23 07:17	9°♄35'25	1.34250 AU	max. Earth dist.	7683 Oct 06 06:49	21°♄42'03	1.32965 AU
evening rise	7682 Oct 27 19:56	18°♄38'37			7683 Oct 10 05:37	0°♄	
	7682 Nov 02 22:20	0°♄		evening rise	7683 Oct 11 12:20	2°♄36'27	
desc. node	7682 Nov 08 01:50	8°♄49'25		desc. node	7683 Oct 25 22:53	28°♄42'54	
	7682 Nov 22 11:51	0°♄			7683 Oct 26 18:21	0°♄	
evening max el	7682 Dec 01 17:20	10°♄26'18	27°02'25	evening max el	7683 Nov 14 05:26	23°♄44'33	27°27'09
retrograde	7682 Dec 15 00:33	17°♄46'09			7683 Nov 23 01:45	0°♄	
evening set	7682 Dec 21 17:31	15°♄09'14		retrograde	7683 Nov 27 20:55	1°♄03'04	
min. Earth dist.	7682 Dec 25 16:21	11°♄19'03	0.65432 AU		7683 Dec 02 09:21	30°♄♂	
inferior conj	7682 Dec 27 18:31	8°♄56'45	-1°06'12	evening set	7683 Dec 04 21:33	28°♄29'24	
minimum elong	7682 Dec 27 20:27	8°♄51'15	1°05'16	min. Earth dist.	7683 Dec 08 15:40	25°♄11'24	0.63817 AU
asc. node	7682 Dec 31 01:11	5°♄29'25		inferior conj	7683 Dec 11 05:14	22°♄33'23	-2°13'03
morning rise	7683 Jan 03 00:37	3°♄21'49		minimum elong	7683 Dec 11 09:21	22°♄22'47	2°11'18
direct	7683 Jan 05 17:50	2°♄41'57		morning rise	7683 Dec 17 22:51	17°♄13'21	
morning max el	7683 Jan 12 04:38	6°♄07'48	18°06'30	asc. node	7683 Dec 17 22:13	17°♄13'59	
	7683 Jan 28 12:24	0°♄		direct	7683 Dec 20 09:16	16°♄44'04	
morning set	7683 Jan 30 13:33	3°♄20'59		morning max el	7683 Dec 26 21:48	20°♄07'40	17°49'45
desc. node	7683 Feb 04 01:08	10°♄39'09			7684 Jan 03 07:36	0°♄	
				morning set	7684 Jan 12 12:40	15°♄26'33	
superior conj	7683 Feb 14 06:49	27°♄01'18	-1°08'56		7684 Jan 21 03:01	0°♄	
minimum elong	7683 Feb 13 22:50	26°♄29'49	1°07'54	desc. node	7684 Jan 21 22:05	1°♄19'10	
	7683 Feb 16 04:12	0°♄					
max. Earth dist.	7683 Feb 17 02:48	1°♄28'45	1.45377 AU	superior conj	7684 Jan 25 06:07	6°♄47'59	-0°23'55
evening rise	7683 Mar 02 11:28	22°♄16'48		minimum elong	7684 Jan 25 03:27	6°♄37'10	0°23'25
	7683 Mar 07 11:14	0°♄		max. Earth dist.	7684 Jan 30 21:28	15°♄52'32	1.44621 AU
greatest brilliancy	7683 Mar 15 08:00	12°♄00'29	-0.7m		7684 Feb 08 22:20	0°♄	
evening max el	7683 Mar 27 04:00	27°♄45'26	19°31'30	evening rise	7684 Feb 09 22:57	1°♄34'36	
asc. node	7683 Mar 29 00:15	29°♄28'01			7684 Feb 29 02:41	0°♄	
	7683 Mar 29 16:27	0°♄		evening max el	7684 Mar 09 06:03	11°♄23'19	20°32'11
retrograde	7683 Apr 03 09:39	1°♄53'25		asc. node	7684 Mar 14 21:19	15°♄36'10	
evening set	7683 Apr 07 00:10	0°♄37'26		retrograde	7684 Mar 17 08:04	16°♄07'01	

evening set	7684 Mar 21 07:38	14° $\Upsilon$ 35'59		retrograde	7685 Mar 01 05:48	0° $\Upsilon$ 27'18	
inferior conj	7684 Mar 26 15:25	8° $\Upsilon$ 28'29	3°04'32	asc. node	7685 Mar 01 18:22	0° $\Upsilon$ 25'53	
minimum elong	7684 Mar 26 13:36	8° $\Upsilon$ 34'42	3°04'12		7685 Mar 03 12:05	30° $\Re$ $\Re$	
min. Earth dist.	7684 Mar 27 06:50	7° $\Upsilon$ 35'42	0.67804 AU	evening set	7685 Mar 05 15:40	28° $\Re$ 40'56	
morning rise	7684 Mar 31 19:22	2° $\Upsilon$ 13'10		inferior conj	7685 Mar 10 23:18	22° $\Re$ 22'54	2°38'13
	7684 Apr 04 12:26	30° $\Re$ $\Re$		minimum elong	7685 Mar 10 21:04	22° $\Re$ 30'41	2°37'41
direct	7684 Apr 06 09:09	29° $\Re$ 44'12		min. Earth dist.	7685 Mar 11 01:54	22° $\Re$ 13'50	0.68282 AU
	7684 Apr 08 07:56	0° $\Upsilon$		morning rise	7685 Mar 16 02:18	16° $\Re$ 11'01	
morning max el	7684 Apr 17 13:30	6° $\Upsilon$ 25'31	24°15'46	direct	7685 Mar 21 01:58	14° $\Re$ 01'58	
desc. node	7684 Apr 18 21:42	7° $\Upsilon$ 49'29		morning max el	7685 Mar 30 23:36	19° $\Re$ 52'58	22°46'07
	7684 May 05 20:25	0° $\Re$		desc. node	7685 Apr 05 18:39	26° $\Re$ 27'40	
morning set	7684 May 23 07:01	27° $\Re$ 56'04			7685 Apr 08 13:11	0° $\Upsilon$	
	7684 May 24 11:24	0° $\Pi$			7685 Apr 29 01:07	0° $\Re$	
max. Earth dist.	7684 May 26 23:01	4° $\Pi$ 24'51	1.37919 AU	morning set	7685 May 04 05:03	8° $\Re$ 21'05	
				max. Earth dist.	7685 May 08 19:45	16° $\Re$ 05'41	1.40161 AU
superior conj	7684 Jun 03 00:59	17° $\Pi$ 34'30	-1°12'03	superior conj	7685 May 16 14:09	29° $\Re$ 47'59	-1°40'46
minimum elong	7684 Jun 03 05:20	17° $\Pi$ 55'22	1°11'27	minimum elong	7685 May 16 19:46	0° $\Pi$ 13'34	1°40'14
	7684 Jun 09 09:26	0° $\Re$			7685 May 16 16:47	0° $\Pi$	
asc. node	7684 Jun 10 20:24	2° $\Re$ 53'17			7685 May 26 11:18	18° $\Pi$ 18'05	
evening rise	7684 Jun 11 20:02	4° $\Re$ 50'17		evening rise	7685 May 28 17:27	22° $\Pi$ 34'11	
	7684 Jun 26 17:51	0° $\Omega$		asc. node	7685 May 28 17:27	22° $\Pi$ 34'11	
evening max el	7684 Jun 28 09:09	1° $\Omega$ 45'07	19°05'52		7685 Jun 01 18:30	0° $\Re$	
retrograde	7684 Jul 07 05:54	6° $\Omega$ 07'36		evening max el	7685 Jun 11 13:21	14° $\Re$ 08'15	18°26'47
evening set	7684 Jul 09 04:18	5° $\Omega$ 55'58		retrograde	7685 Jun 19 03:09	17° $\Re$ 54'50	
desc. node	7684 Jul 15 21:02	2° $\Omega$ 50'37		evening set	7685 Jun 21 07:53	17° $\Re$ 36'41	
inferior conj	7684 Jul 17 13:20	1° $\Omega$ 43'05	-0°30'36	inferior conj	7685 Jun 28 20:59	13° $\Re$ 03'59	1°07'27
minimum elong	7684 Jul 17 12:01	1° $\Omega$ 45'20	0°30'12	minimum elong	7685 Jun 28 23:14	12° $\Re$ 59'28	1°06'34
	7684 Jul 20 01:47	30° $\Re$ $\Re$		min. Earth dist.	7685 Jul 02 06:04	10° $\Re$ 22'42	0.58171 AU
min. Earth dist.	7684 Jul 20 10:55	29° $\Re$ 44'53	0.56283 AU	desc. node	7685 Jul 02 18:04	10° $\Re$ 00'12	
morning rise	7684 Jul 25 16:39	26° $\Re$ 53'32		morning rise	7685 Jul 06 11:13	7° $\Re$ 38'44	
direct	7684 Jul 30 21:26	25° $\Re$ 50'33		direct	7685 Jul 12 11:01	6° $\Re$ 05'44	
	7684 Aug 10 11:05	0° $\Omega$		morning max el	7685 Jul 26 20:26	13° $\Re$ 46'41	27°02'15
morning max el	7684 Aug 14 02:16	3° $\Omega$ 06'42	25°44'02		7685 Aug 08 18:28	0° $\Omega$	
	7684 Sep 02 05:02	0° $\Pi$		asc. node	7685 Aug 24 16:48	28° $\Omega$ 37'02	
asc. node	7684 Sep 06 19:48	8° $\Pi$ 50'45			7685 Aug 25 08:44	0° $\Pi$	
morning set	7684 Sep 10 15:09	16° $\Pi$ 43'35		morning set	7685 Aug 26 00:28	1° $\Pi$ 22'43	
	7684 Sep 16 17:07	0° $\Re$					
superior conj	7684 Sep 17 12:25	1° $\Re$ 46'28	1°30'04	superior conj	7685 Sep 02 00:13	16° $\Pi$ 37'26	1°16'05
minimum elong	7684 Sep 17 10:32	1° $\Re$ 36'05	1°29'52	minimum elong	7685 Sep 01 21:58	16° $\Pi$ 25'00	1°15'43
max. Earth dist.	7684 Sep 18 13:17	4° $\Re$ 03'26	1.32126 AU	max. Earth dist.	7685 Sep 01 23:23	16° $\Pi$ 32'48	1.31733 AU
evening rise	7684 Sep 24 13:06	16° $\Re$ 56'11			7685 Sep 08 02:40	0° $\Re$	
	7684 Oct 01 03:33	0° $\Re$		evening rise	7685 Sep 08 19:38	1° $\Re$ 30'24	
desc. node	7684 Oct 11 19:59	18° $\Re$ 05'14			7685 Sep 24 03:56	0° $\Re$	
	7684 Oct 20 13:42	0° $\Re$		desc. node	7685 Sep 28 17:04	6° $\Re$ 43'51	
evening max el	7684 Oct 26 14:13	6° $\Re$ 29'54	27°21'19	evening max el	7685 Oct 08 16:49	18° $\Re$ 29'33	26°41'39
retrograde	7684 Nov 09 09:53	13° $\Re$ 43'07		retrograde	7685 Oct 22 14:37	25° $\Re$ 37'33	
evening set	7684 Nov 16 12:33	11° $\Re$ 22'16		evening set	7685 Oct 29 10:12	23° $\Re$ 40'28	
min. Earth dist.	7684 Nov 20 04:37	8° $\Re$ 31'00	0.61919 AU	min. Earth dist.	7685 Nov 02 06:38	21° $\Re$ 04'38	0.59849 AU
inferior conj	7684 Nov 23 04:06	5° $\Re$ 48'10	-3°21'42	inferior conj	7685 Nov 05 11:36	18° $\Re$ 31'25	-4°26'03
minimum elong	7684 Nov 23 10:17	5° $\Re$ 34'02	3°19'29	minimum elong	7685 Nov 05 18:43	18° $\Re$ 17'13	4°24'09
morning rise	7684 Nov 30 10:07	0° $\Re$ 46'34		morning rise	7685 Nov 13 05:32	13° $\Re$ 51'36	
direct	7684 Dec 02 16:30	0° $\Re$ 24'17		direct	7685 Nov 15 11:20	13° $\Re$ 33'06	
asc. node	7684 Dec 03 19:14	0° $\Re$ 29'50		asc. node	7685 Nov 20 16:16	15° $\Re$ 18'37	
morning max el	7684 Dec 09 14:06	3° $\Re$ 54'12	17°51'06	morning max el	7685 Nov 23 02:08	17° $\Re$ 18'12	18°11'40
morning set	7684 Dec 25 08:56	28° $\Re$ 32'43		morning set	7685 Dec 02 02:40	0° $\Re$	
	7684 Dec 26 04:20	0° $\Re$			7685 Dec 08 20:11	12° $\Re$ 20'19	
superior conj	7685 Jan 05 06:59	17° $\Re$ 49'15	0°18'17	superior conj	7685 Dec 18 08:15	0° $\Re$ 00'15	0°52'27
minimum elong	7685 Jan 05 08:38	17° $\Re$ 56'19	0°18'09	minimum elong	7685 Dec 18 11:39	0° $\Re$ 15'35	0°52'05
desc. node	7685 Jan 07 19:06	22° $\Re$ 04'06			7685 Dec 18 08:11	0° $\Re$	
max. Earth dist.	7685 Jan 12 13:09	29° $\Re$ 55'56	1.43220 AU	desc. node	7685 Dec 25 16:07	12° $\Re$ 49'49	
	7685 Jan 12 14:09	0° $\Re$		max. Earth dist.	7685 Dec 25 23:41	13° $\Re$ 21'48	1.41339 AU
evening rise	7685 Jan 19 14:12	11° $\Re$ 09'52		evening rise	7685 Dec 30 21:49	21° $\Re$ 31'03	
	7685 Feb 01 01:07	0° $\Re$			7686 Jan 05 05:54	0° $\Re$	
evening max el	7685 Feb 20 02:41	25° $\Re$ 02'46	21°44'12	evening max el	7686 Jan 26 05:20	0° $\Re$	
	7685 Feb 26 20:30	0° $\Upsilon$		retrograde	7686 Feb 13 01:19	14° $\Re$ 49'13	

asc. node	7686 Feb 16 15:27	13° $\text{K}$ 44'44		7686 Dec 29 11:03	0° $\approx$	
evening set	7686 Feb 17 22:40	12° $\text{K}$ 47'50		evening max el	7687 Jan 16 08:30	22° $\approx$ 28'43 24°22'43
inferior conj	7686 Feb 23 07:53	6° $\text{K}$ 22'33	2°03'00	retrograde	7687 Jan 27 17:20	29° $\approx$ 08'23
minimum elong	7686 Feb 23 05:40	6° $\text{K}$ 30'13	2°02'21	evening set	7687 Feb 02 03:07	26° $\approx$ 53'07
min. Earth dist.	7686 Feb 22 22:38	6° $\text{K}$ 54'31	0.68341 AU	asc. node	7687 Feb 03 12:30	25° $\approx$ 33'27
morning rise	7686 Feb 28 12:35	0° $\text{K}$ 15'21		min. Earth dist.	7687 Feb 06 18:46	21° $\approx$ 33'52 0.68006 AU
	7686 Feb 28 20:23	30° $\text{R}$ $\approx$		inferior conj	7687 Feb 07 15:20	20° $\approx$ 24'48 1°19'34
direct	7686 Mar 04 22:09	28° $\approx$ 28'42		minimum elong	7687 Feb 07 13:37	20° $\approx$ 30'35 1°19'00
	7686 Mar 09 09:28	0° $\text{K}$		morning rise	7687 Feb 13 00:13	14° $\approx$ 23'45
morning max el	7686 Mar 13 14:21	3° $\text{K}$ 29'58	21°21'04	direct	7687 Feb 16 20:32	12° $\approx$ 59'11
desc. node	7686 Mar 23 15:38	15° $\text{K}$ 46'28		morning max el	7687 Feb 24 12:21	17° $\approx$ 18'42 20°06'55
	7686 Apr 02 13:34	0° $\text{Y}$			7687 Mar 06 15:32	0° $\text{K}$
morning set	7686 Apr 13 23:25	17° $\text{Y}$ 29'32		desc. node	7687 Mar 10 12:37	5° $\text{K}$ 34'59
max. Earth dist.	7686 Apr 20 21:23	28° $\text{Y}$ 37'36	1.42266 AU	morning set	7687 Mar 23 22:21	25° $\text{K}$ 48'56
	7686 Apr 21 17:24	0° $\text{B}$			7687 Mar 26 15:10	0° $\text{Y}$
				max. Earth dist.	7687 Apr 03 06:05	12° $\text{Y}$ 00'45 1.43976 AU
superior conj	7686 Apr 28 06:42	11° $\text{B}$ 03'17	-2°02'31			
minimum elong	7686 Apr 28 11:26	11° $\text{B}$ 23'42	2°02'19	superior conj	7687 Apr 08 22:51	21° $\text{Y}$ 13'53 -2°11'26
	7686 May 08 22:46	0° $\text{II}$		minimum elong	7687 Apr 08 22:59	21° $\text{Y}$ 14'25 2°11'28
evening rise	7686 May 09 13:19	1° $\text{II}$ 05'58			7687 Apr 14 05:42	0° $\text{B}$
asc. node	7686 May 15 14:30	11° $\text{II}$ 56'46		evening rise	7687 Apr 21 21:33	13° $\text{B}$ 04'06
evening max el	7686 May 25 23:46	27° $\text{II}$ 01'29	18°07'50		7687 May 01 21:41	0° $\text{II}$
	7686 May 30 07:11	0° $\text{B}$		asc. node	7687 May 02 11:33	0° $\text{II}$ 54'46
retrograde	7686 Jun 01 18:10	0° $\text{B}$ 27'49		evening max el	7687 May 09 12:53	10° $\text{II}$ 15'54 18°08'05
evening set	7686 Jun 04 06:19	29° $\text{II}$ 59'52		retrograde	7687 May 15 22:44	13° $\text{II}$ 36'57
	7686 Jun 04 06:10	30° $\text{R}$ $\text{II}$		evening set	7687 May 18 18:09	12° $\text{II}$ 56'53
inferior conj	7686 Jun 11 01:30	25° $\text{II}$ 06'59	2°17'09	inferior conj	7687 May 24 23:16	7° $\text{II}$ 44'53 2°59'59
minimum elong	7686 Jun 11 04:38	24° $\text{II}$ 59'41	2°16'13	minimum elong	7687 May 25 01:38	7° $\text{II}$ 38'36 2°59'28
min. Earth dist.	7686 Jun 14 08:26	22° $\text{II}$ 04'22	0.60374 AU	min. Earth dist.	7687 May 27 19:22	4° $\text{II}$ 45'17 0.62586 AU
morning rise	7686 Jun 18 00:17	19° $\text{II}$ 15'16		morning rise	7687 May 31 07:28	1° $\text{II}$ 37'34
desc. node	7686 Jun 19 15:05	18° $\text{II}$ 21'14			7687 Jun 03 01:00	30° $\text{R}$ $\text{B}$
direct	7686 Jun 24 13:26	17° $\text{II}$ 10'12		desc. node	7687 Jun 06 12:06	29° $\text{B}$ 07'47
morning max el	7686 Jul 08 21:25	25° $\text{II}$ 06'57	27°46'46	direct	7687 Jun 07 02:12	29° $\text{B}$ 06'42
	7686 Jul 13 09:03	0° $\text{B}$			7687 Jun 11 09:01	0° $\text{II}$
	7686 Aug 02 04:01	0° $\text{Q}$		morning max el	7687 Jun 21 03:51	7° $\text{II}$ 09'21 27°53'06
morning set	7686 Aug 10 06:02	15° $\text{Q}$ 48'39			7687 Jul 08 14:04	0° $\text{B}$
asc. node	7686 Aug 11 13:50	18° $\text{Q}$ 35'07		morning set	7687 Jul 25 05:41	29° $\text{B}$ 54'08
max. Earth dist.	7686 Aug 16 09:21	28° $\text{Q}$ 59'34	1.31786 AU		7687 Jul 25 06:50	0° $\text{Q}$
	7686 Aug 16 20:20	0° $\text{P}$		asc. node	7687 Jul 29 10:49	8° $\text{Q}$ 39'26
				max. Earth dist.	7687 Jul 30 15:10	11° $\text{Q}$ 10'48 1.32304 AU
superior conj	7686 Aug 17 11:29	1° $\text{P}$ 23'39	0°57'19			
minimum elong	7686 Aug 17 09:21	1° $\text{P}$ 11'53	0°56'52	superior conj	7687 Aug 01 20:21	15° $\text{Q}$ 58'32 0°34'10
evening rise	7686 Aug 24 05:43	16° $\text{P}$ 12'36		minimum elong	7687 Aug 01 18:50	15° $\text{Q}$ 50'18 0°33'47
	7686 Aug 31 00:35	0° $\text{B}$			7687 Aug 08 06:52	0° $\text{P}$
desc. node	7686 Sep 15 14:08	24° $\text{B}$ 21'37		evening rise	7687 Aug 17 17:18	0° $\text{P}$ 55'51
evening max el	7686 Sep 20 11:33	29° $\text{B}$ 39'07	25°30'30		7687 Aug 24 14:57	0° $\text{B}$
	7686 Sep 20 20:25	0° $\text{L}$		evening max el	7687 Sep 02 00:03	10° $\text{B}$ 07'18 23°57'36
retrograde	7686 Oct 04 09:45	6° $\text{L}$ 41'59		desc. node	7687 Sep 02 11:13	10° $\text{B}$ 33'49
evening set	7686 Oct 10 09:45	5° $\text{L}$ 18'25		retrograde	7687 Sep 15 16:41	16° $\text{B}$ 59'05
min. Earth dist.	7686 Oct 14 23:36	2° $\text{L}$ 40'38	0.57804 AU	evening set	7687 Sep 20 08:35	16° $\text{B}$ 11'20
inferior conj	7686 Oct 18 00:31	0° $\text{L}$ 34'25	-5°14'57	min. Earth dist.	7687 Sep 26 10:39	13° $\text{B}$ 12'58 0.56069 AU
minimum elong	7686 Oct 18 05:38	0° $\text{L}$ 25'32	5°14'13	inferior conj	7687 Sep 28 17:07	11° $\text{B}$ 49'59 -5°31'34
	7686 Oct 18 20:27	30° $\text{R}$ $\text{B}$		minimum elong	7687 Sep 28 16:12	11° $\text{B}$ 51'23 5°31'32
morning rise	7686 Oct 26 03:52	26° $\text{B}$ 17'32		morning rise	7687 Oct 07 01:59	7° $\text{B}$ 52'44
direct	7686 Oct 28 13:21	26° $\text{B}$ 00'00		direct	7687 Oct 09 20:06	7° $\text{B}$ 33'17
	7686 Nov 06 02:03	0° $\text{L}$		morning max el	7687 Oct 19 23:08	12° $\text{B}$ 18'37 19°56'35
morning max el	7686 Nov 06 06:18	0° $\text{L}$ 10'05	18°53'02	asc. node	7687 Oct 25 10:18	18° $\text{B}$ 46'03
asc. node	7686 Nov 07 13:17	1° $\text{L}$ 29'26			7687 Nov 01 05:30	0° $\text{L}$
morning set	7686 Nov 22 17:48	26° $\text{L}$ 36'18		morning set	7687 Nov 06 22:17	11° $\text{L}$ 10'19
	7686 Nov 24 11:12	0° $\text{X}$				
superior conj	7686 Dec 01 05:03	13° $\text{X}$ 07'13	1°17'11	superior conj	7687 Nov 14 16:15	26° $\text{L}$ 54'50 1°32'54
minimum elong	7686 Dec 01 08:18	13° $\text{X}$ 22'42	1°16'55	minimum elong	7687 Nov 14 18:25	27° $\text{L}$ 05'38 1°32'51
max. Earth dist.	7686 Dec 08 05:46	26° $\text{X}$ 03'51	1.39212 AU		7687 Nov 16 05:36	0° $\text{X}$
	7686 Dec 10 11:33	0° $\text{B}$		max. Earth dist.	7687 Nov 20 11:33	8° $\text{X}$ 11'01 1.37090 AU
evening rise	7686 Dec 12 03:26	2° $\text{B}$ 51'32		evening rise	7687 Nov 24 06:10	15° $\text{X}$ 08'02
desc. node	7686 Dec 12 13:10	3° $\text{B}$ 33'00		desc. node	7687 Nov 29 10:12	24° $\text{X}$ 09'05
					7687 Dec 02 22:59	0° $\text{B}$

	7687 Dec 24 03:15	0°♊				7688 Nov 07 01:37	0°♊	
evening max el	7687 Dec 29 21:35	6°♊15'50	25°36'26	desc. node		7688 Nov 15 07:14	14°♊33'28	
retrograde	7688 Jan 11 04:43	13°♊19'13				7688 Nov 25 05:20	0°♊	
evening set	7688 Jan 17 03:22	10°♊52'17		evening max el		7688 Dec 11 10:50	19°♊59'28	26°36'42
asc. node	7688 Jan 21 09:33	6°♊15'08		retrograde		7688 Dec 24 10:37	27°♊15'23	
min. Earth dist.	7688 Jan 21 11:57	6°♊07'34	0.67292 AU	evening set		7688 Dec 30 21:34	24°♊40'30	
inferior conj	7688 Jan 22 19:47	4°♊25'55	0°28'26	min. Earth dist.		7689 Jan 03 23:49	20°♊30'41	0.66215 AU
minimum elong	7688 Jan 22 19:04	4°♊28'12	0°28'14	inferior conj		7689 Jan 05 19:12	18°♊21'33	-0°29'49
	7688 Jan 26 15:42	30°♊♊		minimum elong		7689 Jan 05 20:02	18°♊19'05	0°29'22
morning rise	7688 Jan 28 11:12	28°♊33'02		asc. node		7689 Jan 07 06:37	16°♊38'05	
direct	7688 Jan 31 19:41	27°♊28'24		morning rise		7689 Jan 11 19:22	12°♊39'18	
	7688 Feb 06 08:21	0°♊		direct		7689 Jan 14 17:41	11°♊51'22	
morning max el	7688 Feb 07 18:10	1°♊17'43	19°07'22	morning max el		7689 Jan 21 06:29	15°♊22'23	18°23'56
greatest brilliancy	7688 Feb 21 07:34	19°♊30'46	-0.7m			7689 Feb 01 01:59	0°♊	
desc. node	7688 Feb 25 09:35	25°♊45'02		morning set		7689 Feb 10 03:00	14°♊20'17	
	7688 Feb 28 03:43	0°♊		desc. node		7689 Feb 11 06:33	16°♊10'11	
morning set	7688 Mar 02 00:36	4°♊26'37				7689 Feb 19 23:54	0°♊	
max. Earth dist.	7688 Mar 15 21:20	26°♊04'16	1.45089 AU					
	7688 Mar 18 09:07	0°♊		superior conj		7689 Feb 25 20:14	9°♊11'01	-1°32'27
superior conj	7688 Mar 18 15:42	0°♊26'02	-2°01'50	minimum elong		7689 Feb 25 10:40	8°♊33'32	1°31'27
minimum elong	7688 Mar 18 08:57	29°♊59'20	2°01'28	max. Earth dist.		7689 Feb 26 16:34	10°♊30'39	1.45487 AU
evening rise	7688 Apr 02 07:46	24°♊05'10				7689 Mar 11 03:03	0°♊	
	7688 Apr 05 22:07	0°♊		evening rise		7689 Mar 13 18:34	4°♊09'51	
asc. node	7688 Apr 18 08:36	19°♊20'20		greatest brilliancy		7689 Mar 23 21:21	20°♊02'12	-0.8m
evening max el	7688 Apr 22 01:40	23°♊43'38	18°26'48			7689 Mar 30 13:54	0°♊	
retrograde	7688 Apr 28 12:36	27°♊13'17		asc. node		7689 Apr 05 05:40	7°♊02'40	
evening set	7688 May 01 15:07	26°♊19'44		evening max el		7689 Apr 05 11:29	7°♊17'34	19°03'08
inferior conj	7688 May 07 10:10	20°♊49'51	3°20'55	retrograde		7689 Apr 12 08:03	11°♊08'23	
minimum elong	7688 May 07 11:10	20°♊46'53	3°20'45	evening set		7689 Apr 15 18:01	10°♊00'35	
min. Earth dist.	7688 May 09 15:30	18°♊13'24	0.64564 AU	inferior conj		7689 Apr 21 06:28	4°♊14'24	3°24'48
morning rise	7688 May 13 06:21	14°♊35'04		minimum elong		7689 Apr 21 06:08	4°♊15'28	3°24'43
direct	7688 May 19 23:05	11°♊50'03		min. Earth dist.		7689 Apr 22 20:18	2°♊14'03	0.66163 AU
desc. node	7688 May 23 09:06	12°♊27'21				7689 Apr 24 17:06	30°♊♊	
morning max el	7688 Jun 02 13:26	19°♊47'30	27°23'35	morning rise		7689 Apr 26 17:50	27°♊57'07	
	7688 Jun 11 06:27	0°♊		direct		7689 May 03 02:41	25°♊10'29	
	7688 Jun 30 14:54	0°♊		desc. node		7689 May 10 06:06	27°♊52'29	
morning set	7688 Jul 07 20:50	13°♊32'03				7689 May 12 23:29	0°♊	
max. Earth dist.	7688 Jul 12 13:16	22°♊57'51	1.33303 AU	morning max el		7689 May 15 23:47	2°♊50'04	26°24'55
asc. node	7688 Jul 15 07:50	28°♊45'59				7689 Jun 05 12:17	0°♊	
	7688 Jul 15 21:48	0°♊		morning set		7689 Jun 21 00:06	26°♊32'39	
superior conj	7688 Jul 16 00:52	0°♊16'15	0°07'14			7689 Jun 22 19:49	0°♊	
minimum elong	7688 Jul 16 00:30	0°♊14'19	0°07'04	max. Earth dist.		7689 Jun 25 00:57	4°♊17'44	1.34780 AU
behind sun begin	7688 Jul 15 19:32	29°♊47'58		superior conj		7689 Jun 29 22:37	14°♊09'49	-0°22'41
behind sun end	7688 Jul 16 05:27	0°♊40'42		minimum elong		7689 Jun 29 23:54	14°♊16'25	0°22'31
evening rise	7688 Jul 23 04:34	15°♊34'36		asc. node		7689 Jul 02 04:50	18°♊50'26	
	7688 Jul 30 09:14	0°♊		evening rise		7689 Jul 07 13:31	0°♊02'28	
evening max el	7688 Aug 13 13:02	20°♊22'08	22°18'43			7689 Jul 07 13:02	0°♊	
desc. node	7688 Aug 19 08:15	24°♊49'43				7689 Jul 25 12:20	0°♊	
retrograde	7688 Aug 26 11:04	26°♊47'48		evening max el		7689 Jul 26 10:54	0°♊57'50	20°49'09
evening set	7688 Aug 29 15:03	26°♊25'41		desc. node		7689 Aug 06 05:17	6°♊38'14	
min. Earth dist.	7688 Sep 06 19:14	22°♊51'45	0.54966 AU	retrograde		7689 Aug 06 23:19	6°♊39'38	
inferior conj	7688 Sep 07 16:25	22°♊21'54	-4°58'12	evening set		7689 Aug 09 02:50	6°♊28'34	
minimum elong	7688 Sep 07 08:38	22°♊32'53	4°56'47	inferior conj		7689 Aug 18 08:55	2°♊31'34	-3°32'06
morning rise	7688 Sep 16 03:54	18°♊33'38		minimum elong		7689 Aug 17 23:54	2°♊44'23	3°29'18
direct	7688 Sep 19 10:34	18°♊09'30		min. Earth dist.		7689 Aug 19 04:31	2°♊03'41	0.54737 AU
morning max el	7688 Oct 01 02:59	23°♊38'17	21°21'47			7689 Aug 23 01:26	30°♊♊	
	7688 Oct 06 16:55	0°♊		morning rise		7689 Aug 26 21:02	28°♊32'53	
asc. node	7688 Oct 11 07:19	6°♊53'56		direct		7689 Aug 30 18:42	28°♊00'17	
morning set	7688 Oct 21 07:07	25°♊55'17				7689 Sep 07 02:16	0°♊	
	7688 Oct 23 05:52	0°♊		morning max el		7689 Sep 12 20:15	4°♊15'45	23°03'08
superior conj	7688 Oct 28 13:44	11°♊11'28	1°40'36	asc. node		7689 Sep 28 04:18	25°♊40'58	
minimum elong	7688 Oct 28 14:32	11°♊15'35	1°40'40			7689 Sep 30 11:21	0°♊	
max. Earth dist.	7688 Nov 01 22:24	20°♊04'48	1.35190 AU	morning set		7689 Oct 05 18:17	10°♊45'37	
evening rise	7688 Nov 06 02:34	28°♊11'35		superior conj		7689 Oct 12 18:17	25°♊47'47	1°41'16
				minimum elong		7689 Oct 12 17:48	25°♊45'11	1°41'19



	7689 Oct 14 17:41	0°♌		minimum elong	7690 Sep 27 01:48	10°♌26'58	1°35'41
max. Earth dist.	7689 Oct 15 17:17	2°♌04'13	1.33650 AU	max. Earth dist.	7690 Sep 28 19:58	14°♌16'50	1.32546 AU
evening rise	7689 Oct 20 12:41	11°♌52'23		evening rise	7690 Oct 04 08:59	26°♌00'18	
	7689 Oct 30 08:58	0°♌			7690 Oct 06 08:28	0°♌	
desc. node	7689 Nov 02 04:16	4°♌40'32		desc. node	7690 Oct 20 01:20	24°♌22'00	
	7689 Nov 20 13:43	0°♌			7690 Oct 23 18:57	0°♌	
evening max el	7689 Nov 23 23:37	3°♌30'07	27°16'18	evening max el	7690 Nov 06 10:23	16°♌35'05	27°28'38
retrograde	7689 Dec 07 10:37	10°♌49'51		retrograde	7690 Nov 20 04:08	23°♌52'27	
evening set	7689 Dec 14 07:35	8°♌13'02		evening set	7690 Nov 27 06:33	21°♌22'34	
min. Earth dist.	7689 Dec 18 04:10	4°♌37'15	0.64786 AU	min. Earth dist.	7690 Nov 30 23:07	18°♌17'10	0.63037 AU
inferior conj	7689 Dec 20 11:20	2°♌07'08	-1°34'05	inferior conj	7690 Dec 03 17:23	15°♌35'11	-2°42'15
minimum elong	7689 Dec 20 14:10	1°♌59'23	1°32'47	minimum elong	7690 Dec 03 22:27	15°♌22'48	2°40'13
	7689 Dec 22 11:30	30°♌♌		morning rise	7690 Dec 10 16:18	10°♌22'55	
asc. node	7689 Dec 25 03:39	27°♌40'19		asc. node	7690 Dec 12 00:42	10°♌01'51	
morning rise	7689 Dec 26 22:11	26°♌38'21		direct	7690 Dec 13 00:32	9°♌57'09	
direct	7689 Dec 29 12:17	26°♌03'24		morning max el	7690 Dec 19 16:06	13°♌22'25	17°48'07
morning max el	7690 Jan 04 22:49	29°♌26'51	17°57'19		7690 Dec 31 02:05	0°♌	
	7690 Jan 05 11:49	0°♌		morning set	7691 Jan 04 19:53	8°♌15'22	
morning set	7690 Jan 22 10:59	25°♌42'02		desc. node	7691 Jan 16 00:31	27°♌28'34	
	7690 Jan 25 01:00	0°♌					
desc. node	7690 Jan 29 03:32	6°♌46'12		superior conj	7691 Jan 16 17:55	28°♌41'02	-0°05'17
				minimum elong	7691 Jan 16 17:23	28°♌38'48	0°05'06
superior conj	7690 Feb 05 08:02	18°♌23'16	-0°50'02	behind sun begin	7691 Jan 16 08:31	28°♌01'53	
minimum elong	7690 Feb 05 02:11	17°♌59'54	0°49'09	behind sun end	7691 Jan 17 02:16	29°♌15'38	
max. Earth dist.	7690 Feb 09 12:18	25°♌00'33	1.45139 AU		7691 Jan 17 12:58	0°♌	
	7690 Feb 12 16:38	0°♌		max. Earth dist.	7691 Jan 23 05:30	9°♌15'40	1.44091 AU
evening rise	7690 Feb 21 11:10	13°♌35'44		evening rise	7691 Jan 31 22:15	22°♌55'35	
	7690 Mar 04 05:30	0°♌			7691 Feb 05 13:19	0°♌	
greatest brilliancy	7690 Mar 07 21:20	5°♌26'25	-0.6m		7691 Feb 26 16:04	0°♌	
evening max el	7690 Mar 19 16:34	20°♌54'09	19°55'35	evening max el	7691 Mar 02 16:09	4°♌31'50	21°01'40
asc. node	7690 Mar 23 02:43	23°♌49'25		asc. node	7691 Mar 09 23:48	9°♌25'41	
retrograde	7690 Mar 27 06:12	25°♌16'42		retrograde	7691 Mar 11 04:38	9°♌33'09	
evening set	7690 Mar 31 00:25	23°♌54'15		evening set	7691 Mar 15 08:20	7°♌55'44	
inferior conj	7690 Apr 05 09:11	17°♌53'41	3°15'11	inferior conj	7691 Mar 20 15:49	1°♌43'16	2°54'31
minimum elong	7690 Apr 05 07:48	17°♌58'20	3°14'59	minimum elong	7691 Mar 20 13:46	1°♌50'21	2°54'06
min. Earth dist.	7690 Apr 06 08:24	16°♌35'40	0.67330 AU	min. Earth dist.	7691 Mar 21 01:40	1°♌09'08	0.68055 AU
morning rise	7690 Apr 10 14:57	11°♌36'55			7691 Mar 21 21:49	30°♌♌	
direct	7690 Apr 16 12:12	8°♌59'13		morning rise	7691 Mar 25 18:59	25°♌28'58	
desc. node	7690 Apr 27 03:05	14°♌51'56		direct	7691 Mar 31 02:45	23°♌07'56	
morning max el	7690 Apr 28 09:21	16°♌06'18	25°06'10	morning max el	7691 Apr 10 18:26	29°♌29'11	23°37'33
	7690 May 09 20:51	0°♌			7691 Apr 11 06:29	0°♌	
	7690 May 29 10:38	0°♌		desc. node	7691 Apr 14 00:04	2°♌59'29	
morning set	7690 Jun 03 11:03	8°♌44'20			7691 May 03 16:11	0°♌	
max. Earth dist.	7690 Jun 07 02:18	15°♌21'46	1.36681 AU	morning set	7691 May 16 00:11	19°♌52'24	
				max. Earth dist.	7691 May 19 22:04	26°♌37'49	1.38862 AU
superior conj	7690 Jun 13 10:45	27°♌31'49	-0°54'05		7691 May 21 19:41	0°♌	
minimum elong	7690 Jun 13 14:00	27°♌47'50	0°53'37				
	7690 Jun 14 16:41	0°♌		superior conj	7691 May 27 09:35	10°♌13'23	-1°24'46
asc. node	7690 Jun 19 01:51	8°♌49'03		minimum elong	7691 May 27 14:38	10°♌37'03	1°24'10
evening rise	7690 Jun 21 17:53	14°♌13'07		evening rise	7691 Jun 05 14:55	27°♌58'56	
	7690 Jun 30 00:40	0°♌		asc. node	7691 Jun 05 22:53	28°♌37'43	
evening max el	7690 Jul 08 21:54	12°♌15'35	19°37'39		7691 Jun 06 15:51	0°♌	
retrograde	7690 Jul 18 17:20	17°♌05'38		evening max el	7691 Jun 21 20:56	24°♌17'41	18°46'50
evening set	7690 Jul 20 13:54	16°♌55'59		retrograde	7691 Jun 30 03:16	28°♌22'56	
desc. node	7690 Jul 24 02:21	15°♌50'02		evening set	7691 Jul 02 03:56	28°♌09'05	
inferior conj	7690 Jul 29 09:23	12°♌52'10	-1°36'46	inferior conj	7691 Jul 10 04:33	23°♌48'31	0°14'06
minimum elong	7690 Jul 29 04:57	12°♌59'07	1°35'11	minimum elong	7691 Jul 10 05:06	23°♌47'31	0°13'48
min. Earth dist.	7690 Jul 31 16:47	11°♌25'10	0.55468 AU	transit middle	7691 Jul 10 05:06	23°♌47'31	0°13'48
morning rise	7690 Aug 06 17:40	8°♌23'25		transit begin	7691 Jul 10 03:12	23°♌50'59	
direct	7690 Aug 11 10:11	7°♌34'25		transit end	7691 Jul 10 07:00	23°♌44'02	
morning max el	7690 Aug 25 09:04	14°♌32'12	24°48'18	desc. node	7691 Jul 10 23:24	23°♌13'54	
	7690 Sep 06 14:03	0°♌		min. Earth dist.	7691 Jul 13 09:10	21°♌29'27	0.57019 AU
asc. node	7690 Sep 15 01:17	14°♌56'52		morning rise	7691 Jul 18 02:48	18°♌42'50	
morning set	7690 Sep 20 06:01	25°♌35'20		direct	7691 Jul 23 16:12	17°♌27'32	
	7690 Sep 22 07:14	0°♌		morning max el	7691 Aug 06 23:58	24°♌56'20	26°20'45
					7691 Aug 11 16:23	0°♌	
superior conj	7690 Sep 27 03:17	10°♌35'04	1°35'47		7691 Aug 30 15:27	0°♌	

asc. node	7691 Sep 01 22:17	4°♎34'04			7692 Aug 05 20:02	0°♏	
morning set	7691 Sep 04 16:43	10°♎19'56		asc. node	7692 Aug 18 19:18	24°♏25'34	
				morning set	7692 Aug 19 00:38	24°♏53'33	
superior conj	7691 Sep 11 14:38	25°♎26'50	1°24'46		7692 Aug 21 10:10	0°♎	
minimum elong	7691 Sep 11 12:33	25°♎15'17	1°24'29	max. Earth dist.	7692 Aug 25 14:44	9°♎11'23	1.31705 AU
max. Earth dist.	7691 Sep 12 04:16	26°♎42'15	1.31901 AU				
	7691 Sep 13 16:07	0°♏		superior conj	7692 Aug 26 02:26	10°♎16'10	1°08'42
evening rise	7691 Sep 18 12:33	10°♏27'29		minimum elong	7692 Aug 26 00:10	10°♎03'40	1°08'17
	7691 Sep 28 14:37	0°♎		evening rise	7692 Sep 01 20:51	25°♎05'45	
desc. node	7691 Oct 06 22:24	13°♎27'33			7692 Sep 04 04:57	0°♏	
evening max el	7691 Oct 19 16:53	29°♎02'23	27°08'37		7692 Sep 21 13:08	0°♎	
	7691 Oct 20 18:01	0°♏		desc. node	7692 Sep 22 19:29	1°♎42'22	
retrograde	7691 Nov 02 14:05	6°♏13'48		evening max el	7692 Sep 30 16:28	10°♎41'13	26°14'53
evening set	7691 Nov 09 14:47	4°♏01'50		retrograde	7692 Oct 14 14:43	17°♎46'22	
min. Earth dist.	7691 Nov 13 07:37	1°♏18'36	0.61049 AU	evening set	7692 Oct 21 03:33	16°♎03'01	
	7691 Nov 14 20:28	30°♎		min. Earth dist.	7692 Oct 25 05:39	13°♎28'26	0.58965 AU
inferior conj	7691 Nov 16 10:10	28°♎37'46	-3°50'03	inferior conj	7692 Oct 28 10:08	11°♎04'55	-4°49'32
minimum elong	7691 Nov 16 16:59	28°♎23'02	3°47'51	minimum elong	7692 Oct 28 16:52	10°♎52'14	4°48'05
morning rise	7691 Nov 23 21:27	23°♎45'01		morning rise	7692 Nov 05 08:27	6°♎34'26	
direct	7691 Nov 26 02:56	23°♎24'49		direct	7692 Nov 07 15:16	6°♎16'38	
asc. node	7691 Nov 28 21:44	23°♎57'38		asc. node	7692 Nov 14 18:45	9°♎22'29	
morning max el	7691 Dec 03 07:02	27°♎00'29	17°57'20	morning max el	7692 Nov 15 16:03	10°♎11'18	18°26'32
	7691 Dec 05 22:30	0°♏			7692 Nov 28 15:32	0°♏	
morning set	7691 Dec 18 23:11	21°♏40'44		morning set	7692 Dec 01 15:21	5°♏41'49	
	7691 Dec 23 12:17	0°♏					
superior conj	7691 Dec 29 05:36	10°♏12'49	0°33'53	superior conj	7692 Dec 10 15:47	22°♏48'59	1°04'05
minimum elong	7691 Dec 29 08:17	10°♏24'35	0°33'36	minimum elong	7692 Dec 10 19:18	23°♏05'11	1°03'44
desc. node	7692 Jan 02 21:32	18°♏13'57			7692 Dec 14 14:45	0°♏	
max. Earth dist.	7692 Jan 05 18:37	23°♏02'27	1.42470 AU	max. Earth dist.	7692 Dec 18 03:17	6°♏10'45	1.40456 AU
	7692 Jan 10 01:15	0°♏		desc. node	7692 Dec 19 18:34	8°♏58'51	
evening rise	7692 Jan 11 19:17	2°♏47'27		evening rise	7692 Dec 22 12:05	13°♏33'36	
	7692 Jan 29 23:37	0°♏			7693 Jan 01 21:17	0°♏	
evening max el	7692 Feb 13 10:44	18°♏11'38	22°17'19	evening max el	7693 Jan 24 05:33	0°♏	
retrograde	7692 Feb 23 01:33	23°♏53'53			7693 Jan 26 01:46	1°♏55'01	23°37'15
asc. node	7692 Feb 24 20:53	23°♏37'13		retrograde	7693 Feb 05 19:33	8°♏15'14	
evening set	7692 Feb 27 16:05	22°♏01'18		evening set	7693 Feb 10 22:10	6°♏07'50	
inferior conj	7692 Mar 04 00:13	15°♏39'52	2°24'20	asc. node	7693 Feb 10 17:56	6°♏16'40	
minimum elong	7692 Mar 03 21:56	15°♏47'49	2°23'43	inferior conj	7693 Feb 16 08:31	29°♏40'59	1°45'34
min. Earth dist.	7692 Mar 03 21:47	15°♏48'21	0.68358 AU	minimum elong	7693 Feb 16 06:27	29°♏48'04	1°44'55
morning rise	7692 Mar 09 03:36	9°♏29'39		min. Earth dist.	7693 Feb 15 18:28	0°♏29'05	0.68250 AU
direct	7692 Mar 13 21:18	7°♏29'43			7693 Feb 16 02:58	30°♎	
morning max el	7692 Mar 23 05:53	12°♏59'06	22°08'49	morning rise	7693 Feb 21 14:43	23°♏36'18	
desc. node	7692 Mar 30 21:03	21°♏56'07		direct	7693 Feb 25 18:37	21°♏59'02	
	7692 Apr 05 19:38	0°♏		morning max el	7693 Mar 05 23:25	26°♏40'41	20°47'55
morning set	7692 Apr 25 10:16	29°♏43'14			7693 Mar 09 00:31	0°♏	
	7692 Apr 25 14:24	0°♏		desc. node	7693 Mar 17 18:02	11°♏28'42	
max. Earth dist.	7692 Apr 30 19:55	8°♏37'06	1.41087 AU		7693 Mar 30 07:23	0°♏	
				morning set	7693 Apr 04 18:23	8°♏24'34	
superior conj	7692 May 08 14:34	22°♏03'06	-1°51'11	max. Earth dist.	7693 Apr 13 01:02	21°♏33'42	1.43061 AU
minimum elong	7692 May 08 20:11	22°♏28'04	1°50'46		7693 Apr 18 04:10	0°♏	
	7692 May 13 00:18	0°♏		superior conj	7693 Apr 19 21:05	2°♏51'28	-2°08'15
evening rise	7692 May 19 01:02	11°♏10'15		minimum elong	7693 Apr 20 00:21	3°♏05'17	2°08'11
asc. node	7692 May 22 19:56	18°♏11'03		evening rise	7693 May 01 20:04	23°♏38'04	
	7692 May 29 18:02	0°♏			7693 May 05 10:15	0°♏	
evening max el	7692 Jun 04 04:19	6°♏54'49	18°16'24	asc. node	7693 May 09 16:59	7°♏23'47	
retrograde	7692 Jun 11 08:15	10°♏30'27		evening max el	7693 May 18 16:17	19°♏57'44	18°05'35
evening set	7692 Jun 13 16:16	10°♏08'21		retrograde	7693 May 25 05:38	23°♏19'57	
inferior conj	7692 Jun 20 21:20	5°♏27'09	1°40'32	evening set	7693 May 27 21:00	22°♏46'55	
minimum elong	7692 Jun 21 00:15	5°♏20'55	1°39'30	inferior conj	7693 Jun 03 09:40	17°♏45'25	2°38'21
min. Earth dist.	7692 Jun 24 07:00	2°♏33'53	0.59090 AU	minimum elong	7693 Jun 03 12:36	17°♏38'09	2°37'33
desc. node	7692 Jun 26 20:27	0°♏39'45		min. Earth dist.	7693 Jun 06 12:36	14°♏41'37	0.61335 AU
	7692 Jun 27 21:54	30°♎		morning rise	7693 Jun 10 02:02	11°♏46'02	
morning rise	7692 Jun 28 05:07	29°♏49'40		desc. node	7693 Jun 13 17:29	9°♏57'12	
direct	7692 Jul 04 11:45	28°♏02'33		direct	7693 Jun 16 18:31	9°♏29'10	
	7692 Jul 11 08:13	0°♏		morning max el	7693 Jul 01 00:12	17°♏28'38	27°54'10
morning max el	7692 Jul 18 20:43	5°♏50'54	27°25'42		7693 Jul 11 10:04	0°♏	

	7693 Jul 29 13:15	0°♎			7694 Jul 05 09:46	0°♏	
morning set	7693 Aug 03 03:56	9°♎10'52		morning set	7694 Jul 18 00:20	23°♏05'32	
asc. node	7693 Aug 05 16:18	14°♎26'17			7694 Jul 21 09:36	0°♎	
max. Earth dist.	7693 Aug 08 23:34	21°♎33'09	1.31955 AU	max. Earth dist.	7694 Jul 23 02:41	3°♎35'32	1.32667 AU
				asc. node	7694 Jul 23 13:18	4°♎31'49	
superior conj	7693 Aug 10 12:52	24°♎57'29	0°48'00				
minimum elong	7693 Aug 10 10:56	24°♎46'51	0°47'34	superior conj	7694 Jul 25 20:07	9°♎25'23	0°23'09
	7693 Aug 12 19:47	0°♏		minimum elong	7694 Jul 25 19:02	9°♎19'30	0°22'51
evening rise	7693 Aug 17 07:47	9°♏48'40		evening rise	7694 Aug 01 19:27	24°♎30'25	
	7693 Aug 27 14:30	0°♏			7694 Aug 04 10:17	0°♏	
desc. node	7693 Sep 09 16:32	18°♏46'34			7694 Aug 23 01:27	0°♏	
evening max el	7693 Sep 12 08:02	21°♏30'20	24°52'43	evening max el	7694 Aug 24 19:28	1°♏47'49	23°15'14
retrograde	7693 Sep 26 04:27	28°♏29'06		desc. node	7694 Aug 27 13:35	4°♏13'24	
evening set	7693 Oct 01 16:25	27°♏21'03		retrograde	7694 Sep 07 06:14	8°♏31'38	
min. Earth dist.	7693 Oct 06 19:15	24°♏36'54	0.57014 AU	evening set	7694 Sep 11 06:28	7°♏56'25	
inferior conj	7693 Oct 09 14:21	22°♏47'28	-5°27'05	min. Earth dist.	7694 Sep 18 04:41	4°♏44'35	0.55499 AU
minimum elong	7693 Oct 09 17:22	22°♏42'33	5°26'50	inferior conj	7694 Sep 19 22:49	3°♏43'02	-5°24'18
morning rise	7693 Oct 17 20:33	18°♏39'50		minimum elong	7694 Sep 19 18:41	3°♏49'05	5°23'55
direct	7693 Oct 20 09:23	18°♏21'40			7694 Sep 27 20:08	30°♏	
morning max el	7693 Oct 29 15:40	22°♏45'03	19°17'21	morning rise	7694 Sep 28 09:06	29°♏51'53	
asc. node	7693 Nov 01 15:47	26°♏02'41		direct	7694 Oct 01 08:02	29°♏30'57	
	7693 Nov 04 13:16	0°♏			7694 Oct 04 17:02	0°♏	
morning set	7693 Nov 15 16:13	20°♏06'20		morning max el	7694 Oct 12 03:08	4°♏33'41	20°30'28
	7693 Nov 20 15:04	0°♏		asc. node	7694 Oct 19 12:47	13°♏42'57	
					7694 Oct 28 14:29	0°♏	
superior conj	7693 Nov 23 19:15	6°♏14'37	1°24'54	morning set	7694 Oct 30 22:51	4°♏46'09	
minimum elong	7693 Nov 23 22:07	6°♏28'30	1°24'44				
max. Earth dist.	7693 Nov 30 09:02	18°♏37'31	1.38294 AU	superior conj	7694 Nov 07 11:21	20°♏16'38	1°37'05
evening rise	7693 Dec 04 02:55	25°♏18'03		minimum elong	7694 Nov 07 12:56	20°♏24'42	1°37'05
desc. node	7693 Dec 06 15:34	29°♏39'06			7694 Nov 12 08:49	0°♏	
	7693 Dec 06 20:30	0°♏		max. Earth dist.	7694 Nov 12 16:16	0°♏35'59	1.36238 AU
	7693 Dec 26 12:53	0°♏		evening rise	7694 Nov 16 13:41	7°♏56'07	
evening max el	7694 Jan 08 14:56	15°♏40'44	24°55'12	desc. node	7694 Nov 23 12:36	20°♏10'57	
retrograde	7694 Jan 20 09:36	22°♏31'34			7694 Nov 29 13:59	0°♏	
evening set	7694 Jan 26 01:01	20°♏10'43		evening max el	7694 Dec 22 03:50	29°♏26'35	26°04'01
asc. node	7694 Jan 28 14:59	17°♏32'05			7694 Dec 22 17:47	0°♏	
min. Earth dist.	7694 Jan 30 13:28	15°♏06'26	0.67751 AU	retrograde	7695 Jan 03 18:52	6°♏37'19	
inferior conj	7694 Jan 31 14:53	13°♏42'43	0°58'47	evening set	7695 Jan 09 22:56	4°♏06'06	
minimum elong	7694 Jan 31 13:32	13°♏47'12	0°58'20		7695 Jan 13 20:53	30°♏	
morning rise	7694 Feb 06 02:18	7°♏45'11		min. Earth dist.	7695 Jan 14 04:38	29°♏36'21	0.66879 AU
direct	7694 Feb 09 17:25	6°♏29'30		inferior conj	7695 Jan 15 17:27	27°♏41'59	0°04'32
morning max el	7694 Feb 17 00:52	10°♏34'22	19°39'44	minimum elong	7695 Jan 15 17:20	27°♏42'22	0°04'35
greatest brilliancy	7694 Mar 01 19:23	27°♏15'39	-0.7m	transit middle	7695 Jan 15 17:20	27°♏42'22	0°04'35
	7694 Mar 03 15:44	0°♏		transit begin	7695 Jan 15 14:36	27°♏50'53	
desc. node	7694 Mar 04 15:00	1°♏26'53		transit end	7695 Jan 15 20:04	27°♏33'52	
morning set	7694 Mar 14 15:33	16°♏42'38		asc. node	7695 Jan 15 12:02	27°♏58'52	
	7694 Mar 23 04:43	0°♏		morning rise	7695 Jan 21 12:21	21°♏53'28	
max. Earth dist.	7694 Mar 26 13:12	5°♏17'25	1.44535 AU	direct	7695 Jan 24 16:11	20°♏56'35	
				morning max el	7695 Jan 31 09:47	24°♏36'53	18°46'49
superior conj	7694 Mar 31 02:35	12°♏34'18	-2°09'51		7695 Feb 04 23:48	0°♏	
minimum elong	7694 Mar 30 23:46	12°♏22'59	2°09'49	desc. node	7695 Feb 19 11:58	21°♏43'46	
	7694 Apr 10 17:04	0°♏		morning set	7695 Feb 22 02:16	25°♏47'36	
evening rise	7694 Apr 13 19:21	5°♏12'25			7695 Feb 24 18:43	0°♏	
asc. node	7694 Apr 26 14:01	26°♏08'43		max. Earth dist.	7695 Mar 09 06:01	19°♏30'55	1.45349 AU
	7694 Apr 29 08:41	0°♏					
evening max el	7694 May 02 05:29	3°♏17'48	18°13'45	superior conj	7695 Mar 10 12:06	21°♏28'53	-1°51'34
retrograde	7694 May 08 14:48	6°♏41'13		minimum elong	7695 Mar 10 03:18	20°♏54'19	1°50'53
evening set	7694 May 11 13:09	5°♏55'35			7695 Mar 15 21:54	0°♏	
inferior conj	7694 May 17 13:30	0°♏35'31	3°11'14	evening rise	7695 Mar 25 19:25	15°♏48'11	
minimum elong	7694 May 17 15:19	0°♏30'28	3°10'53	greatest brilliancy	7695 Apr 01 11:50	26°♏34'16	-0.9m
	7694 May 18 02:12	30°♏			7695 Apr 03 15:25	0°♏	
min. Earth dist.	7694 May 20 03:28	27°♏43'47	0.63465 AU	asc. node	7695 Apr 13 11:04	14°♏17'06	
morning rise	7694 May 23 16:11	24°♏23'58		evening max el	7695 Apr 15 17:12	16°♏48'17	18°40'11
direct	7694 May 30 10:43	21°♏45'47		retrograde	7695 Apr 22 07:27	20°♏25'51	
desc. node	7694 May 31 14:29	21°♏50'02		evening set	7695 Apr 25 12:57	19°♏26'30	
morning max el	7694 Jun 13 08:33	29°♏47'56	27°44'41	inferior conj	7695 May 01 04:49	13°♏49'33	3°24'23
	7694 Jun 13 13:20	0°♏		minimum elong	7695 May 01 05:14	13°♏48'17	3°24'17

min. Earth dist.	7695 May 03 03:35	11°♄26'59	0.65293 AU	inferior conj	7696 Apr 14 04:12	27°♄21'10	3°22'10
morning rise	7695 May 06 20:49	7°♄32'56		minimum elong	7696 Apr 14 03:23	27°♄23'51	3°22'03
direct	7695 May 13 10:43	4°♄45'33		min. Earth dist.	7696 Apr 15 11:46	25°♄38'05	0.66716 AU
desc. node	7695 May 18 11:29	6°♄06'30		morning rise	7696 Apr 19 12:48	21°♄03'51	
morning max el	7695 May 26 18:49	12°♄38'06	27°01'37	direct	7696 Apr 25 17:11	18°♄19'32	
	7695 Jun 09 16:55	0°♄		desc. node	7696 May 04 08:29	22°♄15'29	
	7695 Jun 28 00:18	0°♄		morning max el	7696 May 08 04:43	25°♄47'12	25°53'10
morning set	7695 Jul 01 10:53	6°♄28'51			7696 May 12 01:19	0°♄	
max. Earth dist.	7695 Jul 05 20:22	15°♄09'37	1.33867 AU		7696 Jun 02 05:44	0°♄	
				morning set	7696 Jun 13 07:50	19°♄10'34	
superior conj	7695 Jul 09 22:03	23°♄33'24	-0°05'12	max. Earth dist.	7696 Jun 17 03:05	26°♄19'11	1.35541 AU
minimum elong	7695 Jul 09 22:20	23°♄34'53	0°05'14		7696 Jun 19 00:41	0°♄	
behind sun begin	7695 Jul 09 16:58	23°♄06'45					
behind sun end	7695 Jul 10 03:42	24°♄03'04		superior conj	7696 Jun 22 16:09	7°♄15'05	-0°35'55
asc. node	7695 Jul 10 10:18	24°♄37'43		minimum elong	7696 Jun 22 18:15	7°♄25'40	0°35'38
	7695 Jul 12 23:11	0°♄		asc. node	7696 Jun 26 07:18	14°♄40'24	
evening rise	7695 Jul 17 05:58	9°♄04'51		evening rise	7696 Jun 30 13:17	23°♄26'22	
	7695 Jul 28 05:33	0°♄			7696 Jul 03 19:13	0°♄	
evening max el	7695 Aug 06 11:20	12°♄07'36	21°38'52	evening max el	7696 Jul 18 14:49	23°♄00'40	20°16'18
desc. node	7695 Aug 14 10:39	17°♄29'46		retrograde	7696 Jul 29 09:44	28°♄19'44	
retrograde	7695 Aug 18 21:07	18°♄16'49		evening set	7696 Jul 31 08:30	28°♄10'06	
evening set	7695 Aug 21 12:13	18°♄01'09		desc. node	7696 Jul 31 07:41	28°♄10'25	
inferior conj	7695 Aug 30 17:34	14°♄01'57	-4°27'20	inferior conj	7696 Aug 09 11:43	24°♄12'15	-2°44'39
minimum elong	7695 Aug 30 08:20	14°♄14'53	4°25'06	minimum elong	7696 Aug 09 04:15	24°♄23'14	2°42'05
min. Earth dist.	7695 Aug 30 13:39	14°♄07'26	0.54743 AU	min. Earth dist.	7696 Aug 11 00:06	23°♄18'48	0.54940 AU
morning rise	7695 Sep 08 05:33	10°♄11'32		morning rise	7696 Aug 17 22:55	20°♄02'34	
direct	7695 Sep 11 17:58	9°♄44'33		direct	7696 Aug 22 04:30	19°♄23'52	
morning max el	7695 Sep 24 02:02	15°♄34'02	22°03'31	morning max el	7696 Sep 04 16:21	25°♄58'31	23°48'16
	7695 Oct 05 03:28	0°♄			7696 Sep 08 12:08	0°♄	
asc. node	7695 Oct 06 09:47	2°♄08'34		asc. node	7696 Sep 22 06:47	21°♄08'46	
morning set	7695 Oct 15 08:54	19°♄33'40			7696 Sep 26 18:08	0°♄	
	7695 Oct 20 06:53	0°♄		morning set	7696 Sep 28 20:30	4°♄23'49	
superior conj	7695 Oct 22 12:13	4°♄42'37	1°41'42	superior conj	7696 Oct 05 18:56	19°♄23'57	1°39'39
minimum elong	7695 Oct 22 12:26	4°♄43'49	1°41'45	minimum elong	7696 Oct 05 17:59	19°♄18'50	1°39'39
max. Earth dist.	7695 Oct 26 05:59	12°♄28'30	1.34481 AU	max. Earth dist.	7696 Oct 08 04:24	24°♄32'53	1.33130 AU
evening rise	7695 Oct 30 16:24	21°♄16'48			7696 Oct 10 18:35	0°♄	
	7695 Nov 04 08:22	0°♄		evening rise	7696 Oct 13 07:17	5°♄10'05	
desc. node	7695 Nov 10 09:38	10°♄28'35		desc. node	7696 Oct 27 06:41	0°♄25'30	
	7695 Nov 23 10:41	0°♄			7696 Oct 27 00:21	0°♄	
evening max el	7695 Dec 04 17:00	13°♄05'57	26°56'30	evening max el	7696 Nov 16 05:26	26°♄27'46	27°25'19
retrograde	7695 Dec 17 22:35	20°♄25'04			7696 Nov 20 09:42	0°♄	
evening set	7695 Dec 24 13:59	17°♄48'34		retrograde	7696 Nov 29 19:48	3°♄46'29	
min. Earth dist.	7695 Dec 28 13:43	13°♄53'13	0.65645 AU	evening set	7696 Dec 06 19:40	1°♄11'49	
inferior conj	7695 Dec 30 14:05	11°♄34'09	-0°56'26		7696 Dec 08 07:20	30°♄	
minimum elong	7695 Dec 30 15:43	11°♄29'27	0°55'38	min. Earth dist.	7696 Dec 10 14:24	27°♄49'19	0.64075 AU
asc. node	7696 Jan 02 09:05	8°♄31'56		inferior conj	7696 Dec 13 02:18	25°♄13'09	-2°02'43
morning rise	7696 Jan 05 18:35	5°♄57'06		minimum elong	7696 Dec 13 06:05	25°♄03'17	2°01'05
direct	7696 Jan 08 13:03	5°♄15'15		asc. node	7696 Dec 19 06:09	20°♄04'03	
morning max el	7696 Jan 15 00:09	8°♄42'13	18°10'26	morning rise	7696 Dec 19 18:07	19°♄50'41	
	7696 Jan 29 19:57	0°♄		direct	7696 Dec 22 05:27	19°♄20'00	
morning set	7696 Feb 02 17:27	6°♄19'34		morning max el	7696 Dec 28 17:12	22°♄43'13	17°51'12
desc. node	7696 Feb 06 08:57	12°♄14'01			7697 Jan 03 10:46	0°♄	
				morning set	7697 Jan 14 12:54	18°♄14'37	
superior conj	7696 Feb 17 17:24	0°♄19'30	-1°15'26		7697 Jan 21 12:12	0°♄	
minimum elong	7696 Feb 17 08:50	29°♄45'45	1°14'21	desc. node	7697 Jan 23 05:57	2°♄53'06	
	7696 Feb 17 12:27	0°♄					
max. Earth dist.	7696 Feb 20 01:21	3°♄59'10	1.45429 AU	superior conj	7697 Jan 27 13:24	9°♄56'18	-0°30'44
evening rise	7696 Mar 04 21:19	25°♄32'52		minimum elong	7697 Jan 27 09:55	9°♄42'11	0°30'08
	7696 Mar 07 18:04	0°♄		max. Earth dist.	7697 Feb 01 20:37	18°♄25'53	1.44777 AU
greatest brilliancy	7696 Mar 17 02:06	14°♄22'10	-0.7m		7697 Feb 09 05:59	0°♄	
	7696 Mar 28 15:52	0°♄		evening rise	7697 Feb 12 09:43	4°♄51'49	
evening max el	7696 Mar 29 01:14	0°♄24'13	19°23'42		7697 Mar 01 04:57	0°♄	
asc. node	7696 Mar 30 08:07	1°♄37'48		evening max el	7697 Mar 12 04:08	14°♄01'52	20°22'18
retrograde	7696 Apr 05 04:17	4°♄27'17		asc. node	7697 Mar 17 05:12	17°♄56'44	
evening set	7696 Apr 08 17:37	3°♄13'26		retrograde	7697 Mar 20 02:41	18°♄39'45	
	7696 Apr 12 01:53	30°♄		evening set	7697 Mar 24 00:53	17°♄10'51	

inferior conj	7697 Mar 29 08:51	11° $\Upsilon$ 05'05	3°07'38	asc. node	7698 Mar 04 02:17	2° $\Upsilon$ 59'18	
minimum elong	7697 Mar 29 07:08	11° $\Upsilon$ 10'56	3°07'21	evening set	7698 Mar 08 08:57	1° $\Upsilon$ 15'11	
min. Earth dist.	7697 Mar 30 02:13	10° $\Upsilon$ 05'51	0.67698 AU		7698 Mar 09 17:22	30° $\Re$ $\Re$	
morning rise	7697 Apr 03 13:11	4° $\Upsilon$ 49'25		inferior conj	7698 Mar 13 16:29	24° $\Re$ 58'23	2°42'50
direct	7697 Apr 09 04:57	2° $\Upsilon$ 18'03		minimum elong	7698 Mar 13 14:17	25° $\Re$ 06'02	2°42'18
morning max el	7697 Apr 20 13:44	9° $\Upsilon$ 06'07	24°29'03	min. Earth dist.	7698 Mar 13 20:55	24° $\Re$ 42'59	0.68240 AU
desc. node	7697 Apr 21 05:30	9° $\Upsilon$ 46'36		morning rise	7698 Mar 18 19:27	18° $\Re$ 45'50	
	7697 May 07 00:40	0° $\Re$		direct	7698 Mar 23 21:12	16° $\Re$ 33'40	
	7697 May 25 21:11	0° $\Pi$		morning max el	7698 Apr 02 23:33	22° $\Re$ 32'34	22°59'19
morning set	7697 May 26 10:08	0° $\Pi$ 56'29		desc. node	7698 Apr 08 02:30	28° $\Re$ 17'21	
max. Earth dist.	7697 May 30 01:21	7° $\Pi$ 24'50	1.37594 AU		7698 Apr 09 11:41	0° $\Upsilon$	
					7698 Apr 30 08:42	0° $\Re$	
superior conj	7697 Jun 05 23:07	20° $\Pi$ 21'07	-1°07'22	morning set	7698 May 07 12:14	11° $\Re$ 32'48	
minimum elong	7697 Jun 06 03:11	20° $\Pi$ 40'48	1°06'49	max. Earth dist.	7698 May 11 21:40	18° $\Re$ 58'28	1.39828 AU
	7697 Jun 10 21:03	0° $\Re$			7698 May 18 03:25	0° $\Pi$	
asc. node	7697 Jun 13 04:19	4° $\Re$ 35'18					
evening rise	7697 Jun 14 14:53	7° $\Re$ 27'22		superior conj	7698 May 19 14:55	2° $\Pi$ 41'48	-1°36'46
	7697 Jun 27 09:13	0° $\Omega$		minimum elong	7698 May 19 20:26	3° $\Pi$ 07'10	1°36'12
evening max el	7697 Jul 01 07:15	4° $\Omega$ 37'29	19°13'25	evening rise	7698 May 29 07:45	20° $\Pi$ 59'56	
retrograde	7697 Jul 10 09:36	9° $\Omega$ 06'48		asc. node	7698 May 31 01:21	24° $\Pi$ 18'09	
evening set	7697 Jul 12 07:19	8° $\Omega$ 55'50			7698 Jun 03 02:25	0° $\Re$	
desc. node	7697 Jul 18 04:45	6° $\Omega$ 25'56		evening max el	7698 Jun 14 10:11	16° $\Re$ 55'02	18°31'19
inferior conj	7697 Jul 20 19:12	4° $\Omega$ 45'21	-0°47'33	retrograde	7698 Jun 22 03:59	20° $\Re$ 46'08	
minimum elong	7697 Jul 20 17:07	4° $\Omega$ 48'50	0°46'49	evening set	7698 Jun 24 07:33	20° $\Re$ 29'15	
min. Earth dist.	7697 Jul 23 13:34	2° $\Omega$ 55'01	0.56050 AU	inferior conj	7698 Jul 01 23:36	15° $\Re$ 59'43	0°54'20
morning rise	7697 Jul 29 00:01	0° $\Omega$ 01'22		minimum elong	7698 Jul 02 01:30	15° $\Re$ 56'00	0°53'33
	7697 Jul 29 01:28	30° $\Re$ $\Re$		desc. node	7698 Jul 05 01:49	13° $\Re$ 35'01	
direct	7697 Aug 03 01:37	29° $\Re$ 02'21		min. Earth dist.	7698 Jul 05 07:59	13° $\Re$ 23'28	0.57857 AU
	7697 Aug 08 01:34	0° $\Omega$		morning rise	7698 Jul 09 15:59	10° $\Re$ 39'09	
morning max el	7697 Aug 17 05:12	6° $\Omega$ 13'50	25°30'14	direct	7698 Jul 15 13:09	9° $\Re$ 10'53	
	7697 Sep 03 12:46	0° $\Re$		morning max el	7698 Jul 29 22:32	16° $\Re$ 49'15	26°52'35
asc. node	7697 Sep 09 03:48	10° $\Re$ 34'39			7698 Aug 09 18:47	0° $\Omega$	
morning set	7697 Sep 13 08:00	19° $\Re$ 11'58			7698 Aug 26 21:09	0° $\Re$	
	7697 Sep 18 07:08	0° $\Re$		asc. node	7698 Aug 27 00:46	0° $\Re$ 18'41	
				morning set	7698 Aug 28 17:43	3° $\Re$ 52'42	
superior conj	7697 Sep 20 05:09	4° $\Re$ 13'40	1°31'44				
minimum elong	7697 Sep 20 03:22	4° $\Re$ 03'50	1°31'35	superior conj	7698 Sep 04 16:52	19° $\Re$ 04'59	1°18'31
max. Earth dist.	7697 Sep 21 10:05	6° $\Re$ 52'39	1.32220 AU	minimum elong	7698 Sep 04 14:39	18° $\Re$ 52'42	1°18'12
evening rise	7697 Sep 27 07:00	19° $\Re$ 27'05		max. Earth dist.	7698 Sep 04 19:48	19° $\Re$ 21'15	1.31758 AU
	7697 Oct 02 14:03	0° $\Re$			7698 Sep 09 16:02	0° $\Re$	
desc. node	7697 Oct 14 03:44	19° $\Re$ 53'14		evening rise	7698 Sep 11 12:49	3° $\Re$ 59'32	
	7697 Oct 21 07:56	0° $\Re$			7698 Sep 25 08:17	0° $\Re$	
evening max el	7697 Oct 29 14:50	9° $\Re$ 18'43	27°24'18	desc. node	7698 Oct 01 00:48	8° $\Re$ 39'28	
retrograde	7697 Nov 12 09:58	16° $\Re$ 32'59		evening max el	7698 Oct 11 18:26	21° $\Re$ 25'31	26°49'43
evening set	7697 Nov 19 12:53	14° $\Re$ 09'24		retrograde	7698 Oct 25 16:10	28° $\Re$ 34'41	
min. Earth dist.	7697 Nov 23 04:53	11° $\Re$ 14'53	0.62214 AU	evening set	7698 Nov 01 13:28	26° $\Re$ 33'16	
inferior conj	7697 Nov 26 03:10	8° $\Re$ 31'50	-3°11'24	min. Earth dist.	7698 Nov 05 08:33	23° $\Re$ 56'07	0.60160 AU
minimum elong	7697 Nov 26 09:06	8° $\Re$ 18'03	3°09'13	inferior conj	7698 Nov 08 13:12	21° $\Re$ 20'15	-4°16'59
morning rise	7697 Dec 03 07:22	3° $\Re$ 27'27		minimum elong	7698 Nov 08 20:18	21° $\Re$ 05'45	4°14'59
direct	7697 Dec 05 14:10	3° $\Re$ 04'19		morning rise	7698 Nov 16 05:29	16° $\Re$ 37'08	
asc. node	7697 Dec 06 03:12	3° $\Re$ 05'40		direct	7698 Nov 18 11:00	16° $\Re$ 18'21	
morning max el	7697 Dec 12 09:54	6° $\Re$ 32'39	17°49'47	asc. node	7698 Nov 23 00:15	17° $\Re$ 40'48	
	7697 Dec 27 14:06	0° $\Re$		morning max el	7698 Nov 25 22:49	20° $\Re$ 00'41	18°07'19
morning set	7697 Dec 28 06:28	1° $\Re$ 13'04			7698 Dec 03 08:41	0° $\Re$	
				morning set	7698 Dec 11 15:46	14° $\Re$ 55'03	
superior conj	7698 Jan 08 10:27	20° $\Re$ 46'38	0°12'19		7698 Dec 19 19:03	0° $\Re$	
minimum elong	7698 Jan 08 11:36	20° $\Re$ 51'34	0°12'15				
behind sun begin	7698 Jan 08 05:53	20° $\Re$ 27'15		superior conj	7698 Dec 21 08:18	2° $\Re$ 47'47	0°47'50
behind sun end	7698 Jan 08 17:20	21° $\Re$ 15'50		minimum elong	7698 Dec 21 11:35	3° $\Re$ 02'28	0°47'30
desc. node	7698 Jan 10 02:57	23° $\Re$ 37'32		desc. node	7698 Dec 27 23:57	14° $\Re$ 23'08	
	7698 Jan 13 23:14	0° $\Re$		max. Earth dist.	7698 Dec 28 23:57	16° $\Re$ 04'22	1.41640 AU
max. Earth dist.	7698 Jan 15 12:54	2° $\Re$ 33'25	1.43462 AU	evening rise	7699 Jan 03 04:05	24° $\Re$ 35'00	
evening rise	7698 Jan 22 23:29	14° $\Re$ 22'13			7699 Jan 06 13:45	0° $\Re$	
	7698 Feb 02 06:40	0° $\Re$			7699 Jan 27 04:38	0° $\Re$	
evening max el	7698 Feb 23 01:30	27° $\Re$ 40'46	21°32'51	evening max el	7699 Feb 05 18:10	11° $\Re$ 21'20	22°51'04
	7698 Feb 25 13:32	0° $\Upsilon$		retrograde	7699 Feb 15 20:42	17° $\Re$ 21'01	
retrograde	7698 Mar 04 00:43	2° $\Upsilon$ 59'19		asc. node	7699 Feb 18 23:22	16° $\Re$ 32'12	

evening set	7699 Feb 20 16:12	15° $\text{K}$ 21'56		retrograde	7700 Jan 30 13:13	1° $\text{K}$ 40'29	
min. Earth dist.	7699 Feb 25 17:34	9° $\text{K}$ 23'25	0.68357 AU		7700 Feb 04 04:38	30° $\text{R}$ $\approx$	
inferior conj	7699 Feb 26 01:04	8° $\text{K}$ 57'25	2°08'56	evening set	7700 Feb 04 21:05	29° $\approx$ 27'18	
minimum elong	7699 Feb 25 22:49	9° $\text{K}$ 05'13	2°08'16	asc. node	7700 Feb 05 20:27	28° $\approx$ 33'18	
morning rise	7699 Mar 03 05:21	2° $\text{K}$ 49'18		min. Earth dist.	7700 Feb 09 13:56	24° $\approx$ 02'54	0.68079 AU
direct	7699 Mar 07 16:58	0° $\text{K}$ 59'14		inferior conj	7700 Feb 10 08:47	22° $\approx$ 59'15	1°26'42
morning max el	7699 Mar 16 13:21	6° $\text{K}$ 07'47	21°33'07	minimum elong	7700 Feb 10 06:57	23° $\approx$ 05'26	1°26'05
desc. node	7699 Mar 25 23:28	17° $\text{K}$ 30'51		morning rise	7700 Feb 15 16:52	16° $\approx$ 57'07	
	7699 Apr 03 19:00	0° $\text{Y}$		direct	7700 Feb 19 15:08	15° $\approx$ 29'14	
morning set	7699 Apr 17 10:37	20° $\text{Y}$ 52'23		morning max el	7700 Feb 27 10:04	19° $\approx$ 54'12	20°17'05
	7699 Apr 23 02:17	0° $\text{B}$			7700 Mar 07 17:14	0° $\text{K}$	
max. Earth dist.	7699 Apr 23 22:06	1° $\text{B}$ 21'34	1.41969 AU	desc. node	7700 Mar 12 20:26	7° $\text{K}$ 15'21	
				morning set	7700 Mar 27 11:14	29° $\text{K}$ 15'14	
superior conj	7699 May 01 10:52	14° $\text{B}$ 06'49	-1°59'55		7700 Mar 27 22:48	0° $\text{Y}$	
minimum elong	7699 May 01 15:58	14° $\text{B}$ 28'55	1°59'39	max. Earth dist.	7700 Apr 06 05:45	14° $\text{Y}$ 37'44	1.43755 AU
	7699 May 10 08:37	0° $\text{II}$					
evening rise	7699 May 12 12:03	3° $\text{II}$ 54'42		superior conj	7700 Apr 12 06:48	24° $\text{Y}$ 27'19	-2°11'10
asc. node	7699 May 17 22:23	13° $\text{II}$ 44'02		minimum elong	7700 Apr 12 07:52	24° $\text{Y}$ 31'46	2°11'13
evening max el	7699 May 28 19:58	29° $\text{II}$ 44'56	18°09'26		7700 Apr 15 14:47	0° $\text{B}$	
	7699 May 29 02:12	0° $\text{B}$		evening rise	7700 Apr 24 23:13	16° $\text{B}$ 00'44	
retrograde	7699 Jun 04 16:30	3° $\text{B}$ 13'08			7700 May 03 02:36	0° $\text{II}$	
evening set	7699 Jun 07 03:33	2° $\text{B}$ 46'50		asc. node	7700 May 04 19:26	2° $\text{II}$ 46'14	
	7699 Jun 11 16:58	30° $\text{R}$ $\text{II}$		evening max el	7700 May 12 08:54	12° $\text{II}$ 56'51	18°06'50
inferior conj	7699 Jun 14 01:13	27° $\text{II}$ 57'05	2°08'25	retrograde	7700 May 18 19:17	16° $\text{II}$ 17'36	
minimum elong	7699 Jun 14 04:20	27° $\text{II}$ 49'56	2°07'24	evening set	7700 May 21 13:41	15° $\text{II}$ 39'23	
min. Earth dist.	7699 Jun 17 09:12	24° $\text{II}$ 56'00	0.60038 AU	inferior conj	7700 May 27 20:38	10° $\text{II}$ 30'05	2°55'00
morning rise	7699 Jun 21 02:18	22° $\text{II}$ 08'40		minimum elong	7700 May 27 23:11	10° $\text{II}$ 23'28	2°54'24
desc. node	7699 Jun 21 22:51	21° $\text{II}$ 39'06		min. Earth dist.	7700 May 30 18:41	7° $\text{II}$ 28'45	0.62270 AU
direct	7699 Jun 27 14:04	20° $\text{II}$ 07'59		morning rise	7700 Jun 03 06:53	4° $\text{II}$ 24'41	
morning max el	7699 Jul 11 22:26	28° $\text{II}$ 03'06	27°42'30	desc. node	7700 Jun 08 19:53	2° $\text{II}$ 01'45	
	7699 Jul 13 19:45	0° $\text{B}$		direct	7700 Jun 10 01:22	1° $\text{II}$ 57'04	
	7699 Aug 03 12:48	0° $\text{Q}$		morning max el	7700 Jun 24 04:04	9° $\text{II}$ 58'58	27°54'32
morning set	7699 Aug 12 23:56	18° $\text{Q}$ 20'57			7700 Jul 09 18:00	0° $\text{B}$	
asc. node	7699 Aug 13 21:45	20° $\text{Q}$ 15'14			7700 Jul 26 18:55	0° $\text{Q}$	
	7699 Aug 18 10:10	0° $\text{M}$		morning set	7700 Jul 28 00:35	2° $\text{Q}$ 29'39	
max. Earth dist.	7699 Aug 19 05:56	1° $\text{M}$ 48'47	1.31749 AU	asc. node	7700 Jul 31 18:43	10° $\text{Q}$ 18'38	
				max. Earth dist.	7700 Aug 02 12:37	14° $\text{Q}$ 02'55	1.32200 AU
superior conj	7699 Aug 20 04:20	3° $\text{M}$ 52'26	1°00'27				
minimum elong	7699 Aug 20 02:09	3° $\text{M}$ 40'23	1°00'02	superior conj	7700 Aug 04 13:39	18° $\text{Q}$ 29'11	0°37'57
evening rise	7699 Aug 26 22:28	18° $\text{M}$ 41'00		minimum elong	7700 Aug 04 12:01	18° $\text{Q}$ 20'14	0°37'33
	7699 Sep 01 10:45	0° $\text{Q}$			7700 Aug 09 20:00	0° $\text{M}$	
desc. node	7699 Sep 17 21:51	26° $\text{Q}$ 27'42		evening rise	7700 Aug 11 09:56	3° $\text{M}$ 24'24	
	7699 Sep 20 22:43	0° $\text{M}$			7700 Aug 25 14:52	0° $\text{Q}$	
evening max el	7699 Sep 23 14:22	2° $\text{M}$ 42'24	25°42'49	desc. node	7700 Sep 04 18:55	12° $\text{Q}$ 54'28	
retrograde	7699 Oct 07 12:50	9° $\text{M}$ 46'02		evening max el	7700 Sep 05 03:31	13° $\text{Q}$ 15'25	24°12'10
evening set	7699 Oct 13 16:31	8° $\text{M}$ 17'15		retrograde	7700 Sep 18 21:26	20° $\text{Q}$ 09'05	
min. Earth dist.	7699 Oct 18 02:47	5° $\text{M}$ 40'46	0.58098 AU	evening set	7700 Sep 23 18:47	19° $\text{Q}$ 16'22	
inferior conj	7699 Oct 21 05:00	3° $\text{M}$ 29'32	-5°09'14	min. Earth dist.	7700 Sep 29 14:21	16° $\text{Q}$ 22'11	0.56299 AU
minimum elong	7699 Oct 21 10:41	3° $\text{M}$ 19'27	5°08'18	inferior conj	7700 Oct 02 00:31	14° $\text{Q}$ 52'06	-5°31'59
	7699 Oct 26 21:20	30° $\text{R}$ $\text{Q}$		minimum elong	7700 Oct 02 00:43	14° $\text{Q}$ 51'48	5°31'56
morning rise	7699 Oct 29 07:11	29° $\text{Q}$ 09'07		morning rise	7700 Oct 10 08:48	10° $\text{Q}$ 52'19	
direct	7699 Oct 31 15:44	28° $\text{Q}$ 51'38		direct	7700 Oct 13 01:29	10° $\text{Q}$ 33'14	
	7699 Nov 05 04:00	0° $\text{M}$		morning max el	7700 Oct 22 22:55	15° $\text{Q}$ 12'39	19°45'42
morning max el	7699 Nov 09 04:19	2° $\text{M}$ 57'33	18°45'25	asc. node	7700 Oct 27 18:15	20° $\text{Q}$ 47'17	
asc. node	7699 Nov 09 21:16	3° $\text{M}$ 39'49			7700 Nov 02 13:36	0° $\text{M}$	
morning set	7699 Nov 25 12:01	29° $\text{M}$ 07'03		morning set	7700 Nov 09 15:39	13° $\text{M}$ 39'02	
	7699 Nov 25 22:51	0° $\text{Z}$					
superior conj	7699 Dec 04 02:26	15° $\text{Z}$ 46'41	1°14'01	superior conj	7700 Nov 17 11:46	29° $\text{M}$ 29'02	1°31'04
minimum elong	7699 Dec 04 05:48	16° $\text{Z}$ 02'32	1°13'44	minimum elong	7700 Nov 17 14:07	29° $\text{M}$ 40'43	1°30'58
max. Earth dist.	7699 Dec 11 06:20	28° $\text{Z}$ 51'47	1.39537 AU		7700 Nov 17 18:01	0° $\text{Z}$	
	7699 Dec 11 21:52	0° $\text{Z}$		max. Earth dist.	7700 Nov 23 12:03	11° $\text{Z}$ 04'05	1.37397 AU
desc. node	7699 Dec 14 20:56	5° $\text{Z}$ 06'30		evening rise	7700 Nov 27 06:03	17° $\text{Z}$ 54'50	
evening rise	7699 Dec 15 06:17	5° $\text{Z}$ 46'10		desc. node	7700 Dec 01 17:56	25° $\text{Z}$ 43'55	
	7699 Dec 30 15:57	0° $\approx$			7700 Dec 04 07:20	0° $\text{Z}$	
evening max el	7700 Jan 19 08:06	25° $\approx$ 05'29	24°11'08		7700 Dec 24 23:25	0° $\approx$	
	7700 Jan 25 08:33	0° $\text{K}$		evening max el	7701 Jan 01 21:15	8° $\approx$ 52'50	25°26'10
				retrograde	7701 Jan 14 01:15	15° $\approx$ 53'03	

evening set	7701 Jan 19 22:02	13° $\approx$ 27'39		desc. node	7701 Nov 18 14:57	16° $\approx$ 10'34	
asc. node	7701 Jan 23 17:30	9° $\approx$ 22'29			7701 Nov 27 09:25	0° $\approx$	
min. Earth dist.	7701 Jan 24 07:38	8° $\approx$ 37'52	0.67422 AU	evening max el	7701 Dec 15 10:23	22° $\approx$ 37'25	26°28'51
inferior conj	7701 Jan 25 13:47	7° $\approx$ 00'48	0°36'40	retrograde	7701 Dec 28 07:59	29° $\approx$ 52'14	
minimum elong	7701 Jan 25 12:53	7° $\approx$ 03'42	0°36'23	evening set	7702 Jan 03 17:17	27° $\approx$ 18'02	
morning rise	7701 Jan 31 04:04	1° $\approx$ 06'38		min. Earth dist.	7702 Jan 07 20:23	23° $\approx$ 03'12	0.66399 AU
	7701 Feb 03 05:00	30° $\approx$		inferior conj	7702 Jan 09 14:06	20° $\approx$ 57'40	-0°20'36
direct	7701 Feb 03 14:16	29° $\approx$ 59'10		minimum elong	7702 Jan 09 14:39	20° $\approx$ 55'58	0°20'14
	7701 Feb 03 23:36	0° $\approx$		asc. node	7702 Jan 10 14:34	19° $\approx$ 44'42	
morning max el	7701 Feb 10 14:46	3° $\approx$ 51'59	19°15'15	morning rise	7702 Jan 15 12:50	15° $\approx$ 13'48	
greatest brilliancy	7701 Feb 23 19:42	21° $\approx$ 27'22	-0.7m	direct	7702 Jan 18 12:32	14° $\approx$ 23'39	
desc. node	7701 Feb 27 17:23	27° $\approx$ 22'31		morning max el	7702 Jan 25 02:19	17° $\approx$ 56'37	18°29'21
	7701 Mar 01 10:31	0° $\approx$			7702 Feb 03 06:41	0° $\approx$	
morning set	7701 Mar 06 11:22	7° $\approx$ 45'39		morning set	7702 Feb 14 09:25	17° $\approx$ 26'10	
max. Earth dist.	7701 Mar 19 20:29	28° $\approx$ 37'32	1.44968 AU	desc. node	7702 Feb 14 14:20	17° $\approx$ 45'42	
	7701 Mar 20 17:24	0° $\approx$			7702 Feb 22 08:03	0° $\approx$	
superior conj	7701 Mar 23 02:38	3° $\approx$ 46'34	-2°04'37	superior conj	7702 Mar 02 07:49	12° $\approx$ 32'15	-1°38'00
minimum elong	7701 Mar 22 20:49	3° $\approx$ 23'32	2°04'21	minimum elong	7702 Mar 01 22:12	11° $\approx$ 54'37	1°37'01
evening rise	7701 Apr 06 12:53	27° $\approx$ 10'30		max. Earth dist.	7702 Mar 02 15:18	13° $\approx$ 01'37	1.45475 AU
	7701 Apr 08 05:51	0° $\approx$			7702 Mar 13 10:52	0° $\approx$	
asc. node	7701 Apr 21 16:30	21° $\approx$ 17'19		evening rise	7702 Mar 18 03:01	7° $\approx$ 22'56	
evening max el	7701 Apr 25 21:53	26° $\approx$ 22'54	18°22'50	greatest brilliancy	7702 Mar 27 11:01	22° $\approx$ 07'19	-0.8m
retrograde	7701 May 02 08:04	29° $\approx$ 50'26			7702 Apr 01 15:07	0° $\approx$	
evening set	7701 May 05 09:32	28° $\approx$ 58'54		asc. node	7702 Apr 08 13:35	9° $\approx$ 07'01	
inferior conj	7701 May 11 05:50	23° $\approx$ 31'27	3°18'53	evening max el	7702 Apr 09 08:15	9° $\approx$ 56'00	18°56'40
minimum elong	7701 May 11 07:03	23° $\approx$ 27'54	3°18'41	retrograde	7702 Apr 16 02:58	13° $\approx$ 43'11	
min. Earth dist.	7701 May 13 13:24	20° $\approx$ 50'42	0.64292 AU	evening set	7702 Apr 19 11:45	12° $\approx$ 37'35	
morning rise	7701 May 17 03:37	17° $\approx$ 17'21		inferior conj	7702 Apr 25 00:58	6° $\approx$ 53'38	3°25'05
direct	7701 May 23 20:59	14° $\approx$ 33'52		minimum elong	7702 Apr 25 00:50	6° $\approx$ 54'04	3°25'02
desc. node	7701 May 26 16:54	14° $\approx$ 59'24		min. Earth dist.	7702 Apr 26 17:04	4° $\approx$ 47'19	0.65949 AU
morning max el	7701 Jun 06 13:25	22° $\approx$ 32'37	27°30'02	morning rise	7702 Apr 30 13:26	0° $\approx$ 36'21	
	7701 Jun 13 02:55	0° $\approx$			7702 May 01 06:57	30° $\approx$	
	7701 Jul 02 23:57	0° $\approx$		direct	7702 May 06 23:39	27° $\approx$ 49'15	
morning set	7701 Jul 11 17:11	16° $\approx$ 12'04			7702 May 13 09:07	0° $\approx$	
max. Earth dist.	7701 Jul 16 12:11	25° $\approx$ 54'24	1.33127 AU	desc. node	7702 May 13 13:54	0° $\approx$ 07'38	
	7701 Jul 18 11:00	0° $\approx$		morning max el	7702 May 19 23:56	5° $\approx$ 32'49	26°35'11
asc. node	7701 Jul 18 15:43	0° $\approx$ 24'56			7702 Jun 07 17:39	0° $\approx$	
superior conj	7701 Jul 19 18:57	2° $\approx$ 49'43	0°11'33	morning set	7702 Jun 24 22:32	29° $\approx$ 19'29	
minimum elong	7701 Jul 19 18:22	2° $\approx$ 46'40	0°11'19		7702 Jun 25 07:06	0° $\approx$	
behind sun begin	7701 Jul 19 14:30	2° $\approx$ 25'59		max. Earth dist.	7702 Jun 29 01:35	7° $\approx$ 18'41	1.34527 AU
behind sun end	7701 Jul 19 22:15	3° $\approx$ 07'22		superior conj	7702 Jul 03 17:55	16° $\approx$ 47'43	-0°17'59
evening rise	7701 Jul 26 21:23	18° $\approx$ 04'11		minimum elong	7702 Jul 03 18:56	16° $\approx$ 52'55	0°17'54
	7701 Aug 01 18:06	0° $\approx$		asc. node	7702 Jul 05 12:45	20° $\approx$ 30'18	
evening max el	7701 Aug 17 15:48	23° $\approx$ 29'41	22°33'05		7702 Jul 10 01:16	0° $\approx$	
desc. node	7701 Aug 22 15:59	27° $\approx$ 30'11		evening rise	7702 Jul 11 06:51	2° $\approx$ 34'34	
	7701 Aug 30 04:54	0° $\approx$			7702 Jul 26 22:21	0° $\approx$	
retrograde	7701 Aug 30 17:30	0° $\approx$ 00'38		evening max el	7702 Jul 30 11:58	4° $\approx$ 01'06	21°01'31
	7701 Aug 31 06:09	30° $\approx$		desc. node	7702 Aug 09 13:03	9° $\approx$ 43'21	
evening set	7701 Sep 03 02:35	29° $\approx$ 35'33		retrograde	7702 Aug 11 06:22	9° $\approx$ 50'39	
min. Earth dist.	7701 Sep 10 22:55	26° $\approx$ 07'51	0.55078 AU	evening set	7702 Aug 13 12:15	9° $\approx$ 38'44	
inferior conj	7701 Sep 12 01:55	25° $\approx$ 29'35	-5°06'51	inferior conj	7702 Aug 22 18:39	5° $\approx$ 41'29	-3°47'52
minimum elong	7701 Sep 11 18:55	25° $\approx$ 39'31	5°05'46	minimum elong	7702 Aug 22 09:21	5° $\approx$ 54'38	3°45'08
morning rise	7701 Sep 20 13:09	21° $\approx$ 41'17		min. Earth dist.	7702 Aug 23 08:10	5° $\approx$ 22'24	0.54706 AU
direct	7701 Sep 23 17:47	21° $\approx$ 18'04		morning rise	7702 Aug 31 06:50	1° $\approx$ 45'38	
morning max el	7701 Oct 05 04:41	26° $\approx$ 39'44	21°07'57	direct	7702 Sep 04 01:54	1° $\approx$ 14'47	
	7701 Oct 08 08:36	0° $\approx$		morning max el	7702 Sep 16 23:22	7° $\approx$ 23'36	22°47'26
asc. node	7701 Oct 14 15:15	8° $\approx$ 48'24		asc. node	7702 Oct 01 12:14	27° $\approx$ 30'31	
morning set	7701 Oct 25 00:00	28° $\approx$ 23'10			7702 Oct 02 20:46	0° $\approx$	
	7701 Oct 25 18:38	0° $\approx$		morning set	7702 Oct 09 11:00	13° $\approx$ 13'36	
superior conj	7701 Nov 01 07:59	13° $\approx$ 42'26	1°39'55	superior conj	7702 Oct 16 11:44	28° $\approx$ 17'04	1°41'36
minimum elong	7701 Nov 01 08:59	13° $\approx$ 47'36	1°39'57	minimum elong	7702 Oct 16 11:25	28° $\approx$ 15'26	1°41'38
max. Earth dist.	7701 Nov 05 22:00	22° $\approx$ 59'15	1.35449 AU		7702 Oct 17 07:04	0° $\approx$	
	7701 Nov 09 13:00	0° $\approx$		max. Earth dist.	7702 Oct 19 15:32	4° $\approx$ 56'49	1.33851 AU
evening rise	7701 Nov 10 00:05	0° $\approx$ 52'14		evening rise	7702 Oct 24 08:29	14° $\approx$ 28'44	

	7702 Nov 01 17:41	0°♊			7703 Oct 08 20:34	0°♎	
desc. node	7702 Nov 05 12:01	6°♊21'01		desc. node	7703 Oct 23 09:05	26°♎06'56	
	7702 Nov 22 04:51	0°♊			7703 Oct 25 21:37	0°♊	
evening max el	7702 Nov 27 23:16	6°♊10'43	27°11'54	evening max el	7703 Nov 10 10:33	19°♊20'43	27°28'44
retrograde	7702 Dec 11 09:03	13°♊30'46		retrograde	7703 Nov 24 03:40	26°♊38'42	
evening set	7702 Dec 18 04:42	10°♊53'41		evening set	7703 Dec 01 05:32	24°♊07'18	
min. Earth dist.	7702 Dec 22 02:01	7°♊12'58	0.65022 AU	min. Earth dist.	7703 Dec 04 22:36	20°♊57'34	0.63315 AU
inferior conj	7702 Dec 24 07:29	4°♊45'17	-1°24'01	inferior conj	7703 Dec 07 15:15	18°♊16'42	-2°31'47
minimum elong	7702 Dec 24 10:00	4°♊38'21	1°22'51	minimum elong	7703 Dec 07 19:59	18°♊04'55	2°29'52
asc. node	7702 Dec 28 11:36	0°♊37'57		morning rise	7703 Dec 14 12:18	13°♊01'38	
	7702 Dec 29 08:24	30°♋♊		asc. node	7703 Dec 15 08:39	12°♊45'56	
morning rise	7702 Dec 30 16:39	29°♊14'24		direct	7703 Dec 16 21:12	12°♊34'45	
direct	7703 Jan 02 07:47	28°♊37'50		morning max el	7703 Dec 23 11:37	15°♊59'22	17°48'18
	7703 Jan 06 07:46	0°♊			7704 Jan 02 09:23	0°♊	
morning max el	7703 Jan 08 18:17	2°♊01'52	18°00'09	morning set	7704 Jan 08 18:49	10°♊59'45	
morning set	7703 Jan 26 13:09	28°♊35'21		desc. node	7704 Jan 19 08:20	29°♊02'15	
	7703 Jan 27 09:36	0°♋			7704 Jan 19 22:14	0°♋	
desc. node	7703 Feb 01 11:20	8°♋20'22					
				superior conj	7704 Jan 20 23:31	1°♋44'38	-0°11'49
superior conj	7703 Feb 09 17:22	21°♋37'29	-0°56'50	minimum elong	7704 Jan 20 22:17	1°♋39'29	0°11'33
minimum elong	7703 Feb 09 10:43	21°♋11'01	0°55'53	behind sun begin	7704 Jan 20 15:37	1°♋11'59	
max. Earth dist.	7703 Feb 13 10:50	27°♋30'55	1.45237 AU	behind sun end	7704 Jan 21 04:56	2°♋06'57	
	7703 Feb 15 00:49	0°♋		max. Earth dist.	7704 Jan 27 04:32	11°♋49'26	1.44289 AU
evening rise	7703 Feb 25 21:37	16°♋52'26		evening rise	7704 Feb 05 08:35	26°♋11'16	
	7703 Mar 06 11:09	0°♌			7704 Feb 07 20:18	0°♋	
greatest brilliancy	7703 Mar 11 20:21	8°♌05'06	-0.7m		7704 Feb 28 12:46	0°♌	
evening max el	7703 Mar 23 14:06	23°♌32'13	19°46'54	evening max el	7704 Mar 05 14:34	7°♌10'22	20°51'08
asc. node	7703 Mar 26 10:40	26°♌03'06		asc. node	7704 Mar 12 07:44	11°♌51'24	
retrograde	7703 Mar 31 00:52	27°♌49'37		retrograde	7704 Mar 13 23:20	12°♌05'27	
evening set	7703 Apr 03 17:45	26°♌29'28		evening set	7704 Mar 18 01:32	10°♌30'19	
inferior conj	7703 Apr 09 02:55	20°♌31'00	3°17'22	inferior conj	7704 Mar 23 09:05	4°♌19'35	2°58'19
minimum elong	7703 Apr 09 01:40	20°♌35'09	3°17'12	minimum elong	7704 Mar 23 07:07	4°♌26'23	2°57'55
min. Earth dist.	7703 Apr 10 04:16	19°♌06'18	0.67182 AU	min. Earth dist.	7704 Mar 23 20:53	3°♌38'51	0.67977 AU
morning rise	7703 Apr 14 09:18	14°♌13'53			7704 Mar 26 16:15	30°♋♌	
direct	7703 Apr 20 08:27	11°♌34'11		morning rise	7704 Mar 28 12:28	28°♋04'52	
desc. node	7703 Apr 30 10:55	16°♌54'33		direct	7704 Apr 02 22:23	25°♋40'50	
morning max el	7703 May 02 09:36	18°♌47'26	25°18'44		7704 Apr 11 12:02	0°♌	
	7703 May 11 21:01	0°♍		morning max el	7704 Apr 13 18:32	2°♌09'22	23°50'56
	7703 May 31 19:20	0°♍		desc. node	7704 Apr 16 07:55	4°♌53'28	
morning set	7703 Jun 07 12:15	11°♍39'28			7704 May 04 22:09	0°♍	
max. Earth dist.	7703 Jun 11 04:08	18°♍22'59	1.36369 AU	morning set	7704 May 19 04:58	22°♍57'51	
				max. Earth dist.	7704 May 23 00:08	29°♍34'35	1.38529 AU
superior conj	7703 Jun 17 07:42	0°♎15'04	-0°49'18		7704 May 23 05:51	0°♍	
minimum elong	7703 Jun 17 10:39	0°♎29'41	0°48'53				
	7703 Jun 17 04:40	0°♎		superior conj	7704 May 30 08:47	13°♍03'24	-1°20'19
asc. node	7703 Jun 22 09:47	10°♎30'12		minimum elong	7704 May 30 13:36	13°♍26'11	1°19'42
evening rise	7703 Jun 25 12:05	16°♎48'13		evening rise	7704 Jun 08 10:22	0°♎38'10	
	7703 Jul 02 07:01	0°♏		asc. node	7704 Jun 08 06:49	0°♎20'46	
evening max el	7703 Jul 12 21:03	15°♏12'31	19°47'05		7704 Jun 08 02:35	0°♎	
retrograde	7703 Jul 22 22:38	20°♏10'01		evening max el	7704 Jun 24 18:30	27°♎08'18	18°53'06
evening set	7703 Jul 24 19:17	20°♏00'35			7704 Jun 28 11:14	0°♏	
desc. node	7703 Jul 27 10:08	19°♏17'52		retrograde	7704 Jul 03 05:38	1°♏19'11	
inferior conj	7703 Aug 02 17:07	15°♏58'49	-1°54'46	evening set	7704 Jul 05 05:26	1°♏06'12	
minimum elong	7703 Aug 02 11:50	16°♏06'57	1°52'52		7704 Jul 08 07:18	30°♋♎	
min. Earth dist.	7703 Aug 04 20:03	14°♏40'20	0.55300 AU	inferior conj	7704 Jul 13 09:03	26°♎48'28	-0°01'24
morning rise	7703 Aug 11 02:19	11°♏35'16		minimum elong	7704 Jul 13 08:59	26°♎48'35	0°01'29
direct	7703 Aug 15 15:54	10°♏49'13		transit middle	7704 Jul 13 08:59	26°♎48'35	0°01'29
morning max el	7703 Aug 29 12:25	17°♏41'37	24°32'57	transit begin	7704 Jul 13 05:16	26°♎55'12	
	7703 Sep 08 15:00	0°♐		transit end	7704 Jul 13 12:42	26°♎41'57	
asc. node	7703 Sep 18 09:14	16°♐42'39		desc. node	7704 Jul 13 07:11	26°♎51'47	
morning set	7703 Sep 23 22:46	28°♐03'44		min. Earth dist.	7704 Jul 16 11:34	24°♎36'24	0.56749 AU
	7703 Sep 24 20:31	0°♑		morning rise	7704 Jul 21 09:10	21°♎48'26	
				direct	7704 Jul 26 19:41	20°♎37'31	
superior conj	7703 Sep 30 20:14	13°♑03'19	1°36'59	morning max el	7704 Aug 10 02:29	28°♎02'06	26°08'25
minimum elong	7703 Sep 30 18:53	12°♑55'58	1°36'55		7704 Aug 12 01:04	0°♑	
max. Earth dist.	7703 Oct 02 17:06	17°♑07'10	1.32685 AU		7704 Sep 01 01:40	0°♐	
evening rise	7703 Oct 08 03:30	28°♑33'24		asc. node	7704 Sep 04 06:14	6°♐17'04	



morning set	7704 Sep 07 09:41	12° $\mathbb{M}$ 49'12			7705 Aug 23 23:23	0° $\mathbb{M}$	
superior conj	7704 Sep 14 07:19	27° $\mathbb{M}$ 54'34	1°26'45	superior conj	7705 Aug 29 19:07	12° $\mathbb{M}$ 44'34	1°11'26
minimum elong	7704 Sep 14 05:18	27° $\mathbb{M}$ 43'24	1°26'32	minimum elong	7705 Aug 29 16:51	12° $\mathbb{M}$ 32'02	1°11'03
max. Earth dist.	7704 Sep 15 00:48	29° $\mathbb{M}$ 31'10	1.31972 AU	max. Earth dist.	7705 Aug 29 11:14	12° $\mathbb{M}$ 00'53	1.31701 AU
	7704 Sep 15 06:01	0° $\mathbb{L}$		evening rise	7705 Sep 05 13:48	27° $\mathbb{M}$ 35'08	
evening rise	7704 Sep 21 06:07	12° $\mathbb{L}$ 58'07			7705 Sep 06 17:14	0° $\mathbb{L}$	
	7704 Sep 29 23:09	0° $\mathbb{M}$			7705 Sep 23 11:45	0° $\mathbb{M}$	
desc. node	7704 Oct 09 06:09	15° $\mathbb{M}$ 18'38		desc. node	7705 Sep 26 03:12	3° $\mathbb{M}$ 42'37	
	7704 Oct 20 19:35	0° $\mathbb{L}$		evening max el	7705 Oct 04 18:42	13° $\mathbb{M}$ 41'34	26°24'59
evening max el	7704 Oct 22 17:57	1° $\mathbb{L}$ 54'44	27°13'46	retrograde	7705 Oct 18 16:46	20° $\mathbb{M}$ 47'33	
retrograde	7704 Nov 05 14:41	9° $\mathbb{L}$ 06'39		evening set	7705 Oct 25 08:16	18° $\mathbb{M}$ 59'12	
evening set	7704 Nov 12 16:14	6° $\mathbb{L}$ 51'29		min. Earth dist.	7705 Oct 29 08:04	16° $\mathbb{M}$ 24'38	0.59274 AU
min. Earth dist.	7704 Nov 16 08:42	4° $\mathbb{L}$ 05'35	0.61356 AU	inferior conj	7705 Nov 01 12:58	13° $\mathbb{M}$ 57'23	-4°41'36
inferior conj	7704 Nov 19 10:14	1° $\mathbb{L}$ 23'49	-3°40'05	minimum elong	7705 Nov 01 19:54	13° $\mathbb{M}$ 44'02	4°39'57
minimum elong	7704 Nov 19 16:51	1° $\mathbb{L}$ 09'12	3°37'52	morning rise	7705 Nov 09 09:48	9° $\mathbb{M}$ 23'34	
	7704 Nov 21 01:00	30° $\mathbb{R}$ $\mathbb{M}$		direct	7705 Nov 11 16:11	9° $\mathbb{M}$ 05'33	
morning rise	7704 Nov 26 19:41	26° $\mathbb{M}$ 27'50		asc. node	7705 Nov 18 02:43	11° $\mathbb{M}$ 40'13	
direct	7704 Nov 29 01:24	26° $\mathbb{M}$ 06'58		morning max el	7705 Nov 19 13:14	12° $\mathbb{M}$ 56'36	18°20'51
asc. node	7704 Dec 01 05:41	26° $\mathbb{M}$ 27'29			7705 Dec 01 00:49	0° $\mathbb{L}$	
morning max el	7704 Dec 06 03:04	29° $\mathbb{M}$ 40'30	17°54'43	morning set	7705 Dec 05 10:18	8° $\mathbb{L}$ 15'52	
	7704 Dec 06 10:51	0° $\mathbb{L}$					
morning set	7704 Dec 21 19:46	24° $\mathbb{L}$ 18'50		superior conj	7705 Dec 14 14:37	25° $\mathbb{L}$ 33'53	1°00'06
	7704 Dec 24 22:42	0° $\mathbb{L}$		minimum elong	7705 Dec 14 18:07	25° $\mathbb{L}$ 49'55	0°59'45
					7705 Dec 17 01:19	0° $\mathbb{L}$	
superior conj	7705 Jan 01 07:27	13° $\mathbb{L}$ 05'50	0°28'29	max. Earth dist.	7705 Dec 22 04:03	8° $\mathbb{L}$ 57'58	1.40773 AU
minimum elong	7705 Jan 01 09:49	13° $\mathbb{L}$ 16'07	0°28'15	desc. node	7705 Dec 23 02:17	10° $\mathbb{L}$ 32'45	
desc. node	7705 Jan 05 05:18	19° $\mathbb{L}$ 47'26		evening rise	7705 Dec 26 16:53	16° $\mathbb{L}$ 34'33	
max. Earth dist.	7705 Jan 08 18:34	25° $\mathbb{L}$ 42'24	1.42742 AU		7706 Jan 04 03:54	0° $\mathbb{L}$	
	7705 Jan 11 09:49	0° $\mathbb{L}$			7706 Jan 25 21:07	0° $\mathbb{L}$	
evening rise	7705 Jan 15 03:21	5° $\mathbb{L}$ 56'56		evening max el	7706 Jan 30 01:15	4° $\mathbb{L}$ 33'04	23°25'14
	7705 Jan 31 03:18	0° $\mathbb{L}$		retrograde	7706 Feb 09 15:03	10° $\mathbb{L}$ 48'04	
evening max el	7705 Feb 16 09:52	20° $\mathbb{L}$ 50'16	22°05'36	asc. node	7706 Feb 14 01:52	9° $\mathbb{L}$ 10'31	
retrograde	7705 Feb 25 20:31	26° $\mathbb{L}$ 26'12		evening set	7706 Feb 14 15:50	8° $\mathbb{L}$ 42'41	
asc. node	7705 Feb 27 04:48	26° $\mathbb{L}$ 16'54		min. Earth dist.	7706 Feb 19 13:21	2° $\mathbb{L}$ 58'55	0.68295 AU
evening set	7705 Mar 02 09:24	24° $\mathbb{L}$ 35'47		inferior conj	7706 Feb 20 01:45	2° $\mathbb{L}$ 16'19	1°52'00
inferior conj	7705 Mar 07 17:20	18° $\mathbb{L}$ 15'32	2°29'31	minimum elong	7706 Feb 19 23:38	2° $\mathbb{L}$ 23'38	1°51'19
minimum elong	7705 Mar 07 15:03	18° $\mathbb{L}$ 23'28	2°28'54		7706 Feb 21 18:15	30° $\mathbb{R}$ $\mathbb{L}$	
min. Earth dist.	7705 Mar 07 16:39	18° $\mathbb{L}$ 17'54	0.68343 AU	morning rise	7706 Feb 25 07:23	26° $\mathbb{L}$ 10'47	
morning rise	7705 Mar 12 20:32	12° $\mathbb{L}$ 04'45		direct	7706 Mar 01 13:15	24° $\mathbb{L}$ 30'16	
direct	7705 Mar 17 16:20	10° $\mathbb{L}$ 01'33		morning max el	7706 Mar 09 21:53	29° $\mathbb{L}$ 18'27	20°59'13
morning max el	7705 Mar 27 05:22	15° $\mathbb{L}$ 38'15	22°21'43		7706 Mar 10 14:11	0° $\mathbb{L}$	
desc. node	7705 Apr 03 04:53	23° $\mathbb{L}$ 43'53		desc. node	7706 Mar 21 01:50	13° $\mathbb{L}$ 11'48	
	7705 Apr 07 21:58	0° $\mathbb{L}$			7706 Apr 01 13:46	0° $\mathbb{L}$	
	7705 Apr 27 22:34	0° $\mathbb{L}$		morning set	7706 Apr 09 06:40	11° $\mathbb{L}$ 50'39	
morning set	7705 Apr 29 19:13	3° $\mathbb{L}$ 00'28		max. Earth dist.	7706 Apr 17 01:31	24° $\mathbb{L}$ 16'04	1.42797 AU
max. Earth dist.	7705 May 04 21:29	11° $\mathbb{L}$ 27'13	1.40770 AU		7706 Apr 20 13:09	0° $\mathbb{L}$	
superior conj	7705 May 12 16:41	25° $\mathbb{L}$ 01'33	-1°47'40	superior conj	7706 Apr 24 02:45	5° $\mathbb{L}$ 59'28	-2°06'30
minimum elong	7705 May 12 22:21	25° $\mathbb{L}$ 26'59	1°47'11	minimum elong	7706 Apr 24 06:38	6° $\mathbb{L}$ 15'59	2°06'25
	7705 May 15 10:40	0° $\mathbb{L}$		evening rise	7706 May 05 19:54	26° $\mathbb{L}$ 30'26	
evening rise	7705 May 22 22:20	13° $\mathbb{L}$ 55'15			7706 May 07 18:46	0° $\mathbb{L}$	
asc. node	7705 May 26 03:50	19° $\mathbb{L}$ 56'48		asc. node	7706 May 13 00:52	9° $\mathbb{L}$ 13'13	
	7705 May 31 20:37	0° $\mathbb{L}$		evening max el	7706 May 22 12:15	22° $\mathbb{L}$ 39'59	18°05'55
evening max el	7705 Jun 08 00:47	9° $\mathbb{L}$ 40'24	18°19'37	retrograde	7706 May 29 03:09	26° $\mathbb{L}$ 03'23	
retrograde	7705 Jun 15 07:54	13° $\mathbb{L}$ 19'31		evening set	7706 May 31 17:23	25° $\mathbb{L}$ 32'10	
evening set	7705 Jun 17 14:47	12° $\mathbb{L}$ 58'50		inferior conj	7706 Jun 07 08:15	20° $\mathbb{L}$ 33'35	2°31'18
inferior conj	7705 Jun 24 22:36	8° $\mathbb{L}$ 20'31	1°29'20	minimum elong	7706 Jun 07 11:16	20° $\mathbb{L}$ 26'14	2°30'26
minimum elong	7705 Jun 25 01:19	8° $\mathbb{L}$ 14'49	1°28'19	min. Earth dist.	7706 Jun 10 12:41	17° $\mathbb{L}$ 29'43	0.61000 AU
min. Earth dist.	7705 Jun 28 08:18	5° $\mathbb{L}$ 31'01	0.58764 AU	morning rise	7706 Jun 14 02:49	14° $\mathbb{L}$ 36'35	
desc. node	7705 Jun 30 04:15	4° $\mathbb{L}$ 08'52		desc. node	7706 Jun 17 01:17	13° $\mathbb{L}$ 04'53	
morning rise	7705 Jul 02 08:40	2° $\mathbb{L}$ 47'12		direct	7706 Jun 20 18:15	12° $\mathbb{L}$ 23'45	
direct	7705 Jul 08 13:04	1° $\mathbb{L}$ 05'04		morning max el	7706 Jul 05 00:54	20° $\mathbb{L}$ 22'29	27°52'27
morning max el	7705 Jul 22 22:15	8° $\mathbb{L}$ 50'49	27°18'20		7706 Jul 13 07:19	0° $\mathbb{L}$	
	7705 Aug 08 00:55	0° $\mathbb{L}$			7706 Jul 31 23:37	0° $\mathbb{L}$	
asc. node	7705 Aug 22 03:14	26° $\mathbb{L}$ 06'48		morning set	7706 Aug 06 22:13	11° $\mathbb{L}$ 45'04	
morning set	7705 Aug 22 18:07	27° $\mathbb{L}$ 24'50		asc. node	7706 Aug 09 00:12	16° $\mathbb{L}$ 06'25	

max. Earth dist.	7706 Aug 12 20:32	24° $\Omega$ 24'26	1.31882 AU	morning set	7707 Jul 21 19:49	25° $\Omega$ 44'00	
					7707 Jul 23 22:09	0° $\Omega$	
superior conj	7706 Aug 14 05:51	27° $\Omega$ 27'26	0°51'25	asc. node	7707 Jul 26 21:11	6° $\Omega$ 11'44	
minimum elong	7706 Aug 14 03:50	27° $\Omega$ 16'20	0°50'59	max. Earth dist.	7707 Jul 27 00:40	6° $\Omega$ 30'15	1.32529 AU
	7706 Aug 15 09:31	0° $\Pi$					
evening rise	7706 Aug 21 00:26	12° $\Pi$ 17'39		superior conj	7707 Jul 29 13:44	11° $\Omega$ 58'07	0°27'12
	7706 Aug 29 21:39	0° $\Omega$		minimum elong	7707 Jul 29 12:28	11° $\Omega$ 51'21	0°26'50
desc. node	7706 Sep 13 00:16	20° $\Omega$ 59'17		evening rise	7707 Aug 05 12:09	27° $\Omega$ 00'12	
evening max el	7706 Sep 16 11:14	24° $\Omega$ 37'08	25°06'24		7707 Aug 06 22:07	0° $\Pi$	
	7706 Sep 23 19:53	0° $\Pi$			7707 Aug 24 11:17	0° $\Omega$	
retrograde	7706 Sep 30 08:21	1° $\Pi$ 37'38		evening max el	7707 Aug 28 22:47	4° $\Omega$ 57'20	23°30'04
evening set	7706 Oct 06 00:53	0° $\Pi$ 24'03		desc. node	7707 Aug 30 21:21	6° $\Omega$ 42'52	
	7706 Oct 06 22:27	30° $\Omega$		retrograde	7707 Sep 11 12:00	11° $\Omega$ 44'27	
min. Earth dist.	7706 Oct 10 22:40	27° $\Omega$ 42'38	0.57280 AU	evening set	7707 Sep 15 17:42	11° $\Omega$ 05'07	
inferior conj	7706 Oct 13 20:11	25° $\Omega$ 46'57	-5°23'39	min. Earth dist.	7707 Sep 22 08:37	7° $\Omega$ 58'13	0.55682 AU
minimum elong	7706 Oct 14 00:03	25° $\Omega$ 40'31	5°23'14	inferior conj	7707 Sep 24 07:20	6° $\Omega$ 48'59	-5°28'04
morning rise	7706 Oct 22 01:30	21° $\Omega$ 36'16		minimum elong	7707 Sep 24 04:20	6° $\Omega$ 53'27	5°27'52
direct	7706 Oct 24 13:02	21° $\Omega$ 18'24		morning rise	7707 Oct 02 17:11	2° $\Omega$ 56'00	
morning max el	7706 Nov 02 14:29	25° $\Omega$ 36'50	19°08'22	direct	7707 Oct 05 14:19	2° $\Omega$ 35'40	
asc. node	7706 Nov 04 23:43	28° $\Omega$ 10'08		morning max el	7707 Oct 16 03:51	7° $\Omega$ 32'17	20°18'13
	7706 Nov 06 10:43	0° $\Pi$		asc. node	7707 Oct 22 20:43	15° $\Omega$ 41'55	
morning set	7706 Nov 19 10:05	22° $\Pi$ 37'37			7707 Oct 31 01:16	0° $\Pi$	
	7706 Nov 23 03:03	0° $\Omega$		morning set	7707 Nov 03 16:01	7° $\Pi$ 15'18	
superior conj	7706 Nov 27 15:51	8° $\Omega$ 53'23	1°22'18	superior conj	7707 Nov 11 06:19	22° $\Pi$ 50'25	1°35'44
minimum elong	7706 Nov 27 18:52	9° $\Omega$ 07'55	1°22'06	minimum elong	7707 Nov 11 08:07	22° $\Pi$ 59'29	1°35'43
max. Earth dist.	7706 Dec 04 09:50	21° $\Omega$ 29'57	1.38616 AU		7707 Nov 14 20:47	0° $\Omega$	
evening rise	7706 Dec 08 04:31	28° $\Omega$ 10'43		max. Earth dist.	7707 Nov 16 16:16	3° $\Omega$ 30'02	1.36530 AU
	7706 Dec 09 05:55	0° $\Omega$		evening rise	7707 Nov 20 12:33	10° $\Omega$ 41'15	
desc. node	7706 Dec 09 23:17	1° $\Omega$ 14'05		desc. node	7707 Nov 26 20:19	21° $\Omega$ 47'22	
	7706 Dec 28 14:58	0° $\approx$			7707 Dec 01 20:48	0° $\Omega$	
evening max el	7707 Jan 12 14:29	18° $\approx$ 18'16	24°43'55		7707 Dec 24 02:21	0° $\approx$	
retrograde	7707 Jan 24 05:49	25° $\approx$ 05'33		evening max el	7707 Dec 26 03:25	2° $\approx$ 04'36	25°54'41
evening set	7707 Jan 29 19:16	22° $\approx$ 46'32		retrograde	7708 Jan 07 15:54	9° $\approx$ 13'09	
asc. node	7707 Jan 31 22:56	20° $\approx$ 37'09		evening set	7708 Jan 13 18:03	6° $\approx$ 43'23	
min. Earth dist.	7707 Feb 03 08:48	17° $\approx$ 37'00	0.67851 AU	min. Earth dist.	7708 Jan 18 00:45	2° $\approx$ 08'21	0.67031 AU
inferior conj	7707 Feb 04 08:33	16° $\approx$ 18'14	1°06'23	asc. node	7708 Jan 18 20:01	1° $\approx$ 08'04	
minimum elong	7707 Feb 04 07:03	16° $\approx$ 23'13	1°05'53	inferior conj	7708 Jan 19 11:49	0° $\approx$ 18'16	0°13'12
morning rise	7707 Feb 09 19:01	10° $\approx$ 19'28		minimum elong	7708 Jan 19 11:29	0° $\approx$ 19'21	0°13'11
direct	7707 Feb 13 11:54	9° $\approx$ 00'47		transit middle	7708 Jan 19 11:29	0° $\approx$ 19'21	0°13'11
morning max el	7707 Feb 20 22:10	13° $\approx$ 10'33	19°48'53	transit begin	7708 Jan 19 09:51	0° $\approx$ 24'29	
	7707 Mar 05 20:14	0° $\Omega$		transit end	7708 Jan 19 13:06	0° $\approx$ 14'13	
greatest brilliancy	7707 Mar 05 19:36	29° $\approx$ 57'41	-0.6m		7708 Jan 19 17:38	30° $\Omega$	
desc. node	7707 Mar 07 22:47	3° $\Omega$ 06'34		morning rise	7708 Jan 25 05:27	24° $\Omega$ 28'08	
morning set	7707 Mar 19 03:56	20° $\Omega$ 07'49		direct	7708 Jan 28 10:51	23° $\Omega$ 28'38	
	7707 Mar 25 12:31	0° $\Omega$		morning max el	7708 Feb 04 06:03	27° $\Omega$ 11'55	18°53'37
max. Earth dist.	7707 Mar 30 12:25	7° $\Omega$ 52'38	1.44351 AU		7708 Feb 06 19:10	0° $\approx$	
				desc. node	7708 Feb 22 19:44	23° $\approx$ 20'57	
superior conj	7707 Apr 04 11:56	15° $\Omega$ 51'59	-2°10'50	morning set	7708 Feb 26 11:17	29° $\approx$ 02'00	
minimum elong	7707 Apr 04 10:12	15° $\Omega$ 44'58	2°10'51		7708 Feb 27 02:09	0° $\Omega$	
	7707 Apr 13 01:40	0° $\Omega$		max. Earth dist.	7708 Mar 12 04:37	22° $\Omega$ 02'29	1.45273 AU
evening rise	7707 Apr 17 22:25	8° $\Omega$ 13'37					
asc. node	7707 Apr 29 21:56	28° $\Omega$ 03'25		superior conj	7708 Mar 13 23:43	24° $\Omega$ 51'46	-1°55'38
	7707 May 01 05:36	0° $\Pi$		minimum elong	7708 Mar 13 15:31	24° $\Omega$ 19'30	1°55'03
evening max el	7707 May 06 01:30	5° $\Pi$ 58'37	18°11'23		7708 Mar 17 05:54	0° $\Omega$	
retrograde	7707 May 12 10:52	9° $\Pi$ 21'01		evening rise	7708 Mar 29 02:01	18° $\Omega$ 57'49	
evening set	7707 May 15 08:08	8° $\Pi$ 37'24			7708 Apr 04 21:23	0° $\Omega$	
inferior conj	7707 May 21 10:05	3° $\Pi$ 20'09	3°07'34	asc. node	7708 Apr 15 19:01	16° $\Omega$ 18'12	
minimum elong	7707 May 21 12:06	3° $\Pi$ 14'37	3°07'11	evening max el	7708 Apr 18 13:39	19° $\Omega$ 28'14	18°35'11
min. Earth dist.	7707 May 24 02:16	0° $\Pi$ 25'12	0.63161 AU	retrograde	7708 Apr 25 02:35	23° $\Omega$ 02'45	
	7707 May 24 11:56	30° $\Omega$		evening set	7708 Apr 28 07:02	22° $\Omega$ 05'28	
morning rise	7707 May 27 14:37	27° $\Omega$ 09'50		inferior conj	7708 May 03 23:57	16° $\Omega$ 31'04	3°23'25
direct	7707 Jun 03 09:21	24° $\Omega$ 33'56		minimum elong	7708 May 04 00:34	16° $\Omega$ 29'10	3°23'18
desc. node	7707 Jun 03 22:18	24° $\Omega$ 34'51		min. Earth dist.	7708 May 06 01:03	14° $\Omega$ 03'19	0.65046 AU
	7707 Jun 14 13:54	0° $\Pi$		morning rise	7708 May 09 17:21	10° $\Omega$ 14'59	
morning max el	7707 Jun 17 08:42	2° $\Pi$ 36'42	27°48'21	direct	7708 May 16 08:22	7° $\Omega$ 28'07	
	7707 Jul 07 16:11	0° $\Omega$		desc. node	7708 May 20 19:19	8° $\Omega$ 31'39	

morning max el	7708 May 29 18:46	15°♄22'46	27°09'50	direct	7709 Apr 29 13:55	20°♃57'43	
	7708 Jun 10 18:09	0°♄		desc. node	7709 May 07 16:19	24°♃25'40	
	7708 Jun 29 10:18	0°♄		morning max el	7709 May 12 04:50	28°♃29'40	26°04'34
morning set	7708 Jul 04 08:03	9°♄12'35			7709 May 13 15:26	0°♄	
max. Earth dist.	7708 Jul 08 19:54	18°♄08'38	1.33660 AU		7709 Jun 04 12:40	0°♄	
				morning set	7709 Jun 17 07:17	22°♄00'56	
superior conj	7708 Jul 12 16:37	26°♄09'44	-0°00'40	max. Earth dist.	7709 Jun 21 04:17	29°♄21'12	1.35269 AU
minimum elong	7708 Jul 12 16:40	26°♄09'57	0°00'47		7709 Jun 21 12:18	0°♄	
behind sun begin	7708 Jul 12 11:05	25°♄40'34					
behind sun end	7708 Jul 12 22:14	26°♄39'22		superior conj	7709 Jun 26 12:04	9°♄55'38	-0°31'09
asc. node	7708 Jul 12 18:11	26°♄17'59		minimum elong	7709 Jun 26 13:52	10°♄04'48	0°30'55
	7708 Jul 14 12:06	0°♄		asc. node	7709 Jun 29 15:13	16°♄21'24	
evening rise	7708 Jul 19 22:58	11°♄36'12		evening rise	7709 Jul 04 06:54	26°♄00'02	
	7708 Jul 29 09:41	0°♄			7709 Jul 06 05:54	0°♄	
evening max el	7708 Aug 09 13:31	15°♄14'47	21°52'32	evening max el	7709 Jul 22 15:01	26°♄01'29	20°27'23
desc. node	7708 Aug 16 18:27	20°♄21'05			7709 Jul 27 21:35	0°♄	
retrograde	7708 Aug 22 03:55	21°♄29'57		retrograde	7709 Aug 02 16:03	1°♄28'28	
evening set	7708 Aug 24 23:10	21°♄12'22		desc. node	7709 Aug 03 15:32	1°♄26'03	
min. Earth dist.	7708 Sep 02 17:27	17°♄25'52	0.54803 AU	evening set	7709 Aug 04 16:12	1°♄18'27	
inferior conj	7708 Sep 03 03:26	17°♄11'52	-4°39'24		7709 Aug 08 20:56	30°♄	
minimum elong	7708 Sep 02 18:33	17°♄24'19	4°37'26	inferior conj	7709 Aug 13 20:43	27°♄21'12	-3°01'59
morning rise	7708 Sep 11 15:15	13°♄22'34		minimum elong	7709 Aug 13 12:35	27°♄32'58	2°59'16
direct	7708 Sep 15 01:39	12°♄56'36		min. Earth dist.	7709 Aug 15 03:24	26°♄36'42	0.54851 AU
morning max el	7708 Sep 27 04:24	18°♄38'58	21°48'41	morning rise	7709 Aug 22 08:19	23°♄15'48	
	7708 Oct 06 06:29	0°♄		direct	7709 Aug 26 11:08	22°♄39'21	
asc. node	7708 Oct 08 17:42	4°♄01'17		morning max el	7709 Sep 08 19:33	29°♄07'15	23°32'31
morning set	7708 Oct 18 01:42	22°♄01'57			7709 Sep 09 17:24	0°♄	
	7708 Oct 21 20:08	0°♄		asc. node	7709 Sep 25 14:41	22°♄56'54	
					7709 Sep 29 05:41	0°♄	
superior conj	7708 Oct 25 06:05	7°♄13'13	1°41'26	morning set	7709 Oct 02 13:11	6°♄52'10	
minimum elong	7708 Oct 25 06:30	7°♄15'28	1°41'29				
max. Earth dist.	7708 Oct 29 04:57	15°♄22'36	1.34718 AU	superior conj	7709 Oct 09 12:04	21°♄52'46	1°40'21
evening rise	7708 Nov 02 13:10	23°♄56'12		minimum elong	7709 Oct 09 11:17	21°♄48'31	1°40'22
	7708 Nov 05 18:44	0°♄		max. Earth dist.	7709 Oct 12 02:13	27°♄25'18	1.33302 AU
desc. node	7708 Nov 12 17:23	12°♄07'40			7709 Oct 13 07:35	0°♄	
	7708 Nov 24 11:12	0°♄		evening rise	7709 Oct 17 02:26	7°♄45'10	
evening max el	7708 Dec 07 16:44	15°♄46'08	26°50'06		7709 Oct 29 07:01	0°♄	
retrograde	7708 Dec 20 20:26	23°♄04'18		desc. node	7709 Oct 30 14:28	2°♄08'23	
evening set	7708 Dec 27 10:17	20°♄28'20		evening max el	7709 Nov 20 05:22	29°♄11'17	27°22'49
min. Earth dist.	7708 Dec 31 10:55	16°♄27'53	0.65849 AU		7709 Nov 21 02:17	0°♄	
inferior conj	7709 Jan 02 09:32	14°♄12'12	-0°46'47	retrograde	7709 Dec 03 18:34	6°♄30'19	
minimum elong	7709 Jan 02 10:52	14°♄08'19	0°46'06	evening set	7709 Dec 10 17:33	3°♄54'46	
asc. node	7709 Jan 04 17:04	11°♄36'52		min. Earth dist.	7709 Dec 14 12:55	0°♄27'44	0.64328 AU
morning rise	7709 Jan 08 12:27	8°♄33'12			7709 Dec 14 23:35	30°♄	
direct	7709 Jan 11 08:14	7°♄49'17		inferior conj	7709 Dec 16 23:10	27°♄53'31	-1°52'24
morning max el	7709 Jan 17 19:46	11°♄17'29	18°14'48	minimum elong	7709 Dec 17 02:37	27°♄44'24	1°50'53
	7709 Jan 31 02:45	0°♄		asc. node	7709 Dec 22 14:07	22°♄57'24	
morning set	7709 Feb 05 22:04	9°♄21'12		morning rise	7709 Dec 23 13:13	22°♄28'46	
desc. node	7709 Feb 08 16:43	13°♄49'39		direct	7709 Dec 26 01:30	21°♄56'38	
	7709 Feb 18 20:32	0°♄		morning max el	7710 Jan 01 12:37	25°♄19'40	17°53'00
					7710 Jan 05 10:38	0°♄	
superior conj	7709 Feb 21 04:25	3°♄39'49	-1°21'43	morning set	7710 Jan 18 13:39	21°♄05'00	
minimum elong	7709 Feb 20 19:22	3°♄04'15	1°20'39		7710 Jan 23 21:04	0°♄	
max. Earth dist.	7709 Feb 23 00:07	6°♄31'09	1.45468 AU	desc. node	7710 Jan 26 13:41	4°♄27'37	
evening rise	7709 Mar 09 06:57	28°♄49'27					
	7709 Mar 10 01:01	0°♄		superior conj	7710 Jan 31 21:18	13°♄07'19	-0°37'37
greatest brilliancy	7709 Mar 20 18:47	16°♄39'22	-0.7m	minimum elong	7710 Jan 31 16:58	12°♄49'53	0°36'54
	7709 Mar 30 05:13	0°♄		max. Earth dist.	7710 Feb 05 19:44	20°♄59'49	1.44919 AU
evening max el	7709 Apr 01 22:24	3°♄03'50	19°16'11		7710 Feb 11 13:36	0°♄	
asc. node	7709 Apr 02 16:06	3°♄47'07		evening rise	7710 Feb 16 20:33	8°♄10'14	
retrograde	7709 Apr 08 23:00	7°♄02'15			7710 Mar 03 08:12	0°♄	
evening set	7709 Apr 12 11:09	5°♄50'30		greatest brilliancy	7710 Mar 03 14:12	0°♄21'54	-0.6m
inferior conj	7709 Apr 17 22:21	0°♄00'21	3°23'19	evening max el	7710 Mar 16 02:05	16°♄41'08	20°12'38
minimum elong	7709 Apr 17 21:42	0°♄02'27	3°23'14	asc. node	7710 Mar 20 13:12	20°♄16'22	
	7709 Apr 17 22:27	30°♄		retrograde	7710 Mar 23 21:21	21°♄13'27	
min. Earth dist.	7709 Apr 19 08:05	28°♄11'08	0.66536 AU	evening set	7710 Mar 27 18:09	19°♄46'44	
morning rise	7709 Apr 23 07:52	23°♄43'02		inferior conj	7710 Apr 02 02:22	13°♄42'42	3°10'32

minimum elong	7710 Apr 02 00:46	13° $\Upsilon$ 48'09	3°10'17	inferior conj	7711 Mar 17 09:39	27° $\text{X}$ 34'36	2°47'12
min. Earth dist.	7710 Apr 02 21:44	12° $\Upsilon$ 36'56	0.67583 AU	minimum elong	7711 Mar 17 07:30	27° $\text{X}$ 42'06	2°46'43
morning rise	7710 Apr 07 07:09	7° $\Upsilon$ 26'38		min. Earth dist.	7711 Mar 17 15:56	27° $\text{X}$ 12'46	0.68185 AU
direct	7710 Apr 13 00:51	4° $\Upsilon$ 52'59		morning rise	7711 Mar 22 12:38	21° $\text{X}$ 21'24	
morning max el	7710 Apr 24 14:02	11° $\Upsilon$ 47'46	24°42'08	direct	7711 Mar 27 16:28	19° $\text{X}$ 06'06	
desc. node	7710 Apr 24 13:17	11° $\Upsilon$ 45'54		morning max el	7711 Apr 06 23:34	25° $\text{X}$ 13'01	23°12'38
	7710 May 09 03:51	0° $\text{Z}$		desc. node	7711 Apr 11 10:16	0° $\Upsilon$ 08'36	
	7710 May 28 06:33	0° $\text{II}$			7711 Apr 11 07:23	0° $\Upsilon$	
morning set	7710 May 30 12:45	3° $\text{II}$ 56'11			7711 May 02 15:42	0° $\text{Z}$	
max. Earth dist.	7710 Jun 03 03:38	10° $\text{II}$ 26'05	1.37270 AU	morning set	7711 May 11 18:49	14° $\text{Z}$ 43'51	
				max. Earth dist.	7711 May 15 23:37	21° $\text{Z}$ 53'01	1.39491 AU
					7711 May 20 13:46	0° $\text{II}$	
superior conj	7710 Jun 09 20:56	23° $\text{II}$ 07'28	-1°02'40				
minimum elong	7710 Jun 10 00:43	23° $\text{II}$ 25'55	1°02'07				
	7710 Jun 13 08:42	0° $\text{S}$		superior conj	7711 May 23 15:15	5° $\text{II}$ 35'29	-1°32'37
asc. node	7710 Jun 16 12:16	6° $\text{S}$ 17'57		minimum elong	7711 May 23 20:39	6° $\text{II}$ 00'25	1°32'01
evening rise	7710 Jun 18 09:33	10° $\text{S}$ 04'41		evening rise	7711 Jun 02 03:56	23° $\text{II}$ 41'58	
	7710 Jun 29 07:09	0° $\Omega$		asc. node	7711 Jun 03 09:18	26° $\text{II}$ 02'55	
evening max el	7710 Jul 05 05:35	7° $\Omega$ 31'44	19°21'28		7711 Jun 05 11:12	0° $\text{S}$	
retrograde	7710 Jul 14 13:49	12° $\Omega$ 08'15		evening max el	7711 Jun 18 07:11	19° $\text{S}$ 43'42	18°36'18
evening set	7710 Jul 16 10:57	11° $\Omega$ 57'51		retrograde	7711 Jun 26 05:12	23° $\text{S}$ 39'30	
desc. node	7710 Jul 21 12:34	10° $\Omega$ 00'44		evening set	7711 Jun 28 07:39	23° $\text{S}$ 23'49	
inferior conj	7710 Jul 25 01:35	7° $\Omega$ 49'47	-1°04'51	inferior conj	7711 Jul 06 02:41	18° $\text{S}$ 57'30	0°40'34
minimum elong	7710 Jul 24 22:42	7° $\Omega$ 54'31	1°03'49	minimum elong	7711 Jul 06 04:10	18° $\text{S}$ 54'40	0°39'55
min. Earth dist.	7710 Jul 27 16:23	6° $\Omega$ 07'30	0.55828 AU	desc. node	7711 Jul 08 09:37	17° $\text{S}$ 12'12	
morning rise	7710 Aug 02 07:44	3° $\Omega$ 11'15		min. Earth dist.	7711 Jul 09 10:04	16° $\text{S}$ 26'48	0.57552 AU
direct	7710 Aug 07 06:06	2° $\Omega$ 16'02		morning rise	7711 Jul 13 21:11	13° $\text{S}$ 41'55	
morning max el	7710 Aug 21 08:20	9° $\Omega$ 22'52	25°15'57	direct	7711 Jul 19 15:42	12° $\text{S}$ 18'16	
	7710 Sep 05 18:53	0° $\text{P}$		morning max el	7711 Aug 03 00:45	19° $\text{S}$ 53'45	26°42'08
asc. node	7710 Sep 12 11:41	12° $\text{P}$ 19'37			7711 Aug 11 16:04	0° $\Omega$	
morning set	7710 Sep 17 00:48	21° $\text{P}$ 41'20			7711 Aug 29 08:54	0° $\text{P}$	
	7710 Sep 20 20:50	0° $\text{Z}$		asc. node	7711 Aug 30 08:40	2° $\text{P}$ 01'12	
				morning set	7711 Sep 01 10:52	6° $\text{P}$ 23'20	
superior conj	7710 Sep 23 21:54	6° $\text{Z}$ 42'02	1°33'18				
minimum elong	7710 Sep 23 20:13	6° $\text{Z}$ 32'47	1°33'10	superior conj	7711 Sep 08 09:31	21° $\text{P}$ 33'28	1°20'52
max. Earth dist.	7710 Sep 25 06:58	9° $\text{Z}$ 43'14	1.32324 AU	minimum elong	7711 Sep 08 07:20	21° $\text{P}$ 21'23	1°20'33
evening rise	7710 Oct 01 01:01	21° $\text{Z}$ 59'21		max. Earth dist.	7711 Sep 08 16:11	22° $\text{P}$ 10'26	1.31796 AU
	7710 Oct 05 00:54	0° $\text{M}$			7711 Sep 12 05:27	0° $\text{Z}$	
desc. node	7710 Oct 17 11:31	21° $\text{M}$ 41'26		evening rise	7711 Sep 15 06:03	6° $\text{Z}$ 29'48	
	7710 Oct 23 05:01	0° $\text{X}$			7711 Sep 27 13:53	0° $\text{M}$	
evening max el	7710 Nov 02 15:15	12° $\text{X}$ 07'15	27°26'28	desc. node	7711 Oct 04 08:35	10° $\text{M}$ 34'44	
retrograde	7710 Nov 16 09:53	19° $\text{X}$ 22'37		evening max el	7711 Oct 15 19:49	24° $\text{M}$ 20'58	26°57'01
evening set	7710 Nov 23 12:50	16° $\text{X}$ 56'30			7711 Oct 23 14:52	0° $\text{X}$	
min. Earth dist.	7710 Nov 27 04:54	13° $\text{X}$ 58'26	0.62508 AU	retrograde	7711 Oct 29 17:27	1° $\text{X}$ 31'07	
inferior conj	7710 Nov 30 01:53	11° $\text{X}$ 15'26	-3°01'01		7711 Nov 04 15:11	30° $\text{X}$ $\text{M}$	
minimum elong	7710 Nov 30 07:31	11° $\text{X}$ 02'06	2°58'53	evening set	7711 Nov 05 16:10	29° $\text{M}$ 25'44	
morning rise	7710 Dec 07 04:14	6° $\text{X}$ 08'18		min. Earth dist.	7711 Nov 09 10:14	26° $\text{M}$ 46'44	0.60472 AU
direct	7710 Dec 09 11:29	5° $\text{X}$ 44'19		inferior conj	7711 Nov 12 14:18	24° $\text{M}$ 08'44	-4°07'40
asc. node	7710 Dec 09 11:07	5° $\text{X}$ 44'19		minimum elong	7711 Nov 12 21:22	23° $\text{M}$ 54'02	4°05'34
morning max el	7710 Dec 16 05:35	9° $\text{X}$ 11'19	17°48'49	morning rise	7711 Nov 20 04:54	19° $\text{M}$ 22'14	
	7710 Dec 29 23:17	0° $\text{Z}$		direct	7711 Nov 22 10:16	19° $\text{M}$ 03'04	
morning set	7711 Jan 01 04:15	3° $\text{Z}$ 54'43		asc. node	7711 Nov 26 08:07	20° $\text{M}$ 05'16	
				morning max el	7711 Nov 29 19:15	22° $\text{M}$ 42'54	18°03'24
superior conj	7711 Jan 12 14:23	23° $\text{Z}$ 46'02	0°06'11		7711 Dec 05 12:08	0° $\text{X}$	
minimum elong	7711 Jan 12 15:00	23° $\text{Z}$ 48'36	0°06'13	morning set	7711 Dec 15 11:31	17° $\text{X}$ 30'51	
behind sun begin	7711 Jan 12 06:40	23° $\text{Z}$ 13'29			7711 Dec 22 05:45	0° $\text{Z}$	
behind sun end	7711 Jan 12 23:19	24° $\text{Z}$ 23'37					
desc. node	7711 Jan 13 10:42	25° $\text{Z}$ 11'18		superior conj	7711 Dec 25 08:44	5° $\text{Z}$ 36'55	0°43'03
	7711 Jan 16 08:15	0° $\approx$		minimum elong	7711 Dec 25 11:50	5° $\text{Z}$ 50'44	0°42'42
max. Earth dist.	7711 Jan 19 12:21	5° $\approx$ 10'04	1.43694 AU	desc. node	7711 Dec 31 07:41	15° $\text{Z}$ 56'46	
evening rise	7711 Jan 27 09:01	17° $\approx$ 35'52		max. Earth dist.	7712 Jan 01 23:54	18° $\text{Z}$ 45'47	1.41935 AU
	7711 Feb 04 12:33	0° $\text{X}$		evening rise	7712 Jan 07 10:45	27° $\text{Z}$ 40'40	
	7711 Feb 26 16:39	0° $\Upsilon$			7712 Jan 08 21:44	0° $\approx$	
evening max el	7711 Feb 27 00:09	0° $\Upsilon$ 19'16	21°21'43		7712 Jan 29 05:22	0° $\text{X}$	
asc. node	7711 Mar 07 10:15	5° $\Upsilon$ 31'04		evening max el	7712 Feb 09 17:25	13° $\text{X}$ 59'30	22°39'14
retrograde	7711 Mar 07 19:35	5° $\Upsilon$ 31'51		retrograde	7712 Feb 19 15:55	19° $\text{X}$ 53'22	
evening set	7711 Mar 12 02:11	3° $\Upsilon$ 50'03		asc. node	7712 Feb 22 07:17	19° $\text{X}$ 18'00	
	7711 Mar 15 14:57	30° $\text{X}$ $\text{X}$		evening set	7712 Feb 24 09:39	17° $\text{X}$ 56'34	

inferior conj	7712 Feb 29 18:13	11° $\text{K}$ 33'03	2°14'38		7713 Feb 09 15:42	30° $\text{R}$	
minimum elong	7712 Feb 29 15:56	11° $\text{K}$ 40'56	2°13'59	min. Earth dist.	7713 Feb 12 09:00	26° $\text{R}$ 32'39	0.68145 AU
min. Earth dist.	7712 Feb 29 12:29	11° $\text{K}$ 52'56	0.68363 AU	inferior conj	7713 Feb 13 02:10	25° $\text{R}$ 34'25	1°33'37
morning rise	7712 Mar 05 22:07	5° $\text{K}$ 24'05		minimum elong	7713 Feb 13 00:14	25° $\text{R}$ 40'57	1°33'00
direct	7712 Mar 10 11:50	3° $\text{K}$ 30'31		morning rise	7713 Feb 18 09:31	19° $\text{R}$ 31'20	
morning max el	7712 Mar 19 12:27	8° $\text{K}$ 46'24	21°45'27	direct	7713 Feb 22 09:46	18° $\text{R}$ 00'07	
desc. node	7712 Mar 28 07:14	19° $\text{K}$ 16'27		morning max el	7713 Mar 02 07:58	22° $\text{R}$ 30'39	20°27'36
	7712 Apr 04 23:35	0° $\text{Y}$			7713 Mar 08 16:55	0° $\text{K}$	
morning set	7712 Apr 20 21:17	24° $\text{Y}$ 14'33		desc. node	7713 Mar 15 04:10	8° $\text{K}$ 56'33	
	7712 Apr 24 10:51	0° $\text{B}$			7713 Mar 29 06:04	0° $\text{Y}$	
max. Earth dist.	7712 Apr 26 22:57	4° $\text{B}$ 07'27	1.41667 AU	morning set	7713 Mar 31 00:05	2° $\text{Y}$ 42'16	
				max. Earth dist.	7713 Apr 09 05:45	17° $\text{Y}$ 16'54	1.43524 AU
superior conj	7712 May 04 14:30	17° $\text{B}$ 09'40	-1°57'02				
minimum elong	7712 May 04 19:51	17° $\text{B}$ 33'05	1°56'43	superior conj	7713 Apr 15 14:09	27° $\text{Y}$ 39'48	-2°10'30
	7712 May 11 18:34	0° $\text{II}$		minimum elong	7713 Apr 15 16:05	27° $\text{Y}$ 47'52	2°10'31
evening rise	7712 May 15 10:23	6° $\text{II}$ 42'56			7713 Apr 16 23:47	0° $\text{B}$	
asc. node	7712 May 20 06:20	15° $\text{II}$ 31'41		evening rise	7713 Apr 28 00:22	18° $\text{B}$ 56'34	
	7712 May 29 10:31	0° $\text{E}$			7713 May 04 08:53	0° $\text{II}$	
evening max el	7712 May 31 16:13	2° $\text{E}$ 29'30	18°11'26	asc. node	7713 May 07 03:24	4° $\text{II}$ 37'44	
retrograde	7712 Jun 07 15:06	5° $\text{E}$ 59'54		evening max el	7713 May 15 04:56	15° $\text{II}$ 38'33	18°06'00
evening set	7712 Jun 10 01:05	5° $\text{E}$ 35'08		retrograde	7713 May 21 16:05	18° $\text{II}$ 59'25	
inferior conj	7712 Jun 17 01:17	0° $\text{E}$ 48'26	1°58'58	evening set	7713 May 24 09:27	18° $\text{II}$ 23'00	
minimum elong	7712 Jun 17 04:22	0° $\text{E}$ 41'31	1°57'57	inferior conj	7713 May 30 18:20	13° $\text{II}$ 16'23	2°49'27
	7712 Jun 17 22:52	30° $\text{R}$ $\text{II}$		minimum elong	7713 May 30 21:02	13° $\text{II}$ 09'29	2°48'48
min. Earth dist.	7712 Jun 20 10:07	27° $\text{II}$ 49'30	0.59708 AU	min. Earth dist.	7713 Jun 02 18:11	10° $\text{II}$ 13'48	0.61950 AU
morning rise	7712 Jun 24 04:44	25° $\text{II}$ 03'37		morning rise	7713 Jun 06 06:42	7° $\text{II}$ 12'58	
desc. node	7712 Jun 24 06:39	25° $\text{II}$ 00'46		desc. node	7713 Jun 11 03:41	4° $\text{II}$ 59'46	
direct	7712 Jun 30 14:54	23° $\text{II}$ 07'30		direct	7713 Jun 13 00:41	4° $\text{II}$ 48'55	
	7712 Jul 13 22:22	0° $\text{E}$		morning max el	7713 Jun 27 04:25	12° $\text{II}$ 49'56	27°55'08
morning max el	7712 Jul 14 23:31	1° $\text{E}$ 00'27	27°37'22		7713 Jul 10 20:27	0° $\text{E}$	
	7712 Aug 04 20:39	0° $\text{Q}$			7713 Jul 28 06:34	0° $\text{Q}$	
morning set	7712 Aug 15 17:42	20° $\text{Q}$ 53'11		morning set	7713 Jul 30 19:20	5° $\text{Q}$ 04'58	
asc. node	7712 Aug 16 05:40	21° $\text{Q}$ 55'53		asc. node	7713 Aug 03 02:40	11° $\text{Q}$ 58'24	
	7712 Aug 19 23:50	0° $\text{P}$		max. Earth dist.	7713 Aug 05 09:58	16° $\text{Q}$ 55'06	1.32106 AU
max. Earth dist.	7712 Aug 22 02:25	4° $\text{P}$ 38'01	1.31723 AU				
superior conj	7712 Aug 22 21:06	6° $\text{P}$ 21'24	1°03'30	superior conj	7713 Aug 07 06:54	20° $\text{Q}$ 59'53	0°41'39
minimum elong	7712 Aug 22 18:53	6° $\text{P}$ 09'08	1°03'04	minimum elong	7713 Aug 07 05:08	20° $\text{Q}$ 50'17	0°41'13
evening rise	7712 Aug 29 15:15	21° $\text{P}$ 09'57		evening rise	7713 Aug 11 09:21	0° $\text{P}$	
	7712 Sep 02 21:33	0° $\text{A}$			7713 Aug 26 17:25	0° $\text{A}$	
desc. node	7712 Sep 20 05:38	28° $\text{A}$ 32'39		desc. node	7713 Sep 07 02:43	15° $\text{A}$ 13'26	
	7712 Sep 21 09:45	0° $\text{M}$		evening max el	7713 Sep 08 07:03	16° $\text{A}$ 23'55	24°26'39
evening max el	7712 Sep 26 17:02	5° $\text{M}$ 45'22	25°54'37	retrograde	7713 Sep 22 01:59	23° $\text{A}$ 19'26	
retrograde	7712 Oct 10 15:36	12° $\text{M}$ 49'32		evening set	7713 Sep 27 04:41	22° $\text{A}$ 21'29	
evening set	7712 Oct 16 22:42	11° $\text{M}$ 15'38		min. Earth dist.	7713 Oct 02 18:01	19° $\text{A}$ 31'12	0.56537 AU
min. Earth dist.	7712 Oct 21 05:47	8° $\text{M}$ 40'09	0.58396 AU	inferior conj	7713 Oct 05 07:37	17° $\text{A}$ 54'11	-5°31'15
inferior conj	7712 Oct 24 09:01	6° $\text{M}$ 24'18	-5°02'51	minimum elong	7713 Oct 05 08:53	17° $\text{A}$ 52'11	5°31'11
minimum elong	7712 Oct 24 15:09	6° $\text{M}$ 13'10	5°01'43	morning rise	7713 Oct 13 15:15	13° $\text{A}$ 51'46	
morning rise	7712 Nov 01 09:55	2° $\text{M}$ 00'18		direct	7713 Oct 16 06:31	13° $\text{A}$ 33'02	
direct	7712 Nov 03 17:45	1° $\text{M}$ 42'46		morning max el	7713 Oct 25 22:29	18° $\text{A}$ 06'38	19°35'19
morning max el	7712 Nov 12 02:03	5° $\text{M}$ 44'41	18°38'19	asc. node	7713 Oct 30 02:10	22° $\text{A}$ 50'22	
asc. node	7712 Nov 12 05:08	5° $\text{M}$ 52'10			7713 Nov 03 19:47	0° $\text{M}$	
	7712 Nov 27 09:56	0° $\text{X}$		morning set	7713 Nov 12 09:12	16° $\text{M}$ 09'06	
morning set	7712 Nov 28 06:24	1° $\text{X}$ 39'06			7713 Nov 19 06:18	0° $\text{X}$	
superior conj	7712 Dec 07 00:09	18° $\text{X}$ 27'50	1°10'40	superior conj	7713 Nov 20 07:36	2° $\text{X}$ 05'02	1°29'01
minimum elong	7712 Dec 07 03:35	18° $\text{X}$ 43'56	1°10'21	minimum elong	7713 Nov 20 10:08	2° $\text{X}$ 17'34	1°28'53
	7712 Dec 13 08:11	0° $\text{Z}$		max. Earth dist.	7713 Nov 26 12:52	13° $\text{X}$ 58'21	1.37710 AU
max. Earth dist.	7712 Dec 14 06:59	1° $\text{Z}$ 40'12	1.39860 AU	evening rise	7713 Nov 30 06:26	20° $\text{X}$ 43'45	
desc. node	7712 Dec 17 04:40	6° $\text{Z}$ 40'34		desc. node	7713 Dec 04 01:42	27° $\text{X}$ 19'17	
evening rise	7712 Dec 18 09:38	8° $\text{Z}$ 42'53			7713 Dec 05 15:58	0° $\text{Z}$	
	7712 Dec 31 21:18	0° $\text{R}$			7713 Dec 25 21:43	0° $\text{R}$	
evening max el	7713 Jan 22 07:43	27° $\text{R}$ 43'17	23°59'25	evening max el	7714 Jan 04 20:55	11° $\text{R}$ 30'22	25°15'31
	7713 Jan 24 18:31	0° $\text{K}$		retrograde	7714 Jan 16 21:40	18° $\text{R}$ 27'20	
retrograde	7713 Feb 02 08:58	4° $\text{K}$ 13'14		evening set	7714 Jan 22 16:37	16° $\text{R}$ 03'26	
evening set	7713 Feb 07 14:58	2° $\text{K}$ 02'06		asc. node	7714 Jan 26 01:25	12° $\text{R}$ 29'59	
asc. node	7713 Feb 08 04:21	1° $\text{K}$ 32'12		min. Earth dist.	7714 Jan 27 03:13	11° $\text{R}$ 08'37	0.67549 AU

inferior conj	7714 Jan 28 07:42	9° $\approx$ 36'08	0°44'45		7714 Dec 24 04:41	0° $\approx$	
minimum elong	7714 Jan 28 06:38	9° $\approx$ 39'38	0°44'25	retrograde	7714 Dec 31 05:20	2° $\approx$ 28'59	
morning rise	7714 Feb 02 20:56	3° $\approx$ 40'46			7715 Jan 06 10:44	30° $\approx$ 3	
direct	7714 Feb 06 08:51	2° $\approx$ 30'27		evening set	7715 Jan 06 12:52	29° $\approx$ 55'39	
morning max el	7714 Feb 13 11:35	6° $\approx$ 27'04	19°23'28	min. Earth dist.	7715 Jan 10 16:50	25° $\approx$ 35'40	0.66578 AU
greatest brilliancy	7714 Feb 26 10:54	23° $\approx$ 35'57	-0.7m	inferior conj	7715 Jan 12 08:52	23° $\approx$ 33'49	-0°11'26
desc. node	7714 Mar 02 01:08	29° $\approx$ 00'30		minimum elong	7715 Jan 12 09:10	23° $\approx$ 32'53	0°11'12
	7714 Mar 02 16:48	0° $\approx$		transit middle	7715 Jan 12 09:10	23° $\approx$ 32'53	0°11'12
morning set	7714 Mar 09 22:38	11° $\approx$ 06'39		transit begin	7715 Jan 12 07:06	23° $\approx$ 39'12	
	7714 Mar 22 01:36	0° $\approx$		transit end	7715 Jan 12 11:14	23° $\approx$ 26'35	
max. Earth dist.	7714 Mar 22 19:45	1° $\approx$ 11'35	1.44832 AU	asc. node	7715 Jan 12 22:29	22° $\approx$ 52'31	
				morning rise	7715 Jan 18 06:14	17° $\approx$ 48'22	
superior conj	7714 Mar 26 13:11	7° $\approx$ 06'28	-2°06'55	direct	7715 Jan 21 07:21	16° $\approx$ 55'57	
minimum elong	7714 Mar 26 08:25	6° $\approx$ 47'25	2°06'45	morning max el	7715 Jan 27 22:18	20° $\approx$ 31'10	18°35'06
evening rise	7714 Apr 09 17:27	0° $\approx$ 14'45			7715 Feb 04 09:53	0° $\approx$	
	7714 Apr 09 13:55	0° $\approx$		desc. node	7715 Feb 16 22:07	19° $\approx$ 21'24	
asc. node	7714 Apr 24 00:28	23° $\approx$ 13'44		morning set	7715 Feb 17 16:32	20° $\approx$ 34'07	
evening max el	7714 Apr 28 18:04	29° $\approx$ 02'27	18°19'18		7715 Feb 23 16:06	0° $\approx$	
	7714 Apr 29 18:39	0° $\approx$					
retrograde	7714 May 05 03:44	2° $\approx$ 28'18		superior conj	7715 Mar 05 19:31	15° $\approx$ 54'03	-1°43'09
evening set	7714 May 08 04:07	1° $\approx$ 38'48		minimum elong	7715 Mar 05 10:02	15° $\approx$ 16'54	1°42'17
	7714 May 10 11:11	30° $\approx$ 8		max. Earth dist.	7715 Mar 05 13:55	15° $\approx$ 32'07	1.45446 AU
inferior conj	7714 May 14 01:45	26° $\approx$ 13'49	3°16'29		7715 Mar 14 18:52	0° $\approx$	
minimum elong	7714 May 14 03:11	26° $\approx$ 09'42	3°16'14	evening rise	7715 Mar 21 11:02	10° $\approx$ 35'00	
min. Earth dist.	7714 May 16 11:32	23° $\approx$ 29'00	0.64008 AU	greatest brilliancy	7715 Mar 29 23:28	24° $\approx$ 07'38	-0.8m
morning rise	7714 May 20 01:11	20° $\approx$ 00'29			7715 Apr 02 18:15	0° $\approx$	
direct	7714 May 26 19:04	17° $\approx$ 18'42		asc. node	7715 Apr 10 21:32	11° $\approx$ 10'15	
desc. node	7714 May 29 00:42	17° $\approx$ 34'36		evening max el	7715 Apr 12 04:55	12° $\approx$ 34'32	18°50'35
morning max el	7714 Jun 09 13:31	25° $\approx$ 18'45	27°35'51	retrograde	7715 Apr 18 21:57	16° $\approx$ 18'15	
	7714 Jun 13 20:18	0° $\approx$		evening set	7715 Apr 22 05:34	15° $\approx$ 14'51	
	7714 Jul 04 08:22	0° $\approx$		inferior conj	7715 Apr 27 19:38	9° $\approx$ 33'17	3°25'08
morning set	7714 Jul 14 13:21	18° $\approx$ 51'52		minimum elong	7715 Apr 27 19:41	9° $\approx$ 33'07	3°25'03
max. Earth dist.	7714 Jul 19 10:57	28° $\approx$ 50'57	1.32958 AU	min. Earth dist.	7715 Apr 29 14:03	7° $\approx$ 21'04	0.65723 AU
	7714 Jul 20 00:07	0° $\approx$		morning rise	7715 May 03 09:15	3° $\approx$ 16'05	
asc. node	7714 Jul 20 23:41	2° $\approx$ 04'30		direct	7715 May 09 20:48	0° $\approx$ 28'41	
				desc. node	7715 May 15 21:42	2° $\approx$ 24'59	
superior conj	7714 Jul 22 12:57	5° $\approx$ 23'09	0°15'47	morning max el	7715 May 23 00:04	8° $\approx$ 15'56	26°44'59
minimum elong	7714 Jul 22 12:11	5° $\approx$ 19'02	0°15'31		7715 Jun 08 22:11	0° $\approx$	
behind sun begin	7714 Jul 22 10:52	5° $\approx$ 12'02			7715 Jun 26 18:06	0° $\approx$	
behind sun end	7714 Jul 22 13:29	5° $\approx$ 26'03		morning set	7715 Jun 27 20:39	2° $\approx$ 05'24	
evening rise	7714 Jul 29 14:13	20° $\approx$ 34'07		max. Earth dist.	7715 Jul 02 01:59	10° $\approx$ 19'08	1.34284 AU
	7714 Aug 03 04:01	0° $\approx$					
evening max el	7714 Aug 20 18:49	26° $\approx$ 38'16	22°47'41	superior conj	7715 Jul 06 13:02	19° $\approx$ 24'58	-0°13'21
desc. node	7714 Aug 24 23:49	0° $\approx$ 07'58		minimum elong	7715 Jul 06 13:46	19° $\approx$ 28'48	0°13'18
	7714 Aug 24 19:11	0° $\approx$		behind sun begin	7715 Jul 06 10:31	19° $\approx$ 11'54	
retrograde	7714 Sep 02 23:56	3° $\approx$ 14'10		behind sun end	7715 Jul 06 17:02	19° $\approx$ 45'43	
evening set	7714 Sep 06 14:17	2° $\approx$ 45'48		asc. node	7715 Jul 07 20:43	22° $\approx$ 10'16	
	7714 Sep 13 01:01	30° $\approx$ 8			7715 Jul 11 13:51	0° $\approx$	
min. Earth dist.	7714 Sep 14 02:45	29° $\approx$ 23'56	0.55208 AU	evening rise	7715 Jul 14 00:07	5° $\approx$ 06'14	
inferior conj	7714 Sep 15 11:18	28° $\approx$ 37'23	-5°14'17		7715 Jul 27 16:31	0° $\approx$	
minimum elong	7714 Sep 15 05:15	28° $\approx$ 46'04	5°13'29	evening max el	7715 Aug 02 13:21	7° $\approx$ 05'09	21°14'14
morning rise	7714 Sep 23 22:15	24° $\approx$ 48'33		desc. node	7715 Aug 11 20:53	12° $\approx$ 44'21	
direct	7714 Sep 27 00:50	24° $\approx$ 26'13		retrograde	7715 Aug 14 13:26	13° $\approx$ 01'58	
morning max el	7714 Oct 08 06:14	29° $\approx$ 41'00	20°54'29	evening set	7715 Aug 16 22:08	12° $\approx$ 48'59	
	7714 Oct 08 14:15	0° $\approx$		inferior conj	7715 Aug 26 04:30	8° $\approx$ 51'16	-4°02'50
asc. node	7714 Oct 16 23:10	10° $\approx$ 44'03		minimum elong	7715 Aug 25 19:04	9° $\approx$ 04'33	4°00'13
	7714 Oct 27 06:59	0° $\approx$		min. Earth dist.	7715 Aug 26 11:53	8° $\approx$ 40'52	0.54701 AU
morning set	7714 Oct 27 17:02	0° $\approx$ 51'50		morning rise	7715 Sep 03 16:39	4° $\approx$ 57'43	
				direct	7715 Sep 07 09:17	4° $\approx$ 28'22	
superior conj	7714 Nov 04 02:29	16° $\approx$ 14'36	1°39'01	morning max el	7715 Sep 20 02:22	10° $\approx$ 30'31	22°31'51
minimum elong	7714 Nov 04 03:41	16° $\approx$ 20'49	1°39'04	asc. node	7715 Oct 03 20:11	29° $\approx$ 20'24	
max. Earth dist.	7714 Nov 08 21:47	25° $\approx$ 54'05	1.35718 AU		7715 Oct 04 05:02	0° $\approx$	
	7714 Nov 11 00:36	0° $\approx$		morning set	7715 Oct 12 03:43	15° $\approx$ 41'01	
evening rise	7714 Nov 12 22:01	3° $\approx$ 34'26			7715 Oct 18 20:35	0° $\approx$	
desc. node	7714 Nov 20 22:45	17° $\approx$ 47'47					
	7714 Nov 28 14:24	0° $\approx$		superior conj	7715 Oct 19 05:16	0° $\approx$ 46'09	1°41'44
evening max el	7714 Dec 18 09:57	25° $\approx$ 15'21	26°20'28	minimum elong	7715 Oct 19 05:09	0° $\approx$ 45'31	1°41'48

max. Earth dist.	7715 Oct 22 13:52	7° $\mathbb{M}$ 48'53	1.34063 AU	max. Earth dist.	7716 Oct 04 14:19	19° $\mathbb{L}$ 56'59	1.32832 AU
evening rise	7715 Oct 27 04:29	17° $\mathbb{M}$ 05'15			7716 Oct 09 09:06	0° $\mathbb{M}$	
	7715 Nov 03 03:05	0° $\mathbb{X}$		evening rise	7716 Oct 09 22:06	1° $\mathbb{M}$ 06'08	
desc. node	7715 Nov 07 19:49	8° $\mathbb{X}$ 00'38		desc. node	7716 Oct 24 16:53	27° $\mathbb{M}$ 50'45	
	7715 Nov 22 23:44	0° $\mathbb{Z}$			7716 Oct 26 01:50	0° $\mathbb{X}$	
evening max el	7715 Nov 30 22:54	8° $\mathbb{Z}$ 50'32	27°07'01	evening max el	7716 Nov 12 10:39	22° $\mathbb{X}$ 05'07	27°28'13
retrograde	7715 Dec 14 07:22	16° $\mathbb{Z}$ 10'38		retrograde	7716 Nov 26 02:59	29° $\mathbb{X}$ 23'32	
evening set	7715 Dec 21 01:35	13° $\mathbb{Z}$ 33'33		evening set	7716 Dec 03 04:13	26° $\mathbb{X}$ 50'53	
min. Earth dist.	7715 Dec 24 23:42	9° $\mathbb{Z}$ 47'48	0.65246 AU	min. Earth dist.	7716 Dec 06 21:50	23° $\mathbb{X}$ 36'42	0.63584 AU
inferior conj	7715 Dec 27 03:26	7° $\mathbb{Z}$ 22'51	-1°14'03	inferior conj	7716 Dec 09 12:49	20° $\mathbb{X}$ 57'17	-2°21'23
minimum elong	7715 Dec 27 05:37	7° $\mathbb{Z}$ 16'43	1°13'01	minimum elong	7716 Dec 09 17:13	20° $\mathbb{X}$ 46'08	2°19'33
asc. node	7715 Dec 30 19:32	3° $\mathbb{Z}$ 37'05		morning rise	7716 Dec 16 08:01	15° $\mathbb{X}$ 39'30	
morning rise	7716 Jan 02 10:56	1° $\mathbb{Z}$ 49'47		asc. node	7716 Dec 16 16:33	15° $\mathbb{X}$ 31'52	
direct	7716 Jan 05 03:09	1° $\mathbb{Z}$ 11'30		direct	7716 Dec 18 17:41	15° $\mathbb{X}$ 11'23	
morning max el	7716 Jan 11 13:45	4° $\mathbb{Z}$ 36'26	18°03'22	morning max el	7716 Dec 25 07:02	18° $\mathbb{X}$ 35'25	17°48'55
	7716 Jan 28 17:58	0° $\mathbb{Z}$			7717 Jan 02 15:31	0° $\mathbb{Z}$	
morning set	7716 Jan 29 15:54	1° $\mathbb{Z}$ 30'14		morning set	7717 Jan 10 18:09	13° $\mathbb{Z}$ 45'06	
desc. node	7716 Feb 03 19:05	9° $\mathbb{Z}$ 54'21			7717 Jan 20 07:33	0° $\mathbb{Z}$	
				desc. node	7717 Jan 20 16:05	0° $\mathbb{Z}$ 35'25	
superior conj	7716 Feb 13 03:12	24° $\mathbb{Z}$ 53'04	-1°03'35	superior conj	7717 Jan 23 05:41	4° $\mathbb{Z}$ 49'35	-0°18'30
minimum elong	7716 Feb 12 19:47	24° $\mathbb{Z}$ 23'43	1°02'33	minimum elong	7717 Jan 23 03:41	4° $\mathbb{Z}$ 41'21	0°18'06
	7716 Feb 16 09:05	0° $\mathbb{X}$		max. Earth dist.	7717 Jan 29 03:35	14° $\mathbb{Z}$ 22'44	1.44473 AU
max. Earth dist.	7716 Feb 16 09:20	0° $\mathbb{X}$ 00'57	1.45319 AU	evening rise	7717 Feb 07 19:07	29° $\mathbb{Z}$ 27'25	
evening rise	7716 Feb 29 07:55	20° $\mathbb{X}$ 08'53			7717 Feb 08 03:36	0° $\mathbb{X}$	
	7716 Mar 06 17:22	0° $\mathbb{Y}$			7717 Feb 28 12:13	0° $\mathbb{Y}$	
greatest brilliancy	7716 Mar 13 17:13	10° $\mathbb{Y}$ 36'12	-0.7m	evening max el	7717 Mar 08 12:52	9° $\mathbb{Y}$ 48'40	20°40'46
evening max el	7716 Mar 25 11:31	26° $\mathbb{Y}$ 10'20	19°38'31	asc. node	7717 Mar 14 15:39	14° $\mathbb{Y}$ 14'54	
asc. node	7716 Mar 27 18:35	28° $\mathbb{Y}$ 15'07		retrograde	7717 Mar 16 17:56	14° $\mathbb{Y}$ 37'31	
	7716 Mar 30 18:32	0° $\mathbb{B}$		evening set	7717 Mar 20 18:43	13° $\mathbb{Y}$ 04'35	
retrograde	7716 Apr 01 19:29	0° $\mathbb{B}$ 22'35		inferior conj	7717 Mar 26 02:22	6° $\mathbb{Y}$ 55'37	3°01'49
	7716 Apr 03 18:50	30° $\mathbb{R}$ $\mathbb{Y}$		minimum elong	7717 Mar 26 00:29	7° $\mathbb{Y}$ 02'06	3°01'28
evening set	7716 Apr 05 11:05	29° $\mathbb{Y}$ 04'42		min. Earth dist.	7717 Mar 26 16:07	6° $\mathbb{Y}$ 08'20	0.67893 AU
inferior conj	7716 Apr 10 20:42	23° $\mathbb{Y}$ 08'24	3°19'20	morning rise	7717 Mar 31 06:02	0° $\mathbb{Y}$ 40'32	
minimum elong	7716 Apr 10 19:36	23° $\mathbb{Y}$ 12'03	3°19'10		7717 Apr 01 01:22	30° $\mathbb{R}$ $\mathbb{X}$	
min. Earth dist.	7716 Apr 12 00:14	21° $\mathbb{Y}$ 37'06	0.67027 AU	direct	7717 Apr 05 18:04	28° $\mathbb{X}$ 13'45	
morning rise	7716 Apr 16 03:47	16° $\mathbb{Y}$ 51'06			7717 Apr 11 00:21	0° $\mathbb{Y}$	
direct	7716 Apr 22 04:49	14° $\mathbb{Y}$ 09'32		morning max el	7717 Apr 16 18:37	4° $\mathbb{Y}$ 49'10	24°04'16
desc. node	7716 May 01 18:41	18° $\mathbb{Y}$ 58'30		desc. node	7717 Apr 18 15:39	6° $\mathbb{Y}$ 47'54	
morning max el	7716 May 04 09:47	21° $\mathbb{Y}$ 28'23	25°31'03		7717 May 06 03:35	0° $\mathbb{B}$	
	7716 May 11 19:25	0° $\mathbb{B}$		morning set	7717 May 22 09:04	26° $\mathbb{B}$ 00'44	
	7716 Jun 01 03:43	0° $\mathbb{II}$			7717 May 24 15:59	0° $\mathbb{II}$	
morning set	7716 Jun 09 12:57	14° $\mathbb{II}$ 32'47		max. Earth dist.	7717 May 26 02:13	2° $\mathbb{II}$ 31'46	1.38202 AU
max. Earth dist.	7716 Jun 13 05:42	21° $\mathbb{II}$ 23'36	1.36068 AU				
	7716 Jun 17 16:40	0° $\mathbb{E}$		superior conj	7717 Jun 02 07:31	15° $\mathbb{II}$ 51'29	-1°15'45
superior conj	7716 Jun 19 04:20	2° $\mathbb{E}$ 57'02	-0°44'32	minimum elong	7717 Jun 02 12:05	16° $\mathbb{II}$ 13'15	1°15'10
minimum elong	7716 Jun 19 06:59	3° $\mathbb{E}$ 10'13	0°44'08		7717 Jun 09 13:47	0° $\mathbb{E}$	
asc. node	7716 Jun 23 17:43	12° $\mathbb{E}$ 10'59		asc. node	7717 Jun 10 14:44	2° $\mathbb{E}$ 03'00	
evening rise	7716 Jun 27 06:04	19° $\mathbb{E}$ 22'14		evening rise	7717 Jun 11 05:32	3° $\mathbb{E}$ 15'50	
	7716 Jul 02 15:09	0° $\mathbb{Q}$		evening max el	7717 Jun 27 16:09	29° $\mathbb{E}$ 58'41	18°59'48
evening max el	7716 Jul 14 20:27	18° $\mathbb{Q}$ 09'53	19°56'58		7717 Jun 27 16:42	0° $\mathbb{Q}$	
retrograde	7716 Jul 25 04:08	23° $\mathbb{Q}$ 14'49		retrograde	7717 Jul 06 08:21	4° $\mathbb{Q}$ 15'40	
evening set	7716 Jul 27 01:12	23° $\mathbb{Q}$ 05'28		evening set	7717 Jul 08 07:22	4° $\mathbb{Q}$ 03'27	
desc. node	7716 Jul 28 17:57	22° $\mathbb{Q}$ 41'51		desc. node	7717 Jul 15 14:58	0° $\mathbb{Q}$ 27'59	
inferior conj	7716 Aug 05 01:10	19° $\mathbb{Q}$ 05'25	-2°12'40		7717 Jul 16 07:14	30° $\mathbb{R}$ $\mathbb{E}$	
minimum elong	7716 Aug 04 19:04	19° $\mathbb{Q}$ 14'39	2°10'30	inferior conj	7717 Jul 16 13:55	29° $\mathbb{E}$ 48'22	-0°17'22
min. Earth dist.	7716 Aug 06 23:17	17° $\mathbb{Q}$ 55'37	0.55154 AU	minimum elong	7717 Jul 16 13:12	29° $\mathbb{E}$ 49'39	0°17'12
morning rise	7716 Aug 13 11:10	14° $\mathbb{Q}$ 46'57		min. Earth dist.	7717 Jul 19 13:58	27° $\mathbb{E}$ 43'37	0.56490 AU
direct	7716 Aug 17 21:56	14° $\mathbb{Q}$ 03'35		morning rise	7717 Jul 24 15:47	24° $\mathbb{E}$ 54'01	
morning max el	7716 Aug 31 15:40	20° $\mathbb{Q}$ 50'06	24°17'25	direct	7717 Jul 29 23:17	23° $\mathbb{E}$ 47'24	
	7716 Sep 08 12:54	0° $\mathbb{P}$			7717 Aug 11 23:58	0° $\mathbb{Q}$	
asc. node	7716 Sep 19 17:10	18° $\mathbb{P}$ 28'25		morning max el	7717 Aug 13 05:04	1° $\mathbb{Q}$ 07'29	25°55'37
	7716 Sep 25 09:33	0° $\mathbb{L}$			7717 Sep 02 11:08	0° $\mathbb{P}$	
morning set	7716 Sep 25 15:26	0° $\mathbb{L}$ 31'11		asc. node	7717 Sep 06 14:09	7° $\mathbb{P}$ 59'46	
				morning set	7717 Sep 10 02:34	15° $\mathbb{P}$ 17'31	
superior conj	7716 Oct 02 13:09	15° $\mathbb{L}$ 30'48	1°38'03	superior conj	7717 Sep 16 23:57	0° $\mathbb{L}$ 21'30	1°28'39
minimum elong	7716 Oct 02 11:57	15° $\mathbb{L}$ 24'12	1°38'01				

minimum elong	7717 Sep 16 22:00	0°♄10'45	1°28'27	minimum elong	7718 Sep 01 09:31	14°♄59'45	1°13'43
	7717 Sep 16 20:04	0°♄		max. Earth dist.	7718 Sep 01 07:44	14°♄49'49	1.31708 AU
max. Earth dist.	7717 Sep 17 21:23	2°♄19'44	1.32048 AU	evening rise	7718 Sep 08 06:49	0°♄04'03	
evening rise	7717 Sep 23 23:43	15°♄28'16			7718 Sep 08 06:03	0°♄	
	7717 Oct 01 08:34	0°♄			7718 Sep 24 13:04	0°♄	
desc. node	7717 Oct 11 13:57	17°♄08'31		desc. node	7718 Sep 28 11:00	5°♄41'00	
	7717 Oct 21 05:53	0°♄		evening max el	7718 Oct 07 20:40	16°♄39'48	26°34'20
evening max el	7717 Oct 25 18:53	4°♄45'36	27°18'12	retrograde	7718 Oct 21 18:33	23°♄46'46	
retrograde	7717 Nov 08 15:02	11°♄58'08		evening set	7718 Oct 28 12:24	21°♄53'35	
evening set	7717 Nov 15 17:15	9°♄39'51		min. Earth dist.	7718 Nov 01 10:15	19°♄18'33	0.59585 AU
min. Earth dist.	7717 Nov 19 09:28	6°♄51'10	0.61661 AU	inferior conj	7718 Nov 04 15:18	16°♄47'55	-4°33'12
inferior conj	7717 Nov 22 09:56	4°♄08'42	-3°30'00	minimum elong	7718 Nov 04 22:22	16°♄34'02	4°31'24
minimum elong	7717 Nov 22 16:20	3°♄54'18	3°27'46	morning rise	7718 Nov 12 10:37	12°♄10'50	
	7717 Nov 27 19:17	30°♄		direct	7718 Nov 14 16:38	11°♄52'35	
morning rise	7717 Nov 29 17:33	29°♄09'36		asc. node	7718 Nov 20 10:36	13°♄58'48	
direct	7717 Dec 01 23:35	28°♄48'00		morning max el	7718 Nov 22 10:11	15°♄40'16	18°15'39
asc. node	7717 Dec 03 13:35	28°♄59'03			7718 Dec 02 09:16	0°♄	
	7717 Dec 06 00:31	0°♄		morning set	7718 Dec 08 05:27	10°♄49'32	
morning max el	7717 Dec 08 22:58	2°♄19'31	17°52'33				
morning set	7717 Dec 24 16:37	26°♄57'15		superior conj	7718 Dec 17 13:51	28°♄19'03	0°55'54
	7717 Dec 26 09:00	0°♄		minimum elong	7718 Dec 17 17:19	28°♄34'46	0°55'32
					7718 Dec 18 12:09	0°♄	
superior conj	7718 Jan 04 09:48	15°♄59'52	0°22'53	max. Earth dist.	7718 Dec 25 04:38	11°♄42'51	1.41085 AU
minimum elong	7718 Jan 04 11:48	16°♄08'27	0°22'42	desc. node	7718 Dec 25 10:05	12°♄05'59	
desc. node	7718 Jan 07 13:04	21°♄20'19		evening rise	7718 Dec 29 22:11	19°♄35'49	
max. Earth dist.	7718 Jan 11 18:32	28°♄21'23	1.43006 AU		7719 Jan 05 11:13	0°♄	
	7718 Jan 12 18:44	0°♄			7719 Jan 26 16:42	0°♄	
evening rise	7718 Jan 18 11:51	9°♄07'02		evening max el	7719 Feb 02 00:38	7°♄09'58	23°13'14
	7718 Feb 01 07:54	0°♄		retrograde	7719 Feb 12 10:30	13°♄19'47	
evening max el	7718 Feb 19 08:53	23°♄28'14	21°53'58	asc. node	7719 Feb 16 09:47	12°♄01'26	
retrograde	7718 Feb 28 15:25	28°♄57'55		evening set	7719 Feb 17 09:27	11°♄16'29	
asc. node	7718 Mar 01 12:43	28°♄53'52		inferior conj	7719 Feb 22 18:58	4°♄50'39	1°58'12
evening set	7718 Mar 05 02:41	27°♄09'40		minimum elong	7719 Feb 22 16:47	4°♄58'11	1°57'32
inferior conj	7718 Mar 10 10:26	20°♄50'36	2°34'25	min. Earth dist.	7719 Feb 22 08:15	5°♄27'36	0.68328 AU
minimum elong	7718 Mar 10 08:10	20°♄58'28	2°33'51		7719 Feb 26 15:22	30°♄	
min. Earth dist.	7718 Mar 10 11:31	20°♄46'51	0.68320 AU	morning rise	7719 Feb 28 00:04	28°♄44'15	
morning rise	7718 Mar 15 13:30	14°♄39'13		direct	7719 Mar 04 07:55	27°♄00'26	
direct	7718 Mar 20 11:24	12°♄32'52			7719 Mar 10 18:21	0°♄	
morning max el	7718 Mar 30 05:00	18°♄17'07	22°34'43	morning max el	7719 Mar 12 20:34	1°♄55'34	21°10'49
desc. node	7718 Apr 05 12:36	25°♄31'30		desc. node	7719 Mar 23 09:34	14°♄54'21	
	7718 Apr 08 23:15	0°♄			7719 Apr 02 20:01	0°♄	
	7718 Apr 29 06:37	0°♄		morning set	7719 Apr 12 18:38	15°♄15'14	
morning set	7718 May 03 03:32	6°♄15'20		max. Earth dist.	7719 Apr 20 02:04	26°♄58'19	1.42516 AU
max. Earth dist.	7718 May 07 23:15	14°♄18'07	1.40447 AU		7719 Apr 21 22:14	0°♄	
superior conj	7718 May 15 18:18	27°♄57'54	-1°43'56	superior conj	7719 Apr 27 07:54	9°♄05'23	-2°04'28
minimum elong	7718 May 15 23:58	28°♄23'33	1°43'25	minimum elong	7719 Apr 27 12:18	9°♄24'13	2°04'18
	7718 May 16 21:13	0°♄		evening rise	7719 May 08 19:21	29°♄21'08	
evening rise	7718 May 25 19:18	16°♄38'43			7719 May 09 03:59	0°♄	
asc. node	7718 May 28 11:47	21°♄41'43		asc. node	7719 May 15 08:49	11°♄01'46	
	7718 Jun 02 01:54	0°♄		evening max el	7719 May 25 08:18	25°♄22'19	18°06'44
evening max el	7718 Jun 10 21:21	12°♄25'53	18°23'16	retrograde	7719 Jun 01 01:01	28°♄47'12	
retrograde	7718 Jun 18 07:56	16°♄08'53		evening set	7719 Jun 03 14:05	28°♄17'47	
evening set	7718 Jun 20 13:39	15°♄49'36		inferior conj	7719 Jun 10 07:15	23°♄22'14	2°23'37
inferior conj	7718 Jun 28 00:16	11°♄14'18	1°17'25	minimum elong	7719 Jun 10 10:20	23°♄14'52	2°22'43
minimum elong	7718 Jun 28 02:46	11°♄09'12	1°16'29	min. Earth dist.	7719 Jun 13 13:04	20°♄18'49	0.60662 AU
min. Earth dist.	7718 Jul 01 09:46	8°♄28'59	0.58438 AU	morning rise	7719 Jun 17 04:04	17°♄27'57	
desc. node	7718 Jul 02 11:59	7°♄39'47		desc. node	7719 Jun 19 09:02	16°♄16'09	
morning rise	7718 Jul 05 12:35	5°♄45'15		direct	7719 Jun 23 18:20	15°♄19'13	
direct	7718 Jul 11 14:35	4°♄08'05		morning max el	7719 Jul 08 01:46	23°♄17'02	27°49'50
morning max el	7718 Jul 25 23:58	11°♄51'21	27°10'10		7719 Jul 14 01:39	0°♄	
	7718 Aug 09 04:25	0°♄			7719 Aug 02 09:30	0°♄	
asc. node	7718 Aug 24 11:09	27°♄47'48		morning set	7719 Aug 09 16:23	14°♄18'24	
morning set	7718 Aug 25 11:30	29°♄55'18		asc. node	7719 Aug 11 08:09	17°♄46'26	
	7718 Aug 25 12:24	0°♄		max. Earth dist.	7719 Aug 15 17:22	27°♄14'41	1.31823 AU
superior conj	7718 Sep 01 11:46	15°♄12'14	1°14'05	superior conj	7719 Aug 16 22:48	29°♄56'41	0°54'46



minimum elong	7719 Aug 16 20:43	29° $\Omega$ 45'11	0°54'19	superior conj	7720 Jul 31 07:15	14° $\Omega$ 29'37	0°31'07
	7719 Aug 16 23:24	0° $\mathbb{M}$		minimum elong	7720 Jul 31 05:51	14° $\Omega$ 22'00	0°30'45
evening rise	7719 Aug 23 17:09	14° $\mathbb{M}$ 46'07		evening rise	7720 Aug 07 04:50	29° $\Omega$ 28'58	
	7719 Aug 31 06:13	0° $\underline{\Omega}$			7720 Aug 07 10:39	0° $\mathbb{M}$	
desc. node	7719 Sep 15 08:05	23° $\underline{\Omega}$ 09'17			7720 Aug 24 04:22	0° $\underline{\Omega}$	
evening max el	7719 Sep 19 14:16	27° $\underline{\Omega}$ 42'10	25°19'36	evening max el	7720 Aug 31 02:14	8° $\underline{\Omega}$ 06'02	23°44'53
	7719 Sep 22 05:02	0° $\mathbb{M}$		desc. node	7720 Sep 01 05:09	9° $\underline{\Omega}$ 08'40	
retrograde	7719 Oct 03 12:01	4° $\mathbb{M}$ 44'06		retrograde	7720 Sep 13 17:28	14° $\underline{\Omega}$ 55'47	
evening set	7719 Oct 09 08:45	3° $\mathbb{M}$ 25'05		evening set	7720 Sep 18 04:40	14° $\underline{\Omega}$ 12'04	
min. Earth dist.	7719 Oct 14 02:02	0° $\mathbb{M}$ 45'48	0.57557 AU	min. Earth dist.	7720 Sep 24 12:32	11° $\underline{\Omega}$ 09'51	0.55882 AU
	7719 Oct 15 05:22	30° $\mathbb{R}$ $\underline{\Omega}$		inferior conj	7720 Sep 26 15:31	9° $\underline{\Omega}$ 53'11	-5°30'37
inferior conj	7719 Oct 17 01:32	28° $\underline{\Omega}$ 44'18	-5°19'15	minimum elong	7720 Sep 26 13:40	9° $\underline{\Omega}$ 55'59	5°30'32
minimum elong	7719 Oct 17 06:08	28° $\underline{\Omega}$ 36'27	5°18'41	morning rise	7720 Oct 05 00:52	5° $\underline{\Omega}$ 58'00	
morning rise	7719 Oct 25 05:52	24° $\underline{\Omega}$ 30'22		direct	7720 Oct 07 20:20	5° $\underline{\Omega}$ 38'10	
direct	7719 Oct 27 16:13	24° $\underline{\Omega}$ 12'44		morning max el	7720 Oct 18 04:15	10° $\underline{\Omega}$ 28'48	20°06'26
morning max el	7719 Nov 05 13:03	28° $\underline{\Omega}$ 26'34	18°59'54	asc. node	7720 Oct 24 04:39	17° $\underline{\Omega}$ 41'10	
asc. node	7719 Nov 07 07:38	0° $\mathbb{M}$ 17'54			7720 Oct 31 11:21	0° $\mathbb{M}$	
	7719 Nov 07 01:15	0° $\mathbb{M}$		morning set	7720 Nov 05 09:16	9° $\mathbb{M}$ 43'47	
morning set	7719 Nov 22 04:06	25° $\mathbb{M}$ 08'08					
	7719 Nov 24 15:06	0° $\mathbb{X}$		superior conj	7720 Nov 13 01:29	25° $\mathbb{M}$ 23'51	1°34'12
superior conj	7719 Nov 30 12:45	11° $\mathbb{X}$ 31'51	1°19'30	minimum elong	7720 Nov 13 03:30	25° $\mathbb{M}$ 33'55	1°34'10
minimum elong	7719 Nov 30 15:54	11° $\mathbb{X}$ 46'57	1°19'16		7720 Nov 15 09:04	0° $\mathbb{X}$	
max. Earth dist.	7719 Dec 07 10:28	24° $\mathbb{X}$ 19'47	1.38937 AU	max. Earth dist.	7720 Nov 18 16:29	6° $\mathbb{X}$ 23'27	1.36826 AU
	7719 Dec 10 15:50	0° $\mathbb{Z}$		evening rise	7720 Nov 22 11:47	13° $\mathbb{X}$ 26'35	
evening rise	7719 Dec 11 06:34	1° $\mathbb{Z}$ 03'29		desc. node	7720 Nov 28 04:10	23° $\mathbb{X}$ 23'19	
desc. node	7719 Dec 12 07:07	2° $\mathbb{Z}$ 48'22			7720 Dec 02 04:23	0° $\mathbb{Z}$	
	7719 Dec 29 18:24	0° $\approx$			7720 Dec 23 16:51	0° $\approx$	
evening max el	7720 Jan 15 14:05	20° $\approx$ 55'05	24°32'35	evening max el	7720 Dec 28 03:07	4° $\approx$ 42'09	25°45'02
retrograde	7720 Jan 27 01:59	27° $\approx$ 38'30		retrograde	7721 Jan 09 12:49	11° $\approx$ 48'06	
evening set	7720 Feb 01 13:28	25° $\approx$ 21'28		evening set	7721 Jan 15 13:04	9° $\approx$ 19'50	
asc. node	7720 Feb 03 06:51	23° $\approx$ 40'29		min. Earth dist.	7721 Jan 19 20:46	4° $\approx$ 39'35	0.67175 AU
min. Earth dist.	7720 Feb 06 04:06	20° $\approx$ 06'42	0.67938 AU	asc. node	7721 Jan 20 03:55	4° $\approx$ 17'07	
inferior conj	7720 Feb 07 02:10	18° $\approx$ 53'04	1°13'51	inferior conj	7721 Jan 21 06:06	2° $\approx$ 53'58	0°21'49
minimum elong	7720 Feb 07 00:32	18° $\approx$ 58'30	1°13'18	minimum elong	7721 Jan 21 05:33	2° $\approx$ 55'44	0°21'40
morning rise	7720 Feb 12 11:45	12° $\approx$ 53'04			7721 Jan 23 15:22	30° $\mathbb{R}$ $\mathbb{Z}$	
direct	7720 Feb 16 06:28	11° $\approx$ 31'16		morning rise	7721 Jan 26 22:31	27° $\mathbb{Z}$ 02'18	
morning max el	7720 Feb 23 19:39	15° $\approx$ 46'10	19°58'25	direct	7721 Jan 30 05:34	26° $\mathbb{Z}$ 00'03	
	7720 Mar 06 00:01	0° $\mathbb{X}$		morning max el	7721 Feb 06 02:27	29° $\mathbb{Z}$ 46'30	19°00'49
desc. node	7720 Mar 09 06:34	4° $\mathbb{X}$ 45'54			7721 Feb 06 07:51	0° $\approx$	
morning set	7720 Mar 21 16:36	23° $\mathbb{X}$ 33'14		greatest brilliancy	7721 Feb 20 05:08	18° $\approx$ 55'11	-0.8m
	7720 Mar 25 20:23	0° $\mathbb{Y}$		desc. node	7721 Feb 24 03:33	24° $\approx$ 58'02	
max. Earth dist.	7720 Apr 01 11:46	10° $\mathbb{Y}$ 27'55	1.44155 AU		7721 Feb 27 09:29	0° $\mathbb{X}$	
superior conj	7720 Apr 06 20:51	19° $\mathbb{Y}$ 07'50	-2°11'22	morning set	7721 Feb 28 21:01	2° $\mathbb{X}$ 18'02	
minimum elong	7720 Apr 06 20:10	19° $\mathbb{Y}$ 05'03	2°11'24	max. Earth dist.	7721 Mar 15 03:29	24° $\mathbb{X}$ 34'34	1.45184 AU
	7720 Apr 13 10:36	0° $\mathbb{Z}$		superior conj	7721 Mar 17 11:13	28° $\mathbb{X}$ 13'55	-1°59'15
evening rise	7720 Apr 20 01:01	11° $\mathbb{Z}$ 12'43		minimum elong	7721 Mar 17 03:45	27° $\mathbb{X}$ 44'30	1°58'48
asc. node	7720 May 01 05:53	29° $\mathbb{Z}$ 56'39			7721 Mar 18 14:05	0° $\mathbb{Y}$	
	7720 May 01 06:46	0° $\mathbb{I}$		evening rise	7721 Apr 01 08:10	22° $\mathbb{Y}$ 05'49	
evening max el	7720 May 07 21:34	8° $\mathbb{I}$ 39'05	18°09'25		7721 Apr 06 04:15	0° $\mathbb{Z}$	
retrograde	7720 May 14 07:06	12° $\mathbb{I}$ 00'39		asc. node	7721 Apr 18 02:57	18° $\mathbb{Z}$ 17'28	
evening set	7720 May 17 03:21	11° $\mathbb{I}$ 18'59		evening max el	7721 Apr 21 10:04	22° $\mathbb{Z}$ 07'39	18°30'30
inferior conj	7720 May 23 06:59	6° $\mathbb{I}$ 04'34	3°03'27	retrograde	7721 Apr 27 21:50	25° $\mathbb{Z}$ 39'22	
minimum elong	7720 May 23 09:12	5° $\mathbb{I}$ 58'36	3°02'59	evening set	7721 May 01 01:15	24° $\mathbb{Z}$ 44'06	
min. Earth dist.	7720 May 26 01:19	3° $\mathbb{I}$ 06'53	0.62856 AU	inferior conj	7721 May 06 19:17	19° $\mathbb{Z}$ 12'09	3°22'05
	7720 May 29 11:14	30° $\mathbb{R}$ $\mathbb{Z}$		minimum elong	7721 May 06 20:07	19° $\mathbb{Z}$ 09'39	3°21'56
morning rise	7720 May 29 13:28	29° $\mathbb{Z}$ 55'45		min. Earth dist.	7721 May 08 22:40	16° $\mathbb{Z}$ 39'36	0.64793 AU
direct	7720 Jun 05 08:15	27° $\mathbb{Z}$ 22'27		morning rise	7721 May 12 14:10	12° $\mathbb{Z}$ 56'43	
desc. node	7720 Jun 05 06:03	27° $\mathbb{Z}$ 22'28		direct	7721 May 19 06:10	10° $\mathbb{Z}$ 10'44	
	7720 Jun 12 21:28	0° $\mathbb{I}$		desc. node	7721 May 23 03:03	10° $\mathbb{Z}$ 58'40	
morning max el	7720 Jun 19 08:54	5° $\mathbb{I}$ 25'18	27°51'11	morning max el	7721 Jun 01 18:43	18° $\mathbb{Z}$ 07'02	27°17'26
	7720 Jul 07 21:56	0° $\mathbb{Z}$			7721 Jun 11 18:00	0° $\mathbb{I}$	
morning set	7720 Jul 23 15:07	28° $\mathbb{Z}$ 20'51		morning set	7721 Jun 30 20:06	0° $\mathbb{Z}$	
	7720 Jul 24 10:40	0° $\Omega$		max. Earth dist.	7721 Jul 07 04:56	11° $\mathbb{Z}$ 54'28	
asc. node	7720 Jul 28 05:10	7° $\Omega$ 51'18			7721 Jul 11 19:11	21° $\mathbb{Z}$ 06'05	1.33464 AU
max. Earth dist.	7720 Jul 28 22:26	9° $\Omega$ 23'20	1.32404 AU	superior conj	7721 Jul 15 11:02	28° $\mathbb{Z}$ 44'36	0°03'46

minimum elong	7721 Jul 15 10:51	28° $\text{☿}$ 43'37	0°03'38	max. Earth dist.	7722 Jun 24 05:21	2° $\text{☿}$ 22'42	1.35001 AU
behind sun begin	7721 Jul 15 05:26	28° $\text{☿}$ 14'59					
behind sun end	7721 Jul 15 16:15	29° $\text{☿}$ 12'17		superior conj	7722 Jun 29 07:45	12° $\text{☿}$ 34'50	-0°26'26
asc. node	7721 Jul 15 02:11	27° $\text{☿}$ 57'46		minimum elong	7722 Jun 29 09:16	12° $\text{☿}$ 42'33	0°26'14
	7721 Jul 16 01:15	0° $\text{♊}$		asc. node	7722 Jul 01 23:11	18° $\text{☿}$ 01'56	
evening rise	7721 Jul 22 15:55	14° $\text{♊}$ 06'31		evening rise	7722 Jul 07 00:24	28° $\text{☿}$ 32'45	
	7721 Jul 30 16:07	0° $\text{♋}$			7722 Jul 07 17:20	0° $\text{♊}$	
evening max el	7721 Aug 12 16:00	18° $\text{♋}$ 22'01	22°06'30	evening max el	7722 Jul 25 15:30	29° $\text{♊}$ 02'46	20°38'55
desc. node	7721 Aug 19 02:12	23° $\text{♋}$ 08'15			7722 Jul 26 15:45	0° $\text{♋}$	
retrograde	7721 Aug 25 10:38	24° $\text{♋}$ 42'56		retrograde	7722 Aug 05 22:41	4° $\text{♋}$ 37'50	
evening set	7721 Aug 28 10:27	24° $\text{♋}$ 23'04		desc. node	7722 Aug 05 23:15	4° $\text{♋}$ 37'49	
min. Earth dist.	7721 Sep 05 21:14	20° $\text{♋}$ 43'29	0.54879 AU	evening set	7722 Aug 08 00:31	4° $\text{♋}$ 27'18	
inferior conj	7721 Sep 06 13:16	20° $\text{♋}$ 20'59	-4°50'23	inferior conj	7722 Aug 17 06:00	0° $\text{♋}$ 30'20	-3°18'52
minimum elong	7721 Sep 06 04:55	20° $\text{♋}$ 32'43	4°48'42	minimum elong	7722 Aug 16 21:19	0° $\text{♋}$ 42'46	3°16'05
morning rise	7721 Sep 15 00:53	16° $\text{♋}$ 32'27			7722 Aug 18 03:08	30° $\text{♋}$ 00	
direct	7721 Sep 18 09:16	16° $\text{♋}$ 07'29		min. Earth dist.	7722 Aug 18 06:47	29° $\text{♋}$ 54'48	0.54779 AU
morning max el	7721 Sep 30 06:33	21° $\text{♋}$ 42'36	21°34'08	morning rise	7722 Aug 25 17:53	26° $\text{♋}$ 28'47	
	7721 Oct 07 06:25	0° $\text{♌}$		direct	7722 Aug 29 17:55	25° $\text{♋}$ 54'29	
asc. node	7721 Oct 11 01:39	5° $\text{♌}$ 54'39			7722 Sep 09 06:51	0° $\text{♋}$	
morning set	7721 Oct 20 18:32	24° $\text{♌}$ 30'01		morning max el	7722 Sep 11 22:45	2° $\text{♋}$ 15'43	23°16'44
	7721 Oct 23 09:17	0° $\text{♍}$		asc. node	7722 Sep 27 22:39	24° $\text{♋}$ 45'45	
					7722 Sep 30 16:31	0° $\text{♌}$	
superior conj	7721 Oct 28 00:04	9° $\text{♍}$ 43'48	1°41'01	morning set	7722 Oct 05 05:51	9° $\text{♌}$ 20'20	
minimum elong	7721 Oct 28 00:42	9° $\text{♍}$ 47'06	1°41'05				
max. Earth dist.	7721 Nov 01 04:13	18° $\text{♍}$ 17'06	1.34965 AU	superior conj	7722 Oct 12 05:17	24° $\text{♌}$ 21'37	1°40'55
evening rise	7721 Nov 05 10:12	26° $\text{♍}$ 36'00		minimum elong	7722 Oct 12 04:40	24° $\text{♌}$ 18'17	1°40'57
	7721 Nov 07 05:34	0° $\text{♎}$			7722 Oct 14 20:47	0° $\text{♍}$	
desc. node	7721 Nov 15 01:12	13° $\text{♎}$ 46'13		max. Earth dist.	7722 Oct 15 00:11	0° $\text{♍}$ 17'55	1.33483 AU
	7721 Nov 25 13:22	0° $\text{☿}$		evening rise	7722 Oct 19 21:46	10° $\text{♍}$ 20'30	
evening max el	7721 Dec 10 16:26	18° $\text{☿}$ 25'26	26°43'06		7722 Oct 30 14:33	0° $\text{♎}$	
retrograde	7721 Dec 23 18:04	25° $\text{☿}$ 42'27		desc. node	7722 Nov 01 22:14	3° $\text{♎}$ 50'25	
evening set	7721 Dec 30 06:23	23° $\text{☿}$ 07'04			7722 Nov 21 07:30	0° $\text{☿}$	
min. Earth dist.	7722 Jan 03 07:53	19° $\text{☿}$ 01'34	0.66050 AU	evening max el	7722 Nov 23 05:09	1° $\text{☿}$ 53'29	27°19'34
inferior conj	7722 Jan 05 04:46	16° $\text{☿}$ 49'21	-0°37'13	retrograde	7722 Dec 06 17:10	9° $\text{☿}$ 12'54	
minimum elong	7722 Jan 05 05:48	16° $\text{☿}$ 46'16	0°36'41	evening set	7722 Dec 13 15:06	6° $\text{☿}$ 36'35	
asc. node	7722 Jan 07 00:57	14° $\text{☿}$ 42'36		min. Earth dist.	7722 Dec 17 11:06	3° $\text{☿}$ 04'56	0.64578 AU
morning rise	7722 Jan 11 06:10	11° $\text{☿}$ 08'33		inferior conj	7722 Dec 19 19:44	0° $\text{☿}$ 32'48	-1°42'11
direct	7722 Jan 14 03:19	10° $\text{☿}$ 22'29		minimum elong	7722 Dec 19 22:50	0° $\text{☿}$ 24'26	1°40'47
morning max el	7722 Jan 20 15:26	13° $\text{☿}$ 52'02	18°19'33		7722 Dec 20 07:57	30° $\text{☿}$ 00	
	7722 Feb 01 08:59	0° $\text{♈}$		asc. node	7722 Dec 24 21:59	25° $\text{☿}$ 52'11	
morning set	7722 Feb 09 03:19	12° $\text{♈}$ 24'02		morning rise	7722 Dec 26 08:02	25° $\text{☿}$ 05'52	
desc. node	7722 Feb 11 00:32	15° $\text{♈}$ 25'13		direct	7722 Dec 28 21:17	24° $\text{☿}$ 32'14	
	7722 Feb 20 04:45	0° $\text{♉}$		morning max el	7723 Jan 04 08:00	27° $\text{☿}$ 55'21	17°55'10
					7723 Jan 06 05:34	0° $\text{☿}$	
superior conj	7722 Feb 24 15:42	7° $\text{♉}$ 00'19	-1°27'47	morning set	7723 Jan 21 14:49	23° $\text{☿}$ 56'01	
minimum elong	7722 Feb 24 06:18	6° $\text{♉}$ 23'27	1°26'43		7723 Jan 25 05:54	0° $\text{♈}$	
max. Earth dist.	7722 Feb 25 22:54	9° $\text{♉}$ 02'30	1.45491 AU	desc. node	7723 Jan 28 21:30	6° $\text{♈}$ 02'07	
	7722 Mar 11 08:25	0° $\text{♊}$					
evening rise	7722 Mar 12 16:13	2° $\text{♊}$ 04'39		superior conj	7723 Feb 04 05:41	16° $\text{♈}$ 19'14	-0°44'30
greatest brilliancy	7722 Mar 23 10:25	18° $\text{♊}$ 52'04	-0.8m	minimum elong	7723 Feb 04 00:31	15° $\text{♈}$ 58'29	0°43'41
	7722 Mar 31 01:09	0° $\text{♋}$		max. Earth dist.	7723 Feb 08 18:38	23° $\text{♈}$ 32'12	1.45046 AU
evening max el	7722 Apr 04 19:25	5° $\text{♋}$ 42'33	19°08'58		7723 Feb 12 21:30	0° $\text{♉}$	
asc. node	7722 Apr 05 00:00	5° $\text{♋}$ 54'04		evening rise	7723 Feb 20 07:16	11° $\text{♉}$ 27'52	
retrograde	7722 Apr 11 17:44	9° $\text{♋}$ 36'41			7723 Mar 04 12:31	0° $\text{♊}$	
evening set	7722 Apr 15 04:44	8° $\text{♋}$ 27'02		greatest brilliancy	7723 Mar 07 00:45	3° $\text{♊}$ 42'10	-0.6m
inferior conj	7722 Apr 20 16:34	2° $\text{♋}$ 39'00	3°24'11	evening max el	7723 Mar 18 23:50	19° $\text{♊}$ 19'44	20°03'19
minimum elong	7722 Apr 20 16:05	2° $\text{♋}$ 40'31	3°24'06	asc. node	7723 Mar 22 21:03	22° $\text{♊}$ 33'30	
min. Earth dist.	7722 Apr 22 04:30	0° $\text{♋}$ 43'44	0.66345 AU	retrograde	7723 Mar 26 16:00	23° $\text{♊}$ 46'42	
	7722 Apr 22 18:28	30° $\text{♋}$ 00		evening set	7723 Mar 30 11:25	22° $\text{♊}$ 22'15	
morning rise	7722 Apr 26 03:04	26° $\text{♊}$ 21'40		inferior conj	7723 Apr 04 19:54	16° $\text{♊}$ 20'03	3°13'11
direct	7722 May 02 10:39	23° $\text{♊}$ 35'35		minimum elong	7723 Apr 04 18:25	16° $\text{♊}$ 25'03	3°12'58
desc. node	7722 May 10 00:04	26° $\text{♊}$ 37'00		min. Earth dist.	7723 Apr 05 17:19	15° $\text{♊}$ 07'41	0.67451 AU
	7722 May 13 23:51	0° $\text{♋}$		morning rise	7723 Apr 10 01:11	10° $\text{♊}$ 03'34	
morning max el	7722 May 15 04:55	1° $\text{♋}$ 11'39	26°15'38	direct	7723 Apr 15 20:48	7° $\text{♊}$ 27'43	
	7722 Jun 05 19:08	0° $\text{♌}$		desc. node	7723 Apr 26 21:04	13° $\text{♊}$ 46'16	
morning set	7722 Jun 20 06:22	24° $\text{♌}$ 49'36		morning max el	7723 Apr 27 14:21	14° $\text{♊}$ 29'17	24°55'09
	7722 Jun 22 23:53	0° $\text{☿}$			7723 May 10 06:05	0° $\text{♋}$	

	7723 May 29 15:40	0°♂		desc. node	7724 Apr 12 18:02	2°♂00'55	
morning set	7723 Jun 02 14:52	6°♂54'18			7724 May 02 22:18	0°♂	
max. Earth dist.	7723 Jun 06 05:50	13°♂27'43	1.36950 AU	morning set	7724 May 14 00:46	17°♂53'08	
				max. Earth dist.	7724 May 18 01:33	24°♂48'21	1.39154 AU
superior conj	7723 Jun 12 18:25	25°♂52'38	-0°57'54		7724 May 21 00:01	0°♂	
minimum elong	7723 Jun 12 21:54	26°♂09'46	0°57'25				
	7723 Jun 14 20:31	0°♂		superior conj	7724 May 25 15:11	8°♂27'59	-1°28'18
asc. node	7723 Jun 18 20:11	7°♂59'56		minimum elong	7724 May 25 20:24	8°♂52'18	1°27'43
evening rise	7723 Jun 21 04:01	12°♂41'09		evening rise	7724 Jun 03 23:51	26°♂23'07	
	7723 Jun 30 09:18	0°♂		asc. node	7724 Jun 04 17:12	27°♂46'59	
evening max el	7723 Jul 08 04:09	10°♂26'37	19°29'59		7724 Jun 05 20:51	0°♂	
retrograde	7723 Jul 17 18:24	15°♂10'27		evening max el	7724 Jun 20 04:22	22°♂33'09	18°41'45
evening set	7723 Jul 19 15:07	15°♂00'30		retrograde	7724 Jun 28 06:48	26°♂33'54	
desc. node	7723 Jul 23 20:18	13°♂33'12		evening set	7724 Jun 30 08:13	26°♂19'16	
inferior conj	7723 Jul 28 08:26	10°♂54'48	-1°22'28	inferior conj	7724 Jul 08 06:16	21°♂56'05	0°26'07
minimum elong	7723 Jul 28 04:42	11°♂00'47	1°21'07	minimum elong	7724 Jul 08 07:16	21°♂54'14	0°25'39
min. Earth dist.	7723 Jul 30 19:21	9°♂20'43	0.55626 AU	desc. node	7724 Jul 09 17:22	20°♂50'14	
morning rise	7723 Aug 05 15:46	6°♂21'37		min. Earth dist.	7724 Jul 11 12:19	19°♂31'27	0.57262 AU
direct	7723 Aug 10 10:59	5°♂29'51		morning rise	7724 Jul 16 02:48	16°♂45'46	
morning max el	7723 Aug 24 11:32	12°♂31'55	25°01'12	direct	7724 Jul 21 18:38	15°♂26'35	
	7723 Sep 06 23:26	0°♂		morning max el	7724 Aug 05 03:03	22°♂58'38	26°30'56
asc. node	7723 Sep 14 19:39	14°♂04'58			7724 Aug 11 09:51	0°♂	
morning set	7723 Sep 19 17:32	24°♂09'58			7724 Aug 29 20:10	0°♂	
	7723 Sep 22 10:25	0°♂		asc. node	7724 Aug 31 16:38	3°♂44'02	
				morning set	7724 Sep 03 03:56	8°♂53'14	
superior conj	7723 Sep 26 14:41	9°♂09'57	1°34'44				
minimum elong	7723 Sep 26 13:06	9°♂01'20	1°34'37	superior conj	7724 Sep 10 02:10	24°♂01'32	1°23'05
max. Earth dist.	7723 Sep 28 03:51	12°♂33'09	1.32441 AU	minimum elong	7724 Sep 10 00:02	23°♂49'44	1°22'48
evening rise	7723 Oct 03 19:08	24°♂31'24		max. Earth dist.	7724 Sep 10 12:32	24°♂58'59	1.31847 AU
	7723 Oct 06 12:20	0°♂			7724 Sep 12 19:07	0°♂	
desc. node	7723 Oct 19 19:16	23°♂28'08		evening rise	7724 Sep 16 23:23	9°♂00'00	
	7723 Oct 24 04:39	0°♂			7724 Sep 27 20:49	0°♂	
evening max el	7723 Nov 05 15:28	14°♂54'08	27°27'55	desc. node	7724 Oct 05 16:21	12°♂28'22	
retrograde	7723 Nov 19 09:38	22°♂10'38		evening max el	7724 Oct 17 21:05	27°♂15'20	27°03'37
evening set	7723 Nov 26 12:23	19°♂42'23			7724 Oct 21 01:39	0°♂	
min. Earth dist.	7723 Nov 30 04:41	16°♂40'27	0.62795 AU	retrograde	7724 Oct 31 18:36	4°♂26'17	
inferior conj	7723 Dec 03 00:14	13°♂57'52	-2°50'41	evening set	7724 Nov 07 18:26	2°♂17'17	
minimum elong	7723 Dec 03 05:34	13°♂45'01	2°48'35		7724 Nov 10 23:55	30°♂	
morning rise	7723 Dec 10 00:45	8°♂47'58		min. Earth dist.	7724 Nov 11 11:44	29°♂36'08	0.60780 AU
asc. node	7723 Dec 11 19:02	8°♂24'33		inferior conj	7724 Nov 14 15:03	26°♂56'26	-3°58'05
direct	7723 Dec 12 08:29	8°♂23'05		minimum elong	7724 Nov 14 22:00	26°♂41'40	3°55'55
morning max el	7723 Dec 19 01:09	11°♂49'02	17°48'15	morning rise	7724 Nov 22 03:53	22°♂06'35	
	7723 Dec 31 07:56	0°♂		direct	7724 Nov 24 09:15	21°♂46'55	
morning set	7724 Jan 04 02:21	6°♂36'50		asc. node	7724 Nov 27 16:05	22°♂31'46	
				morning max el	7724 Dec 01 15:33	25°♂24'30	17°59'56
superior conj	7724 Jan 15 18:49	26°♂46'30	-0°00'06		7724 Dec 05 12:01	0°♂	
minimum elong	7724 Jan 15 18:49	26°♂46'30	0°00'00	morning set	7724 Dec 17 07:34	20°♂07'39	
behind sun begin	7724 Jan 15 13:09	26°♂22'45			7724 Dec 22 16:22	0°♂	
behind sun end	7724 Jan 16 00:30	27°♂10'12					
desc. node	7724 Jan 15 18:29	26°♂45'02		superior conj	7724 Dec 27 09:39	8°♂27'33	0°38'02
	7724 Jan 17 17:23	0°♂		minimum elong	7724 Dec 27 12:32	8°♂40'18	0°37'43
max. Earth dist.	7724 Jan 22 11:31	7°♂45'02	1.43911 AU	desc. node	7725 Jan 01 15:29	17°♂30'42	
evening rise	7724 Jan 30 18:47	20°♂49'55		max. Earth dist.	7725 Jan 03 23:51	21°♂26'51	1.42223 AU
	7724 Feb 05 18:55	0°♂			7725 Jan 09 05:54	0°♂	
	7724 Feb 27 05:52	0°♂		evening rise	7725 Jan 09 17:56	0°♂47'59	
evening max el	7724 Feb 29 22:41	2°♂57'42	21°10'50		7725 Jan 29 07:23	0°♂	
asc. node	7724 Mar 08 18:07	8°♂00'36		evening max el	7725 Feb 11 16:40	16°♂38'05	22°27'24
retrograde	7724 Mar 09 14:22	8°♂04'18		retrograde	7725 Feb 21 11:03	22°♂25'46	
evening set	7724 Mar 13 19:24	6°♂24'50		asc. node	7725 Feb 23 15:12	22°♂01'44	
inferior conj	7724 Mar 19 02:50	0°♂10'57	2°51'21	evening set	7725 Feb 26 03:02	20°♂31'16	
minimum elong	7724 Mar 19 00:44	0°♂18'13	2°50'55	inferior conj	7725 Mar 03 11:21	14°♂08'51	2°20'08
	7724 Mar 19 06:00	30°♂		minimum elong	7725 Mar 03 09:04	14°♂16'47	2°19'31
min. Earth dist.	7724 Mar 19 11:02	29°♂42'30	0.68118 AU	min. Earth dist.	7725 Mar 03 07:24	14°♂22'35	0.68364 AU
morning rise	7724 Mar 24 05:54	23°♂57'06		morning rise	7725 Mar 08 14:56	7°♂59'09	
direct	7724 Mar 29 11:50	21°♂38'41		direct	7725 Mar 13 06:48	6°♂02'07	
morning max el	7724 Apr 08 23:36	27°♂53'28	23°26'02	morning max el	7725 Mar 22 11:41	11°♂25'15	21°57'57
	7724 Apr 10 23:29	0°♂		desc. node	7725 Mar 30 15:01	21°♂02'55	

	7725 Apr 06 03:22	0°♿			7726 Mar 09 13:55	0°♿	
morning set	7725 Apr 24 07:21	27°♿35'02		desc. node	7726 Mar 17 11:59	10°♿38'46	
	7725 Apr 25 19:15	0°♿			7726 Mar 30 12:59	0°♿	
max. Earth dist.	7725 Apr 30 00:04	6°♿54'54	1.41361 AU	morning set	7726 Apr 03 12:49	6°♿09'24	
				max. Earth dist.	7726 Apr 12 05:57	19°♿57'27	1.43281 AU
superior conj	7725 May 07 17:35	20°♿11'01	-1°53'54		7726 Apr 18 08:44	0°♿	
minimum elong	7725 May 07 23:07	20°♿35'27	1°53'31				
	7725 May 13 04:41	0°♿		superior conj	7726 Apr 18 20:55	0°♿50'56	-2°09'26
evening rise	7725 May 18 08:21	9°♿30'03		minimum elong	7726 Apr 18 23:39	1°♿02'20	2°09'24
asc. node	7725 May 22 14:15	17°♿18'33		evening rise	7726 May 01 01:04	21°♿51'24	
	7725 May 30 05:27	0°♿			7726 May 05 16:10	0°♿	
evening max el	7725 Jun 03 12:35	5°♿14'38	18°13'52	asc. node	7726 May 09 11:18	6°♿28'32	
retrograde	7725 Jun 10 14:02	8°♿47'39		evening max el	7726 May 18 00:57	18°♿20'48	18°05'37
evening set	7725 Jun 12 22:58	8°♿24'20		retrograde	7726 May 24 13:11	21°♿42'13	
inferior conj	7725 Jun 20 01:46	3°♿40'35	1°48'57	evening set	7726 May 27 05:29	21°♿07'38	
minimum elong	7725 Jun 20 04:47	3°♿34'01	1°47'54	inferior conj	7726 Jun 02 16:21	16°♿03'44	2°43'26
min. Earth dist.	7725 Jun 23 11:11	0°♿44'27	0.59378 AU	minimum elong	7726 Jun 02 19:11	15°♿56'36	2°42'41
	7725 Jun 24 09:18	30°♿		min. Earth dist.	7726 Jun 05 17:54	13°♿00'19	0.61618 AU
desc. node	7725 Jun 26 14:24	28°♿25'34		morning rise	7726 Jun 09 06:51	10°♿02'25	
morning rise	7725 Jun 27 07:33	27°♿59'36		desc. node	7726 Jun 13 11:26	8°♿01'44	
direct	7725 Jul 03 15:55	26°♿08'16		direct	7726 Jun 16 00:08	7°♿42'12	
	7725 Jul 13 10:26	0°♿		morning max el	7726 Jun 30 04:55	15°♿42'25	27°55'03
morning max el	7725 Jul 18 00:44	3°♿58'45	27°31'27		7726 Jul 11 21:08	0°♿	
	7725 Aug 06 03:28	0°♿			7726 Jul 29 17:41	0°♿	
morning set	7725 Aug 18 11:23	23°♿25'15		morning set	7726 Aug 02 13:59	7°♿40'39	
asc. node	7725 Aug 18 13:38	23°♿36'59		asc. node	7726 Aug 05 10:38	13°♿38'56	
	7725 Aug 21 13:23	0°♿		max. Earth dist.	7726 Aug 08 07:17	19°♿48'01	1.32018 AU
max. Earth dist.	7725 Aug 24 22:56	7°♿27'33	1.31706 AU				
				superior conj	7726 Aug 10 00:06	23°♿31'06	0°45'15
superior conj	7725 Aug 25 13:54	8°♿50'24	1°06'27	minimum elong	7726 Aug 09 22:14	23°♿20'53	0°44'49
minimum elong	7725 Aug 25 11:39	8°♿37'59	1°06'02		7726 Aug 12 22:49	0°♿	
evening rise	7725 Sep 01 08:08	23°♿39'22		evening rise	7726 Aug 16 19:20	8°♿23'13	
	7725 Sep 04 09:00	0°♿			7726 Aug 27 21:57	0°♿	
	7725 Sep 22 02:26	0°♿		desc. node	7726 Sep 09 10:29	17°♿30'30	
desc. node	7725 Sep 22 13:25	0°♿36'01		evening max el	7726 Sep 11 10:32	19°♿32'30	24°40'51
evening max el	7725 Sep 29 19:39	8°♿47'53	26°05'52	retrograde	7726 Sep 25 06:16	26°♿29'46	
retrograde	7725 Oct 13 18:06	15°♿52'33		evening set	7726 Sep 30 14:07	25°♿26'22	
evening set	7725 Oct 20 04:24	14°♿13'32		min. Earth dist.	7726 Oct 05 21:37	22°♿39'36	0.56789 AU
min. Earth dist.	7725 Oct 24 08:39	11°♿38'44	0.58697 AU	inferior conj	7726 Oct 08 14:19	20°♿55'50	-5°29'29
inferior conj	7725 Oct 27 12:39	9°♿18'38	-4°55'49	minimum elong	7726 Oct 08 16:35	20°♿52'11	5°29'19
minimum elong	7725 Oct 27 19:10	9°♿06'35	4°54'30	morning rise	7726 Oct 16 21:14	16°♿50'40	
morning rise	7725 Nov 04 12:12	4°♿51'07		direct	7726 Oct 19 11:09	16°♿32'16	
direct	7725 Nov 06 19:24	4°♿33'29		morning max el	7726 Oct 28 21:49	21°♿00'15	19°25'25
asc. node	7725 Nov 14 13:07	8°♿06'48		asc. node	7726 Nov 01 10:08	24°♿55'25	
morning max el	7725 Nov 14 23:37	8°♿31'29	18°31'46		7726 Nov 04 23:29	0°♿	
	7725 Nov 28 20:26	0°♿		morning set	7726 Nov 15 02:54	18°♿40'00	
morning set	7725 Dec 01 01:03	4°♿12'26			7726 Nov 20 18:30	0°♿	
				superior conj	7726 Nov 23 03:43	4°♿42'19	1°26'46
superior conj	7725 Dec 09 22:19	21°♿10'51	1°07'03	minimum elong	7726 Nov 23 06:26	4°♿55'38	1°26'37
minimum elong	7725 Dec 10 01:49	21°♿27'03	1°06'44	max. Earth dist.	7726 Nov 29 13:42	16°♿52'20	1.38027 AU
	7725 Dec 14 18:36	0°♿		evening rise	7726 Dec 03 07:15	23°♿34'14	
max. Earth dist.	7725 Dec 17 07:52	4°♿29'12	1.40183 AU	desc. node	7726 Dec 06 09:32	28°♿54'59	
desc. node	7725 Dec 19 12:29	8°♿15'09			7726 Dec 07 00:54	0°♿	
evening rise	7725 Dec 21 13:34	11°♿41'43			7726 Dec 26 21:41	0°♿	
	7726 Jan 02 03:07	0°♿		evening max el	7727 Jan 07 20:33	14°♿08'05	25°04'38
	7726 Jan 24 22:45	0°♿		retrograde	7727 Jan 19 18:01	21°♿01'46	
evening max el	7726 Jan 25 07:22	0°♿21'39	23°47'31	evening set	7727 Jan 25 11:06	18°♿39'28	
retrograde	7726 Feb 05 04:37	6°♿46'22		asc. node	7727 Jan 28 09:21	15°♿36'58	
evening set	7726 Feb 10 08:47	4°♿37'14		min. Earth dist.	7727 Jan 29 22:41	13°♿39'35	0.67667 AU
asc. node	7726 Feb 10 12:17	4°♿29'43		inferior conj	7727 Jan 31 01:33	12°♿11'45	0°52'40
	7726 Feb 14 11:03	30°♿		minimum elong	7727 Jan 31 00:18	12°♿15'48	0°52'16
min. Earth dist.	7726 Feb 15 04:02	29°♿02'48	0.68208 AU	morning rise	7727 Feb 05 13:46	6°♿15'13	
inferior conj	7726 Feb 15 19:32	28°♿09'59	1°40'23	direct	7727 Feb 09 03:24	5°♿02'02	
minimum elong	7726 Feb 15 17:31	28°♿16'51	1°39'44	morning max el	7727 Feb 16 08:34	9°♿02'51	19°32'00
morning rise	7726 Feb 21 02:14	22°♿06'02		greatest brilliancy	7727 Mar 01 04:17	25°♿52'59	-0.7m
direct	7726 Feb 25 04:27	20°♿31'32			7727 Mar 03 22:28	0°♿	
morning max el	7726 Mar 05 06:06	25°♿07'55	20°38'22				

desc. node	7727 Mar 04 08:58	0° $\text{H}$ 39'30		transit end	7728 Jan 15 06:22	26° $\text{Z}$ 01'29	
morning set	7727 Mar 13 10:20	14° $\text{H}$ 29'27		asc. node	7728 Jan 15 06:24	26° $\text{Z}$ 01'24	
	7727 Mar 23 09:36	0° $\text{Y}$		morning rise	7728 Jan 20 23:30	20° $\text{Z}$ 23'21	
max. Earth dist.	7727 Mar 25 18:57	3° $\text{Y}$ 46'09	1.44679 AU	direct	7728 Jan 24 02:03	19° $\text{Z}$ 28'34	
				morning max el	7728 Jan 30 18:22	23° $\text{Z}$ 06'24	18°41'14
superior conj	7727 Mar 29 23:20	10° $\text{Y}$ 25'47	-2°08'44		7728 Feb 05 10:48	0° $\approx$	
minimum elong	7727 Mar 29 19:37	10° $\text{Y}$ 10'57	2°08'39	desc. node	7728 Feb 19 05:57	20° $\approx$ 58'25	
	7727 Apr 10 22:08	0° $\text{Z}$		morning set	7728 Feb 21 00:18	23° $\approx$ 44'54	
evening rise	7727 Apr 12 21:29	3° $\text{Z}$ 18'07			7728 Feb 24 23:48	0° $\text{H}$	
asc. node	7727 Apr 26 08:22	25° $\text{Z}$ 09'37		max. Earth dist.	7728 Mar 07 12:32	18° $\text{H}$ 03'38	1.45401 AU
	7727 Apr 30 00:20	0° $\text{II}$					
evening max el	7727 May 01 14:08	1° $\text{II}$ 42'35	18°16'11	superior conj	7728 Mar 08 07:16	19° $\text{H}$ 17'03	-1°47'59
retrograde	7727 May 07 23:33	5° $\text{II}$ 07'04		minimum elong	7728 Mar 07 22:05	18° $\text{H}$ 41'04	1°47'12
evening set	7727 May 10 22:50	4° $\text{II}$ 19'39			7728 Mar 15 02:45	0° $\text{Y}$	
	7727 May 15 23:24	30° $\text{R}$ 8		evening rise	7728 Mar 23 18:35	13° $\text{Y}$ 46'54	
inferior conj	7727 May 16 21:53	28° $\text{Z}$ 57'17	3°13'40	greatest brilliancy	7728 Mar 31 09:36	25° $\text{Y}$ 59'30	-0.9m
minimum elong	7727 May 16 23:31	28° $\text{Z}$ 52'37	3°13'22		7728 Apr 02 22:34	0° $\text{Z}$	
min. Earth dist.	7727 May 19 09:55	26° $\text{Z}$ 08'37	0.63714 AU	asc. node	7728 Apr 12 05:25	13° $\text{Z}$ 12'56	
morning rise	7727 May 22 23:02	22° $\text{Z}$ 44'49		evening max el	7728 Apr 14 01:28	15° $\text{Z}$ 13'52	18°44'49
direct	7727 May 29 17:16	20° $\text{Z}$ 04'55		retrograde	7728 Apr 20 16:57	18° $\text{Z}$ 54'10	
desc. node	7727 May 31 08:27	20° $\text{Z}$ 13'24		evening set	7728 Apr 23 23:24	17° $\text{Z}$ 52'59	
morning max el	7727 Jun 12 13:38	28° $\text{Z}$ 06'15	27°40'59	inferior conj	7728 Apr 29 14:24	12° $\text{Z}$ 13'55	3°24'46
	7727 Jun 14 09:11	0° $\text{II}$		minimum elong	7728 Apr 29 14:39	12° $\text{Z}$ 13'07	3°24'41
	7727 Jul 05 15:58	0° $\text{Z}$		min. Earth dist.	7728 May 01 11:10	9° $\text{Z}$ 55'58	0.65495 AU
morning set	7727 Jul 17 09:17	21° $\text{Z}$ 31'48		morning rise	7728 May 05 05:17	5° $\text{Z}$ 56'55	
	7727 Jul 21 12:56	0° $\Omega$		direct	7728 May 11 18:07	3° $\text{Z}$ 09'26	
max. Earth dist.	7727 Jul 22 09:29	1° $\Omega$ 47'42	1.32796 AU	desc. node	7728 May 17 05:27	4° $\text{Z}$ 45'11	
asc. node	7727 Jul 23 07:37	3° $\Omega$ 44'41		morning max el	7728 May 25 00:05	10° $\text{Z}$ 59'50	26°54'10
					7728 Jun 09 01:32	0° $\text{II}$	
superior conj	7727 Jul 25 06:47	7° $\Omega$ 56'50	0°19'57		7728 Jun 27 04:40	0° $\text{Z}$	
minimum elong	7727 Jul 25 05:50	7° $\Omega$ 51'43	0°19'39	morning set	7728 Jun 29 18:20	4° $\text{Z}$ 50'28	
evening rise	7727 Aug 01 06:59	23° $\Omega$ 04'32		max. Earth dist.	7728 Jul 04 01:54	13° $\text{Z}$ 18'43	1.34054 AU
	7727 Aug 04 14:41	0° $\text{H}$					
evening max el	7727 Aug 23 21:57	29° $\text{H}$ 47'53	23°02'28	superior conj	7728 Jul 08 07:52	22° $\text{Z}$ 01'50	-0°08'46
	7727 Aug 24 02:58	0° $\text{Z}$		minimum elong	7728 Jul 08 08:20	22° $\text{Z}$ 04'20	0°08'47
desc. node	7727 Aug 27 07:34	2° $\text{Z}$ 43'11		behind sun begin	7728 Jul 08 03:32	21° $\text{Z}$ 39'14	
retrograde	7727 Sep 06 06:14	6° $\text{Z}$ 28'15		behind sun end	7728 Jul 08 13:09	22° $\text{Z}$ 29'28	
evening set	7727 Sep 10 01:56	5° $\text{Z}$ 56'18		asc. node	7728 Jul 09 04:37	23° $\text{Z}$ 50'30	
min. Earth dist.	7727 Sep 17 06:37	2° $\text{Z}$ 39'56	0.55359 AU		7728 Jul 12 02:34	0° $\Omega$	
inferior conj	7727 Sep 18 20:27	1° $\text{Z}$ 45'14	-5°20'26	evening rise	7728 Jul 15 17:11	7° $\Omega$ 37'40	
minimum elong	7727 Sep 18 15:26	1° $\text{Z}$ 52'31	5°19'52		7728 Jul 27 15:34	0° $\text{H}$	
	7727 Sep 21 23:58	30° $\text{R}$ 8		evening max el	7728 Aug 04 14:57	10° $\text{H}$ 10'30	21°27'21
morning rise	7727 Sep 27 07:05	27° $\text{H}$ 55'21		desc. node	7728 Aug 13 04:36	15° $\text{H}$ 41'50	
direct	7727 Sep 30 07:41	27° $\text{H}$ 33'48		retrograde	7728 Aug 16 20:25	16° $\text{H}$ 14'07	
	7727 Oct 07 21:41	0° $\text{Z}$		evening set	7728 Aug 19 08:23	15° $\text{H}$ 59'49	
morning max el	7727 Oct 11 07:32	2° $\text{Z}$ 42'00	20°41'22	inferior conj	7728 Aug 28 14:20	12° $\text{H}$ 01'24	-4°16'48
asc. node	7727 Oct 19 07:08	12° $\text{Z}$ 41'25		minimum elong	7728 Aug 28 04:56	12° $\text{H}$ 14'35	4°14'23
	7727 Oct 28 18:46	0° $\text{H}$		min. Earth dist.	7728 Aug 28 15:38	11° $\text{H}$ 59'35	0.54716 AU
morning set	7727 Oct 30 10:04	3° $\text{H}$ 20'54		morning rise	7728 Sep 06 02:23	8° $\text{H}$ 09'41	
				direct	7728 Sep 09 16:44	7° $\text{H}$ 41'38	
superior conj	7727 Nov 06 21:06	18° $\text{H}$ 47'37	1°38'00	morning max el	7728 Sep 22 05:05	13° $\text{H}$ 37'02	22°16'30
minimum elong	7727 Nov 06 22:32	18° $\text{H}$ 54'52	1°38'00		7728 Oct 04 11:34	0° $\text{Z}$	
max. Earth dist.	7727 Nov 11 21:36	28° $\text{H}$ 48'46	1.35995 AU	asc. node	7728 Oct 05 04:07	1° $\text{Z}$ 11'48	
	7727 Nov 12 12:18	0° $\text{Z}$		morning set	7728 Oct 13 20:24	18° $\text{Z}$ 09'01	
evening rise	7727 Nov 15 20:14	6° $\text{Z}$ 17'51			7728 Oct 19 09:56	0° $\text{H}$	
desc. node	7727 Nov 23 06:34	19° $\text{Z}$ 25'11					
	7727 Nov 29 20:05	0° $\text{Z}$		superior conj	7728 Oct 20 22:51	3° $\text{H}$ 16'05	1°41'46
evening max el	7727 Dec 21 09:29	27° $\text{Z}$ 53'34	26°11'47	minimum elong	7728 Oct 20 22:55	3° $\text{H}$ 16'28	1°41'49
	7727 Dec 23 16:40	0° $\approx$		max. Earth dist.	7728 Oct 24 12:20	10° $\text{H}$ 41'56	1.34284 AU
retrograde	7728 Jan 03 02:36	5° $\approx$ 05'49		evening rise	7728 Oct 29 00:42	19° $\text{H}$ 43'07	
evening set	7728 Jan 09 08:17	2° $\approx$ 33'34			7728 Nov 03 12:47	0° $\text{Z}$	
	7728 Jan 11 22:59	30° $\text{R}$ 8		desc. node	7728 Nov 09 03:35	9° $\text{Z}$ 40'32	
min. Earth dist.	7728 Jan 13 13:09	28° $\text{Z}$ 08'23	0.66744 AU		7728 Nov 22 21:03	0° $\text{Z}$	
inferior conj	7728 Jan 15 03:29	26° $\text{Z}$ 10'24	-0°02'27	evening max el	7728 Dec 02 22:32	11° $\text{Z}$ 30'56	27°01'38
minimum elong	7728 Jan 15 03:32	26° $\text{Z}$ 10'13	0°02'19	retrograde	7728 Dec 16 05:32	18° $\text{Z}$ 50'44	
transit middle	7728 Jan 15 03:32	26° $\text{Z}$ 10'13	0°02'19	evening set	7728 Dec 22 22:15	16° $\text{Z}$ 13'55	
transit begin	7728 Jan 15 00:42	26° $\text{Z}$ 18'58		min. Earth dist.	7728 Dec 26 21:14	12° $\text{Z}$ 23'00	0.65461 AU

inferior conj	7728 Dec 28 23:10	10° $\text{Z}$ 01'06	-1°04'13	evening set	7729 Dec 06 02:34	29° $\text{Z}$ 34'50	
minimum elong	7728 Dec 29 01:02	9° $\text{Z}$ 55'46	1°03'18	min. Earth dist.	7729 Dec 09 20:47	26° $\text{Z}$ 16'11	0.63851 AU
asc. node	7729 Jan 01 03:27	6° $\text{Z}$ 38'51		inferior conj	7729 Dec 12 10:08	23° $\text{Z}$ 38'23	-2°11'00
morning rise	7729 Jan 04 05:01	4° $\text{Z}$ 25'52		minimum elong	7729 Dec 12 14:11	23° $\text{Z}$ 27'56	2°09'16
direct	7729 Jan 06 22:24	3° $\text{Z}$ 45'44		morning rise	7729 Dec 19 03:29	18° $\text{Z}$ 18'01	
morning max el	7729 Jan 13 09:14	7° $\text{Z}$ 11'42	18°07'01	asc. node	7729 Dec 19 00:30	18° $\text{Z}$ 21'03	
	7729 Jan 29 01:40	0° $\approx$		direct	7729 Dec 21 14:02	17° $\text{Z}$ 48'33	
morning set	7729 Jan 31 19:18	4° $\approx$ 28'07		morning max el	7729 Dec 28 02:26	21° $\text{Z}$ 12'03	17°49'57
desc. node	7729 Feb 05 02:55	11° $\approx$ 29'50			7730 Jan 03 19:47	0° $\text{Z}$	
				morning set	7730 Jan 13 17:58	16° $\text{Z}$ 32'38	
superior conj	7729 Feb 15 13:31	28° $\approx$ 11'14	-1°10'12		7730 Jan 21 16:39	0° $\approx$	
minimum elong	7729 Feb 15 05:26	27° $\approx$ 39'19	1°09'08	desc. node	7730 Jan 22 23:53	2° $\approx$ 09'46	
	7729 Feb 16 17:08	0° $\text{H}$					
max. Earth dist.	7729 Feb 18 07:52	2° $\text{H}$ 32'08	1.45386 AU	superior conj	7730 Jan 26 12:27	7° $\approx$ 57'01	-0°25'15
evening rise	7729 Mar 03 18:04	23° $\text{H}$ 26'22		minimum elong	7730 Jan 26 09:38	7° $\approx$ 45'34	0°24'45
	7729 Mar 07 23:45	0° $\text{Y}$		max. Earth dist.	7730 Feb 01 02:40	16° $\approx$ 56'39	1.44646 AU
greatest brilliancy	7729 Mar 16 12:28	13° $\text{Y}$ 02'42	-0.7m		7730 Feb 09 10:57	0° $\text{H}$	
evening max el	7729 Mar 28 08:50	28° $\text{Y}$ 49'39	19°30'21	evening rise	7730 Feb 11 05:47	2° $\text{H}$ 44'50	
	7729 Mar 29 14:11	0° $\text{B}$			7730 Mar 01 13:23	0° $\text{Y}$	
asc. node	7729 Mar 30 02:28	0° $\text{B}$ 26'41		evening max el	7730 Mar 11 11:03	12° $\text{Y}$ 27'46	20°30'40
retrograde	7729 Apr 04 14:05	2° $\text{B}$ 56'50		asc. node	7730 Mar 16 23:33	16° $\text{Y}$ 37'20	
evening set	7729 Apr 08 04:27	1° $\text{B}$ 41'08		retrograde	7730 Mar 19 12:32	17° $\text{Y}$ 10'31	
	7729 Apr 10 02:58	30° $\text{R}$ $\text{Y}$		evening set	7730 Mar 23 11:55	15° $\text{Y}$ 39'45	
inferior conj	7729 Apr 13 14:34	25° $\text{Y}$ 47'01	3°20'56	inferior conj	7730 Mar 28 19:44	9° $\text{Y}$ 32'30	3°05'08
minimum elong	7729 Apr 13 13:38	25° $\text{Y}$ 50'08	3°20'49	minimum elong	7730 Mar 28 17:56	9° $\text{Y}$ 38'39	3°04'48
min. Earth dist.	7729 Apr 14 20:17	24° $\text{Y}$ 09'17	0.66868 AU	min. Earth dist.	7730 Mar 29 11:26	8° $\text{Y}$ 38'46	0.67798 AU
morning rise	7729 Apr 18 22:27	19° $\text{Y}$ 29'39		morning rise	7730 Apr 02 23:44	3° $\text{Y}$ 17'06	
direct	7729 Apr 25 01:19	16° $\text{Y}$ 46'29		direct	7730 Apr 08 13:48	0° $\text{Y}$ 47'47	
desc. node	7729 May 04 02:28	21° $\text{Y}$ 05'08		morning max el	7730 Apr 19 18:46	7° $\text{Y}$ 29'57	24°17'33
morning max el	7729 May 07 09:52	24° $\text{Y}$ 10'14	25°43'01	desc. node	7730 Apr 20 23:29	8° $\text{Y}$ 44'35	
	7729 May 12 15:11	0° $\text{B}$			7730 May 07 08:09	0° $\text{B}$	
	7729 Jun 02 11:30	0° $\text{II}$		morning set	7730 May 25 12:39	29° $\text{B}$ 02'51	
morning set	7729 Jun 12 13:08	17° $\text{II}$ 25'12			7730 May 26 01:46	0° $\text{II}$	
max. Earth dist.	7729 Jun 16 07:02	24° $\text{II}$ 24'36	1.35781 AU	max. Earth dist.	7730 May 29 04:29	5° $\text{II}$ 31'15	1.37877 AU
	7729 Jun 19 04:27	0° $\text{E}$					
				superior conj	7730 Jun 05 05:56	18° $\text{II}$ 39'23	-1°11'08
superior conj	7729 Jun 22 00:40	5° $\text{E}$ 38'40	-0°39'44	minimum elong	7730 Jun 05 10:14	19° $\text{II}$ 00'04	1°10'34
minimum elong	7729 Jun 22 03:00	5° $\text{E}$ 50'25	0°39'25		7730 Jun 11 01:09	0° $\text{E}$	
asc. node	7729 Jun 26 01:37	13° $\text{E}$ 52'01		asc. node	7730 Jun 12 22:38	3° $\text{E}$ 45'32	
evening rise	7729 Jun 29 23:51	21° $\text{E}$ 56'12		evening rise	7730 Jun 14 00:31	5° $\text{E}$ 53'47	
	7729 Jul 04 00:25	0° $\Omega$			7730 Jun 28 00:53	0° $\Omega$	
evening max el	7729 Jul 17 20:04	21° $\Omega$ 08'28	20°07'12	evening max el	7730 Jun 30 14:02	2° $\Omega$ 50'39	19°06'54
retrograde	7729 Jul 28 09:49	26° $\Omega$ 20'59		retrograde	7730 Jul 09 11:35	7° $\Omega$ 14'10	
evening set	7729 Jul 30 07:38	26° $\Omega$ 11'33		evening set	7730 Jul 11 09:51	7° $\Omega$ 02'38	
desc. node	7729 Jul 31 01:38	26° $\Omega$ 02'53		desc. node	7730 Jul 17 22:43	4° $\Omega$ 04'21	
inferior conj	7729 Aug 08 09:28	22° $\Omega$ 12'53	-2°30'28	inferior conj	7730 Jul 19 19:18	2° $\Omega$ 50'06	-0°33'53
minimum elong	7729 Aug 08 02:35	22° $\Omega$ 23'08	2°28'03	minimum elong	7730 Jul 19 17:51	2° $\Omega$ 52'35	0°33'25
min. Earth dist.	7729 Aug 10 02:31	21° $\Omega$ 11'50	0.55026 AU	min. Earth dist.	7730 Jul 22 16:27	0° $\Omega$ 52'59	0.56245 AU
morning rise	7729 Aug 16 20:07	17° $\Omega$ 59'20			7730 Jul 24 01:51	30° $\text{R}$ $\text{E}$	
direct	7729 Aug 21 04:07	17° $\Omega$ 18'31		morning rise	7730 Jul 27 22:47	28° $\text{E}$ 01'24	
morning max el	7729 Sep 03 18:49	23° $\Omega$ 58'48	24°01'51	direct	7730 Aug 02 03:10	26° $\text{E}$ 58'57	
	7729 Sep 09 06:18	0° $\text{M}$			7730 Aug 11 01:56	0° $\Omega$	
asc. node	7729 Sep 22 01:07	20° $\text{M}$ 15'40		morning max el	7730 Aug 16 07:50	4° $\Omega$ 14'29	25°42'17
	7729 Sep 26 22:00	0° $\text{E}$			7730 Sep 03 19:25	0° $\text{M}$	
morning set	7729 Sep 28 08:04	2° $\text{E}$ 59'27		asc. node	7730 Sep 08 22:06	9° $\text{M}$ 43'48	
				morning set	7730 Sep 12 19:25	17° $\text{M}$ 46'34	
					7730 Sep 18 09:58	0° $\text{E}$	
superior conj	7729 Oct 05 06:08	17° $\text{E}$ 59'16	1°39'00				
minimum elong	7729 Oct 05 05:04	17° $\text{E}$ 53'29	1°38'59	superior conj	7730 Sep 19 16:37	2° $\text{E}$ 49'13	1°30'25
max. Earth dist.	7729 Oct 07 11:44	22° $\text{E}$ 48'24	1.32985 AU	minimum elong	7730 Sep 19 14:46	2° $\text{E}$ 38'58	1°30'15
	7729 Oct 10 21:43	0° $\text{M}$		max. Earth dist.	7730 Sep 20 18:06	5° $\text{E}$ 09'32	1.32132 AU
evening rise	7729 Oct 12 16:52	3° $\text{M}$ 40'20		evening rise	7730 Sep 26 17:28	17° $\text{E}$ 59'30	
desc. node	7729 Oct 27 00:36	29° $\text{M}$ 34'37			7730 Oct 02 18:31	0° $\text{M}$	
	7729 Oct 27 06:58	0° $\text{Z}$		desc. node	7730 Oct 13 21:40	18° $\text{M}$ 57'51	
evening max el	7729 Nov 15 10:43	24° $\text{Z}$ 50'00	27°26'59		7730 Oct 21 21:24	0° $\text{Z}$	
	7729 Nov 22 02:41	0° $\text{Z}$		evening max el	7730 Oct 28 19:37	7° $\text{Z}$ 36'05	27°21'51
retrograde	7729 Nov 29 02:04	2° $\text{Z}$ 08'35		retrograde	7730 Nov 11 15:12	14° $\text{Z}$ 49'26	
	7729 Dec 05 12:11	30° $\text{R}$ $\text{Z}$					

evening set	7730 Nov 18 17:54	12°♊28'12		min. Earth dist.	7731 Nov 04 12:14	22°♍11'02	0.59895 AU
min. Earth dist.	7730 Nov 22 09:57	9°♊36'29	0.61962 AU	inferior conj	7731 Nov 07 17:10	19°♍37'26	-4°24'26
inferior conj	7730 Nov 25 09:17	6°♊53'35	-3°19'45	minimum elong	7731 Nov 08 00:17	19°♍23'09	4°22'31
minimum elong	7730 Nov 25 15:26	6°♊39'30	3°17'32	morning rise	7731 Nov 15 10:54	14°♍57'08	
morning rise	7730 Dec 02 15:04	1°♊51'34		direct	7731 Nov 17 16:36	14°♍38'38	
direct	7730 Dec 04 21:29	1°♊29'11		asc. node	7731 Nov 22 18:36	16°♍19'31	
asc. node	7730 Dec 05 21:34	1°♊33'42		morning max el	7731 Nov 25 06:58	18°♍23'17	18°10'57
morning max el	7730 Dec 11 18:48	4°♊58'50	17°50'50		7731 Dec 03 16:19	0°♊	
morning set	7730 Dec 27 13:49	29°♊37'14		morning set	7731 Dec 11 00:48	13°♊23'52	
	7730 Dec 27 18:53	0°♊			7731 Dec 19 22:58	0°♊	
superior conj	7731 Jan 07 12:43	18°♋56'10	0°17'05	superior conj	7731 Dec 20 13:30	1°♋05'37	0°51'29
minimum elong	7731 Jan 07 14:17	19°♋02'48	0°16'58	minimum elong	7731 Dec 20 16:52	1°♋20'48	0°51'08
desc. node	7731 Jan 09 20:52	22°♋54'02		desc. node	7731 Dec 27 17:52	13°♋39'26	
	7731 Jan 14 03:39	0°♋		max. Earth dist.	7731 Dec 28 04:58	14°♋26'24	1.41387 AU
max. Earth dist.	7731 Jan 14 18:23	1°♋00'06	1.43260 AU	evening rise	7732 Jan 02 03:56	22°♋38'36	
evening rise	7731 Jan 21 20:44	12°♋18'43			7732 Jan 06 18:49	0°♋	
	7731 Feb 02 12:59	0°♋			7732 Jan 27 14:40	0°♋	
evening max el	7731 Feb 22 07:47	26°♋06'41	21°42'34	evening max el	7732 Feb 04 23:59	9°♋47'33	23°01'20
	7731 Feb 26 22:57	0°♋		retrograde	7732 Feb 15 05:56	15°♋52'05	
retrograde	7731 Mar 03 10:20	1°♋30'21		asc. node	7732 Feb 18 17:45	14°♋50'57	
asc. node	7731 Mar 03 20:39	1°♋29'24		evening set	7732 Feb 20 03:02	13°♋50'59	
	7731 Mar 07 11:56	30°♋		min. Earth dist.	7732 Feb 25 03:11	7°♋56'55	0.68347 AU
evening set	7731 Mar 07 19:59	29°♋44'15		inferior conj	7732 Feb 25 12:11	7°♋25'47	2°04'17
inferior conj	7731 Mar 13 03:36	23°♋26'22	2°39'12	minimum elong	7732 Feb 25 09:58	7°♋33'29	2°03'36
minimum elong	7731 Mar 13 01:22	23°♋34'08	2°38'39	morning rise	7732 Mar 01 16:49	1°♋18'26	
min. Earth dist.	7731 Mar 13 06:27	23°♋16'25	0.68281 AU		7732 Mar 03 19:17	30°♋	
morning rise	7731 Mar 18 06:35	17°♋14'24		direct	7732 Mar 06 02:40	29°♋31'17	
direct	7731 Mar 23 06:33	15°♋04'54			7732 Mar 08 13:08	0°♋	
morning max el	7731 Apr 02 04:51	20°♋57'02	22°47'55	morning max el	7732 Mar 14 19:27	4°♋33'34	21°22'41
desc. node	7731 Apr 07 20:28	27°♋21'02		desc. node	7732 Mar 24 17:26	16°♋38'32	
	7731 Apr 09 22:46	0°♋			7732 Apr 03 01:40	0°♋	
	7731 Apr 30 14:11	0°♋		morning set	7732 Apr 15 06:14	18°♋39'32	
morning set	7731 May 06 11:19	9°♋29'37		max. Earth dist.	7732 Apr 22 02:42	29°♋41'59	1.42225 AU
max. Earth dist.	7731 May 11 01:15	17°♋11'26	1.40115 AU		7732 Apr 22 07:05	0°♋	
	7731 May 18 07:38	0°♋		superior conj	7732 Apr 29 12:33	12°♋10'34	-2°02'05
superior conj	7731 May 18 19:31	0°♋54'00	-1°40'02	minimum elong	7732 Apr 29 17:22	12°♋31'22	2°01'52
minimum elong	7731 May 19 01:08	1°♋19'36	1°39'29		7732 May 09 13:30	0°♋	
evening rise	7731 May 28 16:04	19°♋22'28		evening rise	7732 May 10 18:27	2°♋11'20	
asc. node	7731 May 30 19:41	23°♋26'52		asc. node	7732 May 16 16:44	12°♋50'03	
	7731 Jun 03 08:45	0°♋		evening max el	7732 May 27 04:28	28°♋05'50	18°08'00
evening max el	7731 Jun 13 18:07	15°♋13'10	18°27'23		7732 May 29 11:13	0°♋	
retrograde	7731 Jun 21 08:29	19°♋00'26		retrograde	7732 Jun 02 23:10	1°♋32'24	
evening set	7731 Jun 23 13:01	18°♋42'29		evening set	7732 Jun 05 11:07	1°♋04'43	
inferior conj	7731 Jul 01 02:33	14°♋10'14	1°04'51		7732 Jun 07 14:51	30°♋	
minimum elong	7731 Jul 01 04:43	14°♋05'52	1°03'58	inferior conj	7732 Jun 12 06:40	26°♋12'15	2°15'21
min. Earth dist.	7731 Jul 04 11:32	11°♋29'39	0.58122 AU	minimum elong	7732 Jun 12 09:47	26°♋04'59	2°14'22
desc. node	7731 Jul 04 19:47	11°♋14'09		min. Earth dist.	7732 Jun 15 13:44	23°♋09'51	0.60327 AU
morning rise	7731 Jul 08 17:04	8°♋45'40		morning rise	7732 Jun 19 05:46	20°♋20'58	
direct	7731 Jul 14 16:31	7°♋13'20		desc. node	7732 Jun 20 16:51	19°♋31'41	
morning max el	7731 Jul 29 01:57	14°♋53'59	27°01'04	direct	7732 Jun 25 18:45	18°♋16'30	
	7731 Aug 10 05:56	0°♋		morning max el	7732 Jul 10 02:45	26°♋12'59	27°46'14
asc. node	7731 Aug 26 19:05	29°♋29'32			7732 Jul 13 15:42	0°♋	
	7731 Aug 27 00:58	0°♋			7732 Aug 02 18:41	0°♋	
morning set	7731 Aug 28 04:49	2°♋25'56		morning set	7732 Aug 11 10:26	16°♋51'27	
				asc. node	7732 Aug 12 16:05	19°♋26'39	
superior conj	7731 Sep 04 04:27	17°♋40'14	1°16'36	max. Earth dist.	7732 Aug 17 14:05	0°♋04'33	1.31779 AU
minimum elong	7731 Sep 04 02:12	17°♋27'50	1°16'16		7732 Aug 17 13:15	0°♋	
max. Earth dist.	7731 Sep 04 04:10	17°♋38'43	1.31731 AU	superior conj	7732 Aug 18 15:43	2°♋25'56	0°57'59
	7731 Sep 09 19:12	0°♋		minimum elong	7732 Aug 18 13:35	2°♋14'06	0°57'33
evening rise	7731 Sep 10 23:55	2°♋33'24		evening rise	7732 Aug 25 09:55	17°♋14'45	
	7731 Sep 25 16:19	0°♋			7732 Aug 31 15:50	0°♋	
desc. node	7731 Sep 30 18:44	7°♋37'50		desc. node	7732 Sep 16 15:49	25°♋17'02	
evening max el	7731 Oct 10 22:22	19°♋36'38	26°42'54		7732 Sep 20 22:10	0°♋	
retrograde	7731 Oct 24 20:08	26°♋44'47		evening max el	7732 Sep 21 17:11	0°♋46'17	25°32'17
evening set	7731 Oct 31 16:00	24°♋47'04					

retrograde	7732 Oct 05 15:26	7° $\mathbb{M}$ 49'13		desc. node	7733 Sep 03 12:54	11° $\mathbb{A}$ 31'53	
evening set	7732 Oct 11 15:59	6° $\mathbb{M}$ 24'56		retrograde	7733 Sep 16 22:34	18° $\mathbb{A}$ 06'48	
min. Earth dist.	7732 Oct 16 05:18	3° $\mathbb{M}$ 47'20	0.57842 AU	evening set	7733 Sep 21 15:16	17° $\mathbb{A}$ 18'20	
inferior conj	7732 Oct 19 06:23	1° $\mathbb{M}$ 40'28	-5°14'10	min. Earth dist.	7733 Sep 27 16:24	14° $\mathbb{A}$ 20'35	0.56097 AU
minimum elong	7732 Oct 19 11:38	1° $\mathbb{M}$ 31'20	5°13'23	inferior conj	7733 Sep 29 23:20	12° $\mathbb{A}$ 56'41	-5°31'59
	7732 Oct 21 18:03	30° $\mathbb{R}$ $\mathbb{A}$		minimum elong	7733 Sep 29 22:37	12° $\mathbb{A}$ 57'46	5°31'56
morning rise	7732 Oct 27 09:37	27° $\mathbb{A}$ 23'06		morning rise	7733 Oct 08 08:08	8° $\mathbb{A}$ 59'04	
direct	7732 Oct 29 18:55	27° $\mathbb{A}$ 05'36		direct	7733 Oct 11 02:02	8° $\mathbb{A}$ 39'41	
	7732 Nov 06 01:10	0° $\mathbb{M}$		morning max el	7733 Oct 21 04:20	13° $\mathbb{A}$ 24'18	19°55'06
morning max el	7732 Nov 07 11:17	1° $\mathbb{M}$ 15'13	18°51'57	asc. node	7733 Oct 26 12:35	19° $\mathbb{A}$ 41'52	
asc. node	7732 Nov 08 15:36	2° $\mathbb{M}$ 27'20			7733 Nov 01 20:13	0° $\mathbb{M}$	
morning set	7732 Nov 23 22:13	27° $\mathbb{M}$ 39'02		morning set	7733 Nov 08 02:35	12° $\mathbb{M}$ 12'41	
	7732 Nov 25 02:54	0° $\mathbb{A}$					
superior conj	7732 Dec 02 09:54	14° $\mathbb{A}$ 11'10	1°16'30	superior conj	7733 Nov 15 20:50	27° $\mathbb{M}$ 57'57	1°32'30
minimum elong	7732 Dec 02 13:10	14° $\mathbb{A}$ 26'43	1°16'15	minimum elong	7733 Nov 15 23:02	28° $\mathbb{M}$ 08'56	1°32'26
max. Earth dist.	7732 Dec 09 11:05	27° $\mathbb{A}$ 09'03	1.39257 AU		7733 Nov 16 21:25	0° $\mathbb{A}$	
	7732 Dec 11 01:56	0° $\mathbb{B}$		max. Earth dist.	7733 Nov 21 16:54	9° $\mathbb{A}$ 17'07	1.37129 AU
evening rise	7732 Dec 13 09:03	3° $\mathbb{B}$ 57'38		evening rise	7733 Nov 25 11:22	16° $\mathbb{A}$ 13'01	
desc. node	7732 Dec 13 14:53	4° $\mathbb{B}$ 22'25		desc. node	7733 Nov 30 11:53	24° $\mathbb{A}$ 58'36	
	7732 Dec 29 22:40	0° $\mathbb{A}$			7733 Dec 03 12:24	0° $\mathbb{B}$	
evening max el	7733 Jan 17 13:42	23° $\mathbb{A}$ 32'24	24°21'06		7733 Dec 24 11:09	0° $\mathbb{A}$	
	7733 Jan 27 05:42	0° $\mathbb{H}$		evening max el	7733 Dec 31 02:46	7° $\mathbb{A}$ 19'32	25°35'00
retrograde	7733 Jan 28 22:01	0° $\mathbb{H}$ 11'27		retrograde	7734 Jan 12 09:29	14° $\mathbb{A}$ 22'31	
	7733 Jan 30 12:48	30° $\mathbb{R}$ $\mathbb{A}$		evening set	7734 Jan 18 07:51	11° $\mathbb{A}$ 55'48	
evening set	7733 Feb 03 07:32	27° $\mathbb{A}$ 56'28		asc. node	7734 Jan 22 11:51	7° $\mathbb{A}$ 25'20	
asc. node	7733 Feb 04 14:48	26° $\mathbb{A}$ 42'20		min. Earth dist.	7734 Jan 22 16:35	7° $\mathbb{A}$ 10'24	0.67314 AU
min. Earth dist.	7733 Feb 07 23:20	22° $\mathbb{A}$ 36'31	0.68019 AU	inferior conj	7734 Jan 24 00:12	5° $\mathbb{A}$ 29'21	0°30'10
inferior conj	7733 Feb 08 19:41	21° $\mathbb{A}$ 28'09	1°21'06	minimum elong	7734 Jan 23 23:27	5° $\mathbb{A}$ 31'45	0°29'58
minimum elong	7733 Feb 08 17:56	21° $\mathbb{A}$ 34'02	1°20'32		7734 Jan 29 01:47	30° $\mathbb{R}$ $\mathbb{B}$	
morning rise	7733 Feb 14 04:26	15° $\mathbb{A}$ 26'58		morning rise	7734 Jan 29 15:26	29° $\mathbb{B}$ 36'17	
direct	7733 Feb 18 01:03	14° $\mathbb{A}$ 01'54		direct	7734 Feb 02 00:11	28° $\mathbb{B}$ 31'13	
morning max el	7733 Feb 25 17:16	18° $\mathbb{A}$ 22'08	20°08'18		7734 Feb 06 03:53	0° $\mathbb{A}$	
	7733 Mar 07 02:30	0° $\mathbb{H}$		morning max el	7734 Feb 08 22:56	2° $\mathbb{A}$ 20'56	19°08'24
desc. node	7733 Mar 11 14:23	6° $\mathbb{H}$ 26'13		greatest brilliancy	7734 Feb 22 11:12	20° $\mathbb{A}$ 28'49	-0.7m
morning set	7733 Mar 25 05:25	26° $\mathbb{H}$ 59'27		desc. node	7734 Feb 26 11:20	26° $\mathbb{A}$ 35'26	
	7733 Mar 27 04:04	0° $\mathbb{Y}$			7734 Feb 28 16:28	0° $\mathbb{H}$	
max. Earth dist.	7733 Apr 04 11:18	13° $\mathbb{Y}$ 04'19	1.43948 AU	morning set	7734 Mar 04 07:18	5° $\mathbb{H}$ 35'48	
				max. Earth dist.	7734 Mar 18 02:26	27° $\mathbb{H}$ 07'04	1.45079 AU
superior conj	7733 Apr 10 05:14	22° $\mathbb{Y}$ 22'33	-2°11'27		7734 Mar 19 22:19	0° $\mathbb{Y}$	
minimum elong	7733 Apr 10 05:33	22° $\mathbb{Y}$ 23'51	2°11'30	superior conj	7734 Mar 20 22:25	1° $\mathbb{Y}$ 35'16	-2°02'25
	7733 Apr 14 19:36	0° $\mathbb{B}$		minimum elong	7734 Mar 20 15:50	1° $\mathbb{Y}$ 09'12	2°02'04
evening rise	7733 Apr 23 03:06	14° $\mathbb{B}$ 10'31		evening rise	7734 Apr 04 13:43	25° $\mathbb{Y}$ 12'18	
	7733 May 02 10:29	0° $\mathbb{H}$			7734 Apr 07 11:40	0° $\mathbb{B}$	
asc. node	7733 May 03 13:48	1° $\mathbb{H}$ 48'56		asc. node	7734 Apr 20 10:51	20° $\mathbb{B}$ 15'24	
evening max el	7733 May 10 17:35	11° $\mathbb{H}$ 19'49	18°07'51	evening max el	7734 Apr 24 06:21	24° $\mathbb{B}$ 46'54	18°26'13
retrograde	7733 May 17 03:28	14° $\mathbb{H}$ 40'46		retrograde	7734 Apr 30 17:10	28° $\mathbb{B}$ 16'11	
evening set	7733 May 19 22:43	14° $\mathbb{H}$ 00'58		evening set	7734 May 03 19:32	27° $\mathbb{B}$ 22'55	
inferior conj	7733 May 26 04:07	8° $\mathbb{H}$ 49'20	2°58'51	inferior conj	7734 May 09 14:45	21° $\mathbb{B}$ 53'23	3°20'22
minimum elong	7733 May 26 06:31	8° $\mathbb{H}$ 42'59	2°58'19	minimum elong	7734 May 09 15:48	21° $\mathbb{B}$ 50'17	3°20'13
min. Earth dist.	7733 May 29 00:30	5° $\mathbb{H}$ 49'28	0.62544 AU	min. Earth dist.	7734 May 11 20:24	19° $\mathbb{B}$ 16'17	0.64527 AU
morning rise	7733 Jun 01 12:37	2° $\mathbb{H}$ 42'14		morning rise	7734 May 15 11:11	15° $\mathbb{B}$ 38'38	
desc. node	7733 Jun 07 13:52	0° $\mathbb{H}$ 13'30		direct	7734 May 22 03:59	12° $\mathbb{B}$ 53'53	
direct	7733 Jun 08 07:18	0° $\mathbb{H}$ 11'51		desc. node	7734 May 25 10:53	13° $\mathbb{B}$ 28'25	
morning max el	7733 Jun 22 09:06	8° $\mathbb{H}$ 14'22	27°53'19	morning max el	7734 Jun 04 18:38	20° $\mathbb{B}$ 51'34	27°24'32
	7733 Jul 09 02:36	0° $\mathbb{B}$			7734 Jun 12 15:56	0° $\mathbb{H}$	
	7733 Jul 25 22:54	0° $\mathbb{Q}$			7734 Jul 02 05:24	0° $\mathbb{B}$	
morning set	7733 Jul 26 10:12	0° $\mathbb{Q}$ 57'06		morning set	7734 Jul 10 01:34	14° $\mathbb{B}$ 35'40	
asc. node	7733 Jul 30 13:04	9° $\mathbb{Q}$ 30'34		max. Earth dist.	7734 Jul 14 18:18	24° $\mathbb{B}$ 03'34	1.33273 AU
max. Earth dist.	7733 Jul 31 20:00	12° $\mathbb{Q}$ 15'52	1.32288 AU	asc. node	7734 Jul 17 10:04	29° $\mathbb{B}$ 37'09	
					7734 Jul 17 14:23	0° $\mathbb{Q}$	
superior conj	7733 Aug 03 00:39	17° $\mathbb{Q}$ 00'49	0°34'59	superior conj	7734 Jul 18 05:17	1° $\mathbb{Q}$ 19'04	0°08'09
minimum elong	7733 Aug 02 23:07	16° $\mathbb{Q}$ 52'26	0°34'35	minimum elong	7734 Jul 18 04:52	1° $\mathbb{Q}$ 16'54	0°07'58
	7733 Aug 08 23:33	0° $\mathbb{H}$		behind sun begin	7734 Jul 18 00:05	0° $\mathbb{Q}$ 51'26	
evening rise	7733 Aug 09 21:29	1° $\mathbb{H}$ 57'45		behind sun end	7734 Jul 18 09:40	1° $\mathbb{Q}$ 42'24	
	7733 Aug 25 02:02	0° $\mathbb{A}$		evening rise	7734 Jul 25 08:47	16° $\mathbb{Q}$ 36'48	
evening max el	7733 Sep 03 05:45	11° $\mathbb{A}$ 14'50	23°59'39				



































































































































