

































































































































superior conj	10100 Jan 03 05:06	18° $\text{Z}$ 31'41	1°06'51		10100 Dec 16 13:36	0° $\text{Z}$	
minimum elong	10100 Jan 03 08:14	18° $\text{Z}$ 46'43	1°06'53				
	10100 Jan 09 08:49	0° $\approx$		superior conj	10100 Dec 17 18:11	2° $\text{Z}$ 24'22	1°25'22
max. Earth dist.	10100 Jan 10 02:02	1° $\approx$ 17'24	1.38860 AU	minimum elong	10100 Dec 17 20:40	2° $\text{Z}$ 36'49	1°25'34
desc. node	10100 Jan 12 10:30	5° $\approx$ 27'17		max. Earth dist.	10100 Dec 23 09:03	13° $\text{Z}$ 24'38	1.36713 AU
evening rise	10100 Jan 13 21:49	8° $\approx$ 00'20		evening rise	10100 Dec 27 04:08	20° $\text{Z}$ 27'36	
	10100 Jan 27 14:55	0° $\text{X}$		desc. node	10100 Dec 30 07:28	26° $\text{Z}$ 02'50	
evening max el	10100 Feb 18 04:35	27° $\text{X}$ 50'39	24°35'40		10101 Jan 01 14:34	0° $\approx$	
	10100 Feb 20 12:10	0° $\text{Y}$			10101 Jan 21 14:57	0° $\text{X}$	
retrograde	10100 Mar 01 18:08	4° $\text{Y}$ 35'59		evening max el	10101 Jan 31 18:00	11° $\text{X}$ 40'24	25°47'52
evening set	10100 Mar 07 06:34	2° $\text{Y}$ 17'52		retrograde	10101 Feb 13 05:02	18° $\text{X}$ 48'21	
asc. node	10100 Mar 07 11:42	2° $\text{Y}$ 06'46		evening set	10101 Feb 19 05:43	16° $\text{X}$ 20'13	
	10100 Mar 09 13:04	30° $\text{R}$ $\text{X}$		asc. node	10101 Feb 22 08:52	13° $\text{X}$ 08'05	
min. Earth dist.	10100 Mar 11 20:24	27° $\text{X}$ 06'03	0.68108 AU	min. Earth dist.	10101 Feb 23 12:43	11° $\text{X}$ 43'19	0.67276 AU
inferior conj	10100 Mar 12 19:41	25° $\text{X}$ 48'23	1°38'49	inferior conj	10101 Feb 24 23:46	9° $\text{X}$ 52'39	0°50'39
minimum elong	10100 Mar 12 17:42	25° $\text{X}$ 55'01	1°38'12	minimum elong	10101 Feb 24 22:33	9° $\text{X}$ 56'31	0°50'21
morning rise	10100 Mar 18 04:58	19° $\text{X}$ 49'14		morning rise	10101 Mar 02 15:54	4° $\text{X}$ 02'32	
direct	10100 Mar 21 23:55	18° $\text{X}$ 26'55		direct	10101 Mar 05 23:16	2° $\text{X}$ 59'58	
morning max el	10100 Mar 29 11:03	22° $\text{X}$ 37'20	19°52'07	morning max el	10101 Mar 12 18:17	6° $\text{X}$ 41'44	18°55'47
	10100 Apr 04 16:55	0° $\text{Y}$		greatest brilliancy	10101 Mar 26 18:56	25° $\text{X}$ 41'36	-0.8m
desc. node	10100 Apr 10 11:02	8° $\text{Y}$ 01'32		desc. node	10101 Mar 28 07:50	28° $\text{X}$ 02'54	
morning set	10100 Apr 25 01:32	29° $\text{Y}$ 59'12			10101 Mar 29 14:15	0° $\text{Y}$	
	10100 Apr 25 01:45	0° $\text{Z}$		morning set	10101 Apr 04 07:47	8° $\text{Y}$ 52'56	
max. Earth dist.	10100 May 06 01:39	17° $\text{Z}$ 11'14	1.44401 AU		10101 Apr 17 20:52	0° $\text{Z}$	
				max. Earth dist.	10101 Apr 18 18:28	1° $\text{Z}$ 24'41	1.45382 AU
superior conj	10100 May 11 05:15	25° $\text{Z}$ 27'15	-2°12'27				
minimum elong	10100 May 11 06:43	25° $\text{Z}$ 33'14	2°12'47	superior conj	10101 Apr 20 19:16	4° $\text{Z}$ 36'18	-2°06'32
	10100 May 14 00:08	0° $\text{II}$		minimum elong	10101 Apr 20 13:24	4° $\text{Z}$ 13'16	2°06'30
evening rise	10100 May 24 14:17	17° $\text{II}$ 44'38		evening rise	10101 May 05 19:42	28° $\text{Z}$ 36'14	
	10100 May 31 19:55	0° $\text{III}$			10101 May 06 16:21	0° $\text{II}$	
asc. node	10100 Jun 03 10:02	4° $\text{III}$ 12'57		asc. node	10101 May 21 07:06	22° $\text{II}$ 54'54	
evening max el	10100 Jun 11 12:28	15° $\text{III}$ 09'18	18°09'03	evening max el	10101 May 26 01:09	28° $\text{II}$ 40'54	18°30'50
retrograde	10100 Jun 17 21:24	18° $\text{III}$ 29'53			10101 May 27 11:48	0° $\text{III}$	
evening set	10100 Jun 20 17:23	17° $\text{III}$ 48'14		retrograde	10101 Jun 01 12:34	2° $\text{III}$ 11'26	
inferior conj	10100 Jun 26 20:47	12° $\text{III}$ 32'21	2°40'52	evening set	10101 Jun 04 16:19	1° $\text{III}$ 15'26	
minimum elong	10100 Jun 26 23:19	12° $\text{III}$ 25'28	2°39'54		10101 Jun 06 09:46	30° $\text{R}$ $\text{II}$	
min. Earth dist.	10100 Jun 29 14:24	9° $\text{III}$ 35'28	0.62989 AU	inferior conj	10101 Jun 10 09:48	25° $\text{II}$ 42'30	3°08'09
morning rise	10100 Jul 03 03:33	6° $\text{III}$ 21'18		minimum elong	10101 Jun 10 11:18	25° $\text{II}$ 37'59	3°07'32
desc. node	10100 Jul 07 10:48	4° $\text{III}$ 08'41		min. Earth dist.	10101 Jun 12 12:49	23° $\text{II}$ 10'07	0.64955 AU
direct	10100 Jul 09 21:02	3° $\text{III}$ 49'28		morning rise	10101 Jun 16 05:22	19° $\text{II}$ 23'58	
morning max el	10100 Jul 23 21:04	11° $\text{III}$ 52'08	27°50'57	direct	10101 Jun 22 19:19	16° $\text{II}$ 40'54	
	10100 Aug 07 05:48	0° $\text{IV}$		desc. node	10101 Jun 24 07:53	16° $\text{II}$ 48'44	
	10100 Aug 24 18:41	0° $\text{V}$		morning max el	10101 Jul 06 07:20	24° $\text{II}$ 37'05	27°13'50
morning set	10100 Aug 27 06:51	4° $\text{V}$ 58'11			10101 Jul 11 04:01	0° $\text{III}$	
asc. node	10100 Aug 30 09:50	11° $\text{V}$ 23'33			10101 Jul 31 16:24	0° $\text{IV}$	
max. Earth dist.	10100 Sep 01 11:35	15° $\text{V}$ 46'44	1.32305 AU	morning set	10101 Aug 10 19:10	18° $\text{IV}$ 24'17	
				max. Earth dist.	10101 Aug 15 07:04	27° $\text{IV}$ 22'40	1.33460 AU
superior conj	10100 Sep 03 23:56	21° $\text{V}$ 12'18	0°44'26		10101 Aug 16 13:37	0° $\text{V}$	
minimum elong	10100 Sep 03 22:04	21° $\text{V}$ 02'07	0°43'59	asc. node	10101 Aug 17 06:40	1° $\text{V}$ 28'42	
	10100 Sep 08 00:32	0° $\text{VI}$					
evening rise	10100 Sep 10 20:50	6° $\text{VI}$ 09'48		superior conj	10101 Aug 19 03:12	5° $\text{V}$ 22'45	0°18'20
	10100 Sep 23 07:53	0° $\text{VII}$		minimum elong	10101 Aug 19 02:17	5° $\text{V}$ 17'55	0°17'56
desc. node	10100 Oct 03 08:51	13° $\text{VII}$ 26'49		evening rise	10101 Aug 26 07:43	20° $\text{V}$ 43'37	
evening max el	10100 Oct 04 16:28	14° $\text{VII}$ 46'21	23°41'58		10101 Aug 30 19:54	0° $\text{VI}$	
retrograde	10100 Oct 18 05:36	21° $\text{VII}$ 32'14		evening max el	10101 Sep 16 05:13	24° $\text{VI}$ 55'36	22°02'25
evening set	10100 Oct 22 18:42	20° $\text{VII}$ 47'13		desc. node	10101 Sep 20 06:06	28° $\text{VI}$ 17'20	
min. Earth dist.	10100 Oct 29 02:43	17° $\text{VII}$ 45'03	0.55693 AU		10101 Sep 23 06:59	0° $\text{VII}$	
inferior conj	10100 Oct 31 02:26	16° $\text{VII}$ 33'56	-5°43'44	retrograde	10101 Sep 28 21:36	1° $\text{VII}$ 14'26	
minimum elong	10100 Oct 31 02:47	16° $\text{VII}$ 33'25	5°43'25	evening set	10101 Oct 01 23:33	0° $\text{VIII}$ 53'15	
morning rise	10100 Nov 08 12:46	12° $\text{VIII}$ 39'26			10101 Oct 04 19:32	30° $\text{R}$ $\text{VI}$	
direct	10100 Nov 11 08:05	12° $\text{VIII}$ 19'50		inferior conj	10101 Oct 10 22:50	26° $\text{VI}$ 53'56	-5°17'51
morning max el	10100 Nov 21 19:37	17° $\text{VIII}$ 17'07	20°11'28	minimum elong	10101 Oct 10 15:22	27° $\text{VI}$ 04'23	5°16'29
asc. node	10100 Nov 26 10:03	22° $\text{VIII}$ 33'10		min. Earth dist.	10101 Oct 10 09:56	27° $\text{VI}$ 12'00	0.54757 AU
	10100 Dec 01 07:32	0° $\text{IX}$		morning rise	10101 Oct 19 08:41	23° $\text{VI}$ 06'44	
morning set	10100 Dec 10 02:55	16° $\text{IX}$ 47'07		direct	10101 Oct 22 19:41	22° $\text{VI}$ 40'21	

morning max el	10101 Nov 03 20:12	28°  20'59	21°41'32	evening set	10102 Sep 11 11:55	10°  54'45	
	10101 Nov 05 11:54	0°  11		inferior conj	10102 Sep 20 15:18	6°  58'09	-3°57'04
asc. node	10101 Nov 13 06:59	10°  22'20		minimum elong	10102 Sep 20 05:39	7°  12'06	3°54'06
	10101 Nov 23 18:42	0°  17		min. Earth dist.	10102 Sep 21 18:29	6°  18'53	0.54728 AU
morning set	10101 Nov 24 12:34	1°  33'06		morning rise	10102 Sep 28 23:03	2°  57'22	
				direct	10102 Oct 03 03:53	2°  19'28	
superior conj	10101 Dec 01 16:56	16°  37'43'16	1°36'13	morning max el	10102 Oct 16 10:43	8°  44'42	23°26'16
minimum elong	10101 Dec 01 18:17	16°  37'50'17	1°36'33	asc. node	10102 Oct 31 03:54	28°  54'55	
max. Earth dist.	10101 Dec 05 21:10	25°  37'18'09	1.34805 AU		10102 Oct 31 18:25	0°  11	
	10101 Dec 08 05:59	0°  03		morning set	10102 Nov 09 00:05	16°  11'21'39	
evening rise	10101 Dec 10 02:56	3°  33'7'04			10102 Nov 15 07:36	0°  17	
desc. node	10101 Dec 17 04:27	16°  32'7'43					
	10101 Dec 25 11:40	0°  00		superior conj	10102 Nov 15 22:17	1°  37'19'20	1°40'08
evening max el	10102 Jan 14 07:26	25°  33'23'41	26°45'38	minimum elong	10102 Nov 15 22:24	1°  37'19'58	1°40'30
	10102 Jan 19 21:29	0°  08		max. Earth dist.	10102 Nov 18 16:59	7°  37'15'35	1.33280 AU
retrograde	10102 Jan 27 10:28	2°  08'43'39		evening rise	10102 Nov 23 14:36	17°  37'19'55	
evening set	10102 Feb 02 22:24	0°  08'09'43			10102 Nov 30 06:47	0°  03	
	10102 Feb 03 03:12	30°  08'00		desc. node	10102 Dec 04 01:28	6°  33'36'36	
min. Earth dist.	10102 Feb 06 23:26	26°  33'07'15	0.66053 AU		10102 Dec 19 21:11	0°  00	
inferior conj	10102 Feb 08 22:20	23°  33'49'44	-0°06'22	evening max el	10102 Dec 27 20:11	8°  33'50'50	27°21'46
minimum elong	10102 Feb 08 22:30	23°  33'49'15	0°06'00	retrograde	10103 Jan 10 09:51	16°  33'13'32	
transit middle	10102 Feb 08 22:30	23°  33'49'15	0°06'00	evening set	10103 Jan 17 06:25	13°  33'40'17	
transit begin	10102 Feb 08 19:47	23°  33'57'16		min. Earth dist.	10103 Jan 21 02:31	10°  33'10'19	0.64477 AU
transit end	10102 Feb 09 01:14	23°  33'41'14		inferior conj	10103 Jan 23 12:59	7°  33'34'06	-1°11'39
asc. node	10102 Feb 09 06:03	23°  33'27'07		minimum elong	10103 Jan 23 15:11	7°  33'28'11	1°10'21
morning rise	10102 Feb 14 23:42	18°  33'10'50		asc. node	10103 Jan 27 03:13	4°  33'02'18	
direct	10102 Feb 17 20:52	17°  33'24'58		morning rise	10103 Jan 30 01:43	2°  33'08'54	
morning max el	10102 Feb 24 07:42	20°  33'50'50	18°15'54	direct	10103 Feb 01 14:27	1°  33'36'02	
	10102 Mar 03 12:21	0°  08		morning max el	10103 Feb 08 00:39	4°  33'57'01	17°52'54
desc. node	10102 Mar 15 04:37	18°  08'21'29			10103 Feb 24 18:07	0°  08	
morning set	10102 Mar 15 15:37	19°  08'05'38		morning set	10103 Feb 25 04:25	0°  08'43'15	
	10102 Mar 22 11:24	0°  00		desc. node	10103 Mar 02 01:24	8°  08'51'49	
superior conj	10102 Mar 31 01:12	13°  00'31'10	-1°40'43	superior conj	10103 Mar 10 17:36	23°  08'01'00	-1°01'16
minimum elong	10102 Mar 30 15:39	12°  00'53'44	1°39'52	minimum elong	10103 Mar 10 10:50	22°  08'33'52	1°00'18
max. Earth dist.	10102 Apr 01 14:11	15°  00'55'55	1.45624 AU		10103 Mar 15 02:58	0°  00	
	10102 Apr 10 14:27	0°  00		max. Earth dist.	10103 Mar 15 09:27	0°  00'25'36	1.45125 AU
evening rise	10102 Apr 16 01:58	8°  00'33'27		evening rise	10103 Mar 26 16:09	17°  00'57'09	
greatest brilliancy	10102 Apr 27 05:14	25°  00'35'04'9	-0.8m		10103 Apr 03 14:04	0°  00	
	10102 Apr 29 23:29	0°  00		greatest brilliancy	10103 Apr 10 15:42	10°  00'30'10	-0.6m
asc. node	10102 May 08 04:13	10°  00'11'59'23		evening max el	10103 Apr 22 14:36	26°  00'30'10'07	20°04'57
evening max el	10102 May 09 10:25	12°  00'11'19'44	19°09'57	asc. node	10103 Apr 25 01:24	28°  00'31'3'53	
retrograde	10102 May 16 08:50	16°  00'11'25'4			10103 Apr 28 00:37	0°  00	
evening set	10102 May 19 20:41	15°  00'11'01'47		retrograde	10103 Apr 30 07:19	0°  00'11'27'23	
inferior conj	10102 May 25 07:48	9°  00'11'13'28	3°18'35		10103 May 02 11:44	30°  00'30'00'47	
minimum elong	10102 May 25 08:05	9°  00'11'12'32	3°18'11	evening set	10103 May 04 04:03	29°  00'30'00'47	
min. Earth dist.	10102 May 26 19:42	7°  00'11'17'44	0.66538 AU	inferior conj	10103 May 09 11:47	22°  00'30'58'54	3°15'28
morning rise	10102 May 30 19:00	2°  00'11'53'01		minimum elong	10103 May 09 10:59	23°  00'30'01'37	3°15'05
direct	10102 Jun 06 00:37	0°  00		min. Earth dist.	10103 May 10 09:16	21°  00'30'46'04	0.67683 AU
desc. node	10102 Jun 11 04:54	1°  00'11'40'38		morning rise	10103 May 14 17:36	16°  00'30'40'04	
morning max el	10102 Jun 18 18:04	7°  00'11'45'45	26°09'29	direct	10103 May 20 11:49	14°  00'30'06'10	
	10102 Jul 06 01:37	0°  00		desc. node	10103 May 29 01:52	18°  00'30'13'30	
	10102 Jul 24 03:04	0°  00		morning max el	10103 Jun 01 03:46	21°  00'30'06'11	24°47'27
morning set	10102 Jul 24 18:49	1°  00'11'12'50			10103 Jun 08 20:09	0°  00	
max. Earth dist.	10102 Jul 28 16:02	8°  00'11'35'18	1.35103 AU		10103 Jun 29 06:52	0°  00	
superior conj	10102 Aug 02 23:08	19°  00'11'08'35	-0°11'38	morning set	10103 Jul 07 01:18	13°  00'11'03'11'39	
minimum elong	10102 Aug 02 23:50	19°  00'11'12'07	0°11'49	max. Earth dist.	10103 Jul 10 15:37	19°  00'11'03'39'46	1.37152 AU
behind sun begin	10102 Aug 02 19:43	18°  00'11'05'10'07			10103 Jul 16 03:27	0°  00	
behind sun end	10102 Aug 03 03:57	19°  00'11'03'33'08		superior conj	10103 Jul 17 08:40	2°  00'11'21'46	-0°44'09
asc. node	10102 Aug 04 03:32	21°  00'11'03'34'07		minimum elong	10103 Jul 17 11:31	2°  00'11'35'36	0°44'01
	10102 Aug 08 05:00	0°  00		asc. node	10103 Jul 22 00:27	11°  00'11'35'37	
evening rise	10102 Aug 10 16:04	5°  00'11'07'01		evening rise	10103 Jul 25 19:29	19°  00'11'13'11	
	10102 Aug 24 12:23	0°  00			10103 Jul 31 08:06	0°  00	
evening max el	10102 Aug 29 04:14	5°  00'11'03'12'23	20°34'31	evening max el	10103 Aug 11 17:03	16°  00'11'52'21	19°25'59
desc. node	10102 Sep 07 03:19	10°  00'11'02'52'19		retrograde	10103 Aug 21 05:34	21°  00'11'35'41	
retrograde	10102 Sep 09 09:41	11°  00'11'02'05'33		evening set	10103 Aug 23 01:40	21°  00'11'25'53	




















































































































desc. node	10103 Aug 25 00:33	20° $\mathring{\text{M}}$ 55'24			10104 Aug 09 10:15	30° $\mathring{\text{R}}$ $\mathring{\text{Q}}$	
inferior conj	10103 Aug 31 18:21	17° $\mathring{\text{M}}$ 19'23	-2°05'09	desc. node	10104 Aug 10 21:47	28° $\mathring{\text{Q}}$ 56'23	
minimum elong	10103 Aug 31 12:45	17° $\mathring{\text{M}}$ 28'25	2°03'07	inferior conj	10104 Aug 11 17:19	28° $\mathring{\text{Q}}$ 19'53	-0°14'59
min. Earth dist.	10103 Sep 03 06:23	15° $\mathring{\text{M}}$ 42'42	0.55645 AU	minimum elong	10104 Aug 11 16:43	28° $\mathring{\text{Q}}$ 21'01	0°15'01
morning rise	10103 Sep 08 21:16	12° $\mathring{\text{M}}$ 47'09		transit middle	10104 Aug 11 16:43	28° $\mathring{\text{Q}}$ 21'01	0°15'01
direct	10103 Sep 13 21:47	11° $\mathring{\text{M}}$ 50'07		transit begin	10104 Aug 11 15:24	28° $\mathring{\text{Q}}$ 23'30	
morning max el	10103 Sep 27 22:17	18° $\mathring{\text{M}}$ 53'28	25°11'36	transit end	10104 Aug 11 18:02	28° $\mathring{\text{Q}}$ 18'32	
	10103 Oct 07 05:59	0° $\mathring{\text{A}}$		min. Earth dist.	10104 Aug 14 22:56	25° $\mathring{\text{Q}}$ 54'40	0.57331 AU
asc. node	10103 Oct 18 00:47	18° $\mathring{\text{A}}$ 00'03		morning rise	10104 Aug 19 10:43	23° $\mathring{\text{Q}}$ 10'27	
	10103 Oct 23 23:02	0° $\mathring{\text{M}}$		direct	10104 Aug 25 06:01	21° $\mathring{\text{Q}}$ 46'53	
morning set	10103 Oct 24 11:44	1° $\mathring{\text{M}}$ 07'41		morning max el	10104 Sep 08 13:37	29° $\mathring{\text{Q}}$ 17'55	26°40'04
					10104 Sep 09 06:42	0° $\mathring{\text{M}}$	
superior conj	10103 Oct 31 07:45	16° $\mathring{\text{M}}$ 04'56	1°37'47		10104 Sep 30 00:34	0° $\mathring{\text{A}}$	
minimum elong	10103 Oct 31 06:47	15° $\mathring{\text{M}}$ 59'36	1°38'02	asc. node	10104 Oct 03 21:39	7° $\mathring{\text{A}}$ 29'01	
max. Earth dist.	10103 Nov 01 20:16	19° $\mathring{\text{M}}$ 25'16	1.32208 AU	morning set	10104 Oct 07 21:50	15° $\mathring{\text{A}}$ 46'15	
	10103 Nov 06 18:56	0° $\mathring{\text{A}}$			10104 Oct 14 09:40	0° $\mathring{\text{M}}$	
evening rise	10103 Nov 07 11:50	1° $\mathring{\text{A}}$ 27'33					
desc. node	10103 Nov 20 22:34	26° $\mathring{\text{A}}$ 22'29		superior conj	10104 Oct 14 19:13	0° $\mathring{\text{M}}$ 53'07	1°29'39
	10103 Nov 23 04:50	0° $\mathring{\text{B}}$		minimum elong	10104 Oct 14 17:27	0° $\mathring{\text{M}}$ 43'13	1°29'41
evening max el	10103 Dec 10 06:47	21° $\mathring{\text{B}}$ 50'38	27°29'43	max. Earth dist.	10104 Oct 15 04:33	1° $\mathring{\text{M}}$ 44'55	1.31617 AU
retrograde	10103 Dec 24 02:18	29° $\mathring{\text{B}}$ 08'55		evening rise	10104 Oct 21 15:53	15° $\mathring{\text{M}}$ 51'58	
evening set	10103 Dec 31 03:01	26° $\mathring{\text{B}}$ 44'49			10104 Oct 28 17:26	0° $\mathring{\text{A}}$	
min. Earth dist.	10104 Jan 03 20:11	23° $\mathring{\text{B}}$ 43'10	0.62605 AU	desc. node	10104 Nov 06 19:43	15° $\mathring{\text{A}}$ 35'23	
inferior conj	10104 Jan 06 16:52	20° $\mathring{\text{B}}$ 59'04	-2°23'27		10104 Nov 17 12:42	0° $\mathring{\text{B}}$	
minimum elong	10104 Jan 06 21:35	20° $\mathring{\text{B}}$ 47'45	2°21'11	evening max el	10104 Nov 21 12:33	4° $\mathring{\text{B}}$ 09'02	27°04'27
morning rise	10104 Jan 13 18:28	15° $\mathring{\text{B}}$ 50'25		retrograde	10104 Dec 05 10:18	11° $\mathring{\text{B}}$ 19'33	
asc. node	10104 Jan 14 00:22	15° $\mathring{\text{B}}$ 45'37		evening set	10104 Dec 12 08:27	9° $\mathring{\text{B}}$ 14'10	
direct	10104 Jan 16 01:05	15° $\mathring{\text{B}}$ 26'39		min. Earth dist.	10104 Dec 16 03:09	6° $\mathring{\text{B}}$ 32'42	0.60540 AU
morning max el	10104 Jan 22 18:05	18° $\mathring{\text{B}}$ 52'26	17°47'27	inferior conj	10104 Dec 19 06:31	3° $\mathring{\text{B}}$ 54'32	-3°37'50
	10104 Jan 30 21:21	0° $\mathring{\text{A}}$		minimum elong	10104 Dec 19 13:36	3° $\mathring{\text{B}}$ 39'37	3°35'03
morning set	10104 Feb 07 17:13	13° $\mathring{\text{A}}$ 30'10			10104 Dec 24 15:56	30° $\mathring{\text{R}}$ $\mathring{\text{A}}$	
desc. node	10104 Feb 16 22:12	29° $\mathring{\text{A}}$ 30'12		morning rise	10104 Dec 26 21:18	29° $\mathring{\text{A}}$ 05'41	
	10104 Feb 17 05:14	0° $\mathring{\text{H}}$		direct	10104 Dec 29 00:57	28° $\mathring{\text{A}}$ 47'24	
				asc. node	10104 Dec 30 21:28	29° $\mathring{\text{A}}$ 01'31	
superior conj	10104 Feb 19 08:53	3° $\mathring{\text{H}}$ 37'34	-0°18'16		10105 Jan 02 05:33	0° $\mathring{\text{B}}$	
minimum elong	10104 Feb 19 07:04	3° $\mathring{\text{H}}$ 30'00	0°17'45	morning max el	10105 Jan 05 08:32	2° $\mathring{\text{B}}$ 26'47	18°00'39
max. Earth dist.	10104 Feb 26 02:23	14° $\mathring{\text{H}}$ 40'08	1.43950 AU	morning set	10105 Jan 20 23:25	27° $\mathring{\text{B}}$ 05'27	
evening rise	10104 Mar 05 04:49	27° $\mathring{\text{H}}$ 26'13			10105 Jan 22 13:10	0° $\mathring{\text{A}}$	
	10104 Mar 06 20:46	0° $\mathring{\text{Y}}$					
	10104 Mar 27 10:56	0° $\mathring{\text{B}}$		superior conj	10105 Jan 31 01:02	15° $\mathring{\text{A}}$ 24'14	0°20'50
evening max el	10104 Apr 04 13:18	9° $\mathring{\text{B}}$ 44'07	21°13'00	minimum elong	10105 Jan 31 02:43	15° $\mathring{\text{A}}$ 31'40	0°20'55
asc. node	10104 Apr 10 22:36	14° $\mathring{\text{B}}$ 24'11		desc. node	10105 Feb 02 19:03	20° $\mathring{\text{A}}$ 12'18	
retrograde	10104 Apr 13 05:48	14° $\mathring{\text{B}}$ 50'18		max. Earth dist.	10105 Feb 07 15:25	28° $\mathring{\text{A}}$ 25'08	1.42220 AU
evening set	10104 Apr 17 12:30	13° $\mathring{\text{B}}$ 08'10			10105 Feb 08 14:19	0° $\mathring{\text{H}}$	
inferior conj	10104 Apr 22 19:20	6° $\mathring{\text{B}}$ 54'40	3°00'58	evening rise	10105 Feb 13 06:12	7° $\mathring{\text{H}}$ 33'33	
minimum elong	10104 Apr 22 17:42	7° $\mathring{\text{B}}$ 00'21	3°00'27		10105 Feb 28 01:04	0° $\mathring{\text{Y}}$	
min. Earth dist.	10104 Apr 23 03:22	6° $\mathring{\text{B}}$ 26'45	0.68374 AU	evening max el	10105 Mar 18 07:09	23° $\mathring{\text{Y}}$ 28'43	22°29'57
morning rise	10104 Apr 27 22:40	0° $\mathring{\text{B}}$ 39'42		retrograde	10105 Mar 28 02:39	29° $\mathring{\text{Y}}$ 16'57	
	10104 Apr 28 17:57	30° $\mathring{\text{R}}$ $\mathring{\text{Y}}$		asc. node	10105 Mar 28 19:49	29° $\mathring{\text{Y}}$ 14'26	
direct	10104 May 03 03:50	28° $\mathring{\text{Y}}$ 22'20		evening set	10105 Apr 01 20:21	27° $\mathring{\text{Y}}$ 19'38	
	10104 May 08 01:50	0° $\mathring{\text{B}}$		inferior conj	10105 Apr 07 04:20	20° $\mathring{\text{Y}}$ 57'04	2°36'24
morning max el	10104 May 13 13:25	4° $\mathring{\text{B}}$ 33'35	23°17'54	minimum elong	10105 Apr 07 02:13	21° $\mathring{\text{Y}}$ 04'25	2°35'46
desc. node	10104 May 14 22:48	6° $\mathring{\text{B}}$ 00'41		min. Earth dist.	10105 Apr 06 23:45	21° $\mathring{\text{Y}}$ 13'00	0.68612 AU
	10104 Jun 02 02:12	0° $\mathring{\text{II}}$		morning rise	10105 Apr 12 07:56	14° $\mathring{\text{Y}}$ 47'25	
morning set	10104 Jun 17 09:21	24° $\mathring{\text{II}}$ 07'11		direct	10105 Apr 16 23:27	12° $\mathring{\text{Y}}$ 50'50	
	10104 Jun 20 20:18	0° $\mathring{\text{B}}$		morning max el	10105 Apr 26 02:11	18° $\mathring{\text{Y}}$ 09'40	21°50'13
max. Earth dist.	10104 Jun 21 12:04	1° $\mathring{\text{B}}$ 08'12	1.39424 AU	desc. node	10105 May 01 19:40	24° $\mathring{\text{Y}}$ 41'40	
					10105 May 05 21:19	0° $\mathring{\text{B}}$	
superior conj	10104 Jun 29 04:00	14° $\mathring{\text{B}}$ 53'23	-1°16'58		10105 May 26 05:00	0° $\mathring{\text{II}}$	
minimum elong	10104 Jun 29 09:05	15° $\mathring{\text{B}}$ 16'56	1°16'38	morning set	10105 May 28 14:57	3° $\mathring{\text{II}}$ 50'02	
	10104 Jul 07 02:52	0° $\mathring{\text{Q}}$		max. Earth dist.	10105 Jun 03 12:30	13° $\mathring{\text{II}}$ 26'59	1.41645 AU
asc. node	10104 Jul 07 21:24	1° $\mathring{\text{Q}}$ 29'27					
evening rise	10104 Jul 08 15:05	2° $\mathring{\text{Q}}$ 54'41		superior conj	10105 Jun 11 04:34	26° $\mathring{\text{II}}$ 32'46	-1°46'24
evening max el	10104 Jul 24 17:49	28° $\mathring{\text{Q}}$ 58'27	18°38'38	minimum elong	10105 Jun 11 10:53	27° $\mathring{\text{II}}$ 00'31	1°46'11
	10104 Jul 25 20:26	0° $\mathring{\text{M}}$			10105 Jun 13 03:31	0° $\mathring{\text{B}}$	
retrograde	10104 Aug 01 18:53	2° $\mathring{\text{M}}$ 59'24		evening rise	10105 Jun 21 23:08	16° $\mathring{\text{B}}$ 02'16	
evening set	10104 Aug 03 19:15	2° $\mathring{\text{M}}$ 45'10		asc. node	10105 Jun 24 18:25	21° $\mathring{\text{B}}$ 11'13	

	10105 Jun 29 17:42	0°♎		evening max el	10106 Jun 21 15:26	24°♊48'36	18°04'36
evening max el	10105 Jul 08 02:36	11°♎40'48	18°11'52	retrograde	10106 Jun 28 03:20	28°♊10'05	
retrograde	10105 Jul 15 03:25	15°♎14'22		evening set	10106 Jun 30 18:45	27°♊36'06	
evening set	10105 Jul 17 11:05	14°♎51'45		inferior conj	10106 Jul 07 05:36	22°♊30'31	2°15'55
inferior conj	10105 Jul 24 14:01	10°♎05'37	1°13'33	minimum elong	10106 Jul 07 08:25	22°♊23'21	2°14'44
minimum elong	10105 Jul 24 16:14	10°♎00'43	1°12'26	min. Earth dist.	10106 Jul 10 06:17	19°♊27'37	0.61732 AU
min. Earth dist.	10105 Jul 27 22:16	7°♎10'08	0.59467 AU	morning rise	10106 Jul 13 19:50	16°♊26'56	
desc. node	10105 Jul 28 18:59	6°♎27'57		desc. node	10106 Jul 15 16:08	15°♊19'58	
morning rise	10105 Jul 31 18:15	4°♎24'00		direct	10106 Jul 20 12:09	14°♊06'49	
direct	10105 Aug 07 03:28	2°♎30'39		morning max el	10106 Aug 03 17:03	22°♊08'16	27°56'57
morning max el	10105 Aug 21 12:02	10°♎20'46	27°37'29		10106 Aug 10 14:46	0°♎	
	10105 Sep 05 17:22	0°♐			10106 Aug 29 21:05	0°♐	
asc. node	10105 Sep 20 18:29	27°♐15'09		morning set	10106 Sep 06 06:18	14°♐21'30	
morning set	10105 Sep 22 04:42	0°♑12'56		asc. node	10106 Sep 07 15:19	17°♐12'18	
	10105 Sep 22 02:14	0°♑		max. Earth dist.	10106 Sep 11 21:19	26°♐16'52	1.31872 AU
max. Earth dist.	10105 Sep 28 14:14	14°♑06'10	1.31505 AU				
				superior conj	10106 Sep 13 16:49	0°♑14'53	0°57'25
superior conj	10105 Sep 29 06:52	15°♑38'33	1°16'06	minimum elong	10106 Sep 13 14:39	0°♑03'04	0°56'59
minimum elong	10105 Sep 29 04:40	15°♑26'18	1°15'53		10106 Sep 13 14:06	0°♑	
	10105 Oct 05 19:24	0°♒		evening rise	10106 Sep 20 11:19	15°♑05'27	
evening rise	10105 Oct 06 00:24	0°♒26'50			10106 Sep 27 19:31	0°♒	
	10105 Oct 21 22:58	0°♓		desc. node	10106 Oct 11 14:07	21°♒25'17	
desc. node	10105 Oct 24 16:55	4°♓02'25		evening max el	10106 Oct 16 00:41	26°♒13'53	24°38'38
evening max el	10105 Nov 03 10:41	15°♓36'17	26°05'13		10106 Oct 20 15:28	0°♓	
retrograde	10105 Nov 17 08:30	22°♓39'34		retrograde	10106 Oct 29 19:32	3°♓09'10	
evening set	10105 Nov 23 18:12	21°♓01'56		evening set	10106 Nov 04 04:03	2°♓05'14	
min. Earth dist.	10105 Nov 27 23:32	18°♓27'02	0.58445 AU		10106 Nov 08 08:25	30°♒♒	
inferior conj	10105 Dec 01 02:23	16°♓10'40	-4°46'22	min. Earth dist.	10106 Nov 09 11:54	29°♒18'17	0.56556 AU
minimum elong	10105 Dec 01 10:09	15°♓56'29	4°44'07	inferior conj	10106 Nov 12 01:59	27°♒39'31	-5°33'56
morning rise	10105 Dec 09 04:33	11°♓44'23		minimum elong	10106 Nov 12 06:26	27°♒32'25	5°33'08
direct	10105 Dec 11 09:36	11°♓28'16		morning rise	10106 Nov 20 11:01	23°♒35'22	
asc. node	10105 Dec 17 18:29	13°♓51'29		direct	10106 Nov 22 23:09	23°♒18'12	
morning max el	10105 Dec 19 16:22	15°♓30'21	18°34'04	morning max el	10106 Dec 02 13:52	27°♒52'49	19°29'31
	10105 Dec 29 18:29	0°♈		asc. node	10106 Dec 04 15:28	0°♓03'28	
morning set	10106 Jan 04 17:41	11°♈13'12			10106 Dec 04 14:16	0°♓	
				morning set	10106 Dec 19 20:07	25°♓42'03	
superior conj	10106 Jan 13 14:28	28°♈10'40	0°52'27		10106 Dec 21 23:21	0°♈	
minimum elong	10106 Jan 13 17:32	28°♈24'57	0°52'25				
	10106 Jan 14 14:03	0°♉		superior conj	10106 Dec 27 20:12	11°♈42'50	1°15'42
desc. node	10106 Jan 20 15:56	10°♉54'42		minimum elong	10106 Dec 27 23:09	11°♈57'15	1°15'47
max. Earth dist.	10106 Jan 20 23:47	11°♉28'52	1.40127 AU	max. Earth dist.	10107 Jan 03 05:34	23°♈51'08	1.37920 AU
evening rise	10106 Jan 25 03:53	18°♉35'13		evening rise	10107 Jan 06 22:56	0°♉32'48	
	10106 Feb 01 05:19	0°♊			10107 Jan 06 15:29	0°♉	
	10106 Feb 22 10:34	0°♋		desc. node	10107 Jan 07 12:51	1°♉33'50	
evening max el	10106 Feb 28 21:41	7°♋15'28	23°50'20		10107 Jan 25 11:37	0°♊	
retrograde	10106 Mar 11 20:30	13°♋42'29		evening max el	10107 Feb 11 10:56	21°♊04'33	25°07'41
asc. node	10106 Mar 15 17:02	12°♋32'11		retrograde	10107 Feb 23 10:24	28°♊01'38	
evening set	10106 Mar 17 02:03	11°♋31'08		evening set	10107 Mar 01 04:05	25°♊38'35	
min. Earth dist.	10106 Mar 21 20:15	5°♋59'32	0.68412 AU	asc. node	10107 Mar 02 14:12	24°♊17'52	
inferior conj	10106 Mar 22 12:52	5°♋02'54	2°02'28	min. Earth dist.	10107 Mar 05 14:46	20°♊41'46	0.67795 AU
minimum elong	10106 Mar 22 10:42	5°♋10'18	2°01'48	inferior conj	10107 Mar 06 19:08	19°♊09'02	1°19'29
	10106 Mar 26 15:52	30°♌♌		minimum elong	10107 Mar 06 17:24	19°♊14'43	1°18'59
morning rise	10106 Mar 27 19:22	28°♌59'41		morning rise	10107 Mar 12 07:02	13°♌13'39	
direct	10106 Mar 31 21:32	27°♌25'14		direct	10107 Mar 15 20:49	12°♌00'15	
	10106 Apr 06 17:18	0°♍		morning max el	10107 Mar 23 00:18	15°♌57'13	19°26'17
morning max el	10106 Apr 08 21:19	1°♍57'29	20°31'29		10107 Apr 02 22:42	0°♍	
desc. node	10106 Apr 18 16:30	14°♍01'44		greatest brilliancy	10107 Apr 04 17:48	2°♍38'09	-0.7m
	10106 Apr 29 16:05	0°♎		desc. node	10107 Apr 05 13:18	3°♍50'31	
morning set	10106 May 07 20:58	12°♎31'07		morning set	10107 Apr 16 20:09	21°♍00'33	
max. Earth dist.	10106 May 16 19:45	26°♎38'49	1.43543 AU		10107 Apr 22 15:33	0°♎	
	10106 May 18 21:28	0°♏		max. Earth dist.	10107 Apr 29 09:15	10°♎33'04	1.44898 AU
superior conj	10106 May 23 06:02	7°♏10'05	-2°07'05	superior conj	10107 May 03 07:28	16°♎46'56	-2°12'28
minimum elong	10106 May 23 10:34	7°♏29'00	2°07'16	minimum elong	10107 May 03 05:54	16°♎40'40	2°12'44
evening rise	10106 Jun 04 15:05	28°♏24'14			10107 May 11 11:29	0°♏	
	10106 Jun 05 12:56	0°♐		evening rise	10107 May 17 10:13	9°♏50'55	
asc. node	10106 Jun 11 15:26	10°♐35'04		asc. node	10107 May 29 12:30	29°♏35'02	

	10107 May 29 19:09	0°☿				10108 May 03 07:32	0°♊	
evening max el	10107 Jun 05 05:03	8°☿14'11	18°16'03	greatest brilliancy		10108 May 05 07:57	3°♊11'44	-0.8m
retrograde	10107 Jun 11 14:06	11°☿37'35		asc. node		10108 May 15 09:36	18°♊02'33	
evening set	10107 Jun 14 13:15	10°☿50'10		evening max el		10108 May 18 16:36	21°♊49'53	18°45'27
inferior conj	10107 Jun 20 12:00	5°☿26'58	2°54'42	retrograde		10108 May 25 07:44	25°♊28'25	
minimum elong	10107 Jun 20 14:09	5°☿20'50	2°53'53	evening set		10108 May 28 14:51	24°♊26'08	
min. Earth dist.	10107 Jun 22 23:41	2°☿38'16	0.63867 AU	inferior conj		10108 Jun 03 05:16	18°♊46'46	3°14'22
	10107 Jun 25 14:41	30°☿♊		minimum elong		10108 Jun 03 06:15	18°♊43'41	3°13'52
morning rise	10107 Jun 26 13:40	29°♊11'34		min. Earth dist.		10108 Jun 05 01:56	16°♊28'37	0.65685 AU
desc. node	10107 Jul 02 13:13	26°♊35'02		morning rise		10108 Jun 08 20:56	12°♊26'57	
direct	10107 Jul 03 06:19	26°♊33'20		direct		10108 Jun 15 07:58	9°♊42'08	
	10107 Jul 11 20:35	0°☿		desc. node		10108 Jun 18 10:15	10°♊14'40	
morning max el	10107 Jul 17 02:13	4°☿35'40	27°38'53	morning max el		10108 Jun 28 12:45	17°♊31'40	26°49'06
	10107 Aug 05 06:07	0°♊				10108 Jul 08 22:46	0°☿	
morning set	10107 Aug 21 00:20	28°♊05'42				10108 Jul 28 04:11	0°♊	
	10107 Aug 21 23:13	0°♊		morning set		10108 Aug 03 07:47	11°♊17'31	
asc. node	10107 Aug 25 12:10	7°♊15'59		max. Earth dist.		10108 Aug 07 12:41	19°♊30'45	1.34103 AU
max. Earth dist.	10107 Aug 25 21:49	8°♊06'32	1.32736 AU	asc. node		10108 Aug 11 09:03	27°♊22'09	
superior conj	10107 Aug 28 23:10	14°♊36'52	0°33'53	superior conj		10108 Aug 11 23:42	28°♊38'25	0°06'03
minimum elong	10107 Aug 28 21:37	14°♊28'34	0°33'25	minimum elong		10108 Aug 11 23:24	28°♊36'48	0°05'44
evening rise	10107 Sep 04 22:46	29°♊42'38		behind sun begin		10108 Aug 11 18:00	28°♊08'42	
	10107 Sep 05 02:01	0°♊		behind sun end		10108 Aug 12 04:47	29°♊04'57	
	10107 Sep 21 22:04	0°♊				10108 Aug 12 15:19	0°♊	
evening max el	10107 Sep 27 11:26	6°♊23'53	22°58'55	evening rise		10108 Aug 19 08:52	14°♊13'07	
desc. node	10107 Sep 28 11:21	7°♊20'00				10108 Aug 27 08:32	0°♊	
retrograde	10107 Oct 10 18:07	13°♊00'57		evening max el		10108 Sep 08 03:59	16°♊42'13	21°22'59
evening set	10107 Oct 14 15:28	12°♊27'56		desc. node		10108 Sep 14 08:35	21°♊17'01	
min. Earth dist.	10107 Oct 21 20:20	9°♊10'39	0.55189 AU	retrograde		10108 Sep 20 06:50	22°♊43'04	
inferior conj	10107 Oct 23 06:27	8°♊21'30	-5°39'54	evening set		10108 Sep 22 20:31	22°♊27'53	
minimum elong	10107 Oct 23 03:15	8°♊26'07	5°39'27	inferior conj		10108 Oct 01 23:33	18°♊31'48	-4°49'27
morning rise	10107 Oct 31 16:52	4°♊31'59		minimum elong		10108 Oct 01 14:11	18°♊44'55	4°47'11
direct	10107 Nov 03 18:12	4°♊10'05		min. Earth dist.		10108 Oct 02 04:05	18°♊25'27	0.54628 AU
morning max el	10107 Nov 14 22:11	9°♊25'55	20°47'29	morning rise		10108 Oct 10 08:37	14°♊41'14	
asc. node	10107 Nov 21 12:25	17°♊21'40		direct		10108 Oct 14 03:11	14°♊10'27	
	10107 Nov 28 23:06	0°♊		morning max el		10108 Oct 26 17:45	20°♊10'46	22°24'55
morning set	10107 Dec 04 03:46	10°♊23'30				10108 Nov 03 21:09	0°♊	
				asc. node		10108 Nov 07 09:21	5°♊31'17	
superior conj	10107 Dec 11 13:47	25°♊47'35	1°30'52	morning set		10108 Nov 17 14:29	25°♊11'35	
minimum elong	10107 Dec 11 15:49	25°♊57'58	1°31'08			10108 Nov 19 20:44	0°♊	
	10107 Dec 13 15:31	0°♊						
max. Earth dist.	10107 Dec 16 13:46	5°♊47'42	1.35852 AU	superior conj		10108 Nov 24 15:43	10°♊15'04	1°38'40
evening rise	10107 Dec 20 12:41	13°♊19'00		minimum elong		10108 Nov 24 16:32	10°♊19'24	1°39'03
desc. node	10107 Dec 25 09:48	22°♊05'16		max. Earth dist.		10108 Nov 28 05:09	17°♊41'58	1.34105 AU
	10107 Dec 30 02:15	0°♊		evening rise		10108 Dec 02 17:29	26°♊44'32	
	10108 Jan 20 10:08	0°♊				10108 Dec 04 10:09	0°♊	
evening max el	10108 Jan 25 00:16	4°♊52'07	26°14'48	desc. node		10108 Dec 11 06:50	12°♊24'30	
retrograde	10108 Feb 06 19:12	12°♊07'16				10108 Dec 22 10:25	0°♊	
evening set	10108 Feb 13 00:43	9°♊36'08		evening max el		10109 Jan 06 13:49	18°♊30'49	27°04'11
min. Earth dist.	10108 Feb 17 05:04	5°♊13'47	0.66789 AU	retrograde		10109 Jan 19 22:06	25°♊52'29	
asc. node	10108 Feb 17 11:23	4°♊54'38		evening set		10109 Jan 26 13:59	23°♊18'19	
inferior conj	10108 Feb 18 21:08	3°♊10'47	0°27'31	min. Earth dist.		10109 Jan 30 12:54	19°♊29'43	0.65421 AU
minimum elong	10108 Feb 18 20:25	3°♊12'59	0°27'29	inferior conj		10109 Feb 01 16:40	17°♊03'25	-0°33'05
	10108 Feb 21 14:43	30°♊		minimum elong		10109 Feb 01 17:37	17°♊00'42	0°32'21
morning rise	10108 Feb 24 16:54	27°♊24'59		asc. node		10109 Feb 03 08:33	15°♊13'13	
direct	10108 Feb 27 19:38	26°♊30'02		morning rise		10109 Feb 07 22:36	11°♊29'41	
	10108 Mar 05 08:44	0°♊		direct		10109 Feb 10 16:00	10°♊49'43	
morning max el	10108 Mar 05 10:23	0°♊04'02	18°36'47	morning max el		10109 Feb 17 01:34	14°♊12'17	18°03'59
desc. node	10108 Mar 22 10:04	23°♊59'40				10109 Feb 28 10:39	0°♊	
morning set	10108 Mar 26 11:51	0°♊23'46		morning set		10109 Mar 07 08:17	11°♊13'38	
	10108 Mar 26 05:48	0°♊		desc. node		10109 Mar 09 06:52	14°♊23'41	
max. Earth dist.	10108 Apr 11 03:05	24°♊54'06	1.45573 AU			10109 Mar 18 23:24	0°♊	
superior conj	10108 Apr 11 15:55	25°♊44'19	-1°57'50	superior conj		10109 Mar 22 00:03	4°♊47'37	-1°25'03
minimum elong	10108 Apr 11 07:40	25°♊12'01	1°57'26	minimum elong		10109 Mar 21 15:03	4°♊12'07	1°24'02
	10108 Apr 14 09:13	0°♊		max. Earth dist.		10109 Mar 24 23:04	9°♊26'52	1.45505 AU
evening rise	10108 Apr 27 05:22	20°♊17'26		evening rise		10109 Apr 07 03:19	29°♊55'59	

	10109 Apr 07 04:22	0°♄		superior conj	10110 Mar 02 01:16	14°♄43'06	-0°42'55
greatest brilliancy	10109 Apr 20 05:35	19°♄56'54	-0.7m	minimum elong	10110 Mar 01 20:38	14°♄24'13	0°42'06
	10109 Apr 27 07:45	0°♄		max. Earth dist.	10110 Mar 07 18:10	23°♄53'43	1.44703 AU
evening max el	10109 May 01 23:57	5°♄30'18	19°31'36		10110 Mar 11 15:06	0°♄	
asc. node	10109 May 02 06:45	5°♄47'16		evening rise	10110 Mar 17 14:55	9°♄17'04	
retrograde	10109 May 09 05:09	9°♄35'56			10110 Mar 31 10:03	0°♄	
evening set	10109 May 12 20:47	8°♄18'07		evening max el	10110 Apr 15 01:47	19°♄12'11	20°32'32
inferior conj	10109 May 18 06:07	2°♄23'56	3°18'45	asc. node	10110 Apr 19 03:56	22°♄36'20	
minimum elong	10109 May 18 05:55	2°♄24'36	3°18'22	retrograde	10110 Apr 23 03:54	23°♄54'45	
min. Earth dist.	10109 May 19 11:46	0°♄46'05	0.67085 AU	evening set	10110 Apr 27 04:50	22°♄21'16	
	10109 May 20 02:00	30°♄		inferior conj	10110 May 02 11:52	16°♄14'02	3°10'37
morning rise	10109 May 23 14:42	26°♄04'07		minimum elong	10110 May 02 10:41	16°♄18'07	3°10'11
direct	10109 May 29 15:51	23°♄23'48		min. Earth dist.	10110 May 03 03:26	15°♄20'36	0.68028 AU
desc. node	10109 Jun 05 07:15	25°♄52'49		morning rise	10110 May 07 16:19	9°♄56'48	
	10109 Jun 10 04:39	0°♄		direct	10110 May 13 05:02	7°♄29'31	
morning max el	10109 Jun 10 22:55	0°♄45'31	25°36'09	desc. node	10110 May 23 04:12	13°♄00'10	
	10109 Jul 02 22:05	0°♄		morning max el	10110 May 24 08:29	14°♄09'37	24°09'52
morning set	10109 Jul 17 00:44	23°♄46'18			10110 Jun 06 05:33	0°♄	
	10109 Jul 20 09:24	0°♄			10110 Jun 25 19:08	0°♄	
max. Earth dist.	10109 Jul 20 17:21	0°♄37'34	1.35938 AU	morning set	10110 Jun 28 22:24	5°♄20'09	
				max. Earth dist.	10110 Jul 02 15:17	11°♄50'47	1.38105 AU
superior conj	10109 Jul 26 15:42	12°♄11'45	-0°25'12				
minimum elong	10109 Jul 26 17:15	12°♄19'30	0°25'15	superior conj	10110 Jul 09 19:45	25°♄08'41	-0°58'11
asc. node	10109 Jul 29 05:57	17°♄26'31		minimum elong	10110 Jul 09 23:34	25°♄26'56	0°57'56
evening rise	10109 Aug 03 15:29	28°♄30'23			10110 Jul 12 08:10	0°♄	
	10109 Aug 04 09:04	0°♄		asc. node	10110 Jul 16 02:55	7°♄25'33	
evening max el	10109 Aug 21 08:54	27°♄36'31	20°02'45	evening rise	10110 Jul 18 16:02	12°♄27'43	
	10109 Aug 24 03:16	0°♄			10110 Jul 28 03:31	0°♄	
retrograde	10109 Aug 31 20:31	2°♄48'35		evening max el	10110 Aug 04 03:09	9°♄17'17	19°03'12
desc. node	10109 Sep 01 05:50	2°♄48'11		retrograde	10110 Aug 12 23:35	13°♄41'29	
evening set	10109 Sep 02 18:35	2°♄38'54		evening set	10110 Aug 14 20:40	13°♄30'23	
	10109 Sep 09 11:56	30°♄		desc. node	10110 Aug 19 03:03	11°♄52'44	
inferior conj	10109 Sep 11 18:55	28°♄39'24	-3°11'19	inferior conj	10110 Aug 23 05:51	9°♄16'06	-1°16'40
minimum elong	10109 Sep 11 10:30	28°♄52'01	3°08'26	minimum elong	10110 Aug 23 02:32	9°♄21'50	1°15'34
min. Earth dist.	10109 Sep 13 13:30	27°♄35'33	0.55014 AU	min. Earth dist.	10110 Aug 26 03:06	7°♄17'20	0.56285 AU
morning rise	10109 Sep 20 01:11	24°♄27'17		morning rise	10110 Aug 31 05:18	4°♄27'54	
direct	10109 Sep 24 14:29	23°♄42'17		direct	10110 Sep 05 13:54	3°♄20'40	
	10109 Oct 07 19:38	0°♄		morning max el	10110 Sep 19 18:42	10°♄36'44	25°52'15
morning max el	10109 Oct 08 05:57	0°♄23'58	24°12'00		10110 Oct 04 13:48	0°♄	
asc. node	10109 Oct 25 06:16	24°♄19'00		asc. node	10110 Oct 12 03:10	13°♄35'16	
	10109 Oct 28 05:48	0°♄		morning set	10110 Oct 17 13:32	24°♄43'26	
morning set	10109 Nov 02 02:18	9°♄59'49			10110 Oct 20 00:03	0°♄	
superior conj	10109 Nov 08 23:07	24°♄55'52	1°39'51	superior conj	10110 Oct 24 09:41	9°♄43'14	1°35'00
minimum elong	10109 Nov 08 22:44	24°♄53'51	1°40'12	minimum elong	10110 Oct 24 08:20	9°♄35'45	1°35'11
max. Earth dist.	10109 Nov 11 04:41	29°♄45'47	1.32773 AU	max. Earth dist.	10110 Oct 25 10:32	12°♄00'35	1.31902 AU
	10109 Nov 11 07:20	0°♄		evening rise	10110 Oct 31 10:05	24°♄54'09	
evening rise	10109 Nov 16 09:38	10°♄38'52			10110 Nov 02 21:46	0°♄	
	10109 Nov 26 17:48	0°♄		desc. node	10110 Nov 15 01:02	21°♄57'37	
desc. node	10109 Nov 28 03:55	2°♄24'35			10110 Nov 20 08:21	0°♄	
	10109 Dec 18 06:31	0°♄		evening max el	10110 Dec 02 10:42	14°♄30'24	27°22'59
evening max el	10109 Dec 20 02:03	1°♄47'55	27°28'53	retrograde	10110 Dec 16 07:15	21°♄45'45	
retrograde	10110 Jan 02 18:18	9°♄08'26		evening set	10110 Dec 23 08:05	19°♄28'04	
evening set	10110 Jan 09 17:28	6°♄38'02		min. Earth dist.	10110 Dec 27 01:01	16°♄36'36	0.61746 AU
min. Earth dist.	10110 Jan 13 12:04	3°♄20'55	0.63718 AU	inferior conj	10110 Dec 30 01:18	13°♄52'59	-2°55'06
inferior conj	10110 Jan 16 03:06	0°♄40'07	-1°41'26	minimum elong	10110 Dec 30 07:07	13°♄39'47	2°52'31
minimum elong	10110 Jan 16 06:20	0°♄31'49	1°39'44	morning rise	10111 Jan 06 08:38	8°♄52'44	
	10110 Jan 16 18:52	30°♄		asc. node	10111 Jan 08 02:49	8°♄32'37	
asc. node	10110 Jan 21 05:42	26°♄11'57		direct	10111 Jan 08 13:35	8°♄31'44	
morning rise	10110 Jan 22 21:10	25°♄21'30		morning max el	10111 Jan 15 11:44	12°♄01'53	17°50'46
direct	10110 Jan 25 07:07	24°♄52'51			10111 Jan 27 13:24	0°♄	
morning max el	10110 Jan 31 19:05	28°♄14'23	17°48'25	morning set	10111 Jan 31 04:58	6°♄32'00	
	10110 Feb 02 10:17	0°♄					
morning set	10110 Feb 17 08:05	23°♄23'00		superior conj	10111 Feb 11 03:20	25°♄50'04	-0°00'54
	10110 Feb 21 05:06	0°♄		minimum elong	10111 Feb 11 03:16	25°♄49'48	0°00'36
desc. node	10110 Feb 24 03:41	4°♄57'49		behind sun begin	10111 Feb 10 18:44	25°♄13'13	
				behind sun end	10111 Feb 11 11:49	26°♄26'17	

desc. node	10111 Feb 11 00:31	25° $\approx$ 37'58		superior conj	10112 Jan 24 05:12	8° $\approx$ 04'20	0°35'15
	10111 Feb 13 14:17	0° $\mathbb{H}$		minimum elong	10112 Jan 24 07:42	8° $\approx$ 15'39	0°35'14
max. Earth dist.	10111 Feb 18 09:27	7° $\mathbb{H}$ 56'29	1.43265 AU	desc. node	10112 Jan 28 21:22	16° $\approx$ 20'53	
evening rise	10111 Feb 25 07:26	18° $\mathbb{H}$ 58'08		max. Earth dist.	10112 Jan 31 19:58	21° $\approx$ 23'13	1.41356 AU
	10111 Mar 04 12:07	0° $\mathbb{Y}$		evening rise	10112 Feb 05 17:02	29° $\approx$ 28'08	
	10111 Mar 26 05:35	0° $\mathbb{B}$			10112 Feb 06 00:54	0° $\mathbb{H}$	
evening max el	10111 Mar 28 22:03	2° $\mathbb{B}$ 54'35	21°44'59		10112 Feb 26 00:54	0° $\mathbb{Y}$	
asc. node	10111 Apr 06 01:07	8° $\mathbb{B}$ 14'04		evening max el	10112 Mar 10 14:13	16° $\mathbb{Y}$ 39'52	23°04'08
retrograde	10111 Apr 07 01:59	8° $\mathbb{B}$ 19'22		retrograde	10112 Mar 20 21:46	22° $\mathbb{Y}$ 45'51	
evening set	10111 Apr 11 13:12	6° $\mathbb{B}$ 30'36		asc. node	10112 Mar 22 22:18	22° $\mathbb{Y}$ 26'00	
inferior conj	10111 Apr 16 20:15	0° $\mathbb{B}$ 12'37	2°51'44	evening set	10112 Mar 25 20:18	20° $\mathbb{Y}$ 42'35	
minimum elong	10111 Apr 16 18:22	0° $\mathbb{B}$ 19'11	2°51'10	inferior conj	10112 Mar 31 05:17	14° $\mathbb{Y}$ 17'00	2°23'08
	10111 Apr 16 23:52	30° $\mathbb{R}$ $\mathbb{Y}$		minimum elong	10112 Mar 31 03:06	14° $\mathbb{Y}$ 24'36	2°22'28
min. Earth dist.	10111 Apr 16 22:47	0° $\mathbb{B}$ 03'47	0.68519 AU	min. Earth dist.	10112 Mar 30 19:35	14° $\mathbb{Y}$ 50'34	0.68575 AU
morning rise	10111 Apr 21 23:22	23° $\mathbb{Y}$ 59'38		morning rise	10112 Apr 05 09:47	8° $\mathbb{Y}$ 09'39	
direct	10111 Apr 26 22:36	21° $\mathbb{Y}$ 50'59		direct	10112 Apr 09 19:31	6° $\mathbb{Y}$ 22'24	
morning max el	10111 May 06 19:08	27° $\mathbb{Y}$ 40'25	22°39'59	morning max el	10112 Apr 18 10:12	11° $\mathbb{Y}$ 20'44	21°15'12
	10111 May 08 23:44	0° $\mathbb{B}$		desc. node	10112 Apr 25 21:57	20° $\mathbb{Y}$ 10'55	
desc. node	10111 May 10 01:05	1° $\mathbb{B}$ 11'57			10112 May 03 00:39	0° $\mathbb{B}$	
	10111 May 30 20:45	0° $\mathbb{II}$		morning set	10112 May 19 13:50	24° $\mathbb{B}$ 57'24	
morning set	10111 Jun 09 19:28	15° $\mathbb{II}$ 45'04			10112 May 22 18:04	0° $\mathbb{II}$	
max. Earth dist.	10111 Jun 14 12:32	23° $\mathbb{II}$ 37'25	1.40384 AU	max. Earth dist.	10112 May 26 15:01	6° $\mathbb{II}$ 16'15	1.42505 AU
	10111 Jun 18 05:08	0° $\mathbb{B}$					
				superior conj	10112 Jun 02 22:40	18° $\mathbb{II}$ 31'38	-1°56'38
superior conj	10111 Jun 22 07:34	7° $\mathbb{B}$ 18'28	-1°30'08	minimum elong	10112 Jun 03 04:44	18° $\mathbb{II}$ 57'38	1°56'35
minimum elong	10111 Jun 22 13:24	7° $\mathbb{B}$ 44'54	1°29'49		10112 Jun 09 12:11	0° $\mathbb{B}$	
evening rise	10111 Jul 02 07:11	25° $\mathbb{B}$ 55'33		evening rise	10112 Jun 14 08:54	8° $\mathbb{B}$ 44'06	
asc. node	10111 Jul 02 23:52	27° $\mathbb{B}$ 14'26		asc. node	10112 Jun 18 20:51	16° $\mathbb{B}$ 48'40	
	10111 Jul 04 11:01	0° $\mathbb{Q}$			10112 Jun 26 23:28	0° $\mathbb{Q}$	
evening max el	10111 Jul 18 07:45	21° $\mathbb{Q}$ 39'26	18°24'49	evening max el	10112 Jun 30 18:43	4° $\mathbb{Q}$ 33'29	18°06'32
retrograde	10111 Jul 25 21:19	25° $\mathbb{Q}$ 27'05		retrograde	10112 Jul 07 12:39	7° $\mathbb{Q}$ 59'46	
evening set	10111 Jul 28 00:27	25° $\mathbb{Q}$ 09'51		evening set	10112 Jul 09 23:40	7° $\mathbb{Q}$ 32'38	
inferior conj	10111 Aug 04 14:12	20° $\mathbb{Q}$ 35'53	0°25'40	inferior conj	10112 Jul 16 19:19	2° $\mathbb{Q}$ 38'20	1°43'06
minimum elong	10111 Aug 04 15:06	20° $\mathbb{Q}$ 34'04	0°25'01	minimum elong	10112 Jul 16 22:01	2° $\mathbb{Q}$ 32'01	1°41'53
desc. node	10111 Aug 06 00:14	19° $\mathbb{Q}$ 26'48			10112 Jul 19 15:04	30° $\mathbb{R}$ $\mathbb{B}$	
min. Earth dist.	10111 Aug 07 22:36	17° $\mathbb{Q}$ 54'51	0.58199 AU	min. Earth dist.	10112 Jul 20 01:28	29° $\mathbb{B}$ 36'39	0.60433 AU
morning rise	10111 Aug 12 02:14	15° $\mathbb{Q}$ 11'19		desc. node	10112 Jul 22 21:24	27° $\mathbb{B}$ 19'56	
direct	10111 Aug 18 04:05	13° $\mathbb{Q}$ 34'57		morning rise	10112 Jul 23 17:33	26° $\mathbb{B}$ 46'11	
morning max el	10111 Sep 01 13:03	21° $\mathbb{Q}$ 16'02	27°08'48	direct	10112 Jul 30 06:54	24° $\mathbb{B}$ 40'21	
	10111 Sep 09 03:46	0° $\mathbb{P}$			10112 Aug 10 18:12	0° $\mathbb{Q}$	
	10111 Sep 27 09:38	0° $\mathbb{A}$		morning max el	10112 Aug 13 14:13	2° $\mathbb{Q}$ 36'35	27°50'28
asc. node	10111 Sep 29 00:02	3° $\mathbb{A}$ 12'11			10112 Sep 02 15:24	0° $\mathbb{P}$	
morning set	10111 Oct 01 22:29	9° $\mathbb{A}$ 17'38		asc. node	10112 Sep 14 20:52	23° $\mathbb{P}$ 03'20	
				morning set	10112 Sep 15 03:20	23° $\mathbb{P}$ 36'55	
superior conj	10111 Oct 08 21:28	24° $\mathbb{A}$ 31'06	1°24'33		10112 Sep 18 03:36	0° $\mathbb{A}$	
minimum elong	10111 Oct 08 19:28	24° $\mathbb{A}$ 19'56	1°24'28	max. Earth dist.	10112 Sep 21 04:35	6° $\mathbb{A}$ 38'26	1.31597 AU
max. Earth dist.	10111 Oct 08 19:43	24° $\mathbb{A}$ 21'22	1.31507 AU				
	10111 Oct 11 08:41	0° $\mathbb{M}$		superior conj	10112 Sep 22 08:36	9° $\mathbb{A}$ 13'19	1°08'48
evening rise	10111 Oct 15 16:17	9° $\mathbb{M}$ 23'38		minimum elong	10112 Sep 22 06:22	9° $\mathbb{A}$ 00'54	1°08'29
	10111 Oct 26 05:41	0° $\mathbb{J}$		evening rise	10112 Sep 29 02:02	24° $\mathbb{A}$ 00'41	
desc. node	10111 Nov 01 22:11	10° $\mathbb{J}$ 52'58			10112 Oct 01 22:14	0° $\mathbb{M}$	
evening max el	10111 Nov 14 13:21	26° $\mathbb{J}$ 27'39	26°43'10	desc. node	10112 Oct 18 19:23	28° $\mathbb{M}$ 55'15	
	10111 Nov 18 19:56	0° $\mathbb{B}$			10112 Oct 19 15:05	0° $\mathbb{J}$	
retrograde	10111 Nov 28 11:45	3° $\mathbb{B}$ 35'53		evening max el	10112 Oct 26 08:04	7° $\mathbb{J}$ 33'26	25°31'12
evening set	10111 Dec 05 05:51	1° $\mathbb{B}$ 41'08		retrograde	10112 Nov 09 05:31	14° $\mathbb{J}$ 33'31	
	10111 Dec 07 21:21	30° $\mathbb{R}$ $\mathbb{J}$		evening set	10112 Nov 15 05:51	13° $\mathbb{J}$ 10'14	
min. Earth dist.	10111 Dec 09 03:28	29° $\mathbb{J}$ 04'24	0.59635 AU	min. Earth dist.	10112 Nov 19 20:23	10° $\mathbb{J}$ 32'19	0.57596 AU
inferior conj	10111 Dec 12 07:51	26° $\mathbb{J}$ 33'12	-4°08'24	inferior conj	10112 Nov 22 19:21	8° $\mathbb{J}$ 30'22	-5°10'17
minimum elong	10111 Dec 12 15:33	26° $\mathbb{J}$ 17'54	4°05'40	minimum elong	10112 Nov 23 02:18	8° $\mathbb{J}$ 18'22	5°08'36
morning rise	10111 Dec 20 03:54	21° $\mathbb{J}$ 53'56		morning rise	10112 Dec 01 01:04	4° $\mathbb{J}$ 13'28	
direct	10111 Dec 22 07:19	21° $\mathbb{J}$ 37'07		direct	10112 Dec 03 08:16	3° $\mathbb{J}$ 57'20	
asc. node	10111 Dec 25 23:53	22° $\mathbb{J}$ 29'39		asc. node	10112 Dec 11 20:55	7° $\mathbb{J}$ 56'11	
morning max el	10111 Dec 29 23:56	25° $\mathbb{J}$ 25'15	18°12'17	morning max el	10112 Dec 12 03:48	8° $\mathbb{J}$ 12'33	18°54'47
	10112 Jan 02 20:36	0° $\mathbb{B}$			10112 Dec 26 05:26	0° $\mathbb{B}$	
morning set	10112 Jan 14 16:54	20° $\mathbb{B}$ 22'58		morning set	10112 Dec 28 15:05	4° $\mathbb{B}$ 40'59	
	10112 Jan 19 19:40	0° $\approx$					
				superior conj	10113 Jan 06 02:09	21° $\mathbb{B}$ 11'37	1°03'20

minimum elong	10113 Jan 06 05:18	21°  26'38	1°03'19	minimum elong	10113 Dec 20 16:03	5°  11'57	1°23'14
	10113 Jan 10 19:35	0° 		max. Earth dist.	10113 Dec 26 09:23	16°  18'39	1.37022 AU
max. Earth dist.	10113 Jan 13 02:45	4°  08'10	1.39193 AU	evening rise	10113 Dec 30 03:31	23°  13'42	
desc. node	10113 Jan 14 18:16	7°  02'15		desc. node	10114 Jan 01 15:12	27°  38'24	
evening rise	10113 Jan 17 00:04	10°  54'32			10114 Jan 02 23:53	0° 	
	10113 Jan 28 20:51	0° 			10114 Jan 22 15:00	0° 	
	10113 Feb 20 16:52	0° 		evening max el	10114 Feb 03 17:29	14°  17'28	25°37'51
evening max el	10113 Feb 21 04:10	0°  28'17	24°24'03	retrograde	10114 Feb 16 01:35	21°  18'22'49	
retrograde	10113 Mar 04 13:57	7°  08'53		evening set	10114 Feb 22 00:32	18°  18'55'47	
asc. node	10113 Mar 09 19:30	5°  03'10		asc. node	10114 Feb 24 16:41	16°  16'14'28	
evening set	10113 Mar 10 00:36	4°  52'30		min. Earth dist.	10114 Feb 26 08:26	14°  14'13'52	0.67423 AU
	10113 Mar 14 08:12	30° 		inferior conj	10114 Feb 27 17:47	12°  12'27'35	0°58'32
min. Earth dist.	10113 Mar 14 15:33	29°  35'33	0.68204 AU	minimum elong	10114 Feb 27 16:24	12°  12'32'00	0°58'10
inferior conj	10113 Mar 15 13:05	28°  23'17	1°45'21	morning rise	10114 Mar 05 08:45	6°  6'36'10	
minimum elong	10113 Mar 15 11:02	28°  30'10	1°44'43	direct	10114 Mar 08 17:44	5°  5'30'52	
morning rise	10113 Mar 20 21:34	22°  23'02		morning max el	10114 Mar 15 14:41	9°  9'16'04	19°03'12
direct	10113 Mar 24 18:24	20°  23'57'32		greatest brilliancy	10114 Mar 29 00:43	27°  27'14'24	-0.7m
morning max el	10113 Apr 01 08:29	25°  13'01	20°01'49	desc. node	10114 Mar 30 15:34	29°  29'41'58	
	10113 Apr 05 14:13	0° 			10114 Mar 30 20:18	0° 	
desc. node	10113 Apr 12 18:46	9°  44'02		morning set	10114 Apr 07 17:45	12°  12'49'09'56	
	10113 Apr 26 08:45	0° 			10114 Apr 19 04:50	0° 	
morning set	10113 Apr 28 14:02	3°  24'35		max. Earth dist.	10114 Apr 21 17:27	3°  3'57'35	1.45277 AU
max. Earth dist.	10113 May 09 01:11	19°  47'54	1.44201 AU				
				superior conj	10114 Apr 24 06:20	7°  7'57'11	-2°08'46
superior conj	10113 May 14 13:42	28°  42'12	-2°11'37	minimum elong	10114 Apr 24 01:32	7°  7'38'17	2°08'50
minimum elong	10113 May 14 16:07	28°  52'05	2°11'55		10114 May 08 00:06	0° 	
	10113 May 15 08:44	0° 		evening rise	10114 May 09 01:32	1°  1'43'49	
evening rise	10113 May 27 16:28	20°  24'43'03		asc. node	10114 May 23 14:57	24°  24'14'49'45	
	10113 Jun 02 02:35	0° 			10114 May 27 15:16	0° 	
asc. node	10113 Jun 05 17:52	6°  02'53		evening max el	10114 May 28 21:19	1°  1'19'58	18°26'24
evening max el	10113 Jun 14 08:18	17°  49'51	18°07'18	retrograde	10114 Jun 04 07:52	4°  4'48'20	
retrograde	10113 Jun 20 17:39	21°  10'09		evening set	10114 Jun 07 10:24	3°  3'54'35	
evening set	10113 Jun 23 12:28	20°  23'03'30			10114 Jun 11 20:02	30° 	
inferior conj	10113 Jun 29 17:40	15°  17'08	2°35'00	inferior conj	10114 Jun 13 05:07	28°  28'12'40'01	3°05'11
minimum elong	10113 Jun 29 20:18	15°  10'05	2°33'57	minimum elong	10114 Jun 13 06:48	28°  28'19'02	3°04'30
min. Earth dist.	10113 Jul 02 13:13	12°  18'09	0.62671 AU	min. Earth dist.	10114 Jun 15 10:23	25°  25'14'70'01	0.64683 AU
morning rise	10113 Jul 06 02:19	9°  07'47		morning rise	10114 Jun 19 02:11	22°  22'10'6'00	
desc. node	10113 Jul 09 18:31	7°  08'52		direct	10114 Jun 25 16:55	19°  19'23'57	
direct	10113 Jul 12 19:43	6°  08'38'47		desc. node	10114 Jun 26 15:36	19°  19'26'57	
morning max el	10113 Jul 26 21:07	14°  41'08	27°53'42	morning max el	10114 Jul 09 07:18	27°  27'12'22'13	27°21'17
	10113 Aug 08 07:09	0° 			10114 Jul 11 18:46	0° 	
	10113 Aug 26 05:36	0° 			10114 Aug 02 00:01	0° 	
morning set	10113 Aug 30 02:02	7°  07'35'47		morning set	10114 Aug 13 15:56	21°  21'06'39	
asc. node	10113 Sep 01 17:42	13°  13'07'42			10114 Aug 18 02:13	0° 	
max. Earth dist.	10113 Sep 04 09:25	18°  18'41'43	1.32178 AU	max. Earth dist.	10114 Aug 18 06:22	0°  0'21'20	1.33258 AU
				asc. node	10114 Aug 19 14:33	3°  3'08'23	
superior conj	10113 Sep 06 17:17	23°  23'44'20	0°48'01	superior conj	10114 Aug 21 21:25	7°  7'07'57'39	0°22'34
minimum elong	10113 Sep 06 15:19	23°  23'33'36	0°47'33	minimum elong	10114 Aug 21 20:19	7°  7'05'14'48	0°22'08
	10113 Sep 09 13:53	0° 		evening rise	10114 Aug 29 00:32	23°  23'07'14'14	
evening rise	10113 Sep 13 13:25	8°  8'39'40			10114 Sep 01 06:30	0° 	
	10113 Sep 24 11:56	0° 		evening max el	10114 Sep 19 07:47	28°  28'03'42	22°16'43
desc. node	10113 Oct 05 16:35	15°  15'44'06			10114 Sep 21 11:19	0° 	
evening max el	10113 Oct 07 19:57	17°  17'56'11	23°56'54	desc. node	10114 Sep 22 13:49	0°  0'15'52'01	
retrograde	10113 Oct 21 10:47	24°  24'44'45		retrograde	10114 Oct 02 04:26	4°  4'12'28'04	
evening set	10113 Oct 26 05:17	23°  23'54'59		evening set	10114 Oct 05 11:07	4°  4'10'04'16	
min. Earth dist.	10113 Nov 01 06:26	20°  20'57'23	0.55900 AU	min. Earth dist.	10114 Oct 13 13:48	0°  0'12'29'37	0.54840 AU
inferior conj	10113 Nov 03 10:24	19°  19'38'47	-5°42'44	inferior conj	10114 Oct 14 08:30	0°  0'10'03'18	-5°25'34
minimum elong	10113 Nov 03 11:56	19°  19'36'27	5°42'22	minimum elong	10114 Oct 14 02:01	0°  0'12'12'26	5°24'29
morning rise	10113 Nov 11 20:35	15°  15'42'09			10114 Oct 14 10:51	30° 	
direct	10113 Nov 14 13:56	15°  15'23'15		morning rise	10114 Oct 22 18:34	26°  26'05'16'11	
morning max el	10113 Nov 24 19:50	20°  20'14'14	19°59'52	direct	10114 Oct 26 02:54	25°  25'05'51'09	
asc. node	10113 Nov 28 17:54	24°  24'38'08			10114 Nov 05 07:25	0°	
	10113 Dec 02 11:21	0°		morning max el	10114 Nov 06 22:22	1°  1'12'25'15	21°27'03
morning set	10113 Dec 12 20:05	19°  19'07'16'17		asc. node	10114 Nov 15 14:51	12°  12'12'19'20	
	10113 Dec 18 02:08	0°			10114 Nov 25 06:37	0°	
superior conj	10113 Dec 20 13:26	4°  4'58'52	1°23'03	morning set	10114 Nov 27 05:19	4°  4'07'01'13	



superior conj	10114 Dec 04 10:59	19°♊14'28	1°35'00	morning max el	10115 Oct 19 14:01	11°♊53'32	23°10'17
minimum elong	10114 Dec 04 12:31	19°♊22'24	1°35'21	asc. node	10115 Nov 02 11:47	0°♊46'00	
max. Earth dist.	10114 Dec 08 20:21	28°♊12'11	1.35061 AU		10115 Nov 02 01:13	0°♊	
	10114 Dec 09 18:05	0°♊		morning set	10115 Nov 11 16:40	18°♊49'28	
evening rise	10114 Dec 13 00:07	6°♊17'24			10115 Nov 16 21:11	0°♊	
desc. node	10114 Dec 19 12:12	18°♊05'09					
	10114 Dec 26 17:35	0°♊		superior conj	10115 Nov 18 15:32	3°♊48'22	1°39'56
evening max el	10115 Jan 17 06:50	28°♊02'00	26°38'17	minimum elong	10115 Nov 18 15:50	3°♊49'58	1°40'20
	10115 Jan 19 10:18	0°♊		max. Earth dist.	10115 Nov 21 14:53	10°♊07'36	1.33474 AU
retrograde	10115 Jan 30 08:01	5°♊21'21		evening rise	10115 Nov 26 10:06	19°♊55'51	
evening set	10115 Feb 05 18:22	2°♊47'51			10115 Dec 01 16:49	0°♊	
	10115 Feb 08 16:05	30°♊		desc. node	10115 Dec 06 09:15	8°♊16'49	
min. Earth dist.	10115 Feb 09 20:11	28°♊40'19	0.66254 AU		10115 Dec 20 18:23	0°♊	
inferior conj	10115 Feb 11 17:21	26°♊26'11	0°02'52	evening max el	10115 Dec 30 19:52	11°♊32'29	27°18'08
minimum elong	10115 Feb 11 17:16	26°♊26'27	0°03'06	retrograde	10116 Jan 13 08:27	18°♊55'27	
transit middle	10115 Feb 11 17:16	26°♊26'27	0°03'06	evening set	10116 Jan 20 03:51	16°♊21'45	
transit begin	10115 Feb 11 14:24	26°♊35'00		min. Earth dist.	10116 Jan 24 00:37	12°♊47'03	0.64728 AU
transit end	10115 Feb 11 20:08	26°♊17'56		inferior conj	10116 Jan 26 09:23	10°♊12'59	-1°01'14
asc. node	10115 Feb 11 13:53	26°♊36'33		minimum elong	10116 Jan 26 11:15	10°♊07'55	1°00'06
morning rise	10115 Feb 17 17:13	20°♊45'31		asc. node	10116 Jan 29 11:04	7°♊05'31	
direct	10115 Feb 20 15:44	19°♊57'28		morning rise	10116 Feb 01 20:18	4°♊45'28	
morning max el	10115 Feb 27 03:23	23°♊25'07	18°20'47	direct	10116 Feb 04 10:08	4°♊10'55	
	10115 Mar 04 13:32	0°♊		morning max el	10116 Feb 10 20:00	7°♊32'08	17°55'12
desc. node	10115 Mar 17 12:22	19°♊58'09			10116 Feb 26 02:22	0°♊	
morning set	10115 Mar 18 21:13	22°♊09'17		morning set	10116 Feb 28 05:57	3°♊34'58	
	10115 Mar 23 19:28	0°♊		desc. node	10116 Mar 03 09:10	10°♊26'54	
superior conj	10115 Apr 03 12:20	16°♊51'08	-1°45'43	superior conj	10116 Mar 13 02:09	26°♊12'53	-1°07'44
minimum elong	10115 Apr 03 02:53	16°♊14'08	1°44'59	minimum elong	10116 Mar 12 18:42	25°♊43'06	1°06'41
max. Earth dist.	10115 Apr 04 12:38	18°♊26'09	1.45632 AU		10116 Mar 15 11:19	0°♊	
	10115 Apr 11 22:14	0°♊		max. Earth dist.	10116 Mar 17 08:01	2°♊56'26	1.45248 AU
evening rise	10115 Apr 19 11:00	11°♊48'00		evening rise	10116 Mar 29 02:45	21°♊14'08	
greatest brilliancy	10115 Apr 29 20:50	28°♊03'38	-0.8m		10116 Apr 03 20:20	0°♊	
	10115 May 01 03:16	0°♊		greatest brilliancy	10116 Apr 12 18:57	13°♊23'39	-0.6m
asc. node	10115 May 10 12:05	13°♊00'41		evening max el	10116 Apr 24 12:19	28°♊39'06	19°55'53
evening max el	10115 May 12 07:15	14°♊58'01	19°03'05		10116 Apr 25 22:23	0°♊	
retrograde	10115 May 19 03:37	18°♊47'10		asc. node	10116 Apr 26 09:16	0°♊23'24	
evening set	10115 May 22 14:11	17°♊38'26		retrograde	10116 May 02 01:51	2°♊59'41	
inferior conj	10115 May 28 02:03	11°♊52'23	3°17'56	evening set	10116 May 05 21:14	1°♊35'25	
minimum elong	10115 May 28 02:31	11°♊50'52	3°17'29		10116 May 07 15:49	30°♊	
min. Earth dist.	10115 May 29 16:14	9°♊50'30	0.66331 AU	inferior conj	10116 May 11 05:19	25°♊35'34	3°16'41
morning rise	10115 Jun 02 14:19	5°♊31'52		minimum elong	10116 May 11 04:40	25°♊37'46	3°16'18
direct	10115 Jun 08 21:25	2°♊47'47		min. Earth dist.	10116 May 12 04:55	24°♊16'03	0.67545 AU
desc. node	10115 Jun 13 12:37	4°♊00'42		morning rise	10116 May 16 11:46	19°♊16'24	
morning max el	10115 Jun 21 18:06	10°♊28'05	26°20'20	direct	10116 May 22 07:52	16°♊40'28	
	10115 Jul 07 05:16	0°♊		desc. node	10116 May 30 09:35	20°♊19'44	
	10115 Jul 25 13:26	0°♊		morning max el	10116 Jun 03 03:51	23°♊46'35	25°00'19
morning set	10115 Jul 27 17:45	4°♊01'29			10116 Jun 08 16:48	0°♊	
max. Earth dist.	10115 Jul 31 16:47	11°♊36'00	1.34831 AU		10116 Jun 29 14:37	0°♊	
superior conj	10115 Aug 05 18:40	21°♊47'33	-0°06'54	morning set	10116 Jul 09 03:08	16°♊08'35	
minimum elong	10115 Aug 05 19:04	21°♊49'39	0°07'07	max. Earth dist.	10116 Jul 12 17:26	22°♊39'44	1.36826 AU
behind sun begin	10115 Aug 05 13:43	21°♊22'09			10116 Jul 16 14:55	0°♊	
behind sun end	10115 Aug 06 00:26	22°♊17'11		superior conj	10116 Jul 19 06:02	5°♊06'29	-0°39'08
asc. node	10115 Aug 06 11:27	23°♊13'55		minimum elong	10116 Jul 19 08:31	5°♊18'42	0°39'02
	10115 Aug 09 17:30	0°♊		asc. node	10116 Jul 23 08:23	13°♊16'30	
evening rise	10115 Aug 13 09:26	7°♊39'25		evening rise	10116 Jul 27 13:47	21°♊48'47	
	10115 Aug 25 10:04	0°♊			10116 Jul 31 17:03	0°♊	
evening max el	10115 Sep 01 04:58	8°♊33'55	20°46'26	evening max el	10116 Aug 13 15:54	19°♊48'37	19°34'52
desc. node	10115 Sep 09 11:03	13°♊48'57		retrograde	10116 Aug 23 10:11	24°♊39'00	
retrograde	10115 Sep 12 16:20	14°♊15'20		evening set	10116 Aug 25 06:28	24°♊29'24	
evening set	10115 Sep 14 20:51	14°♊03'46		desc. node	10116 Aug 26 08:16	24°♊15'22	
inferior conj	10115 Sep 24 00:40	10°♊07'48	-4°12'04	inferior conj	10116 Sep 03 01:28	20°♊25'09	-2°22'40
minimum elong	10115 Sep 23 14:50	10°♊21'50	4°09'12	minimum elong	10116 Sep 02 19:03	20°♊35'17	2°20'22
min. Earth dist.	10115 Sep 24 22:13	9°♊36'58	0.54670 AU	min. Earth dist.	10116 Sep 05 09:29	18°♊56'46	0.55455 AU
morning rise	10115 Oct 02 08:46	6°♊10'09		morning rise	10116 Sep 11 05:22	15°♊58'28	
direct	10115 Oct 06 10:52	5°♊34'18		direct	10116 Sep 16 03:08	15°♊04'43	

morning max el	10116 Sep 30 01:29	22° $\mathbb{M}$ 02'45	24°56'33	direct	10117 Aug 28 08:57	24° $\Omega$ 55'59	
	10116 Oct 07 01:35	0° $\mathfrak{A}$			10117 Sep 08 23:54	0° $\mathbb{M}$	
asc. node	10116 Oct 19 08:41	19° $\mathfrak{A}$ 47'07		morning max el	10117 Sep 11 15:58	2° $\mathbb{M}$ 23'06	26°28'37
	10116 Oct 24 11:30	0° $\mathbb{M}$			10117 Oct 01 08:57	0° $\mathfrak{A}$	
morning set	10116 Oct 26 04:26	3° $\mathbb{M}$ 36'24		asc. node	10117 Oct 06 05:33	9° $\mathfrak{A}$ 13'02	
				morning set	10117 Oct 10 14:52	18° $\mathfrak{A}$ 16'24	
					10117 Oct 15 23:37	0° $\mathbb{M}$	
superior conj	10116 Nov 02 00:33	18° $\mathbb{M}$ 33'07	1°38'31				
minimum elong	10116 Nov 01 23:44	18° $\mathbb{M}$ 28'36	1°38'48				
max. Earth dist.	10116 Nov 03 17:20	22° $\mathbb{M}$ 16'14	1.32340 AU	superior conj	10117 Oct 17 11:50	3° $\mathbb{M}$ 21'08	1°31'15
	10116 Nov 07 07:52	0° $\mathfrak{A}$		minimum elong	10117 Oct 17 10:09	3° $\mathbb{M}$ 11'49	1°31'18
evening rise	10116 Nov 09 06:09	4° $\mathfrak{A}$ 00'37		max. Earth dist.	10117 Oct 18 01:10	4° $\mathbb{M}$ 35'12	1.31678 AU
desc. node	10116 Nov 22 06:21	28° $\mathfrak{A}$ 06'45		evening rise	10117 Oct 24 09:19	18° $\mathbb{M}$ 22'49	
	10116 Nov 23 10:07	0° $\mathfrak{B}$			10117 Oct 30 03:35	0° $\mathfrak{A}$	
evening max el	10116 Dec 12 07:03	24° $\mathfrak{B}$ 37'24	27°30'33	desc. node	10117 Nov 09 03:28	17° $\mathfrak{A}$ 25'10	
	10116 Dec 19 08:51	0° $\approx$			10117 Nov 18 03:00	0° $\mathfrak{B}$	
retrograde	10116 Dec 26 01:51	1° $\approx$ 56'10		evening max el	10117 Nov 24 13:39	7° $\mathfrak{B}$ 02'18	27°10'18
	10117 Jan 01 08:08	30° $\mathfrak{R}$ $\mathfrak{B}$		retrograde	10117 Dec 08 10:59	14° $\mathfrak{B}$ 13'46	
evening set	10117 Jan 02 02:19	29° $\mathfrak{B}$ 30'18		evening set	10117 Dec 15 10:12	12° $\mathfrak{B}$ 04'55	
min. Earth dist.	10117 Jan 05 19:49	26° $\mathfrak{B}$ 24'44	0.62902 AU	min. Earth dist.	10117 Dec 19 04:15	9° $\mathfrak{B}$ 21'15	0.60858 AU
inferior conj	10117 Jan 08 15:03	23° $\mathfrak{B}$ 41'11	-2°12'16	inferior conj	10117 Dec 22 07:00	6° $\mathfrak{B}$ 41'15	-3°26'44
minimum elong	10117 Jan 08 19:23	23° $\mathfrak{B}$ 30'37	2°10'08	minimum elong	10117 Dec 22 13:47	6° $\mathfrak{B}$ 26'41	3°23'57
asc. node	10117 Jan 15 08:11	18° $\mathfrak{B}$ 35'48		morning rise	10117 Dec 29 19:53	1° $\mathfrak{B}$ 49'19	
morning rise	10117 Jan 15 14:40	18° $\mathfrak{B}$ 29'43		direct	10117 Dec 31 23:48	1° $\mathfrak{B}$ 30'24	
direct	10117 Jan 17 22:04	18° $\mathfrak{B}$ 04'47		asc. node	10118 Jan 02 05:15	1° $\mathfrak{B}$ 36'42	
morning max el	10117 Jan 24 13:30	21° $\mathfrak{B}$ 29'13	17°47'06	morning max el	10118 Jan 08 04:35	5° $\mathfrak{B}$ 06'58	17°57'28
	10117 Jan 31 01:49	0° $\approx$		morning set	10118 Jan 23 19:31	29° $\mathfrak{B}$ 41'38	
morning set	10117 Feb 09 15:35	16° $\approx$ 12'43			10118 Jan 23 23:31	0° $\approx$	
	10117 Feb 17 14:52	0° $\mathfrak{H}$					
desc. node	10117 Feb 18 06:01	1° $\mathfrak{H}$ 04'14		superior conj	10118 Feb 03 02:13	18° $\approx$ 14'48	0°15'22
				minimum elong	10118 Feb 03 03:31	18° $\approx$ 20'29	0°15'28
superior conj	10117 Feb 21 13:38	6° $\mathfrak{H}$ 38'12	-0°24'39	behind sun begin	10118 Feb 03 01:28	18° $\approx$ 11'34	
minimum elong	10117 Feb 21 11:07	6° $\mathfrak{H}$ 27'46	0°24'03	behind sun end	10118 Feb 03 05:33	18° $\approx$ 29'24	
max. Earth dist.	10117 Feb 28 01:39	17° $\mathfrak{H}$ 14'44	1.44169 AU	desc. node	10118 Feb 05 02:52	21° $\approx$ 46'00	
	10117 Mar 08 04:19	0° $\mathfrak{Y}$			10118 Feb 09 23:40	0° $\mathfrak{H}$	
evening rise	10117 Mar 08 14:39	0° $\mathfrak{Y}$ 39'52		max. Earth dist.	10118 Feb 10 15:25	1° $\mathfrak{H}$ 05'16	1.42504 AU
	10117 Mar 28 11:52	0° $\mathfrak{B}$		evening rise	10118 Feb 16 13:25	10° $\mathfrak{H}$ 39'45	
evening max el	10117 Apr 07 11:50	12° $\mathfrak{B}$ 21'46	21°02'12		10118 Mar 01 06:10	0° $\mathfrak{Y}$	
asc. node	10117 Apr 13 06:26	16° $\mathfrak{B}$ 44'13		evening max el	10118 Mar 21 06:14	26° $\mathfrak{Y}$ 05'54	22°18'07
retrograde	10117 Apr 16 00:25	17° $\mathfrak{B}$ 21'28			10118 Mar 25 20:29	0° $\mathfrak{B}$	
evening set	10117 Apr 20 05:36	15° $\mathfrak{B}$ 41'32		retrograde	10118 Mar 30 21:35	1° $\mathfrak{B}$ 48'04	
inferior conj	10117 Apr 25 12:26	9° $\mathfrak{B}$ 29'39	3°03'48	asc. node	10118 Mar 31 03:36	1° $\mathfrak{B}$ 47'46	
minimum elong	10117 Apr 25 10:54	9° $\mathfrak{B}$ 34'56	3°03'19		10118 Apr 04 10:09	30° $\mathfrak{R}$ $\mathfrak{Y}$	
min. Earth dist.	10117 Apr 25 22:23	8° $\mathfrak{B}$ 55'08	0.68303 AU	evening set	10118 Apr 04 13:38	29° $\mathfrak{Y}$ 52'50	
morning rise	10117 Apr 30 15:59	3° $\mathfrak{B}$ 14'08		inferior conj	10118 Apr 09 21:19	23° $\mathfrak{Y}$ 31'21	2°40'44
direct	10117 May 05 23:10	0° $\mathfrak{B}$ 54'01		minimum elong	10118 Apr 09 19:15	23° $\mathfrak{Y}$ 38'33	2°40'08
morning max el	10117 May 16 13:19	7° $\mathfrak{B}$ 12'42	23°31'21	min. Earth dist.	10118 Apr 09 18:31	23° $\mathfrak{Y}$ 41'04	0.68603 AU
desc. node	10117 May 17 06:31	7° $\mathfrak{B}$ 56'54		morning rise	10118 Apr 15 00:43	17° $\mathfrak{Y}$ 20'52	
	10117 Jun 03 07:01	0° $\mathbb{I}$		direct	10118 Apr 19 18:13	15° $\mathfrak{Y}$ 21'11	
morning set	10117 Jun 20 14:51	27° $\mathbb{I}$ 14'04		morning max el	10118 Apr 29 01:28	20° $\mathfrak{Y}$ 47'42	22°02'54
	10117 Jun 22 05:51	0° $\mathfrak{E}$		desc. node	10118 May 04 03:25	26° $\mathfrak{Y}$ 30'59	
max. Earth dist.	10117 Jun 24 14:03	4° $\mathfrak{E}$ 03'17	1.39081 AU		10118 May 06 21:24	0° $\mathfrak{B}$	
					10118 May 27 12:34	0° $\mathbb{I}$	
superior conj	10117 Jul 02 03:44	17° $\mathfrak{E}$ 44'51	-1°12'05	morning set	10118 Jun 01 00:30	7° $\mathbb{I}$ 08'01	
minimum elong	10117 Jul 02 08:30	18° $\mathfrak{E}$ 07'09	1°11'47	max. Earth dist.	10118 Jun 06 13:44	16° $\mathbb{I}$ 14'23	1.41329 AU
	10117 Jul 08 13:50	0° $\Omega$					
asc. node	10117 Jul 10 05:20	3° $\Omega$ 11'42		superior conj	10118 Jun 14 07:22	29° $\mathbb{I}$ 32'27	-1°42'21
evening rise	10117 Jul 11 10:45	5° $\Omega$ 34'32		minimum elong	10118 Jun 14 13:38	0° $\mathfrak{E}$ 00'13	1°42'07
	10117 Jul 25 23:04	0° $\mathbb{M}$			10118 Jun 14 13:35	0° $\mathfrak{E}$	
evening max el	10117 Jul 27 15:05	1° $\mathbb{M}$ 48'14	18°44'22	evening rise	10118 Jun 24 20:47	18° $\mathfrak{E}$ 47'49	
retrograde	10117 Aug 04 20:46	5° $\mathbb{M}$ 54'46		asc. node	10118 Jun 27 02:17	22° $\mathfrak{E}$ 55'27	
evening set	10117 Aug 06 20:11	5° $\mathbb{M}$ 41'27			10118 Jul 01 00:06	0° $\Omega$	
desc. node	10117 Aug 13 05:28	2° $\mathbb{M}$ 30'33		evening max el	10118 Jul 10 22:50	14° $\Omega$ 25'17	18°14'33
inferior conj	10117 Aug 14 21:11	1° $\mathbb{M}$ 19'00	-0°30'36	retrograde	10118 Jul 18 02:39	18° $\Omega$ 02'10	
minimum elong	10117 Aug 14 19:55	1° $\mathbb{M}$ 21'18	0°30'21	evening set	10118 Jul 20 09:04	17° $\Omega$ 41'04	
	10117 Aug 16 15:55	30° $\mathfrak{R}$ $\Omega$		inferior conj	10118 Jul 27 14:44	12° $\Omega$ 57'58	1°01'46
min. Earth dist.	10117 Aug 18 01:04	29° $\Omega$ 00'16	0.57041 AU	minimum elong	10118 Jul 27 16:41	12° $\Omega$ 53'45	1°00'45
morning rise	10117 Aug 22 16:17	26° $\Omega$ 15'07		min. Earth dist.	10118 Jul 30 23:20	10° $\Omega$ 05'31	0.59131 AU

desc. node	10118 Jul 31 02:39	9°♎58'47		min. Earth dist.	10119 Jul 13 06:04	22°♏14'00	0.61399 AU
morning rise	10118 Aug 03 21:01	7°♎20'21		morning rise	10119 Jul 16 20:00	19°♏16'22	
direct	10118 Aug 10 04:26	5°♎31'28		desc. node	10119 Jul 17 23:48	18°♏32'54	
morning max el	10118 Aug 24 13:23	13°♎19'31	27°31'16	direct	10119 Jul 23 11:46	16°♏59'37	
	10118 Sep 06 19:44	0°♎		morning max el	10119 Aug 06 17:32	25°♏00'21	27°56'28
asc. node	10118 Sep 23 02:25	28°♎56'51			10119 Aug 11 07:12	0°♎	
	10118 Sep 23 14:41	0°♎			10119 Aug 31 06:15	0°♎	
morning set	10118 Sep 24 22:18	2°♎44'54		morning set	10119 Sep 09 00:50	16°♎56'35	
				asc. node	10119 Sep 09 23:15	18°♎52'41	
superior conj	10118 Oct 01 23:31	18°♎06'57	1°18'30	max. Earth dist.	10119 Sep 14 18:26	29°♎08'51	1.31780 AU
minimum elong	10118 Oct 01 21:21	17°♎54'55	1°18'18		10119 Sep 15 03:48	0°♎	
max. Earth dist.	10118 Oct 01 10:50	16°♎56'26	1.31490 AU				
	10118 Oct 07 08:37	0°♎		superior conj	10119 Sep 16 09:51	2°♎45'09	1°00'34
evening rise	10118 Oct 08 17:16	2°♎56'01		minimum elong	10119 Sep 16 07:39	2°♎33'04	1°00'11
	10118 Oct 23 01:48	0°♎		evening rise	10119 Sep 23 03:56	17°♎34'26	
desc. node	10118 Oct 27 00:37	5°♎59'52			10119 Sep 29 05:00	0°♎	
evening max el	10118 Nov 06 12:55	18°♎36'51	26°15'59	desc. node	10119 Oct 13 21:48	23°♎34'05	
retrograde	10118 Nov 20 10:54	25°♎41'32		evening max el	10119 Oct 19 04:03	29°♎21'39	24°52'54
evening set	10118 Nov 26 23:13	23°♎59'06			10119 Oct 19 20:27	0°♎	
min. Earth dist.	10118 Dec 01 02:01	21°♎24'23	0.58748 AU	retrograde	10119 Nov 01 23:58	6°♎18'40	
inferior conj	10118 Dec 04 05:42	19°♎03'34	-4°36'57	evening set	10119 Nov 07 12:54	5°♎09'42	
minimum elong	10118 Dec 04 13:33	18°♎48'54	4°34'32	min. Earth dist.	10119 Nov 12 15:36	2°♎25'40	0.56807 AU
morning rise	10118 Dec 12 06:26	14°♎34'02		inferior conj	10119 Nov 15 08:28	0°♎40'25	-5°28'57
direct	10118 Dec 14 10:53	14°♎17'50		minimum elong	10119 Nov 15 13:44	0°♎31'49	5°27'56
asc. node	10118 Dec 20 02:19	16°♎12'54			10119 Nov 16 09:29	30°♎	
morning max el	10118 Dec 22 13:41	18°♎15'54	18°27'46	morning rise	10119 Nov 23 16:50	26°♎33'07	
	10118 Dec 31 01:32	0°♎		direct	10119 Nov 26 03:22	26°♎16'24	
morning set	10119 Jan 07 12:14	13°♎45'08			10119 Dec 04 17:01	0°♎	
	10119 Jan 16 01:16	0°♎		morning max el	10119 Dec 05 13:01	0°♎45'49	19°19'46
				asc. node	10119 Dec 06 23:21	2°♎13'59	
superior conj	10119 Jan 16 12:46	0°♎53'14	0°48'12	morning set	10119 Dec 22 13:41	28°♎11'50	
minimum elong	10119 Jan 16 15:45	1°♎06'58	0°48'09		10119 Dec 23 11:20	0°♎	
desc. node	10119 Jan 22 23:43	12°♎28'32					
max. Earth dist.	10119 Jan 24 00:14	14°♎14'49	1.40447 AU	superior conj	10119 Dec 30 16:26	14°♎19'51	1°12'40
evening rise	10119 Jan 28 07:50	21°♎32'43		minimum elong	10119 Dec 30 19:28	14°♎34'35	1°12'45
	10119 Feb 02 13:08	0°♎		max. Earth dist.	10120 Jan 06 06:02	26°♎42'26	1.38247 AU
	10119 Feb 23 08:24	0°♎			10120 Jan 08 01:54	0°♎	
evening max el	10119 Mar 03 21:03	9°♎51'57	23°38'25	evening rise	10120 Jan 09 23:55	3°♎23'01	
retrograde	10119 Mar 14 16:03	16°♎14'02		desc. node	10120 Jan 09 20:37	3°♎08'36	
asc. node	10119 Mar 18 00:47	15°♎20'03			10120 Jan 26 15:57	0°♎	
evening set	10119 Mar 19 19:44	14°♎04'40		evening max el	10120 Feb 14 10:26	23°♎41'04	24°56'38
min. Earth dist.	10119 Mar 24 15:09	8°♎27'47	0.68465 AU		10120 Feb 23 05:38	0°♎	
inferior conj	10119 Mar 25 06:01	7°♎36'52	2°08'14	retrograde	10120 Feb 26 06:36	0°♎34'28	
minimum elong	10119 Mar 25 03:50	7°♎44'23	2°07'33		10120 Feb 29 02:51	30°♎	
morning rise	10119 Mar 30 11:55	1°♎32'34		evening set	10120 Mar 02 22:26	28°♎13'06	
	10119 Apr 02 16:39	30°♎		asc. node	10120 Mar 03 21:59	27°♎18'57	
direct	10119 Apr 03 15:59	29°♎54'53		min. Earth dist.	10120 Mar 07 10:11	23°♎10'57	0.67914 AU
	10119 Apr 04 15:49	0°♎		inferior conj	10120 Mar 08 12:46	21°♎43'24	1°26'38
morning max el	10119 Apr 11 19:32	4°♎33'45	20°42'27	minimum elong	10120 Mar 08 10:56	21°♎49'27	1°26'04
desc. node	10119 Apr 21 00:16	15°♎45'55		morning rise	10120 Mar 13 23:42	15°♎46'34	
	10119 Apr 30 21:58	0°♎		direct	10120 Mar 17 15:14	14°♎30'07	
morning set	10119 May 11 09:19	15°♎56'14		morning max el	10120 Mar 24 21:17	18°♎31'37	19°34'58
max. Earth dist.	10119 May 19 19:43	29°♎17'58	1.43290 AU		10120 Apr 03 01:38	0°♎	
	10119 May 20 06:06	0°♎		greatest brilliancy	10120 Apr 06 13:50	5°♎04'17	-0.7m
				desc. node	10120 Apr 06 21:05	5°♎30'57	
superior conj	10119 May 26 12:26	10°♎19'14	-2°04'48	morning set	10120 Apr 19 07:55	24°♎22'31	
minimum elong	10119 May 26 17:31	10°♎40'35	2°04'55		10120 Apr 22 23:17	0°♎	
	10119 Jun 06 21:57	0°♎		max. Earth dist.	10120 May 01 08:08	13°♎05'48	1.44740 AU
evening rise	10119 Jun 07 15:26	1°♎17'13					
asc. node	10119 Jun 13 23:16	12°♎22'14		superior conj	10120 May 05 17:15	20°♎04'22	-2°12'52
evening max el	10119 Jun 24 11:17	27°♎29'50	18°04'29	minimum elong	10120 May 05 16:49	20°♎02'37	2°13'12
	10119 Jun 27 17:53	0°♎			10120 May 11 20:06	0°♎	
retrograde	10119 Jul 01 00:29	0°♎52'09		evening rise	10120 May 19 13:54	12°♎52'18	
evening set	10119 Jul 03 14:42	0°♎20'05			10120 May 29 22:10	0°♎	
	10119 Jul 04 08:15	30°♎		asc. node	10120 May 30 20:19	1°♎26'09	
inferior conj	10119 Jul 10 03:44	25°♎17'26	2°08'02	evening max el	10120 Jun 07 01:01	10°♎53'23	18°13'13
minimum elong	10119 Jul 10 06:34	25°♎10'22	2°06'50	retrograde	10120 Jun 13 09:50	14°♎15'28	

evening set	10120 Jun 16 07:52	13°☿30'07		evening max el	10121 May 21 13:05	24°♊28'21	18°39'59
inferior conj	10120 Jun 22 08:11	8°☿09'31	2°50'09	retrograde	10121 May 28 02:42	28°♊03'43	
minimum elong	10120 Jun 22 10:29	8°☿03'05	2°49'15	evening set	10121 May 31 08:40	27°♊03'37	
min. Earth dist.	10120 Jun 24 22:02	5°☿17'32	0.63569 AU	inferior conj	10121 Jun 06 00:04	21°♊26'31	3°12'27
morning rise	10120 Jun 28 11:35	1°☿55'28		minimum elong	10121 Jun 06 01:15	21°♊22'53	3°11'53
	10120 Jul 01 17:33	30°♋♊		min. Earth dist.	10121 Jun 07 22:58	19°♊03'11	0.65438 AU
desc. node	10120 Jul 03 20:55	29°♊24'59		morning rise	10121 Jun 11 17:04	15°♊07'06	
direct	10120 Jul 05 04:41	29°♊19'10		direct	10121 Jun 18 05:14	12°♊22'42	
	10120 Jul 08 20:31	0°☿		desc. node	10121 Jun 20 18:00	12°♊44'25	
morning max el	10120 Jul 19 02:07	7°☿21'55	27°43'44	morning max el	10121 Jul 01 12:37	20°♊14'41	26°58'17
	10120 Aug 05 11:01	0°♌			10121 Jul 09 21:20	0°☿	
	10120 Aug 22 11:10	0°♍			10121 Jul 29 13:18	0°♌	
morning set	10120 Aug 22 20:10	0°♍44'50		morning set	10121 Aug 06 05:27	14°♌02'20	
asc. node	10120 Aug 26 20:06	8°♍55'37		max. Earth dist.	10121 Aug 10 12:43	22°♌30'50	1.33871 AU
max. Earth dist.	10120 Aug 27 20:06	11°♍01'51	1.32573 AU	asc. node	10121 Aug 13 16:58	29°♌01'45	
					10121 Aug 14 04:09	0°♍	
superior conj	10120 Aug 30 16:54	17°♍09'51	0°37'45	superior conj	10121 Aug 14 18:31	1°♍15'11	0°10'32
minimum elong	10120 Aug 30 15:14	17°♍00'48	0°37'18	minimum elong	10121 Aug 14 17:59	1°♍12'21	0°10'11
	10120 Sep 05 14:48	0°♎		behind sun begin	10121 Aug 14 13:33	0°♍49'11	
evening rise	10120 Sep 06 15:27	2°♎12'21		behind sun end	10121 Aug 14 22:24	1°♍35'33	
	10120 Sep 21 17:58	0°♏		evening rise	10121 Aug 22 01:57	16°♍44'37	
evening max el	10120 Sep 29 14:53	9°♏34'06	23°14'02		10121 Aug 28 16:13	0°♎	
desc. node	10120 Sep 29 19:02	9°♏44'04		evening max el	10121 Sep 11 05:59	19°♎48'44	21°36'25
retrograde	10120 Oct 13 00:11	16°♏14'34		desc. node	10121 Sep 16 16:16	24°♎00'58	
evening set	10120 Oct 17 03:02	15°♏37'39		retrograde	10121 Sep 23 13:46	25°♎56'01	
min. Earth dist.	10120 Oct 24 00:26	12°♏26'00	0.55346 AU	evening set	10121 Sep 26 07:27	25°♎39'00	
inferior conj	10120 Oct 25 15:31	11°♏29'05	-5°42'33	inferior conj	10121 Oct 05 09:28	21°♎42'05	-5°00'41
minimum elong	10120 Oct 25 13:35	11°♏31'55	5°42'11	minimum elong	10121 Oct 05 00:37	21°♎54'28	4°58'44
morning rise	10120 Nov 03 01:58	7°♏38'04		min. Earth dist.	10121 Oct 05 07:52	21°♎44'20	0.54657 AU
direct	10120 Nov 06 01:06	7°♏17'03		morning rise	10121 Oct 13 18:50	17°♎53'13	
morning max el	10120 Nov 16 23:22	12°♏26'28	20°34'27	direct	10121 Oct 17 10:50	17°♎24'01	
asc. node	10120 Nov 22 20:21	19°♏23'19		morning max el	10121 Oct 29 20:33	23°♎17'24	22°09'30
	10120 Nov 29 07:53	0°♐			10121 Nov 04 17:59	0°♏	
morning set	10120 Dec 05 20:47	12°♐52'08		asc. node	10121 Nov 09 17:19	7°♏25'55	
				morning set	10121 Nov 20 07:12	27°♏39'33	
superior conj	10120 Dec 13 08:32	28°♐20'32	1°29'01		10121 Nov 21 09:47	0°♐	
minimum elong	10120 Dec 13 10:44	28°♐31'42	1°29'17	superior conj	10121 Nov 27 09:25	12°♐45'01	1°37'54
	10120 Dec 14 04:09	0°♑		minimum elong	10121 Nov 27 10:26	12°♐50'20	1°38'17
max. Earth dist.	10120 Dec 18 13:43	8°♑42'09	1.36148 AU	max. Earth dist.	10121 Dec 01 04:00	20°♐36'01	1.34343 AU
evening rise	10120 Dec 22 11:10	16°♑02'49		evening rise	10121 Dec 05 13:57	29°♐22'48	
desc. node	10120 Dec 26 17:34	23°♑41'31			10121 Dec 05 21:40	0°♑	
	10120 Dec 30 10:30	0°♒		desc. node	10121 Dec 13 14:35	14°♑02'41	
	10121 Jan 20 04:21	0°♓			10121 Dec 23 13:56	0°♒	
evening max el	10121 Jan 26 23:52	7°♓29'44	26°05'43	evening max el	10122 Jan 09 13:26	21°♒10'15	26°58'11
retrograde	10121 Feb 08 16:11	14°♓42'29		retrograde	10122 Jan 22 19:55	28°♒31'18	
evening set	10121 Feb 14 20:00	12°♓12'23		evening set	10122 Jan 29 10:30	25°♒57'07	
asc. node	10121 Feb 18 19:12	8°♓03'24		min. Earth dist.	10122 Feb 02 10:10	22°♒03'43	0.65651 AU
min. Earth dist.	10121 Feb 19 01:17	7°♓44'53	0.66968 AU	inferior conj	10122 Feb 04 12:14	19°♒40'22	-0°23'21
inferior conj	10121 Feb 20 15:34	5°♓46'07	0°36'02	minimum elong	10122 Feb 04 12:54	19°♒38'28	0°22'45
minimum elong	10121 Feb 20 14:39	5°♓48'57	0°35'52	asc. node	10122 Feb 05 16:25	18°♒20'39	
morning rise	10121 Feb 26 10:00	29°♒58'41		morning rise	10122 Feb 10 16:32	14°♒04'46	
	10121 Feb 26 09:08	30°♒♒		direct	10122 Feb 13 11:14	13°♒22'46	
direct	10121 Mar 01 14:21	29°♒01'05		morning max el	10122 Feb 19 21:02	16°♒46'09	18°07'47
	10121 Mar 04 22:26	0°♓			10122 Mar 01 16:24	0°♓	
morning max el	10121 Mar 08 06:24	2°♓37'34	18°43'04	morning set	10122 Mar 10 12:02	14°♓11'26	
desc. node	10121 Mar 24 17:53	25°♓37'29		desc. node	10122 Mar 11 14:41	15°♓59'32	
	10121 Mar 27 13:09	0°♈			10122 Mar 20 07:51	0°♈	
morning set	10121 Mar 29 20:01	3°♈34'37		superior conj	10122 Mar 25 10:16	8°♈04'04	-1°30'52
max. Earth dist.	10121 Apr 14 01:43	27°♈24'40	1.45521 AU	minimum elong	10122 Mar 25 00:57	7°♈27'22	1°29'53
				max. Earth dist.	10122 Mar 27 21:49	11°♈57'43	1.45561 AU
superior conj	10121 Apr 15 03:22	29°♈05'07	-2°01'20		10122 Apr 08 11:47	0°♈	
minimum elong	10121 Apr 14 19:50	28°♈35'38	2°01'05	evening rise	10122 Apr 10 13:16	3°♈11'55	
	10121 Apr 15 17:22	0°♉		greatest brilliancy	10122 Apr 22 23:44	22°♉18'21	-0.7m
evening rise	10121 Apr 30 12:39	23°♉27'37			10122 Apr 28 06:42	0°♉	
	10121 May 04 14:26	0°♊					
greatest brilliancy	10121 May 07 15:50	4°♊53'35	-0.9m				
asc. node	10121 May 17 17:25	19°♊59'22					

asc. node	10122 May 04 14:34	7° $\Pi$ 51'24			10123 Mar 12 23:14	0° $\Upsilon$	
evening max el	10122 May 04 21:08	8° $\Pi$ 08'09	19°23'45	evening rise	10123 Mar 21 01:29	12° $\Upsilon$ 33'26	
retrograde	10122 May 11 23:47	12° $\Pi$ 09'11			10123 Apr 01 14:47	0° $\mathcal{B}$	
evening set	10122 May 15 14:06	10° $\Pi$ 53'40		evening max el	10123 Apr 17 23:46	21° $\mathcal{B}$ 49'50	20°22'36
inferior conj	10122 May 20 23:59	5° $\Pi$ 01'29	3°18'56	asc. node	10123 Apr 21 11:45	24° $\mathcal{B}$ 49'59	
minimum elong	10122 May 20 23:58	5° $\Pi$ 01'33	3°18'32	retrograde	10123 Apr 25 22:30	26° $\mathcal{B}$ 26'39	
min. Earth dist.	10122 May 22 07:47	3° $\Pi$ 17'21	0.66901 AU	evening set	10123 Apr 29 21:57	24° $\mathcal{B}$ 55'33	
	10122 May 25 01:29	30° $\mathcal{R}$ $\mathcal{B}$		inferior conj	10123 May 05 05:10	18° $\mathcal{B}$ 50'04	3°12'32
morning rise	10122 May 26 09:26	28° $\mathcal{B}$ 41'24		minimum elong	10123 May 05 04:07	18° $\mathcal{B}$ 53'41	3°12'08
direct	10122 Jun 01 12:11	25° $\mathcal{B}$ 59'58		min. Earth dist.	10123 May 05 22:46	17° $\mathcal{B}$ 49'50	0.67917 AU
desc. node	10122 Jun 07 15:01	28° $\mathcal{B}$ 06'36		morning rise	10123 May 10 10:02	12° $\mathcal{B}$ 32'11	
	10122 Jun 10 05:10	0° $\Pi$		direct	10123 May 16 00:39	10° $\mathcal{B}$ 02'31	
morning max el	10122 Jun 13 23:01	3° $\Pi$ 26'54	25°48'11	desc. node	10123 May 25 11:57	15° $\mathcal{B}$ 02'06	
	10122 Jul 04 03:51	0° $\mathcal{E}$		morning max el	10123 May 27 08:38	16° $\mathcal{B}$ 49'55	24°23'06
morning set	10122 Jul 20 00:50	26° $\mathcal{E}$ 38'16			10123 Jun 07 06:56	0° $\Pi$	
	10122 Jul 21 20:25	0° $\mathcal{Q}$			10123 Jun 27 03:45	0° $\mathcal{E}$	
max. Earth dist.	10122 Jul 23 18:56	3° $\mathcal{Q}$ 39'45	1.35640 AU	morning set	10123 Jul 02 01:38	8° $\mathcal{E}$ 20'59	
				max. Earth dist.	10123 Jul 05 17:15	14° $\mathcal{E}$ 49'02	1.37767 AU
superior conj	10122 Jul 29 11:57	14° $\mathcal{Q}$ 53'04	-0°20'17	superior conj	10123 Jul 12 17:56	27° $\mathcal{E}$ 55'36	-0°53'10
minimum elong	10122 Jul 29 13:10	14° $\mathcal{Q}$ 59'17	0°20'23	minimum elong	10123 Jul 12 21:24	28° $\mathcal{E}$ 12'19	0°52'59
asc. node	10122 Jul 31 13:50	19° $\mathcal{Q}$ 06'34			10123 Jul 13 19:41	0° $\mathcal{Q}$	
	10122 Aug 05 20:41	0° $\mathcal{N}$		asc. node	10123 Jul 18 10:45	9° $\mathcal{Q}$ 06'29	
evening rise	10122 Aug 06 09:13	1° $\mathcal{N}$ 04'19		evening rise	10123 Jul 21 10:47	15° $\mathcal{Q}$ 04'44	
	10122 Aug 23 18:32	0° $\mathcal{A}$			10123 Jul 29 07:55	0° $\mathcal{N}$	
evening max el	10122 Aug 24 08:46	0° $\mathcal{A}$ 36'16	20°13'22	evening max el	10123 Aug 07 01:08	12° $\mathcal{N}$ 10'06	19°10'45
desc. node	10122 Sep 03 13:31	5° $\mathcal{A}$ 55'22		retrograde	10123 Aug 16 03:06	16° $\mathcal{N}$ 40'55	
retrograde	10122 Sep 04 02:40	5° $\mathcal{A}$ 56'10		evening set	10123 Aug 17 23:38	16° $\mathcal{N}$ 30'23	
evening set	10122 Sep 06 01:52	5° $\mathcal{A}$ 46'13		desc. node	10123 Aug 21 10:43	15° $\mathcal{N}$ 20'06	
inferior conj	10122 Sep 15 03:32	1° $\mathcal{A}$ 47'53	-3°28'02	inferior conj	10123 Aug 26 11:34	12° $\mathcal{N}$ 18'58	-1°33'46
minimum elong	10122 Sep 14 18:34	2° $\mathcal{A}$ 01'08	3°25'04	minimum elong	10123 Aug 26 07:26	12° $\mathcal{N}$ 25'54	1°32'19
min. Earth dist.	10122 Sep 16 16:54	0° $\mathcal{A}$ 52'39	0.54899 AU	min. Earth dist.	10123 Aug 29 05:54	10° $\mathcal{N}$ 27'40	0.56046 AU
	10122 Sep 18 05:41	30° $\mathcal{R}$ $\mathcal{N}$		morning rise	10123 Sep 03 12:17	7° $\mathcal{N}$ 36'18	
morning rise	10122 Sep 23 10:23	27° $\mathcal{N}$ 40'06		direct	10123 Sep 08 18:03	6° $\mathcal{N}$ 32'48	
direct	10122 Sep 27 20:40	26° $\mathcal{N}$ 57'46		morning max el	10123 Sep 22 21:38	13° $\mathcal{N}$ 44'46	25°38'28
	10122 Oct 06 22:37	0° $\mathcal{A}$			10123 Oct 05 17:01	0° $\mathcal{A}$	
morning max el	10122 Oct 11 09:24	3° $\mathcal{A}$ 33'42	23°56'06	asc. node	10123 Oct 14 11:04	15° $\mathcal{A}$ 20'54	
asc. node	10122 Oct 27 14:13	26° $\mathcal{A}$ 08'25		morning set	10123 Oct 20 06:19	27° $\mathcal{A}$ 12'43	
	10122 Oct 29 15:49	0° $\mathcal{M}$			10123 Oct 21 13:24	0° $\mathcal{M}$	
morning set	10122 Nov 04 18:57	12° $\mathcal{M}$ 28'05					
superior conj	10122 Nov 11 16:09	27° $\mathcal{M}$ 24'22	1°40'05	superior conj	10123 Oct 27 02:21	12° $\mathcal{M}$ 11'21	1°36'08
minimum elong	10122 Nov 11 15:57	27° $\mathcal{M}$ 23'17	1°40'25	minimum elong	10123 Oct 27 01:08	12° $\mathcal{M}$ 04'36	1°36'19
	10122 Nov 12 20:55	0° $\mathcal{X}$		max. Earth dist.	10123 Oct 28 07:14	14° $\mathcal{M}$ 50'38	1.31998 AU
max. Earth dist.	10122 Nov 14 02:16	2° $\mathcal{X}$ 37'32	1.32939 AU	evening rise	10123 Nov 03 03:56	27° $\mathcal{M}$ 26'02	
evening rise	10122 Nov 19 04:35	13° $\mathcal{X}$ 13'14			10123 Nov 04 09:50	0° $\mathcal{X}$	
	10122 Nov 28 02:20	0° $\mathcal{Z}$		desc. node	10123 Nov 17 08:45	23° $\mathcal{X}$ 44'04	
desc. node	10122 Nov 30 11:39	4° $\mathcal{Z}$ 06'12			10123 Nov 21 09:38	0° $\mathcal{Z}$	
	10122 Dec 18 17:57	0° $\mathcal{A}$		evening max el	10123 Dec 05 11:11	17° $\mathcal{Z}$ 19'54	27°26'03
evening max el	10122 Dec 23 01:52	4° $\mathcal{A}$ 31'16	27°27'02	retrograde	10123 Dec 19 07:30	24° $\mathcal{Z}$ 36'33	
retrograde	10123 Jan 05 17:16	11° $\mathcal{A}$ 52'45		evening set	10123 Dec 26 08:25	22° $\mathcal{Z}$ 16'23	
evening set	10123 Jan 12 15:40	9° $\mathcal{A}$ 21'07		min. Earth dist.	10123 Dec 30 01:17	19° $\mathcal{Z}$ 21'35	0.62048 AU
min. Earth dist.	10123 Jan 16 10:42	5° $\mathcal{A}$ 59'44	0.63988 AU	inferior conj	10124 Jan 02 00:26	16° $\mathcal{Z}$ 37'24	-2°43'49
inferior conj	10123 Jan 19 00:13	3° $\mathcal{A}$ 20'13	-1°30'41	minimum elong	10124 Jan 02 05:52	16° $\mathcal{Z}$ 24'50	2°41'19
minimum elong	10123 Jan 19 03:05	3° $\mathcal{A}$ 12'46	1°29'05	morning rise	10124 Jan 09 05:47	11° $\mathcal{Z}$ 34'14	
	10123 Jan 22 11:41	30° $\mathcal{R}$ $\mathcal{Z}$		asc. node	10124 Jan 10 10:41	11° $\mathcal{Z}$ 17'03	
asc. node	10123 Jan 23 13:34	29° $\mathcal{Z}$ 10'20		direct	10124 Jan 11 11:11	11° $\mathcal{Z}$ 12'23	
morning rise	10123 Jan 25 16:24	27° $\mathcal{Z}$ 59'20		morning max el	10124 Jan 18 07:25	14° $\mathcal{Z}$ 40'53	17°49'14
direct	10123 Jan 28 03:17	27° $\mathcal{Z}$ 29'17			10124 Jan 28 21:28	0° $\mathcal{A}$	
	10123 Feb 02 16:43	0° $\mathcal{A}$		morning set	10124 Feb 03 02:18	9° $\mathcal{A}$ 12'10	
morning max el	10123 Feb 03 14:27	0° $\mathcal{A}$ 50'21	17°49'38	desc. node	10124 Feb 13 08:18	27° $\mathcal{A}$ 12'22	
morning set	10123 Feb 20 08:09	26° $\mathcal{A}$ 10'32					
	10123 Feb 22 14:11	0° $\mathcal{X}$		superior conj	10124 Feb 14 06:34	28° $\mathcal{A}$ 47'07	-0°07'00
desc. node	10123 Feb 26 11:29	6° $\mathcal{X}$ 32'42		minimum elong	10124 Feb 14 05:55	28° $\mathcal{A}$ 44'24	0°06'39
				behind sun begin	10124 Feb 13 21:55	28° $\mathcal{A}$ 10'21	
superior conj	10123 Mar 05 08:16	17° $\mathcal{X}$ 50'36	-0°49'30	behind sun end	10124 Feb 14 13:56	29° $\mathcal{A}$ 18'22	
minimum elong	10123 Mar 05 02:51	17° $\mathcal{X}$ 28'42	0°48'36		10124 Feb 14 23:47	0° $\mathcal{X}$	
max. Earth dist.	10123 Mar 10 17:04	26° $\mathcal{X}$ 26'22	1.44865 AU	max. Earth dist.	10124 Feb 21 08:52	10° $\mathcal{X}$ 33'15	1.43515 AU

evening rise	10124 Feb 28 16:22	22° $\text{H}$ 09'45		superior conj	10125 Jan 26 05:05	10° $\approx$ 51'51	0°30'16
	10124 Mar 04 18:48	0° $\text{Y}$		minimum elong	10125 Jan 26 07:20	11° $\approx$ 01'56	0°30'16
	10124 Mar 25 23:41	0° $\text{B}$		desc. node	10125 Jan 30 05:10	17° $\approx$ 55'05	
evening max el	10124 Mar 30 20:49	5° $\text{B}$ 32'23	21°33'35	max. Earth dist.	10125 Feb 02 20:05	24° $\approx$ 05'55	1.41667 AU
asc. node	10124 Apr 07 08:55	10° $\text{B}$ 39'41			10125 Feb 06 09:36	0° $\text{H}$	
retrograde	10124 Apr 08 20:45	10° $\text{B}$ 50'42		evening rise	10125 Feb 07 22:57	2° $\text{H}$ 31'34	
evening set	10124 Apr 13 06:20	9° $\text{B}$ 04'18			10125 Feb 26 03:54	0° $\text{Y}$	
inferior conj	10124 Apr 18 13:16	2° $\text{B}$ 47'48	2°55'13	evening max el	10125 Mar 13 13:32	19° $\text{Y}$ 17'29	22°52'07
minimum elong	10124 Apr 18 11:28	2° $\text{B}$ 54'04	2°54'41	retrograde	10125 Mar 23 16:53	25° $\text{Y}$ 17'17	
min. Earth dist.	10124 Apr 18 17:43	2° $\text{B}$ 32'16	0.68480 AU	asc. node	10125 Mar 25 06:06	25° $\text{Y}$ 05'34	
	10124 Apr 20 14:27	30° $\text{R}$ $\text{Y}$		evening set	10125 Mar 28 13:42	23° $\text{Y}$ 16'07	
morning rise	10124 Apr 23 16:24	26° $\text{Y}$ 34'01		inferior conj	10125 Apr 02 22:19	16° $\text{Y}$ 51'36	2°28'05
direct	10124 Apr 28 17:43	24° $\text{Y}$ 22'13		minimum elong	10125 Apr 02 20:08	16° $\text{Y}$ 59'08	2°27'25
	10124 May 08 11:02	0° $\text{B}$		min. Earth dist.	10125 Apr 02 14:25	17° $\text{Y}$ 18'58	0.68600 AU
morning max el	10124 May 08 18:50	0° $\text{B}$ 19'28	22°53'07	morning rise	10125 Apr 08 02:27	10° $\text{Y}$ 43'22	
desc. node	10124 May 11 08:52	3° $\text{B}$ 05'30		direct	10125 Apr 12 14:13	8° $\text{Y}$ 52'46	
	10124 May 31 02:59	0° $\text{II}$		morning max el	10125 Apr 21 08:58	13° $\text{Y}$ 58'04	21°27'12
morning set	10124 Jun 12 02:37	18° $\text{II}$ 56'44		desc. node	10125 Apr 28 05:45	21° $\text{Y}$ 58'25	
max. Earth dist.	10124 Jun 16 13:53	26° $\text{II}$ 28'01	1.40048 AU		10125 May 04 03:56	0° $\text{B}$	
	10124 Jun 18 14:57	0° $\text{B}$		morning set	10125 May 23 00:47	28° $\text{B}$ 19'19	
					10125 May 24 02:09	0° $\text{II}$	
superior conj	10124 Jun 24 08:27	10° $\text{B}$ 13'11	-1°25'32	max. Earth dist.	10125 May 29 15:35	8° $\text{II}$ 59'49	1.42214 AU
minimum elong	10124 Jun 24 14:03	10° $\text{B}$ 38'44	1°25'12				
evening rise	10124 Jul 04 03:32	28° $\text{B}$ 37'28		superior conj	10125 Jun 06 02:57	21° $\text{II}$ 35'44	-1°53'13
asc. node	10124 Jul 04 07:42	28° $\text{B}$ 57'15		minimum elong	10125 Jun 06 09:11	22° $\text{II}$ 02'40	1°53'06
	10124 Jul 04 20:53	0° $\text{B}$			10125 Jun 10 21:57	0° $\text{B}$	
evening max el	10124 Jul 20 04:29	24° $\text{B}$ 27'03	18°29'18	evening rise	10125 Jun 17 07:33	11° $\text{B}$ 32'47	
retrograde	10124 Jul 27 21:51	28° $\text{B}$ 19'01		asc. node	10125 Jun 21 04:40	18° $\text{B}$ 34'10	
evening set	10124 Jul 29 23:57	28° $\text{B}$ 02'55			10125 Jun 27 22:49	0° $\text{B}$	
inferior conj	10124 Aug 06 16:36	23° $\text{B}$ 32'08	0°11'37	evening max el	10125 Jul 03 14:45	7° $\text{B}$ 17'01	18°08'01
minimum elong	10124 Aug 06 17:02	23° $\text{B}$ 31'19	0°11'10	retrograde	10125 Jul 10 10:48	10° $\text{B}$ 45'30	
transit middle	10124 Aug 06 17:02	23° $\text{B}$ 31'19	0°11'10	evening set	10125 Jul 12 20:40	10° $\text{B}$ 19'58	
transit begin	10124 Aug 06 14:27	23° $\text{B}$ 36'24		inferior conj	10125 Jul 19 18:48	5° $\text{B}$ 28'28	1°33'06
transit end	10124 Aug 06 19:36	23° $\text{B}$ 26'14		minimum elong	10125 Jul 19 21:22	5° $\text{B}$ 22'35	1°31'53
desc. node	10124 Aug 07 07:54	23° $\text{B}$ 01'53		min. Earth dist.	10125 Jul 23 01:53	2° $\text{B}$ 28'31	0.60092 AU
min. Earth dist.	10124 Aug 10 00:21	20° $\text{B}$ 56'12	0.57882 AU	desc. node	10125 Jul 25 05:05	0° $\text{B}$ 44'43	
morning rise	10124 Aug 14 06:33	18° $\text{B}$ 12'45			10125 Jul 26 06:33	30° $\text{R}$ $\text{B}$	
direct	10124 Aug 20 06:17	16° $\text{B}$ 40'49		morning rise	10125 Jul 26 19:08	29° $\text{B}$ 39'54	
morning max el	10124 Sep 03 14:51	24° $\text{B}$ 18'44	26°59'29	direct	10125 Aug 02 07:13	27° $\text{B}$ 38'19	
	10124 Sep 08 19:35	0° $\text{B}$			10125 Aug 09 17:58	0° $\text{B}$	
	10124 Sep 27 20:06	0° $\text{B}$		morning max el	10125 Aug 16 14:59	5° $\text{B}$ 32'26	27°46'48
asc. node	10124 Sep 30 07:55	4° $\text{B}$ 55'28			10125 Sep 03 21:15	0° $\text{B}$	
morning set	10124 Oct 03 15:42	11° $\text{B}$ 48'59		asc. node	10125 Sep 17 04:44	24° $\text{B}$ 44'47	
				morning set	10125 Sep 17 21:17	26° $\text{B}$ 10'43	
superior conj	10124 Oct 10 14:03	26° $\text{B}$ 59'59	1°26'30		10125 Sep 19 16:42	0° $\text{B}$	
minimum elong	10124 Oct 10 12:07	26° $\text{B}$ 49'14	1°26'28	max. Earth dist.	10125 Sep 24 01:22	9° $\text{B}$ 30'10	1.31552 AU
max. Earth dist.	10124 Oct 10 16:09	27° $\text{B}$ 11'38	1.31535 AU				
	10124 Oct 11 22:26	0° $\text{B}$		superior conj	10125 Sep 25 01:23	11° $\text{B}$ 43'14	1°11'31
evening rise	10124 Oct 17 09:25	11° $\text{B}$ 54'23		minimum elong	10125 Sep 24 23:09	11° $\text{B}$ 30'50	1°11'14
	10124 Oct 26 13:33	0° $\text{B}$		evening rise	10125 Oct 01 18:46	26° $\text{B}$ 30'40	
desc. node	10124 Nov 03 05:52	12° $\text{B}$ 46'13			10125 Oct 03 10:11	0° $\text{B}$	
evening max el	10124 Nov 16 14:59	29° $\text{B}$ 25'03	26°51'18		10125 Oct 20 10:19	0° $\text{B}$	
	10124 Nov 17 06:03	0° $\text{B}$		desc. node	10125 Oct 21 03:03	0° $\text{B}$ 57'40	
retrograde	10124 Nov 30 13:16	6° $\text{B}$ 34'05		evening max el	10125 Oct 29 10:56	10° $\text{B}$ 38'33	25°43'41
evening set	10124 Dec 07 08:56	4° $\text{B}$ 35'30		retrograde	10125 Nov 12 08:32	17° $\text{B}$ 39'34	
min. Earth dist.	10124 Dec 11 05:22	1° $\text{B}$ 57'17	0.59954 AU	evening set	10125 Nov 18 12:27	16° $\text{B}$ 11'13	
	10124 Dec 13 15:35	30° $\text{R}$ $\text{B}$		min. Earth dist.	10125 Nov 22 23:26	13° $\text{B}$ 34'45	0.57890 AU
inferior conj	10124 Dec 14 09:31	29° $\text{B}$ 23'21	-3°57'41	inferior conj	10125 Nov 26 00:01	11° $\text{B}$ 27'30	-5°02'18
minimum elong	10124 Dec 14 17:03	29° $\text{B}$ 08'05	3°54'55	minimum elong	10125 Nov 26 07:21	11° $\text{B}$ 14'34	5°00'25
morning rise	10124 Dec 22 03:47	24° $\text{B}$ 40'36		morning rise	10125 Dec 04 04:36	7° $\text{B}$ 07'14	
direct	10124 Dec 24 07:09	24° $\text{B}$ 23'21		direct	10125 Dec 06 10:57	6° $\text{B}$ 51'10	
asc. node	10124 Dec 27 07:44	24° $\text{B}$ 59'27		asc. node	10125 Dec 14 04:47	10° $\text{B}$ 13'17	
morning max el	10124 Dec 31 20:28	28° $\text{B}$ 08'20	18°07'45	morning max el	10125 Dec 15 01:47	11° $\text{B}$ 01'34	18°47'02
	10125 Jan 02 13:57	0° $\text{B}$			10125 Dec 27 15:22	0° $\text{B}$	
morning set	10125 Jan 16 12:18	22° $\text{B}$ 57'53		morning set	10125 Dec 31 09:12	7° $\text{B}$ 12'42	
	10125 Jan 20 06:34	0° $\approx$					
				superior conj	10126 Jan 08 23:30	23° $\text{B}$ 52'09	0°59'36

minimum elong	10126 Jan 09 02:39	24° $\text{♄}$ 07'01	0°59'35	minimum elong	10126 Dec 23 11:42	7° $\text{♄}$ 48'11	1°20'43
	10126 Jan 12 06:31	0° $\text{♄}$		max. Earth dist.	10126 Dec 29 09:51	19° $\text{♄}$ 12'51	1.37332 AU
max. Earth dist.	10126 Jan 16 03:29	6° $\text{♄}$ 57'56	1.39524 AU	evening rise	10127 Jan 02 03:19	26° $\text{♄}$ 01'20	
desc. node	10126 Jan 17 02:03	8° $\text{♄}$ 36'54		desc. node	10127 Jan 03 22:57	29° $\text{♄}$ 14'10	
evening rise	10126 Jan 20 02:44	13° $\text{♄}$ 49'27			10127 Jan 04 09:28	0° $\text{♄}$	
	10126 Jan 30 03:21	0° $\text{♄}$			10127 Jan 23 16:21	0° $\text{♄}$	
	10126 Feb 21 05:19	0° $\text{♄}$		evening max el	10127 Feb 06 16:58	16° $\text{♄}$ 54'58	25°27'32
evening max el	10126 Feb 24 03:43	3° $\text{♄}$ 05'44	24°12'22	retrograde	10127 Feb 18 22:07	23° $\text{♄}$ 57'43	
retrograde	10126 Mar 07 09:41	9° $\text{♄}$ 41'37		evening set	10127 Feb 24 19:18	21° $\text{♄}$ 31'54	
asc. node	10126 Mar 12 03:19	7° $\text{♄}$ 57'31		asc. node	10127 Feb 27 00:33	19° $\text{♄}$ 20'33	
evening set	10126 Mar 12 18:34	7° $\text{♄}$ 26'57		min. Earth dist.	10127 Mar 01 04:07	16° $\text{♄}$ 44'52	0.67563 AU
min. Earth dist.	10126 Mar 17 10:37	2° $\text{♄}$ 04'57	0.68286 AU	inferior conj	10127 Mar 02 11:45	15° $\text{♄}$ 03'08	1°06'15
inferior conj	10126 Mar 18 06:26	0° $\text{♄}$ 58'02	1°51'43	minimum elong	10127 Mar 02 10:14	15° $\text{♄}$ 08'02	1°05'49
minimum elong	10126 Mar 18 04:20	1° $\text{♄}$ 05'09	1°51'02	morning rise	10127 Mar 08 01:36	9° $\text{♄}$ 10'21	
	10126 Mar 18 23:43	30° $\text{♄}$		direct	10127 Mar 11 12:13	8° $\text{♄}$ 02'18	
morning rise	10126 Mar 23 14:10	24° $\text{♄}$ 56'48		morning max el	10127 Mar 18 11:18	11° $\text{♄}$ 51'19	19°10'55
direct	10126 Mar 27 12:53	23° $\text{♄}$ 28'10		greatest brilliancy	10127 Mar 31 13:04	29° $\text{♄}$ 12'49	-0.7m
morning max el	10126 Apr 04 06:10	27° $\text{♄}$ 49'09	20°11'56		10127 Apr 01 01:38	0° $\text{♄}$	
	10126 Apr 06 07:27	0° $\text{♄}$		desc. node	10127 Apr 01 23:24	1° $\text{♄}$ 22'07	
desc. node	10126 Apr 15 02:36	11° $\text{♄}$ 27'22		morning set	10127 Apr 11 04:19	15° $\text{♄}$ 29'08	
	10126 Apr 27 15:25	0° $\text{♄}$			10127 Apr 20 12:37	0° $\text{♄}$	
morning set	10126 May 02 02:41	6° $\text{♄}$ 50'47		max. Earth dist.	10127 Apr 24 16:24	6° $\text{♄}$ 30'56	1.45160 AU
max. Earth dist.	10126 May 12 01:02	22° $\text{♄}$ 26'17	1.43985 AU				
	10126 May 16 17:19	0° $\text{♄}$		superior conj	10127 Apr 27 17:11	11° $\text{♄}$ 18'05	-2°10'31
superior conj	10126 May 17 21:41	1° $\text{♄}$ 56'11	-2°10'21	minimum elong	10127 Apr 27 13:31	11° $\text{♄}$ 03'33	2°10'41
minimum elong	10126 May 18 00:58	2° $\text{♄}$ 09'39	2°10'38		10127 May 09 08:02	0° $\text{♄}$	
evening rise	10126 May 30 18:14	23° $\text{♄}$ 40'36		evening rise	10127 May 12 06:53	4° $\text{♄}$ 50'35	
	10126 Jun 03 10:03	0° $\text{♄}$		asc. node	10127 May 25 22:48	26° $\text{♄}$ 44'10	
asc. node	10126 Jun 08 01:42	7° $\text{♄}$ 52'17			10127 May 28 07:17	0° $\text{♄}$	
evening max el	10126 Jun 17 04:11	20° $\text{♄}$ 30'57	18°05'56	evening max el	10127 May 31 17:28	3° $\text{♄}$ 59'38	18°22'23
retrograde	10126 Jun 23 14:11	23° $\text{♄}$ 51'20		retrograde	10127 Jun 07 03:21	7° $\text{♄}$ 26'06	
evening set	10126 Jun 26 07:50	23° $\text{♄}$ 13'42		evening set	10127 Jun 10 04:40	6° $\text{♄}$ 34'37	
inferior conj	10126 Jul 02 14:55	18° $\text{♄}$ 02'56	2°28'37	inferior conj	10127 Jun 16 00:43	1° $\text{♄}$ 06'33	3°01'44
minimum elong	10126 Jul 02 17:39	17° $\text{♄}$ 55'46	2°27'30	minimum elong	10127 Jun 16 02:35	1° $\text{♄}$ 01'07	3°01'01
min. Earth dist.	10126 Jul 05 12:19	15° $\text{♄}$ 02'13	0.62349 AU		10127 Jun 16 23:25	30° $\text{♄}$	
morning rise	10126 Jul 09 01:30	11° $\text{♄}$ 55'22		min. Earth dist.	10127 Jun 18 08:14	28° $\text{♄}$ 25'11	0.64406 AU
desc. node	10126 Jul 12 02:15	10° $\text{♄}$ 12'47		morning rise	10127 Jun 21 23:20	24° $\text{♄}$ 49'14	
direct	10126 Jul 15 18:38	9° $\text{♄}$ 29'23		direct	10127 Jun 28 14:48	22° $\text{♄}$ 08'18	
morning max el	10126 Jul 29 21:21	17° $\text{♄}$ 31'28	27°55'35	desc. node	10127 Jun 28 23:21	22° $\text{♄}$ 08'44	
	10126 Aug 09 06:45	0° $\text{♄}$			10127 Jul 12 03:59	0° $\text{♄}$	
	10126 Aug 27 16:05	0° $\text{♄}$		morning max el	10127 Jul 12 07:20	0° $\text{♄}$ 08'24	27°28'01
morning set	10126 Sep 01 21:03	10° $\text{♄}$ 12'53			10127 Aug 03 06:55	0° $\text{♄}$	
asc. node	10126 Sep 04 01:36	14° $\text{♄}$ 43'58		morning set	10127 Aug 16 12:29	23° $\text{♄}$ 48'46	
max. Earth dist.	10126 Sep 07 07:06	21° $\text{♄}$ 36'09	1.32060 AU		10127 Aug 19 14:37	0° $\text{♄}$	
				max. Earth dist.	10127 Aug 21 05:23	3° $\text{♄}$ 19'25	1.33065 AU
superior conj	10126 Sep 09 10:33	26° $\text{♄}$ 15'59	0°51'28	asc. node	10127 Aug 21 22:28	4° $\text{♄}$ 48'26	
minimum elong	10126 Sep 09 08:31	26° $\text{♄}$ 04'47	0°51'02				
	10126 Sep 11 03:24	0° $\text{♄}$		superior conj	10127 Aug 24 15:33	10° $\text{♄}$ 32'33	0°26'42
evening rise	10126 Sep 16 06:02	11° $\text{♄}$ 09'26		minimum elong	10127 Aug 24 14:17	10° $\text{♄}$ 25'45	0°26'16
	10126 Sep 25 17:54	0° $\text{♄}$		evening rise	10127 Aug 31 17:21	25° $\text{♄}$ 45'09	
desc. node	10126 Oct 08 00:15	17° $\text{♄}$ 58'55			10127 Sep 02 17:49	0° $\text{♄}$	
evening max el	10126 Oct 10 23:26	21° $\text{♄}$ 05'39	24°11'43		10127 Sep 21 05:56	0° $\text{♄}$	
retrograde	10126 Oct 24 15:49	27° $\text{♄}$ 56'47		evening max el	10127 Sep 22 10:40	1° $\text{♄}$ 13'08	22°31'19
evening set	10126 Oct 29 15:29	27° $\text{♄}$ 02'06		desc. node	10127 Sep 24 21:29	3° $\text{♄}$ 24'14	
min. Earth dist.	10126 Nov 04 10:08	24° $\text{♄}$ 08'40	0.56115 AU	retrograde	10127 Oct 05 11:13	7° $\text{♄}$ 42'34	
inferior conj	10126 Nov 06 18:00	22° $\text{♄}$ 42'47	-5°40'40	evening set	10127 Oct 08 22:52	7° $\text{♄}$ 15'49	
minimum elong	10126 Nov 06 20:40	22° $\text{♄}$ 38'41	5°40'11	min. Earth dist.	10127 Oct 16 17:51	3° $\text{♄}$ 47'32	0.54939 AU
morning rise	10126 Nov 15 03:54	18° $\text{♄}$ 43'47		inferior conj	10127 Oct 17 18:08	3° $\text{♄}$ 13'07	-5°31'59
direct	10126 Nov 17 19:20	18° $\text{♄}$ 25'34		minimum elong	10127 Oct 17 12:45	3° $\text{♄}$ 20'46	5°31'10
morning max el	10126 Nov 27 19:47	23° $\text{♄}$ 10'34	19°48'49		10127 Oct 24 06:37	30° $\text{♄}$	
asc. node	10126 Dec 01 01:48	26° $\text{♄}$ 44'52		morning rise	10127 Oct 26 04:21	29° $\text{♄}$ 25'36	
	10126 Dec 03 11:51	0° $\text{♄}$		direct	10127 Oct 29 10:06	29° $\text{♄}$ 01'47	
morning set	10126 Dec 15 13:22	21° $\text{♄}$ 46'04			10127 Nov 03 07:46	0° $\text{♄}$	
	10126 Dec 19 14:31	0° $\text{♄}$		morning max el	10127 Nov 10 00:23	4° $\text{♄}$ 29'33	21°12'55
superior conj	10126 Dec 23 08:57	7° $\text{♄}$ 34'34	1°20'34	asc. node	10127 Nov 17 22:47	14° $\text{♄}$ 18'22	
					10127 Nov 26 17:47	0° $\text{♄}$	
				morning set	10127 Nov 29 22:09	6° $\text{♄}$ 30'17	

superior conj	10127 Dec 07 05:14	21° $\text{♄}$ 47'02	1°33'39	morning max el	10128 Oct 21 17:14	15° $\text{♄}$ 02'59	22°54'21
minimum elong	10127 Dec 07 06:57	21° $\text{♄}$ 55'52	1°33'58		10128 Nov 02 05:56	0° $\text{♄}$	
	10127 Dec 11 06:13	0° $\text{♄}$		asc. node	10128 Nov 03 19:42	2° $\text{♄}$ 39'01	
max. Earth dist.	10127 Dec 11 19:44	1° $\text{♄}$ 07'04	1.35327 AU	morning set	10128 Nov 13 09:18	21° $\text{♄}$ 18'15	
evening rise	10127 Dec 15 21:39	8° $\text{♄}$ 59'33			10128 Nov 17 10:33	0° $\text{♄}$	
desc. node	10127 Dec 21 19:55	19° $\text{♄}$ 42'48					
	10127 Dec 28 00:06	0° $\text{♄}$		superior conj	10128 Nov 20 08:54	6° $\text{♄}$ 18'35	1°39'37
	10128 Jan 19 13:38	0° $\text{♄}$		minimum elong	10128 Nov 20 09:23	6° $\text{♄}$ 21'10	1°39'59
evening max el	10128 Jan 20 06:18	0° $\text{♄}$ 40'59	26°30'26	max. Earth dist.	10128 Nov 23 13:04	13° $\text{♄}$ 01'15	1.33683 AU
retrograde	10128 Feb 02 05:29	7° $\text{♄}$ 59'18		evening rise	10128 Nov 28 05:52	22° $\text{♄}$ 33'26	
evening set	10128 Feb 08 14:10	5° $\text{♄}$ 26'28			10128 Dec 02 03:08	0° $\text{♄}$	
min. Earth dist.	10128 Feb 12 16:49	1° $\text{♄}$ 13'47	0.66451 AU	desc. node	10128 Dec 07 16:56	9° $\text{♄}$ 57'01	
asc. node	10128 Feb 13 21:45	29° $\text{♄}$ 47'03			10128 Dec 20 17:36	0° $\text{♄}$	
	10128 Feb 13 17:28	30° $\text{♄}$		evening max el	10129 Jan 01 19:33	14° $\text{♄}$ 14'30	27°13'50
inferior conj	10128 Feb 14 12:14	29° $\text{♄}$ 03'17	0°11'54	retrograde	10129 Jan 15 06:49	21° $\text{♄}$ 37'15	
minimum elong	10128 Feb 14 11:55	29° $\text{♄}$ 04'15	0°12'02	evening set	10129 Jan 22 01:00	19° $\text{♄}$ 03'17	
transit middle	10128 Feb 14 11:55	29° $\text{♄}$ 04'15	0°12'02	min. Earth dist.	10129 Jan 25 22:30	15° $\text{♄}$ 23'43	0.64976 AU
transit begin	10128 Feb 14 09:59	29° $\text{♄}$ 10'03		inferior conj	10129 Jan 28 05:32	12° $\text{♄}$ 52'10	-0°51'01
transit end	10128 Feb 14 13:50	28° $\text{♄}$ 58'28		minimum elong	10129 Jan 28 07:03	12° $\text{♄}$ 47'57	0°50'01
morning rise	10128 Feb 20 10:37	23° $\text{♄}$ 20'47		asc. node	10129 Jan 30 18:55	10° $\text{♄}$ 10'49	
direct	10128 Feb 23 10:34	22° $\text{♄}$ 30'26		morning rise	10129 Feb 03 14:39	7° $\text{♄}$ 22'20	
morning max el	10128 Feb 29 23:10	26° $\text{♄}$ 00'05	18°26'00	direct	10129 Feb 06 05:40	6° $\text{♄}$ 45'58	
	10128 Mar 04 11:14	0° $\text{♄}$		morning max el	10129 Feb 12 15:19	10° $\text{♄}$ 07'32	17°57'54
desc. node	10128 Mar 18 20:12	21° $\text{♄}$ 36'01			10129 Feb 26 09:55	0° $\text{♄}$	
morning set	10128 Mar 21 03:30	25° $\text{♄}$ 15'29		morning set	10129 Mar 02 08:01	6° $\text{♄}$ 28'59	
	10128 Mar 24 03:15	0° $\text{♄}$		desc. node	10129 Mar 05 16:59	12° $\text{♄}$ 03'03	
superior conj	10128 Apr 05 23:40	20° $\text{♄}$ 12'14	-1°50'23	superior conj	10129 Mar 16 11:10	29° $\text{♄}$ 26'50	-1°14'02
minimum elong	10128 Apr 05 14:29	19° $\text{♄}$ 36'20	1°49'45	minimum elong	10129 Mar 16 03:05	28° $\text{♄}$ 54'42	1°13'00
max. Earth dist.	10128 Apr 06 11:00	20° $\text{♄}$ 56'33	1.45630 AU		10129 Mar 16 19:32	0° $\text{♄}$	
	10128 Apr 12 06:00	0° $\text{♄}$		max. Earth dist.	10129 Mar 20 06:36	5° $\text{♄}$ 27'56	1.45354 AU
evening rise	10128 Apr 21 19:38	15° $\text{♄}$ 02'02		evening rise	10129 Apr 01 13:15	24° $\text{♄}$ 31'49	
	10128 May 01 08:04	0° $\text{♄}$			10129 Apr 05 02:46	0° $\text{♄}$	
greatest brilliancy	10128 May 01 11:20	0° $\text{♄}$ 12'42	-0.8m	greatest brilliancy	10129 Apr 15 17:58	16° $\text{♄}$ 02'55	-0.6m
asc. node	10128 May 11 19:56	15° $\text{♄}$ 01'09			10129 Apr 26 04:29	0° $\text{♄}$	
evening max el	10128 May 14 04:00	17° $\text{♄}$ 36'47	18°56'34	evening max el	10129 Apr 27 09:53	1° $\text{♄}$ 17'55	19°47'07
retrograde	10128 May 20 22:24	21° $\text{♄}$ 22'00		asc. node	10129 Apr 28 17:04	2° $\text{♄}$ 32'12	
evening set	10128 May 24 07:44	20° $\text{♄}$ 15'35		retrograde	10129 May 04 20:21	5° $\text{♄}$ 33'00	
inferior conj	10128 May 29 20:25	14° $\text{♄}$ 31'54	3°16'53	evening set	10129 May 08 14:25	4° $\text{♄}$ 11'00	
minimum elong	10128 May 29 21:05	14° $\text{♄}$ 29'49	3°16'26		10129 May 12 14:27	30° $\text{♄}$	
min. Earth dist.	10128 May 31 12:54	12° $\text{♄}$ 24'02	0.66115 AU	inferior conj	10129 May 13 22:53	28° $\text{♄}$ 13'11	3°17'38
morning rise	10128 Jun 04 09:49	8° $\text{♄}$ 11'27		minimum elong	10129 May 13 22:23	28° $\text{♄}$ 14'50	3°17'15
direct	10128 Jun 10 18:22	5° $\text{♄}$ 26'52		min. Earth dist.	10129 May 15 00:36	26° $\text{♄}$ 47'07	0.67394 AU
desc. node	10128 Jun 14 20:25	6° $\text{♄}$ 23'36		morning rise	10129 May 19 06:01	21° $\text{♄}$ 53'46	
morning max el	10128 Jun 23 18:03	13° $\text{♄}$ 10'55	26°30'46	direct	10129 May 25 03:58	19° $\text{♄}$ 16'04	
	10128 Jul 07 07:40	0° $\text{♄}$		desc. node	10129 Jun 01 17:24	22° $\text{♄}$ 28'50	
	10128 Jul 25 23:21	0° $\text{♄}$		morning max el	10129 Jun 06 03:54	26° $\text{♄}$ 27'54	25°13'04
morning set	10128 Jul 29 16:22	6° $\text{♄}$ 49'48			10129 Jun 09 10:15	0° $\text{♄}$	
max. Earth dist.	10128 Aug 02 17:18	14° $\text{♄}$ 37'02	1.34566 AU		10129 Jun 30 21:40	0° $\text{♄}$	
superior conj	10128 Aug 07 14:01	24° $\text{♄}$ 26'43	-0°02'12	morning set	10129 Jul 12 04:29	19° $\text{♄}$ 04'58	
minimum elong	10128 Aug 07 14:09	24° $\text{♄}$ 27'25	0°02'28	max. Earth dist.	10129 Jul 15 19:13	25° $\text{♄}$ 41'20	1.36509 AU
behind sun begin	10128 Aug 07 08:21	23° $\text{♄}$ 57'28			10129 Jul 18 02:06	0° $\text{♄}$	
behind sun end	10128 Aug 07 19:57	24° $\text{♄}$ 57'25		superior conj	10129 Jul 22 03:04	7° $\text{♄}$ 51'10	-0°34'07
asc. node	10128 Aug 07 19:21	24° $\text{♄}$ 54'17		minimum elong	10129 Jul 22 05:12	8° $\text{♄}$ 01'46	0°34'05
	10128 Aug 10 06:02	0° $\text{♄}$		asc. node	10129 Jul 25 16:13	14° $\text{♄}$ 57'36	
evening rise	10128 Aug 15 02:42	10° $\text{♄}$ 12'14		evening rise	10129 Jul 30 07:53	24° $\text{♄}$ 24'44	
	10128 Aug 25 11:35	0° $\text{♄}$			10129 Aug 02 02:50	0° $\text{♄}$	
evening max el	10128 Sep 03 06:06	11° $\text{♄}$ 38'39	20°58'50	evening max el	10129 Aug 16 14:58	22° $\text{♄}$ 46'29	19°44'11
desc. node	10128 Sep 10 18:44	16° $\text{♄}$ 43'09		retrograde	10129 Aug 26 15:12	27° $\text{♄}$ 44'12	
retrograde	10128 Sep 14 23:07	17° $\text{♄}$ 27'02		evening set	10129 Aug 28 11:52	27° $\text{♄}$ 34'41	
evening set	10128 Sep 17 06:25	17° $\text{♄}$ 14'28		desc. node	10129 Aug 28 15:58	27° $\text{♄}$ 32'53	
inferior conj	10128 Sep 26 10:17	13° $\text{♄}$ 18'50	-4°26'16	inferior conj	10129 Sep 06 08:58	23° $\text{♄}$ 32'20	-2°40'10
minimum elong	10128 Sep 26 00:28	13° $\text{♄}$ 32'45	4°23'34	minimum elong	10129 Sep 06 01:47	23° $\text{♄}$ 43'27	2°37'36
min. Earth dist.	10128 Sep 27 02:02	12° $\text{♄}$ 56'30	0.54633 AU	min. Earth dist.	10129 Sep 08 12:35	22° $\text{♄}$ 12'28	0.55287 AU
morning rise	10128 Oct 04 18:43	9° $\text{♄}$ 24'01		morning rise	10129 Sep 14 13:47	19° $\text{♄}$ 11'03	
direct	10128 Oct 08 18:11	8° $\text{♄}$ 50'01		direct	10129 Sep 19 08:41	18° $\text{♄}$ 20'28	



morning max el	10129 Oct 03 04:44	25° $\mathbb{M}$ 12'47	24°41'09	direct	10130 Aug 31 12:06	28° $\Omega$ 06'30	
	10129 Oct 07 16:06	0° $\mathfrak{A}$			10130 Sep 07 11:30	0° $\mathbb{M}$	
asc. node	10129 Oct 21 16:35	21° $\mathfrak{A}$ 35'27		morning max el	10130 Sep 14 18:29	5° $\mathbb{M}$ 29'42	26°16'27
	10129 Oct 25 23:17	0° $\mathbb{M}$			10130 Oct 02 16:05	0° $\mathfrak{A}$	
morning set	10129 Oct 28 21:04	6° $\mathbb{M}$ 05'26		asc. node	10130 Oct 08 13:25	10° $\mathfrak{A}$ 57'52	
				morning set	10130 Oct 13 07:48	20° $\mathfrak{A}$ 46'39	
					10130 Oct 17 13:23	0° $\mathbb{M}$	
superior conj	10129 Nov 04 17:21	21° $\mathbb{M}$ 01'42	1°39'06				
minimum elong	10129 Nov 04 16:41	20° $\mathbb{M}$ 58'04	1°39'25				
max. Earth dist.	10129 Nov 06 14:30	25° $\mathbb{M}$ 07'54	1.32484 AU	superior conj	10130 Oct 20 04:23	5° $\mathbb{M}$ 49'25	1°32'42
	10129 Nov 08 20:55	0° $\mathfrak{A}$		minimum elong	10130 Oct 20 02:49	5° $\mathbb{M}$ 40'44	1°32'48
evening rise	10129 Nov 12 00:34	6° $\mathfrak{A}$ 34'24		max. Earth dist.	10130 Oct 20 21:45	7° $\mathbb{M}$ 25'42	1.31748 AU
desc. node	10129 Nov 24 14:00	29° $\mathfrak{A}$ 50'25		evening rise	10130 Oct 27 02:49	20° $\mathbb{M}$ 54'09	
	10129 Nov 24 16:19	0° $\mathfrak{B}$			10130 Oct 31 14:17	0° $\mathfrak{A}$	
evening max el	10129 Dec 15 07:09	27° $\mathfrak{B}$ 23'39	27°30'39	desc. node	10130 Nov 11 11:08	19° $\mathfrak{A}$ 14'18	
	10129 Dec 18 06:34	0° $\mathfrak{A}$			10130 Nov 18 21:25	0° $\mathfrak{B}$	
retrograde	10129 Dec 29 01:06	4° $\mathfrak{A}$ 42'56		evening max el	10130 Nov 27 14:33	9° $\mathfrak{B}$ 54'54	27°15'28
evening set	10130 Jan 05 01:14	2° $\mathfrak{A}$ 15'25		retrograde	10130 Dec 11 11:34	17° $\mathfrak{B}$ 07'38	
	10130 Jan 07 19:57	30° $\mathfrak{A}$ 3		evening set	10130 Dec 18 11:34	14° $\mathfrak{B}$ 55'28	
min. Earth dist.	10130 Jan 08 19:06	29° $\mathfrak{B}$ 05'53	0.63191 AU	min. Earth dist.	10130 Dec 22 05:03	12° $\mathfrak{B}$ 09'23	0.61169 AU
inferior conj	10130 Jan 11 12:53	26° $\mathfrak{B}$ 23'07	-2°01'12	inferior conj	10130 Dec 25 07:05	9° $\mathfrak{B}$ 27'49	-3°15'31
minimum elong	10130 Jan 11 16:49	26° $\mathfrak{B}$ 13'20	1°59'12	minimum elong	10130 Dec 25 13:33	9° $\mathfrak{B}$ 13'41	3°12'47
asc. node	10130 Jan 17 16:03	21° $\mathfrak{B}$ 28'34		morning rise	10131 Jan 01 18:03	4° $\mathfrak{B}$ 32'57	
morning rise	10130 Jan 18 10:32	21° $\mathfrak{B}$ 09'01		direct	10131 Jan 03 22:16	4° $\mathfrak{B}$ 13'21	
direct	10130 Jan 20 18:47	20° $\mathfrak{B}$ 42'50		asc. node	10131 Jan 04 13:08	4° $\mathfrak{B}$ 14'59	
morning max el	10130 Jan 27 08:49	24° $\mathfrak{B}$ 06'01	17°47'12	morning max el	10131 Jan 11 00:32	7° $\mathfrak{B}$ 47'25	17°54'45
	10130 Feb 01 03:30	0° $\mathfrak{A}$			10131 Jan 25 09:18	0° $\mathfrak{A}$	
morning set	10130 Feb 12 14:18	18° $\mathfrak{A}$ 56'59		morning set	10131 Jan 26 15:54	2° $\mathfrak{A}$ 19'22	
	10130 Feb 19 00:14	0° $\mathfrak{H}$					
desc. node	10130 Feb 20 13:45	2° $\mathfrak{H}$ 38'59		superior conj	10131 Feb 06 03:53	21° $\mathfrak{A}$ 07'42	0°09'42
				minimum elong	10131 Feb 06 04:45	21° $\mathfrak{A}$ 11'26	0°09'53
superior conj	10130 Feb 24 18:54	9° $\mathfrak{H}$ 41'06	-0°31'07	behind sun begin	10131 Feb 05 22:12	20° $\mathfrak{A}$ 42'58	
minimum elong	10130 Feb 24 15:39	9° $\mathfrak{H}$ 27'42	0°30'26	behind sun end	10131 Feb 06 11:18	21° $\mathfrak{A}$ 39'50	
max. Earth dist.	10130 Mar 03 00:50	19° $\mathfrak{H}$ 49'40	1.44368 AU	desc. node	10131 Feb 07 10:34	23° $\mathfrak{A}$ 20'14	
	10130 Mar 09 11:52	0° $\mathfrak{Y}$			10131 Feb 11 08:55	0° $\mathfrak{H}$	
evening rise	10130 Mar 12 00:41	3° $\mathfrak{Y}$ 55'01		max. Earth dist.	10131 Feb 13 15:20	3° $\mathfrak{H}$ 45'25	1.42777 AU
	10130 Mar 29 13:56	0° $\mathfrak{B}$		evening rise	10131 Feb 19 21:05	13° $\mathfrak{H}$ 48'01	
evening max el	10130 Apr 10 10:11	15° $\mathfrak{B}$ 00'17	20°51'36		10131 Mar 02 11:35	0° $\mathfrak{Y}$	
asc. node	10130 Apr 15 14:14	19° $\mathfrak{B}$ 03'29		evening max el	10131 Mar 24 05:13	28° $\mathfrak{Y}$ 43'52	22°06'21
retrograde	10130 Apr 18 18:57	19° $\mathfrak{B}$ 53'46			10131 Mar 25 12:39	0° $\mathfrak{B}$	
evening set	10130 Apr 22 22:40	18° $\mathfrak{B}$ 16'01		asc. node	10131 Apr 02 11:26	4° $\mathfrak{B}$ 19'46	
inferior conj	10130 Apr 28 05:32	12° $\mathfrak{B}$ 05'44	3°06'27	retrograde	10131 Apr 02 16:30	4° $\mathfrak{B}$ 19'59	
minimum elong	10130 Apr 28 04:07	12° $\mathfrak{B}$ 10'37	3°05'59	evening set	10131 Apr 07 06:52	2° $\mathfrak{B}$ 26'55	
min. Earth dist.	10130 Apr 28 17:25	11° $\mathfrak{B}$ 24'39	0.68218 AU		10131 Apr 09 16:02	30° $\mathfrak{A}$ Y	
morning rise	10130 May 03 09:21	5° $\mathfrak{B}$ 49'39		inferior conj	10131 Apr 12 14:16	26° $\mathfrak{Y}$ 06'32	2°44'53
direct	10130 May 08 18:30	3° $\mathfrak{B}$ 26'58		minimum elong	10131 Apr 12 12:16	26° $\mathfrak{Y}$ 13'32	2°44'17
morning max el	10130 May 19 13:17	9° $\mathfrak{B}$ 53'04	23°44'50	min. Earth dist.	10131 Apr 12 13:18	26° $\mathfrak{Y}$ 09'54	0.68584 AU
desc. node	10130 May 19 14:20	9° $\mathfrak{B}$ 55'42		morning rise	10131 Apr 17 17:32	19° $\mathfrak{Y}$ 55'11	
	10130 Jun 04 10:49	0° $\mathbb{I}$		direct	10131 Apr 22 13:01	17° $\mathfrak{Y}$ 52'23	
morning set	10130 Jun 23 19:43	0° $\mathfrak{B}$ 20'12		morning max el	10131 May 02 00:54	23° $\mathfrak{Y}$ 26'50	22°15'45
	10130 Jun 23 14:58	0° $\mathfrak{B}$		desc. node	10131 May 06 11:12	28° $\mathfrak{Y}$ 22'13	
max. Earth dist.	10130 Jun 27 16:11	7° $\mathfrak{B}$ 00'44	1.38741 AU		10131 May 07 19:09	0° $\mathfrak{B}$	
					10131 May 28 19:37	0° $\mathbb{I}$	
superior conj	10130 Jul 05 03:01	20° $\mathfrak{B}$ 35'53	-1°07'10	morning set	10131 Jun 04 09:24	10° $\mathbb{I}$ 25'05	
minimum elong	10130 Jul 05 07:28	20° $\mathfrak{B}$ 56'49	1°06'53	max. Earth dist.	10131 Jun 09 15:02	19° $\mathbb{I}$ 03'27	1.41006 AU
	10130 Jul 10 00:49	0° $\Omega$			10131 Jun 15 23:28	0° $\mathfrak{B}$	
asc. node	10130 Jul 12 13:07	4° $\Omega$ 54'01					
evening rise	10130 Jul 14 06:08	8° $\Omega$ 14'25		superior conj	10131 Jun 17 09:36	2° $\mathfrak{B}$ 31'20	-1°38'09
	10130 Jul 26 14:57	0° $\mathbb{M}$		minimum elong	10131 Jun 17 15:46	2° $\mathfrak{B}$ 58'51	1°37'52
evening max el	10130 Jul 30 12:27	4° $\mathbb{M}$ 39'15	18°50'31	evening rise	10131 Jun 27 18:04	21° $\mathfrak{B}$ 33'00	
retrograde	10130 Aug 07 23:05	8° $\mathbb{M}$ 51'46		asc. node	10131 Jun 29 10:05	24° $\mathfrak{B}$ 39'40	
evening set	10130 Aug 09 21:36	8° $\mathbb{M}$ 39'18			10131 Jul 02 07:40	0° $\Omega$	
desc. node	10130 Aug 15 13:12	6° $\mathbb{M}$ 03'58		evening max el	10131 Jul 13 19:10	17° $\Omega$ 11'01	18°17'43
inferior conj	10130 Aug 18 01:29	4° $\mathbb{M}$ 19'40	-0°46'39	retrograde	10131 Jul 21 02:11	20° $\Omega$ 51'27	
minimum elong	10130 Aug 17 23:32	4° $\mathbb{M}$ 23'10	0°46'06	evening set	10131 Jul 23 07:24	20° $\Omega$ 31'48	
min. Earth dist.	10130 Aug 21 03:20	2° $\mathbb{M}$ 07'42	0.56767 AU	inferior conj	10131 Jul 30 15:51	15° $\Omega$ 51'51	0°49'28
	10130 Aug 24 14:07	30° $\mathfrak{A}$ 2		minimum elong	10131 Jul 30 17:29	15° $\Omega$ 48'25	0°48'32
morning rise	10130 Aug 25 22:12	29° $\Omega$ 21'17		desc. node	10131 Aug 02 10:24	13° $\Omega$ 31'39	

min. Earth dist.	10131 Aug 03 00:36	13°02'54	0.58800 AU	desc. node	10132 Jul 19 07:34	21°04'55	
morning rise	10131 Aug 07 00:10	10°01'30		direct	10132 Jul 25 11:39	19°05'42	
direct	10131 Aug 13 05:43	8°03'40		morning max el	10132 Aug 08 18:05	27°05'40	27°55'13
morning max el	10131 Aug 27 14:53	16°01'56	27°24'13		10132 Aug 10 18:34	0°01	
	10131 Sep 07 19:57	0°00			10132 Aug 31 14:31	0°00	
asc. node	10131 Sep 25 10:15	0°03'11		morning set	10132 Sep 10 19:16	19°00'32	12
	10131 Sep 25 02:34	0°01		asc. node	10132 Sep 11 07:07	20°00'33	38
morning set	10131 Sep 27 15:49	5°01'17	19		10132 Sep 15 17:16	0°01	
				max. Earth dist.	10132 Sep 16 15:29	2°01'27	1.31702 AU
superior conj	10131 Oct 04 16:10	20°03'05	1°20'46	superior conj	10132 Sep 18 02:53	5°01'16	1°03'38
minimum elong	10131 Oct 04 14:03	20°02'41	1°20'38	minimum elong	10132 Sep 18 00:40	5°03'59	1°03'16
max. Earth dist.	10131 Oct 04 07:21	19°04'70	1.31484 AU	evening rise	10132 Sep 24 20:39	20°04'31	
	10131 Oct 08 21:58	0°00			10132 Sep 29 15:16	0°00	
evening rise	10131 Oct 11 10:12	5°00'26	07	desc. node	10132 Oct 15 05:31	25°00'41	48
	10131 Oct 24 06:15	0°00			10132 Oct 18 20:47	0°00	
desc. node	10131 Oct 29 08:18	7°00'56	48	evening max el	10132 Oct 21 07:21	2°00'29	32 25°06'45
evening max el	10131 Nov 09 14:58	21°00'37	16 26°26'08	retrograde	10132 Nov 04 04:04	9°00'27	50
retrograde	10131 Nov 23 13:09	28°00'43	22	evening set	10132 Nov 09 21:12	8°00'13	53
evening set	10131 Nov 30 03:46	26°00'56	23	min. Earth dist.	10132 Nov 14 19:14	5°00'32	19 0.57075 AU
min. Earth dist.	10131 Dec 04 04:26	24°00'21	21 0.59055 AU	inferior conj	10132 Nov 17 14:31	3°00'40	55 -5°23'05
inferior conj	10131 Dec 07 08:37	21°00'56	30 -4°27'08	minimum elong	10132 Nov 17 20:30	3°00'30	59 5°21'50
minimum elong	10131 Dec 07 16:29	21°00'41	29 4°24'35		10132 Nov 24 06:02	30°00'00	
morning rise	10131 Dec 15 07:48	17°00'23	38	morning rise	10132 Nov 25 22:07	29°00'00	30'18
direct	10131 Dec 17 11:45	17°00'07	19	direct	10132 Nov 28 07:17	29°00'00	13'54
asc. node	10131 Dec 22 10:13	18°00'37	24		10132 Dec 02 04:06	0°00	
morning max el	10131 Dec 25 10:50	21°00'01	41 18°21'56	morning max el	10132 Dec 07 11:54	3°00'38	17 19°10'29
	10132 Jan 01 06:21	0°00		asc. node	10132 Dec 08 07:15	4°00'26	39
morning set	10132 Jan 10 07:02	16°00'18	34		10132 Dec 23 22:52	0°00	
	10132 Jan 17 12:21	0°00		morning set	10132 Dec 24 07:27	0°00	42'29
superior conj	10132 Jan 19 11:31	3°00'37	53 0°43'43	superior conj	10133 Jan 01 12:58	16°00'35	02 1°09'29
minimum elong	10132 Jan 19 14:22	3°00'50	54 0°43'42	minimum elong	10133 Jan 01 16:03	17°00'31	12'58 1°09'31
desc. node	10132 Jan 25 07:26	14°00'02	47	max. Earth dist.	10133 Jan 08 06:33	29°00'33	21 1.38580 AU
max. Earth dist.	10132 Jan 27 00:36	17°00'00	29 1.40767 AU		10133 Jan 08 12:28	0°00	
evening rise	10132 Jan 31 12:22	24°00'32	37	desc. node	10133 Jan 11 04:20	4°00'43	19
	10132 Feb 03 21:08	0°00		evening rise	10133 Jan 12 01:21	6°00'14	44
	10132 Feb 24 07:56	0°00			10133 Jan 26 21:01	0°00	
evening max el	10132 Mar 05 20:25	12°00'29	20 23°26'25	evening max el	10133 Feb 16 10:00	26°00'18	04 24°45'25
retrograde	10132 Mar 16 11:31	18°00'46	10		10133 Feb 20 15:17	0°00	
asc. node	10132 Mar 19 08:40	18°00'06	18	retrograde	10133 Feb 28 02:42	3°00'07	15
evening set	10132 Mar 21 13:23	16°00'38	52	evening set	10133 Mar 05 16:41	0°00'47	39
inferior conj	10132 Mar 26 23:10	10°00'11	42 2°13'47	asc. node	10133 Mar 06 05:53	0°00'18	14
minimum elong	10132 Mar 26 20:58	10°00'19	17 2°13'06		10133 Mar 06 13:32	30°00'00	
min. Earth dist.	10132 Mar 26 10:06	10°00'56	39 0.68511 AU	min. Earth dist.	10133 Mar 10 05:33	25°00'14	016 0.68024 AU
morning rise	10132 Apr 01 04:31	4°00'06	16	inferior conj	10133 Mar 11 06:21	24°00'17	58 1°33'32
direct	10132 Apr 05 10:31	2°00'25	15	minimum elong	10133 Mar 11 04:26	24°00'24	23 1°32'56
morning max el	10132 Apr 13 17:54	7°00'10	53 20°53'40	morning rise	10133 Mar 16 16:22	18°00'19	51
desc. node	10132 Apr 22 08:03	17°00'31	35	direct	10133 Mar 20 09:44	17°00'00	15
	10132 May 01 03:11	0°00		morning max el	10133 Mar 27 18:25	21°00'06	25 19°44'00
morning set	10132 May 13 21:25	19°00'21	19		10133 Apr 04 02:55	0°00	
	10132 May 20 14:29	0°00		desc. node	10133 Apr 09 04:52	7°00'12	11
max. Earth dist.	10132 May 21 19:40	1°00'11	58'00 1.43024 AU	greatest brilliancy	10133 Apr 09 13:25	7°00'43	27 -0.6m
superior conj	10132 May 28 18:18	13°00'27	39 -2°02'09	morning set	10133 Apr 22 20:00	27°00'45	56
minimum elong	10132 May 28 23:50	13°00'51	03 2°02'14		10133 Apr 24 06:47	0°00	
	10132 Jun 07 07:11	0°00		max. Earth dist.	10133 May 04 07:15	15°00'39	59 1.44563 AU
evening rise	10132 Jun 09 15:20	4°00'09	35	superior conj	10133 May 09 02:37	23°00'21	13 -2°12'50
asc. node	10132 Jun 15 07:07	14°00'09	31	minimum elong	10133 May 09 03:16	23°00'23	49 2°13'10
	10132 Jun 26 02:15	0°00			10133 May 13 04:42	0°00	
evening max el	10132 Jun 26 07:13	0°00'12	22 18°04'49	evening rise	10133 May 22 17:04	15°00'11	52'52
retrograde	10132 Jul 02 21:53	3°00'35	47		10133 May 31 02:55	0°00	
evening set	10132 Jul 05 10:56	3°00'05	33	asc. node	10133 Jun 02 04:11	3°00'17	16
	10132 Jul 10 01:39	30°00'00		evening max el	10133 Jun 09 21:00	13°00'33	36 18°10'48
inferior conj	10132 Jul 12 02:14	28°00'05	51 1°59'37	retrograde	10133 Jun 16 05:46	16°00'54	42
minimum elong	10132 Jul 12 05:03	27°00'58	59 1°58'22	evening set	10133 Jun 19 02:42	16°00'11	21
min. Earth dist.	10132 Jul 15 06:05	25°00'02	28 0.61060 AU	inferior conj	10133 Jun 25 04:38	10°00'53	19 2°45'05
morning rise	10132 Jul 18 20:33	22°00'07	39				

minimum elong	10133 Jun 25 07:04	10°☿46'36	2°44'08	min. Earth dist.	10134 Jun 10 20:10	21°♄38'38	0.65182 AU
min. Earth dist.	10133 Jun 27 20:34	7°☿58'29	0.63259 AU	morning rise	10134 Jun 14 13:26	17°♄47'54	
morning rise	10133 Jul 01 09:51	4°☿40'48		direct	10134 Jun 21 02:37	15°♄04'10	
desc. node	10133 Jul 06 04:42	2°☿19'09		desc. node	10134 Jun 23 01:45	15°♄17'14	
direct	10133 Jul 08 03:13	2°☿06'47		morning max el	10134 Jul 04 12:30	22°♄58'26	27°06'53
morning max el	10133 Jul 22 02:04	10°☿09'32	27°47'57		10134 Jul 10 17:36	0°☿	
	10133 Aug 06 14:36	0°♊			10134 Jul 30 21:50	0°♊	
	10133 Aug 23 22:41	0°♋		morning set	10134 Aug 09 02:46	16°♊46'12	
morning set	10133 Aug 25 15:50	3°♋24'04		max. Earth dist.	10134 Aug 13 12:29	25°♊30'33	1.33649 AU
asc. node	10133 Aug 29 03:57	10°♋35'33			10134 Aug 15 16:54	0°♋	
max. Earth dist.	10133 Aug 30 18:18	13°♋57'52	1.32423 AU	asc. node	10134 Aug 16 00:49	0°♋41'13	
superior conj	10133 Sep 02 10:33	19°♋43'08	0°41'33	superior conj	10134 Aug 17 13:05	3°♋51'16	0°14'57
minimum elong	10133 Sep 02 08:45	19°♋33'25	0°41'04	minimum elong	10134 Aug 17 12:20	3°♋47'17	0°14'33
	10133 Sep 07 03:46	0°♌		behind sun begin	10134 Aug 17 09:56	3°♋34'42	
evening rise	10133 Sep 09 08:09	4°♌42'44		behind sun end	10134 Aug 17 14:43	3°♋59'52	
	10133 Sep 22 17:42	0°♍		evening rise	10134 Aug 24 18:54	19°♋15'52	
desc. node	10133 Oct 02 02:46	12°♍06'07			10134 Aug 30 01:12	0°♌	
evening max el	10133 Oct 02 18:27	12°♍44'53	23°29'06	evening max el	10134 Sep 14 08:11	22°♌55'57	21°50'13
retrograde	10133 Oct 16 05:58	19°♍28'20		desc. node	10134 Sep 18 23:59	26°♌41'37	
evening set	10133 Oct 20 14:22	18°♍47'10		retrograde	10134 Sep 26 20:39	29°♌09'28	
min. Earth dist.	10133 Oct 27 04:26	15°♍40'47	0.55525 AU	evening set	10134 Sep 29 18:42	28°♌50'19	
inferior conj	10133 Oct 29 00:16	14°♍36'12	-5°43'48	inferior conj	10134 Oct 08 19:21	24°♌52'13	-5°10'42
minimum elong	10133 Oct 28 23:36	14°♍37'12	5°43'30	minimum elong	10134 Oct 08 11:12	25°♌03'37	5°09'04
morning rise	10133 Nov 06 10:42	10°♍43'24		min. Earth dist.	10134 Oct 08 11:40	25°♌02'58	0.54703 AU
direct	10133 Nov 09 07:44	10°♍23'11		morning rise	10134 Oct 17 04:58	21°♌04'28	
morning max el	10133 Nov 20 00:14	15°♍26'06	20°21'52	direct	10134 Oct 20 18:18	20°♌36'48	
asc. node	10133 Nov 25 04:14	21°♍26'18		morning max el	10134 Nov 01 23:08	26°♌23'17	21°54'23
	10133 Nov 30 15:07	0°♎			10134 Nov 05 09:04	0°♍	
morning set	10133 Dec 08 13:53	15°♎21'10		asc. node	10134 Nov 12 01:09	9°♍21'09	
	10133 Dec 15 16:47	0°♏		morning set	10134 Nov 22 23:54	0°♎07'40	
					10134 Nov 22 22:26	0°♎	
superior conj	10133 Dec 16 03:28	0°♏54'08	1°27'02	superior conj	10134 Nov 30 03:13	15°♎15'29	1°37'00
minimum elong	10133 Dec 16 05:49	1°♏06'02	1°27'15	minimum elong	10134 Nov 30 04:25	15°♎21'45	1°37'22
max. Earth dist.	10133 Dec 21 13:53	11°♏36'51	1.36451 AU	max. Earth dist.	10134 Dec 04 03:00	23°♎30'20	1.34585 AU
evening rise	10133 Dec 25 09:59	18°♏47'34			10134 Dec 07 09:26	0°♏	
desc. node	10133 Dec 29 01:18	25°♏17'27		evening rise	10134 Dec 08 10:39	2°♏01'49	
	10133 Dec 31 19:11	0°♐		desc. node	10134 Dec 15 22:18	15°♏40'37	
	10134 Jan 21 01:16	0°♑			10134 Dec 24 18:26	0°♐	
evening max el	10134 Jan 29 23:28	10°♑07'22	25°56'18	evening max el	10135 Jan 12 12:57	23°♐49'24	26°51'41
retrograde	10134 Feb 11 13:00	17°♑17'34			10135 Jan 20 22:05	0°♑	
evening set	10134 Feb 17 15:08	14°♑48'31		retrograde	10135 Jan 25 17:36	1°♑09'57	
asc. node	10134 Feb 21 03:06	11°♑11'32			10135 Jan 30 04:17	30°♒	
min. Earth dist.	10134 Feb 21 21:21	10°♑15'57	0.67137 AU	evening set	10135 Feb 01 06:49	28°♒35'51	
inferior conj	10134 Feb 23 09:53	8°♑21'30	0°44'17	min. Earth dist.	10135 Feb 05 07:12	24°♒37'38	0.65871 AU
minimum elong	10134 Feb 23 08:47	8°♑24'56	0°44'03	inferior conj	10135 Feb 07 07:36	22°♒17'18	-0°13'47
morning rise	10134 Mar 01 03:03	2°♑32'36		minimum elong	10135 Feb 07 07:58	22°♒16'12	0°13'19
direct	10134 Mar 04 09:01	1°♑32'19		transit middle	10135 Feb 07 07:58	22°♒16'12	0°13'19
morning max el	10134 Mar 11 02:34	5°♑11'31	18°49'44	transit begin	10135 Feb 07 06:19	22°♒20'59	
desc. node	10134 Mar 27 01:39	27°♑15'45		transit end	10135 Feb 07 09:37	22°♒11'25	
	10134 Mar 28 20:03	0°♒		asc. node	10135 Feb 08 00:16	21°♒29'09	
morning set	10134 Apr 02 04:50	6°♒47'47		morning rise	10135 Feb 13 10:17	16°♒39'55	
max. Earth dist.	10134 Apr 17 00:34	29°♒56'32	1.45451 AU	direct	10135 Feb 16 06:19	15°♒55'52	
	10134 Apr 17 01:27	0°♓		morning max el	10135 Feb 22 16:34	19°♒20'23	18°11'58
superior conj	10134 Apr 18 14:43	2°♓26'08	-2°04'25		10135 Mar 02 20:48	0°♓	
minimum elong	10134 Apr 18 08:04	2°♓00'01	2°04'16	morning set	10135 Mar 13 16:25	17°♓11'24	
evening rise	10134 May 03 19:26	26°♓37'03		desc. node	10135 Mar 13 22:26	17°♓35'40	
	10134 May 05 21:42	0°♔			10135 Mar 21 16:08	0°♒	
asc. node	10134 May 20 01:18	21°♔55'38		superior conj	10135 Mar 28 20:53	11°♒22'01	-1°36'25
evening max el	10134 May 24 09:28	27°♔07'06	18°34'53	minimum elong	10135 Mar 28 11:22	10°♒44'41	1°35'31
	10134 May 28 04:58	0°♕		max. Earth dist.	10135 Mar 30 20:28	14°♒28'27	1.45604 AU
retrograde	10134 May 30 21:48	0°♕39'41			10135 Apr 09 19:23	0°♓	
	10134 Jun 02 13:16	30°♓		evening rise	10135 Apr 13 22:58	6°♓27'35	
evening set	10134 Jun 03 02:35	29°♓41'47		greatest brilliancy	10135 Apr 25 16:56	24°♓36'35	-0.7m
inferior conj	10134 Jun 08 19:04	24°♓06'53	3°10'06		10135 Apr 29 08:03	0°♔	
minimum elong	10134 Jun 08 20:25	24°♓02'45	3°09'31				

asc. node	10135 May 06 22:26	9° $\Pi$ 54'21			10136 Apr 01 20:13	0° $\mathcal{B}$	
evening max el	10135 May 07 18:09	10° $\Pi$ 45'52	19°16'09	greatest brilliancy	10136 Apr 07 06:10	8° $\mathcal{B}$ 00'25	-0.6m
retrograde	10135 May 14 18:27	14° $\Pi$ 42'35		evening max el	10136 Apr 19 21:35	24° $\mathcal{B}$ 27'06	20°12'56
evening set	10135 May 18 07:27	13° $\Pi$ 29'24		asc. node	10136 Apr 22 19:35	27° $\mathcal{B}$ 01'39	
inferior conj	10135 May 23 17:57	7° $\Pi$ 39'16	3°18'48	retrograde	10136 Apr 27 17:02	28° $\mathcal{B}$ 58'09	
minimum elong	10135 May 23 18:06	7° $\Pi$ 38'46	3°18'24	evening set	10136 May 01 15:01	27° $\mathcal{B}$ 29'30	
min. Earth dist.	10135 May 25 03:57	5° $\Pi$ 48'50	0.66711 AU	inferior conj	10136 May 06 22:29	21° $\mathcal{B}$ 25'53	3°14'15
morning rise	10135 May 29 04:20	1° $\Pi$ 18'56		minimum elong	10136 May 06 21:34	21° $\mathcal{B}$ 29'00	3°13'50
	10135 May 30 21:30	30° $\mathcal{K}$ $\mathcal{B}$		min. Earth dist.	10136 May 07 18:11	20° $\mathcal{B}$ 18'49	0.67799 AU
direct	10135 Jun 04 08:36	28° $\mathcal{B}$ 36'28		morning rise	10136 May 12 03:51	15° $\mathcal{B}$ 07'25	
	10135 Jun 09 06:45	0° $\Pi$		direct	10136 May 17 20:24	12° $\mathcal{B}$ 35'26	
desc. node	10135 Jun 09 22:46	0° $\Pi$ 22'22		desc. node	10136 May 26 19:44	17° $\mathcal{B}$ 05'11	
morning max el	10135 Jun 16 23:04	6° $\Pi$ 08'25	25°59'47	morning max el	10136 May 29 08:44	19° $\mathcal{B}$ 29'48	24°36'12
	10135 Jul 05 08:56	0° $\mathcal{E}$			10136 Jun 07 06:57	0° $\Pi$	
morning set	10135 Jul 23 00:28	29° $\mathcal{E}$ 28'42			10136 Jun 27 12:09	0° $\mathcal{E}$	
	10135 Jul 23 07:14	0° $\mathcal{Q}$		morning set	10136 Jul 04 04:20	11° $\mathcal{E}$ 19'51	
max. Earth dist.	10135 Jul 26 20:11	6° $\mathcal{Q}$ 41'06	1.35348 AU	max. Earth dist.	10136 Jul 07 19:03	17° $\mathcal{E}$ 47'02	1.37432 AU
					10136 Jul 14 07:16	0° $\mathcal{Q}$	
superior conj	10135 Aug 01 07:52	17° $\mathcal{Q}$ 33'11	-0°15'27	superior conj	10136 Jul 14 15:47	0° $\mathcal{Q}$ 41'09	-0°48'10
minimum elong	10135 Aug 01 08:48	17° $\mathcal{Q}$ 37'52	0°15'35	minimum elong	10136 Jul 14 18:54	0° $\mathcal{Q}$ 56'17	0°48'00
behind sun begin	10135 Aug 01 07:16	17° $\mathcal{Q}$ 30'04		asc. node	10136 Jul 19 18:36	10° $\mathcal{Q}$ 46'52	
behind sun end	10135 Aug 01 10:20	17° $\mathcal{Q}$ 45'40		evening rise	10136 Jul 23 05:19	17° $\mathcal{Q}$ 40'40	
asc. node	10135 Aug 02 21:42	20° $\mathcal{Q}$ 46'15			10136 Jul 29 14:34	0° $\mathcal{P}$	
	10135 Aug 07 08:44	0° $\mathcal{P}$		evening max el	10136 Aug 08 23:22	15° $\mathcal{P}$ 03'44	19°18'48
evening rise	10135 Aug 09 02:45	3° $\mathcal{P}$ 37'23		retrograde	10136 Aug 18 06:59	19° $\mathcal{P}$ 41'15	
	10135 Aug 24 04:04	0° $\mathcal{A}$		evening set	10136 Aug 20 03:11	19° $\mathcal{P}$ 31'11	
evening max el	10135 Aug 27 08:53	3° $\mathcal{A}$ 36'50	20°24'32	desc. node	10136 Aug 22 18:27	18° $\mathcal{P}$ 44'32	
desc. node	10135 Sep 05 21:12	8° $\mathcal{A}$ 58'43		inferior conj	10136 Aug 28 17:44	15° $\mathcal{P}$ 22'31	-1°51'06
retrograde	10135 Sep 07 09:02	9° $\mathcal{A}$ 04'33		minimum elong	10136 Aug 28 12:48	15° $\mathcal{P}$ 30'39	1°49'19
evening set	10135 Sep 09 09:44	8° $\mathcal{A}$ 54'13		min. Earth dist.	10136 Aug 31 08:49	13° $\mathcal{P}$ 39'01	0.55818 AU
inferior conj	10135 Sep 18 12:26	4° $\mathcal{A}$ 56'54	-3°44'22	morning rise	10136 Sep 05 19:38	10° $\mathcal{P}$ 45'31	
minimum elong	10135 Sep 18 03:02	5° $\mathcal{A}$ 10'37	3°41'21	direct	10136 Sep 10 22:37	9° $\mathcal{P}$ 45'32	
min. Earth dist.	10135 Sep 19 20:25	4° $\mathcal{A}$ 10'15	0.54796 AU	morning max el	10136 Sep 25 00:40	16° $\mathcal{P}$ 53'05	25°24'14
morning rise	10135 Sep 26 19:45	0° $\mathcal{A}$ 53'04			10136 Oct 05 17:57	0° $\mathcal{A}$	
direct	10135 Oct 01 03:06	0° $\mathcal{A}$ 13'12		asc. node	10136 Oct 15 18:55	17° $\mathcal{A}$ 06'43	
morning max el	10135 Oct 14 12:50	6° $\mathcal{A}$ 43'27	23°40'08	morning set	10136 Oct 21 23:03	29° $\mathcal{A}$ 41'44	
asc. node	10135 Oct 29 22:03	27° $\mathcal{A}$ 58'17			10136 Oct 22 02:28	0° $\mathcal{M}$	
	10135 Oct 31 00:44	0° $\mathcal{M}$		superior conj	10136 Oct 28 19:02	14° $\mathcal{M}$ 39'29	1°37'05
morning set	10135 Nov 07 11:32	14° $\mathcal{M}$ 56'24		minimum elong	10136 Oct 28 17:57	14° $\mathcal{M}$ 33'30	1°37'20
superior conj	10135 Nov 14 09:14	29° $\mathcal{M}$ 53'17	1°40'09	max. Earth dist.	10136 Oct 30 04:02	17° $\mathcal{M}$ 40'56	1.32105 AU
minimum elong	10135 Nov 14 09:12	29° $\mathcal{M}$ 53'10	1°40'31	evening rise	10136 Nov 04 21:55	29° $\mathcal{M}$ 58'18	
	10135 Nov 14 10:28	0° $\mathcal{X}$			10136 Nov 04 22:15	0° $\mathcal{X}$	
max. Earth dist.	10135 Nov 16 23:57	5° $\mathcal{X}$ 29'45	1.33114 AU	desc. node	10136 Nov 18 16:26	25° $\mathcal{X}$ 29'29	
evening rise	10135 Nov 21 23:42	15° $\mathcal{X}$ 48'22			10136 Nov 21 12:42	0° $\mathcal{Z}$	
	10135 Nov 29 11:27	0° $\mathcal{Z}$		evening max el	10136 Dec 07 11:33	20° $\mathcal{Z}$ 08'19	27°28'20
desc. node	10135 Dec 02 19:20	5° $\mathcal{Z}$ 47'16		retrograde	10136 Dec 21 07:30	27° $\mathcal{Z}$ 25'57	
	10135 Dec 19 10:05	0° $\mathcal{A}$		evening set	10136 Dec 28 08:21	25° $\mathcal{Z}$ 03'36	
evening max el	10135 Dec 26 01:35	7° $\mathcal{A}$ 14'00	27°24'29	min. Earth dist.	10137 Jan 01 01:22	22° $\mathcal{Z}$ 05'09	0.62350 AU
retrograde	10136 Jan 08 16:06	14° $\mathcal{A}$ 36'17		inferior conj	10137 Jan 03 23:13	19° $\mathcal{Z}$ 20'51	-2°32'30
evening set	10136 Jan 15 13:32	12° $\mathcal{A}$ 03'41		minimum elong	10137 Jan 04 04:15	19° $\mathcal{Z}$ 08'57	2°30'07
min. Earth dist.	10136 Jan 19 09:06	8° $\mathcal{A}$ 37'47	0.64254 AU	morning rise	10137 Jan 11 02:33	14° $\mathcal{Z}$ 14'42	
inferior conj	10136 Jan 21 21:02	5° $\mathcal{A}$ 59'50	-1°19'59	asc. node	10137 Jan 11 18:30	14° $\mathcal{Z}$ 03'18	
minimum elong	10136 Jan 21 23:31	5° $\mathcal{A}$ 53'15	1°18'34	direct	10137 Jan 13 08:33	13° $\mathcal{Z}$ 51'53	
asc. node	10136 Jan 25 21:23	2° $\mathcal{A}$ 10'29		morning max el	10137 Jan 20 03:00	17° $\mathcal{Z}$ 18'51	17°48'05
morning rise	10136 Jan 28 11:20	0° $\mathcal{A}$ 36'40			10137 Jan 29 04:30	0° $\mathcal{A}$	
direct	10136 Jan 30 23:12	0° $\mathcal{A}$ 05'07		morning set	10137 Feb 04 23:58	11° $\mathcal{A}$ 52'49	
morning max el	10136 Feb 06 09:47	3° $\mathcal{A}$ 26'02	17°51'14	desc. node	10137 Feb 14 16:02	28° $\mathcal{A}$ 46'06	
morning set	10136 Feb 23 08:41	28° $\mathcal{A}$ 59'23			10137 Feb 15 09:26	0° $\mathcal{H}$	
	10136 Feb 23 23:03	0° $\mathcal{H}$		superior conj	10137 Feb 16 10:19	1° $\mathcal{H}$ 45'06	-0°13'13
desc. node	10136 Feb 28 19:14	8° $\mathcal{H}$ 07'24		minimum elong	10137 Feb 16 09:02	1° $\mathcal{H}$ 39'46	0°12'46
superior conj	10136 Mar 07 15:50	20° $\mathcal{H}$ 59'40	-0°56'03	behind sun begin	10137 Feb 16 03:36	1° $\mathcal{H}$ 16'51	
minimum elong	10136 Mar 07 09:40	20° $\mathcal{H}$ 34'50	0°55'06	behind sun end	10137 Feb 16 14:28	2° $\mathcal{H}$ 02'38	
max. Earth dist.	10136 Mar 12 15:48	28° $\mathcal{H}$ 58'03	1.45016 AU	max. Earth dist.	10137 Feb 23 08:05	13° $\mathcal{H}$ 08'29	1.43757 AU
	10136 Mar 13 07:30	0° $\mathcal{Y}$		evening rise	10137 Mar 03 01:38	25° $\mathcal{H}$ 21'50	
evening rise	10136 Mar 23 12:07	15° $\mathcal{Y}$ 50'01					

	10137 Mar 06 01:56	0°♿		superior conj	10138 Jan 29 05:23	13°♊39'48	0°25'05
	10137 Mar 26 21:09	0°♄		minimum elong	10138 Jan 29 07:21	13°♊48'30	0°25'08
evening max el	10137 Apr 02 19:31	8°♄09'56	21°22'25	desc. node	10138 Feb 01 12:52	19°♊28'14	
asc. node	10137 Apr 09 16:45	13°♄03'02		max. Earth dist.	10138 Feb 05 20:13	26°♊47'25	1.41968 AU
retrograde	10137 Apr 11 15:26	13°♄21'42			10138 Feb 07 18:41	0°♋	
evening set	10137 Apr 15 23:27	11°♄37'36		evening rise	10138 Feb 11 05:20	5°♋35'27	
inferior conj	10137 Apr 21 06:19	5°♄22'43	2°58'31		10138 Feb 27 07:56	0°♿	
minimum elong	10137 Apr 21 04:36	5°♄28'40	2°57'59	evening max el	10138 Mar 16 12:50	21°♿54'47	22°40'12
min. Earth dist.	10137 Apr 21 12:42	5°♄00'29	0.68429 AU	retrograde	10138 Mar 26 11:58	27°♿48'22	
	10137 Apr 25 12:01	30°♋♿		asc. node	10138 Mar 27 13:59	27°♿42'37	
morning rise	10137 Apr 26 09:32	29°♿08'15		evening set	10138 Mar 31 07:06	25°♿49'15	
direct	10137 May 01 12:55	26°♿53'23		inferior conj	10138 Apr 05 15:22	19°♿25'48	2°32'49
	10137 May 08 12:15	0°♄		minimum elong	10138 Apr 05 13:13	19°♿33'14	2°32'10
morning max el	10137 May 11 18:36	2°♄58'15	23°06'24	min. Earth dist.	10138 Apr 05 09:15	19°♿47'01	0.68611 AU
desc. node	10137 May 13 16:39	4°♄59'47		morning rise	10138 Apr 10 19:11	13°♿16'47	
	10137 Jun 01 08:48	0°♄		direct	10138 Apr 15 08:59	11°♿22'56	
morning set	10137 Jun 15 09:11	22°♄06'32		morning max el	10138 Apr 24 07:57	16°♿35'24	21°39'29
max. Earth dist.	10137 Jun 19 15:29	29°♄20'00	1.39713 AU	desc. node	10138 Apr 30 13:31	23°♿46'07	
	10137 Jun 20 00:44	0°♄			10138 May 05 06:19	0°♄	
					10138 May 25 10:09	0°♄	
superior conj	10137 Jun 27 08:57	13°♄06'32	-1°20'49	morning set	10138 May 26 11:19	1°♄39'51	
minimum elong	10137 Jun 27 14:16	13°♄31'03	1°20'29	max. Earth dist.	10138 Jun 01 16:35	11°♄45'10	1.41915 AU
	10137 Jul 06 07:20	0°♄					
evening rise	10137 Jul 06 23:39	1°♄18'18		superior conj	10138 Jun 09 06:45	24°♄38'12	-1°49'32
asc. node	10137 Jul 06 15:33	0°♄39'25		minimum elong	10138 Jun 09 13:04	25°♄05'44	1°49'23
evening max el	10137 Jul 23 01:23	27°♄14'58	18°34'10		10138 Jun 12 07:56	0°♄	
	10137 Jul 26 14:37	0°♄		evening rise	10138 Jun 20 05:55	14°♄20'14	
retrograde	10137 Jul 30 22:48	1°♄11'38		asc. node	10138 Jun 23 12:33	20°♄18'59	
evening set	10137 Aug 01 23:56	0°♄56'34			10138 Jun 29 01:52	0°♄	
	10137 Aug 04 12:35	30°♋♄		evening max el	10138 Jul 06 10:53	10°♄00'36	18°09'51
inferior conj	10137 Aug 09 19:31	26°♄28'48	-0°02'56	retrograde	10138 Jul 13 09:22	13°♄31'39	
minimum elong	10137 Aug 09 19:23	26°♄29'02	0°03'10	evening set	10138 Jul 15 18:03	13°♄07'42	
transit middle	10137 Aug 09 19:23	26°♄29'02	0°03'10	inferior conj	10138 Jul 22 18:45	8°♄19'02	1°22'27
transit begin	10137 Aug 09 15:51	26°♄35'50		minimum elong	10138 Jul 22 21:08	8°♄13'40	1°21'16
transit end	10137 Aug 09 22:56	26°♄22'13		min. Earth dist.	10138 Jul 26 02:32	5°♄21'17	0.59758 AU
desc. node	10137 Aug 09 15:41	26°♄36'10		desc. node	10138 Jul 27 12:53	4°♄11'22	
min. Earth dist.	10137 Aug 13 02:15	23°♄58'28	0.57580 AU	morning rise	10138 Jul 29 21:11	2°♄34'08	
morning rise	10137 Aug 17 11:20	21°♄14'47		direct	10138 Aug 05 07:48	0°♄36'57	
direct	10137 Aug 23 08:47	19°♄47'19		morning max el	10138 Aug 19 16:01	8°♄28'52	27°42'11
morning max el	10137 Sep 06 16:49	27°♄21'35	26°49'22		10138 Sep 05 02:07	0°♄	
	10137 Sep 09 06:12	0°♄		asc. node	10138 Sep 19 12:38	26°♄25'25	
	10137 Sep 29 06:01	0°♄		morning set	10138 Sep 20 15:08	28°♄43'07	
asc. node	10137 Oct 02 15:47	6°♄38'10			10138 Sep 21 05:45	0°♄	
morning set	10137 Oct 06 08:51	14°♄19'08		max. Earth dist.	10138 Sep 26 22:07	12°♄20'37	1.31520 AU
superior conj	10137 Oct 13 06:38	29°♄27'50	1°28'18	superior conj	10138 Sep 27 18:10	14°♄11'51	1°14'08
minimum elong	10137 Oct 13 04:47	29°♄17'33	1°28'19	minimum elong	10138 Sep 27 15:56	13°♄59'31	1°13'53
max. Earth dist.	10137 Oct 13 12:36	0°♄01'01	1.31574 AU	evening rise	10138 Oct 04 11:34	28°♄59'39	
	10137 Oct 13 12:25	0°♄			10138 Oct 04 22:52	0°♄	
evening rise	10137 Oct 20 02:39	14°♄24'28			10138 Oct 21 09:20	0°♄	
	10137 Oct 27 22:32	0°♄		desc. node	10138 Oct 23 10:48	2°♄57'36	
desc. node	10137 Nov 05 13:35	14°♄37'33		evening max el	10138 Nov 01 13:39	13°♄41'26	25°55'35
	10137 Nov 17 08:17	0°♄		retrograde	10138 Nov 15 11:22	20°♄43'37	
evening max el	10137 Nov 19 16:27	2°♄20'35	26°58'42	evening set	10138 Nov 21 18:31	19°♄10'12	
retrograde	10137 Dec 03 14:30	9°♄30'19		min. Earth dist.	10138 Nov 26 02:18	16°♄34'49	0.58182 AU
evening set	10137 Dec 10 11:34	7°♄28'04		inferior conj	10138 Nov 29 04:13	14°♄22'34	-4°53'50
min. Earth dist.	10137 Dec 14 07:00	4°♄48'09	0.60271 AU	minimum elong	10138 Nov 29 11:51	14°♄08'53	4°51'43
inferior conj	10137 Dec 17 10:47	2°♄11'48	-3°46'50	morning rise	10138 Dec 07 07:34	9°♄59'03	
minimum elong	10137 Dec 17 18:05	1°♄56'41	3°44'01	direct	10138 Dec 09 13:08	9°♄43'00	
	10137 Dec 20 05:32	30°♋♄		asc. node	10138 Dec 16 12:39	12°♄31'21	
morning rise	10137 Dec 25 03:13	27°♄25'41		morning max el	10138 Dec 17 23:33	13°♄48'51	18°39'52
direct	10137 Dec 27 06:41	27°♄07'55			10138 Dec 29 00:32	0°♄	
asc. node	10137 Dec 29 15:36	27°♄30'36		morning set	10139 Jan 03 03:30	9°♄44'16	
	10138 Jan 02 19:16	0°♄					
morning max el	10138 Jan 03 16:49	0°♄49'49	18°03'41	superior conj	10139 Jan 11 21:13	26°♄33'11	0°55'41
morning set	10138 Jan 19 07:56	25°♄32'45		minimum elong	10139 Jan 12 00:20	26°♄47'47	0°55'38
	10138 Jan 21 17:25	0°♄			10139 Jan 13 17:42	0°♄	

max. Earth dist.	10139 Jan 19 04:20	9° $\approx$ 46'49	1.39849 AU	minimum elong	10139 Dec 26 07:36	10° $\approx$ 24'25	1°18'00
desc. node	10139 Jan 19 09:46	10° $\approx$ 10'35		max. Earth dist.	10140 Jan 01 10:19	22° $\approx$ 05'32	1.37645 AU
evening rise	10139 Jan 23 05:53	16° $\approx$ 45'05		evening rise	10140 Jan 05 03:32	28° $\approx$ 49'25	
	10139 Jan 31 10:30	0° $\approx$			10140 Jan 05 19:31	0° $\approx$	
	10139 Feb 21 22:36	0° $\approx$		desc. node	10140 Jan 06 06:41	0° $\approx$ 48'56	
evening max el	10139 Feb 27 03:14	5° $\approx$ 42'34	24°00'32		10140 Jan 24 19:05	0° $\approx$	
retrograde	10139 Mar 10 05:21	12° $\approx$ 13'42		evening max el	10140 Feb 09 16:26	19° $\approx$ 31'38	25°16'56
asc. node	10139 Mar 14 11:12	10° $\approx$ 49'14		retrograde	10140 Feb 21 18:35	26° $\approx$ 31'32	
evening set	10139 Mar 15 12:28	10° $\approx$ 00'46		evening set	10140 Feb 27 13:54	24° $\approx$ 07'08	
min. Earth dist.	10139 Mar 20 05:38	4° $\approx$ 33'39	0.68360 AU	asc. node	10140 Feb 29 08:24	22° $\approx$ 24'36	
inferior conj	10139 Mar 20 23:45	3° $\approx$ 32'11	1°57'48	min. Earth dist.	10140 Mar 02 23:42	19° $\approx$ 14'51	0.67695 AU
minimum elong	10139 Mar 20 21:36	3° $\approx$ 39'28	1°57'09	inferior conj	10140 Mar 04 05:36	17° $\approx$ 37'50	1°13'44
	10139 Mar 23 17:32	30° $\approx$ 11		minimum elong	10140 Mar 04 03:57	17° $\approx$ 43'11	1°13'16
morning rise	10139 Mar 26 06:48	27° $\approx$ 29'54		morning rise	10140 Mar 09 18:22	11° $\approx$ 43'40	
direct	10139 Mar 30 07:22	25° $\approx$ 58'08		direct	10140 Mar 13 06:40	10° $\approx$ 32'47	
	10139 Apr 06 17:48	0° $\approx$		morning max el	10140 Mar 20 08:03	14° $\approx$ 25'54	19°18'59
morning max el	10139 Apr 07 04:04	0° $\approx$ 25'01	20°22'19		10140 Apr 01 06:21	0° $\approx$	
desc. node	10139 Apr 17 10:20	13° $\approx$ 10'14		greatest brilliancy	10140 Apr 02 04:26	1° $\approx$ 21'51	-0.7m
	10139 Apr 28 21:59	0° $\approx$		desc. node	10140 Apr 03 07:07	3° $\approx$ 01'32	
morning set	10139 May 05 15:19	10° $\approx$ 16'19		morning set	10140 Apr 13 15:20	18° $\approx$ 48'57	
max. Earth dist.	10139 May 15 00:59	25° $\approx$ 04'29	1.43756 AU		10140 Apr 20 20:31	0° $\approx$	
	10139 May 18 02:06	0° $\approx$		max. Earth dist.	10140 Apr 26 15:12	9° $\approx$ 03'01	1.45028 AU
superior conj	10139 May 21 05:09	5° $\approx$ 07'56	-2°08'42	superior conj	10140 Apr 30 03:41	14° $\approx$ 37'17	-2°11'48
minimum elong	10139 May 21 09:10	5° $\approx$ 24'35	2°08'57	minimum elong	10140 Apr 30 01:10	14° $\approx$ 27'17	2°12'02
evening rise	10139 Jun 02 19:31	26° $\approx$ 36'04			10140 May 09 16:25	0° $\approx$	
	10139 Jun 04 18:20	0° $\approx$		evening rise	10140 May 14 11:36	7° $\approx$ 54'47	
asc. node	10139 Jun 10 09:37	9° $\approx$ 40'35		asc. node	10140 May 27 06:41	28° $\approx$ 37'02	
evening max el	10139 Jun 20 00:03	23° $\approx$ 11'28	18°04'58		10140 May 28 05:24	0° $\approx$	
retrograde	10139 Jun 26 10:58	26° $\approx$ 32'17		evening max el	10140 Jun 02 13:31	6° $\approx$ 38'28	18°18'49
evening set	10139 Jun 29 03:24	25° $\approx$ 56'39		retrograde	10140 Jun 08 22:54	10° $\approx$ 03'15	
inferior conj	10139 Jul 05 12:29	20° $\approx$ 48'36	2°21'40	evening set	10140 Jun 11 23:02	9° $\approx$ 13'59	
minimum elong	10139 Jul 05 15:16	20° $\approx$ 41'24	2°20'31	inferior conj	10140 Jun 17 20:30	3° $\approx$ 48'30	2°57'55
min. Earth dist.	10139 Jul 08 11:40	17° $\approx$ 46'33	0.62023 AU	minimum elong	10140 Jun 17 22:31	3° $\approx$ 42'40	2°57'08
morning rise	10139 Jul 12 01:01	14° $\approx$ 43'01		min. Earth dist.	10140 Jun 20 06:17	1° $\approx$ 03'00	0.64118 AU
desc. node	10139 Jul 14 10:01	13° $\approx$ 19'17			10140 Jun 21 05:32	30° $\approx$ 11	
direct	10139 Jul 18 17:46	12° $\approx$ 20'09		morning rise	10140 Jun 23 20:44	27° $\approx$ 32'07	
morning max el	10139 Aug 01 21:43	20° $\approx$ 21'56	27°56'40	desc. node	10140 Jun 30 07:05	24° $\approx$ 52'44	
	10139 Aug 10 04:23	0° $\approx$		direct	10140 Jun 30 12:51	24° $\approx$ 52'32	
	10139 Aug 29 02:14	0° $\approx$			10140 Jul 11 04:49	0° $\approx$	
morning set	10139 Sep 04 15:55	12° $\approx$ 48'44		morning max el	10140 Jul 14 07:18	2° $\approx$ 54'05	27°34'11
asc. node	10139 Sep 06 09:30	16° $\approx$ 23'30			10140 Aug 03 13:13	0° $\approx$	
max. Earth dist.	10139 Sep 10 04:36	24° $\approx$ 29'05	1.31953 AU	morning set	10140 Aug 18 08:48	26° $\approx$ 02'39	
					10140 Aug 20 02:54	0° $\approx$	
superior conj	10139 Sep 12 03:47	28° $\approx$ 46'33	0°54'51	max. Earth dist.	10140 Aug 23 04:10	6° $\approx$ 16'30	1.32880 AU
minimum elong	10139 Sep 12 01:40	28° $\approx$ 34'59	0°54'24	asc. node	10140 Aug 23 06:22	6° $\approx$ 28'00	
	10139 Sep 12 17:09	0° $\approx$					
evening rise	10139 Sep 18 22:41	13° $\approx$ 38'20		superior conj	10140 Aug 26 09:33	13° $\approx$ 06'32	0°30'46
	10139 Sep 27 01:35	0° $\approx$		minimum elong	10140 Aug 26 08:07	12° $\approx$ 58'52	0°30'18
desc. node	10139 Oct 10 08:01	20° $\approx$ 11'02		evening rise	10140 Sep 02 10:07	28° $\approx$ 15'20	
evening max el	10139 Oct 14 02:52	24° $\approx$ 13'46	24°26'19		10140 Sep 03 05:50	0° $\approx$	
	10139 Oct 22 10:25	0° $\approx$			10140 Sep 20 14:43	0° $\approx$	
retrograde	10139 Oct 27 20:38	1° $\approx$ 07'19		evening max el	10140 Sep 24 13:45	4° $\approx$ 22'40	22°46'09
evening set	10139 Nov 02 01:12	0° $\approx$ 07'40		desc. node	10140 Sep 26 05:14	5° $\approx$ 53'19	
	10139 Nov 02 09:14	30° $\approx$ 11		retrograde	10140 Oct 07 17:49	10° $\approx$ 56'28	
min. Earth dist.	10139 Nov 07 13:51	27° $\approx$ 17'56	0.56341 AU	evening set	10140 Oct 11 10:38	10° $\approx$ 26'28	
inferior conj	10139 Nov 10 01:12	25° $\approx$ 14'50	-5°37'29	min. Earth dist.	10140 Oct 18 21:57	7° $\approx$ 04'15	0.55063 AU
minimum elong	10139 Nov 10 04:53	25° $\approx$ 39'15	5°36'51	inferior conj	10140 Oct 20 03:37	6° $\approx$ 21'51	-5°37'00
morning rise	10139 Nov 18 10:43	21° $\approx$ 43'26		minimum elong	10140 Oct 19 23:25	6° $\approx$ 27'53	5°36'24
direct	10139 Nov 21 00:16	21° $\approx$ 25'50		morning rise	10140 Oct 28 13:58	2° $\approx$ 33'27	
morning max el	10139 Nov 30 19:28	26° $\approx$ 05'12	19°38'16	direct	10140 Oct 31 17:17	2° $\approx$ 10'43	
asc. node	10139 Dec 03 09:39	28° $\approx$ 52'11		morning max el	10140 Nov 12 02:07	7° $\approx$ 32'09	20°59'03
	10139 Dec 04 07:39	0° $\approx$		asc. node	10140 Nov 19 06:36	16° $\approx$ 17'28	
morning set	10139 Dec 18 06:48	24° $\approx$ 15'25			10140 Nov 27 04:19	0° $\approx$	
	10139 Dec 21 02:55	0° $\approx$		morning set	10140 Dec 01 15:00	8° $\approx$ 58'21	
superior conj	10139 Dec 26 04:44	10° $\approx$ 10'19	1°17'53	superior conj	10140 Dec 08 23:37	24° $\approx$ 18'55	1°32'07

minimum elong	10140 Dec 09 01:30	24° $\text{♁}$ 28'38	1°32'25		10141 Nov 18 23:55	0° $\text{♁}$	
	10140 Dec 11 18:42	0° $\text{♁}$					
max. Earth dist.	10140 Dec 13 19:12	4° $\text{♁}$ 00'41	1.35606 AU	superior conj	10141 Nov 23 02:20	8° $\text{♁}$ 48'01	1°39'07
evening rise	10140 Dec 17 19:27	11° $\text{♁}$ 41'27		minimum elong	10141 Nov 23 03:00	8° $\text{♁}$ 51'36	1°39'31
desc. node	10140 Dec 23 03:40	21° $\text{♁}$ 19'22		max. Earth dist.	10141 Nov 26 11:25	15° $\text{♁}$ 54'25	1.33907 AU
	10140 Dec 28 07:31	0° $\text{♁}$		evening rise	10141 Dec 01 01:50	25° $\text{♁}$ 10'39	
	10141 Jan 19 00:58	0° $\text{♁}$			10141 Dec 03 14:02	0° $\text{♁}$	
evening max el	10141 Jan 22 05:46	3° $\text{♁}$ 18'36	26°22'10	desc. node	10141 Dec 10 00:42	11° $\text{♁}$ 36'17	
retrograde	10141 Feb 04 02:46	10° $\text{♁}$ 35'22			10141 Dec 21 18:55	0° $\text{♁}$	
evening set	10141 Feb 10 09:44	8° $\text{♁}$ 03'25		evening max el	10142 Jan 04 19:11	16° $\text{♁}$ 54'59	27°08'55
min. Earth dist.	10141 Feb 14 13:17	3° $\text{♁}$ 45'32	0.66639 AU	retrograde	10142 Jan 18 04:56	24° $\text{♁}$ 17'16	
asc. node	10141 Feb 15 05:34	2° $\text{♁}$ 56'21		evening set	10142 Jan 24 21:53	21° $\text{♁}$ 43'12	
inferior conj	10141 Feb 16 06:55	1° $\text{♁}$ 38'55	0°20'44	min. Earth dist.	10142 Jan 28 20:09	17° $\text{♁}$ 58'46	0.65217 AU
minimum elong	10141 Feb 16 06:22	1° $\text{♁}$ 40'36	0°20'45	inferior conj	10142 Jan 31 01:25	15° $\text{♁}$ 29'58	-0°40'55
	10141 Feb 17 15:59	30° $\text{♁}$		minimum elong	10142 Jan 31 02:37	15° $\text{♁}$ 26'36	0°40'05
morning rise	10141 Feb 22 03:51	25° $\text{♁}$ 54'38		asc. node	10142 Feb 02 02:42	13° $\text{♁}$ 16'39	
direct	10141 Feb 25 05:17	25° $\text{♁}$ 01'50		morning rise	10142 Feb 06 08:48	9° $\text{♁}$ 57'59	
morning max el	10141 Mar 03 18:58	28° $\text{♁}$ 33'43	18°31'34	direct	10142 Feb 09 01:05	9° $\text{♁}$ 19'43	
	10141 Mar 05 03:52	0° $\text{♁}$		morning max el	10142 Feb 15 10:37	12° $\text{♁}$ 41'44	18°01'01
desc. node	10141 Mar 21 03:54	23° $\text{♁}$ 12'52			10142 Feb 27 17:00	0° $\text{♁}$	
morning set	10141 Mar 24 10:22	28° $\text{♁}$ 22'32		morning set	10142 Mar 05 10:38	9° $\text{♁}$ 23'55	
	10141 Mar 25 11:03	0° $\text{♁}$		desc. node	10142 Mar 08 00:43	13° $\text{♁}$ 38'34	
					10142 Mar 18 03:56	0° $\text{♁}$	
superior conj	10141 Apr 09 11:02	23° $\text{♁}$ 32'43	-1°54'39				
minimum elong	10141 Apr 09 02:18	22° $\text{♁}$ 58'32	1°54'09	superior conj	10142 Mar 19 20:39	2° $\text{♁}$ 41'26	-1°20'12
max. Earth dist.	10141 Apr 09 09:22	23° $\text{♁}$ 26'12	1.45608 AU	minimum elong	10142 Mar 19 12:01	2° $\text{♁}$ 07'16	1°19'11
	10141 Apr 13 14:01	0° $\text{♁}$		max. Earth dist.	10142 Mar 23 05:15	7° $\text{♁}$ 59'01	1.45442 AU
evening rise	10141 Apr 25 03:43	18° $\text{♁}$ 14'04		evening rise	10142 Apr 04 23:37	27° $\text{♁}$ 48'53	
	10141 May 02 13:53	0° $\text{♁}$			10142 Apr 06 09:39	0° $\text{♁}$	
greatest brilliancy	10141 May 04 00:14	2° $\text{♁}$ 14'52	-0.8m	greatest brilliancy	10142 Apr 18 14:41	18° $\text{♁}$ 33'40	-0.7m
asc. node	10141 May 14 03:46	17° $\text{♁}$ 00'00			10142 Apr 26 20:19	0° $\text{♁}$	
evening max el	10141 May 17 00:36	20° $\text{♁}$ 14'55	18°50'27	evening max el	10142 Apr 30 07:18	3° $\text{♁}$ 56'11	19°38'36
retrograde	10141 May 23 17:10	23° $\text{♁}$ 56'24		asc. node	10142 May 01 00:54	4° $\text{♁}$ 39'11	
evening set	10141 May 27 01:19	22° $\text{♁}$ 52'14		retrograde	10142 May 07 14:50	8° $\text{♁}$ 06'00	
inferior conj	10141 Jun 01 14:53	17° $\text{♁}$ 10'55	3°15'34	evening set	10142 May 11 07:36	6° $\text{♁}$ 46'15	
minimum elong	10141 Jun 01 15:44	17° $\text{♁}$ 08'16	3°15'05	inferior conj	10142 May 16 16:30	0° $\text{♁}$ 50'24	3°18'20
min. Earth dist.	10141 Jun 03 09:38	14° $\text{♁}$ 57'22	0.65886 AU	minimum elong	10142 May 16 16:11	0° $\text{♁}$ 51'29	3°17'56
morning rise	10141 Jun 07 05:29	10° $\text{♁}$ 50'43			10142 May 17 07:39	30° $\text{♁}$	
direct	10141 Jun 13 15:24	8° $\text{♁}$ 05'55		min. Earth dist.	10142 May 17 20:21	29° $\text{♁}$ 17'56	0.67235 AU
desc. node	10141 Jun 17 04:07	8° $\text{♁}$ 48'16		morning rise	10142 May 22 00:25	24° $\text{♁}$ 30'46	
morning max el	10141 Jun 26 17:54	15° $\text{♁}$ 53'11	26°40'51	direct	10142 May 28 00:07	21° $\text{♁}$ 51'34	
	10141 Jul 08 08:54	0° $\text{♁}$		desc. node	10142 Jun 04 01:06	24° $\text{♁}$ 39'04	
	10141 Jul 27 09:02	0° $\text{♁}$		morning max el	10142 Jun 09 03:53	29° $\text{♁}$ 08'45	25°25'35
morning set	10141 Aug 01 14:35	9° $\text{♁}$ 36'28			10142 Jun 09 23:44	0° $\text{♁}$	
max. Earth dist.	10141 Aug 05 17:36	17° $\text{♁}$ 37'21	1.34312 AU		10142 Jul 02 04:20	0° $\text{♁}$	
				morning set	10142 Jul 15 05:19	21° $\text{♁}$ 59'05	
superior conj	10141 Aug 10 09:06	27° $\text{♁}$ 04'40	0°02'27	max. Earth dist.	10142 Jul 18 20:54	28° $\text{♁}$ 42'40	1.36201 AU
minimum elong	10141 Aug 10 08:59	27° $\text{♁}$ 04'03	0°02'09		10142 Jul 19 13:18	0° $\text{♁}$	
behind sun begin	10141 Aug 10 03:14	26° $\text{♁}$ 34'14					
behind sun end	10141 Aug 10 14:45	27° $\text{♁}$ 33'56		superior conj	10142 Jul 24 23:45	10° $\text{♁}$ 34'01	-0°29'09
asc. node	10141 Aug 10 03:12	26° $\text{♁}$ 34'03		minimum elong	10142 Jul 25 01:33	10° $\text{♁}$ 43'02	0°29'09
	10141 Aug 11 18:44	0° $\text{♁}$		asc. node	10142 Jul 28 00:06	16° $\text{♁}$ 38'12	
evening rise	10141 Aug 17 19:51	12° $\text{♁}$ 44'12		evening rise	10142 Aug 02 01:48	26° $\text{♁}$ 59'20	
	10141 Aug 26 16:05	0° $\text{♁}$			10142 Aug 03 13:30	0° $\text{♁}$	
evening max el	10141 Sep 06 07:33	14° $\text{♁}$ 43'58	21°11'40	evening max el	10142 Aug 19 14:16	25° $\text{♁}$ 44'23	19°53'57
desc. node	10141 Sep 13 02:28	19° $\text{♁}$ 33'33			10142 Aug 25 16:18	0° $\text{♁}$	
retrograde	10141 Sep 18 05:58	20° $\text{♁}$ 39'05		retrograde	10142 Aug 29 20:33	0° $\text{♁}$ 49'45	
evening set	10141 Sep 20 16:32	20° $\text{♁}$ 25'13		desc. node	10142 Aug 30 23:41	0° $\text{♁}$ 46'17	
inferior conj	10141 Sep 29 20:05	16° $\text{♁}$ 29'30	-4°39'32	evening set	10142 Aug 31 17:54	0° $\text{♁}$ 40'10	
minimum elong	10141 Sep 29 10:26	16° $\text{♁}$ 43'05	4°37'03		10142 Sep 03 06:14	30° $\text{♁}$	
min. Earth dist.	10141 Sep 30 05:50	16° $\text{♁}$ 15'46	0.54623 AU	inferior conj	10142 Sep 09 16:50	26° $\text{♁}$ 39'26	-2°57'28
morning rise	10141 Oct 08 04:51	12° $\text{♁}$ 37'09		minimum elong	10142 Sep 09 08:56	26° $\text{♁}$ 51'26	2°54'42
direct	10141 Oct 12 01:42	12° $\text{♁}$ 04'54		min. Earth dist.	10142 Sep 11 15:43	25° $\text{♁}$ 28'09	0.55135 AU
morning max el	10141 Oct 24 20:17	18° $\text{♁}$ 11'09	22°38'26	morning rise	10142 Sep 17 22:26	22° $\text{♁}$ 23'14	
	10141 Nov 03 08:23	0° $\text{♁}$		direct	10142 Sep 22 14:23	21° $\text{♁}$ 35'41	
asc. node	10141 Nov 06 03:31	4° $\text{♁}$ 31'53		morning max el	10142 Oct 06 08:01	28° $\text{♁}$ 22'14	24°25'35
morning set	10141 Nov 16 01:53	23° $\text{♁}$ 46'06			10142 Oct 07 23:28	0° $\text{♁}$	

asc. node	10142 Oct 24 00:26	23° <u>♄</u> 23'39		asc. node	10143 Oct 10 21:19	12° <u>♄</u> 43'06	
	10142 Oct 27 10:33	0° <u>♍</u>		morning set	10143 Oct 16 00:43	23° <u>♄</u> 16'52	
morning set	10142 Oct 31 13:41	8° <u>♍</u> 33'50			10143 Oct 19 03:02	0° <u>♍</u>	
superior conj	10142 Nov 07 10:12	23° <u>♍</u> 29'52	1°39'34	superior conj	10143 Oct 22 21:02	8° <u>♍</u> 17'55	1°34'02
minimum elong	10142 Nov 07 09:42	23° <u>♍</u> 27'08	1°39'54	minimum elong	10143 Oct 22 19:35	8° <u>♍</u> 09'52	1°34'11
max. Earth dist.	10142 Nov 09 11:50	27° <u>♍</u> 59'28	1.32635 AU	max. Earth dist.	10143 Oct 23 18:27	10° <u>♍</u> 16'31	1.31822 AU
	10142 Nov 10 10:16	0° <u>♎</u>		evening rise	10143 Oct 29 20:29	23° <u>♍</u> 25'55	
evening rise	10142 Nov 14 19:10	9° <u>♎</u> 08'04			10143 Nov 02 01:33	0° <u>♎</u>	
	10142 Nov 25 23:33	0° <u>♏</u>		desc. node	10143 Nov 13 18:54	21° <u>♎</u> 02'58	
desc. node	10142 Nov 26 21:47	1° <u>♏</u> 33'31			10143 Nov 19 18:55	0° <u>♏</u>	
	10142 Dec 18 03:32	0° <u>♐</u>		evening max el	10143 Nov 30 15:19	12° <u>♏</u> 46'40	27°19'54
evening max el	10142 Dec 18 07:11	0° <u>♐</u> 08'41	27°30'03	retrograde	10143 Dec 14 12:05	20° <u>♏</u> 00'51	
retrograde	10143 Jan 01 00:14	7° <u>♐</u> 28'38		evening set	10143 Dec 21 12:37	17° <u>♏</u> 45'35	
evening set	10143 Jan 07 23:53	4° <u>♐</u> 59'33		min. Earth dist.	10143 Dec 25 05:44	14° <u>♏</u> 56'46	0.61480 AU
min. Earth dist.	10143 Jan 11 18:07	1° <u>♐</u> 46'01	0.63474 AU	inferior conj	10143 Dec 28 06:54	12° <u>♏</u> 13'55	-3°04'14
	10143 Jan 13 12:28	30° <u>♑</u>		minimum elong	10143 Dec 28 13:01	12° <u>♏</u> 00'17	3°01'34
inferior conj	10143 Jan 14 10:27	29° <u>♏</u> 04'11	-1°50'11	morning rise	10144 Jan 04 15:55	7° <u>♏</u> 16'09	
minimum elong	10143 Jan 14 14:00	28° <u>♏</u> 55'14	1°48'20	direct	10144 Jan 06 20:29	6° <u>♏</u> 55'50	
asc. node	10143 Jan 19 23:51	24° <u>♏</u> 23'25		asc. node	10144 Jan 06 20:59	6° <u>♏</u> 55'50	
morning rise	10143 Jan 21 06:10	23° <u>♏</u> 47'39		morning max el	10144 Jan 13 20:26	10° <u>♏</u> 27'41	17°52'26
direct	10143 Jan 23 15:19	23° <u>♏</u> 20'09			10144 Jan 26 18:35	0° <u>♐</u>	
morning max el	10143 Jan 30 04:09	26° <u>♏</u> 42'20	17°47'43	morning set	10144 Jan 29 12:38	4° <u>♐</u> 58'02	
	10143 Feb 02 01:15	0° <u>♐</u>					
morning set	10143 Feb 15 13:30	21° <u>♐</u> 42'18		superior conj	10144 Feb 09 06:09	24° <u>♐</u> 02'12	0°03'52
	10143 Feb 20 09:34	0° <u>♑</u>		minimum elong	10144 Feb 09 06:31	24° <u>♐</u> 03'47	0°04'06
desc. node	10143 Feb 22 21:32	4° <u>♑</u> 13'41		behind sun begin	10144 Feb 08 22:20	23° <u>♐</u> 28'31	
				behind sun end	10144 Feb 09 14:42	24° <u>♐</u> 38'58	
superior conj	10143 Feb 28 00:50	12° <u>♑</u> 45'39	-0°37'39	desc. node	10144 Feb 09 18:22	24° <u>♐</u> 54'43	
minimum elong	10143 Feb 27 20:49	12° <u>♑</u> 29'14	0°36'53		10144 Feb 12 18:19	0° <u>♑</u>	
max. Earth dist.	10143 Mar 06 00:04	22° <u>♑</u> 24'07	1.44555 AU	max. Earth dist.	10144 Feb 16 15:04	6° <u>♑</u> 24'19	1.43046 AU
	10143 Mar 10 19:43	0° <u>♒</u>		evening rise	10144 Feb 23 05:16	16° <u>♑</u> 57'32	
evening rise	10143 Mar 15 11:01	7° <u>♒</u> 10'48			10144 Mar 02 17:35	0° <u>♒</u>	
	10143 Mar 30 17:14	0° <u>♓</u>			10144 Mar 24 20:55	0° <u>♓</u>	
evening max el	10143 Apr 13 08:26	17° <u>♓</u> 38'29	20°41'10	evening max el	10144 Mar 26 04:09	1° <u>♓</u> 21'40	21°54'43
asc. node	10143 Apr 17 22:04	21° <u>♓</u> 20'44		asc. node	10144 Apr 03 19:16	6° <u>♓</u> 49'29	
retrograde	10143 Apr 21 13:33	22° <u>♓</u> 25'57		retrograde	10144 Apr 04 11:27	6° <u>♓</u> 51'43	
evening set	10143 Apr 25 15:47	20° <u>♓</u> 50'28		evening set	10144 Apr 09 00:07	5° <u>♓</u> 00'55	
inferior conj	10143 Apr 30 22:43	14° <u>♓</u> 41'48	3°08'50		10144 Apr 13 08:46	30° <u>♒</u>	
minimum elong	10143 Apr 30 21:25	14° <u>♓</u> 46'15	3°08'23	inferior conj	10144 Apr 14 07:19	28° <u>♒</u> 41'46	2°48'47
min. Earth dist.	10143 May 01 12:34	13° <u>♓</u> 54'05	0.68124 AU	minimum elong	10144 Apr 14 05:22	28° <u>♒</u> 48'32	2°48'12
morning rise	10143 May 06 02:51	8° <u>♓</u> 25'05		min. Earth dist.	10144 Apr 14 08:12	28° <u>♒</u> 38'38	0.68558 AU
direct	10143 May 11 13:55	5° <u>♓</u> 59'56		morning rise	10144 Apr 19 10:28	22° <u>♒</u> 29'31	
desc. node	10143 May 21 22:03	11° <u>♓</u> 55'23		direct	10144 Apr 24 07:58	20° <u>♒</u> 23'34	
morning max el	10143 May 22 13:23	12° <u>♓</u> 33'31	23°58'17	morning max el	10144 May 04 00:31	26° <u>♒</u> 06'06	22°28'41
	10143 Jun 05 13:53	0° <u>♊</u>		desc. node	10144 May 07 18:58	0° <u>♓</u> 14'08	
	10143 Jun 24 23:57	0° <u>♋</u>			10144 May 07 14:09	0° <u>♓</u>	
morning set	10143 Jun 27 00:02	3° <u>♋</u> 24'22			10144 May 29 02:25	0° <u>♊</u>	
max. Earth dist.	10143 Jun 30 18:23	9° <u>♋</u> 58'42	1.38402 AU	morning set	10144 Jun 06 17:46	13° <u>♊</u> 40'28	
				max. Earth dist.	10144 Jun 11 16:21	21° <u>♊</u> 52'56	1.40677 AU
superior conj	10143 Jul 08 01:56	23° <u>♋</u> 25'19	-1°02'12		10144 Jun 16 09:22	0° <u>♋</u>	
minimum elong	10143 Jul 08 06:02	23° <u>♋</u> 44'48	1°01'56				
	10143 Jul 11 12:06	0° <u>♌</u>		superior conj	10144 Jun 19 11:25	5° <u>♋</u> 28'52	-1°33'45
asc. node	10143 Jul 14 21:02	6° <u>♌</u> 36'05		minimum elong	10144 Jun 19 17:25	5° <u>♋</u> 55'53	1°33'28
evening rise	10143 Jul 17 01:18	10° <u>♌</u> 53'09		evening rise	10144 Jun 29 15:03	24° <u>♋</u> 17'12	
	10143 Jul 27 13:35	0° <u>♍</u>		asc. node	10144 Jun 30 18:00	26° <u>♋</u> 23'47	
evening max el	10143 Aug 02 10:00	7° <u>♍</u> 30'35	18°57'07		10144 Jul 02 16:19	0° <u>♌</u>	
retrograde	10143 Aug 11 01:50	11° <u>♍</u> 49'21		evening max el	10144 Jul 15 15:39	19° <u>♌</u> 57'30	18°21'19
evening set	10143 Aug 12 23:31	11° <u>♍</u> 37'39		retrograde	10144 Jul 23 02:06	23° <u>♌</u> 41'43	
desc. node	10143 Aug 17 20:54	9° <u>♍</u> 35'26		evening set	10144 Jul 25 06:09	23° <u>♌</u> 23'26	
inferior conj	10143 Aug 21 06:17	7° <u>♍</u> 20'55	-1°03'06	inferior conj	10144 Aug 01 17:27	18° <u>♌</u> 46'43	0°36'28
minimum elong	10143 Aug 21 03:36	7° <u>♍</u> 25'39	1°02'14	minimum elong	10144 Aug 01 18:42	18° <u>♌</u> 44'08	0°35'42
min. Earth dist.	10143 Aug 24 05:48	5° <u>♍</u> 15'55	0.56499 AU	desc. node	10144 Aug 03 18:07	17° <u>♌</u> 06'01	
morning rise	10143 Aug 29 04:29	2° <u>♍</u> 28'02		min. Earth dist.	10144 Aug 05 02:08	16° <u>♌</u> 01'48	0.58472 AU
direct	10143 Sep 03 15:33	1° <u>♍</u> 17'23		morning rise	10144 Aug 09 03:45	13° <u>♌</u> 01'59	
morning max el	10143 Sep 17 21:12	8° <u>♍</u> 36'51	26°03'48	direct	10144 Aug 15 07:23	11° <u>♌</u> 37'49	
	10143 Oct 03 21:59	0° <u>♎</u>		morning max el	10144 Aug 29 16:32	19° <u>♌</u> 21'21	27°16'22
































































































































	10144 Sep 07 17:38	0°♎			10145 Aug 10 22:39	0°♏	
	10144 Sep 25 13:58	0°♏	morning max el		10145 Aug 11 18:41	0°♏48'42	27°53'00
asc. node	10144 Sep 26 18:11	2°♏22'12			10145 Sep 01 21:57	0°♎	
morning set	10144 Sep 29 09:16	7°♏49'36	morning set		10145 Sep 13 13:29	22°♎07'03	
			asc. node		10145 Sep 13 15:02	22°♎15'03	
superior conj	10144 Oct 06 08:50	23°♏05'22	1°22'57		10145 Sep 17 06:37	0°♏	
minimum elong	10144 Oct 06 06:46	22°♏53'54	1°22'50	max. Earth dist.	10145 Sep 19 12:22	4°♏53'28	1.31641 AU
max. Earth dist.	10144 Oct 06 03:50	22°♏37'32	1.31487 AU				
	10144 Oct 09 11:32	0°♎	superior conj		10145 Sep 20 19:48	7°♏46'52	1°06'35
evening rise	10144 Oct 13 03:14	7°♎56'37	minimum elong		10145 Sep 20 17:34	7°♏34'30	1°06'14
	10144 Oct 24 12:11	0°♎	evening rise		10145 Sep 27 13:20	22°♏34'27	
desc. node	10144 Oct 30 16:04	9°♎52'48			10145 Oct 01 02:18	0°♎	
evening max el	10144 Nov 11 16:54	24°♎36'56	26°35'40	desc. node	10145 Oct 17 13:15	27°♎47'29	
	10144 Nov 19 00:18	0°♎			10145 Oct 19 07:06	0°♎	
retrograde	10144 Nov 25 15:15	1°♎44'20	evening max el		10145 Oct 24 10:31	5°♎36'17	25°20'06
evening set	10144 Dec 02 07:51	29°♎53'05	retrograde		10145 Nov 07 07:44	12°♎35'32	
	10144 Dec 02 02:39	30°♎♎	evening set		10145 Nov 13 04:48	11°♎16'36	
min. Earth dist.	10144 Dec 06 06:45	27°♎17'18	0.59365 AU	min. Earth dist.	10145 Nov 17 22:39	8°♎37'08	0.57352 AU
inferior conj	10144 Dec 09 11:09	24°♎48'49	-4°16'58	inferior conj	10145 Nov 20 20:01	6°♎39'58	-5°16'24
minimum elong	10144 Dec 09 18:57	24°♎33'35	4°14'17	minimum elong	10145 Nov 21 02:35	6°♎28'49	5°14'55
morning rise	10144 Dec 17 08:42	20°♎12'32		morning rise	10145 Nov 29 02:41	2°♎25'57	
direct	10144 Dec 19 12:17	19°♎56'00		direct	10145 Dec 01 10:42	2°♎09'44	
asc. node	10144 Dec 23 18:05	21°♎04'03		morning max el	10145 Dec 10 10:24	6°♎29'13	19°01'48
morning max el	10144 Dec 27 07:49	23°♎46'55	18°16'30	asc. node	10145 Dec 10 15:06	6°♎40'40	
	10145 Jan 01 08:12	0°♎			10145 Dec 25 09:55	0°♎	
morning set	10145 Jan 12 02:04	18°♎52'41		morning set	10145 Dec 27 01:17	3°♎13'25	
	10145 Jan 17 23:24	0°♎					
superior conj	10145 Jan 21 10:41	6°♎23'41	0°39'04	superior conj	10146 Jan 04 09:43	19°♎36'53	1°06'06
minimum elong	10145 Jan 21 13:21	6°♎35'49	0°39'02	minimum elong	10146 Jan 04 12:52	19°♎51'54	1°06'07
desc. node	10145 Jan 26 15:13	15°♎37'21			10146 Jan 09 23:12	0°♎	
max. Earth dist.	10145 Jan 29 00:50	19°♎44'56	1.41087 AU	max. Earth dist.	10146 Jan 11 07:10	2°♎24'04	1.38910 AU
evening rise	10145 Feb 02 17:24	27°♎33'54		desc. node	10146 Jan 13 12:07	6°♎18'18	
	10145 Feb 04 05:24	0°♎		evening rise	10146 Jan 15 03:10	9°♎07'31	
	10145 Feb 24 08:59	0°♎			10146 Jan 28 02:39	0°♎	
evening max el	10145 Mar 08 19:49	15°♎06'56	23°14'26	evening max el	10146 Feb 19 09:35	28°♎55'31	24°34'03
retrograde	10145 Mar 19 06:55	21°♎18'06			10146 Feb 20 12:24	0°♎	
asc. node	10145 Mar 21 16:30	20°♎50'18		retrograde	10146 Mar 02 22:38	5°♎40'10	
evening set	10145 Mar 24 06:59	19°♎12'58		evening set	10146 Mar 08 10:49	3°♎22'17	
min. Earth dist.	10145 Mar 29 05:03	13°♎25'26	0.68549 AU	asc. node	10146 Mar 08 13:42	3°♎16'04	
inferior conj	10145 Mar 29 16:19	12°♎46'36	2°19'06		10146 Mar 11 14:41	30°♎♎	
minimum elong	10145 Mar 29 14:07	12°♎54'12	2°18'26	min. Earth dist.	10146 Mar 13 00:47	28°♎09'46	0.68124 AU
morning rise	10145 Apr 03 21:10	6°♎40'05		inferior conj	10146 Mar 13 23:50	26°♎52'49	1°40'13
direct	10145 Apr 08 05:10	4°♎55'44		minimum elong	10146 Mar 13 21:50	26°♎59'30	1°39'36
morning max el	10145 Apr 16 16:26	9°♎48'11	21°05'08	morning rise	10146 Mar 19 08:59	20°♎53'32	
desc. node	10145 Apr 24 15:49	19°♎17'54		direct	10146 Mar 23 04:13	19°♎30'44	
	10145 May 02 07:44	0°♎		morning max el	10146 Mar 30 15:43	23°♎41'49	19°53'25
morning set	10145 May 17 09:11	22°♎45'41			10146 Apr 05 01:57	0°♎	
	10145 May 21 22:43	0°♎		desc. node	10146 Apr 11 12:37	8°♎54'19	
max. Earth dist.	10145 May 24 19:49	4°♎39'24	1.42748 AU		10146 Apr 25 13:57	0°♎	
superior conj	10145 May 31 23:39	16°♎34'57	-1°59'13	morning set	10146 Apr 26 08:21	1°♎10'48	
minimum elong	10145 Jun 01 05:32	16°♎59'58	1°59'14	max. Earth dist.	10146 May 07 06:40	18°♎16'04	1.44373 AU
	10145 Jun 08 16:37	0°♎		superior conj	10146 May 12 11:31	26°♎37'26	-2°12'21
evening rise	10145 Jun 12 14:50	7°♎01'00		minimum elong	10146 May 12 13:11	26°♎44'11	2°12'40
asc. node	10145 Jun 17 15:01	15°♎56'36			10146 May 14 13:13	0°♎	
	10145 Jun 26 13:18	0°♎		evening rise	10146 May 25 19:43	18°♎52'40	
evening max el	10145 Jun 29 03:12	2°♎55'42	18°05'31		10146 Jun 01 08:53	0°♎	
retrograde	10145 Jul 05 19:32	6°♎20'31		asc. node	10146 Jun 04 12:03	5°♎08'04	
evening set	10145 Jul 08 07:28	5°♎52'00		evening max el	10146 Jun 12 16:56	16°♎14'29	18°08'43
inferior conj	10145 Jul 15 01:05	0°♎55'13	1°50'35	retrograde	10146 Jun 19 01:53	19°♎34'58	
minimum elong	10145 Jul 15 03:51	0°♎48'37	1°49'21	evening set	10146 Jun 21 21:41	18°♎53'37	
	10145 Jul 16 00:06	30°♎♎		inferior conj	10146 Jun 28 01:21	13°♎38'06	2°39'35
min. Earth dist.	10145 Jul 18 06:16	27°♎52'30	0.60724 AU	minimum elong	10146 Jun 28 03:54	13°♎31'10	2°38'34
morning rise	10145 Jul 21 21:31	25°♎00'11		min. Earth dist.	10146 Jun 30 19:15	10°♎40'54	0.62947 AU
desc. node	10145 Jul 21 15:17	25°♎10'28		morning rise	10146 Jul 04 08:24	7°♎27'13	
direct	10145 Jul 28 11:45	22°♎50'51		desc. node	10146 Jul 08 12:23	5°♎17'13	
				direct	10146 Jul 11 01:51	4°♎55'50	

morning max el	10146 Jul 25 02:05	12°☿58'23	27°51'20	morning max el	10147 Jul 07 12:24	25°♄43'08	27°14'52
	10146 Aug 07 16:46	0°♊			10147 Jul 11 10:41	0°☿	
	10146 Aug 25 09:47	0°♎			10147 Aug 01 05:43	0°♊	
morning set	10146 Aug 28 11:12	6°♎02'40		morning set	10147 Aug 11 23:46	19°♊29'38	
asc. node	10146 Aug 31 11:52	12°♎16'08		max. Earth dist.	10147 Aug 16 12:00	28°♊30'11	1.33435 AU
max. Earth dist.	10146 Sep 02 16:17	16°♎53'31	1.32290 AU		10147 Aug 17 05:28	0°♎	
				asc. node	10147 Aug 18 08:43	2°♎21'22	
superior conj	10146 Sep 05 04:02	22°♎16'01	0°45'12				
minimum elong	10146 Sep 05 02:08	22°♎05'42	0°44'44	superior conj	10147 Aug 20 07:27	6°♎27'05	0°19'14
	10146 Sep 08 16:56	0°♊		minimum elong	10147 Aug 20 06:29	6°♎22'02	0°18'50
evening rise	10146 Sep 12 00:48	7°♊13'07		evening rise	10147 Aug 27 11:45	21°♎47'14	
	10146 Sep 23 20:18	0°♌			10147 Aug 31 11:08	0°♊	
desc. node	10146 Oct 04 10:27	14°♌25'28		evening max el	10147 Sep 17 10:35	26°♊04'13	22°04'19
evening max el	10146 Oct 05 21:57	15°♌55'13	23°44'01	desc. node	10147 Sep 21 07:41	29°♊19'28	
retrograde	10146 Oct 19 11:19	22°♌41'23			10147 Sep 22 08:27	0°♌	
evening set	10146 Oct 24 01:13	21°♌55'41		retrograde	10147 Sep 30 03:31	2°♌23'45	
min. Earth dist.	10146 Oct 30 08:15	18°♌54'10	0.55719 AU	evening set	10147 Oct 03 06:11	2°♌02'11	
inferior conj	10146 Nov 01 08:32	17°♌42'06	-5°43'48		10147 Oct 08 14:37	30°♋♊	
minimum elong	10146 Nov 01 09:06	17°♌41'14	5°43'30	min. Earth dist.	10147 Oct 11 15:30	28°♊21'48	0.54768 AU
morning rise	10146 Nov 09 18:53	13°♌47'19		inferior conj	10147 Oct 12 05:09	28°♊02'40	-5°19'31
direct	10146 Nov 12 13:53	13°♌27'50		minimum elong	10147 Oct 11 21:51	28°♊12'54	5°18'11
morning max el	10146 Nov 23 00:41	18°♌24'20	20°09'53	morning rise	10147 Oct 20 15:01	24°♊15'30	
asc. node	10146 Nov 27 12:04	23°♌30'33		direct	10147 Oct 24 01:39	23°♊49'18	
	10146 Dec 01 20:19	0°♈		morning max el	10147 Nov 05 01:31	29°♊29'04	21°39'34
morning set	10146 Dec 11 06:59	17°♈50'36			10147 Nov 05 14:27	0°♌	
	10146 Dec 17 05:17	0°♊		asc. node	10147 Nov 14 09:01	11°♌18'06	
					10147 Nov 24 10:30	0°♈	
superior conj	10146 Dec 18 22:32	3°♊28'34	1°24'51	morning set	10147 Nov 25 16:35	2°♈36'24	
minimum elong	10146 Dec 19 01:02	3°♊41'09	1°25'03				
max. Earth dist.	10146 Dec 24 14:09	14°♊31'49	1.36753 AU	superior conj	10147 Dec 02 21:07	17°♈46'56	1°35'55
evening rise	10146 Dec 28 09:04	21°♊33'29		minimum elong	10147 Dec 02 22:30	17°♈54'09	1°36'17
desc. node	10146 Dec 31 09:04	26°♊53'51		max. Earth dist.	10147 Dec 07 02:04	26°♈25'06	1.34836 AU
	10147 Jan 02 04:09	0°♌			10147 Dec 08 21:18	0°♊	
	10147 Jan 22 00:06	0°♈		evening rise	10147 Dec 11 07:33	4°♊42'06	
evening max el	10147 Feb 01 22:59	12°♈45'17	25°46'32	desc. node	10147 Dec 18 06:03	17°♊19'01	
retrograde	10147 Feb 14 09:37	19°♈52'57			10147 Dec 25 23:41	0°♌	
evening set	10147 Feb 20 10:04	17°♈24'57		evening max el	10148 Jan 15 12:22	26°♌28'40	26°44'40
asc. node	10147 Feb 23 10:53	14°♈19'32			10148 Jan 19 13:52	0°♈	
min. Earth dist.	10147 Feb 24 17:12	12°♈47'22	0.67295 AU	retrograde	10148 Jan 28 15:12	3°♈48'41	
inferior conj	10147 Feb 26 04:01	10°♈57'16	0°52'22	evening set	10148 Feb 04 02:54	1°♈14'49	
minimum elong	10147 Feb 26 02:45	11°♈01'15	0°52'03		10148 Feb 05 12:54	30°♋♌	
morning rise	10147 Mar 03 19:58	5°♈06'59		min. Earth dist.	10148 Feb 08 04:01	27°♌11'41	0.66081 AU
direct	10147 Mar 07 03:34	4°♈04'00		inferior conj	10148 Feb 10 02:43	24°♌54'32	-0°04'24
morning max el	10147 Mar 13 22:50	7°♈46'14	18°56'49	minimum elong	10148 Feb 10 02:50	24°♌54'12	0°04'04
greatest brilliancy	10147 Mar 27 20:08	26°♈32'29	-0.8m	transit middle	10148 Feb 10 02:50	24°♌54'12	0°04'04
desc. node	10147 Mar 29 09:25	28°♈55'02		transit begin	10148 Feb 09 23:59	25°♌02'35	
	10147 Mar 30 02:20	0°♎		transit end	10148 Feb 10 05:40	24°♌45'51	
morning set	10147 Apr 05 14:16	10°♎03'34		asc. node	10148 Feb 10 08:03	24°♌38'51	
	10147 Apr 18 09:22	0°♋		morning rise	10148 Feb 16 03:52	19°♌15'25	
max. Earth dist.	10147 Apr 19 23:28	2°♋29'19	1.45367 AU	direct	10148 Feb 19 01:14	18°♌29'14	
				morning max el	10148 Feb 25 12:09	21°♌55'16	18°16'33
superior conj	10147 Apr 22 01:55	5°♋47'30	-2°07'01		10148 Mar 02 23:14	0°♈	
minimum elong	10147 Apr 21 20:15	5°♋25'13	2°07'00	desc. node	10148 Mar 15 06:13	19°♈12'54	
evening rise	10147 May 07 01:40	29°♋45'46		morning set	10148 Mar 15 21:26	20°♈13'58	
	10147 May 07 05:11	0°♄			10148 Mar 22 00:08	0°♎	
asc. node	10147 May 22 09:08	23°♄51'17					
evening max el	10147 May 27 05:42	29°♄46'10	18°30'09	superior conj	10148 Mar 31 07:47	14°♎41'40	-1°41'41
	10147 May 27 11:19	0°☿		minimum elong	10148 Mar 30 22:14	14°♎04'16	1°40'52
retrograde	10147 Jun 02 16:58	3°☿16'21		max. Earth dist.	10148 Apr 01 19:00	16°♎59'30	1.45630 AU
evening set	10147 Jun 05 20:33	2°☿20'41			10148 Apr 10 02:57	0°♋	
	10147 Jun 08 17:58	30°♋♄		evening rise	10148 Apr 16 08:17	9°♋43'08	
inferior conj	10147 Jun 11 14:12	26°♄48'04	3°07'27	greatest brilliancy	10148 Apr 27 09:10	26°♋52'04	-0.8m
minimum elong	10147 Jun 11 15:45	26°♄43'26	3°06'48		10148 Apr 29 10:53	0°♄	
min. Earth dist.	10147 Jun 13 17:32	24°♄15'02	0.64918 AU	asc. node	10148 May 08 06:14	11°♄56'36	
morning rise	10147 Jun 17 10:00	20°♄29'33		evening max el	10148 May 09 15:01	13°♄24'12	19°08'58
direct	10147 Jun 24 00:03	17°♄46'41		retrograde	10148 May 16 13:08	17°♄16'46	
desc. node	10147 Jun 25 09:27	17°♄53'13		evening set	10148 May 20 00:49	16°♄05'58	

inferior conj	10148 May 25 12:02	10° $\Pi$ 18'00	3°18'23	evening set	10149 May 04 08:08	0° $\Pi$ 04'31	
minimum elong	10148 May 25 12:22	10° $\Pi$ 16'55	3°17'58		10149 May 04 10:32	30° $\mathbb{R}$	
min. Earth dist.	10148 May 27 00:17	8° $\Pi$ 21'18	0.66510 AU	inferior conj	10149 May 09 15:55	24° $\mathbb{B}$ 02'54	3°15'40
morning rise	10148 May 30 23:24	3° $\Pi$ 57'28		minimum elong	10149 May 09 15:08	24° $\mathbb{B}$ 05'31	3°15'16
direct	10148 Jun 06 05:11	1° $\Pi$ 14'05		min. Earth dist.	10149 May 10 13:43	22° $\mathbb{B}$ 49'04	0.67667 AU
desc. node	10148 Jun 11 06:29	2° $\Pi$ 40'48		morning rise	10149 May 14 21:50	17° $\mathbb{B}$ 43'59	
morning max el	10148 Jun 18 23:07	8° $\Pi$ 50'48	26°11'01	direct	10149 May 20 16:19	15° $\mathbb{B}$ 09'48	
	10148 Jul 05 13:02	0° $\mathfrak{C}$		desc. node	10149 May 29 03:28	19° $\mathbb{B}$ 10'42	
	10148 Jul 23 17:36	0° $\Omega$		morning max el	10149 Jun 01 08:50	22° $\mathbb{B}$ 10'44	24°49'14
morning set	10148 Jul 24 23:44	2° $\Omega$ 18'56			10149 Jun 08 04:47	0° $\Pi$	
max. Earth dist.	10148 Jul 28 21:11	9° $\Omega$ 43'00	1.35060 AU		10149 Jun 28 19:57	0° $\mathfrak{C}$	
				morning set	10149 Jul 07 06:36	14° $\mathfrak{C}$ 18'34	
superior conj	10148 Aug 03 03:35	20° $\Omega$ 13'26	-0°10'40	max. Earth dist.	10149 Jul 10 20:51	20° $\mathfrak{C}$ 46'48	1.37102 AU
minimum elong	10148 Aug 03 04:13	20° $\Omega$ 16'39	0°10'50		10149 Jul 15 18:38	0° $\Omega$	
behind sun begin	10148 Aug 02 23:44	19° $\Omega$ 53'49					
behind sun end	10148 Aug 03 08:41	20° $\Omega$ 39'32		superior conj	10149 Jul 17 13:22	3° $\Omega$ 27'07	-0°43'08
asc. node	10148 Aug 04 05:36	22° $\Omega$ 26'48		minimum elong	10149 Jul 17 16:09	3° $\Omega$ 40'38	0°43'01
	10148 Aug 07 20:55	0° $\mathbb{P}$		asc. node	10149 Jul 22 02:30	12° $\Omega$ 28'15	
evening rise	10148 Aug 10 20:11	6° $\mathbb{P}$ 10'53		evening rise	10149 Jul 25 23:44	20° $\Omega$ 17'14	
	10148 Aug 23 22:00	0° $\underline{\mathfrak{A}}$			10149 Jul 30 22:37	0° $\mathbb{P}$	
evening max el	10148 Aug 29 09:24	6° $\underline{\mathfrak{A}}$ 39'43	20°36'14	evening max el	10149 Aug 11 21:57	17° $\mathbb{P}$ 59'37	19°27'18
desc. node	10148 Sep 07 04:54	11° $\underline{\mathfrak{A}}$ 59'32		retrograde	10149 Aug 21 11:19	22° $\mathbb{P}$ 44'01	
retrograde	10148 Sep 09 15:42	12° $\underline{\mathfrak{A}}$ 15'00		evening set	10149 Aug 23 07:26	22° $\mathbb{P}$ 34'15	
evening set	10148 Sep 11 18:17	12° $\underline{\mathfrak{A}}$ 04'05		desc. node	10149 Aug 25 02:09	22° $\mathbb{P}$ 07'21	
inferior conj	10148 Sep 20 21:43	8° $\underline{\mathfrak{A}}$ 07'37	-4°00'02	inferior conj	10149 Sep 01 00:27	18° $\mathbb{P}$ 28'05	-2°08'33
minimum elong	10148 Sep 20 12:00	8° $\underline{\mathfrak{A}}$ 21'36	3°57'05	minimum elong	10149 Aug 31 18:41	18° $\mathbb{P}$ 37'21	2°06'29
min. Earth dist.	10148 Sep 22 00:05	7° $\underline{\mathfrak{A}}$ 29'34	0.54716 AU	min. Earth dist.	10149 Sep 03 11:53	16° $\mathbb{P}$ 52'39	0.55613 AU
morning rise	10148 Sep 29 05:27	4° $\underline{\mathfrak{A}}$ 07'20		morning rise	10149 Sep 09 03:26	13° $\mathbb{P}$ 56'45	
direct	10148 Oct 03 09:57	3° $\underline{\mathfrak{A}}$ 29'42		direct	10149 Sep 14 03:38	13° $\mathbb{P}$ 00'07	
morning max el	10148 Oct 16 16:17	9° $\underline{\mathfrak{A}}$ 54'08	23°24'01	morning max el	10149 Sep 28 03:48	20° $\mathbb{P}$ 02'42	25°09'30
asc. node	10148 Oct 31 05:56	29° $\underline{\mathfrak{A}}$ 49'54			10149 Oct 06 15:42	0° $\underline{\mathfrak{A}}$	
	10148 Oct 31 08:12	0° $\mathbb{M}$		asc. node	10149 Oct 18 02:50	18° $\underline{\mathfrak{A}}$ 54'06	
morning set	10148 Nov 09 04:07	17° $\mathbb{M}$ 25'20			10149 Oct 23 15:04	0° $\mathbb{M}$	
	10148 Nov 14 23:54	0° $\mathfrak{A}$		morning set	10149 Oct 24 15:48	2° $\mathbb{M}$ 11'18	
superior conj	10148 Nov 16 02:24	2° $\mathfrak{A}$ 23'08	1°40'04	superior conj	10149 Oct 31 11:48	17° $\mathbb{M}$ 08'23	1°37'56
minimum elong	10148 Nov 16 02:33	2° $\mathfrak{A}$ 23'59	1°40'27	minimum elong	10149 Oct 31 10:52	17° $\mathbb{M}$ 03'14	1°38'12
max. Earth dist.	10148 Nov 18 21:47	8° $\mathfrak{A}$ 22'50	1.33306 AU	max. Earth dist.	10149 Nov 02 00:58	20° $\mathbb{M}$ 32'11	1.32228 AU
evening rise	10148 Nov 23 19:02	18° $\mathfrak{A}$ 24'46			10149 Nov 06 10:54	0° $\mathfrak{A}$	
	10148 Nov 29 21:02	0° $\mathfrak{B}$		evening rise	10149 Nov 07 16:07	2° $\mathfrak{A}$ 31'44	
desc. node	10148 Dec 04 03:06	7° $\mathfrak{B}$ 28'36		desc. node	10149 Nov 21 00:12	27° $\mathfrak{A}$ 14'54	
	10148 Dec 19 05:28	0° $\approx$			10149 Nov 22 17:05	0° $\mathfrak{B}$	
evening max el	10148 Dec 28 01:13	9° $\approx$ 56'25	27°21'16	evening max el	10149 Dec 10 11:53	22° $\mathfrak{B}$ 56'25	27°29'48
retrograde	10149 Jan 10 14:45	17° $\approx$ 19'12			10149 Dec 21 23:33	0° $\approx$	
evening set	10149 Jan 17 11:07	14° $\approx$ 45'55		retrograde	10149 Dec 24 07:17	0° $\approx$ 14'44	
min. Earth dist.	10149 Jan 21 07:19	11° $\approx$ 15'17	0.64515 AU		10149 Dec 26 13:38	30° $\mathbb{R}$	
inferior conj	10149 Jan 23 17:34	8° $\approx$ 39'17	-1°09'29	evening set	10149 Dec 27 07:57	27° $\mathfrak{B}$ 50'28	
minimum elong	10149 Jan 23 19:42	8° $\approx$ 33'33	1°08'13	min. Earth dist.	10150 Jan 04 01:13	24° $\mathfrak{B}$ 48'11	0.62650 AU
asc. node	10149 Jan 27 05:12	5° $\approx$ 12'32		inferior conj	10150 Jan 06 21:41	22° $\mathfrak{B}$ 04'09	-2°21'16
morning rise	10149 Jan 30 06:02	3° $\approx$ 13'46		minimum elong	10150 Jan 07 02:20	21° $\mathfrak{B}$ 52'59	2°19'00
direct	10149 Feb 01 18:56	2° $\approx$ 40'40		morning rise	10150 Jan 13 23:01	16° $\mathfrak{B}$ 55'05	
morning max el	10149 Feb 08 05:04	6° $\approx$ 01'38	17°53'11	asc. node	10150 Jan 14 02:21	16° $\mathfrak{B}$ 52'18	
	10149 Feb 24 07:27	0° $\mathfrak{H}$		direct	10150 Jan 16 05:44	16° $\mathfrak{B}$ 31'11	
morning set	10149 Feb 25 09:40	1° $\mathfrak{H}$ 49'54		morning max el	10150 Jan 22 22:29	19° $\mathfrak{B}$ 56'43	17°47'21
desc. node	10149 Mar 02 03:02	9° $\mathfrak{H}$ 42'58			10150 Jan 30 09:57	0° $\approx$	
				morning set	10150 Feb 07 21:59	14° $\approx$ 35'00	
superior conj	10149 Mar 10 23:52	24° $\mathfrak{H}$ 10'30	-1°02'33	desc. node	10150 Feb 16 23:52	0° $\mathfrak{H}$ 20'49	
minimum elong	10149 Mar 10 16:58	23° $\mathfrak{H}$ 42'52	1°01'32		10150 Feb 16 18:58	0° $\mathfrak{H}$	
	10149 Mar 14 15:42	0° $\mathbb{Y}$					
max. Earth dist.	10149 Mar 15 14:19	1° $\mathbb{Y}$ 29'18	1.45149 AU	superior conj	10150 Feb 19 14:34	4° $\mathfrak{H}$ 45'02	-0°19'31
evening rise	10149 Mar 26 22:41	19° $\mathbb{Y}$ 07'09		minimum elong	10150 Feb 19 12:38	4° $\mathfrak{H}$ 36'54	0°19'00
	10149 Apr 03 02:02	0° $\mathbb{B}$		max. Earth dist.	10150 Feb 26 07:17	15° $\mathfrak{H}$ 43'48	1.43983 AU
greatest brilliancy	10149 Apr 10 21:24	11° $\mathbb{B}$ 37'27	-0.6m	evening rise	10150 Mar 06 11:13	28° $\mathfrak{H}$ 35'26	
evening max el	10149 Apr 22 19:20	27° $\mathbb{B}$ 05'26	20°03'38		10150 Mar 07 09:09	0° $\mathbb{Y}$	
asc. node	10149 Apr 25 03:23	29° $\mathbb{B}$ 12'42			10150 Mar 27 20:44	0° $\mathbb{B}$	
	10149 Apr 26 05:16	0° $\Pi$		evening max el	10150 Apr 05 18:09	10° $\mathbb{B}$ 48'28	21°11'27
retrograde	10149 Apr 30 11:35	1° $\Pi$ 30'48		asc. node	10150 Apr 12 00:34	15° $\mathbb{B}$ 25'23	

retrograde	10150 Apr 14 10:05	15°♄53'42			10151 Feb 28 12:28	0°♄	
evening set	10150 Apr 18 16:35	14°♄11'50		evening max el	10151 Mar 19 12:03	24°♄32'45	22°28'16
inferior conj	10150 Apr 23 23:24	7°♄58'36	3°01'32		10151 Mar 27 04:39	0°♄	
minimum elong	10150 Apr 23 21:48	8°♄04'11	3°01'03	retrograde	10151 Mar 29 06:58	0°♄20'07	
min. Earth dist.	10150 Apr 24 07:43	7°♄29'41	0.68365 AU	asc. node	10151 Mar 29 21:47	0°♄18'15	
morning rise	10150 Apr 29 02:47	1°♄43'32			10151 Mar 31 06:52	30°♄	
	10150 May 01 16:42	30°♄		evening set	10151 Apr 03 00:27	28°♄23'03	
direct	10150 May 04 08:13	29°♄25'46		inferior conj	10151 Apr 08 08:22	22°♄00'38	2°37'19
	10150 May 07 04:04	0°♄		minimum elong	10151 Apr 08 06:16	22°♄07'57	2°36'41
morning max el	10150 May 14 18:27	5°♄38'04	23°19'49	min. Earth dist.	10151 Apr 08 04:03	22°♄15'43	0.68614 AU
desc. node	10150 May 16 00:25	6°♄56'00		morning rise	10151 Apr 13 11:57	15°♄50'52	
	10150 Jun 02 13:48	0°♄		direct	10151 Apr 18 03:45	13°♄53'51	
morning set	10150 Jun 18 15:13	25°♄15'37		morning max el	10151 Apr 27 07:07	19°♄13'45	21°51'58
	10150 Jun 21 10:11	0°♄		desc. node	10151 May 02 21:17	25°♄35'19	
max. Earth dist.	10150 Jun 22 17:23	2°♄14'45	1.39377 AU		10151 May 06 07:12	0°♄	
					10151 May 26 17:44	0°♄	
superior conj	10150 Jun 30 09:04	15°♄59'42	-1°16'00	morning set	10151 May 29 21:20	4°♄59'36	
minimum elong	10150 Jun 30 14:05	16°♄23'03	1°15'41	max. Earth dist.	10151 Jun 04 17:45	14°♄32'23	1.41606 AU
	10150 Jul 07 18:00	0°♄					
asc. node	10150 Jul 08 23:28	2°♄22'17		superior conj	10151 Jun 12 10:00	27°♄39'43	-1°45'39
evening rise	10150 Jul 09 19:34	3°♄59'20		minimum elong	10151 Jun 12 16:20	28°♄07'31	1°45'26
	10150 Jul 25 20:43	0°♄			10151 Jun 13 17:49	0°♄	
evening max el	10150 Jul 25 22:29	0°♄04'22	18°39'24	evening rise	10151 Jun 23 03:53	17°♄07'15	
retrograde	10150 Aug 03 00:12	4°♄06'09		asc. node	10151 Jun 25 20:25	22°♄04'01	
evening set	10150 Aug 05 00:23	3°♄52'03			10151 Jun 30 07:05	0°♄	
desc. node	10150 Aug 11 23:21	0°♄10'53		evening max el	10151 Jul 09 07:05	12°♄45'15	18°12'10
	10150 Aug 12 05:17	30°♄		retrograde	10151 Jul 16 08:17	16°♄19'16	
inferior conj	10150 Aug 12 22:54	29°♄27'09	-0°18'05	evening set	10151 Jul 18 15:45	15°♄56'54	
minimum elong	10150 Aug 12 22:10	29°♄28'31	0°18'03	inferior conj	10151 Jul 25 19:06	11°♄11'08	1°11'11
min. Earth dist.	10150 Aug 16 04:16	27°♄02'52	0.57288 AU	minimum elong	10151 Jul 25 21:15	11°♄06'22	1°10'05
morning rise	10150 Aug 20 16:30	24°♄18'34		min. Earth dist.	10151 Jul 29 03:24	8°♄16'02	0.59421 AU
direct	10150 Aug 26 11:28	22°♄55'34		desc. node	10151 Jul 29 20:33	7°♄41'03	
	10150 Sep 09 08:06	0°♄		morning rise	10151 Aug 01 23:36	5°♄30'03	
morning max el	10150 Sep 09 18:58	0°♄25'58	26°38'33	direct	10151 Aug 08 08:35	3°♄37'18	
	10150 Sep 30 14:58	0°♄		morning max el	10151 Aug 22 17:14	11°♄27'09	27°36'46
asc. node	10150 Oct 04 23:44	8°♄22'12			10151 Sep 06 05:23	0°♄	
morning set	10150 Oct 09 01:57	16°♄49'42		asc. node	10151 Sep 21 20:35	28°♄07'29	
	10150 Oct 15 02:22	0°♄		morning set	10151 Sep 22 18:20	0°♄	
					10151 Sep 23 08:53	1°♄16'06	
superior conj	10150 Oct 15 23:15	1°♄56'11	1°30'00				
minimum elong	10150 Oct 15 21:30	1°♄46'25	1°30'02	superior conj	10151 Sep 30 10:53	16°♄41'10	1°16'37
max. Earth dist.	10150 Oct 16 09:09	2°♄51'13	1.31623 AU	minimum elong	10151 Sep 30 08:42	16°♄28'58	1°16'25
evening rise	10150 Oct 22 20:01	16°♄55'26		max. Earth dist.	10151 Sep 29 18:49	15°♄11'49	1.31493 AU
	10150 Oct 29 08:12	0°♄			10151 Oct 06 11:47	0°♄	
desc. node	10150 Nov 07 21:19	16°♄28'30		evening rise	10151 Oct 07 04:26	1°♄29'34	
	10150 Nov 17 18:46	0°♄			10151 Oct 22 10:41	0°♄	
evening max el	10150 Nov 22 17:48	5°♄15'40	27°05'20	desc. node	10151 Oct 25 18:28	4°♄56'51	
retrograde	10150 Dec 06 15:28	12°♄26'15		evening max el	10151 Nov 04 16:08	16°♄44'07	26°06'57
evening set	10150 Dec 13 13:45	10°♄20'25		retrograde	10151 Nov 18 13:59	23°♄47'40	
min. Earth dist.	10150 Dec 17 08:23	7°♄38'37	0.60585 AU	evening set	10151 Nov 25 00:05	22°♄09'20	
inferior conj	10150 Dec 20 11:40	5°♄00'10	-3°35'47	min. Earth dist.	10151 Nov 29 05:00	19°♄34'32	0.58481 AU
minimum elong	10150 Dec 20 18:43	4°♄45'19	3°32'59	inferior conj	10151 Dec 02 08:01	17°♄17'31	-4°44'44
morning rise	10150 Dec 28 02:13	0°♄10'52		minimum elong	10151 Dec 02 15:49	17°♄03'13	4°42'27
	10150 Dec 28 21:03	30°♄		morning rise	10151 Dec 10 10:01	12°♄50'48	
direct	10150 Dec 30 05:52	29°♄52'30		direct	10151 Dec 12 14:55	12°♄34'43	
asc. node	10150 Dec 31 23:28	0°♄04'53		asc. node	10151 Dec 18 20:32	14°♄52'20	
	10150 Dec 31 14:17	0°♄		morning max el	10151 Dec 20 21:07	16°♄36'15	18°33'08
morning max el	10151 Jan 06 13:03	3°♄31'28	18°00'07		10151 Dec 30 08:19	0°♄	
morning set	10151 Jan 22 03:52	28°♄09'16		morning set	10152 Jan 05 21:59	12°♄16'59	
	10151 Jan 23 03:50	0°♄					
				superior conj	10152 Jan 14 19:18	29°♄16'00	0°51'33
superior conj	10151 Feb 01 06:12	16°♄30'04	0°19'45	minimum elong	10152 Jan 14 22:21	29°♄30'09	0°51'31
minimum elong	10151 Feb 01 07:49	16°♄37'10	0°19'49		10152 Jan 15 04:47	0°♄	
desc. node	10151 Feb 03 20:41	21°♄02'36		desc. node	10152 Jan 21 17:33	11°♄45'10	
max. Earth dist.	10151 Feb 08 20:26	29°♄29'34	1.42262 AU	max. Earth dist.	10152 Jan 22 05:01	12°♄35'02	1.40175 AU
	10151 Feb 09 03:47	0°♄		evening rise	10152 Jan 26 09:32	19°♄42'37	
evening rise	10151 Feb 14 12:12	8°♄41'29			10152 Feb 01 17:57	0°♄	