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evening max el	7734 Aug 15 18:41	21° $\mathbb{M}$ 30'03	22°20'48		7735 Jul 26 17:23	0° $\mathbb{M}$	
desc. node	7734 Aug 21 09:58	25° $\mathbb{M}$ 52'17		evening max el	7735 Jul 28 16:17	2° $\mathbb{M}$ 04'59	20°50'56
retrograde	7734 Aug 28 17:14	27° $\mathbb{M}$ 56'31		desc. node	7735 Aug 08 07:02	7° $\mathbb{M}$ 45'48	
evening set	7734 Aug 31 22:01	27° $\mathbb{M}$ 33'57		retrograde	7735 Aug 09 05:35	7° $\mathbb{M}$ 47'59	
min. Earth dist.	7734 Sep 09 01:01	24° $\mathbb{M}$ 00'58	0.54977 AU	evening set	7735 Aug 11 09:27	7° $\mathbb{M}$ 36'47	
inferior conj	7734 Sep 09 23:02	23° $\mathbb{M}$ 29'56	-5°00'05	inferior conj	7735 Aug 20 15:33	3° $\mathbb{M}$ 39'47	-3°35'13
minimum elong	7734 Sep 09 15:22	23° $\mathbb{M}$ 40'46	4°58'45	minimum elong	7735 Aug 20 06:28	3° $\mathbb{M}$ 52'41	3°32'26
morning rise	7734 Sep 18 10:26	19° $\mathbb{M}$ 41'44		min. Earth dist.	7735 Aug 21 10:16	3° $\mathbb{M}$ 13'10	0.54730 AU
direct	7734 Sep 21 16:50	19° $\mathbb{M}$ 17'44			7735 Aug 28 03:13	30° $\mathbb{R}$ $\Omega$	
morning max el	7734 Oct 03 08:30	24° $\mathbb{M}$ 45'31	21°19'50	morning rise	7735 Aug 29 03:36	29° $\Omega$ 41'34	
	7734 Oct 08 01:52	0° $\mathbb{L}$		direct	7735 Sep 02 00:58	29° $\Omega$ 09'11	
asc. node	7734 Oct 13 09:34	7° $\mathbb{L}$ 48'42			7735 Sep 06 19:13	0° $\mathbb{M}$	
morning set	7734 Oct 23 11:23	26° $\mathbb{L}$ 58'00		morning max el	7735 Sep 15 01:57	5° $\mathbb{M}$ 23'43	23°00'56
	7734 Oct 24 22:13	0° $\mathbb{M}$		asc. node	7735 Sep 30 06:34	26° $\mathbb{M}$ 34'31	
					7735 Oct 02 02:35	0° $\mathbb{L}$	
superior conj	7734 Oct 30 18:11	12° $\mathbb{M}$ 14'33	1°40'27	morning set	7735 Oct 07 22:31	11° $\mathbb{L}$ 48'01	
minimum elong	7734 Oct 30 19:01	12° $\mathbb{M}$ 18'54	1°40'29				
max. Earth dist.	7734 Nov 04 03:40	21° $\mathbb{M}$ 11'33	1.35224 AU	superior conj	7735 Oct 14 22:36	26° $\mathbb{L}$ 50'16	1°41'20
evening rise	7734 Nov 08 07:29	29° $\mathbb{M}$ 16'09		minimum elong	7735 Oct 14 22:10	26° $\mathbb{L}$ 47'54	1°41'23
	7734 Nov 08 16:47	0° $\mathbb{X}$			7735 Oct 16 10:12	0° $\mathbb{M}$	
desc. node	7734 Nov 17 08:55	15° $\mathbb{X}$ 23'38		max. Earth dist.	7735 Oct 17 22:19	3° $\mathbb{M}$ 10'11	1.33678 AU
	7734 Nov 26 16:51	0° $\mathbb{Z}$		evening rise	7735 Oct 22 17:21	12° $\mathbb{M}$ 55'55	
evening max el	7734 Dec 13 16:02	21° $\mathbb{Z}$ 03'35	26°35'34		7735 Oct 31 22:58	0° $\mathbb{X}$	
retrograde	7734 Dec 26 15:31	28° $\mathbb{Z}$ 19'22		desc. node	7735 Nov 04 05:58	5° $\mathbb{X}$ 31'02	
evening set	7735 Jan 02 02:13	25° $\mathbb{Z}$ 44'37			7735 Nov 21 19:52	0° $\mathbb{Z}$	
min. Earth dist.	7735 Jan 06 04:35	21° $\mathbb{Z}$ 34'06	0.66246 AU	evening max el	7735 Nov 26 04:50	4° $\mathbb{Z}$ 34'10	27°15'42
inferior conj	7735 Jan 07 23:45	19° $\mathbb{Z}$ 25'24	-0°27'53	retrograde	7735 Dec 09 15:40	11° $\mathbb{Z}$ 53'59	
minimum elong	7735 Jan 08 00:32	19° $\mathbb{Z}$ 23'06	0°27'26	evening set	7735 Dec 16 12:24	9° $\mathbb{Z}$ 17'10	
asc. node	7735 Jan 09 08:53	17° $\mathbb{Z}$ 48'15		min. Earth dist.	7735 Dec 20 09:06	5° $\mathbb{Z}$ 40'41	0.64820 AU
morning rise	7735 Jan 13 23:42	13° $\mathbb{Z}$ 42'56		inferior conj	7735 Dec 22 16:03	3° $\mathbb{Z}$ 10'51	-1°32'02
direct	7735 Jan 16 22:14	12° $\mathbb{Z}$ 54'41		minimum elong	7735 Dec 22 18:49	3° $\mathbb{Z}$ 03'17	1°30'46
morning max el	7735 Jan 23 11:08	16° $\mathbb{Z}$ 25'52	18°24'37		7735 Dec 25 18:47	30° $\mathbb{R}$ $\mathbb{X}$	
	7735 Feb 02 14:25	0° $\mathbb{A}$		asc. node	7735 Dec 27 05:56	28° $\mathbb{X}$ 47'57	
morning set	7735 Feb 12 09:06	15° $\mathbb{A}$ 27'52		morning rise	7735 Dec 29 02:39	27° $\mathbb{X}$ 41'48	
desc. node	7735 Feb 13 08:17	17° $\mathbb{A}$ 00'16		direct	7735 Dec 31 16:54	27° $\mathbb{X}$ 06'38	
	7735 Feb 21 13:01	0° $\mathbb{H}$			7736 Jan 06 14:49	0° $\mathbb{Z}$	
				morning max el	7736 Jan 07 03:25	0° $\mathbb{Z}$ 30'08	17°57'41
superior conj	7735 Feb 28 03:05	10° $\mathbb{H}$ 20'40	-1°33'33	morning set	7736 Jan 24 16:29	26° $\mathbb{Z}$ 47'43	
minimum elong	7735 Feb 27 17:30	9° $\mathbb{H}$ 43'07	1°32'32		7736 Jan 26 14:43	0° $\mathbb{A}$	
max. Earth dist.	7735 Feb 28 21:36	11° $\mathbb{H}$ 33'12	1.45493 AU	desc. node	7736 Jan 31 05:16	7° $\mathbb{A}$ 35'53	
	7735 Mar 12 16:07	0° $\mathbb{Y}$					
evening rise	7735 Mar 16 00:59	5° $\mathbb{Y}$ 18'14		superior conj	7736 Feb 07 14:35	19° $\mathbb{A}$ 32'00	-0°51'21
greatest brilliancy	7735 Mar 26 01:06	21° $\mathbb{Y}$ 00'55	-0.8m	minimum elong	7736 Feb 07 08:34	19° $\mathbb{A}$ 08'03	0°50'28
	7735 Apr 01 00:49	0° $\mathbb{B}$		max. Earth dist.	7736 Feb 11 17:21	26° $\mathbb{A}$ 03'12	1.45154 AU
asc. node	7735 Apr 07 07:55	7° $\mathbb{B}$ 59'22			7736 Feb 14 05:41	0° $\mathbb{H}$	
evening max el	7735 Apr 07 16:14	8° $\mathbb{B}$ 20'49	19°02'11	evening rise	7736 Feb 23 17:52	14° $\mathbb{H}$ 44'47	
retrograde	7735 Apr 14 12:31	12° $\mathbb{B}$ 11'03			7736 Mar 04 17:44	0° $\mathbb{Y}$	
evening set	7735 Apr 17 22:21	11° $\mathbb{B}$ 03'33		greatest brilliancy	7736 Mar 09 02:36	6° $\mathbb{Y}$ 30'47	-0.6m
inferior conj	7735 Apr 23 10:53	5° $\mathbb{B}$ 17'41	3°24'45	evening max el	7736 Mar 20 21:28	21° $\mathbb{Y}$ 57'46	19°54'19
minimum elong	7735 Apr 23 10:36	5° $\mathbb{B}$ 18'36	3°24'41	asc. node	7736 Mar 24 04:59	24° $\mathbb{Y}$ 48'29	
min. Earth dist.	7735 Apr 25 01:04	3° $\mathbb{B}$ 16'25	0.66136 AU	retrograde	7736 Mar 28 10:40	26° $\mathbb{Y}$ 19'32	
	7735 Apr 27 21:18	30° $\mathbb{R}$ $\mathbb{Y}$		evening set	7736 Apr 01 04:42	24° $\mathbb{Y}$ 57'25	
morning rise	7735 Apr 28 22:26	29° $\mathbb{Y}$ 00'20		inferior conj	7736 Apr 06 13:31	18° $\mathbb{Y}$ 57'10	3°15'36
direct	7735 May 05 07:26	26° $\mathbb{Y}$ 13'40		minimum elong	7736 Apr 06 12:10	19° $\mathbb{Y}$ 01'42	3°15'24
desc. node	7735 May 12 07:53	28° $\mathbb{Y}$ 50'19		min. Earth dist.	7736 Apr 07 13:03	17° $\mathbb{Y}$ 38'08	0.67311 AU
	7735 May 13 21:49	0° $\mathbb{B}$		morning rise	7736 Apr 11 19:22	12° $\mathbb{Y}$ 40'17	
morning max el	7735 May 18 05:01	3° $\mathbb{B}$ 53'51	26°26'21	direct	7736 Apr 17 16:54	10° $\mathbb{Y}$ 02'19	
	7735 Jun 07 00:57	0° $\mathbb{I}$		desc. node	7736 Apr 28 04:52	15° $\mathbb{Y}$ 47'41	
morning set	7735 Jun 23 05:05	27° $\mathbb{I}$ 37'07		morning max el	7736 Apr 29 14:38	17° $\mathbb{Y}$ 10'23	25°07'56
	7735 Jun 24 11:18	0° $\mathbb{G}$			7736 May 10 07:11	0° $\mathbb{B}$	
max. Earth dist.	7735 Jun 27 06:14	5° $\mathbb{G}$ 24'06	1.34740 AU		7736 May 30 00:35	0° $\mathbb{I}$	
				morning set	7736 Jun 04 16:28	9° $\mathbb{I}$ 50'20	
superior conj	7735 Jul 02 03:12	15° $\mathbb{G}$ 13'10	-0°21'42	max. Earth dist.	7736 Jun 08 07:47	16° $\mathbb{I}$ 28'33	1.36637 AU
minimum elong	7735 Jul 02 04:26	15° $\mathbb{G}$ 19'29	0°21'35				
asc. node	7735 Jul 04 07:04	19° $\mathbb{G}$ 41'46		superior conj	7736 Jun 14 15:35	28° $\mathbb{I}$ 36'13	-0°53'08
	7735 Jul 09 05:18	0° $\Omega$		minimum elong	7736 Jun 14 18:47	28° $\mathbb{I}$ 51'58	0°52'40

	7736 Jun 15 08:32	0°☿		superior conj	7737 May 28 14:43	11°♊18'36	-1°23'55
asc. node	7736 Jun 20 04:06	9°☿40'56		minimum elong	7737 May 28 19:43	11°♊42'08	1°23'18
evening rise	7736 Jun 22 22:20	15°☿16'21		evening rise	7737 Jun 06 19:31	29°♊02'37	
	7736 Jun 30 14:27	0°♌		asc. node	7737 Jun 07 01:08	29°♊29'56	
evening max el	7736 Jul 10 03:00	13°♌21'51	19°38'57		7737 Jun 07 07:19	0°☿	
retrograde	7736 Jul 19 23:20	18°♌13'00		evening max el	7737 Jun 23 01:45	25°☿22'35	18°47'37
evening set	7736 Jul 21 19:53	18°♌03'24		retrograde	7737 Jul 01 08:45	29°☿28'38	
desc. node	7736 Jul 25 04:06	17°♌02'17		evening set	7737 Jul 03 09:16	29°☿14'55	
inferior conj	7736 Jul 30 15:42	13°♌59'53	-1°40'17	inferior conj	7737 Jul 11 10:20	24°☿54'44	0°11'07
minimum elong	7736 Jul 30 11:07	14°♌07'04	1°38'37	minimum elong	7737 Jul 11 10:46	24°☿53'57	0°10'51
min. Earth dist.	7736 Aug 01 22:28	12°♌34'07	0.55443 AU	transit middle	7737 Jul 11 10:46	24°☿53'57	0°10'51
morning rise	7736 Aug 08 00:04	9°♌31'56		transit begin	7737 Jul 11 08:02	24°☿58'55	
direct	7736 Aug 12 16:15	8°♌43'18		transit end	7737 Jul 11 13:30	24°☿48'58	
morning max el	7736 Aug 26 14:47	15°♌40'17	24°46'11	desc. node	7737 Jul 12 01:10	24°☿27'36	
	7736 Sep 07 02:07	0°♍		min. Earth dist.	7737 Jul 14 14:41	22°☿36'37	0.56982 AU
asc. node	7736 Sep 16 03:34	15°♍49'41		morning rise	7737 Jul 19 08:48	19°☿49'54	
morning set	7736 Sep 21 10:16	26°♍37'48		direct	7737 Jul 24 21:52	18°☿35'08	
	7736 Sep 22 23:57	0°♎		morning max el	7737 Aug 08 05:29	26°☿03'21	26°19'11
					7737 Aug 11 22:59	0°♏	
superior conj	7736 Sep 28 07:33	11°♎37'25	1°36'01		7737 Aug 31 06:56	0°♍	
minimum elong	7736 Sep 28 06:06	11°♎29'30	1°35'57	asc. node	7737 Sep 03 00:34	5°♍26'14	
max. Earth dist.	7736 Sep 30 00:50	15°♎22'23	1.32565 AU	morning set	7737 Sep 05 21:00	11°♍22'26	
evening rise	7736 Oct 05 13:28	27°♎03'20					
	7736 Oct 07 00:21	0°♏		superior conj	7737 Sep 12 18:52	26°♍29'06	1°25'11
desc. node	7736 Oct 21 03:02	25°♏13'18		minimum elong	7737 Sep 12 16:48	26°♍17'38	1°24'56
	7736 Oct 24 06:25	0°♐		max. Earth dist.	7737 Sep 13 09:01	27°♍47'25	1.31903 AU
evening max el	7736 Nov 07 15:39	17°♐39'50	27°28'42		7737 Sep 14 09:02	0°♎	
retrograde	7736 Nov 21 09:20	24°♐57'19		evening rise	7737 Sep 19 16:53	11°♎30'08	
evening set	7736 Nov 28 11:39	22°♐27'16			7737 Sep 29 04:53	0°♏	
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inferior conj	7736 Dec 04 22:21	16°♐39'23	-2°40'13		7737 Oct 20 18:41	0°♐	
minimum elong	7736 Dec 05 03:21	16°♐27'06	2°38'13	evening max el	7737 Oct 20 22:21	0°♐08'40	27°09'31
morning rise	7736 Dec 11 21:00	11°♐26'43		retrograde	7737 Nov 03 19:32	7°♐20'12	
asc. node	7736 Dec 13 03:00	11°♐06'33		evening set	7737 Nov 10 20:19	5°♐07'49	
direct	7736 Dec 14 05:19	11°♐00'49		min. Earth dist.	7737 Nov 14 13:06	2°♐24'14	0.61088 AU
morning max el	7736 Dec 20 20:43	14°♐25'58	17°48'06		7737 Nov 17 07:50	30°♑♏	
	7736 Dec 31 15:57	0°♑		inferior conj	7737 Nov 17 15:31	29°♏43'15	-3°48'14
morning set	7737 Jan 06 00:56	9°♑19'47		minimum elong	7737 Nov 17 22:18	29°♏28'30	3°46'01
desc. node	7737 Jan 17 02:14	28°♑18'04		morning rise	7737 Nov 25 02:33	24°♏50'02	
				direct	7737 Nov 27 08:02	24°♏29'46	
superior conj	7737 Jan 17 23:55	29°♑48'17	-0°06'35	asc. node	7737 Nov 30 00:03	24°♏59'59	
minimum elong	7737 Jan 17 23:15	29°♑45'30	0°06'22	morning max el	7737 Dec 04 11:47	28°♏05'10	17°56'55
behind sun begin	7737 Jan 17 14:38	29°♑09'40			7737 Dec 06 06:10	0°♐	
behind sun end	7737 Jan 18 07:53	0°♒21'17		morning set	7737 Dec 20 03:57	22°♐44'56	
	7737 Jan 18 02:45	0°♑			7737 Dec 24 03:02	0°♑	
max. Earth dist.	7737 Jan 24 10:35	10°♒18'46	1.44118 AU				
evening rise	7737 Feb 02 04:55	24°♒04'31		superior conj	7737 Dec 30 11:07	11°♑19'11	0°32'46
	7737 Feb 06 01:49	0°♒		minimum elong	7737 Dec 30 13:45	11°♑30'38	0°32'30
	7737 Feb 27 00:33	0°♓		desc. node	7738 Jan 03 23:14	19°♑03'41	
evening max el	7737 Mar 03 21:11	5°♓35'45	21°00'08	max. Earth dist.	7738 Jan 06 23:55	24°♑07'09	1.42509 AU
asc. node	7737 Mar 11 02:05	10°♓27'32			7738 Jan 10 14:30	0°♒	
retrograde	7737 Mar 12 09:08	10°♓36'11		evening rise	7738 Jan 13 01:41	3°♒56'07	
evening set	7737 Mar 16 12:37	8°♓59'03			7738 Jan 30 10:42	0°♒	
inferior conj	7737 Mar 21 20:06	2°♓46'51	2°55'19	evening max el	7738 Feb 14 15:54	19°♒16'00	22°15'36
minimum elong	7737 Mar 21 18:04	2°♓53'53	2°54'53	retrograde	7738 Feb 24 06:07	24°♒57'19	
min. Earth dist.	7737 Mar 22 06:14	2°♓11'45	0.68047 AU	asc. node	7738 Feb 25 23:10	24°♒42'21	
	7737 Mar 23 21:14	30°♒♒		evening set	7738 Feb 28 20:25	23°♒05'01	
morning rise	7737 Mar 26 23:18	26°♒32'28		inferior conj	7738 Mar 06 04:30	16°♒43'45	2°25'27
direct	7737 Apr 01 07:22	24°♒10'59		minimum elong	7738 Mar 06 02:13	16°♒51'42	2°24'50
	7737 Apr 11 10:19	0°♓		min. Earth dist.	7738 Mar 06 02:19	16°♒51'22	0.68361 AU
morning max el	7737 Apr 11 23:41	0°♓33'17	23°39'25	morning rise	7738 Mar 11 07:52	10°♒33'27	
desc. node	7737 Apr 15 01:51	3°♓53'38		direct	7738 Mar 16 01:52	8°♒33'02	
	7737 May 04 04:39	0°♔		morning max el	7738 Mar 25 11:04	14°♒03'24	22°10'35
morning set	7737 May 17 06:05	20°♔59'49		desc. node	7738 Apr 01 22:49	22°♒49'12	
max. Earth dist.	7737 May 21 03:33	27°♔43'50	1.38821 AU		7738 Apr 07 06:33	0°♓	
	7737 May 22 10:20	0°♕			7738 Apr 27 03:43	0°♔	
				morning set	7738 Apr 27 16:47	0°♔52'47	

max. Earth dist.	7738 May 03 01:24	9°842'46	1.41047 AU	morning set	7739 Apr 07 01:21	9°935'17	
				max. Earth dist.	7739 Apr 15 06:18	22°938'10	1.43023 AU
superior conj	7738 May 10 20:08	23°809'56	-1°50'32		7739 Apr 19 17:52	0°8	
minimum elong	7738 May 11 01:46	23°835'03	1°50'07				
	7738 May 14 15:08	0°II		superior conj	7739 Apr 22 03:07	3°859'41	-2°07'58
evening rise	7738 May 21 05:56	12°II15'11		minimum elong	7739 Apr 22 06:31	4°814'03	2°07'56
asc. node	7738 May 24 22:11	19°II04'10		evening rise	7739 May 04 01:18	24°844'16	
	7738 May 31 06:01	0°☾			7739 May 07 00:25	0°II	
evening max el	7738 Jun 06 09:01	7°☾59'26	18°16'46	asc. node	7739 May 11 19:14	8°II18'05	
retrograde	7738 Jun 13 13:23	11°☾35'32		evening max el	7739 May 20 20:57	21°II02'29	18°05'38
evening set	7738 Jun 15 21:13	11°☾13'40		retrograde	7739 May 27 10:32	24°II24'53	
inferior conj	7738 Jun 23 02:41	6°☾32'50	1°38'16	evening set	7739 May 30 01:42	23°II52'08	
minimum elong	7738 Jun 23 05:33	6°☾26'43	1°37'14	inferior conj	7739 Jun 05 14:41	18°II51'03	2°36'48
min. Earth dist.	7738 Jun 26 12:22	3°☾40'05	0.59046 AU	minimum elong	7739 Jun 05 17:38	18°II43'46	2°36'00
desc. node	7738 Jun 28 22:14	1°☾52'17		min. Earth dist.	7739 Jun 08 17:49	15°II47'15	0.61283 AU
morning rise	7738 Jun 30 10:47	0°☾55'56		morning rise	7739 Jun 12 07:22	12°II52'00	
	7738 Jul 02 09:48	30°8II		desc. node	7739 Jun 15 19:15	11°II06'24	
direct	7738 Jul 06 17:07	29°II09'31		direct	7739 Jun 18 23:41	10°II35'44	
	7738 Jul 11 03:31	0°☾		morning max el	7739 Jul 03 05:31	18°II35'09	27°54'03
morning max el	7738 Jul 21 02:08	6°☾57'29	27°24'47		7739 Jul 12 19:59	0°☾	
	7738 Aug 07 09:14	0°♂			7739 Jul 31 04:25	0°♂	
asc. node	7738 Aug 20 21:33	25°♂17'31		morning set	7739 Aug 05 08:24	10°♂14'53	
morning set	7738 Aug 21 04:59	25°♂56'30		asc. node	7739 Aug 07 18:31	15°♂18'31	
	7738 Aug 23 02:49	0°♏		max. Earth dist.	7739 Aug 11 04:25	22°♂39'36	1.31943 AU
superior conj	7738 Aug 28 06:39	11°♏18'42	1°09'17	superior conj	7739 Aug 12 17:09	26°♂00'55	0°48'46
minimum elong	7738 Aug 28 04:23	11°♏06'11	1°08'53	minimum elong	7739 Aug 12 15:12	25°♂50'11	0°48'19
max. Earth dist.	7738 Aug 27 19:29	10°♏16'49	1.31698 AU		7739 Aug 14 12:33	0°♏	
evening rise	7738 Sep 04 01:05	26°♏08'25		evening rise	7739 Aug 19 12:00	10°♏51'53	
	7738 Sep 05 21:05	0°♏			7739 Aug 29 04:21	0°♏	
	7738 Sep 22 23:16	0°♏		desc. node	7739 Sep 11 18:16	19°♏44'16	
desc. node	7738 Sep 24 21:12	2°♏37'12		evening max el	7739 Sep 14 13:47	22°♏39'04	24°54'41
evening max el	7738 Oct 02 22:06	11°♏48'53	26°16'29	retrograde	7739 Sep 28 10:16	29°♏38'03	
retrograde	7738 Oct 16 20:21	18°♏54'10		evening set	7739 Oct 03 22:58	28°♏29'10	
evening set	7738 Oct 23 09:35	17°♏10'04		min. Earth dist.	7739 Oct 09 01:03	25°♏45'25	0.57052 AU
min. Earth dist.	7738 Oct 27 11:19	14°♏35'34	0.59005 AU	inferior conj	7739 Oct 11 20:28	23°♏55'08	-5°26'44
inferior conj	7738 Oct 30 15:53	12°♏11'31	-4°48'15	minimum elong	7739 Oct 11 23:39	23°♏49'55	5°26'26
minimum elong	7738 Oct 30 22:40	11°♏58'41	4°46'45	morning rise	7739 Oct 20 02:35	19°♏47'04	
morning rise	7738 Nov 07 14:01	7°♏40'34		direct	7739 Oct 22 15:12	19°♏28'59	
direct	7738 Nov 09 20:43	7°♏22'47		morning max el	7739 Oct 31 20:49	23°♏51'41	19°16'02
asc. node	7738 Nov 16 21:03	10°♏22'30		asc. node	7739 Nov 03 18:02	27°♏00'34	
morning max el	7738 Nov 17 20:59	11°♏16'57	18°25'41		7739 Nov 06 00:02	0°♏	
	7738 Nov 30 06:22	0°♏		morning set	7739 Nov 17 20:37	21°♏09'57	
morning set	7738 Dec 03 19:54	6°♏45'39			7739 Nov 22 06:46	0°♏	
superior conj	7738 Dec 12 20:53	23°♏54'20	1°03'15	superior conj	7739 Nov 26 00:02	7°♏19'16	1°24'20
minimum elong	7738 Dec 13 00:23	24°♏10'29	1°02'54	minimum elong	7739 Nov 26 02:56	7°♏33'17	1°24'09
	7738 Dec 16 05:19	0°♏		max. Earth dist.	7739 Dec 02 14:26	19°♏44'08	1.38343 AU
max. Earth dist.	7738 Dec 20 08:44	7°♏16'43	1.40505 AU	evening rise	7739 Dec 06 08:26	26°♏24'41	
desc. node	7738 Dec 21 20:14	9°♏48'38			7739 Dec 08 10:23	0°♏	
evening rise	7738 Dec 24 18:01	14°♏41'10		desc. node	7739 Dec 08 17:16	0°♏29'13	
	7739 Jan 03 09:38	0°♏			7739 Dec 27 23:17	0°♏	
	7739 Jan 25 11:27	0°♏		evening max el	7740 Jan 10 20:06	16°♏44'54	24°53'34
evening max el	7739 Jan 28 06:56	2°♏59'04	23°35'31	retrograde	7740 Jan 22 14:19	23°♏35'15	
retrograde	7739 Feb 08 00:10	9°♏18'32		evening set	7740 Jan 28 05:27	21°♏14'39	
asc. node	7739 Feb 12 20:14	7°♏24'23		asc. node	7740 Jan 30 17:17	18°♏42'12	
evening set	7739 Feb 13 02:32	7°♏11'23		min. Earth dist.	7740 Feb 01 18:03	16°♏09'37	0.67770 AU
min. Earth dist.	7739 Feb 17 23:00	1°♏31'57	0.68263 AU	inferior conj	7740 Feb 02 19:15	14°♏46'33	1°00'23
inferior conj	7739 Feb 18 12:50	0°♏44'36	1°46'56	minimum elong	7740 Feb 02 17:52	14°♏51'08	0°59'56
minimum elong	7739 Feb 18 10:45	0°♏51'44	1°46'16	morning rise	7740 Feb 08 06:31	8°♏48'51	
	7739 Feb 19 01:54	30°8♏		direct	7740 Feb 11 21:54	7°♏32'44	
morning rise	7739 Feb 23 18:55	24°♏39'48		morning max el	7740 Feb 19 05:43	11°♏38'12	19°40'55
direct	7739 Feb 27 23:07	23°♏02'03		greatest brilliancy	7740 Mar 03 00:17	28°♏18'57	-0.7m
morning max el	7739 Mar 08 04:25	27°♏44'35	20°49'25		7740 Mar 04 03:38	0°♏	
	7739 Mar 10 07:19	0°♏		desc. node	7740 Mar 05 16:44	2°♏18'07	
desc. node	7739 Mar 19 19:46	12°♏20'36		morning set	7740 Mar 15 22:28	17°♏53'07	
	7739 Mar 31 19:48	0°9			7740 Mar 23 17:38	0°9	

max. Earth dist.	7740 Mar 27 18:14	6°♿20'43	1.44509 AU		7741 Feb 05 08:49	0°♿	
				desc. node	7741 Feb 20 13:41	22°♿34'52	
superior conj	7740 Apr 01 09:05	13°♿43'42	-2°10'06	morning set	7741 Feb 23 08:48	26°♿57'23	
minimum elong	7740 Apr 01 06:28	13°♿33'10	2°10'05		7741 Feb 25 07:28	0°♿	
	7740 Apr 11 06:45	0°♿		max. Earth dist.	7741 Mar 10 11:07	20°♿34'45	1.45341 AU
evening rise	7740 Apr 15 01:01	6°♿19'43					
asc. node	7740 Apr 27 16:17	27°♿04'09		superior conj	7741 Mar 11 19:01	22°♿39'51	-1°52'24
	7740 Apr 29 17:49	0°♿		minimum elong	7741 Mar 11 10:19	22°♿05'40	1°51'43
evening max el	7740 May 03 10:09	4°♿22'15	18°13'25		7741 Mar 16 10:49	0°♿	
retrograde	7740 May 09 19:28	7°♿45'32		evening rise	7741 Mar 27 01:39	16°♿57'16	
evening set	7740 May 12 17:39	7°♿00'11		greatest brilliancy	7741 Apr 02 13:27	27°♿25'26	-0.9m
inferior conj	7740 May 18 18:13	1°♿40'32	3°10'22		7741 Apr 04 04:06	0°♿	
minimum elong	7740 May 18 20:04	1°♿35'23	3°10'01	asc. node	7741 Apr 14 13:21	15°♿14'13	
	7740 May 20 06:15	30°♿8		evening max el	7741 Apr 16 21:57	17°♿52'54	18°39'25
min. Earth dist.	7740 May 21 08:31	28°♿48'18	0.63418 AU	retrograde	7741 Apr 23 11:59	21°♿29'57	
morning rise	7740 May 24 21:11	25°♿29'07		evening set	7741 Apr 26 17:21	20°♿30'54	
direct	7740 May 31 15:41	22°♿51'18		inferior conj	7741 May 02 09:21	14°♿54'20	3°24'05
desc. node	7740 Jun 01 16:16	22°♿54'38		minimum elong	7741 May 02 09:48	14°♿52'55	3°23'59
	7740 Jun 13 15:59	0°♿		min. Earth dist.	7741 May 04 08:27	12°♿30'58	0.65261 AU
morning max el	7740 Jun 14 13:47	0°♿53'38	27°45'18	morning rise	7741 May 08 01:34	8°♿37'43	
	7740 Jul 05 23:02	0°♿		direct	7741 May 14 15:37	5°♿50'26	
morning set	7740 Jul 19 04:56	24°♿10'00		desc. node	7741 May 19 13:16	7°♿07'22	
	7740 Jul 22 01:44	0°♿		morning max el	7741 May 28 00:02	13°♿43'21	27°02'48
max. Earth dist.	7740 Jul 24 07:40	4°♿42'22	1.32647 AU		7741 Jun 10 03:51	0°♿	
asc. node	7740 Jul 24 15:30	5°♿23'58			7741 Jun 28 15:02	0°♿	
				morning set	7741 Jul 02 15:43	7°♿33'55	
superior conj	7740 Jul 27 00:27	10°♿29'03	0°24'02	max. Earth dist.	7741 Jul 07 01:30	16°♿16'39	1.33836 AU
minimum elong	7740 Jul 26 23:20	10°♿22'58	0°23'42				
evening rise	7740 Aug 02 23:39	25°♿33'36		superior conj	7741 Jul 11 02:32	24°♿37'32	-0°04'15
	7740 Aug 05 02:15	0°♿		minimum elong	7741 Jul 11 02:45	24°♿38'44	0°04'19
	7740 Aug 23 06:25	0°♿		behind sun begin	7741 Jul 10 21:18	24°♿10'06	
evening max el	7740 Aug 26 01:09	2°♿56'33	23°17'17	behind sun end	7741 Jul 11 08:13	25°♿07'24	
desc. node	7740 Aug 28 15:20	5°♿14'18		asc. node	7741 Jul 11 12:31	25°♿30'03	
retrograde	7740 Sep 08 12:16	9°♿40'46			7741 Jul 13 15:33	0°♿	
evening set	7740 Sep 12 13:20	9°♿04'57		evening rise	7741 Jul 18 10:11	10°♿08'09	
min. Earth dist.	7740 Sep 19 10:28	5°♿53'48	0.55527 AU		7741 Jul 28 18:15	0°♿	
inferior conj	7740 Sep 21 05:13	4°♿51'12	-5°25'15	evening max el	7741 Aug 07 16:51	13°♿16'08	21°40'48
minimum elong	7740 Sep 21 01:17	4°♿56'58	5°24'55	desc. node	7741 Aug 15 12:25	18°♿35'13	
morning rise	7740 Sep 29 15:27	0°♿59'47		retrograde	7741 Aug 20 03:18	19°♿26'11	
direct	7740 Oct 02 14:09	0°♿38'56		evening set	7741 Aug 22 19:01	19°♿10'15	
morning max el	7740 Oct 13 08:29	5°♿40'52	20°28'44	inferior conj	7741 Sep 01 00:12	15°♿10'54	-4°29'49
asc. node	7740 Oct 20 15:01	14°♿38'49		minimum elong	7741 Aug 31 15:00	15°♿23'47	4°27'38
	7740 Oct 29 06:05	0°♿		min. Earth dist.	7741 Aug 31 19:25	15°♿17'35	0.54750 AU
morning set	7740 Nov 01 03:08	5°♿49'12		morning rise	7741 Sep 09 12:06	11°♿20'41	
				direct	7741 Sep 13 00:16	10°♿53'49	
superior conj	7740 Nov 08 15:52	21°♿20'20	1°36'47	morning max el	7741 Sep 25 07:36	16°♿42'18	22°01'26
minimum elong	7740 Nov 08 17:30	21°♿28'37	1°36'47		7741 Oct 05 16:10	0°♿	
	7740 Nov 13 00:18	0°♿		asc. node	7741 Oct 07 12:01	3°♿03'28	
max. Earth dist.	7740 Nov 13 21:29	1°♿42'29	1.36278 AU	morning set	7741 Oct 16 13:07	20°♿36'52	
evening rise	7740 Nov 17 18:45	9°♿01'29			7741 Oct 20 23:17	0°♿	
desc. node	7740 Nov 24 14:17	21°♿01'23					
	7740 Nov 30 02:38	0°♿		superior conj	7741 Oct 23 16:34	5°♿46'05	1°41'37
	7740 Dec 22 20:21	0°♿		minimum elong	7741 Oct 23 16:50	5°♿47'31	1°41'41
evening max el	7740 Dec 23 09:01	0°♿31'08	26°02'46	max. Earth dist.	7741 Oct 27 11:05	13°♿35'26	1.34513 AU
retrograde	7741 Jan 04 23:44	7°♿41'41		evening rise	7741 Oct 31 21:11	22°♿21'36	
evening set	7741 Jan 11 03:31	5°♿10'43			7741 Nov 04 22:58	0°♿	
min. Earth dist.	7741 Jan 15 09:21	0°♿40'15	0.66899 AU	desc. node	7741 Nov 11 11:20	11°♿19'43	
	7741 Jan 15 22:22	30°♿3			7741 Nov 23 20:34	0°♿	
inferior conj	7741 Jan 16 21:56	28°♿46'25	0°06'22	evening max el	7741 Dec 05 22:13	14°♿10'58	26°55'39
minimum elong	7741 Jan 16 21:46	28°♿46'57	0°06'25	retrograde	7741 Dec 19 03:33	21°♿30'02	
transit middle	7741 Jan 16 21:46	28°♿46'57	0°06'25	evening set	7741 Dec 25 18:43	18°♿53'40	
transit begin	7741 Jan 16 19:09	28°♿55'06		min. Earth dist.	7741 Dec 29 18:35	14°♿57'36	0.65674 AU
transit end	7741 Jan 17 00:23	28°♿38'48		inferior conj	7741 Dec 31 18:44	12°♿38'57	-0°54'27
asc. node	7741 Jan 16 14:19	29°♿10'10		minimum elong	7741 Dec 31 20:18	12°♿34'25	0°53'40
morning rise	7741 Jan 22 16:38	22°♿57'41		asc. node	7742 Jan 03 11:23	9°♿42'12	
direct	7741 Jan 25 20:42	22°♿00'25		morning rise	7742 Jan 06 22:59	7°♿01'39	
morning max el	7741 Feb 01 14:31	25°♿41'08	18°47'46	direct	7742 Jan 09 17:38	6°♿19'31	

morning max el	7742 Jan 16 04:47	9°  46'36	18°11'01	morning rise	7742 Dec 21 22:45	20°  55'59	
	7742 Jan 30 08:57	0° 		direct	7742 Dec 24 10:13	20°  25'06	
morning set	7742 Feb 03 23:20	7°  27'32		morning max el	7742 Dec 30 21:50	23°  48'13	17°51'21
desc. node	7742 Feb 07 10:38	13°  04'43			7743 Jan 04 21:43	0° 	
	7742 Feb 18 01:19	0° 		morning set	7743 Jan 16 18:13	19°  21'07	
					7743 Jan 23 01:44	0° 	
superior conj	7742 Feb 19 00:13	1°  30'08	-1°16'39	desc. node	7743 Jan 25 07:38	3°  43'42	
minimum elong	7742 Feb 18 15:32	0°  56'01	1°15'35				
max. Earth dist.	7742 Feb 21 06:27	5°  03'03	1.45439 AU	superior conj	7743 Jan 29 19:46	11°  05'44	-0°32'05
evening rise	7742 Mar 07 03:56	26°  42'56		minimum elong	7743 Jan 29 16:07	10°  51'00	0°31'27
	7742 Mar 09 06:37	0° 		max. Earth dist.	7743 Feb 04 01:45	19°  30'05	1.44804 AU
greatest brilliancy	7742 Mar 19 06:20	15°  23'48	-0.7m		7743 Feb 10 18:34	0° 	
	7742 Mar 29 21:03	0° 		evening rise	7743 Feb 14 16:29	6°  02'10	
evening max el	7742 Mar 31 06:05	1°  28'48	19°22'33		7743 Mar 02 16:04	0° 	
asc. node	7742 Apr 01 10:26	2°  36'42		evening max el	7743 Mar 14 09:07	15°  06'36	20°20'52
retrograde	7742 Apr 07 08:45	5°  31'07		asc. node	7743 Mar 19 07:32	18°  57'56	
evening set	7742 Apr 10 21:56	4°  17'32		retrograde	7743 Mar 22 07:11	19°  43'36	
	7742 Apr 15 03:15	30°  08'00		evening set	7743 Mar 26 05:11	18°  14'59	
inferior conj	7742 Apr 16 08:36	28°  25'34	3°22'20	inferior conj	7743 Mar 31 13:10	12°  09'28	3°08'12
minimum elong	7742 Apr 16 07:49	28°  28'07	3°22'13	minimum elong	7743 Mar 31 11:29	12°  15'13	3°07'55
min. Earth dist.	7742 Apr 17 16:29	26°  41'34	0.66697 AU	min. Earth dist.	7743 Apr 01 06:50	11°  09'16	0.67687 AU
morning rise	7742 Apr 21 17:21	22°  08'12		morning rise	7743 Apr 05 17:35	5°  53'42	
direct	7742 Apr 27 21:57	19°  23'45		direct	7743 Apr 11 09:37	3°  22'02	
desc. node	7742 May 06 10:15	23°  13'17		morning max el	7743 Apr 22 19:01	10°  11'03	24°30'49
morning max el	7742 May 10 09:58	26°  52'00	25°54'44	desc. node	7743 Apr 23 07:14	10°  42'21	
	7742 May 13 07:57	0° 			7743 May 08 11:55	0° 	
	7742 Jun 03 18:50	0° 			7743 May 27 11:18	0° 	
morning set	7742 Jun 15 12:58	20°  16'26		morning set	7743 May 28 15:45	2°  03'51	
max. Earth dist.	7742 Jun 19 08:23	27°  26'16	1.35499 AU	max. Earth dist.	7743 Jun 01 06:53	8°  32'13	1.37549 AU
	7742 Jun 20 16:11	0° 					
superior conj	7742 Jun 24 20:49	8°  19'42	-0°34'58	superior conj	7743 Jun 08 04:04	21°  26'43	-1°06'27
minimum elong	7742 Jun 24 22:51	8°  30'00	0°34'40	minimum elong	7743 Jun 08 08:06	21°  46'12	1°05'54
asc. node	7742 Jun 28 09:34	15°  33'03			7743 Jun 12 12:42	0° 	
evening rise	7742 Jul 02 17:36	24°  29'58		asc. node	7743 Jun 15 06:37	5°  28'28	
	7742 Jul 05 10:42	0° 		evening rise	7743 Jun 16 19:24	8°  31'42	
evening max el	7742 Jul 20 20:04	24°  08'22	20°17'55		7743 Jun 28 19:08	0° 	
retrograde	7742 Jul 31 15:53	29°  02'43		evening max el	7743 Jul 03 12:13	5°  44'09	19°14'30
desc. node	7742 Aug 02 09:29	29°  02'05		retrograde	7743 Jul 12 15:25	10°  02'43	
evening set	7742 Aug 02 14:50	29°  01'01		evening set	7743 Jul 14 13:00	10°  03'40	
inferior conj	7742 Aug 11 18:14	25°  02'20	-2°48'05	desc. node	7743 Jul 20 06:33	7°  40'17	
minimum elong	7742 Aug 11 10:37	25°  32'29	2°45'28	inferior conj	7743 Jul 23 01:18	5°  53'33	-0°50'51
min. Earth dist.	7742 Aug 13 05:49	24°  29'11	0.54918 AU	minimum elong	7743 Jul 22 23:03	5°  57'17	0°50'06
morning rise	7742 Aug 20 05:24	21°  02'24		min. Earth dist.	7743 Jul 25 19:09	4°  04'21	0.56013 AU
direct	7742 Aug 24 10:39	20°  34'00		morning rise	7743 Jul 31 06:14	1°  02'25	
morning max el	7742 Sep 06 22:03	27°  07'44	23°46'07	direct	7743 Aug 05 07:26	0° 	
	7742 Sep 09 17:25	0° 		morning max el	7743 Aug 19 10:52	7°  22'47	25°28'23
asc. node	7742 Sep 24 09:01	22°  03'14			7743 Sep 05 02:27	0° 	
	7742 Sep 28 09:57	0° 		asc. node	7743 Sep 11 06:02	11°  28'17	
morning set	7742 Oct 01 00:46	5°  27'46		morning set	7743 Sep 15 12:17	20°  15'49	
					7743 Sep 19 23:49	0° 	
superior conj	7742 Oct 07 23:13	20°  27'53	1°39'47	superior conj	7743 Sep 22 09:23	5°  17'17	1°32'05
minimum elong	7742 Oct 07 22:19	20°  22'58	1°39'48	minimum elong	7743 Sep 22 07:37	5°  07'35	1°31'55
max. Earth dist.	7742 Oct 10 09:26	25°  40'33	1.33151 AU	max. Earth dist.	7743 Sep 23 14:57	7°  59'43	1.32230 AU
	7742 Oct 12 10:39	0° 		evening rise	7743 Sep 29 11:25	20°  31'16	
evening rise	7742 Oct 15 11:52	6°  14'59			7743 Oct 04 05:07	0° 	
	7742 Oct 28 13:10	0° 		desc. node	7743 Oct 16 05:30	20°  46'39	
desc. node	7742 Oct 29 08:25	1°  17'58			7743 Oct 22 16:45	0° 	
evening max el	7742 Nov 18 10:44	27°  33'55	27°24'59	evening max el	7743 Oct 31 20:10	10°  25'16	27°24'39
	7742 Nov 21 04:51	0° 		retrograde	7743 Nov 14 15:13	17°  39'40	
retrograde	7742 Dec 02 00:57	4°  52'39		evening set	7743 Nov 21 18:08	15°  15'43	
evening set	7742 Dec 09 00:39	2°  17'53		min. Earth dist.	7743 Nov 25 10:11	12°  20'41	0.62258 AU
	7742 Dec 11 17:06	30°  08'00		inferior conj	7743 Nov 28 08:17	9°  37'37	-3°09'25
min. Earth dist.	7742 Dec 12 19:30	28°  54'44	0.64116 AU	minimum elong	7743 Nov 28 14:10	9°  23'55	3°07'14
inferior conj	7742 Dec 15 07:11	26°  18'47	-2°00'37	morning rise	7743 Dec 05 12:14	4°  32'51	
minimum elong	7742 Dec 15 10:54	26°  09'04	1°59'00	direct	7743 Dec 07 19:04	4°  09'38	
asc. node	7742 Dec 21 08:26	21°  12'19		asc. node	7743 Dec 08 05:27	4°  10'29	

morning max el	7743 Dec 14 14:33	7° $\text{♁}$ 37'42	17°49'33	asc. node	7744 Nov 24 02:28	18° $\text{♁}$ 42'31	
	7743 Dec 29 04:23	0° $\text{♁}$		morning max el	7744 Nov 27 03:34	21° $\text{♁}$ 06'12	18°06'43
morning set	7743 Dec 30 11:20	2° $\text{♁}$ 18'07			7744 Dec 03 21:17	0° $\text{♁}$	
				morning set	7744 Dec 12 20:22	15° $\text{♁}$ 59'25	
superior conj	7744 Jan 10 16:12	21° $\text{♁}$ 54'13	0°11'06		7744 Dec 20 09:40	0° $\text{♁}$	
minimum elong	7744 Jan 10 17:15	21° $\text{♁}$ 58'41	0°11'03				
behind sun begin	7744 Jan 10 10:49	21° $\text{♁}$ 31'21		superior conj	7744 Dec 22 13:34	3° $\text{♁}$ 54'02	0°46'52
behind sun end	7744 Jan 10 23:42	22° $\text{♁}$ 25'58		minimum elong	7744 Dec 22 16:49	4° $\text{♁}$ 08'32	0°46'30
desc. node	7744 Jan 12 04:39	24° $\text{♁}$ 27'53		desc. node	7744 Dec 29 01:38	15° $\text{♁}$ 13'31	
	7744 Jan 15 12:39	0° $\text{♁}$		max. Earth dist.	7744 Dec 30 05:09	17° $\text{♁}$ 09'31	1.41683 AU
max. Earth dist.	7744 Jan 17 18:02	3° $\text{♁}$ 37'47	1.43499 AU	evening rise	7745 Jan 04 10:12	25° $\text{♁}$ 43'29	
evening rise	7744 Jan 25 06:00	15° $\text{♁}$ 31'38			7745 Jan 07 02:33	0° $\text{♁}$	
	7744 Feb 03 18:32	0° $\text{♁}$			7745 Jan 27 14:20	0° $\text{♁}$	
evening max el	7744 Feb 25 06:33	28° $\text{♁}$ 45'22	21°31'16	evening max el	7745 Feb 06 23:17	12° $\text{♁}$ 25'57	22°49'23
	7744 Feb 26 13:13	0° $\text{♁}$		retrograde	7745 Feb 17 01:15	18° $\text{♁}$ 24'50	
retrograde	7744 Mar 05 05:14	4° $\text{♁}$ 03'07		asc. node	7745 Feb 20 01:38	17° $\text{♁}$ 38'57	
asc. node	7744 Mar 05 04:35	4° $\text{♁}$ 03'07		evening set	7745 Feb 21 20:31	16° $\text{♁}$ 26'03	
evening set	7744 Mar 09 13:16	2° $\text{♁}$ 19'16		inferior conj	7745 Feb 27 05:21	10° $\text{♁}$ 01'39	2°10'07
	7744 Mar 11 20:44	30° $\text{♁}$		minimum elong	7745 Feb 27 03:05	10° $\text{♁}$ 09'29	2°09'28
inferior conj	7744 Mar 14 20:46	26° $\text{♁}$ 02'40	2°43'44	min. Earth dist.	7745 Feb 26 22:05	10° $\text{♁}$ 26'49	0.68362 AU
minimum elong	7744 Mar 14 18:35	26° $\text{♁}$ 10'17	2°43'13	morning rise	7745 Mar 04 09:33	3° $\text{♁}$ 53'25	
min. Earth dist.	7744 Mar 15 01:27	25° $\text{♁}$ 46'21	0.68234 AU	direct	7745 Mar 08 21:29	2° $\text{♁}$ 02'50	
morning rise	7744 Mar 19 23:44	19° $\text{♁}$ 50'01		morning max el	7745 Mar 17 18:26	7° $\text{♁}$ 12'23	21°34'46
direct	7744 Mar 25 01:46	17° $\text{♁}$ 37'24		desc. node	7745 Mar 27 01:10	18° $\text{♁}$ 23'44	
morning max el	7744 Apr 04 04:48	23° $\text{♁}$ 37'31	23°01'11		7745 Apr 04 06:36	0° $\text{♁}$	
desc. node	7744 Apr 09 04:13	29° $\text{♁}$ 11'32		morning set	7745 Apr 18 17:19	22° $\text{♁}$ 02'55	
	7744 Apr 09 20:04	0° $\text{♁}$			7745 Apr 23 15:40	0° $\text{♁}$	
	7744 Apr 30 21:21	0° $\text{♁}$		max. Earth dist.	7745 Apr 25 03:25	2° $\text{♁}$ 26'58	1.41932 AU
morning set	7744 May 08 18:27	12° $\text{♁}$ 42'16					
max. Earth dist.	7744 May 13 03:12	20° $\text{♁}$ 05'29	1.39781 AU	superior conj	7745 May 02 16:35	15° $\text{♁}$ 14'35	-1°59'25
	7744 May 18 17:59	0° $\text{♁}$		minimum elong	7745 May 02 21:44	15° $\text{♁}$ 36'59	1°59'09
					7745 May 10 23:14	0° $\text{♁}$	
superior conj	7744 May 20 20:15	3° $\text{♁}$ 48'50	-1°35'59	evening rise	7745 May 13 17:04	5° $\text{♁}$ 00'31	
minimum elong	7744 May 21 01:46	4° $\text{♁}$ 14'11	1°35'24	asc. node	7745 May 19 00:41	14° $\text{♁}$ 38'19	
evening rise	7744 May 30 12:31	22° $\text{♁}$ 05'23			7745 May 29 05:16	0° $\text{♁}$	
asc. node	7744 Jun 01 03:40	25° $\text{♁}$ 12'08		evening max el	7745 May 30 00:38	0° $\text{♁}$ 49'59	18°09'40
	7744 Jun 03 16:54	0° $\text{♁}$		retrograde	7745 Jun 05 21:29	4° $\text{♁}$ 18'28	
evening max el	7744 Jun 15 15:00	18° $\text{♁}$ 01'09	18°31'57	evening set	7745 Jun 08 08:22	3° $\text{♁}$ 52'23	
retrograde	7744 Jun 23 09:24	21° $\text{♁}$ 52'56			7745 Jun 14 05:00	30° $\text{♁}$	
evening set	7744 Jun 25 12:45	21° $\text{♁}$ 36'15		inferior conj	7745 Jun 15 06:24	29° $\text{♁}$ 03'03	2°06'26
inferior conj	7744 Jul 03 05:15	17° $\text{♁}$ 07'08	0°51'35	minimum elong	7745 Jun 15 09:31	28° $\text{♁}$ 55'57	2°05'26
minimum elong	7744 Jul 03 07:03	17° $\text{♁}$ 03'36	0°50'49	min. Earth dist.	7745 Jun 18 14:31	26° $\text{♁}$ 02'14	0.59994 AU
desc. node	7744 Jul 06 03:35	14° $\text{♁}$ 50'13		morning rise	7745 Jun 22 07:49	23° $\text{♁}$ 15'06	
min. Earth dist.	7744 Jul 06 13:29	14° $\text{♁}$ 31'41	0.57814 AU	desc. node	7745 Jun 23 00:36	22° $\text{♁}$ 50'45	
morning rise	7744 Jul 10 21:54	11° $\text{♁}$ 47'17		direct	7745 Jun 28 19:22	21° $\text{♁}$ 15'03	
direct	7744 Jul 16 18:44	10° $\text{♁}$ 19'37		morning max el	7745 Jul 13 03:46	29° $\text{♁}$ 09'50	27°41'52
morning max el	7744 Jul 31 04:03	17° $\text{♁}$ 57'33	26°51'13		7745 Jul 13 23:41	0° $\text{♁}$	
	7744 Aug 10 05:06	0° $\text{♁}$			7745 Aug 04 02:59	0° $\text{♁}$	
	7744 Aug 27 13:03	0° $\text{♁}$		morning set	7745 Aug 14 04:19	19° $\text{♁}$ 24'28	
asc. node	7744 Aug 28 03:02	1° $\text{♁}$ 11'48		asc. node	7745 Aug 15 00:01	21° $\text{♁}$ 07'44	
morning set	7744 Aug 29 22:02	4° $\text{♁}$ 56'30			7745 Aug 19 02:55	0° $\text{♁}$	
				max. Earth dist.	7745 Aug 20 10:38	2° $\text{♁}$ 54'27	1.31739 AU
superior conj	7744 Sep 05 21:06	20° $\text{♁}$ 08'25	1°19'02				
minimum elong	7744 Sep 05 18:53	19° $\text{♁}$ 56'11	1°18'42	superior conj	7745 Aug 21 08:33	4° $\text{♁}$ 55'29	1°01'07
max. Earth dist.	7744 Sep 06 00:32	20° $\text{♁}$ 27'31	1.31760 AU	minimum elong	7745 Aug 21 06:22	4° $\text{♁}$ 43'23	1°00'41
	7744 Sep 10 08:33	0° $\text{♁}$		evening rise	7745 Aug 28 02:40	19° $\text{♁}$ 44'00	
evening rise	7744 Sep 12 17:06	5° $\text{♁}$ 03'09			7745 Sep 02 02:08	0° $\text{♁}$	
	7744 Sep 25 21:08	0° $\text{♁}$		desc. node	7745 Sep 18 23:37	27° $\text{♁}$ 24'04	
desc. node	7744 Oct 02 02:34	9° $\text{♁}$ 34'03			7745 Sep 21 03:52	0° $\text{♁}$	
evening max el	7744 Oct 12 23:53	22° $\text{♁}$ 32'48	26°50'50	evening max el	7745 Sep 24 20:02	3° $\text{♁}$ 50'45	25°44'39
retrograde	7744 Oct 26 21:37	29° $\text{♁}$ 42'07		retrograde	7745 Oct 08 18:33	10° $\text{♁}$ 54'29	
evening set	7744 Nov 02 19:07	27° $\text{♁}$ 40'10		evening set	7745 Oct 14 22:43	9° $\text{♁}$ 24'57	
min. Earth dist.	7744 Nov 06 14:03	25° $\text{♁}$ 02'45	0.60201 AU	min. Earth dist.	7745 Oct 19 08:30	6° $\text{♁}$ 48'40	0.58132 AU
inferior conj	7744 Nov 09 18:37	22° $\text{♁}$ 26'35	-4°15'22	inferior conj	7745 Oct 22 10:51	4° $\text{♁}$ 36'50	-5°08'18
minimum elong	7744 Nov 10 01:44	22° $\text{♁}$ 12'01	4°13'20	minimum elong	7745 Oct 22 16:38	4° $\text{♁}$ 26'32	5°07'20
morning rise	7744 Nov 17 10:42	17° $\text{♁}$ 43'00		morning rise	7745 Oct 30 12:52	0° $\text{♁}$ 15'54	
direct	7744 Nov 19 16:10	17° $\text{♁}$ 24'11			7745 Nov 01 04:40	30° $\text{♁}$	

direct	7745 Nov 01 21:16	29°♄58'27		direct	7746 Oct 14 07:28	11°♄41'06	
	7745 Nov 02 13:45	0°♄		morning max el	7746 Oct 24 04:08	16°♄19'46	19°44'14
morning max el	7745 Nov 10 09:17	4°♄03'56	18°44'26	asc. node	7746 Oct 28 20:30	21°♄44'33	
asc. node	7745 Nov 10 23:29	4°♄39'08			7746 Nov 03 03:22	0°♄	
morning set	7745 Nov 26 16:29	0°♄11'21		morning set	7746 Nov 10 20:01	14°♄42'53	
	7745 Nov 26 14:10	0°♄			7746 Nov 18 09:39	0°♄	
superior conj	7745 Dec 05 07:22	16°♄52'18	1°13'18	superior conj	7746 Nov 18 16:26	0°♄33'40	1°30'36
minimum elong	7745 Dec 05 10:45	17°♄08'11	1°13'00	minimum elong	7746 Nov 18 18:50	0°♄45'33	1°30'31
max. Earth dist.	7745 Dec 12 11:47	29°♄58'50	1.39582 AU	max. Earth dist.	7746 Nov 24 17:30	12°♄11'39	1.37441 AU
	7745 Dec 12 12:03	0°♄		evening rise	7746 Nov 28 11:23	19°♄01'25	
desc. node	7745 Dec 15 22:39	5°♄57'18		desc. node	7746 Dec 02 19:41	26°♄34'45	
evening rise	7745 Dec 16 12:02	6°♄54'03			7746 Dec 04 20:42	0°♄	
	7745 Dec 31 03:29	0°♄			7746 Dec 25 07:59	0°♄	
evening max el	7746 Jan 20 13:18	26°♄10'33	24°09'25	evening max el	7747 Jan 03 02:27	9°♄57'36	25°24'37
	7746 Jan 24 22:41	0°♄		retrograde	7747 Jan 15 05:59	16°♄57'22	
retrograde	7746 Jan 31 17:52	2°♄44'48		evening set	7747 Jan 21 02:32	14°♄32'11	
evening set	7746 Feb 06 01:29	0°♄31'54		asc. node	7747 Jan 24 19:44	10°♄33'51	
asc. node	7746 Feb 06 22:40	29°♄43'15		min. Earth dist.	7747 Jan 25 12:16	9°♄41'42	0.67446 AU
	7746 Feb 06 15:43	30°♄		inferior conj	7747 Jan 26 18:12	8°♄05'13	0°38'24
min. Earth dist.	7746 Feb 10 18:29	25°♄06'48	0.68096 AU	minimum elong	7747 Jan 26 17:15	8°♄08'15	0°38'07
inferior conj	7746 Feb 11 13:06	24°♄03'52	1°28'11	morning rise	7747 Feb 01 08:19	2°♄10'54	
minimum elong	7746 Feb 11 11:15	24°♄10'07	1°27'35	direct	7747 Feb 04 18:47	1°♄03'00	
morning rise	7746 Feb 16 21:05	18°♄01'35		morning max el	7747 Feb 11 19:33	4°♄56'14	19°16'20
direct	7746 Feb 20 19:39	16°♄33'12		greatest brilliancy	7747 Feb 24 23:39	22°♄27'34	-0.7m
morning max el	7746 Feb 28 15:00	20°♄58'51	20°18'28	desc. node	7747 Feb 28 19:06	28°♄13'49	
	7746 Mar 08 03:13	0°♄			7747 Mar 01 22:52	0°♄	
desc. node	7746 Mar 13 22:07	8°♄07'29		morning set	7747 Mar 07 18:09	8°♄56'05	
	7746 Mar 28 11:22	0°♄		max. Earth dist.	7747 Mar 21 01:34	29°♄41'11	1.44954 AU
morning set	7746 Mar 28 18:14	0°♄26'33			7747 Mar 21 06:21	0°♄	
max. Earth dist.	7746 Apr 07 10:57	15°♄42'16	1.43731 AU				
superior conj	7746 Apr 13 13:01	25°♄36'24	-2°11'07	superior conj	7747 Mar 24 09:19	4°♄56'44	-2°05'06
minimum elong	7746 Apr 13 14:15	25°♄41'32	2°11'09	minimum elong	7747 Mar 24 03:42	4°♄34'25	2°04'52
	7746 Apr 16 04:27	0°♄		evening rise	7747 Apr 07 18:46	28°♄18'30	
evening rise	7746 Apr 26 04:36	17°♄07'31			7747 Apr 08 19:17	0°♄	
	7746 May 03 15:49	0°♄		asc. node	7747 Apr 22 18:46	22°♄13'16	
asc. node	7746 May 05 21:43	3°♄41'10		evening max el	7747 Apr 27 02:34	27°♄27'12	18°22'18
evening max el	7746 May 13 13:33	14°♄01'23	18°06'41		7747 Apr 30 08:01	0°♄	
retrograde	7746 May 20 00:01	17°♄22'06		retrograde	7747 May 03 12:39	0°♄54'28	
evening set	7746 May 22 18:15	16°♄44'09		evening set	7747 May 06 13:58	0°♄03'13	
inferior conj	7746 May 29 01:29	11°♄35'13	2°53'46		7747 May 06 16:16	30°♄	
minimum elong	7746 May 29 04:04	11°♄28'32	2°53'10	inferior conj	7747 May 12 10:26	24°♄36'07	3°18'19
min. Earth dist.	7746 May 31 23:48	8°♄33'40	0.62227 AU	minimum elong	7747 May 12 11:42	24°♄32'26	3°18'06
morning rise	7746 Jun 04 12:03	5°♄30'02		min. Earth dist.	7747 May 14 18:20	21°♄54'43	0.64252 AU
desc. node	7746 Jun 09 21:37	3°♄08'46		morning rise	7747 May 18 08:29	18°♄22'05	
direct	7746 Jun 11 06:27	3°♄02'57		direct	7747 May 25 01:54	15°♄38'52	
morning max el	7746 Jun 25 09:18	11°♄04'45	27°54'41	desc. node	7747 May 27 18:38	16°♄02'05	
	7746 Jul 10 05:48	0°♄		morning max el	7747 Jun 07 18:38	23°♄37'51	27°30'56
	7746 Jul 27 10:37	0°♄			7747 Jun 13 11:01	0°♄	
morning set	7746 Jul 29 05:05	3°♄33'28			7747 Jul 03 13:59	0°♄	
asc. node	7746 Aug 01 21:00	11°♄11'00		morning set	7747 Jul 12 21:54	17°♄16'44	
max. Earth dist.	7746 Aug 03 17:26	15°♄08'54	1.32182 AU	max. Earth dist.	7747 Jul 17 17:16	27°♄01'26	1.33099 AU
					7747 Jul 19 03:21	0°♄	
superior conj	7746 Aug 05 17:57	19°♄32'27	0°38'45	asc. node	7747 Jul 19 18:01	1°♄17'26	
minimum elong	7746 Aug 05 16:17	19°♄23'21	0°38'20				
	7746 Aug 10 12:36	0°♄		superior conj	7747 Jul 20 23:22	3°♄53'34	0°12'27
evening rise	7746 Aug 12 14:07	4°♄27'22		minimum elong	7747 Jul 20 22:45	3°♄50'18	0°12'13
	7746 Aug 26 02:47	0°♄		behind sun begin	7747 Jul 20 19:13	3°♄31'25	
desc. node	7746 Sep 05 20:41	13°♄53'36		behind sun end	7747 Jul 21 02:17	4°♄09'11	
evening max el	7746 Sep 06 09:19	14°♄24'26	24°14'20	evening rise	7747 Jul 28 01:37	19°♄07'31	
retrograde	7746 Sep 20 03:21	21°♄18'21			7747 Aug 02 09:13	0°♄	
evening set	7746 Sep 25 01:33	20°♄24'51		evening max el	7747 Aug 18 21:30	24°♄38'44	22°35'12
min. Earth dist.	7746 Sep 30 20:10	17°♄31'17	0.56326 AU	desc. node	7747 Aug 23 17:45	28°♄33'11	
inferior conj	7746 Oct 03 06:48	16°♄00'16	-5°32'09		7747 Aug 26 11:18	0°♄	
minimum elong	7746 Oct 03 07:12	15°♄59'39	5°32'07	retrograde	7747 Aug 31 23:41	1°♄10'24	
morning rise	7746 Oct 11 15:00	12°♄00'07		evening set	7747 Sep 04 09:36	0°♄44'50	
					7747 Sep 06 18:04	30°♄	

min. Earth dist.	7747 Sep 12 04:44	27° $\mathbb{M}$ 17'59	0.55096 AU	desc. node	7748 Aug 09 14:50	10° $\mathbb{M}$ 50'13	
inferior conj	7747 Sep 13 08:32	26° $\mathbb{M}$ 38'32	-5°08'33	retrograde	7748 Aug 11 12:34	10° $\mathbb{M}$ 59'09	
minimum elong	7747 Sep 13 01:42	26° $\mathbb{M}$ 48'15	5°07'30	evening set	7748 Aug 13 18:51	10° $\mathbb{M}$ 47'06	
morning rise	7747 Sep 21 19:43	22° $\mathbb{M}$ 50'12		inferior conj	7748 Aug 23 01:14	6° $\mathbb{M}$ 49'48	-3°50'48
direct	7747 Sep 25 00:06	22° $\mathbb{M}$ 27'06		minimum elong	7748 Aug 22 15:53	7° $\mathbb{M}$ 03'00	3°48'05
morning max el	7747 Oct 06 10:12	27° $\mathbb{M}$ 47'47	21°06'01	min. Earth dist.	7748 Aug 23 13:52	6° $\mathbb{M}$ 31'56	0.54705 AU
	7747 Oct 08 14:12	0° $\mathbb{L}$		morning rise	7748 Aug 31 13:20	2° $\mathbb{M}$ 54'19	
asc. node	7747 Oct 15 17:31	9° $\mathbb{L}$ 44'04		direct	7748 Sep 04 08:08	2° $\mathbb{M}$ 23'38	
morning set	7747 Oct 26 04:18	29° $\mathbb{L}$ 26'34		morning max el	7748 Sep 17 05:01	8° $\mathbb{M}$ 31'32	22°45'17
	7747 Oct 26 10:45	0° $\mathbb{M}$		asc. node	7748 Oct 01 14:32	28° $\mathbb{M}$ 24'33	
					7748 Oct 02 11:30	0° $\mathbb{L}$	
superior conj	7747 Nov 02 12:28	14° $\mathbb{M}$ 46'15	1°39'41	morning set	7748 Oct 09 15:14	14° $\mathbb{L}$ 16'10	
minimum elong	7747 Nov 02 13:31	14° $\mathbb{M}$ 51'39	1°39'45				
max. Earth dist.	7747 Nov 07 03:15	24° $\mathbb{M}$ 06'24	1.35488 AU	superior conj	7748 Oct 16 16:03	29° $\mathbb{L}$ 19'46	1°41'36
	7747 Nov 10 04:12	0° $\mathbb{M}$		minimum elong	7748 Oct 16 15:47	29° $\mathbb{L}$ 18'22	1°41'40
evening rise	7747 Nov 11 05:04	1° $\mathbb{M}$ 57'32			7748 Oct 16 23:36	0° $\mathbb{M}$	
desc. node	7747 Nov 19 16:43	17° $\mathbb{M}$ 01'28		max. Earth dist.	7748 Oct 19 20:32	6° $\mathbb{M}$ 02'50	1.33878 AU
	7747 Nov 27 21:13	0° $\mathbb{L}$		evening rise	7748 Oct 24 13:09	15° $\mathbb{M}$ 32'31	
evening max el	7747 Dec 16 15:36	23° $\mathbb{L}$ 41'57	26°27'39		7748 Nov 01 07:54	0° $\mathbb{M}$	
	7747 Dec 25 07:39	0° $\mathbb{M}$		desc. node	7748 Nov 05 13:47	7° $\mathbb{M}$ 11'58	
retrograde	7747 Dec 29 12:53	0° $\mathbb{M}$ 56'37			7748 Nov 21 12:25	0° $\mathbb{L}$	
	7748 Jan 02 10:38	30° $\mathbb{R}$ 3		evening max el	7748 Nov 28 04:29	7° $\mathbb{L}$ 15'11	27°11'20
evening set	7748 Jan 04 21:54	28° $\mathbb{L}$ 22'33		retrograde	7748 Dec 11 14:07	14° $\mathbb{L}$ 35'23	
min. Earth dist.	7748 Jan 09 01:08	24° $\mathbb{L}$ 07'00	0.66427 AU	evening set	7748 Dec 18 09:32	11° $\mathbb{L}$ 58'20	
inferior conj	7748 Jan 10 18:38	22° $\mathbb{L}$ 01'54	-0°18'39	min. Earth dist.	7748 Dec 22 06:58	8° $\mathbb{L}$ 16'55	0.65049 AU
minimum elong	7748 Jan 10 19:08	22° $\mathbb{L}$ 00'22	0°18'20	inferior conj	7748 Dec 24 12:12	5° $\mathbb{L}$ 49'33	-1°22'00
asc. node	7748 Jan 11 16:49	20° $\mathbb{L}$ 55'35		minimum elong	7748 Dec 24 14:39	5° $\mathbb{L}$ 42'46	1°20'51
morning rise	7748 Jan 16 17:10	16° $\mathbb{L}$ 17'50		asc. node	7748 Dec 28 13:53	1° $\mathbb{L}$ 46'37	
direct	7748 Jan 19 17:04	15° $\mathbb{L}$ 27'22		morning rise	7748 Dec 30 21:08	0° $\mathbb{L}$ 18'23	
morning max el	7748 Jan 26 06:59	19° $\mathbb{L}$ 00'34	18°30'07		7748 Dec 31 15:45	30° $\mathbb{R}$ 2	
	7748 Feb 03 18:28	0° $\mathbb{M}$		direct	7749 Jan 02 12:24	29° $\mathbb{M}$ 41'35	
morning set	7748 Feb 15 15:38	18° $\mathbb{M}$ 34'38			7749 Jan 04 09:15	0° $\mathbb{L}$	
desc. node	7748 Feb 15 16:04	18° $\mathbb{M}$ 36'21		morning max el	7749 Jan 08 22:54	3° $\mathbb{L}$ 05'44	18°00'36
	7748 Feb 22 21:00	0° $\mathbb{M}$		morning set	7749 Jan 26 18:46	29° $\mathbb{L}$ 42'02	
					7749 Jan 26 23:07	0° $\mathbb{M}$	
superior conj	7748 Mar 02 14:42	13° $\mathbb{M}$ 42'41	-1°39'00	desc. node	7749 Feb 01 13:02	9° $\mathbb{M}$ 10'34	
minimum elong	7748 Mar 02 05:05	13° $\mathbb{M}$ 05'04	1°38'04				
max. Earth dist.	7748 Mar 02 20:23	14° $\mathbb{M}$ 04'55	1.45474 AU	superior conj	7749 Feb 10 00:02	22° $\mathbb{M}$ 47'16	-0°58'10
	7748 Mar 12 23:49	0° $\mathbb{M}$		minimum elong	7749 Feb 09 17:14	22° $\mathbb{M}$ 20'15	0°57'11
evening rise	7748 Mar 18 09:24	8° $\mathbb{M}$ 32'00		max. Earth dist.	7749 Feb 13 15:56	28° $\mathbb{M}$ 34'23	1.45247 AU
greatest brilliancy	7748 Mar 27 14:48	23° $\mathbb{M}$ 06'52	-0.8m		7749 Feb 14 13:44	0° $\mathbb{M}$	
	7748 Apr 01 02:38	0° $\mathbb{L}$		evening rise	7749 Feb 26 04:22	18° $\mathbb{M}$ 02'23	
asc. node	7748 Apr 08 15:50	10° $\mathbb{L}$ 04'20			7749 Mar 05 23:24	0° $\mathbb{M}$	
evening max el	7748 Apr 09 13:00	11° $\mathbb{L}$ 00'09	18°55'45	greatest brilliancy	7749 Mar 12 01:25	9° $\mathbb{M}$ 09'28	-0.7m
retrograde	7748 Apr 16 07:28	14° $\mathbb{L}$ 46'45		evening max el	7749 Mar 23 19:01	24° $\mathbb{M}$ 36'42	19°45'38
evening set	7748 Apr 19 16:05	13° $\mathbb{L}$ 41'27		asc. node	7749 Mar 26 12:56	27° $\mathbb{M}$ 02'37	
inferior conj	7748 Apr 25 05:25	7° $\mathbb{L}$ 57'51	3°25'02	retrograde	7749 Mar 31 05:22	28° $\mathbb{M}$ 53'19	
minimum elong	7748 Apr 25 05:19	7° $\mathbb{L}$ 58'10	3°24'57	evening set	7749 Apr 03 22:04	27° $\mathbb{M}$ 33'28	
min. Earth dist.	7748 Apr 26 21:51	5° $\mathbb{L}$ 50'38	0.65919 AU	inferior conj	7749 Apr 09 07:17	21° $\mathbb{M}$ 35'19	3°17'43
morning rise	7748 Apr 30 18:03	1° $\mathbb{L}$ 40'30		minimum elong	7749 Apr 09 06:04	21° $\mathbb{M}$ 39'22	3°17'33
	7748 May 03 02:01	30° $\mathbb{R}$ 9		min. Earth dist.	7749 Apr 10 08:58	20° $\mathbb{M}$ 09'38	0.67164 AU
direct	7748 May 07 04:27	28° $\mathbb{M}$ 53'24		morning rise	7749 Apr 14 13:47	15° $\mathbb{M}$ 18'08	
	7748 May 11 15:34	0° $\mathbb{L}$		direct	7749 Apr 20 13:11	12° $\mathbb{M}$ 38'09	
desc. node	7748 May 13 15:39	1° $\mathbb{L}$ 06'42		desc. node	7749 Apr 30 12:38	17° $\mathbb{M}$ 51'10	
morning max el	7748 May 20 05:10	6° $\mathbb{L}$ 37'32	26°36'34	morning max el	7749 May 02 14:54	19° $\mathbb{M}$ 52'12	25°20'27
	7748 Jun 07 05:48	0° $\mathbb{M}$			7749 May 11 06:31	0° $\mathbb{L}$	
	7748 Jun 24 22:18	0° $\mathbb{L}$			7749 May 31 09:01	0° $\mathbb{M}$	
morning set	7748 Jun 25 03:29	0° $\mathbb{L}$ 24'27		morning set	7749 Jun 07 17:35	12° $\mathbb{M}$ 45'35	
max. Earth dist.	7748 Jun 29 06:51	8° $\mathbb{L}$ 25'38	1.34493 AU	max. Earth dist.	7749 Jun 11 09:33	19° $\mathbb{M}$ 29'54	1.36331 AU
					7749 Jun 16 20:25	0° $\mathbb{L}$	
superior conj	7748 Jul 03 22:28	17° $\mathbb{L}$ 51'32	-0°17'02				
minimum elong	7748 Jul 03 23:25	17° $\mathbb{L}$ 56'27	0°16'57	superior conj	7749 Jun 17 12:29	1° $\mathbb{L}$ 19'34	-0°48'21
asc. node	7748 Jul 05 15:01	21° $\mathbb{L}$ 22'27		minimum elong	7749 Jun 17 15:22	1° $\mathbb{L}$ 33'55	0°47'56
	7748 Jul 09 17:33	0° $\mathbb{L}$		asc. node	7749 Jun 22 12:03	11° $\mathbb{L}$ 22'28	
evening rise	7748 Jul 11 11:07	3° $\mathbb{L}$ 37'32		evening rise	7749 Jun 25 16:28	17° $\mathbb{L}$ 51'32	
	7748 Jul 26 06:52	0° $\mathbb{M}$			7749 Jul 01 21:29	0° $\mathbb{L}$	
evening max el	7748 Jul 30 17:21	5° $\mathbb{M}$ 08'34	21°03'16	evening max el	7749 Jul 13 02:09	16° $\mathbb{L}$ 18'48	19°48'23



retrograde	7749 Jul 23 04:34	21°♎17'18		evening max el	7750 Jun 25 23:21	28°♎13'35	18°53'59
evening set	7749 Jul 25 01:15	21°♎07'55			7750 Jun 28 00:16	0°♎	
desc. node	7749 Jul 27 11:54	20°♎29'08		retrograde	7750 Jul 04 11:10	2°♎25'21	
inferior conj	7749 Aug 02 23:24	17°♎06'23	-1°58'09	evening set	7750 Jul 06 10:51	2°♎12'29	
minimum elong	7749 Aug 02 17:58	17°♎14'44	1°56'12		7750 Jul 11 12:46	30°♎♎	
min. Earth dist.	7749 Aug 05 01:42	15°♎49'05	0.55280 AU	desc. node	7750 Jul 14 08:55	28°♎05'45	
morning rise	7749 Aug 11 08:39	12°♎43'36		inferior conj	7750 Jul 14 14:54	27°♎55'08	-0°04'30
direct	7749 Aug 15 21:55	11°♎57'51		minimum elong	7750 Jul 14 14:42	27°♎55'29	0°04'33
morning max el	7749 Aug 29 18:03	18°♎49'24	24°30'52	transit middle	7750 Jul 14 14:42	27°♎55'29	0°04'33
	7749 Sep 08 01:58	0°♎		transit begin	7750 Jul 14 11:07	28°♎01'50	
asc. node	7749 Sep 18 11:31	17°♎35'43		transit end	7750 Jul 14 18:17	27°♎49'06	
morning set	7749 Sep 24 02:59	29°♎06'09		min. Earth dist.	7750 Jul 17 17:05	25°♎44'05	0.56710 AU
	7749 Sep 24 13:05	0°♎		morning rise	7750 Jul 22 15:13	22°♎55'57	
				direct	7750 Jul 28 01:22	21°♎45'36	
superior conj	7749 Oct 01 00:27	14°♎05'41	1°37'13	morning max el	7750 Aug 11 08:02	29°♎09'32	26°06'46
minimum elong	7749 Sep 30 23:08	13°♎58'29	1°37'09		7750 Aug 12 04:32	0°♎	
max. Earth dist.	7749 Oct 02 21:56	18°♎12'39	1.32701 AU		7750 Sep 01 16:45	0°♎	
evening rise	7749 Oct 08 07:57	29°♎36'31		asc. node	7750 Sep 05 08:30	7°♎09'34	
	7749 Oct 08 12:34	0°♎		morning set	7750 Sep 08 13:57	13°♎51'57	
desc. node	7749 Oct 23 10:51	26°♎58'38					
	7749 Oct 25 09:36	0°♎		superior conj	7750 Sep 15 11:32	28°♎57'06	1°27'11
evening max el	7749 Nov 10 15:51	20°♎25'47	27°28'47	minimum elong	7750 Sep 15 09:32	28°♎46'01	1°26'57
retrograde	7749 Nov 24 08:54	27°♎43'55			7750 Sep 15 22:55	0°♎	
evening set	7749 Dec 01 10:39	25°♎12'23		max. Earth dist.	7750 Sep 16 05:35	0°♎36'51	1.31976 AU
min. Earth dist.	7749 Dec 05 03:47	22°♎02'02	0.63350 AU	evening rise	7750 Sep 22 10:27	14°♎01'07	
inferior conj	7749 Dec 07 20:13	19°♎21'18	-2°29'47		7750 Sep 30 13:42	0°♎	
minimum elong	7749 Dec 08 00:53	19°♎09'38	2°27'52	desc. node	7750 Oct 10 07:55	16°♎11'43	
morning rise	7749 Dec 14 17:01	14°♎05'52			7750 Oct 20 23:58	0°♎	
asc. node	7749 Dec 15 10:56	13°♎51'38		evening max el	7750 Oct 23 23:24	3°♎01'05	27°14'31
direct	7749 Dec 17 02:00	13°♎38'50		retrograde	7750 Nov 06 20:03	10°♎13'05	
morning max el	7749 Dec 23 16:15	17°♎03'20	17°48'20	evening set	7750 Nov 13 21:41	7°♎57'29	
	7750 Jan 01 22:44	0°♎		min. Earth dist.	7750 Nov 17 14:08	5°♎11'12	0.61399 AU
morning set	7750 Jan 08 23:56	12°♎04'46		inferior conj	7750 Nov 20 15:31	2°♎29'19	-3°38'13
desc. node	7750 Jan 19 10:02	29°♎51'55		minimum elong	7750 Nov 20 22:07	2°♎14'43	3°35'59
	7750 Jan 19 11:58	0°♎			7750 Nov 23 14:49	30°♎♎	
				morning rise	7750 Nov 28 00:44	27°♎32'51	
superior conj	7750 Jan 21 05:37	2°♎52'28	-0°13'09	direct	7750 Nov 30 06:28	27°♎11'55	
minimum elong	7750 Jan 21 04:13	2°♎46'43	0°12'50	asc. node	7750 Dec 02 07:56	27°♎30'20	
behind sun begin	7750 Jan 20 22:26	2°♎22'51			7750 Dec 06 12:25	0°♎	
behind sun end	7750 Jan 21 10:00	3°♎10'33		morning max el	7750 Dec 07 07:47	0°♎45'08	17°54'21
max. Earth dist.	7750 Jan 27 09:40	12°♎52'54	1.44316 AU	morning set	7750 Dec 23 00:34	25°♎23'02	
evening rise	7750 Feb 05 15:17	27°♎20'36			7750 Dec 25 13:26	0°♎	
	7750 Feb 07 08:51	0°♎					
	7750 Feb 27 22:22	0°♎		superior conj	7751 Jan 02 13:02	14°♎12'14	0°27'21
evening max el	7750 Mar 06 19:36	8°♎14'28	20°49'37	minimum elong	7751 Jan 02 15:20	14°♎22'10	0°27'07
asc. node	7750 Mar 13 10:01	12°♎52'57		desc. node	7751 Jan 06 07:03	20°♎37'08	
retrograde	7750 Mar 15 03:49	13°♎08'36		max. Earth dist.	7751 Jan 09 23:52	26°♎46'45	1.42786 AU
evening set	7750 Mar 19 05:50	11°♎33'44			7751 Jan 11 23:14	0°♎	
inferior conj	7750 Mar 24 13:23	5°♎23'16	2°58'59	evening rise	7751 Jan 16 09:48	7°♎05'26	
minimum elong	7750 Mar 24 11:26	5°♎30'00	2°58'37		7751 Jan 31 14:49	0°♎	
min. Earth dist.	7750 Mar 25 01:28	4°♎41'34	0.67970 AU	evening max el	7751 Feb 17 14:59	21°♎54'01	22°03'55
	7750 Mar 28 19:35	30°♎♎		retrograde	7751 Feb 27 01:02	27°♎29'00	
morning rise	7750 Mar 29 16:49	29°♎08'27		asc. node	7751 Feb 28 07:04	27°♎20'58	
direct	7750 Apr 04 03:01	26°♎44'02		evening set	7751 Mar 03 13:43	25°♎38'51	
	7750 Apr 11 10:47	0°♎		inferior conj	7751 Mar 08 21:36	19°♎18'45	2°30'30
morning max el	7750 Apr 14 23:47	3°♎13'31	23°52'45	minimum elong	7751 Mar 08 19:20	19°♎26'40	2°29'56
desc. node	7750 Apr 17 09:35	5°♎47'37		min. Earth dist.	7751 Mar 08 21:10	19°♎20'15	0.68345 AU
	7750 May 05 10:21	0°♎		morning rise	7751 Mar 14 00:47	13°♎07'53	
morning set	7750 May 20 10:47	24°♎05'06		direct	7751 Mar 18 20:54	11°♎04'13	
	7750 May 23 20:23	0°♎		morning max el	7751 Mar 28 10:33	16°♎41'57	22°23'28
max. Earth dist.	7750 May 24 05:37	0°♎40'51	1.38485 AU	desc. node	7751 Apr 04 06:34	24°♎36'19	
					7751 Apr 08 08:35	0°♎	
superior conj	7750 May 31 13:51	14°♎08'36	-1°19'25		7751 Apr 28 11:51	0°♎	
minimum elong	7750 May 31 18:38	14°♎31'14	1°18'49	morning set	7751 May 01 01:38	4°♎09'17	
	7750 Jun 08 18:09	0°♎		max. Earth dist.	7751 May 06 02:56	12°♎32'29	1.40724 AU
asc. node	7750 Jun 09 09:06	1°♎13'15					
evening rise	7750 Jun 09 14:56	1°♎41'52		superior conj	7751 May 13 22:10	26°♎07'49	-1°46'59

minimum elong	7751 May 14 03:51	26°♄33'21	1°46'30	minimum elong	7752 Apr 24 12:43	7°♄24'01	2°06'04
	7751 May 16 01:33	0°♄		evening rise	7752 May 06 01:06	27°♄36'00	
evening rise	7751 May 24 03:10	14°♄59'48			7752 May 07 09:16	0°♄	
asc. node	7751 May 27 06:07	20°♄49'48		asc. node	7752 May 13 03:09	10°♄06'59	
	7751 Jun 01 09:45	0°♄		evening max el	7752 May 22 16:56	23°♄44'20	18°06'03
evening max el	7751 Jun 09 05:32	10°♄45'10	18°20'07	retrograde	7752 May 29 08:07	27°♄08'00	
retrograde	7751 Jun 16 13:07	14°♄24'51		evening set	7752 May 31 22:09	26°♄37'04	
evening set	7751 Jun 18 19:49	14°♄04'24		inferior conj	7752 Jun 07 13:20	21°♄38'54	2°29'38
inferior conj	7751 Jun 26 04:02	9°♄26'30	1°26'53	minimum elong	7752 Jun 07 16:23	21°♄31'33	2°28'47
minimum elong	7751 Jun 26 06:43	9°♄20'55	1°25'54	min. Earth dist.	7752 Jun 10 17:59	18°♄35'06	0.60948 AU
min. Earth dist.	7751 Jun 29 13:41	6°♄37'37	0.58713 AU	morning rise	7752 Jun 14 08:14	15°♄42'17	
desc. node	7751 Jul 01 05:57	5°♄22'10		desc. node	7752 Jun 17 02:58	14°♄14'29	
morning rise	7751 Jul 03 14:25	3°♄53'48		direct	7752 Jun 20 23:28	13°♄30'03	
direct	7751 Jul 09 18:29	2°♄12'22		morning max el	7752 Jul 05 06:16	21°♄28'41	27°52'10
morning max el	7751 Jul 24 03:41	9°♄57'44	27°17'18		7752 Jul 12 16:22	0°♄	
	7751 Aug 08 13:32	0°♄			7752 Jul 31 14:39	0°♄	
asc. node	7751 Aug 23 05:29	26°♄58'53		morning set	7752 Aug 07 02:40	12°♄48'23	
morning set	7751 Aug 23 22:27	28°♄27'46		asc. node	7752 Aug 09 02:29	16°♄58'26	
	7751 Aug 24 15:54	0°♄		max. Earth dist.	7752 Aug 13 01:22	25°♄30'13	1.31873 AU
superior conj	7751 Aug 30 23:20	13°♄47'04	1°12'02	superior conj	7752 Aug 14 10:06	28°♄30'08	0°52'09
minimum elong	7751 Aug 30 21:04	13°♄34'33	1°11'38	minimum elong	7752 Aug 14 08:05	28°♄18'56	0°51'43
max. Earth dist.	7751 Aug 30 16:00	13°♄06'26	1.31701 AU		7752 Aug 15 02:25	0°♄	
evening rise	7751 Sep 06 18:03	28°♄37'47		evening rise	7752 Aug 21 04:39	13°♄20'11	
	7751 Sep 07 09:34	0°♄			7752 Aug 29 12:11	0°♄	
	7751 Sep 23 23:01	0°♄		desc. node	7752 Sep 13 02:01	21°♄55'43	
desc. node	7751 Sep 27 04:58	4°♄37'00		evening max el	7752 Sep 16 16:55	25°♄44'45	25°08'16
evening max el	7751 Oct 06 00:14	14°♄48'21	26°26'19		7752 Sep 22 01:15	0°♄	
retrograde	7751 Oct 19 22:14	21°♄54'23		retrograde	7752 Sep 30 14:06	2°♄45'21	
evening set	7751 Oct 26 14:06	20°♄05'21		evening set	7752 Oct 06 07:17	1°♄30'56	
min. Earth dist.	7751 Oct 30 13:38	17°♄30'41	0.59319 AU		7752 Oct 09 06:59	30°♄	
inferior conj	7751 Nov 02 18:32	15°♄03'00	-4°40'09	min. Earth dist.	7752 Oct 11 04:24	28°♄49'48	0.57321 AU
minimum elong	7751 Nov 03 01:31	14°♄49'32	4°38'30	inferior conj	7752 Oct 14 02:11	26°♄53'20	-5°23'03
morning rise	7751 Nov 10 15:13	10°♄28'43		minimum elong	7752 Oct 14 06:11	26°♄46'37	5°22'37
direct	7751 Nov 12 21:31	10°♄10'42		morning rise	7752 Oct 22 07:24	22°♄42'10	
asc. node	7751 Nov 19 04:56	12°♄39'42		direct	7752 Oct 24 18:44	22°♄24'21	
morning max el	7751 Nov 20 18:04	14°♄01'17	18°20'05	morning max el	7752 Nov 02 19:33	26°♄42'10	19°07'08
	7751 Dec 01 15:26	0°♄		asc. node	7752 Nov 05 01:57	29°♄07'13	
morning set	7751 Dec 06 14:50	9°♄19'00			7752 Nov 05 19:22	0°♄	
superior conj	7751 Dec 15 19:44	26°♄38'38	0°59'14	morning set	7752 Nov 19 14:27	23°♄40'05	
minimum elong	7751 Dec 15 23:14	26°♄54'36	0°58'52		7752 Nov 22 18:54	0°♄	
	7751 Dec 17 16:06	0°♄		superior conj	7752 Nov 27 20:37	9°♄56'58	1°21'42
max. Earth dist.	7751 Dec 23 09:22	10°♄02'38	1.40819 AU	minimum elong	7752 Nov 27 23:40	10°♄11'36	1°21'30
desc. node	7751 Dec 24 04:04	11°♄22'20		max. Earth dist.	7752 Dec 04 15:07	22°♄35'05	1.38661 AU
evening rise	7751 Dec 27 22:52	17°♄41'31		evening rise	7752 Dec 08 10:01	29°♄16'19	
	7752 Jan 04 16:37	0°♄			7752 Dec 08 20:09	0°♄	
	7752 Jan 26 04:51	0°♄		desc. node	7752 Dec 10 01:04	2°♄03'43	
evening max el	7752 Jan 31 06:23	5°♄36'29	23°23'32		7752 Dec 28 02:02	0°♄	
retrograde	7752 Feb 10 19:38	11°♄50'48		evening max el	7753 Jan 12 19:39	19°♄21'43	24°42'21
asc. node	7752 Feb 15 04:06	10°♄17'24		retrograde	7753 Jan 24 10:32	26°♄08'32	
evening set	7752 Feb 15 20:11	9°♄45'40		evening set	7753 Jan 29 23:42	23°♄49'48	
min. Earth dist.	7752 Feb 20 17:52	4°♄01'11	0.68303 AU	asc. node	7753 Feb 01 01:09	21°♄46'38	
inferior conj	7752 Feb 21 06:03	3°♄19'21	1°53'19	min. Earth dist.	7753 Feb 03 13:22	18°♄39'35	0.67865 AU
minimum elong	7752 Feb 21 03:54	3°♄26'43	1°52'39	inferior conj	7753 Feb 04 12:54	17°♄21'28	1°08'00
	7752 Feb 23 18:32	30°♄		minimum elong	7753 Feb 04 11:22	17°♄26'32	1°07'29
morning rise	7752 Feb 26 11:35	27°♄13'43		morning rise	7753 Feb 09 23:14	11°♄22'32	
direct	7752 Mar 01 17:45	25°♄32'43		direct	7753 Feb 13 16:23	10°♄03'24	
	7752 Mar 09 18:03	0°♄		morning max el	7753 Feb 21 03:03	14°♄13'50	19°50'11
morning max el	7752 Mar 10 02:56	0°♄21'50	21°00'49		7753 Mar 05 07:59	0°♄	
desc. node	7752 Mar 21 03:33	14°♄03'11		greatest brilliancy	7753 Mar 06 01:44	1°♄04'48	-0.6m
	7752 Apr 01 02:11	0°♄		desc. node	7753 Mar 08 00:31	3°♄57'20	
morning set	7752 Apr 09 13:37	13°♄00'52		morning set	7753 Mar 19 10:56	21°♄17'58	
max. Earth dist.	7752 Apr 17 06:48	25°♄20'07	1.42756 AU		7753 Mar 25 01:33	0°♄	
	7752 Apr 20 02:56	0°♄		max. Earth dist.	7753 Mar 30 17:35	8°♄55'50	1.44328 AU
superior conj	7752 Apr 24 08:43	7°♄07'01	-2°06'12	superior conj	7753 Apr 04 18:24	17°♄00'39	-2°11'00

minimum elong	7753 Apr 04 16:52	16° $\Upsilon$ 54'25	2°11'01		7754 Feb 26 15:01	0° $\text{H}$	
	7753 Apr 12 15:34	0° $\text{B}$		max. Earth dist.	7754 Mar 13 09:44	23° $\text{H}$ 05'30	1.45267 AU
evening rise	7753 Apr 18 04:03	9° $\text{B}$ 20'00					
asc. node	7753 Apr 30 00:12	28° $\text{B}$ 57'45		superior conj	7754 Mar 15 06:38	26° $\text{H}$ 01'52	-1°56'22
	7753 Apr 30 16:50	0° $\text{II}$		minimum elong	7754 Mar 14 22:33	25° $\text{H}$ 30'04	1°55'49
evening max el	7753 May 06 06:10	7° $\text{II}$ 02'08	18°11'04		7754 Mar 17 19:03	0° $\Upsilon$	
retrograde	7753 May 12 15:32	10° $\text{II}$ 24'21		evening rise	7754 Mar 30 08:12	20° $\Upsilon$ 05'53	
evening set	7753 May 15 12:40	9° $\text{II}$ 41'02			7754 Apr 05 10:35	0° $\text{B}$	
inferior conj	7753 May 21 14:51	4° $\text{II}$ 24'11	3°06'39	asc. node	7754 Apr 16 21:16	17° $\text{B}$ 13'53	
minimum elong	7753 May 21 16:54	4° $\text{II}$ 18'33	3°06'13	evening max el	7754 Apr 19 18:24	20° $\text{B}$ 31'46	18°34'25
min. Earth dist.	7753 May 24 07:21	1° $\text{II}$ 28'48	0.63120 AU	retrograde	7754 Apr 26 07:08	24° $\text{B}$ 05'48	
	7753 May 25 18:39	30° $\text{R}$ $\text{B}$		evening set	7754 Apr 29 11:26	23° $\text{B}$ 08'48	
morning rise	7753 May 27 19:41	28° $\text{B}$ 14'01		inferior conj	7754 May 05 04:30	17° $\text{B}$ 34'43	3°23'02
direct	7753 Jun 03 14:24	25° $\text{B}$ 38'30		minimum elong	7754 May 05 05:10	17° $\text{B}$ 32'42	3°22'54
desc. node	7753 Jun 04 00:00	25° $\text{B}$ 39'01		min. Earth dist.	7754 May 07 05:56	15° $\text{B}$ 06'15	0.65016 AU
	7753 Jun 13 12:07	0° $\text{II}$		morning rise	7754 May 10 22:08	11° $\text{B}$ 18'41	
morning max el	7753 Jun 17 13:57	3° $\text{II}$ 41'22	27°48'48	direct	7754 May 17 13:17	8° $\text{B}$ 31'56	
	7753 Jul 07 05:25	0° $\text{B}$		desc. node	7754 May 21 21:02	9° $\text{B}$ 31'48	
morning set	7753 Jul 22 00:24	26° $\text{B}$ 47'11		morning max el	7754 May 30 23:58	16° $\text{B}$ 26'49	27°10'54
	7753 Jul 23 14:24	0° $\Omega$			7754 Jun 11 04:50	0° $\text{II}$	
asc. node	7753 Jul 26 23:30	7° $\Omega$ 03'20			7754 Jun 30 01:09	0° $\text{B}$	
max. Earth dist.	7753 Jul 27 05:33	7° $\Omega$ 35'32	1.32506 AU	morning set	7754 Jul 05 12:52	10° $\text{B}$ 16'20	
				max. Earth dist.	7754 Jul 10 00:57	19° $\text{B}$ 14'09	1.33628 AU
superior conj	7753 Jul 29 18:03	13° $\Omega$ 00'37	0°28'01				
minimum elong	7753 Jul 29 16:46	12° $\Omega$ 53'39	0°27'41	superior conj	7754 Jul 13 21:05	27° $\text{B}$ 12'36	0°00'15
evening rise	7753 Aug 05 16:19	28° $\Omega$ 02'14		minimum elong	7754 Jul 13 21:05	27° $\text{B}$ 12'34	0°00'09
	7753 Aug 06 14:30	0° $\text{H}$		behind sun begin	7754 Jul 13 15:32	26° $\text{B}$ 43'17	
	7753 Aug 23 19:27	0° $\text{B}$		behind sun end	7754 Jul 14 02:38	27° $\text{B}$ 41'53	
evening max el	7753 Aug 29 04:33	6° $\text{B}$ 05'30	23°32'17	asc. node	7754 Jul 13 20:30	27° $\text{B}$ 09'30	
desc. node	7753 Aug 30 23:04	7° $\text{B}$ 42'25			7754 Jul 15 04:43	0° $\Omega$	
retrograde	7753 Sep 11 18:05	12° $\text{B}$ 53'01		evening rise	7754 Jul 21 03:12	12° $\Omega$ 38'22	
evening set	7753 Sep 16 00:38	12° $\text{B}$ 13'02			7754 Jul 29 23:32	0° $\text{H}$	
min. Earth dist.	7753 Sep 22 14:28	9° $\text{B}$ 06'52	0.55705 AU	evening max el	7754 Aug 10 19:07	16° $\text{H}$ 22'33	21°54'34
inferior conj	7753 Sep 24 13:47	7° $\text{B}$ 56'36	-5°28'55	desc. node	7754 Aug 17 20:09	21° $\text{H}$ 24'55	
minimum elong	7753 Sep 24 10:59	8° $\text{B}$ 00'46	5°28'43	retrograde	7754 Aug 23 10:08	22° $\text{H}$ 38'37	
morning rise	7753 Oct 02 23:33	4° $\text{B}$ 03'18		evening set	7754 Aug 26 06:05	22° $\text{H}$ 20'42	
direct	7753 Oct 05 20:26	3° $\text{B}$ 43'04		inferior conj	7754 Sep 04 10:06	18° $\text{H}$ 20'06	-4°41'45
morning max el	7753 Oct 16 09:12	8° $\text{B}$ 38'55	20°16'32	minimum elong	7754 Sep 04 01:17	18° $\text{H}$ 32'27	4°39'50
asc. node	7753 Oct 22 22:59	16° $\text{B}$ 37'42		min. Earth dist.	7754 Sep 03 23:15	18° $\text{H}$ 35'18	0.54806 AU
	7753 Oct 30 16:39	0° $\text{H}$		morning rise	7754 Sep 12 21:50	14° $\text{H}$ 31'00	
morning set	7753 Nov 03 20:19	8° $\text{H}$ 17'58		direct	7754 Sep 16 07:59	14° $\text{H}$ 05'10	
				morning max el	7754 Sep 28 09:59	19° $\text{H}$ 46'36	21°46'39
superior conj	7753 Nov 11 10:53	23° $\text{H}$ 53'46	1°35'23		7754 Oct 06 18:13	0° $\text{B}$	
minimum elong	7753 Nov 11 12:44	24° $\text{H}$ 03'03	1°35'22	asc. node	7754 Oct 09 20:01	4° $\text{B}$ 56'03	
	7753 Nov 14 12:28	0° $\text{H}$		morning set	7754 Oct 19 05:58	23° $\text{B}$ 04'45	
max. Earth dist.	7753 Nov 16 21:37	4° $\text{H}$ 36'31	1.36571 AU		7754 Oct 22 12:37	0° $\text{H}$	
evening rise	7753 Nov 20 17:43	11° $\text{H}$ 46'24					
desc. node	7753 Nov 26 22:06	22° $\text{H}$ 37'35		superior conj	7754 Oct 26 10:29	8° $\text{H}$ 16'18	1°41'19
	7753 Dec 01 09:51	0° $\text{B}$		minimum elong	7754 Oct 26 10:58	8° $\text{H}$ 18'46	1°41'23
	7753 Dec 23 07:46	0° $\approx$		max. Earth dist.	7754 Oct 30 10:10	16° $\text{H}$ 29'26	1.34751 AU
evening max el	7753 Dec 26 08:39	3° $\approx$ 08'37	25°53'18	evening rise	7754 Nov 03 18:01	25° $\text{H}$ 00'41	
retrograde	7754 Jan 07 20:45	10° $\approx$ 16'52			7754 Nov 06 09:39	0° $\text{H}$	
evening set	7754 Jan 13 22:38	7° $\approx$ 47'20		desc. node	7754 Nov 13 19:08	12° $\text{H}$ 58'18	
min. Earth dist.	7754 Jan 18 05:28	3° $\approx$ 11'35	0.67055 AU		7754 Nov 24 21:56	0° $\text{B}$	
asc. node	7754 Jan 18 22:14	2° $\approx$ 19'04		evening max el	7754 Dec 08 21:58	16° $\text{B}$ 50'23	26°49'05
inferior conj	7754 Jan 19 16:18	1° $\approx$ 22'04	0°15'05	retrograde	7754 Dec 22 01:23	24° $\text{B}$ 08'20	
minimum elong	7754 Jan 19 15:55	1° $\approx$ 23'18	0°15'01	evening set	7754 Dec 28 15:00	21° $\text{B}$ 32'30	
transit middle	7754 Jan 19 15:55	1° $\approx$ 23'18	0°15'01	min. Earth dist.	7755 Jan 01 15:45	17° $\text{B}$ 31'20	0.65884 AU
transit begin	7754 Jan 19 14:53	1° $\approx$ 26'33		inferior conj	7755 Jan 03 14:08	15° $\text{B}$ 16'04	-0°44'48
transit end	7754 Jan 19 16:56	1° $\approx$ 20'04		minimum elong	7755 Jan 03 15:25	15° $\text{B}$ 12'20	0°44'08
	7754 Jan 20 18:42	30° $\text{R}$ $\text{B}$		asc. node	7755 Jan 05 19:19	12° $\text{B}$ 46'38	
morning rise	7754 Jan 25 09:44	25° $\text{B}$ 31'43		morning rise	7755 Jan 09 16:50	9° $\text{B}$ 36'49	
direct	7754 Jan 28 15:23	24° $\text{B}$ 31'49		direct	7755 Jan 12 12:50	8° $\text{B}$ 52'35	
morning max el	7754 Feb 04 10:48	28° $\text{B}$ 15'29	18°54'36	morning max el	7755 Jan 19 00:24	12° $\text{B}$ 20'51	18°15'23
	7754 Feb 06 02:07	0° $\approx$			7755 Jan 31 15:45	0° $\approx$	
desc. node	7754 Feb 22 21:31	24° $\approx$ 11'34		morning set	7755 Feb 07 03:59	10° $\approx$ 28'10	
morning set	7754 Feb 26 17:55	0° $\text{H}$ 11'17		desc. node	7755 Feb 09 18:29	14° $\approx$ 39'44	

	7755 Feb 19 09:41	0° $\text{H}$		morning max el	7756 Jan 02 17:13	26° $\text{X}$ 23'21	17°53'12
					7756 Jan 05 20:11	0° $\text{Z}$	
superior conj	7755 Feb 22 11:13	4° $\text{H}$ 49'17 -1°22'54		morning set	7756 Jan 19 18:58	22° $\text{Z}$ 10'21	
minimum elong	7755 Feb 22 02:05	4° $\text{H}$ 13'26 1°21'49			7756 Jan 24 10:50	0° $\approx$	
max. Earth dist.	7755 Feb 24 05:08	7° $\text{H}$ 33'38 1.45477 AU		desc. node	7756 Jan 27 15:27	5° $\approx$ 17'31	
evening rise	7755 Mar 10 13:29	29° $\text{H}$ 58'10					
	7755 Mar 10 13:57	0° $\text{Y}$		superior conj	7756 Feb 02 03:39	14° $\approx$ 15'35	-0°38'57
greatest brilliancy	7755 Mar 21 23:00	17° $\text{Y}$ 39'55 -0.7m		minimum elong	7756 Feb 01 23:10	13° $\approx$ 57'31	0°38'13
	7755 Mar 30 13:46	0° $\text{Z}$		max. Earth dist.	7756 Feb 07 00:47	22° $\approx$ 02'38	1.44942 AU
evening max el	7755 Apr 03 03:14	4° $\text{Z}$ 07'24 19°15'07			7756 Feb 12 02:32	0° $\text{H}$	
asc. node	7755 Apr 03 18:20	4° $\text{Z}$ 44'32		evening rise	7756 Feb 18 03:13	9° $\text{H}$ 19'10	
retrograde	7755 Apr 10 03:28	8° $\text{Z}$ 05'08			7756 Mar 02 19:58	0° $\text{Y}$	
evening set	7755 Apr 13 15:29	6° $\text{Z}$ 53'40		greatest brilliancy	7756 Mar 03 22:30	1° $\text{Y}$ 37'12	-0.6m
inferior conj	7755 Apr 19 02:44	1° $\text{Z}$ 03'50 3°23'25		evening max el	7756 Mar 16 06:59	17° $\text{Y}$ 44'43	20°11'19
minimum elong	7755 Apr 19 02:08	1° $\text{Z}$ 05'49 3°23'19		asc. node	7756 Mar 20 15:24	21° $\text{Y}$ 16'00	
	7755 Apr 19 22:26	30° $\text{R}$ $\text{Y}$		retrograde	7756 Mar 24 01:48	22° $\text{Y}$ 16'15	
min. Earth dist.	7755 Apr 20 12:48	29° $\text{Y}$ 13'43 0.66511 AU		evening set	7756 Mar 27 22:26	20° $\text{Y}$ 49'49	
morning rise	7755 Apr 24 12:25	24° $\text{Y}$ 46'29		inferior conj	7756 Apr 02 06:39	14° $\text{Y}$ 46'03	3°11'02
direct	7755 Apr 30 18:39	22° $\text{Y}$ 01'05		minimum elong	7756 Apr 02 05:05	14° $\text{Y}$ 51'24	3°10'47
desc. node	7755 May 08 18:03	25° $\text{Y}$ 22'56		min. Earth dist.	7756 Apr 03 02:19	13° $\text{Y}$ 39'21	0.67566 AU
morning max el	7755 May 13 10:05	29° $\text{Y}$ 33'41 26°06'09		morning rise	7756 Apr 07 11:31	8° $\text{Y}$ 29'55	
	7755 May 13 20:22	0° $\text{Z}$		direct	7756 Apr 13 05:28	5° $\text{Y}$ 55'58	
	7755 Jun 05 01:43	0° $\text{II}$		desc. node	7756 Apr 24 15:02	12° $\text{Y}$ 41'04	
morning set	7755 Jun 18 12:26	23° $\text{II}$ 06'04		morning max el	7756 Apr 24 19:18	12° $\text{Y}$ 51'48	24°43'58
	7755 Jun 22 03:54	0° $\text{Z}$			7756 May 08 14:57	0° $\text{Z}$	
max. Earth dist.	7755 Jun 22 09:41	0° $\text{Z}$ 27'59 1.35229 AU			7756 May 27 20:41	0° $\text{II}$	
				morning set	7756 May 30 18:16	5° $\text{II}$ 02'34	
superior conj	7755 Jun 27 16:45	10° $\text{Z}$ 59'34 -0°30'11		max. Earth dist.	7756 Jun 03 09:10	11° $\text{II}$ 32'58	1.37227 AU
minimum elong	7755 Jun 27 18:30	11° $\text{Z}$ 08'26 0°29'57					
asc. node	7755 Jun 30 17:31	17° $\text{Z}$ 13'19		superior conj	7756 Jun 10 01:49	24° $\text{II}$ 12'07	-1°01'43
evening rise	7755 Jul 05 11:15	27° $\text{Z}$ 02'58		minimum elong	7756 Jun 10 05:33	24° $\text{II}$ 30'19	1°01'12
	7755 Jul 06 21:49	0° $\Omega$			7756 Jun 13 00:31	0° $\text{Z}$	
evening max el	7755 Jul 23 20:20	27° $\Omega$ 08'32 20°29'00		asc. node	7756 Jun 16 14:31	7° $\text{Z}$ 10'00	
	7755 Jul 27 06:10	0° $\text{H}$		evening rise	7756 Jun 18 14:01	11° $\text{Z}$ 08'07	
retrograde	7755 Aug 03 22:15	2° $\text{H}$ 36'46			7756 Jun 28 19:09	0° $\Omega$	
desc. node	7755 Aug 04 17:13	2° $\text{H}$ 35'11		evening max el	7756 Jul 05 10:34	8° $\Omega$ 37'31	19°22'35
evening set	7755 Aug 05 22:37	2° $\text{H}$ 26'41		retrograde	7756 Jul 14 19:39	13° $\Omega$ 15'05	
	7755 Aug 12 10:58	30° $\text{R}$ $\Omega$		evening set	7756 Jul 16 16:41	13° $\Omega$ 04'46	
inferior conj	7755 Aug 15 03:17	28° $\Omega$ 29'31 -3°05'17		desc. node	7756 Jul 21 14:17	11° $\Omega$ 13'39	
minimum elong	7755 Aug 14 19:02	28° $\Omega$ 41'26 3°02'34		inferior conj	7756 Jul 25 07:43	8° $\Omega$ 57'01	-1°08'14
min. Earth dist.	7755 Aug 16 09:08	27° $\Omega$ 46'19 0.54836 AU		minimum elong	7756 Jul 25 04:40	9° $\Omega$ 01'59	1°07'09
morning rise	7755 Aug 23 14:51	24° $\Omega$ 24'47		min. Earth dist.	7756 Jul 27 21:59	7° $\Omega$ 15'53	0.55800 AU
direct	7755 Aug 27 17:21	23° $\Omega$ 48'37		morning rise	7756 Aug 02 13:59	4° $\Omega$ 19'17	
	7755 Sep 09 18:33	0° $\text{H}$		direct	7756 Aug 07 11:58	3° $\Omega$ 24'28	
morning max el	7755 Sep 10 01:17	0° $\text{H}$ 15'36 23°30'20		morning max el	7756 Aug 21 13:58	10° $\Omega$ 30'36	25°13'59
asc. node	7755 Sep 26 17:01	23° $\text{H}$ 50'54			7756 Sep 05 08:15	0° $\text{H}$	
	7755 Sep 29 21:25	0° $\text{Z}$		asc. node	7756 Sep 12 14:00	13° $\text{H}$ 12'29	
morning set	7755 Oct 03 17:27	7° $\text{Z}$ 55'07		morning set	7756 Sep 17 05:02	22° $\text{H}$ 43'46	
					7756 Sep 20 13:41	0° $\text{Z}$	
superior conj	7755 Oct 10 16:23	22° $\text{Z}$ 55'42 1°40'28					
minimum elong	7755 Oct 10 15:38	22° $\text{Z}$ 51'39 1°40'29		superior conj	7756 Sep 24 02:07	7° $\text{Z}$ 44'17	1°33'36
max. Earth dist.	7755 Oct 13 07:16	28° $\text{Z}$ 31'56 1.33325 AU		minimum elong	7756 Sep 24 00:28	7° $\text{Z}$ 35'11	1°33'29
	7755 Oct 13 23:57	0° $\text{H}$		max. Earth dist.	7756 Sep 25 11:45	10° $\text{Z}$ 48'32	1.32336 AU
evening rise	7755 Oct 18 07:03	8° $\text{H}$ 49'03		evening rise	7756 Oct 01 05:25	23° $\text{Z}$ 02'11	
	7755 Oct 29 20:27	0° $\text{X}$			7756 Oct 04 16:28	0° $\text{H}$	
desc. node	7755 Oct 31 16:11	2° $\text{X}$ 59'37		desc. node	7756 Oct 17 13:14	22° $\text{H}$ 33'21	
	7755 Nov 21 03:54	0° $\text{Z}$			7756 Oct 22 15:11	0° $\text{X}$	
evening max el	7755 Nov 21 10:36	0° $\text{Z}$ 16'02 27°22'22		evening max el	7756 Nov 02 20:32	13° $\text{X}$ 12'29	27°26'48
retrograde	7755 Dec 04 23:38	7° $\text{Z}$ 35'06		retrograde	7756 Nov 16 15:08	20° $\text{X}$ 28'08	
evening set	7755 Dec 11 22:27	4° $\text{Z}$ 59'27		evening set	7756 Nov 23 18:02	18° $\text{X}$ 01'46	
min. Earth dist.	7755 Dec 15 17:56	1° $\text{Z}$ 31'46 0.64368 AU		min. Earth dist.	7756 Nov 27 10:08	15° $\text{X}$ 03'11	0.62544 AU
	7755 Dec 17 04:43	30° $\text{R}$ $\text{X}$		inferior conj	7756 Nov 30 06:56	12° $\text{X}$ 20'11	-2°59'04
inferior conj	7755 Dec 18 03:59	28° $\text{X}$ 57'48 -1°50'22		minimum elong	7756 Nov 30 12:31	12° $\text{X}$ 06'56	2°56'56
minimum elong	7755 Dec 18 07:21	28° $\text{X}$ 48'49 1°48'51		morning rise	7756 Dec 07 09:02	7° $\text{X}$ 12'42	
asc. node	7755 Dec 23 16:23	24° $\text{X}$ 04'47		direct	7756 Dec 09 16:20	6° $\text{X}$ 48'37	
morning rise	7755 Dec 24 17:47	23° $\text{X}$ 32'43		asc. node	7756 Dec 09 13:24	6° $\text{X}$ 48'41	
direct	7755 Dec 27 06:11	23° $\text{X}$ 00'24		morning max el	7756 Dec 16 10:13	10° $\text{X}$ 15'28	17°48'43

	7756 Dec 29 13:31	0°♁		direct	7757 Nov 22 15:22	20°♍08'12	
morning set	7757 Jan 01 09:12	4°♁59'19		asc. node	7757 Nov 26 10:26	21°♍06'55	
				morning max el	7757 Nov 30 00:01	23°♍47'48	18°02'55
superior conj	7757 Jan 12 20:14	24°♁53'16	0°04'57		7757 Dec 04 23:37	0°♁	
minimum elong	7757 Jan 12 20:44	24°♁55'21	0°04'58	morning set	7757 Dec 15 16:12	18°♁35'02	
behind sun begin	7757 Jan 12 12:08	24°♁19'08			7757 Dec 21 20:29	0°♁	
behind sun end	7757 Jan 13 05:20	25°♁31'29					
desc. node	7757 Jan 13 12:26	26°♁01'17		superior conj	7757 Dec 25 14:07	6°♁43'07	0°42'00
	7757 Jan 15 21:51	0°♁		minimum elong	7757 Dec 25 17:11	6°♁56'43	0°41'41
max. Earth dist.	7757 Jan 19 17:29	6°♁13'49	1.43725 AU	desc. node	7757 Dec 31 09:26	16°♁46'55	
evening rise	7757 Jan 27 15:36	18°♁44'56		max. Earth dist.	7758 Jan 02 05:13	19°♁50'55	1.41977 AU
	7757 Feb 04 00:44	0°♁		evening rise	7758 Jan 07 17:01	28°♁49'12	
	7757 Feb 25 21:37	0°♁			7758 Jan 08 10:45	0°♁	
evening max el	7757 Feb 27 05:11	1°♁23'22	21°20'08		7758 Jan 28 15:44	0°♁	
asc. node	7757 Mar 07 12:28	6°♁33'54		evening max el	7758 Feb 09 22:34	15°♁03'48	22°37'29
retrograde	7757 Mar 08 00:04	6°♁35'07		retrograde	7758 Feb 19 20:28	20°♁56'45	
evening set	7757 Mar 12 06:29	4°♁53'36		asc. node	7758 Feb 22 09:32	20°♁23'55	
	7757 Mar 16 14:16	30°♁		evening set	7758 Feb 24 13:57	19°♁00'15	
inferior conj	7757 Mar 17 13:55	28°♁38'23	2°48'03	inferior conj	7758 Mar 01 22:29	12°♁36'52	2°15'48
minimum elong	7757 Mar 17 11:47	28°♁45'49	2°47'34	minimum elong	7758 Mar 01 20:13	12°♁44'46	2°15'09
min. Earth dist.	7757 Mar 17 20:29	28°♁15'34	0.68180 AU	min. Earth dist.	7758 Mar 01 17:00	12°♁55'55	0.68371 AU
morning rise	7757 Mar 22 16:55	22°♁25'03		morning rise	7758 Mar 07 02:20	6°♁27'47	
direct	7757 Mar 27 21:03	20°♁09'19		direct	7758 Mar 11 16:22	4°♁33'42	
morning max el	7757 Apr 07 04:48	26°♁17'20	23°14'28	morning max el	7758 Mar 20 17:34	9°♁50'32	21°47'05
	7757 Apr 10 14:42	0°♁		desc. node	7758 Mar 29 08:58	20°♁09'09	
desc. node	7757 Apr 11 12:00	1°♁02'29			7758 Apr 05 11:04	0°♁	
	7757 May 02 04:22	0°♁		morning set	7758 Apr 22 03:52	25°♁24'06	
morning set	7757 May 12 00:52	15°♁52'01			7758 Apr 25 00:17	0°♁	
max. Earth dist.	7757 May 16 05:05	22°♁59'12	1.39448 AU	max. Earth dist.	7758 Apr 28 04:15	5°♁12'12	1.41630 AU
	7757 May 20 04:26	0°♁					
				superior conj	7758 May 05 20:06	18°♁16'29	-1°56'30
superior conj	7757 May 23 20:28	6°♁41'17	-1°31'48	minimum elong	7758 May 06 01:30	18°♁40'09	1°56'09
minimum elong	7757 May 24 01:50	7°♁06'09	1°31'12		7758 May 12 09:21	0°♁	
evening rise	7757 Jun 02 08:36	24°♁46'13		evening rise	7758 May 16 15:18	7°♁47'51	
asc. node	7757 Jun 03 11:31	26°♁55'32		asc. node	7758 May 21 08:34	16°♁24'56	
	7757 Jun 05 02:12	0°♁			7758 May 29 19:01	0°♁	
evening max el	7757 Jun 18 11:58	20°♁48'51	18°37'00	evening max el	7758 Jun 01 20:53	3°♁34'03	18°11'46
retrograde	7757 Jun 26 10:36	24°♁45'22		retrograde	7758 Jun 08 20:07	7°♁04'49	
evening set	7757 Jun 28 12:52	24°♁29'50		evening set	7758 Jun 11 05:56	6°♁40'16	
inferior conj	7757 Jul 06 08:22	20°♁03'55	0°37'43	inferior conj	7758 Jun 18 06:30	1°♁54'00	1°56'57
minimum elong	7757 Jul 06 09:45	20°♁01'17	0°37'06	minimum elong	7758 Jun 18 09:35	1°♁47'09	1°55'55
desc. node	7757 Jul 08 11:19	18°♁26'29			7758 Jun 20 09:33	30°♁	
min. Earth dist.	7757 Jul 09 15:34	17°♁34'04	0.57514 AU	min. Earth dist.	7758 Jun 21 15:26	28°♁55'27	0.59658 AU
morning rise	7757 Jul 14 03:06	14°♁49'05		morning rise	7758 Jun 25 10:16	26°♁09'44	
direct	7757 Jul 19 21:17	13°♁26'00		desc. node	7758 Jun 25 08:21	26°♁12'35	
morning max el	7757 Aug 03 06:14	21°♁00'57	26°40'39	direct	7758 Jul 01 20:12	24°♁14'18	
	7757 Aug 11 01:29	0°♁			7758 Jul 13 22:15	0°♁	
	7757 Aug 29 00:46	0°♁		morning max el	7758 Jul 16 04:51	2°♁06'59	27°36'41
asc. node	7757 Aug 30 10:57	2°♁53'34			7758 Aug 05 10:29	0°♁	
morning set	7757 Sep 01 15:08	7°♁25'55		morning set	7758 Aug 16 22:05	21°♁56'37	
				asc. node	7758 Aug 17 07:56	22°♁48'17	
superior conj	7757 Sep 08 13:43	22°♁35'47	1°21'20		7758 Aug 20 16:33	0°♁	
minimum elong	7757 Sep 08 11:33	22°♁23'46	1°21'02	max. Earth dist.	7758 Aug 23 07:10	5°♁43'52	1.31715 AU
max. Earth dist.	7757 Sep 08 20:52	23°♁15'29	1.31799 AU				
	7757 Sep 11 22:14	0°♁		superior conj	7758 Aug 24 01:21	7°♁24'26	1°04'09
evening rise	7757 Sep 15 10:20	7°♁32'24		minimum elong	7758 Aug 23 23:07	7°♁12'07	1°03'44
	7757 Sep 27 03:29	0°♁		evening rise	7758 Aug 30 19:29	22°♁13'01	
desc. node	7757 Oct 04 10:18	11°♁28'04			7758 Sep 03 13:15	0°♁	
evening max el	7757 Oct 16 01:16	25°♁27'25	26°58'05	desc. node	7758 Sep 21 07:21	29°♁28'24	
	7757 Oct 21 19:53	0°♁			7758 Sep 21 17:19	0°♁	
retrograde	7757 Oct 29 22:57	2°♁37'44		evening max el	7758 Sep 27 22:44	6°♁53'37	25°56'21
evening set	7757 Nov 05 21:46	0°♁31'52		retrograde	7758 Oct 11 21:16	13°♁57'51	
	7757 Nov 06 18:18	30°♁		evening set	7758 Oct 18 04:52	12°♁23'11	
min. Earth dist.	7757 Nov 09 15:43	27°♁52'36	0.60509 AU	min. Earth dist.	7758 Oct 22 11:32	9°♁47'49	0.58435 AU
inferior conj	7757 Nov 12 19:41	25°♁14'22	-4°05'58	inferior conj	7758 Oct 25 14:51	7°♁31'25	-5°01'44
minimum elong	7757 Nov 13 02:45	24°♁59'38	4°03'52	minimum elong	7758 Oct 25 21:05	7°♁20'05	5°00'34
morning rise	7757 Nov 20 10:03	20°♁27'24		morning rise	7758 Nov 02 15:36	3°♁06'55	

direct	7758 Nov 04 23:17	2° $\mathbb{M}$ 49'24		morning max el	7759 Oct 27 03:41	19° $\mathbb{L}$ 13'28	19°33'52
asc. node	7758 Nov 13 07:27	6° $\mathbb{M}$ 51'49		asc. node	7759 Oct 31 04:28	23° $\mathbb{L}$ 47'53	
morning max el	7758 Nov 13 07:02	6° $\mathbb{M}$ 50'49	18°37'23		7759 Nov 04 08:45	0° $\mathbb{M}$	
	7758 Nov 28 01:09	0° $\mathbb{X}$		morning set	7759 Nov 13 13:34	17° $\mathbb{M}$ 12'36	
morning set	7758 Nov 29 10:56	2° $\mathbb{X}$ 43'17			7759 Nov 19 22:02	0° $\mathbb{X}$	
superior conj	7758 Dec 08 05:12	19° $\mathbb{X}$ 33'26	1°09'52	superior conj	7759 Nov 21 12:17	3° $\mathbb{X}$ 09'22	1°28'31
minimum elong	7758 Dec 08 08:38	19° $\mathbb{X}$ 49'32	1°09'34	minimum elong	7759 Nov 21 14:52	3° $\mathbb{X}$ 22'04	1°28'24
	7758 Dec 13 22:34	0° $\mathbb{Z}$		max. Earth dist.	7759 Nov 27 18:13	15° $\mathbb{X}$ 05'03	1.37755 AU
max. Earth dist.	7758 Dec 15 12:28	2° $\mathbb{Z}$ 46'51	1.39908 AU	evening rise	7759 Dec 01 11:48	21° $\mathbb{X}$ 50'00	
desc. node	7758 Dec 18 06:27	7° $\mathbb{Z}$ 31'09		desc. node	7759 Dec 05 03:28	28° $\mathbb{X}$ 09'50	
evening rise	7758 Dec 19 15:30	9° $\mathbb{Z}$ 50'47			7759 Dec 06 05:36	0° $\mathbb{Z}$	
	7759 Jan 01 09:12	0° $\mathbb{A}$			7759 Dec 26 07:09	0° $\mathbb{A}$	
evening max el	7759 Jan 23 12:56	28° $\mathbb{A}$ 47'57	23°57'39	evening max el	7760 Jan 06 02:08	12° $\mathbb{A}$ 34'55	25°14'01
	7759 Jan 24 18:52	0° $\mathbb{H}$		retrograde	7760 Jan 18 02:27	19° $\mathbb{A}$ 31'29	
retrograde	7759 Feb 03 13:36	5° $\mathbb{H}$ 17'07		evening set	7760 Jan 23 21:07	17° $\mathbb{A}$ 07'49	
evening set	7759 Feb 08 19:21	3° $\mathbb{H}$ 06'15		asc. node	7760 Jan 27 03:42	13° $\mathbb{A}$ 40'59	
asc. node	7759 Feb 09 06:37	2° $\mathbb{H}$ 41'19		min. Earth dist.	7760 Jan 28 07:50	12° $\mathbb{A}$ 12'20	0.67566 AU
	7759 Feb 11 17:34	30° $\mathbb{R}$ $\mathbb{A}$		inferior conj	7760 Jan 29 12:07	10° $\mathbb{A}$ 40'26	0°46'27
min. Earth dist.	7759 Feb 13 13:34	27° $\mathbb{A}$ 36'06	0.68162 AU	minimum elong	7760 Jan 29 11:01	10° $\mathbb{A}$ 44'03	0°46'06
inferior conj	7759 Feb 14 06:30	26° $\mathbb{A}$ 38'36	1°35'06	morning rise	7760 Feb 04 01:12	4° $\mathbb{A}$ 44'57	
minimum elong	7759 Feb 14 04:33	26° $\mathbb{A}$ 45'13	1°34'27	direct	7760 Feb 07 13:22	3° $\mathbb{A}$ 34'12	
morning rise	7759 Feb 19 13:45	20° $\mathbb{A}$ 35'24		morning max el	7760 Feb 14 16:24	7° $\mathbb{A}$ 31'22	19°24'38
direct	7759 Feb 23 14:18	19° $\mathbb{A}$ 03'42		greatest brilliancy	7760 Feb 27 14:45	24° $\mathbb{A}$ 35'49	-0.7m
morning max el	7759 Mar 03 12:56	23° $\mathbb{A}$ 34'57	20°29'01	desc. node	7760 Mar 02 02:56	29° $\mathbb{A}$ 52'16	
	7759 Mar 09 02:06	0° $\mathbb{H}$			7760 Mar 02 04:58	0° $\mathbb{H}$	
desc. node	7759 Mar 16 05:57	9° $\mathbb{H}$ 48'43		morning set	7760 Mar 10 05:34	12° $\mathbb{H}$ 17'40	
	7759 Mar 29 18:37	0° $\mathbb{Y}$			7760 Mar 21 14:28	0° $\mathbb{Y}$	
morning set	7759 Apr 01 07:06	3° $\mathbb{Y}$ 53'16		max. Earth dist.	7760 Mar 23 00:56	2° $\mathbb{Y}$ 15'50	1.44812 AU
max. Earth dist.	7759 Apr 10 10:56	18° $\mathbb{Y}$ 21'04	1.43495 AU				
superior conj	7759 Apr 16 20:18	28° $\mathbb{Y}$ 48'25	-2°10'21	superior conj	7760 Mar 26 19:54	8° $\mathbb{Y}$ 16'58	-2°07'19
minimum elong	7759 Apr 16 22:24	28° $\mathbb{Y}$ 57'09	2°10'22	minimum elong	7760 Mar 26 15:19	7° $\mathbb{Y}$ 58'41	2°07'11
	7759 Apr 17 13:30	0° $\mathbb{B}$			7760 Apr 09 03:23	0° $\mathbb{B}$	
evening rise	7759 Apr 29 05:43	20° $\mathbb{B}$ 02'57		evening rise	7760 Apr 09 23:20	1° $\mathbb{B}$ 23'07	
	7759 May 04 22:35	0° $\mathbb{I}$		asc. node	7760 Apr 24 02:42	24° $\mathbb{B}$ 09'43	
asc. node	7759 May 08 05:37	5° $\mathbb{I}$ 32'03			7760 Apr 28 19:53	0° $\mathbb{I}$	
evening max el	7759 May 16 09:34	16° $\mathbb{I}$ 42'57	18°05'55	evening max el	7760 Apr 28 22:45	0° $\mathbb{I}$ 07'14	18°18'47
retrograde	7759 May 22 20:52	20° $\mathbb{I}$ 03'52		retrograde	7760 May 05 08:21	3° $\mathbb{I}$ 32'49	
evening set	7759 May 25 14:04	19° $\mathbb{I}$ 27'44		evening set	7760 May 08 08:35	2° $\mathbb{I}$ 43'38	
inferior conj	7759 May 31 23:13	14° $\mathbb{I}$ 21'30	2°48'10		7760 May 11 19:18	30° $\mathbb{R}$ $\mathbb{B}$	
minimum elong	7759 Jun 01 01:57	14° $\mathbb{I}$ 14'32	2°47'29	inferior conj	7760 May 14 06:25	27° $\mathbb{B}$ 19'01	3°15'47
min. Earth dist.	7759 Jun 03 23:20	11° $\mathbb{I}$ 18'45	0.61901 AU	minimum elong	7760 May 14 07:54	27° $\mathbb{B}$ 14'47	3°15'32
morning rise	7759 Jun 07 11:54	8° $\mathbb{I}$ 18'21		min. Earth dist.	7760 May 16 16:32	24° $\mathbb{B}$ 33'36	0.63968 AU
desc. node	7759 Jun 12 05:24	6° $\mathbb{I}$ 07'23		morning rise	7760 May 20 06:07	21° $\mathbb{B}$ 05'44	
direct	7759 Jun 14 05:46	5° $\mathbb{I}$ 54'52		direct	7760 May 27 00:01	18° $\mathbb{B}$ 24'17	
morning max el	7759 Jun 28 09:39	13° $\mathbb{I}$ 55'48	27°55'15	desc. node	7760 May 29 02:26	18° $\mathbb{B}$ 38'21	
	7759 Jul 11 07:40	0° $\mathbb{C}$		morning max el	7760 Jun 09 18:46	26° $\mathbb{B}$ 24'33	27°36'36
	7759 Jul 28 22:04	0° $\mathbb{Q}$			7760 Jun 13 02:50	0° $\mathbb{I}$	
morning set	7759 Jul 31 23:50	6° $\mathbb{Q}$ 08'58			7760 Jul 03 22:05	0° $\mathbb{C}$	
asc. node	7759 Aug 04 04:55	12° $\mathbb{Q}$ 50'47		morning set	7760 Jul 14 18:01	19° $\mathbb{C}$ 56'33	
max. Earth dist.	7759 Aug 06 14:49	18° $\mathbb{Q}$ 01'32	1.32088 AU	max. Earth dist.	7760 Jul 19 15:59	29° $\mathbb{C}$ 58'00	1.32934 AU
					7760 Jul 19 16:22	0° $\mathbb{Q}$	
				asc. node	7760 Jul 21 01:56	2° $\mathbb{Q}$ 56'58	
superior conj	7759 Aug 08 11:10	22° $\mathbb{Q}$ 03'18	0°42'25				
minimum elong	7759 Aug 08 09:24	21° $\mathbb{Q}$ 53'33	0°42'00	superior conj	7760 Jul 22 17:19	6° $\mathbb{Q}$ 27'00	0°16'40
	7759 Aug 12 02:01	0° $\mathbb{P}$		minimum elong	7760 Jul 22 16:31	6° $\mathbb{Q}$ 22'40	0°16'24
evening rise	7759 Aug 15 06:48	6° $\mathbb{P}$ 56'34		evening rise	7760 Jul 29 18:25	21° $\mathbb{Q}$ 37'25	
	7759 Aug 27 06:11	0° $\mathbb{L}$			7760 Aug 02 19:29	0° $\mathbb{P}$	
desc. node	7759 Sep 08 04:26	16° $\mathbb{L}$ 11'57		evening max el	7760 Aug 21 00:29	27° $\mathbb{P}$ 47'13	22°49'46
evening max el	7759 Sep 09 12:49	17° $\mathbb{L}$ 32'52	24°28'43		7760 Aug 23 12:08	0° $\mathbb{L}$	
retrograde	7759 Sep 23 07:51	24° $\mathbb{L}$ 28'34		desc. node	7760 Aug 25 01:30	1° $\mathbb{L}$ 10'06	
evening set	7759 Sep 28 11:21	23° $\mathbb{L}$ 29'47		retrograde	7760 Sep 03 06:04	4° $\mathbb{L}$ 23'44	
min. Earth dist.	7759 Oct 03 23:48	20° $\mathbb{L}$ 40'03	0.56572 AU	evening set	7760 Sep 06 21:14	3° $\mathbb{L}$ 54'50	
inferior conj	7759 Oct 06 13:51	19° $\mathbb{L}$ 02'06	-5°31'14	min. Earth dist.	7760 Sep 14 08:31	0° $\mathbb{L}$ 33'47	0.55230 AU
minimum elong	7759 Oct 06 15:18	18° $\mathbb{L}$ 59'47	5°31'08		7760 Sep 15 08:08	30° $\mathbb{R}$ $\mathbb{P}$	
morning rise	7759 Oct 14 21:24	14° $\mathbb{L}$ 59'17		inferior conj	7760 Sep 15 17:50	29° $\mathbb{P}$ 46'05	-5°15'43
direct	7759 Oct 17 12:28	14° $\mathbb{L}$ 40'37		minimum elong	7760 Sep 15 11:57	29° $\mathbb{P}$ 54'32	5°14'57

morning rise	7760 Sep 24 04:44	25° $\mathbb{M}$ 57'07		desc. node	7761 Aug 11 22:34	13° $\mathbb{M}$ 50'43	
direct	7760 Sep 27 07:03	25° $\mathbb{M}$ 34'53		retrograde	7761 Aug 14 19:36	14° $\mathbb{M}$ 10'52	
	7760 Oct 07 13:56	0° $\mathbb{L}$		evening set	7761 Aug 17 04:45	13° $\mathbb{M}$ 57'42	
morning max el	7760 Oct 08 11:41	0° $\mathbb{L}$ 48'46	20°52'36	inferior conj	7761 Aug 26 11:02	9° $\mathbb{M}$ 59'58	-4°05'35
asc. node	7760 Oct 17 01:29	11° $\mathbb{L}$ 40'03		minimum elong	7761 Aug 26 01:35	10° $\mathbb{M}$ 13'15	4°03'00
	7760 Oct 26 22:56	0° $\mathbb{M}$		min. Earth dist.	7761 Aug 26 17:37	9° $\mathbb{M}$ 50'43	0.54698 AU
morning set	7760 Oct 27 21:17	1° $\mathbb{M}$ 55'01		morning rise	7761 Sep 03 23:06	6° $\mathbb{M}$ 06'44	
				direct	7761 Sep 07 15:27	5° $\mathbb{M}$ 37'33	
superior conj	7760 Nov 04 06:56	17° $\mathbb{M}$ 18'16	1°38'48	morning max el	7761 Sep 20 07:56	11° $\mathbb{M}$ 38'52	22°29'48
minimum elong	7760 Nov 04 08:11	17° $\mathbb{M}$ 24'43	1°38'49	asc. node	7761 Oct 03 22:28	0° $\mathbb{L}$ 15'20	
max. Earth dist.	7760 Nov 09 03:00	27° $\mathbb{M}$ 00'56	1.35757 AU		7761 Oct 03 19:00	0° $\mathbb{L}$	
	7760 Nov 10 15:55	0° $\mathbb{X}$		morning set	7761 Oct 12 07:56	16° $\mathbb{L}$ 44'27	
evening rise	7760 Nov 13 02:59	4° $\mathbb{X}$ 39'37			7761 Oct 18 12:57	0° $\mathbb{M}$	
desc. node	7760 Nov 21 00:30	18° $\mathbb{X}$ 38'36					
	7760 Nov 28 02:32	0° $\mathbb{Z}$		superior conj	7761 Oct 19 09:35	1° $\mathbb{M}$ 49'47	1°41'44
evening max el	7760 Dec 18 15:08	26° $\mathbb{Z}$ 19'57	26°19'20	minimum elong	7761 Oct 19 09:31	1° $\mathbb{M}$ 49'23	1°41'48
	7760 Dec 22 20:55	0° $\mathbb{Z}$		max. Earth dist.	7761 Oct 22 18:54	8° $\mathbb{M}$ 55'59	1.34088 AU
retrograde	7760 Dec 31 10:14	3° $\mathbb{Z}$ 33'30		evening rise	7761 Oct 27 09:11	18° $\mathbb{M}$ 10'05	
evening set	7761 Jan 06 17:29	1° $\mathbb{Z}$ 00'20			7761 Nov 02 17:18	0° $\mathbb{X}$	
	7761 Jan 07 20:34	30° $\mathbb{R}$ $\mathbb{Z}$		desc. node	7761 Nov 07 21:31	8° $\mathbb{X}$ 52'15	
min. Earth dist.	7761 Jan 10 21:35	26° $\mathbb{Z}$ 39'39	0.66599 AU		7761 Nov 22 08:09	0° $\mathbb{Z}$	
inferior conj	7761 Jan 12 13:23	24° $\mathbb{Z}$ 38'17	-0°09'34	evening max el	7761 Dec 01 04:07	9° $\mathbb{Z}$ 55'59	27°06'20
minimum elong	7761 Jan 12 13:39	24° $\mathbb{Z}$ 37'30	0°09'21	retrograde	7761 Dec 14 12:26	17° $\mathbb{Z}$ 16'09	
transit middle	7761 Jan 12 13:39	24° $\mathbb{Z}$ 37'30	0°09'21	evening set	7761 Dec 21 06:24	14° $\mathbb{Z}$ 39'10	
transit begin	7761 Jan 12 11:18	24° $\mathbb{Z}$ 44'40		min. Earth dist.	7761 Dec 25 04:38	10° $\mathbb{Z}$ 52'41	0.65276 AU
transit end	7761 Jan 12 15:59	24° $\mathbb{Z}$ 30'21		inferior conj	7761 Dec 27 08:08	8° $\mathbb{Z}$ 28'05	-1°12'03
asc. node	7761 Jan 13 00:47	24° $\mathbb{Z}$ 03'36		minimum elong	7761 Dec 27 10:15	8° $\mathbb{Z}$ 22'06	1°11'01
morning rise	7761 Jan 18 10:33	18° $\mathbb{Z}$ 52'38		asc. node	7761 Dec 30 21:50	4° $\mathbb{Z}$ 47'06	
direct	7761 Jan 21 11:52	17° $\mathbb{Z}$ 59'53		morning rise	7762 Jan 02 15:24	2° $\mathbb{Z}$ 54'44	
morning max el	7761 Jan 28 02:59	21° $\mathbb{Z}$ 35'26	18°35'56	direct	7762 Jan 05 07:47	2° $\mathbb{Z}$ 16'11	
	7761 Feb 03 20:51	0° $\mathbb{Z}$		morning max el	7762 Jan 11 18:23	5° $\mathbb{Z}$ 41'12	18°03'51
desc. node	7761 Feb 16 23:53	20° $\mathbb{Z}$ 12'44			7762 Jan 28 07:10	0° $\mathbb{Z}$	
morning set	7761 Feb 17 22:51	21° $\mathbb{Z}$ 43'21		morning set	7762 Jan 29 21:37	2° $\mathbb{Z}$ 38'00	
	7761 Feb 23 04:53	0° $\mathbb{X}$		desc. node	7762 Feb 03 20:51	10° $\mathbb{Z}$ 45'36	
superior conj	7761 Mar 06 02:26	17° $\mathbb{X}$ 05'09	-1°44'08	superior conj	7762 Feb 13 09:56	26° $\mathbb{Z}$ 03'48	-1°04'52
minimum elong	7761 Mar 05 16:59	16° $\mathbb{X}$ 28'10	1°43'16	minimum elong	7762 Feb 13 02:23	25° $\mathbb{Z}$ 33'57	1°03'51
max. Earth dist.	7761 Mar 05 19:02	16° $\mathbb{X}$ 36'12	1.45441 AU		7762 Feb 15 21:51	0° $\mathbb{X}$	
	7761 Mar 14 07:42	0° $\mathbb{Y}$		max. Earth dist.	7762 Feb 16 14:23	1° $\mathbb{X}$ 05'00	1.45332 AU
evening rise	7761 Mar 21 17:24	11° $\mathbb{Y}$ 44'41		evening rise	7762 Mar 01 14:39	21° $\mathbb{X}$ 19'31	
greatest brilliancy	7761 Mar 30 03:04	25° $\mathbb{Y}$ 07'01	-0.8m		7762 Mar 07 05:38	0° $\mathbb{Y}$	
	7761 Apr 02 06:13	0° $\mathbb{Z}$		greatest brilliancy	7762 Mar 14 22:05	11° $\mathbb{Y}$ 40'30	-0.7m
asc. node	7761 Apr 10 23:47	12° $\mathbb{Z}$ 07'54		evening max el	7762 Mar 26 16:25	27° $\mathbb{Y}$ 15'25	19°37'16
evening max el	7761 Apr 12 09:41	13° $\mathbb{Z}$ 39'20	18°49'40	asc. node	7762 Mar 28 20:51	29° $\mathbb{Y}$ 14'54	
retrograde	7761 Apr 19 02:29	17° $\mathbb{Z}$ 22'29			7762 Mar 29 21:30	0° $\mathbb{Z}$	
evening set	7761 Apr 22 09:55	16° $\mathbb{Z}$ 19'25		retrograde	7762 Apr 02 23:58	1° $\mathbb{Z}$ 26'52	
inferior conj	7761 Apr 28 00:06	10° $\mathbb{Z}$ 38'12	3°24'55	evening set	7762 Apr 06 15:25	0° $\mathbb{Z}$ 09'16	
minimum elong	7761 Apr 28 00:12	10° $\mathbb{Z}$ 37'53	3°24'51		7762 Apr 06 20:30	30° $\mathbb{R}$ $\mathbb{Y}$	
min. Earth dist.	7761 Apr 29 18:52	8° $\mathbb{Z}$ 25'07	0.65696 AU	inferior conj	7762 Apr 12 01:05	24° $\mathbb{Y}$ 13'19	3°19'34
morning rise	7761 May 03 13:56	4° $\mathbb{Z}$ 20'57		minimum elong	7762 Apr 12 00:01	24° $\mathbb{Y}$ 16'50	3°19'26
direct	7761 May 10 01:39	1° $\mathbb{Z}$ 33'33		min. Earth dist.	7762 Apr 13 04:56	22° $\mathbb{Y}$ 41'02	0.67010 AU
desc. node	7761 May 15 23:27	3° $\mathbb{Z}$ 25'06		morning rise	7762 Apr 17 08:18	17° $\mathbb{Y}$ 55'56	
morning max el	7761 May 23 05:17	9° $\mathbb{Z}$ 21'15	26°46'14	direct	7762 Apr 23 09:34	15° $\mathbb{Y}$ 14'09	
	7761 Jun 08 09:50	0° $\mathbb{I}$		desc. node	7762 May 02 20:27	19° $\mathbb{Y}$ 56'08	
	7761 Jun 26 09:05	0° $\mathbb{L}$		morning max el	7762 May 05 15:03	22° $\mathbb{Y}$ 33'41	25°32'41
morning set	7761 Jun 28 01:32	3° $\mathbb{L}$ 10'30			7762 May 12 03:52	0° $\mathbb{Z}$	
max. Earth dist.	7761 Jul 02 07:06	11° $\mathbb{L}$ 25'55	1.34254 AU		7762 Jun 01 17:04	0° $\mathbb{I}$	
				morning set	7762 Jun 10 18:13	15° $\mathbb{I}$ 39'20	
superior conj	7761 Jul 06 17:32	20° $\mathbb{L}$ 28'59	-0°12'24	max. Earth dist.	7762 Jun 14 11:05	22° $\mathbb{I}$ 31'06	1.36030 AU
minimum elong	7761 Jul 06 18:13	20° $\mathbb{L}$ 32'32	0°12'23		7762 Jun 18 08:13	0° $\mathbb{L}$	
behind sun begin	7761 Jul 06 14:31	20° $\mathbb{L}$ 13'20					
behind sun end	7761 Jul 06 21:54	20° $\mathbb{L}$ 51'46		superior conj	7762 Jun 20 09:05	4° $\mathbb{L}$ 02'07	-0°43'33
asc. node	7761 Jul 07 22:57	23° $\mathbb{L}$ 02'34		minimum elong	7762 Jun 20 11:40	4° $\mathbb{L}$ 15'02	0°43'11
	7761 Jul 11 06:09	0° $\mathbb{O}$		asc. node	7762 Jun 24 19:57	13° $\mathbb{L}$ 03'41	
evening rise	7761 Jul 14 04:21	6° $\mathbb{O}$ 09'24		evening rise	7762 Jun 28 10:26	20° $\mathbb{L}$ 26'09	
	7761 Jul 27 03:05	0° $\mathbb{M}$			7762 Jul 03 06:00	0° $\mathbb{O}$	
evening max el	7761 Aug 02 18:44	8° $\mathbb{M}$ 13'02	21°16'02	evening max el	7762 Jul 16 01:34	19° $\mathbb{O}$ 17'01	19°58'18

retrograde	7762 Jul 26 10:05	24°♎23'01			7763 Jun 27 19:53	0°♎	
evening set	7762 Jul 28 07:14	24°♎13'39		evening max el	7763 Jun 28 21:07	1°♎05'38	19°00'47
desc. node	7762 Jul 29 19:38	23°♎53'14		retrograde	7763 Jul 07 14:04	5°♎23'36	
inferior conj	7762 Aug 06 07:28	20°♎13'51	-2°16'06	evening set	7763 Jul 09 12:57	5°♎11'29	
minimum elong	7762 Aug 06 01:13	20°♎23'17	2°13'52	desc. node	7763 Jul 16 16:42	1°♎43'32	
min. Earth dist.	7762 Aug 08 04:56	19°♎05'14	0.55134 AU	inferior conj	7763 Jul 17 19:56	0°♎56'46	-0°20'39
morning rise	7762 Aug 14 17:30	15°♎56'08		minimum elong	7763 Jul 17 19:04	0°♎58'16	0°20'25
direct	7762 Aug 19 03:58	15°♎13'05			7763 Jul 19 04:29	30°♎	
morning max el	7762 Sep 01 21:17	21°♎58'45	24°15'22	min. Earth dist.	7763 Jul 20 19:32	28°♎53'10	0.56454 AU
	7762 Sep 08 22:09	0°♎		morning rise	7763 Jul 25 22:00	26°♎03'17	
asc. node	7762 Sep 20 19:26	19°♎22'30		direct	7763 Jul 31 05:06	24°♎57'14	
	7762 Sep 26 01:46	0°♎			7763 Aug 11 21:19	0°♎	
morning set	7762 Sep 26 19:39	1°♎34'41		morning max el	7763 Aug 14 10:42	2°♎16'35	25°53'46
					7763 Sep 03 01:34	0°♎	
superior conj	7762 Oct 03 17:24	16°♎34'16	1°38'15	asc. node	7763 Sep 07 16:25	8°♎53'26	
minimum elong	7762 Oct 03 16:13	16°♎27'51	1°38'13	morning set	7763 Sep 11 06:50	16°♎21'21	
max. Earth dist.	7762 Oct 05 19:12	21°♎03'50	1.32848 AU		7763 Sep 17 12:47	0°♎	
	7762 Oct 10 01:01	0°♎					
evening rise	7762 Oct 11 02:35	2°♎10'27		superior conj	7763 Sep 18 04:10	1°♎25'04	1°29'02
desc. node	7762 Oct 25 18:34	28°♎43'04		minimum elong	7763 Sep 18 02:15	1°♎14'26	1°28'50
	7762 Oct 26 14:02	0°♎		max. Earth dist.	7763 Sep 19 02:12	3°♎26'32	1.32060 AU
evening max el	7762 Nov 13 15:55	23°♎11'11	27°28'07	evening rise	7763 Sep 25 04:06	16°♎32'20	
	7762 Nov 24 01:55	0°♎			7763 Oct 01 23:14	0°♎	
retrograde	7762 Nov 27 08:08	0°♎29'37		desc. node	7763 Oct 12 15:37	18°♎01'48	
	7762 Nov 30 11:13	30°♎			7763 Oct 21 12:21	0°♎	
evening set	7762 Dec 04 09:14	27°♎56'51		evening max el	7763 Oct 27 00:14	5°♎52'18	27°18'44
min. Earth dist.	7762 Dec 08 02:56	24°♎42'03	0.63623 AU	retrograde	7763 Nov 09 20:18	13°♎04'54	
inferior conj	7762 Dec 10 17:43	22°♎02'47	-2°19'20	evening set	7763 Nov 16 22:35	10°♎46'15	
minimum elong	7762 Dec 10 22:03	21°♎51'47	2°17'31	min. Earth dist.	7763 Nov 20 14:48	7°♎57'05	0.61704 AU
morning rise	7762 Dec 17 12:40	16°♎44'38		inferior conj	7763 Nov 23 15:06	5°♎14'34	-3°28'04
asc. node	7762 Dec 17 18:51	16°♎38'58		minimum elong	7763 Nov 23 21:28	5°♎00'13	3°25'50
direct	7762 Dec 19 22:27	16°♎16'20		morning rise	7763 Nov 30 22:29	0°♎15'04	
morning max el	7762 Dec 26 11:38	19°♎40'15	17°49'00		7763 Dec 01 22:52	30°♎	
	7763 Jan 03 04:04	0°♎		direct	7763 Dec 03 04:33	29°♎53'22	
morning set	7763 Jan 11 23:19	14°♎51'03			7763 Dec 04 09:58	0°♎	
	7763 Jan 20 21:08	0°♎		asc. node	7763 Dec 04 15:52	0°♎02'56	
desc. node	7763 Jan 21 17:49	1°♎26'07		morning max el	7763 Dec 10 03:37	3°♎24'35	17°52'16
				morning set	7763 Dec 25 21:25	28°♎02'09	
superior conj	7763 Jan 24 11:50	5°♎58'17	-0°19'49		7763 Dec 26 23:29	0°♎	
minimum elong	7763 Jan 24 09:40	5°♎49'26	0°19'24	superior conj	7764 Jan 05 15:25	17°♎07'04	0°21'43
max. Earth dist.	7763 Jan 30 08:39	15°♎26'41	1.44503 AU	minimum elong	7764 Jan 05 17:20	17°♎15'15	0°21'33
	7763 Feb 08 16:04	0°♎		desc. node	7764 Jan 08 14:47	22°♎10'47	
evening rise	7763 Feb 09 01:47	0°♎37'19		max. Earth dist.	7764 Jan 12 23:43	29°♎26'04	1.43046 AU
	7763 Feb 28 22:27	0°♎			7764 Jan 13 08:02	0°♎	
evening max el	7763 Mar 09 17:51	10°♎53'20	20°39'22	evening rise	7764 Jan 19 18:17	10°♎16'13	
asc. node	7763 Mar 15 17:54	15°♎16'40			7764 Feb 01 19:25	0°♎	
retrograde	7763 Mar 17 22:25	15°♎41'17		evening max el	7764 Feb 20 13:56	24°♎32'44	21°52'22
evening set	7763 Mar 21 23:00	14°♎08'37			7764 Feb 29 06:27	0°♎	
inferior conj	7763 Mar 27 06:40	7°♎59'54	3°02'30	retrograde	7764 Feb 29 19:54	0°♎01'34	
minimum elong	7763 Mar 27 04:48	8°♎06'19	3°02'08		7764 Mar 01 09:11	30°♎	
min. Earth dist.	7763 Mar 27 20:42	7°♎11'41	0.67881 AU	asc. node	7764 Mar 01 14:58	29°♎58'19	
morning rise	7763 Apr 01 10:23	1°♎44'47		evening set	7764 Mar 05 06:59	28°♎13'34	
	7763 Apr 03 22:39	30°♎		inferior conj	7764 Mar 10 14:42	21°♎54'40	2°35'27
direct	7763 Apr 06 22:42	29°♎17'38		minimum elong	7764 Mar 10 12:27	22°♎02'30	2°34'52
	7763 Apr 10 04:15	0°♎		min. Earth dist.	7764 Mar 10 16:02	21°♎50'02	0.68317 AU
morning max el	7763 Apr 17 23:53	5°♎54'06	24°06'09	morning rise	7764 Mar 15 17:45	15°♎43'12	
desc. node	7763 Apr 19 17:26	7°♎43'21		direct	7764 Mar 20 15:57	13°♎36'23	
	7763 May 06 15:17	0°♎		morning max el	7764 Mar 30 10:12	19°♎21'44	22°36'33
morning set	7763 May 23 14:51	27°♎08'59		desc. node	7764 Apr 05 14:24	26°♎25'24	
	7763 May 25 06:11	0°♎			7764 Apr 08 09:02	0°♎	
max. Earth dist.	7763 May 27 07:47	3°♎39'34	1.38153 AU		7764 Apr 28 19:32	0°♎	
superior conj	7763 Jun 03 12:35	16°♎57'50	-1°14'51	morning set	7764 May 03 09:52	7°♎24'56	
minimum elong	7763 Jun 03 17:07	17°♎19'25	1°14'15	max. Earth dist.	7764 May 08 04:45	15°♎24'43	1.40399 AU
	7763 Jun 10 05:14	0°♎					
asc. node	7763 Jun 11 16:58	2°♎56'20		superior conj	7764 May 15 23:43	29°♎05'00	-1°43'13
evening rise	7763 Jun 12 10:06	4°♎20'47		minimum elong	7764 May 16 05:23	29°♎30'42	1°42'42



	7764 May 16 11:51	0°♂		7765 May 08 18:26	0°♂	
evening rise	7764 May 26 00:07	17°♂44'11		evening rise	7765 May 09 00:31	0°♂27'23
asc. node	7764 May 28 14:00	22°♂35'22		asc. node	7765 May 15 11:04	11°♂55'58
	7764 Jun 01 15:34	0°♂		evening max el	7765 May 25 12:59	26°♂27'20 18°06'52
evening max el	7764 Jun 11 02:08	13°♂31'51 18°23'51		retrograde	7765 Jun 01 05:58	29°♂52'26
retrograde	7764 Jun 18 13:17	17°♂15'32		evening set	7765 Jun 03 18:52	29°♂23'17
evening set	7764 Jun 20 18:47	16°♂56'28		inferior conj	7765 Jun 10 12:22	24°♂28'10 2°21'53
inferior conj	7764 Jun 28 05:51	12°♂21'33 1°14'54		minimum elong	7765 Jun 10 15:28	24°♂20'49 2°20'57
minimum elong	7764 Jun 28 08:16	12°♂16'37 1°13'57		min. Earth dist.	7765 Jun 13 18:23	21°♂24'51 0.60615 AU
min. Earth dist.	7764 Jul 01 15:15	9°♂36'59 0.58392 AU		morning rise	7765 Jun 17 09:31	18°♂34'15
desc. node	7764 Jul 02 13:46	8°♂54'38		desc. node	7765 Jun 19 10:49	17°♂26'46
morning rise	7764 Jul 05 18:28	6°♂53'11		direct	7765 Jun 23 23:36	16°♂26'08
direct	7764 Jul 11 20:05	5°♂16'41		morning max el	7765 Jul 08 07:08	24°♂23'49 27°49'24
morning max el	7764 Jul 26 05:28	12°♂59'31 27°08'55			7765 Jul 13 09:11	0°♂
	7764 Aug 08 16:09	0°♂			7765 Aug 02 00:11	0°♂
asc. node	7764 Aug 24 13:24	28°♂40'40		morning set	7765 Aug 09 20:49	15°♂22'09
	7764 Aug 25 04:36	0°♂		asc. node	7765 Aug 11 10:24	18°♂38'47
morning set	7764 Aug 25 15:49	0°♂58'57		max. Earth dist.	7765 Aug 15 22:09	28°♂20'43 1.31813 AU
					7765 Aug 16 16:12	0°♂
superior conj	7764 Sep 01 15:59	16°♂15'28 1°14'38		superior conj	7765 Aug 17 03:04	0°♂59'53 0°55'28
minimum elong	7764 Sep 01 13:44	16°♂03'00 1°14'16		minimum elong	7765 Aug 17 00:58	0°♂48'18 0°55'01
max. Earth dist.	7764 Sep 01 12:29	15°♂56'00 1.31712 AU		evening rise	7765 Aug 23 21:22	15°♂49'10
	7764 Sep 07 22:25	0°♂			7765 Aug 30 21:04	0°♂
evening rise	7764 Sep 08 11:05	1°♂07'26		desc. node	7765 Sep 15 09:47	24°♂05'56
	7764 Sep 24 00:58	0°♂		evening max el	7765 Sep 19 19:58	28°♂50'30 25°21'28
desc. node	7764 Sep 28 12:42	6°♂35'29			7765 Sep 21 02:16	0°♂
evening max el	7764 Oct 08 02:10	17°♂46'59 26°35'33		retrograde	7765 Oct 03 17:47	5°♂52'31
retrograde	7764 Oct 22 00:01	24°♂54'05		evening set	7765 Oct 09 15:06	4°♂32'43
evening set	7764 Oct 28 18:10	23°♂00'15		min. Earth dist.	7765 Oct 14 07:47	1°♂53'42 0.57595 AU
min. Earth dist.	7764 Nov 01 15:47	20°♂25'03 0.59627 AU		inferior conj	7765 Oct 17 07:30	29°♂51'28 -5°18'37
inferior conj	7764 Nov 04 20:48	17°♂54'02 -4°31'42		minimum elong	7765 Oct 17 12:14	29°♂43'22 5°17'59
minimum elong	7764 Nov 05 03:54	17°♂40'04 4°29'53			7765 Oct 17 02:32	30°♂♂
morning rise	7764 Nov 12 15:56	13°♂16'31		morning rise	7765 Oct 25 11:42	25°♂37'02
direct	7764 Nov 14 21:52	12°♂58'16		direct	7765 Oct 27 21:51	25°♂19'27
asc. node	7764 Nov 20 12:54	14°♂59'32		morning max el	7765 Nov 05 18:05	29°♂32'45 18°58'45
morning max el	7764 Nov 22 14:59	16°♂45'33 18°14'59			7765 Nov 06 05:13	0°♂
	7764 Dec 01 23:12	0°♂		asc. node	7765 Nov 07 09:56	1°♂16'26
morning set	7764 Dec 08 10:00	11°♂53'33		morning set	7765 Nov 22 08:29	26°♂11'40
					7765 Nov 24 06:42	0°♂
superior conj	7764 Dec 17 19:02	29°♂24'51 0°54'59		superior conj	7765 Nov 30 17:34	12°♂36'35 1°18'51
minimum elong	7764 Dec 17 22:28	29°♂40'27 0°54'38		minimum elong	7765 Nov 30 20:45	12°♂51'45 1°18'37
	7764 Dec 18 02:47	0°♂		max. Earth dist.	7765 Dec 07 15:49	25°♂26'07 1.38982 AU
desc. node	7764 Dec 25 11:48	12°♂56'15			7765 Dec 10 05:58	0°♂
max. Earth dist.	7764 Dec 25 09:56	12°♂48'20 1.41126 AU		evening rise	7765 Dec 11 12:09	2°♂10'20
evening rise	7764 Dec 30 04:13	20°♂43'54		desc. node	7765 Dec 12 08:48	3°♂38'29
	7765 Jan 04 23:50	0°♂			7765 Dec 29 05:35	0°♂
evening max el	7765 Jan 26 01:10	0°♂		evening max el	7766 Jan 15 19:15	21°♂59'30 24°30'57
retrograde	7765 Feb 02 05:47	8°♂14'42 23°11'32		retrograde	7766 Jan 27 06:41	28°♂42'21
asc. node	7765 Feb 12 15:06	14°♂23'49		evening set	7766 Feb 01 17:53	26°♂25'36
evening set	7765 Feb 16 12:03	13°♂09'10		asc. node	7766 Feb 03 09:09	24°♂50'18
inferior conj	7765 Feb 17 13:48	12°♂20'48		min. Earth dist.	7766 Feb 06 08:40	21°♂10'07 0.67954 AU
minimum elong	7765 Feb 22 23:16	5°♂55'01 1°59'31		inferior conj	7766 Feb 07 06:30	19°♂57'10 1°15'23
min. Earth dist.	7765 Feb 22 21:04	6°♂02'35 1°58'51		minimum elong	7766 Feb 07 04:51	20°♂02'43 1°14'50
	7765 Feb 22 12:46	6°♂31'12 0.68333 AU		morning rise	7766 Feb 12 15:57	13°♂57'00
morning rise	7765 Feb 27 22:44	30°♂		direct	7766 Feb 16 10:56	12°♂34'42
direct	7765 Feb 28 04:17	29°♂48'29		morning max el	7766 Feb 24 00:33	16°♂50'19 19°59'45
	7765 Mar 04 12:26	28°♂04'11			7766 Mar 06 11:06	0°♂
morning max el	7765 Mar 09 13:57	0°♂		desc. node	7766 Mar 10 08:19	5°♂37'42
desc. node	7765 Mar 13 01:39	3°♂00'17 21°12'27		morning set	7766 Mar 22 23:38	24°♂44'17
	7765 Mar 23 11:22	15°♂47'20			7766 Mar 26 09:09	0°♂
morning set	7765 Apr 02 07:59	0°♂		max. Earth dist.	7766 Apr 02 16:55	11°♂31'49 1.44131 AU
max. Earth dist.	7765 Apr 13 01:32	16°♂26'24				
	7765 Apr 20 07:25	28°♂03'43 1.42480 AU		superior conj	7766 Apr 08 03:15	20°♂17'07 -2°11'27
	7765 Apr 21 11:44	0°♂		minimum elong	7766 Apr 08 02:45	20°♂15'06 2°11'29
superior conj	7765 Apr 27 13:48	10°♂13'41 -2°04'03			7766 Apr 14 00:20	0°♂
minimum elong	7765 Apr 27 18:18	10°♂32'57 2°03'54				

evening rise	7766 Apr 21 06:34	12°♄19'41		minimum elong	7767 Mar 18 10:40	28°♄55'03	1°59'28
	7766 May 01 18:56	0°♄			7767 Mar 19 03:08	0°♄	
asc. node	7766 May 02 08:09	0°♄51'31		evening rise	7767 Apr 02 14:10	23°♄13'46	
evening max el	7766 May 09 02:13	9°♄43'20	18°09'09		7767 Apr 06 17:31	0°♄	
retrograde	7766 May 15 11:47	13°♄04'44		asc. node	7767 Apr 19 05:13	19°♄13'29	
evening set	7766 May 18 07:53	12°♄23'22		evening max el	7767 Apr 22 14:46	23°♄11'39	18°29'52
inferior conj	7766 May 24 11:45	7°♄09'20	3°02'24	retrograde	7767 Apr 29 02:22	26°♄42'58	
minimum elong	7766 May 24 14:00	7°♄03'17	3°01'56	evening set	7767 May 02 05:38	25°♄47'57	
min. Earth dist.	7766 May 27 06:24	4°♄11'17	0.62811 AU	inferior conj	7767 May 07 23:49	20°♄16'21	3°21'37
morning rise	7766 May 30 18:33	1°♄00'43		minimum elong	7767 May 08 00:42	20°♄13'43	3°21'29
	7766 Jun 01 06:43	30°♄		min. Earth dist.	7767 May 10 03:33	17°♄43'05	0.64756 AU
desc. node	7766 Jun 06 07:51	28°♄27'59		morning rise	7767 May 13 18:56	14°♄00'58	
direct	7766 Jun 06 13:19	28°♄27'49		direct	7767 May 20 11:02	11°♄15'11	
	7766 Jun 12 05:39	0°♄		desc. node	7767 May 24 04:51	12°♄00'01	
morning max el	7766 Jun 20 14:08	6°♄30'44	27°51'37	morning max el	7767 Jun 02 23:53	19°♄11'41	27°18'30
	7766 Jul 08 10:34	0°♄			7767 Jun 12 03:47	0°♄	
morning set	7766 Jul 24 19:43	29°♄25'02			7767 Jul 01 10:34	0°♄	
	7766 Jul 25 02:38	0°♄		morning set	7767 Jul 08 09:43	12°♄58'58	
asc. node	7766 Jul 29 07:25	8°♄43'25		max. Earth dist.	7767 Jul 13 00:17	22°♄12'44	1.33433 AU
max. Earth dist.	7766 Jul 30 03:20	10°♄29'33	1.32379 AU	asc. node	7767 Jul 16 04:24	28°♄49'36	
superior conj	7766 Aug 01 11:36	15°♄33'08	0°31'58	superior conj	7767 Jul 16 15:29	29°♄48'16	0°04'43
minimum elong	7766 Aug 01 10:10	15°♄25'21	0°31'35	minimum elong	7767 Jul 16 15:15	29°♄47'00	0°04'33
evening rise	7766 Aug 08 09:02	0°♄32'04		behind sun begin	7767 Jul 16 09:55	29°♄18'48	
	7766 Aug 08 03:03	0°♄		behind sun end	7767 Jul 16 20:35	0°♄15'14	
	7766 Aug 24 14:10	0°♄			7767 Jul 16 17:42	0°♄	
evening max el	7766 Sep 01 08:04	9°♄15'26	23°47'08	evening rise	7767 Jul 23 20:08	15°♄09'30	
desc. node	7766 Sep 02 06:53	10°♄08'49			7767 Jul 31 06:28	0°♄	
retrograde	7766 Sep 14 23:32	16°♄05'34		evening max el	7767 Aug 13 21:38	19°♄30'35	22°08'34
evening set	7766 Sep 19 11:37	15°♄21'07		desc. node	7767 Aug 20 03:58	24°♄12'10	
min. Earth dist.	7766 Sep 25 18:26	12°♄19'39	0.55907 AU	retrograde	7767 Aug 26 16:50	25°♄52'20	
inferior conj	7766 Sep 27 22:00	11°♄01'57	-5°31'13	evening set	7767 Aug 29 17:25	25°♄32'03	
minimum elong	7766 Sep 27 20:21	11°♄04'26	5°31'08	min. Earth dist.	7767 Sep 07 03:02	21°♄53'29	0.54890 AU
morning rise	7766 Oct 06 07:17	7°♄06'27		inferior conj	7767 Sep 07 19:56	21°♄29'46	-4°52'25
direct	7766 Oct 09 02:30	6°♄46'42		minimum elong	7767 Sep 07 11:40	21°♄41'22	4°50'50
morning max el	7766 Oct 19 09:38	11°♄36'31	20°04'45	morning rise	7767 Sep 16 07:29	17°♄41'21	
asc. node	7766 Oct 25 06:56	18°♄38'16		direct	7767 Sep 19 15:38	17°♄16'30	
	7766 Nov 01 02:06	0°♄		morning max el	7767 Oct 01 12:07	22°♄50'37	21°32'05
morning set	7766 Nov 06 13:37	10°♄47'32			7767 Oct 07 16:30	0°♄	
				asc. node	7767 Oct 12 03:55	6°♄49'44	
superior conj	7766 Nov 14 06:06	26°♄28'16	1°33'49	morning set	7767 Oct 21 22:48	25°♄33'04	
minimum elong	7766 Nov 14 08:09	26°♄38'31	1°33'46		7767 Oct 24 01:39	0°♄	
	7766 Nov 16 00:40	0°♄		superior conj	7767 Oct 29 04:29	10°♄47'09	1°40'52
max. Earth dist.	7766 Nov 19 21:53	7°♄30'53	1.36872 AU	minimum elong	7767 Oct 29 05:10	10°♄50'40	1°40'56
evening rise	7766 Nov 23 17:02	14°♄32'48		max. Earth dist.	7767 Nov 02 09:26	19°♄24'02	1.35003 AU
desc. node	7766 Nov 29 05:50	24°♄13'46		evening rise	7767 Nov 06 15:04	27°♄40'42	
	7766 Dec 02 17:28	0°♄			7767 Nov 07 20:36	0°♄	
	7766 Dec 23 23:45	0°♄		desc. node	7767 Nov 16 02:53	14°♄36'41	
evening max el	7766 Dec 29 08:19	5°♄46'37	25°43'32		7767 Nov 26 00:35	0°♄	
retrograde	7767 Jan 10 17:36	12°♄52'06		evening max el	7767 Dec 11 21:38	19°♄29'39	26°42'02
evening set	7767 Jan 16 17:35	10°♄24'05		retrograde	7767 Dec 24 22:58	26°♄46'27	
min. Earth dist.	7767 Jan 21 01:26	5°♄43'06	0.67202 AU	evening set	7767 Dec 31 11:02	24°♄11'11	
asc. node	7767 Jan 21 06:13	5°♄28'02		min. Earth dist.	7768 Jan 04 12:40	20°♄05'00	0.66082 AU
inferior conj	7767 Jan 22 10:32	3°♄58'03	0°23'34	inferior conj	7768 Jan 06 09:20	17°♄53'12	-0°35'18
minimum elong	7767 Jan 22 09:56	3°♄59'57	0°23'26	minimum elong	7768 Jan 06 10:19	17°♄50'17	0°34'45
	7767 Jan 25 19:43	30°♄		asc. node	7768 Jan 08 03:15	15°♄52'29	
morning rise	7767 Jan 28 02:46	28°♄06'11		morning rise	7768 Jan 12 10:31	12°♄12'11	
direct	7767 Jan 31 10:04	27°♄03'31		direct	7768 Jan 15 07:52	11°♄25'48	
	7767 Feb 06 09:53	0°♄		morning max el	7768 Jan 21 20:03	14°♄55'29	18°20'09
morning max el	7767 Feb 07 07:10	0°♄50'18	19°01'46		7768 Feb 01 21:37	0°♄	
greatest brilliancy	7767 Feb 21 06:30	19°♄45'12	-0.8m	morning set	7768 Feb 10 09:16	13°♄31'18	
desc. node	7767 Feb 25 05:16	25°♄48'55		desc. node	7768 Feb 12 02:14	16°♄15'18	
	7767 Feb 27 22:09	0°♄			7768 Feb 20 17:49	0°♄	
morning set	7767 Mar 02 03:37	3°♄27'32		superior conj	7768 Feb 25 22:27	8°♄09'54	-1°28'53
max. Earth dist.	7767 Mar 16 08:30	25°♄37'35	1.45173 AU	minimum elong	7768 Feb 25 13:01	7°♄32'53	1°27'51
superior conj	7767 Mar 18 17:59	29°♄23'54	-1°59'55				




























































































































max. Earth dist.	7768 Feb 27 03:55	10° $\text{X}$ 05'19	1.45494 AU	desc. node	7769 Jan 28 23:12	6° $\approx$ 51'48	
	7768 Mar 10 21:19	0° $\text{Y}$					
evening rise	7768 Mar 12 22:38	3° $\text{Y}$ 13'22		superior conj	7769 Feb 04 12:08	17° $\approx$ 27'52	-0°45'49
greatest brilliancy	7768 Mar 23 14:31	19° $\text{Y}$ 52'33	-0.8m	minimum elong	7769 Feb 04 06:48	17° $\approx$ 06'31	0°45'00
	7768 Mar 30 11:13	0° $\text{Z}$		max. Earth dist.	7769 Feb 08 23:41	24° $\approx$ 35'05	1.45064 AU
evening max el	7768 Apr 05 00:12	6° $\text{Z}$ 46'27	19°08'00		7769 Feb 12 10:28	0° $\text{X}$	
asc. node	7768 Apr 05 02:17	6° $\text{Z}$ 51'43		evening rise	7769 Feb 20 13:57	12° $\text{X}$ 36'59	
retrograde	7768 Apr 11 22:12	10° $\text{Z}$ 40'00			7769 Mar 04 00:33	0° $\text{Y}$	
evening set	7768 Apr 15 09:03	9° $\text{Z}$ 30'38		greatest brilliancy	7769 Mar 07 06:34	4° $\text{Y}$ 48'31	-0.6m
inferior conj	7768 Apr 20 20:58	3° $\text{Z}$ 42'54	3°24'13	evening max el	7769 Mar 19 04:43	20° $\text{Y}$ 23'18	20°02'00
minimum elong	7768 Apr 20 20:32	3° $\text{Z}$ 44'17	3°24'08	asc. node	7769 Mar 22 23:21	23° $\text{Y}$ 32'55	
min. Earth dist.	7768 Apr 22 09:13	1° $\text{Z}$ 46'46	0.66314 AU	retrograde	7769 Mar 26 20:27	24° $\text{Y}$ 49'31	
	7768 Apr 23 20:09	30° $\text{R}$ $\text{Y}$		evening set	7769 Mar 30 15:41	23° $\text{Y}$ 25'21	
morning rise	7768 Apr 26 07:37	27° $\text{Y}$ 25'31		inferior conj	7769 Apr 05 00:12	17° $\text{Y}$ 23'26	3°13'38
direct	7768 May 02 15:23	24° $\text{Y}$ 39'24		minimum elong	7769 Apr 04 22:45	17° $\text{Y}$ 28'19	3°13'24
desc. node	7768 May 10 01:49	27° $\text{Y}$ 35'10		min. Earth dist.	7769 Apr 05 21:56	16° $\text{Y}$ 10'05	0.67437 AU
	7768 May 13 01:16	0° $\text{Z}$		morning rise	7769 Apr 10 05:35	11° $\text{Y}$ 06'50	
morning max el	7768 May 15 10:09	2° $\text{Z}$ 16'08	26°17'11	direct	7769 Apr 16 01:26	8° $\text{Y}$ 30'42	
	7768 Jun 05 07:47	0° $\text{II}$		desc. node	7769 Apr 26 22:48	14° $\text{Y}$ 41'39	
morning set	7768 Jun 20 11:25	25° $\text{II}$ 54'52		morning max el	7769 Apr 27 19:35	15° $\text{Y}$ 33'11	24°56'53
	7768 Jun 22 15:17	0° $\text{Z}$			7769 May 09 16:45	0° $\text{Z}$	
max. Earth dist.	7768 Jun 24 10:42	3° $\text{Z}$ 29'55	1.34965 AU		7769 May 29 05:41	0° $\text{II}$	
				morning set	7769 Jun 02 20:15	8° $\text{II}$ 00'03	
superior conj	7768 Jun 29 12:22	13° $\text{Z}$ 38'55	-0°25'27	max. Earth dist.	7769 Jun 06 11:15	14° $\text{II}$ 34'00	1.36908 AU
minimum elong	7768 Jun 29 13:49	13° $\text{Z}$ 46'21	0°25'16				
asc. node	7768 Jul 02 01:24	18° $\text{Z}$ 53'52		superior conj	7769 Jun 12 23:12	26° $\text{II}$ 56'43	-0°56'59
evening rise	7768 Jul 07 04:43	29° $\text{Z}$ 35'55		minimum elong	7769 Jun 13 02:39	27° $\text{II}$ 13'35	0°56'29
	7768 Jul 07 09:23	0° $\text{Q}$			7769 Jun 14 12:22	0° $\text{Z}$	
	7768 Jul 25 16:46	0° $\text{P}$		asc. node	7769 Jun 18 22:25	8° $\text{Z}$ 51'44	
evening max el	7768 Jul 25 20:49	0° $\text{P}$ 10'04	20°40'34	evening rise	7769 Jun 21 08:25	13° $\text{Z}$ 44'04	
retrograde	7768 Aug 06 04:52	5° $\text{P}$ 46'16			7769 Jun 29 22:34	0° $\text{Q}$	
desc. node	7768 Aug 06 01:01	5° $\text{P}$ 46'12		evening max el	7769 Jul 08 09:08	11° $\text{Q}$ 32'11	19°31'11
evening set	7768 Aug 08 06:59	5° $\text{P}$ 35'38		retrograde	7769 Jul 18 00:14	16° $\text{Q}$ 17'05	
inferior conj	7768 Aug 17 12:33	1° $\text{P}$ 38'39	-3°22'05	evening set	7769 Jul 19 20:54	16° $\text{Q}$ 07'12	
minimum elong	7768 Aug 17 03:47	1° $\text{P}$ 51'11	3°19'16	desc. node	7769 Jul 23 22:03	14° $\text{Q}$ 45'09	
min. Earth dist.	7768 Aug 18 12:29	1° $\text{P}$ 04'22	0.54772 AU	inferior conj	7769 Jul 28 14:35	12° $\text{Q}$ 01'48	-1°25'52
	7768 Aug 20 10:39	30° $\text{R}$ $\text{Q}$		minimum elong	7769 Jul 28 10:41	12° $\text{Q}$ 08'01	1°24'28
morning rise	7768 Aug 26 00:23	27° $\text{Q}$ 37'37		min. Earth dist.	7769 Jul 31 00:57	10° $\text{Q}$ 28'52	0.55597 AU
direct	7768 Aug 30 00:08	27° $\text{Q}$ 03'32		morning rise	7769 Aug 05 21:59	7° $\text{Q}$ 29'23	
	7768 Sep 07 21:57	0° $\text{P}$		direct	7769 Aug 10 16:50	6° $\text{Q}$ 38'00	
morning max el	7768 Sep 12 04:25	3° $\text{P}$ 23'46	23°14'34	morning max el	7769 Aug 24 17:09	13° $\text{Q}$ 39'23	24°59'16
asc. node	7768 Sep 28 00:53	25° $\text{P}$ 39'16			7769 Sep 06 12:05	0° $\text{P}$	
	7768 Sep 30 07:57	0° $\text{Z}$		asc. node	7769 Sep 14 21:52	14° $\text{P}$ 57'26	
morning set	7768 Oct 05 10:05	10° $\text{Z}$ 22'59		morning set	7769 Sep 19 21:47	25° $\text{P}$ 12'25	
					7769 Sep 22 03:12	0° $\text{Z}$	
superior conj	7768 Oct 12 09:35	25° $\text{Z}$ 24'18	1°40'59				
minimum elong	7768 Oct 12 09:01	25° $\text{Z}$ 21'11	1°41'02	superior conj	7769 Sep 26 18:55	10° $\text{Z}$ 12'18	1°35'00
	7768 Oct 14 13:16	0° $\text{M}$		minimum elong	7769 Sep 26 17:23	10° $\text{Z}$ 03'51	1°34'55
max. Earth dist.	7768 Oct 15 05:11	1° $\text{M}$ 24'02	1.33509 AU	max. Earth dist.	7769 Sep 28 08:40	13° $\text{Z}$ 38'34	1.32450 AU
evening rise	7768 Oct 20 02:24	11° $\text{M}$ 24'11		evening rise	7769 Oct 03 23:35	25° $\text{Z}$ 34'25	
	7768 Oct 30 04:21	0° $\text{X}$			7769 Oct 06 04:06	0° $\text{M}$	
desc. node	7768 Nov 01 23:57	4° $\text{X}$ 41'20		desc. node	7769 Oct 19 21:00	24° $\text{M}$ 19'59	
	7768 Nov 20 12:17	0° $\text{Z}$			7769 Oct 23 15:36	0° $\text{X}$	
evening max el	7768 Nov 23 10:21	2° $\text{Z}$ 57'54	27°19'05	evening max el	7769 Nov 05 20:48	15° $\text{X}$ 59'36	27°28'10
retrograde	7768 Dec 06 22:13	10° $\text{Z}$ 17'26		retrograde	7769 Nov 19 14:56	23° $\text{X}$ 16'22	
evening set	7768 Dec 13 19:58	7° $\text{Z}$ 41'06		evening set	7769 Nov 26 17:35	20° $\text{X}$ 47'53	
min. Earth dist.	7768 Dec 17 16:05	4° $\text{Z}$ 08'46	0.64612 AU	min. Earth dist.	7769 Nov 30 09:56	17° $\text{X}$ 45'24	0.62830 AU
inferior conj	7768 Dec 20 00:29	1° $\text{Z}$ 36'54	-1°40'07	inferior conj	7769 Dec 03 05:18	15° $\text{X}$ 02'50	-2°48'36
minimum elong	7768 Dec 20 03:32	1° $\text{Z}$ 28'41	1°38'45	minimum elong	7769 Dec 03 10:34	14° $\text{X}$ 50'06	2°46'33
	7768 Dec 21 13:10	30° $\text{R}$ $\text{X}$		morning rise	7769 Dec 10 05:33	9° $\text{X}$ 52'35	
asc. node	7768 Dec 25 00:17	26° $\text{X}$ 59'52		asc. node	7769 Dec 11 21:18	9° $\text{X}$ 29'40	
morning rise	7768 Dec 26 12:34	26° $\text{X}$ 09'42		direct	7769 Dec 12 13:20	9° $\text{X}$ 27'34	
direct	7768 Dec 29 01:57	25° $\text{X}$ 35'52		morning max el	7769 Dec 19 05:50	12° $\text{X}$ 53'25	17°48'14
morning max el	7769 Jan 04 12:36	28° $\text{X}$ 58'57	17°55'27		7769 Dec 30 21:55	0° $\text{Z}$	
	7769 Jan 05 11:59	0° $\text{Z}$		morning set	7770 Jan 04 07:26	7° $\text{Z}$ 41'56	
morning set	7769 Jan 21 20:14	25° $\text{Z}$ 01'41		desc. node	7770 Jan 15 20:11	27° $\text{Z}$ 34'43	
	7769 Jan 24 19:38	0° $\approx$					

superior conj	7770 Jan 16 00:53	27° $\text{♄}$ 54'22	-0°01'26	morning set	7770 Dec 18 12:19	21° $\text{♄}$ 11'38	
minimum elong	7770 Jan 16 00:44	27° $\text{♄}$ 53'47	0°01'18		7770 Dec 23 07:13	0° $\text{♄}$	
behind sun begin	7770 Jan 15 15:36	27° $\text{♄}$ 15'36					
behind sun end	7770 Jan 16 09:52	28° $\text{♄}$ 31'54		superior conj	7770 Dec 28 15:09	9° $\text{♄}$ 33'37	0°36'56
	7770 Jan 17 07:05	0° $\approx$		minimum elong	7770 Dec 28 17:59	9° $\text{♄}$ 46'06	0°36'38
max. Earth dist.	7770 Jan 22 16:45	8° $\approx$ 49'00	1.43945 AU	desc. node	7771 Jan 02 17:11	18° $\text{♄}$ 20'08	
evening rise	7770 Jan 31 01:32	21° $\approx$ 59'24		max. Earth dist.	7771 Jan 05 05:11	22° $\text{♄}$ 31'22	1.42268 AU
	7770 Feb 05 07:18	0° $\text{♄}$			7771 Jan 09 19:12	0° $\approx$	
	7770 Feb 26 13:24	0° $\text{♄}$		evening rise	7771 Jan 11 00:19	1° $\approx$ 56'17	
evening max el	7770 Mar 02 03:44	4° $\text{♄}$ 01'34	21°09'12		7771 Jan 29 18:22	0° $\text{♄}$	
asc. node	7770 Mar 09 20:24	9° $\text{♄}$ 02'39		evening max el	7771 Feb 12 21:49	17° $\text{♄}$ 41'49	22°25'40
retrograde	7770 Mar 10 18:52	9° $\text{♄}$ 07'10		retrograde	7771 Feb 22 15:37	23° $\text{♄}$ 28'34	
evening set	7770 Mar 14 23:41	7° $\text{♄}$ 28'02		asc. node	7771 Feb 24 17:29	23° $\text{♄}$ 06'34	
inferior conj	7770 Mar 20 07:08	1° $\text{♄}$ 14'22	2°52'11	evening set	7771 Feb 27 07:22	21° $\text{♄}$ 34'20	
minimum elong	7770 Mar 20 05:03	1° $\text{♄}$ 21'35	2°51'43	inferior conj	7771 Mar 04 15:39	15° $\text{♄}$ 12'05	2°21'16
min. Earth dist.	7770 Mar 20 15:37	0° $\text{♄}$ 44'57	0.68118 AU	minimum elong	7771 Mar 04 13:22	15° $\text{♄}$ 20'02	2°20'38
	7770 Mar 21 04:38	30° $\text{♄}$		min. Earth dist.	7771 Mar 04 11:57	15° $\text{♄}$ 24'57	0.68371 AU
morning rise	7770 Mar 25 10:13	25° $\text{♄}$ 00'24		morning rise	7771 Mar 09 19:12	9° $\text{♄}$ 02'18	
direct	7770 Mar 30 16:28	22° $\text{♄}$ 41'32		direct	7771 Mar 14 11:23	7° $\text{♄}$ 04'46	
morning max el	7770 Apr 10 04:51	28° $\text{♄}$ 57'20	23°27'47	morning max el	7771 Mar 23 16:51	12° $\text{♄}$ 28'52	21°59'38
	7770 Apr 11 05:05	0° $\text{♄}$		desc. node	7771 Mar 31 16:46	21° $\text{♄}$ 55'11	
desc. node	7770 Apr 13 19:48	2° $\text{♄}$ 54'33			7771 Apr 06 14:43	0° $\text{♄}$	
	7770 May 03 10:57	0° $\text{♄}$		morning set	7771 Apr 25 13:54	28° $\text{♄}$ 43'59	
morning set	7770 May 15 06:41	19° $\text{♄}$ 00'14			7771 Apr 26 08:45	0° $\text{♄}$	
max. Earth dist.	7770 May 19 06:57	25° $\text{♄}$ 53'39	1.39111 AU	max. Earth dist.	7771 May 01 05:24	7° $\text{♄}$ 59'19	1.41320 AU
	7770 May 21 14:45	0° $\text{♄}$					
superior conj	7770 May 26 20:18	9° $\text{♄}$ 32'52	-1°27'30	superior conj	7771 May 08 23:10	21° $\text{♄}$ 17'17	-1°53'18
minimum elong	7770 May 27 01:30	9° $\text{♄}$ 57'05	1°26'53	minimum elong	7771 May 09 04:44	21° $\text{♄}$ 41'55	1°52'55
evening rise	7770 Jun 05 04:27	27° $\text{♄}$ 26'28			7771 May 13 19:37	0° $\text{♄}$	
asc. node	7770 Jun 05 19:28	28° $\text{♄}$ 39'06		evening rise	7771 May 19 13:15	10° $\text{♄}$ 34'27	
	7770 Jun 06 12:14	0° $\text{♄}$		asc. node	7771 May 23 16:31	18° $\text{♄}$ 11'23	
evening max el	7770 Jun 21 09:10	23° $\text{♄}$ 37'49	18°42'33		7771 May 30 16:34	0° $\text{♄}$	
retrograde	7770 Jun 29 12:14	27° $\text{♄}$ 39'20		evening max el	7771 Jun 04 17:17	6° $\text{♄}$ 18'55	18°14'16
evening set	7770 Jul 01 13:30	27° $\text{♄}$ 24'51		retrograde	7771 Jun 11 19:10	9° $\text{♄}$ 52'23	
inferior conj	7770 Jul 09 12:00	23° $\text{♄}$ 02'05	0°23'13	evening set	7771 Jun 14 03:54	9° $\text{♄}$ 29'18	
minimum elong	7770 Jul 09 12:53	23° $\text{♄}$ 00'27	0°22'46	inferior conj	7771 Jun 21 07:06	4° $\text{♄}$ 45'57	1°46'45
desc. node	7770 Jul 10 19:08	22° $\text{♄}$ 03'52		minimum elong	7771 Jun 21 10:04	4° $\text{♄}$ 39'29	1°45'43
min. Earth dist.	7770 Jul 12 17:49	20° $\text{♄}$ 38'21	0.57219 AU	min. Earth dist.	7771 Jun 24 16:33	1° $\text{♄}$ 50'18	0.59327 AU
morning rise	7770 Jul 17 08:45	17° $\text{♄}$ 52'35			7771 Jun 27 02:41	30° $\text{♄}$	
direct	7770 Jul 23 00:15	16° $\text{♄}$ 33'58		desc. node	7771 Jun 27 16:11	29° $\text{♄}$ 37'35	
morning max el	7770 Aug 06 08:34	24° $\text{♄}$ 05'32	26°29'28	morning rise	7771 Jun 28 13:12	29° $\text{♄}$ 05'36	
	7770 Aug 11 17:47	0° $\text{♄}$		direct	7771 Jul 04 21:17	27° $\text{♄}$ 14'58	
	7770 Aug 30 11:49	0° $\text{♄}$			7771 Jul 13 01:13	0° $\text{♄}$	
asc. node	7770 Sep 01 18:52	4° $\text{♄}$ 35'58		morning max el	7771 Jul 19 06:07	5° $\text{♄}$ 05'06	27°30'39
morning set	7770 Sep 04 08:13	9° $\text{♄}$ 55'44			7771 Aug 06 16:58	0° $\text{♄}$	
				morning set	7771 Aug 19 15:45	24° $\text{♄}$ 28'10	
superior conj	7770 Sep 11 06:22	25° $\text{♄}$ 03'46	1°23'32	asc. node	7771 Aug 19 15:52	24° $\text{♄}$ 28'49	
minimum elong	7770 Sep 11 04:15	24° $\text{♄}$ 52'03	1°23'16		7771 Aug 22 06:05	0° $\text{♄}$	
max. Earth dist.	7770 Sep 11 17:17	26° $\text{♄}$ 04'15	1.31847 AU	max. Earth dist.	7771 Aug 26 03:42	8° $\text{♄}$ 33'04	1.31700 AU
	7770 Sep 13 11:59	0° $\text{♄}$					
evening rise	7770 Sep 18 03:41	10° $\text{♄}$ 02'37		superior conj	7771 Aug 26 18:07	9° $\text{♄}$ 52'54	1°07'04
	7770 Sep 28 10:52	0° $\text{♄}$		minimum elong	7771 Aug 26 15:53	9° $\text{♄}$ 40'27	1°06'39
desc. node	7770 Oct 06 18:04	13° $\text{♄}$ 21'26		evening rise	7771 Sep 02 12:22	24° $\text{♄}$ 41'55	
evening max el	7770 Oct 19 02:34	28° $\text{♄}$ 21'42	27°04'36		7771 Sep 05 01:02	0° $\text{♄}$	
	7770 Oct 20 22:25	0° $\text{♄}$			7771 Sep 22 11:52	0° $\text{♄}$	
retrograde	7770 Nov 02 00:02	5° $\text{♄}$ 32'46		desc. node	7771 Sep 23 15:09	1° $\text{♄}$ 30'51	
evening set	7770 Nov 09 00:01	3° $\text{♄}$ 23'18		evening max el	7771 Oct 01 01:18	9° $\text{♄}$ 55'14	26°07'27
min. Earth dist.	7770 Nov 12 17:15	0° $\text{♄}$ 41'47	0.60820 AU	retrograde	7771 Oct 14 23:42	16° $\text{♄}$ 59'54	
	7770 Nov 13 13:20	30° $\text{♄}$		evening set	7771 Oct 21 10:27	15° $\text{♄}$ 20'09	
inferior conj	7770 Nov 15 20:26	28° $\text{♄}$ 01'55	-3°56'18	min. Earth dist.	7771 Oct 25 14:20	12° $\text{♄}$ 45'23	0.58742 AU
minimum elong	7770 Nov 16 03:22	27° $\text{♄}$ 47'07	3°54'07	inferior conj	7771 Oct 28 18:25	10° $\text{♄}$ 24'44	-4°54'37
morning rise	7770 Nov 23 09:03	23° $\text{♄}$ 11'33		minimum elong	7771 Oct 29 00:59	10° $\text{♄}$ 12'31	4°53'15
direct	7770 Nov 25 14:23	22° $\text{♄}$ 51'50		morning rise	7771 Nov 05 17:48	5° $\text{♄}$ 56'41	
asc. node	7770 Nov 28 18:21	23° $\text{♄}$ 33'37		direct	7771 Nov 08 00:54	5° $\text{♄}$ 39'03	
morning max el	7770 Dec 02 20:20	26° $\text{♄}$ 29'08	17°59'29	asc. node	7771 Nov 15 15:23	9° $\text{♄}$ 05'47	
	7770 Dec 05 21:35	0° $\text{♄}$		morning max el	7771 Nov 16 04:32	9° $\text{♄}$ 36'32	18°30'51
					7771 Nov 29 11:36	0° $\text{♄}$	

morning set	7771 Dec 02 05:34	5°♊15'32			7772 Nov 20 10:24	0°♊	
superior conj	7771 Dec 11 03:22	22°♊15'23	1°06'15	superior conj	7772 Nov 23 08:24	5°♊45'40	1°26'14
minimum elong	7771 Dec 11 06:51	22°♊31'34	1°05'55	minimum elong	7772 Nov 23 11:09	5°♊59'07	1°26'05
	7771 Dec 15 09:18	0°♋		max. Earth dist.	7772 Nov 29 19:03	17°♊58'01	1.38068 AU
max. Earth dist.	7771 Dec 18 13:14	5°♋34'18	1.40231 AU	evening rise	7772 Dec 03 12:37	24°♊39'31	
desc. node	7771 Dec 20 14:12	9°♋04'28		desc. node	7772 Dec 06 11:13	29°♊44'19	
evening rise	7771 Dec 22 19:27	12°♋48'32			7772 Dec 06 14:55	0°♋	
	7772 Jan 02 15:30	0°♌			7772 Dec 26 07:57	0°♌	
	7772 Jan 25 03:24	0°♌		evening max el	7773 Jan 08 01:45	15°♌11'50	25°03'08
evening max el	7772 Jan 26 12:35	1°♌25'20	23°45'49	retrograde	7773 Jan 19 22:47	22°♌05'10	
retrograde	7772 Feb 06 09:16	7°♌49'19		evening set	7773 Jan 25 15:35	19°♌43'05	
evening set	7772 Feb 11 13:11	5°♌40'27		asc. node	7773 Jan 28 11:38	16°♌47'02	
asc. node	7772 Feb 11 14:35	5°♌37'29		min. Earth dist.	7773 Jan 30 03:18	14°♌42'31	0.67680 AU
	7772 Feb 16 10:09	30°♍		inferior conj	7773 Jan 31 05:56	13°♌15'17	0°54'19
inferior conj	7772 Feb 16 23:51	29°♌13'15	1°41'46	minimum elong	7773 Jan 31 04:40	13°♌19'28	0°53'55
minimum elong	7772 Feb 16 21:50	29°♌20'10	1°41'08	morning rise	7773 Feb 05 18:00	7°♌18'38	
min. Earth dist.	7772 Feb 16 08:35	0°♌05'20	0.68220 AU	direct	7773 Feb 09 07:54	6°♌05'00	
morning rise	7772 Feb 22 06:27	23°♌09'12		morning max el	7773 Feb 16 13:26	10°♌06'28	19°33'16
direct	7772 Feb 26 08:58	21°♌34'13		greatest brilliancy	7773 Mar 01 08:25	26°♌53'08	-0.7m
morning max el	7772 Mar 05 11:07	26°♌11'23	20°39'52		7773 Mar 03 10:37	0°♌	
	7772 Mar 08 22:02	0°♌		desc. node	7773 Mar 04 10:40	1°♌30'19	
desc. node	7772 Mar 17 13:44	11°♌30'07		morning set	7773 Mar 13 17:23	15°♌40'09	
	7772 Mar 30 01:37	0°♍			7773 Mar 22 22:37	0°♍	
morning set	7772 Apr 03 19:52	7°♍19'49		max. Earth dist.	7773 Mar 26 00:14	4°♍50'04	1.44658 AU
max. Earth dist.	7772 Apr 12 11:16	21°♍01'28	1.43249 AU				
	7772 Apr 17 22:36	0°♎		superior conj	7773 Mar 30 06:03	11°♍35'39	-2°09'05
superior conj	7772 Apr 19 03:04	1°♎58'51	-2°09'12	minimum elong	7773 Mar 30 02:33	11°♍21'36	2°09'00
minimum elong	7772 Apr 19 05:56	2°♎10'50	2°09'12		7773 Apr 10 11:52	0°♎	
evening rise	7772 May 01 06:24	22°♎57'10		evening rise	7773 Apr 13 03:21	4°♎25'45	
	7772 May 05 06:22	0°♏		asc. node	7773 Apr 26 10:39	26°♎04'46	
asc. node	7772 May 09 13:35	7°♏22'15			7773 Apr 29 07:53	0°♏	
evening max el	7772 May 18 05:37	19°♏24'34	18°05'31	evening max el	7773 May 01 18:50	2°♏46'32	18°15'40
retrograde	7772 May 24 18:00	22°♏46'06		retrograde	7773 May 08 04:12	6°♏10'46	
evening set	7772 May 27 10:07	22°♏11'47		evening set	7773 May 11 03:19	5°♏23'40	
inferior conj	7772 Jun 02 21:18	17°♏08'16	2°41'59	inferior conj	7773 May 17 02:35	0°♏01'40	3°12'51
minimum elong	7772 Jun 03 00:09	17°♏01'07	2°41'14	minimum elong	7773 May 17 04:16	29°♏56'54	3°12'32
min. Earth dist.	7772 Jun 05 23:05	14°♏04'46	0.61574 AU		7773 May 17 03:10	30°♏	
morning rise	7772 Jun 09 12:08	11°♏07'13		min. Earth dist.	7773 May 19 14:57	27°♏12'27	0.63679 AU
desc. node	7772 Jun 13 13:13	9°♏09'18		morning rise	7773 May 23 04:01	23°♏49'16	
direct	7772 Jun 16 05:14	8°♏47'36		direct	7773 May 29 22:17	21°♏09'42	
morning max el	7772 Jun 30 10:11	16°♏47'40	27°54'57	desc. node	7773 May 31 10:14	21°♏16'50	
	7772 Jul 11 07:53	0°♐		morning max el	7773 Jun 12 18:54	29°♏11'09	27°41'33
	7772 Jul 29 09:11	0°♑			7773 Jun 13 14:00	0°♑	
morning set	7772 Aug 02 18:25	8°♑43'22		morning set	7773 Jul 17 13:54	22°♑35'04	
asc. node	7772 Aug 05 12:53	14°♑30'11			7773 Jul 21 05:20	0°♑	
max. Earth dist.	7772 Aug 08 12:05	20°♑53'05	1.32006 AU	max. Earth dist.	7773 Jul 22 14:24	2°♑52'58	1.32776 AU
				asc. node	7773 Jul 23 09:52	4°♑35'58	
superior conj	7772 Aug 10 04:20	24°♑33'11	0°46'01				
minimum elong	7772 Aug 10 02:27	24°♑22'52	0°45'34	superior conj	7773 Jul 25 11:08	8°♑59'18	0°20'49
	7772 Aug 12 15:44	0°♒		minimum elong	7773 Jul 25 10:09	8°♑53'58	0°20'30
evening rise	7772 Aug 16 23:29	9°♒25'05		evening rise	7773 Aug 01 11:09	24°♑06'26	
	7772 Aug 27 11:41	0°♓			7773 Aug 04 06:43	0°♒	
desc. node	7772 Sep 09 12:14	18°♓27'20			7773 Aug 23 05:29	0°♓	
evening max el	7772 Sep 11 16:13	20°♓39'55	24°42'50	evening max el	7773 Aug 24 03:35	0°♓55'23	23°04'31
retrograde	7772 Sep 25 12:03	27°♓37'22		desc. node	7773 Aug 27 09:19	3°♓43'24	
evening set	7772 Sep 30 20:39	26°♓33'10		retrograde	7773 Sep 06 12:17	7°♓36'19	
min. Earth dist.	7772 Oct 06 03:19	23°♓46'53	0.56823 AU	evening set	7773 Sep 10 08:47	7°♓03'48	
inferior conj	7772 Oct 08 20:24	22°♓02'13	-5°29'16	min. Earth dist.	7773 Sep 17 12:22	3°♓48'12	0.55378 AU
minimum elong	7772 Oct 08 22:50	21°♓58'17	5°29'05	inferior conj	7773 Sep 19 02:52	2°♓52'28	-5°21'37
morning rise	7772 Oct 17 03:14	17°♓56'39		minimum elong	7773 Sep 18 22:02	2°♓59'29	5°21'07
direct	7772 Oct 19 16:56	17°♓38'19			7773 Sep 24 15:14	30°♒	
morning max el	7772 Oct 29 02:55	22°♓05'37	19°24'06	morning rise	7773 Sep 27 13:26	29°♒02'25	
asc. node	7772 Nov 01 12:23	25°♓51'52		direct	7773 Sep 30 13:45	28°♒40'58	
	7772 Nov 04 11:31	0°♔			7773 Oct 06 03:43	0°♓	
morning set	7772 Nov 15 07:13	19°♔42'22		morning max el	7773 Oct 11 12:54	3°♓48'24	20°39'38

asc. node	7773 Oct 19 09:22	13°♊36'24		minimum elong	7774 Aug 29 11:35	13°♎22'57	4°17'05
	7773 Oct 28 10:40	0°♍		min. Earth dist.	7774 Aug 29 21:26	13°♎09'09	0.54717 AU
morning set	7773 Oct 30 14:19	4°♍23'13		morning rise	7774 Sep 07 08:57	9°♎18'22	
				direct	7774 Sep 10 23:02	8°♎50'28	
superior conj	7773 Nov 07 01:34	19°♍50'29	1°37'42	morning max el	7774 Sep 23 10:43	14°♎44'59	22°14'24
minimum elong	7773 Nov 07 03:02	19°♍57'58	1°37'44		7774 Oct 05 00:56	0°♊	
max. Earth dist.	7773 Nov 12 02:49	29°♍54'52	1.36031 AU	asc. node	7774 Oct 06 06:21	2°♊06'02	
	7773 Nov 12 03:52	0°♊		morning set	7774 Oct 15 00:39	19°♊11'53	
evening rise	7773 Nov 16 01:14	7°♊22'20			7774 Oct 20 02:26	0°♍	
desc. node	7773 Nov 23 08:14	20°♊14'58					
	7773 Nov 29 08:43	0°♋		superior conj	7774 Oct 22 03:13	4°♍19'13	1°41'42
evening max el	7773 Dec 21 14:38	28°♋57'19	26°10'34	minimum elong	7774 Oct 22 03:20	4°♍19'50	1°41'47
	7773 Dec 22 17:09	0°♌		max. Earth dist.	7774 Oct 25 17:27	11°♍48'37	1.34313 AU
retrograde	7774 Jan 03 07:27	6°♌09'27		evening rise	7774 Oct 30 05:28	20°♍47'32	
evening set	7774 Jan 09 12:51	3°♌37'24			7774 Nov 04 03:22	0°♊	
	7774 Jan 13 01:41	30°♋♋		desc. node	7774 Nov 10 05:19	10°♊31'25	
min. Earth dist.	7774 Jan 13 17:51	29°♋11'29	0.66766 AU		7774 Nov 23 06:37	0°♋	
inferior conj	7774 Jan 15 07:58	27°♋14'00	-0°00'36	evening max el	7774 Dec 04 03:45	12°♋35'31	27°00'47
minimum elong	7774 Jan 15 07:58	27°♋13'58	0°00'29	retrograde	7774 Dec 17 10:33	19°♋55'13	
transit middle	7774 Jan 15 07:58	27°♋13'58	0°00'29	evening set	7774 Dec 24 03:00	17°♋18'30	
transit begin	7774 Jan 15 05:06	27°♋22'49		min. Earth dist.	7774 Dec 28 02:07	13°♋26'51	0.65496 AU
transit end	7774 Jan 15 10:50	27°♋05'08		inferior conj	7774 Dec 30 03:49	11°♋05'20	-1°02'10
asc. node	7774 Jan 15 08:41	27°♋11'47		minimum elong	7774 Dec 30 05:38	11°♋00'10	1°01'17
morning rise	7774 Jan 21 03:46	21°♋26'44		asc. node	7775 Jan 02 05:42	7°♋48'22	
direct	7774 Jan 24 06:33	20°♋31'36		morning rise	7775 Jan 05 09:27	5°♋29'48	
morning max el	7774 Jan 30 23:03	24°♋09'46	18°42'07	direct	7775 Jan 08 03:01	4°♋49'22	
	7774 Feb 04 20:57	0°♌		morning max el	7775 Jan 14 13:51	8°♋15'26	18°07'29
desc. node	7774 Feb 19 07:36	21°♌48'27			7775 Jan 29 14:58	0°♌	
morning set	7774 Feb 21 06:42	24°♌53'26		morning set	7775 Feb 02 01:02	5°♌34'47	
	7774 Feb 24 12:47	0°♍		desc. node	7775 Feb 06 04:35	12°♌19'38	
max. Earth dist.	7774 Mar 08 17:33	19°♍06'21	1.45395 AU				
				superior conj	7775 Feb 16 20:12	29°♌20'36	-1°11'27
superior conj	7774 Mar 09 14:09	20°♍27'05	-1°48'52	minimum elong	7775 Feb 16 11:59	28°♌48'15	1°10'23
minimum elong	7774 Mar 09 05:02	19°♍51'22	1°48'06		7775 Feb 17 06:12	0°♍	
	7774 Mar 15 15:51	0°♎		max. Earth dist.	7775 Feb 19 12:50	3°♍34'43	1.45399 AU
evening rise	7774 Mar 25 00:50	14°♎55'15		evening rise	7775 Mar 05 00:38	24°♍35'17	
greatest brilliancy	7774 Apr 01 12:39	26°♎55'41	-0.9m		7775 Mar 08 12:27	0°♎	
	7774 Apr 03 11:13	0°♏		greatest brilliancy	7775 Mar 17 16:57	14°♎04'25	-0.7m
asc. node	7774 Apr 13 07:43	14°♏09'28		evening max el	7775 Mar 29 13:41	29°♎53'28	19°29'16
evening max el	7774 Apr 15 06:13	16°♏17'40	18°44'01		7775 Mar 29 16:16	0°♏	
retrograde	7774 Apr 21 21:29	19°♏57'28		asc. node	7775 Mar 31 04:46	1°♏25'01	
evening set	7774 Apr 25 03:47	18°♏56'35		retrograde	7775 Apr 05 18:34	3°♏59'55	
inferior conj	7774 Apr 30 18:55	13°♏17'52	3°24'32	evening set	7775 Apr 09 08:47	2°♏44'29	
minimum elong	7774 Apr 30 19:13	13°♏16'57	3°24'26		7775 Apr 12 06:36	30°♋♋	
min. Earth dist.	7774 May 02 16:02	10°♏59'06	0.65463 AU	inferior conj	7775 Apr 14 18:57	26°♎50'42	3°21'11
morning rise	7774 May 06 10:00	7°♏00'52		minimum elong	7775 Apr 14 18:03	26°♎53'41	3°21'03
direct	7774 May 12 22:59	4°♏13'27		min. Earth dist.	7775 Apr 16 00:59	25°♎12'01	0.66844 AU
desc. node	7774 May 18 07:12	5°♏44'50		morning rise	7775 Apr 20 02:58	20°♎33'17	
morning max el	7774 May 26 05:19	12°♏04'16	26°55'25	direct	7775 Apr 26 06:04	17°♎49'58	
	7774 Jun 09 12:58	0°♐		desc. node	7775 May 05 04:11	22°♎01'55	
	7774 Jun 27 19:39	0°♑		morning max el	7775 May 08 15:07	25°♎14'27	25°44'42
morning set	7774 Jun 30 23:14	5°♑54'57			7775 May 12 22:53	0°♏	
max. Earth dist.	7774 Jul 05 07:04	14°♑25'03	1.34022 AU		7775 Jun 03 00:50	0°♐	
				morning set	7775 Jun 13 18:22	18°♐31'01	
superior conj	7774 Jul 09 12:23	23°♑05'18	-0°07'49	max. Earth dist.	7775 Jun 17 12:29	25°♐31'53	1.35739 AU
minimum elong	7774 Jul 09 12:49	23°♑07'32	0°07'51		7775 Jun 19 20:04	0°♑	
behind sun begin	7774 Jul 09 07:48	22°♑41'24					
behind sun end	7774 Jul 09 17:49	23°♑33'42		superior conj	7775 Jun 23 05:24	6°♑43'12	-0°38'46
asc. node	7774 Jul 10 06:53	24°♑42'13		minimum elong	7775 Jun 23 07:41	6°♑54'40	0°38'26
	7774 Jul 12 19:03	0°♒		asc. node	7775 Jun 27 03:54	14°♑44'20	
evening rise	7774 Jul 16 21:27	8°♒40'20		evening rise	7775 Jul 01 04:15	22°♑59'40	
	7774 Jul 28 03:46	0°♓			7775 Jul 04 15:47	0°♒	
evening max el	7774 Aug 05 20:27	11°♓18'11	21°29'14	evening max el	7775 Jul 19 01:19	22°♒15'44	20°08'42
desc. node	7774 Aug 14 06:23	16°♓47'11		retrograde	7775 Jul 29 15:56	27°♒29'24	
retrograde	7774 Aug 18 02:38	17°♓22'47		evening set	7775 Jul 31 13:55	27°♒19'55	
evening set	7774 Aug 20 15:09	17°♓08'15		desc. node	7775 Aug 01 03:27	27°♒13'40	
inferior conj	7774 Aug 29 20:58	13°♓09'47	-4°19'29	inferior conj	7775 Aug 09 15:59	23°♒21'24	-2°33'53

minimum elong	7775 Aug 09 08:57	23° $\Omega$ 31'51	2°31'26	minimum elong	7776 Jul 19 23:49	4° $\Omega$ 00'51	0°36'42
min. Earth dist.	7775 Aug 11 08:13	22° $\Omega$ 21'40	0.55011 AU	min. Earth dist.	7776 Jul 22 22:05	2° $\Omega$ 02'13	0.56211 AU
morning rise	7775 Aug 18 02:38	19° $\Omega$ 08'35			7776 Jul 26 08:56	30° $\mathbb{R}$ $\mathfrak{S}$	
direct	7775 Aug 22 10:20	18° $\Omega$ 28'03		morning rise	7776 Jul 28 05:04	29° $\mathfrak{S}$ 10'17	
morning max el	7775 Sep 05 00:31	25° $\Omega$ 07'20	23°59'37	direct	7776 Aug 02 09:02	28° $\mathfrak{S}$ 08'21	
	7775 Sep 09 13:40	0° $\mathbb{M}$			7776 Aug 09 08:33	0° $\Omega$	
asc. node	7775 Sep 23 03:20	21° $\mathbb{M}$ 09'01		morning max el	7776 Aug 16 13:31	5° $\Omega$ 23'06	25°40'20
	7775 Sep 27 14:09	0° $\underline{\Omega}$			7776 Sep 03 09:33	0° $\mathbb{M}$	
morning set	7775 Sep 29 12:19	4° $\underline{\Omega}$ 02'16		asc. node	7776 Sep 09 00:22	10° $\mathbb{M}$ 36'52	
				morning set	7776 Sep 12 23:42	18° $\mathbb{M}$ 49'44	
					7776 Sep 18 02:49	0° $\underline{\Omega}$	
superior conj	7775 Oct 06 10:24	19° $\underline{\Omega}$ 02'02	1°39'09	superior conj	7776 Sep 19 20:53	3° $\underline{\Omega}$ 52'09	1°30'47
minimum elong	7775 Oct 06 09:23	18° $\underline{\Omega}$ 56'27	1°39'09	minimum elong	7776 Sep 19 19:02	3° $\underline{\Omega}$ 42'01	1°30'37
max. Earth dist.	7775 Oct 08 16:41	23° $\underline{\Omega}$ 54'38	1.33010 AU	max. Earth dist.	7776 Sep 20 22:56	6° $\underline{\Omega}$ 15'37	1.32148 AU
	7775 Oct 11 13:57	0° $\mathbb{M}$		evening rise	7776 Sep 26 21:54	19° $\underline{\Omega}$ 02'57	
evening rise	7775 Oct 13 21:25	4° $\mathbb{M}$ 44'01			7776 Oct 02 09:38	0° $\mathbb{M}$	
	7775 Oct 27 19:51	0° $\mathfrak{A}$		desc. node	7776 Oct 13 23:27	19° $\mathbb{M}$ 50'38	
desc. node	7775 Oct 28 02:23	0° $\mathfrak{A}$ 26'14			7776 Oct 21 05:45	0° $\mathfrak{A}$	
evening max el	7775 Nov 16 15:58	25° $\mathfrak{A}$ 54'50	27°26'42	evening max el	7776 Oct 29 00:58	8° $\mathfrak{A}$ 41'49	27°22'14
	7775 Nov 21 14:56	0° $\mathfrak{S}$		retrograde	7776 Nov 11 20:28	15° $\mathfrak{A}$ 55'17	
retrograde	7775 Nov 30 07:09	3° $\mathfrak{S}$ 13'27		evening set	7776 Nov 18 23:10	13° $\mathfrak{A}$ 33'43	
evening set	7775 Dec 07 07:31	0° $\mathfrak{S}$ 39'37		min. Earth dist.	7776 Nov 22 15:14	10° $\mathfrak{A}$ 41'30	0.62003 AU
	7775 Dec 08 04:07	30° $\mathbb{R}$ $\mathfrak{A}$		inferior conj	7776 Nov 25 14:24	7° $\mathfrak{A}$ 58'35	-3°17'50
min. Earth dist.	7775 Dec 11 01:52	27° $\mathfrak{A}$ 20'18	0.63889 AU	minimum elong	7776 Nov 25 20:31	7° $\mathfrak{A}$ 44'33	3°15'36
inferior conj	7775 Dec 13 14:58	24° $\mathfrak{A}$ 42'46	-2°08'56	morning rise	7776 Dec 02 19:57	2° $\mathfrak{A}$ 56'12	
minimum elong	7775 Dec 13 18:58	24° $\mathfrak{A}$ 32'27	2°07'14	direct	7776 Dec 05 02:24	2° $\mathfrak{A}$ 33'42	
morning rise	7775 Dec 20 08:05	19° $\mathfrak{A}$ 22'04		asc. node	7776 Dec 05 23:47	2° $\mathfrak{A}$ 37'17	
asc. node	7775 Dec 20 02:43	19° $\mathfrak{A}$ 27'38		morning max el	7776 Dec 11 23:27	6° $\mathfrak{A}$ 03'08	17°50'38
direct	7775 Dec 22 18:45	18° $\mathfrak{A}$ 52'25			7776 Dec 27 09:23	0° $\mathfrak{S}$	
morning max el	7775 Dec 29 07:01	22° $\mathfrak{A}$ 15'49	17°50'06	morning set	7776 Dec 27 18:40	0° $\mathfrak{S}$ 41'41	
	7776 Jan 04 07:42	0° $\mathfrak{S}$					
morning set	7776 Jan 14 23:11	17° $\mathfrak{S}$ 37'55		superior conj	7777 Jan 07 18:26	20° $\mathfrak{S}$ 03'07	0°15'53
	7776 Jan 22 06:25	0° $\approx$		minimum elong	7777 Jan 07 19:53	20° $\mathfrak{S}$ 09'19	0°15'47
desc. node	7776 Jan 24 01:36	2° $\approx$ 59'34		behind sun begin	7777 Jan 07 18:23	20° $\mathfrak{S}$ 02'53	
				behind sun end	7777 Jan 07 21:24	20° $\mathfrak{S}$ 15'46	
superior conj	7776 Jan 27 18:40	9° $\approx$ 05'11	-0°26'35	desc. node	7777 Jan 09 22:36	23° $\mathfrak{S}$ 44'01	
minimum elong	7776 Jan 27 15:42	8° $\approx$ 53'06	0°26'03		7777 Jan 13 17:09	0° $\approx$	
max. Earth dist.	7776 Feb 02 07:44	17° $\approx$ 59'51	1.44670 AU	max. Earth dist.	7777 Jan 14 23:35	2° $\approx$ 04'17	1.43294 AU
	7776 Feb 09 23:41	0° $\mathfrak{H}$		evening rise	7777 Jan 22 03:15	13° $\approx$ 27'43	
evening rise	7776 Feb 12 12:28	3° $\mathfrak{H}$ 54'06			7777 Feb 02 00:49	0° $\mathfrak{H}$	
	7776 Mar 01 00:23	0° $\mathbb{Y}$		evening max el	7777 Feb 22 12:50	27° $\mathfrak{H}$ 10'57	21°40'55
evening max el	7776 Mar 11 16:00	13° $\mathbb{Y}$ 31'46	20°29'17		7777 Feb 25 15:36	0° $\mathbb{Y}$	
asc. node	7776 Mar 17 01:49	17° $\mathbb{Y}$ 38'07		retrograde	7777 Mar 03 14:50	2° $\mathbb{Y}$ 33'46	
retrograde	7776 Mar 19 17:00	18° $\mathbb{Y}$ 13'41		asc. node	7777 Mar 03 22:54	2° $\mathbb{Y}$ 33'11	
evening set	7776 Mar 23 16:12	16° $\mathbb{Y}$ 43'11		evening set	7777 Mar 08 00:16	0° $\mathbb{Y}$ 47'57	
inferior conj	7776 Mar 29 00:01	10° $\mathbb{Y}$ 36'12	3°05'44		7777 Mar 08 21:46	30° $\mathbb{R}$ $\mathfrak{H}$	
minimum elong	7776 Mar 28 22:15	10° $\mathbb{Y}$ 42'15	3°05'25	inferior conj	7777 Mar 13 07:51	24° $\mathfrak{H}$ 30'15	2°40'07
min. Earth dist.	7776 Mar 29 16:01	9° $\mathbb{Y}$ 41'30	0.67783 AU	minimum elong	7777 Mar 13 05:38	24° $\mathfrak{H}$ 37'58	2°39'35
morning rise	7776 Apr 03 04:05	4° $\mathbb{Y}$ 20'44		min. Earth dist.	7777 Mar 13 10:58	24° $\mathfrak{H}$ 19'24	0.68279 AU
direct	7776 Apr 08 18:26	1° $\mathbb{Y}$ 51'05		morning rise	7777 Mar 18 10:50	18° $\mathfrak{H}$ 18'10	
morning max el	7776 Apr 20 00:02	8° $\mathbb{Y}$ 34'17	24°19'28	direct	7777 Mar 23 11:06	16° $\mathfrak{H}$ 08'14	
desc. node	7776 Apr 21 01:10	9° $\mathbb{Y}$ 39'25		morning max el	7777 Apr 02 10:04	22° $\mathfrak{H}$ 01'27	22°49'44
	7776 May 06 19:43	0° $\mathfrak{B}$		desc. node	7777 Apr 07 22:09	28° $\mathfrak{H}$ 14'30	
morning set	7776 May 25 18:21	0° $\mathbb{I}$ 10'16			7777 Apr 09 07:54	0° $\mathbb{Y}$	
	7776 May 25 15:59	0° $\mathbb{I}$			7777 Apr 30 03:04	0° $\mathfrak{B}$	
max. Earth dist.	7776 May 29 10:04	6° $\mathbb{I}$ 38'34	1.37828 AU	morning set	7777 May 06 17:31	10° $\mathfrak{B}$ 38'17	
				max. Earth dist.	7777 May 11 06:43	18° $\mathfrak{B}$ 17'26	1.40072 AU
superior conj	7776 Jun 05 10:57	19° $\mathbb{I}$ 44'59	-1°10'13		7777 May 17 22:22	0° $\mathbb{I}$	
minimum elong	7776 Jun 05 15:13	20° $\mathbb{I}$ 05'27	1°09'38	superior conj	7777 May 19 00:50	2° $\mathbb{I}$ 00'08	-1°39'17
	7776 Jun 10 16:48	0° $\mathfrak{S}$		minimum elong	7777 May 19 06:26	2° $\mathbb{I}$ 25'45	1°38'44
asc. node	7776 Jun 13 00:56	4° $\mathfrak{S}$ 38'35		evening rise	7777 May 28 20:47	20° $\mathbb{I}$ 26'59	
evening rise	7776 Jun 14 05:05	6° $\mathfrak{S}$ 58'05		asc. node	7777 May 30 21:59	24° $\mathbb{I}$ 20'07	
	7776 Jun 27 09:09	0° $\Omega$			7777 Jun 02 23:08	0° $\mathfrak{S}$	
evening max el	7776 Jun 30 19:03	3° $\Omega$ 57'12	19°07'59	evening max el	7777 Jun 13 22:51	16° $\mathfrak{S}$ 18'12	18°28'00
retrograde	7776 Jul 09 17:25	8° $\Omega$ 21'46		retrograde	7777 Jun 21 13:48	20° $\mathfrak{S}$ 06'09	
evening set	7776 Jul 11 15:33	8° $\Omega$ 10'21					
desc. node	7776 Jul 18 00:29	5° $\Omega$ 19'06					
inferior conj	7776 Jul 20 01:26	3° $\Omega$ 58'07	-0°37'13				



























































































































































































































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inferior conj	7777 Jul 01 08:06	15°  16'36	1°02'12	minimum elong	7778 Jun 13 14:54	27°  10'32	2°12'31
minimum elong	7777 Jul 01 10:12	15°  12'24	1°01'21	min. Earth dist.	7778 Jun 16 19:01	24°  15'32	0.60279 AU
min. Earth dist.	7777 Jul 04 16:59	12°  36'42	0.58075 AU	morning rise	7778 Jun 20 11:12	21°  26'56	
desc. node	7777 Jul 04 21:32	12°  28'10		desc. node	7778 Jun 21 18:34	20°  42'28	
morning rise	7777 Jul 08 22:53	9°  52'42		direct	7778 Jun 26 24:00	19°  23'03	
direct	7777 Jul 14 21:58	8°  21'01		morning max el	7778 Jul 11 08:04	27°  19'24	27°45'48
morning max el	7777 Jul 29 07:27	16°  01'22	26°59'52		7778 Jul 13 21:23	0° 	
	7777 Aug 09 17:02	0° 			7778 Aug 03 09:04	0° 	
asc. node	7777 Aug 26 21:24	0°  22'20		morning set	7778 Aug 12 14:50	17°  05'50	9
	7777 Aug 26 17:04	0° 		asc. node	7778 Aug 13 18:22	20°  09'20	
morning set	7777 Aug 28 09:09	3°  29'20			7778 Aug 18 06:00	0° 	
				max. Earth dist.	7778 Aug 18 18:49	1°  10'30	1.31763 AU
superior conj	7777 Sep 04 08:40	18°  29'15	1°17'09	superior conj	7778 Aug 19 19:57	3°  29'11	0°58'41
minimum elong	7777 Sep 04 06:27	18°  30'53	1°16'48	minimum elong	7778 Aug 19 17:48	3°  17'17	0°58'14
max. Earth dist.	7777 Sep 04 08:56	18°  44'43	1.31727 AU	evening rise	7778 Aug 26 14:06	18°  17'54	
	7777 Sep 09 11:44	0° 			7778 Sep 01 07:00	0° 	
evening rise	7777 Sep 11 04:12	3°  36'38		desc. node	7778 Sep 17 17:36	26°  14'00	
	7777 Sep 25 04:54	0° 			7778 Sep 21 01:00	0° 	
desc. node	7777 Sep 30 20:31	8°  32'28		evening max el	7778 Sep 22 22:54	1°  55'09	25°34'14
evening max el	7777 Oct 11 03:54	20°  44'07	26°44'10	retrograde	7778 Oct 06 21:13	8°  58'16	
retrograde	7777 Oct 25 01:41	27°  52'29		evening set	7778 Oct 12 22:21	7°  33'11	
evening set	7777 Oct 31 21:47	25°  54'08		min. Earth dist.	7778 Oct 17 11:05	4°  55'51	0.57879 AU
min. Earth dist.	7777 Nov 04 17:49	23°  17'57	0.59936 AU	inferior conj	7778 Oct 20 12:22	2°  48'16	-5°13'18
inferior conj	7777 Nov 07 22:42	20°  43'58	-4°22'52	minimum elong	7778 Oct 20 17:44	2°  38'53	5°12'29
minimum elong	7777 Nov 08 05:51	20°  29'36	4°20'55		7778 Oct 24 21:41	30° 	
morning rise	7777 Nov 15 16:15	16°  03'12		morning rise	7778 Oct 28 15:29	28°  30'23	
direct	7777 Nov 17 21:51	15°  44'42		direct	7778 Oct 31 00:35	28°  12'56	
asc. node	7777 Nov 22 20:51	17°  20'58			7778 Nov 05 17:05	0° 	
morning max el	7777 Nov 25 11:48	19°  29'00	18°10'18	morning max el	7778 Nov 08 16:21	2°  22'00	18°50'48
	7777 Dec 03 05:30	0° 		asc. node	7778 Nov 09 17:52	3°  26'41	
morning set	7777 Dec 11 05:25	14°  28'17		morning set	7778 Nov 25 02:40	28°  43'11	
	7777 Dec 19 13:37	0° 			7778 Nov 25 18:19	0° 	
superior conj	7777 Dec 20 18:46	2°  11'55	0°50'32	superior conj	7778 Dec 03 14:48	15°  21'63	1°15'48
minimum elong	7777 Dec 20 22:07	2°  26'57	0°50'10	minimum elong	7778 Dec 03 18:05	15°  23'20	9
desc. node	7777 Dec 27 19:36	14°  29'55		max. Earth dist.	7778 Dec 10 16:28	28°  15'46	1.39308 AU
max. Earth dist.	7777 Dec 28 10:19	15°  32'11	1.41432 AU		7778 Dec 11 16:07	0° 	
evening rise	7778 Jan 02 10:06	23°  47'11		evening rise	7778 Dec 14 14:45	5°  05'10	
	7778 Jan 06 07:34	0° 		desc. node	7778 Dec 14 16:37	5°  13'06	
	7778 Jan 26 23:58	0° 			7778 Dec 30 10:07	0° 	
evening max el	7778 Feb 05 05:08	10°  52'13	22°59'34	evening max el	7779 Jan 18 18:52	24°  36'56	24°19'23
retrograde	7778 Feb 15 10:32	16°  55'57			7779 Jan 25 15:19	0° 	
asc. node	7778 Feb 18 19:59	15°  58'11		retrograde	7779 Jan 30 02:41	1°  51'18	
evening set	7778 Feb 20 07:22	14°  55'10			7779 Feb 03 04:00	30° 	
inferior conj	7778 Feb 25 16:28	8°  30'03	2°05'30	evening set	7779 Feb 04 11:56	29°  00'37	
minimum elong	7778 Feb 25 14:14	8°  37'46	2°04'51	asc. node	7779 Feb 05 17:03	27°  52'04	
min. Earth dist.	7778 Feb 25 07:42	9°  00'22	0.68357 AU	min. Earth dist.	7779 Feb 09 03:54	23°  39'56	0.68037 AU
morning rise	7778 Mar 02 21:02	2°  22'35		inferior conj	7779 Feb 10 00:01	22°  32'20	1°22'37
direct	7778 Mar 07 07:11	0° 		minimum elong	7779 Feb 09 22:15	22°  38'17	1°22'02
morning max el	7778 Mar 16 00:33	5°  38'12	21°24'17	morning rise	7779 Feb 15 08:38	16°  30'58	
desc. node	7778 Mar 25 19:07	17°  31'14		direct	7779 Feb 19 05:32	15°  05'26	
	7778 Apr 03 13:28	0° 		morning max el	7779 Feb 26 22:10	19°  26'20	20°09'37
morning set	7778 Apr 16 13:01	19°  50'06			7779 Mar 07 12:59	0° 	
	7778 Apr 22 20:33	0° 		desc. node	7779 Mar 12 16:05	7°  18'04	
max. Earth dist.	7778 Apr 23 07:59	0°  46'59	1.42191 AU	morning set	7779 Mar 26 12:24	28°  10'36	
					7779 Mar 27 16:42	0° 	
superior conj	7778 Apr 30 18:19	13°  18'15	-2°01'38	max. Earth dist.	7779 Apr 05 16:23	14°  08'21	1.43920 AU
minimum elong	7778 Apr 30 23:13	13°  39'24	2°01'24				
	7778 May 10 04:06	0° 		superior conj	7779 Apr 11 11:32	23°  31'52	-2°11'28
evening rise	7778 May 11 23:30	3°  16'59		minimum elong	7779 Apr 11 12:02	23°  33'54	2°11'30
asc. node	7778 May 17 19:01	13°  44'03			7779 Apr 15 09:14	0° 	
evening max el	7778 May 28 09:06	29°  10'25	18°08'10	evening rise	7779 Apr 24 08:34	15°  17'38	
	7778 May 29 06:30	0° 			7779 May 02 23:18	0° 	
retrograde	7778 Jun 04 04:06	2°  37'14		asc. node	7779 May 04 16:04	2°  44'08	
evening set	7778 Jun 06 15:52	2°  09'48		evening max el	7779 May 11 22:14	12°  24'36	18°07'39
	7778 Jun 10 08:53	30°					



retrograde	7779 May 18 08:11	15° $\Pi$ 45'29		retrograde	7780 Apr 30 21:43	29° $\mathcal{B}$ 20'27	
evening set	7779 May 21 03:16	15° $\Pi$ 05'58		evening set	7780 May 03 23:57	28° $\mathcal{B}$ 27'28	
inferior conj	7779 May 27 08:55	9° $\Pi$ 54'43	2°57'44	inferior conj	7780 May 09 19:19	22° $\mathcal{B}$ 58'16	3°19'52
minimum elong	7779 May 27 11:21	9° $\Pi$ 48'18	2°57'10	minimum elong	7780 May 09 20:25	22° $\mathcal{B}$ 55'03	3°19'40
min. Earth dist.	7779 May 30 05:36	6° $\Pi$ 54'34	0.62498 AU	min. Earth dist.	7780 May 12 01:17	20° $\mathcal{B}$ 20'32	0.64489 AU
morning rise	7779 Jun 02 17:43	3° $\Pi$ 47'52		morning rise	7780 May 15 15:59	16° $\mathcal{B}$ 43'34	
desc. node	7779 Jun 08 15:34	1° $\Pi$ 20'19		direct	7780 May 22 08:52	13° $\mathcal{B}$ 59'06	
direct	7779 Jun 09 12:21	1° $\Pi$ 17'58		desc. node	7780 May 25 12:35	14° $\mathcal{B}$ 30'56	
morning max el	7779 Jun 23 14:18	9° $\Pi$ 20'25	27°53'37	morning max el	7780 Jun 04 23:49	21° $\mathcal{B}$ 57'00	27°25'27
	7779 Jul 09 14:37	0° $\mathcal{E}$			7780 Jun 12 00:36	0° $\Pi$	
	7779 Jul 26 14:36	0° $\mathcal{O}$			7780 Jul 01 19:31	0° $\mathcal{E}$	
morning set	7779 Jul 27 14:44	2° $\mathcal{O}$ 1'34		morning set	7780 Jul 10 06:15	15° $\mathcal{E}$ 40'20	
asc. node	7779 Jul 31 15:21	10° $\mathcal{O}$ 23'26		max. Earth dist.	7780 Jul 14 23:20	25° $\mathcal{E}$ 10'28	1.33250 AU
max. Earth dist.	7779 Aug 02 00:53	13° $\mathcal{O}$ 22'36	1.32268 AU		7780 Jul 17 06:42	0° $\mathcal{O}$	
				asc. node	7780 Jul 17 12:20	0° $\mathcal{O}$ 29'43	
superior conj	7779 Aug 04 04:58	18° $\mathcal{O}$ 04'41	0°35'48	superior conj	7780 Jul 18 09:40	2° $\mathcal{O}$ 22'54	0°09'03
minimum elong	7779 Aug 04 03:24	17° $\mathcal{O}$ 56'08	0°35'24	minimum elong	7780 Jul 18 09:13	2° $\mathcal{O}$ 20'29	0°08'51
	7779 Aug 09 16:00	0° $\mathcal{M}$		behind sun begin	7780 Jul 18 04:37	1° $\mathcal{O}$ 56'03	
evening rise	7779 Aug 11 01:41	3° $\mathcal{M}$ 01'15		behind sun end	7780 Jul 18 13:49	2° $\mathcal{O}$ 44'58	
	7779 Aug 25 13:08	0° $\mathcal{L}$		evening rise	7780 Jul 25 12:58	17° $\mathcal{O}$ 40'01	
evening max el	7779 Sep 04 11:33	12° $\mathcal{L}$ 24'24	24°01'49		7780 Jul 31 14:55	0° $\mathcal{M}$	
desc. node	7779 Sep 04 14:39	12° $\mathcal{L}$ 31'48		evening max el	7780 Aug 16 00:15	22° $\mathcal{M}$ 38'32	22°22'46
retrograde	7779 Sep 18 04:32	19° $\mathcal{L}$ 16'36		desc. node	7780 Aug 21 11:42	26° $\mathcal{M}$ 55'23	
evening set	7779 Sep 22 22:06	18° $\mathcal{L}$ 27'23		retrograde	7780 Aug 28 23:18	29° $\mathcal{M}$ 05'42	
min. Earth dist.	7779 Sep 28 22:13	15° $\mathcal{L}$ 30'18	0.56127 AU	evening set	7780 Sep 01 04:51	28° $\mathcal{M}$ 42'41	
inferior conj	7779 Oct 01 05:42	14° $\mathcal{L}$ 05'23	-5°32'19	min. Earth dist.	7780 Sep 09 06:43	25° $\mathcal{M}$ 10'33	0.54991 AU
minimum elong	7779 Oct 01 05:11	14° $\mathcal{L}$ 06'10	5°32'17	inferior conj	7780 Sep 10 05:31	24° $\mathcal{M}$ 38'25	-5°01'56
morning rise	7779 Oct 09 14:26	10° $\mathcal{L}$ 07'26		minimum elong	7780 Sep 09 21:58	24° $\mathcal{M}$ 49'03	5°00'37
direct	7779 Oct 12 08:07	9° $\mathcal{L}$ 48'06		morning rise	7780 Sep 18 16:51	20° $\mathcal{M}$ 50'14	
morning max el	7779 Oct 22 09:37	14° $\mathcal{L}$ 31'57	19°53'31	direct	7780 Sep 21 23:00	20° $\mathcal{M}$ 26'20	
asc. node	7779 Oct 27 14:51	20° $\mathcal{L}$ 39'18		morning max el	7780 Oct 03 13:56	25° $\mathcal{M}$ 53'12	21°18'00
	7779 Nov 02 10:21	0° $\mathcal{M}$			7780 Oct 07 09:36	0° $\mathcal{L}$	
morning set	7779 Nov 09 06:56	13° $\mathcal{M}$ 16'37		asc. node	7780 Oct 13 11:50	8° $\mathcal{L}$ 44'12	
				morning set	7780 Oct 23 15:39	28° $\mathcal{L}$ 01'22	
superior conj	7779 Nov 17 01:28	29° $\mathcal{M}$ 02'36	1°32'04		7780 Oct 24 14:24	0° $\mathcal{M}$	
minimum elong	7779 Nov 17 03:43	29° $\mathcal{M}$ 13'46	1°32'00	superior conj	7780 Oct 30 22:37	13° $\mathcal{M}$ 18'18	1°40'15
	7779 Nov 17 13:01	0° $\mathcal{X}$		minimum elong	7780 Oct 30 23:30	13° $\mathcal{M}$ 22'53	1°40'19
max. Earth dist.	7779 Nov 22 22:17	10° $\mathcal{X}$ 24'36	1.37177 AU	max. Earth dist.	7780 Nov 04 08:52	22° $\mathcal{M}$ 18'46	1.35256 AU
evening rise	7779 Nov 26 16:39	17° $\mathcal{X}$ 19'30			7780 Nov 08 07:52	0° $\mathcal{X}$	
desc. node	7779 Dec 01 13:38	25° $\mathcal{X}$ 49'37		evening rise	7780 Nov 08 12:23	0° $\mathcal{X}$ 21'22	
	7779 Dec 04 01:39	0° $\mathcal{Z}$		desc. node	7780 Nov 17 10:41	16° $\mathcal{X}$ 14'58	
	7779 Dec 24 19:10	0° $\approx$			7780 Nov 26 04:19	0° $\mathcal{Z}$	
evening max el	7780 Jan 01 07:59	8° $\approx$ 24'15	25°33'30	evening max el	7780 Dec 13 21:14	22° $\mathcal{Z}$ 08'37	26°34'32
retrograde	7780 Jan 13 14:14	15° $\approx$ 26'44		retrograde	7780 Dec 26 20:25	29° $\mathcal{Z}$ 24'22	
evening set	7780 Jan 19 12:21	13° $\approx$ 00'14		evening set	7781 Jan 02 06:53	26° $\mathcal{Z}$ 49'44	
asc. node	7780 Jan 23 14:06	8° $\approx$ 36'37		min. Earth dist.	7781 Jan 06 09:22	22° $\mathcal{Z}$ 38'33	0.66270 AU
min. Earth dist.	7780 Jan 23 21:13	8° $\approx$ 14'08	0.67339 AU	inferior conj	7781 Jan 08 04:20	20° $\mathcal{Z}$ 30'16	-0°25'55
inferior conj	7780 Jan 25 04:37	6° $\approx$ 33'39	0°31'56	minimum elong	7781 Jan 08 05:03	20° $\mathcal{Z}$ 28'08	0°25'30
minimum elong	7780 Jan 25 03:50	6° $\approx$ 36'12	0°31'42	asc. node	7781 Jan 09 11:08	18° $\mathcal{Z}$ 59'37	
morning rise	7780 Jan 30 19:41	0° $\approx$ 40'26		morning rise	7781 Jan 14 04:04	14° $\mathcal{Z}$ 47'36	
	7780 Feb 01 02:30	30° $\mathcal{R}$ $\mathcal{Z}$		direct	7781 Jan 17 02:48	13° $\mathcal{Z}$ 59'02	
direct	7780 Feb 03 04:41	29° $\mathcal{Z}$ 34'56		morning max el	7781 Jan 23 15:49	17° $\mathcal{Z}$ 30'26	18°25'22
	7780 Feb 05 08:26	0° $\approx$			7781 Feb 02 02:24	0° $\approx$	
morning max el	7780 Feb 10 03:40	3° $\approx$ 25'04	19°09'24	morning set	7781 Feb 12 15:16	16° $\approx$ 36'49	
greatest brilliancy	7780 Feb 23 14:27	21° $\approx$ 26'25	-0.7m	desc. node	7781 Feb 13 10:02	17° $\approx$ 51'32	
desc. node	7780 Feb 27 13:03	27° $\approx$ 26'46			7781 Feb 21 01:50	0° $\mathcal{X}$	
	7780 Feb 29 04:54	0° $\mathcal{X}$		superior conj	7781 Feb 28 09:59	11° $\mathcal{X}$ 31'45	-1°34'37
morning set	7780 Mar 04 13:58	6° $\mathcal{X}$ 45'51		minimum elong	7781 Feb 28 00:22	10° $\mathcal{X}$ 54'08	1°33'37
max. Earth dist.	7780 Mar 18 07:31	28° $\mathcal{X}$ 10'48	1.45064 AU	max. Earth dist.	7781 Mar 01 02:44	12° $\mathcal{X}$ 37'20	1.45494 AU
	7780 Mar 19 11:14	0° $\mathcal{Y}$			7781 Mar 12 04:51	0° $\mathcal{Y}$	
superior conj	7780 Mar 21 05:07	2° $\mathcal{Y}$ 45'31	-2°02'58	evening rise	7781 Mar 16 07:27	6° $\mathcal{Y}$ 28'09	
minimum elong	7780 Mar 20 22:41	2° $\mathcal{Y}$ 20'05	2°02'39	greatest brilliancy	7781 Mar 26 04:57	22° $\mathcal{Y}$ 01'21	-0.8m
evening rise	7780 Apr 04 19:39	26° $\mathcal{Y}$ 20'35			7781 Mar 31 11:42	0° $\mathcal{B}$	
	7780 Apr 07 00:57	0° $\mathcal{B}$		asc. node	7781 Apr 07 10:10	8° $\mathcal{B}$ 57'30	
asc. node	7780 Apr 20 13:06	21° $\mathcal{B}$ 11'45					
evening max el	7780 Apr 24 11:02	25° $\mathcal{B}$ 51'30	18°25'38				

evening max el	7781 Apr 07 21:02	9°♄25'38	19°01'12	greatest brilliancy	7782 Mar 10 07:42	7°♄35'34	-0.6m
retrograde	7781 Apr 14 17:03	13°♄15'18		evening max el	7782 Mar 22 02:22	23°♄02'24	19°53'01
evening set	7781 Apr 18 02:42	12°♄08'06		asc. node	7782 Mar 25 07:15	25°♄48'28	
inferior conj	7781 Apr 23 15:21	6°♄22'33	3°24'43	retrograde	7782 Mar 29 15:09	27°♄23'22	
minimum elong	7781 Apr 23 15:06	6°♄23'20	3°24'38	evening set	7782 Apr 02 09:01	26°♄01'32	
min. Earth dist.	7781 Apr 25 05:50	4°♄20'24	0.66110 AU	inferior conj	7782 Apr 07 17:53	20°♄01'34	3°15'57
morning rise	7781 Apr 29 03:03	0°♄05'08		minimum elong	7782 Apr 07 16:33	20°♄06'00	3°15'46
	7781 Apr 29 05:24	30°♄		min. Earth dist.	7782 Apr 08 17:43	18°♄41'33	0.67298 AU
direct	7781 May 05 12:14	27°♄18'26		morning rise	7782 Apr 12 23:50	13°♄44'35	
desc. node	7781 May 12 09:35	29°♄49'39		direct	7782 Apr 18 21:37	11°♄06'22	
	7781 May 12 15:41	0°♄		desc. node	7782 Apr 29 06:35	16°♄44'11	
morning max el	7781 May 18 10:16	4°♄59'11	26°27'45	morning max el	7782 Apr 30 19:54	18°♄15'16	25°09'36
	7781 Jun 06 13:09	0°♄			7782 May 10 17:02	0°♄	
morning set	7781 Jun 23 10:04	28°♄42'43			7782 May 30 14:15	0°♄	
	7781 Jun 24 02:27	0°♄		morning set	7782 Jun 05 21:49	10°♄56'52	
max. Earth dist.	7781 Jun 27 11:30	6°♄31'34	1.34708 AU	max. Earth dist.	7782 Jun 09 13:12	17°♄35'45	1.36593 AU
superior conj	7781 Jul 02 07:46	16°♄17'35	-0°20'45	superior conj	7782 Jun 15 20:22	29°♄41'13	-0°52'11
minimum elong	7781 Jul 02 08:56	16°♄23'37	0°20'38	minimum elong	7782 Jun 15 23:30	29°♄56'42	0°51'44
asc. node	7781 Jul 04 09:20	20°♄34'29			7782 Jun 16 00:10	0°♄	
	7781 Jul 08 21:23	0°♄		asc. node	7782 Jun 21 06:23	10°♄33'49	
evening rise	7781 Jul 09 22:05	2°♄08'33		evening rise	7782 Jun 24 02:43	16°♄20'12	
	7781 Jul 25 23:45	0°♄			7782 Jul 01 04:21	0°♄	
evening max el	7781 Jul 28 21:36	3°♄12'44	20°52'35	evening max el	7782 Jul 11 08:05	14°♄28'54	19°40'17
desc. node	7781 Aug 08 08:46	8°♄53'42		retrograde	7782 Jul 21 05:18	19°♄21'10	
retrograde	7781 Aug 09 11:43	8°♄56'50		evening set	7782 Jul 23 01:49	19°♄11'37	
evening set	7781 Aug 11 15:56	8°♄45'30		desc. node	7782 Jul 26 05:50	18°♄15'10	
inferior conj	7781 Aug 20 22:03	4°♄48'28	-3°38'14	inferior conj	7782 Jul 31 22:00	15°♄08'25	-1°43'44
minimum elong	7781 Aug 20 12:55	5°♄01'27	3°35'27	minimum elong	7782 Jul 31 17:15	15°♄15'51	1°42'01
min. Earth dist.	7781 Aug 21 15:57	4°♄23'02	0.54724 AU	min. Earth dist.	7782 Aug 03 04:08	13°♄43'53	0.55414 AU
morning rise	7781 Aug 29 10:03	0°♄50'40		morning rise	7782 Aug 09 06:25	10°♄41'17	
direct	7781 Sep 02 07:07	0°♄18'28		direct	7782 Aug 13 22:15	9°♄53'01	
morning max el	7781 Sep 15 07:33	6°♄32'06	22°58'50	morning max el	7782 Aug 27 20:28	16°♄49'18	24°44'08
asc. node	7781 Sep 30 08:50	27°♄29'01			7782 Sep 07 13:31	0°♄	
	7781 Oct 01 17:27	0°♄		asc. node	7782 Sep 17 05:51	16°♄43'43	
morning set	7781 Oct 08 02:45	12°♄51'18		morning set	7782 Sep 22 14:31	27°♄41'28	
					7782 Sep 23 16:24	0°♄	
superior conj	7781 Oct 15 02:54	27°♄53'41	1°41'23	superior conj	7782 Sep 29 11:47	12°♄41'01	1°36'18
minimum elong	7781 Oct 15 02:30	27°♄51'31	1°41'26	minimum elong	7782 Sep 29 10:22	12°♄33'15	1°36'13
	7781 Oct 16 02:35	0°♄		max. Earth dist.	7782 Oct 01 05:42	16°♄29'18	1.32580 AU
max. Earth dist.	7781 Oct 18 03:17	4°♄16'54	1.33700 AU	evening rise	7782 Oct 06 17:56	28°♄07'41	
evening rise	7781 Oct 22 21:58	14°♄00'24			7782 Oct 07 16:03	0°♄	
	7781 Oct 31 12:50	0°♄		desc. node	7782 Oct 22 04:49	26°♄06'17	
desc. node	7781 Nov 04 07:44	6°♄22'58			7782 Oct 24 17:45	0°♄	
	7781 Nov 21 02:14	0°♄		evening max el	7782 Nov 08 20:59	18°♄46'13	27°28'47
evening max el	7781 Nov 26 10:03	5°♄39'41	27°15'11	retrograde	7782 Nov 22 14:35	26°♄03'50	
retrograde	7781 Dec 09 20:45	12°♄59'41		evening set	7782 Nov 29 16:48	23°♄33'36	
evening set	7781 Dec 16 17:17	10°♄22'52		min. Earth dist.	7782 Dec 03 09:33	20°♄26'55	0.63113 AU
min. Earth dist.	7781 Dec 20 14:04	6°♄45'44	0.64849 AU	inferior conj	7782 Dec 06 03:22	17°♄45'12	-2°38'12
inferior conj	7781 Dec 22 20:49	4°♄16'08	-1°30'00	minimum elong	7782 Dec 06 08:18	17°♄33'02	2°36'11
minimum elong	7781 Dec 22 23:31	4°♄08'43	1°28'45	morning rise	7782 Dec 13 01:45	12°♄32'08	
asc. node	7781 Dec 27 08:12	29°♄57'22		asc. node	7782 Dec 14 05:15	12°♄13'01	
	7781 Dec 27 06:47	30°♄		direct	7782 Dec 15 10:08	12°♄06'05	
morning rise	7781 Dec 29 07:10	28°♄46'49		morning max el	7782 Dec 22 01:22	15°♄31'08	17°48'07
direct	7781 Dec 31 21:33	28°♄11'25			7783 Jan 01 05:22	0°♄	
	7782 Jan 05 12:38	0°♄		morning set	7783 Jan 07 06:03	10°♄25'47	
morning max el	7782 Jan 07 08:03	1°♄34'59	17°58'05	desc. node	7783 Jan 18 04:01	29°♄08'57	
morning set	7782 Jan 24 22:04	27°♄55'01			7783 Jan 18 16:16	0°♄	
	7782 Jan 26 04:08	0°♄		superior conj	7783 Jan 19 06:01	0°♄57'06	-0°07'53
desc. node	7782 Jan 31 07:00	8°♄26'51		minimum elong	7783 Jan 19 05:13	0°♄53'43	0°07'39
superior conj	7782 Feb 07 21:11	20°♄42'16	-0°52'42	behind sun begin	7783 Jan 18 20:55	0°♄19'19	
minimum elong	7782 Feb 07 15:02	20°♄17'43	0°51'46	behind sun end	7783 Jan 19 13:30	1°♄28'04	
max. Earth dist.	7782 Feb 11 22:27	27°♄07'21	1.45173 AU	max. Earth dist.	7783 Jan 25 15:46	11°♄23'18	1.44152 AU
	7782 Feb 13 18:25	0°♄		evening rise	7783 Feb 03 11:39	25°♄14'49	
evening rise	7782 Feb 24 00:36	15°♄55'10			7783 Feb 06 14:07	0°♄	
	7782 Mar 05 05:45	0°♄					