	10152 Feb 22 18:50	0°♿		desc. node	10153 Jan 07 14:27	2°≈24'08	
evening max el	10152 Mar 01 02:39	8°♿19'37	23°48'34		10153 Jan 24 22:48	0°♿	
retrograde	10152 Mar 12 00:56	14°♿45'55		evening max el	10153 Feb 11 15:55	22°♿08'25	25°06'03
asc. node	10152 Mar 15 18:59	13°♿39'16		retrograde	10153 Feb 23 14:55	29°♿04'58	
evening set	10152 Mar 17 06:14	12°♿34'49		evening set	10153 Mar 01 08:21	26°♿42'09	
min. Earth dist.	10152 Mar 22 00:35	7°♿02'28	0.68428 AU	asc. node	10153 Mar 02 16:11	25°♿27'18	
inferior conj	10152 Mar 22 16:58	6°♿06'36	2°03'44	min. Earth dist.	10153 Mar 05 19:10	21°♿44'35	0.67820 AU
minimum elong	10152 Mar 22 14:48	6°♿14'02	2°03'03	inferior conj	10153 Mar 06 23:18	20°♿12'31	1°21'04
morning rise	10152 Mar 27 23:23	0°♿03'13		minimum elong	10153 Mar 06 21:33	20°♿18'17	1°20'31
	10152 Mar 28 01:03	30°♿		morning rise	10153 Mar 12 11:04	14°♿16'55	
direct	10152 Apr 01 01:49	28°♿28'18		direct	10153 Mar 16 01:06	13°♿03'04	
	10152 Apr 05 11:08	0°♿		morning max el	10153 Mar 23 04:55	17°♿00'34	19°27'22
morning max el	10152 Apr 09 02:07	3°♿01'26	20°32'55		10153 Apr 02 09:59	0°♿	
desc. node	10152 Apr 18 18:07	14°♿54'17		greatest brilliancy	10153 Apr 04 22:09	3°♿39'50	-0.7m
	10152 Apr 29 04:04	0°♿		desc. node	10153 Apr 05 14:56	4°♿41'59	
morning set	10152 May 08 03:43	13°♿41'35		morning set	10153 Apr 17 02:46	22°♿10'09	
max. Earth dist.	10152 May 17 00:45	27°♿42'45	1.43514 AU		10153 Apr 22 04:15	0°♿	
	10152 May 18 10:43	0°♿		max. Earth dist.	10153 Apr 29 14:01	11°♿35'36	1.44880 AU
superior conj	10152 May 23 11:56	8°♿18'10	-2°06'42	superior conj	10153 May 03 13:49	17°♿55'50	-2°12'35
minimum elong	10152 May 23 16:36	8°♿37'36	2°06'52	minimum elong	10153 May 03 12:27	17°♿50'24	2°12'53
evening rise	10152 Jun 04 20:12	29°♿30'09			10153 May 11 00:52	0°♿	
	10152 Jun 05 03:00	0°♿		evening rise	10153 May 17 15:45	10°♿57'44	
asc. node	10152 Jun 11 17:25	11°♿28'19			10153 May 29 06:50	0°♿	
evening max el	10152 Jun 21 19:52	25°♿52'31	18°04'32	asc. node	10153 May 29 14:28	0°♿29'01	
retrograde	10152 Jun 28 07:56	29°♿14'05		evening max el	10153 Jun 05 09:30	9°♿17'48	18°15'38
evening set	10152 Jun 30 23:09	28°♿40'25		retrograde	10153 Jun 11 18:30	12°♿41'00	
inferior conj	10152 Jul 07 10:19	23°♿35'12	2°14'16	evening set	10153 Jun 14 17:30	11°♿53'53	
minimum elong	10152 Jul 07 13:09	23°♿28'04	2°13'04	inferior conj	10153 Jun 20 16:27	6°♿31'04	2°53'42
min. Earth dist.	10152 Jul 10 11:14	20°♿32'12	0.61687 AU	minimum elong	10153 Jun 20 18:38	6°♿24'53	2°52'51
morning rise	10152 Jul 14 00:50	17°♿31'56		min. Earth dist.	10153 Jun 23 04:28	3°♿41'52	0.63823 AU
desc. node	10152 Jul 15 17:41	16°♿29'37		morning rise	10153 Jun 26 18:23	0°♿15'50	
direct	10152 Jul 20 17:06	15°♿12'15			10153 Jun 27 02:35	30°♿	
morning max el	10152 Aug 03 22:06	23°♿13'38	27°56'59	desc. node	10153 Jul 02 14:47	27°♿40'17	
	10152 Aug 09 22:57	0°♿		direct	10153 Jul 03 11:04	27°♿37'54	
	10152 Aug 29 11:38	0°♿			10153 Jul 10 11:32	0°♿	
morning set	10152 Sep 06 10:36	15°♿24'49		morning max el	10153 Jul 17 07:12	5°♿40'21	27°39'39
asc. node	10152 Sep 07 17:24	18°♿04'08			10153 Aug 04 18:36	0°♿	
max. Earth dist.	10152 Sep 12 01:55	27°♿22'18	1.31852 AU	morning set	10153 Aug 21 04:48	29°♿09'44	
	10152 Sep 13 06:46	0°♿			10153 Aug 21 14:54	0°♿	
superior conj	10152 Sep 13 20:53	1°♿17'33	0°58'05	asc. node	10153 Aug 25 14:13	8°♿07'44	
minimum elong	10152 Sep 13 18:43	1°♿05'39	0°57'41	max. Earth dist.	10153 Aug 26 02:37	9°♿12'47	1.32709 AU
evening rise	10152 Sep 20 15:19	16°♿07'53		superior conj	10153 Aug 29 03:21	15°♿40'06	0°34'43
	10152 Sep 27 10:19	0°♿		minimum elong	10153 Aug 29 01:46	15°♿31'37	0°34'16
desc. node	10152 Oct 11 15:40	22°♿21'44			10153 Sep 04 18:18	0°♿	
evening max el	10152 Oct 16 06:16	27°♿22'21	24°40'48	evening rise	10153 Sep 05 02:47	0°♿45'20	
	10152 Oct 19 07:06	0°♿			10153 Sep 21 07:12	0°♿	
retrograde	10152 Oct 30 01:17	4°♿17'57		evening max el	10153 Sep 27 17:01	7°♿32'35	23°01'06
evening set	10152 Nov 04 10:30	3°♿13'17		desc. node	10153 Sep 28 12:53	8°♿19'28	
min. Earth dist.	10152 Nov 09 17:33	0°♿26'48	0.56584 AU	retrograde	10153 Oct 11 00:04	14°♿10'04	
	10152 Nov 10 10:35	30°♿		evening set	10153 Oct 14 22:15	13°♿36'29	
inferior conj	10152 Nov 12 08:01	28°♿47'08	-5°33'17	min. Earth dist.	10153 Oct 22 02:01	10°♿20'01	0.55209 AU
minimum elong	10152 Nov 12 12:38	28°♿39'45	5°32'26	inferior conj	10153 Oct 23 12:49	9°♿29'48	-5°40'42
morning rise	10152 Nov 20 17:00	24°♿42'35		minimum elong	10153 Oct 23 09:51	9°♿34'06	5°40'15
direct	10152 Nov 23 04:51	24°♿25'31		morning rise	10153 Oct 31 23:14	5°♿40'04	
morning max el	10152 Dec 02 18:53	28°♿59'29	19°28'06	direct	10153 Nov 04 00:16	5°♿18'17	
	10152 Dec 03 19:00	0°♿		morning max el	10153 Nov 15 03:29	10°♿33'19	20°45'39
asc. node	10152 Dec 04 17:33	1°♿01'48		asc. node	10153 Nov 21 14:30	18°♿17'58	
morning set	10152 Dec 20 00:17	26°♿45'21			10153 Nov 28 13:52	0°♿	
	10152 Dec 21 15:00	0°♿		morning set	10153 Dec 04 07:53	11°♿26'24	
superior conj	10152 Dec 28 00:45	12°♿47'09	1°15'01	superior conj	10153 Dec 11 18:08	26°♿51'06	1°30'26
minimum elong	10152 Dec 28 03:43	13°♿01'37	1°15'07	minimum elong	10153 Dec 11 20:12	27°♿01'38	1°30'43
max. Earth dist.	10153 Jan 03 10:46	24°♿57'41	1.37968 AU		10153 Dec 13 07:18	0°♿	
	10153 Jan 06 05:45	0°≈		max. Earth dist.	10153 Dec 16 18:53	6°♿54'23	1.35894 AU
evening rise	10153 Jan 07 04:10	1°≈39'00		evening rise	10153 Dec 20 17:35	14°♿24'07	

desc. node	10153 Dec 25 11:24	22°  55'33		max. Earth dist.	10154 Nov 29 10:02	18°  47'51	1.34134 AU
	10153 Dec 29 15:32	0° 		evening rise	10154 Dec 03 22:03	27°  48'17	
	10154 Jan 19 17:02	0° 			10154 Dec 05 01:22	0° 	
evening max el	10154 Jan 25 05:17	5°  56'08	26°13'30	desc. node	10154 Dec 12 08:25	13°  14'47	
retrograde	10154 Feb 06 23:51	13°  10'56			10154 Dec 22 21:41	0° 	
evening set	10154 Feb 13 05:07	10°  39'57		evening max el	10155 Jan 07 18:51	19°  35'06	27°03'27
min. Earth dist.	10154 Feb 17 09:36	6°  16'53	0.66819 AU	retrograde	10155 Jan 21 02:55	26°  56'48	
asc. node	10154 Feb 17 13:23	6°  05'25		evening set	10155 Jan 27 18:36	24°  22'42	
inferior conj	10154 Feb 19 01:26	4°  14'25	0°29'22	min. Earth dist.	10155 Jan 31 17:37	20°  33'27	0.65450 AU
minimum elong	10154 Feb 19 00:41	4°  16'45	0°29'17	inferior conj	10155 Feb 02 21:10	18°  07'29	-0°31'02
	10154 Feb 22 20:40	30° 		minimum elong	10155 Feb 02 22:03	18°  04'57	0°30'20
morning rise	10154 Feb 24 21:00	28°  28'23		asc. node	10155 Feb 04 10:35	16°  23'38	
direct	10154 Feb 27 23:58	27°  33'02		morning rise	10155 Feb 09 02:51	12°  33'32	
	10154 Mar 05 09:29	0° 		direct	10155 Feb 11 20:26	11°  53'15	
morning max el	10154 Mar 06 14:53	1°  07'18	18°37'35	morning max el	10155 Feb 18 06:01	15°  15'53	18°04'32
desc. node	10154 Mar 23 11:44	24°  50'36			10155 Feb 28 23:20	0° 	
	10154 Mar 26 18:35	0° 		morning set	10155 Mar 08 13:55	12°  10'41	
morning set	10154 Mar 27 17:59	1°  31'57		desc. node	10155 Mar 10 08:32	15°  14'26	
					10155 Mar 19 12:23	0° 	
superior conj	10154 Apr 12 22:31	26°  53'48	-1°58'31	superior conj	10155 Mar 23 06:37	5°  57'20	-1°26'12
minimum elong	10154 Apr 12 14:23	26°  21'58	1°58'10	minimum elong	10155 Mar 22 21:33	5°  21'35	1°25'12
max. Earth dist.	10154 Apr 12 07:55	25°  56'39	1.45570 AU	max. Earth dist.	10155 Mar 26 04:03	10°  30'16	1.45516 AU
	10154 Apr 14 22:05	0° 			10155 Apr 07 16:53	0° 	
evening rise	10154 Apr 28 11:26	21°  25'30		evening rise	10155 Apr 08 09:51	1°  05'36	
	10154 May 03 20:23	0° 		greatest brilliancy	10155 Apr 21 09:48	20°  08'27	-0.7m
greatest brilliancy	10154 May 06 10:59	4°  08'28	-0.9m		10155 Apr 27 17:14	0° 	
asc. node	10154 May 16 11:33	18°  15'41		evening max el	10155 May 03 04:38	6°  13'41	19°30'24
evening max el	10154 May 19 21:08	22°  53'21	18°44'39	asc. node	10155 May 03 08:43	6°  14'25	
retrograde	10154 May 26 12:02	26°  31'22		retrograde	10155 May 10 09:26	10°  21'39'04	
evening set	10154 May 29 19:00	25°  29'24		evening set	10155 May 14 00:53	9°  21'33	
inferior conj	10154 Jun 04 09:32	19°  50'21	3°13'54	inferior conj	10155 May 19 10:18	3°  27'40	3°18'42
minimum elong	10154 Jun 04 10:34	19°  47'10	3°13'22	minimum elong	10155 May 19 10:08	3°  28'11	3°18'19
min. Earth dist.	10154 Jun 06 06:31	17°  31'27	0.65652 AU	min. Earth dist.	10155 May 20 16:16	1°  48'52	0.67066 AU
morning rise	10154 Jun 10 01:24	13°  23'03			10155 May 22 02:37	30° 	
direct	10154 Jun 16 12:35	10°  45'51		morning rise	10155 May 24 19:02	27°  07'45	
desc. node	10154 Jun 19 11:52	11°  21'50		direct	10155 May 30 20:23	24°  08'19	
morning max el	10154 Jun 29 17:44	18°  35'46	26°50'24	desc. node	10155 Jun 06 08:54	26°  05'10	
	10154 Jul 09 08:36	0° 			10155 Jun 10 06:43	0° 	
	10154 Jul 28 18:23	0° 		morning max el	10155 Jun 12 03:58	1°  49'41	25°37'46
morning set	10154 Aug 04 12:27	12°  21'50			10155 Jul 03 10:33	0° 	
max. Earth dist.	10154 Aug 08 17:40	20°  37'06	1.34071 AU	morning set	10155 Jul 18 05:44	24°  05'13'2	
asc. node	10154 Aug 12 11:04	28°  13'29			10155 Jul 21 00:29	0° 	
superior conj	10154 Aug 13 04:01	29°  41'43	0°07'00	max. Earth dist.	10155 Jul 21 22:33	1°  44'06	1.35899 AU
minimum elong	10154 Aug 13 03:39	29°  39'50	0°06'40				
behind sun begin	10154 Aug 12 22:24	29°  12'28		superior conj	10155 Jul 27 20:12	13°  15'34	-0°24'12
behind sun end	10154 Aug 13 08:54	0°  07'15		minimum elong	10155 Jul 27 21:41	13°  23'01	0°24'16
	10154 Aug 13 07:31	0° 		asc. node	10155 Jul 30 07:57	18°  17'51	
evening rise	10154 Aug 20 12:55	15°  15'35		evening rise	10155 Aug 04 19:37	29°  33'06	
	10154 Aug 27 22:45	0° 			10155 Aug 05 00:53	0° 	
evening max el	10154 Sep 09 09:16	17°  49'35	21°24'50	evening max el	10155 Aug 22 13:51	28°  14'25	20°04'11
desc. node	10154 Sep 15 10:08	22°  19'58			10155 Aug 23 23:05	0° 	
retrograde	10154 Sep 21 12:47	23°  51'16		retrograde	10155 Sep 02 02:21	3°  55'58	
evening set	10154 Sep 24 03:04	23°  35'48		desc. node	10155 Sep 02 07:23	3°  55'51	
inferior conj	10154 Oct 03 05:55	19°  39'37	-4°51'41	evening set	10155 Sep 04 00:35	3°  46'14	
minimum elong	10154 Oct 02 20:37	19°  52'38	4°49'28		10155 Sep 12 16:21	30° 	
min. Earth dist.	10154 Oct 03 09:37	19°  34'25	0.54633 AU	inferior conj	10155 Sep 13 01:06	29°  14'54	-3°14'29
morning rise	10154 Oct 11 14:58	15°  49'19		minimum elong	10155 Sep 12 16:35	29°  59'39	3°11'35
direct	10154 Oct 15 09:16	15°  18'42		min. Earth dist.	10155 Sep 14 18:59	28°  14'14	0.54997 AU
morning max el	10154 Oct 27 23:10	21°  18'04	22°22'50	morning rise	10155 Sep 21 07:23	25°  13'25	
	10154 Nov 04 07:47	0° 		direct	10155 Sep 25 20:18	24°  15'04'6	
asc. node	10154 Nov 08 11:27	6°  25'39			10155 Oct 07 18:13	0° 	
morning set	10154 Nov 18 18:32	26°  13'50		morning max el	10155 Oct 09 11:25	1°  31'38	24°09'52
	10154 Nov 20 13:09	0° 		asc. node	10155 Oct 26 08:21	25°  12'24	
					10155 Oct 28 21:07	0° 	
superior conj	10154 Nov 25 19:53	11°  17'33	1°38'29	morning set	10155 Nov 03 06:19	11°  12'03	
minimum elong	10154 Nov 25 20:45	11°  22'06	1°38'52				

superior conj	10155 Nov 10 03:09	25°♄58'05	1°39'54	superior conj	10156 Oct 24 13:42	10°♄45'56	1°35'15
minimum elong	10155 Nov 10 02:49	25°♄56'16	1°40'15	minimum elong	10156 Oct 24 12:23	10°♄38'37	1°35'26
	10155 Nov 11 23:49	0°♄		max. Earth dist.	10156 Oct 25 15:10	13°♄06'40	1.31910 AU
max. Earth dist.	10155 Nov 12 09:22	0°♄51'19	1.32791 AU	evening rise	10156 Oct 31 14:15	25°♄57'26	
evening rise	10155 Nov 17 13:57	11°♄41'58			10156 Nov 02 13:26	0°♄	
	10155 Nov 27 07:39	0°♄		desc. node	10156 Nov 15 02:35	22°♄49'48	
desc. node	10155 Nov 29 05:29	3°♄15'28			10156 Nov 19 19:04	0°♄	
	10155 Dec 18 10:56	0°♄		evening max el	10156 Dec 02 15:52	15°♄36'28	27°23'31
evening max el	10155 Dec 21 07:08	2°♄52'47	27°28'46	retrograde	10156 Dec 16 12:25	22°♄52'04	
retrograde	10156 Jan 03 23:17	10°♄13'33		evening set	10156 Dec 23 13:14	20°♄34'03	
evening set	10156 Jan 10 22:19	7°♄43'00		min. Earth dist.	10156 Dec 27 06:10	17°♄42'06	0.61789 AU
min. Earth dist.	10156 Jan 14 16:58	4°♄25'20	0.63752 AU	inferior conj	10156 Dec 30 06:19	14°♄58'20	-2°52'55
inferior conj	10156 Jan 17 07:49	1°♄44'38	-1°39'18	minimum elong	10156 Dec 30 12:03	14°♄45'16	2°50'20
minimum elong	10156 Jan 17 10:59	1°♄36'30	1°37'35	morning rise	10157 Jan 06 13:22	9°♄57'41	
	10156 Jan 19 01:41	30°♄		asc. node	10157 Jan 08 04:52	9°♄37'58	
asc. node	10156 Jan 22 07:46	27°♄20'08		direct	10157 Jan 08 18:22	9°♄36'35	
morning rise	10156 Jan 24 01:36	26°♄25'44		morning max el	10157 Jan 15 16:13	13°♄06'28	17°50'30
direct	10156 Jan 26 11:41	25°♄56'52			10157 Jan 27 03:22	0°♄	
morning max el	10156 Feb 01 23:32	29°♄18'20	17°48'36	morning set	10157 Jan 31 09:38	7°♄36'29	
	10156 Feb 02 15:49	0°♄					
morning set	10156 Feb 18 13:11	24°♄28'32		superior conj	10157 Feb 11 08:52	26°♄57'00	-0°02'08
	10156 Feb 21 18:51	0°♄		minimum elong	10157 Feb 11 08:42	26°♄56'17	0°01'50
desc. node	10156 Feb 25 05:20	5°♄48'13		behind sun begin	10157 Feb 11 00:10	26°♄19'45	
				behind sun end	10157 Feb 11 17:14	27°♄32'44	
superior conj	10156 Mar 02 07:21	15°♄51'33	-0°44'13	desc. node	10157 Feb 11 02:09	26°♄28'16	
minimum elong	10156 Mar 02 02:35	15°♄32'05	0°43'23		10157 Feb 13 03:58	0°♄	
max. Earth dist.	10156 Mar 07 23:12	24°♄57'31	1.44729 AU	max. Earth dist.	10157 Feb 18 14:28	9°♄00'36	1.43304 AU
	10156 Mar 11 03:52	0°♄		evening rise	10157 Feb 25 13:46	20°♄07'03	
evening rise	10156 Mar 17 21:31	10°♄26'41			10157 Mar 04 00:15	0°♄	
	10156 Mar 30 21:34	0°♄			10157 Mar 25 12:34	0°♄	
evening max el	10156 Apr 15 06:35	20°♄16'04	20°31'01	evening max el	10157 Mar 29 02:58	3°♄58'38	21°43'18
asc. node	10156 Apr 19 05:55	23°♄35'38		asc. node	10157 Apr 06 03:08	9°♄16'08	
retrograde	10156 Apr 23 08:11	24°♄57'42		retrograde	10157 Apr 07 06:19	9°♄22'29	
evening set	10156 Apr 27 08:56	23°♄24'33		evening set	10157 Apr 11 17:18	7°♄34'01	
inferior conj	10156 May 02 15:59	17°♄17'32	3°10'58	inferior conj	10157 Apr 17 00:20	1°♄16'15	2°52'28
minimum elong	10156 May 02 14:49	17°♄21'31	3°10'32	minimum elong	10157 Apr 16 22:28	1°♄22'44	2°51'54
min. Earth dist.	10156 May 03 07:50	16°♄23'07	0.68021 AU	min. Earth dist.	10157 Apr 17 03:09	1°♄06'26	0.68519 AU
morning rise	10156 May 07 20:30	11°♄00'09			10157 Apr 17 22:17	30°♄	
direct	10156 May 13 09:28	8°♄32'34		morning rise	10157 Apr 22 03:27	25°♄03'07	
desc. node	10156 May 23 05:51	13°♄56'06		direct	10157 Apr 27 02:59	22°♄54'00	
morning max el	10156 May 24 13:34	15°♄13'40	24°11'38	morning max el	10157 May 07 00:10	28°♄44'34	22°41'47
	10156 Jun 05 16:05	0°♄			10157 May 08 05:14	0°♄	
	10156 Jun 25 08:47	0°♄		desc. node	10157 May 10 02:45	2°♄06'23	
morning set	10156 Jun 29 03:51	6°♄26'38			10157 May 30 09:01	0°♄	
max. Earth dist.	10156 Jul 02 20:30	12°♄56'40	1.38060 AU	morning set	10157 Jun 10 01:32	16°♄53'37	
				max. Earth dist.	10157 Jun 14 17:42	24°♄42'40	1.40340 AU
superior conj	10156 Jul 10 00:31	26°♄13'18	-0°57'11		10157 Jun 17 19:19	0°♄	
minimum elong	10156 Jul 10 04:17	26°♄31'16	0°56'58				
	10156 Jul 11 23:35	0°♄		superior conj	10157 Jun 22 12:46	8°♄24'38	-1°29'15
asc. node	10156 Jul 16 04:54	8°♄17'07		minimum elong	10157 Jun 22 18:34	8°♄50'56	1°28'56
evening rise	10156 Jul 18 20:19	13°♄30'55		evening rise	10157 Jul 02 11:45	26°♄59'56	
	10156 Jul 27 16:18	0°♄		asc. node	10157 Jul 03 01:51	28°♄06'40	
evening max el	10156 Aug 04 07:51	10°♄22'41	19°04'14		10157 Jul 04 01:51	0°♄	
retrograde	10156 Aug 13 05:05	14°♄47'53		evening max el	10157 Jul 18 12:17	22°♄44'20	18°25'23
evening set	10156 Aug 15 02:03	14°♄36'53		retrograde	10157 Jul 26 02:23	26°♄32'36	
desc. node	10156 Aug 19 04:37	13°♄04'51		evening set	10157 Jul 28 05:20	26°♄15'33	
inferior conj	10156 Aug 23 11:38	10°♄23'03	-1°19'59	inferior conj	10157 Aug 04 19:31	21°♄42'02	0°22'54
minimum elong	10156 Aug 23 08:10	10°♄29'01	1°18'48	minimum elong	10157 Aug 04 20:19	21°♄40'24	0°22'17
min. Earth dist.	10156 Aug 26 08:29	8°♄25'20	0.56246 AU	desc. node	10157 Aug 06 01:49	20°♄40'43	
morning rise	10156 Aug 31 11:12	5°♄35'43		min. Earth dist.	10157 Aug 08 03:50	19°♄01'43	0.58153 AU
direct	10156 Sep 05 19:27	4°♄28'58		morning rise	10157 Aug 12 07:47	16°♄18'15	
morning max el	10156 Sep 20 00:07	11°♄44'33	25°50'28	direct	10157 Aug 18 09:22	14°♄42'27	
	10156 Oct 04 02:23	0°♄		morning max el	10157 Sep 01 18:17	22°♄23'05	27°07'38
asc. node	10156 Oct 12 05:13	14°♄28'15			10157 Sep 08 12:13	0°♄	
morning set	10156 Oct 17 17:36	25°♄46'23			10157 Sep 27 00:56	0°♄	
	10156 Oct 19 16:34	0°♄		asc. node	10157 Sep 29 02:04	4°♄04'36	
				morning set	10157 Oct 02 02:35	10°♄20'44	

superior conj	10157 Oct 09 01:27	25°♄33'48	1°24'58			10158 Sep 18 19:58	0°♄	
minimum elong	10157 Oct 08 23:28	25°♄22'43	1°24'54	max. Earth dist.		10158 Sep 22 09:10	7°♄44'22	1.31591 AU
max. Earth dist.	10157 Oct 09 00:15	25°♄27'05	1.31507 AU					
	10157 Oct 11 01:21	0°♄		superior conj		10158 Sep 23 12:38	10°♄16'16	1°09'23
evening rise	10157 Oct 15 20:20	10°♄26'34		minimum elong		10158 Sep 23 10:24	10°♄03'50	1°09'05
	10157 Oct 25 19:34	0°♄		evening rise		10158 Sep 30 06:02	25°♄03'34	
desc. node	10157 Nov 01 23:44	11°♄46'17				10158 Oct 02 14:06	0°♄	
evening max el	10157 Nov 14 18:38	27°♄34'28	26°44'23	desc. node		10158 Oct 19 20:54	29°♄50'18	
	10157 Nov 17 13:33	0°♄				10158 Oct 19 23:48	0°♄	
retrograde	10157 Nov 28 17:02	4°♄42'47		evening max el		10158 Oct 27 13:32	8°♄41'21	25°33'00
evening set	10157 Dec 05 11:20	2°♄47'34		retrograde		10158 Nov 10 10:59	15°♄41'28	
min. Earth dist.	10157 Dec 09 08:48	0°♄10'36	0.59681 AU	evening set		10158 Nov 16 11:50	14°♄17'29	
	10157 Dec 09 14:19	30°♄		min. Earth dist.		10158 Nov 21 01:52	11°♄39'47	0.57635 AU
inferior conj	10157 Dec 12 13:09	27°♄39'00	-4°06'27	inferior conj		10158 Nov 24 01:03	9°♄37'09	-5°09'00
minimum elong	10157 Dec 12 20:50	27°♄23'42	4°03'43	minimum elong		10158 Nov 24 08:06	9°♄24'58	5°07'17
morning rise	10157 Dec 20 09:00	22°♄59'13		morning rise		10158 Dec 02 06:40	5°♄19'46	
direct	10157 Dec 22 12:22	22°♄42'22		direct		10158 Dec 04 13:41	5°♄03'41	
asc. node	10157 Dec 26 01:56	23°♄31'34		asc. node		10158 Dec 12 22:57	8°♄55'36	
morning max el	10157 Dec 30 04:31	26°♄30'04	18°11'35	morning max el		10158 Dec 13 08:34	9°♄18'17	18°53'39
	10158 Jan 02 05:49	0°♄				10158 Dec 26 20:26	0°♄	
morning set	10158 Jan 14 21:15	21°♄26'21		morning set		10158 Dec 29 19:16	5°♄44'09	
	10158 Jan 19 10:32	0°♄						
superior conj	10158 Jan 24 10:11	9°♄09'31	0°34'14	superior conj		10159 Jan 07 06:47	22°♄16'01	1°02'31
minimum elong	10158 Jan 24 12:38	9°♄20'34	0°34'13	minimum elong		10159 Jan 07 09:56	22°♄31'00	1°02'32
desc. node	10158 Jan 28 22:59	17°♄10'53				10159 Jan 11 10:12	0°♄	
max. Earth dist.	10158 Feb 01 00:57	22°♄27'32	1.41400 AU	max. Earth dist.		10159 Jan 14 07:54	5°♄14'03	1.39239 AU
evening rise	10158 Feb 05 22:51	0°♄35'28		desc. node		10159 Jan 15 19:50	7°♄52'21	
	10158 Feb 05 14:07	0°♄		evening rise		10159 Jan 18 05:26	12°♄00'56	
	10158 Feb 25 11:30	0°♄				10159 Jan 29 09:00	0°♄	
evening max el	10158 Mar 11 19:10	17°♄43'54	23°02'29	evening max el		10159 Feb 20 21:02	0°♄	
retrograde	10158 Mar 22 02:09	23°♄49'04				10159 Feb 22 09:08	1°♄32'24	24°22'28
asc. node	10158 Mar 24 00:19	23°♄31'06		retrograde		10159 Mar 05 18:24	8°♄12'22	
evening set	10158 Mar 27 00:27	21°♄46'04		asc. node		10159 Mar 10 21:31	6°♄11'19	
inferior conj	10158 Apr 01 09:22	15°♄20'40	2°24'14	evening set		10159 Mar 11 04:49	5°♄56'12	
minimum elong	10158 Apr 01 07:11	15°♄28'14	2°23'33	min. Earth dist.		10159 Mar 15 19:54	0°♄38'35	0.68217 AU
min. Earth dist.	10158 Mar 31 23:55	15°♄53'21	0.68578 AU			10159 Mar 16 07:24	30°♄	
morning rise	10158 Apr 06 13:48	9°♄13'11		inferior conj		10159 Mar 16 17:13	29°♄27'01	1°46'45
direct	10158 Apr 10 23:50	7°♄25'26		minimum elong		10159 Mar 16 15:09	29°♄33'57	1°46'06
morning max el	10158 Apr 19 15:05	12°♄24'47	21°16'55	morning rise		10159 Mar 22 01:34	23°♄26'40	
desc. node	10158 Apr 26 23:36	21°♄04'18		direct		10159 Mar 25 22:41	22°♄00'42	
	10158 May 03 11:42	0°♄		morning max el		10159 Apr 02 13:12	26°♄16'56	20°03'13
morning set	10158 May 20 20:31	26°♄08'10				10159 Apr 05 22:03	0°♄	
	10158 May 23 07:00	0°♄		desc. node		10159 Apr 13 20:25	10°♄36'29	
max. Earth dist.	10158 May 27 20:13	7°♄21'32	1.42464 AU			10159 Apr 26 21:00	0°♄	
				morning set		10159 Apr 29 20:51	4°♄35'38	
				max. Earth dist.		10159 May 10 06:15	20°♄52'24	1.44172 AU
superior conj	10158 Jun 04 04:25	19°♄39'53	-1°56'01					
minimum elong	10158 Jun 04 10:32	20°♄06'08	1°55'57	superior conj		10159 May 15 19:52	29°♄51'30	-2°11'25
	10158 Jun 10 02:24	0°♄		minimum elong		10159 May 15 22:28	0°♄02'06	2°11'44
evening rise	10158 Jun 15 13:51	9°♄50'13				10159 May 15 21:57	0°♄	
asc. node	10158 Jun 19 22:50	17°♄42'04		evening rise		10159 May 28 21:49	21°♄50'13	
	10158 Jun 27 09:38	0°♄				10159 Jun 02 16:01	0°♄	
evening max el	10158 Jul 01 23:13	5°♄38'32	18°06'40	asc. node		10159 Jun 06 19:52	6°♄57'07	
retrograde	10158 Jul 08 17:25	9°♄05'07		evening max el		10159 Jun 15 12:47	18°♄54'32	18°07'04
evening set	10158 Jul 11 04:15	8°♄38'14		retrograde		10159 Jun 21 22:13	22°♄14'49	
inferior conj	10158 Jul 18 00:17	3°♄44'19	1°41'01	evening set		10159 Jun 24 16:51	21°♄35'28	
minimum elong	10158 Jul 18 02:57	3°♄38'04	1°39'47	inferior conj		10159 Jun 30 22:19	16°♄22'26	2°33'35
min. Earth dist.	10158 Jul 21 06:34	0°♄42'52	0.60387 AU	minimum elong		10159 Jul 01 00:59	16°♄15'21	2°32'32
	10158 Jul 22 02:23	30°♄		min. Earth dist.		10159 Jul 03 18:07	13°♄23'14	0.62627 AU
desc. node	10158 Jul 23 22:59	28°♄32'47		morning rise		10159 Jul 07 07:16	10°♄13'18	
morning rise	10158 Jul 24 22:49	27°♄52'40		desc. node		10159 Jul 10 20:08	8°♄17'34	
direct	10158 Jul 31 11:59	25°♄47'25		direct		10159 Jul 14 00:37	7°♄44'46	
	10158 Aug 10 14:21	0°♄		morning max el		10159 Jul 28 02:11	15°♄47'03	27°53'59
morning max el	10158 Aug 14 19:22	3°♄43'15	27°49'59			10159 Aug 08 17:39	0°♄	
	10158 Sep 03 04:37	0°♄				10159 Aug 26 20:38	0°♄	
asc. node	10158 Sep 15 22:54	23°♄55'33		morning set		10159 Aug 31 06:23	8°♄39'50	
morning set	10158 Sep 16 07:33	24°♄40'27		asc. node		10159 Sep 02 19:44	13°♄55'46	



max. Earth dist.	10159 Sep 05 14:07	19° $\mathbb{M}$ 48'00	1.32160 AU	max. Earth dist.	10160 Aug 18 11:17	1° $\mathbb{M}$ 28'31	1.33226 AU
				asc. node	10160 Aug 19 16:35	4° $\mathbb{M}$ 00'36	
superior conj	10159 Sep 07 21:24	24° $\mathbb{M}$ 47'39	0°48'45	superior conj	10160 Aug 22 01:40	9° $\mathbb{M}$ 01'44	0°23'27
minimum elong	10159 Sep 07 19:25	24° $\mathbb{M}$ 36'49	0°48'19	minimum elong	10160 Aug 22 00:32	8° $\mathbb{M}$ 55'41	0°23'01
	10159 Sep 10 06:25	0° $\mathbb{L}$		evening rise	10160 Aug 29 04:35	24° $\mathbb{M}$ 17'44	
evening rise	10159 Sep 14 17:25	9° $\mathbb{L}$ 42'40			10160 Aug 31 22:05	0° $\mathbb{L}$	
	10159 Sep 25 01:14	0° $\mathbb{M}$		evening max el	10160 Sep 19 13:17	29° $\mathbb{L}$ 12'55	22°18'50
desc. node	10159 Oct 06 18:07	16° $\mathbb{M}$ 41'55			10160 Sep 20 09:06	0° $\mathbb{M}$	
evening max el	10159 Oct 09 01:31	19° $\mathbb{M}$ 05'00	23°59'02	desc. node	10160 Sep 22 15:22	1° $\mathbb{M}$ 53'51	
retrograde	10159 Oct 22 16:34	25° $\mathbb{M}$ 53'55		retrograde	10160 Oct 02 10:29	5° $\mathbb{M}$ 38'03	
evening set	10159 Oct 27 11:51	25° $\mathbb{M}$ 03'25		evening set	10160 Oct 05 17:57	5° $\mathbb{M}$ 13'48	
min. Earth dist.	10159 Nov 02 12:03	22° $\mathbb{M}$ 06'27	0.55925 AU	min. Earth dist.	10160 Oct 13 19:28	1° $\mathbb{M}$ 40'06	0.54850 AU
inferior conj	10159 Nov 04 16:32	20° $\mathbb{M}$ 46'54	-5°42'40	inferior conj	10160 Oct 14 14:58	1° $\mathbb{M}$ 12'38	-5°27'01
minimum elong	10159 Nov 04 18:17	20° $\mathbb{M}$ 44'14	5°42'16	minimum elong	10160 Oct 14 08:40	1° $\mathbb{M}$ 21'31	5°25'59
morning rise	10159 Nov 13 02:42	16° $\mathbb{M}$ 49'58			10160 Oct 16 19:23	30° $\mathbb{R}$ $\mathbb{L}$	
direct	10159 Nov 15 19:45	16° $\mathbb{M}$ 31'12		morning rise	10160 Oct 23 01:02	27° $\mathbb{L}$ 25'31	
morning max el	10159 Nov 26 00:55	21° $\mathbb{M}$ 21'27	19°58'20	direct	10160 Oct 26 09:01	27° $\mathbb{L}$ 00'39	
asc. node	10159 Nov 29 19:57	25° $\mathbb{M}$ 35'52			10160 Nov 04 00:20	0° $\mathbb{M}$	
	10159 Dec 02 22:59	0° $\mathbb{X}$		morning max el	10160 Nov 07 03:47	2° $\mathbb{M}$ 33'56	21°25'02
morning set	10159 Dec 14 00:12	20° $\mathbb{X}$ 19'55		asc. node	10160 Nov 15 16:55	13° $\mathbb{M}$ 15'46	
	10159 Dec 18 17:50	0° $\mathbb{Z}$			10160 Nov 24 22:08	0° $\mathbb{X}$	
superior conj	10159 Dec 21 17:52	6° $\mathbb{Z}$ 03'22	1°22'30	morning set	10160 Nov 27 09:23	5° $\mathbb{X}$ 04'55	
minimum elong	10159 Dec 21 20:31	6° $\mathbb{Z}$ 16'33	1°22'40				
max. Earth dist.	10159 Dec 27 14:35	17° $\mathbb{Z}$ 26'05	1.37063 AU	superior conj	10160 Dec 04 15:15	20° $\mathbb{X}$ 18'38	1°34'42
evening rise	10159 Dec 31 08:34	24° $\mathbb{Z}$ 19'59		minimum elong	10160 Dec 04 16:49	20° $\mathbb{X}$ 26'46	1°35'02
desc. node	10160 Jan 02 16:46	28° $\mathbb{Z}$ 29'11		max. Earth dist.	10160 Dec 09 01:23	29° $\mathbb{X}$ 19'41	1.35099 AU
	10160 Jan 03 13:39	0° $\mathbb{X}$			10160 Dec 09 09:29	0° $\mathbb{Z}$	
	10160 Jan 23 00:47	0° $\mathbb{X}$		evening rise	10160 Dec 13 04:51	7° $\mathbb{Z}$ 23'00	
evening max el	10160 Feb 04 22:29	15° $\mathbb{X}$ 22'20	25°36'21	desc. node	10160 Dec 19 13:45	18° $\mathbb{Z}$ 56'14	
retrograde	10160 Feb 17 06:10	22° $\mathbb{X}$ 27'23			10160 Dec 26 05:57	0° $\mathbb{X}$	
evening set	10160 Feb 23 04:53	20° $\mathbb{X}$ 00'32		evening max el	10161 Jan 17 11:50	29° $\mathbb{X}$ 07'00	26°37'09
asc. node	10160 Feb 25 18:42	17° $\mathbb{X}$ 25'44			10161 Jan 18 10:15	0° $\mathbb{X}$	
min. Earth dist.	10160 Feb 27 12:54	15° $\mathbb{X}$ 17'54	0.67449 AU	retrograde	10161 Jan 30 12:45	6° $\mathbb{X}$ 26'14	
inferior conj	10160 Feb 28 22:01	13° $\mathbb{X}$ 32'12	1°00'14	evening set	10161 Feb 05 22:50	3° $\mathbb{X}$ 52'51	
minimum elong	10160 Feb 28 20:37	13° $\mathbb{X}$ 36'42	0°59'51		10161 Feb 09 19:28	30° $\mathbb{R}$ $\mathbb{X}$	
morning rise	10160 Mar 05 12:49	7° $\mathbb{X}$ 40'35		min. Earth dist.	10161 Feb 10 00:46	29° $\mathbb{X}$ 44'37	0.66286 AU
direct	10160 Mar 08 22:03	6° $\mathbb{X}$ 34'54		inferior conj	10161 Feb 11 21:43	27° $\mathbb{X}$ 30'55	0°04'46
morning max el	10160 Mar 15 19:16	10° $\mathbb{X}$ 20'32	19°04'13	minimum elong	10161 Feb 11 21:34	27° $\mathbb{X}$ 31'20	0°05'00
greatest brilliancy	10160 Mar 29 04:03	28° $\mathbb{X}$ 13'11	-0.7m	transit middle	10161 Feb 11 21:34	27° $\mathbb{X}$ 31'20	0°05'00
	10160 Mar 30 08:15	0° $\mathbb{Y}$		transit begin	10161 Feb 11 18:48	27° $\mathbb{X}$ 39'37	
desc. node	10160 Mar 30 17:14	0° $\mathbb{Y}$ 34'09		transit end	10161 Feb 12 00:21	27° $\mathbb{X}$ 23'04	
morning set	10160 Apr 08 00:17	13° $\mathbb{Y}$ 20'18		asc. node	10161 Feb 11 15:55	27° $\mathbb{X}$ 48'14	
	10160 Apr 18 17:24	0° $\mathbb{Z}$		morning rise	10161 Feb 17 21:21	21° $\mathbb{X}$ 50'00	
max. Earth dist.	10160 Apr 21 22:20	5° $\mathbb{Z}$ 01'21	1.45268 AU	direct	10161 Feb 20 20:05	21° $\mathbb{X}$ 01'37	
				morning max el	10161 Feb 27 07:51	24° $\mathbb{X}$ 29'30	18°21'27
superior conj	10160 Apr 24 12:53	9° $\mathbb{Z}$ 07'36	-2°09'08		10161 Mar 03 23:16	0° $\mathbb{X}$	
minimum elong	10160 Apr 24 08:18	8° $\mathbb{Z}$ 49'28	2°09'14	desc. node	10161 Mar 17 14:02	20° $\mathbb{X}$ 49'50	
	10160 May 07 13:09	0° $\mathbb{I}$		morning set	10161 Mar 19 03:07	23° $\mathbb{X}$ 17'46	
evening rise	10160 May 09 07:22	2° $\mathbb{I}$ 52'20			10161 Mar 23 08:12	0° $\mathbb{Y}$	
asc. node	10160 May 23 16:56	25° $\mathbb{I}$ 45'07					
	10160 May 26 21:45	0° $\mathbb{L}$		superior conj	10161 Apr 03 18:58	18° $\mathbb{Y}$ 01'39	-1°46'38
evening max el	10160 May 29 01:50	2° $\mathbb{L}$ 24'24	18°25'49	minimum elong	10161 Apr 03 09:33	17° $\mathbb{Y}$ 24'49	1°45'55
retrograde	10160 Jun 04 12:16	5° $\mathbb{L}$ 52'30		max. Earth dist.	10161 Apr 04 17:27	19° $\mathbb{Y}$ 29'35	1.45637 AU
evening set	10160 Jun 07 14:38	4° $\mathbb{L}$ 59'04			10161 Apr 11 10:48	0° $\mathbb{Z}$	
	10160 Jun 12 22:57	30° $\mathbb{R}$ $\mathbb{I}$		evening rise	10161 Apr 19 17:16	12° $\mathbb{Z}$ 57'30	
inferior conj	10160 Jun 13 09:32	29° $\mathbb{I}$ 28'51	3°04'21	greatest brilliancy	10161 Apr 30 00:36	29° $\mathbb{Z}$ 04'13	-0.8m
minimum elong	10160 Jun 13 11:16	29° $\mathbb{I}$ 23'46	3°03'40		10161 Apr 30 15:08	0° $\mathbb{I}$	
min. Earth dist.	10160 Jun 15 15:08	26° $\mathbb{I}$ 51'11	0.64645 AU	asc. node	10161 May 10 14:04	13° $\mathbb{I}$ 57'28	
morning rise	10160 Jun 19 06:50	23° $\mathbb{I}$ 10'52		evening max el	10161 May 12 11:50	16° $\mathbb{I}$ 02'24	19°02'08
direct	10160 Jun 25 21:38	20° $\mathbb{I}$ 29'01		retrograde	10161 May 19 07:54	19° $\mathbb{I}$ 50'56	
desc. node	10160 Jun 26 17:15	20° $\mathbb{I}$ 31'16		evening set	10161 May 22 18:18	18° $\mathbb{I}$ 42'31	
morning max el	10160 Jul 09 12:21	28° $\mathbb{I}$ 27'36	27°22'16	inferior conj	10161 May 28 06:16	12° $\mathbb{I}$ 56'50	3°17'38
	10160 Jul 10 23:51	0° $\mathbb{L}$		minimum elong	10161 May 28 06:47	12° $\mathbb{I}$ 55'12	3°17'11
	10160 Aug 01 13:11	0° $\mathbb{L}$		min. Earth dist.	10161 May 29 20:48	10° $\mathbb{I}$ 54'01	0.66300 AU
morning set	10160 Aug 13 20:31	22° $\mathbb{L}$ 11'40		morning rise	10161 Jun 02 18:42	6° $\mathbb{I}$ 36'16	
	10160 Aug 17 18:04	0° $\mathbb{M}$		direct	10161 Jun 09 02:00	3° $\mathbb{I}$ 52'09	

desc. node	10161 Jun 13 14:18	5° $\Pi$ 01'25		morning rise	10162 May 17 15:59	20° $\mathcal{B}$ 20'49	
morning max el	10161 Jun 21 23:09	11° $\Pi$ 33'08	26°21'52	direct	10162 May 23 12:20	17° $\mathcal{B}$ 44'39	
	10161 Jul 06 16:16	0° $\mathcal{E}$		desc. node	10162 May 31 11:17	21° $\mathcal{B}$ 18'01	
	10161 Jul 25 03:49	0° $\Omega$		morning max el	10162 Jun 04 08:53	24° $\mathcal{B}$ 51'35	25°02'06
morning set	10161 Jul 27 22:39	5° $\Omega$ 07'39			10162 Jun 09 00:13	0° $\Pi$	
max. Earth dist.	10161 Jul 31 21:54	12° $\Omega$ 43'48	1.34788 AU		10162 Jun 30 03:23	0° $\mathcal{E}$	
				morning set	10162 Jul 10 08:21	17° $\mathcal{E}$ 15'36	
superior conj	10161 Aug 05 23:06	22° $\Omega$ 52'33	-0°05'54	max. Earth dist.	10162 Jul 13 22:39	23° $\mathcal{E}$ 47'12	1.36783 AU
minimum elong	10161 Aug 05 23:28	22° $\Omega$ 54'21	0°06'09		10162 Jul 17 05:57	0° $\Omega$	
behind sun begin	10161 Aug 05 17:57	22° $\Omega$ 26'04					
behind sun end	10161 Aug 06 04:58	23° $\Omega$ 22'42		superior conj	10162 Jul 20 10:40	6° $\Omega$ 11'57	-0°38'07
asc. node	10161 Aug 06 13:27	24° $\Omega$ 06'25		minimum elong	10162 Jul 20 13:05	6° $\Omega$ 23'51	0°38'03
	10161 Aug 09 09:27	0° $\mathcal{M}$		asc. node	10162 Jul 24 10:21	14° $\Omega$ 08'56	
evening rise	10161 Aug 13 13:33	8° $\mathcal{M}$ 43'28		evening rise	10162 Jul 28 17:59	22° $\Omega$ 52'58	
	10161 Aug 24 21:23	0° $\mathcal{A}$			10162 Aug 01 07:57	0° $\mathcal{M}$	
evening max el	10161 Sep 01 10:14	9° $\mathcal{A}$ 42'52	20°48'15	evening max el	10162 Aug 14 20:46	20° $\mathcal{M}$ 55'49	19°36'09
desc. node	10161 Sep 09 12:38	14° $\mathcal{A}$ 55'50		retrograde	10162 Aug 24 15:54	25° $\mathcal{M}$ 47'16	
retrograde	10161 Sep 12 22:26	15° $\mathcal{A}$ 25'20		evening set	10162 Aug 26 12:13	25° $\mathcal{M}$ 37'41	
evening set	10161 Sep 15 03:22	15° $\mathcal{A}$ 13'37		desc. node	10162 Aug 27 09:54	25° $\mathcal{M}$ 26'19	
inferior conj	10161 Sep 24 07:10	11° $\mathcal{A}$ 17'44	-4°14'56	inferior conj	10162 Sep 04 07:31	21° $\mathcal{M}$ 33'42	-2°26'02
minimum elong	10161 Sep 23 21:19	11° $\mathcal{A}$ 31'47	4°12'05	minimum elong	10162 Sep 04 00:57	21° $\mathcal{M}$ 44'02	2°23'40
min. Earth dist.	10161 Sep 25 03:52	10° $\mathcal{A}$ 48'10	0.54661 AU	min. Earth dist.	10162 Sep 06 14:56	20° $\mathcal{M}$ 06'30	0.55430 AU
morning rise	10161 Oct 02 15:15	7° $\mathcal{A}$ 20'34		morning rise	10162 Sep 12 11:29	17° $\mathcal{M}$ 07'52	
direct	10161 Oct 06 17:01	6° $\mathcal{A}$ 44'56		direct	10162 Sep 17 08:55	16° $\mathcal{M}$ 14'29	
morning max el	10161 Oct 19 19:36	13° $\mathcal{A}$ 03'19	23°08'00	morning max el	10162 Oct 01 06:57	23° $\mathcal{M}$ 11'41	24°54'28
	10161 Nov 01 14:16	0° $\mathcal{M}$			10162 Oct 07 09:42	0° $\mathcal{A}$	
asc. node	10161 Nov 02 13:51	1° $\mathcal{M}$ 41'32		asc. node	10162 Oct 20 10:44	20° $\mathcal{A}$ 41'16	
morning set	10161 Nov 11 20:44	19° $\mathcal{M}$ 53'27			10162 Oct 25 03:19	0° $\mathcal{M}$	
	10161 Nov 16 13:28	0° $\mathcal{X}$		morning set	10162 Oct 27 08:29	4° $\mathcal{M}$ 39'58	
superior conj	10161 Nov 18 19:41	4° $\mathcal{X}$ 52'28	1°39'51	superior conj	10162 Nov 03 04:35	19° $\mathcal{M}$ 36'33	1°38'38
minimum elong	10161 Nov 18 20:01	4° $\mathcal{X}$ 54'17	1°40'14	minimum elong	10162 Nov 03 03:48	19° $\mathcal{M}$ 32'14	1°38'55
max. Earth dist.	10161 Nov 21 19:46	11° $\mathcal{X}$ 15'14	1.33506 AU	max. Earth dist.	10162 Nov 04 21:59	23° $\mathcal{M}$ 22'57	1.32356 AU
evening rise	10161 Nov 26 14:36	21° $\mathcal{X}$ 01'03			10162 Nov 07 23:55	0° $\mathcal{X}$	
	10161 Dec 01 07:16	0° $\mathcal{Z}$		evening rise	10162 Nov 10 10:24	5° $\mathcal{X}$ 04'48	
desc. node	10161 Dec 06 10:47	9° $\mathcal{Z}$ 08'24		desc. node	10162 Nov 23 07:53	28° $\mathcal{X}$ 58'57	
	10161 Dec 20 03:37	0° $\approx$			10162 Nov 23 22:45	0° $\mathcal{Z}$	
evening max el	10161 Dec 31 00:53	12° $\approx$ 37'57	27°17'30	evening max el	10162 Dec 13 12:09	25° $\mathcal{Z}$ 43'37	27°30'40
retrograde	10162 Jan 13 13:17	20° $\approx$ 00'53			10162 Dec 18 18:16	0° $\approx$	
evening set	10162 Jan 20 08:30	17° $\approx$ 27'12		retrograde	10162 Dec 27 06:52	3° $\approx$ 02'30	
min. Earth dist.	10162 Jan 24 05:23	13° $\approx$ 51'46	0.64766 AU	evening set	10163 Jan 03 07:15	0° $\approx$ 36'28	
inferior conj	10162 Jan 26 13:55	11° $\approx$ 18'01	-0°59'09		10163 Jan 04 03:21	30° $\mathcal{R}$ $\mathcal{Z}$	
minimum elong	10162 Jan 26 15:43	11° $\approx$ 13'08	0°58'01	min. Earth dist.	10163 Jan 07 00:48	27° $\mathcal{Z}$ 30'21	0.62940 AU
asc. node	10162 Jan 29 13:07	8° $\approx$ 15'47		inferior conj	10163 Jan 09 19:51	24° $\mathcal{Z}$ 46'51	-2°10'05
morning rise	10162 Feb 02 00:34	5° $\approx$ 50'10		minimum elong	10163 Jan 10 00:07	24° $\mathcal{Z}$ 36'26	2°07'57
direct	10162 Feb 04 14:35	5° $\approx$ 15'22		asc. node	10163 Jan 16 10:16	19° $\mathcal{Z}$ 43'35	
morning max el	10162 Feb 11 00:23	8° $\approx$ 36'34	17°55'31	morning rise	10163 Jan 16 19:12	19° $\mathcal{Z}$ 35'01	
	10162 Feb 25 15:32	0° $\mathcal{H}$		direct	10163 Jan 19 02:42	19° $\mathcal{Z}$ 09'55	
morning set	10162 Feb 28 11:14	4° $\mathcal{H}$ 41'46		morning max el	10163 Jan 25 17:55	22° $\mathcal{Z}$ 34'08	17°47'04
desc. node	10162 Mar 04 10:48	11° $\mathcal{H}$ 18'10			10163 Jan 31 13:19	0° $\approx$	
				morning set	10163 Feb 10 20:25	17° $\approx$ 18'28	
superior conj	10162 Mar 14 08:26	27° $\mathcal{H}$ 22'32	-1°08'56		10163 Feb 18 04:26	0° $\mathcal{H}$	
minimum elong	10162 Mar 14 00:51	26° $\mathcal{H}$ 52'18	1°07'55	desc. node	10163 Feb 19 07:34	1° $\mathcal{H}$ 55'14	
	10162 Mar 16 00:02	0° $\mathcal{Y}$					
max. Earth dist.	10162 Mar 18 12:49	4° $\mathcal{Y}$ 00'05	1.45265 AU	superior conj	10163 Feb 22 19:24	7° $\mathcal{H}$ 46'39	-0°25'56
evening rise	10162 Mar 30 09:15	22° $\mathcal{Y}$ 24'18		minimum elong	10163 Feb 22 16:45	7° $\mathcal{H}$ 35'38	0°25'19
	10162 Apr 04 08:21	0° $\mathcal{B}$		max. Earth dist.	10163 Mar 01 06:36	18° $\mathcal{H}$ 19'22	1.44198 AU
greatest brilliancy	10162 Apr 14 00:06	14° $\mathcal{B}$ 29'21	-0.6m		10163 Mar 08 16:36	0° $\mathcal{Y}$	
evening max el	10162 Apr 25 17:01	29° $\mathcal{B}$ 43'48	19°54'36	evening rise	10163 Mar 09 21:05	1° $\mathcal{Y}$ 50'00	
	10162 Apr 25 23:29	0° $\Pi$			10163 Mar 28 22:03	0° $\mathcal{B}$	
asc. node	10162 Apr 27 11:15	1° $\Pi$ 22'19		evening max el	10163 Apr 08 16:40	13° $\mathcal{B}$ 26'51	21°00'38
retrograde	10162 May 03 06:06	4° $\Pi$ 03'33		asc. node	10163 Apr 14 08:27	17° $\mathcal{B}$ 45'50	
evening set	10162 May 07 01:18	2° $\Pi$ 39'35		retrograde	10163 Apr 17 04:41	18° $\mathcal{B}$ 25'37	
	10162 May 09 19:05	30° $\mathcal{R}$ $\mathcal{B}$		evening set	10163 Apr 21 09:41	16° $\mathcal{B}$ 45'58	
inferior conj	10162 May 12 09:25	26° $\mathcal{B}$ 40'03	3°16'50	inferior conj	10163 Apr 26 16:30	10° $\mathcal{B}$ 34'19	3°04'21
minimum elong	10162 May 12 08:48	26° $\mathcal{B}$ 42'08	3°16'26	minimum elong	10163 Apr 26 15:00	10° $\mathcal{B}$ 39'31	3°03'52
min. Earth dist.	10162 May 13 09:21	25° $\mathcal{B}$ 19'33	0.67526 AU	min. Earth dist.	10163 Apr 27 02:44	9° $\mathcal{B}$ 58'51	0.68295 AU

morning rise	10163 May 01 20:05	4°♄18'42		inferior conj	10164 Apr 10 01:21	24°♄35'44	2°41'37
direct	10163 May 07 03:33	1°♄58'14		minimum elong	10164 Apr 09 23:18	24°♄42'52	2°41'00
morning max el	10163 May 17 18:21	8°♄17'57	23°33'12	min. Earth dist.	10164 Apr 09 22:50	24°♄44'33	0.68608 AU
desc. node	10163 May 18 08:11	8°♄53'22		morning rise	10164 Apr 15 04:45	18°♄25'06	
	10163 Jun 03 18:08	0°♄		direct	10164 Apr 19 22:31	16°♄24'59	
morning set	10163 Jun 21 20:32	28°♄22'37		morning max el	10164 Apr 29 06:25	21°♄52'35	22°04'36
	10163 Jun 22 19:29	0°♄		desc. node	10164 May 04 05:02	27°♄25'36	
max. Earth dist.	10163 Jun 25 19:23	5°♄10'40	1.39040 AU		10164 May 06 06:19	0°♄	
					10164 May 27 00:58	0°♄	
superior conj	10163 Jul 03 08:40	18°♄51'19	-1°11'08	morning set	10164 Jun 01 06:43	8°♄17'55	
minimum elong	10163 Jul 03 13:23	19°♄13'22	1°10'50	max. Earth dist.	10164 Jun 06 18:53	17°♄20'16	1.41287 AU
	10163 Jul 09 04:55	0°♄			10164 Jun 14 03:40	0°♄	
asc. node	10163 Jul 11 07:17	4°♄04'34					
evening rise	10163 Jul 12 15:08	6°♄39'22		superior conj	10164 Jun 14 12:41	0°♄39'51	-1°41'35
	10163 Jul 26 05:57	0°♄		minimum elong	10164 Jun 14 18:57	1°♄07'38	1°41'19
evening max el	10163 Jul 28 19:41	2°♄54'17	18°45'08	evening rise	10164 Jun 25 01:26	19°♄53'23	
retrograde	10163 Aug 06 02:02	7°♄01'40		asc. node	10164 Jun 27 04:16	23°♄48'53	
evening set	10163 Aug 08 01:18	6°♄48'28			10164 Jun 30 13:50	0°♄	
desc. node	10163 Aug 14 07:07	3°♄44'30		evening max el	10164 Jul 11 03:18	15°♄30'44	18°14'57
inferior conj	10163 Aug 16 02:44	2°♄26'23	-0°33'40	retrograde	10164 Jul 18 07:34	19°♄08'08	
minimum elong	10163 Aug 16 01:21	2°♄28'55	0°33'22	evening set	10164 Jul 20 13:47	18°♄47'17	
	10163 Aug 19 11:15	30°♄		inferior conj	10164 Jul 27 19:51	14°♄04'36	0°59'20
min. Earth dist.	10163 Aug 19 06:21	0°♄08'34	0.57004 AU	minimum elong	10164 Jul 27 21:44	14°♄00'33	0°58'18
morning rise	10163 Aug 23 22:01	27°♄23'17		min. Earth dist.	10164 Jul 31 04:28	11°♄12'39	0.59082 AU
direct	10163 Aug 29 14:21	26°♄04'43		desc. node	10164 Jul 31 04:16	11°♄13'02	
	10163 Sep 08 18:05	0°♄		morning rise	10164 Aug 04 02:23	8°♄27'36	
morning max el	10163 Sep 12 21:17	3°♄31'16	26°27'04	direct	10164 Aug 10 09:35	6°♄39'18	
	10163 Oct 01 22:51	0°♄		morning max el	10164 Aug 24 18:34	14°♄27'06	27°30'28
asc. node	10163 Oct 07 07:34	10°♄06'19			10164 Sep 06 06:44	0°♄	
morning set	10163 Oct 11 18:56	19°♄20'01		asc. node	10164 Sep 23 04:24	29°♄49'50	
	10163 Oct 16 16:13	0°♄			10164 Sep 23 06:23	0°♄	
superior conj	10163 Oct 18 15:49	4°♄24'24	1°31'33	morning set	10164 Sep 25 02:28	3°♄49'12	
minimum elong	10163 Oct 18 14:10	4°♄15'14	1°31'38	max. Earth dist.	10164 Oct 01 15:24	18°♄03'14	1.31481 AU
max. Earth dist.	10163 Oct 19 05:43	5°♄41'38	1.31681 AU	superior conj	10164 Oct 02 03:33	19°♄10'46	1°19'00
evening rise	10163 Oct 25 13:26	19°♄26'34		minimum elong	10164 Oct 02 01:24	18°♄58'47	1°18'50
	10163 Oct 30 18:32	0°♄			10164 Oct 07 00:55	0°♄	
desc. node	10163 Nov 10 05:01	18°♄18'33		evening rise	10164 Oct 08 21:19	3°♄59'58	
	10163 Nov 18 10:39	0°♄			10164 Oct 22 14:00	0°♄	
evening max el	10163 Nov 25 18:53	8°♄09'36	27°11'13	desc. node	10164 Oct 27 02:11	6°♄55'11	
retrograde	10163 Dec 09 16:12	15°♄21'18		evening max el	10164 Nov 06 18:20	19°♄45'36	26°17'34
evening set	10163 Dec 16 15:30	13°♄12'00		retrograde	10164 Nov 20 16:21	26°♄50'34	
min. Earth dist.	10163 Dec 20 09:28	10°♄28'03	0.60897 AU	evening set	10164 Nov 27 05:01	25°♄07'29	
inferior conj	10163 Dec 23 12:08	7°♄47'47	-3°24'37	min. Earth dist.	10164 Dec 01 07:29	22°♄32'45	0.58788 AU
minimum elong	10163 Dec 23 18:52	7°♄33'17	3°21'50	inferior conj	10164 Dec 04 11:15	20°♄11'20	-4°35'14
morning rise	10163 Dec 31 00:46	2°♄55'27		minimum elong	10164 Dec 04 19:08	19°♄56'34	4°32'47
direct	10164 Jan 02 04:41	2°♄36'27		morning rise	10164 Dec 12 11:49	15°♄41'21	
asc. node	10164 Jan 03 07:21	2°♄41'38		direct	10164 Dec 14 16:09	15°♄25'10	
morning max el	10164 Jan 09 09:07	6°♄12'39	17°57'03	asc. node	10164 Dec 20 04:22	17°♄15'12	
	10164 Jan 24 13:52	0°♄		morning max el	10164 Dec 22 18:25	19°♄22'44	18°26'54
morning set	10164 Jan 25 00:03	0°♄46'43			10164 Dec 30 14:24	0°♄	
				morning set	10165 Jan 07 16:36	14°♄50'01	
superior conj	10164 Feb 04 07:30	19°♄22'04	0°14'11		10165 Jan 15 15:52	0°♄	
minimum elong	10164 Feb 04 08:43	19°♄27'22	0°14'20	superior conj	10165 Jan 16 17:42	1°♄59'45	0°47'14
behind sun begin	10164 Feb 04 05:06	19°♄11'33		minimum elong	10165 Jan 16 20:39	2°♄13'19	0°47'12
behind sun end	10164 Feb 04 12:20	19°♄43'10		desc. node	10165 Jan 23 01:16	13°♄19'32	
desc. node	10164 Feb 06 04:23	22°♄36'49		max. Earth dist.	10165 Jan 24 05:26	15°♄21'31	1.40497 AU
	10164 Feb 10 12:58	0°♄		evening rise	10165 Jan 28 13:36	22°♄41'18	
max. Earth dist.	10164 Feb 11 20:33	2°♄11'05	1.42546 AU		10165 Feb 02 01:44	0°♄	
evening rise	10164 Feb 17 19:32	11°♄49'03			10165 Feb 22 17:15	0°♄	
	10164 Feb 29 17:32	0°♄		evening max el	10165 Mar 04 02:01	10°♄56'53	23°36'38
evening max el	10164 Mar 21 11:08	27°♄10'47	22°16'23	retrograde	10165 Mar 14 20:27	17°♄18'11	
	10164 Mar 24 13:46	0°♄		asc. node	10165 Mar 18 02:50	16°♄27'17	
retrograde	10164 Mar 31 01:54	2°♄52'03		evening set	10165 Mar 19 23:55	15°♄09'05	
asc. node	10164 Mar 31 05:39	2°♄51'56		inferior conj	10165 Mar 25 10:07	8°♄41'20	2°09'26
evening set	10164 Apr 04 17:44	0°♄57'04		minimum elong	10165 Mar 25 07:56	8°♄48'52	2°08'45
	10164 Apr 05 18:26	30°♄					

min. Earth dist.	10165 Mar 24 19:30	9° $\Upsilon$ 31'25	0.68480 AU	asc. node	10166 Mar 05 00:02	28° $\text{X}$ 28'53	
morning rise	10165 Mar 30 15:56	2° $\Upsilon$ 36'51		min. Earth dist.	10166 Mar 08 14:36	24° $\text{X}$ 14'44	0.67931 AU
direct	10165 Apr 03 20:17	0° $\Upsilon$ 58'41		inferior conj	10166 Mar 09 16:57	22° $\text{X}$ 47'51	1°28'08
morning max el	10165 Apr 12 00:20	5° $\Upsilon$ 38'25	20°43'54	minimum elong	10166 Mar 09 15:06	22° $\text{X}$ 54'00	1°27'34
desc. node	10165 Apr 21 01:52	16° $\Upsilon$ 39'20		morning rise	10166 Mar 15 03:44	16° $\text{X}$ 50'52	
	10165 Apr 30 09:34	0° $\text{B}$		direct	10166 Mar 18 19:33	15° $\text{X}$ 33'56	
morning set	10165 May 11 16:00	17° $\text{B}$ 07'15		morning max el	10166 Mar 26 01:57	19° $\text{X}$ 36'04	19°36'11
	10165 May 19 19:06	0° $\text{II}$			10166 Apr 03 12:05	0° $\Upsilon$	
max. Earth dist.	10165 May 20 00:38	0° $\text{II}$ 22'25	1.43256 AU	desc. node	10166 Apr 07 22:42	6° $\Upsilon$ 23'29	
				greatest brilliancy	10166 Apr 07 18:39	6° $\Upsilon$ 08'36	-0.7m
superior conj	10165 May 26 18:15	11° $\text{II}$ 27'52	-2°04'20	morning set	10166 Apr 20 14:40	25° $\Upsilon$ 33'42	
minimum elong	10165 May 26 23:27	11° $\text{II}$ 49'40	2°04'28		10166 Apr 23 11:40	0° $\text{B}$	
	10165 Jun 06 11:56	0° $\text{B}$		max. Earth dist.	10166 May 02 13:04	14° $\text{B}$ 10'04	1.44717 AU
evening rise	10165 Jun 07 20:28	2° $\text{B}$ 23'45					
asc. node	10165 Jun 14 01:17	13° $\text{B}$ 16'23		superior conj	10166 May 06 23:37	21° $\text{B}$ 14'33	-2°12'55
evening max el	10165 Jun 24 15:43	28° $\text{B}$ 34'50	18°04'31	minimum elong	10166 May 06 23:23	21° $\text{B}$ 13'36	2°13'15
	10165 Jun 26 06:22	0° $\text{Q}$			10166 May 12 09:14	0° $\text{II}$	
retrograde	10165 Jul 01 05:07	1° $\text{Q}$ 57'19		evening rise	10166 May 20 19:26	14° $\text{II}$ 00'19	
evening set	10165 Jul 03 19:09	1° $\text{Q}$ 25'33			10166 May 30 10:21	0° $\text{B}$	
	10165 Jul 06 07:01	30° $\text{R}$ $\text{B}$		asc. node	10166 May 31 22:21	2° $\text{B}$ 21'23	
inferior conj	10165 Jul 10 08:30	26° $\text{B}$ 23'18	2°06'15	evening max el	10166 Jun 08 05:31	11° $\text{B}$ 58'22	18°12'51
minimum elong	10165 Jul 10 11:20	26° $\text{B}$ 16'17	2°05'03	retrograde	10166 Jun 14 14:18	15° $\text{B}$ 20'15	
min. Earth dist.	10165 Jul 13 11:04	23° $\text{B}$ 19'52	0.61349 AU	evening set	10166 Jun 17 12:10	14° $\text{B}$ 35'12	
morning rise	10165 Jul 17 01:03	20° $\text{B}$ 22'38		inferior conj	10166 Jun 23 12:43	9° $\text{B}$ 14'59	2°48'59
desc. node	10165 Jul 18 01:27	19° $\text{B}$ 44'12		minimum elong	10166 Jun 23 15:02	9° $\text{B}$ 08'29	2°48'05
direct	10165 Jul 23 16:43	18° $\text{B}$ 06'23		min. Earth dist.	10166 Jun 26 02:52	6° $\text{B}$ 22'34	0.63525 AU
morning max el	10165 Aug 06 22:35	26° $\text{B}$ 07'00	27°56'24	morning rise	10166 Jun 29 16:24	3° $\text{B}$ 01'07	
	10165 Aug 10 13:24	0° $\text{Q}$		desc. node	10166 Jul 04 22:34	0° $\text{B}$ 32'12	
	10165 Aug 30 20:14	0° $\text{R}$		direct	10166 Jul 06 09:31	0° $\text{B}$ 25'11	
morning set	10165 Sep 09 05:07	18° $\text{R}$ 01'04		morning max el	10166 Jul 20 07:09	8° $\text{B}$ 27'56	27°44'23
asc. node	10165 Sep 10 01:13	19° $\text{R}$ 45'14			10166 Aug 05 22:49	0° $\text{Q}$	
	10165 Sep 14 20:12	0° $\text{Q}$			10166 Aug 23 02:31	0° $\text{R}$	
max. Earth dist.	10165 Sep 14 23:04	0° $\text{Q}$ 15'41	1.31766 AU	morning set	10166 Aug 24 00:37	1° $\text{R}$ 49'42	
				asc. node	10166 Aug 27 22:06	9° $\text{R}$ 48'04	
superior conj	10165 Sep 16 13:55	3° $\text{Q}$ 48'58	1°01'14	max. Earth dist.	10166 Aug 29 00:53	12° $\text{R}$ 09'01	1.32551 AU
minimum elong	10165 Sep 16 11:43	3° $\text{Q}$ 36'50	1°00'51				
evening rise	10165 Sep 23 07:56	18° $\text{Q}$ 38'04		superior conj	10166 Aug 31 21:04	18° $\text{R}$ 13'54	0°38'35
	10165 Sep 28 19:59	0° $\text{R}$		minimum elong	10166 Aug 31 19:21	18° $\text{R}$ 04'42	0°38'06
desc. node	10165 Oct 13 23:24	24° $\text{R}$ 31'12			10166 Sep 06 07:02	0° $\text{Q}$	
	10165 Oct 18 20:53	0° $\text{R}$		evening rise	10166 Sep 07 19:28	3° $\text{Q}$ 15'54	
evening max el	10165 Oct 19 09:35	0° $\text{R}$ 30'47	24°54'54		10166 Sep 22 04:33	0° $\text{R}$	
retrograde	10165 Nov 02 05:37	7° $\text{R}$ 27'55		desc. node	10166 Sep 30 20:38	10° $\text{R}$ 43'52	
evening set	10165 Nov 07 19:10	6° $\text{R}$ 18'15		evening max el	10166 Sep 30 20:27	10° $\text{R}$ 43'25	23°16'09
min. Earth dist.	10165 Nov 12 21:11	3° $\text{R}$ 34'34	0.56843 AU	retrograde	10166 Oct 14 06:01	17° $\text{R}$ 24'11	
inferior conj	10165 Nov 15 14:22	1° $\text{R}$ 48'29	-5°28'07	evening set	10166 Oct 18 09:44	16° $\text{R}$ 46'38	
minimum elong	10165 Nov 15 19:48	1° $\text{R}$ 39'38	5°27'03	min. Earth dist.	10166 Oct 25 06:04	13° $\text{R}$ 35'42	0.55372 AU
	10165 Nov 18 11:35	30° $\text{R}$ $\text{R}$		inferior conj	10166 Oct 26 21:47	12° $\text{R}$ 37'48	-5°43'01
morning rise	10165 Nov 23 22:41	27° $\text{R}$ 40'42		minimum elong	10166 Oct 26 20:05	12° $\text{R}$ 40'18	5°42'41
direct	10165 Nov 26 08:58	27° $\text{R}$ 24'03		morning rise	10166 Nov 04 08:15	8° $\text{R}$ 46'29	
	10165 Dec 03 12:36	0° $\text{R}$		direct	10166 Nov 07 07:04	8° $\text{R}$ 25'35	
morning max el	10165 Dec 05 17:58	1° $\text{R}$ 52'52	19°18'27	morning max el	10166 Nov 18 04:33	13° $\text{R}$ 34'08	20°32'40
asc. node	10165 Dec 07 01:22	3° $\text{R}$ 13'08		asc. node	10166 Nov 23 22:21	20° $\text{R}$ 20'13	
morning set	10165 Dec 22 17:53	29° $\text{R}$ 15'46			10166 Nov 29 21:57	0° $\text{R}$	
	10165 Dec 23 02:45	0° $\text{B}$		morning set	10166 Dec 07 00:52	13° $\text{R}$ 55'33	
superior conj	10165 Dec 30 21:01	15° $\text{B}$ 24'51	1°11'59	superior conj	10166 Dec 14 12:52	29° $\text{R}$ 24'35	1°28'35
minimum elong	10165 Dec 31 00:03	15° $\text{B}$ 39'37	1°12'02	minimum elong	10166 Dec 14 15:05	29° $\text{R}$ 35'54	1°28'50
max. Earth dist.	10166 Jan 06 11:10	27° $\text{B}$ 49'11	1.38294 AU		10166 Dec 14 19:50	0° $\text{B}$	
	10166 Jan 07 16:09	0° $\approx$		max. Earth dist.	10166 Dec 19 18:48	9° $\text{B}$ 49'14	1.36189 AU
desc. node	10166 Jan 09 22:11	3° $\approx$ 59'22		evening rise	10166 Dec 23 16:03	17° $\text{B}$ 08'31	
evening rise	10166 Jan 10 05:11	4° $\approx$ 29'55		desc. node	10166 Dec 27 19:09	24° $\text{B}$ 32'21	
	10166 Jan 26 03:16	0° $\text{X}$			10166 Dec 30 23:49	0° $\approx$	
evening max el	10166 Feb 14 15:26	24° $\text{X}$ 45'53	24°55'04		10167 Jan 20 12:10	0° $\text{X}$	
	10166 Feb 21 03:59	0° $\Upsilon$		evening max el	10167 Jan 28 04:53	8° $\text{X}$ 34'37	26°04'27
retrograde	10166 Feb 26 11:09	1° $\Upsilon$ 38'43		retrograde	10167 Feb 09 20:50	15° $\text{X}$ 47'05	
	10166 Mar 03 04:59	30° $\text{R}$ $\text{X}$		evening set	10167 Feb 16 00:24	13° $\text{X}$ 17'09	
evening set	10166 Mar 04 02:43	29° $\text{X}$ 17'36		asc. node	10167 Feb 19 21:15	9° $\text{X}$ 15'02	

min. Earth dist.	10167 Feb 20 05:49	8° <del>✕</del> 48'59	0.66992 AU	inferior conj	10168 Feb 05 16:42	20° <del>≈</del> 45'28	-0°21'18
inferior conj	10167 Feb 21 19:52	6° <del>✕</del> 50'45	0°37'48	minimum elong	10168 Feb 05 17:18	20° <del>≈</del> 43'45	0°20'44
minimum elong	10167 Feb 21 18:55	6° <del>✕</del> 53'43	0°37'39	asc. node	10168 Feb 06 18:26	19° <del>≈</del> 32'24	
morning rise	10167 Feb 27 14:06	1° <del>✕</del> 03'08		morning rise	10168 Feb 11 20:45	15° <del>≈</del> 09'39	
direct	10167 Mar 02 18:42	0° <del>✕</del> 05'08		direct	10168 Feb 14 15:39	14° <del>≈</del> 27'20	
morning max el	10167 Mar 09 10:56	3° <del>✕</del> 41'55	18°43'59	morning max el	10168 Feb 21 01:30	17° <del>≈</del> 50'48	18°08'22
desc. node	10167 Mar 25 19:30	26° <del>✕</del> 29'18			10168 Mar 01 04:24	0° <del>✕</del>	
	10167 Mar 28 01:33	0° <del>Υ</del>		morning set	10168 Mar 10 17:46	15° <del>✕</del> 19'42	
morning set	10167 Mar 31 02:20	4° <del>Υ</del> 44'27		desc. node	10168 Mar 11 16:18	16° <del>✕</del> 51'01	
max. Earth dist.	10167 Apr 15 06:40	28° <del>Υ</del> 28'46	1.45516 AU		10168 Mar 19 20:37	0° <del>Υ</del>	
superior conj	10167 Apr 16 10:02	0° <del>♄</del> 15'57	-2°01'58	superior conj	10168 Mar 25 16:55	9° <del>Υ</del> 14'52	-1°31'57
minimum elong	10167 Apr 16 02:40	29° <del>Υ</del> 47'04	2°01'44	minimum elong	10168 Mar 25 07:33	8° <del>Υ</del> 38'02	1°31'00
	10167 Apr 16 05:58	0° <del>♄</del>		max. Earth dist.	10168 Mar 28 02:48	13° <del>Υ</del> 01'57	1.45574 AU
evening rise	10167 May 01 18:43	24° <del>♄</del> 36'52			10168 Apr 08 00:12	0° <del>♄</del>	
	10167 May 05 03:11	0° <del>♄</del>		evening rise	10168 Apr 10 19:48	4° <del>♄</del> 22'21	
greatest brilliancy	10167 May 08 17:56	5° <del>♄</del> 47'33	-0.9m	greatest brilliancy	10168 Apr 23 03:52	23° <del>♄</del> 20'16	-0.7m
asc. node	10167 May 18 19:28	20° <del>♄</del> 55'34			10168 Apr 27 17:03	0° <del>♄</del>	
evening max el	10167 May 22 17:38	25° <del>♄</del> 32'51	18°39'11	asc. node	10168 May 04 16:36	8° <del>♄</del> 49'03	
retrograde	10167 May 29 07:02	29° <del>♄</del> 07'45		evening max el	10168 May 05 01:48	9° <del>♄</del> 12'38	19°22'32
evening set	10167 Jun 01 12:50	28° <del>♄</del> 07'57		retrograde	10168 May 12 04:04	13° <del>♄</del> 12'55	
inferior conj	10167 Jun 07 04:23	22° <del>♄</del> 31'08	3°11'51	evening set	10168 May 15 18:12	11° <del>♄</del> 57'43	
minimum elong	10167 Jun 07 05:37	22° <del>♄</del> 27'24	3°11'17	inferior conj	10168 May 21 04:10	6° <del>♄</del> 05'48	3°18'50
min. Earth dist.	10167 Jun 09 03:36	20° <del>♄</del> 07'05	0.65408 AU	minimum elong	10168 May 21 04:11	6° <del>♄</del> 05'45	3°18'25
morning rise	10167 Jun 12 21:36	16° <del>♄</del> 11'44		min. Earth dist.	10168 May 22 12:18	4° <del>♄</del> 20'43	0.66882 AU
direct	10167 Jun 19 09:54	13° <del>♄</del> 27'27			10168 May 26 07:28	30° <del>♄</del>	
desc. node	10167 Jun 21 19:38	13° <del>♄</del> 47'05		morning rise	10168 May 26 13:47	29° <del>♄</del> 45'36	
morning max el	10167 Jul 02 17:37	21° <del>♄</del> 19'41	26°59'26	direct	10168 Jun 01 16:43	27° <del>♄</del> 04'04	
	10167 Jul 10 06:08	0° <del>♄</del>		desc. node	10168 Jun 07 16:39	29° <del>♄</del> 05'54	
	10167 Jul 30 03:08	0° <del>♄</del>			10168 Jun 09 00:40	0° <del>♄</del>	
morning set	10167 Aug 07 10:04	15° <del>♄</del> 07'08		morning max el	10168 Jun 14 04:04	4° <del>♄</del> 31'39	25°49'43
max. Earth dist.	10167 Aug 11 17:38	23° <del>♄</del> 37'34	1.33839 AU		10168 Jul 03 15:54	0° <del>♄</del>	
asc. node	10167 Aug 14 18:59	29° <del>♄</del> 53'47		morning set	10168 Jul 20 05:47	27° <del>♄</del> 43'51	
	10167 Aug 14 20:10	0° <del>♄</del>			10168 Jul 21 11:17	0° <del>♄</del>	
superior conj	10167 Aug 15 22:46	2° <del>♄</del> 19'00	0°11'28	max. Earth dist.	10168 Jul 24 00:04	4° <del>♄</del> 46'35	1.35599 AU
minimum elong	10167 Aug 15 22:11	2° <del>♄</del> 15'55	0°11'06	superior conj	10168 Jul 29 16:25	15° <del>♄</del> 57'19	-0°19'18
behind sun begin	10167 Aug 15 18:03	1° <del>♄</del> 54'16		minimum elong	10168 Jul 29 17:35	16° <del>♄</del> 03'13	0°19'25
behind sun end	10167 Aug 16 02:19	2° <del>♄</del> 37'36		asc. node	10168 Jul 31 15:52	19° <del>♄</del> 58'33	
evening rise	10167 Aug 23 05:57	17° <del>♄</del> 47'42			10168 Aug 05 12:33	0° <del>♄</del>	
	10167 Aug 29 06:50	0° <del>♄</del>		evening rise	10168 Aug 06 13:19	2° <del>♄</del> 07'29	
evening max el	10167 Sep 12 11:18	20° <del>♄</del> 57'04	21°38'23		10168 Aug 22 22:56	0° <del>♄</del>	
desc. node	10167 Sep 17 17:52	25° <del>♄</del> 04'13		evening max el	10168 Aug 24 13:45	1° <del>♄</del> 43'20	20°14'55
retrograde	10167 Sep 24 19:44	27° <del>♄</del> 05'16		desc. node	10168 Sep 03 15:07	7° <del>♄</del> 03'01	
evening set	10167 Sep 27 14:06	26° <del>♄</del> 47'56		retrograde	10168 Sep 04 08:33	7° <del>♄</del> 04'25	
inferior conj	10167 Oct 06 15:52	22° <del>♄</del> 50'56	-5°02'47	evening set	10168 Sep 06 07:57	6° <del>♄</del> 54'25	
minimum elong	10167 Oct 06 07:08	23° <del>♄</del> 03'09	5°00'52	inferior conj	10168 Sep 15 09:46	2° <del>♄</del> 56'16	-3°31'14
min. Earth dist.	10167 Oct 06 13:27	22° <del>♄</del> 54'19	0.54658 AU	minimum elong	10168 Sep 15 00:42	3° <del>♄</del> 09'38	3°28'14
morning rise	10167 Oct 15 01:13	19° <del>♄</del> 02'17		min. Earth dist.	10168 Sep 16 22:23	2° <del>♄</del> 02'15	0.54877 AU
direct	10167 Oct 18 16:53	18° <del>♄</del> 33'17			10168 Sep 20 16:58	30° <del>♄</del>	
morning max el	10167 Oct 31 01:58	24° <del>♄</del> 25'46	22°07'26	morning rise	10168 Sep 23 16:36	28° <del>♄</del> 49'09	
	10167 Nov 05 02:24	0° <del>♄</del>		direct	10168 Sep 28 02:33	28° <del>♄</del> 07'08	
asc. node	10167 Nov 10 19:18	8° <del>♄</del> 21'14			10168 Oct 05 05:27	0° <del>♄</del>	
morning set	10167 Nov 21 11:14	28° <del>♄</del> 42'57		morning max el	10168 Oct 11 14:54	4° <del>♄</del> 42'21	23°53'58
	10167 Nov 22 01:51	0° <del>♄</del>		asc. node	10168 Oct 27 16:13	27° <del>♄</del> 02'36	
superior conj	10167 Nov 28 13:36	13° <del>♄</del> 48'43	1°37'41		10168 Oct 29 06:31	0° <del>♄</del>	
minimum elong	10167 Nov 28 14:38	13° <del>♄</del> 54'14	1°38'05	morning set	10168 Nov 04 22:58	13° <del>♄</del> 31'22	
max. Earth dist.	10167 Dec 02 08:57	21° <del>♄</del> 43'19	1.34372 AU	superior conj	10168 Nov 11 20:12	28° <del>♄</del> 27'39	1°40'04
evening rise	10167 Dec 06 18:33	0° <del>♄</del> 27'49		minimum elong	10168 Nov 11 20:02	28° <del>♄</del> 26'47	1°40'27
	10167 Dec 06 12:48	0° <del>♄</del>			10168 Nov 12 13:15	0° <del>♄</del>	
desc. node	10167 Dec 14 16:09	14° <del>♄</del> 54'00		max. Earth dist.	10168 Nov 14 07:02	3° <del>♄</del> 44'28	1.32959 AU
	10167 Dec 24 01:21	0° <del>♄</del>		evening rise	10168 Nov 19 08:56	14° <del>♄</del> 17'28	
evening max el	10168 Jan 10 18:28	22° <del>♄</del> 15'36	26°57'20		10168 Nov 27 16:15	0° <del>♄</del>	
retrograde	10168 Jan 24 00:43	29° <del>♄</del> 36'41		desc. node	10168 Nov 30 13:12	4° <del>♄</del> 57'50	
evening set	10168 Jan 30 15:06	27° <del>♄</del> 02'32			10168 Dec 18 00:11	0° <del>♄</del>	
min. Earth dist.	10168 Feb 03 14:50	23° <del>♄</del> 08'30	0.65682 AU	evening max el	10168 Dec 23 06:53	5° <del>♄</del> 36'39	27°26'44

retrograde	10169 Jan 05 22:10	12° $\approx$ 58'18		evening set	10169 Dec 26 13:28	23° $\approx$ 22'10	
evening set	10169 Jan 12 20:25	10° $\approx$ 26'33		min. Earth dist.	10169 Dec 30 06:22	20° $\approx$ 26'49	0.62092 AU
min. Earth dist.	10169 Jan 16 15:32	7° $\approx$ 04'31	0.64028 AU	inferior conj	10170 Jan 02 05:21	17° $\approx$ 42'33	-2°41'37
inferior conj	10169 Jan 19 04:51	4° $\approx$ 25'09	-1°28'29	minimum elong	10170 Jan 02 10:42	17° $\approx$ 30'06	2°39'08
minimum elong	10169 Jan 19 07:38	4° $\approx$ 17'53	1°26'56	morning rise	10170 Jan 09 10:25	12° $\approx$ 38'57	
asc. node	10169 Jan 23 15:35	0° $\approx$ 19'24		asc. node	10170 Jan 10 12:41	12° $\approx$ 22'45	
	10169 Jan 24 02:51	30° $\approx$ 3		direct	10170 Jan 11 15:54	12° $\approx$ 16'59	
morning rise	10169 Jan 25 20:46	29° $\approx$ 03'57		morning max el	10170 Jan 18 11:51	15° $\approx$ 45'13	17°48'59
direct	10169 Jan 28 07:47	28° $\approx$ 33'41			10170 Jan 28 11:02	0° $\approx$	
	10169 Feb 01 11:49	0° $\approx$		morning set	10170 Feb 03 06:57	10° $\approx$ 16'28	
morning max el	10169 Feb 03 18:51	1° $\approx$ 54'41	17°49'49	desc. node	10170 Feb 13 09:51	28° $\approx$ 02'19	
morning set	10169 Feb 20 13:14	27° $\approx$ 16'26					
	10169 Feb 22 03:46	0° $\approx$		superior conj	10170 Feb 14 12:04	29° $\approx$ 53'53	-0°08'15
desc. node	10169 Feb 26 13:04	7° $\approx$ 23'17		minimum elong	10170 Feb 14 11:19	29° $\approx$ 50'39	0°07'51
				behind sun begin	10170 Feb 14 03:37	29° $\approx$ 17'58	
superior conj	10169 Mar 05 14:22	18° $\approx$ 59'26	-0°50'47	behind sun end	10170 Feb 14 19:01	0° $\approx$ 23'16	
minimum elong	10169 Mar 05 08:49	18° $\approx$ 36'59	0°49'52		10170 Feb 14 13:31	0° $\approx$	
max. Earth dist.	10169 Mar 10 21:57	27° $\approx$ 29'57	1.44890 AU	max. Earth dist.	10170 Feb 21 13:42	11° $\approx$ 36'39	1.43551 AU
	10169 Mar 12 11:58	0° $\approx$		evening rise	10170 Feb 28 22:37	23° $\approx$ 18'20	
evening rise	10169 Mar 21 08:01	13° $\approx$ 04'31			10170 Mar 05 07:03	0° $\approx$	
	10169 Apr 01 02:26	0° $\approx$			10170 Mar 26 08:05	0° $\approx$	
evening max el	10169 Apr 18 04:31	22° $\approx$ 54'04	20°21'11	evening max el	10170 Apr 01 01:41	6° $\approx$ 36'24	21°32'01
asc. node	10169 Apr 21 13:46	25° $\approx$ 49'23		asc. node	10170 Apr 08 10:56	11° $\approx$ 41'21	
retrograde	10169 Apr 26 02:47	27° $\approx$ 30'02		retrograde	10170 Apr 10 01:02	11° $\approx$ 53'48	
evening set	10169 Apr 30 02:01	25° $\approx$ 59'16		evening set	10170 Apr 14 10:25	10° $\approx$ 07'41	
inferior conj	10169 May 05 09:16	19° $\approx$ 54'03	3°12'53	inferior conj	10170 Apr 19 17:20	3° $\approx$ 51'27	2°55'55
minimum elong	10169 May 05 08:14	19° $\approx$ 57'33	3°12'27	minimum elong	10170 Apr 19 15:33	3° $\approx$ 57'39	2°55'23
min. Earth dist.	10169 May 06 03:11	18° $\approx$ 52'49	0.67903 AU	min. Earth dist.	10170 Apr 19 22:04	3° $\approx$ 34'55	0.68473 AU
morning rise	10169 May 10 14:13	13° $\approx$ 36'03			10170 Apr 22 14:41	30° $\approx$ 1	
direct	10169 May 16 05:06	11° $\approx$ 06'03		morning rise	10170 Apr 24 20:29	27° $\approx$ 37'32	
desc. node	10169 May 25 13:36	15° $\approx$ 58'51		direct	10170 Apr 29 22:04	25° $\approx$ 25'18	
morning max el	10169 May 27 13:43	17° $\approx$ 54'31	24°24'57		10170 May 08 13:13	0° $\approx$	
	10169 Jun 06 16:45	0° $\approx$		morning max el	10170 May 09 23:51	1° $\approx$ 23'40	22°54'59
	10169 Jun 26 17:06	0° $\approx$		desc. node	10170 May 12 10:29	4° $\approx$ 00'10	
morning set	10169 Jul 02 07:06	9° $\approx$ 28'11			10170 May 31 14:59	0° $\approx$	
max. Earth dist.	10169 Jul 05 22:32	15° $\approx$ 55'52	1.37720 AU	morning set	10170 Jun 13 08:36	20° $\approx$ 05'24	
				max. Earth dist.	10170 Jun 17 19:10	27° $\approx$ 34'10	1.40003 AU
superior conj	10169 Jul 12 22:44	29° $\approx$ 00'59	-0°52'10		10170 Jun 19 04:59	0° $\approx$	
minimum elong	10169 Jul 13 02:08	29° $\approx$ 17'24	0°51'59				
	10169 Jul 13 10:57	0° $\approx$		superior conj	10170 Jun 25 13:36	11° $\approx$ 19'33	-1°24'37
asc. node	10169 Jul 18 12:46	9° $\approx$ 58'48		minimum elong	10170 Jun 25 19:10	11° $\approx$ 44'57	1°24'18
evening rise	10169 Jul 21 15:06	16° $\approx$ 08'43		evening rise	10170 Jul 05 08:05	29° $\approx$ 42'04	
	10169 Jul 28 21:29	0° $\approx$		asc. node	10170 Jul 05 09:43	29° $\approx$ 49'48	
evening max el	10169 Aug 07 05:54	13° $\approx$ 16'26	19°11'50		10170 Jul 05 11:51	0° $\approx$	
retrograde	10169 Aug 16 08:41	17° $\approx$ 48'12		evening max el	10170 Jul 21 09:04	25° $\approx$ 32'20	18°29'54
evening set	10169 Aug 18 05:07	17° $\approx$ 37'46		retrograde	10170 Jul 29 02:59	29° $\approx$ 02'45	
desc. node	10169 Aug 21 12:21	16° $\approx$ 32'20		evening set	10170 Jul 31 04:55	29° $\approx$ 09'00	
inferior conj	10169 Aug 26 17:26	13° $\approx$ 26'44	-1°37'06	inferior conj	10170 Aug 07 22:01	24° $\approx$ 38'36	0°08'46
minimum elong	10169 Aug 26 13:10	13° $\approx$ 33'55	1°35'36	minimum elong	10170 Aug 07 22:20	24° $\approx$ 37'59	0°08'21
min. Earth dist.	10169 Aug 29 11:20	11° $\approx$ 36'33	0.56011 AU	transit middle	10170 Aug 07 22:20	24° $\approx$ 37'59	0°08'21
morning rise	10169 Sep 03 18:17	8° $\approx$ 44'57		transit begin	10170 Aug 07 19:16	24° $\approx$ 43'59	
direct	10169 Sep 08 23:43	7° $\approx$ 41'52		transit end	10170 Aug 08 01:24	24° $\approx$ 31'57	
morning max el	10169 Sep 23 03:05	14° $\approx$ 53'13	25°36'33	desc. node	10170 Aug 08 09:34	24° $\approx$ 15'52	
	10169 Oct 05 04:41	0° $\approx$		min. Earth dist.	10170 Aug 11 05:38	22° $\approx$ 03'27	0.57844 AU
asc. node	10169 Oct 14 13:05	16° $\approx$ 14'13		morning rise	10170 Aug 15 12:12	19° $\approx$ 19'59	
morning set	10169 Oct 20 10:22	28° $\approx$ 15'59		direct	10170 Aug 21 11:41	17° $\approx$ 48'37	
	10169 Oct 21 05:45	0° $\approx$		morning max el	10170 Sep 04 20:08	25° $\approx$ 25'53	26°58'06
					10170 Sep 09 02:19	0° $\approx$	
superior conj	10169 Oct 27 06:22	13° $\approx$ 14'23	1°36'19		10170 Sep 28 11:11	0° $\approx$	
minimum elong	10169 Oct 27 05:10	13° $\approx$ 07'49	1°36'32	asc. node	10170 Oct 01 09:56	5° $\approx$ 47'34	
max. Earth dist.	10169 Oct 28 11:51	15° $\approx$ 56'55	1.32009 AU	morning set	10170 Oct 04 19:48	12° $\approx$ 51'38	
evening rise	10169 Nov 03 08:07	28° $\approx$ 29'39					
	10169 Nov 04 01:37	0° $\approx$		superior conj	10170 Oct 11 18:03	28° $\approx$ 02'15	1°26'53
desc. node	10169 Nov 17 10:18	24° $\approx$ 36'18		minimum elong	10170 Oct 11 16:08	27° $\approx$ 51'36	1°26'52
	10169 Nov 20 21:01	0° $\approx$		max. Earth dist.	10170 Oct 11 20:39	28° $\approx$ 16'46	1.31537 AU
evening max el	10169 Dec 05 16:17	18° $\approx$ 25'46	27°26'25		10170 Oct 12 15:13	0° $\approx$	
retrograde	10169 Dec 19 12:34	25° $\approx$ 42'35		evening rise	10170 Oct 18 13:29	12° $\approx$ 56'56	

	10170 Oct 27 03:55	0°♊	evening rise	10171 Oct 02 22:48	27°♊33'06	
desc. node	10170 Nov 04 07:28	13°♊39'09		10171 Oct 04 02:23	0°♋	
	10170 Nov 17 07:06	0°♌		10171 Oct 20 20:37	0°♊	
evening max el	10170 Nov 17 20:15	0°♌31'31 26°52'28	desc. node	10171 Oct 22 04:40	1°♊52'12	
retrograde	10170 Dec 01 18:33	7°♌40'39	evening max el	10171 Oct 30 16:25	11°♊45'54 25°45'25	
evening set	10170 Dec 08 14:22	5°♌41'37	retrograde	10171 Nov 13 14:00	18°♊47'03	
min. Earth dist.	10170 Dec 12 10:40	3°♌03'10 0.59992 AU	evening set	10171 Nov 19 18:23	17°♊17'58	
inferior conj	10170 Dec 15 14:46	0°♌28'53 -3°55'46	min. Earth dist.	10171 Nov 24 04:56	14°♊41'40 0.57925 AU	
minimum elong	10170 Dec 15 22:16	0°♌13'38 3°52'57	inferior conj	10171 Nov 27 05:40	12°♊33'47 -5°00'58	
	10170 Dec 16 05:01	30°♋♊	minimum elong	10171 Nov 27 13:05	12°♊20'42 4°59'00	
morning rise	10170 Dec 23 08:48	25°♊45'40	morning rise	10171 Dec 05 10:08	8°♊13'05	
direct	10170 Dec 25 12:08	25°♊28'23	direct	10171 Dec 07 16:19	7°♊57'03	
asc. node	10170 Dec 28 09:45	26°♊01'42	asc. node	10171 Dec 15 06:48	11°♊12'39	
morning max el	10171 Jan 02 01:01	29°♊12'59 18°07'10	morning max el	10171 Dec 16 06:33	12°♊06'53 18°46'03	
	10171 Jan 02 19:24	0°♌		10171 Dec 28 06:06	0°♌	
morning set	10171 Jan 17 16:43	24°♌01'31	morning set	10172 Jan 01 13:28	8°♌15'54	
	10171 Jan 20 21:24	0°♍				
			superior conj	10172 Jan 10 04:15	24°♌56'44 0°58'46	
superior conj	10171 Jan 27 10:09	11°♍57'22 0°29'12	minimum elong	10172 Jan 10 07:23	25°♌11'32 0°58'44	
minimum elong	10171 Jan 27 12:21	12°♍07'11 0°29'13		10172 Jan 12 21:17	0°♍	
desc. node	10171 Jan 31 06:42	18°♍44'52	max. Earth dist.	10172 Jan 17 08:45	8°♍03'59 1.39568 AU	
max. Earth dist.	10171 Feb 04 01:11	25°♍10'46 1.41709 AU	desc. node	10172 Jan 18 03:36	9°♍26'42	
	10171 Feb 06 22:55	0°♎	evening rise	10172 Jan 21 08:15	14°♍56'08	
evening rise	10171 Feb 09 04:52	3°♎39'17		10172 Jan 30 15:47	0°♎	
	10171 Feb 26 14:49	0°♏		10172 Feb 21 11:40	0°♏	
evening max el	10171 Mar 14 18:30	20°♏21'38 22°50'26	evening max el	10172 Feb 25 08:42	4°♏09'41 24°10'39	
retrograde	10171 Mar 24 21:15	26°♏20'33	retrograde	10172 Mar 07 14:07	10°♏44'53	
asc. node	10171 Mar 26 08:08	26°♏10'15	asc. node	10172 Mar 12 05:20	9°♏05'02	
evening set	10171 Mar 29 17:51	24°♏19'38	evening set	10172 Mar 12 22:46	8°♏30'25	
inferior conj	10171 Apr 04 02:23	17°♏55'16 2°29'06	min. Earth dist.	10172 Mar 17 14:58	3°♏07'42 0.68303 AU	
minimum elong	10171 Apr 04 00:14	18°♏02'46 2°28'27	inferior conj	10172 Mar 18 10:34	2°♏01'32 1°53'01	
min. Earth dist.	10171 Apr 03 18:45	18°♏21'46 0.68604 AU	minimum elong	10172 Mar 18 08:27	2°♏08'41 1°52'22	
morning rise	10171 Apr 09 06:29	11°♏46'56		10172 Mar 19 23:11	30°♋♎	
direct	10171 Apr 13 18:33	9°♏55'50	morning rise	10172 Mar 23 18:11	26°♎00'08	
morning max el	10171 Apr 22 13:53	15°♏02'09 21°28'54	direct	10172 Mar 27 17:11	24°♎31'03	
desc. node	10171 Apr 29 07:20	22°♏51'36	morning max el	10172 Apr 04 10:55	28°♎52'46 20°13'18	
	10171 May 04 14:39	0°♐		10172 Apr 05 13:03	0°♏	
morning set	10171 May 24 07:21	29°♐29'31	desc. node	10172 Apr 15 04:10	12°♏19'12	
	10171 May 24 15:02	0°♑		10172 Apr 27 03:43	0°♐	
max. Earth dist.	10171 May 30 20:50	10°♑05'11 1.42175 AU	morning set	10172 May 02 09:28	8°♐01'03	
			max. Earth dist.	10172 May 12 06:00	23°♐29'42 1.43958 AU	
				10172 May 16 06:41	0°♑	
superior conj	10171 Jun 07 08:34	22°♑43'21 -1°52'31				
minimum elong	10171 Jun 07 14:50	23°♑10'28 1°52'25	superior conj	10172 May 18 03:45	3°♑04'22 -2°10'06	
	10171 Jun 11 12:14	0°♒	minimum elong	10172 May 18 07:10	3°♑18'27 2°10'22	
evening rise	10171 Jun 18 12:26	12°♒38'20	evening rise	10172 May 30 23:27	24°♑46'38	
asc. node	10171 Jun 22 06:42	19°♒27'19		10172 Jun 02 23:53	0°♒	
	10171 Jun 28 10:41	0°♓		10172 Jun 08 03:45	8°♒45'50	
evening max el	10171 Jul 04 19:16	8°♓21'47 18°08'13	asc. node	10172 Jun 17 08:38	21°♒34'46 18°05'48	
retrograde	10171 Jul 11 15:39	11°♓50'35	evening max el	10172 Jun 23 18:46	24°♒55'15	
evening set	10171 Jul 14 01:20	11°♓25'18	retrograde	10172 Jun 26 12:13	24°♒17'55	
inferior conj	10171 Jul 20 23:50	6°♓34'10 1°30'52	evening set	10172 Jun 26 12:13	24°♒17'55	
minimum elong	10171 Jul 21 02:22	6°♓28'23 1°29'40	inferior conj	10172 Jul 02 19:36	19°♒07'31 2°27'06	
min. Earth dist.	10171 Jul 24 07:00	3°♓34'33 0.60048 AU	minimum elong	10172 Jul 02 22:20	19°♒00'21 2°26'00	
desc. node	10171 Jul 26 06:44	1°♓57'32	min. Earth dist.	10172 Jul 05 17:15	16°♒06'36 0.62299 AU	
morning rise	10171 Jul 28 00:28	0°♓46'06	morning rise	10172 Jul 09 06:27	13°♒00'14	
	10171 Jul 29 09:50	30°♎♒	desc. node	10172 Jul 12 03:52	11°♒21'19	
direct	10171 Aug 03 12:22	28°♒45'08	direct	10172 Jul 15 23:31	10°♒34'43	
	10171 Aug 08 20:32	0°♓	morning max el	10172 Jul 30 02:26	18°♒36'49 27°55'52	
morning max el	10171 Aug 17 20:10	6°♓38'49 27°46'10		10172 Aug 08 16:38	0°♓	
	10171 Sep 04 10:08	0°♔		10172 Aug 27 06:59	0°♔	
asc. node	10171 Sep 18 06:47	25°♔36'30	morning set	10172 Sep 02 01:26	11°♔16'42	
morning set	10171 Sep 19 01:29	27°♔13'41	asc. node	10172 Sep 04 03:39	15°♔35'44	
	10171 Sep 20 09:04	0°♕	max. Earth dist.	10172 Sep 07 11:51	22°♔42'22 1.32039 AU	
max. Earth dist.	10171 Sep 25 05:56	10°♕35'28 1.31547 AU				
			superior conj	10172 Sep 09 14:42	27°♔19'05 0°52'13	
superior conj	10171 Sep 26 05:26	12°♕45'39 1°12'06	minimum elong	10172 Sep 09 12:38	27°♔07'48 0°51'47	
minimum elong	10171 Sep 26 03:12	12°♕33'15 1°11'49		10172 Sep 10 20:02	0°♕	

evening rise	10172 Sep 16 10:05	12° $\Omega$ 12'16		evening rise	10173 Aug 31 21:22	26° $\eta$ 47'50	
	10172 Sep 25 07:54	0° $\mathbb{M}$			10173 Sep 02 09:48	0° $\Omega$	
desc. node	10172 Oct 08 01:53	18° $\mathbb{M}$ 56'23			10173 Sep 20 10:20	0° $\mathbb{M}$	
evening max el	10172 Oct 11 05:04	22° $\mathbb{M}$ 14'22	24°13'52	evening max el	10173 Sep 22 16:12	2° $\mathbb{M}$ 21'46	22°33'30
retrograde	10172 Oct 24 21:38	29° $\mathbb{M}$ 05'50		desc. node	10173 Sep 24 23:08	4° $\mathbb{M}$ 24'59	
evening set	10172 Oct 29 22:04	28° $\mathbb{M}$ 10'24		retrograde	10173 Oct 05 17:18	8° $\mathbb{M}$ 51'49	
min. Earth dist.	10172 Nov 04 15:48	25° $\mathbb{M}$ 17'32	0.56145 AU	evening set	10173 Oct 09 05:44	8° $\mathbb{M}$ 24'35	
inferior conj	10172 Nov 07 00:10	23° $\mathbb{M}$ 50'40	-5°40'19	min. Earth dist.	10173 Oct 16 23:32	4° $\mathbb{M}$ 57'13	0.54956 AU
minimum elong	10172 Nov 07 03:01	23° $\mathbb{M}$ 46'14	5°39'48	inferior conj	10173 Oct 18 00:36	4° $\mathbb{M}$ 21'39	-5°33'10
morning rise	10172 Nov 15 10:04	19° $\mathbb{M}$ 51'18		minimum elong	10173 Oct 17 19:25	4° $\mathbb{M}$ 29'01	5°32'23
direct	10172 Nov 18 01:11	19° $\mathbb{M}$ 33'12		morning rise	10173 Oct 26 10:50	0° $\mathbb{M}$ 34'01	
morning max el	10172 Nov 28 00:54	24° $\mathbb{M}$ 17'27	19°47'16	direct	10173 Oct 29 16:14	0° $\mathbb{M}$ 10'22	
asc. node	10172 Dec 01 03:49	27° $\mathbb{M}$ 42'19		morning max el	10173 Nov 10 05:45	5° $\mathbb{M}$ 37'16	21°10'52
	10172 Dec 02 21:55	0° $\mathbb{A}$		asc. node	10173 Nov 18 00:48	15° $\mathbb{M}$ 13'55	
morning set	10172 Dec 15 17:32	22° $\mathbb{A}$ 49'12			10173 Nov 26 09:13	0° $\mathbb{A}$	
	10172 Dec 19 06:20	0° $\mathbb{B}$		morning set	10173 Nov 30 02:12	7° $\mathbb{A}$ 32'50	
superior conj	10172 Dec 23 13:27	8° $\mathbb{B}$ 38'35	1°19'58	superior conj	10173 Dec 07 09:30	22° $\mathbb{A}$ 50'03	1°33'18
minimum elong	10172 Dec 23 16:13	8° $\mathbb{B}$ 52'18	1°20'07	minimum elong	10173 Dec 07 11:14	22° $\mathbb{A}$ 59'05	1°33'37
max. Earth dist.	10172 Dec 29 15:02	20° $\mathbb{B}$ 19'21	1.37378 AU		10173 Dec 10 21:56	0° $\mathbb{B}$	
evening rise	10173 Jan 02 08:28	27° $\mathbb{B}$ 07'08		max. Earth dist.	10173 Dec 12 00:44	2° $\mathbb{B}$ 13'13	1.35369 AU
	10173 Jan 03 23:35	0° $\approx$		evening rise	10173 Dec 16 02:24	10° $\mathbb{B}$ 04'01	
desc. node	10173 Jan 04 00:34	0° $\approx$ 04'16		desc. node	10173 Dec 21 21:33	20° $\mathbb{B}$ 33'01	
	10173 Jan 23 02:54	0° $\mathbb{H}$			10173 Dec 27 13:03	0° $\approx$	
evening max el	10173 Feb 06 21:58	17° $\mathbb{H}$ 58'55	25°25'59	evening max el	10174 Jan 18 17:37	0° $\mathbb{H}$	
retrograde	10173 Feb 19 02:42	25° $\mathbb{H}$ 01'16		retrograde	10174 Jan 20 11:17	1° $\mathbb{H}$ 44'39	26°29'18
evening set	10173 Feb 24 23:36	22° $\mathbb{H}$ 35'38		evening set	10174 Feb 02 10:11	9° $\mathbb{H}$ 02'50	
asc. node	10173 Feb 27 02:33	20° $\mathbb{H}$ 30'35		retrograde	10174 Feb 08 18:36	6° $\mathbb{H}$ 30'09	
min. Earth dist.	10173 Mar 01 08:33	17° $\mathbb{H}$ 47'53	0.67587 AU	min. Earth dist.	10174 Feb 12 21:23	2° $\mathbb{H}$ 16'44	0.66478 AU
inferior conj	10173 Mar 02 15:58	16° $\mathbb{H}$ 06'44	1°07'53	asc. node	10174 Feb 13 23:45	0° $\mathbb{H}$ 57'38	
minimum elong	10173 Mar 02 14:25	16° $\mathbb{H}$ 11'44	1°07'26	inferior conj	10174 Feb 14 16:34	0° $\mathbb{H}$ 06'43	0°13'47
morning rise	10173 Mar 08 05:39	10° $\mathbb{H}$ 13'46		minimum elong	10174 Feb 14 16:11	0° $\mathbb{H}$ 07'51	0°13'53
direct	10173 Mar 11 16:31	9° $\mathbb{H}$ 05'18		transit middle	10174 Feb 14 16:11	0° $\mathbb{H}$ 07'51	0°13'53
morning max el	10173 Mar 18 15:54	12° $\mathbb{H}$ 54'49	19°11'59	transit begin	10174 Feb 14 14:44	0° $\mathbb{H}$ 12'15	
greatest brilliancy	10173 Mar 31 16:45	0° $\Upsilon$ 12'01	-0.7m	transit end	10174 Feb 14 17:39	0° $\mathbb{H}$ 03'27	
	10173 Mar 31 13:33	0° $\Upsilon$			10174 Feb 14 18:48	30° $\mathbb{R}$ $\approx$	
desc. node	10173 Apr 02 00:59	2° $\Upsilon$ 13'13		morning rise	10174 Feb 20 14:43	24° $\approx$ 23'59	
morning set	10173 Apr 11 10:53	16° $\Upsilon$ 38'43		direct	10174 Feb 23 14:53	23° $\approx$ 33'17	
	10173 Apr 20 01:23	0° $\mathbb{B}$		morning max el	10174 Mar 02 03:37	27° $\approx$ 03'13	18°26'44
max. Earth dist.	10173 Apr 24 21:16	7° $\mathbb{B}$ 33'41	1.45147 AU		10174 Mar 04 19:28	0° $\mathbb{H}$	
superior conj	10173 Apr 27 23:41	12° $\mathbb{B}$ 27'23	-2°10'49	desc. node	10174 Mar 19 21:47	22° $\mathbb{H}$ 26'30	
minimum elong	10173 Apr 27 20:13	12° $\mathbb{B}$ 13'42	2°11'00	morning set	10174 Mar 22 09:28	26° $\mathbb{H}$ 23'15	
	10173 May 08 21:23	0° $\mathbb{I}$			10174 Mar 24 16:10	0° $\Upsilon$	
evening rise	10173 May 12 12:36	5° $\mathbb{I}$ 57'50		superior conj	10174 Apr 07 06:19	21° $\Upsilon$ 22'01	-1°51'13
asc. node	10173 May 26 00:49	27° $\mathbb{I}$ 38'33		minimum elong	10174 Apr 06 21:12	20° $\Upsilon$ 46'23	1°50'38
	10173 May 27 16:50	0° $\mathbb{B}$		max. Earth dist.	10174 Apr 07 15:50	21° $\Upsilon$ 59'14	1.45627 AU
evening max el	10173 May 31 21:56	5° $\mathbb{B}$ 03'03	18°21'51		10174 Apr 12 18:48	0° $\mathbb{B}$	
retrograde	10173 Jun 07 07:44	8° $\mathbb{B}$ 29'14		evening rise	10174 Apr 23 01:51	16° $\mathbb{B}$ 10'46	
evening set	10173 Jun 10 08:52	7° $\mathbb{B}$ 38'05			10174 May 01 20:26	0° $\mathbb{I}$	
inferior conj	10173 Jun 16 05:07	2° $\mathbb{B}$ 10'23	3°00'53	greatest brilliancy	10174 May 02 14:58	1° $\mathbb{I}$ 12'04	-0.8m
minimum elong	10173 Jun 16 07:01	2° $\mathbb{B}$ 04'52	3°00'08	asc. node	10174 May 12 21:56	15° $\mathbb{I}$ 57'12	
	10173 Jun 18 01:51	30° $\mathbb{R}$ $\mathbb{I}$		evening max el	10174 May 15 08:34	18° $\mathbb{I}$ 40'34	18°55'39
min. Earth dist.	10173 Jun 18 12:58	29° $\mathbb{I}$ 28'21	0.64364 AU	retrograde	10174 May 22 02:41	22° $\mathbb{I}$ 25'12	
morning rise	10173 Jun 22 03:59	25° $\mathbb{I}$ 53'08		evening set	10174 May 25 11:51	21° $\mathbb{I}$ 19'06	
direct	10173 Jun 28 19:31	23° $\mathbb{I}$ 12'27		inferior conj	10174 May 31 00:39	15° $\mathbb{I}$ 35'46	3°16'33
desc. node	10173 Jun 29 00:58	23° $\mathbb{I}$ 12'37		minimum elong	10174 May 31 01:21	15° $\mathbb{I}$ 33'33	3°16'04
	10173 Jul 11 06:38	0° $\mathbb{B}$		min. Earth dist.	10174 Jun 01 17:28	13° $\mathbb{I}$ 27'03	0.66084 AU
morning max el	10173 Jul 12 12:21	1° $\mathbb{B}$ 12'52	27°28'59	morning rise	10174 Jun 05 14:14	9° $\mathbb{I}$ 15'18	
	10173 Aug 02 19:59	0° $\mathbb{Q}$		direct	10174 Jun 11 22:58	6° $\mathbb{I}$ 30'42	
morning set	10173 Aug 16 17:02	24° $\mathbb{Q}$ 52'57		desc. node	10174 Jun 15 21:59	7° $\mathbb{I}$ 24'03	
	10173 Aug 19 06:30	0° $\mathbb{P}$		morning max el	10174 Jun 24 23:04	14° $\mathbb{I}$ 15'15	26°32'13
max. Earth dist.	10173 Aug 21 10:16	4° $\mathbb{P}$ 25'55	1.33033 AU		10174 Jul 07 18:24	0° $\mathbb{B}$	
asc. node	10173 Aug 22 00:29	5° $\mathbb{P}$ 40'01			10174 Jul 26 13:46	0° $\mathbb{Q}$	
superior conj	10173 Aug 24 19:46	11° $\mathbb{P}$ 35'50	0°27'35	morning set	10174 Jul 30 21:09	7° $\mathbb{Q}$ 54'41	
minimum elong	10173 Aug 24 18:28	11° $\mathbb{P}$ 28'50	0°27'08	max. Earth dist.	10174 Aug 03 22:20	15° $\mathbb{Q}$ 43'37	1.34530 AU



superior conj	10174 Aug 08 18:22	25°Ω30'27	-0°01'15	max. Earth dist.	10175 Jul 17 00:24	26°Ω47'37	1.36470 AU
minimum elong	10174 Aug 08 18:27	25°Ω30'52	0°01'30		10175 Jul 18 17:17	0°Ω	
behind sun begin	10174 Aug 08 12:37	25°Ω00'47					
behind sun end	10174 Aug 09 00:17	26°Ω01'01		superior conj	10175 Jul 23 07:37	8°Ω55'12	-0°33'07
asc. node	10174 Aug 08 21:22	25°Ω45'57		minimum elong	10175 Jul 23 09:42	9°Ω05'30	0°33'05
	10174 Aug 10 22:11	0°Π		asc. node	10175 Jul 26 18:16	15°Ω49'19	
evening rise	10174 Aug 16 06:46	11°Π15'03		evening rise	10175 Jul 31 12:02	25°Ω27'31	
	10174 Aug 26 00:25	0°Ω			10175 Aug 02 18:16	0°Π	
evening max el	10174 Sep 04 11:19	12°Ω46'15	21°00'38	evening max el	10175 Aug 17 19:49	23°Π52'24	19°45'29
desc. node	10174 Sep 11 20:21	17°Ω47'52		retrograde	10175 Aug 27 20:52	28°Π51'14	
retrograde	10174 Sep 16 05:07	18°Ω35'36		evening set	10175 Aug 29 17:38	28°Π41'42	
evening set	10174 Sep 18 12:55	18°Ω22'49		desc. node	10175 Aug 29 17:33	28°Π41'44	
inferior conj	10174 Sep 27 16:43	14°Ω27'13	-4°28'56	inferior conj	10175 Sep 07 14:59	24°Π39'37	-2°43'26
minimum elong	10174 Sep 27 06:53	14°Ω41'07	4°26'15	minimum elong	10175 Sep 07 07:40	24°Π50'55	2°40'50
min. Earth dist.	10174 Sep 28 07:38	14°Ω06'06	0.54631 AU	min. Earth dist.	10175 Sep 09 17:59	23°Π20'54	0.55261 AU
morning rise	10174 Oct 06 01:08	10°Ω32'49		morning rise	10175 Sep 15 19:51	20°Π19'08	
direct	10174 Oct 10 00:16	9°Ω59'02		direct	10175 Sep 20 14:25	19°Π28'55	
morning max el	10174 Oct 22 22:43	16°Ω11'03	22°52'06	morning max el	10175 Oct 04 10:09	26°Π20'31	24°39'09
	10174 Nov 02 18:26	0°Π			10175 Oct 07 22:15	0°Ω	
asc. node	10174 Nov 04 21:43	3°Π33'11		asc. node	10175 Oct 22 18:36	22°Ω28'43	
morning set	10174 Nov 14 13:19	22°Π20'44			10175 Oct 26 15:02	0°Π	
	10174 Nov 18 03:01	0°♌		morning set	10175 Oct 30 01:06	7°Π08'10	
superior conj	10174 Nov 21 13:01	7°♌21'14	1°39'28	superior conj	10175 Nov 05 21:23	22°Π04'22	1°39'12
minimum elong	10174 Nov 21 13:32	7°♌24'02	1°39'53	minimum elong	10175 Nov 05 20:46	22°Π00'56	1°39'31
max. Earth dist.	10174 Nov 24 17:53	14°♌07'19	1.33714 AU	max. Earth dist.	10175 Nov 07 19:13	26°Π14'05	1.32498 AU
evening rise	10174 Nov 29 10:21	23°♌37'14			10175 Nov 09 13:13	0°♌	
	10174 Dec 02 18:02	0°♍		evening rise	10175 Nov 13 04:51	7°♌37'57	
desc. node	10174 Dec 08 18:34	10°♍47'47			10175 Nov 25 05:30	0°♍	
	10174 Dec 21 03:56	0°♎		desc. node	10175 Nov 25 15:38	0°♍42'14	
evening max el	10175 Jan 03 00:34	15°♎18'46	27°13'12	evening max el	10175 Dec 16 12:17	28°♍29'17	27°30'41
retrograde	10175 Jan 16 11:39	22°♎41'30			10175 Dec 18 04:12	0°♎	
evening set	10175 Jan 23 05:38	20°♎07'34		retrograde	10175 Dec 30 06:08	5°♎48'44	
min. Earth dist.	10175 Jan 27 03:15	16°♎27'19	0.65011 AU	evening set	10176 Jan 06 06:09	3°♎21'01	
inferior conj	10175 Jan 29 10:03	13°♎56'05	-0°48'54	min. Earth dist.	10176 Jan 10 00:04	0°♎10'58	0.63230 AU
minimum elong	10175 Jan 29 11:30	13°♎52'03	0°47'57		10176 Jan 10 04:37	30°♎♊	
asc. node	10175 Jan 31 20:55	11°♎20'31		inferior conj	10176 Jan 12 17:41	27°♍28'14	-1°58'58
morning rise	10175 Feb 04 18:54	8°♎25'57		minimum elong	10176 Jan 12 21:33	27°♍18'38	1°56'59
direct	10175 Feb 07 10:07	7°♎49'19		asc. node	10176 Jan 18 18:03	22°♍36'32	
morning max el	10175 Feb 13 19:42	11°♎10'53	17°58'16	morning rise	10176 Jan 19 15:03	22°♍13'48	
	10175 Feb 26 23:07	0°♎		direct	10176 Jan 21 23:26	21°♍47'26	
morning set	10175 Mar 03 13:23	7°♎35'02		morning max el	10176 Jan 28 13:16	25°♍10'26	17°47'13
desc. node	10175 Mar 06 18:34	12°♎53'16			10176 Feb 01 13:46	0°♎	
	10175 Mar 17 08:32	0°♏		morning set	10176 Feb 13 19:16	20°♎02'25	
					10176 Feb 19 13:59	0°♎	
superior conj	10175 Mar 17 17:31	0°♏35'42	-1°15'14	desc. node	10176 Feb 21 15:22	3°♎29'29	
minimum elong	10175 Mar 17 09:19	0°♏03'10	1°14'12				
max. Earth dist.	10175 Mar 21 11:27	6°♏30'48	1.45368 AU	superior conj	10176 Feb 26 00:50	10°♎49'16	-0°32'25
evening rise	10175 Apr 02 19:45	25°♏41'06		minimum elong	10176 Feb 25 21:26	10°♎35'17	0°31'43
	10175 Apr 05 15:09	0°♏		max. Earth dist.	10176 Mar 03 05:53	20°♎53'46	1.44401 AU
greatest brilliancy	10175 Apr 16 22:51	17°♏06'48	-0.6m		10176 Mar 09 00:28	0°♏	
	10175 Apr 26 10:45	0°♏		evening rise	10176 Mar 12 07:13	5°♏04'37	
evening max el	10175 Apr 28 14:34	2°♏21'42	19°45'51		10176 Mar 29 00:52	0°♏	
asc. node	10175 Apr 29 19:05	3°♏29'59		evening max el	10176 Apr 10 15:01	16°♏04'19	20°50'02
retrograde	10175 May 06 00:35	6°♏35'58		asc. node	10176 Apr 15 16:14	20°♏03'36	
evening set	10175 May 09 18:29	5°♏14'15		retrograde	10176 Apr 18 23:14	20°♏56'51	
	10175 May 14 14:01	30°♏♋		evening set	10176 Apr 23 02:46	19°♏19'23	
inferior conj	10175 May 15 03:00	29°♏16'44	3°17'43	inferior conj	10176 Apr 28 09:37	13°♏09'19	3°06'54
minimum elong	10175 May 15 02:32	29°♏18'16	3°17'19	minimum elong	10176 Apr 28 08:14	13°♏14'06	3°06'26
min. Earth dist.	10175 May 16 05:02	27°♏49'43	0.67377 AU	min. Earth dist.	10176 Apr 28 21:47	12°♏27'17	0.68212 AU
morning rise	10175 May 20 10:16	22°♏57'14		morning rise	10176 May 03 13:29	6°♏53'08	
direct	10175 May 26 08:26	20°♏19'22		direct	10176 May 08 22:54	4°♏30'06	
desc. node	10175 Jun 02 18:57	23°♏26'16		desc. node	10176 May 19 15:54	10°♏51'06	
morning max el	10175 Jun 07 08:53	27°♏31'53	25°14'46	morning max el	10176 May 19 18:21	10°♏57'15	23°46'38
	10175 Jun 09 16:34	0°♏			10176 Jun 03 21:55	0°♏	
	10175 Jul 01 10:29	0°♏			10176 Jun 23 04:44	0°♏	
morning set	10175 Jul 13 09:35	20°♏10'29		morning set	10176 Jun 24 01:19	1°♏27'21	

max. Earth dist.	10176 Jun 27 21:28	8°☿06'54	1.38697 AU			10177 May 07 03:20	0°♄		
						10177 May 28 08:06	0°♄		
superior conj	10176 Jul 05 07:54	21°♄41'05	-1°06'12	morning set		10177 Jun 04 15:37	11°♄34'13		
minimum elong	10176 Jul 05 12:17	22°♄01'46	1°05'55	max. Earth dist.		10177 Jun 09 20:12	20°♄08'44	1.40960 AU	
	10176 Jul 09 16:10	0°♄				10177 Jun 15 13:41	0°♄		
asc. node	10176 Jul 12 15:10	5°♄46'15							
evening rise	10176 Jul 14 10:29	9°♄18'06		superior conj		10177 Jun 17 14:55	3°♄38'02	-1°37'19	
	10176 Jul 26 01:10	0°♄		minimum elong		10177 Jun 17 21:04	4°♄05'30	1°37'03	
evening max el	10176 Jul 30 17:05	5°♄44'31	18°51'22	evening rise		10177 Jun 27 22:42	22°♄37'55		
retrograde	10176 Aug 08 04:26	9°♄57'55		asc. node		10177 Jun 29 12:08	25°♄32'40		
evening set	10176 Aug 10 02:47	9°♄45'35				10177 Jul 01 21:58	0°♄		
desc. node	10176 Aug 15 14:46	7°♄16'52		evening max el		10177 Jul 13 23:42	18°♄16'11	18°18'13	
inferior conj	10176 Aug 18 07:06	5°♄26'20	-0°49'48	retrograde		10177 Jul 21 07:13	21°♄57'14		
minimum elong	10176 Aug 18 05:01	5°♄30'05	0°49'12	evening set		10177 Jul 23 12:14	21°♄37'48		
min. Earth dist.	10176 Aug 21 08:38	3°♄15'20	0.56726 AU	inferior conj		10177 Jul 30 21:06	16°♄58'18	0°46'49	
morning rise	10176 Aug 26 03:58	0°♄28'47		minimum elong		10177 Jul 30 22:39	16°♄55'02	0°45'55	
	10176 Aug 27 09:24	30°♄♄		desc. node		10177 Aug 02 11:59	14°♄46'07		
direct	10176 Aug 31 17:32	29°♄14'30		min. Earth dist.		10177 Aug 03 05:50	14°♄09'57	0.58751 AU	
	10176 Sep 05 02:32	0°♄		morning rise		10177 Aug 07 05:40	11°♄25'38		
morning max el	10176 Sep 14 23:49	6°♄37'13	26°14'53	direct		10177 Aug 13 10:57	9°♄41'43		
	10176 Oct 02 05:39	0°♄		morning max el		10177 Aug 27 20:08	17°♄27'18	27°23'13	
asc. node	10176 Oct 08 15:28	11°♄50'45				10177 Sep 07 06:14	0°♄		
morning set	10176 Oct 13 11:52	21°♄49'43				10177 Sep 24 18:11	0°♄		
	10176 Oct 17 06:02	0°♄		asc. node		10177 Sep 25 12:19	1°♄32'00		
				morning set		10177 Sep 27 19:58	6°♄20'55		
superior conj	10176 Oct 20 08:24	6°♄52'11	1°33'00						
minimum elong	10176 Oct 20 06:51	6°♄43'38	1°33'06	superior conj		10177 Oct 04 20:12	21°♄39'12	1°21'15	
max. Earth dist.	10176 Oct 21 02:21	8°♄31'45	1.31750 AU	minimum elong		10177 Oct 04 18:05	21°♄27'29	1°21'07	
evening rise	10176 Oct 27 06:58	21°♄57'25		max. Earth dist.		10177 Oct 04 11:56	20°♄53'12	1.31481 AU	
	10176 Oct 31 05:36	0°♄				10177 Oct 08 14:30	0°♄		
desc. node	10176 Nov 11 12:44	20°♄07'10		evening rise		10177 Oct 11 14:16	6°♄29'24		
	10176 Nov 18 06:33	0°♄				10177 Oct 23 19:17	0°♄		
evening max el	10176 Nov 27 19:44	11°♄01'24	27°16'13	desc. node		10177 Oct 29 09:54	8°♄51'04		
retrograde	10176 Dec 11 16:45	18°♄14'27		evening max el		10177 Nov 09 20:20	22°♄44'49	26°27'33	
evening set	10176 Dec 18 16:48	16°♄01'52		retrograde		10177 Nov 23 18:33	29°♄51'06		
min. Earth dist.	10176 Dec 22 10:15	13°♄15'25	0.61212 AU	evening set		10177 Nov 30 09:25	28°♄03'32		
inferior conj	10176 Dec 25 12:11	10°♄33'38	-3°13'23	min. Earth dist.		10177 Dec 04 09:50	25°♄28'24	0.59097 AU	
minimum elong	10176 Dec 25 18:35	10°♄19'34	3°10'38	inferior conj		10177 Dec 07 14:03	23°♄03'01	-4°25'21	
morning rise	10177 Jan 01 22:54	5°♄38'22		minimum elong		10177 Dec 07 21:56	22°♄47'57	4°22'45	
direct	10177 Jan 04 03:08	5°♄18'41		morning rise		10177 Dec 15 13:03	18°♄29'40		
asc. node	10177 Jan 04 15:09	5°♄19'45		direct		10177 Dec 17 16:54	18°♄13'22		
morning max el	10177 Jan 11 05:03	8°♄52'24	17°54'23	asc. node		10177 Dec 22 12:14	19°♄39'00		
	10177 Jan 24 23:39	0°♄		morning max el		10177 Dec 25 15:30	22°♄07'17	18°21'08	
morning set	10177 Jan 26 20:30	3°♄23'52				10177 Dec 31 18:24	0°♄		
				morning set		10178 Jan 10 11:23	17°♄22'24		
superior conj	10177 Feb 06 09:17	22°♄14'26	0°08'31			10178 Jan 17 03:10	0°♄		
minimum elong	10177 Feb 06 10:03	22°♄17'45	0°08'42						
behind sun begin	10177 Feb 06 03:02	21°♄47'21		superior conj		10178 Jan 19 16:28	4°♄43'25	0°42'45	
behind sun end	10177 Feb 06 17:03	22°♄48'06		minimum elong		10178 Jan 19 19:16	4°♄56'14	0°42'43	
desc. node	10177 Feb 07 12:12	24°♄10'38		desc. node		10178 Jan 25 09:04	14°♄53'17		
	10177 Feb 10 22:30	0°♄		max. Earth dist.		10178 Jan 27 05:42	18°♄05'48	1.40815 AU	
max. Earth dist.	10177 Feb 13 20:22	4°♄49'55	1.42821 AU	evening rise		10178 Jan 31 18:07	25°♄40'14		
evening rise	10177 Feb 20 03:17	14°♄56'40				10178 Feb 03 10:04	0°♄		
	10177 Mar 01 23:24	0°♄				10178 Feb 23 17:39	0°♄		
evening max el	10177 Mar 24 10:07	29°♄47'52	22°04'40	evening max el		10178 Mar 07 01:24	13°♄33'33	23°24'43	
	10177 Mar 24 14:57	0°♄		retrograde		10178 Mar 17 15:57	19°♄49'34		
retrograde	10177 Apr 02 20:51	5°♄23'07		asc. node		10178 Mar 20 10:39	19°♄12'28		
asc. node	10177 Apr 02 13:25	5°♄22'39		evening set		10178 Mar 22 17:34	17°♄42'34		
evening set	10177 Apr 07 10:59	3°♄30'20		min. Earth dist.		10178 Mar 27 14:27	11°♄59'36	0.68521 AU	
	10177 Apr 10 16:27	30°♄♄		inferior conj		10178 Mar 28 03:17	11°♄15'29	2°14'56	
inferior conj	10177 Apr 12 18:22	27°♄10'08	2°45'42	minimum elong		10178 Mar 28 01:04	11°♄23'04	2°14'15	
minimum elong	10177 Apr 12 16:22	27°♄17'04	2°45'06	morning rise		10178 Apr 02 08:33	5°♄09'54		
min. Earth dist.	10177 Apr 12 17:40	27°♄12'33	0.68586 AU	direct		10178 Apr 06 14:51	3°♄28'25		
morning rise	10177 Apr 17 21:36	20°♄58'37		morning max el		10178 Apr 14 22:45	8°♄14'57	20°55'11	
direct	10177 Apr 22 17:22	18°♄55'23		desc. node		10178 Apr 23 09:41	18°♄24'35		
morning max el	10177 May 02 05:54	24°♄30'59	22°17'29			10178 May 01 14:43	0°♄		
desc. node	10177 May 06 12:49	29°♄16'09		morning set		10178 May 15 04:05	20°♄31'48		

	10178 May 21 03:32	0°♂		greatest brilliancy	10179 Apr 10 19:07	8°♂50'57	-0.6m
max. Earth dist.	10178 May 23 00:43	3°♂02'30	1.42989 AU	morning set	10179 Apr 24 02:52	28°♂57'30	
					10179 Apr 24 19:06	0°♂	
superior conj	10178 May 30 00:05	14°♂35'43	-2°01'39	max. Earth dist.	10179 May 05 12:17	16°♂44'37	1.44543 AU
minimum elong	10178 May 30 05:42	14°♂59'28	2°01'42				
	10178 Jun 07 21:21	0°♂		superior conj	10179 May 10 08:59	24°♂31'24	-2°12'47
evening rise	10178 Jun 10 20:21	5°♂15'34		minimum elong	10179 May 10 09:50	24°♂34'49	2°13'08
asc. node	10178 Jun 16 09:08	15°♂03'06			10179 May 13 17:51	0°♂	
	10178 Jun 26 06:35	0°♂		evening rise	10179 May 23 22:35	17°♂00'46	
evening max el	10178 Jun 27 11:41	1°♂17'02	18°04'53		10179 May 31 15:42	0°♂	
retrograde	10178 Jul 04 02:34	4°♂40'38		asc. node	10179 Jun 03 06:12	4°♂12'02	
evening set	10178 Jul 06 15:27	4°♂10'39		evening max el	10179 Jun 11 01:29	14°♂38'20	18°10'24
	10178 Jul 12 10:50	30°♂		retrograde	10179 Jun 17 10:15	17°♂59'16	
inferior conj	10178 Jul 13 07:05	29°♂11'22	1°57'43	evening set	10179 Jun 20 07:00	17°♂16'13	
minimum elong	10178 Jul 13 09:53	29°♂04'33	1°56'29	inferior conj	10179 Jun 26 09:12	11°♂58'31	2°43'53
min. Earth dist.	10178 Jul 16 11:06	26°♂08'05	0.61014 AU	minimum elong	10179 Jun 26 11:39	11°♂51'45	2°42'54
morning rise	10178 Jul 20 01:42	23°♂13'37		min. Earth dist.	10179 Jun 29 01:24	9°♂03'21	0.63221 AU
desc. node	10178 Jul 20 09:10	23°♂01'30		morning rise	10179 Jul 02 14:41	5°♂46'11	
direct	10178 Jul 26 16:41	21°♂00'58		desc. node	10179 Jul 07 06:17	3°♂26'43	
morning max el	10178 Aug 09 23:10	29°♂00'18	27°54'56	direct	10179 Jul 09 08:04	3°♂12'35	
	10178 Aug 10 22:40	0°♂		morning max el	10179 Jul 23 07:05	11°♂15'14	27°48'25
	10178 Sep 01 04:21	0°♂			10179 Aug 07 02:02	0°♂	
morning set	10178 Sep 11 23:29	20°♂35'45			10179 Aug 24 13:58	0°♂	
asc. node	10178 Sep 12 09:11	21°♂25'59		morning set	10179 Aug 26 20:13	4°♂28'16	
	10178 Sep 16 09:45	0°♂		asc. node	10179 Aug 30 06:02	11°♂27'57	
max. Earth dist.	10178 Sep 17 20:03	3°♂07'16	1.31693 AU	max. Earth dist.	10179 Aug 31 23:00	15°♂04'11	1.32402 AU
superior conj	10178 Sep 19 06:55	6°♂19'12	1°04'16	superior conj	10179 Sep 03 14:40	20°♂46'35	0°42'19
minimum elong	10178 Sep 19 04:41	6°♂06'54	1°03'54	minimum elong	10179 Sep 03 12:51	20°♂36'44	0°41'51
evening rise	10178 Sep 26 00:38	21°♂07'18			10179 Sep 07 20:11	0°♂	
	10178 Sep 30 06:44	0°♂		evening rise	10179 Sep 10 12:08	5°♂45'45	
desc. node	10178 Oct 16 07:07	26°♂37'41			10179 Sep 23 05:36	0°♂	
	10178 Oct 19 01:48	0°♂		desc. node	10179 Oct 03 04:20	13°♂04'55	
evening max el	10178 Oct 22 12:51	3°♂37'39	25°08'40	evening max el	10179 Oct 03 23:59	13°♂53'41	23°31'13
retrograde	10178 Nov 05 09:37	10°♂36'02		retrograde	10179 Oct 17 11:43	20°♂37'28	
evening set	10178 Nov 11 03:19	9°♂21'22		evening set	10179 Oct 21 20:58	19°♂55'38	
min. Earth dist.	10178 Nov 16 00:46	6°♂40'05	0.57109 AU	min. Earth dist.	10179 Oct 28 10:01	16°♂49'58	0.55548 AU
inferior conj	10178 Nov 18 20:18	4°♂47'59	-5°22'05	inferior conj	10179 Oct 30 06:26	15°♂44'25	-5°44'07
minimum elong	10178 Nov 19 02:25	4°♂37'48	5°20'47	minimum elong	10179 Oct 30 06:00	15°♂45'04	5°43'48
morning rise	10178 Nov 27 03:48	0°♂36'53		morning rise	10179 Nov 07 16:53	11°♂51'22	
direct	10178 Nov 29 12:45	0°♂20'32		direct	10179 Nov 10 13:37	11°♂31'15	
morning max el	10178 Dec 08 16:44	4°♂44'21	19°09'19	morning max el	10179 Nov 21 05:20	16°♂33'22	20°20'12
asc. node	10178 Dec 09 09:16	5°♂25'29		asc. node	10179 Nov 26 06:16	22°♂23'28	
	10178 Dec 24 14:13	0°♂			10179 Dec 01 04:28	0°♂	
morning set	10178 Dec 25 11:37	1°♂45'54		morning set	10179 Dec 09 17:56	16°♂24'34	
					10179 Dec 16 08:29	0°♂	
superior conj	10179 Jan 02 17:33	18°♂02'38	1°08'45				
minimum elong	10179 Jan 02 20:39	18°♂17'35	1°08'48	superior conj	10179 Dec 17 07:47	1°♂58'12	1°26'32
	10179 Jan 09 02:54	0°♂		minimum elong	10179 Dec 17 10:10	2°♂10'15	1°26'46
max. Earth dist.	10179 Jan 09 11:43	0°♂39'50	1.38622 AU	max. Earth dist.	10179 Dec 22 18:58	12°♂44'01	1.36489 AU
desc. node	10179 Jan 12 05:59	5°♂34'03		evening rise	10179 Dec 26 14:52	19°♂53'22	
evening rise	10179 Jan 13 06:39	7°♂21'23		desc. node	10179 Dec 30 02:54	26°♂08'28	
	10179 Jan 27 08:40	0°♂			10180 Jan 01 08:40	0°♂	
evening max el	10179 Feb 17 15:01	27°♂22'52	24°43'50		10180 Jan 21 09:58	0°♂	
	10179 Feb 20 11:39	0°♂		evening max el	10180 Jan 31 04:27	11°♂12'18	25°54'57
retrograde	10179 Mar 01 07:13	4°♂11'30		retrograde	10180 Feb 12 17:36	18°♂22'13	
evening set	10179 Mar 06 20:57	1°♂52'07		evening set	10180 Feb 18 19:29	15°♂53'19	
asc. node	10179 Mar 07 07:51	1°♂28'00		asc. node	10180 Feb 22 05:04	12°♂23'12	
	10179 Mar 08 18:27	30°♂		min. Earth dist.	10180 Feb 23 01:48	11°♂20'06	0.67161 AU
min. Earth dist.	10179 Mar 11 09:58	26°♂44'02	0.68039 AU	inferior conj	10180 Feb 24 14:07	9°♂26'11	0°46'03
inferior conj	10179 Mar 12 10:31	25°♂22'29	1°35'01	minimum elong	10180 Feb 24 13:00	9°♂29'44	0°45'48
minimum elong	10179 Mar 12 08:35	25°♂28'57	1°34'25	morning rise	10180 Mar 01 07:06	3°♂37'07	
morning rise	10179 Mar 17 20:23	19°♂24'11		direct	10180 Mar 04 13:19	2°♂36'25	
direct	10179 Mar 21 14:02	18°♂04'06		morning max el	10180 Mar 11 07:05	6°♂15'58	18°50'42
morning max el	10179 Mar 28 23:07	22°♂10'57	19°45'19	desc. node	10180 Mar 27 03:17	28°♂07'55	
	10179 Apr 04 12:36	0°♂			10180 Mar 28 08:16	0°♂	
desc. node	10179 Apr 10 06:30	8°♂04'56		morning set	10180 Apr 02 11:13	7°♂58'00	

	10180 Apr 16 14:01	0°♄		transit end	10181 Feb 07 14:23	23°♊15'15	
max. Earth dist.	10180 Apr 17 05:30	1°♄00'40	1.45446 AU	asc. node	10181 Feb 08 02:15	22°♊40'56	
				morning rise	10181 Feb 13 14:26	17°♊44'39	
superior conj	10180 Apr 18 21:21	3°♄37'00	-2°04'56	direct	10181 Feb 16 10:40	17°♊00'17	
minimum elong	10180 Apr 18 14:53	3°♄11'34	2°04'51	morning max el	10181 Feb 22 20:58	20°♊24'57	18°12'33
evening rise	10180 May 04 01:25	27°♄46'10			10181 Mar 02 08:08	0°♋	
	10180 May 05 10:33	0°♋		morning set	10181 Mar 13 22:07	18°♋19'39	
asc. node	10180 May 20 03:17	22°♋51'29		desc. node	10181 Mar 14 00:03	18°♋27'26	
evening max el	10180 May 24 13:59	28°♋11'35	18°34'08		10181 Mar 21 04:50	0°♌	
	10180 May 26 15:31	0°♌					
retrograde	10180 May 31 02:07	1°♌43'46		superior conj	10181 Mar 29 03:26	12°♌32'41	-1°37'27
evening set	10180 Jun 03 06:44	0°♌46'11		minimum elong	10181 Mar 28 17:54	11°♌55'17	1°36'33
	10180 Jun 04 09:30	30°♌♋		max. Earth dist.	10181 Mar 31 01:19	15°♌32'25	1.45611 AU
inferior conj	10180 Jun 08 23:23	25°♋11'36	3°09'28		10181 Apr 09 07:47	0°♄	
minimum elong	10180 Jun 09 00:47	25°♋07'21	3°08'51	evening rise	10181 Apr 14 05:20	7°♄37'43	
min. Earth dist.	10180 Jun 11 00:49	22°♋42'36	0.65149 AU	greatest brilliancy	10181 Apr 25 20:56	25°♄38'25	-0.7m
morning rise	10180 Jun 14 17:58	18°♋52'37			10181 Apr 28 19:01	0°♋	
direct	10180 Jun 21 07:15	16°♋09'04		asc. node	10181 May 07 00:24	10°♋51'56	
desc. node	10180 Jun 23 03:21	16°♋20'30		evening max el	10181 May 07 22:45	11°♋50'37	19°15'06
morning max el	10180 Jul 04 17:30	24°♋03'39	27°08'01	retrograde	10181 May 14 22:43	15°♋46'42	
	10180 Jul 10 01:17	0°♌		evening set	10181 May 18 11:32	14°♋33'51	
	10180 Jul 30 11:24	0°♍		inferior conj	10181 May 23 22:08	8°♋44'01	3°18'38
morning set	10180 Aug 09 07:23	17°♍51'20		minimum elong	10181 May 23 22:19	8°♋43'23	3°18'13
max. Earth dist.	10180 Aug 13 17:25	26°♍37'45	1.33615 AU	min. Earth dist.	10181 May 25 08:27	6°♋52'40	0.66685 AU
	10180 Aug 15 08:49	0°♎		morning rise	10181 May 29 08:40	2°♋23'35	
asc. node	10180 Aug 16 02:53	1°♎33'44			10181 Jun 02 09:09	30°♋♄	
				direct	10181 Jun 04 13:08	29°♄41'02	
superior conj	10180 Aug 17 17:21	4°♎55'25	0°15'50		10181 Jun 06 19:40	0°♋	
minimum elong	10180 Aug 17 16:33	4°♎51'12	0°15'27	desc. node	10181 Jun 10 00:22	1°♋22'30	
behind sun begin	10180 Aug 17 15:01	4°♎43'11		morning max el	10181 Jun 17 04:08	7°♋13'44	26°01'22
behind sun end	10180 Aug 17 18:04	4°♎59'13			10181 Jul 04 20:30	0°♌	
evening rise	10180 Aug 24 22:55	20°♎19'20			10181 Jul 22 21:48	0°♍	
	10180 Aug 29 16:11	0°♏		morning set	10181 Jul 23 05:24	0°♍35'04	
evening max el	10180 Sep 14 13:34	24°♏04'57	21°52'15	max. Earth dist.	10181 Jul 27 01:20	7°♍48'58	1.35307 AU
desc. node	10180 Sep 19 01:33	27°♏44'42					
	10180 Sep 24 05:53	0°♎		superior conj	10181 Aug 01 12:20	18°♍38'15	-0°14'27
retrograde	10180 Sep 27 02:42	0°♎19'25		minimum elong	10181 Aug 01 13:12	18°♍42'38	0°14'36
evening set	10180 Sep 30 01:27	29°♏59'55		behind sun begin	10181 Aug 01 10:38	18°♍29'34	
	10180 Sep 30 01:18	30°♋♏		behind sun end	10181 Aug 01 15:47	18°♍55'44	
min. Earth dist.	10180 Oct 08 17:15	26°♏13'39	0.54706 AU	asc. node	10181 Aug 02 23:43	21°♍38'58	
inferior conj	10180 Oct 09 01:48	26°♏01'42	-5°12'37		10181 Aug 07 00:33	0°♎	
minimum elong	10180 Oct 08 17:47	26°♏12'55	5°11'01	evening rise	10181 Aug 09 06:52	4°♎41'26	
morning rise	10180 Oct 17 11:26	22°♏14'09			10181 Aug 23 12:07	0°♏	
direct	10180 Oct 21 00:24	21°♏46'41		evening max el	10181 Aug 27 13:58	4°♏45'03	20°26'09
morning max el	10180 Nov 02 04:34	27°♏32'17	21°52'17	desc. node	10181 Sep 05 22:48	10°♏06'30	
	10180 Nov 04 14:19	0°♎		retrograde	10181 Sep 07 15:02	10°♏13'51	
asc. node	10180 Nov 12 03:12	10°♎17'25		evening set	10181 Sep 09 15:58	10°♏03'26	
	10180 Nov 22 14:15	0°♐		inferior conj	10181 Sep 18 18:46	6°♏06'16	-3°47'22
morning set	10180 Nov 23 03:55	1°♐11'31		minimum elong	10181 Sep 18 09:18	6°♏20'04	3°44'23
				min. Earth dist.	10181 Sep 20 01:58	5°♏20'50	0.54783 AU
superior conj	10180 Nov 30 07:24	16°♐19'38	1°36'45	morning rise	10181 Sep 27 02:05	2°♏03'00	
minimum elong	10180 Nov 30 08:38	16°♐26'07	1°37'07	direct	10181 Oct 01 09:05	1°♏23'25	
max. Earth dist.	10180 Dec 04 07:59	24°♐38'09	1.34619 AU	morning max el	10181 Oct 14 18:22	7°♏52'53	23°37'54
	10180 Dec 07 00:37	0°♑		asc. node	10181 Oct 30 00:06	28°♏53'20	
evening rise	10180 Dec 08 15:16	3°♑07'17			10181 Oct 30 14:52	0°♎	
desc. node	10180 Dec 15 23:54	16°♑32'19		morning set	10181 Nov 07 15:33	16°♎00'07	
	10180 Dec 24 06:11	0°♒			10181 Nov 14 02:46	0°♐	
evening max el	10181 Jan 12 17:56	24°♒54'41	26°50'42				
	10181 Jan 19 02:25	0°♋		superior conj	10181 Nov 14 13:18	0°♐57'01	1°40'07
retrograde	10181 Jan 25 22:20	2°♋15'11		minimum elong	10181 Nov 14 13:19	0°♐57'07	1°40'29
evening set	10181 Feb 01 11:19	29°♒41'07		max. Earth dist.	10181 Nov 17 04:43	6°♐36'55	1.33141 AU
	10181 Feb 01 01:31	30°♋♒		evening rise	10181 Nov 22 04:05	16°♐53'03	
min. Earth dist.	10181 Feb 05 11:49	25°♒42'14	0.65904 AU		10181 Nov 29 01:34	0°♑	
inferior conj	10181 Feb 07 11:59	23°♒22'16	-0°11'47	desc. node	10181 Dec 02 20:57	6°♑39'19	
minimum elong	10181 Feb 07 12:18	23°♒21'20	0°11'21		10181 Dec 18 17:41	0°♒	
transit middle	10181 Feb 07 12:18	23°♒21'20	0°11'21	evening max el	10181 Dec 26 06:33	8°♒19'24	27°24'04
transit begin	10181 Feb 07 10:13	23°♒27'25		retrograde	10182 Jan 08 20:58	15°♒41'51	

evening set	10182 Jan 15 18:14	13°09'11		evening set	10182 Dec 29 13:21	26°09'52	
min. Earth dist.	10182 Jan 19 13:54	9°42'36	0.64291 AU	min. Earth dist.	10183 Jan 02 06:24	23°10'52	0.62389 AU
inferior conj	10182 Jan 22 01:37	7°04'52	-1°17'52	inferior conj	10183 Jan 05 04:05	20°26'34	-2°30'20
minimum elong	10182 Jan 22 04:02	6°58'27	1°16'28	minimum elong	10183 Jan 05 09:03	20°14'48	2°27'58
asc. node	10182 Jan 25 23:24	3°20'05		morning rise	10183 Jan 12 07:08	15°20'00	
morning rise	10182 Jan 28 15:39	1°41'23		asc. node	10183 Jan 12 20:32	15°10'07	
direct	10182 Jan 31 03:40	1°09'38		direct	10183 Jan 14 13:13	14°35'03	
morning max el	10182 Feb 06 14:08	4°30'30	17°51'27	morning max el	10183 Jan 21 07:25	18°23'48	17°47'57
morning set	10182 Feb 23 13:47	0°05'41			10183 Jan 29 17:23	0°00	
	10182 Feb 23 12:26	0°00		morning set	10183 Feb 06 04:42	12°58'11	
desc. node	10182 Feb 28 20:52	8°58'43		desc. node	10183 Feb 15 17:41	29°37'15	
					10183 Feb 15 23:02	0°00	
superior conj	10182 Mar 08 21:56	22°08'55	-0°57'19	superior conj	10183 Feb 17 15:55	2°52'59	-0°14'28
minimum elong	10182 Mar 08 15:38	21°43'33	0°56'21	minimum elong	10183 Feb 17 14:31	2°47'06	0°14'00
	10182 Mar 13 20:08	0°00		behind sun begin	10183 Feb 17 10:09	2°28'39	
max. Earth dist.	10182 Mar 13 20:34	0°01'42	1.45033 AU	behind sun end	10183 Feb 17 18:54	3°05'31	
evening rise	10182 Mar 24 18:35	17°00'10		max. Earth dist.	10183 Feb 24 13:01	14°13'01	1.43788 AU
	10182 Apr 02 07:55	0°00		evening rise	10183 Mar 04 07:58	26°31'30	
greatest brilliancy	10182 Apr 08 17:01	9°26'58	-0.6m		10183 Mar 06 14:05	0°00	
evening max el	10182 Apr 21 02:20	25°32'11	20°11'37		10183 Mar 27 06:17	0°00	
asc. node	10182 Apr 23 21:33	28°01'30		evening max el	10183 Apr 04 00:23	9°14'52	21°20'52
	10182 Apr 28 05:13	0°00		asc. node	10183 Apr 10 18:44	14°05'08	
retrograde	10182 Apr 28 21:19	0°02'27		retrograde	10183 Apr 12 19:43	14°25'40	
	10182 Apr 29 13:13	30°00		evening set	10183 Apr 17 03:32	12°41'51	
evening set	10182 May 02 19:07	28°34'06		inferior conj	10183 Apr 22 10:23	6°27'14	2°59'07
inferior conj	10182 May 08 02:36	22°30'49	3°14'29	minimum elong	10183 Apr 22 08:42	6°33'05	2°58'36
minimum elong	10182 May 08 01:43	22°33'49	3°14'05	min. Earth dist.	10183 Apr 22 17:03	6°04'00	0.68422 AU
min. Earth dist.	10182 May 08 22:37	21°22'43	0.67779 AU	morning rise	10183 Apr 27 13:38	0°12'38	
morning rise	10182 May 13 08:03	16°12'15			10183 Apr 27 19:27	30°00	
direct	10182 May 19 00:51	13°39'57		direct	10183 May 02 17:18	27°57'22	
desc. node	10182 May 27 21:19	18°03'04			10183 May 08 06:10	0°00	
morning max el	10182 May 30 13:48	20°35'21	24°38'05	morning max el	10183 May 12 23:37	4°03'18	23°08'16
	10182 Jun 07 15:46	0°00		desc. node	10183 May 14 18:15	5°55'30	
	10182 Jun 28 01:05	0°00			10183 Jun 01 20:22	0°00	
morning set	10182 Jul 05 09:45	12°28'00		morning set	10183 Jun 16 15:04	23°15'39	
max. Earth dist.	10182 Jul 09 00:24	18°55'22	1.37387 AU		10183 Jun 20 14:30	0°00	
	10182 Jul 14 22:17	0°00		max. Earth dist.	10183 Jun 20 20:47	0°27'08	1.39667 AU
superior conj	10182 Jul 15 20:33	1°04'34	-0°47'08	superior conj	10183 Jun 28 14:01	14°13'29	-1°19'53
minimum elong	10182 Jul 15 23:36	2°02'23	0°46'59	minimum elong	10183 Jun 28 19:18	14°37'49	1°19'34
asc. node	10182 Jul 20 20:38	11°04'09			10183 Jul 06 22:15	0°00	
evening rise	10182 Jul 24 09:38	18°04'54		asc. node	10183 Jul 07 17:34	1°03'24	
	10182 Jul 30 04:37	0°00		evening rise	10183 Jul 08 04:08	2°02'32	
evening max el	10182 Aug 10 04:13	16°11'12	19°19'54	evening max el	10183 Jul 24 06:00	28°02'17	18°34'52
retrograde	10182 Aug 19 12:36	20°49'40			10183 Jul 26 02:58	0°00	
evening set	10182 Aug 21 08:47	20°39'39		retrograde	10183 Aug 01 04:01	2°00'18	
desc. node	10182 Aug 23 20:00	19°57'10		evening set	10183 Aug 03 04:59	2°03'45	
inferior conj	10182 Aug 29 23:42	16°31'19	-1°54'28		10183 Aug 07 16:58	30°00	
minimum elong	10182 Aug 29 18:37	16°39'40	1°52'38	desc. node	10183 Aug 10 17:13	27°05'14	
min. Earth dist.	10182 Sep 01 14:18	14°48'56	0.55794 AU	inferior conj	10183 Aug 11 01:00	27°03'22	-0°05'57
morning rise	10182 Sep 07 01:43	11°55'08		minimum elong	10183 Aug 11 00:46	27°03'50	0°06'07
direct	10182 Sep 12 04:23	10°55'33		transit middle	10183 Aug 11 00:46	27°03'50	0°06'07
morning max el	10182 Sep 26 06:08	18°02'18	25°22'11	transit begin	10183 Aug 10 21:25	27°04'14	
	10182 Oct 06 04:26	0°00		transit end	10183 Aug 11 04:06	27°03'25	
asc. node	10182 Oct 16 20:59	18°00'53		min. Earth dist.	10183 Aug 14 07:32	25°06'55	0.57539 AU
	10182 Oct 22 18:36	0°00		morning rise	10183 Aug 18 17:02	22°02'31	
morning set	10182 Oct 23 03:07	0°45'26		direct	10183 Aug 24 14:12	20°05'17	
superior conj	10182 Oct 29 23:05	15°43'01	1°37'16	morning max el	10183 Sep 07 22:08	28°02'57	26°47'57
minimum elong	10182 Oct 29 22:02	15°37'14	1°37'30		10183 Sep 09 09:56	0°00	
max. Earth dist.	10182 Oct 31 08:38	18°47'29	1.32121 AU		10183 Sep 29 20:32	0°00	
	10182 Nov 05 14:07	0°00		asc. node	10183 Oct 03 17:52	7°31'48	
evening rise	10182 Nov 06 02:10	1°02'29		morning set	10183 Oct 07 12:59	15°02'30	
desc. node	10182 Nov 19 18:02	26°22'10		superior conj	10183 Oct 14 10:41	0°03'29	1°28'41
	10182 Nov 22 00:34	0°00		minimum elong	10183 Oct 14 08:51	0°02'19	1°28'42
evening max el	10182 Dec 08 16:40	21°14'39	27°28'37		10183 Oct 14 05:01	0°00	
retrograde	10182 Dec 22 12:34	28°32'25					

max. Earth dist.	10183 Oct 14 17:12	1° $\mathbb{M}$ 07'44	1.31577 AU	evening rise	10184 Oct 04 15:38	0° $\mathbb{M}$ 03'37	
evening rise	10183 Oct 21 06:48	15° $\mathbb{M}$ 28'32			10184 Oct 04 14:57	0° $\mathbb{M}$	
	10183 Oct 28 13:00	0° $\mathbb{M}$			10184 Oct 20 20:16	0° $\mathbb{M}$	
desc. node	10183 Nov 06 15:10	15° $\mathbb{M}$ 31'27		desc. node	10184 Oct 23 12:21	3° $\mathbb{M}$ 53'13	
	10183 Nov 17 12:31	0° $\mathbb{M}$		evening max el	10184 Nov 01 19:08	14° $\mathbb{M}$ 50'22	25°57'18
evening max el	10183 Nov 20 21:47	3° $\mathbb{M}$ 28'24	26°59'45	retrograde	10184 Nov 15 16:51	21° $\mathbb{M}$ 52'42	
retrograde	10183 Dec 04 19:46	10° $\mathbb{M}$ 38'17		evening set	10184 Nov 22 00:27	20° $\mathbb{M}$ 18'35	
evening set	10183 Dec 11 17:00	8° $\mathbb{M}$ 35'35		min. Earth dist.	10184 Nov 26 07:49	17° $\mathbb{M}$ 43'17	0.58224 AU
min. Earth dist.	10183 Dec 15 12:21	5° $\mathbb{M}$ 55'24	0.60310 AU	inferior conj	10184 Nov 29 09:54	15° $\mathbb{M}$ 30'21	-4°52'15
inferior conj	10183 Dec 18 16:03	3° $\mathbb{M}$ 18'46	-3°44'46	minimum elong	10184 Nov 29 17:35	15° $\mathbb{M}$ 16'32	4°50'06
minimum elong	10183 Dec 18 23:19	3° $\mathbb{M}$ 03'41	3°41'58	morning rise	10184 Dec 07 13:07	11° $\mathbb{M}$ 06'23	
	10183 Dec 23 02:22	30° $\mathbb{R}$ $\mathbb{M}$		direct	10184 Dec 09 18:32	10° $\mathbb{M}$ 50'21	
morning rise	10183 Dec 26 08:14	28° $\mathbb{M}$ 32'12		asc. node	10184 Dec 16 14:43	13° $\mathbb{M}$ 32'40	
direct	10183 Dec 28 11:41	28° $\mathbb{M}$ 14'23		morning max el	10184 Dec 18 04:21	14° $\mathbb{M}$ 55'36	18°38'50
asc. node	10183 Dec 30 17:39	28° $\mathbb{M}$ 34'50			10184 Dec 28 14:34	0° $\mathbb{M}$	
	10184 Jan 02 14:00	0° $\mathbb{M}$		morning set	10185 Jan 03 07:48	10° $\mathbb{M}$ 48'39	
morning max el	10184 Jan 04 21:25	1° $\mathbb{M}$ 55'53	18°03'11				
morning set	10184 Jan 20 12:28	26° $\mathbb{M}$ 38'02		superior conj	10185 Jan 12 02:02	27° $\mathbb{M}$ 39'00	0°54'47
	10184 Jan 22 07:56	0° $\mathbb{M}$		minimum elong	10185 Jan 12 05:08	27° $\mathbb{M}$ 53'30	0°54'46
					10185 Jan 13 08:19	0° $\mathbb{M}$	
superior conj	10184 Jan 30 10:38	14° $\mathbb{M}$ 47'07	0°23'59	desc. node	10185 Jan 19 11:24	11° $\mathbb{M}$ 01'37	
minimum elong	10184 Jan 30 12:31	14° $\mathbb{M}$ 55'28	0°24'01	max. Earth dist.	10185 Jan 19 09:31	10° $\mathbb{M}$ 53'24	1.39899 AU
desc. node	10184 Feb 02 14:32	20° $\mathbb{M}$ 19'39		evening rise	10185 Jan 23 11:29	17° $\mathbb{M}$ 52'55	
max. Earth dist.	10184 Feb 07 01:26	27° $\mathbb{M}$ 53'48	1.42013 AU		10185 Jan 30 22:54	0° $\mathbb{M}$	
	10184 Feb 08 07:50	0° $\mathbb{M}$			10185 Feb 21 06:04	0° $\mathbb{M}$	
evening rise	10184 Feb 12 11:25	6° $\mathbb{M}$ 44'54		evening max el	10185 Feb 27 08:13	6° $\mathbb{M}$ 47'17	23°58'47
	10184 Feb 27 18:52	0° $\mathbb{M}$		retrograde	10185 Mar 10 09:47	13° $\mathbb{M}$ 17'43	
evening max el	10184 Mar 16 17:48	22° $\mathbb{M}$ 59'56	22°38'24	asc. node	10185 Mar 14 13:10	11° $\mathbb{M}$ 57'12	
retrograde	10184 Mar 26 16:18	28° $\mathbb{M}$ 52'32		evening set	10185 Mar 15 16:39	11° $\mathbb{M}$ 05'01	
asc. node	10184 Mar 27 15:57	28° $\mathbb{M}$ 47'47		min. Earth dist.	10185 Mar 20 09:59	5° $\mathbb{M}$ 37'10	0.68376 AU
evening set	10184 Mar 31 11:14	26° $\mathbb{M}$ 53'40		inferior conj	10185 Mar 21 03:51	4° $\mathbb{M}$ 36'27	1°59'08
inferior conj	10184 Apr 05 19:26	20° $\mathbb{M}$ 30'21	2°33'48	minimum elong	10185 Mar 21 01:42	4° $\mathbb{M}$ 43'46	1°58'26
minimum elong	10184 Apr 05 17:18	20° $\mathbb{M}$ 37'46	2°33'08		10185 Mar 24 20:50	30° $\mathbb{R}$ $\mathbb{M}$	
min. Earth dist.	10184 Apr 05 13:35	20° $\mathbb{M}$ 50'41	0.68620 AU	morning rise	10185 Mar 26 10:48	28° $\mathbb{M}$ 34'02	
morning rise	10184 Apr 10 23:14	14° $\mathbb{M}$ 21'13		direct	10185 Mar 30 11:39	27° $\mathbb{M}$ 01'48	
direct	10184 Apr 15 13:19	12° $\mathbb{M}$ 26'54			10185 Apr 05 18:08	0° $\mathbb{M}$	
morning max el	10184 Apr 24 12:53	17° $\mathbb{M}$ 40'19	21°41'09	morning max el	10185 Apr 07 08:50	1° $\mathbb{M}$ 29'30	20°23'43
desc. node	10184 Apr 30 15:10	24° $\mathbb{M}$ 40'29		desc. node	10185 Apr 17 12:01	14° $\mathbb{M}$ 03'27	
	10184 May 04 16:20	0° $\mathbb{M}$			10185 Apr 28 09:54	0° $\mathbb{M}$	
	10184 May 24 22:45	0° $\mathbb{M}$		morning set	10185 May 05 22:04	11° $\mathbb{M}$ 27'27	
morning set	10184 May 26 17:44	2° $\mathbb{M}$ 50'12		max. Earth dist.	10185 May 15 05:56	26° $\mathbb{M}$ 08'50	1.43725 AU
max. Earth dist.	10184 Jun 01 21:42	12° $\mathbb{M}$ 50'43	1.41875 AU		10185 May 17 15:11	0° $\mathbb{M}$	
superior conj	10184 Jun 09 12:14	25° $\mathbb{M}$ 45'58	-1°48'50	superior conj	10185 May 21 11:07	6° $\mathbb{M}$ 16'50	-2°08'22
minimum elong	10184 Jun 09 18:34	26° $\mathbb{M}$ 13'36	1°48'39	minimum elong	10185 May 21 15:17	6° $\mathbb{M}$ 34'04	2°08'37
	10184 Jun 11 22:03	0° $\mathbb{M}$		evening rise	10185 Jun 03 00:39	27° $\mathbb{M}$ 42'50	
evening rise	10184 Jun 20 10:40	15° $\mathbb{M}$ 26'02			10185 Jun 04 08:07	0° $\mathbb{M}$	
asc. node	10184 Jun 23 14:32	21° $\mathbb{M}$ 12'33		asc. node	10185 Jun 10 11:34	10° $\mathbb{M}$ 34'37	
	10184 Jun 28 14:35	0° $\mathbb{M}$		evening max el	10185 Jun 20 04:28	24° $\mathbb{M}$ 16'15	18°04'54
evening max el	10184 Jul 06 15:22	11° $\mathbb{M}$ 06'02	18°10'11	retrograde	10185 Jun 26 15:33	27° $\mathbb{M}$ 37'12	
retrograde	10184 Jul 13 14:15	14° $\mathbb{M}$ 37'33		evening set	10185 Jun 29 07:47	27° $\mathbb{M}$ 01'53	
evening set	10184 Jul 15 22:44	14° $\mathbb{M}$ 13'51		inferior conj	10185 Jul 05 17:10	21° $\mathbb{M}$ 54'13	2°20'07
inferior conj	10184 Jul 22 23:48	9° $\mathbb{M}$ 25'33	1°20'09	minimum elong	10185 Jul 05 19:58	21° $\mathbb{M}$ 47'02	2°18'57
minimum elong	10184 Jul 23 02:09	9° $\mathbb{M}$ 20'18	1°18'59	min. Earth dist.	10185 Jul 08 16:37	18° $\mathbb{M}$ 51'59	0.61970 AU
min. Earth dist.	10184 Jul 26 07:40	6° $\mathbb{M}$ 28'12	0.59706 AU	morning rise	10185 Jul 12 05:59	15° $\mathbb{M}$ 48'57	
desc. node	10184 Jul 27 14:26	5° $\mathbb{M}$ 25'25		desc. node	10185 Jul 14 11:36	14° $\mathbb{M}$ 29'25	
morning rise	10184 Jul 30 02:31	3° $\mathbb{M}$ 41'13		direct	10185 Jul 18 22:39	13° $\mathbb{M}$ 26'34	
direct	10184 Aug 05 12:55	1° $\mathbb{M}$ 44'40		morning max el	10185 Aug 02 02:47	21° $\mathbb{M}$ 28'23	27°56'52
morning max el	10184 Aug 19 21:11	9° $\mathbb{M}$ 36'17	27°41'34		10185 Aug 09 12:58	0° $\mathbb{M}$	
	10184 Sep 04 14:11	0° $\mathbb{M}$			10185 Aug 28 16:38	0° $\mathbb{M}$	
asc. node	10184 Sep 19 14:42	27° $\mathbb{M}$ 18'44		morning set	10185 Sep 04 20:15	13° $\mathbb{M}$ 53'31	
morning set	10184 Sep 20 19:20	29° $\mathbb{M}$ 47'32		asc. node	10185 Sep 06 11:32	17° $\mathbb{M}$ 16'26	
	10184 Sep 20 21:43	0° $\mathbb{M}$		max. Earth dist.	10185 Sep 10 09:19	25° $\mathbb{M}$ 36'26	1.31932 AU
max. Earth dist.	10184 Sep 27 02:44	13° $\mathbb{M}$ 27'41	1.31511 AU				
				superior conj	10185 Sep 12 07:52	29° $\mathbb{M}$ 50'36	0°55'32
superior conj	10184 Sep 27 22:12	15° $\mathbb{M}$ 15'44	1°14'40	minimum elong	10185 Sep 12 05:45	29° $\mathbb{M}$ 38'57	0°55'08
minimum elong	10184 Sep 27 19:59	15° $\mathbb{M}$ 03'25	1°14'27		10185 Sep 12 09:35	0° $\mathbb{M}$	

evening rise	10185 Sep 19 02:41	14° $\Omega$ 42'09		superior conj	10186 Aug 27 13:41	14° $\Pi$ 10'05	0°31'36
	10185 Sep 26 15:51	0° $\mathbb{M}$		minimum elong	10186 Aug 27 12:13	14° $\Pi$ 02'14	0°31'09
desc. node	10185 Oct 10 09:32	21° $\mathbb{M}$ 08'54		evening rise	10186 Sep 03 14:04	29° $\Pi$ 18'17	
evening max el	10185 Oct 14 08:29	25° $\mathbb{M}$ 23'32	24°28'30		10186 Sep 03 21:55	0° $\Omega$	
	10185 Oct 20 07:34	0° $\mathbb{A}$			10186 Sep 20 22:19	0° $\mathbb{M}$	
retrograde	10185 Oct 28 02:26	2° $\mathbb{A}$ 17'19		evening max el	10186 Sep 25 19:14	5° $\mathbb{M}$ 31'26	22°48'17
evening set	10185 Nov 02 07:44	1° $\mathbb{A}$ 16'53		desc. node	10186 Sep 27 06:46	6° $\mathbb{M}$ 53'29	
	10185 Nov 05 03:21	30° $\mathbb{R}$ $\mathbb{M}$		retrograde	10186 Oct 08 23:43	12° $\mathbb{M}$ 05'44	
min. Earth dist.	10185 Nov 07 19:29	28° $\mathbb{M}$ 27'40	0.56377 AU	evening set	10186 Oct 12 17:21	11° $\mathbb{M}$ 35'13	
inferior conj	10185 Nov 10 07:18	26° $\mathbb{M}$ 53'47	-5°36'58	min. Earth dist.	10186 Oct 20 03:34	8° $\mathbb{M}$ 13'50	0.55079 AU
minimum elong	10185 Nov 10 11:11	26° $\mathbb{M}$ 47'41	5°36'16	inferior conj	10186 Oct 21 09:55	7° $\mathbb{M}$ 30'24	-5°37'59
morning rise	10185 Nov 18 16:48	22° $\mathbb{M}$ 51'43		minimum elong	10186 Oct 21 05:55	7° $\mathbb{M}$ 36'08	5°37'24
direct	10185 Nov 21 06:03	22° $\mathbb{M}$ 34'14		morning rise	10186 Oct 29 20:17	3° $\mathbb{M}$ 41'49	
morning max el	10185 Dec 01 00:31	27° $\mathbb{M}$ 12'49	19°36'43	direct	10186 Nov 01 23:15	3° $\mathbb{M}$ 19'14	
asc. node	10185 Dec 03 11:44	29° $\mathbb{M}$ 51'05		morning max el	10186 Nov 13 07:21	8° $\mathbb{M}$ 39'53	20°57'11
	10185 Dec 03 14:44	0° $\mathbb{A}$		asc. node	10186 Nov 20 08:41	17° $\mathbb{M}$ 14'00	
morning set	10185 Dec 18 10:55	25° $\mathbb{A}$ 19'12			10186 Nov 27 19:14	0° $\mathbb{A}$	
	10185 Dec 20 18:30	0° $\mathbb{B}$		morning set	10186 Dec 02 19:02	10° $\mathbb{A}$ 01'34	
superior conj	10185 Dec 26 09:14	11° $\mathbb{B}$ 15'04	1°17'15	superior conj	10186 Dec 10 03:52	25° $\mathbb{A}$ 22'41	1°31'44
minimum elong	10185 Dec 26 12:07	11° $\mathbb{B}$ 29'14	1°17'23	minimum elong	10186 Dec 10 05:48	25° $\mathbb{A}$ 32'34	1°32'03
max. Earth dist.	10186 Jan 01 15:28	23° $\mathbb{B}$ 12'29	1.37696 AU		10186 Dec 12 10:20	0° $\mathbb{B}$	
evening rise	10186 Jan 05 08:42	29° $\mathbb{B}$ 55'57		max. Earth dist.	10186 Dec 15 00:13	5° $\mathbb{B}$ 07'38	1.35645 AU
	10186 Jan 05 09:37	0° $\approx$		evening rise	10186 Dec 19 00:14	12° $\mathbb{B}$ 46'46	
desc. node	10186 Jan 06 08:17	1° $\approx$ 39'46		desc. node	10186 Dec 24 05:14	22° $\mathbb{B}$ 10'06	
	10186 Jan 24 05:53	0° $\mathbb{H}$			10186 Dec 28 20:31	0° $\approx$	
evening max el	10186 Feb 09 21:25	20° $\mathbb{H}$ 36'04	25°15'22		10187 Jan 19 06:42	0° $\mathbb{H}$	
retrograde	10186 Feb 21 23:08	27° $\mathbb{H}$ 35'31		evening max el	10187 Jan 23 10:46	4° $\mathbb{H}$ 23'18	26°20'59
evening set	10186 Feb 27 18:11	25° $\mathbb{H}$ 11'19		retrograde	10187 Feb 05 07:27	11° $\mathbb{H}$ 39'53	
asc. node	10186 Mar 01 10:24	23° $\mathbb{H}$ 34'49		evening set	10187 Feb 11 14:10	9° $\mathbb{H}$ 08'05	
min. Earth dist.	10186 Mar 04 04:07	20° $\mathbb{H}$ 18'18	0.67717 AU	min. Earth dist.	10187 Feb 15 17:50	4° $\mathbb{H}$ 49'29	0.66666 AU
inferior conj	10186 Mar 05 09:46	18° $\mathbb{H}$ 41'57	1°15'20	asc. node	10187 Feb 16 07:36	4° $\mathbb{H}$ 07'54	
minimum elong	10186 Mar 05 08:06	18° $\mathbb{H}$ 47'23	1°14'50	inferior conj	10187 Feb 17 11:14	2° $\mathbb{H}$ 43'23	0°22'35
morning rise	10186 Mar 10 22:23	12° $\mathbb{H}$ 47'34		minimum elong	10187 Feb 17 10:38	2° $\mathbb{H}$ 45'12	0°22'35
direct	10186 Mar 14 10:57	11° $\mathbb{H}$ 36'15			10187 Feb 19 19:07	30° $\mathbb{R}$ $\approx$	
morning max el	10186 Mar 21 12:39	15° $\mathbb{H}$ 29'58	19°20'05	morning rise	10187 Feb 23 07:58	26° $\approx$ 58'51	
	10186 Apr 01 17:43	0° $\mathbb{Y}$		direct	10187 Feb 26 09:38	26° $\approx$ 05'41	
greatest brilliancy	10186 Apr 03 08:17	2° $\mathbb{Y}$ 22'24	-0.7m	morning max el	10187 Mar 04 23:27	29° $\approx$ 37'50	18°32'23
desc. node	10186 Apr 04 08:48	3° $\mathbb{Y}$ 53'51			10187 Mar 05 08:19	0° $\mathbb{H}$	
morning set	10186 Apr 14 21:57	19° $\mathbb{Y}$ 59'25		desc. node	10187 Mar 22 05:34	24° $\mathbb{H}$ 04'36	
	10186 Apr 21 09:02	0° $\mathbb{B}$		morning set	10187 Mar 25 16:30	29° $\mathbb{H}$ 31'39	
max. Earth dist.	10186 Apr 27 20:05	10° $\mathbb{B}$ 06'46	1.45010 AU		10187 Mar 25 23:41	0° $\mathbb{Y}$	
superior conj	10186 May 01 10:09	15° $\mathbb{B}$ 47'23	-2°11'59	superior conj	10187 Apr 10 17:44	24° $\mathbb{Y}$ 43'30	-1°55'26
minimum elong	10186 May 01 07:51	15° $\mathbb{B}$ 38'14	2°12'16	minimum elong	10187 Apr 10 09:06	24° $\mathbb{Y}$ 09'42	1°54'58
	10186 May 10 05:34	0° $\mathbb{I}$		max. Earth dist.	10187 Apr 10 14:14	24° $\mathbb{Y}$ 29'47	1.45606 AU
evening rise	10186 May 15 17:17	9° $\mathbb{I}$ 02'52			10187 Apr 14 02:38	0° $\mathbb{B}$	
asc. node	10186 May 28 08:38	29° $\mathbb{I}$ 31'54		evening rise	10187 Apr 26 09:56	19° $\mathbb{B}$ 23'34	
	10186 May 28 16:13	0° $\mathbb{E}$			10187 May 03 02:22	0° $\mathbb{I}$	
evening max el	10186 Jun 03 17:58	7° $\mathbb{E}$ 42'50	18°18'18	greatest brilliancy	10187 May 05 03:38	3° $\mathbb{I}$ 13'54	-0.8m
retrograde	10186 Jun 10 03:17	11° $\mathbb{E}$ 07'19		asc. node	10187 May 15 05:44	17° $\mathbb{I}$ 56'16	
evening set	10186 Jun 13 03:14	10° $\mathbb{E}$ 18'23		evening max el	10187 May 18 05:10	21° $\mathbb{I}$ 19'22	18°49'32
inferior conj	10186 Jun 19 00:54	4° $\mathbb{E}$ 53'17	2°56'59	retrograde	10187 May 24 21:28	25° $\mathbb{I}$ 00'16	
minimum elong	10186 Jun 19 02:57	4° $\mathbb{E}$ 47'22	2°56'10	evening set	10187 May 28 05:27	23° $\mathbb{I}$ 56'24	
min. Earth dist.	10186 Jun 21 11:00	2° $\mathbb{E}$ 07'13	0.64079 AU	inferior conj	10187 Jun 02 19:09	18° $\mathbb{I}$ 15'25	3°15'07
	10186 Jun 23 11:49	30° $\mathbb{R}$ $\mathbb{I}$		minimum elong	10187 Jun 02 20:03	18° $\mathbb{I}$ 12'38	3°14'37
morning rise	10186 Jun 25 01:23	28° $\mathbb{I}$ 36'59		min. Earth dist.	10187 Jun 04 14:14	16° $\mathbb{I}$ 01'04	0.65859 AU
desc. node	10186 Jul 01 08:43	25° $\mathbb{I}$ 58'07		morning rise	10187 Jun 08 09:57	11° $\mathbb{I}$ 55'13	
direct	10186 Jul 01 17:36	25° $\mathbb{I}$ 57'39		direct	10187 Jun 14 20:02	9° $\mathbb{I}$ 10'27	
	10186 Jul 11 01:55	0° $\mathbb{E}$		desc. node	10187 Jun 18 05:46	9° $\mathbb{I}$ 49'54	
morning max el	10186 Jul 15 12:16	3° $\mathbb{E}$ 59'22	27°34'59	morning max el	10187 Jun 27 22:54	16° $\mathbb{I}$ 58'00	26°42'08
	10186 Aug 04 01:47	0° $\mathbb{Q}$			10187 Jul 08 18:56	0° $\mathbb{E}$	
morning set	10186 Aug 19 13:15	27° $\mathbb{Q}$ 34'05			10187 Jul 27 23:13	0° $\mathbb{Q}$	
	10186 Aug 20 18:32	0° $\mathbb{P}$		morning set	10187 Aug 02 19:18	10° $\mathbb{Q}$ 41'21	
asc. node	10186 Aug 24 08:21	7° $\mathbb{P}$ 20'02		max. Earth dist.	10187 Aug 06 22:33	18° $\mathbb{Q}$ 43'54	1.34279 AU
max. Earth dist.	10186 Aug 24 08:54	7° $\mathbb{P}$ 22'55	1.32853 AU	asc. node	10187 Aug 11 05:12	27° $\mathbb{Q}$ 25'44	

superior conj	10187 Aug 11 13:26	28°08'28	0°03'24		10188 Jul 19 04:21	0°00'	
minimum elong	10187 Aug 11 13:15	28°07'34	0°03'05				
behind sun begin	10187 Aug 11 07:34	27°03'00		superior conj	10188 Jul 25 04:18	11°03'25	-0°28'08
behind sun end	10187 Aug 11 18:57	28°03'11		minimum elong	10188 Jul 25 06:03	11°04'07	0°28'10
	10187 Aug 12 10:50	0°00'		asc. node	10188 Jul 28 02:06	17°02'54	
evening rise	10187 Aug 18 23:53	13°04'03		evening rise	10188 Aug 02 05:58	28°02'35	
	10187 Aug 27 05:46	0°00'			10188 Aug 03 05:07	0°00'	
evening max el	10187 Sep 07 12:45	15°05'34	21°13'28	evening max el	10188 Aug 19 19:13	26°05'09	19°55'22
desc. node	10187 Sep 14 04:01	20°03'27			10188 Aug 23 16:43	0°00'	
retrograde	10187 Sep 19 11:52	21°04'36		retrograde	10188 Aug 30 02:23	1°05'40	
evening set	10187 Sep 21 23:00	21°03'30		desc. node	10188 Aug 31 01:16	1°05'12	
inferior conj	10187 Oct 01 02:25	17°03'48	-4°41'56	evening set	10188 Aug 31 23:51	1°04'04	
minimum elong	10187 Sep 30 16:48	17°05'18	4°39'30		10188 Sep 06 02:15	30°00'00	
min. Earth dist.	10187 Oct 01 11:22	17°02'51	0.54619 AU	inferior conj	10188 Sep 09 23:00	27°04'33	-3°00'46
morning rise	10187 Oct 09 11:09	13°04'49		minimum elong	10188 Sep 09 14:59	27°05'43	2°57'58
direct	10187 Oct 13 07:44	13°04'44		min. Earth dist.	10188 Sep 11 21:11	26°03'29	0.55110 AU
morning max el	10187 Oct 26 01:42	19°04'09	22°36'21	morning rise	10188 Sep 18 04:37	23°03'20	
	10187 Nov 03 19:41	0°00'		direct	10188 Sep 22 20:13	22°04'45	
asc. node	10187 Nov 07 05:35	5°02'48		morning max el	10188 Oct 06 13:31	29°03'42	24°23'31
morning set	10187 Nov 17 05:54	24°04'05			10188 Oct 07 01:44	0°00'	
	10187 Nov 19 16:14	0°00'		asc. node	10188 Oct 24 02:29	24°04'33	
					10188 Oct 27 01:55	0°00'	
superior conj	10187 Nov 24 06:27	9°05'13	1°38'58	morning set	10188 Oct 31 17:45	9°03'04	
minimum elong	10187 Nov 24 07:09	9°05'50	1°39'22				
max. Earth dist.	10187 Nov 27 16:17	17°01'13	1.33932 AU	superior conj	10188 Nov 07 14:17	24°03'30	1°39'38
evening rise	10187 Dec 02 06:19	26°04'15		minimum elong	10188 Nov 07 13:49	24°03'30	1°39'58
	10187 Dec 04 04:59	0°00'		max. Earth dist.	10188 Nov 09 16:37	29°06'17	1.32651 AU
desc. node	10187 Dec 11 02:14	12°02'27			10188 Nov 10 02:36	0°00'	
	10187 Dec 22 05:38	0°00'		evening rise	10188 Nov 14 23:30	10°04'20	
evening max el	10188 Jan 06 00:13	18°00'04	27°08'13		10188 Nov 25 13:02	0°00'	
retrograde	10188 Jan 19 09:45	25°02'21		desc. node	10188 Nov 26 23:19	2°02'50	
evening set	10188 Jan 26 02:30	22°04'16			10188 Dec 17 05:53	0°00'	
min. Earth dist.	10188 Jan 30 00:53	19°03'11	0.65251 AU	evening max el	10188 Dec 18 12:16	1°04'21	27°29'56
inferior conj	10188 Feb 01 05:56	16°03'41	-0°38'52	retrograde	10189 Jan 01 05:12	8°03'42	
minimum elong	10188 Feb 01 07:04	16°03'10	0°38'02	evening set	10189 Jan 08 04:46	6°05'12	
asc. node	10188 Feb 03 04:46	14°02'23		min. Earth dist.	10189 Jan 11 23:04	2°05'10	0.63515 AU
morning rise	10188 Feb 07 13:04	11°02'26		inferior conj	10189 Jan 14 15:13	0°09'20	-1°47'59
direct	10188 Feb 10 05:32	10°02'35		minimum elong	10189 Jan 14 18:41	0°00'33	1°46'08
morning max el	10188 Feb 16 15:02	13°04'54	18°01'27		10189 Jan 14 18:54	30°00'00	
	10188 Feb 28 05:47	0°00'		asc. node	10189 Jan 20 01:55	25°03'15	
morning set	10188 Mar 05 16:08	10°03'05		morning rise	10189 Jan 21 10:39	24°05'28	
desc. node	10188 Mar 08 02:20	14°02'30		direct	10189 Jan 23 19:56	24°02'46	
	10188 Mar 17 16:50	0°00'		morning max el	10189 Jan 30 08:35	27°04'46	17°47'46
					10189 Feb 01 09:04	0°00'	
superior conj	10188 Mar 20 03:05	3°05'10	-1°21'23	morning set	10189 Feb 15 18:30	22°04'49	
minimum elong	10188 Mar 19 18:22	3°05'16	1°20'21		10189 Feb 19 23:18	0°00'	
max. Earth dist.	10188 Mar 23 10:10	9°02'33	1.45460 AU	desc. node	10189 Feb 22 23:09	5°04'11	
evening rise	10188 Apr 05 06:06	28°05'30					
	10188 Apr 05 22:03	0°00'		superior conj	10189 Feb 28 06:49	13°05'55	-0°38'56
greatest brilliancy	10188 Apr 18 19:04	19°03'57	-0.7m	minimum elong	10189 Feb 28 02:39	13°06'54	0°38'11
	10188 Apr 26 04:50	0°00'		max. Earth dist.	10189 Mar 06 05:01	23°02'48	1.44587 AU
evening max el	10188 Apr 30 11:59	5°00'10	19°37'24		10189 Mar 10 08:26	0°00'	
asc. node	10188 May 01 02:54	5°03'46		evening rise	10189 Mar 15 17:32	8°02'14	
retrograde	10188 May 07 19:07	9°00'11			10189 Mar 30 04:33	0°00'	
evening set	10188 May 11 11:42	7°04'43		evening max el	10189 Apr 13 13:14	18°04'18	20°39'42
inferior conj	10188 May 16 20:40	1°05'40	3°18'19	asc. node	10189 Apr 18 00:05	22°02'19	
minimum elong	10188 May 16 20:23	1°05'07	3°17'56	retrograde	10189 Apr 21 17:50	23°02'53	
min. Earth dist.	10188 May 18 00:49	0°02'45	0.67216 AU	evening set	10189 Apr 25 19:53	21°05'41	
	10188 May 18 07:09	30°00'00		inferior conj	10189 May 01 02:49	15°04'15	3°09'14
morning rise	10188 May 22 04:43	25°03'42		minimum elong	10189 May 01 01:33	15°04'35	3°08'48
direct	10188 May 28 04:38	22°05'07		min. Earth dist.	10189 May 01 16:57	14°05'33	0.68116 AU
desc. node	10188 Jun 04 02:45	25°03'13		morning rise	10189 May 06 07:01	9°02'24	
	10188 Jun 09 03:46	0°00'		direct	10189 May 11 18:20	7°02'55	
morning max el	10188 Jun 09 08:56	0°01'30	25°27'14	desc. node	10189 May 21 23:43	12°05'10	
	10188 Jul 01 16:52	0°00'		morning max el	10189 May 22 18:27	13°03'34	24°00'04
morning set	10188 Jul 15 10:24	23°04'50			10189 Jun 05 00:39	0°00'	
max. Earth dist.	10188 Jul 19 02:07	29°04'29	1.36158 AU		10189 Jun 24 13:36	0°00'	



morning set	10189 Jun 27 05:35	4°☿31'21			10190 May 29 14:47	0°♄	
max. Earth dist.	10189 Jun 30 23:39	11°☿04'54	1.38354 AU	morning set	10190 Jun 07 23:55	14°♄49'16	
				max. Earth dist.	10190 Jun 12 21:36	22°♄58'26	1.40632 AU
superior conj	10189 Jul 08 06:47	24°☿30'27	-1°01'13		10190 Jun 16 23:35	0°☿	
minimum elong	10189 Jul 08 10:50	24°☿49'40	1°00'58				
	10189 Jul 11 03:27	0°♄		superior conj	10190 Jun 20 16:41	6°☿35'14	-1°32'55
asc. node	10189 Jul 14 23:01	7°♄27'57		minimum elong	10190 Jun 20 22:40	7°☿02'09	1°32'36
evening rise	10189 Jul 17 05:40	11°♄56'54		evening rise	10190 Jun 30 19:41	25°☿21'46	
	10189 Jul 27 01:33	0°♄		asc. node	10190 Jul 01 20:00	27°☿16'08	
evening max el	10189 Aug 02 14:44	8°♄36'18	18°58'06		10190 Jul 03 07:00	0°♄	
retrograde	10189 Aug 11 07:20	12°♄56'01		evening max el	10190 Jul 16 20:13	21°♄02'26	18°21'50
evening set	10189 Aug 13 04:52	12°♄44'27		retrograde	10190 Jul 24 07:10	24°♄47'14	
desc. node	10189 Aug 17 22:31	10°♄48'19		evening set	10190 Jul 26 11:02	24°♄29'09	
inferior conj	10189 Aug 21 12:03	8°♄28'06	-1°06'23	inferior conj	10190 Aug 02 22:46	19°♄52'52	0°33'46
minimum elong	10189 Aug 21 09:13	8°♄33'04	1°05'27	minimum elong	10190 Aug 02 23:56	19°♄50'29	0°33'01
min. Earth dist.	10189 Aug 24 11:11	6°♄24'09	0.56462 AU	desc. node	10190 Aug 04 19:44	18°♄20'06	
morning rise	10189 Aug 29 10:23	3°♄36'02		min. Earth dist.	10190 Aug 06 07:24	17°♄08'36	0.58428 AU
direct	10189 Sep 03 21:06	2°♄25'52		morning rise	10190 Aug 10 09:19	14°♄24'50	
morning max el	10189 Sep 18 02:37	9°♄44'45	26°02'01	direct	10190 Aug 16 12:42	12°♄45'15	
	10189 Oct 03 10:59	0°♄		morning max el	10190 Aug 30 21:48	20°♄28'20	27°15'11
asc. node	10189 Oct 10 23:21	13°♄35'50			10190 Sep 08 02:59	0°♄	
morning set	10189 Oct 16 04:48	24°♄19'43			10190 Sep 26 05:30	0°♄	
	10189 Oct 18 19:39	0°♄		asc. node	10190 Sep 27 20:13	3°♄14'13	
				morning set	10190 Sep 30 13:23	8°♄52'23	
superior conj	10189 Oct 23 01:03	9°♄20'27	1°34'18				
minimum elong	10189 Oct 22 23:38	9°♄12'35	1°34'27	superior conj	10190 Oct 07 12:50	24°♄07'42	1°23'22
max. Earth dist.	10189 Oct 23 23:03	11°♄22'13	1.31832 AU	minimum elong	10190 Oct 07 10:48	23°♄56'19	1°23'17
evening rise	10189 Oct 30 00:39	24°♄28'58		max. Earth dist.	10190 Oct 07 08:22	23°♄42'49	1.31488 AU
	10189 Nov 01 17:10	0°♄			10190 Oct 10 04:15	0°♄	
desc. node	10189 Nov 13 20:27	21°♄54'59		evening rise	10190 Oct 14 07:18	8°♄59'09	
	10189 Nov 19 05:13	0°♄			10190 Oct 25 01:55	0°♄	
evening max el	10189 Nov 30 20:27	13°♄52'21	27°20'28	desc. node	10190 Oct 31 17:36	10°♄45'48	
retrograde	10189 Dec 14 17:12	21°♄06'46		evening max el	10190 Nov 12 22:12	25°♄43'23	26°36'57
evening set	10189 Dec 21 17:45	18°♄51'10			10190 Nov 18 07:13	0°♄	
min. Earth dist.	10189 Dec 25 10:50	16°♄01'53	0.61521 AU	retrograde	10190 Nov 26 20:34	2°♄50'53	
inferior conj	10189 Dec 28 11:53	13°♄18'53	-3°02'04	evening set	10190 Dec 03 13:23	0°♄59'06	
minimum elong	10189 Dec 28 17:56	13°♄05'20	2°59'24		10190 Dec 05 05:02	30°♄	
morning rise	10190 Jan 04 20:39	8°♄20'43		min. Earth dist.	10190 Dec 07 12:06	28°♄23'07	0.59405 AU
asc. node	10190 Jan 06 23:02	8°♄00'21		inferior conj	10190 Dec 10 16:28	25°♄54'14	-4°15'06
direct	10190 Jan 07 01:15	8°♄00'19		minimum elong	10190 Dec 11 00:16	25°♄38'58	4°12'25
morning max el	10190 Jan 14 00:54	11°♄31'53	17°52'09	morning rise	10190 Dec 18 13:49	21°♄17'27	
	10190 Jan 26 08:49	0°♄		direct	10190 Dec 20 17:19	21°♄00'55	
morning set	10190 Jan 29 17:15	6°♄02'04		asc. node	10190 Dec 24 20:07	22°♄05'13	
				morning max el	10190 Dec 28 12:24	24°♄51'26	18°15'49
superior conj	10190 Feb 09 11:35	25°♄08'36	0°02'40		10191 Jan 01 18:53	0°♄	
minimum elong	10190 Feb 09 11:51	25°♄09'45	0°02'55	morning set	10191 Jan 13 06:24	19°♄55'50	
behind sun begin	10190 Feb 09 03:31	24°♄33'53			10191 Jan 18 14:21	0°♄	
behind sun end	10190 Feb 09 20:11	25°♄45'31					
desc. node	10190 Feb 09 20:01	25°♄44'49		superior conj	10191 Jan 22 15:38	7°♄28'38	0°38'03
	10190 Feb 12 08:02	0°♄		minimum elong	10191 Jan 22 18:16	7°♄40'33	0°38'03
max. Earth dist.	10190 Feb 16 20:03	7°♄28'06	1.43082 AU	desc. node	10191 Jan 27 16:48	16°♄27'02	
evening rise	10190 Feb 23 11:29	18°♄05'53		max. Earth dist.	10191 Jan 30 05:54	20°♄49'35	1.41129 AU
	10190 Mar 03 05:39	0°♄		evening rise	10191 Feb 03 23:10	28°♄41'02	
	10190 Mar 25 02:41	0°♄			10191 Feb 04 18:36	0°♄	
evening max el	10190 Mar 27 09:02	2°♄25'32	21°53'05		10191 Feb 24 19:21	0°♄	
asc. node	10190 Apr 04 21:17	7°♄51'45		evening max el	10191 Mar 10 00:46	16°♄10'46	23°12'44
retrograde	10190 Apr 05 15:47	7°♄54'41		retrograde	10191 Mar 20 11:18	22°♄21'07	
evening set	10190 Apr 10 04:13	6°♄04'11		asc. node	10191 Mar 22 18:30	21°♄55'33	
inferior conj	10190 Apr 15 11:23	29°♄45'14	2°49'35	evening set	10191 Mar 25 11:07	20°♄16'15	
minimum elong	10190 Apr 15 09:28	29°♄51'56	2°49'00	inferior conj	10191 Mar 30 20:23	13°♄50'01	2°20'14
	10190 Apr 15 07:09	30°♄		minimum elong	10191 Mar 30 18:11	13°♄57'37	2°19'33
min. Earth dist.	10190 Apr 15 12:33	29°♄41'07	0.68555 AU	min. Earth dist.	10191 Mar 30 09:23	14°♄28'00	0.68557 AU
morning rise	10190 Apr 20 14:32	23°♄32'50		morning rise	10191 Apr 05 01:10	7°♄43'21	
direct	10190 Apr 25 12:19	21°♄26'26		direct	10191 Apr 09 09:28	5°♄58'29	
morning max el	10190 May 05 05:32	27°♄10'07	22°30'30	morning max el	10191 Apr 17 21:18	10°♄51'54	21°06'45
	10190 May 07 20:55	0°♄		desc. node	10191 Apr 25 17:28	20°♄10'46	
desc. node	10190 May 08 20:38	1°♄08'18			10191 May 02 19:06	0°♄	

morning set	10191 May 18 15:48	23°♄55'36		desc. node	10192 Apr 11 14:16	9°♄46'28	
	10191 May 22 11:49	0°♄			10192 Apr 25 02:22	0°♄	
max. Earth dist.	10191 May 26 00:54	5°♄43'38	1.42715 AU	morning set	10192 Apr 26 15:11	2°♄21'26	
				max. Earth dist.	10192 May 07 11:39	19°♄19'40	1.44353 AU
superior conj	10191 Jun 02 05:21	17°♄42'15	-1°58'39	superior conj	10192 May 12 17:45	27°♄46'21	-2°12'12
minimum elong	10191 Jun 02 11:17	18°♄07'34	1°58'39	minimum elong	10192 May 12 19:36	27°♄53'51	2°12'34
	10191 Jun 09 06:58	0°♄			10192 May 14 02:34	0°♄	
evening rise	10191 Jun 13 19:45	8°♄06'06		evening rise	10192 May 26 01:06	19°♄59'15	
asc. node	10191 Jun 18 16:59	16°♄49'13			10192 May 31 22:16	0°♄	
	10191 Jun 26 22:17	0°♄		asc. node	10192 Jun 04 14:01	6°♄01'34	
evening max el	10191 Jun 30 07:39	3°♄59'33	18°05'37	evening max el	10192 Jun 12 21:21	17°♄18'06	18°08'24
retrograde	10191 Jul 07 00:13	7°♄24'34		retrograde	10192 Jun 19 06:21	20°♄38'29	
evening set	10191 Jul 09 11:58	6°♄56'18		evening set	10192 Jun 22 01:59	19°♄57'26	
inferior conj	10191 Jul 16 05:57	1°♄59'54	1°48'38	inferior conj	10192 Jun 28 05:54	14°♄42'13	2°38'16
minimum elong	10191 Jul 16 08:41	1°♄53'23	1°47'23	minimum elong	10192 Jun 28 08:28	14°♄35'16	2°37'15
	10191 Jul 18 08:11	30°♄		min. Earth dist.	10192 Jul 01 00:04	11°♄44'43	0.62905 AU
min. Earth dist.	10191 Jul 19 11:17	28°♄57'22	0.60679 AU	morning rise	10192 Jul 04 13:14	8°♄31'33	
desc. node	10191 Jul 22 16:55	26°♄21'32		desc. node	10192 Jul 08 14:02	6°♄24'13	
morning rise	10191 Jul 23 02:40	26°♄05'20		direct	10192 Jul 11 06:40	6°♄00'35	
direct	10191 Jul 29 16:47	23°♄56'33		morning max el	10192 Jul 25 07:05	14°♄03'03	27°51'45
	10191 Aug 10 23:22	0°♄			10192 Aug 07 03:54	0°♄	
morning max el	10191 Aug 12 23:46	1°♄54'07	27°52'41		10192 Aug 25 01:04	0°♄	
	10191 Sep 02 11:36	0°♄		morning set	10192 Aug 28 15:34	7°♄05'56	
morning set	10191 Sep 14 17:42	23°♄09'53		asc. node	10192 Aug 31 13:52	13°♄07'20	
asc. node	10191 Sep 14 17:03	23°♄06'30		max. Earth dist.	10192 Sep 02 20:58	17°♄59'03	1.32266 AU
	10191 Sep 17 23:10	0°♄					
max. Earth dist.	10191 Sep 20 16:55	5°♄58'33	1.31627 AU	superior conj	10192 Sep 05 08:08	23°♄18'34	0°45'58
				minimum elong	10192 Sep 05 06:13	23°♄08'08	0°45'30
superior conj	10191 Sep 21 23:50	8°♄49'10	1°07'10		10192 Sep 08 09:34	0°♄	
minimum elong	10191 Sep 21 21:36	8°♄36'46	1°06'51	evening rise	10192 Sep 12 04:46	8°♄15'21	
evening rise	10191 Sep 28 17:19	23°♄36'40			10192 Sep 23 09:16	0°♄	
	10191 Oct 01 18:08	0°♄		desc. node	10192 Oct 04 12:01	15°♄23'15	
desc. node	10191 Oct 18 14:47	28°♄42'28		evening max el	10192 Oct 06 03:33	17°♄03'38	23°46'15
	10191 Oct 19 14:47	0°♄		retrograde	10192 Oct 19 17:10	23°♄50'14	
evening max el	10191 Oct 25 16:02	6°♄44'06	25°22'05	evening set	10192 Oct 24 07:54	23°♄03'49	
retrograde	10191 Nov 08 13:17	13°♄43'30		min. Earth dist.	10192 Oct 30 13:51	20°♄03'03	0.55743 AU
evening set	10191 Nov 14 10:57	12°♄23'50		inferior conj	10192 Nov 01 14:45	18°♄49'54	-5°43'55
min. Earth dist.	10191 Nov 19 04:13	9°♄44'40	0.57385 AU	minimum elong	10192 Nov 01 15:33	18°♄48'43	5°43'34
inferior conj	10191 Nov 22 01:50	7°♄46'46	-5°15'17	morning rise	10192 Nov 10 01:07	14°♄54'53	
minimum elong	10191 Nov 22 08:31	7°♄35'24	5°13'43	direct	10192 Nov 12 19:48	14°♄35'31	
morning rise	10191 Nov 30 08:24	3°♄32'17		morning max el	10192 Nov 23 05:49	19°♄31'13	20°08'12
direct	10191 Dec 02 16:12	3°♄16'07		asc. node	10192 Nov 27 14:08	24°♄27'29	
morning max el	10191 Dec 11 15:14	7°♄34'59	19°00'38		10192 Dec 01 08:51	0°♄	
asc. node	10191 Dec 11 17:09	7°♄39'37		morning set	10192 Dec 11 11:05	18°♄53'25	
	10191 Dec 26 01:06	0°♄			10192 Dec 16 21:09	0°♄	
morning set	10191 Dec 28 05:29	4°♄16'34					
				superior conj	10192 Dec 19 02:55	4°♄32'07	1°24'20
superior conj	10192 Jan 05 14:22	20°♄41'15	1°05'19	minimum elong	10192 Dec 19 05:27	4°♄44'49	1°24'32
minimum elong	10192 Jan 05 17:30	20°♄56'15	1°05'21	max. Earth dist.	10192 Dec 24 19:19	15°♄38'22	1.36798 AU
	10192 Jan 10 13:49	0°♄		evening rise	10192 Dec 28 14:03	22°♄38'42	
max. Earth dist.	10192 Jan 12 12:22	3°♄30'14	1.38955 AU	desc. node	10192 Dec 31 10:36	27°♄43'40	
desc. node	10192 Jan 14 13:40	7°♄08'12			10193 Jan 01 18:02	0°♄	
evening rise	10192 Jan 16 08:33	10°♄13'59			10193 Jan 21 09:50	0°♄	
	10192 Jan 28 14:43	0°♄		evening max el	10193 Feb 02 03:58	13°♄49'03	25°45'05
evening max el	10192 Feb 20 14:36	29°♄59'41	24°32'22	retrograde	10193 Feb 14 14:11	20°♄56'21	
	10192 Feb 20 14:43	0°♄		evening set	10193 Feb 20 14:24	18°♄28'30	
retrograde	10192 Mar 03 03:06	6°♄43'42		asc. node	10193 Feb 23 12:55	15°♄29'36	
evening set	10192 Mar 08 15:03	4°♄26'02		min. Earth dist.	10193 Feb 24 21:38	13°♄50'15	0.67321 AU
asc. node	10192 Mar 08 15:42	4°♄24'38		inferior conj	10193 Feb 26 08:14	12°♄00'41	0°54'03
	10192 Mar 12 14:50	30°♄		minimum elong	10193 Feb 26 06:56	12°♄04'48	0°53'44
min. Earth dist.	10192 Mar 13 05:10	29°♄12'48	0.68142 AU	morning rise	10193 Mar 03 24:00	6°♄10'15	
inferior conj	10192 Mar 14 03:58	27°♄56'35	1°41'41	direct	10193 Mar 07 07:51	5°♄06'52	
minimum elong	10192 Mar 14 01:57	28°♄03'20	1°41'02	morning max el	10193 Mar 14 03:21	8°♄49'30	18°57'47
morning rise	10192 Mar 19 12:59	21°♄57'09		greatest brilliancy	10193 Mar 27 21:53	27°♄24'17	-0.8m
direct	10192 Mar 23 08:31	20°♄33'52		desc. node	10193 Mar 29 11:02	29°♄46'11	
morning max el	10192 Mar 30 20:25	24°♄45'35	19°54'45		10193 Mar 29 14:39	0°♄	
	10192 Apr 04 10:45	0°♄					

morning set	10193 Apr 05 20:41	11° $\Upsilon$ 12'44		asc. node	10194 Feb 10 10:07	25° $\approx$ 49'15	
	10193 Apr 17 22:10	0° $\text{B}$		morning rise	10194 Feb 16 08:01	20° $\approx$ 18'48	
max. Earth dist.	10193 Apr 20 04:22	3° $\text{B}$ 32'21	1.45354 AU	direct	10194 Feb 19 05:35	19° $\approx$ 32'18	
				morning max el	10194 Feb 25 16:35	22° $\approx$ 58'32	18°17'10
superior conj	10193 Apr 22 08:29	6° $\text{B}$ 57'10	-2°07'28		10194 Mar 03 10:01	0° $\text{H}$	
minimum elong	10193 Apr 22 03:01	6° $\text{B}$ 35'36	2°07'29	desc. node	10194 Mar 16 07:49	20° $\text{H}$ 03'24	
	10193 May 06 18:20	0° $\text{II}$		morning set	10194 Mar 17 03:13	21° $\text{H}$ 21'08	
evening rise	10193 May 07 07:34	0° $\text{II}$ 53'43			10194 Mar 22 13:07	0° $\Upsilon$	
asc. node	10193 May 22 11:06	24° $\text{II}$ 46'07					
	10193 May 26 15:01	0° $\text{E}$		superior conj	10194 Apr 01 14:21	15° $\Upsilon$ 51'11	-1°42'39
evening max el	10193 May 27 10:12	0° $\text{E}$ 49'56	18°29'29	minimum elong	10194 Apr 01 04:49	15° $\Upsilon$ 13'51	1°41'51
retrograde	10193 Jun 02 21:20	4° $\text{E}$ 19'46		max. Earth dist.	10194 Apr 02 23:47	18° $\Upsilon$ 02'03	1.45630 AU
evening set	10193 Jun 06 00:43	3° $\text{E}$ 24'25			10194 Apr 10 15:41	0° $\text{B}$	
	10193 Jun 09 22:25	30° $\text{R}$ $\text{II}$		evening rise	10194 Apr 17 14:35	10° $\text{B}$ 52'03	
inferior conj	10193 Jun 11 18:33	27° $\text{II}$ 52'09	3°06'42	greatest brilliancy	10194 Apr 28 13:14	27° $\text{B}$ 53'12	-0.8m
minimum elong	10193 Jun 11 20:08	27° $\text{II}$ 47'26	3°06'02		10194 Apr 29 22:39	0° $\text{II}$	
min. Earth dist.	10193 Jun 13 22:12	25° $\text{II}$ 18'25	0.64879 AU	asc. node	10194 May 09 08:15	12° $\text{II}$ 53'10	
morning rise	10193 Jun 17 14:35	21° $\text{II}$ 33'39		evening max el	10194 May 10 19:38	14° $\text{II}$ 28'07	19°07'59
direct	10193 Jun 24 04:42	18° $\text{II}$ 50'59		retrograde	10194 May 17 17:27	18° $\text{II}$ 20'07	
desc. node	10193 Jun 25 11:07	18° $\text{II}$ 56'24		evening set	10194 May 21 04:57	17° $\text{II}$ 09'39	
morning max el	10193 Jul 07 17:25	26° $\text{II}$ 47'48	27°15'58	inferior conj	10194 May 26 16:15	11° $\text{II}$ 22'01	3°18'09
	10193 Jul 10 17:09	0° $\text{E}$		minimum elong	10194 May 26 16:37	11° $\text{II}$ 20'49	3°17'43
	10193 Jul 31 19:11	0° $\Omega$		min. Earth dist.	10194 May 28 04:50	9° $\text{II}$ 24'25	0.66480 AU
morning set	10193 Aug 12 04:22	20° $\Omega$ 34'02		morning rise	10194 Jun 01 03:47	5° $\text{II}$ 01'26	
max. Earth dist.	10193 Aug 16 16:57	29° $\Omega$ 36'47	1.33404 AU	direct	10194 Jun 07 09:45	2° $\text{II}$ 17'59	
	10193 Aug 16 21:28	0° $\text{M}$		desc. node	10194 Jun 12 08:09	3° $\text{II}$ 40'44	
asc. node	10193 Aug 18 10:42	3° $\text{M}$ 12'48		morning max el	10194 Jun 20 04:10	9° $\text{II}$ 55'22	26°12'35
					10194 Jul 06 00:27	0° $\text{E}$	
superior conj	10193 Aug 20 11:42	7° $\text{M}$ 30'31	0°20'09		10194 Jul 24 08:13	0° $\Omega$	
minimum elong	10193 Aug 20 10:42	7° $\text{M}$ 25'14	0°19'43	morning set	10194 Jul 26 04:37	3° $\Omega$ 24'18	
evening rise	10193 Aug 27 15:47	22° $\text{M}$ 50'00		max. Earth dist.	10194 Jul 30 02:20	10° $\Omega$ 50'01	1.35025 AU
	10193 Aug 31 02:40	0° $\Omega$					
evening max el	10193 Sep 17 16:01	27° $\Omega$ 12'30	22°06'22	superior conj	10194 Aug 04 08:01	21° $\Omega$ 17'29	-0°09'39
	10193 Sep 20 21:39	0° $\text{M}$		minimum elong	10194 Aug 04 08:36	21° $\Omega$ 20'25	0°09'52
desc. node	10193 Sep 21 09:15	0° $\text{M}$ 21'02		behind sun begin	10194 Aug 04 03:49	20° $\Omega$ 56'02	
retrograde	10193 Sep 30 09:35	3° $\text{M}$ 32'50		behind sun end	10194 Aug 04 13:22	21° $\Omega$ 44'50	
evening set	10193 Oct 03 12:58	3° $\text{M}$ 10'52		asc. node	10194 Aug 05 07:34	23° $\Omega$ 18'18	
	10193 Oct 11 00:38	30° $\text{R}$ $\Omega$			10194 Aug 08 13:00	0° $\text{M}$	
inferior conj	10193 Oct 12 11:35	29° $\Omega$ 11'10	-5°21'08	evening rise	10194 Aug 12 00:18	7° $\text{M}$ 13'56	
minimum elong	10193 Oct 12 04:27	29° $\Omega$ 21'11	5°19'51		10194 Aug 24 08:39	0° $\Omega$	
min. Earth dist.	10193 Oct 11 21:07	29° $\Omega$ 31'28	0.54778 AU	evening max el	10194 Aug 30 14:30	7° $\Omega$ 46'46	20°37'49
morning rise	10193 Oct 20 21:28	25° $\Omega$ 24'03		desc. node	10194 Sep 08 06:31	13° $\Omega$ 05'13	
direct	10193 Oct 24 07:44	24° $\Omega$ 58'02		retrograde	10194 Sep 10 21:36	13° $\Omega$ 23'00	
	10193 Nov 04 14:43	0° $\text{M}$		evening set	10194 Sep 13 00:32	13° $\Omega$ 11'57	
morning max el	10193 Nov 05 06:56	0° $\text{M}$ 36'57	21°37'30	inferior conj	10194 Sep 22 04:00	9° $\Omega$ 15'35	-4°02'55
asc. node	10193 Nov 14 11:04	12° $\text{M}$ 13'27		minimum elong	10194 Sep 21 18:15	9° $\Omega$ 29'37	3°59'57
	10193 Nov 24 02:21	0° $\text{A}$		min. Earth dist.	10194 Sep 23 05:38	8° $\Omega$ 38'38	0.54711 AU
morning set	10193 Nov 25 20:39	3° $\text{A}$ 39'12		morning rise	10194 Sep 30 11:43	5° $\Omega$ 15'44	
				direct	10194 Oct 04 15:55	4° $\Omega$ 38'20	
superior conj	10193 Dec 03 01:21	18° $\text{A}$ 50'06	1°35'38	morning max el	10194 Oct 17 21:46	11° $\Omega$ 01'58	23°21'51
minimum elong	10193 Dec 03 02:46	18° $\text{A}$ 57'31	1°36'00		10194 Oct 31 22:02	0° $\text{M}$	
max. Earth dist.	10193 Dec 07 07:04	27° $\text{A}$ 31'41	1.34874 AU	asc. node	10194 Nov 01 07:58	0° $\text{M}$ 43'39	
	10193 Dec 08 12:51	0° $\text{B}$		morning set	10194 Nov 10 08:09	18° $\text{M}$ 27'47	
evening rise	10193 Dec 11 12:15	5° $\text{B}$ 46'36			10194 Nov 15 16:27	0° $\text{A}$	
desc. node	10193 Dec 18 07:35	18° $\text{B}$ 09'08					
	10193 Dec 25 12:08	0° $\approx$		superior conj	10194 Nov 17 06:31	3° $\text{A}$ 25'43	1°40'00
evening max el	10194 Jan 15 17:20	27° $\approx$ 32'33	26°43'37	minimum elong	10194 Nov 17 06:42	3° $\text{A}$ 26'46	1°40'24
	10194 Jan 18 10:45	0° $\text{H}$		max. Earth dist.	10194 Nov 20 02:32	9° $\text{A}$ 28'32	1.33329 AU
retrograde	10194 Jan 28 19:55	4° $\text{H}$ 52'32		evening rise	10194 Nov 24 23:28	19° $\text{A}$ 28'22	
evening set	10194 Feb 04 07:23	2° $\text{H}$ 18'45			10194 Nov 30 11:38	0° $\text{B}$	
	10194 Feb 06 18:44	30° $\text{R}$ $\approx$		desc. node	10194 Dec 05 04:39	8° $\text{B}$ 19'13	
min. Earth dist.	10194 Feb 08 08:37	28° $\approx$ 14'53	0.66113 AU		10194 Dec 19 14:27	0° $\approx$	
inferior conj	10194 Feb 10 07:06	25° $\approx$ 58'09	-0°02'29	evening max el	10194 Dec 29 06:15	11° $\approx$ 01'07	27°20'51
minimum elong	10194 Feb 10 07:09	25° $\approx$ 57'59	0°02'10	retrograde	10195 Jan 11 19:41	18° $\approx$ 24'03	
transit middle	10194 Feb 10 07:09	25° $\approx$ 57'59	0°02'10	evening set	10195 Jan 18 15:51	15° $\approx$ 50'47	
transit begin	10194 Feb 10 04:15	26° $\approx$ 06'34		min. Earth dist.	10195 Jan 22 12:08	12° $\approx$ 19'31	0.64547 AU
transit end	10194 Feb 10 10:03	25° $\approx$ 49'25		inferior conj	10195 Jan 24 22:10	9° $\approx$ 43'44	-1°07'21

minimum elong	10195 Jan 25 00:14	9° $\approx$ 38'10	1°06'07	min. Earth dist.	10196 Jan 05 06:16	25° $\approx$ 53'22	0.62686 AU
asc. node	10195 Jan 28 07:17	6° $\approx$ 21'58		inferior conj	10196 Jan 08 02:33	23° $\approx$ 09'23	-2°19'03
morning rise	10195 Jan 31 10:23	4° $\approx$ 17'54		minimum elong	10196 Jan 08 07:07	22° $\approx$ 58'21	2°16'49
direct	10195 Feb 02 23:25	3° $\approx$ 44'34		morning rise	10196 Jan 15 03:36	17° $\approx$ 59'56	
morning max el	10195 Feb 09 09:29	7° $\approx$ 05'32	17°53'29	asc. node	10196 Jan 15 04:25	17° $\approx$ 59'13	
	10195 Feb 24 20:55	0° $\approx$		direct	10196 Jan 17 10:24	17° $\approx$ 35'53	
morning set	10195 Feb 26 14:57	2° $\approx$ 56'03		morning max el	10196 Jan 24 02:56	21° $\approx$ 01'13	17°47'18
desc. node	10195 Mar 03 04:37	10° $\approx$ 33'20			10196 Jan 30 22:13	0° $\approx$	
				morning set	10196 Feb 09 02:50	15° $\approx$ 40'14	
superior conj	10195 Mar 12 06:08	25° $\approx$ 19'30	-1°03'47		10196 Feb 17 08:43	0° $\approx$	
minimum elong	10195 Mar 11 23:06	24° $\approx$ 51'22	1°02'48	desc. node	10196 Feb 18 01:25	1° $\approx$ 11'05	
	10195 Mar 15 04:34	0° $\approx$					
max. Earth dist.	10195 Mar 16 19:11	2° $\approx$ 32'35	1.45166 AU	superior conj	10196 Feb 20 20:20	5° $\approx$ 52'52	-0°20'49
evening rise	10195 Mar 28 05:13	20° $\approx$ 16'48		minimum elong	10196 Feb 20 18:15	5° $\approx$ 44'11	0°20'16
	10195 Apr 03 14:07	0° $\approx$		max. Earth dist.	10196 Feb 27 12:20	16° $\approx$ 48'12	1.44017 AU
greatest brilliancy	10195 Apr 12 03:20	12° $\approx$ 45'20	-0.6m	evening rise	10196 Mar 06 17:40	29° $\approx$ 44'56	
evening max el	10195 Apr 24 00:05	28° $\approx$ 09'39	20°02'19		10196 Mar 06 21:34	0° $\approx$	
	10195 Apr 25 23:50	0° $\approx$			10196 Mar 27 06:48	0° $\approx$	
asc. node	10195 Apr 26 05:25	0° $\approx$ 11'25		evening max el	10196 Apr 05 23:00	11° $\approx$ 52'37	21°09'51
retrograde	10195 May 01 15:52	2° $\approx$ 34'09		asc. node	10196 Apr 12 02:38	16° $\approx$ 26'20	
evening set	10195 May 05 12:15	1° $\approx$ 08'11		retrograde	10196 Apr 14 14:21	16° $\approx$ 56'51	
	10195 May 06 19:46	30° $\approx$ 8'8		evening set	10196 Apr 18 20:40	15° $\approx$ 15'15	
inferior conj	10195 May 10 20:03	25° $\approx$ 06'54	3°15'52	inferior conj	10196 Apr 24 03:28	9° $\approx$ 02'15	3°02'07
minimum elong	10195 May 10 19:19	25° $\approx$ 09'23	3°15'28	minimum elong	10196 Apr 24 01:53	9° $\approx$ 07'44	3°01'36
min. Earth dist.	10195 May 11 18:10	23° $\approx$ 52'03	0.67650 AU	min. Earth dist.	10196 Apr 24 12:04	8° $\approx$ 32'23	0.68364 AU
morning rise	10195 May 16 02:04	18° $\approx$ 47'53		morning rise	10196 Apr 29 06:53	2° $\approx$ 47'05	
direct	10195 May 21 20:48	16° $\approx$ 13'26		direct	10196 May 04 12:37	0° $\approx$ 28'56	
desc. node	10195 May 30 05:07	20° $\approx$ 08'03		morning max el	10196 May 14 23:28	6° $\approx$ 42'16	23°21'36
morning max el	10195 Jun 02 13:54	23° $\approx$ 15'15	24°51'01	desc. node	10196 May 16 02:02	7° $\approx$ 51'08	
	10195 Jun 08 13:04	0° $\approx$			10196 Jun 02 01:20	0° $\approx$	
	10195 Jun 29 08:59	0° $\approx$		morning set	10196 Jun 18 20:57	26° $\approx$ 12'23'25	
morning set	10195 Jul 08 11:53	15° $\approx$ 25'11			10196 Jun 21 00:03	0° $\approx$	
max. Earth dist.	10195 Jul 12 02:08	21° $\approx$ 53'53	1.37059 AU	max. Earth dist.	10196 Jun 22 22:34	3° $\approx$ 20'40	1.39328 AU
	10195 Jul 16 09:49	0° $\approx$					
superior conj	10195 Jul 18 18:03	4° $\approx$ 32'07	-0°42'07	superior conj	10196 Jun 30 14:02	17° $\approx$ 05'30	-1°15'04
minimum elong	10195 Jul 18 20:45	4° $\approx$ 45'19	0°42'01	minimum elong	10196 Jun 30 19:00	17° $\approx$ 28'38	1°14'45
asc. node	10195 Jul 23 04:29	13° $\approx$ 20'13		asc. node	10196 Jul 09 01:27	3° $\approx$ 14'46	
evening rise	10195 Jul 27 03:59	21° $\approx$ 20'52		evening rise	10196 Jul 09 23:58	5° $\approx$ 03'32	
	10195 Jul 31 13:24	0° $\approx$			10196 Jul 25 00:26	0° $\approx$	
evening max el	10195 Aug 13 02:48	19° $\approx$ 06'01	19°28'29	evening max el	10196 Jul 26 03:06	1° $\approx$ 10'10	18°40'15
retrograde	10195 Aug 22 16:56	23° $\approx$ 51'22		retrograde	10196 Aug 03 05:31	5° $\approx$ 12'50	
evening set	10195 Aug 24 13:05	23° $\approx$ 41'38		evening set	10196 Aug 05 05:32	4° $\approx$ 58'53	
desc. node	10195 Aug 26 03:47	23° $\approx$ 18'02		desc. node	10196 Aug 12 00:59	1° $\approx$ 25'09	
inferior conj	10195 Sep 02 06:26	19° $\approx$ 35'47	-2°11'55	inferior conj	10196 Aug 13 04:28	0° $\approx$ 34'23	-0°21'08
minimum elong	10195 Sep 02 00:31	19° $\approx$ 45'16	2°09'47	minimum elong	10196 Aug 13 03:37	0° $\approx$ 35'59	0°21'04
min. Earth dist.	10195 Sep 04 17:19	18° $\approx$ 01'30	0.55588 AU		10196 Aug 13 22:45	30° $\approx$ 8'8	
morning rise	10195 Sep 10 09:30	15° $\approx$ 05'15		min. Earth dist.	10196 Aug 16 09:34	28° $\approx$ 11'05	0.57241 AU
direct	10195 Sep 15 09:25	14° $\approx$ 09'00		morning rise	10196 Aug 20 22:15	25° $\approx$ 12'42	
morning max el	10195 Sep 29 09:15	21° $\approx$ 10'47	25°07'28	direct	10196 Aug 26 16:54	24° $\approx$ 10'41'17	
	10195 Oct 07 01:08	0° $\approx$			10196 Sep 08 07:29	0° $\approx$	
asc. node	10195 Oct 19 04:51	19° $\approx$ 47'10		morning max el	10196 Sep 10 00:18	1° $\approx$ 34'08	26°37'04
	10195 Oct 24 07:10	0° $\approx$			10196 Sep 30 05:07	0° $\approx$	
morning set	10195 Oct 25 19:50	3° $\approx$ 14'01		asc. node	10196 Oct 05 01:42	9° $\approx$ 15'14	
				morning set	10196 Oct 09 06:03	17° $\approx$ 53'28	
superior conj	10195 Nov 01 15:50	18° $\approx$ 10'59	1°38'04		10196 Oct 14 18:58	0° $\approx$	
minimum elong	10195 Nov 01 14:56	18° $\approx$ 06'01	1°38'21	superior conj	10196 Oct 16 03:16	2° $\approx$ 59'36	1°30'20
max. Earth dist.	10195 Nov 03 05:35	21° $\approx$ 37'58	1.32242 AU	minimum elong	10196 Oct 16 01:32	2° $\approx$ 49'58	1°30'24
	10195 Nov 07 03:03	0° $\approx$		max. Earth dist.	10196 Oct 16 13:47	3° $\approx$ 58'00	1.31627 AU
evening rise	10195 Nov 08 20:21	3° $\approx$ 35'05		evening rise	10196 Oct 23 00:09	17° $\approx$ 59'19	
desc. node	10195 Nov 22 01:46	28° $\approx$ 06'33			10196 Oct 28 23:00	0° $\approx$	
	10195 Nov 23 05:39	0° $\approx$		desc. node	10196 Nov 07 22:54	17° $\approx$ 22'01	
evening max el	10195 Dec 11 17:01	24° $\approx$ 02'09	27°30'03		10196 Nov 17 01:26	0° $\approx$	
	10195 Dec 19 23:02	0° $\approx$		evening max el	10196 Nov 22 23:04	6° $\approx$ 22'55	27°06'13
retrograde	10195 Dec 25 12:22	1° $\approx$ 20'38		retrograde	10196 Dec 06 20:41	13° $\approx$ 33'38	
	10195 Dec 30 18:19	30° $\approx$ 8'8		evening set	10196 Dec 13 19:06	11° $\approx$ 32'21	
evening set	10196 Jan 01 12:57	28° $\approx$ 56'10					

min. Earth dist.	10196 Dec 17 13:40	8° $\text{S}$ 45'13	0.60631 AU	inferior conj	10197 Dec 02 13:32	18° $\text{S}$ 24'25	-4°43'07
inferior conj	10196 Dec 20 16:52	6° $\text{S}$ 06'30	-3°33'40	minimum elong	10197 Dec 02 21:22	18° $\text{S}$ 10'01	4°40'46
minimum elong	10196 Dec 20 23:51	5° $\text{S}$ 51'42	3°30'51	morning rise	10197 Dec 10 15:23	13° $\text{S}$ 57'12	
morning rise	10196 Dec 28 07:10	1° $\text{S}$ 16'45		direct	10197 Dec 12 20:09	13° $\text{S}$ 41'08	
direct	10196 Dec 30 10:50	0° $\text{S}$ 58'19		asc. node	10197 Dec 18 22:32	15° $\text{S}$ 53'16	
asc. node	10197 Jan 01 01:30	1° $\text{S}$ 09'02		morning max el	10197 Dec 21 01:48	17° $\text{S}$ 42'07	18°32'12
morning max el	10197 Jan 06 17:35	4° $\text{S}$ 36'51	17°59'38		10197 Dec 29 21:50	0° $\text{S}$	
morning set	10197 Jan 22 08:23	29° $\text{S}$ 13'52		morning set	10198 Jan 06 02:14	13° $\text{S}$ 20'41	
	10197 Jan 22 18:23	0° $\approx$			10198 Jan 14 19:32	0° $\approx$	
superior conj	10197 Feb 01 11:28	17° $\approx$ 36'48	0°18'35	superior conj	10198 Jan 15 00:06	0° $\approx$ 21'14	0°50'39
minimum elong	10197 Feb 01 13:00	17° $\approx$ 43'32	0°18'42	minimum elong	10198 Jan 15 03:07	0° $\approx$ 35'16	0°50'37
desc. node	10197 Feb 03 22:15	21° $\approx$ 53'01		desc. node	10198 Jan 21 19:07	12° $\approx$ 35'31	
	10197 Feb 08 17:10	0° $\text{H}$		max. Earth dist.	10198 Jan 22 10:06	13° $\approx$ 40'38	1.40222 AU
max. Earth dist.	10197 Feb 09 01:33	0° $\text{H}$ 34'46	1.42307 AU	evening rise	10198 Jan 26 15:07	20° $\approx$ 49'54	
evening rise	10197 Feb 14 18:19	9° $\text{H}$ 50'19			10198 Feb 01 06:37	0° $\text{H}$	
	10197 Feb 27 23:50	0° $\text{Y}$			10198 Feb 22 03:22	0° $\text{Y}$	
evening max el	10197 Mar 19 16:59	25° $\text{Y}$ 37'10	22°26'30	evening max el	10198 Mar 02 07:36	9° $\text{Y}$ 24'02	23°46'54
	10197 Mar 25 01:15	0° $\text{B}$		retrograde	10198 Mar 13 05:22	15° $\text{Y}$ 49'43	
retrograde	10197 Mar 29 11:18	1° $\text{B}$ 23'37		asc. node	10198 Mar 16 21:01	14° $\text{Y}$ 46'30	
asc. node	10197 Mar 29 23:50	1° $\text{B}$ 22'17		evening set	10198 Mar 18 10:24	13° $\text{Y}$ 38'51	
	10197 Apr 02 11:26	30° $\text{R}$ $\text{Y}$		min. Earth dist.	10198 Mar 23 04:55	8° $\text{Y}$ 05'47	0.68436 AU
evening set	10197 Apr 03 04:34	29° $\text{Y}$ 26'49		inferior conj	10198 Mar 23 21:03	7° $\text{Y}$ 10'42	2°04'58
inferior conj	10197 Apr 08 12:26	23° $\text{Y}$ 04'34	2°38'14	minimum elong	10198 Mar 23 18:52	7° $\text{Y}$ 18'09	2°04'17
minimum elong	10197 Apr 08 10:21	23° $\text{Y}$ 11'50	2°37'36	morning rise	10198 Mar 29 03:22	1° $\text{Y}$ 07'11	
min. Earth dist.	10197 Apr 08 08:22	23° $\text{Y}$ 18'44	0.68620 AU		10198 Mar 30 23:59	30° $\text{R}$ $\text{H}$	
morning rise	10197 Apr 13 15:59	16° $\text{Y}$ 54'38		direct	10198 Apr 02 06:05	29° $\text{H}$ 31'47	
direct	10197 Apr 18 08:04	14° $\text{Y}$ 57'12			10198 Apr 04 14:52	0° $\text{Y}$	
morning max el	10197 Apr 27 12:03	20° $\text{Y}$ 18'06	21°53'39	morning max el	10198 Apr 10 06:55	4° $\text{Y}$ 05'54	20°34'28
desc. node	10197 May 02 22:54	26° $\text{Y}$ 29'15		desc. node	10198 Apr 19 19:43	15° $\text{Y}$ 47'24	
	10197 May 05 16:46	0° $\text{B}$			10198 Apr 29 15:49	0° $\text{B}$	
	10197 May 26 06:21	0° $\text{II}$		morning set	10198 May 09 10:33	14° $\text{B}$ 53'07	
morning set	10197 May 30 03:39	6° $\text{II}$ 09'14		max. Earth dist.	10198 May 18 05:51	28° $\text{B}$ 47'50	1.43480 AU
max. Earth dist.	10197 Jun 04 22:51	15° $\text{II}$ 37'28	1.41564 AU		10198 May 18 23:43	0° $\text{II}$	
superior conj	10197 Jun 12 15:24	28° $\text{II}$ 46'49	-1°44'54	superior conj	10198 May 24 17:55	9° $\text{II}$ 27'22	-2°06'17
minimum elong	10197 Jun 12 21:44	29° $\text{II}$ 14'41	1°44'41	minimum elong	10198 May 24 22:42	9° $\text{II}$ 47'18	2°06'28
	10197 Jun 13 08:01	0° $\text{S}$			10198 Jun 05 16:54	0° $\text{S}$	
evening rise	10197 Jun 23 08:34	18° $\text{S}$ 12'27		evening rise	10198 Jun 06 01:22	0° $\text{S}$ 37'11	
asc. node	10197 Jun 25 22:26	22° $\text{S}$ 57'09		asc. node	10198 Jun 12 19:27	12° $\text{S}$ 22'42	
	10197 Jun 29 20:36	0° $\Omega$		evening max el	10198 Jun 23 00:19	26° $\text{S}$ 57'33	18°04'27
evening max el	10197 Jul 09 11:32	13° $\Omega$ 50'15	18°12'32		10198 Jun 27 13:14	0° $\Omega$	
retrograde	10197 Jul 16 13:12	17° $\Omega$ 24'48		retrograde	10198 Jun 29 12:33	0° $\Omega$ 19'13	
evening set	10197 Jul 18 20:26	17° $\Omega$ 02'41			10198 Jul 01 12:12	30° $\text{R}$ $\text{S}$	
inferior conj	10197 Jul 26 00:10	12° $\Omega$ 17'21	1°08'49	evening set	10198 Jul 02 03:34	29° $\text{S}$ 45'51	
minimum elong	10197 Jul 26 02:17	12° $\Omega$ 12'43	1°07'43	inferior conj	10198 Jul 08 15:04	24° $\text{S}$ 41'04	2°12'32
min. Earth dist.	10197 Jul 29 08:31	9° $\Omega$ 22'41	0.59368 AU	minimum elong	10198 Jul 08 17:53	24° $\text{S}$ 33'56	2°11'21
desc. node	10197 Jul 29 22:11	8° $\Omega$ 54'47		min. Earth dist.	10198 Jul 11 16:13	21° $\text{S}$ 37'59	0.61640 AU
morning rise	10197 Aug 02 04:56	6° $\Omega$ 36'52		morning rise	10198 Jul 15 05:53	18° $\text{S}$ 38'06	
direct	10197 Aug 08 13:40	4° $\Omega$ 44'45		desc. node	10198 Jul 16 19:19	17° $\text{S}$ 40'30	
morning max el	10197 Aug 22 22:24	12° $\Omega$ 34'22	27°36'03	direct	10198 Jul 21 22:03	16° $\text{S}$ 18'56	
	10197 Sep 05 16:53	0° $\text{M}$		morning max el	10198 Aug 05 03:12	24° $\text{S}$ 20'14	27°56'58
asc. node	10197 Sep 21 22:33	29° $\text{M}$ 00'05			10198 Aug 10 06:15	0° $\Omega$	
	10197 Sep 22 10:10	0° $\Omega$			10198 Aug 30 01:50	0° $\text{M}$	
morning set	10197 Sep 23 13:02	2° $\Omega$ 20'04		morning set	10198 Sep 07 14:53	16° $\text{M}$ 29'08	
max. Earth dist.	10197 Sep 29 23:24	16° $\Omega$ 18'31	1.31487 AU	asc. node	10198 Sep 08 19:23	18° $\text{M}$ 56'37	
				max. Earth dist.	10198 Sep 13 06:32	28° $\text{M}$ 28'54	1.31836 AU
superior conj	10197 Sep 30 14:53	17° $\Omega$ 44'34	1°17'09		10198 Sep 13 23:13	0° $\Omega$	
minimum elong	10197 Sep 30 12:42	17° $\Omega$ 32'25	1°16'56				
	10197 Oct 06 04:04	0° $\text{M}$		superior conj	10198 Sep 15 00:56	2° $\Omega$ 21'09	0°58'47
evening rise	10197 Oct 07 08:27	2° $\text{M}$ 33'05		minimum elong	10198 Sep 14 22:46	2° $\Omega$ 09'13	0°58'22
	10197 Oct 21 22:34	0° $\text{S}$		evening rise	10198 Sep 21 19:17	17° $\Omega$ 11'15	
desc. node	10197 Oct 25 20:04	5° $\text{S}$ 51'57			10198 Sep 28 01:06	0° $\text{M}$	
evening max el	10197 Nov 04 21:31	17° $\text{S}$ 52'11	26°08'31	desc. node	10198 Oct 12 17:16	23° $\text{M}$ 19'00	
retrograde	10197 Nov 18 19:23	24° $\text{S}$ 55'52		evening max el	10198 Oct 17 11:47	28° $\text{M}$ 31'22	24°42'52
evening set	10197 Nov 25 05:51	23° $\text{S}$ 16'50			10198 Oct 19 02:49	0° $\text{S}$	
min. Earth dist.	10197 Nov 29 10:25	20° $\text{S}$ 42'03	0.58526 AU	retrograde	10198 Oct 31 06:57	5° $\text{S}$ 27'10	

evening set	10198 Nov 05 16:49	4°♊21'45			10199 Sep 21 16:49	0°♍	
min. Earth dist.	10198 Nov 10 23:08	1°♊35'42	0.56617 AU	evening max el	10199 Sep 28 22:33	8°♍41'54	23°03'18
	10198 Nov 13 10:58	30°♍		desc. node	10199 Sep 29 14:30	9°♍19'45	
inferior conj	10198 Nov 13 13:58	29°♍55'10	-5°32'35	retrograde	10199 Oct 12 05:59	15°♍19'54	
minimum elong	10198 Nov 13 18:45	29°♍47'30	5°31'41	evening set	10199 Oct 16 05:01	14°♍45'45	
morning rise	10198 Nov 21 22:55	25°♍50'08		min. Earth dist.	10199 Oct 23 07:40	11°♍30'09	0.55223 AU
direct	10198 Nov 24 10:28	25°♍33'11		inferior conj	10199 Oct 24 19:08	10°♍38'55	-5°41'25
	10198 Dec 03 21:06	0°♊		minimum elong	10199 Oct 24 16:24	10°♍42'54	5°41'00
morning max el	10198 Dec 03 23:50	0°♊06'29	19°26'42	morning rise	10199 Nov 02 05:34	6°♍49'02	
asc. node	10198 Dec 05 19:32	2°♊00'31		direct	10199 Nov 05 06:16	6°♍27'23	
morning set	10198 Dec 21 04:24	27°♊48'58		morning max el	10199 Nov 16 08:44	11°♍41'41	20°43'51
	10198 Dec 22 06:30	0°♊		asc. node	10199 Nov 22 16:30	19°♍15'08	
					10199 Nov 29 04:10	0°♊	
superior conj	10198 Dec 29 05:14	13°♊51'47	1°14'22	morning set	10199 Dec 05 11:59	12°♊30'30	
minimum elong	10198 Dec 29 08:13	14°♊06'18	1°14'27				
max. Earth dist.	10199 Jan 04 15:51	26°♊04'19	1.38014 AU	superior conj	10199 Dec 12 22:28	27°♊55'48	1°30'01
	10199 Jan 06 19:57	0°♊		minimum elong	10199 Dec 13 00:33	28°♊06'30	1°30'17
evening rise	10199 Jan 08 09:19	2°♊45'30			10199 Dec 13 22:52	0°♊	
desc. node	10199 Jan 08 16:01	3°♊14'50		max. Earth dist.	10199 Dec 17 24:00	8°♊02'28	1.35933 AU
	10199 Jan 25 09:55	0°♊		evening rise	10199 Dec 21 22:27	15°♊30'28	
evening max el	10199 Feb 12 20:52	23°♊13'04	25°04'32	desc. node	10199 Dec 26 12:59	23°♊47'05	
	10199 Feb 23 06:16	0°♊			10199 Dec 30 04:35	0°♊	
retrograde	10199 Feb 24 19:27	0°♊09'12			10200 Jan 19 23:59	0°♊	
	10199 Feb 26 07:21	30°♊		evening max el	10200 Jan 26 10:20	7°♊01'41	26°12'12
evening set	10199 Mar 02 12:37	27°♊46'37		retrograde	10200 Feb 08 04:32	14°♊16'10	
asc. node	10199 Mar 03 18:13	26°♊37'27		evening set	10200 Feb 14 09:33	11°♊45'21	
min. Earth dist.	10199 Mar 06 23:35	22°♊48'18	0.67838 AU	min. Earth dist.	10200 Feb 18 14:09	7°♊21'35	0.66849 AU
inferior conj	10199 Mar 08 03:29	21°♊16'56	1°22'34	asc. node	10200 Feb 18 15:24	7°♊17'49	
minimum elong	10199 Mar 08 01:42	21°♊22'46	1°22'03	inferior conj	10200 Feb 20 05:46	5°♊19'37	0°31'12
morning rise	10199 Mar 13 15:05	15°♊21'08		minimum elong	10200 Feb 20 04:57	5°♊22'06	0°31'06
direct	10199 Mar 17 05:22	14°♊06'50			10200 Feb 25 08:44	30°♊	
morning max el	10199 Mar 24 09:32	18°♊04'57	19°28'34	morning rise	10200 Feb 26 01:07	29°♊33'21	
	10199 Apr 02 20:47	0°♊		direct	10200 Mar 01 04:21	28°♊37'36	
greatest brilliancy	10199 Apr 06 02:31	4°♊42'34	-0.7m		10200 Mar 05 03:40	0°♊	
desc. node	10199 Apr 06 16:31	5°♊34'19		morning max el	10200 Mar 07 19:23	2°♊12'08	18°38'24
morning set	10199 Apr 18 09:28	23°♊21'14		desc. node	10200 Mar 24 13:19	25°♊42'39	
	10199 Apr 22 16:39	0°♊			10200 Mar 27 06:59	0°♊	
max. Earth dist.	10199 Apr 30 18:56	12°♊39'49	1.44861 AU	morning set	10200 Mar 29 00:12	2°♊41'46	
				max. Earth dist.	10200 Apr 13 12:48	27°♊00'45	1.45570 AU
superior conj	10199 May 04 20:14	19°♊06'11	-2°12'43				
minimum elong	10199 May 04 19:05	19°♊01'35	2°13'01	superior conj	10200 Apr 14 05:11	28°♊04'51	-1°59'12
	10199 May 11 13:58	0°♊		minimum elong	10200 Apr 13 21:10	27°♊33'31	1°58'53
evening rise	10199 May 18 21:22	12°♊05'58			10200 Apr 15 10:35	0°♊	
	10199 May 29 18:34	0°♊		evening rise	10200 Apr 29 17:32	22°♊35'02	
asc. node	10199 May 30 16:31	1°♊24'24			10200 May 04 08:57	0°♊	
evening max el	10199 Jun 06 13:59	10°♊22'34	18°15'11	greatest brilliancy	10200 May 07 13:58	5°♊06'13	-0.9m
retrograde	10199 Jun 12 22:56	13°♊45'32		asc. node	10200 May 17 13:37	19°♊54'20	
evening set	10199 Jun 15 21:45	12°♊58'44		evening max el	10200 May 21 01:43	23°♊58'08	18°43'50
inferior conj	10199 Jun 21 20:56	7°♊36'15	2°52'36	retrograde	10200 May 27 16:21	27°♊35'38	
minimum elong	10199 Jun 21 23:09	7°♊30'00	2°51'45	evening set	10200 May 30 23:10	26°♊33'58	
min. Earth dist.	10199 Jun 24 09:15	4°♊46'35	0.63786 AU	inferior conj	10200 Jun 05 13:50	20°♊55'14	3°13'22
morning rise	10199 Jun 27 23:08	1°♊21'10		minimum elong	10200 Jun 05 14:55	20°♊51'55	3°12'50
	10199 Jun 29 23:24	30°♊		min. Earth dist.	10200 Jun 07 11:09	18°♊35'33	0.65622 AU
desc. node	10199 Jul 03 16:25	28°♊46'43		morning rise	10200 Jun 11 05:55	14°♊35'25	
direct	10199 Jul 04 15:52	28°♊43'32		direct	10200 Jun 17 17:14	11°♊50'50	
	10199 Jul 09 17:09	0°♊		desc. node	10200 Jun 20 13:29	12°♊18'20	
morning max el	10199 Jul 18 12:12	6°♊45'59	27°40'18	morning max el	10200 Jun 30 22:44	19°♊41'03	26°51'38
	10199 Aug 05 06:45	0°♊			10200 Jul 09 17:48	0°♊	
morning set	10199 Aug 22 09:15	0°♊14'19			10200 Jul 29 08:15	0°♊	
	10199 Aug 22 06:22	0°♊		morning set	10200 Aug 05 17:10	13°♊27'17	
asc. node	10199 Aug 26 16:15	9°♊00'06		max. Earth dist.	10200 Aug 09 22:40	21°♊44'25	1.34037 AU
max. Earth dist.	10199 Aug 27 07:20	10°♊19'16	1.32683 AU	asc. node	10200 Aug 13 13:07	29°♊06'05	
					10200 Aug 13 23:29	0°♊	
superior conj	10199 Aug 30 07:30	16°♊43'53	0°35'32				
minimum elong	10199 Aug 30 05:54	16°♊35'14	0°35'04	superior conj	10200 Aug 14 08:20	0°♊46'11	0°07'56
	10199 Sep 05 10:30	0°♊		minimum elong	10200 Aug 14 07:56	0°♊44'03	0°07'35
evening rise	10199 Sep 06 06:46	1°♊48'36		behind sun begin	10200 Aug 14 02:51	0°♊17'33	