	7783 Feb 27 09:17	0°♿		superior conj	7783 Dec 31 16:36	12°♿25'46	0°31'41
evening max el	7783 Mar 05 02:13	6°♿40'29	20°58'34	minimum elong	7783 Dec 31 19:10	12°♿36'55	0°31'25
asc. node	7783 Mar 12 04:20	11°♿30'01		desc. node	7784 Jan 05 01:01	19°♿54'10	
retrograde	7783 Mar 13 13:37	11°♿39'57		max. Earth dist.	7784 Jan 08 05:06	25°♿11'46	1.42548 AU
evening set	7783 Mar 17 16:55	10°♿03'07			7784 Jan 11 03:43	0°♿	
inferior conj	7783 Mar 23 00:24	3°♿51'10	2°56'02	evening rise	7784 Jan 14 08:02	5°♿04'59	
minimum elong	7783 Mar 22 22:23	3°♿58'06	2°55'38		7784 Jan 30 21:48	0°♿	
min. Earth dist.	7783 Mar 23 10:49	3°♿15'06	0.68044 AU	evening max el	7784 Feb 15 21:01	20°♿20'42	22°13'57
	7783 Mar 25 21:56	30°♿		retrograde	7784 Feb 25 10:39	26°♿01'07	
morning rise	7783 Mar 28 03:38	27°♿36'41		asc. node	7784 Feb 27 01:24	25°♿47'47	
direct	7783 Apr 02 12:01	25°♿14'45		evening set	7784 Mar 01 00:44	24°♿09'05	
	7783 Apr 11 12:18	0°♿		inferior conj	7784 Mar 06 08:47	17°♿48'00	2°26'31
morning max el	7783 Apr 13 04:57	1°♿38'03	23°41'12	minimum elong	7784 Mar 06 06:30	17°♿55'57	2°25'55
desc. node	7783 Apr 16 03:34	4°♿48'18		min. Earth dist.	7784 Mar 06 06:51	17°♿54'45	0.68360 AU
	7783 May 04 16:50	0°♿		morning rise	7784 Mar 11 12:06	11°♿37'37	
morning set	7783 May 18 11:57	22°♿07'49		direct	7784 Mar 16 06:25	9°♿36'43	
max. Earth dist.	7783 May 22 08:58	28°♿50'19	1.38775 AU	morning max el	7784 Mar 25 16:14	15°♿08'07	22°12'25
	7783 May 23 00:45	0°♿		desc. node	7784 Apr 02 00:33	23°♿42'40	
					7784 Apr 06 17:11	0°♿	
superior conj	7783 May 29 19:50	12°♿24'32	-1°23'03		7784 Apr 26 16:50	0°♿	
minimum elong	7783 May 30 00:48	12°♿47'56	1°22'28	morning set	7784 Apr 27 23:21	2°♿03'02	
	7783 Jun 07 22:40	0°♿		max. Earth dist.	7784 May 03 06:53	10°♿49'04	1.41004 AU
evening rise	7783 Jun 08 00:07	0°♿07'04					
asc. node	7783 Jun 08 03:25	0°♿23'07		superior conj	7784 May 11 01:43	24°♿17'27	-1°49'54
evening max el	7783 Jun 24 06:38	26°♿28'41	18°48'30	minimum elong	7784 May 11 07:23	24°♿42'43	1°49'27
	7783 Jun 29 10:08	0°♿			7784 May 14 05:48	0°♿	
retrograde	7783 Jul 02 14:19	0°♿35'33		evening rise	7784 May 21 10:51	13°♿20'50	
evening set	7783 Jul 04 14:40	0°♿22'00		asc. node	7784 May 25 00:28	19°♿58'00	
	7783 Jul 05 21:29	30°♿			7784 May 30 18:20	0°♿	
inferior conj	7783 Jul 12 16:10	26°♿02'13	0°08'03	evening max el	7784 Jun 06 13:45	9°♿04'52	18°17'09
minimum elong	7783 Jul 12 16:29	26°♿01'39	0°07'49	retrograde	7784 Jun 13 18:33	12°♿41'28	
transit middle	7783 Jul 12 16:29	26°♿01'39	0°07'49	evening set	7784 Jun 16 02:11	12°♿19'49	
transit begin	7783 Jul 12 13:15	26°♿07'31		inferior conj	7784 Jun 23 08:05	7°♿39'22	1°35'56
transit end	7783 Jul 12 19:43	25°♿55'46		minimum elong	7784 Jun 23 10:54	7°♿33'21	1°34'55
desc. node	7783 Jul 13 02:53	25°♿42'42		min. Earth dist.	7784 Jun 26 17:45	4°♿47'09	0.59000 AU
min. Earth dist.	7783 Jul 15 20:12	23°♿45'08	0.56940 AU	desc. node	7784 Jun 28 23:55	3°♿05'57	
morning rise	7783 Jul 20 14:52	20°♿58'15		morning rise	7784 Jun 30 16:29	2°♿03'03	
direct	7783 Jul 26 03:33	19°♿44'05		direct	7784 Jul 06 22:31	0°♿17'21	
morning max el	7783 Aug 09 11:02	27°♿11'40	26°17'32	morning max el	7784 Jul 21 07:33	8°♿04'52	27°23'48
	7783 Aug 12 04:13	0°♿			7784 Aug 06 22:04	0°♿	
	7783 Aug 31 22:03	0°♿		asc. node	7784 Aug 20 23:51	26°♿10'20	
asc. node	7783 Sep 04 02:51	6°♿19'34		morning set	7784 Aug 21 09:19	26°♿59'58	
morning set	7783 Sep 07 01:16	12°♿25'56			7784 Aug 22 19:17	0°♿	
superior conj	7783 Sep 13 23:04	27°♿32'20	1°25'38	superior conj	7784 Aug 28 10:51	12°♿21'41	1°09'53
minimum elong	7783 Sep 13 21:00	27°♿20'57	1°25'22	minimum elong	7784 Aug 28 08:35	12°♿09'11	1°09'29
max. Earth dist.	7783 Sep 14 13:47	28°♿53'45	1.31912 AU	max. Earth dist.	7784 Aug 28 00:14	11°♿22'48	1.31696 AU
	7783 Sep 15 01:46	0°♿		evening rise	7784 Sep 04 05:18	27°♿11'30	
evening rise	7783 Sep 20 21:12	12°♿33'47			7784 Sep 05 13:13	0°♿	
	7783 Sep 29 19:07	0°♿			7784 Sep 22 09:47	0°♿	
desc. node	7783 Oct 09 01:52	15°♿14'00		desc. node	7784 Sep 24 22:55	3°♿32'10	
	7783 Oct 20 20:50	0°♿		evening max el	7784 Oct 03 03:39	12°♿56'18	26°17'55
evening max el	7783 Oct 22 03:45	1°♿15'19	27°10'15	retrograde	7784 Oct 17 01:50	20°♿01'35	
retrograde	7783 Nov 05 00:50	8°♿26'51		evening set	7784 Oct 23 15:28	18°♿16'46	
evening set	7783 Nov 12 01:45	6°♿14'03		min. Earth dist.	7784 Oct 27 16:53	15°♿42'15	0.59049 AU
min. Earth dist.	7783 Nov 15 18:31	3°♿30'02	0.61132 AU	inferior conj	7784 Oct 30 21:29	13°♿17'43	-4°46'54
inferior conj	7783 Nov 18 20:46	0°♿48'57	-3°46'25	minimum elong	7784 Oct 31 04:20	13°♿04'45	4°45'23
minimum elong	7783 Nov 19 03:32	0°♿34'13	3°44'12	morning rise	7784 Nov 07 19:28	8°♿46'17	
	7783 Nov 19 19:27	30°♿		direct	7784 Nov 10 02:04	8°♿28'29	
morning rise	7783 Nov 26 07:34	25°♿55'15		asc. node	7784 Nov 16 23:19	11°♿22'17	
direct	7783 Nov 28 13:04	25°♿34'55		morning max el	7784 Nov 18 01:48	12°♿22'10	18°24'50
asc. node	7783 Dec 01 02:17	26°♿02'38			7784 Nov 29 21:05	0°♿	
morning max el	7783 Dec 05 16:27	29°♿10'00	17°56'31	morning set	7784 Dec 04 00:21	7°♿49'07	
	7783 Dec 06 11:53	0°♿					
morning set	7783 Dec 21 08:40	23°♿49'22		superior conj	7784 Dec 13 01:53	24°♿59'19	1°02'24
	7783 Dec 24 17:42	0°♿		minimum elong	7784 Dec 13 05:23	25°♿15'25	1°02'04
					7784 Dec 15 19:55	0°♿	

max. Earth dist.	7784 Dec 20 14:01	8°  22'05	1.40548 AU	minimum elong	7785 Nov 26 07:42	8°  37'57	1°23'34
desc. node	7784 Dec 21 22:00	10°  38'49		max. Earth dist.	7785 Dec 02 19:51	20°  50'57	1.38388 AU
evening rise	7784 Dec 24 23:51	15°  48'23		evening rise	7785 Dec 06 13:54	27°  31'15	
	7785 Jan 02 22:03	0°  ≈			7785 Dec 08 00:20	0°  	
	7785 Jan 24 17:59	0°  ✕		desc. node	7785 Dec 08 19:00	1°   19'42	
evening max el	7785 Jan 28 12:05	4°  ✕03'24	23°33'53		7785 Dec 27 09:49	0°  ≈	
retrograde	7785 Feb 08 04:46	10°  ✕22'13		evening max el	7786 Jan 11 01:17	17°  ≈49'15	24°51'58
asc. node	7785 Feb 12 22:28	8°  ✕32'32		retrograde	7786 Jan 22 19:02	24°  ≈39'10	
evening set	7785 Feb 13 06:53	8°  ✕15'18		evening set	7786 Jan 28 09:54	22°  ≈18'49	
min. Earth dist.	7785 Feb 18 03:30	2°  ✕35'12	0.68269 AU	asc. node	7786 Jan 30 19:31	19°  ≈52'44	
inferior conj	7785 Feb 18 17:07	1°  ✕48'34	1°48'19	min. Earth dist.	7786 Feb 01 22:38	17°  ≈13'04	0.67788 AU
minimum elong	7785 Feb 18 15:01	1°  ✕55'45	1°47'39	inferior conj	7786 Feb 02 23:37	15°  ≈50'38	1°02'03
	7785 Feb 20 01:15	30°  		minimum elong	7786 Feb 02 22:12	15°  ≈55'20	1°01'34
morning rise	7785 Feb 23 23:07	25°  ≈43'41		morning rise	7786 Feb 08 10:44	9°  ≈52'46	
direct	7785 Feb 28 03:36	24°  ≈05'27		direct	7786 Feb 12 02:22	8°  ≈36'12	
morning max el	7785 Mar 08 09:26	28°  ≈48'54	20°51'01	morning max el	7786 Feb 19 10:34	12°  ≈42'18	19°42'10
	7785 Mar 09 12:56	0°  ✕		greatest brilliancy	7786 Mar 04 05:11	29°  ≈22'27	-0.6m
desc. node	7785 Mar 19 21:30	13°  ✕12'53			7786 Mar 04 15:23	0°  ✕	
	7785 Mar 31 08:03	0°  		desc. node	7786 Mar 06 18:28	3°  ✕09'38	
morning set	7785 Apr 07 08:22	10°   46'34		morning set	7786 Mar 17 05:27	19°  ✕04'01	
max. Earth dist.	7785 Apr 15 11:42	23°   43'27	1.42990 AU		7786 Mar 24 06:30	0°  	
	7785 Apr 19 07:29	0°  		max. Earth dist.	7786 Mar 28 23:22	7°   43'1	1.44487 AU
superior conj	7785 Apr 22 09:10	5°   08'13	-2°07'42	superior conj	7786 Apr 02 15:38	14°   53'24	-2°10'20
minimum elong	7785 Apr 22 12:42	5°   23'09	2°07'38	minimum elong	7786 Apr 02 13:13	14°   43'40	2°10'20
evening rise	7785 May 04 06:34	25°   50'40			7786 Apr 11 20:26	0°  	
	7785 May 06 14:39	0°  		evening rise	7786 Apr 16 06:43	7°   527'11	
asc. node	7785 May 11 21:29	9°   12'19		asc. node	7786 Apr 28 18:31	27°   59'17	
evening max el	7785 May 21 01:36	22°   107'01	18°05'36		7786 Apr 30 03:51	0°  	
retrograde	7785 May 27 15:22	25°   129'31		evening max el	7786 May 04 14:50	5°   126'32	18°13'03
evening set	7785 May 30 06:22	24°   157'03		retrograde	7786 May 11 00:08	8°   149'38	
inferior conj	7785 Jun 05 19:41	19°   156'21	2°35'17	evening set	7786 May 13 22:10	8°   1104'36	
minimum elong	7785 Jun 05 22:39	19°   149'03	2°34'27	inferior conj	7786 May 19 22:57	2°   1145'20	3°09'30
min. Earth dist.	7785 Jun 08 23:01	16°   152'30	0.61240 AU	minimum elong	7786 May 20 00:51	2°   1140'04	3°09'08
morning rise	7785 Jun 12 12:41	13°   157'33			7786 May 22 10:48	30°   152'36	
desc. node	7785 Jun 15 20:57	12°   115'22		min. Earth dist.	7786 May 22 13:34	29°   152'36	0.63377 AU
direct	7785 Jun 19 04:51	11°   1141'53		morning rise	7786 May 26 02:12	26°   1534'01	
morning max el	7785 Jul 03 10:50	19°   1141'11	27°53'50	direct	7786 Jun 01 20:43	23°   1556'32	
	7785 Jul 12 05:42	0°  		desc. node	7786 Jun 02 17:58	23°   1559'01	
	7785 Jul 30 19:35	0°  			7786 Jun 13 17:17	0°  	
morning set	7785 Aug 05 12:50	11°   118'11		morning max el	7786 Jun 15 19:01	1°   1158'58	27°45'49
asc. node	7785 Aug 07 20:50	16°   110'43			7786 Jul 06 12:19	0°  	
max. Earth dist.	7785 Aug 11 09:10	23°   1145'04	1.31927 AU	morning set	7786 Jul 20 09:33	25°   1113'53	
superior conj	7785 Aug 12 21:23	27°   1103'38	0°49'29		7786 Jul 22 17:56	0°  	
minimum elong	7785 Aug 12 19:25	26°   1152'47	0°49'03	max. Earth dist.	7786 Jul 25 12:35	5°   1148'16	1.32624 AU
	7785 Aug 14 05:24	0°  		asc. node	7786 Jul 25 17:48	6°   1115'58	
evening rise	7785 Aug 19 16:10	11°   1154'25		superior conj	7786 Jul 28 04:49	11°   1132'11	0°24'53
	7785 Aug 28 18:31	0°  		minimum elong	7786 Jul 28 03:39	11°   1125'55	0°24'33
desc. node	7785 Sep 11 19:58	20°   1141'25		evening rise	7786 Aug 04 03:51	26°   1136'16	
evening max el	7785 Sep 14 19:30	23°   1147'22	24°56'44		7786 Aug 05 18:25	0°  	
	7785 Sep 24 04:17	0°  			7786 Aug 23 12:45	0°  	
retrograde	7785 Sep 28 16:06	0°   1146'38		evening max el	7786 Aug 27 06:54	4°   1105'08	23°19'27
	7785 Oct 03 04:39	30°   1154'39		desc. node	7786 Aug 29 17:02	6°   1114'43	
evening set	7785 Oct 04 05:30	29°   1136'55		retrograde	7786 Sep 09 18:22	10°   1149'51	
min. Earth dist.	7785 Oct 09 06:48	26°   1153'38	0.57083 AU	evening set	7786 Sep 13 20:17	10°   1113'25	
inferior conj	7785 Oct 12 02:34	25°   1102'30	-5°26'21	min. Earth dist.	7786 Sep 20 16:19	7°   1103'01	0.55547 AU
minimum elong	7785 Oct 12 05:55	24°   1156'59	5°26'02	inferior conj	7786 Sep 22 11:42	5°   1159'22	-5°26'17
morning rise	7785 Oct 20 08:35	20°   1154'02		minimum elong	7786 Sep 22 07:58	6°   1104'51	5°25'57
direct	7785 Oct 22 20:58	20°   1136'01		morning rise	7786 Sep 30 21:52	2°   1107'44	
morning max el	7785 Nov 01 01:55	24°   1158'06	19°14'45	direct	7786 Oct 03 20:17	1°   1146'58	
asc. node	7785 Nov 03 20:20	27°   1158'31		morning max el	7786 Oct 14 13:53	6°   1148'09	20°27'01
	7785 Nov 05 09:59	0°  		asc. node	7786 Oct 21 17:19	15°   1134'59	
morning set	7785 Nov 18 00:59	22°   1113'27			7786 Oct 29 21:35	0°  	
	7785 Nov 21 22:27	0°  		morning set	7786 Nov 02 07:27	6°   1152'25	
superior conj	7785 Nov 26 04:47	8° 					

minimum elong	7786 Nov 09 22:06	22° $\mathbb{M}$ 32'38	1°36'27		7787 Oct 06 04:35	0° $\mathbb{L}$	
	7786 Nov 13 15:52	0° $\mathbb{A}$		asc. node	7787 Oct 08 14:20	3° $\mathbb{L}$ 58'16	
max. Earth dist.	7786 Nov 15 02:48	2° $\mathbb{A}$ 49'27	1.36319 AU	morning set	7787 Oct 17 17:24	21° $\mathbb{L}$ 39'46	
evening rise	7786 Nov 18 23:53	10° $\mathbb{A}$ 06'59			7787 Oct 21 15:48	0° $\mathbb{M}$	
desc. node	7786 Nov 25 16:02	21° $\mathbb{A}$ 51'54					
	7786 Nov 30 15:27	0° $\mathbb{B}$		superior conj	7787 Oct 24 20:59	6° $\mathbb{M}$ 49'15	1°41'32
	7786 Dec 23 00:18	0° $\mathbb{A}$		minimum elong	7787 Oct 24 21:18	6° $\mathbb{M}$ 50'54	1°41'36
evening max el	7786 Dec 24 14:13	1° $\mathbb{A}$ 35'17	26°01'23	max. Earth dist.	7787 Oct 28 16:15	14° $\mathbb{M}$ 42'01	1.34548 AU
retrograde	7787 Jan 06 04:35	8° $\mathbb{A}$ 45'30		evening rise	7787 Nov 02 02:02	23° $\mathbb{M}$ 26'04	
evening set	7787 Jan 12 08:04	6° $\mathbb{A}$ 14'45			7787 Nov 05 13:48	0° $\mathbb{A}$	
min. Earth dist.	7787 Jan 16 14:02	1° $\mathbb{A}$ 43'33	0.66928 AU	desc. node	7787 Nov 12 13:04	12° $\mathbb{A}$ 10'20	
asc. node	7787 Jan 17 16:34	0° $\mathbb{A}$ 20'59			7787 Nov 24 06:57	0° $\mathbb{B}$	
	7787 Jan 17 23:17	30° $\mathbb{R}$ $\mathbb{B}$		evening max el	7787 Dec 07 03:26	15° $\mathbb{B}$ 15'13	26°54'43
inferior conj	7787 Jan 18 02:24	29° $\mathbb{B}$ 50'14	0°08'13	retrograde	7787 Dec 20 08:31	22° $\mathbb{B}$ 34'08	
minimum elong	7787 Jan 18 02:11	29° $\mathbb{B}$ 50'55	0°08'14	evening set	7787 Dec 26 23:26	19° $\mathbb{B}$ 57'53	
transit middle	7787 Jan 18 02:11	29° $\mathbb{B}$ 50'55	0°08'14	min. Earth dist.	7787 Dec 30 23:27	16° $\mathbb{B}$ 01'05	0.65706 AU
transit begin	7787 Jan 17 23:44	29° $\mathbb{B}$ 58'33		inferior conj	7788 Jan 01 23:21	13° $\mathbb{B}$ 42'52	-0°52'28
transit end	7787 Jan 18 04:38	29° $\mathbb{B}$ 43'17		minimum elong	7788 Jan 02 00:52	13° $\mathbb{B}$ 38'30	0°51'42
morning rise	7787 Jan 23 20:55	24° $\mathbb{B}$ 01'17		asc. node	7788 Jan 04 13:39	10° $\mathbb{B}$ 51'43	
direct	7787 Jan 27 01:13	23° $\mathbb{B}$ 03'37		morning rise	7788 Jan 08 03:23	8° $\mathbb{B}$ 05'17	
morning max el	7787 Feb 02 19:13	26° $\mathbb{B}$ 44'39	18°48'37	direct	7788 Jan 10 22:14	7° $\mathbb{B}$ 22'51	
	7787 Feb 05 17:16	0° $\mathbb{A}$		morning max el	7788 Jan 17 09:24	10° $\mathbb{B}$ 50'01	18°11'34
desc. node	7787 Feb 21 15:28	23° $\mathbb{A}$ 25'30			7788 Jan 30 22:06	0° $\mathbb{A}$	
morning set	7787 Feb 24 15:14	28° $\mathbb{A}$ 06'01		morning set	7788 Feb 05 05:10	8° $\mathbb{A}$ 34'20	
	7787 Feb 25 20:22	0° $\mathbb{H}$		desc. node	7788 Feb 08 12:26	13° $\mathbb{A}$ 54'56	
max. Earth dist.	7787 Mar 11 16:04	21° $\mathbb{H}$ 37'11	1.45333 AU		7788 Feb 18 14:27	0° $\mathbb{H}$	
superior conj	7787 Mar 13 01:49	23° $\mathbb{H}$ 49'38	-1°53'11	superior conj	7788 Feb 20 06:57	2° $\mathbb{H}$ 39'30	-1°17'52
minimum elong	7787 Mar 12 17:12	23° $\mathbb{H}$ 15'48	1°52'32	minimum elong	7788 Feb 19 22:11	2° $\mathbb{H}$ 05'02	1°16'47
	7787 Mar 16 23:54	0° $\mathbb{Y}$		max. Earth dist.	7788 Feb 22 11:28	6° $\mathbb{H}$ 05'37	1.45449 AU
evening rise	7787 Mar 28 07:47	18° $\mathbb{Y}$ 05'15		evening rise	7788 Mar 07 10:29	27° $\mathbb{H}$ 51'40	
greatest brilliancy	7787 Apr 03 14:50	28° $\mathbb{Y}$ 14'53	-0.9m		7788 Mar 08 19:28	0° $\mathbb{Y}$	
	7787 Apr 04 17:02	0° $\mathbb{B}$		greatest brilliancy	7788 Mar 19 10:35	16° $\mathbb{Y}$ 24'33	-0.7m
asc. node	7787 Apr 15 15:34	16° $\mathbb{B}$ 10'24			7788 Mar 29 04:01	0° $\mathbb{B}$	
evening max el	7787 Apr 18 02:41	18° $\mathbb{B}$ 56'51	18°38'44	evening max el	7788 Mar 31 10:55	2° $\mathbb{B}$ 32'24	19°21'29
retrograde	7787 Apr 24 16:31	22° $\mathbb{B}$ 33'26		asc. node	7788 Apr 01 12:39	3° $\mathbb{B}$ 34'21	
evening set	7787 Apr 27 21:44	21° $\mathbb{B}$ 34'40		retrograde	7788 Apr 07 13:13	6° $\mathbb{B}$ 34'00	
inferior conj	7787 May 03 13:52	15° $\mathbb{B}$ 58'30	3°23'46	evening set	7788 Apr 11 02:15	5° $\mathbb{B}$ 20'42	
minimum elong	7787 May 03 14:23	15° $\mathbb{B}$ 56'57	3°23'40		7788 Apr 16 03:27	30° $\mathbb{R}$ $\mathbb{Y}$	
min. Earth dist.	7787 May 05 13:20	13° $\mathbb{B}$ 34'19	0.65222 AU	inferior conj	7788 Apr 16 12:58	29° $\mathbb{Y}$ 29'03	3°22'28
morning rise	7787 May 09 06:18	9° $\mathbb{B}$ 41'55		minimum elong	7788 Apr 16 12:14	29° $\mathbb{Y}$ 31'28	3°22'22
direct	7787 May 15 20:30	6° $\mathbb{B}$ 54'45		min. Earth dist.	7788 Apr 17 21:11	27° $\mathbb{Y}$ 44'08	0.66671 AU
desc. node	7787 May 20 15:00	8° $\mathbb{B}$ 07'42		morning rise	7788 Apr 21 21:52	23° $\mathbb{Y}$ 11'39	
morning max el	7787 May 29 05:16	14° $\mathbb{B}$ 48'05	27°04'03	direct	7788 Apr 28 02:42	20° $\mathbb{Y}$ 27'06	
	7787 Jun 10 14:40	0° $\mathbb{I}$		desc. node	7788 May 06 12:01	24° $\mathbb{Y}$ 10'22	
	7787 Jun 29 05:47	0° $\mathbb{E}$		morning max el	7788 May 10 15:12	27° $\mathbb{Y}$ 56'01	25°56'22
morning set	7787 Jul 03 20:36	8° $\mathbb{E}$ 38'53			7788 May 12 14:10	0° $\mathbb{B}$	
max. Earth dist.	7787 Jul 08 06:43	17° $\mathbb{E}$ 23'48	1.33803 AU		7788 Jun 03 08:00	0° $\mathbb{I}$	
superior conj	7787 Jul 12 07:04	25° $\mathbb{E}$ 41'32	-0°03'17	morning set	7788 Jun 15 18:08	21° $\mathbb{I}$ 21'42	
minimum elong	7787 Jul 12 07:14	25° $\mathbb{E}$ 42'29	0°03'22	max. Earth dist.	7788 Jun 19 13:47	28° $\mathbb{I}$ 33'10	1.35460 AU
behind sun begin	7787 Jul 12 01:43	25° $\mathbb{E}$ 13'29			7788 Jun 20 07:47	0° $\mathbb{E}$	
behind sun end	7787 Jul 12 12:46	26° $\mathbb{E}$ 11'31		superior conj	7788 Jun 25 01:30	9° $\mathbb{E}$ 23'42	-0°33'59
asc. node	7787 Jul 12 14:48	26° $\mathbb{E}$ 22'13		minimum elong	7788 Jun 25 03:28	9° $\mathbb{E}$ 33'43	0°33'43
	7787 Jul 14 08:00	0° $\mathbb{Q}$		asc. node	7788 Jun 28 11:48	16° $\mathbb{E}$ 24'48	
evening rise	7787 Jul 19 14:29	11° $\mathbb{Q}$ 11'24		evening rise	7788 Jul 02 21:56	25° $\mathbb{E}$ 32'57	
	7787 Jul 29 07:25	0° $\mathbb{P}$			7788 Jul 05 02:26	0° $\mathbb{Q}$	
evening max el	7787 Aug 08 22:28	14° $\mathbb{P}$ 24'39	21°42'46	evening max el	7788 Jul 21 01:19	25° $\mathbb{Q}$ 15'14	20°19'28
desc. node	7787 Aug 16 14:06	19° $\mathbb{P}$ 40'20			7788 Jul 28 05:03	0° $\mathbb{P}$	
retrograde	7787 Aug 21 09:34	20° $\mathbb{P}$ 35'31		retrograde	7788 Jul 31 22:01	0° $\mathbb{P}$ 36'43	
evening set	7787 Aug 24 01:56	20° $\mathbb{P}$ 19'17		desc. node	7788 Aug 02 11:11	0° $\mathbb{P}$ 30'38	
inferior conj	7787 Sep 02 06:54	16° $\mathbb{P}$ 19'46	-4°32'17	evening set	7788 Aug 02 21:10	0° $\mathbb{P}$ 26'58	
minimum elong	7787 Sep 01 21:45	16° $\mathbb{P}$ 32'35	4°30'08		7788 Aug 04 18:59	30° $\mathbb{R}$ $\mathbb{Q}$	
min. Earth dist.	7787 Sep 02 01:15	16° $\mathbb{P}$ 27'41	0.54759 AU	inferior conj	7788 Aug 12 00:45	26° $\mathbb{Q}$ 29'20	-2°51'25
morning rise	7787 Sep 10 18:44	12° $\mathbb{P}$ 29'43		minimum elong	7788 Aug 11 17:00	26° $\mathbb{Q}$ 40'39	2°48'47
direct	7787 Sep 14 06:42	12° $\mathbb{P}$ 02'57		min. Earth dist.	7788 Aug 13 11:31	25° $\mathbb{Q}$ 38'29	0.54907 AU
morning max el	7787 Sep 26 13:15	17° $\mathbb{P}$ 50'26	21°59'18	morning rise	7788 Aug 20 11:54	22° $\mathbb{Q}$ 21'03	

direct	7788 Aug 24 16:50	21° $\Omega$ 42'55		direct	7789 Aug 05 13:15	1° $\Omega$ 20'04	
morning max el	7788 Sep 07 03:44	28° $\Omega$ 15'36	23°43'55	morning max el	7789 Aug 19 16:29	8° $\Omega$ 30'15	25°26'29
	7788 Sep 08 21:51	0° $\mathbb{N}$			7789 Sep 04 16:13	0° $\mathbb{N}$	
asc. node	7788 Sep 24 11:21	22° $\mathbb{N}$ 56'37		asc. node	7789 Sep 11 08:19	12° $\mathbb{N}$ 20'50	
	7788 Sep 28 01:56	0° $\underline{\Omega}$		morning set	7789 Sep 15 16:31	21° $\mathbb{N}$ 18'07	
morning set	7788 Oct 01 05:00	6° $\underline{\Omega}$ 30'05			7789 Sep 19 16:44	0° $\underline{\Omega}$	
superior conj	7788 Oct 08 03:30	21° $\underline{\Omega}$ 30'10	1°39'56	superior conj	7789 Sep 22 13:36	6° $\underline{\Omega}$ 19'22	1°32'24
minimum elong	7788 Oct 08 02:38	21° $\underline{\Omega}$ 25'27	1°39'56	minimum elong	7789 Sep 22 11:51	6° $\underline{\Omega}$ 09'48	1°32'16
max. Earth dist.	7788 Oct 10 14:22	26° $\underline{\Omega}$ 46'10	1.33174 AU	max. Earth dist.	7789 Sep 23 19:45	9° $\underline{\Omega}$ 05'01	1.32240 AU
	7788 Oct 12 03:04	0° $\mathbb{L}$		evening rise	7789 Sep 29 15:47	21° $\underline{\Omega}$ 33'56	
evening rise	7788 Oct 15 16:27	7° $\mathbb{L}$ 18'12			7789 Oct 03 20:36	0° $\mathbb{L}$	
	7788 Oct 28 02:31	0° $\mathbb{J}$		desc. node	7789 Oct 16 07:11	21° $\mathbb{L}$ 38'24	
desc. node	7788 Oct 29 10:08	2° $\mathbb{J}$ 08'47			7789 Oct 22 02:24	0° $\mathbb{J}$	
evening max el	7788 Nov 18 15:59	28° $\mathbb{J}$ 38'24	27°24'42	evening max el	7789 Nov 01 01:31	11° $\mathbb{J}$ 30'35	27°25'04
	7788 Nov 20 03:39	0° $\mathbb{Z}$		retrograde	7789 Nov 14 20:31	18° $\mathbb{J}$ 45'11	
retrograde	7788 Dec 02 06:03	5° $\mathbb{Z}$ 57'13		evening set	7789 Nov 21 23:25	16° $\mathbb{J}$ 20'55	
evening set	7788 Dec 09 05:37	3° $\mathbb{Z}$ 22'24		min. Earth dist.	7789 Nov 25 15:28	13° $\mathbb{J}$ 25'24	0.62297 AU
min. Earth dist.	7788 Dec 13 00:33	29° $\mathbb{J}$ 58'37	0.64148 AU	inferior conj	7789 Nov 28 13:25	10° $\mathbb{J}$ 42'18	-3°07'28
	7788 Dec 13 00:01	30° $\mathbb{R}$ $\mathbb{J}$		minimum elong	7789 Nov 28 19:14	10° $\mathbb{J}$ 28'40	3°05'17
inferior conj	7788 Dec 15 12:02	27° $\mathbb{J}$ 22'55	-1°58'36	morning rise	7789 Dec 05 17:07	5° $\mathbb{J}$ 37'08	
minimum elong	7788 Dec 15 15:41	27° $\mathbb{J}$ 13'19	1°56'59	direct	7789 Dec 07 23:59	5° $\mathbb{J}$ 13'49	
asc. node	7788 Dec 21 10:44	22° $\mathbb{J}$ 19'07		asc. node	7789 Dec 08 07:47	5° $\mathbb{J}$ 14'18	
morning rise	7788 Dec 22 03:21	21° $\mathbb{J}$ 59'48		morning max el	7789 Dec 14 19:13	8° $\mathbb{J}$ 41'42	17°49'23
direct	7788 Dec 24 14:56	21° $\mathbb{J}$ 28'44			7789 Dec 28 18:50	0° $\mathbb{Z}$	
morning max el	7788 Dec 31 02:26	24° $\mathbb{J}$ 51'47	17°51'36	morning set	7789 Dec 30 16:15	3° $\mathbb{Z}$ 22'20	
	7789 Jan 04 08:25	0° $\mathbb{Z}$		superior conj	7790 Jan 10 22:00	23° $\mathbb{Z}$ 01'00	0°09'52
morning set	7789 Jan 16 23:34	20° $\mathbb{Z}$ 26'38		minimum elong	7790 Jan 10 22:57	23° $\mathbb{Z}$ 05'00	0°09'50
	7789 Jan 22 15:32	0° $\approx$		behind sun begin	7790 Jan 10 15:54	22° $\mathbb{Z}$ 35'09	
desc. node	7789 Jan 25 09:25	4° $\approx$ 33'39		behind sun end	7790 Jan 11 05:59	23° $\mathbb{Z}$ 34'46	
superior conj	7789 Jan 30 02:09	12° $\approx$ 14'17	-0°33'26	desc. node	7790 Jan 12 06:22	25° $\mathbb{Z}$ 17'25	
minimum elong	7789 Jan 29 22:20	11° $\approx$ 58'54	0°32'48		7790 Jan 15 02:20	0° $\approx$	
max. Earth dist.	7789 Feb 04 06:56	20° $\approx$ 33'32	1.44824 AU	max. Earth dist.	7790 Jan 17 23:16	4° $\approx$ 41'34	1.43534 AU
	7789 Feb 10 07:26	0° $\mathbb{H}$		evening rise	7790 Jan 25 12:35	16° $\approx$ 40'20	
evening rise	7789 Feb 14 23:17	7° $\mathbb{H}$ 11'42			7790 Feb 03 06:43	0° $\mathbb{H}$	
	7789 Mar 02 03:33	0° $\mathbb{Y}$		evening max el	7790 Feb 25 11:36	29° $\mathbb{H}$ 48'59	21°29'37
evening max el	7789 Mar 14 14:04	16° $\mathbb{Y}$ 10'30	20°19'25		7790 Feb 25 15:58	0° $\mathbb{Y}$	
asc. node	7789 Mar 19 09:45	19° $\mathbb{Y}$ 58'08		retrograde	7790 Mar 06 09:45	5° $\mathbb{Y}$ 05'51	
retrograde	7789 Mar 22 11:38	20° $\mathbb{Y}$ 46'39		asc. node	7790 Mar 06 06:51	5° $\mathbb{Y}$ 05'46	
evening set	7789 Mar 26 09:28	19° $\mathbb{Y}$ 18'18		evening set	7790 Mar 10 17:33	3° $\mathbb{Y}$ 22'18	
inferior conj	7789 Mar 31 17:29	13° $\mathbb{Y}$ 13'02	3°08'44		7790 Mar 13 21:31	30° $\mathbb{R}$ $\mathbb{H}$	
minimum elong	7789 Mar 31 15:49	13° $\mathbb{Y}$ 18'42	3°08'28	inferior conj	7790 Mar 16 01:02	27° $\mathbb{H}$ 05'53	2°44'37
min. Earth dist.	7789 Apr 01 11:26	12° $\mathbb{Y}$ 11'53	0.67676 AU	minimum elong	7790 Mar 15 22:51	27° $\mathbb{H}$ 13'26	2°44'06
morning rise	7789 Apr 05 21:58	6° $\mathbb{Y}$ 57'10		min. Earth dist.	7790 Mar 16 05:59	26° $\mathbb{H}$ 48'39	0.68234 AU
direct	7789 Apr 11 14:15	4° $\mathbb{Y}$ 25'12		morning rise	7790 Mar 21 04:00	20° $\mathbb{H}$ 53'06	
morning max el	7789 Apr 23 00:17	11° $\mathbb{Y}$ 15'08	24°32'37	direct	7790 Mar 26 06:20	18° $\mathbb{H}$ 40'02	
desc. node	7789 Apr 23 09:01	11° $\mathbb{Y}$ 37'24		morning max el	7790 Apr 05 10:02	24° $\mathbb{H}$ 41'16	23°02'57
	7789 May 07 23:17	0° $\mathbb{B}$		desc. node	7790 Apr 10 05:58	0° $\mathbb{Y}$ 04'44	
	7789 May 27 01:32	0° $\mathbb{I}$			7790 Apr 10 04:24	0° $\mathbb{Y}$	
morning set	7789 May 28 21:18	3° $\mathbb{I}$ 10'05			7790 May 01 10:17	0° $\mathbb{B}$	
max. Earth dist.	7789 Jun 01 12:23	9° $\mathbb{I}$ 38'37	1.37507 AU	morning set	7790 May 10 00:33	13° $\mathbb{B}$ 49'52	
superior conj	7789 Jun 08 08:59	22° $\mathbb{I}$ 31'08	-1°05'31	max. Earth dist.	7790 May 14 08:37	21° $\mathbb{B}$ 10'38	1.39738 AU
minimum elong	7789 Jun 08 12:57	22° $\mathbb{I}$ 50'23	1°04'59		7790 May 19 08:49	0° $\mathbb{I}$	
	7789 Jun 12 04:32	0° $\mathbb{E}$		superior conj	7790 May 22 01:30	4° $\mathbb{I}$ 54'02	-1°35'12
asc. node	7789 Jun 15 08:50	6° $\mathbb{E}$ 20'11		minimum elong	7790 May 22 07:00	5° $\mathbb{I}$ 19'19	1°34'37
evening rise	7789 Jun 16 23:51	9° $\mathbb{E}$ 34'48		evening rise	7790 May 31 17:11	23° $\mathbb{I}$ 09'00	
	7789 Jun 28 06:11	0° $\Omega$		asc. node	7790 Jun 02 05:52	26° $\mathbb{I}$ 04'09	
evening max el	7789 Jul 03 17:10	6° $\Omega$ 49'29	19°15'36		7790 Jun 04 07:50	0° $\mathbb{E}$	
retrograde	7789 Jul 12 21:12	11° $\Omega$ 20'58		evening max el	7790 Jun 16 19:44	19° $\mathbb{E}$ 05'32	18°32'37
evening set	7789 Jul 14 18:40	11° $\Omega$ 10'11		retrograde	7790 Jun 24 14:44	22° $\mathbb{E}$ 58'00	
desc. node	7789 Jul 20 08:15	8° $\Omega$ 53'17		evening set	7790 Jun 26 17:53	22° $\mathbb{E}$ 41'32	
inferior conj	7789 Jul 23 07:22	7° $\Omega$ 00'24	-0°54'14	inferior conj	7790 Jul 04 10:49	18° $\mathbb{E}$ 12'54	0°48'52
minimum elong	7789 Jul 23 04:59	7° $\Omega$ 04'22	0°53'24	minimum elong	7790 Jul 04 12:33	18° $\mathbb{E}$ 09'31	0°48'07
min. Earth dist.	7789 Jul 26 00:44	5° $\Omega$ 12'20	0.55980 AU	desc. node	7790 Jul 07 05:17	16° $\mathbb{E}$ 03'44	
morning rise	7789 Jul 31 12:27	2° $\Omega$ 18'04		min. Earth dist.	7790 Jul 07 18:56	15° $\mathbb{E}$ 38'12	0.57766 AU

morning rise	7790 Jul 12 03:45	12°☿53'47		morning rise	7791 Jun 23 13:19	24°♊20'39	
direct	7790 Jul 18 00:14	11°☿26'44		desc. node	7791 Jun 24 02:20	24°♊01'37	
morning max el	7790 Aug 01 09:32	19°☿04'22	26°49'57	direct	7791 Jun 30 00:38	22°♊21'13	
	7790 Aug 10 15:21	0°♊			7791 Jul 14 02:40	0°☿	
	7790 Aug 28 05:03	0°♊		morning max el	7791 Jul 14 09:05	0°☿15'44	27°41'17
asc. node	7790 Aug 29 05:17	2°♊03'54			7791 Aug 04 17:10	0°♊	
morning set	7790 Aug 31 02:20	5°♊59'16		morning set	7791 Aug 15 08:41	20°♊27'18	
				asc. node	7791 Aug 16 02:15	21°♊59'18	
superior conj	7790 Sep 07 01:18	21°♊10'51	1°19'32		7791 Aug 19 19:45	0°♊	
minimum elong	7790 Sep 06 23:06	20°♊58'40	1°19'13	max. Earth dist.	7791 Aug 21 15:22	3°♊59'38	1.31731 AU
max. Earth dist.	7790 Sep 07 05:18	21°♊32'59	1.31757 AU				
	7790 Sep 11 01:18	0°♊		superior conj	7791 Aug 22 12:46	5°♊57'52	1°01'47
evening rise	7790 Sep 13 21:22	6°♊05'51		minimum elong	7791 Aug 22 10:34	5°♊45'43	1°01'21
	7790 Sep 26 10:25	0°♊		evening rise	7791 Aug 29 06:52	20°♊46'20	
desc. node	7790 Oct 03 04:15	10°♊27'34			7791 Sep 02 17:47	0°♊	
evening max el	7790 Oct 14 05:23	23°♊39'34	26°52'00	desc. node	7791 Sep 20 01:19	28°♊19'18	
	7790 Oct 23 16:12	0°♊			7791 Sep 21 10:19	0°♊	
retrograde	7790 Oct 28 03:08	0°♊49'04		evening max el	7791 Sep 26 01:40	4°♊58'07	25°46'22
	7790 Nov 01 11:30	30°♊		retrograde	7791 Oct 10 00:11	12°♊01'51	
evening set	7790 Nov 04 00:50	28°♊46'32		evening set	7791 Oct 16 04:53	10°♊31'36	
min. Earth dist.	7790 Nov 07 19:37	26°♊08'52	0.60245 AU	min. Earth dist.	7791 Oct 20 14:11	7°♊55'28	0.58174 AU
inferior conj	7790 Nov 11 00:07	23°♊32'22	-4°13'40	inferior conj	7791 Oct 23 16:40	5°♊43'00	-5°07'18
minimum elong	7790 Nov 11 07:14	23°♊17'44	4°11'37	minimum elong	7791 Oct 23 22:34	5°♊32'29	5°06'17
morning rise	7790 Nov 18 16:00	18°♊48'17		morning rise	7791 Oct 31 18:34	1°♊21'33	
direct	7790 Nov 20 21:23	18°♊29'27		direct	7791 Nov 03 02:49	1°♊04'07	
asc. node	7790 Nov 25 04:47	19°♊43'47		morning max el	7791 Nov 11 14:15	5°♊09'05	18°43'24
morning max el	7790 Nov 28 08:23	22°♊11'06	18°06'06	asc. node	7791 Nov 12 01:46	5°♊37'31	
	7790 Dec 04 09:39	0°♊			7791 Nov 27 05:41	0°♊	
morning set	7790 Dec 14 01:01	17°♊03'04		morning set	7791 Nov 27 20:56	1°♊14'13	
	7790 Dec 21 00:31	0°♊					
superior conj	7790 Dec 23 18:55	4°♊59'37	0°45'50	superior conj	7791 Dec 06 12:18	17°♊56'26	1°12'34
minimum elong	7790 Dec 23 22:07	5°♊13'55	0°45'31	minimum elong	7791 Dec 06 15:41	18°♊12'21	1°12'17
desc. node	7790 Dec 30 03:22	16°♊03'02			7791 Dec 13 02:37	0°♊	
max. Earth dist.	7790 Dec 31 10:25	18°♊13'56	1.41732 AU	max. Earth dist.	7791 Dec 13 17:06	1°♊03'54	1.39630 AU
evening rise	7791 Jan 05 16:26	26°♊51'17		desc. node	7791 Dec 17 00:22	6°♊46'42	
	7791 Jan 07 15:42	0°♊		evening rise	7791 Dec 17 17:45	8°♊00'21	
	7791 Jan 28 00:35	0°♊			7791 Dec 31 15:32	0°♊	
evening max el	7791 Feb 08 04:25	13°♊29'28	22°47'39	evening max el	7792 Jan 21 18:30	27°♊14'06	24°07'47
retrograde	7791 Feb 18 05:49	19°♊27'30			7792 Jan 24 19:11	0°♊	
asc. node	7791 Feb 21 03:55	18°♊44'27		retrograde	7792 Feb 01 22:32	3°♊47'39	
evening set	7791 Feb 23 00:51	17°♊29'01		evening set	7792 Feb 07 05:53	1°♊35'01	
inferior conj	7791 Feb 28 09:37	11°♊04'45	2°11'20	asc. node	7792 Feb 08 00:58	0°♊51'31	
minimum elong	7791 Feb 28 07:22	11°♊12'36	2°10'40		7792 Feb 08 20:56	30°♊	
min. Earth dist.	7791 Feb 28 02:37	11°♊29'03	0.68370 AU	min. Earth dist.	7792 Feb 11 23:02	26°♊09'14	0.68108 AU
morning rise	7791 Mar 05 13:46	4°♊56'22		inferior conj	7792 Feb 12 17:26	25°♊07'01	1°29'40
direct	7791 Mar 10 01:59	3°♊05'16		minimum elong	7792 Feb 12 15:34	25°♊13'21	1°29'03
morning max el	7791 Mar 18 23:32	8°♊15'48	21°36'24	morning rise	7792 Feb 18 01:18	19°♊04'38	
desc. node	7791 Mar 28 02:56	19°♊15'45		direct	7792 Feb 22 00:10	17°♊35'44	
	7791 Apr 04 18:26	0°♊		morning max el	7792 Feb 29 19:57	22°♊02'08	20°19'54
morning set	7791 Apr 20 00:01	23°♊12'18			7792 Mar 07 13:16	0°♊	
	7791 Apr 24 05:17	0°♊		desc. node	7792 Mar 13 23:54	8°♊58'43	
max. Earth dist.	7791 Apr 26 08:40	3°♊31'00	1.41891 AU		7792 Mar 28 00:09	0°♊	
				morning set	7792 Mar 29 01:17	1°♊37'01	
superior conj	7791 May 03 22:18	16°♊21'15	-1°58'55	max. Earth dist.	7792 Apr 07 16:11	16°♊45'59	1.43698 AU
minimum elong	7791 May 04 03:31	16°♊43'58	1°58'38				
	7791 May 11 14:05	0°♊		superior conj	7792 Apr 13 19:17	26°♊44'49	-2°11'02
evening rise	7791 May 14 22:05	6°♊05'15		minimum elong	7792 Apr 13 20:42	26°♊50'40	2°11'04
asc. node	7791 May 20 02:54	15°♊31'08			7792 Apr 15 18:18	0°♊	
	7791 May 29 11:21	0°♊		evening rise	7792 Apr 26 10:03	18°♊13'46	
evening max el	7791 May 31 05:18	1°♊54'01	18°09'54		7792 May 03 05:23	0°♊	
retrograde	7791 Jun 07 02:28	5°♊22'49		asc. node	7792 May 05 23:58	4°♊35'16	
evening set	7791 Jun 09 13:10	4°♊56'59		evening max el	7792 May 13 18:14	15°♊05'31	18°06'32
inferior conj	7791 Jun 16 11:34	0°♊08'05	2°04'30	retrograde	7792 May 20 04:48	18°♊26'14	
minimum elong	7791 Jun 16 14:40	0°♊01'01	2°03'29	evening set	7792 May 22 22:53	17°♊48'33	
	7791 Jun 16 15:07	30°♊		inferior conj	7792 May 29 06:23	12°♊40'00	2°52'30
min. Earth dist.	7791 Jun 19 19:49	27°♊07'33	0.59945 AU	minimum elong	7792 May 29 08:59	12°♊33'15	2°51'53
				min. Earth dist.	7792 Jun 01 04:57	9°♊38'16	0.62181 AU

morning rise	7792 Jun 04 17:16	6° $\Pi$ 35'04		morning rise	7793 May 18 13:23	19° $\mathcal{B}$ 26'08	
desc. node	7792 Jun 09 23:22	4° $\Pi$ 15'36		direct	7793 May 25 06:50	16° $\mathcal{B}$ 43'14	
direct	7792 Jun 11 11:35	4° $\Pi$ 08'32		desc. node	7793 May 27 20:24	17° $\mathcal{B}$ 04'15	
morning max el	7792 Jun 25 14:34	12° $\Pi$ 10'12	27°54'48	morning max el	7793 Jun 07 23:52	24° $\mathcal{B}$ 42'24	27°31'43
	7792 Jul 09 17:32	0° $\mathcal{E}$			7793 Jun 12 18:53	0° $\Pi$	
	7792 Jul 27 02:22	0° $\Omega$			7793 Jul 03 04:05	0° $\mathcal{E}$	
morning set	7792 Jul 29 09:35	4° $\Omega$ 36'43		morning set	7793 Jul 13 02:34	18° $\mathcal{E}$ 20'18	
asc. node	7792 Aug 01 23:14	12° $\Omega$ 02'27		max. Earth dist.	7793 Jul 17 22:15	28° $\mathcal{E}$ 07'08	1.33074 AU
max. Earth dist.	7792 Aug 03 22:17	16° $\Omega$ 14'28	1.32169 AU		7793 Jul 18 19:50	0° $\Omega$	
				asc. node	7793 Jul 19 20:15	2° $\Omega$ 08'49	
superior conj	7792 Aug 05 22:14	20° $\Omega$ 35'04	0°39'32				
minimum elong	7792 Aug 05 20:32	20° $\Omega$ 25'49	0°39'07	superior conj	7793 Jul 21 03:45	4° $\Omega$ 56'21	0°13'20
	7792 Aug 10 05:22	0° $\mathcal{N}$		minimum elong	7793 Jul 21 03:05	4° $\Omega$ 52'50	0°13'06
evening rise	7792 Aug 12 18:19	5° $\mathcal{N}$ 29'40		behind sun begin	7793 Jul 20 23:57	4° $\Omega$ 36'03	
	7792 Aug 25 15:16	0° $\mathcal{A}$		behind sun end	7793 Jul 21 06:14	5° $\Omega$ 09'39	
desc. node	7792 Sep 05 22:23	14° $\mathcal{A}$ 51'25		evening rise	7793 Jul 28 05:49	20° $\Omega$ 09'45	
evening max el	7792 Sep 06 15:03	15° $\mathcal{A}$ 32'19	24°16'21		7793 Aug 02 00:40	0° $\mathcal{N}$	
retrograde	7792 Sep 20 09:11	22° $\mathcal{A}$ 26'23		evening max el	7793 Aug 19 03:09	25° $\mathcal{N}$ 46'35	22°37'16
evening set	7792 Sep 25 08:12	21° $\mathcal{A}$ 32'06		desc. node	7793 Aug 23 19:28	29° $\mathcal{N}$ 34'50	
min. Earth dist.	7792 Oct 01 01:55	18° $\mathcal{A}$ 39'06	0.56360 AU		7793 Aug 24 11:42	0° $\mathcal{A}$	
inferior conj	7792 Oct 03 13:00	17° $\mathcal{A}$ 07'11	-5°32'18	retrograde	7793 Sep 01 05:48	2° $\mathcal{A}$ 19'00	
minimum elong	7792 Oct 03 13:36	17° $\mathcal{A}$ 06'15	5°32'15	evening set	7793 Sep 04 16:32	1° $\mathcal{A}$ 52'56	
morning rise	7792 Oct 11 21:09	13° $\mathcal{A}$ 06'39			7793 Sep 09 13:29	30° $\mathcal{R}$ $\mathcal{N}$	
direct	7792 Oct 14 13:22	12° $\mathcal{A}$ 47'42		min. Earth dist.	7793 Sep 12 10:31	28° $\mathcal{N}$ 26'57	0.55109 AU
morning max el	7792 Oct 24 09:19	17° $\mathcal{A}$ 25'36	19°42'47	inferior conj	7793 Sep 13 15:04	27° $\mathcal{N}$ 46'23	-5°10'09
asc. node	7792 Oct 28 22:46	22° $\mathcal{A}$ 40'51		minimum elong	7793 Sep 13 08:23	27° $\mathcal{N}$ 55'54	5°09'10
	7792 Nov 02 17:05	0° $\mathcal{M}$		morning rise	7793 Sep 22 02:10	23° $\mathcal{N}$ 58'02	
morning set	7792 Nov 11 00:20	15° $\mathcal{M}$ 45'24		direct	7793 Sep 25 06:16	23° $\mathcal{N}$ 35'03	
	7792 Nov 18 01:31	0° $\mathcal{X}$		morning max el	7793 Oct 06 15:40	28° $\mathcal{N}$ 54'52	21°04'11
					7793 Oct 07 18:20	0° $\mathcal{A}$	
superior conj	7792 Nov 18 21:04	1° $\mathcal{X}$ 37'01	1°30'09	asc. node	7793 Oct 15 19:47	10° $\mathcal{A}$ 39'08	
minimum elong	7792 Nov 18 23:30	1° $\mathcal{X}$ 49'03	1°30'03	morning set	7793 Oct 26 08:35	0° $\mathcal{M}$ 29'28	
max. Earth dist.	7792 Nov 24 22:51	13° $\mathcal{X}$ 17'41	1.37484 AU		7793 Oct 26 02:54	0° $\mathcal{M}$	
evening rise	7792 Nov 28 16:40	20° $\mathcal{X}$ 06'38					
desc. node	7792 Dec 02 21:23	27° $\mathcal{X}$ 24'24		superior conj	7793 Nov 02 16:56	15° $\mathcal{M}$ 49'36	1°39'30
	7792 Dec 04 10:25	0° $\mathcal{Z}$		minimum elong	7793 Nov 02 18:02	15° $\mathcal{M}$ 55'14	1°39'32
	7792 Dec 24 17:13	0° $\approx$		max. Earth dist.	7793 Nov 07 08:31	25° $\mathcal{M}$ 13'13	1.35521 AU
evening max el	7793 Jan 03 07:39	11° $\approx$ 01'20	25°23'10		7793 Nov 09 19:33	0° $\mathcal{X}$	
retrograde	7793 Jan 15 10:44	18° $\approx$ 00'42		evening rise	7793 Nov 11 10:03	3° $\mathcal{X}$ 02'26	
evening set	7793 Jan 21 07:02	15° $\approx$ 35'44		desc. node	7793 Nov 19 18:26	17° $\mathcal{X}$ 51'55	
asc. node	7793 Jan 24 22:02	11° $\approx$ 44'03			7793 Nov 27 09:14	0° $\mathcal{Z}$	
min. Earth dist.	7793 Jan 25 16:53	10° $\approx$ 44'35	0.67465 AU	evening max el	7793 Dec 16 20:49	24° $\mathcal{Z}$ 46'27	26°26'29
inferior conj	7793 Jan 26 22:37	9° $\approx$ 08'41	0°40'07		7793 Dec 23 10:23	0° $\approx$	
minimum elong	7793 Jan 26 21:38	9° $\approx$ 11'50	0°39'49	retrograde	7793 Dec 29 17:49	2° $\approx$ 01'04	
morning rise	7793 Feb 01 12:35	3° $\approx$ 14'13			7794 Jan 04 09:34	30° $\mathcal{R}$ $\mathcal{Z}$	
direct	7793 Feb 04 23:17	2° $\approx$ 05'54		evening set	7794 Jan 05 02:34	29° $\mathcal{Z}$ 27'09	
morning max el	7793 Feb 12 00:21	5° $\approx$ 59'36	19°17'27	min. Earth dist.	7794 Jan 09 05:54	25° $\mathcal{Z}$ 10'55	0.66453 AU
greatest brilliancy	7793 Feb 25 03:36	23° $\approx$ 26'58	-0.7m	inferior conj	7794 Jan 10 23:12	23° $\mathcal{Z}$ 06'15	-0°16'43
desc. node	7793 Feb 28 20:51	29° $\approx$ 04'32		minimum elong	7794 Jan 10 23:39	23° $\mathcal{Z}$ 04'52	0°16'25
	7793 Mar 01 11:24	0° $\mathcal{H}$		asc. node	7794 Jan 11 19:05	22° $\mathcal{Z}$ 06'34	
morning set	7793 Mar 08 00:57	10° $\mathcal{H}$ 05'46		morning rise	7794 Jan 16 21:31	17° $\mathcal{Z}$ 21'59	
	7793 Mar 20 19:28	0° $\mathcal{Y}$		direct	7794 Jan 19 21:39	16° $\mathcal{Z}$ 31'10	
max. Earth dist.	7793 Mar 21 06:45	0° $\mathcal{Y}$ 44'27	1.44939 AU	morning max el	7794 Jan 26 11:42	20° $\mathcal{Z}$ 04'38	18°30'54
					7794 Feb 03 06:02	0° $\approx$	
superior conj	7793 Mar 24 16:00	6° $\mathcal{Y}$ 06'07	-2°05'35	morning set	7794 Feb 15 21:55	19° $\approx$ 43'15	
minimum elong	7793 Mar 24 10:34	5° $\mathcal{Y}$ 44'30	2°05'22	desc. node	7794 Feb 15 17:51	19° $\approx$ 27'08	
evening rise	7793 Apr 08 00:39	29° $\mathcal{Y}$ 25'48			7794 Feb 22 09:58	0° $\mathcal{H}$	
	7793 Apr 08 08:55	0° $\mathcal{B}$					
asc. node	7793 Apr 22 21:02	23° $\mathcal{B}$ 08'28		superior conj	7794 Mar 03 21:38	14° $\mathcal{H}$ 53'08	-1°40'01
evening max el	7793 Apr 27 07:16	28° $\mathcal{B}$ 30'53	18°21'47	minimum elong	7794 Mar 03 12:03	14° $\mathcal{H}$ 15'36	1°39'05
	7793 Apr 28 23:00	0° $\Pi$		max. Earth dist.	7794 Mar 04 01:29	15° $\mathcal{H}$ 08'12	1.45477 AU
retrograde	7793 May 03 17:16	1° $\Pi$ 57'52			7794 Mar 13 12:48	0° $\mathcal{Y}$	
evening set	7793 May 06 18:26	1° $\Pi$ 06'54		evening rise	7794 Mar 19 15:49	9° $\mathcal{Y}$ 40'59	
	7793 May 08 09:42	30° $\mathcal{R}$ $\mathcal{B}$		greatest brilliancy	7794 Mar 28 18:27	24° $\mathcal{Y}$ 05'40	-0.8m
inferior conj	7793 May 12 15:05	25° $\mathcal{B}$ 40'08	3°17'39		7794 Apr 01 14:29	0° $\mathcal{B}$	
minimum elong	7793 May 12 16:24	25° $\mathcal{B}$ 36'20	3°17'26	asc. node	7794 Apr 09 18:07	11° $\mathcal{B}$ 01'17	
min. Earth dist.	7793 May 14 23:17	22° $\mathcal{B}$ 58'10	0.64215 AU	evening max el	7794 Apr 10 17:48	12° $\mathcal{B}$ 04'00	18°54'49



retrograde	7794 Apr 17 11:59	15°♄50'02		evening max el	7795 Mar 24 23:53	25°♄40'41	19°44'25
evening set	7794 Apr 20 20:27	14°♄45'03		asc. node	7795 Mar 27 15:11	28°♄01'37	
inferior conj	7794 Apr 26 09:54	9°♄01'46	3°24'53	retrograde	7795 Apr 01 09:49	29°♄56'31	
minimum elong	7794 Apr 26 09:50	9°♄01'57	3°24'49	evening set	7795 Apr 05 02:22	28°♄36'59	
min. Earth dist.	7794 Apr 28 02:41	6°♄53'39	0.65893 AU	inferior conj	7795 Apr 10 11:37	22°♄39'09	3°18'04
morning rise	7794 May 01 22:43	2°♄44'21		minimum elong	7795 Apr 10 10:26	22°♄43'04	3°17'53
	7794 May 07 12:42	30°♄		min. Earth dist.	7795 Apr 11 13:37	21°♄12'28	0.67145 AU
direct	7794 May 08 09:16	29°♄57'15		morning rise	7795 Apr 15 18:14	16°♄21'53	
	7794 May 09 06:12	0°♄		direct	7795 Apr 21 17:54	13°♄41'40	
desc. node	7794 May 14 17:26	2°♄05'34		desc. node	7795 May 01 14:26	18°♄47'41	
morning max el	7794 May 21 10:25	7°♄41'55	26°37'53	morning max el	7795 May 03 20:10	20°♄56'35	25°22'10
	7794 Jun 07 17:55	0°♄			7795 May 11 15:46	0°♄	
	7794 Jun 25 13:31	0°♄			7795 May 31 22:36	0°♄	
morning set	7794 Jun 26 08:26	1°♄29'04		morning set	7795 Jun 08 22:55	13°♄51'45	
max. Earth dist.	7794 Jun 30 12:04	9°♄32'05	1.34457 AU	max. Earth dist.	7795 Jun 12 14:57	20°♄36'51	1.36286 AU
					7795 Jun 17 12:05	0°♄	
superior conj	7794 Jul 05 03:01	18°♄55'04	-0°16'05	superior conj	7795 Jun 18 17:16	2°♄24'17	-0°47'23
minimum elong	7794 Jul 05 03:55	18°♄59'43	0°16'01	minimum elong	7795 Jun 18 20:06	2°♄38'21	0°46'59
behind sun begin	7794 Jul 05 03:29	18°♄57'30		asc. node	7795 Jun 23 14:18	12°♄14'46	
behind sun end	7794 Jul 05 04:20	19°♄01'56		evening rise	7795 Jun 26 20:52	18°♄55'06	
asc. node	7794 Jul 06 17:17	22°♄14'09			7795 Jul 02 12:06	0°♄	
	7794 Jul 10 09:55	0°♄		evening max el	7795 Jul 14 07:17	17°♄25'49	19°49'47
evening rise	7794 Jul 12 15:24	4°♄40'15		retrograde	7795 Jul 24 10:37	22°♄25'27	
	7794 Jul 26 16:21	0°♄		evening set	7795 Jul 26 07:19	22°♄16'04	
evening max el	7794 Jul 31 22:45	6°♄16'01	21°05'04	desc. node	7795 Jul 28 13:37	21°♄41'13	
desc. node	7794 Aug 10 16:33	11°♄56'57		inferior conj	7795 Aug 04 05:47	18°♄14'49	-2°01'41
retrograde	7794 Aug 12 18:48	12°♄07'43		minimum elong	7795 Aug 04 00:11	18°♄23'24	1°59'40
evening set	7794 Aug 15 01:29	11°♄55'30		min. Earth dist.	7795 Aug 06 07:23	16°♄58'49	0.55255 AU
inferior conj	7794 Aug 24 07:50	7°♄58'12	-3°53'45	morning rise	7795 Aug 12 15:05	13°♄52'51	
minimum elong	7794 Aug 23 22:26	8°♄11'27	3°51'03	direct	7795 Aug 17 04:01	13°♄07'26	
min. Earth dist.	7794 Aug 24 19:37	7°♄41'33	0.54699 AU	morning max el	7795 Aug 30 23:44	19°♄58'10	24°28'43
morning rise	7794 Sep 01 19:52	4°♄03'08			7795 Sep 08 12:14	0°♄	
direct	7794 Sep 05 14:22	3°♄32'37		asc. node	7795 Sep 19 13:47	18°♄29'25	
morning max el	7794 Sep 18 10:40	9°♄39'41	22°43'10	morning set	7795 Sep 25 07:13	0°♄09'20	
asc. node	7794 Oct 02 16:47	29°♄18'43			7795 Sep 25 05:28	0°♄	
	7794 Oct 03 01:56	0°♄		superior conj	7795 Oct 02 04:42	15°♄08'46	1°37'25
morning set	7794 Oct 10 19:28	15°♄19'05		minimum elong	7795 Oct 02 03:25	15°♄01'45	1°37'23
superior conj	7794 Oct 17 20:23	0°♄22'53	1°41'37	max. Earth dist.	7795 Oct 04 02:49	19°♄19'06	1.32720 AU
minimum elong	7794 Oct 17 20:09	0°♄21'42	1°41'41		7795 Oct 09 04:31	0°♄	
	7794 Oct 17 16:05	0°♄		evening rise	7795 Oct 09 12:26	0°♄40'22	
max. Earth dist.	7794 Oct 21 01:35	7°♄09'28	1.33905 AU	desc. node	7795 Oct 24 12:31	27°♄50'24	
evening rise	7794 Oct 25 17:50	16°♄36'46			7795 Oct 25 21:40	0°♄	
	7794 Nov 01 22:08	0°♄		evening max el	7795 Nov 11 21:05	21°♄31'09	27°28'43
desc. node	7794 Nov 06 15:28	8°♄02'56		retrograde	7795 Nov 25 14:03	28°♄49'19	
	7794 Nov 21 20:24	0°♄		evening set	7795 Dec 02 15:40	26°♄17'41	
evening max el	7794 Nov 29 09:41	8°♄19'56	27°10'39	min. Earth dist.	7795 Dec 06 08:55	23°♄06'39	0.63389 AU
retrograde	7794 Dec 12 19:09	15°♄40'10		inferior conj	7795 Dec 09 01:07	20°♄26'07	-2°27'44
evening set	7794 Dec 19 14:20	13°♄03'10		minimum elong	7795 Dec 09 05:44	20°♄14'34	2°25'50
min. Earth dist.	7794 Dec 23 11:54	9°♄21'02	0.65083 AU	morning rise	7795 Dec 15 21:40	15°♄10'18	
inferior conj	7794 Dec 25 16:54	6°♄54'00	-1°19'58	asc. node	7795 Dec 16 13:13	14°♄57'35	
minimum elong	7794 Dec 25 19:17	6°♄47'23	1°18'50	direct	7795 Dec 18 06:45	14°♄43'06	
asc. node	7794 Dec 29 16:09	2°♄55'30		morning max el	7795 Dec 24 20:49	18°♄07'29	17°48'22
morning rise	7795 Jan 01 01:35	1°♄22'31			7796 Jan 02 11:49	0°♄	
direct	7795 Jan 03 17:00	0°♄45'29		morning set	7796 Jan 10 05:01	13°♄09'59	
morning max el	7795 Jan 10 03:31	4°♄09'44	18°01'00	desc. node	7796 Jan 20 11:45	0°♄42'04	
	7795 Jan 27 12:37	0°♄			7796 Jan 20 01:39	0°♄	
morning set	7795 Jan 28 00:23	0°♄48'38		superior conj	7796 Jan 22 11:41	4°♄00'30	-0°14'27
desc. node	7795 Feb 02 14:48	10°♄00'57		minimum elong	7796 Jan 22 10:08	3°♄54'10	0°14'07
superior conj	7795 Feb 11 06:40	23°♄56'50	-0°59'28	behind sun begin	7796 Jan 22 05:32	3°♄35'11	
minimum elong	7795 Feb 10 23:43	23°♄29'15	0°58'29	behind sun end	7796 Jan 22 14:45	4°♄13'08	
max. Earth dist.	7795 Feb 14 20:57	29°♄37'27	1.45264 AU	max. Earth dist.	7796 Jan 28 14:41	13°♄56'19	1.44344 AU
	7795 Feb 15 02:42	0°♄		evening rise	7796 Feb 06 21:57	28°♄30'07	
evening rise	7795 Feb 27 11:03	19°♄11'54			7796 Feb 07 21:22	0°♄	
	7795 Mar 06 11:47	0°♄			7796 Feb 28 08:12	0°♄	
greatest brilliancy	7795 Mar 13 06:14	10°♄12'40	-0.7m				

evening max el	7796 Mar 07 00:34	9°♿18'49	20°48'09	minimum elong	7797 Jan 02 20:47	15°♿28'38	0°26'00
asc. node	7796 Mar 13 12:16	13°♿54'45		desc. node	7797 Jan 06 08:43	21°♿27'15	
retrograde	7796 Mar 15 08:16	14°♿12'03		max. Earth dist.	7797 Jan 10 05:06	27°♿51'38	1.42821 AU
evening set	7796 Mar 19 10:06	12°♿37'28			7797 Jan 11 12:31	0°≈	
inferior conj	7796 Mar 24 17:39	6°♿27'17	2°59'43	evening rise	7797 Jan 16 16:11	8°≈14'31	
minimum elong	7796 Mar 24 15:43	6°♿33'57	2°59'20		7797 Jan 31 02:09	0°♿	
min. Earth dist.	7796 Mar 25 06:02	5°♿44'38	0.67960 AU	evening max el	7797 Feb 17 20:05	22°♿58'55	22°02'16
morning rise	7796 Mar 29 21:07	0°♿12'25		retrograde	7797 Feb 27 05:33	28°♿33'01	
	7796 Mar 30 02:44	30°♿♿		asc. node	7797 Feb 28 09:20	28°♿26'09	
direct	7796 Apr 04 07:37	27°♿47'36		evening set	7797 Mar 03 18:01	26°♿43'09	
	7796 Apr 10 05:16	0°♿		inferior conj	7797 Mar 09 01:52	20°♿23'14	2°31'34
morning max el	7796 Apr 15 05:01	4°♿18'04	23°54'38	minimum elong	7797 Mar 08 23:36	20°♿31'07	2°30'59
desc. node	7796 Apr 17 11:23	6°♿42'37		min. Earth dist.	7797 Mar 09 01:41	20°♿23'53	0.68344 AU
	7796 May 04 22:18	0°♿		morning rise	7797 Mar 14 05:01	14°♿12'17	
morning set	7796 May 20 16:35	25°♿12'54		direct	7797 Mar 19 01:26	12°♿08'09	
	7796 May 23 10:43	0°♿		morning max el	7797 Mar 28 15:45	17°♿46'59	22°25'18
max. Earth dist.	7796 May 24 11:08	1°♿47'49	1.38441 AU	desc. node	7797 Apr 04 08:19	25°♿30'17	
					7797 Apr 07 18:39	0°♿	
superior conj	7796 May 31 18:55	15°♿14'22	-1°18'33		7797 Apr 28 00:48	0°♿	
minimum elong	7796 May 31 23:39	15°♿36'50	1°17'56	morning set	7797 May 01 08:04	5°♿19'20	
	7796 Jun 08 09:38	0°♿		max. Earth dist.	7797 May 06 08:29	13°♿39'21	1.40684 AU
asc. node	7796 Jun 09 11:19	2°♿06'00					
evening rise	7796 Jun 09 19:30	2°♿46'10		superior conj	7797 May 14 03:39	27°♿15'09	-1°46'17
evening max el	7796 Jun 26 04:13	29°♿19'29	18°54'52	minimum elong	7797 May 14 09:21	27°♿40'47	1°45'48
	7796 Jun 26 21:22	0°♿			7797 May 15 16:10	0°♿	
retrograde	7796 Jul 04 16:45	3°♿32'09		evening rise	7797 May 24 08:01	16°♿05'19	
evening set	7796 Jul 06 16:17	3°♿19'24		asc. node	7797 May 27 08:21	21°♿43'26	
	7796 Jul 13 11:45	30°♿♿			7797 May 31 23:01	0°♿	
desc. node	7796 Jul 14 10:42	29°♿20'12		evening max el	7797 Jun 09 10:15	11°♿50'33	18°20'32
inferior conj	7796 Jul 14 20:47	29°♿02'24	-0°07'37	retrograde	7797 Jun 16 18:19	15°♿30'46	
minimum elong	7796 Jul 14 20:28	29°♿02'58	0°07'37	evening set	7797 Jun 19 00:48	15°♿10'32	
transit middle	7796 Jul 14 20:28	29°♿02'58	0°07'37	inferior conj	7797 Jun 26 09:28	10°♿33'00	1°24'30
transit begin	7796 Jul 14 17:10	29°♿08'47		minimum elong	7797 Jun 26 12:05	10°♿27'32	1°23'30
transit end	7796 Jul 14 23:45	28°♿57'07		min. Earth dist.	7797 Jun 29 19:05	7°♿44'43	0.58672 AU
min. Earth dist.	7796 Jul 17 22:37	26°♿52'24	0.56675 AU	desc. node	7797 Jul 01 07:44	6°♿35'50	
morning rise	7796 Jul 22 21:18	24°♿04'04		morning rise	7797 Jul 03 20:09	5°♿00'53	
direct	7796 Jul 28 07:05	22°♿54'16		direct	7797 Jul 09 23:55	3°♿20'08	
	7796 Aug 11 06:15	0°♿		morning max el	7797 Jul 24 09:08	11°♿05'05	27°16'12
morning max el	7796 Aug 11 13:35	0°♿17'29	26°05'02		7797 Aug 08 01:48	0°♿	
	7796 Sep 01 07:36	0°♿		asc. node	7797 Aug 23 07:43	27°♿51'18	
asc. node	7796 Sep 05 10:45	8°♿02'24		morning set	7797 Aug 24 02:46	29°♿31'02	
morning set	7796 Sep 08 18:12	14°♿54'56			7797 Aug 24 08:15	0°♿	
superior conj	7796 Sep 15 15:43	29°♿59'48	1°27'34	superior conj	7797 Aug 31 03:32	14°♿49'55	1°12'35
minimum elong	7796 Sep 15 13:44	29°♿48'49	1°27'21	minimum elong	7797 Aug 31 01:16	14°♿37'24	1°12'12
	7796 Sep 15 15:45	0°♿		max. Earth dist.	7797 Aug 30 20:43	14°♿12'08	1.31698 AU
max. Earth dist.	7796 Sep 16 10:19	1°♿42'34	1.31984 AU	evening rise	7797 Sep 06 22:17	29°♿40'47	
evening rise	7796 Sep 22 14:45	15°♿04'16			7797 Sep 07 01:54	0°♿	
	7796 Sep 30 04:20	0°♿			7797 Sep 23 10:27	0°♿	
desc. node	7796 Oct 10 09:35	17°♿04'36		desc. node	7797 Sep 27 06:41	5°♿31'44	
	7796 Oct 20 05:18	0°♿		evening max el	7797 Oct 06 05:47	15°♿55'54	26°27'46
evening max el	7796 Oct 24 04:47	4°♿07'22	27°15'14	retrograde	7797 Oct 20 03:46	23°♿02'07	
retrograde	7796 Nov 07 01:22	11°♿19'27		evening set	7797 Oct 26 19:59	21°♿12'23	
evening set	7796 Nov 14 03:04	9°♿03'27		min. Earth dist.	7797 Oct 30 19:13	18°♿37'42	0.59356 AU
min. Earth dist.	7796 Nov 17 19:29	6°♿16'47	0.61438 AU	inferior conj	7797 Nov 03 00:08	16°♿09'34	-4°38'47
inferior conj	7796 Nov 20 20:44	3°♿34'47	-3°36'21	minimum elong	7797 Nov 03 07:10	15°♿55'59	4°37'04
minimum elong	7796 Nov 21 03:18	3°♿20'14	3°34'07	morning rise	7797 Nov 10 20:38	11°♿34'51	
	7796 Nov 25 09:09	30°♿♿		direct	7797 Nov 13 02:49	11°♿16'50	
morning rise	7796 Nov 28 05:42	28°♿37'55		asc. node	7797 Nov 19 07:14	13°♿40'26	
direct	7796 Nov 30 11:27	28°♿16'53		morning max el	7797 Nov 20 22:54	15°♿06'59	18°19'20
asc. node	7796 Dec 02 10:14	28°♿33'24			7797 Dec 01 05:38	0°♿	
	7796 Dec 05 08:22	0°♿		morning set	7797 Dec 06 19:23	10°♿23'13	
morning max el	7796 Dec 07 12:27	1°♿49'51	17°54'01				
morning set	7796 Dec 23 05:18	26°♿27'34		superior conj	7797 Dec 16 00:52	27°♿44'30	0°58'20
	7796 Dec 25 04:01	0°♿		minimum elong	7797 Dec 16 04:20	28°♿00'22	0°57'59
					7797 Dec 17 06:40	0°♿	
superior conj	7797 Jan 02 18:34	15°♿19'03	0°26'12	max. Earth dist.	7797 Dec 23 14:45	11°♿08'45	1.40864 AU

desc. node	7797 Dec 24 05:43	12° $\text{S}$ 12'30		max. Earth dist.	7798 Dec 05 20:33	23° $\text{N}$ 42'19	1.38710 AU
evening rise	7797 Dec 28 04:50	18° $\text{S}$ 49'36			7798 Dec 09 10:07	0° $\text{S}$	
	7798 Jan 04 05:06	0° $\approx$		evening rise	7798 Dec 09 15:38	0° $\text{S}$ 23'53	
	7798 Jan 25 12:40	0° $\text{H}$		desc. node	7798 Dec 11 02:45	2° $\text{S}$ 54'23	
evening max el	7798 Jan 31 11:31	6° $\text{H}$ 41'07	23°21'49		7798 Dec 28 12:53	0° $\approx$	
retrograde	7798 Feb 11 00:13	12° $\text{H}$ 54'45		evening max el	7799 Jan 14 00:51	20° $\approx$ 26'32	24°40'40
asc. node	7798 Feb 15 06:25	11° $\text{H}$ 25'16		retrograde	7799 Jan 25 15:15	27° $\approx$ 12'46	
evening set	7798 Feb 16 00:32	10° $\text{H}$ 49'52		evening set	7799 Jan 31 04:08	24° $\approx$ 54'19	
inferior conj	7798 Feb 21 10:20	4° $\text{H}$ 23'37	1°54'37	asc. node	7799 Feb 02 03:28	22° $\approx$ 57'03	
minimum elong	7798 Feb 21 08:11	4° $\text{H}$ 31'02	1°53'58	min. Earth dist.	7799 Feb 04 17:57	19° $\approx$ 43'20	0.67885 AU
min. Earth dist.	7798 Feb 20 22:23	5° $\text{H}$ 04'41	0.68312 AU	inferior conj	7799 Feb 05 17:16	18° $\approx$ 25'53	1°09'33
	7798 Feb 24 20:57	30° $\text{R}$ $\approx$		minimum elong	7799 Feb 05 15:42	18° $\approx$ 31'04	1°09'03
morning rise	7798 Feb 26 15:47	28° $\approx$ 17'51		morning rise	7799 Feb 11 03:28	12° $\approx$ 26'48	
direct	7798 Mar 02 22:14	26° $\approx$ 36'22		direct	7799 Feb 14 20:54	11° $\approx$ 07'11	
	7798 Mar 09 19:12	0° $\text{H}$		morning max el	7799 Feb 22 07:56	15° $\approx$ 18'16	19°51'25
morning max el	7798 Mar 11 07:58	1° $\text{H}$ 26'27	21°02'23		7799 Mar 05 19:17	0° $\text{H}$	
desc. node	7798 Mar 22 05:16	14° $\text{H}$ 55'49		greatest brilliancy	7799 Mar 07 08:23	2° $\text{H}$ 14'56	-0.6m
	7798 Apr 01 14:14	0° $\text{Y}$		desc. node	7799 Mar 09 02:15	4° $\text{H}$ 49'09	
morning set	7798 Apr 10 20:31	14° $\text{Y}$ 12'04		morning set	7799 Mar 20 17:54	22° $\text{H}$ 29'05	
max. Earth dist.	7798 Apr 18 12:05	26° $\text{Y}$ 25'16	1.42719 AU		7799 Mar 25 14:16	0° $\text{Y}$	
	7798 Apr 20 16:25	0° $\text{B}$		max. Earth dist.	7799 Mar 31 22:38	9° $\text{Y}$ 59'41	1.44302 AU
superior conj	7798 Apr 25 14:40	8° $\text{B}$ 15'31	-2°05'50	superior conj	7799 Apr 06 00:50	18° $\text{Y}$ 10'21	-2°11'10
minimum elong	7798 Apr 25 18:46	8° $\text{B}$ 33'00	2°05'43	minimum elong	7799 Apr 05 23:30	18° $\text{Y}$ 04'54	2°11'11
evening rise	7798 May 07 06:17	28° $\text{B}$ 42'31			7799 Apr 13 05:10	0° $\text{B}$	
	7798 May 07 23:34	0° $\text{II}$		evening rise	7799 Apr 19 09:38	10° $\text{B}$ 27'31	
asc. node	7798 May 14 05:24	11° $\text{II}$ 01'35		asc. node	7799 May 01 02:28	29° $\text{B}$ 53'25	
evening max el	7798 May 23 21:36	24° $\text{II}$ 49'29	18°06'08		7799 May 01 04:12	0° $\text{II}$	
retrograde	7798 May 30 13:02	28° $\text{II}$ 13'21		evening max el	7799 May 07 10:51	8° $\text{II}$ 07'05	18°10'49
evening set	7798 Jun 02 02:53	27° $\text{II}$ 42'43		retrograde	7799 May 13 20:14	11° $\text{II}$ 29'11	
inferior conj	7798 Jun 08 18:24	22° $\text{II}$ 44'59	2°27'59	evening set	7799 May 16 17:12	10° $\text{II}$ 46'09	
minimum elong	7798 Jun 08 21:27	22° $\text{II}$ 37'37	2°27'06	inferior conj	7799 May 22 19:37	5° $\text{II}$ 29'44	3°05'40
min. Earth dist.	7798 Jun 11 23:14	19° $\text{II}$ 41'14	0.60899 AU	minimum elong	7799 May 22 21:43	5° $\text{II}$ 24'01	3°05'14
morning rise	7798 Jun 15 13:37	16° $\text{II}$ 48'43		min. Earth dist.	7799 May 25 12:27	2° $\text{II}$ 33'54	0.63071 AU
desc. node	7798 Jun 18 04:45	15° $\text{II}$ 24'48			7799 May 28 04:46	30° $\text{R}$ $\text{B}$	
direct	7798 Jun 22 04:41	14° $\text{II}$ 37'05		morning rise	7799 May 29 00:45	29° $\text{B}$ 19'45	
morning max el	7798 Jul 06 11:36	22° $\text{II}$ 35'39	27°51'54	direct	7799 Jun 04 19:26	26° $\text{B}$ 44'39	
	7798 Jul 13 00:41	0° $\text{S}$		desc. node	7799 Jun 05 01:48	26° $\text{B}$ 44'52	
	7798 Aug 01 05:24	0° $\Omega$			7799 Jun 13 06:13	0° $\text{II}$	
morning set	7798 Aug 08 07:08	13° $\Omega$ 52'43		morning max el	7799 Jun 18 19:12	4° $\text{II}$ 47'38	27°49'19
asc. node	7798 Aug 10 04:42	17° $\Omega$ 51'02			7799 Jul 07 18:04	0° $\text{S}$	
max. Earth dist.	7798 Aug 14 06:10	26° $\Omega$ 36'48	1.31860 AU	morning set	7799 Jul 23 05:00	27° $\text{S}$ 52'11	
					7799 Jul 24 06:16	0° $\Omega$	
superior conj	7798 Aug 15 14:24	29° $\Omega$ 33'54	0°52'54	asc. node	7799 Jul 28 01:42	7° $\Omega$ 55'59	
minimum elong	7798 Aug 15 12:21	29° $\Omega$ 22'38	0°52'26	max. Earth dist.	7799 Jul 28 10:32	8° $\Omega$ 42'56	1.32485 AU
	7798 Aug 15 19:08	0° $\text{M}$					
evening rise	7798 Aug 22 08:53	14° $\text{M}$ 23'48		superior conj	7799 Jul 30 22:25	14° $\Omega$ 04'53	0°28'54
	7798 Aug 30 02:41	0° $\underline{\text{A}}$		minimum elong	7799 Jul 30 21:06	13° $\Omega$ 57'45	0°28'31
desc. node	7798 Sep 14 03:46	22° $\underline{\text{A}}$ 53'27		evening rise	7799 Aug 06 20:33	29° $\Omega$ 06'04	
evening max el	7798 Sep 17 22:40	26° $\underline{\text{A}}$ 53'55	25°10'14		7799 Aug 07 06:41	0° $\text{M}$	
	7798 Sep 21 14:29	0° $\text{M}$			7799 Aug 24 03:59	0° $\underline{\text{A}}$	
retrograde	7798 Oct 01 19:57	3° $\text{M}$ 54'44		evening max el	7799 Aug 30 10:20	7° $\underline{\text{A}}$ 15'06	23°34'23
evening set	7798 Oct 07 13:46	2° $\text{M}$ 39'31		desc. node	7799 Sep 01 00:52	8° $\underline{\text{A}}$ 43'25	
	7798 Oct 12 09:25	30° $\text{R}$ $\underline{\text{A}}$		retrograde	7799 Sep 13 00:08	14° $\underline{\text{A}}$ 02'53	
min. Earth dist.	7798 Oct 12 10:12	29° $\underline{\text{A}}$ 58'44	0.57356 AU	evening set	7799 Sep 17 07:32	13° $\underline{\text{A}}$ 22'14	
inferior conj	7798 Oct 15 08:16	28° $\underline{\text{A}}$ 01'28	-5°22'30	min. Earth dist.	7799 Sep 23 20:19	10° $\underline{\text{A}}$ 16'44	0.55737 AU
minimum elong	7798 Oct 15 12:25	27° $\underline{\text{A}}$ 54'28	5°22'01	inferior conj	7799 Sep 25 20:13	9° $\underline{\text{A}}$ 05'27	-5°29'34
morning rise	7798 Oct 23 13:22	23° $\underline{\text{A}}$ 49'51		minimum elong	7799 Sep 25 17:38	9° $\underline{\text{A}}$ 09'18	5°29'26
direct	7798 Oct 26 00:30	23° $\underline{\text{A}}$ 32'06		morning rise	7799 Oct 04 05:57	5° $\underline{\text{A}}$ 11'48	
morning max el	7798 Nov 04 00:41	27° $\underline{\text{A}}$ 49'21	19°05'55	direct	7799 Oct 07 02:35	4° $\underline{\text{A}}$ 51'37	
asc. node	7798 Nov 06 04:14	0° $\text{M}$ 06'08		morning max el	7799 Oct 17 14:34	9° $\underline{\text{A}}$ 46'40	20°14'49
	7798 Nov 06 02:07	0° $\text{M}$		asc. node	7799 Oct 24 01:14	17° $\underline{\text{A}}$ 34'25	
morning set	7798 Nov 20 18:54	24° $\text{M}$ 44'29			7799 Oct 31 07:40	0° $\text{M}$	
	7798 Nov 23 10:27	0° $\text{N}$		morning set	7799 Nov 05 00:38	9° $\text{M}$ 21'35	
superior conj	7798 Nov 29 01:29	11° $\text{N}$ 02'29	1°21'05	superior conj	7799 Nov 12 15:28	24° $\text{M}$ 58'03	1°35'02
minimum elong	7798 Nov 29 04:33	11° $\text{N}$ 17'13	1°20'51	minimum elong	7799 Nov 12 17:21	25° $\text{M}$ 07'32	1°35'00

	7799 Nov 15 04:02	0°♊		superior conj	7800 Oct 27 14:52	9°♎19'59	1°41'12
max. Earth dist.	7799 Nov 18 02:53	5°♊43'33	1.36615 AU	minimum elong	7800 Oct 27 15:23	9°♎22'41	1°41'16
evening rise	7799 Nov 21 22:53	12°♊52'24		max. Earth dist.	7800 Oct 31 15:18	17°♎36'30	1.34789 AU
desc. node	7799 Nov 27 23:49	23°♊28'21		evening rise	7800 Nov 04 22:51	26°♎05'45	
	7799 Dec 01 22:48	0°♋			7800 Nov 07 00:30	0°♊	
	7799 Dec 23 13:38	0°♋		desc. node	7800 Nov 14 20:52	13°♊49'29	
evening max el	7799 Dec 27 13:51	4°♋13'23	25°51'58		7800 Nov 25 08:43	0°♋	
retrograde	7800 Jan 09 01:35	11°♋21'19		evening max el	7800 Dec 10 03:10	17°♋55'17	26°48'08
evening set	7800 Jan 15 03:11	8°♋52'01		retrograde	7800 Dec 23 06:19	25°♋13'08	
min. Earth dist.	7800 Jan 19 10:09	4°♋15'32	0.67076 AU	evening set	7800 Dec 29 19:41	22°♋37'26	
asc. node	7800 Jan 20 00:32	3°♋30'31		min. Earth dist.	7801 Jan 02 20:35	18°♋35'34	0.65911 AU
inferior conj	7800 Jan 20 20:46	2°♋26'36	0°16'53	inferior conj	7801 Jan 04 18:44	16°♋20'43	-0°42'49
minimum elong	7800 Jan 20 20:20	2°♋27'59	0°16'48	minimum elong	7801 Jan 04 19:57	16°♋17'10	0°42'11
	7800 Jan 22 20:49	30°♋♋		asc. node	7801 Jan 06 21:36	13°♋57'10	
morning rise	7800 Jan 26 14:01	26°♋36'02		morning rise	7801 Jan 10 21:13	10°♋41'15	
direct	7800 Jan 29 19:54	25°♋35'43		direct	7801 Jan 13 17:24	9°♋56'42	
morning max el	7800 Feb 05 15:32	29°♋19'48	18°55'33	morning max el	7801 Jan 20 05:01	13°♋25'06	18°16'01
	7800 Feb 06 07:18	0°♌			7801 Feb 01 04:24	0°♌	
desc. node	7800 Feb 23 23:13	25°♌02'50		morning set	7801 Feb 08 09:56	11°♌36'21	
	7800 Feb 27 03:38	0°♍		desc. node	7801 Feb 10 20:11	15°♌30'35	
morning set	7800 Feb 28 00:30	1°♍21'15			7801 Feb 19 22:33	0°♍	
max. Earth dist.	7800 Mar 14 14:48	24°♍09'19	1.45255 AU				
				superior conj	7801 Feb 23 18:02	5°♍59'59	-1°24'04
superior conj	7800 Mar 16 13:27	27°♍12'39	-1°57'06	minimum elong	7801 Feb 23 08:50	5°♍23'52	1°23'00
minimum elong	7800 Mar 16 05:30	26°♍41'21	1°56'34	max. Earth dist.	7801 Feb 25 10:14	8°♍37'34	1.45482 AU
	7800 Mar 18 07:55	0°♎			7801 Mar 11 02:36	0°♎	
evening rise	7800 Mar 31 14:18	21°♎14'45		evening rise	7801 Mar 11 20:02	1°♎08'07	
	7800 Apr 05 23:32	0°♏		greatest brilliancy	7801 Mar 23 03:08	18°♎41'16	-0.8m
asc. node	7800 Apr 17 23:33	18°♏10'59			7801 Mar 30 22:43	0°♏	
evening max el	7800 Apr 20 23:08	21°♏36'40	18°33'46	evening max el	7801 Apr 04 08:02	5°♏11'59	19°14'02
retrograde	7800 Apr 27 11:41	25°♏10'15		asc. node	7801 Apr 04 20:38	5°♏43'07	
evening set	7800 Apr 30 15:51	24°♏13'32		retrograde	7801 Apr 11 07:55	9°♏09'03	
inferior conj	7800 May 06 09:03	18°♏39'50	3°22'39	evening set	7801 Apr 14 19:47	7°♏57'50	
minimum elong	7800 May 06 09:46	18°♏37'40	3°22'31	inferior conj	7801 Apr 20 07:07	2°♏08'18	3°23'30
min. Earth dist.	7800 May 08 10:50	16°♏10'37	0.64978 AU	minimum elong	7801 Apr 20 06:33	2°♏10'09	3°23'24
morning rise	7800 May 12 02:55	12°♏23'50		min. Earth dist.	7801 Apr 21 17:31	0°♏17'17	0.66489 AU
direct	7800 May 18 18:11	9°♏37'16			7801 Apr 21 22:57	30°♎♎	
desc. node	7800 May 22 22:48	10°♏33'38		morning rise	7801 Apr 25 16:57	25°♎50'53	
morning max el	7800 Jun 01 05:12	17°♏32'28	27°12'03	direct	7801 May 01 23:23	23°♎05'25	
	7800 Jun 11 14:47	0°♐		desc. node	7801 May 09 19:47	26°♎21'16	
	7800 Jun 30 15:30	0°♑			7801 May 13 23:51	0°♑	
morning set	7800 Jul 06 17:40	11°♑21'52		morning max el	7801 May 14 15:17	0°♑38'32	26°07'40
max. Earth dist.	7800 Jul 11 06:06	20°♑21'54	1.33598 AU		7801 Jun 05 14:25	0°♐	
asc. node	7800 Jul 14 22:44	28°♑02'18		morning set	7801 Jun 19 17:29	24°♐11'39	
					7801 Jun 22 19:14	0°♑	
superior conj	7800 Jul 15 01:34	28°♑17'16	0°01'13	max. Earth dist.	7801 Jun 23 14:57	1°♑35'07	1.35190 AU
minimum elong	7800 Jul 15 01:30	28°♑16'56	0°01'05				
behind sun begin	7800 Jul 14 19:57	27°♑47'37		superior conj	7801 Jun 28 21:20	12°♑03'56	-0°29'14
behind sun end	7800 Jul 15 07:04	28°♑46'18		minimum elong	7801 Jun 28 23:02	12°♑12'31	0°29'00
	7800 Jul 15 20:59	0°♒		asc. node	7801 Jul 01 19:46	18°♑05'54	
evening rise	7800 Jul 22 07:26	13°♒042'16		evening rise	7801 Jul 06 15:31	28°♑06'24	
	7800 Jul 30 13:19	0°♓			7801 Jul 07 13:38	0°♒	
evening max el	7800 Aug 12 00:44	17°♓31'51	21°56'34	evening max el	7801 Jul 25 01:34	28°♒16'08	20°30'38
desc. node	7800 Aug 18 21:56	22°♓30'07			7801 Jul 26 23:30	0°♓	
retrograde	7800 Aug 24 16:20	23°♓48'41		retrograde	7801 Aug 05 04:23	3°♓45'37	
evening set	7800 Aug 27 13:01	23°♓30'25		desc. node	7801 Aug 05 18:58	3°♓44'41	
min. Earth dist.	7800 Sep 05 05:04	19°♓45'59	0.54820 AU	evening set	7801 Aug 07 05:00	3°♓35'28	
inferior conj	7800 Sep 05 16:46	19°♓29'35	-4°43'58		7801 Aug 15 18:47	30°♒♒	
minimum elong	7800 Sep 05 08:02	19°♓41'49	4°42'07	inferior conj	7801 Aug 16 09:47	29°♒38'23	-3°08'36
morning rise	7800 Sep 14 04:26	15°♓40'35		minimum elong	7801 Aug 16 01:25	29°♒50'27	3°05'50
direct	7800 Sep 17 14:21	15°♓14'52		min. Earth dist.	7801 Aug 17 14:48	28°♒56'28	0.54820 AU
morning max el	7800 Sep 29 15:33	20°♓55'11	21°44'31	morning rise	7801 Aug 24 21:19	25°♒34'17	
	7800 Oct 07 05:10	0°♔		direct	7801 Aug 28 23:28	24°♒58'24	
asc. node	7800 Oct 10 22:14	5°♔51'23			7801 Sep 09 16:49	0°♔	
morning set	7800 Oct 20 10:12	24°♔08'10		morning max el	7801 Sep 11 06:56	1°♔24'29	23°28'12
	7800 Oct 23 04:56	0°♕		asc. node	7801 Sep 27 19:14	24°♔45'16	
					7801 Sep 30 12:50	0°♕	

morning set	7801 Oct 04 21:40	8° $\Omega$ 58'46		morning set	7802 Sep 19 09:17	23° $\Pi$ 47'24	
					7802 Sep 22 06:17	0° $\Omega$	
superior conj	7801 Oct 11 20:40	23° $\Omega$ 59'23	1°40'33	superior conj	7802 Sep 26 06:21	8° $\Omega$ 47'45	1°33'54
minimum elong	7801 Oct 11 19:57	23° $\Omega$ 55'33	1°40'36	minimum elong	7802 Sep 26 04:43	8° $\Omega$ 38'47	1°33'47
max. Earth dist.	7801 Oct 14 12:16	29° $\Omega$ 39'16	1.33347 AU	max. Earth dist.	7802 Sep 27 16:36	11° $\Omega$ 55'26	1.32345 AU
	7801 Oct 14 16:11	0° $\Pi$		evening rise	7802 Oct 03 09:49	24° $\Omega$ 06'16	
evening rise	7801 Oct 19 11:39	9° $\Pi$ 53'45			7802 Oct 06 07:52	0° $\Pi$	
	7801 Oct 30 09:48	0° $\Sigma$		desc. node	7802 Oct 19 14:57	23° $\Pi$ 26'23	
desc. node	7801 Nov 01 17:54	3° $\Sigma$ 51'47			7802 Oct 24 01:22	0° $\Sigma$	
	7801 Nov 21 06:33	0° $\Sigma$		evening max el	7802 Nov 05 01:50	14° $\Sigma$ 18'53	27°27'04
evening max el	7801 Nov 22 15:52	1° $\Sigma$ 21'52	27°21'56	retrograde	7802 Nov 18 20:23	21° $\Sigma$ 34'43	
retrograde	7801 Dec 06 04:45	8° $\Sigma$ 41'00		evening set	7802 Nov 25 23:15	19° $\Sigma$ 08'04	
evening set	7801 Dec 13 03:23	6° $\Sigma$ 05'17		min. Earth dist.	7802 Nov 29 15:24	16° $\Sigma$ 08'55	0.62588 AU
min. Earth dist.	7801 Dec 16 22:57	2° $\Sigma$ 36'57	0.64405 AU	inferior conj	7802 Dec 02 12:01	13° $\Sigma$ 25'56	-2°57'02
inferior conj	7801 Dec 19 08:48	0° $\Sigma$ 03'13	-1°48'15	minimum elong	7802 Dec 02 17:32	13° $\Sigma$ 12'46	2°54'54
minimum elong	7801 Dec 19 12:06	29° $\Sigma$ 54'23	1°46'47	morning rise	7802 Dec 09 13:52	8° $\Sigma$ 18'02	
	7801 Dec 19 10:00	30° $\Sigma$ 18'02		direct	7802 Dec 11 21:12	7° $\Sigma$ 53'51	
asc. node	7801 Dec 24 18:38	25° $\Sigma$ 13'28		asc. node	7802 Dec 11 15:39	7° $\Sigma$ 54'06	
morning rise	7801 Dec 25 22:21	24° $\Sigma$ 37'50		morning max el	7802 Dec 18 14:52	11° $\Sigma$ 20'29	17°48'33
direct	7801 Dec 28 10:53	24° $\Sigma$ 05'18			7802 Dec 31 03:33	0° $\Sigma$	
morning max el	7802 Jan 03 21:50	27° $\Sigma$ 28'13	17°53'28	morning set	7803 Jan 03 14:08	6° $\Sigma$ 04'29	
	7802 Jan 06 04:20	0° $\Sigma$					
morning set	7802 Jan 21 00:23	23° $\Sigma$ 17'08		superior conj	7803 Jan 15 02:07	26° $\Sigma$ 01'05	0°03'40
	7802 Jan 25 00:21	0° $\approx$		minimum elong	7803 Jan 15 02:29	26° $\Sigma$ 02'37	0°03'44
desc. node	7802 Jan 28 17:09	6° $\approx$ 08'14		behind sun begin	7803 Jan 14 17:40	25° $\Sigma$ 25'35	
				behind sun end	7803 Jan 15 11:17	26° $\Sigma$ 39'34	
superior conj	7802 Feb 03 10:07	15° $\approx$ 25'24	-0°40'18	desc. node	7803 Jan 15 14:07	26° $\Sigma$ 51'28	
minimum elong	7802 Feb 03 05:28	15° $\approx$ 06'42	0°39'33		7803 Jan 17 11:24	0° $\approx$	
max. Earth dist.	7802 Feb 08 05:57	23° $\approx$ 06'55	1.44965 AU	max. Earth dist.	7803 Jan 21 22:35	7° $\approx$ 17'49	1.43763 AU
	7802 Feb 12 15:13	0° $\text{H}$		evening rise	7803 Jan 29 22:12	19° $\approx$ 54'22	
evening rise	7802 Feb 19 10:01	10° $\text{H}$ 29'40			7803 Feb 05 12:53	0° $\text{H}$	
	7802 Mar 04 07:33	0° $\Upsilon$			7803 Feb 27 03:42	0° $\Upsilon$	
greatest brilliancy	7802 Mar 06 05:54	2° $\Upsilon$ 50'13	-0.6m	evening max el	7803 Mar 01 10:12	2° $\Upsilon$ 27'37	21°18'34
evening max el	7802 Mar 18 11:56	18° $\Upsilon$ 49'23	20°09'53	asc. node	7803 Mar 09 14:45	7° $\Upsilon$ 36'47	
asc. node	7802 Mar 22 17:42	22° $\Upsilon$ 16'41		retrograde	7803 Mar 10 04:34	7° $\Upsilon$ 38'30	
retrograde	7802 Mar 26 06:16	23° $\Upsilon$ 20'03		evening set	7803 Mar 14 10:46	5° $\Upsilon$ 57'17	
evening set	7802 Mar 30 02:43	21° $\Upsilon$ 53'56		inferior conj	7803 Mar 19 18:12	29° $\text{H}$ 42'18	2°48'54
inferior conj	7802 Apr 04 10:58	15° $\Upsilon$ 50'25	3°11'32	minimum elong	7803 Mar 19 16:04	29° $\text{H}$ 49'41	2°48'25
minimum elong	7802 Apr 04 09:25	15° $\Upsilon$ 55'39	3°11'16		7803 Mar 19 13:06	30° $\text{R}$ 18'31	
min. Earth dist.	7802 Apr 05 06:56	14° $\Upsilon$ 42'43	0.67555 AU	min. Earth dist.	7803 Mar 20 01:03	29° $\text{H}$ 18'31	0.68175 AU
morning rise	7802 Apr 09 15:54	9° $\Upsilon$ 34'08		morning rise	7803 Mar 24 21:12	23° $\text{H}$ 28'51	
direct	7802 Apr 15 10:08	6° $\Upsilon$ 59'54		direct	7803 Mar 30 01:37	21° $\text{H}$ 12'39	
desc. node	7802 Apr 26 16:46	13° $\Upsilon$ 37'04		morning max el	7803 Apr 09 10:02	27° $\text{H}$ 21'50	23°16'18
morning max el	7802 Apr 27 00:34	13° $\Upsilon$ 56'39	24°45'42		7803 Apr 11 21:18	0° $\Upsilon$	
	7802 May 10 01:40	0° $\text{B}$		desc. node	7803 Apr 13 13:44	1° $\Upsilon$ 56'34	
	7802 May 29 10:37	0° $\text{II}$			7803 May 03 16:54	0° $\text{B}$	
morning set	7802 Jun 01 23:45	6° $\text{II}$ 09'19		morning set	7803 May 14 06:56	17° $\text{B}$ 00'35	
max. Earth dist.	7802 Jun 05 14:36	12° $\text{II}$ 39'56	1.37184 AU	max. Earth dist.	7803 May 18 10:32	24° $\text{B}$ 05'31	1.39400 AU
					7803 May 21 18:59	0° $\text{II}$	
superior conj	7802 Jun 12 06:40	25° $\text{II}$ 17'09	-1°00'48	superior conj	7803 May 26 01:42	7° $\text{II}$ 47'33	-1°30'58
minimum elong	7802 Jun 12 10:22	25° $\text{II}$ 35'07	1°00'16	minimum elong	7803 May 26 07:03	8° $\text{II}$ 12'20	1°30'23
	7802 Jun 14 16:13	0° $\text{E}$		evening rise	7803 Jun 04 13:17	25° $\text{II}$ 50'56	
asc. node	7802 Jun 18 16:47	8° $\text{E}$ 02'47		asc. node	7803 Jun 05 13:49	27° $\text{II}$ 48'54	
evening rise	7802 Jun 20 18:27	12° $\text{E}$ 11'54			7803 Jun 06 17:13	0° $\text{E}$	
	7802 Jun 30 07:32	0° $\Omega$		evening max el	7803 Jun 20 16:47	21° $\text{E}$ 54'39	18°37'45
evening max el	7802 Jul 07 15:31	9° $\Omega$ 43'50	19°23'45	retrograde	7803 Jun 28 16:03	25° $\text{E}$ 51'54	
retrograde	7802 Jul 17 01:28	14° $\Omega$ 22'29		evening set	7803 Jun 30 18:08	25° $\text{E}$ 36'34	
evening set	7802 Jul 18 22:24	14° $\Omega$ 12'15		inferior conj	7803 Jul 08 14:04	21° $\text{E}$ 11'06	0°34'51
desc. node	7802 Jul 23 16:02	12° $\Omega$ 26'59		minimum elong	7803 Jul 08 15:21	21° $\text{E}$ 08'39	0°34'15
inferior conj	7802 Jul 27 13:49	10° $\Omega$ 04'52	-1°11'36	desc. node	7803 Jul 10 13:05	19° $\text{E}$ 41'27	
minimum elong	7802 Jul 27 10:37	10° $\Omega$ 10'06	1°10'28	min. Earth dist.	7803 Jul 11 21:06	18° $\text{E}$ 42'06	0.57468 AU
min. Earth dist.	7802 Jul 30 03:33	8° $\Omega$ 24'53	0.55764 AU	morning rise	7803 Jul 16 09:04	15° $\text{E}$ 57'03	
morning rise	7802 Aug 04 20:11	5° $\Omega$ 27'58		direct	7803 Jul 22 02:54	14° $\text{E}$ 34'33	
direct	7802 Aug 09 17:47	4° $\Omega$ 33'36		morning max el	7803 Aug 05 11:46	22° $\text{E}$ 09'02	26°39'13
morning max el	7802 Aug 23 19:35	11° $\Omega$ 39'11	25°12'07		7803 Aug 12 10:07	0° $\Omega$	
	7802 Sep 06 21:05	0° $\Pi$					
asc. node	7802 Sep 14 16:13	14° $\Pi$ 06'02					

	7803 Aug 30 16:22	0°♎	morning max el	7804 Jul 17 10:13	3°♎13'36	27°35'54
asc. node	7803 Sep 01 13:12	3°♎46'33		7804 Aug 06 00:12	0°♎	
morning set	7803 Sep 03 19:27	8°♎29'33	morning set	7804 Aug 18 02:26	22°♎59'38	
			asc. node	7804 Aug 18 10:12	23°♎40'19	
superior conj	7803 Sep 10 17:56	23°♎39'05 1°21'50		7804 Aug 21 09:16	0°♎	
minimum elong	7803 Sep 10 15:46	23°♎27'08 1°21'32	max. Earth dist.	7804 Aug 24 11:53	6°♎49'11	1.31710 AU
max. Earth dist.	7803 Sep 11 01:38	24°♎21'45 1.31801 AU				
	7803 Sep 13 14:54	0°♎	superior conj	7804 Aug 25 05:34	8°♎27'00	1°04'47
evening rise	7803 Sep 17 14:38	8°♎35'59	minimum elong	7804 Aug 25 03:20	8°♎14'39	1°04'21
	7803 Sep 28 17:05	0°♎	evening rise	7804 Aug 31 23:42	23°♎15'35	
desc. node	7803 Oct 06 12:02	12°♎22'11		7804 Sep 04 05:08	0°♎	
evening max el	7803 Oct 18 06:44	26°♎34'35 26°59'05	desc. node	7804 Sep 22 09:07	0°♎23'44	
	7803 Oct 22 09:08	0°♎		7804 Sep 22 01:46	0°♎	
retrograde	7803 Nov 01 04:24	3°♎45'00	evening max el	7804 Sep 29 04:22	8°♎01'08	25°58'01
evening set	7803 Nov 08 03:22	1°♎38'38	retrograde	7804 Oct 13 02:53	15°♎05'23	
	7803 Nov 10 13:52	30°♎	evening set	7804 Oct 19 10:56	13°♎29'59	
min. Earth dist.	7803 Nov 11 21:13	28°♎59'03 0.60554 AU	min. Earth dist.	7804 Oct 23 17:12	10°♎54'45	0.58473 AU
inferior conj	7803 Nov 15 01:06	26°♎20'32 -4°04'15	inferior conj	7804 Oct 26 20:36	8°♎37'48	-5°00'39
minimum elong	7803 Nov 15 08:08	26°♎05'46 4°02'06	minimum elong	7804 Oct 27 02:55	8°♎26'17	4°59'26
morning rise	7803 Nov 22 15:15	21°♎33'05	morning rise	7804 Nov 03 21:12	4°♎12'47	
direct	7803 Nov 24 20:32	21°♎13'50	direct	7804 Nov 06 04:45	3°♎55'18	
asc. node	7803 Nov 28 12:40	22°♎09'02	asc. node	7804 Nov 14 09:41	7°♎50'50	
morning max el	7803 Dec 02 04:46	24°♎53'07 18°02'21	morning max el	7804 Nov 14 11:57	7°♎56'15	18°36'29
	7803 Dec 06 10:19	0°♎		7804 Nov 28 16:22	0°♎	
morning set	7803 Dec 17 20:52	19°♎39'16	morning set	7804 Nov 30 15:26	3°♎46'53	
	7803 Dec 23 11:13	0°♎				
superior conj	7803 Dec 27 19:29	7°♎49'18 0°40'58	superior conj	7804 Dec 09 10:11	20°♎38'26	1°09'07
minimum elong	7803 Dec 27 22:30	8°♎02'39 0°40'39	minimum elong	7804 Dec 09 13:38	20°♎54'32	1°08'48
desc. node	7804 Jan 02 11:07	17°♎36'53		7804 Dec 14 13:05	0°♎	
max. Earth dist.	7804 Jan 04 10:24	20°♎55'32 1.42023 AU	max. Earth dist.	7804 Dec 16 17:54	3°♎52'57	1.39953 AU
evening rise	7804 Jan 09 23:15	29°♎57'34	desc. node	7804 Dec 19 08:09	8°♎21'09	
	7804 Jan 09 23:51	0°♎	evening rise	7804 Dec 20 21:19	10°♎58'04	
	7804 Jan 30 02:18	0°♎		7805 Jan 01 21:17	0°♎	
evening max el	7804 Feb 12 03:41	16°♎07'57 22°35'49	evening max el	7805 Jan 24 21:14	0°♎	
retrograde	7804 Feb 22 01:01	22°♎00'00	retrograde	7805 Jan 24 18:09	29°♎52'23	23°55'57
asc. node	7804 Feb 24 11:49	21°♎29'33	evening set	7805 Feb 04 18:15	6°♎20'49	
evening set	7804 Feb 26 18:17	20°♎03'48	asc. node	7805 Feb 09 23:45	4°♎10'13	
inferior conj	7804 Mar 03 02:46	13°♎40'34 2°16'56		7805 Feb 10 08:53	3°♎50'10	
minimum elong	7804 Mar 03 00:30	13°♎48'28 2°16'18	inferior conj	7805 Feb 13 17:59	30°♎	
min. Earth dist.	7804 Mar 02 21:32	13°♎58'44 0.68375 AU	minimum elong	7805 Feb 15 10:50	27°♎42'37	1°36'31
morning rise	7804 Mar 08 06:34	7°♎31'23	min. Earth dist.	7805 Feb 15 08:52	27°♎49'17	1°35'54
direct	7804 Mar 12 20:55	5°♎36'47	morning rise	7805 Feb 14 18:07	28°♎39'23	0.68175 AU
morning max el	7804 Mar 21 22:41	10°♎54'36 21°48'46	direct	7805 Feb 20 17:59	21°♎39'18	
desc. node	7804 Mar 30 10:41	21°♎01'46	morning max el	7805 Feb 24 18:50	20°♎07'05	
	7804 Apr 05 22:26	0°♎		7805 Mar 04 17:57	24°♎39'07	20°30'29
morning set	7804 Apr 23 10:29	26°♎33'57	desc. node	7805 Mar 09 10:53	0°♎	
	7804 Apr 25 13:39	0°♎		7805 Mar 17 07:40	10°♎40'28	
max. Earth dist.	7804 Apr 29 09:37	6°♎17'27 1.41588 AU	morning set	7805 Mar 30 07:10	0°♎	
			max. Earth dist.	7805 Apr 02 14:09	5°♎04'16	
superior conj	7804 May 07 01:46	19°♎23'40 -1°55'55		7805 Apr 11 16:15	19°♎25'36	1.43467 AU
minimum elong	7804 May 07 07:13	19°♎47'35 1°55'35	superior conj	7805 Apr 18 02:30	29°♎56'59	-2°10'12
	7804 May 13 00:05	0°♎	minimum elong	7805 Apr 18 04:45	0°♎06'22	2°10'13
evening rise	7804 May 17 20:17	8°♎53'10		7805 Apr 18 03:13	0°♎	
asc. node	7804 May 22 10:51	17°♎18'37	evening rise	7805 Apr 30 11:06	21°♎09'19	
	7804 May 30 04:37	0°♎		7805 May 05 12:29	0°♎	
evening max el	7804 Jun 03 01:36	4°♎38'56 18°12'05	asc. node	7805 May 09 07:55	6°♎26'23	
retrograde	7804 Jun 10 01:11	8°♎10'04	evening max el	7805 May 17 14:15	17°♎47'13	18°05'48
evening set	7804 Jun 12 10:50	7°♎45'45	retrograde	7805 May 24 01:41	21°♎08'10	
inferior conj	7804 Jun 19 11:47	2°♎59'52 1°54'50	evening set	7805 May 26 18:43	20°♎32'18	
minimum elong	7804 Jun 19 14:50	2°♎53'05 1°53'48	inferior conj	7805 Jun 02 04:10	15°♎26'25	2°46'48
	7804 Jun 22 21:36	30°♎	minimum elong	7805 Jun 02 06:54	15°♎19'24	2°46'06
min. Earth dist.	7804 Jun 22 20:47	0°♎01'43 0.59613 AU	min. Earth dist.	7805 Jun 05 04:29	12°♎23'33	0.61858 AU
desc. node	7804 Jun 26 10:08	27°♎24'43	morning rise	7805 Jun 08 17:09	9°♎23'30	
morning rise	7804 Jun 26 15:53	27°♎16'07	desc. node	7805 Jun 13 07:10	7°♎14'54	
direct	7804 Jul 03 01:34	25°♎21'21	direct	7805 Jun 15 10:55	7°♎00'36	
	7804 Jul 13 19:42	0°♎	morning max el	7805 Jun 29 14:56	15°♎01'22	27°55'15

	7805 Jul 11 18:46	0°☿			7806 Jun 14 09:05	0°♊		
	7805 Jul 29 13:39	0°♎			7806 Jul 05 11:55	0°☿		
morning set	7805 Aug 02 04:19	7°♎12'05		morning set	7806 Jul 16 22:42	21°☿00'20		
asc. node	7805 Aug 05 07:13	13°♎42'28			7806 Jul 21 08:45	0°♎		
max. Earth dist.	7805 Aug 07 19:38	19°♎06'49	1.32074 AU	max. Earth dist.	7806 Jul 21 21:00	1°♎04'00	1.32905 AU	
				asc. node	7806 Jul 23 04:14	3°♎48'41		
superior conj	7805 Aug 09 15:28	23°♎05'51	0°43'12					
minimum elong	7805 Aug 09 13:40	22°♎55'59	0°42'45	superior conj	7806 Jul 24 21:43	7°♎29'59	0°17'33	
	7805 Aug 12 18:52	0°♏		minimum elong	7806 Jul 24 20:52	7°♎25'26	0°17'16	
evening rise	7805 Aug 16 11:00	7°♏58'51		evening rise	7806 Jul 31 22:38	22°♎39'54		
	7805 Aug 27 19:28	0°♏			7806 Aug 04 11:16	0°♏		
desc. node	7805 Sep 09 06:13	17°♏09'35		evening max el	7806 Aug 23 06:12	28°♏55'36	22°51'56	
evening max el	7805 Sep 10 18:33	18°♏40'47	24°30'45		7806 Aug 24 09:43	0°♏		
retrograde	7805 Sep 24 13:39	25°♏36'42		desc. node	7806 Aug 27 03:17	2°♏11'39		
evening set	7805 Sep 29 17:58	24°♏37'07		retrograde	7806 Sep 05 12:15	5°♏32'50		
min. Earth dist.	7805 Oct 05 05:34	21°♏47'54	0.56601 AU	evening set	7806 Sep 09 04:15	5°♏03'23		
inferior conj	7805 Oct 07 20:00	20°♏09'05	-5°31'10	min. Earth dist.	7806 Sep 16 14:20	1°♏43'09	0.55246 AU	
minimum elong	7805 Oct 07 21:38	20°♏06'28	5°31'04	inferior conj	7806 Sep 18 00:24	0°♏54'18	-5°17'08	
morning rise	7805 Oct 16 03:28	16°♏05'55		minimum elong	7806 Sep 17 18:42	1°♏02'30	5°16'25	
direct	7805 Oct 18 18:20	15°♏47'18			7806 Sep 19 14:39	30°♏		
morning max el	7805 Oct 28 08:50	20°♏19'27	19°32'33	morning rise	7806 Sep 26 11:14	27°♏05'15		
asc. node	7805 Nov 01 06:43	24°♏44'37		direct	7806 Sep 29 13:18	26°♏43'07		
	7805 Nov 04 21:25	0°♏			7806 Oct 08 09:49	0°♏		
morning set	7805 Nov 14 17:56	18°♏15'42		morning max el	7806 Oct 10 17:10	1°♏56'09	20°50'46	
	7805 Nov 20 13:51	0°♏		asc. node	7806 Oct 19 03:44	12°♏35'24		
					7806 Oct 28 14:53	0°♏		
superior conj	7805 Nov 22 16:59	4°♏13'22	1°28'01	morning set	7806 Oct 30 01:35	2°♏58'00		
minimum elong	7805 Nov 22 19:36	4°♏26'13	1°27'53					
max. Earth dist.	7805 Nov 28 23:40	16°♏11'47	1.37796 AU	superior conj	7806 Nov 06 11:26	18°♏21'46	1°38'32	
evening rise	7805 Dec 02 17:11	22°♏55'58		minimum elong	7806 Nov 06 12:44	18°♏28'26	1°38'34	
desc. node	7805 Dec 06 05:11	28°♏59'52		max. Earth dist.	7806 Nov 11 08:17	28°♏07'47	1.35794 AU	
	7805 Dec 06 19:23	0°♏			7806 Nov 12 07:22	0°♏		
	7805 Dec 26 16:56	0°♏		evening rise	7806 Nov 15 08:01	5°♏44'39		
evening max el	7806 Jan 07 07:20	13°♏39'06	25°12'27	desc. node	7806 Nov 23 02:14	19°♏29'00		
retrograde	7806 Jan 19 07:11	20°♏35'14			7806 Nov 29 14:56	0°♏		
evening set	7806 Jan 25 01:36	18°♏11'49		evening max el	7806 Dec 20 20:20	27°♏24'07	26°18'04	
asc. node	7806 Jan 28 05:57	14°♏51'36			7806 Dec 23 17:33	0°♏		
min. Earth dist.	7806 Jan 29 12:27	13°♏15'38	0.67588 AU	retrograde	7807 Jan 02 15:07	4°♏37'30		
inferior conj	7806 Jan 30 16:31	11°♏44'19	0°48'09	evening set	7807 Jan 08 22:05	2°♏04'30		
minimum elong	7806 Jan 30 15:22	11°♏48'03	0°47'47		7807 Jan 11 02:27	30°♏		
morning rise	7806 Feb 05 05:26	5°♏48'40		min. Earth dist.	7807 Jan 13 02:18	27°♏43'06	0.66627 AU	
direct	7806 Feb 08 17:52	4°♏37'30		inferior conj	7807 Jan 14 17:54	25°♏42'11	-0°07'39	
morning max el	7806 Feb 15 21:14	8°♏35'09	19°25'47	minimum elong	7807 Jan 14 18:06	25°♏41'34	0°07'27	
greatest brilliancy	7806 Feb 28 19:06	25°♏36'57	-0.7m	transit middle	7807 Jan 14 18:06	25°♏41'34	0°07'27	
	7806 Mar 03 17:15	0°♏		transit begin	7807 Jan 14 15:33	25°♏49'23		
desc. node	7806 Mar 04 04:37	0°♏43'01		transit end	7807 Jan 14 20:39	25°♏33'46		
morning set	7806 Mar 12 12:26	13°♏27'47		asc. node	7807 Jan 15 03:01	25°♏14'23		
	7806 Mar 23 03:31	0°♏		morning rise	7807 Jan 20 14:51	19°♏56'19		
max. Earth dist.	7806 Mar 25 06:02	3°♏19'00	1.44798 AU	direct	7807 Jan 23 16:23	19°♏03'13		
				morning max el	7807 Jan 30 07:40	22°♏39'04	18°36'44	
superior conj	7806 Mar 29 02:32	9°♏26'20	-2°07'43		7807 Feb 05 07:38	0°♏		
minimum elong	7806 Mar 28 22:09	9°♏08'49	2°07'35	desc. node	7807 Feb 19 01:35	21°♏02'56		
	7806 Apr 10 17:04	0°♏		morning set	7807 Feb 20 05:10	22°♏51'42		
evening rise	7806 Apr 12 05:09	2°♏30'14			7807 Feb 24 17:54	0°♏		
asc. node	7806 Apr 26 04:58	25°♏04'45						
	7806 Apr 30 00:44	0°♊		superior conj	7807 Mar 08 09:19	18°♏15'07	-1°45'04	
evening max el	7806 May 01 03:25	1°♊10'45	18°18'18	minimum elong	7807 Mar 07 23:55	17°♏38'18	1°44'13	
retrograde	7806 May 07 12:58	4°♊36'08		max. Earth dist.	7807 Mar 08 00:05	17°♏38'56	1.45440 AU	
evening set	7806 May 10 13:02	3°♊47'15			7807 Mar 15 20:47	0°♏		
	7806 May 15 00:19	30°♏		evening rise	7807 Mar 23 23:42	12°♏52'59		
inferior conj	7806 May 16 11:04	28°♏23'00	3°15'06	greatest brilliancy	7807 Apr 01 06:26	26°♏04'22	-0.8m	
minimum elong	7806 May 16 12:35	28°♏18'38	3°14'49		7807 Apr 03 18:37	0°♏		
min. Earth dist.	7806 May 18 21:31	25°♏36'58	0.63928 AU	asc. node	7807 Apr 13 02:02	13°♏04'15		
morning rise	7806 May 22 11:02	22°♏09'46		evening max el	7807 Apr 14 14:24	14°♏42'46	18°48'49	
direct	7806 May 29 04:56	19°♏28'37		retrograde	7807 Apr 21 06:58	18°♏25'21		
desc. node	7806 May 31 04:11	19°♏40'58		evening set	7807 Apr 24 14:15	17°♏22'36		
morning max el	7806 Jun 11 23:59	27°♏29'08	27°37'22	inferior conj	7807 Apr 30 04:34	11°♏41'45	3°24'46	

minimum elong	7807 Apr 30 04:42	11° $\text{841}'18$	3°24'41		7808 Apr 09 06:23	30° $\text{8}\text{Y}$	
min. Earth dist.	7807 May 01 23:40	9° $\text{827}'47$	0.65666 AU	inferior conj	7808 Apr 13 05:25	25° $\text{Y}16'58$	3°19'50
morning rise	7807 May 05 18:35	5° $\text{824}'27$		minimum elong	7808 Apr 13 04:24	25° $\text{Y}20'23$	3°19'42
direct	7807 May 12 06:28	2° $\text{837}'06$		min. Earth dist.	7808 Apr 14 09:36	23° $\text{Y}43'44$	0.66989 AU
desc. node	7807 May 18 01:10	4° $\text{823}'59$		morning rise	7808 Apr 18 12:46	18° $\text{Y}59'34$	
morning max el	7807 May 25 10:31	10° $\text{825}'20$	26°47'32	direct	7808 Apr 24 14:17	16° $\text{Y}17'33$	
	7807 Jun 09 21:36	0° $\text{II}$		desc. node	7808 May 03 22:08	20° $\text{Y}52'32$	
	7807 Jun 28 00:11	0° $\text{☾}$		morning max el	7808 May 06 20:17	23° $\text{Y}37'48$	25°34'23
morning set	7807 Jun 30 06:25	4° $\text{☾}14'48$			7808 May 12 12:16	0° $\text{8}$	
max. Earth dist.	7807 Jul 04 12:17	12° $\text{☾}32'10$	1.34218 AU		7808 Jun 02 06:33	0° $\text{II}$	
				morning set	7808 Jun 11 23:27	16° $\text{II}44'49$	
superior conj	7807 Jul 08 22:02	21° $\text{☾}32'14$	-0°11'28	max. Earth dist.	7808 Jun 15 16:28	23° $\text{II}37'42$	1.35992 AU
minimum elong	7807 Jul 08 22:40	21° $\text{☾}35'32$	0°11'26		7808 Jun 18 23:55	0° $\text{☾}$	
behind sun begin	7807 Jul 08 18:36	21° $\text{☾}14'23$					
behind sun end	7807 Jul 09 02:44	21° $\text{☾}56'41$		superior conj	7808 Jun 21 13:48	5° $\text{☾}06'10$	-0°42'35
asc. node	7807 Jul 10 01:13	23° $\text{☾}54'12$		minimum elong	7808 Jun 21 16:20	5° $\text{☾}18'47$	0°42'13
	7807 Jul 12 22:38	0° $\text{Q}$		asc. node	7808 Jun 25 22:14	13° $\text{☾}55'38$	
evening rise	7807 Jul 16 08:35	7° $\text{Q}11'51$		evening rise	7808 Jun 29 14:48	21° $\text{☾}29'03$	
	7807 Jul 28 14:28	0° $\text{P}$			7808 Jul 03 21:13	0° $\text{Q}$	
evening max el	7807 Aug 05 00:11	9° $\text{P}20'30$	21°17'55	evening max el	7808 Jul 17 06:43	20° $\text{Q}23'18$	19°59'42
desc. node	7807 Aug 14 00:21	14° $\text{P}56'32$		retrograde	7808 Jul 27 16:05	25° $\text{Q}30'22$	
retrograde	7807 Aug 17 01:51	15° $\text{P}19'20$		evening set	7808 Jul 29 13:20	25° $\text{Q}21'00$	
evening set	7807 Aug 19 11:29	15° $\text{P}06'00$		desc. node	7808 Jul 30 21:23	25° $\text{Q}03'37$	
inferior conj	7807 Aug 28 17:41	11° $\text{P}08'11$	-4°08'23	inferior conj	7808 Aug 07 13:51	21° $\text{Q}21'23$	-2°19'29
minimum elong	7807 Aug 28 08:13	11° $\text{P}21'29$	4°05'49	minimum elong	7808 Aug 07 07:27	21° $\text{Q}31'02$	2°17'14
min. Earth dist.	7807 Aug 28 23:23	11° $\text{P}00'10$	0.54699 AU	min. Earth dist.	7808 Aug 09 10:36	20° $\text{Q}14'01$	0.55117 AU
morning rise	7807 Sep 06 05:41	7° $\text{P}15'16$		morning rise	7808 Aug 15 23:54	17° $\text{Q}04'25$	
direct	7807 Sep 09 21:45	6° $\text{P}46'13$		direct	7808 Aug 20 10:04	16° $\text{Q}21'39$	
morning max el	7807 Sep 22 13:35	12° $\text{P}46'35$	22°27'37	morning max el	7808 Sep 03 02:56	23° $\text{Q}06'23$	24°13'12
	7807 Oct 05 08:56	0° $\text{Q}$			7808 Sep 09 07:05	0° $\text{P}$	
asc. node	7807 Oct 06 00:43	1° $\text{Q}09'09$		asc. node	7808 Sep 21 21:42	20° $\text{P}15'21$	
morning set	7807 Oct 14 12:09	17° $\text{Q}46'41$			7808 Sep 26 18:09	0° $\text{Q}$	
	7807 Oct 20 05:34	0° $\text{M}$		morning set	7808 Sep 27 23:52	2° $\text{Q}36'45$	
superior conj	7807 Oct 21 13:54	2° $\text{M}52'12$	1°41'42	superior conj	7808 Oct 04 21:38	17° $\text{Q}36'18$	1°38'26
minimum elong	7807 Oct 21 13:52	2° $\text{M}52'02$	1°41'47	minimum elong	7808 Oct 04 20:29	17° $\text{Q}30'04$	1°38'24
max. Earth dist.	7807 Oct 24 23:56	10° $\text{M}01'47$	1.34120 AU	max. Earth dist.	7808 Oct 07 00:04	22° $\text{Q}09'06$	1.32869 AU
evening rise	7807 Oct 29 13:53	19° $\text{M}13'40$			7808 Oct 10 17:18	0° $\text{M}$	
	7807 Nov 04 07:55	0° $\text{J}$		evening rise	7808 Oct 12 07:04	3° $\text{M}13'19$	
desc. node	7807 Nov 09 23:17	9° $\text{J}42'44$		desc. node	7808 Oct 26 20:20	29° $\text{M}34'11$	
	7807 Nov 23 17:24	0° $\text{Z}$			7808 Oct 27 02:49	0° $\text{J}$	
evening max el	7807 Dec 03 09:17	10° $\text{Z}59'49$	27°05'37	evening max el	7808 Nov 14 21:11	24° $\text{J}15'34$	27°28'00
retrograde	7807 Dec 16 17:25	18° $\text{Z}20'01$			7808 Nov 22 14:56	0° $\text{Z}$	
evening set	7807 Dec 23 11:10	15° $\text{Z}43'06$		retrograde	7808 Nov 28 13:17	1° $\text{Z}34'02$	
min. Earth dist.	7807 Dec 27 09:32	11° $\text{Z}55'53$	0.65305 AU		7808 Dec 04 01:55	30° $\text{R}\text{J}$	
inferior conj	7807 Dec 29 12:47	9° $\text{Z}31'41$	-1°10'01	evening set	7808 Dec 05 14:14	29° $\text{J}01'10$	
minimum elong	7807 Dec 29 14:51	9° $\text{Z}25'52$	1°09'02	min. Earth dist.	7808 Dec 09 08:02	25° $\text{J}45'43$	0.63658 AU
asc. node	7808 Jan 02 00:03	5° $\text{Z}55'36$		inferior conj	7808 Dec 11 22:36	23° $\text{J}06'40$	-2°17'19
morning rise	7808 Jan 04 19:48	3° $\text{Z}58'01$		minimum elong	7808 Dec 12 02:52	22° $\text{J}55'47$	2°15'31
direct	7808 Jan 07 12:20	3° $\text{Z}19'14$		morning rise	7808 Dec 18 17:17	17° $\text{J}48'09$	
morning max el	7808 Jan 13 22:58	6° $\text{Z}44'22$	18°04'19	asc. node	7808 Dec 18 21:06	17° $\text{J}44'34$	
	7808 Jan 29 20:40	0° $\text{≈}$		direct	7808 Dec 21 03:11	17° $\text{J}19'40$	
morning set	7808 Feb 01 03:17	3° $\text{≈}44'13$		morning max el	7808 Dec 27 16:13	20° $\text{J}43'30$	17°49'07
desc. node	7808 Feb 05 22:33	11° $\text{≈}35'15$			7809 Jan 03 16:40	0° $\text{Z}$	
				morning set	7809 Jan 13 04:29	15° $\text{Z}55'44$	
superior conj	7808 Feb 15 16:36	27° $\text{≈}13'01$	-1°06'10		7809 Jan 21 11:00	0° $\text{≈}$	
minimum elong	7808 Feb 15 08:55	26° $\text{≈}42'40$	1°05'07	desc. node	7809 Jan 22 19:32	2° $\text{≈}15'29$	
	7808 Feb 17 10:56	0° $\text{H}$					
max. Earth dist.	7808 Feb 18 19:23	2° $\text{H}07'34$	1.45340 AU	superior conj	7809 Jan 25 17:59	7° $\text{≈}05'53$	-0°21'09
evening rise	7808 Mar 02 21:18	22° $\text{H}28'38$		minimum elong	7809 Jan 25 15:41	6° $\text{≈}56'25$	0°20'42
	7808 Mar 07 18:14	0° $\text{Y}$		max. Earth dist.	7809 Jan 31 13:46	16° $\text{≈}29'42$	1.44525 AU
greatest brilliancy	7808 Mar 16 02:47	12° $\text{Y}43'03$	-0.7m		7809 Feb 09 04:51	0° $\text{H}$	
evening max el	7808 Mar 27 21:16	28° $\text{Y}19'13$	19°36'05	evening rise	7809 Feb 10 08:29	1° $\text{H}46'19$	
asc. node	7808 Mar 29 23:06	0° $\text{8}13'24$			7809 Mar 01 09:10	0° $\text{Y}$	
	7808 Mar 29 16:34	0° $\text{8}$		evening max el	7809 Mar 10 22:50	11° $\text{Y}57'10$	20°37'54
retrograde	7808 Apr 04 04:25	2° $\text{8}29'55$		asc. node	7809 Mar 16 20:10	16° $\text{Y}17'30$	
evening set	7808 Apr 07 19:42	1° $\text{8}12'36$		retrograde	7809 Mar 19 02:52	16° $\text{Y}44'12$	



evening set	7809 Mar 23 03:18	15° $\Upsilon$ 11'49			7810 Mar 06 11:28	30° $\Re$ $\Re$		
inferior conj	7809 Mar 28 10:57	9° $\Upsilon$ 03'22	3°03'06	evening set	7810 Mar 07 11:18	29° $\Re$ 16'45		
minimum elong	7809 Mar 28 09:07	9° $\Upsilon$ 09'41	3°02'47	inferior conj	7810 Mar 12 18:59	22° $\Re$ 58'01	2°36'24	
min. Earth dist.	7809 Mar 29 01:16	8° $\Upsilon$ 14'12	0.67871 AU	minimum elong	7810 Mar 12 16:45	23° $\Re$ 05'49	2°35'51	
morning rise	7809 Apr 02 14:43	2° $\Upsilon$ 48'09		min. Earth dist.	7810 Mar 12 20:34	22° $\Re$ 52'30	0.68317 AU	
direct	7809 Apr 08 03:19	0° $\Upsilon$ 20'40		morning rise	7810 Mar 17 22:02	16° $\Re$ 46'27		
morning max el	7809 Apr 19 05:07	6° $\Upsilon$ 58'03	24°07'59	direct	7810 Mar 22 20:31	14° $\Re$ 39'11		
desc. node	7809 Apr 20 19:06	8° $\Upsilon$ 37'36		morning max el	7810 Apr 01 15:26	20° $\Re$ 25'38	22°38'21	
	7809 May 07 03:10	0° $\Re$		desc. node	7810 Apr 07 16:06	27° $\Re$ 18'08		
morning set	7809 May 24 20:33	28° $\Re$ 15'38			7810 Apr 09 18:49	0° $\Upsilon$		
	7809 May 25 20:36	0° $\Pi$			7810 Apr 30 08:38	0° $\Re$		
max. Earth dist.	7809 May 28 13:19	4° $\Pi$ 45'53	1.38113 AU	morning set	7810 May 05 16:11	8° $\Re$ 33'28		
				max. Earth dist.	7810 May 10 10:15	16° $\Re$ 30'15	1.40355 AU	
superior conj	7809 Jun 04 17:35	18° $\Pi$ 02'31	-1°13'57	superior conj	7810 May 18 05:07	0° $\Pi$ 10'57	-1°42'29	
minimum elong	7809 Jun 04 22:04	18° $\Pi$ 23'56	1°13'22	minimum elong	7810 May 18 10:48	0° $\Pi$ 36'41	1°41'58	
	7809 Jun 10 21:00	0° $\Re$			7810 May 18 02:42	0° $\Pi$		
asc. node	7809 Jun 12 19:15	3° $\Re$ 48'28		evening rise	7810 May 28 04:55	18° $\Pi$ 48'28		
evening rise	7809 Jun 13 14:38	5° $\Re$ 24'02		asc. node	7810 May 30 16:17	23° $\Pi$ 28'10		
	7809 Jun 28 02:03	0° $\Omega$			7810 Jun 03 05:44	0° $\Re$		
evening max el	7809 Jun 30 01:58	2° $\Omega$ 10'31	19°01'41	evening max el	7810 Jun 13 06:53	14° $\Re$ 36'24	18°24'23	
retrograde	7809 Jul 08 19:40	6° $\Omega$ 29'23		retrograde	7810 Jun 20 18:33	18° $\Re$ 20'42		
evening set	7809 Jul 10 18:24	6° $\Omega$ 17'24		evening set	7810 Jun 22 23:51	18° $\Re$ 01'51		
desc. node	7809 Jul 17 18:25	2° $\Omega$ 56'39		inferior conj	7810 Jun 30 11:21	13° $\Re$ 27'21	1°12'19	
inferior conj	7809 Jul 19 01:50	2° $\Omega$ 03'01	-0°23'50	minimum elong	7810 Jun 30 13:42	13° $\Re$ 22'33	1°11'24	
minimum elong	7809 Jul 19 00:49	2° $\Omega$ 04'45	0°23'33	min. Earth dist.	7810 Jul 03 20:40	10° $\Re$ 43'27	0.58346 AU	
min. Earth dist.	7809 Jul 22 01:02	0° $\Omega$ 00'28	0.56420 AU	desc. node	7810 Jul 04 15:28	10° $\Re$ 08'02		
	7809 Jul 22 01:19	30° $\Re$ $\Re$		morning rise	7810 Jul 08 00:15	7° $\Re$ 59'37		
morning rise	7809 Jul 27 04:04	27° $\Re$ 10'22		direct	7810 Jul 14 01:32	6° $\Re$ 23'46		
direct	7809 Aug 01 10:48	26° $\Re$ 04'51		morning max el	7810 Jul 28 10:56	14° $\Re$ 06'14	27°07'47	
	7809 Aug 11 16:17	0° $\Omega$			7810 Aug 10 03:55	0° $\Omega$		
morning max el	7809 Aug 15 16:15	3° $\Omega$ 23'33	25°52'03	asc. node	7810 Aug 26 15:41	29° $\Omega$ 32'43		
	7809 Sep 03 16:12	0° $\Pi$			7810 Aug 26 20:56	0° $\Pi$		
asc. node	7809 Sep 08 18:42	9° $\Pi$ 45'38		morning set	7810 Aug 27 20:09	2° $\Pi$ 01'39		
morning set	7809 Sep 12 11:06	17° $\Pi$ 23'36						
	7809 Sep 18 05:46	0° $\Re$		superior conj	7810 Sep 03 20:12	17° $\Pi$ 17'47	1°15'11	
superior conj	7809 Sep 19 08:23	2° $\Re$ 27'05	1°29'25	minimum elong	7810 Sep 03 17:58	17° $\Pi$ 05'19	1°14'49	
minimum elong	7809 Sep 19 06:29	2° $\Re$ 16'33	1°29'13	max. Earth dist.	7810 Sep 03 17:13	17° $\Pi$ 01'13	1.31710 AU	
max. Earth dist.	7809 Sep 20 06:59	4° $\Re$ 31'42	1.32065 AU		7810 Sep 09 15:02	0° $\Re$		
evening rise	7809 Sep 26 08:27	17° $\Re$ 34'53		evening rise	7810 Sep 10 15:21	2° $\Re$ 09'55		
	7809 Oct 02 14:19	0° $\Pi$			7810 Sep 25 13:20	0° $\Pi$		
desc. node	7809 Oct 13 17:24	18° $\Pi$ 54'15		desc. node	7810 Sep 30 14:29	7° $\Pi$ 29'33		
	7809 Oct 21 19:54	0° $\Re$		evening max el	7810 Oct 10 07:41	18° $\Pi$ 53'44	26°36'52	
evening max el	7809 Oct 28 05:39	6° $\Re$ 58'05	27°19'23	retrograde	7810 Oct 24 05:32	26° $\Pi$ 01'03		
retrograde	7809 Nov 11 01:38	14° $\Re$ 10'50		evening set	7810 Oct 30 23:59	24° $\Pi$ 06'36		
evening set	7809 Nov 18 03:58	11° $\Re$ 51'47		min. Earth dist.	7810 Nov 03 21:22	21° $\Pi$ 31'17	0.59669 AU	
min. Earth dist.	7809 Nov 21 20:10	9° $\Re$ 02'14	0.61743 AU	inferior conj	7810 Nov 07 02:22	18° $\Pi$ 59'50	-4°30'11	
inferior conj	7809 Nov 24 20:20	6° $\Re$ 19'38	-3°26'10	minimum elong	7810 Nov 07 09:30	18° $\Pi$ 45'46	4°28'20	
minimum elong	7809 Nov 25 02:39	6° $\Re$ 05'20	3°23'55	morning rise	7810 Nov 14 21:20	14° $\Pi$ 21'53		
morning rise	7809 Dec 02 03:28	1° $\Re$ 19'43		direct	7810 Nov 17 03:10	14° $\Pi$ 03'38		
direct	7809 Dec 04 09:34	0° $\Re$ 57'56		asc. node	7810 Nov 22 15:10	15° $\Pi$ 59'52		
asc. node	7809 Dec 05 18:08	1° $\Re$ 06'05		morning max el	7810 Nov 24 19:51	17° $\Pi$ 50'31	18°14'17	
morning max el	7809 Dec 11 08:20	4° $\Re$ 28'52	17°52'00		7810 Dec 03 13:03	0° $\Re$		
morning set	7809 Dec 27 02:18	29° $\Re$ 06'22		morning set	7810 Dec 10 14:37	12° $\Re$ 57'05		
	7809 Dec 27 14:10	0° $\Re$			7810 Dec 19 17:37	0° $\Re$		
superior conj	7810 Jan 06 21:07	18° $\Re$ 13'39	0°20'33	superior conj	7810 Dec 20 00:16	0° $\Re$ 30'07	0°54'03	
minimum elong	7810 Jan 06 22:56	18° $\Re$ 21'26	0°20'22	minimum elong	7810 Dec 20 03:40	0° $\Re$ 45'35	0°53'42	
desc. node	7810 Jan 09 16:33	23° $\Re$ 00'26		max. Earth dist.	7810 Dec 27 15:16	13° $\Re$ 53'10	1.41174 AU	
	7810 Jan 13 21:37	0° $\Re$		desc. node	7810 Dec 27 13:34	13° $\Re$ 45'58		
max. Earth dist.	7810 Jan 14 05:02	0° $\Re$ 30'19	1.43084 AU	evening rise	7811 Jan 01 10:18	21° $\Re$ 51'19		
evening rise	7810 Jan 21 00:48	11° $\Re$ 24'51			7811 Jan 06 12:45	0° $\Re$		
	7810 Feb 02 07:16	0° $\Re$			7811 Jan 27 10:19	0° $\Re$		
evening max el	7810 Feb 21 19:02	25° $\Re$ 36'33	21°50'42	evening max el	7811 Feb 04 10:56	9° $\Re$ 18'15	23°09'50	
	7810 Feb 27 06:16	0° $\Upsilon$		retrograde	7811 Feb 14 19:42	15° $\Re$ 26'36		
retrograde	7810 Mar 03 00:26	1° $\Upsilon$ 04'30		asc. node	7811 Feb 18 14:18	14° $\Re$ 15'40		
asc. node	7810 Mar 03 17:14	1° $\Upsilon$ 01'59		evening set	7811 Feb 19 18:10	13° $\Re$ 23'53		

min. Earth dist.	7811 Feb 24 17:19	7° $\text{H}$ 33'32	0.68341 AU	retrograde	7812 Jan 29 11:23	29° $\approx$ 45'27	
inferior conj	7811 Feb 25 03:34	6° $\text{H}$ 58'10	2°00'48	evening set	7812 Feb 03 22:18	27° $\approx$ 28'59	
minimum elong	7811 Feb 25 01:22	7° $\text{H}$ 05'45	2°00'08	asc. node	7812 Feb 05 11:23	25° $\approx$ 59'35	
morning rise	7811 Mar 02 08:31	0° $\text{H}$ 51'30		min. Earth dist.	7812 Feb 08 13:15	22° $\approx$ 12'47	0.67969 AU
	7811 Mar 03 14:07	30° $\text{R}$ $\approx$		inferior conj	7812 Feb 09 10:51	21° $\approx$ 00'33	1°16'57
direct	7811 Mar 06 16:57	29° $\approx$ 06'43		minimum elong	7812 Feb 09 09:10	21° $\approx$ 06'10	1°16'23
	7811 Mar 10 01:20	0° $\text{H}$		morning rise	7812 Feb 14 20:10	15° $\approx$ 00'12	
morning max el	7811 Mar 15 06:44	4° $\text{H}$ 03'47	21°14'03	direct	7812 Feb 18 15:26	13° $\approx$ 37'25	
desc. node	7811 Mar 25 13:05	16° $\text{H}$ 38'57		morning max el	7812 Feb 26 05:26	17° $\approx$ 53'44	20°01'03
	7811 Apr 03 20:09	0° $\text{Y}$			7812 Mar 06 22:12	0° $\text{H}$	
morning set	7811 Apr 15 08:24	17° $\text{Y}$ 36'25		desc. node	7812 Mar 11 10:04	6° $\text{H}$ 28'48	
max. Earth dist.	7811 Apr 22 12:40	29° $\text{Y}$ 07'46	1.42436 AU	morning set	7812 Mar 24 06:37	25° $\text{H}$ 54'34	
	7811 Apr 23 01:24	0° $\text{B}$			7812 Mar 26 22:03	0° $\text{Y}$	
				max. Earth dist.	7812 Apr 03 22:02	12° $\text{Y}$ 35'06	1.44104 AU
superior conj	7811 Apr 29 19:40	11° $\text{B}$ 21'00	-2°03'40				
minimum elong	7811 Apr 30 00:16	11° $\text{B}$ 40'41	2°03'29	superior conj	7812 Apr 09 09:37	21° $\text{Y}$ 25'44	-2°11'31
	7811 May 10 09:04	0° $\text{II}$		minimum elong	7812 Apr 09 09:19	21° $\text{Y}$ 24'30	2°11'34
evening rise	7811 May 11 05:38	1° $\text{II}$ 32'48			7812 Apr 14 14:10	0° $\text{B}$	
asc. node	7811 May 17 13:20	12° $\text{II}$ 49'38		evening rise	7812 Apr 22 12:06	13° $\text{B}$ 26'05	
evening max el	7811 May 27 17:41	27° $\text{II}$ 31'53	18°07'05		7812 May 02 07:31	0° $\text{II}$	
	7811 May 30 22:43	0° $\text{B}$		asc. node	7812 May 03 10:23	1° $\text{II}$ 45'54	
retrograde	7811 Jun 03 10:58	0° $\text{B}$ 57'18		evening max el	7812 May 10 06:52	10° $\text{II}$ 47'16	18°08'55
evening set	7811 Jun 05 23:41	0° $\text{B}$ 28'26		retrograde	7812 May 16 16:28	14° $\text{II}$ 08'34	
	7811 Jun 07 01:14	30° $\text{R}$ $\text{II}$		evening set	7812 May 19 12:25	13° $\text{II}$ 27'27	
inferior conj	7811 Jun 12 17:32	25° $\text{II}$ 33'46	2°20'06	inferior conj	7812 May 25 16:33	8° $\text{II}$ 13'51	3°01'23
minimum elong	7811 Jun 12 20:38	25° $\text{II}$ 26'26	2°19'09	minimum elong	7812 May 25 18:50	8° $\text{II}$ 07'43	3°00'52
min. Earth dist.	7811 Jun 15 23:44	22° $\text{II}$ 30'36	0.60561 AU	min. Earth dist.	7812 May 28 11:29	5° $\text{II}$ 15'28	0.62766 AU
morning rise	7811 Jun 19 15:00	19° $\text{II}$ 40'17		morning rise	7812 May 31 23:38	2° $\text{II}$ 05'26	
desc. node	7811 Jun 21 12:30	18° $\text{II}$ 37'24			7812 Jun 04 21:09	30° $\text{R}$ $\text{B}$	
direct	7811 Jun 26 04:52	17° $\text{II}$ 32'48		desc. node	7812 Jun 07 09:33	29° $\text{B}$ 33'25	
morning max el	7811 Jul 10 12:31	25° $\text{II}$ 30'21	27°49'00	direct	7812 Jun 07 18:22	29° $\text{B}$ 33'00	
	7811 Jul 14 16:08	0° $\text{B}$			7812 Jun 10 18:30	0° $\text{II}$	
	7811 Aug 03 14:47	0° $\text{Q}$		morning max el	7812 Jun 21 19:22	7° $\text{II}$ 35'55	27°51'59
morning set	7811 Aug 12 01:15	16° $\text{Q}$ 25'44			7812 Jul 08 23:05	0° $\text{B}$	
asc. node	7811 Aug 13 12:41	19° $\text{Q}$ 31'07			7812 Jul 25 18:34	0° $\text{Q}$	
max. Earth dist.	7811 Aug 18 02:59	29° $\text{Q}$ 26'49	1.31805 AU	morning set	7812 Jul 26 00:14	0° $\text{Q}$ 28'33	
	7811 Aug 18 09:02	0° $\text{M}$		asc. node	7812 Jul 30 09:41	9° $\text{Q}$ 35'21	
				max. Earth dist.	7812 Jul 31 08:11	11° $\text{Q}$ 35'20	1.32361 AU
superior conj	7811 Aug 19 07:20	2° $\text{M}$ 02'55	0°56'10				
minimum elong	7811 Aug 19 05:13	1° $\text{M}$ 51'16	0°55'44	superior conj	7812 Aug 02 15:53	16° $\text{Q}$ 36'00	0°32'47
evening rise	7811 Aug 26 01:36	16° $\text{M}$ 52'04		minimum elong	7812 Aug 02 14:25	16° $\text{Q}$ 28'03	0°32'24
	7811 Sep 01 12:09	0° $\text{Q}$			7812 Aug 08 19:35	0° $\text{M}$	
desc. node	7811 Sep 17 11:32	25° $\text{Q}$ 02'19		evening rise	7812 Aug 09 13:12	1° $\text{M}$ 34'30	
evening max el	7811 Sep 22 01:41	29° $\text{Q}$ 58'31	25°23'18		7812 Aug 25 00:45	0° $\text{Q}$	
	7811 Sep 22 02:18	0° $\text{M}$		evening max el	7812 Sep 02 13:48	10° $\text{Q}$ 23'41	23°49'14
retrograde	7811 Oct 05 23:34	7° $\text{M}$ 00'35		desc. node	7812 Sep 03 08:35	11° $\text{Q}$ 07'54	
evening set	7811 Oct 11 21:27	5° $\text{M}$ 39'59		retrograde	7812 Sep 16 05:28	17° $\text{Q}$ 14'02	
min. Earth dist.	7811 Oct 16 13:33	3° $\text{M}$ 01'12	0.57638 AU	evening set	7812 Sep 20 18:24	16° $\text{Q}$ 28'52	
inferior conj	7811 Oct 19 13:28	0° $\text{M}$ 58'14	-5°17'49	min. Earth dist.	7812 Sep 27 00:13	13° $\text{Q}$ 28'03	0.55938 AU
minimum elong	7811 Oct 19 18:20	0° $\text{M}$ 49'53	5°17'10	inferior conj	7812 Sep 29 04:18	12° $\text{Q}$ 09'23	-5°31'44
	7811 Oct 20 23:52	30° $\text{R}$ $\text{Q}$		minimum elong	7812 Sep 29 02:52	12° $\text{Q}$ 11'33	5°31'40
morning rise	7811 Oct 27 17:34	26° $\text{Q}$ 43'16		morning rise	7812 Oct 07 13:31	8° $\text{Q}$ 13'31	
direct	7811 Oct 30 03:31	26° $\text{Q}$ 25'44		direct	7812 Oct 10 08:30	7° $\text{Q}$ 53'51	
	7811 Nov 07 06:23	0° $\text{M}$		morning max el	7812 Oct 20 14:52	12° $\text{Q}$ 42'52	20°03'09
morning max el	7811 Nov 07 23:08	0° $\text{M}$ 38'29	18°57'34	asc. node	7812 Oct 26 09:12	19° $\text{Q}$ 34'23	
asc. node	7811 Nov 09 12:11	2° $\text{M}$ 14'23			7812 Nov 01 16:49	0° $\text{M}$	
morning set	7811 Nov 24 12:54	27° $\text{M}$ 14'39		morning set	7812 Nov 07 17:54	11° $\text{M}$ 50'12	
	7811 Nov 25 22:25	0° $\text{J}$					
				superior conj	7812 Nov 15 10:40	27° $\text{M}$ 31'38	1°33'25
superior conj	7811 Dec 02 22:26	13° $\text{J}$ 40'46	1°18'12	minimum elong	7812 Nov 15 12:45	27° $\text{M}$ 42'05	1°33'23
minimum elong	7811 Dec 03 01:37	13° $\text{J}$ 56'02	1°17'58		7812 Nov 16 16:26	0° $\text{J}$	
max. Earth dist.	7811 Dec 09 21:09	26° $\text{J}$ 31'37	1.39031 AU	max. Earth dist.	7812 Nov 21 03:10	8° $\text{J}$ 37'05	1.36915 AU
	7811 Dec 11 20:20	0° $\text{B}$		evening rise	7812 Nov 24 22:12	15° $\text{J}$ 38'02	
evening rise	7811 Dec 13 17:47	3° $\text{B}$ 16'38		desc. node	7812 Nov 30 07:36	25° $\text{J}$ 03'59	
desc. node	7811 Dec 14 10:36	4° $\text{B}$ 28'24			7812 Dec 03 06:49	0° $\text{B}$	
	7811 Dec 30 17:07	0° $\approx$			7812 Dec 24 07:18	0° $\approx$	
evening max el	7812 Jan 18 00:26	23° $\approx$ 03'12	24°29'19	evening max el	7812 Dec 30 13:31	6° $\approx$ 50'44	25°42'10

retrograde	7813 Jan 11 22:24	13° $\approx$ 55'54			7813 Nov 26 11:55	0° $\approx$	
evening set	7813 Jan 17 22:06	11° $\approx$ 28'07		evening max el	7813 Dec 13 02:49	20° $\approx$ 34'12	26°41'00
asc. node	7813 Jan 22 08:26	6° $\approx$ 39'04		retrograde	7813 Dec 26 03:52	27° $\approx$ 50'53	
min. Earth dist.	7813 Jan 22 06:06	6° $\approx$ 46'26	0.67221 AU	evening set	7814 Jan 01 15:41	25° $\approx$ 15'44	
inferior conj	7813 Jan 23 14:58	5° $\approx$ 02'00	0°25'23	min. Earth dist.	7814 Jan 05 17:27	21° $\approx$ 08'52	0.66112 AU
minimum elong	7813 Jan 23 14:20	5° $\approx$ 04'02	0°25'13	inferior conj	7814 Jan 07 13:53	18° $\approx$ 57'30	-0°33'21
	7813 Jan 28 03:45	30° $\approx$ 3		minimum elong	7814 Jan 07 14:49	18° $\approx$ 54'44	0°32'50
morning rise	7813 Jan 29 07:01	29° $\approx$ 09'57		asc. node	7814 Jan 09 05:30	17° $\approx$ 02'58	
direct	7813 Feb 01 14:34	28° $\approx$ 06'52		morning rise	7814 Jan 13 14:52	13° $\approx$ 16'16	
	7813 Feb 06 07:46	0° $\approx$		direct	7814 Jan 16 12:25	12° $\approx$ 29'33	
morning max el	7813 Feb 08 11:55	1° $\approx$ 54'05	19°02'51	morning max el	7814 Jan 23 00:41	15° $\approx$ 59'24	18°20'50
greatest brilliancy	7813 Feb 22 08:31	20° $\approx$ 37'40	-0.8m		7814 Feb 02 10:01	0° $\approx$	
desc. node	7813 Feb 26 07:02	26° $\approx$ 40'00		morning set	7814 Feb 11 15:18	14° $\approx$ 39'17	
	7813 Feb 28 10:47	0° $\approx$		desc. node	7814 Feb 13 03:58	17° $\approx$ 05'58	
morning set	7813 Mar 03 10:22	4° $\approx$ 37'33			7814 Feb 21 06:48	0° $\approx$	
max. Earth dist.	7813 Mar 17 13:39	26° $\approx$ 41'13	1.45163 AU				
	7813 Mar 19 16:08	0° $\approx$		superior conj	7814 Feb 27 05:18	9° $\approx$ 20'11	-1°30'01
				minimum elong	7814 Feb 26 19:49	8° $\approx$ 43'01	1°28'58
superior conj	7813 Mar 20 00:51	0° $\approx$ 34'22	-2°00'32	max. Earth dist.	7814 Feb 28 09:00	11° $\approx$ 08'42	1.45499 AU
minimum elong	7813 Mar 19 17:41	0° $\approx$ 06'06	2°00'08		7814 Mar 12 10:09	0° $\approx$	
evening rise	7813 Apr 03 20:16	24° $\approx$ 22'09		evening rise	7814 Mar 15 05:07	4° $\approx$ 22'39	
	7813 Apr 07 06:49	0° $\approx$		greatest brilliancy	7814 Mar 25 18:29	20° $\approx$ 52'46	-0.8m
asc. node	7813 Apr 20 07:27	20° $\approx$ 09'24			7814 Mar 31 21:41	0° $\approx$	
evening max el	7813 Apr 23 19:29	24° $\approx$ 15'45	18°29'10	evening max el	7814 Apr 07 04:59	7° $\approx$ 50'31	19°06'58
retrograde	7813 Apr 30 06:55	27° $\approx$ 46'38		asc. node	7814 Apr 07 04:30	7° $\approx$ 49'18	
evening set	7813 May 03 10:02	26° $\approx$ 51'55		retrograde	7814 Apr 14 02:41	11° $\approx$ 43'26	
inferior conj	7813 May 09 04:23	21° $\approx$ 20'37	3°21'10	evening set	7814 Apr 17 13:22	10° $\approx$ 34'21	
minimum elong	7813 May 09 05:18	21° $\approx$ 17'52	3°21'00	inferior conj	7814 Apr 23 01:22	4° $\approx$ 46'57	3°24'13
min. Earth dist.	7813 May 11 08:26	18° $\approx$ 46'40	0.64723 AU	minimum elong	7814 Apr 23 00:59	4° $\approx$ 48'12	3°24'08
morning rise	7813 May 14 23:45	15° $\approx$ 05'17		min. Earth dist.	7814 Apr 24 13:57	2° $\approx$ 49'53	0.66290 AU
direct	7813 May 21 15:56	12° $\approx$ 19'42			7814 Apr 26 23:25	30° $\approx$ 3	
desc. node	7813 May 25 06:34	13° $\approx$ 01'28		morning rise	7814 Apr 28 12:11	28° $\approx$ 29'29	
morning max el	7813 Jun 04 05:05	20° $\approx$ 16'22	27°19'29	direct	7814 May 04 20:08	25° $\approx$ 43'20	
	7813 Jun 12 13:15	0° $\approx$		desc. node	7814 May 12 03:33	28° $\approx$ 33'25	
	7813 Jul 02 00:58	0° $\approx$			7814 May 14 00:36	0° $\approx$	
morning set	7813 Jul 09 14:27	14° $\approx$ 03'05		morning max el	7814 May 17 15:23	3° $\approx$ 20'40	26°18'40
max. Earth dist.	7813 Jul 14 05:18	23° $\approx$ 18'52	1.33404 AU		7814 Jun 06 20:20	0° $\approx$	
asc. node	7813 Jul 17 06:41	29° $\approx$ 41'35		morning set	7814 Jun 22 16:28	27° $\approx$ 00'06	
	7813 Jul 17 10:10	0° $\approx$			7814 Jun 24 06:36	0° $\approx$	
				max. Earth dist.	7814 Jun 26 16:00	4° $\approx$ 36'51	1.34925 AU
superior conj	7813 Jul 17 19:53	0° $\approx$ 51'30	0°05'37				
minimum elong	7813 Jul 17 19:36	0° $\approx$ 50'00	0°05'27	superior conj	7814 Jul 01 16:58	14° $\approx$ 43'00	-0°24'29
behind sun begin	7813 Jul 17 14:23	0° $\approx$ 22'21		minimum elong	7814 Jul 01 18:21	14° $\approx$ 50'09	0°24'19
behind sun end	7813 Jul 18 00:50	1° $\approx$ 17'43		asc. node	7814 Jul 04 03:41	19° $\approx$ 46'08	
evening rise	7813 Jul 25 00:19	16° $\approx$ 12'05		evening rise	7814 Jul 09 09:00	0° $\approx$ 39'05	
	7813 Jul 31 21:06	0° $\approx$			7814 Jul 09 01:27	0° $\approx$	
evening max el	7813 Aug 15 03:12	20° $\approx$ 38'40	22°10'36		7814 Jul 26 20:13	0° $\approx$	
desc. node	7813 Aug 21 05:39	25° $\approx$ 15'25		evening max el	7814 Jul 28 02:08	1° $\approx$ 17'43	20°42'17
retrograde	7813 Aug 27 22:57	27° $\approx$ 01'14		retrograde	7814 Aug 08 11:06	6° $\approx$ 55'09	
evening set	7813 Aug 31 00:18	26° $\approx$ 40'34		desc. node	7814 Aug 08 02:43	6° $\approx$ 54'51	
min. Earth dist.	7813 Sep 08 08:46	23° $\approx$ 02'59	0.54899 AU	evening set	7814 Aug 10 13:29	6° $\approx$ 44'26	
inferior conj	7813 Sep 09 02:29	22° $\approx$ 38'05	-4°54'30	inferior conj	7814 Aug 19 19:07	2° $\approx$ 47'30	-3°25'15
minimum elong	7813 Sep 08 18:21	22° $\approx$ 49'32	4°52'56	minimum elong	7814 Aug 19 10:16	3° $\approx$ 00'09	3°22'28
morning rise	7813 Sep 17 13:58	18° $\approx$ 49'47		min. Earth dist.	7814 Aug 20 18:11	2° $\approx$ 14'31	0.54757 AU
direct	7813 Sep 20 21:54	18° $\approx$ 25'03			7814 Aug 25 00:25	30° $\approx$ 3	
morning max el	7813 Oct 02 17:36	23° $\approx$ 58'12	21°30'07	morning rise	7814 Aug 28 06:55	28° $\approx$ 47'05	
	7813 Oct 08 01:51	0° $\approx$		direct	7814 Sep 01 06:20	28° $\approx$ 13'14	
asc. node	7813 Oct 13 06:12	7° $\approx$ 44'56			7814 Sep 08 04:13	0° $\approx$	
morning set	7813 Oct 23 03:01	26° $\approx$ 36'01		morning max el	7814 Sep 14 10:07	4° $\approx$ 32'37	23°12'25
	7813 Oct 24 17:57	0° $\approx$		asc. node	7814 Sep 30 03:11	26° $\approx$ 33'57	
					7814 Oct 01 23:02	0° $\approx$	
superior conj	7813 Oct 30 08:52	11° $\approx$ 50'26	1°40'43	morning set	7814 Oct 07 14:20	11° $\approx$ 26'32	
minimum elong	7813 Oct 30 09:35	11° $\approx$ 54'11	1°40'47				
max. Earth dist.	7813 Nov 03 14:37	20° $\approx$ 30'57	1.35036 AU	superior conj	7814 Oct 14 13:54	26° $\approx$ 27'55	1°41'04
evening rise	7813 Nov 07 19:55	28° $\approx$ 45'26		minimum elong	7814 Oct 14 13:21	26° $\approx$ 25'01	1°41'06
	7813 Nov 08 11:41	0° $\approx$			7814 Oct 16 05:36	0° $\approx$	
desc. node	7813 Nov 17 04:36	15° $\approx$ 27'31		max. Earth dist.	7814 Oct 17 10:15	2° $\approx$ 31'28	1.33532 AU

evening rise	7814 Oct 22 07:02	12° $\mathbb{M}$ 28'51		evening rise	7815 Oct 06 04:02	26° $\mathbb{A}$ 38'20	
	7814 Oct 31 18:03	0° $\mathbb{A}$			7815 Oct 07 19:46	0° $\mathbb{M}$	
desc. node	7814 Nov 04 01:40	5° $\mathbb{A}$ 33'11		desc. node	7815 Oct 21 22:44	25° $\mathbb{M}$ 12'34	
	7814 Nov 21 17:36	0° $\mathbb{B}$			7815 Oct 25 02:40	0° $\mathbb{A}$	
evening max el	7814 Nov 25 15:35	4° $\mathbb{B}$ 03'19	27°18'31	evening max el	7815 Nov 08 02:04	17° $\mathbb{A}$ 05'25	27°28'19
retrograde	7814 Dec 09 03:17	11° $\mathbb{B}$ 22'55		retrograde	7815 Nov 21 20:10	24° $\mathbb{A}$ 22'21	
evening set	7814 Dec 16 00:51	8° $\mathbb{B}$ 46'32		evening set	7815 Nov 28 22:44	21° $\mathbb{A}$ 53'41	
min. Earth dist.	7814 Dec 19 21:04	5° $\mathbb{B}$ 13'31	0.64652 AU	min. Earth dist.	7815 Dec 02 15:08	18° $\mathbb{A}$ 50'36	0.62870 AU
inferior conj	7814 Dec 22 05:16	2° $\mathbb{B}$ 41'53	-1°38'05	inferior conj	7815 Dec 05 10:18	16° $\mathbb{A}$ 08'06	-2°46'37
minimum elong	7814 Dec 22 08:14	2° $\mathbb{B}$ 33'51	1°36'43	minimum elong	7815 Dec 05 15:31	15° $\mathbb{A}$ 55'28	2°44'33
	7814 Dec 24 20:14	30° $\mathbb{R}$ $\mathbb{A}$		morning rise	7815 Dec 12 10:18	10° $\mathbb{A}$ 57'28	
asc. node	7814 Dec 27 02:33	28° $\mathbb{A}$ 08'33		asc. node	7815 Dec 13 23:35	10° $\mathbb{A}$ 35'10	
morning rise	7814 Dec 28 17:06	27° $\mathbb{A}$ 14'23		direct	7815 Dec 14 18:10	10° $\mathbb{A}$ 32'20	
direct	7814 Dec 31 06:36	26° $\mathbb{A}$ 40'21		morning max el	7815 Dec 21 10:27	13° $\mathbb{A}$ 58'03	17°48'09
morning max el	7815 Jan 06 17:13	0° $\mathbb{B}$ 03'24	17°55'43		7816 Jan 01 11:41	0° $\mathbb{B}$	
	7815 Jan 06 15:50	0° $\mathbb{B}$		morning set	7816 Jan 06 12:26	8° $\mathbb{B}$ 47'06	
morning set	7815 Jan 24 01:39	26° $\mathbb{B}$ 08'02		desc. node	7816 Jan 17 21:57	28° $\mathbb{B}$ 25'19	
	7815 Jan 26 09:11	0° $\mathbb{A}$					
desc. node	7815 Jan 31 00:57	7° $\mathbb{A}$ 42'22		superior conj	7816 Jan 18 06:48	29° $\mathbb{B}$ 02'13	-0°02'42
				minimum elong	7816 Jan 18 06:32	29° $\mathbb{B}$ 01'07	0°02'34
superior conj	7815 Feb 06 18:36	18° $\mathbb{A}$ 37'11	-0°47'09	behind sun begin	7816 Jan 17 21:26	28° $\mathbb{B}$ 23'07	
minimum elong	7815 Feb 06 13:06	18° $\mathbb{A}$ 15'13	0°46'18	behind sun end	7816 Jan 18 15:38	29° $\mathbb{B}$ 39'02	
max. Earth dist.	7815 Feb 11 04:42	25° $\mathbb{A}$ 38'28	1.45086 AU		7816 Jan 18 20:40	0° $\mathbb{A}$	
	7815 Feb 13 23:18	0° $\mathbb{H}$		max. Earth dist.	7816 Jan 24 21:47	9° $\mathbb{A}$ 52'47	1.43977 AU
evening rise	7815 Feb 22 20:38	13° $\mathbb{H}$ 46'40		evening rise	7816 Feb 02 08:08	23° $\mathbb{A}$ 08'56	
	7815 Mar 05 12:31	0° $\mathbb{Y}$			7816 Feb 06 19:34	0° $\mathbb{H}$	
greatest brilliancy	7815 Mar 09 12:12	5° $\mathbb{Y}$ 54'51	-0.6m		7816 Feb 27 21:21	0° $\mathbb{Y}$	
evening max el	7815 Mar 21 09:37	21° $\mathbb{Y}$ 27'30	20°00'42	evening max el	7816 Mar 03 08:45	5° $\mathbb{Y}$ 06'07	21°07'42
asc. node	7815 Mar 25 01:35	24° $\mathbb{Y}$ 32'44		asc. node	7816 Mar 10 22:39	10° $\mathbb{Y}$ 05'23	
retrograde	7815 Mar 29 00:56	25° $\mathbb{Y}$ 52'57		retrograde	7816 Mar 11 23:22	10° $\mathbb{Y}$ 10'52	
evening set	7815 Apr 01 19:59	24° $\mathbb{Y}$ 29'06		evening set	7816 Mar 16 03:59	8° $\mathbb{Y}$ 32'01	
inferior conj	7815 Apr 07 04:31	18° $\mathbb{Y}$ 27'27	3°14'02	inferior conj	7816 Mar 21 11:25	2° $\mathbb{Y}$ 18'38	2°52'57
minimum elong	7815 Apr 07 03:06	18° $\mathbb{Y}$ 32'14	3°13'50	minimum elong	7816 Mar 21 09:21	2° $\mathbb{Y}$ 25'47	2°52'31
min. Earth dist.	7815 Apr 08 02:34	17° $\mathbb{Y}$ 13'07	0.67420 AU	min. Earth dist.	7816 Mar 21 20:11	1° $\mathbb{Y}$ 48'13	0.68110 AU
morning rise	7815 Apr 12 09:59	12° $\mathbb{Y}$ 10'46			7816 Mar 23 03:55	30° $\mathbb{R}$ $\mathbb{H}$	
direct	7815 Apr 18 06:07	9° $\mathbb{Y}$ 34'21		morning rise	7816 Mar 26 14:31	26° $\mathbb{H}$ 04'33	
desc. node	7815 Apr 29 00:32	15° $\mathbb{Y}$ 37'44		direct	7816 Mar 31 21:04	23° $\mathbb{H}$ 45'16	
morning max el	7815 Apr 30 00:51	16° $\mathbb{Y}$ 37'50	24°58'39		7816 Apr 11 09:15	0° $\mathbb{Y}$	
	7815 May 11 03:00	0° $\mathbb{B}$		morning max el	7816 Apr 11 10:06	0° $\mathbb{Y}$ 02'09	23°29'39
	7815 May 30 19:28	0° $\mathbb{H}$		desc. node	7816 Apr 14 21:32	3° $\mathbb{Y}$ 49'12	
morning set	7815 Jun 05 01:42	9° $\mathbb{H}$ 06'47			7816 May 03 23:12	0° $\mathbb{B}$	
max. Earth dist.	7815 Jun 08 16:42	15° $\mathbb{H}$ 41'15	1.36863 AU	morning set	7816 May 16 12:41	20° $\mathbb{B}$ 08'58	
				max. Earth dist.	7816 May 20 12:29	27° $\mathbb{B}$ 00'49	1.39065 AU
					7816 May 22 05:09	0° $\mathbb{H}$	
superior conj	7815 Jun 15 04:04	28° $\mathbb{H}$ 01'51	-0°56'01				
minimum elong	7815 Jun 15 07:27	28° $\mathbb{H}$ 18'28	0°55'33	superior conj	7816 May 28 01:31	10° $\mathbb{H}$ 39'25	-1°26'38
	7815 Jun 16 04:03	0° $\mathbb{B}$		minimum elong	7816 May 28 06:40	11° $\mathbb{H}$ 03'31	1°26'02
asc. node	7815 Jun 21 00:41	9° $\mathbb{B}$ 44'25		evening rise	7816 Jun 06 09:08	28° $\mathbb{H}$ 31'29	
evening rise	7815 Jun 23 12:52	14° $\mathbb{B}$ 48'02		asc. node	7816 Jun 06 21:44	29° $\mathbb{H}$ 32'31	
	7815 Jul 01 12:00	0° $\mathbb{Q}$			7816 Jun 07 03:25	0° $\mathbb{B}$	
evening max el	7815 Jul 10 14:12	12° $\mathbb{Q}$ 39'00	19°32'26	evening max el	7816 Jun 22 14:03	24° $\mathbb{B}$ 44'04	18°43'19
retrograde	7815 Jul 20 06:11	17° $\mathbb{Q}$ 25'00		retrograde	7816 Jun 30 17:44	28° $\mathbb{B}$ 46'20	
evening set	7815 Jul 22 02:47	17° $\mathbb{Q}$ 15'11		evening set	7816 Jul 02 18:51	28° $\mathbb{B}$ 32'00	
desc. node	7815 Jul 25 23:47	15° $\mathbb{Q}$ 58'24		inferior conj	7816 Jul 10 17:48	24° $\mathbb{B}$ 09'39	0°20'12
inferior conj	7815 Jul 30 20:50	13° $\mathbb{Q}$ 10'06	-1°29'19	minimum elong	7816 Jul 10 18:34	24° $\mathbb{B}$ 08'13	0°19'48
minimum elong	7815 Jul 30 16:47	13° $\mathbb{Q}$ 16'34	1°27'51	desc. node	7816 Jul 11 20:50	23° $\mathbb{B}$ 19'16	
min. Earth dist.	7815 Aug 02 06:37	11° $\mathbb{Q}$ 38'21	0.55569 AU	min. Earth dist.	7816 Jul 13 23:22	21° $\mathbb{B}$ 46'51	0.57181 AU
morning rise	7815 Aug 08 04:19	8° $\mathbb{Q}$ 38'29		morning rise	7816 Jul 18 14:47	19° $\mathbb{B}$ 00'56	
direct	7815 Aug 12 22:47	7° $\mathbb{Q}$ 47'30		direct	7816 Jul 24 05:57	17° $\mathbb{B}$ 42'54	
morning max el	7815 Aug 26 22:49	14° $\mathbb{Q}$ 48'10	24°57'14	morning max el	7816 Aug 07 14:07	25° $\mathbb{B}$ 13'50	26°27'51
	7815 Sep 08 00:09	0° $\mathbb{H}$			7816 Aug 12 00:35	0° $\mathbb{Q}$	
asc. node	7815 Sep 17 00:10	15° $\mathbb{H}$ 51'11			7816 Aug 31 03:09	0° $\mathbb{H}$	
morning set	7815 Sep 22 02:02	26° $\mathbb{H}$ 15'49		asc. node	7816 Sep 02 21:10	5° $\mathbb{H}$ 29'10	
	7815 Sep 23 19:46	0° $\mathbb{A}$		morning set	7816 Sep 05 12:31	10° $\mathbb{H}$ 59'11	
superior conj	7815 Sep 28 23:10	11° $\mathbb{A}$ 15'34	1°35'17				
minimum elong	7815 Sep 28 21:39	11° $\mathbb{A}$ 07'16	1°35'11	superior conj	7816 Sep 12 10:36	26° $\mathbb{H}$ 06'57	1°24'00
max. Earth dist.	7815 Sep 30 13:31	14° $\mathbb{A}$ 45'01	1.32465 AU	minimum elong	7816 Sep 12 08:30	25° $\mathbb{H}$ 55'18	1°23'43

max. Earth dist.	7816 Sep 12 22:02	27° $\cap$ 10'16	1.31854 AU	superior conj	7817 Aug 27 22:21	10° $\cap$ 56'08	1°07'40
	7816 Sep 14 04:45	0° $\Omega$		minimum elong	7817 Aug 27 20:06	10° $\cap$ 43'40	1°07'17
evening rise	7816 Sep 19 08:01	11° $\Omega$ 06'08		max. Earth dist.	7817 Aug 27 08:27	9° $\cap$ 39'04	1.31693 AU
	7816 Sep 29 00:55	0° $\cap$		evening rise	7817 Sep 03 16:37	25° $\cap$ 45'15	
desc. node	7816 Oct 07 19:49	14° $\cap$ 15'08			7817 Sep 05 17:01	0° $\Omega$	
evening max el	7816 Oct 20 08:01	29° $\cap$ 28'33	27°05'29		7817 Sep 22 21:33	0° $\cap$	
	7816 Oct 20 21:33	0° $\mathcal{A}$		desc. node	7817 Sep 24 16:52	2° $\cap$ 26'29	
retrograde	7816 Nov 03 05:27	6° $\mathcal{A}$ 39'40		evening max el	7817 Oct 02 06:57	11° $\cap$ 03'34	26°09'06
evening set	7816 Nov 10 05:31	4° $\mathcal{A}$ 29'45		retrograde	7817 Oct 16 05:19	18° $\cap$ 08'21	
min. Earth dist.	7816 Nov 13 22:42	1° $\mathcal{A}$ 47'53	0.60860 AU	evening set	7817 Oct 22 16:31	16° $\cap$ 27'52	
	7816 Nov 16 01:34	30° $\mathcal{R}\cap$		min. Earth dist.	7817 Oct 26 20:01	13° $\cap$ 53'11	0.58778 AU
inferior conj	7816 Nov 17 01:45	29° $\cap$ 07'52	-3°54'31	inferior conj	7817 Oct 30 00:09	11° $\cap$ 32'02	-4°53'21
minimum elong	7816 Nov 17 08:40	28° $\cap$ 53'04	3°52'20	minimum elong	7817 Oct 30 06:49	11° $\cap$ 19'38	4°51'58
morning rise	7816 Nov 24 14:07	24° $\cap$ 17'01		morning rise	7817 Nov 06 23:23	7° $\cap$ 03'31	
direct	7816 Nov 26 19:26	23° $\cap$ 57'15		direct	7817 Nov 09 06:22	6° $\cap$ 45'53	
asc. node	7816 Nov 29 20:38	24° $\cap$ 36'09		asc. node	7817 Nov 16 17:40	10° $\cap$ 06'12	
morning max el	7816 Dec 04 01:03	27° $\cap$ 34'17	17°59'04	morning max el	7817 Nov 17 09:28	10° $\cap$ 42'53	18°30'00
	7816 Dec 06 05:45	0° $\mathcal{A}$			7817 Nov 30 02:21	0° $\mathcal{A}$	
morning set	7816 Dec 19 17:02	22° $\mathcal{A}$ 16'14		morning set	7817 Dec 03 10:07	6° $\mathcal{A}$ 20'13	
	7816 Dec 23 21:54	0° $\mathcal{Z}$					
superior conj	7816 Dec 29 20:35	10° $\mathcal{Z}$ 40'18	0°35'52	superior conj	7817 Dec 12 08:26	23° $\mathcal{A}$ 21'34	1°05'25
minimum elong	7816 Dec 29 23:22	10° $\mathcal{Z}$ 52'30	0°35'35	minimum elong	7817 Dec 12 11:55	23° $\mathcal{A}$ 37'43	1°05'06
desc. node	7817 Jan 03 18:57	19° $\mathcal{Z}$ 10'46			7817 Dec 15 23:43	0° $\mathcal{Z}$	
max. Earth dist.	7817 Jan 06 10:27	23° $\mathcal{Z}$ 36'36	1.42308 AU	max. Earth dist.	7817 Dec 19 18:43	6° $\mathcal{Z}$ 41'21	1.40276 AU
	7817 Jan 10 08:18	0° $\approx$		desc. node	7817 Dec 21 15:58	9° $\mathcal{Z}$ 55'34	
evening rise	7817 Jan 12 06:37	3° $\approx$ 05'14		evening rise	7817 Dec 24 01:23	13° $\mathcal{Z}$ 57'02	
	7817 Jan 30 05:12	0° $\mathcal{H}$			7818 Jan 03 03:35	0° $\approx$	
evening max el	7817 Feb 14 02:57	18° $\mathcal{H}$ 46'35	22°23'59	evening max el	7818 Jan 25 08:28	0° $\mathcal{H}$	
retrograde	7817 Feb 23 20:08	24° $\mathcal{H}$ 32'24			7818 Jan 27 17:46	2° $\mathcal{H}$ 30'30	23°44'02
asc. node	7817 Feb 25 19:44	24° $\mathcal{H}$ 12'23		retrograde	7818 Feb 07 13:52	8° $\mathcal{H}$ 53'43	
evening set	7817 Feb 28 11:41	22° $\mathcal{H}$ 38'28		evening set	7818 Feb 12 17:33	6° $\mathcal{H}$ 45'07	
inferior conj	7817 Mar 05 19:55	16° $\mathcal{H}$ 16'22	2°22'23	asc. node	7818 Feb 12 16:48	6° $\mathcal{H}$ 46'42	
minimum elong	7817 Mar 05 17:38	16° $\mathcal{H}$ 24'18	2°21'45	min. Earth dist.	7818 Feb 17 13:07	1° $\mathcal{H}$ 09'17	0.68235 AU
min. Earth dist.	7817 Mar 05 16:28	16° $\mathcal{H}$ 28'23	0.68375 AU	inferior conj	7818 Feb 18 04:10	0° $\mathcal{H}$ 17'57	1°43'13
morning rise	7817 Mar 10 23:26	10° $\mathcal{H}$ 06'30		minimum elong	7818 Feb 18 02:07	0° $\mathcal{H}$ 24'55	1°42'33
direct	7817 Mar 15 15:56	8° $\mathcal{H}$ 08'27			7818 Feb 18 09:26	30° $\mathcal{R}\approx$	
morning max el	7817 Mar 24 21:59	13° $\mathcal{H}$ 33'32	22°01'21	morning rise	7818 Feb 23 10:40	24° $\approx$ 13'46	
desc. node	7817 Apr 01 18:31	22° $\mathcal{H}$ 48'35		direct	7818 Feb 27 13:29	22° $\approx$ 38'18	
	7817 Apr 07 01:35	0° $\mathcal{Y}$		morning max el	7818 Mar 07 16:07	27° $\approx$ 16'14	20°41'20
morning set	7817 Apr 26 20:25	29° $\mathcal{Y}$ 53'56			7818 Mar 10 04:56	0° $\mathcal{H}$	
	7817 Apr 26 21:55	0° $\mathcal{B}$		desc. node	7818 Mar 19 15:30	12° $\mathcal{H}$ 22'54	
max. Earth dist.	7817 May 02 10:48	9° $\mathcal{B}$ 05'10	1.41281 AU		7818 Mar 31 13:52	0° $\mathcal{Y}$	
superior conj	7817 May 10 04:43	22° $\mathcal{B}$ 24'33	-1°52'42	morning set	7818 Apr 06 02:49	8° $\mathcal{Y}$ 31'10	
minimum elong	7817 May 10 10:19	22° $\mathcal{B}$ 49'21	1°52'18	max. Earth dist.	7818 Apr 14 16:30	22° $\mathcal{Y}$ 06'20	1.43220 AU
	7817 May 14 10:16	0° $\cap$			7818 Apr 19 12:08	0° $\mathcal{B}$	
evening rise	7817 May 20 18:08	11° $\cap$ 39'52		superior conj	7818 Apr 21 09:06	3° $\mathcal{B}$ 07'33	-2°08'59
asc. node	7817 May 24 18:46	19° $\cap$ 05'07		minimum elong	7818 Apr 21 12:07	3° $\mathcal{B}$ 20'09	2°08'58
	7817 May 31 04:05	0° $\mathcal{E}$		evening rise	7818 May 03 11:39	24° $\mathcal{B}$ 03'41	
evening max el	7817 Jun 05 21:59	7° $\mathcal{E}$ 24'04	18°14'38		7818 May 06 20:22	0° $\cap$	
retrograde	7817 Jun 13 00:15	10° $\mathcal{E}$ 57'57		asc. node	7818 May 11 15:48	8° $\cap$ 16'44	
evening set	7817 Jun 15 08:49	10° $\mathcal{E}$ 35'06		evening max el	7818 May 20 10:14	20° $\cap$ 29'16	18°05'30
inferior conj	7817 Jun 22 12:24	5° $\mathcal{E}$ 52'08	1°44'34	retrograde	7818 May 26 22:48	23° $\cap$ 50'55	
minimum elong	7817 Jun 22 15:21	5° $\mathcal{E}$ 45'45	1°43'32	evening set	7818 May 29 14:45	23° $\cap$ 16'53	
min. Earth dist.	7817 Jun 25 21:53	2° $\mathcal{E}$ 56'58	0.59281 AU	inferior conj	7818 Jun 05 02:14	18° $\cap$ 13'44	2°40'34
desc. node	7817 Jun 28 17:53	0° $\mathcal{E}$ 50'31		minimum elong	7818 Jun 05 05:06	18° $\cap$ 06'32	2°39'47
morning rise	7817 Jun 29 18:49	0° $\mathcal{E}$ 12'21		min. Earth dist.	7818 Jun 08 04:14	15° $\cap$ 10'09	0.61526 AU
	7817 Jun 30 03:42	30° $\mathcal{R}\cap$		morning rise	7818 Jun 11 17:22	12° $\cap$ 12'58	
direct	7817 Jul 06 02:38	28° $\cap$ 22'24		desc. node	7818 Jun 15 14:56	10° $\cap$ 17'58	
	7817 Jul 12 07:32	0° $\mathcal{E}$		direct	7818 Jun 18 10:20	9° $\cap$ 53'55	
morning max el	7817 Jul 20 11:30	6° $\mathcal{E}$ 12'11	27°29'50	morning max el	7818 Jul 02 15:27	17° $\cap$ 53'54	27°54'55
	7817 Aug 07 06:07	0° $\mathcal{O}$			7818 Jul 12 18:00	0° $\mathcal{E}$	
morning set	7817 Aug 20 20:07	25° $\mathcal{O}$ 31'49		morning set	7818 Jul 31 00:20	0° $\mathcal{O}$	
asc. node	7817 Aug 20 18:11	25° $\mathcal{O}$ 21'39			7818 Aug 04 22:52	9° $\mathcal{O}$ 47'27	
	7817 Aug 22 22:37	0° $\cap$		asc. node	7818 Aug 07 15:08	15° $\mathcal{O}$ 22'52	
				max. Earth dist.	7818 Aug 10 16:53	21° $\mathcal{O}$ 59'33	1.31988 AU

superior conj	7818 Aug 12 08:35	25° $\Omega$ 36'42	0°46'45	superior conj	7819 Jul 27 15:29	10° $\Omega$ 03'21	0°21'41
minimum elong	7818 Aug 12 06:41	25° $\Omega$ 26'15	0°46'19	minimum elong	7819 Jul 27 14:27	9° $\Omega$ 57'49	0°21'22
	7818 Aug 14 08:26	0° $\mathbb{M}$		evening rise	7819 Aug 03 15:20	25° $\Omega$ 09'59	
evening rise	7818 Aug 19 03:40	10° $\mathbb{M}$ 28'25			7819 Aug 05 22:33	0° $\mathbb{M}$	
	7818 Aug 29 01:21	0° $\underline{\Omega}$			7819 Aug 24 09:08	0° $\underline{\Omega}$	
desc. node	7818 Sep 11 13:56	19° $\underline{\Omega}$ 25'36		evening max el	7819 Aug 26 09:19	2° $\underline{\Omega}$ 04'54	23°06'42
evening max el	7818 Sep 13 21:58	21° $\underline{\Omega}$ 49'08	24°44'56	desc. node	7819 Aug 29 10:59	4° $\underline{\Omega}$ 45'11	
retrograde	7818 Sep 27 17:55	28° $\underline{\Omega}$ 46'52		retrograde	7819 Sep 08 18:27	8° $\underline{\Omega}$ 46'22	
evening set	7818 Oct 03 03:17	27° $\underline{\Omega}$ 41'49		evening set	7819 Sep 12 15:46	8° $\underline{\Omega}$ 13'16	
min. Earth dist.	7818 Oct 08 09:06	24° $\underline{\Omega}$ 56'02	0.56856 AU	min. Earth dist.	7819 Sep 19 18:11	4° $\underline{\Omega}$ 58'27	0.55402 AU
inferior conj	7818 Oct 11 02:35	23° $\underline{\Omega}$ 10'27	-5°29'02	inferior conj	7819 Sep 21 09:24	4° $\underline{\Omega}$ 01'34	-5°22'48
minimum elong	7818 Oct 11 05:12	23° $\underline{\Omega}$ 06'12	5°28'49	minimum elong	7819 Sep 21 04:45	4° $\underline{\Omega}$ 08'20	5°22'19
morning rise	7818 Oct 19 09:20	19° $\underline{\Omega}$ 04'30		morning rise	7819 Sep 29 19:54	0° $\underline{\Omega}$ 11'17	
direct	7818 Oct 21 22:49	18° $\underline{\Omega}$ 46'14			7819 Sep 30 18:50	30° $\mathbb{R}$ $\mathbb{M}$	
morning max el	7818 Oct 31 08:05	23° $\underline{\Omega}$ 12'51	19°22'44	direct	7819 Oct 02 19:56	29° $\mathbb{M}$ 49'57	
asc. node	7818 Nov 03 14:41	26° $\underline{\Omega}$ 50'13			7819 Oct 04 20:05	0° $\underline{\Omega}$	
	7818 Nov 05 22:29	0° $\mathbb{M}$		morning max el	7819 Oct 13 18:19	4° $\underline{\Omega}$ 56'30	20°37'47
morning set	7818 Nov 17 11:36	20° $\mathbb{M}$ 46'27		asc. node	7819 Oct 21 11:41	14° $\underline{\Omega}$ 33'04	
	7818 Nov 22 02:01	0° $\mathbb{X}$			7819 Oct 30 02:12	0° $\mathbb{M}$	
				morning set	7819 Nov 01 18:35	5° $\mathbb{M}$ 26'51	
superior conj	7818 Nov 25 13:08	6° $\mathbb{X}$ 50'43	1°25'41	superior conj	7819 Nov 09 06:04	20° $\mathbb{M}$ 54'41	1°37'26
minimum elong	7818 Nov 25 15:55	7° $\mathbb{X}$ 04'19	1°25'32	minimum elong	7819 Nov 09 07:35	21° $\mathbb{M}$ 02'23	1°37'26
max. Earth dist.	7818 Dec 02 00:28	19° $\mathbb{X}$ 05'24	1.38115 AU		7819 Nov 13 19:17	0° $\mathbb{X}$	
evening rise	7818 Dec 05 18:04	25° $\mathbb{X}$ 46'33		max. Earth dist.	7819 Nov 14 08:04	1° $\mathbb{X}$ 02'08	1.36074 AU
	7818 Dec 08 04:40	0° $\mathbb{Z}$		evening rise	7819 Nov 18 06:17	8° $\mathbb{X}$ 28'07	
desc. node	7818 Dec 08 12:57	0° $\mathbb{Z}$ 35'17		desc. node	7819 Nov 25 09:57	21° $\mathbb{X}$ 05'54	
	7818 Dec 27 18:05	0° $\approx$			7819 Nov 30 21:15	0° $\mathbb{Z}$	
evening max el	7819 Jan 10 06:56	16° $\approx$ 16'41	25°01'31		7819 Dec 23 18:59	0° $\approx$	
retrograde	7819 Jan 22 03:31	23° $\approx$ 09'33		evening max el	7819 Dec 23 19:49	0° $\approx$ 02'01	26°09'18
evening set	7819 Jan 27 20:02	20° $\approx$ 47'42		retrograde	7820 Jan 05 12:19	7° $\approx$ 13'58	
asc. node	7819 Jan 30 13:53	17° $\approx$ 58'05		evening set	7820 Jan 11 17:26	4° $\approx$ 42'06	
min. Earth dist.	7819 Feb 01 07:52	15° $\approx$ 46'26	0.67700 AU	min. Earth dist.	7820 Jan 15 22:34	0° $\approx$ 15'27	0.66790 AU
inferior conj	7819 Feb 02 10:18	14° $\approx$ 19'48	0°56'00		7820 Jan 16 03:37	30° $\mathbb{R}$ $\mathbb{Z}$	
minimum elong	7819 Feb 02 09:00	14° $\approx$ 24'05	0°55'34	asc. node	7820 Jan 17 10:57	28° $\mathbb{Z}$ 23'06	
morning rise	7819 Feb 07 22:13	8° $\approx$ 23'00		inferior conj	7820 Jan 17 12:26	28° $\mathbb{Z}$ 18'30	0°01'15
direct	7819 Feb 11 12:22	7° $\approx$ 08'56		minimum elong	7820 Jan 17 12:24	28° $\mathbb{Z}$ 18'37	0°01'21
morning max el	7819 Feb 18 18:15	11° $\approx$ 10'59	19°34'27	transit middle	7820 Jan 17 12:24	28° $\mathbb{Z}$ 18'37	0°01'21
greatest brilliancy	7819 Mar 03 12:45	27° $\approx$ 55'04	-0.7m	transit begin	7820 Jan 17 09:33	28° $\mathbb{Z}$ 27'27	
	7819 Mar 04 22:25	0° $\mathbb{X}$		transit end	7820 Jan 17 15:15	28° $\mathbb{Z}$ 09'48	
desc. node	7819 Mar 06 12:27	2° $\mathbb{X}$ 22'22		morning rise	7820 Jan 23 08:03	22° $\mathbb{Z}$ 31'00	
morning set	7819 Mar 16 00:18	16° $\mathbb{X}$ 51'16		direct	7820 Jan 26 11:03	21° $\mathbb{Z}$ 35'30	
	7819 Mar 24 11:23	0° $\mathbb{Y}$		morning max el	7820 Feb 02 03:44	25° $\mathbb{Z}$ 14'02	18°42'59
max. Earth dist.	7819 Mar 28 05:20	5° $\mathbb{Y}$ 54'11	1.44637 AU		7820 Feb 06 06:15	0° $\approx$	
				desc. node	7820 Feb 21 09:23	22° $\approx$ 39'55	
superior conj	7819 Apr 01 12:37	12° $\mathbb{Y}$ 45'49	-2°09'22	morning set	7820 Feb 23 13:07	26° $\approx$ 02'54	
minimum elong	7819 Apr 01 09:19	12° $\mathbb{Y}$ 32'34	2°09'19		7820 Feb 26 01:31	0° $\mathbb{X}$	
	7819 Apr 12 01:22	0° $\mathbb{B}$		max. Earth dist.	7820 Mar 09 22:34	20° $\mathbb{X}$ 10'02	1.45387 AU
evening rise	7819 Apr 15 09:05	5° $\mathbb{B}$ 33'44					
asc. node	7819 Apr 28 12:51	27° $\mathbb{B}$ 00'27		superior conj	7820 Mar 10 21:02	21° $\mathbb{X}$ 38'05	-1°49'44
	7819 Apr 30 16:23	0° $\mathbb{I}$		minimum elong	7820 Mar 10 12:00	21° $\mathbb{X}$ 02'39	1°48'59
evening max el	7819 May 03 23:29	3° $\mathbb{I}$ 51'14	18°15'15		7820 Mar 16 04:42	0° $\mathbb{Y}$	
retrograde	7819 May 10 08:48	7° $\mathbb{I}$ 15'15		evening rise	7820 Mar 26 07:06	16° $\mathbb{Y}$ 04'35	
evening set	7819 May 13 07:46	6° $\mathbb{I}$ 28'28		greatest brilliancy	7820 Apr 02 15:40	27° $\mathbb{Y}$ 52'43	-0.9m
inferior conj	7819 May 19 07:14	1° $\mathbb{I}$ 06'51	3°12'04		7820 Apr 03 23:43	0° $\mathbb{B}$	
minimum elong	7819 May 19 08:58	1° $\mathbb{I}$ 01'59	3°11'44	asc. node	7820 Apr 14 09:55	15° $\mathbb{B}$ 06'40	
	7819 May 20 06:55	30° $\mathbb{R}$ $\mathbb{B}$		evening max el	7820 Apr 16 10:57	17° $\mathbb{B}$ 22'23	18°43'12
min. Earth dist.	7819 May 21 19:56	28° $\mathbb{B}$ 17'04	0.63635 AU	retrograde	7820 Apr 23 01:59	21° $\mathbb{B}$ 01'40	
morning rise	7819 May 25 08:57	24° $\mathbb{B}$ 54'32		evening set	7820 Apr 26 08:08	20° $\mathbb{B}$ 01'05	
direct	7819 Jun 01 03:13	22° $\mathbb{B}$ 15'19		inferior conj	7820 May 01 23:23	14° $\mathbb{B}$ 22'44	3°24'16
desc. node	7819 Jun 02 11:57	22° $\mathbb{B}$ 21'14		minimum elong	7820 May 01 23:44	14° $\mathbb{B}$ 21'40	3°24'10
	7819 Jun 14 17:19	0° $\mathbb{I}$		min. Earth dist.	7820 May 03 20:51	12° $\mathbb{B}$ 03'09	0.65433 AU
morning max el	7819 Jun 15 00:07	0° $\mathbb{I}$ 17'01	27°42'14	morning rise	7820 May 07 14:41	8° $\mathbb{B}$ 05'44	
	7819 Jul 06 18:55	0° $\mathbb{E}$		direct	7820 May 14 03:50	5° $\mathbb{B}$ 18'21	
morning set	7819 Jul 19 18:31	23° $\mathbb{E}$ 39'53		desc. node	7820 May 19 08:58	6° $\mathbb{B}$ 45'31	
	7819 Jul 22 21:24	0° $\Omega$		morning max el	7820 May 27 10:31	13° $\mathbb{B}$ 09'33	26°56'37
max. Earth dist.	7819 Jul 24 19:22	4° $\Omega$ 00'07	1.32750 AU		7820 Jun 09 23:58	0° $\mathbb{I}$	
asc. node	7819 Jul 25 12:07	5° $\Omega$ 28'40					
































































































































	7820 Jun 28 10:23	0°☿		morning max el	7821 May 09 20:23	26°♊19'42	25°46'19
morning set	7820 Jul 02 04:03	7°☿00'01			7821 May 13 05:42	0°♊	
max. Earth dist.	7820 Jul 06 12:11	15°☿31'56	1.33993 AU		7821 Jun 03 13:53	0°♊	
				morning set	7821 Jun 14 23:34	19°♊37'11	
superior conj	7820 Jul 10 16:51	24°☿09'20	-0°06'52	max. Earth dist.	7821 Jun 18 17:53	26°♊39'24	1.35704 AU
minimum elong	7820 Jul 10 17:13	24°☿11'18	0°06'55		7821 Jun 20 11:33	0°☿	
behind sun begin	7820 Jul 10 12:04	23°☿44'19					
behind sun end	7820 Jul 10 22:23	24°☿38'19		superior conj	7821 Jun 24 10:06	7°☿47'57	-0°37'47
asc. node	7820 Jul 11 09:06	25°☿34'30		minimum elong	7821 Jun 24 12:20	7°☿59'08	0°37'29
	7820 Jul 13 11:24	0°♊		asc. node	7821 Jun 28 06:07	15°☿36'42	
evening rise	7820 Jul 18 01:40	9°♊43'32		evening rise	7821 Jul 02 08:36	24°☿03'18	
	7820 Jul 28 16:15	0°♊			7821 Jul 05 07:14	0°♊	
evening max el	7820 Aug 07 01:53	12°♊26'14	21°31'04	evening max el	7821 Jul 20 06:29	23°♊22'42	20°10'06
desc. node	7820 Aug 15 08:04	17°♊52'39		retrograde	7821 Jul 30 21:54	28°♊37'26	
retrograde	7820 Aug 19 08:46	18°♊31'43		evening set	7821 Aug 01 20:03	28°♊27'55	
evening set	7820 Aug 21 21:50	18°♊16'56		desc. node	7821 Aug 02 05:09	28°♊23'53	
inferior conj	7820 Aug 31 03:31	14°♊18'24	-4°22'01	inferior conj	7821 Aug 10 22:21	24°♊29'32	-2°37'15
minimum elong	7820 Aug 30 18:09	14°♊31'31	4°19'40	minimum elong	7821 Aug 10 15:10	24°♊40'10	2°34'45
min. Earth dist.	7820 Aug 31 03:10	14°♊18'54	0.54721 AU	min. Earth dist.	7821 Aug 12 13:51	23°♊31'01	0.54996 AU
morning rise	7820 Sep 08 15:25	10°♊27'13		morning rise	7821 Aug 19 09:00	20°♊17'24	
direct	7820 Sep 12 05:16	9°♊59'26		direct	7821 Aug 23 16:25	19°♊37'09	
morning max el	7820 Sep 24 16:16	15°♊53'02	22°12'21	morning max el	7821 Sep 06 06:09	26°♊15'31	23°57'32
	7820 Oct 05 13:53	0°♊			7821 Sep 09 20:03	0°♊	
asc. node	7820 Oct 07 08:39	3°♊01'00		asc. node	7821 Sep 24 05:38	22°♊02'53	
morning set	7820 Oct 16 04:52	20°♊15'00			7821 Sep 28 06:09	0°♊	
	7820 Oct 20 18:53	0°♊		morning set	7821 Sep 30 16:32	5°♊05'16	
superior conj	7820 Oct 23 07:33	5°♊22'33	1°41'39	superior conj	7821 Oct 07 14:39	20°♊05'01	1°39'19
minimum elong	7820 Oct 23 07:43	5°♊23'24	1°41'44	minimum elong	7821 Oct 07 13:40	19°♊59'37	1°39'19
max. Earth dist.	7820 Oct 26 22:29	12°♊55'16	1.34342 AU	max. Earth dist.	7821 Oct 09 21:36	25°♊01'01	1.33027 AU
evening rise	7820 Oct 31 10:12	21°♊52'08			7821 Oct 12 06:09	0°♊	
	7820 Nov 04 17:58	0°♊		evening rise	7821 Oct 15 01:56	5°♊47'54	
desc. node	7820 Nov 11 07:00	11°♊22'30			7821 Oct 28 08:46	0°♊	
	7820 Nov 23 16:23	0°♊		desc. node	7821 Oct 29 04:03	1°♊17'56	
evening max el	7820 Dec 05 08:58	13°♊40'32	27°00'02	evening max el	7821 Nov 17 21:15	27°♊00'28	27°26'33
retrograde	7820 Dec 18 15:34	21°♊00'14			7821 Nov 21 08:18	0°♊	
evening set	7820 Dec 25 07:47	18°♊23'38		retrograde	7821 Dec 01 12:18	4°♊19'09	
min. Earth dist.	7820 Dec 29 07:01	14°♊31'17	0.65522 AU	evening set	7821 Dec 08 12:32	1°♊45'13	
inferior conj	7820 Dec 31 08:29	12°♊10'09	-1°00'12		7821 Dec 10 15:33	30°♊	
minimum elong	7820 Dec 31 10:14	12°♊05'09	0°59'19	min. Earth dist.	7821 Dec 12 06:58	28°♊25'18	0.63924 AU
asc. node	7821 Jan 03 08:01	8°♊58'23		inferior conj	7821 Dec 14 19:52	25°♊47'57	-2°06'53
morning rise	7821 Jan 06 13:52	6°♊34'21		minimum elong	7821 Dec 14 23:48	25°♊37'47	2°05'11
direct	7821 Jan 09 07:37	5°♊53'38		asc. node	7821 Dec 21 05:04	20°♊35'03	
morning max el	7821 Jan 15 18:29	9°♊19'49	18°08'03	morning rise	7821 Dec 21 12:44	20°♊26'54	
	7821 Jan 30 04:02	0°♊		direct	7821 Dec 23 23:30	19°♊57'04	
morning set	7821 Feb 03 06:52	6°♊42'40		morning max el	7821 Dec 30 11:39	23°♊20'23	17°50'16
desc. node	7821 Feb 07 06:21	13°♊10'41			7822 Jan 04 19:02	0°♊	
	7821 Feb 17 19:02	0°♊		morning set	7822 Jan 16 04:28	18°♊43'57	
					7822 Jan 22 20:04	0°♊	
superior conj	7821 Feb 18 03:00	0°♊31'22	-1°12'43	desc. node	7822 Jan 25 03:19	3°♊49'57	
minimum elong	7821 Feb 17 18:41	29°♊58'35	1°11'38				
max. Earth dist.	7821 Feb 20 17:56	4°♊38'43	1.45406 AU	superior conj	7822 Jan 29 00:57	10°♊14'03	-0°27'56
evening rise	7821 Mar 06 07:20	25°♊45'45		minimum elong	7822 Jan 28 21:50	10°♊01'21	0°27'22
	7821 Mar 09 00:55	0°♊		max. Earth dist.	7822 Feb 03 12:55	19°♊03'58	1.44696 AU
greatest brilliancy	7821 Mar 18 21:33	15°♊07'40	-0.7m		7822 Feb 10 12:20	0°♊	
	7821 Mar 29 20:25	0°♊		evening rise	7822 Feb 13 19:12	5°♊04'01	
evening max el	7821 Mar 30 18:35	0°♊58'32	19°28'05		7822 Mar 02 11:27	0°♊	
asc. node	7821 Apr 01 07:01	2°♊24'21		evening max el	7822 Mar 13 21:00	14°♊36'16	20°27'52
retrograde	7821 Apr 06 23:03	5°♊04'12		asc. node	7822 Mar 19 04:07	18°♊39'16	
evening set	7821 Apr 10 13:07	3°♊49'02		retrograde	7822 Mar 21 21:30	19°♊17'19	
	7821 Apr 14 08:37	30°♊		evening set	7822 Mar 25 20:32	17°♊47'04	
inferior conj	7821 Apr 15 23:21	27°♊55'36	3°21'21	inferior conj	7822 Mar 31 04:22	11°♊40'20	3°06'19
minimum elong	7821 Apr 15 22:29	27°♊58'27	3°21'14	minimum elong	7822 Mar 31 02:37	11°♊46'17	3°06'01
min. Earth dist.	7821 Apr 17 05:43	26°♊15'58	0.66824 AU	min. Earth dist.	7822 Mar 31 20:37	10°♊44'42	0.67771 AU
morning rise	7821 Apr 21 07:30	21°♊38'07		morning rise	7822 Apr 05 08:29	5°♊24'47	
direct	7821 Apr 27 10:51	18°♊54'38		direct	7822 Apr 10 23:06	2°♊54'49	
desc. node	7821 May 06 05:58	22°♊59'58		morning max el	7822 Apr 22 05:19	9°♊39'01	24°21'17

desc. node	7822 Apr 23 02:57	10° $\Upsilon$ 34'52		morning rise	7823 Mar 20 15:07	19° $\Upsilon$ 21'42	
	7822 May 08 07:05	0° $\Upsilon$		direct	7823 Mar 25 15:40	17° $\Upsilon$ 11'19	
	7822 May 27 06:07	0° $\Pi$		morning max el	7823 Apr 04 15:18	23° $\Upsilon$ 05'39	22°51'31
morning set	7822 May 28 00:01	1° $\Pi$ 17'40		desc. node	7823 Apr 09 23:56	29° $\Upsilon$ 08'05	
max. Earth dist.	7822 May 31 15:37	7° $\Pi$ 45'52	1.37782 AU		7823 Apr 10 16:44	0° $\Upsilon$	
					7823 May 01 15:55	0° $\Upsilon$	
superior conj	7822 Jun 07 15:57	20° $\Pi$ 50'35	-1°09'17	morning set	7823 May 08 23:45	11° $\Upsilon$ 47'01	
minimum elong	7822 Jun 07 20:09	21° $\Pi$ 10'50	1°08'43	max. Earth dist.	7823 May 13 12:09	19° $\Upsilon$ 23'20	1.40022 AU
	7822 Jun 12 08:25	0° $\Upsilon$			7823 May 19 13:03	0° $\Pi$	
asc. node	7822 Jun 15 03:10	5° $\Upsilon$ 31'16					
evening rise	7822 Jun 16 09:36	8° $\Upsilon$ 02'21		superior conj	7823 May 21 06:10	3° $\Pi$ 06'28	-1°38'32
	7822 Jun 28 18:34	0° $\Omega$		minimum elong	7823 May 21 11:47	3° $\Pi$ 32'04	1°37'58
evening max el	7822 Jul 03 00:00	5° $\Omega$ 03'37	19°09'02	evening rise	7823 May 31 01:33	21° $\Pi$ 31'44	
retrograde	7822 Jul 11 23:11	9° $\Omega$ 29'12		asc. node	7823 Jun 02 00:12	25° $\Pi$ 13'09	
evening set	7822 Jul 13 21:12	9° $\Omega$ 17'54			7823 Jun 04 13:39	0° $\Upsilon$	
desc. node	7822 Jul 20 02:13	6° $\Omega$ 33'33		evening max el	7823 Jun 16 03:39	17° $\Upsilon$ 23'44	18°28'40
inferior conj	7822 Jul 22 07:30	5° $\Omega$ 06'00	-0°40'34	retrograde	7823 Jun 23 19:11	21° $\Upsilon$ 12'24	
minimum elong	7822 Jul 22 05:44	5° $\Omega$ 08'58	0°39'59	evening set	7823 Jun 25 23:18	20° $\Upsilon$ 54'52	
min. Earth dist.	7822 Jul 25 03:39	3° $\Omega$ 11'15	0.56175 AU	inferior conj	7823 Jul 03 13:43	16° $\Upsilon$ 23'30	0°59'32
morning rise	7822 Jul 30 11:17	0° $\Omega$ 19'00		minimum elong	7823 Jul 03 15:45	16° $\Upsilon$ 19'28	0°58'41
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direct	7822 Aug 04 14:52	29° $\Upsilon$ 17'36		min. Earth dist.	7823 Jul 06 22:29	13° $\Upsilon$ 44'23	0.58027 AU
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morning max el	7822 Aug 18 19:09	6° $\Omega$ 31'39	25°38'29	direct	7823 Jul 17 03:30	9° $\Upsilon$ 29'16	
	7822 Sep 04 23:25	0° $\Pi$		morning max el	7823 Jul 31 12:57	17° $\Upsilon$ 09'13	26°58'32
asc. node	7822 Sep 11 02:37	11° $\Pi$ 30'05			7823 Aug 11 03:42	0° $\Omega$	
morning set	7822 Sep 15 03:58	19° $\Pi$ 53'09			7823 Aug 28 09:04	0° $\Pi$	
	7822 Sep 19 19:35	0° $\Omega$		asc. node	7823 Aug 28 23:36	1° $\Pi$ 14'45	
				morning set	7823 Aug 30 13:27	4° $\Pi$ 32'38	
superior conj	7822 Sep 22 01:07	4° $\Omega$ 55'19	1°31'08				
minimum elong	7822 Sep 21 23:18	4° $\Omega$ 45'19	1°30'58	superior conj	7823 Sep 06 12:53	19° $\Pi$ 46'09	1°17'40
max. Earth dist.	7822 Sep 23 03:47	7° $\Omega$ 22'05	1.32157 AU	minimum elong	7823 Sep 06 10:39	19° $\Pi$ 33'50	1°17'20
evening rise	7822 Sep 29 02:17	20° $\Omega$ 06'41		max. Earth dist.	7823 Sep 06 13:41	19° $\Pi$ 50'39	1.31732 AU
	7822 Oct 04 00:48	0° $\Pi$			7823 Sep 11 04:21	0° $\Omega$	
desc. node	7822 Oct 16 01:09	20° $\Pi$ 43'28		evening rise	7823 Sep 13 08:29	4° $\Omega$ 39'44	
	7822 Oct 22 14:26	0° $\Upsilon$			7823 Sep 26 17:48	0° $\Pi$	
evening max el	7822 Oct 31 06:20	9° $\Upsilon$ 48'13	27°22'42	desc. node	7823 Oct 02 22:13	9° $\Pi$ 26'20	
retrograde	7822 Nov 14 01:46	17° $\Upsilon$ 01'51		evening max el	7823 Oct 13 09:21	21° $\Pi$ 50'44	26°45'16
evening set	7822 Nov 21 04:29	14° $\Upsilon$ 39'56		retrograde	7823 Oct 27 07:07	28° $\Pi$ 59'10	
min. Earth dist.	7822 Nov 24 20:34	11° $\Upsilon$ 47'15	0.62045 AU	evening set	7823 Nov 03 03:27	27° $\Pi$ 00'14	
inferior conj	7822 Nov 27 19:35	9° $\Upsilon$ 04'16	-3°15'50	min. Earth dist.	7823 Nov 06 23:19	24° $\Pi$ 23'49	0.59980 AU
minimum elong	7822 Nov 28 01:38	8° $\Upsilon$ 50'19	3°13'37	inferior conj	7823 Nov 10 04:08	21° $\Pi$ 49'30	-4°21'14
morning rise	7822 Dec 05 00:53	4° $\Upsilon$ 01'30		minimum elong	7823 Nov 10 11:18	21° $\Pi$ 35'04	4°19'16
direct	7822 Dec 07 07:22	3° $\Upsilon$ 38'55		morning rise	7823 Nov 17 21:29	17° $\Pi$ 08'15	
asc. node	7822 Dec 08 02:05	3° $\Upsilon$ 41'39		direct	7823 Nov 20 03:01	16° $\Pi$ 49'44	
morning max el	7822 Dec 14 04:08	7° $\Upsilon$ 08'05	17°50'24	asc. node	7823 Nov 24 23:06	18° $\Pi$ 21'39	
	7822 Dec 28 23:48	0° $\Upsilon$		morning max el	7823 Nov 27 16:34	20° $\Pi$ 33'42	18°09'41
morning set	7822 Dec 29 23:34	1° $\Upsilon$ 46'36			7823 Dec 04 18:30	0° $\Upsilon$	
				morning set	7823 Dec 13 10:01	15° $\Upsilon$ 31'48	
superior conj	7823 Jan 10 00:12	21° $\Upsilon$ 10'28	0°14'40		7823 Dec 21 04:27	0° $\Upsilon$	
minimum elong	7823 Jan 10 01:33	21° $\Upsilon$ 16'14	0°14'35				
behind sun begin	7823 Jan 09 21:55	21° $\Upsilon$ 00'46		superior conj	7823 Dec 23 00:01	3° $\Upsilon$ 17'18	0°49'33
behind sun end	7823 Jan 10 05:11	21° $\Upsilon$ 31'42		minimum elong	7823 Dec 23 03:19	3° $\Upsilon$ 32'11	0°49'13
desc. node	7823 Jan 12 00:20	24° $\Upsilon$ 34'10		desc. node	7823 Dec 29 21:20	15° $\Upsilon$ 19'38	
	7823 Jan 15 06:40	0° $\approx$		max. Earth dist.	7823 Dec 30 15:33	16° $\Upsilon$ 36'44	1.41474 AU
max. Earth dist.	7823 Jan 17 04:48	3° $\approx$ 08'40	1.43334 AU	evening rise	7824 Jan 04 16:12	24° $\Upsilon$ 54'50	
evening rise	7823 Jan 24 09:48	14° $\approx$ 36'56			7824 Jan 07 20:34	0° $\approx$	
	7823 Feb 03 12:44	0° $\Upsilon$			7824 Jan 28 09:44	0° $\Upsilon$	
evening max el	7823 Feb 24 17:54	28° $\Upsilon$ 15'02	21°39'17	evening max el	7824 Feb 07 10:16	11° $\Upsilon$ 56'12	22°57'53
	7823 Feb 26 13:57	0° $\Upsilon$		retrograde	7824 Feb 17 15:06	17° $\Upsilon$ 59'09	
retrograde	7823 Mar 05 19:21	3° $\Upsilon$ 36'59		asc. node	7824 Feb 20 22:15	17° $\Upsilon$ 04'35	
asc. node	7823 Mar 06 01:12	3° $\Upsilon$ 36'41		evening set	7824 Feb 22 11:42	15° $\Upsilon$ 58'40	
evening set	7823 Mar 10 04:35	1° $\Upsilon$ 51'26		inferior conj	7824 Feb 27 20:45	9° $\Upsilon$ 33'39	2°06'46
	7823 Mar 12 02:16	30° $\Upsilon$		minimum elong	7824 Feb 27 18:31	9° $\Upsilon$ 41'24	2°06'06
inferior conj	7823 Mar 15 12:08	25° $\Upsilon$ 33'55	2°41'04	min. Earth dist.	7824 Feb 27 12:13	10° $\Upsilon$ 03'09	0.68361 AU
minimum elong	7823 Mar 15 09:56	25° $\Upsilon$ 41'36	2°40'31	morning rise	7824 Mar 04 01:14	3° $\Upsilon$ 26'04	
min. Earth dist.	7823 Mar 15 15:32	25° $\Upsilon$ 22'08	0.68278 AU	direct	7824 Mar 08 11:42	1° $\Upsilon$ 37'53	






































































































































morning max el	7824 Mar 17 05:39	6° $\text{H}$ 42'11	21°25'58	minimum elong	7825 Feb 11 02:31	23° $\approx$ 41'47	1°23'32
desc. node	7824 Mar 26 20:54	18° $\text{H}$ 23'40		morning rise	7825 Feb 16 12:49	17° $\approx$ 34'15	
	7824 Apr 04 01:19	0° $\text{Y}$		direct	7825 Feb 20 10:00	16° $\approx$ 08'12	
morning set	7824 Apr 17 19:51	21° $\text{Y}$ 00'27		morning max el	7825 Feb 28 03:04	20° $\approx$ 29'51	20°11'02
	7824 Apr 23 10:04	0° $\text{B}$			7825 Mar 07 23:26	0° $\text{H}$	
max. Earth dist.	7824 Apr 24 13:20	1° $\text{B}$ 51'49	1.42149 AU	desc. node	7825 Mar 13 17:50	8° $\text{H}$ 09'25	
				morning set	7825 Mar 27 19:27	29° $\text{H}$ 21'11	
superior conj	7824 May 02 00:09	14° $\text{B}$ 25'48	-2°01'10		7825 Mar 28 05:30	0° $\text{Y}$	
minimum elong	7824 May 02 05:07	14° $\text{B}$ 47'19	2°00'56	max. Earth dist.	7825 Apr 06 21:35	15° $\text{Y}$ 12'00	1.43895 AU
	7824 May 10 18:46	0° $\text{II}$					
evening rise	7824 May 13 04:35	4° $\text{II}$ 22'33		superior conj	7825 Apr 12 17:50	24° $\text{Y}$ 40'24	-2°11'26
asc. node	7824 May 18 21:15	14° $\text{II}$ 37'40		minimum elong	7825 Apr 12 18:31	24° $\text{Y}$ 43'10	2°11'30
	7824 May 29 07:44	0° $\text{E}$			7825 Apr 15 23:03	0° $\text{B}$	
evening max el	7824 May 29 13:48	0° $\text{E}$ 15'09	18°08'23	evening rise	7825 Apr 25 14:01	16° $\text{B}$ 23'51	
retrograde	7824 Jun 05 09:05	3° $\text{E}$ 42'14			7825 May 03 12:34	0° $\text{II}$	
evening set	7824 Jun 07 20:41	3° $\text{E}$ 15'03		asc. node	7825 May 05 18:18	3° $\text{II}$ 38'14	
	7824 Jun 12 21:58	30° $\text{K}$ $\text{II}$		evening max el	7825 May 13 02:52	13° $\text{II}$ 28'17	18°07'26
inferior conj	7824 Jun 14 16:58	28° $\text{II}$ 23'29	2°11'37	retrograde	7825 May 19 12:53	16° $\text{II}$ 49'05	
minimum elong	7824 Jun 14 20:05	28° $\text{II}$ 16'17	2°10'37	evening set	7825 May 22 07:49	16° $\text{II}$ 09'51	
min. Earth dist.	7824 Jun 18 00:21	25° $\text{II}$ 21'28	0.60230 AU	inferior conj	7825 May 28 13:44	10° $\text{II}$ 58'57	2°56'33
morning rise	7824 Jun 21 16:43	22° $\text{II}$ 33'07		minimum elong	7825 May 28 16:12	10° $\text{II}$ 52'28	2°55'59
desc. node	7824 Jun 22 20:19	21° $\text{II}$ 53'39		min. Earth dist.	7825 May 31 10:41	7° $\text{II}$ 58'32	0.62456 AU
direct	7824 Jun 28 05:18	20° $\text{II}$ 29'53		morning rise	7825 Jun 03 22:50	4° $\text{II}$ 52'20	
morning max el	7824 Jul 12 13:27	28° $\text{II}$ 26'00	27°45'15	desc. node	7825 Jun 09 17:21	2° $\text{II}$ 26'04	
	7824 Jul 14 02:08	0° $\text{E}$		direct	7825 Jun 10 17:26	2° $\text{II}$ 22'55	
	7824 Aug 03 23:21	0° $\text{O}$		morning max el	7825 Jun 24 19:31	10° $\text{II}$ 25'15	27°53'52
morning set	7824 Aug 13 19:14	18° $\text{O}$ 58'28			7825 Jul 10 02:45	0° $\text{E}$	
asc. node	7824 Aug 14 20:35	21° $\text{O}$ 11'16			7825 Jul 27 06:28	0° $\text{O}$	
	7824 Aug 18 22:47	0° $\text{M}$		morning set	7825 Jul 28 19:15	3° $\text{O}$ 04'43	
max. Earth dist.	7824 Aug 19 23:35	2° $\text{M}$ 16'11	1.31757 AU	asc. node	7825 Aug 01 17:35	11° $\text{O}$ 14'49	
				max. Earth dist.	7825 Aug 03 05:42	14° $\text{O}$ 27'50	1.32247 AU
superior conj	7824 Aug 21 00:11	4° $\text{M}$ 31'57	0°59'21				
minimum elong	7824 Aug 20 22:01	4° $\text{M}$ 20'00	0°58'55	superior conj	7825 Aug 05 09:15	19° $\text{O}$ 07'13	0°36'36
evening rise	7824 Aug 27 18:19	19° $\text{M}$ 20'34		minimum elong	7825 Aug 05 07:39	18° $\text{O}$ 58'31	0°36'12
	7824 Sep 01 22:25	0° $\text{L}$			7825 Aug 10 08:42	0° $\text{M}$	
desc. node	7824 Sep 18 19:17	27° $\text{L}$ 09'41		evening rise	7825 Aug 12 05:50	4° $\text{M}$ 03'26	
	7824 Sep 21 05:36	0° $\text{M}$			7825 Aug 26 00:58	0° $\text{L}$	
evening max el	7824 Sep 24 04:33	3° $\text{M}$ 02'43	25°35'59	evening max el	7825 Sep 05 17:20	13° $\text{L}$ 32'47	24°04'01
retrograde	7824 Oct 08 02:51	10° $\text{M}$ 05'48		desc. node	7825 Sep 05 16:21	13° $\text{L}$ 30'24	
evening set	7824 Oct 14 04:32	8° $\text{M}$ 39'56		retrograde	7825 Sep 19 10:30	20° $\text{L}$ 25'18	
min. Earth dist.	7824 Oct 18 16:47	6° $\text{M}$ 02'46	0.57922 AU	evening set	7825 Sep 24 04:56	19° $\text{L}$ 35'19	
inferior conj	7824 Oct 21 18:13	3° $\text{M}$ 54'32	-5°12'26	min. Earth dist.	7825 Sep 30 04:02	16° $\text{L}$ 38'55	0.56154 AU
minimum elong	7824 Oct 21 23:41	3° $\text{M}$ 44'55	5°11'34	inferior conj	7825 Oct 02 12:02	15° $\text{L}$ 13'01	-5°32'40
	7824 Oct 28 13:26	30° $\text{K}$ $\text{L}$		minimum elong	7825 Oct 02 11:44	15° $\text{L}$ 13'29	5°32'37
morning rise	7824 Oct 29 21:11	29° $\text{L}$ 36'06		morning rise	7825 Oct 10 20:42	11° $\text{L}$ 14'44	
direct	7824 Nov 01 06:07	29° $\text{L}$ 18'41		direct	7825 Oct 13 14:10	10° $\text{L}$ 55'28	
	7824 Nov 04 19:09	0° $\text{M}$		morning max el	7825 Oct 23 14:53	15° $\text{L}$ 38'32	19°51'57
morning max el	7824 Nov 09 21:17	3° $\text{M}$ 27'11	18°49'42	asc. node	7825 Oct 28 17:07	21° $\text{L}$ 35'50	
asc. node	7824 Nov 10 20:07	4° $\text{M}$ 24'45			7825 Nov 03 00:25	0° $\text{M}$	
morning set	7824 Nov 26 07:02	29° $\text{M}$ 45'54		morning set	7825 Nov 10 11:15	14° $\text{M}$ 19'36	
	7824 Nov 26 09:55	0° $\text{X}$					
superior conj	7824 Dec 04 19:38	16° $\text{X}$ 20'30	1°15'07	superior conj	7825 Nov 18 06:05	0° $\text{X}$ 06'20	1°31'39
minimum elong	7824 Dec 04 22:56	16° $\text{X}$ 36'10	1°14'51	minimum elong	7825 Nov 18 08:22	0° $\text{X}$ 17'41	1°31'34
max. Earth dist.	7824 Dec 11 21:45	29° $\text{X}$ 20'54	1.39354 AU		7825 Nov 18 04:49	0° $\text{X}$	
	7824 Dec 12 06:36	0° $\text{Z}$		max. Earth dist.	7825 Nov 24 03:40	11° $\text{X}$ 31'17	1.37221 AU
evening rise	7824 Dec 15 20:21	6° $\text{Z}$ 11'17		evening rise	7825 Nov 27 21:55	18° $\text{X}$ 25'08	
desc. node	7824 Dec 15 18:18	6° $\text{Z}$ 02'33		desc. node	7825 Dec 02 15:19	26° $\text{X}$ 39'30	
	7824 Dec 30 21:57	0° $\approx$			7825 Dec 04 15:11	0° $\text{Z}$	
evening max el	7825 Jan 20 00:01	25° $\approx$ 40'38	24°17'47		7825 Dec 25 03:48	0° $\approx$	
	7825 Jan 25 02:19	0° $\text{H}$		evening max el	7826 Jan 02 13:11	9° $\approx$ 28'17	25°32'00
retrograde	7825 Jan 31 07:19	2° $\text{H}$ 18'25		retrograde	7826 Jan 14 19:00	16° $\approx$ 30'18	
evening set	7825 Feb 05 16:18	0° $\text{H}$ 04'01		evening set	7826 Jan 20 16:51	14° $\approx$ 04'03	
	7825 Feb 05 18:11	30° $\text{K}$ $\approx$		asc. node	7826 Jan 24 16:22	9° $\approx$ 47'08	
asc. node	7825 Feb 06 19:19	29° $\approx$ 00'49		min. Earth dist.	7826 Jan 25 01:51	9° $\approx$ 17'14	0.67362 AU
min. Earth dist.	7825 Feb 10 08:26	24° $\approx$ 42'38	0.68048 AU	inferior conj	7826 Jan 26 09:02	7° $\approx$ 37'20	0°33'40
inferior conj	7825 Feb 11 04:19	23° $\approx$ 35'44	1°24'07	minimum elong	7826 Jan 26 08:12	7° $\approx$ 40'01	0°33'26
				morning rise	7826 Jan 31 23:56	1° $\approx$ 43'57	

direct	7826 Feb 04 09:11	0° $\approx$ 38'02		evening set	7827 Jan 04 11:31	27° $\approx$ 53'29	
morning max el	7826 Feb 11 08:25	4° $\approx$ 28'33	19°10'27	min. Earth dist.	7827 Jan 08 14:08	23° $\approx$ 41'36	0.66303 AU
greatest brilliancy	7826 Feb 24 17:48	22° $\approx$ 23'39	-0.7m	inferior conj	7827 Jan 10 08:53	21° $\approx$ 33'46	-0°24'01
desc. node	7826 Feb 28 14:47	28° $\approx$ 17'27		minimum elong	7827 Jan 10 09:32	21° $\approx$ 31'47	0°23'36
	7826 Mar 01 17:30	0° $\approx$		asc. node	7827 Jan 11 13:26	20° $\approx$ 09'27	
morning set	7826 Mar 06 20:43	7° $\approx$ 55'31		morning rise	7827 Jan 16 08:24	15° $\approx$ 50'52	
max. Earth dist.	7826 Mar 20 12:38	29° $\approx$ 13'55	1.45053 AU	direct	7827 Jan 19 07:20	15° $\approx$ 01'59	
	7826 Mar 21 00:20	0° $\approx$		morning max el	7827 Jan 25 20:28	18° $\approx$ 33'34	18°26'02
					7827 Feb 03 14:32	0° $\approx$	
superior conj	7826 Mar 23 11:52	3° $\approx$ 55'12	-2°03'32	morning set	7827 Feb 14 21:20	17° $\approx$ 43'59	
minimum elong	7826 Mar 23 05:37	3° $\approx$ 30'26	2°03'13	desc. node	7827 Feb 15 11:45	18° $\approx$ 41'21	
evening rise	7826 Apr 07 01:37	27° $\approx$ 28'09			7827 Feb 22 14:59	0° $\approx$	
	7826 Apr 08 14:29	0° $\approx$					
asc. node	7826 Apr 22 15:22	22° $\approx$ 07'04		superior conj	7827 Mar 02 16:46	12° $\approx$ 41'00	-1°35'40
evening max el	7826 Apr 26 15:44	26° $\approx$ 55'06	18°25'01	minimum elong	7827 Mar 02 07:09	12° $\approx$ 03'22	1°34'41
	7826 May 01 00:13	0° $\approx$		max. Earth dist.	7827 Mar 03 07:44	13° $\approx$ 39'37	1.45495 AU
retrograde	7826 May 03 02:17	0° $\approx$ 23'41			7827 Mar 13 17:57	0° $\approx$	
	7826 May 05 03:48	30° $\approx$ 8		evening rise	7827 Mar 18 13:49	7° $\approx$ 36'17	
evening set	7826 May 06 04:22	29° $\approx$ 30'59		greatest brilliancy	7827 Mar 28 08:53	23° $\approx$ 00'44	-0.8m
inferior conj	7826 May 11 23:55	24° $\approx$ 02'07	3°19'17		7827 Apr 01 23:15	0° $\approx$	
minimum elong	7826 May 12 01:03	23° $\approx$ 58'46	3°19'05	asc. node	7827 Apr 09 12:26	9° $\approx$ 54'16	
min. Earth dist.	7826 May 14 06:13	21° $\approx$ 23'43	0.64454 AU	evening max el	7827 Apr 10 01:48	10° $\approx$ 29'01	19°00'18
morning rise	7826 May 17 20:50	17° $\approx$ 47'26		retrograde	7827 Apr 16 21:33	14° $\approx$ 18'09	
direct	7826 May 24 13:45	15° $\approx$ 03'14		evening set	7827 Apr 20 07:02	13° $\approx$ 11'14	
desc. node	7826 May 27 14:22	15° $\approx$ 32'31		inferior conj	7827 Apr 25 19:46	7° $\approx$ 26'01	3°24'40
morning max el	7826 Jun 07 05:01	23° $\approx$ 01'18	27°26'21	minimum elong	7827 Apr 25 19:34	7° $\approx$ 26'40	3°24'35
	7826 Jun 13 09:16	0° $\approx$		min. Earth dist.	7827 Apr 27 10:36	5° $\approx$ 22'59	0.66079 AU
	7826 Jul 03 09:47	0° $\approx$		morning rise	7827 May 01 07:39	1° $\approx$ 08'33	
morning set	7826 Jul 12 10:58	16° $\approx$ 43'59			7827 May 02 18:43	30° $\approx$ 8	
max. Earth dist.	7826 Jul 17 04:23	26° $\approx$ 16'16	1.33221 AU	direct	7827 May 07 17:00	28° $\approx$ 21'51	
	7826 Jul 18 23:14	0° $\approx$			7827 May 13 04:02	0° $\approx$	
asc. node	7826 Jul 19 14:35	1° $\approx$ 20'59		desc. node	7827 May 14 11:22	0° $\approx$ 47'52	
				morning max el	7827 May 20 15:31	6° $\approx$ 03'16	26°29'14
superior conj	7826 Jul 20 14:05	3° $\approx$ 25'45	0°09'58		7827 Jun 08 01:30	0° $\approx$	
minimum elong	7826 Jul 20 13:35	3° $\approx$ 23'06	0°09'45	morning set	7827 Jun 25 15:06	29° $\approx$ 14'32	
behind sun begin	7826 Jul 20 09:13	2° $\approx$ 59'49			7827 Jun 25 17:45	0° $\approx$	
behind sun end	7826 Jul 20 17:58	3° $\approx$ 46'24		max. Earth dist.	7827 Jun 29 16:50	7° $\approx$ 38'16	1.34670 AU
evening rise	7826 Jul 27 17:12	18° $\approx$ 42'17					
	7826 Aug 02 06:08	0° $\approx$		superior conj	7827 Jul 04 12:23	17° $\approx$ 21'16	-0°19'47
evening max el	7826 Aug 18 05:56	23° $\approx$ 46'36	22°24'53	minimum elong	7827 Jul 04 13:30	17° $\approx$ 27'01	0°19'40
desc. node	7826 Aug 23 13:26	27° $\approx$ 57'51		asc. node	7827 Jul 06 11:36	21° $\approx$ 26'05	
	7826 Aug 28 17:08	0° $\approx$			7827 Jul 10 13:43	0° $\approx$	
retrograde	7826 Aug 31 05:31	0° $\approx$ 14'36		evening rise	7827 Jul 12 02:24	3° $\approx$ 11'22	
	7826 Sep 02 19:03	30° $\approx$ 8			7827 Jul 27 07:38	0° $\approx$	
evening set	7826 Sep 03 11:51	29° $\approx$ 51'08		evening max el	7827 Jul 31 03:00	4° $\approx$ 20'03	20°54'20
min. Earth dist.	7826 Sep 11 12:31	26° $\approx$ 19'59	0.55002 AU	desc. node	7827 Aug 10 10:31	10° $\approx$ 01'01	
inferior conj	7826 Sep 12 12:09	25° $\approx$ 46'37	-5°03'44	retrograde	7827 Aug 11 18:00	10° $\approx$ 05'17	
minimum elong	7826 Sep 12 04:45	25° $\approx$ 57'05	5°02'30	evening set	7827 Aug 13 22:33	9° $\approx$ 53'50	
morning rise	7826 Sep 20 23:25	21° $\approx$ 58'31		inferior conj	7827 Aug 23 04:41	5° $\approx$ 56'46	-3°41'21
direct	7826 Sep 24 05:18	21° $\approx$ 34'44		minimum elong	7827 Aug 22 19:29	6° $\approx$ 09'50	3°38'33
morning max el	7826 Oct 05 19:29	27° $\approx$ 00'40	21°16'02	min. Earth dist.	7827 Aug 23 21:44	5° $\approx$ 32'35	0.54719 AU
	7826 Oct 08 16:19	0° $\approx$		morning rise	7827 Aug 31 16:37	1° $\approx$ 59'25	
asc. node	7826 Oct 15 14:06	9° $\approx$ 39'10		direct	7827 Sep 04 13:23	1° $\approx$ 27'26	
morning set	7826 Oct 25 19:56	29° $\approx$ 44'11		morning max el	7827 Sep 17 13:16	7° $\approx$ 40'08	22°56'40
	7826 Oct 26 06:39	0° $\approx$		asc. node	7827 Oct 02 11:07	28° $\approx$ 22'43	
					7827 Oct 03 08:19	0° $\approx$	
superior conj	7826 Nov 02 03:04	14° $\approx$ 12'29	1°40'04	morning set	7827 Oct 10 07:01	13° $\approx$ 53'58	
minimum elong	7826 Nov 02 04:00	14° $\approx$ 26'17	1°40'08				
max. Earth dist.	7826 Nov 06 14:10	23° $\approx$ 12'54	1.35294 AU	superior conj	7827 Oct 17 07:16	28° $\approx$ 56'26	1°41'25
	7826 Nov 09 23:11	0° $\approx$		minimum elong	7827 Oct 17 06:54	28° $\approx$ 54'30	1°41'28
evening rise	7826 Nov 10 17:20	1° $\approx$ 26'00			7827 Oct 17 19:10	0° $\approx$	
desc. node	7826 Nov 19 12:22	17° $\approx$ 05'02		max. Earth dist.	7827 Oct 20 08:21	5° $\approx$ 12'30	1.33728 AU
	7826 Nov 27 16:14	0° $\approx$		evening rise	7827 Oct 25 02:41	15° $\approx$ 04'12	
evening max el	7826 Dec 16 02:25	23° $\approx$ 12'29	26°33'21		7827 Nov 02 03:05	0° $\approx$	
	7826 Dec 26 02:44	0° $\approx$		desc. node	7827 Nov 06 09:25	7° $\approx$ 13'27	
retrograde	7826 Dec 29 01:18	0° $\approx$ 28'01			7827 Nov 22 09:39	0° $\approx$	
	7826 Dec 31 20:10	30° $\approx$ 8		evening max el	7827 Nov 28 15:15	6° $\approx$ 43'48	27°14'33

retrograde	7827 Dec 12 01:48	14°  03'53		retrograde	7828 Nov 23 19:51	27°  08'56	
evening set	7827 Dec 18 22:07	11°  27'05		evening set	7828 Nov 30 21:56	24°  38'34	
min. Earth dist.	7827 Dec 22 19:01	7°  49'14	0.64885 AU	min. Earth dist.	7828 Dec 04 14:45	21°  31'18	0.63147 AU
inferior conj	7827 Dec 25 01:33	5°  19'55	-1°27'57	inferior conj	7828 Dec 07 08:22	18°  49'41	-2°36'08
minimum elong	7827 Dec 25 04:11	5°  12'40	1°26'43	minimum elong	7828 Dec 07 13:14	18°  37'38	2°34'09
asc. node	7827 Dec 29 10:29	1°  05'15		morning rise	7828 Dec 14 06:29	13°  36'15	
morning rise	7827 Dec 31 11:40	29°  50'19		asc. node	7828 Dec 15 07:32	13°  18'15	
	7827 Dec 31 03:34	30°  R 		direct	7828 Dec 16 14:57	13°  10'04	
direct	7828 Jan 03 02:12	29°  14'42		morning max el	7828 Dec 23 06:01	16°  35'02	17°48'08
	7828 Jan 06 01:06	0°  3			7829 Jan 01 18:53	0°  3	
morning max el	7828 Jan 09 12:40	2°  38'16	17°58'24	morning set	7829 Jan 08 11:09	11°  30'39	
morning set	7828 Jan 27 03:33	29°  00'31		desc. node	7829 Jan 19 05:42	29°  38'27	
	7828 Jan 27 17:52	0°  ≈			7829 Jan 19 06:04	0°  ≈	
desc. node	7828 Feb 02 08:43	9°  ≈16'18					
				superior conj	7829 Jan 20 12:05	2°  ≈04'45	-0°09'12
superior conj	7828 Feb 10 03:42	21°  ≈50'41	-0°53'59	minimum elong	7829 Jan 20 11:08	2°  ≈00'49	0°08'57
minimum elong	7828 Feb 09 21:23	21°  ≈25'34	0°53'04	behind sun begin	7829 Jan 20 03:17	1°  ≈28'14	
max. Earth dist.	7828 Feb 14 03:24	28°  ≈09'27	1.45189 AU	behind sun end	7829 Jan 20 19:00	2°  ≈33'20	
	7828 Feb 15 07:33	0°  H		max. Earth dist.	7829 Jan 26 20:56	12°  ≈26'49	1.44181 AU
evening rise	7828 Feb 26 07:14	17°  H03'47		evening rise	7829 Feb 04 18:22	26°  ≈24'03	
	7828 Mar 05 18:10	0°  Y			7829 Feb 07 02:41	0°  H	
greatest brilliancy	7828 Mar 11 13:00	8°  Y39'53	-0.6m		7829 Feb 27 18:42	0°  Y	
evening max el	7828 Mar 23 07:14	24°  Y05'44	19°51'48	evening max el	7829 Mar 06 07:15	7°  Y44'21	20°57'01
asc. node	7828 Mar 26 09:31	26°  Y47'10		asc. node	7829 Mar 13 06:36	12°  Y31'34	
retrograde	7828 Mar 30 19:36	28°  Y25'57		retrograde	7829 Mar 14 18:06	12°  Y42'51	
evening set	7828 Apr 03 13:18	27°  Y04'25		evening set	7829 Mar 18 21:12	11°  Y06'18	
inferior conj	7828 Apr 08 22:12	21°  Y04'47	3°16'21	inferior conj	7829 Mar 24 04:41	4°  Y54'36	2°56'48
minimum elong	7828 Apr 08 20:55	21°  Y09'06	3°16'09	minimum elong	7829 Mar 24 02:41	5°  Y01'29	2°56'23
min. Earth dist.	7828 Apr 09 22:22	19°  Y43'45	0.67277 AU	min. Earth dist.	7829 Mar 24 15:23	4°  Y17'35	0.68039 AU
morning rise	7828 Apr 14 04:15	14°  Y47'43			7829 Mar 28 00:05	30°  R  H	
direct	7828 Apr 20 02:17	12°  Y09'13		morning rise	7829 Mar 29 07:58	28°  H40'02	
desc. node	7828 Apr 30 08:22	17°  Y39'52		direct	7829 Apr 03 16:39	26°  H17'41	
morning max el	7828 May 02 01:09	19°  Y19'03	25°11'22		7829 Apr 11 12:27	0°  Y	
	7828 May 11 02:54	0°  B		morning max el	7829 Apr 14 10:11	2°  Y41'59	23°43'00
	7828 May 31 04:03	0°  II		desc. node	7829 Apr 17 05:20	5°  Y42'20	
morning set	7828 Jun 07 03:11	12°  II02'34			7829 May 05 05:08	0°  B	
max. Earth dist.	7828 Jun 10 18:40	18°  II42'20	1.36551 AU	morning set	7829 May 19 17:47	23°  B14'52	
	7828 Jun 16 15:59	0°  ☿		max. Earth dist.	7829 May 23 14:27	29°  B56'14	1.38733 AU
					7829 May 23 15:18	0°  II	
superior conj	7828 Jun 17 01:10	0°  ☿45'20	-0°51'14				
minimum elong	7828 Jun 17 04:15	1°  ☿00'33	0°50'47	superior conj	7829 May 31 00:54	13°  II29'28	-1°22'12
asc. node	7828 Jun 22 08:37	11°  ☿25'28		minimum elong	7829 May 31 05:51	13°  II52'44	1°21'36
evening rise	7828 Jun 25 07:08	17°  ☿23'09			7829 Jun 08 14:14	0°  ☿	
	7828 Jul 01 18:46	0°  Ω		evening rise	7829 Jun 09 04:41	1°  ☿10'30	
evening max el	7828 Jul 12 13:09	15°  Ω34'46	19°41'33	asc. node	7829 Jun 09 05:39	1°  ☿15'11	
retrograde	7828 Jul 22 11:13	20°  Ω28'05		evening max el	7829 Jun 25 11:28	27°  ☿33'35	18°49'21
evening set	7828 Jul 24 07:45	20°  Ω18'34			7829 Jun 28 11:34	0°  Ω	
desc. node	7828 Jul 27 07:37	19°  Ω26'31		retrograde	7829 Jul 03 19:48	1°  Ω41'16	
inferior conj	7828 Aug 02 04:16	16°  Ω15'39	-1°47'11	evening set	7829 Jul 05 20:01	1°  Ω27'51	
minimum elong	7828 Aug 01 23:22	16°  Ω23'18	1°45'24		7829 Jul 09 13:22	30°  R  ☿	
min. Earth dist.	7828 Aug 04 09:47	14°  Ω52'17	0.55393 AU	inferior conj	7829 Jul 13 21:58	27°  ☿08'27	0°05'02
morning rise	7828 Aug 10 12:44	11°  Ω49'15		minimum elong	7829 Jul 13 22:10	27°  ☿08'06	0°04'50
direct	7828 Aug 15 04:15	11°  Ω01'19		transit middle	7829 Jul 13 22:10	27°  ☿08'06	0°04'50
morning max el	7828 Aug 29 02:07	17°  Ω56'49	24°42'04	transit begin	7829 Jul 13 18:38	27°  ☿14'29	
	7828 Sep 08 00:53	0°  ♍		transit end	7829 Jul 14 01:42	27°  ☿01'41	
asc. node	7828 Sep 18 08:06	17°  ♍36'11		desc. node	7829 Jul 14 04:40	26°  ☿56'18	
morning set	7828 Sep 23 18:46	28°  ♍43'38		min. Earth dist.	7829 Jul 17 01:42	24°  ☿52'22	0.56903 AU
	7828 Sep 24 09:04	0°  ♌		morning rise	7829 Jul 21 20:53	22°  ☿05'18	
				direct	7829 Jul 27 09:14	20°  ☿51'42	
superior conj	7828 Sep 30 16:03	13°  ♌43'07	1°36'31	morning max el	7829 Aug 10 16:33	28°  ☿18'38	26°15'54
minimum elong	7828 Sep 30 14:39	13°  ♌35'31	1°36'28		7829 Aug 12 08:48	0°  Ω	
max. Earth dist.	7828 Oct 02 10:32	17°  ♌34'24	1.32594 AU		7829 Sep 01 13:16	0°  ♍	
evening rise	7828 Oct 07 22:24	29°  ♌10'29		asc. node	7829 Sep 05 05:05	7°  ♍11'27	
	7828 Oct 08 08:07	0°  ♌		morning set	7829 Sep 08 05:30	13°  ♍28'09	
desc. node	7828 Oct 23 06:30	26°  ♌57'28					
	7828 Oct 25 05:44	0°  ♍		superior conj	7829 Sep 15 03:15	28°  ♍34'18	1°26'02
evening max el	7828 Nov 10 02:17	19°  ♍51'09	27°28'55	minimum elong	7829 Sep 15 01:13	28°  ♍23'00	1°25'48

	7829 Sep 15 18:44	0°♄		minimum elong	7830 Aug 30 12:48	13°♄11'50	1°10'05
max. Earth dist.	7829 Sep 15 18:30	29°♄58'41	1.31917 AU	evening rise	7830 Sep 06 09:32	28°♄14'18	
evening rise	7829 Sep 22 01:30	13°♄36'12			7830 Sep 07 05:29	0°♄	
	7829 Sep 30 09:44	0°♄			7830 Sep 23 20:44	0°♄	
desc. node	7829 Oct 10 03:35	16°♄06'33		desc. node	7830 Sep 27 00:39	4°♄27'00	
	7829 Oct 21 00:39	0°♄		evening max el	7830 Oct 05 09:16	14°♄03'50	26°19'27
evening max el	7829 Oct 23 09:11	2°♄21'17	27°11'07	retrograde	7830 Oct 19 07:25	21°♄09'14	
retrograde	7829 Nov 06 06:13	9°♄32'58		evening set	7830 Oct 25 21:27	19°♄23'41	
evening set	7829 Nov 13 07:14	7°♄19'45		min. Earth dist.	7830 Oct 29 22:31	16°♄49'11	0.59092 AU
min. Earth dist.	7829 Nov 16 23:57	4°♄35'22	0.61170 AU	inferior conj	7830 Nov 02 03:11	14°♄24'08	-4°45'34
inferior conj	7829 Nov 20 02:04	1°♄54'10	-3°44'36	minimum elong	7830 Nov 02 10:05	14°♄11'01	4°43'59
minimum elong	7829 Nov 20 08:48	1°♄39'27	3°42'21	morning rise	7830 Nov 10 00:59	9°♄52'12	
	7829 Nov 22 08:14	30°♄		direct	7830 Nov 12 07:29	9°♄34'24	
morning rise	7829 Nov 27 12:38	27°♄00'02		asc. node	7830 Nov 19 01:33	12°♄22'11	
direct	7829 Nov 29 18:07	26°♄39'38		morning max el	7830 Nov 20 06:42	13°♄27'37	18°24'01
asc. node	7829 Dec 02 04:34	27°♄04'57			7830 Dec 01 11:41	0°♄	
	7829 Dec 06 15:12	0°♄		morning set	7830 Dec 06 04:55	8°♄52'53	
morning max el	7829 Dec 06 21:10	0°♄14'26	17°56'10				
morning set	7829 Dec 22 13:27	24°♄53'29		superior conj	7830 Dec 15 07:01	26°♄04'41	1°01'33
	7829 Dec 25 08:29	0°♄		minimum elong	7830 Dec 15 10:30	26°♄20'43	1°01'12
					7830 Dec 17 10:37	0°♄	
superior conj	7830 Jan 01 22:09	13°♄32'05	0°30'33	max. Earth dist.	7830 Dec 22 19:26	9°♄27'44	1.40597 AU
minimum elong	7830 Jan 02 00:38	13°♄42'55	0°30'19	desc. node	7830 Dec 23 23:41	11°♄28'32	
desc. node	7830 Jan 06 02:41	20°♄43'36		evening rise	7830 Dec 27 05:51	16°♄56'01	
max. Earth dist.	7830 Jan 09 10:26	26°♄16'26	1.42589 AU		7831 Jan 04 10:36	0°♄	
	7830 Jan 11 17:07	0°♄			7831 Jan 26 01:15	0°♄	
evening rise	7830 Jan 15 14:27	6°♄13'33		evening max el	7831 Jan 30 17:16	5°♄07'27	23°32'05
	7830 Jan 31 09:11	0°♄		retrograde	7831 Feb 10 09:22	11°♄25'30	
evening max el	7830 Feb 17 02:08	21°♄24'34	22°12'12	evening set	7831 Feb 15 11:15	9°♄18'52	
retrograde	7830 Feb 26 15:08	27°♄04'01		asc. node	7831 Feb 15 00:45	9°♄40'08	
asc. node	7830 Feb 28 03:41	26°♄52'10		inferior conj	7831 Feb 20 21:24	2°♄52'10	1°49'39
evening set	7830 Mar 03 05:01	25°♄12'16		minimum elong	7831 Feb 20 19:18	2°♄59'24	1°49'00
inferior conj	7830 Mar 08 13:02	18°♄51'21	2°27'34	min. Earth dist.	7831 Feb 20 08:01	3°♄38'03	0.68282 AU
minimum elong	7830 Mar 08 10:46	18°♄59'16	2°26'58		7831 Feb 23 01:16	30°♄	
min. Earth dist.	7830 Mar 08 11:21	18°♄57'12	0.68367 AU	morning rise	7831 Feb 26 03:19	26°♄47'10	
morning rise	7830 Mar 13 16:20	12°♄40'51		direct	7831 Mar 02 08:05	25°♄08'27	
direct	7830 Mar 18 10:57	10°♄39'29		morning max el	7831 Mar 10 14:28	29°♄52'46	20°52'32
morning max el	7830 Mar 27 21:23	16°♄11'50	22°14'07		7831 Mar 10 17:21	0°♄	
desc. node	7830 Apr 04 02:17	24°♄35'12		desc. node	7831 Mar 21 23:13	14°♄04'39	
	7830 Apr 08 03:54	0°♄			7831 Apr 01 20:25	0°♄	
	7830 Apr 28 06:08	0°♄		morning set	7831 Apr 09 15:18	11°♄57'01	
morning set	7830 Apr 30 05:44	3°♄11'35		max. Earth dist.	7831 Apr 17 16:57	24°♄47'34	1.42956 AU
max. Earth dist.	7830 May 05 12:12	11°♄53'38	1.40963 AU		7831 Apr 20 21:12	0°♄	
superior conj	7830 May 13 07:10	25°♄23'24	-1°49'14	superior conj	7831 Apr 24 15:10	6°♄15'59	-2°07'24
minimum elong	7830 May 13 12:51	25°♄48'48	1°48'48	minimum elong	7831 Apr 24 18:49	6°♄31'27	2°07'20
	7830 May 15 20:39	0°♄		evening rise	7831 May 06 11:47	26°♄56'20	
evening rise	7830 May 23 15:39	14°♄25'01			7831 May 08 05:02	0°♄	
asc. node	7830 May 27 02:42	20°♄50'44		asc. node	7831 May 13 23:45	10°♄06'08	
	7830 Jun 01 07:18	0°♄		evening max el	7831 May 23 06:13	23°♄11'05	18°05'37
evening max el	7830 Jun 08 18:26	10°♄09'10	18°17'38	retrograde	7831 May 29 20:13	26°♄33'47	
retrograde	7830 Jun 15 23:42	13°♄46'19		evening set	7831 Jun 01 11:01	26°♄01'36	
evening set	7830 Jun 18 07:08	13°♄24'54		inferior conj	7831 Jun 08 00:39	21°♄01'19	2°33'43
inferior conj	7830 Jun 25 13:25	8°♄44'51	1°33'38	minimum elong	7831 Jun 08 03:38	20°♄53'59	2°32'53
minimum elong	7830 Jun 25 16:13	8°♄38'56	1°32'37	min. Earth dist.	7831 Jun 11 04:13	17°♄57'25	0.61190 AU
min. Earth dist.	7830 Jun 28 23:06	5°♄53'11	0.58948 AU	morning rise	7831 Jun 14 17:58	15°♄02'50	
desc. node	7830 Jul 01 01:41	4°♄18'24		desc. node	7831 Jun 17 22:43	13°♄24'02	
morning rise	7830 Jul 02 22:08	3°♄09'10		direct	7831 Jun 21 09:58	12°♄47'46	
direct	7830 Jul 09 03:51	1°♄24'10		morning max el	7831 Jul 05 16:07	20°♄47'02	27°53'41
morning max el	7830 Jul 23 12:55	9°♄11'21	27°22'55		7831 Jul 13 15:02	0°♄	
	7830 Aug 08 10:48	0°♄			7831 Aug 01 10:37	0°♄	
asc. node	7830 Aug 23 02:03	27°♄02'15		morning set	7831 Aug 07 17:16	12°♄21'35	
morning set	7830 Aug 23 13:39	28°♄03'01		asc. node	7831 Aug 09 23:02	17°♄02'29	
	7830 Aug 24 11:47	0°♄		max. Earth dist.	7831 Aug 13 13:59	24°♄50'58	1.31914 AU
max. Earth dist.	7830 Aug 30 04:59	12°♄28'31	1.31690 AU				
				superior conj	7831 Aug 15 01:37	28°♄06'25	0°50'14
superior conj	7830 Aug 30 15:03	13°♄24'21	1°10'29	minimum elong	7831 Aug 14 23:38	27°♄55'29	0°49'46