behind sun end	10200 Aug 14 13:01	1° $\mathbb{M}$ 10'36		asc. node	10201 Jul 31 10:01	19° $\Omega$ 10'54	
evening rise	10200 Aug 21 16:59	16° $\mathbb{M}$ 19'16		evening rise	10201 Aug 05 23:48	0° $\mathbb{M}$ 37'31	
	10200 Aug 28 12:58	0° $\underline{\mathbb{A}}$			10201 Aug 05 16:28	0° $\mathbb{M}$	
evening max el	10200 Sep 10 14:36	18° $\underline{\mathbb{A}}$ 58'25	21°26'44		10201 Aug 23 22:35	0° $\underline{\mathbb{A}}$	
desc. node	10200 Sep 16 11:45	23° $\underline{\mathbb{A}}$ 24'20		evening max el	10201 Aug 23 18:53	29° $\mathbb{M}$ 50'54	20°05'41
retrograde	10200 Sep 22 18:49	25° $\underline{\mathbb{A}}$ 01'03		retrograde	10201 Sep 03 08:17	5° $\underline{\mathbb{A}}$ 05'16	
evening set	10200 Sep 25 09:42	24° $\underline{\mathbb{A}}$ 45'19		desc. node	10201 Sep 03 09:00	5° $\underline{\mathbb{A}}$ 05'16	
inferior conj	10200 Oct 04 12:20	20° $\underline{\mathbb{A}}$ 49'05	-4°53'59	evening set	10201 Sep 05 06:41	4° $\underline{\mathbb{A}}$ 55'30	
minimum elong	10200 Oct 04 03:08	21° $\underline{\mathbb{A}}$ 01'59	4°51'48	inferior conj	10201 Sep 14 07:22	0° $\underline{\mathbb{A}}$ 56'19	-3°17'46
min. Earth dist.	10200 Oct 04 15:12	20° $\underline{\mathbb{A}}$ 45'05	0.54630 AU	minimum elong	10201 Sep 13 22:44	1° $\underline{\mathbb{A}}$ 09'13	3°14'49
morning rise	10200 Oct 12 21:24	16° $\underline{\mathbb{A}}$ 59'08			10201 Sep 15 21:03	30° $\mathbb{R}$ $\mathbb{M}$	
direct	10200 Oct 16 15:21	16° $\underline{\mathbb{A}}$ 28'42		min. Earth dist.	10201 Sep 16 00:31	29° $\mathbb{M}$ 54'53	0.54979 AU
morning max el	10200 Oct 29 04:37	22° $\underline{\mathbb{A}}$ 27'13	22°20'44	morning rise	10201 Sep 22 13:39	26° $\mathbb{M}$ 45'31	
	10200 Nov 04 17:18	0° $\mathbb{M}$		direct	10201 Sep 27 02:13	26° $\mathbb{M}$ 01'11	
asc. node	10200 Nov 09 13:27	7° $\mathbb{M}$ 21'28			10201 Oct 07 12:31	0° $\underline{\mathbb{A}}$	
morning set	10200 Nov 19 22:36	27° $\mathbb{M}$ 17'55		morning max el	10201 Oct 10 16:58	2° $\underline{\mathbb{A}}$ 41'13	24°07'40
	10200 Nov 21 05:12	0° $\mathbb{X}$		asc. node	10201 Oct 27 10:23	26° $\underline{\mathbb{A}}$ 07'12	
					10201 Oct 29 11:57	0° $\mathbb{M}$	
superior conj	10200 Nov 27 00:04	12° $\mathbb{X}$ 21'51	1°38'17	morning set	10201 Nov 04 10:23	12° $\mathbb{M}$ 06'03	
minimum elong	10200 Nov 27 00:58	12° $\mathbb{X}$ 26'37	1°38'41				
max. Earth dist.	10200 Nov 30 15:01	19° $\mathbb{X}$ 55'59	1.34164 AU	superior conj	10201 Nov 11 07:15	27° $\mathbb{M}$ 02'01	1°39'54
evening rise	10200 Dec 05 02:38	28° $\mathbb{X}$ 53'53		minimum elong	10201 Nov 11 06:57	27° $\mathbb{M}$ 00'25	1°40'17
	10200 Dec 05 16:18	0° $\mathbb{Z}$			10201 Nov 12 16:04	0° $\mathbb{X}$	
desc. node	10200 Dec 13 10:01	14° $\mathbb{Z}$ 06'42		max. Earth dist.	10201 Nov 13 14:08	1° $\mathbb{X}$ 58'41	1.32813 AU
	10200 Dec 23 08:43	0° $\approx$		evening rise	10201 Nov 18 18:19	12° $\mathbb{X}$ 46'47	
evening max el	10201 Jan 08 23:53	20° $\approx$ 40'47	27°02'35		10201 Nov 27 21:18	0° $\mathbb{Z}$	
retrograde	10201 Jan 22 07:41	28° $\approx$ 02'24		desc. node	10201 Nov 30 07:05	4° $\mathbb{Z}$ 07'49	
evening set	10201 Jan 28 23:10	25° $\approx$ 28'19			10201 Dec 18 15:50	0° $\approx$	
min. Earth dist.	10201 Feb 01 22:18	21° $\approx$ 38'24	0.65488 AU	evening max el	10201 Dec 22 12:09	3° $\approx$ 58'42	27°28'31
inferior conj	10201 Feb 04 01:38	19° $\approx$ 12'47	-0°28'58	retrograde	10202 Jan 05 04:12	11° $\approx$ 19'40	
minimum elong	10201 Feb 04 02:28	19° $\approx$ 10'25	0°28'18	evening set	10202 Jan 12 03:06	8° $\approx$ 49'00	
asc. node	10201 Feb 05 12:35	17° $\approx$ 35'23		min. Earth dist.	10202 Jan 15 21:49	5° $\approx$ 30'43	0.63791 AU
morning rise	10201 Feb 10 07:04	13° $\approx$ 38'33		inferior conj	10202 Jan 18 12:29	2° $\approx$ 50'07	-1°37'05
direct	10201 Feb 13 00:52	12° $\approx$ 57'59		minimum elong	10202 Jan 18 15:34	2° $\approx$ 42'10	1°35'25
morning max el	10201 Feb 19 10:27	16° $\approx$ 20'38	18°04'59		10202 Jan 21 10:45	30° $\mathbb{R}$ $\mathbb{Z}$	
	10201 Mar 01 11:35	0° $\mathbb{X}$		asc. node	10202 Jan 23 09:45	28° $\mathbb{Z}$ 29'27	
morning set	10201 Mar 09 19:28	13° $\mathbb{X}$ 28'28		morning rise	10202 Jan 25 06:00	27° $\mathbb{Z}$ 30'55	
desc. node	10201 Mar 11 10:08	16° $\mathbb{X}$ 05'56		direct	10202 Jan 27 16:13	27° $\mathbb{Z}$ 01'52	
	10201 Mar 20 01:08	0° $\mathbb{Y}$			10202 Feb 02 18:14	0° $\approx$	
				morning max el	10202 Feb 03 03:55	0° $\approx$ 23'12	17°48'43
superior conj	10201 Mar 24 13:04	7° $\mathbb{Y}$ 07'37	-1°27'18	morning set	10202 Feb 19 18:12	25° $\approx$ 34'48	
minimum elong	10201 Mar 24 03:57	6° $\mathbb{Y}$ 31'39	1°26'19		10202 Feb 22 08:22	0° $\mathbb{X}$	
max. Earth dist.	10201 Mar 27 08:54	11° $\mathbb{Y}$ 34'10	1.45530 AU	desc. node	10202 Feb 26 06:55	6° $\mathbb{X}$ 39'23	
	10201 Apr 08 05:12	0° $\mathbb{Z}$					
evening rise	10201 Apr 09 16:17	2° $\mathbb{Z}$ 15'44		superior conj	10202 Mar 04 13:22	17° $\mathbb{X}$ 00'38	-0°45'30
greatest brilliancy	10201 Apr 22 14:01	22° $\mathbb{Z}$ 00'54	-0.7m	minimum elong	10202 Mar 04 08:27	16° $\mathbb{X}$ 40'36	0°44'39
	10201 Apr 28 02:53	0° $\mathbb{I}$		max. Earth dist.	10202 Mar 10 04:03	26° $\mathbb{X}$ 01'37	1.44754 AU
asc. node	10201 May 04 10:45	7° $\mathbb{I}$ 42'33			10202 Mar 12 16:25	0° $\mathbb{Y}$	
evening max el	10201 May 04 09:16	7° $\mathbb{I}$ 38'51	19°29'16	evening rise	10202 Mar 20 04:00	11° $\mathbb{Y}$ 36'51	
retrograde	10201 May 11 13:42	11° $\mathbb{I}$ 43'03			10202 Apr 01 08:55	0° $\mathbb{Z}$	
evening set	10201 May 15 04:59	10° $\mathbb{I}$ 25'51		evening max el	10202 Apr 17 11:19	21° $\mathbb{Z}$ 20'46	20°29'35
inferior conj	10201 May 20 14:28	4° $\mathbb{I}$ 32'14	3°18'42	asc. node	10202 Apr 21 07:55	24° $\mathbb{Z}$ 35'47	
minimum elong	10201 May 20 14:20	4° $\mathbb{I}$ 32'37	3°18'17	retrograde	10202 Apr 25 12:26	26° $\mathbb{Z}$ 01'33	
min. Earth dist.	10201 May 21 20:44	2° $\mathbb{I}$ 52'31	0.67041 AU	evening set	10202 Apr 29 12:59	24° $\mathbb{Z}$ 28'42	
	10201 May 24 04:53	30° $\mathbb{R}$ $\mathbb{Z}$		inferior conj	10202 May 04 20:03	18° $\mathbb{Z}$ 21'57	3°11'21
morning rise	10201 May 25 23:20	28° $\mathbb{Z}$ 12'15		minimum elong	10202 May 04 18:56	18° $\mathbb{Z}$ 25'50	3°10'54
direct	10201 Jun 01 00:54	25° $\mathbb{Z}$ 31'42		min. Earth dist.	10202 May 05 12:13	17° $\mathbb{Z}$ 26'31	0.68007 AU
desc. node	10201 Jun 07 10:31	27° $\mathbb{Z}$ 50'30		morning rise	10202 May 10 00:38	12° $\mathbb{Z}$ 04'26	
	10201 Jun 10 06:26	0° $\mathbb{I}$		direct	10202 May 15 13:52	9° $\mathbb{Z}$ 36'32	
morning max el	10201 Jun 13 09:01	2° $\mathbb{I}$ 54'53	25°39'28	desc. node	10202 May 25 07:28	14° $\mathbb{Z}$ 53'02	
	10201 Jul 03 22:34	0° $\mathbb{Z}$		morning max el	10202 May 26 18:36	16° $\mathbb{Z}$ 18'41	24°13'28
morning set	10201 Jul 19 10:49	25° $\mathbb{Z}$ 58'21			10202 Jun 07 02:04	0° $\mathbb{I}$	
	10201 Jul 21 15:13	0° $\Omega$			10202 Jun 26 22:03	0° $\mathbb{Z}$	
max. Earth dist.	10201 Jul 23 03:49	2° $\Omega$ 52'13	1.35855 AU	morning set	10202 Jul 01 09:18	7° $\mathbb{Z}$ 34'19	
				max. Earth dist.	10202 Jul 05 01:48	14° $\mathbb{Z}$ 04'03	1.38015 AU
superior conj	10201 Jul 29 00:45	14° $\Omega$ 21'03	-0°23'12				
minimum elong	10201 Jul 29 02:11	14° $\Omega$ 28'11	0°23'16	superior conj	10202 Jul 12 05:17	27° $\mathbb{Z}$ 19'08	-0°56'12

































































































































minimum elong	10202 Jul 12 08:59	27° $\mathfrak{D}$ 36'49	0°55'59	superior conj	10203 Jun 24 17:54	9° $\mathfrak{D}$ 31'29	-1°28'21
	10202 Jul 13 14:43	0° $\mathcal{O}$		minimum elong	10203 Jun 24 23:40	9° $\mathfrak{D}$ 57'40	1°28'03
asc. node	10202 Jul 18 06:55	9° $\mathcal{O}$ 10'03		evening rise	10203 Jul 04 16:16	28° $\mathfrak{D}$ 04'58	
evening rise	10202 Jul 21 00:36	14° $\mathcal{O}$ 35'21		asc. node	10203 Jul 05 03:51	28° $\mathfrak{D}$ 59'52	
	10202 Jul 29 05:12	0° $\mathfrak{M}$			10203 Jul 05 16:33	0° $\mathcal{O}$	
evening max el	10202 Aug 06 12:33	11° $\mathfrak{M}$ 29'13	19°05'15	evening max el	10203 Jul 20 16:49	23° $\mathcal{O}$ 49'54	18°25'57
retrograde	10202 Aug 15 10:34	15° $\mathfrak{M}$ 55'23		retrograde	10203 Jul 28 07:25	27° $\mathcal{O}$ 38'43	
evening set	10202 Aug 17 07:26	15° $\mathfrak{M}$ 44'28		evening set	10203 Jul 30 10:12	27° $\mathcal{O}$ 21'52	
desc. node	10202 Aug 21 06:15	14° $\mathfrak{M}$ 17'47		inferior conj	10203 Aug 07 00:49	22° $\mathcal{O}$ 48'46	0°20'08
inferior conj	10202 Aug 25 17:26	11° $\mathfrak{M}$ 31'01	-1°23'14	minimum elong	10203 Aug 07 01:32	22° $\mathcal{O}$ 47'20	0°19'33
minimum elong	10202 Aug 25 13:49	11° $\mathfrak{M}$ 37'13	1°22'00	desc. node	10203 Aug 08 03:26	21° $\mathcal{O}$ 55'06	
min. Earth dist.	10202 Aug 28 13:53	9° $\mathfrak{M}$ 34'21	0.56214 AU	min. Earth dist.	10203 Aug 10 09:03	20° $\mathcal{O}$ 09'10	0.58111 AU
morning rise	10202 Sep 02 17:07	6° $\mathfrak{M}$ 44'28		morning rise	10203 Aug 14 13:20	17° $\mathcal{O}$ 25'43	
direct	10202 Sep 08 01:02	5° $\mathfrak{M}$ 38'11		direct	10203 Aug 20 14:42	15° $\mathcal{O}$ 50'28	
morning max el	10202 Sep 22 05:31	12° $\mathfrak{M}$ 53'09	25°48'36	morning max el	10203 Sep 03 23:30	23° $\mathcal{O}$ 30'37	27°06'24
	10202 Oct 05 14:31	0° $\mathfrak{L}$			10203 Sep 09 19:55	0° $\mathfrak{M}$	
asc. node	10202 Oct 14 07:16	15° $\mathfrak{L}$ 21'50			10203 Sep 28 16:02	0° $\mathfrak{L}$	
morning set	10202 Oct 19 21:38	26° $\mathfrak{L}$ 49'47		asc. node	10203 Oct 01 04:06	4° $\mathfrak{L}$ 57'31	
	10202 Oct 21 08:57	0° $\mathfrak{M}$		morning set	10203 Oct 04 06:40	11° $\mathfrak{L}$ 24'10	
superior conj	10202 Oct 26 17:42	11° $\mathfrak{M}$ 49'06	1°35'28	superior conj	10203 Oct 11 05:26	26° $\mathfrak{L}$ 36'52	1°25'24
minimum elong	10202 Oct 26 16:24	11° $\mathfrak{M}$ 41'57	1°35'40	minimum elong	10203 Oct 11 03:28	26° $\mathfrak{L}$ 25'52	1°25'20
max. Earth dist.	10202 Oct 27 19:43	14° $\mathfrak{M}$ 12'53	1.31919 AU	max. Earth dist.	10203 Oct 11 04:45	26° $\mathfrak{L}$ 33'03	1.31505 AU
evening rise	10202 Nov 02 18:25	27° $\mathfrak{M}$ 01'09			10203 Oct 12 17:58	0° $\mathfrak{M}$	
	10202 Nov 04 05:05	0° $\mathfrak{X}$		evening rise	10203 Oct 18 00:22	11° $\mathfrak{M}$ 29'53	
desc. node	10202 Nov 17 04:12	23° $\mathfrak{X}$ 42'41			10203 Oct 27 09:31	0° $\mathfrak{X}$	
	10202 Nov 21 05:56	0° $\mathfrak{Z}$		desc. node	10203 Nov 04 01:20	12° $\mathfrak{X}$ 40'22	
evening max el	10202 Dec 04 21:00	16° $\mathfrak{Z}$ 42'59	27°24'04	evening max el	10203 Nov 16 23:56	28° $\mathfrak{X}$ 42'00	26°45'41
retrograde	10202 Dec 18 17:33	23° $\mathfrak{Z}$ 58'52			10203 Nov 18 10:21	0° $\mathfrak{Z}$	
evening set	10202 Dec 25 18:21	21° $\mathfrak{Z}$ 40'33		retrograde	10203 Nov 30 22:21	5° $\mathfrak{Z}$ 50'30	
min. Earth dist.	10202 Dec 29 11:16	18° $\mathfrak{Z}$ 48'08	0.61825 AU	evening set	10203 Dec 07 16:51	3° $\mathfrak{Z}$ 54'46	
inferior conj	10203 Jan 01 11:16	16° $\mathfrak{Z}$ 04'16	-2°50'46	min. Earth dist.	10203 Dec 11 14:10	1° $\mathfrak{Z}$ 17'35	0.59718 AU
minimum elong	10203 Jan 01 16:57	15° $\mathfrak{Z}$ 51'19	2°48'11		10203 Dec 13 05:32	30° $\mathfrak{R}$ $\mathfrak{X}$	
morning rise	10203 Jan 08 18:03	11° $\mathfrak{Z}$ 03'13		inferior conj	10203 Dec 14 18:29	28° $\mathfrak{X}$ 45'36	-4°04'35
asc. node	10203 Jan 10 06:52	10° $\mathfrak{Z}$ 44'02		minimum elong	10203 Dec 15 02:09	28° $\mathfrak{X}$ 30'18	4°01'48
direct	10203 Jan 10 23:04	10° $\mathfrak{Z}$ 42'01		morning rise	10203 Dec 22 14:05	24° $\mathfrak{X}$ 05'21	
morning max el	10203 Jan 17 20:40	14° $\mathfrak{Z}$ 11'43	17°50'18	direct	10203 Dec 24 17:25	23° $\mathfrak{X}$ 48'28	
	10203 Jan 28 17:00	0° $\mathfrak{A}$		asc. node	10203 Dec 28 03:57	24° $\mathfrak{X}$ 34'24	
morning set	10203 Feb 02 14:18	8° $\mathfrak{A}$ 41'53		morning max el	10204 Jan 01 09:06	27° $\mathfrak{X}$ 35'46	18°10'57
desc. node	10203 Feb 13 03:43	27° $\mathfrak{A}$ 19'19			10204 Jan 03 13:32	0° $\mathfrak{Z}$	
superior conj	10203 Feb 13 14:24	28° $\mathfrak{A}$ 05'00	-0°03'23	morning set	10204 Jan 17 01:39	22° $\mathfrak{Z}$ 30'53	
minimum elong	10203 Feb 13 14:06	28° $\mathfrak{A}$ 03'44	0°03'03		10204 Jan 21 01:13	0° $\mathfrak{A}$	
behind sun begin	10203 Feb 13 05:37	27° $\mathfrak{A}$ 27'29		superior conj	10204 Jan 26 15:14	10° $\mathfrak{A}$ 15'55	0°33'11
behind sun end	10203 Feb 13 22:35	28° $\mathfrak{A}$ 39'54		minimum elong	10204 Jan 26 17:38	10° $\mathfrak{A}$ 26'43	0°33'11
	10203 Feb 14 17:27	0° $\mathfrak{H}$		desc. node	10204 Jan 31 00:33	18° $\mathfrak{A}$ 01'41	
max. Earth dist.	10203 Feb 20 19:30	10° $\mathfrak{H}$ 05'52	1.43337 AU	max. Earth dist.	10204 Feb 03 06:04	23° $\mathfrak{A}$ 33'28	1.41444 AU
evening rise	10203 Feb 27 20:05	21° $\mathfrak{H}$ 17'00			10204 Feb 07 03:09	0° $\mathfrak{H}$	
	10203 Mar 05 12:08	0° $\mathfrak{Y}$		evening rise	10204 Feb 08 04:45	1° $\mathfrak{H}$ 44'08	
	10203 Mar 26 19:47	0° $\mathfrak{B}$			10204 Feb 26 21:58	0° $\mathfrak{Y}$	
evening max el	10203 Mar 31 07:51	5° $\mathfrak{B}$ 03'49	21°41'37	evening max el	10204 Mar 13 00:08	18° $\mathfrak{Y}$ 48'51	23°00'42
asc. node	10203 Apr 08 05:06	10° $\mathfrak{B}$ 19'13		retrograde	10204 Mar 23 06:30	24° $\mathfrak{Y}$ 53'06	
retrograde	10203 Apr 09 10:37	10° $\mathfrak{B}$ 26'41		asc. node	10204 Mar 25 02:19	24° $\mathfrak{Y}$ 36'56	
evening set	10203 Apr 13 21:23	8° $\mathfrak{B}$ 38'32		evening set	10204 Mar 28 04:34	22° $\mathfrak{Y}$ 50'22	
inferior conj	10203 Apr 19 04:23	2° $\mathfrak{B}$ 20'58	2°53'11	min. Earth dist.	10204 Apr 02 04:15	16° $\mathfrak{Y}$ 56'55	0.68589 AU
minimum elong	10203 Apr 19 02:33	2° $\mathfrak{B}$ 27'24	2°52'38	inferior conj	10204 Apr 02 13:26	16° $\mathfrak{Y}$ 25'07	2°25'16
min. Earth dist.	10203 Apr 19 07:29	2° $\mathfrak{B}$ 10'12	0.68519 AU	minimum elong	10204 Apr 02 11:15	16° $\mathfrak{Y}$ 32'41	2°24'36
	10203 Apr 20 21:25	30° $\mathfrak{R}$ $\mathfrak{Y}$		morning rise	10204 Apr 07 17:49	10° $\mathfrak{Y}$ 17'30	
morning rise	10203 Apr 24 07:31	26° $\mathfrak{Y}$ 07'42		direct	10204 Apr 12 04:08	8° $\mathfrak{Y}$ 29'15	
direct	10203 Apr 29 07:21	23° $\mathfrak{Y}$ 58'08		morning max el	10204 Apr 20 19:57	13° $\mathfrak{Y}$ 29'31	21°18'32
morning max el	10203 May 09 05:10	29° $\mathfrak{Y}$ 49'47	22°43'35	desc. node	10204 Apr 28 01:10	21° $\mathfrak{Y}$ 58'03	
	10203 May 09 09:13	0° $\mathfrak{B}$			10204 May 03 22:28	0° $\mathfrak{B}$	
desc. node	10203 May 12 04:20	3° $\mathfrak{B}$ 01'46		morning set	10204 May 22 03:04	27° $\mathfrak{B}$ 18'47	
	10203 May 31 20:55	0° $\mathfrak{I}$			10204 May 23 19:47	0° $\mathfrak{I}$	
morning set	10203 Jun 12 07:32	18° $\mathfrak{I}$ 02'54		max. Earth dist.	10204 May 29 01:16	8° $\mathfrak{I}$ 26'34	1.42430 AU
max. Earth dist.	10203 Jun 16 22:54	25° $\mathfrak{I}$ 49'02	1.40300 AU	superior conj	10204 Jun 05 10:01	20° $\mathfrak{I}$ 47'54	-1°55'22
	10203 Jun 19 09:13	0° $\mathfrak{D}$					



minimum elong	10204 Jun 05 16:11	21° $\Pi$ 14'23	1°55'19	superior conj	10205 May 17 02:03	1° $\Pi$ 00'58	-2°11'14
	10204 Jun 10 16:32	0° $\mathfrak{D}$		minimum elong	10205 May 17 04:49	1° $\Pi$ 12'16	2°11'32
evening rise	10204 Jun 16 18:43	10° $\mathfrak{D}$ 56'05		evening rise	10205 May 30 03:09	22° $\Pi$ 57'29	
asc. node	10204 Jun 21 00:51	18° $\mathfrak{D}$ 35'41			10205 Jun 03 05:30	0° $\mathfrak{D}$	
	10204 Jun 27 20:30	0° $\Omega$		asc. node	10205 Jun 07 21:53	7° $\mathfrak{D}$ 51'32	
evening max el	10204 Jul 03 03:39	6° $\Omega$ 43'23	18°06'49	evening max el	10205 Jun 16 17:14	19° $\mathfrak{D}$ 59'09	18°06'49
retrograde	10204 Jul 09 22:08	10° $\Omega$ 10'16		retrograde	10205 Jun 23 02:44	23° $\mathfrak{D}$ 19'25	
evening set	10204 Jul 12 08:46	9° $\Omega$ 43'38		evening set	10205 Jun 25 21:11	22° $\mathfrak{D}$ 40'23	
inferior conj	10204 Jul 19 05:10	4° $\Omega$ 50'04	1°38'56	inferior conj	10205 Jul 02 02:56	17° $\mathfrak{D}$ 27'42	2°32'11
minimum elong	10204 Jul 19 07:48	4° $\Omega$ 43'55	1°37'42	minimum elong	10205 Jul 02 05:36	17° $\mathfrak{D}$ 20'36	2°31'06
min. Earth dist.	10204 Jul 22 11:35	1° $\Omega$ 48'52	0.60339 AU	min. Earth dist.	10205 Jul 04 22:59	14° $\mathfrak{D}$ 28'14	0.62581 AU
	10204 Jul 24 16:37	30° $\mathfrak{R}$ $\mathfrak{D}$		morning rise	10205 Jul 08 12:09	11° $\mathfrak{D}$ 18'47	
desc. node	10204 Jul 25 00:35	29° $\mathfrak{D}$ 45'20		desc. node	10205 Jul 11 21:44	9° $\mathfrak{D}$ 26'18	
morning rise	10204 Jul 26 03:59	28° $\mathfrak{D}$ 58'57		direct	10205 Jul 15 05:27	8° $\mathfrak{D}$ 50'43	
direct	10204 Aug 01 17:00	26° $\mathfrak{D}$ 54'17		morning max el	10205 Jul 29 07:14	16° $\mathfrak{D}$ 52'58	27°54'19
	10204 Aug 10 06:36	0° $\Omega$			10205 Aug 09 03:50	0° $\Omega$	
morning max el	10204 Aug 16 00:26	4° $\Omega$ 49'47	27°49'36		10205 Aug 27 11:31	0° $\mathfrak{M}$	
	10204 Sep 03 17:35	0° $\mathfrak{M}$		morning set	10205 Sep 01 10:45	9° $\mathfrak{M}$ 44'01	
morning set	10204 Sep 17 11:45	25° $\mathfrak{M}$ 44'27		asc. node	10205 Sep 03 21:46	14° $\mathfrak{M}$ 47'59	
asc. node	10204 Sep 17 00:55	24° $\mathfrak{M}$ 48'11		max. Earth dist.	10205 Sep 06 18:50	20° $\mathfrak{M}$ 54'35	1.32141 AU
	10204 Sep 19 12:12	0° $\mathfrak{L}$					
max. Earth dist.	10204 Sep 23 13:45	8° $\mathfrak{L}$ 50'50	1.31577 AU	superior conj	10205 Sep 09 01:30	25° $\mathfrak{M}$ 51'05	0°49'31
				minimum elong	10205 Sep 08 23:30	25° $\mathfrak{M}$ 40'08	0°49'03
superior conj	10204 Sep 24 16:40	11° $\mathfrak{L}$ 19'43	1°09'59		10205 Sep 10 22:57	0° $\mathfrak{L}$	
minimum elong	10204 Sep 24 14:26	11° $\mathfrak{L}$ 07'17	1°09'41	evening rise	10205 Sep 15 21:25	10° $\mathfrak{L}$ 45'46	
evening rise	10204 Oct 01 10:03	26° $\mathfrak{L}$ 07'02			10205 Sep 25 14:46	0° $\mathfrak{M}$	
	10204 Oct 03 05:57	0° $\mathfrak{M}$		desc. node	10205 Oct 07 19:45	17° $\mathfrak{M}$ 39'59	
	10204 Oct 20 08:53	0° $\mathfrak{J}$		evening max el	10205 Oct 10 07:05	20° $\mathfrak{M}$ 13'50	24°01'09
desc. node	10204 Oct 20 22:32	0° $\mathfrak{J}$ 46'25		retrograde	10205 Oct 23 22:19	27° $\mathfrak{M}$ 03'02	
evening max el	10204 Oct 28 19:03	9° $\mathfrak{J}$ 50'17	25°34'54	evening set	10205 Oct 28 18:24	26° $\mathfrak{M}$ 11'48	
retrograde	10204 Nov 11 16:32	16° $\mathfrak{J}$ 50'32		min. Earth dist.	10205 Nov 03 17:38	23° $\mathfrak{M}$ 15'26	0.55954 AU
evening set	10204 Nov 17 17:56	15° $\mathfrak{J}$ 25'48		inferior conj	10205 Nov 05 22:39	21° $\mathfrak{M}$ 54'55	-5°42'28
min. Earth dist.	10204 Nov 22 07:25	12° $\mathfrak{J}$ 48'21	0.57673 AU	minimum elong	10205 Nov 06 00:37	21° $\mathfrak{M}$ 51'55	5°42'04
inferior conj	10204 Nov 25 06:50	10° $\mathfrak{J}$ 44'58	-5°07'41	morning rise	10205 Nov 14 08:50	17° $\mathfrak{M}$ 57'39	
minimum elong	10204 Nov 25 13:58	10° $\mathfrak{J}$ 32'35	5°05'55	direct	10205 Nov 17 01:33	17° $\mathfrak{M}$ 39'00	
morning rise	10204 Dec 03 12:20	6° $\mathfrak{J}$ 27'05		morning max el	10205 Nov 27 06:00	22° $\mathfrak{M}$ 28'27	19°56'45
direct	10204 Dec 05 19:11	6° $\mathfrak{J}$ 11'02		asc. node	10205 Nov 30 21:59	26° $\mathfrak{M}$ 33'18	
asc. node	10204 Dec 14 00:59	9° $\mathfrak{J}$ 55'50			10205 Dec 03 10:06	0° $\mathfrak{J}$	
morning max el	10204 Dec 14 13:25	10° $\mathfrak{J}$ 25'00	18°52'31	morning set	10205 Dec 15 04:19	21° $\mathfrak{J}$ 23'06	
	10204 Dec 27 11:10	0° $\mathfrak{Z}$			10205 Dec 19 09:37	0° $\mathfrak{Z}$	
morning set	10204 Dec 30 23:30	6° $\mathfrak{Z}$ 48'14		superior conj	10205 Dec 22 22:17	7° $\mathfrak{Z}$ 07'19	1°21'56
				minimum elong	10205 Dec 23 00:57	7° $\mathfrak{Z}$ 20'36	1°22'07
superior conj	10205 Jan 08 11:30	23° $\mathfrak{Z}$ 21'22	1°01'43	max. Earth dist.	10205 Dec 28 19:42	18° $\mathfrak{Z}$ 32'41	1.37107 AU
minimum elong	10205 Jan 08 14:38	23° $\mathfrak{Z}$ 36'18	1°01'43	evening rise	10206 Jan 01 13:36	25° $\mathfrak{Z}$ 25'36	
	10205 Jan 12 00:46	0° $\approx$		desc. node	10206 Jan 03 18:24	29° $\mathfrak{Z}$ 19'43	
max. Earth dist.	10205 Jan 15 13:07	6° $\approx$ 20'49	1.39289 AU		10206 Jan 04 03:38	0° $\approx$	
desc. node	10205 Jan 16 21:27	8° $\approx$ 43'09			10206 Jan 23 10:58	0° $\mathfrak{H}$	
evening rise	10205 Jan 19 10:54	13° $\approx$ 08'18		evening max el	10206 Feb 06 03:27	16° $\mathfrak{H}$ 26'30	25°34'58
	10205 Jan 29 21:07	0° $\mathfrak{H}$		retrograde	10206 Feb 18 10:45	23° $\mathfrak{H}$ 31'16	
	10205 Feb 21 02:00	0° $\mathfrak{Y}$		evening set	10206 Feb 24 09:14	21° $\mathfrak{H}$ 04'34	
evening max el	10205 Feb 23 14:09	2° $\mathfrak{Y}$ 37'07	24°20'45	asc. node	10206 Feb 26 20:43	18° $\mathfrak{H}$ 36'16	
retrograde	10205 Mar 06 22:52	9° $\mathfrak{Y}$ 16'22		min. Earth dist.	10206 Feb 28 17:22	16° $\mathfrak{H}$ 21'15	0.67468 AU
asc. node	10205 Mar 11 23:31	7° $\mathfrak{Y}$ 19'57		inferior conj	10206 Mar 02 02:16	14° $\mathfrak{H}$ 36'07	1°01'53
evening set	10205 Mar 12 09:02	7° $\mathfrak{Y}$ 00'24		minimum elong	10206 Mar 02 00:49	14° $\mathfrak{H}$ 40'44	1°01'30
min. Earth dist.	10205 Mar 17 00:16	1° $\mathfrak{Y}$ 42'05	0.68234 AU	morning rise	10206 Mar 07 16:53	8° $\mathfrak{H}$ 44'20	
inferior conj	10205 Mar 17 21:21	0° $\mathfrak{Y}$ 31'14	1°48'06	direct	10206 Mar 11 02:21	7° $\mathfrak{H}$ 38'15	
minimum elong	10205 Mar 17 19:16	0° $\mathfrak{Y}$ 38'14	1°47'27	morning max el	10206 Mar 17 23:51	11° $\mathfrak{H}$ 24'23	19°05'17
	10205 Mar 18 06:39	30° $\mathfrak{R}$ $\mathfrak{H}$		greatest brilliancy	10206 Mar 31 07:02	29° $\mathfrak{H}$ 10'14	-0.7m
morning rise	10205 Mar 23 05:35	24° $\mathfrak{H}$ 30'45			10206 Mar 31 20:13	0° $\mathfrak{Y}$	
direct	10205 Mar 27 02:59	23° $\mathfrak{H}$ 04'19		desc. node	10206 Apr 01 18:49	1° $\mathfrak{Y}$ 25'44	
morning max el	10205 Apr 03 17:55	27° $\mathfrak{H}$ 21'16	20°04'34	morning set	10206 Apr 10 06:50	14° $\mathfrak{Y}$ 30'29	
	10205 Apr 06 04:57	0° $\mathfrak{Y}$			10206 Apr 20 06:01	0° $\mathfrak{B}$	
desc. node	10205 Apr 14 22:00	11° $\mathfrak{Y}$ 29'04		max. Earth dist.	10206 Apr 24 03:17	6° $\mathfrak{B}$ 05'12	1.45248 AU
	10205 Apr 27 09:09	0° $\mathfrak{B}$					
morning set	10205 May 01 03:42	5° $\mathfrak{B}$ 46'56		superior conj	10206 Apr 26 19:29	10° $\mathfrak{B}$ 18'03	-2°09'31
max. Earth dist.	10205 May 11 11:17	21° $\mathfrak{B}$ 56'55	1.44145 AU	minimum elong	10206 Apr 26 15:06	10° $\mathfrak{B}$ 00'44	2°09'38
	10205 May 16 11:07	0° $\Pi$					

	10206 May 09 02:13	0°♂		morning set	10207 Mar 21 09:02	24°♂25'46	
evening rise	10206 May 11 13:15	4°♂01'01			10207 Mar 24 21:03	0°♀	
asc. node	10206 May 25 18:58	26°♂40'46					
	10206 May 28 05:32	0°♂		superior conj	10207 Apr 06 01:35	19°♀11'42	-1°47'32
evening max el	10206 May 31 06:22	3°♂29'09	18°25'13	minimum elong	10207 Apr 05 16:12	18°♀35'02	1°46'51
retrograde	10206 Jun 06 16:43	6°♂56'57		max. Earth dist.	10207 Apr 06 22:17	20°♀32'38	1.45638 AU
evening set	10206 Jun 09 18:53	6°♂03'52			10207 Apr 12 23:29	0°♂	
inferior conj	10206 Jun 15 13:59	0°♂34'00	3°03'33	evening rise	10207 Apr 21 23:32	14°♂06'37	
minimum elong	10206 Jun 15 15:44	0°♂28'49	3°02'50	greatest brilliancy	10207 May 02 04:30	0°♂04'51	-0.8m
	10206 Jun 16 01:28	30°♂♂			10207 May 02 03:14	0°♂	
min. Earth dist.	10206 Jun 17 19:53	27°♂55'43	0.64605 AU	asc. node	10207 May 12 16:06	14°♂54'00	
morning rise	10206 Jun 21 11:31	24°♂16'05		evening max el	10207 May 14 16:27	17°♂06'30	19°01'11
direct	10206 Jun 28 02:24	21°♂34'25		retrograde	10207 May 21 12:13	20°♂54'26	
desc. node	10206 Jun 28 18:49	21°♂36'00		evening set	10207 May 24 22:27	19°♂46'20	
morning max el	10206 Jul 11 17:25	29°♂33'17	27°23'14	inferior conj	10207 May 30 10:31	14°♂01'01	3°17'19
	10206 Jul 12 03:54	0°♂		minimum elong	10207 May 30 11:05	13°♂59'15	3°16'51
	10206 Aug 03 02:13	0°♂		min. Earth dist.	10207 Jun 01 01:23	11°♂57'18	0.66272 AU
morning set	10206 Aug 16 01:06	23°♂16'33		morning rise	10207 Jun 04 23:08	7°♂40'23	
	10206 Aug 19 09:52	0°♂		direct	10207 Jun 11 06:36	4°♂56'15	
max. Earth dist.	10206 Aug 20 16:12	2°♂35'35	1.33202 AU	desc. node	10207 Jun 15 15:51	6°♂01'44	
asc. node	10206 Aug 21 18:38	4°♂52'51		morning max el	10207 Jun 24 04:11	12°♂37'45	26°23'17
					10207 Jul 08 03:14	0°♂	
superior conj	10206 Aug 24 05:55	10°♂05'37	0°24'20		10207 Jul 26 18:16	0°♂	
minimum elong	10206 Aug 24 04:44	9°♂59'20	0°23'54	morning set	10207 Jul 30 03:28	6°♂12'50	
evening rise	10206 Aug 31 08:37	25°♂20'56		max. Earth dist.	10207 Aug 03 02:59	13°♂50'40	1.34751 AU
	10206 Sep 02 13:50	0°♂					
	10206 Sep 21 10:07	0°♂		superior conj	10207 Aug 08 03:30	23°♂56'33	-0°04'57
evening max el	10206 Sep 21 18:43	0°♂21'19	22°20'49	minimum elong	10207 Aug 08 03:47	23°♂58'03	0°05'11
desc. node	10206 Sep 24 16:59	2°♂54'56		behind sun begin	10207 Aug 07 22:09	23°♂29'07	
retrograde	10206 Oct 04 16:26	6°♂47'04		behind sun end	10207 Aug 08 09:25	24°♂27'03	
evening set	10206 Oct 08 00:39	6°♂22'22		asc. node	10207 Aug 08 15:31	24°♂58'28	
min. Earth dist.	10206 Oct 16 01:06	2°♂49'30	0.54866 AU		10207 Aug 11 01:33	0°♂	
inferior conj	10206 Oct 16 21:19	2°♂20'59	-5°28'24	evening rise	10207 Aug 15 17:38	9°♂46'29	
minimum elong	10206 Oct 16 15:12	2°♂29'37	5°27'24		10207 Aug 26 09:30	0°♂	
	10206 Oct 21 07:54	30°♂♂		evening max el	10207 Sep 03 15:24	10°♂50'23	20°49'58
morning rise	10206 Oct 25 07:24	28°♂33'47		desc. node	10207 Sep 11 14:12	16°♂01'07	
direct	10206 Oct 28 15:02	28°♂09'05		retrograde	10207 Sep 15 04:23	16°♂33'49	
	10206 Nov 04 10:03	0°♂		evening set	10207 Sep 17 09:45	16°♂21'57	
morning max el	10206 Nov 09 09:06	3°♂41'32	21°23'04	inferior conj	10207 Sep 26 13:31	12°♂26'10	-4°17'42
asc. node	10206 Nov 17 18:57	14°♂11'14		minimum elong	10207 Sep 26 03:39	12°♂40'13	4°14'52
	10206 Nov 26 13:43	0°♂		min. Earth dist.	10207 Sep 27 09:26	11°♂57'45	0.54655 AU
morning set	10206 Nov 29 13:25	6°♂07'39		morning rise	10207 Oct 04 21:35	8°♂29'26	
				direct	10207 Oct 08 23:04	7°♂54'00	
superior conj	10206 Dec 06 19:28	21°♂21'48	1°34'22	morning max el	10207 Oct 22 01:05	14°♂11'34	23°05'49
minimum elong	10206 Dec 06 21:05	21°♂30'08	1°34'43		10207 Nov 03 03:15	0°♂	
	10206 Dec 11 01:06	0°♂		asc. node	10207 Nov 04 15:53	2°♂35'50	
max. Earth dist.	10206 Dec 11 06:18	0°♂25'54	1.35134 AU	morning set	10207 Nov 14 00:45	20°♂56'15	
evening rise	10206 Dec 15 09:33	8°♂27'34			10207 Nov 18 05:54	0°♂	
desc. node	10206 Dec 21 15:24	19°♂46'54					
	10206 Dec 27 18:39	0°♂		superior conj	10207 Nov 20 23:48	5°♂55'27	1°39'45
evening max el	10207 Jan 19 16:48	0°♂11'16	26°36'08	minimum elong	10207 Nov 21 00:11	5°♂57'29	1°40'09
	10207 Jan 19 12:10	0°♂		max. Earth dist.	10207 Nov 24 00:34	12°♂21'39	1.33531 AU
retrograde	10207 Feb 01 17:29	7°♂30'29		evening rise	10207 Nov 28 19:04	22°♂05'10	
evening set	10207 Feb 08 03:19	4°♂57'13			10207 Dec 02 21:59	0°♂	
min. Earth dist.	10207 Feb 12 05:21	0°♂48'17	0.66312 AU	desc. node	10207 Dec 08 12:25	9°♂59'40	
	10207 Feb 12 21:42	30°♂♂			10207 Dec 21 13:22	0°♂	
asc. node	10207 Feb 13 17:56	28°♂59'26		evening max el	10208 Jan 02 05:56	13°♂42'58	27°16'58
inferior conj	10207 Feb 14 02:06	28°♂34'59	0°06'43	retrograde	10208 Jan 15 18:11	21°♂05'58	
minimum elong	10207 Feb 14 01:54	28°♂35'33	0°06'54	evening set	10208 Jan 22 13:11	18°♂32'17	
transit middle	10207 Feb 14 01:54	28°♂35'33	0°06'54	min. Earth dist.	10208 Jan 26 10:11	14°♂56'10	0.64801 AU
transit begin	10207 Feb 13 23:16	28°♂43'26		inferior conj	10208 Jan 28 18:29	12°♂22'42	-0°56'59
transit end	10207 Feb 14 04:32	28°♂27'42		minimum elong	10208 Jan 28 20:13	12°♂18'00	0°55'54
morning rise	10207 Feb 20 01:30	22°♂53'51		asc. node	10208 Jan 31 15:05	9°♂26'05	
direct	10207 Feb 23 00:27	22°♂05'07		morning rise	10208 Feb 04 04:52	6°♂54'31	
morning max el	10207 Mar 01 12:19	25°♂33'14	18°22'09	direct	10208 Feb 06 19:03	6°♂19'28	
	10207 Mar 05 08:34	0°♂		morning max el	10208 Feb 13 04:48	9°♂40'40	17°55'53
desc. node	10207 Mar 19 15:38	21°♂40'44			10208 Feb 27 04:47	0°♂	

morning set	10208 Mar 01 16:37	5° $\text{H}$ 48'22		morning max el	10209 Jan 26 22:18	23° $\text{Z}$ 37'59	17°47'02
desc. node	10208 Mar 05 12:27	12° $\text{H}$ 08'58			10209 Feb 01 00:36	0° $\approx$	
				morning set	10209 Feb 12 01:16	18° $\approx$ 23'10	
superior conj	10208 Mar 15 14:49	28° $\text{H}$ 31'56	-1°10'11		10209 Feb 18 18:18	0° $\text{H}$	
minimum elong	10208 Mar 15 07:07	28° $\text{H}$ 01'16	1°09'09	desc. node	10209 Feb 20 09:14	2° $\text{H}$ 45'28	
	10208 Mar 16 12:57	0° $\text{Y}$					
max. Earth dist.	10208 Mar 19 17:45	5° $\text{Y}$ 03'34	1.45286 AU	superior conj	10209 Feb 24 01:12	8° $\text{H}$ 54'01	-0°27'12
evening rise	10208 Mar 31 15:49	23° $\text{Y}$ 34'02		minimum elong	10209 Feb 23 22:25	8° $\text{H}$ 42'26	0°26'35
	10208 Apr 04 20:37	0° $\text{Z}$		max. Earth dist.	10209 Mar 02 11:30	19° $\text{H}$ 22'38	1.44230 AU
greatest brilliancy	10208 Apr 15 05:01	15° $\text{Z}$ 33'24	-0.6m		10209 Mar 09 05:15	0° $\text{Y}$	
	10208 Apr 26 03:26	0° $\text{II}$		evening rise	10209 Mar 11 03:31	2° $\text{Y}$ 58'55	
evening max el	10208 Apr 26 21:44	0° $\text{II}$ 47'40	19°53'17		10209 Mar 29 08:47	0° $\text{Z}$	
asc. node	10208 Apr 28 13:14	2° $\text{II}$ 20'17		evening max el	10209 Apr 09 21:28	14° $\text{Z}$ 30'33	20°59'06
retrograde	10208 May 04 10:21	5° $\text{II}$ 06'31		asc. node	10209 Apr 15 10:23	18° $\text{Z}$ 45'54	
evening set	10208 May 08 05:23	3° $\text{II}$ 42'51		retrograde	10209 Apr 18 08:56	19° $\text{Z}$ 28'22	
	10208 May 11 20:01	30° $\text{RZ}$		evening set	10209 Apr 22 13:45	17° $\text{Z}$ 48'59	
inferior conj	10208 May 13 13:33	27° $\text{Z}$ 43'36	3°16'57	inferior conj	10209 Apr 27 20:33	11° $\text{Z}$ 37'35	3°04'51
minimum elong	10208 May 13 12:58	27° $\text{Z}$ 45'33	3°16'33	minimum elong	10209 Apr 27 19:05	11° $\text{Z}$ 42'41	3°04'22
min. Earth dist.	10208 May 14 13:47	26° $\text{Z}$ 22'07	0.67511 AU	min. Earth dist.	10209 Apr 28 07:05	11° $\text{Z}$ 01'08	0.68287 AU
morning rise	10208 May 18 20:14	21° $\text{Z}$ 24'16		morning rise	10209 May 03 00:12	5° $\text{Z}$ 21'52	
direct	10208 May 24 16:50	18° $\text{Z}$ 47'52		direct	10209 May 08 07:55	3° $\text{Z}$ 01'03	
desc. node	10208 Jun 01 12:52	22° $\text{Z}$ 15'07		morning max el	10209 May 18 23:23	9° $\text{Z}$ 21'47	23°35'05
morning max el	10208 Jun 05 13:55	25° $\text{Z}$ 55'36	25°03'50	desc. node	10209 May 19 09:48	9° $\text{Z}$ 48'23	
	10208 Jun 09 07:29	0° $\text{II}$			10209 Jun 04 05:29	0° $\text{II}$	
	10208 Jun 30 16:19	0° $\text{Z}$		morning set	10209 Jun 23 02:16	29° $\text{II}$ 30'04	
morning set	10208 Jul 11 13:33	18° $\text{Z}$ 21'32			10209 Jun 23 09:20	0° $\text{Z}$	
max. Earth dist.	10208 Jul 15 03:50	24° $\text{Z}$ 53'32	1.36737 AU	max. Earth dist.	10209 Jun 27 00:40	6° $\text{Z}$ 16'39	1.38990 AU
	10208 Jul 17 21:08	0° $\text{Z}$					
				superior conj	10209 Jul 04 13:38	19° $\text{Z}$ 56'45	-1°10'09
superior conj	10208 Jul 21 15:17	7° $\text{Z}$ 16'24	-0°37'06	minimum elong	10209 Jul 04 18:18	20° $\text{Z}$ 18'35	1°09'52
minimum elong	10208 Jul 21 17:38	7° $\text{Z}$ 28'00	0°37'03		10209 Jul 09 20:12	0° $\text{Z}$	
asc. node	10208 Jul 25 12:24	15° $\text{Z}$ 00'56		asc. node	10209 Jul 12 09:19	4° $\text{Z}$ 56'45	
evening rise	10208 Jul 29 22:11	23° $\text{Z}$ 56'09		evening rise	10209 Jul 13 19:32	7° $\text{Z}$ 43'14	
	10208 Aug 01 23:09	0° $\text{np}$			10209 Jul 26 14:30	0° $\text{np}$	
evening max el	10208 Aug 16 01:39	22° $\text{np}$ 02'17	19°37'28	evening max el	10209 Jul 30 00:20	3° $\text{np}$ 59'48	18°46'00
retrograde	10208 Aug 25 21:38	26° $\text{np}$ 54'50		retrograde	10209 Aug 07 07:26	8° $\text{np}$ 08'07	
evening set	10208 Aug 27 18:00	26° $\text{np}$ 45'16		evening set	10209 Aug 09 06:32	7° $\text{np}$ 55'04	
desc. node	10208 Aug 28 11:26	26° $\text{np}$ 36'28		desc. node	10209 Aug 15 08:39	4° $\text{np}$ 58'16	
inferior conj	10208 Sep 05 13:35	22° $\text{np}$ 41'34	-2°29'23	inferior conj	10209 Aug 17 08:23	3° $\text{np}$ 33'23	-0°36'51
minimum elong	10208 Sep 05 06:53	22° $\text{np}$ 52'06	2°26'59	minimum elong	10209 Aug 17 06:51	3° $\text{np}$ 36'10	0°36'30
min. Earth dist.	10208 Sep 07 20:23	21° $\text{np}$ 15'37	0.55401 AU	min. Earth dist.	10209 Aug 20 11:42	1° $\text{np}$ 16'35	0.56960 AU
morning rise	10208 Sep 13 17:37	18° $\text{np}$ 16'37			10209 Aug 22 09:55	30° $\text{RZ}$	
direct	10208 Sep 18 14:43	17° $\text{np}$ 23'38		morning rise	10209 Aug 25 03:50	28° $\text{Z}$ 31'10	
morning max el	10208 Oct 02 12:25	24° $\text{np}$ 20'01	24°52'23	direct	10209 Aug 30 19:49	27° $\text{Z}$ 13'11	
	10208 Oct 07 17:16	0° $\text{Z}$			10209 Sep 08 07:32	0° $\text{np}$	
asc. node	10208 Oct 21 12:46	21° $\text{Z}$ 34'51		morning max el	10209 Sep 14 02:40	4° $\text{np}$ 39'09	26°25'27
	10208 Oct 25 19:09	0° $\text{ML}$			10209 Oct 02 12:41	0° $\text{Z}$	
morning set	10208 Oct 28 12:30	5° $\text{ML}$ 42'54		asc. node	10209 Oct 08 09:38	10° $\text{Z}$ 59'19	
				morning set	10209 Oct 12 23:01	20° $\text{Z}$ 23'07	
					10209 Oct 17 08:53	0° $\text{ML}$	
superior conj	10208 Nov 04 08:37	20° $\text{ML}$ 39'21	1°38'45				
minimum elong	10208 Nov 04 07:52	20° $\text{ML}$ 35'14	1°39'03	superior conj	10209 Oct 19 19:49	5° $\text{ML}$ 27'08	1°31'52
max. Earth dist.	10208 Nov 06 02:41	24° $\text{ML}$ 29'19	1.32375 AU	minimum elong	10209 Oct 19 18:11	5° $\text{ML}$ 18'06	1°31'57
	10208 Nov 08 16:09	0° $\text{Z}$		max. Earth dist.	10209 Oct 20 10:21	6° $\text{ML}$ 47'47	1.31689 AU
evening rise	10208 Nov 11 14:41	6° $\text{Z}$ 08'27		evening rise	10209 Oct 26 17:34	20° $\text{ML}$ 29'44	
desc. node	10208 Nov 24 09:28	29° $\text{Z}$ 50'41			10209 Oct 31 09:44	0° $\text{Z}$	
	10208 Nov 24 11:44	0° $\text{Z}$		desc. node	10209 Nov 11 06:35	19° $\text{Z}$ 11'05	
evening max el	10208 Dec 14 17:14	26° $\text{Z}$ 48'54	27°30'41		10209 Nov 18 19:11	0° $\text{Z}$	
	10208 Dec 18 10:37	0° $\approx$		evening max el	10209 Nov 27 00:05	9° $\text{Z}$ 15'40	27°11'56
retrograde	10208 Dec 28 11:49	4° $\approx$ 07'51		retrograde	10209 Dec 10 21:20	16° $\text{Z}$ 27'29	
evening set	10209 Jan 04 12:07	1° $\approx$ 41'38		evening set	10209 Dec 17 20:44	14° $\text{Z}$ 17'44	
	10209 Jan 06 16:14	30° $\text{RZ}$		min. Earth dist.	10209 Dec 21 14:38	11° $\text{Z}$ 33'25	0.60945 AU
min. Earth dist.	10209 Jan 08 05:46	28° $\text{Z}$ 34'55	0.62984 AU	inferior conj	10209 Dec 24 17:13	8° $\text{Z}$ 52'54	-3°22'31
inferior conj	10209 Jan 11 00:37	25° $\text{Z}$ 51'30	-2°07'53	minimum elong	10209 Dec 24 23:54	8° $\text{Z}$ 38'29	3°19'43
minimum elong	10209 Jan 11 04:48	25° $\text{Z}$ 41'14	2°05'46		10210 Jan 01 05:37	4° $\text{Z}$ 00'08	
morning rise	10209 Jan 17 23:41	20° $\text{Z}$ 39'17		morning rise	10210 Jan 03 09:33	3° $\text{Z}$ 41'04	
asc. node	10209 Jan 17 12:14	20° $\text{Z}$ 50'32		direct	10210 Jan 04 09:21	3° $\text{Z}$ 45'12	
direct	10209 Jan 20 07:19	20° $\text{Z}$ 14'00		asc. node			

morning max el	10210 Jan 10 13:35	7°  16'51	17°56'35	asc. node	10210 Dec 22 06:25	18°  15'49	
	10210 Jan 25 04:28	0° 		morning max el	10210 Dec 24 23:05	20°  27'41	18°26'04
morning set	10210 Jan 26 04:31	1°  50'08		morning set	10211 Jan 01 03:16	0° 	
					10211 Jan 09 20:53	15°  53'06	
superior conj	10210 Feb 05 12:44	20°  27'38	0°13'04		10211 Jan 17 06:48	0° 	
minimum elong	10210 Feb 05 13:51	20°  32'32	0°13'12				
behind sun begin	10210 Feb 05 09:14	20°  12'19		superior conj	10211 Jan 18 22:34	3°  04'29	0°46'17
behind sun end	10210 Feb 05 18:29	20°  52'44		minimum elong	10211 Jan 19 01:28	3°  17'53	0°46'16
desc. node	10210 Feb 07 06:01	23°  26'41		desc. node	10211 Jan 25 02:53	14°  09'27	
	10210 Feb 11 02:39	0° 		max. Earth dist.	10211 Jan 26 10:33	16°  26'33	1.40542 AU
max. Earth dist.	10210 Feb 13 01:31	3°  14'43	1.42588 AU	evening rise	10211 Jan 30 19:15	23°  48'09	
evening rise	10210 Feb 19 01:35	12°  56'36			10211 Feb 03 14:43	0° 	
	10210 Mar 02 05:22	0° 			10211 Feb 24 02:44	0° 	
evening max el	10210 Mar 23 16:01	28°  14'13	22°14'45	evening max el	10211 Mar 06 06:58	12°  00'39	23°34'56
	10210 Mar 25 12:31	0° 		retrograde	10211 Mar 17 00:53	18°  21'16	
retrograde	10210 Apr 02 06:13	3°  54'39		asc. node	10211 Mar 20 04:49	17°  33'28	
asc. node	10210 Apr 02 07:35	3°  54'38		evening set	10211 Mar 22 04:05	16°  12'25	
evening set	10210 Apr 06 21:49	1°  59'56		min. Earth dist.	10211 Mar 26 23:51	10°  34'00	0.68489 AU
	10210 Apr 08 21:45	30°  00'00		inferior conj	10211 Mar 27 14:13	9°  44'46	2°10'38
inferior conj	10210 Apr 12 05:24	25°  38'45	2°42'29	minimum elong	10211 Mar 27 12:01	9°  52'18	2°09'57
minimum elong	10210 Apr 12 03:22	25°  45'51	2°41'52	morning rise	10211 Apr 01 19:57	3°  40'06	
min. Earth dist.	10210 Apr 12 03:07	25°  46'41	0.68606 AU	direct	10211 Apr 06 00:34	2°  01'27	
morning rise	10210 Apr 17 08:46	19°  28'00		morning max el	10211 Apr 14 05:10	6°  42'09	20°45'27
direct	10210 Apr 22 02:49	17°  27'27		desc. node	10211 Apr 23 03:31	17°  31'55	
morning max el	10210 May 01 11:22	22°  56'11	22°06'24		10211 May 01 21:21	0° 	
desc. node	10210 May 06 06:41	28°  19'04		morning set	10211 May 13 22:46	18°  17'42	
	10210 May 07 15:16	0° 			10211 May 21 08:16	0° 	
	10210 May 28 13:37	0° 		max. Earth dist.	10211 May 22 05:43	1°  26'34	1.43223 AU
morning set	10210 Jun 03 13:00	9°  26'50					
max. Earth dist.	10210 Jun 09 00:09	18°  25'26	1.41244 AU	superior conj	10211 May 29 00:08	12°  35'51	-2°03'52
	10210 Jun 15 17:59	0° 		minimum elong	10211 May 29 05:26	12°  58'05	2°03'59
					10211 Jun 08 02:09	0° 	
superior conj	10210 Jun 16 18:02	1°  46'13	-1°40'46	evening rise	10211 Jun 10 01:33	3°  29'35	
minimum elong	10210 Jun 17 00:18	2°  13'59	1°40'32	asc. node	10211 Jun 16 03:16	14°  09'27	
evening rise	10210 Jun 27 06:07	20°  57'52		evening max el	10211 Jun 26 20:11	29°  38'55	18°04'29
asc. node	10210 Jun 29 06:15	24°  41'10			10211 Jun 27 04:57	0° 	
	10210 Jul 02 04:01	0° 		retrograde	10211 Jul 03 09:47	3°  01'31	
evening max el	10210 Jul 13 07:48	16°  35'04	18°15'21	evening set	10211 Jul 05 23:38	2°  30'02	
retrograde	10210 Jul 20 12:30	20°  12'58			10211 Jul 09 20:20	30°  00'00	
evening set	10210 Jul 22 18:32	19°  12'52		inferior conj	10211 Jul 12 13:19	27°  28'10	2°04'29
inferior conj	10210 Jul 30 01:00	15°  10'05	0°56'50	minimum elong	10211 Jul 12 16:08	27°  21'11	2°03'14
minimum elong	10210 Jul 30 02:49	15°  06'11	0°55'50	min. Earth dist.	10211 Jul 15 16:05	24°  24'44	0.61306 AU
desc. node	10210 Aug 02 05:52	12°  26'19		morning rise	10211 Jul 19 06:09	21°  27'52	
min. Earth dist.	10210 Aug 02 09:38	12°  18'38	0.59037 AU	desc. node	10211 Jul 20 03:02	20°  54'43	
morning rise	10210 Aug 06 07:49	9°  33'40		direct	10211 Jul 25 21:45	19°  21'05	
direct	10210 Aug 12 14:46	7°  45'57		morning max el	10211 Aug 09 03:41	27°  12'28	27°56'15
morning max el	10210 Aug 26 23:48	15°  33'27	27°29'33		10211 Aug 11 19:18	0° 	
	10210 Sep 07 17:49	0° 			10211 Sep 01 10:26	0° 	
	10210 Sep 24 22:17	0° 		morning set	10211 Sep 11 09:23	19°  04'05	
asc. node	10210 Sep 25 06:28	0°  41'49		asc. node	10211 Sep 12 03:18	20°  36'54	
morning set	10210 Sep 27 06:37	4°  51'51			10211 Sep 16 12:51	0° 	
				max. Earth dist.	10211 Sep 17 03:39	1°  20'45	1.31751 AU
superior conj	10210 Oct 04 07:33	20°  12'54	1°19'29				
minimum elong	10210 Oct 04 05:24	20°  00'58	1°19'19	superior conj	10211 Sep 18 18:00	4°  51'23	1°01'53
max. Earth dist.	10210 Oct 03 19:56	19°  08'20	1.31476 AU	minimum elong	10211 Sep 18 15:47	4°  39'12	1°01'31
	10210 Oct 08 17:33	0° 		evening rise	10211 Sep 25 11:57	19°  40'17	
evening rise	10210 Oct 11 01:20	5°  02'12			10211 Sep 30 11:24	0° 	
	10210 Oct 24 02:52	0° 		desc. node	10211 Oct 16 00:58	25°  00'00	
desc. node	10210 Oct 29 03:45	7°  48'46			10211 Oct 19 23:42	0° 	
evening max el	10210 Nov 08 23:41	20°  52'26	26°19'07	evening max el	10211 Oct 21 15:07	1°  38'40	24°56'57
retrograde	10210 Nov 22 21:45	27°  57'38		retrograde	10211 Nov 04 11:18	8°  36'02	
evening set	10210 Nov 29 10:44	26°  13'56		evening set	10211 Nov 10 01:27	7°  25'39	
min. Earth dist.	10210 Dec 03 12:54	23°  39'10	0.58826 AU	min. Earth dist.	10211 Nov 15 02:47	4°  42'21	0.56872 AU
inferior conj	10210 Dec 06 16:44	21°  17'12	-4°33'31	inferior conj	10211 Nov 17 20:18	2°  55'29	-5°27'15
minimum elong	10210 Dec 07 00:38	21°  02'21	4°31'02	minimum elong	10211 Nov 18 01:52	2°  46'21	5°26'08
morning rise	10210 Dec 14 17:07	16°  46'45			10211 Nov 22 19:21	30°  00'00	
direct	10210 Dec 16 21:19	16°  30'36		morning rise	10211 Nov 26 04:32	28°  00'00	


































































































































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	10211 Dec 04 00:33	0° $\mathbb{A}$		direct	10212 Nov 08 13:05	9° $\mathbb{M}$ 33'50	
morning max el	10211 Dec 07 22:54	2° $\mathbb{A}$ 58'56	19°17'10	morning max el	10212 Nov 19 09:48	14° $\mathbb{M}$ 41'36	20°30'55
asc. node	10211 Dec 09 03:27	4° $\mathbb{A}$ 11'33		asc. node	10212 Nov 25 00:26	21° $\mathbb{M}$ 17'02	
morning set	10211 Dec 24 22:04	0° $\mathbb{B}$ 18'50			10212 Nov 30 11:51	0° $\mathbb{A}$	
	10211 Dec 24 18:17	0° $\mathbb{B}$		morning set	10212 Dec 08 05:00	14° $\mathbb{A}$ 58'48	
					10212 Dec 15 11:39	0° $\mathbb{B}$	
superior conj	10212 Jan 02 01:35	16° $\mathbb{B}$ 29'01	1°11'15	superior conj	10212 Dec 15 17:15	0° $\mathbb{B}$ 28'27	1°28'06
minimum elong	10212 Jan 02 04:38	16° $\mathbb{B}$ 43'48	1°11'20	minimum elong	10212 Dec 15 19:30	0° $\mathbb{B}$ 39'55	1°28'22
max. Earth dist.	10212 Jan 08 16:22	28° $\mathbb{B}$ 55'23	1.38340 AU	max. Earth dist.	10212 Dec 20 23:59	10° $\mathbb{B}$ 56'26	1.36232 AU
	10212 Jan 09 06:39	0° $\mathbb{A}$		evening rise	10212 Dec 24 21:00	18° $\mathbb{B}$ 14'03	
desc. node	10212 Jan 11 23:47	4° $\mathbb{A}$ 49'27		desc. node	10212 Dec 28 20:45	25° $\mathbb{B}$ 22'50	
evening rise	10212 Jan 12 10:28	5° $\mathbb{A}$ 36'03			10212 Dec 31 13:21	0° $\mathbb{A}$	
	10212 Jan 27 14:57	0° $\mathbb{H}$			10213 Jan 20 20:35	0° $\mathbb{H}$	
evening max el	10212 Feb 16 20:26	25° $\mathbb{H}$ 49'48	24°53'26	evening max el	10213 Jan 29 09:54	9° $\mathbb{H}$ 38'53	26°03'03
	10212 Feb 21 17:15	0° $\mathbb{Y}$		retrograde	10213 Feb 11 01:27	16° $\mathbb{H}$ 50'58	
retrograde	10212 Feb 28 15:39	2° $\mathbb{Y}$ 42'02		evening set	10213 Feb 17 04:47	14° $\mathbb{H}$ 21'11	
evening set	10212 Mar 05 06:58	0° $\mathbb{Y}$ 21'10		asc. node	10213 Feb 20 23:15	10° $\mathbb{H}$ 25'58	
	10212 Mar 05 16:36	30° $\mathbb{R}$ $\mathbb{H}$		min. Earth dist.	10213 Feb 21 10:19	9° $\mathbb{H}$ 52'18	0.67023 AU
asc. node	10212 Mar 06 02:02	29° $\mathbb{H}$ 37'54		inferior conj	10213 Feb 23 00:09	7° $\mathbb{H}$ 54'38	0°39'36
min. Earth dist.	10212 Mar 09 19:01	25° $\mathbb{H}$ 17'34	0.67955 AU	minimum elong	10213 Feb 22 23:09	7° $\mathbb{H}$ 57'43	0°39'25
inferior conj	10212 Mar 10 21:07	23° $\mathbb{H}$ 51'23	1°29'39	morning rise	10213 Feb 28 18:11	2° $\mathbb{H}$ 06'48	
minimum elong	10212 Mar 10 19:15	23° $\mathbb{H}$ 57'36	1°29'04	direct	10213 Mar 03 23:02	1° $\mathbb{H}$ 08'23	
morning rise	10212 Mar 16 07:46	17° $\mathbb{H}$ 54'12		morning max el	10213 Mar 10 15:26	4° $\mathbb{H}$ 45'28	18°44'49
direct	10212 Mar 19 23:51	16° $\mathbb{H}$ 36'48		desc. node	10213 Mar 26 21:08	27° $\mathbb{H}$ 20'30	
morning max el	10212 Mar 27 06:36	20° $\mathbb{H}$ 39'30	19°37'21		10213 Mar 28 14:08	0° $\mathbb{Y}$	
	10212 Apr 03 22:33	0° $\mathbb{Y}$		morning set	10213 Apr 01 08:33	5° $\mathbb{Y}$ 53'06	
greatest brilliancy	10212 Apr 08 23:37	7° $\mathbb{Y}$ 12'29	-0.7m	max. Earth dist.	10213 Apr 16 11:31	29° $\mathbb{Y}$ 31'33	1.45512 AU
desc. node	10212 Apr 09 00:20	7° $\mathbb{Y}$ 15'06			10213 Apr 16 18:46	0° $\mathbb{B}$	
morning set	10212 Apr 21 21:22	26° $\mathbb{Y}$ 43'35					
	10212 Apr 24 00:18	0° $\mathbb{B}$		superior conj	10213 Apr 17 16:36	1° $\mathbb{B}$ 25'30	-2°02'33
max. Earth dist.	10212 May 03 17:56	15° $\mathbb{B}$ 12'55	1.44698 AU	minimum elong	10213 Apr 17 09:22	0° $\mathbb{B}$ 57'12	2°02'22
				evening rise	10213 May 03 00:41	25° $\mathbb{B}$ 44'50	
superior conj	10212 May 08 05:55	22° $\mathbb{B}$ 23'21	-2°12'57		10213 May 05 16:10	0° $\mathbb{H}$	
minimum elong	10212 May 08 05:54	22° $\mathbb{B}$ 23'15	2°13'17	greatest brilliancy	10213 May 09 19:58	6° $\mathbb{H}$ 40'23	-0.9m
	10212 May 12 22:38	0° $\mathbb{H}$		asc. node	10213 May 19 21:25	21° $\mathbb{H}$ 50'35	
evening rise	10212 May 22 00:55	15° $\mathbb{H}$ 06'57		evening max el	10213 May 23 22:09	26° $\mathbb{H}$ 36'25	18°38'28
	10212 May 30 23:03	0° $\mathbb{B}$			10213 May 29 01:47	0° $\mathbb{B}$	
asc. node	10212 Jun 02 00:20	3° $\mathbb{B}$ 15'11		retrograde	10213 May 30 11:21	0° $\mathbb{B}$ 10'52	
evening max el	10212 Jun 09 09:58	13° $\mathbb{B}$ 01'59	18°12'29		10213 May 31 20:30	30° $\mathbb{R}$ $\mathbb{H}$	
retrograde	10212 Jun 15 18:44	16° $\mathbb{B}$ 23'43		evening set	10213 Jun 02 16:59	29° $\mathbb{H}$ 11'23	
evening set	10212 Jun 18 16:27	15° $\mathbb{B}$ 38'57		inferior conj	10213 Jun 08 08:41	23° $\mathbb{H}$ 34'53	3°11'16
inferior conj	10212 Jun 24 17:13	10° $\mathbb{B}$ 19'06	2°47'52	minimum elong	10213 Jun 08 09:56	23° $\mathbb{H}$ 31'02	3°10'42
minimum elong	10212 Jun 24 19:34	10° $\mathbb{B}$ 12'32	2°46'56	min. Earth dist.	10213 Jun 10 08:13	21° $\mathbb{H}$ 10'06	0.65371 AU
min. Earth dist.	10212 Jun 27 07:40	7° $\mathbb{B}$ 26'15	0.63481 AU	morning rise	10213 Jun 14 02:06	17° $\mathbb{H}$ 15'30	
morning rise	10212 Jun 30 21:10	4° $\mathbb{B}$ 05'25		direct	10213 Jun 20 14:31	14° $\mathbb{H}$ 31'23	
desc. node	10212 Jul 06 00:09	1° $\mathbb{B}$ 38'12		desc. node	10213 Jun 22 21:14	14° $\mathbb{H}$ 49'02	
direct	10212 Jul 07 14:18	1° $\mathbb{B}$ 29'50		morning max el	10213 Jul 03 22:36	22° $\mathbb{H}$ 24'01	27°00'42
morning max el	10212 Jul 21 12:09	9° $\mathbb{B}$ 32'38	27°45'02		10213 Jul 10 14:43	0° $\mathbb{B}$	
	10212 Aug 06 10:45	0° $\mathbb{Q}$			10213 Jul 30 16:57	0° $\mathbb{Q}$	
	10212 Aug 23 18:01	0° $\mathbb{H}$		morning set	10213 Aug 08 14:44	16° $\mathbb{Q}$ 11'45	
morning set	10212 Aug 25 05:05	2° $\mathbb{H}$ 53'36		max. Earth dist.	10213 Aug 12 22:37	24° $\mathbb{Q}$ 44'21	1.33804 AU
asc. node	10212 Aug 29 00:10	10° $\mathbb{H}$ 39'45		asc. node	10213 Aug 15 21:00	0° $\mathbb{H}$ 45'29	
max. Earth dist.	10212 Aug 30 05:40	13° $\mathbb{H}$ 15'04	1.32524 AU		10213 Aug 15 12:14	0° $\mathbb{H}$	
				superior conj	10213 Aug 17 03:04	3° $\mathbb{H}$ 22'39	0°12'23
superior conj	10212 Sep 02 01:15	19° $\mathbb{H}$ 17'02	0°39'23	minimum elong	10213 Aug 17 02:26	3° $\mathbb{H}$ 19'19	0°12'01
minimum elong	10212 Sep 01 23:31	19° $\mathbb{H}$ 07'41	0°38'55	behind sun begin	10213 Aug 16 22:39	2° $\mathbb{H}$ 59'28	
	10212 Sep 06 23:30	0° $\mathbb{Q}$		behind sun end	10213 Aug 17 06:13	3° $\mathbb{H}$ 39'12	
evening rise	10212 Sep 08 23:30	4° $\mathbb{Q}$ 18'34		evening rise	10213 Aug 24 10:00	18° $\mathbb{H}$ 50'37	
	10212 Sep 22 15:51	0° $\mathbb{M}$			10213 Aug 29 21:43	0° $\mathbb{Q}$	
desc. node	10212 Oct 01 22:12	11° $\mathbb{M}$ 42'47		evening max el	10213 Sep 13 16:40	22° $\mathbb{Q}$ 05'15	21°40'20
evening max el	10212 Oct 02 02:04	11° $\mathbb{M}$ 52'12	23°18'21	desc. node	10213 Sep 18 19:27	26° $\mathbb{Q}$ 07'02	
retrograde	10212 Oct 15 11:57	18° $\mathbb{M}$ 33'23		retrograde	10213 Sep 26 01:45	28° $\mathbb{Q}$ 14'19	
evening set	10212 Oct 19 16:31	17° $\mathbb{M}$ 55'11		evening set	10213 Sep 28 20:48	27° $\mathbb{Q}$ 56'39	
min. Earth dist.	10212 Oct 26 11:44	14° $\mathbb{M}$ 45'05	0.55391 AU	inferior conj	10213 Oct 07 22:18	23° $\mathbb{Q}$ 59'30	-5°04'48
inferior conj	10212 Oct 28 04:07	13° $\mathbb{M}$ 46'08	-5°43'33				
minimum elong	10212 Oct 28 02:38	13° $\mathbb{M}$ 48'18	5°43'12				

minimum elong	10213 Oct 07 13:40	24°♄11'34	5°02'56	retrograde	10214 Sep 06 14:27	8°♄12'45	
min. Earth dist.	10213 Oct 07 19:02	24°♄04'05	0.54664 AU	evening set	10214 Sep 08 14:06	8°♄02'42	
morning rise	10213 Oct 16 07:40	20°♄11'03		inferior conj	10214 Sep 17 16:02	4°♄04'41	-3°34'19
direct	10213 Oct 19 22:59	19°♄42'15		minimum elong	10214 Sep 17 06:53	4°♄18'09	3°31'19
morning max el	10213 Nov 01 07:23	25°♄33'46	22°05'18	min. Earth dist.	10214 Sep 19 03:54	3°♄11'51	0.54865 AU
	10213 Nov 05 10:01	0°♄		morning rise	10214 Sep 25 22:52	29°♄58'07	
asc. node	10213 Nov 11 21:23	9°♄16'21			10214 Sep 25 20:27	30°♄	
morning set	10213 Nov 22 15:16	29°♄45'43		direct	10214 Sep 30 08:28	29°♄16'25	
	10213 Nov 22 17:59	0°♄			10214 Oct 04 18:23	0°♄	
				morning max el	10214 Oct 13 20:24	5°♄50'48	23°51'45
superior conj	10213 Nov 29 17:46	14°♄51'44	1°37'28	asc. node	10214 Oct 29 18:16	27°♄56'38	
minimum elong	10213 Nov 29 18:51	14°♄57'28	1°37'51		10214 Oct 30 21:08	0°♄	
max. Earth dist.	10213 Dec 03 13:52	22°♄49'46	1.34406 AU	morning set	10214 Nov 07 02:58	14°♄34'06	
	10213 Dec 07 04:09	0°♄					
evening rise	10213 Dec 07 23:08	1°♄32'06		superior conj	10214 Nov 14 00:15	29°♄30'24	1°40'05
desc. node	10213 Dec 15 17:45	15°♄44'38		minimum elong	10214 Nov 14 00:08	29°♄29'45	1°40'27
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evening max el	10214 Jan 11 23:27	23°♄19'55	26°56'27	max. Earth dist.	10214 Nov 16 11:44	4°♄50'28	1.32982 AU
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retrograde	10214 Jan 25 05:28	0°♄41'00			10214 Nov 29 06:24	0°♄	
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evening set	10214 Jan 31 19:38	28°♄06'55			10214 Dec 19 07:12	0°♄	
min. Earth dist.	10214 Feb 04 19:28	24°♄12'14	0.65713 AU	evening max el	10214 Dec 25 11:54	6°♄41'35	27°26'27
inferior conj	10214 Feb 06 21:07	21°♄49'32	-0°19'18	retrograde	10215 Jan 08 03:07	14°♄03'27	
minimum elong	10214 Feb 06 21:40	21°♄47'59	0°18'45	evening set	10215 Jan 15 01:10	11°♄31'36	
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morning rise	10214 Feb 13 00:55	16°♄13'30		inferior conj	10215 Jan 21 09:29	5°♄29'45	-1°26'21
direct	10214 Feb 15 20:02	15°♄30'54		minimum elong	10215 Jan 21 12:12	5°♄22'39	1°24'49
morning max el	10214 Feb 22 05:54	18°♄54'28	18°08'55	asc. node	10215 Jan 25 17:36	1°♄28'14	
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morning set	10214 Mar 12 23:24	16°♄26'54			10215 Jan 28 09:51	30°♄	
desc. node	10214 Mar 13 17:56	17°♄41'58		direct	10215 Jan 30 12:15	29°♄37'48	
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				morning max el	10215 Feb 05 23:14	2°♄58'46	17°50'02
superior conj	10214 Mar 27 23:26	10°♄24'37	-1°33'02	morning set	10215 Feb 22 18:21	28°♄22'24	
minimum elong	10214 Mar 27 14:01	9°♄47'38	1°32'05		10215 Feb 23 17:22	0°♄	
max. Earth dist.	10214 Mar 30 07:38	14°♄05'06	1.45581 AU	desc. node	10215 Feb 28 14:42	8°♄14'10	
	10214 Apr 09 12:45	0°♄					
evening rise	10214 Apr 13 02:12	5°♄31'47		superior conj	10215 Mar 07 20:30	20°♄08'22	-0°52'04
greatest brilliancy	10214 Apr 25 07:58	24°♄21'44	-0.7m	minimum elong	10215 Mar 07 14:49	19°♄45'21	0°51'09
	10214 Apr 29 03:47	0°♄		max. Earth dist.	10215 Mar 13 02:54	28°♄33'51	1.44911 AU
asc. node	10214 May 06 18:33	9°♄46'06			10215 Mar 14 00:42	0°♄	
evening max el	10214 May 07 06:24	10°♄16'39	19°21'26	evening rise	10215 Mar 23 14:34	14°♄53'11	
retrograde	10214 May 14 08:19	14°♄16'19			10215 Apr 02 14:09	0°♄	
evening set	10214 May 17 22:17	13°♄01'26		evening max el	10215 Apr 20 09:15	23°♄58'21	20°19'44
inferior conj	10214 May 23 08:20	7°♄09'49	3°18'42	asc. node	10215 Apr 23 15:43	26°♄48'40	
minimum elong	10214 May 23 08:23	7°♄09'38	3°18'18	retrograde	10215 Apr 28 07:02	28°♄33'25	
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morning rise	10214 May 28 18:05	0°♄49'32		inferior conj	10215 May 07 13:20	20°♄58'03	3°13'09
	10214 May 29 18:14	30°♄		minimum elong	10215 May 07 12:21	21°♄01'26	3°12'44
direct	10214 Jun 03 21:13	28°♄07'53		min. Earth dist.	10215 May 08 07:33	19°♄55'48	0.67893 AU
desc. node	10214 Jun 09 18:15	0°♄05'02		morning rise	10215 May 12 18:22	14°♄39'54	
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morning max el	10214 Jun 16 09:06	5°♄36'14	25°51'21	desc. node	10215 May 27 15:13	16°♄55'38	
	10214 Jul 05 03:48	0°♄		morning max el	10215 May 29 18:45	18°♄59'03	24°26'42
morning set	10214 Jul 22 10:44	28°♄49'34			10215 Jun 08 02:18	0°♄	
	10214 Jul 23 02:02	0°♄			10215 Jun 28 06:22	0°♄	
max. Earth dist.	10214 Jul 26 05:16	5°♄53'53	1.35559 AU	morning set	10215 Jul 04 12:25	10°♄34'50	
				max. Earth dist.	10215 Jul 08 03:42	17°♄02'15	1.37678 AU
superior conj	10214 Jul 31 20:52	17°♄01'41	-0°18'18				
minimum elong	10214 Jul 31 21:58	17°♄07'17	0°18'26	superior conj	10215 Jul 15 03:24	0°♄05'52	-0°51'10
asc. node	10214 Aug 02 17:51	20°♄50'32		minimum elong	10215 Jul 15 06:45	0°♄21'59	0°51'00
	10214 Aug 07 04:24	0°♄			10215 Jul 15 02:11	0°♄	
evening rise	10214 Aug 08 17:26	3°♄10'50		asc. node	10215 Jul 20 14:45	10°♄50'51	
	10214 Aug 24 05:04	0°♄		evening rise	10215 Jul 23 19:19	17°♄12'12	
evening max el	10214 Aug 26 18:47	2°♄50'33	20°16'29		10215 Jul 30 11:22	0°♄	
desc. node	10214 Sep 05 16:40	8°♄10'35		evening max el	10215 Aug 09 10:37	14°♄22'21	19°12'55




































































































































retrograde	10215 Aug 18 14:11	18° $\mathbb{M}$ 55'06		evening max el	10216 Jul 22 13:36	26° $\Omega$ 37'44	18°30'32
evening set	10215 Aug 20 10:33	18° $\mathbb{M}$ 44'44			10216 Jul 27 11:59	0° $\mathbb{M}$	
desc. node	10215 Aug 23 13:53	17° $\mathbb{M}$ 44'04		retrograde	10216 Jul 30 08:05	0° $\mathbb{M}$ 31'01	
inferior conj	10215 Aug 28 23:15	14° $\mathbb{M}$ 34'08	-1°40'26	evening set	10216 Aug 01 09:51	0° $\mathbb{M}$ 15'15	
minimum elong	10215 Aug 28 18:49	14° $\mathbb{M}$ 41'33	1°38'51		10216 Aug 02 06:24	30° $\mathbb{R}$ $\Omega$	
min. Earth dist.	10215 Aug 31 16:43	12° $\mathbb{M}$ 45'01	0.55977 AU	inferior conj	10216 Aug 09 03:23	25° $\Omega$ 45'16	0°05'54
morning rise	10215 Sep 06 00:11	9° $\mathbb{M}$ 53'13		minimum elong	10216 Aug 09 03:36	25° $\Omega$ 44'51	0°05'31
direct	10215 Sep 11 05:19	8° $\mathbb{M}$ 50'33		transit middle	10216 Aug 09 03:36	25° $\Omega$ 44'51	0°05'31
morning max el	10215 Sep 25 08:29	16° $\mathbb{M}$ 01'21	25°34'43	transit begin	10216 Aug 09 00:13	25° $\Omega$ 51'26	
	10215 Oct 06 16:00	0° $\Omega$		transit end	10216 Aug 09 06:58	25° $\Omega$ 38'15	
asc. node	10215 Oct 16 15:08	17° $\Omega$ 07'43		desc. node	10216 Aug 09 11:07	25° $\Omega$ 30'05	
morning set	10215 Oct 22 14:25	29° $\Omega$ 19'14		min. Earth dist.	10216 Aug 12 10:52	23° $\Omega$ 10'53	0.57799 AU
	10215 Oct 22 22:01	0° $\mathbb{M}$		morning rise	10216 Aug 16 17:47	20° $\Omega$ 27'28	
				direct	10216 Aug 22 16:59	18° $\Omega$ 56'40	
superior conj	10215 Oct 29 10:22	14° $\mathbb{M}$ 17'28	1°36'31	morning max el	10216 Sep 06 01:22	26° $\Omega$ 33'27	26°56'51
minimum elong	10215 Oct 29 09:13	14° $\mathbb{M}$ 11'05	1°36'45		10216 Sep 09 08:01	0° $\mathbb{M}$	
max. Earth dist.	10215 Oct 30 16:27	17° $\mathbb{M}$ 03'15	1.32018 AU		10216 Sep 29 01:57	0° $\Omega$	
evening rise	10215 Nov 05 12:19	29° $\mathbb{M}$ 33'24		asc. node	10216 Oct 02 11:58	6° $\Omega$ 40'45	
	10215 Nov 05 17:27	0° $\mathbb{M}$		morning set	10216 Oct 05 23:54	13° $\Omega$ 55'20	
desc. node	10215 Nov 19 11:52	25° $\mathbb{M}$ 28'47					
	10215 Nov 22 08:35	0° $\mathbb{Z}$		superior conj	10216 Oct 12 22:02	29° $\Omega$ 05'36	1°27'16
evening max el	10215 Dec 07 21:26	19° $\mathbb{Z}$ 32'14	27°26'53	minimum elong	10216 Oct 12 20:09	28° $\Omega$ 55'04	1°27'16
retrograde	10215 Dec 21 17:42	26° $\mathbb{Z}$ 49'19		max. Earth dist.	10216 Oct 13 01:13	29° $\Omega$ 23'16	1.31535 AU
evening set	10215 Dec 28 18:33	24° $\mathbb{Z}$ 28'37			10216 Oct 13 07:49	0° $\mathbb{M}$	
min. Earth dist.	10216 Jan 01 11:29	21° $\mathbb{Z}$ 32'45	0.62130 AU	evening rise	10216 Oct 19 17:34	14° $\mathbb{M}$ 00'38	
inferior conj	10216 Jan 04 10:18	18° $\mathbb{Z}$ 48'26	-2°39'24		10216 Oct 27 18:12	0° $\mathbb{M}$	
minimum elong	10216 Jan 04 15:35	18° $\mathbb{Z}$ 36'07	2°36'56	desc. node	10216 Nov 05 09:00	14° $\mathbb{M}$ 32'58	
morning rise	10216 Jan 11 15:05	13° $\mathbb{Z}$ 44'25			10216 Nov 17 09:18	0° $\mathbb{Z}$	
asc. node	10216 Jan 12 14:44	13° $\mathbb{Z}$ 29'18		evening max el	10216 Nov 19 01:34	1° $\mathbb{Z}$ 39'12	26°53'38
direct	10216 Jan 13 20:37	13° $\mathbb{Z}$ 22'20		retrograde	10216 Dec 02 23:51	8° $\mathbb{Z}$ 48'27	
morning max el	10216 Jan 20 16:19	16° $\mathbb{Z}$ 50'21	17°48'50	evening set	10216 Dec 09 19:50	6° $\mathbb{Z}$ 48'55	
	10216 Jan 30 00:17	0° $\approx$		min. Earth dist.	10216 Dec 13 16:00	4° $\mathbb{Z}$ 10'15	0.60036 AU
morning set	10216 Feb 05 11:42	11° $\approx$ 21'56		inferior conj	10216 Dec 16 20:04	1° $\mathbb{Z}$ 35'35	-3°53'43
desc. node	10216 Feb 15 11:31	28° $\approx$ 53'28		minimum elong	10216 Dec 17 03:32	1° $\mathbb{Z}$ 20'22	3°50'55
	10216 Feb 16 03:08	0° $\mathbb{H}$			10216 Dec 18 20:14	30° $\mathbb{R}$ $\mathbb{M}$	
				morning rise	10216 Dec 24 13:52	26° $\mathbb{M}$ 51'53	
superior conj	10216 Feb 16 17:44	1° $\mathbb{H}$ 01'58	-0°09'30	direct	10216 Dec 26 17:12	26° $\mathbb{M}$ 34'32	
minimum elong	10216 Feb 16 16:51	0° $\mathbb{H}$ 58'12	0°09'06	asc. node	10216 Dec 29 11:50	27° $\mathbb{M}$ 05'09	
behind sun begin	10216 Feb 16 09:33	0° $\mathbb{H}$ 27'17			10217 Jan 02 21:48	0° $\mathbb{Z}$	
behind sun end	10216 Feb 17 00:08	1° $\mathbb{H}$ 29'03		morning max el	10217 Jan 03 05:36	0° $\mathbb{Z}$ 18'42	18°06'32
max. Earth dist.	10216 Feb 23 18:45	12° $\mathbb{H}$ 41'34	1.43588 AU	morning set	10217 Jan 18 21:09	25° $\mathbb{Z}$ 06'01	
evening rise	10216 Mar 02 05:03	24° $\mathbb{H}$ 28'19			10217 Jan 21 12:04	0° $\approx$	
	10216 Mar 05 19:11	0° $\mathbb{Y}$					
	10216 Mar 26 16:41	0° $\mathbb{Z}$		superior conj	10217 Jan 28 15:16	13° $\approx$ 03'44	0°28'07
evening max el	10216 Apr 02 06:35	7° $\mathbb{Z}$ 41'15	21°30'20	minimum elong	10217 Jan 28 17:24	13° $\approx$ 13'15	0°28'09
asc. node	10216 Apr 09 12:55	12° $\mathbb{Z}$ 43'38		desc. node	10217 Feb 01 08:20	19° $\approx$ 35'41	
retrograde	10216 Apr 11 05:21	12° $\mathbb{Z}$ 57'38		max. Earth dist.	10217 Feb 05 06:15	26° $\approx$ 16'06	1.41755 AU
evening set	10216 Apr 15 14:31	11° $\mathbb{Z}$ 11'49			10217 Feb 07 12:08	0° $\mathbb{H}$	
inferior conj	10216 Apr 20 21:24	4° $\mathbb{Z}$ 55'50	2°56'35	evening rise	10217 Feb 10 10:49	4° $\mathbb{H}$ 47'46	
minimum elong	10216 Apr 20 19:39	5° $\mathbb{Z}$ 01'57	2°56'02		10217 Feb 27 01:43	0° $\mathbb{Y}$	
min. Earth dist.	10216 Apr 21 02:26	4° $\mathbb{Z}$ 38'18	0.68475 AU	evening max el	10217 Mar 15 23:29	21° $\mathbb{Y}$ 26'24	22°48'44
	10216 Apr 24 17:01	30° $\mathbb{R}$ $\mathbb{Y}$		retrograde	10217 Mar 26 01:38	27° $\mathbb{Y}$ 24'25	
morning rise	10216 Apr 26 00:34	28° $\mathbb{Y}$ 41'46		asc. node	10217 Mar 27 10:08	27° $\mathbb{Y}$ 15'28	
direct	10216 May 01 02:27	26° $\mathbb{Y}$ 29'06		evening set	10217 Mar 30 22:00	25° $\mathbb{Y}$ 23'45	
	10216 May 08 12:51	0° $\mathbb{Z}$		inferior conj	10217 Apr 05 06:29	18° $\mathbb{Y}$ 59'33	2°30'09
morning max el	10216 May 11 04:52	2° $\mathbb{Z}$ 28'30	22°56'46	minimum elong	10217 Apr 05 04:20	19° $\mathbb{Y}$ 07'02	2°29'28
desc. node	10216 May 13 12:08	4° $\mathbb{Z}$ 55'35		min. Earth dist.	10217 Apr 04 23:06	19° $\mathbb{Y}$ 25'11	0.68609 AU
	10216 Jun 01 02:48	0° $\mathbb{H}$		morning rise	10217 Apr 10 10:31	12° $\mathbb{Y}$ 51'07	
morning set	10216 Jun 14 14:32	21° $\mathbb{H}$ 14'06		direct	10217 Apr 14 22:53	10° $\mathbb{Y}$ 59'33	
max. Earth dist.	10216 Jun 19 00:20	28° $\mathbb{H}$ 40'04	1.39962 AU	morning max el	10217 Apr 23 18:48	16° $\mathbb{Y}$ 06'52	21°30'36
	10216 Jun 19 18:54	0° $\mathbb{Z}$		desc. node	10217 Apr 30 09:01	23° $\mathbb{Y}$ 45'48	
					10217 May 05 01:00	0° $\mathbb{Z}$	
superior conj	10216 Jun 26 18:42	12° $\mathbb{Z}$ 25'58	-1°23'42		10217 May 25 03:42	0° $\mathbb{H}$	
minimum elong	10216 Jun 27 00:13	12° $\mathbb{Z}$ 51'12	1°23'23	morning set	10217 May 25 13:55	0° $\mathbb{H}$ 40'25	
asc. node	10216 Jul 06 11:41	0° $\Omega$ 42'28		max. Earth dist.	10217 Jun 01 02:02	11° $\mathbb{H}$ 11'03	1.42134 AU
	10216 Jul 06 02:48	0° $\Omega$					
evening rise	10216 Jul 06 12:34	0° $\Omega$ 46'41		superior conj	10217 Jun 08 14:11	23° $\mathbb{H}$ 51'43	-1°51'51

minimum elong	10217 Jun 08 20:29	24° $\Pi$ 19'00	1°51'44	superior conj	10218 May 20 09:51	4° $\Pi$ 14'04	-2°09'49
	10217 Jun 12 02:19	0° $\mathfrak{D}$		minimum elong	10218 May 20 13:26	4° $\Pi$ 28'49	2°10'06
evening rise	10217 Jun 19 17:18	13° $\mathfrak{D}$ 44'39		evening rise	10218 Jun 02 04:45	25° $\Pi$ 54'16	
asc. node	10217 Jun 23 08:41	20° $\mathfrak{D}$ 21'01			10218 Jun 04 13:28	0° $\mathfrak{D}$	
	10217 Jun 28 22:48	0° $\Omega$		asc. node	10218 Jun 10 05:43	9° $\mathfrak{D}$ 40'25	
evening max el	10217 Jul 05 23:46	9° $\Omega$ 27'20	18°08'26	evening max el	10218 Jun 19 13:07	22° $\mathfrak{D}$ 40'05	18°05'37
retrograde	10217 Jul 12 20:29	12° $\Omega$ 56'32		retrograde	10218 Jun 25 23:23	26° $\mathfrak{D}$ 00'37	
evening set	10217 Jul 15 05:58	12° $\Omega$ 31'30		evening set	10218 Jun 28 16:38	25° $\mathfrak{D}$ 23'36	
inferior conj	10217 Jul 22 04:52	7° $\Omega$ 40'45	1°28'41	inferior conj	10218 Jul 05 00:17	20° $\mathfrak{D}$ 13'34	2°25'36
minimum elong	10217 Jul 22 07:21	7° $\Omega$ 35'04	1°27'28	minimum elong	10218 Jul 05 03:02	20° $\mathfrak{D}$ 06'23	2°24'27
min. Earth dist.	10217 Jul 25 12:07	4° $\Omega$ 41'28	0.60000 AU	min. Earth dist.	10218 Jul 07 22:10	17° $\mathfrak{D}$ 12'29	0.62255 AU
desc. node	10217 Jul 27 08:20	3° $\Omega$ 11'22		morning rise	10218 Jul 11 11:26	14° $\mathfrak{D}$ 06'31	
morning rise	10217 Jul 29 05:46	1° $\Omega$ 53'13		desc. node	10218 Jul 14 05:30	12° $\mathfrak{D}$ 31'25	
	10217 Aug 03 03:23	30° $\mathfrak{R}$ $\mathfrak{D}$		direct	10218 Jul 18 04:26	11° $\mathfrak{D}$ 41'28	
direct	10217 Aug 04 17:28	29° $\mathfrak{D}$ 52'53		morning max el	10218 Aug 01 07:31	19° $\mathfrak{D}$ 43'30	27°56'01
	10217 Aug 06 08:07	0° $\Omega$			10218 Aug 10 01:49	0° $\Omega$	
morning max el	10217 Aug 19 01:21	7° $\Omega$ 46'15	27°45'36		10218 Aug 28 21:33	0° $\mathfrak{M}$	
	10217 Sep 04 22:31	0° $\mathfrak{M}$		morning set	10218 Sep 04 05:45	12° $\mathfrak{M}$ 21'08	
asc. node	10217 Sep 19 08:49	26° $\mathfrak{M}$ 29'32		asc. node	10218 Sep 06 05:39	16° $\mathfrak{M}$ 28'16	
morning set	10217 Sep 20 05:42	28° $\mathfrak{M}$ 18'00		max. Earth dist.	10218 Sep 09 16:30	23° $\mathfrak{M}$ 49'02	1.32026 AU
	10217 Sep 21 01:07	0° $\mathfrak{L}$					
max. Earth dist.	10217 Sep 26 10:34	11° $\mathfrak{L}$ 42'22	1.31539 AU	superior conj	10218 Sep 11 18:47	28° $\mathfrak{M}$ 22'46	0°52'56
				minimum elong	10218 Sep 11 16:43	28° $\mathfrak{M}$ 11'24	0°52'30
superior conj	10217 Sep 27 09:29	13° $\mathfrak{L}$ 49'23	1°12'39		10218 Sep 12 12:31	0° $\mathfrak{L}$	
minimum elong	10217 Sep 27 07:15	13° $\mathfrak{L}$ 37'00	1°12'24	evening rise	10218 Sep 18 14:04	13° $\mathfrak{L}$ 15'39	
evening rise	10217 Oct 04 02:50	28° $\mathfrak{L}$ 36'52			10218 Sep 26 21:58	0° $\mathfrak{M}$	
	10217 Oct 04 18:24	0° $\mathfrak{M}$		desc. node	10218 Oct 10 03:25	19° $\mathfrak{M}$ 53'58	
	10217 Oct 21 06:57	0° $\mathfrak{J}$		evening max el	10218 Oct 13 10:34	23° $\mathfrak{M}$ 23'14	24°15'54
desc. node	10217 Oct 23 06:12	2° $\mathfrak{J}$ 47'45			10218 Oct 24 13:54	0° $\mathfrak{J}$	
evening max el	10217 Oct 31 21:54	12° $\mathfrak{J}$ 54'43	25°47'11	retrograde	10218 Oct 27 03:19	0° $\mathfrak{J}$ 15'00	
retrograde	10217 Nov 14 19:29	19° $\mathfrak{J}$ 55'57			10218 Oct 29 17:14	30° $\mathfrak{R}$ $\mathfrak{M}$	
evening set	10217 Nov 21 00:22	18° $\mathfrak{J}$ 26'09		evening set	10218 Nov 01 04:29	29° $\mathfrak{M}$ 18'51	
min. Earth dist.	10217 Nov 25 10:26	15° $\mathfrak{J}$ 50'01	0.57966 AU	min. Earth dist.	10218 Nov 06 21:22	26° $\mathfrak{M}$ 26'30	0.56173 AU
inferior conj	10217 Nov 28 11:22	13° $\mathfrak{J}$ 41'27	-4°59'30	inferior conj	10218 Nov 09 06:10	24° $\mathfrak{M}$ 58'45	-5°40'00
minimum elong	10217 Nov 28 18:51	13° $\mathfrak{J}$ 28'12	4°57'30	minimum elong	10218 Nov 09 09:14	24° $\mathfrak{M}$ 54'00	5°39'26
morning rise	10217 Dec 06 15:42	9° $\mathfrak{J}$ 20'16		morning rise	10218 Nov 17 16:03	20° $\mathfrak{M}$ 59'03	
direct	10217 Dec 08 21:43	9° $\mathfrak{J}$ 04'16		direct	10218 Nov 20 06:52	20° $\mathfrak{M}$ 41'04	
asc. node	10217 Dec 16 08:53	12° $\mathfrak{J}$ 13'27		morning max el	10218 Nov 30 05:54	25° $\mathfrak{M}$ 24'38	19°45'49
morning max el	10217 Dec 17 11:20	13° $\mathfrak{J}$ 13'27	18°44'58	asc. node	10218 Dec 03 05:53	28° $\mathfrak{M}$ 40'39	
	10217 Dec 28 20:27	0° $\mathfrak{Z}$			10218 Dec 04 06:54	0° $\mathfrak{J}$	
morning set	10218 Jan 02 17:42	9° $\mathfrak{Z}$ 19'58		morning set	10218 Dec 17 21:40	23° $\mathfrak{J}$ 53'01	
					10218 Dec 20 21:57	0° $\mathfrak{Z}$	
superior conj	10218 Jan 11 08:58	26° $\mathfrak{Z}$ 02'07	0°57'54				
minimum elong	10218 Jan 11 12:06	26° $\mathfrak{Z}$ 16'51	0°57'54	superior conj	10218 Dec 25 17:54	9° $\mathfrak{Z}$ 43'20	1°19'22
	10218 Jan 13 11:55	0° $\approx$		minimum elong	10218 Dec 25 20:42	9° $\mathfrak{Z}$ 57'08	1°19'31
max. Earth dist.	10218 Jan 18 13:55	9° $\approx$ 10'28	1.39618 AU	max. Earth dist.	10218 Dec 31 20:10	21° $\mathfrak{Z}$ 26'38	1.37418 AU
desc. node	10218 Jan 19 05:12	10° $\approx$ 17'28		evening rise	10219 Jan 04 13:32	28° $\mathfrak{Z}$ 13'41	
evening rise	10218 Jan 22 13:43	16° $\approx$ 03'29			10219 Jan 05 13:32	0° $\approx$	
	10218 Jan 31 04:06	0° $\mathfrak{H}$		desc. node	10219 Jan 06 02:07	0° $\approx$ 55'13	
	10218 Feb 21 18:23	0° $\mathfrak{Y}$			10219 Jan 24 13:18	0° $\mathfrak{H}$	
evening max el	10218 Feb 26 13:41	5° $\mathfrak{Y}$ 14'20	24°09'01	evening max el	10219 Feb 09 02:57	19° $\mathfrak{H}$ 04'00	25°24'30
retrograde	10218 Mar 09 18:34	11° $\mathfrak{Y}$ 48'54		retrograde	10219 Feb 21 07:17	26° $\mathfrak{H}$ 06'03	
asc. node	10218 Mar 14 07:23	10° $\mathfrak{Y}$ 13'15		evening set	10219 Feb 27 03:56	23° $\mathfrak{H}$ 40'37	
evening set	10218 Mar 15 03:00	9° $\mathfrak{Y}$ 34'38		asc. node	10219 Mar 01 04:35	21° $\mathfrak{H}$ 41'46	
min. Earth dist.	10218 Mar 19 19:20	4° $\mathfrak{Y}$ 11'14	0.68315 AU	min. Earth dist.	10219 Mar 03 13:00	18° $\mathfrak{H}$ 52'08	0.67607 AU
inferior conj	10218 Mar 20 14:42	3° $\mathfrak{Y}$ 05'48	1°54'22	inferior conj	10219 Mar 04 20:11	17° $\mathfrak{H}$ 11'35	1°09'31
minimum elong	10218 Mar 20 12:34	3° $\mathfrak{Y}$ 12'59	1°53'41	minimum elong	10219 Mar 04 18:36	17° $\mathfrak{H}$ 16'41	1°09'04
	10218 Mar 22 23:53	30° $\mathfrak{R}$ $\mathfrak{H}$		morning rise	10219 Mar 10 09:42	11° $\mathfrak{H}$ 18'27	
morning rise	10218 Mar 25 22:13	27° $\mathfrak{H}$ 04'16		direct	10219 Mar 13 20:50	10° $\mathfrak{H}$ 09'34	
direct	10218 Mar 29 21:28	25° $\mathfrak{H}$ 34'43		morning max el	10219 Mar 20 20:31	13° $\mathfrak{H}$ 59'36	19°13'06
morning max el	10218 Apr 06 15:41	29° $\mathfrak{H}$ 57'16	20°14'43		10219 Apr 02 01:00	0° $\mathfrak{Y}$	
	10218 Apr 06 16:47	0° $\mathfrak{Y}$		greatest brilliancy	10219 Apr 02 20:29	1° $\mathfrak{Y}$ 12'40	-0.7m
desc. node	10218 Apr 17 05:50	13° $\mathfrak{Y}$ 12'24		desc. node	10219 Apr 04 02:39	3° $\mathfrak{Y}$ 05'56	
	10218 Apr 28 15:41	0° $\mathfrak{B}$		morning set	10219 Apr 13 17:31	17° $\mathfrak{Y}$ 49'52	
morning set	10218 May 04 16:18	9° $\mathfrak{B}$ 12'41			10219 Apr 21 13:48	0° $\mathfrak{B}$	
max. Earth dist.	10218 May 14 11:06	24° $\mathfrak{B}$ 34'52	1.43925 AU	max. Earth dist.	10219 Apr 27 02:10	8° $\mathfrak{B}$ 38'01	1.45131 AU
	10218 May 17 19:43	0° $\Pi$					



superior conj	10219 Apr 30 06:13	13°  38'20	-2°11'05	morning set	10220 Mar 23 15:29	27°  32'30	
minimum elong	10219 Apr 30 02:59	13°  25'28	2°11'18		10220 Mar 25 04:44	0°  Y	
	10219 May 10 10:21	0°  II					
evening rise	10219 May 14 18:23	7°  II06'49		superior conj	10220 Apr 08 12:56	22°  Y32'57	-1°52'04
asc. node	10219 May 28 02:48	28°  II34'17		minimum elong	10220 Apr 08 03:54	21°  Y57'37	1°51'29
	10219 May 29 02:38	0°  ☿		max. Earth dist.	10220 Apr 08 20:39	23°  Y03'05	1.45631 AU
evening max el	10219 Jun 03 02:27	6°  ☿08'09	18°21'18		10220 Apr 13 07:17	0°  8	
retrograde	10219 Jun 09 12:09	9°  ☿34'05		evening rise	10220 Apr 24 08:02	17°  820'23	
evening set	10219 Jun 12 13:07	8°  ☿43'15			10220 May 02 08:39	0°  II	
inferior conj	10219 Jun 18 09:34	3°  ☿15'55	2°59'58	greatest brilliancy	10220 May 03 18:26	2°  II11'46	-0.8m
minimum elong	10219 Jun 18 11:30	3°  ☿10'19	2°59'12	asc. node	10220 May 13 23:54	16°  II53'57	
min. Earth dist.	10219 Jun 20 17:45	0°  ☿33'16	0.64325 AU	evening max el	10220 May 16 13:07	19°  II45'10	18°54'45
	10219 Jun 21 05:43	30°  RII		retrograde	10220 May 23 06:58	23°  II29'11	
morning rise	10219 Jun 24 08:41	26°  II58'45		evening set	10220 May 26 15:57	22°  II23'25	
direct	10219 Jul 01 00:16	24°  II18'16		inferior conj	10220 Jun 01 04:53	16°  II40'25	3°16'09
desc. node	10219 Jul 01 02:37	24°  II18'18		minimum elong	10220 Jun 01 05:38	16°  II38'05	3°15'40
	10219 Jul 12 07:02	0°  ☿		min. Earth dist.	10220 Jun 02 22:02	14°  II30'50	0.66054 AU
morning max el	10219 Jul 14 17:23	2°  ☿18'54	27°29'50	morning rise	10220 Jun 06 18:39	10°  II19'56	
	10219 Aug 04 08:36	0°  ♊		direct	10220 Jun 13 03:34	7°  II35'21	
morning set	10219 Aug 18 21:34	25°  ♊58'11		desc. node	10220 Jun 16 23:39	8°  II25'31	
	10219 Aug 20 22:05	0°  ♊		morning max el	10220 Jun 26 04:04	15°  II20'26	26°33'39
max. Earth dist.	10219 Aug 23 15:07	5°  ♊33'15	1.33007 AU		10220 Jul 08 04:39	0°  ☿	
asc. node	10219 Aug 24 02:30	6°  ♊32'33			10220 Jul 27 03:53	0°  ♊	
				morning set	10220 Aug 01 01:57	9°  ♊00'42	
superior conj	10219 Aug 26 23:58	12°  ♊40'07	0°28'26	max. Earth dist.	10220 Aug 05 03:22	16°  ♊51'18	1.34488 AU
minimum elong	10219 Aug 26 22:38	12°  ♊32'56	0°27'59				
evening rise	10219 Sep 03 01:23	27°  ♊51'30		superior conj	10220 Aug 09 22:44	26°  ♊35'20	-0°00'15
	10219 Sep 04 01:40	0°  ♊		minimum elong	10220 Aug 09 22:46	26°  ♊35'31	0°00'33
	10219 Sep 21 15:55	0°  ♊		behind sun begin	10220 Aug 09 16:56	26°  ♊05'24	
evening max el	10219 Sep 24 21:39	3°  ♊30'57	22°35'33	behind sun end	10220 Aug 10 04:36	27°  ♊05'42	
desc. node	10219 Sep 27 00:40	5°  ♊26'04		asc. node	10220 Aug 09 23:21	26°  ♊38'31	
retrograde	10219 Oct 07 23:13	10°  ♊01'34			10220 Aug 11 14:06	0°  ♊	
evening set	10219 Oct 11 12:26	9°  ♊33'51		evening rise	10220 Aug 17 10:50	12°  ♊19'03	
min. Earth dist.	10219 Oct 19 05:08	6°  ♊07'19	0.54971 AU		10220 Aug 26 13:20	0°  ♊	
inferior conj	10219 Oct 20 06:55	5°  ♊30'42	-5°34'19	evening max el	10220 Sep 05 16:36	13°  ♊55'26	21°02'33
minimum elong	10219 Oct 20 01:56	5°  ♊37'48	5°33'34	desc. node	10220 Sep 12 21:55	18°  ♊53'57	
morning rise	10219 Oct 28 17:10	1°  ♊42'57		retrograde	10220 Sep 17 11:11	19°  ♊45'47	
direct	10219 Oct 31 22:14	1°  ♊19'27		evening set	10220 Sep 19 19:29	19°  ♊32'49	
morning max el	10219 Nov 12 11:02	6°  ♊45'36	21°08'58	inferior conj	10220 Sep 28 23:11	15°  ♊37'16	-4°31'34
asc. node	10219 Nov 20 02:50	16°  ♊10'39		minimum elong	10220 Sep 28 13:23	15°  ♊51'07	4°28'55
	10219 Nov 28 00:16	0°  ♊		min. Earth dist.	10220 Sep 29 13:14	15°  ♊17'23	0.54625 AU
morning set	10219 Dec 02 06:14	8°  ♊36'33		morning rise	10220 Oct 07 07:36	11°  ♊43'17	
				direct	10220 Oct 11 06:25	11°  ♊09'43	
superior conj	10219 Dec 09 13:44	23°  ♊54'19	1°32'57	morning max el	10220 Oct 24 04:14	17°  ♊20'49	22°49'50
minimum elong	10219 Dec 09 15:31	24°  ♊03'32	1°33'16		10220 Nov 03 06:07	0°  ♊	
	10219 Dec 12 13:26	0°  ♊		asc. node	10220 Nov 05 23:45	4°  ♊29'04	
max. Earth dist.	10219 Dec 14 05:42	3°  ♊20'40	1.35404 AU	morning set	10220 Nov 15 17:20	23°  ♊24'53	
evening rise	10219 Dec 18 07:08	11°  ♊09'47			10220 Nov 18 19:11	0°  ♊	
desc. node	10219 Dec 23 23:04	21°  ♊24'11					
	10219 Dec 29 01:46	0°  ♊		superior conj	10220 Nov 22 17:09	8°  ♊25'31	1°39'21
	10220 Jan 19 21:55	0°  ♊		minimum elong	10220 Nov 22 17:42	8°  ♊28'33	1°39'45
evening max el	10220 Jan 22 16:15	2°  ♊49'59	26°28'09	max. Earth dist.	10220 Nov 25 22:46	15°  ♊15'18	1.33746 AU
retrograde	10220 Feb 04 14:53	10°  ♊08'01		evening rise	10220 Nov 30 14:51	24°  ♊42'44	
evening set	10220 Feb 10 23:02	7°  ♊35'29			10220 Dec 03 08:42	0°  ♊	
min. Earth dist.	10220 Feb 15 01:56	3°  ♊21'22	0.66507 AU	desc. node	10220 Dec 09 20:05	11°  ♊39'34	
asc. node	10220 Feb 16 01:47	2°  ♊09'44			10220 Dec 21 14:07	0°  ♊	
inferior conj	10220 Feb 16 20:53	1°  ♊11'49	0°15'39	evening max el	10221 Jan 04 05:34	16°  ♊24'29	27°12'28
minimum elong	10220 Feb 16 20:28	1°  ♊13'06	0°15'45	retrograde	10221 Jan 17 16:26	23°  ♊47'09	
transit middle	10220 Feb 16 20:28	1°  ♊13'06	0°15'45	evening set	10221 Jan 24 10:14	21°  ♊13'16	
transit begin	10220 Feb 16 19:54	1°  ♊14'49		min. Earth dist.	10221 Jan 28 07:59	17°  ♊32'17	0.65049 AU
transit end	10220 Feb 16 21:02	1°  ♊11'23		inferior conj	10221 Jan 30 14:32	15°  ♊01'24	-0°46'50
	10220 Feb 17 20:55	30°  R♊		minimum elong	10221 Jan 30 15:56	14°  ♊57'32	0°45'53
morning rise	10220 Feb 22 18:49	25°  ♊28'50		asc. node	10221 Feb 01 22:57	12°  ♊31'34	
direct	10220 Feb 25 19:13	24°  ♊37'46		morning rise	10221 Feb 05 23:09	9°  ♊30'58	
morning max el	10220 Mar 03 08:05	28°  ♊07'58	18°27'29	direct	10221 Feb 08 14:32	8°  ♊54'03	
	10220 Mar 05 02:04	0°  ♊		morning max el	10221 Feb 15 00:04	12°  ♊15'35	17°58'39
desc. node	10220 Mar 20 23:24	23°  ♊18'33			10221 Feb 27 11:55	0°  ♊	

morning set	10221 Mar 04 18:45	8° $\text{H}$ 42'24	morning rise	10222 Jan 20 19:30	23° $\text{Z}$ 18'48
desc. node	10221 Mar 07 20:09	13° $\text{H}$ 44'47	direct	10222 Jan 23 04:01	22° $\text{Z}$ 52'15
	10221 Mar 17 21:15	0° $\text{Y}$	morning max el	10222 Jan 29 17:38	26° $\text{Z}$ 15'03 17°47'14
				10222 Feb 01 23:04	0° $\approx$
superior conj	10221 Mar 18 23:53	1° $\text{Y}$ 45'48 -1°16'25	morning set	10222 Feb 15 00:08	21° $\approx$ 08'02
minimum elong	10221 Mar 18 15:35	1° $\text{Y}$ 12'54 1°15'24		10222 Feb 20 03:37	0° $\text{H}$
max. Earth dist.	10221 Mar 22 16:16	7° $\text{Y}$ 34'42 1.45387 AU	desc. node	10222 Feb 22 16:57	4° $\text{H}$ 20'23
evening rise	10221 Apr 04 02:13	26° $\text{Y}$ 51'25			
	10221 Apr 06 03:17	0° $\text{Z}$	superior conj	10222 Feb 27 06:40	11° $\text{H}$ 57'41 -0°33'41
greatest brilliancy	10221 Apr 18 03:22	18° $\text{Z}$ 10'22 -0.6m	minimum elong	10222 Feb 27 03:08	11° $\text{H}$ 43'07 0°32'59
	10221 Apr 26 17:46	0° $\text{II}$	max. Earth dist.	10222 Mar 05 10:47	21° $\text{H}$ 57'57 1.44428 AU
evening max el	10221 Apr 29 19:14	3° $\text{II}$ 26'22 19°44'36		10222 Mar 10 12:57	0° $\text{Y}$
asc. node	10221 Apr 30 21:03	4° $\text{II}$ 28'30	evening rise	10222 Mar 14 13:40	6° $\text{Y}$ 14'32
retrograde	10221 May 07 04:49	7° $\text{II}$ 39'48		10222 Mar 30 11:43	0° $\text{Z}$
evening set	10221 May 10 22:32	6° $\text{II}$ 18'22	evening max el	10222 Apr 12 19:49	17° $\text{Z}$ 09'10 20°48'33
inferior conj	10221 May 16 07:06	0° $\text{II}$ 21'08 3°17'47	asc. node	10222 Apr 17 18:15	21° $\text{Z}$ 04'33
minimum elong	10221 May 16 06:41	0° $\text{II}$ 22'32 3°17'23	retrograde	10222 Apr 21 03:30	22° $\text{Z}$ 00'49
	10221 May 16 13:26	30° $\text{KZ}$	evening set	10222 Apr 25 06:50	20° $\text{Z}$ 23'39
min. Earth dist.	10221 May 17 09:28	28° $\text{Z}$ 53'10 0.67358 AU	inferior conj	10222 Apr 30 13:41	14° $\text{Z}$ 13'50 3°07'23
morning rise	10221 May 21 14:30	24° $\text{Z}$ 01'34	minimum elong	10222 Apr 30 12:20	14° $\text{Z}$ 18'31 3°06'54
direct	10221 May 27 12:55	21° $\text{Z}$ 23'30	min. Earth dist.	10222 May 01 02:08	13° $\text{Z}$ 30'48 0.68200 AU
desc. node	10221 Jun 03 20:38	24° $\text{Z}$ 24'51	morning rise	10222 May 05 17:36	7° $\text{Z}$ 57'30
morning max el	10221 Jun 08 13:54	28° $\text{Z}$ 36'47 25°16'30	direct	10222 May 11 03:17	5° $\text{Z}$ 34'10
	10221 Jun 09 21:47	0° $\text{II}$	desc. node	10222 May 21 17:33	11° $\text{Z}$ 47'44
	10221 Jul 01 22:57	0° $\text{Z}$	morning max el	10222 May 21 23:24	12° $\text{Z}$ 02'24 23°48'32
morning set	10221 Jul 14 14:43	21° $\text{Z}$ 17'16		10222 Jun 05 08:36	0° $\text{II}$
max. Earth dist.	10221 Jul 18 05:36	27° $\text{Z}$ 55'09 1.36424 AU		10222 Jun 24 18:12	0° $\text{Z}$
	10221 Jul 19 08:11	0° $\text{Z}$	morning set	10222 Jun 26 06:58	2° $\text{Z}$ 35'42
			max. Earth dist.	10222 Jun 30 02:51	9° $\text{Z}$ 14'30 1.38652 AU
superior conj	10221 Jul 24 12:12	10° $\text{Z}$ 00'33 -0°32'06			
minimum elong	10221 Jul 24 14:12	10° $\text{Z}$ 10'32 0°32'06	superior conj	10222 Jul 07 12:49	22° $\text{Z}$ 47'26 -1°05'13
asc. node	10221 Jul 27 20:13	16° $\text{Z}$ 41'49	minimum elong	10222 Jul 07 17:08	23° $\text{Z}$ 07'51 1°04'56
evening rise	10221 Aug 01 16:13	26° $\text{Z}$ 31'42		10222 Jul 11 07:17	0° $\text{Z}$
	10221 Aug 03 09:32	0° $\text{np}$	asc. node	10222 Jul 14 17:09	6° $\text{Z}$ 39'06
evening max el	10221 Aug 19 00:45	25° $\text{np}$ 00'06 19°46'54	evening rise	10222 Jul 16 14:53	10° $\text{Z}$ 22'55
	10221 Aug 28 22:23	0° $\text{Z}$		10222 Jul 27 11:55	0° $\text{np}$
retrograde	10221 Aug 29 02:41	0° $\text{Z}$ 00'05	evening max el	10222 Aug 01 21:45	6° $\text{np}$ 50'55 18°52'14
	10221 Aug 29 07:00	30° $\text{Knp}$	retrograde	10222 Aug 10 09:50	11° $\text{np}$ 05'13
evening set	10221 Aug 30 23:33	29° $\text{np}$ 50'33	evening set	10222 Aug 12 08:03	10° $\text{np}$ 53'00
desc. node	10221 Aug 30 19:11	29° $\text{np}$ 52'18	desc. node	10222 Aug 17 16:24	8° $\text{np}$ 30'45
inferior conj	10221 Sep 08 21:09	25° $\text{np}$ 48'42 -2°46'48	inferior conj	10222 Aug 20 12:48	6° $\text{np}$ 34'08 -0°53'00
minimum elong	10221 Sep 08 13:42	26° $\text{np}$ 00'11 2°44'09	minimum elong	10222 Aug 20 10:34	6° $\text{np}$ 38'07 0°52'21
min. Earth dist.	10221 Sep 10 23:29	24° $\text{np}$ 31'14 0.55236 AU	min. Earth dist.	10222 Aug 23 13:59	4° $\text{np}$ 24'06 0.56690 AU
morning rise	10221 Sep 17 02:03	21° $\text{np}$ 29'02	morning rise	10222 Aug 28 09:48	1° $\text{np}$ 37'22
direct	10221 Sep 21 20:15	20° $\text{np}$ 39'12	direct	10222 Sep 02 23:03	0° $\text{np}$ 23'37
morning max el	10221 Oct 05 15:39	27° $\text{np}$ 29'56 24°37'00	morning max el	10222 Sep 17 05:14	7° $\text{np}$ 45'45 26°13'12
	10221 Oct 08 02:47	0° $\text{Z}$		10222 Oct 03 18:51	0° $\text{Z}$
asc. node	10221 Oct 23 20:37	23° $\text{Z}$ 23'12	asc. node	10222 Oct 10 17:29	12° $\text{Z}$ 44'05
	10221 Oct 27 06:25	0° $\text{ML}$	morning set	10222 Oct 15 15:58	22° $\text{Z}$ 53'21
morning set	10221 Oct 31 05:08	8° $\text{ML}$ 11'59		10222 Oct 18 22:34	0° $\text{ML}$
superior conj	10221 Nov 07 01:26	23° $\text{ML}$ 08'02 1°39'17	superior conj	10222 Oct 22 12:25	7° $\text{ML}$ 55'29 1°33'16
minimum elong	10221 Nov 07 00:50	23° $\text{ML}$ 04'48 1°39'36	minimum elong	10222 Oct 22 10:54	7° $\text{ML}$ 47'05 1°33'24
max. Earth dist.	10221 Nov 08 23:55	27° $\text{ML}$ 21'17 1.32519 AU	max. Earth dist.	10222 Oct 23 06:58	9° $\text{ML}$ 38'16 1.31758 AU
	10221 Nov 10 05:23	0° $\text{X}$	evening rise	10222 Oct 29 11:07	23° $\text{ML}$ 01'12
evening rise	10221 Nov 14 09:09	8° $\text{X}$ 42'26		10222 Nov 01 20:57	0° $\text{X}$
	10221 Nov 25 18:41	0° $\text{Z}$	desc. node	10222 Nov 13 14:18	21° $\text{X}$ 00'09
desc. node	10221 Nov 26 17:10	1° $\text{Z}$ 34'25		10222 Nov 19 16:03	0° $\text{Z}$
evening max el	10221 Dec 17 17:21	29° $\text{Z}$ 35'13 27°30'36	evening max el	10222 Nov 30 00:55	12° $\text{Z}$ 08'07 27°16'55
	10221 Dec 18 03:54	0° $\approx$	retrograde	10222 Dec 13 21:54	19° $\text{Z}$ 21'22
retrograde	10221 Dec 31 11:04	6° $\approx$ 54'44	evening set	10222 Dec 20 22:01	17° $\text{Z}$ 08'23
evening set	10222 Jan 07 11:00	4° $\approx$ 26'51	min. Earth dist.	10222 Dec 24 15:25	14° $\text{Z}$ 21'33 0.61252 AU
min. Earth dist.	10222 Jan 11 04:59	1° $\approx$ 16'13 0.63272 AU	inferior conj	10222 Dec 27 17:15	11° $\text{Z}$ 39'33 -3°11'13
	10222 Jan 12 11:58	30° $\text{KZ}$	minimum elong	10222 Dec 27 23:35	11° $\text{Z}$ 25'35 3°08'30
inferior conj	10222 Jan 13 22:25	28° $\text{Z}$ 33'35 -1°56'46	morning rise	10223 Jan 04 03:42	6° $\text{Z}$ 43'53
minimum elong	10222 Jan 14 02:12	28° $\text{Z}$ 24'08 1°54'49	direct	10223 Jan 06 07:57	6° $\text{Z}$ 24'08
asc. node	10222 Jan 19 20:06	23° $\text{Z}$ 44'39	asc. node	10223 Jan 06 17:13	6° $\text{Z}$ 24'46

morning max el	10223 Jan 13 09:33	9°  57'31	17°54'01	morning rise	10223 Dec 17 18:22	19°  36'21	
	10223 Jan 26 13:51	0° 		direct	10223 Dec 19 22:06	19°  20'03	
morning set	10223 Jan 29 01:03	4°  28'32		asc. node	10223 Dec 24 14:17	20°  41'21	
				morning max el	10223 Dec 27 20:13	23°  13'32	18°20'22
superior conj	10223 Feb 08 14:38	23°  21'26	0°07'19		10224 Jan 02 05:45	0° 	
minimum elong	10223 Feb 08 15:18	23°  24'18	0°07'32	morning set	10224 Jan 12 15:47	18°  26'59	
behind sun begin	10223 Feb 08 07:55	22°  52'19			10224 Jan 18 17:54	0° 	
behind sun end	10223 Feb 08 22:41	23°  56'14					
desc. node	10223 Feb 09 13:46	25°  01'13		superior conj	10224 Jan 21 21:28	5°  49'43	0°41'45
	10223 Feb 12 12:01	0° 		minimum elong	10224 Jan 22 00:13	6°  02'20	0°41'44
max. Earth dist.	10223 Feb 16 01:25	5°  54'51	1.42859 AU	desc. node	10224 Jan 27 10:38	15°  43'59	
evening rise	10223 Feb 22 09:26	16°  05'38		max. Earth dist.	10224 Jan 29 10:53	19°  12'02	1.40862 AU
	10223 Mar 03 11:09	0° 		evening rise	10224 Feb 02 23:57	26°  48'40	
	10223 Mar 25 18:42	0° 			10224 Feb 04 22:58	0° 	
evening max el	10223 Mar 26 15:00	0°  52'25	22°03'00		10224 Feb 25 03:27	0° 	
asc. node	10223 Apr 04 15:28	6°  26'02		evening max el	10224 Mar 08 06:22	14°  38'16	23°22'55
retrograde	10223 Apr 05 01:10	6°  26'50		retrograde	10224 Mar 18 20:21	20°  53'26	
evening set	10223 Apr 09 15:05	4°  34'19		asc. node	10224 Mar 21 12:41	20°  18'54	
	10223 Apr 13 15:50	30°  R 		evening set	10224 Mar 23 21:44	18°  46'42	
inferior conj	10223 Apr 14 22:25	28°  Y14'17	2°46'31	inferior conj	10224 Mar 29 07:23	12°  Y19'43	2°16'06
minimum elong	10223 Apr 14 20:27	28°  Y21'10	2°45'55	minimum elong	10224 Mar 29 05:11	12°  Y27'18	2°15'24
min. Earth dist.	10223 Apr 14 21:59	28°  Y15'47	0.68587 AU	min. Earth dist.	10224 Mar 28 18:49	13°  Y02'58	0.68535 AU
morning rise	10223 Apr 20 01:39	22°  Y02'38		morning rise	10224 Apr 03 12:35	6°  Y13'57	
direct	10223 Apr 24 21:41	19°  Y58'57		direct	10224 Apr 07 19:10	4°  Y31'58	
morning max el	10223 May 04 10:53	25°  Y35'42	22°19'14	morning max el	10224 Apr 16 03:36	9°  Y19'23	20°56'41
	10223 May 08 10:49	0° 		desc. node	10224 Apr 24 11:18	19°  Y17'54	
desc. node	10223 May 08 14:27	0°  810'49			10224 May 02 02:05	0° 	
	10223 May 29 20:22	0° 		morning set	10224 May 16 10:43	21°  842'19	
morning set	10223 Jun 06 21:47	12°  II43'41			10224 May 21 16:31	0°  II	
max. Earth dist.	10223 Jun 12 01:25	21°  II14'38	1.40920 AU	max. Earth dist.	10224 May 24 05:41	4°  II06'50	1.42957 AU
	10223 Jun 17 03:45	0° 					
superior conj	10223 Jun 19 20:11	4°  54'58	-1°36'29	superior conj	10224 May 31 05:49	15°  II43'45	-2°01'07
minimum elong	10223 Jun 20 02:19	5°  512'24	1°36'12	minimum elong	10224 May 31 11:31	16°  II07'52	2°01'11
evening rise	10223 Jun 30 03:20	23°  543'02		evening rise	10224 Jun 08 11:30	0° 	
asc. node	10223 Jul 01 14:08	26°  525'40		asc. node	10224 Jun 12 01:18	6°  521'26	
	10223 Jul 03 12:21	0° 			10224 Jun 17 11:08	15°  556'35	
evening max el	10223 Jul 16 04:12	19°  021'18	18°18'39	evening max el	10224 Jun 26 13:09	0° 	
retrograde	10223 Jul 23 12:11	23°  02'50		retrograde	10224 Jun 28 16:07	2°  021'32	18°04'57
evening set	10223 Jul 25 17:00	22°  043'38		evening set	10224 Jul 05 07:13	5°  045'19	
inferior conj	10223 Aug 02 02:18	18°  004'34	0°44'15	inferior conj	10224 Jul 07 19:56	5°  015'36	
minimum elong	10223 Aug 02 03:46	18°  001'28	0°43'22	minimum elong	10224 Jul 14 11:54	0°  016'43	1°55'50
desc. node	10223 Aug 04 13:37	16°  000'06			10224 Jul 14 14:41	0°  009'57	1°54'35
min. Earth dist.	10223 Aug 05 11:02	15°  016'44	0.58706 AU	min. Earth dist.	10224 Jul 14 18:47	30°  R 	
morning rise	10223 Aug 09 11:06	12°  032'32		morning rise	10224 Jul 17 16:07	27°  513'30	0.60967 AU
direct	10223 Aug 15 16:11	10°  049'09		desc. node	10224 Jul 21 06:48	24°  519'23	
morning max el	10223 Aug 30 01:21	18°  034'25	27°22'16	direct	10224 Jul 21 10:48	24°  512'52	
	10223 Sep 08 16:11	0° 		morning max el	10224 Jul 27 21:41	22°  507'15	
	10223 Sep 26 09:44	0° 			10224 Aug 11 04:13	0°  006'20	27°54'44
asc. node	10223 Sep 27 14:21	2°  024'33			10224 Aug 11 01:40	0°  0	
morning set	10223 Sep 30 00:09	7°  024'33		morning set	10224 Sep 01 18:02	0° 	
max. Earth dist.	10223 Oct 06 16:28	21°  059'11	1.31472 AU	asc. node	10224 Sep 13 03:44	21°  039'27	
					10224 Sep 13 11:10	22°  018'00	
superior conj	10223 Oct 07 00:14	22°  042'23	1°21'42	max. Earth dist.	10224 Sep 17 02:12	0° 	
minimum elong	10223 Oct 06 22:09	22°  030'44	1°21'36		10224 Sep 19 00:39	4°  013'15	1.31677 AU
	10223 Oct 10 07:04	0° 		superior conj	10224 Sep 20 10:58	7°  022'19	1°04'54
evening rise	10223 Oct 13 18:20	7°  032'44		minimum elong	10224 Sep 20 08:44	7°  009'59	1°04'33
	10223 Oct 25 08:29	0° 		evening rise	10224 Sep 27 04:38	22°  010'19	
desc. node	10223 Oct 31 11:29	9°  045'28			10224 Sep 30 22:17	0° 	
evening max el	10223 Nov 12 01:43	23°  052'51	26°29'05	desc. node	10224 Oct 17 08:42	27°  033'50	
	10223 Nov 21 00:39	0° 			10224 Oct 19 07:46	0° 	
retrograde	10223 Nov 26 00:00	0°  59'26		evening max el	10224 Oct 23 18:24	4°  046'22	25°10'41
	10223 Nov 30 21:22	30°  R 		retrograde	10224 Nov 06 15:17	11°  044'53	
evening set	10223 Dec 02 15:09	29°  011'17		evening set	10224 Nov 12 09:33	10°  029'30	
min. Earth dist.	10223 Dec 06 15:18	26°  036'04	0.59133 AU	min. Earth dist.	10224 Nov 17 06:22	7°  048'34	0.57143 AU
inferior conj	10223 Dec 09 19:33	24°  010'10	-4°23'32	inferior conj	10224 Nov 20 02:12	5°  055'40	-5°21'05
minimum elong	10223 Dec 10 03:26	23°  055'01	4°20'54	minimum elong	10224 Nov 20 08:26	5°  045'15	5°19'43

morning rise	10224 Nov 28 09:37	1° $\text{♊}$ 44'04		morning rise	10225 Nov 08 23:07	12° $\text{♍}$ 59'12	
direct	10224 Nov 30 18:20	1° $\text{♊}$ 27'47		direct	10225 Nov 11 19:33	12° $\text{♍}$ 39'12	
morning max el	10224 Dec 09 21:39	5° $\text{♊}$ 51'00	19°08'04	morning max el	10225 Nov 22 10:29	17° $\text{♍}$ 40'26	20°18'30
asc. node	10224 Dec 10 11:19	6° $\text{♊}$ 24'48		asc. node	10225 Nov 27 08:17	23° $\text{♍}$ 20'15	
	10224 Dec 25 05:28	0° $\text{♊}$			10225 Dec 01 17:34	0° $\text{♊}$	
morning set	10224 Dec 26 15:50	2° $\text{♊}$ 49'36		morning set	10225 Dec 10 22:02	17° $\text{♊}$ 27'33	
					10225 Dec 17 00:19	0° $\text{♊}$	
superior conj	10225 Jan 03 22:11	19° $\text{♊}$ 07'27	1°08'00	superior conj	10225 Dec 18 12:09	3° $\text{♊}$ 01'53	1°26'03
minimum elong	10225 Jan 04 01:17	19° $\text{♊}$ 22'24	1°08'03	minimum elong	10225 Dec 18 14:34	3° $\text{♊}$ 14'03	1°26'17
	10225 Jan 09 17:24	0° $\text{♊}$			10225 Dec 18 14:34	3° $\text{♊}$ 14'03	1°26'17
max. Earth dist.	10225 Jan 10 16:56	1° $\text{♊}$ 46'31	1.38671 AU	max. Earth dist.	10225 Dec 24 00:05	13° $\text{♊}$ 50'38	1.36533 AU
desc. node	10225 Jan 13 07:32	6° $\text{♊}$ 24'21		evening rise	10225 Dec 27 19:49	20° $\text{♊}$ 58'43	
evening rise	10225 Jan 14 12:00	8° $\text{♊}$ 28'09		desc. node	10225 Dec 31 04:28	26° $\text{♊}$ 58'37	
	10225 Jan 27 20:31	0° $\text{♊}$			10226 Jan 01 22:25	0° $\text{♊}$	
evening max el	10225 Feb 18 20:01	28° $\text{♊}$ 27'09	24°42'11		10226 Jan 21 19:14	0° $\text{♊}$	
	10225 Feb 20 11:11	0° $\text{♊}$		evening max el	10226 Feb 01 09:26	12° $\text{♊}$ 16'21	25°53'35
retrograde	10225 Mar 02 11:41	5° $\text{♊}$ 15'05		retrograde	10226 Feb 13 22:10	19° $\text{♊}$ 25'56	
evening set	10225 Mar 08 01:11	2° $\text{♊}$ 55'55		evening set	10226 Feb 19 23:50	16° $\text{♊}$ 57'11	
asc. node	10225 Mar 08 09:54	2° $\text{♊}$ 36'49		asc. node	10226 Feb 23 07:06	13° $\text{♊}$ 33'45	
	10225 Mar 10 20:38	30° $\text{♊}$		min. Earth dist.	10226 Feb 24 06:17	12° $\text{♊}$ 23'17	0.67186 AU
min. Earth dist.	10225 Mar 12 14:21	27° $\text{♊}$ 47'08	0.68061 AU	inferior conj	10226 Feb 25 18:22	10° $\text{♊}$ 29'55	0°47'46
inferior conj	10225 Mar 13 14:40	26° $\text{♊}$ 26'17	1°36'28	minimum elong	10226 Feb 25 17:12	10° $\text{♊}$ 33'35	0°47'30
minimum elong	10225 Mar 13 12:43	26° $\text{♊}$ 32'48	1°35'51	morning rise	10226 Mar 03 11:09	4° $\text{♊}$ 40'40	
morning rise	10225 Mar 19 00:24	20° $\text{♊}$ 27'49		direct	10226 Mar 06 17:37	3° $\text{♊}$ 39'34	
direct	10225 Mar 22 18:20	19° $\text{♊}$ 07'15		morning max el	10226 Mar 13 11:35	7° $\text{♊}$ 19'28	18°51'39
morning max el	10225 Mar 30 03:47	23° $\text{♊}$ 14'43	19°46'32	desc. node	10226 Mar 29 04:53	28° $\text{♊}$ 59'07	
	10225 Apr 04 22:05	0° $\text{♊}$			10226 Mar 29 20:40	0° $\text{♊}$	
desc. node	10225 Apr 11 08:07	8° $\text{♊}$ 56'57		morning set	10226 Apr 04 17:34	9° $\text{♊}$ 07'10	
greatest brilliancy	10225 Apr 12 00:51	9° $\text{♊}$ 57'57	-0.6m		10226 Apr 18 02:46	0° $\text{♊}$	
morning set	10225 Apr 25 09:34	0° $\text{♊}$ 07'49		max. Earth dist.	10226 Apr 19 10:23	2° $\text{♊}$ 03'49	1.45436 AU
	10225 Apr 25 07:32	0° $\text{♊}$					
max. Earth dist.	10225 May 06 17:11	17° $\text{♊}$ 48'04	1.44520 AU	superior conj	10226 Apr 21 03:56	4° $\text{♊}$ 46'50	-2°05'28
				minimum elong	10226 Apr 20 21:38	4° $\text{♊}$ 22'05	2°05'23
superior conj	10225 May 11 15:11	25° $\text{♊}$ 40'24	-2°12'44	evening rise	10226 May 06 07:21	28° $\text{♊}$ 54'20	
minimum elong	10225 May 11 16:14	25° $\text{♊}$ 44'35	2°13'05		10226 May 06 23:35	0° $\text{♊}$	
	10225 May 14 07:07	0° $\text{♊}$		asc. node	10226 May 22 05:16	23° $\text{♊}$ 46'38	
evening rise	10225 May 25 03:58	18° $\text{♊}$ 07'37		evening max el	10226 May 26 18:28	29° $\text{♊}$ 15'21	18°33'25
	10225 Jun 01 04:45	0° $\text{♊}$			10226 May 27 13:11	0° $\text{♊}$	
asc. node	10225 Jun 04 08:11	5° $\text{♊}$ 06'12		retrograde	10226 Jun 02 06:26	2° $\text{♊}$ 47'09	
evening max el	10225 Jun 12 05:55	15° $\text{♊}$ 42'28	18°10'07	evening set	10226 Jun 05 10:52	1° $\text{♊}$ 49'53	
retrograde	10225 Jun 18 14:42	19° $\text{♊}$ 03'17			10226 Jun 07 19:00	30° $\text{♊}$	
evening set	10225 Jun 21 11:17	18° $\text{♊}$ 20'33		inferior conj	10226 Jun 11 03:41	26° $\text{♊}$ 15'37	3°08'48
inferior conj	10225 Jun 27 13:43	13° $\text{♊}$ 03'11	2°42'37	minimum elong	10226 Jun 11 05:07	26° $\text{♊}$ 11'15	3°08'10
minimum elong	10225 Jun 27 16:12	12° $\text{♊}$ 56'23	2°41'39	min. Earth dist.	10226 Jun 13 05:26	23° $\text{♊}$ 45'55	0.65114 AU
min. Earth dist.	10225 Jun 30 06:12	10° $\text{♊}$ 07'41	0.63174 AU	morning rise	10226 Jun 16 22:30	19° $\text{♊}$ 56'38	
morning rise	10225 Jul 03 19:29	6° $\text{♊}$ 51'04		direct	10226 Jun 23 11:52	17° $\text{♊}$ 13'15	
desc. node	10225 Jul 08 07:55	4° $\text{♊}$ 33'52		desc. node	10226 Jun 25 05:00	17° $\text{♊}$ 23'12	
direct	10225 Jul 10 12:51	4° $\text{♊}$ 17'53		morning max el	10226 Jul 06 22:28	25° $\text{♊}$ 08'07	27°09'07
morning max el	10225 Jul 24 12:05	12° $\text{♊}$ 20'33	27°48'58		10226 Jul 11 08:40	0° $\text{♊}$	
	10225 Aug 07 13:18	0° $\text{♊}$			10226 Aug 01 00:59	0° $\text{♊}$	
	10225 Aug 25 05:11	0° $\text{♊}$		morning set	10226 Aug 11 11:57	18° $\text{♊}$ 55'28	
morning set	10225 Aug 28 00:36	5° $\text{♊}$ 32'24		max. Earth dist.	10226 Aug 15 22:20	27° $\text{♊}$ 44'06	1.33586 AU
asc. node	10225 Aug 31 08:00	12° $\text{♊}$ 19'48			10226 Aug 17 00:51	0° $\text{♊}$	
max. Earth dist.	10225 Sep 02 03:44	16° $\text{♊}$ 10'42	1.32381 AU	asc. node	10226 Aug 18 04:51	2° $\text{♊}$ 25'05	
superior conj	10225 Sep 04 18:48	21° $\text{♊}$ 49'58	0°43'07	superior conj	10226 Aug 19 21:33	5° $\text{♊}$ 58'33	0°16'45
minimum elong	10225 Sep 04 16:57	21° $\text{♊}$ 39'59	0°42'39	minimum elong	10226 Aug 19 20:42	5° $\text{♊}$ 54'07	0°16'21
	10225 Sep 08 12:38	0° $\text{♊}$		evening rise	10226 Aug 27 02:54	21° $\text{♊}$ 21'48	
evening rise	10225 Sep 11 16:07	6° $\text{♊}$ 48'44			10226 Aug 31 07:32	0° $\text{♊}$	
	10225 Sep 23 17:54	0° $\text{♊}$		evening max el	10226 Sep 16 18:52	25° $\text{♊}$ 12'31	21°54'12
desc. node	10225 Oct 04 05:54	14° $\text{♊}$ 03'34		desc. node	10226 Sep 21 03:09	28° $\text{♊}$ 46'19	
evening max el	10225 Oct 05 05:33	15° $\text{♊}$ 02'33	23°33'22		10226 Sep 23 06:53	0° $\text{♊}$	
retrograde	10225 Oct 18 17:31	21° $\text{♊}$ 46'37		retrograde	10226 Sep 29 08:36	1° $\text{♊}$ 27'48	
evening set	10225 Oct 23 03:38	21° $\text{♊}$ 04'05		evening set	10226 Oct 02 08:04	1° $\text{♊}$ 07'56	
min. Earth dist.	10225 Oct 29 15:39	17° $\text{♊}$ 59'07	0.55575 AU		10226 Oct 05 19:25	30° $\text{♊}$	
inferior conj	10225 Oct 31 12:40	16° $\text{♊}$ 52'34	-5°44'20	inferior conj	10226 Oct 11 08:07	27° $\text{♊}$ 09'33	-5°14'24
minimum elong	10225 Oct 31 12:27	16° $\text{♊}$ 52'53	5°44'01	minimum elong	10226 Oct 11 00:14	27° $\text{♊}$ 20'34	5°12'51

min. Earth dist.	10226 Oct 10 22:47	27° $\Omega$ 22'36	0.54715 AU	evening max el	10227 Aug 29 19:00	5° $\Omega$ 51'31	20°27'44
morning rise	10226 Oct 19 17:45	23° $\Omega$ 22'05		desc. node	10227 Sep 08 00:24	11° $\Omega$ 12'25	
direct	10226 Oct 23 06:23	22° $\Omega$ 54'49		retrograde	10227 Sep 09 20:55	11° $\Omega$ 21'22	
morning max el	10226 Nov 04 09:54	28° $\Omega$ 39'33	21°50'17	evening set	10227 Sep 11 22:07	11° $\Omega$ 10'53	
	10226 Nov 05 18:32	0° $\mathbb{M}$		inferior conj	10227 Sep 21 01:00	7° $\Omega$ 13'52	-3°50'24
asc. node	10226 Nov 14 05:12	11° $\mathbb{M}$ 12'05		minimum elong	10227 Sep 20 15:28	7° $\Omega$ 27'44	3°47'23
	10226 Nov 24 06:15	0° $\mathbb{X}$		min. Earth dist.	10227 Sep 22 07:26	6° $\Omega$ 29'35	0.54769 AU
morning set	10226 Nov 25 07:56	2° $\mathbb{X}$ 13'54		morning rise	10227 Sep 29 08:18	3° $\Omega$ 11'09	
				direct	10227 Oct 03 14:59	2° $\Omega$ 31'49	
superior conj	10226 Dec 02 11:34	17° $\mathbb{X}$ 22'22	1°36'29	morning max el	10227 Oct 16 23:49	9° $\Omega$ 00'33	23°35'45
minimum elong	10226 Dec 02 12:50	17° $\mathbb{X}$ 29'03	1°36'52	asc. node	10227 Nov 01 02:07	29° $\Omega$ 46'50	
max. Earth dist.	10226 Dec 06 12:52	25° $\mathbb{X}$ 44'10	1.34650 AU		10227 Nov 01 05:03	0° $\mathbb{M}$	
	10226 Dec 08 16:08	0° $\mathbb{Z}$		morning set	10227 Nov 09 19:32	17° $\mathbb{M}$ 02'25	
evening rise	10226 Dec 10 19:52	4° $\mathbb{Z}$ 11'21			10227 Nov 15 19:18	0° $\mathbb{X}$	
desc. node	10226 Dec 18 01:27	17° $\mathbb{Z}$ 22'31					
	10226 Dec 25 18:25	0° $\approx$		superior conj	10227 Nov 16 17:21	1° $\mathbb{X}$ 59'23	1°40'04
evening max el	10227 Jan 14 22:55	25° $\approx$ 58'58	26°49'48	minimum elong	10227 Nov 16 17:24	1° $\mathbb{X}$ 59'42	1°40'28
	10227 Jan 19 16:41	0° $\mathbb{X}$		max. Earth dist.	10227 Nov 19 09:26	7° $\mathbb{X}$ 42'43	1.33161 AU
retrograde	10227 Jan 28 03:06	3° $\mathbb{X}$ 19'33		evening rise	10227 Nov 24 08:26	17° $\mathbb{X}$ 56'25	
evening set	10227 Feb 03 15:51	0° $\mathbb{X}$ 45'31			10227 Nov 30 16:02	0° $\mathbb{Z}$	
	10227 Feb 04 13:23	30° $\mathbb{R}$ $\approx$		desc. node	10227 Dec 04 22:29	7° $\mathbb{Z}$ 30'00	
min. Earth dist.	10227 Feb 07 16:25	26° $\approx$ 46'00	0.65930 AU		10227 Dec 20 02:04	0° $\approx$	
inferior conj	10227 Feb 09 16:23	24° $\approx$ 26'23	-0°09'49	evening max el	10227 Dec 28 11:34	9° $\approx$ 24'01	27°23'44
minimum elong	10227 Feb 09 16:39	24° $\approx$ 25'37	0°09'24	retrograde	10228 Jan 11 01:53	16° $\approx$ 46'41	
transit middle	10227 Feb 09 16:39	24° $\approx$ 25'37	0°09'24	evening set	10228 Jan 17 22:59	14° $\approx$ 13'57	
transit begin	10227 Feb 09 14:15	24° $\approx$ 32'36		min. Earth dist.	10228 Jan 21 18:43	10° $\approx$ 46'44	0.64325 AU
transit end	10227 Feb 09 19:02	24° $\approx$ 18'38		inferior conj	10228 Jan 24 06:13	8° $\approx$ 09'11	-1°15'42
asc. node	10227 Feb 10 04:16	23° $\approx$ 51'50		minimum elong	10228 Jan 24 08:34	8° $\approx$ 02'57	1°14'20
morning rise	10227 Feb 15 18:36	18° $\approx$ 48'34		asc. node	10228 Jan 28 01:26	4° $\approx$ 29'03	
direct	10227 Feb 18 15:02	18° $\approx$ 03'53		morning rise	10228 Jan 30 20:00	2° $\approx$ 45'23	
morning max el	10227 Feb 25 01:26	21° $\approx$ 28'44	18°13'14	direct	10228 Feb 02 08:08	2° $\approx$ 13'26	
	10227 Mar 03 19:24	0° $\mathbb{X}$		morning max el	10228 Feb 08 18:33	5° $\approx$ 34'16	17°51'43
morning set	10227 Mar 16 03:57	19° $\mathbb{X}$ 27'28			10228 Feb 25 02:02	0° $\mathbb{X}$	
desc. node	10227 Mar 16 01:39	19° $\mathbb{X}$ 18'15		morning set	10228 Feb 25 19:00	1° $\mathbb{X}$ 11'30	
	10227 Mar 22 17:45	0° $\mathbb{Y}$		desc. node	10228 Mar 01 22:25	9° $\mathbb{X}$ 48'49	
superior conj	10227 Mar 31 10:06	13° $\mathbb{Y}$ 42'56	-1°38'28	superior conj	10228 Mar 10 04:10	23° $\mathbb{X}$ 17'40	-0°58'35
minimum elong	10227 Mar 31 00:34	13° $\mathbb{Y}$ 05'32	1°37'37	minimum elong	10228 Mar 09 21:44	22° $\mathbb{X}$ 51'46	0°57'37
max. Earth dist.	10227 Apr 02 06:17	16° $\mathbb{Y}$ 35'57	1.45617 AU		10228 Mar 14 09:03	0° $\mathbb{Y}$	
	10227 Apr 10 20:24	0° $\mathbb{B}$		max. Earth dist.	10228 Mar 15 01:29	1° $\mathbb{Y}$ 04'57	1.45055 AU
evening rise	10227 Apr 16 11:47	8° $\mathbb{B}$ 47'22		evening rise	10228 Mar 26 01:09	18° $\mathbb{Y}$ 09'40	
greatest brilliancy	10227 Apr 28 00:55	26° $\mathbb{B}$ 39'16	-0.7m		10228 Apr 02 19:58	0° $\mathbb{B}$	
	10227 Apr 30 06:25	0° $\mathbb{I}$		greatest brilliancy	10228 Apr 10 00:46	10° $\mathbb{B}$ 41'05	-0.6m
asc. node	10227 May 09 02:24	11° $\mathbb{I}$ 48'42		evening max el	10228 Apr 22 07:05	26° $\mathbb{B}$ 35'58	20°10'14
evening max el	10227 May 10 03:23	12° $\mathbb{I}$ 54'32	19°13'58	asc. node	10228 Apr 24 23:35	29° $\mathbb{B}$ 00'02	
retrograde	10227 May 17 03:00	16° $\mathbb{I}$ 49'55			10228 Apr 26 11:23	0° $\mathbb{I}$	
evening set	10227 May 20 15:38	15° $\mathbb{I}$ 37'24		retrograde	10228 Apr 30 01:36	1° $\mathbb{I}$ 05'21	
inferior conj	10227 May 26 02:19	9° $\mathbb{I}$ 47'52	3°18'28		10228 May 03 10:19	30° $\mathbb{R}$ $\mathbb{B}$	
minimum elong	10227 May 26 02:33	9° $\mathbb{I}$ 47'07	3°18'02	evening set	10228 May 03 23:12	29° $\mathbb{B}$ 37'19	
min. Earth dist.	10227 May 27 12:59	7° $\mathbb{I}$ 55'34	0.66663 AU	inferior conj	10228 May 09 06:43	23° $\mathbb{B}$ 34'19	3°14'45
morning rise	10227 May 31 13:01	3° $\mathbb{I}$ 27'20		minimum elong	10228 May 09 05:53	23° $\mathbb{B}$ 37'12	3°14'20
direct	10227 Jun 06 17:41	0° $\mathbb{I}$ 44'42		min. Earth dist.	10228 May 10 03:03	22° $\mathbb{B}$ 25'13	0.67766 AU
desc. node	10227 Jun 12 02:01	2° $\mathbb{I}$ 21'51		morning rise	10228 May 14 12:16	17° $\mathbb{B}$ 15'38	
morning max el	10227 Jun 19 09:10	8° $\mathbb{I}$ 18'01	26°02'51	direct	10228 May 20 05:20	14° $\mathbb{B}$ 43'02	
	10227 Jul 06 08:13	0° $\mathbb{O}$		desc. node	10228 May 28 22:58	18° $\mathbb{B}$ 59'38	
	10227 Jul 24 12:33	0° $\Omega$		morning max el	10228 May 31 18:53	21° $\mathbb{B}$ 39'23	24°39'51
morning set	10227 Jul 25 10:16	1° $\Omega$ 39'52			10228 Jun 08 00:46	0° $\mathbb{I}$	
max. Earth dist.	10227 Jul 29 06:25	8° $\Omega$ 55'12	1.35270 AU		10228 Jun 28 14:20	0° $\mathbb{O}$	
				morning set	10228 Jul 06 15:05	13° $\mathbb{O}$ 34'11	
superior conj	10227 Aug 03 16:44	19° $\Omega$ 41'43	-0°13'28	max. Earth dist.	10228 Jul 10 05:36	20° $\mathbb{O}$ 01'19	1.37342 AU
minimum elong	10227 Aug 03 17:32	19° $\Omega$ 45'49	0°13'39		10228 Jul 15 13:36	0° $\Omega$	
behind sun begin	10227 Aug 03 14:18	19° $\Omega$ 29'19					
behind sun end	10227 Aug 03 20:47	20° $\Omega$ 02'19		superior conj	10228 Jul 17 01:15	2° $\Omega$ 52'03	-0°46'08
asc. node	10227 Aug 05 01:43	22° $\Omega$ 30'14		minimum elong	10228 Jul 17 04:14	3° $\Omega$ 06'34	0°46'00
	10227 Aug 08 16:38	0° $\mathbb{P}$		asc. node	10228 Jul 21 22:39	12° $\Omega$ 31'46	
evening rise	10227 Aug 11 10:56	5° $\mathbb{P}$ 43'52		evening rise	10228 Jul 25 13:53	19° $\Omega$ 48'48	
	10227 Aug 24 21:36	0° $\Omega$			10228 Jul 30 19:12	0° $\mathbb{P}$	

evening max el	10228 Aug 11 09:01	17° $\mathbb{M}$ 17'04	19°21'05	evening rise	10229 Jul 09 08:39	3° $\Omega$ 27'41	
retrograde	10228 Aug 20 18:14	21° $\mathbb{M}$ 56'33		evening max el	10229 Jul 25 10:38	29° $\Omega$ 26'25	18°35'33
evening set	10228 Aug 22 14:23	21° $\mathbb{M}$ 46'35			10229 Jul 26 00:41	0° $\mathbb{M}$	
desc. node	10228 Aug 24 21:39	21° $\mathbb{M}$ 08'02		retrograde	10229 Aug 02 09:13	3° $\mathbb{M}$ 24'34	
inferior conj	10228 Aug 31 05:39	17° $\mathbb{M}$ 38'38	-1°57'48	evening set	10229 Aug 04 10:03	3° $\mathbb{M}$ 09'48	
minimum elong	10228 Aug 31 00:24	17° $\mathbb{M}$ 47'13	1°55'55		10229 Aug 10 13:06	30° $\mathbb{R}$ $\Omega$	
min. Earth dist.	10228 Sep 02 19:45	15° $\mathbb{M}$ 57'23	0.55760 AU	desc. node	10229 Aug 11 18:53	29° $\Omega$ 04'53	
morning rise	10228 Sep 08 07:44	13° $\mathbb{M}$ 03'21		inferior conj	10229 Aug 12 06:30	28° $\Omega$ 42'47	-0°08'54
direct	10228 Sep 13 10:05	12° $\mathbb{M}$ 04'10		minimum elong	10229 Aug 12 06:08	28° $\Omega$ 43'28	0°09'03
morning max el	10228 Sep 27 11:35	19° $\mathbb{M}$ 10'16	25°20'14	transit middle	10229 Aug 12 06:08	28° $\Omega$ 43'28	0°09'03
	10228 Oct 06 14:45	0° $\Omega$		transit begin	10229 Aug 12 03:08	28° $\Omega$ 49'12	
asc. node	10228 Oct 17 23:00	18° $\Omega$ 53'50		transit end	10229 Aug 12 09:08	28° $\Omega$ 37'45	
	10228 Oct 23 10:48	0° $\mathbb{M}$		min. Earth dist.	10229 Aug 15 12:50	26° $\Omega$ 14'13	0.57498 AU
morning set	10228 Oct 24 07:10	1° $\mathbb{M}$ 48'17		morning rise	10229 Aug 19 22:44	23° $\Omega$ 30'24	
				direct	10229 Aug 25 19:36	22° $\Omega$ 04'06	
superior conj	10228 Oct 31 03:06	16° $\mathbb{M}$ 45'43	1°37'26	morning max el	10229 Sep 09 03:27	29° $\Omega$ 37'08	26°46'30
minimum elong	10228 Oct 31 02:05	16° $\mathbb{M}$ 40'07	1°37'42		10229 Sep 09 12:47	0° $\mathbb{M}$	
max. Earth dist.	10228 Nov 01 13:17	19° $\mathbb{M}$ 53'34	1.32133 AU		10229 Sep 30 11:08	0° $\Omega$	
	10228 Nov 06 06:12	0° $\mathbb{M}$		asc. node	10229 Oct 04 19:51	8° $\Omega$ 23'50	
evening rise	10228 Nov 07 06:24	2° $\mathbb{M}$ 05'53		morning set	10229 Oct 08 17:04	16° $\Omega$ 25'48	
desc. node	10228 Nov 20 19:37	27° $\mathbb{M}$ 14'00			10229 Oct 14 21:49	0° $\mathbb{M}$	
	10228 Nov 22 12:52	0° $\mathbb{M}$					
evening max el	10228 Dec 09 21:48	22° $\mathbb{M}$ 20'16	27°28'53	superior conj	10229 Oct 15 14:41	1° $\mathbb{M}$ 33'45	1°29'02
retrograde	10228 Dec 23 17:39	29° $\mathbb{M}$ 38'10		minimum elong	10229 Oct 15 12:52	1° $\mathbb{M}$ 23'42	1°29'04
evening set	10228 Dec 30 18:23	27° $\mathbb{M}$ 15'24		max. Earth dist.	10229 Oct 15 21:46	2° $\mathbb{M}$ 13'10	1.31582 AU
min. Earth dist.	10229 Jan 03 11:29	24° $\mathbb{M}$ 15'51	0.62433 AU	evening rise	10229 Oct 22 10:54	16° $\mathbb{M}$ 31'11	
inferior conj	10229 Jan 06 08:59	21° $\mathbb{M}$ 31'31	-2°28'05		10229 Oct 29 03:51	0° $\mathbb{M}$	
minimum elong	10229 Jan 06 13:53	21° $\mathbb{M}$ 19'54	2°25'45	desc. node	10229 Nov 07 16:47	16° $\mathbb{M}$ 24'08	
morning rise	10229 Jan 13 11:46	16° $\mathbb{M}$ 24'32			10229 Nov 17 18:16	0° $\mathbb{M}$	
asc. node	10229 Jan 13 22:34	16° $\mathbb{M}$ 16'19		evening max el	10229 Nov 22 03:01	4° $\mathbb{M}$ 34'29	27°00'44
direct	10229 Jan 15 17:56	16° $\mathbb{M}$ 01'26		retrograde	10229 Dec 06 00:57	11° $\mathbb{M}$ 44'27	
morning max el	10229 Jan 22 11:52	19° $\mathbb{M}$ 27'56	17°47'47	evening set	10229 Dec 12 22:20	9° $\mathbb{M}$ 41'17	
	10229 Jan 30 06:15	0° $\approx$		min. Earth dist.	10229 Dec 16 17:35	7° $\mathbb{M}$ 00'49	0.60354 AU
morning set	10229 Feb 07 09:27	14° $\approx$ 02'36		inferior conj	10229 Dec 19 21:14	4° $\mathbb{M}$ 23'54	-3°42'45
desc. node	10229 Feb 16 19:14	0° $\mathbb{M}$ 27'00		minimum elong	10229 Dec 20 04:27	4° $\mathbb{M}$ 08'52	3°39'55
	10229 Feb 16 12:54	0° $\mathbb{M}$			10229 Dec 26 09:59	30° $\mathbb{R}$ $\mathbb{M}$	
				morning rise	10229 Dec 27 13:10	29° $\mathbb{M}$ 36'53	
superior conj	10229 Feb 18 21:35	3° $\mathbb{M}$ 59'57	-0°15'44	direct	10229 Dec 29 16:37	29° $\mathbb{M}$ 19'00	
minimum elong	10229 Feb 18 20:03	3° $\mathbb{M}$ 53'31	0°15'15	asc. node	10229 Dec 31 19:39	29° $\mathbb{M}$ 37'21	
behind sun begin	10229 Feb 18 17:16	3° $\mathbb{M}$ 41'48			10230 Jan 01 20:46	0° $\mathbb{M}$	
behind sun end	10229 Feb 18 22:50	4° $\mathbb{M}$ 05'14		morning max el	10230 Jan 06 01:55	3° $\mathbb{M}$ 00'06	18°02'39
max. Earth dist.	10229 Feb 25 17:56	15° $\mathbb{M}$ 16'21	1.43825 AU	morning set	10230 Jan 21 16:53	27° $\mathbb{M}$ 41'19	
evening rise	10229 Mar 05 14:21	27° $\mathbb{M}$ 40'14			10230 Jan 22 22:46	0° $\approx$	
	10229 Mar 07 02:35	0° $\mathbb{M}$					
	10229 Mar 27 16:05	0° $\mathbb{M}$		superior conj	10230 Jan 31 15:45	15° $\approx$ 52'21	0°22'53
evening max el	10229 Apr 05 05:16	10° $\mathbb{M}$ 18'42	21°19'17	minimum elong	10230 Jan 31 17:34	16° $\approx$ 00'23	0°22'57
asc. node	10229 Apr 11 20:48	15° $\mathbb{M}$ 06'05		desc. node	10230 Feb 03 16:06	21° $\approx$ 09'09	
retrograde	10229 Apr 14 00:02	15° $\mathbb{M}$ 28'32		max. Earth dist.	10230 Feb 08 06:29	28° $\approx$ 57'56	1.42054 AU
evening set	10229 Apr 18 07:39	13° $\mathbb{M}$ 44'59			10230 Feb 08 21:24	0° $\mathbb{M}$	
inferior conj	10229 Apr 23 14:28	7° $\mathbb{M}$ 30'38	2°59'45	evening rise	10230 Feb 13 17:21	7° $\mathbb{M}$ 52'15	
minimum elong	10229 Apr 23 12:49	7° $\mathbb{M}$ 36'24	2°59'13		10230 Feb 28 06:19	0° $\mathbb{M}$	
min. Earth dist.	10229 Apr 23 21:26	7° $\mathbb{M}$ 06'25	0.68417 AU	evening max el	10230 Mar 18 22:45	24° $\mathbb{M}$ 03'40	22°36'46
morning rise	10229 Apr 28 17:45	1° $\mathbb{M}$ 15'55		retrograde	10230 Mar 28 20:40	29° $\mathbb{M}$ 55'25	
	10229 Apr 30 10:42	30° $\mathbb{R}$ $\mathbb{M}$		asc. node	10230 Mar 29 17:59	29° $\mathbb{M}$ 51'34	
direct	10229 May 03 21:42	29° $\mathbb{M}$ 00'15		evening set	10230 Apr 02 15:23	27° $\mathbb{M}$ 56'48	
	10229 May 07 16:08	0° $\mathbb{M}$		inferior conj	10230 Apr 07 23:30	21° $\mathbb{M}$ 33'40	2°34'45
morning max el	10229 May 14 04:39	5° $\mathbb{M}$ 07'13	23°10'06	minimum elong	10230 Apr 07 21:23	21° $\mathbb{M}$ 41'02	2°34'06
desc. node	10229 May 15 19:52	6° $\mathbb{M}$ 50'06		min. Earth dist.	10230 Apr 07 17:54	21° $\mathbb{M}$ 53'08	0.68619 AU
	10229 Jun 02 08:09	0° $\mathbb{M}$		morning rise	10230 Apr 13 03:16	15° $\mathbb{M}$ 24'26	
morning set	10229 Jun 17 20:59	24° $\mathbb{M}$ 23'39		direct	10230 Apr 17 17:39	13° $\mathbb{M}$ 29'39	
	10229 Jun 21 04:29	0° $\mathbb{M}$		morning max el	10230 Apr 26 17:50	18° $\mathbb{M}$ 44'11	21°42'56
max. Earth dist.	10229 Jun 22 02:05	1° $\mathbb{M}$ 33'00	1.39621 AU	desc. node	10230 May 02 16:45	25° $\mathbb{M}$ 33'38	
					10230 May 06 02:26	0° $\mathbb{M}$	
superior conj	10229 Jun 29 19:07	15° $\mathbb{M}$ 19'20	-1°18'56		10230 May 26 11:31	0° $\mathbb{M}$	
minimum elong	10229 Jun 30 00:21	15° $\mathbb{M}$ 43'29	1°18'38	morning set	10230 May 29 00:16	4° $\mathbb{M}$ 00'14	
	10229 Jul 07 13:27	0° $\Omega$		max. Earth dist.	10230 Jun 04 03:00	13° $\mathbb{M}$ 56'16	1.41831 AU
asc. node	10229 Jul 08 19:36	2° $\Omega$ 24'58					

superior conj	10230 Jun 11 17:48	26° $\Pi$ 53'27	-1°48'05	superior conj	10231 May 23 17:05	7° $\Pi$ 25'00	-2°08'02
minimum elong	10230 Jun 12 00:10	27° $\Pi$ 21'12	1°47'55	minimum elong	10231 May 23 21:22	7° $\Pi$ 42'47	2°08'16
	10230 Jun 13 12:18	0° $\mathfrak{E}$		evening rise	10231 Jun 05 05:49	28° $\Pi$ 48'53	
evening rise	10230 Jun 22 15:31	16° $\mathfrak{E}$ 31'33			10231 Jun 05 22:06	0° $\mathfrak{E}$	
asc. node	10230 Jun 25 16:36	22° $\mathfrak{E}$ 05'44		asc. node	10231 Jun 12 13:36	11° $\mathfrak{E}$ 28'15	
	10230 Jun 30 03:46	0° $\Omega$		evening max el	10231 Jun 22 08:55	25° $\mathfrak{E}$ 20'18	18°04'50
evening max el	10230 Jul 08 19:54	12° $\Omega$ 10'57	18°10'27	retrograde	10231 Jun 28 20:10	28° $\mathfrak{E}$ 41'23	
retrograde	10230 Jul 15 19:10	15° $\Omega$ 42'53		evening set	10231 Jul 01 12:12	28° $\mathfrak{E}$ 06'21	
evening set	10230 Jul 18 03:26	15° $\Omega$ 19'27		inferior conj	10231 Jul 07 21:54	22° $\mathfrak{E}$ 59'05	2°18'28
inferior conj	10230 Jul 25 04:55	10° $\Omega$ 31'32	1°17'47	minimum elong	10231 Jul 08 00:42	22° $\mathfrak{E}$ 51'55	2°17'18
minimum elong	10230 Jul 25 07:12	10° $\Omega$ 26'24	1°16'38	min. Earth dist.	10231 Jul 10 21:35	19° $\mathfrak{E}$ 56'43	0.61923 AU
min. Earth dist.	10230 Jul 28 12:48	7° $\Omega$ 34'36	0.59660 AU	morning rise	10231 Jul 14 10:59	16° $\mathfrak{E}$ 54'07	
desc. node	10230 Jul 29 16:03	6° $\Omega$ 38'54		desc. node	10231 Jul 16 13:12	15° $\mathfrak{E}$ 38'56	
morning rise	10230 Aug 01 07:54	4° $\Omega$ 47'44		direct	10231 Jul 21 03:33	14° $\mathfrak{E}$ 32'11	
direct	10230 Aug 07 18:06	2° $\Omega$ 51'48		morning max el	10231 Aug 04 07:52	22° $\mathfrak{E}$ 33'59	27°56'58
morning max el	10230 Aug 22 02:24	10° $\Omega$ 43'02	27°40'49		10231 Aug 10 21:23	0° $\Omega$	
	10230 Sep 06 02:16	0° $\mathfrak{M}$			10231 Aug 30 07:10	0° $\mathfrak{M}$	
asc. node	10230 Sep 21 16:43	28° $\mathfrak{M}$ 10'32		morning set	10231 Sep 07 00:34	14° $\mathfrak{M}$ 57'09	
morning set	10230 Sep 22 23:31	0° $\mathfrak{U}$ 50'34		asc. node	10231 Sep 08 13:34	18° $\mathfrak{M}$ 08'17	
	10230 Sep 22 13:51	0° $\mathfrak{U}$		max. Earth dist.	10231 Sep 12 13:59	26° $\mathfrak{M}$ 42'21	1.31913 AU
max. Earth dist.	10230 Sep 29 07:18	14° $\mathfrak{U}$ 33'08	1.31508 AU				
				superior conj	10231 Sep 14 11:57	0° $\mathfrak{U}$ 53'31	0°56'15
superior conj	10230 Sep 30 02:14	16° $\mathfrak{U}$ 18'11	1°15'13	minimum elong	10231 Sep 14 09:49	0° $\mathfrak{U}$ 41'47	0°55'50
minimum elong	10230 Sep 30 00:01	16° $\mathfrak{U}$ 05'55	1°14'59		10231 Sep 14 02:12	0° $\mathfrak{U}$	
	10230 Oct 06 07:22	0° $\mathfrak{M}$		evening rise	10231 Sep 21 06:41	15° $\mathfrak{U}$ 44'49	
evening rise	10230 Oct 06 19:40	1° $\mathfrak{M}$ 06'07			10231 Sep 28 06:33	0° $\mathfrak{M}$	
	10230 Oct 22 07:57	0° $\mathfrak{J}$		desc. node	10231 Oct 12 11:09	22° $\mathfrak{M}$ 05'48	
desc. node	10230 Oct 25 13:57	4° $\mathfrak{J}$ 47'24		evening max el	10231 Oct 16 14:02	26° $\mathfrak{M}$ 32'00	24°30'37
evening max el	10230 Nov 04 00:31	15° $\mathfrak{J}$ 57'21	25°58'54		10231 Oct 20 18:13	0° $\mathfrak{J}$	
retrograde	10230 Nov 17 22:14	22° $\mathfrak{J}$ 59'50		retrograde	10231 Oct 30 08:11	3° $\mathfrak{J}$ 26'06	
evening set	10230 Nov 24 06:15	21° $\mathfrak{J}$ 25'02		evening set	10231 Nov 04 14:11	2° $\mathfrak{J}$ 24'56	
min. Earth dist.	10230 Nov 28 13:14	18° $\mathfrak{J}$ 49'49	0.58263 AU		10231 Nov 09 09:27	30° $\mathfrak{R}$ $\mathfrak{M}$	
inferior conj	10230 Dec 01 15:26	16° $\mathfrak{J}$ 36'17	-4°50'45	min. Earth dist.	10231 Nov 10 01:06	29° $\mathfrak{M}$ 36'12	0.56406 AU
minimum elong	10230 Dec 01 23:10	16° $\mathfrak{J}$ 22'20	4°48'32	inferior conj	10231 Nov 12 13:20	28° $\mathfrak{M}$ 01'24	-5°36'24
morning rise	10230 Dec 09 18:30	12° $\mathfrak{J}$ 11'53		minimum elong	10231 Nov 12 17:24	27° $\mathfrak{M}$ 54'59	5°35'40
direct	10230 Dec 11 23:48	11° $\mathfrak{J}$ 55'52		morning rise	10231 Nov 20 22:48	23° $\mathfrak{M}$ 58'56	
asc. node	10230 Dec 18 16:42	14° $\mathfrak{J}$ 32'17		direct	10231 Nov 23 11:46	23° $\mathfrak{M}$ 41'33	
morning max el	10230 Dec 20 09:02	16° $\mathfrak{J}$ 00'34	18°37'55	morning max el	10231 Dec 03 05:32	28° $\mathfrak{M}$ 19'30	19°35'16
	10230 Dec 30 04:39	0° $\mathfrak{Z}$			10231 Dec 04 20:32	0° $\mathfrak{J}$	
morning set	10231 Jan 05 12:02	11° $\mathfrak{Z}$ 51'35		asc. node	10231 Dec 05 13:42	0° $\mathfrak{J}$ 48'56	
				morning set	10231 Dec 20 15:04	26° $\mathfrak{J}$ 22'26	
superior conj	10231 Jan 14 06:47	28° $\mathfrak{Z}$ 43'25	0°53'55		10231 Dec 22 10:10	0° $\mathfrak{Z}$	
minimum elong	10231 Jan 14 09:51	28° $\mathfrak{Z}$ 57'48	0°53'54				
	10231 Jan 14 23:12	0° $\approx$		superior conj	10231 Dec 28 13:44	12° $\mathfrak{Z}$ 19'19	1°16'37
max. Earth dist.	10231 Jan 21 14:39	11° $\approx$ 58'41	1.39943 AU	minimum elong	10231 Dec 28 16:38	12° $\mathfrak{Z}$ 33'33	1°16'44
desc. node	10231 Jan 21 12:58	11° $\approx$ 51'20		max. Earth dist.	10232 Jan 03 20:37	24° $\mathfrak{Z}$ 19'05	1.37740 AU
evening rise	10231 Jan 25 17:00	18° $\approx$ 59'23			10232 Jan 06 23:52	0° $\approx$	
	10231 Feb 01 11:38	0° $\mathfrak{H}$		evening rise	10232 Jan 07 13:52	1° $\approx$ 02'05	
	10231 Feb 22 14:15	0° $\mathfrak{Y}$		desc. node	10232 Jan 08 09:53	2° $\approx$ 30'09	
evening max el	10231 Mar 01 13:08	7° $\mathfrak{Y}$ 50'58	23°57'07		10232 Jan 25 16:56	0° $\mathfrak{H}$	
retrograde	10231 Mar 12 14:11	14° $\mathfrak{Y}$ 20'48		evening max el	10232 Feb 12 02:23	21° $\mathfrak{H}$ 40'21	25°13'47
asc. node	10231 Mar 16 15:11	13° $\mathfrak{Y}$ 04'03		retrograde	10232 Feb 24 03:41	28° $\mathfrak{H}$ 39'22	
evening set	10231 Mar 17 20:49	12° $\mathfrak{Y}$ 08'19		evening set	10232 Feb 29 22:27	26° $\mathfrak{H}$ 15'23	
min. Earth dist.	10231 Mar 22 14:18	6° $\mathfrak{Y}$ 39'45	0.68388 AU	asc. node	10232 Mar 02 12:22	24° $\mathfrak{H}$ 44'57	
inferior conj	10231 Mar 23 07:57	5° $\mathfrak{Y}$ 39'48	2°00'22	min. Earth dist.	10232 Mar 05 08:31	21° $\mathfrak{H}$ 21'39	0.67741 AU
minimum elong	10231 Mar 23 05:47	5° $\mathfrak{Y}$ 47'09	1°59'42	inferior conj	10232 Mar 06 13:57	19° $\mathfrak{H}$ 45'55	1°16'55
	10231 Mar 28 03:33	30° $\mathfrak{R}$ $\mathfrak{H}$		minimum elong	10232 Mar 06 12:15	19° $\mathfrak{H}$ 51'27	1°16'25
morning rise	10231 Mar 28 14:47	29° $\mathfrak{H}$ 37'13		morning rise	10232 Mar 12 02:25	13° $\mathfrak{H}$ 51'21	
direct	10231 Apr 01 15:54	28° $\mathfrak{H}$ 04'33		direct	10232 Mar 15 15:14	12° $\mathfrak{H}$ 39'35	
	10231 Apr 06 14:42	0° $\mathfrak{Y}$		morning max el	10232 Mar 22 17:15	16° $\mathfrak{H}$ 33'51	19°21'12
morning max el	10231 Apr 09 13:36	2° $\mathfrak{Y}$ 33'06	20°25'11		10232 Apr 02 05:00	0° $\mathfrak{Y}$	
desc. node	10231 Apr 19 13:34	14° $\mathfrak{Y}$ 55'27		greatest brilliancy	10232 Apr 04 12:30	3° $\mathfrak{Y}$ 24'01	-0.7m
	10231 Apr 29 21:58	0° $\mathfrak{B}$		desc. node	10232 Apr 05 10:22	4° $\mathfrak{Y}$ 45'28	
morning set	10231 May 08 04:51	12° $\mathfrak{B}$ 37'51		morning set	10232 Apr 16 04:35	21° $\mathfrak{Y}$ 09'32	
max. Earth dist.	10231 May 17 10:56	27° $\mathfrak{B}$ 12'37	1.43694 AU		10232 Apr 21 21:39	0° $\mathfrak{B}$	
	10231 May 19 04:26	0° $\Pi$		max. Earth dist.	10232 Apr 29 00:56	11° $\mathfrak{B}$ 09'55	1.44997 AU

superior conj	10232 May 02 16:34	16°♄56'52	-2°12'11	superior conj	10233 Apr 12 00:22	25°♄53'35	-1°56'10
minimum elong	10232 May 02 14:28	16°♄48'34	2°12'27	minimum elong	10233 Apr 11 15:49	25°♄20'12	1°55'45
	10232 May 10 18:50	0°♄		max. Earth dist.	10233 Apr 11 19:02	25°♄32'45	1.45605 AU
evening rise	10232 May 16 22:54	10°♄10'10			10233 Apr 14 15:21	0°♄	
asc. node	10232 May 29 10:38	0°♄26'23		evening rise	10233 Apr 27 16:04	20°♄32'22	
	10232 May 29 03:36	0°♄			10233 May 03 14:58	0°♄	
evening max el	10232 Jun 04 22:25	8°♄46'35	18°17'50	greatest brilliancy	10233 May 06 06:54	4°♄12'08	-0.8m
retrograde	10232 Jun 11 07:39	12°♄10'48		asc. node	10233 May 16 07:44	18°♄52'16	
evening set	10232 Jun 14 07:26	11°♄22'11		evening max el	10233 May 19 09:42	22°♄23'22	18°48'41
inferior conj	10232 Jun 20 05:20	5°♄57'27	2°56'00	retrograde	10233 May 26 01:45	26°♄03'44	
minimum elong	10232 Jun 20 07:25	5°♄51'28	2°55'10	evening set	10233 May 29 09:33	25°♄00'11	
min. Earth dist.	10232 Jun 22 15:46	3°♄10'49	0.64037 AU	inferior conj	10233 Jun 03 23:24	19°♄19'31	3°14'42
	10232 Jun 25 20:56	30°♄		minimum elong	10233 Jun 04 00:19	19°♄16'37	3°14'10
morning rise	10232 Jun 26 06:05	29°♄41'17		min. Earth dist.	10233 Jun 05 18:48	17°♄04'22	0.65827 AU
desc. node	10232 Jul 02 10:18	27°♄03'04		morning rise	10233 Jun 09 14:24	12°♄59'20	
direct	10232 Jul 02 22:20	27°♄02'13		direct	10233 Jun 16 00:38	10°♄14'38	
	10232 Jul 10 19:45	0°♄		desc. node	10233 Jun 19 07:21	10°♄51'16	
morning max el	10232 Jul 16 17:16	5°♄04'09	27°35'49	morning max el	10233 Jun 29 03:53	18°♄02'37	26°43'31
	10232 Aug 04 14:19	0°♄			10233 Jul 09 04:44	0°♄	
morning set	10232 Aug 20 17:45	28°♄38'21			10233 Jul 28 13:17	0°♄	
	10232 Aug 21 10:10	0°♄		morning set	10233 Aug 04 00:03	11°♄46'39	
asc. node	10232 Aug 25 10:23	8°♄11'59		max. Earth dist.	10233 Aug 08 03:35	19°♄51'01	1.34241 AU
max. Earth dist.	10232 Aug 25 13:42	8°♄29'21	1.32822 AU	asc. node	10233 Aug 12 07:15	28°♄18'03	
superior conj	10232 Aug 28 17:52	15°♄13'32	0°32'27	superior conj	10233 Aug 12 17:47	29°♄12'43	0°04'21
minimum elong	10232 Aug 28 16:22	15°♄05'30	0°32'00	minimum elong	10233 Aug 12 17:33	29°♄11'33	0°04'02
evening rise	10232 Sep 04 18:04	0°♄21'12		behind sun begin	10233 Aug 12 11:56	28°♄42'23	
	10232 Sep 04 14:06	0°♄		behind sun end	10233 Aug 12 23:10	29°♄40'47	
	10232 Sep 21 06:49	0°♄			10233 Aug 13 02:52	0°♄	
evening max el	10232 Sep 27 00:49	6°♄40'37	22°50'32	evening rise	10233 Aug 20 03:57	14°♄50'28	
desc. node	10232 Sep 28 08:23	7°♄53'57			10233 Aug 27 19:38	0°♄	
retrograde	10232 Oct 10 05:46	13°♄15'28		evening max el	10233 Sep 08 18:05	17°♄00'12	21°15'24
evening set	10232 Oct 14 00:14	12°♄44'24		desc. node	10233 Sep 15 05:37	21°♄42'11	
min. Earth dist.	10232 Oct 21 09:16	9°♄23'55	0.55096 AU	retrograde	10233 Sep 20 17:57	22°♄57'13	
inferior conj	10232 Oct 22 16:22	8°♄39'22	-5°38'55	evening set	10233 Sep 23 05:39	22°♄42'52	
minimum elong	10232 Oct 22 12:35	8°♄44'47	5°38'21	inferior conj	10233 Oct 02 08:55	18°♄47'09	-4°44'26
morning rise	10232 Oct 31 02:44	4°♄50'36		minimum elong	10233 Oct 01 23:21	19°♄00'35	4°42'01
direct	10232 Nov 03 05:21	4°♄28'10		min. Earth dist.	10233 Oct 02 17:01	18°♄35'46	0.54618 AU
morning max el	10232 Nov 14 12:41	9°♄47'58	20°55'13	morning rise	10233 Oct 10 17:39	14°♄55'31	
asc. node	10232 Nov 21 10:41	18°♄10'24		direct	10233 Oct 14 13:54	14°♄23'40	
	10232 Nov 28 09:59	0°♄		morning max el	10233 Oct 27 07:12	20°♄28'06	22°34'07
morning set	10232 Dec 03 23:06	11°♄04'47			10233 Nov 04 06:20	0°♄	
				asc. node	10233 Nov 08 07:38	6°♄22'04	
superior conj	10232 Dec 11 08:10	26°♄26'28	1°31'20	morning set	10233 Nov 18 09:58	25°♄52'30	
minimum elong	10232 Dec 11 10:07	26°♄36'32	1°31'39		10233 Nov 20 08:29	0°♄	
	10232 Dec 13 02:02	0°♄		superior conj	10233 Nov 25 10:37	10°♄54'48	1°38'47
max. Earth dist.	10232 Dec 16 05:17	6°♄14'43	1.35689 AU	minimum elong	10233 Nov 25 11:22	10°♄58'48	1°39'12
evening rise	10232 Dec 20 05:04	13°♄52'07		max. Earth dist.	10233 Nov 28 21:12	18°♄08'21	1.33967 AU
desc. node	10232 Dec 25 06:50	23°♄00'50		evening rise	10233 Dec 03 10:54	27°♄19'53	
	10232 Dec 29 09:42	0°♄			10233 Dec 04 20:00	0°♄	
	10233 Jan 19 13:12	0°♄		desc. node	10233 Dec 12 03:51	13°♄18'32	
evening max el	10233 Jan 24 15:45	5°♄27'33	26°19'42		10233 Dec 22 16:38	0°♄	
retrograde	10233 Feb 06 12:05	12°♄43'52		evening max el	10234 Jan 07 05:15	19°♄04'53	27°07'25
evening set	10233 Feb 12 18:33	10°♄12'14		retrograde	10234 Jan 20 14:33	26°♄27'01	
min. Earth dist.	10233 Feb 16 22:22	5°♄52'54	0.66696 AU	evening set	10234 Jan 27 07:05	23°♄53'00	
asc. node	10233 Feb 17 09:34	5°♄19'03		min. Earth dist.	10234 Jan 31 05:34	20°♄07'14	0.65288 AU
inferior conj	10233 Feb 18 15:31	3°♄47'21	0°24'26	inferior conj	10234 Feb 02 10:25	17°♄39'05	-0°36'47
minimum elong	10233 Feb 18 14:53	3°♄49'18	0°24'25	minimum elong	10234 Feb 02 11:29	17°♄36'03	0°36'00
	10233 Feb 22 00:05	30°♄		asc. node	10234 Feb 04 06:46	15°♄37'59	
morning rise	10233 Feb 24 12:02	28°♄02'34		morning rise	10234 Feb 08 17:17	12°♄06'33	
direct	10233 Feb 27 13:56	27°♄09'01		direct	10234 Feb 11 09:58	11°♄27'41	
	10233 Mar 05 10:18	0°♄		morning max el	10234 Feb 17 19:25	14°♄49'43	18°01'52
morning max el	10233 Mar 06 03:54	0°♄41'27	18°33'09		10234 Feb 28 18:29	0°♄	
desc. node	10233 Mar 23 07:10	24°♄55'41		morning set	10234 Mar 07 21:35	11°♄37'43	
morning set	10233 Mar 26 22:35	0°♄40'08		desc. node	10234 Mar 10 03:57	15°♄20'21	
	10233 Mar 26 12:24	0°♄			10234 Mar 19 05:45	0°♄	



superior conj	10234 Mar 22 09:29	5° $\Upsilon$ 00'32	-1°22'31	morning set	10235 Feb 17 23:31	23° $\approx$ 53'53	
minimum elong	10234 Mar 22 00:41	4° $\Upsilon$ 25'45	1°21'30		10235 Feb 21 12:54	0° $\text{H}$	
max. Earth dist.	10234 Mar 25 15:00	10° $\Upsilon$ 05'46	1.45471 AU	desc. node	10235 Feb 25 00:45	5° $\text{H}$ 55'12	
	10234 Apr 07 10:26	0° $\text{B}$					
evening rise	10234 Apr 07 12:33	0° $\text{B}$ 08'09		superior conj	10235 Mar 02 12:48	15° $\text{H}$ 02'49	-0°40'15
greatest brilliancy	10234 Apr 20 23:37	20° $\text{B}$ 39'07	-0.7m	minimum elong	10235 Mar 02 08:30	14° $\text{H}$ 45'14	0°39'27
	10234 Apr 27 13:51	0° $\text{II}$		max. Earth dist.	10235 Mar 08 10:02	24° $\text{H}$ 32'22	1.44613 AU
evening max el	10234 May 02 16:39	6° $\text{II}$ 04'27	19°36'12		10235 Mar 11 21:00	0° $\Upsilon$	
asc. node	10234 May 03 04:53	6° $\text{II}$ 34'39		evening rise	10235 Mar 18 00:04	9° $\Upsilon$ 30'27	
retrograde	10234 May 09 23:22	10° $\text{II}$ 12'44			10235 Mar 31 15:45	0° $\text{B}$	
evening set	10234 May 13 15:47	8° $\text{II}$ 53'34		evening max el	10235 Apr 15 18:02	19° $\text{B}$ 47'04	20°38'11
inferior conj	10234 May 19 00:48	2° $\text{II}$ 58'18	3°18'21	asc. node	10235 Apr 20 02:05	23° $\text{B}$ 20'45	
minimum elong	10234 May 19 00:33	2° $\text{II}$ 59'08	3°17'56	retrograde	10235 Apr 23 22:07	24° $\text{B}$ 32'46	
min. Earth dist.	10234 May 20 05:16	1° $\text{II}$ 23'58	0.67194 AU	evening set	10235 Apr 27 23:58	22° $\text{B}$ 57'52	
	10234 May 21 07:20	30° $\text{R}$ $\text{B}$		inferior conj	10235 May 03 06:55	16° $\text{B}$ 49'40	3°09'38
morning rise	10234 May 24 08:59	26° $\text{B}$ 38'29		minimum elong	10235 May 03 05:41	16° $\text{B}$ 53'54	3°09'11
direct	10234 May 30 09:06	23° $\text{B}$ 59'02		min. Earth dist.	10235 May 03 21:20	16° $\text{B}$ 00'00	0.68106 AU
desc. node	10234 Jun 06 04:22	26° $\text{B}$ 35'48		morning rise	10235 May 08 11:11	10° $\text{B}$ 32'41	
	10234 Jun 10 06:21	0° $\text{II}$		direct	10235 May 13 22:45	8° $\text{B}$ 06'54	
morning max el	10234 Jun 11 13:57	1° $\text{II}$ 17'42	25°28'56	desc. node	10235 May 24 01:18	13° $\text{B}$ 47'44	
	10234 Jul 03 05:11	0° $\text{B}$		morning max el	10235 May 24 23:32	14° $\text{B}$ 42'37	24°01'54
morning set	10234 Jul 17 15:28	24° $\text{B}$ 10'56			10235 Jun 06 10:58	0° $\text{II}$	
	10234 Jul 20 19:16	0° $\Omega$			10235 Jun 26 02:59	0° $\text{B}$	
max. Earth dist.	10234 Jul 21 07:22	0° $\Omega$ 56'50	1.36119 AU	morning set	10235 Jun 29 11:07	5° $\text{B}$ 39'02	
				max. Earth dist.	10235 Jul 03 04:57	12° $\text{B}$ 12'00	1.38313 AU
superior conj	10234 Jul 27 08:51	12° $\Omega$ 43'05	-0°27'08				
minimum elong	10234 Jul 27 10:32	12° $\Omega$ 51'28	0°27'10	superior conj	10235 Jul 10 11:37	25° $\text{B}$ 36'12	-1°00'13
asc. node	10234 Jul 30 04:08	18° $\Omega$ 22'11		minimum elong	10235 Jul 10 15:36	25° $\text{B}$ 55'08	0°59'59
evening rise	10234 Aug 04 10:08	29° $\Omega$ 06'06			10235 Jul 12 18:38	0° $\Omega$	
	10234 Aug 04 20:44	0° $\text{H}$		asc. node	10235 Jul 17 01:03	8° $\Omega$ 20'41	
evening max el	10234 Aug 22 00:08	27° $\text{H}$ 57'57	19°56'44	evening rise	10235 Jul 19 10:00	13° $\Omega$ 01'10	
	10234 Aug 24 07:17	0° $\Omega$			10235 Jul 28 13:53	0° $\text{H}$	
retrograde	10234 Sep 01 08:09	3° $\Omega$ 05'36		evening max el	10235 Aug 04 19:24	9° $\text{H}$ 42'17	18°59'00
desc. node	10234 Sep 02 02:52	3° $\Omega$ 03'57		retrograde	10235 Aug 13 12:45	14° $\text{H}$ 02'54	
evening set	10234 Sep 03 05:45	2° $\Omega$ 55'58		evening set	10235 Aug 15 10:09	13° $\text{H}$ 51'26	
	10234 Sep 10 09:58	30° $\text{R}$ $\text{H}$		desc. node	10235 Aug 20 00:06	12° $\text{H}$ 01'12	
inferior conj	10234 Sep 12 05:07	28° $\text{H}$ 55'39	-3°03'58	inferior conj	10235 Aug 23 17:45	9° $\text{H}$ 35'28	-1°09'34
minimum elong	10234 Sep 11 20:59	29° $\text{H}$ 07'59	3°01'08	minimum elong	10235 Aug 23 14:45	9° $\text{H}$ 40'41	1°08'36
min. Earth dist.	10234 Sep 14 02:38	27° $\text{H}$ 46'46	0.55090 AU	min. Earth dist.	10235 Aug 26 16:31	7° $\text{H}$ 32'30	0.56428 AU
morning rise	10234 Sep 20 10:46	24° $\text{H}$ 40'57		morning rise	10235 Aug 31 16:12	4° $\text{H}$ 44'13	
direct	10234 Sep 25 02:01	23° $\text{H}$ 54'06		direct	10235 Sep 06 02:37	3° $\text{H}$ 34'30	
	10234 Oct 08 02:01	0° $\Omega$		morning max el	10235 Sep 20 07:59	10° $\text{H}$ 52'51	26°00'19
morning max el	10234 Oct 08 19:00	0° $\Omega$ 39'08	24°21'26		10235 Oct 04 23:37	0° $\Omega$	
asc. node	10234 Oct 26 04:32	25° $\Omega$ 11'34		asc. node	10235 Oct 13 01:24	14° $\Omega$ 29'15	
	10234 Oct 28 17:08	0° $\text{H}$		morning set	10235 Oct 18 08:51	25° $\Omega$ 23'06	
morning set	10234 Nov 02 21:48	10° $\text{H}$ 40'17			10235 Oct 20 12:07	0° $\text{H}$	
superior conj	10234 Nov 09 18:21	25° $\text{H}$ 36'10	1°39'40	superior conj	10235 Oct 25 05:03	10° $\text{H}$ 23'36	1°34'33
minimum elong	10234 Nov 09 17:55	25° $\text{H}$ 33'50	1°40'02	minimum elong	10235 Oct 25 03:40	10° $\text{H}$ 15'53	1°34'43
	10234 Nov 11 18:57	0° $\text{H}$		max. Earth dist.	10235 Oct 26 03:37	12° $\text{H}$ 28'27	1.31836 AU
max. Earth dist.	10234 Nov 11 21:21	0° $\text{H}$ 12'52	1.32667 AU	evening rise	10235 Nov 01 04:48	25° $\text{H}$ 32'38	
evening rise	10234 Nov 17 03:49	11° $\text{H}$ 16'07			10235 Nov 03 08:44	0° $\text{H}$	
	10234 Nov 27 02:38	0° $\text{B}$		desc. node	10235 Nov 15 22:04	22° $\text{H}$ 48'05	
desc. node	10234 Nov 29 00:56	3° $\text{B}$ 17'08			10235 Nov 20 15:36	0° $\text{B}$	
	10234 Dec 18 09:25	0° $\approx$		evening max el	10235 Dec 03 01:37	14° $\text{B}$ 59'11	27°21'09
evening max el	10234 Dec 20 17:22	2° $\approx$ 20'11	27°29'52	retrograde	10235 Dec 16 22:24	22° $\text{B}$ 13'59	
retrograde	10235 Jan 03 10:12	9° $\approx$ 40'31		evening set	10235 Dec 23 22:57	19° $\text{B}$ 58'02	
evening set	10235 Jan 10 09:38	7° $\approx$ 11'05		min. Earth dist.	10235 Dec 27 16:01	17° $\text{B}$ 08'22	0.61559 AU
min. Earth dist.	10235 Jan 14 04:00	3° $\approx$ 56'25	0.63551 AU	inferior conj	10235 Dec 30 16:57	14° $\text{B}$ 25'09	-2°59'55
inferior conj	10235 Jan 16 19:58	1° $\approx$ 14'45	-1°45'46	minimum elong	10235 Dec 30 22:56	14° $\text{B}$ 11'43	2°57'15
minimum elong	10235 Jan 16 23:22	1° $\approx$ 06'08	1°43'57	morning rise	10236 Jan 07 01:26	9° $\text{B}$ 26'37	
	10235 Jan 18 01:55	30° $\text{R}$ $\text{B}$		direct	10236 Jan 09 06:04	9° $\text{B}$ 06'08	
asc. node	10235 Jan 22 03:56	26° $\text{B}$ 40'41		asc. node	10236 Jan 09 01:04	9° $\text{B}$ 06'19	
morning rise	10235 Jan 23 15:07	25° $\text{B}$ 57'34		morning max el	10236 Jan 16 05:25	12° $\text{B}$ 37'25	17°51'51
direct	10235 Jan 26 00:32	25° $\text{B}$ 29'42			10236 Jan 27 22:41	0° $\approx$	
morning max el	10235 Feb 01 13:02	28° $\text{B}$ 51'33	17°47'52	morning set	10236 Jan 31 21:54	7° $\approx$ 07'21	
	10235 Feb 02 15:10	0° $\approx$					

superior conj	10236 Feb 11 17:04	26° $\approx$ 16'17	0°01'26			10237 Jan 02 04:14	0° $\approx$	
minimum elong	10236 Feb 11 17:13	26° $\approx$ 16'56	0°01'42	morning set		10237 Jan 14 10:48	21° $\approx$ 00'39	
behind sun begin	10236 Feb 11 08:47	25° $\approx$ 40'42				10237 Jan 19 05:01	0° $\approx$	
behind sun end	10236 Feb 12 01:38	26° $\approx$ 53'05						
desc. node	10236 Feb 11 21:34	26° $\approx$ 35'41		superior conj		10237 Jan 23 20:41	8° $\approx$ 35'15	0°37'02
	10236 Feb 13 21:33	0° $\approx$		minimum elong		10237 Jan 23 23:15	8° $\approx$ 46'55	0°37'01
max. Earth dist.	10236 Feb 19 01:05	8° $\approx$ 33'16	1.43123 AU	desc. node		10237 Jan 28 18:26	17° $\approx$ 18'14	
evening rise	10236 Feb 25 17:45	19° $\approx$ 15'27		max. Earth dist.		10237 Jan 31 11:02	21° $\approx$ 55'45	1.41178 AU
	10236 Mar 03 17:31	0° $\approx$		evening rise		10237 Feb 05 05:03	29° $\approx$ 49'47	
	10236 Mar 25 09:02	0° $\approx$				10237 Feb 05 07:33	0° $\approx$	
evening max el	10236 Mar 28 13:55	3° $\approx$ 30'12	21°51'23			10237 Feb 25 05:33	0° $\approx$	
asc. node	10236 Apr 05 23:17	8° $\approx$ 54'44		evening max el		10237 Mar 11 05:44	17° $\approx$ 15'41	23°10'58
retrograde	10236 Apr 06 20:06	8° $\approx$ 58'26		retrograde		10237 Mar 21 15:40	23° $\approx$ 25'05	
evening set	10236 Apr 11 08:19	7° $\approx$ 08'14		asc. node		10237 Mar 23 20:29	23° $\approx$ 01'41	
inferior conj	10236 Apr 16 15:27	0° $\approx$ 49'28	2°50'18	evening set		10237 Mar 26 15:15	21° $\approx$ 20'30	
minimum elong	10236 Apr 16 13:33	0° $\approx$ 56'06	2°49'44	min. Earth dist.		10237 Mar 31 13:43	15° $\approx$ 31'30	0.68569 AU
min. Earth dist.	10236 Apr 16 16:54	0° $\approx$ 44'23	0.68558 AU	inferior conj		10237 Apr 01 00:27	14° $\approx$ 54'24	2°21'18
	10236 Apr 17 05:39	30° $\approx$		minimum elong		10237 Mar 31 22:16	15° $\approx$ 01'58	2°20'38
morning rise	10236 Apr 21 18:36	24° $\approx$ 36'54		morning rise		10237 Apr 06 05:11	8° $\approx$ 47'34	
direct	10236 Apr 26 16:40	22° $\approx$ 30'03		direct		10237 Apr 10 13:47	7° $\approx$ 02'12	
morning max el	10236 May 06 10:30	28° $\approx$ 14'50	22°32'13	morning max el		10237 Apr 19 02:08	11° $\approx$ 56'31	21°08'17
	10236 May 08 02:37	0° $\approx$		desc. node		10237 Apr 26 19:03	21° $\approx$ 04'24	
desc. node	10236 May 09 22:12	2° $\approx$ 03'02				10237 May 03 06:05	0° $\approx$	
	10236 May 30 02:53	0° $\approx$		morning set		10237 May 19 22:22	25° $\approx$ 06'18	
morning set	10236 Jun 09 05:58	15° $\approx$ 58'27				10237 May 23 00:37	0° $\approx$	
max. Earth dist.	10236 Jun 14 02:42	24° $\approx$ 04'07	1.40587 AU	max. Earth dist.		10237 May 27 05:55	6° $\approx$ 48'34	1.42678 AU
	10236 Jun 17 13:33	0° $\approx$						
superior conj	10236 Jun 21 21:52	7° $\approx$ 42'04	-1°32'02	superior conj		10237 Jun 03 11:00	18° $\approx$ 50'29	-1°58'04
minimum elong	10236 Jun 22 03:49	8° $\approx$ 08'54	1°31'45	minimum elong		10237 Jun 03 17:00	19° $\approx$ 16'05	1°58'04
evening rise	10236 Jul 02 00:14	26° $\approx$ 26'51		evening rise		10237 Jun 09 21:02	0° $\approx$	
asc. node	10236 Jul 02 22:01	28° $\approx$ 09'26		asc. node		10237 Jun 15 00:39	9° $\approx$ 12'16	
	10236 Jul 03 21:34	0° $\approx$				10237 Jun 19 19:00	17° $\approx$ 43'09	
evening max el	10236 Jul 18 00:43	22° $\approx$ 08'03	18°22'24	evening max el		10237 Jun 27 07:53	0° $\approx$	
retrograde	10236 Jul 25 12:12	25° $\approx$ 53'28		retrograde		10237 Jul 01 12:05	5° $\approx$ 04'45	18°05'46
evening set	10236 Jul 27 15:53	25° $\approx$ 35'35		evening set		10237 Jul 08 04:54	8° $\approx$ 30'01	
inferior conj	10236 Aug 04 04:02	20° $\approx$ 59'45	0°31'02	inferior conj		10237 Jul 10 16:29	8° $\approx$ 02'00	
minimum elong	10236 Aug 04 05:06	20° $\approx$ 57'33	0°30'19	minimum elong		10237 Jul 17 10:49	3° $\approx$ 06'01	1°46'37
desc. node	10236 Aug 05 21:18	19° $\approx$ 34'52		min. Earth dist.		10237 Jul 17 13:32	2° $\approx$ 59'34	1°45'22
min. Earth dist.	10236 Aug 07 12:37	18° $\approx$ 16'08	0.58381 AU			10237 Jul 20 16:18	0° $\approx$ 03'40	0.60629 AU
morning rise	10236 Aug 11 14:49	15° $\approx$ 32'28		desc. node		10237 Jul 20 17:56	30° $\approx$	
direct	10236 Aug 17 17:56	13° $\approx$ 53'26		morning rise		10237 Jul 23 18:28	27° $\approx$ 34'14	
morning max el	10236 Sep 01 03:01	21° $\approx$ 36'08	27°14'06	direct		10237 Jul 24 07:49	27° $\approx$ 11'56	
	10236 Sep 08 11:32	0° $\approx$				10237 Jul 30 21:48	25° $\approx$ 03'45	
	10236 Sep 26 20:39	0° $\approx$		morning max el		10237 Aug 10 21:14	0° $\approx$	
asc. node	10236 Sep 28 22:15	4° $\approx$ 07'31				10237 Aug 14 04:49	3° $\approx$ 01'01	27°52'20
morning set	10236 Oct 01 17:31	9° $\approx$ 56'28		morning set		10237 Sep 03 00:43	0° $\approx$	
				asc. node		10237 Sep 15 21:54	24° $\approx$ 14'06	
superior conj	10236 Oct 08 16:51	25° $\approx$ 11'23	1°23'50			10237 Sep 15 19:04	23° $\approx$ 59'25	
minimum elong	10236 Oct 08 14:49	25° $\approx$ 00'05	1°23'44	max. Earth dist.		10237 Sep 18 15:22	0° $\approx$	
max. Earth dist.	10236 Oct 08 12:55	24° $\approx$ 49'30	1.31485 AU			10237 Sep 21 21:30	7° $\approx$ 05'14	1.31619 AU
	10236 Oct 10 20:46	0° $\approx$		superior conj		10237 Sep 23 03:51	9° $\approx$ 52'48	1°07'47
evening rise	10236 Oct 15 11:22	10° $\approx$ 03'03		minimum elong		10237 Sep 23 01:36	9° $\approx$ 40'24	1°07'28
	10236 Oct 25 15:31	0° $\approx$		evening rise		10237 Sep 29 21:18	24° $\approx$ 40'14	
desc. node	10236 Nov 01 19:13	11° $\approx$ 40'33				10237 Oct 02 09:49	0° $\approx$	
evening max el	10236 Nov 14 03:33	26° $\approx$ 51'38	26°38'18	desc. node		10237 Oct 19 16:23	29° $\approx$ 38'41	
	10236 Nov 17 20:51	0° $\approx$				10237 Oct 19 22:51	0° $\approx$	
retrograde	10236 Nov 28 01:58	3° $\approx$ 59'18		evening max el		10237 Oct 26 21:29	7° $\approx$ 52'46	25°23'54
evening set	10236 Dec 04 18:59	2° $\approx$ 07'00		retrograde		10237 Nov 09 18:45	14° $\approx$ 52'11	
	10236 Dec 08 01:46	30° $\approx$		evening set		10237 Nov 15 16:57	13° $\approx$ 31'48	
min. Earth dist.	10236 Dec 08 17:29	29° $\approx$ 30'51	0.59447 AU	min. Earth dist.		10237 Nov 20 09:43	10° $\approx$ 52'51	0.57424 AU
inferior conj	10236 Dec 11 21:52	27° $\approx$ 01'30	-4°13'13	inferior conj		10237 Nov 23 07:33	8° $\approx$ 54'16	-5°14'04
minimum elong	10236 Dec 12 05:40	26° $\approx$ 46'13	4°10'29	minimum elong		10237 Nov 23 14:20	8° $\approx$ 42'42	5°12'28
morning rise	10236 Dec 19 19:01	22° $\approx$ 24'13		morning rise		10237 Dec 01 14:00	4° $\approx$ 39'17	
direct	10236 Dec 21 22:25	22° $\approx$ 07'40		direct		10237 Dec 03 21:38	4° $\approx$ 23'10	
asc. node	10236 Dec 25 22:07	23° $\approx$ 08'11		asc. node		10237 Dec 12 19:08	8° $\approx$ 39'18	
morning max el	10236 Dec 29 17:03	25° $\approx$ 57'47	18°15'06	morning max el		10237 Dec 12 20:01	8° $\approx$ 41'25	18°59'31

	10237 Dec 26 16:02	0°♄		morning set	10238 Dec 13 15:08	19°♄56'57	
morning set	10237 Dec 29 09:40	5°♄20'27			10238 Dec 18 12:50	0°♄	
superior conj	10238 Jan 06 18:59	21°♄46'22	1°04'33	superior conj	10238 Dec 21 07:16	5°♄36'24	1°23'48
minimum elong	10238 Jan 06 22:07	22°♄01'21	1°04'35	minimum elong	10238 Dec 21 09:49	5°♄49'13	1°24'01
	10238 Jan 11 04:20	0°♄		max. Earth dist.	10238 Dec 27 00:22	16°♄45'24	1.36838 AU
max. Earth dist.	10238 Jan 13 17:31	4°♄36'52	1.39001 AU	evening rise	10238 Dec 30 18:59	23°♄44'41	
desc. node	10238 Jan 15 15:19	7°♄59'18		desc. node	10239 Jan 02 12:13	28°♄34'53	
evening rise	10238 Jan 17 13:55	11°♄21'08			10239 Jan 03 07:47	0°♄	
	10238 Jan 29 02:39	0°♄			10239 Jan 22 19:28	0°♄	
evening max el	10238 Feb 20 18:03	0°♄		evening max el	10239 Feb 04 08:56	14°♄54'05	25°43'44
retrograde	10238 Feb 21 19:34	1°♄04'39	24°30'46	retrograde	10239 Feb 16 18:47	22°♄01'08	
evening set	10238 Mar 05 07:34	7°♄48'02		evening set	10239 Feb 22 18:44	19°♄33'27	
asc. node	10238 Mar 10 19:16	5°♄30'36		asc. node	10239 Feb 25 14:53	16°♄41'14	
min. Earth dist.	10238 Mar 10 17:40	5°♄33'59		min. Earth dist.	10239 Feb 27 02:05	14°♄54'33	0.67341 AU
	10238 Mar 15 09:32	0°♄16'41	0.68156 AU	inferior conj	10239 Feb 28 12:28	13°♄05'31	0°55'46
	10238 Mar 15 14:32	30°♄		minimum elong	10239 Feb 28 11:08	13°♄09'44	0°55'25
inferior conj	10238 Mar 16 08:06	29°♄01'12	1°43'06	morning rise	10239 Mar 06 04:03	7°♄14'56	
minimum elong	10238 Mar 16 06:04	29°♄08'00	1°42'27	direct	10239 Mar 09 12:09	6°♄11'08	
morning rise	10238 Mar 21 17:00	23°♄01'37		morning max el	10239 Mar 16 07:55	9°♄54'13	18°58'51
direct	10238 Mar 25 12:48	21°♄37'52		greatest brilliancy	10239 Mar 30 00:09	28°♄19'21	-0.8m
morning max el	10238 Apr 02 01:07	25°♄50'18	19°56'08		10239 Mar 31 02:34	0°♄	
	10238 Apr 05 18:39	0°♄		desc. node	10239 Mar 31 12:40	0°♄38'38	
desc. node	10238 Apr 13 15:53	10°♄39'29		morning set	10239 Apr 08 03:12	12°♄23'34	
	10238 Apr 26 14:28	0°♄			10239 Apr 19 10:37	0°♄	
morning set	10238 Apr 28 22:02	3°♄33'16		max. Earth dist.	10239 Apr 22 09:21	4°♄36'58	1.45345 AU
max. Earth dist.	10238 May 09 16:40	20°♄24'38	1.44326 AU				
superior conj	10238 May 14 23:59	28°♄56'31	-2°12'05	superior conj	10239 Apr 24 15:07	8°♄08'17	-2°07'54
minimum elong	10238 May 15 02:01	29°♄04'46	2°12'25	minimum elong	10239 Apr 24 09:50	7°♄47'30	2°07'57
	10238 May 15 15:35	0°♄			10239 May 08 07:13	0°♄	
evening rise	10238 May 28 06:30	21°♄07'12		evening rise	10239 May 09 13:29	2°♄02'59	
	10238 Jun 02 11:27	0°♄		asc. node	10239 May 24 13:06	25°♄42'04	
asc. node	10238 Jun 06 16:01	6°♄56'36			10239 May 27 20:33	0°♄	
evening max el	10238 Jun 15 01:49	18°♄23'16	18°08'08	evening max el	10239 May 29 14:42	1°♄54'44	18°28'48
retrograde	10238 Jun 21 10:52	21°♄43'37		retrograde	10239 Jun 05 01:41	5°♄24'12	
evening set	10238 Jun 24 06:18	21°♄02'52		evening set	10239 Jun 08 04:55	4°♄29'11	
inferior conj	10238 Jun 30 10:29	15°♄47'59	2°36'56		10239 Jun 13 01:39	30°♄	
minimum elong	10238 Jun 30 13:05	15°♄40'59	2°35'54	inferior conj	10239 Jun 13 22:55	28°♄57'15	3°05'57
min. Earth dist.	10238 Jul 03 04:55	12°♄50'12	0.62861 AU	minimum elong	10239 Jun 14 00:32	28°♄52'25	3°05'16
morning rise	10238 Jul 06 18:07	9°♄37'32		min. Earth dist.	10239 Jun 16 02:54	26°♄22'49	0.64847 AU
desc. node	10238 Jul 10 15:36	7°♄33'05		morning rise	10239 Jun 19 19:11	22°♄38'43	
direct	10238 Jul 13 11:31	7°♄07'01		direct	10239 Jun 26 09:24	19°♄56'15	
morning max el	10238 Jul 27 12:06	15°♄09'23	27°52'08	desc. node	10239 Jun 27 12:41	20°♄00'37	
	10238 Aug 08 14:21	0°♄		morning max el	10239 Jul 09 22:27	27°♄53'20	27°16'57
	10238 Aug 26 15:57	0°♄			10239 Jul 11 22:36	0°♄	
morning set	10238 Aug 30 19:55	8°♄10'36			10239 Aug 02 08:20	0°♄	
asc. node	10238 Sep 02 15:54	14°♄00'11		morning set	10239 Aug 14 08:56	21°♄38'59	
max. Earth dist.	10238 Sep 05 01:40	19°♄06'03	1.32247 AU		10239 Aug 18 13:16	0°♄	
				max. Earth dist.	10239 Aug 18 21:49	0°♄43'49	1.33373 AU
				asc. node	10239 Aug 20 12:46	4°♄05'23	
superior conj	10238 Sep 07 12:13	24°♄22'28	0°46'43				
minimum elong	10238 Sep 07 10:17	24°♄11'54	0°46'16	superior conj	10239 Aug 22 15:55	8°♄34'31	0°21'01
	10238 Sep 10 01:57	0°♄		minimum elong	10239 Aug 22 14:53	8°♄29'01	0°20'36
evening rise	10238 Sep 14 08:44	9°♄18'52		evening rise	10239 Aug 29 19:47	23°♄53'21	
	10238 Sep 24 22:16	0°♄			10239 Sep 01 18:10	0°♄	
desc. node	10238 Oct 06 13:35	16°♄21'54		evening max el	10239 Sep 19 21:25	28°♄21'30	22°08'28
evening max el	10238 Oct 08 09:03	18°♄12'46	23°48'21		10239 Sep 21 16:26	0°♄	
retrograde	10238 Oct 21 22:52	24°♄59'39		desc. node	10239 Sep 23 10:49	1°♄23'14	
evening set	10238 Oct 26 14:26	24°♄12'31		retrograde	10239 Oct 02 15:37	4°♄42'40	
min. Earth dist.	10238 Nov 01 19:25	21°♄12'22	0.55771 AU	evening set	10239 Oct 05 19:43	4°♄20'18	
inferior conj	10238 Nov 03 20:51	19°♄58'16	-5°43'55	min. Earth dist.	10239 Oct 14 02:43	0°♄41'54	0.54784 AU
minimum elong	10238 Nov 03 21:52	19°♄56'44	5°43'34	inferior conj	10239 Oct 14 18:00	0°♄20'27	-5°22'47
morning rise	10238 Nov 12 07:14	16°♄02'55		minimum elong	10239 Oct 14 11:02	0°♄30'14	5°21'32
direct	10238 Nov 15 01:38	15°♄43'40			10239 Oct 15 08:35	30°♄	
morning max el	10238 Nov 25 10:52	20°♄38'33	20°06'36	morning rise	10239 Oct 23 03:53	26°♄33'24	
asc. node	10238 Nov 29 16:08	25°♄25'06		direct	10239 Oct 26 13:47	26°♄07'34	
	10238 Dec 02 20:43	0°♄			10239 Nov 05 11:08	0°♄	

morning max el	10239 Nov 07 12:18	1° $\mathbb{M}$ 45'41	21°35'29	inferior conj	10240 Sep 23 10:21	10° $\underline{\mathfrak{A}}$ 24'49	-4°05'48
asc. node	10239 Nov 16 13:07	13° $\mathbb{M}$ 09'51		minimum elong	10240 Sep 23 00:34	10° $\underline{\mathfrak{A}}$ 38'53	4°02'52
	10239 Nov 25 17:52	0° $\mathfrak{A}$		min. Earth dist.	10240 Sep 24 11:13	9° $\underline{\mathfrak{A}}$ 49'03	0.54697 AU
morning set	10239 Nov 28 00:41	4° $\mathfrak{A}$ 43'01		morning rise	10240 Oct 01 18:03	6° $\underline{\mathfrak{A}}$ 25'29	
				direct	10240 Oct 05 21:55	5° $\underline{\mathfrak{A}}$ 48'20	
superior conj	10239 Dec 05 05:34	19° $\mathfrak{A}$ 54'21	1°35'20	morning max el	10240 Oct 19 03:16	12° $\underline{\mathfrak{A}}$ 11'11	23°19'40
minimum elong	10239 Dec 05 07:01	20° $\mathfrak{A}$ 01'58	1°35'43		10240 Nov 01 11:17	0° $\mathbb{M}$	
max. Earth dist.	10239 Dec 09 12:04	28° $\mathfrak{A}$ 39'28	1.34907 AU	asc. node	10240 Nov 02 10:03	1° $\mathbb{M}$ 38'55	
	10239 Dec 10 04:12	0° $\mathfrak{B}$		morning set	10240 Nov 11 12:11	19° $\mathbb{M}$ 31'32	
evening rise	10239 Dec 13 16:55	6° $\mathfrak{B}$ 52'15			10240 Nov 16 08:45	0° $\mathfrak{A}$	
desc. node	10239 Dec 20 09:13	19° $\mathfrak{B}$ 00'54					
	10239 Dec 27 00:23	0° $\approx$		superior conj	10240 Nov 18 10:36	4° $\mathfrak{A}$ 29'34	1°39'56
evening max el	10240 Jan 17 22:20	28° $\approx$ 38'01	26°42'35	minimum elong	10240 Nov 18 10:51	4° $\mathfrak{A}$ 30'50	1°40'20
	10240 Jan 19 09:30	0° $\mathfrak{H}$		max. Earth dist.	10240 Nov 21 07:20	10° $\mathfrak{A}$ 35'56	1.33355 AU
retrograde	10240 Jan 31 00:40	5° $\mathfrak{H}$ 58'00		evening rise	10240 Nov 26 03:54	20° $\mathfrak{A}$ 33'16	
evening set	10240 Feb 06 11:54	3° $\mathfrak{H}$ 24'17			10240 Dec 01 02:04	0° $\mathfrak{B}$	
	10240 Feb 09 23:08	30° $\mathfrak{R}$		desc. node	10240 Dec 06 06:15	9° $\mathfrak{B}$ 11'11	
min. Earth dist.	10240 Feb 10 13:14	29° $\approx$ 19'44	0.66143 AU		10240 Dec 19 23:31	0° $\approx$	
inferior conj	10240 Feb 12 11:29	27° $\approx$ 03'24	-0°00'30	evening max el	10240 Dec 30 11:15	12° $\approx$ 06'35	27°20'19
minimum elong	10240 Feb 12 11:29	27° $\approx$ 03'23	0°00'13	retrograde	10241 Jan 13 00:32	19° $\approx$ 29'34	
transit middle	10240 Feb 12 11:29	27° $\approx$ 03'23	0°00'13	evening set	10241 Jan 19 20:31	16° $\approx$ 56'17	
transit begin	10240 Feb 12 08:33	27° $\approx$ 12'04		min. Earth dist.	10241 Jan 23 16:55	13° $\approx$ 24'18	0.64586 AU
transit end	10240 Feb 12 14:25	26° $\approx$ 54'44		inferior conj	10241 Jan 26 02:44	10° $\approx$ 48'46	-1°05'14
asc. node	10240 Feb 12 12:05	27° $\approx$ 01'37		minimum elong	10241 Jan 26 04:44	10° $\approx$ 43'23	1°04'01
morning rise	10240 Feb 18 12:10	21° $\approx$ 23'48		asc. node	10241 Jan 29 09:17	7° $\approx$ 32'08	
direct	10240 Feb 21 09:56	20° $\approx$ 36'59		morning rise	10241 Feb 01 14:40	5° $\approx$ 22'37	
morning max el	10240 Feb 27 21:03	24° $\approx$ 03'25	18°17'50	direct	10241 Feb 04 03:53	4° $\approx$ 49'02	
	10240 Mar 03 19:54	0° $\mathfrak{H}$		morning max el	10241 Feb 10 13:52	8° $\approx$ 09'58	17°53'45
desc. node	10240 Mar 17 09:28	20° $\mathfrak{H}$ 55'31			10241 Feb 25 10:10	0° $\mathfrak{H}$	
morning set	10240 Mar 18 09:06	22° $\mathfrak{H}$ 30'07		morning set	10241 Feb 27 20:10	4° $\mathfrak{H}$ 02'36	
	10240 Mar 23 01:46	0° $\mathfrak{Y}$		desc. node	10241 Mar 04 06:16	11° $\mathfrak{H}$ 24'40	
superior conj	10240 Apr 02 21:01	17° $\mathfrak{Y}$ 02'25	-1°43'37	superior conj	10241 Mar 13 12:21	26° $\mathfrak{H}$ 28'56	-1°05'02
minimum elong	10240 Apr 02 11:30	16° $\mathfrak{Y}$ 25'10	1°42'51	minimum elong	10241 Mar 13 05:12	26° $\mathfrak{H}$ 00'19	1°04'01
max. Earth dist.	10240 Apr 04 04:42	19° $\mathfrak{Y}$ 06'21	1.45637 AU		10241 Mar 15 17:19	0° $\mathfrak{Y}$	
	10240 Apr 11 04:06	0° $\mathfrak{B}$		max. Earth dist.	10241 Mar 17 23:57	3° $\mathfrak{Y}$ 36'02	1.45184 AU
evening rise	10240 Apr 18 20:58	12° $\mathfrak{B}$ 02'27		evening rise	10241 Mar 29 11:43	21° $\mathfrak{Y}$ 26'54	
greatest brilliancy	10240 Apr 29 17:06	28° $\mathfrak{B}$ 54'35	-0.8m		10241 Apr 04 02:06	0° $\mathfrak{B}$	
	10240 Apr 30 10:16	0° $\mathbb{I}$		greatest brilliancy	10241 Apr 13 09:15	13° $\mathfrak{B}$ 53'47	-0.6m
asc. node	10240 May 10 10:14	13° $\mathbb{I}$ 50'33		evening max el	10241 Apr 25 04:50	29° $\mathfrak{B}$ 14'28	20°01'02
evening max el	10240 May 12 00:15	15° $\mathbb{I}$ 33'00	19°06'56		10241 Apr 25 23:25	0° $\mathbb{I}$	
retrograde	10240 May 18 21:45	19° $\mathbb{I}$ 24'19		asc. node	10241 Apr 27 07:23	1° $\mathbb{I}$ 10'33	
evening set	10240 May 22 09:05	18° $\mathbb{I}$ 14'12		retrograde	10241 May 02 20:08	3° $\mathbb{I}$ 38'08	
inferior conj	10240 May 27 20:29	12° $\mathbb{I}$ 26'53	3°17'53	evening set	10241 May 06 16:21	2° $\mathbb{I}$ 12'28	
minimum elong	10240 May 27 20:54	12° $\mathbb{I}$ 25'34	3°17'26		10241 May 09 00:17	30° $\mathfrak{R}$	
min. Earth dist.	10240 May 29 09:24	10° $\mathbb{I}$ 28'22	0.66456 AU	inferior conj	10241 May 12 00:11	26° $\mathfrak{B}$ 11'32	3°16'02
morning rise	10240 Jun 02 08:11	6° $\mathbb{I}$ 06'13		minimum elong	10241 May 11 23:29	26° $\mathfrak{B}$ 13'53	3°15'38
direct	10240 Jun 08 14:22	3° $\mathbb{I}$ 22'42		min. Earth dist.	10241 May 12 22:37	24° $\mathfrak{B}$ 55'40	0.67629 AU
desc. node	10240 Jun 13 09:45	4° $\mathbb{I}$ 41'24		morning rise	10241 May 17 06:18	19° $\mathfrak{B}$ 52'26	
morning max el	10240 Jun 21 09:13	11° $\mathbb{I}$ 00'41	26°14'02	direct	10241 May 23 01:17	17° $\mathfrak{B}$ 17'43	
	10240 Jul 06 11:30	0° $\mathfrak{E}$		desc. node	10241 May 31 06:45	21° $\mathfrak{B}$ 06'04	
	10240 Jul 24 22:37	0° $\mathfrak{Q}$		morning max el	10241 Jun 03 18:58	24° $\mathfrak{B}$ 20'26	24°52'52
morning set	10240 Jul 27 09:30	4° $\mathfrak{Q}$ 30'13			10241 Jun 08 20:41	0° $\mathbb{I}$	
max. Earth dist.	10240 Jul 31 07:23	11° $\mathfrak{Q}$ 57'13	1.34986 AU		10241 Jun 29 21:44	0° $\mathfrak{E}$	
superior conj	10240 Aug 05 12:27	22° $\mathfrak{Q}$ 22'10	-0°08'41	morning set	10241 Jul 09 17:14	16° $\mathfrak{E}$ 32'48	
minimum elong	10240 Aug 05 12:58	22° $\mathfrak{Q}$ 24'48	0°08'54	max. Earth dist.	10241 Jul 13 07:28	23° $\mathfrak{E}$ 01'50	1.37014 AU
behind sun begin	10240 Aug 05 07:56	21° $\mathfrak{Q}$ 59'07			10241 Jul 17 00:48	0° $\mathfrak{Q}$	
behind sun end	10240 Aug 05 17:59	22° $\mathfrak{Q}$ 50'31		superior conj	10241 Jul 19 22:48	5° $\mathfrak{Q}$ 38'06	-0°41'05
asc. node	10240 Aug 06 09:38	24° $\mathfrak{Q}$ 10'54		minimum elong	10241 Jul 20 01:26	5° $\mathfrak{Q}$ 50'59	0°41'00
	10240 Aug 09 04:57	0° $\mathfrak{M}$		asc. node	10241 Jul 24 06:32	14° $\mathfrak{Q}$ 13'12	
evening rise	10240 Aug 13 04:24	8° $\mathfrak{M}$ 17'38		evening rise	10241 Jul 28 08:16	22° $\mathfrak{Q}$ 25'30	
	10240 Aug 24 19:44	0° $\underline{\mathfrak{A}}$			10241 Aug 01 04:11	0° $\mathfrak{M}$	
evening max el	10240 Aug 31 19:38	8° $\underline{\mathfrak{A}}$ 54'54	20°39'30	evening max el	10241 Aug 14 07:41	20° $\mathfrak{M}$ 13'24	19°29'40
desc. node	10240 Sep 09 08:05	14° $\underline{\mathfrak{A}}$ 11'51		retrograde	10241 Aug 23 22:37	24° $\mathfrak{M}$ 59'45	
retrograde	10240 Sep 12 03:37	14° $\underline{\mathfrak{A}}$ 32'11		evening set	10241 Aug 25 18:47	24° $\mathfrak{M}$ 50'03	
evening set	10240 Sep 14 06:52	14° $\underline{\mathfrak{A}}$ 21'03		desc. node	10241 Aug 27 05:19	24° $\mathfrak{M}$ 29'41	

inferior conj	10241 Sep 03 12:28	20° $\mathbb{M}$ 44'30	-2°15'17	inferior conj	10242 Aug 15 10:01	1° $\mathbb{M}$ 41'39	-0°24'14
minimum elong	10241 Sep 03 06:25	20° $\mathbb{M}$ 54'12	2°13'06	minimum elong	10242 Aug 15 09:02	1° $\mathbb{M}$ 43'29	0°24'06
min. Earth dist.	10241 Sep 05 22:48	19° $\mathbb{M}$ 11'23	0.55563 AU		10242 Aug 17 16:24	30° $\mathbb{R}$ $\mathcal{Q}$	
morning rise	10241 Sep 11 15:37	16° $\mathbb{M}$ 14'48		min. Earth dist.	10242 Aug 18 14:51	29° $\mathcal{Q}$ 19'19	0.57205 AU
direct	10241 Sep 16 15:14	15° $\mathbb{M}$ 18'57		morning rise	10242 Aug 23 04:00	26° $\mathcal{Q}$ 34'45	
morning max el	10241 Sep 30 14:44	22° $\mathbb{M}$ 19'55	25°05'23	direct	10242 Aug 28 22:21	25° $\mathcal{Q}$ 12'55	
	10241 Oct 07 09:42	0° $\underline{\mathcal{A}}$			10242 Sep 09 04:22	0° $\mathbb{M}$	
asc. node	10241 Oct 20 06:57	20° $\underline{\mathcal{A}}$ 41'27		morning max el	10242 Sep 12 05:39	2° $\mathbb{M}$ 42'05	26°35'30
	10241 Oct 24 23:02	0° $\mathbb{M}$			10242 Oct 01 19:11	0° $\underline{\mathcal{A}}$	
morning set	10241 Oct 26 23:53	4° $\mathbb{M}$ 17'37		asc. node	10242 Oct 07 03:47	10° $\underline{\mathcal{A}}$ 08'20	
				morning set	10242 Oct 11 10:07	18° $\underline{\mathcal{A}}$ 56'35	
					10242 Oct 16 11:39	0° $\mathbb{M}$	
superior conj	10241 Nov 02 19:52	19° $\mathbb{M}$ 14'25	1°38'12	superior conj	10242 Oct 18 07:16	4° $\mathbb{M}$ 02'21	1°30'40
minimum elong	10241 Nov 02 19:00	19° $\mathbb{M}$ 09'39	1°38'30	minimum elong	10242 Oct 18 05:33	3° $\mathbb{M}$ 52'51	1°30'44
max. Earth dist.	10241 Nov 04 10:15	22° $\mathbb{M}$ 44'41	1.32259 AU	max. Earth dist.	10242 Oct 18 18:19	5° $\mathbb{M}$ 03'47	1.31634 AU
	10241 Nov 07 19:08	0° $\mathcal{A}$		evening rise	10242 Oct 25 04:16	19° $\mathbb{M}$ 02'28	
evening rise	10241 Nov 10 00:37	4° $\mathcal{A}$ 39'14			10242 Oct 30 14:03	0° $\mathcal{A}$	
desc. node	10241 Nov 23 03:19	28° $\mathcal{A}$ 58'49		desc. node	10242 Nov 10 00:27	18° $\mathcal{A}$ 14'49	
	10241 Nov 23 18:15	0° $\mathcal{B}$			10242 Nov 18 08:57	0° $\mathcal{B}$	
evening max el	10241 Dec 12 22:06	25° $\mathcal{B}$ 08'07	27°30'11	evening max el	10242 Nov 25 04:16	7° $\mathcal{B}$ 29'30	27°07'09
	10241 Dec 19 02:48	0° $\approx$		retrograde	10242 Dec 09 01:50	14° $\mathcal{B}$ 40'25	
retrograde	10241 Dec 26 17:21	2° $\approx$ 26'38		evening set	10242 Dec 16 00:24	12° $\mathcal{B}$ 33'42	
evening set	10242 Jan 02 17:52	0° $\approx$ 01'59		min. Earth dist.	10242 Dec 19 18:52	9° $\mathcal{B}$ 51'16	0.60669 AU
	10242 Jan 02 19:01	30° $\mathbb{R}$ $\mathcal{B}$		inferior conj	10242 Dec 22 22:00	7° $\mathcal{B}$ 12'18	-3°31'37
min. Earth dist.	10242 Jan 06 11:14	26° $\mathcal{B}$ 58'37	0.62729 AU	minimum elong	10242 Dec 23 04:56	6° $\mathcal{B}$ 57'33	3°28'47
inferior conj	10242 Jan 09 07:21	24° $\mathcal{B}$ 14'38	-2°16'53	morning rise	10242 Dec 30 12:02	2° $\mathcal{B}$ 22'09	
minimum elong	10242 Jan 09 11:51	24° $\mathcal{B}$ 03'46	2°14'39	direct	10243 Jan 01 15:43	2° $\mathcal{B}$ 03'39	
morning rise	10242 Jan 16 08:07	19° $\mathcal{B}$ 04'47		asc. node	10243 Jan 03 03:32	2° $\mathcal{B}$ 12'52	
asc. node	10242 Jan 16 06:26	19° $\mathcal{B}$ 06'17		morning max el	10243 Jan 08 22:05	5° $\mathcal{B}$ 41'48	17°59'13
direct	10242 Jan 18 15:01	18° $\mathcal{B}$ 40'34			10243 Jan 24 08:54	0° $\approx$	
morning max el	10242 Jan 25 07:19	22° $\mathcal{B}$ 05'40	17°47'11	morning set	10243 Jan 24 12:52	0° $\approx$ 18'17	
	10242 Jan 31 10:03	0° $\approx$					
morning set	10242 Feb 10 07:35	16° $\approx$ 45'12		superior conj	10243 Feb 03 16:42	18° $\approx$ 43'20	0°17'28
	10242 Feb 17 22:27	0° $\mathcal{H}$		minimum elong	10243 Feb 03 18:09	18° $\approx$ 49'41	0°17'34
desc. node	10242 Feb 19 03:03	2° $\mathcal{H}$ 01'52		desc. node	10243 Feb 05 23:52	22° $\approx$ 43'41	
					10243 Feb 10 06:37	0° $\mathcal{H}$	
superior conj	10242 Feb 22 01:59	7° $\mathcal{H}$ 00'21	-0°22'03	max. Earth dist.	10243 Feb 11 06:39	1° $\mathcal{H}$ 40'03	1.42346 AU
minimum elong	10242 Feb 21 23:46	6° $\mathcal{H}$ 51'07	0°21'30	evening rise	10243 Feb 17 00:22	10° $\mathcal{H}$ 58'57	
max. Earth dist.	10242 Feb 28 17:12	17° $\mathcal{H}$ 51'58	1.44049 AU		10243 Mar 01 11:16	0° $\mathcal{Y}$	
	10242 Mar 08 09:59	0° $\mathcal{Y}$		evening max el	10243 Mar 21 21:53	26° $\mathcal{Y}$ 41'38	22°24'48
evening rise	10242 Mar 08 23:58	0° $\mathcal{Y}$ 54'03			10243 Mar 25 15:36	0° $\mathcal{B}$	
	10242 Mar 28 17:02	0° $\mathcal{B}$		retrograde	10243 Mar 31 15:36	2° $\mathcal{B}$ 27'12	
evening max el	10242 Apr 08 03:49	12° $\mathcal{B}$ 57'01	21°08'22	asc. node	10243 Apr 01 01:46	2° $\mathcal{B}$ 26'19	
asc. node	10242 Apr 14 04:34	17° $\mathcal{B}$ 27'25		evening set	10243 Apr 05 08:39	0° $\mathcal{B}$ 30'38	
retrograde	10242 Apr 16 18:37	18° $\mathcal{B}$ 00'18			10243 Apr 05 22:28	30° $\mathbb{R}$ $\mathcal{Y}$	
evening set	10242 Apr 21 00:44	16° $\mathcal{B}$ 18'59		inferior conj	10243 Apr 10 16:29	24° $\mathcal{Y}$ 08'32	2°39'09
inferior conj	10242 Apr 26 07:31	10° $\mathcal{B}$ 06'13	3°02'40	minimum elong	10243 Apr 10 14:24	24° $\mathcal{Y}$ 15'46	2°38'31
minimum elong	10242 Apr 26 05:58	10° $\mathcal{B}$ 11'37	3°02'10	min. Earth dist.	10243 Apr 10 12:40	24° $\mathcal{Y}$ 21'49	0.68624 AU
min. Earth dist.	10242 Apr 26 16:24	9° $\mathcal{B}$ 35'24	0.68352 AU	morning rise	10243 Apr 15 20:00	17° $\mathcal{Y}$ 58'28	
morning rise	10242 May 01 10:58	3° $\mathcal{B}$ 50'58		direct	10243 Apr 20 12:22	16° $\mathcal{Y}$ 00'35	
direct	10242 May 06 16:58	1° $\mathcal{B}$ 32'27		morning max el	10243 Apr 29 16:59	21° $\mathcal{Y}$ 22'33	21°55'24
morning max el	10242 May 17 04:29	7° $\mathcal{B}$ 46'53	23°23'30	desc. node	10243 May 05 00:32	27° $\mathcal{Y}$ 23'23	
desc. node	10242 May 18 03:40	8° $\mathcal{B}$ 46'47			10243 May 07 02:00	0° $\mathcal{B}$	
	10242 Jun 03 12:37	0° $\mathbb{I}$			10243 May 27 18:51	0° $\mathbb{I}$	
morning set	10242 Jun 21 02:44	27° $\mathbb{I}$ 31'57		morning set	10243 Jun 01 09:59	7° $\mathbb{I}$ 19'02	
	10242 Jun 22 13:44	0° $\mathcal{E}$		max. Earth dist.	10243 Jun 07 04:02	16° $\mathbb{I}$ 43'01	1.41522 AU
max. Earth dist.	10242 Jun 25 03:57	4° $\mathcal{E}$ 27'52	1.39282 AU				
				superior conj	10243 Jun 14 20:48	29° $\mathbb{I}$ 54'02	-1°44'08
superior conj	10242 Jul 02 19:02	18° $\mathcal{E}$ 11'58	-1°14'06	minimum elong	10243 Jun 15 03:08	0° $\mathcal{E}$ 21'55	1°43'55
minimum elong	10242 Jul 02 23:58	18° $\mathcal{E}$ 34'52	1°13'48		10243 Jun 14 22:09	0° $\mathcal{E}$	
	10242 Jul 09 00:13	0° $\mathcal{Q}$		evening rise	10243 Jun 25 13:16	19° $\mathcal{E}$ 17'45	
asc. node	10242 Jul 11 03:26	4° $\mathcal{Q}$ 07'36		asc. node	10243 Jun 28 00:23	23° $\mathcal{E}$ 50'08	
evening rise	10242 Jul 12 04:24	6° $\mathcal{Q}$ 08'22			10243 Jul 01 10:18	0° $\mathcal{Q}$	
	10242 Jul 26 06:22	0° $\mathbb{M}$		evening max el	10243 Jul 11 16:01	14° $\mathcal{Q}$ 55'21	18°12'55
evening max el	10242 Jul 28 07:44	2° $\mathbb{M}$ 16'11	18°41'00	retrograde	10243 Jul 18 18:07	18° $\mathcal{Q}$ 30'25	
retrograde	10242 Aug 05 10:46	6° $\mathbb{M}$ 19'38		evening set	10243 Jul 21 01:10	18° $\mathcal{Q}$ 08'32	
evening set	10242 Aug 07 10:39	6° $\mathbb{M}$ 05'49					
desc. node	10242 Aug 14 02:33	2° $\mathbb{M}$ 39'28					

inferior conj	10243 Jul 28 05:18	13°♎23'36	1°06'23	minimum elong	10244 Jul 09 22:37	25°♊38'57	2°09'39
minimum elong	10243 Jul 28 07:21	13°♎19'07	1°05'18	min. Earth dist.	10244 Jul 12 21:11	22°♊42'51	0.61588 AU
min. Earth dist.	10243 Jul 31 13:41	10°♎29'25	0.59321 AU	morning rise	10244 Jul 16 10:53	19°♊43'27	
desc. node	10243 Jul 31 23:45	10°♎08'50		desc. node	10244 Jul 17 20:54	18°♊50'40	
morning rise	10243 Aug 04 10:20	7°♎43'42		direct	10244 Jul 23 02:58	17°♊24'46	
direct	10243 Aug 10 18:50	5°♎52'11		morning max el	10244 Aug 06 08:16	25°♊26'05	27°57'02
morning max el	10243 Aug 25 03:35	13°♎41'26	27°35'12		10244 Aug 10 13:08	0°♎	
	10243 Sep 07 04:13	0°♎			10244 Aug 30 16:00	0°♎	
asc. node	10243 Sep 24 00:36	29°♎52'41		morning set	10244 Sep 08 19:12	17°♎33'11	
	10243 Sep 24 02:02	0°♎		asc. node	10244 Sep 09 21:25	19°♎48'52	
morning set	10243 Sep 25 17:12	3°♎23'32		max. Earth dist.	10244 Sep 14 11:13	29°♎35'26	1.31817 AU
max. Earth dist.	10243 Oct 02 03:57	17°♎24'28	1.31483 AU		10244 Sep 14 15:44	0°♎	
superior conj	10243 Oct 02 18:54	18°♏47'31	1°17'39	superior conj	10244 Sep 16 05:02	3°♏24'33	0°59'27
minimum elong	10243 Oct 02 16:44	18°♏35'25	1°17'28	minimum elong	10244 Sep 16 02:51	3°♏12'32	0°59'04
	10243 Oct 07 20:30	0°♏		evening rise	10244 Sep 22 23:18	18°♏14'26	
evening rise	10243 Oct 09 12:29	3°♏36'08			10244 Sep 28 16:08	0°♏	
	10243 Oct 23 10:52	0°♏		desc. node	10244 Oct 13 18:49	24°♏15'49	
desc. node	10243 Oct 27 21:37	6°♏46'17		evening max el	10244 Oct 18 17:24	29°♏40'28	24°45'00
evening max el	10243 Nov 07 02:55	18°♏59'52	26°10'06		10244 Oct 19 01:40	0°♏	
retrograde	10243 Nov 21 00:48	26°♏03'46		retrograde	10244 Nov 01 12:44	6°♏36'27	
evening set	10243 Nov 27 11:38	24°♏24'04		evening set	10244 Nov 06 23:16	5°♏30'17	
min. Earth dist.	10243 Dec 01 15:51	21°♏49'18	0.58564 AU	min. Earth dist.	10244 Nov 12 04:47	2°♏44'40	0.56654 AU
inferior conj	10243 Dec 04 19:05	19°♏31'03	-4°41'28	inferior conj	10244 Nov 14 20:01	1°♏03'13	-5°31'50
minimum elong	10243 Dec 05 02:57	19°♏16'33	4°39'05	minimum elong	10244 Nov 15 00:58	0°♏55'15	5°30'52
morning rise	10243 Dec 12 20:46	15°♏03'24			10244 Nov 16 11:56	30°♏	
direct	10243 Dec 15 01:24	14°♏47'21		morning rise	10244 Nov 23 04:55	26°♏57'41	
asc. node	10243 Dec 21 00:36	16°♏54'14		direct	10244 Nov 25 16:11	26°♏40'49	
morning max el	10243 Dec 23 06:31	18°♏47'50	18°31'19		10244 Dec 03 19:47	0°♏	
	10243 Dec 31 11:06	0°♏		morning max el	10244 Dec 05 04:51	1°♏13'26	19°25'16
morning set	10244 Jan 08 06:32	14°♏24'26		asc. node	10244 Dec 06 21:37	2°♏59'16	
	10244 Jan 16 10:20	0°♏		morning set	10244 Dec 22 08:35	28°♏52'22	
					10244 Dec 22 22:04	0°♏	
superior conj	10244 Jan 17 04:56	1°♏26'35	0°49'43	superior conj	10244 Dec 30 09:48	14°♏56'14	1°13'40
minimum elong	10244 Jan 17 07:56	1°♏40'28	0°49'42	minimum elong	10244 Dec 30 12:48	15°♏10'49	1°13'47
desc. node	10244 Jan 23 20:43	13°♏25'54		max. Earth dist.	10245 Jan 05 21:01	27°♏10'46	1.38065 AU
max. Earth dist.	10244 Jan 24 15:16	14°♏46'31	1.40268 AU		10245 Jan 07 10:21	0°♏	
evening rise	10244 Jan 28 20:45	21°♏57'19		evening rise	10245 Jan 09 14:35	3°♏51'50	
	10244 Feb 02 19:23	0°♏		desc. node	10245 Jan 09 17:37	4°♏05'07	
	10244 Feb 23 12:17	0°♏			10245 Jan 25 21:23	0°♏	
evening max el	10244 Mar 03 12:33	10°♏28'14	23°45'08	evening max el	10245 Feb 14 01:51	24°♏17'03	25°02'55
retrograde	10244 Mar 14 09:46	16°♏53'10			10245 Feb 21 11:30	0°♏	
asc. node	10244 Mar 17 22:59	15°♏53'22		retrograde	10245 Feb 25 23:58	1°♏12'38	
evening set	10244 Mar 19 14:33	14°♏42'34			10245 Mar 02 02:34	30°♏	
min. Earth dist.	10244 Mar 24 09:14	9°♏08'44	0.68451 AU	evening set	10245 Mar 03 16:53	28°♏50'17	
inferior conj	10244 Mar 25 01:08	8°♏14'26	2°06'13	asc. node	10245 Mar 04 20:13	27°♏46'47	
minimum elong	10244 Mar 24 22:57	8°♏21'54	2°05'31	min. Earth dist.	10245 Mar 08 04:00	23°♏51'13	0.67860 AU
morning rise	10244 Mar 30 07:21	2°♏10'45		inferior conj	10245 Mar 09 07:38	22°♏20'32	1°24'07
direct	10244 Apr 03 10:21	0°♏34'52		minimum elong	10245 Mar 09 05:50	22°♏26'28	1°23'34
morning max el	10244 Apr 11 11:42	5°♏09'49	20°35'55	morning rise	10245 Mar 14 19:05	16°♏24'32	
desc. node	10244 Apr 20 21:22	16°♏40'09		direct	10245 Mar 18 09:39	15°♏09'47	
	10244 Apr 30 03:39	0°♏		morning max el	10245 Mar 25 14:09	19°♏08'30	19°29'43
morning set	10244 May 10 17:14	16°♏03'26			10245 Apr 03 07:37	0°♏	
max. Earth dist.	10244 May 19 10:46	29°♏51'31	1.43448 AU	greatest brilliancy	10245 Apr 07 07:01	5°♏44'54	-0.7m
	10244 May 19 12:52	0°♏		desc. node	10245 Apr 07 18:11	6°♏26'09	
superior conj	10244 May 25 23:46	10°♏35'18	-2°05'53	morning set	10245 Apr 19 16:09	24°♏31'18	
minimum elong	10244 May 26 04:40	10°♏55'44	2°06'03		10245 Apr 23 05:16	0°♏	
	10244 Jun 06 06:58	0°♏		max. Earth dist.	10245 May 01 23:48	13°♏42'52	1.44842 AU
evening rise	10244 Jun 07 06:24	1°♏42'59		superior conj	10245 May 06 02:37	20°♏15'26	-2°12'48
asc. node	10244 Jun 13 21:23	13°♏15'54		minimum elong	10245 May 06 01:41	20°♏11'41	2°13'08
evening max el	10244 Jun 24 04:43	28°♏01'40	18°04'28		10245 May 12 03:17	0°♏	
	10244 Jun 26 13:50	0°♏		evening rise	10245 May 20 02:56	13°♏13'02	
retrograde	10244 Jun 30 17:09	1°♏23'29			10245 May 30 06:49	0°♏	
evening set	10244 Jul 03 07:59	0°♏50'24		asc. node	10245 May 31 18:27	2°♏18'23	
	10244 Jul 04 22:15	30°♏		evening max el	10245 Jun 07 18:25	11°♏26'18	18°14'46
inferior conj	10244 Jul 09 19:48	25°♏46'02	2°10'53				

retrograde	10245 Jun 14 03:20	14°♄49'03		asc. node	10246 May 18 15:35	20°♂49'51	
evening set	10245 Jun 17 01:59	14°♄02'33		evening max el	10246 May 22 06:17	25°♂02'07	18°43'00
inferior conj	10245 Jun 23 01:23	8°♄40'27	2°51'35	retrograde	10246 May 28 20:41	28°♂39'07	
minimum elong	10245 Jun 23 03:38	8°♄34'07	2°50'41	evening set	10246 Jun 01 03:19	27°♂37'45	
min. Earth dist.	10245 Jun 25 14:01	5°♄50'16	0.63742 AU	inferior conj	10246 Jun 06 18:08	21°♂59'20	3°12'49
morning rise	10245 Jun 29 03:50	2°♄25'30		minimum elong	10246 Jun 06 19:15	21°♂55'54	3°12'16
	10245 Jul 03 23:41	30°♄♂		min. Earth dist.	10246 Jun 08 15:47	19°♂38'54	0.65588 AU
desc. node	10245 Jul 04 18:03	29°♂52'16		morning rise	10246 Jun 12 10:26	15°♂39'32	
direct	10245 Jul 05 20:38	29°♂48'11		direct	10246 Jun 18 21:53	12°♂55'03	
	10245 Jul 07 18:58	0°♄		desc. node	10246 Jun 21 15:07	13°♂20'11	
morning max el	10245 Jul 19 17:11	7°♄50'45	27°41'04	morning max el	10246 Jul 02 03:44	20°♂45'33	26°52'55
	10245 Aug 05 18:53	0°♄			10246 Jul 10 02:55	0°♄	
	10245 Aug 22 21:54	0°♄			10246 Jul 29 22:13	0°♄	
morning set	10245 Aug 23 13:43	1°♄18'24		morning set	10246 Aug 06 21:52	14°♄31'52	
asc. node	10245 Aug 27 18:15	9°♄51'42		max. Earth dist.	10246 Aug 11 03:40	22°♄51'00	1.34005 AU
max. Earth dist.	10245 Aug 28 12:07	11°♄25'30	1.32655 AU	asc. node	10246 Aug 14 15:07	29°♄57'29	
					10246 Aug 14 15:36	0°♄	
superior conj	10245 Aug 31 11:40	17°♄47'08	0°36'22	superior conj	10246 Aug 15 12:39	1°♄49'41	0°08'52
minimum elong	10245 Aug 31 10:02	17°♄38'20	0°35'54	minimum elong	10246 Aug 15 12:12	1°♄47'18	0°08'31
	10245 Sep 06 02:51	0°♄		behind sun begin	10246 Aug 15 07:19	1°♄21'49	
evening rise	10245 Sep 07 10:46	2°♄51'19		behind sun end	10246 Aug 15 17:04	2°♄12'49	
	10245 Sep 22 03:14	0°♄		evening rise	10246 Aug 22 21:01	17°♄21'56	
evening max el	10245 Sep 30 04:07	9°♄50'39	23°05'30		10246 Aug 29 03:36	0°♄	
desc. node	10245 Sep 30 16:04	10°♄19'10		evening max el	10246 Sep 11 19:53	20°♄06'03	21°28'37
retrograde	10245 Oct 13 11:54	16°♄29'05		desc. node	10246 Sep 17 13:19	24°♄27'18	
evening set	10245 Oct 17 11:48	15°♄54'18		retrograde	10246 Sep 24 00:47	26°♄09'35	
min. Earth dist.	10245 Oct 24 13:21	12°♄39'33	0.55246 AU	evening set	10246 Sep 26 16:19	25°♄53'34	
inferior conj	10245 Oct 26 01:30	11°♄47'15	-5°42'07	inferior conj	10246 Oct 05 18:45	21°♄57'15	-4°56'09
minimum elong	10245 Oct 25 22:58	11°♄50'54	5°41'42	minimum elong	10246 Oct 05 09:37	22°♄10'02	4°54'02
morning rise	10245 Nov 03 11:57	7°♄57'07		min. Earth dist.	10246 Oct 05 20:46	21°♄54'25	0.54633 AU
direct	10245 Nov 06 12:19	7°♄35'36		morning rise	10246 Oct 14 03:48	18°♄07'34	
morning max el	10245 Nov 17 13:59	12°♄49'01	20°41'58	direct	10246 Oct 17 21:28	17°♄37'21	
asc. node	10245 Nov 23 18:36	20°♄11'32		morning max el	10246 Oct 30 10:03	23°♄34'56	22°18'36
	10245 Nov 29 18:30	0°♄			10246 Nov 05 02:29	0°♄	
morning set	10245 Dec 06 16:03	13°♄33'14		asc. node	10246 Nov 10 15:31	8°♄16'08	
				morning set	10246 Nov 21 02:37	28°♄20'23	
superior conj	10245 Dec 14 02:47	28°♄59'05	1°29'35		10246 Nov 21 21:28	0°♄	
minimum elong	10245 Dec 14 04:54	29°♄09'57	1°29'52	superior conj	10246 Nov 28 04:13	13°♄24'33	1°38'06
	10245 Dec 14 14:44	0°♄		minimum elong	10246 Nov 28 05:10	13°♄29'32	1°38'30
max. Earth dist.	10245 Dec 19 05:02	9°♄08'44	1.35977 AU	max. Earth dist.	10246 Dec 01 19:55	21°♄02'14	1.34196 AU
evening rise	10245 Dec 23 03:19	16°♄35'20		evening rise	10246 Dec 06 07:11	29°♄57'49	
desc. node	10245 Dec 27 14:35	24°♄37'10			10246 Dec 06 07:38	0°♄	
	10245 Dec 30 18:05	0°♄		desc. node	10246 Dec 14 11:35	14°♄57'03	
	10246 Jan 20 07:55	0°♄			10246 Dec 23 20:22	0°♄	
evening max el	10246 Jan 27 15:20	8°♄05'34	26°10'57	evening max el	10247 Jan 10 04:54	21°♄45'03	27°01'48
retrograde	10246 Feb 09 09:12	15°♄19'44		retrograde	10247 Jan 23 12:28	29°♄06'38	
evening set	10246 Feb 15 13:57	12°♄49'06		evening set	10247 Jan 30 03:46	26°♄32'34	
asc. node	10246 Feb 19 17:27	8°♄28'25		min. Earth dist.	10247 Feb 03 02:59	22°♄42'01	0.65520 AU
min. Earth dist.	10246 Feb 19 18:42	8°♄24'37	0.66875 AU	inferior conj	10247 Feb 05 06:07	20°♄16'43	-0°26'57
inferior conj	10246 Feb 21 10:04	6°♄23'13	0°33'00	minimum elong	10247 Feb 05 06:53	20°♄14'32	0°26'18
minimum elong	10246 Feb 21 09:13	6°♄25'49	0°32'53	asc. node	10247 Feb 06 14:39	18°♄45'41	
morning rise	10246 Feb 27 05:13	0°♄36'44		morning rise	10247 Feb 11 11:18	14°♄42'16	
	10246 Feb 28 12:18	30°♄♄		direct	10247 Feb 14 05:17	14°♄01'24	
direct	10246 Mar 02 08:41	29°♄40'35		morning max el	10247 Feb 20 14:52	17°♄24'05	18°05'28
	10246 Mar 04 05:59	0°♄			10247 Mar 01 24:00	0°♄	
morning max el	10246 Mar 08 23:53	3°♄15'25	18°39'15	morning set	10247 Mar 11 01:02	14°♄35'06	
desc. node	10246 Mar 25 14:58	26°♄33'43		desc. node	10247 Mar 12 11:45	16°♄56'25	
	10246 Mar 27 19:40	0°♄			10247 Mar 20 14:11	0°♄	
morning set	10246 Mar 30 06:25	3°♄50'23		superior conj	10247 Mar 25 19:32	8°♄16'49	-1°28'26
max. Earth dist.	10246 Apr 14 17:40	28°♄03'43	1.45562 AU	minimum elong	10247 Mar 25 10:22	7°♄40'39	1°27'26
				max. Earth dist.	10247 Mar 28 13:50	12°♄37'15	1.45541 AU
superior conj	10246 Apr 15 11:51	29°♄14'50	-1°59'53		10247 Apr 08 17:48	0°♄	
minimum elong	10246 Apr 15 03:58	28°♄44'00	1°59'35	evening rise	10247 Apr 10 22:43	3°♄24'50	
	10246 Apr 15 23:23	0°♄		greatest brilliancy	10247 Apr 23 18:20	23°♄02'36	-0.7m
evening rise	10246 Apr 30 23:39	23°♄43'40					
	10246 May 04 21:48	0°♄					
greatest brilliancy	10246 May 08 16:57	6°♄03'03	-0.9m				