	7831 Aug 15 22:14	0°♍		superior conj	7832 Jul 29 09:09	12°♊35'26	0°25'45
evening rise	7831 Aug 21 20:20	12°♍57'02		minimum elong	7832 Jul 29 07:57	12°♊28'59	0°25'24
	7831 Aug 30 08:53	0°♌		evening rise	7832 Aug 05 08:02	27°♊39'00	
desc. node	7831 Sep 13 21:44	21°♌38'34			7832 Aug 06 10:38	0°♍	
evening max el	7831 Sep 17 01:11	24°♌55'28	24°58'42		7832 Aug 23 20:07	0°♌	
	7831 Sep 23 19:40	0°♍		evening max el	7832 Aug 28 12:35	5°♌13'37	23°21'34
retrograde	7831 Sep 30 21:52	1°♍54'54		desc. node	7832 Aug 30 18:49	7°♌15'09	
evening set	7831 Oct 06 11:57	0°♍44'20		retrograde	7832 Sep 11 00:24	11°♌58'45	
	7831 Oct 08 02:44	30°♋♌		evening set	7832 Sep 15 03:09	11°♌21'42	
min. Earth dist.	7831 Oct 11 12:30	28°♌01'27	0.57122 AU	min. Earth dist.	7832 Sep 21 22:08	8°♌12'01	0.55572 AU
inferior conj	7831 Oct 14 08:36	26°♌09'28	-5°25'54	inferior conj	7832 Sep 23 18:07	7°♌07'20	-5°27'10
minimum elong	7831 Oct 14 12:07	26°♌03'40	5°25'33	minimum elong	7832 Sep 23 14:36	7°♌12'32	5°26'53
morning rise	7831 Oct 22 14:33	22°♌00'32		morning rise	7832 Oct 02 04:14	3°♌15'26	
direct	7831 Oct 25 02:42	21°♌42'35		direct	7832 Oct 05 02:23	2°♌54'46	
morning max el	7831 Nov 03 07:00	26°♌04'01	19°13'28	morning max el	7832 Oct 15 19:14	7°♌55'09	20°25'16
asc. node	7831 Nov 05 22:33	28°♌55'52		asc. node	7832 Oct 22 19:33	16°♌30'48	
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morning set	7831 Nov 20 05:21	23°♍16'22		morning set	7832 Nov 03 11:42	7°♍55'15	
	7831 Nov 23 14:15	0°♌					
superior conj	7831 Nov 28 09:32	9°♌27'47	1°23'11	superior conj	7832 Nov 11 00:55	23°♍27'36	1°36'08
minimum elong	7831 Nov 28 12:29	9°♌42'02	1°22'59	minimum elong	7832 Nov 11 02:38	23°♍36'18	1°36'08
max. Earth dist.	7831 Dec 05 01:10	21°♌56'46	1.38434 AU	max. Earth dist.	7832 Nov 16 08:01	3°♌55'49	1.36360 AU
evening rise	7831 Dec 08 19:21	28°♌37'12		evening rise	7832 Nov 20 04:57	11°♌12'06	
	7831 Dec 09 14:28	0°♌		desc. node	7832 Nov 26 17:45	22°♌42'10	
desc. node	7831 Dec 10 20:42	2°♌09'28			7832 Dec 01 04:24	0°♌	
	7831 Dec 28 20:40	0°♌			7832 Dec 23 05:10	0°♌	
evening max el	7832 Jan 13 06:27	18°♌53'14	24°50'26	evening max el	7832 Dec 25 19:24	2°♌39'31	26°00'08
retrograde	7832 Jan 24 23:47	25°♌42'46		retrograde	7833 Jan 07 09:26	9°♌49'32	
evening set	7832 Jan 30 14:21	23°♌22'40		evening set	7833 Jan 13 12:39	7°♌19'01	
asc. node	7832 Feb 01 21:48	21°♌02'46		min. Earth dist.	7833 Jan 17 18:45	2°♌47'07	0.66947 AU
min. Earth dist.	7832 Feb 04 03:14	18°♌16'14	0.67801 AU	asc. node	7833 Jan 18 18:52	1°♌31'58	
inferior conj	7832 Feb 05 04:00	16°♌54'26	1°03'39	inferior conj	7833 Jan 19 06:54	0°♌54'19	0°10'02
minimum elong	7832 Feb 05 02:32	16°♌59'14	1°03'11	minimum elong	7833 Jan 19 06:38	0°♌55'09	0°10'03
morning rise	7832 Feb 10 14:57	10°♌56'26		transit middle	7833 Jan 19 06:38	0°♌55'09	0°10'03
direct	7832 Feb 14 06:51	9°♌39'25		transit begin	7833 Jan 19 04:24	1°♌02'07	
morning max el	7832 Feb 21 15:27	13°♌46'14	19°43'28	transit end	7833 Jan 19 08:51	0°♌48'12	
	7832 Mar 05 03:03	0°♌			7833 Jan 20 00:24	30°♋♌	
greatest brilliancy	7832 Mar 05 10:00	0°♌25'30	-0.6m	morning rise	7833 Jan 25 01:13	25°♌05'11	
desc. node	7832 Mar 07 20:10	4°♌00'53		direct	7833 Jan 28 05:44	24°♌07'08	
morning set	7832 Mar 18 12:31	20°♌15'08		morning max el	7833 Feb 03 23:56	27°♌48'33	18°49'33
	7832 Mar 24 19:20	0°♍			7833 Feb 06 00:37	0°♌	
max. Earth dist.	7832 Mar 30 04:35	8°♍28'40	1.44462 AU	desc. node	7833 Feb 22 17:08	24°♌16'13	
				morning set	7833 Feb 25 21:46	29°♌15'33	
superior conj	7832 Apr 03 22:15	16°♍03'23	-2°10'35		7833 Feb 26 09:08	0°♌	
minimum elong	7832 Apr 03 20:02	15°♍54'27	2°10'33	max. Earth dist.	7833 Mar 12 21:08	22°♌40'46	1.45323 AU
	7832 Apr 12 10:05	0°♌					
evening rise	7832 Apr 17 12:28	8°♌34'56		superior conj	7833 Mar 14 08:43	25°♌00'21	-1°53'59
asc. node	7832 Apr 29 20:49	28°♌54'48		minimum elong	7833 Mar 14 00:12	24°♌26'57	1°53'21
	7832 Apr 30 14:31	0°♍			7833 Mar 17 12:51	0°♍	
evening max el	7832 May 05 19:31	6°♍31'04	18°12'39	evening rise	7833 Mar 29 14:00	19°♍14'12	
retrograde	7832 May 12 04:49	9°♍53'58		greatest brilliancy	7833 Apr 04 14:18	28°♍57'12	-0.9m
evening set	7832 May 15 02:40	9°♍09'14			7833 Apr 05 05:55	0°♌	
inferior conj	7832 May 21 03:42	3°♍50'23	3°08'35	asc. node	7833 Apr 16 17:54	17°♌07'25	
minimum elong	7832 May 21 05:38	3°♍45'01	3°08'12	evening max el	7833 Apr 19 07:27	20°♌01'24	18°37'58
min. Earth dist.	7832 May 23 18:38	0°♍57'10	0.63337 AU	retrograde	7833 Apr 25 21:05	23°♌37'30	
	7832 May 24 16:40	30°♋♌		evening set	7833 Apr 29 02:09	22°♌39'01	
morning rise	7832 May 27 07:14	27°♌39'11		inferior conj	7833 May 04 18:26	17°♌03'12	3°23'26
direct	7832 Jun 03 01:47	25°♌02'04		minimum elong	7833 May 04 18:59	17°♌01'31	3°23'19
desc. node	7832 Jun 03 19:44	25°♌03'51		min. Earth dist.	7833 May 06 18:14	14°♌38'16	0.65192 AU
	7832 Jun 13 16:30	0°♍		morning rise	7833 May 10 11:05	10°♌46'39	
morning max el	7832 Jun 17 00:17	3°♍04'36	27°46'20	direct	7833 May 17 01:24	7°♌59'36	
	7832 Jul 07 01:23	0°♌		desc. node	7833 May 21 16:44	9°♌08'39	
morning set	7832 Jul 21 14:09	26°♌17'54		morning max el	7833 May 30 10:29	15°♌53'10	27°05'08
	7832 Jul 23 10:01	0°♊			7833 Jun 11 01:12	0°♍	
max. Earth dist.	7832 Jul 26 17:29	6°♊54'23	1.32604 AU		7833 Jun 29 20:25	0°♌	
asc. node	7832 Jul 26 20:03	7°♊07'59		morning set	7833 Jul 05 01:25	9°♌43'35	

































































































































max. Earth dist.	7833 Jul 09 11:49	18°  30'20	1.33774 AU		7834 Jun 04 20:50	0° 	
				morning set	7834 Jun 17 23:18	22°  27'47	
superior conj	7833 Jul 13 11:32	26°  45'17	-0°02'22		7834 Jun 21 23:10	0° 	
minimum elong	7833 Jul 13 11:40	26°  45'59	0°02'26	max. Earth dist.	7834 Jun 21 19:10	29°  40'46	1.35421 AU
behind sun begin	7833 Jul 13 06:06	26°  16'43					
behind sun end	7833 Jul 13 17:14	27°  15'16		superior conj	7834 Jun 27 06:12	10°  28'33	-0°33'01
asc. node	7833 Jul 13 17:07	27°  14'36		minimum elong	7834 Jun 27 08:07	10°  38'18	0°32'45
	7833 Jul 15 00:25	0° 		asc. node	7834 Jun 30 14:06	17°  17'39	
evening rise	7833 Jul 20 18:43	12°  14'23		evening rise	7834 Jul 05 02:18	26°  36'48	
	7833 Jul 29 20:56	0° 			7834 Jul 06 18:07	0° 	
evening max el	7833 Aug 10 04:00	15°  32'49	21°44'41	evening max el	7834 Jul 23 06:35	26°  22'57	20°21'00
desc. node	7833 Aug 17 15:53	20°  45'10			7834 Jul 27 21:57	0° 	
retrograde	7833 Aug 22 15:45	21°  44'33		retrograde	7834 Aug 03 04:09	1°  45'36	
evening set	7833 Aug 25 08:44	21°  48'03		desc. node	7834 Aug 04 12:57	1°  40'51	
inferior conj	7833 Sep 03 13:30	17°  28'27	-4°34'43	evening set	7834 Aug 05 03:29	1°  35'47	
minimum elong	7833 Sep 03 04:24	17°  41'11	4°32'36		7834 Aug 09 23:08	30°  R 	
min. Earth dist.	7833 Sep 03 07:02	17°  43'31	0.54762 AU	inferior conj	7834 Aug 14 07:14	27°  38'15	-2°54'46
morning rise	7833 Sep 12 01:15	13°  38'38		minimum elong	7834 Aug 13 23:22	27°  49'44	2°52'06
direct	7833 Sep 15 12:59	13°  11'59		min. Earth dist.	7834 Aug 15 17:11	26°  48'42	0.54892 AU
morning max el	7833 Sep 27 18:49	18°  58'35	21°57'17	morning rise	7834 Aug 22 18:23	23°  30'40	
	7833 Oct 06 16:26	0° 		direct	7834 Aug 26 23:00	22°  52'48	
asc. node	7833 Oct 09 16:34	4°  53'11		morning max el	7834 Sep 09 09:25	29°  24'32	23°41'46
morning set	7833 Oct 18 21:40	22°  43'12			7834 Sep 10 00:14	0° 	
	7833 Oct 22 08:11	0° 		asc. node	7834 Sep 26 13:34	23°  45'49	
					7834 Sep 29 17:34	0° 	
superior conj	7833 Oct 26 01:23	7°  52'58	1°41'26	morning set	7834 Oct 03 09:15	7°  53'41	
minimum elong	7833 Oct 26 01:44	7°  54'51	1°41'31				
max. Earth dist.	7833 Oct 29 21:25	15°  49'26	1.34577 AU	superior conj	7834 Oct 10 07:47	22°  33'46	1°40'03
evening rise	7833 Nov 03 06:50	24°  31'10		minimum elong	7834 Oct 10 06:57	22°  29'14	1°40'04
	7833 Nov 06 04:33	0° 		max. Earth dist.	7834 Oct 12 19:22	27°  53'23	1.33196 AU
desc. node	7833 Nov 13 14:49	13°  40'148			7834 Oct 13 19:18	0° 	
	7833 Nov 24 17:20	0° 		evening rise	7834 Oct 17 21:01	8°  22'47	
evening max el	7833 Dec 08 08:42	16°  32'032	26°53'49		7834 Oct 29 15:43	0° 	
retrograde	7833 Dec 21 13:31	23°  39'19		desc. node	7834 Oct 31 11:53	3°  40'05	
evening set	7833 Dec 28 04:12	21°  30'11		evening max el	7834 Nov 20 21:14	29°  44'05	27°24'20
min. Earth dist.	7834 Jan 01 04:20	17°  30'540	0.65738 AU		7834 Nov 21 03:58	0° 	
inferior conj	7834 Jan 03 04:01	14°  34'751	-0°50'25	retrograde	7834 Dec 04 11:07	7°  30'2'59	
minimum elong	7834 Jan 03 05:28	14°  43'40	0°49'41	evening set	7834 Dec 11 10:32	4°  38'05	
asc. node	7834 Jan 05 15:54	12°  30'2'29		min. Earth dist.	7834 Dec 15 05:36	1°  30'3'39	0.64187 AU
morning rise	7834 Jan 09 07:49	9°  31'0'00			7834 Dec 16 06:06	30°  R 	
direct	7834 Jan 12 02:51	8°  32'7'15		inferior conj	7834 Dec 17 16:51	28°  42'8'10	-1°56'29
morning max el	7834 Jan 18 14:03	11°  35'4'32	18°12'07	minimum elong	7834 Dec 17 20:26	28°  42'18'44	1°54'55
	7834 Jan 31 10:57	0° 		asc. node	7834 Dec 23 12:56	23°  42'27'16	
morning set	7834 Feb 06 11:04	9°  42'2'17		morning rise	7834 Dec 24 07:55	23°  42'04'44	
desc. node	7834 Feb 09 14:08	14°  45'3'38		direct	7834 Dec 26 19:38	22°  42'33'28	
	7834 Feb 19 03:21	0° 		morning max el	7835 Jan 02 07:02	25°  42'56'25	17°51'48
					7835 Jan 05 18:06	0° 	
superior conj	7834 Feb 21 13:45	3°  45'0'02	-1°19'04	morning set	7835 Jan 19 04:52	21°  32'3'54	
minimum elong	7834 Feb 21 04:54	3°  45'15'13	1°18'00		7835 Jan 24 05:07	0° 	
max. Earth dist.	7834 Feb 23 16:33	7°  45'0'9'23	1.45459 AU	desc. node	7835 Jan 27 11:07	5°  42'2'12	
evening rise	7834 Mar 09 17:05	29°  45'0'1'35					
	7834 Mar 10 08:05	0° 		superior conj	7835 Feb 01 08:28	13°  42'23'25	-0°34'46
greatest brilliancy	7834 Mar 21 14:55	17°  45'26'30	-0.7m	minimum elong	7835 Feb 01 04:31	13°  42'07'24	0°34'06
	7834 Mar 30 11:46	0° 		max. Earth dist.	7835 Feb 06 11:59	21°  42'37'17	1.44849 AU
evening max el	7834 Apr 02 15:47	3°  42'37'04	19°20'24		7835 Feb 11 20:07	0° 	
asc. node	7834 Apr 03 14:58	4°  42'33'10		evening rise	7835 Feb 17 05:58	8°  42'21'37	
retrograde	7834 Apr 09 17:43	7°  42'37'57			7835 Mar 03 14:58	0° 	
evening set	7834 Apr 13 06:36	6°  42'24'55		evening max el	7835 Mar 16 19:00	17°  42'14'57	20°18'04
inferior conj	7834 Apr 18 17:24	0°  42'33'35	3°22'37	asc. node	7835 Mar 21 12:01	20°  42'14'58'55	
minimum elong	7834 Apr 18 16:41	0°  42'35'52	3°22'30	retrograde	7835 Mar 24 16:06	21°  42'14'50'19	
	7834 Apr 19 03:41	30°  R 		evening set	7835 Mar 28 13:46	20°  42'14'22'14	
min. Earth dist.	7834 Apr 20 01:55	28°  42'14'45	0.66649 AU	inferior conj	7835 Apr 02 21:47	14°  42'14'17'14	3°09'17
morning rise	7834 Apr 24 02:25	24°  42'14'16'08		minimum elong	7835 Apr 02 20:09	14°  42'14'22'48	3°09'01
direct	7834 Apr 30 07:29	21°  42'14'31'29		min. Earth dist.	7835 Apr 03 16:02	13°  42'14'15'06	0.67660 AU
desc. node	7834 May 08 13:44	25°  42'14'08'21		morning rise	7835 Apr 08 02:20	8°  42'14'01'18	
morning max el	7834 May 12 20:27	29°  42'14'01'03	25°57'57	direct	7835 Apr 13 18:53	5°  42'14'29'00	
	7834 May 13 19:15	0° 		morning max el	7835 Apr 25 05:34	12°  42'14'20'00	24°34'30

desc. node	7835 Apr 25 10:44	12° $\Upsilon$ 33'08		morning max el	7836 Apr 06 15:14	25° $\text{H}$ 46'04	23°04'48
	7835 May 09 10:12	0° $\text{B}$			7836 Apr 10 11:50	0° $\Upsilon$	
	7835 May 28 15:26	0° $\Pi$		desc. node	7836 Apr 11 07:41	0° $\Upsilon$ 58'59	
morning set	7835 May 31 02:56	4° $\Pi$ 17'50			7836 May 01 22:49	0° $\text{B}$	
max. Earth dist.	7835 Jun 03 17:56	10° $\Pi$ 46'31	1.37457 AU	morning set	7836 May 11 06:39	14° $\text{B}$ 58'51	
				max. Earth dist.	7836 May 15 14:05	22° $\text{B}$ 17'21	1.39692 AU
					7836 May 19 23:18	0° $\Pi$	
superior conj	7835 Jun 10 13:56	23° $\Pi$ 37'08	-1°04'35				
minimum elong	7835 Jun 10 17:52	23° $\Pi$ 56'09	1°04'02				
	7835 Jun 13 20:05	0° $\text{E}$		superior conj	7836 May 23 06:44	6° $\Pi$ 00'35	-1°34'24
asc. node	7835 Jun 17 11:08	7° $\text{E}$ 13'44		minimum elong	7836 May 23 12:13	6° $\Pi$ 25'50	1°33'50
evening rise	7835 Jun 19 04:22	10° $\text{E}$ 39'34		evening rise	7836 Jun 01 21:52	24° $\Pi$ 13'59	
	7835 Jun 29 17:30	0° $\Omega$		asc. node	7836 Jun 03 08:08	26° $\Pi$ 57'49	
evening max el	7835 Jul 05 22:11	7° $\Omega$ 56'48	19°16'46		7836 Jun 04 22:35	0° $\text{E}$	
retrograde	7835 Jul 15 03:06	12° $\Omega$ 29'24		evening max el	7836 Jun 18 00:31	20° $\text{E}$ 11'28	18°33'20
evening set	7835 Jul 17 00:27	12° $\Omega$ 18'43		retrograde	7836 Jun 25 20:07	24° $\text{E}$ 04'40	
desc. node	7835 Jul 22 10:00	10° $\Omega$ 08'18		evening set	7836 Jun 27 23:06	23° $\text{E}$ 48'22	
inferior conj	7835 Jul 25 13:34	8° $\Omega$ 09'17	-0°57'39	inferior conj	7836 Jul 05 16:29	19° $\text{E}$ 20'11	0°46'04
minimum elong	7835 Jul 25 11:01	8° $\Omega$ 13'30	0°56'46	minimum elong	7836 Jul 05 18:07	19° $\text{E}$ 17'00	0°45'22
min. Earth dist.	7835 Jul 28 06:23	6° $\Omega$ 22'26	0.55947 AU	desc. node	7836 Jul 08 07:03	17° $\text{E}$ 18'50	
morning rise	7835 Aug 02 18:46	3° $\Omega$ 27'47		min. Earth dist.	7836 Jul 09 00:26	16° $\text{E}$ 46'19	0.57722 AU
direct	7835 Aug 07 19:08	2° $\Omega$ 30'17		morning rise	7836 Jul 13 09:40	14° $\text{E}$ 01'49	
morning max el	7835 Aug 21 22:11	9° $\Omega$ 39'45	25°24'27	direct	7836 Jul 19 05:48	12° $\text{E}$ 35'23	
	7835 Sep 06 05:22	0° $\text{H}$		morning max el	7836 Aug 02 15:04	20° $\text{E}$ 12'36	26°48'31
asc. node	7835 Sep 13 10:34	13° $\text{H}$ 14'46			7836 Aug 11 00:48	0° $\Omega$	
morning set	7835 Sep 17 20:46	22° $\text{H}$ 22'03			7836 Aug 28 20:45	0° $\text{H}$	
	7835 Sep 21 09:21	0° $\underline{\Omega}$		asc. node	7836 Aug 30 07:34	2° $\text{H}$ 57'08	
				morning set	7836 Sep 01 06:37	7° $\text{H}$ 02'55	
superior conj	7835 Sep 24 17:50	7° $\underline{\Omega}$ 23'04	1°32'44				
minimum elong	7835 Sep 24 16:07	7° $\underline{\Omega}$ 13'38	1°32'36	superior conj	7836 Sep 08 05:30	22° $\text{H}$ 14'08	1°20'03
max. Earth dist.	7835 Sep 26 00:35	10° $\underline{\Omega}$ 11'58	1.32255 AU	minimum elong	7836 Sep 08 03:18	22° $\text{H}$ 02'00	1°19'43
evening rise	7835 Oct 01 20:12	22° $\underline{\Omega}$ 38'11		max. Earth dist.	7836 Sep 08 10:01	22° $\text{H}$ 39'14	1.31760 AU
	7835 Oct 05 11:54	0° $\text{M}$			7836 Sep 11 17:54	0° $\underline{\Omega}$	
desc. node	7835 Oct 18 08:56	22° $\text{M}$ 31'39		evening rise	7836 Sep 15 01:38	7° $\underline{\Omega}$ 09'23	
	7835 Oct 23 12:05	0° $\text{X}$			7836 Sep 26 23:43	0° $\text{M}$	
evening max el	7835 Nov 03 06:49	12° $\text{X}$ 36'53	27°25'20	desc. node	7836 Oct 04 06:00	11° $\text{M}$ 22'02	
retrograde	7835 Nov 17 01:45	19° $\text{X}$ 51'38		evening max el	7836 Oct 15 10:51	24° $\text{M}$ 46'53	26°53'06
evening set	7835 Nov 24 04:37	17° $\text{X}$ 27'03			7836 Oct 22 09:44	0° $\text{X}$	
min. Earth dist.	7835 Nov 27 20:42	14° $\text{X}$ 31'00	0.62339 AU	retrograde	7836 Oct 29 08:35	1° $\text{X}$ 56'32	
inferior conj	7835 Nov 30 18:28	11° $\text{X}$ 47'54	-3°05'29	evening set	7836 Nov 05 06:28	29° $\text{M}$ 53'27	
minimum elong	7835 Dec 01 00:14	11° $\text{X}$ 34'21	3°03'18		7836 Nov 05 01:54	30° $\text{R}$ $\text{M}$	
morning rise	7835 Dec 07 21:55	6° $\text{X}$ 42'21		min. Earth dist.	7836 Nov 09 01:07	27° $\text{M}$ 15'30	0.60286 AU
direct	7835 Dec 10 04:50	6° $\text{X}$ 18'56		inferior conj	7836 Nov 12 05:32	24° $\text{M}$ 38'44	-4°12'02
asc. node	7835 Dec 10 09:59	6° $\text{X}$ 19'09		minimum elong	7836 Nov 12 12:39	24° $\text{M}$ 24'04	4°09'57
morning max el	7835 Dec 16 23:50	9° $\text{X}$ 46'38	17°49'13	morning rise	7836 Nov 19 21:12	19° $\text{M}$ 54'10	
	7835 Dec 30 08:59	0° $\text{Z}$		direct	7836 Nov 22 02:30	19° $\text{M}$ 35'19	
morning set	7836 Jan 01 21:08	4° $\text{Z}$ 27'28		asc. node	7836 Nov 26 07:01	20° $\text{M}$ 45'45	
				morning max el	7836 Nov 29 13:08	23° $\text{M}$ 16'40	18°05'32
					7836 Dec 04 21:14	0° $\text{X}$	
superior conj	7836 Jan 13 03:47	24° $\text{Z}$ 08'44	0°08'38				
minimum elong	7836 Jan 13 04:37	24° $\text{Z}$ 12'14	0°08'38	morning set	7836 Dec 15 05:39	18° $\text{X}$ 07'39	
behind sun begin	7836 Jan 12 21:05	23° $\text{Z}$ 40'20			7836 Dec 21 15:10	0° $\text{Z}$	
behind sun end	7836 Jan 13 12:09	24° $\text{Z}$ 44'04					
desc. node	7836 Jan 14 08:05	26° $\text{Z}$ 07'57		superior conj	7836 Dec 25 00:13	6° $\text{Z}$ 06'11	0°44'51
	7836 Jan 16 15:48	0° $\approx$		minimum elong	7836 Dec 25 03:22	6° $\text{Z}$ 20'17	0°44'30
max. Earth dist.	7836 Jan 20 04:23	5° $\approx$ 45'55	1.43568 AU	desc. node	7836 Dec 31 05:04	16° $\text{Z}$ 53'42	
evening rise	7836 Jan 27 19:07	17° $\approx$ 49'53		max. Earth dist.	7837 Jan 01 15:41	19° $\text{Z}$ 19'31	1.41772 AU
	7836 Feb 04 18:41	0° $\text{H}$		evening rise	7837 Jan 06 22:37	28° $\text{Z}$ 00'13	
	7836 Feb 26 20:02	0° $\Upsilon$			7837 Jan 08 04:34	0° $\approx$	
evening max el	7836 Feb 27 16:36	0° $\Upsilon$ 53'35	21°28'02		7837 Jan 28 10:37	0° $\text{H}$	
asc. node	7836 Mar 07 09:04	6° $\Upsilon$ 09'21		evening max el	7837 Feb 09 09:33	14° $\text{H}$ 34'32	22°45'56
retrograde	7836 Mar 07 14:13	6° $\Upsilon$ 09'35		retrograde	7837 Feb 19 10:23	20° $\text{H}$ 31'46	
evening set	7836 Mar 11 21:49	4° $\Upsilon$ 26'20		asc. node	7837 Feb 22 06:08	19° $\text{H}$ 51'32	
	7836 Mar 15 21:18	30° $\text{R}$ $\text{H}$		evening set	7837 Feb 24 05:10	18° $\text{H}$ 33'35	
inferior conj	7836 Mar 17 05:16	28° $\text{H}$ 10'06	2°45'30	inferior conj	7837 Mar 01 13:53	12° $\text{H}$ 09'28	2°12'31
minimum elong	7836 Mar 17 03:07	28° $\text{H}$ 17'38	2°45'00	minimum elong	7837 Mar 01 11:38	12° $\text{H}$ 17'19	2°11'53
min. Earth dist.	7836 Mar 17 10:30	27° $\text{H}$ 51'56	0.68228 AU	min. Earth dist.	7837 Mar 01 07:08	12° $\text{H}$ 32'54	0.68375 AU
morning rise	7836 Mar 22 08:15	21° $\text{H}$ 57'13		morning rise	7837 Mar 06 17:59	6° $\text{H}$ 00'57	
direct	7836 Mar 27 10:52	19° $\text{H}$ 43'42		direct	7837 Mar 11 06:31	4° $\text{H}$ 09'19	

morning max el	7837 Mar 20 04:39	9° $\text{H}$ 20'53	21°38'06	direct	7838 Feb 23 04:39	18° $\approx$ 39'34	
desc. node	7837 Mar 29 04:38	20° $\text{H}$ 09'07		morning max el	7838 Mar 03 00:52	23° $\approx$ 06'39	20°21'17
	7837 Apr 05 05:45	0° $\text{Y}$			7838 Mar 08 22:34	0° $\text{H}$	
morning set	7837 Apr 21 06:44	24° $\text{Y}$ 23'11		desc. node	7838 Mar 16 01:35	9° $\text{H}$ 50'53	
	7837 Apr 24 18:30	0° $\text{B}$			7838 Mar 29 12:37	0° $\text{Y}$	
max. Earth dist.	7837 Apr 27 14:01	4° $\text{B}$ 36'48	1.41855 AU	morning set	7838 Mar 31 08:18	2° $\text{Y}$ 48'24	
				max. Earth dist.	7838 Apr 09 21:22	17° $\text{Y}$ 50'29	1.43671 AU
superior conj	7837 May 05 04:01	17° $\text{B}$ 29'15	-1°58'23				
minimum elong	7837 May 05 09:18	17° $\text{B}$ 52'15	1°58'06	superior conj	7838 Apr 16 01:31	27° $\text{Y}$ 54'01	-2°10'57
	7837 May 12 04:38	0° $\text{II}$		minimum elong	7838 Apr 16 03:05	28° $\text{Y}$ 00'33	2°10'58
evening rise	7837 May 16 03:05	7° $\text{II}$ 11'15			7838 Apr 17 07:52	0° $\text{B}$	
asc. node	7837 May 21 05:10	16° $\text{II}$ 25'22		evening rise	7838 Apr 28 15:27	19° $\text{B}$ 20'43	
	7837 May 29 18:51	0° $\text{E}$			7838 May 04 18:53	0° $\text{II}$	
evening max el	7837 Jun 01 09:58	2° $\text{E}$ 59'12	18°10'09	asc. node	7838 May 08 02:14	5° $\text{II}$ 30'17	
retrograde	7837 Jun 08 07:28	6° $\text{E}$ 28'17		evening max el	7838 May 15 22:53	16° $\text{II}$ 10'16	18°06'23
evening set	7837 Jun 10 17:59	6° $\text{E}$ 02'42		retrograde	7838 May 22 09:32	19° $\text{II}$ 30'59	
inferior conj	7837 Jun 17 16:45	1° $\text{E}$ 14'11	2°02'30	evening set	7838 May 25 03:27	18° $\text{II}$ 53'34	
minimum elong	7837 Jun 17 19:51	1° $\text{E}$ 07'11	2°01'29	inferior conj	7838 May 31 11:14	13° $\text{II}$ 45'22	2°51'16
	7837 Jun 19 01:22	30° $\text{R}$ $\text{II}$		minimum elong	7838 May 31 13:52	13° $\text{II}$ 38'34	2°50'37
min. Earth dist.	7837 Jun 21 01:08	28° $\text{II}$ 13'58	0.59899 AU	min. Earth dist.	7838 Jun 03 10:04	10° $\text{II}$ 43'26	0.62134 AU
morning rise	7837 Jun 24 18:50	25° $\text{II}$ 27'15		morning rise	7838 Jun 06 22:25	7° $\text{II}$ 40'41	
desc. node	7837 Jun 25 04:05	25° $\text{II}$ 13'39		desc. node	7838 Jun 12 01:05	5° $\text{II}$ 23'07	
direct	7837 Jul 01 05:58	23° $\text{II}$ 28'28		direct	7838 Jun 13 16:38	5° $\text{II}$ 14'41	
	7837 Jul 14 03:43	0° $\text{E}$		morning max el	7838 Jun 27 19:48	13° $\text{II}$ 16'15	27°55'00
morning max el	7837 Jul 15 14:25	1° $\text{E}$ 22'40	27°40'38		7838 Jul 11 04:48	0° $\text{E}$	
	7837 Aug 05 07:00	0° $\text{O}$			7838 Jul 28 17:51	0° $\text{O}$	
morning set	7837 Aug 16 13:03	21° $\text{O}$ 31'03		morning set	7838 Jul 31 14:07	5° $\text{O}$ 41'08	
asc. node	7837 Aug 17 04:32	22° $\text{O}$ 52'09		asc. node	7838 Aug 04 01:32	12° $\text{O}$ 55'15	
	7837 Aug 20 12:23	0° $\text{P}$		max. Earth dist.	7838 Aug 06 03:10	17° $\text{O}$ 21'08	1.32148 AU
max. Earth dist.	7837 Aug 22 20:05	5° $\text{P}$ 05'36	1.31721 AU				
				superior conj	7838 Aug 08 02:33	21° $\text{O}$ 38'53	0°40'20
superior conj	7837 Aug 23 17:00	7° $\text{P}$ 01'12	1°02'26	minimum elong	7838 Aug 08 00:50	21° $\text{O}$ 29'30	0°39'55
minimum elong	7837 Aug 23 14:47	6° $\text{P}$ 49'00	1°02'00		7838 Aug 11 21:58	0° $\text{P}$	
evening rise	7837 Aug 30 11:04	21° $\text{P}$ 49'37		evening rise	7838 Aug 14 22:32	6° $\text{P}$ 33'13	
	7837 Sep 03 09:23	0° $\text{A}$			7838 Aug 27 03:46	0° $\text{A}$	
desc. node	7837 Sep 21 03:04	29° $\text{A}$ 15'46		desc. node	7838 Sep 08 00:09	15° $\text{A}$ 50'53	
	7837 Sep 21 17:16	0° $\text{M}$		evening max el	7838 Sep 08 20:53	16° $\text{A}$ 42'01	24°18'32
evening max el	7837 Sep 27 07:21	6° $\text{M}$ 06'43	25°48'11	retrograde	7838 Sep 22 15:10	23° $\text{A}$ 36'21	
retrograde	7837 Oct 11 05:53	13° $\text{M}$ 10'33		evening set	7838 Sep 27 15:01	22° $\text{A}$ 41'16	
evening set	7837 Oct 17 11:06	11° $\text{M}$ 39'33		min. Earth dist.	7838 Oct 03 07:45	19° $\text{A}$ 48'55	0.56390 AU
min. Earth dist.	7837 Oct 21 19:56	9° $\text{M}$ 03'36	0.58212 AU	inferior conj	7838 Oct 05 19:21	18° $\text{A}$ 16'00	-5°32'23
inferior conj	7837 Oct 24 22:33	6° $\text{M}$ 50'31	-5°06'18	minimum elong	7838 Oct 05 20:09	18° $\text{A}$ 14'45	5°32'20
minimum elong	7837 Oct 25 04:32	6° $\text{M}$ 39'48	5°05'14	morning rise	7838 Oct 14 03:25	14° $\text{A}$ 15'07	
morning rise	7837 Nov 02 00:17	2° $\text{M}$ 28'34		direct	7838 Oct 16 19:25	13° $\text{A}$ 56'14	
direct	7837 Nov 04 08:23	2° $\text{M}$ 11'09		morning max el	7838 Oct 26 14:36	18° $\text{A}$ 33'24	19°41'17
morning max el	7837 Nov 12 19:13	6° $\text{M}$ 15'37	18°42'22	asc. node	7838 Oct 31 01:03	23° $\text{A}$ 38'49	
asc. node	7837 Nov 13 04:02	6° $\text{M}$ 37'15			7838 Nov 04 06:06	0° $\text{M}$	
	7837 Nov 27 20:52	0° $\text{J}$		morning set	7838 Nov 13 04:44	16° $\text{M}$ 49'44	
morning set	7837 Nov 29 01:24	2° $\text{J}$ 18'31			7838 Nov 19 17:09	0° $\text{J}$	
				superior conj	7838 Nov 21 01:47	2° $\text{J}$ 42'09	1°29'39
superior conj	7837 Dec 07 17:14	19° $\text{J}$ 02'02	1°11'49	minimum elong	7838 Nov 21 04:15	2° $\text{J}$ 54'21	1°29'34
minimum elong	7837 Dec 07 20:38	19° $\text{J}$ 17'59	1°11'32		7838 Nov 27 04:21	14° $\text{J}$ 25'40	1.37532 AU
	7837 Dec 13 16:55	0° $\text{Z}$		max. Earth dist.	7838 Nov 30 22:03	21° $\text{J}$ 13'38	
max. Earth dist.	7837 Dec 14 22:30	2° $\text{Z}$ 10'41	1.39678 AU	evening rise	7838 Dec 04 23:08	28° $\text{J}$ 15'29	
desc. node	7837 Dec 18 02:05	7° $\text{Z}$ 37'27		desc. node	7838 Dec 05 23:55	0° $\text{Z}$	
evening rise	7837 Dec 18 23:31	9° $\text{Z}$ 08'13			7838 Dec 26 02:24	0° $\approx$	
	7838 Jan 01 03:19	0° $\approx$			7839 Jan 05 12:53	12° $\approx$ 06'15	25°21'34
evening max el	7838 Jan 22 23:41	28° $\approx$ 18'59	24°06'03	evening max el	7839 Jan 17 15:30	19° $\approx$ 05'06	
	7838 Jan 24 18:18	0° $\text{H}$		retrograde	7839 Jan 23 11:31	16° $\approx$ 40'20	
retrograde	7838 Feb 03 03:10	4° $\text{H}$ 51'47		evening set	7839 Jan 27 00:17	12° $\approx$ 55'23	
evening set	7838 Feb 08 10:15	2° $\text{H}$ 39'27		asc. node	7839 Jan 27 21:31	11° $\approx$ 48'30	0.67491 AU
asc. node	7838 Feb 09 03:13	2° $\text{H}$ 01'05		min. Earth dist.	7839 Jan 29 03:02	10° $\approx$ 13'10	0°41'50
	7838 Feb 10 23:46	30° $\text{R}$ $\approx$		inferior conj	7839 Jan 29 02:01	10° $\approx$ 16'27	0°41'32
min. Earth dist.	7838 Feb 13 03:35	27° $\approx$ 12'57	0.68124 AU	minimum elong	7839 Feb 03 16:50	4° $\approx$ 18'33	
inferior conj	7838 Feb 13 21:45	26° $\approx$ 11'29	1°30'07	morning rise	7839 Feb 07 03:48	3° $\approx$ 09'48	
minimum elong	7838 Feb 13 19:52	26° $\approx$ 17'53	1°30'31	direct	7839 Feb 14 05:09	7° $\approx$ 03'57	19°18'29
morning rise	7838 Feb 19 05:30	20° $\approx$ 08'57		morning max el			



greatest brilliancy	7839 Feb 27 07:28	24° $\approx$ 26'57	-0.7m	inferior conj	7840 Jan 13 03:44	24° $\approx$ 10'39	-0°14'47
desc. node	7839 Mar 02 22:33	29° $\approx$ 55'55		minimum elong	7840 Jan 13 04:08	24° $\approx$ 09'26	0°14'31
	7839 Mar 02 23:38	0° $\approx$		transit middle	7840 Jan 13 04:08	24° $\approx$ 09'26	0°14'31
morning set	7839 Mar 10 07:44	11° $\approx$ 16'13		transit begin	7840 Jan 13 02:54	24° $\approx$ 13'13	
	7839 Mar 22 08:21	0° $\approx$		transit end	7840 Jan 13 05:23	24° $\approx$ 05'40	
max. Earth dist.	7839 Mar 23 11:51	1° $\approx$ 48'18	1.44923 AU	asc. node	7840 Jan 13 21:21	23° $\approx$ 17'40	
				morning rise	7840 Jan 19 01:51	18° $\approx$ 26'12	
superior conj	7839 Mar 26 22:40	7° $\approx$ 16'16	-2°06'03	direct	7840 Jan 22 02:11	17° $\approx$ 35'04	
minimum elong	7839 Mar 26 17:25	6° $\approx$ 55'22	2°05'50	morning max el	7840 Jan 28 16:23	21° $\approx$ 08'47	18°31'39
	7839 Apr 09 22:21	0° $\approx$			7840 Feb 04 17:14	0° $\approx$	
evening rise	7839 Apr 10 06:31	0° $\approx$ 33'53		desc. node	7840 Feb 17 19:33	20° $\approx$ 17'56	
asc. node	7839 Apr 24 23:18	24° $\approx$ 04'29		morning set	7840 Feb 18 04:07	20° $\approx$ 51'52	
evening max el	7839 Apr 29 11:57	29° $\approx$ 35'24	18°21'16		7840 Feb 23 22:50	0° $\approx$	
	7839 Apr 29 22:03	0° $\approx$					
retrograde	7839 May 05 21:52	3° $\approx$ 02'06		superior conj	7840 Mar 05 04:28	16° $\approx$ 03'41	-1°41'01
evening set	7839 May 08 22:52	2° $\approx$ 11'27		minimum elong	7840 Mar 04 18:54	15° $\approx$ 26'13	1°40'06
	7839 May 11 19:29	30° $\approx$ 08'08		max. Earth dist.	7840 Mar 05 06:30	16° $\approx$ 11'37	1.45473 AU
inferior conj	7839 May 14 19:42	26° $\approx$ 45'01	3°17'03		7840 Mar 14 01:40	0° $\approx$	
minimum elong	7839 May 14 21:04	26° $\approx$ 41'06	3°16'48	evening rise	7840 Mar 20 22:10	10° $\approx$ 50'12	
min. Earth dist.	7839 May 17 04:14	24° $\approx$ 02'26	0.64173 AU	greatest brilliancy	7840 Mar 29 22:11	25° $\approx$ 05'21	-0.8m
morning rise	7839 May 20 18:15	20° $\approx$ 31'04			7840 Apr 02 02:21	0° $\approx$	
direct	7839 May 27 11:45	17° $\approx$ 48'28		asc. node	7840 Apr 10 20:22	11° $\approx$ 58'50	
desc. node	7839 May 29 22:07	18° $\approx$ 07'22		evening max el	7840 Apr 11 22:33	13° $\approx$ 08'29	18°53'56
morning max el	7839 Jun 10 05:05	25° $\approx$ 47'54	27°32'36	retrograde	7840 Apr 18 16:30	16° $\approx$ 54'01	
	7839 Jun 14 01:51	0° $\approx$		evening set	7840 Apr 22 00:48	15° $\approx$ 49'20	
	7839 Jul 04 17:51	0° $\approx$		inferior conj	7840 Apr 27 14:21	10° $\approx$ 06'25	3°24'46
morning set	7839 Jul 15 07:16	19° $\approx$ 25'02		minimum elong	7840 Apr 27 14:21	10° $\approx$ 06'27	3°24'42
max. Earth dist.	7839 Jul 20 03:18	29° $\approx$ 14'09	1.33048 AU	min. Earth dist.	7840 Apr 29 07:29	7° $\approx$ 57'25	0.65862 AU
	7839 Jul 20 12:05	0° $\approx$		morning rise	7840 May 03 03:22	3° $\approx$ 48'57	
asc. node	7839 Jul 21 22:32	3° $\approx$ 01'20		direct	7840 May 09 14:04	1° $\approx$ 01'50	
				desc. node	7840 May 15 19:06	3° $\approx$ 05'08	
superior conj	7839 Jul 23 08:09	6° $\approx$ 00'16	0°14'14	morning max el	7840 May 22 15:39	8° $\approx$ 47'04	26°39'15
minimum elong	7839 Jul 23 07:27	5° $\approx$ 56'32	0°13'59		7840 Jun 08 05:39	0° $\approx$	
behind sun begin	7839 Jul 23 04:48	5° $\approx$ 42'20			7840 Jun 26 04:29	0° $\approx$	
behind sun end	7839 Jul 23 10:06	6° $\approx$ 10'44		morning set	7840 Jun 27 13:22	2° $\approx$ 34'27	
evening rise	7839 Jul 30 10:02	21° $\approx$ 13'06		max. Earth dist.	7840 Jul 01 17:20	10° $\approx$ 39'28	1.34425 AU
	7839 Aug 03 16:05	0° $\approx$					
evening max el	7839 Aug 21 08:49	26° $\approx$ 55'32	22°39'20	superior conj	7840 Jul 06 07:33	19° $\approx$ 59'19	-0°15'07
	7839 Aug 24 23:31	0° $\approx$		minimum elong	7840 Jul 06 08:24	20° $\approx$ 03'41	0°15'04
desc. node	7839 Aug 25 21:15	0° $\approx$ 37'30		behind sun begin	7840 Jul 06 06:22	19° $\approx$ 53'11	
retrograde	7839 Sep 03 11:57	3° $\approx$ 28'37		behind sun end	7840 Jul 06 10:25	20° $\approx$ 14'11	
evening set	7839 Sep 06 23:29	3° $\approx$ 02'02		asc. node	7840 Jul 07 19:33	23° $\approx$ 06'40	
	7839 Sep 13 23:50	30° $\approx$ 08'08			7840 Jul 11 02:11	0° $\approx$	
min. Earth dist.	7839 Sep 14 16:18	29° $\approx$ 36'53	0.55127 AU	evening rise	7840 Jul 13 19:40	5° $\approx$ 43'40	
inferior conj	7839 Sep 15 21:37	28° $\approx$ 55'11	-5°11'44		7840 Jul 27 02:29	0° $\approx$	
minimum elong	7839 Sep 15 15:06	29° $\approx$ 04'29	5°10'48	evening max el	7840 Aug 02 04:08	7° $\approx$ 23'53	21°06'49
morning rise	7839 Sep 24 08:40	25° $\approx$ 06'46		desc. node	7840 Aug 11 18:18	13° $\approx$ 03'52	
direct	7839 Sep 27 12:30	24° $\approx$ 43'54		retrograde	7840 Aug 14 00:58	13° $\approx$ 16'36	
	7839 Oct 08 19:57	0° $\approx$		evening set	7840 Aug 16 08:05	13° $\approx$ 04'13	
morning max el	7839 Oct 08 21:09	0° $\approx$ 02'47	21°02'19	inferior conj	7840 Aug 25 14:24	9° $\approx$ 06'50	-3°56'37
asc. node	7839 Oct 17 22:04	11° $\approx$ 34'56		minimum elong	7840 Aug 25 04:58	9° $\approx$ 20'08	3°53'56
	7839 Oct 27 18:53	0° $\approx$		min. Earth dist.	7840 Aug 26 01:22	8° $\approx$ 51'22	0.54699 AU
morning set	7839 Oct 28 12:53	1° $\approx$ 32'53		morning rise	7840 Sep 03 02:21	5° $\approx$ 12'04	
				direct	7840 Sep 06 20:36	4° $\approx$ 41'43	
superior conj	7839 Nov 04 21:25	16° $\approx$ 53'27	1°39'15	morning max el	7840 Sep 19 16:17	10° $\approx$ 47'51	22°41'02
minimum elong	7839 Nov 04 22:33	16° $\approx$ 59'18	1°39'18	asc. node	7840 Oct 03 19:03	0° $\approx$ 13'01	
max. Earth dist.	7839 Nov 09 13:46	26° $\approx$ 12'02	1.35558 AU		7840 Oct 03 16:08	0° $\approx$	
	7839 Nov 11 10:52	0° $\approx$		morning set	7840 Oct 11 23:41	16° $\approx$ 21'58	
evening rise	7839 Nov 13 15:01	4° $\approx$ 07'44			7840 Oct 18 08:35	0° $\approx$	
desc. node	7839 Nov 21 20:12	18° $\approx$ 42'59					
	7839 Nov 28 21:19	0° $\approx$		superior conj	7840 Oct 19 00:42	1° $\approx$ 25'57	1°41'38
evening max el	7839 Dec 19 01:59	25° $\approx$ 51'03	26°25'21	minimum elong	7840 Oct 19 00:31	1° $\approx$ 25'00	1°41'41
	7839 Dec 23 23:49	0° $\approx$		max. Earth dist.	7840 Oct 22 06:34	8° $\approx$ 15'44	1.33931 AU
retrograde	7839 Dec 31 22:43	3° $\approx$ 05'35		evening rise	7840 Oct 26 22:31	17° $\approx$ 40'57	
evening set	7840 Jan 07 07:12	0° $\approx$ 31'49			7840 Nov 02 12:29	0° $\approx$	
	7840 Jan 07 22:05	30° $\approx$ 08'08		desc. node	7840 Nov 07 17:16	8° $\approx$ 54'20	
min. Earth dist.	7840 Jan 11 10:40	26° $\approx$ 14'53	0.66480 AU		7840 Nov 22 04:49	0° $\approx$	

evening max el	7840 Nov 30 14:53	9°  24'46	27°10'02	evening max el	7841 Nov 13 02:23	22°  36'51	27°28'45
retrograde	7840 Dec 14 00:13	16°  45'06		retrograde	7841 Nov 26 19:15	29°  55'09	
evening set	7840 Dec 20 19:10	14°  08'09		evening set	7841 Dec 03 20:45	27°  23'22	
min. Earth dist.	7840 Dec 24 16:49	10°  25'20	0.65112 AU	min. Earth dist.	7841 Dec 07 14:05	24°  11'42	0.63424 AU
inferior conj	7840 Dec 26 21:37	7°  358'37	-1°17'55	inferior conj	7841 Dec 10 06:04	21°  31'21	-2°25'41
minimum elong	7840 Dec 26 23:56	7°  352'09	1°16'50	minimum elong	7841 Dec 10 10:37	21°  19'55	2°23'47
asc. node	7840 Dec 30 18:24	4°  304'44		morning rise	7841 Dec 17 02:21	16°  15'07	
morning rise	7841 Jan 02 06:03	2°  326'51		asc. node	7841 Dec 17 15:26	16°  04'08	
direct	7841 Jan 04 21:38	1°  349'34		direct	7841 Dec 19 11:31	15°  47'46	
morning max el	7841 Jan 11 08:08	5°  313'54	18°01'26	morning max el	7841 Dec 26 01:27	19°  12'03	17°48'29
	7841 Jan 28 02:01	0° 			7842 Jan 03 00:36	0° 	
morning set	7841 Jan 29 06:01	1°  55'33		morning set	7842 Jan 11 10:13	14°  35'48	
desc. node	7841 Feb 03 16:32	10°  51'26		desc. node	7842 Jan 20 15:20	0° 	
					7842 Jan 21 13:32	1°  32'35	
superior conj	7841 Feb 12 13:18	25°  06'41	-1°00'47	superior conj	7842 Jan 23 17:53	5°  09'12	-0°15'47
minimum elong	7841 Feb 12 06:13	24°  38'34	0°59'46	minimum elong	7842 Jan 23 16:12	5°  02'15	0°15'26
	7841 Feb 15 15:36	0° 			7842 Jan 23 13:30	4°  51'09	
max. Earth dist.	7841 Feb 16 02:01	0°  40'58	1.45279 AU	behind sun begin	7842 Jan 23 18:53	5°  13'21	
evening rise	7841 Feb 28 17:44	20°  21'42		behind sun end	7842 Jan 29 19:54	15°  00'32	1.44376 AU
	7841 Mar 07 00:08	0° 		max. Earth dist.	7842 Feb 08 04:44	29°  40'10	
greatest brilliancy	7841 Mar 14 11:05	11°  016'15	-0.7m	evening rise	7842 Feb 08 09:54	0° 	
evening max el	7841 Mar 26 04:45	26°  044'54	19°43'09		7842 Feb 28 18:21	0° 	
asc. node	7841 Mar 28 17:26	29°  00'47		evening max el	7842 Mar 09 05:35	10°  23'03	20°46'35
	7841 Mar 30 05:05	0° 		asc. node	7842 Mar 15 14:29	14°  05'12	
retrograde	7841 Apr 02 14:16	0°  359'54		retrograde	7842 Mar 17 12:43	15°  15'18	
	7841 Apr 05 19:07	30°  08'00		evening set	7842 Mar 21 14:22	13°  04'00	
evening set	7841 Apr 06 06:38	29°  040'39		inferior conj	7842 Mar 26 21:56	7°  31'03	3°00'22
inferior conj	7841 Apr 11 15:57	23°  043'09	3°18'19	minimum elong	7842 Mar 26 20:01	7°  37'37	3°00'00
minimum elong	7841 Apr 11 14:49	23°  046'57	3°18'10	min. Earth dist.	7842 Mar 27 10:35	6°  047'26	0.67957 AU
min. Earth dist.	7841 Apr 12 18:17	22°  015'29	0.67130 AU	morning rise	7842 Apr 01 01:27	1°  16'06	
morning rise	7841 Apr 16 22:41	17°  025'48			7842 Apr 02 17:16	30°  08'00	
direct	7841 Apr 22 22:36	14°  045'20		direct	7842 Apr 06 12:16	28°  05'53	
desc. node	7841 May 02 16:06	19°  044'06			7842 Apr 10 16:09	0° 	
morning max el	7841 May 05 01:23	22°  001'00	25°23'47	morning max el	7842 Apr 17 10:15	5°  22'16	23°56'24
	7841 May 12 00:39	0° 		desc. node	7842 Apr 19 13:06	7°  037'00	
	7841 Jun 01 12:06	0° 			7842 May 06 10:17	0° 	
morning set	7841 Jun 10 04:09	14°  057'26		morning set	7842 May 22 22:18	26°  08'19'48	
max. Earth dist.	7841 Jun 13 20:17	21°  043'24	1.36247 AU		7842 May 25 01:07	0° 	
	7841 Jun 18 03:44	0° 		max. Earth dist.	7842 May 26 16:30	2°  05'38	1.38399 AU
superior conj	7841 Jun 19 21:58	3°  028'30	-0°46'26	superior conj	7842 Jun 02 23:55	16°  019'17	-1°17'39
minimum elong	7841 Jun 20 00:44	3°  042'18	0°46'02	minimum elong	7842 Jun 03 04:37	16°  041'35	1°17'04
asc. node	7841 Jun 24 16:34	13°  007'04			7842 Jun 10 01:16	0° 	
evening rise	7841 Jun 28 01:12	19°  058'10		asc. node	7842 Jun 11 13:34	2°  058'25	
	7841 Jul 03 02:58	0° 		evening rise	7842 Jun 12 00:01	3°  049'38	
evening max el	7841 Jul 15 12:21	18°  032'12	19°51'09		7842 Jun 27 23:13	0° 	
retrograde	7841 Jul 25 16:32	23°  032'54		evening max el	7842 Jun 28 09:03	0°  024'46	18°55'48
evening set	7841 Jul 27 13:17	23°  023'32		retrograde	7842 Jul 06 22:19	4°  038'20	
desc. node	7841 Jul 29 15:19	22°  052'23		evening set	7842 Jul 08 21:42	4°  025'43	
inferior conj	7841 Aug 05 12:03	19°  022'33	-2°05'05	desc. node	7842 Jul 16 12:22	0°  034'08	
minimum elong	7841 Aug 05 06:18	19°  031'21	2°03'01	inferior conj	7842 Jul 17 02:37	0°  0209'05	-0°10'47
min. Earth dist.	7841 Aug 07 12:59	18°  007'45	0.55232 AU	minimum elong	7842 Jul 17 02:10	0°  0209'52	0°10'42
morning rise	7841 Aug 13 21:23	15°  001'21		transit middle	7842 Jul 17 02:10	0°  0209'52	0°10'42
direct	7841 Aug 18 10:02	14°  016'15		transit begin	7842 Jul 16 23:23	0°  0214'48	
morning max el	7841 Sep 01 05:21	21°  006'10	24°26'41	transit end	7842 Jul 17 04:58	0°  0204'56	
	7841 Sep 08 22:04	0° 			7842 Jul 17 07:45	30°  08'00	
asc. node	7841 Sep 20 16:03	19°  0022'47		min. Earth dist.	7842 Jul 20 04:06	28°  000'08	0.56634 AU
	7841 Sep 25 21:49	0° 		morning rise	7842 Jul 25 03:21	25°  011'38	
morning set	7841 Sep 26 11:26	1°  012'10		direct	7842 Jul 30 12:44	24°  002'24	
					7842 Aug 12 06:11	0° 	
superior conj	7841 Oct 03 08:56	16°  011'35	1°37'39	morning max el	7842 Aug 13 19:05	1°  024'58	26°03'23
minimum elong	7841 Oct 03 07:41	16°  004'45	1°37'36		7842 Sep 02 22:18	0° 	
max. Earth dist.	7841 Oct 05 07:40	20°  025'13	1.32734 AU	asc. node	7842 Sep 07 13:01	8°  0055'13	
	7841 Oct 09 20:34	0° 		morning set	7842 Sep 10 22:26	15°  0057'45	
evening rise	7841 Oct 10 16:54	1°  0044'02			7842 Sep 17 08:37	0° 	
desc. node	7841 Oct 25 14:18	28°  0042'36					
	7841 Oct 26 09:57	0° 					

superior conj	7842 Sep 17 19:53	1°♌02'23	1°27'59	minimum elong	7843 Sep 02 05:28	15°♏40'02	1°12'47
minimum elong	7842 Sep 17 17:55	0°♌51'30	1°27'46	max. Earth dist.	7843 Sep 02 01:29	15°♏17'56	1.31696 AU
max. Earth dist.	7842 Sep 18 15:04	2°♌48'21	1.31990 AU		7843 Sep 08 18:21	0°♌	
evening rise	7842 Sep 24 19:04	16°♌07'20		evening rise	7843 Sep 09 02:31	0°♌43'34	
	7842 Oct 01 19:08	0°♌			7843 Sep 24 22:19	0°♌	
desc. node	7842 Oct 12 11:20	17°♌57'33		desc. node	7843 Sep 29 08:23	6°♌25'59	
	7842 Oct 21 11:33	0°♌		evening max el	7843 Oct 08 11:20	17°♌02'52	26°29'07
evening max el	7842 Oct 26 10:09	5°♌13'30	27°15'55	retrograde	7843 Oct 22 09:15	24°♌09'08	
retrograde	7842 Nov 09 06:39	12°♌25'39		evening set	7843 Oct 29 01:49	22°♌18'41	
evening set	7842 Nov 16 08:27	10°♌09'16		min. Earth dist.	7843 Nov 02 00:47	19°♌43'56	0.59402 AU
min. Earth dist.	7842 Nov 20 00:51	7°♌22'10	0.61481 AU	inferior conj	7843 Nov 05 05:43	17°♌15'19	-4°37'19
inferior conj	7842 Nov 23 01:56	4°♌40'05	-3°34'29	minimum elong	7843 Nov 05 12:47	17°♌01'37	4°35'34
minimum elong	7842 Nov 23 08:28	4°♌25'33	3°32'14	morning rise	7843 Nov 13 02:03	12°♌40'07	
	7842 Nov 29 15:31	30°♌		direct	7843 Nov 15 08:08	12°♌22'06	
morning rise	7842 Nov 30 10:41	29°♌42'45		asc. node	7843 Nov 21 09:30	14°♌40'18	
direct	7842 Dec 02 16:27	29°♌21'38		morning max el	7843 Nov 23 03:44	16°♌11'46	18°18'34
asc. node	7842 Dec 04 12:28	29°♌36'17			7843 Dec 02 19:51	0°♌	
	7842 Dec 05 15:35	0°♌		morning set	7843 Dec 08 23:54	11°♌26'20	
morning max el	7842 Dec 09 17:07	2°♌54'17	17°53'42				
morning set	7842 Dec 25 10:06	27°♌31'48		superior conj	7843 Dec 18 05:58	28°♌49'17	0°57'27
	7842 Dec 26 18:43	0°♌		minimum elong	7843 Dec 18 09:26	29°♌05'04	0°57'06
					7843 Dec 18 21:30	0°♌	
superior conj	7843 Jan 05 00:10	16°♌25'33	0°25'04	max. Earth dist.	7843 Dec 25 20:03	12°♌13'28	1.40908 AU
minimum elong	7843 Jan 05 02:18	16°♌34'47	0°24'51	desc. node	7843 Dec 26 07:29	13°♌02'12	
desc. node	7843 Jan 08 10:30	22°♌17'16		evening rise	7843 Dec 30 10:47	19°♌56'36	
max. Earth dist.	7843 Jan 12 10:19	28°♌55'49	1.42861 AU		7844 Jan 05 17:55	0°♌	
	7843 Jan 13 02:01	0°♌			7844 Jan 26 21:14	0°♌	
evening rise	7843 Jan 18 22:38	9°♌23'09		evening max el	7844 Feb 02 16:41	7°♌44'52	23°20'10
	7843 Feb 01 13:47	0°♌		retrograde	7844 Feb 13 04:51	13°♌57'48	
evening max el	7843 Feb 20 01:11	24°♌02'56	22°00'36	asc. node	7844 Feb 17 08:38	12°♌32'23	
retrograde	7843 Mar 01 10:04	29°♌36'08		evening set	7844 Feb 18 04:54	11°♌53'11	
asc. node	7843 Mar 02 11:33	29°♌30'21		min. Earth dist.	7844 Feb 23 02:55	6°♌07'19	0.68317 AU
evening set	7843 Mar 05 22:19	27°♌46'32		inferior conj	7844 Feb 23 14:38	5°♌27'00	1°55'58
inferior conj	7843 Mar 11 06:08	21°♌26'47	2°32'35	minimum elong	7844 Feb 23 12:28	5°♌34'26	1°55'18
minimum elong	7843 Mar 11 03:53	21°♌34'39	2°32'01		7844 Feb 28 02:05	30°♌	
min. Earth dist.	7843 Mar 11 06:13	21°♌26'33	0.68344 AU	morning rise	7844 Feb 28 20:00	29°♌21'08	
morning rise	7843 Mar 16 09:16	15°♌15'44		direct	7844 Mar 04 02:44	27°♌39'09	
direct	7843 Mar 21 05:59	13°♌11'10			7844 Mar 09 17:21	0°♌	
morning max el	7843 Mar 30 20:56	18°♌51'02	22°27'07	morning max el	7844 Mar 12 13:03	2°♌30'14	21°04'00
desc. node	7843 Apr 06 10:05	26°♌23'19		desc. node	7844 Mar 23 07:02	15°♌47'46	
	7843 Apr 09 04:46	0°♌			7844 Apr 02 02:27	0°♌	
	7843 Apr 29 13:54	0°♌		morning set	7844 Apr 12 03:29	15°♌22'38	
morning set	7843 May 03 14:29	6°♌28'24		max. Earth dist.	7844 Apr 19 17:29	27°♌30'03	1.42682 AU
max. Earth dist.	7843 May 08 13:58	14°♌44'58	1.40639 AU		7844 Apr 21 06:05	0°♌	
superior conj	7843 May 16 09:07	28°♌21'36	-1°45'35	superior conj	7844 Apr 26 20:39	9°♌23'17	-2°05'29
minimum elong	7843 May 16 14:50	28°♌47'19	1°45'05	minimum elong	7844 Apr 27 00:52	9°♌41'15	2°05'21
	7843 May 17 06:56	0°♌		evening rise	7844 May 08 11:30	29°♌48'14	
evening rise	7843 May 26 12:51	17°♌10'00			7844 May 08 14:07	0°♌	
asc. node	7843 May 29 10:36	22°♌36'28		asc. node	7844 May 15 07:39	11°♌55'06	
	7843 Jun 02 12:44	0°♌		evening max el	7844 May 25 02:17	25°♌53'39	18°06'11
evening max el	7843 Jun 11 14:59	12°♌55'25	18°21'02	retrograde	7844 May 31 17:57	29°♌17'41	
retrograde	7843 Jun 18 23:34	16°♌36'15		evening set	7844 Jun 03 07:36	28°♌47'19	
evening set	7843 Jun 21 05:51	16°♌16'15		inferior conj	7844 Jun 09 23:29	23°♌50'00	2°26'19
inferior conj	7843 Jun 28 14:56	11°♌39'08	1°22'01	minimum elong	7844 Jun 10 02:32	23°♌42'38	2°25'25
minimum elong	7843 Jun 28 17:30	11°♌33'48	1°21'02	min. Earth dist.	7844 Jun 13 04:30	20°♌46'19	0.60855 AU
min. Earth dist.	7843 Jul 02 00:31	8°♌51'28	0.58623 AU	morning rise	7844 Jun 16 19:02	17°♌54'04	
desc. node	7843 Jul 03 09:25	7°♌49'29		desc. node	7844 Jun 19 06:28	16°♌34'13	
morning rise	7843 Jul 06 01:55	6°♌07'39		direct	7844 Jun 23 09:56	15°♌43'01	
direct	7843 Jul 12 05:19	4°♌27'37		morning max el	7844 Jul 07 16:57	23°♌41'26	27°51'31
morning max el	7843 Jul 26 14:35	12°♌12'12	27°15'07		7844 Jul 13 08:53	0°♌	
	7843 Aug 09 13:53	0°♌			7844 Aug 01 20:19	0°♌	
asc. node	7843 Aug 25 10:01	28°♌43'50		morning set	7844 Aug 09 11:32	14°♌55'21	
morning set	7843 Aug 26 07:05	0°♌34'07		asc. node	7844 Aug 11 07:01	18°♌42'42	
	7843 Aug 26 00:36	0°♌		max. Earth dist.	7844 Aug 15 10:54	27°♌41'35	1.31850 AU
superior conj	7843 Sep 02 07:44	15°♏52'32	1°13'09	superior conj	7844 Aug 16 18:38	0°♏35'59	0°53'35

minimum elong	7844 Aug 16 16:34	0° $\mathbb{M}$ 24'37	0°53'08	max. Earth dist.	7845 Jul 29 15:24	9° $\mathcal{Q}$ 48'06	1.32468 AU
	7844 Aug 16 12:06	0° $\mathbb{M}$					
evening rise	7844 Aug 23 13:03	15° $\mathbb{M}$ 25'41		superior conj	7845 Aug 01 02:46	15° $\mathcal{Q}$ 07'24	0°29'43
	7844 Aug 30 17:39	0° $\mathcal{A}$		minimum elong	7845 Aug 01 01:25	15° $\mathcal{Q}$ 00'04	0°29'21
desc. node	7844 Sep 15 05:28	23° $\mathcal{A}$ 49'20			7845 Aug 07 23:14	0° $\mathbb{M}$	
evening max el	7844 Sep 19 04:19	28° $\mathcal{A}$ 01'11	25°12'09	evening rise	7845 Aug 08 00:45	0° $\mathbb{M}$ 08'05	
	7844 Sep 21 09:42	0° $\mathbb{M}$			7845 Aug 24 13:45	0° $\mathcal{A}$	
retrograde	7844 Oct 03 01:42	5° $\mathbb{M}$ 02'13		evening max el	7845 Aug 31 16:03	8° $\mathcal{A}$ 22'49	23°36'28
evening set	7844 Oct 08 20:09	3° $\mathbb{M}$ 46'12		desc. node	7845 Sep 02 02:33	9° $\mathcal{A}$ 42'20	
min. Earth dist.	7844 Oct 13 15:56	1° $\mathbb{M}$ 05'45	0.57391 AU	retrograde	7845 Sep 14 06:07	15° $\mathcal{A}$ 10'58	
	7844 Oct 15 07:23	30° $\mathcal{R}$ $\mathcal{A}$		evening set	7845 Sep 18 14:21	14° $\mathcal{A}$ 29'40	
inferior conj	7844 Oct 16 14:14	29° $\mathcal{A}$ 07'43	-5°21'55	min. Earth dist.	7845 Sep 25 02:07	11° $\mathcal{A}$ 24'52	0.55759 AU
minimum elong	7844 Oct 16 18:32	29° $\mathcal{A}$ 00'27	5°21'25	inferior conj	7845 Sep 27 02:34	10° $\mathcal{A}$ 12'37	-5°30'20
morning rise	7844 Oct 24 19:15	24° $\mathcal{A}$ 55'40		minimum elong	7845 Sep 27 00:12	10° $\mathcal{A}$ 16'10	5°30'11
direct	7844 Oct 27 06:08	24° $\mathcal{A}$ 37'59		morning rise	7845 Oct 05 12:14	6° $\mathcal{A}$ 18'42	
morning max el	7844 Nov 05 05:43	28° $\mathcal{A}$ 54'40	19°04'44	direct	7845 Oct 08 08:37	5° $\mathcal{A}$ 58'36	
	7844 Nov 06 07:37	0° $\mathbb{M}$		morning max el	7845 Oct 18 19:52	10° $\mathcal{A}$ 52'57	20°13'12
asc. node	7844 Nov 07 06:32	1° $\mathbb{M}$ 03'36		asc. node	7845 Oct 25 03:33	18° $\mathcal{A}$ 30'14	
morning set	7844 Nov 21 23:17	25° $\mathbb{M}$ 47'07			7845 Oct 31 22:45	0° $\mathbb{M}$	
	7844 Nov 24 02:15	0° $\mathcal{X}$		morning set	7845 Nov 06 04:57	10° $\mathbb{M}$ 24'10	
superior conj	7844 Nov 30 06:16	12° $\mathcal{X}$ 06'15	1°20'27	superior conj	7845 Nov 13 20:01	26° $\mathbb{M}$ 01'17	1°34'40
minimum elong	7844 Nov 30 09:21	12° $\mathcal{X}$ 21'06	1°20'15	minimum elong	7845 Nov 13 21:57	26° $\mathbb{M}$ 10'58	1°34'39
max. Earth dist.	7844 Dec 07 01:52	24° $\mathcal{X}$ 47'50	1.38753 AU		7845 Nov 15 19:50	0° $\mathcal{X}$	
	7844 Dec 10 00:27	0° $\mathcal{Z}$		max. Earth dist.	7845 Nov 19 08:12	6° $\mathcal{X}$ 49'53	1.36654 AU
evening rise	7844 Dec 10 21:09	1° $\mathcal{Z}$ 29'44		evening rise	7845 Nov 23 04:01	13° $\mathcal{X}$ 57'25	
desc. node	7844 Dec 12 04:30	3° $\mathcal{Z}$ 44'04		desc. node	7845 Nov 29 01:32	24° $\mathcal{X}$ 18'14	
	7844 Dec 29 00:12	0° $\approx$			7845 Dec 02 12:05	0° $\mathcal{Z}$	
evening max el	7845 Jan 15 06:02	21° $\approx$ 30'18	24°39'07		7845 Dec 23 20:28	0° $\approx$	
retrograde	7845 Jan 26 19:59	28° $\approx$ 16'07		evening max el	7845 Dec 28 19:03	5° $\approx$ 17'12	25°50'35
evening set	7845 Feb 01 08:36	25° $\approx$ 57'56		retrograde	7846 Jan 10 06:24	12° $\approx$ 24'45	
asc. node	7845 Feb 03 05:43	24° $\approx$ 06'47		evening set	7846 Jan 16 07:43	9° $\approx$ 55'41	
min. Earth dist.	7845 Feb 05 22:34	20° $\approx$ 46'15	0.67896 AU	min. Earth dist.	7846 Jan 20 14:50	5° $\approx$ 18'29	0.67101 AU
inferior conj	7845 Feb 06 21:38	19° $\approx$ 29'29	1°11'11	asc. node	7846 Jan 21 02:48	4° $\approx$ 40'59	
minimum elong	7845 Feb 06 20:03	19° $\approx$ 34'45	1°10'39	inferior conj	7846 Jan 22 01:13	3° $\approx$ 30'06	0°18'41
morning rise	7845 Feb 12 07:41	13° $\approx$ 30'13		minimum elong	7846 Jan 22 00:44	3° $\approx$ 31'37	0°18'36
direct	7845 Feb 16 01:23	12° $\approx$ 10'08			7846 Jan 25 00:08	30° $\mathcal{R}$ $\mathcal{Z}$	
morning max el	7845 Feb 23 12:50	16° $\approx$ 21'56	19°52'46	morning rise	7846 Jan 27 18:17	27° $\mathcal{Z}$ 39'20	
	7845 Mar 06 06:38	0° $\mathcal{H}$		direct	7846 Jan 31 00:26	26° $\mathcal{Z}$ 38'36	
greatest brilliancy	7845 Mar 08 14:47	3° $\mathcal{H}$ 23'23	-0.6m		7846 Feb 06 10:45	0° $\approx$	
desc. node	7845 Mar 10 04:01	5° $\mathcal{H}$ 40'25		morning max el	7846 Feb 06 20:15	0° $\approx$ 23'02	18°56'29
morning set	7845 Mar 22 01:01	23° $\mathcal{H}$ 40'01		desc. node	7846 Feb 25 00:59	25° $\approx$ 53'13	
	7845 Mar 26 03:09	0° $\mathcal{Y}$			7846 Feb 27 16:30	0° $\mathcal{H}$	
max. Earth dist.	7845 Apr 02 03:51	11° $\mathcal{Y}$ 03'27	1.44276 AU	morning set	7846 Mar 01 07:04	2° $\mathcal{H}$ 30'04	
				max. Earth dist.	7846 Mar 15 19:49	25° $\mathcal{H}$ 11'50	1.45246 AU
superior conj	7845 Apr 07 07:24	19° $\mathcal{Y}$ 19'46	-2°11'17	superior conj	7846 Mar 17 20:15	28° $\mathcal{H}$ 22'12	-1°57'48
minimum elong	7845 Apr 07 06:15	19° $\mathcal{Y}$ 15'08	2°11'20	minimum elong	7846 Mar 17 12:25	27° $\mathcal{H}$ 51'23	1°57'17
	7845 Apr 13 18:57	0° $\mathcal{B}$			7846 Mar 18 21:04	0° $\mathcal{Y}$	
evening rise	7845 Apr 20 15:21	11° $\mathcal{B}$ 34'41		evening rise	7846 Apr 01 20:22	22° $\mathcal{Y}$ 22'22	
	7845 May 01 16:14	0° $\mathbb{I}$			7846 Apr 06 12:51	0° $\mathcal{B}$	
asc. node	7845 May 02 04:43	0° $\mathbb{I}$ 48'01		asc. node	7846 Apr 19 01:47	19° $\mathcal{B}$ 06'35	
evening max el	7845 May 08 15:34	9° $\mathbb{I}$ 11'11	18°10'27	evening max el	7846 Apr 22 03:52	22° $\mathcal{B}$ 40'20	18°33'08
retrograde	7845 May 15 00:57	12° $\mathbb{I}$ 33'07		retrograde	7846 Apr 28 16:14	26° $\mathcal{B}$ 13'29	
evening set	7845 May 17 21:46	11° $\mathbb{I}$ 50'22		evening set	7846 May 01 20:16	25° $\mathcal{B}$ 17'02	
inferior conj	7845 May 24 00:25	6° $\mathbb{I}$ 34'20	3°04'41	inferior conj	7846 May 07 13:37	19° $\mathcal{B}$ 43'43	3°22'14
minimum elong	7845 May 24 02:33	6° $\mathbb{I}$ 28'31	3°04'13	minimum elong	7846 May 07 14:23	19° $\mathcal{B}$ 41'25	3°22'06
min. Earth dist.	7845 May 26 17:33	3° $\mathbb{I}$ 38'06	0.63033 AU	min. Earth dist.	7846 May 09 15:44	17° $\mathcal{B}$ 13'46	0.64940 AU
morning rise	7845 May 30 05:51	0° $\mathbb{I}$ 24'30		morning rise	7846 May 13 07:42	13° $\mathcal{B}$ 27'46	
	7845 May 30 19:14	30° $\mathcal{R}$ $\mathcal{B}$		direct	7846 May 19 23:05	10° $\mathcal{B}$ 41'23	
direct	7845 Jun 06 00:32	27° $\mathcal{B}$ 49'47		desc. node	7846 May 24 00:32	11° $\mathcal{B}$ 34'18	
desc. node	7845 Jun 06 03:31	27° $\mathcal{B}$ 49'50		morning max el	7846 Jun 02 10:25	18° $\mathcal{B}$ 36'53	27°13'11
	7845 Jun 12 19:39	0° $\mathbb{I}$			7846 Jun 12 00:49	0° $\mathbb{I}$	
morning max el	7845 Jun 20 00:28	5° $\mathbb{I}$ 52'43	27°49'41		7846 Jul 01 06:04	0° $\mathcal{B}$	
	7845 Jul 08 06:56	0° $\mathcal{B}$		morning set	7846 Jul 07 22:30	12° $\mathcal{B}$ 26'12	
morning set	7845 Jul 24 09:36	28° $\mathcal{B}$ 55'24		max. Earth dist.	7846 Jul 12 11:16	21° $\mathcal{B}$ 28'23	1.33567 AU
	7845 Jul 24 22:24	0° $\mathcal{Q}$					
asc. node	7845 Jul 29 04:00	8° $\mathcal{Q}$ 47'28					

superior conj	7846 Jul 16 06:04	29°☿20'42	0°02'09			7847 Jun 23 10:40	0°☿	
minimum elong	7846 Jul 16 05:57	29°☿20'08	0°02'01	max. Earth dist.		7847 Jun 24 20:20	2°☿42'07	1.35148 AU
behind sun begin	7846 Jul 16 00:25	28°☿50'57						
behind sun end	7846 Jul 16 11:29	29°☿49'21		superior conj		7847 Jun 30 01:59	13°☿07'53	-0°28'14
asc. node	7846 Jul 16 01:00	28°☿54'00		minimum elong		7847 Jun 30 03:37	13°☿16'11	0°28'03
	7846 Jul 16 13:30	0°♊		asc. node		7847 Jul 02 21:59	18°☿57'35	
evening rise	7846 Jul 23 11:42	14°♊45'00		evening rise		7847 Jul 07 19:51	29°☿09'26	
	7846 Jul 31 03:39	0°♋				7847 Jul 08 05:40	0°♊	
evening max el	7846 Aug 13 06:22	18°♋39'59	21°58'33	evening max el		7847 Jul 26 06:54	29°♊23'26	20°32'19
desc. node	7846 Aug 19 23:38	23°♋33'56				7847 Jul 26 22:08	0°♋	
retrograde	7846 Aug 25 22:34	24°♋57'38		retrograde		7847 Aug 06 10:37	4°♋54'07	
evening set	7846 Aug 28 19:57	24°♋39'00		desc. node		7847 Aug 06 20:42	4°♋53'41	
inferior conj	7846 Sep 06 23:26	20°♋37'59	-4°46'11	evening set		7847 Aug 08 11:29	4°♋43'53	
minimum elong	7846 Sep 06 14:47	20°♋50'06	4°44'23	inferior conj		7847 Aug 17 16:23	0°♋46'48	-3°11'52
min. Earth dist.	7846 Sep 06 10:52	20°♋55'36	0.54830 AU	minimum elong		7847 Aug 17 07:55	0°♋59'00	3°09'06
morning rise	7846 Sep 15 11:02	16°♋49'09		min. Earth dist.		7847 Aug 18 20:31	0°♋06'13	0.54811 AU
direct	7846 Sep 18 20:43	16°♋23'32				7847 Aug 19 00:51	30°♋♊	
morning max el	7846 Sep 30 21:08	22°♋02'51	21°42'27	morning rise		7847 Aug 26 03:53	26°♊43'17	
	7846 Oct 07 15:45	0°♌		direct		7847 Aug 30 05:43	26°♊07'40	
asc. node	7846 Oct 12 00:32	6°♌46'09				7847 Sep 09 11:53	0°♋	
morning set	7846 Oct 21 14:28	25°♌10'54		morning max el		7847 Sep 12 12:38	2°♋32'41	23°25'55
	7846 Oct 23 21:23	0°♍		asc. node		7847 Sep 28 21:31	25°♋38'50	
						7847 Oct 01 04:20	0°♌	
superior conj	7846 Oct 28 19:17	10°♍23'00	1°41'05	morning set		7847 Oct 06 01:53	10°♌01'09	
minimum elong	7846 Oct 28 19:51	10°♍25'56	1°41'09					
max. Earth dist.	7846 Nov 01 20:31	18°♍43'12	1.34824 AU	superior conj		7847 Oct 13 00:56	25°♌01'46	1°40'40
evening rise	7846 Nov 06 03:43	27°♍10'10		minimum elong		7847 Oct 13 00:16	24°♌58'09	1°40'41
	7846 Nov 07 15:36	0°♎				7847 Oct 15 08:43	0°♍	
desc. node	7846 Nov 15 22:35	14°♎39'53		max. Earth dist.		7847 Oct 15 17:13	0°♍45'03	1.33376 AU
	7846 Nov 25 19:55	0°♏		evening rise		7847 Oct 20 16:14	10°♍57'06	
evening max el	7846 Dec 11 08:22	18°♏59'24	26°47'06			7847 Oct 30 23:38	0°♎	
retrograde	7846 Dec 24 11:13	26°♏17'04		desc. node		7847 Nov 02 19:37	4°♎42'32	
evening set	7846 Dec 31 00:22	23°♏41'29				7847 Nov 21 10:57	0°♏	
min. Earth dist.	7847 Jan 04 01:23	19°♏38'54	0.65944 AU	evening max el		7847 Nov 23 21:04	2°♏25'57	27°21'28
inferior conj	7847 Jan 05 23:19	17°♏24'30	-0°40'51	retrograde		7847 Dec 07 09:47	9°♏45'11	
minimum elong	7847 Jan 06 00:29	17°♏21'06	0°40'14	evening set		7847 Dec 14 08:15	7°♏09'27	
asc. node	7847 Jan 07 23:51	15°♏06'56		min. Earth dist.		7847 Dec 18 03:55	3°♏40'27	0.64439 AU
morning rise	7847 Jan 12 01:34	11°♏44'46		inferior conj		7847 Dec 20 13:32	1°♏06'57	-1°46'14
direct	7847 Jan 14 21:58	10°♏59'55		minimum elong		7847 Dec 20 16:47	0°♏58'17	1°44'46
morning max el	7847 Jan 21 09:38	14°♏28'25	18°16'36			7847 Dec 21 14:55	30°♋♎	
	7847 Feb 01 17:13	0°♐		asc. node		7847 Dec 25 20:53	26°♎20'30	
morning set	7847 Feb 09 15:51	12°♐43'14		morning rise		7847 Dec 27 02:51	25°♎41'19	
desc. node	7847 Feb 11 21:56	16°♐20'36		direct		7847 Dec 29 15:31	25°♎08'35	
	7847 Feb 20 11:43	0°♑		morning max el		7848 Jan 05 02:24	28°♎31'28	17°53'45
						7848 Jan 06 11:35	0°♏	
superior conj	7847 Feb 25 00:47	7°♑09'12	-1°25'14	morning set		7848 Jan 22 05:44	24°♏22'28	
minimum elong	7847 Feb 24 15:31	6°♑32'52	1°24'09			7848 Jan 25 14:09	0°♐	
max. Earth dist.	7847 Feb 26 15:13	9°♑39'53	1.45490 AU	desc. node		7848 Jan 29 18:55	6°♐58'02	
	7847 Mar 11 15:34	0°♒						
evening rise	7847 Mar 13 02:29	2°♒16'28		superior conj		7848 Feb 04 16:31	16°♐33'47	-0°41'38
greatest brilliancy	7847 Mar 24 07:09	19°♒41'01	-0.8m	minimum elong		7848 Feb 04 11:43	16°♐14'28	0°40'52
	7847 Mar 31 08:37	0°♓		max. Earth dist.		7848 Feb 09 11:00	24°♐09'42	1.44982 AU
evening max el	7847 Apr 05 12:49	6°♓15'19	19°13'02			7848 Feb 13 04:12	0°♑	
asc. node	7847 Apr 05 22:50	6°♓40'11		evening rise		7848 Feb 20 16:42	11°♑38'46	
retrograde	7847 Apr 12 12:22	10°♓11'45				7848 Mar 03 19:29	0°♒	
evening set	7847 Apr 16 00:05	9°♓00'49		greatest brilliancy		7848 Mar 06 12:50	4°♒00'40	-0.6m
inferior conj	7847 Apr 21 11:30	3°♓11'35	3°23'34	evening max el		7848 Mar 18 16:49	19°♒53'03	20°08'33
minimum elong	7847 Apr 21 10:58	3°♓13'18	3°23'29	asc. node		7848 Mar 22 19:54	23°♒16'16	
min. Earth dist.	7847 Apr 22 22:13	1°♓19'39	0.66460 AU	retrograde		7848 Mar 26 10:43	24°♒22'57	
	7847 Apr 23 23:47	30°♓♒		evening set		7848 Mar 30 06:59	22°♒57'06	
morning rise	7847 Apr 26 21:29	26°♒54'08		inferior conj		7848 Apr 04 15:15	16°♒53'52	3°11'59
direct	7847 May 03 04:07	24°♒08'35		minimum elong		7848 Apr 04 13:44	16°♒59'00	3°11'45
desc. node	7847 May 10 21:32	27°♒18'36		min. Earth dist.		7848 Apr 05 11:31	15°♒45'10	0.67538 AU
	7847 May 14 02:24	0°♔		morning rise		7848 Apr 09 20:17	10°♒37'29	
morning max el	7847 May 15 20:30	1°♔42'24	26°09'17	direct		7848 Apr 15 14:45	8°♒02'57	
	7847 Jun 06 03:13	0°♕		desc. node		7848 Apr 26 18:30	14°♒32'23	
morning set	7847 Jun 20 22:35	25°♕16'47		morning max el		7848 Apr 27 05:49	15°♒00'43	24°47'32

	7848 May 09 12:24	0°♄			7849 Apr 11 03:17	0°♅	
	7848 May 29 00:35	0°♅		desc. node	7849 Apr 13 15:29	2°♅50'18	
morning set	7848 Jun 02 05:15	7°♅15'41			7849 May 03 05:30	0°♄	
max. Earth dist.	7848 Jun 05 20:08	13°♅46'52	1.37138 AU	morning set	7849 May 14 12:55	18°♄08'10	
				max. Earth dist.	7849 May 18 15:56	25°♄11'01	1.39358 AU
superior conj	7848 Jun 12 11:32	26°♅21'47	-0°59'50		7849 May 21 09:38	0°♅	
minimum elong	7848 Jun 12 15:10	26°♅39'30	0°59'20				
	7848 Jun 14 07:58	0°♄		superior conj	7849 May 26 06:53	8°♅52'48	-1°30'10
asc. node	7848 Jun 18 19:00	8°♄54'47		minimum elong	7849 May 26 12:12	9°♅17'29	1°29'34
evening rise	7848 Jun 20 22:53	13°♄15'19		evening rise	7849 Jun 04 17:54	26°♅54'37	
	7848 Jun 29 20:28	0°♄		asc. node	7849 Jun 05 16:02	28°♅41'07	
evening max el	7848 Jul 07 20:33	10°♄49'56	19°24'59		7849 Jun 06 08:28	0°♄	
retrograde	7848 Jul 17 07:21	15°♄29'43		evening max el	7849 Jun 20 21:33	22°♄59'23	18°38'30
evening set	7848 Jul 19 04:13	15°♄19'33		retrograde	7849 Jun 28 21:27	26°♄57'21	
desc. node	7848 Jul 23 17:45	13°♄40'08		evening set	7849 Jun 30 23:20	26°♄42'11	
inferior conj	7848 Jul 27 20:03	11°♄12'30	-1°15'04	inferior conj	7849 Jul 08 19:43	22°♄17'10	0°31'59
minimum elong	7848 Jul 27 16:40	11°♄17'58	1°13'51	minimum elong	7849 Jul 08 20:55	22°♄14'56	0°31'26
min. Earth dist.	7848 Jul 30 09:12	9°♄33'43	0.55735 AU	desc. node	7849 Jul 10 14:47	20°♄55'17	
morning rise	7848 Aug 05 02:30	6°♄36'23		min. Earth dist.	7849 Jul 12 02:34	19°♄49'01	0.57423 AU
direct	7848 Aug 09 23:43	5°♄42'29		morning rise	7849 Jul 16 14:58	17°♄03'56	
morning max el	7848 Aug 24 01:16	12°♄47'20	25°10'03	direct	7849 Jul 22 08:29	15°♄42'00	
	7848 Sep 06 09:50	0°♄		morning max el	7849 Aug 05 17:16	23°♄16'05	26°37'51
asc. node	7848 Sep 14 18:30	14°♄58'54			7849 Aug 11 18:26	0°♄	
morning set	7848 Sep 19 13:31	24°♄49'57			7849 Aug 30 07:59	0°♄	
	7848 Sep 21 23:03	0°♄		asc. node	7849 Sep 01 15:29	4°♄39'00	
				morning set	7849 Sep 03 23:45	9°♄32'29	
superior conj	7848 Sep 26 10:34	9°♄50'07	1°34'12				
minimum elong	7848 Sep 26 08:58	9°♄41'19	1°34'05	superior conj	7849 Sep 10 22:09	24°♄41'45	1°22'18
max. Earth dist.	7848 Sep 27 21:26	13°♄01'01	1.32361 AU	minimum elong	7849 Sep 10 20:01	24°♄29'52	1°22'01
evening rise	7848 Oct 03 14:14	25°♄09'16		max. Earth dist.	7849 Sep 11 06:23	25°♄27'22	1.31799 AU
	7848 Oct 05 23:38	0°♄			7849 Sep 13 07:44	0°♄	
desc. node	7848 Oct 19 16:40	24°♄18'05		evening rise	7849 Sep 17 18:56	9°♄38'58	
	7848 Oct 23 12:16	0°♄			7849 Sep 28 06:59	0°♄	
evening max el	7848 Nov 05 07:08	15°♄23'54	27°27'17	desc. node	7849 Oct 06 13:43	13°♄15'40	
retrograde	7848 Nov 19 01:37	22°♄39'54		evening max el	7849 Oct 18 12:14	27°♄41'31	27°00'10
evening set	7848 Nov 26 04:25	20°♄12'59			7849 Oct 21 03:31	0°♄	
min. Earth dist.	7848 Nov 29 20:37	17°♄13'15	0.62627 AU	retrograde	7849 Nov 01 09:54	4°♄52'06	
inferior conj	7848 Dec 02 17:02	14°♄30'19	-2°55'03	evening set	7849 Nov 08 09:02	2°♄45'14	
minimum elong	7848 Dec 02 22:31	14°♄17'15	2°52'55	min. Earth dist.	7849 Nov 12 02:47	0°♄05'20	0.60595 AU
morning rise	7848 Dec 09 18:39	9°♄22'03			7849 Nov 12 05:25	30°♄	
asc. node	7848 Dec 11 17:56	8°♄58'17		inferior conj	7849 Nov 15 06:33	27°♄26'35	-4°02'27
direct	7848 Dec 12 02:01	8°♄57'46		minimum elong	7849 Nov 15 13:35	27°♄11'48	4°00'18
morning max el	7848 Dec 18 19:29	12°♄24'15	17°48'27	morning rise	7849 Nov 22 20:29	22°♄38'38	
	7848 Dec 30 17:42	0°♄		direct	7849 Nov 25 01:43	22°♄19'21	
morning set	7849 Jan 03 19:05	7°♄08'44		asc. node	7849 Nov 28 14:59	23°♄11'11	
				morning max el	7849 Dec 02 09:34	25°♄58'19	18°01'49
superior conj	7849 Jan 15 07:58	27°♄08'01	0°02'25		7849 Dec 05 20:13	0°♄	
minimum elong	7849 Jan 15 08:13	27°♄09'05	0°02'30	morning set	7849 Dec 18 01:35	20°♄43'34	
behind sun begin	7849 Jan 14 23:16	26°♄31'28			7849 Dec 23 02:01	0°♄	
behind sun end	7849 Jan 15 17:10	27°♄46'36					
desc. node	7849 Jan 15 15:53	27°♄41'13		superior conj	7849 Dec 28 00:55	8°♄55'37	0°39'54
	7849 Jan 17 01:10	0°♄		minimum elong	7849 Dec 28 03:53	9°♄08'45	0°39'36
max. Earth dist.	7849 Jan 22 03:44	8°♄21'18	1.43794 AU	desc. node	7850 Jan 02 12:52	18°♄26'57	
evening rise	7849 Jan 30 04:47	21°♄03'10		max. Earth dist.	7850 Jan 04 15:42	22°♄00'26	1.42069 AU
	7849 Feb 05 01:16	0°♄			7850 Jan 09 13:03	0°♄	
	7849 Feb 26 10:49	0°♄		evening rise	7850 Jan 10 05:34	1°♄06'10	
evening max el	7849 Mar 01 15:13	3°♄31'25	21°16'59		7850 Jan 29 13:04	0°♄	
asc. node	7849 Mar 09 17:00	8°♄39'06		evening max el	7850 Feb 12 08:50	17°♄12'07	22°34'03
retrograde	7849 Mar 10 09:03	8°♄41'25		retrograde	7850 Feb 22 05:34	23°♄03'15	
evening set	7849 Mar 14 15:02	7°♄00'31		asc. node	7850 Feb 24 14:05	22°♄35'08	
inferior conj	7849 Mar 19 22:27	0°♄45'45	2°49'43	evening set	7850 Feb 26 22:36	21°♄07'21	
minimum elong	7849 Mar 19 20:20	0°♄53'04	2°49'15	inferior conj	7850 Mar 04 07:03	14°♄44'17	2°18'06
min. Earth dist.	7849 Mar 20 05:34	0°♄21'02	0.68171 AU	minimum elong	7850 Mar 04 04:46	14°♄52'12	2°17'28
	7849 Mar 20 11:38	30°♄		min. Earth dist.	7850 Mar 04 02:05	15°♄01'34	0.68384 AU
morning rise	7849 Mar 25 01:28	24°♄32'11		morning rise	7850 Mar 09 10:48	8°♄34'59	
direct	7849 Mar 30 06:11	22°♄15'32		direct	7850 Mar 14 01:27	6°♄39'53	
morning max el	7849 Apr 09 15:15	28°♄25'50	23°18'07	morning max el	7850 Mar 23 03:48	11°♄58'39	21°50'26

desc. node	7850 Mar 31 12:28	21° $\text{X}$ 54'32		morning max el	7851 Mar 05 22:55	25° $\approx$ 42'59	20°31'54
	7850 Apr 06 09:42	0° $\text{Y}$			7851 Mar 09 19:10	0° $\text{X}$	
morning set	7850 Apr 24 17:06	27° $\text{Y}$ 43'32		desc. node	7851 Mar 18 09:26	11° $\text{X}$ 32'22	
	7850 Apr 26 03:02	0° $\text{X}$			7851 Mar 30 19:41	0° $\text{Y}$	
max. Earth dist.	7850 Apr 30 14:55	7° $\text{X}$ 22'11	1.41550 AU	morning set	7851 Apr 03 21:08	6° $\text{Y}$ 15'01	
				max. Earth dist.	7851 Apr 12 21:30	20° $\text{Y}$ 29'52	1.43434 AU
					7851 Apr 18 16:54	0° $\text{X}$	
superior conj	7850 May 08 07:24	20° $\text{X}$ 30'31	-1°55'22				
minimum elong	7850 May 08 12:54	20° $\text{X}$ 54'40	1°55'00				
	7850 May 13 14:52	0° $\text{II}$		superior conj	7851 Apr 19 08:39	1° $\text{X}$ 05'29	-2°10'02
evening rise	7850 May 19 01:14	9° $\text{II}$ 58'04		minimum elong	7851 Apr 19 11:03	1° $\text{X}$ 15'31	2°10'03
asc. node	7850 May 23 13:05	18° $\text{II}$ 11'41		evening rise	7851 May 01 16:27	22° $\text{X}$ 15'44	
	7850 May 30 15:14	0° $\text{X}$			7851 May 06 02:24	0° $\text{II}$	
evening max el	7850 Jun 04 06:17	5° $\text{X}$ 43'21	18°12'23	asc. node	7851 May 10 10:09	7° $\text{II}$ 20'43	
retrograde	7850 Jun 11 06:13	9° $\text{X}$ 14'52		evening max el	7851 May 18 18:55	18° $\text{II}$ 51'48	18°05'44
evening set	7850 Jun 13 15:41	8° $\text{X}$ 50'46		retrograde	7851 May 25 06:29	22° $\text{II}$ 12'51	
inferior conj	7850 Jun 20 17:01	4° $\text{X}$ 05'16	1°52'46	evening set	7851 May 27 23:21	21° $\text{II}$ 37'16	
minimum elong	7850 Jun 20 20:03	3° $\text{X}$ 58'34	1°51'43	inferior conj	7851 Jun 03 09:05	16° $\text{II}$ 31'45	2°45'26
min. Earth dist.	7850 Jun 24 02:07	1° $\text{X}$ 07'30	0.59564 AU	minimum elong	7851 Jun 03 11:51	16° $\text{II}$ 24'43	2°44'43
	7850 Jun 25 11:48	30° $\text{R}$ $\text{II}$		min. Earth dist.	7851 Jun 06 09:39	13° $\text{II}$ 28'47	0.61809 AU
desc. node	7850 Jun 27 11:51	28° $\text{II}$ 36'33		morning rise	7851 Jun 09 22:24	10° $\text{II}$ 29'07	
morning rise	7850 Jun 27 21:26	28° $\text{II}$ 22'06		desc. node	7851 Jun 14 08:54	8° $\text{II}$ 23'02	
direct	7850 Jul 04 06:52	26° $\text{II}$ 27'59		direct	7851 Jun 16 16:01	8° $\text{II}$ 06'48	
	7850 Jul 13 13:54	0° $\text{X}$		morning max el	7851 Jun 30 20:13	16° $\text{II}$ 07'30	27°55'18
morning max el	7850 Jul 18 15:34	4° $\text{X}$ 19'55	27°35'15		7851 Jul 12 05:25	0° $\text{X}$	
	7850 Aug 06 13:44	0° $\text{X}$			7851 Jul 30 04:58	0° $\text{X}$	
morning set	7850 Aug 19 06:49	24° $\text{X}$ 02'57		morning set	7851 Aug 03 08:48	8° $\text{X}$ 16'05	
asc. node	7850 Aug 19 12:28	24° $\text{X}$ 32'32		asc. node	7851 Aug 06 09:27	14° $\text{X}$ 34'44	
	7850 Aug 22 01:55	0° $\text{X}$		max. Earth dist.	7851 Aug 09 00:30	20° $\text{X}$ 13'14	1.32059 AU
max. Earth dist.	7850 Aug 25 16:39	7° $\text{X}$ 54'57	1.31698 AU				
				superior conj	7851 Aug 10 19:45	24° $\text{X}$ 09'14	0°43'58
superior conj	7850 Aug 26 09:48	9° $\text{X}$ 29'54	1°05'25	minimum elong	7851 Aug 10 17:56	23° $\text{X}$ 59'14	0°43'32
minimum elong	7850 Aug 26 07:34	9° $\text{X}$ 17'31	1°05'00		7851 Aug 13 11:36	0° $\text{X}$	
evening rise	7850 Sep 02 03:56	24° $\text{X}$ 18'32		evening rise	7851 Aug 17 15:12	9° $\text{X}$ 02'00	
	7850 Sep 04 21:04	0° $\text{X}$			7851 Aug 28 08:50	0° $\text{X}$	
	7850 Sep 22 10:41	0° $\text{X}$		desc. node	7851 Sep 10 07:53	18° $\text{X}$ 07'45	
desc. node	7850 Sep 23 10:49	1° $\text{X}$ 19'16		evening max el	7851 Sep 12 00:20	19° $\text{X}$ 49'42	24°32'50
evening max el	7850 Sep 30 10:04	9° $\text{X}$ 09'21	25°59'45	retrograde	7851 Sep 25 19:31	26° $\text{X}$ 45'49	
retrograde	7850 Oct 14 08:34	16° $\text{X}$ 13'40		evening set	7851 Oct 01 00:38	25° $\text{X}$ 45'24	
evening set	7850 Oct 20 17:07	14° $\text{X}$ 37'31		min. Earth dist.	7851 Oct 06 11:21	22° $\text{X}$ 56'43	0.56636 AU
min. Earth dist.	7850 Oct 24 22:55	12° $\text{X}$ 02'26	0.58513 AU	inferior conj	7851 Oct 09 02:12	21° $\text{X}$ 16'59	-5°31'06
inferior conj	7850 Oct 28 02:27	9° $\text{X}$ 44'53	-4°59'29	minimum elong	7851 Oct 09 04:02	21° $\text{X}$ 14'03	5°30'57
minimum elong	7850 Oct 28 08:51	9° $\text{X}$ 33'10	4°58'14	morning rise	7851 Oct 17 09:37	17° $\text{X}$ 13'25	
morning rise	7850 Nov 05 02:54	5° $\text{X}$ 19'21		direct	7851 Oct 20 00:15	16° $\text{X}$ 54'52	
direct	7850 Nov 07 10:19	5° $\text{X}$ 01'52		morning max el	7851 Oct 29 14:01	21° $\text{X}$ 26'16	19°31'08
morning max el	7850 Nov 15 16:56	9° $\text{X}$ 02'19	18°35'29	asc. node	7851 Nov 02 09:00	25° $\text{X}$ 42'13	
asc. node	7850 Nov 15 12:00	8° $\text{X}$ 50'34			7851 Nov 05 09:27	0° $\text{X}$	
	7850 Nov 29 07:27	0° $\text{X}$		morning set	7851 Nov 15 22:18	19° $\text{X}$ 19'15	
morning set	7850 Dec 01 19:57	4° $\text{X}$ 50'45			7851 Nov 21 05:36	0° $\text{X}$	
				superior conj	7851 Nov 23 21:42	5° $\text{X}$ 17'49	1°27'30
superior conj	7850 Dec 10 15:12	21° $\text{X}$ 43'38	1°08'19	minimum elong	7851 Nov 24 00:21	5° $\text{X}$ 30'49	1°27'22
minimum elong	7850 Dec 10 18:39	21° $\text{X}$ 59'44	1°08'00	max. Earth dist.	7851 Nov 30 05:05	17° $\text{X}$ 18'44	1.37843 AU
	7850 Dec 15 03:39	0° $\text{X}$		evening rise	7851 Dec 03 22:34	24° $\text{X}$ 02'19	
max. Earth dist.	7850 Dec 17 23:19	4° $\text{X}$ 59'01	1.40004 AU	desc. node	7851 Dec 07 06:54	29° $\text{X}$ 50'14	
desc. node	7850 Dec 20 09:53	9° $\text{X}$ 11'14			7851 Dec 07 09:12	0° $\text{X}$	
evening rise	7850 Dec 22 03:10	12° $\text{X}$ 05'27			7851 Dec 27 02:54	0° $\text{X}$	
	7851 Jan 02 09:30	0° $\text{X}$		evening max el	7852 Jan 08 12:31	14° $\text{X}$ 43'25	25°10'54
	7851 Jan 25 01:07	0° $\text{X}$		retrograde	7852 Jan 20 11:55	21° $\text{X}$ 39'07	
evening max el	7851 Jan 25 23:21	0° $\text{X}$ 56'32	23°54'15	evening set	7852 Jan 26 06:05	19° $\text{X}$ 15'54	
retrograde	7851 Feb 05 22:54	7° $\text{X}$ 24'11		asc. node	7852 Jan 29 08:15	16° $\text{X}$ 02'11	
evening set	7851 Feb 11 04:09	5° $\text{X}$ 13'52		min. Earth dist.	7852 Jan 30 17:03	14° $\text{X}$ 19'03	0.67608 AU
asc. node	7851 Feb 11 11:10	4° $\text{X}$ 58'33		inferior conj	7852 Jan 31 20:55	12° $\text{X}$ 48'19	0°49'50
	7851 Feb 15 17:27	30° $\text{R}$ $\text{X}$		minimum elong	7852 Jan 31 19:44	12° $\text{X}$ 52'10	0°49'27
min. Earth dist.	7851 Feb 15 22:40	29° $\text{X}$ 42'21	0.68190 AU	morning rise	7852 Feb 06 09:41	6° $\text{X}$ 52'31	
inferior conj	7851 Feb 16 15:10	28° $\text{X}$ 46'18	1°37'58	direct	7852 Feb 09 22:22	5° $\text{X}$ 40'56	
minimum elong	7851 Feb 16 13:11	28° $\text{X}$ 53'02	1°37'19	morning max el	7852 Feb 17 02:03	9° $\text{X}$ 39'07	19°26'54
morning rise	7851 Feb 21 22:13	22° $\text{X}$ 42'52		greatest brilliancy	7852 Feb 29 23:14	26° $\text{X}$ 37'35	-0.7m
direct	7851 Feb 25 23:21	21° $\text{X}$ 10'11					

	7852 Mar 03 05:21	0° $\text{H}$		transit begin	7853 Jan 14 19:52	26° $\text{Z}$ 54'46	
desc. node	7852 Mar 04 06:24	1° $\text{H}$ 34'28		transit end	7853 Jan 15 01:16	26° $\text{Z}$ 38'14	
morning set	7852 Mar 12 19:17	14° $\text{H}$ 38'09		asc. node	7853 Jan 15 05:17	26° $\text{Z}$ 25'56	
	7852 Mar 22 16:25	0° $\text{Y}$		morning rise	7853 Jan 20 19:10	21° $\text{Z}$ 00'54	
max. Earth dist.	7852 Mar 25 11:09	4° $\text{Y}$ 22'43	1.44779 AU	direct	7853 Jan 23 20:55	20° $\text{Z}$ 07'27	
				morning max el	7853 Jan 30 12:23	23° $\text{Z}$ 43'37	18°37'36
superior conj	7852 Mar 29 09:08	10° $\text{Y}$ 36'07	-2°08'05		7853 Feb 04 17:45	0° $\approx$	
minimum elong	7852 Mar 29 04:57	10° $\text{Y}$ 19'21	2°07'58	desc. node	7853 Feb 19 03:21	21° $\approx$ 54'22	
	7852 Apr 10 06:37	0° $\text{Z}$		morning set	7853 Feb 20 11:33	24° $\approx$ 01'16	
evening rise	7852 Apr 12 10:57	3° $\text{Z}$ 37'59			7853 Feb 24 06:40	0° $\text{H}$	
asc. node	7852 Apr 26 07:13	26° $\text{Z}$ 00'18		max. Earth dist.	7853 Mar 08 05:10	18° $\text{H}$ 42'51	1.45438 AU
	7852 Apr 29 07:21	0° $\text{II}$					
evening max el	7852 May 01 08:05	2° $\text{II}$ 15'04	18°17'50	superior conj	7853 Mar 08 16:15	19° $\text{H}$ 26'18	-1°46'00
retrograde	7852 May 07 17:36	5° $\text{II}$ 40'14		minimum elong	7853 Mar 08 06:54	18° $\text{H}$ 49'42	1°45'10
evening set	7852 May 10 17:30	4° $\text{II}$ 51'40			7853 Mar 15 09:38	0° $\text{Y}$	
	7852 May 16 04:20	30° $\text{RZ}$		evening rise	7853 Mar 24 06:02	14° $\text{Y}$ 02'30	
inferior conj	7852 May 16 15:43	29° $\text{Z}$ 27'46	3°14'21	greatest brilliancy	7853 Apr 01 09:48	27° $\text{Y}$ 02'45	-0.8m
minimum elong	7852 May 16 17:17	29° $\text{Z}$ 23'19	3°14'04		7853 Apr 03 06:55	0° $\text{Z}$	
min. Earth dist.	7852 May 19 02:29	26° $\text{Z}$ 41'12	0.63889 AU	asc. node	7853 Apr 13 04:16	14° $\text{Z}$ 01'34	
morning rise	7852 May 22 15:57	23° $\text{Z}$ 14'37		evening max el	7853 Apr 14 19:10	15° $\text{Z}$ 47'22	18°47'56
direct	7852 May 29 09:52	20° $\text{Z}$ 33'47		retrograde	7853 Apr 21 11:28	19° $\text{Z}$ 29'23	
desc. node	7852 May 31 05:56	20° $\text{Z}$ 44'32		evening set	7853 Apr 24 18:36	18° $\text{Z}$ 26'56	
morning max el	7852 Jun 12 05:11	28° $\text{Z}$ 34'29	27°38'04	inferior conj	7853 Apr 30 09:02	12° $\text{Z}$ 46'27	3°24'32
	7852 Jun 13 14:12	0° $\text{II}$		minimum elong	7853 Apr 30 09:14	12° $\text{Z}$ 45'52	3°24'27
	7852 Jul 05 01:27	0° $\text{Z}$		min. Earth dist.	7853 May 02 04:30	10° $\text{Z}$ 31'37	0.65639 AU
morning set	7852 Jul 17 03:19	22° $\text{Z}$ 04'29		morning rise	7853 May 05 23:16	6° $\text{Z}$ 29'07	
	7852 Jul 21 00:58	0° $\text{Z}$		direct	7853 May 12 11:18	3° $\text{Z}$ 41'48	
max. Earth dist.	7852 Jul 22 01:56	2° $\text{Z}$ 10'19	1.32884 AU	desc. node	7853 May 18 02:57	5° $\text{Z}$ 24'09	
asc. node	7852 Jul 23 06:26	4° $\text{Z}$ 40'38		morning max el	7853 May 25 15:44	11° $\text{Z}$ 30'27	26°48'45
					7853 Jun 09 08:56	0° $\text{II}$	
superior conj	7852 Jul 25 02:03	8° $\text{Z}$ 33'19	0°18'26		7853 Jun 27 15:00	0° $\text{Z}$	
minimum elong	7852 Jul 25 01:09	8° $\text{Z}$ 28'33	0°18'08	morning set	7853 Jun 30 11:16	5° $\text{Z}$ 19'48	
evening rise	7852 Aug 01 02:48	23° $\text{Z}$ 42'43		max. Earth dist.	7853 Jul 04 17:26	13° $\text{Z}$ 39'04	1.34187 AU
	7852 Aug 04 03:04	0° $\text{H}$					
	7852 Aug 23 10:13	0° $\text{Z}$		superior conj	7853 Jul 09 02:31	22° $\text{Z}$ 36'12	-0°10'30
evening max el	7852 Aug 23 11:48	0° $\text{Z}$ 03'53	22°53'59	minimum elong	7853 Jul 09 03:06	22° $\text{Z}$ 39'13	0°10'31
desc. node	7852 Aug 27 04:58	3° $\text{Z}$ 12'55		behind sun begin	7853 Jul 08 22:43	22° $\text{Z}$ 16'28	
retrograde	7852 Sep 05 18:17	6° $\text{Z}$ 41'44		behind sun end	7853 Jul 09 07:28	23° $\text{Z}$ 01'59	
evening set	7852 Sep 09 11:05	6° $\text{Z}$ 11'45		asc. node	7853 Jul 10 03:26	24° $\text{Z}$ 46'21	
min. Earth dist.	7852 Sep 16 20:05	2° $\text{Z}$ 52'17	0.55264 AU		7853 Jul 12 14:57	0° $\text{Z}$	
inferior conj	7852 Sep 18 06:50	2° $\text{Z}$ 02'23	-5°18'28	evening rise	7853 Jul 16 12:48	8° $\text{Z}$ 14'58	
minimum elong	7852 Sep 18 01:18	2° $\text{Z}$ 10'21	5°17'48		7853 Jul 28 02:13	0° $\text{H}$	
	7852 Sep 22 00:20	30° $\text{RZ}$		evening max el	7853 Aug 05 05:35	10° $\text{H}$ 28'24	21°19'43
morning rise	7852 Sep 26 17:35	28° $\text{H}$ 13'12		desc. node	7853 Aug 14 02:03	16° $\text{H}$ 02'34	
direct	7852 Sep 29 19:22	27° $\text{H}$ 51'11		retrograde	7853 Aug 17 08:00	16° $\text{H}$ 28'11	
	7852 Oct 06 23:16	0° $\text{Z}$		evening set	7853 Aug 19 18:07	16° $\text{H}$ 14'38	
morning max el	7852 Oct 10 22:32	3° $\text{Z}$ 03'25	20°49'01	inferior conj	7853 Aug 29 00:12	12° $\text{H}$ 16'47	-4°11'05
asc. node	7852 Oct 19 05:59	13° $\text{Z}$ 31'09		minimum elong	7853 Aug 28 14:44	12° $\text{H}$ 30'04	4°08'34
	7852 Oct 28 06:40	0° $\text{H}$		min. Earth dist.	7853 Aug 29 05:05	12° $\text{H}$ 09'56	0.54698 AU
morning set	7852 Oct 30 05:51	4° $\text{H}$ 01'14		morning rise	7853 Sep 06 12:07	8° $\text{H}$ 24'10	
				direct	7853 Sep 10 03:58	7° $\text{H}$ 55'15	
superior conj	7852 Nov 06 15:55	19° $\text{H}$ 25'33	1°38'17	morning max el	7853 Sep 22 19:09	13° $\text{H}$ 54'46	22°25'34
minimum elong	7852 Nov 06 17:15	19° $\text{H}$ 32'26	1°38'19		7853 Oct 04 22:21	0° $\text{Z}$	
max. Earth dist.	7852 Nov 11 13:30	29° $\text{H}$ 14'42	1.35827 AU	asc. node	7853 Oct 06 02:58	2° $\text{Z}$ 03'52	
	7852 Nov 11 22:48	0° $\text{Z}$		morning set	7853 Oct 14 16:21	18° $\text{Z}$ 49'55	
evening rise	7852 Nov 15 13:01	6° $\text{Z}$ 50'02			7853 Oct 19 21:59	0° $\text{H}$	
desc. node	7852 Nov 23 03:55	20° $\text{Z}$ 19'45					
	7852 Nov 29 03:18	0° $\text{Z}$		superior conj	7853 Oct 21 18:13	3° $\text{H}$ 55'41	1°41'41
evening max el	7852 Dec 21 01:31	28° $\text{Z}$ 29'01	26°16'53	minimum elong	7853 Oct 21 18:13	3° $\text{H}$ 55'44	1°41'46
	7852 Dec 22 16:34	0° $\approx$		max. Earth dist.	7853 Oct 25 04:58	11° $\text{H}$ 08'42	1.34145 AU
retrograde	7853 Jan 02 20:02	5° $\approx$ 42'20		evening rise	7853 Oct 29 18:34	20° $\text{H}$ 18'23	
evening set	7853 Jan 09 02:42	3° $\approx$ 09'31			7853 Nov 03 22:22	0° $\text{Z}$	
	7853 Jan 12 06:26	30° $\text{RZ}$		desc. node	7853 Nov 10 00:56	10° $\text{Z}$ 34'03	
min. Earth dist.	7853 Jan 13 07:02	28° $\text{Z}$ 47'25	0.66650 AU		7853 Nov 23 02:36	0° $\text{Z}$	
inferior conj	7853 Jan 14 22:25	26° $\text{Z}$ 46'57	-0°05'46	evening max el	7853 Dec 03 14:29	12° $\text{Z}$ 05'12	27°04'55
minimum elong	7853 Jan 14 22:34	26° $\text{Z}$ 46'30	0°05'34	retrograde	7853 Dec 16 22:27	19° $\text{Z}$ 25'26	
transit middle	7853 Jan 14 22:34	26° $\text{Z}$ 46'30	0°05'34	evening set	7853 Dec 23 15:56	16° $\text{Z}$ 48'37	





retrograde	7855 Nov 12 06:54	15°♊17'19		evening set	7856 Oct 31 05:44	25°♍13'23	
evening set	7855 Nov 19 09:17	12°♊57'53		min. Earth dist.	7856 Nov 04 02:54	22°♍37'56	0.59710 AU
min. Earth dist.	7855 Nov 23 01:29	10°♊07'52	0.61785 AU	inferior conj	7856 Nov 07 07:52	20°♍06'06	-4°28'40
inferior conj	7855 Nov 26 01:29	7°♊25'14	-3°24'14	minimum elong	7856 Nov 07 15:02	19°♍51'56	4°26'47
minimum elong	7855 Nov 26 07:46	7°♊10'59	3°22'00	morning rise	7856 Nov 15 02:39	15°♍27'41	
morning rise	7855 Dec 03 08:23	2°♊24'54		direct	7856 Nov 17 08:23	15°♍09'26	
direct	7855 Dec 05 14:30	2°♊03'02		asc. node	7856 Nov 22 17:27	17°♍00'53	
asc. node	7855 Dec 06 20:25	2°♊09'56		morning max el	7856 Nov 25 00:38	18°♍55'56	18°13'36
morning max el	7855 Dec 12 12:59	5°♊33'43	17°51'44		7856 Dec 03 02:25	0°♊	
morning set	7855 Dec 28 07:05	0°♊11'11		morning set	7856 Dec 10 19:09	14°♊01'06	
	7855 Dec 28 04:37	0°♊			7856 Dec 19 08:18	0°♊	
superior conj	7856 Jan 08 02:45	19°♋20'53	0°19'21	superior conj	7856 Dec 20 05:24	1°♋35'54	0°53'07
minimum elong	7856 Jan 08 04:28	19°♋28'16	0°19'14	minimum elong	7856 Dec 20 08:48	1°♋51'14	0°52'47
desc. node	7856 Jan 10 18:14	23°♋50'48		desc. node	7856 Dec 27 15:14	14°♋36'07	
	7856 Jan 14 11:00	0°♋		max. Earth dist.	7856 Dec 27 20:32	14°♋58'35	1.41215 AU
max. Earth dist.	7856 Jan 15 10:14	1°♋35'06	1.43118 AU	evening rise	7857 Jan 01 16:17	22°♋59'20	
evening rise	7856 Jan 22 07:15	12°♋34'13			7857 Jan 06 01:29	0°♋	
	7856 Feb 02 18:54	0°♋			7857 Jan 26 19:26	0°♋	
evening max el	7856 Feb 23 00:09	26°♋41'37	21°49'06	evening max el	7857 Feb 04 16:03	10°♋22'53	23°08'10
	7856 Feb 26 18:23	0°♋		retrograde	7857 Feb 15 00:18	16°♋30'35	
retrograde	7856 Mar 03 04:59	2°♋08'45		asc. node	7857 Feb 18 16:37	15°♋23'06	
asc. node	7856 Mar 03 19:32	2°♋06'51		evening set	7857 Feb 19 22:30	14°♋28'08	
evening set	7856 Mar 07 15:37	0°♋21'16		inferior conj	7857 Feb 25 07:51	8°♋02'30	2°02'03
	7856 Mar 08 01:35	30°♋		minimum elong	7857 Feb 25 05:38	8°♋10'08	2°01'24
inferior conj	7856 Mar 12 23:16	24°♋02'43	2°37'24	min. Earth dist.	7857 Feb 24 21:50	8°♋37'05	0.68345 AU
minimum elong	7856 Mar 12 21:02	24°♋10'29	2°36'51	morning rise	7857 Mar 02 12:43	1°♋55'42	
min. Earth dist.	7856 Mar 13 01:06	23°♋56'20	0.68311 AU	direct	7857 Mar 06 21:26	0°♋10'25	
morning rise	7856 Mar 18 02:18	17°♋51'04		morning max el	7857 Mar 15 11:49	5°♋08'32	21°15'42
direct	7856 Mar 23 01:05	15°♋43'20		desc. node	7857 Mar 25 14:48	17°♋31'52	
morning max el	7856 Apr 01 20:41	21°♋30'58	22°40'14		7857 Apr 03 07:55	0°♋	
desc. node	7856 Apr 07 17:52	28°♋12'32		morning set	7857 Apr 15 15:16	18°♋47'41	
	7856 Apr 09 03:53	0°♋		max. Earth dist.	7857 Apr 22 18:00	0°♋13'19	1.42399 AU
	7856 Apr 29 21:19	0°♋			7857 Apr 22 14:45	0°♋	
morning set	7856 May 05 22:35	9°♋43'41		superior conj	7857 Apr 30 01:33	12°♋29'27	-2°03'14
max. Earth dist.	7856 May 10 15:52	17°♋37'43	1.40312 AU	minimum elong	7857 Apr 30 06:14	12°♋49'33	2°03'03
	7856 May 17 17:12	0°♋			7857 May 09 23:30	0°♋	
superior conj	7856 May 18 10:35	1°♋18'33	-1°41'45	evening rise	7857 May 11 10:46	2°♋39'14	
minimum elong	7856 May 18 16:16	1°♋44'19	1°41'12	asc. node	7857 May 17 15:36	13°♋44'08	
evening rise	7856 May 28 09:46	19°♋54'20		evening max el	7857 May 27 22:22	28°♋37'02	18°07'13
asc. node	7856 May 30 18:33	24°♋22'07			7857 May 29 11:57	0°♋	
	7856 Jun 02 19:49	0°♋		retrograde	7857 Jun 03 15:55	2°♋02'40	
evening max el	7856 Jun 13 11:40	15°♋42'23	18°24'53	evening set	7857 Jun 06 04:26	1°♋34'04	
retrograde	7856 Jun 20 23:51	19°♋27'16			7857 Jun 09 00:45	30°♋	
evening set	7856 Jun 23 04:57	19°♋08'38		inferior conj	7857 Jun 12 22:39	26°♋39'48	2°18'17
inferior conj	7856 Jun 30 16:53	14°♋34'32	1°09'46	minimum elong	7857 Jun 13 01:45	26°♋32'30	2°17'21
minimum elong	7856 Jun 30 19:11	14°♋29'53	1°08'51	min. Earth dist.	7857 Jun 16 05:01	23°♋36'47	0.60516 AU
min. Earth dist.	7856 Jul 04 02:07	11°♋51'18	0.58304 AU	morning rise	7857 Jun 19 20:27	20°♋46'44	
desc. node	7856 Jul 04 17:16	11°♋22'45		desc. node	7857 Jun 21 14:17	19°♋48'22	
morning rise	7856 Jul 08 06:05	9°♋07'25		direct	7857 Jun 26 10:08	18°♋39'49	
direct	7856 Jul 14 07:03	7°♋32'14		morning max el	7857 Jul 10 17:51	26°♋37'10	27°48'34
morning max el	7856 Jul 28 16:27	15°♋14'17	27°06'32		7857 Jul 13 22:14	0°♋	
	7856 Aug 09 15:05	0°♋			7857 Aug 03 05:10	0°♋	
asc. node	7856 Aug 26 17:56	0°♋25'32		morning set	7857 Aug 12 05:41	17°♋29'36	
	7856 Aug 26 13:00	0°♋		asc. node	7857 Aug 13 14:56	20°♋23'34	
morning set	7856 Aug 28 00:28	3°♋05'16			7857 Aug 18 01:46	0°♋	
				max. Earth dist.	7857 Aug 18 07:44	0°♋32'46	1.31792 AU
superior conj	7856 Sep 04 00:25	18°♋20'58	1°15'43	superior conj	7857 Aug 19 11:35	3°♋06'16	0°56'52
minimum elong	7856 Sep 03 22:11	18°♋08'32	1°15'22	minimum elong	7857 Aug 19 09:28	2°♋54'33	0°56'25
max. Earth dist.	7856 Sep 03 21:58	18°♋07'17	1.31711 AU	evening rise	7857 Aug 26 05:49	17°♋55'16	
	7856 Sep 09 07:31	0°♋			7857 Sep 01 03:16	0°♋	
evening rise	7856 Sep 10 19:37	3°♋13'16		desc. node	7857 Sep 17 13:16	25°♋59'14	
	7856 Sep 25 01:46	0°♋			7857 Sep 21 04:04	0°♋	
desc. node	7856 Sep 30 16:11	8°♋24'05		evening max el	7857 Sep 22 07:23	1°♋07'11	25°25'13
evening max el	7856 Oct 10 13:10	20°♋01'01	26°38'07	retrograde	7857 Oct 06 05:21	8°♋09'27	
retrograde	7856 Oct 24 11:00	27°♋08'29					

evening set	7857 Oct 12 03:49	6°♄48'05		retrograde	7858 Sep 17 11:29	18°♄23'40	
min. Earth dist.	7857 Oct 16 19:18	4°♄09'37	0.57672 AU	evening set	7858 Sep 22 01:16	17°♄37'46	
inferior conj	7857 Oct 19 19:27	2°♄05'55	-5°17'06	min. Earth dist.	7858 Sep 28 06:03	14°♄37'38	0.55968 AU
minimum elong	7857 Oct 20 00:27	1°♄57'18	5°16'24	inferior conj	7858 Sep 30 10:42	13°♄17'58	-5°32'11
	7857 Oct 23 00:29	30°♄		minimum elong	7858 Sep 30 09:28	13°♄19'49	5°32'08
morning rise	7857 Oct 27 23:26	27°♄50'29		morning rise	7858 Oct 08 19:51	9°♄21'44	
direct	7857 Oct 30 09:10	27°♄33'00		direct	7858 Oct 11 14:36	9°♄02'07	
	7857 Nov 06 02:26	0°♄		morning max el	7858 Oct 21 20:11	13°♄50'22	20°01'30
morning max el	7857 Nov 08 04:12	1°♄45'15	18°56'25	asc. node	7858 Oct 27 11:26	20°♄31'18	
asc. node	7857 Nov 09 14:27	3°♄13'28			7858 Nov 02 07:08	0°♄	
morning set	7857 Nov 24 17:21	28°♄18'52		morning set	7858 Nov 08 22:13	12°♄53'50	
	7857 Nov 25 13:52	0°♄					
superior conj	7857 Dec 03 03:17	14°♄46'10	1°17'32	superior conj	7858 Nov 16 15:16	28°♄35'59	1°33'02
minimum elong	7857 Dec 03 06:30	15°♄01'30	1°17'17	minimum elong	7858 Nov 16 17:24	28°♄46'36	1°32'58
max. Earth dist.	7857 Dec 10 02:33	27°♄38'36	1.39078 AU		7858 Nov 17 08:06	0°♄	
	7857 Dec 11 10:30	0°♄		max. Earth dist.	7858 Nov 22 08:31	9°♄44'22	1.36960 AU
evening rise	7857 Dec 13 23:25	4°♄24'09		evening rise	7858 Nov 26 03:26	16°♄44'11	
desc. node	7857 Dec 14 12:16	5°♄18'59		desc. node	7858 Dec 01 09:18	25°♄54'35	
	7857 Dec 30 04:27	0°♄			7858 Dec 03 20:07	0°♄	
evening max el	7858 Jan 18 05:37	24°♄08'00	24°27'38	evening max el	7858 Dec 24 15:10	0°♄	
	7858 Jan 26 01:32	0°♄			7858 Dec 31 18:42	7°♄55'13	25°40'41
retrograde	7858 Jan 29 16:03	0°♄49'36		retrograde	7859 Jan 13 03:09	14°♄59'55	
	7858 Feb 01 23:54	30°♄		evening set	7859 Jan 19 02:35	12°♄32'22	
evening set	7858 Feb 04 02:42	28°♄33'26		asc. node	7859 Jan 23 10:42	7°♄50'05	
asc. node	7858 Feb 05 13:39	27°♄09'39		min. Earth dist.	7859 Jan 23 10:44	7°♄49'58	0.67247 AU
min. Earth dist.	7858 Feb 08 17:49	23°♄16'30	0.67987 AU	inferior conj	7859 Jan 24 19:23	6°♄06'07	0°27'08
inferior conj	7858 Feb 09 15:11	22°♄04'57	1°18'28	minimum elong	7859 Jan 24 18:42	6°♄08'18	0°26'58
minimum elong	7858 Feb 09 13:28	22°♄10'40	1°17'55	morning rise	7859 Jan 30 11:15	0°♄13'53	
morning rise	7858 Feb 15 00:22	16°♄04'27			7859 Jan 30 20:31	30°♄	
direct	7858 Feb 18 19:56	14°♄41'11		direct	7859 Feb 02 19:03	29°♄10'22	
morning max el	7858 Feb 26 10:19	18°♄58'09	20°02'21		7859 Feb 05 20:32	0°♄	
	7858 Mar 07 08:47	0°♄		morning max el	7859 Feb 09 16:38	2°♄57'57	19°03'48
desc. node	7858 Mar 12 11:46	7°♄20'44		greatest brilliancy	7859 Feb 23 11:28	21°♄33'51	-0.8m
morning set	7858 Mar 25 13:37	27°♄05'50		desc. node	7859 Feb 27 08:44	27°♄31'01	
	7858 Mar 27 10:40	0°♄			7859 Feb 28 23:20	0°♄	
max. Earth dist.	7858 Apr 05 03:08	13°♄39'11	1.44077 AU	morning set	7859 Mar 04 16:57	5°♄47'09	
				max. Earth dist.	7859 Mar 18 18:39	27°♄44'26	1.45150 AU
superior conj	7858 Apr 10 15:58	22°♄35'15	-2°11'34		7859 Mar 20 05:06	0°♄	
minimum elong	7858 Apr 10 15:51	22°♄34'45	2°11'37	superior conj	7859 Mar 21 07:33	1°♄44'20	-2°01'10
	7858 Apr 15 03:45	0°♄		minimum elong	7859 Mar 21 00:32	1°♄16'40	2°00'46
evening rise	7858 Apr 23 17:37	14°♄33'21		evening rise	7859 Apr 05 02:12	25°♄30'08	
	7858 May 02 20:08	0°♄			7859 Apr 07 20:05	0°♄	
asc. node	7858 May 04 12:39	2°♄41'14		asc. node	7859 Apr 21 09:41	21°♄05'38	
evening max el	7858 May 11 11:32	11°♄52'06	18°08'43	evening max el	7859 Apr 25 00:10	25°♄20'04	18°28'36
retrograde	7858 May 17 21:11	15°♄13'18		retrograde	7859 May 01 11:27	28°♄50'36	
evening set	7858 May 20 16:59	14°♄32'28		evening set	7859 May 04 14:26	27°♄56'10	
inferior conj	7858 May 26 21:21	9°♄19'15	3°00'16	inferior conj	7859 May 10 08:56	22°♄25'14	3°20'41
minimum elong	7858 May 26 23:40	9°♄13'03	2°59'45	minimum elong	7859 May 10 09:54	22°♄22'21	3°20'31
min. Earth dist.	7858 May 29 16:35	6°♄20'32	0.62719 AU	min. Earth dist.	7859 May 12 13:19	19°♄50'36	0.64681 AU
morning rise	7858 Jun 02 04:44	3°♄11'03		morning rise	7859 May 16 04:32	16°♄09'57	
desc. node	7858 Jun 08 11:18	0°♄39'53		direct	7859 May 22 20:48	13°♄24'37	
direct	7858 Jun 08 23:26	0°♄39'04		desc. node	7859 May 26 08:18	14°♄03'27	
morning max el	7858 Jun 23 00:36	8°♄41'58	27°52'21	morning max el	7859 Jun 05 10:16	21°♄21'36	27°20'35
	7858 Jul 09 11:12	0°♄			7859 Jun 12 22:11	0°♄	
	7858 Jul 26 10:18	0°♄			7859 Jul 02 15:04	0°♄	
morning set	7858 Jul 27 04:48	1°♄33'02		morning set	7859 Jul 10 19:13	15°♄08'12	
asc. node	7858 Jul 31 11:54	10°♄27'44		max. Earth dist.	7859 Jul 15 10:26	24°♄26'21	1.33373 AU
max. Earth dist.	7858 Aug 01 13:06	12°♄42'05	1.32341 AU	asc. node	7859 Jul 18 08:54	0°♄34'04	
					7859 Jul 18 02:26	0°♄	
superior conj	7858 Aug 03 20:13	17°♄39'50	0°33'38	superior conj	7859 Jul 19 00:20	1°♄55'46	0°06'33
minimum elong	7858 Aug 03 18:43	17°♄31'42	0°33'13	minimum elong	7859 Jul 19 00:00	1°♄54'02	0°06'22
	7858 Aug 09 12:01	0°♄		behind sun begin	7859 Jul 18 18:55	1°♄27'02	
evening rise	7858 Aug 10 17:25	2°♄37'56		behind sun end	7859 Jul 19 05:06	2°♄21'03	
	7858 Aug 25 11:36	0°♄		evening rise	7859 Jul 26 04:33	17°♄15'43	
evening max el	7858 Sep 03 19:36	11°♄33'06	23°51'23		7859 Aug 01 11:47	0°♄	
desc. node	7858 Sep 04 10:21	12°♄07'59					

evening max el	7859 Aug 16 08:52	21° $\mathbb{M}$ 47'56	22°12'41		7860 Jul 26 01:40	0° $\mathbb{M}$	
desc. node	7859 Aug 22 07:24	26° $\mathbb{M}$ 19'36		evening max el	7860 Jul 28 07:26	2° $\mathbb{M}$ 25'06	20°43'59
retrograde	7859 Aug 29 05:09	28° $\mathbb{M}$ 11'14		desc. node	7860 Aug 08 04:29	8° $\mathbb{M}$ 03'01	
evening set	7859 Sep 01 07:18	27° $\mathbb{M}$ 50'07		retrograde	7860 Aug 08 17:16	8° $\mathbb{M}$ 03'43	
min. Earth dist.	7859 Sep 09 14:35	24° $\mathbb{M}$ 13'28	0.54916 AU	evening set	7860 Aug 10 19:59	7° $\mathbb{M}$ 52'54	
inferior conj	7859 Sep 10 09:10	23° $\mathbb{M}$ 47'22	-4°56'29	inferior conj	7860 Aug 20 01:40	3° $\mathbb{M}$ 55'58	-3°28'27
minimum elong	7859 Sep 10 01:08	23° $\mathbb{M}$ 58'39	4°54'59	minimum elong	7860 Aug 19 16:44	4° $\mathbb{M}$ 08'44	3°25'38
morning rise	7859 Sep 18 20:35	19° $\mathbb{M}$ 59'05		min. Earth dist.	7860 Aug 20 23:53	3° $\mathbb{M}$ 24'15	0.54749 AU
direct	7859 Sep 22 04:16	19° $\mathbb{M}$ 34'28			7860 Aug 28 07:50	30° $\mathbb{R}$ $\mathbb{L}$	
morning max el	7859 Oct 03 23:10	25° $\mathbb{M}$ 06'29	21°28'03	morning rise	7860 Aug 28 13:25	29° $\mathbb{L}$ 56'03	
	7859 Oct 08 10:09	0° $\mathbb{L}$		direct	7860 Sep 01 12:32	29° $\mathbb{L}$ 22'27	
asc. node	7859 Oct 14 08:25	8° $\mathbb{L}$ 40'14			7860 Sep 05 14:49	0° $\mathbb{M}$	
morning set	7859 Oct 24 07:17	27° $\mathbb{L}$ 39'17		morning max el	7860 Sep 14 15:47	5° $\mathbb{M}$ 40'54	23°10'15
	7859 Oct 25 10:11	0° $\mathbb{M}$		asc. node	7860 Sep 30 05:25	27° $\mathbb{M}$ 27'51	
					7860 Oct 01 14:04	0° $\mathbb{L}$	
superior conj	7859 Oct 31 13:18	12° $\mathbb{M}$ 54'00	1°40'33	morning set	7860 Oct 07 18:34	12° $\mathbb{L}$ 29'26	
minimum elong	7859 Oct 31 14:04	12° $\mathbb{M}$ 57'59	1°40'38				
max. Earth dist.	7859 Nov 04 19:49	21° $\mathbb{M}$ 37'54	1.35076 AU	superior conj	7860 Oct 14 18:12	27° $\mathbb{L}$ 30'53	1°41'07
evening rise	7859 Nov 09 00:49	29° $\mathbb{M}$ 50'25		minimum elong	7860 Oct 14 17:42	27° $\mathbb{L}$ 28'12	1°41'11
	7859 Nov 09 02:50	0° $\mathbb{M}$			7860 Oct 15 22:05	0° $\mathbb{M}$	
desc. node	7859 Nov 18 06:20	16° $\mathbb{M}$ 18'15		max. Earth dist.	7860 Oct 17 15:15	3° $\mathbb{M}$ 37'52	1.33557 AU
	7859 Nov 26 23:28	0° $\mathbb{L}$		evening rise	7860 Oct 22 11:40	13° $\mathbb{M}$ 32'50	
evening max el	7859 Dec 14 08:00	21° $\mathbb{L}$ 38'33	26°39'54		7860 Oct 31 08:02	0° $\mathbb{M}$	
retrograde	7859 Dec 27 08:45	28° $\mathbb{L}$ 55'05		desc. node	7860 Nov 04 03:22	6° $\mathbb{M}$ 24'21	
evening set	7860 Jan 02 20:19	26° $\mathbb{L}$ 20'04			7860 Nov 20 23:52	0° $\mathbb{L}$	
min. Earth dist.	7860 Jan 06 22:12	22° $\mathbb{L}$ 12'30	0.66140 AU	evening max el	7860 Nov 25 20:49	5° $\mathbb{L}$ 08'12	27°18'02
inferior conj	7860 Jan 08 18:26	20° $\mathbb{L}$ 01'33	-0°31'24	retrograde	7860 Dec 09 08:23	12° $\mathbb{L}$ 27'55	
minimum elong	7860 Jan 08 19:18	19° $\mathbb{L}$ 58'58	0°30'54	evening set	7860 Dec 16 05:45	9° $\mathbb{L}$ 51'30	
asc. node	7860 Jan 10 07:45	18° $\mathbb{L}$ 13'16		min. Earth dist.	7860 Dec 20 02:04	6° $\mathbb{L}$ 17'49	0.64683 AU
morning rise	7860 Jan 14 19:12	14° $\mathbb{L}$ 20'07		inferior conj	7860 Dec 22 10:02	3° $\mathbb{L}$ 46'27	-1°36'00
direct	7860 Jan 17 16:57	13° $\mathbb{L}$ 33'06		minimum elong	7860 Dec 22 12:57	3° $\mathbb{L}$ 38'34	1°34'40
morning max el	7860 Jan 24 05:18	17° $\mathbb{L}$ 03'06	18°21'31		7860 Dec 26 06:05	30° $\mathbb{R}$ $\mathbb{M}$	
	7860 Feb 02 22:18	0° $\mathbb{M}$		asc. node	7860 Dec 27 04:49	29° $\mathbb{M}$ 16'55	
morning set	7860 Feb 12 21:20	15° $\mathbb{M}$ 47'06		morning rise	7860 Dec 28 21:37	28° $\mathbb{M}$ 18'40	
desc. node	7860 Feb 14 05:41	17° $\mathbb{M}$ 56'27		direct	7860 Dec 31 11:16	27° $\mathbb{M}$ 44'25	
	7860 Feb 21 19:48	0° $\mathbb{M}$			7861 Jan 05 16:13	0° $\mathbb{L}$	
				morning max el	7861 Jan 06 21:51	1° $\mathbb{L}$ 07'31	17°56'05
superior conj	7860 Feb 28 12:07	10° $\mathbb{M}$ 30'18	-1°31'06	morning set	7861 Jan 24 07:10	27° $\mathbb{L}$ 14'30	
minimum elong	7860 Feb 28 02:35	9° $\mathbb{M}$ 52'59	1°30'05		7861 Jan 25 22:48	0° $\mathbb{M}$	
max. Earth dist.	7860 Feb 29 14:02	12° $\mathbb{M}$ 11'51	1.45501 AU	desc. node	7861 Jan 31 02:39	8° $\mathbb{M}$ 32'32	
	7860 Mar 11 23:01	0° $\mathbb{Y}$					
evening rise	7860 Mar 15 11:34	5° $\mathbb{Y}$ 31'46		superior conj	7861 Feb 07 01:10	19° $\mathbb{M}$ 46'44	-0°48'30
greatest brilliancy	7860 Mar 25 22:27	21° $\mathbb{Y}$ 53'03	-0.8m	minimum elong	7861 Feb 06 19:31	19° $\mathbb{M}$ 24'10	0°47'38
	7860 Mar 31 08:32	0° $\mathbb{L}$		max. Earth dist.	7861 Feb 11 09:52	26° $\mathbb{M}$ 42'11	1.45103 AU
asc. node	7860 Apr 07 06:46	8° $\mathbb{L}$ 46'55			7861 Feb 13 12:12	0° $\mathbb{M}$	
evening max el	7860 Apr 07 09:45	8° $\mathbb{L}$ 54'31	19°05'58	evening rise	7861 Feb 23 03:25	14° $\mathbb{M}$ 56'42	
retrograde	7860 Apr 14 07:08	12° $\mathbb{L}$ 46'51			7861 Mar 05 00:34	0° $\mathbb{Y}$	
evening set	7860 Apr 17 17:40	11° $\mathbb{L}$ 38'03		greatest brilliancy	7861 Mar 09 17:48	7° $\mathbb{Y}$ 01'01	-0.6m
inferior conj	7860 Apr 23 05:45	5° $\mathbb{L}$ 50'57	3°24'15	evening max el	7861 Mar 21 14:32	22° $\mathbb{Y}$ 31'47	19°59'20
minimum elong	7860 Apr 23 05:24	5° $\mathbb{L}$ 52'04	3°24'09	asc. node	7861 Mar 25 03:51	25° $\mathbb{Y}$ 32'34	
min. Earth dist.	7860 Apr 24 18:41	3° $\mathbb{L}$ 52'59	0.66263 AU	retrograde	7861 Mar 29 05:24	26° $\mathbb{Y}$ 56'24	
	7860 Apr 28 05:10	30° $\mathbb{R}$ $\mathbb{Y}$		evening set	7861 Apr 02 00:17	25° $\mathbb{Y}$ 32'52	
morning rise	7860 Apr 28 16:44	29° $\mathbb{Y}$ 33'26		inferior conj	7861 Apr 07 08:52	19° $\mathbb{Y}$ 31'29	3°14'29
direct	7860 May 05 00:51	26° $\mathbb{Y}$ 47'14		minimum elong	7861 Apr 07 07:28	19° $\mathbb{Y}$ 36'10	3°14'16
desc. node	7860 May 12 05:19	29° $\mathbb{Y}$ 31'52		min. Earth dist.	7861 Apr 08 07:12	18° $\mathbb{Y}$ 16'10	0.67407 AU
	7860 May 12 20:58	0° $\mathbb{L}$		morning rise	7861 Apr 12 14:25	13° $\mathbb{Y}$ 14'41	
morning max el	7860 May 17 20:35	4° $\mathbb{L}$ 25'10	26°20'10	direct	7861 Apr 18 10:49	10° $\mathbb{Y}$ 37'59	
	7860 Jun 06 08:43	0° $\mathbb{L}$		desc. node	7861 Apr 29 02:18	16° $\mathbb{Y}$ 33'47	
morning set	7860 Jun 22 21:28	28° $\mathbb{L}$ 05'17		morning max el	7861 Apr 30 06:09	17° $\mathbb{Y}$ 42'22	25°00'22
	7860 Jun 23 21:51	0° $\mathbb{L}$			7861 May 10 13:07	0° $\mathbb{L}$	
max. Earth dist.	7860 Jun 26 21:18	5° $\mathbb{L}$ 43'56	1.34888 AU		7861 May 30 09:16	0° $\mathbb{L}$	
				morning set	7861 Jun 05 07:07	10° $\mathbb{L}$ 12'52	
superior conj	7860 Jul 01 21:32	15° $\mathbb{L}$ 46'59	-0°23'31	max. Earth dist.	7861 Jun 08 22:08	16° $\mathbb{L}$ 47'50	1.36823 AU
minimum elong	7860 Jul 01 22:52	15° $\mathbb{L}$ 53'51	0°23'22				
asc. node	7860 Jul 04 05:54	20° $\mathbb{L}$ 38'11		superior conj	7861 Jun 15 08:53	29° $\mathbb{L}$ 06'15	-0°55'05
	7860 Jul 08 17:35	0° $\mathbb{L}$		minimum elong	7861 Jun 15 12:13	29° $\mathbb{L}$ 22'36	0°54'36
evening rise	7860 Jul 09 13:16	1° $\mathbb{L}$ 42'11			7861 Jun 15 19:48	0° $\mathbb{L}$	



















































































































asc. node	7861 Jun 21 02:56	10°♊36'29		minimum elong	7862 May 29 11:48	12°♊08'42	1°25'12
evening rise	7861 Jun 23 17:17	15°♊51'13		evening rise	7862 Jun 07 13:45	29°♊35'15	
	7861 Jul 01 01:55	0°♊			7862 Jun 07 18:51	0°♊	
evening max el	7861 Jul 10 19:13	13°♊44'55	19°33'40	asc. node	7862 Jun 08 00:00	0°♊24'57	
retrograde	7861 Jul 20 12:04	18°♊31'58		evening max el	7862 Jun 23 18:52	25°♊49'13	18°44'08
evening set	7861 Jul 22 08:36	18°♊22'13		retrograde	7862 Jul 01 23:14	29°♊52'18	
desc. node	7861 Jul 26 01:34	17°♊10'26		evening set	7862 Jul 04 00:10	29°♊38'07	
inferior conj	7861 Jul 31 03:01	14°♊17'28	-1°32'43	inferior conj	7862 Jul 11 23:34	25°♊16'11	0°17'15
minimum elong	7861 Jul 30 22:48	14°♊24'10	1°31'12	minimum elong	7862 Jul 12 00:13	25°♊14'58	0°16'52
min. Earth dist.	7861 Aug 02 12:13	12°♊46'53	0.55539 AU	desc. node	7862 Jul 12 22:37	24°♊33'23	
morning rise	7861 Aug 08 10:35	9°♊46'39		min. Earth dist.	7862 Jul 15 04:54	22°♊54'19	0.57137 AU
direct	7861 Aug 13 04:43	8°♊56'02		morning rise	7862 Jul 19 20:47	20°♊08'19	
morning max el	7861 Aug 27 04:28	15°♊56'03	24°55'16	direct	7862 Jul 25 11:35	18°♊50'52	
	7861 Sep 07 12:03	0°♊		morning max el	7862 Aug 08 19:39	26°♊21'16	26°26'21
asc. node	7861 Sep 17 02:25	16°♊44'06			7862 Aug 12 06:48	0°♊	
morning set	7861 Sep 22 06:16	27°♊18'33			7862 Aug 31 18:27	0°♊	
	7861 Sep 23 12:24	0°♊		asc. node	7862 Sep 03 23:24	6°♊21'35	
				morning set	7862 Sep 06 16:49	12°♊02'14	
superior conj	7861 Sep 29 03:24	12°♊18'12	1°35'32	superior conj	7862 Sep 13 14:50	27°♊09'44	1°24'27
minimum elong	7861 Sep 29 01:54	12°♊10'03	1°35'28	minimum elong	7862 Sep 13 12:44	26°♊58'10	1°24'11
max. Earth dist.	7861 Sep 30 18:21	15°♊50'55	1.32476 AU	max. Earth dist.	7862 Sep 14 02:49	28°♊16'07	1.31856 AU
evening rise	7861 Oct 06 08:27	27°♊41'39			7862 Sep 14 21:36	0°♊	
	7861 Oct 07 11:38	0°♊		evening rise	7862 Sep 20 12:21	12°♊09'18	
desc. node	7861 Oct 22 00:27	26°♊04'35			7862 Sep 29 15:12	0°♊	
	7861 Oct 24 14:07	0°♊		desc. node	7862 Oct 08 21:33	15°♊08'33	
evening max el	7861 Nov 08 07:23	18°♊11'01	27°28'31		7862 Oct 20 22:46	0°♊	
retrograde	7861 Nov 22 01:26	25°♊28'11		evening max el	7862 Oct 21 13:30	0°♊35'18	27°06'24
evening set	7861 Nov 29 03:56	22°♊59'17		retrograde	7862 Nov 04 10:54	7°♊46'29	
min. Earth dist.	7861 Dec 02 20:24	19°♊55'36	0.62908 AU	evening set	7862 Nov 11 11:05	5°♊36'07	
inferior conj	7861 Dec 05 15:22	17°♊13'10	-2°44'34	min. Earth dist.	7862 Nov 15 04:12	2°♊53'54	0.60905 AU
minimum elong	7861 Dec 05 20:31	17°♊00'38	2°42'31	inferior conj	7862 Nov 18 07:08	0°♊13'40	-3°52'42
morning rise	7861 Dec 12 15:07	12°♊02'08		minimum elong	7862 Nov 18 14:02	29°♊58'52	3°50'29
asc. node	7861 Dec 14 01:53	11°♊40'33			7862 Nov 18 13:30	30°♊	
direct	7861 Dec 14 23:01	11°♊36'53		morning rise	7862 Nov 25 19:17	25°♊22'19	
morning max el	7861 Dec 21 15:07	15°♊02'26	17°48'04	direct	7862 Nov 28 00:35	25°♊02'29	
	7862 Jan 01 01:24	0°♊		asc. node	7862 Nov 30 22:53	25°♊38'29	
morning set	7862 Jan 06 17:28	9°♊52'00		morning max el	7862 Dec 05 05:49	28°♊39'12	17°58'34
desc. node	7862 Jan 17 23:37	29°♊14'54			7862 Dec 06 12:27	0°♊	
	7862 Jan 18 10:26	0°♊		morning set	7862 Dec 20 21:46	23°♊20'18	
superior conj	7862 Jan 18 12:47	0°♊09'51	-0°04'01		7862 Dec 24 12:43	0°♊	
minimum elong	7862 Jan 18 12:23	0°♊08'11	0°03'50	superior conj	7862 Dec 31 02:04	11°♊46'24	0°34'46
behind sun begin	7862 Jan 18 03:24	29°♊30'40		minimum elong	7862 Dec 31 04:47	11°♊58'20	0°34'30
behind sun end	7862 Jan 18 21:23	0°♊45'38		desc. node	7863 Jan 04 20:38	20°♊00'13	
max. Earth dist.	7862 Jan 25 02:55	10°♊56'21	1.44011 AU	max. Earth dist.	7863 Jan 07 15:43	24°♊40'56	1.42355 AU
evening rise	7862 Feb 02 14:48	24°♊18'07			7863 Jan 10 21:41	0°♊	
	7862 Feb 06 08:03	0°♊		evening rise	7863 Jan 13 12:59	4°♊13'31	
	7862 Feb 27 06:04	0°♊			7863 Jan 30 16:27	0°♊	
evening max el	7862 Mar 04 13:47	6°♊09'57	21°06'08	evening max el	7863 Feb 15 08:05	19°♊50'19	22°22'16
asc. node	7862 Mar 12 00:57	11°♊07'18		retrograde	7863 Feb 25 00:41	25°♊35'09	
retrograde	7862 Mar 13 03:52	11°♊13'47		asc. node	7863 Feb 26 22:02	25°♊16'57	
evening set	7862 Mar 17 08:17	9°♊35'14		evening set	7863 Mar 01 16:00	23°♊41'29	
inferior conj	7862 Mar 22 15:42	3°♊22'05	2°53'43	inferior conj	7863 Mar 07 00:12	17°♊19'33	2°23'26
minimum elong	7862 Mar 22 13:40	3°♊29'10	2°53'17	minimum elong	7863 Mar 06 21:55	17°♊27'28	2°22'50
min. Earth dist.	7862 Mar 23 00:46	2°♊50'42	0.68106 AU	min. Earth dist.	7863 Mar 06 21:00	17°♊30'42	0.68380 AU
	7862 Mar 25 03:47	30°♊		morning rise	7863 Mar 12 03:41	11°♊09'35	
morning rise	7862 Mar 27 18:50	27°♊07'55		direct	7863 Mar 16 20:29	9°♊11'03	
direct	7862 Apr 02 01:41	24°♊48'10		morning max el	7863 Mar 26 03:07	14°♊37'04	22°03'02
	7862 Apr 11 12:21	0°♊		desc. node	7863 Apr 02 20:13	23°♊40'47	
morning max el	7862 Apr 12 15:20	1°♊06'06	23°31'27		7863 Apr 07 12:36	0°♊	
desc. node	7862 Apr 15 23:15	4°♊42'58			7863 Apr 27 11:17	0°♊	
	7862 May 04 11:37	0°♊		morning set	7863 Apr 28 02:57	1°♊02'57	
morning set	7862 May 17 18:37	21°♊16'27		max. Earth dist.	7863 May 03 16:11	10°♊09'56	1.41237 AU
max. Earth dist.	7862 May 21 17:53	28°♊06'24	1.39020 AU				
	7862 May 22 19:43	0°♊		superior conj	7863 May 11 10:18	23°♊30'59	-1°52'04
superior conj	7862 May 29 06:40	11°♊44'43	-1°25'47	minimum elong	7863 May 11 15:56	23°♊55'58	1°51'41

	7863 May 15 01:07	0°♊		superior conj	7864 Apr 21 15:13	4°♊15'28	-2°08'45
evening rise	7863 May 21 23:03	12°♊44'28		minimum elong	7864 Apr 21 18:21	4°♊28'39	2°08'43
asc. node	7863 May 25 21:03	19°♊58'08		evening rise	7864 May 03 16:57	25°♊09'31	
	7863 May 31 16:22	0°♋			7864 May 06 10:39	0°♊	
evening max el	7863 Jun 07 02:42	8°♋28'31	18°15'00	asc. node	7864 May 11 18:06	9°♊10'38	
retrograde	7863 Jun 14 05:21	12°♋02'51		evening max el	7864 May 20 14:54	21°♊33'19	18°05'28
evening set	7863 Jun 16 13:44	11°♋40'14		retrograde	7864 May 27 03:40	24°♊55'05	
inferior conj	7863 Jun 23 17:43	6°♋57'40	1°42'20	evening set	7864 May 29 19:25	24°♊21'21	
minimum elong	7863 Jun 23 20:38	6°♋51'22	1°41'18	inferior conj	7864 Jun 05 07:13	19°♊18'35	2°39'03
min. Earth dist.	7863 Jun 27 03:13	4°♋02'59	0.59232 AU	minimum elong	7864 Jun 05 10:06	19°♊11'21	2°38'17
desc. node	7863 Jun 29 19:39	2°♋02'47		min. Earth dist.	7864 Jun 08 09:26	16°♊14'57	0.61479 AU
morning rise	7863 Jul 01 00:27	1°♋18'27		morning rise	7864 Jun 11 22:40	13°♊18'05	
	7863 Jul 03 23:37	30°♋♊		desc. node	7864 Jun 15 16:40	11°♊26'09	
direct	7863 Jul 07 08:00	29°♊29'12		direct	7864 Jun 18 15:29	10°♊59'38	
	7863 Jul 10 18:22	0°♌		morning max el	7864 Jul 02 20:44	18°♊59'30	27°54'47
morning max el	7863 Jul 21 16:53	7°♌18'35	27°28'58		7864 Jul 12 04:02	0°♌	
	7863 Aug 07 19:13	0°♍			7864 Jul 30 15:36	0°♍	
asc. node	7863 Aug 21 20:24	26°♍13'18		morning set	7864 Aug 05 03:19	10°♍50'22	
morning set	7863 Aug 22 00:27	26°♍34'34		asc. node	7864 Aug 07 17:23	16°♍14'18	
	7863 Aug 23 15:14	0°♎		max. Earth dist.	7864 Aug 10 21:41	23°♍04'44	1.31977 AU
max. Earth dist.	7863 Aug 28 13:11	10°♎44'22	1.31690 AU				
				superior conj	7864 Aug 12 12:50	26°♍39'00	0°47'31
superior conj	7863 Aug 29 02:33	11°♎58'26	1°08'18	minimum elong	7864 Aug 12 10:55	26°♍28'27	0°47'03
minimum elong	7863 Aug 29 00:18	11°♎45'57	1°07'53		7864 Aug 14 01:22	0°♎	
evening rise	7863 Sep 04 20:50	26°♎47'38		evening rise	7864 Aug 19 07:51	11°♎30'29	
	7863 Sep 06 09:16	0°♏			7864 Aug 28 15:33	0°♏	
	7863 Sep 23 08:00	0°♐		desc. node	7864 Sep 11 15:42	20°♏22'24	
desc. node	7863 Sep 25 18:38	3°♐21'07		evening max el	7864 Sep 14 03:38	22°♏56'32	24°46'53
evening max el	7863 Oct 03 12:32	12°♐10'31	26°10'37	retrograde	7864 Sep 27 23:39	29°♏54'28	
retrograde	7863 Oct 17 10:50	19°♐15'17		evening set	7864 Oct 03 09:45	28°♏48'36	
evening set	7863 Oct 23 22:28	17°♐34'04		min. Earth dist.	7864 Oct 08 14:48	26°♏03'14	0.56891 AU
min. Earth dist.	7863 Oct 28 01:38	14°♐59'25	0.58821 AU	inferior conj	7864 Oct 11 08:37	24°♏16'49	-5°28'43
inferior conj	7863 Oct 31 05:49	12°♐37'47	-4°52'07	minimum elong	7864 Oct 11 11:25	24°♏12'17	5°28'30
minimum elong	7863 Oct 31 12:32	12°♐25'14	4°50'40	morning rise	7864 Oct 19 15:17	20°♏10'29	
morning rise	7863 Nov 08 04:54	8°♐08'46		direct	7864 Oct 22 04:34	19°♏52'16	
direct	7863 Nov 10 11:45	7°♐51'09		morning max el	7864 Oct 31 13:10	24°♏18'14	19°21'27
asc. node	7863 Nov 17 19:53	11°♐05'05		asc. node	7864 Nov 03 16:53	27°♏46'45	
morning max el	7863 Nov 18 14:19	11°♐47'39	18°29'09		7864 Nov 05 09:09	0°♑	
	7863 Nov 30 17:18	0°♒		morning set	7864 Nov 17 15:56	21°♑48'58	
morning set	7863 Dec 04 14:36	7°♒23'12			7864 Nov 21 17:55	0°♒	
superior conj	7863 Dec 13 13:28	24°♒26'02	1°04'37	superior conj	7864 Nov 25 17:50	7°♒54'12	1°25'09
minimum elong	7863 Dec 13 16:57	24°♒42'09	1°04'17	minimum elong	7864 Nov 25 20:39	8°♒07'56	1°24'59
	7863 Dec 16 14:30	0°♓		max. Earth dist.	7864 Dec 02 05:48	20°♒11'03	1.38157 AU
max. Earth dist.	7863 Dec 21 00:05	7°♓46'26	1.40322 AU	evening rise	7864 Dec 05 23:27	26°♒52'00	
desc. node	7863 Dec 22 17:40	10°♓44'51			7864 Dec 07 18:49	0°♓	
evening rise	7863 Dec 25 07:14	15°♓03'43		desc. node	7864 Dec 08 14:40	1°♓24'48	
	7864 Jan 03 16:09	0°♈			7864 Dec 27 04:45	0°♈	
	7864 Jan 25 14:54	0°♉		evening max el	7865 Jan 10 12:04	17°♈20'15	24°59'58
evening max el	7864 Jan 28 22:56	3°♉34'06	23°42'21	retrograde	7865 Jan 22 08:14	24°♈12'44	
retrograde	7864 Feb 08 18:28	9°♉56'37		evening set	7865 Jan 28 00:28	21°♈51'08	
evening set	7864 Feb 13 21:55	7°♉48'15		asc. node	7865 Jan 30 16:07	19°♈07'56	
asc. node	7864 Feb 13 19:04	7°♉54'13		min. Earth dist.	7865 Feb 01 12:26	16°♈49'10	0.67717 AU
min. Earth dist.	7864 Feb 18 17:38	2°♉11'45	0.68245 AU	inferior conj	7865 Feb 02 14:40	15°♈23'08	0°57'38
inferior conj	7864 Feb 19 08:28	1°♉21'09	1°44'35	minimum elong	7865 Feb 02 13:19	15°♈27'32	0°57'12
minimum elong	7864 Feb 19 06:24	1°♉28'11	1°43'56	morning rise	7865 Feb 08 02:26	9°♈26'11	
	7864 Feb 20 08:25	30°♈♈		direct	7865 Feb 11 16:51	8°♈11'42	
morning rise	7864 Feb 24 14:52	25°♈16'52		morning max el	7865 Feb 18 23:05	12°♈14'20	19°35'40
direct	7864 Feb 28 17:59	23°♈40'55		greatest brilliancy	7865 Mar 03 17:29	28°♈57'16	-0.7m
morning max el	7864 Mar 07 21:07	28°♈19'42	20°42'52		7865 Mar 04 10:27	0°♉	
	7864 Mar 09 11:23	0°♊		desc. node	7865 Mar 06 14:07	3°♉12'50	
desc. node	7864 Mar 19 17:10	13°♊14'07		morning set	7865 Mar 16 07:13	18°♊01'14	
	7864 Mar 31 02:22	0°♋			7865 Mar 24 00:26	0°♋	
morning set	7864 Apr 06 09:50	9°♋41'37		max. Earth dist.	7865 Mar 28 10:27	6°♋57'12	1.44618 AU
max. Earth dist.	7864 Apr 14 21:49	23°♋10'29	1.43185 AU				
	7864 Apr 19 01:54	0°♌		superior conj	7865 Apr 01 19:10	13°♋54'42	-2°09'40
				minimum elong	7865 Apr 01 16:03	13°♋42'14	2°09'37

	7865 Apr 11 15:10	0°♄		max. Earth dist.	7866 Mar 11 03:38	21°♄12'51	1.45386 AU
evening rise	7865 Apr 15 14:47	6°♄40'23					
asc. node	7865 Apr 28 15:08	27°♄55'05		superior conj	7866 Mar 12 03:56	22°♄48'06	-1°50'35
	7865 Apr 30 02:15	0°♄		minimum elong	7866 Mar 11 18:59	22°♄13'00	1°49'52
evening max el	7865 May 04 04:08	4°♄54'34	18°14'50		7866 Mar 16 17:48	0°♄	
retrograde	7865 May 10 13:26	8°♄18'24		evening rise	7866 Mar 27 13:20	17°♄12'43	
evening set	7865 May 13 12:14	7°♄31'54		greatest brilliancy	7866 Apr 03 18:16	28°♄46'54	-0.9m
inferior conj	7865 May 19 11:55	2°♄10'40	3°11'15		7866 Apr 04 12:37	0°♄	
minimum elong	7865 May 19 13:42	2°♄05'41	3°10'54	asc. node	7866 Apr 15 12:11	16°♄02'43	
	7865 May 21 10:28	30°♄		evening max el	7866 Apr 17 15:41	18°♄25'50	18°42'23
min. Earth dist.	7865 May 22 00:58	29°♄20'20	0.63596 AU	retrograde	7866 Apr 24 06:29	22°♄04'33	
morning rise	7865 May 25 13:55	25°♄58'26		evening set	7866 Apr 27 12:29	21°♄04'16	
direct	7865 Jun 01 08:11	23°♄19'32		inferior conj	7866 May 03 03:53	15°♄26'17	3°24'00
desc. node	7865 Jun 02 13:40	23°♄24'20		minimum elong	7866 May 03 04:16	15°♄25'05	3°23'54
	7865 Jun 13 19:54	0°♄		min. Earth dist.	7866 May 05 01:42	13°♄05'52	0.65403 AU
morning max el	7865 Jun 15 05:20	1°♄21'24	27°42'51	morning rise	7866 May 08 19:24	9°♄09'16	
	7865 Jul 06 08:23	0°♄		direct	7866 May 15 08:42	6°♄21'58	
morning set	7865 Jul 19 23:08	24°♄43'07		desc. node	7866 May 20 10:40	7°♄44'53	
	7865 Jul 22 13:41	0°♄		morning max el	7866 May 28 15:43	14°♄13'33	26°57'48
max. Earth dist.	7865 Jul 25 00:18	5°♄05'30	1.32724 AU		7866 Jun 10 11:06	0°♄	
asc. node	7865 Jul 25 14:23	6°♄20'04			7866 Jun 29 01:16	0°♄	
				morning set	7866 Jul 03 08:54	8°♄04'01	
superior conj	7865 Jul 27 19:49	11°♄05'49	0°22'33	max. Earth dist.	7866 Jul 07 17:17	16°♄37'43	1.33958 AU
minimum elong	7865 Jul 27 18:45	11°♄00'04	0°22'14				
evening rise	7865 Aug 03 19:31	26°♄11'59		superior conj	7866 Jul 11 21:20	25°♄12'23	-0°05'57
	7865 Aug 05 14:46	0°♄		minimum elong	7866 Jul 11 21:39	25°♄14'06	0°06'00
	7865 Aug 23 14:47	0°♄		behind sun begin	7866 Jul 11 16:22	24°♄46'23	
evening max el	7865 Aug 26 15:01	3°♄12'53	23°08'53	behind sun end	7866 Jul 12 02:57	25°♄41'51	
desc. node	7865 Aug 29 12:45	5°♄45'34		asc. node	7866 Jul 12 11:24	26°♄26'08	
retrograde	7865 Sep 09 00:34	9°♄54'57			7866 Jul 14 03:56	0°♄	
evening set	7865 Sep 12 22:43	9°♄21'15		evening rise	7866 Jul 19 05:54	10°♄45'50	
min. Earth dist.	7865 Sep 19 24:00	6°♄07'14	0.55419 AU		7866 Jul 29 05:21	0°♄	
inferior conj	7865 Sep 21 15:53	5°♄09'15	-5°23'56	evening max el	7866 Aug 08 07:25	13°♄33'59	21°33'04
minimum elong	7865 Sep 21 11:26	5°♄15'44	5°23'30	desc. node	7866 Aug 16 09:50	18°♄57'41	
morning rise	7865 Sep 30 02:19	1°♄18'48		retrograde	7866 Aug 20 15:03	19°♄40'25	
direct	7865 Oct 03 02:05	0°♄57'33		evening set	7866 Aug 23 04:41	19°♄25'24	
morning max el	7865 Oct 13 23:44	6°♄03'22	20°36'02	inferior conj	7866 Sep 01 10:11	15°♄26'46	-4°24'39
asc. node	7865 Oct 21 13:53	15°♄28'19		minimum elong	7866 Sep 01 00:51	15°♄39'51	4°22'20
	7865 Oct 29 17:50	0°♄		min. Earth dist.	7866 Sep 01 08:57	15°♄28'30	0.54721 AU
morning set	7865 Nov 01 22:52	6°♄29'35		morning rise	7866 Sep 09 22:00	11°♄35'51	
				direct	7866 Sep 13 11:35	11°♄08'12	
superior conj	7865 Nov 09 10:35	21°♄58'04	1°37'07	morning max el	7866 Sep 25 21:53	17°♄00'51	22°10'14
minimum elong	7865 Nov 09 12:09	22°♄05'59	1°37'09		7866 Oct 06 02:34	0°♄	
	7865 Nov 13 10:56	0°♄		asc. node	7866 Oct 08 10:54	3°♄55'13	
max. Earth dist.	7865 Nov 14 13:23	2°♄08'48	1.36111 AU	morning set	7866 Oct 17 09:07	21°♄17'40	
evening rise	7865 Nov 18 11:22	9°♄33'11			7866 Oct 21 11:26	0°♄	
desc. node	7865 Nov 25 11:43	21°♄56'13					
	7865 Nov 30 10:06	0°♄		superior conj	7866 Oct 24 11:55	6°♄25'27	1°41'35
	7865 Dec 22 22:24	0°♄		minimum elong	7866 Oct 24 12:07	6°♄26'32	1°41'40
evening max el	7865 Dec 24 01:01	1°♄06'12	26°07'59	max. Earth dist.	7866 Oct 28 03:38	14°♄01'49	1.34375 AU
retrograde	7866 Jan 05 17:12	8°♄17'56		evening rise	7866 Nov 01 14:58	22°♄56'20	
evening set	7866 Jan 11 22:01	5°♄46'17			7866 Nov 05 08:49	0°♄	
min. Earth dist.	7866 Jan 16 03:17	1°♄18'54	0.66817 AU	desc. node	7866 Nov 12 08:46	12°♄13'15	
	7866 Jan 17 04:50	30°♄			7866 Nov 24 02:39	0°♄	
inferior conj	7866 Jan 17 16:56	29°♄22'27	0°03'10	evening max el	7866 Dec 06 14:10	14°♄44'45	26°59'09
minimum elong	7866 Jan 17 16:51	29°♄22'44	0°03'14	retrograde	7866 Dec 19 20:33	22°♄04'22	
transit middle	7866 Jan 17 16:51	29°♄22'44	0°03'14	evening set	7866 Dec 26 12:31	19°♄27'54	
transit begin	7866 Jan 17 14:03	29°♄31'25		min. Earth dist.	7866 Dec 30 11:54	15°♄34'47	0.65556 AU
transit end	7866 Jan 17 19:39	29°♄14'04		inferior conj	7867 Jan 01 13:07	13°♄14'05	-0°58'09
asc. node	7866 Jan 17 13:09	29°♄34'10		minimum elong	7867 Jan 01 14:49	13°♄09'15	0°57'19
morning rise	7866 Jan 23 12:21	23°♄34'43		asc. node	7867 Jan 04 10:13	10°♄07'48	
direct	7866 Jan 26 15:34	22°♄38'51		morning rise	7867 Jan 07 18:16	7°♄37'59	
morning max el	7866 Feb 02 08:27	26°♄17'44	18°43'51	direct	7867 Jan 10 12:12	6°♄56'59	
	7866 Feb 05 15:05	0°♄		morning max el	7867 Jan 16 23:05	10°♄23'15	18°08'34
desc. node	7866 Feb 21 11:06	23°♄30'14			7867 Jan 30 17:15	0°♄	
morning set	7866 Feb 23 19:34	27°♄11'40		morning set	7867 Feb 04 12:39	7°♄49'25	
	7866 Feb 25 14:28	0°♄		desc. node	7867 Feb 08 08:05	14°♄00'40	

	7867 Feb 18 08:10	0°♄	morning set	7868 Jan 17 09:42	19°♄49'08	
				7868 Jan 23 09:54	0°♄	
superior conj	7867 Feb 19 09:45	1°♄40'54 -1°13'57	desc. node	7868 Jan 26 05:03	4°♄39'45	
minimum elong	7867 Feb 19 01:20	1°♄07'42 1°12'53				
max. Earth dist.	7867 Feb 21 22:56	5°♄41'20 1.45417 AU	superior conj	7868 Jan 30 07:12	11°♄22'12 -0°29'16	
evening rise	7867 Mar 07 13:57	26°♄54'53	minimum elong	7868 Jan 30 03:55	11°♄08'52 0°28'41	
	7867 Mar 09 13:40	0°♄	max. Earth dist.	7868 Feb 04 18:01	20°♄07'09 1.44718 AU	
greatest brilliancy	7867 Mar 20 01:58	16°♄09'09 -0.7m		7868 Feb 11 01:10	0°♄	
	7867 Mar 30 02:41	0°♄	evening rise	7868 Feb 15 01:55	6°♄13'20	
evening max el	7867 Mar 31 23:26	2°♄02'19 19°26'56		7868 Mar 01 22:47	0°♄	
asc. node	7867 Apr 02 09:15	3°♄22'26	evening max el	7868 Mar 14 01:58	15°♄40'21 20°26'27	
retrograde	7867 Apr 08 03:31	6°♄07'14	asc. node	7868 Mar 19 06:21	19°♄39'54	
evening set	7867 Apr 11 17:25	4°♄52'21	retrograde	7868 Mar 22 01:58	20°♄20'33	
	7867 Apr 16 09:04	30°♄♄	evening set	7868 Mar 26 00:49	18°♄50'34	
inferior conj	7867 Apr 17 03:43	28°♄59'14 3°21'34	inferior conj	7868 Mar 31 08:39	12°♄44'06 3°06'53	
minimum elong	7867 Apr 17 02:54	29°♄01'57 3°21'26	minimum elong	7868 Mar 31 06:56	12°♄49'58 3°06'36	
min. Earth dist.	7867 Apr 18 10:25	27°♄18'39 0.66802 AU	min. Earth dist.	7868 Apr 01 01:12	11°♄47'32 0.67758 AU	
morning rise	7867 Apr 22 12:01	22°♄41'44	morning rise	7868 Apr 05 12:50	6°♄28'29	
direct	7867 Apr 28 15:35	19°♄58'06	direct	7868 Apr 11 03:43	3°♄58'12	
desc. node	7867 May 07 07:41	23°♄56'50	morning max el	7868 Apr 22 10:36	10°♄43'23 24°23'08	
morning max el	7867 May 11 01:37	27°♄23'50 25°47'58	desc. node	7868 Apr 23 04:40	11°♄29'53	
	7867 May 13 12:15	0°♄		7868 May 07 18:24	0°♄	
	7867 Jun 04 03:03	0°♄		7868 May 26 20:16	0°♄	
morning set	7867 Jun 16 04:47	20°♄42'42	morning set	7868 May 28 05:40	2°♄24'35	
max. Earth dist.	7867 Jun 19 23:17	27°♄46'13 1.35663 AU	max. Earth dist.	7868 May 31 21:12	8°♄52'58 1.37741 AU	
	7867 Jun 21 03:07	0°♄				
superior conj	7867 Jun 25 14:50	8°♄52'10 -0°36'49	superior conj	7868 Jun 07 20:55	21°♄55'37 -1°08'21	
minimum elong	7867 Jun 25 17:00	9°♄03'04 0°36'31	minimum elong	7868 Jun 08 01:05	22°♄15'39 1°07'48	
asc. node	7867 Jun 29 08:26	16°♄28'55	asc. node	7868 Jun 12 00:08	0°♄	
evening rise	7867 Jul 03 12:58	25°♄06'26	evening rise	7868 Jun 15 05:27	6°♄23'43	
	7867 Jul 05 22:54	0°♄		7868 Jun 16 14:07	9°♄06'00	
evening max el	7867 Jul 21 11:43	24°♄29'39 20°11'37	evening max el	7868 Jun 28 05:07	0°♄	
retrograde	7867 Aug 01 04:01	29°♄45'34	retrograde	7868 Jul 03 04:55	6°♄09'09 19°10'00	
evening set	7867 Aug 03 02:20	29°♄36'01	retrograde	7868 Jul 12 04:53	10°♄35'42	
desc. node	7867 Aug 03 06:54	29°♄34'04	evening set	7868 Jul 14 02:46	10°♄24'30	
inferior conj	7867 Aug 12 04:51	25°♄37'47 -2°40'40	desc. node	7868 Jul 20 03:58	7°♄46'52	
minimum elong	7867 Aug 11 21:32	25°♄48'36 2°38'08	inferior conj	7868 Jul 22 13:30	6°♄12'55 -0°43'49	
min. Earth dist.	7867 Aug 13 19:34	24°♄40'33 0.54979 AU	minimum elong	7868 Jul 22 11:36	6°♄16'08 0°43'12	
morning rise	7867 Aug 20 15:30	21°♄26'23	min. Earth dist.	7868 Jul 25 09:12	4°♄19'15 0.56145 AU	
direct	7867 Aug 24 22:35	20°♄46'26	morning rise	7868 Jul 30 17:26	1°♄26'44	
morning max el	7867 Sep 07 11:51	27°♄23'49 23°55'21	direct	7868 Aug 04 20:39	0°♄25'49	
	7867 Sep 10 01:21	0°♄	morning max el	7868 Aug 19 00:46	7°♄39'12 25°36'39	
asc. node	7867 Sep 25 07:56	22°♄56'28		7868 Sep 04 13:17	0°♄	
	7867 Sep 28 22:07	0°♄	asc. node	7868 Sep 11 04:56	12°♄22'51	
morning set	7867 Oct 01 20:47	6°♄08'02	morning set	7868 Sep 15 08:13	20°♄55'41	
				7868 Sep 19 12:29	0°♄	
superior conj	7867 Oct 08 18:57	21°♄07'44 1°39'27	superior conj	7868 Sep 22 05:19	5°♄57'36 1°31'29	
minimum elong	7867 Oct 08 17:59	21°♄02'32 1°39'28	minimum elong	7868 Sep 22 03:32	5°♄47'44 1°31'19	
max. Earth dist.	7867 Oct 11 02:33	26°♄07'13 1.33050 AU	max. Earth dist.	7868 Sep 23 08:34	8°♄27'32 1.32164 AU	
	7867 Oct 12 22:31	0°♄	evening rise	7868 Sep 29 06:39	21°♄09'31	
evening rise	7867 Oct 16 06:30	6°♄51'31		7868 Oct 03 16:12	0°♄	
	7867 Oct 28 22:01	0°♄	desc. node	7868 Oct 16 02:54	21°♄35'54	
desc. node	7867 Oct 30 05:49	2°♄09'21		7868 Oct 21 23:46	0°♄	
evening max el	7867 Nov 19 02:31	28°♄05'14 27°26'16	evening max el	7868 Oct 31 11:41	10°♄53'59 27°23'15	
	7867 Nov 21 05:36	0°♄	retrograde	7868 Nov 14 07:04	18°♄07'52	
retrograde	7867 Dec 02 17:25	5°♄23'54	evening set	7868 Nov 21 09:48	15°♄45'35	
evening set	7867 Dec 09 17:30	2°♄49'53	min. Earth dist.	7868 Nov 25 01:53	12°♄52'27 0.62082 AU	
	7867 Dec 12 23:41	30°♄♄	inferior conj	7868 Nov 28 00:44	10°♄09'26 -3°13'55	
min. Earth dist.	7867 Dec 13 12:02	29°♄29'19 0.63962 AU	minimum elong	7868 Nov 28 06:45	9°♄55'32 3°11'41	
inferior conj	7867 Dec 16 00:43	26°♄52'12 -2°04'50	morning rise	7868 Dec 05 05:48	5°♄06'17	
minimum elong	7867 Dec 16 04:35	26°♄42'10 2°03'09	direct	7868 Dec 07 12:18	4°♄43'37	
asc. node	7867 Dec 22 07:18	21°♄41'42	asc. node	7868 Dec 08 04:21	4°♄45'38	
morning rise	7867 Dec 22 17:20	21°♄30'48	morning max el	7868 Dec 14 08:49	8°♄12'33 17°50'12	
direct	7867 Dec 25 04:14	21°♄00'47		7868 Dec 28 14:13	0°♄	
morning max el	7867 Dec 31 16:14	24°♄23'59 17°50'25	morning set	7868 Dec 30 04:27	2°♄51'13	
	7868 Jan 05 06:01	0°♄				



superior conj	7869 Jan 10 05:56	22°  17'37	0°13'27			7869 Dec 04 06:58	0° 	
minimum elong	7869 Jan 10 07:11	22°  22'56	0°13'23	morning set		7869 Dec 13 14:38	16°  36'02	
behind sun begin	7869 Jan 10 02:21	22°  02'20				7869 Dec 20 19:12	0° 	
behind sun end	7869 Jan 10 12:01	22°  43'31						
desc. node	7869 Jan 12 02:02	25°  24'11		superior conj		7869 Dec 23 05:17	4°  23'24	0°48'34
	7869 Jan 14 20:14	0° 		minimum elong		7869 Dec 23 08:34	4°  38'07	0°48'14
max. Earth dist.	7869 Jan 17 10:03	4°  13'07	1.43367 AU	desc. node		7869 Dec 29 23:03	16°  30'52	
evening rise	7869 Jan 24 16:20	15°  46'05		max. Earth dist.		7869 Dec 30 20:52	17°  34'07	1.41519 AU
	7869 Feb 03 00:42	0° 		evening rise		7870 Jan 04 22:21	26°  03'10	
evening max el	7869 Feb 24 22:59	29°  19'29	21°37'39			7870 Jan 07 09:30	0° 	
	7869 Feb 25 15:18	0° 				7870 Jan 27 19:37	0° 	
retrograde	7869 Mar 05 23:53	4°  40'37		evening max el		7870 Feb 07 15:23	13°  00'28	22°56'08
asc. node	7869 Mar 06 03:25	4°  40'30		retrograde		7870 Feb 17 19:40	19°  02'36	
evening set	7869 Mar 10 08:54	2°  55'20		asc. node		7870 Feb 21 00:29	18°  11'11	
	7869 Mar 13 04:08	30°  08'08		evening set		7870 Feb 22 16:01	17°  02'25	
inferior conj	7869 Mar 15 16:25	26°  08'00	2°41'58	min. Earth dist.		7870 Feb 27 16:45	11°  06'09	0.68370 AU
minimum elong	7869 Mar 15 14:13	26°  45'39	2°41'27	inferior conj		7870 Feb 28 01:01	10°  03'31	2°07'58
min. Earth dist.	7869 Mar 15 20:04	26°  25'19	0.68275 AU	minimum elong		7870 Feb 27 22:47	10°  45'16	2°07'19
morning rise	7869 Mar 20 19:24	20°  08'41		morning rise		7870 Mar 05 05:27	4°  29'46	
direct	7869 Mar 25 20:14	18°  14'50		direct		7870 Mar 09 16:12	2°  41'05	
morning max el	7869 Apr 04 20:33	24°  10'21	22°53'22	morning max el		7870 Mar 18 10:43	7°  46'22	21°27'34
desc. node	7869 Apr 10 01:37	0°  01'49		desc. node		7870 Mar 27 22:35	19°  16'04	
	7869 Apr 10 01:02	0° 				7870 Apr 04 12:59	0° 	
	7869 May 01 04:37	0° 		morning set		7870 Apr 19 02:34	22°  10'44	
morning set	7869 May 09 05:58	12°  05'00				7870 Apr 23 23:27	0° 	
max. Earth dist.	7869 May 13 17:40	20°  29'46	1.39981 AU	max. Earth dist.		7870 Apr 25 18:33	2°  56'32	1.42108 AU
	7869 May 19 03:39	0° 						
superior conj	7869 May 21 11:30	4°  12'53	-1°37'44	superior conj		7870 May 03 05:53	15°  03'22	-2°00'42
minimum elong	7869 May 21 17:06	4°  38'28	1°37'11	minimum elong		7870 May 03 10:57	15°  55'14	2°00'27
evening rise	7869 May 31 06:18	22°  13'31		evening rise		7870 May 11 09:21	0° 	
asc. node	7869 Jun 02 02:28	26°  06'19		asc. node		7870 May 19 23:30	15°  11'37	
	7869 Jun 04 04:18	0° 				7870 May 29 12:13	0° 	
evening max el	7869 Jun 16 08:24	18°  28'53	18°29'14	evening max el		7870 May 30 18:28	1°  20'09	18°08'39
retrograde	7869 Jun 24 00:30	22°  18'10		retrograde		7870 Jun 06 14:04	4°  47'34	
evening set	7869 Jun 26 04:25	22°  00'51		evening set		7870 Jun 09 01:29	4°  20'38	
inferior conj	7869 Jul 03 19:16	17°  29'53	0°56'50			7870 Jun 15 08:49	30°  08'08	
minimum elong	7869 Jul 03 21:14	17°  26'01	0°56'01	inferior conj		7870 Jun 15 22:08	29°  12'31	2°09'42
min. Earth dist.	7869 Jul 07 03:56	14°  51'30	0.57987 AU	minimum elong		7870 Jun 16 01:14	29°  12'21	2°08'42
desc. node	7869 Jul 07 01:00	14°  57'01		min. Earth dist.		7870 Jun 19 05:40	26°  12'45	0.60178 AU
morning rise	7869 Jul 11 10:37	12°  07'22		morning rise		7870 Jun 22 22:13	23°  13'39	
direct	7869 Jul 17 09:01	10°  36'56		desc. node		7870 Jun 23 22:01	23°  10'52	
morning max el	7869 Jul 31 18:26	18°  16'27	26°57'13	direct		7870 Jun 29 10:35	21°  13'03	
	7869 Aug 10 14:07	0° 		morning max el		7870 Jul 13 18:47	29°  13'58	27°44'43
	7869 Aug 28 01:03	0° 				7870 Jul 14 05:36	0° 	
asc. node	7869 Aug 29 01:53	2°  07'14				7870 Aug 04 13:22	0° 	
morning set	7869 Aug 30 17:44	5°  03'30		morning set		7870 Aug 14 23:37	20°  02'25	
				asc. node		7870 Aug 15 22:51	22°  04'01	
superior conj	7869 Sep 06 17:04	20°  08'40	1°18'12			7870 Aug 19 15:27	0° 	
minimum elong	7869 Sep 06 14:51	20°  03'23	1°17'51	max. Earth dist.		7870 Aug 21 04:21	3°  02'33	1.31749 AU
max. Earth dist.	7869 Sep 06 18:22	20°  05'52	1.31730 AU					
	7869 Sep 10 21:03	0° 		superior conj		7870 Aug 22 04:26	5°  03'56	1°00'02
evening rise	7869 Sep 13 12:44	5°  42'27		minimum elong		7870 Aug 22 02:15	5°  03'25	0°59'36
	7869 Sep 26 06:57	0° 		evening rise		7870 Aug 28 22:32	20°  03'59	
desc. node	7869 Oct 02 23:58	10°  02'20				7870 Sep 02 13:51	0° 	
evening max el	7869 Oct 13 14:51	22°  05'42	26°46'32	desc. node		7870 Sep 19 21:02	28°  06'18	
	7869 Oct 25 22:20	0° 				7870 Sep 21 11:02	0° 	
retrograde	7869 Oct 27 12:39	0°  06'25		evening max el		7870 Sep 25 10:15	4°  03'11	25°37'47
	7869 Oct 29 02:38	30°  08'08		retrograde		7870 Oct 09 08:36	11°  03'14	
evening set	7869 Nov 03 09:11	28°  06'54		evening set		7870 Oct 15 10:48	9°  03'47	
min. Earth dist.	7869 Nov 07 04:51	25°  30'19	0.60017 AU	min. Earth dist.		7870 Oct 19 22:33	7°  03'10	0.57963 AU
inferior conj	7869 Nov 10 09:38	22°  55'38	-4°19'39	inferior conj		7870 Oct 23 00:07	5°  03'01	-5°11'28
minimum elong	7869 Nov 10 16:48	22°  41'08	4°17'39	minimum elong		7870 Oct 23 05:43	4°  03'02	5°10'35
morning rise	7869 Nov 18 02:47	18°  13'57		morning rise		7870 Oct 31 02:58	0°	
direct	7869 Nov 20 08:14	17°  05'55		direct		7870 Nov 02 11:43	0°	
asc. node	7869 Nov 25 01:22	19°  03'01		morning max el		7870 Nov 11 02:18	4°  03'37	18°48'38
morning max el	7869 Nov 27 21:23	21°  03'39	18°09'05	asc. node		7870 Nov 11 22:22	5°  03'55	

morning set	7870 Nov 27 11:30	0° $\mathbb{A}$ 49'57		morning set	7871 Nov 11 15:33	15° $\mathbb{M}$ 22'56	
	7870 Nov 27 01:17	0° $\mathbb{A}$			7871 Nov 18 20:34	0° $\mathbb{A}$	
superior conj	7870 Dec 06 00:34	17° $\mathbb{A}$ 25'51	1°14'24	superior conj	7871 Nov 19 10:42	1° $\mathbb{A}$ 10'25	1°31'12
minimum elong	7870 Dec 06 03:53	17° $\mathbb{A}$ 41'34	1°14'08	minimum elong	7871 Nov 19 13:01	1° $\mathbb{A}$ 21'56	1°31'08
	7870 Dec 12 20:57	0° $\mathbb{B}$		max. Earth dist.	7871 Nov 25 08:57	12° $\mathbb{A}$ 37'53	1.37266 AU
max. Earth dist.	7870 Dec 13 03:10	0° $\mathbb{B}$ 27'31	1.39403 AU	evening rise	7871 Nov 29 03:10	19° $\mathbb{A}$ 31'04	
desc. node	7870 Dec 16 20:04	6° $\mathbb{B}$ 53'13		desc. node	7871 Dec 03 17:06	27° $\mathbb{A}$ 30'14	
evening rise	7870 Dec 17 02:06	7° $\mathbb{B}$ 18'50			7871 Dec 05 04:43	0° $\mathbb{B}$	
	7870 Dec 31 09:40	0° $\mathbb{B}$			7871 Dec 25 12:38	0° $\mathbb{B}$	
evening max el	7871 Jan 21 05:13	26° $\mathbb{B}$ 45'14	24°16'04	evening max el	7872 Jan 03 18:23	10° $\mathbb{B}$ 32'50	25°30'35
	7871 Jan 24 20:17	0° $\mathbb{H}$		retrograde	7872 Jan 15 23:46	17° $\mathbb{B}$ 34'29	
retrograde	7871 Feb 01 11:59	3° $\mathbb{H}$ 22'15		evening set	7872 Jan 21 21:21	15° $\mathbb{B}$ 08'29	
evening set	7871 Feb 06 20:42	1° $\mathbb{H}$ 08'09		asc. node	7872 Jan 25 18:36	10° $\mathbb{B}$ 58'28	
asc. node	7871 Feb 07 21:32	0° $\mathbb{H}$ 10'26		min. Earth dist.	7872 Jan 26 06:30	10° $\mathbb{B}$ 21'00	0.67379 AU
	7871 Feb 08 01:38	30° $\mathbb{R}$		inferior conj	7872 Jan 27 13:27	8° $\mathbb{B}$ 41'41	0°35'27
min. Earth dist.	7871 Feb 11 13:00	25° $\mathbb{B}$ 46'03	0.68066 AU	minimum elong	7872 Jan 27 12:34	8° $\mathbb{B}$ 44'30	0°35'11
inferior conj	7871 Feb 12 08:38	24° $\mathbb{B}$ 39'52	1°25'38	morning rise	7872 Feb 02 04:10	2° $\mathbb{B}$ 48'09	
minimum elong	7871 Feb 12 06:49	24° $\mathbb{B}$ 46'00	1°25'02	direct	7872 Feb 05 13:41	1° $\mathbb{B}$ 41'49	
morning rise	7871 Feb 17 17:01	18° $\mathbb{B}$ 38'14		morning max el	7872 Feb 12 13:12	5° $\mathbb{B}$ 32'47	19°11'35
direct	7871 Feb 21 14:30	17° $\mathbb{B}$ 11'40		greatest brilliancy	7872 Feb 25 21:16	23° $\mathbb{B}$ 22'10	-0.7m
morning max el	7871 Mar 01 07:58	21° $\mathbb{B}$ 34'01	20°12'22	desc. node	7872 Feb 29 16:32	29° $\mathbb{B}$ 09'03	
	7871 Mar 08 09:24	0° $\mathbb{H}$			7872 Mar 01 05:50	0° $\mathbb{H}$	
desc. node	7871 Mar 14 19:33	9° $\mathbb{H}$ 01'17		morning set	7872 Mar 07 03:33	9° $\mathbb{H}$ 06'18	
	7871 Mar 28 18:06	0° $\mathbb{Y}$		max. Earth dist.	7872 Mar 20 17:47	0° $\mathbb{Y}$ 18'08	1.45036 AU
morning set	7871 Mar 29 02:26	0° $\mathbb{Y}$ 32'10			7872 Mar 20 13:11	0° $\mathbb{Y}$	
max. Earth dist.	7871 Apr 08 02:42	16° $\mathbb{Y}$ 15'58	1.43866 AU				
superior conj	7871 Apr 14 00:06	25° $\mathbb{Y}$ 49'24	-2°11'25	superior conj	7872 Mar 23 18:40	5° $\mathbb{Y}$ 06'01	-2°04'04
minimum elong	7871 Apr 14 00:57	25° $\mathbb{Y}$ 52'54	2°11'28	minimum elong	7872 Mar 23 12:35	4° $\mathbb{Y}$ 41'55	2°03'47
	7871 Apr 16 12:41	0° $\mathbb{B}$		evening rise	7872 Apr 07 07:37	28° $\mathbb{Y}$ 36'51	
evening rise	7871 Apr 26 19:27	17° $\mathbb{B}$ 30'38			7872 Apr 08 03:47	0° $\mathbb{B}$	
	7871 May 04 01:49	0° $\mathbb{H}$		asc. node	7872 Apr 22 17:36	23° $\mathbb{B}$ 03'26	
asc. node	7871 May 06 20:32	4° $\mathbb{H}$ 33'03		evening max el	7872 Apr 26 20:26	27° $\mathbb{B}$ 59'55	18°24'26
evening max el	7871 May 14 07:31	14° $\mathbb{H}$ 32'57	18°07'18		7872 Apr 29 04:45	0° $\mathbb{H}$	
retrograde	7871 May 20 17:36	17° $\mathbb{H}$ 53'44		retrograde	7872 May 03 06:52	1° $\mathbb{H}$ 28'11	
evening set	7871 May 23 12:23	17° $\mathbb{H}$ 14'46		evening set	7872 May 06 08:48	0° $\mathbb{H}$ 35'46	
inferior conj	7871 May 29 18:34	12° $\mathbb{H}$ 04'16	2°55'25		7872 May 07 07:14	30° $\mathbb{R}$	
minimum elong	7871 May 29 21:03	11° $\mathbb{H}$ 57'43	2°54'49	inferior conj	7872 May 12 04:31	25° $\mathbb{B}$ 07'14	3°18'44
min. Earth dist.	7871 Jun 01 15:47	9° $\mathbb{H}$ 03'37	0.62406 AU	minimum elong	7872 May 12 05:43	25° $\mathbb{B}$ 03'46	3°18'31
morning rise	7871 Jun 05 03:58	5° $\mathbb{H}$ 57'55		min. Earth dist.	7872 May 14 11:09	22° $\mathbb{B}$ 28'13	0.64415 AU
desc. node	7871 Jun 10 19:03	3° $\mathbb{H}$ 33'07		morning rise	7872 May 18 01:42	18° $\mathbb{B}$ 52'37	
direct	7871 Jun 11 22:30	3° $\mathbb{H}$ 29'02		direct	7872 May 24 18:41	16° $\mathbb{B}$ 08'41	
morning max el	7871 Jun 26 00:45	11° $\mathbb{H}$ 31'21	27°54'09	desc. node	7872 May 27 16:04	16° $\mathbb{B}$ 35'27	
	7871 Jul 10 14:20	0° $\mathbb{B}$		morning max el	7872 Jun 07 10:15	24° $\mathbb{B}$ 06'57	27°27'17
	7871 Jul 27 22:00	0° $\mathbb{O}$			7872 Jun 12 17:01	0° $\mathbb{H}$	
morning set	7871 Jul 29 23:46	4° $\mathbb{O}$ 09'06			7872 Jul 02 23:39	0° $\mathbb{B}$	
asc. node	7871 Aug 02 19:50	12° $\mathbb{O}$ 07'28		morning set	7872 Jul 12 15:41	17° $\mathbb{B}$ 48'55	
max. Earth dist.	7871 Aug 04 10:34	15° $\mathbb{O}$ 34'38	1.32231 AU	max. Earth dist.	7872 Jul 17 09:27	27° $\mathbb{B}$ 23'31	1.33194 AU
					7872 Jul 18 15:28	0° $\mathbb{O}$	
superior conj	7871 Aug 06 13:32	20° $\mathbb{O}$ 10'58	0°37'25	asc. node	7872 Jul 19 16:51	2° $\mathbb{O}$ 13'41	
minimum elong	7871 Aug 06 11:55	20° $\mathbb{O}$ 02'07	0°37'00				
	7871 Aug 11 01:14	0° $\mathbb{H}$		superior conj	7872 Jul 20 18:29	4° $\mathbb{O}$ 29'48	0°10'52
evening rise	7871 Aug 13 10:01	5° $\mathbb{H}$ 06'51		minimum elong	7872 Jul 20 17:56	4° $\mathbb{O}$ 26'55	0°10'38
	7871 Aug 26 12:58	0° $\mathbb{B}$		behind sun begin	7872 Jul 20 13:50	4° $\mathbb{O}$ 05'01	
desc. node	7871 Sep 06 18:05	14° $\mathbb{B}$ 29'48		behind sun end	7872 Jul 20 22:03	4° $\mathbb{O}$ 48'51	
evening max el	7871 Sep 06 23:05	14° $\mathbb{B}$ 41'54	24°06'05	evening rise	7872 Jul 27 21:24	19° $\mathbb{O}$ 45'45	
retrograde	7871 Sep 20 16:21	21° $\mathbb{B}$ 34'32			7872 Aug 01 21:16	0° $\mathbb{H}$	
evening set	7871 Sep 25 11:39	20° $\mathbb{B}$ 43'46		evening max el	7872 Aug 18 11:33	24° $\mathbb{H}$ 55'34	22°26'56
min. Earth dist.	7871 Oct 01 09:50	17° $\mathbb{B}$ 47'57	0.56191 AU	desc. node	7872 Aug 23 15:10	29° $\mathbb{H}$ 01'05	
inferior conj	7871 Oct 03 18:18	16° $\mathbb{B}$ 21'07	-5°32'53		7872 Aug 25 11:03	0° $\mathbb{B}$	
minimum elong	7871 Oct 03 18:13	16° $\mathbb{B}$ 21'16	5°32'50	retrograde	7872 Aug 31 11:38	1° $\mathbb{B}$ 24'18	
morning rise	7871 Oct 12 02:55	12° $\mathbb{B}$ 22'25		evening set	7872 Sep 03 18:47	1° $\mathbb{B}$ 00'23	
direct	7871 Oct 14 20:09	12° $\mathbb{B}$ 03'13			7872 Sep 06 19:54	30° $\mathbb{R}$	
morning max el	7871 Oct 24 20:06	16° $\mathbb{B}$ 45'27	19°50'24	min. Earth dist.	7872 Sep 11 18:16	27° $\mathbb{H}$ 30'06	0.55019 AU
asc. node	7871 Oct 29 19:22	22° $\mathbb{B}$ 32'50		inferior conj	7872 Sep 12 18:43	26° $\mathbb{H}$ 55'34	-5°05'31
	7871 Nov 03 14:06	0° $\mathbb{M}$		minimum elong	7872 Sep 12 11:28	27° $\mathbb{H}$ 05'51	5°04'19
				morning rise	7872 Sep 21 05:57	23° $\mathbb{H}$ 07'29	

direct	7872 Sep 24 11:35	22° $\mathbb{M}$ 43'48		minimum elong	7873 Aug 23 02:00	7° $\mathbb{M}$ 19'01	3°41'35
morning max el	7872 Oct 06 00:58	28° $\mathbb{M}$ 08'45	21°14'04	min. Earth dist.	7873 Aug 24 03:27	6° $\mathbb{M}$ 42'57	0.54708 AU
	7872 Oct 07 21:18	0° $\mathbb{L}$		morning rise	7873 Aug 31 23:07	3° $\mathbb{M}$ 09'01	
asc. node	7872 Oct 15 16:23	10° $\mathbb{L}$ 34'58		direct	7873 Sep 04 19:35	2° $\mathbb{M}$ 37'14	
	7872 Oct 25 22:43	0° $\mathbb{M}$		morning max el	7873 Sep 17 18:56	8° $\mathbb{M}$ 49'07	22°54'33
morning set	7872 Oct 26 00:09	0° $\mathbb{M}$ 07'30		asc. node	7873 Oct 02 13:24	29° $\mathbb{M}$ 17'46	
					7873 Oct 02 22:41	0° $\mathbb{L}$	
superior conj	7872 Nov 02 07:29	15° $\mathbb{M}$ 25'11	1°39'53	morning set	7873 Oct 10 11:15	14° $\mathbb{L}$ 57'46	
minimum elong	7872 Nov 02 08:27	15° $\mathbb{M}$ 30'13	1°39'56				
max. Earth dist.	7872 Nov 06 19:20	24° $\mathbb{M}$ 32'41	1.35331 AU	superior conj	7873 Oct 17 11:35	0° $\mathbb{M}$ 00'23	1°41'27
	7872 Nov 09 14:26	0° $\mathbb{X}$		minimum elong	7873 Oct 17 11:15	29° $\mathbb{L}$ 58'40	1°41'30
evening rise	7872 Nov 10 22:13	2° $\mathbb{X}$ 31'08			7873 Oct 17 11:31	0° $\mathbb{M}$	
desc. node	7872 Nov 19 14:08	17° $\mathbb{X}$ 56'14		max. Earth dist.	7873 Oct 20 13:25	6° $\mathbb{M}$ 30'47	1.33752 AU
	7872 Nov 27 04:05	0° $\mathbb{Z}$		evening rise	7873 Oct 25 07:21	16° $\mathbb{M}$ 09'16	
evening max el	7872 Dec 16 07:37	24° $\mathbb{Z}$ 17'18	26°32'16		7873 Nov 01 17:07	0° $\mathbb{X}$	
	7872 Dec 23 18:15	0° $\mathbb{Z}$		desc. node	7873 Nov 06 11:11	8° $\mathbb{X}$ 05'39	
retrograde	7872 Dec 29 06:13	1° $\mathbb{Z}$ 32'46			7873 Nov 21 17:05	0° $\mathbb{Z}$	
	7873 Jan 03 06:07	30° $\mathbb{K}$ $\mathbb{Z}$		evening max el	7873 Nov 28 20:28	7° $\mathbb{Z}$ 49'32	27°13'56
evening set	7873 Jan 04 16:10	28° $\mathbb{Z}$ 58'22		retrograde	7873 Dec 12 06:52	15° $\mathbb{Z}$ 09'43	
min. Earth dist.	7873 Jan 08 18:53	24° $\mathbb{Z}$ 45'48	0.66327 AU	evening set	7873 Dec 19 02:59	12° $\mathbb{Z}$ 32'55	
inferior conj	7873 Jan 10 13:26	22° $\mathbb{Z}$ 38'24	-0°22'05	min. Earth dist.	7873 Dec 23 00:00	8° $\mathbb{Z}$ 54'22	0.64921 AU
minimum elong	7873 Jan 10 14:02	22° $\mathbb{Z}$ 36'35	0°21'42	inferior conj	7873 Dec 25 06:18	6° $\mathbb{Z}$ 25'20	-1°25'54
asc. node	7873 Jan 11 15:42	21° $\mathbb{Z}$ 20'35		minimum elong	7873 Dec 25 08:53	6° $\mathbb{Z}$ 18'15	1°24'41
morning rise	7873 Jan 16 12:45	16° $\mathbb{Z}$ 55'19		asc. node	7873 Dec 29 12:45	2° $\mathbb{Z}$ 14'57	
direct	7873 Jan 19 11:53	16° $\mathbb{Z}$ 06'06		morning rise	7873 Dec 31 16:11	0° $\mathbb{Z}$ 55'26	
morning max el	7873 Jan 26 01:08	19° $\mathbb{Z}$ 37'56	18°26'48	direct	7874 Jan 03 06:51	0° $\mathbb{Z}$ 19'36	
	7873 Feb 03 02:07	0° $\mathbb{Z}$		morning max el	7874 Jan 09 17:18	3° $\mathbb{Z}$ 43'11	17°58'45
morning set	7873 Feb 15 03:31	18° $\mathbb{Z}$ 52'53		morning set	7874 Jan 27 09:06	0° $\mathbb{Z}$ 07'44	
desc. node	7873 Feb 15 13:30	19° $\mathbb{Z}$ 32'35			7874 Jan 27 07:14	0° $\mathbb{Z}$	
	7873 Feb 22 03:49	0° $\mathbb{K}$		desc. node	7874 Feb 02 10:30	10° $\mathbb{Z}$ 07'27	
superior conj	7873 Mar 02 23:40	13° $\mathbb{K}$ 52'01	-1°36'44	superior conj	7874 Feb 10 10:17	23° $\mathbb{Z}$ 00'53	-0°55'19
minimum elong	7873 Mar 02 14:03	13° $\mathbb{K}$ 14'22	1°35'44	minimum elong	7874 Feb 10 03:50	22° $\mathbb{Z}$ 35'12	0°54'22
max. Earth dist.	7873 Mar 03 12:53	14° $\mathbb{K}$ 43'48	1.45495 AU	max. Earth dist.	7874 Feb 14 08:28	29° $\mathbb{Z}$ 13'22	1.45208 AU
	7873 Mar 13 06:42	0° $\mathbb{Y}$			7874 Feb 14 20:19	0° $\mathbb{K}$	
evening rise	7873 Mar 18 20:16	8° $\mathbb{Y}$ 46'09		evening rise	7874 Feb 26 13:58	18° $\mathbb{K}$ 14'07	
greatest brilliancy	7873 Mar 28 12:45	24° $\mathbb{Y}$ 01'11	-0.8m		7874 Mar 06 06:17	0° $\mathbb{Y}$	
	7873 Apr 01 10:41	0° $\mathbb{B}$		greatest brilliancy	7874 Mar 12 18:13	9° $\mathbb{Y}$ 45'10	-0.6m
asc. node	7873 Apr 09 14:42	10° $\mathbb{B}$ 52'14		evening max el	7874 Mar 24 12:08	25° $\mathbb{Y}$ 10'26	19°50'31
evening max el	7873 Apr 10 06:36	11° $\mathbb{B}$ 33'46	18°59'19	asc. node	7874 Mar 27 11:47	27° $\mathbb{Y}$ 47'04	
retrograde	7873 Apr 17 02:03	15° $\mathbb{B}$ 22'17		retrograde	7874 Apr 01 00:05	29° $\mathbb{Y}$ 29'52	
evening set	7873 Apr 20 11:23	14° $\mathbb{B}$ 15'41		evening set	7874 Apr 04 17:36	28° $\mathbb{Y}$ 08'37	
inferior conj	7873 Apr 26 00:13	8° $\mathbb{B}$ 30'47	3°24'35	inferior conj	7874 Apr 10 02:33	22° $\mathbb{Y}$ 09'18	3°16'40
minimum elong	7873 Apr 26 00:04	8° $\mathbb{B}$ 31'18	3°24'30	minimum elong	7874 Apr 10 01:18	22° $\mathbb{Y}$ 13'29	3°16'29
min. Earth dist.	7873 Apr 27 15:23	6° $\mathbb{B}$ 26'51	0.66054 AU	min. Earth dist.	7874 Apr 11 03:02	20° $\mathbb{Y}$ 47'16	0.67262 AU
morning rise	7873 May 01 12:17	2° $\mathbb{B}$ 13'14		morning rise	7874 Apr 15 08:42	15° $\mathbb{Y}$ 52'08	
	7873 May 04 23:44	30° $\mathbb{R}$ $\mathbb{Y}$		direct	7874 Apr 21 06:59	13° $\mathbb{Y}$ 13'21	
direct	7873 May 07 21:48	29° $\mathbb{Y}$ 26'30		desc. node	7874 May 01 10:04	18° $\mathbb{Y}$ 36'38	
	7873 May 11 00:18	0° $\mathbb{B}$		morning max el	7874 May 03 06:24	20° $\mathbb{Y}$ 24'02	25°13'03
desc. node	7873 May 14 13:04	1° $\mathbb{B}$ 47'13			7874 May 11 12:08	0° $\mathbb{B}$	
morning max el	7873 May 20 20:46	7° $\mathbb{B}$ 08'29	26°30'35		7874 May 31 17:32	0° $\mathbb{I}$	
	7873 Jun 07 13:27	0° $\mathbb{I}$		morning set	7874 Jun 08 08:33	13° $\mathbb{I}$ 09'14	
	7873 Jun 25 08:47	0° $\mathbb{E}$		max. Earth dist.	7874 Jun 12 00:01	19° $\mathbb{I}$ 49'24	1.36508 AU
morning set	7873 Jun 25 20:04	0° $\mathbb{E}$ 52'56			7874 Jun 17 07:33	0° $\mathbb{E}$	
max. Earth dist.	7873 Jun 29 22:03	8° $\mathbb{E}$ 45'24	1.34634 AU				
superior conj	7873 Jul 04 16:55	18° $\mathbb{E}$ 25'33	-0°18'50	superior conj	7874 Jun 18 05:58	1° $\mathbb{E}$ 50'27	-0°50'16
minimum elong	7873 Jul 04 17:59	18° $\mathbb{E}$ 31'00	0°18'44	minimum elong	7874 Jun 18 09:00	2° $\mathbb{E}$ 05'24	0°49'51
asc. node	7873 Jul 06 13:53	22° $\mathbb{E}$ 18'43		asc. node	7874 Jun 23 10:54	12° $\mathbb{E}$ 18'22	
	7873 Jul 10 05:54	0° $\mathbb{Q}$		evening rise	7874 Jun 26 11:32	18° $\mathbb{E}$ 27'06	
evening rise	7873 Jul 12 06:40	4° $\mathbb{Q}$ 14'46			7874 Jul 02 09:10	0° $\mathbb{Q}$	
	7873 Jul 26 16:19	0° $\mathbb{M}$		evening max el	7874 Jul 13 18:13	16° $\mathbb{Q}$ 41'48	19°42'52
evening max el	7873 Jul 31 08:21	5° $\mathbb{M}$ 28'04	20°56'06	retrograde	7874 Jul 23 17:10	21° $\mathbb{Q}$ 36'13	
desc. node	7873 Aug 10 12:13	11° $\mathbb{M}$ 08'54		evening set	7874 Jul 25 13:41	21° $\mathbb{Q}$ 26'44	
retrograde	7873 Aug 12 00:14	11° $\mathbb{M}$ 14'28		desc. node	7874 Jul 28 09:17	20° $\mathbb{Q}$ 39'05	
evening set	7873 Aug 14 05:07	11° $\mathbb{M}$ 02'55		inferior conj	7874 Aug 03 10:31	17° $\mathbb{Q}$ 24'08	-1°50'37
inferior conj	7873 Aug 23 11:16	7° $\mathbb{M}$ 05'53	-3°44'21	minimum elong	7874 Aug 03 05:27	17° $\mathbb{Q}$ 32'01	1°48'47
				min. Earth dist.	7874 Aug 05 15:26	16° $\mathbb{Q}$ 01'57	0.55364 AU

morning rise	7874 Aug 11 19:03	12° $\Omega$ 58'34		minimum elong	7875 Jul 15 03:55	28° $\Theta$ 16'17	0°01'45
direct	7874 Aug 16 10:12	12° $\Omega$ 10'58		transit middle	7875 Jul 15 03:55	28° $\Theta$ 16'17	0°01'45
morning max el	7874 Aug 30 07:45	19° $\Omega$ 05'45	24°40'03	transit begin	7875 Jul 15 00:13	28° $\Theta$ 22'56	
	7874 Sep 08 11:21	0° $\Pi$		transit end	7875 Jul 15 07:36	28° $\Theta$ 09'37	
asc. node	7874 Sep 19 10:23	18° $\Pi$ 30'25		desc. node	7875 Jul 15 06:20	28° $\Theta$ 11'55	
morning set	7874 Sep 24 23:00	29° $\Pi$ 47'24		min. Earth dist.	7875 Jul 18 07:15	26° $\Theta$ 01'21	0.56863 AU
	7874 Sep 25 01:22	0° $\Omega$		morning rise	7875 Jul 23 02:58	23° $\Theta$ 14'07	
				direct	7875 Jul 28 14:57	22° $\Theta$ 01'06	
superior conj	7874 Oct 01 20:17	14° $\Omega$ 46'49	1°36'46	morning max el	7875 Aug 11 22:07	29° $\Theta$ 27'22	26°14'14
minimum elong	7874 Oct 01 18:56	14° $\Omega$ 39'23	1°36'42		7875 Aug 12 11:28	0° $\Omega$	
max. Earth dist.	7874 Oct 03 15:24	18° $\Omega$ 41'26	1.32609 AU		7875 Sep 02 04:02	0° $\Pi$	
	7874 Oct 08 23:56	0° $\Pi$		asc. node	7875 Sep 06 07:22	8° $\Pi$ 05'08	
evening rise	7874 Oct 09 02:52	0° $\Pi$ 14'56		morning set	7875 Sep 09 09:47	14° $\Pi$ 31'58	
desc. node	7874 Oct 24 08:14	27° $\Pi$ 50'17					
	7874 Oct 25 17:31	0° $\Sigma$		superior conj	7875 Sep 16 07:28	29° $\Pi$ 37'50	1°26'28
evening max el	7874 Nov 11 07:33	20° $\Sigma$ 57'21	27°28'56	minimum elong	7875 Sep 16 05:26	29° $\Pi$ 26'38	1°26'14
retrograde	7874 Nov 25 01:03	28° $\Sigma$ 15'14			7875 Sep 16 11:28	0° $\Omega$	
evening set	7874 Dec 02 03:01	25° $\Sigma$ 44'42		max. Earth dist.	7875 Sep 16 23:17	1° $\Omega$ 05'20	1.31924 AU
min. Earth dist.	7874 Dec 05 19:55	22° $\Sigma$ 36'48	0.63190 AU	evening rise	7875 Sep 23 05:50	14° $\Omega$ 40'09	
inferior conj	7874 Dec 08 13:19	19° $\Sigma$ 55'18	-2°34'06		7875 Oct 01 00:12	0° $\Pi$	
minimum elong	7874 Dec 08 18:08	19° $\Sigma$ 43'22	2°32'07	desc. node	7875 Oct 11 05:16	17° $\Pi$ 00'14	
morning rise	7874 Dec 15 11:12	14° $\Sigma$ 41'28			7875 Oct 21 05:11	0° $\Sigma$	
asc. node	7874 Dec 16 09:47	14° $\Sigma$ 24'43		evening max el	7875 Oct 24 14:35	3° $\Sigma$ 28'18	27°11'52
direct	7874 Dec 17 19:45	14° $\Sigma$ 15'08		retrograde	7875 Nov 07 11:32	10° $\Sigma$ 39'58	
morning max el	7874 Dec 24 10:37	17° $\Sigma$ 39'57	17°48'05	evening set	7875 Nov 14 12:39	8° $\Sigma$ 26'20	
	7875 Jan 02 07:58	0° $\Xi$		min. Earth dist.	7875 Nov 18 05:21	5° $\Sigma$ 41'33	0.61214 AU
morning set	7875 Jan 09 16:11	12° $\Xi$ 36'15		inferior conj	7875 Nov 21 07:19	3° $\Sigma$ 00'13	-3°42'43
	7875 Jan 19 19:41	0° $\approx$		minimum elong	7875 Nov 21 14:01	2° $\Sigma$ 45'32	3°40'29
desc. node	7875 Jan 20 07:28	0° $\approx$ 49'14			7875 Nov 25 00:32	30° $\Sigma$	
				morning rise	7875 Nov 28 17:39	28° $\Pi$ 05'36	
superior conj	7875 Jan 21 18:06	3° $\approx$ 13'04	-0°10'29	direct	7875 Nov 30 23:08	27° $\Pi$ 45'08	
minimum elong	7875 Jan 21 17:00	3° $\approx$ 08'32	0°10'13	asc. node	7875 Dec 03 06:49	28° $\Pi$ 08'11	
behind sun begin	7875 Jan 21 09:41	2° $\approx$ 38'13			7875 Dec 06 13:57	0° $\Sigma$	
behind sun end	7875 Jan 22 00:19	3° $\approx$ 38'48		morning max el	7875 Dec 08 01:51	1° $\Sigma$ 19'38	17°55'45
max. Earth dist.	7875 Jan 28 01:56	13° $\approx$ 30'35	1.44214 AU	morning set	7875 Dec 23 18:10	25° $\Sigma$ 58'10	
evening rise	7875 Feb 06 00:59	27° $\approx$ 33'48			7875 Dec 25 23:05	0° $\Xi$	
	7875 Feb 07 15:04	0° $\text{H}$					
	7875 Feb 28 04:14	0° $\Upsilon$		superior conj	7876 Jan 03 03:38	14° $\Xi$ 38'55	0°29'27
evening max el	7875 Mar 07 12:14	8° $\Upsilon$ 48'56	20°55'33	minimum elong	7876 Jan 03 06:03	14° $\Xi$ 49'25	0°29'12
asc. node	7875 Mar 14 08:50	13° $\Upsilon$ 33'47		desc. node	7876 Jan 07 04:26	21° $\Xi$ 34'14	
retrograde	7875 Mar 15 22:33	13° $\Upsilon$ 46'31		max. Earth dist.	7876 Jan 10 15:39	27° $\Xi$ 21'21	1.42631 AU
evening set	7875 Mar 20 01:29	12° $\Upsilon$ 10'15			7876 Jan 12 06:23	0° $\approx$	
inferior conj	7875 Mar 25 08:57	5° $\Upsilon$ 58'50	2°57'30	evening rise	7876 Jan 16 20:46	7° $\approx$ 22'31	
minimum elong	7875 Mar 25 06:59	6° $\Upsilon$ 05'39	2°57'07		7876 Jan 31 20:28	0° $\text{H}$	
min. Earth dist.	7875 Mar 25 19:57	5° $\Upsilon$ 20'50	0.68029 AU	evening max el	7876 Feb 18 07:12	22° $\text{H}$ 29'07	22°10'33
	7875 Mar 30 05:25	30° $\text{H}$		retrograde	7876 Feb 27 19:38	28° $\text{H}$ 07'39	
morning rise	7875 Mar 30 12:16	29° $\text{H}$ 44'12		asc. node	7876 Feb 29 05:53	27° $\text{H}$ 57'15	
direct	7875 Apr 04 21:15	27° $\text{H}$ 21'26		evening set	7876 Mar 03 09:18	26° $\text{H}$ 16'10	
	7875 Apr 11 08:53	0° $\Upsilon$		inferior conj	7876 Mar 08 17:17	19° $\text{H}$ 55'24	2°28'38
morning max el	7875 Apr 15 15:25	3° $\Upsilon$ 46'46	23°44'53	minimum elong	7876 Mar 08 15:01	20° $\text{H}$ 03'19	2°28'02
desc. node	7875 Apr 18 07:04	6° $\Upsilon$ 37'16		min. Earth dist.	7876 Mar 08 15:50	20° $\text{H}$ 00'26	0.68368 AU
	7875 May 05 17:03	0° $\Xi$		morning rise	7876 Mar 13 20:33	13° $\text{H}$ 44'51	
morning set	7875 May 20 23:41	24° $\Xi$ 23'24		direct	7876 Mar 18 15:29	11° $\text{H}$ 43'01	
	7875 May 24 05:31	0° $\Pi$		morning max el	7876 Mar 28 02:31	17° $\text{H}$ 16'24	22°15'52
max. Earth dist.	7875 May 24 19:58	1° $\Pi$ 03'33	1.38684 AU	desc. node	7876 Apr 04 04:02	25° $\text{H}$ 28'46	
					7876 Apr 07 14:10	0° $\Upsilon$	
superior conj	7875 Jun 01 06:03	14° $\Pi$ 35'57	-1°21'19		7876 Apr 27 19:07	0° $\Xi$	
minimum elong	7875 Jun 01 10:57	14° $\Pi$ 59'04	1°20'43	morning set	7876 Apr 30 12:09	4° $\Xi$ 21'18	
	7875 Jun 09 05:34	0° $\Theta$		max. Earth dist.	7876 May 05 17:39	12° $\Xi$ 59'52	1.40921 AU
evening rise	7875 Jun 10 09:18	2° $\Theta$ 15'29					
asc. node	7875 Jun 10 07:54	2° $\Theta$ 08'40		superior conj	7876 May 13 12:38	26° $\Xi$ 30'30	-1°48'35
evening max el	7875 Jun 26 16:21	28° $\Theta$ 40'11	18°50'13	minimum elong	7876 May 13 18:21	26° $\Xi$ 56'01	1°48'07
	7875 Jun 28 03:47	0° $\Omega$			7876 May 15 11:15	0° $\Pi$	
retrograde	7875 Jul 05 01:22	2° $\Omega$ 48'44		evening rise	7876 May 23 20:29	15° $\Pi$ 30'21	
evening set	7875 Jul 07 01:27	2° $\Omega$ 35'25		asc. node	7876 May 27 04:55	21° $\Pi$ 44'19	
	7875 Jul 12 16:05	30° $\text{R}\Theta$			7876 May 31 20:23	0° $\Theta$	
inferior conj	7875 Jul 15 03:50	28° $\Theta$ 16'25	0°01'53	evening max el	7876 Jun 08 23:08	11° $\Theta$ 14'30	18°18'04
































































































































retrograde	7876 Jun 16 04:51	14°♄52'10		evening set	7877 Jun 01 15:43	27°♄06'42	
evening set	7876 Jun 18 12:07	14°♄30'59		inferior conj	7877 Jun 08 05:40	22°♄06'48	2°32'10
inferior conj	7876 Jun 25 18:49	9°♄51'17	1°31'18	minimum elong	7877 Jun 08 08:39	21°♄59'28	2°31'18
minimum elong	7876 Jun 25 21:33	9°♄45'29	1°30'16	min. Earth dist.	7877 Jun 11 09:27	19°♄02'55	0.61145 AU
min. Earth dist.	7876 Jun 29 04:27	7°♄00'13	0.58904 AU	morning rise	7877 Jun 14 23:19	16°♄08'38	
desc. node	7876 Jul 01 03:24	5°♄32'00		desc. node	7877 Jun 18 00:27	14°♄33'26	
morning rise	7876 Jul 03 03:50	4°♄16'11		direct	7877 Jun 21 15:08	13°♄54'08	
direct	7876 Jul 09 09:15	2°♄31'52		morning max el	7877 Jul 05 21:25	21°♄53'16	27°53'27
morning max el	7876 Jul 23 18:20	10°♄18'37	27°21'54		7877 Jul 12 23:50	0°♄	
	7876 Aug 07 23:11	0°♄			7877 Aug 01 01:30	0°♄	
asc. node	7876 Aug 23 04:20	27°♄54'58		morning set	7877 Aug 07 21:41	13°♄25'09	
morning set	7876 Aug 23 17:57	29°♄06'18		asc. node	7877 Aug 10 01:18	17°♄54'48	
	7876 Aug 24 04:08	0°♄		max. Earth dist.	7877 Aug 13 18:45	25°♄56'45	1.31900 AU
superior conj	7876 Aug 30 19:14	14°♄27'13	1°11'03	superior conj	7877 Aug 15 05:52	29°♄09'24	0°50'57
minimum elong	7876 Aug 30 16:59	14°♄14'42	1°10'40	minimum elong	7877 Aug 15 03:52	28°♄58'22	0°50'30
max. Earth dist.	7876 Aug 30 09:41	13°♄34'11	1.31687 AU		7877 Aug 15 15:03	0°♄	
evening rise	7876 Sep 06 13:45	29°♄17'17		evening rise	7877 Aug 22 00:31	13°♄59'52	
	7876 Sep 06 21:47	0°♄			7877 Aug 29 23:25	0°♄	
	7876 Sep 23 07:59	0°♄		desc. node	7877 Sep 13 23:25	22°♄35'41	
desc. node	7876 Sep 27 02:20	5°♄21'51		evening max el	7877 Sep 17 06:54	26°♄03'55	25°00'42
evening max el	7876 Oct 05 14:49	15°♄11'24	26°20'56		7877 Sep 22 03:21	0°♄	
retrograde	7876 Oct 19 12:55	22°♄16'57		retrograde	7877 Oct 01 03:42	3°♄03'35	
evening set	7876 Oct 26 03:20	20°♄30'43		evening set	7877 Oct 06 18:27	1°♄52'12	
min. Earth dist.	7876 Oct 30 04:06	17°♄56'12	0.59128 AU		7877 Oct 10 09:54	30°♄	
inferior conj	7876 Nov 02 08:47	15°♄30'41	-4°44'12	min. Earth dist.	7877 Oct 11 18:15	29°♄09'43	0.57154 AU
minimum elong	7876 Nov 02 15:44	15°♄17'27	4°42'36	inferior conj	7877 Oct 14 14:40	27°♄16'54	-5°25'29
morning rise	7876 Nov 10 06:25	10°♄58'20		minimum elong	7877 Oct 14 18:20	27°♄10'48	5°25'05
direct	7876 Nov 12 12:49	10°♄40'31		morning rise	7877 Oct 22 20:30	23°♄07'33	
asc. node	7876 Nov 19 03:50	13°♄22'35		direct	7877 Oct 25 08:26	22°♄49'40	
morning max el	7876 Nov 20 11:32	14°♄33'18	18°23'16	morning max el	7877 Nov 03 12:06	27°♄10'32	19°12'15
	7876 Dec 01 01:59	0°♄		asc. node	7877 Nov 06 00:51	29°♄54'06	
morning set	7876 Dec 06 09:26	9°♄57'08			7877 Nov 06 02:49	0°♄	
				morning set	7877 Nov 20 09:45	24°♄20'09	
superior conj	7876 Dec 15 12:06	27°♄10'34	1°00'40		7877 Nov 23 05:55	0°♄	
minimum elong	7876 Dec 15 15:35	27°♄26'33	1°00'21	superior conj	7877 Nov 28 14:19	10°♄32'40	1°22'35
	7876 Dec 17 01:13	0°♄		minimum elong	7877 Nov 28 17:18	10°♄47'02	1°22'24
max. Earth dist.	7876 Dec 23 00:50	10°♄34'06	1.40639 AU	max. Earth dist.	7877 Dec 05 06:35	23°♄03'46	1.38477 AU
desc. node	7876 Dec 24 01:26	12°♄19'14		evening rise	7877 Dec 09 00:52	29°♄44'09	
evening rise	7876 Dec 27 11:48	18°♄04'13			7877 Dec 09 04:31	0°♄	
	7877 Jan 03 23:02	0°♄		desc. node	7877 Dec 10 22:26	3°♄00'02	
	7877 Jan 25 08:45	0°♄			7877 Dec 28 07:30	0°♄	
evening max el	7877 Jan 30 22:25	6°♄12'20	23°30'20	evening max el	7878 Jan 13 11:39	19°♄57'54	24°48'46
retrograde	7877 Feb 10 13:58	12°♄29'41		retrograde	7878 Jan 25 04:30	26°♄46'56	
asc. node	7877 Feb 15 02:57	10°♄48'41		evening set	7878 Jan 30 18:48	24°♄27'06	
evening set	7877 Feb 15 15:36	10°♄23'18		asc. node	7878 Feb 02 00:03	22°♄13'25	
min. Earth dist.	7877 Feb 20 12:32	4°♄41'47	0.68293 AU	min. Earth dist.	7878 Feb 04 07:48	19°♄19'56	0.67821 AU
inferior conj	7877 Feb 21 01:42	3°♄56'40	1°51'03	inferior conj	7878 Feb 05 08:21	17°♄58'47	1°05'17
minimum elong	7877 Feb 20 23:35	4°♄03'56	1°50'22	minimum elong	7878 Feb 05 06:52	18°♄03'41	1°04'48
	7877 Feb 24 02:59	30°♄		morning rise	7878 Feb 10 19:10	12°♄00'36	
morning rise	7877 Feb 26 07:31	27°♄51'31		direct	7878 Feb 14 11:21	10°♄43'08	
direct	7877 Mar 02 12:35	26°♄12'20		morning max el	7878 Feb 21 20:19	14°♄50'35	19°44'42
	7877 Mar 09 19:31	0°♄			7878 Mar 05 14:30	0°♄	
morning max el	7877 Mar 10 19:30	0°♄57'30	20°54'05	greatest brilliancy	7878 Mar 06 15:22	1°♄30'50	-0.6m
desc. node	7877 Mar 22 01:00	14°♄57'27		desc. node	7878 Mar 08 21:58	4°♄52'44	
	7877 Apr 01 08:30	0°♄		morning set	7878 Mar 19 19:30	21°♄26'06	
morning set	7877 Apr 09 22:14	13°♄08'13			7878 Mar 25 08:08	0°♄	
max. Earth dist.	7877 Apr 17 22:14	25°♄52'36	1.42925 AU	max. Earth dist.	7878 Mar 31 09:42	9°♄32'28	1.44442 AU
	7877 Apr 20 10:41	0°♄					
superior conj	7877 Apr 24 21:08	7°♄24'24	-2°07'06	superior conj	7878 Apr 05 04:45	17°♄12'59	-2°10'46
minimum elong	7877 Apr 25 00:55	7°♄40'23	2°07'01	minimum elong	7878 Apr 05 02:44	17°♄04'51	2°10'47
evening rise	7877 May 06 16:59	28°♄02'39			7878 Apr 12 23:44	0°♄	
	7877 May 07 19:19	0°♄		evening rise	7878 Apr 18 18:08	9°♄42'14	
asc. node	7877 May 14 01:56	11°♄00'16		asc. node	7878 Apr 30 23:01	29°♄49'44	
evening max el	7877 May 23 10:52	24°♄15'44	18°05'39		7878 May 01 01:45	0°♄	
retrograde	7877 May 30 01:05	27°♄38'37		evening max el	7878 May 07 00:10	7°♄35'17	18°12'17

retrograde	7878 May 13 09:27	10° $\Pi$ 57'59		evening rise	7879 Mar 30 20:10	20° $\Upsilon$ 22'44	
evening set	7878 May 16 07:09	10° $\Pi$ 13'33			7879 Apr 05 18:56	0° $\mathcal{B}$	
inferior conj	7878 May 22 08:25	4° $\Pi$ 55'07	3°07'42	asc. node	7879 Apr 17 20:06	18° $\mathcal{B}$ 03'42	
minimum elong	7878 May 22 10:23	4° $\Pi$ 49'39	3°07'18	evening max el	7879 Apr 20 12:11	21° $\mathcal{B}$ 05'32	18°37'13
min. Earth dist.	7878 May 24 23:41	2° $\Pi$ 01'24	0.63294 AU	retrograde	7879 Apr 27 01:36	24° $\mathcal{B}$ 41'08	
	7878 May 27 00:24	30° $\mathcal{R}$ $\mathcal{B}$		evening set	7879 Apr 30 06:31	23° $\mathcal{B}$ 42'56	
morning rise	7878 May 28 12:14	28° $\mathcal{B}$ 44'03		inferior conj	7879 May 05 22:56	18° $\mathcal{B}$ 07'29	3°23'04
direct	7878 Jun 04 06:46	26° $\mathcal{B}$ 07'18		minimum elong	7879 May 05 23:32	18° $\mathcal{B}$ 05'40	3°22'57
desc. node	7878 Jun 04 21:29	26° $\mathcal{B}$ 08'30		min. Earth dist.	7879 May 07 23:06	15° $\mathcal{B}$ 41'47	0.65159 AU
	7878 Jun 13 13:07	0° $\Pi$		morning rise	7879 May 11 15:49	11° $\mathcal{B}$ 50'58	
morning max el	7878 Jun 18 05:32	4° $\Pi$ 10'01	27°46'54	direct	7879 May 18 06:17	9° $\mathcal{B}$ 04'01	
	7878 Jul 07 14:17	0° $\mathcal{E}$		desc. node	7879 May 22 18:30	10° $\mathcal{B}$ 09'22	
morning set	7878 Jul 22 18:46	27° $\mathcal{E}$ 22'10		morning max el	7879 May 31 15:41	16° $\mathcal{B}$ 57'53	27°06'18
	7878 Jul 24 02:01	0° $\Omega$			7879 Jun 11 11:31	0° $\Pi$	
asc. node	7878 Jul 27 22:18	8° $\Omega$ 00'10			7879 Jun 30 10:59	0° $\mathcal{E}$	
max. Earth dist.	7878 Jul 27 22:26	8° $\Omega$ 00'50	1.32579 AU	morning set	7879 Jul 06 06:15	10° $\mathcal{E}$ 48'12	
				max. Earth dist.	7879 Jul 10 16:56	19° $\mathcal{E}$ 36'54	1.33744 AU
superior conj	7878 Jul 30 13:31	13° $\Omega$ 38'59	0°26'36	superior conj	7879 Jul 14 16:01	27° $\mathcal{E}$ 48'58	-0°01'24
minimum elong	7878 Jul 30 12:17	13° $\Omega$ 32'20	0°26'15	minimum elong	7879 Jul 14 16:05	27° $\mathcal{E}$ 49'22	0°01'31
evening rise	7878 Aug 06 12:15	28° $\Omega$ 42'04		behind sun begin	7879 Jul 14 10:30	27° $\mathcal{E}$ 19'59	
	7878 Aug 07 02:54	0° $\mathcal{N}$		behind sun end	7879 Jul 14 21:41	28° $\mathcal{E}$ 18'49	
	7878 Aug 24 04:16	0° $\mathcal{A}$		asc. node	7879 Jul 14 19:18	28° $\mathcal{E}$ 06'17	
evening max el	7878 Aug 29 18:23	6° $\mathcal{A}$ 22'49	23°23'46		7879 Jul 15 16:51	0° $\Omega$	
desc. node	7878 Aug 31 20:30	8° $\mathcal{A}$ 15'51		evening rise	7879 Jul 21 22:57	13° $\Omega$ 17'17	
retrograde	7878 Sep 12 06:32	13° $\mathcal{A}$ 08'24			7879 Jul 30 10:46	0° $\mathcal{N}$	
evening set	7878 Sep 16 10:08	12° $\mathcal{A}$ 30'41		evening max el	7879 Aug 11 09:33	16° $\mathcal{N}$ 40'57	21°46'38
min. Earth dist.	7878 Sep 23 04:00	9° $\mathcal{A}$ 21'46	0.55596 AU	desc. node	7879 Aug 18 17:36	21° $\mathcal{N}$ 49'42	
inferior conj	7878 Sep 25 00:38	8° $\mathcal{A}$ 16'01	-5°28'06	retrograde	7879 Aug 23 21:55	22° $\mathcal{N}$ 53'31	
minimum elong	7878 Sep 24 21:19	8° $\mathcal{A}$ 20'55	5°27'50	evening set	7879 Aug 26 15:35	22° $\mathcal{N}$ 36'42	
morning rise	7878 Oct 03 10:41	4° $\mathcal{A}$ 23'49		inferior conj	7879 Sep 04 20:08	18° $\mathcal{N}$ 36'58	-4°37'02
direct	7878 Oct 06 08:33	4° $\mathcal{A}$ 03'14		minimum elong	7879 Sep 04 11:06	18° $\mathcal{N}$ 49'37	4°35'00
morning max el	7878 Oct 17 00:38	9° $\mathcal{A}$ 02'48	20°23'31	min. Earth dist.	7879 Sep 04 12:49	18° $\mathcal{N}$ 47'12	0.54771 AU
asc. node	7878 Oct 23 21:53	17° $\mathcal{A}$ 27'26		morning rise	7879 Sep 13 07:49	14° $\mathcal{N}$ 47'20	
	7878 Oct 31 04:07	0° $\mathcal{M}$		direct	7879 Sep 16 19:19	14° $\mathcal{N}$ 20'48	
morning set	7878 Nov 04 16:01	8° $\mathcal{M}$ 58'43		morning max el	7879 Sep 29 00:24	20° $\mathcal{N}$ 06'23	21°55'11
superior conj	7878 Nov 12 05:30	24° $\mathcal{M}$ 31'41	1°35'48		7879 Oct 07 03:55	0° $\mathcal{A}$	
minimum elong	7878 Nov 12 07:15	24° $\mathcal{M}$ 40'35	1°35'48	asc. node	7879 Oct 10 18:53	5° $\mathcal{A}$ 47'57	
	7878 Nov 14 23:08	0° $\mathcal{J}$		morning set	7879 Oct 20 01:54	23° $\mathcal{A}$ 45'50	
max. Earth dist.	7878 Nov 17 13:21	5° $\mathcal{J}$ 02'58	1.36402 AU		7879 Oct 23 00:41	0° $\mathcal{M}$	
evening rise	7878 Nov 21 10:06	12° $\mathcal{J}$ 17'54		superior conj	7879 Oct 27 05:44	8° $\mathcal{M}$ 55'49	1°41'21
desc. node	7878 Nov 27 19:28	23° $\mathcal{J}$ 32'42		minimum elong	7879 Oct 27 06:09	8° $\mathcal{M}$ 57'56	1°41'25
	7878 Dec 01 17:24	0° $\mathcal{Z}$		max. Earth dist.	7879 Oct 31 02:31	16° $\mathcal{M}$ 55'37	1.34611 AU
	7878 Dec 23 10:47	0° $\approx$		evening rise	7879 Nov 04 11:37	25° $\mathcal{M}$ 35'18	
evening max el	7878 Dec 27 00:36	3° $\approx$ 44'00	25°58'47		7879 Nov 06 19:34	0° $\mathcal{J}$	
retrograde	7879 Jan 08 14:17	10° $\approx$ 53'43		desc. node	7879 Nov 14 16:31	13° $\mathcal{J}$ 52'11	
evening set	7879 Jan 14 17:13	8° $\approx$ 23'25			7879 Nov 25 04:13	0° $\mathcal{Z}$	
min. Earth dist.	7879 Jan 18 23:28	3° $\approx$ 50'45	0.66973 AU	evening max el	7879 Dec 09 13:54	17° $\mathcal{Z}$ 24'45	26°52'58
asc. node	7879 Jan 19 21:09	2° $\approx$ 43'08		retrograde	7879 Dec 22 18:29	24° $\mathcal{Z}$ 43'25	
inferior conj	7879 Jan 20 11:22	1° $\approx$ 58'33	0°11'52	evening set	7879 Dec 29 08:55	22° $\mathcal{Z}$ 07'24	
minimum elong	7879 Jan 20 11:03	1° $\approx$ 59'31	0°11'52	min. Earth dist.	7880 Jan 02 09:11	18° $\mathcal{Z}$ 09'12	0.65765 AU
transit middle	7879 Jan 20 11:03	1° $\approx$ 59'31	0°11'52	inferior conj	7880 Jan 04 08:38	15° $\mathcal{Z}$ 51'47	-0°48'29
transit begin	7879 Jan 20 09:08	2° $\approx$ 05'33		minimum elong	7880 Jan 04 10:01	15° $\mathcal{Z}$ 47'46	0°47'45
transit end	7879 Jan 20 12:58	1° $\approx$ 53'30		asc. node	7880 Jan 06 18:13	13° $\mathcal{Z}$ 12'00	
	7879 Jan 22 02:07	30° $\mathcal{R}$ $\mathcal{Z}$		morning rise	7880 Jan 10 12:12	10° $\mathcal{Z}$ 13'42	
morning rise	7879 Jan 26 05:29	26° $\mathcal{Z}$ 09'09		direct	7880 Jan 13 07:26	9° $\mathcal{Z}$ 30'38	
direct	7879 Jan 29 10:15	25° $\mathcal{Z}$ 10'43		morning max el	7880 Jan 19 18:40	12° $\mathcal{Z}$ 58'02	18°12'43
morning max el	7879 Feb 05 04:39	28° $\mathcal{Z}$ 52'29	18°50'28		7880 Jan 31 23:52	0° $\approx$	
	7879 Feb 06 06:38	0° $\approx$		morning set	7880 Feb 07 16:56	10° $\approx$ 49'33	
desc. node	7879 Feb 23 18:55	25° $\approx$ 07'19		desc. node	7880 Feb 10 15:52	15° $\approx$ 35'58	
	7879 Feb 26 21:54	0° $\mathcal{H}$			7880 Feb 19 16:24	0° $\mathcal{H}$	
morning set	7879 Feb 27 04:17	0° $\mathcal{H}$ 24'56		superior conj	7880 Feb 22 20:33	5° $\mathcal{H}$ 00'03	-1°20'17
max. Earth dist.	7879 Mar 14 02:10	23° $\mathcal{H}$ 43'57	1.45316 AU	minimum elong	7880 Feb 22 11:36	4° $\mathcal{H}$ 24'54	1°19'12
superior conj	7879 Mar 15 15:35	26° $\mathcal{H}$ 10'48	-1°54'46	max. Earth dist.	7880 Feb 24 21:37	8° $\mathcal{H}$ 12'36	1.45461 AU
minimum elong	7879 Mar 15 07:11	25° $\mathcal{H}$ 37'48	1°54'09	evening rise	7880 Mar 09 23:41	0° $\Upsilon$ 11'07	
	7879 Mar 18 01:50	0° $\Upsilon$					

	7880 Mar 09 20:49	0°♿		superior conj	7881 Feb 01 14:47	14°≈31'43	-0°36'06
greatest brilliancy	7880 Mar 21 19:19	18°♿28'25	-0.7m	minimum elong	7881 Feb 01 10:40	14°≈15'04	0°35'25
	7880 Mar 29 20:26	0°♿		max. Earth dist.	7881 Feb 06 17:07	22°≈40'34	1.44868 AU
evening max el	7880 Apr 02 20:39	4°♿41'29	19°19'18		7881 Feb 11 09:02	0°♿	
asc. node	7880 Apr 03 17:12	5°♿31'30		evening rise	7881 Feb 17 12:40	9°♿30'50	
retrograde	7880 Apr 09 22:12	8°♿41'39			7881 Mar 03 02:40	0°♿	
evening set	7880 Apr 13 10:55	7°♿28'53		evening max el	7881 Mar 16 23:56	18°♿18'51	20°16'42
inferior conj	7880 Apr 18 21:47	1°♿37'53	3°22'42	asc. node	7881 Mar 21 14:17	21°♿59'04	
minimum elong	7880 Apr 18 21:08	1°♿40'02	3°22'37	retrograde	7881 Mar 24 20:34	22°♿53'24	
	7880 Apr 20 03:53	30°♿♿		evening set	7881 Mar 28 18:03	21°♿25'36	
min. Earth dist.	7880 Apr 20 06:39	29°♿51'07	0.66624 AU	inferior conj	7881 Apr 03 02:05	15°♿20'51	3°09'47
morning rise	7880 Apr 24 06:58	25°♿20'22		minimum elong	7881 Apr 03 00:29	15°♿26'18	3°09'32
direct	7880 Apr 30 12:14	22°♿35'38		min. Earth dist.	7881 Apr 03 20:37	14°♿17'46	0.67646 AU
desc. node	7880 May 08 15:29	26°♿06'16		morning rise	7881 Apr 08 06:42	9°♿04'48	
	7880 May 12 23:25	0°♿		direct	7881 Apr 13 23:31	6°♿32'13	
morning max el	7880 May 13 01:42	0°♿05'48	25°59'34	morning max el	7881 Apr 25 10:50	13°♿24'12	24°36'18
	7880 Jun 04 09:39	0°♿		desc. node	7881 Apr 25 12:27	13°♿28'20	
morning set	7880 Jun 18 04:26	23°♿33'21			7881 May 08 21:10	0°♿	
	7880 Jun 21 14:35	0°♿			7881 May 28 05:29	0°♿	
max. Earth dist.	7880 Jun 22 00:35	0°♿48'06	1.35387 AU	morning set	7881 May 31 08:28	5°♿24'15	
				max. Earth dist.	7881 Jun 03 23:26	11°♿53'11	1.37414 AU
superior conj	7880 Jun 27 10:51	11°♿32'48	-0°32'01				
minimum elong	7880 Jun 27 12:43	11°♿42'15	0°31'47	superior conj	7881 Jun 10 18:50	24°♿41'47	-1°03'39
asc. node	7880 Jun 30 16:19	18°♿09'31		minimum elong	7881 Jun 10 22:43	25°♿00'34	1°03'07
evening rise	7880 Jul 05 06:38	27°♿39'59			7881 Jun 13 11:50	0°♿	
	7880 Jul 06 10:00	0°♿		asc. node	7881 Jun 17 13:20	8°♿05'40	
evening max el	7880 Jul 23 11:48	27°♿29'44	20°22'29	evening rise	7881 Jun 19 08:50	11°♿42'56	
	7880 Jul 26 09:51	0°♿			7881 Jun 29 05:46	0°♿	
retrograde	7880 Aug 03 10:12	2°♿53'29		evening max el	7881 Jul 06 03:07	9°♿02'24	19°17'51
desc. node	7880 Aug 04 14:40	2°♿49'55		retrograde	7881 Jul 15 08:52	13°♿36'03	
evening set	7880 Aug 05 09:46	2°♿43'38		evening set	7881 Jul 17 06:07	13°♿25'27	
	7880 Aug 12 10:02	30°♿♿		desc. node	7881 Jul 22 11:42	11°♿21'16	
inferior conj	7880 Aug 14 13:41	28°♿46'09	-2°58'03	inferior conj	7881 Jul 25 19:38	9°♿16'20	-1°01'02
minimum elong	7880 Aug 14 05:42	28°♿57'47	2°55'22	minimum elong	7881 Jul 25 16:56	9°♿20'48	1°00'05
min. Earth dist.	7880 Aug 15 22:50	27°♿57'50	0.54883 AU	min. Earth dist.	7881 Jul 28 11:56	7°♿30'38	0.55916 AU
morning rise	7880 Aug 23 00:50	24°♿39'11		morning rise	7881 Aug 03 00:57	4°♿35'39	
direct	7880 Aug 27 05:09	24°♿01'35		direct	7881 Aug 08 00:57	3°♿38'36	
	7880 Sep 09 01:00	0°♿		morning max el	7881 Aug 22 03:47	10°♿47'24	25°22'34
morning max el	7880 Sep 09 15:04	0°♿32'20	23°39'36		7881 Sep 05 18:35	0°♿	
asc. node	7880 Sep 26 15:50	24°♿44'13		asc. node	7881 Sep 13 12:48	14°♿07'19	
	7880 Sep 29 09:17	0°♿		morning set	7881 Sep 18 01:01	23°♿24'38	
morning set	7880 Oct 03 13:27	8°♿36'01			7881 Sep 21 02:09	0°♿	
superior conj	7880 Oct 10 12:02	23°♿36'05	1°40'11	superior conj	7881 Sep 24 22:03	8°♿25'29	1°33'03
minimum elong	7880 Oct 10 11:14	23°♿31'46	1°40'12	minimum elong	7881 Sep 24 20:21	8°♿16'12	1°32'55
max. Earth dist.	7880 Oct 13 00:18	28°♿59'09	1.33218 AU	max. Earth dist.	7881 Sep 26 05:23	11°♿17'33	1.32265 AU
	7880 Oct 13 11:47	0°♿		evening rise	7881 Oct 02 00:36	23°♿41'13	
evening rise	7880 Oct 18 01:34	9°♿26'01			7881 Oct 05 03:31	0°♿	
	7880 Oct 29 05:20	0°♿		desc. node	7881 Oct 18 10:37	23°♿23'42	
desc. node	7880 Oct 31 13:34	3°♿51'56			7881 Oct 22 22:24	0°♿	
	7880 Nov 20 06:25	0°♿		evening max el	7881 Nov 03 12:08	13°♿42'30	27°25'44
evening max el	7880 Nov 21 02:28	0°♿48'37	27°24'02	retrograde	7881 Nov 17 07:02	20°♿57'32	
retrograde	7880 Dec 04 16:12	8°♿07'35		evening set	7881 Nov 24 09:53	18°♿32'40	
evening set	7880 Dec 11 15:28	5°♿32'36		min. Earth dist.	7881 Nov 28 01:58	15°♿36'06	0.62378 AU
min. Earth dist.	7880 Dec 15 10:37	2°♿07'32	0.64221 AU	inferior conj	7881 Nov 30 23:34	12°♿52'58	-3°03'27
	7880 Dec 17 11:12	30°♿♿		minimum elong	7881 Dec 01 05:18	12°♿39'30	3°01'17
inferior conj	7880 Dec 17 21:40	29°♿32'17	-1°54'28	morning rise	7881 Dec 08 02:47	7°♿47'03	
minimum elong	7880 Dec 18 01:11	29°♿23'00	1°52'54	direct	7881 Dec 10 09:45	7°♿23'32	
asc. node	7880 Dec 23 15:16	24°♿34'12		asc. node	7881 Dec 10 12:16	7°♿23'35	
morning rise	7880 Dec 24 12:29	24°♿08'33		morning max el	7881 Dec 17 04:31	10°♿51'01	17°49'05
direct	7880 Dec 27 00:19	23°♿37'05			7881 Dec 29 23:15	0°♿	
morning max el	7881 Jan 02 11:38	26°♿59'59	17°52'02	morning set	7882 Jan 02 02:06	5°♿32'06	
	7881 Jan 05 03:09	0°♿					
morning set	7881 Jan 19 10:10	22°♿38'14		superior conj	7882 Jan 13 09:39	25°♿15'56	0°07'23
	7881 Jan 23 18:56	0°≈		minimum elong	7882 Jan 13 10:22	25°♿18'58	0°07'23
desc. node	7881 Jan 27 12:49	6°≈13'55		behind sun begin	7882 Jan 13 02:25	24°♿45'21	
				behind sun end	7882 Jan 13 18:19	25°♿52'31	

desc. node	7882 Jan 14 09:49	26°♄57'42		superior conj	7882 Dec 26 05:33	7°♄11'39	0°43'49
	7882 Jan 16 05:31	0°♄		minimum elong	7882 Dec 26 08:41	7°♄25'33	0°43'30
max. Earth dist.	7882 Jan 20 09:34	6°♄49'42	1.43606 AU	desc. node	7883 Jan 01 06:49	17°♄43'10	
evening rise	7882 Jan 28 01:44	18°♄58'51		max. Earth dist.	7883 Jan 02 20:55	20°♄23'41	1.41819 AU
	7882 Feb 04 06:58	0°♄		evening rise	7883 Jan 08 04:50	29°♄07'53	
	7882 Feb 26 01:48	0°♄			7883 Jan 08 17:50	0°♄	
evening max el	7882 Feb 27 21:39	1°♄57'14	21°26'25		7883 Jan 28 21:15	0°♄	
asc. node	7882 Mar 08 11:20	7°♄11'52		evening max el	7883 Feb 10 14:40	15°♄38'03	22°44'14
retrograde	7882 Mar 08 18:43	7°♄12'21		retrograde	7883 Feb 20 14:56	21°♄34'24	
evening set	7882 Mar 13 02:06	5°♄29'23		asc. node	7883 Feb 23 08:24	20°♄56'50	
	7882 Mar 17 20:06	30°♄		evening set	7883 Feb 25 09:29	19°♄36'31	
inferior conj	7882 Mar 18 09:33	29°♄13'21	2°46'22	inferior conj	7883 Mar 02 18:10	13°♄12'32	2°13'44
minimum elong	7882 Mar 18 07:24	29°♄20'50	2°45'52	minimum elong	7883 Mar 02 15:54	13°♄20'23	2°13'04
min. Earth dist.	7882 Mar 18 15:03	28°♄54'13	0.68226 AU	min. Earth dist.	7883 Mar 02 11:40	13°♄35'06	0.68381 AU
morning rise	7882 Mar 23 12:31	23°♄00'20		morning rise	7883 Mar 07 22:12	7°♄03'54	
direct	7882 Mar 28 15:26	20°♄46'22		direct	7883 Mar 12 11:03	5°♄11'45	
morning max el	7882 Apr 07 20:28	26°♄49'51	23°06'36	morning max el	7883 Mar 21 09:46	10°♄24'19	21°39'47
	7882 Apr 10 19:02	0°♄		desc. node	7883 Mar 30 06:25	21°♄01'14	
desc. node	7882 Apr 12 09:26	1°♄52'19			7883 Apr 05 17:23	0°♄	
	7882 May 02 11:33	0°♄		morning set	7883 Apr 22 13:26	25°♄32'40	
morning set	7882 May 12 12:45	16°♄06'44			7883 Apr 25 08:00	0°♄	
max. Earth dist.	7882 May 16 19:29	23°♄22'44	1.39643 AU	max. Earth dist.	7883 Apr 28 19:19	5°♄41'07	1.41811 AU
	7882 May 20 13:59	0°♄					
				superior conj	7883 May 06 09:44	18°♄36'02	-1°57'52
superior conj	7882 May 24 11:59	7°♄06'07	-1°33'37	minimum elong	7883 May 06 15:04	18°♄59'19	1°57'34
minimum elong	7882 May 24 17:27	7°♄31'19	1°33'02		7883 May 12 19:26	0°♄	
evening rise	7882 Jun 03 02:33	25°♄17'57		evening rise	7883 May 17 08:04	8°♄16'06	
asc. node	7882 Jun 04 10:21	27°♄50'11		asc. node	7883 May 22 07:24	17°♄18'26	
	7882 Jun 05 13:39	0°♄			7883 May 30 03:58	0°♄	
evening max el	7882 Jun 19 05:18	21°♄16'27	18°34'04	evening max el	7883 Jun 02 14:41	4°♄03'46	18°10'30
retrograde	7882 Jun 27 01:32	25°♄10'23		retrograde	7883 Jun 09 12:31	7°♄33'13	
evening set	7882 Jun 29 04:19	24°♄54'16		evening set	7883 Jun 11 22:53	7°♄07'52	
inferior conj	7882 Jul 06 22:08	20°♄26'33	0°43'17	inferior conj	7883 Jun 18 22:02	2°♄19'49	2°00'29
minimum elong	7882 Jul 06 23:41	20°♄23'32	0°42'35	minimum elong	7883 Jun 19 01:06	2°♄12'52	1°59'27
desc. node	7882 Jul 09 08:46	18°♄33'05			7883 Jun 21 12:02	30°♄	
min. Earth dist.	7882 Jul 10 05:56	17°♄53'29	0.57675 AU	min. Earth dist.	7883 Jun 22 06:30	29°♄19'57	0.59845 AU
morning rise	7882 Jul 14 15:35	15°♄08'56		morning rise	7883 Jun 26 00:26	26°♄33'26	
direct	7882 Jul 20 11:22	13°♄43'07		desc. node	7883 Jun 26 05:49	26°♄25'26	
morning max el	7882 Aug 03 20:34	21°♄19'55	26°47'08	direct	7883 Jul 02 11:19	24°♄35'20	
	7882 Aug 11 10:01	0°♄			7883 Jul 14 02:58	0°♄	
	7882 Aug 29 12:30	0°♄		morning max el	7883 Jul 16 19:49	2°♄29'16	27°40'00
asc. node	7882 Aug 31 09:46	3°♄49'13			7883 Aug 05 20:47	0°♄	
morning set	7882 Sep 02 10:55	8°♄05'47		morning set	7883 Aug 17 17:27	22°♄34'21	
				asc. node	7883 Aug 18 06:46	23°♄44'06	
superior conj	7882 Sep 09 09:42	23°♄16'41	1°20'32		7883 Aug 21 05:05	0°♄	
minimum elong	7882 Sep 09 07:31	23°♄04'36	1°20'14	max. Earth dist.	7883 Aug 24 00:53	6°♄11'29	1.31716 AU
max. Earth dist.	7882 Sep 09 14:46	23°♄44'48	1.31762 AU				
	7882 Sep 12 10:42	0°♄		superior conj	7883 Aug 24 21:14	8°♄04'00	1°03'05
evening rise	7882 Sep 16 05:56	8°♄12'12		minimum elong	7883 Aug 24 19:01	7°♄51'46	1°02'40
	7882 Sep 27 13:25	0°♄		evening rise	7883 Aug 31 15:18	22°♄52'24	
desc. node	7882 Oct 05 07:41	12°♄15'22			7883 Sep 04 01:13	0°♄	
evening max el	7882 Oct 16 16:19	25°♄53'18	26°54'08	desc. node	7883 Sep 22 04:45	0°♄11'02	
	7882 Oct 21 18:46	0°♄			7883 Sep 22 01:17	0°♄	
retrograde	7882 Oct 30 14:03	3°♄03'01		evening max el	7883 Sep 28 13:01	7°♄14'21	25°49'51
evening set	7882 Nov 06 12:05	0°♄59'25		retrograde	7883 Oct 12 11:30	14°♄18'06	
	7882 Nov 08 01:29	30°♄		evening set	7883 Oct 18 17:15	12°♄46'20	
min. Earth dist.	7882 Nov 10 06:37	28°♄21'11	0.60331 AU	min. Earth dist.	7883 Oct 23 01:40	10°♄10'29	0.58258 AU
inferior conj	7882 Nov 13 10:56	25°♄44'08	-4°10'17	inferior conj	7883 Oct 26 04:22	7°♄56'48	-5°05'14
minimum elong	7882 Nov 13 18:04	25°♄29'26	4°08'12	minimum elong	7883 Oct 26 10:28	7°♄45'52	5°04'07
morning rise	7882 Nov 21 02:24	20°♄59'04		morning rise	7883 Nov 03 05:59	3°♄34'17	
direct	7882 Nov 23 07:39	20°♄40'11		direct	7883 Nov 05 13:56	3°♄16'53	
asc. node	7882 Nov 27 09:16	21°♄46'51		morning max el	7883 Nov 14 00:10	7°♄20'46	18°41'18
morning max el	7882 Nov 30 17:54	24°♄21'15	18°04'58	asc. node	7883 Nov 14 06:18	7°♄35'43	
	7882 Dec 05 08:29	0°♄			7883 Nov 28 12:16	0°♄	
morning set	7882 Dec 16 10:18	19°♄11'10		morning set	7883 Nov 30 05:50	3°♄21'19	
	7882 Dec 22 06:06	0°♄					
				superior conj	7883 Dec 08 22:10	20°♄06'09	1°11'05



minimum elong	7883 Dec 09 01:34	20°  22'08	1°10'47	minimum elong	7884 Nov 21 08:57	3°  58'05	1°29'05
	7883 Dec 14 07:37	0° 		max. Earth dist.	7884 Nov 27 09:44	15°  31'57	1.37576 AU
max. Earth dist.	7883 Dec 16 03:49	3°  15'40	1.39728 AU	evening rise	7884 Dec 01 03:23	22°  19'09	
desc. node	7883 Dec 19 03:48	8°  26'47		desc. node	7884 Dec 05 00:49	29°  05'06	
evening rise	7883 Dec 20 05:15	10°  14'33			7884 Dec 05 13:47	0° 	
	7884 Jan 01 15:34	0° 			7884 Dec 25 12:10	0° 	
evening max el	7884 Jan 24 04:52	29°  22'31	24°04'24	evening max el	7885 Jan 05 18:06	13°  10'13	25°20'03
	7884 Jan 24 20:12	0° 		retrograde	7885 Jan 17 20:17	20°  08'39	
retrograde	7884 Feb 04 07:48	5°  54'39		evening set	7885 Jan 23 16:01	17°  44'07	
evening set	7884 Feb 09 14:39	3°  42'35		asc. node	7885 Jan 27 02:35	14°  05'48	
asc. node	7884 Feb 10 05:30	3°  09'15		min. Earth dist.	7885 Jan 28 02:09	12°  51'36	0.67510 AU
	7884 Feb 13 00:28	30° 		inferior conj	7885 Jan 29 07:27	11°  16'51	0°43'33
min. Earth dist.	7884 Feb 14 08:08	28°  15'24	0.68136 AU	minimum elong	7885 Jan 29 06:23	11°  20'16	0°43'14
inferior conj	7884 Feb 15 02:05	27°  14'40	1°32'36	morning rise	7885 Feb 03 21:05	5°  22'06	
minimum elong	7884 Feb 15 00:10	27°  21'08	1°31'59	direct	7885 Feb 07 08:19	4°  12'56	
morning rise	7884 Feb 20 09:42	21°  12'01		morning max el	7885 Feb 14 09:58	8°  07'35	19°19'39
direct	7884 Feb 24 09:10	19°  42'09		greatest brilliancy	7885 Feb 27 11:11	25°  25'38	-0.7m
morning max el	7884 Mar 03 05:50	24°  09'59	20°22'44		7885 Mar 02 11:59	0° 	
	7884 Mar 08 07:50	0° 		desc. node	7885 Mar 03 00:20	0°  46'52	
desc. node	7884 Mar 16 03:23	10°  42'15		morning set	7885 Mar 10 14:39	12°  42'27	
	7884 Mar 29 01:21	0° 			7885 Mar 21 21:24	0° 	
morning set	7884 Mar 31 15:20	3°  09'58'47		max. Earth dist.	7885 Mar 23 17:04	2°  51'54	1.44909 AU
max. Earth dist.	7884 Apr 10 02:36	18°  09'54'09	1.43641 AU				
				superior conj	7885 Mar 27 05:26	8°  26'08	-2°06'30
superior conj	7884 Apr 16 07:45	29°  02'09	-2°10'50	minimum elong	7885 Mar 27 00:22	8°  05'58	2°06'19
minimum elong	7884 Apr 16 09:29	29°  09'23	2°10'52		7885 Apr 09 11:58	0° 	
	7884 Apr 16 21:42	0° 		evening rise	7885 Apr 10 12:29	1°  41'35	
evening rise	7884 Apr 28 20:52	20°  26'39		asc. node	7885 Apr 25 01:33	24°  09'38	
	7884 May 04 08:46	0° 			7885 Apr 29 01:32	0° 	
asc. node	7884 May 08 04:28	6°  24'01		evening max el	7885 Apr 29 16:39	0°  39'08	18°20'40
evening max el	7884 May 16 03:33	17°  14'01	18°06'15	retrograde	7885 May 06 02:28	4°  10'53'2	
retrograde	7884 May 22 14:19	20°  13'44		evening set	7885 May 09 03:19	3°  15'10	
evening set	7884 May 25 08:04	19°  15'36			7885 May 13 01:23	30° 	
inferior conj	7884 May 31 16:07	14°  49'45	2°49'59	inferior conj	7885 May 15 00:21	27°  49'06	3°16'21
minimum elong	7884 May 31 18:46	14°  42'54	2°49'19	minimum elong	7885 May 15 01:45	27°  45'03	3°16'06
min. Earth dist.	7884 Jun 03 15:12	11°  47'39	0.62089 AU	min. Earth dist.	7885 May 17 09:12	25°  05'52	0.64139 AU
morning rise	7884 Jun 07 03:37	8°  45'20		morning rise	7885 May 20 23:09	21°  35'09	
desc. node	7884 Jun 12 02:53	6°  29'46		direct	7885 May 27 16:41	18°  52'50	
direct	7884 Jun 13 21:45	6°  19'52		desc. node	7885 May 29 23:55	19°  09'46	
morning max el	7884 Jun 28 01:02	14°  21'17	27°55'07	morning max el	7885 Jun 10 10:19	26°  52'27	27°33'22
	7884 Jul 10 16:08	0° 			7885 Jun 13 08:31	0° 	
	7884 Jul 28 09:28	0° 			7885 Jul 04 07:46	0° 	
morning set	7884 Jul 31 18:37	6°  44'06		morning set	7885 Jul 15 11:57	20°  28'31	
asc. node	7884 Aug 04 03:46	13°  46'33			7885 Jul 20 04:31	0° 	
max. Earth dist.	7884 Aug 06 07:59	18°  26'22	1.32131 AU	max. Earth dist.	7885 Jul 20 08:18	0°  19'44	1.33021 AU
				asc. node	7885 Jul 22 00:47	3°  52'33	
superior conj	7884 Aug 08 06:50	22°  41'15	0°41'07	superior conj	7885 Jul 23 12:32	7°  02'56	0°15'08
minimum elong	7884 Aug 08 05:05	22°  31'43	0°40'41	minimum elong	7885 Jul 23 11:48	6°  58'59	0°14'51
	7884 Aug 11 14:49	0° 		behind sun begin	7885 Jul 23 09:46	6°  48'08	
evening rise	7884 Aug 15 02:42	7°  17'35'18		behind sun end	7885 Jul 23 13:49	7°  09'50	
	7884 Aug 26 16:54	0° 		evening rise	7885 Jul 30 14:14	22°  15'12	
desc. node	7884 Sep 08 01:51	16°  48'34			7885 Aug 03 07:51	0° 	
evening max el	7884 Sep 09 02:38	17°  50'01	24°20'39	evening max el	7885 Aug 21 14:28	28°  17'03'24	22°41'27
retrograde	7884 Sep 22 21:03	24°  44'36			7885 Aug 23 18:10	0° 	
evening set	7884 Sep 27 21:44	23°  48'42		desc. node	7885 Aug 25 22:57	1°  38'53	
min. Earth dist.	7884 Oct 03 13:32	20°  56'57	0.56421 AU	retrograde	7885 Sep 03 18:07	4°  37'15	
inferior conj	7884 Oct 06 01:35	19°  23'06	-5°32'29	evening set	7885 Sep 07 06:26	4°  10'10	
minimum elong	7884 Oct 06 02:35	19°  21'32	5°32'24	min. Earth dist.	7885 Sep 14 22:03	0°  45'54	0.55138 AU
morning rise	7884 Oct 14 09:35	15°  21'52		inferior conj	7885 Sep 16 04:09	0°  03'03	-5°13'18
direct	7884 Oct 17 01:23	15°  03'02		minimum elong	7885 Sep 15 21:47	0°  12'07	5°12'24
morning max el	7884 Oct 26 19:48	19°  39'27	19°39'49		7885 Sep 16 06:17	30° 	
asc. node	7884 Oct 31 03:19	24°  35'22		morning rise	7885 Sep 24 15:08	26°  17'14'37	
	7884 Nov 03 19:01	0° 		direct	7885 Sep 27 18:40	25°  17'51'52	
morning set	7884 Nov 13 09:04	17°  11'52'28			7885 Oct 07 18:51	0° 	
	7884 Nov 19 09:04	0° 		morning max el	7885 Oct 09 02:37	1°  09'55	21°00'28
superior conj	7884 Nov 21 06:26	3°  45'43	1°29'11	asc. node	7885 Oct 18 00:20	12°  30'08	


































































































































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morning set	7885 Oct 28 17:09	2°♌35'42		morning rise	7886 Sep 04 08:55	6°♏21'04	
				direct	7886 Sep 08 02:51	5°♏50'54	
superior conj	7885 Nov 05 01:53	17°♌56'44	1°39'02	morning max el	7886 Sep 20 21:58	11°♏56'10	22°38'54
minimum elong	7885 Nov 05 03:04	18°♌02'49	1°39'05		7886 Oct 04 06:04	0°♏	
max. Earth dist.	7885 Nov 09 19:04	27°♌27'19	1.35593 AU	asc. node	7886 Oct 04 21:18	1°♏07'18	
	7885 Nov 11 02:21	0°♏		morning set	7886 Oct 13 03:56	17°♏25'05	
evening rise	7885 Nov 13 19:59	5°♏12'33			7886 Oct 19 01:05	0°♌	
desc. node	7885 Nov 21 21:51	19°♏33'02					
	7885 Nov 28 09:41	0°♏		superior conj	7886 Oct 20 05:02	2°♌29'13	1°41'37
evening max el	7885 Dec 19 07:10	26°♏55'11	26°24'08	minimum elong	7886 Oct 20 04:54	2°♌28'29	1°41'42
	7885 Dec 22 18:47	0°♏		max. Earth dist.	7886 Oct 23 11:39	9°♌22'34	1.33959 AU
retrograde	7886 Jan 01 03:36	4°♏09'35		evening rise	7886 Oct 28 03:13	18°♌45'21	
evening set	7886 Jan 07 11:49	1°♏35'57			7886 Nov 03 02:55	0°♏	
	7886 Jan 09 05:29	30°♏3		desc. node	7886 Nov 08 18:54	9°♏45'09	
min. Earth dist.	7886 Jan 11 15:24	27°♏18'18	0.66510 AU		7886 Nov 22 13:39	0°♏	
inferior conj	7886 Jan 13 08:16	25°♏14'31	-0°12'55	evening max el	7886 Dec 01 20:04	10°♏29'25	27°09'18
minimum elong	7886 Jan 13 08:36	25°♏13'29	0°12'38	retrograde	7886 Dec 15 05:14	17°♏49'47	
transit middle	7886 Jan 13 08:36	25°♏13'29	0°12'38	evening set	7886 Dec 21 23:57	15°♏12'54	
transit begin	7886 Jan 13 06:49	25°♏18'54		min. Earth dist.	7886 Dec 25 21:44	11°♏29'21	0.65149 AU
transit end	7886 Jan 13 10:24	25°♏08'03		inferior conj	7886 Dec 28 02:18	9°♏02'56	-1°15'53
asc. node	7886 Jan 13 23:39	24°♏28'07		minimum elong	7886 Dec 28 04:34	8°♏56'39	1°14'48
morning rise	7886 Jan 19 06:10	19°♏29'51		asc. node	7886 Dec 31 20:41	5°♏13'40	
direct	7886 Jan 22 06:42	18°♏38'23		morning rise	7887 Jan 03 10:30	3°♏30'52	
morning max el	7886 Jan 28 21:03	22°♏12'22	18°32'23	direct	7887 Jan 06 02:14	2°♏53'21	
	7886 Feb 04 04:15	0°♏		morning max el	7887 Jan 12 12:43	6°♏17'43	18°01'48
desc. node	7886 Feb 17 21:16	21°♏08'09			7887 Jan 28 15:30	0°♏	
morning set	7886 Feb 18 10:20	21°♏59'53		morning set	7887 Jan 30 11:35	3°♏01'50	
	7886 Feb 23 11:53	0°♏		desc. node	7887 Feb 04 18:12	11°♏41'19	
superior conj	7886 Mar 06 11:20	17°♏13'31	-1°42'00	superior conj	7887 Feb 13 19:52	26°♏15'48	-1°02'03
minimum elong	7886 Mar 06 01:47	16°♏36'10	1°41'05	minimum elong	7887 Feb 13 12:39	25°♏47'10	1°01'03
max. Earth dist.	7886 Mar 06 11:31	17°♏14'17	1.45475 AU		7887 Feb 16 04:38	0°♏	
	7886 Mar 14 14:44	0°♏		max. Earth dist.	7887 Feb 17 06:56	1°♏43'26	1.45295 AU
evening rise	7886 Mar 22 04:30	11°♏58'37		evening rise	7887 Mar 02 00:19	21°♏30'44	
greatest brilliancy	7886 Mar 31 01:51	26°♏03'56	-0.8m		7887 Mar 07 12:40	0°♏	
	7886 Apr 02 14:37	0°♏		greatest brilliancy	7887 Mar 15 15:56	12°♏19'21	-0.7m
asc. node	7886 Apr 11 22:38	12°♏55'28		evening max el	7887 Mar 27 09:35	27°♏48'35	19°41'59
evening max el	7886 Apr 13 03:18	14°♏12'04	18°53'03	asc. node	7887 Mar 29 19:42	29°♏59'27	
retrograde	7886 Apr 19 21:01	17°♏57'03			7887 Mar 29 19:59	0°♏	
evening set	7886 Apr 23 05:09	16°♏52'42		retrograde	7887 Apr 03 18:42	2°♏02'49	
inferior conj	7886 Apr 28 18:48	11°♏10'07	3°24'38	evening set	7887 Apr 07 10:55	0°♏43'52	
minimum elong	7886 Apr 28 18:50	11°♏10'01	3°24'33		7887 Apr 08 08:52	30°♏♏	
min. Earth dist.	7886 Apr 30 12:17	9°♏00'14	0.65833 AU	inferior conj	7887 Apr 12 20:17	24°♏46'42	3°18'39
morning rise	7886 May 04 08:00	4°♏52'38		minimum elong	7887 Apr 12 19:10	24°♏50'24	3°18'29
direct	7886 May 10 18:53	2°♏05'30		min. Earth dist.	7887 Apr 13 22:56	23°♏18'02	0.67110 AU
desc. node	7886 May 16 20:54	4°♏04'04		morning rise	7887 Apr 18 03:07	18°♏29'18	
morning max el	7886 May 23 20:54	9°♏51'21	26°40'37	direct	7887 Apr 24 03:17	15°♏48'36	
	7886 Jun 08 17:27	0°♏		desc. node	7887 May 03 17:52	20°♏40'30	
	7886 Jun 26 19:33	0°♏		morning max el	7887 May 06 06:35	23°♏05'05	25°25'30
morning set	7886 Jun 28 18:20	3°♏39'10			7887 May 12 09:15	0°♏	
max. Earth dist.	7886 Jul 02 22:32	11°♏45'53	1.34387 AU		7887 Jun 02 01:33	0°♏	
				morning set	7887 Jun 11 09:26	16°♏03'22	
superior conj	7886 Jul 07 12:07	21°♏02'56	-0°14'09	max. Earth dist.	7887 Jun 15 01:42	22°♏50'23	1.36204 AU
minimum elong	7886 Jul 07 12:54	21°♏07'01	0°14'07		7887 Jun 18 19:21	0°♏	
behind sun begin	7886 Jul 07 10:07	20°♏52'36					
behind sun end	7886 Jul 07 15:41	21°♏21'27		superior conj	7887 Jun 21 02:43	4°♏32'59	-0°45'28
asc. node	7886 Jul 08 21:47	23°♏58'17		minimum elong	7887 Jun 21 05:26	4°♏46'31	0°45'05
	7886 Jul 11 18:35	0°♏		asc. node	7887 Jun 25 18:47	13°♏59'04	
evening rise	7886 Jul 14 23:57	6°♏46'26		evening rise	7887 Jun 29 05:35	21°♏01'32	
	7886 Jul 27 13:26	0°♏			7887 Jul 03 18:00	0°♏	
evening max el	7886 Aug 03 09:34	8°♏31'32	21°08'39	evening max el	7887 Jul 16 17:29	19°♏38'53	19°52'31
desc. node	7886 Aug 12 20:02	14°♏10'26		retrograde	7887 Jul 26 22:30	24°♏40'40	
retrograde	7886 Aug 15 07:15	14°♏25'21		evening set	7887 Jul 28 19:20	24°♏31'18	
evening set	7886 Aug 17 14:47	14°♏12'49		desc. node	7887 Jul 30 17:07	24°♏03'39	
inferior conj	7886 Aug 26 21:02	10°♏15'27	-3°59'33	inferior conj	7887 Aug 06 18:24	20°♏30'34	-2°08'32
minimum elong	7886 Aug 26 11:35	10°♏28'46	3°56'53	minimum elong	7887 Aug 06 12:30	20°♏39'35	2°06'25

min. Earth dist.	7887 Aug 08 18:39	19°♎16'59	0.55213 AU	inferior conj	7888 Jul 17 08:33	1°♎16'20	-0°13'55
morning rise	7887 Aug 15 03:46	16°♎10'08		minimum elong	7888 Jul 17 07:58	1°♎17'21	0°13'49
direct	7887 Aug 19 16:07	15°♎25'20		transit middle	7888 Jul 17 07:58	1°♎17'21	0°13'49
morning max el	7887 Sep 02 11:00	22°♎14'23	24°24'33	transit begin	7888 Jul 17 06:03	1°♎20'43	
	7887 Sep 09 07:18	0°♎		transit end	7888 Jul 17 09:52	1°♎13'59	
asc. node	7887 Sep 21 18:16	20°♎15'51			7888 Jul 19 03:45	30°♎	
	7887 Sep 26 14:08	0°♎		min. Earth dist.	7888 Jul 20 09:37	29°♎08'30	0.56602 AU
morning set	7887 Sep 27 15:39	2°♎14'50		morning rise	7888 Jul 25 09:28	26°♎19'43	
				direct	7888 Jul 30 18:30	25°♎11'02	
superior conj	7887 Oct 04 13:10	17°♎14'12	1°37'50		7888 Aug 11 03:24	0°♎	
minimum elong	7887 Oct 04 11:57	17°♎07'32	1°37'49	morning max el	7888 Aug 14 00:39	2°♎32'51	26°01'35
max. Earth dist.	7887 Oct 06 12:31	21°♎31'02	1.32753 AU		7888 Sep 02 12:51	0°♎	
	7887 Oct 10 12:44	0°♎		asc. node	7888 Sep 07 15:14	9°♎47'42	
evening rise	7887 Oct 11 21:23	2°♎47'26		morning set	7888 Sep 11 02:40	17°♎00'31	
desc. node	7887 Oct 26 15:59	29°♎34'06			7888 Sep 17 01:30	0°♎	
	7887 Oct 26 22:31	0°♎					
evening max el	7887 Nov 14 07:39	23°♎41'58	27°28'42	superior conj	7888 Sep 18 00:05	2°♎04'54	1°28'22
	7887 Nov 23 07:11	0°♎		minimum elong	7888 Sep 17 22:09	1°♎54'08	1°28'10
retrograde	7887 Nov 28 00:25	1°♎00'20		max. Earth dist.	7888 Sep 18 19:49	3°♎53'53	1.32000 AU
	7887 Dec 02 11:28	30°♎		evening rise	7888 Sep 24 23:25	17°♎10'21	
evening set	7887 Dec 05 01:47	28°♎28'27			7888 Oct 01 10:06	0°♎	
min. Earth dist.	7887 Dec 08 19:12	25°♎16'09	0.63460 AU	desc. node	7888 Oct 12 13:04	18°♎50'19	
inferior conj	7887 Dec 11 10:58	22°♎35'59	-2°23'37		7888 Oct 20 18:36	0°♎	
minimum elong	7887 Dec 11 15:27	22°♎24'41	2°21'45	evening max el	7888 Oct 26 15:32	6°♎19'31	27°16'35
morning rise	7887 Dec 18 06:59	17°♎19'23		retrograde	7888 Nov 09 11:56	13°♎31'47	
asc. node	7887 Dec 18 17:41	17°♎10'08		evening set	7888 Nov 16 13:48	11°♎15'01	
direct	7887 Dec 20 16:16	16°♎51'51		min. Earth dist.	7888 Nov 20 06:12	8°♎27'30	0.61518 AU
morning max el	7887 Dec 27 06:02	20°♎16'04	17°48'33	inferior conj	7888 Nov 23 07:08	5°♎45'21	-3°32'36
	7888 Jan 03 13:12	0°♎		minimum elong	7888 Nov 23 13:38	5°♎30'52	3°30'21
morning set	7888 Jan 12 15:19	15°♎21'00		morning rise	7888 Nov 30 15:38	0°♎47'37	
	7888 Jan 21 05:06	0°♎		direct	7888 Dec 02 21:25	0°♎26'25	
desc. node	7888 Jan 22 15:11	2°♎22'23		asc. node	7888 Dec 04 14:43	0°♎39'21	
				morning max el	7888 Dec 09 21:46	3°♎58'49	17°53'27
superior conj	7888 Jan 24 23:59	6°♎17'15	-0°17'07	morning set	7888 Dec 25 14:54	28°♎36'19	
minimum elong	7888 Jan 24 22:08	6°♎09'42	0°16'44		7888 Dec 26 09:20	0°♎	
max. Earth dist.	7888 Jan 31 01:00	16°♎04'08	1.44402 AU				
	7888 Feb 08 22:30	0°♎		superior conj	7889 Jan 05 05:46	17°♎32'24	0°23'54
evening rise	7888 Feb 09 11:24	0°♎49'38		minimum elong	7889 Jan 05 07:49	17°♎41'15	0°23'43
	7888 Feb 29 04:45	0°♎		desc. node	7889 Jan 08 12:11	23°♎07'11	
evening max el	7888 Mar 09 10:34	11°♎27'20	20°45'07	max. Earth dist.	7889 Jan 12 15:36	0°♎00'38	1.42897 AU
asc. node	7888 Mar 15 16:45	15°♎57'45			7889 Jan 12 15:27	0°♎	
retrograde	7888 Mar 17 17:10	16°♎18'40		evening rise	7889 Jan 19 05:04	10°♎32'11	
evening set	7888 Mar 21 18:39	14°♎44'38			7889 Feb 01 01:23	0°♎	
inferior conj	7888 Mar 27 02:12	8°♎34'58	3°01'04	evening max el	7889 Feb 20 06:16	25°♎07'19	21°58'55
minimum elong	7888 Mar 27 00:19	8°♎41'27	3°00'42		7889 Feb 26 16:23	0°♎	
min. Earth dist.	7888 Mar 27 15:09	7°♎50'24	0.67947 AU	retrograde	7889 Mar 01 14:33	0°♎39'38	
morning rise	7888 Apr 01 05:46	2°♎19'57		asc. node	7889 Mar 02 13:50	0°♎34'49	
	7888 Apr 05 14:13	30°♎			7889 Mar 04 08:13	30°♎	
direct	7888 Apr 06 16:53	29°♎54'22		evening set	7889 Mar 06 02:36	28°♎50'17	
	7888 Apr 07 20:16	0°♎		inferior conj	7889 Mar 11 10:23	22°♎30'43	2°33'35
morning max el	7888 Apr 17 15:29	6°♎26'45	23°58'16	minimum elong	7889 Mar 11 08:08	22°♎38'34	2°33'01
desc. node	7888 Apr 19 14:49	8°♎31'49		min. Earth dist.	7889 Mar 11 10:42	22°♎29'37	0.68346 AU
	7888 May 05 22:01	0°♎		morning rise	7889 Mar 16 13:30	16°♎19'34	
morning set	7888 May 23 04:04	27°♎27'23		direct	7889 Mar 21 10:31	14°♎14'32	
	7888 May 24 15:21	0°♎		morning max el	7889 Mar 31 02:07	19°♎55'25	22°28'52
max. Earth dist.	7888 May 26 22:03	4°♎00'44	1.38355 AU	desc. node	7889 Apr 06 11:47	27°♎16'40	
					7889 Apr 08 14:31	0°♎	
superior conj	7888 Jun 03 04:58	17°♎24'55	-1°16'46		7889 Apr 29 02:52	0°♎	
minimum elong	7888 Jun 03 09:37	17°♎47'02	1°16'10	morning set	7889 May 03 20:46	7°♎37'21	
	7888 Jun 09 16:48	0°♎		max. Earth dist.	7889 May 08 19:21	15°♎50'36	1.40599 AU
asc. node	7888 Jun 11 15:48	3°♎51'09					
evening rise	7888 Jun 12 04:34	4°♎53'50		superior conj	7889 May 16 14:29	29°♎27'57	-1°44'53
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evening max el	7888 Jun 28 13:57	1°♎30'41	18°56'43		7889 May 16 21:36	0°♎	
retrograde	7888 Jul 07 03:56	5°♎45'08		evening rise	7889 May 26 17:37	18°♎14'39	
evening set	7888 Jul 09 03:11	5°♎32'38		asc. node	7889 May 29 12:51	23°♎29'42	
desc. node	7888 Jul 16 14:09	1°♎48'29			7889 Jun 02 02:38	0°♎	

evening max el	7889 Jun 11 19:41	14°☿00'16	18°21'33		7890 May 30 18:21	0°☿	
retrograde	7889 Jun 19 04:46	17°☿41'43		retrograde	7890 Jun 01 22:50	0°☿22'36	
evening set	7889 Jun 21 10:51	17°☿21'57			7890 Jun 04 03:59	30°☿II	
inferior conj	7889 Jun 28 20:21	12°☿45'14	1°19'35	evening set	7890 Jun 04 12:18	29°☿II52'31	
minimum elong	7889 Jun 28 22:52	12°☿40'02	1°18'37	inferior conj	7890 Jun 11 04:31	24°☿II55'37	2°24'37
min. Earth dist.	7889 Jul 02 05:53	9°☿58'11	0.58576 AU	minimum elong	7890 Jun 11 07:35	24°☿II48'16	2°23'43
desc. node	7889 Jul 03 11:12	9°☿02'53		min. Earth dist.	7890 Jun 14 09:45	21°☿II51'58	0.60805 AU
morning rise	7889 Jul 06 07:37	7°☿14'24		morning rise	7890 Jun 18 00:23	19°☿II00'03	
direct	7889 Jul 12 10:41	5°☿35'01		desc. node	7890 Jun 20 08:15	17°☿II44'17	
morning max el	7889 Jul 26 20:00	13°☿19'17	27°14'05	direct	7890 Jun 24 15:06	16°☿II49'37	
	7889 Aug 09 01:39	0°☿		morning max el	7890 Jul 08 22:16	24°☿II47'59	27°51'15
asc. node	7889 Aug 25 12:15	29°☿36'15			7890 Jul 13 16:11	0°☿	
	7889 Aug 25 16:49	0°☿			7890 Aug 02 10:51	0°☿	
morning set	7889 Aug 26 11:25	1°☿37'31		morning set	7890 Aug 10 15:58	15°☿II59'24	
				asc. node	7890 Aug 12 09:14	19°☿II35'13	
superior conj	7889 Sep 02 11:57	16°☿55'33	1°13'43	max. Earth dist.	7890 Aug 16 15:43	28°☿II48'04	1.31835 AU
minimum elong	7889 Sep 02 09:42	16°☿43'04	1°13'21		7890 Aug 17 04:49	0°☿	
max. Earth dist.	7889 Sep 02 06:14	16°☿23'52	1.31692 AU				
	7889 Sep 08 10:48	0°☿		superior conj	7890 Aug 17 22:52	1°☿39'27	0°54'19
evening rise	7889 Sep 09 06:47	1°☿46'46		minimum elong	7890 Aug 17 20:48	1°☿28'01	0°53'51
	7889 Sep 24 10:21	0°☿		evening rise	7890 Aug 24 17:15	16°☿II29'02	
desc. node	7889 Sep 29 10:09	7°☿20'56			7890 Aug 31 08:31	0°☿	
evening max el	7889 Oct 08 16:54	18°☿10'35	26°30'32	desc. node	7890 Sep 16 07:14	24°☿II46'51	
retrograde	7889 Oct 22 14:50	25°☿17'05		evening max el	7890 Sep 20 10:03	29°☿II10'09	25°14'07
evening set	7889 Oct 29 07:43	23°☿25'57			7890 Sep 21 07:32	0°☿	
min. Earth dist.	7889 Nov 02 06:23	20°☿51'08	0.59441 AU	retrograde	7890 Oct 04 07:32	6°☿II11'20	
inferior conj	7889 Nov 05 11:21	18°☿22'05	-4°35'52	evening set	7890 Oct 10 02:36	4°☿II54'30	
minimum elong	7889 Nov 05 18:27	18°☿08'16	4°34'05	min. Earth dist.	7890 Oct 14 21:42	2°☿II14'23	0.57430 AU
morning rise	7889 Nov 13 07:29	13°☿46'26		inferior conj	7890 Oct 17 20:17	0°☿II15'33	-5°21'17
direct	7889 Nov 15 13:29	13°☿28'24		minimum elong	7890 Oct 18 00:44	0°☿II08'01	5°20'43
asc. node	7889 Nov 21 11:45	15°☿41'14			7890 Oct 18 05:29	30°☿☿	
morning max el	7889 Nov 23 08:36	17°☿17'41	18°17'51	morning rise	7890 Oct 26 01:12	26°☿II02'59	
	7889 Dec 02 09:36	0°☿		direct	7890 Oct 28 11:51	25°☿II45'22	
morning set	7889 Dec 09 04:30	12°☿30'53			7890 Nov 06 10:12	0°☿	
				morning max el	7890 Nov 06 10:49	0°☿II01'28	19°03'29
superior conj	7889 Dec 18 11:11	29°☿55'34	0°56'32	asc. node	7890 Nov 08 08:47	2°☿II02'16	
minimum elong	7889 Dec 18 14:38	0°☿II11'14	0°56'11	morning set	7890 Nov 23 03:41	26°☿II50'58	
	7889 Dec 18 12:10	0°☿			7890 Nov 24 17:50	0°☿	
max. Earth dist.	7889 Dec 26 01:28	13°☿31'44	1.40953 AU				
desc. node	7889 Dec 26 09:12	13°☿52'39		superior conj	7890 Dec 01 11:05	13°☿II11'14	1°19'50
evening rise	7889 Dec 30 16:52	21°☿05'10		minimum elong	7890 Dec 01 14:12	13°☿II26'11	1°19'36
	7890 Jan 05 06:33	0°☿		max. Earth dist.	7890 Dec 08 07:14	25°☿II54'26	1.38801 AU
	7890 Jan 26 05:50	0°☿			7890 Dec 10 14:37	0°☿	
evening max el	7890 Feb 02 21:52	8°☿49'42	23°18'22	evening rise	7890 Dec 12 02:43	2°☿II36'46	
retrograde	7890 Feb 13 09:28	15°☿01'52		desc. node	7890 Dec 13 06:13	4°☿II34'34	
asc. node	7890 Feb 17 10:55	13°☿40'19			7890 Dec 29 11:25	0°☿	
evening set	7890 Feb 18 09:15	12°☿57'32		evening max el	7891 Jan 16 11:13	22°☿II34'54	24°37'30
inferior conj	7890 Feb 23 18:56	6°☿31'23	1°57'16	retrograde	7891 Jan 28 00:42	29°☿II20'12	
minimum elong	7890 Feb 23 16:46	6°☿38'52	1°56'36	evening set	7891 Feb 02 13:02	27°☿II02'18	
min. Earth dist.	7890 Feb 23 07:27	7°☿10'56	0.68328 AU	asc. node	7891 Feb 04 08:00	25°☿II17'03	
morning rise	7890 Mar 01 00:13	0°☿25'23		min. Earth dist.	7891 Feb 07 03:09	21°☿II49'53	0.67912 AU
	7890 Mar 01 13:44	30°☿☿		inferior conj	7891 Feb 08 01:59	20°☿II33'48	1°12'44
direct	7890 Mar 05 07:15	28°☿II42'55		minimum elong	7891 Feb 08 00:23	20°☿II39'11	1°12'12
	7890 Mar 09 08:35	0°☿		morning rise	7891 Feb 13 11:54	14°☿II34'22	
morning max el	7890 Mar 13 18:07	3°☿34'55	21°05'34	direct	7891 Feb 17 05:52	13°☿II13'49	
desc. node	7890 Mar 24 08:46	16°☿40'23		morning max el	7891 Feb 24 17:43	17°☿II26'20	19°54'04
	7890 Apr 02 14:24	0°☿			7891 Mar 06 17:36	0°☿	
morning set	7890 Apr 13 10:23	16°☿Y33'36		greatest brilliancy	7891 Mar 09 22:22	4°☿II37'01	-0.6m
max. Earth dist.	7890 Apr 20 22:45	28°☿Y34'58	1.42648 AU	desc. node	7891 Mar 11 05:43	6°☿II32'18	
	7890 Apr 21 19:32	0°☿		morning set	7891 Mar 23 08:03	24°☿II51'27	
					7891 Mar 26 15:48	0°☿	
superior conj	7890 Apr 28 02:33	10°☿II31'25	-2°05'06	max. Earth dist.	7891 Apr 03 08:58	12°☿Y07'43	1.44250 AU
minimum elong	7890 Apr 28 06:52	10°☿II49'51	2°04'59				
	7890 May 09 04:33	0°☿II		superior conj	7891 Apr 08 13:52	20°☿Y29'44	-2°11'25
evening rise	7890 May 09 16:38	0°☿II54'18		minimum elong	7891 Apr 08 12:55	20°☿Y25'52	2°11'27
asc. node	7890 May 16 09:55	12°☿II49'23			7891 Apr 14 08:30	0°☿	
evening max el	7890 May 26 06:55	26°☿II58'20	18°06'17	evening rise	7891 Apr 21 20:57	12°☿II42'23	