	10247 Apr 28 13:16	0° $\Pi$		max. Earth dist.	10248 Mar 10 09:00	27° $\text{X}$ 05'03	1.44784 AU
evening max el	10247 May 05 13:56	8° $\Pi$ 42'27	19°28'06		10248 Mar 12 05:16	0° $\Upsilon$	
asc. node	10247 May 05 12:45	8° $\Pi$ 39'27		evening rise	10248 Mar 20 10:34	12° $\Upsilon$ 46'17	
retrograde	10247 May 12 17:59	12° $\Pi$ 45'55			10248 Mar 31 20:38	0° $\text{B}$	
evening set	10247 May 16 09:05	11° $\Pi$ 29'01		evening max el	10248 Apr 17 16:05	22° $\text{B}$ 24'20	20°28'06
inferior conj	10247 May 21 18:37	5° $\Pi$ 35'41	3°18'35	asc. node	10248 Apr 21 09:54	25° $\text{B}$ 34'41	
minimum elong	10247 May 21 18:33	5° $\Pi$ 35'57	3°18'11	retrograde	10248 Apr 25 16:42	27° $\text{B}$ 04'15	
min. Earth dist.	10247 May 23 01:12	3° $\Pi$ 55'03	0.67020 AU	evening set	10248 Apr 29 17:03	25° $\text{B}$ 31'42	
	10247 May 26 08:56	30° $\text{K}$ $\text{B}$		inferior conj	10248 May 05 00:09	19° $\text{B}$ 25'13	3°11'40
morning rise	10247 May 27 03:38	29° $\text{B}$ 15'35		minimum elong	10248 May 04 23:03	19° $\text{B}$ 28'58	3°11'14
direct	10247 Jun 02 05:24	26° $\text{B}$ 34'56		min. Earth dist.	10248 May 05 16:36	18° $\text{B}$ 28'45	0.67999 AU
desc. node	10247 Jun 08 12:08	28° $\text{B}$ 48'47		morning rise	10248 May 10 04:48	13° $\text{B}$ 07'33	
	10247 Jun 10 04:03	0° $\Pi$		direct	10248 May 15 18:17	10° $\text{B}$ 39'19	
morning max el	10247 Jun 14 14:03	3° $\Pi$ 58'51	25°41'04	desc. node	10248 May 25 09:06	15° $\text{B}$ 48'54	
	10247 Jul 04 10:49	0° $\text{E}$		morning max el	10248 May 26 23:39	17° $\text{B}$ 22'30	24°15'13
morning set	10247 Jul 20 15:48	27° $\text{E}$ 03'22			10248 Jun 06 12:12	0° $\Pi$	
	10247 Jul 22 06:11	0° $\Omega$			10248 Jun 26 11:33	0° $\text{E}$	
max. Earth dist.	10247 Jul 24 08:58	3° $\Omega$ 58'28	1.35815 AU	morning set	10248 Jul 01 14:43	8° $\text{E}$ 40'41	
				max. Earth dist.	10248 Jul 05 06:59	15° $\text{E}$ 09'45	1.37969 AU
superior conj	10247 Jul 30 05:14	15° $\Omega$ 24'44	-0°22'12				
minimum elong	10247 Jul 30 06:36	15° $\Omega$ 31'33	0°22'17	superior conj	10248 Jul 12 10:03	28° $\text{E}$ 23'41	-0°55'13
asc. node	10247 Aug 01 12:00	20° $\Omega$ 02'08		minimum elong	10248 Jul 12 13:41	28° $\text{E}$ 41'05	0°55'00
	10247 Aug 06 08:23	0° $\Pi$			10248 Jul 13 06:06	0° $\Omega$	
evening rise	10247 Aug 07 03:55	1° $\Pi$ 40'07		asc. node	10248 Jul 18 08:54	10° $\Omega$ 01'35	
	10247 Aug 24 01:45	0° $\text{A}$		evening rise	10248 Jul 21 04:53	15° $\Omega$ 38'32	
evening max el	10247 Aug 24 23:51	0° $\text{A}$ 57'10	20°07'09		10248 Jul 28 18:45	0° $\Pi$	
desc. node	10247 Sep 04 10:33	6° $\text{A}$ 12'37		evening max el	10248 Aug 06 17:16	12° $\Pi$ 34'37	19°06'18
retrograde	10247 Sep 04 14:08	6° $\text{A}$ 12'41		retrograde	10248 Aug 15 16:04	17° $\Pi$ 01'46	
evening set	10247 Sep 06 12:41	6° $\text{A}$ 02'53		evening set	10248 Aug 17 12:50	16° $\Pi$ 50'56	
inferior conj	10247 Sep 15 13:32	2° $\text{A}$ 03'53	-3°20'57	desc. node	10248 Aug 21 07:47	15° $\Pi$ 29'35	
minimum elong	10247 Sep 15 04:48	2° $\text{A}$ 16'55	3°17'59	inferior conj	10248 Aug 25 23:12	12° $\Pi$ 37'54	-1°26'34
min. Earth dist.	10247 Sep 17 05:58	1° $\text{A}$ 03'38	0.54957 AU	minimum elong	10248 Aug 25 19:26	12° $\Pi$ 44'20	1°25'15
	10247 Sep 19 02:29	30° $\text{K}$ $\Pi$		min. Earth dist.	10248 Aug 28 19:15	10° $\Pi$ 42'16	0.56176 AU
morning rise	10247 Sep 23 19:49	27° $\Pi$ 53'47		morning rise	10248 Sep 02 22:59	7° $\Pi$ 52'12	
direct	10247 Sep 28 08:03	27° $\Pi$ 09'46		direct	10248 Sep 08 06:34	6° $\Pi$ 46'21	
	10247 Oct 07 02:33	0° $\text{A}$		morning max el	10248 Sep 22 10:54	14° $\Pi$ 00'46	25°46'49
morning max el	10247 Oct 11 22:26	3° $\text{A}$ 49'06	24°05'36		10248 Oct 05 02:31	0° $\text{A}$	
asc. node	10247 Oct 28 12:25	27° $\text{A}$ 00'45		asc. node	10248 Oct 14 09:16	16° $\text{A}$ 14'36	
	10247 Oct 30 02:52	0° $\Pi$		morning set	10248 Oct 20 01:40	27° $\text{A}$ 52'35	
morning set	10247 Nov 05 14:25	13° $\Pi$ 08'49			10248 Oct 21 01:23	0° $\Pi$	
superior conj	10247 Nov 12 11:19	28° $\Pi$ 04'46	1°39'56	superior conj	10248 Oct 26 21:42	12° $\Pi$ 51'41	1°35'41
minimum elong	10247 Nov 12 11:04	28° $\Pi$ 03'22	1°40'19	minimum elong	10248 Oct 26 20:26	12° $\Pi$ 44'42	1°35'54
	10247 Nov 13 08:33	0° $\text{A}$		max. Earth dist.	10248 Oct 28 00:19	15° $\Pi$ 18'40	1.31927 AU
max. Earth dist.	10247 Nov 14 18:54	3° $\text{A}$ 05'02	1.32829 AU	evening rise	10248 Nov 02 22:35	28° $\Pi$ 04'19	
evening rise	10247 Nov 19 22:40	13° $\text{A}$ 50'28			10248 Nov 03 20:56	0° $\text{A}$	
	10247 Nov 28 11:19	0° $\text{B}$		desc. node	10248 Nov 17 05:43	24° $\text{A}$ 34'33	
desc. node	10247 Dec 01 08:38	4° $\text{B}$ 59'00			10248 Nov 20 17:16	0° $\text{B}$	
	10247 Dec 18 21:49	0° $\approx$		evening max el	10248 Dec 05 02:07	17° $\text{B}$ 48'45	27°24'33
evening max el	10247 Dec 23 17:13	5° $\approx$ 03'56	27°28'19	retrograde	10248 Dec 18 22:40	25° $\text{B}$ 04'52	
retrograde	10248 Jan 06 09:11	12° $\approx$ 25'09		evening set	10248 Dec 25 23:26	22° $\text{B}$ 46'16	
evening set	10248 Jan 13 07:56	9° $\approx$ 54'21		min. Earth dist.	10248 Dec 29 16:21	19° $\text{B}$ 53'22	0.61868 AU
min. Earth dist.	10248 Jan 17 02:43	6° $\approx$ 35'28	0.63830 AU	inferior conj	10249 Jan 01 16:13	17° $\text{B}$ 09'22	-2°48'32
inferior conj	10248 Jan 19 17:12	3° $\approx$ 54'58	-1°34'53	minimum elong	10249 Jan 01 21:49	16° $\text{B}$ 56'32	2°45'59
minimum elong	10248 Jan 19 20:13	3° $\approx$ 47'11	1°33'13	morning rise	10249 Jan 08 22:44	12° $\text{B}$ 07'54	
	10248 Jan 23 23:24	30° $\text{K}$ $\text{B}$		asc. node	10249 Jan 10 08:54	11° $\text{B}$ 49'21	
asc. node	10248 Jan 24 11:47	29° $\text{B}$ 38'13		direct	10249 Jan 11 03:48	11° $\text{B}$ 46'36	
morning rise	10248 Jan 26 10:27	28° $\text{B}$ 35'28		morning max el	10249 Jan 18 01:07	15° $\text{B}$ 16'02	17°50'03
direct	10248 Jan 28 20:47	28° $\text{B}$ 06'13			10249 Jan 28 06:44	0° $\approx$	
	10248 Feb 02 16:27	0° $\approx$		morning set	10249 Feb 02 18:58	9° $\approx$ 46'09	
morning max el	10248 Feb 04 08:22	1° $\approx$ 27'25	17°48'51	desc. node	10249 Feb 13 05:20	28° $\approx$ 09'21	
morning set	10248 Feb 20 23:17	26° $\approx$ 40'23					
	10248 Feb 22 22:06	0° $\text{X}$		superior conj	10249 Feb 13 19:55	29° $\approx$ 11'38	-0°04'37
desc. node	10248 Feb 27 08:33	7° $\text{X}$ 29'50		minimum elong	10249 Feb 13 19:31	29° $\approx$ 09'55	0°04'17
				behind sun begin	10249 Feb 13 11:09	28° $\approx$ 34'12	
superior conj	10248 Mar 04 19:28	18° $\text{X}$ 09'05	-0°46'47	behind sun end	10249 Feb 14 03:53	29° $\approx$ 45'33	
minimum elong	10248 Mar 04 14:24	17° $\text{X}$ 48'28	0°45'57		10249 Feb 14 07:17	0° $\text{X}$	



max. Earth dist.	10249 Feb 21 00:26	11° $\text{H}$ 09'27	1.43378 AU	desc. node	10250 Jan 31 02:08	18° $\approx$ 51'33	
evening rise	10249 Feb 28 02:22	22° $\text{H}$ 25'30		max. Earth dist.	10250 Feb 03 11:09	24° $\approx$ 38'08	1.41489 AU
	10249 Mar 05 00:26	0° $\text{Y}$			10250 Feb 06 16:31	0° $\text{H}$	
	10249 Mar 26 04:03	0° $\text{B}$		evening rise	10250 Feb 08 10:37	2° $\text{H}$ 51'38	
evening max el	10249 Mar 31 12:42	6° $\text{B}$ 07'25	21°39'59		10250 Feb 26 08:52	0° $\text{Y}$	
asc. node	10249 Apr 08 07:05	11° $\text{B}$ 20'39		evening max el	10250 Mar 14 05:04	19° $\text{Y}$ 52'42	22°59'00
retrograde	10249 Apr 09 14:54	11° $\text{B}$ 29'19		retrograde	10250 Mar 24 10:51	25° $\text{Y}$ 56'05	
evening set	10249 Apr 14 01:28	9° $\text{B}$ 41'29		asc. node	10250 Mar 26 04:18	25° $\text{Y}$ 41'36	
inferior conj	10249 Apr 19 08:26	3° $\text{B}$ 24'09	2°53'55	evening set	10250 Mar 29 08:42	23° $\text{Y}$ 53'36	
minimum elong	10249 Apr 19 06:37	3° $\text{B}$ 30'30	2°53'21	inferior conj	10250 Apr 03 17:30	17° $\text{Y}$ 28'31	2°26'21
min. Earth dist.	10249 Apr 19 11:49	3° $\text{B}$ 12'23	0.68518 AU	minimum elong	10250 Apr 03 15:19	17° $\text{Y}$ 36'04	2°25'40
	10249 Apr 21 20:59	30° $\text{R}$ $\text{Y}$		min. Earth dist.	10250 Apr 03 08:34	17° $\text{Y}$ 59'27	0.68596 AU
morning rise	10249 Apr 24 11:35	27° $\text{Y}$ 10'45		morning rise	10250 Apr 08 21:49	11° $\text{Y}$ 20'47	
direct	10249 Apr 29 11:42	25° $\text{Y}$ 00'44		direct	10250 Apr 13 08:27	9° $\text{Y}$ 32'02	
	10249 May 08 12:21	0° $\text{B}$		morning max el	10250 Apr 22 00:49	14° $\text{Y}$ 33'17	21°20'10
morning max el	10249 May 09 10:10	0° $\text{B}$ 53'30	22°45'22	desc. node	10250 Apr 29 02:52	22° $\text{Y}$ 51'15	
desc. node	10249 May 12 06:01	3° $\text{B}$ 56'01			10250 May 04 09:20	0° $\text{B}$	
	10249 May 31 09:05	0° $\text{II}$		morning set	10250 May 23 09:36	28° $\text{B}$ 28'34	
morning set	10249 Jun 12 13:32	19° $\text{II}$ 11'06			10250 May 24 08:44	0° $\text{II}$	
max. Earth dist.	10249 Jun 17 04:05	26° $\text{II}$ 54'15	1.40253 AU	max. Earth dist.	10250 May 30 06:24	9° $\text{II}$ 31'09	1.42394 AU
	10249 Jun 18 23:19	0° $\text{B}$					
superior conj	10249 Jun 24 23:03	10° $\text{B}$ 37'26	-1°27'29	superior conj	10250 Jun 06 15:38	21° $\text{II}$ 55'07	-1°54'44
minimum elong	10249 Jun 25 04:47	11° $\text{B}$ 03'28	1°27'10	minimum elong	10250 Jun 06 21:50	22° $\text{II}$ 21'49	1°54'40
evening rise	10249 Jul 04 20:48	29° $\text{B}$ 09'09			10250 Jun 11 06:49	0° $\text{B}$	
asc. node	10249 Jul 05 05:50	29° $\text{B}$ 52'00		evening rise	10250 Jun 17 23:34	12° $\text{B}$ 01'14	
	10249 Jul 05 07:31	0° $\text{B}$		asc. node	10250 Jun 22 02:49	19° $\text{B}$ 28'20	
evening max el	10249 Jul 20 21:23	24° $\text{B}$ 54'56	18°26'35		10250 Jun 28 08:10	0° $\text{B}$	
retrograde	10249 Jul 28 12:32	28° $\text{B}$ 44'25		evening max el	10250 Jul 04 08:07	7° $\text{B}$ 47'38	18°07'00
evening set	10249 Jul 30 15:09	28° $\text{B}$ 27'44		retrograde	10250 Jul 11 02:54	11° $\text{B}$ 14'50	
inferior conj	10249 Aug 07 06:12	23° $\text{B}$ 55'06	0°17'18	evening set	10250 Jul 13 13:21	10° $\text{B}$ 48'27	
minimum elong	10249 Aug 07 06:49	23° $\text{B}$ 53'52	0°16'45	inferior conj	10250 Jul 20 10:07	5° $\text{B}$ 55'14	1°36'51
desc. node	10249 Aug 08 05:01	23° $\text{B}$ 09'16		minimum elong	10250 Jul 20 12:44	5° $\text{B}$ 49'11	1°35'37
min. Earth dist.	10249 Aug 10 14:19	21° $\text{B}$ 16'15	0.58064 AU	min. Earth dist.	10250 Jul 23 16:38	2° $\text{B}$ 54'21	0.60293 AU
morning rise	10249 Aug 14 18:56	18° $\text{B}$ 32'50		desc. node	10250 Jul 26 02:14	0° $\text{B}$ 57'22	
direct	10249 Aug 20 20:03	16° $\text{B}$ 58'11		morning rise	10250 Jul 27 09:14	0° $\text{B}$ 04'38	
morning max el	10249 Sep 04 04:47	24° $\text{B}$ 37'51	27°05'09		10250 Jul 27 12:13	30° $\text{R}$ $\text{B}$	
	10249 Sep 09 03:07	0° $\text{B}$		direct	10250 Aug 02 22:05	28° $\text{B}$ 00'34	
	10249 Sep 28 07:06	0° $\text{B}$			10250 Aug 09 16:56	0° $\text{B}$	
asc. node	10249 Oct 01 06:07	5° $\text{B}$ 49'55		morning max el	10250 Aug 17 05:32	5° $\text{B}$ 55'42	27°49'05
morning set	10249 Oct 04 10:46	12° $\text{B}$ 27'13			10250 Sep 04 06:34	0° $\text{B}$	
				asc. node	10250 Sep 18 02:56	25° $\text{B}$ 39'53	
superior conj	10249 Oct 11 09:26	27° $\text{B}$ 39'30	1°25'47	morning set	10250 Sep 18 15:56	26° $\text{B}$ 47'21	
minimum elong	10249 Oct 11 07:28	27° $\text{B}$ 28'36	1°25'46		10250 Sep 20 04:32	0° $\text{B}$	
max. Earth dist.	10249 Oct 11 09:18	27° $\text{B}$ 38'48	1.31507 AU	max. Earth dist.	10250 Sep 24 18:17	9° $\text{B}$ 56'04	1.31568 AU
	10249 Oct 12 10:41	0° $\text{B}$					
evening rise	10249 Oct 18 04:26	12° $\text{B}$ 32'48		superior conj	10250 Sep 25 20:41	12° $\text{B}$ 22'04	1°10'33
	10249 Oct 26 23:47	0° $\text{B}$		minimum elong	10250 Sep 25 18:26	12° $\text{B}$ 09'39	1°10'16
desc. node	10249 Nov 04 02:51	13° $\text{B}$ 33'21		evening rise	10250 Oct 02 14:02	27° $\text{B}$ 09'22	
evening max el	10249 Nov 17 05:14	29° $\text{B}$ 48'45	26°46'52		10250 Oct 03 22:05	0° $\text{B}$	
	10249 Nov 17 10:01	0° $\text{B}$			10250 Oct 20 18:50	0° $\text{B}$	
retrograde	10249 Dec 01 03:37	6° $\text{B}$ 57'19		desc. node	10250 Oct 22 00:03	1° $\text{B}$ 41'01	
evening set	10249 Dec 07 22:19	5° $\text{B}$ 01'04		evening max el	10250 Oct 30 00:31	10° $\text{B}$ 57'51	25°36'45
min. Earth dist.	10249 Dec 11 19:30	2° $\text{B}$ 23'38	0.59761 AU	retrograde	10250 Nov 12 22:00	17° $\text{B}$ 58'14	
inferior conj	10249 Dec 14 23:46	29° $\text{B}$ 51'19	-4°02'36	evening set	10250 Nov 18 23:55	16° $\text{B}$ 32'48	
minimum elong	10249 Dec 15 07:24	29° $\text{B}$ 36'00	3°59'48	min. Earth dist.	10250 Nov 23 12:55	13° $\text{B}$ 55'33	0.57708 AU
	10249 Dec 14 19:27	30° $\text{R}$ $\text{B}$		inferior conj	10250 Nov 26 12:31	11° $\text{B}$ 51'30	-5°06'25
morning rise	10249 Dec 22 19:09	25° $\text{B}$ 10'33		minimum elong	10250 Nov 26 19:45	11° $\text{B}$ 38'56	5°04'34
direct	10249 Dec 24 22:25	24° $\text{B}$ 53'38		morning rise	10250 Dec 04 17:54	7° $\text{B}$ 33'10	
asc. node	10249 Dec 28 05:59	25° $\text{B}$ 36'26		direct	10250 Dec 07 00:35	7° $\text{B}$ 17'09	
morning max el	10250 Jan 01 13:39	28° $\text{B}$ 40'31	18°10'18	asc. node	10250 Dec 15 03:02	10° $\text{B}$ 55'13	
	10250 Jan 02 19:57	0° $\text{B}$		morning max el	10250 Dec 15 18:11	11° $\text{B}$ 30'32	18°51'29
morning set	10250 Jan 17 06:01	23° $\text{B}$ 34'22			10250 Dec 28 01:56	0° $\text{B}$	
	10250 Jan 20 16:07	0° $\approx$		morning set	10251 Jan 01 03:43	7° $\text{B}$ 51'32	
superior conj	10250 Jan 26 20:16	11° $\approx$ 21'15	0°32'08	superior conj	10251 Jan 09 16:11	24° $\text{B}$ 25'59	1°00'54
minimum elong	10250 Jan 26 22:36	11° $\approx$ 31'47	0°32'09	minimum elong	10251 Jan 09 19:19	24° $\text{B}$ 40'52	1°00'55
					10251 Jan 12 15:31	0° $\approx$	

max. Earth dist.	10251 Jan 16 18:19	7° $\approx$ 26'56	1.39331 AU	evening rise	10252 Jan 02 18:38	26° $\approx$ 31'26	
desc. node	10251 Jan 17 23:00	9° $\approx$ 33'12		desc. node	10252 Jan 04 19:56	0° $\approx$ 09'56	
evening rise	10251 Jan 20 16:21	14° $\approx$ 15'03			10252 Jan 04 17:40	0° $\approx$	
	10251 Jan 30 09:27	0° $\approx$			10252 Jan 23 21:18	0° $\approx$	
	10251 Feb 21 07:52	0° $\approx$		evening max el	10252 Feb 07 08:27	17° $\approx$ 31'00	25°33'29
evening max el	10251 Feb 24 19:10	3° $\approx$ 41'36	24°19'05	retrograde	10252 Feb 19 15:21	24° $\approx$ 35'27	
retrograde	10251 Mar 08 03:20	10° $\approx$ 20'14		evening set	10252 Feb 25 13:34	22° $\approx$ 08'53	
asc. node	10251 Mar 13 01:32	8° $\approx$ 28'23		asc. node	10252 Feb 27 22:46	19° $\approx$ 46'53	
evening set	10251 Mar 13 13:16	8° $\approx$ 04'30		min. Earth dist.	10252 Feb 29 21:48	17° $\approx$ 24'53	0.67491 AU
min. Earth dist.	10251 Mar 18 04:38	2° $\approx$ 45'30	0.68249 AU	inferior conj	10252 Mar 02 06:29	15° $\approx$ 40'20	1°03'32
inferior conj	10251 Mar 19 01:29	1° $\approx$ 35'22	1°49'30	minimum elong	10252 Mar 02 05:01	15° $\approx$ 45'03	1°03'08
minimum elong	10251 Mar 18 23:24	1° $\approx$ 42'24	1°48'50	morning rise	10252 Mar 07 20:56	9° $\approx$ 48'22	
	10251 Mar 20 06:10	30° $\approx$		direct	10252 Mar 11 06:39	8° $\approx$ 41'52	
morning rise	10251 Mar 24 09:36	25° $\approx$ 34'45		morning max el	10252 Mar 18 04:26	12° $\approx$ 28'31	19°06'20
direct	10251 Mar 28 07:18	24° $\approx$ 07'51			10252 Mar 31 08:03	0° $\approx$	
morning max el	10251 Apr 04 22:41	28° $\approx$ 25'32	20°05'59	greatest brilliancy	10252 Mar 31 10:15	0° $\approx$ 08'18	-0.7m
	10251 Apr 06 10:52	0° $\approx$		desc. node	10252 Apr 01 20:27	2° $\approx$ 17'38	
desc. node	10251 Apr 15 23:40	12° $\approx$ 21'48		morning set	10252 Apr 10 13:24	15° $\approx$ 40'44	
	10251 Apr 27 21:19	0° $\approx$			10252 Apr 19 18:38	0° $\approx$	
morning set	10251 May 02 10:35	6° $\approx$ 58'11		max. Earth dist.	10252 Apr 24 08:13	7° $\approx$ 08'57	1.45237 AU
max. Earth dist.	10251 May 12 16:23	23° $\approx$ 01'24	1.44122 AU				
	10251 May 17 00:19	0° $\approx$		superior conj	10252 Apr 27 02:04	11° $\approx$ 28'21	-2°09'52
				minimum elong	10252 Apr 26 21:53	11° $\approx$ 11'50	2°10'00
superior conj	10251 May 18 08:15	2° $\approx$ 10'13	-2°10'59		10252 May 08 15:20	0° $\approx$	
minimum elong	10251 May 18 11:10	2° $\approx$ 22'13	2°11'19	evening rise	10252 May 11 19:05	5° $\approx$ 09'24	
evening rise	10251 May 31 08:31	24° $\approx$ 04'28		asc. node	10252 May 25 20:58	27° $\approx$ 35'52	
	10251 Jun 03 19:09	0° $\approx$			10252 May 27 14:26	0° $\approx$	
asc. node	10251 Jun 08 23:52	8° $\approx$ 45'20		evening max el	10252 May 31 10:52	4° $\approx$ 33'19	18°24'35
evening max el	10251 Jun 17 21:41	21° $\approx$ 03'17	18°06'32	retrograde	10252 Jun 06 21:06	8° $\approx$ 00'48	
retrograde	10251 Jun 24 07:16	24° $\approx$ 23'33		evening set	10252 Jun 09 23:05	7° $\approx$ 08'04	
evening set	10251 Jun 27 01:32	23° $\approx$ 44'49		inferior conj	10252 Jun 15 18:22	1° $\approx$ 38'34	3°02'41
inferior conj	10251 Jul 03 07:34	18° $\approx$ 32'28	2°30'45	minimum elong	10252 Jun 15 20:09	1° $\approx$ 33'17	3°01'58
minimum elong	10251 Jul 03 10:15	18° $\approx$ 25'22	2°29'39		10252 Jun 17 03:46	30° $\approx$	
min. Earth dist.	10251 Jul 06 03:53	15° $\approx$ 32'45	0.62541 AU	min. Earth dist.	10252 Jun 18 00:36	28° $\approx$ 59'37	0.64568 AU
morning rise	10251 Jul 09 17:04	12° $\approx$ 23'46		morning rise	10252 Jun 21 16:09	25° $\approx$ 20'41	
desc. node	10251 Jul 12 23:24	10° $\approx$ 34'36		direct	10252 Jun 28 07:07	22° $\approx$ 39'14	
direct	10251 Jul 16 10:19	9° $\approx$ 56'08		desc. node	10252 Jun 28 20:29	22° $\approx$ 40'17	
morning max el	10251 Jul 30 12:17	17° $\approx$ 58'18	27°54'33		10252 Jul 11 07:01	0° $\approx$	
	10251 Aug 09 13:53	0° $\approx$		morning max el	10252 Jul 11 22:28	0° $\approx$ 38'26	27°24'12
	10251 Aug 28 02:26	0° $\approx$			10252 Aug 02 15:12	0° $\approx$	
morning set	10251 Sep 02 15:05	10° $\approx$ 47'31		morning set	10252 Aug 16 05:41	24° $\approx$ 21'15	
asc. node	10251 Sep 04 23:47	15° $\approx$ 39'33			10252 Aug 19 01:40	0° $\approx$	
max. Earth dist.	10251 Sep 07 23:30	22° $\approx$ 00'18	1.32121 AU	max. Earth dist.	10252 Aug 20 21:04	3° $\approx$ 42'17	1.33171 AU
				asc. node	10252 Aug 21 20:38	5° $\approx$ 44'41	
superior conj	10251 Sep 10 05:36	26° $\approx$ 53'51	0°50'14				
minimum elong	10251 Sep 10 03:34	26° $\approx$ 42'48	0°49'48	superior conj	10252 Aug 24 10:10	11° $\approx$ 09'22	0°25'13
	10251 Sep 11 15:35	0° $\approx$		minimum elong	10252 Aug 24 08:57	11° $\approx$ 02'54	0°24'46
evening rise	10251 Sep 17 01:24	11° $\approx$ 48'15		evening rise	10252 Aug 31 12:39	26° $\approx$ 24'04	
	10251 Sep 26 04:40	0° $\approx$			10252 Sep 02 05:41	0° $\approx$	
desc. node	10251 Oct 08 21:18	18° $\approx$ 37'20			10252 Sep 20 13:07	0° $\approx$	
evening max el	10251 Oct 11 12:38	21° $\approx$ 22'15	24°03'18	evening max el	10252 Sep 22 00:12	1° $\approx$ 30'16	22°22'56
retrograde	10251 Oct 25 04:06	28° $\approx$ 11'51		desc. node	10252 Sep 24 18:34	3° $\approx$ 56'20	
evening set	10251 Oct 30 00:57	27° $\approx$ 19'54		retrograde	10252 Oct 04 22:31	7° $\approx$ 56'46	
min. Earth dist.	10251 Nov 04 23:12	24° $\approx$ 24'11	0.55978 AU	evening set	10252 Oct 08 07:29	7° $\approx$ 31'37	
inferior conj	10251 Nov 07 04:46	23° $\approx$ 02'39	-5°42'21	min. Earth dist.	10252 Oct 16 06:46	3° $\approx$ 59'43	0.54875 AU
minimum elong	10251 Nov 07 06:56	22° $\approx$ 59'20	5°41'54	inferior conj	10252 Oct 17 03:45	3° $\approx$ 30'05	-5°29'45
morning rise	10251 Nov 15 14:56	19° $\approx$ 05'06		minimum elong	10252 Oct 16 21:50	3° $\approx$ 38'27	5°28'48
direct	10251 Nov 18 07:21	18° $\approx$ 46'34			10252 Oct 24 12:59	30° $\approx$	
morning max el	10251 Nov 28 11:04	23° $\approx$ 35'18	19°55'14	morning rise	10252 Oct 25 13:51	29° $\approx$ 42'52	
asc. node	10251 Dec 02 00:02	27° $\approx$ 30'51		direct	10252 Oct 28 21:05	29° $\approx$ 18'21	
	10251 Dec 03 20:33	0° $\approx$			10252 Nov 02 01:12	0° $\approx$	
morning set	10251 Dec 16 08:26	22° $\approx$ 26'20		morning max el	10252 Nov 09 14:30	4° $\approx$ 50'01	21°21'03
	10251 Dec 20 01:23	0° $\approx$		asc. node	10252 Nov 17 21:00	15° $\approx$ 07'33	
					10252 Nov 26 05:03	0° $\approx$	
superior conj	10251 Dec 24 02:42	8° $\approx$ 11'24	1°21'22	morning set	10252 Nov 29 17:30	7° $\approx$ 11'13	
minimum elong	10251 Dec 24 05:24	8° $\approx$ 24'48	1°21'33				
max. Earth dist.	10251 Dec 30 00:53	19° $\approx$ 39'41	1.37148 AU	superior conj	10252 Dec 06 23:44	22° $\approx$ 25'48	1°34'03

minimum elong	10252 Dec 07 01:22	22° $\text{♁}$ 34'19	1°34'23			10253 Nov 02 15:48	0° $\text{♁}$	
	10252 Dec 10 16:38	0° $\text{♁}$		asc. node		10253 Nov 04 17:54	3° $\text{♁}$ 30'33	
max. Earth dist.	10252 Dec 11 11:20	1° $\text{♁}$ 33'19	1.35171 AU	morning set		10253 Nov 14 04:46	21° $\text{♁}$ 59'25	
evening rise	10252 Dec 15 14:17	9° $\text{♁}$ 32'59				10253 Nov 17 22:16	0° $\text{♁}$	
desc. node	10252 Dec 21 16:55	20° $\text{♁}$ 37'41						
	10252 Dec 27 07:20	0° $\text{♁}$		superior conj		10253 Nov 21 03:54	6° $\text{♁}$ 58'45	1°39'39
	10253 Jan 18 15:13	0° $\text{♁}$		minimum elong		10253 Nov 21 04:19	7° $\text{♁}$ 01'00	1°40'03
evening max el	10253 Jan 19 21:46	1° $\text{♁}$ 15'57	26°35'00	max. Earth dist.		10253 Nov 24 05:20	13° $\text{♁}$ 28'13	1.33559 AU
retrograde	10253 Feb 01 22:11	8° $\text{♁}$ 35'05		evening rise		10253 Nov 28 23:30	23° $\text{♁}$ 09'33	
evening set	10253 Feb 08 07:47	6° $\text{♁}$ 01'55				10253 Dec 02 12:44	0° $\text{♁}$	
min. Earth dist.	10253 Feb 12 09:56	1° $\text{♁}$ 52'15	0.66344 AU	desc. node		10253 Dec 08 13:58	10° $\text{♁}$ 50'52	
asc. node	10253 Feb 13 19:59	0° $\text{♁}$ 10'46				10253 Dec 20 23:21	0° $\text{♁}$	
	10253 Feb 13 23:34	30° $\text{♁}$		evening max el		10254 Jan 02 10:56	14° $\text{♁}$ 48'03	27°16'25
inferior conj	10253 Feb 14 06:26	29° $\text{♁}$ 39'24	0°08'35	retrograde		10254 Jan 15 23:01	22° $\text{♁}$ 11'04	
minimum elong	10253 Feb 14 06:12	29° $\text{♁}$ 40'08	0°08'46	evening set		10254 Jan 22 17:50	19° $\text{♁}$ 37'25	
transit middle	10253 Feb 14 06:12	29° $\text{♁}$ 40'08	0°08'46	min. Earth dist.		10254 Jan 26 14:55	16° $\text{♁}$ 00'38	0.64834 AU
transit begin	10253 Feb 14 03:45	29° $\text{♁}$ 47'26		inferior conj		10254 Jan 28 23:01	13° $\text{♁}$ 27'27	-0°54'54
transit end	10253 Feb 14 08:38	29° $\text{♁}$ 32'50		minimum elong		10254 Jan 29 00:40	13° $\text{♁}$ 22'55	0°53'50
morning rise	10253 Feb 20 05:37	23° $\text{♁}$ 58'01		asc. node		10254 Jan 31 17:08	10° $\text{♁}$ 36'14	
direct	10253 Feb 23 04:47	23° $\text{♁}$ 08'58		morning rise		10254 Feb 04 09:08	7° $\text{♁}$ 58'57	
morning max el	10253 Mar 01 16:45	26° $\text{♁}$ 37'16	18°22'49	direct		10254 Feb 06 23:29	7° $\text{♁}$ 23'38	
	10253 Mar 04 16:57	0° $\text{♁}$		morning max el		10254 Feb 13 09:11	10° $\text{♁}$ 44'51	17°56'13
desc. node	10253 Mar 19 17:12	22° $\text{♁}$ 31'59				10254 Feb 26 17:51	0° $\text{♁}$	
morning set	10253 Mar 21 14:56	25° $\text{♁}$ 34'03		morning set		10254 Mar 02 21:54	6° $\text{♁}$ 55'02	
	10253 Mar 24 09:48	0° $\text{♁}$		desc. node		10254 Mar 06 13:59	12° $\text{♁}$ 59'50	
superior conj	10253 Apr 06 08:11	20° $\text{♁}$ 22'04	-1°48'26	superior conj		10254 Mar 16 21:04	29° $\text{♁}$ 41'26	-1°11'23
minimum elong	10253 Apr 05 22:51	19° $\text{♁}$ 45'37	1°47'46	minimum elong		10254 Mar 16 13:16	29° $\text{♁}$ 10'20	1°10'22
max. Earth dist.	10253 Apr 07 03:02	21° $\text{♁}$ 35'47	1.45638 AU			10254 Mar 17 01:44	0° $\text{♁}$	
	10253 Apr 12 12:04	0° $\text{♁}$		max. Earth dist.		10254 Mar 20 22:34	6° $\text{♁}$ 07'10	1.45299 AU
evening rise	10253 Apr 22 05:47	15° $\text{♁}$ 16'04		evening rise		10254 Apr 01 22:16	24° $\text{♁}$ 44'03	
	10253 May 01 15:19	0° $\text{♁}$				10254 Apr 05 08:43	0° $\text{♁}$	
greatest brilliancy	10253 May 02 08:19	1° $\text{♁}$ 05'38	-0.8m	greatest brilliancy		10254 Apr 16 10:10	16° $\text{♁}$ 39'12	-0.6m
asc. node	10253 May 12 18:06	15° $\text{♁}$ 50'49				10254 Apr 26 08:41	0° $\text{♁}$	
evening max el	10253 May 14 21:01	18° $\text{♁}$ 10'58	19°00'15	evening max el		10254 Apr 28 02:27	1° $\text{♁}$ 52'32	19°52'04
retrograde	10253 May 21 16:31	21° $\text{♁}$ 58'19		asc. node		10254 Apr 29 15:15	3° $\text{♁}$ 19'18	
evening set	10253 May 25 02:34	20° $\text{♁}$ 50'33		retrograde		10254 May 05 14:36	6° $\text{♁}$ 10'34	
inferior conj	10253 May 30 14:45	15° $\text{♁}$ 05'35	3°16'59	evening set		10254 May 09 09:28	4° $\text{♁}$ 47'12	
minimum elong	10253 May 30 15:21	15° $\text{♁}$ 03'41	3°16'31			10254 May 13 20:10	30° $\text{♁}$	
min. Earth dist.	10253 Jun 01 05:57	13° $\text{♁}$ 00'58	0.66241 AU	inferior conj		10254 May 14 17:40	28° $\text{♁}$ 48'17	3°17'05
morning rise	10253 Jun 05 03:33	8° $\text{♁}$ 44'56		minimum elong		10254 May 14 17:08	28° $\text{♁}$ 50'07	3°16'40
direct	10253 Jun 11 11:12	6° $\text{♁}$ 00'45		min. Earth dist.		10254 May 15 18:13	27° $\text{♁}$ 25'50	0.67489 AU
desc. node	10253 Jun 15 17:31	7° $\text{♁}$ 02'44		morning rise		10254 May 20 00:27	22° $\text{♁}$ 28'53	
morning max el	10253 Jun 24 09:11	13° $\text{♁}$ 42'50	26°24'47	direct		10254 May 25 21:18	19° $\text{♁}$ 52'17	
	10253 Jul 07 13:50	0° $\text{♁}$		desc. node		10254 Jun 02 14:28	23° $\text{♁}$ 13'35	
	10253 Jul 26 08:30	0° $\text{♁}$		morning max el		10254 Jun 06 18:57	27° $\text{♁}$ 00'52	25°05'39
morning set	10253 Jul 30 08:19	7° $\text{♁}$ 18'41				10254 Jun 09 13:42	0° $\text{♁}$	
max. Earth dist.	10253 Aug 03 08:05	14° $\text{♁}$ 58'14	1.34715 AU			10254 Jul 01 04:50	0° $\text{♁}$	
superior conj	10253 Aug 08 07:54	25° $\text{♁}$ 01'11	-0°03'57	morning set		10254 Jul 12 18:46	19° $\text{♁}$ 28'51	
minimum elong	10253 Aug 08 08:08	25° $\text{♁}$ 02'25	0°04'13	max. Earth dist.		10254 Jul 16 09:10	26° $\text{♁}$ 01'50	1.36695 AU
behind sun begin	10253 Aug 08 02:25	24° $\text{♁}$ 32'58				10254 Jul 18 12:01	0° $\text{♁}$	
behind sun end	10253 Aug 08 13:52	25° $\text{♁}$ 31'54		superior conj		10254 Jul 22 19:55	8° $\text{♁}$ 22'11	-0°36'05
asc. node	10253 Aug 08 17:29	25° $\text{♁}$ 50'34		minimum elong		10254 Jul 22 22:12	8° $\text{♁}$ 33'27	0°36'02
	10253 Aug 10 17:31	0° $\text{♁}$		asc. node		10254 Jul 26 14:22	15° $\text{♁}$ 53'39	
evening rise	10253 Aug 15 21:44	10° $\text{♁}$ 50'10		evening rise		10254 Jul 31 02:24	25° $\text{♁}$ 00'37	
	10253 Aug 25 21:56	0° $\text{♁}$				10254 Aug 02 14:14	0° $\text{♁}$	
evening max el	10253 Sep 03 20:35	11° $\text{♁}$ 58'30	20°51'40	evening max el		10254 Aug 17 06:32	23° $\text{♁}$ 09'44	19°38'43
desc. node	10253 Sep 11 15:50	17° $\text{♁}$ 06'53		retrograde		10254 Aug 27 03:20	28° $\text{♁}$ 03'17	
retrograde	10253 Sep 15 10:20	17° $\text{♁}$ 42'52		evening set		10254 Aug 28 23:47	27° $\text{♁}$ 53'43	
evening set	10253 Sep 17 16:08	17° $\text{♁}$ 30'50		desc. node		10254 Aug 29 13:04	27° $\text{♁}$ 47'16	
inferior conj	10253 Sep 26 19:53	13° $\text{♁}$ 35'08	-4°20'24	inferior conj		10254 Sep 06 19:40	23° $\text{♁}$ 50'15	-2°32'45
minimum elong	10253 Sep 26 10:01	13° $\text{♁}$ 49'10	4°17'36	minimum elong		10254 Sep 06 12:49	24° $\text{♁}$ 00'59	2°30'17
min. Earth dist.	10253 Sep 27 15:01	13° $\text{♁}$ 07'52	0.54652 AU	min. Earth dist.		10254 Sep 09 01:49	22° $\text{♁}$ 25'30	0.55383 AU
morning rise	10253 Oct 05 03:57	9° $\text{♁}$ 38'49		morning rise		10254 Sep 14 23:45	19° $\text{♁}$ 26'04	
direct	10253 Oct 09 05:08	9° $\text{♁}$ 03'37		direct		10254 Sep 19 20:34	18° $\text{♁}$ 33'27	
morning max el	10253 Oct 22 06:34	15° $\text{♁}$ 20'18	23°03'35	morning max el		10254 Oct 03 17:53	25° $\text{♁}$ 28'57	24°50'14

	10254 Oct 07 23:48	0°♄			10255 Sep 07 11:47	0°♍	
asc. node	10254 Oct 22 14:45	22°♄28'37		morning max el	10255 Sep 15 08:00	5°♍47'45	26°23'51
	10254 Oct 26 10:47	0°♌			10255 Oct 03 02:06	0°♄	
morning set	10254 Oct 29 16:31	6°♌46'11		asc. node	10255 Oct 09 11:37	11°♄52'48	
				morning set	10255 Oct 14 03:06	21°♄27'08	
superior conj	10254 Nov 05 12:38	21°♌42'30	1°38'50		10255 Oct 18 01:22	0°♌	
minimum elong	10254 Nov 05 11:55	21°♌38'35	1°39'10				
max. Earth dist.	10254 Nov 07 07:19	25°♌35'43	1.32395 AU	superior conj	10255 Oct 20 23:50	6°♌30'51	1°32'10
	10254 Nov 09 08:21	0°♊		minimum elong	10255 Oct 20 22:14	6°♌21'57	1°32'17
evening rise	10254 Nov 12 18:56	7°♊12'25		max. Earth dist.	10255 Oct 21 14:57	7°♌54'43	1.31694 AU
desc. node	10254 Nov 25 11:03	0°♋42'45		evening rise	10255 Oct 27 21:43	21°♌33'57	
	10254 Nov 25 00:47	0°♎			10255 Nov 01 00:52	0°♊	
evening max el	10254 Dec 15 22:18	27°♎54'48	27°30'46	desc. node	10255 Nov 12 08:10	20°♊04'45	
	10254 Dec 18 06:30	0°♏			10255 Nov 19 03:50	0°♎	
retrograde	10254 Dec 29 16:47	5°♏13'53		evening max el	10255 Nov 28 05:18	10°♎23'05	27°12'44
evening set	10255 Jan 05 17:01	2°♏47'30		retrograde	10255 Dec 12 02:32	17°♎35'10	
	10255 Jan 09 02:19	30°♏♎		evening set	10255 Dec 19 02:01	15°♎25'00	
min. Earth dist.	10255 Jan 09 10:43	29°♎40'15	0.63020 AU	min. Earth dist.	10255 Dec 22 19:51	12°♎40'19	0.60986 AU
inferior conj	10255 Jan 12 05:23	26°♎56'54	-2°05'40	inferior conj	10255 Dec 25 22:21	9°♎59'34	-3°20'20
minimum elong	10255 Jan 12 09:30	26°♎46'48	2°03'36	minimum elong	10255 Dec 26 04:58	9°♎45'14	3°17'34
asc. node	10255 Jan 18 14:16	21°♎58'20		morning rise	10256 Jan 02 10:29	5°♎06'24	
morning rise	10255 Jan 19 04:10	21°♎44'21		direct	10256 Jan 04 14:26	4°♎47'16	
direct	10255 Jan 21 11:55	21°♎18'55		asc. node	10256 Jan 05 11:21	4°♎50'28	
morning max el	10255 Jan 28 02:42	24°♎42'42	17°47'04	morning max el	10256 Jan 11 18:07	8°♎22'43	17°56'13
	10255 Feb 01 11:02	0°♏			10256 Jan 25 18:41	0°♏	
morning set	10255 Feb 13 06:08	19°♏28'55		morning set	10256 Jan 27 09:07	2°♏55'35	
	10255 Feb 19 07:57	0°♐					
desc. node	10255 Feb 21 10:47	3°♐36'18		superior conj	10256 Feb 06 18:07	21°♏35'22	0°11'52
				minimum elong	10256 Feb 06 19:09	21°♏39'51	0°12'02
superior conj	10255 Feb 25 07:00	10°♐02'27	-0°28'30	behind sun begin	10256 Feb 06 13:44	21°♏16'12	
minimum elong	10255 Feb 25 04:04	9°♐50'18	0°27'51	behind sun end	10256 Feb 07 00:34	22°♏03'28	
max. Earth dist.	10255 Mar 03 16:30	20°♐27'19	1.44259 AU	desc. node	10256 Feb 08 07:37	24°♏17'50	
	10255 Mar 09 17:39	0°♑			10256 Feb 11 16:02	0°♐	
evening rise	10255 Mar 12 09:58	4°♑08'56		max. Earth dist.	10256 Feb 14 06:39	4°♐20'34	1.42630 AU
	10255 Mar 29 19:22	0°♌		evening rise	10256 Feb 20 07:48	14°♐06'24	
evening max el	10255 Apr 11 02:16	15°♌35'17	20°57'34		10256 Mar 01 16:51	0°♑	
asc. node	10255 Apr 16 12:25	19°♌47'03		evening max el	10256 Mar 23 20:56	29°♑19'20	22°12'58
retrograde	10255 Apr 19 13:11	20°♌32'11			10256 Mar 24 13:25	0°♌	
evening set	10255 Apr 23 17:48	18°♌53'03		retrograde	10256 Apr 02 10:32	4°♌58'50	
inferior conj	10255 Apr 29 00:36	12°♌41'54	3°05'22	asc. node	10256 Apr 02 09:37	4°♌58'49	
minimum elong	10255 Apr 28 23:09	12°♌46'54	3°04'52	evening set	10256 Apr 07 01:55	3°♌04'23	
min. Earth dist.	10255 Apr 29 11:24	12°♌04'29	0.68280 AU		10256 Apr 09 23:11	30°♌♑	
morning rise	10255 May 04 04:18	6°♌26'03		inferior conj	10256 Apr 12 09:27	26°♑43'21	2°43'21
direct	10255 May 09 12:17	4°♌04'53		minimum elong	10256 Apr 12 07:26	26°♑50'24	2°42'43
morning max el	10255 May 20 04:24	10°♌26'41	23°36'54	min. Earth dist.	10256 Apr 12 07:27	26°♑50'22	0.68612 AU
desc. node	10255 May 20 11:24	10°♌44'29		morning rise	10256 Apr 17 12:49	20°♑32'26	
	10255 Jun 04 16:24	0°♒		direct	10256 Apr 22 07:09	18°♑31'27	
	10255 Jun 23 22:52	0°♉		morning max el	10256 May 01 16:21	24°♑01'15	22°08'06
morning set	10255 Jun 24 07:54	0°♉38'15		desc. node	10256 May 06 08:18	29°♑13'51	
max. Earth dist.	10255 Jun 28 05:54	7°♉23'32	1.38944 AU		10256 May 06 23:24	0°♌	
					10256 May 28 01:54	0°♒	
superior conj	10255 Jul 05 18:31	21°♉02'57	-1°09'12	morning set	10256 Jun 03 19:14	10°♒36'42	
minimum elong	10255 Jul 05 23:08	21°♉24'32	1°08'55	max. Earth dist.	10256 Jun 09 05:16	19°♒31'10	1.41202 AU
	10255 Jul 10 11:16	0°♑			10256 Jun 15 08:00	0°♉	
asc. node	10255 Jul 13 11:18	5°♑49'46					
evening rise	10255 Jul 14 23:53	8°♑47'54		superior conj	10256 Jun 16 23:21	2°♉53'32	-1°39'59
	10255 Jul 26 23:54	0°♍		minimum elong	10256 Jun 17 05:36	3°♉21'18	1°39'44
evening max el	10255 Jul 31 04:58	5°♍06'08	18°46'53	evening rise	10256 Jun 27 10:45	22°♉03'19	
retrograde	10255 Aug 08 12:47	9°♍15'22		asc. node	10256 Jun 29 08:16	25°♉34'41	
evening set	10255 Aug 10 11:43	9°♍02'27			10256 Jul 01 18:04	0°♑	
desc. node	10255 Aug 16 10:16	6°♍12'33		evening max el	10256 Jul 13 12:17	17°♑40'34	18°15'48
inferior conj	10255 Aug 18 13:59	4°♍41'09	-0°40'00	retrograde	10256 Jul 20 17:27	21°♑19'03	
minimum elong	10255 Aug 18 12:20	4°♍44'10	0°39'35	evening set	10256 Jul 22 23:17	20°♑58'39	
min. Earth dist.	10255 Aug 21 17:00	2°♍25'20	0.56918 AU	inferior conj	10256 Jul 30 06:10	16°♑16'51	0°54'19
	10255 Aug 25 16:28	30°♑♒		minimum elong	10256 Jul 30 07:55	16°♑13'06	0°53'20
morning rise	10255 Aug 26 09:37	29°♑39'46		desc. node	10256 Aug 02 07:30	13°♑40'49	
direct	10255 Sep 01 01:15	28°♑22'21		min. Earth dist.	10256 Aug 02 14:49	13°♑25'52	0.58984 AU

morning rise	10256 Aug 06 13:13	10° $\Omega$ 41'05	direct	10257 Jul 26 02:45	20° $\Theta$ 19'08	
direct	10256 Aug 12 19:55	8° $\Omega$ 53'57	morning max el	10257 Aug 09 08:47	28° $\Theta$ 19'25	27°56'10
morning max el	10256 Aug 27 05:00	16° $\Omega$ 41'14		10257 Aug 10 23:48	0° $\Omega$	
	10256 Sep 07 04:09	0° $\Pi$		10257 Sep 01 00:07	0° $\Pi$	
	10256 Sep 24 13:45	0° $\underline{\Omega}$	morning set	10257 Sep 11 13:40	20° $\Pi$ 08'49	
asc. node	10256 Sep 25 08:28	1° $\underline{\Omega}$ 35'03	asc. node	10257 Sep 12 05:19	21° $\Pi$ 29'52	
morning set	10256 Sep 27 10:46	5° $\underline{\Omega}$ 56'17		10257 Sep 16 05:09	0° $\underline{\Omega}$	
			max. Earth dist.	10257 Sep 17 08:17	2° $\underline{\Omega}$ 27'52	1.31735 AU
superior conj	10256 Oct 04 11:34	21° $\underline{\Omega}$ 16'50				
minimum elong	10256 Oct 04 09:26	21° $\underline{\Omega}$ 04'58	superior conj	10257 Sep 18 22:03	5° $\underline{\Omega}$ 55'28	1°02'33
max. Earth dist.	10256 Oct 04 00:32	20° $\underline{\Omega}$ 15'32	minimum elong	10257 Sep 18 19:51	5° $\underline{\Omega}$ 43'15	1°02'11
	10256 Oct 08 09:54	0° $\Pi$	evening rise	10257 Sep 25 15:57	20° $\underline{\Omega}$ 44'11	
evening rise	10256 Oct 11 05:23	6° $\Pi$ 06'18		10257 Sep 30 02:36	0° $\Pi$	
	10256 Oct 23 15:34	0° $\mathcal{A}$	desc. node	10257 Oct 16 02:33	26° $\Pi$ 24'07	
desc. node	10256 Oct 29 05:21	8° $\mathcal{A}$ 44'05		10257 Oct 19 03:23	0° $\mathcal{A}$	
evening max el	10256 Nov 09 05:04	22° $\mathcal{A}$ 01'03	evening max el	10257 Oct 21 20:41	2° $\mathcal{A}$ 48'14	24°59'00
retrograde	10256 Nov 23 03:11	29° $\mathcal{A}$ 06'26	retrograde	10257 Nov 04 16:57	9° $\mathcal{A}$ 45'43	
evening set	10256 Nov 29 16:28	27° $\mathcal{A}$ 22'04	evening set	10257 Nov 10 07:45	8° $\mathcal{A}$ 34'35	
min. Earth dist.	10256 Dec 03 18:20	24° $\mathcal{A}$ 47'15	min. Earth dist.	10257 Nov 15 08:25	5° $\mathcal{A}$ 51'39	0.56911 AU
inferior conj	10256 Dec 06 22:15	22° $\mathcal{A}$ 24'42	inferior conj	10257 Nov 18 02:14	4° $\mathcal{A}$ 03'56	-5°26'21
minimum elong	10256 Dec 07 06:10	22° $\mathcal{A}$ 09'47	minimum elong	10257 Nov 18 07:57	3° $\mathcal{A}$ 54'33	5°25'10
morning rise	10256 Dec 14 22:28	17° $\mathcal{A}$ 53'45	morning rise	10257 Nov 26 10:25	29° $\Pi$ 55'12	
direct	10256 Dec 17 02:32	17° $\mathcal{A}$ 37'37		10257 Nov 26 02:21	30° $\mathcal{R}\Pi$	
asc. node	10256 Dec 22 08:26	19° $\mathcal{A}$ 17'59	direct	10257 Nov 28 20:12	29° $\Pi$ 38'42	
morning max el	10256 Dec 25 03:47	21° $\mathcal{A}$ 34'11		10257 Dec 01 12:03	0° $\mathcal{A}$	
	10256 Dec 31 15:22	0° $\mathcal{B}$	morning max el	10257 Dec 08 03:50	4° $\mathcal{A}$ 06'15	19°15'47
morning set	10257 Jan 10 01:12	16° $\mathcal{B}$ 57'31	asc. node	10257 Dec 09 05:28	5° $\mathcal{A}$ 11'06	
	10257 Jan 16 21:31	0° $\approx$		10257 Dec 24 09:34	0° $\mathcal{B}$	
			morning set	10257 Dec 25 02:13	1° $\mathcal{B}$ 22'48	
superior conj	10257 Jan 19 03:28	4° $\approx$ 10'32				
minimum elong	10257 Jan 19 06:20	4° $\approx$ 23'47	superior conj	10258 Jan 02 06:09	17° $\mathcal{B}$ 34'03	1°10'34
desc. node	10257 Jan 25 04:28	15° $\approx$ 00'18	minimum elong	10258 Jan 02 09:12	17° $\mathcal{B}$ 48'52	1°10'38
max. Earth dist.	10257 Jan 26 15:39	17° $\approx$ 32'34		10258 Jan 08 21:00	0° $\approx$	
evening rise	10257 Jan 31 00:58	24° $\approx$ 56'15	max. Earth dist.	10258 Jan 08 21:28	0° $\approx$ 02'08	1.38391 AU
	10257 Feb 03 03:32	0° $\mathcal{H}$	desc. node	10258 Jan 12 01:22	5° $\approx$ 40'19	
	10257 Feb 23 12:09	0° $\Upsilon$	evening rise	10258 Jan 12 15:44	6° $\approx$ 42'59	
evening max el	10257 Mar 06 11:56	13° $\Upsilon$ 05'26		10258 Jan 27 02:31	0° $\mathcal{H}$	
retrograde	10257 Mar 17 05:18	19° $\Upsilon$ 25'19	evening max el	10258 Feb 17 01:25	26° $\mathcal{H}$ 54'31	24°51'51
asc. node	10257 Mar 20 06:51	18° $\Upsilon$ 40'27		10258 Feb 20 11:56	0° $\Upsilon$	
evening set	10257 Mar 22 08:16	17° $\Upsilon$ 16'44	retrograde	10258 Feb 28 20:09	3° $\Upsilon$ 46'11	
min. Earth dist.	10257 Mar 27 04:12	11° $\Upsilon$ 37'35	evening set	10258 Mar 06 11:14	1° $\Upsilon$ 25'32	
inferior conj	10257 Mar 27 18:19	10° $\Upsilon$ 49'09	asc. node	10258 Mar 07 04:05	0° $\Upsilon$ 47'35	
minimum elong	10257 Mar 27 16:07	10° $\Upsilon$ 56'42		10258 Mar 07 23:01	30° $\mathcal{R}\mathcal{H}$	
morning rise	10257 Apr 01 23:57	4° $\Upsilon$ 44'21	min. Earth dist.	10258 Mar 10 23:25	26° $\mathcal{H}$ 21'13	0.67972 AU
direct	10257 Apr 06 04:52	3° $\Upsilon$ 05'12	inferior conj	10258 Mar 12 01:17	24° $\mathcal{H}$ 55'46	1°31'06
morning max el	10257 Apr 14 10:00	7° $\Upsilon$ 46'52	minimum elong	10258 Mar 11 23:23	25° $\mathcal{H}$ 02'02	1°30'31
desc. node	10257 Apr 23 05:08	18° $\Upsilon$ 25'30	morning rise	10258 Mar 17 11:47	18° $\mathcal{H}$ 58'24	
	10257 May 01 08:46	0° $\mathcal{B}$	direct	10258 Mar 21 04:09	17° $\mathcal{H}$ 40'33	
morning set	10257 May 14 05:30	19° $\mathcal{B}$ 29'04	morning max el	10258 Mar 28 11:14	21° $\mathcal{H}$ 43'51	19°38'34
	10257 May 20 21:08	0° $\Pi$		10258 Apr 04 08:25	0° $\Upsilon$	
max. Earth dist.	10257 May 22 10:44	2° $\Pi$ 31'34	greatest brilliancy	10258 Apr 10 04:16	8° $\Upsilon$ 16'13	-0.6m
			desc. node	10258 Apr 10 01:56	8° $\Upsilon$ 07'43	
superior conj	10257 May 29 05:59	13° $\Pi$ 44'49	morning set	10258 Apr 23 04:06	27° $\Upsilon$ 54'49	
minimum elong	10257 May 29 11:22	14° $\Pi$ 07'28		10258 Apr 24 12:35	0° $\mathcal{B}$	
	10257 Jun 07 16:06	0° $\Theta$	max. Earth dist.	10258 May 04 22:51	16° $\mathcal{B}$ 17'16	1.44676 AU
evening rise	10257 Jun 10 06:36	4° $\Theta$ 36'24				
asc. node	10257 Jun 16 05:17	15° $\Theta$ 03'48	superior conj	10258 May 09 12:16	23° $\mathcal{B}$ 33'36	-2°12'58
	10257 Jun 26 07:29	0° $\Omega$	minimum elong	10258 May 09 12:27	23° $\mathcal{B}$ 34'18	2°13'19
evening max el	10257 Jun 27 00:38	0° $\Omega$ 44'11		10258 May 13 11:41	0° $\Pi$	
retrograde	10257 Jul 03 14:27	4° $\Omega$ 06'57	evening rise	10258 May 23 06:27	16° $\Pi$ 15'05	
evening set	10257 Jul 06 04:05	3° $\Omega$ 35'45		10258 May 31 11:38	0° $\Theta$	
	10257 Jul 11 06:32	30° $\mathcal{R}\Theta$	asc. node	10258 Jun 03 02:22	4° $\Theta$ 10'24	
inferior conj	10257 Jul 12 18:07	28° $\Theta$ 34'18	evening max el	10258 Jun 10 14:26	14° $\Theta$ 06'56	18°12'05
minimum elong	10257 Jul 12 20:56	28° $\Theta$ 27'22	retrograde	10258 Jun 16 23:11	17° $\Theta$ 28'29	
min. Earth dist.	10257 Jul 15 21:05	25° $\Theta$ 30'53	evening set	10258 Jun 19 20:43	16° $\Theta$ 44'01	
morning rise	10257 Jul 19 11:15	22° $\Theta$ 34'25	inferior conj	10258 Jun 25 21:43	11° $\Theta$ 24'29	2°46'41
desc. node	10257 Jul 20 04:40	22° $\Theta$ 06'32	minimum elong	10258 Jun 26 00:06	11° $\Theta$ 17'53	2°45'44

min. Earth dist.	10258 Jun 28 12:28	8°☿31'16	0.63442 AU	min. Earth dist.	10259 Jun 11 12:51	22°♄14'18	0.65341 AU
morning rise	10258 Jul 02 01:57	5°☿10'59		morning rise	10259 Jun 15 06:38	18°♄20'23	
desc. node	10258 Jul 07 01:48	2°☿45'34		direct	10259 Jun 21 19:10	15°♄36'26	
direct	10258 Jul 08 19:06	2°☿35'46		desc. node	10259 Jun 23 22:52	15°♄52'12	
morning max el	10258 Jul 22 17:07	10°☿38'27	27°45'35	morning max el	10259 Jul 05 03:36	23°♄29'20	27°01'49
	10258 Aug 06 22:11	0°♄			10259 Jul 10 22:37	0°☿	
	10258 Aug 24 09:14	0°♄			10259 Jul 31 06:31	0°♄	
morning set	10258 Aug 26 09:29	3°♄58'07		morning set	10259 Aug 09 19:21	17°♄16'44	
asc. node	10258 Aug 30 02:10	11°♄32'07		max. Earth dist.	10259 Aug 14 03:32	25°♄51'17	1.33774 AU
max. Earth dist.	10258 Aug 31 10:22	14°♄21'40	1.32503 AU		10259 Aug 16 04:10	0°♄	
				asc. node	10259 Aug 16 23:01	1°♄37'42	
superior conj	10258 Sep 03 05:22	20°♄20'46	0°40'11	superior conj	10259 Aug 18 07:19	4°♄26'38	0°13'18
minimum elong	10258 Sep 03 03:37	20°♄11'16	0°39'43	minimum elong	10259 Aug 18 06:39	4°♄23'04	0°12'55
	10258 Sep 07 15:50	0°♄		behind sun begin	10259 Aug 18 03:16	4°♄05'19	
evening rise	10258 Sep 10 03:27	5°♄21'50		behind sun end	10259 Aug 18 10:01	4°♄40'51	
	10258 Sep 23 03:26	0°♄		evening rise	10259 Aug 25 14:00	19°♄53'51	
desc. node	10258 Oct 02 23:48	12°♄42'16			10259 Aug 30 12:41	0°♄	
evening max el	10258 Oct 03 07:34	13°♄01'18	23°20'30	evening max el	10259 Sep 14 21:57	23°♄13'31	21°42'14
retrograde	10258 Oct 16 17:46	19°♄42'53		desc. node	10259 Sep 19 21:02	27°♄09'58	
evening set	10258 Oct 20 23:10	19°♄04'04		retrograde	10259 Sep 27 07:41	29°♄23'28	
min. Earth dist.	10258 Oct 27 17:20	15°♄54'45	0.55410 AU	evening set	10259 Sep 30 03:23	29°♄05'29	
inferior conj	10258 Oct 29 10:19	14°♄54'48	-5°43'59	inferior conj	10259 Oct 09 04:37	25°♄08'13	-5°06'48
minimum elong	10258 Oct 29 09:05	14°♄56'37	5°43'39	minimum elong	10259 Oct 08 20:06	25°♄20'07	5°04'59
morning rise	10258 Nov 06 20:49	11°♄03'03		min. Earth dist.	10259 Oct 09 00:32	25°♄13'55	0.54665 AU
direct	10258 Nov 09 19:01	10°♄42'24		morning rise	10259 Oct 17 13:59	21°♄19'59	
morning max el	10258 Nov 20 14:58	15°♄49'24	20°29'12	direct	10259 Oct 21 04:57	20°♄51'22	
asc. node	10258 Nov 26 02:26	22°♄14'15		morning max el	10259 Nov 02 12:44	26°♄42'03	22°03'19
	10258 Dec 01 01:17	0°♄			10259 Nov 05 16:20	0°♄	
morning set	10258 Dec 09 09:04	16°♄02'34		asc. node	10259 Nov 12 23:22	10°♄11'52	
	10258 Dec 16 03:20	0°♄			10259 Nov 23 09:54	0°♄	
superior conj	10258 Dec 16 21:34	1°♄32'52	1°27'38	morning set	10259 Nov 23 19:18	0°♄49'17	
minimum elong	10258 Dec 16 23:51	1°♄44'29	1°27'54	superior conj	10259 Nov 30 21:55	15°♄55'34	1°37'14
max. Earth dist.	10258 Dec 22 05:05	12°♄04'02	1.36271 AU	minimum elong	10259 Nov 30 23:03	16°♄01'31	1°37'38
evening rise	10258 Dec 26 01:53	19°♄20'08		max. Earth dist.	10259 Dec 04 18:49	23°♄57'22	1.34433 AU
desc. node	10258 Dec 29 22:19	26°♄13'59			10259 Dec 07 19:22	0°♄	
	10259 Jan 01 02:46	0°♄		evening rise	10259 Dec 09 03:43	2°♄37'16	
	10259 Jan 21 05:04	0°♄		desc. node	10259 Dec 16 19:18	16°♄36'03	
evening max el	10259 Jan 30 14:55	10°♄44'08	26°01'45		10259 Dec 25 00:53	0°♄	
retrograde	10259 Feb 12 06:05	17°♄55'53		evening max el	10260 Jan 13 04:25	24°♄25'13	26°55'33
evening set	10259 Feb 18 09:10	15°♄26'15			10260 Jan 20 09:26	0°♄	
asc. node	10259 Feb 22 01:16	11°♄37'55		retrograde	10260 Jan 26 10:11	1°♄46'19	
min. Earth dist.	10259 Feb 22 14:50	10°♄56'42	0.67049 AU		10260 Jan 31 21:46	30°♄	
inferior conj	10259 Feb 24 04:26	8°♄59'33	0°41'22	evening set	10260 Feb 02 00:09	29°♄12'14	
minimum elong	10259 Feb 24 03:24	9°♄02'47	0°41'10	min. Earth dist.	10260 Feb 06 00:06	25°♄16'54	0.65747 AU
morning rise	10259 Mar 01 22:17	3°♄11'32		inferior conj	10260 Feb 08 01:32	22°♄54'34	-0°17'17
direct	10259 Mar 05 03:22	2°♄12'43		minimum elong	10260 Feb 08 02:01	22°♄53'10	0°16'46
morning max el	10259 Mar 11 19:58	5°♄50'07	18°45'43	asc. node	10260 Feb 08 22:26	21°♄54'48	
desc. node	10259 Mar 27 22:43	28°♄12'35		morning rise	10260 Feb 14 05:06	17°♄18'17	
	10259 Mar 29 02:23	0°♄		direct	10260 Feb 17 00:25	16°♄35'22	
morning set	10259 Apr 02 14:53	7°♄03'14		morning max el	10260 Feb 23 10:19	19°♄59'01	18°09'28
	10259 Apr 17 07:17	0°♄			10260 Mar 02 03:55	0°♄	
max. Earth dist.	10259 Apr 17 16:28	0°♄35'56	1.45508 AU	morning set	10260 Mar 13 05:03	17°♄34'48	
superior conj	10259 Apr 18 23:16	2°♄36'34	-2°03'09	desc. node	10260 Mar 13 19:29	18°♄33'14	
minimum elong	10259 Apr 18 16:12	2°♄08'54	2°02'59		10260 Mar 20 22:19	0°♄	
evening rise	10259 May 04 06:44	26°♄54'20		superior conj	10260 Mar 28 05:56	11°♄34'52	-1°34'05
	10259 May 06 04:55	0°♄		minimum elong	10260 Mar 27 20:30	10°♄57'47	1°33'10
greatest brilliancy	10259 May 10 21:50	7°♄33'35	-0.9m	max. Earth dist.	10260 Mar 30 12:30	15°♄08'48	1.45594 AU
asc. node	10259 May 20 23:27	22°♄46'55			10260 Apr 09 01:11	0°♄	
evening max el	10259 May 25 02:41	27°♄41'11	18°37'39	evening rise	10260 Apr 13 08:34	6°♄41'34	
	10259 May 27 21:35	0°♄		greatest brilliancy	10260 Apr 25 11:59	25°♄23'12	-0.7m
retrograde	10259 May 31 15:41	1°♄15'10			10260 Apr 28 14:41	0°♄	
evening set	10259 Jun 03 21:08	0°♄16'00		asc. node	10260 May 06 20:34	10°♄43'32	
	10259 Jun 04 07:07	30°♄		evening max el	10260 May 07 11:00	11°♄20'54	19°20'20
inferior conj	10259 Jun 09 13:00	24°♄39'48	3°10'40	retrograde	10260 May 14 12:35	15°♄19'55	
minimum elong	10259 Jun 09 14:18	24°♄35'50	3°10'03				

evening set	10260 May 18 02:23	14° $\Pi$ 05'21		inferior conj	10261 May 07 17:26	22° $\mathcal{B}$ 01'58	3°13'28
inferior conj	10260 May 23 12:30	8° $\Pi$ 14'02	3°18'36	minimum elong	10261 May 07 16:28	22° $\mathcal{B}$ 05'15	3°13'01
minimum elong	10260 May 23 12:36	8° $\Pi$ 13'43	3°18'10	min. Earth dist.	10261 May 08 11:57	20° $\mathcal{B}$ 58'42	0.67879 AU
min. Earth dist.	10260 May 24 21:16	6° $\Pi$ 27'04	0.66833 AU	morning rise	10261 May 12 22:33	15° $\mathcal{B}$ 43'42	
morning rise	10260 May 28 22:24	1° $\Pi$ 53'39		direct	10261 May 18 13:57	13° $\mathcal{B}$ 13'06	
	10260 May 31 16:14	30° $\mathcal{R}$ 8		desc. node	10261 May 27 16:49	17° $\mathcal{B}$ 52'23	
direct	10260 Jun 04 01:43	29° $\mathcal{B}$ 11'55		morning max el	10261 May 29 23:47	20° $\mathcal{B}$ 03'32	24°28'29
	10260 Jun 07 17:39	0° $\Pi$			10261 Jun 07 11:34	0° $\Pi$	
desc. node	10260 Jun 09 19:52	1° $\Pi$ 04'29			10261 Jun 27 19:31	0° $\mathcal{E}$	
morning max el	10260 Jun 16 14:08	6° $\Pi$ 41'01	25°52'57	morning set	10261 Jul 04 17:48	11° $\mathcal{E}$ 41'51	
	10260 Jul 04 15:31	0° $\mathcal{E}$		max. Earth dist.	10261 Jul 08 08:58	18° $\mathcal{E}$ 09'13	1.37631 AU
morning set	10260 Jul 22 15:42	29° $\mathcal{E}$ 55'37			10261 Jul 14 17:21	0° $\mathcal{N}$	
	10260 Jul 22 16:40	0° $\mathcal{N}$					
max. Earth dist.	10260 Jul 26 10:24	7° $\mathcal{N}$ 01'14	1.35516 AU	superior conj	10261 Jul 15 08:08	1° $\mathcal{N}$ 11'10	-0°50'10
				minimum elong	10261 Jul 15 11:25	1° $\mathcal{N}$ 26'59	0°50'00
superior conj	10260 Aug 01 01:20	18° $\mathcal{N}$ 06'25	-0°17'19	asc. node	10261 Jul 20 16:46	11° $\mathcal{N}$ 43'17	
minimum elong	10260 Aug 01 02:23	18° $\mathcal{N}$ 11'42	0°17'26	evening rise	10261 Jul 23 23:35	18° $\mathcal{N}$ 16'09	
asc. node	10260 Aug 02 19:53	21° $\mathcal{N}$ 42'55			10261 Jul 30 01:27	0° $\mathcal{N}$	
	10260 Aug 06 20:14	0° $\mathcal{N}$		evening max el	10261 Aug 09 15:24	15° $\mathcal{N}$ 28'52	19°14'03
evening rise	10260 Aug 08 21:33	4° $\mathcal{N}$ 14'33		retrograde	10261 Aug 18 19:45	20° $\mathcal{N}$ 02'36	
	10260 Aug 23 12:28	0° $\mathcal{E}$		evening set	10261 Aug 20 16:05	19° $\mathcal{N}$ 52'18	
evening max el	10260 Aug 26 23:50	3° $\mathcal{E}$ 58'19	20°18'04	desc. node	10261 Aug 23 15:32	18° $\mathcal{N}$ 56'10	
desc. node	10260 Sep 05 18:17	9° $\mathcal{E}$ 18'33		inferior conj	10261 Aug 29 05:10	15° $\mathcal{N}$ 42'05	-1°43'44
retrograde	10260 Sep 06 20:25	9° $\mathcal{E}$ 21'40		minimum elong	10261 Aug 29 00:35	15° $\mathcal{N}$ 49'44	1°42'07
evening set	10260 Sep 08 20:16	9° $\mathcal{E}$ 11'33		min. Earth dist.	10261 Aug 31 22:09	13° $\mathcal{N}$ 54'05	0.55946 AU
inferior conj	10260 Sep 17 22:19	5° $\mathcal{E}$ 13'42	-3°37'29	morning rise	10261 Sep 06 06:12	11° $\mathcal{N}$ 01'59	
minimum elong	10260 Sep 17 13:05	5° $\mathcal{E}$ 27'16	3°34'27	direct	10261 Sep 11 11:01	9° $\mathcal{N}$ 59'46	
min. Earth dist.	10260 Sep 19 09:26	4° $\mathcal{E}$ 22'04	0.54847 AU	morning max el	10261 Sep 25 13:55	17° $\mathcal{N}$ 09'52	25°32'43
morning rise	10260 Sep 26 05:08	1° $\mathcal{E}$ 07'45			10261 Oct 06 02:55	0° $\mathcal{E}$	
direct	10260 Sep 30 14:23	0° $\mathcal{E}$ 26'20		asc. node	10261 Oct 16 17:08	18° $\mathcal{E}$ 00'56	
morning max el	10260 Oct 14 01:55	6° $\mathcal{E}$ 59'58	23°49'34	morning set	10261 Oct 22 18:26	0° $\mathcal{N}$ 22'16	
asc. node	10260 Oct 29 20:16	28° $\mathcal{E}$ 51'10			10261 Oct 22 14:16	0° $\mathcal{N}$	
	10260 Oct 30 11:23	0° $\mathcal{N}$					
morning set	10260 Nov 07 06:59	15° $\mathcal{N}$ 37'46		superior conj	10261 Oct 29 14:22	15° $\mathcal{N}$ 20'19	1°36'42
	10260 Nov 13 22:03	0° $\mathcal{N}$		minimum elong	10261 Oct 29 13:15	15° $\mathcal{N}$ 14'05	1°36'57
				max. Earth dist.	10261 Oct 30 21:02	18° $\mathcal{N}$ 09'13	1.32033 AU
superior conj	10260 Nov 14 04:20	0° $\mathcal{N}$ 34'05	1°40'03		10261 Nov 05 09:25	0° $\mathcal{N}$	
minimum elong	10260 Nov 14 04:15	0° $\mathcal{N}$ 33'39	1°40'27	evening rise	10261 Nov 05 16:30	0° $\mathcal{N}$ 36'51	
max. Earth dist.	10260 Nov 16 16:29	5° $\mathcal{N}$ 57'38	1.33003 AU	desc. node	10261 Nov 19 13:29	26° $\mathcal{N}$ 21'02	
evening rise	10260 Nov 21 17:39	16° $\mathcal{N}$ 25'46			10261 Nov 21 20:31	0° $\mathcal{E}$	
	10260 Nov 28 20:30	0° $\mathcal{E}$		evening max el	10261 Dec 08 02:32	20° $\mathcal{E}$ 37'57	27°27'15
desc. node	10260 Dec 02 16:22	6° $\mathcal{E}$ 41'02		retrograde	10261 Dec 21 22:46	27° $\mathcal{E}$ 55'11	
	10260 Dec 18 14:31	0° $\mathcal{E}$		evening set	10261 Dec 28 23:33	25° $\mathcal{E}$ 34'16	
evening max el	10260 Dec 25 16:55	7° $\mathcal{E}$ 47'15	27°26'06	min. Earth dist.	10262 Jan 01 16:32	22° $\mathcal{E}$ 37'50	0.62169 AU
retrograde	10261 Jan 08 08:01	15° $\mathcal{E}$ 09'18		inferior conj	10262 Jan 04 15:10	19° $\mathcal{E}$ 53'31	-2°37'14
evening set	10261 Jan 15 05:55	12° $\mathcal{E}$ 37'21		minimum elong	10262 Jan 04 20:23	19° $\mathcal{E}$ 41'19	2°34'46
min. Earth dist.	10261 Jan 19 01:11	9° $\mathcal{E}$ 14'05	0.64100 AU	morning rise	10262 Jan 11 19:40	14° $\mathcal{E}$ 49'05	
inferior conj	10261 Jan 21 14:06	6° $\mathcal{E}$ 35'00	-1°24'09	asc. node	10262 Jan 12 16:42	14° $\mathcal{E}$ 35'10	
minimum elong	10261 Jan 21 16:45	6° $\mathcal{E}$ 28'04	1°22'39	direct	10262 Jan 14 01:16	14° $\mathcal{E}$ 26'53	
asc. node	10261 Jan 25 19:35	2° $\mathcal{E}$ 37'53		morning max el	10262 Jan 20 20:44	17° $\mathcal{E}$ 54'41	17°48'41
morning rise	10261 Jan 28 05:28	1° $\mathcal{E}$ 13'12			10262 Jan 29 13:26	0° $\mathcal{E}$	
direct	10261 Jan 30 16:46	0° $\mathcal{E}$ 42'31		morning set	10262 Feb 05 16:24	12° $\mathcal{E}$ 26'40	
morning max el	10261 Feb 06 03:38	4° $\mathcal{E}$ 03'24	17°50'13	desc. node	10262 Feb 15 13:05	29° $\mathcal{E}$ 43'49	
morning set	10261 Feb 22 23:27	29° $\mathcal{E}$ 28'36			10262 Feb 15 16:53	0° $\mathcal{H}$	
	10261 Feb 23 06:51	0° $\mathcal{H}$					
desc. node	10261 Feb 28 16:16	9° $\mathcal{H}$ 04'58		superior conj	10262 Feb 16 23:19	2° $\mathcal{H}$ 09'15	-0°10'45
				minimum elong	10262 Feb 16 22:18	2° $\mathcal{H}$ 04'59	0°10'20
superior conj	10261 Mar 08 02:36	21° $\mathcal{H}$ 17'25	-0°53'21	behind sun begin	10262 Feb 16 15:31	1° $\mathcal{H}$ 36'12	
minimum elong	10261 Mar 07 20:47	20° $\mathcal{H}$ 53'51	0°52'25	behind sun end	10262 Feb 17 05:06	2° $\mathcal{H}$ 33'42	
max. Earth dist.	10261 Mar 13 07:43	29° $\mathcal{H}$ 37'24	1.44937 AU	max. Earth dist.	10262 Feb 23 23:42	13° $\mathcal{H}$ 45'43	1.43620 AU
	10261 Mar 13 13:26	0° $\mathcal{Y}$		evening rise	10262 Mar 03 11:23	25° $\mathcal{H}$ 37'31	
evening rise	10261 Mar 23 21:04	16° $\mathcal{Y}$ 03'01			10262 Mar 06 07:27	0° $\mathcal{Y}$	
	10261 Apr 02 01:54	0° $\mathcal{B}$			10262 Mar 27 01:46	0° $\mathcal{B}$	
evening max el	10261 Apr 20 13:58	25° $\mathcal{B}$ 02'33	20°18'21	evening max el	10262 Apr 03 11:27	8° $\mathcal{B}$ 45'42	21°28'44
asc. node	10261 Apr 23 17:43	27° $\mathcal{B}$ 47'55		asc. node	10262 Apr 10 14:55	13° $\mathcal{B}$ 45'31	
retrograde	10261 Apr 28 11:16	29° $\mathcal{B}$ 36'45		retrograde	10262 Apr 12 09:38	14° $\mathcal{B}$ 01'07	
evening set	10261 May 02 10:08	28° $\mathcal{B}$ 06'38		evening set	10262 Apr 16 18:36	12° $\mathcal{B}$ 15'36	

inferior conj	10262 Apr 22 01:28	5°♄59'52	2°57'15	evening rise	10263 Feb 11 16:46	5°♄55'45	
minimum elong	10262 Apr 21 23:44	6°♄05'53	2°56'42		10263 Feb 27 12:50	0°♄	
min. Earth dist.	10262 Apr 22 06:46	5°♄41'21	0.68470 AU	evening max el	10263 Mar 17 04:26	22°♄30'44	22°47'00
	10262 Apr 26 22:20	30°♄		retrograde	10263 Mar 27 05:58	28°♄27'50	
morning rise	10262 Apr 27 04:39	29°♄45'41		asc. node	10263 Mar 28 12:08	28°♄20'08	
direct	10262 May 02 06:50	27°♄32'34		evening set	10263 Apr 01 02:08	26°♄27'26	
	10262 May 08 09:07	0°♄		inferior conj	10263 Apr 06 10:33	20°♄03'24	2°31'07
morning max el	10262 May 12 09:54	3°♄33'03	22°58'38	minimum elong	10263 Apr 06 08:24	20°♄10'51	2°30'28
desc. node	10262 May 14 13:43	5°♄50'33		min. Earth dist.	10263 Apr 06 03:25	20°♄28'08	0.68615 AU
	10262 Jun 01 14:34	0°♄		morning rise	10263 Apr 11 14:32	13°♄54'49	
morning set	10262 Jun 15 20:28	22°♄22'45		direct	10263 Apr 16 03:12	12°♄02'47	
max. Earth dist.	10262 Jun 20 05:37	29°♄46'21	1.39919 AU	morning max el	10263 Apr 24 23:42	17°♄11'03	21°32'18
	10262 Jun 20 08:47	0°♄		desc. node	10263 May 01 10:35	24°♄39'11	
					10263 May 05 11:20	0°♄	
superior conj	10262 Jun 27 23:49	13°♄32'21	-1°22'47		10263 May 25 16:30	0°♄	
minimum elong	10262 Jun 28 05:17	13°♄57'24	1°22'29	morning set	10263 May 26 20:25	1°♄50'19	
	10262 Jul 06 17:48	0°♄		max. Earth dist.	10263 Jun 02 07:11	12°♄15'57	1.42099 AU
evening rise	10262 Jul 07 17:05	1°♄51'18					
asc. node	10262 Jul 07 13:44	1°♄35'16		superior conj	10263 Jun 09 19:44	24°♄58'57	-1°51'09
evening max el	10262 Jul 23 18:12	27°♄43'14	18°31'11	minimum elong	10263 Jun 10 02:04	25°♄26'22	1°51'02
	10262 Jul 26 12:52	0°♄			10263 Jun 12 16:35	0°♄	
retrograde	10262 Jul 31 13:15	1°♄37'10		evening rise	10263 Jun 20 22:07	14°♄49'46	
evening set	10262 Aug 02 14:52	1°♄21'34		asc. node	10263 Jun 24 10:43	21°♄13'59	
	10262 Aug 05 21:12	30°♄			10263 Jun 29 11:33	0°♄	
inferior conj	10262 Aug 10 08:50	26°♄51'58	0°02'59	evening max el	10263 Jul 07 04:12	10°♄31'36	18°08'38
minimum elong	10262 Aug 10 08:56	26°♄51'46	0°02'39	retrograde	10263 Jul 14 01:16	14°♄01'10	
transit middle	10262 Aug 10 08:56	26°♄51'46	0°02'39	evening set	10263 Jul 16 10:33	13°♄36'23	
transit begin	10262 Aug 10 05:23	26°♄58'40		inferior conj	10263 Jul 23 09:50	8°♄45'59	1°26'27
transit end	10262 Aug 10 12:28	26°♄44'51		minimum elong	10263 Jul 23 12:17	8°♄40'25	1°25'15
desc. node	10262 Aug 10 12:44	26°♄44'19		min. Earth dist.	10263 Jul 26 17:11	5°♄47'01	0.59953 AU
min. Earth dist.	10262 Aug 13 16:08	24°♄18'26	0.57759 AU	desc. node	10263 Jul 28 09:56	4°♄23'48	
morning rise	10262 Aug 17 23:28	21°♄34'58		morning rise	10263 Jul 30 11:02	2°♄58'59	
direct	10262 Aug 23 22:24	20°♄04'44		direct	10263 Aug 05 22:32	0°♄59'15	
morning max el	10262 Sep 07 06:39	27°♄40'54	26°55'28	morning max el	10263 Aug 20 06:28	8°♄52'17	27°45'05
	10262 Sep 09 12:52	0°♄			10263 Sep 05 11:00	0°♄	
	10262 Sep 29 16:42	0°♄		asc. node	10263 Sep 20 10:53	27°♄21'36	
asc. node	10262 Oct 03 14:01	7°♄33'15		morning set	10263 Sep 21 09:55	29°♄21'12	
morning set	10262 Oct 07 03:59	14°♄58'19			10263 Sep 21 17:19	0°♄	
				max. Earth dist.	10263 Sep 27 15:09	12°♄48'03	1.31527 AU
superior conj	10262 Oct 14 02:03	0°♄08'12	1°27'39				
minimum elong	10262 Oct 14 00:10	29°♄57'46	1°27'39	superior conj	10263 Sep 28 13:31	14°♄52'02	1°13'13
max. Earth dist.	10262 Oct 14 05:45	0°♄28'49	1.31540 AU	minimum elong	10263 Sep 28 11:17	14°♄39'40	1°12'58
	10262 Oct 14 00:34	0°♄		evening rise	10263 Oct 05 06:52	29°♄39'35	
evening rise	10262 Oct 20 21:40	15°♄03'34			10263 Oct 05 10:40	0°♄	
	10262 Oct 28 08:50	0°♄			10263 Oct 21 17:57	0°♄	
desc. node	10262 Nov 06 10:38	15°♄26'07		desc. node	10263 Oct 24 07:49	3°♄42'43	
	10262 Nov 17 13:15	0°♄		evening max el	10263 Nov 02 03:24	14°♄02'43	25°49'00
evening max el	10262 Nov 20 06:50	2°♄45'43	26°54'43	retrograde	10263 Nov 16 01:01	21°♄04'09	
retrograde	10262 Dec 04 05:03	9°♄55'03		evening set	10263 Nov 22 06:21	19°♄33'37	
evening set	10262 Dec 11 01:14	7°♄55'05		min. Earth dist.	10263 Nov 26 15:56	16°♄57'41	0.58003 AU
min. Earth dist.	10262 Dec 14 21:18	5°♄16'07	0.60076 AU	inferior conj	10263 Nov 29 17:05	14°♄48'24	-4°58'03
inferior conj	10262 Dec 18 01:18	2°♄41'10	-3°51'46	minimum elong	10263 Nov 30 00:38	14°♄35'00	4°55'59
minimum elong	10262 Dec 18 08:44	2°♄25'57	3°48'56	morning rise	10263 Dec 07 21:17	10°♄26'46	
	10262 Dec 21 13:46	30°♄		direct	10263 Dec 10 03:08	10°♄10'47	
morning rise	10262 Dec 25 18:51	27°♄57'00		asc. node	10263 Dec 17 10:54	13°♄13'30	
direct	10262 Dec 27 22:10	27°♄39'36		morning max el	10263 Dec 18 16:09	14°♄19'24	18°43'55
asc. node	10262 Dec 30 13:49	28°♄07'37			10263 Dec 29 10:45	0°♄	
	10263 Jan 02 20:23	0°♄		morning set	10264 Jan 03 21:57	10°♄23'32	
morning max el	10263 Jan 04 10:08	1°♄23'21	18°06'00				
morning set	10263 Jan 20 01:34	26°♄09'48		superior conj	10264 Jan 12 13:44	27°♄07'04	0°57'04
	10263 Jan 22 02:52	0°♄		minimum elong	10264 Jan 12 16:50	27°♄21'43	0°57'03
					10264 Jan 14 02:42	0°♄	
superior conj	10263 Jan 29 20:22	14°♄09'29	0°27'03	max. Earth dist.	10264 Jan 19 19:10	10°♄16'40	1.39664 AU
minimum elong	10263 Jan 29 22:26	14°♄18'41	0°27'05	desc. node	10264 Jan 20 06:49	11°♄07'45	
desc. node	10263 Feb 02 09:56	20°♄25'48		evening rise	10264 Jan 23 19:16	17°♄10'29	
max. Earth dist.	10263 Feb 06 11:21	27°♄21'03	1.41794 AU		10264 Jan 31 16:39	0°♄	
	10263 Feb 08 01:32	0°♄			10264 Feb 22 01:48	0°♄	



evening max el	10264 Feb 27 18:41	6°♿18'35	24°07'17		10265 Jan 24 00:16	0°♿	
retrograde	10264 Mar 09 23:01	12°♿52'27		evening max el	10265 Feb 09 07:54	20°♿07'35	25°23'00
asc. node	10264 Mar 14 09:21	11°♿21'00		retrograde	10265 Feb 21 11:50	27°♿09'17	
evening set	10264 Mar 15 07:12	10°♿38'24		evening set	10265 Feb 27 08:13	24°♿44'02	
min. Earth dist.	10264 Mar 19 23:41	5°♿14'17	0.68331 AU	asc. node	10265 Mar 01 06:34	22°♿51'25	
inferior conj	10264 Mar 20 18:49	4°♿09'34	1°55'40	min. Earth dist.	10265 Mar 03 17:25	19°♿54'49	0.67630 AU
minimum elong	10264 Mar 20 16:41	4°♿16'48	1°55'00	inferior conj	10265 Mar 05 00:22	18°♿14'55	1°11'07
	10264 Mar 24 02:06	30°♿♿		minimum elong	10265 Mar 04 22:46	18°♿20'05	1°10'39
morning rise	10264 Mar 26 02:13	28°♿07'55		morning rise	10265 Mar 10 13:43	12°♿21'34	
direct	10264 Mar 30 01:46	26°♿37'53		direct	10265 Mar 14 01:05	11°♿12'16	
	10264 Apr 05 18:33	0°♿		morning max el	10265 Mar 21 01:05	15°♿02'51	19°14'09
morning max el	10264 Apr 06 20:26	1°♿01'14	20°16'08		10265 Apr 01 12:40	0°♿	
desc. node	10264 Apr 17 07:25	14°♿04'39		greatest brilliancy	10265 Apr 02 24:00	2°♿11'14	-0.7m
	10264 Apr 28 03:47	0°♿		desc. node	10265 Apr 04 04:13	3°♿57'06	
morning set	10264 May 04 23:08	10°♿23'28		morning set	10265 Apr 14 00:05	18°♿59'27	
max. Earth dist.	10264 May 14 16:10	25°♿38'59	1.43898 AU		10265 Apr 21 02:30	0°♿	
	10264 May 17 08:57	0°♿		max. Earth dist.	10265 Apr 27 07:00	9°♿40'54	1.45111 AU
superior conj	10264 May 20 15:56	5°♿22'42	-2°09'31	superior conj	10265 Apr 30 12:42	14°♿47'50	-2°11'20
minimum elong	10264 May 20 19:40	5°♿38'03	2°09'48	minimum elong	10265 Apr 30 09:40	14°♿35'49	2°11'35
evening rise	10264 Jun 02 10:00	27°♿00'39			10265 May 09 23:37	0°♿	
	10264 Jun 04 03:21	0°♿		evening rise	10265 May 15 00:06	8°♿14'26	
asc. node	10264 Jun 10 07:44	10°♿34'04		asc. node	10265 May 28 04:48	29°♿28'59	
evening max el	10264 Jun 19 17:32	23°♿43'59	18°05'26		10265 May 28 13:17	0°♿	
retrograde	10264 Jun 26 03:55	27°♿04'33		evening max el	10265 Jun 03 06:55	7°♿12'08	18°20'47
evening set	10264 Jun 28 20:58	26°♿27'50		retrograde	10265 Jun 09 16:34	10°♿37'49	
inferior conj	10264 Jul 05 04:56	21°♿18'10	2°24'03	evening set	10265 Jun 12 17:20	9°♿47'20	
minimum elong	10264 Jul 05 07:41	21°♿11'00	2°22'55	inferior conj	10265 Jun 18 13:59	4°♿20'22	2°59'04
min. Earth dist.	10264 Jul 08 03:04	18°♿16'53	0.62209 AU	minimum elong	10265 Jun 18 15:57	4°♿14'40	2°58'16
morning rise	10264 Jul 11 16:22	15°♿11'21		min. Earth dist.	10265 Jun 20 22:30	1°♿37'07	0.64283 AU
desc. node	10264 Jul 14 07:04	13°♿40'09			10265 Jun 22 10:36	30°♿♿	
direct	10264 Jul 18 09:18	12°♿46'46		morning rise	10265 Jun 24 13:20	28°♿03'17	
morning max el	10264 Aug 01 12:34	20°♿48'47	27°56'14	direct	10265 Jul 01 05:01	25°♿23'02	
	10264 Aug 09 10:59	0°♿		desc. node	10265 Jul 01 04:09	25°♿23'02	
	10264 Aug 28 12:15	0°♿			10265 Jul 11 05:47	0°♿	
morning set	10264 Sep 04 10:05	13°♿24'38		morning max el	10265 Jul 14 22:23	3°♿23'53	27°30'45
asc. node	10264 Sep 06 07:42	17°♿20'01			10265 Aug 03 21:18	0°♿	
max. Earth dist.	10264 Sep 09 21:11	24°♿54'51	1.32004 AU	morning set	10265 Aug 19 02:05	27°♿02'31	
					10265 Aug 20 13:48	0°♿	
superior conj	10264 Sep 11 22:52	29°♿25'33	0°53'39	max. Earth dist.	10265 Aug 23 19:58	6°♿39'44	1.32980 AU
minimum elong	10264 Sep 11 20:47	29°♿14'05	0°53'13	asc. node	10265 Aug 24 04:32	7°♿24'25	
	10264 Sep 12 05:09	0°♿					
evening rise	10264 Sep 18 18:03	14°♿18'09		superior conj	10265 Aug 27 04:11	13°♿43'31	0°29'18
	10264 Sep 26 12:24	0°♿		minimum elong	10265 Aug 27 02:48	13°♿36'08	0°28'51
desc. node	10264 Oct 10 05:02	20°♿51'10		evening rise	10265 Sep 03 05:24	28°♿54'17	
evening max el	10264 Oct 13 16:09	24°♿31'47	24°18'06		10265 Sep 03 17:47	0°♿	
	10264 Oct 21 07:29	0°♿			10265 Sep 20 22:58	0°♿	
retrograde	10264 Oct 27 09:06	1°♿23'55		evening max el	10265 Sep 25 03:08	4°♿39'21	22°37'39
evening set	10264 Nov 01 11:02	0°♿27'00		desc. node	10265 Sep 27 02:15	6°♿26'17	
	10264 Nov 02 14:16	30°♿♿		retrograde	10265 Oct 08 05:10	11°♿10'30	
min. Earth dist.	10264 Nov 07 03:00	27°♿35'15	0.56203 AU	evening set	10265 Oct 11 19:12	10°♿42'17	
inferior conj	10264 Nov 09 12:17	26°♿06'30	-5°39'35	min. Earth dist.	10265 Oct 19 10:48	7°♿16'36	0.54989 AU
minimum elong	10264 Nov 09 15:33	26°♿01'26	5°38'59	inferior conj	10265 Oct 20 13:17	6°♿38'56	-5°35'26
morning rise	10264 Nov 17 22:10	22°♿06'25		minimum elong	10265 Oct 20 08:31	6°♿45'44	5°34'43
direct	10264 Nov 20 12:38	21°♿48'35		morning rise	10265 Oct 28 23:33	2°♿51'02	
morning max el	10264 Nov 30 10:58	26°♿31'23	19°44'16	direct	10265 Nov 01 04:17	2°♿27'41	
asc. node	10264 Dec 03 07:54	29°♿38'17		morning max el	10265 Nov 12 16:21	7°♿53'01	21°07'00
	10264 Dec 03 14:59	0°♿		asc. node	10265 Nov 20 04:51	17°♿06'14	
morning set	10264 Dec 18 01:47	24°♿55'56			10265 Nov 27 15:25	0°♿	
	10264 Dec 20 13:44	0°♿		morning set	10265 Dec 02 10:17	9°♿39'06	
superior conj	10264 Dec 25 22:21	10°♿34'08	1°18'45	superior conj	10265 Dec 09 18:00	24°♿57'23	1°32'34
minimum elong	10264 Dec 26 01:10	11°♿01'01	1°18'55	minimum elong	10265 Dec 09 19:49	25°♿06'47	1°32'55
max. Earth dist.	10265 Jan 01 01:19	22°♿32'57	1.37467 AU		10265 Dec 12 05:14	0°♿	
evening rise	10265 Jan 04 18:38	29°♿19'12		max. Earth dist.	10265 Dec 14 10:41	4°♿26'48	1.35445 AU
	10265 Jan 05 03:49	0°♿		evening rise	10265 Dec 18 11:54	12°♿14'20	
desc. node	10265 Jan 06 03:44	1°♿45'21		desc. node	10265 Dec 24 00:42	22°♿14'29	

	10265 Dec 28 14:57	0°♊		evening rise	10266 Dec 01 19:20	25°♊46'26	
	10266 Jan 19 03:38	0°♋			10266 Dec 03 23:48	0°♌	
evening max el	10266 Jan 22 21:13	3°♋53'43	26°26'58	desc. node	10266 Dec 10 21:42	12°♌30'15	
retrograde	10266 Feb 04 19:33	11°♋11'32			10266 Dec 22 00:56	0°♍	
evening set	10266 Feb 11 03:27	8°♋39'09		evening max el	10267 Jan 05 10:36	17°♍29'01	27°11'51
min. Earth dist.	10266 Feb 15 06:28	4°♋24'19	0.66536 AU	retrograde	10267 Jan 18 21:17	24°♍51'43	
asc. node	10266 Feb 16 03:45	3°♋20'21		evening set	10267 Jan 25 14:52	22°♍17'51	
inferior conj	10266 Feb 17 01:12	2°♋15'14	0°17'33	min. Earth dist.	10267 Jan 29 12:43	18°♍36'14	0.65080 AU
minimum elong	10266 Feb 17 00:44	2°♋16'40	0°17'36	inferior conj	10267 Jan 31 19:04	16°♍05'40	-0°44'42
	10266 Feb 18 23:18	30°♌		minimum elong	10267 Jan 31 20:23	16°♍01'59	0°43'48
morning rise	10266 Feb 22 22:55	26°♌32'01		asc. node	10267 Feb 03 00:55	13°♌41'53	
direct	10266 Feb 25 23:32	25°♌40'35		morning rise	10267 Feb 07 03:24	10°♌34'56	
morning max el	10266 Mar 04 12:31	29°♌11'01	18°28'12	direct	10267 Feb 09 18:59	9°♌57'45	
	10266 Mar 05 07:41	0°♍		morning max el	10267 Feb 16 04:30	13°♌19'19	17°59'06
desc. node	10266 Mar 22 01:00	24°♍09'06			10267 Feb 28 00:54	0°♎	
morning set	10266 Mar 24 21:27	28°♍40'05		morning set	10267 Mar 06 00:14	9°♎49'04	
	10266 Mar 25 17:38	0°♏		desc. node	10267 Mar 08 21:48	14°♎35'23	
					10267 Mar 18 10:15	0°♏	
superior conj	10266 Apr 09 19:31	23°♏42'23	-1°52'51	superior conj	10267 Mar 20 06:19	2°♏55'12	-1°17'37
minimum elong	10266 Apr 09 10:33	23°♏07'21	1°52'20	minimum elong	10267 Mar 19 21:56	2°♏21'55	1°16'36
max. Earth dist.	10266 Apr 10 01:24	24°♏05'24	1.45627 AU	max. Earth dist.	10267 Mar 23 21:14	8°♏38'05	1.45403 AU
	10266 Apr 13 20:06	0°♐		evening rise	10267 Apr 05 08:46	28°♏00'59	
evening rise	10266 Apr 25 14:11	18°♐28'46			10267 Apr 06 15:43	0°♑	
	10266 May 02 21:13	0°♒		greatest brilliancy	10267 Apr 19 07:52	19°♑12'49	-0.6m
greatest brilliancy	10266 May 04 22:08	3°♒11'17	-0.8m		10267 Apr 27 01:57	0°♒	
asc. node	10266 May 15 01:54	17°♒49'43		evening max el	10267 Apr 30 23:56	4°♒30'11	19°43'20
evening max el	10266 May 17 17:41	20°♒48'52	18°53'53	asc. node	10267 May 01 23:02	5°♒26'02	
retrograde	10266 May 24 11:14	24°♒32'19		retrograde	10267 May 08 09:04	8°♒42'46	
evening set	10266 May 27 20:05	23°♒26'51		evening set	10267 May 12 02:37	7°♒21'39	
inferior conj	10266 Jun 02 09:07	17°♒44'14	3°15'47	inferior conj	10267 May 17 11:15	1°♒24'42	3°17'50
minimum elong	10266 Jun 02 09:54	17°♒41'46	3°15'16	minimum elong	10267 May 17 10:52	1°♒25'58	3°17'25
min. Earth dist.	10266 Jun 04 02:36	15°♒33'48	0.66022 AU	min. Earth dist.	10267 May 18 13:55	29°♒55'47	0.67340 AU
morning rise	10266 Jun 07 23:05	11°♒23'44			10267 May 18 12:38	30°♒	
direct	10266 Jun 14 08:09	8°♒39'10		morning rise	10267 May 22 18:46	25°♒05'03	
desc. node	10266 Jun 18 01:12	9°♒26'08		direct	10267 May 28 17:25	22°♒26'49	
morning max el	10266 Jun 27 09:03	16°♒24'42	26°35'03	desc. node	10267 Jun 04 22:13	25°♒22'28	
	10266 Jul 08 14:55	0°♓		morning max el	10267 Jun 09 18:57	29°♒40'51	25°18'12
	10266 Jul 27 18:07	0°♑			10267 Jun 10 02:26	0°♒	
morning set	10266 Aug 02 06:42	10°♑05'27		morning set	10267 Jul 02 11:33	0°♓	
max. Earth dist.	10266 Aug 06 08:25	17°♑57'58	1.34455 AU	max. Earth dist.	10267 Jul 15 19:50	22°♓22'54	
					10267 Jul 19 10:48	29°♓01'41	1.36381 AU
superior conj	10266 Aug 11 03:05	27°♑38'59	0°00'42		10267 Jul 19 23:15	0°♑	
minimum elong	10266 Aug 11 03:03	27°♑38'50	0°00'25	superior conj	10267 Jul 25 16:45	11°♑04'45	-0°31'05
behind sun begin	10266 Aug 10 21:14	27°♑08'45		minimum elong	10267 Jul 25 18:42	11°♑14'25	0°31'06
behind sun end	10266 Aug 11 08:53	28°♑08'59		asc. node	10267 Jul 28 22:15	17°♑33'34	
asc. node	10266 Aug 11 01:23	27°♑30'08		evening rise	10267 Aug 02 20:22	27°♑34'41	
	10266 Aug 12 06:14	0°♒			10267 Aug 04 01:07	0°♒	
evening rise	10266 Aug 18 14:53	13°♒21'42		evening max el	10267 Aug 20 05:40	26°♒06'27	19°48'16
	10266 Aug 27 02:55	0°♓			10267 Aug 25 12:42	0°♓	
evening max el	10266 Sep 06 21:48	15°♓02'37	21°04'16	retrograde	10267 Aug 30 08:28	1°♓07'33	
desc. node	10266 Sep 13 23:28	19°♓57'53		desc. node	10267 Aug 31 20:44	1°♓01'18	
retrograde	10266 Sep 18 17:05	20°♓53'49		evening set	10267 Sep 01 05:26	0°♓58'00	
evening set	10266 Sep 21 01:54	20°♓40'39			10267 Sep 04 11:44	30°♒	
inferior conj	10266 Sep 30 05:30	16°♓45'07	-4°34'06	inferior conj	10267 Sep 10 03:16	26°♒56'21	-2°50'05
minimum elong	10266 Sep 29 19:44	16°♓58'55	4°31'29	minimum elong	10267 Sep 09 19:41	27°♒08'01	2°47'25
min. Earth dist.	10266 Sep 30 18:46	16°♓26'22	0.54624 AU	min. Earth dist.	10267 Sep 12 04:55	25°♒40'07	0.55213 AU
morning rise	10266 Oct 08 13:55	12°♓51'29		morning rise	10267 Sep 18 08:12	22°♒37'28	
direct	10266 Oct 12 12:28	12°♓18'06		direct	10267 Sep 23 02:04	21°♒48'00	
morning max el	10266 Oct 25 09:39	18°♓28'20	22°47'42	morning max el	10267 Oct 06 21:07	28°♒37'53	24°34'53
	10266 Nov 03 17:51	0°♔			10267 Oct 08 06:28	0°♓	
asc. node	10266 Nov 07 01:46	5°♔23'04		asc. node	10267 Oct 24 22:40	24°♓16'37	
morning set	10266 Nov 16 21:21	24°♔27'10			10267 Oct 27 21:55	0°♔	
	10266 Nov 19 11:39	0°♕		morning set	10267 Nov 01 09:09	9°♔14'34	
superior conj	10266 Nov 23 21:16	9°♕28'01	1°39'12	superior conj	10267 Nov 08 05:27	24°♔10'32	1°39'21
minimum elong	10266 Nov 23 21:52	9°♕31'15	1°39'37				
max. Earth dist.	10266 Nov 27 03:35	16°♕21'10	1.33772 AU				

minimum elong	10267 Nov 08 04:54	24°♍07'30	1°39'42	minimum elong	10268 Oct 22 14:57	8°♍50'15	1°33'42
max. Earth dist.	10267 Nov 10 04:37	28°♍27'14	1.32536 AU	max. Earth dist.	10268 Oct 23 11:37	10°♍44'46	1.31764 AU
	10267 Nov 10 21:49	0°♌		evening rise	10268 Oct 29 15:18	24°♍04'44	
evening rise	10267 Nov 15 13:26	9°♌45'47			10268 Nov 01 12:27	0°♌	
	10267 Nov 26 08:14	0°♍		desc. node	10268 Nov 13 15:54	21°♌52'53	
desc. node	10267 Nov 27 18:46	2°♍25'50			10268 Nov 19 02:02	0°♍	
	10267 Dec 18 05:41	0°♎		evening max el	10268 Nov 30 06:08	13°♍14'33	27°17'34
evening max el	10267 Dec 18 22:25	0°♎40'23	27°30'35	retrograde	10268 Dec 14 03:05	20°♍28'00	
retrograde	10268 Jan 01 16:02	8°♎00'05		evening set	10268 Dec 21 03:14	18°♍14'36	
evening set	10268 Jan 08 15:53	5°♎32'03		min. Earth dist.	10268 Dec 24 20:36	15°♍27'21	0.61299 AU
min. Earth dist.	10268 Jan 12 09:55	2°♎20'51	0.63310 AU	inferior conj	10268 Dec 27 22:20	12°♍45'07	-3°09'04
	10268 Jan 14 18:31	30°♎♋		minimum elong	10268 Dec 28 04:37	12°♍31'15	3°06'19
inferior conj	10268 Jan 15 03:10	29°♍38'17	-1°54'35	morning rise	10269 Jan 04 08:31	7°♍49'02	
minimum elong	10268 Jan 15 06:53	29°♍29'00	1°52'38	direct	10269 Jan 06 12:48	7°♍29'11	
asc. node	10268 Jan 20 22:06	24°♍52'23		asc. node	10269 Jan 06 19:14	7°♍29'30	
morning rise	10268 Jan 21 23:59	24°♍23'12		morning max el	10269 Jan 13 14:03	11°♍02'14	17°53'38
direct	10268 Jan 24 08:37	23°♍56'28			10269 Jan 26 04:06	0°♎	
morning max el	10268 Jan 30 22:04	27°♍19'05	17°47'18	morning set	10269 Jan 29 05:38	5°♎32'43	
	10268 Feb 02 07:33	0°♎					
morning set	10268 Feb 16 05:06	22°♎13'16		superior conj	10269 Feb 08 20:02	24°♎27'55	0°06'09
	10268 Feb 20 17:27	0°♏		minimum elong	10269 Feb 08 20:36	24°♎30'22	0°06'21
desc. node	10268 Feb 23 18:35	5°♏10'43		behind sun begin	10269 Feb 08 12:54	23°♎57'02	
				behind sun end	10269 Feb 09 04:17	25°♎03'36	
superior conj	10268 Feb 28 12:37	13°♏05'40	-0°35'00	desc. node	10269 Feb 09 15:25	25°♎51'29	
minimum elong	10268 Feb 28 08:56	12°♏50'32	0°34'16		10269 Feb 12 01:44	0°♏	
max. Earth dist.	10268 Mar 05 15:47	23°♏01'41	1.44459 AU	max. Earth dist.	10269 Feb 16 06:26	6°♏59'00	1.42901 AU
	10268 Mar 10 01:42	0°♐		evening rise	10269 Feb 22 15:39	17°♏14'05	
evening rise	10268 Mar 14 20:11	7°♐23'54			10269 Mar 02 23:10	0°♐	
	10268 Mar 29 22:58	0°♑			10269 Mar 24 23:57	0°♑	
evening max el	10268 Apr 13 00:37	18°♑12'55	20°47'00	evening max el	10269 Mar 26 19:54	1°♑56'19	22°01'19
asc. node	10268 Apr 17 20:13	22°♑04'14		asc. node	10269 Apr 04 17:27	7°♑28'35	
retrograde	10268 Apr 21 07:46	23°♑03'39		retrograde	10269 Apr 05 05:31	7°♑29'50	
evening set	10268 Apr 25 10:55	21°♑26'45		evening set	10269 Apr 09 19:12	5°♑37'36	
inferior conj	10268 Apr 30 17:46	15°♑17'11	3°07'48		10269 Apr 14 14:21	30°♑♐	
minimum elong	10268 Apr 30 16:27	15°♑21'45	3°07'20	inferior conj	10269 Apr 15 02:29	29°♐17'45	2°47'18
min. Earth dist.	10268 May 01 06:31	14°♑33'10	0.68194 AU	minimum elong	10269 Apr 15 00:32	29°♐24'34	2°46'43
morning rise	10268 May 05 21:45	9°♑00'42		min. Earth dist.	10269 Apr 15 02:19	29°♐18'19	0.68588 AU
direct	10268 May 11 07:40	6°♑37'03		morning rise	10269 Apr 20 05:43	23°♐05'57	
desc. node	10268 May 21 19:10	12°♑43'05		direct	10269 Apr 25 02:02	21°♐01'49	
morning max el	10268 May 22 04:27	13°♑06'18	23°50'20	morning max el	10269 May 04 15:53	26°♐39'43	22°21'00
	10268 Jun 04 19:29	0°♒			10269 May 07 17:55	0°♑	
	10268 Jun 24 07:53	0°♓		desc. node	10269 May 08 16:04	1°♑04'47	
morning set	10268 Jun 26 12:34	3°♓42'41			10269 May 29 08:45	0°♒	
max. Earth dist.	10268 Jun 30 08:05	10°♓20'19	1.38604 AU	morning set	10269 Jun 07 03:58	13°♒52'32	
				max. Earth dist.	10269 Jun 12 06:37	22°♒19'52	1.40876 AU
superior conj	10268 Jul 07 17:41	23°♓52'30	-1°04'13		10269 Jun 16 17:56	0°♓	
minimum elong	10268 Jul 07 21:57	24°♓12'39	1°03'59				
	10268 Jul 10 22:36	0°♈		superior conj	10269 Jun 20 01:29	5°♓51'23	-1°35'38
asc. node	10268 Jul 14 19:11	7°♈31'08		minimum elong	10269 Jun 20 07:36	6°♓18'45	1°35'23
evening rise	10268 Jul 16 19:13	11°♈26'31		evening rise	10269 Jun 30 07:58	24°♓47'39	
	10268 Jul 26 23:34	0°♉		asc. node	10269 Jul 01 16:08	27°♓18'10	
evening max el	10268 Aug 02 02:26	7°♉56'30	18°53'13		10269 Jul 03 02:55	0°♈	
retrograde	10268 Aug 10 15:18	12°♉11'49		evening max el	10269 Jul 16 08:43	20°♈26'06	18°19'07
evening set	10268 Aug 12 13:22	11°♉59'44		retrograde	10269 Jul 23 17:12	24°♈08'12	
desc. node	10268 Aug 17 17:58	9°♉44'03		evening set	10269 Jul 25 21:49	23°♈49'13	
inferior conj	10268 Aug 20 18:31	7°♉41'18	-0°56'15	inferior conj	10269 Aug 02 07:31	19°♈10'37	0°41'37
minimum elong	10268 Aug 20 16:09	7°♉45'32	0°55'32	minimum elong	10269 Aug 02 08:55	19°♈07'41	0°40'46
min. Earth dist.	10268 Aug 23 19:22	5°♉32'18	0.56645 AU	desc. node	10269 Aug 04 15:12	17°♈14'03	
morning rise	10268 Aug 28 15:41	2°♉45'24		min. Earth dist.	10269 Aug 05 16:14	16°♈23'23	0.58659 AU
direct	10268 Sep 03 04:33	1°♉32'12		morning rise	10269 Aug 09 16:35	13°♈39'16	
morning max el	10268 Sep 17 10:39	8°♉53'52	26°11'31	direct	10269 Aug 15 21:25	11°♈56'28	
	10268 Oct 03 07:54	0°♊		morning max el	10269 Aug 30 06:35	19°♈41'26	27°21'15
asc. node	10268 Oct 10 19:33	13°♊37'18			10269 Sep 08 01:46	0°♉	
morning set	10268 Oct 15 20:03	23°♊56'42			10269 Sep 26 01:12	0°♊	
	10268 Oct 18 15:07	0°♋		asc. node	10269 Sep 27 16:24	3°♊17'02	
				morning set	10269 Sep 30 04:16	8°♊27'45	
superior conj	10268 Oct 22 16:27	8°♋58'30	1°33'33				

superior conj	10269 Oct 07 04:14	23°♄45'06	1°22'11			10270 Sep 17 18:37	0°♄	
minimum elong	10269 Oct 07 02:09	23°♄33'32	1°22'04	max. Earth dist.		10270 Sep 20 05:12	5°♄18'55	1.31666 AU
max. Earth dist.	10269 Oct 06 21:01	23°♄04'59	1.31470 AU					
	10269 Oct 09 23:42	0°♄		superior conj		10270 Sep 21 15:01	8°♄25'13	1°05'31
evening rise	10269 Oct 13 22:23	8°♄35'37		minimum elong		10270 Sep 21 12:47	8°♄12'52	1°05'11
	10269 Oct 24 22:01	0°♄		evening rise		10270 Sep 28 08:37	23°♄13'04	
desc. node	10269 Oct 31 13:04	10°♄39'18				10270 Oct 01 13:59	0°♄	
evening max el	10269 Nov 12 07:02	24°♄59'54	26°30'28	desc. node		10270 Oct 18 10:15	28°♄29'29	
	10269 Nov 18 21:19	0°♄				10270 Oct 19 14:47	0°♄	
retrograde	10269 Nov 26 05:20	2°♄06'39		evening max el		10270 Oct 24 23:53	5°♄54'27	25°12'37
evening set	10269 Dec 02 20:45	0°♄17'56		retrograde		10270 Nov 07 20:49	12°♄53'03	
	10269 Dec 03 09:49	30°♄♄		evening set		10270 Nov 13 15:40	11°♄36'59	
min. Earth dist.	10269 Dec 06 20:41	27°♄42'34	0.59176 AU	min. Earth dist.		10270 Nov 18 11:54	8°♄56'22	0.57177 AU
inferior conj	10269 Dec 10 00:57	25°♄16'11	-4°21'42	inferior conj		10270 Nov 21 07:59	7°♄02'43	-5°20'00
minimum elong	10269 Dec 10 08:50	25°♄01'00	4°19'03	minimum elong		10270 Nov 21 14:20	6°♄52'04	5°18'35
morning rise	10269 Dec 17 23:34	20°♄41'54		morning rise		10270 Nov 29 15:19	2°♄50'39	
direct	10269 Dec 20 03:12	20°♄25'35		direct		10270 Dec 01 23:50	2°♄34'25	
asc. node	10269 Dec 24 16:18	21°♄42'42		morning max el		10270 Dec 11 02:29	6°♄57'03	19°06'51
morning max el	10269 Dec 28 00:49	24°♄18'37	18°19'34	asc. node		10270 Dec 11 13:20	7°♄23'46	
	10270 Jan 01 16:41	0°♄				10270 Dec 25 20:40	0°♄	
morning set	10270 Jan 12 20:05	19°♄30'19		morning set		10270 Dec 27 19:59	3°♄52'52	
	10270 Jan 18 08:49	0°♄						
				superior conj		10271 Jan 05 02:44	20°♄11'51	1°07'15
superior conj	10270 Jan 22 02:22	6°♄54'47	0°40'46	minimum elong		10271 Jan 05 05:51	20°♄26'48	1°07'18
minimum elong	10270 Jan 22 05:05	7°♄07'12	0°40'45			10271 Jan 10 07:59	0°♄	
desc. node	10270 Jan 27 12:16	16°♄34'11		max. Earth dist.		10271 Jan 11 22:03	2°♄52'41	1.38716 AU
max. Earth dist.	10270 Jan 29 15:55	20°♄16'48	1.40907 AU	desc. node		10271 Jan 14 09:08	7°♄14'49	
evening rise	10270 Feb 03 05:40	27°♄55'52		evening rise		10271 Jan 15 17:17	9°♄34'33	
	10270 Feb 04 12:06	0°♄				10271 Jan 28 08:28	0°♄	
	10270 Feb 24 13:38	0°♄		evening max el		10271 Feb 20 00:59	29°♄31'30	24°40'35
evening max el	10270 Mar 09 11:19	15°♄42'18	23°21'16			10271 Feb 20 12:40	0°♄	
retrograde	10270 Mar 20 00:45	21°♄56'44		retrograde		10271 Mar 03 16:09	6°♄18'48	
asc. node	10270 Mar 22 14:39	21°♄24'45		evening set		10271 Mar 09 05:24	3°♄59'53	
evening set	10270 Mar 25 01:53	19°♄50'17		asc. node		10271 Mar 09 11:52	3°♄45'49	
inferior conj	10270 Mar 30 11:27	13°♄23'26	2°17'13			10271 Mar 12 21:20	30°♄♄	
minimum elong	10270 Mar 30 09:16	13°♄31'01	2°16'32	min. Earth dist.		10271 Mar 13 18:42	28°♄50'24	0.68078 AU
min. Earth dist.	10270 Mar 29 23:09	14°♄05'49	0.68541 AU	inferior conj		10271 Mar 14 18:48	27°♄30'14	1°37'55
morning rise	10270 Apr 04 16:35	7°♄17'30		minimum elong		10271 Mar 14 16:49	27°♄36'50	1°37'18
direct	10270 Apr 08 23:27	5°♄35'01		morning rise		10271 Mar 20 04:24	21°♄31'38	
morning max el	10270 Apr 17 08:27	10°♄23'27	20°58'19	direct		10271 Mar 23 22:37	20°♄10'35	
desc. node	10270 Apr 25 12:55	20°♄11'01		morning max el		10271 Mar 31 08:26	24°♄18'41	19°47'49
	10270 May 02 13:24	0°♄				10271 Apr 05 07:03	0°♄	
morning set	10270 May 17 17:28	22°♄53'13		desc. node		10271 Apr 12 09:43	9°♄49'16	
	10270 May 22 05:28	0°♄		greatest brilliancy		10271 Apr 13 06:44	11°♄05'48	-0.6m
max. Earth dist.	10270 May 25 10:48	5°♄11'40	1.42920 AU			10271 Apr 25 19:52	0°♄	
				morning set		10271 Apr 26 16:20	1°♄18'38	
superior conj	10270 Jun 01 11:39	16°♄52'09	-2°00'34	max. Earth dist.		10271 May 07 22:09	18°♄52'05	1.44498 AU
minimum elong	10270 Jun 01 17:26	17°♄16'37	2°00'37					
	10270 Jun 09 01:39	0°♄		superior conj		10271 May 12 21:26	26°♄49'48	-2°12'40
evening rise	10270 Jun 13 06:21	7°♄27'41		minimum elong		10271 May 12 22:40	26°♄54'47	2°13'01
asc. node	10270 Jun 18 13:09	16°♄50'07				10271 May 14 20:18	0°♄	
	10270 Jun 26 21:13	0°♄		evening rise		10271 May 26 09:23	19°♄14'49	
evening max el	10270 Jun 29 20:35	3°♄26'17	18°04'58			10271 Jun 01 17:53	0°♄	
retrograde	10270 Jul 06 11:55	6°♄50'14		asc. node		10271 Jun 05 10:10	6°♄00'29	
evening set	10270 Jul 09 00:26	6°♄20'48		evening max el		10271 Jun 13 10:22	16°♄46'45	18°09'47
inferior conj	10270 Jul 15 16:45	1°♄22'17	1°53'54	retrograde		10271 Jun 19 19:09	20°♄07'28	
minimum elong	10270 Jul 15 19:31	1°♄15'35	1°52'39	evening set		10271 Jun 22 15:34	19°♄25'01	
	10270 Jul 17 02:38	30°♄♄		inferior conj		10271 Jun 28 18:16	14°♄07'59	2°41'23
min. Earth dist.	10270 Jul 18 21:09	28°♄19'11	0.60923 AU	minimum elong		10271 Jun 28 20:46	14°♄01'09	2°40'22
morning rise	10270 Jul 22 11:58	25°♄25'24		min. Earth dist.		10271 Jul 01 11:01	11°♄12'09	0.63133 AU
desc. node	10270 Jul 22 12:21	25°♄24'45		morning rise		10271 Jul 05 00:18	7°♄56'04	
direct	10270 Jul 29 02:43	23°♄13'48		desc. node		10271 Jul 09 09:29	5°♄41'16	
	10270 Aug 11 03:11	0°♄		direct		10271 Jul 11 17:39	5°♄23'17	
morning max el	10270 Aug 12 09:19	1°♄12'33	27°54'26	morning max el		10271 Jul 25 17:05	13°♄25'55	27°49'27
	10270 Sep 02 07:35	0°♄				10271 Aug 08 00:21	0°♄	
morning set	10270 Sep 14 07:58	22°♄42'58				10271 Aug 25 20:20	0°♄	
asc. node	10270 Sep 14 13:14	23°♄10'14		morning set		10271 Aug 29 04:59	6°♄36'27	

asc. node	10271 Sep 01 10:04	13°♎11'57			10272 Aug 16 16:42	0°♎	
max. Earth dist.	10271 Sep 03 08:27	17°♎16'56	1.32358 AU	asc. node	10272 Aug 18 06:53	3°♎17'24	
superior conj	10271 Sep 05 22:55	22°♎53'17	0°43'52	superior conj	10272 Aug 20 01:48	7°♎02'35	0°17'39
minimum elong	10271 Sep 05 21:03	22°♎43'10	0°43'26	minimum elong	10272 Aug 20 00:55	6°♎57'55	0°17'15
	10271 Sep 09 05:07	0°♏		evening rise	10272 Aug 27 06:55	22°♎25'11	
evening rise	10271 Sep 12 20:06	7°♏51'40			10272 Aug 30 22:51	0°♏	
	10271 Sep 24 06:32	0°♎		evening max el	10272 Sep 17 00:17	26°♏21'26	21°56'14
desc. node	10271 Oct 05 07:27	15°♎02'11		desc. node	10272 Sep 21 04:42	29°♏48'56	
evening max el	10271 Oct 06 11:07	16°♎11'34	23°35'34		10272 Sep 21 11:26	0°♎	
retrograde	10271 Oct 19 23:22	22°♎56'03		retrograde	10272 Sep 29 14:38	2°♎37'36	
evening set	10271 Oct 24 10:18	22°♎12'50		evening set	10272 Oct 02 14:50	2°♎17'21	
min. Earth dist.	10271 Oct 30 21:14	19°♎08'38	0.55595 AU		10272 Oct 08 12:25	30°♎♏	
inferior conj	10271 Nov 01 18:53	18°♎01'04	-5°44'35	min. Earth dist.	10272 Oct 11 04:24	28°♏33'02	0.54721 AU
minimum elong	10271 Nov 01 18:54	18°♎01'02	5°44'15	inferior conj	10272 Oct 11 14:33	28°♏18'49	-5°16'12
morning rise	10271 Nov 10 05:21	14°♎07'28		minimum elong	10272 Oct 11 06:49	28°♏29'39	5°14'42
direct	10271 Nov 13 01:26	13°♎47'37		morning rise	10272 Oct 20 00:12	24°♏31'27	
morning max el	10271 Nov 23 15:38	18°♎48'05	20°16'50	direct	10272 Oct 23 12:26	24°♏04'24	
asc. node	10271 Nov 28 10:19	24°♎17'44		morning max el	10272 Nov 04 15:18	29°♏48'16	21°48'12
	10271 Dec 02 06:07	0°♏			10272 Nov 04 20:17	0°♎	
morning set	10271 Dec 12 02:08	18°♏31'18		asc. node	10272 Nov 14 07:16	12°♎08'12	
	10271 Dec 17 16:02	0°♏			10272 Nov 23 21:58	0°♏	
				morning set	10272 Nov 25 11:59	3°♏17'33	
superior conj	10271 Dec 19 16:31	4°♏06'20	1°25'32	superior conj	10272 Dec 02 15:46	18°♏26'22	1°36'13
minimum elong	10271 Dec 19 18:58	4°♏18'39	1°25'46	minimum elong	10272 Dec 02 17:05	18°♏33'16	1°36'36
max. Earth dist.	10271 Dec 25 05:16	14°♏58'27	1.36574 AU	max. Earth dist.	10272 Dec 06 17:50	26°♏51'39	1.34685 AU
evening rise	10271 Dec 29 00:47	22°♏04'53			10272 Dec 08 07:30	0°♏	
desc. node	10272 Jan 01 06:04	27°♏49'48		evening rise	10272 Dec 11 00:31	5°♏16'41	
	10272 Jan 02 12:04	0°♏		desc. node	10272 Dec 18 03:03	18°♏13'54	
	10272 Jan 22 04:32	0°♏			10272 Dec 25 06:34	0°♏	
evening max el	10272 Feb 02 14:25	13°♏21'16	25°52'09	evening max el	10273 Jan 15 03:52	27°♏03'53	26°48'46
retrograde	10272 Feb 15 02:45	20°♏30'30			10273 Jan 18 11:25	0°♏	
evening set	10272 Feb 21 04:10	18°♏01'54		retrograde	10273 Jan 28 07:49	4°♏24'27	
asc. node	10272 Feb 24 09:03	14°♏45'18		evening set	10273 Feb 03 20:20	1°♏50'30	
min. Earth dist.	10272 Feb 25 10:44	13°♏27'18	0.67215 AU		10273 Feb 05 21:06	30°♎♏	
inferior conj	10272 Feb 26 22:36	11°♏34'29	0°49'32	min. Earth dist.	10273 Feb 07 21:01	27°♏50'17	0.65964 AU
minimum elong	10272 Feb 26 21:24	11°♏38'16	0°49'14	inferior conj	10273 Feb 09 20:45	25°♏31'02	-0°07'50
morning rise	10272 Mar 03 15:12	5°♏45'03		minimum elong	10273 Feb 09 20:58	25°♏30'26	0°07'27
direct	10272 Mar 06 21:55	4°♏43'33		transit middle	10273 Feb 09 20:58	25°♏30'26	0°07'27
morning max el	10272 Mar 13 16:07	8°♏23'47	18°52'34	transit begin	10273 Feb 09 18:21	25°♏38'04	
desc. node	10272 Mar 29 06:31	29°♏51'08		transit end	10273 Feb 09 23:35	25°♏22'48	
	10272 Mar 29 08:49	0°♏		asc. node	10273 Feb 10 06:15	25°♏03'22	
morning set	10272 Apr 04 23:54	10°♏16'55		morning rise	10273 Feb 15 22:45	19°♏53'00	
	10272 Apr 17 15:22	0°♏		direct	10273 Feb 18 19:23	19°♏08'00	
max. Earth dist.	10272 Apr 19 15:15	3°♏07'29	1.45431 AU	morning max el	10273 Feb 25 05:50	22°♏33'00	18°13'49
					10273 Mar 03 06:08	0°♏	
superior conj	10272 Apr 21 10:29	5°♏57'06	-2°05'57	morning set	10273 Mar 16 09:40	20°♏35'26	
minimum elong	10272 Apr 21 04:21	5°♏33'02	2°05'55	desc. node	10273 Mar 16 03:19	20°♏09'54	
evening rise	10272 May 06 13:14	0°♏02'52			10273 Mar 22 06:32	0°♏	
	10272 May 06 12:31	0°♏					
asc. node	10272 May 22 07:14	24°♏42'06		superior conj	10273 Mar 31 16:38	14°♏53'13	-1°39'28
	10272 May 26 15:15	0°♏		minimum elong	10273 Mar 31 07:05	14°♏15'49	1°38'38
evening max el	10272 May 26 22:57	0°♏19'34	18°32'45	max. Earth dist.	10273 Apr 02 11:03	17°♏39'20	1.45623 AU
retrograde	10272 Jun 02 10:46	3°♏50'59			10273 Apr 10 08:54	0°♏	
evening set	10272 Jun 05 15:02	2°♏54'02		evening rise	10273 Apr 16 18:05	9°♏57'03	
	10272 Jun 09 00:35	30°♎♏		greatest brilliancy	10273 Apr 28 04:55	27°♏40'51	-0.7m
inferior conj	10272 Jun 11 08:01	27°♏20'05	3°08'07		10273 Apr 29 17:50	0°♏	
minimum elong	10272 Jun 11 09:29	27°♏15'37	3°07'29	asc. node	10273 May 09 04:21	12°♏45'52	
min. Earth dist.	10272 Jun 13 10:05	24°♏49'42	0.65078 AU	evening max el	10273 May 10 07:58	13°♏59'01	19°12'57
morning rise	10272 Jun 17 03:03	21°♏01'07		retrograde	10273 May 17 07:16	17°♏53'47	
direct	10272 Jun 23 16:30	18°♏17'55		evening set	10273 May 20 19:44	16°♏41'36	
desc. node	10272 Jun 25 06:34	18°♏26'27		inferior conj	10273 May 26 06:30	10°♏52'25	3°18'16
morning max el	10272 Jul 07 03:28	26°♏13'09	27°10'14	minimum elong	10273 May 26 06:47	10°♏51'32	3°17'49
	10272 Jul 10 15:20	0°♏		min. Earth dist.	10273 May 27 17:30	8°♏59'09	0.66634 AU
	10272 Jul 31 14:20	0°♏		morning rise	10273 May 31 17:22	4°♏31'48	
morning set	10272 Aug 11 16:33	20°♏00'26		direct	10273 Jun 06 22:12	1°♏49'04	
max. Earth dist.	10272 Aug 16 03:15	28°♏51'10	1.33552 AU				