	7891 May 02 04:21	0°♊	evening rise	7892 Apr 02 02:29	23°♎31'28	
asc. node	7891 May 03 06:59	1°♊43'40		7892 Apr 06 01:53	0°♎	
evening max el	7891 May 09 20:13	10°♊16'06 18°10'10	asc. node	7892 Apr 19 04:04	20°♎03'40	
retrograde	7891 May 16 05:37	13°♊37'52	evening max el	7892 Apr 22 08:36	23°♎45'17 18°32'25	
evening set	7891 May 19 02:16	12°♊55'26	retrograde	7892 Apr 28 20:46	27°♎17'59	
inferior conj	7891 May 25 05:11	7°♊39'48 3°03'39	evening set	7892 May 02 00:39	26°♎21'49	
minimum elong	7891 May 25 07:21	7°♊33'54 3°03'11	inferior conj	7892 May 07 18:09	20°♎48'50 3°21'49	
min. Earth dist.	7891 May 27 22:37	4°♊43'10 0.62988 AU	minimum elong	7892 May 07 18:58	20°♎46'25 3°21'39	
morning rise	7891 May 31 10:54	1°♊30'09	min. Earth dist.	7892 May 09 20:36	18°♎18'11 0.64906 AU	
	7891 Jun 02 20:12	30°♋♎	morning rise	7892 May 13 12:28	14°♎32'56	
direct	7891 Jun 07 05:35	28°♎55'51	direct	7892 May 20 03:57	11°♎46'44	
desc. node	7891 Jun 07 05:16	28°♎55'51	desc. node	7892 May 24 02:15	12°♎36'20	
	7891 Jun 11 21:56	0°♊	morning max el	7892 Jun 02 15:35	19°♎42'23 27°14'13	
morning max el	7891 Jun 21 05:41	6°♊58'50 27°50'08		7892 Jun 11 10:11	0°♊	
	7891 Jul 08 19:17	0°♎		7892 Jun 30 20:17	0°♎	
morning set	7891 Jul 25 14:10	0°♊00'02	morning set	7892 Jul 08 03:15	13°♎31'09	
	7891 Jul 25 14:09	0°♊	max. Earth dist.	7892 Jul 12 16:19	22°♎35'22 1.33542 AU	
asc. node	7891 Jul 30 06:15	9°♊40'12				
max. Earth dist.	7891 Jul 30 20:17	10°♊54'54 1.32447 AU	superior conj	7892 Jul 16 10:28	0°♊24'42 0°03'04	
			minimum elong	7892 Jul 16 10:19	0°♊23'54 0°02'56	
superior conj	7891 Aug 02 07:05	16°♊11'20 0°30'34	behind sun begin	7892 Jul 16 04:50	29°♎54'58	
minimum elong	7891 Aug 02 05:42	16°♊03'50 0°30'11	behind sun end	7892 Jul 16 15:48	0°♊52'53	
	7891 Aug 08 15:34	0°♎	asc. node	7892 Jul 16 03:15	29°♎46'33	
evening rise	7891 Aug 09 04:56	1°♎11'34		7892 Jul 16 05:48	0°♊	
	7891 Aug 24 23:40	0°♎	evening rise	7892 Jul 23 15:54	15°♊48'18	
evening max el	7891 Sep 01 21:48	9°♎32'17 23°38'38		7892 Jul 30 18:02	0°♎	
desc. node	7891 Sep 03 04:18	10°♎42'58	evening max el	7892 Aug 13 11:53	19°♎48'26 22°00'29	
retrograde	7891 Sep 15 12:08	16°♎20'45	desc. node	7892 Aug 20 01:22	24°♎38'07	
evening set	7891 Sep 19 21:15	15°♎38'45	retrograde	7892 Aug 26 04:40	26°♎06'52	
min. Earth dist.	7891 Sep 26 07:57	12°♎34'40 0.55789 AU	evening set	7892 Aug 29 02:44	25°♎47'53	
inferior conj	7891 Sep 28 09:00	11°♎21'23 -5°30'58	min. Earth dist.	7892 Sep 06 16:34	22°♎05'28 0.54838 AU	
minimum elong	7891 Sep 28 06:50	11°♎24'38 5°30'50	inferior conj	7892 Sep 07 05:57	21°♎46'43 -4°48'21	
morning rise	7891 Oct 06 18:36	7°♎27'09	minimum elong	7892 Sep 06 21:24	21°♎58'43 4°46'35	
direct	7891 Oct 09 14:45	7°♎07'08	morning rise	7892 Sep 15 17:29	17°♎58'02	
morning max el	7891 Oct 20 01:12	12°♎00'38 20°11'28	direct	7892 Sep 19 02:57	17°♎32'32	
asc. node	7891 Oct 26 05:47	19°♎27'06	morning max el	7892 Oct 01 02:38	23°♎10'56 21°40'30	
	7891 Nov 01 13:22	0°♎		7892 Oct 07 01:25	0°♎	
morning set	7891 Nov 07 09:13	11°♎27'43	asc. node	7892 Oct 12 02:46	7°♎41'30	
			morning set	7892 Oct 21 18:42	26°♎14'24	
superior conj	7891 Nov 15 00:34	27°♎05'29 1°34'18		7892 Oct 23 13:37	0°♎	
minimum elong	7891 Nov 15 02:32	27°♎15'22 1°34'16				
	7891 Nov 16 11:28	0°♎	superior conj	7892 Oct 28 23:40	11°♎26'49 1°40'56	
max. Earth dist.	7891 Nov 20 13:27	7°♎56'50 1.36700 AU	minimum elong	7892 Oct 29 00:16	11°♎29'59 1°41'01	
evening rise	7891 Nov 24 09:10	15°♎03'21	max. Earth dist.	7892 Nov 02 01:41	19°♎50'38 1.34855 AU	
desc. node	7891 Nov 30 03:15	25°♎09'00	evening rise	7892 Nov 06 08:32	28°♎15'23	
	7891 Dec 03 01:15	0°♎		7892 Nov 07 06:34	0°♎	
	7891 Dec 24 03:35	0°♎	desc. node	7892 Nov 16 00:17	15°♎31'17	
evening max el	7891 Dec 30 00:14	6°♎21'49 25°49'14		7892 Nov 25 07:00	0°♎	
retrograde	7892 Jan 11 11:13	13°♎29'02	evening max el	7892 Dec 11 13:35	20°♎04'44 26°46'09	
evening set	7892 Jan 17 12:15	11°♎00'12	retrograde	7892 Dec 24 16:09	27°♎22'17	
min. Earth dist.	7892 Jan 21 19:30	6°♎22'17 0.67122 AU	evening set	7892 Dec 31 05:04	24°♎46'49	
asc. node	7892 Jan 22 05:04	5°♎52'17	min. Earth dist.	7893 Jan 04 06:12	20°♎43'33 0.65972 AU	
inferior conj	7892 Jan 23 05:40	4°♎34'29 0°20'28	inferior conj	7893 Jan 06 03:55	18°♎29'34 -0°38'51	
minimum elong	7892 Jan 23 05:08	4°♎36'09 0°20'22	minimum elong	7893 Jan 06 05:01	18°♎26'20 0°38'16	
	7892 Jan 27 06:40	30°♋♎	asc. node	7893 Jan 08 02:06	16°♎18'06	
morning rise	7892 Jan 28 22:32	28°♎43'32	morning rise	7893 Jan 12 05:57	12°♎49'36	
direct	7892 Feb 01 04:55	27°♎42'23	direct	7893 Jan 15 02:32	12°♎04'26	
	7892 Feb 06 10:26	0°♎	morning max el	7893 Jan 21 14:17	15°♎33'05 18°17'16	
morning max el	7892 Feb 08 00:58	1°♎27'12 18°57'28		7893 Feb 01 05:33	0°♎	
desc. node	7892 Feb 26 02:40	26°♎44'31	morning set	7893 Feb 09 21:52	13°♎51'52	
	7892 Feb 28 05:03	0°♎	desc. node	7893 Feb 11 23:37	17°♎11'42	
morning set	7892 Mar 01 13:39	3°♎40'10		7893 Feb 20 00:32	0°♎	
max. Earth dist.	7892 Mar 16 00:53	26°♎15'48 1.45232 AU				
			superior conj	7893 Feb 25 07:38	8°♎20'19 -1°26'22	
superior conj	7892 Mar 18 03:05	29°♎33'09 -1°58'30	minimum elong	7893 Feb 24 22:19	7°♎43'45 1°25'19	
minimum elong	7892 Mar 17 19:23	29°♎02'53 1°58'00	max. Earth dist.	7893 Feb 26 20:22	10°♎44'15 1.45494 AU	
	7892 Mar 18 09:54	0°♎		7893 Mar 11 04:10	0°♎	

evening rise	7893 Mar 13 09:03	3° $\Upsilon$ 26'48		superior conj	7894 Feb 04 22:57	17° $\approx$ 43'29	-0°42'59
greatest brilliancy	7893 Mar 24 11:19	20° $\Upsilon$ 42'48	-0.8m	minimum elong	7894 Feb 04 17:59	17° $\approx$ 23'32	0°42'11
	7893 Mar 30 18:34	0° $\text{B}$		max. Earth dist.	7894 Feb 09 16:03	25° $\approx$ 13'39	1.45006 AU
evening max el	7893 Apr 05 17:40	7° $\text{B}$ 20'25	19°11'58		7894 Feb 12 16:55	0° $\text{H}$	
asc. node	7893 Apr 06 01:07	7° $\text{B}$ 39'03		evening rise	7894 Feb 20 23:25	12° $\text{H}$ 48'55	
retrograde	7893 Apr 12 16:52	11° $\text{B}$ 16'11			7894 Mar 04 07:15	0° $\Upsilon$	
evening set	7893 Apr 16 04:26	10° $\text{B}$ 05'32		greatest brilliancy	7894 Mar 07 19:09	5° $\Upsilon$ 09'47	-0.6m
inferior conj	7893 Apr 21 15:55	4° $\text{B}$ 16'37	3°23'38	evening max el	7894 Mar 19 21:44	20° $\Upsilon$ 57'36	20°07'14
minimum elong	7893 Apr 21 15:26	4° $\text{B}$ 18'11	3°23'32	asc. node	7894 Mar 23 22:10	24° $\Upsilon$ 16'44	
min. Earth dist.	7893 Apr 23 02:57	2° $\text{B}$ 23'47	0.66436 AU	retrograde	7894 Mar 27 15:11	25° $\Upsilon$ 26'45	
	7893 Apr 25 02:27	30° $\text{R}\Upsilon$		evening set	7894 Mar 31 11:17	24° $\Upsilon$ 01'11	
morning rise	7893 Apr 27 02:03	27° $\Upsilon$ 59'06		inferior conj	7894 Apr 05 19:35	17° $\Upsilon$ 58'13	3°12'28
direct	7893 May 03 08:53	25° $\Upsilon$ 13'30		minimum elong	7894 Apr 05 18:06	18° $\Upsilon$ 03'15	3°12'14
desc. node	7893 May 10 23:15	28° $\Upsilon$ 17'34		min. Earth dist.	7894 Apr 06 16:09	16° $\Upsilon$ 48'32	0.67522 AU
	7893 May 13 02:28	0° $\text{B}$		morning rise	7894 Apr 11 00:41	11° $\Upsilon$ 41'45	
morning max el	7893 May 16 01:45	2° $\text{B}$ 47'55	26°10'48	direct	7894 Apr 16 19:24	9° $\Upsilon$ 06'55	
	7893 Jun 05 15:35	0° $\text{II}$		desc. node	7894 Apr 27 20:13	15° $\Upsilon$ 28'35	
morning set	7893 Jun 21 03:39	26° $\text{II}$ 22'50		morning max el	7894 Apr 28 11:06	16° $\Upsilon$ 05'42	24°49'21
	7893 Jun 23 01:50	0° $\text{E}$			7894 May 09 22:40	0° $\text{B}$	
max. Earth dist.	7893 Jun 25 01:40	3° $\text{E}$ 49'53	1.35114 AU		7894 May 29 14:16	0° $\text{II}$	
				morning set	7894 Jun 03 10:46	8° $\text{II}$ 23'05	
superior conj	7893 Jun 30 06:36	14° $\text{E}$ 12'42	-0°27'17	max. Earth dist.	7894 Jun 07 01:37	14° $\text{II}$ 54'36	1.37089 AU
minimum elong	7893 Jun 30 08:10	14° $\text{E}$ 20'43	0°27'05				
asc. node	7893 Jul 03 00:15	19° $\text{E}$ 50'28		superior conj	7894 Jun 13 16:26	27° $\text{II}$ 27'30	-0°58'54
	7893 Jul 07 21:35	0° $\text{O}$		minimum elong	7894 Jun 13 20:00	27° $\text{II}$ 44'58	0°58'23
evening rise	7893 Jul 08 00:09	0° $\text{O}$ 13'15			7894 Jun 14 23:30	0° $\text{E}$	
	7893 Jul 25 23:48	0° $\text{H}$		asc. node	7894 Jun 19 21:16	9° $\text{E}$ 48'06	
evening max el	7893 Jul 26 12:08	0° $\text{H}$ 31'08	20°33'52	evening rise	7894 Jun 22 03:21	14° $\text{E}$ 19'50	
retrograde	7893 Aug 06 16:43	6° $\text{H}$ 02'55			7894 Jun 30 09:34	0° $\text{O}$	
desc. node	7893 Aug 06 22:26	6° $\text{H}$ 02'47		evening max el	7894 Jul 09 01:35	11° $\text{O}$ 57'18	19°26'14
evening set	7893 Aug 08 17:50	5° $\text{H}$ 52'36		retrograde	7894 Jul 18 13:18	16° $\text{O}$ 38'14	
inferior conj	7893 Aug 17 22:50	1° $\text{H}$ 55'32	-3°15'05	evening set	7894 Jul 20 10:05	16° $\text{O}$ 28'09	
minimum elong	7893 Aug 17 14:16	2° $\text{H}$ 07'52	3°12'18	desc. node	7894 Jul 24 19:30	14° $\text{O}$ 54'26	
min. Earth dist.	7893 Aug 19 02:09	1° $\text{H}$ 16'11	0.54801 AU	inferior conj	7894 Jul 29 02:18	12° $\text{O}$ 21'26	-1°18'31
	7893 Aug 21 09:02	30° $\text{R}\text{O}$		minimum elong	7894 Jul 28 22:46	12° $\text{O}$ 27'09	1°17'16
morning rise	7893 Aug 26 10:18	27° $\text{O}$ 52'37		min. Earth dist.	7894 Jul 31 14:53	10° $\text{O}$ 43'52	0.55702 AU
direct	7893 Aug 30 11:50	27° $\text{O}$ 17'13		morning rise	7894 Aug 06 08:51	7° $\text{O}$ 46'09	
	7893 Sep 08 01:16	0° $\text{H}$		direct	7894 Aug 11 05:39	6° $\text{O}$ 52'41	
morning max el	7893 Sep 12 18:15	3° $\text{H}$ 41'19	23°23'50	morning max el	7894 Aug 25 06:58	13° $\text{O}$ 56'49	25°08'00
asc. node	7893 Sep 28 23:44	26° $\text{H}$ 33'10			7894 Sep 06 21:57	0° $\text{H}$	
	7893 Sep 30 19:29	0° $\text{A}$		asc. node	7894 Sep 15 20:43	15° $\text{H}$ 52'52	
morning set	7893 Oct 06 06:06	11° $\text{A}$ 04'40		morning set	7894 Sep 20 17:46	25° $\text{H}$ 53'56	
					7894 Sep 22 15:32	0° $\text{A}$	
superior conj	7893 Oct 13 05:12	26° $\text{A}$ 05'19	1°40'45				
minimum elong	7893 Oct 13 04:34	26° $\text{A}$ 01'54	1°40'47	superior conj	7894 Sep 27 14:49	10° $\text{A}$ 53'57	1°34'30
	7893 Oct 15 01:02	0° $\text{M}$		minimum elong	7894 Sep 27 13:14	10° $\text{A}$ 45'17	1°34'23
max. Earth dist.	7893 Oct 15 22:12	1° $\text{M}$ 52'09	1.33395 AU	max. Earth dist.	7894 Sep 29 02:17	14° $\text{A}$ 08'05	1.32376 AU
evening rise	7893 Oct 20 20:48	12° $\text{M}$ 01'40		evening rise	7894 Oct 04 18:41	26° $\text{A}$ 13'43	
	7893 Oct 30 13:16	0° $\text{J}$			7894 Oct 06 15:12	0° $\text{M}$	
desc. node	7893 Nov 02 21:20	5° $\text{J}$ 34'40		desc. node	7894 Oct 20 18:25	25° $\text{M}$ 11'17	
	7893 Nov 20 15:42	0° $\text{B}$			7894 Oct 23 23:04	0° $\text{J}$	
evening max el	7893 Nov 24 02:16	3° $\text{B}$ 31'42	27°21'04	evening max el	7894 Nov 06 12:27	16° $\text{J}$ 30'22	27°27'28
retrograde	7893 Dec 07 14:51	10° $\text{B}$ 51'06		retrograde	7894 Nov 20 06:53	23° $\text{J}$ 46'32	
evening set	7893 Dec 14 13:09	8° $\text{B}$ 15'18		evening set	7894 Nov 27 09:36	21° $\text{J}$ 19'22	
min. Earth dist.	7893 Dec 18 08:54	4° $\text{B}$ 45'39	0.64474 AU	min. Earth dist.	7894 Dec 01 01:51	18° $\text{J}$ 19'03	0.62669 AU
inferior conj	7893 Dec 20 18:20	2° $\text{B}$ 12'23	-1°44'09	inferior conj	7894 Dec 03 22:05	15° $\text{J}$ 36'10	-2°53'02
minimum elong	7893 Dec 20 21:31	2° $\text{B}$ 03'52	1°42'43	minimum elong	7894 Dec 04 03:30	15° $\text{J}$ 23'11	2°50'54
	7893 Dec 22 21:37	30° $\text{R}\text{J}$		morning rise	7894 Dec 10 23:27	10° $\text{J}$ 27'30	
asc. node	7893 Dec 25 23:07	27° $\text{J}$ 29'25		asc. node	7894 Dec 12 20:09	10° $\text{J}$ 04'01	
morning rise	7893 Dec 27 07:24	26° $\text{J}$ 46'28		direct	7894 Dec 13 06:52	10° $\text{J}$ 03'05	
direct	7893 Dec 29 20:12	26° $\text{J}$ 13'32		morning max el	7894 Dec 20 00:08	13° $\text{J}$ 29'26	17°48'21
morning max el	7894 Jan 05 07:01	29° $\text{J}$ 36'22	17°54'02		7894 Dec 31 07:28	0° $\text{B}$	
	7894 Jan 05 16:22	0° $\text{B}$		morning set	7895 Jan 05 00:04	8° $\text{B}$ 14'18	
morning set	7894 Jan 22 11:09	25° $\text{B}$ 29'16					
	7894 Jan 25 03:40	0° $\approx$		superior conj	7895 Jan 16 13:54	28° $\text{B}$ 16'19	0°01'08
desc. node	7894 Jan 29 20:35	7° $\approx$ 48'43		minimum elong	7895 Jan 16 14:01	28° $\text{B}$ 16'47	0°01'14
				behind sun begin	7895 Jan 16 04:59	27° $\text{B}$ 38'52	

behind sun end	7895 Jan 16 23:03	28°  54'37		superior conj	7895 Dec 29 06:17	10°  01'55	0°38'52
desc. node	7895 Jan 16 17:37	28°  31'52		minimum elong	7895 Dec 29 09:12	10°  14'47	0°38'33
	7895 Jan 17 14:43	0°  ≈		desc. node	7896 Jan 03 14:36	19°  17'13	
max. Earth dist.	7895 Jan 23 08:52	9°  ≈25'41	1.43830 AU	max. Earth dist.	7896 Jan 05 20:56	23°  05'17	1.42109 AU
evening rise	7895 Jan 31 11:25	22°  ≈13'03			7896 Jan 10 02:13	0°  ≈	
	7895 Feb 05 13:27	0°  ✕		evening rise	7896 Jan 11 11:49	2°  ≈14'46	
	7895 Feb 26 18:24	0°  Υ			7896 Jan 29 23:50	0°  ✕	
evening max el	7895 Mar 02 20:15	4°  Υ35'59	21°15'24	evening max el	7896 Feb 13 13:58	18°  ✕16'48	22°32'23
asc. node	7895 Mar 10 19:15	9°  Υ42'03		retrograde	7896 Feb 23 10:08	24°  ✕07'04	
retrograde	7895 Mar 11 13:33	9°  Υ45'03		asc. node	7896 Feb 25 16:20	23°  ✕41'12	
evening set	7895 Mar 15 19:19	8°  Υ04'27		evening set	7896 Feb 28 02:55	22°  ✕11'28	
inferior conj	7895 Mar 21 02:44	1°  Υ49'55	2°50'32	inferior conj	7896 Mar 04 11:19	15°  ✕48'34	2°19'14
minimum elong	7895 Mar 21 00:38	1°  Υ57'11	2°50'05	minimum elong	7896 Mar 04 09:03	15°  ✕56'29	2°18'36
min. Earth dist.	7895 Mar 21 10:08	1°  Υ24'13	0.68167 AU	min. Earth dist.	7896 Mar 04 06:36	16°  ✕04'59	0.68385 AU
	7895 Mar 22 10:38	30°  ✕✕		morning rise	7896 Mar 09 15:02	9°  ✕39'10	
morning rise	7895 Mar 26 05:46	25°  ✕36'13		direct	7896 Mar 14 06:00	7°  ✕43'32	
direct	7895 Mar 31 10:47	23°  ✕19'08		morning max el	7896 Mar 23 08:57	13°  ✕03'20	21°52'12
morning max el	7895 Apr 10 20:30	29°  ✕30'31	23°19'55	desc. node	7896 Mar 31 14:10	22°  ✕47'40	
	7895 Apr 11 08:03	0°  Υ			7896 Apr 05 20:40	0°  Υ	
desc. node	7895 Apr 14 17:12	3°  Υ44'37		morning set	7896 Apr 24 23:46	28°  Υ54'01	
	7895 May 03 17:50	0°  ♄			7896 Apr 25 16:12	0°  ♄	
morning set	7895 May 15 18:57	19°  ♄16'46		max. Earth dist.	7896 Apr 30 20:20	8°  ♄28'00	1.41510 AU
max. Earth dist.	7895 May 19 21:24	26°  ♄17'40	1.39308 AU				
	7895 May 22 00:02	0°  ♄		superior conj	7896 May 08 13:05	21°  ♄38'14	-1°54'46
				minimum elong	7896 May 08 18:37	22°  ♄02'36	1°54'25
superior conj	7895 May 27 12:05	9°  ♄59'11	-1°29'20		7896 May 13 05:29	0°  ♄	
minimum elong	7895 May 27 17:23	10°  ♄23'47	1°28'45	evening rise	7896 May 19 06:13	11°  ♄03'50	
evening rise	7895 Jun 05 22:34	27°  ♄59'29		asc. node	7896 May 23 15:22	19°  ♄05'40	
asc. node	7895 Jun 06 18:18	29°  ♄34'36			7896 May 30 02:24	0°  ♄	
	7895 Jun 06 23:35	0°  ♄		evening max el	7896 Jun 04 11:00	6°  ♄48'37	18°12'41
evening max el	7895 Jun 22 02:25	24°  ♄05'38	18°39'19	retrograde	7896 Jun 11 11:18	10°  ♄20'30	
retrograde	7895 Jun 30 02:57	28°  ♄04'23		evening set	7896 Jun 13 20:35	9°  ♄56'38	
evening set	7895 Jul 02 04:40	27°  ♄49'22		inferior conj	7896 Jun 20 22:19	5°  ♄11'32	1°50'36
inferior conj	7895 Jul 10 01:30	23°  ♄24'50	0°29'04	minimum elong	7896 Jun 21 01:19	5°  ♄04'54	1°49'33
minimum elong	7895 Jul 10 02:35	23°  ♄22'47	0°28'32	min. Earth dist.	7896 Jun 24 07:28	2°  ♄14'12	0.59518 AU
desc. node	7895 Jul 11 16:34	22°  ♄10'46			7896 Jun 27 06:57	30°  ✕♄	
min. Earth dist.	7895 Jul 13 08:07	20°  ♄57'36	0.57379 AU	desc. node	7896 Jun 27 13:36	29°  ♄49'20	
morning rise	7895 Jul 17 21:00	18°  ♄12'23		morning rise	7896 Jun 28 03:03	29°  ♄28'55	
direct	7895 Jul 23 14:10	16°  ♄51'04		direct	7896 Jul 04 12:15	27°  ♄35'29	
morning max el	7895 Aug 06 22:50	24°  ♄24'38	26°36'17		7896 Jul 12 02:24	0°  ♄	
	7895 Aug 12 01:42	0°  ♄		morning max el	7896 Jul 18 20:57	5°  ♄27'00	27°34'28
	7895 Aug 30 23:18	0°  ♄			7896 Aug 06 02:59	0°  ♄	
asc. node	7895 Sep 02 17:44	5°  ♄32'08		morning set	7896 Aug 19 11:11	25°  ♄06'30	
morning set	7895 Sep 05 04:02	10°  ♄36'10		asc. node	7896 Aug 19 14:45	25°  ♄25'07	
					7896 Aug 21 18:29	0°  ♄	
superior conj	7895 Sep 12 02:22	25°  ♄45'06	1°22'47	max. Earth dist.	7896 Aug 25 21:24	9°  ♄00'52	1.31693 AU
minimum elong	7895 Sep 12 00:14	25°  ♄33'17	1°22'29				
max. Earth dist.	7895 Sep 12 11:09	26°  ♄33'47	1.31807 AU	superior conj	7896 Aug 26 14:02	10°  ♄33'00	1°06'03
	7895 Sep 14 00:27	0°  ♄		minimum elong	7896 Aug 26 11:48	10°  ♄20'36	1°05'37
evening rise	7895 Sep 18 23:15	10°  ♄42'38		evening rise	7896 Sep 02 08:09	25°  ♄21'39	
	7895 Sep 28 20:57	0°  ♄			7896 Sep 04 13:04	0°  ♄	
desc. node	7895 Oct 07 15:30	14°  ♄09'45			7896 Sep 21 20:10	0°  ♄	
evening max el	7895 Oct 19 17:40	28°  ♄48'24	27°01'04	desc. node	7896 Sep 23 12:35	2°  ♄14'54	
	7895 Oct 21 01:08	0°  ♄		evening max el	7896 Sep 30 15:41	10°  ♄17'13	26°01'23
retrograde	7895 Nov 02 15:16	5°  ♄58'59		retrograde	7896 Oct 14 14:09	17°  ♄21'31	
evening set	7895 Nov 09 14:34	3°  ♄51'39		evening set	7896 Oct 20 23:10	15°  ♄44'39	
min. Earth dist.	7895 Nov 13 08:15	1°  ♄11'22	0.60639 AU	min. Earth dist.	7896 Oct 25 04:35	13°  ♄09'38	0.58555 AU
	7895 Nov 14 18:39	30°  ✕♄		inferior conj	7896 Oct 28 08:12	10°  ♄51'31	-4°58'19
inferior conj	7895 Nov 16 11:53	28°  ♄32'27	-4°00'44	minimum elong	7896 Oct 28 14:41	10°  ♄39'38	4°57'01
minimum elong	7895 Nov 16 18:54	28°  ♄17'38	3°58'33	morning rise	7896 Nov 05 08:29	6°  ♄25'29	
morning rise	7895 Nov 24 01:35	23°  ♄43'59		direct	7896 Nov 07 15:47	6°  ♄08'00	
direct	7895 Nov 26 06:47	23°  ♄24'40		asc. node	7896 Nov 15 14:14	9°  ♄49'57	
asc. node	7895 Nov 29 17:12	24°  ♄13'13		morning max el	7896 Nov 15 21:50	10°  ♄07'55	18°34'32
morning max el	7895 Dec 03 14:17	27°  ♄03'19	18°01'19		7896 Nov 28 22:26	0°  ♄	
	7895 Dec 06 05:00	0°  ♄		morning set	7896 Dec 02 00:24	5°  ♄54'21	
morning set	7895 Dec 19 06:15	21°  ♄47'48					
	7895 Dec 23 16:47	0°  ♄		superior conj	7896 Dec 10 20:10	22°  ♄48'37	1°07'32





superior conj	7898 Nov 07 20:25	20° $\mathbb{M}$ 29'13	1°38'00	morning max el	7899 Sep 24 00:47	15° $\mathbb{M}$ 02'45	22°23'25
minimum elong	7898 Nov 07 21:48	20° $\mathbb{M}$ 36'20	1°38'03		7899 Oct 05 11:36	0° $\mathbb{A}$	
	7898 Nov 12 14:20	0° $\mathbb{A}$		asc. node	7899 Oct 07 05:14	2° $\mathbb{A}$ 58'06	
max. Earth dist.	7898 Nov 12 18:48	0° $\mathbb{A}$ 21'45	1.35868 AU	morning set	7899 Oct 15 20:36	19° $\mathbb{A}$ 52'36	
evening rise	7898 Nov 16 18:03	7° $\mathbb{A}$ 55'16			7899 Oct 20 14:34	0° $\mathbb{M}$	
desc. node	7898 Nov 24 05:40	21° $\mathbb{A}$ 10'21					
	7898 Nov 29 15:57	0° $\mathbb{B}$		superior conj	7899 Oct 22 22:35	4° $\mathbb{M}$ 58'36	1°41'39
evening max el	7898 Dec 22 06:40	29° $\mathbb{B}$ 33'02	26°15'35	minimum elong	7899 Oct 22 22:38	4° $\mathbb{M}$ 58'53	1°41'44
	7898 Dec 22 17:55	0° $\approx$		max. Earth dist.	7899 Oct 26 10:02	12° $\mathbb{M}$ 14'56	1.34177 AU
retrograde	7899 Jan 04 00:52	6° $\approx$ 46'10		evening rise	7899 Oct 30 23:20	21° $\mathbb{M}$ 22'30	
evening set	7899 Jan 10 07:17	4° $\approx$ 13'32			7899 Nov 04 13:07	0° $\mathbb{A}$	
	7899 Jan 14 08:39	30° $\mathbb{R}$ $\mathbb{B}$		desc. node	7899 Nov 11 02:43	11° $\mathbb{A}$ 24'52	
min. Earth dist.	7899 Jan 14 11:45	29° $\mathbb{B}$ 50'42	0.66679 AU		7899 Nov 23 12:26	0° $\mathbb{B}$	
inferior conj	7899 Jan 16 02:54	27° $\mathbb{B}$ 50'43	-0°03'51	evening max el	7899 Dec 04 19:42	13° $\mathbb{B}$ 09'28	27°04'07
minimum elong	7899 Jan 16 03:00	27° $\mathbb{B}$ 50'25	0°03'42	retrograde	7899 Dec 18 03:28	20° $\mathbb{B}$ 29'38	
transit middle	7899 Jan 16 03:00	27° $\mathbb{B}$ 50'25	0°03'42	evening set	7899 Dec 24 20:42	17° $\mathbb{B}$ 52'54	
transit begin	7899 Jan 16 00:12	27° $\mathbb{B}$ 59'00		min. Earth dist.	7899 Dec 28 19:19	14° $\mathbb{B}$ 04'14	0.65367 AU
transit end	7899 Jan 16 05:48	27° $\mathbb{B}$ 41'50		inferior conj	7899 Dec 30 22:07	11° $\mathbb{B}$ 40'46	-1°05'58
asc. node	7899 Jan 16 07:30	27° $\mathbb{B}$ 36'36		minimum elong	7899 Dec 31 00:03	11° $\mathbb{B}$ 35'17	1°05'01
morning rise	7899 Jan 21 23:27	22° $\mathbb{B}$ 04'26		asc. node	7900 Jan 03 04:33	8° $\mathbb{B}$ 14'46	
direct	7899 Jan 25 01:25	21° $\mathbb{B}$ 10'38		morning rise	7900 Jan 06 04:39	6° $\mathbb{B}$ 06'30	
morning max el	7899 Jan 31 17:03	24° $\mathbb{B}$ 47'05	18°38'22	direct	7900 Jan 08 21:32	5° $\mathbb{B}$ 27'10	
	7899 Feb 05 03:36	0° $\approx$		morning max el	7900 Jan 15 08:11	8° $\mathbb{B}$ 52'31	18°05'18
desc. node	7899 Feb 20 05:03	22° $\approx$ 44'38			7900 Jan 29 23:11	0° $\approx$	
morning set	7899 Feb 21 17:48	25° $\approx$ 09'23		morning set	7900 Feb 02 14:43	5° $\approx$ 58'23	
	7899 Feb 24 19:39	0° $\mathbb{H}$		desc. node	7900 Feb 07 02:02	13° $\approx$ 16'14	
superior conj	7899 Mar 09 23:03	20° $\mathbb{H}$ 36'00	-1°46'54	superior conj	7900 Feb 17 06:00	29° $\approx$ 32'49	-1°08'42
minimum elong	7899 Mar 09 13:45	19° $\mathbb{H}$ 59'36	1°46'06	minimum elong	7900 Feb 16 22:04	29° $\approx$ 01'31	1°07'39
max. Earth dist.	7899 Mar 09 10:04	19° $\mathbb{H}$ 45'10	1.45434 AU		7900 Feb 17 12:53	0° $\mathbb{H}$	
	7899 Mar 15 22:41	0° $\mathbb{Y}$		max. Earth dist.	7900 Feb 20 05:28	4° $\mathbb{H}$ 14'07	1.45368 AU
evening rise	7899 Mar 25 12:15	15° $\mathbb{Y}$ 10'40		evening rise	7900 Mar 05 10:34	24° $\mathbb{H}$ 47'47	
greatest brilliancy	7899 Apr 02 13:14	28° $\mathbb{Y}$ 00'34	-0.9m		7900 Mar 08 19:20	0° $\mathbb{Y}$	
	7899 Apr 03 19:32	0° $\mathbb{B}$		greatest brilliancy	7900 Mar 18 11:48	14° $\mathbb{Y}$ 47'30	-0.7m
asc. node	7899 Apr 14 06:30	14° $\mathbb{B}$ 58'03			7900 Mar 29 20:22	0° $\mathbb{B}$	
evening max el	7899 Apr 15 23:53	16° $\mathbb{B}$ 51'04	18°47'09	evening max el	7900 Mar 30 06:58	0° $\mathbb{B}$ 27'26	19°33'43
retrograde	7899 Apr 22 15:58	20° $\mathbb{B}$ 32'38		asc. node	7900 Apr 01 03:34	2° $\mathbb{B}$ 10'45	
evening set	7899 Apr 25 22:56	19° $\mathbb{B}$ 30'28		retrograde	7900 Apr 06 13:19	4° $\mathbb{B}$ 36'32	
inferior conj	7899 May 01 13:30	13° $\mathbb{B}$ 50'22	3°24'21	evening set	7900 Apr 10 04:17	3° $\mathbb{B}$ 19'47	
minimum elong	7899 May 01 13:44	13° $\mathbb{B}$ 49'38	3°24'15		7900 Apr 13 13:36	30° $\mathbb{R}$ $\mathbb{Y}$	
min. Earth dist.	7899 May 03 09:19	11° $\mathbb{B}$ 34'40	0.65605 AU	inferior conj	7900 Apr 15 14:07	27° $\mathbb{Y}$ 24'49	3°20'19
morning rise	7899 May 07 03:55	7° $\mathbb{B}$ 33'01		minimum elong	7900 Apr 15 13:10	27° $\mathbb{Y}$ 27'58	3°20'11
direct	7899 May 13 16:06	4° $\mathbb{B}$ 45'43		min. Earth dist.	7900 Apr 16 18:57	25° $\mathbb{Y}$ 49'39	0.66951 AU
desc. node	7899 May 19 04:37	6° $\mathbb{B}$ 23'33		morning rise	7900 Apr 20 21:43	21° $\mathbb{Y}$ 07'17	
morning max el	7899 May 26 20:55	12° $\mathbb{B}$ 34'53	26°50'05	direct	7900 Apr 26 23:45	18° $\mathbb{Y}$ 24'54	
	7899 Jun 09 20:12	0° $\mathbb{I}$		desc. node	7900 May 06 01:37	22° $\mathbb{Y}$ 46'20	
	7899 Jun 28 05:51	0° $\mathbb{G}$		morning max el	7900 May 09 06:44	25° $\mathbb{Y}$ 46'33	25°37'39
morning set	7899 Jul 01 16:10	6° $\mathbb{G}$ 24'36			7900 May 13 03:31	0° $\mathbb{B}$	
max. Earth dist.	7899 Jul 05 22:39	14° $\mathbb{G}$ 45'52	1.34153 AU		7900 Jun 03 09:04	0° $\mathbb{I}$	
superior conj	7899 Jul 10 07:02	23° $\mathbb{G}$ 39'56	-0°09'34	morning set	7900 Jun 14 09:52	18° $\mathbb{I}$ 56'13	
minimum elong	7899 Jul 10 07:34	23° $\mathbb{G}$ 42'41	0°09'34	max. Earth dist.	7900 Jun 18 03:11	25° $\mathbb{I}$ 51'21	1.35912 AU
behind sun begin	7899 Jul 10 02:55	23° $\mathbb{G}$ 18'31			7900 Jun 20 07:02	0° $\mathbb{G}$	
behind sun end	7899 Jul 10 12:12	24° $\mathbb{G}$ 06'52		superior conj	7900 Jun 23 23:12	7° $\mathbb{G}$ 14'49	-0°40'39
asc. node	7899 Jul 11 05:43	25° $\mathbb{G}$ 38'28		minimum elong	7900 Jun 24 01:36	7° $\mathbb{G}$ 26'54	0°40'19
	7899 Jul 13 07:22	0° $\mathbb{Q}$		asc. node	7900 Jun 28 02:43	15° $\mathbb{G}$ 40'00	
evening rise	7899 Jul 17 17:04	9° $\mathbb{Q}$ 17'55		evening rise	7900 Jul 01 23:28	23° $\mathbb{G}$ 35'31	
	7899 Jul 28 14:33	0° $\mathbb{M}$			7900 Jul 05 03:54	0° $\mathbb{Q}$	
evening max el	7899 Aug 06 11:04	11° $\mathbb{M}$ 36'16	21°21'35	evening max el	7900 Jul 19 17:01	22° $\mathbb{Q}$ 36'58	20°02'36
desc. node	7899 Aug 15 03:46	17° $\mathbb{M}$ 08'23		retrograde	7900 Jul 30 04:07	27° $\mathbb{Q}$ 46'15	
retrograde	7899 Aug 18 14:13	17° $\mathbb{M}$ 37'00		evening set	7900 Aug 01 01:35	27° $\mathbb{Q}$ 36'52	
evening set	7899 Aug 21 00:52	17° $\mathbb{M}$ 23'14		desc. node	7900 Aug 02 00:49	27° $\mathbb{Q}$ 25'08	
inferior conj	7899 Aug 30 06:51	13° $\mathbb{M}$ 25'18	-4°13'50	inferior conj	7900 Aug 10 02:37	23° $\mathbb{Q}$ 37'38	-2°26'20
minimum elong	7899 Aug 29 21:23	13° $\mathbb{M}$ 38'35	4°11'20	minimum elong	7900 Aug 09 19:55	23° $\mathbb{Q}$ 47'41	2°23'59
min. Earth dist.	7899 Aug 30 10:53	13° $\mathbb{M}$ 19'39	0.54701 AU	min. Earth dist.	7900 Aug 11 21:54	22° $\mathbb{Q}$ 32'47	0.55078 AU
morning rise	7899 Sep 07 18:41	9° $\mathbb{M}$ 32'57		morning rise	7900 Aug 18 12:42	19° $\mathbb{Q}$ 22'12	
direct	7899 Sep 11 10:18	9° $\mathbb{M}$ 04'10		direct	7900 Aug 22 22:16	18° $\mathbb{Q}$ 40'01	

morning max el	7900 Sep 05 14:13	25° $\Omega$ 22'56	24°08'58	direct	7901 Aug 03 22:17	28° $\Omega$ 22'03	
	7900 Sep 09 22:10	0° $\mathbb{M}$			7901 Aug 10 10:34	0° $\Omega$	
asc. node	7900 Sep 24 02:14	22° $\mathbb{M}$ 02'35		morning max el	7901 Aug 18 03:24	5° $\Omega$ 39'21	25°48'28
	7900 Sep 28 02:21	0° $\underline{\Omega}$			7901 Sep 04 20:31	0° $\mathbb{M}$	
morning set	7900 Sep 30 08:19	4° $\underline{\Omega}$ 42'42		asc. node	7901 Sep 10 23:13	11° $\mathbb{M}$ 31'26	
				morning set	7901 Sep 14 19:35	19° $\mathbb{M}$ 29'24	
					7901 Sep 19 15:28	0° $\underline{\Omega}$	
superior conj	7900 Oct 07 06:08	19° $\underline{\Omega}$ 42'10	1°38'48				
minimum elong	7900 Oct 07 05:04	19° $\underline{\Omega}$ 36'19	1°38'47				
max. Earth dist.	7900 Oct 09 09:53	24° $\underline{\Omega}$ 21'48	1.32905 AU	superior conj	7901 Sep 21 16:47	4° $\underline{\Omega}$ 32'23	1°30'09
	7900 Oct 12 01:42	0° $\mathbb{M}$		minimum elong	7901 Sep 21 14:55	4° $\underline{\Omega}$ 22'06	1°29'58
evening rise	7900 Oct 14 16:06	5° $\mathbb{M}$ 21'00		max. Earth dist.	7901 Sep 22 16:33	6° $\underline{\Omega}$ 43'25	1.32082 AU
	7900 Oct 28 04:28	0° $\mathbb{M}$		evening rise	7901 Sep 28 17:09	19° $\underline{\Omega}$ 41'14	
desc. node	7900 Oct 28 23:46	1° $\mathbb{M}$ 17'49			7901 Oct 03 20:36	0° $\mathbb{M}$	
evening max el	7900 Nov 17 07:45	26° $\mathbb{M}$ 26'38	27°27'46	desc. node	7901 Oct 15 20:50	20° $\mathbb{M}$ 39'41	
	7900 Nov 21 12:53	0° $\mathbb{Z}$			7901 Oct 22 12:27	0° $\mathbb{M}$	
retrograde	7900 Nov 30 23:35	3° $\mathbb{Z}$ 45'16		evening max el	7901 Oct 30 16:23	9° $\mathbb{M}$ 10'11	27°20'32
evening set	7900 Dec 08 00:17	1° $\mathbb{Z}$ 12'14		retrograde	7901 Nov 13 12:15	16° $\mathbb{M}$ 23'14	
	7900 Dec 09 12:47	30° $\mathbb{R}$ $\mathbb{M}$		evening set	7901 Nov 20 14:39	14° $\mathbb{M}$ 03'25	
min. Earth dist.	7900 Dec 11 18:19	27° $\mathbb{M}$ 55'29	0.63729 AU	min. Earth dist.	7901 Nov 24 06:50	11° $\mathbb{M}$ 13'00	0.61823 AU
inferior conj	7900 Dec 14 08:25	25° $\mathbb{M}$ 16'51	-2°13'11	inferior conj	7901 Nov 27 06:41	8° $\mathbb{M}$ 30'16	-3°22'19
minimum elong	7900 Dec 14 12:34	25° $\mathbb{M}$ 06'15	2°11'24	minimum elong	7901 Nov 27 12:56	8° $\mathbb{M}$ 16'04	3°20'04
morning rise	7900 Dec 21 02:35	19° $\mathbb{M}$ 57'38		morning rise	7901 Dec 04 13:21	3° $\mathbb{M}$ 29'33	
asc. node	7900 Dec 21 01:37	19° $\mathbb{M}$ 58'35		direct	7901 Dec 06 19:29	3° $\mathbb{M}$ 07'35	
direct	7900 Dec 23 12:42	19° $\mathbb{M}$ 28'47		asc. node	7901 Dec 07 22:41	3° $\mathbb{M}$ 13'18	
morning max el	7900 Dec 30 01:28	22° $\mathbb{M}$ 52'24	17°49'25	morning max el	7901 Dec 13 17:41	6° $\mathbb{M}$ 38'02	17°51'31
	7901 Jan 04 16:15	0° $\mathbb{Z}$			7901 Dec 28 19:13	0° $\mathbb{Z}$	
morning set	7901 Jan 15 14:58	18° $\mathbb{Z}$ 07'36		morning set	7901 Dec 29 11:59	1° $\mathbb{Z}$ 15'33	
	7901 Jan 22 14:25	0° $\approx$					
desc. node	7901 Jan 24 23:01	3° $\approx$ 56'19		superior conj	7902 Jan 09 08:29	20° $\mathbb{Z}$ 27'41	0°18'10
				minimum elong	7902 Jan 09 10:07	20° $\mathbb{Z}$ 34'40	0°18'02
superior conj	7901 Jan 28 06:31	9° $\approx$ 23'35	-0°23'50	desc. node	7902 Jan 11 20:00	24° $\mathbb{Z}$ 40'36	
minimum elong	7901 Jan 28 03:54	9° $\approx$ 12'51	0°23'21		7902 Jan 15 00:40	0° $\approx$	
max. Earth dist.	7901 Feb 03 00:07	18° $\approx$ 37'49	1.44580 AU	max. Earth dist.	7902 Jan 16 15:33	2° $\approx$ 39'25	1.43156 AU
	7901 Feb 10 06:06	0° $\mathbb{H}$		evening rise	7902 Jan 23 13:49	13° $\approx$ 43'06	
evening rise	7901 Feb 12 22:03	4° $\mathbb{H}$ 06'29			7902 Feb 03 06:53	0° $\mathbb{H}$	
	7901 Mar 02 06:51	0° $\mathbb{Y}$		evening max el	7902 Feb 24 05:15	27° $\mathbb{H}$ 45'26	21°47'23
evening max el	7901 Mar 13 08:50	14° $\mathbb{Y}$ 06'01	20°34'54		7902 Feb 26 14:58	0° $\mathbb{Y}$	
asc. node	7901 Mar 19 00:39	18° $\mathbb{Y}$ 20'02		retrograde	7902 Mar 05 09:30	3° $\mathbb{Y}$ 11'38	
retrograde	7901 Mar 21 11:48	18° $\mathbb{Y}$ 51'11		asc. node	7902 Mar 05 21:45	3° $\mathbb{Y}$ 10'18	
evening set	7901 Mar 25 11:52	17° $\mathbb{Y}$ 19'19		evening set	7902 Mar 09 19:56	1° $\mathbb{Y}$ 24'26	
inferior conj	7901 Mar 30 19:34	11° $\mathbb{Y}$ 11'22	3°04'22		7902 Mar 11 07:39	30° $\mathbb{R}$ $\mathbb{H}$	
minimum elong	7901 Mar 30 17:46	11° $\mathbb{Y}$ 17'31	3°04'02	inferior conj	7902 Mar 15 03:33	25° $\mathbb{H}$ 06'03	2°38'21
min. Earth dist.	7901 Mar 31 10:27	10° $\mathbb{Y}$ 20'18	0.67856 AU	minimum elong	7902 Mar 15 01:20	25° $\mathbb{H}$ 13'47	2°37'48
morning rise	7901 Apr 04 23:27	4° $\mathbb{Y}$ 56'01		min. Earth dist.	7902 Mar 15 05:39	24° $\mathbb{H}$ 58'46	0.68314 AU
direct	7901 Apr 10 12:37	2° $\mathbb{Y}$ 27'49		morning rise	7902 Mar 20 06:34	18° $\mathbb{H}$ 54'17	
morning max el	7901 Apr 21 15:38	9° $\mathbb{Y}$ 07'01	24°11'36	direct	7902 Mar 25 05:39	16° $\mathbb{H}$ 46'07	
desc. node	7901 Apr 22 22:38	10° $\mathbb{Y}$ 27'43		morning max el	7902 Apr 04 01:54	22° $\mathbb{H}$ 34'48	22°41'59
	7901 May 08 02:16	0° $\mathbb{B}$		desc. node	7902 Apr 09 19:36	29° $\mathbb{H}$ 05'27	
morning set	7901 May 27 07:55	0° $\mathbb{I}$ 29'49			7902 Apr 10 13:04	0° $\mathbb{Y}$	
	7901 May 27 01:01	0° $\mathbb{I}$			7902 May 01 10:19	0° $\mathbb{B}$	
max. Earth dist.	7901 May 31 00:17	6° $\mathbb{I}$ 59'08	1.38027 AU	morning set	7902 May 08 04:50	10° $\mathbb{B}$ 51'50	
				max. Earth dist.	7902 May 12 21:17	18° $\mathbb{B}$ 42'48	1.40268 AU
					7902 May 19 08:00	0° $\mathbb{I}$	
superior conj	7901 Jun 07 03:34	20° $\mathbb{I}$ 12'55	-1°12'08				
minimum elong	7901 Jun 07 07:57	20° $\mathbb{I}$ 33'56	1°11'34				
	7901 Jun 12 04:17	0° $\mathbb{E}$		superior conj	7902 May 20 15:56	2° $\mathbb{I}$ 24'10	-1°41'00
asc. node	7901 Jun 14 23:44	5° $\mathbb{E}$ 33'26		minimum elong	7902 May 20 21:37	2° $\mathbb{I}$ 49'57	1°40'28
evening rise	7901 Jun 15 23:40	7° $\mathbb{E}$ 31'40		evening rise	7902 May 30 14:30	20° $\mathbb{I}$ 58'15	
	7901 Jun 28 18:34	0° $\Omega$		asc. node	7902 Jun 01 20:47	25° $\mathbb{I}$ 14'30	
evening max el	7901 Jul 02 11:47	4° $\Omega$ 22'04	19°03'40		7902 Jun 04 10:22	0° $\mathbb{E}$	
retrograde	7901 Jul 11 07:02	8° $\Omega$ 42'55		evening max el	7902 Jun 15 16:23	16° $\mathbb{E}$ 46'47	18°25'28
evening set	7901 Jul 13 05:30	8° $\Omega$ 31'10		retrograde	7902 Jun 23 05:08	20° $\mathbb{E}$ 32'21	
desc. node	7901 Jul 19 21:54	5° $\Omega$ 24'41		evening set	7902 Jun 25 10:02	20° $\mathbb{E}$ 13'56	
inferior conj	7901 Jul 21 13:46	4° $\Omega$ 17'26	-0°30'18	inferior conj	7902 Jul 02 22:24	15° $\mathbb{E}$ 40'18	1°07'10
minimum elong	7901 Jul 21 12:29	4° $\Omega$ 19'39	0°29'55	minimum elong	7902 Jul 03 00:38	15° $\mathbb{E}$ 35'47	1°06'17
min. Earth dist.	7901 Jul 24 12:07	2° $\Omega$ 17'07	0.56348 AU	min. Earth dist.	7902 Jul 06 07:34	12° $\mathbb{E}$ 57'43	0.58254 AU
	7901 Jul 28 10:03	30° $\mathbb{R}$ $\mathbb{E}$		desc. node	7902 Jul 06 18:57	12° $\mathbb{E}$ 36'12	
morning rise	7901 Jul 29 16:20	29° $\mathbb{E}$ 26'30		morning rise	7902 Jul 10 11:52	10° $\mathbb{E}$ 13'50	

direct	7902 Jul 16 12:28	8°☿39'20		morning max el	7903 Jul 12 23:10	27°♄43'00	27°48'06
morning max el	7902 Jul 30 21:55	16°☿21'06	27°05'23		7903 Jul 15 03:50	0°☿	
	7902 Aug 11 02:10	0°♌			7903 Aug 04 19:36	0°♌	
	7902 Aug 28 05:07	0°♍		morning set	7903 Aug 14 10:03	18°♌32'20	
asc. node	7902 Aug 28 20:13	1°♍17'48		asc. node	7903 Aug 15 17:11	21°♌15'14	
morning set	7902 Aug 30 04:47	4°♍08'06			7903 Aug 19 18:38	0°♍	
				max. Earth dist.	7903 Aug 20 12:26	1°♍37'44	1.31784 AU
superior conj	7902 Sep 06 04:37	19°♍23'22	1°16'16				
minimum elong	7902 Sep 06 02:23	19°♍10'58	1°15'55	superior conj	7903 Aug 21 15:47	4°♍08'28	0°57'33
max. Earth dist.	7902 Sep 06 02:44	19°♍12'53	1.31707 AU	minimum elong	7903 Aug 21 13:39	3°♍56'41	0°57'06
	7902 Sep 11 00:12	0°♎		evening rise	7903 Aug 28 09:58	18°♍57'19	
evening rise	7902 Sep 12 23:52	4°♎15'53			7903 Sep 02 18:43	0°♎	
	7902 Sep 26 14:37	0°♏		desc. node	7903 Sep 19 14:58	26°♎54'48	
desc. node	7902 Oct 02 17:54	9°♏18'01			7903 Sep 22 07:54	0°♏	
evening max el	7902 Oct 12 18:43	21°♏07'53	26°39'26	evening max el	7903 Sep 24 12:59	2°♏14'22	25°27'02
retrograde	7902 Oct 26 16:31	28°♏15'30		retrograde	7903 Oct 08 11:01	9°♏16'43	
evening set	7902 Nov 02 11:32	26°♏19'44		evening set	7903 Oct 14 10:03	7°♏54'36	
min. Earth dist.	7902 Nov 06 08:28	23°♏44'07	0.59754 AU	min. Earth dist.	7903 Oct 19 01:00	5°♏16'19	0.57711 AU
inferior conj	7902 Nov 09 13:26	21°♏11'53	-4°27'06	inferior conj	7903 Oct 22 01:19	3°♏11'57	-5°16'17
minimum elong	7902 Nov 09 20:36	20°♏57'38	4°25'11	minimum elong	7903 Oct 22 06:27	3°♏03'05	5°15'33
morning rise	7902 Nov 17 08:00	16°♏32'58			7903 Oct 27 06:49	30°♏♎	
direct	7902 Nov 19 13:40	16°♏14'43		morning rise	7903 Oct 30 05:11	28°♎56'01	
asc. node	7902 Nov 24 19:43	18°♏01'23		direct	7903 Nov 01 14:44	28°♎38'35	
morning max el	7902 Nov 27 05:28	20°♏00'48	18°12'54		7903 Nov 06 14:51	0°♏	
	7902 Dec 04 15:38	0°♐		morning max el	7903 Nov 10 09:10	2°♏50'17	18°55'17
morning set	7902 Dec 12 23:45	15°♐04'32		asc. node	7903 Nov 11 16:43	4°♏11'10	
	7902 Dec 20 23:13	0°♑		morning set	7903 Nov 26 21:43	29°♏21'20	
					7903 Nov 27 05:34	0°♐	
superior conj	7902 Dec 22 10:38	2°♑41'10	0°52'10				
minimum elong	7902 Dec 22 14:00	2°♑56'23	0°51'50	superior conj	7903 Dec 05 08:05	15°♐49'50	1°16'51
desc. node	7902 Dec 29 17:00	15°♑25'50		minimum elong	7903 Dec 05 11:19	16°♐05'14	1°16'37
max. Earth dist.	7902 Dec 30 01:52	16°♑03'24	1.41261 AU	max. Earth dist.	7903 Dec 12 07:48	28°♐43'31	1.39123 AU
evening rise	7903 Jan 03 22:24	24°♑06'53			7903 Dec 13 01:03	0°♑	
	7903 Jan 07 14:33	0°♒		evening rise	7903 Dec 16 04:58	5°♑29'57	
	7903 Jan 28 05:08	0°♓		desc. node	7903 Dec 16 14:00	6°♑08'32	
evening max el	7903 Feb 06 21:13	11°♓26'39	23°06'26		7903 Dec 31 16:17	0°♒	
retrograde	7903 Feb 17 04:55	17°♓33'36		evening max el	7904 Jan 20 10:47	25°♒11'38	24°26'04
asc. node	7903 Feb 20 18:51	16°♓29'39			7904 Jan 26 06:49	0°♓	
evening set	7903 Feb 22 02:51	15°♓31'26		retrograde	7904 Jan 31 20:45	1°♓52'43	
min. Earth dist.	7903 Feb 27 02:22	9°♓39'39	0.68353 AU		7904 Feb 05 19:44	30°♒♑	
inferior conj	7903 Feb 27 12:08	9°♓05'54	2°03'20	evening set	7904 Feb 06 07:07	29°♒36'51	
minimum elong	7903 Feb 27 09:56	9°♓13'33	2°02'40	asc. node	7904 Feb 07 15:54	28°♒18'47	
morning rise	7903 Mar 04 16:56	2°♓58'58		min. Earth dist.	7904 Feb 10 22:23	24°♒19'13	0.67996 AU
direct	7903 Mar 09 01:57	1°♓13'10		inferior conj	7904 Feb 11 19:31	23°♒08'23	1°20'02
morning max el	7903 Mar 17 16:54	6°♓12'18	21°17'19	minimum elong	7904 Feb 11 17:47	23°♒14'12	1°19'28
desc. node	7903 Mar 27 16:34	18°♓23'51		morning rise	7904 Feb 17 04:34	17°♒07'44	
	7903 Apr 04 19:54	0°♔		direct	7904 Feb 21 00:25	15°♒43'59	
morning set	7903 Apr 17 22:09	19°♔57'49		morning max el	7904 Feb 28 15:14	20°♒01'43	20°03'47
	7903 Apr 24 04:20	0°♕			7904 Mar 07 19:23	0°♓	
max. Earth dist.	7903 Apr 24 23:20	1°♕17'42	1.42361 AU	desc. node	7904 Mar 13 13:31	8°♓12'04	
				morning set	7904 Mar 26 20:45	28°♓16'56	
superior conj	7903 May 02 07:26	13°♕36'47	-2°02'48		7904 Mar 27 23:26	0°♔	
minimum elong	7903 May 02 12:12	13°♕57'16	2°02'36	max. Earth dist.	7904 Apr 06 08:21	14°♔43'09	1.44048 AU
	7903 May 11 14:12	0°♖					
evening rise	7903 May 13 15:54	3°♖44'32		superior conj	7904 Apr 11 22:26	23°♔44'37	-2°11'37
asc. node	7903 May 19 17:50	14°♖37'19		minimum elong	7904 Apr 11 22:31	23°♔44'55	2°11'40
evening max el	7903 May 30 03:01	29°♖41'06	18°07'19		7904 Apr 15 17:28	0°♕	
	7903 May 30 10:52	0°♗		evening rise	7904 Apr 24 23:13	15°♕40'26	
retrograde	7903 Jun 05 20:50	3°♗06'56			7904 May 03 09:09	0°♖	
evening set	7903 Jun 08 09:10	2°♗38'37		asc. node	7904 May 05 14:53	3°♖35'49	
	7903 Jun 12 15:15	30°♗♖		evening max el	7904 May 12 16:13	12°♖56'26	18°08'25
inferior conj	7903 Jun 15 03:44	27°♖44'47	2°16'31	retrograde	7904 May 19 01:54	16°♖17'30	
minimum elong	7903 Jun 15 06:50	27°♖37'30	2°15'32	evening set	7904 May 21 21:32	15°♖36'57	
min. Earth dist.	7903 Jun 18 10:16	24°♖41'55	0.60469 AU	inferior conj	7904 May 28 02:10	10°♖24'07	2°59'10
morning rise	7903 Jun 22 01:52	21°♖52'08		minimum elong	7904 May 28 04:32	10°♖17'50	2°58'37
desc. node	7903 Jun 23 16:00	20°♖58'28		min. Earth dist.	7904 May 30 21:42	7°♖25'06	0.62679 AU
direct	7903 Jun 28 15:23	19°♖45'50		morning rise	7904 Jun 03 09:52	4°♖16'08	

desc. node	7904 Jun 09 13:00	1° $\Pi$ 45'56		morning max el	7905 Jun 06 15:30	22° $\mathcal{B}$ 26'28	27°21'32
direct	7904 Jun 10 04:32	1° $\Pi$ 44'37			7905 Jun 13 06:54	0° $\Pi$	
morning max el	7904 Jun 24 05:50	9° $\Pi$ 47'20	27°52'35		7905 Jul 03 05:16	0° $\mathcal{B}$	
	7904 Jul 09 23:20	0° $\mathcal{B}$		morning set	7905 Jul 11 23:57	16° $\mathcal{B}$ 12'23	
	7904 Jul 27 02:08	0° $\Omega$		max. Earth dist.	7905 Jul 16 15:31	25° $\mathcal{B}$ 32'43	1.33347 AU
morning set	7904 Jul 28 09:19	2° $\Omega$ 36'17			7905 Jul 18 18:52	0° $\Omega$	
asc. node	7904 Aug 01 14:10	11° $\Omega$ 19'21		asc. node	7905 Jul 19 11:10	1° $\Omega$ 25'53	
max. Earth dist.	7904 Aug 02 17:55	13° $\Omega$ 47'25	1.32327 AU				
				superior conj	7905 Jul 20 04:46	2° $\Omega$ 59'08	0°07'28
superior conj	7904 Aug 05 00:30	18° $\Omega$ 42'24	0°34'26	minimum elong	7905 Jul 20 04:24	2° $\Omega$ 57'08	0°07'16
minimum elong	7904 Aug 04 22:59	18° $\Omega$ 34'07	0°34'02	behind sun begin	7905 Jul 19 23:27	2° $\Omega$ 30'55	
	7904 Aug 10 04:42	0° $\mathcal{N}$		behind sun end	7905 Jul 20 09:20	3° $\Omega$ 23'22	
evening rise	7904 Aug 11 21:34	3° $\mathcal{N}$ 40'05		evening rise	7905 Jul 27 08:47	18° $\Omega$ 18'25	
	7904 Aug 25 23:15	0° $\mathcal{A}$			7905 Aug 02 02:51	0° $\mathcal{N}$	
evening max el	7904 Sep 05 01:17	12° $\mathcal{A}$ 40'48	23°53'25	evening max el	7905 Aug 17 14:29	22° $\mathcal{N}$ 56'03	22°14'41
desc. node	7904 Sep 05 12:02	13° $\mathcal{A}$ 06'22		desc. node	7905 Aug 23 09:06	27° $\mathcal{N}$ 22'32	
retrograde	7904 Sep 18 17:21	19° $\mathcal{A}$ 31'36		retrograde	7905 Aug 30 11:18	29° $\mathcal{N}$ 20'08	
evening set	7904 Sep 23 07:57	18° $\mathcal{A}$ 45'01		evening set	7905 Sep 02 14:13	28° $\mathcal{N}$ 58'36	
min. Earth dist.	7904 Sep 29 11:47	15° $\mathcal{A}$ 45'30	0.55996 AU	min. Earth dist.	7905 Sep 10 20:21	25° $\mathcal{N}$ 22'54	0.54927 AU
inferior conj	7904 Oct 01 16:56	14° $\mathcal{A}$ 24'54	-5°32'39	inferior conj	7905 Sep 11 15:45	24° $\mathcal{N}$ 55'37	-4°58'26
minimum elong	7904 Oct 01 15:55	14° $\mathcal{A}$ 26'27	5°32'35	minimum elong	7905 Sep 11 07:50	25° $\mathcal{N}$ 06'45	4°56'59
morning rise	7904 Oct 10 02:02	10° $\mathcal{A}$ 28'21		morning rise	7905 Sep 20 03:06	21° $\mathcal{N}$ 07'27	
direct	7904 Oct 12 20:33	10° $\mathcal{A}$ 08'48		direct	7905 Sep 23 10:31	20° $\mathcal{N}$ 42'56	
morning max el	7904 Oct 23 01:23	14° $\mathcal{A}$ 56'19	19°59'58	morning max el	7905 Oct 05 04:40	26° $\mathcal{N}$ 14'01	21°26'06
asc. node	7904 Oct 28 13:42	21° $\mathcal{A}$ 27'18			7905 Oct 08 17:35	0° $\mathcal{A}$	
	7904 Nov 02 21:25	0° $\mathcal{M}$		asc. node	7905 Oct 15 10:42	9° $\mathcal{A}$ 35'20	
morning set	7904 Nov 10 02:29	13° $\mathcal{M}$ 56'13		morning set	7905 Oct 25 11:32	28° $\mathcal{A}$ 42'15	
					7905 Oct 26 02:26	0° $\mathcal{M}$	
superior conj	7904 Nov 17 19:48	29° $\mathcal{M}$ 39'04	1°32'37				
minimum elong	7904 Nov 17 21:58	29° $\mathcal{M}$ 49'53	1°32'34	superior conj	7905 Nov 01 17:43	13° $\mathcal{M}$ 57'20	1°40'24
	7904 Nov 17 24:00	0° $\mathcal{X}$		minimum elong	7905 Nov 01 18:32	14° $\mathcal{M}$ 01'32	1°40'27
max. Earth dist.	7904 Nov 23 13:47	10° $\mathcal{X}$ 50'19	1.37000 AU	max. Earth dist.	7905 Nov 06 01:03	22° $\mathcal{M}$ 44'57	1.35109 AU
evening rise	7904 Nov 27 08:34	17° $\mathcal{X}$ 49'05			7905 Nov 09 18:06	0° $\mathcal{X}$	
desc. node	7904 Dec 02 11:00	26° $\mathcal{X}$ 44'26		evening rise	7905 Nov 10 05:42	0° $\mathcal{X}$ 55'13	
	7904 Dec 04 09:41	0° $\mathcal{Z}$		desc. node	7905 Nov 19 08:04	17° $\mathcal{X}$ 09'03	
	7904 Dec 24 23:40	0° $\approx$			7905 Nov 27 11:11	0° $\mathcal{Z}$	
evening max el	7905 Jan 01 23:52	8° $\approx$ 59'02	25°39'20	evening max el	7905 Dec 15 13:12	22° $\mathcal{Z}$ 43'05	26°38'49
retrograde	7905 Jan 14 07:56	16° $\approx$ 03'21		retrograde	7905 Dec 28 13:38	29° $\mathcal{Z}$ 59'30	
evening set	7905 Jan 20 07:05	13° $\approx$ 36'03		evening set	7906 Jan 04 00:59	27° $\mathcal{Z}$ 24'36	
min. Earth dist.	7905 Jan 24 15:22	8° $\approx$ 52'58	0.67266 AU	min. Earth dist.	7906 Jan 08 03:00	23° $\mathcal{Z}$ 16'20	0.66171 AU
asc. node	7905 Jan 24 12:57	9° $\approx$ 00'32		inferior conj	7906 Jan 09 23:00	21° $\mathcal{Z}$ 05'49	-0°29'26
inferior conj	7905 Jan 25 23:48	7° $\approx$ 09'41	0°28'54	minimum elong	7906 Jan 09 23:49	21° $\mathcal{Z}$ 03'23	0°28'58
minimum elong	7905 Jan 25 23:04	7° $\approx$ 11'59	0°28'43	asc. node	7906 Jan 11 10:00	19° $\mathcal{Z}$ 23'54	
morning rise	7905 Jan 31 15:29	1° $\approx$ 17'17		morning rise	7906 Jan 15 23:33	15° $\mathcal{Z}$ 24'09	
direct	7905 Feb 03 23:33	0° $\approx$ 13'21		direct	7906 Jan 18 21:30	14° $\mathcal{Z}$ 36'49	
morning max el	7905 Feb 10 21:22	4° $\approx$ 01'21	19°04'52	morning max el	7906 Jan 25 09:57	18° $\mathcal{Z}$ 06'58	18°22'11
greatest brilliancy	7905 Feb 24 14:04	22° $\approx$ 28'19	-0.8m		7906 Feb 03 10:24	0° $\approx$	
desc. node	7905 Feb 28 10:27	28° $\approx$ 21'41		morning set	7906 Feb 14 03:23	16° $\approx$ 54'55	
	7905 Mar 01 11:58	0° $\mathcal{H}$		desc. node	7906 Feb 15 07:27	18° $\approx$ 47'02	
morning set	7905 Mar 05 23:39	6° $\mathcal{H}$ 56'44			7906 Feb 22 08:50	0° $\mathcal{H}$	
max. Earth dist.	7905 Mar 19 23:47	28° $\mathcal{H}$ 47'49	1.45136 AU				
	7905 Mar 20 18:08	0° $\mathcal{Y}$		superior conj	7906 Mar 01 18:55	11° $\mathcal{H}$ 40'16	-1°32'13
				minimum elong	7906 Mar 01 09:22	11° $\mathcal{H}$ 02'50	1°31'11
superior conj	7905 Mar 22 14:20	2° $\mathcal{Y}$ 54'18	-2°01'46	max. Earth dist.	7906 Mar 02 19:05	13° $\mathcal{H}$ 14'51	1.45506 AU
minimum elong	7905 Mar 22 07:29	2° $\mathcal{Y}$ 27'14	2°01'24		7906 Mar 13 11:56	0° $\mathcal{Y}$	
evening rise	7905 Apr 06 08:14	26° $\mathcal{Y}$ 38'08		evening rise	7906 Mar 17 18:00	6° $\mathcal{Y}$ 40'39	
	7905 Apr 08 09:29	0° $\mathcal{B}$		greatest brilliancy	7906 Mar 28 02:21	22° $\mathcal{Y}$ 52'48	-0.8m
asc. node	7905 Apr 22 11:56	22° $\mathcal{B}$ 01'26			7906 Apr 01 19:44	0° $\mathcal{B}$	
evening max el	7905 Apr 26 04:54	26° $\mathcal{B}$ 24'11	18°27'59	asc. node	7906 Apr 09 08:59	9° $\mathcal{B}$ 44'13	
retrograde	7905 May 02 16:02	29° $\mathcal{B}$ 54'20		evening max el	7906 Apr 09 14:32	9° $\mathcal{B}$ 58'25	19°05'02
evening set	7905 May 05 18:52	29° $\mathcal{B}$ 00'11		retrograde	7906 Apr 16 11:38	13° $\mathcal{B}$ 50'11	
inferior conj	7905 May 11 13:32	23° $\mathcal{B}$ 29'36	3°20'09	evening set	7906 Apr 19 22:01	12° $\mathcal{B}$ 41'40	
minimum elong	7905 May 11 14:33	23° $\mathcal{B}$ 26'35	3°19'59	inferior conj	7906 Apr 25 10:12	6° $\mathcal{B}$ 54'53	3°24'12
min. Earth dist.	7905 May 13 18:15	20° $\mathcal{B}$ 54'19	0.64645 AU	minimum elong	7906 Apr 25 09:53	6° $\mathcal{B}$ 55'52	3°24'08
morning rise	7905 May 17 09:23	17° $\mathcal{B}$ 14'21		min. Earth dist.	7906 Apr 26 23:27	4° $\mathcal{B}$ 56'01	0.66234 AU
direct	7905 May 24 01:44	14° $\mathcal{B}$ 29'17		morning rise	7906 Apr 30 21:21	0° $\mathcal{B}$ 37'19	
desc. node	7905 May 27 10:01	15° $\mathcal{B}$ 05'12			7906 May 01 15:13	30° $\mathcal{R}$ $\mathcal{Y}$	

direct	7906 May 07 05:37	27° $\Upsilon$ 51'04		morning rise	7907 Apr 14 18:50	14° $\Upsilon$ 18'30	
	7906 May 13 12:42	0° $\mathcal{B}$		direct	7907 Apr 20 15:28	11° $\Upsilon$ 41'32	
desc. node	7906 May 14 07:02	0° $\mathcal{B}$ 30'12		desc. node	7907 May 01 04:04	17° $\Upsilon$ 29'57	
morning max el	7906 May 20 01:50	5° $\mathcal{B}$ 29'40	26°21'40	morning max el	7907 May 02 11:25	18° $\Upsilon$ 46'56	25°02'12
	7906 Jun 07 20:59	0° $\Pi$			7907 May 11 22:54	0° $\mathcal{B}$	
morning set	7906 Jun 25 02:31	29° $\Pi$ 10'40			7907 May 31 22:52	0° $\Pi$	
	7906 Jun 25 13:02	0° $\mathcal{E}$		morning set	7907 Jun 07 12:35	11° $\Pi$ 19'51	
max. Earth dist.	7906 Jun 29 02:38	6° $\mathcal{E}$ 51'10	1.34848 AU	max. Earth dist.	7907 Jun 11 03:40	17° $\Pi$ 55'30	1.36774 AU
					7907 Jun 17 11:24	0° $\mathcal{E}$	
superior conj	7906 Jul 04 02:09	16° $\mathcal{E}$ 51'13	-0°22'32	superior conj	7907 Jun 17 13:45	0° $\mathcal{E}$ 11'37	-0°54'06
minimum elong	7906 Jul 04 03:26	16° $\mathcal{E}$ 57'48	0°22'25	minimum elong	7907 Jun 17 17:02	0° $\mathcal{E}$ 27'43	0°53'39
asc. node	7906 Jul 06 08:10	21° $\mathcal{E}$ 30'23		asc. node	7907 Jun 23 05:12	11° $\mathcal{E}$ 29'15	
	7906 Jul 10 09:45	0° $\Omega$		evening rise	7907 Jun 25 21:44	16° $\mathcal{E}$ 55'24	
evening rise	7906 Jul 11 17:35	2° $\Omega$ 45'34			7907 Jul 02 15:55	0° $\Omega$	
	7906 Jul 27 08:33	0° $\mathcal{N}$		evening max el	7907 Jul 13 00:20	14° $\Omega$ 52'14	19°35'00
evening max el	7906 Jul 30 12:49	3° $\mathcal{N}$ 32'59	20°45'43	retrograde	7907 Jul 22 18:05	19° $\Omega$ 40'26	
desc. node	7906 Aug 10 06:11	9° $\mathcal{N}$ 11'30		evening set	7907 Jul 24 14:36	19° $\Omega$ 30'44	
retrograde	7906 Aug 10 23:33	9° $\mathcal{N}$ 12'49		desc. node	7907 Jul 28 03:15	18° $\Omega$ 24'05	
evening set	7906 Aug 13 02:34	9° $\mathcal{N}$ 01'53		inferior conj	7907 Aug 02 09:23	15° $\Omega$ 26'20	-1°36'17
inferior conj	7906 Aug 22 08:19	5° $\mathcal{N}$ 04'57	-3°31'35	minimum elong	7907 Aug 02 05:00	15° $\Omega$ 33'16	1°34'41
minimum elong	7906 Aug 21 23:18	5° $\mathcal{N}$ 17'48	3°28'47	min. Earth dist.	7907 Aug 04 17:57	13° $\Omega$ 57'00	0.55512 AU
min. Earth dist.	7906 Aug 23 05:39	4° $\mathcal{N}$ 34'30	0.54741 AU	morning rise	7907 Aug 10 17:01	10° $\Omega$ 56'20	
morning rise	7906 Aug 30 20:00	1° $\mathcal{N}$ 05'32		direct	7907 Aug 15 10:47	10° $\Omega$ 06'07	
direct	7906 Sep 03 18:47	0° $\mathcal{N}$ 32'09		morning max el	7907 Aug 29 10:13	17° $\Omega$ 05'23	24°53'07
morning max el	7906 Sep 16 21:30	6° $\mathcal{N}$ 49'38	23°08'01		7907 Sep 08 23:17	0° $\mathcal{N}$	
asc. node	7906 Oct 02 07:42	28° $\mathcal{N}$ 22'10		asc. node	7907 Sep 19 04:43	17° $\mathcal{N}$ 38'02	
	7906 Oct 03 04:52	0° $\mathcal{A}$		morning set	7907 Sep 24 10:32	28° $\mathcal{N}$ 22'04	
morning set	7906 Oct 09 22:48	13° $\mathcal{A}$ 32'34			7907 Sep 25 04:51	0° $\mathcal{A}$	
superior conj	7906 Oct 16 22:31	28° $\mathcal{A}$ 34'06	1°41'12	superior conj	7907 Oct 01 07:39	13° $\mathcal{A}$ 21'35	1°35'48
minimum elong	7906 Oct 16 22:03	28° $\mathcal{A}$ 31'37	1°41'14	minimum elong	7907 Oct 01 06:12	13° $\mathcal{A}$ 13'37	1°35'44
	7906 Oct 17 14:34	0° $\mathcal{M}$		max. Earth dist.	7907 Oct 02 23:14	16° $\mathcal{A}$ 57'35	1.32496 AU
max. Earth dist.	7906 Oct 19 20:16	4° $\mathcal{M}$ 44'32	1.33586 AU	evening rise	7907 Oct 08 12:56	28° $\mathcal{A}$ 45'42	
evening rise	7906 Oct 24 16:19	14° $\mathcal{M}$ 37'04			7907 Oct 09 03:30	0° $\mathcal{M}$	
	7906 Nov 01 22:08	0° $\mathcal{X}$		desc. node	7907 Oct 24 02:10	26° $\mathcal{M}$ 56'49	
desc. node	7906 Nov 06 05:07	7° $\mathcal{X}$ 15'43			7907 Oct 26 01:45	0° $\mathcal{X}$	
	7906 Nov 22 06:49	0° $\mathcal{Z}$		evening max el	7907 Nov 10 12:40	19° $\mathcal{X}$ 16'37	27°28'34
evening max el	7906 Nov 28 02:01	6° $\mathcal{Z}$ 12'54	27°17'26	retrograde	7907 Nov 24 06:38	26° $\mathcal{X}$ 33'50	
retrograde	7906 Dec 11 13:25	13° $\mathcal{Z}$ 32'42		evening set	7907 Dec 01 09:01	24° $\mathcal{X}$ 04'46	
evening set	7906 Dec 18 10:34	10° $\mathcal{Z}$ 56'17		min. Earth dist.	7907 Dec 05 01:35	21° $\mathcal{X}$ 00'25	0.62951 AU
min. Earth dist.	7906 Dec 22 07:00	7° $\mathcal{Z}$ 21'54	0.64719 AU	inferior conj	7907 Dec 07 20:20	18° $\mathcal{X}$ 18'07	-2°42'33
inferior conj	7906 Dec 24 14:46	4° $\mathcal{Z}$ 50'48	-1°33'58	minimum elong	7907 Dec 08 01:25	18° $\mathcal{X}$ 05'42	2°40'30
minimum elong	7906 Dec 24 17:37	4° $\mathcal{Z}$ 43'05	1°32'39	morning rise	7907 Dec 14 19:50	13° $\mathcal{X}$ 06'41	
asc. node	7906 Dec 29 07:03	0° $\mathcal{Z}$ 25'10		asc. node	7907 Dec 16 04:08	12° $\mathcal{X}$ 45'54	
	7906 Dec 29 22:09	30° $\mathcal{R}$ $\mathcal{X}$		direct	7907 Dec 17 03:48	12° $\mathcal{X}$ 41'18	
morning rise	7906 Dec 31 02:06	29° $\mathcal{X}$ 22'45		morning max el	7907 Dec 23 19:43	16° $\mathcal{X}$ 06'44	17°48'01
direct	7907 Jan 02 15:54	28° $\mathcal{X}$ 48'17			7908 Jan 02 14:56	0° $\mathcal{Z}$	
	7907 Jan 06 09:47	0° $\mathcal{Z}$		morning set	7908 Jan 08 22:28	10° $\mathcal{Z}$ 56'56	
morning max el	7907 Jan 09 02:26	2° $\mathcal{Z}$ 11'24	17°56'24	desc. node	7908 Jan 20 01:24	0° $\approx$ 05'18	
morning set	7907 Jan 26 12:37	28° $\mathcal{Z}$ 20'36			7908 Jan 20 00:08	0° $\approx$	
	7907 Jan 27 12:26	0° $\approx$		superior conj	7908 Jan 20 18:43	1° $\approx$ 17'32	-0°05'17
desc. node	7907 Feb 02 04:27	9° $\approx$ 23'00		minimum elong	7908 Jan 20 18:12	1° $\approx$ 15'20	0°05'05
superior conj	7907 Feb 09 07:39	20° $\approx$ 55'51	-0°49'49	behind sun begin	7908 Jan 20 09:22	0° $\approx$ 38'34	
minimum elong	7907 Feb 09 01:51	20° $\approx$ 32'41	0°48'57	behind sun end	7908 Jan 21 03:01	1° $\approx$ 52'02	
max. Earth dist.	7907 Feb 13 14:52	27° $\approx$ 45'11	1.45120 AU	max. Earth dist.	7908 Jan 27 07:59	11° $\approx$ 59'59	1.44041 AU
	7907 Feb 15 01:09	0° $\mathcal{H}$		evening rise	7908 Feb 04 21:24	25° $\approx$ 27'29	
evening rise	7907 Feb 25 10:06	16° $\mathcal{H}$ 06'09			7908 Feb 07 20:28	0° $\mathcal{H}$	
	7907 Mar 06 12:43	0° $\Upsilon$			7908 Feb 28 15:03	0° $\Upsilon$	
greatest brilliancy	7907 Mar 11 23:23	8° $\Upsilon$ 06'58	-0.6m	evening max el	7908 Mar 05 18:47	7° $\Upsilon$ 14'20	21°04'37
evening max el	7907 Mar 23 19:25	23° $\Upsilon$ 35'51	19°58'05	asc. node	7908 Mar 13 03:10	12° $\Upsilon$ 09'40	
asc. node	7907 Mar 27 06:04	26° $\Upsilon$ 32'06		retrograde	7908 Mar 14 08:20	12° $\Upsilon$ 17'16	
retrograde	7907 Mar 31 09:52	27° $\Upsilon$ 59'42		evening set	7908 Mar 18 12:33	10° $\Upsilon$ 39'01	
evening set	7907 Apr 04 04:34	26° $\Upsilon$ 36'28		inferior conj	7908 Mar 23 19:58	4° $\Upsilon$ 26'07	2°54'30
inferior conj	7907 Apr 09 13:10	20° $\Upsilon$ 35'25	3°14'53	minimum elong	7908 Mar 23 17:56	4° $\Upsilon$ 33'09	2°54'04
minimum elong	7907 Apr 09 11:49	20° $\Upsilon$ 39'58	3°14'41	min. Earth dist.	7908 Mar 24 05:18	3° $\Upsilon$ 53'47	0.68098 AU
min. Earth dist.	7907 Apr 10 11:51	19° $\Upsilon$ 19'04	0.67386 AU				

	7908 Mar 27 05:12	30° $\text{R}\text{H}$		retrograde	7909 Feb 26 05:12	26° $\text{H}$ 39'05	
morning rise	7908 Mar 28 23:07	28° $\text{H}$ 11'52		asc. node	7909 Feb 28 00:16	26° $\text{H}$ 22'42	
direct	7908 Apr 03 06:16	25° $\text{H}$ 51'40		evening set	7909 Mar 02 20:18	24° $\text{H}$ 45'43	
	7908 Apr 11 13:18	0° $\text{Y}$		inferior conj	7909 Mar 08 04:27	18° $\text{H}$ 23'57	2°24'34
morning max el	7908 Apr 13 20:34	2° $\text{Y}$ 10'42	23°33'19	minimum elong	7909 Mar 08 02:11	18° $\text{H}$ 31'52	2°23'57
desc. node	7908 Apr 17 01:02	5° $\text{Y}$ 37'39		min. Earth dist.	7909 Mar 08 01:30	18° $\text{H}$ 34'14	0.68385 AU
	7908 May 04 23:45	0° $\text{B}$		morning rise	7909 Mar 13 07:54	12° $\text{H}$ 13'53	
morning set	7908 May 19 00:32	22° $\text{B}$ 24'34		direct	7909 Mar 18 01:01	10° $\text{H}$ 14'52	
max. Earth dist.	7908 May 22 23:21	29° $\text{B}$ 12'59	1.38976 AU	morning max el	7909 Mar 27 08:15	15° $\text{H}$ 41'52	22°04'47
	7908 May 23 10:04	0° $\text{II}$		desc. node	7909 Apr 03 21:59	24° $\text{H}$ 34'31	
					7909 Apr 07 23:06	0° $\text{Y}$	
superior conj	7908 May 30 11:48	12° $\text{II}$ 50'38	-1°24'56		7909 Apr 28 00:19	0° $\text{B}$	
minimum elong	7908 May 30 16:54	13° $\text{II}$ 14'29	1°24'21	morning set	7909 Apr 29 09:27	2° $\text{B}$ 13'02	
	7908 Jun 08 10:11	0° $\text{B}$		max. Earth dist.	7909 May 04 21:34	11° $\text{B}$ 15'51	1.41199 AU
evening rise	7908 Jun 08 18:21	0° $\text{B}$ 39'38					
asc. node	7908 Jun 09 02:13	1° $\text{B}$ 17'48		superior conj	7909 May 12 15:51	24° $\text{B}$ 38'20	-1°51'27
evening max el	7908 Jun 24 23:42	26° $\text{B}$ 54'56	18°44'57	minimum elong	7909 May 12 21:31	25° $\text{B}$ 03'28	1°51'02
	7908 Jun 29 03:44	0° $\text{Q}$			7909 May 15 15:42	0° $\text{II}$	
retrograde	7908 Jul 03 04:42	0° $\text{Q}$ 58'47		evening rise	7909 May 23 03:56	13° $\text{II}$ 49'54	
evening set	7908 Jul 05 05:29	0° $\text{Q}$ 44'45		asc. node	7909 May 26 23:14	20° $\text{II}$ 51'39	
	7908 Jul 07 10:37	30° $\text{R}\text{B}$			7909 Jun 01 04:52	0° $\text{B}$	
inferior conj	7908 Jul 13 05:19	26° $\text{B}$ 23'14	0°14'14	evening max el	7909 Jun 08 07:22	9° $\text{B}$ 33'36	18°15'22
minimum elong	7908 Jul 13 05:52	26° $\text{B}$ 22'13	0°13'55	retrograde	7909 Jun 15 10:26	13° $\text{B}$ 08'24	
transit middle	7908 Jul 13 05:52	26° $\text{B}$ 22'13	0°13'55	evening set	7909 Jun 17 18:38	12° $\text{B}$ 46'00	
transit begin	7908 Jul 13 04:01	26° $\text{B}$ 25'37		inferior conj	7909 Jun 24 23:01	8° $\text{B}$ 03'48	1°40'08
transit end	7908 Jul 13 07:43	26° $\text{B}$ 18'49		minimum elong	7909 Jun 25 01:53	7° $\text{B}$ 57'35	1°39'05
desc. node	7908 Jul 14 00:20	25° $\text{B}$ 48'06		min. Earth dist.	7909 Jun 28 08:33	5° $\text{B}$ 09'36	0.59187 AU
min. Earth dist.	7908 Jul 16 10:24	24° $\text{B}$ 02'20	0.57097 AU	desc. node	7909 Jun 30 21:22	3° $\text{B}$ 15'45	
morning rise	7908 Jul 21 02:47	21° $\text{B}$ 16'13		morning rise	7909 Jul 02 06:03	2° $\text{B}$ 25'09	
direct	7908 Jul 26 17:15	19° $\text{B}$ 59'20		direct	7909 Jul 08 13:19	0° $\text{B}$ 36'34	
morning max el	7908 Aug 10 01:10	27° $\text{B}$ 29'09	26°24'48	morning max el	7909 Jul 22 22:14	8° $\text{B}$ 25'34	27°28'08
	7908 Aug 12 11:54	0° $\text{Q}$			7909 Aug 08 07:56	0° $\text{Q}$	
	7908 Sep 01 09:32	0° $\text{M}$		asc. node	7909 Aug 22 22:39	27° $\text{Q}$ 06'02	
asc. node	7908 Sep 05 01:42	7° $\text{M}$ 14'43		morning set	7909 Aug 23 04:47	27° $\text{Q}$ 38'10	
morning set	7908 Sep 07 21:06	13° $\text{M}$ 05'34			7909 Aug 24 07:38	0° $\text{M}$	
				max. Earth dist.	7909 Aug 29 17:55	11° $\text{M}$ 50'25	1.31681 AU
superior conj	7908 Sep 14 19:02	28° $\text{M}$ 12'48	1°24'52				
minimum elong	7908 Sep 14 16:57	28° $\text{M}$ 01'18	1°24'38	superior conj	7909 Aug 30 06:46	13° $\text{M}$ 01'38	1°08'53
max. Earth dist.	7908 Sep 15 07:33	29° $\text{M}$ 22'07	1.31859 AU	minimum elong	7909 Aug 30 04:30	12° $\text{M}$ 49'08	1°08'30
	7908 Sep 15 14:24	0° $\text{L}$		evening rise	7909 Sep 06 01:02	27° $\text{M}$ 50'56	
evening rise	7908 Sep 21 16:39	13° $\text{L}$ 12'44			7909 Sep 07 01:24	0° $\text{L}$	
	7908 Sep 30 05:33	0° $\text{M}$			7909 Sep 23 18:33	0° $\text{M}$	
desc. node	7908 Oct 09 23:13	16° $\text{M}$ 02'02		desc. node	7909 Sep 26 20:18	4° $\text{M}$ 16'36	
	7908 Oct 21 01:25	0° $\text{J}$		evening max el	7909 Oct 04 18:11	13° $\text{M}$ 18'58	26°12'16
evening max el	7908 Oct 22 18:56	1° $\text{J}$ 42'19	27°07'19	retrograde	7909 Oct 18 16:28	20° $\text{M}$ 23'52	
retrograde	7908 Nov 05 16:18	8° $\text{J}$ 53'37		evening set	7909 Oct 25 04:31	18° $\text{M}$ 41'54	
evening set	7908 Nov 12 16:37	6° $\text{J}$ 42'50		min. Earth dist.	7909 Oct 29 07:17	16° $\text{M}$ 07'23	0.58860 AU
min. Earth dist.	7908 Nov 16 09:41	4° $\text{J}$ 00'15	0.60946 AU	inferior conj	7909 Nov 01 11:35	13° $\text{M}$ 45'10	-4°50'49
inferior conj	7908 Nov 19 12:29	1° $\text{J}$ 19'51	-3°50'52	minimum elong	7909 Nov 01 18:22	13° $\text{M}$ 32'27	4°49'20
minimum elong	7908 Nov 19 19:21	1° $\text{J}$ 05'03	3°48'38	morning rise	7909 Nov 09 10:29	9° $\text{M}$ 15'40	
	7908 Nov 21 02:19	30° $\text{R}\text{M}$		direct	7909 Nov 11 17:13	8° $\text{M}$ 58'03	
morning rise	7908 Nov 27 00:24	26° $\text{M}$ 28'02		asc. node	7909 Nov 18 22:12	12° $\text{M}$ 05'49	
direct	7908 Nov 29 05:41	26° $\text{M}$ 08'09		morning max el	7909 Nov 19 19:15	12° $\text{M}$ 54'05	18°28'15
asc. node	7908 Dec 02 01:11	26° $\text{M}$ 41'26			7909 Dec 01 07:47	0° $\text{J}$	
morning max el	7908 Dec 06 10:32	29° $\text{M}$ 44'33	17°58'06	morning set	7909 Dec 05 19:07	8° $\text{J}$ 27'43	
	7908 Dec 06 16:45	0° $\text{J}$					
morning set	7908 Dec 22 02:28	24° $\text{J}$ 25'02		superior conj	7909 Dec 14 18:31	25° $\text{J}$ 32'02	1°03'46
	7908 Dec 25 03:22	0° $\text{B}$		minimum elong	7909 Dec 14 22:00	25° $\text{J}$ 48'07	1°03'27
					7909 Dec 17 05:02	0° $\text{B}$	
superior conj	7909 Jan 01 07:31	12° $\text{B}$ 53'15	0°33'40	max. Earth dist.	7909 Dec 22 05:31	8° $\text{B}$ 53'14	1.40372 AU
minimum elong	7909 Jan 01 10:10	13° $\text{B}$ 04'53	0°33'25	desc. node	7909 Dec 23 19:21	11° $\text{B}$ 35'28	
desc. node	7909 Jan 05 22:22	20° $\text{B}$ 50'49		evening rise	7909 Dec 26 13:08	16° $\text{B}$ 11'57	
max. Earth dist.	7909 Jan 08 20:57	25° $\text{B}$ 46'09	1.42397 AU		7910 Jan 04 04:28	0° $\text{B}$	
	7909 Jan 11 10:53	0° $\text{B}$			7910 Jan 25 21:36	0° $\text{H}$	
evening rise	7909 Jan 14 19:18	5° $\text{B}$ 22'40		evening max el	7910 Jan 30 04:06	4° $\text{H}$ 38'52	23°40'35
	7909 Jan 31 03:30	0° $\text{H}$		retrograde	7910 Feb 09 23:04	11° $\text{H}$ 00'35	
evening max el	7909 Feb 16 13:12	20° $\text{H}$ 55'10	22°20'33	asc. node	7910 Feb 14 21:20	9° $\text{H}$ 02'41	

evening set	7910 Feb 15 02:16	8° $\text{X}$ 52'28		evening set	7911 Jan 30 04:55	22° $\approx$ 55'41	
min. Earth dist.	7910 Feb 19 22:09	3° $\text{X}$ 15'17	0.68260 AU	asc. node	7911 Feb 01 18:24	20° $\approx$ 18'42	
inferior conj	7910 Feb 20 12:45	2° $\text{X}$ 25'24	1°45'58	min. Earth dist.	7911 Feb 03 17:02	17° $\approx$ 52'59	0.67740 AU
minimum elong	7910 Feb 20 10:41	2° $\text{X}$ 32'28	1°45'18	inferior conj	7911 Feb 04 19:02	16° $\approx$ 27'35	0°59'16
	7910 Feb 22 08:18	30° $\text{R}$ $\approx$		minimum elong	7911 Feb 04 17:40	16° $\approx$ 32'05	0°58'50
morning rise	7910 Feb 25 19:04	26° $\approx$ 21'00		morning rise	7911 Feb 10 06:39	10° $\approx$ 30'27	
direct	7910 Mar 01 22:27	24° $\approx$ 44'35		direct	7911 Feb 13 21:19	9° $\approx$ 15'32	
morning max el	7910 Mar 10 02:05	29° $\approx$ 24'11	20°44'20	morning max el	7911 Feb 21 03:55	13° $\approx$ 18'46	19°36'49
	7910 Mar 10 16:12	0° $\text{X}$			7911 Mar 05 22:05	0° $\text{X}$	
desc. node	7910 Mar 21 18:56	14° $\text{X}$ 06'41		greatest brilliancy	7911 Mar 05 22:16	0° $\text{X}$ 00'40	-0.7m
	7910 Apr 01 14:33	0° $\text{Y}$		desc. node	7911 Mar 08 15:53	4° $\text{X}$ 04'43	
morning set	7910 Apr 08 16:45	10° $\text{Y}$ 52'44		morning set	7911 Mar 18 14:06	19° $\text{X}$ 12'06	
max. Earth dist.	7910 Apr 17 03:03	24° $\text{Y}$ 15'20	1.43151 AU		7911 Mar 25 13:10	0° $\text{Y}$	
	7910 Apr 20 15:23	0° $\text{B}$		max. Earth dist.	7911 Mar 30 15:29	8° $\text{Y}$ 00'59	1.44597 AU
superior conj	7910 Apr 23 21:14	5° $\text{B}$ 24'06	-2°08'30	superior conj	7911 Apr 04 01:40	15° $\text{Y}$ 04'35	-2°09'56
minimum elong	7910 Apr 24 00:30	5° $\text{B}$ 37'52	2°08'28	minimum elong	7911 Apr 03 22:46	14° $\text{Y}$ 52'54	2°09'54
evening rise	7910 May 05 22:11	26° $\text{B}$ 16'05			7911 Apr 13 04:41	0° $\text{B}$	
	7910 May 08 00:46	0° $\text{II}$		evening rise	7911 Apr 17 20:29	7° $\text{B}$ 48'09	
asc. node	7910 May 13 20:17	10° $\text{II}$ 05'08		asc. node	7911 Apr 30 17:21	28° $\text{B}$ 50'44	
evening max el	7910 May 22 19:31	22° $\text{II}$ 38'14	18°05'28		7911 May 01 12:27	0° $\text{II}$	
retrograde	7910 May 29 08:29	26° $\text{II}$ 00'09		evening max el	7911 May 06 08:46	5° $\text{II}$ 59'16	18°14'28
evening set	7910 Jun 01 00:03	25° $\text{II}$ 26'42		retrograde	7911 May 12 18:04	9° $\text{II}$ 22'56	
inferior conj	7910 Jun 07 12:09	20° $\text{II}$ 24'20	2°37'35	evening set	7911 May 15 16:42	8° $\text{II}$ 36'45	
minimum elong	7910 Jun 07 15:04	20° $\text{II}$ 17'05	2°36'47	inferior conj	7911 May 21 16:36	3° $\text{II}$ 15'55	3°10'25
min. Earth dist.	7910 Jun 10 14:35	17° $\text{II}$ 20'38	0.61429 AU	minimum elong	7911 May 21 18:25	3° $\text{II}$ 10'50	3°10'03
morning rise	7910 Jun 14 03:55	14° $\text{II}$ 24'07		min. Earth dist.	7911 May 24 05:58	0° $\text{II}$ 25'03	0.63551 AU
desc. node	7910 Jun 17 18:24	12° $\text{II}$ 35'19			7911 May 24 15:21	30° $\text{R}$ $\text{B}$	
direct	7910 Jun 20 20:35	12° $\text{II}$ 06'16		morning rise	7911 May 27 18:52	27° $\text{B}$ 03'48	
morning max el	7910 Jul 05 02:01	20° $\text{II}$ 06'07	27°54'45	direct	7911 Jun 03 13:09	24° $\text{B}$ 25'13	
	7910 Jul 13 13:22	0° $\text{B}$		desc. node	7911 Jun 04 15:26	24° $\text{B}$ 29'03	
	7910 Aug 01 06:30	0° $\text{Q}$			7911 Jun 14 20:10	0° $\text{II}$	
morning set	7910 Aug 07 07:47	11° $\text{Q}$ 54'46		morning max el	7911 Jun 17 10:32	2° $\text{II}$ 27'18	27°43'30
asc. node	7910 Aug 09 19:36	17° $\text{Q}$ 07'00			7911 Jul 07 21:21	0° $\text{B}$	
max. Earth dist.	7910 Aug 13 02:31	24° $\text{Q}$ 11'32	1.31960 AU	morning set	7911 Jul 22 03:44	25° $\text{B}$ 47'51	
					7911 Jul 24 05:39	0° $\text{Q}$	
superior conj	7910 Aug 14 17:06	27° $\text{Q}$ 42'50	0°48'16	max. Earth dist.	7911 Jul 27 05:15	6° $\text{Q}$ 12'26	1.32702 AU
minimum elong	7910 Aug 14 15:10	27° $\text{Q}$ 32'09	0°47'49	asc. node	7911 Jul 27 16:35	7° $\text{Q}$ 12'26	
	7910 Aug 15 18:02	0° $\text{P}$					
evening rise	7910 Aug 21 12:03	12° $\text{P}$ 34'07		superior conj	7911 Jul 30 00:09	12° $\text{Q}$ 09'44	0°23'25
	7910 Aug 30 05:37	0° $\text{Q}$		minimum elong	7911 Jul 29 23:03	12° $\text{Q}$ 03'48	0°23'05
desc. node	7910 Sep 13 17:22	21° $\text{Q}$ 20'40		evening rise	7911 Aug 05 23:42	27° $\text{Q}$ 15'25	
evening max el	7910 Sep 16 09:25	24° $\text{Q}$ 06'03	24°48'57		7911 Aug 07 06:49	0° $\text{P}$	
	7910 Sep 24 22:39	0° $\text{M}$			7911 Aug 24 21:13	0° $\text{Q}$	
retrograde	7910 Sep 30 05:32	1° $\text{M}$ 04'13		evening max el	7911 Aug 28 20:41	4° $\text{Q}$ 21'56	23°10'57
evening set	7910 Oct 05 16:22	29° $\text{Q}$ 57'30		desc. node	7911 Aug 31 14:28	6° $\text{Q}$ 46'50	
	7910 Oct 05 13:50	30° $\text{R}$ $\text{Q}$		retrograde	7911 Sep 11 06:36	11° $\text{Q}$ 04'28	
min. Earth dist.	7910 Oct 10 20:36	27° $\text{Q}$ 12'37	0.56925 AU	evening set	7911 Sep 15 05:35	10° $\text{Q}$ 30'11	
inferior conj	7910 Oct 13 14:47	25° $\text{Q}$ 25'19	-5°28'26	min. Earth dist.	7911 Sep 22 05:47	7° $\text{Q}$ 16'52	0.55443 AU
minimum elong	7910 Oct 13 17:46	25° $\text{Q}$ 20'28	5°28'10	inferior conj	7911 Sep 23 22:18	6° $\text{Q}$ 17'51	-5°24'59
morning rise	7910 Oct 21 21:23	21° $\text{Q}$ 18'33		minimum elong	7911 Sep 23 18:03	6° $\text{Q}$ 24'04	5°24'35
direct	7910 Oct 24 10:25	21° $\text{Q}$ 00'25		morning rise	7911 Oct 02 08:41	2° $\text{Q}$ 27'10	
morning max el	7910 Nov 02 18:20	25° $\text{Q}$ 25'41	19°20'06	direct	7911 Oct 05 08:12	2° $\text{Q}$ 06'01	
asc. node	7910 Nov 05 19:11	28° $\text{Q}$ 45'27		morning max el	7911 Oct 16 05:06	7° $\text{Q}$ 11'02	20°34'19
	7910 Nov 06 18:25	0° $\text{M}$		asc. node	7911 Oct 23 16:10	16° $\text{Q}$ 24'43	
morning set	7910 Nov 19 20:20	22° $\text{M}$ 53'19			7911 Oct 31 09:11	0° $\text{M}$	
	7910 Nov 23 09:32	0° $\text{X}$		morning set	7911 Nov 04 03:10	7° $\text{M}$ 33'10	
superior conj	7910 Nov 27 22:37	8° $\text{X}$ 59'33	1°24'35	superior conj	7911 Nov 11 15:07	23° $\text{M}$ 02'14	1°36'50
minimum elong	7910 Nov 28 01:28	9° $\text{X}$ 13'25	1°24'25	minimum elong	7911 Nov 11 16:43	23° $\text{M}$ 10'21	1°36'50
max. Earth dist.	7910 Dec 04 11:15	21° $\text{X}$ 18'39	1.38206 AU		7911 Nov 15 02:28	0° $\text{X}$	
evening rise	7910 Dec 08 04:57	27° $\text{X}$ 59'19		max. Earth dist.	7911 Nov 16 18:36	3° $\text{X}$ 15'50	1.36149 AU
	7910 Dec 09 08:43	0° $\text{B}$		evening rise	7911 Nov 20 16:26	10° $\text{X}$ 38'58	
desc. node	7910 Dec 10 16:22	2° $\text{B}$ 15'37		desc. node	7911 Nov 27 13:24	22° $\text{X}$ 47'04	
	7910 Dec 28 15:16	0° $\approx$			7911 Dec 01 22:52	0° $\text{B}$	
evening max el	7911 Jan 12 17:15	18° $\approx$ 25'02	24°58'19		7911 Dec 24 02:35	0° $\approx$	
retrograde	7911 Jan 24 12:56	25° $\approx$ 17'03		evening max el	7911 Dec 26 06:13	2° $\approx$ 11'08	26°06'44




















































































































retrograde	7912 Jan 07 22:05	9° $\approx$ 22'40		evening rise	7912 Nov 02 19:43	24° $\mathbb{M}$ 01'07	
evening set	7912 Jan 14 02:36	6° $\approx$ 51'15			7912 Nov 05 23:35	0° $\mathbb{A}$	
min. Earth dist.	7912 Jan 18 08:00	2° $\approx$ 23'10	0.66839 AU	desc. node	7912 Nov 13 10:27	13° $\mathbb{A}$ 04'28	
inferior conj	7912 Jan 19 21:26	0° $\approx$ 27'13	0°05'00		7912 Nov 24 12:56	0° $\mathbb{B}$	
minimum elong	7912 Jan 19 21:18	0° $\approx$ 27'38	0°05'04	evening max el	7912 Dec 07 19:24	15° $\mathbb{B}$ 50'02	26°58'23
transit middle	7912 Jan 19 21:18	0° $\approx$ 27'38	0°05'04	retrograde	7912 Dec 21 01:33	23° $\mathbb{B}$ 09'36	
transit begin	7912 Jan 19 18:35	0° $\approx$ 36'03		evening set	7912 Dec 27 17:17	20° $\mathbb{B}$ 33'15	
transit end	7912 Jan 20 00:00	0° $\approx$ 19'14		min. Earth dist.	7912 Dec 31 16:47	16° $\mathbb{B}$ 39'26	0.65582 AU
asc. node	7912 Jan 19 15:28	0° $\approx$ 45'45		inferior conj	7913 Jan 02 17:47	14° $\mathbb{B}$ 19'08	-0°56'10
	7912 Jan 20 06:14	30° $\mathbb{R}$ $\mathbb{B}$		minimum elong	7913 Jan 02 19:25	14° $\mathbb{B}$ 14'28	0°55'20
morning rise	7912 Jan 25 16:39	24° $\mathbb{B}$ 39'17		asc. node	7913 Jan 05 12:32	11° $\mathbb{B}$ 18'14	
direct	7912 Jan 28 20:06	23° $\mathbb{B}$ 43'02		morning rise	7913 Jan 08 22:42	8° $\mathbb{B}$ 42'46	
morning max el	7912 Feb 04 13:10	27° $\mathbb{B}$ 22'16	18°44'44	direct	7913 Jan 11 16:49	8° $\mathbb{B}$ 01'29	
	7912 Feb 06 22:43	0° $\approx$		morning max el	7913 Jan 18 03:44	11° $\mathbb{B}$ 27'52	18°09'08
desc. node	7912 Feb 23 12:51	24° $\approx$ 21'44			7913 Jan 31 06:09	0° $\approx$	
morning set	7912 Feb 26 02:02	28° $\approx$ 21'30		morning set	7913 Feb 05 18:30	8° $\approx$ 57'28	
	7912 Feb 27 03:09	0° $\mathbb{H}$		desc. node	7913 Feb 09 09:48	14° $\approx$ 51'42	
max. Earth dist.	7912 Mar 12 08:41	22° $\mathbb{H}$ 16'47	1.45379 AU		7913 Feb 18 21:01	0° $\mathbb{H}$	
superior conj	7912 Mar 13 10:49	23° $\mathbb{H}$ 59'15	-1°51'26	superior conj	7913 Feb 20 16:32	2° $\mathbb{H}$ 51'38	-1°15'12
minimum elong	7912 Mar 13 01:57	23° $\mathbb{H}$ 24'29	1°50'43	minimum elong	7913 Feb 20 08:00	2° $\mathbb{H}$ 18'03	1°14'07
	7912 Mar 17 06:37	0° $\mathbb{Y}$		max. Earth dist.	7913 Feb 23 04:04	6° $\mathbb{H}$ 45'31	1.45428 AU
evening rise	7912 Mar 28 19:34	18° $\mathbb{Y}$ 22'06		evening rise	7913 Mar 08 20:36	28° $\mathbb{H}$ 05'06	
greatest brilliancy	7912 Apr 04 20:57	29° $\mathbb{Y}$ 42'43	-0.9m		7913 Mar 10 02:12	0° $\mathbb{Y}$	
	7912 Apr 05 01:17	0° $\mathbb{B}$		greatest brilliancy	7913 Mar 21 06:14	17° $\mathbb{Y}$ 11'00	-0.7m
asc. node	7912 Apr 16 14:26	17° $\mathbb{B}$ 00'04			7913 Mar 30 09:53	0° $\mathbb{B}$	
evening max el	7912 Apr 18 20:26	19° $\mathbb{B}$ 30'45	18°41'37	evening max el	7913 Apr 02 04:17	3° $\mathbb{B}$ 06'59	19°25'47
retrograde	7912 Apr 25 11:01	23° $\mathbb{B}$ 08'58		asc. node	7913 Apr 03 11:32	4° $\mathbb{B}$ 21'23	
evening set	7912 Apr 28 16:52	22° $\mathbb{B}$ 08'58		retrograde	7913 Apr 09 07:59	7° $\mathbb{B}$ 11'08	
inferior conj	7912 May 04 08:24	16° $\mathbb{B}$ 31'22	3°23'41	evening set	7913 Apr 12 21:44	5° $\mathbb{B}$ 56'32	
minimum elong	7912 May 04 08:50	16° $\mathbb{B}$ 30'02	3°23'35	inferior conj	7913 Apr 18 08:06	0° $\mathbb{B}$ 03'42	3°21'42
min. Earth dist.	7912 May 06 06:34	14° $\mathbb{B}$ 10'08	0.65371 AU	minimum elong	7913 Apr 18 07:19	0° $\mathbb{B}$ 06'18	3°21'35
morning rise	7912 May 10 00:08	10° $\mathbb{B}$ 14'22			7913 Apr 18 09:14	30° $\mathbb{R}$ $\mathbb{Y}$	
direct	7912 May 16 13:34	7° $\mathbb{B}$ 27'09		min. Earth dist.	7913 Apr 19 15:06	28° $\mathbb{Y}$ 22'13	0.66784 AU
desc. node	7912 May 21 12:27	8° $\mathbb{B}$ 46'00		morning rise	7913 Apr 23 16:33	23° $\mathbb{Y}$ 46'09	
morning max el	7912 May 29 20:57	15° $\mathbb{B}$ 19'05	26°58'59	direct	7913 Apr 29 20:21	21° $\mathbb{Y}$ 02'22	
	7912 Jun 10 21:34	0° $\mathbb{I}$		desc. node	7913 May 08 09:27	24° $\mathbb{Y}$ 54'41	
	7912 Jun 29 15:46	0° $\mathbb{B}$		morning max el	7913 May 12 06:51	28° $\mathbb{Y}$ 28'42	25°49'31
morning set	7912 Jul 04 13:44	9° $\mathbb{B}$ 09'22			7913 May 13 17:47	0° $\mathbb{B}$	
max. Earth dist.	7912 Jul 08 22:26	17° $\mathbb{B}$ 45'08	1.33929 AU	morning set	7913 Jun 04 15:56	0° $\mathbb{I}$	
superior conj	7912 Jul 13 01:49	26° $\mathbb{B}$ 16'46	-0°04'59	max. Earth dist.	7913 Jun 17 09:55	21° $\mathbb{I}$ 48'29	
minimum elong	7912 Jul 13 02:05	26° $\mathbb{B}$ 18'11	0°05'04		7913 Jun 21 04:33	28° $\mathbb{I}$ 53'12	1.35624 AU
behind sun begin	7912 Jul 12 20:41	25° $\mathbb{B}$ 49'53			7913 Jun 21 18:29	0° $\mathbb{B}$	
behind sun end	7912 Jul 13 07:30	26° $\mathbb{B}$ 46'31		superior conj	7913 Jun 26 19:29	9° $\mathbb{B}$ 56'42	-0°35'51
asc. node	7912 Jul 13 13:36	27° $\mathbb{B}$ 18'32		minimum elong	7913 Jun 26 21:35	10° $\mathbb{B}$ 07'19	0°35'34
	7912 Jul 14 20:13	0° $\mathbb{Q}$		asc. node	7913 Jun 30 10:38	17° $\mathbb{B}$ 21'19	
evening rise	7912 Jul 20 10:08	11° $\mathbb{Q}$ 49'22		evening rise	7913 Jul 04 17:16	26° $\mathbb{B}$ 09'56	
	7912 Jul 29 18:33	0° $\mathbb{P}$			7913 Jul 06 14:31	0° $\mathbb{Q}$	
evening max el	7912 Aug 09 12:55	14° $\mathbb{P}$ 42'28	21°34'55	evening max el	7913 Jul 22 16:55	25° $\mathbb{Q}$ 37'04	20°13'10
desc. node	7912 Aug 17 11:33	20° $\mathbb{P}$ 03'13			7913 Jul 28 22:59	0° $\mathbb{P}$	
retrograde	7912 Aug 21 21:12	20° $\mathbb{P}$ 49'42		retrograde	7913 Aug 02 10:06	0° $\mathbb{P}$ 54'09	
evening set	7912 Aug 24 11:25	20° $\mathbb{P}$ 34'25		evening set	7913 Aug 04 08:34	0° $\mathbb{P}$ 44'34	
inferior conj	7912 Sep 02 16:46	16° $\mathbb{P}$ 35'39	-4°27'07	desc. node	7913 Aug 04 08:38	0° $\mathbb{P}$ 44'33	
minimum elong	7912 Sep 02 07:27	16° $\mathbb{P}$ 48'41	4°24'51		7913 Aug 07 03:16	30° $\mathbb{R}$ $\mathbb{Q}$	
min. Earth dist.	7912 Sep 02 14:42	16° $\mathbb{P}$ 38'33	0.54728 AU	inferior conj	7913 Aug 13 11:17	26° $\mathbb{Q}$ 46'29	-2°44'04
morning rise	7912 Sep 11 04:30	12° $\mathbb{P}$ 44'56		minimum elong	7913 Aug 13 03:50	26° $\mathbb{Q}$ 57'28	2°41'29
direct	7912 Sep 14 17:53	12° $\mathbb{P}$ 17'23		min. Earth dist.	7913 Aug 15 01:14	25° $\mathbb{Q}$ 50'31	0.54960 AU
morning max el	7912 Sep 27 03:27	18° $\mathbb{P}$ 09'06	22°08'10	morning rise	7913 Aug 21 21:56	22° $\mathbb{Q}$ 35'49	
	7912 Oct 06 14:40	0° $\mathbb{U}$		direct	7913 Aug 26 04:42	21° $\mathbb{Q}$ 56'09	
asc. node	7912 Oct 09 13:09	4° $\mathbb{U}$ 50'10		morning max el	7913 Sep 08 17:29	28° $\mathbb{Q}$ 32'36	23°53'14
morning set	7912 Oct 18 13:20	22° $\mathbb{U}$ 20'53			7913 Sep 10 05:01	0° $\mathbb{P}$	
	7912 Oct 22 03:50	0° $\mathbb{M}$		asc. node	7913 Sep 26 10:09	23° $\mathbb{P}$ 50'37	
superior conj	7912 Oct 25 16:16	7° $\mathbb{M}$ 28'57	1°41'32		7913 Sep 29 13:48	0° $\mathbb{U}$	
minimum elong	7912 Oct 25 16:31	7° $\mathbb{M}$ 30'15	1°41'36	morning set	7913 Oct 03 01:01	7° $\mathbb{U}$ 11'35	
max. Earth dist.	7912 Oct 29 08:42	15° $\mathbb{M}$ 08'41	1.34404 AU	superior conj	7913 Oct 09 23:12	22° $\mathbb{U}$ 11'16	1°39'36






































































































































minimum elong	7913 Oct 09 22:17	22° $\Omega$ 06'16	1°39'37	minimum elong	7914 Sep 24 07:45	6° $\Omega$ 51'06	1°31'40
max. Earth dist.	7913 Oct 12 07:30	27° $\Omega$ 14'18	1.33068 AU	max. Earth dist.	7914 Sep 25 13:23	9° $\Omega$ 34'11	1.32174 AU
	7913 Oct 13 14:44	0° $\mathbb{M}$		evening rise	7914 Oct 01 11:00	22° $\Omega$ 13'19	
evening rise	7913 Oct 17 11:02	7° $\mathbb{M}$ 56'01			7914 Oct 05 07:31	0° $\mathbb{M}$	
	7913 Oct 29 11:09	0° $\mathcal{A}$		desc. node	7914 Oct 18 04:35	22° $\mathbb{M}$ 28'49	
desc. node	7913 Oct 31 07:31	3° $\mathcal{A}$ 01'33			7914 Oct 23 09:19	0° $\mathcal{A}$	
evening max el	7913 Nov 20 07:48	29° $\mathcal{A}$ 11'16	27°26'02	evening max el	7914 Nov 02 17:00	12° $\mathcal{A}$ 00'14	27°23'39
	7913 Nov 21 04:47	0° $\mathcal{B}$		retrograde	7914 Nov 16 12:18	19° $\mathcal{A}$ 14'13	
retrograde	7913 Dec 03 22:33	6° $\mathcal{B}$ 30'01		evening set	7914 Nov 23 15:03	16° $\mathcal{A}$ 51'34	
evening set	7913 Dec 10 22:30	3° $\mathcal{B}$ 55'56		min. Earth dist.	7914 Nov 27 07:09	13° $\mathcal{A}$ 57'56	0.62125 AU
min. Earth dist.	7913 Dec 14 17:07	0° $\mathcal{B}$ 34'42	0.63998 AU	inferior conj	7914 Nov 30 05:49	11° $\mathcal{A}$ 14'53	-3°11'54
	7913 Dec 15 06:44	30° $\mathcal{R}$ $\mathcal{A}$		minimum elong	7914 Nov 30 11:48	11° $\mathcal{A}$ 01'04	3°09'42
inferior conj	7913 Dec 17 05:36	27° $\mathcal{A}$ 57'48	-2°02'44	morning rise	7914 Dec 07 10:39	6° $\mathcal{A}$ 11'19	
minimum elong	7913 Dec 17 09:23	27° $\mathcal{A}$ 47'55	2°01'04	direct	7914 Dec 09 17:11	5° $\mathcal{A}$ 48'33	
asc. node	7913 Dec 23 09:35	22° $\mathcal{A}$ 49'48		asc. node	7914 Dec 10 06:36	5° $\mathcal{A}$ 49'58	
morning rise	7913 Dec 23 21:57	22° $\mathcal{A}$ 36'05		morning max el	7914 Dec 16 13:27	9° $\mathcal{A}$ 17'16	17°50'00
direct	7913 Dec 26 08:59	22° $\mathcal{A}$ 05'51			7914 Dec 30 04:30	0° $\mathcal{B}$	
morning max el	7914 Jan 01 20:51	25° $\mathcal{A}$ 28'57	17°50'37	morning set	7915 Jan 01 09:18	3° $\mathcal{B}$ 56'00	
	7914 Jan 05 15:59	0° $\mathcal{B}$					
morning set	7914 Jan 18 15:01	20° $\mathcal{B}$ 55'48		superior conj	7915 Jan 12 11:40	23° $\mathcal{B}$ 24'55	0°12'14
	7914 Jan 23 23:29	0° $\approx$		minimum elong	7915 Jan 12 12:49	23° $\mathcal{B}$ 29'48	0°12'12
desc. node	7914 Jan 27 06:47	5° $\approx$ 30'37		behind sun begin	7915 Jan 12 07:05	23° $\mathcal{B}$ 05'26	
				behind sun end	7915 Jan 12 18:32	23° $\mathcal{B}$ 54'07	
superior conj	7914 Jan 31 13:35	12° $\approx$ 31'50	-0°30'37	desc. node	7915 Jan 14 03:45	26° $\mathcal{B}$ 14'25	
minimum elong	7914 Jan 31 10:08	12° $\approx$ 17'51	0°30'01		7915 Jan 16 09:48	0° $\approx$	
max. Earth dist.	7914 Feb 05 23:12	21° $\approx$ 11'38	1.44745 AU	max. Earth dist.	7915 Jan 19 15:13	5° $\approx$ 17'25	1.43402 AU
	7914 Feb 11 13:47	0° $\mathcal{H}$		evening rise	7915 Jan 26 22:51	16° $\approx$ 55'20	
evening rise	7914 Feb 16 08:44	7° $\mathcal{H}$ 23'58			7915 Feb 04 12:42	0° $\mathcal{H}$	
	7914 Mar 03 10:02	0° $\mathcal{Y}$			7915 Feb 26 18:41	0° $\mathcal{Y}$	
evening max el	7914 Mar 16 06:57	16° $\mathcal{Y}$ 45'05	20°24'57	evening max el	7915 Feb 27 04:02	0° $\mathcal{Y}$ 24'00	21°36'03
asc. node	7914 Mar 21 08:38	20° $\mathcal{Y}$ 41'07		retrograde	7915 Mar 08 04:23	5° $\mathcal{Y}$ 44'16	
retrograde	7914 Mar 24 06:25	21° $\mathcal{Y}$ 24'22		asc. node	7915 Mar 08 05:41	5° $\mathcal{Y}$ 44'15	
evening set	7914 Mar 28 05:07	19° $\mathcal{Y}$ 54'40		evening set	7915 Mar 12 13:11	3° $\mathcal{Y}$ 59'18	
inferior conj	7914 Apr 02 12:57	13° $\mathcal{Y}$ 48'27	3°07'28		7915 Mar 16 04:22	30° $\mathcal{R}$ $\mathcal{H}$	
minimum elong	7914 Apr 02 11:16	13° $\mathcal{Y}$ 54'13	3°07'10	inferior conj	7915 Mar 17 20:41	27° $\mathcal{H}$ 42'08	2°42'55
min. Earth dist.	7914 Apr 03 05:48	12° $\mathcal{Y}$ 50'54	0.67750 AU	minimum elong	7915 Mar 17 18:30	27° $\mathcal{H}$ 49'45	2°42'23
morning rise	7914 Apr 07 17:13	7° $\mathcal{Y}$ 32'42		min. Earth dist.	7915 Mar 18 00:35	27° $\mathcal{H}$ 28'33	0.68269 AU
direct	7914 Apr 13 08:22	5° $\mathcal{Y}$ 02'06		morning rise	7915 Mar 22 23:39	21° $\mathcal{H}$ 29'43	
morning max el	7914 Apr 24 15:51	11° $\mathcal{Y}$ 48'11	24°24'55	direct	7915 Mar 28 00:47	19° $\mathcal{H}$ 18'25	
desc. node	7914 Apr 25 06:26	12° $\mathcal{Y}$ 25'37		morning max el	7915 Apr 07 01:47	25° $\mathcal{H}$ 15'08	22°55'15
	7914 May 09 05:28	0° $\mathcal{B}$			7915 Apr 11 08:48	0° $\mathcal{Y}$	
	7914 May 28 10:15	0° $\mathbb{I}$		desc. node	7915 Apr 12 03:24	0° $\mathcal{Y}$ 55'59	
morning set	7914 May 30 11:16	3° $\mathbb{I}$ 31'43			7915 May 02 17:13	0° $\mathcal{B}$	
max. Earth dist.	7914 Jun 03 02:40	9° $\mathbb{I}$ 59'53	1.37697 AU	morning set	7915 May 11 12:14	14° $\mathcal{B}$ 05'19	
				max. Earth dist.	7915 May 15 23:13	21° $\mathcal{B}$ 36'30	1.39934 AU
superior conj	7914 Jun 10 01:51	23° $\mathbb{I}$ 00'56	-1°07'27		7915 May 20 18:09	0° $\mathbb{I}$	
minimum elong	7914 Jun 10 05:58	23° $\mathbb{I}$ 20'45	1°06'53				
	7914 Jun 13 15:45	0° $\mathcal{E}$		superior conj	7915 May 23 16:52	5° $\mathbb{I}$ 19'40	-1°36'58
asc. node	7914 Jun 17 07:40	7° $\mathcal{E}$ 16'25		minimum elong	7915 May 23 22:27	5° $\mathbb{I}$ 45'14	1°36'24
evening rise	7914 Jun 18 18:36	10° $\mathcal{E}$ 10'01		evening rise	7915 Jun 02 11:04	23° $\mathbb{I}$ 41'39	
	7914 Jun 29 16:14	0° $\mathcal{Q}$		asc. node	7915 Jun 04 04:43	26° $\mathbb{I}$ 59'43	
evening max el	7914 Jul 05 09:50	7° $\mathcal{Q}$ 15'22	19°11'04		7915 Jun 05 19:00	0° $\mathcal{E}$	
retrograde	7914 Jul 14 10:38	11° $\mathcal{Q}$ 43'02		evening max el	7915 Jun 18 13:10	19° $\mathcal{E}$ 34'34	18°29'50
evening set	7914 Jul 16 08:23	11° $\mathcal{Q}$ 31'56		retrograde	7915 Jun 26 05:51	23° $\mathcal{E}$ 24'30	
desc. node	7914 Jul 22 05:42	9° $\mathcal{Q}$ 00'57		evening set	7915 Jun 28 09:34	23° $\mathcal{E}$ 07'23	
inferior conj	7914 Jul 24 19:32	7° $\mathcal{Q}$ 20'43	-0°47'09	inferior conj	7915 Jul 06 00:52	18° $\mathcal{E}$ 36'54	0°54'08
minimum elong	7914 Jul 24 17:28	7° $\mathcal{Q}$ 24'11	0°46'28	minimum elong	7915 Jul 06 02:45	18° $\mathcal{E}$ 33'11	0°53'20
min. Earth dist.	7914 Jul 27 14:46	5° $\mathcal{Q}$ 28'11	0.56107 AU	desc. node	7915 Jul 09 02:45	16° $\mathcal{E}$ 11'48	
morning rise	7914 Aug 01 23:36	2° $\mathcal{Q}$ 35'23		min. Earth dist.	7915 Jul 09 09:24	15° $\mathcal{E}$ 59'16	0.57942 AU
direct	7914 Aug 07 02:23	1° $\mathcal{Q}$ 35'00		morning rise	7915 Jul 13 16:30	13° $\mathcal{E}$ 15'05	
morning max el	7914 Aug 21 06:22	8° $\mathcal{Q}$ 47'46	25°34'48	direct	7915 Jul 19 14:34	11° $\mathcal{E}$ 45'16	
	7914 Sep 06 02:39	0° $\mathbb{N}$		morning max el	7915 Aug 02 23:57	19° $\mathcal{E}$ 24'25	26°55'53
asc. node	7914 Sep 13 07:08	13° $\mathbb{N}$ 16'11			7915 Aug 11 23:57	0° $\mathcal{Q}$	
morning set	7914 Sep 17 12:27	21° $\mathbb{N}$ 59'10			7915 Aug 29 16:49	0° $\mathbb{N}$	
	7914 Sep 21 05:10	0° $\mathcal{A}$		asc. node	7915 Aug 31 04:07	2° $\mathbb{N}$ 59'58	
				morning set	7915 Sep 01 22:02	6° $\mathbb{N}$ 38'57	
superior conj	7914 Sep 24 09:31	7° $\mathcal{A}$ 00'51	1°31'48				

superior conj	7915 Sep 08 21:16	21° $\mathbb{M}$ 51'43	1°18'41			7916 Aug 20 08:12	0° $\mathbb{M}$	
minimum elong	7915 Sep 08 19:03	21° $\mathbb{M}$ 39'28	1°18'22	max. Earth dist.		7916 Aug 22 09:02	4° $\mathbb{M}$ 27'41	1.31741 AU
max. Earth dist.	7915 Sep 08 23:06	22° $\mathbb{M}$ 01'56	1.31732 AU					
	7915 Sep 12 13:42	0° $\mathbb{L}$		superior conj		7916 Aug 23 08:39	6° $\mathbb{M}$ 37'59	1°00'42
evening rise	7915 Sep 15 16:59	6° $\mathbb{L}$ 45'41		minimum elong		7916 Aug 23 06:28	6° $\mathbb{M}$ 25'55	1°00'15
	7915 Sep 27 20:13	0° $\mathbb{M}$		evening rise		7916 Aug 30 02:43	21° $\mathbb{M}$ 26'26	
desc. node	7915 Oct 05 01:38	11° $\mathbb{M}$ 14'24				7916 Sep 03 05:33	0° $\mathbb{L}$	
evening max el	7915 Oct 15 20:17	24° $\mathbb{M}$ 04'38	26°47'40	desc. node		7916 Sep 20 22:43	29° $\mathbb{L}$ 01'57	
	7915 Oct 24 06:15	0° $\mathbb{L}$				7916 Sep 21 17:43	0° $\mathbb{M}$	
retrograde	7915 Oct 29 18:04	1° $\mathbb{L}$ 13'28		evening max el		7916 Sep 26 15:54	5° $\mathbb{M}$ 19'02	25°39'36
	7915 Nov 04 02:26	30° $\mathbb{R}$ $\mathbb{M}$		retrograde		7916 Oct 10 14:18	12° $\mathbb{M}$ 22'16	
evening set	7915 Nov 05 14:50	29° $\mathbb{M}$ 13'22		evening set		7916 Oct 16 17:01	10° $\mathbb{M}$ 54'56	
min. Earth dist.	7915 Nov 09 10:21	26° $\mathbb{M}$ 36'31	0.60062 AU	min. Earth dist.		7916 Oct 21 04:15	8° $\mathbb{M}$ 18'09	0.57998 AU
inferior conj	7915 Nov 12 15:04	24° $\mathbb{M}$ 01'30	-4°18'01	inferior conj		7916 Oct 24 05:59	6° $\mathbb{M}$ 08'37	-5°10'36
minimum elong	7915 Nov 12 22:15	23° $\mathbb{M}$ 46'57	4°15'59	minimum elong		7916 Oct 24 11:41	5° $\mathbb{M}$ 58'33	5°09'39
morning rise	7915 Nov 20 08:01	19° $\mathbb{M}$ 19'20		morning rise		7916 Nov 01 08:41	1° $\mathbb{M}$ 49'10	
direct	7915 Nov 22 13:24	19° $\mathbb{M}$ 00'48		direct		7916 Nov 03 17:17	1° $\mathbb{M}$ 31'49	
asc. node	7915 Nov 27 03:37	20° $\mathbb{M}$ 24'11		morning max el		7916 Nov 12 07:17	5° $\mathbb{M}$ 39'22	18°47'35
morning max el	7915 Nov 30 02:07	22° $\mathbb{M}$ 44'03	18°08'25	asc. node		7916 Nov 13 00:37	6° $\mathbb{M}$ 22'37	
	7915 Dec 05 18:59	0° $\mathbb{L}$				7916 Nov 27 16:41	0° $\mathbb{L}$	
morning set	7915 Dec 15 19:11	17° $\mathbb{L}$ 39'40		morning set		7916 Nov 28 15:56	1° $\mathbb{L}$ 53'25	
	7915 Dec 22 10:01	0° $\mathbb{Z}$						
superior conj	7915 Dec 25 10:29	5° $\mathbb{Z}$ 28'53	0°47'36	superior conj		7916 Dec 07 05:27	18° $\mathbb{L}$ 30'35	1°13'42
minimum elong	7915 Dec 25 13:44	5° $\mathbb{Z}$ 43'26	0°47'16	minimum elong		7916 Dec 07 08:47	18° $\mathbb{L}$ 46'20	1°13'25
desc. node	7916 Jan 01 00:43	16° $\mathbb{Z}$ 59'38				7916 Dec 13 11:26	0° $\mathbb{Z}$	
max. Earth dist.	7916 Jan 02 02:01	18° $\mathbb{Z}$ 46'35	1.41562 AU	max. Earth dist.		7916 Dec 14 08:31	1° $\mathbb{Z}$ 33'36	1.39448 AU
evening rise	7916 Jan 07 04:24	27° $\mathbb{Z}$ 10'53		desc. node		7916 Dec 17 21:43	7° $\mathbb{Z}$ 43'06	
	7916 Jan 08 22:34	0° $\mathbb{R}$		evening rise		7916 Dec 31 07:46	8° $\mathbb{Z}$ 25'47	
	7916 Jan 29 05:45	0° $\mathbb{H}$				7916 Dec 31 21:35	0° $\mathbb{R}$	
evening max el	7916 Feb 09 20:29	14° $\mathbb{H}$ 04'36	22°54'30	evening max el		7917 Jan 22 10:25	27° $\mathbb{R}$ 49'35	24°14'24
retrograde	7916 Feb 20 00:14	20° $\mathbb{H}$ 06'01				7917 Jan 24 18:22	0° $\mathbb{H}$	
asc. node	7916 Feb 23 02:45	19° $\mathbb{H}$ 17'36		retrograde		7917 Feb 02 16:39	4° $\mathbb{H}$ 25'55	
evening set	7916 Feb 24 20:21	18° $\mathbb{H}$ 06'08		evening set		7917 Feb 08 01:06	2° $\mathbb{H}$ 12'05	
inferior conj	7916 Mar 01 05:17	11° $\mathbb{H}$ 41'21	2°09'13	asc. node		7917 Feb 08 23:49	1° $\mathbb{H}$ 19'41	
minimum elong	7916 Mar 01 03:02	11° $\mathbb{H}$ 49'08	2°08'33			7917 Feb 10 05:24	30° $\mathbb{R}$ $\mathbb{R}$	
min. Earth dist.	7916 Feb 29 21:15	12° $\mathbb{H}$ 09'09	0.68371 AU	min. Earth dist.		7917 Feb 12 17:33	26° $\mathbb{R}$ 49'17	0.68079 AU
morning rise	7916 Mar 06 09:38	5° $\mathbb{H}$ 33'28		inferior conj		7917 Feb 13 12:58	25° $\mathbb{R}$ 43'50	1°27'07
direct	7916 Mar 10 20:42	3° $\mathbb{H}$ 44'17		minimum elong		7917 Feb 13 11:08	25° $\mathbb{R}$ 50'02	1°26'32
morning max el	7916 Mar 19 15:48	8° $\mathbb{H}$ 50'37	21°29'18	morning rise		7917 Feb 18 21:14	19° $\mathbb{R}$ 42'03	
desc. node	7916 Mar 29 00:19	20° $\mathbb{H}$ 08'48		direct		7917 Feb 22 19:01	18° $\mathbb{R}$ 14'59	
	7916 Apr 05 00:33	0° $\mathbb{Y}$		morning max el		7917 Mar 02 12:54	22° $\mathbb{R}$ 38'02	20°13'47
morning set	7916 Apr 20 09:23	23° $\mathbb{Y}$ 21'24				7917 Mar 08 19:05	0° $\mathbb{H}$	
	7916 Apr 24 12:47	0° $\mathbb{Z}$		desc. node		7917 Mar 15 21:16	9° $\mathbb{H}$ 52'59	
max. Earth dist.	7916 Apr 26 23:55	4° $\mathbb{Z}$ 01'51	1.42068 AU	morning set		7917 Mar 29 06:43	0° $\mathbb{Y}$	
				max. Earth dist.		7917 Apr 09 07:56	17° $\mathbb{Y}$ 20'14	1.43837 AU
superior conj	7916 May 04 11:42	16° $\mathbb{Z}$ 41'13	-2°00'11					
minimum elong	7916 May 04 16:49	17° $\mathbb{Z}$ 03'26	1°59'57	superior conj		7917 Apr 15 06:26	26° $\mathbb{Y}$ 58'29	-2°11'22
	7916 May 11 23:57	0° $\mathbb{H}$		minimum elong		7917 Apr 15 07:27	27° $\mathbb{Y}$ 02'43	2°11'25
evening rise	7916 May 15 14:41	6° $\mathbb{H}$ 34'03				7917 Apr 17 02:20	0° $\mathbb{Z}$	
asc. node	7916 May 21 01:45	16° $\mathbb{H}$ 25'28		evening rise		7917 Apr 28 00:56	18° $\mathbb{Z}$ 37'27	
	7916 May 29 18:58	0° $\mathbb{L}$				7917 May 04 15:17	0° $\mathbb{H}$	
evening max el	7916 May 31 23:09	2° $\mathbb{L}$ 25'00	18°08'50	asc. node		7917 May 07 22:48	5° $\mathbb{H}$ 27'42	
retrograde	7916 Jun 07 19:03	5° $\mathbb{L}$ 52'39		evening max el		7917 May 15 12:12	15° $\mathbb{H}$ 37'27	18°07'07
evening set	7916 Jun 10 06:18	5° $\mathbb{L}$ 25'59		retrograde		7917 May 21 22:22	18° $\mathbb{H}$ 58'10	
inferior conj	7916 Jun 17 03:19	0° $\mathbb{L}$ 35'16	2°07'45	evening set		7917 May 24 17:00	18° $\mathbb{H}$ 19'27	
minimum elong	7916 Jun 17 06:25	0° $\mathbb{L}$ 28'08	2°06'45	inferior conj		7917 May 30 23:26	13° $\mathbb{H}$ 09'20	2°54'10
	7916 Jun 17 18:35	30° $\mathbb{R}$ $\mathbb{H}$		minimum elong		7917 May 31 01:58	13° $\mathbb{H}$ 02'43	2°53'34
min. Earth dist.	7916 Jun 20 10:59	27° $\mathbb{H}$ 33'45	0.60135 AU	min. Earth dist.		7917 Jun 02 20:55	10° $\mathbb{H}$ 08'27	0.62363 AU
morning rise	7916 Jun 24 03:44	24° $\mathbb{H}$ 45'51		morning rise		7917 Jun 06 09:10	7° $\mathbb{H}$ 03'11	
desc. node	7916 Jun 24 23:47	24° $\mathbb{H}$ 16'42		desc. node		7917 Jun 11 20:49	4° $\mathbb{H}$ 39'58	
direct	7916 Jun 30 15:54	22° $\mathbb{H}$ 43'52		direct		7917 Jun 13 03:37	4° $\mathbb{H}$ 34'49	
	7916 Jul 14 07:55	0° $\mathbb{L}$		morning max el		7917 Jun 27 06:01	12° $\mathbb{H}$ 36'58	27°54'19
morning max el	7916 Jul 15 00:07	0° $\mathbb{L}$ 39'24	27°44'05			7917 Jul 11 01:54	0° $\mathbb{L}$	
	7916 Aug 05 03:24	0° $\mathbb{L}$				7917 Jul 28 13:39	0° $\mathbb{L}$	
morning set	7916 Aug 16 03:59	21° $\mathbb{L}$ 05'27		morning set		7917 Jul 31 04:18	5° $\mathbb{L}$ 12'37	
asc. node	7916 Aug 17 01:05	22° $\mathbb{L}$ 55'53		asc. node		7917 Aug 03 22:04	12° $\mathbb{L}$ 59'08	

max. Earth dist.	7917 Aug 05 15:26	16°♎40'21	1.32215 AU		7918 Jul 20 07:48	0°♎	
				asc. node	7918 Jul 21 19:05	3°♎05'30	
superior conj	7917 Aug 07 17:52	21°♎13'53	0°38'14				
minimum elong	7917 Aug 07 16:12	21°♎04'52	0°37'48	superior conj	7918 Jul 22 22:56	5°♎33'26	0°11'48
	7917 Aug 11 17:59	0°♎		minimum elong	7918 Jul 22 22:21	5°♎30'19	0°11'33
evening rise	7917 Aug 14 14:14	6°♎09'25		behind sun begin	7918 Jul 22 18:33	5°♎10'02	
	7917 Aug 27 01:33	0°♎		behind sun end	7918 Jul 23 02:10	5°♎50'38	
desc. node	7917 Sep 07 19:50	15°♎28'16		evening rise	7918 Jul 30 01:39	20°♎48'48	
evening max el	7917 Sep 08 04:53	15°♎50'18	24°08'11		7918 Aug 03 12:42	0°♎	
retrograde	7917 Sep 21 22:18	22°♎43'08		evening max el	7918 Aug 20 17:17	26°♎04'22	22°29'03
evening set	7917 Sep 26 18:25	21°♎51'36		desc. node	7918 Aug 25 16:56	0°♎03'54	
min. Earth dist.	7917 Oct 02 15:38	18°♎56'25	0.56219 AU		7918 Aug 25 14:26	0°♎	
inferior conj	7917 Oct 05 00:36	17°♎28'40	-5°33'07	retrograde	7918 Sep 02 17:51	2°♎33'50	
minimum elong	7917 Oct 05 00:42	17°♎28'29	5°33'05	evening set	7918 Sep 06 01:51	2°♎09'25	
morning rise	7917 Oct 13 09:08	13°♎29'36			7918 Sep 11 13:20	30°♎	
direct	7917 Oct 16 02:08	13°♎10'28		min. Earth dist.	7918 Sep 14 00:08	28°♎40'02	0.55036 AU
morning max el	7917 Oct 26 01:21	17°♎51'59	19°48'55	inferior conj	7918 Sep 15 01:23	28°♎04'18	-5°07'15
asc. node	7917 Oct 30 21:37	23°♎29'27		minimum elong	7918 Sep 14 18:17	28°♎14'22	5°06'07
	7917 Nov 04 03:31	0°♎		morning rise	7918 Sep 23 12:34	24°♎16'11	
morning set	7917 Nov 12 19:54	16°♎26'08		direct	7918 Sep 26 17:55	23°♎52'38	
	7917 Nov 19 12:25	0°♎		morning max el	7918 Oct 08 06:32	29°♎16'34	21°12'04
					7918 Oct 09 00:36	0°♎	
superior conj	7917 Nov 20 15:21	2°♎14'24	1°30'45	asc. node	7918 Oct 17 18:38	11°♎30'08	
minimum elong	7917 Nov 20 17:43	2°♎26'06	1°30'40		7918 Oct 27 14:50	0°♎	
max. Earth dist.	7917 Nov 26 14:25	13°♎44'57	1.37309 AU	morning set	7918 Oct 28 04:27	1°♎10'31	
evening rise	7917 Nov 30 08:28	20°♎36'58					
desc. node	7917 Dec 04 18:46	28°♎20'12		superior conj	7918 Nov 04 11:58	16°♎28'35	1°39'40
	7917 Dec 05 18:25	0°♎		minimum elong	7918 Nov 04 12:59	16°♎33'51	1°39'44
	7917 Dec 25 21:53	0°♎		max. Earth dist.	7918 Nov 09 00:36	25°♎39'28	1.35371 AU
evening max el	7918 Jan 04 23:35	11°♎37'01	25°29'02		7918 Nov 11 05:53	0°♎	
retrograde	7918 Jan 17 04:31	18°♎38'11		evening rise	7918 Nov 13 03:12	3°♎36'00	
evening set	7918 Jan 23 01:51	16°♎12'23		desc. node	7918 Nov 21 15:49	18°♎46'25	
asc. node	7918 Jan 26 20:53	12°♎09'03			7918 Nov 28 16:17	0°♎	
min. Earth dist.	7918 Jan 27 11:08	11°♎24'12	0.67405 AU	evening max el	7918 Dec 18 12:48	25°♎21'18	26°31'04
inferior conj	7918 Jan 28 17:52	9°♎45'28	0°37'10		7918 Dec 24 04:18	0°♎	
minimum elong	7918 Jan 28 16:57	9°♎48'25	0°36'54	retrograde	7918 Dec 31 11:06	2°♎36'38	
morning rise	7918 Feb 03 08:25	3°♎51'46		evening set	7919 Jan 06 20:47	0°♎02'23	
direct	7918 Feb 06 18:12	2°♎45'00			7919 Jan 06 21:57	30°♎	
morning max el	7918 Feb 13 17:58	6°♎36'23	19°12'37	min. Earth dist.	7919 Jan 10 23:38	25°♎49'06	0.66358 AU
greatest brilliancy	7918 Feb 27 01:14	24°♎21'46	-0.7m	inferior conj	7919 Jan 12 17:58	23°♎42'08	-0°20'09
desc. node	7918 Mar 02 18:15	29°♎59'41		minimum elong	7919 Jan 12 18:31	23°♎40'29	0°19'48
	7918 Mar 02 18:19	0°♎		asc. node	7919 Jan 13 17:57	22°♎30'49	
morning set	7918 Mar 09 10:17	10°♎15'51		morning rise	7919 Jan 18 17:04	17°♎58'51	
	7918 Mar 22 02:15	0°♎		direct	7919 Jan 21 16:25	17°♎09'19	
max. Earth dist.	7918 Mar 22 22:51	1°♎21'01	1.45023 AU	morning max el	7919 Jan 28 05:47	20°♎41'21	18°27'31
					7919 Feb 04 13:42	0°♎	
superior conj	7918 Mar 26 01:22	6°♎15'27	-2°04'35	morning set	7919 Feb 17 09:39	20°♎00'34	
minimum elong	7918 Mar 25 19:27	5°♎52'03	2°04'19	desc. node	7919 Feb 17 15:12	20°♎22'36	
evening rise	7918 Apr 09 13:30	29°♎44'13			7919 Feb 23 16:55	0°♎	
	7918 Apr 09 17:20	0°♎					
asc. node	7918 Apr 24 19:52	23°♎58'49		superior conj	7919 Mar 05 06:30	15°♎01'41	-1°37'45
evening max el	7918 Apr 29 01:08	29°♎03'42	18°23'55	minimum elong	7919 Mar 04 20:53	14°♎24'02	1°36'47
	7918 Apr 30 01:05	0°♎		max. Earth dist.	7919 Mar 05 17:53	15°♎46'15	1.45496 AU
retrograde	7918 May 05 11:28	2°♎31'41			7919 Mar 14 19:46	0°♎	
evening set	7918 May 08 13:14	1°♎39'34		evening rise	7919 Mar 21 02:39	9°♎54'30	
	7918 May 10 19:19	30°♎		greatest brilliancy	7919 Mar 30 16:33	25°♎00'12	-0.8m
inferior conj	7918 May 14 09:08	26°♎11'23	3°18'09		7919 Apr 02 22:39	0°♎	
minimum elong	7918 May 14 10:22	26°♎07'47	3°17'56	asc. node	7919 Apr 11 16:56	11°♎48'54	
min. Earth dist.	7918 May 16 16:05	23°♎31'43	0.64372 AU	evening max el	7919 Apr 12 11:21	12°♎37'09	18°58'24
morning rise	7918 May 20 06:33	19°♎56'49		retrograde	7919 Apr 19 06:32	16°♎25'09	
direct	7918 May 26 23:35	17°♎13'10		evening set	7919 Apr 22 15:42	15°♎18'50	
desc. node	7918 May 29 17:51	17°♎37'36		inferior conj	7919 Apr 28 04:39	9°♎34'17	3°24'32
morning max el	7918 Jun 09 15:29	25°♎11'44	27°28'16	minimum elong	7919 Apr 28 04:31	9°♎34'39	3°24'26
	7918 Jun 14 00:33	0°♎		min. Earth dist.	7919 Apr 29 20:10	7°♎29'24	0.66022 AU
	7918 Jul 04 13:35	0°♎		morning rise	7919 May 03 16:52	3°♎16'41	
morning set	7918 Jul 14 20:27	18°♎53'22		direct	7919 May 10 02:33	0°♎29'55	
max. Earth dist.	7918 Jul 19 14:35	28°♎30'18	1.33164 AU	desc. node	7919 May 16 14:52	2°♎45'39	

morning max el	7919 May 23 01:59	8°  12'33	26°32'04	morning max el	7920 May 04 11:40	21°  28'11	25°14'47
	7919 Jun 09 01:29	0°  II			7920 May 11 21:19	0°  B	
	7919 Jun 26 23:55	0°  S			7920 Jun 01 07:08	0°  II	
morning set	7919 Jun 28 01:03	1°  S57'44		morning set	7920 Jun 09 13:52	14°  II14'56	
max. Earth dist.	7919 Jul 02 03:22	9°  S52'17	1.34595 AU	max. Earth dist.	7920 Jun 13 05:26	20°  II55'54	1.36468 AU
					7920 Jun 17 23:15	0°  S	
superior conj	7919 Jul 06 21:29	19°  S29'11	-0°17'51	superior conj	7920 Jun 19 10:44	2°  S54'33	-0°49'19
minimum elong	7919 Jul 06 22:30	19°  S34'22	0°17'47	minimum elong	7920 Jun 19 13:42	3°  S09'14	0°48'54
asc. node	7919 Jul 08 16:05	23°  S10'17		asc. node	7920 Jun 24 13:07	13°  S10'04	
	7919 Jul 11 22:14	0°  Q		evening rise	7920 Jun 27 15:55	19°  S30'01	
evening rise	7919 Jul 14 10:56	5°  Q17'34			7920 Jul 02 24:00	0°  Q	
	7919 Jul 28 02:07	0°  M		evening max el	7920 Jul 14 23:17	17°  Q47'48	19°44'11
evening max el	7919 Aug 02 13:45	6°  M35'32	20°57'54	retrograde	7920 Jul 24 23:07	22°  Q43'16	
desc. node	7919 Aug 12 14:01	12°  M16'02		evening set	7920 Jul 26 19:38	22°  Q33'49	
retrograde	7919 Aug 14 06:29	12°  M23'04		desc. node	7920 Jul 29 11:05	21°  Q50'17	
evening set	7919 Aug 16 11:46	12°  M11'22		inferior conj	7920 Aug 04 16:49	18°  Q31'29	-1°54'03
inferior conj	7919 Aug 25 17:55	8°  M14'17	-3°47'24	minimum elong	7920 Aug 04 11:35	18°  Q39'36	1°52'10
minimum elong	7919 Aug 25 08:36	8°  M27'29	3°44'38	min. Earth dist.	7920 Aug 06 21:04	17°  Q10'32	0.55341 AU
min. Earth dist.	7919 Aug 26 09:12	7°  M52'37	0.54706 AU	morning rise	7920 Aug 13 01:23	14°  Q06'42	
morning rise	7919 Sep 03 05:43	4°  M17'50		direct	7920 Aug 17 16:14	13°  Q19'26	
direct	7919 Sep 07 01:53	3°  M46'14		morning max el	7920 Aug 31 13:24	20°  Q13'25	24°37'57
morning max el	7919 Sep 20 00:38	9°  M57'10	22°52'18		7920 Sep 08 21:42	0°  M	
asc. node	7919 Oct 04 15:38	0°  A11'22		asc. node	7920 Sep 20 12:36	19°  M22'57	
	7919 Oct 04 13:06	0°  A			7920 Sep 25 17:52	0°  A	
morning set	7919 Oct 12 15:29	16°  A00'07		morning set	7920 Sep 26 03:12	0°  A49'35	
	7919 Oct 19 04:09	0°  M					
superior conj	7919 Oct 19 15:54	1°  M02'51	1°41'28	superior conj	7920 Oct 03 00:30	15°  A48'54	1°36'59
minimum elong	7919 Oct 19 15:37	1°  M01'21	1°41'32	minimum elong	7920 Oct 02 23:10	15°  A41'39	1°36'56
max. Earth dist.	7919 Oct 22 18:25	7°  M36'34	1.33782 AU	max. Earth dist.	7920 Oct 04 20:13	19°  A46'46	1.32626 AU
evening rise	7919 Oct 27 12:00	17°  M12'47			7920 Oct 09 16:08	0°  M	
	7919 Nov 03 07:36	0°  A		evening rise	7920 Oct 10 07:18	1°  M17'46	
desc. node	7919 Nov 08 12:53	8°  A56'04		desc. node	7920 Oct 25 09:57	28°  M41'34	
	7919 Nov 23 01:33	0°  S			7920 Oct 26 05:56	0°  A	
evening max el	7919 Dec 01 01:40	8°  S53'32	27°13'20	evening max el	7920 Nov 12 12:49	22°  A02'04	27°29'00
retrograde	7919 Dec 14 11:55	16°  S13'48		retrograde	7920 Nov 26 06:14	29°  A20'05	
evening set	7919 Dec 21 07:48	13°  S37'02		evening set	7920 Dec 03 08:06	26°  A49'24	
min. Earth dist.	7919 Dec 25 04:56	9°  S57'46	0.64952 AU	min. Earth dist.	7920 Dec 07 01:05	23°  A40'52	0.63226 AU
inferior conj	7919 Dec 27 11:00	7°  S29'04	-1°23'51	inferior conj	7920 Dec 09 18:16	20°  A59'31	-2°32'03
minimum elong	7919 Dec 27 13:31	7°  S22'08	1°22'40	minimum elong	7920 Dec 09 23:02	20°  A47'42	2°30'06
asc. node	7919 Dec 31 15:01	3°  S22'57		morning rise	7920 Dec 16 15:54	15°  A45'17	
morning rise	7920 Jan 02 20:38	1°  S58'52		asc. node	7920 Dec 17 12:03	15°  A29'53	
direct	7920 Jan 05 11:27	1°  S22'49		direct	7920 Dec 19 00:31	15°  A18'49	
morning max el	7920 Jan 11 21:53	4°  S46'30	17°59'08	morning max el	7920 Dec 25 15:13	18°  A43'31	17°48'05
	7920 Jan 28 20:54	0°  A			7921 Jan 02 21:07	0°  S	
morning set	7920 Jan 29 14:39	1°  A13'38		morning set	7921 Jan 10 21:15	13°  S40'43	
desc. node	7920 Feb 04 12:10	10°  A56'59			7921 Jan 20 09:35	0°  A	
				desc. node	7921 Jan 21 09:07	1°  A38'24	
superior conj	7920 Feb 12 16:52	24°  A09'54	-0°56'38	superior conj	7921 Jan 23 00:07	4°  A20'19	-0°11'48
minimum elong	7920 Feb 12 10:16	23°  A43'38	0°55'41	minimum elong	7921 Jan 22 22:53	4°  A15'13	0°11'29
	7920 Feb 16 09:24	0°  A		behind sun begin	7921 Jan 22 16:14	3°  A47'42	
max. Earth dist.	7920 Feb 16 13:31	0°  A16'14	1.45220 AU	behind sun end	7921 Jan 23 05:32	4°  A42'42	
evening rise	7920 Feb 28 20:40	19°  A23'24		max. Earth dist.	7921 Jan 29 07:01	14°  A33'35	1.44243 AU
	7920 Mar 06 18:43	0°  Y		evening rise	7921 Feb 07 07:38	28°  A42'37	
greatest brilliancy	7920 Mar 13 23:19	10°  Y49'07	-0.6m		7921 Feb 08 03:47	0°  A	
evening max el	7920 Mar 25 17:01	26°  Y14'15	19°49'14		7921 Feb 28 14:23	0°  Y	
asc. node	7920 Mar 28 14:02	28°  Y46'02		evening max el	7921 Mar 08 17:13	9°  Y52'28	20°54'00
	7920 Mar 30 16:58	0°  B		asc. node	7921 Mar 15 11:07	14°  Y34'56	
retrograde	7920 Apr 02 04:33	0°  B32'52		retrograde	7921 Mar 17 03:00	14°  Y49'08	
	7920 Apr 04 13:39	30°  R <sup>Y</sup>		evening set	7921 Mar 21 05:44	13°  Y13'09	
evening set	7920 Apr 05 21:53	29°  Y11'57		inferior conj	7921 Mar 26 13:12	7°  Y02'00	2°58'12
inferior conj	7920 Apr 11 06:52	23°  Y12'56	3°17'02	minimum elong	7921 Mar 26 11:15	7°  Y08'44	2°57'49
minimum elong	7920 Apr 11 05:39	23°  Y17'01	3°16'51	min. Earth dist.	7921 Mar 27 00:29	6°  Y23'02	0.68024 AU
min. Earth dist.	7920 Apr 12 07:40	21°  Y49'55	0.67245 AU	morning rise	7921 Mar 31 16:33	0°  Y47'16	
morning rise	7920 Apr 16 13:08	16°  Y55'41			7921 Apr 01 15:35	30°  R <sup>A</sup>	
direct	7920 Apr 22 11:41	14°  Y16'38		direct	7921 Apr 06 01:50	28°  R <sup>A</sup> 24'06	
desc. node	7920 May 02 11:49	19°  Y32'42					

	7921 Apr 11 00:15	0°♿		inferior conj	7922 Mar 10 21:33	20°♿58'34	2°29'39
morning max el	7921 Apr 16 20:37	4°♿50'23	23°46'40	minimum elong	7922 Mar 10 19:17	21°♿06'28	2°29'04
desc. node	7921 Apr 19 08:45	7°♿31'02		min. Earth dist.	7922 Mar 10 20:21	21°♿02'44	0.68373 AU
	7921 May 06 05:10	0°♿		morning rise	7922 Mar 16 00:47	14°♿47'56	
morning set	7921 May 22 05:28	25°♿30'05		direct	7922 Mar 20 20:01	12°♿45'37	
	7921 May 24 19:59	0°♿		morning max el	7922 Mar 30 07:41	18°♿20'00	22°17'36
max. Earth dist.	7921 May 26 01:20	2°♿08'55	1.38642 AU	desc. node	7922 Apr 06 05:43	26°♿21'08	
					7922 Apr 09 00:31	0°♿	
superior conj	7921 Jun 02 11:05	15°♿40'35	-1°20'27		7922 Apr 29 08:19	0°♿	
minimum elong	7921 Jun 02 15:57	16°♿03'33	1°19'51	morning set	7922 May 02 18:33	5°♿29'56	
	7921 Jun 09 21:13	0°♿		max. Earth dist.	7922 May 07 23:04	14°♿04'50	1.40878 AU
asc. node	7921 Jun 11 10:10	3°♿00'40					
evening rise	7921 Jun 11 13:50	3°♿18'37		superior conj	7922 May 15 18:07	27°♿36'35	-1°47'54
evening max el	7921 Jun 27 21:09	29°♿44'52	18°51'04	minimum elong	7922 May 15 23:50	28°♿02'12	1°47'27
	7921 Jun 28 03:23	0°♿			7922 May 17 02:04	0°♿	
retrograde	7921 Jul 06 06:52	3°♿54'16		evening rise	7922 May 26 01:19	16°♿34'38	
evening set	7921 Jul 08 06:47	3°♿41'06		asc. node	7922 May 29 07:12	22°♿37'09	
	7921 Jul 15 12:32	30°♿			7922 Jun 02 10:01	0°♿	
inferior conj	7921 Jul 16 09:37	29°♿22'28	-0°01'09	evening max el	7922 Jun 11 03:50	12°♿18'49	18°18'30
minimum elong	7921 Jul 16 09:33	29°♿22'34	0°01'15	retrograde	7922 Jun 18 10:01	15°♿57'02	
transit middle	7921 Jul 16 09:33	29°♿22'34	0°01'15	evening set	7922 Jun 20 17:04	15°♿36'04	
transit begin	7921 Jul 16 05:51	29°♿29'13		inferior conj	7922 Jun 28 00:10	10°♿56'47	1°28'55
transit end	7921 Jul 16 13:16	29°♿15'54		minimum elong	7922 Jun 28 02:52	10°♿51'05	1°27'55
desc. node	7921 Jul 16 08:05	29°♿25'12		min. Earth dist.	7922 Jul 01 09:48	8°♿06'15	0.58854 AU
min. Earth dist.	7921 Jul 19 12:44	27°♿08'24	0.56821 AU	desc. node	7922 Jul 03 05:08	6°♿44'37	
morning rise	7921 Jul 24 08:56	24°♿21'03		morning rise	7922 Jul 05 09:30	5°♿22'17	
direct	7921 Jul 29 20:34	23°♿08'35		direct	7922 Jul 11 14:36	3°♿38'40	
	7921 Aug 12 13:08	0°♿		morning max el	7922 Jul 25 23:43	11°♿25'06	27°20'59
morning max el	7921 Aug 13 03:36	0°♿34'16	26°12'41		7922 Aug 09 11:30	0°♿	
	7921 Sep 02 18:55	0°♿		asc. node	7922 Aug 25 06:33	28°♿46'50	
asc. node	7921 Sep 07 09:35	8°♿57'11		morning set	7922 Aug 25 22:17	0°♿09'12	
morning set	7921 Sep 10 14:03	15°♿34'32			7922 Aug 25 20:32	0°♿	
superior conj	7921 Sep 17 11:40	0°♿40'10	1°26'53	superior conj	7922 Sep 01 23:27	15°♿29'42	1°11'39
minimum elong	7921 Sep 17 09:39	0°♿29'04	1°26'39	minimum elong	7922 Sep 01 21:11	15°♿17'11	1°11'15
	7921 Sep 17 04:24	0°♿		max. Earth dist.	7922 Sep 01 14:26	14°♿39'45	1.31681 AU
max. Earth dist.	7921 Sep 18 04:03	2°♿10'47	1.31926 AU	evening rise	7922 Sep 08 17:59	0°♿19'55	
evening rise	7921 Sep 24 10:09	15°♿42'57			7922 Sep 08 14:15	0°♿	
	7921 Oct 01 15:01	0°♿			7922 Sep 24 19:42	0°♿	
desc. node	7921 Oct 12 07:01	17°♿53'10		desc. node	7922 Sep 29 04:06	6°♿16'28	
	7921 Oct 21 10:59	0°♿		evening max el	7922 Oct 07 20:24	16°♿18'37	26°22'24
evening max el	7921 Oct 25 20:02	4°♿34'38	27°12'41	retrograde	7922 Oct 21 18:27	23°♿24'15	
retrograde	7921 Nov 08 16:56	11°♿46'24		evening set	7922 Oct 28 09:15	21°♿37'18	
evening set	7921 Nov 15 18:08	9°♿32'20		min. Earth dist.	7922 Nov 01 09:43	19°♿02'46	0.59172 AU
min. Earth dist.	7921 Nov 19 10:47	6°♿47'12	0.61256 AU	inferior conj	7922 Nov 04 14:26	16°♿36'47	-4°42'49
inferior conj	7921 Nov 22 12:37	4°♿05'42	-3°40'51	minimum elong	7922 Nov 04 21:26	16°♿23'24	4°41'09
minimum elong	7921 Nov 22 19:18	3°♿51'02	3°38'35	morning rise	7922 Nov 12 11:54	12°♿03'56	
	7921 Nov 27 23:49	30°♿		direct	7922 Nov 14 18:12	11°♿46'07	
morning rise	7921 Nov 29 22:43	29°♿10'37		asc. node	7922 Nov 21 06:03	14°♿22'19	
direct	7921 Dec 02 04:13	28°♿50'04		morning max el	7922 Nov 22 16:25	15°♿38'24	18°22'28
asc. node	7921 Dec 04 09:03	29°♿10'53			7922 Dec 02 16:18	0°♿	
	7921 Dec 06 04:58	0°♿		morning set	7922 Dec 08 13:59	11°♿00'31	
morning max el	7921 Dec 09 06:35	2°♿24'16	17°55'22				
morning set	7921 Dec 24 22:57	27°♿02'19		superior conj	7922 Dec 17 17:13	28°♿15'31	0°59'49
	7921 Dec 26 13:51	0°♿		minimum elong	7922 Dec 17 20:41	28°♿31'26	0°59'28
					7922 Dec 18 16:04	0°♿	
superior conj	7922 Jan 04 09:12	15°♿45'14	0°28'18	max. Earth dist.	7922 Dec 25 06:12	11°♿39'14	1.40688 AU
minimum elong	7922 Jan 04 11:32	15°♿55'24	0°28'05	desc. node	7922 Dec 26 03:09	13°♿08'43	
desc. node	7922 Jan 08 06:07	22°♿23'40		evening rise	7922 Dec 29 17:45	19°♿11'20	
max. Earth dist.	7922 Jan 11 20:56	28°♿25'43	1.42676 AU		7923 Jan 05 11:51	0°♿	
	7922 Jan 12 19:56	0°♿			7923 Jan 26 17:08	0°♿	
evening rise	7922 Jan 18 03:12	8°♿31'00		evening max el	7923 Feb 02 03:34	7°♿15'55	23°28'38
	7922 Feb 01 08:07	0°♿		retrograde	7923 Feb 12 18:34	13°♿32'33	
evening max el	7922 Feb 19 12:19	23°♿32'49	22°08'50	asc. node	7923 Feb 17 05:14	11°♿55'42	
retrograde	7922 Mar 01 00:08	29°♿10'23		evening set	7923 Feb 17 19:57	11°♿26'25	
asc. node	7922 Mar 02 08:10	29°♿01'17		min. Earth dist.	7923 Feb 22 17:04	5°♿44'13	0.68303 AU
evening set	7922 Mar 05 13:36	27°♿19'10		inferior conj	7923 Feb 23 06:00	4°♿59'50	1°52'21

minimum elong	7923 Feb 23 03:52	5°  07'09	1°51'42	inferior conj	7924 Feb 07 12:43	19°  02'19	1°06'53
	7923 Feb 27 06:41	30°  R 		minimum elong	7924 Feb 07 11:13	19°  07'19	1°06'24
morning rise	7923 Feb 28 11:44	28°  54'35		morning rise	7924 Feb 12 23:24	13°  03'59	
direct	7923 Mar 04 17:05	27°  14'55		direct	7924 Feb 16 15:50	11°  46'04	
	7923 Mar 10 19:23	0°  H		morning max el	7924 Feb 24 01:12	15°  54'09	19°45'57
morning max el	7923 Mar 13 00:32	2°  H01'01	20°55'37		7924 Mar 06 01:59	0°  H	
desc. node	7923 Mar 24 02:41	15°  H48'53		greatest brilliancy	7924 Mar 07 20:41	2°  H35'18	-0.6m
	7923 Apr 02 20:48	0°  Y		desc. node	7924 Mar 09 23:39	5°  H43'38	
morning set	7923 Apr 12 05:10	14°  Y18'26		morning set	7924 Mar 21 02:28	22°  H36'27	
max. Earth dist.	7923 Apr 20 03:30	26°  Y56'41	1.42886 AU		7924 Mar 25 21:01	0°  Y	
	7923 Apr 22 00:21	0°  B		max. Earth dist.	7924 Apr 01 14:49	10°  Y35'49	1.44419 AU
superior conj	7923 Apr 27 03:07	8°  B32'01	-2°06'47	superior conj	7924 Apr 06 11:14	18°  Y22'01	-2°10'58
minimum elong	7923 Apr 27 07:01	8°  B48'31	2°06'42	minimum elong	7924 Apr 06 09:25	18°  Y14'41	2°10'58
evening rise	7923 May 08 22:12	29°  B08'19			7924 Apr 13 13:28	0°  B	
	7923 May 09 09:47	0°  II		evening rise	7924 Apr 19 23:47	10°  B49'05	
asc. node	7923 May 16 04:14	11°  II54'12			7924 May 01 13:33	0°  II	
evening max el	7923 May 25 15:32	25°  II20'00	18°05'43	asc. node	7924 May 02 01:18	0°  II44'38	
retrograde	7923 Jun 01 06:00	28°  II43'06		evening max el	7924 May 08 04:50	8°  II39'12	18°11'57
evening set	7923 Jun 03 20:26	28°  II11'30		retrograde	7924 May 14 14:07	12°  II01'44	
inferior conj	7923 Jun 10 10:42	23°  II12'00	2°30'31	evening set	7924 May 17 11:40	11°  II17'36	
minimum elong	7923 Jun 10 13:43	23°  II04'40	2°29'40	inferior conj	7924 May 23 13:09	5°  II59'34	3°06'46
min. Earth dist.	7923 Jun 13 14:41	20°  II08'10	0.61094 AU	minimum elong	7924 May 23 15:10	5°  II54'01	3°06'20
morning rise	7923 Jun 17 04:41	17°  II14'11		min. Earth dist.	7924 May 26 04:45	3°  II05'23	0.63253 AU
desc. node	7923 Jun 20 02:10	15°  II42'45			7924 May 29 11:28	30°  R  B	
direct	7923 Jun 23 20:19	15°  II00'17		morning rise	7924 May 29 17:16	29°  B48'38	
morning max el	7923 Jul 08 02:44	22°  II59'21	27°53'14	direct	7924 Jun 05 11:48	27°  B12'16	
	7923 Jul 14 08:13	0°  B		desc. node	7924 Jun 05 23:12	27°  B12'59	
	7923 Aug 02 16:20	0°  O			7924 Jun 13 05:58	0°  II	
morning set	7923 Aug 10 02:08	14°  O28'31		morning max el	7924 Jun 19 10:45	5°  II15'03	27°47'21
asc. node	7923 Aug 12 03:34	18°  O46'44			7924 Jul 08 03:08	0°  B	
max. Earth dist.	7923 Aug 15 23:34	27°  O02'28	1.31889 AU	morning set	7924 Jul 23 23:20	28°  B25'40	
					7924 Jul 24 18:03	0°  O	
superior conj	7923 Aug 17 10:07	0°  M12'11	0°51'41	max. Earth dist.	7924 Jul 29 03:19	9°  O06'28	1.32558 AU
minimum elong	7923 Aug 17 08:06	0°  M01'03	0°51'14	asc. node	7924 Jul 29 00:34	8°  O51'56	
	7923 Aug 17 07:55	0°  M					
evening rise	7923 Aug 24 04:43	15°  M02'28		superior conj	7924 Jul 31 17:50	14°  O41'46	0°27'26
	7923 Aug 31 14:12	0°  B		minimum elong	7924 Jul 31 16:34	14°  O34'55	0°27'05
desc. node	7923 Sep 16 01:11	23°  B32'32		evening rise	7924 Aug 07 16:25	29°  O44'23	
evening max el	7923 Sep 19 12:36	27°  B11'52	25°02'38		7924 Aug 07 19:21	0°  M	
	7923 Sep 22 18:49	0°  M			7924 Aug 24 13:26	0°  B	
retrograde	7923 Oct 03 09:28	4°  M11'43		evening max el	7924 Aug 31 00:05	7°  B30'59	23°25'54
evening set	7923 Oct 09 00:54	2°  M59'32		desc. node	7924 Sep 01 22:15	9°  B15'43	
min. Earth dist.	7923 Oct 14 00:00	0°  M17'24	0.57191 AU	retrograde	7924 Sep 13 12:34	14°  B16'58	
	7923 Oct 14 10:45	30°  R  B		evening set	7924 Sep 17 17:00	13°  B38'39	
inferior conj	7923 Oct 16 20:42	28°  B23'45	-5°24'57	min. Earth dist.	7924 Sep 24 09:47	10°  B30'26	0.55618 AU
minimum elong	7923 Oct 17 00:32	28°  B17'23	5°24'32	inferior conj	7924 Sep 26 07:01	9°  B23'41	-5°28'57
morning rise	7923 Oct 25 02:27	24°  B13'58		minimum elong	7924 Sep 26 03:54	9°  B28'17	5°28'43
direct	7923 Oct 27 14:10	23°  B56'09		morning rise	7924 Oct 04 17:00	5°  B31'14	
morning max el	7923 Nov 05 17:12	28°  B16'23	19°11'00	direct	7924 Oct 07 14:38	5°  B10'44	
	7923 Nov 07 09:13	0°  M		morning max el	7924 Oct 18 05:58	10°  B09'36	20°21'52
asc. node	7923 Nov 08 03:04	0°  M51'29		asc. node	7924 Oct 25 00:06	18°  B23'12	
morning set	7923 Nov 22 14:07	25°  M23'06			7924 Oct 31 19:11	0°  M	
	7923 Nov 24 21:43	0°  B		morning set	7924 Nov 05 20:19	10°  M01'43	
superior conj	7923 Nov 30 19:06	11°  B36'43	1°21'59	superior conj	7924 Nov 13 10:02	25°  M35'22	1°35'27
minimum elong	7923 Nov 30 22:06	11°  B51'12	1°21'48	minimum elong	7924 Nov 13 11:51	25°  M44'29	1°35'27
max. Earth dist.	7923 Dec 07 11:54	24°  B09'31	1.38523 AU		7924 Nov 15 14:51	0°  B	
	7923 Dec 10 18:50	0°  B		max. Earth dist.	7924 Nov 18 18:39	6°  B09'46	1.36439 AU
evening rise	7923 Dec 11 06:22	0°  B50'11		evening rise	7924 Nov 22 15:13	13°  B23'22	
desc. node	7923 Dec 13 00:11	3°  B49'53		desc. node	7924 Nov 28 21:13	24°  B23'17	
	7923 Dec 29 18:44	0°  B			7924 Dec 02 06:32	0°  B	
evening max el	7924 Jan 15 16:49	21°  B01'42	24°47'12		7924 Dec 23 17:05	0°  B	
retrograde	7924 Jan 27 09:14	27°  B50'17		evening max el	7924 Dec 28 05:50	4°  B48'39	25°57'27
evening set	7924 Feb 01 23:15	25°  B30'43		retrograde	7925 Jan 09 19:09	11°  B58'06	
asc. node	7924 Feb 04 02:18	23°  B23'13		evening set	7925 Jan 15 21:48	9°  B28'03	
min. Earth dist.	7924 Feb 06 12:24	20°  B22'50	0.67836 AU	min. Earth dist.	7925 Jan 20 04:11	4°  B54'39	0.66995 AU

asc. node	7925 Jan 20 23:22	3° $\approx$ 54'48		evening max el	7925 Dec 10 19:06	18° $\approx$ 29'39	26°52'02
inferior conj	7925 Jan 21 15:51	3° $\approx$ 02'59	0°13'45	retrograde	7925 Dec 23 23:25	25° $\approx$ 48'13	
minimum elong	7925 Jan 21 15:29	3° $\approx$ 04'07	0°13'43	evening set	7925 Dec 30 13:37	23° $\approx$ 12'21	
transit middle	7925 Jan 21 15:29	3° $\approx$ 04'07	0°13'43	min. Earth dist.	7926 Jan 03 14:00	19° $\approx$ 13'26	0.65796 AU
transit begin	7925 Jan 21 14:00	3° $\approx$ 08'48		inferior conj	7926 Jan 05 13:14	16° $\approx$ 56'27	-0°46'27
transit end	7925 Jan 21 16:59	2° $\approx$ 59'27		minimum elong	7926 Jan 05 14:34	16° $\approx$ 52'35	0°45'45
	7925 Jan 24 05:11	30° $\approx$ 3		asc. node	7926 Jan 07 20:26	14° $\approx$ 22'35	
morning rise	7925 Jan 27 09:47	27° $\approx$ 13'23		morning rise	7926 Jan 11 16:34	11° $\approx$ 18'06	
direct	7925 Jan 30 14:47	26° $\approx$ 14'32		direct	7926 Jan 14 12:01	10° $\approx$ 34'44	
	7925 Feb 06 10:44	0° $\approx$		morning max el	7926 Jan 20 23:17	14° $\approx$ 02'13	18°13'19
morning max el	7925 Feb 06 09:25	29° $\approx$ 56'42	18°51'26		7926 Feb 01 12:34	0° $\approx$	
desc. node	7925 Feb 24 20:38	25° $\approx$ 58'19		morning set	7926 Feb 08 22:51	11° $\approx$ 57'25	
	7925 Feb 27 10:38	0° $\approx$		desc. node	7926 Feb 11 17:35	16° $\approx$ 26'39	
morning set	7925 Feb 28 10:54	1° $\approx$ 34'45			7926 Feb 20 05:22	0° $\approx$	
max. Earth dist.	7925 Mar 15 07:19	24° $\approx$ 47'40	1.45312 AU				
				superior conj	7926 Feb 24 03:22	6° $\approx$ 10'28	-1°21'28
superior conj	7925 Mar 16 22:31	27° $\approx$ 21'32	-1°55'31	minimum elong	7926 Feb 23 18:21	5° $\approx$ 35'01	1°20'24
minimum elong	7925 Mar 16 14:14	26° $\approx$ 49'01	1°54'57	max. Earth dist.	7926 Feb 26 02:40	9° $\approx$ 16'01	1.45472 AU
	7925 Mar 18 14:48	0° $\approx$			7926 Mar 11 09:32	0° $\approx$	
evening rise	7925 Apr 01 02:23	21° $\approx$ 31'29		evening rise	7926 Mar 12 06:16	1° $\approx$ 20'48	
	7925 Apr 06 08:00	0° $\approx$		greatest brilliancy	7926 Mar 23 23:27	19° $\approx$ 29'24	-0.7m
asc. node	7925 Apr 18 22:22	19° $\approx$ 00'07			7926 Mar 31 05:46	0° $\approx$	
evening max el	7925 Apr 21 16:55	22° $\approx$ 09'40	18°36'26	evening max el	7926 Apr 05 01:27	5° $\approx$ 45'43	19°18'12
retrograde	7925 Apr 28 06:07	25° $\approx$ 44'45		asc. node	7926 Apr 05 19:26	6° $\approx$ 29'41	
evening set	7925 May 01 10:54	24° $\approx$ 46'50		retrograde	7926 Apr 12 02:38	9° $\approx$ 45'11	
inferior conj	7925 May 07 03:28	19° $\approx$ 11'44	3°22'43	evening set	7926 Apr 15 15:13	8° $\approx$ 32'41	
minimum elong	7925 May 07 04:07	19° $\approx$ 09'47	3°22'34	inferior conj	7926 Apr 21 02:10	2° $\approx$ 42'00	3°22'50
min. Earth dist.	7925 May 09 03:58	16° $\approx$ 45'16	0.65130 AU	minimum elong	7926 Apr 21 01:32	2° $\approx$ 44'01	3°22'44
morning rise	7925 May 12 20:35	12° $\approx$ 55'14		min. Earth dist.	7926 Apr 22 11:21	0° $\approx$ 54'19	0.66601 AU
direct	7925 May 19 11:10	10° $\approx$ 08'25			7926 Apr 23 04:30	30° $\approx$ 3	
desc. node	7925 May 23 20:13	11° $\approx$ 10'03		morning rise	7926 Apr 26 11:30	26° $\approx$ 24'27	
morning max el	7925 Jun 01 20:53	18° $\approx$ 02'32	27°07'22	direct	7926 May 02 16:58	23° $\approx$ 39'36	
	7925 Jun 11 21:37	0° $\approx$		desc. node	7926 May 10 17:12	27° $\approx$ 04'06	
	7925 Jul 01 01:30	0° $\approx$			7926 May 14 02:24	0° $\approx$	
morning set	7925 Jul 07 11:02	11° $\approx$ 52'28		morning max el	7926 May 15 06:55	1° $\approx$ 10'22	26°01'08
max. Earth dist.	7925 Jul 11 21:59	20° $\approx$ 43'00	1.33714 AU		7926 Jun 05 22:20	0° $\approx$	
				morning set	7926 Jun 20 09:33	24° $\approx$ 39'03	
superior conj	7925 Jul 15 20:27	28° $\approx$ 52'20	-0°00'29		7926 Jun 23 05:53	0° $\approx$	
minimum elong	7925 Jul 15 20:29	28° $\approx$ 52'30	0°00'36	max. Earth dist.	7926 Jun 24 05:55	1° $\approx$ 55'15	1.35346 AU
behind sun begin	7925 Jul 15 14:53	28° $\approx$ 23'04					
behind sun end	7925 Jul 16 02:05	29° $\approx$ 21'59		superior conj	7926 Jun 29 15:30	12° $\approx$ 37'16	-0°31'03
asc. node	7925 Jul 15 21:35	28° $\approx$ 58'19		minimum elong	7926 Jun 29 17:19	12° $\approx$ 46'26	0°30'50
	7925 Jul 16 09:17	0° $\approx$		asc. node	7926 Jul 02 18:35	19° $\approx$ 02'05	
evening rise	7925 Jul 23 03:10	14° $\approx$ 19'55		evening rise	7926 Jul 07 10:57	28° $\approx$ 43'27	
	7925 Jul 31 00:55	0° $\approx$			7926 Jul 08 01:52	0° $\approx$	
evening max el	7925 Aug 12 15:04	17° $\approx$ 48'56	21°48'35	evening max el	7926 Jul 25 17:03	28° $\approx$ 37'21	20°24'06
desc. node	7925 Aug 19 19:20	22° $\approx$ 53'59			7926 Jul 27 04:54	0° $\approx$	
retrograde	7925 Aug 25 04:05	24° $\approx$ 02'22		retrograde	7926 Aug 05 16:22	4° $\approx$ 02'23	
evening set	7925 Aug 27 22:23	23° $\approx$ 45'14		desc. node	7926 Aug 06 16:24	3° $\approx$ 59'50	
inferior conj	7925 Sep 06 02:42	19° $\approx$ 45'22	-4°39'25	evening set	7926 Aug 07 16:08	3° $\approx$ 52'27	
minimum elong	7925 Sep 05 17:44	19° $\approx$ 57'56	4°37'24	inferior conj	7926 Aug 16 20:13	29° $\approx$ 55'06	-3°01'24
min. Earth dist.	7925 Sep 05 18:33	19° $\approx$ 56'47	0.54775 AU	minimum elong	7926 Aug 16 12:07	0° $\approx$ 06'53	2°58'41
morning rise	7925 Sep 14 14:19	15° $\approx$ 55'57			7926 Aug 16 16:51	30° $\approx$ 3	
direct	7925 Sep 18 01:34	15° $\approx$ 29'32		min. Earth dist.	7926 Aug 18 04:32	29° $\approx$ 08'05	0.54866 AU
morning max el	7925 Sep 30 05:56	21° $\approx$ 14'10	21°53'10	morning rise	7926 Aug 25 07:20	25° $\approx$ 48'49	
	7925 Oct 07 14:46	0° $\approx$		direct	7926 Aug 29 11:18	25° $\approx$ 01'31	
asc. node	7925 Oct 11 21:06	6° $\approx$ 42'45			7926 Sep 09 22:34	0° $\approx$	
morning set	7925 Oct 21 06:07	24° $\approx$ 48'54		morning max el	7926 Sep 11 20:45	1° $\approx$ 41'21	23°37'24
	7925 Oct 23 17:03	0° $\approx$		asc. node	7926 Sep 28 18:06	25° $\approx$ 38'39	
					7926 Oct 01 00:39	0° $\approx$	
superior conj	7925 Oct 28 10:06	9° $\approx$ 59'10	1°41'14	morning set	7926 Oct 05 17:40	9° $\approx$ 39'31	
minimum elong	7925 Oct 28 10:32	10° $\approx$ 01'30	1°41'20				
max. Earth dist.	7925 Nov 01 07:39	18° $\approx$ 02'40	1.34641 AU	superior conj	7926 Oct 12 16:18	24° $\approx$ 39'35	1°40'17
evening rise	7925 Nov 05 16:25	26° $\approx$ 40'04		minimum elong	7926 Oct 12 15:32	24° $\approx$ 35'27	1°40'19
	7925 Nov 07 10:32	0° $\approx$		max. Earth dist.	7926 Oct 15 05:17	0° $\approx$ 06'17	1.33242 AU
desc. node	7925 Nov 15 18:15	14° $\approx$ 43'20			7926 Oct 15 04:05	0° $\approx$	
	7925 Nov 25 15:09	0° $\approx$		evening rise	7926 Oct 20 06:08	10° $\approx$ 30'28	

	7926 Oct 30 18:51	0°♊		desc. node	7927 Oct 20 12:22	24°♎16'31	
desc. node	7926 Nov 02 15:18	4°♊43'57			7927 Oct 24 08:53	0°♊	
	7926 Nov 21 09:45	0°♊		evening max el	7927 Nov 05 17:25	14°♊48'23	27°26'03
evening max el	7926 Nov 23 07:42	1°♊54'04	27°23'37	retrograde	7927 Nov 19 12:15	22°♊03'37	
retrograde	7926 Dec 06 21:16	9°♊13'04		evening set	7927 Nov 26 15:04	19°♊38'28	
evening set	7926 Dec 13 20:23	6°♊38'00		min. Earth dist.	7927 Nov 30 07:12	16°♊41'22	0.62417 AU
min. Earth dist.	7926 Dec 17 15:37	3°♊12'18	0.64259 AU	inferior conj	7927 Dec 03 04:37	13°♊58'14	-3°01'31
inferior conj	7926 Dec 20 02:28	0°♊37'16	-1°52'24	minimum elong	7927 Dec 03 10:18	13°♊44'51	2°59'19
minimum elong	7926 Dec 20 05:55	0°♊28'08	1°50'51	morning rise	7927 Dec 10 07:35	8°♊51'58	
	7926 Dec 20 16:38	30°♋♊		direct	7927 Dec 12 14:34	8°♊28'21	
asc. node	7926 Dec 25 17:29	25°♊42'15		asc. node	7927 Dec 12 14:30	8°♊28'21	
morning rise	7926 Dec 26 17:02	25°♊13'14		morning max el	7927 Dec 19 09:07	11°♊55'39	17°48'55
direct	7926 Dec 29 05:00	24°♊41'34			7927 Dec 31 13:17	0°♊	
morning max el	7927 Jan 04 16:12	28°♊04'23	17°52'14	morning set	7928 Jan 04 06:58	6°♊37'02	
	7927 Jan 06 10:41	0°♊					
morning set	7927 Jan 21 15:28	23°♊44'25		superior conj	7928 Jan 15 15:25	26°♊23'33	0°06'09
	7927 Jan 25 08:33	0°♋		minimum elong	7928 Jan 15 16:01	26°♊26'04	0°06'11
desc. node	7927 Jan 29 14:31	7°♋04'24		behind sun begin	7928 Jan 15 07:44	25°♊51'04	
				behind sun end	7928 Jan 16 00:18	27°♊00'59	
superior conj	7927 Feb 03 21:08	15°♋40'53	-0°37'27	desc. node	7928 Jan 16 11:31	27°♊48'06	
minimum elong	7927 Feb 03 16:51	15°♋23'37	0°36'44		7928 Jan 17 19:05	0°♋	
max. Earth dist.	7927 Feb 08 22:12	23°♋44'21	1.44891 AU	max. Earth dist.	7928 Jan 22 14:41	7°♋53'59	1.43636 AU
	7927 Feb 12 21:47	0°♌		evening rise	7928 Jan 30 08:15	20°♋08'21	
evening rise	7927 Feb 19 19:22	10°♌40'51			7928 Feb 05 19:03	0°♌	
	7927 Mar 04 14:17	0°♍			7928 Feb 27 08:07	0°♍	
evening max el	7927 Mar 19 04:51	19°♍23'24	20°15'19	evening max el	7928 Mar 01 02:41	3°♍02'08	21°24'51
asc. node	7927 Mar 23 16:30	22°♍59'44		retrograde	7928 Mar 09 23:14	8°♍16'27	
retrograde	7927 Mar 27 01:01	23°♍57'08		asc. node	7928 Mar 09 13:34	8°♍15'37	
evening set	7927 Mar 30 22:19	22°♍29'37		evening set	7928 Mar 14 06:24	6°♍33'47	
inferior conj	7927 Apr 05 06:23	16°♍25'07	3°10'18	inferior conj	7928 Mar 19 13:49	0°♍17'59	2°47'13
minimum elong	7927 Apr 05 04:48	16°♍30'29	3°10'03	minimum elong	7928 Mar 19 11:41	0°♍25'25	2°46'45
min. Earth dist.	7927 Apr 06 01:12	15°♍21'05	0.67630 AU		7928 Mar 19 18:59	30°♎♌	
morning rise	7927 Apr 10 11:04	10°♍09'00		min. Earth dist.	7928 Mar 19 19:35	29°♎57'54	0.68218 AU
direct	7927 Apr 16 04:09	7°♍36'07		morning rise	7928 Mar 24 16:47	24°♎04'51	
morning max el	7927 Apr 27 16:06	14°♍29'07	24°38'09	direct	7928 Mar 29 20:00	21°♎50'26	
desc. node	7927 Apr 27 14:10	14°♍24'14		morning max el	7928 Apr 09 01:43	27°♎55'07	23°08'30
	7927 May 10 07:45	0°♏			7928 Apr 11 01:01	0°♏	
	7927 May 29 19:16	0°♐		desc. node	7928 Apr 13 11:07	2°♏46'52	
morning set	7927 Jun 02 14:01	6°♐31'33			7928 May 02 23:50	0°♏	
max. Earth dist.	7927 Jun 06 05:00	13°♐00'56	1.37371 AU	morning set	7928 May 13 18:54	17°♏16'14	
				max. Earth dist.	7928 May 18 01:02	24°♏30'06	1.39599 AU
superior conj	7927 Jun 12 23:45	25°♐47'18	-1°02'42		7928 May 21 04:19	0°♐	
minimum elong	7927 Jun 13 03:34	26°♐05'51	1°02'11				
	7927 Jun 15 03:24	0°♑		superior conj	7928 May 25 17:17	8°♐13'10	-1°32'47
asc. node	7927 Jun 19 15:36	8°♑58'39		minimum elong	7928 May 25 22:43	8°♐38'17	1°32'13
evening rise	7927 Jun 21 13:18	12°♑47'11		evening rise	7928 Jun 04 07:16	26°♐23'24	
	7927 Jun 30 18:18	0°♒		asc. node	7928 Jun 05 12:37	28°♐43'59	
evening max el	7927 Jul 08 08:05	10°♒08'58	19°18'58		7928 Jun 06 04:34	0°♑	
retrograde	7927 Jul 17 14:41	14°♒43'40		evening max el	7928 Jun 20 10:06	22°♑22'34	18°34'43
evening set	7927 Jul 19 11:49	14°♒33'10		retrograde	7928 Jun 28 06:56	26°♑17'09	
desc. node	7927 Jul 24 13:28	12°♒35'05		evening set	7928 Jun 30 09:31	26°♑01'14	
inferior conj	7927 Jul 28 01:45	10°♒24'22	-1°04'22	inferior conj	7928 Jul 08 03:48	21°♑33'54	0°40'26
minimum elong	7927 Jul 27 22:53	10°♒29'05	1°03'22	minimum elong	7928 Jul 08 05:16	21°♑31'05	0°39'46
min. Earth dist.	7927 Jul 30 17:31	8°♒39'50	0.55886 AU	desc. node	7928 Jul 10 10:30	19°♑48'19	
morning rise	7927 Aug 05 07:12	5°♒44'30		min. Earth dist.	7928 Jul 11 11:26	19°♑01'40	0.57637 AU
direct	7927 Aug 10 06:48	4°♒47'55		morning rise	7928 Jul 15 21:31	16°♑17'01	
morning max el	7927 Aug 24 09:26	11°♒56'02	25°20'35	direct	7928 Jul 21 16:59	14°♑51'46	
	7927 Sep 07 07:20	0°♓		morning max el	7928 Aug 05 02:05	22°♑28'00	26°45'40
asc. node	7927 Sep 15 15:04	15°♓00'50			7928 Aug 11 18:28	0°♒	
morning set	7927 Sep 20 05:14	24°♓27'52			7928 Aug 30 04:02	0°♓	
	7927 Sep 22 18:48	0°♔		asc. node	7928 Sep 01 12:03	4°♓42'16	
				morning set	7928 Sep 03 15:12	9°♓09'11	
superior conj	7927 Sep 27 02:14	9°♔28'29	1°33'22				
minimum elong	7927 Sep 27 00:34	9°♔19'20	1°33'14	superior conj	7928 Sep 10 13:54	24°♓19'46	1°21'02
max. Earth dist.	7927 Sep 28 10:11	12°♔23'46	1.32278 AU	minimum elong	7928 Sep 10 11:44	24°♓07'45	1°20'43
evening rise	7927 Oct 04 04:58	24°♔44'47		max. Earth dist.	7928 Sep 10 19:27	24°♓50'33	1.31766 AU
	7927 Oct 06 19:06	0°♕			7928 Sep 13 03:26	0°♕	



















































































































evening rise	7928 Sep 17 10:12	9° $\Omega$ 15'31		minimum elong	7929 Aug 25 23:17	8° $\Pi$ 55'25	1°03'19
	7928 Sep 28 03:10	0° $\Pi$		evening rise	7929 Sep 01 19:33	23° $\Pi$ 56'06	
desc. node	7928 Oct 06 09:27	13° $\Pi$ 09'33			7929 Sep 04 17:00	0° $\Omega$	
evening max el	7928 Oct 17 21:45	27° $\Pi$ 00'21	26°55'13		7929 Sep 22 09:39	0° $\Pi$	
	7928 Oct 21 10:13	0° $\Sigma$		desc. node	7929 Sep 23 06:32	1° $\Pi$ 07'33	
retrograde	7928 Oct 31 19:31	4° $\Sigma$ 10'15		evening max el	7929 Sep 29 18:44	8° $\Pi$ 23'12	25°51'36
evening set	7928 Nov 07 17:42	2° $\Sigma$ 06'10		retrograde	7929 Oct 13 17:13	15° $\Pi$ 27'00	
	7928 Nov 10 19:33	30° $\Sigma$ $\Pi$		evening set	7929 Oct 19 23:27	13° $\Pi$ 54'29	
min. Earth dist.	7928 Nov 11 12:06	29° $\Pi$ 27'39	0.60369 AU	min. Earth dist.	7929 Oct 24 07:24	11° $\Pi$ 18'47	0.58296 AU
inferior conj	7928 Nov 14 16:20	26° $\Pi$ 50'20	-4°08'38	inferior conj	7929 Oct 27 10:14	9° $\Pi$ 04'31	-5°04'07
minimum elong	7928 Nov 14 23:27	26° $\Pi$ 35'35	4°06'30	minimum elong	7929 Oct 27 16:25	8° $\Pi$ 53'23	5°02'59
morning rise	7928 Nov 22 07:35	22° $\Pi$ 04'49		morning rise	7929 Nov 04 11:42	4° $\Pi$ 41'29	
direct	7928 Nov 24 12:47	21° $\Pi$ 45'54		direct	7929 Nov 06 19:30	4° $\Pi$ 24'07	
asc. node	7928 Nov 28 11:32	22° $\Pi$ 48'54		morning max el	7929 Nov 15 05:10	8° $\Pi$ 27'31	18°40'20
morning max el	7928 Dec 01 22:40	25° $\Pi$ 26'41	18°04'26	asc. node	7929 Nov 15 08:33	8° $\Pi$ 35'44	
	7928 Dec 05 18:42	0° $\Sigma$			7929 Nov 29 03:16	0° $\Sigma$	
morning set	7928 Dec 17 14:57	20° $\Sigma$ 15'42		morning set	7929 Dec 01 10:21	4° $\Sigma$ 26'01	
	7928 Dec 22 20:49	0° $\Sigma$					
superior conj	7928 Dec 27 10:53	8° $\Sigma$ 18'08	0°42'48	superior conj	7929 Dec 10 03:11	21° $\Sigma$ 12'13	1°10'19
minimum elong	7928 Dec 27 13:57	8° $\Sigma$ 31'49	0°42'29	minimum elong	7929 Dec 10 06:35	21° $\Sigma$ 28'12	1°10'01
desc. node	7929 Jan 02 08:32	18° $\Sigma$ 33'44			7929 Dec 14 22:02	0° $\Sigma$	
max. Earth dist.	7929 Jan 04 02:10	21° $\Sigma$ 29'03	1.41860 AU	max. Earth dist.	7929 Dec 17 09:18	4° $\Sigma$ 22'57	1.39776 AU
evening rise	7929 Jan 09 11:01	0° $\approx$ 16'38		desc. node	7929 Dec 20 05:35	9° $\Sigma$ 17'56	
	7929 Jan 09 06:52	0° $\approx$		evening rise	7929 Dec 21 11:05	11° $\Sigma$ 22'51	
	7929 Jan 29 07:42	0° $\Sigma$			7930 Jan 02 03:31	0° $\approx$	
evening max el	7929 Feb 11 19:48	16° $\Sigma$ 42'51	22°42'32	evening max el	7930 Jan 24 23:04	0° $\Sigma$	
retrograde	7929 Feb 21 19:29	22° $\Sigma$ 38'20			7930 Jan 25 10:04	0° $\Sigma$ 27'38	24°02'38
asc. node	7929 Feb 24 10:39	22° $\Sigma$ 03'22		retrograde	7930 Feb 05 12:26	6° $\Sigma$ 58'57	
evening set	7929 Feb 26 13:48	20° $\Sigma$ 40'46		evening set	7930 Feb 10 19:02	4° $\Sigma$ 47'09	
inferior conj	7929 Mar 03 22:26	14° $\Sigma$ 16'56	2°14'52	asc. node	7930 Feb 11 07:43	4° $\Sigma$ 18'53	
minimum elong	7929 Mar 03 20:10	14° $\Sigma$ 24'48	2°14'14		7930 Feb 15 00:33	30° $\Sigma$ $\approx$	
min. Earth dist.	7929 Mar 03 16:11	14° $\Sigma$ 38'38	0.68386 AU	min. Earth dist.	7930 Feb 15 12:41	29° $\approx$ 19'16	0.68154 AU
morning rise	7929 Mar 09 02:25	8° $\Sigma$ 08'10		inferior conj	7930 Feb 16 06:24	28° $\approx$ 19'15	1°34'04
direct	7929 Mar 13 15:34	6° $\Sigma$ 15'31		minimum elong	7930 Feb 16 04:28	28° $\approx$ 25'48	1°33'26
morning max el	7929 Mar 22 14:52	11° $\Sigma$ 29'04	21°41'27	morning rise	7930 Feb 21 13:56	22° $\approx$ 16'29	
desc. node	7929 Mar 31 08:05	21° $\Sigma$ 54'20		direct	7930 Feb 25 13:41	20° $\approx$ 46'06	
	7929 Apr 06 04:30	0° $\Upsilon$		morning max el	7930 Mar 05 10:47	25° $\approx$ 14'39	20°24'07
morning set	7929 Apr 23 20:06	26° $\Upsilon$ 43'19			7930 Mar 09 16:10	0° $\Sigma$	
	7929 Apr 25 21:09	0° $\Sigma$		desc. node	7930 Mar 18 05:05	11° $\Sigma$ 34'34	
max. Earth dist.	7929 Apr 30 00:38	6° $\Sigma$ 46'45	1.41771 AU		7930 Mar 30 13:43	0° $\Upsilon$	
superior conj	7929 May 07 15:25	19° $\Sigma$ 43'57	-1°57'19	morning set	7930 Apr 02 22:19	5° $\Upsilon$ 10'07	
minimum elong	7929 May 07 20:49	20° $\Sigma$ 07'30	1°57'00	max. Earth dist.	7930 Apr 12 07:47	19° $\Upsilon$ 58'43	1.43612 AU
	7929 May 13 09:57	0° $\Pi$			7930 Apr 18 11:12	0° $\Sigma$	
evening rise	7929 May 18 13:03	9° $\Pi$ 22'05		superior conj	7930 Apr 18 13:55	0° $\Sigma$ 11'14	-2°10'43
asc. node	7929 May 23 09:40	18° $\Pi$ 12'46		minimum elong	7930 Apr 18 15:49	0° $\Sigma$ 19'08	2°10'45
	7929 May 30 13:50	0° $\Sigma$		evening rise	7930 May 01 02:12	21° $\Sigma$ 33'31	
evening max el	7929 Jun 03 19:23	5° $\Sigma$ 09'13	18°10'47		7930 May 05 22:28	0° $\Pi$	
retrograde	7929 Jun 10 17:33	8° $\Sigma$ 39'02		asc. node	7930 May 10 06:43	7° $\Pi$ 19'00	
evening set	7929 Jun 13 03:44	8° $\Sigma$ 13'54		evening max el	7930 May 18 08:11	18° $\Pi$ 18'59	18°06'11
inferior conj	7929 Jun 20 03:16	3° $\Sigma$ 26'16	1°58'24	retrograde	7930 May 24 19:05	21° $\Pi$ 39'45	
minimum elong	7929 Jun 20 06:20	3° $\Sigma$ 19'23	1°57'23	evening set	7930 May 27 12:40	21° $\Pi$ 02'53	
min. Earth dist.	7929 Jun 23 11:50	0° $\Sigma$ 26'45	0.59797 AU	inferior conj	7930 Jun 02 21:01	15° $\Pi$ 55'25	2°48'42
	7929 Jun 24 00:37	30° $\Sigma$ $\Pi$		minimum elong	7930 Jun 02 23:41	15° $\Pi$ 48'31	2°48'01
morning rise	7929 Jun 27 06:00	27° $\Pi$ 40'26		min. Earth dist.	7930 Jun 05 20:20	12° $\Pi$ 53'09	0.62038 AU
desc. node	7929 Jun 27 07:31	27° $\Pi$ 38'09		morning rise	7930 Jun 09 08:49	9° $\Pi$ 51'16	
direct	7929 Jul 03 16:39	25° $\Pi$ 42'59		desc. node	7930 Jun 14 04:34	7° $\Pi$ 37'54	
	7929 Jul 13 23:09	0° $\Sigma$		direct	7930 Jun 16 02:50	7° $\Pi$ 26'23	
morning max el	7929 Jul 18 01:11	3° $\Sigma$ 36'36	27°39'20	morning max el	7930 Jun 30 06:18	15° $\Pi$ 27'46	27°55'18
	7929 Aug 06 10:12	0° $\Omega$			7930 Jul 12 02:48	0° $\Sigma$	
morning set	7929 Aug 18 21:51	23° $\Omega$ 38'29			7930 Jul 30 00:41	0° $\Omega$	
asc. node	7929 Aug 19 09:03	24° $\Omega$ 37'09		morning set	7930 Aug 02 23:08	7° $\Omega$ 48'47	
	7929 Aug 21 21:37	0° $\Pi$		asc. node	7930 Aug 06 06:02	14° $\Omega$ 39'35	
max. Earth dist.	7929 Aug 25 05:39	7° $\Pi$ 17'58	1.31708 AU	max. Earth dist.	7930 Aug 08 12:52	19° $\Omega$ 33'31	1.32112 AU
superior conj	7929 Aug 26 01:30	9° $\Pi$ 07'42	1°03'45	superior conj	7930 Aug 10 11:08	23° $\Omega$ 45'21	0°41'54
				minimum elong	7930 Aug 10 09:22	23° $\Omega$ 35'41	0°41'29



































































































































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evening rise	7930 Aug 17 06:54	8°♍39'07		behind sun begin	7931 Jul 25 15:10	7°♌57'57	
	7930 Aug 28 05:58	0°♌		behind sun end	7931 Jul 25 17:05	8°♌08'11	
desc. node	7930 Sep 10 03:37	17°♌47'55		evening rise	7931 Aug 01 18:26	23°♌18'59	
evening max el	7930 Sep 11 08:26	18°♌59'42	24°22'46		7931 Aug 04 23:25	0°♍	
retrograde	7930 Sep 25 02:56	25°♌54'28		evening max el	7931 Aug 23 20:10	29°♍12'59	22°43'36
evening set	7930 Sep 30 04:29	24°♌57'44			7931 Aug 24 16:01	0°♌	
min. Earth dist.	7930 Oct 05 19:22	22°♌06'33	0.56457 AU	desc. node	7931 Aug 28 00:39	2°♌41'46	
inferior conj	7930 Oct 08 07:52	20°♌31'45	-5°32'27	retrograde	7931 Sep 06 00:17	5°♌47'30	
minimum elong	7930 Oct 08 09:04	20°♌29'52	5°32'23	evening set	7931 Sep 09 13:27	5°♌19'53	
morning rise	7930 Oct 16 15:49	16°♌30'06		min. Earth dist.	7931 Sep 17 03:51	1°♌56'28	0.55160 AU
direct	7930 Oct 19 07:23	16°♌11'21		inferior conj	7931 Sep 18 10:45	1°♌12'25	-5°14'49
morning max el	7930 Oct 29 01:02	20°♌46'55	19°38'18	minimum elong	7931 Sep 18 04:34	1°♌21'15	5°13'58
asc. node	7930 Nov 02 05:35	25°♌33'13			7931 Sep 20 14:25	30°♍	
	7930 Nov 05 07:10	0°♍		morning rise	7931 Sep 26 21:41	27°♍23'53	
morning set	7930 Nov 15 13:25	18°♍56'26		direct	7931 Sep 30 00:58	27°♍01'14	
	7930 Nov 21 00:46	0°♎			7931 Oct 08 12:37	0°♌	
				morning max el	7931 Oct 11 08:06	2°♌18'19	20°58'30
superior conj	7930 Nov 23 11:07	4°♎50'30	1°28'41	asc. node	7931 Oct 20 02:35	13°♌26'23	
minimum elong	7930 Nov 23 13:40	5°♎03'01	1°28'35		7931 Oct 29 02:38	0°♍	
max. Earth dist.	7930 Nov 29 15:06	16°♎39'13	1.37623 AU	morning set	7931 Oct 30 21:23	3°♍39'17	
evening rise	7930 Dec 03 08:44	23°♎25'48					
desc. node	7930 Dec 07 02:37	29°♎56'13		superior conj	7931 Nov 07 06:20	19°♍00'46	1°38'47
	7930 Dec 07 03:30	0°♏		minimum elong	7931 Nov 07 07:33	19°♍07'04	1°38'50
	7930 Dec 26 21:54	0°♎		max. Earth dist.	7931 Nov 12 00:16	28°♍34'30	1.35635 AU
evening max el	7931 Jan 07 23:17	14°♎14'57	25°18'31		7931 Nov 12 17:45	0°♎	
retrograde	7931 Jan 20 01:01	21°♎12'59		evening rise	7931 Nov 16 00:58	6°♎18'04	
evening set	7931 Jan 25 20:30	18°♎48'41		desc. node	7931 Nov 23 23:38	20°♎24'17	
asc. node	7931 Jan 29 04:47	15°♎17'08			7931 Nov 29 22:01	0°♏	
min. Earth dist.	7931 Jan 30 06:45	13°♎55'29	0.67531 AU	evening max el	7931 Dec 21 12:21	27°♏59'51	26°22'56
inferior conj	7931 Jan 31 11:50	12°♎21'19	0°45'17		7931 Dec 23 16:44	0°♎	
minimum elong	7931 Jan 31 10:45	12°♎24'51	0°44'56	retrograde	7932 Jan 03 08:28	5°♎14'06	
morning rise	7931 Feb 06 01:19	6°♎26'25		evening set	7932 Jan 09 16:25	2°♎40'38	
direct	7931 Feb 09 12:48	5°♎16'50			7932 Jan 12 10:19	30°♍	
morning max el	7931 Feb 16 14:44	9°♎11'58	19°20'45	min. Earth dist.	7932 Jan 13 20:07	28°♏22'16	0.66534 AU
greatest brilliancy	7931 Mar 01 15:05	26°♎25'52	-0.7m	inferior conj	7932 Jan 15 12:46	26°♏18'57	-0°11'00
	7931 Mar 04 00:03	0°♐		minimum elong	7932 Jan 15 13:03	26°♏18'03	0°10'45
desc. node	7931 Mar 05 02:04	1°♐38'38		transit middle	7932 Jan 15 13:03	26°♏18'03	0°10'45
morning set	7931 Mar 12 21:28	13°♐37'14		transit begin	7932 Jan 15 10:54	26°♏24'35	
	7931 Mar 23 10:11	0°♑		transit end	7932 Jan 15 15:12	26°♏11'32	
max. Earth dist.	7931 Mar 25 22:08	3°♑55'52	1.44890 AU	asc. node	7932 Jan 16 01:52	25°♏39'18	
				morning rise	7932 Jan 21 10:28	20°♏34'04	
superior conj	7931 Mar 29 12:06	9°♑36'31	-2°06'55	direct	7932 Jan 24 11:12	19°♏42'16	
minimum elong	7931 Mar 29 07:13	9°♑17'06	2°06'46	morning max el	7932 Jan 31 01:42	23°♏16'33	18°33'11
	7931 Apr 11 01:21	0°♒			7932 Feb 05 14:39	0°♎	
evening rise	7931 Apr 12 18:19	2°♒49'51		desc. node	7932 Feb 19 23:01	21°♎59'25	
asc. node	7931 Apr 27 03:46	25°♒55'42		morning set	7932 Feb 20 16:34	23°♎08'50	
	7931 Apr 30 07:04	0°♓			7932 Feb 25 00:42	0°♐	
evening max el	7931 May 01 21:19	1°♓43'52	18°20'10				
retrograde	7931 May 08 07:04	5°♓10'03		superior conj	7932 Mar 07 18:12	18°♐24'24	-1°42'58
evening set	7931 May 11 07:45	4°♓19'59		minimum elong	7932 Mar 07 08:41	17°♐47'09	1°42'05
	7931 May 16 05:51	30°♒		max. Earth dist.	7932 Mar 07 16:36	18°♐18'06	1.45470 AU
inferior conj	7931 May 17 04:58	28°♒54'16	3°15'43		7932 Mar 15 03:33	0°♑	
minimum elong	7931 May 17 06:24	28°♒50'07	3°15'26	evening rise	7932 Mar 23 10:52	13°♑08'07	
min. Earth dist.	7931 May 19 14:10	26°♒10'26	0.64095 AU	greatest brilliancy	7932 Apr 01 05:32	27°♑03'37	-0.8m
morning rise	7931 May 23 04:01	22°♒40'25			7932 Apr 03 02:46	0°♒	
direct	7931 May 29 21:35	19°♒58'23		asc. node	7932 Apr 13 00:50	13°♒52'54	
desc. node	7931 Jun 01 01:35	20°♒13'25		evening max el	7932 Apr 14 08:02	15°♒16'37	18°52'07
morning max el	7931 Jun 12 15:32	27°♒58'16	27°34'14	retrograde	7932 Apr 21 01:29	19°♒01'02	
	7931 Jun 14 13:58	0°♓		evening set	7932 Apr 24 09:27	17°♒56'59	
	7931 Jul 05 21:11	0°♑		inferior conj	7932 Apr 29 23:14	12°♒14'45	3°24'28
morning set	7931 Jul 17 16:38	21°♑33'41		minimum elong	7932 Apr 29 23:18	12°♒14'31	3°24'23
	7931 Jul 21 20:35	0°♌		min. Earth dist.	7932 May 01 17:03	10°♒04'00	0.65805 AU
max. Earth dist.	7931 Jul 22 13:21	1°♌27'20	1.32993 AU	morning rise	7932 May 05 12:37	5°♒57'12	
asc. node	7931 Jul 24 03:02	4°♌45'32		direct	7932 May 11 23:40	3°♒10'05	
				desc. node	7932 May 17 22:35	5°♒03'50	
superior conj	7931 Jul 25 16:55	8°♌07'15	0°16'01	morning max el	7932 May 25 02:05	10°♒56'26	26°41'55

	7932 Jun 09 04:50	0°♂		desc. node	7933 May 04 19:35	21°♂37'37	
	7932 Jun 27 10:21	0°♂		morning max el	7933 May 07 11:49	24°♂09'57	25°27'08
morning set	7932 Jun 29 23:12	4°♂44'16			7933 May 12 17:12	0°♂	
max. Earth dist.	7932 Jul 04 03:41	12°♂52'47	1.34354 AU		7933 Jun 02 14:48	0°♂	
				morning set	7933 Jun 12 14:41	17°♂09'24	
superior conj	7932 Jul 08 16:35	22°♂06'56	-0°13'13	max. Earth dist.	7933 Jun 16 07:00	23°♂57'07	1.36166 AU
minimum elong	7932 Jul 08 17:19	22°♂10'44	0°13'11		7933 Jun 19 10:52	0°♂	
behind sun begin	7932 Jul 08 14:00	21°♂53'28					
behind sun end	7932 Jul 08 20:39	22°♂28'01		superior conj	7933 Jun 22 07:26	5°♂37'33	-0°44'30
asc. node	7932 Jul 10 00:02	24°♂50'43		minimum elong	7933 Jun 22 10:06	5°♂50'48	0°44'08
	7932 Jul 12 10:52	0°♂		asc. node	7933 Jun 26 21:02	14°♂51'30	
evening rise	7932 Jul 16 04:09	7°♂49'34		evening rise	7933 Jun 30 09:55	22°♂04'55	
	7932 Jul 28 00:50	0°♂			7933 Jul 04 09:10	0°♂	
evening max el	7932 Aug 04 14:56	9°♂39'26	21°10'28	evening max el	7933 Jul 17 22:33	20°♂45'29	19°53'52
desc. node	7932 Aug 13 21:42	15°♂17'01		retrograde	7933 Jul 28 04:26	25°♂48'21	
retrograde	7932 Aug 16 13:26	15°♂34'17		evening set	7933 Jul 30 01:19	25°♂39'00	
evening set	7932 Aug 18 21:23	15°♂21'35		desc. node	7933 Jul 31 18:46	25°♂14'44	
inferior conj	7932 Aug 28 03:34	11°♂24'11	-4°02'23	inferior conj	7933 Aug 08 00:40	21°♂38'31	-2°11'56
minimum elong	7932 Aug 27 18:06	11°♂37'32	3°59'45	minimum elong	7933 Aug 07 18:37	21°♂47'44	2°09'46
min. Earth dist.	7932 Aug 28 12:51	11°♂11'08	0.54689 AU	min. Earth dist.	7933 Aug 10 00:17	20°♂26'07	0.55189 AU
morning rise	7932 Sep 05 15:23	7°♂30'11		morning rise	7933 Aug 16 10:04	17°♂18'52	
direct	7932 Sep 09 09:02	7°♂00'10		direct	7933 Aug 20 22:05	16°♂34'23	
morning max el	7932 Sep 22 03:34	13°♂04'37	22°36'48	morning max el	7933 Sep 03 16:36	23°♂22'37	24°22'32
	7932 Oct 04 19:37	0°♂			7933 Sep 09 15:45	0°♂	
asc. node	7932 Oct 05 23:35	2°♂02'11		asc. node	7933 Sep 22 20:33	21°♂09'47	
morning set	7932 Oct 14 08:09	18°♂28'26			7933 Sep 27 06:16	0°♂	
	7932 Oct 19 17:31	0°♂		morning set	7933 Sep 28 19:52	3°♂18'03	
superior conj	7932 Oct 21 09:21	3°♂32'47	1°41'37	superior conj	7933 Oct 05 17:23	18°♂17'23	1°38'03
minimum elong	7932 Oct 21 09:15	3°♂32'16	1°41'41	minimum elong	7933 Oct 05 16:12	18°♂10'54	1°38'01
max. Earth dist.	7932 Oct 24 16:41	10°♂29'38	1.33984 AU	max. Earth dist.	7933 Oct 07 17:23	22°♂37'35	1.32767 AU
evening rise	7932 Oct 29 07:54	19°♂50'06			7933 Oct 11 04:50	0°♂	
	7932 Nov 03 17:22	0°♂		evening rise	7933 Oct 13 01:50	3°♂51'27	
desc. node	7932 Nov 09 20:38	10°♂36'51			7933 Oct 27 11:05	0°♂	
	7932 Nov 22 22:42	0°♂		desc. node	7933 Oct 27 17:41	0°♂26'20	
evening max el	7932 Dec 03 01:17	11°♂34'46	27°08'38	evening max el	7933 Nov 15 12:56	24°♂47'54	27°28'40
retrograde	7932 Dec 16 10:17	18°♂55'13			7933 Nov 22 06:48	0°♂	
evening set	7932 Dec 23 04:46	16°♂18'23		retrograde	7933 Nov 29 05:36	2°♂06'21	
min. Earth dist.	7932 Dec 27 02:41	12°♂34'06	0.65180 AU		7933 Dec 05 15:53	30°♂♂	
inferior conj	7932 Dec 29 07:01	10°♂08'02	-1°13'51	evening set	7933 Dec 06 06:51	29°♂34'21	
minimum elong	7932 Dec 29 09:12	10°♂01'55	1°12'47	min. Earth dist.	7933 Dec 10 00:21	26°♂21'26	0.63499 AU
asc. node	7933 Jan 01 22:55	6°♂23'34		inferior conj	7933 Dec 12 15:55	23°♂41'24	-2°21'35
morning rise	7933 Jan 04 14:58	4°♂35'40		minimum elong	7933 Dec 12 20:20	23°♂30'14	2°19'42
direct	7933 Jan 07 06:51	3°♂57'54		morning rise	7933 Dec 19 11:40	18°♂24'25	
morning max el	7933 Jan 13 17:21	7°♂22'21	18°02'16	asc. node	7933 Dec 19 19:58	18°♂17'03	
	7933 Jan 29 04:45	0°♂		direct	7933 Dec 21 21:04	17°♂56'42	
morning set	7933 Jan 31 17:15	4°♂09'18		morning max el	7933 Dec 28 10:39	21°♂20'47	17°48'36
desc. node	7933 Feb 05 19:59	12°♂32'24			7934 Jan 04 01:21	0°♂	
				morning set	7934 Jan 13 20:29	16°♂26'47	
superior conj	7933 Feb 15 02:35	27°♂26'15	-1°03'22		7934 Jan 21 18:49	0°♂	
minimum elong	7933 Feb 14 19:13	26°♂57'07	1°02'21	desc. node	7934 Jan 23 16:56	3°♂12'53	
	7933 Feb 16 17:29	0°♂					
max. Earth dist.	7933 Feb 18 12:00	2°♂47'19	1.45310 AU	superior conj	7934 Jan 26 06:08	7°♂25'46	-0°18'26
evening rise	7933 Mar 03 07:03	22°♂41'07		minimum elong	7934 Jan 26 04:08	7°♂17'37	0°18'02
	7933 Mar 08 01:00	0°♂		max. Earth dist.	7934 Feb 01 06:06	17°♂08'00	1.44434 AU
greatest brilliancy	7933 Mar 16 20:45	13°♂23'13	-0.7m		7934 Feb 09 11:05	0°♂	
evening max el	7933 Mar 28 14:28	28°♂53'16	19°40'42	evening rise	7934 Feb 10 18:06	1°♂59'25	
	7933 Mar 29 18:08	0°♂			7934 Mar 01 15:21	0°♂	
asc. node	7933 Mar 30 21:54	0°♂58'50		evening max el	7934 Mar 11 15:34	12°♂31'39	20°43'39
retrograde	7933 Apr 04 23:09	3°♂06'42		asc. node	7934 Mar 17 18:59	16°♂59'10	
evening set	7933 Apr 08 15:12	1°♂48'02		retrograde	7934 Mar 19 21:38	17°♂22'02	
	7933 Apr 10 15:40	30°♂♂		evening set	7934 Mar 23 22:56	15°♂48'16	
inferior conj	7933 Apr 14 00:37	25°♂51'12	3°18'54	inferior conj	7934 Mar 29 06:30	9°♂38'51	3°01'42
minimum elong	7933 Apr 13 23:33	25°♂54'45	3°18'45	minimum elong	7934 Mar 29 04:38	9°♂45'16	3°01'21
min. Earth dist.	7933 Apr 15 03:36	24°♂21'32	0.67095 AU	min. Earth dist.	7934 Mar 29 19:44	8°♂53'20	0.67939 AU
morning rise	7933 Apr 19 07:35	19°♂33'42		morning rise	7934 Apr 03 10:07	3°♂23'46	
direct	7933 Apr 25 08:00	16°♂52'46		direct	7934 Apr 08 21:30	0°♂57'49	

morning max el	7934 Apr 19 20:43	7° $\Upsilon$ 31'09	24°00'05	direct	7935 Mar 23 15:05	15° $\Upsilon$ 17'37	
desc. node	7934 Apr 21 16:34	9° $\Upsilon$ 26'39		morning max el	7935 Apr 02 07:19	20° $\Upsilon$ 59'35	22°30'38
	7934 May 07 09:40	0° $\Upsilon$		desc. node	7935 Apr 08 13:33	28° $\Upsilon$ 09'54	
morning set	7934 May 25 09:50	28° $\Upsilon$ 34'56			7935 Apr 10 00:05	0° $\Upsilon$	
	7934 May 26 05:32	0° $\Pi$			7935 Apr 30 15:48	0° $\Upsilon$	
max. Earth dist.	7934 May 29 03:34	5° $\Pi$ 07'33	1.38309 AU	morning set	7935 May 06 03:07	8° $\Upsilon$ 46'20	
				max. Earth dist.	7935 May 11 00:51	16° $\Upsilon$ 56'28	1.40554 AU
superior conj	7934 Jun 05 10:01	18° $\Pi$ 30'32	-1°15'52				
minimum elong	7934 Jun 05 14:38	18° $\Pi$ 52'28	1°15'17	superior conj	7935 May 18 19:56	0° $\Pi$ 34'26	-1°44'10
	7934 Jun 11 08:21	0° $\Upsilon$		minimum elong	7935 May 19 01:40	1° $\Pi$ 00'16	1°43'40
asc. node	7934 Jun 13 18:03	4° $\Upsilon$ 43'54			7935 May 18 12:16	0° $\Pi$	
evening rise	7934 Jun 14 09:08	5° $\Upsilon$ 58'01		evening rise	7935 May 28 22:26	19° $\Pi$ 19'29	
	7934 Jun 28 10:20	0° $\Omega$		asc. node	7935 May 31 15:05	24° $\Pi$ 22'42	
evening max el	7934 Jun 30 18:51	2° $\Omega$ 36'43	18°57'40		7935 Jun 03 16:46	0° $\Upsilon$	
retrograde	7934 Jul 09 09:34	6° $\Omega$ 52'07		evening max el	7935 Jun 14 00:26	15° $\Upsilon$ 05'21	18°22'04
evening set	7934 Jul 11 08:41	6° $\Omega$ 39'44		retrograde	7935 Jun 21 10:02	18° $\Upsilon$ 47'24	
desc. node	7934 Jul 18 15:51	3° $\Omega$ 03'09		evening set	7935 Jun 23 15:55	18° $\Upsilon$ 27'50	
inferior conj	7934 Jul 19 14:28	2° $\Omega$ 23'48	-0°17'09	inferior conj	7935 Jul 01 01:50	13° $\Upsilon$ 51'31	1°17'06
minimum elong	7934 Jul 19 13:45	2° $\Omega$ 25'04	0°16'59	minimum elong	7935 Jul 01 04:17	13° $\Upsilon$ 46'27	1°16'07
min. Earth dist.	7934 Jul 22 15:10	0° $\Omega$ 17'03	0.56562 AU	min. Earth dist.	7935 Jul 04 11:18	11° $\Upsilon$ 05'08	0.58531 AU
	7934 Jul 23 01:23	30° $\Upsilon$		desc. node	7935 Jul 05 12:55	10° $\Upsilon$ 16'41	
morning rise	7934 Jul 27 15:34	27° $\Upsilon$ 28'03		morning rise	7935 Jul 08 13:24	8° $\Upsilon$ 21'18	
direct	7934 Aug 02 00:14	26° $\Upsilon$ 19'57		direct	7935 Jul 14 16:09	6° $\Upsilon$ 42'36	
	7934 Aug 11 20:52	0° $\Omega$		morning max el	7935 Jul 29 01:27	14° $\Upsilon$ 26'26	27°12'56
morning max el	7934 Aug 16 06:14	3° $\Omega$ 41'07	25°59'53		7935 Aug 10 13:11	0° $\Omega$	
	7934 Sep 04 03:08	0° $\Pi$			7935 Aug 27 09:01	0° $\Pi$	
asc. node	7934 Sep 09 17:32	10° $\Pi$ 41'02		asc. node	7935 Aug 27 14:31	0° $\Pi$ 28'31	
morning set	7934 Sep 13 06:57	18° $\Pi$ 03'56		morning set	7935 Aug 28 15:43	2° $\Pi$ 40'23	
	7934 Sep 18 18:18	0° $\Omega$					
superior conj	7934 Sep 20 04:19	3° $\Omega$ 08'03	1°28'45	superior conj	7935 Sep 04 16:08	17° $\Pi$ 58'00	1°14'16
minimum elong	7934 Sep 20 02:23	2° $\Omega$ 57'23	1°28'33	minimum elong	7935 Sep 04 13:53	17° $\Pi$ 45'31	1°13'54
max. Earth dist.	7934 Sep 21 00:39	5° $\Omega$ 00'21	1.32007 AU	max. Earth dist.	7935 Sep 04 10:57	17° $\Pi$ 29'12	1.31693 AU
evening rise	7934 Sep 27 03:46	18° $\Omega$ 14'00			7935 Sep 10 03:24	0° $\Omega$	
	7934 Oct 03 01:05	0° $\Pi$		evening rise	7935 Sep 11 11:01	2° $\Omega$ 49'21	
desc. node	7934 Oct 14 14:45	19° $\Pi$ 43'28			7935 Sep 25 22:50	0° $\Pi$	
	7934 Oct 22 02:08	0° $\Upsilon$		desc. node	7935 Oct 01 11:51	8° $\Pi$ 14'53	
evening max el	7934 Oct 28 20:57	7° $\Upsilon$ 26'13	27°17'13	evening max el	7935 Oct 10 22:23	19° $\Pi$ 17'12	26°31'50
retrograde	7934 Nov 11 17:16	14° $\Upsilon$ 38'32		retrograde	7935 Oct 24 20:17	26° $\Pi$ 23'51	
evening set	7934 Nov 18 19:13	12° $\Upsilon$ 21'21		evening set	7935 Oct 31 13:29	24° $\Pi$ 32'05	
min. Earth dist.	7934 Nov 22 11:35	9° $\Upsilon$ 33'25	0.61562 AU	min. Earth dist.	7935 Nov 04 11:55	21° $\Pi$ 57'09	0.59481 AU
inferior conj	7934 Nov 25 12:22	6° $\Upsilon$ 51'10	-3°30'40	inferior conj	7935 Nov 07 16:52	19° $\Pi$ 27'41	-4°34'22
minimum elong	7934 Nov 25 18:50	6° $\Upsilon$ 36'43	3°28'24	minimum elong	7935 Nov 07 24:00	19° $\Pi$ 13'46	4°32'34
morning rise	7934 Dec 02 20:38	1° $\Upsilon$ 52'59		morning rise	7935 Nov 15 12:49	14° $\Pi$ 51'37	
direct	7934 Dec 05 02:26	1° $\Upsilon$ 31'42		direct	7935 Nov 17 18:44	14° $\Pi$ 33'35	
asc. node	7934 Dec 06 17:00	1° $\Upsilon$ 43'01		asc. node	7935 Nov 23 14:01	16° $\Pi$ 41'19	
morning max el	7934 Dec 12 02:28	5° $\Upsilon$ 03'47	17°53'06	morning max el	7935 Nov 25 13:24	18° $\Pi$ 22'27	18°17'10
morning set	7934 Dec 27 19:42	29° $\Upsilon$ 40'57			7935 Dec 03 23:17	0° $\Upsilon$	
	7934 Dec 27 23:54	0° $\Upsilon$		morning set	7935 Dec 11 09:03	13° $\Upsilon$ 34'19	
					7935 Dec 20 03:02	0° $\Upsilon$	
superior conj	7935 Jan 07 11:23	18° $\Upsilon$ 39'17	0°22'44	superior conj	7935 Dec 20 16:20	1° $\Upsilon$ 00'44	0°55'37
minimum elong	7935 Jan 07 13:21	18° $\Upsilon$ 47'46	0°22'34	minimum elong	7935 Dec 20 19:45	1° $\Upsilon$ 16'18	0°55'17
desc. node	7935 Jan 10 13:56	23° $\Upsilon$ 57'23		desc. node	7935 Dec 28 10:57	14° $\Upsilon$ 42'32	
	7935 Jan 14 04:58	0° $\approx$		max. Earth dist.	7935 Dec 28 06:46	14° $\Upsilon$ 24'44	1.40995 AU
max. Earth dist.	7935 Jan 14 20:52	1° $\approx$ 05'15	1.42940 AU	evening rise	7936 Jan 01 22:52	22° $\Upsilon$ 12'36	
evening rise	7935 Jan 21 11:31	11° $\approx$ 41'06			7936 Jan 06 19:28	0° $\approx$	
	7935 Feb 02 13:08	0° $\Upsilon$			7936 Jan 27 14:59	0° $\Upsilon$	
evening max el	7935 Feb 22 11:21	26° $\Upsilon$ 11'27	21°57'16	evening max el	7936 Feb 05 03:00	9° $\Upsilon$ 53'44	23°16'41
	7935 Feb 26 22:51	0° $\Upsilon$		retrograde	7936 Feb 15 14:04	16° $\Upsilon$ 05'13	
retrograde	7935 Mar 03 19:04	1° $\Upsilon$ 42'52		asc. node	7936 Feb 19 13:09	14° $\Upsilon$ 47'32	
asc. node	7935 Mar 04 16:04	1° $\Upsilon$ 38'57		evening set	7936 Feb 20 13:37	14° $\Upsilon$ 01'10	
evening set	7935 Mar 08 06:55	29° $\Upsilon$ 53'46		inferior conj	7936 Feb 25 23:14	7° $\Upsilon$ 35'05	1°58'36
	7935 Mar 08 03:50	30° $\Upsilon$		minimum elong	7936 Feb 25 21:03	7° $\Upsilon$ 42'36	1°57'56
inferior conj	7935 Mar 13 14:40	23° $\Upsilon$ 34'21	2°34'35	min. Earth dist.	7936 Feb 25 11:58	8° $\Upsilon$ 13'51	0.68334 AU
minimum elong	7935 Mar 13 12:26	23° $\Upsilon$ 42'10	2°34'01	morning rise	7936 Mar 02 04:26	1° $\Upsilon$ 28'57	
min. Earth dist.	7935 Mar 13 15:14	23° $\Upsilon$ 32'23	0.68347 AU		7936 Mar 04 21:05	30° $\Upsilon$	
morning rise	7935 Mar 18 17:46	17° $\Upsilon$ 23'07		direct	7936 Mar 06 11:46	29° $\approx$ 46'00	

	7936 Mar 08 03:53	0° $\text{H}$		inferior conj	7937 Feb 09 06:19	21° $\approx$ 37'25	1°14'19
morning max el	7936 Mar 14 23:12	4° $\text{H}$ 38'58	21°07'12	minimum elong	7937 Feb 09 04:41	21° $\approx$ 42'54	1°13'47
desc. node	7936 Mar 25 10:32	17° $\text{H}$ 32'38		morning rise	7937 Feb 14 16:05	15° $\approx$ 37'50	
	7936 Apr 03 02:25	0° $\text{Y}$		direct	7937 Feb 18 10:21	14° $\approx$ 16'48	
morning set	7936 Apr 14 17:18	17° $\text{Y}$ 44'13		morning max el	7937 Feb 25 22:36	18° $\approx$ 30'00	19°55'23
max. Earth dist.	7936 Apr 22 04:05	29° $\text{Y}$ 39'37	1.42611 AU		7937 Mar 07 04:34	0° $\text{H}$	
	7936 Apr 22 09:04	0° $\text{B}$		desc. node	7937 Mar 12 07:29	7° $\text{H}$ 23'36	
				morning set	7937 Mar 24 15:04	26° $\text{H}$ 01'58	
superior conj	7936 Apr 29 08:29	11° $\text{B}$ 39'13	-2°04'43		7937 Mar 27 04:38	0° $\text{Y}$	
minimum elong	7936 Apr 29 12:55	11° $\text{B}$ 58'06	2°04'35	max. Earth dist.	7937 Apr 04 14:07	13° $\text{Y}$ 11'09	1.44228 AU
	7936 May 09 19:05	0° $\text{II}$					
evening rise	7936 May 10 21:49	2° $\text{II}$ 00'04		superior conj	7937 Apr 09 20:17	21° $\text{Y}$ 38'34	-2°11'31
asc. node	7936 May 17 12:09	13° $\text{II}$ 42'59		minimum elong	7937 Apr 09 19:32	21° $\text{Y}$ 35'30	2°11'34
evening max el	7936 May 27 11:35	28° $\text{II}$ 02'42	18°06'22		7937 Apr 14 22:16	0° $\text{B}$	
	7936 May 29 20:11	0° $\text{B}$		evening rise	7937 Apr 23 02:31	13° $\text{B}$ 48'52	
retrograde	7936 Jun 03 03:46	1° $\text{B}$ 27'11			7937 May 02 17:03	0° $\text{II}$	
evening set	7936 Jun 05 17:03	0° $\text{B}$ 57'23		asc. node	7937 May 04 09:12	2° $\text{II}$ 37'51	
	7936 Jun 07 14:19	30° $\text{K}$ $\text{II}$		evening max el	7937 May 11 00:51	11° $\text{II}$ 19'43	18°09'52
inferior conj	7936 Jun 12 09:37	26° $\text{II}$ 00'53	2°22'55	retrograde	7937 May 17 10:16	14° $\text{II}$ 41'19	
minimum elong	7936 Jun 12 12:41	25° $\text{II}$ 53'33	2°21'59	evening set	7937 May 20 06:46	13° $\text{II}$ 59'10	
min. Earth dist.	7936 Jun 15 15:02	22° $\text{II}$ 57'19	0.60760 AU	inferior conj	7937 May 26 09:56	8° $\text{II}$ 43'56	3°02'39
morning rise	7936 Jun 19 05:48	20° $\text{II}$ 05'41		minimum elong	7937 May 26 12:08	8° $\text{II}$ 37'58	3°02'10
desc. node	7936 Jun 21 09:58	18° $\text{II}$ 54'13		min. Earth dist.	7937 May 29 03:41	5° $\text{II}$ 46'55	0.62946 AU
direct	7936 Jun 25 20:20	17° $\text{II}$ 55'49		morning rise	7937 Jun 01 15:57	2° $\text{II}$ 34'28	
morning max el	7936 Jul 10 03:35	25° $\text{II}$ 53'59	27°50'51	direct	7937 Jun 08 10:37	0° $\text{II}$ 00'34	
	7936 Jul 13 23:02	0° $\text{B}$		desc. node	7937 Jun 08 07:00	0° $\text{II}$ 00'39	
	7936 Aug 03 01:27	0° $\text{Q}$		morning max el	7937 Jun 22 10:55	8° $\text{II}$ 03'36	27°50'33
morning set	7936 Aug 11 20:22	17° $\text{Q}$ 02'19			7937 Jul 09 07:48	0° $\text{B}$	
asc. node	7936 Aug 13 11:30	20° $\text{Q}$ 26'57			7937 Jul 26 06:06	0° $\text{Q}$	
	7936 Aug 17 21:42	0° $\text{M}$		morning set	7937 Jul 26 18:43	1° $\text{Q}$ 03'21	
max. Earth dist.	7936 Aug 17 20:27	29° $\text{Q}$ 53'12	1.31826 AU	asc. node	7937 Jul 31 08:30	10° $\text{Q}$ 31'40	
				max. Earth dist.	7937 Aug 01 01:09	12° $\text{Q}$ 00'18	1.32423 AU
superior conj	7936 Aug 19 03:06	2° $\text{M}$ 41'49	0°55'00				
minimum elong	7936 Aug 19 01:01	2° $\text{M}$ 30'17	0°54'33	superior conj	7937 Aug 03 11:23	17° $\text{Q}$ 13'59	0°31'23
evening rise	7936 Aug 25 21:26	17° $\text{M}$ 31'13		minimum elong	7937 Aug 03 09:58	17° $\text{Q}$ 06'18	0°31'00
	7936 Aug 31 23:47	0° $\text{B}$			7937 Aug 09 08:10	0° $\text{M}$	
desc. node	7936 Sep 17 08:55	25° $\text{B}$ 42'38		evening rise	7937 Aug 10 09:06	2° $\text{M}$ 13'46	
	7936 Sep 21 08:26	0° $\text{M}$			7937 Aug 25 10:28	0° $\text{B}$	
evening max el	7936 Sep 21 15:41	0° $\text{M}$ 17'27	25°15'58	evening max el	7937 Sep 03 03:34	10° $\text{B}$ 40'38	23°40'50
retrograde	7936 Oct 05 13:15	7° $\text{M}$ 18'45		desc. node	7937 Sep 04 05:59	11° $\text{B}$ 42'12	
evening set	7936 Oct 11 08:54	6° $\text{M}$ 01'09		retrograde	7937 Sep 16 18:10	17° $\text{B}$ 29'26	
min. Earth dist.	7936 Oct 16 03:23	3° $\text{M}$ 21'18	0.57465 AU	evening set	7937 Sep 21 04:07	16° $\text{B}$ 46'45	
inferior conj	7936 Oct 19 02:11	1° $\text{M}$ 21'45	-5°20'38	min. Earth dist.	7937 Sep 27 13:47	13° $\text{B}$ 43'23	0.55814 AU
minimum elong	7936 Oct 19 06:47	1° $\text{M}$ 13'57	5°20'03	inferior conj	7937 Sep 29 15:24	12° $\text{B}$ 29'05	-5°31'37
	7936 Oct 21 03:36	30° $\text{K}$ $\text{B}$		minimum elong	7937 Sep 29 13:27	12° $\text{B}$ 32'02	5°31'30
morning rise	7936 Oct 27 06:59	27° $\text{B}$ 08'43		morning rise	7937 Oct 08 00:56	8° $\text{B}$ 34'31	
direct	7936 Oct 29 17:27	26° $\text{B}$ 51'09		direct	7937 Oct 10 20:49	8° $\text{B}$ 14'35	
	7936 Nov 06 09:49	0° $\text{M}$		morning max el	7937 Oct 21 06:31	13° $\text{B}$ 07'19	20°09'49
morning max el	7936 Nov 07 15:49	1° $\text{M}$ 06'44	19°02'22	asc. node	7937 Oct 27 08:03	20° $\text{B}$ 23'16	
asc. node	7936 Nov 09 11:03	2° $\text{M}$ 59'51			7937 Nov 02 03:58	0° $\text{M}$	
morning set	7936 Nov 24 08:03	27° $\text{M}$ 53'44		morning set	7937 Nov 08 13:30	12° $\text{M}$ 30'31	
	7936 Nov 25 09:34	0° $\text{X}$					
superior conj	7936 Dec 02 15:52	14° $\text{X}$ 15'12	1°19'11	superior conj	7937 Nov 16 05:07	28° $\text{M}$ 08'58	1°33'55
minimum elong	7936 Dec 02 19:00	14° $\text{X}$ 30'13	1°18'58	minimum elong	7937 Nov 16 07:08	28° $\text{M}$ 19'03	1°33'53
max. Earth dist.	7936 Dec 09 12:34	27° $\text{X}$ 00'07	1.38843 AU		7937 Nov 17 03:17	0° $\text{X}$	
	7936 Dec 11 05:03	0° $\text{B}$		max. Earth dist.	7937 Nov 21 18:48	9° $\text{X}$ 03'27	1.36742 AU
evening rise	7936 Dec 13 08:14	3° $\text{B}$ 42'50		evening rise	7937 Nov 25 14:20	16° $\text{X}$ 08'39	
desc. node	7936 Dec 14 07:56	5° $\text{B}$ 24'19		desc. node	7937 Dec 01 04:57	25° $\text{X}$ 59'04	
	7936 Dec 29 22:59	0° $\approx$			7937 Dec 03 14:41	0° $\text{B}$	
evening max el	7937 Jan 17 16:23	23° $\approx$ 38'49	24°35'53		7937 Dec 24 11:24	0° $\approx$	
	7937 Jan 26 18:21	0° $\text{H}$		evening max el	7937 Dec 31 05:25	7° $\approx$ 25'49	25°47'49
retrograde	7937 Jan 29 05:23	0° $\text{H}$ 23'35		retrograde	7938 Jan 12 16:00	14° $\approx$ 32'40	
	7937 Jan 31 13:14	30° $\text{K}$ $\approx$		evening set	7938 Jan 18 16:45	12° $\approx$ 04'05	
evening set	7937 Feb 03 17:26	28° $\approx$ 05'57		min. Earth dist.	7938 Jan 23 00:10	7° $\approx$ 25'25	0.67147 AU
asc. node	7937 Feb 05 10:14	26° $\approx$ 26'36		asc. node	7938 Jan 23 07:18	7° $\approx$ 03'01	
min. Earth dist.	7937 Feb 08 07:42	22° $\approx$ 52'50	0.67927 AU	inferior conj	7938 Jan 24 10:05	5° $\approx$ 38'13	0°22'16
				minimum elong	7938 Jan 24 09:31	5° $\approx$ 40'01	0°22'09

	7938 Jan 29 18:51	30° 		asc. node	7939 Jan 10 04:22	17° 	27°28'
morning rise	7938 Jan 30 02:47	29° 	47°03'	morning rise	7939 Jan 14 10:17	13° 	52°46'
direct	7938 Feb 02 09:25	28° 	45°29'	direct	7939 Jan 17 07:04	13° 	07°17'
	7938 Feb 06 04:06	0° 		morning max el	7939 Jan 23 18:52	16° 	36°04' 18°17'53"
morning max el	7938 Feb 09 05:40	2° 	30'40" 18°58'26"		7939 Feb 02 18:07	0° 	
desc. node	7938 Feb 27 04:25	27° 	35°13'	morning set	7939 Feb 12 03:48	14° 	58°49'
	7938 Feb 28 17:47	0° 		desc. node	7939 Feb 14 01:22	18° 	01°44'
morning set	7938 Mar 03 20:16	4° 	49°23'		7939 Feb 21 13:42	0° 	
max. Earth dist.	7938 Mar 18 05:55	27° 	18°34' 1.45225 AU				
	7938 Mar 19 22:59	0° 		superior conj	7939 Feb 27 14:25	9° 	29°46' -1°27'31"
superior conj	7938 Mar 20 09:53	0° 	42°56' -1°59'10"	minimum elong	7939 Feb 27 05:03	8° 	53°00' 1°26'27"
minimum elong	7938 Mar 20 02:20	0° 	13°12' 1°58'42"	max. Earth dist.	7939 Mar 01 01:24	11° 	46°49' 1.45495 AU
evening rise	7938 Apr 04 08:32	24° 	39°11'		7939 Mar 12 17:06	0° 	
	7938 Apr 07 15:15	0° 		evening rise	7939 Mar 15 15:32	4° 	35°31'
asc. node	7938 Apr 21 06:15	20° 	59°02'	greatest brilliancy	7939 Mar 26 15:30	21° 	43°24' -0.8m
evening max el	7938 Apr 24 13:16	24° 	48°43' 18°31'43"		7939 Apr 01 05:18	0° 	
retrograde	7938 May 01 01:16	28° 	20°59'	evening max el	7939 Apr 07 22:27	8° 	24°10' 19°10'57"
evening set	7938 May 04 05:00	27° 	25°06'	asc. node	7939 Apr 08 03:19	8° 	36°22'
inferior conj	7938 May 09 22:40	21° 	52°27' 3°21'21"	retrograde	7939 Apr 14 21:20	12° 	19°18'
minimum elong	7938 May 09 23:31	21° 	49°54' 3°21'12"	evening set	7939 Apr 18 08:44	11° 	08°56'
min. Earth dist.	7938 May 12 01:27	19° 	21°04' 0.64873 AU	inferior conj	7939 Apr 23 20:19	5° 	20°20' 3°23'39"
morning rise	7938 May 15 17:14	15° 	36°35'	minimum elong	7939 Apr 23 19:52	5° 	21°47' 3°23'34"
direct	7938 May 22 08:49	12° 	50°33'	min. Earth dist.	7939 Apr 25 07:40	3° 	26°35' 0.66407 AU
desc. node	7938 May 26 04:00	13° 	36°59'		7939 Apr 28 06:38	30° 	
morning max el	7938 Jun 04 20:45	20° 	46°26' 27°15'16"	morning rise	7939 Apr 29 06:36	29° 	02°45'
	7938 Jun 12 19:38	0° 		direct	7939 May 05 13:37	26° 	17°07'
morning set	7938 Jul 02 10:41	0° 		desc. node	7939 May 13 00:59	29° 	15°26'
	7938 Jul 10 08:00	14° 	34°57'		7939 May 14 00:36	0° 	
max. Earth dist.	7938 Jul 14 21:22	23° 	41°13' 1.33510 AU	morning max el	7939 May 18 06:59	3° 	52°10' 26°12'23"
	7938 Jul 17 22:17	0° 			7939 Jun 07 04:05	0° 	
asc. node	7938 Jul 18 05:28	0° 	37°52'	morning set	7939 Jun 23 08:44	27° 	12°7'59"
					7939 Jun 24 17:09	0° 	
superior conj	7938 Jul 18 14:54	1° 	27°41' 0°04'00"	max. Earth dist.	7939 Jun 27 07:04	4° 	56°58' 1.35077 AU
minimum elong	7938 Jul 18 14:42	1° 	26°36' 0°03'50"				
behind sun begin	7938 Jul 18 09:17	0° 	58°00'	superior conj	7939 Jul 02 11:14	15° 	16°37' -0°26'17"
behind sun end	7938 Jul 18 20:06	1° 	55°15'	minimum elong	7939 Jul 02 12:45	15° 	24°20' 0°26'07"
evening rise	7938 Jul 25 20:06	16° 	50°36'	asc. node	7939 Jul 05 02:28	20° 	42°08'
	7938 Aug 01 08:51	0° 			7939 Jul 09 13:44	0° 	
evening max el	7938 Aug 15 17:29	20° 	56°22' 22°02'33"	evening rise	7939 Jul 10 04:28	1° 	16°13'
desc. node	7938 Aug 22 03:04	25° 	41°30'		7939 Jul 27 04:09	0° 	
retrograde	7938 Aug 28 10:50	27° 	15°39'	evening max el	7939 Jul 28 17:27	1° 	38°10' 20°35'30"
evening set	7938 Aug 31 09:40	26° 	56°17'	retrograde	7939 Aug 08 22:54	7° 	11°08'
min. Earth dist.	7938 Sep 08 22:21	23° 	14°55' 0.54847 AU	desc. node	7939 Aug 09 00:08	7° 	11°07'
inferior conj	7938 Sep 09 12:36	22° 	54°57' -4°50'28"	evening set	7939 Aug 11 00:17	7° 	00°44'
minimum elong	7938 Sep 09 04:08	23° 	06°48' 4°48'46"	inferior conj	7939 Aug 20 05:23	3° 	03°40' -3°18'19"
morning rise	7938 Sep 18 00:04	19° 	06°24'	minimum elong	7939 Aug 19 20:44	3° 	16°07' 3°15'31"
direct	7938 Sep 21 09:17	18° 	41°01'	min. Earth dist.	7939 Aug 21 07:51	2° 	25°36' 0.54792 AU
morning max el	7938 Oct 03 08:11	24° 	18°24' 21°38'26"		7939 Aug 25 23:58	30° 	
	7938 Oct 08 10:32	0° 		morning rise	7939 Aug 28 16:50	29° 	01°19'
asc. node	7938 Oct 14 05:02	8° 	36°09'	direct	7939 Sep 01 18:03	28° 	02°6'09"
morning set	7938 Oct 23 22:55	27° 	16°49'		7939 Sep 08 05:37	0° 	
	7938 Oct 25 06:02	0° 		morning max el	7939 Sep 14 23:57	4° 	49°18' 23°21'38"
superior conj	7938 Oct 31 04:02	12° 	29°31' 1°40'49"	asc. node	7939 Oct 01 02:01	27° 	26°44'
minimum elong	7938 Oct 31 04:41	12° 	32°54' 1°40'53"		7939 Oct 02 10:42	0° 	
max. Earth dist.	7938 Nov 04 06:50	20° 	56°52' 1.34892 AU	morning set	7939 Oct 08 10:20	12° 	07°05'
evening rise	7938 Nov 08 13:21	29° 	19°26'				
	7938 Nov 08 21:52	0° 		superior conj	7939 Oct 15 09:30	27° 	07°45' 1°40'50"
desc. node	7938 Nov 18 01:59	16° 	21°22'	minimum elong	7939 Oct 15 08:54	27° 	04°33' 1°40'52"
	7938 Nov 26 18:41	0°			7939 Oct 16 17:38	0°	
evening max el	7938 Dec 13 18:46	21°	08°25' 26°45'08"	max. Earth dist.	7939 Oct 18 03:12	2°	58°07' 1.33421 AU
retrograde	7938 Dec 26 21:03	28°	25°49'	evening rise	7939 Oct 23 01:25	13°	05°04'
evening set	7939 Jan 02 09:42	25°	30°28'		7939 Nov 01 03:21	0°	
min. Earth dist.	7939 Jan 06 10:59	21°	34°30' 0.66002 AU	desc. node	7939 Nov 04 23:02	6°	25°14'
inferior conj	7939 Jan 08 08:28	19°	32°56' -0°36'56"		7939 Nov 21 21:52	0°	
minimum elong	7939 Jan 08 09:31	19°	29°53' 0°36'21"	evening max el	7939 Nov 26 07:29	4°	35°48' 27°20'35"
				retrograde	7939 Dec 09 19:54	11°	55°16'
				evening set	7939 Dec 16 18:01	9°	19°24'

min. Earth dist.	7939 Dec 20 13:53	5°  49'05	0.64509 AU	min. Earth dist.	7940 Dec 02 07:06	19°  23'50	0.62704 AU
inferior conj	7939 Dec 22 23:05	3°  16'05	-1°42'08	inferior conj	7940 Dec 05 03:09	16°  40'56	-2°50'59
minimum elong	7939 Dec 23 02:12	3°  07'43	1°40'42	minimum elong	7940 Dec 05 08:31	16°  28'04	2°48'53
	7939 Dec 26 05:47	30°  R 		morning rise	7940 Dec 12 04:16	11°  31'55	
asc. node	7939 Dec 28 01:25	28°  7'36'31		asc. node	7940 Dec 13 22:28	11°  7'08'49	
morning rise	7939 Dec 29 11:55	27°  7'49'52		direct	7940 Dec 14 11:44	11°  7'07'23	
direct	7940 Jan 01 00:51	27°  7'16'43		morning max el	7940 Dec 21 04:48	14°  7'33'36	17°48'16
	7940 Jan 06 18:52	0°  Z			7940 Dec 31 21:22	0°  Z	
morning max el	7940 Jan 07 11:35	0°  Z39'32	17°54'18	morning set	7941 Jan 06 05:06	9°  Z19'01	
morning set	7940 Jan 24 16:30	26°  Z34'26					
	7940 Jan 26 17:30	0°  ≈		superior conj	7941 Jan 17 19:50	29°  Z23'39	-0°00'10
desc. node	7940 Jan 31 22:20	8°  ≈38'19		minimum elong	7941 Jan 17 19:50	29°  Z23'39	0°00'02
				behind sun begin	7941 Jan 17 11:13	28°  Z47'28	
superior conj	7940 Feb 07 05:20	18°  ≈51'41	-0°44'17	behind sun end	7941 Jan 18 04:28	29°  Z59'45	
minimum elong	7940 Feb 07 00:13	18°  ≈31'08	0°43'29	desc. node	7941 Jan 17 19:19	29°  Z21'27	
max. Earth dist.	7940 Feb 11 21:06	26°  ≈16'18	1.45021 AU		7941 Jan 18 04:31	0°  ≈	
	7940 Feb 14 05:59	0°  X		max. Earth dist.	7941 Jan 24 14:01	10°  ≈29'17	1.43862 AU
evening rise	7940 Feb 23 06:05	13°  X57'50		evening rise	7941 Feb 01 18:04	23°  ≈22'09	
	7940 Mar 04 19:23	0°  Y			7941 Feb 06 01:55	0°  X	
greatest brilliancy	7940 Mar 09 01:45	6°  Y18'57	-0.6m		7941 Feb 27 02:49	0°  Y	
evening max el	7940 Mar 21 02:38	22°  Y01'19	20°05'55	evening max el	7941 Mar 04 01:18	5°  Y39'54	21°13'50
asc. node	7940 Mar 25 00:25	25°  Y16'14		asc. node	7941 Mar 11 21:30	10°  Y44'17	
retrograde	7940 Mar 28 19:40	26°  Y29'42		retrograde	7941 Mar 12 18:03	10°  Y48'04	
evening set	7940 Apr 01 15:34	25°  Y04'26		evening set	7941 Mar 16 23:37	9°  Y07'46	
inferior conj	7940 Apr 06 23:53	19°  Y01'46	3°12'55	inferior conj	7941 Mar 22 07:01	2°  Y53'28	2°51'22
minimum elong	7940 Apr 06 22:26	19°  Y06'40	3°12'41	minimum elong	7941 Mar 22 04:57	3°  Y00'41	2°50'54
min. Earth dist.	7940 Apr 07 20:46	17°  Y51'06	0.67504 AU	min. Earth dist.	7941 Mar 22 14:42	2°  Y26'47	0.68162 AU
morning rise	7940 Apr 12 05:04	12°  Y45'11			7941 Mar 24 10:05	30°  R 	
direct	7940 Apr 18 00:04	10°  Y10'04		morning rise	7941 Mar 27 10:04	26°  X39'40	
desc. node	7940 Apr 28 21:59	16°  Y24'08		direct	7941 Apr 01 15:24	24°  X22'08	
morning max el	7940 Apr 29 16:23	17°  Y09'53	24°51'09		7941 Apr 11 11:50	0°  Y	
	7940 May 10 08:58	0°  B		morning max el	7941 Apr 12 01:45	0°  Y34'35	23°21'46
	7940 May 30 04:06	0°  II		desc. node	7941 Apr 15 18:58	4°  Y38'31	
morning set	7940 Jun 04 16:14	9°  II29'17			7941 May 04 06:14	0°  B	
max. Earth dist.	7940 Jun 08 07:08	16°  II01'23	1.37049 AU	morning set	7941 May 17 00:58	20°  B24'38	
				max. Earth dist.	7941 May 21 02:52	27°  B23'37	1.39263 AU
superior conj	7940 Jun 14 21:18	28°  II31'57	-0°57'56		7941 May 22 14:33	0°  II	
minimum elong	7940 Jun 15 00:49	28°  II49'10	0°57'27	superior conj	7941 May 28 17:17	11°  II04'45	-1°28'30
	7940 Jun 15 15:16	0°  S		minimum elong	7941 May 28 22:33	11°  II29'15	1°27'54
asc. node	7940 Jun 20 23:29	10°  S39'51		evening rise	7941 Jun 07 03:13	29°  II03'29	
evening rise	7940 Jun 23 07:48	15°  S23'03		asc. node	7941 Jun 07 20:31	0°  S26'55	
	7940 Jun 30 23:21	0°  Q			7941 Jun 07 14:56	0°  S	
evening max el	7940 Jul 10 06:35	13°  Q02'52	19°27'21	evening max el	7941 Jun 23 07:14	25°  S10'46	18°40'04
retrograde	7940 Jul 19 19:08	17°  Q44'49		retrograde	7941 Jul 01 08:23	29°  S10'15	
evening set	7940 Jul 21 15:50	17°  Q34'48		evening set	7941 Jul 03 09:57	28°  S55'24	
desc. node	7940 Jul 25 21:12	16°  Q06'34		inferior conj	7941 Jul 11 07:14	24°  S31'17	0°26'08
inferior conj	7940 Jul 30 08:26	13°  Q28'24	-1°21'57	minimum elong	7941 Jul 11 08:13	24°  S29'26	0°25'38
minimum elong	7940 Jul 30 04:44	13°  Q34'21	1°20'37	desc. node	7941 Jul 12 18:18	23°  S25'02	
min. Earth dist.	7940 Aug 01 20:28	11°  Q51'57	0.55677 AU	min. Earth dist.	7941 Jul 14 13:39	22°  S04'57	0.57338 AU
morning rise	7940 Aug 07 15:04	8°  Q53'52		morning rise	7941 Jul 19 02:58	19°  S19'38	
direct	7940 Aug 12 11:32	8°  Q00'47		direct	7941 Jul 24 19:48	17°  S58'54	
morning max el	7940 Aug 26 12:36	15°  Q04'14	25°06'03	morning max el	7941 Aug 08 04:21	25°  S31'55	26°34'46
	7940 Sep 07 10:11	0°  P			7941 Aug 12 08:35	0°  Q	
asc. node	7940 Sep 16 23:00	16°  P45'24			7941 Aug 31 14:43	0°  P	
morning set	7940 Sep 21 22:02	26°  P56'12		asc. node	7941 Sep 03 19:59	6°  P24'19	
	7940 Sep 23 08:17	0°  Q		morning set	7941 Sep 06 08:19	11°  P38'50	
superior conj	7940 Sep 28 19:03	11°  Q56'05	1°34'46	superior conj	7941 Sep 13 06:35	26°  P47'31	1°23'14
minimum elong	7940 Sep 28 17:30	11°  Q47'35	1°34'41	minimum elong	7941 Sep 13 04:27	26°  P35'46	1°22'58
max. Earth dist.	7940 Sep 30 07:05	15°  Q13'13	1.32386 AU	max. Earth dist.	7941 Sep 13 15:53	27°  P39'05	1.31809 AU
evening rise	7940 Oct 05 23:06	27°  Q16'29			7941 Sep 14 17:21	0°  Q	
	7940 Oct 07 07:11	0°  P		evening rise	7941 Sep 20 03:33	11°  Q45'22	
desc. node	7940 Oct 21 20:06	26°  P02'47			7941 Sep 29 11:16	0°  P	
	7940 Oct 24 10:31	0°  X		desc. node	7941 Oct 08 17:11	15°  P02'46	
evening max el	7940 Nov 07 17:45	17°  X35'36	27°27'46	evening max el	7941 Oct 20 23:09	29°  P54'55	27°02'05
retrograde	7940 Nov 21 12:10	24°  X52'04			7941 Oct 21 01:19	0°  X	
evening set	7940 Nov 28 14:49	22°  X24'41					

retrograde	7941 Nov 03 20:46	7° $\text{♄}$ 05'38		evening max el	7942 Oct 02 21:21	11° $\text{♋}$ 25'12	26°02'59
evening set	7941 Nov 10 20:10	4° $\text{♄}$ 57'50		retrograde	7942 Oct 16 19:44	18° $\text{♋}$ 29'28	
min. Earth dist.	7941 Nov 14 13:46	2° $\text{♄}$ 17'14	0.60679 AU	evening set	7942 Oct 23 05:15	16° $\text{♋}$ 51'50	
	7941 Nov 17 06:59	30° $\text{♋}$		min. Earth dist.	7942 Oct 27 10:18	14° $\text{♋}$ 16'53	0.58602 AU
inferior conj	7941 Nov 17 17:17	29° $\text{♋}$ 38'06	-3°58'55	inferior conj	7942 Oct 30 13:59	11° $\text{♋}$ 58'14	-4°57'05
minimum elong	7941 Nov 18 00:17	29° $\text{♋}$ 23'16	3°56'44	minimum elong	7942 Oct 30 20:32	11° $\text{♋}$ 46'09	4°55'45
morning rise	7941 Nov 25 06:46	24° $\text{♋}$ 49'09		morning rise	7942 Nov 07 14:07	7° $\text{♋}$ 31'39	
direct	7941 Nov 27 11:55	24° $\text{♋}$ 29'47		direct	7942 Nov 09 21:18	7° $\text{♋}$ 14'11	
asc. node	7941 Nov 30 19:30	25° $\text{♋}$ 15'12		asc. node	7942 Nov 17 16:30	10° $\text{♋}$ 49'25	
morning max el	7941 Dec 04 19:04	28° $\text{♋}$ 08'11	18°00'50	morning max el	7942 Nov 18 02:45	11° $\text{♋}$ 13'32	18°33'34
	7941 Dec 06 12:32	0° $\text{♄}$			7942 Nov 30 13:21	0° $\text{♄}$	
morning set	7941 Dec 20 10:58	22° $\text{♄}$ 51'54		morning set	7942 Dec 04 04:53	6° $\text{♄}$ 57'53	
	7941 Dec 24 07:39	0° $\text{♄}$					
superior conj	7941 Dec 30 11:44	11° $\text{♄}$ 08'03	0°37'47	superior conj	7942 Dec 13 01:11	23° $\text{♄}$ 53'35	1°06'44
minimum elong	7941 Dec 30 14:36	11° $\text{♄}$ 20'40	0°37'30	minimum elong	7942 Dec 13 04:38	24° $\text{♄}$ 09'40	1°06'25
desc. node	7942 Jan 04 16:19	20° $\text{♄}$ 06'55			7942 Dec 16 08:59	0° $\text{♄}$	
max. Earth dist.	7942 Jan 07 02:15	24° $\text{♄}$ 10'06	1.42154 AU	max. Earth dist.	7942 Dec 20 10:01	7° $\text{♄}$ 10'25	1.40100 AU
	7942 Jan 10 15:34	0° $\text{♄}$		desc. node	7942 Dec 22 13:18	10° $\text{♄}$ 51'10	
evening rise	7942 Jan 12 18:08	3° $\text{♄}$ 23'08		evening rise	7942 Dec 24 14:48	14° $\text{♄}$ 19'54	
	7942 Jan 30 10:57	0° $\text{♄}$			7943 Jan 03 10:12	0° $\text{♄}$	
evening max el	7942 Feb 14 19:06	19° $\text{♄}$ 20'41	22°30'39		7943 Jan 25 11:55	0° $\text{♄}$	
retrograde	7942 Feb 24 14:40	25° $\text{♄}$ 09'59		evening max el	7943 Jan 28 09:42	3° $\text{♄}$ 04'51	23°50'49
asc. node	7942 Feb 26 18:36	24° $\text{♄}$ 46'13		retrograde	7943 Feb 08 08:06	9° $\text{♄}$ 31'03	
evening set	7942 Mar 01 07:14	23° $\text{♄}$ 14'40		evening set	7943 Feb 13 12:52	7° $\text{♄}$ 21'15	
inferior conj	7942 Mar 06 15:36	16° $\text{♄}$ 51'54	2°20'23	asc. node	7943 Feb 13 15:41	7° $\text{♄}$ 15'13	
minimum elong	7942 Mar 06 13:20	16° $\text{♄}$ 59'49	2°19'44	inferior conj	7943 Feb 18 23:45	0° $\text{♄}$ 53'47	1°40'47
min. Earth dist.	7942 Mar 06 11:08	17° $\text{♄}$ 07'27	0.68393 AU	minimum elong	7943 Feb 18 21:44	1° $\text{♄}$ 00'38	1°40'09
morning rise	7942 Mar 11 19:16	10° $\text{♄}$ 42'24		min. Earth dist.	7943 Feb 18 07:43	1° $\text{♄}$ 48'22	0.68216 AU
direct	7942 Mar 16 10:33	8° $\text{♄}$ 46'16			7943 Feb 19 15:37	30° $\text{♄}$	
morning max el	7942 Mar 25 14:05	14° $\text{♄}$ 07'03	21°53'52	morning rise	7943 Feb 24 06:36	24° $\text{♄}$ 50'08	
desc. node	7942 Apr 02 15:57	23° $\text{♄}$ 40'11		direct	7943 Feb 28 08:19	23° $\text{♄}$ 16'29	
	7942 Apr 07 07:44	0° $\text{♄}$		morning max el	7943 Mar 08 08:50	27° $\text{♄}$ 50'47	20°34'51
morning set	7942 Apr 27 06:20	0° $\text{♄}$ 03'18			7943 Mar 10 09:29	0° $\text{♄}$	
	7942 Apr 27 05:31	0° $\text{♄}$		desc. node	7943 Mar 20 12:54	13° $\text{♄}$ 16'03	
max. Earth dist.	7942 May 03 01:39	9° $\text{♄}$ 32'39	1.41465 AU		7943 Mar 31 20:33	0° $\text{♄}$	
superior conj	7942 May 10 18:41	22° $\text{♄}$ 44'53	-1°54'11	morning set	7943 Apr 06 11:08	8° $\text{♄}$ 36'38	
minimum elong	7942 May 11 00:16	23° $\text{♄}$ 09'28	1°53'49	max. Earth dist.	7943 Apr 15 07:58	22° $\text{♄}$ 38'19	1.43372 AU
	7942 May 14 20:13	0° $\text{♄}$			7943 Apr 19 20:12	0° $\text{♄}$	
evening rise	7942 May 21 11:07	12° $\text{♄}$ 08'39		superior conj	7943 Apr 21 20:54	3° $\text{♄}$ 22'12	-2°09'39
asc. node	7942 May 25 17:34	19° $\text{♄}$ 58'42		minimum elong	7943 Apr 21 23:36	3° $\text{♄}$ 33'30	2°09'40
	7942 May 31 14:17	0° $\text{♄}$		evening rise	7943 May 04 03:04	24° $\text{♄}$ 28'06	
evening max el	7942 Jun 06 15:43	7° $\text{♄}$ 53'25	18°13'06		7943 May 07 06:33	0° $\text{♄}$	
retrograde	7942 Jun 13 16:25	11° $\text{♄}$ 25'45		asc. node	7943 May 12 14:38	9° $\text{♄}$ 09'00	
evening set	7942 Jun 16 01:31	11° $\text{♄}$ 02'08		evening max el	7943 May 21 04:11	21° $\text{♄}$ 00'13	18°05'34
inferior conj	7942 Jun 23 03:38	6° $\text{♄}$ 17'27	1°48'27	retrograde	7943 May 27 16:03	24° $\text{♄}$ 21'26	
minimum elong	7942 Jun 23 06:36	6° $\text{♄}$ 10'54	1°47'24	evening set	7943 May 30 08:34	23° $\text{♄}$ 46'25	
min. Earth dist.	7942 Jun 26 12:50	3° $\text{♄}$ 20'36	0.59464 AU	inferior conj	7943 Jun 05 18:53	18° $\text{♄}$ 41'39	2°42'40
desc. node	7942 Jun 29 15:21	1° $\text{♄}$ 01'56		minimum elong	7943 Jun 05 21:42	18° $\text{♄}$ 34'32	2°41'55
morning rise	7942 Jun 30 08:41	0° $\text{♄}$ 35'27		min. Earth dist.	7943 Jun 08 19:56	15° $\text{♄}$ 38'25	0.61714 AU
	7942 Jul 01 11:11	30° $\text{♄}$		morning rise	7943 Jun 12 08:49	12° $\text{♄}$ 39'33	
direct	7942 Jul 06 17:36	28° $\text{♄}$ 42'43		desc. node	7943 Jun 16 12:24	10° $\text{♄}$ 38'44	
	7942 Jul 12 05:05	0° $\text{♄}$		direct	7943 Jun 19 02:10	10° $\text{♄}$ 18'23	
morning max el	7942 Jul 21 02:21	6° $\text{♄}$ 33'57	27°33'43	morning max el	7943 Jul 03 06:43	18° $\text{♄}$ 18'55	27°55'24
	7942 Aug 07 16:03	0° $\text{♄}$			7943 Jul 13 01:59	0° $\text{♄}$	
morning set	7942 Aug 21 15:33	26° $\text{♄}$ 10'04			7943 Jul 31 11:26	0° $\text{♄}$	
asc. node	7942 Aug 21 16:57	26° $\text{♄}$ 17'23		morning set	7943 Aug 05 17:45	10° $\text{♄}$ 23'20	
	7942 Aug 23 10:59	0° $\text{♄}$		asc. node	7943 Aug 08 13:56	16° $\text{♄}$ 18'44	
max. Earth dist.	7942 Aug 28 02:11	10° $\text{♄}$ 07'07	1.31689 AU	max. Earth dist.	7943 Aug 11 10:09	22° $\text{♄}$ 25'14	1.32024 AU
superior conj	7942 Aug 28 18:16	11° $\text{♄}$ 36'08	1°06'41	superior conj	7943 Aug 13 04:16	26° $\text{♄}$ 15'16	0°45'30
minimum elong	7942 Aug 28 16:01	11° $\text{♄}$ 23'42	1°06'16	minimum elong	7943 Aug 13 02:24	26° $\text{♄}$ 05'00	0°45'03
evening rise	7942 Sep 04 12:24	26° $\text{♄}$ 24'51			7943 Aug 14 21:10	0° $\text{♄}$	
	7942 Sep 06 05:09	0° $\text{♄}$		evening rise	7943 Aug 19 23:33	11° $\text{♄}$ 07'34	
	7942 Sep 23 06:09	0° $\text{♄}$			7943 Aug 29 12:24	0° $\text{♄}$	
desc. node	7942 Sep 25 14:16	3° $\text{♄}$ 10'10		desc. node	7943 Sep 12 11:20	20° $\text{♄}$ 03'39	
				evening max el	7943 Sep 14 11:49	22° $\text{♄}$ 06'55	24°37'00



































































































































retrograde	7943 Sep 28 07:15	29°♄03'32		desc. node	7944 Aug 29 08:26	5°♄15'40	
evening set	7943 Oct 03 13:55	28°♄01'28		retrograde	7944 Sep 08 06:35	9°♄00'09	
min. Earth dist.	7943 Oct 08 22:51	25°♄13'53	0.56703 AU	evening set	7944 Sep 12 01:00	8°♄29'04	
inferior conj	7943 Oct 11 14:35	23°♄32'15	-5°30'46	min. Earth dist.	7944 Sep 19 07:39	5°♄11'15	0.55300 AU
minimum elong	7943 Oct 11 16:47	23°♄28'42	5°30'36	inferior conj	7944 Sep 20 19:51	4°♄19'06	-5°21'03
morning rise	7943 Oct 19 21:51	19°♄27'56		minimum elong	7944 Sep 20 14:42	4°♄26'33	5°20'28
direct	7943 Oct 22 12:01	19°♄09'32		morning rise	7944 Sep 29 06:30	0°♄29'38	
morning max el	7943 Nov 01 00:21	23°♄39'29	19°28'18	direct	7944 Oct 02 07:41	0°♄07'50	
asc. node	7943 Nov 04 13:30	27°♄37'02		morning max el	7944 Oct 13 09:24	5°♄18'24	20°45'21
	7943 Nov 06 07:43	0°♄		asc. node	7944 Oct 21 10:29	15°♄22'40	
morning set	7943 Nov 18 06:59	21°♄25'57			7944 Oct 29 13:58	0°♄	
	7943 Nov 22 13:10	0°♄		morning set	7944 Nov 01 14:21	6°♄07'26	
superior conj	7943 Nov 26 07:05	7°♄26'21	1°26'27	superior conj	7944 Nov 09 00:51	21°♄32'49	1°37'45
minimum elong	7943 Nov 26 09:47	7°♄39'38	1°26'19	minimum elong	7944 Nov 09 02:17	21°♄40'08	1°37'46
max. Earth dist.	7943 Dec 02 15:51	19°♄32'11	1.37935 AU		7944 Nov 13 05:54	0°♄	
evening rise	7943 Dec 06 09:19	26°♄14'42		max. Earth dist.	7944 Nov 14 00:01	1°♄28'36	1.35906 AU
	7943 Dec 08 13:07	0°♄		evening rise	7944 Nov 17 23:01	9°♄00'26	
desc. node	7943 Dec 09 10:18	1°♄30'38		desc. node	7944 Nov 25 07:19	22°♄00'43	
	7943 Dec 27 23:31	0°♄			7944 Nov 30 04:39	0°♄	
evening max el	7944 Jan 10 22:53	16°♄51'54	25°07'46		7944 Dec 22 20:35	0°♄	
retrograde	7944 Jan 22 21:22	23°♄46'45		evening max el	7944 Dec 23 11:49	0°♄37'28	26°14'22
evening set	7944 Jan 28 14:59	21°♄23'58		retrograde	7945 Jan 05 05:44	7°♄50'28	
asc. node	7944 Jan 31 12:44	18°♄23'13		evening set	7945 Jan 11 11:52	5°♄18'01	
min. Earth dist.	7944 Feb 02 02:13	16°♄25'44	0.67647 AU	min. Earth dist.	7945 Jan 15 16:27	0°♄54'27	0.66704 AU
inferior conj	7944 Feb 03 05:40	14°♄56'11	0°53'10		7945 Jan 16 10:17	30°♄	
minimum elong	7944 Feb 03 04:24	15°♄00'17	0°52'46	inferior conj	7945 Jan 17 07:23	28°♄54'58	-0°02'01
morning rise	7944 Feb 08 18:07	9°♄00'07		minimum elong	7945 Jan 17 07:26	28°♄54'49	0°01'52
direct	7944 Feb 12 07:18	7°♄47'40		transit middle	7945 Jan 17 07:26	28°♄54'49	0°01'52
morning max el	7944 Feb 19 11:40	11°♄46'59	19°29'15	transit begin	7945 Jan 17 04:35	29°♄03'35	
greatest brilliancy	7944 Mar 03 07:30	28°♄38'49	-0.7m	transit end	7945 Jan 17 10:17	28°♄46'04	
	7944 Mar 04 05:20	0°♄		asc. node	7945 Jan 17 09:48	28°♄47'32	
desc. node	7944 Mar 06 09:49	3°♄16'53		morning rise	7945 Jan 23 03:44	23°♄08'28	
morning set	7944 Mar 15 09:06	16°♄59'18		direct	7945 Jan 26 05:55	22°♄14'20	
	7944 Mar 23 18:12	0°♄		morning max el	7945 Feb 01 21:43	25°♄51'07	18°39'12
max. Earth dist.	7944 Mar 27 21:28	6°♄30'18	1.44741 AU		7945 Feb 05 12:38	0°♄	
superior conj	7944 Mar 31 22:25	12°♄55'50	-2°08'48	desc. node	7945 Feb 21 06:45	23°♄35'26	
minimum elong	7944 Mar 31 18:37	12°♄40'37	2°08'43	morning set	7945 Feb 23 00:09	26°♄18'22	
	7944 Apr 11 09:46	0°♄			7945 Feb 25 08:29	0°♄	
evening rise	7944 Apr 14 22:34	5°♄53'20		max. Earth dist.	7945 Mar 10 15:07	20°♄48'37	1.45431 AU
asc. node	7944 Apr 28 11:42	27°♄51'03		superior conj	7945 Mar 11 05:54	21°♄46'33	-1°47'49
	7944 Apr 30 00:37	0°♄		minimum elong	7945 Mar 10 20:41	21°♄10'25	1°47'01
evening max el	7944 May 03 17:24	4°♄23'21	18°16'52		7945 Mar 16 11:36	0°♄	
retrograde	7944 May 10 02:48	7°♄48'02		evening rise	7945 Mar 26 18:31	16°♄19'37	
evening set	7944 May 13 02:23	7°♄00'04		greatest brilliancy	7945 Apr 03 16:29	28°♄58'08	-0.9m
inferior conj	7944 May 19 01:00	1°♄36'55	3°12'50		7945 Apr 04 08:07	0°♄	
minimum elong	7944 May 19 02:39	1°♄32'13	3°12'31	asc. node	7945 Apr 15 08:47	15°♄55'06	
	7944 May 20 11:03	30°♄		evening max el	7945 Apr 17 04:37	17°♄55'20	18°46'18
min. Earth dist.	7944 May 21 12:27	28°♄49'10	0.63809 AU	retrograde	7945 Apr 23 20:29	21°♄36'21	
morning rise	7944 May 25 01:46	25°♄23'52		evening set	7945 Apr 27 03:18	20°♄34'30	
direct	7944 May 31 19:45	22°♄43'38		inferior conj	7945 May 02 17:59	14°♄54'44	3°24'05
desc. node	7944 Jun 02 09:24	22°♄51'30		minimum elong	7945 May 02 18:15	14°♄53'53	3°24'00
	7944 Jun 13 21:32	0°♄		min. Earth dist.	7945 May 04 14:08	12°♄38'13	0.65576 AU
morning max el	7944 Jun 14 15:38	0°♄44'47	27°39'29	morning rise	7945 May 08 08:36	8°♄37'23	
	7944 Jul 06 04:15	0°♄		direct	7945 May 14 20:57	5°♄50'06	
morning set	7944 Jul 19 12:35	24°♄12'34		desc. node	7945 May 20 06:23	7°♄23'36	
	7944 Jul 22 09:20	0°♄		morning max el	7945 May 28 02:08	13°♄39'44	26°51'19
max. Earth dist.	7944 Jul 24 11:51	4°♄22'43	1.32832 AU		7945 Jun 10 07:12	0°♄	
asc. node	7944 Jul 25 10:55	6°♄24'24			7945 Jun 28 20:34	0°♄	
superior conj	7944 Jul 27 10:45	10°♄39'48	0°20'11	morning set	7945 Jul 02 21:03	7°♄29'31	
minimum elong	7944 Jul 27 09:47	10°♄34'37	0°19'52	max. Earth dist.	7945 Jul 07 03:45	15°♄52'24	1.34118 AU
evening rise	7944 Aug 03 11:09	25°♄48'08		superior conj	7945 Jul 11 11:32	24°♄43'51	-0°08'36
	7944 Aug 05 11:02	0°♄		minimum elong	7945 Jul 11 12:00	24°♄46'19	0°08'38
	7944 Aug 23 17:16	0°♄		behind sun begin	7945 Jul 11 07:09	24°♄21'00	
evening max el	7944 Aug 25 23:10	2°♄21'03	22°58'16	behind sun end	7945 Jul 11 16:52	25°♄11'40	

asc. node	7945 Jul 12 07:56	26°☿30'30		minimum elong	7946 Jun 25 06:17	8°☿31'31	0°39'22
	7945 Jul 13 23:44	0°♊		asc. node	7946 Jun 29 04:58	16°☿32'37	
evening rise	7945 Jul 18 21:18	10°♊21'01		evening rise	7946 Jul 03 03:50	24°☿39'20	
	7945 Jul 29 03:14	0°♊			7946 Jul 05 19:21	0°♊	
evening max el	7945 Aug 07 16:32	12°♊44'33	21°23'31	evening max el	7946 Jul 20 22:13	23°♊44'29	20°04'04
desc. node	7945 Aug 16 05:30	18°♊14'31		retrograde	7946 Jul 31 10:10	28°♊54'57	
retrograde	7945 Aug 19 20:28	18°♊46'19		evening set	7946 Aug 02 07:47	28°♊45'32	
evening set	7945 Aug 22 07:37	18°♊32'21		desc. node	7946 Aug 03 02:36	28°♊36'23	
inferior conj	7945 Aug 31 13:29	14°♊34'24	-4°16'33	inferior conj	7946 Aug 11 09:03	24°♊46'30	-2°29'48
minimum elong	7945 Aug 31 04:01	14°♊47'40	4°14'05	minimum elong	7946 Aug 11 02:12	24°♊56'45	2°27'23
min. Earth dist.	7945 Aug 31 16:40	14°♊29'55	0.54697 AU	min. Earth dist.	7946 Aug 13 03:35	23°♊42'55	0.55057 AU
morning rise	7945 Sep 09 01:14	10°♊42'22		morning rise	7946 Aug 19 19:08	20°♊31'50	
direct	7945 Sep 12 16:33	10°♊13'45		direct	7946 Aug 24 04:23	19°♊49'58	
morning max el	7945 Sep 25 06:25	16°♊11'28	22°21'19	morning max el	7946 Sep 06 19:54	26°♊31'59	24°06'51
	7945 Oct 06 00:15	0°♊			7946 Sep 10 04:02	0°♊	
asc. node	7945 Oct 08 07:28	3°♊53'06		asc. node	7946 Sep 25 04:27	22°♊56'39	
morning set	7945 Oct 17 00:51	20°♊56'19			7946 Sep 28 18:12	0°♊	
	7945 Oct 21 06:57	0°♊		morning set	7946 Oct 01 12:34	5°♊46'23	
superior conj	7945 Oct 24 02:56	6°♊02'33	1°41'36	superior conj	7946 Oct 08 10:25	20°♊45'49	1°38'57
minimum elong	7945 Oct 24 03:02	6°♊03'03	1°41'41	minimum elong	7946 Oct 08 09:22	20°♊40'09	1°38'58
max. Earth dist.	7945 Oct 27 15:09	13°♊22'32	1.34205 AU	max. Earth dist.	7946 Oct 10 14:50	25°♊28'59	1.32925 AU
evening rise	7945 Nov 01 04:05	22°♊27'43			7946 Oct 12 17:53	0°♊	
	7945 Nov 05 03:43	0°♊		evening rise	7946 Oct 15 20:39	6°♊25'32	
desc. node	7945 Nov 12 04:24	12°♊16'24			7946 Oct 28 17:25	0°♊	
	7945 Nov 23 22:15	0°♊		desc. node	7946 Oct 30 01:29	2°♊10'06	
evening max el	7945 Dec 06 00:56	14°♊14'55	27°03'18	evening max el	7946 Nov 18 13:02	27°♊32'32	27°27'32
retrograde	7945 Dec 19 08:29	21°♊35'02			7946 Nov 21 07:58	0°♊	
evening set	7945 Dec 26 01:29	18°♊58'25		retrograde	7946 Dec 02 04:43	4°♊51'09	
min. Earth dist.	7945 Dec 30 00:14	15°♊09'01	0.65404 AU	evening set	7946 Dec 09 05:17	2°♊18'01	
inferior conj	7946 Jan 01 02:48	12°♊45'54	-1°03'55		7946 Dec 11 22:55	30°♊	
minimum elong	7946 Jan 01 04:40	12°♊40'36	1°03'00	min. Earth dist.	7946 Dec 12 23:24	29°♊00'37	0.63770 AU
asc. node	7946 Jan 04 06:50	9°♊25'03		inferior conj	7946 Dec 15 13:18	26°♊22'12	-2°11'04
morning rise	7946 Jan 07 09:06	7°♊11'21		minimum elong	7946 Dec 15 17:22	26°♊11'44	2°09'20
direct	7946 Jan 10 02:10	6°♊31'44		morning rise	7946 Dec 22 07:13	21°♊02'36	
morning max el	7946 Jan 16 12:49	9°♊57'08	18°05'44	asc. node	7946 Dec 22 03:53	21°♊05'58	
	7946 Jan 30 12:16	0°♊		direct	7946 Dec 24 17:27	20°♊33'35	
morning set	7946 Feb 03 20:26	7°♊05'50		morning max el	7946 Dec 31 06:03	23°♊57'05	17°49'31
desc. node	7946 Feb 08 03:43	14°♊06'55			7947 Jan 05 03:14	0°♊	
	7946 Feb 18 01:47	0°♊		morning set	7947 Jan 16 20:10	19°♊13'34	
superior conj	7946 Feb 18 12:41	0°♊43'00	-1°09'57		7947 Jan 23 04:05	0°♊	
minimum elong	7946 Feb 18 04:38	0°♊11'16	1°08'54	desc. node	7947 Jan 26 00:43	4°♊46'47	
max. Earth dist.	7946 Feb 21 10:27	5°♊17'29	1.45384 AU	superior conj	7947 Jan 29 12:43	10°♊32'22	-0°25'10
evening rise	7946 Mar 06 17:11	25°♊57'38		minimum elong	7947 Jan 29 09:56	10°♊21'02	0°24'39
	7946 Mar 09 07:50	0°♊		max. Earth dist.	7947 Feb 04 05:12	19°♊41'48	1.44608 AU
greatest brilliancy	7946 Mar 19 16:23	15°♊50'19	-0.7m		7947 Feb 10 18:43	0°♊	
	7946 Mar 30 01:40	0°♊		evening rise	7947 Feb 14 04:44	5°♊16'25	
evening max el	7946 Mar 31 11:49	1°♊31'52	19°32'34		7947 Mar 02 17:52	0°♊	
asc. node	7946 Apr 02 05:52	3°♊09'47		evening max el	7947 Mar 14 13:48	15°♊10'38	20°33'29
retrograde	7946 Apr 07 17:46	5°♊40'12		asc. node	7947 Mar 20 02:56	19°♊21'29	
evening set	7946 Apr 11 08:35	4°♊23'43		retrograde	7947 Mar 22 16:16	19°♊54'56	
	7946 Apr 15 14:35	30°♊		evening set	7947 Mar 26 16:09	18°♊23'20	
inferior conj	7946 Apr 16 18:29	28°♊29'04	3°20'32	inferior conj	7947 Mar 31 23:51	12°♊15'39	3°05'00
minimum elong	7946 Apr 16 17:34	28°♊32'06	3°20'23	minimum elong	7947 Mar 31 22:05	12°♊21'43	3°04'40
min. Earth dist.	7946 Apr 17 23:39	26°♊52'57	0.66931 AU	min. Earth dist.	7947 Apr 01 15:01	11°♊23'38	0.67843 AU
morning rise	7946 Apr 22 02:13	22°♊11'30		morning rise	7947 Apr 06 03:47	6°♊00'13	
direct	7946 Apr 28 04:28	19°♊28'56		direct	7947 Apr 11 17:14	3°♊31'42	
desc. node	7946 May 07 03:23	23°♊43'43		morning max el	7947 Apr 22 20:54	10°♊11'56	24°13'28
morning max el	7946 May 10 11:57	26°♊51'16	25°39'17	desc. node	7947 Apr 24 00:22	11°♊23'16	
	7946 May 13 10:10	0°♊			7947 May 08 13:28	0°♊	
	7946 Jun 03 22:05	0°♊			7947 May 27 14:58	0°♊	
morning set	7946 Jun 15 15:06	20°♊02'26		morning set	7947 May 28 13:38	1°♊37'48	
max. Earth dist.	7946 Jun 19 08:33	26°♊58'42	1.35869 AU	max. Earth dist.	7947 Jun 01 05:52	8°♊06'56	1.37980 AU
	7946 Jun 20 22:26	0°♊		superior conj	7947 Jun 08 08:36	21°♊19'05	-1°11'13
superior conj	7946 Jun 25 03:56	8°♊19'44	-0°39'41	minimum elong	7947 Jun 08 12:57	21°♊39'53	1°10'39

	7947 Jun 12 19:46	0°♄		superior conj	7948 May 20 21:15	3°♄30'52	-1°40'15
asc. node	7947 Jun 16 02:00	6°♄26'50		minimum elong	7948 May 21 02:56	3°♄56'40	1°39'43
evening rise	7947 Jun 17 04:14	8°♄36'29		evening rise	7948 May 30 19:14	22°♄03'20	
	7947 Jun 29 04:17	0°♄		asc. node	7948 Jun 01 23:02	26°♄08'07	
evening max el	7947 Jul 03 16:44	5°♄28'55	19°04'40		7948 Jun 04 00:49	0°♄	
retrograde	7947 Jul 12 12:46	9°♄50'46		evening max el	7948 Jun 15 21:06	17°♄52'15	18°26'02
evening set	7947 Jul 14 11:06	9°♄39'07		retrograde	7948 Jun 23 10:25	21°♄38'28	
desc. node	7947 Jul 20 23:40	6°♄39'43		evening set	7948 Jun 25 15:06	21°♄20'16	
inferior conj	7947 Jul 22 19:48	5°♄25'42	-0°33'35	inferior conj	7948 Jul 03 03:54	16°♄47'02	1°04'36
minimum elong	7947 Jul 22 18:22	5°♄28'10	0°33'09	minimum elong	7948 Jul 03 06:04	16°♄42'41	1°03'43
min. Earth dist.	7947 Jul 25 17:41	3°♄26'32	0.56313 AU	min. Earth dist.	7948 Jul 06 12:59	14°♄05'09	0.58210 AU
morning rise	7947 Jul 30 22:32	0°♄35'37		desc. node	7948 Jul 06 20:44	13°♄50'30	
	7947 Aug 01 17:02	30°♄		morning rise	7948 Jul 10 17:39	11°♄21'14	
direct	7947 Aug 05 04:06	29°♄31'42		direct	7948 Jul 16 17:55	9°♄47'21	
	7947 Aug 08 15:24	0°♄		morning max el	7948 Jul 31 03:22	17°♄28'44	27°04'11
morning max el	7947 Aug 19 09:02	6°♄48'16	25°46'37		7948 Aug 10 12:41	0°♄	
	7947 Sep 05 10:13	0°♄			7948 Aug 27 21:00	0°♄	
asc. node	7947 Sep 12 01:27	12°♄24'54		asc. node	7948 Aug 28 22:27	2°♄10'36	
morning set	7947 Sep 15 23:51	20°♄33'07		morning set	7948 Aug 30 09:04	5°♄11'37	
	7947 Sep 20 08:11	0°♄					
superior conj	7947 Sep 22 21:01	5°♄35'50	1°30'30	superior conj	7948 Sep 06 08:48	20°♄26'30	1°16'47
minimum elong	7947 Sep 22 19:10	5°♄25'40	1°30'20	minimum elong	7948 Sep 06 06:35	20°♄14'08	1°16'27
max. Earth dist.	7947 Sep 23 21:22	7°♄50'03	1.32093 AU	max. Earth dist.	7948 Sep 06 07:25	20°♄18'49	1.31704 AU
evening rise	7947 Sep 29 21:32	20°♄45'13			7948 Sep 10 16:47	0°♄	
	7947 Oct 04 11:47	0°♄		evening rise	7948 Sep 13 04:06	5°♄19'11	
desc. node	7947 Oct 16 22:33	21°♄32'55			7948 Sep 26 03:31	0°♄	
	7947 Oct 22 21:18	0°♄		desc. node	7948 Oct 02 19:37	10°♄12'44	
evening max el	7947 Oct 31 21:44	10°♄16'44	27°21'02	evening max el	7948 Oct 13 00:13	22°♄15'31	26°40'45
retrograde	7947 Nov 14 17:30	17°♄29'54		retrograde	7948 Oct 26 22:03	29°♄23'22	
evening set	7947 Nov 21 19:57	15°♄09'45		evening set	7948 Nov 02 17:18	27°♄26'59	
min. Earth dist.	7947 Nov 25 12:08	12°♄18'51	0.61864 AU	min. Earth dist.	7948 Nov 06 14:00	24°♄51'15	0.59790 AU
inferior conj	7947 Nov 28 11:49	9°♄36'04	-3°20'21	inferior conj	7948 Nov 09 18:57	22°♄18'36	-4°25'34
minimum elong	7947 Nov 28 18:02	9°♄21'56	3°18'06	minimum elong	7948 Nov 10 02:09	22°♄04'16	4°23'36
morning rise	7947 Dec 05 18:14	4°♄34'58		morning rise	7948 Nov 17 13:19	17°♄39'16	
direct	7947 Dec 08 00:25	4°♄12'54		direct	7948 Nov 19 18:53	17°♄21'00	
asc. node	7947 Dec 09 00:55	4°♄17'33		asc. node	7948 Nov 24 21:57	19°♄03'00	
morning max el	7947 Dec 14 22:19	7°♄43'05	17°51'16	morning max el	7948 Nov 27 10:16	21°♄06'46	18°12'17
	7947 Dec 29 09:34	0°♄			7948 Dec 04 04:09	0°♄	
morning set	7947 Dec 30 16:48	2°♄20'37		morning set	7948 Dec 13 04:21	16°♄09'22	
					7948 Dec 20 13:51	0°♄	
superior conj	7948 Jan 10 14:09	21°♄35'10	0°16'58	superior conj	7948 Dec 22 15:53	3°♄47'52	0°51'13
minimum elong	7948 Jan 10 15:41	21°♄41'43	0°16'52	minimum elong	7948 Dec 22 19:13	4°♄02'55	0°50'53
desc. node	7948 Jan 12 21:42	25°♄31'03		desc. node	7948 Dec 29 18:41	16°♄16'36	
	7948 Jan 15 14:07	0°♄		max. Earth dist.	7948 Dec 30 07:13	17°♄09'47	1.41303 AU
max. Earth dist.	7948 Jan 17 20:44	3°♄44'15	1.43193 AU	evening rise	7949 Jan 04 04:31	25°♄15'54	
evening rise	7948 Jan 24 20:17	14°♄52'34			7949 Jan 07 03:17	0°♄	
	7948 Feb 03 18:40	0°♄			7949 Jan 27 14:38	0°♄	
evening max el	7948 Feb 25 10:17	28°♄50'08	21°45'44	evening max el	7949 Feb 07 02:22	12°♄31'53	23°04'39
	7948 Feb 26 14:55	0°♄		retrograde	7949 Feb 17 09:30	18°♄38'01	
retrograde	7948 Mar 05 13:59	4°♄15'31		asc. node	7949 Feb 20 21:04	17°♄37'29	
asc. node	7948 Mar 06 00:00	4°♄14'37		evening set	7949 Feb 22 07:11	16°♄36'10	
evening set	7948 Mar 10 00:12	2°♄28'35		inferior conj	7949 Feb 27 16:25	10°♄10'42	2°04'36
	7948 Mar 12 10:32	30°♄		minimum elong	7949 Feb 27 14:11	10°♄18'23	2°03'56
inferior conj	7948 Mar 15 07:48	26°♄10'22	2°39'18	min. Earth dist.	7949 Feb 27 06:52	10°♄43'39	0.68363 AU
minimum elong	7948 Mar 15 05:35	26°♄18'05	2°38'46	morning rise	7949 Mar 04 21:08	4°♄03'38	
min. Earth dist.	7948 Mar 15 10:09	26°♄02'12	0.68313 AU	direct	7949 Mar 09 06:28	2°♄17'19	
morning rise	7948 Mar 20 10:49	19°♄58'30		morning max el	7949 Mar 17 21:59	7°♄17'25	21°18'55
direct	7948 Mar 25 10:10	17°♄49'53		desc. node	7949 Mar 27 18:17	19°♄17'07	
morning max el	7948 Apr 04 07:06	23°♄39'40	22°43'47		7949 Apr 04 07:26	0°♄	
desc. node	7948 Apr 09 21:20	29°♄59'33		morning set	7949 Apr 18 04:56	21°♄08'53	
	7948 Apr 09 21:29	0°♄			7949 Apr 23 17:35	0°♄	
	7948 Apr 30 22:56	0°♄		max. Earth dist.	7949 Apr 25 04:36	2°♄23'07	1.42328 AU
morning set	7948 May 08 11:03	12°♄01'05					
max. Earth dist.	7948 May 13 02:43	19°♄49'13	1.40226 AU	superior conj	7949 May 02 13:13	14°♄44'56	-2°02'20
	7948 May 18 22:28	0°♄		minimum elong	7949 May 02 18:05	15°♄05'48	2°02'09
					7949 May 11 04:39	0°♄	

evening rise	7949 May 13 20:57	4° $\Pi$ 50'37		superior conj	7950 Apr 13 04:47	24° $\Upsilon$ 54'18	-2°11'38
asc. node	7949 May 19 20:04	15° $\Pi$ 31'37		minimum elong	7950 Apr 13 05:03	24° $\Upsilon$ 55'21	2°11'41
	7949 May 29 13:46	0° $\mathfrak{S}$			7950 Apr 16 06:59	0° $\mathfrak{B}$	
evening max el	7949 May 30 07:38	0° $\mathfrak{S}$ 46'01	18°07'28	evening rise	7950 Apr 26 04:43	16° $\mathfrak{B}$ 47'48	
retrograde	7949 Jun 06 01:44	4° $\mathfrak{S}$ 12'05			7950 May 03 22:11	0° $\Pi$	
evening set	7949 Jun 08 13:53	3° $\mathfrak{S}$ 44'01		asc. node	7950 May 06 17:07	4° $\Pi$ 31'04	
	7949 Jun 14 02:38	30° $\mathfrak{R}$ $\Pi$		evening max el	7950 May 13 20:51	14° $\Pi$ 01'12	18°08'10
inferior conj	7949 Jun 15 08:49	28° $\Pi$ 50'38	2°14'40	retrograde	7950 May 20 06:34	17° $\Pi$ 22'10	
minimum elong	7949 Jun 15 11:55	28° $\Pi$ 43'27	2°13'42	evening set	7950 May 23 02:02	16° $\Pi$ 41'54	
min. Earth dist.	7949 Jun 18 15:32	25° $\Pi$ 47'53	0.60423 AU	inferior conj	7950 May 29 06:56	11° $\Pi$ 29'27	2°58'03
morning rise	7949 Jun 22 07:16	22° $\Pi$ 58'23		minimum elong	7950 May 29 09:20	11° $\Pi$ 23'05	2°57'29
desc. node	7949 Jun 23 17:46	22° $\Pi$ 09'25		min. Earth dist.	7950 Jun 01 02:46	8° $\Pi$ 30'07	0.62635 AU
direct	7949 Jun 28 20:36	20° $\Pi$ 52'41		morning rise	7950 Jun 04 14:57	5° $\Pi$ 21'41	
morning max el	7949 Jul 13 04:28	28° $\Pi$ 49'41	27°47'39	desc. node	7950 Jun 10 14:46	2° $\Pi$ 52'34	
	7949 Jul 14 08:07	0° $\mathfrak{S}$		direct	7950 Jun 11 09:34	2° $\Pi$ 50'38	
	7949 Aug 04 09:41	0° $\mathcal{O}$		morning max el	7950 Jun 25 11:02	10° $\Pi$ 53'19	27°52'56
morning set	7949 Aug 14 14:25	19° $\mathcal{O}$ 36'07			7950 Jul 10 11:02	0° $\mathfrak{S}$	
asc. node	7949 Aug 15 19:25	22° $\mathcal{O}$ 07'48			7950 Jul 27 17:40	0° $\mathcal{O}$	
	7949 Aug 19 11:17	0° $\mathfrak{M}$		morning set	7950 Jul 29 13:51	3° $\mathcal{O}$ 40'45	
max. Earth dist.	7949 Aug 20 17:09	2° $\mathfrak{M}$ 43'48	1.31771 AU	asc. node	7950 Aug 02 16:23	12° $\mathcal{O}$ 11'57	
				max. Earth dist.	7950 Aug 03 22:46	14° $\mathcal{O}$ 54'04	1.32306 AU
superior conj	7949 Aug 21 20:00	5° $\mathfrak{M}$ 11'46	0°58'14	superior conj	7950 Aug 06 04:48	19° $\mathcal{O}$ 46'15	0°35'16
minimum elong	7949 Aug 21 17:51	4° $\mathfrak{M}$ 59'54	0°57'47	minimum elong	7950 Aug 06 03:15	19° $\mathcal{O}$ 37'48	0°34'50
evening rise	7949 Aug 28 14:08	20° $\mathfrak{M}$ 00'31			7950 Aug 10 21:12	0° $\mathfrak{M}$	
	7949 Sep 02 10:05	0° $\mathfrak{L}$		evening rise	7950 Aug 13 01:45	4° $\mathfrak{M}$ 43'33	
desc. node	7949 Sep 19 16:42	27° $\mathfrak{L}$ 51'47			7950 Aug 26 10:58	0° $\mathfrak{L}$	
	7949 Sep 21 12:30	0° $\mathfrak{M}$		evening max el	7950 Sep 06 07:04	13° $\mathfrak{L}$ 50'25	23°55'37
evening max el	7949 Sep 24 18:42	3° $\mathfrak{M}$ 23'12	25°28'59	desc. node	7950 Sep 06 13:47	14° $\mathfrak{L}$ 06'27	
retrograde	7949 Oct 08 16:47	10° $\mathfrak{M}$ 25'42		retrograde	7950 Sep 19 23:19	20° $\mathfrak{L}$ 41'29	
evening set	7949 Oct 14 16:23	9° $\mathfrak{M}$ 02'46		evening set	7950 Sep 24 14:49	19° $\mathfrak{L}$ 54'08	
min. Earth dist.	7949 Oct 19 06:45	6° $\mathfrak{M}$ 24'46	0.57747 AU	min. Earth dist.	7950 Sep 30 17:38	16° $\mathfrak{L}$ 55'19	0.56026 AU
inferior conj	7949 Oct 22 07:16	4° $\mathfrak{M}$ 19'41	-5°15'31	inferior conj	7950 Oct 02 23:19	15° $\mathfrak{L}$ 33'43	-5°33'01
minimum elong	7949 Oct 22 12:32	4° $\mathfrak{M}$ 10'34	5°14'44	minimum elong	7950 Oct 02 22:31	15° $\mathfrak{L}$ 34'56	5°32'59
morning rise	7949 Oct 30 11:00	0° $\mathfrak{M}$ 03'14		morning rise	7950 Oct 11 08:22	11° $\mathfrak{L}$ 36'48	
	7949 Oct 30 16:43	30° $\mathfrak{R}$ $\mathfrak{L}$		direct	7950 Oct 14 02:40	11° $\mathfrak{L}$ 17'19	
direct	7949 Nov 01 20:21	29° $\mathfrak{L}$ 45'51		morning max el	7950 Oct 24 06:41	16° $\mathfrak{L}$ 04'01	19°58'20
	7949 Nov 03 22:46	0° $\mathfrak{M}$		asc. node	7950 Oct 29 15:57	22° $\mathfrak{L}$ 24'37	
morning max el	7949 Nov 10 14:11	3° $\mathfrak{M}$ 57'02	18°54'10		7950 Nov 03 11:09	0° $\mathfrak{M}$	
asc. node	7949 Nov 11 18:57	5° $\mathfrak{M}$ 10'24		morning set	7950 Nov 11 06:48	15° $\mathfrak{M}$ 00'05	
	7949 Nov 26 20:55	0° $\mathfrak{X}$			7950 Nov 18 15:42	0° $\mathfrak{X}$	
morning set	7949 Nov 27 02:08	0° $\mathfrak{X}$ 25'35					
superior conj	7949 Dec 05 12:57	16° $\mathfrak{X}$ 55'20	1°16'11	superior conj	7950 Nov 19 00:25	0° $\mathfrak{X}$ 43'37	1°32'11
minimum elong	7949 Dec 05 16:12	17° $\mathfrak{X}$ 10'48	1°15'56	minimum elong	7950 Nov 19 02:37	0° $\mathfrak{X}$ 54'37	1°32'09
max. Earth dist.	7949 Dec 12 13:12	29° $\mathfrak{X}$ 50'39	1.39169 AU	max. Earth dist.	7950 Nov 24 19:08	11° $\mathfrak{X}$ 57'39	1.37047 AU
	7949 Dec 12 15:19	0° $\mathfrak{Z}$		evening rise	7950 Nov 28 13:49	18° $\mathfrak{X}$ 55'27	
evening rise	7949 Dec 16 10:37	6° $\mathfrak{Z}$ 37'38		desc. node	7950 Dec 03 12:42	27° $\mathfrak{X}$ 35'10	
desc. node	7949 Dec 16 15:41	6° $\mathfrak{Z}$ 59'14			7950 Dec 04 23:08	0° $\mathfrak{Z}$	
	7949 Dec 31 03:51	0° $\mathfrak{A}$			7950 Dec 25 08:15	0° $\mathfrak{A}$	
evening max el	7950 Jan 20 15:58	26° $\mathfrak{A}$ 16'38	24°24'22	evening max el	7951 Jan 03 05:05	10° $\mathfrak{A}$ 03'49	25°37'53
	7950 Jan 24 21:59	0° $\mathfrak{H}$		retrograde	7951 Jan 15 12:42	17° $\mathfrak{A}$ 07'41	
retrograde	7950 Feb 01 01:25	2° $\mathfrak{H}$ 57'05		evening set	7951 Jan 21 11:36	14° $\mathfrak{A}$ 40'36	
evening set	7950 Feb 06 11:31	0° $\mathfrak{H}$ 41'29		asc. node	7951 Jan 25 15:13	10° $\mathfrak{A}$ 11'51	
	7950 Feb 07 05:47	30° $\mathfrak{R}$ $\mathfrak{A}$		min. Earth dist.	7951 Jan 25 20:00	9° $\mathfrak{A}$ 56'49	0.67288 AU
asc. node	7950 Feb 07 18:09	29° $\mathfrak{A}$ 29'01		inferior conj	7951 Jan 27 04:13	8° $\mathfrak{A}$ 14'06	0°30'39
min. Earth dist.	7950 Feb 11 02:56	25° $\mathfrak{A}$ 23'07	0.68014 AU	minimum elong	7951 Jan 27 03:27	8° $\mathfrak{A}$ 16'33	0°30'27
inferior conj	7950 Feb 11 23:50	24° $\mathfrak{A}$ 13'02	1°21'33	morning rise	7951 Feb 01 19:44	2° $\mathfrak{A}$ 21'32	
minimum elong	7950 Feb 11 22:05	24° $\mathfrak{A}$ 18'55	1°20'59	direct	7951 Feb 05 04:03	1° $\mathfrak{A}$ 17'11	
morning rise	7950 Feb 17 08:45	18° $\mathfrak{A}$ 12'12		morning max el	7951 Feb 12 02:06	5° $\mathfrak{A}$ 05'34	19°05'54
direct	7950 Feb 21 04:53	16° $\mathfrak{A}$ 47'57		greatest brilliancy	7951 Feb 25 16:39	23° $\mathfrak{A}$ 23'31	-0.7m
morning max el	7950 Feb 28 20:07	21° $\mathfrak{A}$ 06'23	20°05'07	desc. node	7951 Mar 01 12:09	29° $\mathfrak{A}$ 13'03	
	7950 Mar 08 05:24	0° $\mathfrak{H}$			7951 Mar 02 00:21	0° $\mathfrak{H}$	
desc. node	7950 Mar 14 15:13	9° $\mathfrak{H}$ 04'17		morning set	7951 Mar 07 06:21	8° $\mathfrak{H}$ 07'08	
morning set	7950 Mar 28 03:47	29° $\mathfrak{H}$ 28'30		max. Earth dist.	7951 Mar 21 04:52	29° $\mathfrak{H}$ 51'44	1.45121 AU
	7950 Mar 28 11:57	0° $\mathfrak{Y}$			7951 Mar 21 06:59	0° $\mathfrak{Y}$	
max. Earth dist.	7950 Apr 07 13:28	15° $\mathfrak{Y}$ 47'32	1.44023 AU	superior conj	7951 Mar 23 21:08	4° $\mathfrak{Y}$ 05'02	-2°02'22

minimum elong	7951 Mar 23 14:26	3° $\Upsilon$ 38'36	2°02'01	desc. node	7952 Feb 16 09:07	19° $\approx$ 37'43	
evening rise	7951 Apr 07 14:15	27° $\Upsilon$ 46'52			7952 Feb 22 21:44	0° $\text{H}$	
	7951 Apr 08 22:43	0° $\text{B}$					
asc. node	7951 Apr 23 14:11	22° $\text{B}$ 57'59		superior conj	7952 Mar 02 01:49	12° $\text{H}$ 51'07	-1°33'18
evening max el	7951 Apr 27 09:36	27° $\text{B}$ 28'57	18°27'21	minimum elong	7952 Mar 01 16:14	12° $\text{H}$ 13'36	1°32'17
	7951 Apr 30 13:09	0° $\text{II}$		max. Earth dist.	7952 Mar 03 00:14	14° $\text{H}$ 18'55	1.45503 AU
retrograde	7951 May 03 20:35	0° $\text{II}$ 58'43			7952 Mar 13 00:40	0° $\Upsilon$	
evening set	7951 May 06 23:16	0° $\text{II}$ 04'51		evening rise	7952 Mar 18 00:30	7° $\Upsilon$ 50'35	
	7951 May 07 02:36	30° $\text{K}$ $\text{B}$		greatest brilliancy	7952 Mar 28 06:24	23° $\Upsilon$ 53'58	-0.8m
inferior conj	7951 May 12 18:06	24° $\text{B}$ 34'37	3°19'39		7952 Apr 01 06:59	0° $\text{B}$	
minimum elong	7951 May 12 19:10	24° $\text{B}$ 31'28	3°19'27	asc. node	7952 Apr 09 11:17	10° $\text{B}$ 42'36	
min. Earth dist.	7951 May 14 23:08	21° $\text{B}$ 58'39	0.64608 AU	evening max el	7952 Apr 09 19:22	11° $\text{B}$ 03'24	19°04'03
morning rise	7951 May 18 14:11	18° $\text{B}$ 19'24		retrograde	7952 Apr 16 16:11	14° $\text{B}$ 54'34	
direct	7951 May 25 06:36	15° $\text{B}$ 34'35		evening set	7952 Apr 20 02:23	13° $\text{B}$ 46'21	
desc. node	7951 May 28 11:47	16° $\text{B}$ 07'47		inferior conj	7952 Apr 25 14:39	7° $\text{B}$ 59'54	3°24'12
morning max el	7951 Jun 07 20:42	23° $\text{B}$ 31'57	27°22'31	minimum elong	7952 Apr 25 14:23	8° $\text{B}$ 00'44	3°24'07
	7951 Jun 13 14:56	0° $\text{II}$		min. Earth dist.	7952 Apr 27 04:14	6° $\text{B}$ 00'09	0.66205 AU
	7951 Jul 03 19:10	0° $\text{E}$		morning rise	7952 May 01 01:58	1° $\text{B}$ 42'16	
morning set	7951 Jul 13 04:41	17° $\text{E}$ 17'11			7952 May 03 10:50	30° $\text{K}$ $\Upsilon$	
max. Earth dist.	7951 Jul 17 20:36	26° $\text{E}$ 39'47	1.33323 AU	direct	7952 May 07 10:26	28° $\Upsilon$ 55'59	
	7951 Jul 19 11:07	0° $\Omega$			7952 May 11 18:28	0° $\text{B}$	
asc. node	7951 Jul 20 13:23	2° $\Omega$ 18'13		desc. node	7952 May 14 08:46	1° $\text{B}$ 29'36	
				morning max el	7952 May 20 07:07	6° $\text{B}$ 35'11	26°23'08
superior conj	7951 Jul 21 09:10	4° $\Omega$ 03'01	0°08'23		7952 Jun 07 08:56	0° $\text{II}$	
minimum elong	7951 Jul 21 08:45	4° $\Omega$ 00'48	0°08'10	morning set	7952 Jun 25 07:33	0° $\text{E}$ 16'25	
behind sun begin	7951 Jul 21 03:59	3° $\Omega$ 35'31			7952 Jun 25 04:03	0° $\text{E}$	
behind sun end	7951 Jul 21 13:31	4° $\Omega$ 26'07		max. Earth dist.	7952 Jun 29 07:59	7° $\text{E}$ 58'54	1.34817 AU
evening rise	7951 Jul 28 12:59	19° $\Omega$ 21'40					
	7951 Aug 02 17:57	0° $\text{H}$		superior conj	7952 Jul 04 06:45	17° $\text{E}$ 55'44	-0°21'34
evening max el	7951 Aug 18 20:04	24° $\text{H}$ 04'33	22°16'38	minimum elong	7952 Jul 04 07:59	18° $\text{E}$ 02'02	0°21'27
desc. node	7951 Aug 24 10:53	28° $\text{H}$ 25'52		asc. node	7952 Jul 06 10:25	22° $\text{E}$ 22'52	
	7951 Aug 28 04:05	0° $\text{E}$			7952 Jul 10 01:54	0° $\Omega$	
retrograde	7951 Aug 31 17:24	0° $\text{E}$ 29'21		evening rise	7952 Jul 11 21:54	3° $\Omega$ 49'08	
evening set	7951 Sep 03 21:04	0° $\text{E}$ 07'24			7952 Jul 26 16:40	0° $\text{H}$	
	7951 Sep 04 09:12	30° $\text{K}$ $\text{H}$		evening max el	7952 Jul 30 18:07	4° $\text{H}$ 40'29	20°47'19
min. Earth dist.	7951 Sep 12 02:04	26° $\text{H}$ 32'36	0.54942 AU	desc. node	7952 Aug 10 07:58	10° $\text{H}$ 19'18	
inferior conj	7951 Sep 12 22:17	26° $\text{H}$ 04'11	-5°00'18	retrograde	7952 Aug 11 05:41	10° $\text{H}$ 21'21	
minimum elong	7951 Sep 12 14:30	26° $\text{H}$ 15'08	4°58'55	evening set	7952 Aug 13 09:01	10° $\text{H}$ 10'19	
morning rise	7951 Sep 21 09:36	22° $\text{H}$ 16'04		inferior conj	7952 Aug 22 14:49	6° $\text{H}$ 13'20	-3°34'39
direct	7951 Sep 24 16:46	21° $\text{H}$ 51'40		minimum elong	7952 Aug 22 05:44	6° $\text{H}$ 26'17	3°31'51
morning max el	7951 Oct 06 10:10	27° $\text{H}$ 21'48	21°24'09	min. Earth dist.	7952 Aug 23 11:20	5° $\text{H}$ 44'06	0.54738 AU
	7951 Oct 08 23:40	0° $\text{E}$		morning rise	7952 Aug 31 02:27	2° $\text{H}$ 14'22	
asc. node	7951 Oct 16 12:56	10° $\text{E}$ 30'34		direct	7952 Sep 04 00:57	1° $\text{H}$ 41'11	
morning set	7951 Oct 26 15:47	29° $\text{E}$ 45'23		morning max el	7952 Sep 17 03:08	7° $\text{H}$ 57'44	23°05'52
	7951 Oct 26 18:35	0° $\text{H}$		asc. node	7952 Oct 02 09:56	29° $\text{H}$ 16'01	
					7952 Oct 02 19:32	0° $\text{E}$	
superior conj	7951 Nov 02 22:07	15° $\text{H}$ 00'47	1°40'13	morning set	7952 Oct 10 03:00	14° $\text{E}$ 35'21	
minimum elong	7951 Nov 02 22:59	15° $\text{H}$ 05'14	1°40'17				
max. Earth dist.	7951 Nov 07 06:14	23° $\text{H}$ 51'49	1.35144 AU	superior conj	7952 Oct 17 02:48	29° $\text{E}$ 36'58	1°41'14
	7951 Nov 10 09:24	0° $\text{K}$		minimum elong	7952 Oct 17 02:22	29° $\text{E}$ 34'42	1°41'17
evening rise	7951 Nov 11 10:34	2° $\text{K}$ 00'03			7952 Oct 17 07:06	0° $\text{H}$	
desc. node	7951 Nov 20 09:46	17° $\text{K}$ 59'50		max. Earth dist.	7952 Oct 20 01:13	5° $\text{H}$ 50'43	1.33609 AU
	7951 Nov 27 23:03	0° $\text{B}$		evening rise	7952 Oct 24 20:55	15° $\text{H}$ 40'58	
evening max el	7951 Dec 16 18:24	23° $\text{B}$ 47'45	26°37'50		7952 Nov 01 12:21	0° $\text{K}$	
	7951 Dec 25 05:32	0° $\approx$		desc. node	7952 Nov 06 06:51	8° $\text{K}$ 07'02	
retrograde	7951 Dec 29 18:34	1° $\approx$ 04'05			7952 Nov 21 14:17	0° $\text{B}$	
	7952 Jan 02 23:14	30° $\text{K}$ $\text{B}$		evening max el	7952 Nov 28 07:12	7° $\text{B}$ 17'45	27°16'58
evening set	7952 Jan 05 05:40	28° $\text{B}$ 29'17		retrograde	7952 Dec 11 18:29	14° $\text{B}$ 37'46	
min. Earth dist.	7952 Jan 09 07:47	24° $\text{B}$ 20'20	0.66195 AU	evening set	7952 Dec 18 15:27	12° $\text{B}$ 01'20	
inferior conj	7952 Jan 11 03:35	22° $\text{B}$ 10'15	-0°27'30	min. Earth dist.	7952 Dec 22 11:58	8° $\text{B}$ 26'18	0.64750 AU
minimum elong	7952 Jan 11 04:20	22° $\text{B}$ 07'59	0°27'02	inferior conj	7952 Dec 24 19:32	5° $\text{B}$ 55'26	-1°31'54
asc. node	7952 Jan 12 12:17	20° $\text{B}$ 34'39		minimum elong	7952 Dec 24 22:18	5° $\text{B}$ 47'52	1°30'37
morning rise	7952 Jan 17 03:54	16° $\text{B}$ 28'23		asc. node	7952 Dec 29 09:20	1° $\text{B}$ 33'46	
direct	7952 Jan 20 02:04	15° $\text{B}$ 40'44		morning rise	7952 Dec 31 06:38	0° $\text{B}$ 27'07	
morning max el	7952 Jan 26 14:37	19° $\text{B}$ 11'06	18°22'55		7953 Jan 01 15:46	30° $\text{K}$ $\text{K}$	
	7952 Feb 03 22:12	0° $\approx$		direct	7953 Jan 02 20:33	29° $\text{K}$ 52'26	
morning set	7952 Feb 15 09:30	18° $\approx$ 03'26			7953 Jan 04 01:23	0° $\text{B}$	

morning max el	7953 Jan 09 07:03	3°  15'34	17°56'44	morning set	7954 Jan 09 03:32	12°  02'15	
morning set	7953 Jan 26 18:06	29°  26'59			7954 Jan 19 13:53	0° 	
	7953 Jan 27 02:01	0° 		desc. node	7954 Jan 20 03:07	0°  55'21	
desc. node	7953 Feb 02 06:06	10° 	13'03				
				superior conj	7954 Jan 21 00:45	2°  25'35	-0°06'35
superior conj	7953 Feb 09 14:09	22°  05'09	-0°51'09	minimum elong	7954 Jan 21 00:05	2°  22'49	0°06'22
minimum elong	7953 Feb 09 08:12	21°  41'24	0°50'15	behind sun begin	7954 Jan 20 15:31	1°  47'07	
max. Earth dist.	7953 Feb 13 19:54	28°  48'33	1.45137 AU	behind sun end	7954 Jan 21 08:40	2°  58'26	
	7953 Feb 14 14:04	0° 		max. Earth dist.	7954 Jan 27 13:07	13°  03'51	1.44076 AU
evening rise	7953 Feb 25 16:46	17°  15'47		evening rise	7954 Feb 05 04:06	26°  37'02	
	7953 Mar 06 00:53	0° 			7954 Feb 07 08:58	0° 	
greatest brilliancy	7953 Mar 12 04:54	9°  12'51	-0.6m		7954 Feb 28 00:32	0° 	
evening max el	7953 Mar 24 00:19	24°  40'03	19°56'48	evening max el	7954 Mar 06 23:48	8°  18'21	21°03'03
asc. node	7953 Mar 27 08:22	27°  31'50		asc. node	7954 Mar 14 05:26	13°  31'11	
retrograde	7953 Mar 31 14:21	29°  03'08		retrograde	7954 Mar 15 12:47	13°  30'18	
evening set	7953 Apr 04 08:52	27°  40'11		evening set	7954 Mar 19 16:49	11°  42'20	
inferior conj	7953 Apr 09 17:31	21°  39'25	3°15'16	inferior conj	7954 Mar 25 00:14	5°  29'42	2°55'14
minimum elong	7953 Apr 09 16:12	21°  43'53	3°15'04	minimum elong	7954 Mar 24 22:13	5°  36'38	2°54'49
min. Earth dist.	7953 Apr 10 16:30	20°  22'04	0.67369 AU	min. Earth dist.	7954 Mar 25 09:51	4°  56'22	0.68094 AU
morning rise	7953 Apr 14 23:15	15°  22'25			7954 Mar 29 08:47	30°  15'19	
direct	7953 Apr 20 20:09	12°  45'09		morning rise	7954 Mar 30 03:25	29°  15'19	
desc. node	7953 May 01 05:44	18°  26'01		direct	7954 Apr 04 10:52	26°  54'41	
morning max el	7953 May 02 16:40	19°  51'28	25°03'56		7954 Apr 11 11:47	0° 	
	7953 May 11 08:26	0° 		morning max el	7954 Apr 15 01:48	3°  14'44	23°35'07
	7953 May 31 12:26	0° 		desc. node	7954 Apr 18 02:43	6°  31'33	
morning set	7953 Jun 07 17:59	12°  26'19			7954 May 05 11:55	0° 	
max. Earth dist.	7953 Jun 11 09:06	19°  02'32	1.36729 AU	morning set	7954 May 20 06:26	23°  32'12	
	7953 Jun 17 02:59	0° 		max. Earth dist.	7954 May 24 04:46	0°  18'57	1.38926 AU
					7954 May 24 00:27	0° 	
superior conj	7953 Jun 17 18:34	1°  56'28	-0°53'09				
minimum elong	7953 Jun 17 21:47	1°  32'18	0°52'42	superior conj	7954 May 31 16:56	13°  56'10	-1°24'05
asc. node	7953 Jun 23 07:28	12°  52'15		minimum elong	7954 May 31 21:59	14°  19'54	1°23'29
evening rise	7953 Jun 26 02:09	17°  59'04			7954 Jun 09 01:37	0° 	
	7953 Jul 02 06:16	0° 		evening rise	7954 Jun 09 22:56	1°  43'40	
evening max el	7953 Jul 13 05:23	15°  58'53	19°36'17	asc. node	7954 Jun 10 04:29	2°  40'37	
retrograde	7953 Jul 23 00:01	20°  48'11		evening max el	7954 Jun 26 04:33	28°  00'40	18°45'51
evening set	7953 Jul 24 20:30	20°  38'32			7954 Jun 28 12:44	0° 	
desc. node	7953 Jul 28 05:00	19°  36'40		retrograde	7954 Jul 04 10:14	2°  05'22	
inferior conj	7953 Aug 02 15:38	16°  34'27	-1°39'43	evening set	7954 Jul 06 10:51	1°  51'28	
minimum elong	7953 Aug 02 11:06	16°  41'37	1°38'05		7954 Jul 10 19:19	30°  15'12	
min. Earth dist.	7953 Aug 04 23:36	15°  06'19	0.55484 AU	inferior conj	7954 Jul 14 11:08	27°  30'24	0°11'12
morning rise	7953 Aug 10 23:20	12°  05'15		minimum elong	7954 Jul 14 11:34	27°  29'36	0°10'54
direct	7953 Aug 15 16:45	11°  15'24		transit middle	7954 Jul 14 11:34	27°  29'36	0°10'54
morning max el	7953 Aug 29 15:53	18°  13'55	24°51'03	transit begin	7954 Jul 14 08:52	27°  34'35	
	7953 Sep 08 10:13	0° 		transit end	7954 Jul 14 14:17	27°  24'38	
asc. node	7953 Sep 19 06:55	18°  31'16		desc. node	7954 Jul 15 02:04	27°  02'55	
morning set	7953 Sep 24 14:46	29°  25'12		min. Earth dist.	7954 Jul 17 15:56	25°  50'31	0.57051 AU
	7953 Sep 24 21:17	0° 		morning rise	7954 Jul 22 08:49	22°  24'15	
				direct	7954 Jul 27 22:56	21°  07'58	
superior conj	7953 Oct 01 11:54	14°  24'39	1°36'04	morning max el	7954 Aug 11 06:43	28°  37'13	26°23'12
minimum elong	7953 Oct 01 10:28	14°  16'50	1°35'59		7954 Aug 12 15:48	0° 	
max. Earth dist.	7953 Oct 03 04:04	18°  03'50	1.32511 AU		7954 Sep 02 00:28	0° 	
evening rise	7953 Oct 08 17:24	29°  49'28		asc. node	7954 Sep 06 03:55	8°  07'26	
	7953 Oct 08 19:27	0° 		morning set	7954 Sep 09 01:21	14°  08'49	
desc. node	7953 Oct 24 03:56	27°  14'49'15					
	7953 Oct 25 13:37	0° 		superior conj	7954 Sep 15 23:13	29°  15'45	1°25'20
evening max el	7953 Nov 10 17:58	20°  22'27	27°28'41	minimum elong	7954 Sep 15 21:10	29°  10'42	1°25'04
retrograde	7953 Nov 24 11:54	27°  39'48			7954 Sep 16 07:13	0° 	
evening set	7953 Dec 01 14:10	25°  10'33		max. Earth dist.	7954 Sep 16 12:20	0°  28'20	1.31867 AU
min. Earth dist.	7953 Dec 05 06:48	22°  05'36	0.62990 AU	evening rise	7954 Sep 22 20:58	14°  16'06	
inferior conj	7953 Dec 08 01:20	19°  23'24	-2°40'29		7954 Sep 30 20:07	0° 	
minimum elong	7953 Dec 08 06:22	19°  11'05	2°38'27	desc. node	7954 Oct 11 00:59	16°  15'55'28	
morning rise	7953 Dec 15 00:35	14°  21'13			7954 Oct 21 05:33	0° 	
asc. node	7953 Dec 16 06:21	13°  21'42		evening max el	7954 Oct 24 00:20	2°  48'39	27°08'05
direct	7953 Dec 17 08:37	13°  24'46'02		retrograde	7954 Nov 06 21:36	9°  59'55	
morning max el	7953 Dec 24 00:22	17°  21'11'21	17°47'59	evening set	7954 Nov 13 22:03	7°  48'41	
	7954 Jan 02 04:15	0° 		min. Earth dist.	7954 Nov 17 15:06	5°  05'40	0.60993 AU

inferior conj	7954 Nov 20 17:45	2°♊25'09	-3°49'02	minimum elong	7955 Nov 03 00:05	14°♍38'17	4°47'58
minimum elong	7954 Nov 21 00:36	2°♊10'22	3°46'47	morning rise	7955 Nov 10 15:59	10°♍21'08	
	7954 Nov 23 16:45	30°♍		direct	7955 Nov 12 22:37	10°♍03'31	
morning rise	7954 Nov 28 05:26	27°♍32'50		asc. node	7955 Nov 20 00:24	13°♍05'02	
direct	7954 Nov 30 10:43	27°♍12'53		morning max el	7955 Nov 21 00:05	13°♍59'00	18°27'20
asc. node	7954 Dec 03 03:22	27°♍43'30			7955 Dec 01 22:24	0°♊	
	7954 Dec 06 18:04	0°♊		morning set	7955 Dec 06 23:34	9°♊30'40	
morning max el	7954 Dec 07 15:13	0°♊48'57	17°57'39				
morning set	7954 Dec 23 07:10	25°♊28'49		superior conj	7955 Dec 15 23:30	26°♊36'28	1°02'57
	7954 Dec 25 18:13	0°♋		minimum elong	7955 Dec 16 02:59	26°♊52'30	1°02'37
					7955 Dec 17 19:53	0°♋	
superior conj	7955 Jan 02 12:57	13°♋59'09	0°32'36	max. Earth dist.	7955 Dec 23 10:47	9°♋57'58	1.40419 AU
minimum elong	7955 Jan 02 15:33	14°♋10'29	0°32'20	desc. node	7955 Dec 24 21:05	12°♋25'00	
desc. node	7955 Jan 07 00:06	21°♋40'30		evening rise	7955 Dec 27 18:57	17°♋18'35	
max. Earth dist.	7955 Jan 10 02:08	26°♋50'11	1.42439 AU		7956 Jan 04 17:11	0°♌	
	7955 Jan 12 00:23	0°♌			7956 Jan 26 05:15	0°♌	
evening rise	7955 Jan 16 01:37	6°♌30'47		evening max el	7956 Jan 31 09:13	5°♌42'25	23°38'55
	7955 Jan 31 14:57	0°♌		retrograde	7956 Feb 11 03:38	12°♌03'27	
evening max el	7955 Feb 17 18:17	21°♌58'59	22°18'53	asc. node	7956 Feb 15 23:33	10°♌10'07	
retrograde	7955 Feb 27 09:41	27°♌42'00		evening set	7956 Feb 16 06:36	9°♌55'36	
asc. node	7955 Mar 01 02:29	27°♌27'18		min. Earth dist.	7956 Feb 21 02:38	4°♌17'44	0.68268 AU
evening set	7955 Mar 04 00:35	25°♌48'54		inferior conj	7956 Feb 21 17:01	3°♌28'35	1°47'19
inferior conj	7955 Mar 09 08:42	19°♌27'18	2°25'38	minimum elong	7956 Feb 21 14:56	3°♌35'43	1°46'40
minimum elong	7955 Mar 09 06:26	19°♌35'13	2°25'02		7956 Feb 24 08:57	30°♌	
min. Earth dist.	7955 Mar 09 06:00	19°♌36'42	0.68386 AU	morning rise	7956 Feb 26 23:14	27°♌24'06	
morning rise	7955 Mar 14 12:06	13°♌17'10		direct	7956 Mar 02 02:55	25°♌47'12	
direct	7955 Mar 19 05:32	11°♌17'39			7956 Mar 09 19:45	0°♌	
morning max el	7955 Mar 28 13:23	16°♌45'41	22°06'34	morning max el	7956 Mar 10 07:04	0°♌27'40	20°45'53
desc. node	7955 Apr 04 23:41	25°♌27'02		desc. node	7956 Mar 21 20:38	14°♌58'09	
	7955 Apr 08 09:43	0°♍			7956 Apr 01 02:55	0°♍	
	7955 Apr 28 13:30	0°♍		morning set	7956 Apr 08 23:43	12°♍03'08	
morning set	7955 Apr 30 15:59	3°♍22'22		max. Earth dist.	7956 Apr 17 08:22	25°♍19'33	1.43118 AU
max. Earth dist.	7955 May 06 02:57	12°♍20'57	1.41154 AU		7956 Apr 20 05:04	0°♍	
superior conj	7955 May 13 21:25	25°♍45'01	-1°50'48	superior conj	7956 Apr 24 03:16	6°♍31'52	-2°08'14
minimum elong	7955 May 14 03:06	26°♍10'19	1°50'23	minimum elong	7956 Apr 24 06:41	6°♍46'11	2°08'11
	7955 May 16 06:25	0°♎		evening rise	7956 May 06 03:27	27°♍21'44	
evening rise	7955 May 24 08:49	14°♎54'45			7956 May 07 15:09	0°♎	
asc. node	7955 May 28 01:31	21°♎44'55		asc. node	7956 May 13 22:33	10°♎58'49	
	7955 Jun 01 17:54	0°♏		evening max el	7956 May 23 00:09	23°♎42'02	18°05'26
evening max el	7955 Jun 09 12:05	10°♏38'25	18°15'48	retrograde	7956 May 29 13:18	27°♎04'05	
retrograde	7955 Jun 16 15:35	14°♏13'43		evening set	7956 Jun 01 04:42	26°♎30'55	
evening set	7955 Jun 18 23:35	13°♏51'33		inferior conj	7956 Jun 07 17:07	21°♎28'54	2°36'04
inferior conj	7955 Jun 26 04:22	9°♏09'44	1°37'49	minimum elong	7956 Jun 07 20:02	21°♎21'38	2°35'15
minimum elong	7955 Jun 26 07:13	9°♏03'38	1°36'47	min. Earth dist.	7956 Jun 10 19:47	18°♎25'09	0.61384 AU
min. Earth dist.	7955 Jun 29 13:55	6°♏16'05	0.59135 AU	morning rise	7956 Jun 14 09:12	15°♎28'58	
desc. node	7955 Jul 01 23:05	4°♏28'45		desc. node	7956 Jun 17 20:07	13°♎43'26	
morning rise	7955 Jul 03 11:44	3°♏31'44		direct	7956 Jun 21 01:42	13°♎11'41	
direct	7955 Jul 09 18:41	1°♏43'51		morning max el	7956 Jul 05 07:18	21°♎11'26	27°54'37
morning max el	7955 Jul 24 03:38	9°♏32'26	27°27'16		7956 Jul 12 22:42	0°♏	
	7955 Aug 08 20:31	0°♐			7956 Jul 31 21:35	0°♐	
morning set	7955 Aug 24 09:08	28°♐41'23		morning set	7956 Aug 07 12:13	12°♐57'38	
asc. node	7955 Aug 24 00:54	27°♐58'19		asc. node	7956 Aug 09 21:54	17°♐58'38	
	7955 Aug 25 00:03	0°♑		max. Earth dist.	7956 Aug 13 07:18	25°♐16'41	1.31943 AU
superior conj	7955 Aug 31 10:58	14°♑04'22	1°09'30	superior conj	7956 Aug 14 21:21	28°♐45'04	0°49'00
minimum elong	7955 Aug 31 08:42	13°♑51'52	1°09'06	minimum elong	7956 Aug 14 19:23	28°♐34'18	0°48'33
max. Earth dist.	7955 Aug 30 22:40	12°♑56'15	1.31678 AU		7956 Aug 15 10:58	0°♑	
evening rise	7955 Sep 07 05:15	28°♑53'45		evening rise	7956 Aug 21 16:12	13°♑36'11	
	7955 Sep 07 17:43	0°♒			7956 Aug 29 20:11	0°♒	
	7955 Sep 24 05:42	0°♒		desc. node	7956 Sep 13 19:07	22°♒17'36	
desc. node	7955 Sep 27 22:02	5°♒11'27		evening max el	7956 Sep 16 15:09	25°♒14'01	24°51'03
evening max el	7955 Oct 05 23:45	14°♒26'12	26°13'46		7956 Sep 22 20:12	0°♒	
retrograde	7955 Oct 19 21:58	21°♒31'06		retrograde	7956 Sep 30 11:24	2°♒12'28	
evening set	7955 Oct 26 10:28	19°♒48'25		evening set	7956 Oct 05 22:57	1°♒04'55	
min. Earth dist.	7955 Oct 30 12:53	17°♒13'53	0.58906 AU		7956 Oct 08 06:34	30°♒	
inferior conj	7955 Nov 02 17:14	14°♒51'08	-4°49'29	min. Earth dist.	7956 Oct 11 02:21	28°♒20'32	0.56956 AU

inferior conj	7956 Oct 13 20:55	26°♄32'19	-5°28'04	min. Earth dist.	7957 Sep 22 11:38	8°♄25'43	0.55459 AU
minimum elong	7956 Oct 14 00:04	26°♄27'10	5°27'47	inferior conj	7957 Sep 24 04:48	7°♄25'39	-5°26'05
morning rise	7956 Oct 22 03:25	22°♄25'09		minimum elong	7957 Sep 24 00:45	7°♄31'35	5°25'42
direct	7956 Oct 24 16:12	22°♄07'06		morning rise	7957 Oct 02 15:06	3°♄34'46	
morning max el	7956 Nov 02 23:28	26°♄31'44	19°18'47	direct	7957 Oct 05 14:20	3°♄13'43	
asc. node	7956 Nov 05 21:25	29°♄42'42		morning max el	7957 Oct 16 10:31	8°♄18'00	20°32'35
	7956 Nov 06 03:00	0°♄		asc. node	7957 Oct 23 18:26	17°♄20'22	
morning set	7956 Nov 20 00:42	23°♄56'21			7957 Oct 31 00:32	0°♄	
	7956 Nov 23 01:21	0°♄		morning set	7957 Nov 04 07:29	8°♄36'04	
superior conj	7956 Nov 28 03:21	10°♄03'38	1°24'00	superior conj	7957 Nov 11 19:39	24°♄05'44	1°36'30
minimum elong	7956 Nov 28 06:14	10°♄17'37	1°23'51	minimum elong	7957 Nov 11 21:18	24°♄14'04	1°36'32
max. Earth dist.	7956 Dec 04 16:40	22°♄25'07	1.38251 AU		7957 Nov 14 18:13	0°♄	
evening rise	7956 Dec 08 10:25	29°♄05'24		max. Earth dist.	7957 Nov 16 23:56	4°♄22'40	1.36189 AU
	7956 Dec 08 22:57	0°♄		evening rise	7957 Nov 20 21:32	11°♄44'09	
desc. node	7956 Dec 10 18:06	3°♄05'35		desc. node	7957 Nov 27 15:09	23°♄37'18	
	7956 Dec 28 02:13	0°♄			7957 Dec 01 11:58	0°♄	
evening max el	7957 Jan 12 22:26	19°♄28'59	24°56'42		7957 Dec 23 08:00	0°♄	
retrograde	7957 Jan 24 17:40	26°♄20'32		evening max el	7957 Dec 26 11:24	3°♄15'04	26°05'22
evening set	7957 Jan 30 09:22	23°♄59'25		retrograde	7958 Jan 08 02:55	10°♄26'21	
asc. node	7957 Feb 01 20:37	21°♄28'53		evening set	7958 Jan 14 07:11	7°♄55'09	
min. Earth dist.	7957 Feb 03 21:37	18°♄56'00	0.67759 AU	min. Earth dist.	7958 Jan 18 12:43	3°♄26'18	0.66868 AU
inferior conj	7957 Feb 04 23:24	17°♄31'14	1°00'55	asc. node	7958 Jan 19 17:41	1°♄56'29	
minimum elong	7957 Feb 04 22:00	17°♄35'51	1°00'28	inferior conj	7958 Jan 20 01:55	1°♄30'53	0°06'53
morning rise	7957 Feb 10 10:53	11°♄33'56		minimum elong	7958 Jan 20 01:44	1°♄31'27	0°06'55
direct	7957 Feb 14 01:48	10°♄18'34		transit middle	7958 Jan 20 01:44	1°♄31'27	0°06'55
morning max el	7957 Feb 21 08:46	14°♄22'25	19°38'01	transit begin	7958 Jan 19 23:09	1°♄39'28	
	7957 Mar 05 09:49	0°♄		transit end	7958 Jan 20 04:19	1°♄23'27	
greatest brilliancy	7957 Mar 06 02:58	1°♄02'58	-0.7m		7958 Jan 21 07:37	30°♄	
desc. node	7957 Mar 08 17:35	4°♄55'36		morning rise	7958 Jan 25 20:56	25°♄42'42	
morning set	7957 Mar 18 21:04	20°♄22'25		direct	7958 Jan 29 00:37	24°♄46'05	
	7957 Mar 25 02:07	0°♄		morning max el	7958 Feb 04 17:53	28°♄25'37	18°45'34
max. Earth dist.	7957 Mar 30 20:39	9°♄04'24	1.44578 AU		7958 Feb 06 05:34	0°♄	
superior conj	7957 Apr 04 08:15	16°♄13'50	-2°10'12	desc. node	7958 Feb 23 14:34	25°♄11'52	
minimum elong	7957 Apr 04 05:33	16°♄02'57	2°10'10	morning set	7958 Feb 26 08:26	29°♄29'48	
	7957 Apr 12 18:25	0°♄			7958 Feb 26 16:08	0°♄	
evening rise	7957 Apr 18 02:14	8°♄55'10		max. Earth dist.	7958 Mar 13 13:37	23°♄18'55	1.45375 AU
asc. node	7957 Apr 30 19:37	29°♄45'25		superior conj	7958 Mar 14 17:38	25°♄08'46	-1°52'14
	7957 Apr 30 23:34	0°♄		minimum elong	7958 Mar 14 08:52	24°♄34'21	1°51'34
evening max el	7957 May 06 13:27	7°♄02'54	18°14'02		7958 Mar 17 19:45	0°♄	
retrograde	7957 May 12 22:43	10°♄26'20		evening rise	7958 Mar 30 01:44	19°♄29'52	
evening set	7957 May 15 21:11	9°♄40'27			7958 Apr 05 14:22	0°♄	
inferior conj	7957 May 21 21:19	4°♄19'59	3°09'34	greatest brilliancy	7958 Apr 05 23:29	0°♄36'28	-0.9m
minimum elong	7957 May 21 23:10	4°♄14'49	3°09'11	asc. node	7958 Apr 17 16:41	17°♄55'55	
min. Earth dist.	7957 May 24 10:59	1°♄28'37	0.63514 AU	evening max el	7958 Apr 20 01:09	20°♄34'09	18°40'52
	7957 May 25 21:20	30°♄		retrograde	7958 Apr 26 15:32	24°♄11'53	
morning rise	7957 May 27 23:51	28°♄07'58		evening set	7958 Apr 29 21:14	23°♄12'11	
direct	7957 Jun 03 18:10	25°♄29'43		inferior conj	7958 May 05 12:54	17°♄34'58	3°23'24
desc. node	7957 Jun 04 17:08	25°♄32'38		minimum elong	7958 May 05 13:23	17°♄33'30	3°23'17
	7957 Jun 13 18:50	0°♄		min. Earth dist.	7958 May 07 11:25	15°♄12'55	0.65337 AU
morning max el	7957 Jun 17 15:47	3°♄31'55	27°44'03	morning rise	7958 May 11 04:50	11°♄17'59	
	7957 Jul 07 10:32	0°♄		direct	7958 May 17 18:25	8°♄30'51	
morning set	7957 Jul 22 08:21	26°♄51'06		desc. node	7958 May 22 14:09	9°♄45'42	
	7957 Jul 23 21:50	0°♄		morning max el	7958 May 31 02:08	16°♄23'11	27°00'13
max. Earth dist.	7957 Jul 27 10:08	7°♄17'37	1.32677 AU		7958 Jun 11 08:11	0°♄	
asc. node	7957 Jul 27 18:54	8°♄03'57			7958 Jun 30 06:27	0°♄	
superior conj	7957 Jul 30 04:31	13°♄12'16	0°24'16	morning set	7958 Jul 05 18:37	10°♄13'44	
minimum elong	7957 Jul 30 03:22	13°♄06'07	0°23'56	max. Earth dist.	7958 Jul 10 03:36	18°♄51'24	1.33895 AU
evening rise	7957 Aug 06 03:53	28°♄17'26		superior conj	7958 Jul 14 06:20	27°♄20'10	-0°04'03
	7957 Aug 06 23:13	0°♄		minimum elong	7958 Jul 14 06:34	27°♄21'19	0°04'07
	7957 Aug 24 05:04	0°♄		behind sun begin	7958 Jul 14 01:04	26°♄52'33	
evening max el	7957 Aug 29 02:25	5°♄30'00	23°13'09	behind sun end	7958 Jul 14 12:03	27°♄50'08	
desc. node	7957 Aug 31 16:12	7°♄46'57		asc. node	7958 Jul 14 15:54	28°♄10'21	
retrograde	7957 Sep 11 12:44	12°♄13'07			7958 Jul 15 12:43	0°♄	
evening set	7957 Sep 15 12:33	11°♄38'14		evening rise	7958 Jul 21 14:25	12°♄52'00	



	7958 Jul 30 08:19	0° $\mathbb{M}$			7959 Jul 07 06:24	0° $\mathcal{Q}$	
evening max el	7958 Aug 10 18:28	15° $\mathbb{M}$ 50'21	21°36'52	evening max el	7959 Jul 23 22:08	26° $\mathcal{Q}$ 43'36	20°14'39
desc. node	7958 Aug 18 13:17	21° $\mathbb{M}$ 08'01			7959 Jul 28 00:00	0° $\mathbb{M}$	
retrograde	7958 Aug 23 03:26	21° $\mathbb{M}$ 58'30		retrograde	7959 Aug 03 16:10	2° $\mathbb{M}$ 01'48	
evening set	7958 Aug 25 18:17	21° $\mathbb{M}$ 42'57		desc. node	7959 Aug 05 10:22	1° $\mathbb{M}$ 53'54	
inferior conj	7958 Sep 03 23:26	17° $\mathbb{M}$ 44'07	-4°29'41	evening set	7959 Aug 05 14:49	1° $\mathbb{M}$ 52'10	
minimum elong	7958 Sep 03 14:10	17° $\mathbb{M}$ 57'06	4°27'27		7959 Aug 10 23:24	30° $\mathcal{R}\mathcal{Q}$	
min. Earth dist.	7958 Sep 03 20:31	17° $\mathbb{M}$ 48'12	0.54731 AU	inferior conj	7959 Aug 14 17:43	27° $\mathcal{Q}$ 54'10	-2°47'22
morning rise	7958 Sep 12 11:06	13° $\mathbb{M}$ 53'38		minimum elong	7959 Aug 14 10:08	28° $\mathcal{Q}$ 05'19	2°44'46
direct	7958 Sep 16 00:14	13° $\mathbb{M}$ 26'13		min. Earth dist.	7959 Aug 16 06:52	26° $\mathcal{Q}$ 59'29	0.54948 AU
morning max el	7958 Sep 28 09:05	19° $\mathbb{M}$ 17'00	22°06'04	morning rise	7959 Aug 23 04:22	23° $\mathcal{Q}$ 44'11	
	7958 Oct 07 02:27	0° $\mathcal{Q}$		direct	7959 Aug 27 10:51	23° $\mathcal{Q}$ 04'47	
asc. node	7958 Oct 10 15:27	5° $\mathcal{Q}$ 44'41		morning max el	7959 Sep 09 23:09	29° $\mathcal{Q}$ 40'15	23°51'04
morning set	7958 Oct 19 17:37	23° $\mathcal{Q}$ 23'44			7959 Sep 10 07:28	0° $\mathbb{M}$	
	7958 Oct 22 20:22	0° $\mathbb{M}$		asc. node	7959 Sep 27 12:26	24° $\mathbb{M}$ 43'45	
					7959 Sep 30 05:37	0° $\mathcal{Q}$	
superior conj	7958 Oct 26 20:40	8° $\mathbb{M}$ 32'02	1°41'26	morning set	7959 Oct 04 05:14	8° $\mathcal{Q}$ 13'46	
minimum elong	7958 Oct 26 20:58	8° $\mathbb{M}$ 33'34	1°41'32				
max. Earth dist.	7958 Oct 30 13:52	16° $\mathbb{M}$ 15'20	1.34436 AU	superior conj	7959 Oct 11 03:27	23° $\mathcal{Q}$ 13'25	1°39'45
evening rise	7958 Nov 04 00:33	25° $\mathbb{M}$ 05'31		minimum elong	7959 Oct 11 02:34	23° $\mathcal{Q}$ 08'36	1°39'46
	7958 Nov 06 14:36	0° $\mathcal{Q}$		max. Earth dist.	7959 Oct 13 12:25	28° $\mathcal{Q}$ 19'49	1.33089 AU
desc. node	7958 Nov 14 12:12	13° $\mathcal{Q}$ 55'08			7959 Oct 14 07:16	0° $\mathbb{M}$	
	7958 Nov 24 23:43	0° $\mathcal{Q}$		evening rise	7959 Oct 18 15:34	8° $\mathbb{M}$ 59'05	
evening max el	7958 Dec 09 00:38	16° $\mathcal{Q}$ 54'21	26°57'29		7959 Oct 30 00:47	0° $\mathcal{Q}$	
retrograde	7958 Dec 22 06:32	24° $\mathcal{Q}$ 13'46		desc. node	7959 Nov 01 09:16	3° $\mathcal{Q}$ 52'36	
evening set	7958 Dec 28 22:01	21° $\mathcal{Q}$ 37'30			7959 Nov 21 06:26	0° $\mathcal{Q}$	
min. Earth dist.	7959 Jan 01 21:39	17° $\mathcal{Q}$ 42'58	0.65617 AU	evening max el	7959 Nov 21 13:02	0° $\mathcal{Q}$ 15'48	27°25'48
inferior conj	7959 Jan 03 22:25	15° $\mathcal{Q}$ 23'04	-0°54'08	retrograde	7959 Dec 05 03:38	7° $\mathcal{Q}$ 34'41	
minimum elong	7959 Jan 03 23:59	15° $\mathcal{Q}$ 18'34	0°53'20	evening set	7959 Dec 12 03:27	5° $\mathcal{Q}$ 00'30	
asc. node	7959 Jan 06 14:46	12° $\mathcal{Q}$ 27'47		min. Earth dist.	7959 Dec 15 22:10	1° $\mathcal{Q}$ 38'40	0.64031 AU
morning rise	7959 Jan 10 03:06	9° $\mathcal{Q}$ 46'24			7959 Dec 17 12:18	30° $\mathcal{R}\mathcal{Q}$	
direct	7959 Jan 12 21:25	9° $\mathcal{Q}$ 04'49		inferior conj	7959 Dec 18 10:26	29° $\mathcal{Q}$ 01'59	-2°00'41
morning max el	7959 Jan 19 08:20	12° $\mathcal{Q}$ 31'17	18°09'38	minimum elong	7959 Dec 18 14:10	28° $\mathcal{Q}$ 52'15	1°59'02
	7959 Jan 31 19:15	0° $\approx$		asc. node	7959 Dec 24 11:48	23° $\mathcal{Q}$ 56'38	
morning set	7959 Feb 07 00:17	10° $\approx$ 04'02		morning rise	7959 Dec 25 02:31	23° $\mathcal{Q}$ 39'58	
desc. node	7959 Feb 10 11:32	15° $\approx$ 41'33		direct	7959 Dec 27 13:40	23° $\mathcal{Q}$ 09'32	
	7959 Feb 19 10:12	0° $\mathcal{H}$		morning max el	7960 Jan 03 01:26	26° $\mathcal{Q}$ 32'34	17°50'51
					7960 Jan 06 01:27	0° $\mathcal{Q}$	
superior conj	7959 Feb 21 23:14	4° $\mathcal{H}$ 00'49	-1°16'25	morning set	7960 Jan 19 20:18	22° $\mathcal{Q}$ 01'12	
minimum elong	7959 Feb 21 14:37	3° $\mathcal{H}$ 26'51	1°15'19		7960 Jan 24 13:19	0° $\approx$	
max. Earth dist.	7959 Feb 24 09:04	7° $\mathcal{H}$ 47'55	1.45439 AU	desc. node	7960 Jan 28 08:31	6° $\approx$ 20'29	
evening rise	7959 Mar 10 03:08	29° $\mathcal{H}$ 13'43					
	7959 Mar 10 15:03	0° $\mathcal{Y}$		superior conj	7960 Feb 01 19:53	13° $\approx$ 40'12	-0°31'58
greatest brilliancy	7959 Mar 22 10:34	18° $\mathcal{Y}$ 11'58	-0.7m	minimum elong	7960 Feb 01 16:17	13° $\approx$ 25'36	0°31'21
	7959 Mar 30 18:23	0° $\mathcal{Q}$		max. Earth dist.	7960 Feb 07 04:20	22° $\approx$ 15'03	1.44767 AU
evening max el	7959 Apr 03 09:06	4° $\mathcal{Q}$ 10'25	19°24'41		7960 Feb 12 02:40	0° $\mathcal{H}$	
asc. node	7959 Apr 04 13:45	5° $\mathcal{Q}$ 18'59		evening rise	7960 Feb 17 15:28	8° $\mathcal{H}$ 33'24	
retrograde	7959 Apr 10 12:25	8° $\mathcal{Q}$ 13'50			7960 Mar 02 21:37	0° $\mathcal{Y}$	
evening set	7959 Apr 14 02:01	6° $\mathcal{Q}$ 59'31		evening max el	7960 Mar 16 11:53	17° $\mathcal{Y}$ 48'59	20°23'32
inferior conj	7959 Apr 19 12:28	1° $\mathcal{Q}$ 07'00	3°21'52	asc. node	7960 Mar 21 10:49	21° $\mathcal{Y}$ 41'24	
minimum elong	7959 Apr 19 11:42	1° $\mathcal{Q}$ 09'28	3°21'45	retrograde	7960 Mar 24 10:52	22° $\mathcal{Y}$ 27'26	
	7959 Apr 20 08:54	30° $\mathcal{R}\mathcal{Y}$		evening set	7960 Mar 28 09:22	20° $\mathcal{Y}$ 58'00	
min. Earth dist.	7959 Apr 20 19:47	29° $\mathcal{Y}$ 24'35	0.66760 AU	inferior conj	7960 Apr 02 17:14	14° $\mathcal{Y}$ 52'01	3°07'59
morning rise	7959 Apr 24 21:02	24° $\mathcal{Y}$ 49'25		minimum elong	7960 Apr 02 15:35	14° $\mathcal{Y}$ 57'42	3°07'43
direct	7959 May 01 01:04	22° $\mathcal{Y}$ 05'31		min. Earth dist.	7960 Apr 03 10:22	13° $\mathcal{Y}$ 53'32	0.67738 AU
desc. node	7959 May 09 11:09	25° $\mathcal{Y}$ 51'26		morning rise	7960 Apr 07 21:34	8° $\mathcal{Y}$ 36'12	
morning max el	7959 May 13 12:03	29° $\mathcal{Y}$ 32'32	25°51'09	direct	7960 Apr 13 12:59	6° $\mathcal{Y}$ 05'17	
	7959 May 13 22:47	0° $\mathcal{Q}$		morning max el	7960 Apr 24 21:06	12° $\mathcal{Y}$ 52'19	24°26'43
	7959 Jun 05 04:55	0° $\mathbb{I}$		desc. node	7960 Apr 25 08:07	13° $\mathcal{Y}$ 20'31	
morning set	7959 Jun 18 15:04	22° $\mathbb{I}$ 53'37			7960 May 08 16:31	0° $\mathcal{Q}$	
	7959 Jun 22 09:58	0° $\mathcal{Q}$			7960 May 28 00:17	0° $\mathbb{I}$	
max. Earth dist.	7959 Jun 22 09:58	29° $\mathbb{I}$ 59'58	1.35586 AU	morning set	7960 May 30 16:49	4° $\mathbb{I}$ 38'11	
				max. Earth dist.	7960 Jun 03 08:09	11° $\mathbb{I}$ 06'28	1.37655 AU
superior conj	7959 Jun 28 00:09	11° $\mathcal{Q}$ 00'33	-0°34'52				
minimum elong	7959 Jun 28 02:12	11° $\mathcal{Q}$ 10'53	0°34'36	superior conj	7960 Jun 10 06:45	24° $\mathbb{I}$ 05'34	-1°06'30
asc. node	7959 Jul 01 12:54	18° $\mathcal{Q}$ 13'05		minimum elong	7960 Jun 10 10:49	24° $\mathbb{I}$ 25'10	1°05'58
evening rise	7959 Jul 05 21:36	27° $\mathcal{Q}$ 12'45			7960 Jun 13 07:27	0° $\mathcal{Q}$	

asc. node	7960 Jun 17 09:54	8°♊08'30		minimum elong	7961 May 24 03:40	6°♊50'40	1°35'37
evening rise	7960 Jun 18 23:03	11°♊13'20		evening rise	7961 Jun 02 15:43	24°♊45'31	
	7960 Jun 29 04:11	0°♊		asc. node	7961 Jun 04 06:56	27°♊52'12	
evening max el	7960 Jul 05 14:45	8°♊20'50	19°12'08		7961 Jun 05 09:58	0°♊	
retrograde	7960 Jul 14 16:22	12°♊49'32		evening max el	7961 Jun 18 17:53	20°♊39'09	18°30'29
evening set	7960 Jul 16 14:00	12°♊38'32		retrograde	7961 Jun 26 11:09	24°♊29'48	
desc. node	7960 Jul 22 07:24	10°♊14'07		evening set	7961 Jun 28 14:40	24°♊12'53	
inferior conj	7960 Jul 25 01:33	8°♊27'37	-0°50'28	inferior conj	7961 Jul 06 06:25	19°♊42'51	0°51'25
minimum elong	7960 Jul 24 23:21	8°♊31'19	0°49'43	minimum elong	7961 Jul 06 08:12	19°♊39'19	0°50'39
min. Earth dist.	7960 Jul 27 20:18	6°♊36'14	0.56077 AU	desc. node	7961 Jul 09 04:25	17°♊25'34	
morning rise	7960 Aug 02 05:46	3°♊43'05		min. Earth dist.	7961 Jul 09 14:50	17°♊05'57	0.57895 AU
direct	7960 Aug 07 08:10	2°♊43'12		morning rise	7961 Jul 13 22:18	14°♊21'45	
morning max el	7960 Aug 21 11:56	9°♊55'13	25°32'53	direct	7961 Jul 19 20:00	12°♊52'35	
	7960 Sep 05 16:02	0°♊		morning max el	7961 Aug 03 05:24	20°♊31'25	26°54'38
asc. node	7960 Sep 13 09:24	14°♊08'43			7961 Aug 11 09:31	0°♊	
morning set	7960 Sep 17 16:39	23°♊01'23			7961 Aug 29 08:35	0°♊	
	7960 Sep 20 22:01	0°♊		asc. node	7961 Aug 31 06:22	3°♊52'26	
				morning set	7961 Sep 02 02:18	7°♊41'55	
superior conj	7960 Sep 24 13:41	8°♊02'52	1°32'09	superior conj	7961 Sep 09 01:27	22°♊54'20	1°19'13
minimum elong	7960 Sep 24 11:57	7°♊53'15	1°32'00	minimum elong	7961 Sep 08 23:15	22°♊42'09	1°18'53
max. Earth dist.	7960 Sep 25 18:07	10°♊39'13	1.32185 AU	max. Earth dist.	7961 Sep 09 03:50	23°♊07'36	1.31730 AU
evening rise	7960 Oct 01 15:21	23°♊15'54			7961 Sep 12 06:27	0°♊	
	7960 Oct 04 23:10	0°♊		evening rise	7961 Sep 15 21:14	7°♊48'35	
desc. node	7960 Oct 18 06:20	23°♊20'53			7961 Sep 27 09:46	0°♊	
	7960 Oct 22 19:32	0°♊		desc. node	7961 Oct 05 03:23	12°♊08'26	
evening max el	7960 Nov 02 22:19	13°♊05'32	27°24'07	evening max el	7961 Oct 16 01:47	25°♊11'40	26°48'53
retrograde	7960 Nov 16 17:35	20°♊19'48			7961 Oct 22 07:10	0°♊	
evening set	7960 Nov 23 20:18	17°♊56'50		retrograde	7961 Oct 29 23:35	2°♊20'42	
min. Earth dist.	7960 Nov 27 12:24	15°♊02'44	0.62160 AU	evening set	7961 Nov 05 20:33	0°♊20'00	
inferior conj	7960 Nov 30 10:55	12°♊19'38	-3°09'59		7961 Nov 06 10:06	30°♊	
minimum elong	7960 Nov 30 16:51	12°♊05'53	3°07'45	min. Earth dist.	7961 Nov 09 15:54	27°♊42'56	0.60103 AU
morning rise	7960 Dec 07 15:29	7°♊15'44		inferior conj	7961 Nov 12 20:33	25°♊07'35	-4°16'21
direct	7960 Dec 09 22:04	6°♊52'52		minimum elong	7961 Nov 13 03:44	24°♊52'58	4°14'17
asc. node	7960 Dec 10 08:51	6°♊53'47		morning rise	7961 Nov 20 13:17	20°♊24'56	
morning max el	7960 Dec 16 18:05	10°♊21'24	17°49'51	direct	7961 Nov 22 18:35	20°♊06'22	
	7960 Dec 29 18:50	0°♊		asc. node	7961 Nov 27 05:52	21°♊25'37	
morning set	7961 Jan 01 14:12	5°♊00'29		morning max el	7961 Nov 30 06:56	23°♊49'19	18°07'50
					7961 Dec 05 06:23	0°♊	
superior conj	7961 Jan 12 17:27	24°♊32'01	0°11'01	morning set	7961 Dec 15 23:50	18°♊43'49	
minimum elong	7961 Jan 12 18:29	24°♊36'25	0°10'59		7961 Dec 22 00:52	0°♊	
behind sun begin	7961 Jan 12 12:02	24°♊09'02					
behind sun end	7961 Jan 13 00:55	25°♊03'45		superior conj	7961 Dec 25 15:49	6°♊35'00	0°46'36
desc. node	7961 Jan 14 05:29	27°♊04'20		minimum elong	7961 Dec 25 19:01	6°♊49'22	0°46'16
	7961 Jan 15 23:30	0°♊		desc. node	7962 Jan 01 02:29	17°♊49'56	
max. Earth dist.	7961 Jan 19 20:27	6°♊21'38	1.43436 AU	max. Earth dist.	7962 Jan 02 07:21	19°♊51'53	1.41607 AU
evening rise	7961 Jan 27 05:25	18°♊04'25		evening rise	7962 Jan 07 10:37	28°♊19'19	
	7961 Feb 04 00:52	0°♊			7962 Jan 08 11:41	0°♊	
	7961 Feb 25 23:44	0°♊			7962 Jan 28 16:04	0°♊	
evening max el	7961 Feb 27 09:04	1°♊28'00	21°34'22	evening max el	7962 Feb 10 01:38	15°♊08'55	22°52'44
retrograde	7961 Mar 08 08:52	6°♊47'22		retrograde	7962 Feb 20 04:48	21°♊09'30	
asc. node	7961 Mar 08 07:54	6°♊47'21		asc. node	7962 Feb 23 04:58	20°♊24'04	
evening set	7961 Mar 12 17:27	5°♊02'41		evening set	7962 Feb 25 00:40	19°♊09'54	
	7961 Mar 17 03:27	30°♊		inferior conj	7962 Mar 02 09:33	12°♊45'15	2°10'25
inferior conj	7961 Mar 18 00:55	28°♊45'43	2°43'47	minimum elong	7962 Mar 02 07:18	12°♊53'03	2°09'46
minimum elong	7961 Mar 17 22:45	28°♊53'16	2°43'17	min. Earth dist.	7962 Mar 02 01:47	13°♊12'11	0.68380 AU
min. Earth dist.	7961 Mar 18 05:06	28°♊31'11	0.68270 AU	morning rise	7962 Mar 07 13:51	6°♊37'14	
morning rise	7961 Mar 23 03:54	22°♊33'09		direct	7962 Mar 12 01:13	4°♊47'30	
direct	7961 Mar 28 05:20	20°♊21'25		morning max el	7962 Mar 20 20:54	9°♊54'51	21°30'56
morning max el	7961 Apr 07 06:59	26°♊19'11	22°57'00	desc. node	7962 Mar 30 02:03	21°♊01'23	
	7961 Apr 10 16:12	0°♊			7962 Apr 05 12:03	0°♊	
desc. node	7961 Apr 12 05:05	1°♊49'20		morning set	7962 Apr 21 16:08	24°♊31'34	
	7961 May 02 05:54	0°♊			7962 Apr 25 02:09	0°♊	
morning set	7961 May 11 18:19	15°♊13'14		max. Earth dist.	7962 Apr 28 05:11	5°♊06'30	1.42031 AU
max. Earth dist.	7961 May 16 04:35	22°♊41'50	1.39892 AU				
	7961 May 20 08:46	0°♊		superior conj	7962 May 05 17:27	17°♊48'32	-1°59'42
superior conj	7961 May 23 22:05	6°♊25'08	-1°36'11	minimum elong	7962 May 05 22:38	18°♊11'03	1°59'26

	7962 May 12 14:37	0°♂		minimum elong	7963 Apr 16 13:59	28°♂12'56	2°11'22
evening rise	7962 May 16 19:42	7°♂39'21			7963 Apr 17 15:54	0°♂	
asc. node	7962 May 22 03:58	17°♂18'53		evening rise	7963 Apr 29 06:26	19°♂44'42	
	7962 May 30 03:23	0°♂			7963 May 05 04:48	0°♂	
evening max el	7962 Jun 02 03:48	3°♂29'26	18°09'03	asc. node	7963 May 09 01:02	6°♂22'37	
retrograde	7962 Jun 08 24:00	6°♂57'21		evening max el	7963 May 16 16:53	16°♂42'20	18°06'55
evening set	7962 Jun 11 11:03	6°♂30'56		retrograde	7963 May 23 03:07	20°♂03'01	
inferior conj	7962 Jun 18 08:26	1°♂40'40	2°05'51	evening set	7963 May 25 21:35	19°♂24'36	
minimum elong	7962 Jun 18 11:32	1°♂33'34	2°04'49	inferior conj	7963 Jun 01 04:18	14°♂14'50	2°52'57
	7962 Jun 20 04:11	30°♂♂		minimum elong	7963 Jun 01 06:52	14°♂08'09	2°52'19
min. Earth dist.	7962 Jun 21 16:15	28°♂39'23	0.60086 AU	min. Earth dist.	7963 Jun 04 02:04	11°♂13'44	0.62317 AU
morning rise	7962 Jun 25 09:11	25°♂51'45		morning rise	7963 Jun 07 14:21	8°♂08'57	
desc. node	7962 Jun 26 01:29	25°♂27'53		desc. node	7963 Jun 12 22:31	5°♂47'27	
direct	7962 Jul 01 21:10	23°♂50'23		direct	7963 Jun 14 08:43	5°♂41'06	
	7962 Jul 14 08:36	0°♂		morning max el	7963 Jun 28 11:16	13°♂43'05	27°54'30
morning max el	7962 Jul 16 05:26	1°♂45'44	27°43'34		7963 Jul 11 13:04	0°♂	
	7962 Aug 05 17:12	0°♂			7963 Jul 29 05:05	0°♂	
morning set	7962 Aug 17 08:22	22°♂08'52		morning set	7963 Aug 01 08:49	6°♂16'43	
asc. node	7962 Aug 18 03:21	23°♂48'15		asc. node	7963 Aug 05 00:21	13°♂51'37	
	7962 Aug 21 00:52	0°♂		max. Earth dist.	7963 Aug 06 20:18	17°♂46'44	1.32200 AU
max. Earth dist.	7962 Aug 23 13:46	5°♂33'29	1.31731 AU				
				superior conj	7963 Aug 08 22:09	22°♂17'18	0°39'00
superior conj	7962 Aug 24 12:51	7°♂40'56	1°01'22	minimum elong	7963 Aug 08 20:28	22°♂08'09	0°38'36
minimum elong	7962 Aug 24 10:40	7°♂28'50	1°00'55		7963 Aug 12 10:38	0°♂	
evening rise	7962 Aug 31 06:54	22°♂29'19		evening rise	7963 Aug 15 18:25	7°♂12'31	
	7962 Sep 03 21:17	0°♂			7963 Aug 27 14:19	0°♂	
desc. node	7962 Sep 22 00:27	29°♂58'01		desc. node	7963 Sep 08 21:31	16°♂27'03	
	7962 Sep 22 01:05	0°♂		evening max el	7963 Sep 09 10:37	16°♂59'07	24°10'16
evening max el	7962 Sep 27 21:33	6°♂27'09	25°41'24	retrograde	7963 Sep 23 04:11	23°♂52'09	
retrograde	7962 Oct 11 19:57	13°♂30'26		evening set	7963 Sep 28 01:08	22°♂59'51	
evening set	7962 Oct 17 23:14	12°♂02'20		min. Earth dist.	7963 Oct 03 21:24	20°♂05'17	0.56252 AU
min. Earth dist.	7962 Oct 22 09:59	9°♂25'44	0.58040 AU	inferior conj	7963 Oct 06 06:52	18°♂36'34	-5°33'18
inferior conj	7962 Oct 25 11:51	7°♂15'33	-5°09'35	minimum elong	7963 Oct 06 07:11	18°♂36'04	5°33'15
minimum elong	7962 Oct 25 17:40	7°♂05'15	5°08'37	morning rise	7963 Oct 14 15:21	14°♂37'09	
morning rise	7962 Nov 02 14:26	2°♂55'34		direct	7963 Oct 17 08:08	14°♂18'05	
direct	7962 Nov 04 22:52	2°♂38'14		morning max el	7963 Oct 27 06:34	18°♂58'49	19°47'22
morning max el	7962 Nov 13 12:16	6°♂45'14	18°46'29	asc. node	7963 Oct 31 23:54	24°♂26'34	
asc. node	7962 Nov 14 02:54	7°♂21'33			7963 Nov 04 16:30	0°♂	
	7962 Nov 28 08:01	0°♂		morning set	7963 Nov 14 00:12	17°♂29'21	
morning set	7962 Nov 29 20:22	2°♂56'49			7963 Nov 20 04:14	0°♂	
superior conj	7962 Dec 08 10:20	19°♂35'12	1°12'58	superior conj	7963 Nov 21 19:58	3°♂18'23	1°30'17
minimum elong	7962 Dec 08 13:41	19°♂51'00	1°12'42	minimum elong	7963 Nov 21 22:21	3°♂30'15	1°30'13
	7962 Dec 14 02:00	0°♂		max. Earth dist.	7963 Nov 27 19:44	14°♂51'38	1.37354 AU
max. Earth dist.	7962 Dec 15 13:49	2°♂39'10	1.39497 AU	evening rise	7963 Dec 01 13:43	21°♂42'46	
desc. node	7962 Dec 18 23:30	8°♂33'20		desc. node	7963 Dec 05 20:31	29°♂10'43	
evening rise	7962 Dec 19 13:27	9°♂32'35			7963 Dec 06 08:09	0°♂	
	7963 Jan 01 09:39	0°♂			7963 Dec 26 07:23	0°♂	
evening max el	7963 Jan 23 15:36	28°♂53'48	24°12'47	evening max el	7964 Jan 06 04:47	12°♂41'22	25°27'37
	7963 Jan 24 19:04	0°♂		retrograde	7964 Jan 18 09:17	19°♂42'08	
retrograde	7963 Feb 03 21:19	5°♂29'30		evening set	7964 Jan 24 06:21	17°♂16'33	
evening set	7963 Feb 09 05:31	3°♂15'58		asc. node	7964 Jan 27 23:09	13°♂19'58	
asc. node	7963 Feb 10 02:03	2°♂28'55		min. Earth dist.	7964 Jan 28 15:46	12°♂27'42	0.67423 AU
	7963 Feb 12 07:01	30°♂♂		inferior conj	7964 Jan 29 22:17	10°♂49'33	0°38'54
min. Earth dist.	7963 Feb 13 22:07	27°♂52'28	0.68090 AU	minimum elong	7964 Jan 29 21:20	10°♂52'37	0°38'37
inferior conj	7963 Feb 14 17:18	26°♂47'45	1°28'39	morning rise	7964 Feb 04 12:40	4°♂55'42	
minimum elong	7963 Feb 14 15:27	26°♂54'02	1°28'02	direct	7964 Feb 07 22:42	3°♂48'31	
morning rise	7963 Feb 20 01:26	20°♂45'51		morning max el	7964 Feb 14 22:45	7°♂40'23	19°13'43
direct	7963 Feb 23 23:31	19°♂18'17		greatest brilliancy	7964 Feb 28 04:30	25°♂19'20	-0.7m
morning max el	7963 Mar 03 17:50	23°♂42'06	20°15'13		7964 Mar 02 06:36	0°♂	
	7963 Mar 09 04:21	0°♂		desc. node	7964 Mar 02 20:00	0°♂51'08	
desc. node	7963 Mar 16 23:02	10°♂44'57		morning set	7964 Mar 09 17:04	11°♂26'18	
	7963 Mar 29 19:15	0°♂			7964 Mar 21 15:06	0°♂	
morning set	7963 Mar 31 16:37	2°♂54'46		max. Earth dist.	7964 Mar 23 04:03	2°♂25'16	1.45004 AU
max. Earth dist.	7963 Apr 10 13:10	18°♂24'44	1.43805 AU				
				superior conj	7964 Mar 26 08:06	7°♂25'57	-2°05'05
superior conj	7963 Apr 16 12:47	28°♂07'58	-2°11'19	minimum elong	7964 Mar 26 02:23	7°♂03'14	2°04'51

	7964 Apr 09 06:41	0°♄			7965 Feb 23 05:44	0°♄	
evening rise	7964 Apr 09 19:29	0°♄52'45					
asc. node	7964 Apr 24 22:07	24°♄55'02		superior conj	7965 Mar 05 13:24	16°♄12'45	-1°38'47
evening max el	7964 Apr 29 05:52	0°♄08'30	18°23'20	minimum elong	7965 Mar 05 03:47	15°♄35'07	1°37'50
	7964 Apr 29 02:29	0°♄		max. Earth dist.	7965 Mar 05 22:58	16°♄50'10	1.45498 AU
retrograde	7964 May 05 16:05	3°♄36'11			7965 Mar 14 08:32	0°♄	
evening set	7964 May 08 17:42	2°♄44'21		evening rise	7965 Mar 21 09:05	11°♄04'17	
	7964 May 12 02:51	30°♄8		greatest brilliancy	7965 Mar 30 20:22	26°♄00'26	-0.8m
inferior conj	7964 May 14 13:46	27°♄16'31	3°17'31		7965 Apr 02 10:30	0°♄	
minimum elong	7964 May 14 15:03	27°♄12'48	3°17'17	asc. node	7965 Apr 11 19:10	12°♄46'39	
min. Earth dist.	7964 May 16 21:02	24°♄36'14	0.64336 AU	evening max el	7965 Apr 12 16:08	13°♄41'53	18°57'27
morning rise	7964 May 20 11:27	21°♄01'59		retrograde	7965 Apr 19 11:03	17°♄29'20	
direct	7964 May 27 04:32	18°♄18'37		evening set	7965 Apr 22 20:04	16°♄23'20	
desc. node	7964 May 29 19:32	18°♄40'43		inferior conj	7965 Apr 28 09:06	10°♄39'06	3°24'24
morning max el	7964 Jun 09 20:43	26°♄17'22	27°29'06	minimum elong	7965 Apr 28 09:02	10°♄39'20	3°24'19
	7964 Jun 13 07:13	0°♄		min. Earth dist.	7965 Apr 30 00:57	8°♄33'20	0.65995 AU
	7964 Jul 04 03:16	0°♄		morning rise	7965 May 03 21:31	4°♄21'26	
morning set	7964 Jul 15 01:08	19°♄57'52		direct	7965 May 10 07:22	1°♄34'39	
max. Earth dist.	7964 Jul 19 19:36	29°♄36'58	1.33142 AU	desc. node	7965 May 16 16:34	3°♄45'16	
	7964 Jul 20 00:01	0°♄		morning max el	7965 May 23 07:14	9°♄17'52	26°33'27
asc. node	7964 Jul 21 21:21	3°♄57'52			7965 Jun 08 13:05	0°♄	
					7965 Jun 26 14:46	0°♄	
superior conj	7964 Jul 23 03:20	6°♄37'07	0°12'41	morning set	7965 Jun 28 06:02	3°♄03'24	
minimum elong	7964 Jul 23 02:42	6°♄33'46	0°12'26	max. Earth dist.	7965 Jul 02 08:37	10°♄59'43	1.34560 AU
behind sun begin	7964 Jul 22 23:15	6°♄15'19					
behind sun end	7964 Jul 23 06:09	6°♄52'13		superior conj	7965 Jul 07 02:03	20°♄33'41	-0°16'53
evening rise	7964 Jul 30 05:51	21°♄51'52		minimum elong	7965 Jul 07 03:00	20°♄38'35	0°16'50
	7964 Aug 03 04:14	0°♄		asc. node	7965 Jul 08 18:21	24°♄02'55	
evening max el	7964 Aug 20 22:53	27°♄12'49	22°31'03		7965 Jul 11 14:27	0°♄	
	7964 Aug 24 04:15	0°♄		evening rise	7965 Jul 14 15:13	6°♄21'13	
desc. node	7964 Aug 25 18:36	1°♄06'16			7965 Jul 27 12:27	0°♄	
retrograde	7964 Sep 02 23:58	3°♄43'00		evening max el	7965 Aug 02 19:07	7°♄43'39	20°59'39
evening set	7964 Sep 06 08:43	3°♄18'07		desc. node	7965 Aug 12 15:40	13°♄23'36	
	7964 Sep 13 22:27	30°♄8		retrograde	7965 Aug 14 12:40	13°♄32'17	
min. Earth dist.	7964 Sep 14 05:51	29°♄49'36	0.55050 AU	evening set	7965 Aug 16 18:20	13°♄20'26	
inferior conj	7964 Sep 15 07:53	29°♄12'45	-5°08'56	inferior conj	7965 Aug 26 00:28	9°♄23'21	-3°50'21
minimum elong	7964 Sep 15 00:55	29°♄22'37	5°07'51	minimum elong	7965 Aug 25 15:06	9°♄36'36	3°47'37
morning rise	7964 Sep 23 19:00	25°♄24'38		min. Earth dist.	7965 Aug 26 14:56	9°♄02'52	0.54700 AU
direct	7964 Sep 27 00:04	25°♄01'13		morning rise	7965 Sep 03 12:12	5°♄27'17	
	7964 Oct 08 01:23	0°♄		direct	7965 Sep 07 08:04	4°♄55'53	
morning max el	7964 Oct 08 11:58	0°♄24'16	21°10'14	morning max el	7965 Sep 20 06:16	11°♄05'57	22°50'11
asc. node	7964 Oct 17 20:55	12°♄25'55			7965 Oct 04 03:02	0°♄	
	7964 Oct 27 06:46	0°♄		asc. node	7965 Oct 04 17:54	1°♄06'16	
morning set	7964 Oct 28 08:43	2°♄13'59		morning set	7965 Oct 12 19:41	17°♄03'40	
					7965 Oct 18 20:33	0°♄	
superior conj	7964 Nov 04 16:24	17°♄32'29	1°39'28	superior conj	7965 Oct 19 20:12	2°♄06'34	1°41'30
minimum elong	7964 Nov 04 17:28	17°♄37'58	1°39'31	minimum elong	7965 Oct 19 19:57	2°♄05'17	1°41'33
max. Earth dist.	7964 Nov 09 05:50	26°♄46'56	1.35403 AU	max. Earth dist.	7965 Oct 22 23:25	8°♄43'41	1.33807 AU
	7964 Nov 10 21:14	0°♄		evening rise	7965 Oct 27 16:39	18°♄17'36	
evening rise	7964 Nov 13 08:08	4°♄41'25			7965 Nov 02 21:54	0°♄	
desc. node	7964 Nov 21 17:33	19°♄37'40		desc. node	7965 Nov 08 14:35	9°♄47'51	
	7964 Nov 28 04:23	0°♄			7965 Nov 22 09:59	0°♄	
evening max el	7964 Dec 18 18:00	26°♄26'26	26°29'58	evening max el	7965 Dec 01 06:51	9°♄58'59	27°12'42
	7964 Dec 22 20:37	0°♄		retrograde	7965 Dec 14 16:57	17°♄19'22	
retrograde	7964 Dec 31 16:00	3°♄41'43		evening set	7965 Dec 21 12:36	14°♄42'38	
evening set	7965 Jan 07 01:27	1°♄07'35		min. Earth dist.	7965 Dec 25 09:51	11°♄02'41	0.64986 AU
	7965 Jan 08 07:51	30°♄8		inferior conj	7965 Dec 27 15:42	8°♄34'15	-1°21'49
min. Earth dist.	7965 Jan 11 04:24	26°♄53'38	0.66385 AU	minimum elong	7965 Dec 27 18:09	8°♄27'29	1°20'39
inferior conj	7965 Jan 12 22:31	24°♄47'05	-0°18'12	asc. node	7965 Dec 31 17:15	4°♄32'33	
minimum elong	7965 Jan 12 23:01	24°♄45'35	0°17'52	morning rise	7966 Jan 03 01:06	3°♄03'46	
asc. node	7965 Jan 13 20:12	23°♄42'26		direct	7966 Jan 05 16:03	2°♄27'28	
morning rise	7965 Jan 18 21:25	19°♄03'35		morning max el	7966 Jan 12 02:29	5°♄51'13	17°59'32
direct	7965 Jan 21 20:58	18°♄13'44			7966 Jan 28 10:14	0°♄	
morning max el	7965 Jan 28 10:28	21°♄46'00	18°28'16	morning set	7966 Jan 29 20:12	2°♄20'50	
	7965 Feb 04 00:39	0°♄		desc. node	7966 Feb 04 13:56	11°♄48'07	
morning set	7965 Feb 17 15:52	21°♄09'37					
desc. node	7965 Feb 17 16:59	21°♄14'04					

superior conj	7966 Feb 12 23:27	25° $\approx$ 20'00	-0°57'56			7967 Jan 20 23:13	0° $\approx$	
minimum elong	7966 Feb 12 16:42	24° $\approx$ 53'11	0°56'58	desc. node		7967 Jan 22 10:52	2° $\approx$ 29'16	
	7966 Feb 15 22:13	0° $\text{H}$						
max. Earth dist.	7966 Feb 16 18:31	1° $\text{H}$ 19'52	1.45239 AU	superior conj		7967 Jan 24 06:09	5° $\approx$ 28'53	-0°13'06
evening rise	7966 Mar 01 03:19	20° $\text{H}$ 33'29		minimum elong		7967 Jan 24 04:47	5° $\approx$ 23'11	0°12'47
	7966 Mar 07 06:57	0° $\text{Y}$		behind sun begin		7967 Jan 23 23:00	4° $\approx$ 59'17	
greatest brilliancy	7966 Mar 15 04:15	11° $\text{Y}$ 53'23	-0.6m	behind sun end		7967 Jan 24 10:34	5° $\approx$ 47'04	
evening max el	7966 Mar 26 21:52	27° $\text{Y}$ 18'46	19°48'00	max. Earth dist.		7967 Jan 30 12:05	15° $\approx$ 37'44	1.44273 AU
asc. node	7966 Mar 29 16:14	29° $\text{Y}$ 45'35		evening rise		7967 Feb 08 14:17	29° $\approx$ 52'39	
	7966 Mar 30 00:18	0° $\text{B}$				7967 Feb 08 16:12	0° $\text{H}$	
retrograde	7966 Apr 03 08:59	1° $\text{B}$ 36'35				7967 Mar 01 00:26	0° $\text{Y}$	
evening set	7966 Apr 07 02:09	0° $\text{B}$ 15'58		evening max el		7967 Mar 09 22:11	10° $\text{Y}$ 57'13	20°52'31
	7966 Apr 07 10:36	30° $\text{R}$ $\text{Y}$		asc. node		7967 Mar 16 13:18	15° $\text{Y}$ 37'07	
inferior conj	7966 Apr 12 11:11	24° $\text{Y}$ 17'18	3°17'21	retrograde		7967 Mar 18 07:26	15° $\text{Y}$ 52'57	
minimum elong	7966 Apr 12 10:00	24° $\text{Y}$ 21'15	3°17'11	evening set		7967 Mar 22 09:59	14° $\text{Y}$ 17'15	
min. Earth dist.	7966 Apr 13 12:19	22° $\text{Y}$ 53'15	0.67225 AU	inferior conj		7967 Mar 27 17:27	8° $\text{Y}$ 06'21	2°58'55
morning rise	7966 Apr 17 17:34	17° $\text{Y}$ 59'57		minimum elong		7967 Mar 27 15:32	8° $\text{Y}$ 13'01	2°58'32
direct	7966 Apr 23 16:21	15° $\text{Y}$ 20'40		min. Earth dist.		7967 Mar 28 05:01	7° $\text{Y}$ 26'26	0.68016 AU
desc. node	7966 May 03 13:34	20° $\text{Y}$ 29'39		morning rise		7967 Apr 01 20:51	1° $\text{Y}$ 51'34	
morning max el	7966 May 05 16:55	22° $\text{Y}$ 33'07	25°16'32			7967 Apr 04 16:09	30° $\text{R}$ $\text{H}$	
	7966 May 12 05:53	0° $\text{B}$		direct		7967 Apr 07 06:25	29° $\text{H}$ 27'59	
	7966 Jun 01 20:23	0° $\text{II}$				7967 Apr 10 00:50	0° $\text{Y}$	
morning set	7966 Jun 10 19:14	15° $\text{II}$ 21'56		morning max el		7967 Apr 18 01:50	5° $\text{Y}$ 55'17	23°48'32
max. Earth dist.	7966 Jun 14 10:52	22° $\text{II}$ 03'41	1.36420 AU	desc. node		7967 Apr 20 10:33	8° $\text{Y}$ 26'19	
	7966 Jun 18 14:40	0° $\text{E}$				7967 May 06 16:51	0° $\text{B}$	
				morning set		7967 May 23 11:17	26° $\text{B}$ 38'18	
superior conj	7966 Jun 20 15:32	4° $\text{E}$ 00'03	-0°48'20			7967 May 25 10:05	0° $\text{II}$	
minimum elong	7966 Jun 20 18:26	4° $\text{E}$ 14'28	0°47'56	max. Earth dist.		7967 May 27 06:48	3° $\text{II}$ 16'03	1.38596 AU
asc. node	7966 Jun 25 15:20	14° $\text{E}$ 03'04						
evening rise	7966 Jun 28 20:18	20° $\text{E}$ 34'21		superior conj		7967 Jun 03 16:09	16° $\text{II}$ 46'47	-1°19'34
	7966 Jul 03 14:43	0° $\text{O}$		minimum elong		7967 Jun 03 20:59	17° $\text{II}$ 09'35	1°18'59
evening max el	7966 Jul 16 04:25	18° $\text{O}$ 55'37	19°45'36			7967 Jun 10 12:36	0° $\text{E}$	
retrograde	7966 Jul 26 05:08	23° $\text{O}$ 52'14		evening rise		7967 Jun 12 18:24	4° $\text{E}$ 23'21	
evening set	7966 Jul 28 01:41	23° $\text{O}$ 42'49		asc. node		7967 Jun 12 12:21	3° $\text{E}$ 53'45	
desc. node	7966 Jul 30 12:45	23° $\text{O}$ 03'28				7967 Jun 28 06:05	0° $\text{O}$	
inferior conj	7966 Aug 05 23:12	19° $\text{O}$ 40'48	-1°57'36	evening max el		7967 Jun 29 02:01	0° $\text{O}$ 51'19	18°51'59
minimum elong	7966 Aug 05 17:48	19° $\text{O}$ 49'09	1°55'39	retrograde		7967 Jul 07 12:27	5° $\text{O}$ 01'35	
min. Earth dist.	7966 Aug 08 02:46	18° $\text{O}$ 21'08	0.55315 AU	evening set		7967 Jul 09 12:13	4° $\text{O}$ 48'33	
morning rise	7966 Aug 14 07:49	15° $\text{O}$ 16'51		desc. node		7967 Jul 17 09:50	0° $\text{O}$ 40'25	
direct	7966 Aug 18 22:20	14° $\text{O}$ 29'56		inferior conj		7967 Jul 17 15:29	0° $\text{O}$ 30'18	-0°04'16
morning max el	7966 Sep 01 19:07	21° $\text{O}$ 23'06	24°35'47	minimum elong		7967 Jul 17 15:18	0° $\text{O}$ 30'37	0°04'20
	7966 Sep 09 06:59	0° $\text{P}$		transit middle		7967 Jul 17 15:18	0° $\text{O}$ 30'37	0°04'20
asc. node	7966 Sep 21 14:52	20° $\text{P}$ 17'29		transit begin		7967 Jul 17 11:43	0° $\text{O}$ 37'02	
	7966 Sep 26 09:59	0° $\text{A}$		transit end		7967 Jul 17 18:53	0° $\text{O}$ 24'11	
morning set	7966 Sep 27 07:26	1° $\text{A}$ 53'33				7967 Jul 18 08:20	30° $\text{R}$ $\text{E}$	
				min. Earth dist.		7967 Jul 20 18:15	28° $\text{E}$ 17'18	0.56783 AU
superior conj	7966 Oct 04 04:44	16° $\text{A}$ 52'46	1°37'13	morning rise		7967 Jul 25 15:02	25° $\text{E}$ 29'45	
minimum elong	7966 Oct 04 03:26	16° $\text{A}$ 45'42	1°37'10	direct		7967 Jul 31 02:17	24° $\text{E}$ 17'52	
max. Earth dist.	7966 Oct 06 01:06	20° $\text{A}$ 54'03	1.32646 AU			7967 Aug 12 12:07	0° $\text{O}$	
	7966 Oct 10 08:04	0° $\text{M}$		morning max el		7967 Aug 14 09:09	1° $\text{O}$ 42'50	26°10'57
evening rise	7966 Oct 11 11:47	2° $\text{M}$ 22'24				7967 Sep 03 09:22	0° $\text{P}$	
desc. node	7966 Oct 26 11:37	29° $\text{M}$ 34'09		asc. node		7967 Sep 08 11:50	9° $\text{P}$ 50'38	
	7966 Oct 26 18:10	0° $\text{A}$		morning set		7967 Sep 11 18:17	16° $\text{P}$ 38'04	
evening max el	7966 Nov 13 18:05	23° $\text{A}$ 08'13	27°28'57			7967 Sep 17 21:09	0° $\text{A}$	
	7966 Nov 24 09:23	0° $\text{Z}$						
retrograde	7966 Nov 27 11:23	0° $\text{Z}$ 26'15		superior conj		7967 Sep 18 15:50	1° $\text{A}$ 43'26	1°27'17
	7966 Nov 30 10:44	30° $\text{R}$ $\text{A}$		minimum elong		7967 Sep 18 13:51	1° $\text{A}$ 32'25	1°27'04
evening set	7966 Dec 04 13:08	27° $\text{A}$ 55'26		max. Earth dist.		7967 Sep 19 08:47	3° $\text{A}$ 17'08	1.31935 AU
min. Earth dist.	7966 Dec 08 06:14	24° $\text{A}$ 46'12	0.63268 AU	evening rise		7967 Sep 25 14:27	16° $\text{A}$ 46'39	
inferior conj	7966 Dec 10 23:11	22° $\text{A}$ 05'02	-2°30'01			7967 Oct 02 05:47	0° $\text{M}$	
minimum elong	7966 Dec 11 03:53	21° $\text{A}$ 53'21	2°28'03	desc. node		7967 Oct 13 08:42	18° $\text{M}$ 46'32	
morning rise	7966 Dec 17 20:33	16° $\text{A}$ 50'23				7967 Oct 21 17:23	0° $\text{A}$	
asc. node	7966 Dec 18 14:18	16° $\text{A}$ 36'26		evening max el		7967 Oct 27 01:24	5° $\text{A}$ 41'19	27°13'24
direct	7966 Dec 20 05:15	16° $\text{A}$ 23'46		retrograde		7967 Nov 09 22:13	12° $\text{A}$ 53'08	
morning max el	7966 Dec 26 19:48	19° $\text{A}$ 48'21	17°48'06	evening set		7967 Nov 16 23:31	10° $\text{A}$ 38'41	
	7967 Jan 03 09:41	0° $\text{Z}$		min. Earth dist.		7967 Nov 20 16:08	7° $\text{A}$ 53'07	0.61298 AU
morning set	7967 Jan 12 02:18	14° $\text{Z}$ 46'28		inferior conj		7967 Nov 23 17:50	5° $\text{A}$ 11'31	-3°38'58

minimum elong	7967 Nov 24 00:29	4°♊56'53	3°36'42	inferior conj	7968 Nov 04 20:03	17°♍43'28	-4°41'24
morning rise	7967 Dec 01 03:41	0°♊16'00		minimum elong	7968 Nov 05 03:06	17°♍29'58	4°39'43
	7967 Dec 02 08:02	30°♍		morning rise	7968 Nov 12 17:21	13°♍10'10	
direct	7967 Dec 03 09:12	29°♍55'22		direct	7968 Nov 14 23:32	12°♍52'22	
	7967 Dec 04 10:10	0°♊		asc. node	7968 Nov 21 08:22	15°♍23'04	
asc. node	7967 Dec 05 11:20	0°♊14'09		morning max el	7968 Nov 22 21:15	16°♍44'12	18°21'41
morning max el	7967 Dec 10 11:13	3°♊29'15	17°55'00		7968 Dec 02 06:11	0°♊	
morning set	7967 Dec 26 03:40	28°♊06'59		morning set	7968 Dec 08 18:30	12°♊04'43	
	7967 Dec 27 04:25	0°♊					
superior conj	7968 Jan 05 14:41	16°♊52'07	0°27'11	superior conj	7968 Dec 17 22:19	29°♊21'20	0°58'55
minimum elong	7968 Jan 05 16:57	17°♊01'56	0°26'59	minimum elong	7968 Dec 18 01:46	29°♊37'09	0°58'36
desc. node	7968 Jan 09 07:51	23°♊14'14			7968 Dec 18 06:45	0°♊	
max. Earth dist.	7968 Jan 13 02:07	29°♊30'34	1.42713 AU	max. Earth dist.	7968 Dec 25 11:35	12°♊45'25	1.40732 AU
	7968 Jan 13 09:16	0°♊		desc. node	7968 Dec 26 04:50	13°♊59'07	
evening rise	7968 Jan 19 09:33	9°♊40'07		evening rise	7968 Dec 29 23:41	20°♊19'22	
	7968 Feb 01 19:32	0°♊			7969 Jan 05 00:28	0°♊	
evening max el	7968 Feb 20 17:24	24°♊37'47	22°07'11	evening max el	7969 Jan 26 01:32	0°♊	
	7968 Feb 28 10:44	0°♊		retrograde	7969 Feb 02 08:43	8°♊20'37	23°26'56
retrograde	7968 Mar 01 04:38	0°♊14'29		retrograde	7969 Feb 12 23:09	14°♊36'31	
asc. node	7968 Mar 02 10:24	0°♊06'38		asc. node	7969 Feb 17 07:30	13°♊03'43	
	7968 Mar 02 20:53	30°♊		evening set	7969 Feb 18 00:18	12°♊30'39	
evening set	7968 Mar 05 17:53	28°♊23'32		inferior conj	7969 Feb 23 10:17	6°♊04'06	1°53'41
inferior conj	7968 Mar 11 01:47	22°♊03'07	2°30'42	minimum elong	7969 Feb 23 08:08	6°♊11'28	1°53'02
minimum elong	7968 Mar 10 23:32	22°♊10'59	2°30'07	min. Earth dist.	7969 Feb 22 21:33	6°♊47'45	0.68312 AU
min. Earth dist.	7968 Mar 11 00:51	22°♊06'24	0.68372 AU	morning rise	7969 Feb 28 15:56	29°♊58'45	
morning rise	7968 Mar 16 05:00	15°♊52'23			7969 Feb 28 15:18	30°♊	
direct	7968 Mar 21 00:32	13°♊49'37		direct	7969 Mar 04 21:34	28°♊18'36	
morning max el	7968 Mar 30 12:50	19°♊25'02	22°19'25		7969 Mar 09 13:50	0°♊	
desc. node	7968 Apr 06 07:29	27°♊15'15		morning max el	7969 Mar 13 05:33	3°♊05'37	20°57'10
	7968 Apr 08 10:12	0°♊		desc. node	7969 Mar 24 04:27	16°♊41'37	
	7968 Apr 28 21:06	0°♊			7969 Apr 02 08:45	0°♊	
morning set	7968 May 03 01:00	6°♊40'09		morning set	7969 Apr 12 12:05	15°♊29'37	
max. Earth dist.	7968 May 08 04:34	15°♊11'34	1.40838 AU	max. Earth dist.	7969 Apr 20 08:48	28°♊01'52	1.42852 AU
					7969 Apr 21 13:44	0°♊	
superior conj	7968 May 15 23:37	28°♊44'06	-1°47'13	superior conj	7969 Apr 27 09:05	9°♊40'30	-2°06'27
minimum elong	7968 May 16 05:21	29°♊09'49	1°46'45	minimum elong	7969 Apr 27 13:06	9°♊57'30	2°06'21
	7968 May 16 16:32	0°♊		evening rise	7969 May 09 03:24	0°♊14'44	
evening rise	7968 May 26 06:10	17°♊40'20			7969 May 09 00:06	0°♊	
asc. node	7968 May 29 09:23	23°♊30'50		asc. node	7969 May 16 06:27	12°♊48'30	
	7968 Jun 01 23:38	0°♊		evening max el	7969 May 25 20:10	26°♊24'51	18°05'46
evening max el	7968 Jun 11 08:33	13°♊24'21	18°18'55	retrograde	7969 Jun 01 10:52	29°♊48'08	
retrograde	7968 Jun 18 15:11	17°♊03'06		evening set	7969 Jun 04 01:07	29°♊16'48	
evening set	7968 Jun 20 22:03	16°♊42'21		inferior conj	7969 Jun 10 15:43	24°♊17'43	2°28'55
inferior conj	7968 Jun 28 05:34	12°♊03'27	1°26'34	minimum elong	7969 Jun 10 18:44	24°♊10'23	2°28'02
minimum elong	7968 Jun 28 08:13	11°♊57'52	1°25'33	min. Earth dist.	7969 Jun 13 19:54	21°♊13'53	0.61046 AU
min. Earth dist.	7968 Jul 01 15:11	9°♊13'29	0.58811 AU	morning rise	7969 Jun 17 10:00	18°♊20'13	
desc. node	7968 Jul 03 06:53	7°♊58'30		desc. node	7969 Jun 20 03:55	16°♊52'35	
morning rise	7968 Jul 05 15:12	6°♊29'32		direct	7969 Jun 24 01:29	16°♊06'54	
direct	7968 Jul 11 19:59	4°♊46'35		morning max el	7969 Jul 08 08:04	24°♊05'56	27°53'02
morning max el	7968 Jul 26 05:08	12°♊32'36	27°19'57		7969 Jul 13 15:54	0°♊	
	7968 Aug 08 23:20	0°♊			7969 Aug 02 06:55	0°♊	
asc. node	7968 Aug 25 08:49	29°♊39'37		morning set	7969 Aug 10 06:36	15°♊32'38	
	7968 Aug 25 12:44	0°♊		asc. node	7969 Aug 12 05:49	19°♊39'16	
morning set	7968 Aug 26 02:37	1°♊12'47		max. Earth dist.	7969 Aug 16 04:22	28°♊08'48	1.31873 AU
					7969 Aug 17 00:38	0°♊	
superior conj	7968 Sep 02 03:39	16°♊32'50	1°12'12	superior conj	7969 Aug 17 14:24	1°♊15'44	0°52'24
minimum elong	7968 Sep 02 01:24	16°♊20'20	1°11'50	minimum elong	7969 Aug 17 12:22	1°♊04'31	0°51'57
max. Earth dist.	7968 Sep 01 19:10	15°♊45'47	1.31678 AU	evening rise	7969 Aug 24 08:56	16°♊05'50	
	7968 Sep 08 06:39	0°♊			7969 Aug 31 05:00	0°♊	
evening rise	7968 Sep 08 22:13	1°♊23'12		desc. node	7969 Sep 16 02:52	24°♊30'05	
	7968 Sep 24 07:33	0°♊		evening max el	7969 Sep 19 18:21	28°♊21'00	25°04'40
desc. node	7968 Sep 29 05:47	7°♊11'22			7969 Sep 21 14:14	0°♊	
evening max el	7968 Oct 08 01:57	17°♊26'23	26°23'51	retrograde	7969 Oct 03 15:20	5°♊21'06	
retrograde	7968 Oct 21 23:59	24°♊32'08		evening set	7969 Oct 09 07:26	4°♊08'05	
evening set	7968 Oct 28 15:09	22°♊44'28		min. Earth dist.	7969 Oct 14 05:48	1°♊26'22	0.57225 AU
min. Earth dist.	7968 Nov 01 15:17	20°♊09'57	0.59211 AU				

	7969 Oct 16 10:01	30° $\text{R}\text{U}$	evening set	7970 Sep 18 23:55	14° $\text{U}$ 47'34	
inferior conj	7969 Oct 17 02:49	29° $\text{U}$ 31'54 -5°24'26	min. Earth dist.	7970 Sep 25 15:37	11° $\text{U}$ 40'05 0.55643 AU	
minimum elong	7969 Oct 17 06:48	29° $\text{U}$ 25'14 5°23'59	inferior conj	7970 Sep 27 13:28	10° $\text{U}$ 32'17 -5°29'45	
morning rise	7969 Oct 25 08:28	25° $\text{U}$ 21'40	minimum elong	7970 Sep 27 10:34	10° $\text{U}$ 36'36 5°29'32	
direct	7969 Oct 27 19:56	25° $\text{U}$ 03'55	morning rise	7970 Oct 05 23:23	6° $\text{U}$ 39'33	
morning max el	7969 Nov 05 22:20	29° $\text{U}$ 23'33 19°09'44	direct	7970 Oct 08 20:46	6° $\text{U}$ 19'08	
	7969 Nov 06 13:09	0° $\text{M}$	morning max el	7970 Oct 19 11:21	11° $\text{U}$ 17'14 20°20'08	
asc. node	7969 Nov 08 05:23	1° $\text{M}$ 50'23	asc. node	7970 Oct 26 02:22	19° $\text{U}$ 19'51	
morning set	7969 Nov 22 18:33	26° $\text{M}$ 27'21		7970 Nov 01 09:58	0° $\text{M}$	
	7969 Nov 24 13:17	0° $\text{X}$	morning set	7970 Nov 07 00:37	11° $\text{M}$ 05'10	
superior conj	7969 Nov 30 23:55	12° $\text{X}$ 42'03 1°21'22	superior conj	7970 Nov 14 14:36	26° $\text{M}$ 39'26 1°35'07	
minimum elong	7969 Dec 01 02:57	12° $\text{X}$ 56'38 1°21'10	minimum elong	7970 Nov 14 16:26	26° $\text{M}$ 48'46 1°35'06	
max. Earth dist.	7969 Dec 07 17:21	25° $\text{X}$ 16'51 1.38571 AU		7970 Nov 16 06:33	0° $\text{X}$	
	7969 Dec 10 08:58	0° $\text{Z}$	max. Earth dist.	7970 Nov 19 23:55	7° $\text{X}$ 16'42 1.36483 AU	
evening rise	7969 Dec 11 11:56	1° $\text{Z}$ 57'32	evening rise	7970 Nov 23 20:21	14° $\text{X}$ 29'07	
desc. node	7969 Dec 13 01:52	4° $\text{Z}$ 40'33	desc. node	7970 Nov 29 22:55	25° $\text{X}$ 13'49	
	7969 Dec 29 05:50	0° $\approx$		7970 Dec 02 19:44	0° $\text{Z}$	
evening max el	7970 Jan 15 21:59	22° $\approx$ 06'21 24°45'31		7970 Dec 23 24:00	0° $\approx$	
retrograde	7970 Jan 27 13:55	28° $\approx$ 54'24	evening max el	7970 Dec 29 11:00	5° $\approx$ 53'03 25°56'05	
evening set	7970 Feb 02 03:40	26° $\approx$ 35'06	retrograde	7971 Jan 10 23:58	13° $\approx$ 02'09	
asc. node	7970 Feb 04 04:35	24° $\approx$ 33'35	evening set	7971 Jan 17 02:20	10° $\approx$ 32'19	
min. Earth dist.	7970 Feb 06 16:59	21° $\approx$ 26'28 0.67857 AU	min. Earth dist.	7971 Jan 21 08:51	5° $\approx$ 58'12 0.67021 AU	
inferior conj	7970 Feb 07 17:05	20° $\approx$ 06'37 1°08'28	asc. node	7971 Jan 22 01:39	5° $\approx$ 05'46	
minimum elong	7970 Feb 07 15:32	20° $\approx$ 11'43 1°07'58	inferior conj	7971 Jan 22 20:18	4° $\approx$ 07'05 0°15'33	
morning rise	7970 Feb 13 03:37	14° $\approx$ 08'05	minimum elong	7971 Jan 22 19:54	4° $\approx$ 08'21 0°15'30	
direct	7970 Feb 16 20:19	12° $\approx$ 49'43	transit middle	7971 Jan 22 19:54	4° $\approx$ 08'21 0°15'30	
morning max el	7970 Feb 24 06:03	16° $\approx$ 58'25 19°47'08	transit begin	7971 Jan 22 19:07	4° $\approx$ 10'47	
	7970 Mar 06 13:07	0° $\text{X}$	transit end	7971 Jan 22 20:40	4° $\approx$ 05'56	
greatest brilliancy	7970 Mar 09 02:25	3° $\text{X}$ 42'01 -0.6m		7971 Jan 26 10:23	30° $\text{R}\text{Z}$	
desc. node	7970 Mar 11 01:24	6° $\text{X}$ 35'25	morning rise	7971 Jan 28 14:02	28° $\text{Z}$ 17'16	
morning set	7970 Mar 22 09:23	23° $\text{X}$ 47'14	direct	7971 Jan 31 19:17	27° $\text{Z}$ 18'01	
	7970 Mar 26 09:44	0° $\text{Y}$		7971 Feb 06 12:08	0° $\approx$	
max. Earth dist.	7970 Apr 02 19:50	11° $\text{Y}$ 39'20 1.44397 AU	morning max el	7971 Feb 07 14:06	1° $\approx$ 00'32 18°52'19	
			desc. node	7971 Feb 25 22:22	26° $\approx$ 49'19	
superior conj	7970 Apr 07 17:40	19° $\text{Y}$ 31'27 -2°11'07		7971 Feb 27 23:20	0° $\text{X}$	
minimum elong	7970 Apr 07 16:02	19° $\text{Y}$ 24'53 2°11'09	morning set	7971 Mar 01 17:22	2° $\text{X}$ 43'57	
	7970 Apr 14 03:03	0° $\text{Z}$	max. Earth dist.	7971 Mar 16 12:17	25° $\text{X}$ 50'45 1.45301 AU	
evening rise	7970 Apr 21 05:23	11° $\text{Z}$ 56'20				
	7970 May 02 01:33	0° $\text{II}$	superior conj	7971 Mar 18 05:16	28° $\text{X}$ 31'41 -1°56'16	
asc. node	7970 May 03 03:32	1° $\text{II}$ 39'47	minimum elong	7971 Mar 17 21:06	27° $\text{X}$ 59'36 1°55'42	
evening max el	7970 May 09 09:28	9° $\text{II}$ 43'36 18°11'39		7971 Mar 19 03:43	0° $\text{Y}$	
retrograde	7970 May 15 18:46	13° $\text{II}$ 05'59	evening rise	7971 Apr 02 08:27	22° $\text{Y}$ 39'48	
evening set	7970 May 18 16:09	12° $\text{II}$ 22'09		7971 Apr 06 21:04	0° $\text{Z}$	
inferior conj	7970 May 24 17:52	7° $\text{II}$ 04'29 3°05'48	asc. node	7971 Apr 20 00:36	19° $\text{Z}$ 56'36	
minimum elong	7970 May 24 19:55	6° $\text{II}$ 58'51 3°05'23	evening max el	7971 Apr 22 21:37	23° $\text{Z}$ 14'00 18°35'46	
min. Earth dist.	7970 May 27 09:47	4° $\text{II}$ 09'52 0.63208 AU	retrograde	7971 Apr 29 10:38	26° $\text{Z}$ 48'38	
morning rise	7970 May 30 22:15	0° $\text{II}$ 53'44	evening set	7971 May 02 15:16	25° $\text{Z}$ 50'59	
	7970 Jun 01 04:58	30° $\text{R}\text{Z}$	inferior conj	7971 May 08 07:59	20° $\text{Z}$ 16'16 3°22'18	
direct	7970 Jun 06 16:47	28° $\text{Z}$ 17'43	minimum elong	7971 May 08 08:40	20° $\text{Z}$ 14'11 3°22'11	
desc. node	7970 Jun 07 00:57	28° $\text{Z}$ 18'05	min. Earth dist.	7971 May 10 08:49	17° $\text{Z}$ 49'03 0.65092 AU	
	7970 Jun 12 15:48	0° $\text{II}$	morning rise	7971 May 14 01:19	13° $\text{Z}$ 59'48	
morning max el	7970 Jun 20 15:57	6° $\text{II}$ 20'37 27°47'55	direct	7971 May 20 16:01	11° $\text{Z}$ 13'09	
	7970 Jul 08 15:40	0° $\text{U}$	desc. node	7971 May 24 21:58	12° $\text{Z}$ 11'14	
morning set	7970 Jul 25 03:55	29° $\text{U}$ 30'04	morning max el	7971 Jun 03 02:04	19° $\text{Z}$ 07'35 27°08'33	
	7970 Jul 25 09:53	0° $\Omega$		7971 Jun 12 07:15	0° $\text{II}$	
asc. node	7970 Jul 30 02:47	9° $\Omega$ 44'09		7971 Jul 01 15:46	0° $\text{U}$	
max. Earth dist.	7970 Jul 30 08:14	10° $\Omega$ 13'03 1.32535 AU	morning set	7971 Jul 08 15:49	12° $\text{U}$ 57'29	
			max. Earth dist.	7971 Jul 13 03:08	21° $\text{U}$ 50'16 1.33684 AU	
superior conj	7970 Aug 01 22:10	15° $\Omega$ 45'27 0°28'18	asc. node	7971 Jul 16 23:47	29° $\text{U}$ 50'29	
minimum elong	7970 Aug 01 20:52	15° $\Omega$ 38'25 0°27'55				
	7970 Aug 08 11:42	0° $\text{M}$	superior conj	7971 Jul 17 00:55	29° $\text{U}$ 56'27 0°00'29	
evening rise	7970 Aug 08 20:36	0° $\text{M}$ 47'37	minimum elong	7971 Jul 17 00:53	29° $\text{U}$ 56'19 0°00'21	
	7970 Aug 24 23:02	0° $\text{U}$	behind sun begin	7971 Jul 16 19:18	29° $\text{U}$ 26'55	
evening max el	7970 Sep 01 05:50	8° $\text{U}$ 40'09 23°28'03	behind sun end	7971 Jul 17 06:28	0° $\Omega$ 25'46	
desc. node	7970 Sep 02 23:58	10° $\text{U}$ 16'17		7971 Jul 17 01:35	0° $\Omega$	
retrograde	7970 Sep 14 18:37	15° $\text{U}$ 26'31	evening rise	7971 Jul 24 07:23	15° $\Omega$ 23'16	





























































































































	7971 Jul 31 15:12	0° $\mathbb{M}$			7972 Jul 07 17:52	0° $\mathcal{O}$	
evening max el	7971 Aug 13 20:38	18° $\mathbb{M}$ 57'32	21°50'33	evening max el	7972 Jul 25 22:15	29° $\mathcal{O}$ 44'08	20°25'41
desc. node	7971 Aug 20 21:02	23° $\mathbb{M}$ 58'37			7972 Jul 26 04:45	0° $\mathbb{M}$	
retrograde	7971 Aug 26 10:15	25° $\mathbb{M}$ 11'44		retrograde	7972 Aug 05 22:26	5° $\mathbb{M}$ 10'18	
evening set	7971 Aug 29 05:15	24° $\mathbb{M}$ 54'15		desc. node	7972 Aug 06 18:06	5° $\mathbb{M}$ 08'36	
inferior conj	7971 Sep 07 09:19	20° $\mathbb{M}$ 54'12	-4°41'40	evening set	7972 Aug 07 22:25	5° $\mathbb{M}$ 00'19	
minimum elong	7971 Sep 07 00:25	21° $\mathbb{M}$ 06'40	4°39'43	inferior conj	7972 Aug 17 02:38	1° $\mathbb{M}$ 03'00	-3°04'41
min. Earth dist.	7971 Sep 07 00:19	21° $\mathbb{M}$ 06'49	0.54787 AU	minimum elong	7972 Aug 16 18:25	1° $\mathbb{M}$ 14'56	3°01'56
morning rise	7971 Sep 15 20:52	17° $\mathbb{M}$ 04'55		min. Earth dist.	7972 Aug 18 10:09	0° $\mathbb{M}$ 17'15	0.54852 AU
direct	7971 Sep 19 07:54	16° $\mathbb{M}$ 38'36			7972 Aug 18 22:09	30° $\mathcal{R}$ $\mathcal{O}$	
morning max el	7971 Oct 01 11:29	22° $\mathbb{M}$ 22'12	21°51'05	morning rise	7972 Aug 25 13:43	26° $\mathcal{O}$ 57'21	
	7971 Oct 08 00:57	0° $\mathcal{O}$		direct	7972 Aug 29 17:23	26° $\mathcal{O}$ 20'18	
asc. node	7971 Oct 12 23:21	7° $\mathcal{O}$ 37'40			7972 Sep 08 16:49	0° $\mathbb{M}$	
morning set	7971 Oct 22 10:21	25° $\mathcal{O}$ 51'52		morning max el	7972 Sep 12 02:21	2° $\mathbb{M}$ 49'10	23°35'19
	7971 Oct 24 09:26	0° $\mathbb{M}$		asc. node	7972 Sep 28 20:19	26° $\mathbb{M}$ 32'11	
					7972 Sep 30 16:01	0° $\mathcal{O}$	
superior conj	7971 Oct 29 14:28	11° $\mathbb{M}$ 02'25	1°41'08	morning set	7972 Oct 05 21:52	10° $\mathcal{O}$ 42'13	
minimum elong	7971 Oct 29 14:58	11° $\mathbb{M}$ 05'00	1°41'13				
max. Earth dist.	7971 Nov 02 12:47	19° $\mathbb{M}$ 09'23	1.34677 AU	superior conj	7972 Oct 12 20:33	25° $\mathcal{O}$ 42'18	1°40'23
evening rise	7971 Nov 06 21:13	27° $\mathbb{M}$ 44'41		minimum elong	7972 Oct 12 19:50	25° $\mathcal{O}$ 38'23	1°40'26
	7971 Nov 08 01:39	0° $\mathcal{X}$			7972 Oct 14 20:35	0° $\mathbb{M}$	
desc. node	7971 Nov 16 19:57	15° $\mathcal{X}$ 34'03		max. Earth dist.	7972 Oct 15 10:13	1° $\mathbb{M}$ 12'29	1.33261 AU
	7971 Nov 26 02:23	0° $\mathcal{Z}$		evening rise	7972 Oct 20 10:41	11° $\mathbb{M}$ 34'11	
evening max el	7971 Dec 12 00:18	19° $\mathcal{Z}$ 34'10	26°51'06		7972 Oct 30 08:39	0° $\mathcal{X}$	
retrograde	7971 Dec 25 04:20	26° $\mathcal{Z}$ 52'36		desc. node	7972 Nov 02 16:58	5° $\mathcal{X}$ 35'13	
evening set	7971 Dec 31 18:18	24° $\mathcal{Z}$ 16'51			7972 Nov 20 14:18	0° $\mathcal{Z}$	
min. Earth dist.	7972 Jan 04 18:50	20° $\mathcal{Z}$ 17'13	0.65825 AU	evening max el	7972 Nov 23 12:56	2° $\mathcal{Z}$ 59'12	27°23'18
inferior conj	7972 Jan 06 17:50	18° $\mathcal{Z}$ 00'40	-0°44'29	retrograde	7972 Dec 07 02:23	10° $\mathcal{Z}$ 18'23	
minimum elong	7972 Jan 06 19:06	17° $\mathcal{Z}$ 56'59	0°43'48	evening set	7972 Dec 14 01:19	7° $\mathcal{Z}$ 43'15	
asc. node	7972 Jan 08 22:42	15° $\mathcal{Z}$ 32'36		min. Earth dist.	7972 Dec 17 20:38	4° $\mathcal{Z}$ 16'54	0.64291 AU
morning rise	7972 Jan 12 20:56	12° $\mathcal{Z}$ 22'04		inferior conj	7972 Dec 20 07:17	1° $\mathcal{Z}$ 42'05	-1°50'18
direct	7972 Jan 15 16:34	11° $\mathcal{Z}$ 38'24		minimum elong	7972 Dec 20 10:40	1° $\mathcal{Z}$ 33'07	1°48'47
morning max el	7972 Jan 22 03:53	15° $\mathcal{Z}$ 06'01	18°13'55		7972 Dec 21 22:46	30° $\mathcal{R}$ $\mathcal{X}$	
	7972 Feb 02 01:13	0° $\approx$		asc. node	7972 Dec 25 19:44	26° $\mathcal{X}$ 50'13	
morning set	7972 Feb 10 04:44	13° $\approx$ 04'53		morning rise	7972 Dec 26 21:35	26° $\mathcal{X}$ 17'47	
desc. node	7972 Feb 12 19:19	17° $\approx$ 17'12		direct	7972 Dec 29 09:42	25° $\mathcal{X}$ 45'54	
	7972 Feb 20 18:24	0° $\mathcal{H}$		morning max el	7973 Jan 04 20:49	29° $\mathcal{X}$ 08'41	17°52'32
					7973 Jan 05 16:37	0° $\mathcal{Z}$	
superior conj	7972 Feb 25 10:08	7° $\mathcal{H}$ 20'27	-1°22'39	morning set	7973 Jan 21 20:53	24° $\mathcal{Z}$ 50'47	
minimum elong	7972 Feb 25 01:02	6° $\mathcal{H}$ 44'44	1°21'34		7973 Jan 24 22:15	0° $\approx$	
max. Earth dist.	7972 Feb 27 07:45	10° $\mathcal{H}$ 19'23	1.45479 AU	desc. node	7973 Jan 29 16:17	7° $\approx$ 54'51	
	7972 Mar 10 22:17	0° $\mathcal{Y}$					
evening rise	7972 Mar 12 12:47	2° $\mathcal{Y}$ 30'07		superior conj	7973 Feb 04 03:37	16° $\approx$ 50'18	-0°38'48
greatest brilliancy	7972 Mar 24 03:34	20° $\mathcal{Y}$ 30'10	-0.7m	minimum elong	7973 Feb 03 23:10	16° $\approx$ 32'23	0°38'05
	7972 Mar 30 15:42	0° $\mathcal{B}$		max. Earth dist.	7973 Feb 09 03:23	24° $\approx$ 48'18	1.44914 AU
evening max el	7972 Apr 05 06:14	6° $\mathcal{B}$ 49'43	19°17'06		7973 Feb 12 10:38	0° $\mathcal{H}$	
asc. node	7972 Apr 05 21:40	7° $\mathcal{B}$ 27'38		evening rise	7973 Feb 20 02:12	11° $\mathcal{H}$ 51'01	
retrograde	7972 Apr 12 07:04	10° $\mathcal{B}$ 48'29			7973 Mar 04 02:05	0° $\mathcal{Y}$	
evening set	7972 Apr 15 19:30	9° $\mathcal{B}$ 36'16		greatest brilliancy	7973 Mar 06 16:53	3° $\mathcal{Y}$ 51'11	-0.6m
inferior conj	7972 Apr 21 06:31	3° $\mathcal{B}$ 45'51	3°22'55	evening max el	7973 Mar 19 09:48	20° $\mathcal{Y}$ 27'34	20°13'51
minimum elong	7972 Apr 21 05:56	3° $\mathcal{B}$ 47'45	3°22'48	asc. node	7973 Mar 23 18:44	23° $\mathcal{Y}$ 59'54	
min. Earth dist.	7972 Apr 22 16:01	1° $\mathcal{B}$ 57'17	0.66579 AU	retrograde	7973 Mar 27 05:28	25° $\mathcal{Y}$ 00'26	
	7972 Apr 24 05:57	30° $\mathcal{R}$ $\mathcal{Y}$		evening set	7973 Mar 31 02:35	23° $\mathcal{Y}$ 33'12	
morning rise	7972 Apr 26 16:00	27° $\mathcal{Y}$ 28'15		inferior conj	7973 Apr 05 10:40	17° $\mathcal{Y}$ 28'57	3°10'49
direct	7972 May 02 21:40	24° $\mathcal{Y}$ 43'19		minimum elong	7973 Apr 05 09:08	17° $\mathcal{Y}$ 34'13	3°10'33
desc. node	7972 May 10 18:57	28° $\mathcal{Y}$ 01'52		min. Earth dist.	7973 Apr 06 05:49	16° $\mathcal{Y}$ 23'55	0.67621 AU
	7972 May 13 03:53	0° $\mathcal{B}$		morning rise	7973 Apr 10 15:27	11° $\mathcal{Y}$ 12'42	
morning max el	7972 May 15 12:06	2° $\mathcal{B}$ 14'40	26°02'40	direct	7973 Apr 16 08:47	8° $\mathcal{Y}$ 39'30	
	7972 Jun 05 10:57	0° $\mathbb{I}$		desc. node	7973 Apr 27 15:57	15° $\mathcal{Y}$ 19'48	
morning set	7972 Jun 20 14:35	25° $\mathbb{I}$ 44'04		morning max el	7973 Apr 27 21:21	15° $\mathcal{Y}$ 33'24	24°39'53
	7972 Jun 22 21:12	0° $\mathcal{O}$			7973 May 09 18:21	0° $\mathcal{B}$	
max. Earth dist.	7972 Jun 24 11:11	3° $\mathcal{O}$ 01'50	1.35309 AU		7973 May 29 09:10	0° $\mathbb{I}$	
				morning set	7973 Jun 02 19:30	7° $\mathbb{I}$ 37'42	
superior conj	7972 Jun 29 20:05	13° $\mathcal{O}$ 41'04	-0°30'05	max. Earth dist.	7973 Jun 06 10:25	14° $\mathbb{I}$ 07'14	1.37328 AU
minimum elong	7972 Jun 29 21:50	13° $\mathcal{O}$ 49'57	0°29'53				
asc. node	7972 Jul 02 20:47	19° $\mathcal{O}$ 53'52		superior conj	7973 Jun 13 04:35	26° $\mathbb{I}$ 51'40	-1°01'46
evening rise	7972 Jul 07 15:12	29° $\mathcal{O}$ 46'17		minimum elong	7973 Jun 13 08:22	27° $\mathbb{I}$ 09'59	1°01'15



	7973 Jun 14 19:08	0°♄		superior conj	7974 May 26 22:32	9°♄18'51	-1°31'58
asc. node	7973 Jun 19 17:48	9°♄50'31		minimum elong	7974 May 27 03:57	9°♄43'55	1°31'24
evening rise	7973 Jun 21 17:43	13°♄50'18		evening rise	7974 Jun 05 11:57	27°♄27'29	
	7973 Jun 30 07:29	0°♄		asc. node	7974 Jun 06 14:50	29°♄36'24	
evening max el	7973 Jul 08 13:01	11°♄14'30	19°20'07		7974 Jun 06 19:46	0°♄	
retrograde	7973 Jul 17 20:27	15°♄50'18		evening max el	7974 Jun 21 14:54	23°♄27'38	18°35'26
evening set	7973 Jul 19 17:30	15°♄39'53		retrograde	7974 Jun 29 12:21	27°♄22'56	
desc. node	7973 Jul 24 15:11	13°♄47'47		evening set	7974 Jul 01 14:44	27°♄07'12	
inferior conj	7973 Jul 28 07:49	11°♄31'27	-1°07'45	inferior conj	7974 Jul 09 09:29	22°♄40'20	0°37'37
minimum elong	7973 Jul 28 04:48	11°♄36'24	1°06'41	minimum elong	7974 Jul 09 10:51	22°♄37'43	0°36'59
min. Earth dist.	7973 Jul 30 23:05	9°♄48'02	0.55851 AU	desc. node	7974 Jul 11 12:15	21°♄02'33	
morning rise	7973 Aug 05 13:22	6°♄52'23		min. Earth dist.	7974 Jul 12 16:57	20°♄08'57	0.57591 AU
direct	7973 Aug 10 12:35	5°♄56'16		morning rise	7974 Jul 17 03:27	17°♄24'14	
morning max el	7973 Aug 24 15:01	13°♄03'47	25°18'43	direct	7974 Jul 22 22:35	15°♄59'36	
	7973 Sep 06 19:56	0°♄		morning max el	7974 Aug 06 07:36	23°♄35'26	26°44'16
asc. node	7973 Sep 15 17:17	15°♄53'36			7974 Aug 12 02:31	0°♄	
morning set	7973 Sep 20 09:27	25°♄30'35			7974 Aug 30 19:33	0°♄	
	7973 Sep 22 11:30	0°♄		asc. node	7974 Sep 02 14:17	5°♄34'35	
				morning set	7974 Sep 04 19:29	10°♄12'11	
superior conj	7973 Sep 27 06:26	10°♄31'02	1°33'39				
minimum elong	7973 Sep 27 04:47	10°♄22'02	1°33'33	superior conj	7974 Sep 11 18:06	25°♄22'26	1°21'30
max. Earth dist.	7973 Sep 28 14:59	13°♄29'38	1.32286 AU	minimum elong	7974 Sep 11 15:57	25°♄10'29	1°21'13
evening rise	7973 Oct 04 09:20	25°♄47'57		max. Earth dist.	7974 Sep 12 00:13	25°♄56'17	1.31767 AU
	7973 Oct 06 10:51	0°♄			7974 Sep 13 20:15	0°♄	
desc. node	7973 Oct 20 14:02	25°♄08'35		evening rise	7974 Sep 18 14:29	10°♄18'27	
	7973 Oct 23 19:48	0°♄			7974 Sep 28 17:11	0°♄	
evening max el	7973 Nov 05 22:43	15°♄54'05	27°26'25	desc. node	7974 Oct 07 11:08	14°♄02'55	
retrograde	7973 Nov 19 17:32	23°♄09'32		evening max el	7974 Oct 19 03:13	28°♄06'58	26°56'17
evening set	7973 Nov 26 20:18	20°♄44'04			7974 Oct 21 06:05	0°♄	
min. Earth dist.	7973 Nov 30 12:27	17°♄46'26	0.62457 AU	retrograde	7974 Nov 02 00:57	5°♄16'58	
inferior conj	7973 Dec 03 09:42	15°♄03'18	-2°59'28	evening set	7974 Nov 08 23:20	3°♄12'21	
minimum elong	7973 Dec 03 15:19	14°♄50'01	2°57'18	min. Earth dist.	7974 Nov 12 17:39	0°♄33'30	0.60414 AU
morning rise	7973 Dec 10 12:25	9°♄56'38			7974 Nov 13 10:13	30°♄	
direct	7973 Dec 12 19:27	9°♄32'55		inferior conj	7974 Nov 15 21:46	27°♄55'55	-4°06'53
asc. node	7973 Dec 12 16:47	9°♄32'59		minimum elong	7974 Nov 16 04:53	27°♄41'08	4°04'44
morning max el	7973 Dec 19 13:47	13°♄00'03	17°48'48	morning rise	7974 Nov 23 12:47	23°♄09'53	
	7973 Dec 31 03:20	0°♄		direct	7974 Nov 25 17:56	22°♄50'57	
morning set	7974 Jan 04 11:56	7°♄41'46		asc. node	7974 Nov 29 13:49	23°♄50'20	
				morning max el	7974 Dec 03 03:25	26°♄31'21	18°03'50
superior conj	7974 Jan 15 21:18	27°♄30'53	0°04'53		7974 Dec 06 04:11	0°♄	
minimum elong	7974 Jan 15 21:47	27°♄32'57	0°04'56	morning set	7974 Dec 18 19:35	21°♄19'13	
behind sun begin	7974 Jan 15 13:14	26°♄56'51			7974 Dec 23 11:46	0°♄	
behind sun end	7974 Jan 16 06:20	28°♄08'58					
desc. node	7974 Jan 16 13:14	28°♄37'54		superior conj	7974 Dec 28 16:12	9°♄23'37	0°41'46
	7974 Jan 17 08:51	0°♄		minimum elong	7974 Dec 28 19:14	9°♄37'04	0°41'28
max. Earth dist.	7974 Jan 22 19:52	8°♄57'56	1.43672 AU	desc. node	7975 Jan 03 10:13	19°♄23'04	
evening rise	7974 Jan 30 14:53	21°♄17'31		max. Earth dist.	7975 Jan 05 07:21	22°♄33'08	1.41905 AU
	7974 Feb 05 07:24	0°♄			7975 Jan 09 20:14	0°♄	
	7974 Feb 26 15:34	0°♄		evening rise	7975 Jan 10 17:13	1°♄24'21	
evening max el	7974 Mar 02 07:44	4°♄06'06	21°23'14		7975 Jan 29 18:38	0°♄	
asc. node	7974 Mar 10 15:50	9°♄18'15		evening max el	7975 Feb 13 00:56	17°♄46'37	22°40'52
retrograde	7974 Mar 11 03:45	9°♄19'31		retrograde	7975 Feb 23 00:04	23°♄41'16	
evening set	7974 Mar 15 10:42	7°♄37'10		asc. node	7975 Feb 25 12:57	23°♄08'46	
inferior conj	7974 Mar 20 18:06	1°♄21'34	2°48'06	evening set	7975 Feb 27 18:09	21°♄43'59	
minimum elong	7974 Mar 20 15:58	1°♄28'56	2°47'37	inferior conj	7975 Mar 05 02:44	15°♄20'19	2°16'03
min. Earth dist.	7974 Mar 21 00:09	1°♄00'32	0.68215 AU	minimum elong	7975 Mar 05 00:28	15°♄28'11	2°15'25
	7974 Mar 21 17:39	30°♄		min. Earth dist.	7975 Mar 04 20:44	15°♄41'08	0.68389 AU
morning rise	7974 Mar 25 21:05	25°♄08'19		morning rise	7975 Mar 10 06:39	9°♄11'26	
direct	7974 Mar 31 00:36	22°♄53'26		direct	7975 Mar 14 20:06	7°♄18'16	
morning max el	7974 Apr 10 06:59	28°♄59'16	23°10'19	morning max el	7975 Mar 23 19:59	12°♄32'49	21°43'10
	7974 Apr 11 06:30	0°♄		desc. node	7975 Apr 01 09:51	22°♄46'46	
desc. node	7974 Apr 14 12:55	3°♄40'42			7975 Apr 06 15:48	0°♄	
	7974 May 03 12:22	0°♄		morning set	7975 Apr 25 02:50	27°♄53'10	
morning set	7974 May 15 01:00	18°♄24'19			7975 Apr 26 10:30	0°♄	
max. Earth dist.	7974 May 19 06:29	25°♄35'51	1.39554 AU	max. Earth dist.	7975 May 01 06:01	7°♄51'36	1.41729 AU
	7974 May 21 18:52	0°♄					
				superior conj	7975 May 08 21:10	20°♄51'05	-1°56'45

minimum elong	7975 May 09 02:37	21°♄14'55	1°56'26	superior conj	7976 Apr 18 20:13	1°♄20'00	-2°10'35
	7975 May 14 00:42	0°♄		minimum elong	7976 Apr 18 22:17	1°♄28'35	2°10'37
evening rise	7975 May 19 18:06	10°♄27'17		evening rise	7976 May 01 07:40	22°♄40'05	
asc. node	7975 May 24 11:55	19°♄05'52			7976 May 05 12:27	0°♄	
	7975 May 31 00:49	0°♄		asc. node	7976 May 10 08:59	8°♄13'13	
evening max el	7975 Jun 05 00:06	6°♄13'43	18°11'01	evening max el	7976 May 18 12:54	19°♄23'19	18°06'01
retrograde	7975 Jun 11 22:36	9°♄43'51		retrograde	7976 May 24 23:53	22°♄44'05	
evening set	7975 Jun 14 08:36	9°♄18'58		evening set	7976 May 27 17:19	22°♄07'30	
inferior conj	7975 Jun 21 08:31	4°♄31'43	1°56'21	inferior conj	7976 Jun 03 01:56	17°♄00'24	2°47'20
minimum elong	7975 Jun 21 11:33	4°♄24'53	1°55'18	minimum elong	7976 Jun 03 04:39	16°♄53'27	2°46'38
min. Earth dist.	7975 Jun 24 17:11	1°♄32'34	0.59753 AU	min. Earth dist.	7976 Jun 06 01:30	13°♄58'00	0.61996 AU
	7975 Jun 26 15:39	30°♄♄		morning rise	7976 Jun 09 14:04	10°♄56'29	
morning rise	7975 Jun 28 11:34	28°♄46'24		desc. node	7976 Jun 14 06:21	8°♄45'25	
desc. node	7975 Jun 28 09:19	28°♄49'47		direct	7976 Jun 16 07:59	8°♄32'10	
direct	7975 Jul 04 21:59	26°♄49'36		morning max el	7976 Jun 30 11:36	16°♄33'22	27°55'19
	7975 Jul 13 16:02	0°♄			7976 Jul 11 13:30	0°♄	
morning max el	7975 Jul 19 06:32	4°♄42'47	27°38'35		7976 Jul 29 16:06	0°♄	
	7975 Aug 06 23:43	0°♄		morning set	7976 Aug 03 03:37	8°♄51'50	
morning set	7975 Aug 20 02:12	24°♄41'06		asc. node	7976 Aug 06 08:16	15°♄30'50	
asc. node	7975 Aug 20 11:16	25°♄28'34		max. Earth dist.	7976 Aug 08 17:42	20°♄38'47	1.32102 AU
	7975 Aug 22 14:19	0°♄					
max. Earth dist.	7975 Aug 26 10:22	8°♄22'51	1.31704 AU	superior conj	7976 Aug 10 15:25	24°♄47'45	0°42'42
				minimum elong	7976 Aug 10 13:37	24°♄37'57	0°42'15
superior conj	7975 Aug 27 05:42	10°♄09'50	1°04'23		7976 Aug 13 00:18	0°♄	
minimum elong	7975 Aug 27 03:29	9°♄57'32	1°03'57	evening rise	7976 Aug 17 11:06	9°♄41'13	
evening rise	7975 Sep 02 23:45	24°♄58'12			7976 Aug 27 19:43	0°♄	
	7975 Sep 05 09:08	0°♄		desc. node	7976 Sep 10 05:20	18°♄45'09	
	7975 Sep 22 19:04	0°♄		evening max el	7976 Sep 11 14:08	20°♄07'14	24°24'45
desc. node	7975 Sep 24 08:14	2°♄02'17		retrograde	7976 Sep 25 08:44	27°♄02'10	
evening max el	7975 Oct 01 00:21	9°♄30'11	25°53'16	evening set	7976 Sep 30 11:03	26°♄04'39	
retrograde	7975 Oct 14 22:49	16°♄33'59		min. Earth dist.	7976 Oct 06 01:05	23°♄14'00	0.56488 AU
evening set	7975 Oct 21 05:32	15°♄00'46		inferior conj	7976 Oct 08 14:00	21°♄38'20	-5°32'27
min. Earth dist.	7975 Oct 25 13:03	12°♄25'12	0.58336 AU	minimum elong	7976 Oct 08 15:24	21°♄36'08	5°32'22
inferior conj	7975 Oct 28 16:00	10°♄10'21	-5°03'04	morning rise	7976 Oct 16 21:53	17°♄36'20	
minimum elong	7975 Oct 28 22:16	9°♄59'01	5°01'53	direct	7976 Oct 19 13:13	17°♄17'38	
morning rise	7975 Nov 05 17:19	5°♄46'48		morning max el	7976 Oct 29 06:10	21°♄52'30	19°36'56
direct	7975 Nov 08 00:59	5°♄29'27		asc. node	7976 Nov 02 07:49	26°♄29'30	
asc. node	7975 Nov 16 10:49	9°♄34'10			7976 Nov 04 19:10	0°♄	
morning max el	7975 Nov 16 10:05	9°♄32'23	18°39'22	morning set	7976 Nov 15 17:44	19°♄58'57	
	7975 Nov 29 18:30	0°♄			7976 Nov 20 16:43	0°♄	
morning set	7975 Dec 02 14:48	5°♄28'47					
				superior conj	7976 Nov 23 15:45	5°♄53'53	1°28'12
superior conj	7975 Dec 11 08:06	22°♄16'18	1°09'33	minimum elong	7976 Nov 23 18:20	6°♄06'34	1°28'05
minimum elong	7975 Dec 11 11:30	22°♄32'18	1°09'16	max. Earth dist.	7976 Nov 29 20:29	17°♄45'24	1.37664 AU
	7975 Dec 15 12:49	0°♄		evening rise	7976 Dec 03 14:01	24°♄31'06	
max. Earth dist.	7975 Dec 18 14:37	5°♄28'02	1.39820 AU		7976 Dec 06 17:33	0°♄	
desc. node	7975 Dec 21 07:14	10°♄07'05		desc. node	7976 Dec 07 04:15	0°♄45'35	
evening rise	7975 Dec 22 16:48	12°♄29'10			7976 Dec 26 08:10	0°♄	
	7976 Jan 02 15:56	0°♄		evening max el	7977 Jan 08 04:26	15°♄18'37	25°17'01
	7976 Jan 25 03:42	0°♄		retrograde	7977 Jan 20 05:43	22°♄16'14	
evening max el	7976 Jan 26 15:16	1°♄31'24	24°01'01	evening set	7977 Jan 26 00:57	19°♄52'08	
retrograde	7976 Feb 06 17:05	8°♄02'02		asc. node	7977 Jan 29 07:04	16°♄27'03	
evening set	7976 Feb 11 23:25	5°♄50'30		min. Earth dist.	7977 Jan 30 11:20	14°♄58'15	0.67551 AU
asc. node	7976 Feb 12 10:01	5°♄27'05		inferior conj	7977 Jan 31 16:12	13°♄24'41	0°46'56
min. Earth dist.	7976 Feb 16 17:14	0°♄21'56	0.68163 AU	minimum elong	7977 Jan 31 15:05	13°♄28'20	0°46'36
	7976 Feb 16 23:43	30°♄♄		morning rise	7977 Feb 06 05:32	7°♄29'37	
inferior conj	7976 Feb 17 10:43	29°♄22'39	1°35'30	direct	7977 Feb 09 17:16	6°♄19'36	
minimum elong	7976 Feb 17 08:46	29°♄29'16	1°34'53	morning max el	7977 Feb 16 19:31	10°♄15'15	19°21'53
morning rise	7976 Feb 22 18:08	23°♄19'47		greatest brilliancy	7977 Mar 01 19:16	27°♄26'06	-0.7m
direct	7976 Feb 26 18:11	21°♄48'54			7977 Mar 03 12:20	0°♄	
morning max el	7976 Mar 05 15:45	26°♄18'14	20°25'38	desc. node	7977 Mar 05 03:45	2°♄29'01	
	7976 Mar 09 00:13	0°♄		morning set	7977 Mar 13 04:17	14°♄46'53	
desc. node	7976 Mar 18 06:48	12°♄25'59			7977 Mar 22 23:14	0°♄	
	7976 Mar 30 02:17	0°♄		max. Earth dist.	7977 Mar 26 03:15	4°♄58'49	1.44874 AU
morning set	7976 Apr 03 05:27	6°♄21'07					
max. Earth dist.	7976 Apr 12 13:08	21°♄03'09	1.43579 AU	superior conj	7977 Mar 29 18:43	10°♄45'39	-2°07'21
	7976 Apr 18 00:53	0°♄		minimum elong	7977 Mar 29 14:02	10°♄26'58	2°07'11

	7977 Apr 10 15:01	0°♄		morning set	7978 Feb 20 22:48	24°♁16'51	
evening rise	7977 Apr 13 00:08	3°♄56'52			7978 Feb 24 13:44	0°♁	
asc. node	7977 Apr 27 06:02	26°♄50'42					
	7977 Apr 29 14:42	0°♂		superior conj	7978 Mar 09 01:01	19°♁34'04	-1°43'55
evening max el	7977 May 02 01:59	2°♂47'25	18°19'42	minimum elong	7978 Mar 08 15:33	18°♁56'59	1°43'03
retrograde	7977 May 08 11:41	6°♂13'23		max. Earth dist.	7978 Mar 08 21:33	19°♁20'27	1.45471 AU
evening set	7977 May 11 12:12	5°♂23'37			7978 Mar 15 16:37	0°♂	
inferior conj	7977 May 17 09:36	29°♄58'16	3°15'00	evening rise	7978 Mar 24 17:07	14°♂16'13	
minimum elong	7977 May 17 11:05	29°♄54'00	3°14'44	greatest brilliancy	7978 Apr 02 09:02	28°♂01'29	-0.8m
	7977 May 17 09:00	30°♁♄			7978 Apr 03 15:19	0°♄	
min. Earth dist.	7977 May 19 19:07	27°♄13'50	0.64053 AU	asc. node	7978 Apr 14 03:05	14°♄49'14	
morning rise	7977 May 23 08:55	23°♄44'28		evening max el	7978 Apr 15 12:45	16°♄19'56	18°51'17
direct	7977 May 30 02:30	21°♄02'45		retrograde	7978 Apr 22 05:57	20°♄03'50	
desc. node	7977 Jun 01 03:21	21°♄16'01		evening set	7978 Apr 25 13:46	19°♄00'04	
morning max el	7977 Jun 12 20:46	29°♄02'54	27°35'04	inferior conj	7978 May 01 03:40	13°♄18'13	3°24'19
	7977 Jun 13 18:59	0°♂		minimum elong	7978 May 01 03:47	13°♄17'50	3°24'13
	7977 Jul 05 10:47	0°♄		min. Earth dist.	7978 May 02 21:50	11°♄06'32	0.65773 AU
morning set	7977 Jul 17 21:19	22°♄37'35		morning rise	7978 May 06 17:14	7°♄00'37	
	7977 Jul 21 12:51	0°♂		direct	7978 May 13 04:27	4°♄13'30	
max. Earth dist.	7977 Jul 22 18:23	2°♂33'29	1.32965 AU	desc. node	7978 May 19 00:21	6°♄02'40	
asc. node	7977 Jul 24 05:16	5°♂37'00		morning max el	7978 May 26 07:18	12°♄00'27	26°43'18
					7978 Jun 09 16:18	0°♂	
superior conj	7977 Jul 25 21:18	9°♂10'20	0°16'55		7978 Jun 28 01:15	0°♄	
minimum elong	7977 Jul 25 20:29	9°♂05'56	0°16'38	morning set	7978 Jul 01 04:08	5°♄48'56	
evening rise	7977 Aug 01 22:38	24°♂21'32		max. Earth dist.	7978 Jul 05 08:55	13°♄59'28	1.34314 AU
	7977 Aug 04 15:22	0°♁					
	7977 Aug 23 17:13	0°♂		superior conj	7978 Jul 09 21:07	23°♄10'32	-0°12'15
evening max el	7977 Aug 24 01:51	0°♂21'19	22°45'43	minimum elong	7978 Jul 09 21:48	23°♄14'04	0°12'14
desc. node	7977 Aug 28 02:24	3°♂43'21		behind sun begin	7978 Jul 09 18:02	22°♄54'30	
retrograde	7977 Sep 06 06:27	6°♂56'33		behind sun end	7978 Jul 10 01:34	23°♄33'40	
evening set	7977 Sep 09 20:27	6°♂28'24		asc. node	7978 Jul 11 02:15	25°♄42'23	
min. Earth dist.	7977 Sep 17 09:41	3°♂05'49	0.55177 AU		7978 Jul 13 03:16	0°♂	
inferior conj	7977 Sep 18 17:20	2°♂20'38	-5°16'16	evening rise	7978 Jul 17 08:24	8°♂52'23	
minimum elong	7977 Sep 18 11:19	2°♂29'13	5°15'28		7978 Jul 28 12:53	0°♁	
	7977 Sep 23 02:29	30°♁♁		evening max el	7978 Aug 05 20:25	10°♁47'24	21°12'23
morning rise	7977 Sep 27 04:12	28°♁32'00		desc. node	7978 Aug 14 23:29	16°♁23'34	
direct	7977 Sep 30 07:11	28°♁09'29		retrograde	7978 Aug 17 19:44	16°♁43'20	
	7977 Oct 06 23:21	0°♂		evening set	7978 Aug 20 04:10	16°♁30'27	
morning max el	7977 Oct 11 13:35	3°♂25'41	20°56'36	inferior conj	7978 Aug 29 10:17	12°♁33'01	-4°05'17
asc. node	7977 Oct 20 04:47	14°♂21'30		minimum elong	7978 Aug 29 00:47	12°♁46'23	4°02'39
	7977 Oct 28 18:28	0°♁		min. Earth dist.	7978 Aug 29 18:38	12°♁21'15	0.54688 AU
morning set	7977 Oct 31 01:39	4°♁42'07		morning rise	7978 Sep 06 22:01	8°♁39'21	
				direct	7978 Sep 10 15:24	8°♁09'31	
superior conj	7977 Nov 07 10:48	20°♁04'06	1°38'33	morning max el	7978 Sep 23 09:15	14°♁13'01	22°34'32
minimum elong	7977 Nov 07 12:04	20°♁10'37	1°38'35		7978 Oct 05 08:59	0°♂	
max. Earth dist.	7977 Nov 12 05:31	29°♁41'09	1.35673 AU	asc. node	7978 Oct 07 01:47	2°♂56'11	
	7977 Nov 12 09:21	0°♄		morning set	7978 Oct 15 12:22	19°♂31'07	
evening rise	7977 Nov 16 05:57	7°♄22'56			7978 Oct 20 10:05	0°♁	
desc. node	7977 Nov 24 01:18	21°♄14'22					
	7977 Nov 29 10:41	0°♄		superior conj	7978 Oct 22 13:40	4°♁35'39	1°41'35
evening max el	7977 Dec 21 17:30	29°♄03'53	26°21'41	minimum elong	7978 Oct 22 13:37	4°♁35'22	1°41'41
	7977 Dec 22 17:14	0°♁		max. Earth dist.	7978 Oct 25 21:44	11°♁35'58	1.34019 AU
retrograde	7978 Jan 03 13:20	6°♁17'59		evening rise	7978 Oct 30 12:36	20°♁54'07	
evening set	7978 Jan 09 21:00	3°♁44'42			7978 Nov 04 08:06	0°♄	
	7978 Jan 13 13:13	30°♁♄		desc. node	7978 Nov 10 22:21	11°♄27'26	
min. Earth dist.	7978 Jan 14 00:49	29°♄25'37	0.66564 AU		7978 Nov 23 08:26	0°♄	
inferior conj	7978 Jan 15 17:15	27°♄22'43	-0°09'05	evening max el	7978 Dec 04 06:28	12°♄38'50	27°07'52
minimum elong	7978 Jan 15 17:29	27°♄22'00	0°08'52	retrograde	7978 Dec 17 15:16	19°♄59'15	
transit middle	7978 Jan 15 17:29	27°♄22'00	0°08'52	evening set	7978 Dec 24 09:31	17°♄22'30	
transit begin	7978 Jan 15 15:05	27°♄29'20		min. Earth dist.	7978 Dec 28 07:33	13°♄37'28	0.65214 AU
transit end	7978 Jan 15 19:54	27°♄14'40		inferior conj	7978 Dec 30 11:39	11°♄11'47	-1°11'48
asc. node	7978 Jan 16 04:06	26°♄49'49		minimum elong	7978 Dec 30 13:47	11°♄05'49	1°10'46
morning rise	7978 Jan 21 14:45	21°♄37'39		asc. node	7979 Jan 03 01:08	7°♄32'07	
direct	7978 Jan 24 15:43	20°♄45'31		morning rise	7979 Jan 05 19:22	5°♄39'06	
morning max el	7978 Jan 31 06:22	24°♄20'03	18°33'57	direct	7979 Jan 08 11:24	5°♄01'05	
	7978 Feb 05 00:47	0°♁		morning max el	7979 Jan 14 21:54	8°♄25'38	18°02'41
desc. node	7978 Feb 20 00:42	22°♁49'29			7979 Jan 29 18:12	0°♁	

morning set	7979 Feb 01 22:51	5°  15'25		morning max el	7979 Dec 29 15:14	22°  24'29	17°48'39
desc. node	7979 Feb 06 21:40	13°  22'07			7980 Jan 04 13:19	0° 	
superior conj	7979 Feb 16 09:11	28°  35'21	-1°04'38	morning set	7980 Jan 15 01:36	17°  31'39	
minimum elong	7979 Feb 16 01:42	28°  05'41	1°03'37		7980 Jan 22 08:42	0° 	
	7979 Feb 17 06:36	0° 		desc. node	7980 Jan 24 18:38	4° 	02'30
max. Earth dist.	7979 Feb 19 16:59	3°  49'52	1.45322 AU	superior conj	7980 Jan 27 12:14	8°  33'30	-0°19'45
evening rise	7979 Mar 04 13:40	23°  50'09		minimum elong	7980 Jan 27 10:06	8°  24'44	0°19'19
	7979 Mar 08 13:36	0° 		max. Earth dist.	7980 Feb 02 11:09	18°  11'05	1.44460 AU
greatest brilliancy	7979 Mar 18 01:29	14°  25'52	-0.7m		7980 Feb 09 23:51	0° 	
	7979 Mar 29 20:29	0° 		evening rise	7980 Feb 12 00:46	3°  08'35	
evening max el	7979 Mar 29 19:18	29°  57'01	19°39'31		7980 Mar 01 02:16	0° 	
asc. node	7979 Apr 01 00:09	1°  57'23		evening max el	7980 Mar 11 20:32	13°  53'37	20°42'10
retrograde	7979 Apr 06 03:35	4°  09'40		asc. node	7980 Mar 17 21:15	18°  50'15	
evening set	7979 Apr 09 19:28	2°  51'18		retrograde	7980 Mar 20 02:04	18°  52'05	
	7979 Apr 12 18:41	30°  08'57		evening set	7980 Mar 24 03:12	16°  51'36	
inferior conj	7979 Apr 15 04:56	26°  54'47	3°19'12	inferior conj	7980 Mar 29 10:46	10°  42'28	3°02'22
minimum elong	7979 Apr 15 03:54	26°  58'14	3°19'02	minimum elong	7980 Mar 29 08:55	10°  48'48	3°02'00
min. Earth dist.	7979 Apr 16 08:14	25°  52'09	0.67073 AU	min. Earth dist.	7980 Mar 30 00:16	9°  55'59	0.67929 AU
morning rise	7979 Apr 20 12:01	20°  37'15		morning rise	7980 Apr 03 14:25	4°  27'18	
direct	7979 Apr 26 12:42	17°  56'04		direct	7980 Apr 09 02:06	2°  00'59	
desc. node	7979 May 05 21:19	22°  53'05		morning max el	7980 Apr 20 01:56	8°  35'15	24°01'56
morning max el	7979 May 08 17:03	25°  51'05	25°28'53	desc. node	7980 Apr 21 18:17	10°  52'14	
	7979 May 13 00:55	0° 			7980 May 06 21:16	0° 	
	7979 Jun 03 04:03	0° 		morning set	7980 May 25 15:33	29°  41'56	
morning set	7979 Jun 13 19:58	18°  51'18			7980 May 25 19:45	0° 	
max. Earth dist.	7979 Jun 17 12:25	25°  51'04	1.36123 AU	max. Earth dist.	7980 May 29 09:02	6°  51'32	1.38267 AU
	7979 Jun 20 02:24	0° 					
superior conj	7979 Jun 23 12:11	6°  54'00	-0°43'32	superior conj	7980 Jun 05 15:01	19°  53'33	-1°14'58
minimum elong	7979 Jun 23 14:47	6°  54'58	0°43'10	minimum elong	7980 Jun 05 19:36	19°  57'18	1°14'23
asc. node	7979 Jun 27 23:16	15°  53'38			7980 Jun 10 23:59	0° 	
evening rise	7979 Jul 01 14:17	23°  58'14		asc. node	7980 Jun 13 20:19	5°  56'18	
	7979 Jul 05 00:30	0° 		evening rise	7980 Jun 14 13:39	7°  50'35	
evening max el	7979 Jul 19 03:44	21°  52'25	19°55'19		7980 Jun 27 18:37	0° 	
retrograde	7979 Jul 29 10:30	26°  56'25		evening max el	7980 Jun 30 23:42	3°  41'59	18°58'34
evening set	7979 Jul 31 07:28	26°  54'04		retrograde	7980 Jul 09 15:09	7°  58'19	
desc. node	7979 Aug 01 20:33	26°  52'04		evening set	7980 Jul 11 14:07	7°  54'03	
inferior conj	7979 Aug 09 07:06	22°  56'48	-2°15'25	desc. node	7980 Jul 18 17:37	4°  51'41	
minimum elong	7979 Aug 09 00:53	22°  56'14	2°13'12	inferior conj	7980 Jul 19 20:20	3°  50'27	-0°20'17
min. Earth dist.	7979 Aug 11 05:58	21°  53'42	0.55168 AU	minimum elong	7980 Jul 19 19:29	3°  51'57	0°20'05
morning rise	7979 Aug 17 16:31	18°  52'57		min. Earth dist.	7980 Jul 22 20:40	1°  52'44	0.56524 AU
direct	7979 Aug 22 04:13	17°  52'46			7980 Jul 25 02:21	30° 	
morning max el	7979 Sep 04 22:18	24°  31'06	24°20'20	morning rise	7980 Jul 27 21:37	28°  53'34	
	7979 Sep 09 23:29	0° 		direct	7980 Aug 02 05:54	27°  52'00	
asc. node	7979 Sep 23 22:47	22°  59'03	01		7980 Aug 10 09:14	0° 	
	7979 Sep 27 22:24	0° 		morning max el	7980 Aug 16 11:47	4°  48'33	25°58'13
morning set	7979 Sep 30 00:06	4°  52'05			7980 Sep 03 17:21	0° 	
				asc. node	7980 Sep 09 19:47	11°  53'36	
superior conj	7979 Oct 06 21:39	19°  52'09	1°38'13	morning set	7980 Sep 13 11:14	19°  59'06	50
minimum elong	7979 Oct 06 20:30	19°  52'13	1°38'13		7980 Sep 18 11:11	0° 	
max. Earth dist.	7979 Oct 08 22:18	23°  54'44	1.32790 AU	superior conj	7980 Sep 20 08:32	4°  51'43	1°29'08
	7979 Oct 11 21:07	0° 		minimum elong	7980 Sep 20 06:37	4°  50'09	1°28'57
evening rise	7979 Oct 14 06:22	4°  55'04		max. Earth dist.	7980 Sep 21 05:26	6°  50'09	1.32010 AU
	7979 Oct 28 00:03	0° 		evening rise	7980 Sep 27 08:07	19°  51'10	
desc. node	7979 Oct 28 19:25	1°  51'52			7980 Oct 02 16:15	0° 	
evening max el	7979 Nov 16 18:12	25°  52'50	27°28'32	desc. node	7980 Oct 14 16:30	20°  53'36	26
	7979 Nov 21 18:37	0° 			7980 Oct 21 10:20	0° 	
retrograde	7979 Nov 30 10:44	3°  51'17		evening max el	7980 Oct 29 02:23	8°  53'24	27°17'56
evening set	7979 Dec 07 11:51	0°  53'39	12	retrograde	7980 Nov 11 22:39	15°  54'45	13
	7979 Dec 08 08:37	30° 		evening set	7980 Nov 19 00:39	13°  54'27	37
min. Earth dist.	7979 Dec 11 05:29	27°  52'53	0.63539 AU	min. Earth dist.	7980 Nov 22 16:58	10°  54'39	19
inferior conj	7979 Dec 13 20:49	24°  54'45	-2°19'30	inferior conj	7980 Nov 25 17:38	7°  56'57	-3°28'44
minimum elong	7979 Dec 14 01:10	24°  54'34	45	minimum elong	7980 Nov 26 00:04	7°  54'23	33
morning rise	7979 Dec 20 16:19	19°  54'28	25	morning rise	7980 Dec 03 01:39	2°  54'37	00
asc. node	7979 Dec 20 22:12	19°  54'23	04	direct	7980 Dec 05 07:29	2°  54'37	00
direct	7979 Dec 23 01:48	19°  54'00	33	asc. node	7980 Dec 06 19:15	2°  54'46	45

morning max el	7980 Dec 12 07:12	6° $\text{♊}$ 08'48	17°52'47		7981 Dec 03 12:29	0° $\text{♊}$	
	7980 Dec 27 14:27	0° $\text{♊}$		morning set	7981 Dec 11 13:39	14° $\text{♊}$ 38'41	
morning set	7980 Dec 28 00:33	0° $\text{♊}$ 45'45			7981 Dec 19 17:47	0° $\text{♊}$	
superior conj	7981 Jan 07 17:03	19° $\text{♊}$ 46'25	0°21'33	superior conj	7981 Dec 20 21:32	2° $\text{♊}$ 06'49	0°54'42
minimum elong	7981 Jan 07 18:55	19° $\text{♊}$ 54'31	0°21'24	minimum elong	7981 Dec 21 00:56	2° $\text{♊}$ 22'16	0°54'21
desc. node	7981 Jan 10 15:37	24° $\text{♊}$ 47'25		max. Earth dist.	7981 Dec 28 12:10	15° $\text{♊}$ 30'45	1.41045 AU
	7981 Jan 13 18:30	0° $\text{♊}$		desc. node	7981 Dec 28 12:38	15° $\text{♊}$ 32'43	
max. Earth dist.	7981 Jan 15 02:11	2° $\text{♊}$ 10'13	1.42980 AU	evening rise	7982 Jan 02 04:56	23° $\text{♊}$ 20'53	
evening rise	7981 Jan 21 18:01	12° $\text{♊}$ 50'21			7982 Jan 06 08:18	0° $\text{♊}$	
	7981 Feb 02 00:55	0° $\text{♊}$			7982 Jan 27 00:19	0° $\text{♊}$	
evening max el	7981 Feb 22 16:28	27° $\text{♊}$ 15'52	21°55'32	evening max el	7982 Feb 05 08:08	10° $\text{♊}$ 58'03	23°14'54
	7981 Feb 25 16:35	0° $\text{♊}$		retrograde	7982 Feb 15 18:39	17° $\text{♊}$ 08'47	
retrograde	7981 Mar 03 23:35	2° $\text{♊}$ 46'21		asc. node	7982 Feb 19 15:25	15° $\text{♊}$ 54'46	
asc. node	7981 Mar 04 18:21	2° $\text{♊}$ 43'13		evening set	7982 Feb 20 17:57	15° $\text{♊}$ 05'01	
evening set	7981 Mar 08 11:13	0° $\text{♊}$ 57'31		min. Earth dist.	7982 Feb 25 16:30	9° $\text{♊}$ 16'57	0.68347 AU
	7981 Mar 09 12:27	30° $\text{♊}$		inferior conj	7982 Feb 26 03:31	8° $\text{♊}$ 38'59	1°59'51
inferior conj	7981 Mar 13 18:57	24° $\text{♊}$ 38'15	2°35'33	minimum elong	7982 Feb 26 01:20	8° $\text{♊}$ 46'32	1°59'12
minimum elong	7981 Mar 13 16:42	24° $\text{♊}$ 46'03	2°35'00	morning rise	7982 Mar 03 08:39	2° $\text{♊}$ 32'43	
min. Earth dist.	7981 Mar 13 19:45	24° $\text{♊}$ 35'26	0.68350 AU	direct	7982 Mar 07 16:15	0° $\text{♊}$ 49'17	
morning rise	7981 Mar 18 22:02	18° $\text{♊}$ 26'56		morning max el	7982 Mar 16 04:15	5° $\text{♊}$ 43'12	21°08'42
direct	7981 Mar 23 19:38	16° $\text{♊}$ 20'59		desc. node	7982 Mar 26 12:13	18° $\text{♊}$ 24'52	
morning max el	7981 Apr 02 12:31	22° $\text{♊}$ 04'01	22°32'24		7982 Apr 03 14:18	0° $\text{♊}$	
desc. node	7981 Apr 08 15:15	29° $\text{♊}$ 03'15		morning set	7982 Apr 16 00:07	18° $\text{♊}$ 54'41	
	7981 Apr 09 09:14	0° $\text{♊}$			7982 Apr 22 22:28	0° $\text{♊}$	
	7981 Apr 30 04:39	0° $\text{♊}$		max. Earth dist.	7982 Apr 23 09:17	0° $\text{♊}$ 44'07	1.42574 AU
morning set	7981 May 06 09:26	9° $\text{♊}$ 55'19		superior conj	7982 Apr 30 14:21	12° $\text{♊}$ 47'02	-2°04'19
max. Earth dist.	7981 May 11 06:19	18° $\text{♊}$ 02'21	1.40513 AU	minimum elong	7982 Apr 30 18:52	13° $\text{♊}$ 06'20	2°04'11
	7981 May 18 02:53	0° $\text{♊}$			7982 May 10 09:33	0° $\text{♊}$	
superior conj	7981 May 19 01:20	1° $\text{♊}$ 40'50	-1°43'26	evening rise	7982 May 12 02:56	3° $\text{♊}$ 05'56	
minimum elong	7981 May 19 07:04	2° $\text{♊}$ 06'43	1°42'57	asc. node	7982 May 18 14:24	14° $\text{♊}$ 37'09	
evening rise	7981 May 29 03:13	20° $\text{♊}$ 24'08		evening max el	7982 May 28 16:14	29° $\text{♊}$ 07'26	18°06'31
asc. node	7981 May 31 17:21	25° $\text{♊}$ 15'54			7982 May 29 14:59	0° $\text{♊}$	
	7981 Jun 03 07:05	0° $\text{♊}$		retrograde	7982 Jun 04 08:41	2° $\text{♊}$ 32'10	
evening max el	7981 Jun 14 05:08	16° $\text{♊}$ 10'08	18°22'33	evening set	7982 Jun 06 21:46	2° $\text{♊}$ 02'39	
retrograde	7981 Jun 21 15:14	19° $\text{♊}$ 52'45			7982 Jun 10 08:19	30° $\text{♊}$	
evening set	7981 Jun 23 20:55	19° $\text{♊}$ 33'25		inferior conj	7982 Jun 13 14:40	27° $\text{♊}$ 06'36	2°21'09
inferior conj	7981 Jul 01 07:15	14° $\text{♊}$ 57'31	1°14'36	minimum elong	7982 Jun 13 17:44	26° $\text{♊}$ 59'16	2°20'13
minimum elong	7981 Jul 01 09:39	14° $\text{♊}$ 52'35	1°13'39	min. Earth dist.	7982 Jun 16 20:17	24° $\text{♊}$ 03'07	0.60709 AU
min. Earth dist.	7981 Jul 04 16:40	12° $\text{♊}$ 11'43	0.58484 AU	morning rise	7982 Jun 20 11:11	21° $\text{♊}$ 11'48	
desc. node	7981 Jul 05 14:40	11° $\text{♊}$ 30'03		desc. node	7982 Jun 22 11:42	20° $\text{♊}$ 04'41	
morning rise	7981 Jul 08 19:06	9° $\text{♊}$ 27'53		direct	7982 Jun 27 01:32	19° $\text{♊}$ 02'31	
direct	7981 Jul 14 21:32	7° $\text{♊}$ 49'51		morning max el	7982 Jul 11 08:53	27° $\text{♊}$ 00'35	27°50'32
morning max el	7981 Jul 29 06:53	15° $\text{♊}$ 33'23	27°11'54		7982 Jul 14 04:53	0° $\text{♊}$	
	7981 Aug 10 00:23	0° $\text{♊}$			7982 Aug 03 15:43	0° $\text{♊}$	
	7981 Aug 27 01:06	0° $\text{♊}$		morning set	7982 Aug 13 00:47	18° $\text{♊}$ 06'16	
asc. node	7981 Aug 27 16:46	1° $\text{♊}$ 20'54		asc. node	7982 Aug 14 13:44	21° $\text{♊}$ 19'30	
morning set	7981 Aug 28 20:03	3° $\text{♊}$ 43'38			7982 Aug 18 14:23	0° $\text{♊}$	
				max. Earth dist.	7982 Aug 19 01:13	0° $\text{♊}$ 59'26	1.31813 AU
superior conj	7981 Sep 04 20:21	19° $\text{♊}$ 00'50	1°14'50	superior conj	7982 Aug 20 07:21	3° $\text{♊}$ 45'13	0°55'43
minimum elong	7981 Sep 04 18:06	18° $\text{♊}$ 48'23	1°14'28	minimum elong	7982 Aug 20 05:14	3° $\text{♊}$ 33'37	0°55'16
max. Earth dist.	7981 Sep 04 15:41	18° $\text{♊}$ 35'01	1.31685 AU	evening rise	7982 Aug 27 01:38	18° $\text{♊}$ 34'29	
	7981 Sep 09 19:59	0° $\text{♊}$			7982 Sep 01 14:58	0° $\text{♊}$	
evening rise	7981 Sep 11 15:15	3° $\text{♊}$ 52'22		desc. node	7982 Sep 18 10:40	26° $\text{♊}$ 39'50	
	7981 Sep 25 11:26	0° $\text{♊}$			7982 Sep 21 10:40	0° $\text{♊}$	
desc. node	7981 Oct 01 13:36	9° $\text{♊}$ 09'43		evening max el	7982 Sep 22 21:24	1° $\text{♊}$ 26'13	25°17'54
evening max el	7981 Oct 11 03:58	20° $\text{♊}$ 24'58	26°33'18	retrograde	7982 Oct 06 19:02	8° $\text{♊}$ 27'42	
retrograde	7981 Oct 25 01:52	27° $\text{♊}$ 31'51		evening set	7982 Oct 12 15:18	7° $\text{♊}$ 09'18	
evening set	7981 Oct 31 19:23	25° $\text{♊}$ 39'24		min. Earth dist.	7982 Oct 17 09:09	4° $\text{♊}$ 29'45	0.57503 AU
min. Earth dist.	7981 Nov 04 17:32	23° $\text{♊}$ 04'26	0.59521 AU	inferior conj	7982 Oct 20 08:11	2° $\text{♊}$ 29'26	-5°19'56
inferior conj	7981 Nov 07 22:30	20° $\text{♊}$ 34'29	-4°32'53	minimum elong	7982 Oct 20 12:55	2° $\text{♊}$ 21'22	5°19'18
minimum elong	7981 Nov 08 05:40	20° $\text{♊}$ 20'28	4°31'01		7982 Oct 24 06:40	30° $\text{♊}$	
morning rise	7981 Nov 15 18:16	15° $\text{♊}$ 57'57		morning rise	7982 Oct 28 12:53	28° $\text{♊}$ 15'55	
direct	7981 Nov 18 00:05	15° $\text{♊}$ 39'56		direct	7982 Oct 30 23:08	27° $\text{♊}$ 58'24	
asc. node	7981 Nov 23 16:17	17° $\text{♊}$ 42'28			7982 Nov 06 03:02	0° $\text{♊}$	
morning max el	7981 Nov 25 18:17	19° $\text{♊}$ 28'23	18°16'25				

morning max el	7982 Nov 08 20:53	2° $\mathbb{M}$ 13'26	19°01'10	asc. node	7983 Oct 28 10:15	21° $\mathbb{L}$ 19'41	
asc. node	7982 Nov 10 13:17	3° $\mathbb{M}$ 58'34			7983 Nov 02 18:12	0° $\mathbb{M}$	
morning set	7982 Nov 25 12:28	28° $\mathbb{M}$ 57'41		morning set	7983 Nov 09 17:47	13° $\mathbb{M}$ 33'50	
	7982 Nov 26 01:05	0° $\mathbb{A}$					
superior conj	7982 Dec 03 20:43	15° $\mathbb{A}$ 20'19	1°18'32	superior conj	7983 Nov 17 09:40	29° $\mathbb{M}$ 13'00	1°33'32
minimum elong	7982 Dec 03 23:52	15° $\mathbb{A}$ 35'26	1°18'19	minimum elong	7983 Nov 17 11:43	29° $\mathbb{M}$ 23'16	1°33'30
max. Earth dist.	7982 Dec 10 17:55	28° $\mathbb{A}$ 06'43	1.38892 AU	max. Earth dist.	7983 Nov 17 19:02	0° $\mathbb{A}$	
	7982 Dec 11 19:22	0° $\mathbb{B}$		evening rise	7983 Nov 23 00:04	10° $\mathbb{A}$ 10'22	1.36780 AU
evening rise	7982 Dec 14 13:51	4° $\mathbb{B}$ 50'02		desc. node	7983 Nov 26 19:28	17° $\mathbb{A}$ 14'30	
desc. node	7982 Dec 15 09:39	6° $\mathbb{B}$ 14'49			7983 Dec 02 06:41	26° $\mathbb{A}$ 49'52	
	7982 Dec 30 10:29	0° $\mathbb{A}$			7983 Dec 04 04:03	0° $\mathbb{B}$	
evening max el	7983 Jan 18 21:33	24° $\mathbb{A}$ 43'18	24°34'13	evening max el	7983 Dec 24 19:23	0° $\mathbb{A}$	
	7983 Jan 25 12:39	0° $\mathbb{H}$		retrograde	7984 Jan 01 10:37	8° $\mathbb{A}$ 30'44	25°46'28
retrograde	7983 Jan 30 10:04	1° $\mathbb{H}$ 27'28		evening set	7984 Jan 13 20:48	15° $\mathbb{A}$ 37'15	
	7983 Feb 03 19:47	30° $\mathbb{R}$		min. Earth dist.	7984 Jan 19 21:17	13° $\mathbb{A}$ 08'54	
evening set	7983 Feb 04 21:51	29° $\mathbb{A}$ 10'08		asc. node	7984 Jan 24 04:49	8° $\mathbb{A}$ 29'33	0.67166 AU
asc. node	7983 Feb 06 12:29	27° $\mathbb{A}$ 36'37		inferior conj	7984 Jan 24 09:31	8° $\mathbb{A}$ 14'49	
min. Earth dist.	7983 Feb 09 12:16	23° $\mathbb{A}$ 56'17	0.67946 AU	minimum elong	7984 Jan 25 14:31	6° $\mathbb{A}$ 42'55	0°24'05
inferior conj	7983 Feb 10 10:39	22° $\mathbb{A}$ 41'33	1°15'51	morning rise	7984 Jan 25 13:55	6° $\mathbb{A}$ 44'52	0°23'57
minimum elong	7983 Feb 10 08:59	22° $\mathbb{A}$ 47'07	1°15'19		7984 Jan 31 07:02	0° $\mathbb{A}$ 51'34	
morning rise	7983 Feb 15 20:18	16° $\mathbb{A}$ 41'48		direct	7984 Feb 02 05:29	30° $\mathbb{R}$ $\mathbb{B}$	
direct	7983 Feb 19 14:50	15° $\mathbb{A}$ 20'17			7984 Feb 03 13:55	29° $\mathbb{B}$ 49'35	
morning max el	7983 Feb 27 03:27	19° $\mathbb{A}$ 34'08	19°56'38	morning max el	7984 Feb 04 22:57	0° $\mathbb{A}$	
	7983 Mar 07 15:09	0° $\mathbb{H}$		desc. node	7984 Feb 10 10:25	3° $\mathbb{A}$ 35'11	18°59'29
desc. node	7983 Mar 13 09:10	8° $\mathbb{H}$ 15'12			7984 Feb 28 06:07	28° $\mathbb{A}$ 26'42	
morning set	7983 Mar 25 22:00	27° $\mathbb{H}$ 12'50		morning set	7984 Feb 29 06:13	0° $\mathbb{H}$	
	7983 Mar 27 17:17	0° $\mathbb{Y}$		max. Earth dist.	7984 Mar 04 02:58	5° $\mathbb{H}$ 59'59	
max. Earth dist.	7983 Apr 05 19:10	14° $\mathbb{Y}$ 14'53	1.44203 AU		7984 Mar 18 11:05	28° $\mathbb{H}$ 22'58	1.45215 AU
					7984 Mar 19 11:46	0° $\mathbb{Y}$	
superior conj	7983 Apr 11 02:39	22° $\mathbb{Y}$ 47'53	-2°11'37	superior conj	7984 Mar 20 16:45	1° $\mathbb{Y}$ 54'07	-1°59'50
minimum elong	7983 Apr 11 02:05	22° $\mathbb{Y}$ 45'35	2°11'39	minimum elong	7984 Mar 20 09:21	1° $\mathbb{Y}$ 24'57	1°59'23
	7983 Apr 15 11:50	0° $\mathbb{B}$		evening rise	7984 Apr 04 14:39	25° $\mathbb{Y}$ 48'20	
evening rise	7983 Apr 24 08:03	14° $\mathbb{B}$ 56'00			7984 Apr 07 04:21	0° $\mathbb{B}$	
	7983 May 03 05:48	0° $\mathbb{H}$		asc. node	7984 Apr 21 08:30	21° $\mathbb{B}$ 55'52	
asc. node	7983 May 05 11:27	3° $\mathbb{H}$ 33'03		evening max el	7984 Apr 24 17:59	25° $\mathbb{B}$ 53'36	18°31'01
evening max el	7983 May 12 05:29	12° $\mathbb{H}$ 24'15	18°09'35	retrograde	7984 Apr 24 17:59	25° $\mathbb{B}$ 53'36	18°31'01
retrograde	7983 May 18 14:55	15° $\mathbb{H}$ 45'44		evening set	7984 May 01 05:49	29° $\mathbb{B}$ 25'24	
evening set	7983 May 21 11:16	15° $\mathbb{H}$ 03'51		inferior conj	7984 May 04 09:24	28° $\mathbb{B}$ 29'48	
inferior conj	7983 May 27 14:40	9° $\mathbb{H}$ 49'02	3°01'37	minimum elong	7984 May 10 03:13	22° $\mathbb{B}$ 57'29	3°20'55
minimum elong	7983 May 27 16:55	9° $\mathbb{H}$ 42'58	3°01'06	min. Earth dist.	7984 May 10 04:07	22° $\mathbb{B}$ 54'49	3°20'44
min. Earth dist.	7983 May 30 08:44	6° $\mathbb{H}$ 51'38	0.62902 AU	morning rise	7984 May 12 06:20	20° $\mathbb{B}$ 25'26	0.64840 AU
morning rise	7983 Jun 02 20:59	3° $\mathbb{H}$ 39'45		direct	7984 May 15 22:01	16° $\mathbb{B}$ 41'39	
desc. node	7983 Jun 09 08:43	1° $\mathbb{H}$ 06'34		desc. node	7984 May 22 13:43	13° $\mathbb{B}$ 55'52	
direct	7983 Jun 09 15:37	1° $\mathbb{H}$ 06'18		morning max el	7984 May 26 05:43	14° $\mathbb{B}$ 39'08	
morning max el	7983 Jun 23 16:05	9° $\mathbb{H}$ 09'19	27°50'56		7984 Jun 05 01:57	21° $\mathbb{B}$ 51'55	27°16'15
	7983 Jul 09 19:50	0° $\mathbb{B}$			7984 Jun 12 04:19	0° $\mathbb{H}$	
	7983 Jul 26 21:45	0° $\mathbb{Q}$		morning set	7984 Jun 12 00:43	0° $\mathbb{B}$	
morning set	7983 Jul 27 23:13	2° $\mathbb{Q}$ 07'27		max. Earth dist.	7984 Jul 10 12:43	15° $\mathbb{B}$ 39'43	
asc. node	7983 Aug 01 10:43	11° $\mathbb{Q}$ 24'00			7984 Jul 15 02:24	24° $\mathbb{B}$ 48'03	1.33485 AU
max. Earth dist.	7983 Aug 02 06:00	13° $\mathbb{Q}$ 06'37	1.32406 AU	asc. node	7984 Jul 17 14:32	0° $\mathbb{Q}$	
					7984 Jul 18 07:43	1° $\mathbb{Q}$ 30'23	
superior conj	7983 Aug 04 15:40	18° $\mathbb{Q}$ 17'24	0°32'13	superior conj	7984 Jul 18 19:17	2° $\mathbb{Q}$ 31'33	0°04'55
minimum elong	7983 Aug 04 14:13	18° $\mathbb{Q}$ 09'33	0°31'49	minimum elong	7984 Jul 18 19:02	2° $\mathbb{Q}$ 30'15	0°04'44
	7983 Aug 10 00:39	0° $\mathbb{H}$		behind sun begin	7984 Jul 18 13:43	2° $\mathbb{Q}$ 02'06	
evening rise	7983 Aug 11 13:15	3° $\mathbb{H}$ 16'45		behind sun end	7984 Jul 19 00:22	2° $\mathbb{Q}$ 58'26	
	7983 Aug 25 21:36	0° $\mathbb{L}$		evening rise	7984 Jul 26 00:16	17° $\mathbb{Q}$ 53'47	
evening max el	7983 Sep 04 09:15	11° $\mathbb{L}$ 49'17	23°42'54		7984 Jul 31 23:40	0° $\mathbb{H}$	
desc. node	7983 Sep 05 07:45	12° $\mathbb{L}$ 41'58		evening max el	7984 Aug 15 23:00	22° $\mathbb{H}$ 04'46	22°04'29
retrograde	7983 Sep 18 00:04	18° $\mathbb{L}$ 38'18		desc. node	7984 Aug 22 04:49	26° $\mathbb{H}$ 45'19	
evening set	7983 Sep 22 10:51	17° $\mathbb{L}$ 54'57		retrograde	7984 Aug 28 16:54	28° $\mathbb{H}$ 24'48	
min. Earth dist.	7983 Sep 28 19:31	14° $\mathbb{L}$ 52'13	0.55841 AU	evening set	7984 Aug 31 16:28	28° $\mathbb{H}$ 05'03	
inferior conj	7983 Sep 30 21:40	13° $\mathbb{L}$ 36'58	-5°32'10	min. Earth dist.	7984 Sep 09 04:03	24° $\mathbb{H}$ 24'35	0.54859 AU
minimum elong	7983 Sep 30 19:55	13° $\mathbb{L}$ 39'37	5°32'04	inferior conj	7984 Sep 09 19:06	24° $\mathbb{H}$ 03'29	-4°52'33
morning rise	7983 Oct 09 07:08	9° $\mathbb{L}$ 42'04		minimum elong	7984 Sep 09 10:44	24° $\mathbb{H}$ 15'13	4°50'53
direct	7983 Oct 12 02:48	9° $\mathbb{L}$ 22'12		morning rise	7984 Sep 18 06:31	20° $\mathbb{H}$ 15'02	
morning max el	7983 Oct 22 11:45	14° $\mathbb{L}$ 14'12	20°08'15	direct	7984 Sep 21 15:29	19° $\mathbb{H}$ 49'46	

morning max el	7984 Oct 03 13:38	25° $\mathbb{M}$ 26'08	21°36'29		7985 Aug 29 16:22	30° $\mathbb{R}$ $\Omega$	
	7984 Oct 07 18:31	0° $\Omega$		direct	7985 Sep 02 00:12	29° $\Omega$ 36'07	
asc. node	7984 Oct 14 07:15	9° $\Omega$ 31'19			7985 Sep 05 06:38	0° $\mathbb{M}$	
morning set	7984 Oct 24 03:07	28° $\Omega$ 19'59		morning max el	7985 Sep 15 05:37	5° $\mathbb{M}$ 58'22	23°19'28
	7984 Oct 24 22:13	0° $\mathbb{M}$		asc. node	7985 Oct 01 04:15	28° $\mathbb{M}$ 21'25	
					7985 Oct 02 01:27	0° $\Omega$	
superior conj	7984 Oct 31 08:23	13° $\mathbb{M}$ 33'00	1°40'40	morning set	7985 Oct 08 14:33	13° $\Omega$ 10'49	
minimum elong	7984 Oct 31 09:04	13° $\mathbb{M}$ 36'37	1°40'45				
max. Earth dist.	7984 Nov 04 11:56	22° $\mathbb{M}$ 03'48	1.34922 AU	superior conj	7985 Oct 15 13:46	28° $\Omega$ 11'32	1°40'54
evening rise	7984 Nov 08 18:09	0° $\mathbb{X}$ 24'21		minimum elong	7985 Oct 15 13:13	28° $\Omega$ 08'33	1°40'57
	7984 Nov 08 13:02	0° $\mathbb{X}$			7985 Oct 16 09:59	0° $\mathbb{M}$	
desc. node	7984 Nov 18 03:43	17° $\mathbb{X}$ 12'41		max. Earth dist.	7985 Oct 18 08:12	4° $\mathbb{M}$ 05'32	1.33444 AU
	7984 Nov 26 06:12	0° $\mathbb{Z}$		evening rise	7985 Oct 23 06:01	14° $\mathbb{M}$ 09'52	
evening max el	7984 Dec 13 23:56	22° $\mathbb{Z}$ 13'31	26°44'12		7985 Oct 31 17:14	0° $\mathbb{X}$	
retrograde	7984 Dec 27 01:57	29° $\mathbb{Z}$ 30'53		desc. node	7985 Nov 05 00:47	7° $\mathbb{X}$ 17'35	
evening set	7985 Jan 02 14:23	26° $\mathbb{Z}$ 55'39			7985 Nov 21 04:10	0° $\mathbb{Z}$	
min. Earth dist.	7985 Jan 06 15:46	22° $\mathbb{Z}$ 51'01	0.66027 AU	evening max el	7985 Nov 26 12:43	5° $\mathbb{Z}$ 41'36	27°20'07
inferior conj	7985 Jan 08 13:02	20° $\mathbb{Z}$ 37'53	-0°34'56	retrograde	7985 Dec 10 00:59	13° $\mathbb{Z}$ 01'10	
minimum elong	7985 Jan 08 14:01	20° $\mathbb{Z}$ 34'59	0°34'23	evening set	7985 Dec 16 22:54	10° $\mathbb{Z}$ 25'14	
asc. node	7985 Jan 10 06:35	18° $\mathbb{Z}$ 38'38		min. Earth dist.	7985 Dec 20 18:52	6° $\mathbb{Z}$ 54'16	0.64545 AU
morning rise	7985 Jan 14 14:37	14° $\mathbb{Z}$ 57'29		inferior conj	7985 Dec 23 03:52	4° $\mathbb{Z}$ 21'30	-1°40'02
direct	7985 Jan 17 11:37	14° $\mathbb{Z}$ 11'41		minimum elong	7985 Dec 23 06:55	4° $\mathbb{Z}$ 13'18	1°38'39
morning max el	7985 Jan 23 23:30	17° $\mathbb{Z}$ 40'38	18°18'36		7985 Dec 27 19:16	30° $\mathbb{R}$ $\mathbb{X}$	
	7985 Feb 02 06:09	0° $\approx$		asc. node	7985 Dec 28 03:38	29° $\mathbb{X}$ 45'37	
morning set	7985 Feb 12 09:50	16° $\approx$ 07'31		morning rise	7985 Dec 29 16:26	28° $\mathbb{X}$ 54'59	
desc. node	7985 Feb 14 03:04	18° $\approx$ 52'51		direct	7986 Jan 01 05:30	28° $\mathbb{X}$ 21'38	
	7985 Feb 21 02:33	0° $\mathbb{X}$			7986 Jan 05 15:31	0° $\mathbb{Z}$	
				morning max el	7986 Jan 07 16:12	1° $\mathbb{Z}$ 44'27	17°54'36
superior conj	7985 Feb 27 21:17	10° $\mathbb{X}$ 40'49	-1°28'39	morning set	7986 Jan 24 21:56	27° $\mathbb{Z}$ 41'26	
minimum elong	7985 Feb 27 11:51	10° $\mathbb{X}$ 03'51	1°27'36		7986 Jan 26 06:59	0° $\approx$	
max. Earth dist.	7985 Mar 01 06:31	12° $\mathbb{X}$ 51'02	1.45502 AU	desc. node	7986 Feb 01 00:03	9° $\approx$ 29'18	
	7985 Mar 12 05:45	0° $\mathbb{Y}$					
evening rise	7985 Mar 15 22:04	5° $\mathbb{Y}$ 45'36		superior conj	7986 Feb 07 11:50	20° $\approx$ 01'43	-0°45'39
greatest brilliancy	7985 Mar 26 19:23	22° $\mathbb{Y}$ 44'00	-0.8m	minimum elong	7986 Feb 07 06:33	19° $\approx$ 40'33	0°44'49
	7985 Mar 31 16:05	0° $\mathbb{Z}$		max. Earth dist.	7986 Feb 12 02:13	27° $\approx$ 20'36	1.45042 AU
evening max el	7985 Apr 08 03:15	9° $\mathbb{Z}$ 28'48	19°09'53		7986 Feb 13 18:43	0° $\mathbb{X}$	
asc. node	7985 Apr 08 05:35	9° $\mathbb{Z}$ 34'41		evening rise	7986 Feb 23 12:50	15° $\mathbb{X}$ 08'24	
retrograde	7985 Apr 15 01:48	13° $\mathbb{Z}$ 23'18			7986 Mar 05 07:14	0° $\mathbb{Y}$	
evening set	7985 Apr 18 13:03	12° $\mathbb{Z}$ 13'12		greatest brilliancy	7986 Mar 10 07:50	7° $\mathbb{Y}$ 27'25	-0.6m
inferior conj	7985 Apr 24 00:43	6° $\mathbb{Z}$ 24'55	3°23'41	evening max el	7986 Mar 22 07:34	23° $\mathbb{Y}$ 06'13	20°04'34
minimum elong	7985 Apr 24 00:18	6° $\mathbb{Z}$ 26'13	3°23'35	asc. node	7986 Mar 26 02:40	26° $\mathbb{Y}$ 16'49	
min. Earth dist.	7985 Apr 25 12:24	4° $\mathbb{Z}$ 30'15	0.66385 AU	retrograde	7986 Mar 30 00:09	27° $\mathbb{Y}$ 33'47	
morning rise	7985 Apr 29 11:10	0° $\mathbb{Z}$ 07'15		evening set	7986 Apr 02 19:52	26° $\mathbb{Y}$ 08'49	
	7985 Apr 29 14:28	30° $\mathbb{R}$ $\mathbb{Y}$		inferior conj	7986 Apr 08 04:13	20° $\mathbb{Y}$ 06'24	3°13'21
direct	7985 May 05 18:22	27° $\mathbb{Y}$ 21'34		minimum elong	7986 Apr 08 02:48	20° $\mathbb{Y}$ 11'13	3°13'07
	7985 May 12 18:37	0° $\mathbb{Z}$		min. Earth dist.	7986 Apr 09 01:24	18° $\mathbb{Y}$ 54'46	0.67489 AU
desc. node	7985 May 13 02:42	0° $\mathbb{Z}$ 14'09		morning rise	7986 Apr 13 09:29	13° $\mathbb{Y}$ 49'43	
morning max el	7985 May 18 12:12	4° $\mathbb{Z}$ 57'11	26°13'50	direct	7986 Apr 19 04:44	11° $\mathbb{Y}$ 14'19	
	7985 Jun 06 16:16	0° $\mathbb{I}$		desc. node	7986 Apr 29 23:41	17° $\mathbb{Y}$ 20'37	
morning set	7985 Jun 23 13:45	28° $\mathbb{I}$ 33'36		morning max el	7986 Apr 30 21:40	18° $\mathbb{Y}$ 15'05	24°52'55
	7985 Jun 24 08:13	0° $\mathbb{E}$			7986 May 10 18:44	0° $\mathbb{Z}$	
max. Earth dist.	7985 Jun 27 12:20	6° $\mathbb{E}$ 04'13	1.35039 AU		7986 May 30 17:37	0° $\mathbb{I}$	
				morning set	7986 Jun 05 21:43	10° $\mathbb{I}$ 36'29	
superior conj	7985 Jul 02 15:49	16° $\mathbb{E}$ 21'03	-0°25'20	max. Earth dist.	7986 Jun 09 12:36	17° $\mathbb{I}$ 08'58	1.37005 AU
minimum elong	7985 Jul 02 17:16	16° $\mathbb{E}$ 28'29	0°25'10				
asc. node	7985 Jul 05 04:44	21° $\mathbb{E}$ 34'53		superior conj	7986 Jun 16 02:10	29° $\mathbb{I}$ 37'29	-0°56'59
	7985 Jul 09 05:46	0° $\Omega$		minimum elong	7986 Jun 16 05:38	29° $\mathbb{I}$ 54'27	0°56'30
evening rise	7985 Jul 10 08:44	2° $\Omega$ 19'45			7986 Jun 16 06:46	0° $\mathbb{E}$	
	7985 Jul 26 09:58	0° $\mathbb{M}$		asc. node	7986 Jun 22 01:46	11° $\mathbb{E}$ 33'02	
evening max el	7985 Jul 28 22:43	2° $\mathbb{M}$ 46'01	20°37'11	evening rise	7986 Jun 24 12:15	16° $\mathbb{E}$ 27'22	
retrograde	7985 Aug 09 05:04	8° $\mathbb{M}$ 20'15			7986 Jul 01 13:10	0° $\Omega$	
desc. node	7985 Aug 09 01:53	8° $\mathbb{M}$ 20'12		evening max el	7986 Jul 11 11:36	14° $\Omega$ 09'56	19°28'35
evening set	7985 Aug 11 06:44	8° $\mathbb{M}$ 09'46		retrograde	7986 Jul 21 01:03	18° $\Omega$ 52'58	
inferior conj	7985 Aug 20 11:55	4° $\mathbb{M}$ 12'47	-3°21'31	evening set	7986 Jul 22 21:40	18° $\Omega$ 43'02	
minimum elong	7985 Aug 20 03:10	4° $\mathbb{M}$ 25'21	3°18'43	desc. node	7986 Jul 26 22:58	17° $\Omega$ 20'12	
min. Earth dist.	7985 Aug 21 13:33	3° $\mathbb{M}$ 35'59	0.54778 AU	inferior conj	7986 Jul 31 14:39	14° $\Omega$ 36'59	-1°25'21
morning rise	7985 Aug 28 23:19	0° $\mathbb{M}$ 11'01		minimum elong	7986 Jul 31 10:48	14° $\Omega$ 43'11	1°23'58


















































































































min. Earth dist.	7986 Aug 03 02:06	13°01'44	0.55646 AU	inferior conj	7987 Jul 12 13:00	25°39'02	0°23'08
morning rise	7986 Aug 08 21:22	10°03'18		minimum elong	7987 Jul 12 13:52	25°37'24	0°22'42
direct	7986 Aug 13 17:28	9°10'37		desc. node	7987 Jul 13 20:00	24°40'39	
morning max el	7986 Aug 27 18:16	16°13'25	25°04'01	min. Earth dist.	7987 Jul 15 19:11	23°13'37	0.57300 AU
	7986 Sep 07 21:37	0°		morning rise	7987 Jul 20 08:59	20°28'12	
asc. node	7986 Sep 18 01:15	17°39'22		direct	7987 Jul 26 01:28	19°08'02	
morning set	7986 Sep 23 02:15	27°59'57		morning max el	7987 Aug 09 09:54	26°40'25	26°33'12
	7986 Sep 24 00:41	0°			7987 Aug 12 14:12	0°	
					7987 Sep 01 05:46	0°	
superior conj	7986 Sep 29 23:16	12°59'40	1°35'03	asc. node	7987 Sep 04 22:16	7°17'41	
minimum elong	7986 Sep 29 21:45	12°51'19	1°34'57	morning set	7987 Sep 07 12:36	12°42'29	
max. Earth dist.	7986 Oct 01 11:55	16°20'09	1.32402 AU				
evening rise	7986 Oct 07 03:31	28°20'42		superior conj	7987 Sep 14 10:47	27°50'51	1°23'42
	7986 Oct 07 22:56	0°		minimum elong	7987 Sep 14 08:41	27°39'11	1°23'25
desc. node	7986 Oct 22 21:52	26°55'52		max. Earth dist.	7987 Sep 14 20:36	28°45'15	1.31816 AU
	7986 Oct 24 21:55	0°			7987 Sep 15 10:06	0°	
evening max el	7986 Nov 08 23:00	18°41'40	27°27'56	evening rise	7987 Sep 21 07:51	12°49'01	
retrograde	7986 Nov 22 17:22	25°58'16			7987 Sep 30 01:32	0°	
evening set	7986 Nov 29 19:57	23°30'39		desc. node	7987 Oct 09 18:56	15°56'46	
min. Earth dist.	7986 Dec 03 12:19	20°29'10	0.62746 AU		7987 Oct 21 03:03	0°	
inferior conj	7986 Dec 06 08:09	17°46'21	-2°48'59	evening max el	7987 Oct 22 04:33	1°01'50	27°02'59
minimum elong	7986 Dec 06 13:27	17°33'35	2°46'52	retrograde	7987 Nov 05 02:08	8°12'35	
morning rise	7986 Dec 13 09:01	12°36'56		evening set	7987 Nov 12 01:40	6°04'21	
asc. node	7986 Dec 15 00:41	12°14'20		min. Earth dist.	7987 Nov 15 19:11	3°23'24	0.60722 AU
direct	7986 Dec 15 16:33	12°12'18		inferior conj	7987 Nov 18 22:35	0°44'04	-3°57'10
morning max el	7986 Dec 22 09:24	15°38'20	17°48'10	minimum elong	7987 Nov 19 05:35	0°29'14	3°54'57
	7987 Jan 01 10:54	0°			7987 Nov 19 19:31	30°	
morning set	7987 Jan 07 10:02	10°24'12		morning rise	7987 Nov 26 11:51	25°54'38	
desc. node	7987 Jan 18 21:02	0°11'59		direct	7987 Nov 28 16:59	25°35'12	
	7987 Jan 18 18:10	0°		asc. node	7987 Dec 01 21:43	26°17'34	
				morning max el	7987 Dec 05 23:45	29°13'18	18°00'20
superior conj	7987 Jan 19 01:43	0°31'36	-0°01'26		7987 Dec 06 18:00	0°	
minimum elong	7987 Jan 19 01:35	0°31'00	0°01'18	morning set	7987 Dec 21 15:36	23°56'11	
behind sun begin	7987 Jan 18 16:30	29°52'58			7987 Dec 24 22:24	0°	
behind sun end	7987 Jan 19 10:39	1°08'58					
max. Earth dist.	7987 Jan 25 19:03	11°33'14	1.43892 AU	superior conj	7987 Dec 31 17:04	12°14'18	0°36'44
evening rise	7987 Feb 03 00:38	24°31'46		minimum elong	7987 Dec 31 19:52	12°26'39	0°36'27
	7987 Feb 06 14:12	0°		desc. node	7988 Jan 05 18:02	20°57'20	
	7987 Feb 27 11:24	0°		max. Earth dist.	7988 Jan 08 07:24	25°14'47	1.42195 AU
evening max el	7987 Mar 05 06:19	6°44'46	21°12'19		7988 Jan 11 04:49	0°	
asc. node	7987 Mar 12 23:45	11°47'28		evening rise	7988 Jan 14 00:20	4°31'37	
retrograde	7987 Mar 13 22:33	11°52'07			7988 Jan 30 21:59	0°	
evening set	7987 Mar 18 03:55	10°12'07		evening max el	7988 Feb 16 00:12	20°25'17	22°29'01
inferior conj	7987 Mar 23 11:18	3°58'05	2°52'08	retrograde	7988 Feb 25 19:11	26°13'42	
minimum elong	7987 Mar 23 09:14	4°05'14	2°51'43	asc. node	7988 Feb 27 20:49	25°52'00	
min. Earth dist.	7987 Mar 23 19:16	3°30'25	0.68151 AU	evening set	7988 Mar 01 11:32	24°18'40	
	7987 Mar 26 11:00	30°		inferior conj	7988 Mar 06 19:51	17°56'05	2°21'28
morning rise	7987 Mar 28 14:21	27°44'10		minimum elong	7988 Mar 06 17:34	18°04'00	2°20'51
direct	7987 Apr 02 19:59	25°26'10		min. Earth dist.	7988 Mar 06 15:37	18°10'47	0.68392 AU
	7987 Apr 11 13:29	0°		morning rise	7988 Mar 11 23:28	11°46'30	
morning max el	7987 Apr 13 07:01	1°39'49	23°23'41	direct	7988 Mar 16 15:04	9°49'51	
desc. node	7987 Apr 16 20:40	5°33'20		morning max el	7988 Mar 25 19:11	15°11'39	21°55'38
	7987 May 04 18:15	0°		desc. node	7988 Apr 02 17:37	24°33'24	
morning set	7987 May 18 07:03	21°33'58			7988 Apr 06 18:22	0°	
max. Earth dist.	7987 May 22 08:25	28°31'04	1.39217 AU		7988 Apr 26 18:31	0°	
	7987 May 23 04:44	0°		morning set	7988 Apr 27 12:56	1°13'46	
				max. Earth dist.	7988 May 03 07:05	10°38'49	1.41423 AU
superior conj	7987 May 29 22:33	12°11'47	-1°27'38				
minimum elong	7987 May 30 03:47	12°36'11	1°27'03	superior conj	7988 May 11 00:18	23°52'39	-1°53'35
evening rise	7987 Jun 08 07:56	0°08'56		minimum elong	7988 May 11 05:55	24°17'26	1°53'12
	7987 Jun 08 06:05	0°			7988 May 14 10:44	0°	
asc. node	7987 Jun 08 22:49	1°20'49		evening rise	7988 May 21 16:04	13°14'30	
evening max el	7987 Jun 24 12:05	26°17'14	18°40'47	asc. node	7988 May 25 19:50	20°52'50	
	7987 Jun 30 09:18	0°			7988 May 31 02:29	0°	
retrograde	7987 Jul 02 13:52	0°17'27		evening max el	7988 Jun 06 20:25	8°58'52	18°13'26
evening set	7987 Jul 04 15:15	0°02'45		retrograde	7988 Jun 13 21:29	12°31'36	
	7987 Jul 04 19:46	30°		evening set	7988 Jun 16 06:25	12°08'12	




































































































































inferior conj	7988 Jun 23 08:56	7°☿23'53	1°46'14	evening set	7989 May 30 13:12	24°♊51'33	
minimum elong	7988 Jun 23 11:52	7°☿17'26	1°45'12	inferior conj	7989 Jun 05 23:49	19°♊47'09	2°41'15
min. Earth dist.	7988 Jun 26 18:10	4°☿27'29	0.59419 AU	minimum elong	7989 Jun 06 02:40	19°♊40'00	2°40'28
desc. node	7988 Jun 29 17:02	2°☿15'07		min. Earth dist.	7989 Jun 09 01:06	16°♊43'51	0.61665 AU
morning rise	7988 Jun 30 14:18	1°☿42'26		morning rise	7989 Jun 12 14:04	13°♊45'19	
	7988 Jul 05 02:09	30°♋♊		desc. node	7989 Jun 16 14:04	11°♊47'24	
direct	7988 Jul 06 22:58	29°♊50'23		direct	7989 Jun 19 07:18	11°♊24'44	
	7988 Jul 08 20:27	0°☿		morning max el	7989 Jul 03 11:59	19°♊25'11	27°55'23
morning max el	7988 Jul 21 07:43	7°☿41'10	27°32'52		7989 Jul 12 11:37	0°☿	
	7988 Aug 07 04:52	0°♌			7989 Jul 31 02:25	0°♌	
morning set	7988 Aug 21 19:54	27°♌13'39		morning set	7989 Aug 05 22:13	11°♌27'19	
asc. node	7988 Aug 21 19:15	27°♌10'12		asc. node	7989 Aug 08 16:12	17°♌11'21	
	7988 Aug 23 03:24	0°♍		max. Earth dist.	7989 Aug 11 14:59	23°♌31'35	1.32008 AU
superior conj	7988 Aug 28 22:29	12°♍39'15	1°07'18	superior conj	7989 Aug 13 08:32	27°♌18'40	0°46'16
minimum elong	7988 Aug 28 20:14	12°♍26'49	1°06'53	minimum elong	7989 Aug 13 06:39	27°♌08'18	0°45'49
max. Earth dist.	7988 Aug 28 06:55	11°♍13'02	1.31684 AU		7989 Aug 14 13:53	0°♍	
evening rise	7988 Sep 04 16:37	27°♍28'02		evening rise	7989 Aug 20 03:44	12°♍10'46	
	7988 Sep 05 21:18	0°♎			7989 Aug 29 02:28	0°♎	
	7988 Sep 22 16:32	0°♎		desc. node	7989 Sep 12 13:04	21°♎01'49	
desc. node	7988 Sep 25 16:00	4°♎05'46		evening max el	7989 Sep 14 17:35	23°♎15'56	24°39'05
evening max el	7988 Oct 03 02:59	12°♎33'20	26°04'38		7989 Sep 26 04:36	0°♎	
retrograde	7988 Oct 17 01:21	19°♎37'40		retrograde	7989 Sep 28 13:06	0°♎12'46	
evening set	7988 Oct 23 11:18	17°♎59'19			7989 Sep 30 21:51	30°♎♊	
min. Earth dist.	7988 Oct 27 15:57	15°♎24'28	0.58639 AU	evening set	7989 Oct 03 20:34	29°♎09'51	
inferior conj	7988 Oct 30 19:43	13°♎05'17	-4°55'52	min. Earth dist.	7989 Oct 09 04:39	26°♎22'47	0.56737 AU
minimum elong	7988 Oct 31 02:21	12°♎53'03	4°54'29	inferior conj	7989 Oct 11 20:46	24°♎40'14	-5°30'33
morning rise	7988 Nov 07 19:42	8°♎38'13		minimum elong	7989 Oct 11 23:10	24°♎36'23	5°30'22
direct	7988 Nov 10 02:44	8°♎20'46		morning rise	7989 Oct 20 03:58	20°♎35'31	
asc. node	7988 Nov 17 18:44	11°♎49'26		direct	7989 Oct 22 17:55	20°♎17'11	
morning max el	7988 Nov 18 07:39	12°♎19'39	18°32'41	morning max el	7989 Nov 01 05:31	24°♎46'25	19°26'55
	7988 Nov 30 03:58	0°♏		asc. node	7989 Nov 04 15:45	28°♎34'53	
morning set	7988 Dec 04 09:23	8°♏02'12			7989 Nov 05 17:36	0°♎	
superior conj	7988 Dec 13 06:11	24°♏59'21	1°05'55	morning set	7989 Nov 18 11:20	22°♎29'43	
minimum elong	7988 Dec 13 09:38	25°♏15'25	1°05'37		7989 Nov 22 04:54	0°♏	
	7988 Dec 15 23:34	0°♐		superior conj	7989 Nov 26 11:48	8°♏31'03	1°25'54
max. Earth dist.	7988 Dec 20 15:28	8°♐17'16	1.40146 AU	minimum elong	7989 Nov 26 14:32	8°♏44'29	1°25'47
desc. node	7988 Dec 22 15:03	11°♐41'57		max. Earth dist.	7989 Dec 02 21:15	20°♏39'19	1.37982 AU
evening rise	7988 Dec 24 20:38	15°♐27'56		evening rise	7989 Dec 06 14:45	27°♏21'22	
	7989 Jan 02 22:29	0°♑			7989 Dec 08 03:07	0°♐	
	7989 Jan 24 18:14	0°♑		desc. node	7989 Dec 09 12:04	2°♐21'21	
evening max el	7989 Jan 28 14:52	4°♑09'41	23°49'04		7989 Dec 27 10:03	0°♑	
retrograde	7989 Feb 08 12:41	10°♑35'07		evening max el	7990 Jan 11 04:02	17°♑56'20	25°06'08
evening set	7989 Feb 13 17:13	8°♑25'33		retrograde	7990 Jan 23 02:04	24°♑50'44	
asc. node	7989 Feb 13 17:52	8°♑24'10		evening set	7990 Jan 28 19:25	22°♑28'11	
min. Earth dist.	7989 Feb 18 12:13	2°♑51'58	0.68230 AU	asc. node	7990 Jan 31 14:56	19°♑34'00	
inferior conj	7989 Feb 19 04:02	1°♑58'07	1°42'12	min. Earth dist.	7990 Feb 02 06:47	17°♑29'13	0.67670 AU
minimum elong	7989 Feb 19 02:00	2°♑05'02	1°41'33	inferior conj	7990 Feb 03 10:00	16°♑00'17	0°54'51
	7989 Feb 20 15:16	30°♑♑		minimum elong	7990 Feb 03 08:43	16°♑04'29	0°54'26
morning rise	7989 Feb 24 10:47	25°♑54'21		morning rise	7990 Feb 08 22:19	10°♑04'03	
direct	7989 Feb 28 12:48	24°♑20'12		direct	7990 Feb 12 11:46	8°♑51'10	
morning max el	7989 Mar 08 13:48	28°♑55'18	20°36'19	morning max el	7990 Feb 19 16:28	12°♑51'01	19°30'23
	7989 Mar 09 14:54	0°♑		greatest brilliancy	7990 Mar 04 12:00	29°♑40'54	-0.7m
desc. node	7989 Mar 20 14:35	14°♑08'18			7990 Mar 04 17:10	0°♑	
	7989 Mar 31 08:47	0°♒		desc. node	7990 Mar 07 11:33	4°♑08'17	
morning set	7989 Apr 06 18:05	9°♒47'49		morning set	7990 Mar 16 15:56	18°♑09'41	
max. Earth dist.	7989 Apr 15 13:12	23°♒43'03	1.43340 AU		7990 Mar 24 07:03	0°♒	
	7989 Apr 19 09:40	0°♓		max. Earth dist.	7990 Mar 29 02:28	7°♒33'34	1.44722 AU
superior conj	7989 Apr 22 02:59	4°♓30'54	-2°09'28	superior conj	7990 Apr 02 04:57	14°♒05'21	-2°09'07
minimum elong	7989 Apr 22 05:50	4°♓42'47	2°09'27	minimum elong	7990 Apr 02 01:21	13°♒50'56	2°09'03
evening rise	7989 May 04 08:21	25°♓34'38			7990 Apr 11 23:20	0°♓	
	7989 May 06 20:36	0°♊		evening rise	7990 Apr 16 04:17	7°♓00'42	
asc. node	7989 May 12 16:51	10°♊03'33		asc. node	7990 Apr 29 13:53	28°♓46'14	
evening max el	7989 May 21 08:49	22°♊04'58	18°05'33		7990 Apr 30 10:35	0°♊	
retrograde	7989 May 27 20:52	25°♊26'18		evening max el	7990 May 04 22:02	5°♊27'27	18°16'28

retrograde	7990 May 11 07:24	8° $\Pi$ 51'57		evening rise	7991 Mar 28 00:47	17° $\Upsilon$ 28'12	
evening set	7990 May 14 06:49	8° $\Pi$ 04'18			7991 Apr 04 20:52	0° $\mathcal{B}$	
inferior conj	7990 May 20 05:39	2° $\Pi$ 41'32	3°12'06	greatest brilliancy	7991 Apr 04 19:45	29° $\Upsilon$ 55'34	-0.9m
minimum elong	7990 May 20 07:20	2° $\Pi$ 36'45	3°11'45	asc. node	7991 Apr 16 10:58	16° $\mathcal{B}$ 51'33	
min. Earth dist.	7990 May 22 17:25	29° $\mathcal{B}$ 53'11	0.63763 AU	evening max el	7991 Apr 18 09:20	18° $\mathcal{B}$ 59'16	18°45'29
	7990 May 22 14:56	30° $\mathcal{R}$ $\mathcal{B}$		retrograde	7991 Apr 25 00:58	22° $\mathcal{B}$ 39'44	
morning rise	7990 May 26 06:40	26° $\mathcal{B}$ 28'35		evening set	7991 Apr 28 07:37	21° $\mathcal{B}$ 38'12	
direct	7990 Jun 02 00:40	23° $\mathcal{B}$ 48'40		inferior conj	7991 May 03 22:26	15° $\mathcal{B}$ 58'49	3°23'52
desc. node	7990 Jun 03 11:05	23° $\mathcal{B}$ 55'15		minimum elong	7991 May 03 22:45	15° $\mathcal{B}$ 57'50	3°23'46
	7990 Jun 13 23:05	0° $\Pi$		min. Earth dist.	7991 May 05 18:57	13° $\mathcal{B}$ 41'26	0.65544 AU
morning max el	7990 Jun 15 20:51	1° $\Pi$ 50'07	27°40'17	morning rise	7991 May 09 13:15	9° $\mathcal{B}$ 41'27	
	7990 Jul 06 17:21	0° $\mathcal{B}$		direct	7991 May 16 01:46	6° $\mathcal{B}$ 54'12	
morning set	7990 Jul 20 17:15	25° $\mathcal{B}$ 17'14		desc. node	7991 May 21 08:07	8° $\mathcal{B}$ 23'25	
	7990 Jul 23 01:20	0° $\Omega$		morning max el	7991 May 29 07:20	14° $\mathcal{B}$ 44'18	26°52'36
max. Earth dist.	7990 Jul 25 16:53	5° $\Omega$ 29'48	1.32803 AU		7991 Jun 10 18:02	0° $\Pi$	
asc. node	7990 Jul 26 13:11	7° $\Omega$ 16'56			7991 Jun 29 11:14	0° $\mathcal{B}$	
				morning set	7991 Jul 04 01:55	8° $\mathcal{B}$ 34'13	
superior conj	7990 Jul 28 15:07	11° $\Omega$ 43'40	0°21'03	max. Earth dist.	7991 Jul 08 08:55	16° $\mathcal{B}$ 59'01	1.34084 AU
minimum elong	7990 Jul 28 14:07	11° $\Omega$ 38'16	0°20'45				
evening rise	7990 Aug 04 15:21	26° $\Omega$ 51'31		superior conj	7991 Jul 12 16:01	25° $\mathcal{B}$ 47'31	-0°07'39
	7990 Aug 06 03:04	0° $\mathcal{H}$		minimum elong	7991 Jul 12 16:26	25° $\mathcal{B}$ 49'42	0°07'42
	7990 Aug 23 22:51	0° $\mathcal{A}$		behind sun begin	7991 Jul 12 11:24	25° $\mathcal{B}$ 23'22	
evening max el	7990 Aug 27 04:56	3° $\mathcal{A}$ 30'29	23°00'29	behind sun end	7991 Jul 12 21:29	26° $\mathcal{B}$ 16'04	
desc. node	7990 Aug 30 10:08	6° $\mathcal{A}$ 17'30		asc. node	7991 Jul 13 10:10	27° $\mathcal{B}$ 22'28	
retrograde	7990 Sep 09 12:46	10° $\mathcal{A}$ 10'10			7991 Jul 14 16:07	0° $\Omega$	
evening set	7990 Sep 13 08:03	9° $\mathcal{A}$ 38'29		evening rise	7991 Jul 20 01:31	11° $\Omega$ 23'49	
min. Earth dist.	7990 Sep 20 13:31	6° $\mathcal{A}$ 21'29	0.55323 AU		7991 Jul 29 16:23	0° $\mathcal{H}$	
inferior conj	7990 Sep 22 02:27	5° $\mathcal{A}$ 28'10	-5°22'20	evening max el	7991 Aug 08 22:00	13° $\mathcal{H}$ 52'25	21°25'24
minimum elong	7990 Sep 21 21:29	5° $\mathcal{A}$ 35'21	5°21'46	desc. node	7991 Aug 17 07:13	19° $\mathcal{H}$ 19'58	
morning rise	7990 Sep 30 13:03	1° $\mathcal{A}$ 38'30		retrograde	7991 Aug 21 02:41	19° $\mathcal{H}$ 55'06	
direct	7990 Oct 03 13:58	1° $\mathcal{A}$ 16'49		evening set	7991 Aug 23 14:22	19° $\mathcal{H}$ 40'54	
morning max el	7990 Oct 14 14:53	6° $\mathcal{A}$ 26'29	20°43'27	inferior conj	7991 Sep 01 20:06	15° $\mathcal{H}$ 42'51	-4°19'11
asc. node	7990 Oct 22 12:45	16° $\mathcal{A}$ 18'56		minimum elong	7991 Sep 01 10:39	15° $\mathcal{H}$ 56'06	4°16'46
	7990 Oct 30 05:24	0° $\mathcal{M}$		min. Earth dist.	7991 Sep 01 22:25	15° $\mathcal{H}$ 39'35	0.54700 AU
morning set	7990 Nov 02 18:39	7° $\mathcal{M}$ 10'51		morning rise	7991 Sep 10 07:47	11° $\mathcal{H}$ 51'05	
				direct	7991 Sep 13 22:50	11° $\mathcal{H}$ 22'35	
superior conj	7990 Nov 10 05:23	22° $\mathcal{M}$ 36'47	1°37'27	morning max el	7991 Sep 26 12:02	17° $\mathcal{H}$ 19'22	22°19'12
minimum elong	7990 Nov 10 06:51	22° $\mathcal{M}$ 44'19	1°37'29		7991 Oct 06 12:44	0° $\mathcal{A}$	
	7990 Nov 13 21:32	0° $\mathcal{J}$		asc. node	7991 Oct 09 09:46	4° $\mathcal{A}$ 47'36	
max. Earth dist.	7990 Nov 15 05:17	2° $\mathcal{J}$ 35'39	1.35951 AU	morning set	7991 Oct 18 05:05	21° $\mathcal{A}$ 59'01	
evening rise	7990 Nov 19 04:06	10° $\mathcal{J}$ 05'58			7991 Oct 21 23:30	0° $\mathcal{M}$	
desc. node	7990 Nov 26 09:05	22° $\mathcal{J}$ 51'27					
	7990 Nov 30 17:32	0° $\mathcal{B}$		superior conj	7991 Oct 25 07:17	7° $\mathcal{M}$ 05'27	1°41'33
	7990 Dec 23 00:31	0° $\approx$		minimum elong	7991 Oct 25 07:25	7° $\mathcal{M}$ 06'11	1°41'38
evening max el	7990 Dec 24 17:00	1° $\approx$ 41'44	26°13'03	max. Earth dist.	7991 Oct 28 20:13	14° $\mathcal{M}$ 28'51	1.34236 AU
retrograde	7991 Jan 06 10:35	8° $\approx$ 54'30		evening rise	7991 Nov 02 08:49	23° $\mathcal{M}$ 31'51	
evening set	7991 Jan 12 16:26	6° $\approx$ 22'15			7991 Nov 05 18:38	0° $\mathcal{J}$	
min. Earth dist.	7991 Jan 16 21:09	1° $\approx$ 57'56	0.66731 AU	desc. node	7991 Nov 13 06:08	13° $\mathcal{J}$ 07'09	
inferior conj	7991 Jan 18 11:52	29° $\mathcal{B}$ 58'58	-0°00'08		7991 Nov 24 08:39	0° $\mathcal{B}$	
minimum elong	7991 Jan 18 11:52	29° $\mathcal{B}$ 58'58	0°00'00	evening max el	7991 Dec 07 06:08	15° $\mathcal{B}$ 19'20	27°02'33
transit middle	7991 Jan 18 11:52	29° $\mathcal{B}$ 58'58	0°00'00	retrograde	7991 Dec 20 13:30	22° $\mathcal{B}$ 39'27	
transit begin	7991 Jan 18 09:00	0° $\approx$ 07'48		evening set	7991 Dec 27 06:16	20° $\mathcal{B}$ 02'55	
transit end	7991 Jan 18 14:44	29° $\mathcal{B}$ 50'08		min. Earth dist.	7991 Dec 31 05:09	16° $\mathcal{B}$ 12'47	0.65432 AU
	7991 Jan 18 11:31	30° $\mathcal{R}$ $\mathcal{B}$		inferior conj	7992 Jan 02 07:28	13° $\mathcal{B}$ 50'04	-1°01'55
asc. node	7991 Jan 18 12:01	29° $\mathcal{B}$ 58'30		minimum elong	7992 Jan 02 09:17	13° $\mathcal{B}$ 44'56	1°01'00
morning rise	7991 Jan 24 08:00	24° $\mathcal{B}$ 12'13		asc. node	7992 Jan 05 09:06	10° $\mathcal{B}$ 34'27	
direct	7991 Jan 27 10:24	23° $\mathcal{B}$ 17'43		morning rise	7992 Jan 08 13:32	8° $\mathcal{B}$ 15'14	
morning max el	7991 Feb 03 02:24	26° $\mathcal{B}$ 54'51	18°40'02	direct	7992 Jan 11 06:46	7° $\mathcal{B}$ 35'20	
	7991 Feb 05 20:57	0° $\approx$		morning max el	7992 Jan 17 17:26	11° $\mathcal{B}$ 00'50	18°06'14
desc. node	7991 Feb 22 08:31	24° $\approx$ 26'16			7992 Jan 31 01:27	0° $\approx$	
morning set	7991 Feb 24 06:29	27° $\approx$ 27'03		morning set	7992 Feb 05 02:11	8° $\approx$ 12'48	
	7991 Feb 25 21:23	0° $\mathcal{H}$		desc. node	7992 Feb 09 05:29	14° $\approx$ 57'16	
max. Earth dist.	7991 Mar 11 20:07	21° $\mathcal{H}$ 51'35	1.45426 AU		7992 Feb 18 14:51	0° $\mathcal{H}$	
superior conj	7991 Mar 12 12:46	22° $\mathcal{H}$ 56'47	-1°48'41	superior conj	7992 Feb 19 19:25	1° $\mathcal{H}$ 52'51	-1°11'14
minimum elong	7991 Mar 12 03:36	22° $\mathcal{H}$ 20'54	1°47'55	minimum elong	7992 Feb 19 11:16	1° $\mathcal{H}$ 20'39	1°10'09
	7991 Mar 17 00:35	0° $\Upsilon$		max. Earth dist.	7992 Feb 22 15:30	6° $\mathcal{H}$ 20'38	1.45393 AU

evening rise	7992 Mar 06 23:51	27° $\text{X}$ 07'16		superior conj	7993 Jan 29 18:57	11° $\approx$ 40'32	-0°26'30
	7992 Mar 08 20:29	0° $\text{Y}$		minimum elong	7993 Jan 29 16:00	11° $\approx$ 28'34	0°25'58
greatest brilliancy	7992 Mar 19 20:59	16° $\text{Y}$ 52'47	-0.7m	max. Earth dist.	7993 Feb 04 10:22	20° $\approx$ 45'16	1.44636 AU
	7992 Mar 29 08:27	0° $\text{B}$			7993 Feb 10 07:34	0° $\text{X}$	
evening max el	7992 Mar 31 16:42	2° $\text{B}$ 36'04	19°31'22	evening rise	7993 Feb 14 11:27	6° $\text{X}$ 25'45	
asc. node	7992 Apr 02 08:04	4° $\text{B}$ 08'17			7993 Mar 02 05:16	0° $\text{Y}$	
retrograde	7992 Apr 07 22:14	6° $\text{B}$ 43'37		evening max el	7993 Mar 14 18:46	16° $\text{Y}$ 14'25	20°32'00
evening set	7992 Apr 11 12:53	5° $\text{B}$ 27'26		asc. node	7993 Mar 20 05:10	20° $\text{Y}$ 21'56	
inferior conj	7992 Apr 16 22:51	29° $\text{Y}$ 33'06	3°20'43	retrograde	7993 Mar 22 20:43	20° $\text{Y}$ 57'47	
minimum elong	7992 Apr 16 21:58	29° $\text{Y}$ 35'59	3°20'35	evening set	7993 Mar 26 20:26	19° $\text{Y}$ 26'27	
	7992 Apr 16 14:40	30° $\text{R}$ $\text{Y}$		inferior conj	7993 Apr 01 04:08	13° $\text{Y}$ 19'01	3°05'32
min. Earth dist.	7992 Apr 18 04:20	27° $\text{Y}$ 56'02	0.66913 AU	minimum elong	7993 Apr 01 02:24	13° $\text{Y}$ 24'59	3°05'14
morning rise	7992 Apr 22 06:43	23° $\text{Y}$ 15'28		min. Earth dist.	7993 Apr 01 19:36	12° $\text{Y}$ 26'04	0.67835 AU
direct	7992 Apr 28 09:13	20° $\text{Y}$ 32'43		morning rise	7993 Apr 06 08:08	7° $\text{Y}$ 03'29	
desc. node	7992 May 07 05:07	24° $\text{Y}$ 40'50		direct	7993 Apr 11 21:51	4° $\text{Y}$ 34'39	
morning max el	7992 May 10 17:11	27° $\text{Y}$ 55'40	25°40'55	morning max el	7993 Apr 23 02:08	11° $\text{Y}$ 15'49	24°15'14
	7992 May 12 16:16	0° $\text{B}$		desc. node	7993 Apr 24 02:05	12° $\text{Y}$ 17'47	
	7992 Jun 03 11:08	0° $\text{II}$			7993 May 08 00:48	0° $\text{B}$	
morning set	7992 Jun 15 20:17	21° $\text{II}$ 07'52			7993 May 27 05:07	0° $\text{II}$	
max. Earth dist.	7992 Jun 19 13:54	28° $\text{II}$ 05'15	1.35833 AU	morning set	7993 May 28 19:16	2° $\text{II}$ 44'14	
	7992 Jun 20 13:55	0° $\text{E}$		max. Earth dist.	7993 Jun 01 11:20	9° $\text{II}$ 13'06	1.37936 AU
superior conj	7992 Jun 25 08:37	9° $\text{E}$ 23'45	-0°38'42	superior conj	7993 Jun 08 13:33	22° $\text{II}$ 23'40	-1°10'18
minimum elong	7992 Jun 25 10:55	9° $\text{E}$ 35'16	0°38'25	minimum elong	7993 Jun 08 17:51	22° $\text{II}$ 44'16	1°09'44
asc. node	7992 Jun 29 07:12	17° $\text{E}$ 24'26			7993 Jun 12 11:29	0° $\text{E}$	
evening rise	7992 Jul 03 08:10	25° $\text{E}$ 42'14		asc. node	7993 Jun 16 04:14	7° $\text{E}$ 18'46	
	7992 Jul 05 11:04	0° $\text{O}$		evening rise	7993 Jun 17 08:43	9° $\text{E}$ 39'42	
evening max el	7992 Jul 21 03:22	24° $\text{O}$ 50'48	20°05'29		7993 Jun 28 15:13	0° $\text{O}$	
	7992 Jul 30 17:41	0° $\text{P}$		evening max el	7993 Jul 03 21:37	6° $\text{O}$ 34'08	19°05'40
retrograde	7992 Jul 31 16:09	0° $\text{P}$ 02'22		retrograde	7993 Jul 12 18:26	10° $\text{O}$ 57'00	
	7992 Aug 01 14:51	30° $\text{R}$ $\text{O}$		evening set	7993 Jul 14 16:38	10° $\text{O}$ 45'27	
evening set	7992 Aug 02 13:54	29° $\text{O}$ 52'55		desc. node	7993 Jul 21 01:20	7° $\text{O}$ 53'04	
desc. node	7992 Aug 03 04:18	29° $\text{O}$ 46'10		inferior conj	7993 Jul 23 01:45	6° $\text{O}$ 32'24	-0°36'52
inferior conj	7992 Aug 11 15:24	25° $\text{O}$ 54'03	-2°33'08	minimum elong	7993 Jul 23 00:10	6° $\text{O}$ 35'07	0°36'22
minimum elong	7992 Aug 11 08:25	26° $\text{O}$ 04'29	2°30'42	min. Earth dist.	7993 Jul 25 23:12	4° $\text{O}$ 34'19	0.56275 AU
min. Earth dist.	7992 Aug 13 09:14	24° $\text{O}$ 51'40	0.55039 AU	morning rise	7993 Jul 31 04:38	1° $\text{O}$ 43'10	
morning rise	7992 Aug 20 01:30	21° $\text{O}$ 40'06		direct	7993 Aug 05 09:49	0° $\text{O}$ 39'47	
direct	7992 Aug 24 10:26	20° $\text{O}$ 58'32		morning max el	7993 Aug 19 14:36	7° $\text{O}$ 55'45	25°44'53
morning max el	7992 Sep 07 01:31	27° $\text{O}$ 39'38	24°04'45		7993 Sep 04 23:55	0° $\text{P}$	
	7992 Sep 09 09:09	0° $\text{P}$		asc. node	7993 Sep 12 03:43	13° $\text{P}$ 17'35	
asc. node	7992 Sep 25 06:45	23° $\text{P}$ 49'59		morning set	7993 Sep 16 04:06	21° $\text{P}$ 35'51	
	7992 Sep 28 10:08	0° $\text{A}$			7993 Sep 20 01:02	0° $\text{A}$	
morning set	7992 Oct 01 16:47	6° $\text{A}$ 48'48		superior conj	7993 Sep 23 01:13	6° $\text{A}$ 38'20	1°30'52
superior conj	7992 Oct 08 14:39	21° $\text{A}$ 48'12	1°39'08	minimum elong	7993 Sep 22 23:24	6° $\text{A}$ 28'18	1°30'42
minimum elong	7992 Oct 08 13:38	21° $\text{A}$ 42'43	1°39'07	max. Earth dist.	7993 Sep 24 02:11	8° $\text{A}$ 55'55	1.32098 AU
max. Earth dist.	7992 Oct 10 19:43	26° $\text{A}$ 34'43	1.32942 AU	evening rise	7993 Sep 30 01:53	21° $\text{A}$ 48'17	
	7992 Oct 12 10:19	0° $\text{M}$			7993 Oct 04 03:15	0° $\text{M}$	
evening rise	7992 Oct 16 01:08	7° $\text{M}$ 28'48		desc. node	7993 Oct 17 00:16	22° $\text{M}$ 25'26	
	7992 Oct 28 06:46	0° $\text{J}$			7993 Oct 22 06:47	0° $\text{J}$	
desc. node	7992 Oct 30 03:12	3° $\text{J}$ 01'24		evening max el	7993 Nov 01 03:07	11° $\text{J}$ 22'49	27°21'36
evening max el	7992 Nov 18 18:19	28° $\text{J}$ 37'34	27°27'25	retrograde	7993 Nov 14 22:49	18° $\text{J}$ 36'10	
	7992 Nov 20 06:25	0° $\text{Z}$		evening set	7993 Nov 22 01:18	16° $\text{J}$ 15'36	
retrograde	7992 Dec 02 09:53	5° $\text{Z}$ 56'16		min. Earth dist.	7993 Nov 25 17:28	13° $\text{J}$ 24'16	0.61906 AU
evening set	7992 Dec 09 10:19	3° $\text{Z}$ 23'02		inferior conj	7993 Nov 28 17:01	10° $\text{J}$ 41'24	-3°18'23
min. Earth dist.	7992 Dec 13 04:31	0° $\text{Z}$ 05'02	0.63806 AU	minimum elong	7993 Nov 28 23:11	10° $\text{J}$ 27'19	3°16'07
	7992 Dec 13 06:32	30° $\text{R}$ $\text{J}$		morning rise	7993 Dec 05 23:11	5° $\text{J}$ 39'53	
inferior conj	7992 Dec 15 18:12	27° $\text{J}$ 26'47	-2°09'03	direct	7993 Dec 08 05:24	5° $\text{J}$ 17'44	
minimum elong	7992 Dec 15 22:13	27° $\text{J}$ 16'27	2°07'17	asc. node	7993 Dec 09 03:11	5° $\text{J}$ 21'25	
morning rise	7992 Dec 22 11:52	22° $\text{J}$ 06'51		morning max el	7993 Dec 15 03:01	8° $\text{J}$ 47'38	17°51'01
asc. node	7992 Dec 22 06:11	22° $\text{J}$ 12'43			7993 Dec 29 00:02	0° $\text{Z}$	
direct	7992 Dec 24 22:13	21° $\text{J}$ 37'38		morning set	7993 Dec 30 21:40	3° $\text{Z}$ 25'03	
morning max el	7992 Dec 31 10:41	25° $\text{J}$ 01'01	17°49'38	superior conj	7994 Jan 10 19:52	22° $\text{Z}$ 42'01	0°15'46
	7993 Jan 04 13:50	0° $\text{Z}$		minimum elong	7994 Jan 10 21:18	22° $\text{Z}$ 48'08	0°15'40
morning set	7993 Jan 17 01:23	20° $\text{Z}$ 18'52		behind sun begin	7994 Jan 10 19:30	22° $\text{Z}$ 40'23	
	7993 Jan 22 17:57	0° $\approx$		behind sun end	7994 Jan 10 23:07	22° $\text{Z}$ 55'53	
desc. node	7993 Jan 26 02:27	5° $\approx$ 36'38					

desc. node	7994 Jan 12 23:27	26°  20'53		superior conj	7994 Dec 23 21:05	4°  52'54	0°50'15
	7994 Jan 15 03:51	0° 		minimum elong	7994 Dec 24 00:23	5°  07'48	0°49'55
max. Earth dist.	7994 Jan 18 02:01	4°  48'27	1.43235 AU	desc. node	7994 Dec 30 20:26	17°  06'10	
evening rise	7994 Jan 25 02:49	16°  01'21		max. Earth dist.	7994 Dec 31 12:26	18°  13'59	1.41348 AU
	7994 Feb 03 06:48	0° 		evening rise	7995 Jan 05 10:35	26°  23'08	
evening max el	7994 Feb 25 15:21	29°  53'46	21°44'03		7995 Jan 07 16:31	0° 	
	7994 Feb 25 17:49	0° 			7995 Jan 28 00:49	0° 	
retrograde	7994 Mar 06 18:29	5°  18'14		evening max el	7995 Feb 08 07:28	13°  35'21	23°02'58
asc. node	7994 Mar 07 02:15	5°  17'42		retrograde	7995 Feb 18 14:03	19°  40'45	
evening set	7994 Mar 11 04:30	3°  31'34		asc. node	7995 Feb 21 23:18	18°  43'32	
	7994 Mar 14 11:01	30°  11'11		evening set	7995 Feb 23 11:30	17°  39'11	
inferior conj	7994 Mar 16 12:03	27°  13'31	2°40'13	inferior conj	7995 Feb 28 20:41	11°  13'49	2°05'52
minimum elong	7994 Mar 16 09:51	27°  21'11	2°39'41	minimum elong	7995 Feb 28 18:27	11°  21'31	2°05'12
min. Earth dist.	7994 Mar 16 14:40	27°  04'26	0.68315 AU	min. Earth dist.	7995 Feb 28 11:23	11°  45'56	0.68368 AU
morning rise	7994 Mar 21 15:04	21°  01'31		morning rise	7995 Mar 06 01:20	5°  06'36	
direct	7994 Mar 26 14:43	18°  52'27		direct	7995 Mar 10 10:57	3°  19'48	
morning max el	7994 Apr 05 12:18	24°  43'21	22°45'32	morning max el	7995 Mar 19 03:04	8°  20'53	21°20'34
	7994 Apr 10 05:51	0° 		desc. node	7995 Mar 28 20:02	20°  09'00	
desc. node	7994 Apr 10 23:03	0°  52'26			7995 Apr 04 19:16	0° 	
	7994 May 01 11:48	0° 		morning set	7995 Apr 19 11:45	22°  18'46	
morning set	7994 May 09 17:15	13°  09'08			7995 Apr 24 07:04	0° 	
max. Earth dist.	7994 May 14 08:07	20°  54'18	1.40181 AU	max. Earth dist.	7995 Apr 26 09:53	3°  27'18	1.42287 AU
	7994 May 19 13:10	0° 					
superior conj	7994 May 22 02:35	4°  36'28	-1°39'30	superior conj	7995 May 03 19:03	15°  52'04	-2°01'54
minimum elong	7994 May 22 08:15	5°  02'16	1°38'58	minimum elong	7995 May 03 23:59	16°  13'19	2°01'41
evening rise	7994 May 31 23:58	23°  07'20			7995 May 11 19:20	0° 	
asc. node	7994 Jun 03 01:15	27°  00'30		evening rise	7995 May 15 02:02	5°  55'47	
	7994 Jun 04 15:38	0° 		asc. node	7995 May 20 22:17	16°  24'49	
evening max el	7994 Jun 17 01:49	18°  56'46	18°26'37		7995 May 29 19:40	0° 	
retrograde	7994 Jun 24 15:42	22°  43'38		evening max el	7995 May 31 12:19	1°  50'16	18°07'40
evening set	7994 Jun 26 20:10	22°  25'39		retrograde	7995 Jun 07 06:42	5°  16'36	
inferior conj	7994 Jul 04 09:24	17°  52'52	1°01'58	evening set	7995 Jun 09 18:40	4°  48'48	
minimum elong	7994 Jul 04 11:30	17°  48'40	1°01'06	inferior conj	7995 Jun 16 13:58	29°  55'51	2°12'50
desc. node	7994 Jul 07 22:24	15°  04'05		minimum elong	7995 Jun 16 17:03	29°  48'37	2°11'50
min. Earth dist.	7994 Jul 07 18:23	15°  11'41	0.58163 AU		7995 Jun 16 12:11	30°  11'11	
morning rise	7994 Jul 11 23:26	12°  27'44		min. Earth dist.	7995 Jun 19 20:51	26°  53'18	0.60374 AU
direct	7994 Jul 17 23:21	10°  54'29		morning rise	7995 Jun 23 12:45	24°  04'04	
morning max el	7994 Aug 01 08:48	18°  35'32	27°02'59	desc. node	7995 Jun 24 19:26	23°  20'06	
	7994 Aug 10 23:02	0° 		direct	7995 Jun 30 01:52	21°  59'00	
	7994 Aug 28 12:57	0° 			7995 Jul 14 11:30	0° 	
asc. node	7994 Aug 30 00:41	3°  02'36		morning max el	7995 Jul 14 09:47	29°  55'46	27°47'08
morning set	7994 Aug 31 13:21	6°  14'16			7995 Aug 04 23:49	0° 	
				morning set	7995 Aug 15 18:48	20°  03'00	
superior conj	7994 Sep 07 12:59	21°  28'46	1°17'19	asc. node	7995 Aug 16 21:39	22°  05'32	
minimum elong	7994 Sep 07 10:46	21°  16'26	1°16'59		7995 Aug 20 04:04	0° 	
max. Earth dist.	7994 Sep 07 12:08	21°  24'03	1.31704 AU	max. Earth dist.	7995 Aug 21 21:54	3°  49'00	1.31764 AU
	7994 Sep 11 09:33	0° 					
evening rise	7994 Sep 14 08:20	6°  21'39		superior conj	7995 Aug 23 00:12	6°  14'06	0°58'54
	7994 Sep 26 16:51	0° 		minimum elong	7995 Aug 22 22:03	6°  02'11	0°58'28
desc. node	7994 Oct 03 21:19	11°  06'18		evening rise	7995 Aug 29 18:19	21°  02'44	
evening max el	7994 Oct 14 05:40	23°  21'53	26°41'58		7995 Sep 03 01:48	0° 	
	7994 Oct 24 15:55	0° 		desc. node	7995 Sep 20 18:23	28°  04'08	
retrograde	7994 Oct 28 03:30	0°  29'55			7995 Sep 21 18:42	0° 	
	7994 Oct 31 13:42	30°  11'11		evening max el	7995 Sep 26 00:19	4°  30'25	25°30'45
evening set	7994 Nov 03 23:00	28°  32'55		retrograde	7995 Oct 09 22:27	11°  32'56	
min. Earth dist.	7994 Nov 07 19:31	25°  57'00	0.59833 AU	evening set	7995 Oct 15 22:36	10°  09'16	
inferior conj	7994 Nov 11 00:24	23°  23'58	-4°23'56	min. Earth dist.	7995 Oct 20 12:26	7°  31'27	0.57786 AU
minimum elong	7994 Nov 11 07:37	23°  09'34	4°21'58	inferior conj	7995 Oct 23 13:07	5°  25'42	-5°14'39
morning rise	7994 Nov 18 18:36	18°  44'10		minimum elong	7995 Oct 23 18:30	5°  16'21	5°13'50
direct	7994 Nov 21 00:05	18°  25'54		morning rise	7995 Oct 31 16:44	1°  08'44	
asc. node	7994 Nov 26 00:11	20°  03'21		direct	7995 Nov 03 01:54	0°	
morning max el	7994 Nov 28 15:03	22°  11'17	18°11'38	morning max el	7995 Nov 11 19:08	5°  02'04	18°53'05
	7994 Dec 04 16:34	0°		asc. node	7995 Nov 12 21:12	6°  08'11	
morning set	7994 Dec 14 08:55	17°  28'10			7995 Nov 27 12:31	0°	
	7994 Dec 21 04:51	0°		morning set	7995 Nov 28 06:31	1°  28'10	
				superior conj	7995 Dec 06 17:46	17°  59'10	1°15'29

minimum elong	7995 Dec 06 21:02	18°  14'41	1°15'15	minimum elong	7996 Nov 19 07:15	1°  58'18	1°31'43
	7995 Dec 13 05:58	0° 		max. Earth dist.	7996 Nov 25 00:30	13°  04'14	1.37087 AU
max. Earth dist.	7995 Dec 13 18:30	0°  55'46	1.39214 AU	evening rise	7996 Nov 28 19:03	20°  00'54	
evening rise	7995 Dec 17 16:12	7°  43'37		desc. node	7996 Dec 03 14:26	28°  25'15	
desc. node	7995 Dec 17 17:25	7°  48'48			7996 Dec 04 12:53	0° 	
	7995 Dec 31 15:54	0° 			7996 Dec 24 17:22	0° 	
evening max el	7996 Jan 21 21:08	27°  20'16	24°22'46	evening max el	7997 Jan 03 10:18	11°  08'03	25°36'26
	7996 Jan 24 18:54	0° 		retrograde	7997 Jan 15 17:30	18° 	
retrograde	7996 Feb 02 06:04	4°  00'06		evening set	7997 Jan 21 16:07	15°  44'42	
evening set	7996 Feb 07 15:54	1°  44'47		asc. node	7997 Jan 25 17:27	11°  22'54	
asc. node	7996 Feb 08 20:22	0°  37'53		min. Earth dist.	7997 Jan 26 00:40	11°  00'13	0.67310 AU
	7996 Feb 09 10:35	30° 		inferior conj	7997 Jan 27 08:39	9°  18'05	0°32'27
min. Earth dist.	7996 Feb 12 07:29	26°  25'44	0.68027 AU	minimum elong	7997 Jan 27 07:50	9°  20'41	0°32'14
inferior conj	7996 Feb 13 04:09	25°  16'20	1°23'06	morning rise	7997 Feb 01 23:59	3°  25'21	
minimum elong	7996 Feb 13 02:22	25°  22'18	1°22'31	direct	7997 Feb 05 08:34	2°  20'34	
morning rise	7996 Feb 18 12:57	19°  15'22		morning max el	7997 Feb 12 06:52	6°  09'22	19°06'58
direct	7996 Feb 22 09:22	17°  50'36		greatest brilliancy	7997 Feb 25 19:51	24°  20'24	-0.7m
morning max el	7996 Mar 01 01:01	22°  09'46	20°06'30	desc. node	7997 Mar 01 13:57	0°  04'10	
	7996 Mar 07 15:27	0° 			7997 Mar 01 12:52	0° 	
desc. node	7996 Mar 14 16:59	9°  55'33		morning set	7997 Mar 07 13:08	9°  17'07	
morning set	7996 Mar 28 10:48	0°  38'52			7997 Mar 20 20:00	0° 	
	7996 Mar 28 00:43	0° 		max. Earth dist.	7997 Mar 21 10:01	0°  55'08	1.45112 AU
max. Earth dist.	7996 Apr 07 18:41	16°  51'06	1.43998 AU				
				superior conj	7997 Mar 24 03:57	5°  15'08	-2°02'56
superior conj	7996 Apr 13 11:07	26°  02'45	-2°11'38	minimum elong	7997 Mar 23 21:26	4°  49'21	2°02'37
minimum elong	7996 Apr 13 11:33	26°  04'34	2°11'42	evening rise	7997 Apr 07 20:17	28°  54'48	
	7996 Apr 15 20:44	0° 			7997 Apr 08 12:11	0° 	
evening rise	7996 Apr 26 10:12	17°  53'58		asc. node	7997 Apr 23 16:24	23°  53'17	
	7996 May 03 11:40	0° 		evening max el	7997 Apr 27 14:18	28°  32'39	18°26'41
asc. node	7996 May 06 19:20	5°  24'59			7997 Apr 29 04:59	0° 	
evening max el	7996 May 14 01:30	15°  22'50	18°07'57	retrograde	7997 May 04 01:09	2°  22'02	
retrograde	7996 May 20 11:15	18°  25'42		evening set	7997 May 07 03:41	1°  28'26	
evening set	7996 May 23 06:35	17°  24'53			7997 May 08 18:44	30° 	
inferior conj	7996 May 29 11:45	12°  33'38	2°56'55	inferior conj	7997 May 12 22:41	25°  38'31	3°19'05
minimum elong	7996 May 29 14:10	12°  27'12	2°56'20	minimum elong	7997 May 12 23:47	25°  35'15	3°18'53
min. Earth dist.	7996 Jun 01 07:51	9°  34'01	0.62593 AU	min. Earth dist.	7997 May 15 04:03	23°  01'54	0.64576 AU
morning rise	7996 Jun 04 20:04	6°  26'04		morning rise	7997 May 18 19:01	19°  23'20	
desc. node	7996 Jun 10 16:29	3°  25'11		direct	7997 May 25 11:31	16°  38'45	
direct	7996 Jun 11 14:38	3°  25'30		desc. node	7997 May 28 13:32	17°  09'20	
morning max el	7996 Jun 25 16:15	11°  58'06	27°53'10	morning max el	7997 Jun 08 01:53	24°  36'16	27°23'25
	7996 Jul 09 22:52	0° 			7997 Jun 12 22:53	0° 	
	7996 Jul 27 09:25	0° 			7997 Jul 03 09:14	0° 	
morning set	7996 Jul 29 18:21	4°  43'40		morning set	7997 Jul 13 09:24	18°  20'49	
asc. node	7996 Aug 02 18:39	13°  03'18		max. Earth dist.	7997 Jul 18 01:37	27°  45'27	1.33294 AU
max. Earth dist.	7996 Aug 04 03:35	15°  05'05	1.32287 AU		7997 Jul 19 03:32	0° 	
				asc. node	7997 Jul 20 15:38	3°  09'35	
superior conj	7996 Aug 06 09:04	20°  48'32	0°36'03	superior conj	7997 Jul 21 13:35	5°  05'51	0°09'17
minimum elong	7996 Aug 06 07:30	20°  39'56	0°35'39	minimum elong	7997 Jul 21 13:07	5°  03'23	0°09'04
	7996 Aug 10 13:59	0° 		behind sun begin	7997 Jul 21 08:33	4°  39'09	
evening rise	7996 Aug 13 05:54	5°  45'28		behind sun end	7997 Jul 21 17:41	5°  02'39	
	7996 Aug 25 23:26	0° 		evening rise	7997 Jul 28 17:11	20°  23'54	
evening max el	7996 Sep 06 12:49	14°  58'21	23°57'46		7997 Aug 02 09:25	0° 	
desc. node	7996 Sep 06 15:27	15°  04'42		evening max el	7997 Aug 19 01:41	25°  12'27	22°18'43
retrograde	7996 Sep 20 05:15	21°  04'41		desc. node	7997 Aug 24 12:33	29°  28'17	
evening set	7996 Sep 24 21:35	21°  01'36			7997 Aug 25 11:56	0° 	
min. Earth dist.	7996 Sep 30 23:25	18°  03'26	0.56053 AU	retrograde	7997 Aug 31 23:34	1°  38'06	
inferior conj	7996 Oct 03 05:37	16°  04'54	-5°33'26	evening set	7997 Sep 04 04:01	1°  15'43	
minimum elong	7996 Oct 03 05:01	16°  41'49	5°33'23		7997 Sep 07 20:42	30° 	
morning rise	7996 Oct 11 14:35	12°  43'38		min. Earth dist.	7997 Sep 12 07:50	27°  41'54	0.54951 AU
direct	7996 Oct 14 08:38	12°  24'14		inferior conj	7997 Sep 13 04:52	27°  12'17	-5°02'12
morning max el	7996 Oct 24 11:55	17°  10'11	19°56'48	minimum elong	7997 Sep 12 21:13	27°  23'04	5°00'51
asc. node	7996 Oct 29 18:13	23°  02'51		morning rise	7997 Sep 21 16:07	23°  24'16	
	7996 Nov 03 00:48	0° 		direct	7997 Sep 24 23:02	23°  00'00	
morning set	7996 Nov 11 11:06	16°  02'49		morning max el	7997 Oct 06 15:40	28°  29'12	21°22'12
	7996 Nov 18 07:37	0° 			7997 Oct 08 04:20	0° 	
superior conj	7996 Nov 19 05:00	1°  47'08	1°31'46	asc. node	7997 Oct 16 15:14	11°  25'39	

	7997 Oct 26 10:46	0°♌		morning max el	7998 Sep 18 08:50	9°♎06'13	23°03'41
morning set	7997 Oct 26 20:02	0°♌48'08			7998 Oct 03 09:57	0°♏	
				asc. node	7998 Oct 03 12:14	0°♏10'20	
superior conj	7997 Nov 03 02:32	16°♌03'55	1°40'02	morning set	7998 Oct 11 07:15	15°♏38'21	
minimum elong	7997 Nov 03 03:26	16°♌08'35	1°40'06		7998 Oct 17 23:38	0°♌	
max. Earth dist.	7997 Nov 07 11:27	24°♌58'34	1.35179 AU				
	7997 Nov 10 00:52	0°♐		superior conj	7998 Oct 18 07:06	0°♌40'02	1°41'16
evening rise	7997 Nov 11 15:28	3°♐04'37		minimum elong	7998 Oct 18 06:44	0°♌37'59	1°41'20
desc. node	7997 Nov 20 11:28	18°♐50'11		max. Earth dist.	7998 Oct 21 06:16	6°♌57'23	1.33636 AU
	7997 Nov 27 11:11	0°♑		evening rise	7998 Oct 26 01:34	16°♌45'04	
evening max el	7997 Dec 16 23:36	24°♑51'57	26°36'43		7998 Nov 02 02:41	0°♐	
	7997 Dec 23 09:56	0°♒		desc. node	7998 Nov 07 08:30	8°♐57'54	
retrograde	7997 Dec 29 23:28	2°♒08'09			7998 Nov 21 22:20	0°♑	
	7998 Jan 04 20:36	30°♒♑		evening max el	7998 Nov 29 12:23	8°♑22'18	27°16'22
evening set	7998 Jan 05 10:18	29°♑33'28		retrograde	7998 Dec 12 23:31	15°♑42'23	
min. Earth dist.	7998 Jan 09 12:32	25°♑23'51	0.66226 AU	evening set	7998 Dec 19 20:17	13°♑05'56	
inferior conj	7998 Jan 11 08:07	23°♑14'10	-0°25'34	min. Earth dist.	7998 Dec 23 16:55	9°♑30'11	0.64786 AU
minimum elong	7998 Jan 11 08:50	23°♑12'04	0°25'07	inferior conj	7998 Dec 26 00:15	6°♑59'38	-1°29'53
asc. node	7998 Jan 12 14:33	21°♑44'57		minimum elong	7998 Dec 26 02:58	6°♑52'13	1°28'36
morning rise	7998 Jan 17 08:14	17°♑32'06		asc. node	7998 Dec 30 11:37	2°♑41'56	
direct	7998 Jan 20 06:36	16°♑44'07		morning rise	7999 Jan 01 11:06	1°♑31'00	
morning max el	7998 Jan 26 19:15	20°♑14'41	18°23'36	direct	7999 Jan 04 01:10	0°♑56'07	
	7998 Feb 03 09:54	0°♒		morning max el	7999 Jan 10 11:37	4°♑19'16	17°57'03
morning set	7998 Feb 15 15:35	19°♒11'15		morning set	7999 Jan 27 23:32	0°♒32'53	
desc. node	7998 Feb 16 10:54	20°♒28'16			7999 Jan 27 15:39	0°♒	
	7998 Feb 22 10:48	0°♓		desc. node	7999 Feb 03 07:50	11°♒03'12	
superior conj	7998 Mar 03 08:41	14°♓01'10	-1°34'23	superior conj	7999 Feb 10 20:37	23°♒14'06	-0°52'27
minimum elong	7998 Mar 02 23:05	13°♓23'35	1°33'22	minimum elong	7999 Feb 10 14:31	22°♒49'46	0°51'33
max. Earth dist.	7998 Mar 04 05:18	15°♓21'53	1.45505 AU	max. Earth dist.	7999 Feb 15 00:54	29°♒51'25	1.45152 AU
	7998 Mar 13 13:38	0°♈			7999 Feb 15 03:04	0°♓	
evening rise	7998 Mar 19 06:58	8°♈59'34		evening rise	7999 Feb 26 23:26	18°♓25'08	
greatest brilliancy	7998 Mar 29 10:23	24°♈53'59	-0.8m		7999 Mar 06 13:10	0°♈	
	7998 Apr 01 18:42	0°♉		greatest brilliancy	7999 Mar 13 10:26	10°♈18'41	-0.6m
asc. node	7998 Apr 10 13:29	11°♉39'42		evening max el	7999 Mar 25 05:12	25°♈44'09	19°55'33
evening max el	7998 Apr 11 00:09	12°♉07'17	19°03'03	asc. node	7999 Mar 28 10:35	28°♈31'15	
retrograde	7998 Apr 17 20:40	15°♉57'51			7999 Mar 31 16:41	0°♉	
evening set	7998 Apr 21 06:43	14°♉49'57		retrograde	7999 Apr 01 18:49	0°♉06'30	
inferior conj	7998 Apr 26 19:05	9°♉03'49	3°24'09		7999 Apr 02 20:27	30°♈♈	
minimum elong	7998 Apr 26 18:51	9°♉04'31	3°24'04	evening set	7999 Apr 05 13:09	28°♈43'52	
min. Earth dist.	7998 Apr 28 08:59	7°♉03'09	0.66177 AU	inferior conj	7999 Apr 10 21:50	22°♈43'25	3°15'39
morning rise	7998 May 02 06:34	2°♉46'07		minimum elong	7999 Apr 10 20:33	22°♈47'45	3°15'27
	7998 May 08 09:48	30°♈♈		min. Earth dist.	7999 Apr 11 21:08	21°♈25'04	0.67349 AU
direct	7998 May 08 15:12	29°♈59'49		morning rise	7999 Apr 16 03:40	16°♈26'20	
	7998 May 08 20:37	0°♉		direct	7999 Apr 22 00:49	13°♈48'47	
desc. node	7998 May 15 10:33	2°♉28'11		desc. node	7999 May 02 07:31	19°♈22'27	
morning max el	7998 May 21 12:23	7°♉39'40	26°24'38	morning max el	7999 May 03 21:56	20°♈56'05	25°05'45
	7998 Jun 07 20:57	0°♊			7999 May 11 17:38	0°♉	
	7998 Jun 25 19:08	0°♊			7999 Jun 01 01:54	0°♊	
morning set	7998 Jun 26 12:36	1°♊21'36		morning set	7999 Jun 08 23:24	13°♊32'53	
max. Earth dist.	7998 Jun 30 13:20	9°♊05'55	1.34779 AU	max. Earth dist.	7999 Jun 12 14:35	20°♊09'51	1.36688 AU
					7999 Jun 17 18:33	0°♊	
superior conj	7998 Jul 05 11:22	18°♊59'44	-0°20'35	superior conj	7999 Jun 18 23:24	2°♊21'23	-0°52'10
minimum elong	7998 Jul 05 12:32	19°♊05'45	0°20'30	minimum elong	7999 Jun 19 02:33	2°♊36'57	0°51'44
asc. node	7998 Jul 07 12:39	23°♊14'43		asc. node	7999 Jun 24 09:39	13°♊13'58	
	7998 Jul 10 18:11	0°♋		evening rise	7999 Jun 27 06:35	19°♊02'47	
evening rise	7998 Jul 13 02:13	4°♋52'14			7999 Jul 02 20:52	0°♋	
	7998 Jul 27 01:53	0°♌		evening max el	7999 Jul 14 10:25	17°♋05'17	19°37'29
evening max el	7998 Jul 31 23:29	5°♌48'01	20°49'02	retrograde	7999 Jul 24 05:54	21°♋55'35	
desc. node	7998 Aug 11 09:39	11°♌27'04		evening set	7999 Jul 26 02:22	21°♋45'59	
retrograde	7998 Aug 12 11:57	11°♌30'04		desc. node	7999 Jul 29 06:44	20°♋48'44	
evening set	7998 Aug 14 15:35	11°♌18'56		inferior conj	7999 Aug 03 21:52	17°♋42'10	-1°43'09
inferior conj	7998 Aug 23 21:25	7°♌21'58	-3°37'46	minimum elong	7999 Aug 03 17:10	17°♋49'34	1°41'27
minimum elong	7998 Aug 23 12:16	7°♌35'00	3°34'58	min. Earth dist.	7999 Aug 06 05:14	16°♋15'12	0.55463 AU
min. Earth dist.	7998 Aug 24 17:04	6°♌54'00	0.54729 AU	morning rise	7999 Aug 12 05:38	13°♋13'43	
morning rise	7998 Sep 01 09:01	3°♌23'31		direct	7999 Aug 16 22:43	12°♋24'13	
direct	7998 Sep 05 07:11	2°♌50'34					

morning max el	7999 Aug 30 21:31	19°Ω21'56	24°48'58	transit begin	8000 Jul 14 14:02	28°Ω42'51	
	7999 Sep 08 20:48	0°ྐ		transit end	8000 Jul 14 20:28	28°Ω31'05	
asc. node	7999 Sep 20 09:12	19°ྐ24'21		desc. node	8000 Jul 15 03:47	28°Ω17'39	
morning set	7999 Sep 25 18:58	0°Ω27'45		min. Earth dist.	8000 Jul 17 21:26	26°Ω18'39	0.57016 AU
	7999 Sep 25 13:45	0°Ω		morning rise	8000 Jul 22 14:51	23°Ω32'12	
				direct	8000 Jul 28 04:37	22°Ω16'29	
superior conj	7999 Oct 02 16:06	15°Ω27'05	1°36'18	morning max el	8000 Aug 11 12:14	29°Ω45'02	26°21'31
minimum elong	7999 Oct 02 14:42	15°Ω19'26	1°36'14		8000 Aug 11 18:23	0°Ω	
max. Earth dist.	7999 Oct 04 08:50	19°Ω09'15	1.32526 AU		8000 Sep 01 15:18	0°ྐ	
	7999 Oct 09 11:34	0°ྐ		asc. node	8000 Sep 06 06:08	9°ྐ00'00	
evening rise	7999 Oct 09 21:48	0°ྐ52'35		morning set	8000 Sep 09 05:35	15°ྐ11'39	
desc. node	7999 Oct 25 05:35	28°ྐ40'48					
	7999 Oct 26 01:50	0°✎		superior conj	8000 Sep 16 03:24	0°Ω18'20	1°25'45
evening max el	7999 Nov 11 23:13	21°✎27'37	27°28'50	minimum elong	8000 Sep 16 01:21	0°Ω07'01	1°25'31
retrograde	7999 Nov 25 17:06	28°✎45'11			8000 Sep 16 00:06	0°Ω	
evening set	7999 Dec 02 19:16	26°✎15'46		max. Earth dist.	8000 Sep 16 17:01	1°Ω33'45	1.31875 AU
min. Earth dist.	7999 Dec 06 11:57	23°✎10'15	0.63025 AU	evening rise	8000 Sep 23 01:15	15°Ω19'05	
inferior conj	7999 Dec 09 06:18	20°✎28'07	-2°38'28		8000 Sep 30 10:52	0°ྐ	
minimum elong	7999 Dec 09 11:16	20°✎15'55	2°36'26	desc. node	8000 Oct 11 02:40	17°ྐ48'26	
morning rise	7999 Dec 16 05:17	15°✎15'54			8000 Oct 20 10:45	0°✎	
asc. node	7999 Dec 17 08:39	14°✎57'04		evening max el	8000 Oct 24 05:45	3°✎55'04	27°08'57
direct	7999 Dec 18 13:23	14°✎50'15		retrograde	8000 Nov 07 02:59	11°✎06'25	
morning max el	7999 Dec 25 04:57	18°✎15'28	17°47'57	evening set	8000 Nov 14 03:31	8°✎54'47	
	8000 Jan 02 17:24	0°✎		min. Earth dist.	8000 Nov 17 20:30	6°✎11'26	0.61031 AU
morning set	8000 Jan 10 08:31	13°✎07'08		inferior conj	8000 Nov 20 23:01	3°✎30'46	-3°47'12
	8000 Jan 20 03:40	0°≈		minimum elong	8000 Nov 21 05:51	3°✎15'59	3°44'57
desc. node	8000 Jan 21 04:48	1°≈45'20			8000 Nov 25 12:04	30°ꣳྐ	
				morning rise	8000 Nov 28 10:28	28°ྐ38'01	
superior conj	8000 Jan 22 06:41	3°≈33'12	-0°07'52	direct	8000 Nov 30 15:44	28°ྐ17'59	
minimum elong	8000 Jan 22 05:53	3°≈29'52	0°07'38	asc. node	8000 Dec 03 05:40	28°ྐ46'10	
behind sun begin	8000 Jan 21 21:38	2°≈55'34			8000 Dec 05 13:32	0°✎	
behind sun end	8000 Jan 22 14:08	4°≈04'07		morning max el	8000 Dec 07 19:54	1°✎53'48	17°57'16
max. Earth dist.	8000 Jan 28 18:09	14°≈07'22	1.44103 AU	morning set	8000 Dec 23 11:53	26°✎33'17	
evening rise	8000 Feb 06 10:41	27°≈46'19			8000 Dec 25 08:55	0°✎	
	8000 Feb 07 21:28	0°✎					
	8000 Feb 28 10:14	0°ྐ		superior conj	8001 Jan 02 18:25	15°✎05'45	0°31'28
evening max el	8000 Mar 07 04:48	9°ྐ22'46	21°01'34	minimum elong	8001 Jan 02 20:57	15°✎16'47	0°31'15
asc. node	8000 Mar 14 07:40	14°ྐ13'46		desc. node	8001 Jan 07 01:46	22°✎30'34	
retrograde	8000 Mar 15 17:15	14°ྐ23'50		max. Earth dist.	8001 Jan 10 07:26	27°✎55'18	1.42480 AU
evening set	8000 Mar 19 21:06	12°ྐ46'09			8001 Jan 11 13:45	0°≈	
inferior conj	8000 Mar 25 04:30	6°ྐ33'48	2°56'00	evening rise	8001 Jan 16 07:56	7°≈39'38	
minimum elong	8000 Mar 25 02:30	6°ྐ40'41	2°55'35		8001 Jan 31 02:18	0°✎	
min. Earth dist.	8000 Mar 25 14:24	5°ྐ59'30	0.68084 AU	evening max el	8001 Feb 17 23:23	23°✎03'23	22°17'11
morning rise	8000 Mar 30 07:42	0°ྐ19'20		retrograde	8001 Feb 27 14:11	28°✎45'28	
	8000 Mar 30 16:37	30°ꣳ✎		asc. node	8001 Mar 01 04:45	28°✎32'19	
direct	8000 Apr 04 15:27	27°✎58'17		evening set	8001 Mar 04 04:51	26°✎52'37	
	8000 Apr 10 05:33	0°ྐ		inferior conj	8001 Mar 09 12:56	20°✎31'12	2°26'42
morning max el	8000 Apr 15 07:01	4°ྐ19'24	23°37'00	minimum elong	8001 Mar 09 10:40	20°✎39'05	2°26'06
desc. node	8000 Apr 18 04:28	7°ྐ26'20		min. Earth dist.	8001 Mar 09 10:29	20°✎39'44	0.68391 AU
	8000 May 04 23:48	0°✎		morning rise	8001 Mar 14 16:19	14°✎20'58	
morning set	8000 May 20 12:21	24°✎40'31		direct	8001 Mar 19 10:03	12°✎20'58	
	8000 May 23 14:38	0°ྐ		morning max el	8001 Mar 28 18:30	17°✎50'00	22°08'17
max. Earth dist.	8000 May 24 10:18	1°ྐ26'01	1.38882 AU	desc. node	8001 Apr 05 01:25	26°✎20'17	
					8001 Apr 07 19:57	0°ྐ	
superior conj	8000 May 31 22:04	15°ྐ02'19	-1°23'13		8001 Apr 28 02:28	0°✎	
minimum elong	8000 Jun 01 03:05	15°ྐ25'53	1°22'37	morning set	8001 Apr 30 22:25	4°✎31'56	
	8000 Jun 08 16:59	0°Ω		max. Earth dist.	8001 May 06 08:18	13°✎26'32	1.41111 AU
evening rise	8000 Jun 10 03:33	2°Ω48'15					
asc. node	8000 Jun 10 06:40	3°Ω03'26		superior conj	8001 May 14 02:54	26°✎52'00	-1°50'10
evening max el	8000 Jun 26 09:23	29°Ω06'32	18°46'38	minimum elong	8001 May 14 08:37	27°✎17'26	1°49'44
	8000 Jun 27 08:23	0°Ω			8001 May 15 20:58	0°ྐ	
retrograde	8000 Jul 04 15:42	3°Ω12'01		evening rise	8001 May 24 13:39	15°ྐ59'56	
evening set	8000 Jul 06 16:12	2°Ω58'15		asc. node	8001 May 28 03:43	22°ྐ38'25	
	8000 Jul 12 18:36	30°ꣳΩ			8001 Jun 01 07:07	0°Ω	
inferior conj	8000 Jul 14 16:56	28°Ω37'33	0°08'10	evening max el	8001 Jun 09 16:46	11°Ω43'44	18°16'16
minimum elong	8000 Jul 14 17:15	28°Ω36'58	0°07'54	retrograde	8001 Jun 16 20:44	15°Ω19'34	
transit middle	8000 Jul 14 17:15	28°Ω36'58	0°07'54	evening set	8001 Jun 19 04:32	14°Ω57'38	

inferior conj	8001 Jun 26 09:43	10°☿16'14	1°35'32	minimum elong	8002 Jun 09 01:01	22°♂27'15	2°33'44
minimum elong	8001 Jun 26 12:31	10°☿10'14	1°34'30	min. Earth dist.	8002 Jun 12 00:58	19°♂30'44	0.61330 AU
min. Earth dist.	8001 Jun 29 19:16	7°☿23'08	0.59084 AU	morning rise	8002 Jun 15 14:28	16°♂34'57	
desc. node	8001 Jul 02 00:49	5°☿42'18		desc. node	8002 Jun 18 21:53	14°♂52'45	
morning rise	8001 Jul 03 17:23	4°☿38'51		direct	8002 Jun 22 06:48	14°♂18'15	
direct	8001 Jul 10 00:03	2°☿51'41		morning max el	8002 Jul 06 12:35	22°♂18'00	27°54'35
morning max el	8001 Jul 24 09:01	10°☿39'57	27°26'23		8002 Jul 13 07:09	0°☿	
	8001 Aug 08 08:41	0°♂			8002 Aug 01 12:14	0°♂	
asc. node	8001 Aug 24 03:06	28°♂51'01		morning set	8002 Aug 08 16:41	14°♂02'03	
morning set	8001 Aug 24 13:28	29°♂45'19		asc. node	8002 Aug 11 00:05	18°♂51'12	
	8001 Aug 24 16:16	0°♂		max. Earth dist.	8002 Aug 14 12:09	26°♂23'39	1.31927 AU
max. Earth dist.	8001 Aug 31 03:27	14°♂02'49	1.31674 AU				
				superior conj	8002 Aug 16 01:36	29°♂48'53	0°49'45
superior conj	8001 Aug 31 15:11	15°♂07'54	1°10'06	minimum elong	8002 Aug 15 23:37	29°♂38'00	0°49'18
minimum elong	8001 Aug 31 12:56	14°♂55'24	1°09'43		8002 Aug 16 03:37	0°♂	
evening rise	8001 Sep 07 09:30	29°♂57'26		evening rise	8002 Aug 22 20:24	14°♂39'49	
	8001 Sep 07 09:59	0°♂			8002 Aug 30 10:40	0°♂	
	8001 Sep 23 17:00	0°♂		desc. node	8002 Sep 14 20:50	23°♂15'41	
desc. node	8001 Sep 27 23:44	6°♂06'54		evening max el	8002 Sep 17 20:53	26°♂23'13	24°53'03
evening max el	8001 Oct 06 05:22	15°♂34'30	26°15'16		8002 Sep 22 05:53	0°♂	
retrograde	8001 Oct 20 03:32	22°♂39'27		retrograde	8002 Oct 01 17:12	3°♂21'51	
evening set	8001 Oct 26 16:27	20°♂56'02		evening set	8002 Oct 07 05:30	2°♂13'27	
min. Earth dist.	8001 Oct 30 18:33	18°♂21'29	0.58950 AU		8002 Oct 11 12:31	30°♂	
inferior conj	8001 Nov 02 22:56	15°♂58'15	-4°48'08	min. Earth dist.	8002 Oct 12 08:06	29°♂29'29	0.56997 AU
minimum elong	8001 Nov 03 05:50	15°♂45'15	4°46'34	inferior conj	8002 Oct 15 03:02	27°♂40'22	-5°27'40
morning rise	8001 Nov 10 21:31	11°♂27'46		minimum elong	8002 Oct 15 06:21	27°♂34'55	5°27'20
direct	8001 Nov 13 04:03	11°♂10'09		morning rise	8002 Oct 23 09:28	23°♂32'45	
asc. node	8001 Nov 20 02:39	14°♂05'34		direct	8002 Oct 25 22:02	23°♂14'45	
morning max el	8001 Nov 21 04:59	15°♂05'07	18°26'30	morning max el	8002 Nov 04 04:36	27°♂38'41	19°17'25
	8001 Dec 01 12:36	0°♂			8002 Nov 06 09:56	0°♂	
morning set	8001 Dec 07 04:06	10°♂35'05		asc. node	8002 Nov 06 23:40	0°♂40'58	
				morning set	8002 Nov 21 05:03	25°♂00'04	
superior conj	8001 Dec 16 04:37	27°♂42'26	1°02'05		8002 Nov 23 17:02	0°♂	
minimum elong	8001 Dec 16 08:05	27°♂58'25	1°01'46	superior conj	8002 Nov 29 08:06	11°♂08'21	1°23'26
	8001 Dec 17 10:34	0°♂		minimum elong	8002 Nov 29 11:00	11°♂22'27	1°23'16
max. Earth dist.	8001 Dec 23 16:12	11°♂04'22	1.40468 AU	max. Earth dist.	8002 Dec 05 21:58	23°♂31'35	1.38300 AU
desc. node	8001 Dec 24 22:47	13°♂15'29		evening rise	8002 Dec 09 15:51	0°♂12'01	
evening rise	8001 Dec 28 00:55	18°♂26'48			8002 Dec 09 13:06	0°♂	
	8002 Jan 04 05:43	0°♂		desc. node	8002 Dec 11 19:48	3°♂56'02	
	8002 Jan 25 13:02	0°♂			8002 Dec 28 13:10	0°♂	
evening max el	8002 Jan 31 14:23	6°♂47'04	23°37'08	evening max el	8003 Jan 14 03:36	20°♂33'28	24°55'09
retrograde	8002 Feb 11 08:13	13°♂07'21		retrograde	8003 Jan 25 22:24	27°♂24'36	
evening set	8002 Feb 16 10:56	10°♂59'45		evening set	8003 Jan 31 13:49	25°♂03'43	
asc. node	8002 Feb 16 01:49	11°♂18'22		asc. node	8003 Feb 02 22:54	22°♂39'21	
inferior conj	8002 Feb 21 21:18	4°♂32'47	1°48'41	min. Earth dist.	8003 Feb 05 02:12	19°♂59'37	0.67774 AU
minimum elong	8002 Feb 21 19:12	4°♂39'58	1°48'02	inferior conj	8003 Feb 06 03:46	18°♂35'27	1°02'32
min. Earth dist.	8002 Feb 21 07:09	5°♂21'11	0.68283 AU	minimum elong	8003 Feb 06 02:20	18°♂40'11	1°02'04
	8002 Feb 25 11:54	30°♂		morning rise	8003 Feb 11 15:05	12°♂38'02	
morning rise	8002 Feb 27 03:26	28°♂28'10		direct	8003 Feb 15 06:17	11°♂22'14	
direct	8002 Mar 03 07:24	26°♂50'48		morning max el	8003 Feb 22 13:37	15°♂26'44	19°39'16
	8002 Mar 09 20:33	0°♂			8003 Mar 05 21:11	0°♂	
morning max el	8002 Mar 11 12:04	1°♂32'05	20°47'22	greatest brilliancy	8003 Mar 07 07:33	2°♂05'38	-0.7m
desc. node	8002 Mar 22 22:23	15°♂50'39		desc. node	8003 Mar 09 19:21	5°♂47'32	
	8002 Apr 01 15:01	0°♂		morning set	8003 Mar 20 04:02	21°♂33'41	
morning set	8002 Apr 10 06:38	13°♂14'03			8003 Mar 25 14:47	0°♂	
max. Earth dist.	8002 Apr 18 13:32	26°♂23'58	1.43085 AU	max. Earth dist.	8003 Apr 01 01:48	10°♂08'43	1.44553 AU
	8002 Apr 20 18:31	0°♂					
superior conj	8002 Apr 25 09:16	7°♂40'10	-2°07'57	superior conj	8003 Apr 05 14:49	17°♂24'04	-2°10'26
minimum elong	8002 Apr 25 12:47	7°♂55'02	2°07'55	minimum elong	8003 Apr 05 12:19	17°♂13'58	2°10'26
evening rise	8002 May 07 08:39	28°♂27'58			8003 Apr 13 07:53	0°♂	
	8002 May 08 05:23	0°♂		evening rise	8003 Apr 19 07:57	10°♂03'13	
asc. node	8002 May 15 00:46	11°♂53'07			8003 May 01 10:50	0°♂	
evening max el	8002 May 24 04:46	24°♂46'45	18°05'29	asc. node	8003 May 01 21:51	0°♂41'12	
retrograde	8002 May 30 18:08	28°♂09'01		evening max el	8003 May 07 18:07	8°♂07'49	18°13'39
evening set	8002 Jun 02 09:21	27°♂36'08		retrograde	8003 May 14 03:22	11°♂31'03	
inferior conj	8002 Jun 08 22:04	22°♂34'32	2°34'34	evening set	8003 May 17 01:39	10°♂45'29	



inferior conj	8003 May 23 02:01	5° $\Pi$ 25'27	3°08'40	greatest brilliancy	8004 Apr 06 01:47	1° $\mathcal{B}$ 30'38	-0.9m
minimum elong	8003 May 23 03:55	5° $\Pi$ 20'10	3°08'17	asc. node	8004 Apr 17 18:57	18° $\mathcal{B}$ 53'09	
min. Earth dist.	8003 May 25 16:02	2° $\Pi$ 33'33	0.63469 AU	evening max el	8004 Apr 20 05:54	21° $\mathcal{B}$ 38'55	18°40'04
	8003 May 28 06:24	30° $\mathcal{R}$ 8		retrograde	8004 Apr 26 20:03	25° $\mathcal{B}$ 16'08	
morning rise	8003 May 29 04:50	29° $\mathcal{B}$ 13'32		evening set	8004 Apr 30 01:36	24° $\mathcal{B}$ 16'44	
direct	8003 Jun 04 23:09	26° $\mathcal{B}$ 35'38		inferior conj	8004 May 05 17:24	18° $\mathcal{B}$ 39'51	3°23'03
desc. node	8003 Jun 05 18:55	26° $\mathcal{B}$ 37'48		minimum elong	8004 May 05 17:56	18° $\mathcal{B}$ 38'15	3°22'56
	8003 Jun 13 13:40	0° $\Pi$		min. Earth dist.	8004 May 07 16:15	16° $\mathcal{B}$ 17'02	0.65308 AU
morning max el	8003 Jun 18 21:02	4° $\Pi$ 38'03	27°44'41	morning rise	8004 May 11 09:33	12° $\mathcal{B}$ 22'53	
	8003 Jul 07 23:10	0° $\mathcal{E}$		direct	8004 May 17 23:17	9° $\mathcal{B}$ 35'50	
morning set	8003 Jul 23 12:58	27° $\mathcal{E}$ 56'02		desc. node	8004 May 22 15:55	10° $\mathcal{B}$ 46'50	
	8003 Jul 24 13:38	0° $\Omega$		morning max el	8004 May 31 07:19	17° $\mathcal{B}$ 28'27	27°01'21
max. Earth dist.	8003 Jul 28 15:06	8° $\Omega$ 24'51	1.32653 AU		8004 Jun 10 18:13	0° $\Pi$	
asc. node	8003 Jul 28 21:06	8° $\Omega$ 56'33			8004 Jun 29 20:49	0° $\mathcal{E}$	
				morning set	8004 Jul 05 23:25	11° $\mathcal{E}$ 18'44	
superior conj	8003 Jul 31 08:51	14° $\Omega$ 16'24	0°25'09	max. Earth dist.	8004 Jul 10 08:39	19° $\mathcal{E}$ 58'05	1.33864 AU
minimum elong	8003 Jul 31 07:41	14° $\Omega$ 10'04	0°24'47				
evening rise	8003 Aug 07 08:04	29° $\Omega$ 21'04		superior conj	8004 Jul 14 10:47	28° $\mathcal{E}$ 24'11	-0°03'07
	8003 Aug 07 15:24	0° $\mathcal{M}$		minimum elong	8004 Jul 14 10:57	28° $\mathcal{E}$ 25'06	0°03'12
	8003 Aug 24 13:20	0° $\mathcal{L}$		behind sun begin	8004 Jul 14 05:24	27° $\mathcal{E}$ 55'59	
evening max el	8003 Aug 30 08:10	6° $\mathcal{L}$ 39'35	23°15'19	behind sun end	8004 Jul 14 16:31	28° $\mathcal{E}$ 54'15	
desc. node	8003 Sep 01 17:55	8° $\mathcal{L}$ 48'24		asc. node	8004 Jul 14 18:08	29° $\mathcal{E}$ 02'48	
retrograde	8003 Sep 12 18:51	13° $\mathcal{L}$ 23'08			8004 Jul 15 05:00	0° $\Omega$	
evening set	8003 Sep 16 19:31	12° $\mathcal{L}$ 47'38		evening rise	8004 Jul 21 18:37	13° $\Omega$ 55'16	
min. Earth dist.	8003 Sep 23 17:27	9° $\mathcal{L}$ 35'52	0.55485 AU		8004 Jul 29 22:10	0° $\mathcal{M}$	
inferior conj	8003 Sep 25 11:18	8° $\mathcal{L}$ 34'43	-5°27'02	evening max el	8004 Aug 10 23:57	16° $\mathcal{M}$ 58'50	21°38'48
minimum elong	8003 Sep 25 07:27	8° $\mathcal{L}$ 40'22	5°26'43	desc. node	8004 Aug 18 15:00	22° $\mathcal{M}$ 13'20	
morning rise	8003 Oct 03 21:33	4° $\mathcal{L}$ 43'34		retrograde	8004 Aug 23 09:36	23° $\mathcal{M}$ 07'55	
direct	8003 Oct 06 20:30	4° $\mathcal{L}$ 22'37		evening set	8004 Aug 26 01:03	22° $\mathcal{M}$ 52'05	
morning max el	8003 Oct 17 15:55	9° $\mathcal{L}$ 26'03	20°30'45	inferior conj	8004 Sep 04 06:01	18° $\mathcal{M}$ 53'12	-4°32'09
asc. node	8003 Oct 24 20:40	18° $\mathcal{L}$ 17'02		minimum elong	8004 Sep 03 20:47	19° $\mathcal{M}$ 06'06	4°29'57
	8003 Oct 31 15:31	0° $\mathcal{M}$		min. Earth dist.	8004 Sep 04 02:17	18° $\mathcal{M}$ 58'25	0.54732 AU
morning set	8003 Nov 05 11:44	9° $\mathcal{M}$ 39'39		morning rise	8004 Sep 12 17:36	15° $\mathcal{M}$ 02'58	
				direct	8004 Sep 16 06:29	14° $\mathcal{M}$ 35'41	
superior conj	8003 Nov 13 00:09	25° $\mathcal{M}$ 09'55	1°36'12	morning max el	8004 Sep 28 14:39	20° $\mathcal{M}$ 25'34	22°04'02
minimum elong	8003 Nov 13 01:50	25° $\mathcal{M}$ 18'28	1°36'12		8004 Oct 06 13:27	0° $\mathcal{L}$	
	8003 Nov 15 09:51	0° $\mathcal{X}$		asc. node	8004 Oct 10 17:40	6° $\mathcal{L}$ 40'02	
max. Earth dist.	8003 Nov 18 05:10	5° $\mathcal{X}$ 29'49	1.36233 AU	morning set	8004 Oct 19 21:51	24° $\mathcal{L}$ 27'31	
evening rise	8003 Nov 22 02:36	12° $\mathcal{X}$ 49'58			8004 Oct 22 12:40	0° $\mathcal{M}$	
desc. node	8003 Nov 28 16:50	24° $\mathcal{X}$ 28'06					
	8003 Dec 02 01:00	0° $\mathcal{Z}$		superior conj	8004 Oct 27 01:02	9° $\mathcal{M}$ 36'05	1°41'22
	8003 Dec 23 13:53	0° $\approx$		minimum elong	8004 Oct 27 01:22	9° $\mathcal{M}$ 37'51	1°41'27
evening max el	8003 Dec 27 16:34	4° $\approx$ 19'47	26°04'06	max. Earth dist.	8004 Oct 30 18:59	17° $\mathcal{M}$ 23'01	1.34465 AU
retrograde	8004 Jan 09 07:46	11° $\approx$ 30'50		evening rise	8004 Nov 04 05:19	26° $\mathcal{M}$ 10'55	
evening set	8004 Jan 15 11:45	8° $\approx$ 59'50			8004 Nov 06 05:27	0° $\mathcal{X}$	
min. Earth dist.	8004 Jan 19 17:25	4° $\approx$ 30'16	0.66891 AU	desc. node	8004 Nov 14 13:53	14° $\mathcal{X}$ 46'45	
asc. node	8004 Jan 20 20:00	3° $\approx$ 07'49			8004 Nov 24 10:23	0° $\mathcal{Z}$	
inferior conj	8004 Jan 21 06:24	2° $\approx$ 35'23	0°08'41	evening max el	8004 Dec 09 05:51	18° $\mathcal{Z}$ 00'00	26°56'37
minimum elong	8004 Jan 21 06:10	2° $\approx$ 36'06	0°08'43	retrograde	8004 Dec 22 11:32	25° $\mathcal{Z}$ 19'19	
transit middle	8004 Jan 21 06:10	2° $\approx$ 36'06	0°08'43	evening set	8004 Dec 29 02:46	22° $\mathcal{Z}$ 43'11	
transit begin	8004 Jan 21 03:46	2° $\approx$ 43'35		min. Earth dist.	8005 Jan 02 02:32	18° $\mathcal{Z}$ 47'56	0.65650 AU
transit end	8004 Jan 21 08:34	2° $\approx$ 28'39		inferior conj	8005 Jan 04 03:05	16° $\mathcal{Z}$ 28'25	-0°52'06
	8004 Jan 23 10:14	30° $\mathcal{R}$ 3		minimum elong	8005 Jan 04 04:35	16° $\mathcal{Z}$ 24'05	0°51'20
morning rise	8004 Jan 27 01:13	26° $\mathcal{Z}$ 46'59		asc. node	8005 Jan 06 17:02	13° $\mathcal{Z}$ 38'45	
direct	8004 Jan 30 05:07	25° $\mathcal{Z}$ 49'59		morning rise	8005 Jan 10 07:31	10° $\mathcal{Z}$ 51'29	
morning max el	8004 Feb 05 22:34	29° $\mathcal{Z}$ 29'54	18°46'27	direct	8005 Jan 13 02:02	10° $\mathcal{Z}$ 09'35	
	8004 Feb 06 10:28	0° $\approx$		morning max el	8005 Jan 19 12:58	13° $\mathcal{Z}$ 36'08	18°10'10
desc. node	8004 Feb 24 16:17	26° $\approx$ 03'12			8005 Jan 31 07:54	0° $\approx$	
	8004 Feb 27 04:48	0° $\mathcal{H}$		morning set	8005 Feb 07 06:07	11° $\approx$ 12'14	
morning set	8004 Feb 27 14:52	0° $\mathcal{H}$ 39'26		desc. node	8005 Feb 10 13:15	16° $\approx$ 32'44	
max. Earth dist.	8004 Mar 13 18:40	24° $\mathcal{H}$ 22'49	1.45367 AU		8005 Feb 18 23:03	0° $\mathcal{H}$	
superior conj	8004 Mar 15 00:29	26° $\mathcal{H}$ 19'43	-1°53'03	superior conj	8005 Feb 22 06:01	5° $\mathcal{H}$ 11'38	-1°17'37
minimum elong	8004 Mar 14 15:49	25° $\mathcal{H}$ 45'41	1°52'23	minimum elong	8005 Feb 21 21:18	4° $\mathcal{H}$ 37'19	1°16'33
	8004 Mar 17 08:34	0° $\mathcal{Y}$		max. Earth dist.	8005 Feb 24 14:07	8° $\mathcal{H}$ 51'56	1.45452 AU
evening rise	8004 Mar 30 07:57	20° $\mathcal{Y}$ 39'07		evening rise	8005 Mar 10 09:45	0° $\mathcal{Y}$ 24'00	
	8004 Apr 05 03:11	0° $\mathcal{B}$			8005 Mar 10 03:35	0° $\mathcal{Y}$	

greatest brilliancy	8005 Mar 22 14:59	19°♄14'30	-0.7m	minimum elong	8006 Feb 01 22:25	14°♊34'12	0°32'39
	8005 Mar 30 03:13	0°♄		max. Earth dist.	8006 Feb 07 09:26	23°♊19'07	1.44795 AU
evening max el	8005 Apr 03 13:57	5°♄15'13	19°23'32		8006 Feb 11 15:22	0°♄	
asc. node	8005 Apr 04 16:02	6°♄17'57		evening rise	8006 Feb 17 22:09	9°♄43'28	
retrograde	8005 Apr 10 16:52	9°♄17'51			8006 Mar 03 09:07	0°♄	
evening set	8005 Apr 14 06:19	8°♄03'48		evening max el	8006 Mar 17 16:48	18°♄53'29	20°22'08
inferior conj	8005 Apr 19 16:50	2°♄11'36	3°22'00	asc. node	8006 Mar 22 13:05	22°♄42'18	
minimum elong	8005 Apr 19 16:07	2°♄13'56	3°21'52	retrograde	8006 Mar 25 15:18	23°♄31'06	
min. Earth dist.	8005 Apr 21 00:28	0°♄28'15	0.66741 AU	evening set	8006 Mar 29 13:38	22°♄01'56	
	8005 Apr 21 09:16	30°♄		inferior conj	8006 Apr 03 21:31	15°♄56'12	3°08'33
morning rise	8005 Apr 25 01:33	25°♄53'57		minimum elong	8006 Apr 03 19:53	16°♄01'47	3°08'16
direct	8005 May 01 05:47	23°♄09'56		min. Earth dist.	8006 Apr 04 14:56	14°♄56'46	0.67725 AU
desc. node	8005 May 09 12:55	26°♄49'35		morning rise	8006 Apr 09 01:55	9°♄40'18	
	8005 May 13 02:15	0°♄		direct	8006 Apr 14 17:36	7°♄09'05	
morning max el	8005 May 13 17:15	0°♄37'32	25°52'43	morning max el	8006 Apr 26 02:21	13°♄57'09	24°28'33
	8005 Jun 04 17:32	0°♄		desc. node	8006 Apr 26 09:53	14°♄16'21	
morning set	8005 Jun 18 20:12	23°♄59'37			8006 May 09 03:10	0°♄	
	8005 Jun 22 01:12	0°♄			8006 May 28 14:02	0°♄	
max. Earth dist.	8005 Jun 22 15:16	1°♄07'16	1.35547 AU	morning set	8006 May 31 22:25	5°♄45'42	
				max. Earth dist.	8006 Jun 04 13:40	12°♄14'02	1.37607 AU
superior conj	8005 Jun 28 04:48	12°♄05'17	-0°33'55				
minimum elong	8005 Jun 28 06:48	12°♄15'19	0°33'39	superior conj	8006 Jun 11 11:42	25°♄11'20	-1°05'35
asc. node	8005 Jul 01 15:08	19°♄05'42		minimum elong	8006 Jun 11 15:42	25°♄30'42	1°05'02
evening rise	8005 Jul 06 01:54	28°♄16'26			8006 Jun 13 22:57	0°♄	
	8005 Jul 06 22:10	0°♄		asc. node	8006 Jun 18 12:08	9°♄01'38	
evening max el	8005 Jul 24 03:18	27°♄51'01	20°16'09	evening rise	8006 Jun 20 03:33	12°♄17'50	
	8005 Jul 26 14:04	0°♄			8006 Jun 29 16:23	0°♄	
retrograde	8005 Aug 03 22:12	3°♄10'24		evening max el	8006 Jul 06 19:43	9°♄27'42	19°13'15
evening set	8005 Aug 05 21:01	3°♄00'43		retrograde	8006 Jul 15 22:10	13°♄57'27	
desc. node	8005 Aug 05 12:05	3°♄04'02		evening set	8006 Jul 17 19:41	13°♄46'34	
	8005 Aug 13 08:44	30°♄		desc. node	8006 Jul 23 09:09	11°♄28'39	
inferior conj	8005 Aug 15 00:06	29°♄02'52	-2°50'45	inferior conj	8006 Jul 26 07:39	9°♄35'59	-0°53'50
minimum elong	8005 Aug 14 16:24	29°♄14'11	2°48'06	minimum elong	8006 Jul 26 05:17	9°♄39'56	0°53'02
min. Earth dist.	8005 Aug 16 12:29	28°♄09'25	0.54928 AU	min. Earth dist.	8006 Jul 29 01:53	7°♄45'46	0.56041 AU
morning rise	8005 Aug 23 10:45	24°♄53'36		morning rise	8006 Aug 03 11:59	4°♄52'18	
direct	8005 Aug 27 16:55	24°♄14'29		direct	8006 Aug 08 13:59	3°♄52'54	
	8005 Sep 09 07:14	0°♄		morning max el	8006 Aug 22 17:34	11°♄04'16	25°30'59
morning max el	8005 Sep 10 04:46	0°♄49'06	23°49'00		8006 Sep 06 04:50	0°♄	
asc. node	8005 Sep 27 14:38	25°♄38'06		asc. node	8006 Sep 14 11:37	15°♄02'23	
	8005 Sep 29 21:00	0°♄		morning set	8006 Sep 18 20:54	24°♄05'13	
morning set	8005 Oct 04 09:27	9°♄17'33			8006 Sep 21 14:36	0°♄	
superior conj	8005 Oct 11 07:42	24°♄17'11	1°39'52	superior conj	8006 Sep 25 17:54	9°♄06'28	1°32'28
minimum elong	8005 Oct 11 06:51	24°♄12'35	1°39'54	minimum elong	8006 Sep 25 16:11	8°♄56'59	1°32'20
max. Earth dist.	8005 Oct 13 17:23	29°♄27'18	1.33107 AU	max. Earth dist.	8006 Sep 26 22:56	11°♄46'07	1.32196 AU
	8005 Oct 13 23:32	0°♄		evening rise	8006 Oct 02 19:44	24°♄20'03	
evening rise	8005 Oct 18 20:06	10°♄03'48			8006 Oct 05 14:39	0°♄	
	8005 Oct 29 14:10	0°♄		desc. node	8006 Oct 19 08:00	24°♄13'58	
desc. node	8005 Nov 01 10:56	4°♄44'51			8006 Oct 23 05:44	0°♄	
	8005 Nov 20 08:54	0°♄		evening max el	8006 Nov 04 03:37	14°♄12'03	27°24'29
evening max el	8005 Nov 21 18:17	1°♄21'53	27°25'30	retrograde	8006 Nov 17 22:49	21°♄26'30	
retrograde	8005 Dec 05 08:43	8°♄40'48		evening set	8006 Nov 25 01:32	19°♄03'13	
evening set	8005 Dec 12 08:24	6°♄06'31		min. Earth dist.	8006 Nov 28 17:39	16°♄08'36	0.62203 AU
min. Earth dist.	8005 Dec 16 03:13	2°♄44'03	0.64071 AU	inferior conj	8006 Dec 01 16:00	13°♄25'28	-3°07'58
inferior conj	8005 Dec 18 15:16	0°♄07'34	-1°58'34	minimum elong	8006 Dec 01 21:53	13°♄11'48	3°05'44
minimum elong	8005 Dec 18 18:56	29°♄57'59	1°56'57	morning rise	8006 Dec 08 20:20	8°♄21'11	
	8005 Dec 18 18:09	30°♄		direct	8006 Dec 11 02:58	7°♄58'13	
asc. node	8005 Dec 24 14:03	25°♄04'55		asc. node	8006 Dec 11 11:05	7°♄58'44	
morning rise	8005 Dec 25 07:07	24°♄45'13		morning max el	8006 Dec 17 22:43	11°♄26'30	17°49'39
direct	8005 Dec 27 18:23	24°♄14'36			8006 Dec 30 08:55	0°♄	
morning max el	8006 Jan 03 06:02	27°♄37'31	17°51'00	morning set	8007 Jan 02 19:03	6°♄05'37	
	8006 Jan 05 09:27	0°♄					
morning set	8006 Jan 20 01:34	23°♄07'36		superior conj	8007 Jan 13 23:11	25°♄39'39	0°09'47
	8006 Jan 24 02:56	0°♄		minimum elong	8007 Jan 14 00:07	25°♄43'36	0°09'46
desc. node	8006 Jan 28 10:12	7°♄11'08		behind sun begin	8007 Jan 13 17:05	25°♄13'46	
				behind sun end	8007 Jan 14 07:09	26°♄13'23	
superior conj	8006 Feb 02 02:10	14°♄49'27	-0°33'18	desc. node	8007 Jan 15 07:09	27°♄54'41	

	8007 Jan 16 13:05	0°♊		minimum elong	8007 Dec 27 00:16	7°♊55'25	0°45'17
max. Earth dist.	8007 Jan 21 01:34	7°♊26'00	1.43474 AU	desc. node	8008 Jan 02 04:09	18°♊40'07	
evening rise	8007 Jan 28 11:56	19°♊13'52		max. Earth dist.	8008 Jan 03 12:38	20°♊57'18	1.41648 AU
	8007 Feb 04 12:56	0°♋		evening rise	8008 Jan 08 16:46	29°♊27'53	
	8007 Feb 26 05:43	0°♋			8008 Jan 09 00:45	0°♋	
evening max el	8007 Feb 28 14:05	2°♋32'24	21°32'46		8008 Jan 29 02:26	0°♋	
asc. node	8007 Mar 09 10:09	7°♋50'50		evening max el	8008 Feb 11 06:47	16°♋13'42	22°51'00
retrograde	8007 Mar 09 13:20	7°♋50'55		retrograde	8008 Feb 21 09:23	22°♋13'26	
evening set	8007 Mar 13 21:43	6°♋06'31		asc. node	8008 Feb 24 07:13	21°♋30'52	
inferior conj	8007 Mar 19 05:10	29°♋49'44	2°44'41	evening set	8008 Feb 26 04:59	20°♋14'09	
minimum elong	8007 Mar 19 03:00	29°♋57'15	2°44'11	inferior conj	8008 Mar 02 13:50	13°♋49'37	2°11'38
	8007 Mar 19 02:13	30°♋		minimum elong	8008 Mar 02 11:34	13°♋57'26	2°10'59
min. Earth dist.	8007 Mar 19 09:37	29°♋34'16	0.68267 AU	min. Earth dist.	8008 Mar 02 06:18	14°♋15'43	0.68386 AU
morning rise	8007 Mar 24 08:08	23°♋37'03		morning rise	8008 Mar 07 18:03	7°♋41'28	
direct	8007 Mar 29 09:52	21°♋24'52		direct	8008 Mar 12 05:45	5°♋51'13	
morning max el	8007 Apr 08 12:11	27°♋23'46	22°58'49	morning max el	8008 Mar 21 02:01	10°♋59'33	21°32'37
	8007 Apr 10 22:45	0°♌		desc. node	8008 Mar 30 03:47	21°♋54'27	
desc. node	8007 Apr 13 06:50	2°♌43'27			8008 Apr 04 23:19	0°♌	
	8007 May 02 18:20	0°♍		morning set	8008 Apr 21 22:52	25°♌42'11	
morning set	8007 May 13 00:26	16°♍22'04			8008 Apr 24 15:20	0°♍	
max. Earth dist.	8007 May 17 10:01	23°♍48'11	1.39846 AU	max. Earth dist.	8008 Apr 28 10:32	6°♍11'56	1.41995 AU
	8007 May 20 23:10	0°♎					
				superior conj	8008 May 05 23:11	18°♍56'18	-1°59'10
superior conj	8007 May 25 03:21	7°♎31'33	-1°35'24	minimum elong	8008 May 06 04:27	19°♍19'08	1°58'55
minimum elong	8007 May 25 08:54	7°♎57'03	1°34'50		8008 May 12 05:10	0°♎	
evening rise	8007 Jun 03 20:24	25°♎50'22		evening rise	8008 May 17 00:43	8°♎45'06	
asc. node	8007 Jun 05 09:09	28°♎45'31		asc. node	8008 May 22 06:13	18°♎12'46	
	8007 Jun 06 00:52	0°♏			8008 May 29 12:52	0°♏	
evening max el	8007 Jun 19 22:39	21°♏44'48	18°31'10	evening max el	8008 Jun 02 08:29	4°♏34'20	18°09'16
retrograde	8007 Jun 27 16:31	25°♏36'09		retrograde	8008 Jun 09 04:58	8°♏02'31	
evening set	8007 Jun 29 19:50	25°♏19'25		evening set	8008 Jun 11 15:52	7°♏36'20	
inferior conj	8007 Jul 07 12:01	20°♏49'49	0°48'42	inferior conj	8008 Jun 18 13:38	2°♏46'28	2°03'52
minimum elong	8007 Jul 07 13:44	20°♏46'27	0°47'57	minimum elong	8008 Jun 18 16:42	2°♏39'26	2°02'50
desc. node	8007 Jul 10 06:13	18°♏40'15			8008 Jun 21 14:53	30°♏	
min. Earth dist.	8007 Jul 10 20:19	18°♏13'42	0.57852 AU	min. Earth dist.	8008 Jun 21 21:34	29°♏45'29	0.60041 AU
morning rise	8007 Jul 15 04:10	15°♏29'26		morning rise	8008 Jun 25 14:42	26°♏58'01	
direct	8007 Jul 21 01:32	14°♏00'51		desc. node	8008 Jun 26 03:16	26°♏39'29	
morning max el	8007 Aug 04 10:53	21°♏39'13	26°53'15	direct	8008 Jul 02 02:29	24°♏57'18	
	8007 Aug 11 18:24	0°♐			8008 Jul 13 07:02	0°♏	
	8007 Aug 30 00:10	0°♑		morning max el	8008 Jul 16 10:46	2°♏52'20	27°42'56
asc. node	8007 Sep 01 08:35	4°♑45'01			8008 Aug 05 06:51	0°♐	
morning set	8007 Sep 03 06:34	8°♑45'08		morning set	8008 Aug 17 12:43	23°♐12'07	
				asc. node	8008 Aug 18 05:34	24°♐40'20	
superior conj	8007 Sep 10 05:37	23°♑57'12	1°19'42		8008 Aug 20 17:30	0°♑	
minimum elong	8007 Sep 10 03:26	23°♑45'03	1°19'23	max. Earth dist.	8008 Aug 23 18:29	6°♑38'59	1.31723 AU
max. Earth dist.	8007 Sep 10 08:31	24°♑13'16	1.31732 AU				
	8007 Sep 12 23:12	0°♒		superior conj	8008 Aug 24 17:04	8°♑43'44	1°02'01
evening rise	8007 Sep 17 01:29	8°♒51'40		minimum elong	8008 Aug 24 14:52	8°♑31'34	1°01'35
	8007 Sep 27 23:29	0°♓		evening rise	8008 Aug 31 11:06	23°♑32'03	
desc. node	8007 Oct 06 05:06	13°♓02'25			8008 Sep 03 13:10	0°♓	
evening max el	8007 Oct 17 07:14	26°♓18'34	26°50'01		8008 Sep 21 09:17	0°♓	
	8007 Oct 21 18:48	0°♈		desc. node	8008 Sep 22 02:12	0°♓53'49	
retrograde	8007 Oct 31 05:03	3°♈27'45		evening max el	8008 Sep 28 03:12	7°♓35'01	25°43'10
evening set	8007 Nov 07 02:11	1°♈26'32		retrograde	8008 Oct 12 01:37	14°♓38'19	
	8007 Nov 09 07:40	30°♈		evening set	8008 Oct 18 05:25	13°♓09'28	
min. Earth dist.	8007 Nov 10 21:23	28°♈49'13	0.60141 AU	min. Earth dist.	8008 Oct 22 15:41	10°♓33'02	0.58076 AU
inferior conj	8007 Nov 14 01:57	26°♈13'34	-4°14'44	inferior conj	8008 Oct 25 17:41	8°♓22'15	-5°08'39
minimum elong	8007 Nov 14 09:09	25°♈58'54	4°12'38	minimum elong	8008 Oct 25 23:36	8°♓11'45	5°07'37
morning rise	8007 Nov 21 18:29	21°♈30'27		morning rise	8008 Nov 02 20:07	4°♓01'45	
direct	8007 Nov 23 23:42	21°♈11'52		direct	8008 Nov 05 04:23	3°♓44'27	
asc. node	8007 Nov 28 08:06	22°♈27'07		morning max el	8008 Nov 13 17:12	7°♓50'57	18°45'29
morning max el	8007 Dec 01 11:40	24°♈54'32	18°07'17	asc. node	8008 Nov 14 05:08	8°♓20'23	
	8007 Dec 05 17:03	0°♉			8008 Nov 27 23:15	0°♉	
morning set	8007 Dec 17 04:27	19°♉48'06		morning set	8008 Nov 30 00:48	4°♉00'26	
	8007 Dec 22 15:40	0°♊					
				superior conj	8008 Dec 08 15:15	20°♉40'10	1°12'15
superior conj	8007 Dec 26 21:06	7°♊41'15	0°45'36	minimum elong	8008 Dec 08 18:36	20°♉55'59	1°11'58

	8008 Dec 13 16:35	0°♄		max. Earth dist.	8009 Nov 28 01:08	15°♄58'43	1.37399 AU
max. Earth dist.	8008 Dec 15 19:13	3°♄45'32	1.39540 AU	evening rise	8009 Dec 01 19:02	22°♄48'55	
desc. node	8008 Dec 19 01:10	9°♄23'24		desc. node	8009 Dec 05 22:12	0°♄01'00	
evening rise	8008 Dec 19 19:09	10°♄39'49			8009 Dec 05 21:58	0°♄	
	8008 Dec 31 21:43	0°♄			8009 Dec 25 17:08	0°♄	
	8009 Jan 23 21:27	0°♄		evening max el	8010 Jan 06 10:00	13°♄45'46	25°26'05
evening max el	8009 Jan 23 20:47	29°♄58'22	24°11'05	retrograde	8010 Jan 18 14:02	20°♄46'05	
retrograde	8009 Feb 04 01:58	6°♄33'23		evening set	8010 Jan 24 10:50	18°♄20'42	
evening set	8009 Feb 09 09:54	4°♄20'07		asc. node	8010 Jan 28 01:24	14°♄30'49	
asc. node	8009 Feb 10 04:19	3°♄38'13		min. Earth dist.	8010 Jan 28 20:22	13°♄31'10	0.67446 AU
	8009 Feb 13 07:24	30°♄		inferior conj	8010 Jan 30 02:41	11°♄53'35	0°40'37
min. Earth dist.	8009 Feb 14 02:40	28°♄55'55	0.68106 AU	minimum elong	8010 Jan 30 01:42	11°♄56'47	0°40'20
inferior conj	8009 Feb 14 21:37	27°♄51'57	1°30'06	morning rise	8010 Feb 04 16:54	5°♄59'35	
minimum elong	8009 Feb 14 19:44	27°♄58'17	1°29'30	direct	8010 Feb 08 03:12	4°♄51'59	
morning rise	8009 Feb 20 05:38	21°♄49'54		morning max el	8010 Feb 15 03:30	8°♄44'16	19°14'47
direct	8009 Feb 24 04:00	20°♄21'50		greatest brilliancy	8010 Feb 28 08:00	26°♄17'35	-0.7m
morning max el	8009 Mar 03 22:46	24°♄46'21	20°16'37		8010 Mar 02 18:52	0°♄	
	8009 Mar 08 13:06	0°♄		desc. node	8010 Mar 03 21:40	1°♄42'03	
desc. node	8009 Mar 17 00:44	11°♄36'48		morning set	8010 Mar 10 23:52	12°♄36'28	
	8009 Mar 29 07:45	0°♄			8010 Mar 22 04:03	0°♄	
morning set	8009 Mar 31 23:39	4°♄05'51		max. Earth dist.	8010 Mar 24 09:10	3°♄28'46	1.44991 AU
max. Earth dist.	8009 Apr 10 18:21	19°♄28'50	1.43781 AU				
				superior conj	8010 Mar 27 14:50	8°♄35'56	-2°05'35
superior conj	8009 Apr 16 19:03	29°♄16'51	-2°11'14	minimum elong	8010 Mar 27 09:18	8°♄13'56	2°05'21
minimum elong	8009 Apr 16 20:25	29°♄22'30	2°11'17		8010 Apr 09 20:10	0°♄	
	8009 Apr 17 05:30	0°♄		evening rise	8010 Apr 11 01:24	2°♄00'36	
evening rise	8009 Apr 29 11:51	20°♄51'14		asc. node	8010 Apr 26 00:22	25°♄50'35	
	8009 May 04 18:33	0°♄			8010 Apr 29 07:15	0°♄	
asc. node	8009 May 09 03:17	7°♄17'04		evening max el	8010 Apr 30 10:32	1°♄12'27	18°22'45
evening max el	8009 May 16 21:31	17°♄46'28	18°06'43	retrograde	8010 May 06 20:38	4°♄39'49	
retrograde	8009 May 23 07:50	21°♄07'06		evening set	8010 May 09 22:06	3°♄48'16	
evening set	8009 May 26 02:08	20°♄28'57			8010 May 14 07:29	30°♄	
inferior conj	8009 Jun 01 09:08	15°♄19'33	2°51'42	inferior conj	8010 May 15 18:21	28°♄20'47	3°16'54
minimum elong	8009 Jun 01 11:43	15°♄12'48	2°51'04	minimum elong	8010 May 15 19:40	28°♄16'57	3°16'39
min. Earth dist.	8009 Jun 04 07:09	12°♄18'13	0.62273 AU	min. Earth dist.	8010 May 18 01:58	25°♄39'51	0.64297 AU
morning rise	8009 Jun 07 19:29	9°♄13'54		morning rise	8010 May 21 16:17	22°♄06'17	
desc. node	8009 Jun 13 00:18	6°♄54'11		direct	8010 May 28 09:24	19°♄23'12	
direct	8009 Jun 14 13:47	6°♄46'34		desc. node	8010 May 30 21:18	19°♄43'11	
morning max el	8009 Jun 28 16:29	14°♄48'28	27°54'44	morning max el	8010 Jun 11 01:55	27°♄22'11	27°30'00
	8009 Jul 11 00:08	0°♄			8010 Jun 13 13:27	0°♄	
	8009 Jul 28 20:31	0°♄			8010 Jul 04 16:57	0°♄	
morning set	8009 Aug 01 13:20	7°♄20'25		morning set	8010 Jul 16 05:49	21°♄01'59	
asc. node	8009 Aug 05 02:35	14°♄43'32			8010 Jul 20 16:17	0°♄	
max. Earth dist.	8009 Aug 07 01:09	18°♄52'38	1.32178 AU	max. Earth dist.	8010 Jul 21 00:38	0°♄43'23	1.33114 AU
				asc. node	8010 Jul 22 23:35	4°♄49'35	
superior conj	8009 Aug 09 02:27	23°♄20'25	0°39'49				
minimum elong	8009 Aug 09 00:45	23°♄11'07	0°39'23	superior conj	8010 Jul 24 07:43	7°♄40'23	0°13'35
	8009 Aug 12 03:23	0°♄		minimum elong	8010 Jul 24 07:03	7°♄36'48	0°13'19
evening rise	8009 Aug 15 22:36	8°♄15'19		behind sun begin	8010 Jul 24 04:00	7°♄20'35	
	8009 Aug 27 03:26	0°♄		behind sun end	8010 Jul 24 10:05	7°♄53'03	
desc. node	8009 Sep 08 23:18	17°♄25'57		evening rise	8010 Jul 31 10:03	22°♄54'34	
evening max el	8009 Sep 09 16:25	18°♄08'04	24°12'27		8010 Aug 03 19:57	0°♄	
retrograde	8009 Sep 23 10:08	25°♄01'23		evening max el	8010 Aug 22 04:32	28°♄21'13	22°33'09
evening set	8009 Sep 28 07:57	24°♄08'18			8010 Aug 23 23:44	0°♄	
min. Earth dist.	8009 Oct 04 03:14	21°♄14'23	0.56281 AU	desc. node	8010 Aug 26 20:23	2°♄08'36	
inferior conj	8009 Oct 06 13:12	19°♄44'40	-5°33'27	retrograde	8010 Sep 04 06:09	4°♄52'09	
minimum elong	8009 Oct 06 13:43	19°♄43'51	5°33'24	evening set	8010 Sep 07 15:41	4°♄26'46	
morning rise	8009 Oct 14 21:37	15°♄44'55		min. Earth dist.	8010 Sep 15 11:37	0°♄59'10	0.55065 AU
direct	8009 Oct 17 14:11	15°♄25'54		inferior conj	8010 Sep 16 14:28	0°♄21'07	-5°10'34
morning max el	8009 Oct 27 11:50	20°♄05'51	19°45'50	minimum elong	8010 Sep 16 07:40	0°♄30'46	5°09'32
asc. node	8009 Nov 01 02:09	25°♄23'40			8010 Sep 17 05:24	30°♄	
	8009 Nov 04 05:01	0°♄		morning rise	8010 Sep 25 01:32	26°♄33'00	
morning set	8009 Nov 14 04:33	18°♄32'52		direct	8010 Sep 28 06:20	26°♄09'42	
	8009 Nov 19 20:04	0°♄			8010 Oct 07 22:56	0°♄	
				morning max el	8010 Oct 09 17:29	1°♄31'48	21°08'16
superior conj	8009 Nov 22 00:37	4°♄22'39	1°29'49	asc. node	8010 Oct 18 23:08	13°♄21'02	
minimum elong	8009 Nov 22 03:03	4°♄34'41	1°29'44		8010 Oct 27 22:44	0°♄	

morning set	8010 Oct 29 12:57	3°♌16'44		morning rise	8011 Sep 04 18:43	6°♏35'49	
				direct	8011 Sep 08 14:17	6°♏04'36	
superior conj	8010 Nov 05 20:50	18°♌35'37	1°39'14	morning max el	8011 Sep 21 11:54	12°♏13'44	22°48'00
minimum elong	8010 Nov 05 21:56	18°♌41'20	1°39'18		8011 Oct 04 16:56	0°♏	
max. Earth dist.	8010 Nov 10 11:03	27°♌53'30	1.35442 AU	asc. node	8011 Oct 05 20:07	1°♏59'52	
	8010 Nov 11 12:49	0°♏		morning set	8011 Oct 13 23:54	18°♏06'02	
evening rise	8010 Nov 14 13:02	5°♏45'57			8011 Oct 19 13:11	0°♌	
desc. node	8010 Nov 22 19:16	20°♏27'54					
	8010 Nov 28 16:54	0°♏		superior conj	8011 Oct 21 00:29	3°♌09'05	1°41'29
evening max el	8010 Dec 19 23:09	27°♏30'17	26°28'50	minimum elong	8011 Oct 21 00:17	3°♌08'01	1°41'34
	8010 Dec 22 17:35	0°♏		max. Earth dist.	8011 Oct 24 04:24	9°♌49'28	1.33835 AU
retrograde	8011 Jan 01 20:52	4°♏45'27		evening rise	8011 Oct 28 21:18	19°♌21'12	
evening set	8011 Jan 08 06:03	2°♏11'26			8011 Nov 03 12:34	0°♏	
	8011 Jan 10 13:35	30°♏		desc. node	8011 Nov 09 16:19	10°♏38'31	
min. Earth dist.	8011 Jan 12 09:08	27°♏56'47	0.66411 AU		8011 Nov 22 19:12	0°♏	
inferior conj	8011 Jan 14 03:02	25°♏50'40	-0°16'18	evening max el	8011 Dec 02 12:00	11°♏03'03	27°12'05
minimum elong	8011 Jan 14 03:28	25°♏49'20	0°15'59	retrograde	8011 Dec 15 21:58	18°♏23'32	
transit middle	8011 Jan 14 03:28	25°♏49'20	0°15'59	evening set	8011 Dec 22 17:24	15°♏46'50	
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transit end	8011 Jan 14 03:47	25°♏48'25		inferior conj	8011 Dec 28 20:24	9°♏38'02	-1°19'46
asc. node	8011 Jan 14 22:27	24°♏52'36		minimum elong	8011 Dec 28 22:47	9°♏31'26	1°18'38
morning rise	8011 Jan 20 01:43	20°♏06'59		asc. node	8012 Jan 01 19:29	5°♏40'50	
direct	8011 Jan 23 01:28	19°♏16'48		morning rise	8012 Jan 04 05:33	4°♏07'16	
morning max el	8011 Jan 29 15:06	22°♏49'20	18°29'00	direct	8012 Jan 06 20:39	3°♏30'45	
	8011 Feb 04 11:31	0°♏		morning max el	8012 Jan 13 07:03	6°♏54'32	17°59'55
morning set	8011 Feb 18 22:00	22°♏17'27			8012 Jan 28 23:49	0°♏	
desc. node	8011 Feb 18 18:37	22°♏04'05		morning set	8012 Jan 31 01:44	3°♏26'40	
	8011 Feb 23 18:47	0°♏		desc. node	8012 Feb 05 15:35	12°♏37'38	
superior conj	8011 Mar 06 20:14	17°♏22'42	-1°39'48	superior conj	8012 Feb 14 05:59	26°♏28'48	-0°59'14
minimum elong	8011 Mar 06 10:37	16°♏45'07	1°38'52	minimum elong	8012 Feb 13 23:06	26°♏01'26	0°58'15
max. Earth dist.	8011 Mar 07 03:59	17°♏53'05	1.45493 AU		8012 Feb 16 11:20	0°♏	
	8011 Mar 14 21:30	0°♏		max. Earth dist.	8012 Feb 17 23:28	2°♏22'20	1.45251 AU
evening rise	8011 Mar 22 15:27	12°♏13'06		evening rise	8012 Mar 01 09:57	21°♏42'27	
greatest brilliancy	8011 Apr 01 00:15	27°♏00'17	-0.8m		8012 Mar 06 19:28	0°♏	
	8011 Apr 02 22:40	0°♏		greatest brilliancy	8012 Mar 15 09:24	12°♏57'30	-0.6m
asc. node	8011 Apr 12 21:26	13°♏43'55		evening max el	8012 Mar 27 02:43	28°♏22'28	19°46'47
evening max el	8011 Apr 13 20:54	14°♏45'59	18°56'33		8012 Mar 28 20:19	0°♏	
retrograde	8011 Apr 20 15:34	18°♏32'54		asc. node	8012 Mar 29 18:30	0°♏44'23	
evening set	8011 Apr 24 00:24	17°♏27'13		retrograde	8012 Apr 03 13:25	2°♏39'32	
inferior conj	8011 Apr 29 13:32	11°♏43'20	3°24'18	evening set	8012 Apr 07 06:26	1°♏19'12	
minimum elong	8011 Apr 29 13:31	11°♏43'26	3°24'12		8012 Apr 08 19:16	30°♏	
min. Earth dist.	8011 May 01 05:44	9°♏36'42	0.65963 AU	inferior conj	8012 Apr 12 15:30	25°♏20'52	3°17'40
morning rise	8011 May 05 02:08	5°♏25'38		minimum elong	8012 Apr 12 14:21	25°♏24'42	3°17'30
direct	8011 May 11 12:09	2°♏38'50		min. Earth dist.	8012 Apr 13 16:58	23°♏55'49	0.67206 AU
desc. node	8011 May 17 18:16	4°♏44'26		morning rise	8012 Apr 17 21:59	19°♏03'26	
morning max el	8011 May 24 12:29	10°♏22'40	26°34'53	direct	8012 Apr 23 21:01	16°♏23'53	
	8011 Jun 09 00:39	0°♏		desc. node	8012 May 03 15:14	21°♏25'40	
	8011 Jun 27 05:40	0°♏		morning max el	8012 May 05 22:08	23°♏37'10	25°18'15
morning set	8011 Jun 29 10:59	4°♏08'29			8012 May 11 14:17	0°♏	
max. Earth dist.	8011 Jul 03 13:54	12°♏06'47	1.34528 AU		8012 Jun 01 09:46	0°♏	
				morning set	8012 Jun 11 00:32	16°♏27'36	
superior conj	8011 Jul 08 06:36	21°♏37'36	-0°15'55	max. Earth dist.	8012 Jun 14 16:15	23°♏10'16	1.36380 AU
minimum elong	8011 Jul 08 07:30	21°♏42'13	0°15'52		8012 Jun 18 06:15	0°♏	
behind sun begin	8011 Jul 08 06:34	21°♏37'27					
behind sun end	8011 Jul 08 08:25	21°♏46'59		superior conj	8012 Jun 20 20:16	5°♏04'12	-0°47'23
asc. node	8011 Jul 09 20:35	24°♏54'53		minimum elong	8012 Jun 20 23:07	5°♏18'20	0°46'58
	8011 Jul 12 06:47	0°♏		asc. node	8012 Jun 25 17:36	14°♏55'03	
evening rise	8011 Jul 15 19:29	7°♏24'14		evening rise	8012 Jun 29 00:40	21°♏37'18	
	8011 Jul 27 23:38	0°♏			8012 Jul 03 05:53	0°♏	
evening max el	8011 Aug 04 00:29	8°♏51'03	21°01'22	evening max el	8012 Jul 16 09:28	20°♏01'37	19°46'54
desc. node	8011 Aug 13 17:26	14°♏30'12		retrograde	8012 Jul 26 11:01	24°♏59'17	
retrograde	8011 Aug 15 18:51	14°♏40'40		evening set	8012 Jul 28 07:37	24°♏49'53	
evening set	8011 Aug 18 00:55	14°♏28'41		desc. node	8012 Jul 30 14:28	24°♏14'21	
inferior conj	8011 Aug 27 07:02	10°♏31'32	-3°53'19	inferior conj	8012 Aug 06 05:27	20°♏48'07	-2°01'00
minimum elong	8011 Aug 26 21:37	10°♏44'51	3°50'34	minimum elong	8012 Aug 05 23:54	20°♏56'41	1°59'01
min. Earth dist.	8011 Aug 27 20:40	10°♏12'16	0.54700 AU	min. Earth dist.	8012 Aug 08 08:23	19°♏29'38	0.55294 AU

































































































































morning rise	8012 Aug 14 14:07	16° $\Omega$ 24'56		minimum elong	8013 Jul 17 21:02	1° $\Omega$ 37'28	0°07'25
direct	8012 Aug 19 04:19	15° $\Omega$ 38'21		transit middle	8013 Jul 17 21:02	1° $\Omega$ 37'28	0°07'25
morning max el	8012 Sep 02 00:43	22° $\Omega$ 30'41	24°33'43	transit begin	8013 Jul 17 17:44	1° $\Omega$ 43'22	
	8012 Sep 08 16:08	0° $\cap$		transit end	8013 Jul 18 00:21	1° $\Omega$ 31'33	
asc. node	8012 Sep 21 17:05	21° $\cap$ 10'08			8013 Jul 20 03:36	30° $\Re$ $\Im$	
	8012 Sep 26 02:19	0° $\Omega$		min. Earth dist.	8013 Jul 20 23:46	29° $\Im$ 24'59	0.56742 AU
morning set	8012 Sep 27 11:39	2° $\Omega$ 55'51		morning rise	8013 Jul 25 21:06	26° $\Im$ 37'14	
				direct	8013 Jul 31 07:59	25° $\Im$ 25'56	
superior conj	8012 Oct 04 08:58	17° $\Omega$ 55'04	1°37'25		8013 Aug 11 08:52	0° $\Omega$	
minimum elong	8012 Oct 04 07:42	17° $\Omega$ 48'10	1°37'24	morning max el	8013 Aug 14 14:42	2° $\Omega$ 50'16	26°09'17
max. Earth dist.	8012 Oct 06 05:56	21° $\Omega$ 59'28	1.32661 AU		8013 Sep 02 23:52	0° $\cap$	
	8012 Oct 10 00:21	0° $\cap$		asc. node	8013 Sep 08 14:04	10° $\cap$ 42'59	
evening rise	8012 Oct 11 16:14	3° $\cap$ 25'30		morning set	8013 Sep 11 22:32	17° $\cap$ 40'44	
	8012 Oct 26 06:55	0° $\Re$			8013 Sep 17 14:04	0° $\Omega$	
desc. node	8012 Oct 26 13:22	0° $\Re$ 25'44					
evening max el	8012 Nov 13 23:22	24° $\Re$ 13'24	27°29'00	superior conj	8013 Sep 18 20:02	2° $\Omega$ 45'50	1°27'42
	8012 Nov 21 19:26	0° $\Im$		minimum elong	8013 Sep 18 18:04	2° $\Omega$ 34'56	1°27'29
retrograde	8012 Nov 27 16:37	1° $\Im$ 31'34		max. Earth dist.	8013 Sep 19 13:34	4° $\Omega$ 22'47	1.31942 AU
	8012 Dec 03 04:47	30° $\Re$ $\Re$		evening rise	8013 Sep 25 18:47	17° $\Omega$ 49'34	
evening set	8012 Dec 04 18:14	29° $\Re$ 00'38			8013 Oct 01 20:53	0° $\cap$	
min. Earth dist.	8012 Dec 08 11:25	25° $\Re$ 50'48	0.63303 AU	desc. node	8013 Oct 13 10:27	19° $\cap$ 39'20	
inferior conj	8012 Dec 11 04:09	23° $\Re$ 09'46	-2°27'55		8013 Oct 21 00:46	0° $\Re$	
minimum elong	8012 Dec 11 08:47	22° $\Re$ 58'12	2°25'59	evening max el	8013 Oct 27 06:49	6° $\Re$ 47'22	27°14'06
morning rise	8012 Dec 18 01:15	17° $\Re$ 54'44		retrograde	8013 Nov 10 03:32	13° $\Re$ 59'15	
asc. node	8012 Dec 18 16:30	17° $\Re$ 42'23		evening set	8013 Nov 17 04:57	11° $\Re$ 44'23	
direct	8012 Dec 20 10:03	17° $\Re$ 27'57		min. Earth dist.	8013 Nov 20 21:33	8° $\Re$ 58'24	0.61341 AU
morning max el	8012 Dec 27 00:26	20° $\Re$ 52'27	17°48'10	inferior conj	8013 Nov 23 23:05	6° $\Re$ 16'43	-3°37'05
	8013 Jan 02 22:12	0° $\Im$		minimum elong	8013 Nov 24 05:43	6° $\Re$ 02'06	3°34'48
morning set	8013 Jan 12 07:28	15° $\Im$ 51'41		morning rise	8013 Dec 01 08:43	1° $\Re$ 20'44	
	8013 Jan 20 13:07	0° $\approx$		direct	8013 Dec 03 14:14	1° $\Re$ 00'02	
desc. node	8013 Jan 22 12:35	3° $\approx$ 19'00		asc. node	8013 Dec 05 13:33	1° $\Re$ 16'48	
				morning max el	8013 Dec 10 15:55	4° $\Re$ 33'36	17°54'39
superior conj	8013 Jan 24 12:18	6° $\approx$ 36'54	-0°14'26	morning set	8013 Dec 26 08:27	29° $\Re$ 11'02	
minimum elong	8013 Jan 24 10:46	6° $\approx$ 30'37	0°14'05		8013 Dec 26 19:12	0° $\Im$	
behind sun begin	8013 Jan 24 06:10	6° $\approx$ 11'36					
behind sun end	8013 Jan 24 15:23	6° $\approx$ 49'36		superior conj	8014 Jan 05 20:17	17° $\Im$ 58'24	0°26'02
max. Earth dist.	8013 Jan 30 17:16	16° $\approx$ 41'24	1.44305 AU	minimum elong	8014 Jan 05 22:28	18° $\Im$ 07'52	0°25'50
	8013 Feb 08 04:55	0° $\Re$		desc. node	8014 Jan 09 09:35	24° $\Im$ 03'46	
evening rise	8013 Feb 08 21:02	1° $\Re$ 02'04			8014 Jan 12 22:56	0° $\approx$	
	8013 Feb 28 11:02	0° $\Upsilon$		max. Earth dist.	8014 Jan 13 07:23	0° $\approx$ 34'45	1.42755 AU
evening max el	8013 Mar 10 03:12	12° $\Upsilon$ 01'00	20°50'58	evening rise	8014 Jan 19 15:59	10° $\approx$ 48'31	
asc. node	8013 Mar 16 15:33	16° $\Upsilon$ 38'13			8014 Feb 01 07:22	0° $\Re$	
retrograde	8013 Mar 18 11:53	16° $\Upsilon$ 55'44		evening max el	8014 Feb 20 22:30	25° $\Re$ 41'26	22°05'29
evening set	8013 Mar 22 14:15	15° $\Upsilon$ 20'19			8014 Feb 26 04:59	0° $\Upsilon$	
inferior conj	8013 Mar 27 21:44	9° $\Upsilon$ 09'40	2°59'36	retrograde	8014 Mar 02 09:08	1° $\Upsilon$ 17'13	
minimum elong	8013 Mar 27 19:49	9° $\Upsilon$ 16'16	2°59'13	asc. node	8014 Mar 03 12:38	1° $\Upsilon$ 10'32	
min. Earth dist.	8013 Mar 28 09:35	8° $\Upsilon$ 28'47	0.68011 AU		8014 Mar 06 04:30	30° $\Re$ $\Re$	
morning rise	8013 Apr 02 01:10	2° $\Upsilon$ 54'48		evening set	8014 Mar 06 22:11	29° $\Re$ 26'31	
direct	8013 Apr 07 11:03	0° $\Upsilon$ 30'49		inferior conj	8014 Mar 12 06:04	23° $\Re$ 06'17	2°31'43
morning max el	8013 Apr 18 07:04	6° $\Upsilon$ 59'05	23°50'21	minimum elong	8014 Mar 12 03:48	23° $\Re$ 14'08	2°31'08
desc. node	8013 Apr 20 12:14	9° $\Upsilon$ 20'14		min. Earth dist.	8014 Mar 12 05:22	23° $\Re$ 08'42	0.68375 AU
	8013 May 06 04:43	0° $\Re$		morning rise	8014 Mar 17 09:15	16° $\Re$ 55'27	
morning set	8013 May 23 17:04	27° $\Re$ 45'12		direct	8014 Mar 22 05:05	14° $\Re$ 52'13	
	8013 May 25 00:24	0° $\cap$		morning max el	8014 Mar 31 18:01	20° $\Re$ 28'40	22°21'11
max. Earth dist.	8013 May 27 12:15	4° $\cap$ 21'55	1.38550 AU	desc. node	8014 Apr 07 09:12	28° $\Re$ 07'45	
					8014 Apr 08 20:05	0° $\Upsilon$	
superior conj	8013 Jun 03 21:12	17° $\cap$ 51'41	-1°18'41		8014 Apr 29 10:11	0° $\Re$	
minimum elong	8013 Jun 04 01:59	18° $\cap$ 14'19	1°18'06	morning set	8014 May 04 07:24	7° $\Re$ 48'46	
	8013 Jun 10 04:13	0° $\Im$		max. Earth dist.	8014 May 09 09:57	16° $\Re$ 16'25	1.40792 AU
evening rise	8013 Jun 12 22:56	5° $\Im$ 26'46					
asc. node	8013 Jun 12 14:37	4° $\Im$ 46'03		superior conj	8014 May 17 05:04	29° $\Re$ 50'08	-1°46'31
	8013 Jun 27 11:46	0° $\Omega$		minimum elong	8014 May 17 10:50	0° $\cap$ 15'57	1°46'04
evening max el	8013 Jun 29 06:52	1° $\Omega$ 56'31	18°52'55		8014 May 17 07:16	0° $\cap$	
retrograde	8013 Jul 07 18:01	6° $\Omega$ 07'42		evening rise	8014 May 27 10:59	18° $\cap$ 44'38	
evening set	8013 Jul 09 17:38	5° $\Omega$ 54'48		asc. node	8014 May 30 11:39	24° $\cap$ 23'39	
desc. node	8013 Jul 17 11:33	1° $\Omega$ 54'22			8014 Jun 02 13:43	0° $\Im$	
inferior conj	8013 Jul 17 21:21	1° $\Omega$ 36'55	-0°07'25	evening max el	8014 Jun 12 13:16	14° $\Im$ 28'58	18°19'27


































































































































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evening set	8014 Jun 22 03:04	17°♄47'49		evening set	8015 Jun 05 05:48	0°♄21'11	
inferior conj	8014 Jun 29 11:01	13°♄09'20	1°24'07		8015 Jun 06 00:42	30°♄	II
minimum elong	8014 Jun 29 13:37	13°♄03'53	1°23'07	inferior conj	8015 Jun 11 20:44	25°♄22'31	2°27'17
min. Earth dist.	8014 Jul 02 20:36	10°♄19'59	0.58758 AU	minimum elong	8015 Jun 11 23:46	25°♄15'10	2°26'23
desc. node	8014 Jul 04 08:37	9°♄11'48		min. Earth dist.	8015 Jun 15 01:08	22°♄18'41	0.60999 AU
morning rise	8014 Jul 06 20:56	7°♄36'04		morning rise	8015 Jun 18 15:20	19°♄25'20	
direct	8014 Jul 13 01:23	5°♄53'50		desc. node	8015 Jun 21 05:39	18°♄01'37	
morning max el	8014 Jul 27 10:35	13°♄39'31	27°18'58	direct	8015 Jun 25 06:39	17°♄12'36	
	8014 Aug 09 11:02	0°♄		morning max el	8015 Jul 09 13:22	25°♄11'33	27°52'47
asc. node	8014 Aug 26 11:04	0°♄31'53			8015 Jul 13 23:17	0°♄	
	8014 Aug 26 04:56	0°♄			8015 Aug 02 21:35	0°♄	
morning set	8014 Aug 27 06:57	2°♄15'57		morning set	8015 Aug 11 11:00	16°♄35'31	
				asc. node	8015 Aug 13 08:04	20°♄30'55	
superior conj	8014 Sep 03 07:52	17°♄35'33	1°12'48	max. Earth dist.	8015 Aug 17 09:08	29°♄14'01	1.31861 AU
minimum elong	8014 Sep 03 05:37	17°♄23'03	1°12'25		8015 Aug 17 17:31	0°♄	
max. Earth dist.	8014 Sep 02 23:58	16°♄51'43	1.31675 AU				
	8014 Sep 08 23:13	0°♄		superior conj	8015 Aug 18 18:37	2°♄18'01	0°53'08
evening rise	8014 Sep 10 02:28	2°♄26'03		minimum elong	8015 Aug 18 16:34	2°♄06'42	0°52'40
	8014 Sep 24 19:52	0°♄		evening rise	8015 Aug 25 13:06	17°♄07'56	
desc. node	8014 Sep 30 07:32	8°♄05'53			8015 Aug 31 20:11	0°♄	
evening max el	8014 Oct 09 07:32	18°♄33'32	26°25'15	desc. node	8015 Sep 17 04:37	25°♄26'25	
retrograde	8014 Oct 23 05:31	25°♄39'23		evening max el	8015 Sep 21 00:01	29°♄28'33	25°06'37
evening set	8014 Oct 29 21:03	23°♄51'01			8015 Sep 21 13:25	0°♄	
min. Earth dist.	8014 Nov 02 20:53	21°♄16'25	0.59259 AU	retrograde	8015 Oct 04 21:06	6°♄28'51	
inferior conj	8014 Nov 06 01:42	18°♄49'26	-4°39'57	evening set	8015 Oct 10 13:50	5°♄15'01	
minimum elong	8014 Nov 06 08:47	18°♄35'49	4°38'13	min. Earth dist.	8015 Oct 15 11:31	2°♄33'39	0.57262 AU
morning rise	8014 Nov 13 22:49	14°♄15'39		inferior conj	8015 Oct 18 08:48	0°♄38'23	-5°23'51
direct	8014 Nov 16 04:55	13°♄57'50		minimum elong	8015 Oct 18 12:57	0°♄31'27	5°23'23
asc. node	8014 Nov 22 10:35	16°♄22'53			8015 Oct 19 07:57	30°♄	
morning max el	8014 Nov 24 02:06	17°♄49'10	18°20'50	morning rise	8015 Oct 26 14:22	26°♄27'42	
	8014 Dec 02 20:02	0°♄		direct	8015 Oct 29 01:36	26°♄10'01	
morning set	8014 Dec 09 23:01	13°♄07'52			8015 Nov 06 14:50	0°♄	
	8014 Dec 18 21:43	0°♄		morning max el	8015 Nov 07 03:23	0°♄29'05	19°08'30
				asc. node	8015 Nov 09 07:36	2°♄47'44	
superior conj	8014 Dec 19 03:25	0°♄26'06	0°58'03	morning set	8015 Nov 23 22:54	27°♄30'01	
minimum elong	8014 Dec 19 06:51	0°♄41'50	0°57'43		8015 Nov 25 05:05	0°♄	
max. Earth dist.	8014 Dec 26 16:52	13°♄50'03	1.40781 AU				
desc. node	8014 Dec 27 06:35	14°♄48'38		superior conj	8015 Dec 02 04:40	13°♄45'51	1°20'45
evening rise	8014 Dec 31 05:38	21°♄26'19		minimum elong	8015 Dec 02 07:43	14°♄00'32	1°20'34
	8015 Jan 05 13:28	0°♄		max. Earth dist.	8015 Dec 08 22:41	26°♄22'30	1.38616 AU
	8015 Jan 26 10:40	0°♄			8015 Dec 10 23:26	0°♄	
evening max el	8015 Feb 03 13:52	9°♄24'08	23°25'13	evening rise	8015 Dec 12 17:24	3°♄03'23	
retrograde	8015 Feb 14 03:46	15°♄39'20		desc. node	8015 Dec 14 03:36	5°♄30'15	
asc. node	8015 Feb 18 09:44	14°♄10'37			8015 Dec 29 17:22	0°♄	
evening set	8015 Feb 19 04:39	13°♄33'43		evening max el	8016 Jan 17 03:10	23°♄10'07	24°43'57
min. Earth dist.	8015 Feb 24 02:04	7°♄50'07	0.68321 AU	retrograde	8016 Jan 28 18:39	29°♄57'43	
inferior conj	8015 Feb 24 14:34	7°♄07'13	1°55'00	evening set	8016 Feb 03 08:06	27°♄38'41	
minimum elong	8015 Feb 24 12:25	7°♄14'37	1°54'21	asc. node	8016 Feb 05 06:49	25°♄43'17	
morning rise	8015 Mar 01 20:08	1°♄01'46		min. Earth dist.	8016 Feb 07 21:33	22°♄29'20	0.67871 AU
	8015 Mar 03 10:17	30°♄		inferior conj	8016 Feb 08 21:26	21°♄10'10	1°10'04
direct	8015 Mar 06 02:03	29°♄21'08		minimum elong	8016 Feb 08 19:52	21°♄15'22	1°09'34
	8015 Mar 08 21:44	0°♄		morning rise	8016 Feb 14 07:49	15°♄11'28	
morning max el	8015 Mar 14 10:35	4°♄09'05	20°58'44	direct	8016 Feb 18 00:47	13°♄52'38	
desc. node	8015 Mar 25 06:10	17°♄33'10		morning max el	8016 Feb 25 10:55	18°♄02'04	19°48'27
	8015 Apr 02 20:56	0°♄			8016 Mar 06 00:13	0°♄	
morning set	8015 Apr 13 19:00	16°♄39'46		greatest brilliancy	8016 Mar 09 07:49	4°♄46'56	-0.6m
max. Earth dist.	8015 Apr 21 14:07	29°♄06'01	1.42815 AU	desc. node	8016 Mar 11 03:07	7°♄26'31	
	8015 Apr 22 03:21	0°♄		morning set	8016 Mar 22 16:26	24°♄58'02	
					8016 Mar 25 22:33	0°♄	
superior conj	8015 Apr 28 15:03	10°♄47'58	-2°06'06	max. Earth dist.	8016 Apr 03 01:02	12°♄43'06	1.44373 AU
minimum elong	8015 Apr 28 19:10	11°♄05'27	2°06'00				
	8015 May 09 14:39	0°♄		superior conj	8016 Apr 08 00:13	20°♄40'54	-2°11'17
evening rise	8015 May 10 08:36	1°♄20'10		minimum elong	8016 Apr 07 22:48	20°♄35'10	2°11'19
asc. node	8015 May 17 08:43	13°♄41'59			8016 Apr 13 16:43	0°♄	
evening max el	8015 May 27 00:49	27°♄28'46	18°05'48	evening rise	8016 Apr 21 11:05	13°♄03'32	
	8015 May 30 08:16	0°♄			8016 May 01 14:00	0°♄	


































































































































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evening max el	8016 May 09 14:09	10°II47'38	18°11'15	asc. node	8017 Apr 20 02:50	20°852'28	
retrograde	8016 May 15 23:26	14°II09'48		evening max el	8017 Apr 23 02:19	24°817'39	18°35'04
evening set	8016 May 18 20:39	13°II26'16		retrograde	8017 Apr 29 15:08	27°851'50	
inferior conj	8016 May 24 22:37	8°II09'00	3°04'51	evening set	8017 May 02 19:38	26°854'28	
minimum elong	8016 May 25 00:42	8°II03'16	3°04'23	inferior conj	8017 May 08 12:29	21°820'06	3°21'56
min. Earth dist.	8016 May 27 14:50	5°II13'56	0.63169 AU	minimum elong	8017 May 08 13:13	21°817'53	3°21'47
morning rise	8016 May 31 03:17	1°II58'22		min. Earth dist.	8017 May 10 13:40	18°852'08	0.65059 AU
	8016 Jun 03 13:33	30°K8		morning rise	8017 May 14 06:02	15°803'41	
direct	8016 Jun 06 21:50	29°822'44		direct	8017 May 20 20:52	12°817'10	
desc. node	8016 Jun 07 02:40	29°822'52		desc. node	8017 May 24 23:39	13°811'47	
	8016 Jun 10 10:18	0°II		morning max el	8017 Jun 03 07:13	20°811'52	27°09'39
morning max el	8016 Jun 20 21:10	7°II25'38	27°48'20		8017 Jun 11 16:47	0°II	
	8016 Jul 08 04:12	0°6			8017 Jul 01 06:07	0°6	
morning set	8016 Jul 25 08:29	0°933'24		morning set	8017 Jul 08 20:37	14°601'42	
	8016 Jul 25 01:49	0°9		max. Earth dist.	8017 Jul 13 08:12	22°656'24	1.33651 AU
asc. node	8016 Jul 30 05:04	10°935'47			8017 Jul 16 18:00	0°9	
max. Earth dist.	8016 Jul 30 13:04	11°918'17	1.32514 AU				
				superior conj	8017 Jul 17 05:21	0°959'46	0°01'24
superior conj	8016 Aug 02 02:28	16°948'03	0°29'07	minimum elong	8017 Jul 17 05:17	0°959'24	0°01'16
minimum elong	8016 Aug 02 01:09	16°940'51	0°28'45	behind sun begin	8017 Jul 16 23:43	0°930'03	
	8016 Aug 08 04:17	0°n		behind sun end	8017 Jul 17 10:52	1°928'48	
evening rise	8016 Aug 09 00:46	1°n49'43		asc. node	8017 Jul 17 02:03	0°942'23	
	8016 Aug 24 09:32	0°u		evening rise	8017 Jul 24 11:35	16°925'52	
evening max el	8016 Sep 01 11:30	9°u48'03	23°30'10		8017 Jul 31 05:50	0°n	
desc. node	8016 Sep 03 01:42	11°u15'40		evening max el	8017 Aug 14 02:11	20°n05'36	21°52'33
retrograde	8016 Sep 15 00:36	16°u34'49		desc. node	8017 Aug 20 22:46	25°n02'43	
evening set	8016 Sep 19 06:43	15°u55'13		retrograde	8017 Aug 26 16:26	26°n20'42	
min. Earth dist.	8016 Sep 25 21:24	12°u48'27	0.55665 AU	evening set	8017 Aug 29 12:06	26°n02'54	
inferior conj	8016 Sep 27 19:49	11°u39'40	-5°30'31	inferior conj	8017 Sep 07 15:56	22°n02'44	-4°43'59
minimum elong	8016 Sep 27 17:07	11°u43'42	5°30'20	minimum elong	8017 Sep 07 07:06	22°n15'05	4°42'05
morning rise	8016 Oct 06 05:41	7°u46'41		min. Earth dist.	8017 Sep 07 06:04	22°n16'32	0.54790 AU
direct	8016 Oct 09 02:48	7°u26'21		morning rise	8017 Sep 16 03:25	18°n13'40	
morning max el	8016 Oct 19 16:38	12°u23'43	20°18'29	direct	8017 Sep 19 14:12	17°n47'28	
asc. node	8016 Oct 26 04:37	20°u15'38		morning max el	8017 Oct 01 17:02	23°n30'10	21°49'04
	8016 Nov 01 00:41	0°m			8017 Oct 07 10:25	0°u	
morning set	8016 Nov 07 04:52	12°m07'51		asc. node	8017 Oct 13 01:35	8°u32'38	
				morning set	8017 Oct 22 14:36	26°u55'03	
superior conj	8016 Nov 14 19:06	27°m42'46	1°34'44		8017 Oct 24 01:45	0°m	
minimum elong	8016 Nov 14 20:59	27°m52'17	1°34'45				
	8016 Nov 15 22:24	0°x		superior conj	8017 Oct 29 18:51	12°m05'53	1°41'01
max. Earth dist.	8016 Nov 20 05:11	8°x23'07	1.36522 AU	minimum elong	8017 Oct 29 19:23	12°m08'41	1°41'06
evening rise	8016 Nov 24 01:26	15°x34'12		max. Earth dist.	8017 Nov 02 17:58	20°m16'36	1.34708 AU
desc. node	8016 Nov 30 00:37	26°x03'59		evening rise	8017 Nov 07 02:02	28°m49'31	
	8016 Dec 02 09:09	0°z			8017 Nov 07 16:48	0°x	
	8016 Dec 23 07:33	0°z		desc. node	8017 Nov 16 21:41	16°x25'08	
evening max el	8016 Dec 29 16:09	6°z57'02	25°54'44		8017 Nov 25 13:45	0°z	
retrograde	8017 Jan 11 04:46	14°z05'50		evening max el	8017 Dec 12 05:30	20°z38'54	26°50'06
evening set	8017 Jan 17 06:50	11°z36'15		retrograde	8017 Dec 25 09:15	27°z57'10	
min. Earth dist.	8017 Jan 21 13:30	7°z01'25	0.67046 AU	evening set	8017 Dec 31 22:59	25°z21'31	
asc. node	8017 Jan 22 03:52	6°z16'33		min. Earth dist.	8018 Jan 04 23:38	21°z21'11	0.65860 AU
inferior conj	8017 Jan 23 00:44	5°z10'51	0°17'22	inferior conj	8018 Jan 06 22:25	19°z05'03	-0°42'28
minimum elong	8017 Jan 23 00:17	5°z12'16	0°17'18	minimum elong	8018 Jan 06 23:38	19°z01'31	0°41'49
	8017 Jan 27 19:48	30°K3		asc. node	8018 Jan 09 00:54	16°z43'01	
morning rise	8017 Jan 28 18:17	29°z20'49		morning rise	8018 Jan 13 01:18	13°z26'11	
direct	8017 Jan 31 23:47	28°z21'11		direct	8018 Jan 15 21:08	12°z42'12	
	8017 Feb 05 08:52	0°z		morning max el	8018 Jan 22 08:29	16°z09'54	18°14'28
morning max el	8017 Feb 07 18:47	2°z04'02	18°53'14		8018 Feb 01 13:43	0°z	
desc. node	8017 Feb 26 00:03	27°z39'45		morning set	8018 Feb 10 10:36	14°z12'13	
	8017 Feb 27 12:06	0°K		desc. node	8018 Feb 12 21:00	18°z07'31	
morning set	8017 Mar 01 23:52	3°K52'54			8018 Feb 20 07:27	0°K	
max. Earth dist.	8017 Mar 16 17:16	26°K53'27	1.45296 AU				
				superior conj	8018 Feb 25 16:51	8°K30'10	-1°23'49
superior conj	8017 Mar 18 12:03	29°K41'28	-1°56'59	minimum elong	8018 Feb 25 07:41	7°K54'11	1°22'44
minimum elong	8017 Mar 18 04:01	29°K09'52	1°56'26	max. Earth dist.	8018 Feb 27 12:46	11°K22'21	1.45489 AU
	8017 Mar 18 16:46	0°Y			8018 Mar 11 11:06	0°Y	
evening rise	8017 Apr 02 14:31	23°Y47'40		evening rise	8018 Mar 13 19:15	3°Y39'03	



greatest brilliancy	8018 Mar 25 07:37	21° $\Upsilon$ 30'34	-0.7m	minimum elong	8019 Feb 05 05:22	17° $\approx$ 40'38	0°39'23
	8018 Mar 31 02:07	0° $\mathcal{B}$		max. Earth dist.	8019 Feb 10 08:25	25° $\approx$ 51'42	1.44934 AU
evening max el	8018 Apr 06 11:01	7° $\mathcal{B}$ 53'31	19°16'04		8019 Feb 12 23:30	0° $\mathcal{H}$	
asc. node	8018 Apr 06 23:53	8° $\mathcal{B}$ 25'17		evening rise	8019 Feb 21 08:53	13° $\mathcal{H}$ 00'38	
retrograde	8018 Apr 13 11:31	11° $\mathcal{B}$ 51'36			8019 Mar 04 13:57	0° $\Upsilon$	
evening set	8018 Apr 16 23:47	10° $\mathcal{B}$ 39'40		greatest brilliancy	8019 Mar 08 02:57	5° $\Upsilon$ 13'35	-0.6m
inferior conj	8018 Apr 22 10:53	4° $\mathcal{B}$ 49'33	3°22'59	evening max el	8019 Mar 20 14:41	21° $\Upsilon$ 31'46	20°12'31
minimum elong	8018 Apr 22 10:20	4° $\mathcal{B}$ 51'19	3°22'53	asc. node	8019 Mar 24 20:57	25° $\Upsilon$ 00'07	
min. Earth dist.	8018 Apr 23 20:41	3° $\mathcal{B}$ 00'05	0.66554 AU	retrograde	8019 Mar 28 09:55	26° $\Upsilon$ 03'52	
	8018 Apr 26 08:56	30° $\mathcal{R}\Upsilon$		evening set	8019 Apr 01 06:51	24° $\Upsilon$ 36'55	
morning rise	8018 Apr 27 20:31	28° $\Upsilon$ 31'54		inferior conj	8019 Apr 06 14:58	18° $\Upsilon$ 32'57	3°11'16
direct	8018 May 04 02:23	25° $\Upsilon$ 46'55		minimum elong	8019 Apr 06 13:26	18° $\Upsilon$ 38'07	3°11'02
desc. node	8018 May 11 20:38	28° $\Upsilon$ 59'28		min. Earth dist.	8019 Apr 07 10:24	17° $\Upsilon$ 26'57	0.67605 AU
	8018 May 13 03:21	0° $\mathcal{B}$		morning rise	8019 Apr 11 19:49	12° $\Upsilon$ 16'36	
morning max el	8018 May 16 17:18	3° $\mathcal{B}$ 18'56	26°04'14	direct	8019 Apr 17 13:24	9° $\Upsilon$ 43'07	
	8018 Jun 05 23:26	0° $\mathcal{I}$		desc. node	8019 Apr 28 17:37	16° $\Upsilon$ 15'30	
morning set	8018 Jun 21 19:40	26° $\mathcal{I}$ 49'29		morning max el	8019 Apr 29 02:36	16° $\Upsilon$ 38'02	24°41'42
	8018 Jun 23 12:25	0° $\mathcal{E}$			8019 May 10 04:35	0° $\mathcal{B}$	
max. Earth dist.	8018 Jun 25 16:32	4° $\mathcal{E}$ 08'59	1.35268 AU		8019 May 29 22:50	0° $\mathcal{I}$	
				morning set	8019 Jun 04 01:00	8° $\mathcal{I}$ 44'45	
superior conj	8018 Jul 01 00:43	14° $\mathcal{E}$ 45'19	-0°29'07	max. Earth dist.	8019 Jun 07 15:56	15° $\mathcal{I}$ 14'40	1.37284 AU
minimum elong	8018 Jul 01 02:24	14° $\mathcal{E}$ 53'55	0°28'55				
asc. node	8018 Jul 03 23:02	20° $\mathcal{E}$ 46'10		superior conj	8019 Jun 14 09:29	27° $\mathcal{I}$ 56'59	-1°00'49
	8018 Jul 08 09:53	0° $\mathcal{Q}$		minimum elong	8019 Jun 14 13:12	28° $\mathcal{I}$ 15'04	1°00'19
evening rise	8018 Jul 08 19:30	0° $\mathcal{Q}$ 49'36			8019 Jun 15 10:41	0° $\mathcal{E}$	
	8018 Jul 26 07:23	0° $\mathcal{M}$		asc. node	8019 Jun 20 20:04	10° $\mathcal{E}$ 43'26	
evening max el	8018 Jul 27 03:32	0° $\mathcal{M}$ 51'35	20°27'18	evening rise	8019 Jun 22 22:10	14° $\mathcal{E}$ 54'24	
retrograde	8018 Aug 07 04:35	6° $\mathcal{M}$ 18'57			8019 Jun 30 20:51	0° $\mathcal{Q}$	
desc. node	8018 Aug 07 19:50	6° $\mathcal{M}$ 17'56		evening max el	8019 Jul 09 18:01	12° $\mathcal{Q}$ 21'07	19°21'17
evening set	8018 Aug 09 04:49	6° $\mathcal{M}$ 08'54		retrograde	8019 Jul 19 02:19	16° $\mathcal{Q}$ 58'01	
inferior conj	8018 Aug 18 09:10	2° $\mathcal{M}$ 11'37	-3°07'56	evening set	8019 Jul 20 23:16	16° $\mathcal{Q}$ 47'41	
minimum elong	8018 Aug 18 00:50	2° $\mathcal{M}$ 23'42	3°05'12	desc. node	8019 Jul 25 16:53	15° $\mathcal{Q}$ 01'33	
min. Earth dist.	8018 Aug 19 15:49	1° $\mathcal{M}$ 27'10	0.54840 AU	inferior conj	8019 Jul 29 13:59	12° $\mathcal{Q}$ 39'33	-1°11'10
	8018 Aug 22 06:54	30° $\mathcal{R}\mathcal{Q}$		minimum elong	8019 Jul 29 10:49	12° $\mathcal{Q}$ 44'45	1°10'02
morning rise	8018 Aug 26 20:13	28° $\mathcal{Q}$ 06'36		min. Earth dist.	8019 Aug 01 04:42	10° $\mathcal{Q}$ 57'18	0.55822 AU
direct	8018 Aug 30 23:33	27° $\mathcal{Q}$ 29'49		morning rise	8019 Aug 06 19:38	8° $\mathcal{Q}$ 01'16	
	8018 Sep 08 04:53	0° $\mathcal{M}$		direct	8019 Aug 11 18:28	7° $\mathcal{Q}$ 05'35	
morning max el	8018 Sep 13 08:01	3° $\mathcal{M}$ 57'42	23°33'07	morning max el	8019 Aug 25 20:41	14° $\mathcal{Q}$ 12'22	25°16'42
asc. node	8018 Sep 29 22:34	27° $\mathcal{M}$ 26'11			8019 Sep 07 08:06	0° $\mathcal{M}$	
	8018 Oct 01 07:09	0° $\mathcal{Q}$		asc. node	8019 Sep 16 19:34	16° $\mathcal{M}$ 47'01	
morning set	8018 Oct 07 02:05	11° $\mathcal{Q}$ 45'16		morning set	8019 Sep 21 13:41	26° $\mathcal{M}$ 33'41	
					8019 Sep 23 04:06	0° $\mathcal{Q}$	
superior conj	8018 Oct 14 00:50	26° $\mathcal{Q}$ 45'21	1°40'30				
minimum elong	8018 Oct 14 00:08	26° $\mathcal{Q}$ 41'38	1°40'32	superior conj	8019 Sep 28 10:39	11° $\mathcal{Q}$ 33'58	1°33'58
	8018 Oct 15 13:03	0° $\mathcal{M}$		minimum elong	8019 Sep 28 09:02	11° $\mathcal{Q}$ 25'06	1°33'51
max. Earth dist.	8018 Oct 16 15:11	2° $\mathcal{M}$ 19'05	1.33285 AU	max. Earth dist.	8019 Sep 29 19:46	14° $\mathcal{Q}$ 35'36	1.32300 AU
evening rise	8018 Oct 21 15:15	12° $\mathcal{M}$ 38'13		evening rise	8019 Oct 05 13:45	26° $\mathcal{Q}$ 51'28	
	8018 Oct 30 22:33	0° $\mathcal{J}$			8019 Oct 07 02:40	0° $\mathcal{M}$	
desc. node	8018 Nov 03 18:44	6° $\mathcal{J}$ 26'54		desc. node	8019 Oct 21 15:48	26° $\mathcal{M}$ 01'09	
	8018 Nov 20 19:47	0° $\mathcal{B}$			8019 Oct 24 06:58	0° $\mathcal{J}$	
evening max el	8018 Nov 24 18:08	4° $\mathcal{B}$ 04'09	27°22'53	evening max el	8019 Nov 07 04:01	16° $\mathcal{J}$ 59'47	27°26'42
retrograde	8018 Dec 08 07:25	11° $\mathcal{B}$ 23'25		retrograde	8019 Nov 20 22:46	24° $\mathcal{J}$ 15'27	
evening set	8018 Dec 15 06:12	8° $\mathcal{B}$ 48'13		evening set	8019 Nov 28 01:29	21° $\mathcal{J}$ 49'43	
min. Earth dist.	8018 Dec 19 01:37	5° $\mathcal{B}$ 21'13	0.64328 AU	min. Earth dist.	8019 Dec 01 17:40	18° $\mathcal{J}$ 51'33	0.62493 AU
inferior conj	8018 Dec 21 12:02	2° $\mathcal{B}$ 46'40	-1°48'15	inferior conj	8019 Dec 04 14:43	16° $\mathcal{J}$ 08'25	-2°57'30
minimum elong	8018 Dec 21 15:22	2° $\mathcal{B}$ 37'50	1°46'45	minimum elong	8019 Dec 04 20:18	15° $\mathcal{J}$ 55'13	2°55'20
	8018 Dec 24 06:24	30° $\mathcal{R}\mathcal{J}$		morning rise	8019 Dec 11 17:12	11° $\mathcal{J}$ 01'24	
asc. node	8018 Dec 26 21:56	27° $\mathcal{J}$ 58'03		asc. node	8019 Dec 13 19:00	10° $\mathcal{J}$ 37'48	
morning rise	8018 Dec 28 02:07	27° $\mathcal{J}$ 22'03		direct	8019 Dec 14 00:16	10° $\mathcal{J}$ 37'34	
direct	8018 Dec 30 14:21	26° $\mathcal{J}$ 49'59		morning max el	8019 Dec 20 18:24	14° $\mathcal{J}$ 04'34	17°48'43
	8019 Jan 05 20:10	0° $\mathcal{B}$			8019 Dec 31 17:12	0° $\mathcal{B}$	
morning max el	8019 Jan 06 01:23	0° $\mathcal{B}$ 12'43	17°52'47	morning set	8020 Jan 05 16:52	8° $\mathcal{B}$ 46'48	
morning set	8019 Jan 23 02:12	25° $\mathcal{B}$ 56'40					
	8019 Jan 25 11:57	0° $\approx$		superior conj	8020 Jan 17 03:09	28° $\mathcal{B}$ 38'38	0°03'38
desc. node	8019 Jan 30 18:01	8° $\approx$ 45'12		minimum elong	8020 Jan 17 03:31	28° $\mathcal{B}$ 40'09	0°03'42
				behind sun begin	8020 Jan 16 18:45	28° $\mathcal{B}$ 03'13	
superior conj	8019 Feb 05 09:57	17° $\approx$ 59'10	-0°40'09	behind sun end	8020 Jan 17 12:16	29° $\mathcal{B}$ 16'59	

desc. node	8020 Jan 17 15:00	29°  28'26		superior conj	8020 Dec 28 21:36	10°  30'36	0°40'43
	8020 Jan 17 22:32	0° 		minimum elong	8020 Dec 29 00:35	10°  43'50	0°40'25
max. Earth dist.	8020 Jan 24 01:01	10°  02'12	1.43703 AU	desc. node	8021 Jan 03 12:00	20°  14'04	
evening rise	8020 Jan 31 21:28	22°  27'04		max. Earth dist.	8021 Jan 05 12:43	23°  39'06	1.41947 AU
	8020 Feb 05 19:39	0° 			8021 Jan 09 09:20	0° 	
	8020 Feb 26 23:26	0° 		evening rise	8021 Jan 10 23:30	2°  33'43	
evening max el	8020 Mar 02 12:45	5°  10'38	21°21'38		8021 Jan 29 05:20	0° 	
asc. node	8020 Mar 10 18:02	10°  21'21		evening max el	8021 Feb 13 06:05	18°  51'45	22°39'06
retrograde	8020 Mar 11 08:13	10°  23'08		retrograde	8021 Feb 23 04:37	24°  45'30	
evening set	8020 Mar 15 14:57	8°  41'06		asc. node	8021 Feb 25 15:08	24°  45'28	
inferior conj	8020 Mar 20 22:21	2°  25'44	2°48'54	evening set	8021 Feb 27 22:28	22°  48'30	
minimum elong	8020 Mar 20 20:14	2°  33'03	2°48'27	inferior conj	8021 Mar 05 07:00	16°  42'59	2°17'13
min. Earth dist.	8020 Mar 21 04:40	2°  03'45	0.68212 AU	minimum elong	8021 Mar 05 04:44	16°  42'52	2°16'35
	8020 Mar 22 16:55	30°  48'48		min. Earth dist.	8021 Mar 05 01:15	16°  44'56	0.68397 AU
morning rise	8020 Mar 26 01:20	26°  48'12		morning rise	8021 Mar 10 10:52	10°  48'15	
direct	8020 Mar 31 05:10	23°  48'57		direct	8021 Mar 15 00:39	8°  48'17	
	8020 Apr 10 10:38	0° 		morning max el	8021 Mar 24 01:07	13°  48'37	21°44'51
morning max el	8020 Apr 10 12:12	0°  03'57	23°12'08	desc. node	8021 Apr 01 11:36	23°  48'40	
desc. node	8020 Apr 14 14:37	4°  03'45			8021 Apr 06 02:38	0° 	
	8020 May 03 00:38	0° 		morning set	8021 Apr 25 09:28	29°  03'40	
morning set	8020 May 15 07:01	19°  32'41			8021 Apr 25 23:33	0° 	
max. Earth dist.	8020 May 19 11:55	26°  42'10	1.39512 AU	max. Earth dist.	8021 May 01 11:20	8°  57'09	1.41694 AU
	8020 May 21 09:13	0° 					
superior conj	8020 May 27 03:43	10°  24'52	-1°31'09	superior conj	8021 May 09 02:49	21°  58'44	-1°56'12
minimum elong	8020 May 27 09:07	10°  49'50	1°30'35	minimum elong	8021 May 09 08:19	22°  52'48	1°55'52
evening rise	8020 Jun 05 16:35	28°  31'54			8021 May 13 15:13	0° 	
	8020 Jun 06 10:56	0° 		evening rise	8021 May 19 23:02	11°  32'54	
asc. node	8020 Jun 06 17:05	0°  29'30		asc. node	8021 May 24 14:08	19°  59'40	
evening max el	8020 Jun 21 19:39	24°  32'59	18°36'08		8021 May 30 12:16	0° 	
retrograde	8020 Jun 29 17:42	28°  29'00		evening max el	8021 Jun 05 04:44	7°  18'41	18°11'18
evening set	8020 Jul 01 19:55	28°  13'26		retrograde	8021 Jun 12 03:35	10°  49'09	
inferior conj	8020 Jul 09 15:06	23°  47'02	0°34'45	evening set	8021 Jun 14 13:24	10°  42'30	
minimum elong	8020 Jul 09 16:23	23°  44'36	0°34'10	inferior conj	8021 Jun 21 13:42	5°  37'39	1°54'18
desc. node	8020 Jul 11 13:56	22°  17'05		minimum elong	8021 Jun 21 16:43	5°  30'54	1°53'15
min. Earth dist.	8020 Jul 12 22:25	21°  16'27	0.57548 AU	min. Earth dist.	8021 Jun 24 22:28	2°  38'52	0.59706 AU
morning rise	8020 Jul 17 09:19	18°  31'42		desc. node	8021 Jun 28 11:00	0° 	
direct	8020 Jul 23 04:08	17°  30'73		morning rise	8021 Jun 28 17:05	29°  52'53	
morning max el	8020 Aug 06 13:05	24°  43'04	26°42'52		8021 Jun 28 12:22	30°  48'11	
	8020 Aug 11 09:46	0° 		direct	8021 Jul 05 03:17	27°  56'45	
	8020 Aug 30 10:52	0° 			8021 Jul 12 02:19	0° 	
asc. node	8020 Sep 02 16:35	6°  07'40		morning max el	8021 Jul 19 11:50	5°  49'36	27°37'56
morning set	8020 Sep 04 23:46	11°  07'32			8021 Aug 06 12:50	0° 	
				morning set	8021 Aug 20 06:33	25°  44'50	
superior conj	8020 Sep 11 22:18	26°  07'30	1°21'59	asc. node	8021 Aug 20 13:33	26°  42'30	
minimum elong	8020 Sep 11 20:10	26°  13'36	1°21'42		8021 Aug 22 06:46	0° 	
max. Earth dist.	8020 Sep 12 04:56	27°  02'14	1.31766 AU	max. Earth dist.	8021 Aug 26 15:04	9°  28'59	1.31693 AU
	8020 Sep 13 13:02	0° 					
evening rise	8020 Sep 18 18:46	11°  21'49		superior conj	8021 Aug 27 09:54	11°  13'10	1°05'01
	8020 Sep 28 07:17	0° 		minimum elong	8021 Aug 27 07:40	11°  00'49	1°04'36
desc. node	8020 Oct 07 12:52	14°  15'03		evening rise	8021 Sep 03 03:56	26°  01'34	
evening max el	8020 Oct 19 08:43	29°  14'19	26°57'25		8021 Sep 05 01:07	0° 	
	8020 Oct 20 04:31	0° 			8021 Sep 22 04:35	0° 	
retrograde	8020 Nov 02 06:27	6°  24'30		desc. node	8021 Sep 24 09:57	2°  58'28	
evening set	8020 Nov 09 04:59	4°  19'22		evening max el	8021 Oct 01 06:00	10°  38'51	25°55'03
min. Earth dist.	8020 Nov 12 23:11	1°  40'14	0.60452 AU	retrograde	8021 Oct 15 04:28	17°  42'44	
	8020 Nov 14 23:46	30°  48'11		evening set	8021 Oct 21 11:42	16°  08'46	
inferior conj	8020 Nov 16 03:11	29°  10'25	-4°05'09	min. Earth dist.	8021 Oct 25 18:46	13°  33'21	0.58376 AU
minimum elong	8020 Nov 16 10:18	28°  47'36	4°02'59	inferior conj	8021 Oct 28 21:50	11°  17'53	-5°01'55
morning rise	8020 Nov 23 17:59	24°  15'53		minimum elong	8021 Oct 29 04:12	11°  06'22	5°00'42
direct	8020 Nov 25 23:05	23°  15'56		morning rise	8021 Nov 05 23:00	6°  53'50	
asc. node	8020 Nov 29 16:04	24°  52'49		direct	8021 Nov 08 06:32	6°  36'29	
morning max el	8020 Dec 03 08:12	27°  37'03	18°03'20	morning max el	8021 Nov 16 15:02	10°  38'53	18°38'21
	8020 Dec 05 12:08	0° 		asc. node	8021 Nov 16 13:06	10°  34'15	
morning set	8020 Dec 19 00:16	22°  24'09			8021 Nov 29 09:19	0° 	
	8020 Dec 23 02:29	0° 		morning set	8021 Dec 02 19:15	6°  33'05	
				superior conj	8021 Dec 11 13:03	23°  21'55	1°08'46

minimum elong	8021 Dec 11 16:28	23°  37'56	1°08'29	minimum elong	8022 Nov 24 23:01	7°  11'29	1°27'35
	8021 Dec 15 03:22	0° 		max. Earth dist.	8022 Dec 01 01:51	18°  52'42	1.37712 AU
max. Earth dist.	8021 Dec 18 20:00	6°  34'38	1.39869 AU	evening rise	8022 Dec 04 19:21	25°  37'44	
desc. node	8021 Dec 21 08:59	10°  35'59			8022 Dec 07 07:26	0° 	
evening rise	8021 Dec 22 22:34	13°  37'01		desc. node	8022 Dec 08 05:59	1°  36'32	
	8022 Jan 02 04:08	0° 			8022 Dec 26 18:21	0° 	
	8022 Jan 24 08:52	0° 		evening max el	8023 Jan 09 09:36	16°  23'19	25°15'30
evening max el	8022 Jan 26 20:27	2°  36'17	23°59'18	retrograde	8023 Jan 21 10:26	23°  20'30	
retrograde	8022 Feb 06 21:43	9°  06'11		evening set	8023 Jan 27 05:25	20°  56'35	
evening set	8022 Feb 12 03:48	6°  54'55		asc. node	8023 Jan 30 09:18	17°  38'06	
asc. node	8022 Feb 12 12:14	6°  36'27		min. Earth dist.	8023 Jan 31 15:55	16°  02'02	0.67571 AU
min. Earth dist.	8022 Feb 16 21:46	1°  25'40	0.68177 AU	inferior conj	8023 Feb 01 20:35	14°  29'02	0°48'38
inferior conj	8022 Feb 17 15:01	0°  27'07	1°36'58	minimum elong	8023 Feb 01 19:25	14°  32'49	0°48'17
minimum elong	8022 Feb 17 13:03	0°  33'48	1°36'20	morning rise	8023 Feb 07 09:44	8°  33'51	
	8022 Feb 17 23:01	30° 		direct	8023 Feb 10 21:44	7°  23'24	
morning rise	8022 Feb 22 22:19	24°  24'08		morning max el	8023 Feb 18 00:18	11°  19'34	19°23'01
direct	8022 Feb 26 22:40	22°  52'46		greatest brilliancy	8023 Mar 02 22:56	28°  25'33	-0.7m
morning max el	8022 Mar 06 20:41	27°  22'50	20°27'04		8023 Mar 04 00:13	0° 	
	8022 Mar 09 07:07	0° 		desc. node	8023 Mar 06 05:29	3°  20'54	
desc. node	8022 Mar 19 08:33	13°  18'36		morning set	8023 Mar 14 11:07	15°  57'49	
	8022 Mar 30 14:31	0° 			8023 Mar 23 11:57	0° 	
morning set	8022 Apr 04 12:28	7°  32'48		max. Earth dist.	8023 Mar 27 08:23	6°  03'13	1.44851 AU
max. Earth dist.	8022 Apr 13 18:21	22°  08'03	1.43548 AU				
	8022 Apr 18 14:17	0° 		superior conj	8023 Mar 31 01:23	11°  56'15	-2°07'44
superior conj	8022 Apr 20 02:25	2°  29'24	-2°10'26	minimum elong	8023 Mar 30 20:54	11°  38'20	2°07'37
minimum elong	8022 Apr 20 04:38	2°  38'40	2°10'27		8023 Apr 11 04:21	0° 	
evening rise	8022 May 02 13:02	23°  47'17		evening rise	8023 Apr 14 06:00	5°  05'28	
	8022 May 06 02:16	0° 		asc. node	8023 Apr 28 08:14	27°  46'52	
asc. node	8022 May 11 11:11	9°  08'07			8023 Apr 29 23:04	0° 	
evening max el	8022 May 19 17:31	20°  28'24	18°05'53	evening max el	8023 May 03 06:39	3°  52'29	18°19'12
retrograde	8022 May 26 04:39	23°  22'13		retrograde	8023 May 09 16:17	7°  18'11	
evening set	8022 May 28 21:53	23°  22'55		evening set	8023 May 12 16:38	6°  28'44	
inferior conj	8022 Jun 04 06:48	18°  06'11	2°46'01	inferior conj	8023 May 18 14:14	1°  03'45	3°14'18
minimum elong	8022 Jun 04 09:32	17°  59'12	2°45'18	minimum elong	8023 May 18 15:45	0°  59'22	3°14'00
min. Earth dist.	8022 Jun 07 06:38	15°  03'37	0.61948 AU		8023 May 19 12:22	30° 	
morning rise	8022 Jun 10 19:15	12°  02'32		min. Earth dist.	8023 May 21 00:04	28°  18'44	0.64013 AU
desc. node	8022 Jun 15 08:02	9°  53'53		morning rise	8023 May 24 13:48	24°  50'00	
direct	8022 Jun 17 13:03	9°  38'47		direct	8023 May 31 07:26	22°  08'35	
morning max el	8022 Jul 01 16:50	17°  39'53	27°55'25	desc. node	8023 Jun 02 05:03	22°  20'10	
	8022 Jul 11 23:33	0° 			8023 Jun 13 22:24	0° 	
	8022 Jul 30 07:08	0° 		morning max el	8023 Jun 14 01:58	0°  08'57	27°35'49
morning set	8022 Aug 04 08:05	9°  56'19			8023 Jul 05 23:56	0° 	
asc. node	8022 Aug 07 10:31	16°  02'47		morning set	8023 Jul 19 01:57	23°  04'22	
max. Earth dist.	8022 Aug 09 22:33	21°  45'41	1.32085 AU		8023 Jul 22 04:50	0° 	
				max. Earth dist.	8023 Jul 23 23:22	3°  40'30	1.32945 AU
superior conj	8022 Aug 11 19:40	25°  51'36	0°43'28	asc. node	8023 Jul 25 07:29	6°  29'34	
minimum elong	8022 Aug 11 17:51	25°  41'40	0°43'02				
	8022 Aug 13 16:56	0° 		superior conj	8023 Jul 27 01:39	10°  14'16	0°17'48
evening rise	8022 Aug 18 15:16	10°  44'50		minimum elong	8023 Jul 27 00:47	10°  09'39	0°17'30
	8022 Aug 28 09:20	0° 		evening rise	8023 Aug 03 02:48	25°  24'54	
desc. node	8022 Sep 11 07:00	19°  44'00			8023 Aug 05 07:14	0° 	
evening max el	8022 Sep 12 19:54	21°  46'44	24°26'51		8023 Aug 23 20:16	0° 	
retrograde	8022 Sep 26 14:38	28°  11'54		evening max el	8023 Aug 25 07:27	1°  29'59	22°47'43
evening set	8022 Oct 01 17:45	27°  13'34		desc. node	8023 Aug 29 04:04	4°  45'09	
min. Earth dist.	8022 Oct 07 06:50	24°  23'30	0.56523 AU	retrograde	8023 Sep 07 12:29	8°  05'49	
inferior conj	8022 Oct 09 20:14	22°  46'51	-5°32'24	evening set	8023 Sep 11 03:16	7°  37'08	
minimum elong	8022 Oct 09 21:50	22°  44'20	5°32'17	min. Earth dist.	8023 Sep 18 15:24	4°  15'20	0.55197 AU
morning rise	8022 Oct 18 04:04	18°  44'28		inferior conj	8023 Sep 19 23:45	3°  29'05	-5°17'40
direct	8022 Oct 20 19:10	18°  25'50		minimum elong	8023 Sep 19 17:54	3°  37'27	5°16'55
morning max el	8022 Oct 30 11:22	22°  59'56	19°35'26		8023 Sep 27 05:56	30° 	
asc. node	8022 Nov 03 10:06	27°  27'36		morning rise	8023 Sep 28 10:34	29°  40'20	
	8022 Nov 05 06:08	0° 		direct	8023 Oct 01 13:16	29°  17'57	
morning set	8022 Nov 16 22:03	21°  02'53			8023 Oct 05 16:22	0° 	
	8022 Nov 21 08:26	0° 		morning max el	8023 Oct 12 18:57	4°  33'18	20°54'49
superior conj	8022 Nov 24 20:25	6°  58'39	1°27'41	asc. node	8023 Oct 21 07:04	15°  47'36	
					8023 Oct 29 10:03	0° 	
				morning set	8023 Nov 01 05:53	5°  45'31	

superior conj	8023 Nov 08 15:14	21°  08'00	1°38'17	morning max el	8024 Sep 23 14:50	15°  21'24	22°32'26
minimum elong	8023 Nov 08 16:33	21°  14'44	1°38'20		8024 Oct 04 21:54	0° 	
	8023 Nov 13 00:52	0° 		asc. node	8024 Oct 07 04:03	3°  51'05	
max. Earth dist.	8023 Nov 13 10:42	0°  48'16	1.35708 AU	morning set	8024 Oct 15 16:33	20°  34'21	
evening rise	8023 Nov 17 10:53	8° 			8024 Oct 20 02:32	0° 	
desc. node	8023 Nov 25 03:01	22°  05'27					
	8023 Nov 29 23:15	0° 		superior conj	8024 Oct 22 17:58	5°  39'07	1°41'35
	8023 Dec 22 19:03	0° 		minimum elong	8024 Oct 22 17:58	5°  39'03	1°41'39
evening max el	8023 Dec 22 22:39	0°  08'46	26°20'32	max. Earth dist.	8024 Oct 26 02:42	12°  42'39	1.34045 AU
retrograde	8024 Jan 04 18:12	7°  22'50		evening rise	8024 Oct 30 17:16	21°  18'46	
evening set	8024 Jan 11 01:37	4° 			8024 Nov 03 22:45	0° 	
min. Earth dist.	8024 Jan 15 05:33	0°  29'54	0.66586 AU	desc. node	8024 Nov 11 00:03	12°  18'55	
	8024 Jan 15 15:27	30° 			8024 Nov 22 18:08	0° 	
inferior conj	8024 Jan 16 21:45	28°  27'29	-0°07'12	evening max el	8024 Dec 04 11:39	13°  44'10	27°07'12
minimum elong	8024 Jan 16 21:57	28°  26'54	0°06'59	retrograde	8024 Dec 17 20:18	21°  04'38	
transit middle	8024 Jan 16 21:57	28°  26'54	0°06'59	evening set	8024 Dec 24 14:18	18°  27'58	
transit begin	8024 Jan 16 19:21	28°  34'50		min. Earth dist.	8024 Dec 28 12:27	14°  42'15	0.65243 AU
transit end	8024 Jan 17 00:33	28°  31'00		inferior conj	8024 Dec 30 16:20	12°  16'54	-1°09'48
asc. node	8024 Jan 17 06:21	28°  30'12		minimum elong	8024 Dec 30 18:24	12°  11'06	1°08'46
morning rise	8024 Jan 22 19:03	22°  42'12		asc. node	8025 Jan 03 03:25	8°  42'06	
direct	8024 Jan 25 20:13	21°  34'43		morning rise	8025 Jan 05 23:48	6°  34'55	
morning max el	8024 Feb 01 11:03	25°  24'34	18°34'47	direct	8025 Jan 08 16:01	6°  05'39	
	8024 Feb 05 10:02	0° 		morning max el	8025 Jan 15 02:31	9°  30'18	18°03'10
desc. node	8024 Feb 21 02:27	23°  40'59			8025 Jan 29 07:20	0° 	
morning set	8024 Feb 22 05:07	25°  26'17		morning set	8025 Feb 02 04:32	6°  22'57	
	8024 Feb 25 02:29	0° 		desc. node	8025 Feb 06 23:24	14°  13'08	
superior conj	8024 Mar 09 07:55	20°  45'18	-1°44'52	superior conj	8025 Feb 16 15:51	29°  45'40	-1°05'56
minimum elong	8024 Mar 08 22:29	20°  08'23	1°44'01	minimum elong	8025 Feb 16 08:14	29°  15'31	1°04'53
max. Earth dist.	8024 Mar 09 02:35	20°  24'25	1.45465 AU		8025 Feb 16 19:28	0° 	
	8024 Mar 15 05:22	0° 		max. Earth dist.	8025 Feb 19 22:01	4°  53'40	1.45337 AU
evening rise	8024 Mar 24 23:28	15°  26'02		evening rise	8025 Mar 04 20:19	25°  00'13	
greatest brilliancy	8024 Apr 02 12:41	29°  01'17	-0.8m		8025 Mar 08 02:01	0° 	
	8024 Apr 03 03:38	0° 		greatest brilliancy	8025 Mar 18 06:06	15°  28'58	-0.7m
asc. node	8024 Apr 14 05:18	15°  46'59			8025 Mar 29 00:52	0° 	
evening max el	8024 Apr 15 17:31	17°  25'01	18°50'25	evening max el	8025 Mar 30 00:10	1°  01'35	19°38'20
retrograde	8024 Apr 22 10:29	21°  08'24		asc. node	8025 Apr 01 02:23	2°  56'35	
evening set	8024 Apr 25 18:08	20°  04'57		retrograde	8025 Apr 06 08:02	5°  13'25	
inferior conj	8024 May 01 08:09	14°  23'27	3°24'06	evening set	8025 Apr 09 23:46	3°  55'20	
minimum elong	8024 May 01 08:19	14°  22'56	3°24'01		8025 Apr 13 20:08	30° 	
min. Earth dist.	8024 May 03 02:40	12°  10'54	0.65742 AU	inferior conj	8025 Apr 15 09:18	27°  09'09	3°19'25
morning rise	8024 May 06 21:55	8°  05'49		minimum elong	8025 Apr 15 08:18	28°  02'28	3°19'17
direct	8024 May 13 09:17	5°  18'43		min. Earth dist.	8025 Apr 16 12:55	26°  07'32	0.67054 AU
desc. node	8024 May 19 02:03	7°  03'13		morning rise	8025 Apr 20 16:30	21°  04'32	
morning max el	8024 May 26 12:31	13°  06'08	26°44'37	direct	8025 Apr 26 17:25	19°  00'10	
	8024 Jun 09 03:10	0° 		desc. node	8025 May 05 23:04	23°  03'19	
	8024 Jun 27 15:48	0° 		morning max el	8025 May 08 22:18	26°  01'56	25°30'33
morning set	8024 Jul 01 09:02	6°  54'38			8025 May 12 07:51	0° 	
max. Earth dist.	8024 Jul 05 14:08	15°  50'06	1.34284 AU		8025 Jun 02 17:03	0° 	
superior conj	8024 Jul 10 01:38	24°  51'07	-0°11'17	morning set	8025 Jun 14 01:14	19°  21'48	
minimum elong	8024 Jul 10 02:16	24°  18'22	0°11'18	max. Earth dist.	8025 Jun 17 17:48	26°  11'32	1.36077 AU
behind sun begin	8024 Jul 09 22:08	23°  56'54			8025 Jun 19 17:43	0° 	
behind sun end	8024 Jul 10 06:24	24°  53'51		superior conj	8025 Jun 23 16:55	7°  54'07	-0°42'33
asc. node	8024 Jul 11 04:28	26°  35'02		minimum elong	8025 Jun 23 19:28	7°  59'48	0°42'13
	8024 Jul 12 19:29	0° 		asc. node	8025 Jun 28 01:29	16°  53'22	
evening rise	8024 Jul 17 12:39	9°  56'05		evening rise	8025 Jul 01 18:39	24°  51'14	
	8024 Jul 28 01:13	0° 			8025 Jul 04 15:49	0° 	
evening max el	8024 Aug 06 01:48	11°  55'37	21°14'08	evening max el	8025 Jul 19 08:54	23°  00'08	19°56'49
desc. node	8024 Aug 15 01:09	17°  30'04		retrograde	8025 Jul 29 16:33	28°  05'17	
retrograde	8024 Aug 18 01:51	17°  52'28		evening set	8025 Jul 31 13:37	27°  55'56	
evening set	8024 Aug 20 10:46	17°  39'23		desc. node	8025 Aug 01 22:14	27°  03'05	
inferior conj	8024 Aug 29 16:49	13°  41'53	-4°08'00	inferior conj	8025 Aug 09 13:32	23°  55'55	-2°18'55
minimum elong	8024 Aug 29 07:18	13°  55'16	4°05'25	minimum elong	8025 Aug 09 07:10	24°  05'33	2°16'39
min. Earth dist.	8024 Aug 30 00:22	13°  31'15	0.54690 AU	min. Earth dist.	8025 Aug 11 11:40	22°  46'07	0.55144 AU
morning rise	8024 Sep 07 04:29	9°  48'31		morning rise	8025 Aug 17 22:59	19°  54'01	
direct	8024 Sep 10 21:37	9° 		direct	8025 Aug 22 10:22	18° 	

morning max el	8025 Sep 05 04:00	25° $\Omega$ 40'27	24°18'10	direct	8026 Aug 03 11:39	28° $\Theta$ 37'22	
	8025 Sep 09 06:01	0° $\Pi$			8026 Aug 09 10:33	0° $\Omega$	
asc. node	8025 Sep 24 01:02	22° $\Pi$ 57'24		morning max el	8026 Aug 17 17:22	5° $\Omega$ 57'12	25°56'27
	8025 Sep 27 14:14	0° $\Omega$			8026 Sep 04 07:08	0° $\Pi$	
morning set	8025 Sep 30 04:20	5° $\Omega$ 24'41		asc. node	8026 Sep 10 22:01	12° $\Pi$ 27'04	
				morning set	8026 Sep 14 15:29	20° $\Pi$ 10'26	
					8026 Sep 19 03:55	0° $\Omega$	
superior conj	8025 Oct 07 01:54	20° $\Omega$ 23'53	1°38'25				
minimum elong	8025 Oct 07 00:47	20° $\Omega$ 17'46	1°38'24				
max. Earth dist.	8025 Oct 09 03:14	24° $\Omega$ 51'00	1.32810 AU	superior conj	8026 Sep 21 12:44	5° $\Omega$ 14'02	1°29'31
	8025 Oct 11 13:17	0° $\Pi$		minimum elong	8026 Sep 21 10:50	5° $\Omega$ 03'36	1°29'20
evening rise	8025 Oct 14 10:53	5° $\Pi$ 59'40		max. Earth dist.	8026 Sep 22 10:15	7° $\Omega$ 12'49	1.32021 AU
	8025 Oct 27 12:56	0° $\Omega$		evening rise	8026 Sep 28 12:28	20° $\Omega$ 21'00	
desc. node	8025 Oct 28 21:08	2° $\Omega$ 10'18			8026 Oct 03 07:26	0° $\Pi$	
evening max el	8025 Nov 16 23:29	26° $\Omega$ 58'56	27°28'23	desc. node	8026 Oct 15 18:12	21° $\Pi$ 29'33	
	8025 Nov 20 11:30	0° $\Theta$			8026 Oct 21 19:00	0° $\Omega$	
retrograde	8025 Nov 30 15:53	4° $\Theta$ 17'24		evening max el	8026 Oct 30 07:44	9° $\Omega$ 39'05	27°18'27
evening set	8025 Dec 07 16:53	1° $\Theta$ 45'12		retrograde	8026 Nov 13 03:54	16° $\Omega$ 51'37	
	8025 Dec 09 20:48	30° $\Omega$ 37		evening set	8026 Nov 20 05:57	14° $\Omega$ 33'38	
min. Earth dist.	8025 Dec 11 10:38	28° $\Omega$ 30'56	0.63580 AU	min. Earth dist.	8026 Nov 23 22:18	11° $\Omega$ 44'51	0.61648 AU
inferior conj	8025 Dec 14 01:43	25° $\Omega$ 51'19	-2°17'26	inferior conj	8026 Nov 26 22:48	9° $\Omega$ 02'25	-3°26'47
minimum elong	8025 Dec 14 06:01	25° $\Omega$ 40'25	2°15'35	minimum elong	8026 Nov 27 05:11	8° $\Omega$ 48'04	3°24'30
morning rise	8025 Dec 20 20:58	20° $\Omega$ 33'35		morning rise	8026 Dec 04 06:35	4° $\Omega$ 03'23	
asc. node	8025 Dec 21 00:28	20° $\Omega$ 30'19		direct	8026 Dec 06 12:26	3° $\Omega$ 41'56	
direct	8025 Dec 23 06:34	20° $\Omega$ 05'32		asc. node	8026 Dec 07 21:31	3° $\Omega$ 50'18	
morning max el	8025 Dec 29 19:50	23° $\Omega$ 29'20	17°48'44	morning max el	8026 Dec 13 11:50	7° $\Omega$ 13'26	17°52'28
	8026 Jan 04 00:32	0° $\Theta$			8026 Dec 28 04:58	0° $\Theta$	
morning set	8026 Jan 15 06:47	18° $\Theta$ 37'44		morning set	8026 Dec 29 05:18	1° $\Theta$ 50'08	
	8026 Jan 21 22:24	0° $\approx$					
desc. node	8026 Jan 24 20:24	4° $\approx$ 53'18		superior conj	8027 Jan 08 22:38	20° $\Theta$ 53'09	0°20'24
				minimum elong	8027 Jan 09 00:25	21° $\Theta$ 00'51	0°20'16
superior conj	8026 Jan 27 18:26	9° $\approx$ 42'25	-0°21'05	desc. node	8027 Jan 11 17:23	25° $\Theta$ 37'41	
minimum elong	8026 Jan 27 16:08	9° $\approx$ 33'02	0°20'38		8027 Jan 14 08:06	0° $\approx$	
max. Earth dist.	8026 Feb 02 16:17	19° $\approx$ 15'21	1.44491 AU	max. Earth dist.	8027 Jan 16 07:20	3° $\approx$ 14'25	1.43018 AU
	8026 Feb 09 12:27	0° $\mathcal{H}$		evening rise	8027 Jan 23 00:26	13° $\approx$ 59'10	
evening rise	8026 Feb 12 07:31	4° $\mathcal{H}$ 18'46			8027 Feb 02 12:47	0° $\mathcal{H}$	
	8026 Mar 01 13:10	0° $\Upsilon$		evening max el	8027 Feb 23 21:32	28° $\mathcal{H}$ 20'14	21°53'55
evening max el	8026 Mar 13 01:31	14° $\Upsilon$ 40'10	20°40'40		8027 Feb 25 15:15	0° $\Upsilon$	
asc. node	8026 Mar 18 23:29	19° $\Upsilon$ 01'45		retrograde	8027 Mar 05 04:05	3° $\Upsilon$ 49'53	
retrograde	8026 Mar 21 06:32	19° $\Upsilon$ 28'41		asc. node	8027 Mar 05 20:34	3° $\Upsilon$ 47'28	
evening set	8026 Mar 25 07:28	17° $\Upsilon$ 55'27		evening set	8027 Mar 09 15:31	2° $\Upsilon$ 01'19	
inferior conj	8026 Mar 30 15:03	11° $\Upsilon$ 46'34	3°02'59		8027 Mar 11 16:26	30° $\mathcal{R}$ 37	
minimum elong	8026 Mar 30 13:14	11° $\Upsilon$ 52'48	3°02'38	inferior conj	8027 Mar 14 23:11	25° $\mathcal{H}$ 42'15	2°36'33
min. Earth dist.	8026 Mar 31 04:50	10° $\Upsilon$ 59'08	0.67922 AU	minimum elong	8027 Mar 14 20:58	25° $\mathcal{H}$ 50'00	2°36'00
morning rise	8026 Apr 04 18:46	5° $\Upsilon$ 31'19		min. Earth dist.	8027 Mar 15 00:16	25° $\mathcal{H}$ 38'31	0.68347 AU
direct	8026 Apr 10 06:44	3° $\Upsilon$ 04'38		morning rise	8027 Mar 20 02:15	19° $\mathcal{H}$ 30'49	
morning max el	8026 Apr 21 07:11	9° $\Upsilon$ 39'51	24°03'44	direct	8027 Mar 25 00:09	17° $\mathcal{H}$ 24'26	
desc. node	8026 Apr 22 20:04	11° $\Upsilon$ 16'25		morning max el	8027 Apr 03 17:42	23° $\mathcal{H}$ 08'34	22°34'15
	8026 May 07 08:37	0° $\mathcal{B}$		desc. node	8027 Apr 09 17:02	29° $\mathcal{H}$ 57'03	
	8026 May 26 09:46	0° $\Pi$			8027 Apr 09 17:59	0° $\Upsilon$	
morning set	8026 May 26 21:17	0° $\Pi$ 49'29			8027 Apr 30 17:21	0° $\mathcal{B}$	
max. Earth dist.	8026 May 30 14:28	7° $\Pi$ 20'36	1.38219 AU	morning set	8027 May 07 15:48	11° $\mathcal{B}$ 04'52	
				max. Earth dist.	8027 May 12 11:49	19° $\mathcal{B}$ 08'43	1.40468 AU
					8027 May 18 17:24	0° $\Pi$	
superior conj	8026 Jun 06 20:03	20° $\Pi$ 41'15	-1°14'04				
minimum elong	8026 Jun 07 00:35	21° $\Pi$ 02'49	1°13'30	superior conj	8027 May 20 06:47	2° $\Pi$ 47'46	-1°42'43
	8026 Jun 11 15:30	0° $\Theta$		minimum elong	8027 May 20 12:31	3° $\Pi$ 13'42	1°42'12
asc. node	8026 Jun 14 22:31	6° $\Theta$ 29'06		evening rise	8027 May 30 08:03	21° $\Pi$ 29'21	
evening rise	8026 Jun 15 18:11	8° $\Theta$ 05'55			8027 Jun 01 19:35	26° $\Pi$ 09'12	
	8026 Jun 28 03:51	0° $\Omega$		asc. node	8027 Jun 03 21:29	0° $\Theta$	
evening max el	8026 Jul 02 04:37	4° $\Omega$ 48'24	18°59'36		8027 Jun 15 09:52	17° $\Theta$ 15'31	18°23'03
retrograde	8026 Jul 10 20:51	9° $\Omega$ 05'44		evening max el	8027 Jun 22 20:30	20° $\Theta$ 58'46	
evening set	8026 Jul 12 19:40	8° $\Omega$ 53'36		retrograde	8027 Jun 25 01:58	20° $\Theta$ 39'38	
desc. node	8026 Jul 19 19:20	5° $\Omega$ 31'38		evening set	8027 Jul 02 12:45	16° $\Theta$ 04'09	1°12'04
inferior conj	8026 Jul 21 02:19	4° $\Omega$ 38'21	-0°23'33	inferior conj	8027 Jul 02 15:05	15° $\Theta$ 59'22	1°11'07
minimum elong	8026 Jul 21 01:19	4° $\Omega$ 40'05	0°23'17	minimum elong	8027 Jul 05 22:06	13° $\Theta$ 19'00	0.58437 AU
min. Earth dist.	8026 Jul 24 02:14	2° $\Omega$ 33'47	0.56483 AU	min. Earth dist.	8027 Jul 06 16:23	12° $\Theta$ 44'18	
	8026 Jul 28 13:16	30° $\mathcal{R}$ 36		desc. node	8027 Jul 10 00:53	10° $\Theta$ 35'09	
morning rise	8026 Jul 29 03:47	29° $\Theta$ 44'22		morning rise			




































































































































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morning max el	8027 Jul 30 12:21	16°☿40'58	27°10'46		8028 Jul 13 10:07	0°☿	
	8027 Aug 10 11:10	0°♌			8028 Aug 03 06:01	0°♌	
	8027 Aug 27 17:03	0°♍		morning set	8028 Aug 13 05:11	19°♌09'25	
asc. node	8027 Aug 28 19:01	2°♍13'34		asc. node	8028 Aug 14 15:59	22°♌11'24	
morning set	8027 Aug 30 00:22	4°♍47'03			8028 Aug 18 07:10	0°♍	
				max. Earth dist.	8028 Aug 19 05:56	2°♍04'40	1.31798 AU
superior conj	8027 Sep 06 00:32	20°♍03'47	1°15'22				
minimum elong	8027 Sep 05 22:18	19°♍51'22	1°15'01	superior conj	8028 Aug 20 11:34	4°♍47'49	0°56'24
max. Earth dist.	8027 Sep 05 20:26	19°♍41'03	1.31683 AU	minimum elong	8028 Aug 20 09:27	4°♍36'09	0°55'57
	8027 Sep 10 12:36	0°♎		evening rise	8028 Aug 27 05:48	19°♍36'56	
evening rise	8027 Sep 12 19:30	4°♎55'29			8028 Sep 01 06:25	0°♎	
	8027 Sep 26 00:18	0°♏		desc. node	8028 Sep 18 12:20	27°♎36'06	
desc. node	8027 Oct 02 15:16	10°♏03'58			8028 Sep 20 14:40	0°♏	
evening max el	8027 Oct 12 09:27	21°♏32'07	26°34'36	evening max el	8028 Sep 23 03:05	2°♏34'22	25°19'54
retrograde	8027 Oct 26 07:20	28°♏39'06		retrograde	8028 Oct 07 00:49	9°♏36'04	
evening set	8027 Nov 02 01:09	26°♏45'59		evening set	8028 Oct 12 21:42	8°♏16'54	
min. Earth dist.	8027 Nov 05 23:03	24°♏10'53	0.59564 AU	min. Earth dist.	8028 Oct 17 14:55	5°♏37'40	0.57535 AU
inferior conj	8027 Nov 09 04:01	21°♏40'30	-4°31'19	inferior conj	8028 Oct 20 14:11	3°♏36'35	-5°19'15
minimum elong	8027 Nov 09 11:13	21°♏26'23	4°29'27	minimum elong	8028 Oct 20 19:03	3°♏28'15	5°18'34
morning rise	8027 Nov 16 23:36	17°♏03'30			8028 Oct 26 20:05	30°♐♎	
direct	8027 Nov 19 05:19	16°♏45'29		morning rise	8028 Oct 28 18:46	29°♎22'36	
asc. node	8027 Nov 24 18:33	18°♏43'05		direct	8028 Oct 31 04:48	29°♎05'10	
morning max el	8027 Nov 26 23:04	20°♏33'29	18°15'41		8028 Nov 04 08:20	0°♏	
	8027 Dec 04 01:24	0°♐		morning max el	8028 Nov 09 01:56	3°♏19'40	19°00'00
morning set	8027 Dec 12 18:09	15°♐42'13		asc. node	8028 Nov 10 15:33	4°♏57'06	
	8027 Dec 20 08:40	0°♑		morning set	8028 Nov 25 16:52	0°♐01'16	
					8028 Nov 25 16:37	0°♐	
superior conj	8027 Dec 22 02:38	3°♑12'04	0°53'46				
minimum elong	8027 Dec 22 06:01	3°♑27'24	0°53'27	superior conj	8028 Dec 04 01:32	16°♐25'05	1°17'52
max. Earth dist.	8027 Dec 29 17:25	16°♑35'45	1.41089 AU	minimum elong	8028 Dec 04 04:42	16°♐40'16	1°17'39
desc. node	8027 Dec 29 14:20	16°♑22'39		max. Earth dist.	8028 Dec 10 23:19	29°♐13'16	1.38938 AU
evening rise	8028 Jan 03 10:53	24°♑28'19			8028 Dec 11 09:47	0°♑	
	8028 Jan 06 21:18	0°♒		evening rise	8028 Dec 14 19:26	5°♑56'56	
	8028 Jan 27 09:59	0°♓		desc. node	8028 Dec 15 11:20	7°♑04'59	
evening max el	8028 Feb 06 13:14	12°♓02'04	23°13'14		8028 Dec 29 22:10	0°♒	
retrograde	8028 Feb 16 23:13	18°♓12'06		evening max el	8029 Jan 19 02:43	25°♒47'34	24°32'32
asc. node	8028 Feb 20 17:40	17°♓01'41			8029 Jan 24 00:53	0°♓	
evening set	8028 Feb 21 22:16	16°♓08'36		retrograde	8029 Jan 30 14:44	2°♓31'08	
inferior conj	8028 Feb 27 07:46	9°♓42'39	2°01'09	evening set	8029 Feb 05 02:15	0°♓14'05	
minimum elong	8028 Feb 27 05:34	9°♓50'14	2°00'29		8029 Feb 05 08:43	30°♐♒	
min. Earth dist.	8028 Feb 26 20:59	10°♓19'50	0.68353 AU	asc. node	8029 Feb 06 14:43	28°♒46'20	
morning rise	8028 Mar 03 12:49	3°♓36'15		min. Earth dist.	8029 Feb 09 16:49	24°♒59'29	0.67965 AU
direct	8028 Mar 07 20:43	1°♓52'19		inferior conj	8029 Feb 10 14:59	23°♒45'29	1°17'26
morning max el	8028 Mar 16 09:17	6°♓47'16	21°10'20	minimum elong	8029 Feb 10 13:17	23°♒51'07	1°16'53
desc. node	8028 Mar 26 13:58	19°♓17'18		morning rise	8029 Feb 16 00:30	17°♒45'31	
	8028 Apr 03 02:06	0°♔		direct	8029 Feb 19 19:18	16°♒23'32	
morning set	8028 Apr 16 06:58	20°♔05'14		morning max el	8029 Feb 27 08:19	20°♒38'02	19°57'55
	8028 Apr 22 11:52	0°♕			8029 Mar 07 01:33	0°♓	
max. Earth dist.	8028 Apr 23 14:37	1°♕49'00	1.42538 AU	desc. node	8029 Mar 13 10:54	9°♓06'47	
				morning set	8029 Mar 26 04:58	28°♓23'25	
superior conj	8028 Apr 30 20:13	13°♕54'46	-2°03'55		8029 Mar 27 06:00	0°♔	
minimum elong	8028 May 01 00:50	14°♕14'31	2°03'46	max. Earth dist.	8029 Apr 06 00:14	15°♔18'15	1.44181 AU
	8028 May 10 00:05	0°♕					
evening rise	8028 May 12 08:03	4°♕11'39		superior conj	8029 Apr 11 09:01	23°♔56'46	-2°11'40
asc. node	8028 May 18 16:37	15°♕30'46		minimum elong	8029 Apr 11 08:38	23°♔55'15	2°11'44
	8028 May 28 16:09	0°♖			8029 Apr 15 01:29	0°♕	
evening max el	8028 May 28 20:51	0°♖11'45	18°06'36	evening rise	8029 Apr 24 13:35	16°♕02'37	
retrograde	8028 Jun 04 13:34	3°♖36'38			8029 May 02 18:53	0°♕	
evening set	8028 Jun 07 02:28	3°♖07'24		asc. node	8029 May 05 13:39	4°♕27'26	
	8028 Jun 11 20:36	30°♐♕		evening max el	8029 May 12 10:07	13°♕28'08	18°09'19
inferior conj	8028 Jun 13 19:43	28°♕11'45	2°19'25	retrograde	8029 May 18 19:34	16°♕49'29	
minimum elong	8028 Jun 13 22:47	28°♕04'27	2°18'28	evening set	8029 May 21 15:46	16°♕07'53	
min. Earth dist.	8028 Jun 17 01:31	25°♕08'22	0.60664 AU	inferior conj	8029 May 27 19:25	10°♕53'25	3°00'32
morning rise	8028 Jun 20 16:33	22°♕17'19		minimum elong	8029 May 27 21:42	10°♕47'17	3°00'01
desc. node	8028 Jun 22 13:25	21°♕14'40		min. Earth dist.	8029 May 30 13:47	7°♕55'40	0.62861 AU
direct	8028 Jun 27 06:45	20°♕08'37		morning rise	8029 Jun 03 02:02	4°♕44'21	

desc. node	8029 Jun 09 10:27	2°♊11'52		direct	8030 May 23 18:35	15°♊00'00	
direct	8029 Jun 09 20:39	2°♊11'18		desc. node	8030 May 27 07:28	15°♊40'18	
morning max el	8029 Jun 23 21:16	10°♊14'15	27°51'17	morning max el	8030 Jun 06 07:07	22°♊56'21	27°17'20
	8029 Jul 09 07:53	0°♊			8030 Jun 12 12:54	0°♊	
	8029 Jul 26 13:31	0°♊			8030 Jul 02 14:49	0°♊	
morning set	8029 Jul 28 03:46	3°♊10'50		morning set	8030 Jul 11 17:29	16°♊43'59	
asc. node	8029 Aug 01 12:56	12°♊15'31		max. Earth dist.	8030 Jul 16 07:32	25°♊54'37	1.33455 AU
max. Earth dist.	8029 Aug 02 10:49	14°♊12'02	1.32385 AU		8030 Jul 18 06:53	0°♊	
				asc. node	8030 Jul 19 09:55	2°♊22'00	
superior conj	8029 Aug 04 19:58	19°♊20'09	0°33'02				
minimum elong	8029 Aug 04 18:29	19°♊12'08	0°32'38	superior conj	8030 Jul 19 23:44	3°♊34'59	0°05'51
	8029 Aug 09 17:20	0°♊		minimum elong	8030 Jul 19 23:27	3°♊33'26	0°05'39
evening rise	8029 Aug 11 17:25	4°♊19'06		behind sun begin	8030 Jul 19 18:14	3°♊05'51	
	8029 Aug 25 09:20	0°♊		behind sun end	8030 Jul 20 04:39	4°♊01'03	
evening max el	8029 Sep 04 15:01	12°♊57'46	23°45'06	evening rise	8030 Jul 27 04:31	18°♊56'34	
desc. node	8029 Sep 05 09:25	13°♊41'08			8030 Aug 01 14:49	0°♊	
retrograde	8029 Sep 18 06:05	19°♊47'09		evening max el	8030 Aug 17 04:38	23°♊13'02	22°06'30
evening set	8029 Sep 22 17:43	19°♊03'06		desc. node	8030 Aug 23 06:30	27°♊48'39	
min. Earth dist.	8029 Sep 29 01:20	16°♊01'06	0.55865 AU	retrograde	8030 Aug 29 23:05	29°♊33'50	
inferior conj	8029 Oct 01 04:03	14°♊44'51	-5°32'45	evening set	8030 Sep 01 23:24	29°♊13'41	
minimum elong	8029 Oct 01 02:31	14°♊47'10	5°32'40	min. Earth dist.	8030 Sep 10 09:50	25°♊34'11	0.54872 AU
morning rise	8029 Oct 09 13:28	10°♊49'38		inferior conj	8030 Sep 11 01:44	25°♊11'53	-4°54'35
direct	8029 Oct 12 08:53	10°♊29'50		minimum elong	8030 Sep 10 17:29	25°♊23'28	4°52'59
morning max el	8029 Oct 22 17:03	15°♊21'07	20°06'38	morning rise	8030 Sep 19 13:05	21°♊23'32	
asc. node	8029 Oct 28 12:32	22°♊16'10		direct	8030 Sep 22 21:49	20°♊58'22	
	8029 Nov 02 08:15	0°♊		morning max el	8030 Oct 04 19:11	26°♊33'44	21°34'28
morning set	8029 Nov 09 22:06	14°♊36'59			8030 Oct 08 01:34	0°♊	
	8029 Nov 17 10:54	0°♊		asc. node	8030 Oct 15 09:31	10°♊26'10	
				morning set	8030 Oct 25 07:24	29°♊22'47	
superior conj	8029 Nov 17 14:15	0°♊16'49	1°33'08		8030 Oct 25 14:31	0°♊	
minimum elong	8029 Nov 17 16:20	0°♊27'17	1°33'06				
max. Earth dist.	8029 Nov 23 05:26	11°♊17'18	1.36824 AU	superior conj	8030 Nov 01 12:49	14°♊36'06	1°40'31
evening rise	8029 Nov 27 00:41	18°♊20'08		minimum elong	8030 Nov 01 13:33	14°♊39'57	1°40'35
desc. node	8029 Dec 02 08:21	27°♊39'56		max. Earth dist.	8030 Nov 05 17:10	23°♊10'28	1.34959 AU
	8029 Dec 03 17:39	0°♊			8030 Nov 09 04:28	0°♊	
	8029 Dec 24 04:00	0°♊		evening rise	8030 Nov 09 23:02	1°♊28'51	
evening max el	8030 Jan 01 15:49	9°♊34'47	25°45'00	desc. node	8030 Nov 19 05:24	18°♊02'50	
retrograde	8030 Jan 14 01:35	16°♊40'49			8030 Nov 26 18:10	0°♊	
evening set	8030 Jan 20 01:47	14°♊12'42		evening max el	8030 Dec 15 05:08	23°♊17'35	26°43'08
asc. node	8030 Jan 24 11:47	9°♊25'22			8030 Dec 24 23:11	0°♊	
min. Earth dist.	8030 Jan 24 09:28	9°♊32'38	0.67194 AU	retrograde	8030 Dec 28 06:50	0°♊34'47	
inferior conj	8030 Jan 25 18:57	7°♊46'33	0°25'51		8030 Dec 31 09:56	30°♊	
minimum elong	8030 Jan 25 18:17	7°♊48'38	0°25'42	evening set	8031 Jan 03 19:02	27°♊59'39	
morning rise	8030 Jan 31 11:16	1°♊55'01		min. Earth dist.	8031 Jan 07 20:33	23°♊54'20	0.66058 AU
direct	8030 Feb 03 18:25	0°♊52'37		inferior conj	8031 Jan 09 17:37	21°♊41'36	-0°33'00
morning max el	8030 Feb 10 15:07	4°♊38'33	19°00'25	minimum elong	8031 Jan 09 18:32	21°♊38'53	0°32'27
greatest brilliancy	8030 Feb 24 17:01	23°♊43'50	-0.8m	asc. node	8031 Jan 11 08:51	19°♊48'31	
desc. node	8030 Feb 28 07:51	29°♊17'21		morning rise	8031 Jan 15 18:58	16°♊00'59	
	8030 Feb 28 18:54	0°♊		direct	8031 Jan 18 16:10	15°♊14'52	
morning set	8030 Mar 05 09:31	7°♊08'55		morning max el	8031 Jan 25 04:07	18°♊43'57	18°19'15
max. Earth dist.	8030 Mar 19 16:04	29°♊25'33	1.45205 AU		8031 Feb 02 18:19	0°♊	
	8030 Mar 20 00:50	0°♊		morning set	8031 Feb 13 15:49	17°♊14'44	
				desc. node	8031 Feb 15 04:49	19°♊42'58	
superior conj	8030 Mar 21 23:28	3°♊03'32	-2°00'28		8031 Feb 21 15:43	0°♊	
minimum elong	8030 Mar 21 16:13	2°♊34'56	2°00'03				
evening rise	8030 Apr 05 20:37	26°♊55'47		superior conj	8031 Mar 01 04:04	11°♊50'19	-1°29'46
	8030 Apr 07 17:45	0°♊		minimum elong	8031 Feb 28 18:36	11°♊13'12	1°28'43
asc. node	8030 Apr 22 10:42	22°♊51'20		max. Earth dist.	8031 Mar 02 11:33	13°♊53'40	1.45506 AU
evening max el	8030 Apr 25 22:40	26°♊57'13	18°30'24		8031 Mar 12 18:44	0°♊	
	8030 Apr 30 03:22	0°♊		evening rise	8031 Mar 17 04:31	6°♊54'12	
retrograde	8030 May 02 10:20	0°♊28'38		greatest brilliancy	8031 Mar 27 23:22	23°♊43'45	-0.8m
	8030 May 04 16:29	30°♊			8031 Apr 01 03:28	0°♊	
evening set	8030 May 05 13:46	29°♊33'19		asc. node	8031 Apr 09 07:48	10°♊31'45	
inferior conj	8030 May 11 07:45	24°♊01'21	3°20'25	evening max el	8031 Apr 09 08:01	10°♊32'19	19°08'53
minimum elong	8030 May 11 08:42	23°♊58'33	3°20'14	retrograde	8031 Apr 16 06:16	14°♊26'12	
min. Earth dist.	8030 May 13 11:12	21°♊28'36	0.64801 AU	evening set	8031 Apr 19 17:21	13°♊16'24	
morning rise	8030 May 17 02:47	17°♊45'34		inferior conj	8031 Apr 25 05:06	7°♊28'24	3°23'42

minimum elong	8031 Apr 25 04:44	7°♄29'35	3°23'36	evening set	8032 Apr 03 00:09	27°♄12'06	
min. Earth dist.	8031 Apr 26 17:07	5°♄32'52	0.66358 AU	inferior conj	8032 Apr 08 08:32	21°♄09'58	3°13'47
morning rise	8031 Apr 30 15:43	1°♄10'42		minimum elong	8032 Apr 08 07:08	21°♄14'41	3°13'33
	8031 May 02 03:49	30°♄♄		min. Earth dist.	8032 Apr 09 06:02	19°♄57'19	0.67476 AU
direct	8031 May 06 23:06	28°♄24'57		morning rise	8032 Apr 13 13:54	14°♄53'10	
	8031 May 12 06:49	0°♄		direct	8032 Apr 19 09:24	12°♄17'28	
desc. node	8031 May 14 04:29	1°♄12'04		desc. node	8032 Apr 30 01:28	18°♄16'18	
morning max el	8031 May 19 17:25	6°♄01'12	26°15'21	morning max el	8032 May 01 02:56	19°♄19'08	24°54'39
	8031 Jun 07 04:33	0°♄			8032 May 10 04:34	0°♄	
morning set	8031 Jun 24 18:46	29°♄38'19			8032 May 30 07:20	0°♄	
	8031 Jun 24 23:25	0°♄		morning set	8032 Jun 06 03:07	11°♄42'14	
max. Earth dist.	8031 Jun 28 17:40	7°♄10'51	1.35003 AU	max. Earth dist.	8032 Jun 09 18:03	18°♄15'18	1.36964 AU
					8032 Jun 15 22:29	0°♄	
superior conj	8031 Jul 03 20:24	17°♄24'34	-0°24'21				
minimum elong	8031 Jul 03 21:48	17°♄31'43	0°24'13	superior conj	8032 Jun 16 06:58	0°♄41'32	-0°56'02
asc. node	8031 Jul 06 06:55	22°♄26'12		minimum elong	8032 Jun 16 10:23	0°♄58'14	0°55'34
	8031 Jul 09 22:02	0°♄		asc. node	8032 Jun 22 03:57	12°♄24'30	
evening rise	8031 Jul 11 13:01	3°♄22'20		evening rise	8032 Jun 24 16:39	17°♄30'11	
	8031 Jul 26 17:36	0°♄			8032 Jul 01 03:33	0°♄	
evening max el	8031 Jul 30 03:59	3°♄52'39	20°38'47	evening max el	8032 Jul 11 16:35	15°♄15'22	19°29'47
retrograde	8031 Aug 10 11:12	9°♄27'59		retrograde	8032 Jul 21 06:52	19°♄59'28	
desc. node	8031 Aug 10 03:37	9°♄27'44		evening set	8032 Jul 23 03:26	19°♄49'36	
evening set	8031 Aug 12 13:08	9°♄17'24		desc. node	8032 Jul 27 00:42	18°♄31'55	
inferior conj	8031 Aug 21 18:25	5°♄20'24	-3°24'40	inferior conj	8032 Jul 31 20:48	15°♄43'52	-1°28'46
minimum elong	8031 Aug 21 09:34	5°♄33'05	3°21'51	minimum elong	8032 Jul 31 16:47	15°♄50'18	1°27'19
min. Earth dist.	8031 Aug 22 19:13	4°♄44'49	0.54773 AU	min. Earth dist.	8032 Aug 03 07:42	14°♄09'46	0.55619 AU
morning rise	8031 Aug 30 05:46	1°♄19'08		morning rise	8032 Aug 09 03:36	11°♄10'57	
direct	8031 Sep 03 06:20	0°♄44'28		direct	8032 Aug 13 23:21	10°♄18'40	
morning max el	8031 Sep 16 11:15	7°♄05'45	23°17'19	morning max el	8032 Aug 27 23:53	17°♄20'46	25°02'01
asc. node	8031 Oct 02 06:31	29°♄14'35			8032 Sep 07 09:05	0°♄	
	8031 Oct 02 16:21	0°♄		asc. node	8032 Sep 18 03:29	18°♄31'41	
morning set	8031 Oct 09 18:46	14°♄12'52		morning set	8032 Sep 23 06:27	29°♄01'56	
					8032 Sep 23 17:20	0°♄	
superior conj	8031 Oct 16 18:03	29°♄13'39	1°40'58				
minimum elong	8031 Oct 16 17:32	29°♄10'52	1°41'02	superior conj	8032 Sep 30 03:27	14°♄01'33	1°35'18
	8031 Oct 17 02:41	0°♄		minimum elong	8032 Sep 30 01:58	13°♄53'21	1°35'14
max. Earth dist.	8031 Oct 19 13:07	5°♄10'51	1.33467 AU	max. Earth dist.	8032 Oct 01 16:41	17°♄25'10	1.32414 AU
evening rise	8031 Oct 24 10:36	15°♄12'57		evening rise	8032 Oct 07 07:55	29°♄23'14	
	8031 Nov 01 07:37	0°♄			8032 Oct 07 15:05	0°♄	
desc. node	8031 Nov 06 02:28	8°♄07'56		desc. node	8032 Oct 22 23:32	27°♄47'06	
	8031 Nov 21 11:37	0°♄			8032 Oct 24 09:56	0°♄	
evening max el	8031 Nov 27 17:55	6°♄45'49	27°19'42	evening max el	8032 Nov 09 04:18	19°♄46'36	27°28'12
retrograde	8031 Dec 11 06:04	14°♄05'35		retrograde	8032 Nov 22 22:38	27°♄03'26	
evening set	8031 Dec 18 03:48	11°♄29'38		evening set	8032 Nov 30 01:07	24°♄35'35	
min. Earth dist.	8031 Dec 21 23:51	7°♄58'01	0.64574 AU	min. Earth dist.	8032 Dec 03 17:32	21°♄33'33	0.62780 AU
inferior conj	8031 Dec 24 08:38	5°♄25'29	-1°38'00	inferior conj	8032 Dec 06 13:10	18°♄50'48	-2°46'57
minimum elong	8031 Dec 24 11:37	5°♄17'26	1°36'37	minimum elong	8032 Dec 06 18:25	18°♄38'07	2°44'51
asc. node	8031 Dec 29 05:56	0°♄53'16		morning rise	8032 Dec 13 13:46	13°♄40'59	
morning rise	8031 Dec 30 20:57	29°♄58'43		asc. node	8032 Dec 15 02:59	13°♄18'59	
	8031 Dec 30 19:47	30°♄♄		direct	8032 Dec 15 21:21	13°♄16'14	
direct	8032 Jan 02 10:10	29°♄25'09		morning max el	8032 Dec 22 14:02	16°♄42'10	17°48'07
	8032 Jan 05 00:34	0°♄			8033 Jan 01 00:30	0°♄	
morning max el	8032 Jan 08 20:48	2°♄48'00	17°54'58	morning set	8033 Jan 07 15:02	11°♄28'43	
morning set	8032 Jan 26 03:25	28°♄47'19			8033 Jan 18 08:04	0°♄	
	8032 Jan 26 20:45	0°♄		desc. node	8033 Jan 18 22:44	1°♄01'29	
desc. node	8032 Feb 02 01:46	10°♄19'09					
				superior conj	8033 Jan 19 07:39	1°♄38'50	-0°02'44
superior conj	8032 Feb 08 18:21	21°♄10'41	-0°46'59	minimum elong	8033 Jan 19 07:24	1°♄37'45	0°02'34
minimum elong	8032 Feb 08 12:55	20°♄48'54	0°46'09	behind sun begin	8033 Jan 18 22:21	0°♄59'54	
max. Earth dist.	8032 Feb 13 07:21	28°♄23'50	1.45058 AU	behind sun end	8033 Jan 19 16:26	2°♄15'31	
	8032 Feb 14 07:46	0°♄		max. Earth dist.	8033 Jan 26 00:14	12°♄36'52	1.43924 AU
evening rise	8032 Feb 24 19:37	16°♄17'55		evening rise	8033 Feb 03 07:17	25°♄40'48	
	8032 Mar 04 19:27	0°♄			8033 Feb 06 02:47	0°♄	
greatest brilliancy	8032 Mar 10 13:44	8°♄34'16	-0.6m		8033 Feb 26 20:45	0°♄	
evening max el	8032 Mar 22 12:29	24°♄10'01	20°03'12	evening max el	8033 Mar 05 11:21	7°♄48'31	21°10'43
asc. node	8032 Mar 26 04:54	27°♄16'12		asc. node	8033 Mar 13 02:01	12°♄49'20	
retrograde	8032 Mar 30 04:36	28°♄36'46		retrograde	8033 Mar 14 03:02	12°♄54'55	



evening set	8033 Mar 18 08:12	11° $\Upsilon$ 15'13		evening max el	8034 Feb 16 05:19	21° $\text{X}$ 29'05	22°27'18
inferior conj	8033 Mar 23 15:33	5° $\Upsilon$ 01'25	2°52'57	retrograde	8034 Feb 25 23:42	27° $\text{X}$ 16'36	
minimum elong	8033 Mar 23 13:31	5° $\Upsilon$ 08'30	2°52'30	asc. node	8034 Feb 27 23:06	26° $\text{X}$ 56'49	
min. Earth dist.	8033 Mar 23 23:48	4° $\Upsilon$ 32'48	0.68149 AU	evening set	8034 Mar 02 15:50	25° $\text{X}$ 21'51	
	8033 Mar 27 13:21	30° $\text{R}$ $\text{X}$		inferior conj	8034 Mar 08 00:06	18° $\text{X}$ 59'27	2°22'35
morning rise	8033 Mar 28 18:38	28° $\text{X}$ 47'24		minimum elong	8034 Mar 07 21:50	19° $\text{X}$ 07'20	2°21'58
direct	8033 Apr 03 00:34	26° $\text{X}$ 28'56		min. Earth dist.	8034 Mar 07 20:08	19° $\text{X}$ 13'14	0.68398 AU
	8033 Apr 10 13:24	0° $\Upsilon$		morning rise	8034 Mar 13 03:40	12° $\text{X}$ 49'45	
morning max el	8033 Apr 13 12:14	2° $\Upsilon$ 43'38	23°25'29	direct	8034 Mar 17 19:35	10° $\text{X}$ 52'36	
desc. node	8033 Apr 16 22:25	6° $\Upsilon$ 27'07		morning max el	8034 Mar 27 00:18	16° $\text{X}$ 15'22	21°57'21
	8033 May 04 06:32	0° $\text{B}$		desc. node	8034 Apr 03 19:22	25° $\text{X}$ 25'58	
morning set	8033 May 18 12:59	22° $\text{B}$ 41'15			8034 Apr 07 05:05	0° $\Upsilon$	
max. Earth dist.	8033 May 22 13:47	29° $\text{B}$ 36'23	1.39172 AU		8034 Apr 27 07:43	0° $\text{B}$	
	8033 May 22 19:12	0° $\text{II}$		morning set	8034 Apr 28 19:31	2° $\text{B}$ 23'06	
				max. Earth dist.	8034 May 04 12:25	11° $\text{B}$ 43'34	1.41382 AU
superior conj	8033 May 30 03:41	13° $\text{II}$ 16'50	-1°26'48	superior conj	8034 May 12 05:55	24° $\text{B}$ 59'19	-1°52'57
minimum elong	8033 May 30 08:54	13° $\text{II}$ 41'07	1°26'12	minimum elong	8034 May 12 11:34	25° $\text{B}$ 24'17	1°52'35
	8033 Jun 07 21:34	0° $\text{B}$			8034 May 15 01:27	0° $\text{II}$	
evening rise	8033 Jun 08 12:31	1° $\text{B}$ 12'25		evening rise	8034 May 22 20:59	14° $\text{II}$ 19'14	
asc. node	8033 Jun 09 01:01	2° $\text{B}$ 12'47		asc. node	8034 May 26 22:03	21° $\text{II}$ 45'42	
evening max el	8033 Jun 24 16:51	27° $\text{B}$ 22'01	18°41'35		8034 May 31 15:22	0° $\text{B}$	
	8033 Jun 28 01:07	0° $\Omega$		evening max el	8034 Jun 08 01:05	10° $\text{B}$ 03'13	18°13'45
retrograde	8033 Jul 02 19:17	1° $\Omega$ 23'00		retrograde	8034 Jun 15 02:32	13° $\text{B}$ 36'24	
evening set	8033 Jul 04 20:30	1° $\Omega$ 08'28		evening set	8034 Jun 17 11:16	13° $\text{B}$ 13'14	
	8033 Jul 07 20:27	30° $\text{R}$ $\text{B}$		inferior conj	8034 Jun 24 14:11	8° $\text{B}$ 29'18	1°44'04
inferior conj	8033 Jul 12 18:42	26° $\text{B}$ 45'12	0°20'14	minimum elong	8034 Jun 24 17:06	8° $\text{B}$ 22'56	1°43'01
minimum elong	8033 Jul 12 19:28	26° $\text{B}$ 43'46	0°19'49	min. Earth dist.	8034 Jun 27 23:29	5° $\text{B}$ 33'21	0.59370 AU
desc. node	8033 Jul 13 21:45	25° $\text{B}$ 54'25		desc. node	8034 Jun 30 18:48	3° $\text{B}$ 27'12	
min. Earth dist.	8033 Jul 16 00:40	24° $\text{B}$ 20'42	0.57255 AU	morning rise	8034 Jul 01 19:52	2° $\text{B}$ 48'26	
morning rise	8033 Jul 20 14:55	21° $\text{B}$ 35'12		direct	8034 Jul 08 04:15	0° $\text{B}$ 57'05	
direct	8033 Jul 26 07:04	20° $\text{B}$ 15'38		morning max el	8034 Jul 22 13:03	8° $\text{B}$ 47'28	27°32'05
morning max el	8033 Aug 09 15:23	27° $\text{B}$ 47'32	26°31'43		8034 Aug 07 17:37	0° $\Omega$	
	8033 Aug 11 19:15	0° $\Omega$		asc. node	8034 Aug 22 21:25	28° $\Omega$ 01'49	
	8033 Aug 31 20:53	0° $\text{M}$		morning set	8034 Aug 23 00:13	28° $\Omega$ 16'31	
asc. node	8033 Sep 05 00:27	8° $\text{M}$ 09'47			8034 Aug 23 19:52	0° $\text{M}$	
morning set	8033 Sep 07 16:52	13° $\text{M}$ 45'13		max. Earth dist.	8034 Aug 29 11:38	12° $\text{M}$ 18'25	1.31679 AU
superior conj	8033 Sep 14 14:58	28° $\text{M}$ 53'19	1°24'08	superior conj	8034 Aug 30 02:39	13° $\text{M}$ 41'40	1°07'55
minimum elong	8033 Sep 14 12:52	28° $\text{M}$ 41'43	1°23'53	minimum elong	8034 Aug 30 00:24	13° $\text{M}$ 29'12	1°07'30
max. Earth dist.	8033 Sep 15 01:20	29° $\text{M}$ 50'48	1.31818 AU	evening rise	8034 Sep 05 20:48	28° $\text{M}$ 30'31	
	8033 Sep 15 03:00	0° $\text{A}$			8034 Sep 06 13:38	0° $\text{A}$	
evening rise	8033 Sep 21 12:07	13° $\text{A}$ 51'50			8034 Sep 23 03:31	0° $\text{M}$	
	8033 Sep 29 16:07	0° $\text{M}$		desc. node	8034 Sep 26 17:42	5° $\text{M}$ 00'29	
desc. node	8033 Oct 09 20:37	16° $\text{M}$ 49'48		evening max el	8034 Oct 04 08:33	13° $\text{M}$ 40'30	26°06'12
	8033 Oct 20 06:29	0° $\text{X}$		retrograde	8034 Oct 18 06:52	20° $\text{M}$ 44'50	
evening max el	8033 Oct 22 10:00	2° $\text{X}$ 08'15	27°03'56	evening set	8034 Oct 24 17:16	19° $\text{M}$ 05'44	
retrograde	8033 Nov 05 07:32	9° $\text{X}$ 19'06		min. Earth dist.	8034 Oct 28 21:32	16° $\text{M}$ 30'58	0.58683 AU
evening set	8033 Nov 12 07:13	7° $\text{X}$ 10'24		inferior conj	8034 Nov 01 01:24	14° $\text{M}$ 11'14	-4°54'37
min. Earth dist.	8033 Nov 16 00:41	4° $\text{X}$ 29'05	0.60766 AU	minimum elong	8034 Nov 01 08:07	13° $\text{M}$ 58'49	4°53'12
inferior conj	8033 Nov 19 03:57	1° $\text{X}$ 49'33	-3°55'20	morning rise	8034 Nov 09 01:14	9° $\text{M}$ 43'39	
minimum elong	8033 Nov 19 10:56	1° $\text{X}$ 34'42	3°53'06	direct	8034 Nov 11 08:09	9° $\text{M}$ 26'12	
	8033 Nov 21 09:13	30° $\text{R}$ $\text{M}$		asc. node	8034 Nov 18 20:58	12° $\text{M}$ 48'26	
morning rise	8033 Nov 26 16:59	26° $\text{M}$ 59'38		morning max el	8034 Nov 19 12:31	13° $\text{M}$ 24'34	18°31'45
direct	8033 Nov 28 22:06	26° $\text{M}$ 40'08			8034 Nov 30 18:41	0° $\text{X}$	
asc. node	8033 Dec 01 23:59	27° $\text{M}$ 19'31		morning set	8034 Dec 05 13:49	9° $\text{X}$ 05'05	
	8033 Dec 05 21:02	0° $\text{X}$		superior conj	8034 Dec 14 11:08	26° $\text{X}$ 03'38	1°05'07
morning max el	8033 Dec 06 04:29	0° $\text{X}$ 17'53	17°59'49	minimum elong	8034 Dec 14 14:36	26° $\text{X}$ 19'40	1°04'48
morning set	8033 Dec 21 20:17	24° $\text{X}$ 59'58			8034 Dec 16 14:27	0° $\text{B}$	
	8033 Dec 24 13:18	0° $\text{B}$		max. Earth dist.	8034 Dec 21 20:45	9° $\text{B}$ 22'08	1.40193 AU
superior conj	8033 Dec 31 22:30	13° $\text{B}$ 20'09	0°35'39	desc. node	8034 Dec 23 16:43	12° $\text{B}$ 31'12	
minimum elong	8034 Jan 01 01:14	13° $\text{B}$ 32'14	0°35'23	evening rise	8034 Dec 26 02:24	16° $\text{B}$ 34'23	
desc. node	8034 Jan 05 19:43	21° $\text{B}$ 46'44			8035 Jan 03 11:12	0° $\approx$	
max. Earth dist.	8034 Jan 08 12:37	26° $\text{B}$ 18'59	1.42240 AU		8035 Jan 25 01:36	0° $\text{X}$	
	8034 Jan 10 18:19	0° $\approx$		evening max el	8035 Jan 29 20:01	5° $\text{X}$ 13'19	23°47'27
evening rise	8034 Jan 14 06:38	5° $\approx$ 39'44		retrograde	8035 Feb 09 17:18	11° $\text{X}$ 38'04	
	8034 Jan 30 09:22	0° $\text{X}$					

evening set	8035 Feb 14 21:34	9°  28'45		retrograde	8036 Jan 24 06:46	25°  54'07	
asc. node	8035 Feb 14 20:09	9°  31'45		evening set	8036 Jan 29 23:51	23°  31'47	
min. Earth dist.	8035 Feb 19 16:44	3°  54'31	0.68237 AU	asc. node	8036 Feb 01 17:13	20°  43'54	
inferior conj	8035 Feb 20 08:19	3°  01'23	1°43'35	min. Earth dist.	8036 Feb 03 11:22	18°  32'09	0.67686 AU
minimum elong	8035 Feb 20 06:16	3°  08'21	1°42'57	inferior conj	8036 Feb 04 14:22	17°  03'49	0°56'28
	8035 Feb 22 15:29	30°  R 		minimum elong	8036 Feb 04 13:03	17°  08'08	0°56'04
morning rise	8035 Feb 25 14:58	26°  57'32		morning rise	8036 Feb 10 02:31	11°  07'26	
direct	8035 Mar 01 17:16	25°  22'54		direct	8036 Feb 13 16:14	9°  54'08	
	8035 Mar 09 19:13	0°  H		morning max el	8036 Feb 20 21:16	13°  54'35	19°31'35
morning max el	8035 Mar 09 18:46	29°  58'52	20°37'52		8036 Mar 04 04:58	0°  H	
desc. node	8035 Mar 21 16:18	14°  59'54		greatest brilliancy	8036 Mar 04 16:29	0°  H42'29	-0.7m
	8035 Mar 31 21:07	0°  Y		desc. node	8036 Mar 07 13:14	4°  H59'08	
morning set	8035 Apr 08 01:09	10°  Y58'48		morning set	8036 Mar 16 22:50	19°  H19'57	
max. Earth dist.	8035 Apr 16 18:33	24°  Y47'42	1.43302 AU		8036 Mar 23 19:56	0°  Y	
	8035 Apr 19 23:14	0°  8		max. Earth dist.	8036 Mar 29 07:36	8°  Y37'03	1.44700 AU
superior conj	8035 Apr 23 09:09	5°  839'29	-2°09'14	superior conj	8036 Apr 02 11:32	15°  Y14'50	-2°09'27
minimum elong	8035 Apr 23 12:09	5°  852'00	2°09'13	minimum elong	8036 Apr 02 08:08	15°  Y01'11	2°09'22
evening rise	8035 May 05 13:42	26°  841'08			8036 Apr 11 12:55	0°  8	
	8035 May 07 10:48	0°  II		evening rise	8036 Apr 16 10:02	8°  808'06	
asc. node	8035 May 13 19:07	10°  II57'52		asc. node	8036 Apr 29 16:10	29°  841'37	
evening max el	8035 May 22 13:30	23°  II09'36	18°05'29		8036 Apr 29 21:14	0°  II	
retrograde	8035 May 29 01:42	26°  II31'02		evening max el	8036 May 05 02:43	6°  II31'38	18°16'03
evening set	8035 May 31 17:52	25°  II56'35		retrograde	8036 May 11 12:04	9°  II55'57	
inferior conj	8035 Jun 07 04:48	20°  II52'34	2°39'45	evening set	8036 May 14 11:18	9°  II08'36	
minimum elong	8035 Jun 07 07:39	20°  II45'23	2°38'58	inferior conj	8036 May 20 10:21	3°  II46'13	3°11'15
min. Earth dist.	8035 Jun 10 06:17	17°  II49'11	0.61617 AU	minimum elong	8036 May 20 12:05	3°  II41'19	3°10'55
morning rise	8035 Jun 13 19:22	14°  II51'00		min. Earth dist.	8036 May 22 12:27	0°  II57'21	0.63722 AU
desc. node	8035 Jun 17 15:49	12°  II56'04			8036 May 23 20:01	30°  R 	
direct	8035 Jun 20 12:27	12°  II31'01		morning rise	8036 May 26 11:39	27°  833'22	
morning max el	8035 Jul 04 17:18	20°  II31'21	27°55'19	direct	8036 Jun 02 05:39	24°  853'46	
	8035 Jul 12 20:58	0°  6		desc. node	8036 Jun 03 12:50	24°  859'10	
	8035 Jul 31 17:23	0°  Omega			8036 Jun 12 22:48	0°  II	
morning set	8035 Aug 07 02:40	12°  Omega30'49		morning max el	8036 Jun 16 02:05	2°  II55'24	27°40'56
asc. node	8035 Aug 09 18:24	18°  Omega03'03			8036 Jul 06 06:24	0°  6	
max. Earth dist.	8035 Aug 12 19:48	24°  Omega37'27	1.31998 AU	morning set	8036 Jul 20 21:52	26°  621'16	
					8036 Jul 22 17:22	0°  Omega	
superior conj	8035 Aug 14 12:48	28°  Omega21'31	0°47'02	max. Earth dist.	8036 Jul 25 21:50	6°  Omega35'58	1.32780 AU
minimum elong	8035 Aug 14 10:53	28°  Omega11'02	0°46'34	asc. node	8036 Jul 26 15:25	8°  Omega08'45	
	8035 Aug 15 06:43	0°  M					
evening rise	8035 Aug 21 07:55	13°  M13'21		superior conj	8036 Jul 28 19:29	12°  Omega46'54	0°21'56
	8035 Aug 29 16:53	0°  Omega		minimum elong	8036 Jul 28 18:26	12°  Omega41'17	0°21'37
desc. node	8035 Sep 13 14:47	21°  Omega59'03		evening rise	8036 Aug 04 19:33	27°  Omega54'15	
evening max el	8035 Sep 15 23:16	24°  Omega23'54	24°41'03		8036 Aug 05 19:18	0°  M	
	8035 Sep 23 20:05	0°  M			8036 Aug 23 05:50	0°  Omega	
retrograde	8035 Sep 29 18:51	1°  M20'55		evening max el	8036 Aug 27 10:37	4°  Omega38'57	23°02'37
evening set	8035 Oct 05 03:04	0°  M17'10		desc. node	8036 Aug 30 11:52	7°  Omega18'27	
	8035 Oct 05 19:55	30°  R 		retrograde	8036 Sep 09 18:52	11°  Omega19'15	
min. Earth dist.	8035 Oct 10 10:21	27°  Omega30'33	0.56773 AU	evening set	8036 Sep 13 14:59	10°  Omega46'59	
inferior conj	8035 Oct 13 02:51	25°  Omega47'09	-5°30'18	min. Earth dist.	8036 Sep 20 19:20	7°  Omega30'45	0.55342 AU
minimum elong	8035 Oct 13 05:26	25°  Omega43'00	5°30'05	inferior conj	8036 Sep 22 08:56	6°  Omega36'22	-5°23'29
morning rise	8035 Oct 21 09:59	21°  Omega42'02		minimum elong	8036 Sep 22 04:10	6°  Omega43'17	5°22'59
direct	8035 Oct 23 23:41	21°  Omega23'47		morning rise	8036 Sep 30 19:28	2°  Omega46'32	
morning max el	8035 Nov 02 10:37	25°  Omega52'19	19°25'34	direct	8036 Oct 03 20:07	2°  Omega24'58	
asc. node	8035 Nov 05 17:57	29°  Omega31'50		morning max el	8036 Oct 14 20:18	7°  Omega33'51	20°41'40
	8035 Nov 06 02:47	0°  M		asc. node	8036 Oct 22 14:57	17°  Omega14'35	
morning set	8035 Nov 19 15:39	23°  M32'30			8036 Oct 29 20:44	0°  M	
	8035 Nov 22 20:47	0°  Z		morning set	8036 Nov 02 22:55	8°  M14'03	
superior conj	8035 Nov 27 16:28	9°  Z34'47	1°25'23	superior conj	8036 Nov 10 09:53	23°  M40'34	1°37'10
minimum elong	8035 Nov 27 19:14	9°  Z48'21	1°25'14	minimum elong	8036 Nov 10 11:24	23°  M48'20	1°37'11
max. Earth dist.	8035 Dec 04 02:35	21°  Z45'20	1.38026 AU		8036 Nov 13 13:12	0°  Z	
evening rise	8035 Dec 07 20:05	28°  Z27'00		max. Earth dist.	8036 Nov 15 10:32	3°  Z42'36	1.35987 AU
	8035 Dec 08 17:21	0°  Z		evening rise	8036 Nov 19 09:08	11°  Z11'24	
desc. node	8035 Dec 10 13:43	3°  Z11'00		desc. node	8036 Nov 26 10:47	23°  Z42'01	
	8035 Dec 27 20:56	0°  Z			8036 Nov 30 06:29	0°  Z	
evening max el	8036 Jan 12 09:10	19°  Z00'05	25°04'37		8036 Dec 22 05:18	0°  Z	

evening max el	8036 Dec 24 22:12	2° $\approx$ 46'23	26°11'47	max. Earth dist.	8037 Oct 29 01:20	15° $\mathbb{M}$ 36'10	1.34269 AU
retrograde	8037 Jan 06 15:28	9° $\approx$ 59'00		evening rise	8037 Nov 02 13:35	24° $\mathbb{M}$ 36'49	
evening set	8037 Jan 12 21:01	7° $\approx$ 26'57			8037 Nov 05 09:30	0° $\mathbb{A}$	
min. Earth dist.	8037 Jan 17 01:52	3° $\approx$ 01'55	0.66758 AU	desc. node	8037 Nov 13 07:50	13° $\mathbb{A}$ 58'24	
inferior conj	8037 Jan 18 16:22	1° $\approx$ 03'25	0°01'46		8037 Nov 23 19:08	0° $\mathbb{B}$	
minimum elong	8037 Jan 18 16:19	1° $\approx$ 03'35	0°01'52	evening max el	8037 Dec 07 11:21	16° $\mathbb{B}$ 24'20	27°01'41
transit middle	8037 Jan 18 16:19	1° $\approx$ 03'35	0°01'52	retrograde	8037 Dec 20 18:28	23° $\mathbb{B}$ 44'20	
transit begin	8037 Jan 18 13:28	1° $\approx$ 12'22		evening set	8037 Dec 27 11:00	21° $\mathbb{B}$ 07'54	
transit end	8037 Jan 18 19:09	0° $\approx$ 54'49		min. Earth dist.	8037 Dec 31 10:01	17° $\mathbb{B}$ 17'01	0.65467 AU
asc. node	8037 Jan 18 14:15	1° $\approx$ 09'55		inferior conj	8038 Jan 02 12:06	14° $\mathbb{B}$ 54'44	-0°59'52
	8037 Jan 19 13:07	30° $\mathbb{R}$ $\mathbb{B}$		minimum elong	8038 Jan 02 13:51	14° $\mathbb{B}$ 49'45	0°58'59
morning rise	8037 Jan 24 12:19	25° $\mathbb{B}$ 16'28		asc. node	8038 Jan 05 11:19	11° $\mathbb{B}$ 44'26	
direct	8037 Jan 27 14:56	24° $\mathbb{B}$ 21'36		morning rise	8038 Jan 08 17:55	9° $\mathbb{B}$ 19'34	
morning max el	8037 Feb 03 07:06	27° $\mathbb{B}$ 59'03	18°40'52	direct	8038 Jan 11 11:20	8° $\mathbb{B}$ 39'24	
	8037 Feb 05 04:06	0° $\approx$		morning max el	8038 Jan 17 22:01	12° $\mathbb{B}$ 05'00	18°06'44
desc. node	8037 Feb 22 10:13	25° $\approx$ 17'06			8038 Jan 30 14:27	0° $\approx$	
morning set	8037 Feb 24 12:53	28° $\approx$ 36'11		morning set	8038 Feb 05 07:56	9° $\approx$ 20'03	
	8037 Feb 25 10:13	0° $\mathbb{H}$		desc. node	8038 Feb 09 07:11	15° $\approx$ 47'48	
max. Earth dist.	8037 Mar 12 01:08	22° $\mathbb{H}$ 54'48	1.45425 AU		8038 Feb 18 03:51	0° $\mathbb{H}$	
superior conj	8037 Mar 12 19:38	24° $\mathbb{H}$ 07'17	-1°49'33	superior conj	8038 Feb 20 02:07	3° $\mathbb{H}$ 02'52	-1°12'27
minimum elong	8037 Mar 12 10:33	23° $\mathbb{H}$ 31'42	1°48'49	minimum elong	8038 Feb 19 17:51	2° $\mathbb{H}$ 30'15	1°11'24
	8037 Mar 16 13:31	0° $\mathbb{Y}$		max. Earth dist.	8038 Feb 22 20:31	7° $\mathbb{H}$ 23'56	1.45407 AU
evening rise	8037 Mar 28 07:02	18° $\mathbb{Y}$ 36'55		evening rise	8038 Mar 08 06:28	28° $\mathbb{H}$ 16'54	
	8037 Apr 04 09:41	0° $\mathbb{B}$			8038 Mar 09 09:05	0° $\mathbb{Y}$	
greatest brilliancy	8037 Apr 04 22:53	0° $\mathbb{B}$ 52'27	-0.9m	greatest brilliancy	8038 Mar 21 01:23	17° $\mathbb{Y}$ 54'46	-0.7m
asc. node	8037 Apr 16 13:15	17° $\mathbb{B}$ 48'19			8038 Mar 29 16:14	0° $\mathbb{B}$	
evening max el	8037 Apr 18 14:05	20° $\mathbb{B}$ 03'21	18°44'41	evening max el	8038 Apr 01 21:31	3° $\mathbb{B}$ 40'18	19°30'13
retrograde	8037 Apr 25 05:28	23° $\mathbb{B}$ 43'17		asc. node	8038 Apr 03 10:19	5° $\mathbb{B}$ 06'56	
evening set	8037 Apr 28 11:59	22° $\mathbb{B}$ 42'03		retrograde	8038 Apr 09 02:40	7° $\mathbb{B}$ 47'05	
inferior conj	8037 May 04 02:56	17° $\mathbb{B}$ 03'03	3°23'36	evening set	8038 Apr 12 17:10	6° $\mathbb{B}$ 31'11	
minimum elong	8037 May 04 03:17	17° $\mathbb{B}$ 01'55	3°23'29	inferior conj	8038 Apr 18 03:12	0° $\mathbb{B}$ 37'10	3°20'57
min. Earth dist.	8037 May 05 23:48	14° $\mathbb{B}$ 44'47	0.65513 AU	minimum elong	8038 Apr 18 02:21	0° $\mathbb{B}$ 39'57	3°20'48
morning rise	8037 May 09 17:57	10° $\mathbb{B}$ 45'39			8038 Apr 18 14:28	30° $\mathbb{R}$ $\mathbb{Y}$	
direct	8037 May 16 06:37	7° $\mathbb{B}$ 58'29		min. Earth dist.	8038 Apr 19 08:59	28° $\mathbb{Y}$ 59'09	0.66891 AU
desc. node	8037 May 21 09:52	9° $\mathbb{B}$ 23'29		morning rise	8038 Apr 23 11:11	24° $\mathbb{Y}$ 19'31	
morning max el	8037 May 29 12:33	15° $\mathbb{B}$ 49'01	26°53'51	direct	8038 Apr 29 13:56	21° $\mathbb{Y}$ 36'36	
	8037 Jun 10 04:36	0° $\mathbb{I}$		desc. node	8038 May 08 06:52	25° $\mathbb{Y}$ 38'16	
	8037 Jun 29 01:47	0° $\mathbb{E}$		morning max el	8038 May 11 22:25	29° $\mathbb{Y}$ 00'18	25°42'36
morning set	8037 Jul 04 06:48	9° $\mathbb{E}$ 39'11			8038 May 12 21:29	0° $\mathbb{B}$	
max. Earth dist.	8037 Jul 08 14:05	18° $\mathbb{E}$ 05'52	1.34048 AU		8038 Jun 03 23:57	0° $\mathbb{I}$	
superior conj	8037 Jul 12 20:32	26° $\mathbb{E}$ 51'30	-0°06'43	morning set	8038 Jun 17 01:32	22° $\mathbb{I}$ 14'09	
minimum elong	8037 Jul 12 20:54	26° $\mathbb{E}$ 53'25	0°06'46	max. Earth dist.	8038 Jun 20 19:16	29° $\mathbb{I}$ 12'40	1.35788 AU
behind sun begin	8037 Jul 12 15:42	26° $\mathbb{E}$ 26'14			8038 Jun 21 05:12	0° $\mathbb{E}$	
behind sun end	8037 Jul 13 02:07	27° $\mathbb{E}$ 20'39		superior conj	8038 Jun 26 13:21	10° $\mathbb{E}$ 28'45	-0°37'44
asc. node	8037 Jul 13 12:25	28° $\mathbb{E}$ 14'40		minimum elong	8038 Jun 26 15:35	10° $\mathbb{E}$ 39'58	0°37'26
	8037 Jul 14 08:28	0° $\mathbb{Q}$		asc. node	8038 Jun 30 09:27	18° $\mathbb{E}$ 17'10	
evening rise	8037 Jul 20 05:47	12° $\mathbb{Q}$ 27'02		evening rise	8038 Jul 04 12:31	26° $\mathbb{E}$ 46'08	
	8037 Jul 29 05:48	0° $\mathbb{P}$			8038 Jul 06 02:41	0° $\mathbb{Q}$	
evening max el	8037 Aug 09 03:32	15° $\mathbb{P}$ 00'56	21°27'22	evening max el	8038 Jul 22 08:36	25° $\mathbb{Q}$ 58'40	20°07'02
desc. node	8037 Aug 17 08:58	20° $\mathbb{P}$ 25'58			8038 Jul 27 20:17	0° $\mathbb{P}$	
retrograde	8037 Aug 21 08:57	21° $\mathbb{P}$ 04'36		retrograde	8038 Aug 01 22:18	1° $\mathbb{P}$ 11'26	
evening set	8037 Aug 23 21:12	20° $\mathbb{P}$ 50'10		evening set	8038 Aug 03 20:10	1° $\mathbb{P}$ 01'58	
inferior conj	8037 Sep 02 02:47	16° $\mathbb{P}$ 52'04	-4°21'53	desc. node	8038 Aug 04 06:03	0° $\mathbb{P}$ 57'32	
minimum elong	8037 Sep 01 17:21	17° $\mathbb{P}$ 05'17	4°19'29		8038 Aug 07 08:27	30° $\mathbb{R}$ $\mathbb{Q}$	
min. Earth dist.	8037 Sep 02 04:13	16° $\mathbb{P}$ 50'02	0.54700 AU	inferior conj	8038 Aug 12 21:55	27° $\mathbb{Q}$ 03'17	-2°36'38
morning rise	8037 Sep 10 14:23	13° $\mathbb{P}$ 00'35		minimum elong	8038 Aug 12 14:47	27° $\mathbb{Q}$ 13'55	2°34'08
direct	8037 Sep 14 05:12	12° $\mathbb{P}$ 32'14		min. Earth dist.	8038 Aug 14 14:56	26° $\mathbb{Q}$ 02'15	0.55019 AU
morning max el	8037 Sep 26 17:41	18° $\mathbb{P}$ 28'05	22°17'02	morning rise	8038 Aug 21 08:01	22° $\mathbb{Q}$ 50'09	
	8037 Oct 06 00:35	0° $\mathbb{L}$		direct	8038 Aug 25 16:37	22° $\mathbb{Q}$ 08'52	
asc. node	8037 Oct 09 11:58	5° $\mathbb{L}$ 42'26		morning max el	8038 Sep 08 07:14	28° $\mathbb{Q}$ 49'01	24°02'32
morning set	8037 Oct 18 09:19	23° $\mathbb{L}$ 02'27			8038 Sep 09 12:18	0° $\mathbb{P}$	
	8037 Oct 21 15:54	0° $\mathbb{M}$		asc. node	8038 Sep 26 08:59	24° $\mathbb{P}$ 44'18	
superior conj	8037 Oct 25 11:39	8° $\mathbb{M}$ 09'08	1°41'29		8038 Sep 29 01:43	0° $\mathbb{L}$	
minimum elong	8037 Oct 25 11:50	8° $\mathbb{M}$ 10'06	1°41'35	morning set	8038 Oct 02 21:01	7° $\mathbb{L}$ 52'33	

superior conj	8038 Oct 09 18:55	22° <u>♄</u> 51'53	1°39'16	superior conj	8039 Sep 24 05:24	7° <u>♄</u> 41'26	1°31'12
minimum elong	8038 Oct 09 17:57	22° <u>♄</u> 46'36	1°39'17	minimum elong	8039 Sep 24 03:36	7° <u>♄</u> 31'31	1°31'03
max. Earth dist.	8038 Oct 12 00:41	27° <u>♄</u> 41'59	1.32966 AU	max. Earth dist.	8039 Sep 25 06:57	10° <u>♄</u> 02'12	1.32106 AU
	8038 Oct 13 02:35	0° <u>♄</u>		evening rise	8039 Oct 01 06:13	22° <u>♄</u> 51'54	
evening rise	8038 Oct 17 05:41	8° <u>♄</u> 33'23			8039 Oct 04 18:40	0° <u>♄</u>	
	8038 Oct 28 20:03	0° <u>♄</u>		desc. node	8039 Oct 18 01:58	23° <u>♄</u> 18'32	
desc. node	8038 Oct 31 04:53	3° <u>♄</u> 53'31			8039 Oct 22 16:31	0° <u>♄</u>	
evening max el	8038 Nov 19 23:33	29° <u>♄</u> 43'11	27°27'08	evening max el	8039 Nov 02 08:27	12° <u>♄</u> 29'17	27°22'08
	8038 Nov 20 06:42	0° <u>♄</u>		retrograde	8039 Nov 16 04:05	19° <u>♄</u> 42'49	
retrograde	8038 Dec 03 14:57	7° <u>♄</u> 01'51		evening set	8039 Nov 23 06:36	17° <u>♄</u> 21'53	
evening set	8038 Dec 10 15:16	4° <u>♄</u> 28'32		min. Earth dist.	8039 Nov 26 22:46	14° <u>♄</u> 30'08	0.61945 AU
min. Earth dist.	8038 Dec 14 09:35	1° <u>♄</u> 09'52	0.63847 AU	inferior conj	8039 Nov 29 22:10	11° <u>♄</u> 47'11	-3°16'25
	8038 Dec 15 13:02	30° <u>♄</u>		minimum elong	8039 Nov 30 04:17	11° <u>♄</u> 33'10	3°14'09
inferior conj	8038 Dec 16 23:03	28° <u>♄</u> 31'50	-2°06'56	morning rise	8039 Dec 07 04:05	6° <u>♄</u> 45'17	
minimum elong	8038 Dec 17 03:00	28° <u>♄</u> 21'39	2°05'13	direct	8039 Dec 09 10:19	6° <u>♄</u> 23'03	
asc. node	8038 Dec 23 08:24	23° <u>♄</u> 20'03		asc. node	8039 Dec 10 05:26	6° <u>♄</u> 25'53	
morning rise	8038 Dec 23 16:27	23° <u>♄</u> 11'32		morning max el	8039 Dec 16 07:39	9° <u>♄</u> 52'42	17°50'46
direct	8038 Dec 26 02:56	22° <u>♄</u> 42'08			8039 Dec 29 14:15	0° <u>♄</u>	
morning max el	8039 Jan 01 15:14	26° <u>♄</u> 05'22	17°49'44	morning set	8040 Jan 01 02:29	4° <u>♄</u> 30'06	
	8039 Jan 04 23:29	0° <u>♄</u>					
morning set	8039 Jan 18 06:33	21° <u>♄</u> 24'35		superior conj	8040 Jan 12 01:32	23° <u>♄</u> 49'33	0°14'33
	8039 Jan 23 07:40	0° <u>♄</u>		minimum elong	8040 Jan 12 02:52	23° <u>♄</u> 55'14	0°14'29
desc. node	8039 Jan 27 04:08	6° <u>♄</u> 26'56		behind sun begin	8040 Jan 11 23:09	23° <u>♄</u> 39'20	
				behind sun end	8040 Jan 12 06:36	24° <u>♄</u> 31'07	
superior conj	8039 Jan 31 01:07	12° <u>♄</u> 49'07	-0°27'50	desc. node	8040 Jan 14 01:05	27° <u>♄</u> 31'15	
minimum elong	8039 Jan 30 22:02	12° <u>♄</u> 36'32	0°27'16		8040 Jan 15 17:22	0° <u>♄</u>	
max. Earth dist.	8039 Feb 05 15:23	21° <u>♄</u> 48'50	1.44661 AU	max. Earth dist.	8040 Jan 19 07:13	5° <u>♄</u> 53'25	1.43270 AU
	8039 Feb 10 20:17	0° <u>♄</u>		evening rise	8040 Jan 26 09:18	17° <u>♄</u> 10'54	
evening rise	8039 Feb 15 18:07	7° <u>♄</u> 35'31			8040 Feb 03 18:42	0° <u>♄</u>	
	8039 Mar 02 16:35	0° <u>♄</u>			8040 Feb 25 21:52	0° <u>♄</u>	
evening max el	8039 Mar 15 23:42	17° <u>♄</u> 18'52	20°30'35	evening max el	8040 Feb 26 20:24	0° <u>♄</u> 58'39	21°42'25
asc. node	8039 Mar 21 07:24	21° <u>♄</u> 23'04		retrograde	8040 Mar 06 22:58	6° <u>♄</u> 22'16	
retrograde	8039 Mar 24 01:08	22° <u>♄</u> 01'24		asc. node	8040 Mar 07 04:29	6° <u>♄</u> 21'59	
evening set	8039 Mar 28 00:41	20° <u>♄</u> 30'20		evening set	8040 Mar 11 08:46	4° <u>♄</u> 35'53	
inferior conj	8039 Apr 02 08:23	14° <u>♄</u> 23'09	3°06'09		8040 Mar 15 10:43	30° <u>♄</u>	
minimum elong	8039 Apr 02 06:40	14° <u>♄</u> 29'02	3°05'50	inferior conj	8040 Mar 16 16:18	28° <u>♄</u> 18'00	2°41'08
min. Earth dist.	8039 Apr 03 00:08	13° <u>♄</u> 29'15	0.67822 AU	minimum elong	8040 Mar 16 14:06	28° <u>♄</u> 25'38	2°40'37
morning rise	8039 Apr 07 12:27	8° <u>♄</u> 07'34		min. Earth dist.	8040 Mar 16 19:10	28° <u>♄</u> 08'02	0.68312 AU
direct	8039 Apr 13 02:26	5° <u>♄</u> 38'24		morning rise	8040 Mar 21 19:17	22° <u>♄</u> 05'54	
morning max el	8039 Apr 24 07:21	12° <u>♄</u> 20'32	24°17'06	direct	8040 Mar 26 19:15	19° <u>♄</u> 56'23	
desc. node	8039 Apr 25 03:50	13° <u>♄</u> 13'22		morning max el	8040 Apr 05 17:30	25° <u>♄</u> 48'25	22°47'22
	8039 May 08 11:43	0° <u>♄</u>			8040 Apr 09 13:13	0° <u>♄</u>	
	8039 May 27 18:58	0° <u>♄</u>		desc. node	8040 Apr 11 00:45	1° <u>♄</u> 46'42	
morning set	8039 May 30 00:54	3° <u>♄</u> 51'43			8040 May 01 00:13	0° <u>♄</u>	
max. Earth dist.	8039 Jun 02 16:51	10° <u>♄</u> 20'27	1.37893 AU	morning set	8040 May 09 23:28	14° <u>♄</u> 18'34	
				max. Earth dist.	8040 May 14 13:37	22° <u>♄</u> 01'10	1.40139 AU
superior conj	8039 Jun 09 18:30	23° <u>♄</u> 29'17	-1°09'23		8040 May 19 03:31	0° <u>♄</u>	
minimum elong	8039 Jun 09 22:45	23° <u>♄</u> 49'40	1°08'50				
	8039 Jun 13 03:00	0° <u>♄</u>		superior conj	8040 May 22 07:54	5° <u>♄</u> 43'21	-1°38'43
asc. node	8039 Jun 17 06:28	8° <u>♄</u> 11'42		minimum elong	8040 May 22 13:34	6° <u>♄</u> 09'09	1°38'12
evening rise	8039 Jun 18 13:12	10° <u>♄</u> 43'57		evening rise	8040 Jun 01 04:42	24° <u>♄</u> 12'33	
	8039 Jun 29 02:36	0° <u>♄</u>		asc. node	8040 Jun 03 03:29	27° <u>♄</u> 54'07	
evening max el	8039 Jul 05 02:30	7° <u>♄</u> 40'22	19°06'40		8040 Jun 04 06:18	0° <u>♄</u>	
retrograde	8039 Jul 14 00:07	12° <u>♄</u> 04'16		evening max el	8040 Jun 17 06:32	20° <u>♄</u> 02'17	18°27'10
evening set	8039 Jul 15 22:11	11° <u>♄</u> 52'50		retrograde	8040 Jun 24 20:57	23° <u>♄</u> 49'46	
desc. node	8039 Jul 22 03:08	9° <u>♄</u> 07'10		evening set	8040 Jun 27 01:13	23° <u>♄</u> 31'59	
inferior conj	8039 Jul 24 07:44	7° <u>♄</u> 40'06	-0°40'06	inferior conj	8040 Jul 04 14:54	18° <u>♄</u> 59'37	0°59'21
minimum elong	8039 Jul 24 06:00	7° <u>♄</u> 43'03	0°39'33	minimum elong	8040 Jul 04 16:55	18° <u>♄</u> 55'35	0°58'30
min. Earth dist.	8039 Jul 27 04:45	5° <u>♄</u> 43'08	0.56241 AU	min. Earth dist.	8040 Jul 07 23:47	16° <u>♄</u> 19'08	0.58121 AU
morning rise	8039 Aug 01 10:46	2° <u>♄</u> 51'42		desc. node	8040 Jul 08 00:10	16° <u>♄</u> 18'24	
direct	8039 Aug 06 15:33	1° <u>♄</u> 48'51		morning rise	8040 Jul 12 05:12	13° <u>♄</u> 35'08	
morning max el	8039 Aug 20 20:11	9° <u>♄</u> 04'09	25°43'03	direct	8040 Jul 18 04:49	12° <u>♄</u> 02'30	
	8039 Sep 05 13:12	0° <u>♄</u>		morning max el	8040 Aug 01 14:15	19° <u>♄</u> 43'11	27°01'45
asc. node	8039 Sep 13 05:57	14° <u>♄</u> 10'52			8040 Aug 10 08:43	0° <u>♄</u>	
morning set	8039 Sep 17 08:20	22° <u>♄</u> 39'12			8040 Aug 28 04:38	0° <u>♄</u>	
	8039 Sep 20 17:44	0° <u>♄</u>		asc. node	8040 Aug 30 02:55	3° <u>♄</u> 55'24	
				morning set	8040 Aug 31 17:38	7° <u>♄</u> 17'45	

































































































































superior conj	8040 Sep 07 17:10	22° $\text{♎}$ 31'52	1°17'51			8041 Aug 19 20:37	0° $\text{♎}$	
minimum elong	8040 Sep 07 14:57	22° $\text{♎}$ 19'34	1°17'30	max. Earth dist.		8041 Aug 22 02:38	4° $\text{♎}$ 55'24	1.31751 AU
max. Earth dist.	8040 Sep 07 16:49	22° $\text{♎}$ 29'58	1.31701 AU					
	8040 Sep 11 02:13	0° $\text{♏}$		superior conj		8041 Aug 23 04:27	7° $\text{♎}$ 17'48	0°59'36
evening rise	8040 Sep 14 12:34	7° $\text{♏}$ 24'57		minimum elong		8041 Aug 23 02:17	7° $\text{♎}$ 05'49	0°59'09
	8040 Sep 26 06:12	0° $\text{♍}$		evening rise		8041 Aug 29 22:31	22° $\text{♎}$ 06'21	
desc. node	8040 Oct 03 23:03	12° $\text{♍}$ 01'00				8041 Sep 02 17:22	0° $\text{♏}$	
evening max el	8040 Oct 14 11:09	24° $\text{♍}$ 29'30	26°43'17	desc. node		8041 Sep 20 20:09	29° $\text{♏}$ 44'19	
	8040 Oct 21 23:57	0° $\text{♎}$				8041 Sep 21 01:16	0° $\text{♍}$	
retrograde	8040 Oct 28 09:00	1° $\text{♎}$ 37'47		evening max el		8041 Sep 26 06:02	5° $\text{♍}$ 39'33	25°32'39
	8040 Nov 03 14:02	30° $\text{♍}$		retrograde		8041 Oct 10 04:14	12° $\text{♍}$ 42'12	
evening set	8040 Nov 04 04:45	29° $\text{♍}$ 40'11		evening set		8041 Oct 16 04:56	11° $\text{♍}$ 17'48	
min. Earth dist.	8040 Nov 08 01:03	27° $\text{♍}$ 04'07	0.59870 AU	min. Earth dist.		8041 Oct 20 18:12	8° $\text{♍}$ 40'14	0.57823 AU
inferior conj	8040 Nov 11 05:55	24° $\text{♍}$ 30'42	-4°22'23	inferior conj		8041 Oct 23 19:04	6° $\text{♍}$ 33'46	-5°13'46
minimum elong	8040 Nov 11 13:09	24° $\text{♍}$ 16'13	4°20'21	minimum elong		8041 Oct 24 00:34	6° $\text{♍}$ 24'11	5°12'54
morning rise	8040 Nov 18 23:54	19° $\text{♍}$ 50'28		morning rise		8041 Oct 31 22:34	2° $\text{♍}$ 16'18	
direct	8040 Nov 21 05:18	19° $\text{♍}$ 32'11		direct		8041 Nov 03 07:33	1° $\text{♍}$ 58'59	
asc. node	8040 Nov 26 02:26	21° $\text{♍}$ 05'10		morning max el		8041 Nov 12 00:11	6° $\text{♍}$ 09'10	18°51'59
morning max el	8040 Nov 28 19:51	23° $\text{♍}$ 17'13	18°10'59	asc. node		8041 Nov 12 23:26	7° $\text{♍}$ 07'48	
	8040 Dec 04 04:05	0° $\text{♎}$				8041 Nov 27 03:44	0° $\text{♎}$	
morning set	8040 Dec 14 13:30	18° $\text{♎}$ 17'14		morning set		8041 Nov 28 10:59	2° $\text{♎}$ 32'48	
	8040 Dec 20 19:34	0° $\text{♏}$						
				superior conj		8041 Dec 06 22:42	19° $\text{♎}$ 05'02	1°14'47
superior conj	8040 Dec 24 02:19	5° $\text{♏}$ 59'25	0°49'17	minimum elong		8041 Dec 07 01:59	19° $\text{♎}$ 20'37	1°14'32
minimum elong	8040 Dec 24 05:35	6° $\text{♏}$ 14'09	0°48'57			8041 Dec 12 20:21	0° $\text{♏}$	
desc. node	8040 Dec 30 22:05	17° $\text{♏}$ 56'39		max. Earth dist.		8041 Dec 13 23:55	2° $\text{♏}$ 02'59	1.39264 AU
max. Earth dist.	8040 Dec 31 17:46	19° $\text{♏}$ 20'03	1.41393 AU	evening rise		8041 Dec 17 21:55	8° $\text{♏}$ 51'39	
evening rise	8041 Jan 05 16:41	27° $\text{♏}$ 31'54		desc. node		8041 Dec 17 19:07	8° $\text{♏}$ 39'43	
	8041 Jan 07 05:26	0° $\text{♏}$				8041 Dec 31 03:41	0° $\text{♏}$	
	8041 Jan 27 10:50	0° $\text{♎}$		evening max el		8042 Jan 22 02:20	28° $\text{♏}$ 25'16	24°21'02
evening max el	8041 Feb 08 12:34	14° $\text{♎}$ 40'07	23°01'12			8042 Jan 23 18:14	0° $\text{♎}$	
retrograde	8041 Feb 18 18:36	20° $\text{♎}$ 44'43		retrograde		8042 Feb 02 10:44	5° $\text{♎}$ 04'21	
asc. node	8041 Feb 22 01:34	19° $\text{♎}$ 50'39		evening set		8042 Feb 07 20:18	2° $\text{♎}$ 49'20	
evening set	8041 Feb 23 15:48	18° $\text{♎}$ 43'27		asc. node		8042 Feb 08 22:37	1° $\text{♎}$ 47'53	
min. Earth dist.	8041 Feb 28 15:53	12° $\text{♎}$ 49'27	0.68379 AU			8042 Feb 10 13:14	30° $\text{♎}$	
inferior conj	8041 Mar 01 00:56	12° $\text{♎}$ 18'11	2°07'03	min. Earth dist.		8042 Feb 12 12:02	27° $\text{♏}$ 29'33	0.68047 AU
minimum elong	8041 Feb 28 22:42	12° $\text{♎}$ 25'54	2°06'25	inferior conj		8042 Feb 13 08:29	26° $\text{♏}$ 20'52	1°24'35
morning rise	8041 Mar 06 05:31	6° $\text{♎}$ 10'48		minimum elong		8042 Feb 13 06:41	26° $\text{♏}$ 26'56	1°24'01
direct	8041 Mar 10 15:26	4° $\text{♎}$ 23'30		morning rise		8042 Feb 18 17:09	20° $\text{♏}$ 19'45	
morning max el	8041 Mar 19 08:06	9° $\text{♎}$ 25'33	21°22'08	direct		8042 Feb 22 13:53	18° $\text{♏}$ 54'29	
desc. node	8041 Mar 28 21:41	21° $\text{♎}$ 01'50		morning max el		8042 Mar 02 05:55	23° $\text{♏}$ 14'17	20°07'47
	8041 Apr 04 06:41	0° $\text{♎}$				8042 Mar 08 00:48	0° $\text{♎}$	
morning set	8041 Apr 19 18:27	23° $\text{♎}$ 29'23		desc. node		8042 Mar 15 18:39	10° $\text{♎}$ 47'33	
	8041 Apr 23 20:15	0° $\text{♏}$				8042 Mar 28 13:11	0° $\text{♎}$	
max. Earth dist.	8041 Apr 26 15:04	4° $\text{♏}$ 32'12	1.42250 AU	morning set		8042 Mar 29 17:45	1° $\text{♎}$ 50'02	
				max. Earth dist.		8042 Apr 08 23:45	17° $\text{♎}$ 55'12	1.43972 AU
superior conj	8041 May 04 00:47	16° $\text{♏}$ 59'57	-2°01'26					
minimum elong	8041 May 04 05:48	17° $\text{♏}$ 21'34	2°01'13	superior conj		8042 Apr 14 17:23	27° $\text{♎}$ 12'02	-2°11'38
	8041 May 11 09:47	0° $\text{♏}$		minimum elong		8042 Apr 14 18:00	27° $\text{♎}$ 14'35	2°11'41
evening rise	8041 May 15 07:03	7° $\text{♏}$ 01'44				8042 Apr 16 10:12	0° $\text{♏}$	
asc. node	8041 May 21 00:32	17° $\text{♏}$ 19'08		evening rise		8042 Apr 27 15:38	19° $\text{♏}$ 01'01	
	8041 May 29 03:06	0° $\text{♏}$				8042 May 04 01:02	0° $\text{♏}$	
evening max el	8041 May 31 16:56	2° $\text{♏}$ 55'18	18°07'52	asc. node		8042 May 07 21:35	6° $\text{♏}$ 20'13	
retrograde	8041 Jun 07 11:37	6° $\text{♏}$ 21'54		evening max el		8042 May 15 06:07	16° $\text{♏}$ 09'36	18°07'46
evening set	8041 Jun 09 23:24	5° $\text{♏}$ 54'22		retrograde		8042 May 21 15:56	19° $\text{♏}$ 30'25	
inferior conj	8041 Jun 16 19:03	1° $\text{♏}$ 01'50	2°10'57	evening set		8042 May 24 11:07	18° $\text{♏}$ 50'41	
minimum elong	8041 Jun 16 22:08	0° $\text{♏}$ 54'39	2°09'57	inferior conj		8042 May 30 16:32	13° $\text{♏}$ 39'00	2°55'45
	8041 Jun 17 21:29	30° $\text{♏}$		minimum elong		8042 May 30 18:59	13° $\text{♏}$ 32'30	2°55'10
min. Earth dist.	8041 Jun 20 02:05	27° $\text{♏}$ 59'29	0.60325 AU	min. Earth dist.		8042 Jun 02 12:55	10° $\text{♏}$ 39'06	0.62545 AU
morning rise	8041 Jun 23 18:09	25° $\text{♏}$ 10'31		morning rise		8042 Jun 06 01:09	7° $\text{♏}$ 31'41	
desc. node	8041 Jun 24 21:11	24° $\text{♏}$ 31'29		desc. node		8042 Jun 11 18:13	5° $\text{♏}$ 05'08	
direct	8041 Jun 30 07:05	23° $\text{♏}$ 06'02		direct		8042 Jun 12 19:40	5° $\text{♏}$ 01'36	
	8041 Jul 13 13:06	0° $\text{♏}$		morning max el		8042 Jun 26 21:27	13° $\text{♏}$ 04'09	27°53'30
morning max el	8041 Jul 14 15:05	1° $\text{♏}$ 02'37	27°46'42			8042 Jul 10 10:04	0° $\text{♏}$	
	8041 Aug 04 13:33	0° $\text{♏}$				8042 Jul 28 00:46	0° $\text{♏}$	
morning set	8041 Aug 15 23:12	21° $\text{♏}$ 43'09		morning set		8042 Jul 30 22:52	5° $\text{♏}$ 48'10	
asc. node	8041 Aug 16 23:53	23° $\text{♏}$ 52'19		asc. node		8042 Aug 03 20:52	13° $\text{♏}$ 55'58	

max. Earth dist.	8042 Aug 05 08:27	17°Ω05'57	1.32269 AU		8043 Jul 19 19:39	0°Ω	
				asc. node	8043 Jul 21 17:53	4°Ω02'19	
superior conj	8042 Aug 07 13:22	21°Ω52'24	0°36'52				
minimum elong	8042 Aug 07 11:46	21°Ω43'38	0°36'27	superior conj	8043 Jul 22 17:58	6°Ω09'59	0°10'11
	8042 Aug 11 06:33	0°൬		minimum elong	8043 Jul 22 17:28	6°Ω07'16	0°09'58
evening rise	8042 Aug 14 10:05	6°൬48'59		behind sun begin	8043 Jul 22 13:08	5°Ω44'16	
	8042 Aug 26 11:54	0°Ω		behind sun end	8043 Jul 22 21:48	6°Ω30'18	
desc. node	8042 Sep 07 17:15	16°Ω04'30		evening rise	8043 Jul 29 21:23	21°Ω27'24	
evening max el	8042 Sep 07 18:34	16°Ω07'42	23°59'52		8043 Aug 03 00:47	0°൬	
retrograde	8042 Sep 21 11:10	22°Ω59'13		evening max el	8043 Aug 20 07:17	26°൬21'21	22°20'44
evening set	8042 Sep 26 04:21	22°Ω10'23			8043 Aug 24 18:03	0°Ω	
min. Earth dist.	8042 Oct 02 05:12	19°Ω12'51	0.56084 AU	desc. node	8043 Aug 25 14:19	0°Ω31'40	
inferior conj	8042 Oct 04 11:55	17°Ω49'21	-5°33'42	retrograde	8043 Sep 02 05:40	2°Ω47'43	
minimum elong	8042 Oct 04 11:32	17°Ω49'56	5°33'40	evening set	8043 Sep 05 10:55	2°Ω24'52	
morning rise	8042 Oct 12 20:50	13°Ω51'43			8043 Sep 11 11:52	30°R൬	
direct	8042 Oct 15 14:39	13°Ω32'22		min. Earth dist.	8043 Sep 13 13:35	28°൬51'55	0.54968 AU
morning max el	8042 Oct 25 17:10	18°Ω17'32	19°55'15	inferior conj	8043 Sep 14 11:25	28°൬21'08	-5°04'01
asc. node	8042 Oct 30 20:26	24°Ω17'59		minimum elong	8043 Sep 14 03:54	28°൬31'45	5°02'43
	8042 Nov 03 13:53	0°൬		morning rise	8043 Sep 22 22:37	24°൬33'07	
morning set	8042 Nov 12 15:26	17°൬06'36		direct	8043 Sep 26 05:16	24°൬08'58	
	8042 Nov 18 23:24	0°♌		morning max el	8043 Oct 07 21:09	29°൬37'09	21°20'15
					8043 Oct 08 06:47	0°Ω	
superior conj	8042 Nov 20 09:38	2°♌51'38	1°31'20	asc. node	8043 Oct 17 17:26	12°Ω21'06	
minimum elong	8042 Nov 20 11:55	3°♌03'00	1°31'17		8043 Oct 27 02:44	0°൬	
max. Earth dist.	8042 Nov 26 05:51	14°♌11'32	1.37131 AU	morning set	8043 Oct 28 00:15	1°൬51'25	
evening rise	8042 Nov 30 00:17	21°♌07'13					
desc. node	8042 Dec 04 16:11	29°♌16'12		superior conj	8043 Nov 04 06:56	17°൬07'34	1°39'51
	8042 Dec 05 02:31	0°♍		minimum elong	8043 Nov 04 07:53	17°൬12'27	1°39'56
	8042 Dec 25 02:35	0°♍		max. Earth dist.	8043 Nov 08 16:36	26°൬05'33	1.35214 AU
evening max el	8043 Jan 04 15:30	12°♍12'55	25°35'00		8043 Nov 10 16:16	0°♌	
retrograde	8043 Jan 16 22:16	19°♍16'00		evening rise	8043 Nov 12 20:20	4°♌09'43	
evening set	8043 Jan 22 20:38	16°♍49'23		desc. node	8043 Nov 21 13:14	19°♌41'25	
asc. node	8043 Jan 26 19:41	12°♍34'27			8043 Nov 27 23:18	0°♍	
min. Earth dist.	8043 Jan 27 05:19	12°♍04'12	0.67331 AU	evening max el	8043 Dec 18 04:46	25°♍56'49	26°35'41
inferior conj	8043 Jan 28 13:05	10°♍22'41	0°34'13		8043 Dec 22 23:41	0°♍	
minimum elong	8043 Jan 28 12:14	10°♍25'23	0°33'58	retrograde	8043 Dec 31 04:22	3°♍12'59	
morning rise	8043 Feb 03 04:14	4°♍29'47		evening set	8044 Jan 06 14:58	0°♍38'26	
direct	8043 Feb 06 13:05	3°♍24'34			8044 Jan 07 08:57	30°R♍	
morning max el	8043 Feb 13 11:38	7°♍13'48	19°08'01	min. Earth dist.	8044 Jan 10 17:18	26°♍28'09	0.66250 AU
greatest brilliancy	8043 Feb 26 23:13	25°♍18'42	-0.7m	inferior conj	8044 Jan 12 12:41	24°♍18'53	-0°23'36
	8043 Mar 02 01:07	0°♎		minimum elong	8044 Jan 12 13:20	24°♍16'57	0°23'11
desc. node	8043 Mar 02 15:37	0°♎55'37		asc. node	8044 Jan 13 16:46	22°♍56'12	
morning set	8043 Mar 08 19:52	10°♎27'40		morning rise	8044 Jan 18 12:34	18°♍36'38	
	8043 Mar 21 08:47	0°♏		direct	8044 Jan 21 11:08	17°♍48'20	
max. Earth dist.	8043 Mar 22 15:09	1°♏59'20	1.45098 AU	morning max el	8044 Jan 27 23:54	21°♍19'06	18°24'21
					8044 Feb 03 21:05	0°♍	
superior conj	8043 Mar 25 10:42	6°♏25'51	-2°03'30	morning set	8044 Feb 16 21:43	20°♍20'02	
minimum elong	8043 Mar 25 04:22	6°♏00'44	2°03'11	desc. node	8044 Feb 17 12:35	21°♍19'18	
evening rise	8043 Apr 09 02:16	0°♏03'29			8044 Feb 22 23:39	0°♎	
	8043 Apr 09 01:25	0°♏					
asc. node	8043 Apr 24 18:40	24°♏49'53		superior conj	8044 Mar 03 15:33	15°♎12'07	-1°35'27
evening max el	8043 Apr 28 19:00	29°♏37'29	18°26'06	minimum elong	8044 Mar 03 05:56	14°♎34'29	1°34'27
	8043 Apr 29 04:12	0°♐		max. Earth dist.	8044 Mar 04 10:24	16°♎25'54	1.45508 AU
retrograde	8043 May 05 05:43	3°♐06'32			8044 Mar 13 02:22	0°♏	
evening set	8043 May 08 08:06	2°♐13'14		evening rise	8044 Mar 19 13:26	10°♏09'24	
	8043 May 11 03:55	30°R♐		greatest brilliancy	8044 Mar 29 14:14	25°♏54'19	-0.8m
inferior conj	8043 May 14 03:16	26°♐43'39	3°18'32		8044 Apr 01 06:25	0°♏	
minimum elong	8043 May 14 04:25	26°♐40'16	3°18'19	asc. node	8044 Apr 10 15:45	12°♏37'36	
min. Earth dist.	8043 May 16 08:57	24°♐06'24	0.64537 AU	evening max el	8044 Apr 11 04:55	13°♏11'47	19°02'02
morning rise	8043 May 19 23:51	20°♐28'32		retrograde	8044 Apr 18 01:08	17°♏01'46	
direct	8043 May 26 16:25	17°♐44'12		evening set	8044 Apr 21 11:01	15°♏54'09	
desc. node	8043 May 29 15:13	18°♐12'12		inferior conj	8044 Apr 26 23:29	10°♏08'20	3°24'05
morning max el	8043 Jun 09 07:06	25°♐41'56	27°24'23	minimum elong	8044 Apr 26 23:18	10°♏08'54	3°23'59
	8043 Jun 13 05:50	0°♐		min. Earth dist.	8044 Apr 28 13:44	8°♏06'45	0.66154 AU
	8043 Jul 03 22:52	0°♑		morning rise	8044 May 02 11:09	3°♏50'32	
morning set	8043 Jul 14 14:06	19°♑25'49		direct	8044 May 08 19:57	1°♏04'12	
max. Earth dist.	8043 Jul 19 06:40	28°♑52'44	1.33268 AU	desc. node	8044 May 15 12:13	3°♏27'15	

morning max el	8044 May 21 17:35	8° $\text{♄}$ 44'35	26°26'00	morning max el	8045 May 04 03:12	22° $\text{♄}$ 00'55	25°07'25
	8044 Jun 07 08:41	0° $\text{♄}$			8045 May 11 02:26	0° $\text{♄}$	
	8044 Jun 25 10:02	0° $\text{♄}$			8045 May 31 15:16	0° $\text{♄}$	
morning set	8044 Jun 26 17:32	2° $\text{♄}$ 26'42		morning set	8045 Jun 09 04:44	14° $\text{♄}$ 39'10	
max. Earth dist.	8044 Jun 30 18:31	10° $\text{♄}$ 12'46	1.34743 AU	max. Earth dist.	8045 Jun 12 19:56	21° $\text{♄}$ 16'33	1.36647 AU
					8045 Jun 17 10:04	0° $\text{♄}$	
superior conj	8044 Jul 05 15:53	20° $\text{♄}$ 03'41	-0°19'39	superior conj	8045 Jun 19 04:10	3° $\text{♄}$ 26'03	-0°51'13
minimum elong	8044 Jul 05 16:59	20° $\text{♄}$ 09'24	0°19'33	minimum elong	8045 Jun 19 07:16	3° $\text{♄}$ 41'21	0°50'48
asc. node	8044 Jul 07 14:55	24° $\text{♄}$ 07'09		asc. node	8045 Jun 24 11:55	14° $\text{♄}$ 06'32	
	8044 Jul 10 10:24	0° $\text{♄}$		evening rise	8045 Jun 27 10:56	20° $\text{♄}$ 06'13	
evening rise	8044 Jul 13 06:25	5° $\text{♄}$ 55'19			8045 Jul 02 11:38	0° $\text{♄}$	
	8044 Jul 26 11:51	0° $\text{♄}$		evening max el	8045 Jul 14 15:25	18° $\text{♄}$ 11'41	19°38'46
evening max el	8044 Aug 01 04:46	6° $\text{♄}$ 55'32	20°50'46	retrograde	8045 Jul 24 11:47	23° $\text{♄}$ 03'04	
desc. node	8044 Aug 11 11:22	12° $\text{♄}$ 34'41		evening set	8045 Jul 26 08:12	22° $\text{♄}$ 53'31	
retrograde	8044 Aug 12 18:05	12° $\text{♄}$ 38'45		desc. node	8045 Jul 29 08:26	22° $\text{♄}$ 00'45	
evening set	8044 Aug 14 22:04	12° $\text{♄}$ 27'30		inferior conj	8045 Aug 04 04:03	18° $\text{♄}$ 50'01	-1°46'33
inferior conj	8044 Aug 24 03:55	8° $\text{♄}$ 30'34	-3°40'50	minimum elong	8045 Aug 03 23:11	18° $\text{♄}$ 57'40	1°44'48
minimum elong	8044 Aug 23 18:42	8° $\text{♄}$ 43'41	3°38'02	min. Earth dist.	8045 Aug 06 10:49	17° $\text{♄}$ 24'14	0.55434 AU
min. Earth dist.	8044 Aug 24 22:44	8° $\text{♄}$ 03'49	0.54719 AU	morning rise	8045 Aug 12 11:53	14° $\text{♄}$ 22'25	
morning rise	8044 Sep 01 15:27	4° $\text{♄}$ 32'35		direct	8045 Aug 17 04:38	13° $\text{♄}$ 33'15	
direct	8044 Sep 05 13:19	3° $\text{♄}$ 59'51		morning max el	8045 Aug 31 03:07	20° $\text{♄}$ 30'18	24°46'59
morning max el	8044 Sep 18 14:27	10° $\text{♄}$ 14'40	23°01'34		8045 Sep 08 06:42	0° $\text{♄}$	
	8044 Oct 03 00:03	0° $\text{♄}$		asc. node	8045 Sep 20 11:26	20° $\text{♄}$ 17'57	
asc. node	8044 Oct 03 14:27	1° $\text{♄}$ 04'42			8045 Sep 25 06:00	0° $\text{♄}$	
morning set	8044 Oct 11 11:26	16° $\text{♄}$ 41'38		morning set	8045 Sep 25 23:10	1° $\text{♄}$ 30'59	
	8044 Oct 17 16:06	0° $\text{♄}$					
superior conj	8044 Oct 18 11:23	1° $\text{♄}$ 43'27	1°41'18	superior conj	8045 Oct 02 20:17	16° $\text{♄}$ 30'13	1°36'32
minimum elong	8044 Oct 18 11:02	1° $\text{♄}$ 41'37	1°41'23	minimum elong	8045 Oct 02 18:55	16° $\text{♄}$ 22'44	1°36'29
max. Earth dist.	8044 Oct 21 11:15	8° $\text{♄}$ 04'17	1.33658 AU	max. Earth dist.	8045 Oct 04 13:40	20° $\text{♄}$ 15'46	1.32539 AU
evening rise	8044 Oct 26 06:10	17° $\text{♄}$ 49'33			8045 Oct 09 03:36	0° $\text{♄}$	
	8044 Nov 01 17:01	0° $\text{♄}$		evening rise	8045 Oct 10 02:12	1° $\text{♄}$ 56'26	
desc. node	8044 Nov 07 10:16	9° $\text{♄}$ 49'51		desc. node	8045 Oct 25 07:19	29° $\text{♄}$ 33'20	
	8044 Nov 21 06:36	0° $\text{♄}$			8045 Oct 25 14:05	0° $\text{♄}$	
evening max el	8044 Nov 29 17:36	9° $\text{♄}$ 27'48	27°15'51	evening max el	8045 Nov 12 04:27	22° $\text{♄}$ 33'25	27°28'56
retrograde	8044 Dec 13 04:36	16° $\text{♄}$ 48'03		retrograde	8045 Nov 25 22:17	29° $\text{♄}$ 51'07	
evening set	8044 Dec 20 01:08	14° $\text{♄}$ 11'35		evening set	8045 Dec 03 00:21	27° $\text{♄}$ 21'31	
min. Earth dist.	8044 Dec 23 21:52	10° $\text{♄}$ 35'09	0.64817 AU	min. Earth dist.	8045 Dec 06 17:08	24° $\text{♄}$ 15'21	0.63065 AU
inferior conj	8044 Dec 26 04:59	8° $\text{♄}$ 04'51	-1°27'47	inferior conj	8045 Dec 09 11:15	21° $\text{♄}$ 33'20	-2°36'26
minimum elong	8044 Dec 26 07:38	7° $\text{♄}$ 57'37	1°26'33	minimum elong	8045 Dec 09 16:10	21° $\text{♄}$ 21'15	2°34'24
asc. node	8044 Dec 30 13:49	3° $\text{♄}$ 51'26		morning rise	8045 Dec 16 09:59	16° $\text{♄}$ 20'42	
morning rise	8045 Jan 01 15:35	2° $\text{♄}$ 35'57		asc. node	8045 Dec 17 10:51	16° $\text{♄}$ 03'01	
direct	8045 Jan 04 05:48	2° $\text{♄}$ 00'49		direct	8045 Dec 18 18:10	15° $\text{♄}$ 54'55	
morning max el	8045 Jan 10 16:14	5° $\text{♄}$ 24'03	17°57'27	morning max el	8045 Dec 25 09:33	19° $\text{♄}$ 19'59	17°47'55
	8045 Jan 27 05:03	0° $\text{♄}$			8046 Jan 02 06:14	0° $\text{♄}$	
morning set	8045 Jan 28 05:06	1° $\text{♄}$ 40'09		morning set	8046 Jan 10 13:33	14° $\text{♄}$ 12'24	
desc. node	8045 Feb 03 09:34	11° $\text{♄}$ 54'09			8046 Jan 19 17:27	0° $\text{♄}$	
				desc. node	8046 Jan 21 06:31	2° $\text{♄}$ 35'39	
superior conj	8045 Feb 11 03:15	24° $\text{♄}$ 24'27	-0°53'48	superior conj	8046 Jan 22 12:41	4° $\text{♄}$ 41'14	-0°09'10
minimum elong	8045 Feb 10 21:00	23° $\text{♄}$ 59'31	0°52'52	minimum elong	8046 Jan 22 11:44	4° $\text{♄}$ 37'20	0°08'54
	8045 Feb 14 15:54	0° $\text{♄}$		behind sun begin	8046 Jan 22 03:55	4° $\text{♄}$ 04'49	
max. Earth dist.	8045 Feb 15 06:02	0° $\text{♄}$ 55'41	1.45171 AU	behind sun end	8046 Jan 22 19:34	5° $\text{♄}$ 09'48	
evening rise	8045 Feb 27 06:14	19° $\text{♄}$ 35'45		max. Earth dist.	8046 Jan 28 23:12	15° $\text{♄}$ 11'04	1.44135 AU
	8045 Mar 06 01:19	0° $\text{♄}$		evening rise	8046 Feb 06 17:20	28° $\text{♄}$ 55'56	
greatest brilliancy	8045 Mar 13 15:39	11° $\text{♄}$ 23'56	-0.6m		8046 Feb 07 09:59	0° $\text{♄}$	
evening max el	8045 Mar 25 10:06	26° $\text{♄}$ 48'48	19°54'11		8046 Feb 27 20:14	0° $\text{♄}$	
asc. node	8045 Mar 28 12:49	29° $\text{♄}$ 31'07		evening max el	8046 Mar 08 09:48	10° $\text{♄}$ 27'12	21°00'02
	8045 Mar 29 06:35	0° $\text{♄}$		asc. node	8046 Mar 15 09:53	15° $\text{♄}$ 15'55	
retrograde	8045 Apr 01 23:16	1° $\text{♄}$ 10'17		retrograde	8046 Mar 16 21:43	15° $\text{♄}$ 27'22	
	8045 Apr 05 10:36	30° $\text{♄}$ 7'58		evening set	8046 Mar 21 01:22	13° $\text{♄}$ 49'58	
evening set	8045 Apr 05 17:26	29° $\text{♄}$ 47'58		inferior conj	8046 Mar 26 08:46	7° $\text{♄}$ 37'53	2°56'43
inferior conj	8045 Apr 11 02:09	23° $\text{♄}$ 47'49	3°16'00	minimum elong	8046 Mar 26 06:48	7° $\text{♄}$ 44'42	2°56'19
minimum elong	8045 Apr 11 00:53	23° $\text{♄}$ 52'02	3°15'48	min. Earth dist.	8046 Mar 26 18:58	7° $\text{♄}$ 02'36	0.68076 AU
min. Earth dist.	8045 Apr 12 01:46	22° $\text{♄}$ 28'28	0.67337 AU	morning rise	8046 Mar 31 12:00	1° $\text{♄}$ 23'21	
morning rise	8045 Apr 16 08:05	17° $\text{♄}$ 30'36			8046 Apr 02 09:08	30° $\text{♄}$ 8'48	
direct	8045 Apr 22 05:30	14° $\text{♄}$ 52'47		direct	8046 Apr 05 20:03	29° $\text{♄}$ 01'52	
desc. node	8045 May 02 09:12	20° $\text{♄}$ 18'58					

	8046 Apr 09 14:23	0°♿		inferior conj	8047 Mar 10 17:11	21°♿34'46	2°27'45
morning max el	8046 Apr 16 12:15	5°♿24'01	23°38'53	minimum elong	8047 Mar 10 14:55	21°♿42'40	2°27'10
desc. node	8046 Apr 19 06:10	8°♿20'56		min. Earth dist.	8047 Mar 10 14:59	21°♿42'28	0.68389 AU
	8046 May 05 11:37	0°♿		morning rise	8047 Mar 15 20:32	15°♿24'29	
morning set	8046 May 21 18:17	25°♿48'45		direct	8047 Mar 20 14:34	13°♿24'00	
	8046 May 24 04:49	0°♿		morning max el	8047 Mar 29 23:38	18°♿54'05	22°10'05
max. Earth dist.	8046 May 25 15:46	2°♿32'43	1.38836 AU	desc. node	8047 Apr 06 03:07	27°♿13'12	
					8047 Apr 08 06:02	0°♿	
superior conj	8046 Jun 02 03:13	16°♿08'24	-1°22'19		8047 Apr 28 15:26	0°♿	
minimum elong	8046 Jun 02 08:12	16°♿31'50	1°21'44	morning set	8047 May 02 04:56	5°♿41'39	
	8046 Jun 09 08:24	0°♿		max. Earth dist.	8047 May 07 13:49	14°♿32'36	1.41067 AU
evening rise	8046 Jun 11 08:10	3°♿52'46					
asc. node	8046 Jun 11 08:56	3°♿56'31		superior conj	8047 May 15 08:27	27°♿59'05	-1°49'30
	8046 Jun 27 09:14	0°♿		minimum elong	8047 May 15 14:12	28°♿24'39	1°49'04
evening max el	8046 Jun 27 14:13	0°♿12'26	18°47'27		8047 May 16 11:33	0°♿	
retrograde	8046 Jul 05 21:13	4°♿18'43		evening rise	8047 May 25 18:33	17°♿05'11	
evening set	8046 Jul 07 21:33	4°♿05'06		asc. node	8047 May 29 05:58	23°♿31'49	
inferior conj	8046 Jul 15 22:44	29°♿44'47	0°05'05		8047 Jun 01 20:42	0°♿	
minimum elong	8046 Jul 15 22:56	29°♿44'26	0°04'53	evening max el	8047 Jun 10 21:30	12°♿48'47	18°16'38
transit middle	8046 Jul 15 22:56	29°♿44'26	0°04'53	retrograde	8047 Jun 18 01:53	16°♿25'06	
transit begin	8046 Jul 15 19:25	29°♿50'50		evening set	8047 Jun 20 09:30	16°♿03'23	
transit end	8046 Jul 16 02:27	29°♿38'00		inferior conj	8047 Jun 27 15:06	11°♿22'21	1°33'11
	8046 Jul 15 14:22	30°♿		minimum elong	8047 Jun 27 17:52	11°♿16'28	1°32'09
desc. node	8046 Jul 16 05:29	29°♿32'27		min. Earth dist.	8047 Jul 01 00:38	8°♿29'49	0.59041 AU
min. Earth dist.	8046 Jul 19 02:58	27°♿26'52	0.56977 AU	desc. node	8047 Jul 03 02:32	6°♿55'34	
morning rise	8046 Jul 23 20:53	24°♿40'18		morning rise	8047 Jul 04 23:05	5°♿45'31	
direct	8046 Jul 29 10:17	23°♿25'10		direct	8047 Jul 11 05:27	3°♿59'04	
	8046 Aug 11 19:12	0°♿		morning max el	8047 Jul 25 14:26	11°♿46'51	27°25'21
morning max el	8046 Aug 12 17:46	0°♿53'02	26°19'53		8047 Aug 08 20:49	0°♿	
	8046 Sep 02 05:55	0°♿		asc. node	8047 Aug 25 05:23	29°♿43'09	
asc. node	8046 Sep 07 08:24	9°♿53'03			8047 Aug 25 08:36	0°♿	
morning set	8046 Sep 10 09:50	16°♿14'51		morning set	8047 Aug 25 17:47	0°♿48'04	
	8046 Sep 16 16:55	0°♿					
superior conj	8046 Sep 17 07:35	1°♿21'15	1°26'10	superior conj	8047 Sep 01 19:22	16°♿10'11	1°10'41
minimum elong	8046 Sep 17 05:33	1°♿10'01	1°25'56	minimum elong	8047 Sep 01 17:07	15°♿57'41	1°10'17
max. Earth dist.	8046 Sep 17 21:46	2°♿39'44	1.31881 AU	max. Earth dist.	8047 Sep 01 08:09	15°♿07'57	1.31674 AU
evening rise	8046 Sep 24 05:33	16°♿22'23			8047 Sep 08 02:32	0°♿	
	8046 Oct 01 01:40	0°♿		evening rise	8047 Sep 08 13:43	0°♿59'48	
desc. node	8046 Oct 12 04:23	18°♿41'46			8047 Sep 24 04:56	0°♿	
	8046 Oct 20 16:47	0°♿		desc. node	8047 Sep 29 01:28	7°♿01'15	
evening max el	8046 Oct 25 11:09	5°♿01'33	27°09'45	evening max el	8047 Oct 07 10:55	16°♿41'20	26°16'45
retrograde	8046 Nov 08 08:18	12°♿12'55		retrograde	8047 Oct 21 09:02	23°♿46'22	
evening set	8046 Nov 15 08:57	10°♿00'51		evening set	8047 Oct 27 22:19	22°♿02'15	
min. Earth dist.	8046 Nov 19 01:53	7°♿17'07	0.61075 AU	min. Earth dist.	8047 Nov 01 00:07	19°♿27'44	0.58987 AU
inferior conj	8046 Nov 22 04:16	4°♿36'17	-3°45'23	inferior conj	8047 Nov 04 04:33	17°♿04'02	-4°46'48
minimum elong	8046 Nov 22 11:05	4°♿21'31	3°43'05	minimum elong	8047 Nov 04 11:30	16°♿50'54	4°45'12
	8046 Nov 28 19:57	30°♿		morning rise	8047 Nov 12 02:57	12°♿33'06	
morning rise	8046 Nov 29 15:30	29°♿43'02		direct	8047 Nov 14 09:23	12°♿15'29	
direct	8046 Dec 01 20:46	29°♿22'56		asc. node	8047 Nov 21 04:54	15°♿05'01	
asc. node	8046 Dec 04 07:53	29°♿48'40		morning max el	8047 Nov 22 09:48	16°♿10'00	18°25'43
	8046 Dec 04 19:39	0°♿			8047 Dec 02 02:47	0°♿	
morning max el	8046 Dec 09 00:34	2°♿58'25	17°56'49	morning set	8047 Dec 08 08:36	11°♿38'25	
morning set	8046 Dec 24 16:33	27°♿37'13					
	8046 Dec 25 23:41	0°♿		superior conj	8047 Dec 17 09:39	28°♿47'20	1°01'14
superior conj	8047 Jan 03 23:50	16°♿11'44	0°30'23	minimum elong	8047 Dec 17 13:06	29°♿03'15	1°00'55
minimum elong	8047 Jan 04 02:17	16°♿22'27	0°30'09		8047 Dec 18 01:27	0°♿	
desc. node	8047 Jan 08 03:30	23°♿20'26		max. Earth dist.	8047 Dec 24 21:35	12°♿09'53	1.40510 AU
max. Earth dist.	8047 Jan 11 12:34	28°♿59'23	1.42521 AU	desc. node	8047 Dec 26 00:31	14°♿05'19	
	8047 Jan 12 03:17	0°♿		evening rise	8047 Dec 29 06:46	19°♿33'56	
evening rise	8047 Jan 17 14:12	8°♿47'45			8048 Jan 04 18:30	0°♿	
	8047 Jan 31 13:53	0°♿		evening max el	8048 Jan 25 21:26	0°♿	
evening max el	8047 Feb 19 04:28	24°♿07'26	22°15'35	retrograde	8048 Feb 01 19:32	7°♿51'08	23°35'27
retrograde	8047 Feb 28 18:41	29°♿48'36		asc. node	8048 Feb 12 12:49	14°♿10'44	
asc. node	8047 Mar 02 06:57	29°♿36'59		evening set	8048 Feb 17 15:18	12°♿03'22	
evening set	8047 Mar 05 09:09	27°♿56'02		min. Earth dist.	8048 Feb 22 11:40	6°♿24'07	0.68290 AU
				inferior conj	8048 Feb 23 01:35	5°♿36'28	1°50'03





























































































































minimum elong	8048 Feb 22 23:29	5°  43'41	1°49'24	inferior conj	8049 Feb 06 08:06	19°  38'59	1°04'10
	8048 Feb 27 18:08	30°  44		minimum elong	8049 Feb 06 06:38	19°  43'49	1°03'41
morning rise	8048 Feb 28 07:38	29°  31'44		morning rise	8049 Feb 11 19:17	13°  41'24	
direct	8048 Mar 03 11:53	27°  53'52		direct	8049 Feb 15 10:45	12°  25'09	
	8048 Mar 08 17:43	0°  4		morning max el	8049 Feb 22 18:27	16°  30'15	19°40'29
morning max el	8048 Mar 11 17:05	2°  36'04	20°48'57		8049 Mar 05 08:39	0°  4	
desc. node	8048 Mar 23 00:05	16°  42'32		greatest brilliancy	8049 Mar 07 12:40	3°  09'24	-0.7m
	8048 Apr 01 03:11	0°  4		desc. node	8049 Mar 09 21:04	6°  38'24	
morning set	8048 Apr 10 13:39	14°  24'59		morning set	8049 Mar 20 10:57	22°  43'43	
max. Earth dist.	8048 Apr 18 18:53	27°  28'46	1.43049 AU		8049 Mar 25 03:42	0°  4	
	8048 Apr 20 08:01	0°  8		max. Earth dist.	8049 Apr 01 06:49	11°  11'28	1.44533 AU
superior conj	8048 Apr 25 15:19	8°  48'27	-2°07'40	superior conj	8049 Apr 05 21:18	18°  32'51	-2°10'40
minimum elong	8048 Apr 25 18:59	9°  03'53	2°07'36	minimum elong	8049 Apr 05 19:00	18°  23'34	2°10'40
evening rise	8048 May 07 13:55	29°  34'11			8049 Apr 12 21:36	0°  8	
	8048 May 07 19:44	0°  11		evening rise	8049 Apr 19 13:36	11°  09'46	
asc. node	8048 May 15 03:01	12°  47'10			8049 Apr 30 22:50	0°  11	
evening max el	8048 May 24 09:28	25°  51'18	18°05'30	asc. node	8049 May 02 00:04	1°  35'39	
retrograde	8048 May 30 23:03	29°  13'44		evening max el	8049 May 07 22:45	9°  11'21	18°13'19
evening set	8048 Jun 02 14:04	28°  41'08		retrograde	8049 May 14 08:00	12°  34'27	
inferior conj	8048 Jun 09 03:07	23°  39'55	2°32'59	evening set	8049 May 17 06:08	11°  49'10	
minimum elong	8048 Jun 09 06:04	23°  32'37	2°32'08	inferior conj	8049 May 23 06:43	6°  29'32	3°07'49
min. Earth dist.	8048 Jun 12 06:12	20°  36'08	0.61285 AU	minimum elong	8049 May 23 08:39	6°  24'10	3°07'24
morning rise	8048 Jun 15 19:50	17°  40'38		min. Earth dist.	8049 May 25 21:04	3°  37'06	0.63424 AU
desc. node	8048 Jun 18 23:35	16°  02'02		morning rise	8049 May 29 09:48	0°  17'45	
direct	8048 Jun 22 12:01	15°  24'30			8049 May 29 19:11	30°  48'0	
morning max el	8048 Jul 06 17:55	23°  24'06	27°54'21	direct	8049 Jun 05 04:07	27°  40'13	
	8048 Jul 12 15:21	0°  1		desc. node	8049 Jun 05 20:37	27°  41'43	
	8048 Aug 01 03:00	0°  1			8049 Jun 12 04:24	0°  1	
morning set	8048 Aug 08 21:08	15°  05'16		morning max el	8049 Jun 19 02:15	5°  42'51	27°45'19
asc. node	8048 Aug 11 02:22	19°  04'08			8049 Jul 07 11:57	0°  1	
max. Earth dist.	8048 Aug 14 16:57	27°  02'04	1.31918 AU	morning set	8049 Jul 23 17:37	28°  05'56	
	8048 Aug 15 20:30	0°  1			8049 Jul 24 05:36	0°  1	
superior conj	8048 Aug 16 05:52	0°  1	0°50'29	asc. node	8049 Jul 28 23:23	9°  48'26	
minimum elong	8048 Aug 16 03:52	0°  1	0°50'02	max. Earth dist.	8049 Jul 28 20:05	9°  31'01	1.32626 AU
evening rise	8048 Aug 23 00:36	15°  42'13		superior conj	8049 Jul 31 13:13	15°  19'33	0°26'00
	8048 Aug 30 01:37	0°  1		minimum elong	8049 Jul 31 12:01	15°  13'01	0°25'39
desc. node	8048 Sep 14 22:33	24°  12'16			8049 Aug 07 07:50	0°  1	
evening max el	8048 Sep 18 02:34	27°  30'52	24°54'58	evening rise	8049 Aug 07 12:17	0°  1	23°17'31
	8048 Sep 20 22:56	0°  1			8049 Aug 23 22:39	0°  1	
retrograde	8048 Oct 01 22:58	4°  29'41		evening max el	8049 Aug 30 13:57	7°  48'20	23°17'31
evening set	8048 Oct 07 11:57	3°  20'30		desc. node	8049 Sep 01 19:38	9°  48'49	
min. Earth dist.	8048 Oct 12 13:50	0°  1	0.57031 AU	retrograde	8049 Sep 13 01:00	14°  32'21	
	8048 Oct 13 12:43	30°  45'59	-5°27'14	evening set	8049 Sep 17 02:31	13°  56'14	
inferior conj	8048 Oct 15 09:04	28°  46'59	-5°27'14	min. Earth dist.	8049 Sep 23 23:18	10°  45'15	0.55509 AU
minimum elong	8048 Oct 15 12:33	28°  41'15	5°26'53	inferior conj	8049 Sep 25 17:50	9°  42'59	-5°28'02
morning rise	8048 Oct 23 15:25	24°  38'57		minimum elong	8049 Sep 25 14:11	9°  48'20	5°27'43
direct	8048 Oct 26 03:46	24°  21'02		morning rise	8049 Oct 04 04:02	5°  51'35	
morning max el	8048 Nov 04 09:41	28°  44'21	19°16'11	direct	8049 Oct 07 02:43	5°  30'43	
	8048 Nov 05 15:33	0°  1		morning max el	8049 Oct 17 21:21	10°  33'21	20°28'56
asc. node	8048 Nov 07 01:55	1°  38'12		asc. node	8049 Oct 24 22:56	19°  12'59	
morning set	8048 Nov 21 09:25	26°  02'57			8049 Oct 31 06:31	0°  1	
	8048 Nov 23 08:53	0°  1		morning set	8049 Nov 05 16:01	10°  42'32	
superior conj	8048 Nov 29 12:50	12°  47'12	1°22'50	superior conj	8049 Nov 13 04:42	26°  13'26	1°35'51
minimum elong	8048 Nov 29 15:46	12°  47'12	1°22'41	minimum elong	8049 Nov 13 06:25	26°  13'26	1°35'52
max. Earth dist.	8048 Dec 06 03:20	24°  47'37	1.38342 AU		8049 Nov 15 01:41	0°  1	
	8048 Dec 09 03:29	0°  1		max. Earth dist.	8049 Nov 18 10:28	6°  47'36	1.36276 AU
evening rise	8048 Dec 09 21:18	1°  31'59		evening rise	8049 Nov 22 07:42	13°  47'55	08
desc. node	8048 Dec 11 21:33	4°  34'55		desc. node	8049 Nov 28 18:35	25°  47'18	19
	8048 Dec 28 00:28	0°  1			8049 Dec 01 14:20	0°  1	
evening max el	8049 Jan 14 08:45	21°  37'18	24°53'32		8049 Dec 22 20:43	0°  1	
retrograde	8049 Jan 26 03:06	28°  37'58		evening max el	8049 Dec 27 21:45	5°  23'38	26°02'44
evening set	8049 Jan 31 18:14	26°  37'21		retrograde	8050 Jan 09 12:35	12°  34'22	
asc. node	8049 Feb 03 01:06	23°  37'17		evening set	8050 Jan 15 16:17	10°  33'36	
min. Earth dist.	8049 Feb 05 06:45	21°  37'32	0.67793 AU	min. Earth dist.	8050 Jan 19 22:05	5°  33'16	0.66918 AU

asc. node	8050 Jan 20 22:11	4° $\approx$ 18'26			8050 Nov 24 21:43	0° $\approx$	
inferior conj	8050 Jan 21 10:50	3° $\approx$ 38'57	0°10'33	evening max el	8050 Dec 10 11:01	19° $\approx$ 03'44	26°55'42
minimum elong	8050 Jan 21 10:33	3° $\approx$ 39'49	0°10'33	retrograde	8050 Dec 23 16:27	26° $\approx$ 22'55	
transit middle	8050 Jan 21 10:33	3° $\approx$ 39'49	0°10'33	evening set	8050 Dec 30 07:27	23° $\approx$ 46'55	
transit begin	8050 Jan 21 08:24	3° $\approx$ 46'32		min. Earth dist.	8051 Jan 03 07:21	19° $\approx$ 50'56	0.65681 AU
transit end	8050 Jan 21 12:42	3° $\approx$ 33'06		inferior conj	8051 Jan 05 07:40	17° $\approx$ 31'51	-0°50'07
	8050 Jan 24 14:15	30° $\approx$ 18'3		minimum elong	8051 Jan 05 09:06	17° $\approx$ 32'41	0°49'22
morning rise	8050 Jan 27 05:28	27° $\approx$ 50'18		asc. node	8051 Jan 07 19:15	14° $\approx$ 34'51	
direct	8050 Jan 30 09:36	26° $\approx$ 52'55		morning rise	8051 Jan 11 11:52	11° $\approx$ 35'43	
	8050 Feb 05 13:24	0° $\approx$		direct	8051 Jan 14 06:34	11° $\approx$ 31'28	
morning max el	8050 Feb 06 03:15	0° $\approx$ 33'11	18°47'20	morning max el	8051 Jan 20 17:32	14° $\approx$ 39'06	18°10'42
desc. node	8050 Feb 24 18:01	26° $\approx$ 53'34			8051 Jan 31 20:50	0° $\approx$	
	8050 Feb 26 17:43	0° $\approx$		morning set	8051 Feb 08 11:53	12° $\approx$ 18'41	
morning set	8050 Feb 27 21:18	1° $\approx$ 47'55		desc. node	8051 Feb 11 14:59	17° $\approx$ 22'37	
max. Earth dist.	8050 Mar 14 23:39	25° $\approx$ 25'14	1.45362 AU		8051 Feb 19 12:15	0° $\approx$	
superior conj	8050 Mar 16 07:18	27° $\approx$ 29'19	-1°53'50	superior conj	8051 Feb 23 12:43	6° $\approx$ 20'49	-1°18'50
minimum elong	8050 Mar 15 22:43	26° $\approx$ 55'40	1°53'12	minimum elong	8051 Feb 23 03:54	5° $\approx$ 46'09	1°17'44
	8050 Mar 17 21:40	0° $\approx$		max. Earth dist.	8051 Feb 25 19:06	9° $\approx$ 54'19	1.45457 AU
evening rise	8050 Mar 31 14:05	21° $\approx$ 46'50			8051 Mar 10 16:26	0° $\approx$	
	8050 Apr 05 16:22	0° $\approx$		evening rise	8051 Mar 11 16:17	1° $\approx$ 32'48	
greatest brilliancy	8050 Apr 07 03:36	2° $\approx$ 21'35	-0.9m	greatest brilliancy	8051 Mar 23 19:21	20° $\approx$ 15'46	-0.7m
asc. node	8050 Apr 18 21:08	19° $\approx$ 48'45			8051 Mar 30 12:57	0° $\approx$	
evening max el	8050 Apr 21 10:35	22° $\approx$ 42'15	18°39'20	evening max el	8051 Apr 04 18:45	6° $\approx$ 18'52	19°22'26
retrograde	8050 Apr 28 00:31	26° $\approx$ 18'57		asc. node	8051 Apr 05 18:13	7° $\approx$ 15'37	
evening set	8050 May 01 05:55	25° $\approx$ 19'50		retrograde	8051 Apr 11 21:17	10° $\approx$ 20'49	
inferior conj	8050 May 06 21:52	19° $\approx$ 43'20	3°22'45	evening set	8051 Apr 15 10:36	9° $\approx$ 07'02	
minimum elong	8050 May 06 22:26	19° $\approx$ 41'36	3°22'36	inferior conj	8051 Apr 20 21:10	3° $\approx$ 15'09	3°22'07
min. Earth dist.	8050 May 08 21:04	17° $\approx$ 19'42	0.65272 AU	minimum elong	8051 Apr 20 20:29	3° $\approx$ 17'21	3°22'00
morning rise	8050 May 12 14:14	13° $\approx$ 26'23		min. Earth dist.	8051 Apr 22 05:08	1° $\approx$ 30'53	0.66716 AU
direct	8050 May 19 04:06	10° $\approx$ 39'25			8051 Apr 23 09:59	30° $\approx$ 19'	
desc. node	8050 May 23 17:38	11° $\approx$ 46'38		morning rise	8051 Apr 26 06:01	26° $\approx$ 57'28	
morning max el	8050 Jun 01 12:30	18° $\approx$ 32'27	27°02'36	direct	8051 May 02 10:29	24° $\approx$ 13'19	
	8050 Jun 11 04:18	0° $\approx$		desc. node	8051 May 10 14:36	27° $\approx$ 46'42	
	8050 Jun 30 11:18	0° $\approx$			8051 May 13 04:43	0° $\approx$	
morning set	8050 Jul 07 04:15	12° $\approx$ 23'01		morning max el	8051 May 14 22:27	1° $\approx$ 41'32	25°54'21
max. Earth dist.	8050 Jul 11 13:47	21° $\approx$ 04'24	1.33828 AU		8051 Jun 05 06:15	0° $\approx$	
superior conj	8050 Jul 15 15:15	29° $\approx$ 27'34	-0°02'10	morning set	8051 Jun 20 01:19	25° $\approx$ 10'47	
minimum elong	8050 Jul 15 15:22	29° $\approx$ 28'11	0°02'16		8051 Jun 22 16:32	0° $\approx$	
behind sun begin	8050 Jul 15 09:47	28° $\approx$ 58'50		max. Earth dist.	8051 Jun 23 20:38	2° $\approx$ 13'58	1.35508 AU
behind sun end	8050 Jul 15 20:58	29° $\approx$ 57'34		superior conj	8051 Jun 29 09:27	13° $\approx$ 09'08	-0°32'55
asc. node	8050 Jul 15 20:21	29° $\approx$ 54'22		minimum elong	8051 Jun 29 11:23	13° $\approx$ 18'54	0°32'41
	8050 Jul 15 21:26	0° $\approx$		asc. node	8051 Jul 02 17:21	19° $\approx$ 57'25	
evening rise	8050 Jul 22 22:49	14° $\approx$ 57'50		evening rise	8051 Jul 07 06:13	29° $\approx$ 19'15	
	8050 Jul 30 12:28	0° $\approx$			8051 Jul 07 14:10	0° $\approx$	
evening max el	8050 Aug 12 05:31	18° $\approx$ 06'55	21°40'49	evening max el	8051 Jul 25 08:30	28° $\approx$ 57'39	20°17'41
desc. node	8050 Aug 19 16:44	23° $\approx$ 18'00			8051 Jul 26 11:04	0° $\approx$	
retrograde	8050 Aug 24 15:51	24° $\approx$ 16'54		retrograde	8051 Aug 05 04:16	4° $\approx$ 18'12	
evening set	8050 Aug 27 07:56	24° $\approx$ 00'47		desc. node	8051 Aug 06 13:46	4° $\approx$ 13'13	
inferior conj	8050 Sep 05 12:42	20° $\approx$ 01'45	-4°34'36	evening set	8051 Aug 07 03:18	4° $\approx$ 08'28	
minimum elong	8050 Sep 05 03:32	20° $\approx$ 14'35	4°32'27	inferior conj	8051 Aug 16 06:34	0° $\approx$ 10'42	-2°54'03
min. Earth dist.	8050 Sep 05 08:04	20° $\approx$ 08'14	0.54739 AU	minimum elong	8051 Aug 15 22:44	0° $\approx$ 22'11	2°51'24
morning rise	8050 Sep 14 00:14	16° $\approx$ 11'45			8051 Aug 16 13:51	30° $\approx$ 18'	
direct	8050 Sep 17 12:51	15° $\approx$ 44'35		min. Earth dist.	8051 Aug 17 18:09	29° $\approx$ 18'32	0.54914 AU
morning max el	8050 Sep 29 20:16	21° $\approx$ 33'26	22°01'51	morning rise	8051 Aug 24 17:12	26° $\approx$ 02'07	
	8050 Oct 07 00:08	0° $\approx$		direct	8051 Aug 28 23:02	25° $\approx$ 23'18	
asc. node	8050 Oct 11 19:56	7° $\approx$ 34'31			8051 Sep 09 04:38	0° $\approx$	
morning set	8050 Oct 21 02:03	25° $\approx$ 29'58		morning max el	8051 Sep 11 10:25	1° $\approx$ 56'55	23°46'49
	8050 Oct 23 05:09	0° $\approx$		asc. node	8051 Sep 28 16:55	26° $\approx$ 31'27	
superior conj	8050 Oct 28 05:22	10° $\approx$ 38'45	1°41'16		8051 Sep 30 12:30	0° $\approx$	
minimum elong	8050 Oct 28 05:45	10° $\approx$ 40'44	1°41'21	morning set	8051 Oct 05 13:39	10° $\approx$ 19'51	
max. Earth dist.	8050 Nov 01 00:06	18° $\approx$ 29'12	1.34503 AU	superior conj	8051 Oct 12 11:57	25° $\approx$ 19'28	1°40'00
evening rise	8050 Nov 05 10:05	27° $\approx$ 14'53		minimum elong	8051 Oct 12 11:08	25° $\approx$ 15'04	1°40'02
	8050 Nov 06 20:41	0° $\approx$			8051 Oct 14 16:07	0° $\approx$	
desc. node	8050 Nov 15 15:38	15° $\approx$ 37'08		max. Earth dist.	8051 Oct 14 22:19	0° $\approx$ 33'02	1.33130 AU

evening rise	8051 Oct 20 00:38	11°♍07'00			8052 Oct 05 06:27	0°♍	
	8051 Oct 30 04:03	0°♊		desc. node	8052 Oct 19 09:43	25°♍06'12	
desc. node	8051 Nov 02 12:40	5°♊35'50			8052 Oct 22 16:32	0°♊	
	8051 Nov 20 13:13	0°♊		evening max el	8052 Nov 04 08:58	15°♊17'52	27°24'57
evening max el	8051 Nov 22 23:31	2°♊26'16	27°25'11	retrograde	8052 Nov 18 04:07	22°♊32'35	
retrograde	8051 Dec 06 13:48	9°♊45'13		evening set	8052 Nov 25 06:50	20°♊08'58	
evening set	8051 Dec 13 13:19	7°♊10'51		min. Earth dist.	8052 Nov 28 22:57	17°♊13'53	0.62242 AU
min. Earth dist.	8051 Dec 17 08:14	3°♊47'46	0.64108 AU	inferior conj	8052 Dec 01 21:09	14°♊30'41	-3°05'57
inferior conj	8051 Dec 19 20:04	1°♊11'29	-1°56'33	minimum elong	8052 Dec 02 02:59	14°♊17'06	3°03'43
minimum elong	8051 Dec 19 23:41	1°♊02'03	1°54'56	morning rise	8052 Dec 09 01:14	9°♊26'01	
	8051 Dec 20 23:45	30°♋♊		direct	8052 Dec 11 07:53	9°♊02'58	
asc. node	8051 Dec 25 16:19	26°♊11'38		asc. node	8052 Dec 11 13:20	9°♊03'12	
morning rise	8051 Dec 26 11:40	25°♊48'49		morning max el	8052 Dec 18 03:24	12°♊31'02	17°49'28
direct	8051 Dec 28 23:04	25°♊18'00			8052 Dec 29 23:04	0°♊	
morning max el	8052 Jan 04 10:36	28°♊40'51	17°51'11	morning set	8053 Jan 02 24:00	7°♊10'19	
	8052 Jan 05 16:28	0°♊					
morning set	8052 Jan 21 06:48	24°♊12'34		superior conj	8053 Jan 14 05:02	26°♊46'57	0°08'32
	8052 Jan 24 16:51	0°♋		minimum elong	8053 Jan 14 05:50	26°♊50'24	0°08'32
desc. node	8052 Jan 29 11:56	8°♋00'47		behind sun begin	8053 Jan 13 22:19	26°♊18'30	
				behind sun end	8053 Jan 14 13:22	27°♊22'14	
superior conj	8052 Feb 03 08:26	15°♋57'21	-0°34'38	desc. node	8053 Jan 15 08:55	28°♊44'42	
minimum elong	8052 Feb 03 04:31	15°♋41'30	0°33'58		8053 Jan 16 02:52	0°♋	
max. Earth dist.	8052 Feb 08 14:31	24°♋22'02	1.44817 AU	max. Earth dist.	8053 Jan 21 06:49	8°♋30'10	1.43513 AU
	8052 Feb 12 04:23	0°♌		evening rise	8053 Jan 28 18:33	20°♋22'59	
evening rise	8052 Feb 19 04:50	10°♌52'23			8053 Feb 04 01:16	0°♌	
	8052 Mar 02 21:00	0°♍			8053 Feb 25 12:48	0°♍	
evening max el	8052 Mar 17 21:43	19°♍57'00	20°20'43	evening max el	8053 Feb 28 19:07	3°♍36'11	21°31'06
asc. node	8052 Mar 22 15:17	23°♍42'05		retrograde	8053 Mar 09 17:50	8°♍53'49	
retrograde	8052 Mar 25 19:44	24°♍33'46		asc. node	8053 Mar 09 12:22	8°♍53'33	
evening set	8052 Mar 29 17:53	23°♍04'53		evening set	8053 Mar 14 02:00	7°♍09'43	
inferior conj	8052 Apr 04 01:46	16°♍59'25	3°09'02	inferior conj	8053 Mar 19 09:26	0°♍53'07	2°45'33
minimum elong	8052 Apr 04 00:10	17°♍04'53	3°08'46	minimum elong	8053 Mar 19 07:17	1°♍00'35	2°45'03
min. Earth dist.	8052 Apr 04 19:29	15°♍59'01	0.67713 AU	min. Earth dist.	8053 Mar 19 14:09	0°♍36'43	0.68268 AU
morning rise	8052 Apr 09 06:15	10°♍43'24			8053 Mar 20 00:43	30°♋♌	
direct	8052 Apr 14 22:11	8°♍11'54		morning rise	8053 Mar 24 12:24	24°♌40'18	
desc. node	8052 Apr 26 11:34	15°♍11'06		direct	8053 Mar 29 14:26	22°♌27'40	
morning max el	8052 Apr 26 07:34	15°♍00'55	24°30'20	morning max el	8053 Apr 08 17:24	28°♌27'42	23°00'35
	8052 May 08 13:57	0°♎			8053 Apr 10 04:45	0°♎	
	8052 May 28 03:59	0°♏		desc. node	8053 Apr 13 08:34	3°♎36'48	
morning set	8052 Jun 01 03:56	6°♏51'44			8053 May 02 06:55	0°♎	
max. Earth dist.	8052 Jun 04 19:08	13°♏20'13	1.37565 AU	morning set	8053 May 13 06:32	17°♎29'54	
				max. Earth dist.	8053 May 17 15:24	24°♎53'27	1.39803 AU
superior conj	8052 Jun 11 16:34	26°♏15'34	-1°04'39		8053 May 20 13:44	0°♏	
minimum elong	8052 Jun 11 20:32	26°♏34'43	1°04'08				
	8052 Jun 13 14:41	0°♐		superior conj	8053 May 25 08:35	8°♏36'59	-1°34'37
asc. node	8052 Jun 18 14:22	9°♐53'24		minimum elong	8053 May 25 14:08	9°♏02'26	1°34'03
evening rise	8052 Jun 20 07:58	13°♐20'46		evening rise	8053 Jun 04 01:05	26°♏54'13	
	8052 Jun 29 05:24	0°♑		asc. node	8053 Jun 05 11:23	29°♏37'52	
evening max el	8052 Jul 07 00:35	10°♑32'47	19°14'18		8053 Jun 05 16:02	0°♐	
retrograde	8052 Jul 16 03:52	15°♑03'34		evening max el	8053 Jun 20 03:23	22°♐49'23	18°31'49
evening set	8052 Jul 18 01:15	14°♑52'47		retrograde	8053 Jun 27 21:51	26°♐41'25	
desc. node	8052 Jul 23 10:48	12°♑41'15		evening set	8053 Jun 30 00:57	26°♐24'53	
inferior conj	8052 Jul 26 13:37	10°♑42'33	-0°57'10	inferior conj	8053 Jul 07 17:35	21°♐55'43	0°45'57
minimum elong	8052 Jul 26 11:07	10°♑46'45	0°56'17	minimum elong	8053 Jul 07 19:13	21°♐52'32	0°45'14
min. Earth dist.	8052 Jul 29 07:23	8°♑53'25	0.56007 AU	desc. node	8053 Jul 10 07:53	19°♐54'01	
morning rise	8052 Aug 03 18:06	5°♑59'41		min. Earth dist.	8053 Jul 11 01:45	19°♐20'21	0.57806 AU
direct	8052 Aug 08 19:43	5°♑00'45		morning rise	8053 Jul 15 09:59	16°♐36'04	
morning max el	8052 Aug 22 23:09	12°♑11'33	25°29'12	direct	8053 Jul 21 07:02	15°♐08'03	
	8052 Sep 05 17:41	0°♒		morning max el	8053 Aug 04 16:19	22°♐46'03	26°51'59
asc. node	8052 Sep 14 13:53	15°♒55'01			8053 Aug 11 02:58	0°♒	
morning set	8052 Sep 19 01:09	25°♒07'45			8053 Aug 29 15:45	0°♒	
	8052 Sep 21 07:22	0°♓		asc. node	8053 Sep 01 10:51	5°♒37'20	
				morning set	8053 Sep 03 10:52	9°♒47'57	
superior conj	8052 Sep 25 22:07	10°♓08'48	1°32'48				
minimum elong	8052 Sep 25 20:25	9°♓59'28	1°32'40	superior conj	8053 Sep 10 09:49	24°♒59'42	1°20'12
max. Earth dist.	8052 Sep 27 03:45	12°♓51'44	1.32202 AU	minimum elong	8053 Sep 10 07:38	24°♒47'36	1°19'54
evening rise	8052 Oct 03 00:07	25°♓23'00		max. Earth dist.	8053 Sep 10 13:14	25°♒18'39	1.31729 AU

	8053 Sep 12 16:03	0°♄		superior conj	8054 Aug 25 21:18	9°♄46'39	1°02'40
evening rise	8053 Sep 17 05:44	9°♄54'25		minimum elong	8054 Aug 25 19:05	9°♄34'26	1°02'15
	8053 Sep 27 13:27	0°♄		evening rise	8054 Sep 01 15:18	24°♄34'56	
desc. node	8053 Oct 06 06:47	13°♄56'04			8054 Sep 04 05:09	0°♄	
evening max el	8053 Oct 17 12:43	27°♄25'25	26°51'13		8054 Sep 21 18:06	0°♄	
	8053 Oct 20 12:08	0°♄		desc. node	8054 Sep 23 03:52	1°♄49'25	
retrograde	8053 Oct 31 10:33	4°♄34'49		evening max el	8054 Sep 29 08:53	8°♄43'01	25°44'56
evening set	8053 Nov 07 07:53	2°♄33'03		retrograde	8054 Oct 13 07:18	15°♄46'19	
min. Earth dist.	8053 Nov 11 02:55	29°♄55'30	0.60182 AU	evening set	8054 Oct 19 11:36	14°♄16'43	
	8053 Nov 11 00:38	30°♄		min. Earth dist.	8054 Oct 23 21:24	11°♄40'26	0.58118 AU
inferior conj	8053 Nov 14 07:26	27°♄19'31	-4°13'00	inferior conj	8054 Oct 26 23:32	9°♄29'02	-5°07'36
minimum elong	8053 Nov 14 14:37	27°♄04'48	4°10'53	minimum elong	8054 Oct 27 05:33	9°♄18'18	5°06'32
morning rise	8053 Nov 21 23:45	22°♄35'55		morning rise	8054 Nov 04 01:50	5°♄07'59	
direct	8053 Nov 24 04:54	22°♄17'19		direct	8054 Nov 06 09:57	4°♄50'42	
asc. node	8053 Nov 28 10:23	23°♄28'38		morning max el	8054 Nov 14 22:10	8°♄56'41	18°44'27
morning max el	8053 Dec 01 16:29	25°♄59'39	18°06'41	asc. node	8054 Nov 15 07:24	9°♄19'21	
	8053 Dec 05 02:55	0°♄			8054 Nov 28 14:26	0°♄	
morning set	8053 Dec 17 09:06	20°♄52'03		morning set	8054 Dec 01 05:15	5°♄03'53	
	8053 Dec 22 06:36	0°♄					
superior conj	8053 Dec 27 02:26	8°♄47'06	0°44'35	superior conj	8054 Dec 09 20:11	21°♄44'55	1°11'29
minimum elong	8053 Dec 27 05:33	9°♄01'04	0°44'16	minimum elong	8054 Dec 09 23:32	22°♄00'46	1°11'14
desc. node	8054 Jan 02 05:55	19°♄30'05			8054 Dec 14 07:17	0°♄	
max. Earth dist.	8054 Jan 03 17:54	22°♄02'00	1.41695 AU	max. Earth dist.	8054 Dec 17 00:35	4°♄51'25	1.39589 AU
evening rise	8054 Jan 08 22:58	0°♄35'56		desc. node	8054 Dec 20 02:55	10°♄13'30	
	8054 Jan 08 14:04	0°♄		evening rise	8054 Dec 21 00:53	11°♄46'45	
	8054 Jan 28 13:13	0°♄			8055 Jan 01 10:01	0°♄	
evening max el	8054 Feb 11 11:55	17°♄17'32	22°49'17	evening max el	8055 Jan 24 01:23	0°♄	
retrograde	8054 Feb 21 13:56	23°♄16'23		retrograde	8055 Jan 25 01:59	1°♄02'29	24°09'25
asc. node	8054 Feb 24 09:27	22°♄36'37		evening set	8055 Feb 05 06:37	7°♄36'47	
evening set	8054 Feb 26 09:19	21°♄17'26		asc. node	8055 Feb 10 14:17	5°♄23'46	
inferior conj	8054 Mar 03 18:07	14°♄53'01	2°12'50		8055 Feb 11 06:33	4°♄47'04	
minimum elong	8054 Mar 03 15:51	15°♄00'51	2°12'11		8055 Feb 15 06:53	30°♄	
min. Earth dist.	8054 Mar 03 10:50	15°♄18'15	0.68394 AU	min. Earth dist.	8055 Feb 15 07:13	29°♄58'53	0.68121 AU
morning rise	8054 Mar 08 22:17	8°♄44'44		inferior conj	8055 Feb 16 01:57	28°♄55'38	1°31'36
direct	8054 Mar 13 10:16	6°♄54'00		minimum elong	8055 Feb 16 00:03	29°♄02'03	1°30'59
morning max el	8054 Mar 22 07:07	12°♄03'17	21°34'13	morning rise	8055 Feb 21 09:51	22°♄53'28	
desc. node	8054 Mar 31 05:33	22°♄46'48		direct	8055 Feb 25 08:31	21°♄24'54	
	8054 Apr 05 10:41	0°♄		morning max el	8055 Mar 05 03:42	25°♄50'08	20°18'00
morning set	8054 Apr 23 05:33	26°♄51'51		desc. node	8055 Mar 08 21:24	0°♄	
	8054 Apr 25 04:40	0°♄			8055 Mar 18 02:31	12°♄28'37	
max. Earth dist.	8054 Apr 29 15:47	7°♄16'16	1.41954 AU	morning set	8055 Mar 29 20:17	0°♄	
				max. Earth dist.	8055 Apr 02 06:40	5°♄16'34	
superior conj	8054 May 07 04:54	20°♄03'18	-1°58'40		8055 Apr 11 23:34	20°♄32'54	1.43752 AU
minimum elong	8054 May 07 10:13	20°♄26'26	1°58'23		8055 Apr 17 19:06	0°♄	
	8054 May 12 19:49	0°♄		superior conj	8055 Apr 18 01:17	0°♄25'28	-2°11'09
evening rise	8054 May 18 05:43	9°♄50'11		minimum elong	8055 Apr 18 02:50	0°♄31'51	2°11'12
asc. node	8054 May 23 08:25	19°♄05'59		evening rise	8055 Apr 30 17:16	21°♄57'40	
	8054 May 29 23:23	0°♄			8055 May 05 08:24	0°♄	
evening max el	8054 Jun 03 13:09	5°♄38'53	18°09'33	asc. node	8055 May 10 05:29	8°♄11'13	
retrograde	8054 Jun 10 09:59	9°♄07'26		evening max el	8055 May 18 02:10	18°♄50'41	18°06'33
evening set	8054 Jun 12 20:42	8°♄41'29		retrograde	8055 May 24 12:34	22°♄11'18	
inferior conj	8054 Jun 19 18:50	3°♄52'04	2°01'53	evening set	8055 May 27 06:42	21°♄33'26	
minimum elong	8054 Jun 19 21:54	3°♄45'05	2°00'51	inferior conj	8055 Jun 02 13:58	16°♄24'23	2°50'28
min. Earth dist.	8054 Jun 23 02:54	0°♄51'23	0.59990 AU	minimum elong	8055 Jun 02 16:35	16°♄17'35	2°49'48
	8054 Jun 24 03:28	30°♄		min. Earth dist.	8055 Jun 05 12:15	13°♄22'52	0.62229 AU
morning rise	8054 Jun 26 20:14	28°♄04'09		morning rise	8055 Jun 09 00:38	10°♄18'59	
desc. node	8054 Jun 27 04:57	27°♄51'11		desc. node	8055 Jun 14 02:01	8°♄01'15	
direct	8054 Jul 03 07:46	26°♄04'05		direct	8055 Jun 15 18:52	7°♄52'12	
	8054 Jul 13 02:34	0°♄		morning max el	8055 Jun 29 21:42	15°♄53'59	27°54'52
morning max el	8054 Jul 17 16:06	3°♄58'50	27°42'20		8055 Jul 11 10:54	0°♄	
	8054 Aug 05 20:20	0°♄			8055 Jul 29 11:50	0°♄	
morning set	8054 Aug 18 17:06	24°♄15'31		morning set	8055 Aug 02 17:48	8°♄23'47	
asc. node	8054 Aug 19 07:50	25°♄32'39		asc. node	8055 Aug 06 04:49	15°♄35'23	
	8054 Aug 21 10:06	0°♄		max. Earth dist.	8055 Aug 08 05:56	19°♄58'16	1.32165 AU
max. Earth dist.	8054 Aug 24 23:15	7°♄44'49	1.31716 AU				
				superior conj	8055 Aug 10 06:42	24°♄23'11	0°40'35

minimum elong	8055 Aug 10 04:58	24° $\Omega$ 13'44	0°40'10	superior conj	8056 Jul 24 12:03	8° $\Omega$ 43'35	0°14'28
	8055 Aug 12 20:09	0° $\mathbb{M}$		minimum elong	8056 Jul 24 11:21	8° $\Omega$ 39'47	0°14'12
evening rise	8055 Aug 17 02:45	9° $\mathbb{M}$ 17'46		behind sun begin	8056 Jul 24 08:49	8° $\Omega$ 26'16	
	8055 Aug 27 16:55	0° $\mathbb{A}$		behind sun end	8056 Jul 24 13:53	8° $\Omega$ 53'18	
desc. node	8055 Sep 10 00:57	18° $\mathbb{A}$ 23'54		evening rise	8056 Jul 31 14:12	23° $\Omega$ 57'12	
evening max el	8055 Sep 10 22:07	19° $\mathbb{A}$ 16'10	24°14'30		8056 Aug 03 11:46	0° $\mathbb{M}$	
retrograde	8055 Sep 24 15:56	26° $\mathbb{A}$ 09'41		evening max el	8056 Aug 22 10:06	29° $\mathbb{M}$ 29'20	22°35'12
evening set	8055 Sep 29 14:34	25° $\mathbb{A}$ 15'49			8056 Aug 22 22:54	0° $\mathbb{A}$	
min. Earth dist.	8055 Oct 05 08:57	22° $\mathbb{A}$ 22'28	0.56311 AU	desc. node	8056 Aug 26 22:02	3° $\mathbb{A}$ 10'25	
inferior conj	8055 Oct 07 19:22	20° $\mathbb{A}$ 51'52	-5°33'36	retrograde	8056 Sep 04 12:12	6° $\mathbb{A}$ 01'00	
minimum elong	8055 Oct 07 20:05	20° $\mathbb{A}$ 50'44	5°33'31	evening set	8056 Sep 07 22:32	5° $\mathbb{A}$ 35'09	
morning rise	8055 Oct 16 03:43	16° $\mathbb{A}$ 51'45		min. Earth dist.	8056 Sep 15 17:19	2° $\mathbb{A}$ 08'24	0.55079 AU
direct	8055 Oct 18 20:03	16° $\mathbb{A}$ 32'48		inferior conj	8056 Sep 16 20:56	1° $\mathbb{A}$ 29'14	-5°12'10
morning max el	8055 Oct 28 16:58	21° $\mathbb{A}$ 12'01	19°44'25	minimum elong	8056 Sep 16 14:17	1° $\mathbb{A}$ 38'41	5°11'11
asc. node	8055 Nov 02 04:25	26° $\mathbb{A}$ 20'27			8056 Sep 19 13:27	30° $\mathbb{R}$ $\mathbb{M}$	
	8055 Nov 04 17:08	0° $\mathbb{M}$		morning rise	8056 Sep 25 07:56	27° $\mathbb{M}$ 41'06	
morning set	8055 Nov 15 08:51	19° $\mathbb{M}$ 35'53		direct	8056 Sep 28 12:28	27° $\mathbb{M}$ 17'55	
	8055 Nov 20 11:57	0° $\mathbb{A}$			8056 Oct 06 15:27	0° $\mathbb{A}$	
superior conj	8055 Nov 23 05:13	5° $\mathbb{A}$ 26'30	1°29'21	morning max el	8056 Oct 09 22:53	2° $\mathbb{A}$ 39'09	21°06'25
minimum elong	8055 Nov 23 07:41	5° $\mathbb{A}$ 38'42	1°29'16	asc. node	8056 Oct 19 01:24	14° $\mathbb{A}$ 16'35	
max. Earth dist.	8055 Nov 29 06:28	17° $\mathbb{A}$ 05'19	1.37439 AU		8056 Oct 27 14:31	0° $\mathbb{M}$	
evening rise	8055 Dec 03 00:17	23° $\mathbb{A}$ 54'42		morning set	8056 Oct 29 17:09	4° $\mathbb{M}$ 19'44	
	8055 Dec 06 11:54	0° $\mathbb{B}$		superior conj	8056 Nov 06 01:13	19° $\mathbb{M}$ 39'04	1°39'02
desc. node	8055 Dec 06 23:56	0° $\mathbb{B}$ 51'18		minimum elong	8056 Nov 06 02:22	19° $\mathbb{M}$ 45'00	1°39'05
	8055 Dec 26 03:06	0° $\mathbb{A}$		max. Earth dist.	8056 Nov 10 16:13	29° $\mathbb{M}$ 00'21	1.35474 AU
evening max el	8056 Jan 07 15:11	14° $\mathbb{A}$ 50'18	25°24'38		8056 Nov 11 04:20	0° $\mathbb{A}$	
retrograde	8056 Jan 19 18:48	21° $\mathbb{A}$ 50'18		evening rise	8056 Nov 14 17:55	6° $\mathbb{A}$ 50'54	
evening set	8056 Jan 25 15:20	19° $\mathbb{A}$ 25'08		desc. node	8056 Nov 22 20:56	21° $\mathbb{A}$ 18'36	
asc. node	8056 Jan 29 03:38	15° $\mathbb{A}$ 42'03			8056 Nov 28 05:22	0° $\mathbb{B}$	
min. Earth dist.	8056 Jan 30 01:00	14° $\mathbb{A}$ 34'56	0.67464 AU	evening max el	8056 Dec 20 04:18	28° $\mathbb{B}$ 35'00	26°27'44
inferior conj	8056 Jan 31 07:05	12° $\mathbb{A}$ 57'56	0°42'22		8056 Dec 21 16:47	0° $\mathbb{A}$	
minimum elong	8056 Jan 31 06:04	13° $\mathbb{A}$ 01'15	0°42'04	retrograde	8057 Jan 02 01:45	5° $\mathbb{A}$ 50'06	
morning rise	8056 Feb 05 21:08	7° $\mathbb{A}$ 03'47		evening set	8057 Jan 08 10:40	3° $\mathbb{A}$ 16'13	
direct	8056 Feb 09 07:41	5° $\mathbb{A}$ 55'46			8057 Jan 11 17:33	30° $\mathbb{R}$ $\mathbb{B}$	
morning max el	8056 Feb 16 08:18	9° $\mathbb{A}$ 48'32	19°15'57	min. Earth dist.	8057 Jan 12 13:50	29° $\mathbb{B}$ 00'54	0.66436 AU
greatest brilliancy	8056 Feb 29 11:42	27° $\mathbb{A}$ 16'56	-0.7m	inferior conj	8057 Jan 14 07:32	26° $\mathbb{B}$ 55'12	-0°14'24
	8056 Mar 02 06:59	0° $\mathbb{H}$		minimum elong	8057 Jan 14 07:55	26° $\mathbb{B}$ 54'02	0°14'05
desc. node	8056 Mar 03 23:28	2° $\mathbb{H}$ 33'47		transit middle	8057 Jan 14 07:55	26° $\mathbb{B}$ 54'02	0°14'05
morning set	8056 Mar 11 06:45	13° $\mathbb{H}$ 47'22		transit begin	8057 Jan 14 06:32	26° $\mathbb{B}$ 58'15	
	8056 Mar 21 16:52	0° $\mathbb{Y}$		transit end	8057 Jan 14 09:19	26° $\mathbb{B}$ 49'50	
max. Earth dist.	8056 Mar 24 14:22	4° $\mathbb{Y}$ 33'00	1.44977 AU	asc. node	8057 Jan 15 00:42	26° $\mathbb{B}$ 03'43	
superior conj	8056 Mar 27 21:37	9° $\mathbb{Y}$ 46'33	-2°06'03	morning rise	8057 Jan 20 06:00	21° $\mathbb{B}$ 11'20	
minimum elong	8056 Mar 27 16:16	9° $\mathbb{Y}$ 25'17	2°05'51	direct	8057 Jan 23 05:57	20° $\mathbb{B}$ 20'48	
	8056 Apr 09 09:34	0° $\mathbb{B}$		morning max el	8057 Jan 29 19:45	23° $\mathbb{B}$ 53'37	18°29'47
evening rise	8056 Apr 11 07:23	3° $\mathbb{B}$ 09'03			8057 Feb 03 21:42	0° $\mathbb{A}$	
asc. node	8056 Apr 26 02:33	26° $\mathbb{B}$ 46'16		desc. node	8057 Feb 18 20:23	22° $\mathbb{A}$ 55'19	
	8056 Apr 28 13:52	0° $\mathbb{I}$		morning set	8057 Feb 19 04:13	23° $\mathbb{A}$ 26'23	
evening max el	8056 Apr 30 15:12	2° $\mathbb{I}$ 16'48	18°22'08		8057 Feb 23 07:38	0° $\mathbb{H}$	
retrograde	8056 May 07 01:13	5° $\mathbb{I}$ 43'51		superior conj	8057 Mar 07 03:07	18° $\mathbb{H}$ 33'36	-1°40'49
evening set	8056 May 10 02:31	4° $\mathbb{I}$ 52'37		minimum elong	8057 Mar 06 17:32	17° $\mathbb{H}$ 56'05	1°39'53
	8056 May 15 11:00	30° $\mathbb{R}$ $\mathbb{B}$		max. Earth dist.	8057 Mar 07 09:04	18° $\mathbb{H}$ 56'53	1.45494 AU
inferior conj	8056 May 15 22:57	29° $\mathbb{B}$ 25'28	3°16'15		8057 Mar 14 10:19	0° $\mathbb{Y}$	
minimum elong	8056 May 16 00:19	29° $\mathbb{B}$ 21'30	3°15'59	evening rise	8057 Mar 22 21:51	13° $\mathbb{Y}$ 22'37	
min. Earth dist.	8056 May 18 06:53	26° $\mathbb{B}$ 43'54	0.64264 AU	greatest brilliancy	8057 Apr 01 03:56	27° $\mathbb{Y}$ 59'51	-0.8m
morning rise	8056 May 21 21:09	23° $\mathbb{B}$ 10'59			8057 Apr 02 10:51	0° $\mathbb{B}$	
direct	8056 May 28 14:19	20° $\mathbb{B}$ 28'11		asc. node	8057 Apr 12 23:38	14° $\mathbb{B}$ 41'14	
desc. node	8056 May 30 23:03	20° $\mathbb{B}$ 46'08		evening max el	8057 Apr 14 01:39	15° $\mathbb{B}$ 50'22	18°55'36
morning max el	8056 Jun 11 07:07	28° $\mathbb{B}$ 27'18	27°30'47	retrograde	8057 Apr 20 20:02	19° $\mathbb{B}$ 36'42	
	8056 Jun 12 18:46	0° $\mathbb{I}$		evening set	8057 Apr 24 04:42	18° $\mathbb{B}$ 31'20	
	8056 Jul 04 06:28	0° $\mathbb{B}$		inferior conj	8057 Apr 29 17:58	12° $\mathbb{B}$ 47'47	3°24'09
morning set	8056 Jul 16 10:28	22° $\mathbb{B}$ 06'02		minimum elong	8057 Apr 29 17:59	12° $\mathbb{B}$ 47'45	3°24'04
	8056 Jul 20 08:27	0° $\mathbb{A}$		min. Earth dist.	8057 May 01 10:30	10° $\mathbb{B}$ 40'14	0.65936 AU
max. Earth dist.	8056 Jul 21 05:36	1° $\mathbb{A}$ 49'34	1.33089 AU	morning rise	8057 May 05 06:44	6° $\mathbb{B}$ 30'01	
asc. node	8056 Jul 23 01:48	5° $\mathbb{A}$ 41'27		direct	8057 May 11 16:56	3° $\mathbb{B}$ 43'13	
				desc. node	8057 May 17 20:02	5° $\mathbb{B}$ 44'00	

morning max el	8057 May 24 17:42	11°  27'38	26°36'14	direct	8058 Apr 25 01:43	17°  28'06	
	8057 Jun 08 11:58	0°  II		desc. node	8058 May 04 17:00	22°  22'56	
	8057 Jun 26 20:25	0°  III		morning max el	8058 May 07 03:22	24°  42'14	25°20'00
morning set	8057 Jun 29 15:56	5°  III43'46			8058 May 11 21:57	0°  III	
max. Earth dist.	8057 Jul 03 19:06	13°  III43'48	1.34491 AU		8058 Jun 01 22:50	0°  II	
				morning set	8058 Jun 12 05:52	17°  II34'26	
superior conj	8057 Jul 08 11:08	22°  III41'46	-0°14'57	max. Earth dist.	8058 Jun 15 21:40	24°  II17'54	1.36338 AU
minimum elong	8057 Jul 08 11:58	22°  III46'06	0°14'56		8058 Jun 18 21:36	0°  III	
behind sun begin	8057 Jul 08 09:48	22°  III34'52					
behind sun end	8057 Jul 08 14:08	22°  III57'20		superior conj	8058 Jun 22 01:03	6°  III09'32	-0°46'23
asc. node	8057 Jul 09 22:47	25°  III47'04		minimum elong	8058 Jun 22 03:51	6°  III23'23	0°46'01
	8057 Jul 11 23:02	0°  III		asc. node	8058 Jun 26 19:47	15°  III47'42	
evening rise	8057 Jul 15 23:43	8°  III27'31		evening rise	8058 Jun 30 05:04	22°  III41'29	
	8057 Jul 27 11:15	0°  III			8058 Jul 03 21:00	0°  III	
evening max el	8057 Aug 04 05:52	9°  III59'10	21°03'11	evening max el	8058 Jul 17 14:35	21°  III08'59	19°48'14
desc. node	8057 Aug 13 19:07	15°  III37'26		retrograde	8058 Jul 27 17:00	26°  III07'43	
retrograde	8057 Aug 16 01:06	15°  III49'55		evening set	8058 Jul 29 13:38	25°  III58'20	
evening set	8057 Aug 18 07:32	15°  III37'47		desc. node	8058 Jul 31 16:13	25°  III26'32	
inferior conj	8057 Aug 27 13:38	11°  III40'40	-3°56'14	inferior conj	8058 Aug 07 11:47	21°  III56'51	-2°04'28
minimum elong	8057 Aug 27 04:11	11°  III54'01	3°53'32	minimum elong	8058 Aug 07 06:04	22°  III05'38	2°02'25
min. Earth dist.	8057 Aug 28 02:24	11°  III22'38	0.54693 AU	min. Earth dist.	8058 Aug 09 14:04	20°  III39'35	0.55273 AU
morning rise	8057 Sep 05 01:15	7°  III45'24		morning rise	8058 Aug 15 20:30	17°  III34'26	
direct	8057 Sep 08 20:31	7°  III14'23		direct	8058 Aug 20 10:22	16°  III48'11	
morning max el	8057 Sep 21 17:33	13°  III22'40	22°45'50	morning max el	8058 Sep 03 06:23	23°  III39'40	24°31'34
	8057 Oct 04 06:17	0°  III			8058 Sep 09 00:13	0°  III	
asc. node	8057 Oct 05 22:22	2°  III54'52		asc. node	8058 Sep 22 19:20	22°  III04'05	
morning set	8057 Oct 14 04:06	19°  III09'37			8058 Sep 26 18:21	0°  III	
	8057 Oct 19 05:36	0°  III		morning set	8058 Sep 28 15:51	3°  III59'17	
superior conj	8057 Oct 21 04:47	4°  III12'49	1°41'30	superior conj	8058 Oct 05 13:11	18°  III58'25	1°37'38
minimum elong	8057 Oct 21 04:37	4°  III11'58	1°41'34	minimum elong	8058 Oct 05 11:57	18°  III51'41	1°37'36
max. Earth dist.	8057 Oct 24 09:26	10°  III56'50	1.33862 AU	max. Earth dist.	8058 Oct 07 10:46	23°  III06'02	1.32681 AU
evening rise	8057 Oct 29 01:57	20°  III26'03			8058 Oct 10 16:30	0°  III	
	8057 Nov 03 03:04	0°  III		evening rise	8058 Oct 12 20:42	4°  III29'36	
desc. node	8057 Nov 09 17:59	11°  III27'30'02			8058 Oct 26 19:38	0°  III	
	8057 Nov 22 04:26	0°  III		desc. node	8058 Oct 27 15:03	1°  III27'54	
evening max el	8057 Dec 02 17:11	12°  III08'19	27°11'24	evening max el	8058 Nov 15 04:36	25°  III19'04	27°28'58
retrograde	8057 Dec 16 02:59	19°  III28'51			8058 Nov 21 01:51	0°  III	
evening set	8057 Dec 22 22:12	16°  III52'11		retrograde	8058 Nov 28 21:46	2°  III37'18	
min. Earth dist.	8057 Dec 26 19:40	13°  III10'47	0.65052 AU	evening set	8058 Dec 05 23:15	0°  III	
inferior conj	8057 Dec 29 01:04	10°  III34'25'9	-1°17'45		8058 Dec 06 02:45	30°  III	
minimum elong	8057 Dec 29 03:24	10°  III36'33	1°16'37	min. Earth dist.	8058 Dec 09 16:32	26°  III55'46	0.63342 AU
asc. node	8058 Jan 01 21:45	6°  III50'16		inferior conj	8058 Dec 12 09:03	24°  III14'54	-2°25'53
morning rise	8058 Jan 04 09:59	5°  III11'54		minimum elong	8058 Dec 12 13:37	24°  III03'27	2°23'58
direct	8058 Jan 07 01:14	4°  III35'09		morning rise	8058 Dec 19 05:54	18°  III59'29	
morning max el	8058 Jan 13 11:37	7°  III58'59	18°00'18	asc. node	8058 Dec 19 18:47	18°  III48'45	
	8058 Jan 28 13:06	0°  III		direct	8058 Dec 21 14:48	18°  III32'32	
morning set	8058 Jan 31 07:16	4°  III33'40		morning max el	8058 Dec 28 05:00	21°  III56'55	17°48'11
desc. node	8058 Feb 05 17:19	13°  III28'31			8059 Jan 03 10:10	0°  III	
				morning set	8059 Jan 13 12:30	16°  III57'07	
superior conj	8058 Feb 14 12:33	27°  III38'47	-1°00'32		8059 Jan 21 02:51	0°  III	
minimum elong	8058 Feb 14 05:31	27°  III10'53	0°59'32	desc. node	8059 Jan 23 14:17	4°  III09'30	
	8058 Feb 16 00:12	0°  III					
max. Earth dist.	8058 Feb 18 04:26	3°  III25'50	1.45266 AU	superior conj	8059 Jan 25 18:18	7°  III45'07	-0°15'44
evening rise	8058 Mar 02 16:36	22°  III52'31		minimum elong	8059 Jan 25 16:38	7°  III38'14	0°15'22
	8058 Mar 07 07:47	0°  III		behind sun begin	8059 Jan 25 13:49	7°  III26'38	
greatest brilliancy	8058 Mar 16 14:22	14°  III01'56	-0.7m	behind sun end	8059 Jan 25 19:27	7°  III49'50	
evening max el	8058 Mar 28 07:35	29°  III27'09	19°45'34	max. Earth dist.	8059 Jan 31 22:16	17°  III45'08	1.44331 AU
	8058 Mar 28 20:49	0°  III			8059 Feb 08 17:27	0°  III	
asc. node	8058 Mar 30 20:43	1°  III43'59		evening rise	8059 Feb 10 03:38	2°  III11'48	
retrograde	8058 Apr 04 17:53	3°  III43'27			8059 Feb 28 21:32	0°  III	
evening set	8058 Apr 08 10:43	2°  III23'25		evening max el	8059 Mar 11 08:11	13°  III05'56	20°49'33
	8058 Apr 10 23:47	30°  III		asc. node	8059 Mar 17 17:48	17°  III40'29	
inferior conj	8058 Apr 13 19:50	26°  III25'24	3°17'58	retrograde	8059 Mar 19 16:21	17°  III59'46	
minimum elong	8058 Apr 13 18:43	26°  III29'08	3°17'49	evening set	8059 Mar 23 18:33	16°  III24'38	
min. Earth dist.	8058 Apr 14 21:37	24°  III59'23	0.67186 AU	inferior conj	8059 Mar 29 02:00	10°  III14'17	3°00'17
morning rise	8058 Apr 19 02:25	20°  III07'55		minimum elong	8059 Mar 29 00:07	10°  III20'47	2°59'55

min. Earth dist.	8059 Mar 29 14:08	9° $\Upsilon$ 32'25	0.67996 AU	evening set	8060 Mar 07 02:28	0° $\Upsilon$ 30'39	
morning rise	8059 Apr 03 05:28	3° $\Upsilon$ 59'20			8060 Mar 07 16:29	30° $\Re$	
direct	8059 Apr 08 15:39	1° $\Upsilon$ 34'58		inferior conj	8060 Mar 12 10:18	24° $\Re$ 10'35	2°32'44
morning max el	8059 Apr 19 12:18	8° $\Upsilon$ 04'17	23°52'17	minimum elong	8060 Mar 12 08:03	24° $\Re$ 18'24	2°32'10
desc. node	8059 Apr 21 13:58	10° $\Upsilon$ 15'47		min. Earth dist.	8060 Mar 12 09:51	24° $\Re$ 12'08	0.68374 AU
	8059 May 06 16:04	0° $\Re$		morning rise	8060 Mar 17 13:29	17° $\Re$ 59'40	
morning set	8059 May 24 22:56	28° $\Re$ 54'02		direct	8060 Mar 22 09:37	15° $\Re$ 55'58	
	8059 May 25 14:18	0° $\Pi$		morning max el	8060 Mar 31 23:11	21° $\Re$ 33'30	22°22'59
max. Earth dist.	8059 May 28 17:53	5° $\Pi$ 30'04	1.38504 AU	desc. node	8060 Apr 07 10:57	29° $\Re$ 01'38	
					8060 Apr 08 05:15	0° $\Upsilon$	
superior conj	8059 Jun 05 02:20	18° $\Pi$ 58'29	-1°17'47		8060 Apr 28 22:51	0° $\Re$	
minimum elong	8059 Jun 05 07:04	19° $\Pi$ 20'55	1°17'11	morning set	8060 May 04 13:48	8° $\Re$ 58'39	
	8059 Jun 10 19:34	0° $\Re$		max. Earth dist.	8060 May 09 15:25	17° $\Re$ 22'58	1.40748 AU
asc. node	8059 Jun 13 16:50	5° $\Re$ 39'32			8060 May 16 21:41	0° $\Pi$	
evening rise	8059 Jun 14 03:33	6° $\Re$ 32'04					
	8059 Jun 27 18:47	0° $\Omega$		superior conj	8060 May 17 10:31	0° $\Pi$ 57'26	-1°45'51
evening max el	8059 Jun 30 11:47	3° $\Omega$ 03'22	18°53'47	minimum elong	8060 May 17 16:17	1° $\Pi$ 23'20	1°45'21
retrograde	8059 Jul 08 23:37	7° $\Omega$ 15'25		evening rise	8060 May 27 15:48	19° $\Pi$ 50'12	
evening set	8059 Jul 10 23:07	7° $\Omega$ 02'37		asc. node	8060 May 30 13:52	25° $\Pi$ 17'28	
desc. node	8059 Jul 18 13:16	3° $\Omega$ 09'52			8060 Jun 02 03:43	0° $\Re$	
inferior conj	8059 Jul 19 03:16	2° $\Omega$ 45'05	-0°10'36	evening max el	8060 Jun 12 18:00	15° $\Re$ 34'42	18°19'57
minimum elong	8059 Jul 19 02:50	2° $\Omega$ 45'52	0°10'33	retrograde	8060 Jun 20 01:39	19° $\Re$ 14'38	
transit middle	8059 Jul 19 02:50	2° $\Omega$ 45'52	0°10'33	evening set	8060 Jun 22 08:06	18° $\Re$ 54'21	
transit begin	8059 Jul 19 00:01	2° $\Omega$ 50'52		inferior conj	8060 Jun 29 16:27	14° $\Re$ 16'15	1°21'41
transit end	8059 Jul 19 05:39	2° $\Omega$ 40'51		minimum elong	8060 Jun 29 19:00	14° $\Re$ 10'56	1°20'41
min. Earth dist.	8059 Jul 22 05:19	0° $\Omega$ 34'14	0.56709 AU	min. Earth dist.	8060 Jul 03 01:58	11° $\Re$ 27'32	0.58711 AU
	8059 Jul 23 01:49	30° $\Re$		desc. node	8060 Jul 04 10:20	10° $\Re$ 26'08	
morning rise	8059 Jul 27 03:13	27° $\Re$ 46'14		morning rise	8060 Jul 07 02:40	8° $\Re$ 43'37	
direct	8059 Aug 01 13:45	26° $\Re$ 35'30		direct	8060 Jul 13 06:48	7° $\Re$ 02'04	
	8059 Aug 11 01:01	0° $\Omega$		morning max el	8060 Jul 27 16:02	14° $\Re$ 47'23	27°17'56
morning max el	8059 Aug 15 20:17	3° $\Omega$ 59'03	26°07'30		8060 Aug 08 22:13	0° $\Omega$	
	8059 Sep 03 13:58	0° $\Pi$			8060 Aug 25 20:54	0° $\Pi$	
asc. node	8059 Sep 09 16:19	11° $\Pi$ 36'18		asc. node	8060 Aug 26 13:19	1° $\Pi$ 24'52	
morning set	8059 Sep 13 02:48	18° $\Pi$ 44'18		morning set	8060 Aug 27 11:18	3° $\Pi$ 19'55	
	8059 Sep 18 06:51	0° $\Re$		max. Earth dist.	8060 Sep 03 04:43	17° $\Pi$ 58'11	1.31672 AU
superior conj	8059 Sep 20 00:15	3° $\Re$ 49'07	1°28'05	superior conj	8060 Sep 03 12:05	18° $\Pi$ 39'06	1°13'21
minimum elong	8059 Sep 19 22:18	3° $\Re$ 38'19	1°27'53	minimum elong	8060 Sep 03 09:50	18° $\Pi$ 26'37	1°12'59
max. Earth dist.	8059 Sep 20 18:20	5° $\Re$ 29'04	1.31953 AU		8060 Sep 08 15:41	0° $\Re$	
evening rise	8059 Sep 26 23:08	18° $\Re$ 53'18		evening rise	8060 Sep 10 06:44	3° $\Re$ 29'46	
	8059 Oct 02 11:56	0° $\Pi$			8060 Sep 24 08:13	0° $\Pi$	
desc. node	8059 Oct 14 12:08	20° $\Pi$ 32'34		desc. node	8060 Sep 30 09:13	9° $\Pi$ 01'02	
	8059 Oct 21 08:34	0° $\Re$		evening max el	8060 Oct 09 13:06	19° $\Pi$ 41'41	26°26'41
evening max el	8059 Oct 28 12:12	7° $\Re$ 54'01	27°14'47	retrograde	8060 Oct 23 11:04	26° $\Pi$ 47'42	
retrograde	8059 Nov 11 08:50	15° $\Re$ 05'57		evening set	8060 Oct 30 02:57	24° $\Pi$ 58'40	
evening set	8059 Nov 18 10:18	12° $\Re$ 50'41		min. Earth dist.	8060 Nov 03 02:30	22° $\Pi$ 24'01	0.59298 AU
min. Earth dist.	8059 Nov 22 02:54	10° $\Re$ 04'18	0.61381 AU	inferior conj	8060 Nov 06 07:19	19° $\Pi$ 56'34	-4°38'29
inferior conj	8059 Nov 25 04:17	7° $\Re$ 22'32	-3°35'10	minimum elong	8060 Nov 06 14:27	19° $\Pi$ 42'50	4°36'43
minimum elong	8059 Nov 25 10:53	7° $\Re$ 07'58	3°32'54	morning rise	8060 Nov 14 04:16	15° $\Pi$ 22'21	
morning rise	8059 Dec 02 13:41	2° $\Re$ 26'08		direct	8060 Nov 16 10:16	15° $\Pi$ 04'33	
direct	8059 Dec 04 19:13	2° $\Re$ 05'21		asc. node	8060 Nov 22 12:51	17° $\Pi$ 24'09	
asc. node	8059 Dec 06 15:50	2° $\Re$ 20'18		morning max el	8060 Nov 24 06:59	18° $\Pi$ 55'27	18°20'06
morning max el	8059 Dec 11 20:35	5° $\Re$ 38'38	17°54'19		8060 Dec 02 09:17	0° $\Re$	
	8059 Dec 27 09:44	0° $\Re$		morning set	8060 Dec 10 03:36	14° $\Re$ 12'40	
morning set	8059 Dec 27 13:12	0° $\Re$ 15'49			8060 Dec 18 12:24	0° $\Re$	
superior conj	8060 Jan 07 01:48	19° $\Re$ 05'25	0°24'53	superior conj	8060 Dec 19 08:35	1° $\Re$ 32'36	0°57'08
minimum elong	8060 Jan 07 03:54	19° $\Re$ 14'32	0°24'43	minimum elong	8060 Dec 19 12:00	1° $\Re$ 48'15	0°56'49
desc. node	8060 Jan 10 11:17	24° $\Re$ 54'14		max. Earth dist.	8060 Dec 26 22:16	14° $\Re$ 56'44	1.40826 AU
	8060 Jan 13 12:24	0° $\Re$		desc. node	8060 Dec 27 08:17	15° $\Re$ 39'29	
max. Earth dist.	8060 Jan 14 12:38	1° $\Re$ 39'54	1.42793 AU	evening rise	8060 Dec 31 11:40	22° $\Re$ 35'06	
evening rise	8060 Jan 20 22:20	11° $\Re$ 57'40			8061 Jan 05 02:08	0° $\Re$	
	8060 Feb 01 18:58	0° $\Re$			8061 Jan 25 19:37	0° $\Re$	
evening max el	8060 Feb 22 03:35	26° $\Re$ 46'12	22°03'51	evening max el	8061 Feb 03 19:00	10° $\Re$ 29'11	23°23'25
	8060 Feb 25 19:01	0° $\Upsilon$		retrograde	8061 Feb 14 08:20	16° $\Re$ 43'38	
retrograde	8060 Mar 02 13:38	2° $\Upsilon$ 21'06		asc. node	8061 Feb 18 11:58	15° $\Re$ 18'52	
asc. node	8060 Mar 03 14:54	2° $\Upsilon$ 15'27		evening set	8061 Feb 19 08:59	14° $\Re$ 38'18	

inferior conj	8061 Feb 24 18:50	8° $\text{K}$ 11'50	1°56'20		8062 Feb 01 17:06	30° $\text{R}$	
minimum elong	8061 Feb 24 16:40	8° $\text{K}$ 19'17	1°55'40	evening set	8062 Feb 03 12:30	28° $\text{R}$ 43'04	
min. Earth dist.	8061 Feb 24 06:35	8° $\text{K}$ 53'57	0.68334 AU	asc. node	8062 Feb 05 09:03	26° $\text{R}$ 53'34	
morning rise	8061 Mar 02 00:20	2° $\text{K}$ 06'14		min. Earth dist.	8062 Feb 08 02:06	23° $\text{R}$ 32'59	0.67890 AU
direct	8061 Mar 06 06:32	0° $\text{K}$ 25'07		inferior conj	8062 Feb 09 01:45	22° $\text{R}$ 14'29	1°11'39
morning max el	8061 Mar 14 15:37	5° $\text{K}$ 13'58	21°00'16	minimum elong	8062 Feb 09 00:09	22° $\text{R}$ 19'47	1°11'08
desc. node	8061 Mar 25 07:55	18° $\text{K}$ 26'10		morning rise	8062 Feb 14 12:00	16° $\text{R}$ 15'37	
	8061 Apr 02 08:42	0° $\text{Y}$		direct	8062 Feb 18 05:14	14° $\text{R}$ 56'19	
morning set	8061 Apr 14 01:52	17° $\text{Y}$ 50'53		morning max el	8062 Feb 25 15:45	19° $\text{R}$ 06'25	19°49'41
	8061 Apr 21 16:38	0° $\text{B}$			8062 Mar 06 10:53	0° $\text{K}$	
max. Earth dist.	8061 Apr 21 19:18	0° $\text{B}$ 10'51	1.42781 AU	greatest brilliancy	8062 Mar 10 13:38	5° $\text{K}$ 54'08	-0.6m
				desc. node	8062 Mar 12 04:52	8° $\text{K}$ 18'35	
superior conj	8061 Apr 28 20:56	11° $\text{B}$ 56'17	-2°05'44	morning set	8062 Mar 23 23:23	26° $\text{K}$ 09'07	
minimum elong	8061 Apr 29 01:10	12° $\text{B}$ 14'16	2°05'39		8062 Mar 26 11:09	0° $\text{Y}$	
	8061 May 09 04:58	0° $\text{II}$		max. Earth dist.	8062 Apr 04 06:05	13° $\text{Y}$ 47'03	1.44349 AU
evening rise	8061 May 10 13:43	2° $\text{II}$ 26'26					
asc. node	8061 May 17 10:55	14° $\text{II}$ 36'20		superior conj	8062 Apr 09 06:38	21° $\text{Y}$ 50'36	-2°11'25
evening max el	8061 May 27 05:26	28° $\text{II}$ 33'42	18°05'55	minimum elong	8062 Apr 09 05:24	21° $\text{Y}$ 45'39	2°11'28
	8061 May 28 20:43	0° $\text{B}$			8062 Apr 14 06:12	0° $\text{B}$	
retrograde	8061 Jun 02 20:37	1° $\text{B}$ 57'24		evening rise	8062 Apr 22 16:39	14° $\text{B}$ 10'59	
evening set	8061 Jun 05 10:29	1° $\text{B}$ 26'38			8062 May 02 02:30	0° $\text{II}$	
	8061 Jun 08 00:24	30° $\text{R}$ $\text{II}$		asc. node	8062 May 04 07:59	3° $\text{II}$ 29'52	
inferior conj	8061 Jun 12 01:45	26° $\text{II}$ 28'23	2°25'38	evening max el	8062 May 10 18:46	11° $\text{II}$ 52'17	18°10'58
minimum elong	8061 Jun 12 04:47	26° $\text{II}$ 21'03	2°24'43	retrograde	8062 May 17 04:03	15° $\text{II}$ 14'18	
min. Earth dist.	8061 Jun 15 06:22	23° $\text{II}$ 24'34	0.60947 AU	evening set	8062 May 20 01:07	14° $\text{II}$ 31'04	
morning rise	8061 Jun 18 20:40	20° $\text{II}$ 31'34		inferior conj	8062 May 26 03:19	9° $\text{II}$ 14'13	3°03'52
desc. node	8061 Jun 21 07:24	19° $\text{II}$ 11'52		minimum elong	8062 May 26 05:26	9° $\text{II}$ 08'24	3°03'24
direct	8061 Jun 25 11:48	18° $\text{II}$ 19'25		min. Earth dist.	8062 May 28 19:51	6° $\text{II}$ 18'42	0.63123 AU
morning max el	8061 Jul 09 18:39	26° $\text{II}$ 18'18	27°52'34	morning rise	8062 Jun 01 08:16	3° $\text{II}$ 03'46	
	8061 Jul 13 05:34	0° $\text{B}$		direct	8062 Jun 08 02:49	0° $\text{II}$ 28'31	
	8061 Aug 02 11:49	0° $\text{Q}$		desc. node	8062 Jun 08 04:25	0° $\text{II}$ 28'32	
morning set	8061 Aug 11 15:26	17° $\text{Q}$ 39'53		morning max el	8062 Jun 22 02:22	8° $\text{II}$ 31'34	27°48'54
asc. node	8061 Aug 13 10:16	21° $\text{Q}$ 23'40			8062 Jul 08 16:16	0° $\text{B}$	
	8061 Aug 17 10:08	0° $\text{M}$			8062 Jul 25 17:24	0° $\text{Q}$	
max. Earth dist.	8061 Aug 17 13:56	0° $\text{M}$ 20'49	1.31844 AU	morning set	8062 Jul 26 13:03	1° $\text{Q}$ 38'12	
				asc. node	8062 Jul 31 07:15	11° $\text{Q}$ 28'23	
superior conj	8061 Aug 18 22:52	3° $\text{M}$ 21'48	0°53'51	max. Earth dist.	8062 Jul 31 17:58	12° $\text{Q}$ 25'22	1.32489 AU
minimum elong	8061 Aug 18 20:48	3° $\text{M}$ 10'24	0°53'24				
evening rise	8061 Aug 25 17:17	18° $\text{M}$ 11'35		superior conj	8062 Aug 03 06:47	17° $\text{Q}$ 52'09	0°29'59
	8061 Aug 31 11:14	0° $\text{Q}$		minimum elong	8062 Aug 03 05:25	17° $\text{Q}$ 44'45	0°29'35
desc. node	8061 Sep 17 06:19	26° $\text{Q}$ 24'06			8062 Aug 08 20:39	0° $\text{M}$	
	8061 Sep 20 14:11	0° $\text{M}$		evening rise	8062 Aug 10 04:56	2° $\text{M}$ 53'20	
evening max el	8061 Sep 21 05:46	0° $\text{M}$ 37'54	25°08'38		8062 Aug 24 20:10	0° $\text{Q}$	
retrograde	8061 Oct 05 02:57	7° $\text{M}$ 38'22		evening max el	8062 Sep 02 17:17	10° $\text{Q}$ 57'53	23°32'24
evening set	8061 Oct 10 20:20	6° $\text{M}$ 23'43		desc. node	8062 Sep 04 03:23	12° $\text{Q}$ 16'32	
min. Earth dist.	8061 Oct 15 17:17	3° $\text{M}$ 42'43	0.57300 AU	retrograde	8062 Sep 16 06:41	17° $\text{Q}$ 44'59	
inferior conj	8061 Oct 18 14:53	1° $\text{M}$ 46'36	-5°23'16	evening set	8062 Sep 20 13:40	17° $\text{Q}$ 04'41	
minimum elong	8061 Oct 18 19:11	1° $\text{M}$ 39'23	5°22'44	min. Earth dist.	8062 Sep 27 03:14	13° $\text{Q}$ 58'40	0.55694 AU
	8061 Oct 21 09:03	30° $\text{R}$ $\text{Q}$		inferior conj	8062 Sep 29 02:17	12° $\text{Q}$ 48'48	-5°31'15
morning rise	8061 Oct 26 20:21	27° $\text{Q}$ 35'25		minimum elong	8062 Sep 28 23:48	12° $\text{Q}$ 52'31	5°31'05
direct	8061 Oct 29 07:22	27° $\text{Q}$ 17'48		morning rise	8062 Oct 07 12:06	8° $\text{Q}$ 55'28	
	8061 Nov 05 11:34	0° $\text{M}$		direct	8062 Oct 10 08:57	8° $\text{Q}$ 35'13	
morning max el	8061 Nov 07 08:30	1° $\text{M}$ 36'15	19°07'12	morning max el	8062 Oct 20 21:59	13° $\text{Q}$ 31'43	20°16'43
asc. node	8061 Nov 09 09:52	3° $\text{M}$ 46'43		asc. node	8062 Oct 27 06:51	21° $\text{Q}$ 12'42	
morning set	8061 Nov 24 03:17	28° $\text{M}$ 34'07			8062 Nov 01 14:56	0° $\text{M}$	
	8061 Nov 24 20:35	0° $\text{X}$		morning set	8062 Nov 08 09:09	13° $\text{M}$ 11'33	
superior conj	8061 Dec 02 09:28	14° $\text{X}$ 51'03	1°20'07	superior conj	8062 Nov 15 23:38	28° $\text{M}$ 47'06	1°34'23
minimum elong	8061 Dec 02 12:32	15° $\text{X}$ 05'50	1°19'55	minimum elong	8062 Nov 16 01:34	28° $\text{M}$ 56'50	1°34'22
max. Earth dist.	8061 Dec 09 04:02	27° $\text{X}$ 29'25	1.38666 AU		8062 Nov 16 14:07	0° $\text{X}$	
	8061 Dec 10 13:43	0° $\text{B}$		max. Earth dist.	8062 Nov 21 10:28	9° $\text{X}$ 30'24	1.36570 AU
evening rise	8061 Dec 12 22:57	4° $\text{B}$ 10'36		evening rise	8062 Nov 25 06:35	16° $\text{X}$ 40'16	
desc. node	8061 Dec 14 05:17	6° $\text{B}$ 20'54		desc. node	8062 Dec 01 02:17	26° $\text{X}$ 54'38	
	8061 Dec 29 04:46	0° $\text{R}$			8062 Dec 02 22:31	0° $\text{B}$	
evening max el	8062 Jan 17 08:19	24° $\text{R}$ 14'46	24°42'17		8062 Dec 23 15:24	0° $\text{R}$	
	8062 Jan 24 21:12	0° $\text{K}$		evening max el	8062 Dec 30 21:19	8° $\text{R}$ 01'34	25°53'21
retrograde	8062 Jan 28 23:20	1° $\text{K}$ 01'48		retrograde	8063 Jan 12 09:32	15° $\text{R}$ 10'00	



evening set	8063 Jan 18 11:21	12° $\approx$ 40'38		retrograde	8063 Dec 26 14:11	29° $\approx$ 01'56	
min. Earth dist.	8063 Jan 22 18:10	8° $\approx$ 05'03	0.67070 AU	evening set	8064 Jan 02 03:41	26° $\approx$ 26'24	
asc. node	8063 Jan 23 06:08	7° $\approx$ 27'39		min. Earth dist.	8064 Jan 06 04:27	22° $\approx$ 25'24	0.65888 AU
inferior conj	8063 Jan 24 05:09	6° $\approx$ 15'05	0°19'09	inferior conj	8064 Jan 08 03:01	20° $\approx$ 09'39	-0°40'30
minimum elong	8063 Jan 24 04:39	6° $\approx$ 16'38	0°19'04	minimum elong	8064 Jan 08 04:10	20° $\approx$ 06'18	0°39'52
morning rise	8063 Jan 29 22:31	0° $\approx$ 24'50		asc. node	8064 Jan 10 03:11	17° $\approx$ 53'32	
	8063 Jan 30 16:43	30° $\approx$ 32		morning rise	8064 Jan 14 05:40	14° $\approx$ 30'33	
direct	8063 Feb 02 04:15	29° $\approx$ 24'48		direct	8064 Jan 17 01:42	13° $\approx$ 46'16	
	8063 Feb 04 17:41	0° $\approx$		morning max el	8064 Jan 23 13:06	17° $\approx$ 14'05	18°15'06
morning max el	8063 Feb 08 23:28	3° $\approx$ 08'00	18°54'10		8064 Feb 02 01:59	0° $\approx$	
desc. node	8063 Feb 27 01:47	28° $\approx$ 31'04		morning set	8064 Feb 11 16:32	15° $\approx$ 20'14	
	8063 Feb 28 00:40	0° $\approx$		desc. node	8064 Feb 13 22:43	18° $\approx$ 58'20	
morning set	8063 Mar 03 06:23	5° $\approx$ 02'34			8064 Feb 20 20:25	0° $\approx$	
max. Earth dist.	8063 Mar 17 22:16	27° $\approx$ 56'58	1.45285 AU				
	8063 Mar 19 05:36	0° $\approx$		superior conj	8064 Feb 26 23:40	9° $\approx$ 40'43	-1°24'59
				minimum elong	8064 Feb 26 14:26	9° $\approx$ 04'28	1°23'54
superior conj	8063 Mar 19 18:51	0° $\approx$ 52'04	-1°57'42	max. Earth dist.	8064 Feb 28 17:51	12° $\approx$ 26'08	1.45495 AU
minimum elong	8063 Mar 19 10:56	0° $\approx$ 20'59	1°57'10		8064 Mar 10 23:47	0° $\approx$	
evening rise	8063 Apr 03 20:37	24° $\approx$ 56'27		evening rise	8064 Mar 14 01:49	4° $\approx$ 48'54	
	8063 Apr 06 23:24	0° $\approx$		greatest brilliancy	8064 Mar 25 11:50	22° $\approx$ 32'05	-0.7m
asc. node	8063 Apr 21 05:03	21° $\approx$ 49'06			8064 Mar 30 12:44	0° $\approx$	
evening max el	8063 Apr 24 07:00	25° $\approx$ 22'11	18°34'20	evening max el	8064 Apr 06 15:50	8° $\approx$ 58'02	19°14'58
retrograde	8063 Apr 30 19:37	28° $\approx$ 55'54		asc. node	8064 Apr 07 02:08	9° $\approx$ 23'37	
evening set	8063 May 03 23:58	27° $\approx$ 58'50		retrograde	8064 Apr 13 15:58	12° $\approx$ 55'26	
inferior conj	8063 May 09 16:59	22° $\approx$ 24'47	3°21'30	evening set	8064 Apr 17 04:05	11° $\approx$ 43'46	
minimum elong	8063 May 09 17:45	22° $\approx$ 22'27	3°21'21	inferior conj	8064 Apr 22 15:16	5° $\approx$ 53'59	3°23'03
min. Earth dist.	8063 May 11 18:29	19° $\approx$ 56'07	0.65025 AU	minimum elong	8064 Apr 22 14:46	5° $\approx$ 55'37	3°22'56
morning rise	8063 May 15 10:45	16° $\approx$ 08'25		min. Earth dist.	8064 Apr 24 01:24	4° $\approx$ 03'36	0.66532 AU
direct	8063 May 22 01:42	13° $\approx$ 22'04			8064 Apr 27 14:45	30° $\approx$ 39	
desc. node	8063 May 26 01:26	14° $\approx$ 13'24		morning rise	8064 Apr 28 01:03	29° $\approx$ 36'15	
morning max el	8063 Jun 04 12:22	21° $\approx$ 16'58	27°10'45	direct	8064 May 04 07:07	26° $\approx$ 51'12	
	8063 Jun 12 01:44	0° $\approx$		desc. node	8064 May 11 22:25	29° $\approx$ 57'55	
	8063 Jul 01 20:12	0° $\approx$			8064 May 11 23:32	0° $\approx$	
morning set	8063 Jul 10 01:21	15° $\approx$ 06'25		morning max el	8064 May 16 22:31	4° $\approx$ 23'46	26°05'45
max. Earth dist.	8063 Jul 14 13:14	24° $\approx$ 03'07	1.33624 AU		8064 Jun 05 11:42	0° $\approx$	
	8063 Jul 17 10:15	0° $\approx$		morning set	8064 Jun 22 00:43	27° $\approx$ 15'43	
					8064 Jun 23 03:33	0° $\approx$	
superior conj	8063 Jul 18 09:45	2° $\approx$ 03'32	0°02'21	max. Earth dist.	8064 Jun 25 21:51	5° $\approx$ 16'04	1.35234 AU
minimum elong	8063 Jul 18 09:38	2° $\approx$ 02'57	0°02'11				
behind sun begin	8063 Jul 18 04:06	1° $\approx$ 33'45		superior conj	8064 Jul 01 05:19	15° $\approx$ 49'28	-0°28'09
behind sun end	8063 Jul 18 15:11	2° $\approx$ 32'12		minimum elong	8064 Jul 01 06:57	15° $\approx$ 57'46	0°27'58
asc. node	8063 Jul 18 04:14	1° $\approx$ 34'25		asc. node	8064 Jul 04 01:14	21° $\approx$ 38'10	
evening rise	8063 Jul 25 15:46	17° $\approx$ 28'56			8064 Jul 08 01:58	0° $\approx$	
	8063 Jul 31 20:35	0° $\approx$		evening rise	8064 Jul 08 23:47	1° $\approx$ 52'44	
evening max el	8063 Aug 15 07:41	21° $\approx$ 13'51	21°54'29		8064 Jul 25 12:18	0° $\approx$	
desc. node	8063 Aug 22 00:28	26° $\approx$ 06'49		evening max el	8064 Jul 27 08:43	1° $\approx$ 58'30	20°28'50
retrograde	8063 Aug 27 22:30	27° $\approx$ 29'45		retrograde	8064 Aug 07 10:38	7° $\approx$ 27'00	
evening set	8063 Aug 30 18:53	27° $\approx$ 11'36		desc. node	8064 Aug 07 21:34	7° $\approx$ 26'29	
inferior conj	8063 Sep 08 22:28	23° $\approx$ 11'18	-4°46'10	evening set	8064 Aug 09 11:05	7° $\approx$ 16'53	
minimum elong	8063 Sep 08 13:43	23° $\approx$ 23'32	4°44'19	inferior conj	8064 Aug 18 15:34	3° $\approx$ 19'39	-3°11'11
min. Earth dist.	8063 Sep 08 11:48	23° $\approx$ 26'14	0.54798 AU	minimum elong	8064 Aug 18 07:07	3° $\approx$ 31'52	3°08'24
morning rise	8063 Sep 17 09:53	19° $\approx$ 22'23		min. Earth dist.	8064 Aug 19 21:26	2° $\approx$ 36'25	0.54827 AU
direct	8063 Sep 20 20:27	18° $\approx$ 56'19			8064 Aug 24 23:41	30° $\approx$ 30	
morning max el	8063 Oct 02 22:32	24° $\approx$ 38'02	21°47'04	morning rise	8064 Aug 27 02:36	29° $\approx$ 15'15	
	8063 Oct 07 19:01	0° $\approx$		direct	8064 Aug 31 05:38	28° $\approx$ 38'42	
asc. node	8063 Oct 14 03:49	9° $\approx$ 27'42			8064 Sep 06 06:25	0° $\approx$	
morning set	8063 Oct 23 18:49	27° $\approx$ 58'12		morning max el	8064 Sep 13 13:37	5° $\approx$ 05'43	23°31'03
	8063 Oct 24 18:01	0° $\approx$		asc. node	8064 Sep 30 00:47	28° $\approx$ 19'57	
					8064 Sep 30 22:09	0° $\approx$	
superior conj	8063 Oct 30 23:12	13° $\approx$ 09'18	1°40'53	morning set	8064 Oct 07 06:18	12° $\approx$ 48'12	
minimum elong	8063 Oct 30 23:47	13° $\approx$ 12'20	1°40'59				
max. Earth dist.	8063 Nov 03 23:05	21° $\approx$ 23'29	1.34740 AU	superior conj	8064 Oct 14 05:05	27° $\approx$ 48'18	1°40'35
evening rise	8063 Nov 08 06:50	29° $\approx$ 54'19		minimum elong	8064 Oct 14 04:26	27° $\approx$ 44'47	1°40'38
	8063 Nov 08 08:01	0° $\approx$			8064 Oct 15 05:34	0° $\approx$	
desc. node	8063 Nov 17 23:20	17° $\approx$ 15'58		max. Earth dist.	8064 Oct 16 20:08	3° $\approx$ 25'36	1.33303 AU
	8063 Nov 26 01:17	0° $\approx$		evening rise	8064 Oct 21 19:48	13° $\approx$ 42'08	
evening max el	8063 Dec 13 10:42	21° $\approx$ 43'47	26°49'11		8064 Oct 30 12:32	0° $\approx$	

desc. node	8064 Nov 03 20:24	7°♊18'17		desc. node	8065 Oct 21 17:30	26°♎53'38	
	8064 Nov 20 01:56	0°♊			8065 Oct 23 18:21	0°♊	
evening max el	8064 Nov 24 23:21	5°♊09'25	27°22'33	evening max el	8065 Nov 07 09:19	18°♊05'50	27°26'59
retrograde	8064 Dec 08 12:30	12°♊28'50		retrograde	8065 Nov 21 04:03	25°♊21'44	
evening set	8064 Dec 15 11:07	9°♊53'33		evening set	8065 Nov 28 06:42	22°♊55'43	
min. Earth dist.	8064 Dec 19 06:38	6°♊25'56	0.64362 AU	min. Earth dist.	8065 Dec 01 22:56	19°♊57'00	0.62535 AU
inferior conj	8064 Dec 21 16:51	3°♊51'34	-1°46'10	inferior conj	8065 Dec 04 19:48	17°♊13'51	-2°55'26
minimum elong	8064 Dec 21 20:07	3°♊42'54	1°44'41	minimum elong	8065 Dec 05 01:19	17°♊00'45	2°53'16
	8064 Dec 25 17:33	30°♊		morning rise	8065 Dec 11 22:02	12°♊06'26	
asc. node	8064 Dec 27 00:14	29°♊06'15		asc. node	8065 Dec 13 21:15	11°♊43'00	
morning rise	8064 Dec 28 06:41	28°♊26'40		direct	8065 Dec 14 05:09	11°♊42'30	
direct	8064 Dec 30 19:02	27°♊54'24		morning max el	8065 Dec 20 23:03	15°♊09'18	17°48'34
	8065 Jan 04 19:39	0°♊			8065 Dec 31 06:56	0°♊	
morning max el	8065 Jan 06 06:00	1°♊17'05	17°53'02	morning set	8066 Jan 05 21:50	9°♊51'46	
morning set	8065 Jan 23 07:35	27°♊02'51					
	8065 Jan 25 01:38	0°♊		superior conj	8066 Jan 17 09:02	29°♊46'10	0°02'21
desc. node	8065 Jan 30 19:40	9°♊35'19		minimum elong	8066 Jan 17 09:16	29°♊47'13	0°02'27
				behind sun begin	8066 Jan 17 00:23	29°♊09'45	
superior conj	8065 Feb 05 16:21	19°♊08'14	-0°41'29	behind sun end	8066 Jan 17 18:10	0°♊24'36	
minimum elong	8065 Feb 05 11:36	18°♊49'05	0°40'42	desc. node	8066 Jan 17 16:41	0°♊18'21	
max. Earth dist.	8065 Feb 10 13:33	26°♊55'26	1.44958 AU		8066 Jan 17 12:19	0°♊	
	8065 Feb 12 12:24	0°♊		max. Earth dist.	8066 Jan 24 06:08	11°♊06'01	1.43741 AU
evening rise	8065 Feb 21 15:35	14°♊10'19		evening rise	8066 Feb 01 04:05	23°♊36'19	
	8065 Mar 04 01:55	0°♊			8066 Feb 05 08:04	0°♊	
greatest brilliancy	8065 Mar 08 10:50	6°♊27'52	-0.6m		8066 Feb 26 08:02	0°♊	
evening max el	8065 Mar 20 19:36	22°♊35'48	20°11'09	evening max el	8066 Mar 03 17:47	6°♊14'33	21°20'02
asc. node	8065 Mar 24 23:14	26°♊00'08		asc. node	8066 Mar 11 20:20	11°♊23'45	
retrograde	8065 Mar 28 14:23	27°♊07'06		retrograde	8066 Mar 12 12:42	11°♊26'09	
evening set	8065 Apr 01 11:09	25°♊40'26		evening set	8066 Mar 16 19:15	9°♊44'24	
inferior conj	8065 Apr 06 19:16	19°♊36'43	3°11'45	inferior conj	8066 Mar 22 02:37	3°♊29'14	2°49'44
minimum elong	8065 Apr 06 17:47	19°♊41'46	3°11'30	minimum elong	8066 Mar 22 00:32	3°♊36'30	2°49'16
min. Earth dist.	8065 Apr 07 15:00	18°♊29'45	0.67592 AU	min. Earth dist.	8066 Mar 22 09:13	3°♊06'17	0.68210 AU
morning rise	8065 Apr 12 00:12	13°♊20'16			8066 Mar 24 16:54	30°♊	
direct	8065 Apr 17 18:03	10°♊46'29		morning rise	8066 Mar 27 05:38	27°♊15'43	
desc. node	8065 Apr 28 19:23	17°♊11'11		direct	8066 Apr 01 09:44	24°♊59'57	
morning max el	8065 Apr 29 07:52	17°♊42'24	24°43'28		8066 Apr 10 13:35	0°♊	
	8065 May 09 14:41	0°♊		morning max el	8066 Apr 11 17:25	1°♊07'56	23°13'54
	8065 May 29 12:30	0°♊		desc. node	8066 Apr 15 16:21	5°♊28'40	
morning set	8065 Jun 04 06:30	9°♊51'19			8066 May 03 12:58	0°♊	
max. Earth dist.	8065 Jun 07 21:23	16°♊21'27	1.37238 AU	morning set	8066 May 16 13:02	20°♊40'35	
				max. Earth dist.	8066 May 20 17:19	27°♊47'48	1.39464 AU
superior conj	8065 Jun 14 14:21	29°♊01'52	-0°59'53		8066 May 21 23:38	0°♊	
minimum elong	8065 Jun 14 18:01	29°♊19'41	0°59'23				
	8065 Jun 15 02:16	0°♊		superior conj	8066 May 28 08:55	11°♊30'31	-1°30'20
asc. node	8065 Jun 20 22:17	11°♊35'45		minimum elong	8066 May 28 14:18	11°♊55'24	1°29'45
evening rise	8065 Jun 23 02:37	15°♊58'04		evening rise	8066 Jun 06 21:15	29°♊36'02	
	8065 Jun 30 10:38	0°♊			8066 Jun 07 02:14	0°♊	
evening max el	8065 Jul 09 23:00	13°♊27'24	19°22'28	asc. node	8066 Jun 07 19:20	1°♊22'09	
retrograde	8065 Jul 19 08:11	18°♊05'23		evening max el	8066 Jun 23 00:27	25°♊38'16	18°36'53
evening set	8065 Jul 21 05:02	17°♊55'08		retrograde	8066 Jun 30 23:07	29°♊35'02	
desc. node	8065 Jul 25 18:39	16°♊14'46		evening set	8066 Jul 03 01:10	29°♊19'38	
inferior conj	8065 Jul 29 20:08	13°♊47'21	-1°14'34	inferior conj	8066 Jul 10 20:48	24°♊53'41	0°31'55
minimum elong	8065 Jul 29 16:48	13°♊52'48	1°13'24	minimum elong	8066 Jul 10 21:58	24°♊51'26	0°31'20
min. Earth dist.	8065 Aug 01 10:19	12°♊06'17	0.55789 AU	desc. node	8066 Jul 12 15:44	23°♊31'28	
morning rise	8065 Aug 07 01:53	9°♊09'55		min. Earth dist.	8066 Jul 14 03:55	22°♊23'57	0.57504 AU
direct	8065 Aug 12 00:20	8°♊14'39		morning rise	8066 Jul 18 15:15	19°♊39'07	
morning max el	8065 Aug 26 02:19	15°♊20'48	25°14'46	direct	8066 Jul 24 09:43	18°♊15'40	
	8065 Sep 06 19:56	0°♊		morning max el	8066 Aug 07 18:35	25°♊50'34	26°41'24
asc. node	8065 Sep 16 21:46	17°♊40'07			8066 Aug 11 16:19	0°♊	
morning set	8065 Sep 21 17:56	27°♊36'59			8066 Aug 31 02:07	0°♊	
	8065 Sep 22 20:38	0°♊		asc. node	8066 Sep 03 18:46	7°♊19'48	
				morning set	8066 Sep 06 04:02	12°♊18'24	
superior conj	8065 Sep 28 14:53	12°♊37'05	1°34'15				
minimum elong	8065 Sep 28 13:18	12°♊28'22	1°34'09	superior conj	8066 Sep 13 02:29	27°♊28'03	1°22'27
max. Earth dist.	8065 Sep 30 00:37	15°♊42'00	1.32311 AU	minimum elong	8066 Sep 13 00:21	27°♊16'13	1°22'10
evening rise	8065 Oct 05 18:10	27°♊55'13		max. Earth dist.	8066 Sep 13 09:39	28°♊07'44	1.31772 AU
	8065 Oct 06 18:31	0°♊			8066 Sep 14 05:55	0°♊	

evening rise	8066 Sep 19 23:02	12° $\Omega$ 24'39		minimum elong	8067 Aug 28 11:52	12° $\Pi$ 03'11	1°05'13
	8066 Sep 28 21:41	0° $\mathbb{M}$		evening rise	8067 Sep 04 08:07	27° $\Pi$ 03'57	
desc. node	8066 Oct 08 14:35	15° $\mathbb{M}$ 50'20			8067 Sep 05 17:22	0° $\Omega$	
	8066 Oct 20 05:30	0° $\mathbb{A}$			8067 Sep 22 14:57	0° $\mathbb{M}$	
evening max el	8066 Oct 20 14:07	0° $\mathbb{A}$ 20'33	26°58'22	desc. node	8067 Sep 25 11:40	3° $\mathbb{M}$ 53'19	
retrograde	8066 Nov 03 11:51	7° $\mathbb{A}$ 30'47		evening max el	8067 Oct 02 11:36	11° $\mathbb{M}$ 45'55	25°56'40
evening set	8066 Nov 10 10:31	5° $\mathbb{A}$ 25'11		retrograde	8067 Oct 16 10:00	18° $\mathbb{M}$ 49'46	
min. Earth dist.	8066 Nov 14 04:37	2° $\mathbb{A}$ 45'43	0.60495 AU	evening set	8067 Oct 22 17:42	17° $\mathbb{M}$ 15'03	
inferior conj	8066 Nov 17 08:31	0° $\mathbb{A}$ 07'40	-4°03'25	min. Earth dist.	8067 Oct 27 00:24	14° $\mathbb{M}$ 39'43	0.58417 AU
minimum elong	8066 Nov 17 15:37	29° $\mathbb{M}$ 52'50	4°01'13	inferior conj	8067 Oct 30 03:33	12° $\mathbb{M}$ 23'43	-5°00'48
	8066 Nov 17 12:11	30° $\mathbb{R}$ $\mathbb{M}$		minimum elong	8067 Oct 30 09:59	12° $\mathbb{M}$ 12'01	4°59'31
morning rise	8066 Nov 24 23:06	25° $\mathbb{M}$ 20'39		morning rise	8067 Nov 07 04:34	7° $\mathbb{M}$ 59'09	
direct	8066 Nov 27 04:09	25° $\mathbb{M}$ 01'38		direct	8067 Nov 09 11:58	7° $\mathbb{M}$ 41'49	
asc. node	8066 Nov 30 18:16	25° $\mathbb{M}$ 54'09		asc. node	8067 Nov 17 15:17	11° $\mathbb{M}$ 32'43	
morning max el	8066 Dec 04 12:54	28° $\mathbb{M}$ 41'29	18°02'50	morning max el	8067 Nov 17 19:53	11° $\mathbb{M}$ 43'41	18°37'24
	8066 Dec 05 18:48	0° $\mathbb{A}$			8067 Nov 30 00:17	0° $\mathbb{A}$	
morning set	8066 Dec 20 04:55	23° $\mathbb{A}$ 27'45		morning set	8067 Dec 03 23:40	7° $\mathbb{A}$ 35'55	
	8066 Dec 23 17:27	0° $\mathbb{B}$					
superior conj	8066 Dec 30 02:57	11° $\mathbb{B}$ 36'12	0°39'41	superior conj	8067 Dec 12 17:58	24° $\mathbb{A}$ 26'10	1°08'01
minimum elong	8066 Dec 30 05:52	11° $\mathbb{B}$ 49'12	0°39'23	minimum elong	8067 Dec 12 21:23	24° $\mathbb{A}$ 42'10	1°07'43
desc. node	8067 Jan 04 13:40	21° $\mathbb{B}$ 03'32			8067 Dec 15 18:14	0° $\mathbb{B}$	
max. Earth dist.	8067 Jan 06 17:55	24° $\mathbb{B}$ 43'22	1.41988 AU	max. Earth dist.	8067 Dec 20 01:19	7° $\mathbb{B}$ 39'50	1.39913 AU
	8067 Jan 09 22:47	0° $\approx$		desc. node	8067 Dec 22 10:39	11° $\mathbb{B}$ 47'21	
evening rise	8067 Jan 12 05:43	3° $\approx$ 41'35		evening rise	8067 Dec 24 04:18	14° $\mathbb{B}$ 43'31	
	8067 Jan 29 16:29	0° $\mathbb{H}$			8068 Jan 02 16:42	0° $\approx$	
evening max el	8067 Feb 14 11:12	19° $\mathbb{H}$ 55'40	22°37'25	evening max el	8068 Jan 24 15:11	0° $\mathbb{H}$	
retrograde	8067 Feb 24 09:09	25° $\mathbb{H}$ 48'31			8068 Jan 28 01:36	3° $\mathbb{H}$ 40'04	23°57'38
asc. node	8067 Feb 26 17:24	25° $\mathbb{H}$ 20'46		retrograde	8068 Feb 08 02:18	10° $\mathbb{H}$ 09'17	
evening set	8067 Mar 01 02:46	23° $\mathbb{H}$ 51'49		evening set	8068 Feb 13 08:08	7° $\mathbb{H}$ 58'17	
inferior conj	8067 Mar 06 11:15	17° $\mathbb{H}$ 28'27	2°18'22	asc. node	8068 Feb 13 14:28	7° $\mathbb{H}$ 44'32	
minimum elong	8067 Mar 06 08:59	17° $\mathbb{H}$ 36'19	2°17'44	min. Earth dist.	8068 Feb 18 02:16	2° $\mathbb{H}$ 28'21	0.68188 AU
min. Earth dist.	8067 Mar 06 05:45	17° $\mathbb{H}$ 47'32	0.68400 AU	inferior conj	8068 Feb 18 19:18	1° $\mathbb{H}$ 30'32	1°38'22
morning rise	8067 Mar 11 15:04	11° $\mathbb{H}$ 19'21		minimum elong	8068 Feb 18 17:19	1° $\mathbb{H}$ 37'17	1°37'45
direct	8067 Mar 16 05:11	9° $\mathbb{H}$ 25'07			8068 Feb 19 22:14	30° $\mathbb{R}$ $\approx$	
morning max el	8067 Mar 25 06:14	14° $\mathbb{H}$ 41'41	21°46'35	morning rise	8068 Feb 24 02:29	25° $\approx$ 27'26	
desc. node	8067 Apr 02 13:19	24° $\mathbb{H}$ 32'42		direct	8068 Feb 28 03:08	23° $\approx$ 55'34	
	8067 Apr 06 13:36	0° $\mathbb{Y}$		morning max el	8068 Mar 07 01:37	28° $\approx$ 26'25	20°28'34
morning set	8067 Apr 26 16:08	0° $\mathbb{B}$ 13'26			8068 Mar 08 13:25	0° $\mathbb{H}$	
	8067 Apr 26 12:46	0° $\mathbb{B}$		desc. node	8068 Mar 19 10:14	14° $\mathbb{H}$ 09'58	
max. Earth dist.	8067 May 02 16:43	10° $\mathbb{B}$ 02'10	1.41652 AU		8068 Mar 30 03:00	0° $\mathbb{Y}$	
				morning set	8068 Apr 04 19:29	8° $\mathbb{Y}$ 43'19	
superior conj	8067 May 10 08:30	23° $\mathbb{B}$ 05'46	-1°55'37	max. Earth dist.	8068 Apr 13 23:35	23° $\mathbb{Y}$ 11'56	1.43520 AU
minimum elong	8067 May 10 14:02	23° $\mathbb{B}$ 30'04	1°55'17		8068 Apr 18 03:56	0° $\mathbb{B}$	
	8067 May 14 05:53	0° $\mathbb{I}$		superior conj	8068 Apr 20 08:34	3° $\mathbb{B}$ 37'29	-2°10'16
evening rise	8067 May 21 04:01	12° $\mathbb{I}$ 37'59		minimum elong	8068 Apr 20 10:57	3° $\mathbb{B}$ 47'23	2°10'17
asc. node	8067 May 25 16:23	20° $\mathbb{I}$ 52'59		evening rise	8068 May 02 18:22	24° $\mathbb{B}$ 53'06	
	8067 May 31 00:24	0° $\mathbb{E}$			8068 May 05 16:27	0° $\mathbb{I}$	
evening max el	8067 Jun 06 09:26	8° $\mathbb{E}$ 23'18	18°11'36	asc. node	8068 May 11 13:26	10° $\mathbb{I}$ 01'54	
retrograde	8067 Jun 13 08:38	11° $\mathbb{E}$ 54'07		evening max el	8068 May 19 22:08	21° $\mathbb{I}$ 32'01	18°05'46
evening set	8067 Jun 15 18:16	11° $\mathbb{E}$ 29'42		retrograde	8068 May 26 09:23	24° $\mathbb{I}$ 52'53	
inferior conj	8067 Jun 22 18:57	6° $\mathbb{E}$ 43'15	1°52'10	evening set	8068 May 29 02:28	24° $\mathbb{I}$ 16'51	
minimum elong	8067 Jun 22 21:57	6° $\mathbb{E}$ 36'35	1°51'07	inferior conj	8068 Jun 04 11:40	19° $\mathbb{I}$ 10'28	2°44'38
min. Earth dist.	8067 Jun 26 03:47	3° $\mathbb{E}$ 44'53	0.59658 AU	minimum elong	8068 Jun 04 14:25	19° $\mathbb{I}$ 03'25	2°43'55
morning rise	8067 Jun 29 22:40	0° $\mathbb{E}$ 59'02		min. Earth dist.	8068 Jun 07 11:44	16° $\mathbb{I}$ 07'45	0.61904 AU
desc. node	8067 Jun 29 12:46	1° $\mathbb{E}$ 14'08		morning rise	8068 Jun 11 00:26	13° $\mathbb{I}$ 07'04	
	8067 Jul 01 21:09	30° $\mathbb{R}$ $\mathbb{I}$		desc. node	8068 Jun 15 09:47	11° $\mathbb{I}$ 00'53	
direct	8067 Jul 06 08:38	29° $\mathbb{I}$ 03'34		direct	8068 Jun 17 18:07	10° $\mathbb{I}$ 43'51	
	8067 Jul 11 00:03	0° $\mathbb{E}$		morning max el	8068 Jul 01 22:03	18° $\mathbb{I}$ 44'49	27°55'29
morning max el	8067 Jul 20 17:12	6° $\mathbb{E}$ 56'02	27°37'11		8068 Jul 11 09:43	0° $\mathbb{E}$	
	8067 Aug 07 01:54	0° $\mathbb{Q}$			8068 Jul 29 22:22	0° $\mathbb{Q}$	
morning set	8067 Aug 21 10:53	26° $\mathbb{Q}$ 47'42		morning set	8068 Aug 04 12:33	10° $\mathbb{Q}$ 59'12	
asc. node	8067 Aug 21 15:45	27° $\mathbb{Q}$ 13'12		asc. node	8068 Aug 07 12:45	17° $\mathbb{Q}$ 15'07	
	8067 Aug 22 23:19	0° $\mathbb{P}$		max. Earth dist.	8068 Aug 10 03:20	22° $\mathbb{Q}$ 50'49	1.32066 AU
max. Earth dist.	8067 Aug 27 19:47	10° $\mathbb{P}$ 34'15	1.31690 AU				
				superior conj	8068 Aug 11 23:54	26° $\mathbb{Q}$ 53'53	0°44'14
superior conj	8067 Aug 28 14:06	12° $\mathbb{P}$ 15'34	1°05'39	minimum elong	8068 Aug 11 22:04	26° $\mathbb{Q}$ 43'49	0°43'47

	8068 Aug 13 09:49	0°♍		minimum elong	8069 Jul 27 05:06	11°♏12'05	0°18'22
evening rise	8068 Aug 18 19:24	11°♍46'52		evening rise	8069 Aug 03 06:59	26°♏27'02	
	8068 Aug 27 23:30	0°♌			8069 Aug 04 23:25	0°♍	
desc. node	8068 Sep 11 08:45	20°♌41'33			8069 Aug 23 01:16	0°♌	
evening max el	8068 Sep 13 01:38	22°♌24'46	24°29'00	evening max el	8069 Aug 25 13:08	2°♌38'11	22°49'55
retrograde	8068 Sep 26 20:30	29°♌20'14		desc. node	8069 Aug 29 05:50	5°♌46'22	
evening set	8068 Oct 02 00:25	28°♌21'06		retrograde	8069 Sep 07 18:42	9°♌14'43	
min. Earth dist.	8068 Oct 07 12:35	25°♌31'36	0.56552 AU	evening set	8069 Sep 11 10:17	8°♌45'31	
inferior conj	8068 Oct 10 02:27	23°♌54'00	-5°32'19	min. Earth dist.	8069 Sep 18 21:11	5°♌24'36	0.55211 AU
minimum elong	8068 Oct 10 04:14	23°♌51'10	5°32'11	inferior conj	8069 Sep 20 06:19	4°♌37'10	-5°19'03
morning rise	8068 Oct 18 10:12	19°♌51'17		minimum elong	8069 Sep 20 00:40	4°♌45'17	5°18'21
direct	8068 Oct 21 01:05	19°♌32'43		morning rise	8069 Sep 28 17:05	0°♌48'21	
morning max el	8068 Oct 30 16:32	24°♌06'06	19°34'01	direct	8069 Oct 01 19:28	0°♌26'05	
asc. node	8068 Nov 03 12:18	28°♌24'20		morning max el	8069 Oct 13 00:26	5°♌40'35	20°52'55
	8068 Nov 04 16:40	0°♍		asc. node	8069 Oct 21 09:17	16°♌12'49	
morning set	8068 Nov 17 02:22	22°♍05'48			8069 Oct 29 01:40	0°♍	
	8068 Nov 21 00:20	0°♎		morning set	8069 Nov 01 10:08	6°♍48'15	
superior conj	8068 Nov 25 01:04	8°♎02'28	1°27'11	superior conj	8069 Nov 08 19:42	22°♍11'13	1°38'01
minimum elong	8068 Nov 25 03:42	8°♎15'27	1°27'04	minimum elong	8069 Nov 08 21:04	22°♍18'11	1°38'04
max. Earth dist.	8068 Dec 01 07:14	19°♎59'10	1.37755 AU		8069 Nov 12 16:37	0°♎	
evening rise	8068 Dec 05 00:41	26°♎43'29		max. Earth dist.	8069 Nov 13 15:59	1°♎54'58	1.35749 AU
	8068 Dec 06 21:35	0°♏		evening rise	8069 Nov 17 15:53	9°♎33'08	
desc. node	8068 Dec 08 07:40	2°♏26'21		desc. node	8069 Nov 25 04:43	22°♎55'30	
	8068 Dec 26 04:57	0°♏			8069 Nov 29 12:13	0°♏	
evening max el	8069 Jan 09 14:47	17°♏27'20	25°13'55		8069 Dec 21 22:39	0°♏	
retrograde	8069 Jan 21 15:10	24°♏24'06		evening max el	8069 Dec 23 03:48	1°♏12'29	26°19'17
evening set	8069 Jan 27 09:52	22°♏00'25		retrograde	8070 Jan 04 23:03	8°♏26'23	
asc. node	8069 Jan 30 11:31	18°♏48'32		evening set	8070 Jan 11 06:11	5°♏53'25	
min. Earth dist.	8069 Jan 31 20:30	17°♏05'10	0.67592 AU	min. Earth dist.	8070 Jan 15 10:15	1°♏32'53	0.66615 AU
inferior conj	8069 Feb 02 00:57	15°♏32'45	0°50'19		8070 Jan 16 16:45	30°♏	
minimum elong	8069 Feb 01 23:45	15°♏36'38	0°49'58	inferior conj	8070 Jan 17 02:14	29°♏30'58	-0°05'18
morning rise	8069 Feb 07 13:57	9°♏37'24		minimum elong	8070 Jan 17 02:23	29°♏30'32	0°05'07
direct	8069 Feb 11 02:12	8°♏26'32		transit middle	8070 Jan 17 02:23	29°♏30'32	0°05'07
morning max el	8069 Feb 18 05:05	12°♏23'14	19°24'10	transit begin	8070 Jan 16 23:39	29°♏38'53	
greatest brilliancy	8069 Mar 03 02:53	29°♏25'14	-0.7m	transit end	8070 Jan 17 05:06	29°♏22'12	
	8069 Mar 03 12:14	0°♐		asc. node	8070 Jan 17 08:35	29°♏11'37	
desc. node	8069 Mar 06 07:10	4°♐11'41		morning rise	8070 Jan 22 23:20	23°♏45'27	
morning set	8069 Mar 14 17:59	17°♐07'59		direct	8070 Jan 26 00:42	22°♏52'38	
	8069 Mar 23 00:55	0°♑		morning max el	8070 Feb 01 15:41	26°♏27'47	18°35'33
max. Earth dist.	8069 Mar 27 13:31	7°♑06'32	1.44837 AU		8070 Feb 04 18:55	0°♑	
				desc. node	8070 Feb 21 04:07	24°♑30'58	
superior conj	8069 Mar 31 08:03	13°♑05'46	-2°08'08	morning set	8070 Feb 22 11:21	26°♑34'13	
minimum elong	8069 Mar 31 03:45	12°♑48'37	2°08'01		8070 Feb 24 15:32	0°♐	
	8069 Apr 10 17:58	0°♑		superior conj	8070 Mar 10 14:46	21°♐55'04	-1°45'48
evening rise	8069 Apr 14 11:50	6°♑12'45		minimum elong	8070 Mar 10 05:23	21°♐18'19	1°44'58
asc. node	8069 Apr 28 10:29	28°♑41'46		max. Earth dist.	8070 Mar 10 07:34	21°♐26'54	1.45461 AU
	8069 Apr 29 08:49	0°♒			8070 Mar 15 18:26	0°♑	
evening max el	8069 May 03 11:18	4°♒55'59	18°18'40		8070 Mar 26 05:46	16°♑34'22	
retrograde	8069 May 09 20:51	8°♒21'25		evening rise	8070 Mar 26 05:46	16°♑34'22	
evening set	8069 May 12 21:02	7°♒32'16		greatest brilliancy	8070 Apr 03 16:17	29°♑59'43	-0.8m
inferior conj	8069 May 18 18:51	2°♒07'37	3°13'34		8070 Apr 03 16:22	0°♑	
minimum elong	8069 May 18 20:25	2°♒03'08	3°13'15	asc. node	8070 Apr 15 07:33	16°♑43'31	
	8069 May 20 15:25	30°♒		evening max el	8070 Apr 16 22:16	18°♑28'43	18°49'35
min. Earth dist.	8069 May 21 05:01	29°♒22'00	0.63976 AU	retrograde	8070 Apr 23 14:59	22°♒11'35	
morning rise	8069 May 24 18:41	25°♒53'55		evening set	8070 Apr 26 22:28	21°♒08'27	
direct	8069 May 31 12:20	23°♒12'48		inferior conj	8070 May 02 12:36	15°♒27'20	3°23'56
desc. node	8069 Jun 02 06:48	23°♒22'50		minimum elong	8070 May 02 12:48	15°♒26'41	3°23'49
	8069 Jun 13 01:11	0°♒		min. Earth dist.	8070 May 04 07:28	13°♒13'54	0.65709 AU
morning max el	8069 Jun 14 07:11	1°♒13'23	27°36'34	morning rise	8070 May 08 02:33	9°♒09'41	
	8069 Jul 05 13:20	0°♓		direct	8070 May 14 14:06	6°♒22'35	
morning set	8069 Jul 19 06:35	24°♓45'49		desc. node	8070 May 20 03:47	8°♒02'35	
	8069 Jul 21 21:02	0°♓		morning max el	8070 May 27 17:45	14°♒10'33	26°45'59
max. Earth dist.	8069 Jul 24 04:19	4°♓46'06	1.32917 AU		8070 Jun 09 14:09	0°♒	
asc. node	8069 Jul 25 09:43	7°♓20'54			8070 Jun 28 06:31	0°♓	
				morning set	8070 Jul 02 13:59	7°♓59'24	
superior conj	8069 Jul 27 06:00	11°♓16'55	0°18'41	max. Earth dist.	8070 Jul 06 19:21	16°♓13'43	1.34249 AU

superior conj	8070 Jul 11 06:11	25°☿18'48	-0°10'20	max. Earth dist.	8071 Jun 18 23:15	27°♄18'33	1.36039 AU
minimum elong	8070 Jul 11 06:45	25°☿21'46	0°10'20		8071 Jun 20 09:11	0°☿	
behind sun begin	8070 Jul 11 02:19	24°☿58'41					
behind sun end	8070 Jul 11 11:12	25°☿44'53		superior conj	8071 Jun 24 21:40	8°☿51'25	-0°41'34
asc. node	8070 Jul 12 06:44	27°☿26'51		minimum elong	8071 Jun 25 00:09	9°☿03'48	0°41'14
	8070 Jul 13 11:54	0°♁		asc. node	8071 Jun 29 03:45	17°☿28'22	
evening rise	8070 Jul 18 16:56	10°♁58'56		evening rise	8071 Jul 02 23:01	25°☿15'21	
	8070 Jul 28 14:13	0°♊			8071 Jul 05 07:27	0°♁	
evening max el	8070 Aug 07 07:16	13°♊03'19	21°15'59	evening max el	8071 Jul 20 14:02	24°♁06'29	19°58'09
desc. node	8070 Aug 16 02:55	18°♊35'56		retrograde	8071 Jul 30 22:29	29°♁12'40	
retrograde	8070 Aug 19 08:06	19°♊01'10		evening set	8071 Aug 01 19:41	29°♁03'17	
evening set	8070 Aug 21 17:30	18°♊47'53		desc. node	8071 Aug 02 24:00	28°♁48'19	
inferior conj	8070 Aug 30 23:28	14°♊50'21	-4°10'50	inferior conj	8071 Aug 10 19:52	25°♁03'27	-2°22'18
minimum elong	8070 Aug 30 13:57	15°♊03'43	4°08'15	minimum elong	8071 Aug 10 13:21	25°♁13'18	2°19'59
min. Earth dist.	8070 Aug 31 06:10	14°♊40'54	0.54690 AU	min. Earth dist.	8071 Aug 12 17:19	23°♁54'52	0.55129 AU
morning rise	8070 Sep 08 11:04	10°♊57'16		morning rise	8071 Aug 19 05:21	20°♁46'08	
direct	8070 Sep 12 03:55	10°♊27'44		direct	8071 Aug 23 16:27	20°♁02'34	
morning max el	8070 Sep 24 20:30	16°♊29'24	22°30'16	morning max el	8071 Sep 06 09:38	26°♁48'05	24°16'04
	8070 Oct 05 10:38	0°♊			8071 Sep 09 12:03	0°♊	
asc. node	8070 Oct 08 06:17	4°♊45'06		asc. node	8071 Sep 25 03:17	23°♊50'13	
morning set	8070 Oct 16 20:49	21°♊37'02			8071 Sep 28 06:17	0°♊	
	8070 Oct 20 19:08	0°♋		morning set	8071 Oct 01 08:33	6°♊26'56	
superior conj	8070 Oct 23 22:20	6°♋41'59	1°41'32	superior conj	8071 Oct 08 06:09	21°♊26'06	1°38'35
minimum elong	8070 Oct 23 22:22	6°♋42'08	1°41'38	minimum elong	8071 Oct 08 05:04	21°♊20'10	1°38'35
max. Earth dist.	8070 Oct 27 07:47	13°♋48'56	1.34076 AU	max. Earth dist.	8071 Oct 10 08:05	25°♊56'23	1.32827 AU
evening rise	8070 Oct 31 22:01	23°♋02'48			8071 Oct 12 05:46	0°♋	
	8070 Nov 04 13:43	0°♌		evening rise	8071 Oct 15 15:22	7°♋02'44	
desc. node	8070 Nov 12 01:46	13°♌09'29			8071 Oct 28 02:18	0°♌	
	8070 Nov 23 04:29	0°♍		desc. node	8071 Oct 29 22:52	3°♌01'33	
evening max el	8070 Dec 05 16:50	14°♍48'16	27°06'25	evening max el	8071 Nov 18 04:46	28°♌03'54	27°28'21
retrograde	8070 Dec 19 01:18	22°♍08'42			8071 Nov 20 08:34	0°♍	
evening set	8070 Dec 25 19:04	19°♍32'07		retrograde	8071 Dec 01 21:04	5°♍22'29	
min. Earth dist.	8070 Dec 29 17:21	15°♍45'39	0.65278 AU	evening set	8071 Dec 08 21:56	2°♍50'11	
inferior conj	8070 Dec 31 21:00	13°♍20'39	-1°07'44		8071 Dec 12 05:38	30°♋♌	
minimum elong	8070 Dec 31 23:00	13°♍15'01	1°06'45	min. Earth dist.	8071 Dec 12 15:45	29°♌35'19	0.63613 AU
asc. node	8071 Jan 04 05:39	9°♍50'52		inferior conj	8071 Dec 15 06:38	26°♌55'52	-2°15'21
morning rise	8071 Jan 07 04:14	7°♍47'22		minimum elong	8071 Dec 15 10:52	26°♌45'07	2°13'32
direct	8071 Jan 09 20:37	7°♍08'50		morning rise	8071 Dec 22 01:38	21°♌37'47	
morning max el	8071 Jan 16 07:06	10°♍33'32	18°03'34	asc. node	8071 Dec 22 02:42	21°♌36'45	
	8071 Jan 29 20:43	0°♎		direct	8071 Dec 24 11:20	21°♌09'34	
morning set	8071 Feb 03 10:09	7°♎28'57		morning max el	8071 Dec 31 00:27	24°♌33'17	17°48'52
desc. node	8071 Feb 08 01:05	15°♎02'42			8072 Jan 04 11:26	0°♍	
	8071 Feb 17 08:40	0°♏		morning set	8072 Jan 16 11:59	19°♍43'03	
superior conj	8071 Feb 17 22:27	0°♏54'32	-1°07'11		8072 Jan 22 12:17	0°♎	
minimum elong	8071 Feb 17 14:42	0°♏23'54	1°06'08	desc. node	8072 Jan 25 22:04	5°♎43'00	
max. Earth dist.	8071 Feb 21 02:56	5°♏55'49	1.45348 AU	superior conj	8072 Jan 29 00:37	10°♎50'35	-0°22'26
evening rise	8071 Mar 06 02:54	26°♏09'01		minimum elong	8072 Jan 28 22:10	10°♎40'35	0°21'57
	8071 Mar 08 14:44	0°♐		max. Earth dist.	8072 Feb 03 21:28	20°♎19'01	1.44518 AU
greatest brilliancy	8071 Mar 19 10:58	16°♐32'03	-0.7m		8072 Feb 10 01:15	0°♏	
	8071 Mar 29 07:10	0°♑		evening rise	8072 Feb 13 14:14	5°♏28'14	
evening max el	8071 Mar 31 05:01	2°♑05'18	19°37'12		8072 Mar 01 00:23	0°♐	
asc. node	8071 Apr 02 04:38	3°♑54'58		evening max el	8072 Mar 13 06:30	15°♐44'13	20°39'11
retrograde	8071 Apr 07 12:29	6°♑16'24		asc. node	8072 Mar 19 01:43	20°♐02'41	
evening set	8071 Apr 11 04:04	4°♑58'36		retrograde	8072 Mar 21 10:59	20°♐31'48	
	8071 Apr 15 20:16	30°♋♐		evening set	8072 Mar 25 11:45	18°♐58'51	
inferior conj	8071 Apr 16 13:38	29°♐02'47	3°19'42	inferior conj	8072 Mar 30 19:20	12°♐50'12	3°03'36
minimum elong	8071 Apr 16 12:40	29°♐05'58	3°19'32	minimum elong	8072 Mar 30 17:32	12°♐56'22	3°03'16
min. Earth dist.	8071 Apr 17 17:35	27°♐30'11	0.67030 AU	min. Earth dist.	8072 Mar 31 09:24	12°♐01'50	0.67913 AU
morning rise	8071 Apr 21 20:57	22°♐45'08		morning rise	8072 Apr 04 23:06	6°♐34'54	
direct	8071 Apr 27 22:07	20°♐03'33		direct	8072 Apr 10 11:22	4°♐07'52	
desc. node	8071 May 07 00:46	24°♐27'54		morning max el	8072 Apr 21 12:26	10°♐44'05	24°05'35
morning max el	8071 May 10 03:31	27°♐23'04	25°32'16	desc. node	8072 Apr 22 21:45	12°♐11'01	
	8071 May 12 14:24	0°♑			8072 May 06 19:56	0°♑	
	8071 Jun 03 06:08	0°♒			8072 May 25 23:49	0°♒	
morning set	8071 Jun 15 06:30	20°♒27'32		morning set	8072 May 27 02:59	1°♒56'34	

max. Earth dist.	8072 May 30 20:00	8° $\Pi$ 27'19	1.38175 AU	morning set	8073 May 07 22:02	12° $\mathcal{B}$ 13'19	
				max. Earth dist.	8073 May 12 17:09	20° $\mathcal{B}$ 13'49	1.40423 AU
superior conj	8072 Jun 07 01:03	21° $\Pi$ 46'24	-1°13'09		8073 May 18 07:58	0° $\Pi$	
minimum elong	8072 Jun 07 05:32	22° $\Pi$ 07'46	1°12'35				
	8072 Jun 11 07:06	0° $\mathcal{C}$		superior conj	8073 May 20 12:06	3° $\Pi$ 53'42	-1°41'58
asc. node	8072 Jun 15 00:46	7° $\mathcal{C}$ 21'34		minimum elong	8073 May 20 17:51	4° $\Pi$ 19'40	1°41'28
evening rise	8072 Jun 15 22:42	9° $\mathcal{C}$ 09'38		evening rise	8073 May 30 12:45	22° $\Pi$ 33'38	
	8072 Jun 27 14:14	0° $\Omega$		asc. node	8073 Jun 01 21:49	27° $\Pi$ 02'09	
evening max el	8072 Jul 02 09:30	5° $\Omega$ 54'00	19°00'33		8073 Jun 03 12:06	0° $\mathcal{C}$	
retrograde	8072 Jul 11 02:30	10° $\Omega$ 12'17		evening max el	8073 Jun 15 14:34	18° $\mathcal{C}$ 20'22	18°23'39
evening set	8072 Jul 13 01:11	10° $\Omega$ 00'15		retrograde	8073 Jun 23 01:46	22° $\mathcal{C}$ 04'19	
desc. node	8072 Jul 19 21:04	6° $\Omega$ 45'30		evening set	8073 Jun 25 07:01	21° $\mathcal{C}$ 45'25	
inferior conj	8072 Jul 21 08:16	5° $\Omega$ 45'20	-0°26'45	inferior conj	8073 Jul 02 18:13	17° $\mathcal{C}$ 10'22	1°09'30
minimum elong	8072 Jul 21 07:08	5° $\Omega$ 47'18	0°26'27	minimum elong	8073 Jul 02 20:29	17° $\mathcal{C}$ 05'44	1°08'35
min. Earth dist.	8072 Jul 24 07:44	3° $\Omega$ 41'52	0.56449 AU	min. Earth dist.	8073 Jul 06 03:31	14° $\mathcal{C}$ 25'53	0.58385 AU
morning rise	8072 Jul 29 09:54	0° $\Omega$ 52'11		desc. node	8073 Jul 06 18:06	13° $\mathcal{C}$ 58'10	
	8072 Aug 01 06:45	30° $\mathcal{R}$ $\mathcal{C}$		morning rise	8073 Jul 10 06:38	11° $\mathcal{C}$ 42'04	
direct	8072 Aug 03 17:24	29° $\mathcal{C}$ 45'44		direct	8073 Jul 16 08:21	10° $\mathcal{C}$ 05'22	
	8072 Aug 06 04:14	0° $\Omega$		morning max el	8073 Jul 30 17:47	17° $\mathcal{C}$ 48'17	27°09'40
morning max el	8072 Aug 17 22:56	7° $\Omega$ 04'51	25°54'39		8073 Aug 09 21:35	0° $\Omega$	
	8072 Sep 03 20:57	0° $\mathcal{M}$			8073 Aug 27 08:53	0° $\mathcal{M}$	
asc. node	8072 Sep 11 00:15	13° $\mathcal{M}$ 19'32		asc. node	8073 Aug 28 21:14	3° $\mathcal{M}$ 06'10	
morning set	8072 Sep 14 19:43	21° $\mathcal{M}$ 13'00		morning set	8073 Aug 30 04:40	5° $\mathcal{M}$ 50'32	
	8072 Sep 18 20:47	0° $\mathcal{L}$					
superior conj	8072 Sep 21 16:55	6° $\mathcal{L}$ 16'22	1°29'53	superior conj	8073 Sep 06 04:44	21° $\mathcal{M}$ 06'52	1°15'56
minimum elong	8072 Sep 21 15:03	6° $\mathcal{L}$ 06'02	1°29'42	minimum elong	8073 Sep 06 02:30	20° $\mathcal{M}$ 54'28	1°15'34
max. Earth dist.	8072 Sep 22 15:00	8° $\mathcal{L}$ 18'15	1.32030 AU	max. Earth dist.	8073 Sep 06 01:12	20° $\mathcal{M}$ 47'16	1.31681 AU
evening rise	8072 Sep 28 16:48	21° $\mathcal{L}$ 23'51			8073 Sep 10 05:15	0° $\mathcal{L}$	
	8072 Oct 02 22:54	0° $\mathcal{M}$		evening rise	8073 Sep 12 23:44	5° $\mathcal{L}$ 58'46	
desc. node	8072 Oct 15 19:57	22° $\mathcal{M}$ 22'09			8073 Sep 25 13:21	0° $\mathcal{M}$	
	8072 Oct 21 04:20	0° $\mathcal{X}$		desc. node	8073 Oct 02 17:01	10° $\mathcal{M}$ 58'43	
evening max el	8072 Oct 30 13:07	10° $\mathcal{X}$ 45'00	27°19'05	evening max el	8073 Oct 12 15:00	22° $\mathcal{M}$ 39'40	26°35'55
retrograde	8072 Nov 13 09:12	17° $\mathcal{X}$ 57'44		retrograde	8073 Oct 26 12:52	29° $\mathcal{M}$ 46'49	
evening set	8072 Nov 20 11:19	15° $\mathcal{X}$ 39'22		evening set	8073 Nov 02 06:58	27° $\mathcal{M}$ 53'01	
min. Earth dist.	8072 Nov 24 03:39	12° $\mathcal{X}$ 50'11	0.61686 AU	min. Earth dist.	8073 Nov 06 04:38	25° $\mathcal{M}$ 17'48	0.59609 AU
inferior conj	8072 Nov 27 04:00	10° $\mathcal{X}$ 07'40	-3°24'53	inferior conj	8073 Nov 09 09:35	22° $\mathcal{M}$ 46'57	-4°29'46
minimum elong	8072 Nov 27 10:20	9° $\mathcal{X}$ 53'22	3°22'35	minimum elong	8073 Nov 09 16:49	22° $\mathcal{M}$ 32'45	4°27'51
morning rise	8072 Dec 04 11:32	5° $\mathcal{X}$ 08'15		morning rise	8073 Nov 17 05:00	18° $\mathcal{M}$ 09'28	
direct	8072 Dec 06 17:25	4° $\mathcal{X}$ 46'42		direct	8073 Nov 19 10:37	17° $\mathcal{M}$ 51'26	
asc. node	8072 Dec 07 23:45	4° $\mathcal{X}$ 53'45		asc. node	8073 Nov 24 20:45	19° $\mathcal{M}$ 44'01	
morning max el	8072 Dec 13 16:31	8° $\mathcal{X}$ 17'56	17°52'13	morning max el	8073 Nov 27 03:54	21° $\mathcal{M}$ 39'02	18°14'57
	8072 Dec 27 19:28	0° $\mathcal{Z}$			8073 Dec 03 13:51	0° $\mathcal{X}$	
morning set	8072 Dec 29 10:09	2° $\mathcal{Z}$ 54'39		morning set	8073 Dec 12 22:43	16° $\mathcal{X}$ 46'13	
					8073 Dec 19 23:33	0° $\mathcal{Z}$	
superior conj	8073 Jan 09 04:17	22° $\mathcal{Z}$ 00'03	0°19'12	superior conj	8073 Dec 22 07:51	4° $\mathcal{Z}$ 17'51	0°52'50
minimum elong	8073 Jan 09 05:59	22° $\mathcal{Z}$ 07'21	0°19'05	minimum elong	8073 Dec 22 11:12	4° $\mathcal{Z}$ 33'03	0°52'30
desc. node	8073 Jan 11 19:04	26° $\mathcal{Z}$ 27'28		desc. node	8073 Dec 29 16:04	17° $\mathcal{Z}$ 12'45	
	8073 Jan 13 21:47	0° $\approx$		max. Earth dist.	8073 Dec 29 22:43	17° $\mathcal{Z}$ 41'03	1.41137 AU
max. Earth dist.	8073 Jan 16 12:38	4° $\approx$ 19'05	1.43057 AU	evening rise	8074 Jan 03 16:57	25° $\mathcal{Z}$ 36'20	
evening rise	8073 Jan 23 06:56	15° $\approx$ 08'09			8074 Jan 06 10:21	0° $\approx$	
	8073 Feb 02 00:46	0° $\mathcal{H}$			8074 Jan 26 19:52	0° $\mathcal{H}$	
evening max el	8073 Feb 24 02:35	29° $\mathcal{H}$ 24'13	21°52'11	evening max el	8074 Feb 06 18:22	13° $\mathcal{H}$ 06'13	23°11'27
	8073 Feb 24 16:59	0° $\mathcal{Y}$		retrograde	8074 Feb 17 03:48	19° $\mathcal{H}$ 15'28	
retrograde	8073 Mar 05 08:33	4° $\mathcal{Y}$ 52'57		asc. node	8074 Feb 20 19:53	18° $\mathcal{H}$ 08'37	
asc. node	8073 Mar 05 22:48	4° $\mathcal{Y}$ 51'09		evening set	8074 Feb 22 02:35	17° $\mathcal{H}$ 12'16	
evening set	8073 Mar 09 19:47	3° $\mathcal{Y}$ 04'40		min. Earth dist.	8074 Feb 27 01:28	11° $\mathcal{H}$ 22'45	0.68363 AU
	8073 Mar 12 17:44	30° $\mathcal{R}$ $\mathcal{H}$		inferior conj	8074 Feb 27 12:01	10° $\mathcal{H}$ 46'23	2°02'23
inferior conj	8073 Mar 15 03:26	26° $\mathcal{H}$ 45'45	2°37'29	minimum elong	8074 Feb 27 09:49	10° $\mathcal{H}$ 53'59	2°01'44
minimum elong	8073 Mar 15 01:13	26° $\mathcal{H}$ 53'29	2°36'56	morning rise	8074 Mar 04 17:00	4° $\mathcal{H}$ 39'50	
min. Earth dist.	8073 Mar 15 04:46	26° $\mathcal{H}$ 41'08	0.68351 AU	direct	8074 Mar 09 01:12	2° $\mathcal{H}$ 55'25	
morning rise	8073 Mar 20 06:29	20° $\mathcal{H}$ 34'11		morning max el	8074 Mar 17 14:19	7° $\mathcal{H}$ 51'19	21°11'54
direct	8073 Mar 25 04:40	18° $\mathcal{H}$ 27'22		desc. node	8074 Mar 27 15:39	20° $\mathcal{H}$ 09'28	
morning max el	8073 Apr 03 22:52	24° $\mathcal{H}$ 12'33	22°35'59		8074 Apr 03 13:51	0° $\mathcal{Y}$	
	8073 Apr 09 02:28	0° $\mathcal{Y}$		morning set	8074 Apr 17 13:46	21° $\mathcal{Y}$ 15'33	
desc. node	8073 Apr 09 18:42	0° $\mathcal{Y}$ 50'02			8074 Apr 23 01:14	0° $\mathcal{B}$	
	8073 Apr 30 06:07	0° $\mathcal{B}$		max. Earth dist.	8074 Apr 24 19:50	2° $\mathcal{B}$ 53'23	1.42501 AU

superior conj	8074 May 02 02:03	15°♄02'20	-2°03'30	superior conj	8075 Apr 12 15:27	25°♄06'30	-2°11'44
minimum elong	8074 May 02 06:45	15°♄22'29	2°03'20	minimum elong	8075 Apr 12 15:17	25°♄05'46	2°11'47
	8074 May 10 14:37	0°♄			8075 Apr 15 15:00	0°♄	
evening rise	8074 May 13 13:08	5°♄17'11		evening rise	8075 Apr 25 19:10	17°♄10'05	
asc. node	8074 May 19 18:51	16°♄24'32			8075 May 03 07:59	0°♄	
	8074 May 28 20:40	0°♄		asc. node	8075 May 06 15:54	5°♄22'40	
evening max el	8074 May 30 01:28	1°♄16'09	18°06'44	evening max el	8075 May 13 14:46	14°♄32'52	18°09'01
retrograde	8074 Jun 05 18:27	4°♄41'17		retrograde	8075 May 20 00:15	17°♄54'05	
evening set	8074 Jun 08 07:09	4°♄12'18		evening set	8075 May 22 20:17	17°♄12'46	
	8074 Jun 14 06:29	30°♄		inferior conj	8075 May 29 00:11	11°♄58'42	2°59'28
inferior conj	8074 Jun 15 00:45	29°♄17'08	2°17'39	minimum elong	8075 May 29 02:30	11°♄52'29	2°58'55
minimum elong	8074 Jun 15 03:50	29°♄09'51	2°16'41	min. Earth dist.	8075 May 31 18:51	9°♄00'37	0.62818 AU
min. Earth dist.	8074 Jun 18 06:45	26°♄13'51	0.60613 AU	morning rise	8075 Jun 04 07:06	5°♄49'49	
morning rise	8074 Jun 21 21:54	23°♄23'07		desc. node	8075 Jun 10 12:09	3°♄18'14	
desc. node	8074 Jun 23 15:08	22°♄25'02		direct	8075 Jun 11 01:42	3°♄17'13	
direct	8074 Jun 28 11:55	21°♄15'02		morning max el	8075 Jun 25 02:29	11°♄20'06	27°51'39
morning max el	8074 Jul 12 19:29	29°♄12'54	27°49'49		8075 Jul 09 19:32	0°♄	
	8074 Jul 13 14:08	0°♄			8075 Jul 27 05:02	0°♄	
	8074 Aug 03 20:03	0°♄		morning set	8075 Jul 29 08:17	4°♄14'57	
morning set	8074 Aug 14 09:33	20°♄13'05		asc. node	8075 Aug 02 15:12	13°♄07'56	
asc. node	8074 Aug 15 18:12	23°♄03'44		max. Earth dist.	8075 Aug 03 15:39	15°♄18'14	1.32366 AU
	8074 Aug 18 23:49	0°♄					
max. Earth dist.	8074 Aug 20 10:41	3°♄10'48	1.31787 AU	superior conj	8075 Aug 06 00:15	20°♄23'34	0°33'52
				minimum elong	8075 Aug 05 22:44	20°♄15'24	0°33'27
superior conj	8074 Aug 21 15:46	5°♄50'57	0°57'07		8075 Aug 10 09:54	0°♄	
minimum elong	8074 Aug 21 13:38	5°♄39'12	0°56'39	evening rise	8075 Aug 12 21:34	5°♄22'06	
evening rise	8074 Aug 28 09:57	20°♄39'56			8075 Aug 25 21:20	0°♄	
	8074 Sep 01 21:55	0°♄		evening max el	8075 Sep 05 20:43	14°♄06'35	23°47'13
desc. node	8074 Sep 19 14:05	28°♄32'53		desc. node	8075 Sep 06 11:10	14°♄40'47	
	8074 Sep 20 19:47	0°♄		retrograde	8075 Sep 19 12:00	20°♄56'14	
evening max el	8074 Sep 24 08:44	3°♄42'42	25°21'47	evening set	8075 Sep 24 00:30	20°♄11'28	
retrograde	8074 Oct 08 06:32	10°♄44'29		min. Earth dist.	8075 Sep 30 07:07	17°♄10'09	0.55893 AU
evening set	8074 Oct 14 04:00	9°♄24'30		inferior conj	8075 Oct 02 10:22	15°♄52'56	-5°33'13
min. Earth dist.	8074 Oct 18 20:37	6°♄45'32	0.57577 AU	minimum elong	8075 Oct 02 09:03	15°♄54'57	5°33'09
inferior conj	8074 Oct 21 20:07	4°♄43'42	-5°18'26	morning rise	8075 Oct 10 19:44	11°♄57'24	
minimum elong	8074 Oct 22 01:07	4°♄35'08	5°17'44	direct	8075 Oct 13 14:55	11°♄37'41	
morning rise	8074 Oct 30 00:35	0°♄29'12		morning max el	8075 Oct 23 22:19	16°♄28'10	20°05'00
direct	8074 Nov 01 10:24	0°♄11'49		asc. node	8075 Oct 29 14:45	23°♄12'50	
morning max el	8074 Nov 10 06:56	4°♄25'44	18°58'48		8075 Nov 02 21:54	0°♄	
asc. node	8074 Nov 11 17:45	5°♄55'27		morning set	8075 Nov 11 02:22	15°♄40'14	
	8074 Nov 26 08:07	0°♄			8075 Nov 18 02:44	0°♄	
morning set	8074 Nov 26 21:14	1°♄04'33					
				superior conj	8075 Nov 18 18:47	1°♄20'45	1°32'43
superior conj	8074 Dec 05 06:20	17°♄29'33	1°17'12	minimum elong	8075 Nov 18 20:55	1°♄31'24	1°32'42
minimum elong	8074 Dec 05 09:31	17°♄44'49	1°16'59	max. Earth dist.	8075 Nov 24 10:42	12°♄24'04	1.36866 AU
max. Earth dist.	8074 Dec 12 04:35	0°♄19'04	1.38987 AU	evening rise	8075 Nov 28 05:49	19°♄25'52	
	8074 Dec 12 00:19	0°♄		desc. node	8075 Dec 03 10:06	28°♄30'40	
evening rise	8074 Dec 16 00:59	7°♄03'29			8075 Dec 04 07:15	0°♄	
desc. node	8074 Dec 16 13:04	7°♄55'13			8075 Dec 24 12:49	0°♄	
	8074 Dec 30 10:01	0°♄		evening max el	8076 Jan 02 20:59	10°♄39'20	25°43'38
evening max el	8075 Jan 20 07:52	26°♄51'43	24°30'57	retrograde	8076 Jan 15 06:22	17°♄45'00	
	8075 Jan 23 19:41	0°♄		evening set	8076 Jan 21 06:18	15°♄17'07	
retrograde	8075 Jan 31 19:25	3°♄34'45		min. Earth dist.	8076 Jan 25 14:07	10°♄36'22	0.67215 AU
evening set	8075 Feb 06 06:38	1°♄17'59		asc. node	8076 Jan 25 14:01	10°♄36'41	
asc. node	8075 Feb 07 16:56	29°♄56'00		inferior conj	8076 Jan 26 23:22	8°♄50'52	0°27'39
	8075 Feb 07 15:25	30°♄		minimum elong	8076 Jan 26 22:40	8°♄53'04	0°27'28
min. Earth dist.	8075 Feb 10 21:23	26°♄02'40	0.67977 AU	morning rise	8076 Feb 01 15:31	2°♄59'09	
inferior conj	8075 Feb 11 19:18	24°♄49'23	1°18'58	direct	8076 Feb 04 22:55	1°♄56'19	
minimum elong	8075 Feb 11 17:35	24°♄55'07	1°18'25	morning max el	8076 Feb 11 19:51	5°♄42'38	19°01'26
morning rise	8075 Feb 17 04:40	18°♄49'16		greatest brilliancy	8076 Feb 25 18:19	24°♄33'58	-0.8m
direct	8075 Feb 20 23:45	17°♄26'48		desc. node	8076 Feb 29 09:33	0°♄08'32	
morning max el	8075 Feb 28 13:12	21°♄42'03	19°59'17		8076 Feb 29 07:20	0°♄	
	8075 Mar 07 11:36	0°♄		morning set	8076 Mar 05 16:09	8°♄18'58	
desc. node	8075 Mar 14 12:36	9°♄58'25			8076 Mar 19 13:41	0°♄	
morning set	8075 Mar 27 12:02	29°♄34'46		max. Earth dist.	8076 Mar 19 21:10	0°♄29'23	1.45194 AU
	8075 Mar 27 18:35	0°♄					
max. Earth dist.	8075 Apr 07 05:25	16°♄22'35	1.44152 AU	superior conj	8076 Mar 22 06:14	4°♄14'03	-2°01'06

minimum elong	8076 Mar 21 23:08	3° $\Upsilon$ 46'03	2°00'42	desc. node	8077 Feb 15 06:32	20° $\approx$ 34'11	
evening rise	8076 Apr 06 02:39	28° $\Upsilon$ 04'22			8077 Feb 21 04:35	0° $\text{H}$	
	8076 Apr 07 06:58	0° $\text{B}$					
asc. node	8076 Apr 22 12:59	23° $\text{B}$ 47'46		superior conj	8077 Mar 01 10:54	13° $\text{H}$ 01'08	-1°30'53
evening max el	8076 Apr 26 03:23	28° $\text{B}$ 01'44	18°29'44	minimum elong	8077 Mar 01 01:24	12° $\text{H}$ 23'53	1°29'50
	8076 Apr 28 10:19	0° $\text{II}$		max. Earth dist.	8077 Mar 02 16:39	14° $\text{H}$ 57'41	1.45514 AU
retrograde	8076 May 02 14:52	1° $\text{II}$ 32'45			8077 Mar 12 07:26	0° $\Upsilon$	
evening set	8076 May 05 18:10	0° $\text{II}$ 37'42		evening rise	8077 Mar 17 11:01	8° $\Upsilon$ 04'01	
	8076 May 06 17:04	30° $\text{K}$ $\text{B}$		greatest brilliancy	8077 Mar 28 03:21	24° $\Upsilon$ 44'30	-0.8m
inferior conj	8076 May 11 12:19	25° $\text{B}$ 06'04	3°19'55		8077 Mar 31 14:49	0° $\text{B}$	
minimum elong	8076 May 11 13:18	25° $\text{B}$ 03'08	3°19'43	asc. node	8077 Apr 09 10:03	11° $\text{B}$ 29'50	
min. Earth dist.	8076 May 13 16:05	22° $\text{B}$ 32'39	0.64769 AU	evening max el	8077 Apr 09 12:49	11° $\text{B}$ 36'53	19°07'52
morning rise	8076 May 17 07:35	18° $\text{B}$ 50'19		retrograde	8077 Apr 16 10:45	15° $\text{B}$ 30'08	
direct	8076 May 23 23:28	16° $\text{B}$ 04'57		evening set	8077 Apr 19 21:41	14° $\text{B}$ 20'37	
desc. node	8076 May 27 09:09	16° $\text{B}$ 42'19		inferior conj	8077 Apr 25 09:31	8° $\text{B}$ 32'55	3°23'41
morning max el	8076 Jun 06 12:18	24° $\text{B}$ 01'28	27°18'18	minimum elong	8077 Apr 25 09:12	8° $\text{B}$ 33'58	3°23'35
	8076 Jun 11 20:49	0° $\text{II}$		min. Earth dist.	8077 Apr 26 21:51	6° $\text{B}$ 36'30	0.66334 AU
	8076 Jul 02 04:42	0° $\text{G}$		morning rise	8077 Apr 30 20:18	2° $\text{B}$ 15'08	
morning set	8076 Jul 11 22:12	17° $\text{G}$ 48'31			8077 May 04 09:25	30° $\text{K}$ $\Upsilon$	
max. Earth dist.	8076 Jul 16 12:33	27° $\text{G}$ 01'08	1.33427 AU	direct	8077 May 07 03:52	29° $\Upsilon$ 29'21	
	8076 Jul 17 23:07	0° $\Omega$			8077 May 10 02:23	0° $\text{B}$	
asc. node	8076 Jul 19 12:12	3° $\Omega$ 14'26		desc. node	8077 May 14 06:10	2° $\text{B}$ 10'50	
				morning max el	8077 May 19 22:39	7° $\text{B}$ 06'14	26°16'48
superior conj	8076 Jul 20 04:09	4° $\Omega$ 38'40	0°06'45		8077 Jun 06 16:27	0° $\text{II}$	
minimum elong	8076 Jul 20 03:48	4° $\Omega$ 36'51	0°06'34	morning set	8077 Jun 24 23:48	0° $\text{G}$ 43'58	
behind sun begin	8076 Jul 19 22:43	4° $\Omega$ 09'58			8077 Jun 24 14:22	0° $\text{G}$	
behind sun end	8076 Jul 20 08:53	5° $\Omega$ 03'47		max. Earth dist.	8077 Jun 28 22:57	8° $\text{G}$ 18'11	1.34965 AU
evening rise	8076 Jul 27 08:42	19° $\Omega$ 59'35					
	8076 Aug 01 06:02	0° $\text{H}$		superior conj	8077 Jul 04 01:00	18° $\text{G}$ 29'05	-0°23'24
evening max el	8076 Aug 17 10:12	24° $\text{H}$ 21'34	22°08'32	minimum elong	8077 Jul 04 02:20	18° $\text{G}$ 35'56	0°23'16
desc. node	8076 Aug 23 08:14	28° $\text{H}$ 52'17		asc. node	8077 Jul 06 09:13	23° $\text{G}$ 19'00	
	8076 Aug 25 22:03	0° $\Omega$			8077 Jul 09 14:10	0° $\Omega$	
retrograde	8076 Aug 30 05:15	0° $\Omega$ 43'13		evening rise	8077 Jul 11 17:19	4° $\Omega$ 25'57	
evening set	8076 Sep 02 06:17	0° $\Omega$ 22'42			8077 Jul 26 02:01	0° $\text{H}$	
	8076 Sep 03 16:19	30° $\text{K}$ $\text{H}$		evening max el	8077 Jul 30 09:17	5° $\text{H}$ 00'33	20°40'27
min. Earth dist.	8076 Sep 10 15:34	26° $\text{H}$ 44'12	0.54878 AU	desc. node	8077 Aug 10 05:19	10° $\text{H}$ 36'26	
inferior conj	8076 Sep 11 08:18	26° $\text{H}$ 20'43	-4°56'38	retrograde	8077 Aug 10 17:23	10° $\text{H}$ 37'04	
minimum elong	8076 Sep 11 00:09	26° $\text{H}$ 32'09	4°55'05	evening set	8077 Aug 12 19:35	10° $\text{H}$ 26'24	
morning rise	8076 Sep 19 19:35	22° $\text{H}$ 32'33		inferior conj	8077 Aug 22 00:56	6° $\text{H}$ 29'26	-3°27'50
direct	8076 Sep 23 04:04	22° $\text{H}$ 07'30		minimum elong	8077 Aug 21 16:00	6° $\text{H}$ 42'13	3°25'01
morning max el	8076 Oct 05 00:42	27° $\text{H}$ 41'59	21°32'32	min. Earth dist.	8077 Aug 23 00:54	5° $\text{H}$ 55'06	0.54760 AU
	8076 Oct 07 07:00	0° $\Omega$		morning rise	8077 Aug 30 12:14	2° $\text{H}$ 28'43	
asc. node	8076 Oct 15 11:46	11° $\Omega$ 21'48		direct	8077 Sep 03 12:29	1° $\text{H}$ 54'17	
morning set	8076 Oct 25 11:39	0° $\text{M}$ 26'31		morning max el	8077 Sep 16 16:54	8° $\text{H}$ 14'42	23°15'12
	8076 Oct 25 06:33	0° $\text{M}$		asc. node	8077 Oct 02 08:46	0° $\Omega$ 09'21	
					8077 Oct 02 06:43	0° $\Omega$	
superior conj	8076 Nov 01 17:13	15° $\text{M}$ 40'12	1°40'21	morning set	8077 Oct 09 22:59	15° $\Omega$ 16'38	
minimum elong	8076 Nov 01 18:00	15° $\text{M}$ 44'16	1°40'26				
max. Earth dist.	8076 Nov 05 22:25	24° $\text{M}$ 18'21	1.34990 AU	superior conj	8077 Oct 16 22:21	0° $\text{M}$ 17'29	1°41'02
	8076 Nov 08 19:44	0° $\text{X}$		minimum elong	8077 Oct 16 21:52	0° $\text{M}$ 14'55	1°41'06
evening rise	8076 Nov 10 03:55	2° $\text{X}$ 34'24			8077 Oct 16 19:06	0° $\text{M}$	
desc. node	8076 Nov 19 07:10	18° $\text{X}$ 54'33		max. Earth dist.	8077 Oct 19 18:09	6° $\text{M}$ 18'20	1.33490 AU
	8076 Nov 26 05:58	0° $\text{Z}$		evening rise	8077 Oct 24 15:13	16° $\text{M}$ 17'50	
evening max el	8076 Dec 15 10:22	24° $\text{Z}$ 23'01	26°42'05		8077 Oct 31 21:44	0° $\text{X}$	
	8076 Dec 22 17:10	0° $\approx$		desc. node	8077 Nov 06 04:13	9° $\text{X}$ 00'13	
retrograde	8076 Dec 28 11:46	1° $\approx$ 40'06			8077 Nov 20 19:07	0° $\text{Z}$	
	8077 Jan 02 17:33	30° $\text{K}$ $\text{Z}$		evening max el	8077 Nov 27 23:06	7° $\text{Z}$ 51'26	27°19'10
evening set	8077 Jan 03 23:44	29° $\text{Z}$ 05'04		retrograde	8077 Dec 11 11:06	15° $\text{Z}$ 11'21	
min. Earth dist.	8077 Jan 08 01:22	24° $\text{Z}$ 59'04	0.66090 AU	evening set	8077 Dec 18 08:39	12° $\text{Z}$ 35'22	
inferior conj	8077 Jan 09 22:12	22° $\text{Z}$ 46'46	-0°30'58	min. Earth dist.	8077 Dec 22 04:48	9° $\text{Z}$ 03'05	0.64611 AU
minimum elong	8077 Jan 09 23:04	22° $\text{Z}$ 44'12	0°30'28	inferior conj	8077 Dec 24 13:23	6° $\text{Z}$ 30'47	-1°35'55
asc. node	8077 Jan 11 11:03	21° $\text{Z}$ 00'08		minimum elong	8077 Dec 24 16:18	6° $\text{Z}$ 22'54	1°34'33
morning rise	8077 Jan 15 23:21	17° $\text{Z}$ 05'55		asc. node	8077 Dec 29 08:07	2° $\text{Z}$ 02'27	
direct	8077 Jan 18 20:45	16° $\text{Z}$ 19'29		morning rise	8077 Dec 31 01:28	1° $\text{Z}$ 03'44	
morning max el	8077 Jan 25 08:47	19° $\text{Z}$ 48'42	18°19'53	direct	8078 Jan 02 14:49	0° $\text{Z}$ 29'57	
	8077 Feb 02 05:55	0° $\approx$		morning max el	8078 Jan 09 01:24	3° $\text{Z}$ 52'47	17°55'15
morning set	8077 Feb 13 21:51	18° $\approx$ 23'19		morning set	8078 Jan 26 08:50	29° $\text{Z}$ 54'06	



	8078 Jan 26 10:14	0°♊		desc. node	8079 Jan 20 00:29	1°♊52'21	
desc. node	8078 Feb 02 03:31	11°♊10'09					
superior conj	8078 Feb 09 00:48	22°♊20'25 -0°48'19		superior conj	8079 Jan 20 13:33	2°♊47'02 -0°04'00	
minimum elong	8078 Feb 08 19:13	21°♊58'02 0°47'27		minimum elong	8079 Jan 20 13:10	2°♊45'22 0°03'49	
max. Earth dist.	8078 Feb 13 12:21	29°♊27'34 1.45080 AU		behind sun begin	8079 Jan 20 04:13	2°♊07'59	
	8078 Feb 13 20:35	0°♋		behind sun end	8079 Jan 20 22:06	3°♊22'40	
evening rise	8078 Feb 25 02:17	17°♋28'03		max. Earth dist.	8079 Jan 27 05:17	13°♊41'03 1.43956 AU	
	8078 Mar 05 07:29	0°♌		evening rise	8079 Feb 04 13:52	26°♊50'36	
greatest brilliancy	8078 Mar 11 19:28	9°♌41'20 -0.6m			8079 Feb 06 15:07	0°♋	
evening max el	8078 Mar 23 17:21	25°♌14'36 20°01'54			8079 Feb 27 06:08	0°♌	
asc. node	8078 Mar 27 07:07	28°♌16'20		evening max el	8079 Mar 06 16:19	8°♌53'12 21°09'11	
retrograde	8078 Mar 31 09:03	29°♌40'35		asc. node	8079 Mar 14 04:11	13°♌52'01	
evening set	8078 Apr 04 04:25	28°♌16'14		retrograde	8079 Mar 15 07:28	13°♌58'40	
inferior conj	8078 Apr 09 12:50	22°♌14'24 3°14'11		evening set	8079 Mar 19 12:26	12°♌19'16	
minimum elong	8078 Apr 09 11:29	22°♌18'59 3°13'58		inferior conj	8079 Mar 24 19:47	6°♌05'43 2°53'42	
min. Earth dist.	8078 Apr 10 10:39	21°♌00'44 0.67458 AU		minimum elong	8079 Mar 24 17:46	6°♌12'45 2°53'17	
morning rise	8078 Apr 14 18:17	15°♌57'29		min. Earth dist.	8079 Mar 25 04:19	5°♌36'08 0.68143 AU	
direct	8078 Apr 20 14:03	13°♌21'30		morning rise	8079 Mar 29 22:54	29°♋51'36	
desc. node	8078 May 01 03:10	19°♌12'47			8079 Mar 29 19:11	30°♋♋	
morning max el	8078 May 02 08:11	20°♌24'10 24°56'27		direct	8079 Apr 04 05:08	27°♋32'43	
	8078 May 10 13:47	0°♌			8079 Apr 10 09:18	0°♌	
	8078 May 30 20:40	0°♍		morning max el	8079 Apr 14 17:26	3°♌48'28 23°27'19	
morning set	8078 Jun 07 08:35	12°♍49'32		desc. node	8079 Apr 18 00:08	7°♌21'54	
max. Earth dist.	8078 Jun 10 23:31	19°♍23'03 1.36917 AU			8079 May 04 18:24	0°♌	
	8078 Jun 16 13:53	0°♎		morning set	8079 May 19 18:53	23°♌49'40	
					8079 May 23 09:19	0°♍	
superior conj	8078 Jun 17 11:50	1°♎47'10 -0°55'04		max. Earth dist.	8079 May 23 19:14	0°♍43'13 1.39129 AU	
minimum elong	8078 Jun 17 15:11	2°♎03'37 0°54'37					
asc. node	8078 Jun 23 06:14	13°♎17'49		superior conj	8079 May 31 08:48	14°♍23'03 -1°25'56	
evening rise	8078 Jun 25 21:05	18°♎34'39		minimum elong	8079 May 31 13:59	14°♍47'12 1°25'22	
	8078 Jul 01 17:50	0°♏			8079 Jun 08 12:49	0°♎	
evening max el	8078 Jul 12 21:37	16°♏22'41 19°31'02		evening rise	8079 Jun 09 17:06	2°♎17'05	
retrograde	8078 Jul 22 12:47	21°♏07'53		asc. node	8079 Jun 10 03:14	3°♎06'05	
evening set	8078 Jul 24 09:18	20°♏58'04		evening max el	8079 Jun 25 21:39	28°♎27'57 18°42'22	
desc. node	8078 Jul 28 02:23	19°♏45'36			8079 Jun 27 15:18	0°♏	
inferior conj	8078 Aug 02 03:02	16°♏52'40 -1°32'14		retrograde	8079 Jul 04 00:42	2°♏29'40	
minimum elong	8078 Aug 01 22:52	16°♏59'21 1°30'43		evening set	8079 Jul 06 01:46	2°♏15'17	
min. Earth dist.	8078 Aug 04 13:21	15°♏19'46 0.55591 AU			8079 Jul 10 23:58	30°♋♎	
morning rise	8078 Aug 10 09:56	12°♏20'32		inferior conj	8079 Jul 14 00:25	27°♎52'26 0°17'15	
direct	8078 Aug 15 05:18	11°♏28'40		minimum elong	8079 Jul 14 01:04	27°♎51'12 0°16'53	
morning max el	8078 Aug 29 05:33	18°♏30'01 24°59'57		desc. node	8079 Jul 14 23:27	27°♎09'21	
	8078 Sep 07 19:40	0°♐		min. Earth dist.	8079 Jul 17 06:08	25°♎28'52 0.57216 AU	
asc. node	8078 Sep 19 05:46	19°♐25'52		morning rise	8079 Jul 21 20:52	22°♎43'14	
morning set	8078 Sep 24 10:41	0°♑05'39		direct	8079 Jul 27 12:42	21°♎24'15	
	8078 Sep 24 09:37	0°♑		morning max el	8079 Aug 10 20:52	28°♎55'33 26°30'09	
					8079 Aug 11 22:47	0°♏	
superior conj	8078 Oct 01 07:40	15°♑05'08 1°35'34			8079 Sep 01 11:41	0°♐	
minimum elong	8078 Oct 01 06:13	14°♑57'06 1°35'30		asc. node	8079 Sep 06 02:44	9°♐03'02	
max. Earth dist.	8078 Oct 02 21:30	18°♑31'53 1.32430 AU		morning set	8079 Sep 08 21:05	14°♐48'28	
	8078 Oct 08 07:00	0°♒					
evening rise	8078 Oct 08 12:20	0°♒27'28		superior conj	8079 Sep 15 19:07	29°♐56'16 1°24'35	
desc. node	8078 Oct 24 01:16	28°♒39'57		minimum elong	8079 Sep 15 17:02	29°♐44'45 1°24'19	
	8078 Oct 24 21:49	0°♓			8079 Sep 15 19:47	0°♑	
evening max el	8078 Nov 10 09:33	20°♓52'43 27°28'20		max. Earth dist.	8079 Sep 16 06:01	0°♑56'39 1.31823 AU	
retrograde	8078 Nov 24 03:50	28°♓09'41		evening rise	8079 Sep 22 16:22	14°♑55'09	
evening set	8078 Dec 01 06:13	25°♓41'39			8079 Sep 30 06:43	0°♒	
min. Earth dist.	8078 Dec 04 22:42	22°♓39'01 0.62820 AU		desc. node	8079 Oct 10 22:20	17°♒43'30	
inferior conj	8078 Dec 07 18:08	19°♓56'19 -2°44'57			8079 Oct 20 10:52	0°♓	
minimum elong	8078 Dec 07 23:20	19°♓43'45 2°42'51		evening max el	8079 Oct 23 15:24	3°♓15'08 27°04'54	
morning rise	8078 Dec 14 18:29	14°♓46'07		retrograde	8079 Nov 06 12:54	10°♓26'05	
asc. node	8078 Dec 16 05:11	14°♓24'49		evening set	8079 Nov 13 12:42	8°♓16'57	
direct	8078 Dec 17 02:07	14°♓21'15		min. Earth dist.	8079 Nov 17 06:06	5°♓35'17 0.60803 AU	
morning max el	8078 Dec 23 18:37	17°♓47'03 17°48'03		inferior conj	8079 Nov 20 09:14	2°♓55'35 -3°53'34	
	8079 Jan 01 13:38	0°♔		minimum elong	8079 Nov 20 16:12	2°♓40'44 3°51'19	
					8079 Nov 24 02:19	30°♒♒	
morning set	8079 Jan 08 20:00	12°♔34'11		morning rise	8079 Nov 27 22:02	28°♒05'12	
	8079 Jan 18 21:45	0°♕		direct	8079 Nov 30 03:08	27°♒45'40	

asc. node	8079 Dec 03 02:13	28° $\mathbb{M}$ 22'14			8080 Nov 30 08:59	0° $\mathbb{X}$	
	8079 Dec 05 19:26	0° $\mathbb{X}$		morning set	8080 Dec 05 18:17	10° $\mathbb{X}$ 09'17	
morning max el	8079 Dec 07 09:09	1° $\mathbb{X}$ 23'09	17°59'24				
morning set	8079 Dec 23 00:57	26° $\mathbb{X}$ 04'46		superior conj	8080 Dec 14 16:08	27° $\mathbb{X}$ 09'18	1°04'17
	8079 Dec 25 03:57	0° $\mathbb{Z}$		minimum elong	8080 Dec 14 19:35	27° $\mathbb{X}$ 25'19	1°04'00
					8080 Dec 16 05:08	0° $\mathbb{Z}$	
superior conj	8080 Jan 02 03:54	14° $\mathbb{Z}$ 27'06	0°34'34	max. Earth dist.	8080 Dec 22 02:08	10° $\mathbb{Z}$ 28'38	1.40237 AU
minimum elong	8080 Jan 02 06:35	14° $\mathbb{Z}$ 38'54	0°34'19	desc. node	8080 Dec 23 18:26	13° $\mathbb{Z}$ 21'56	
desc. node	8080 Jan 06 21:27	22° $\mathbb{Z}$ 37'38		evening rise	8080 Dec 26 08:14	17° $\mathbb{Z}$ 42'21	
max. Earth dist.	8080 Jan 09 17:53	27° $\mathbb{Z}$ 24'36	1.42278 AU		8081 Jan 02 23:40	0° $\approx$	
	8080 Jan 11 07:35	0° $\approx$			8081 Jan 24 09:03	0° $\mathbb{H}$	
evening rise	8080 Jan 15 12:55	6° $\approx$ 49'03		evening max el	8081 Jan 30 01:10	6° $\mathbb{H}$ 18'13	23°45'42
	8080 Jan 30 20:29	0° $\mathbb{H}$		retrograde	8081 Feb 09 21:53	12° $\mathbb{H}$ 42'14	
evening max el	8080 Feb 17 10:25	22° $\mathbb{H}$ 34'17	22°25'35	asc. node	8081 Feb 14 22:21	10° $\mathbb{H}$ 40'38	
retrograde	8080 Feb 27 04:13	28° $\mathbb{H}$ 20'53		evening set	8081 Feb 15 01:55	10° $\mathbb{H}$ 33'11	
asc. node	8080 Feb 29 01:16	28° $\mathbb{H}$ 03'01		min. Earth dist.	8081 Feb 19 21:14	4° $\mathbb{H}$ 58'15	0.68251 AU
evening set	8080 Mar 02 20:07	26° $\mathbb{H}$ 26'25		inferior conj	8081 Feb 20 12:36	4° $\mathbb{H}$ 05'52	1°44'59
inferior conj	8080 Mar 08 04:21	20° $\mathbb{H}$ 04'11	2°23'42	minimum elong	8081 Feb 20 10:32	4° $\mathbb{H}$ 12'53	1°44'20
minimum elong	8080 Mar 08 02:05	20° $\mathbb{H}$ 12'04	2°23'05		8081 Feb 23 17:39	30° $\mathbb{R}$ $\approx$	
min. Earth dist.	8080 Mar 08 00:38	20° $\mathbb{H}$ 17'06	0.68402 AU	morning rise	8081 Feb 25 19:08	28° $\approx$ 01'54	
morning rise	8080 Mar 13 07:52	13° $\mathbb{H}$ 54'23		direct	8081 Mar 01 21:44	26° $\approx$ 26'47	
direct	8080 Mar 18 00:06	11° $\mathbb{H}$ 56'44			8081 Mar 08 21:02	0° $\mathbb{H}$	
morning max el	8080 Mar 27 05:26	17° $\mathbb{H}$ 20'30	21°59'07	morning max el	8081 Mar 09 23:44	1° $\mathbb{H}$ 03'33	20°39'22
desc. node	8080 Apr 03 21:05	26° $\mathbb{H}$ 19'48		desc. node	8081 Mar 21 18:02	15° $\mathbb{H}$ 52'34	
	8080 Apr 06 15:14	0° $\mathbb{Y}$			8081 Mar 31 09:11	0° $\mathbb{Y}$	
	8080 Apr 26 20:33	0° $\mathbb{B}$		morning set	8081 Apr 08 08:08	12° $\mathbb{Y}$ 10'15	
morning set	8080 Apr 29 02:03	3° $\mathbb{B}$ 33'33		max. Earth dist.	8081 Apr 16 23:47	25° $\mathbb{Y}$ 52'38	1.43272 AU
max. Earth dist.	8080 May 04 17:48	12° $\mathbb{B}$ 49'43	1.41345 AU		8081 Apr 19 12:36	0° $\mathbb{B}$	
superior conj	8080 May 12 11:28	26° $\mathbb{B}$ 06'57	-1°52'20	superior conj	8081 Apr 23 15:14	6° $\mathbb{B}$ 48'22	-2°09'00
minimum elong	8080 May 12 17:10	26° $\mathbb{B}$ 32'06	1°51'57	minimum elong	8081 Apr 23 18:22	7° $\mathbb{B}$ 01'29	2°08'59
	8080 May 14 15:52	0° $\mathbb{I}$		evening rise	8081 May 05 18:58	27° $\mathbb{B}$ 47'50	
evening rise	8080 May 23 01:51	15° $\mathbb{I}$ 24'55			8081 May 07 00:55	0° $\mathbb{I}$	
asc. node	8080 May 27 00:14	22° $\mathbb{I}$ 39'28		asc. node	8081 May 13 21:18	11° $\mathbb{I}$ 52'18	
	8080 May 31 04:20	0° $\mathbb{E}$		evening max el	8081 May 22 18:06	24° $\mathbb{I}$ 14'19	18°05'25
evening max el	8080 Jun 08 05:44	11° $\mathbb{E}$ 08'29	18°14'05	retrograde	8081 May 29 06:29	27° $\mathbb{I}$ 35'52	
retrograde	8080 Jun 15 07:35	14° $\mathbb{E}$ 42'04		evening set	8081 May 31 22:27	27° $\mathbb{I}$ 01'42	
evening set	8080 Jun 17 16:08	14° $\mathbb{E}$ 19'07		inferior conj	8081 Jun 07 09:42	21° $\mathbb{I}$ 58'04	2°38'20
inferior conj	8080 Jun 24 19:27	9° $\mathbb{E}$ 35'33	1°41'52	minimum elong	8081 Jun 07 12:34	21° $\mathbb{I}$ 50'51	2°37'31
minimum elong	8080 Jun 24 22:20	9° $\mathbb{E}$ 29'17	1°40'49	min. Earth dist.	8081 Jun 10 11:26	18° $\mathbb{I}$ 54'34	0.61571 AU
min. Earth dist.	8080 Jun 28 04:47	6° $\mathbb{E}$ 40'05	0.59326 AU	morning rise	8081 Jun 14 00:35	15° $\mathbb{I}$ 56'46	
desc. node	8080 Jun 30 20:30	4° $\mathbb{E}$ 40'17		desc. node	8081 Jun 17 17:31	14° $\mathbb{I}$ 04'54	
morning rise	8080 Jul 02 01:28	3° $\mathbb{E}$ 55'15		direct	8081 Jun 20 17:30	13° $\mathbb{I}$ 37'22	
direct	8080 Jul 08 09:35	2° $\mathbb{E}$ 04'34		morning max el	8081 Jul 04 22:33	21° $\mathbb{I}$ 37'38	27°55'18
morning max el	8080 Jul 22 18:23	9° $\mathbb{E}$ 54'30	27°31'14		8081 Jul 12 05:46	0° $\mathbb{E}$	
	8080 Aug 07 05:59	0° $\mathbb{O}$			8081 Jul 31 08:08	0° $\mathbb{O}$	
asc. node	8080 Aug 22 23:41	28° $\mathbb{O}$ 54'39		morning set	8081 Aug 07 07:08	13° $\mathbb{O}$ 34'57	
morning set	8080 Aug 23 04:32	29° $\mathbb{O}$ 19'59		asc. node	8081 Aug 09 20:40	18° $\mathbb{O}$ 55'41	
	8080 Aug 23 12:09	0° $\mathbb{P}$		max. Earth dist.	8081 Aug 13 00:38	25° $\mathbb{O}$ 43'56	1.31980 AU
max. Earth dist.	8080 Aug 29 16:18	13° $\mathbb{P}$ 24'16	1.31673 AU				
superior conj	8080 Aug 30 06:50	14° $\mathbb{P}$ 44'44	1°08'31	superior conj	8081 Aug 14 17:03	29° $\mathbb{O}$ 25'02	0°47'46
minimum elong	8080 Aug 30 04:35	14° $\mathbb{P}$ 32'15	1°08'06	minimum elong	8081 Aug 14 15:07	29° $\mathbb{O}$ 14'26	0°47'20
evening rise	8080 Sep 06 00:59	29° $\mathbb{P}$ 33'38		evening rise	8081 Aug 14 23:25	0° $\mathbb{P}$	
	8080 Sep 06 05:55	0° $\mathbb{A}$			8081 Aug 21 12:05	14° $\mathbb{P}$ 16'41	
	8080 Sep 22 14:41	0° $\mathbb{M}$			8081 Aug 29 07:19	0° $\mathbb{A}$	
desc. node	8080 Sep 26 19:24	5° $\mathbb{M}$ 55'57		desc. node	8081 Sep 13 16:29	22° $\mathbb{A}$ 57'14	
evening max el	8080 Oct 04 14:09	14° $\mathbb{M}$ 48'32	26°07'50	evening max el	8081 Sep 16 05:02	25° $\mathbb{A}$ 33'09	24°43'09
retrograde	8080 Oct 18 12:26	21° $\mathbb{M}$ 52'58		retrograde	8081 Sep 21 21:07	0° $\mathbb{M}$	
evening set	8080 Oct 24 23:16	20° $\mathbb{M}$ 13'09		evening set	8081 Sep 30 00:45	2° $\mathbb{M}$ 30'25	
min. Earth dist.	8080 Oct 29 03:10	17° $\mathbb{M}$ 38'27	0.58721 AU		8081 Oct 05 09:42	1° $\mathbb{M}$ 25'50	
inferior conj	8080 Nov 01 07:07	15° $\mathbb{M}$ 18'10	-4°53'22	min. Earth dist.	8081 Oct 08 09:57	30° $\mathbb{R}$ $\mathbb{A}$	
minimum elong	8080 Nov 01 13:53	15° $\mathbb{M}$ 05'36	4°51'54	inferior conj	8081 Oct 10 16:07	28° $\mathbb{A}$ 39'44	0.56806 AU
morning rise	8080 Nov 09 06:47	10° $\mathbb{M}$ 50'07		minimum elong	8081 Oct 13 09:02	26° $\mathbb{A}$ 55'23	-5°30'01
direct	8080 Nov 11 13:35	10° $\mathbb{M}$ 32'40		morning rise	8081 Oct 13 11:48	22° $\mathbb{A}$ 50'56	5°29'46
asc. node	8080 Nov 18 23:15	13° $\mathbb{M}$ 48'38		direct	8081 Oct 21 16:05	22° $\mathbb{A}$ 49'52	
morning max el	8080 Nov 19 17:23	14° $\mathbb{M}$ 30'32	18°30'53	morning max el	8081 Oct 24 05:33	22° $\mathbb{A}$ 31'41	
					8081 Nov 02 15:48	26° $\mathbb{A}$ 59'30	19°24'11

	8081 Nov 05 10:28	0°♍		morning max el	8082 Oct 16 01:42	8°♌41'24	20°39'52
asc. node	8081 Nov 05 20:15	0°♍30'09		asc. node	8082 Oct 23 17:15	18°♌10'46	
morning set	8081 Nov 19 20:01	24°♍36'27			8082 Oct 30 11:56	0°♍	
	8081 Nov 22 12:28	0°♌		morning set	8082 Nov 04 03:12	9°♍17'14	
superior conj	8081 Nov 27 21:11	10°♌39'41	1°24'48	superior conj	8082 Nov 11 14:22	24°♍44'17	1°36'52
minimum elong	8081 Nov 27 24:00	10°♌53'22	1°24'40	minimum elong	8082 Nov 11 15:56	24°♍52'15	1°36'53
max. Earth dist.	8081 Dec 04 08:00	22°♌52'35	1.38073 AU		8082 Nov 14 04:57	0°♌	
evening rise	8081 Dec 08 01:31	29°♌33'48		max. Earth dist.	8082 Nov 16 15:45	4°♌49'17	1.36028 AU
	8081 Dec 08 07:29	0°♌		evening rise	8082 Nov 20 14:10	12°♌16'39	
desc. node	8081 Dec 10 15:28	4°♌01'45		desc. node	8082 Nov 27 12:31	24°♌32'38	
	8081 Dec 27 07:48	0°♌			8082 Nov 30 19:35	0°♌	
evening max el	8082 Jan 12 14:21	20°♌04'41	25°03'02		8082 Dec 22 10:59	0°♌	
retrograde	8082 Jan 24 11:30	26°♌58'16		evening max el	8082 Dec 26 03:21	3°♌50'39	26°10'34
evening set	8082 Jan 30 04:18	24°♌36'09		retrograde	8083 Jan 07 20:19	11°♌03'06	
asc. node	8082 Feb 01 19:27	21°♌54'39		evening set	8083 Jan 14 01:36	8°♌31'16	
min. Earth dist.	8082 Feb 03 15:57	19°♌35'47	0.67706 AU	min. Earth dist.	8083 Jan 18 06:35	4°♌05'30	0.66780 AU
inferior conj	8082 Feb 04 18:44	18°♌08'04	0°58'08	inferior conj	8083 Jan 19 20:51	2°♌07'30	0°03'37
minimum elong	8082 Feb 04 17:23	18°♌12'30	0°57'42	minimum elong	8083 Jan 19 20:45	2°♌07'49	0°03'42
morning rise	8082 Feb 10 06:44	12°♌11'32		transit middle	8083 Jan 19 20:45	2°♌07'49	0°03'42
direct	8082 Feb 13 20:42	10°♌57'47		transit begin	8083 Jan 19 17:58	2°♌16'26	
morning max el	8082 Feb 21 02:05	14°♌58'50	19°32'46	transit end	8083 Jan 19 23:32	1°♌59'13	
	8082 Mar 04 16:29	0°♌		asc. node	8083 Jan 19 16:32	2°♌20'52	
greatest brilliancy	8082 Mar 05 20:42	1°♌43'45	-0.7m		8083 Jan 21 15:16	30°♌	
desc. node	8082 Mar 08 14:59	5°♌50'53		morning rise	8083 Jan 25 16:36	26°♌20'20	
morning set	8082 Mar 18 05:45	20°♌30'54		direct	8083 Jan 28 19:26	25°♌25'07	
	8082 Mar 24 08:39	0°♌		morning max el	8083 Feb 04 11:47	29°♌02'53	18°41'44
max. Earth dist.	8082 Mar 30 12:43	9°♌41'05	1.44678 AU		8083 Feb 05 09:55	0°♌	
superior conj	8082 Apr 03 18:08	16°♌24'59	-2°09'44	desc. node	8083 Feb 23 11:57	26°♌08'03	
minimum elong	8082 Apr 03 14:56	16°♌12'08	2°09'42	morning set	8083 Feb 25 19:15	29°♌45'11	
	8082 Apr 12 02:23	0°♌			8083 Feb 25 23:01	0°♌	
evening rise	8082 Apr 17 15:49	9°♌16'07		max. Earth dist.	8083 Mar 13 06:07	23°♌58'02	1.45414 AU
	8082 Apr 30 08:17	0°♌		superior conj	8083 Mar 14 02:29	25°♌17'52	-1°50'25
asc. node	8082 Apr 30 18:22	0°♌37'10		minimum elong	8083 Mar 13 17:29	24°♌42'34	1°49'41
evening max el	8082 May 06 07:22	7°♌36'18	18°15'37		8083 Mar 17 02:23	0°♌	
retrograde	8082 May 12 16:42	11°♌00'25		evening rise	8083 Mar 29 13:16	19°♌45'59	
evening set	8082 May 15 15:46	10°♌13'23			8083 Apr 04 22:28	0°♌	
inferior conj	8082 May 21 15:01	4°♌51'23	3°10'28	greatest brilliancy	8083 Apr 06 02:06	1°♌50'10	-0.9m
minimum elong	8082 May 21 16:48	4°♌46'23	3°10'05	asc. node	8083 Apr 17 15:28	18°♌45'25	
min. Earth dist.	8082 May 24 03:26	2°♌01'58	0.63679 AU	evening max el	8083 Apr 19 18:51	21°♌08'06	18°43'55
	8082 May 26 03:10	30°♌		retrograde	8083 Apr 26 10:01	24°♌47'33	
morning rise	8082 May 27 16:35	28°♌38'37		evening set	8083 Apr 29 16:22	23°♌46'36	
direct	8082 Jun 03 10:38	25°♌59'21		inferior conj	8083 May 05 07:26	18°♌07'59	3°23'18
desc. node	8082 Jun 04 14:34	26°♌03'41		minimum elong	8083 May 05 07:51	18°♌06'43	3°23'12
	8082 Jun 12 19:43	0°♌		min. Earth dist.	8083 May 07 04:39	15°♌48'54	0.65477 AU
morning max el	8082 Jun 17 07:20	4°♌01'12	27°41'37	morning rise	8083 May 10 22:40	11°♌50'37	
	8082 Jul 06 19:10	0°♌		direct	8083 May 17 11:28	9°♌03'29	
morning set	8082 Jul 22 02:31	27°♌25'52		desc. node	8083 May 22 11:34	10°♌24'18	
	8082 Jul 23 09:14	0°♌		morning max el	8083 May 30 17:46	16°♌54'25	26°55'08
max. Earth dist.	8082 Jul 27 02:49	7°♌42'46	1.32757 AU		8083 Jun 10 14:44	0°♌	
asc. node	8082 Jul 27 17:38	9°♌01'06			8083 Jun 29 16:08	0°♌	
superior conj	8082 Jul 29 23:50	13°♌50'41	0°22'49	morning set	8083 Jul 05 11:41	10°♌44'34	
minimum elong	8082 Jul 29 22:45	13°♌44'52	0°22'28	max. Earth dist.	8083 Jul 09 19:17	19°♌13'22	1.34019 AU
evening rise	8082 Aug 05 23:44	28°♌57'29		superior conj	8083 Jul 14 01:03	27°♌55'49	-0°05'45
	8082 Aug 06 11:31	0°♌		minimum elong	8083 Jul 14 01:22	27°♌57'28	0°05'49
	8082 Aug 23 13:41	0°♌		behind sun begin	8083 Jul 13 20:01	27°♌29'34	
evening max el	8082 Aug 28 16:18	5°♌47'50	23°04'42	behind sun end	8083 Jul 14 06:42	28°♌25'24	
desc. node	8082 Aug 31 13:35	8°♌19'38		asc. node	8083 Jul 14 14:39	29°♌07'01	
retrograde	8082 Sep 11 00:57	12°♌28'37			8083 Jul 15 00:44	0°♌	
evening set	8082 Sep 14 21:53	11°♌55'47		evening rise	8083 Jul 21 10:02	13°♌30'29	
min. Earth dist.	8082 Sep 22 01:08	8°♌40'18	0.55365 AU		8083 Jul 29 19:32	0°♌	
inferior conj	8082 Sep 23 15:25	7°♌44'51	-5°24'37	evening max el	8083 Aug 10 09:00	16°♌09'06	21°29'10
minimum elong	8082 Sep 23 10:50	7°♌51'30	5°24'09	desc. node	8083 Aug 18 10:40	21°♌31'21	
morning rise	8082 Oct 02 01:54	3°♌54'49		retrograde	8083 Aug 22 15:05	22°♌13'35	
direct	8082 Oct 05 02:15	3°♌33'21		evening set	8083 Aug 25 03:55	21°♌58'54	

inferior conj	8083 Sep 03 09:22	18° $\cap$ 00'41	-4°24'23	desc. node	8084 Aug 04 07:43	2° $\cap$ 07'46	
minimum elong	8083 Sep 02 23:57	18° $\cap$ 13'52	4°22'03		8084 Aug 10 00:12	30° $\mathbb{R}$ $\mathbb{Q}$	
min. Earth dist.	8083 Sep 03 09:59	17° $\cap$ 59'48	0.54708 AU	inferior conj	8084 Aug 13 04:20	28° $\mathbb{Q}$ 11'31	-2°40'02
morning rise	8083 Sep 11 20:55	14° $\cap$ 09'24		minimum elong	8084 Aug 12 21:03	28° $\mathbb{Q}$ 22'20	2°37'30
direct	8083 Sep 15 11:30	13° $\cap$ 41'10		min. Earth dist.	8084 Aug 14 20:34	27° $\mathbb{Q}$ 11'47	0.55001 AU
morning max el	8083 Sep 27 23:15	19° $\cap$ 36'02	22°14'54	morning rise	8084 Aug 21 14:26	23° $\mathbb{Q}$ 59'07	
	8083 Oct 06 12:07	0° $\mathbb{A}$		direct	8084 Aug 25 22:44	23° $\mathbb{Q}$ 18'09	
asc. node	8083 Oct 10 14:14	6° $\mathbb{A}$ 37'00		morning max el	8084 Sep 08 12:52	29° $\mathbb{Q}$ 57'21	24°00'23
morning set	8083 Oct 19 13:31	24° $\mathbb{A}$ 05'08			8084 Sep 08 14:00	0° $\cap$	
	8083 Oct 22 08:24	0° $\mathbb{M}$		asc. node	8084 Sep 26 11:13	25° $\cap$ 38'00	
					8084 Sep 28 17:18	0° $\mathbb{A}$	
superior conj	8083 Oct 26 15:58	9° $\mathbb{M}$ 12'04	1°41'26	morning set	8084 Oct 03 01:13	8° $\mathbb{A}$ 55'29	
minimum elong	8083 Oct 26 16:12	9° $\mathbb{M}$ 13'15	1°41'31				
max. Earth dist.	8083 Oct 30 06:21	16° $\mathbb{M}$ 42'18	1.34299 AU	superior conj	8084 Oct 09 23:10	23° $\mathbb{A}$ 54'47	1°39'26
evening rise	8083 Nov 03 18:18	25° $\mathbb{M}$ 40'59		minimum elong	8084 Oct 09 22:13	23° $\mathbb{A}$ 49'42	1°39'27
	8083 Nov 06 00:34	0° $\mathbb{X}$		max. Earth dist.	8084 Oct 12 05:37	28° $\mathbb{A}$ 48'27	1.32986 AU
desc. node	8083 Nov 14 09:34	14° $\mathbb{X}$ 49'13			8084 Oct 12 19:01	0° $\mathbb{M}$	
	8083 Nov 24 06:00	0° $\mathbb{Z}$		evening rise	8084 Oct 17 10:13	9° $\mathbb{M}$ 37'14	
evening max el	8083 Dec 08 16:32	17° $\mathbb{Z}$ 28'53	27°00'56		8084 Oct 28 09:37	0° $\mathbb{X}$	
retrograde	8083 Dec 21 23:28	24° $\mathbb{Z}$ 48'49		desc. node	8084 Oct 31 06:36	4° $\mathbb{X}$ 45'10	
evening set	8083 Dec 28 15:45	22° $\mathbb{Z}$ 12'30			8084 Nov 19 08:46	0° $\mathbb{Z}$	
min. Earth dist.	8084 Jan 01 14:53	18° $\mathbb{Z}$ 20'56	0.65496 AU	evening max el	8084 Nov 20 04:49	0° $\mathbb{Z}$ 48'33	27°26'55
inferior conj	8084 Jan 03 16:45	15° $\mathbb{Z}$ 59'00	-0°57'53	retrograde	8084 Dec 03 20:04	8° $\mathbb{Z}$ 07'18	
minimum elong	8084 Jan 03 18:26	15° $\mathbb{Z}$ 54'11	0°57'01	evening set	8084 Dec 10 20:14	5° $\mathbb{Z}$ 33'53	
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morning rise	8084 Jan 09 22:20	10° $\mathbb{Z}$ 23'34			8084 Dec 16 18:57	30° $\mathbb{R}$ $\mathbb{X}$	
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morning max el	8084 Jan 19 02:37	13° $\mathbb{Z}$ 08'48	18°07'14	minimum elong	8084 Dec 17 07:47	29° $\mathbb{X}$ 26'43	2°03'09
	8084 Jan 31 03:26	0° $\mathbb{A}$		asc. node	8084 Dec 23 10:38	24° $\mathbb{X}$ 27'23	
morning set	8084 Feb 06 13:40	10° $\mathbb{A}$ 27'03		morning rise	8084 Dec 23 21:03	24° $\mathbb{X}$ 16'07	
desc. node	8084 Feb 10 08:55	16° $\mathbb{A}$ 38'13		direct	8084 Dec 26 07:40	23° $\mathbb{X}$ 46'32	
	8084 Feb 18 16:55	0° $\mathbb{H}$		morning max el	8085 Jan 01 19:50	27° $\mathbb{X}$ 09'39	17°49'55
					8085 Jan 04 08:13	0° $\mathbb{Z}$	
superior conj	8084 Feb 21 08:48	4° $\mathbb{H}$ 12'34	-1°13'43	morning set	8085 Jan 18 11:50	22° $\mathbb{Z}$ 30'29	
minimum elong	8084 Feb 21 00:25	3° $\mathbb{H}$ 39'33	1°12'37		8085 Jan 22 21:28	0° $\mathbb{A}$	
max. Earth dist.	8084 Feb 24 01:33	8° $\mathbb{H}$ 27'08	1.45416 AU	desc. node	8085 Jan 27 05:54	7° $\mathbb{A}$ 17'21	
evening rise	8084 Mar 08 13:02	29° $\mathbb{H}$ 26'14					
	8084 Mar 08 21:45	0° $\mathbb{Y}$		superior conj	8085 Jan 31 07:26	13° $\mathbb{A}$ 57'55	-0°29'10
greatest brilliancy	8084 Mar 21 05:53	18° $\mathbb{Y}$ 56'58	-0.7m	minimum elong	8085 Jan 31 04:11	13° $\mathbb{A}$ 44'42	0°28'36
	8084 Mar 29 00:53	0° $\mathbb{B}$		max. Earth dist.	8085 Feb 05 20:33	22° $\mathbb{A}$ 52'43	1.44689 AU
evening max el	8084 Apr 02 02:22	4° $\mathbb{B}$ 44'23	19°29'05		8085 Feb 10 09:07	0° $\mathbb{H}$	
asc. node	8084 Apr 03 12:33	6° $\mathbb{B}$ 05'18		evening rise	8085 Feb 16 00:54	8° $\mathbb{H}$ 45'22	
retrograde	8084 Apr 09 07:06	8° $\mathbb{B}$ 50'23			8085 Mar 02 04:08	0° $\mathbb{Y}$	
evening set	8084 Apr 12 21:27	7° $\mathbb{B}$ 34'46		evening max el	8085 Mar 16 04:39	18° $\mathbb{Y}$ 22'50	20°29'05
inferior conj	8084 Apr 18 07:32	1° $\mathbb{B}$ 41'04	3°21'04	asc. node	8085 Mar 21 09:37	22° $\mathbb{Y}$ 23'32	
minimum elong	8084 Apr 18 06:44	1° $\mathbb{B}$ 43'43	3°20'57	retrograde	8085 Mar 24 05:33	23° $\mathbb{Y}$ 04'26	
min. Earth dist.	8084 Apr 19 13:39	0° $\mathbb{B}$ 02'06	0.66869 AU	evening set	8085 Mar 28 04:56	21° $\mathbb{Y}$ 33'38	
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morning rise	8084 Apr 23 15:40	25° $\mathbb{Y}$ 23'21		minimum elong	8085 Apr 02 10:58	15° $\mathbb{Y}$ 32'29	3°06'24
direct	8084 Apr 29 18:39	22° $\mathbb{Y}$ 40'17		min. Earth dist.	8085 Apr 03 04:41	14° $\mathbb{Y}$ 31'49	0.67815 AU
desc. node	8084 May 08 08:34	26° $\mathbb{Y}$ 35'24		morning rise	8085 Apr 07 16:47	9° $\mathbb{Y}$ 10'59	
morning max el	8084 May 12 03:37	0° $\mathbb{B}$ 04'39	25°44'14	direct	8085 Apr 13 07:02	6° $\mathbb{Y}$ 41'29	
	8084 May 12 01:47	0° $\mathbb{B}$		morning max el	8085 Apr 24 12:35	13° $\mathbb{Y}$ 24'33	24°18'53
	8084 Jun 03 12:43	0° $\mathbb{I}$		desc. node	8085 Apr 25 05:34	14° $\mathbb{Y}$ 08'14	
morning set	8084 Jun 17 06:41	23° $\mathbb{I}$ 19'46			8085 May 07 22:42	0° $\mathbb{B}$	
	8084 Jun 20 20:30	0° $\mathbb{E}$			8085 May 27 08:56	0° $\mathbb{I}$	
max. Earth dist.	8084 Jun 21 00:37	0° $\mathbb{E}$ 19'37	1.35747 AU	morning set	8085 May 30 06:30	4° $\mathbb{I}$ 58'17	
				max. Earth dist.	8085 Jun 02 22:15	11° $\mathbb{I}$ 26'35	1.37845 AU
superior conj	8084 Jun 26 18:01	11° $\mathbb{E}$ 33'03	-0°36'45				
minimum elong	8084 Jun 26 20:11	11° $\mathbb{E}$ 43'59	0°36'29	superior conj	8085 Jun 09 23:26	24° $\mathbb{I}$ 34'02	-1°08'27
asc. node	8084 Jun 30 11:40	19° $\mathbb{E}$ 09'17		minimum elong	8085 Jun 10 03:38	24° $\mathbb{I}$ 54'13	1°07'55
evening rise	8084 Jul 04 16:50	27° $\mathbb{E}$ 49'22			8085 Jun 12 18:38	0° $\mathbb{E}$	
	8084 Jul 05 18:28	0° $\mathbb{Q}$		asc. node	8085 Jun 17 08:40	9° $\mathbb{E}$ 03'49	
evening max el	8084 Jul 22 13:46	27° $\mathbb{Q}$ 05'39	20°08'32	evening rise	8085 Jun 18 17:39	11° $\mathbb{E}$ 47'23	
	8084 Jul 26 02:09	0° $\cap$			8085 Jun 28 14:45	0° $\mathbb{Q}$	
retrograde	8084 Aug 02 04:20	2° $\cap$ 19'34		evening max el	8085 Jul 05 07:24	8° $\mathbb{Q}$ 46'05	19°07'46
evening set	8084 Aug 04 02:22	2° $\cap$ 10'04		retrograde	8085 Jul 14 05:51	13° $\mathbb{Q}$ 11'03	


































































































































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desc. node	8085 Jul 22 04:47	10° $\Omega$ 21'00		evening set	8086 Jun 28 06:21	24° $\mathfrak{G}$ 37'50	
inferior conj	8085 Jul 24 13:44	8° $\Omega$ 47'23	-0°43'27	inferior conj	8086 Jul 05 20:28	20° $\mathfrak{G}$ 05'56	0°56'40
minimum elong	8085 Jul 24 11:51	8° $\Omega$ 50'34	0°42'50	minimum elong	8086 Jul 05 22:24	20° $\mathfrak{G}$ 02'03	0°55'50
min. Earth dist.	8085 Jul 27 10:17	6° $\Omega$ 51'33	0.56200 AU	min. Earth dist.	8086 Jul 09 05:15	17° $\mathfrak{G}$ 26'09	0.58071 AU
morning rise	8085 Aug 01 16:55	3° $\Omega$ 59'51		desc. node	8086 Jul 09 01:51	17° $\mathfrak{G}$ 32'37	
direct	8085 Aug 06 21:17	2° $\Omega$ 57'32		morning rise	8086 Jul 13 11:02	14° $\mathfrak{G}$ 42'09	
morning max el	8085 Aug 21 01:46	10° $\Omega$ 12'12	25°41'14	direct	8086 Jul 19 10:17	13° $\mathfrak{G}$ 10'11	
	8085 Sep 05 02:18	0° $\mathfrak{M}$		morning max el	8086 Aug 02 19:45	20° $\mathfrak{G}$ 50'33	27°00'31
asc. node	8085 Sep 13 08:11	15° $\mathfrak{M}$ 03'54			8086 Aug 10 18:05	0° $\Omega$	
morning set	8085 Sep 17 12:33	23° $\mathfrak{M}$ 42'15			8086 Aug 28 20:19	0° $\mathfrak{M}$	
	8085 Sep 20 10:26	0° $\mathfrak{L}$		asc. node	8086 Aug 31 05:09	4° $\mathfrak{M}$ 47'52	
				morning set	8086 Sep 01 21:56	8° $\mathfrak{M}$ 20'54	
superior conj	8085 Sep 24 09:35	8° $\mathfrak{L}$ 44'15	1°31'33	superior conj	8086 Sep 08 21:21	23° $\mathfrak{M}$ 34'35	1°18'21
minimum elong	8085 Sep 24 07:49	8° $\mathfrak{L}$ 34'28	1°31'25	minimum elong	8086 Sep 08 19:09	23° $\mathfrak{M}$ 22'20	1°18'02
max. Earth dist.	8085 Sep 25 11:46	11° $\mathfrak{L}$ 08'25	1.32116 AU	max. Earth dist.	8086 Sep 08 21:35	23° $\mathfrak{M}$ 35'52	1.31701 AU
evening rise	8085 Oct 01 10:34	23° $\mathfrak{L}$ 55'16			8086 Sep 11 18:59	0° $\mathfrak{L}$	
	8085 Oct 04 10:16	0° $\mathfrak{M}$		evening rise	8086 Sep 15 16:49	8° $\mathfrak{L}$ 27'53	
desc. node	8085 Oct 18 03:38	24° $\mathfrak{M}$ 10'59			8086 Sep 26 19:52	0° $\mathfrak{M}$	
	8085 Oct 22 02:46	0° $\mathfrak{X}$		desc. node	8086 Oct 05 00:42	12° $\mathfrak{M}$ 54'40	
evening max el	8085 Nov 02 13:46	13° $\mathfrak{X}$ 35'06	27°22'33	evening max el	8086 Oct 15 16:38	25° $\mathfrak{M}$ 36'18	26°44'28
retrograde	8085 Nov 16 09:20	20° $\mathfrak{X}$ 48'46			8086 Oct 21 05:52	0° $\mathfrak{X}$	
evening set	8085 Nov 23 11:51	18° $\mathfrak{X}$ 27'29		retrograde	8086 Oct 29 14:28	2° $\mathfrak{X}$ 44'41	
min. Earth dist.	8085 Nov 27 04:01	15° $\mathfrak{X}$ 35'13	0.61991 AU	evening set	8086 Nov 05 10:28	0° $\mathfrak{X}$ 46'28	
inferior conj	8085 Nov 30 03:16	12° $\mathfrak{X}$ 52'12	-3°14'25		8086 Nov 06 17:09	30° $\mathfrak{R}$ $\mathfrak{M}$	
minimum elong	8085 Nov 30 09:20	12° $\mathfrak{X}$ 38'16	3°12'09	min. Earth dist.	8086 Nov 09 06:35	28° $\mathfrak{M}$ 10'11	0.59918 AU
morning rise	8085 Dec 07 08:58	7° $\mathfrak{X}$ 49'54		inferior conj	8086 Nov 12 11:24	25° $\mathfrak{M}$ 36'23	-4°20'41
direct	8085 Dec 09 15:14	7° $\mathfrak{X}$ 27'34		minimum elong	8086 Nov 12 18:38	25° $\mathfrak{M}$ 21'50	4°18'39
asc. node	8085 Dec 10 07:40	7° $\mathfrak{X}$ 29'41		morning rise	8086 Nov 20 05:12	20° $\mathfrak{M}$ 55'38	
morning max el	8085 Dec 16 12:17	10° $\mathfrak{X}$ 56'57	17°50'31	direct	8086 Nov 22 10:29	20° $\mathfrak{M}$ 37'21	
	8085 Dec 29 04:36	0° $\mathfrak{Z}$		asc. node	8086 Nov 27 04:42	22° $\mathfrak{M}$ 05'59	
morning set	8086 Jan 01 07:18	5° $\mathfrak{Z}$ 34'16		morning max el	8086 Nov 30 00:37	24° $\mathfrak{M}$ 21'58	18°10'16
					8086 Dec 04 15:16	0° $\mathfrak{X}$	
superior conj	8086 Jan 12 07:14	24° $\mathfrak{Z}$ 56'09	0°13'21	morning set	8086 Dec 15 18:03	19° $\mathfrak{X}$ 20'27	
minimum elong	8086 Jan 12 08:28	25° $\mathfrak{Z}$ 01'25	0°13'18		8086 Dec 21 10:35	0° $\mathfrak{Z}$	
behind sun begin	8086 Jan 12 03:35	24° $\mathfrak{Z}$ 40'35		superior conj	8086 Dec 25 07:30	7° $\mathfrak{Z}$ 04'27	0°48'18
behind sun end	8086 Jan 12 13:20	25° $\mathfrak{Z}$ 22'12		minimum elong	8086 Dec 25 10:45	7° $\mathfrak{Z}$ 19'02	0°48'00
desc. node	8086 Jan 14 02:51	28° $\mathfrak{Z}$ 01'05		desc. node	8086 Dec 31 23:49	18° $\mathfrak{Z}$ 46'10	
	8086 Jan 15 07:11	0° $\mathfrak{A}$		max. Earth dist.	8087 Jan 01 22:58	20° $\mathfrak{Z}$ 24'14	1.41440 AU
max. Earth dist.	8086 Jan 19 12:20	6° $\mathfrak{A}$ 56'58	1.43308 AU	evening rise	8087 Jan 06 22:44	28° $\mathfrak{Z}$ 39'07	
evening rise	8086 Jan 26 15:47	18° $\mathfrak{A}$ 19'26			8087 Jan 07 18:46	0° $\mathfrak{A}$	
	8086 Feb 03 06:57	0° $\mathfrak{H}$			8087 Jan 27 21:25	0° $\mathfrak{H}$	
	8086 Feb 25 03:37	0° $\mathfrak{Y}$		evening max el	8087 Feb 09 17:40	15° $\mathfrak{H}$ 43'35	22°59'32
evening max el	8086 Feb 27 01:25	2° $\mathfrak{Y}$ 02'19	21°40'47	retrograde	8087 Feb 19 23:10	21° $\mathfrak{H}$ 47'25	
retrograde	8086 Mar 08 03:27	7° $\mathfrak{Y}$ 25'04		asc. node	8087 Feb 23 03:47	20° $\mathfrak{H}$ 56'29	
asc. node	8086 Mar 08 06:41	7° $\mathfrak{Y}$ 24'58		evening set	8087 Feb 24 20:07	19° $\mathfrak{H}$ 46'27	
evening set	8086 Mar 12 13:02	5° $\mathfrak{Y}$ 38'59		inferior conj	8087 Mar 02 05:11	13° $\mathfrak{H}$ 21'17	2°08'19
	8086 Mar 17 09:23	30° $\mathfrak{R}$ $\mathfrak{H}$		minimum elong	8087 Mar 02 02:57	13° $\mathfrak{H}$ 29'01	2°07'39
inferior conj	8086 Mar 17 20:32	29° $\mathfrak{H}$ 21'16	2°42'05	min. Earth dist.	8087 Mar 01 20:23	13° $\mathfrak{H}$ 51'44	0.68383 AU
minimum elong	8086 Mar 17 18:21	29° $\mathfrak{H}$ 28'52	2°41'33	morning rise	8087 Mar 07 09:42	7° $\mathfrak{H}$ 13'47	
min. Earth dist.	8086 Mar 17 23:40	29° $\mathfrak{H}$ 10'22	0.68309 AU	direct	8087 Mar 11 19:55	5° $\mathfrak{H}$ 25'58	
morning rise	8086 Mar 22 23:31	23° $\mathfrak{H}$ 09'03		morning max el	8087 Mar 20 13:10	10° $\mathfrak{H}$ 29'04	21°23'47
direct	8086 Mar 27 23:46	20° $\mathfrak{H}$ 59'06		desc. node	8087 Mar 29 23:29	21° $\mathfrak{H}$ 54'01	
morning max el	8086 Apr 06 22:42	26° $\mathfrak{H}$ 52'16	22°49'12		8087 Apr 04 18:17	0° $\mathfrak{Y}$	
	8086 Apr 09 20:23	0° $\mathfrak{Y}$		morning set	8087 Apr 21 01:14	24° $\mathfrak{Y}$ 39'15	
desc. node	8086 Apr 12 02:32	2° $\mathfrak{Y}$ 40'04			8087 Apr 24 09:39	0° $\mathfrak{Z}$	
	8086 May 01 12:52	0° $\mathfrak{Z}$		max. Earth dist.	8087 Apr 27 20:24	5° $\mathfrak{Z}$ 36'41	1.42211 AU
morning set	8086 May 11 05:42	15° $\mathfrak{Z}$ 26'59					
max. Earth dist.	8086 May 15 19:04	23° $\mathfrak{Z}$ 06'42	1.40091 AU	superior conj	8087 May 05 06:36	18° $\mathfrak{Z}$ 07'04	-2°00'57
	8086 May 19 18:04	0° $\mathfrak{I}$		minimum elong	8087 May 05 11:41	18° $\mathfrak{Z}$ 29'02	2°00'44
					8087 May 12 00:27	0° $\mathfrak{I}$	
superior conj	8086 May 23 13:14	6° $\mathfrak{I}$ 49'16	-1°37'58	evening rise	8087 May 16 12:07	8° $\mathfrak{I}$ 06'52	
minimum elong	8086 May 23 18:53	7° $\mathfrak{I}$ 15'03	1°37'25	asc. node	8087 May 22 02:44	18° $\mathfrak{I}$ 12'07	
evening rise	8086 Jun 02 09:26	25° $\mathfrak{I}$ 16'49			8087 May 29 12:13	0° $\mathfrak{G}$	
asc. node	8086 Jun 04 05:41	28° $\mathfrak{I}$ 46'38		evening max el	8087 Jun 01 21:36	3° $\mathfrak{G}$ 59'25	18°08'02
	8086 Jun 04 21:15	0° $\mathfrak{G}$					
evening max el	8086 Jun 18 11:17	21° $\mathfrak{G}$ 07'13	18°27'49				

retrograde	8087 Jun 08 16:34	7°☿26'14		evening max el	8088 May 15 10:48	17°♄13'27	18°07'31
evening set	8087 Jun 11 04:10	6°☿58'57		retrograde	8088 May 21 20:40	20°♄34'10	
inferior conj	8087 Jun 18 00:11	2°☿06'51	2°09'05	evening set	8088 May 24 15:41	19°♄54'43	
minimum elong	8087 Jun 18 03:16	1°☿59'42	2°08'04	inferior conj	8088 May 30 21:22	14°♄43'21	2°54'34
	8087 Jun 20 06:45	30°♄		minimum elong	8088 May 30 23:51	14°♄36'48	2°53'57
min. Earth dist.	8087 Jun 21 07:22	29°♄04'42	0.60280 AU	min. Earth dist.	8088 Jun 02 18:01	11°♄43'12	0.62505 AU
morning rise	8087 Jun 24 23:37	26°♄15'58		morning rise	8088 Jun 06 06:17	8°♄36'15	
desc. node	8087 Jun 25 22:55	25°♄42'01		desc. node	8088 Jun 11 19:58	6°♄11'10	
direct	8087 Jul 01 12:23	24°♄12'05		direct	8088 Jun 13 00:45	6°♄06'39	
	8087 Jul 13 13:24	0°☿		morning max el	8088 Jun 27 02:39	14°♄09'01	27°53'42
morning max el	8087 Jul 15 20:24	2°☿08'24	27°46'10		8088 Jul 09 21:26	0°☿	
	8087 Aug 05 03:26	0°♄			8088 Jul 27 16:21	0°♄	
morning set	8087 Aug 17 03:34	22°♄45'47		morning set	8088 Jul 31 03:23	6°♄51'06	
asc. node	8087 Aug 18 02:08	24°♄43'48		asc. node	8088 Aug 03 23:07	14°♄47'07	
	8087 Aug 20 13:23	0°♄		max. Earth dist.	8088 Aug 05 13:16	18°♄10'55	1.32251 AU
max. Earth dist.	8087 Aug 23 07:20	6°♄00'10	1.31741 AU				
				superior conj	8088 Aug 07 17:40	22°♄54'42	0°37'40
superior conj	8087 Aug 24 08:39	8°♄19'55	1°00'15	minimum elong	8088 Aug 07 16:02	22°♄45'47	0°37'14
minimum elong	8087 Aug 24 06:28	8°♄07'53	0°59'49		8088 Aug 10 23:25	0°♄	
evening rise	8087 Aug 31 02:42	23°♄08'21		evening rise	8088 Aug 14 14:15	7°♄50'56	
	8087 Sep 03 09:20	0°♄			8088 Aug 26 01:04	0°♄	
	8087 Sep 21 09:10	0°♄		desc. node	8088 Sep 07 18:55	17°♄02'27	
desc. node	8087 Sep 21 21:48	0°♄39'32		evening max el	8088 Sep 08 00:18	17°♄15'32	24°01'59
evening max el	8087 Sep 27 11:41	6°♄46'54	25°34'31	retrograde	8088 Sep 21 17:05	24°♄07'20	
retrograde	8087 Oct 11 09:55	13°♄49'41		evening set	8088 Sep 26 11:06	23°♄17'47	
evening set	8087 Oct 17 11:10	12°♄24'31		min. Earth dist.	8088 Oct 02 10:58	20°♄20'54	0.56108 AU
min. Earth dist.	8087 Oct 21 23:55	9°♄47'10	0.57859 AU	inferior conj	8088 Oct 04 18:11	18°♄56'27	-5°34'03
inferior conj	8087 Oct 25 00:57	7°♄40'03	-5°12'54	minimum elong	8088 Oct 04 18:00	18°♄56'44	5°33'59
minimum elong	8087 Oct 25 06:35	7°♄30'14	5°11'59	morning rise	8088 Oct 13 03:02	14°♄58'31	
morning rise	8087 Nov 02 04:19	3°♄22'06		direct	8088 Oct 15 20:38	14°♄39'14	
direct	8087 Nov 04 13:08	3°♄04'49		morning max el	8088 Oct 25 22:24	19°♄23'43	19°53'46
morning max el	8087 Nov 13 05:10	7°♄14'30	18°50'54	asc. node	8088 Oct 30 22:43	25°♄14'21	
asc. node	8087 Nov 14 01:43	8°♄06'05			8088 Nov 03 02:47	0°♄	
	8087 Nov 27 19:08	0°♄		morning set	8088 Nov 12 19:45	18°♄09'25	
morning set	8087 Nov 29 15:24	3°♄35'45			8088 Nov 18 15:22	0°♄	
				superior conj	8088 Nov 20 14:15	3°♄55'13	1°30'54
superior conj	8087 Dec 08 03:34	20°♄09'14	1°14'04	minimum elong	8088 Nov 20 16:34	4°♄06'45	1°30'50
minimum elong	8087 Dec 08 06:51	20°♄24'51	1°13'50	max. Earth dist.	8088 Nov 26 11:15	15°♄18'13	1.37172 AU
	8087 Dec 13 11:05	0°♄		evening rise	8088 Nov 30 05:32	22°♄12'41	
max. Earth dist.	8087 Dec 15 05:16	3°♄08'34	1.39310 AU	desc. node	8088 Dec 04 17:50	0°♄05'54	
desc. node	8087 Dec 18 20:49	9°♄29'17			8088 Dec 04 16:27	0°♄	
evening rise	8087 Dec 19 03:34	9°♄58'04			8088 Dec 24 12:21	0°♄	
	8087 Dec 31 15:55	0°♄		evening max el	8089 Jan 04 20:42	13°♄16'52	25°33'30
evening max el	8088 Jan 23 07:30	29°♄29'07	24°19'22	retrograde	8089 Jan 17 03:01	20°♄19'30	
	8088 Jan 23 20:08	0°♄		evening set	8089 Jan 23 01:07	17°♄53'05	
retrograde	8088 Feb 03 15:24	6°♄07'35		asc. node	8089 Jan 26 21:58	13°♄44'50	
evening set	8088 Feb 09 00:42	3°♄52'50		min. Earth dist.	8089 Jan 27 09:56	13°♄07'14	0.67357 AU
asc. node	8088 Feb 10 00:53	2°♄56'48		inferior conj	8089 Jan 28 17:29	11°♄26'15	0°35'56
	8088 Feb 12 13:57	30°♄		minimum elong	8089 Jan 28 16:36	11°♄29'06	0°35'42
min. Earth dist.	8088 Feb 13 16:36	28°♄32'20	0.68062 AU	morning rise	8089 Feb 03 08:29	5°♄33'12	
inferior conj	8088 Feb 14 12:48	27°♄24'24	1°26'07	direct	8089 Feb 06 17:35	4°♄27'34	
minimum elong	8088 Feb 14 10:59	27°♄30'32	1°25'31	morning max el	8089 Feb 13 16:23	8°♄17'11	19°09'02
morning rise	8088 Feb 19 21:22	21°♄23'07		greatest brilliancy	8089 Feb 27 02:47	26°♄16'37	-0.7m
direct	8088 Feb 23 18:22	19°♄57'22			8089 Mar 01 13:36	0°♄	
morning max el	8088 Mar 02 10:50	24°♄17'52	20°09'10	desc. node	8089 Mar 02 17:22	1°♄46'14	
	8088 Mar 07 10:00	0°♄		morning set	8089 Mar 09 02:33	11°♄36'54	
desc. node	8088 Mar 15 20:25	11°♄39'02			8089 Mar 20 21:52	0°♄	
	8088 Mar 28 01:51	0°♄		max. Earth dist.	8089 Mar 22 20:14	3°♄02'07	1.45088 AU
morning set	8088 Mar 30 00:48	3°♄00'39					
max. Earth dist.	8088 Apr 09 04:57	18°♄58'50	1.43946 AU	superior conj	8089 Mar 25 17:24	7°♄35'05	-2°04'02
				minimum elong	8089 Mar 25 11:13	7°♄10'38	2°03'45
superior conj	8088 Apr 14 23:44	28°♄20'43	-2°11'35		8089 Apr 08 14:59	0°♄	
minimum elong	8088 Apr 15 00:32	28°♄24'01	2°11'40	evening rise	8089 Apr 09 08:11	1°♄10'41	
	8088 Apr 15 23:53	0°♄		asc. node	8089 Apr 24 20:53	25°♄44'52	
evening rise	8088 Apr 27 21:09	20°♄07'26			8089 Apr 28 07:54	0°♄	
	8088 May 03 14:46	0°♄		evening max el	8089 Apr 28 23:40	0°♄40'53	18°25'31
asc. node	8088 May 07 23:48	7°♄14'10					

retrograde	8089 May 05 10:16	4° $\Pi$ 09'36			8090 Mar 13 15:23	0° $\Upsilon$	
evening set	8089 May 08 12:30	3° $\Pi$ 16'36		evening rise	8090 Mar 20 19:48	11° $\Upsilon$ 17'45	
	8089 May 12 09:07	30° $\kappa$ 8		greatest brilliancy	8090 Mar 30 18:01	26° $\Upsilon$ 53'19	-0.8m
inferior conj	8089 May 14 07:50	27° $\delta$ 47'21	3°17'56		8090 Apr 01 18:35	0° $\delta$	
minimum elong	8089 May 14 09:02	27° $\delta$ 43'51	3°17'43	asc. node	8090 Apr 11 17:57	13° $\delta$ 34'13	
min. Earth dist.	8089 May 16 13:51	25° $\delta$ 09'27	0.64498 AU	evening max el	8090 Apr 12 09:39	14° $\delta$ 15'08	19°01'06
morning rise	8089 May 20 04:40	21° $\delta$ 32'16		retrograde	8090 Apr 19 05:36	18° $\delta$ 04'34	
direct	8089 May 26 21:17	18° $\delta$ 48'13		evening set	8090 Apr 22 15:19	16° $\delta$ 57'15	
desc. node	8089 May 29 17:00	19° $\delta$ 13'50		inferior conj	8090 Apr 28 03:53	11° $\delta$ 11'45	3°24'00
morning max el	8089 Jun 09 12:18	26° $\delta$ 46'15	27°25'21	minimum elong	8090 Apr 28 03:44	11° $\delta$ 12'11	3°23'55
	8089 Jun 12 12:37	0° $\Pi$		min. Earth dist.	8090 Apr 29 18:28	9° $\delta$ 09'17	0.66124 AU
	8089 Jul 03 12:41	0° $\phi$		morning rise	8090 May 03 15:43	4° $\delta$ 53'55	
morning set	8089 Jul 14 18:50	20° $\phi$ 29'42		direct	8090 May 10 00:41	2° $\delta$ 07'33	
	8089 Jul 19 11:58	0° $\Omega$		desc. node	8090 May 16 14:00	4° $\delta$ 25'35	
max. Earth dist.	8089 Jul 19 11:44	29° $\phi$ 58'49	1.33238 AU	morning max el	8090 May 22 22:46	9° $\delta$ 48'35	26°27'27
asc. node	8089 Jul 21 20:07	4° $\Omega$ 53'39			8090 Jun 07 20:27	0° $\Pi$	
					8090 Jun 26 01:00	0° $\phi$	
superior conj	8089 Jul 22 22:24	7° $\Omega$ 13'04	0°11'07	morning set	8090 Jun 27 22:30	3° $\phi$ 31'26	
minimum elong	8089 Jul 22 21:51	7° $\Omega$ 10'07	0°10'52	max. Earth dist.	8090 Jul 01 23:47	11° $\phi$ 19'26	1.34706 AU
behind sun begin	8089 Jul 22 17:47	6° $\Omega$ 48'32					
behind sun end	8089 Jul 23 01:54	7° $\Omega$ 31'43		superior conj	8090 Jul 06 20:25	21° $\phi$ 07'16	-0°18'40
evening rise	8089 Jul 30 01:36	22° $\Omega$ 29'53		minimum elong	8090 Jul 06 21:29	21° $\phi$ 12'43	0°18'36
	8089 Aug 02 16:30	0° $\eta$		asc. node	8090 Jul 08 17:05	24° $\phi$ 58'35	
evening max el	8089 Aug 20 12:56	27° $\eta$ 29'32	22°22'49		8090 Jul 11 02:44	0° $\Omega$	
	8089 Aug 23 09:34	0° $\underline{\alpha}$		evening rise	8090 Jul 14 10:41	6° $\Omega$ 58'04	
desc. node	8089 Aug 25 16:01	1° $\underline{\alpha}$ 34'01			8090 Jul 26 22:41	0° $\eta$	
retrograde	8089 Sep 02 11:52	3° $\underline{\alpha}$ 56'41		evening max el	8090 Aug 02 10:06	8° $\eta$ 02'47	20°52'30
evening set	8089 Sep 05 17:53	3° $\underline{\alpha}$ 33'23		desc. node	8090 Aug 12 13:07	13° $\eta$ 41'47	
	8089 Sep 13 20:20	30° $\kappa$ $\eta$		retrograde	8090 Aug 14 00:17	13° $\eta$ 47'08	
min. Earth dist.	8089 Sep 13 19:22	0° $\underline{\alpha}$ 01'22	0.54979 AU	evening set	8090 Aug 16 04:37	13° $\eta$ 35'44	
inferior conj	8089 Sep 14 18:01	29° $\eta$ 29'25	-5°05'48	inferior conj	8090 Aug 25 10:30	9° $\eta$ 38'47	-3°43'51
minimum elong	8089 Sep 14 10:39	29° $\eta$ 39'50	5°04'35	minimum elong	8090 Aug 25 01:13	9° $\eta$ 51'58	3°41'04
morning rise	8089 Sep 23 05:10	25° $\eta$ 41'27		min. Earth dist.	8090 Aug 26 04:27	9° $\eta$ 13'15	0.54715 AU
direct	8089 Sep 26 11:32	25° $\eta$ 17'25		morning rise	8090 Sep 02 21:58	5° $\eta$ 41'13	
	8089 Oct 07 06:51	0° $\underline{\alpha}$		direct	8090 Sep 06 19:32	5° $\eta$ 08'41	
morning max el	8089 Oct 08 02:40	0° $\underline{\alpha}$ 44'39	21°18'19	morning max el	8090 Sep 19 20:06	11° $\eta$ 22'34	22°59'22
asc. node	8089 Oct 17 19:42	13° $\underline{\alpha}$ 16'13			8090 Oct 03 14:04	0° $\underline{\alpha}$	
	8089 Oct 26 18:45	0° $\mathbb{L}$		asc. node	8090 Oct 04 16:41	1° $\underline{\alpha}$ 58'21	
morning set	8089 Oct 28 04:32	2° $\mathbb{L}$ 54'22		morning set	8090 Oct 12 15:38	17° $\underline{\alpha}$ 44'00	
					8090 Oct 18 08:45	0° $\mathbb{L}$	
superior conj	8089 Nov 04 11:23	18° $\mathbb{L}$ 10'53	1°39'39				
minimum elong	8089 Nov 04 12:22	18° $\mathbb{L}$ 16'00	1°39'43	superior conj	8090 Oct 19 15:39	2° $\mathbb{L}$ 45'56	1°41'20
max. Earth dist.	8089 Nov 08 21:53	27° $\mathbb{L}$ 12'33	1.35249 AU	minimum elong	8090 Oct 19 15:21	2° $\mathbb{L}$ 44'19	1°41'25
	8089 Nov 10 07:50	0° $\text{𐌶}$		max. Earth dist.	8090 Oct 22 16:11	9° $\mathbb{L}$ 10'01	1.33685 AU
evening rise	8089 Nov 13 01:16	5° $\text{𐌶}$ 14'30		evening rise	8090 Oct 27 10:47	18° $\mathbb{L}$ 53'04	
desc. node	8089 Nov 21 14:53	20° $\text{𐌶}$ 31'35			8090 Nov 02 07:40	0° $\text{𐌶}$	
	8089 Nov 27 11:44	0° $\text{𐌿}$		desc. node	8090 Nov 08 11:56	10° $\text{𐌶}$ 40'21	
evening max el	8089 Dec 18 09:57	27° $\text{𐌿}$ 00'58	26°34'31		8090 Nov 21 15:38	0° $\text{𐌿}$	
	8089 Dec 21 18:53	0° $\approx$		evening max el	8090 Nov 30 22:45	10° $\text{𐌿}$ 31'59	27°15'18
retrograde	8089 Dec 31 09:14	4° $\approx$ 17'01		retrograde	8090 Dec 14 09:38	17° $\text{𐌿}$ 52'23	
evening set	8090 Jan 06 19:35	1° $\approx$ 42'34		evening set	8090 Dec 21 05:57	15° $\text{𐌿}$ 15'56	
	8090 Jan 08 16:19	30° $\kappa$ $\text{𐌿}$		min. Earth dist.	8090 Dec 25 02:46	11° $\text{𐌿}$ 38'50	0.64848 AU
min. Earth dist.	8090 Jan 10 22:03	27° $\text{𐌿}$ 31'35	0.66282 AU	inferior conj	8090 Dec 27 09:41	9° $\text{𐌿}$ 08'48	-1°25'45
inferior conj	8090 Jan 12 17:13	25° $\text{𐌿}$ 22'45	-0°21'40	minimum elong	8090 Dec 27 12:16	9° $\text{𐌿}$ 01'43	1°24'32
minimum elong	8090 Jan 12 17:48	25° $\text{𐌿}$ 20'58	0°21'16	asc. node	8090 Dec 31 16:04	4° $\text{𐌿}$ 59'33	
asc. node	8090 Jan 13 19:02	24° $\text{𐌿}$ 06'30		morning rise	8091 Jan 02 20:02	3° $\text{𐌿}$ 39'37	
morning rise	8090 Jan 18 16:54	19° $\text{𐌿}$ 40'16		direct	8091 Jan 05 10:23	3° $\text{𐌿}$ 04'17	
direct	8090 Jan 21 15:40	18° $\text{𐌿}$ 51'39		morning max el	8091 Jan 11 20:48	6° $\text{𐌿}$ 27'34	17°57'49
morning max el	8090 Jan 28 04:32	22° $\text{𐌿}$ 22'36	18°25'01		8091 Jan 27 18:39	0° $\approx$	
	8090 Feb 03 08:10	0° $\approx$		morning set	8091 Jan 29 10:35	2° $\approx$ 46'09	
morning set	8090 Feb 17 03:47	21° $\approx$ 27'34		desc. node	8091 Feb 04 11:16	12° $\approx$ 44'04	
desc. node	8090 Feb 17 14:18	22° $\approx$ 09'29					
	8090 Feb 22 12:46	0° $\text{𐌶}$		superior conj	8091 Feb 12 09:46	25° $\approx$ 33'31	-0°55'07
				minimum elong	8091 Feb 12 03:22	25° $\approx$ 08'00	0°54'11
superior conj	8090 Mar 04 22:20	16° $\text{𐌶}$ 21'41	-1°36'30		8091 Feb 15 04:58	0° $\text{𐌶}$	
minimum elong	8090 Mar 04 12:43	15° $\text{𐌶}$ 44'02	1°35'30	max. Earth dist.	8091 Feb 16 11:02	1° $\text{𐌶}$ 58'34	1.45186 AU
max. Earth dist.	8090 Mar 05 15:23	17° $\text{𐌶}$ 28'24	1.45512 AU	evening rise	8091 Feb 28 12:53	20° $\text{𐌶}$ 45'06	

	8091 Mar 06 13:43	0°♿		behind sun begin	8092 Jan 23 10:19	5°♿14'15	
greatest brilliancy	8091 Mar 14 20:52	12°♿28'29	-0.6m	behind sun end	8092 Jan 24 00:54	6°♿14'46	
evening max el	8091 Mar 26 14:58	27°♿52'42	19°52'54	max. Earth dist.	8092 Jan 30 04:21	16°♿14'52	1.44162 AU
	8091 Mar 28 22:56	0°♿		evening rise	8092 Feb 07 23:59	0°♿05'22	
asc. node	8091 Mar 29 15:02	0°♿30'14			8092 Feb 07 22:36	0°♿	
retrograde	8091 Apr 03 03:42	2°♿13'23			8092 Feb 28 06:32	0°♿	
evening set	8091 Apr 06 21:41	0°♿51'22		evening max el	8092 Mar 08 14:47	11°♿31'22	20°58'28
	8091 Apr 07 22:35	30°♿		asc. node	8092 Mar 15 12:08	16°♿17'41	
inferior conj	8091 Apr 12 06:27	24°♿51'32	3°16'22	retrograde	8092 Mar 17 02:09	16°♿30'34	
minimum elong	8091 Apr 12 05:13	24°♿55'39	3°16'10	evening set	8092 Mar 21 05:37	14°♿53'28	
min. Earth dist.	8091 Apr 13 06:23	23°♿31'11	0.67319 AU	inferior conj	8092 Mar 26 13:00	8°♿41'39	2°57'27
morning rise	8091 Apr 17 12:29	18°♿34'15		minimum elong	8092 Mar 26 11:03	8°♿48'23	2°57'03
direct	8091 Apr 23 10:09	15°♿56'09		min. Earth dist.	8092 Mar 26 23:29	8°♿05'24	0.68072 AU
desc. node	8091 May 03 10:57	21°♿15'11		morning rise	8092 Mar 31 16:16	2°♿27'01	
morning max el	8091 May 05 08:25	23°♿05'11	25°09'10	direct	8092 Apr 06 00:38	0°♿05'06	
	8091 May 11 11:00	0°♿		morning max el	8092 Apr 16 17:28	6°♿28'15	23°40'42
	8091 Jun 01 04:37	0°♿		desc. node	8092 Apr 19 07:55	9°♿15'23	
morning set	8091 Jun 10 10:04	15°♿45'11			8092 May 04 23:25	0°♿	
max. Earth dist.	8091 Jun 14 01:22	22°♿23'29	1.36606 AU	morning set	8092 May 22 00:05	26°♿56'02	
	8091 Jun 18 01:35	0°♿		max. Earth dist.	8092 May 23 19:01	0°♿	
					8092 May 25 21:09	3°♿38'37	1.38796 AU
superior conj	8091 Jun 20 08:55	4°♿30'29	-0°50'15				
minimum elong	8091 Jun 20 11:58	4°♿45'31	0°49'51	superior conj	8092 Jun 02 08:15	17°♿13'34	-1°21'28
asc. node	8091 Jun 25 14:06	14°♿58'25		minimum elong	8092 Jun 02 13:12	17°♿36'51	1°20'52
evening rise	8091 Jun 28 15:18	21°♿09'28			8092 Jun 08 23:55	0°♿	
	8091 Jul 03 02:38	0°♿		asc. node	8092 Jun 11 11:08	4°♿48'48	
evening max el	8091 Jul 15 20:28	19°♿17'58	19°40'04	evening rise	8092 Jun 11 12:41	4°♿56'25	
retrograde	8091 Jul 25 17:41	24°♿10'25			8092 Jun 26 13:31	0°♿	
evening set	8091 Jul 27 14:07	24°♿00'54		evening max el	8092 Jun 27 19:00	1°♿17'32	18°48'17
desc. node	8091 Jul 30 10:10	23°♿12'29		retrograde	8092 Jul 06 02:41	5°♿24'39	
inferior conj	8091 Aug 05 10:19	19°♿57'42	-1°50'01	evening set	8092 Jul 08 02:51	5°♿11'11	
minimum elong	8091 Aug 05 05:17	20°♿05'34	1°48'12	inferior conj	8092 Jul 16 04:29	0°♿51'15	0°02'04
min. Earth dist.	8091 Aug 07 16:27	18°♿33'08	0.55412 AU	minimum elong	8092 Jul 16 04:33	0°♿51'07	0°01'54
morning rise	8091 Aug 13 18:12	15°♿30'52		transit middle	8092 Jul 16 04:33	0°♿51'07	0°01'54
direct	8091 Aug 18 10:38	14°♿42'03		transit begin	8092 Jul 16 00:53	0°♿57'47	
morning max el	8091 Sep 01 08:45	21°♿38'17	24°44'52	transit end	8092 Jul 16 08:14	0°♿44'26	
	8091 Sep 08 16:13	0°♿		desc. node	8092 Jul 16 07:13	0°♿46'16	
asc. node	8091 Sep 21 13:38	21°♿10'44			8092 Jul 17 08:34	30°♿	
	8091 Sep 25 22:20	0°♿		min. Earth dist.	8092 Jul 19 08:25	28°♿34'20	0.56936 AU
morning set	8091 Sep 27 03:21	2°♿33'20		morning rise	8092 Jul 24 02:50	25°♿47'38	
				direct	8092 Jul 29 15:54	24°♿33'05	
superior conj	8091 Oct 04 00:29	17°♿32'30	1°36'46		8092 Aug 10 18:05	0°♿	
minimum elong	8091 Oct 03 23:09	17°♿25'11	1°36'43	morning max el	8092 Aug 12 23:14	2°♿00'23	26°18'20
max. Earth dist.	8091 Oct 05 18:27	21°♿21'09	1.32557 AU		8092 Sep 01 20:27	0°♿	
	8091 Oct 09 19:52	0°♿		asc. node	8092 Sep 07 10:37	10°♿45'31	
evening rise	8091 Oct 11 06:38	2°♿59'27		morning set	8092 Sep 10 14:05	17°♿17'46	
desc. node	8091 Oct 26 09:00	0°♿24'42			8092 Sep 16 09:47	0°♿	
	8091 Oct 26 02:47	0°♿					
evening max el	8091 Nov 13 09:42	23°♿38'23	27°29'03	superior conj	8092 Sep 17 11:46	2°♿23'55	1°26'35
	8091 Nov 22 13:37	0°♿		minimum elong	8092 Sep 17 09:45	2°♿12'47	1°26'22
retrograde	8091 Nov 27 03:27	0°♿56'13		max. Earth dist.	8092 Sep 18 02:30	3°♿45'27	1.31884 AU
	8091 Dec 01 11:50	30°♿		evening rise	8092 Sep 24 09:51	17°♿25'31	
evening set	8091 Dec 04 05:25	28°♿26'28			8092 Sep 30 16:39	0°♿	
min. Earth dist.	8091 Dec 07 22:17	25°♿19'40	0.63099 AU	desc. node	8092 Oct 12 06:04	19°♿34'54	
inferior conj	8091 Dec 10 16:11	22°♿37'48	-2°34'23		8092 Oct 19 23:35	0°♿	
minimum elong	8091 Dec 10 21:02	22°♿25'50	2°32'23	evening max el	8092 Oct 25 16:34	6°♿08'14	27°10'36
morning rise	8091 Dec 17 14:39	17°♿24'47		retrograde	8092 Nov 08 13:41	13°♿19'42	
asc. node	8091 Dec 18 13:07	17°♿08'19		evening set	8092 Nov 15 14:26	11°♿07'14	
direct	8091 Dec 19 22:54	16°♿58'52		min. Earth dist.	8092 Nov 19 07:20	8°♿23'07	0.61115 AU
morning max el	8091 Dec 26 14:07	20°♿23'51	17°47'58	inferior conj	8092 Nov 22 09:35	5°♿42'08	-3°43'29
	8092 Jan 02 18:54	0°♿		minimum elong	8092 Nov 22 16:21	5°♿27'23	3°41'12
morning set	8092 Jan 11 18:36	15°♿17'20		morning rise	8092 Nov 29 20:34	0°♿48'26	
	8092 Jan 20 07:19	0°♿		direct	8092 Dec 02 01:51	0°♿28'16	
desc. node	8092 Jan 22 08:13	3°♿25'30		asc. node	8092 Dec 04 10:08	0°♿51'41	
				morning max el	8092 Dec 09 05:17	4°♿03'27	17°56'27
superior conj	8092 Jan 23 18:41	5°♿49'01	-0°10'28	morning set	8092 Dec 24 21:19	28°♿41'54	
minimum elong	8092 Jan 23 17:37	5°♿44'32	0°10'11		8092 Dec 25 14:22	0°♿	



superior conj	8093 Jan 04 05:23	17°  18'38	0°29'15	minimum elong	8093 Dec 17 18:09	0°  08'36	1°00'03
minimum elong	8093 Jan 04 07:46	17°  29'01	0°29'02		8093 Dec 17 16:17	0° 	
desc. node	8093 Jan 08 05:12	24°  10'37		max. Earth dist.	8093 Dec 25 02:55	13°  15'36	1.40559 AU
max. Earth dist.	8093 Jan 11 17:52	0°  04'28	1.42562 AU	desc. node	8093 Dec 26 02:12	14°  55'20	
	8093 Jan 11 16:47	0° 		evening rise	8093 Dec 29 12:40	20°  41'30	
evening rise	8093 Jan 17 20:37	9°  56'56			8094 Jan 04 07:17	0° 	
	8093 Jan 31 01:27	0° 			8094 Jan 25 06:08	0° 	
evening max el	8093 Feb 19 09:36	25°  12'05	22°13'50	evening max el	8094 Feb 02 00:41	8°  55'28	23°33'47
	8093 Feb 25 13:18	0° 		retrograde	8094 Feb 12 17:26	15°  14'23	
retrograde	8093 Feb 28 23:12	0°  52'19		asc. node	8094 Feb 17 06:19	13°  14'01	
asc. node	8093 Mar 02 09:13	0°  42'06		evening set	8094 Feb 17 19:40	13°  10'16	
	8093 Mar 04 03:01	30°  18'18		min. Earth dist.	8094 Feb 22 16:11	7°  27'19	0.68298 AU
evening set	8093 Mar 05 13:27	29°  10'01		inferior conj	8094 Feb 23 05:53	6°  40'24	1°51'24
inferior conj	8093 Mar 10 21:27	22°  38'56	2°28'49	minimum elong	8094 Feb 23 03:46	6°  47'40	1°50'45
minimum elong	8093 Mar 10 19:11	22°  46'48	2°28'13	morning rise	8094 Feb 28 11:50	0°  35'35	
min. Earth dist.	8093 Mar 10 19:30	22°  45'45	0.68394 AU		8094 Mar 01 07:51	30°  18'18	
morning rise	8093 Mar 16 00:46	16°  28'32		direct	8094 Mar 04 16:22	28°  57'14	
direct	8093 Mar 20 19:06	14°  27'35			8094 Mar 08 07:03	0° 	
morning max el	8093 Mar 30 04:48	19°  58'39	22°11'50	morning max el	8094 Mar 12 22:07	3°  40'23	20°50'30
desc. node	8093 Apr 06 04:53	28°  10'41		desc. node	8094 Mar 24 01:50	17°  34'57	
	8093 Apr 07 15:46	0° 			8094 Apr 01 15:10	0° 	
	8093 Apr 28 04:19	0° 		morning set	8094 Apr 11 20:38	15°  36'19	
morning set	8093 May 02 11:25	6°  51'17		max. Earth dist.	8094 Apr 20 00:13	28°  33'56	1.43010 AU
max. Earth dist.	8093 May 07 19:13	15°  38'15	1.41028 AU		8094 Apr 20 21:22	0° 	
superior conj	8093 May 15 13:59	29°  06'00	-1°48'50	superior conj	8094 Apr 26 21:23	9°  57'14	-2°07'21
minimum elong	8093 May 15 19:45	29°  31'42	1°48'23	minimum elong	8094 Apr 27 01:10	10°  13'12	2°07'18
	8093 May 16 02:05	0° 			8094 May 08 09:59	0° 	
evening rise	8093 May 25 23:24	18°  10'13		evening rise	8094 May 08 19:11	0°  40'55	
asc. node	8093 May 29 08:11	24°  25'03		asc. node	8094 May 16 05:15	13°  11'47	
	8093 Jun 01 10:31	0° 		evening max el	8094 May 25 14:08	26°  15'26	18°05'31
evening max el	8093 Jun 11 02:10	13°  53'35	18°17'01		8094 May 30 04:20	0° 	
retrograde	8093 Jun 18 07:00	17°  30'25		retrograde	8094 Jun 01 03:55	0°  19'02	
evening set	8093 Jun 20 14:25	17°  08'56			8094 Jun 03 03:58	30°  18'18	
inferior conj	8093 Jun 27 20:25	12°  28'17	1°30'53	evening set	8094 Jun 03 18:45	29°  14'03	
minimum elong	8093 Jun 27 23:08	12°  22'30	1°29'51	inferior conj	8094 Jun 10 08:07	24°  14'56	2°31'22
min. Earth dist.	8093 Jul 01 05:58	9°  36'15	0.58994 AU	minimum elong	8094 Jun 10 11:06	24°  13'38	2°30'31
desc. node	8093 Jul 03 04:18	8°  08'32		min. Earth dist.	8094 Jun 13 11:25	21°  12'08	0.61235 AU
morning rise	8093 Jul 05 04:42	6°  52'03		morning rise	8094 Jun 17 01:10	18°  12'46	
direct	8093 Jul 11 10:46	5°  06'16		desc. node	8094 Jun 20 01:20	17°  12'00	
morning max el	8093 Jul 25 19:48	12°  53'43	27°24'28	direct	8094 Jun 23 17:11	16°  12'31	
	8093 Aug 08 08:37	0° 		morning max el	8094 Jul 07 23:14	24°  13'05	27°54'11
asc. node	8093 Aug 25 07:35	0°  35'28			8094 Jul 12 22:44	0° 	
	8093 Aug 25 00:46	0° 			8094 Aug 01 17:26	0° 	
morning set	8093 Aug 25 22:06	1°  11'28		morning set	8094 Aug 10 01:34	16°  09'27	
				asc. node	8094 Aug 12 04:35	20°  09'37	
superior conj	8093 Sep 01 23:33	17°  13'10	1°11'16	max. Earth dist.	8094 Aug 15 21:46	28°  35'39	1.31906 AU
minimum elong	8093 Sep 01 21:18	17°  00'39	1°10'53		8094 Aug 16 13:10	0° 	
max. Earth dist.	8093 Sep 01 12:53	16°  14'00	1.31667 AU				
	8093 Sep 07 18:59	0° 		superior conj	8094 Aug 17 10:07	1°  11'28	0°51'13
evening rise	8093 Sep 08 17:55	2°  02'55		minimum elong	8094 Aug 17 08:06	1°  11'28	0°50'46
	8093 Sep 23 16:57	0° 		evening rise	8094 Aug 24 04:47	16°  14'53	
desc. node	8093 Sep 29 03:11	7°  15'56			8094 Aug 30 16:30	0° 	
evening max el	8093 Oct 07 16:30	17°  14'49	26°18'17	desc. node	8094 Sep 16 00:16	25°  09'51	
retrograde	8093 Oct 21 14:36	24°  15'42		evening max el	8094 Sep 19 08:16	28°  09'41	24°56'56
evening set	8093 Oct 28 04:17	23°  09'33			8094 Sep 20 19:26	0° 	
min. Earth dist.	8093 Nov 01 05:43	20°  13'55	0.59031 AU	retrograde	8094 Oct 03 04:46	5°  13'58	
inferior conj	8093 Nov 04 10:14	18°  10'50	-4°45'25	evening set	8094 Oct 08 18:26	4°  13'28	
minimum elong	8093 Nov 04 17:15	17°  15'57	4°43'46	min. Earth dist.	8094 Oct 13 19:35	1°  15'45	0.57069 AU
morning rise	8093 Nov 12 08:29	13°  13'39			8094 Oct 16 11:57	30°  18'18	
direct	8093 Nov 14 14:48	13°  21'48		inferior conj	8094 Oct 16 15:08	29°  05'44	-5°26'46
asc. node	8093 Nov 21 07:10	16°  05'26		minimum elong	8094 Oct 16 18:48	29°  05'48	5°26'23
morning max el	8093 Nov 22 14:42	17°  15'49	18°24'51	morning rise	8094 Oct 24 21:25	25°  05'46	
	8093 Dec 01 16:37	0° 		direct	8094 Oct 27 09:31	25°  05'28	
morning set	8093 Dec 08 13:06	12°  12'42		morning max el	8094 Nov 05 14:47	29°  05'11	19°14'52
					8094 Nov 05 18:30	0° 	
superior conj	8093 Dec 17 14:43	29°  12'45	1°00'22	asc. node	8094 Nov 08 04:10	2°  13'36	

morning set	8094 Nov 22 13:46	27° $\mathbb{M}$ 06'33		morning set	8095 Oct 31 21:10	0° $\mathbb{M}$	
	8094 Nov 24 00:32	0° $\mathbb{A}$			8095 Nov 06 20:16	11° $\mathbb{M}$ 45'56	
superior conj	8094 Nov 30 17:34	13° $\mathbb{A}$ 16'57	1°22'15	superior conj	8095 Nov 14 09:11	27° $\mathbb{M}$ 17'28	1°35'31
minimum elong	8094 Nov 30 20:32	13° $\mathbb{A}$ 31'16	1°22'05	minimum elong	8095 Nov 14 10:57	27° $\mathbb{M}$ 26'25	1°35'32
max. Earth dist.	8094 Dec 07 08:40	25° $\mathbb{A}$ 44'10	1.38391 AU		8095 Nov 15 17:25	0° $\mathbb{A}$	
	8094 Dec 09 17:48	0° $\mathbb{B}$		max. Earth dist.	8095 Nov 19 15:40	7° $\mathbb{A}$ 43'20	1.36314 AU
evening rise	8094 Dec 11 02:45	2° $\mathbb{B}$ 24'34		evening rise	8095 Nov 23 12:46	15° $\mathbb{A}$ 00'53	
desc. node	8094 Dec 12 23:13	5° $\mathbb{B}$ 36'12		desc. node	8095 Nov 29 20:15	26° $\mathbb{A}$ 09'04	
	8094 Dec 28 11:45	0° $\mathbb{B}$			8095 Dec 02 03:33	0° $\mathbb{B}$	
evening max el	8095 Jan 15 13:54	22° $\mathbb{B}$ 41'35	24°51'58		8095 Dec 29 03:44	0° $\mathbb{B}$	
retrograde	8095 Jan 27 07:48	29° $\mathbb{B}$ 31'50		evening max el	8095 Dec 29 02:55	6° $\mathbb{B}$ 28'35	26°01'27
evening set	8095 Feb 01 22:40	27° $\mathbb{B}$ 11'28		retrograde	8096 Jan 10 17:26	13° $\mathbb{B}$ 39'05	
asc. node	8095 Feb 04 03:24	24° $\mathbb{B}$ 59'27		evening set	8096 Jan 16 20:50	11° $\mathbb{B}$ 08'33	
min. Earth dist.	8095 Feb 06 11:20	22° $\mathbb{B}$ 05'55	0.67809 AU	min. Earth dist.	8096 Jan 21 02:46	6° $\mathbb{B}$ 37'31	0.66940 AU
inferior conj	8095 Feb 07 12:27	20° $\mathbb{B}$ 43'02	1°05'44	asc. node	8096 Jan 22 00:26	5° $\mathbb{B}$ 30'11	
minimum elong	8095 Feb 07 10:58	20° $\mathbb{B}$ 47'57	1°05'16	inferior conj	8096 Jan 22 15:17	4° $\mathbb{B}$ 43'43	0°12'23
morning rise	8095 Feb 12 23:30	14° $\mathbb{B}$ 45'16		minimum elong	8096 Jan 22 14:58	4° $\mathbb{B}$ 44'44	0°12'22
direct	8095 Feb 16 15:12	13° $\mathbb{B}$ 28'35		transit middle	8096 Jan 22 14:58	4° $\mathbb{B}$ 44'44	0°12'22
morning max el	8095 Feb 23 23:16	17° $\mathbb{B}$ 34'20	19°41'42	transit begin	8096 Jan 22 13:09	4° $\mathbb{B}$ 50'25	
	8095 Mar 05 19:44	0° $\mathbb{H}$		transit end	8096 Jan 22 16:47	4° $\mathbb{B}$ 39'03	
greatest brilliancy	8095 Mar 08 17:25	4° $\mathbb{H}$ 12'29	-0.6m		8096 Jan 26 22:09	30° $\mathbb{R}$ $\mathbb{B}$	
desc. node	8095 Mar 10 22:46	7° $\mathbb{H}$ 30'01		morning rise	8096 Jan 28 09:44	28° $\mathbb{B}$ 54'52	
morning set	8095 Mar 21 17:54	23° $\mathbb{H}$ 54'45		direct	8096 Jan 31 14:06	27° $\mathbb{B}$ 57'05	
	8095 Mar 25 16:21	0° $\mathbb{Y}$			8096 Feb 05 11:59	0° $\mathbb{B}$	
max. Earth dist.	8095 Apr 02 11:55	12° $\mathbb{Y}$ 15'32	1.44506 AU	morning max el	8096 Feb 07 07:57	1° $\mathbb{B}$ 37'42	18°48'15
				desc. node	8096 Feb 25 19:43	27° $\mathbb{B}$ 44'59	
superior conj	8095 Apr 07 03:50	19° $\mathbb{Y}$ 42'53	-2°10'53		8096 Feb 27 06:18	0° $\mathbb{H}$	
minimum elong	8095 Apr 07 01:43	19° $\mathbb{Y}$ 34'23	2°10'53	morning set	8096 Feb 29 03:48	2° $\mathbb{H}$ 57'54	
	8095 Apr 13 11:03	0° $\mathbb{B}$		max. Earth dist.	8096 Mar 15 04:42	26° $\mathbb{H}$ 29'07	1.45356 AU
evening rise	8095 Apr 20 19:18	12° $\mathbb{B}$ 17'43					
	8095 May 01 10:50	0° $\mathbb{H}$		superior conj	8096 Mar 16 14:09	28° $\mathbb{H}$ 40'23	-1°54'37
asc. node	8095 May 03 02:20	2° $\mathbb{H}$ 31'29		minimum elong	8096 Mar 16 05:42	28° $\mathbb{H}$ 07'10	1°54'00
evening max el	8095 May 09 03:25	10° $\mathbb{H}$ 16'21	18°12'58		8096 Mar 17 10:26	0° $\mathbb{Y}$	
retrograde	8095 May 15 12:41	13° $\mathbb{H}$ 39'17		evening rise	8096 Mar 31 20:15	22° $\mathbb{Y}$ 56'03	
evening set	8095 May 18 10:38	12° $\mathbb{H}$ 54'19			8096 Apr 05 05:17	0° $\mathbb{B}$	
inferior conj	8095 May 24 11:26	7° $\mathbb{H}$ 35'05	3°06'52	greatest brilliancy	8096 Apr 07 04:56	3° $\mathbb{B}$ 11'54	-0.9m
minimum elong	8095 May 24 13:25	7° $\mathbb{H}$ 29'36	3°06'27	asc. node	8096 Apr 18 23:23	20° $\mathbb{B}$ 45'53	
min. Earth dist.	8095 May 27 02:06	4° $\mathbb{H}$ 42'11	0.63381 AU	evening max el	8096 Apr 21 15:18	23° $\mathbb{B}$ 47'04	18°38'35
morning rise	8095 May 30 14:49	1° $\mathbb{H}$ 23'26		retrograde	8096 Apr 28 05:01	27° $\mathbb{B}$ 23'15	
	8095 Jun 01 17:28	30° $\mathbb{R}$ $\mathbb{B}$		evening set	8096 May 01 10:17	26° $\mathbb{B}$ 24'25	
direct	8095 Jun 06 09:08	28° $\mathbb{B}$ 46'14		inferior conj	8096 May 07 02:22	20° $\mathbb{B}$ 48'18	3°22'23
desc. node	8095 Jun 06 22:22	28° $\mathbb{B}$ 47'12		minimum elong	8096 May 07 02:59	20° $\mathbb{B}$ 46'26	3°22'14
	8095 Jun 11 09:07	0° $\mathbb{H}$		min. Earth dist.	8096 May 09 01:55	18° $\mathbb{B}$ 23'52	0.65240 AU
morning max el	8095 Jun 20 07:28	6° $\mathbb{H}$ 48'57	27°45'51	morning rise	8096 May 12 18:57	14° $\mathbb{B}$ 31'21	
	8095 Jul 08 00:16	0° $\mathbb{B}$		direct	8096 May 19 08:57	11° $\mathbb{B}$ 44'31	
morning set	8095 Jul 24 22:11	0° $\mathbb{Q}$ 04'28		desc. node	8096 May 23 19:23	12° $\mathbb{B}$ 48'02	
	8095 Jul 24 21:18	0° $\mathbb{Q}$		morning max el	8096 Jun 01 17:41	19° $\mathbb{B}$ 37'51	27°03'45
max. Earth dist.	8095 Jul 30 00:59	10° $\mathbb{Q}$ 37'41	1.32609 AU		8096 Jun 10 13:41	0° $\mathbb{H}$	
asc. node	8095 Jul 30 01:34	10° $\mathbb{Q}$ 40'46			8096 Jun 30 01:26	0° $\mathbb{B}$	
				morning set	8096 Jul 07 09:03	13° $\mathbb{B}$ 28'16	
superior conj	8095 Aug 01 17:32	16° $\mathbb{Q}$ 23'18	0°26'52	max. Earth dist.	8096 Jul 11 18:53	22° $\mathbb{B}$ 11'40	1.33797 AU
minimum elong	8095 Aug 01 16:18	16° $\mathbb{Q}$ 16'34	0°26'29				
	8095 Aug 08 00:12	0° $\mathbb{H}$		superior conj	8096 Jul 15 19:42	0° $\mathbb{Q}$ 31'50	-0°01'13
evening rise	8095 Aug 08 16:27	1° $\mathbb{H}$ 26'58		minimum elong	8096 Jul 15 19:46	0° $\mathbb{Q}$ 32'13	0°01'20
	8095 Aug 24 08:30	0° $\mathbb{B}$		behind sun begin	8096 Jul 15 14:09	0° $\mathbb{Q}$ 02'45	
evening max el	8095 Aug 31 19:35	8° $\mathbb{B}$ 57'03	23°19'34	behind sun end	8096 Jul 16 01:23	1° $\mathbb{Q}$ 01'44	
desc. node	8095 Sep 02 21:21	10° $\mathbb{B}$ 49'22		asc. node	8096 Jul 15 22:34	0° $\mathbb{Q}$ 46'54	
retrograde	8095 Sep 14 06:58	15° $\mathbb{B}$ 41'28			8096 Jul 15 13:38	0° $\mathbb{Q}$	
evening set	8095 Sep 18 09:19	15° $\mathbb{B}$ 04'45		evening rise	8096 Jul 23 03:01	16° $\mathbb{Q}$ 01'21	
min. Earth dist.	8095 Sep 25 05:04	11° $\mathbb{B}$ 54'28	0.55534 AU		8096 Jul 30 02:48	0° $\mathbb{H}$	
inferior conj	8095 Sep 27 00:11	10° $\mathbb{B}$ 51'12	-5°28'53	evening max el	8096 Aug 12 11:00	19° $\mathbb{H}$ 15'35	21°42'44
minimum elong	8095 Sep 26 20:44	10° $\mathbb{B}$ 56'16	5°28'37	desc. node	8096 Aug 19 18:27	24° $\mathbb{H}$ 23'08	
morning rise	8095 Oct 05 10:20	6° $\mathbb{B}$ 59'33		retrograde	8096 Aug 24 21:59	25° $\mathbb{H}$ 26'23	
direct	8095 Oct 08 08:46	6° $\mathbb{B}$ 38'47		evening set	8096 Aug 27 14:42	25° $\mathbb{H}$ 09'58	
morning max el	8095 Oct 19 02:39	11° $\mathbb{B}$ 40'40	20°27'15	inferior conj	8096 Sep 05 19:16	21° $\mathbb{H}$ 10'48	-4°37'00
asc. node	8095 Oct 26 01:09	20° $\mathbb{B}$ 09'15		minimum elong	8096 Sep 05 10:09	21° $\mathbb{H}$ 23'34	4°34'54

min. Earth dist.	8096 Sep 05 13:47	21° $\mathbb{M}$ 18'28	0.54745 AU	minimum elong	8097 Aug 16 05:09	1° $\mathbb{M}$ 32'00	2°54'47
morning rise	8096 Sep 14 06:43	17° $\mathbb{M}$ 21'00		min. Earth dist.	8097 Aug 17 23:51	0° $\mathbb{M}$ 29'31	0.54895 AU
direct	8096 Sep 17 19:07	16° $\mathbb{M}$ 53'57			8097 Aug 18 20:24	30° $\mathbb{R}$ $\mathcal{Q}$	
morning max el	8096 Sep 30 01:47	22° $\mathbb{M}$ 41'50	21°59'47	morning rise	8097 Aug 24 23:44	27° $\mathcal{Q}$ 12'29	
	8096 Oct 06 09:54	0° $\mathcal{Q}$		direct	8097 Aug 29 05:12	26° $\mathcal{Q}$ 33'58	
asc. node	8096 Oct 11 22:08	8° $\mathcal{Q}$ 29'42			8097 Sep 07 21:02	0° $\mathbb{M}$	
morning set	8096 Oct 21 06:15	26° $\mathcal{Q}$ 33'27		morning max el	8097 Sep 11 16:07	3° $\mathbb{M}$ 06'37	23°44'36
	8096 Oct 22 21:24	0° $\mathbb{M}$		asc. node	8097 Sep 28 19:06	27° $\mathbb{M}$ 26'13	
					8097 Sep 30 03:29	0° $\mathcal{Q}$	
superior conj	8096 Oct 28 09:42	11° $\mathbb{M}$ 42'30	1°41'10	morning set	8097 Oct 05 17:52	11° $\mathcal{Q}$ 23'59	
minimum elong	8096 Oct 28 10:07	11° $\mathbb{M}$ 44'43	1°41'16				
max. Earth dist.	8096 Nov 01 05:11	19° $\mathbb{M}$ 36'32	1.34534 AU	superior conj	8097 Oct 12 16:13	26° $\mathcal{Q}$ 23'34	1°40'06
evening rise	8096 Nov 05 14:50	28° $\mathbb{M}$ 19'59		minimum elong	8097 Oct 12 15:26	26° $\mathcal{Q}$ 19'22	1°40'09
	8096 Nov 06 11:43	0° $\mathcal{M}$			8097 Oct 14 08:24	0° $\mathbb{M}$	
desc. node	8096 Nov 15 17:17	16° $\mathcal{M}$ 28'27		max. Earth dist.	8097 Oct 15 03:18	1° $\mathbb{M}$ 40'52	1.33155 AU
	8096 Nov 24 08:52	0° $\mathcal{B}$		evening rise	8097 Oct 20 05:12	12° $\mathbb{M}$ 12'05	
evening max el	8096 Dec 10 16:12	20° $\mathcal{B}$ 09'02	26°54'49		8097 Oct 29 17:42	0° $\mathcal{M}$	
retrograde	8096 Dec 23 21:21	27° $\mathcal{B}$ 28'07		desc. node	8097 Nov 02 14:21	6° $\mathcal{M}$ 28'14	
evening set	8096 Dec 30 12:08	24° $\mathcal{B}$ 52'14			8097 Nov 19 17:54	0° $\mathcal{B}$	
min. Earth dist.	8097 Jan 03 12:10	20° $\mathcal{B}$ 55'33	0.65712 AU	evening max el	8097 Nov 23 04:44	3° $\mathcal{B}$ 32'14	27°24'47
inferior conj	8097 Jan 05 12:14	18° $\mathcal{B}$ 36'54	-0°48'07	retrograde	8097 Dec 06 18:51	10° $\mathcal{B}$ 51'13	
minimum elong	8097 Jan 05 13:38	18° $\mathcal{B}$ 32'53	0°47'23	evening set	8097 Dec 13 18:14	8° $\mathcal{B}$ 16'46	
asc. node	8097 Jan 07 21:29	15° $\mathcal{B}$ 58'36		min. Earth dist.	8097 Dec 17 13:15	4° $\mathcal{B}$ 53'00	0.64149 AU
morning rise	8097 Jan 11 16:13	12° $\mathcal{B}$ 59'25		inferior conj	8097 Dec 20 00:52	2° $\mathcal{B}$ 16'57	-1°54'26
direct	8097 Jan 14 11:07	12° $\mathcal{B}$ 16'56		minimum elong	8097 Dec 20 04:25	2° $\mathcal{B}$ 07'40	1°52'51
morning max el	8097 Jan 20 22:07	15° $\mathcal{B}$ 43'41	18°11'17		8097 Dec 22 07:09	30° $\mathbb{R}$ $\mathcal{M}$	
	8097 Jan 31 09:16	0° $\approx$		asc. node	8097 Dec 25 18:32	27° $\mathcal{M}$ 20'02	
morning set	8097 Feb 08 17:44	13° $\approx$ 26'47		morning rise	8097 Dec 26 16:13	26° $\mathcal{M}$ 53'58	
desc. node	8097 Feb 11 16:39	18° $\approx$ 13'35		direct	8097 Dec 29 03:46	26° $\mathcal{M}$ 22'57	
	8097 Feb 19 01:09	0° $\mathcal{H}$		morning max el	8098 Jan 04 15:10	29° $\mathcal{M}$ 45'40	17°51'21
					8098 Jan 04 20:53	0° $\mathcal{B}$	
superior conj	8097 Feb 23 19:28	7° $\mathcal{H}$ 31'28	-1°20'01	morning set	8098 Jan 21 12:04	25° $\mathcal{B}$ 19'00	
minimum elong	8097 Feb 23 10:34	6° $\mathcal{H}$ 56'28	1°18'57		8098 Jan 24 06:26	0° $\approx$	
max. Earth dist.	8097 Feb 26 00:09	10° $\mathcal{H}$ 58'15	1.45470 AU	desc. node	8098 Jan 29 13:36	8° $\approx$ 51'28	
	8097 Mar 10 05:00	0° $\mathcal{Y}$					
evening rise	8097 Mar 11 22:50	2° $\mathcal{Y}$ 42'46		superior conj	8098 Feb 03 14:44	17° $\approx$ 06'43	-0°35'58
greatest brilliancy	8097 Mar 23 23:26	21° $\mathcal{Y}$ 16'59	-0.7m	minimum elong	8098 Feb 03 10:39	16° $\approx$ 50'14	0°35'16
	8097 Mar 29 22:53	0° $\mathcal{B}$		max. Earth dist.	8098 Feb 08 19:33	25° $\approx$ 26'02	1.44842 AU
evening max el	8097 Apr 04 23:32	7° $\mathcal{B}$ 23'24	19°21'20		8098 Feb 11 17:06	0° $\mathcal{H}$	
asc. node	8097 Apr 05 20:27	8° $\mathcal{B}$ 14'15		evening rise	8098 Feb 19 11:32	12° $\mathcal{H}$ 02'38	
retrograde	8097 Apr 12 01:43	11° $\mathcal{B}$ 24'37			8098 Mar 03 08:38	0° $\mathcal{Y}$	
evening set	8097 Apr 15 14:52	10° $\mathcal{B}$ 11'06		evening max el	8098 Mar 19 02:37	21° $\mathcal{Y}$ 01'40	20°19'20
inferior conj	8097 Apr 21 01:31	4° $\mathcal{B}$ 19'31	3°22'15	asc. node	8098 Mar 23 17:32	24° $\mathcal{Y}$ 43'00	
minimum elong	8097 Apr 21 00:52	4° $\mathcal{B}$ 21'36	3°22'08	retrograde	8098 Mar 27 00:09	25° $\mathcal{Y}$ 37'37	
min. Earth dist.	8097 Apr 22 09:48	2° $\mathcal{B}$ 34'20	0.66693 AU	evening set	8098 Mar 30 22:08	24° $\mathcal{Y}$ 09'00	
	8097 Apr 24 12:14	30° $\mathbb{R}$ $\mathcal{Y}$		inferior conj	8098 Apr 05 06:03	18° $\mathcal{Y}$ 03'47	3°09'35
morning rise	8097 Apr 26 10:31	28° $\mathcal{Y}$ 01'48		minimum elong	8098 Apr 05 04:28	18° $\mathcal{Y}$ 09'10	3°09'18
direct	8097 May 02 15:12	25° $\mathcal{Y}$ 17'33		min. Earth dist.	8098 Apr 06 00:03	17° $\mathcal{Y}$ 02'25	0.67700 AU
desc. node	8097 May 10 16:21	28° $\mathcal{Y}$ 44'53		morning rise	8098 Apr 10 10:35	11° $\mathcal{Y}$ 47'40	
	8097 May 12 05:02	0° $\mathcal{B}$		direct	8098 Apr 16 02:47	9° $\mathcal{Y}$ 15'51	
morning max el	8097 May 15 03:39	2° $\mathcal{B}$ 46'26	25°55'58	morning max el	8098 Apr 27 12:48	16° $\mathcal{Y}$ 05'51	24°32'09
	8097 Jun 04 18:36	0° $\mathbb{I}$		desc. node	8098 Apr 27 13:19	16° $\mathcal{Y}$ 07'10	
morning set	8097 Jun 20 06:27	26° $\mathbb{I}$ 11'02			8098 May 09 00:11	0° $\mathcal{B}$	
	8097 Jun 22 07:35	0° $\mathcal{Q}$			8098 May 28 17:35	0° $\mathbb{I}$	
max. Earth dist.	8097 Jun 24 01:56	3° $\mathcal{Q}$ 21'33	1.35463 AU	morning set	8098 Jun 02 09:30	7° $\mathbb{I}$ 59'11	
				max. Earth dist.	8098 Jun 06 00:37	14° $\mathbb{I}$ 27'45	1.37519 AU
superior conj	8097 Jun 29 14:06	14° $\mathcal{Q}$ 14'09	-0°31'57				
minimum elong	8097 Jun 29 15:58	14° $\mathcal{Q}$ 23'38	0°31'43	superior conj	8098 Jun 12 21:29	27° $\mathbb{I}$ 21'16	-1°03'43
asc. node	8097 Jul 02 19:34	20° $\mathcal{Q}$ 50'18		minimum elong	8098 Jun 13 01:23	27° $\mathbb{I}$ 40'10	1°03'12
evening rise	8097 Jul 07 10:30	0° $\mathcal{Q}$ 23'16			8098 Jun 14 06:08	0° $\mathcal{Q}$	
	8097 Jul 07 05:59	0° $\mathcal{Q}$		asc. node	8098 Jun 19 16:35	10° $\mathcal{Q}$ 46'29	
	8097 Jul 25 11:22	0° $\mathbb{M}$		evening rise	8098 Jun 21 12:26	14° $\mathcal{Q}$ 25'12	
evening max el	8097 Jul 25 13:46	0° $\mathbb{M}$ 05'57	20°19'21		8098 Jun 29 18:29	0° $\mathcal{Q}$	
retrograde	8097 Aug 05 10:27	5° $\mathbb{M}$ 27'47		evening max el	8098 Jul 08 05:33	11° $\mathcal{Q}$ 39'40	19°15'27
desc. node	8097 Aug 06 15:32	5° $\mathbb{M}$ 24'02		retrograde	8098 Jul 17 09:41	16° $\mathcal{Q}$ 11'34	
evening set	8097 Aug 07 09:41	5° $\mathbb{M}$ 17'59		evening set	8098 Jul 19 06:58	16° $\mathcal{Q}$ 00'52	
inferior conj	8097 Aug 16 13:07	1° $\mathbb{M}$ 20'21	-2°57'29	desc. node	8098 Jul 24 12:37	13° $\mathcal{Q}$ 55'33	

inferior conj	8098 Jul 27 19:44	11° $\Omega$ 51'00	-1°00'30	inferior conj	8099 Jul 08 23:13	23° $\Theta$ 03'00	0°43'10
minimum elong	8098 Jul 27 17:04	11° $\Omega$ 55'26	0°59'35	minimum elong	8099 Jul 09 00:45	23° $\Theta$ 00'00	0°42'28
min. Earth dist.	8098 Jul 30 13:00	10° $\Omega$ 03'02	0.55971 AU	desc. node	8099 Jul 11 09:40	21° $\Theta$ 09'03	
morning rise	8098 Aug 05 00:20	7° $\Omega$ 08'57		min. Earth dist.	8099 Jul 12 07:14	20° $\Theta$ 28'25	0.57765 AU
direct	8098 Aug 10 01:32	6° $\Omega$ 10'32		morning rise	8099 Jul 16 15:53	17° $\Theta$ 44'03	
morning max el	8098 Aug 24 04:48	13° $\Omega$ 20'41	25°27'15	direct	8099 Jul 22 12:37	16° $\Theta$ 16'38	
	8098 Sep 06 05:52	0° $\Pi$		morning max el	8099 Aug 05 21:50	23° $\Theta$ 54'12	26°50'36
asc. node	8098 Sep 15 16:05	16° $\Pi$ 48'41			8099 Aug 11 10:36	0° $\Omega$	
morning set	8098 Sep 20 05:23	26° $\Pi$ 11'32			8099 Aug 30 07:03	0° $\Pi$	
	8098 Sep 21 23:52	0° $\Omega$		asc. node	8099 Sep 02 13:05	6° $\Pi$ 30'15	
				morning set	8099 Sep 04 15:10	10° $\Pi$ 51'37	
superior conj	8098 Sep 27 02:19	11° $\Omega$ 12'21	1°33'06	superior conj	8099 Sep 11 14:01	26° $\Pi$ 03'00	1°20'42
minimum elong	8098 Sep 27 00:38	11° $\Omega$ 03'08	1°32'59	minimum elong	8099 Sep 11 11:51	25° $\Pi$ 50'58	1°20'23
max. Earth dist.	8098 Sep 28 08:34	13° $\Omega$ 58'36	1.32215 AU	max. Earth dist.	8099 Sep 11 17:57	26° $\Pi$ 24'47	1.31730 AU
evening rise	8098 Oct 04 04:29	26° $\Omega$ 27'06			8099 Sep 13 08:48	0° $\Omega$	
	8098 Oct 05 22:06	0° $\Pi$		evening rise	8099 Sep 18 10:01	10° $\Omega$ 57'56	
desc. node	8098 Oct 20 11:27	25° $\Pi$ 59'22			8099 Sep 28 03:27	0° $\Pi$	
	8098 Oct 23 03:25	0° $\Omega$		desc. node	8099 Oct 07 08:33	14° $\Pi$ 50'26	
evening max el	8098 Nov 05 14:15	16° $\Omega$ 24'11	27°25'17	evening max el	8099 Oct 18 18:10	28° $\Pi$ 32'40	26°52'20
retrograde	8098 Nov 19 09:21	23° $\Omega$ 39'03			8099 Oct 20 08:52	0° $\Omega$	
evening set	8098 Nov 26 12:03	21° $\Omega$ 15'07		retrograde	8099 Nov 01 15:59	5° $\Omega$ 42'13	
min. Earth dist.	8098 Nov 30 04:11	18° $\Omega$ 19'30	0.62285 AU	evening set	8099 Nov 08 13:32	3° $\Omega$ 39'55	
inferior conj	8098 Dec 03 02:13	15° $\Omega$ 36'17	-3°03'56	min. Earth dist.	8099 Nov 12 08:26	1° $\Omega$ 02'06	0.60223 AU
minimum elong	8098 Dec 03 07:59	15° $\Omega$ 22'47	3°01'43		8099 Nov 13 15:16	30° $\Omega$	
morning rise	8098 Dec 10 06:03	10° $\Omega$ 31'14		inferior conj	8099 Nov 15 12:51	28° $\Pi$ 25'49	-4°11'20
direct	8098 Dec 12 12:44	10° $\Omega$ 08'04		minimum elong	8099 Nov 15 20:03	28° $\Pi$ 11'03	4°09'11
asc. node	8098 Dec 12 15:34	10° $\Omega$ 08'08		morning rise	8099 Nov 23 04:57	23° $\Pi$ 41'45	
morning max el	8098 Dec 19 08:01	13° $\Omega$ 35'56	17°49'16	direct	8099 Nov 25 10:03	23° $\Pi$ 23'07	
	8098 Dec 30 12:56	0° $\Theta$		asc. node	8099 Nov 29 12:36	24° $\Pi$ 30'36	
morning set	8099 Jan 04 04:50	8° $\Theta$ 15'19		morning max el	8099 Dec 02 21:14	27° $\Pi$ 05'07	18°06'06
					8099 Dec 05 11:32	0° $\Omega$	
superior conj	8099 Jan 15 10:45	27° $\Theta$ 54'30	0°07'18	morning set	8099 Dec 18 13:42	21° $\Omega$ 56'25	
minimum elong	8099 Jan 15 11:28	27° $\Theta$ 57'29	0°07'20		8099 Dec 22 21:25	0° $\Theta$	
behind sun begin	8099 Jan 15 03:33	27° $\Theta$ 23'56		superior conj	8099 Dec 28 07:42	9° $\Theta$ 53'23	0°43'34
behind sun end	8099 Jan 15 19:23	28° $\Theta$ 30'58		minimum elong	8099 Dec 28 10:47	10° $\Theta$ 07'09	0°43'16
desc. node	8099 Jan 16 10:35	29° $\Theta$ 35'02		desc. node	8100 Jan 03 07:35	20° $\Theta$ 20'23	
	8099 Jan 16 16:32	0° $\approx$		max. Earth dist.	8100 Jan 04 23:08	23° $\Theta$ 07'17	1.41738 AU
max. Earth dist.	8099 Jan 22 11:55	9° $\approx$ 34'31	1.43547 AU		8100 Jan 09 03:14	0° $\approx$	
evening rise	8099 Jan 30 01:02	21° $\approx$ 32'25		evening rise	8100 Jan 10 05:06	1° $\approx$ 44'28	
	8099 Feb 04 13:25	0° $\text{H}$			8100 Jan 28 23:55	0° $\text{H}$	
	8099 Feb 25 20:16	0° $\Upsilon$		evening max el	8100 Feb 12 17:01	18° $\text{H}$ 22'08	22°47'35
evening max el	8099 Mar 02 00:09	4° $\Upsilon$ 40'57	21°29'32	retrograde	8100 Feb 22 18:29	24° $\text{H}$ 20'10	
retrograde	8099 Mar 10 22:20	9° $\Upsilon$ 57'45		asc. node	8100 Feb 25 11:43	23° $\text{H}$ 43'01	
asc. node	8099 Mar 10 14:37	9° $\Upsilon$ 57'14		evening set	8100 Feb 27 13:37	22° $\text{H}$ 21'30	
evening set	8099 Mar 15 06:16	8° $\Upsilon$ 13'58		inferior conj	8100 Mar 04 22:22	15° $\text{H}$ 57'14	2°13'58
inferior conj	8099 Mar 20 13:41	1° $\Upsilon$ 57'34	2°46'25	minimum elong	8100 Mar 04 20:06	16° $\text{H}$ 05'04	2°13'21
minimum elong	8099 Mar 20 11:33	2° $\Upsilon$ 04'59	2°45'56	min. Earth dist.	8100 Mar 04 15:20	16° $\text{H}$ 21'36	0.68400 AU
min. Earth dist.	8099 Mar 20 18:40	1° $\Upsilon$ 40'14	0.68261 AU	morning rise	8100 Mar 10 02:29	9° $\text{H}$ 48'49	
	8099 Mar 21 23:48	30° $\text{H}$		direct	8100 Mar 14 14:46	7° $\text{H}$ 57'34	
morning rise	8099 Mar 25 16:39	25° $\text{H}$ 44'39		morning max el	8100 Mar 23 12:11	13° $\text{H}$ 07'50	21°35'53
direct	8099 Mar 30 18:58	23° $\text{H}$ 31'33		desc. node	8100 Apr 01 07:13	23° $\text{H}$ 39'43	
morning max el	8099 Apr 09 22:38	29° $\text{H}$ 32'47	23°02'27		8100 Apr 05 21:41	0° $\Upsilon$	
	8099 Apr 10 09:19	0° $\Upsilon$		morning set	8100 Apr 24 12:13	28° $\Upsilon$ 02'16	
desc. node	8099 Apr 14 10:16	4° $\Upsilon$ 31'19			8100 Apr 25 17:44	0° $\Theta$	
	8099 May 02 19:05	0° $\Theta$		max. Earth dist.	8100 Apr 30 21:04	8° $\Theta$ 21'30	1.41917 AU
morning set	8099 May 14 12:42	18° $\Theta$ 39'19					
max. Earth dist.	8099 May 18 20:56	26° $\Theta$ 00'36	1.39758 AU	superior conj	8100 May 08 10:36	21° $\Theta$ 10'58	-1°58'07
	8099 May 21 03:57	0° $\Pi$		minimum elong	8100 May 08 15:59	21° $\Theta$ 34'23	1°57'51
superior conj	8099 May 26 13:54	9° $\Pi$ 43'58	-1°33'47		8100 May 13 10:19	0° $\Pi$	
minimum elong	8099 May 26 19:25	10° $\Pi$ 09'21	1°33'14	evening rise	8100 May 19 10:42	10° $\Pi$ 55'53	
evening rise	8099 Jun 05 05:49	27° $\Pi$ 59'35		asc. node	8100 May 24 10:42	20° $\Pi$ 00'03	
	8099 Jun 06 07:01	0° $\Theta$			8100 May 30 10:29	0° $\Theta$	
asc. node	8099 Jun 06 13:39	0° $\Theta$ 31'36		evening max el	8100 Jun 04 17:48	6° $\Theta$ 43'48	18°09'47
evening max el	8099 Jun 21 08:10	23° $\Theta$ 55'24	18°32'27	retrograde	8100 Jun 11 14:57	10° $\Theta$ 12'39	
retrograde	8099 Jun 29 03:12	27° $\Theta$ 48'04		evening set	8100 Jun 14 01:29	9° $\Theta$ 46'57	
evening set	8099 Jul 01 06:08	27° $\Theta$ 31'44					

inferior conj	8100 Jun 20 23:59	4°☿57'55	1°59'52	evening set	8101 May 28 11:15	22°♊38'03	
minimum elong	8100 Jun 21 03:02	4°☿50'59	1°58'50	inferior conj	8101 Jun 03 18:48	17°♊29'23	2°49'11
min. Earth dist.	8100 Jun 24 08:11	1°☿57'31	0.59944 AU	minimum elong	8101 Jun 03 21:26	17°♊22'32	2°48'30
	8100 Jun 26 19:41	30°♋♊		min. Earth dist.	8101 Jun 06 17:20	14°♊27'40	0.62182 AU
morning rise	8100 Jun 28 01:43	29°♊10'30		morning rise	8101 Jun 10 05:46	11°♊24'12	
desc. node	8100 Jun 28 06:42	29°♊03'03		desc. node	8101 Jun 15 03:43	9°♊08'32	
direct	8100 Jul 04 13:03	27°♊11'03		direct	8101 Jun 16 23:54	8°♊57'58	
	8100 Jul 12 17:36	0°☿		morning max el	8101 Jul 01 02:55	16°♊59'40	27°55'03
morning max el	8100 Jul 18 21:25	5°☿05'29	27°41'46		8101 Jul 11 21:19	0°☿	
	8100 Aug 06 09:35	0°♌			8101 Jul 30 03:00	0°♌	
morning set	8100 Aug 19 21:29	25°♌19'12		morning set	8101 Aug 03 22:17	9°♌27'42	
asc. node	8100 Aug 20 10:05	26°♌25'07		asc. node	8101 Aug 07 07:03	16°♌27'39	
	8100 Aug 22 02:36	0°♍		max. Earth dist.	8101 Aug 09 10:47	21°♌04'30	1.32145 AU
max. Earth dist.	8100 Aug 26 03:58	8°♍50'42	1.31704 AU				
				superior conj	8101 Aug 11 10:58	25°♌26'29	0°41'23
superior conj	8100 Aug 27 01:32	10°♍49'53	1°03'20	minimum elong	8101 Aug 11 09:13	25°♌16'54	0°40'57
minimum elong	8100 Aug 26 23:19	10°♍37'38	1°02'53		8101 Aug 13 12:52	0°♍	
evening rise	8100 Sep 02 19:31	25°♍38'08		evening rise	8101 Aug 18 06:55	10°♍20'49	
	8100 Sep 04 21:09	0°♎			8101 Aug 28 06:31	0°♎	
	8100 Sep 22 03:21	0°♏		desc. node	8101 Sep 11 02:43	19°♎22'48	
desc. node	8100 Sep 24 05:38	2°♏45'47		evening max el	8101 Sep 12 03:54	20°♎25'17	24°16'39
evening max el	8100 Sep 30 14:35	9°♏51'40	25°46'46	retrograde	8101 Sep 25 21:51	27°♎19'03	
retrograde	8100 Oct 14 13:01	16°♏55'04		evening set	8101 Sep 30 21:20	26°♎24'22	
evening set	8100 Oct 20 17:50	15°♏24'44		min. Earth dist.	8101 Oct 06 14:45	23°♎31'38	0.56342 AU
min. Earth dist.	8100 Oct 25 03:08	12°♏48'40	0.58153 AU	inferior conj	8101 Oct 09 01:38	22°♎00'05	-5°33'38
inferior conj	8100 Oct 28 05:25	10°♏36'36	-5°06'34	minimum elong	8101 Oct 09 02:34	21°♎58'38	5°33'34
minimum elong	8100 Oct 28 11:32	10°♏25'41	5°05'27	morning rise	8101 Oct 17 09:56	17°♎59'36	
morning rise	8100 Nov 05 07:34	6°♏15'04		direct	8101 Oct 20 02:02	17°♎40'44	
direct	8100 Nov 07 15:32	5°♏57'49		morning max el	8101 Oct 29 22:12	22°♎19'10	19°42'55
morning max el	8100 Nov 16 03:10	10°♏03'19	18°43'26	asc. node	8101 Nov 03 06:37	27°♎17'47	
asc. node	8100 Nov 16 09:37	10°♏19'03			8101 Nov 05 04:31	0°♏	
	8100 Nov 29 05:21	0°♐		morning set	8101 Nov 16 13:11	20°♏39'35	
morning set	8100 Dec 02 09:44	6°♐08'18			8101 Nov 21 03:46	0°♐	
				superior conj	8101 Nov 24 09:53	6°♐31'01	1°28'52
superior conj	8100 Dec 11 01:08	22°♐50'37	1°10'45	minimum elong	8101 Nov 24 12:23	6°♐43'23	1°28'47
minimum elong	8100 Dec 11 04:30	23°♐06'30	1°10'28	max. Earth dist.	8101 Nov 30 11:54	18°♐12'42	1.37485 AU
	8100 Dec 14 21:52	0°♑		evening rise	8101 Dec 04 05:36	25°♐01'05	
max. Earth dist.	8100 Dec 18 06:02	5°♑58'27	1.39637 AU		8101 Dec 07 01:51	0°♑	
desc. node	8100 Dec 21 04:37	11°♑04'10		desc. node	8101 Dec 08 01:39	1°♑41'55	
evening rise	8100 Dec 22 06:39	12°♑54'41			8101 Dec 26 13:16	0°♑	
	8101 Jan 01 22:10	0°♒		evening max el	8102 Jan 08 20:21	15°♑54'43	25°23'04
	8101 Jan 24 06:07	0°♓					
evening max el	8101 Jan 26 07:10	2°♓07'20	24°07'39				
retrograde	8101 Feb 06 11:14	8°♓40'49					
evening set	8101 Feb 11 18:39	6°♓28'06					
asc. node	8101 Feb 12 08:47	5°♓56'28					
min. Earth dist.	8101 Feb 16 11:45	1°♓02'30	0.68140 AU				
inferior conj	8101 Feb 17 06:15	29°♓59'57	1°33'03				
minimum elong	8101 Feb 17 04:20	0°♓06'27	1°32'26				
	8101 Feb 17 06:14	30°♓♓					
morning rise	8101 Feb 22 14:03	23°♓57'39					
direct	8101 Feb 26 13:01	22°♓28'35					
morning max el	8101 Mar 06 08:37	26°♓54'29	20°19'22				
	8101 Mar 09 04:47	0°♔					
desc. node	8101 Mar 19 04:10	13°♔20'31					
	8101 Mar 30 08:40	0°♕					
morning set	8101 Apr 03 13:36	6°♕27'31					
max. Earth dist.	8101 Apr 13 04:43	21°♕37'03	1.43726 AU				
	8101 Apr 18 08:35	0°♖					
superior conj	8101 Apr 19 07:27	1°♖34'13	-2°11'03				
minimum elong	8101 Apr 19 09:10	1°♖41'17	2°11'05				
evening rise	8101 May 01 22:38	23°♖04'12					
	8101 May 05 22:15	0°♗					
asc. node	8101 May 11 07:45	9°♗05'52					
evening max el	8101 May 19 06:46	19°♗55'03	18°06'25				
retrograde	8101 May 25 17:16	23°♗15'40					