desc. node	10273 Jun 12 03:37	3° $\Pi$ 22'00		morning rise	10274 May 15 16:27	18° $\mathcal{B}$ 19'58	
morning max el	10273 Jun 19 14:12	9° $\Pi$ 23'08	26°04'28	direct	10274 May 21 09:47	15° $\mathcal{B}$ 47'06	
	10273 Jul 05 19:29	0° $\mathcal{B}$		desc. node	10274 May 30 00:37	19° $\mathcal{B}$ 57'20	
	10273 Jul 24 02:58	0° $\Omega$		morning max el	10274 Jun 01 23:55	22° $\mathcal{B}$ 44'22	24°41'38
morning set	10273 Jul 25 15:12	2° $\Omega$ 46'15			10274 Jun 08 09:03	0° $\Pi$	
max. Earth dist.	10273 Jul 29 11:36	10° $\Omega$ 03'15	1.35228 AU		10274 Jun 29 03:13	0° $\mathcal{B}$	
				morning set	10274 Jul 07 20:21	14° $\mathcal{B}$ 41'17	
superior conj	10273 Aug 03 21:12	20° $\Omega$ 46'49	-0°12'28	max. Earth dist.	10274 Jul 11 10:49	21° $\mathcal{B}$ 08'33	1.37300 AU
minimum elong	10273 Aug 03 21:56	20° $\Omega$ 50'37	0°12'39		10274 Jul 16 04:38	0° $\Omega$	
behind sun begin	10273 Aug 03 18:10	20° $\Omega$ 31'26					
behind sun end	10273 Aug 04 01:43	21° $\Omega$ 09'49		superior conj	10274 Jul 18 05:55	3° $\Omega$ 57'29	-0°45'07
asc. node	10273 Aug 05 03:44	23° $\Omega$ 22'58		minimum elong	10274 Jul 18 08:50	4° $\Omega$ 11'41	0°45'01
	10273 Aug 08 08:29	0° $\mathcal{M}$		asc. node	10274 Jul 23 00:38	13° $\Omega$ 24'18	
evening rise	10273 Aug 11 15:04	6° $\mathcal{M}$ 48'00		evening rise	10274 Jul 26 18:06	20° $\Omega$ 52'52	
	10273 Aug 24 07:29	0° $\mathcal{A}$			10274 Jul 31 09:45	0° $\mathcal{M}$	
evening max el	10273 Aug 30 00:08	6° $\mathcal{A}$ 59'55	20°29'24	evening max el	10274 Aug 12 13:48	18° $\mathcal{M}$ 23'48	19°22'15
desc. node	10273 Sep 08 01:57	12° $\mathcal{A}$ 20'02		retrograde	10274 Aug 21 23:49	23° $\mathcal{M}$ 04'15	
retrograde	10273 Sep 10 02:54	12° $\mathcal{A}$ 30'52		evening set	10274 Aug 23 19:56	22° $\mathcal{M}$ 54'19	
evening set	10273 Sep 12 04:26	12° $\mathcal{A}$ 20'16		desc. node	10274 Aug 25 23:13	22° $\mathcal{M}$ 19'36	
inferior conj	10273 Sep 21 07:22	8° $\mathcal{A}$ 23'22	-3°53'24	inferior conj	10274 Sep 01 11:34	18° $\mathcal{M}$ 46'43	-2°01'09
minimum elong	10273 Sep 20 21:46	8° $\mathcal{A}$ 37'18	3°50'23	minimum elong	10274 Sep 01 06:10	18° $\mathcal{M}$ 55'32	1°59'11
min. Earth dist.	10273 Sep 22 13:02	7° $\mathcal{A}$ 40'18	0.54759 AU	min. Earth dist.	10274 Sep 04 01:08	17° $\mathcal{M}$ 06'36	0.55732 AU
morning rise	10273 Sep 29 14:40	4° $\mathcal{A}$ 21'10		morning rise	10274 Sep 09 13:44	14° $\mathcal{M}$ 12'17	
direct	10273 Oct 03 21:01	3° $\mathcal{A}$ 42'05		direct	10274 Sep 14 15:48	13° $\mathcal{M}$ 13'29	
morning max el	10273 Oct 17 05:23	10° $\mathcal{A}$ 10'00	23°33'29	morning max el	10274 Sep 28 17:00	20° $\mathcal{M}$ 18'53	25°18'17
	10273 Oct 31 18:44	0° $\mathcal{M}$			10274 Oct 07 00:21	0° $\mathcal{A}$	
asc. node	10273 Nov 01 04:12	0° $\mathcal{M}$ 41'57		asc. node	10274 Oct 19 01:05	19° $\mathcal{A}$ 47'54	
morning set	10273 Nov 09 23:35	18° $\mathcal{M}$ 06'03			10274 Oct 24 02:48	0° $\mathcal{M}$	
	10273 Nov 15 11:39	0° $\mathcal{X}$		morning set	10274 Oct 25 11:12	2° $\mathcal{M}$ 51'45	
superior conj	10273 Nov 16 21:28	3° $\mathcal{X}$ 03'07	1°40'02	superior conj	10274 Nov 01 07:07	17° $\mathcal{M}$ 49'02	1°37'35
minimum elong	10273 Nov 16 21:33	3° $\mathcal{X}$ 03'38	1°40'26	minimum elong	10274 Nov 01 06:08	17° $\mathcal{M}$ 43'37	1°37'52
max. Earth dist.	10273 Nov 19 14:12	8° $\mathcal{X}$ 49'43	1.33189 AU	max. Earth dist.	10274 Nov 02 17:53	21° $\mathcal{M}$ 00'03	1.32145 AU
evening rise	10273 Nov 24 12:52	19° $\mathcal{X}$ 01'08			10274 Nov 06 22:13	0° $\mathcal{X}$	
	10273 Nov 30 06:25	0° $\mathcal{B}$		evening rise	10274 Nov 08 10:37	3° $\mathcal{X}$ 09'54	
desc. node	10273 Dec 05 00:04	8° $\mathcal{B}$ 21'45		desc. node	10274 Nov 21 21:10	28° $\mathcal{X}$ 06'26	
	10273 Dec 19 10:37	0° $\approx$			10274 Nov 23 01:10	0° $\mathcal{B}$	
evening max el	10273 Dec 28 16:35	10° $\approx$ 29'28	27°23'17	evening max el	10274 Dec 11 02:55	23° $\mathcal{B}$ 26'44	27°29'13
retrograde	10274 Jan 11 06:47	17° $\approx$ 52'13			10274 Dec 20 20:01	0° $\approx$	
evening set	10274 Jan 18 03:40	15° $\approx$ 19'28		retrograde	10274 Dec 24 22:44	0° $\approx$ 44'51	
min. Earth dist.	10274 Jan 21 23:31	11° $\approx$ 51'34	0.64361 AU		10274 Dec 28 21:23	30° $\mathcal{R}$ $\mathcal{B}$	
inferior conj	10274 Jan 24 10:48	9° $\approx$ 14'15	-1°13'35	evening set	10274 Dec 31 23:24	28° $\mathcal{B}$ 21'53	
minimum elong	10274 Jan 24 13:05	9° $\approx$ 08'11	1°12'14	min. Earth dist.	10275 Jan 04 16:33	25° $\mathcal{B}$ 21'47	0.62469 AU
asc. node	10274 Jan 28 03:27	5° $\approx$ 38'52		inferior conj	10275 Jan 07 13:52	22° $\mathcal{B}$ 37'28	-2°25'55
morning rise	10274 Jan 31 00:18	3° $\approx$ 50'08		minimum elong	10275 Jan 07 18:41	22° $\mathcal{B}$ 25'59	2°23'34
direct	10274 Feb 02 12:35	3° $\approx$ 17'57		morning rise	10275 Jan 14 16:22	17° $\mathcal{B}$ 30'06	
morning max el	10274 Feb 08 22:56	6° $\approx$ 38'47	17°51'59	asc. node	10275 Jan 15 00:38	17° $\mathcal{B}$ 23'38	
	10274 Feb 24 15:24	0° $\mathcal{H}$		direct	10275 Jan 16 22:37	17° $\mathcal{B}$ 06'52	
morning set	10274 Feb 26 00:11	2° $\mathcal{H}$ 18'01		morning max el	10275 Jan 23 16:18	20° $\mathcal{B}$ 33'10	17°47'42
desc. node	10274 Mar 03 00:06	10° $\mathcal{H}$ 40'16			10275 Jan 30 18:30	0° $\approx$	
				morning set	10275 Feb 08 14:15	15° $\approx$ 08'30	
superior conj	10274 Mar 11 10:21	24° $\mathcal{H}$ 27'06	-0°59'50		10275 Feb 17 02:29	0° $\mathcal{H}$	
minimum elong	10274 Mar 11 03:47	24° $\mathcal{H}$ 00'41	0°58'52	desc. node	10275 Feb 17 20:53	1° $\mathcal{H}$ 18'28	
	10274 Mar 14 21:46	0° $\mathcal{Y}$					
max. Earth dist.	10274 Mar 16 06:20	2° $\mathcal{Y}$ 08'50	1.45075 AU	superior conj	10275 Feb 20 03:18	5° $\mathcal{H}$ 08'30	-0°17'00
evening rise	10274 Mar 27 07:40	19° $\mathcal{Y}$ 19'52		minimum elong	10275 Feb 20 01:38	5° $\mathcal{H}$ 01'31	0°16'31
	10274 Apr 03 07:49	0° $\mathcal{B}$		max. Earth dist.	10275 Feb 26 22:58	16° $\mathcal{H}$ 21'33	1.43857 AU
greatest brilliancy	10274 Apr 11 07:54	11° $\mathcal{B}$ 53'57	-0.6m	evening rise	10275 Mar 06 20:48	28° $\mathcal{H}$ 50'40	
evening max el	10274 Apr 23 11:48	27° $\mathcal{B}$ 40'40	20°08'53		10275 Mar 07 14:45	0° $\mathcal{Y}$	
asc. node	10274 Apr 26 01:32	29° $\mathcal{B}$ 59'19			10275 Mar 28 01:41	0° $\mathcal{B}$	
	10274 Apr 26 01:53	0° $\Pi$		evening max el	10275 Apr 06 10:08	11° $\mathcal{B}$ 24'01	21°17'38
retrograde	10274 May 01 05:51	2° $\Pi$ 09'10		asc. node	10275 Apr 12 22:45	16° $\mathcal{B}$ 08'20	
evening set	10274 May 05 03:15	0° $\Pi$ 41'28		retrograde	10275 Apr 15 04:19	16° $\mathcal{B}$ 32'50	
	10274 May 05 23:14	30° $\mathcal{R}$ $\mathcal{B}$		evening set	10275 Apr 19 11:44	14° $\mathcal{B}$ 49'35	
inferior conj	10274 May 10 10:49	24° $\mathcal{B}$ 38'46	3°14'58	inferior conj	10275 Apr 24 18:32	8° $\mathcal{B}$ 35'28	3°00'21
minimum elong	10274 May 10 10:00	24° $\mathcal{B}$ 41'32	3°14'33	minimum elong	10275 Apr 24 16:54	8° $\mathcal{B}$ 41'09	2°59'49
min. Earth dist.	10274 May 11 07:27	23° $\mathcal{B}$ 28'40	0.67751 AU	min. Earth dist.	10275 Apr 25 01:47	8° $\mathcal{B}$ 10'17	0.68415 AU

morning rise	10275 Apr 29 21:51	2°♄20'39		evening set	10276 Apr 02 19:30	29°♄01'14	
direct	10275 May 05 02:05	0°♄04'34		inferior conj	10276 Apr 08 03:34	22°♄38'14	2°35'42
morning max el	10275 May 15 09:41	6°♄12'32	23°11'56	minimum elong	10276 Apr 08 01:28	22°♄45'34	2°35'02
desc. node	10275 May 16 21:33	7°♄46'19		min. Earth dist.	10276 Apr 07 22:13	22°♄56'50	0.68627 AU
	10275 Jun 02 19:29	0°♄		morning rise	10276 Apr 13 07:17	16°♄28'53	
morning set	10275 Jun 19 02:47	25°♄32'29		direct	10276 Apr 17 21:57	14°♄33'40	
	10275 Jun 21 18:08	0°♄		morning max el	10276 Apr 26 22:45	19°♄49'12	21°44'36
max. Earth dist.	10275 Jun 23 07:18	2°♄39'42	1.39581 AU	desc. node	10276 May 02 18:24	26°♄28'16	
					10276 May 05 11:56	0°♄	
superior conj	10275 Jul 01 00:08	16°♄25'58	-1°18'00		10276 May 25 23:58	0°♄	
minimum elong	10275 Jul 01 05:19	16°♄49'54	1°17'42	morning set	10276 May 29 06:40	5°♄10'48	
	10275 Jul 08 04:25	0°♄		max. Earth dist.	10276 Jun 04 08:10	15°♄02'16	1.41792 AU
asc. node	10275 Jul 09 21:33	3°♄17'52					
evening rise	10275 Jul 10 13:05	4°♄32'33		superior conj	10276 Jun 11 23:17	28°♄01'27	-1°47'21
	10275 Jul 26 02:31	0°♄		minimum elong	10276 Jun 12 05:39	28°♄29'17	1°47'11
evening max el	10275 Jul 26 15:11	0°♄32'17	18°36'14		10276 Jun 13 02:19	0°♄	
retrograde	10275 Aug 03 14:23	4°♄31'10		evening rise	10276 Jun 22 20:16	17°♄37'33	
evening set	10275 Aug 05 15:03	4°♄16'33		asc. node	10276 Jun 25 18:32	22°♄59'15	
desc. node	10275 Aug 12 20:28	0°♄19'11			10276 Jun 29 17:00	0°♄	
inferior conj	10275 Aug 13 11:56	29°♄49'55	-0°11'53	evening max el	10276 Jul 09 00:21	13°♄16'24	18°10'44
minimum elong	10275 Aug 13 11:27	29°♄50'49	0°11'58	retrograde	10276 Jul 15 24:00	16°♄48'47	
transit middle	10275 Aug 13 11:27	29°♄50'49	0°11'58	evening set	10276 Jul 18 08:04	16°♄25'36	
transit begin	10275 Aug 13 09:02	29°♄55'26		inferior conj	10276 Jul 25 09:56	11°♄38'05	1°15'30
transit end	10275 Aug 13 13:53	29°♄46'11		minimum elong	10276 Jul 25 12:11	11°♄33'05	1°14'21
	10275 Aug 13 06:37	30°♄		min. Earth dist.	10276 Jul 28 17:54	8°♄41'31	0.59611 AU
min. Earth dist.	10275 Aug 16 18:05	27°♄22'11	0.57457 AU	desc. node	10276 Jul 29 17:39	7°♄52'53	
morning rise	10275 Aug 21 04:22	24°♄38'20		morning rise	10276 Aug 01 13:12	5°♄54'50	
direct	10275 Aug 27 00:56	23°♄12'36		direct	10276 Aug 07 23:10	3°♄59'31	
	10275 Sep 09 13:42	0°♄		morning max el	10276 Aug 22 07:34	11°♄50'29	27°40'10
morning max el	10275 Sep 10 08:42	0°♄45'03	26°45'07		10276 Sep 05 13:50	0°♄	
	10275 Oct 01 01:21	0°♄		asc. node	10276 Sep 21 18:44	29°♄03'40	
asc. node	10275 Oct 05 21:55	9°♄17'21			10276 Sep 22 05:39	0°♄	
morning set	10275 Oct 09 21:08	17°♄29'34		morning set	10276 Sep 23 03:42	1°♄54'55	
	10275 Oct 15 14:24	0°♄		max. Earth dist.	10276 Sep 29 11:54	15°♄40'06	1.31499 AU
superior conj	10275 Oct 16 18:40	2°♄37'11	1°29'23	superior conj	10276 Sep 30 06:15	17°♄21'59	1°15'45
minimum elong	10275 Oct 16 16:52	2°♄27'15	1°29'26	minimum elong	10276 Sep 30 04:02	17°♄09'44	1°15'32
max. Earth dist.	10275 Oct 17 02:18	3°♄19'42	1.31581 AU		10276 Oct 05 23:34	0°♄	
evening rise	10275 Oct 23 14:58	17°♄35'00		evening rise	10276 Oct 06 23:41	2°♄10'00	
	10275 Oct 29 18:34	0°♄			10276 Oct 21 19:32	0°♄	
desc. node	10275 Nov 08 18:18	17°♄17'51		desc. node	10276 Oct 25 15:29	5°♄42'55	
	10275 Nov 18 00:22	0°♄		evening max el	10276 Nov 04 05:58	17°♄06'18	26°00'37
evening max el	10275 Nov 23 08:18	5°♄42'13	27°01'49	retrograde	10276 Nov 18 03:41	24°♄08'58	
retrograde	10275 Dec 07 06:13	12°♄52'21		evening set	10276 Nov 24 12:08	22°♄33'26	
evening set	10275 Dec 14 03:44	10°♄48'43		min. Earth dist.	10276 Nov 28 18:42	19°♄58'19	0.58304 AU
min. Earth dist.	10275 Dec 17 22:52	8°♄08'01	0.60395 AU	inferior conj	10276 Dec 01 21:05	17°♄44'07	-4°49'08
inferior conj	10275 Dec 21 02:28	5°♄30'45	-3°40'41	minimum elong	10276 Dec 02 04:51	17°♄30'02	4°46'54
minimum elong	10275 Dec 21 09:39	5°♄15'45	3°37'50	morning rise	10276 Dec 09 24:00	13°♄19'14	
morning rise	10275 Dec 28 18:10	0°♄43'17		direct	10276 Dec 12 05:08	13°♄03'16	
direct	10275 Dec 30 21:37	0°♄25'20		asc. node	10276 Dec 18 18:46	15°♄33'53	
asc. node	10276 Jan 01 21:45	0°♄41'42		morning max el	10276 Dec 20 13:47	17°♄07'21	18°36'55
morning max el	10276 Jan 07 06:29	4°♄06'01	18°02'06		10276 Dec 29 18:10	0°♄	
morning set	10276 Jan 22 21:22	28°♄46'20		morning set	10277 Jan 05 16:18	12°♄56'02	
	10276 Jan 23 13:15	0°♄					
				superior conj	10277 Jan 14 11:34	29°♄49'19	0°53'01
superior conj	10276 Feb 01 20:56	16°♄59'23	0°21'45	minimum elong	10277 Jan 14 14:38	0°♄03'35	0°53'01
minimum elong	10276 Feb 01 22:40	17°♄07'05	0°21'51		10277 Jan 14 13:51	0°♄	
desc. node	10276 Feb 04 17:41	22°♄00'16		desc. node	10277 Jan 21 14:32	12°♄42'17	
	10276 Feb 09 10:40	0°♄		max. Earth dist.	10277 Jan 21 19:49	13°♄05'21	1.39993 AU
max. Earth dist.	10276 Feb 09 11:37	0°♄03'56	1.42098 AU	evening rise	10277 Jan 25 22:34	20°♄07'16	
evening rise	10276 Feb 14 23:23	9°♄01'26			10277 Feb 01 00:10	0°♄	
	10276 Feb 28 17:28	0°♄			10277 Feb 21 22:29	0°♄	
evening max el	10276 Mar 19 03:42	25°♄08'47	22°35'01	evening max el	10277 Mar 01 18:06	8°♄55'44	23°55'24
	10276 Mar 25 07:58	0°♄		retrograde	10277 Mar 12 18:36	15°♄24'54	
retrograde	10276 Mar 29 01:00	0°♄59'36		asc. node	10277 Mar 16 17:12	14°♄11'50	
asc. node	10276 Mar 29 19:59	0°♄56'33		evening set	10277 Mar 18 01:00	13°♄12'38	
	10276 Apr 01 10:49	30°♄		min. Earth dist.	10277 Mar 22 18:38	7°♄43'20	0.68401 AU

inferior conj	10277 Mar 23 12:02	6° $\Upsilon$ 44'10	2°01'39	min. Earth dist.	10278 Mar 06 12:56	22° $\text{X}$ 25'25	0.67757 AU
minimum elong	10277 Mar 23 09:52	6° $\Upsilon$ 51'32	2°00'58	inferior conj	10278 Mar 07 18:08	20° $\text{X}$ 50'20	1°18'30
morning rise	10277 Mar 28 18:47	0° $\Upsilon$ 41'25		minimum elong	10278 Mar 07 16:24	20° $\text{X}$ 55'57	1°17'59
	10277 Mar 29 19:22	30° $\text{X}$		morning rise	10278 Mar 13 06:26	14° $\text{X}$ 55'35	
direct	10277 Apr 01 20:10	29° $\text{X}$ 08'16		direct	10278 Mar 16 19:30	13° $\text{X}$ 43'22	
	10277 Apr 05 01:45	0° $\Upsilon$		morning max el	10278 Mar 23 21:52	17° $\text{X}$ 38'13	19°22'23
morning max el	10277 Apr 09 18:22	3° $\Upsilon$ 37'42	20°26'37		10278 Apr 02 15:57	0° $\Upsilon$	
desc. node	10277 Apr 19 15:13	15° $\Upsilon$ 48'51		greatest brilliancy	10278 Apr 05 16:34	4° $\Upsilon$ 25'38	-0.7m
	10277 Apr 29 09:42	0° $\text{Z}$		desc. node	10278 Apr 06 12:01	5° $\Upsilon$ 37'59	
morning set	10277 May 08 11:37	13° $\text{Z}$ 49'22		morning set	10278 Apr 17 11:17	22° $\Upsilon$ 20'38	
max. Earth dist.	10277 May 17 15:56	28° $\text{Z}$ 17'30	1.43660 AU		10278 Apr 22 10:02	0° $\text{Z}$	
	10277 May 18 17:22	0° $\text{II}$		max. Earth dist.	10278 Apr 30 05:49	12° $\text{Z}$ 14'04	1.44974 AU
superior conj	10277 May 23 23:04	8° $\text{II}$ 34'22	-2°07'40	superior conj	10278 May 03 23:02	18° $\text{Z}$ 07'30	-2°12'21
minimum elong	10277 May 24 03:30	8° $\text{II}$ 52'43	2°07'54	minimum elong	10278 May 03 21:10	18° $\text{Z}$ 00'02	2°12'39
evening rise	10277 Jun 05 10:59	29° $\text{II}$ 56'10			10278 May 11 07:52	0° $\text{II}$	
	10277 Jun 05 11:52	0° $\text{E}$		evening rise	10278 May 18 04:35	11° $\text{II}$ 18'47	
asc. node	10277 Jun 12 15:33	12° $\text{E}$ 22'36			10278 May 29 15:03	0° $\text{E}$	
evening max el	10277 Jun 22 13:21	26° $\text{E}$ 25'31	18°04'44	asc. node	10278 May 30 12:37	1° $\text{E}$ 21'53	
retrograde	10277 Jun 29 00:46	29° $\text{E}$ 46'42		evening max el	10278 Jun 06 02:55	9° $\text{E}$ 51'46	18°17'22
evening set	10277 Jul 01 16:36	29° $\text{E}$ 11'59		retrograde	10278 Jun 12 12:06	13° $\text{E}$ 15'46	
inferior conj	10277 Jul 08 02:36	24° $\text{E}$ 05'07	2°16'52	evening set	10278 Jun 15 11:43	12° $\text{E}$ 27'27	
minimum elong	10277 Jul 08 05:24	23° $\text{E}$ 57'57	2°15'40	inferior conj	10278 Jun 21 09:49	7° $\text{E}$ 03'07	2°54'58
min. Earth dist.	10277 Jul 11 02:30	21° $\text{E}$ 02'39	0.61875 AU	minimum elong	10278 Jun 21 11:56	6° $\text{E}$ 57'04	2°54'07
morning rise	10277 Jul 14 15:59	18° $\text{E}$ 00'27		min. Earth dist.	10278 Jun 23 20:35	4° $\text{E}$ 15'57	0.63995 AU
desc. node	10277 Jul 16 14:49	16° $\text{E}$ 49'40		morning rise	10278 Jun 27 10:50	0° $\text{E}$ 47'05	
direct	10277 Jul 21 08:29	15° $\text{E}$ 38'59			10278 Jun 28 12:26	30° $\text{X}$ $\text{II}$	
morning max el	10277 Aug 04 12:55	23° $\text{E}$ 40'44	27°57'02	desc. node	10278 Jul 03 11:55	28° $\text{II}$ 09'38	
	10277 Aug 10 04:55	0° $\text{O}$		direct	10278 Jul 04 03:08	28° $\text{II}$ 08'18	
	10277 Aug 29 21:20	0° $\text{P}$			10278 Jul 10 06:45	0° $\text{E}$	
morning set	10277 Sep 07 04:51	16° $\text{P}$ 01'39		morning max el	10278 Jul 17 22:18	6° $\text{E}$ 10'18	27°36'34
asc. node	10277 Sep 08 15:32	19° $\text{P}$ 00'49			10278 Aug 05 02:24	0° $\text{O}$	
max. Earth dist.	10277 Sep 12 18:36	27° $\text{P}$ 49'07	1.31900 AU	morning set	10278 Aug 21 22:14	29° $\text{O}$ 43'28	
	10277 Sep 13 18:37	0° $\text{A}$			10278 Aug 22 01:34	0° $\text{P}$	
superior conj	10277 Sep 14 16:01	1° $\text{A}$ 57'17	0°56'57	asc. node	10278 Aug 26 12:22	9° $\text{P}$ 04'24	
minimum elong	10277 Sep 14 13:52	1° $\text{A}$ 45'29	0°56'32	max. Earth dist.	10278 Aug 26 18:32	9° $\text{P}$ 36'41	1.32800 AU
evening rise	10277 Sep 21 10:40	16° $\text{A}$ 48'19		superior conj	10278 Aug 29 22:03	16° $\text{P}$ 17'44	0°33'18
	10277 Sep 27 21:15	0° $\text{M}$		minimum elong	10278 Aug 29 20:31	16° $\text{P}$ 09'31	0°32'50
desc. node	10277 Oct 12 12:41	23° $\text{M}$ 03'05			10278 Sep 05 06:13	0° $\text{A}$	
evening max el	10277 Oct 16 19:31	27° $\text{M}$ 40'53	24°32'38	evening rise	10278 Sep 05 22:04	1° $\text{A}$ 24'47	
	10277 Oct 19 10:53	0° $\text{J}$			10278 Sep 21 15:59	0° $\text{M}$	
retrograde	10277 Oct 30 13:49	4° $\text{J}$ 35'12		evening max el	10278 Sep 28 06:18	7° $\text{M}$ 49'40	22°52'35
evening set	10277 Nov 04 20:30	3° $\text{J}$ 33'19		desc. node	10278 Sep 29 09:56	8° $\text{M}$ 54'14	
min. Earth dist.	10277 Nov 10 06:40	0° $\text{J}$ 45'00	0.56439 AU	retrograde	10278 Oct 11 11:37	14° $\text{M}$ 24'54	
	10277 Nov 11 11:24	30° $\text{X}$ $\text{M}$		evening set	10278 Oct 15 06:54	13° $\text{M}$ 53'17	
inferior conj	10277 Nov 12 19:17	29° $\text{M}$ 09'21	-5°35'50	min. Earth dist.	10278 Oct 22 14:52	10° $\text{M}$ 33'35	0.55118 AU
minimum elong	10277 Nov 12 23:31	29° $\text{M}$ 02'38	5°35'02	inferior conj	10278 Oct 23 22:38	9° $\text{M}$ 48'01	-5°39'45
morning rise	10277 Nov 21 04:43	25° $\text{M}$ 06'27		minimum elong	10278 Oct 23 19:05	9° $\text{M}$ 53'08	5°39'13
direct	10277 Nov 23 17:23	24° $\text{M}$ 49'11		morning rise	10278 Nov 01 09:01	5° $\text{M}$ 59'02	
morning max el	10277 Dec 03 10:30	29° $\text{M}$ 26'29	19°33'53	direct	10278 Nov 04 11:21	5° $\text{M}$ 36'43	
	10277 Dec 04 00:09	0° $\text{J}$		morning max el	10278 Nov 15 17:54	10° $\text{M}$ 55'43	20°53'22
asc. node	10277 Dec 05 15:45	1° $\text{J}$ 47'31		asc. node	10278 Nov 22 12:43	19° $\text{M}$ 06'57	
morning set	10277 Dec 20 19:11	27° $\text{J}$ 26'05			10278 Nov 29 00:31	0° $\text{J}$	
	10277 Dec 22 01:44	0° $\text{Z}$		morning set	10278 Dec 05 03:08	12° $\text{J}$ 08'00	
superior conj	10277 Dec 28 18:12	13° $\text{Z}$ 23'56	1°15'58	superior conj	10278 Dec 12 12:25	27° $\text{J}$ 30'16	1°30'57
minimum elong	10277 Dec 28 21:07	13° $\text{Z}$ 38'14	1°16'06	minimum elong	10278 Dec 12 14:25	27° $\text{J}$ 40'30	1°31'15
max. Earth dist.	10278 Jan 04 01:41	25° $\text{Z}$ 25'43	1.37784 AU		10278 Dec 13 17:44	0° $\text{Z}$	
	10278 Jan 06 14:05	0° $\approx$		max. Earth dist.	10278 Dec 17 10:16	7° $\text{Z}$ 21'31	1.35726 AU
evening rise	10278 Jan 07 18:59	2° $\approx$ 08'30		evening rise	10278 Dec 21 09:50	14° $\text{Z}$ 57'28	
desc. node	10278 Jan 08 11:26	3° $\approx$ 20'53		desc. node	10278 Dec 26 08:23	23° $\text{Z}$ 51'37	
	10278 Jan 25 04:00	0° $\text{X}$			10278 Dec 29 22:53	0° $\approx$	
evening max el	10278 Feb 12 07:20	22° $\text{X}$ 45'01	25°12'18		10279 Jan 19 20:05	0° $\text{X}$	
retrograde	10278 Feb 24 08:13	29° $\text{X}$ 43'39		evening max el	10279 Jan 25 20:44	6° $\text{X}$ 32'27	26°18'33
evening set	10278 Mar 02 02:45	27° $\text{X}$ 19'53		retrograde	10279 Feb 07 16:46	13° $\text{X}$ 48'33	
asc. node	10278 Mar 03 14:24	25° $\text{X}$ 55'18		evening set	10279 Feb 13 22:58	11° $\text{X}$ 17'04	



min. Earth dist.	10279 Feb 18 02:54	6° $\text{H}$ 57'03	0.66721 AU	retrograde	10280 Jan 21 19:20	27° $\approx$ 32'22	
asc. node	10279 Feb 18 11:36	6° $\text{H}$ 30'45		evening set	10280 Jan 28 11:42	24° $\approx$ 58'24	
inferior conj	10279 Feb 19 19:50	4° $\text{H}$ 51'59	0°26'16	min. Earth dist.	10280 Feb 01 10:18	21° $\approx$ 11'57	0.65324 AU
minimum elong	10279 Feb 19 19:09	4° $\text{H}$ 54'06	0°26'14	inferior conj	10280 Feb 03 14:54	18° $\approx$ 44'08	-0°34'44
	10279 Feb 24 09:23	30° $\text{R}$ $\approx$		minimum elong	10280 Feb 03 15:55	18° $\approx$ 41'17	0°33'57
morning rise	10279 Feb 25 16:08	29° $\approx$ 06'58		asc. node	10280 Feb 05 08:48	16° $\approx$ 49'15	
direct	10279 Feb 28 18:16	28° $\approx$ 13'02		morning rise	10280 Feb 09 21:32	13° $\approx$ 11'20	
	10279 Mar 05 07:34	0° $\text{H}$		direct	10280 Feb 12 14:24	12° $\approx$ 32'10	
morning max el	10279 Mar 07 08:24	1° $\text{H}$ 45'46	18°33'59	morning max el	10280 Feb 18 23:51	15° $\approx$ 54'12	18°02'20
desc. node	10279 Mar 24 08:47	25° $\text{H}$ 47'28			10280 Feb 29 06:56	0° $\text{H}$	
	10279 Mar 27 00:57	0° $\text{Y}$		morning set	10280 Mar 08 03:08	12° $\text{H}$ 45'17	
morning set	10279 Mar 28 04:43	1° $\text{Y}$ 49'23		desc. node	10280 Mar 10 05:35	16° $\text{H}$ 11'43	
					10280 Mar 18 18:36	0° $\text{Y}$	
superior conj	10279 Apr 13 07:00	27° $\text{Y}$ 04'14	-1°56'55				
minimum elong	10279 Apr 12 22:34	26° $\text{Y}$ 31'17	1°56'31	superior conj	10280 Mar 22 15:59	6° $\text{Y}$ 10'44	-1°23'40
max. Earth dist.	10279 Apr 12 23:56	26° $\text{Y}$ 36'35	1.45604 AU	minimum elong	10280 Mar 22 07:07	5° $\text{Y}$ 35'40	1°22'40
	10279 Apr 15 03:56	0° $\text{B}$		max. Earth dist.	10280 Mar 25 19:56	11° $\text{Y}$ 09'37	1.45488 AU
evening rise	10279 Apr 28 22:11	21° $\text{B}$ 41'37			10280 Apr 06 22:48	0° $\text{B}$	
	10279 May 04 03:32	0° $\text{II}$		evening rise	10280 Apr 07 19:05	1° $\text{B}$ 18'18	
greatest brilliancy	10279 May 07 10:04	5° $\text{II}$ 10'19	-0.8m	greatest brilliancy	10280 Apr 21 03:54	21° $\text{B}$ 41'25	-0.7m
asc. node	10279 May 17 09:44	19° $\text{II}$ 48'34			10280 Apr 26 23:22	0° $\text{II}$	
evening max el	10279 May 20 14:16	23° $\text{II}$ 27'49	18°47'51	evening max el	10280 May 02 21:19	7° $\text{II}$ 08'43	19°34'58
retrograde	10279 May 27 06:03	27° $\text{II}$ 07'37		asc. node	10280 May 03 06:54	7° $\text{II}$ 32'27	
evening set	10279 May 30 13:43	26° $\text{II}$ 04'22		retrograde	10280 May 10 03:37	11° $\text{II}$ 16'13	
inferior conj	10279 Jun 05 03:41	20° $\text{II}$ 24'02	3°14'11	evening set	10280 May 13 19:52	9° $\text{II}$ 57'20	
minimum elong	10279 Jun 05 04:39	20° $\text{II}$ 21'01	3°13'40	inferior conj	10280 May 19 04:58	4° $\text{II}$ 02'20	3°18'19
min. Earth dist.	10279 Jun 06 23:25	18° $\text{II}$ 08'05	0.65796 AU	minimum elong	10280 May 19 04:45	4° $\text{II}$ 03'02	3°17'54
morning rise	10279 Jun 10 18:53	14° $\text{II}$ 03'51		min. Earth dist.	10280 May 20 09:44	2° $\text{II}$ 27'03	0.67176 AU
direct	10279 Jun 17 05:17	11° $\text{II}$ 19'12			10280 May 22 08:37	30° $\text{R}$ $\text{B}$	
desc. node	10279 Jun 20 09:00	11° $\text{II}$ 53'08		morning rise	10280 May 24 13:16	27° $\text{B}$ 42'25	
morning max el	10279 Jun 30 08:54	19° $\text{II}$ 07'35	26°44'50	direct	10280 May 30 13:37	25° $\text{B}$ 02'50	
	10279 Jul 09 14:10	0° $\text{B}$		desc. node	10280 Jun 06 06:01	27° $\text{B}$ 34'23	
	10279 Jul 29 03:12	0° $\text{Q}$			10280 Jun 09 07:23	0° $\text{II}$	
morning set	10279 Aug 05 04:47	12° $\text{Q}$ 52'00		morning max el	10280 Jun 11 19:00	2° $\text{II}$ 22'11	25°30'35
max. Earth dist.	10279 Aug 09 08:34	20° $\text{Q}$ 58'11	1.34203 AU		10280 Jul 02 17:26	0° $\text{B}$	
asc. node	10279 Aug 13 09:14	29° $\text{Q}$ 10'13		morning set	10280 Jul 17 20:32	25° $\text{B}$ 16'57	
					10280 Jul 20 10:08	0° $\text{Q}$	
superior conj	10279 Aug 13 22:06	0° $\text{R}$ 17'01	0°05'18	max. Earth dist.	10280 Jul 21 12:32	2° $\text{Q}$ 03'45	1.36073 AU
minimum elong	10279 Aug 13 21:50	0° $\text{R}$ 15'37	0°04'59				
behind sun begin	10279 Aug 13 16:19	29° $\text{Q}$ 46'57		superior conj	10280 Jul 27 13:24	13° $\text{Q}$ 47'44	-0°26'07
behind sun end	10279 Aug 14 03:21	0° $\text{R}$ 44'20		minimum elong	10280 Jul 27 15:01	13° $\text{Q}$ 55'48	0°26'11
	10279 Aug 13 18:50	0° $\text{R}$		asc. node	10280 Jul 30 06:08	19° $\text{Q}$ 14'12	
evening rise	10279 Aug 21 08:00	15° $\text{R}$ 53'57		evening rise	10280 Aug 04 14:17	0° $\text{R}$ 09'38	
	10279 Aug 28 09:45	0° $\text{B}$			10280 Aug 04 12:24	0° $\text{R}$	
evening max el	10279 Sep 09 23:24	18° $\text{B}$ 08'55	21°17'20	evening max el	10280 Aug 22 05:08	29° $\text{R}$ 05'16	19°58'14
desc. node	10279 Sep 16 07:11	22° $\text{B}$ 46'49			10280 Aug 23 04:12	0° $\text{B}$	
retrograde	10279 Sep 21 24:00	24° $\text{B}$ 06'53		retrograde	10280 Sep 01 14:04	4° $\text{B}$ 14'10	
evening set	10279 Sep 24 12:17	23° $\text{B}$ 52'17		desc. node	10280 Sep 02 04:28	4° $\text{B}$ 13'11	
inferior conj	10279 Oct 03 15:23	19° $\text{B}$ 56'32	-4°46'49	evening set	10280 Sep 03 11:48	4° $\text{B}$ 04'31	
minimum elong	10279 Oct 03 05:53	20° $\text{B}$ 09'52	4°44'28	inferior conj	10280 Sep 12 11:21	0° $\text{B}$ 04'26	-3°07'19
min. Earth dist.	10279 Oct 03 22:37	19° $\text{B}$ 46'23	0.54616 AU	minimum elong	10280 Sep 12 03:06	0° $\text{B}$ 16'54	3°04'26
morning rise	10279 Oct 12 00:07	16° $\text{B}$ 05'15			10280 Sep 12 14:16	30° $\text{R}$ $\text{R}$	
direct	10279 Oct 15 20:02	15° $\text{B}$ 33'36		min. Earth dist.	10280 Sep 14 08:09	28° $\text{R}$ 56'47	0.55065 AU
morning max el	10279 Oct 28 12:41	21° $\text{B}$ 37'05	22°31'55	morning rise	10280 Sep 20 17:01	25° $\text{R}$ 50'28	
	10279 Nov 04 16:19	0° $\text{M}$		direct	10280 Sep 25 07:53	25° $\text{R}$ 04'01	
asc. node	10279 Nov 09 09:39	7° $\text{M}$ 17'32			10280 Oct 06 23:24	0° $\text{B}$	
morning set	10279 Nov 19 14:00	26° $\text{M}$ 56'08		morning max el	10280 Oct 09 00:31	1° $\text{B}$ 48'16	24°19'16
	10279 Nov 21 00:37	0° $\text{Z}$		asc. node	10280 Oct 26 06:34	26° $\text{B}$ 05'52	
					10280 Oct 28 08:07	0° $\text{M}$	
superior conj	10279 Nov 26 14:46	11° $\text{Z}$ 58'38	1°38'38	morning set	10280 Nov 03 01:50	11° $\text{M}$ 43'50	
minimum elong	10279 Nov 26 15:34	12° $\text{Z}$ 02'51	1°39'02				
max. Earth dist.	10279 Nov 30 02:08	19° $\text{Z}$ 15'54	1.33998 AU	superior conj	10280 Nov 09 22:24	26° $\text{M}$ 39'38	1°39'43
evening rise	10279 Dec 04 15:27	28° $\text{Z}$ 25'00		minimum elong	10280 Nov 09 22:01	26° $\text{M}$ 37'31	1°40'05
	10279 Dec 05 11:02	0° $\text{Z}$			10280 Nov 11 11:17	0° $\text{Z}$	
desc. node	10279 Dec 13 05:24	14° $\text{Z}$ 09'55		max. Earth dist.	10280 Nov 12 02:07	1° $\text{Z}$ 20'00	1.32689 AU
	10279 Dec 23 03:44	0° $\approx$		evening rise	10280 Nov 17 08:09	12° $\text{Z}$ 20'27	
evening max el	10280 Jan 08 10:17	20° $\approx$ 10'17	27°06'37		10280 Nov 26 16:22	0° $\text{Z}$	

desc. node	10280 Nov 29 02:28	4° $\text{Z}$ 08'51			10281 Nov 20 02:26	0° $\text{Z}$	
	10280 Dec 17 14:04	0° $\approx$		evening max el	10281 Dec 03 06:45	16° $\text{Z}$ 05'14	27°21'41
evening max el	10280 Dec 20 22:25	3° $\approx$ 25'38	27°29'37	retrograde	10281 Dec 17 03:30	23° $\text{Z}$ 20'14	
retrograde	10281 Jan 03 15:07	10° $\approx$ 46'03		evening set	10281 Dec 24 04:04	21° $\text{Z}$ 03'56	
evening set	10281 Jan 10 14:26	8° $\approx$ 16'27		min. Earth dist.	10281 Dec 27 21:08	18° $\text{Z}$ 13'46	0.61604 AU
min. Earth dist.	10281 Jan 14 08:52	5° $\approx$ 01'10	0.63596 AU	inferior conj	10281 Dec 30 21:56	15° $\text{Z}$ 30'24	-2°57'42
inferior conj	10281 Jan 17 00:39	2° $\approx$ 19'37	-1°43'34	minimum elong	10281 Dec 31 03:51	15° $\text{Z}$ 17'05	2°55'03
minimum elong	10281 Jan 17 03:59	2° $\approx$ 11'09	1°41'47	morning rise	10282 Jan 07 06:10	10° $\text{Z}$ 31'27	
	10281 Jan 19 10:00	30° $\text{R}$ $\text{Z}$		direct	10282 Jan 09 10:49	10° $\text{Z}$ 10'53	
asc. node	10281 Jan 22 05:58	27° $\text{Z}$ 48'59		asc. node	10282 Jan 09 03:06	10° $\text{Z}$ 11'20	
morning rise	10281 Jan 23 19:33	27° $\text{Z}$ 02'05		morning max el	10282 Jan 16 09:52	13° $\text{Z}$ 41'51	17°51'31
direct	10281 Jan 26 05:05	26° $\text{Z}$ 34'02			10282 Jan 27 12:38	0° $\approx$	
morning max el	10281 Feb 01 17:25	29° $\text{Z}$ 55'42	17°47'56	morning set	10282 Feb 01 02:27	8° $\approx$ 11'22	
	10281 Feb 01 19:09	0° $\approx$					
morning set	10281 Feb 18 04:28	24° $\approx$ 59'11		superior conj	10282 Feb 11 22:26	27° $\approx$ 22'37	0°00'14
	10281 Feb 21 02:39	0° $\text{X}$		minimum elong	10282 Feb 11 22:29	27° $\approx$ 22'51	0°00'31
desc. node	10281 Feb 25 02:22	6° $\text{X}$ 45'42		behind sun begin	10282 Feb 11 14:01	26° $\approx$ 46'28	
				behind sun end	10282 Feb 12 06:58	27° $\approx$ 59'09	
superior conj	10281 Mar 02 18:45	16° $\text{X}$ 10'57	-0°41'31	desc. node	10282 Feb 11 23:08	27° $\approx$ 25'38	
minimum elong	10281 Mar 02 14:18	15° $\text{X}$ 52'47	0°40'44		10282 Feb 13 11:19	0° $\text{X}$	
max. Earth dist.	10281 Mar 08 14:55	25° $\text{X}$ 35'46	1.44640 AU	max. Earth dist.	10282 Feb 19 05:59	9° $\text{X}$ 36'55	1.43162 AU
	10281 Mar 11 09:45	0° $\text{Y}$		evening rise	10282 Feb 25 23:55	20° $\text{X}$ 23'42	
evening rise	10281 Mar 18 06:33	10° $\text{Y}$ 39'50			10282 Mar 04 05:41	0° $\text{Y}$	
	10281 Mar 31 03:13	0° $\text{Z}$			10282 Mar 25 16:21	0° $\text{Z}$	
evening max el	10281 Apr 15 22:49	20° $\text{Z}$ 51'08	20°36'44	evening max el	10282 Mar 29 18:45	4° $\text{Z}$ 33'58	21°49'46
asc. node	10281 Apr 20 04:05	24° $\text{Z}$ 20'28		asc. node	10282 Apr 07 01:17	9° $\text{Z}$ 56'46	
retrograde	10281 Apr 24 02:24	25° $\text{Z}$ 35'59		retrograde	10282 Apr 08 00:23	10° $\text{Z}$ 01'20	
evening set	10281 Apr 28 04:02	24° $\text{Z}$ 01'23		evening set	10282 Apr 12 12:23	8° $\text{Z}$ 11'25	
inferior conj	10281 May 03 10:59	17° $\text{Z}$ 53'26	3°10'03	inferior conj	10282 Apr 17 19:29	1° $\text{Z}$ 52'52	2°51'05
minimum elong	10281 May 03 09:47	17° $\text{Z}$ 57'33	3°09'35	minimum elong	10282 Apr 17 17:36	1° $\text{Z}$ 59'26	2°50'30
min. Earth dist.	10281 May 04 01:43	17° $\text{Z}$ 02'45	0.68092 AU	min. Earth dist.	10282 Apr 17 21:13	1° $\text{Z}$ 46'49	0.68555 AU
morning rise	10281 May 08 15:19	11° $\text{Z}$ 36'18			10282 Apr 19 04:09	30° $\text{R}$ $\text{Y}$	
direct	10281 May 14 03:09	9° $\text{Z}$ 10'12		morning rise	10282 Apr 22 22:38	25° $\text{Y}$ 40'09	
desc. node	10281 May 24 02:59	14° $\text{Z}$ 44'00		direct	10282 Apr 27 20:58	23° $\text{Y}$ 32'52	
morning max el	10281 May 25 04:36	15° $\text{Z}$ 47'02	24°03'47	morning max el	10282 May 07 15:29	29° $\text{Y}$ 18'48	22°34'02
	10281 Jun 05 21:15	0° $\text{II}$			10282 May 08 07:35	0° $\text{Z}$	
	10281 Jun 25 16:25	0° $\text{Z}$		desc. node	10282 May 10 23:51	2° $\text{Z}$ 57'22	
morning set	10281 Jun 29 16:41	6° $\text{Z}$ 46'32			10282 May 30 15:04	0° $\text{II}$	
max. Earth dist.	10281 Jul 03 10:18	13° $\text{Z}$ 18'52	1.38264 AU	morning set	10282 Jun 10 12:02	17° $\text{II}$ 07'05	
				max. Earth dist.	10282 Jun 15 07:54	25° $\text{II}$ 09'33	1.40544 AU
superior conj	10281 Jul 10 16:29	26° $\text{Z}$ 41'47	-0°59'13		10282 Jun 18 03:37	0° $\text{Z}$	
minimum elong	10281 Jul 10 20:24	27° $\text{Z}$ 00'26	0°59'00				
	10281 Jul 12 09:52	0° $\text{Z}$		superior conj	10282 Jun 23 03:04	8° $\text{Z}$ 48'16	-1°31'11
asc. node	10281 Jul 17 03:03	9° $\text{Z}$ 12'56		minimum elong	10282 Jun 23 08:59	9° $\text{Z}$ 15'00	1°30'53
evening rise	10281 Jul 19 14:21	14° $\text{Z}$ 05'17		evening rise	10282 Jul 03 04:48	27° $\text{Z}$ 31'16	
	10281 Jul 28 02:42	0° $\text{Z}$		asc. node	10282 Jul 03 23:59	29° $\text{Z}$ 01'40	
evening max el	10281 Aug 05 00:07	10° $\text{Z}$ 48'24	18°59'59		10282 Jul 04 12:23	0° $\text{Z}$	
retrograde	10281 Aug 13 18:14	15° $\text{Z}$ 09'59		evening max el	10282 Jul 19 05:14	23° $\text{Z}$ 12'45	18°22'54
evening set	10281 Aug 15 15:32	14° $\text{Z}$ 58'38		retrograde	10282 Jul 26 17:13	26° $\text{Z}$ 58'43	
desc. node	10281 Aug 20 01:43	13° $\text{Z}$ 14'17		evening set	10282 Jul 28 20:43	26° $\text{Z}$ 41'01	
inferior conj	10281 Aug 23 23:32	10° $\text{Z}$ 43'05	-1°12'53	inferior conj	10282 Aug 05 09:18	22° $\text{Z}$ 05'36	0°28'22
minimum elong	10281 Aug 23 20:24	10° $\text{Z}$ 48'33	1°11'50	minimum elong	10282 Aug 05 10:17	22° $\text{Z}$ 03'35	0°27'40
min. Earth dist.	10281 Aug 26 21:55	8° $\text{Z}$ 41'10	0.56389 AU	desc. node	10282 Aug 06 22:56	20° $\text{Z}$ 48'23	
morning rise	10281 Aug 31 22:07	5° $\text{Z}$ 52'40		min. Earth dist.	10282 Aug 08 17:49	19° $\text{Z}$ 22'38	0.58339 AU
direct	10281 Sep 06 08:12	4° $\text{Z}$ 43'28		morning rise	10282 Aug 12 20:20	16° $\text{Z}$ 39'01	
morning max el	10281 Sep 20 13:26	12° $\text{Z}$ 01'17	25°58'31	direct	10282 Aug 18 23:14	15° $\text{Z}$ 00'31	
	10281 Oct 04 11:58	0° $\text{Z}$		morning max el	10282 Sep 02 08:14	22° $\text{Z}$ 42'45	27°12'59
asc. node	10281 Oct 13 03:26	15° $\text{Z}$ 22'27			10282 Sep 08 19:55	0° $\text{Z}$	
morning set	10281 Oct 18 12:56	26° $\text{Z}$ 26'28			10282 Sep 27 11:58	0° $\text{Z}$	
	10281 Oct 20 04:33	0° $\text{Z}$		asc. node	10282 Sep 30 00:16	4° $\text{Z}$ 59'28	
				morning set	10282 Oct 02 21:38	10° $\text{Z}$ 59'12	
superior conj	10281 Oct 25 09:04	11° $\text{Z}$ 26'38	1°34'47				
minimum elong	10281 Oct 25 07:43	11° $\text{Z}$ 19'05	1°34'59	superior conj	10282 Oct 09 20:50	26° $\text{Z}$ 13'42	1°24'14
max. Earth dist.	10281 Oct 26 08:15	13° $\text{Z}$ 34'50	1.31845 AU	minimum elong	10282 Oct 09 18:49	26° $\text{Z}$ 02'30	1°24'11
evening rise	10281 Nov 01 08:58	26° $\text{Z}$ 36'11		max. Earth dist.	10282 Oct 09 17:24	25° $\text{Z}$ 54'36	1.31480 AU
	10281 Nov 03 00:26	0° $\text{Z}$			10282 Oct 11 13:31	0° $\text{Z}$	
desc. node	10281 Nov 15 23:34	23° $\text{Z}$ 40'22		evening rise	10282 Oct 16 15:24	11° $\text{Z}$ 05'35	

	10282 Oct 26 05:34	0°♊	evening rise	10283 Oct 01 01:18	25°♎42'29	
desc. node	10282 Nov 02 20:45	12°♊33'46		10283 Oct 03 01:52	0°♎	
evening max el	10282 Nov 15 08:52	27°♊58'35 26°39'42		10283 Oct 20 07:54	0°♊	
	10282 Nov 17 15:50	0°♊	desc. node	10283 Oct 20 17:57	0°♊33'40	
retrograde	10282 Nov 29 07:20	5°♊06'28	evening max el	10283 Oct 28 03:01	9°♊00'40 25°25'52	
evening set	10282 Dec 06 00:34	3°♊13'39	retrograde	10283 Nov 11 00:19	16°♊00'14	
min. Earth dist.	10282 Dec 09 22:52	0°♊37'21 0.59484 AU	evening set	10283 Nov 16 23:05	14°♊39'07	
	10282 Dec 10 18:20	30°♊	min. Earth dist.	10283 Nov 21 15:16	12°♊00'29 0.57456 AU	
inferior conj	10282 Dec 13 03:15	28°♊07'34 -4°11'19	inferior conj	10283 Nov 24 13:20	10°♊01'10 -5°12'54	
minimum elong	10282 Dec 13 11:02	27°♊52'15 4°08'34	minimum elong	10283 Nov 24 20:14	9°♊49'23 5°11'14	
morning rise	10282 Dec 21 00:10	23°♊29'49	morning rise	10283 Dec 02 19:41	5°♊45'43	
direct	10282 Dec 23 03:31	23°♊13'14	direct	10283 Dec 05 03:07	5°♊29'39	
asc. node	10282 Dec 27 00:10	24°♊10'09	asc. node	10283 Dec 13 21:11	9°♊38'31	
morning max el	10282 Dec 30 21:40	27°♊02'58 18°14'24	morning max el	10283 Dec 14 00:52	9°♊47'18 18°58'23	
	10283 Jan 02 12:47	0°♊		10283 Dec 27 07:01	0°♊	
morning set	10283 Jan 15 15:10	22°♊04'25	morning set	10283 Dec 30 13:54	6°♊23'49	
	10283 Jan 19 19:54	0°♊				
			superior conj	10284 Jan 07 23:40	22°♊50'58 1°03'46	
superior conj	10283 Jan 25 01:40	9°♊40'48 0°36'00	minimum elong	10284 Jan 08 02:48	23°♊05'55 1°03'47	
minimum elong	10283 Jan 25 04:12	9°♊52'14 0°36'00		10284 Jan 11 19:04	0°♊	
desc. node	10283 Jan 29 19:57	18°♊08'09	max. Earth dist.	10284 Jan 14 22:48	5°♊43'23 1.39048 AU	
max. Earth dist.	10283 Feb 01 16:09	23°♊00'56 1.41223 AU	desc. node	10284 Jan 16 16:50	8°♊49'07	
	10283 Feb 05 20:47	0°♊	evening rise	10284 Jan 18 19:21	12°♊27'47	
evening rise	10283 Feb 06 10:53	0°♊57'32		10284 Jan 29 14:55	0°♊	
	10283 Feb 25 16:09	0°♊		10284 Feb 20 22:50	0°♊	
evening max el	10283 Mar 12 10:42	18°♊19'48 23°09'13	evening max el	10284 Feb 23 00:34	2°♊08'39 24°29'01	
retrograde	10283 Mar 22 20:02	24°♊28'18	retrograde	10284 Mar 05 12:00	8°♊51'18	
asc. node	10283 Mar 24 22:29	24°♊06'57	evening set	10284 Mar 10 23:29	6°♊34'04	
evening set	10283 Mar 27 19:23	22°♊24'00	asc. node	10284 Mar 10 19:42	6°♊41'59	
inferior conj	10283 Apr 02 04:32	15°♊58'02 2°22'25	min. Earth dist.	10284 Mar 15 13:53	1°♊19'27 0.68179 AU	
minimum elong	10283 Apr 02 02:20	16°♊05'36 2°21'43	inferior conj	10284 Mar 16 12:14	0°♊04'41 1°44'28	
min. Earth dist.	10283 Apr 01 18:02	16°♊34'16 0.68580 AU	minimum elong	10284 Mar 16 10:11	0°♊11'32 1°43'50	
morning rise	10283 Apr 07 09:12	9°♊51'03		10284 Mar 16 13:38	30°♊	
direct	10283 Apr 11 18:05	8°♊05'11	morning rise	10284 Mar 21 21:01	24°♊04'57	
morning max el	10283 Apr 20 06:59	13°♊00'24 21°09'52	direct	10284 Mar 25 17:06	22°♊40'43	
desc. node	10283 Apr 27 20:41	21°♊57'29	morning max el	10284 Apr 02 05:48	26°♊53'47 19°57'23	
	10283 May 03 17:09	0°♊		10284 Apr 05 02:13	0°♊	
morning set	10283 May 21 04:57	26°♊16'14	desc. node	10284 Apr 13 17:29	11°♊31'15	
	10283 May 23 13:35	0°♊		10284 Apr 26 02:53	0°♊	
max. Earth dist.	10283 May 28 10:58	7°♊52'53 1.42645 AU	morning set	10284 Apr 29 04:45	4°♊43'14	
			max. Earth dist.	10284 May 09 21:36	21°♊27'49 1.44304 AU	
superior conj	10283 Jun 04 16:40	19°♊57'52 -1°57'27	superior conj	10284 May 15 06:07	0°♊04'49 -2°11'55	
minimum elong	10283 Jun 04 22:43	20°♊23'45 1°57'28	minimum elong	10284 May 15 08:19	0°♊13'47 2°12'17	
	10283 Jun 10 11:17	0°♊		10284 May 15 04:56	0°♊	
evening rise	10283 Jun 16 05:33	10°♊17'30	evening rise	10284 May 28 11:48	22°♊13'19	
asc. node	10283 Jun 20 20:57	18°♊35'53		10284 Jun 02 01:03	0°♊	
	10283 Jun 27 18:36	0°♊	asc. node	10284 Jun 06 18:00	7°♊50'01	
evening max el	10283 Jul 02 16:31	6°♊08'49 18°05'53	evening max el	10284 Jun 15 06:14	19°♊26'50 18°07'54	
retrograde	10283 Jul 09 09:36	9°♊34'21	retrograde	10284 Jun 21 15:21	22°♊47'10	
evening set	10283 Jul 11 21:00	9°♊06'34	evening set	10284 Jun 24 10:37	22°♊06'43	
inferior conj	10283 Jul 18 15:42	4°♊10'55 1°44'37	inferior conj	10284 Jun 30 15:03	16°♊52'10 2°35'35	
minimum elong	10283 Jul 18 18:23	4°♊04'33 1°43'21	minimum elong	10284 Jun 30 17:40	16°♊45'09 2°34'32	
min. Earth dist.	10283 Jul 21 21:19	1°♊08'46 0.60585 AU	min. Earth dist.	10284 Jul 03 09:45	13°♊54'07 0.62814 AU	
	10283 Jul 23 05:13	30°♊	morning rise	10284 Jul 06 22:57	10°♊41'57	
desc. node	10283 Jul 24 20:07	28°♊45'39	desc. node	10284 Jul 10 17:15	8°♊40'23	
morning rise	10283 Jul 25 12:59	28°♊17'18	direct	10284 Jul 13 16:19	8°♊11'52	
direct	10283 Aug 01 02:49	26°♊09'40	morning max el	10284 Jul 27 17:07	16°♊14'16 27°52'35	
	10283 Aug 10 16:47	0°♊		10284 Aug 08 00:54	0°♊	
morning max el	10283 Aug 15 09:53	4°♊06'34 27°51'57		10284 Aug 26 07:00	0°♊	
	10283 Sep 03 14:01	0°♊	morning set	10284 Aug 31 00:18	9°♊14'13	
asc. node	10283 Sep 16 21:04	24°♊50'48	asc. node	10284 Sep 02 17:54	14°♊51'32	
morning set	10283 Sep 17 02:06	25°♊16'57	max. Earth dist.	10284 Sep 05 06:24	20°♊12'00 1.32225 AU	
	10283 Sep 19 07:49	0°♊				
max. Earth dist.	10283 Sep 23 02:02	8°♊10'20 1.31606 AU	superior conj	10284 Sep 07 16:21	25°♊25'22 0°47'30	
			minimum elong	10284 Sep 07 14:23	25°♊14'42 0°47'02	
superior conj	10283 Sep 24 07:52	10°♊55'06 1°08'23		10284 Sep 09 18:35	0°♊	
minimum elong	10283 Sep 24 05:38	10°♊42'41 1°08'05				

evening rise	10284 Sep 14 12:45	10° $\Omega$ 21'27		evening rise	10285 Aug 29 23:47	24° $\cap$ 55'48	
	10284 Sep 24 11:48	0° $\cap$			10285 Sep 01 09:58	0° $\Omega$	
desc. node	10284 Oct 06 15:11	17° $\cap$ 19'44		evening max el	10285 Sep 20 02:49	29° $\Omega$ 29'20	22°10'29
evening max el	10284 Oct 08 14:40	19° $\cap$ 21'24	23°50'33		10285 Sep 20 15:35	0° $\cap$	
retrograde	10284 Oct 22 04:41	26° $\cap$ 08'38		desc. node	10285 Sep 23 12:27	2° $\cap$ 24'16	
evening set	10284 Oct 26 21:05	25° $\cap$ 20'45		retrograde	10285 Oct 02 21:35	5° $\cap$ 51'15	
min. Earth dist.	10284 Nov 02 01:04	22° $\cap$ 21'16	0.55797 AU	evening set	10285 Oct 06 02:27	5° $\cap$ 28'28	
inferior conj	10284 Nov 04 03:04	21° $\cap$ 06'10	-5°43'55	min. Earth dist.	10285 Oct 14 08:19	1° $\cap$ 50'57	0.54796 AU
minimum elong	10284 Nov 04 04:18	21° $\cap$ 04'19	5°43'32	inferior conj	10285 Oct 15 00:22	1° $\cap$ 28'24	-5°24'16
morning rise	10284 Nov 12 13:26	17° $\cap$ 10'31		minimum elong	10285 Oct 14 17:35	1° $\cap$ 37'57	5°23'05
direct	10284 Nov 15 07:31	16° $\cap$ 51'23			10285 Oct 17 16:49	30° $\cap$	
morning max el	10284 Nov 25 16:01	21° $\cap$ 45'27	20°05'00	morning rise	10285 Oct 23 10:16	27° $\Omega$ 41'20	
asc. node	10284 Nov 29 18:10	26° $\cap$ 22'07		direct	10285 Oct 26 19:50	27° $\Omega$ 15'41	
	10284 Dec 02 08:13	0° $\nearrow$			10285 Nov 04 03:11	0° $\cap$	
morning set	10284 Dec 13 19:17	21° $\nearrow$ 00'03		morning max el	10285 Nov 07 17:40	2° $\cap$ 52'57	21°33'29
	10284 Dec 18 04:43	0° $\searrow$		asc. node	10285 Nov 16 15:08	14° $\cap$ 04'41	
					10285 Nov 25 09:36	0° $\nearrow$	
superior conj	10284 Dec 21 11:43	6° $\searrow$ 40'17	1°23'16	morning set	10285 Nov 28 04:44	5° $\nearrow$ 45'20	
minimum elong	10284 Dec 21 14:18	6° $\searrow$ 53'13	1°23'28				
max. Earth dist.	10284 Dec 27 05:35	17° $\searrow$ 52'12	1.36883 AU	superior conj	10285 Dec 05 09:47	20° $\nearrow$ 57'04	1°35'03
evening rise	10284 Dec 31 00:03	24° $\searrow$ 50'18		minimum elong	10285 Dec 05 11:17	21° $\nearrow$ 04'53	1°35'25
desc. node	10285 Jan 02 13:47	29° $\searrow$ 24'50		max. Earth dist.	10285 Dec 09 16:59	29° $\nearrow$ 45'17	1.34941 AU
	10285 Jan 02 21:50	0° $\approx$			10285 Dec 09 19:56	0° $\searrow$	
	10285 Jan 22 05:39	0° $\nearrow$		evening rise	10285 Dec 13 21:36	7° $\searrow$ 56'19	
evening max el	10285 Feb 04 13:56	15° $\nearrow$ 58'02	25°42'14	desc. node	10285 Dec 20 10:47	19° $\searrow$ 50'52	
retrograde	10285 Feb 16 23:21	23° $\nearrow$ 04'44			10285 Dec 26 13:09	0° $\approx$	
evening set	10285 Feb 22 23:04	20° $\nearrow$ 37'12		evening max el	10286 Jan 18 03:20	29° $\approx$ 42'01	26°41'37
asc. node	10285 Feb 25 16:55	17° $\nearrow$ 51'29			10286 Jan 18 10:50	0° $\nearrow$	
min. Earth dist.	10285 Feb 27 06:32	15° $\nearrow$ 57'35	0.67368 AU	retrograde	10286 Jan 31 05:27	7° $\nearrow$ 02'00	
inferior conj	10285 Feb 28 16:42	14° $\nearrow$ 09'07	0°57'26	evening set	10286 Feb 06 16:24	4° $\nearrow$ 28'23	
minimum elong	10285 Feb 28 15:20	14° $\nearrow$ 13'27	0°57'06	min. Earth dist.	10286 Feb 10 17:50	0° $\nearrow$ 23'10	0.66168 AU
morning rise	10285 Mar 06 08:07	8° $\nearrow$ 18'21			10286 Feb 11 01:48	30° $\cap$	
direct	10285 Mar 09 16:27	7° $\nearrow$ 14'10		inferior conj	10286 Feb 12 15:52	28° $\approx$ 07'14	0°01'26
morning max el	10285 Mar 16 12:28	10° $\nearrow$ 57'39	18°59'49	minimum elong	10286 Feb 12 15:49	28° $\approx$ 07'22	0°01'42
greatest brilliancy	10285 Mar 30 02:57	29° $\nearrow$ 15'08	-0.8m	transit middle	10286 Feb 12 15:49	28° $\approx$ 07'22	0°01'42
	10285 Mar 30 14:45	0° $\Upsilon$		transit begin	10286 Feb 12 12:55	28° $\approx$ 16'00	
desc. node	10285 Mar 31 14:16	1° $\Upsilon$ 29'40		transit end	10286 Feb 12 18:44	27° $\approx$ 58'45	
morning set	10285 Apr 08 09:39	13° $\Upsilon$ 32'43		asc. node	10286 Feb 12 14:08	28° $\approx$ 12'23	
	10285 Apr 18 23:25	0° $\searrow$		morning rise	10286 Feb 18 16:19	22° $\approx$ 27'25	
max. Earth dist.	10285 Apr 22 14:12	5° $\searrow$ 39'38	1.45335 AU	direct	10286 Feb 21 14:18	21° $\approx$ 40'16	
				morning max el	10286 Feb 28 01:31	25° $\approx$ 06'57	18°18'32
superior conj	10285 Apr 24 21:39	9° $\searrow$ 17'41	-2°08'19		10286 Mar 04 05:35	0° $\nearrow$	
minimum elong	10285 Apr 24 16:34	8° $\searrow$ 57'39	2°08'23	desc. node	10286 Mar 18 11:03	21° $\nearrow$ 46'07	
	10285 May 07 20:26	0° $\cap$		morning set	10286 Mar 19 15:00	23° $\nearrow$ 37'57	
evening rise	10285 May 09 19:19	3° $\cap$ 10'33			10286 Mar 23 14:42	0° $\Upsilon$	
asc. node	10285 May 24 15:06	26° $\cap$ 36'38					
	10285 May 27 04:05	0° $\searrow$		superior conj	10286 Apr 04 03:42	18° $\Upsilon$ 12'31	-1°44'34
evening max el	10285 May 29 19:10	2° $\searrow$ 58'07	18°28'10	minimum elong	10286 Apr 03 18:13	17° $\Upsilon$ 35'23	1°43'50
retrograde	10285 Jun 05 06:03	6° $\searrow$ 27'18		max. Earth dist.	10286 Apr 05 09:37	20° $\Upsilon$ 09'34	1.45638 AU
evening set	10285 Jun 08 09:05	5° $\searrow$ 32'37			10286 Apr 11 16:49	0° $\searrow$	
inferior conj	10285 Jun 14 03:16	0° $\searrow$ 01'00	3°05'11	evening rise	10286 Apr 20 03:20	13° $\searrow$ 11'45	
minimum elong	10285 Jun 14 04:55	29° $\cap$ 56'04	3°04'30		10286 Apr 30 22:17	0° $\cap$	
	10285 Jun 14 03:36	30° $\cap$		greatest brilliancy	10286 Apr 30 20:58	29° $\searrow$ 54'56	-0.8m
min. Earth dist.	10285 Jun 16 07:35	27° $\cap$ 25'54	0.64808 AU	asc. node	10286 May 11 12:15	14° $\cap$ 47'02	
morning rise	10285 Jun 19 23:46	23° $\cap$ 42'32		evening max el	10286 May 13 04:52	16° $\cap$ 36'55	19°05'54
direct	10285 Jun 26 14:02	21° $\cap$ 00'14		retrograde	10286 May 20 02:03	20° $\cap$ 27'35	
desc. node	10285 Jun 27 14:21	21° $\cap$ 03'43		evening set	10286 May 23 13:11	19° $\cap$ 17'48	
morning max el	10285 Jul 10 03:26	28° $\cap$ 57'40	27°18'00	inferior conj	10286 May 29 00:42	13° $\cap$ 30'51	3°17'37
	10285 Jul 11 03:37	0° $\searrow$		minimum elong	10286 May 29 01:09	13° $\cap$ 29'23	3°17'09
	10285 Aug 01 21:37	0° $\Omega$		min. Earth dist.	10286 May 30 13:57	11° $\cap$ 31'24	0.66431 AU
morning set	10285 Aug 14 13:29	22° $\Omega$ 43'03		morning rise	10286 Jun 03 12:35	7° $\cap$ 10'06	
	10285 Aug 18 05:12	0° $\cap$		direct	10286 Jun 09 18:57	4° $\cap$ 26'32	
max. Earth dist.	10285 Aug 19 02:44	1° $\cap$ 50'10	1.33343 AU	desc. node	10286 Jun 14 11:23	5° $\cap$ 41'21	
asc. node	10285 Aug 20 14:44	4° $\cap$ 56'33		morning max el	10286 Jun 22 14:16	12° $\cap$ 05'06	26°15'30
					10286 Jul 06 22:37	0° $\searrow$	
superior conj	10285 Aug 22 20:08	9° $\cap$ 37'36	0°21'55		10286 Jul 25 13:07	0° $\Omega$	
minimum elong	10285 Aug 22 19:03	9° $\cap$ 31'53	0°21'29	morning set	10286 Jul 28 14:20	5° $\Omega$ 35'06	

max. Earth dist.	10286 Aug 01 12:28	13°Ω03'46	1.34951 AU		10287 Jun 30 10:41	0°☿	
				morning set	10287 Jul 10 22:25	17°☿38'38	
superior conj	10286 Aug 06 16:50	23°Ω25'48	-0°07'42	max. Earth dist.	10287 Jul 14 12:35	24°☿07'46	1.36973 AU
minimum elong	10286 Aug 06 17:17	23°Ω28'08	0°07'56		10287 Jul 17 15:58	0°Ω	
behind sun begin	10286 Aug 06 12:03	23°Ω01'22					
behind sun end	10286 Aug 06 22:31	23°Ω54'57		superior conj	10287 Jul 21 03:24	6°Ω42'21	-0°40'06
asc. node	10286 Aug 07 11:37	25°Ω02'17		minimum elong	10287 Jul 21 05:58	6°Ω54'56	0°40'00
	10286 Aug 09 21:04	0°☿		asc. node	10287 Jul 25 08:32	15°Ω04'50	
evening rise	10286 Aug 14 08:28	9°☿20'16		evening rise	10287 Jul 29 12:27	23°Ω28'25	
	10286 Aug 25 07:38	0°Ω			10287 Aug 01 19:20	0°☿	
evening max el	10286 Sep 02 00:45	10°Ω01'50	20°41'10	evening max el	10287 Aug 15 12:28	21°☿19'14	19°30'53
desc. node	10286 Sep 10 09:43	15°Ω17'09		retrograde	10287 Aug 25 04:14	26°☿06'38	
retrograde	10286 Sep 13 09:32	15°Ω40'06		evening set	10287 Aug 27 00:25	25°☿56'58	
evening set	10286 Sep 15 13:10	15°Ω28'50		desc. node	10287 Aug 28 06:56	25°☿39'34	
inferior conj	10286 Sep 24 16:40	11°Ω32'42	-4°08'39	inferior conj	10287 Sep 04 18:25	21°☿51'44	-2°18'37
minimum elong	10286 Sep 24 06:51	11°Ω46'48	4°05'43	minimum elong	10287 Sep 04 12:13	22°☿01'39	2°16'22
min. Earth dist.	10286 Sep 25 16:45	10°Ω58'06	0.54691 AU	min. Earth dist.	10287 Sep 07 04:12	20°☿19'46	0.55534 AU
morning rise	10286 Oct 03 00:21	7°Ω33'50		morning rise	10287 Sep 12 21:37	17°☿22'56	
direct	10286 Oct 07 03:55	6°Ω56'53		direct	10287 Sep 17 20:55	16°☿27'29	
morning max el	10286 Oct 20 08:44	13°Ω18'55	23°17'27	morning max el	10287 Oct 01 20:08	23°☿27'43	25°03'25
	10286 Nov 02 00:34	0°☿			10287 Oct 07 17:53	0°Ω	
asc. node	10286 Nov 03 12:02	2°☿32'30		asc. node	10287 Oct 21 08:55	21°Ω34'29	
morning set	10286 Nov 12 16:10	20°☿33'43			10287 Oct 25 14:56	0°☿	
	10286 Nov 17 01:18	0°☿		morning set	10287 Oct 28 03:54	5°☿20'25	
superior conj	10286 Nov 19 14:40	5°☿31'51	1°39'51	superior conj	10287 Nov 03 23:53	20°☿17'06	1°38'19
minimum elong	10286 Nov 19 14:57	5°☿33'20	1°40'16	minimum elong	10287 Nov 03 23:03	20°☿12'31	1°38'39
max. Earth dist.	10286 Nov 22 12:04	11°☿41'31	1.33380 AU	max. Earth dist.	10287 Nov 05 14:53	23°☿50'46	1.32272 AU
evening rise	10286 Nov 27 08:17	21°☿36'37			10287 Nov 08 11:22	0°☿	
	10286 Dec 01 16:54	0°☿		evening rise	10287 Nov 11 04:50	5°☿42'42	
desc. node	10286 Dec 07 07:50	10°☿01'43		desc. node	10287 Nov 24 04:55	29°☿50'43	
	10286 Dec 20 09:17	0°Ω			10287 Nov 24 07:10	0°☿	
evening max el	10286 Dec 31 16:15	13°Ω11'01	27°19'55	evening max el	10287 Dec 14 03:13	26°☿13'52	27°30'23
retrograde	10287 Jan 14 05:26	20°Ω34'10			10287 Dec 18 15:51	0°Ω	
evening set	10287 Jan 21 01:14	18°Ω00'52		retrograde	10287 Dec 27 22:24	3°Ω32'31	
min. Earth dist.	10287 Jan 24 21:43	14°Ω28'14	0.64616 AU	evening set	10288 Jan 03 22:50	1°Ω07'41	
inferior conj	10287 Jan 27 07:18	11°Ω52'57	-1°03'06		10288 Jan 05 11:08	30°☿☿	
minimum elong	10287 Jan 27 09:14	11°Ω47'45	1°01'55	min. Earth dist.	10288 Jan 07 16:16	28°☿03'46	0.62769 AU
asc. node	10287 Jan 30 11:19	8°Ω41'28		inferior conj	10288 Jan 10 12:11	25°☿19'49	-2°14'37
morning rise	10287 Feb 02 18:58	6°Ω26'30		minimum elong	10288 Jan 10 16:37	25°☿09'05	2°12'25
direct	10287 Feb 05 08:20	5°Ω52'41		asc. node	10288 Jan 17 08:26	20°☿13'25	
morning max el	10287 Feb 11 18:16	9°Ω13'38	17°54'06	morning rise	10288 Jan 17 12:41	20°☿09'34	
	10287 Feb 25 23:33	0°☿		direct	10288 Jan 19 19:42	19°☿45'11	
morning set	10287 Mar 01 01:27	5°☿08'43		morning max el	10288 Jan 26 11:45	23°☿10'04	17°47'08
desc. node	10287 Mar 05 07:49	12°☿14'54			10288 Jan 31 21:29	0°Ω	
				morning set	10288 Feb 11 12:25	17°Ω50'21	
superior conj	10287 Mar 14 18:40	27°☿38'01	-1°06'17		10288 Feb 18 12:15	0°☿	
minimum elong	10287 Mar 14 11:23	27°☿08'55	1°05'16	desc. node	10288 Feb 20 04:38	2°☿52'09	
	10287 Mar 16 06:16	0°☿					
max. Earth dist.	10287 Mar 19 04:54	4°☿39'29	1.45202 AU	superior conj	10288 Feb 23 07:46	8°☿08'11	-0°23'21
evening rise	10287 Mar 30 18:18	22°☿36'40		minimum elong	10288 Feb 23 05:25	7°☿58'23	0°22'46
	10287 Apr 04 14:18	0°☿		max. Earth dist.	10288 Feb 29 22:12	18°☿56'03	1.44082 AU
greatest brilliancy	10287 Apr 14 14:43	14°☿59'55	-0.6m		10288 Mar 07 22:30	0°☿	
	10287 Apr 26 02:21	0°☿		evening rise	10288 Mar 09 06:27	2°☿03'38	
evening max el	10287 Apr 26 09:33	0°☿18'28	19°59'39		10288 Mar 28 03:30	0°☿	
asc. node	10287 Apr 28 09:26	2°☿08'57		evening max el	10288 Apr 08 08:41	14°☿01'22	21°06'45
retrograde	10287 May 04 00:23	4°☿41'15		asc. node	10288 Apr 14 06:36	18°☿28'24	
evening set	10287 May 07 20:25	3°☿15'53		retrograde	10288 Apr 16 22:54	19°☿03'39	
	10287 May 11 01:54	30°☿☿		evening set	10288 Apr 21 04:49	17°☿22'36	
inferior conj	10287 May 13 04:17	27°☿15'15	3°16'13	inferior conj	10288 Apr 26 11:35	11°☿10'06	3°03'13
minimum elong	10287 May 13 03:38	27°☿17'29	3°15'47	minimum elong	10288 Apr 26 10:04	11°☿15'24	3°02'43
min. Earth dist.	10287 May 14 03:03	25°☿58'24	0.67618 AU	min. Earth dist.	10288 Apr 26 20:45	10°☿38'18	0.68348 AU
morning rise	10287 May 18 10:32	20°☿56'03		morning rise	10288 May 01 15:05	4°☿54'43	
direct	10287 May 24 05:45	18°☿21'05		direct	10288 May 06 21:22	2°☿35'51	
desc. node	10287 Jun 01 08:21	22°☿03'11		morning max el	10288 May 17 09:31	8°☿51'17	23°25'20
morning max el	10287 Jun 04 23:59	25°☿24'35	24°54'34	desc. node	10288 May 18 05:15	9°☿42'07	
	10287 Jun 09 04:09	0°☿			10288 Jun 02 23:54	0°☿	

morning set	10288 Jun 21 08:31	28° $\Pi$ 39'52			10289 May 06 10:57	0° $\mathcal{B}$		
	10288 Jun 22 03:29	0° $\mathfrak{D}$			10289 May 27 07:20	0° $\Pi$		
max. Earth dist.	10288 Jun 25 09:14	5° $\mathfrak{D}$ 34'08	1.39239 AU	morning set	10289 Jun 01 16:23	8° $\Pi$ 29'08		
				max. Earth dist.	10289 Jun 07 09:18	17° $\Pi$ 48'58	1.41476 AU	
superior conj	10288 Jul 03 00:02	19° $\mathfrak{D}$ 17'46	-1°13'08		10289 Jun 14 12:15	0° $\mathfrak{D}$		
minimum elong	10288 Jul 03 04:54	19° $\mathfrak{D}$ 40'27	1°12'51					
	10288 Jul 08 15:25	0° $\mathcal{Q}$		superior conj	10289 Jun 15 02:16	1° $\mathfrak{D}$ 01'36	-1°43'20	
asc. node	10288 Jul 11 05:28	5° $\mathcal{Q}$ 00'00		minimum elong	10289 Jun 15 08:36	1° $\mathfrak{D}$ 29'33	1°43'08	
evening rise	10288 Jul 12 08:50	7° $\mathcal{Q}$ 12'30		evening rise	10289 Jun 25 18:02	20° $\mathfrak{D}$ 23'27		
	10288 Jul 25 14:10	0° $\mathfrak{M}$		asc. node	10289 Jun 28 02:25	24° $\mathfrak{D}$ 43'37		
evening max el	10288 Jul 28 12:19	3° $\mathfrak{M}$ 21'29	18°41'44		10289 Jul 01 00:09	0° $\mathcal{Q}$		
retrograde	10288 Aug 05 16:01	7° $\mathfrak{M}$ 25'46		evening max el	10289 Jul 11 20:33	16° $\mathcal{Q}$ 00'47	18°13'17	
evening set	10288 Aug 07 15:44	7° $\mathfrak{M}$ 12'06		retrograde	10289 Jul 18 23:05	19° $\mathcal{Q}$ 36'22		
desc. node	10288 Aug 14 04:10	3° $\mathfrak{M}$ 52'55		evening set	10289 Jul 21 05:55	19° $\mathcal{Q}$ 14'43		
inferior conj	10288 Aug 15 15:32	2° $\mathfrak{M}$ 48'20	-0°27'16	inferior conj	10289 Jul 28 10:28	14° $\mathcal{Q}$ 30'12	1°03'53	
minimum elong	10288 Aug 15 14:25	2° $\mathfrak{M}$ 50'24	0°27'06	minimum elong	10289 Jul 28 12:27	14° $\mathcal{Q}$ 25'52	1°02'50	
min. Earth dist.	10288 Aug 18 20:07	0° $\mathfrak{M}$ 26'54	0.57164 AU	min. Earth dist.	10289 Jul 31 18:51	11° $\mathcal{Q}$ 36'32	0.59273 AU	
	10288 Aug 19 11:30	30° $\mathcal{R}$ $\mathcal{Q}$		desc. node	10289 Aug 01 01:21	11° $\mathcal{Q}$ 23'13		
morning rise	10288 Aug 23 09:42	27° $\mathcal{Q}$ 42'15		morning rise	10289 Aug 04 15:46	8° $\mathcal{Q}$ 50'55		
direct	10288 Aug 29 03:42	26° $\mathcal{Q}$ 21'01		direct	10289 Aug 11 00:02	7° $\mathcal{Q}$ 00'00		
	10288 Sep 07 21:53	0° $\mathfrak{M}$		morning max el	10289 Aug 25 08:49	14° $\mathcal{Q}$ 48'55	27°34'20	
morning max el	10288 Sep 12 10:56	3° $\mathfrak{M}$ 49'39	26°34'00		10289 Sep 06 15:11	0° $\mathfrak{M}$		
	10288 Oct 01 09:06	0° $\mathfrak{L}$			10289 Sep 23 17:45	0° $\mathfrak{L}$		
asc. node	10288 Oct 07 05:46	11° $\mathfrak{L}$ 00'57		asc. node	10289 Sep 24 02:36	0° $\mathfrak{L}$ 45'16		
morning set	10288 Oct 11 14:11	19° $\mathfrak{L}$ 59'42		morning set	10289 Sep 25 21:21	4° $\mathfrak{L}$ 27'13		
	10288 Oct 16 04:18	0° $\mathfrak{M}$						
superior conj	10288 Oct 18 11:14	5° $\mathfrak{M}$ 05'06	1°30'59	superior conj	10289 Oct 02 22:55	19° $\mathfrak{L}$ 50'39	1°18'10	
minimum elong	10288 Oct 18 09:33	4° $\mathfrak{M}$ 55'44	1°31'04	minimum elong	10289 Oct 02 20:45	19° $\mathfrak{L}$ 38'36	1°17'59	
max. Earth dist.	10288 Oct 18 22:53	6° $\mathfrak{M}$ 09'52	1.31637 AU	max. Earth dist.	10289 Oct 02 08:31	18° $\mathfrak{L}$ 30'39	1.31481 AU	
evening rise	10288 Oct 25 08:21	20° $\mathfrak{M}$ 05'41		evening rise	10289 Oct 07 12:57	0° $\mathfrak{M}$		
	10288 Oct 30 05:11	0° $\mathcal{Z}$			10289 Oct 22 23:25	0° $\mathcal{Z}$		
desc. node	10288 Nov 10 02:02	19° $\mathcal{Z}$ 07'53		desc. node	10289 Oct 27 23:12	7° $\mathcal{Z}$ 40'52		
	10288 Nov 17 17:04	0° $\mathfrak{Z}$		evening max el	10289 Nov 07 08:15	20° $\mathcal{Z}$ 07'23	26°11'36	
evening max el	10288 Nov 25 09:28	8° $\mathfrak{Z}$ 36'03	27°08'01	retrograde	10289 Nov 21 06:10	27° $\mathcal{Z}$ 11'30		
retrograde	10288 Dec 09 06:59	15° $\mathfrak{Z}$ 47'07		evening set	10289 Nov 27 17:21	25° $\mathcal{Z}$ 31'09		
evening set	10288 Dec 16 05:39	13° $\mathfrak{Z}$ 39'55		min. Earth dist.	10289 Dec 01 21:15	22° $\mathcal{Z}$ 56'22	0.58606 AU	
min. Earth dist.	10288 Dec 20 00:03	10° $\mathfrak{Z}$ 57'11	0.60714 AU	inferior conj	10289 Dec 05 00:34	20° $\mathcal{Z}$ 37'33	-4°39'49	
inferior conj	10288 Dec 23 03:07	8° $\mathfrak{Z}$ 17'56	-3°29'30	minimum elong	10289 Dec 05 08:27	20° $\mathcal{Z}$ 22'57	4°37'23	
minimum elong	10288 Dec 23 10:00	8° $\mathfrak{Z}$ 03'15	3°26'40	morning rise	10289 Dec 13 02:06	16° $\mathcal{Z}$ 09'27		
morning rise	10288 Dec 30 16:55	3° $\mathfrak{Z}$ 27'21		direct	10289 Dec 15 06:36	15° $\mathcal{Z}$ 53'25		
direct	10289 Jan 01 20:36	3° $\mathfrak{Z}$ 08'47		asc. node	10289 Dec 21 02:34	17° $\mathcal{Z}$ 55'02		
asc. node	10289 Jan 03 05:31	3° $\mathfrak{Z}$ 16'35		morning max el	10289 Dec 23 11:11	19° $\mathcal{Z}$ 53'22	18°30'25	
morning max el	10289 Jan 09 02:35	6° $\mathfrak{Z}$ 46'31	17°58'44		10289 Dec 31 00:01	0° $\mathfrak{Z}$		
	10289 Jan 23 23:29	0° $\approx$		morning set	10290 Jan 08 10:47	15° $\mathfrak{Z}$ 27'56		
morning set	10289 Jan 24 17:20	1° $\approx$ 22'10			10290 Jan 16 01:12	0° $\approx$		
superior conj	10289 Feb 03 21:54	19° $\approx$ 49'18	0°16'20	superior conj	10290 Jan 17 09:44	2° $\approx$ 31'37	0°48'49	
minimum elong	10289 Feb 03 23:16	19° $\approx$ 55'16	0°16'27	minimum elong	10290 Jan 17 12:42	2° $\approx$ 45'22	0°48'47	
desc. node	10289 Feb 06 01:27	23° $\approx$ 33'43		desc. node	10290 Jan 23 22:18	14° $\approx$ 16'09		
	10289 Feb 09 20:13	0° $\mathcal{H}$		max. Earth dist.	10290 Jan 24 20:19	15° $\approx$ 51'49	1.40315 AU	
max. Earth dist.	10289 Feb 11 11:40	2° $\mathcal{H}$ 44'25	1.42389 AU	evening rise	10290 Jan 29 02:20	23° $\approx$ 04'22		
evening rise	10289 Feb 17 06:22	12° $\mathcal{H}$ 06'54			10290 Feb 02 08:16	0° $\mathcal{H}$		
	10289 Feb 28 22:55	0° $\mathcal{Y}$			10290 Feb 22 21:29	0° $\mathcal{Y}$		
evening max el	10289 Mar 22 02:47	27° $\mathcal{Y}$ 45'40	22°23'10	evening max el	10290 Mar 04 17:28	11° $\mathcal{Y}$ 32'17	23°43'30	
	10289 Mar 24 12:25	0° $\mathcal{B}$		retrograde	10290 Mar 15 14:10	17° $\mathcal{Y}$ 56'35		
retrograde	10289 Mar 31 19:56	3° $\mathcal{B}$ 30'25		asc. node	10290 Mar 19 00:59	17° $\mathcal{Y}$ 00'06		
asc. node	10289 Apr 01 03:47	3° $\mathcal{B}$ 29'53		evening set	10290 Mar 20 18:44	15° $\mathcal{Y}$ 46'14		
evening set	10289 Apr 05 12:46	1° $\mathcal{B}$ 34'06		min. Earth dist.	10290 Mar 25 13:34	10° $\mathcal{Y}$ 11'39	0.68459 AU	
	10289 Apr 07 03:28	30° $\mathcal{R}$ $\mathcal{Y}$		inferior conj	10290 Mar 26 05:13	9° $\mathcal{Y}$ 18'10	2°07'25	
inferior conj	10289 Apr 10 20:32	25° $\mathcal{Y}$ 12'09	2°40'03	minimum elong	10290 Mar 26 03:02	9° $\mathcal{Y}$ 25'39	2°06'44	
minimum elong	10289 Apr 10 18:28	25° $\mathcal{Y}$ 19'20	2°39'25	morning rise	10290 Mar 31 11:21	3° $\mathcal{Y}$ 14'20		
min. Earth dist.	10289 Apr 10 16:58	25° $\mathcal{Y}$ 24'34	0.68622 AU	direct	10290 Apr 04 14:37	1° $\mathcal{Y}$ 37'59		
morning rise	10289 Apr 16 00:02	19° $\mathcal{Y}$ 02'00		morning max el	10290 Apr 12 16:29	6° $\mathcal{Y}$ 13'52	20°37'26	
direct	10289 Apr 20 16:40	17° $\mathcal{Y}$ 03'39		desc. node	10290 Apr 21 22:58	17° $\mathcal{Y}$ 32'56		
morning max el	10289 Apr 29 21:57	22° $\mathcal{Y}$ 26'48	21°57'12		10290 Apr 30 15:21	0° $\mathcal{B}$		
desc. node	10289 May 05 02:08	28° $\mathcal{Y}$ 17'12		morning set	10290 May 11 24:00	17° $\mathcal{B}$ 14'26		

	10290 May 20 01:52	0°♂				10291 Apr 03 17:57	0°♂	
max. Earth dist.	10290 May 20 15:47	0°♂56'04	1.43411 AU	greatest brilliancy		10291 Apr 08 11:40	6°♂48'44	-0.7m
				desc. node		10291 Apr 08 19:47	7°♂18'39	
superior conj	10290 May 27 05:41	11°♂44'00	-2°05'27	morning set		10291 Apr 20 22:54	25°♂42'28	
minimum elong	10290 May 27 10:41	12°♂04'55	2°05'38			10291 Apr 23 17:38	0°♂	
	10290 Jun 06 20:56	0°♂		max. Earth dist.		10291 May 03 04:44	14°♂47'04	1.44825 AU
evening rise	10290 Jun 08 11:31	2°♂49'37						
asc. node	10290 Jun 14 23:25	14°♂10'04		superior conj		10291 May 07 09:01	21°♂25'40	-2°12'53
evening max el	10290 Jun 25 09:12	29°♂06'41	18°04'28	minimum elong		10291 May 07 08:18	21°♂22'46	2°13'13
	10290 Jun 26 08:15	0°♂				10291 May 12 16:23	0°♂	
retrograde	10290 Jul 01 21:50	2°♂28'40		evening rise		10291 May 21 08:31	14°♂21'04	
evening set	10290 Jul 04 12:28	1°♂55'53				10291 May 30 19:06	0°♂	
	10290 Jul 07 15:15	30°♂		asc. node		10291 Jun 01 20:29	3°♂13'28	
inferior conj	10290 Jul 11 00:36	26°♂51'55	2°09'05	evening max el		10291 Jun 08 22:55	12°♂31'01	18°14'21
minimum elong	10290 Jul 11 03:25	26°♂44'51	2°07'53	retrograde		10291 Jun 15 07:46	15°♂53'31	
min. Earth dist.	10290 Jul 14 02:13	23°♂48'43	0.61541 AU	evening set		10291 Jun 18 06:15	15°♂07'19	
morning rise	10290 Jul 17 15:59	20°♂49'41		inferior conj		10291 Jun 24 05:54	9°♂45'35	2°50'28
desc. node	10290 Jul 18 22:32	20°♂01'54		minimum elong		10291 Jun 24 08:10	9°♂39'12	2°49'34
direct	10290 Jul 24 07:58	18°♂31'29		min. Earth dist.		10291 Jun 26 18:50	6°♂54'57	0.63701 AU
morning max el	10290 Aug 07 13:22	26°♂32'38	27°56'56	morning rise		10291 Jun 30 08:37	3°♂30'48	
	10290 Aug 10 19:09	0°♂		desc. node		10291 Jul 05 19:40	0°♂58'56	
	10290 Aug 31 05:59	0°♂		direct		10291 Jul 07 01:27	0°♂53'48	
morning set	10290 Sep 09 23:28	18°♂37'15		morning max el		10291 Jul 20 22:12	8°♂56'26	27°41'44
asc. node	10290 Sep 10 23:27	20°♂41'18				10291 Aug 06 06:39	0°♂	
	10290 Sep 15 08:11	0°♂				10291 Aug 23 13:13	0°♂	
max. Earth dist.	10290 Sep 15 15:51	0°♂41'46	1.31805 AU	morning set		10291 Aug 24 18:11	2°♂23'07	
				asc. node		10291 Aug 28 20:18	10°♂44'15	
superior conj	10290 Sep 17 09:06	4°♂27'55	1°00'08	max. Earth dist.		10291 Aug 29 16:54	12°♂32'22	1.32630 AU
minimum elong	10290 Sep 17 06:54	4°♂15'52	0°59'45					
evening rise	10290 Sep 24 03:18	19°♂17'36		superior conj		10291 Sep 01 15:51	18°♂51'04	0°37'11
	10290 Sep 29 07:18	0°♂		minimum elong		10291 Sep 01 14:11	18°♂42'07	0°36'43
desc. node	10290 Oct 14 20:25	25°♂12'36				10291 Sep 06 19:08	0°♂	
	10290 Oct 19 02:53	0°♂		evening rise		10291 Sep 08 14:46	3°♂54'44	
evening max el	10290 Oct 19 22:56	0°♂49'06	24°47'00			10291 Sep 22 14:02	0°♂	
retrograde	10290 Nov 02 18:24	7°♂45'15		evening max el		10291 Oct 01 09:42	11°♂00'06	23°07'41
evening set	10290 Nov 08 05:33	6°♂38'23		desc. node		10291 Oct 01 17:40	11°♂19'15	
min. Earth dist.	10290 Nov 13 10:22	3°♂53'09	0.56686 AU	retrograde		10291 Oct 14 17:49	17°♂38'57	
inferior conj	10290 Nov 16 01:56	2°♂10'53	-5°31'04	evening set		10291 Oct 18 18:34	17°♂03'34	
minimum elong	10290 Nov 16 07:02	2°♂02'39	5°30'04	min. Earth dist.		10291 Oct 25 19:00	13°♂49'38	0.55265 AU
	10290 Nov 19 15:54	30°♂		inferior conj		10291 Oct 27 07:49	12°♂56'18	-5°42'45
morning rise	10290 Nov 24 10:47	28°♂04'55		minimum elong		10291 Oct 27 05:32	12°♂59'37	5°42'20
direct	10290 Nov 26 21:46	27°♂48'08		morning rise		10291 Nov 04 18:17	9°♂05'57	
	10290 Dec 03 12:54	0°♂		direct		10291 Nov 07 18:19	8°♂44'34	
morning max el	10290 Dec 06 09:47	2°♂20'11	19°23'56	morning max el		10291 Nov 18 19:13	13°♂57'10	20°40'08
asc. node	10290 Dec 07 23:36	3°♂57'52		asc. node		10291 Nov 24 20:36	21°♂08'41	
morning set	10290 Dec 23 12:44	29°♂56'00				10291 Nov 30 08:22	0°♂	
	10290 Dec 23 13:32	0°♂		morning set		10291 Dec 07 20:07	14°♂37'00	
superior conj	10290 Dec 31 14:20	16°♂00'58	1°13'00	superior conj		10291 Dec 15 07:05	0°♂03'27	1°29'08
minimum elong	10290 Dec 31 17:20	16°♂15'36	1°13'06	minimum elong		10291 Dec 15 09:15	0°♂14'28	1°29'26
max. Earth dist.	10291 Jan 07 02:10	28°♂17'35	1.38108 AU			10291 Dec 15 06:25	0°♂	
	10291 Jan 08 00:42	0°♂		max. Earth dist.		10291 Dec 20 10:09	10°♂16'25	1.36019 AU
evening rise	10291 Jan 10 19:48	4°♂58'32		evening rise		10291 Dec 24 08:11	17°♂41'22	
desc. node	10291 Jan 10 19:12	4°♂55'56		desc. node		10291 Dec 28 16:10	25°♂28'22	
	10291 Jan 26 08:48	0°♂				10291 Dec 31 07:26	0°♂	
evening max el	10291 Feb 15 06:52	25°♂21'59	25°01'20			10292 Jan 20 15:53	0°♂	
	10291 Feb 20 19:58	0°♂		evening max el		10292 Jan 28 20:19	9°♂10'36	26°09'38
retrograde	10291 Feb 27 04:31	2°♂17'04		retrograde		10292 Feb 10 13:48	16°♂24'29	
evening set	10291 Mar 04 21:10	29°♂54'57		evening set		10292 Feb 16 18:20	13°♂54'00	
	10291 Mar 04 18:45	30°♂		asc. node		10292 Feb 20 19:26	9°♂40'17	
asc. node	10291 Mar 05 22:12	28°♂57'11		min. Earth dist.		10292 Feb 20 23:12	9°♂28'49	0.66904 AU
min. Earth dist.	10291 Mar 09 08:25	24°♂55'10	0.67880 AU	inferior conj		10292 Feb 22 14:20	7°♂27'58	0°34'49
inferior conj	10291 Mar 10 11:49	23°♂25'11	1°25'39	minimum elong		10292 Feb 22 13:27	7°♂30'43	0°34'41
minimum elong	10291 Mar 10 10:00	23°♂31'10	1°25'06	morning rise		10292 Feb 28 09:17	1°♂41'17	
morning rise	10291 Mar 15 23:07	17°♂28'59		direct		10292 Mar 02 13:00	0°♂44'44	
direct	10291 Mar 19 13:57	16°♂13'45		morning max el		10292 Mar 09 04:22	4°♂19'51	18°40'06
morning max el	10291 Mar 26 18:49	20°♂13'04	19°30'56	desc. node		10292 Mar 25 16:34	27°♂25'36	

	10292 Mar 27 08:04	0°♿		morning max el	10293 Feb 20 19:15	18°≈28'36	18°05'56
morning set	10292 Mar 30 12:37	4°♿59'59			10293 Mar 01 11:54	0°♿	
max. Earth dist.	10292 Apr 14 22:31	29°♿07'29	1.45561 AU	morning set	10293 Mar 11 06:34	15°♿42'46	
	10292 Apr 15 11:56	0°♿		desc. node	10293 Mar 12 13:19	17°♿47'52	
					10293 Mar 20 02:57	0°♿	
superior conj	10292 Apr 15 18:29	0°♿25'35	-2°00'32				
minimum elong	10292 Apr 15 10:45	29°♿55'19	2°00'17	superior conj	10293 Mar 26 01:59	9°♿27'04	-1°29'31
evening rise	10292 May 01 05:43	24°♿52'53		minimum elong	10293 Mar 25 16:45	8°♿50'41	1°28'33
	10292 May 04 10:29	0°♿		max. Earth dist.	10293 Mar 28 18:39	13°♿40'59	1.45552 AU
greatest brilliancy	10292 May 08 19:38	6°♿59'27	-0.9m		10293 Apr 08 06:08	0°♿	
asc. node	10292 May 18 17:35	21°♿46'05		evening rise	10293 Apr 11 05:07	4°♿34'56	
evening max el	10292 May 22 10:48	26°♿06'36	18°42'12	greatest brilliancy	10293 Apr 23 22:35	24°♿05'18	-0.7m
retrograde	10292 May 29 00:58	29°♿43'06			10293 Apr 27 23:37	0°♿	
evening set	10292 Jun 01 07:27	28°♿42'03		asc. node	10293 May 05 14:44	9°♿37'24	
inferior conj	10292 Jun 06 22:24	23°♿03'57	3°12'19	evening max el	10293 May 05 18:33	9°♿47'06	19°26'57
minimum elong	10292 Jun 06 23:34	23°♿00'24	3°11'44	retrograde	10293 May 12 22:13	13°♿49'52	
min. Earth dist.	10292 Jun 08 20:23	20°♿42'44	0.65555 AU	evening set	10293 May 16 13:09	12°♿33'17	
morning rise	10292 Jun 12 14:54	16°♿44'10		inferior conj	10293 May 21 22:45	6°♿40'15	3°18'33
direct	10292 Jun 19 02:30	13°♿59'47		minimum elong	10293 May 21 22:43	6°♿40'23	3°18'07
desc. node	10292 Jun 21 16:44	14°♿22'41		min. Earth dist.	10293 May 23 05:40	4°♿58'40	0.66996 AU
morning max el	10292 Jul 02 08:44	21°♿50'40	26°54'14	morning rise	10293 May 27 07:54	0°♿20'03	
	10292 Jul 09 11:27	0°♿			10293 May 27 17:09	30°♿	
	10292 Jul 29 11:53	0°♿		direct	10293 Jun 02 09:52	27°♿39'18	
morning set	10292 Aug 07 02:35	15°♿37'34		desc. node	10293 Jun 08 13:44	29°♿48'16	
max. Earth dist.	10292 Aug 11 08:40	23°♿58'36	1.33965 AU		10293 Jun 08 20:55	0°♿	
	10292 Aug 14 07:28	0°♿		morning max el	10293 Jun 14 19:04	5°♿03'59	25°42'45
asc. node	10292 Aug 14 17:10	0°♿50'15			10293 Jul 03 22:36	0°♿	
				morning set	10293 Jul 20 20:48	28°♿09'54	
superior conj	10292 Aug 15 16:59	2°♿54'24	0°09'48		10293 Jul 21 20:47	0°♿	
minimum elong	10292 Aug 15 16:29	2°♿51'45	0°09'27	max. Earth dist.	10293 Jul 24 14:11	5°♿06'26	1.35773 AU
behind sun begin	10292 Aug 15 11:50	2°♿27'27					
behind sun end	10292 Aug 15 21:07	3°♿16'04		superior conj	10293 Jul 30 09:44	16°♿29'54	-0°21'12
evening rise	10292 Aug 23 01:05	18°♿25'52		minimum elong	10293 Jul 30 11:02	16°♿36'25	0°21'18
	10292 Aug 28 18:10	0°♿		asc. node	10293 Aug 01 14:01	20°♿54'53	
evening max el	10292 Sep 12 01:16	21°♿15'29	21°30'38		10293 Aug 06 00:04	0°♿	
desc. node	10292 Sep 17 14:56	25°♿31'53		evening rise	10293 Aug 07 08:03	2°♿44'12	
retrograde	10292 Sep 24 06:53	27°♿20'01			10293 Aug 23 06:32	0°♿	
evening set	10292 Sep 26 23:04	27°♿03'42		evening max el	10293 Aug 25 04:50	2°♿05'00	20°08'39
inferior conj	10292 Oct 06 01:16	23°♿07'20	-4°58'26	retrograde	10293 Sep 04 20:01	7°♿21'40	
minimum elong	10292 Oct 05 16:14	23°♿19'59	4°56'21	desc. node	10293 Sep 04 12:11	7°♿21'23	
min. Earth dist.	10292 Oct 06 02:25	23°♿05'44	0.54632 AU	evening set	10293 Sep 06 18:46	7°♿11'50	
morning rise	10292 Oct 14 10:20	19°♿17'57		inferior conj	10293 Sep 15 19:46	3°♿13'01	-3°24'06
direct	10292 Oct 18 03:38	18°♿47'57		minimum elong	10293 Sep 15 10:56	3°♿26'10	3°21'08
morning max el	10292 Oct 30 15:34	24°♿44'35	22°16'23	min. Earth dist.	10293 Sep 17 11:27	2°♿13'59	0.54940 AU
	10292 Nov 04 10:17	0°♿			10293 Sep 21 15:49	30°♿	
asc. node	10292 Nov 10 17:33	9°♿12'21		morning rise	10293 Sep 24 02:04	29°♿03'34	
morning set	10292 Nov 21 06:40	29°♿24'35		direct	10293 Sep 28 13:57	28°♿19'53	
	10292 Nov 21 13:23	0°♿			10293 Oct 05 06:46	0°♿	
				morning max el	10293 Oct 12 03:57	4°♿58'27	24°03'25
superior conj	10292 Nov 28 08:24	14°♿28'58	1°37'52	asc. node	10293 Oct 28 14:27	27°♿55'27	
minimum elong	10292 Nov 28 09:23	14°♿34'09	1°38'18		10293 Oct 29 17:23	0°♿	
max. Earth dist.	10292 Dec 02 00:54	22°♿10'22	1.34231 AU	morning set	10293 Nov 05 18:26	14°♿12'31	
	10292 Dec 05 22:44	0°♿					
evening rise	10292 Dec 06 11:47	1°♿03'29		superior conj	10293 Nov 12 15:22	29°♿08'24	1°39'56
desc. node	10292 Dec 14 13:10	15°♿48'54		minimum elong	10293 Nov 12 15:09	29°♿07'13	1°40'20
	10292 Dec 23 07:49	0°≈			10293 Nov 13 00:52	0°♿	
evening max el	10293 Jan 10 09:54	22°≈50'29	27°00'52	max. Earth dist.	10293 Nov 14 23:37	4°♿12'09	1.32851 AU
	10293 Jan 21 18:20	0°♿		evening rise	10293 Nov 20 02:59	14°♿55'00	
retrograde	10293 Jan 23 17:13	0°♿11'58			10293 Nov 28 01:15	0°♿	
	10293 Jan 25 14:34	30°♿		desc. node	10293 Dec 01 10:14	5°♿51'17	
evening set	10293 Jan 30 08:18	27°≈37'55			10293 Dec 18 04:15	0°≈	
min. Earth dist.	10293 Feb 03 07:37	23°≈46'42	0.65558 AU	evening max el	10293 Dec 23 22:13	6°≈09'42	27°28'05
inferior conj	10293 Feb 05 10:32	21°≈21'45	-0°24'54	retrograde	10294 Jan 06 14:05	13°≈31'06	
minimum elong	10293 Feb 05 11:15	21°≈19'43	0°24'17	evening set	10294 Jan 13 12:43	11°≈00'10	
asc. node	10293 Feb 06 16:38	19°≈57'14		min. Earth dist.	10294 Jan 17 07:34	7°≈40'41	0.63868 AU
morning rise	10293 Feb 11 15:29	15°≈47'03		inferior conj	10294 Jan 19 21:51	5°≈00'18	-1°32'42
direct	10293 Feb 14 09:41	15°≈05'52		minimum elong	10294 Jan 20 00:47	4°≈52'42	1°31'04



asc. node	10294 Jan 24 13:47	0° $\approx$ 47'33		asc. node	10295 Jan 11 10:54	12° $\approx$ 55'46	
	10294 Jan 25 21:34	30° $\approx$ 3		direct	10295 Jan 12 08:32	12° $\approx$ 52'10	
morning rise	10294 Jan 26 14:49	29° $\approx$ 40'30		morning max el	10295 Jan 19 05:34	16° $\approx$ 21'22	17°49'49
direct	10294 Jan 29 01:17	29° $\approx$ 11'04			10295 Jan 28 20:03	0° $\approx$	
	10294 Feb 01 04:27	0° $\approx$		morning set	10295 Feb 03 23:38	10° $\approx$ 51'32	
morning max el	10294 Feb 04 12:44	2° $\approx$ 32'09	17°48'59	desc. node	10295 Feb 14 06:55	29° $\approx$ 00'29	
morning set	10294 Feb 21 04:17	27° $\approx$ 46'34			10295 Feb 14 20:51	0° $\approx$	
	10294 Feb 22 11:35	0° $\approx$					
desc. node	10294 Feb 27 10:07	8° $\approx$ 21'00		superior conj	10295 Feb 15 01:26	0° $\approx$ 19'31	-0°05'51
				minimum elong	10295 Feb 15 00:54	0° $\approx$ 17'16	0°05'30
superior conj	10294 Mar 06 01:27	19° $\approx$ 18'10	-0°48'05	behind sun begin	10295 Feb 14 16:43	29° $\approx$ 42'21	
minimum elong	10294 Mar 05 20:15	18° $\approx$ 57'00	0°47'12	behind sun end	10295 Feb 15 09:06	0° $\approx$ 52'07	
max. Earth dist.	10294 Mar 11 13:52	28° $\approx$ 09'15	1.44807 AU	max. Earth dist.	10295 Feb 22 05:24	12° $\approx$ 14'23	1.43414 AU
	10294 Mar 12 17:51	0° $\approx$		evening rise	10295 Mar 01 08:39	23° $\approx$ 35'14	
evening rise	10294 Mar 21 17:02	13° $\approx$ 56'31			10295 Mar 05 12:27	0° $\approx$	
	10294 Apr 01 08:06	0° $\approx$			10295 Mar 26 12:20	0° $\approx$	
evening max el	10294 Apr 18 20:49	23° $\approx$ 29'19	20°26'41	evening max el	10295 Apr 01 17:34	7° $\approx$ 12'19	21°38'20
asc. node	10294 Apr 22 11:53	26° $\approx$ 34'58		asc. node	10295 Apr 09 09:05	12° $\approx$ 23'19	
retrograde	10294 Apr 26 20:58	28° $\approx$ 08'25		retrograde	10295 Apr 10 19:11	12° $\approx$ 33'16	
evening set	10294 Apr 30 21:07	26° $\approx$ 36'11		evening set	10295 Apr 15 05:32	10° $\approx$ 45'43	
inferior conj	10294 May 06 04:13	20° $\approx$ 29'57	3°12'00	inferior conj	10295 Apr 20 12:29	4° $\approx$ 28'38	2°54'34
minimum elong	10294 May 06 03:09	20° $\approx$ 33'37	3°11'33	minimum elong	10295 Apr 20 10:41	4° $\approx$ 34'54	2°54'01
min. Earth dist.	10294 May 06 20:58	19° $\approx$ 32'31	0.67984 AU	min. Earth dist.	10295 Apr 20 16:09	4° $\approx$ 15'52	0.68518 AU
morning rise	10294 May 11 08:57	14° $\approx$ 12'10			10295 Apr 23 22:26	30° $\approx$ 1	
direct	10294 May 16 22:41	11° $\approx$ 43'38		morning rise	10295 Apr 25 15:38	28° $\approx$ 15'04	
desc. node	10294 May 26 10:39	16° $\approx$ 46'11		direct	10295 Apr 30 16:02	26° $\approx$ 04'37	
morning max el	10294 May 28 04:43	18° $\approx$ 27'55	24°17'05		10295 May 08 12:59	0° $\approx$	
	10294 Jun 06 21:37	0° $\approx$		morning max el	10295 May 10 15:08	1° $\approx$ 58'25	22°47'08
	10294 Jun 27 00:35	0° $\approx$		desc. node	10295 May 13 07:33	4° $\approx$ 51'13	
morning set	10294 Jul 02 20:10	9° $\approx$ 48'42			10295 May 31 20:50	0° $\approx$	
max. Earth dist.	10294 Jul 06 12:17	16° $\approx$ 17'30	1.37926 AU	morning set	10295 Jun 13 19:28	20° $\approx$ 20'10	
				max. Earth dist.	10295 Jun 18 09:13	28° $\approx$ 00'21	1.40211 AU
superior conj	10294 Jul 13 14:50	29° $\approx$ 29'49	-0°54'12		10295 Jun 19 13:07	0° $\approx$	
minimum elong	10294 Jul 13 18:23	29° $\approx$ 46'56	0°54'01				
	10294 Jul 13 21:07	0° $\approx$		superior conj	10295 Jun 26 04:10	11° $\approx$ 44'13	-1°26'35
asc. node	10294 Jul 19 10:55	10° $\approx$ 54'42		minimum elong	10295 Jun 26 09:51	12° $\approx$ 10'07	1°26'17
evening rise	10294 Jul 22 09:11	16° $\approx$ 43'14			10295 Jul 05 22:18	0° $\approx$	
	10294 Jul 29 08:16	0° $\approx$		evening rise	10295 Jul 06 01:17	0° $\approx$ 14'11	
evening max el	10294 Aug 07 21:58	13° $\approx$ 41'22	19°07'18	asc. node	10295 Jul 06 07:51	0° $\approx$ 45'20	
retrograde	10294 Aug 16 21:33	18° $\approx$ 09'25		evening max el	10295 Jul 22 01:54	26° $\approx$ 00'39	18°27'11
evening set	10294 Aug 18 18:13	17° $\approx$ 58'41		retrograde	10295 Jul 29 17:35	29° $\approx$ 50'47	
desc. node	10294 Aug 22 09:23	16° $\approx$ 42'26		evening set	10295 Jul 31 20:02	29° $\approx$ 34'16	
inferior conj	10294 Aug 27 05:00	13° $\approx$ 46'00	-1°29'49	inferior conj	10295 Aug 08 11:30	25° $\approx$ 02'02	0°14'28
minimum elong	10294 Aug 27 01:04	13° $\approx$ 52'41	1°28'27	minimum elong	10295 Aug 08 12:02	25° $\approx$ 01'00	0°13'59
min. Earth dist.	10294 Aug 30 00:38	11° $\approx$ 51'25	0.56146 AU	transit middle	10295 Aug 08 12:02	25° $\approx$ 01'00	0°13'59
morning rise	10294 Sep 04 04:54	9° $\approx$ 01'07		transit begin	10295 Aug 08 10:15	25° $\approx$ 04'32	
direct	10294 Sep 09 12:11	7° $\approx$ 55'40		transit end	10295 Aug 08 13:48	24° $\approx$ 57'27	
morning max el	10294 Sep 23 16:18	15° $\approx$ 09'28	25°44'58	desc. node	10295 Aug 09 06:35	24° $\approx$ 23'53	
	10294 Oct 05 13:57	0° $\approx$		min. Earth dist.	10295 Aug 11 19:32	22° $\approx$ 23'54	0.58021 AU
asc. node	10294 Oct 15 11:18	17° $\approx$ 08'19		morning rise	10295 Aug 16 00:28	19° $\approx$ 40'33	
morning set	10294 Oct 21 05:43	28° $\approx$ 56'12		direct	10295 Aug 22 01:19	18° $\approx$ 06'27	
	10294 Oct 21 17:37	0° $\approx$		morning max el	10295 Sep 05 09:59	25° $\approx$ 45'37	27°03'58
					10295 Sep 09 09:19	0° $\approx$	
superior conj	10294 Oct 28 01:42	13° $\approx$ 55'06	1°35'55		10295 Sep 28 21:53	0° $\approx$	
minimum elong	10294 Oct 28 00:28	13° $\approx$ 48'17	1°36'08	asc. node	10295 Oct 02 08:09	6° $\approx$ 43'11	
max. Earth dist.	10294 Oct 29 04:52	16° $\approx$ 25'05	1.31936 AU	morning set	10295 Oct 05 14:54	13° $\approx$ 31'12	
evening rise	10294 Nov 04 02:45	29° $\approx$ 08'17					
	10294 Nov 04 12:43	0° $\approx$		superior conj	10295 Oct 12 13:27	28° $\approx$ 43'07	1°26'12
desc. node	10294 Nov 18 07:20	25° $\approx$ 27'40		minimum elong	10295 Oct 12 11:30	28° $\approx$ 32'20	1°26'11
	10294 Nov 21 04:40	0° $\approx$		max. Earth dist.	10295 Oct 12 13:51	28° $\approx$ 45'22	1.31504 AU
evening max el	10294 Dec 06 07:14	18° $\approx$ 55'23	27°25'04		10295 Oct 13 03:16	0° $\approx$	
retrograde	10294 Dec 20 03:47	26° $\approx$ 11'48		evening rise	10295 Oct 19 08:32	13° $\approx$ 36'45	
evening set	10294 Dec 27 04:31	23° $\approx$ 52'56			10295 Oct 27 13:58	0° $\approx$	
min. Earth dist.	10294 Dec 30 21:27	20° $\approx$ 59'33	0.61905 AU	desc. node	10295 Nov 05 04:29	14° $\approx$ 27'54	
inferior conj	10295 Jan 02 21:10	18° $\approx$ 15'25	-2°46'23		10295 Nov 17 11:04	0° $\approx$	
minimum elong	10295 Jan 03 02:43	18° $\approx$ 02'42	2°43'49	evening max el	10295 Nov 18 10:35	0° $\approx$ 56'58	26°48'09
morning rise	10295 Jan 10 03:24	13° $\approx$ 13'34		retrograde	10295 Dec 02 08:59	8° $\approx$ 05'42	

evening set	10295 Dec 09 03:52	6° $\text{Z}$ 08'57		retrograde	10296 Nov 13 03:29	19° $\text{Z}$ 07'14	
min. Earth dist.	10295 Dec 13 00:52	3° $\text{Z}$ 31'20	0.59800 AU	evening set	10296 Nov 19 05:56	17° $\text{Z}$ 41'03	
inferior conj	10295 Dec 16 05:07	0° $\text{Z}$ 58'37	-4°00'38	min. Earth dist.	10296 Nov 23 18:27	15° $\text{Z}$ 04'00	0.57747 AU
minimum elong	10295 Dec 16 12:44	0° $\text{Z}$ 43'18	3°57'48	inferior conj	10296 Nov 26 18:15	12° $\text{Z}$ 59'15	-5°05'01
	10295 Dec 17 10:39	30° $\text{R}$ $\text{Z}$		minimum elong	10296 Nov 27 01:34	12° $\text{Z}$ 46'31	5°03'08
morning rise	10295 Dec 24 00:16	26° $\text{Z}$ 17'21		morning rise	10296 Dec 04 23:31	8° $\text{Z}$ 40'27	
direct	10295 Dec 26 03:30	26° $\text{Z}$ 00'23		direct	10296 Dec 07 06:02	8° $\text{Z}$ 24'28	
asc. node	10295 Dec 29 07:59	26° $\text{Z}$ 40'04		asc. node	10296 Dec 15 05:03	11° $\text{Z}$ 55'38	
	10296 Jan 02 23:35	0° $\text{Z}$		morning max el	10296 Dec 15 23:00	12° $\text{Z}$ 37'11	18°50'24
morning max el	10296 Jan 02 18:17	29° $\text{Z}$ 46'53	18°09'41		10296 Dec 27 16:23	0° $\text{Z}$	
morning set	10296 Jan 18 10:30	24° $\text{Z}$ 39'33		morning set	10297 Jan 01 07:59	8° $\text{Z}$ 55'43	
	10296 Jan 21 06:45	0° $\text{Z}$					
superior conj	10296 Jan 28 01:24	12° $\text{Z}$ 28'19	0°31'04	superior conj	10297 Jan 09 20:55	25° $\text{Z}$ 31'27	1°00'04
minimum elong	10296 Jan 28 03:41	12° $\text{Z}$ 38'34	0°31'05	minimum elong	10297 Jan 10 00:02	25° $\text{Z}$ 46'17	1°00'05
desc. node	10296 Feb 01 03:47	19° $\text{Z}$ 42'57			10297 Jan 12 06:10	0° $\text{Z}$	
max. Earth dist.	10296 Feb 04 16:21	25° $\text{Z}$ 44'36	1.41536 AU	max. Earth dist.	10297 Jan 16 23:32	8° $\text{Z}$ 33'41	1.39380 AU
	10296 Feb 07 05:37	0° $\text{X}$		desc. node	10297 Jan 18 00:40	10° $\text{Z}$ 24'16	
evening rise	10296 Feb 09 16:36	4° $\text{X}$ 00'51		evening rise	10297 Jan 20 21:50	15° $\text{Z}$ 22'31	
	10296 Feb 26 19:33	0° $\text{Y}$			10297 Jan 29 21:45	0° $\text{X}$	
evening max el	10296 Mar 14 10:03	20° $\text{Y}$ 57'50	22°57'12	evening max el	10297 Feb 20 14:16	0° $\text{Y}$	
retrograde	10296 Mar 24 15:12	27° $\text{Y}$ 00'12			10297 Feb 25 00:09	4° $\text{Y}$ 46'19	24°17'24
asc. node	10296 Mar 26 06:16	26° $\text{Y}$ 47'21		retrograde	10297 Mar 08 07:47	11° $\text{Y}$ 24'18	
evening set	10296 Mar 29 12:50	24° $\text{Y}$ 57'59		asc. node	10297 Mar 13 03:30	9° $\text{Y}$ 36'59	
inferior conj	10296 Apr 03 21:35	18° $\text{Y}$ 33'02	2°27'22	evening set	10297 Mar 13 17:30	9° $\text{Y}$ 08'46	
minimum elong	10296 Apr 03 19:25	18° $\text{Y}$ 40'33	2°26'41	min. Earth dist.	10297 Mar 18 09:01	3° $\text{Y}$ 49'04	0.68265 AU
min. Earth dist.	10296 Apr 03 12:54	19° $\text{Y}$ 03'05	0.68608 AU	inferior conj	10297 Mar 19 05:37	2° $\text{Y}$ 39'41	1°50'52
morning rise	10296 Apr 09 01:52	12° $\text{Y}$ 25'09		minimum elong	10297 Mar 19 03:31	2° $\text{Y}$ 46'45	1°50'11
direct	10296 Apr 13 12:47	10° $\text{Y}$ 35'55			10297 Mar 21 06:29	30° $\text{R}$ $\text{X}$	
morning max el	10296 Apr 22 05:43	15° $\text{Y}$ 38'04	21°21'45	morning rise	10297 Mar 24 13:38	26° $\text{X}$ 38'55	
desc. node	10296 Apr 29 04:27	23° $\text{Y}$ 45'08		direct	10297 Mar 28 11:36	25° $\text{X}$ 11'33	
	10296 May 03 19:47	0° $\text{X}$		morning max el	10297 Apr 05 03:25	29° $\text{X}$ 29'58	20°07'21
morning set	10296 May 23 16:06	29° $\text{X}$ 39'03			10297 Apr 05 15:20	0° $\text{Y}$	
	10296 May 23 21:24	0° $\text{II}$		desc. node	10297 Apr 16 01:18	13° $\text{Y}$ 14'39	
max. Earth dist.	10296 May 30 11:28	10° $\text{II}$ 36'21	1.42357 AU		10297 Apr 27 09:22	0° $\text{X}$	
superior conj	10296 Jun 06 21:12	23° $\text{II}$ 03'04	-1°54'05	morning set	10297 May 02 17:23	8° $\text{X}$ 09'28	
minimum elong	10296 Jun 07 03:27	23° $\text{II}$ 29'58	1°54'01	max. Earth dist.	10297 May 12 21:22	24° $\text{X}$ 05'52	1.44093 AU
	10296 Jun 10 20:54	0° $\text{Z}$			10297 May 16 13:22	0° $\text{II}$	
evening rise	10296 Jun 18 04:23	13° $\text{Z}$ 07'07		superior conj	10297 May 18 14:21	3° $\text{II}$ 19'36	-2°10'46
asc. node	10296 Jun 22 04:50	20° $\text{Z}$ 22'06		minimum elong	10297 May 18 17:27	3° $\text{II}$ 32'16	2°11'05
	10296 Jun 27 20:05	0° $\text{Z}$		evening rise	10297 May 31 13:47	25° $\text{II}$ 11'40	
evening max el	10296 Jul 04 12:33	8° $\text{Z}$ 52'46	18°07'12		10297 Jun 03 08:43	0° $\text{Z}$	
retrograde	10296 Jul 11 07:39	12° $\text{Z}$ 20'17		asc. node	10297 Jun 09 01:52	9° $\text{Z}$ 39'50	
evening set	10296 Jul 13 17:55	11° $\text{Z}$ 54'09		evening max el	10297 Jun 18 02:08	22° $\text{Z}$ 08'09	18°06'22
inferior conj	10296 Jul 20 15:03	7° $\text{Z}$ 01'20	1°34'42	retrograde	10297 Jun 24 11:50	25° $\text{Z}$ 28'28	
minimum elong	10296 Jul 20 17:38	6° $\text{Z}$ 55'22	1°33'29	evening set	10297 Jun 27 05:54	24° $\text{Z}$ 50'02	
min. Earth dist.	10296 Jul 23 21:41	4° $\text{Z}$ 00'42	0.60243 AU	inferior conj	10297 Jul 03 12:12	19° $\text{Z}$ 38'03	2°29'18
desc. node	10296 Jul 26 03:47	2° $\text{Z}$ 10'29		minimum elong	10297 Jul 03 14:54	19° $\text{Z}$ 30'55	2°28'11
morning rise	10296 Jul 27 14:26	1° $\text{Z}$ 11'13		min. Earth dist.	10297 Jul 06 08:47	16° $\text{Z}$ 38'06	0.62493 AU
	10296 Jul 29 21:13	30° $\text{R}$ $\text{Z}$		morning rise	10297 Jul 09 22:00	13° $\text{Z}$ 29'35	
direct	10296 Aug 03 03:07	29° $\text{Z}$ 07'47		desc. node	10297 Jul 13 00:57	11° $\text{Z}$ 43'59	
	10296 Aug 07 13:09	0° $\text{Z}$		direct	10297 Jul 16 15:10	11° $\text{Z}$ 02'26	
morning max el	10296 Aug 17 10:39	7° $\text{Z}$ 02'38	27°48'40	morning max el	10297 Jul 30 17:20	19° $\text{Z}$ 04'34	27°54'52
	10296 Sep 03 19:05	0° $\text{X}$			10297 Aug 08 23:19	0° $\text{Z}$	
asc. node	10296 Sep 18 04:59	26° $\text{X}$ 32'52			10297 Aug 27 17:02	0° $\text{X}$	
morning set	10296 Sep 18 20:08	27° $\text{X}$ 51'33		morning set	10297 Sep 02 19:26	11° $\text{X}$ 52'06	
	10296 Sep 19 20:37	0° $\text{Z}$		asc. node	10297 Sep 05 01:50	16° $\text{X}$ 32'22	
max. Earth dist.	10296 Sep 24 22:54	11° $\text{Z}$ 02'49	1.31558 AU	max. Earth dist.	10297 Sep 08 04:13	23° $\text{X}$ 07'22	1.32103 AU
superior conj	10296 Sep 26 00:43	13° $\text{Z}$ 25'44	1°11'08	superior conj	10297 Sep 10 09:41	27° $\text{X}$ 57'40	0°50'58
minimum elong	10296 Sep 25 22:28	13° $\text{Z}$ 13'19	1°10'52	minimum elong	10297 Sep 10 07:39	27° $\text{X}$ 46'32	0°50'33
evening rise	10296 Oct 02 18:03	28° $\text{Z}$ 13'03			10297 Sep 11 08:02	0° $\text{Z}$	
	10296 Oct 03 14:04	0° $\text{X}$		evening rise	10297 Sep 17 05:23	12° $\text{Z}$ 51'46	
	10296 Oct 20 04:55	0° $\text{X}$			10297 Sep 25 18:36	0° $\text{X}$	
desc. node	10296 Oct 22 01:40	2° $\text{X}$ 37'01		desc. node	10297 Oct 08 22:53	19° $\text{X}$ 35'26	
evening max el	10296 Oct 30 06:01	12° $\text{X}$ 06'45	25°38'34	evening max el	10297 Oct 11 18:11	22° $\text{X}$ 31'27	24°05'25
				retrograde	10297 Oct 25 09:50	29° $\text{X}$ 21'21	

evening set	10297 Oct 30 07:29	28° $\mathbb{M}$ 28'38		retrograde	10298 Oct 06 04:29	9° $\mathbb{M}$ 05'47	
min. Earth dist.	10297 Nov 05 04:49	25° $\mathbb{M}$ 33'28	0.56010 AU	evening set	10298 Oct 09 14:11	8° $\mathbb{M}$ 40'12	
inferior conj	10297 Nov 07 10:52	24° $\mathbb{M}$ 10'58	-5°42'06	min. Earth dist.	10298 Oct 17 12:20	5° $\mathbb{M}$ 09'13	0.54887 AU
minimum elong	10297 Nov 07 13:16	24° $\mathbb{M}$ 07'19	5°41'36	inferior conj	10298 Oct 18 10:04	4° $\mathbb{M}$ 38'29	-5°31'06
morning rise	10297 Nov 15 21:03	20° $\mathbb{M}$ 13'02		minimum elong	10298 Oct 18 04:21	4° $\mathbb{M}$ 46'36	5°30'10
direct	10297 Nov 18 13:10	19° $\mathbb{M}$ 54'37		morning rise	10298 Oct 26 20:11	0° $\mathbb{M}$ 51'12	
morning max el	10297 Nov 28 16:07	24° $\mathbb{M}$ 42'33	19°53'39	direct	10298 Oct 30 03:04	0° $\mathbb{M}$ 26'51	
asc. node	10297 Dec 02 02:04	28° $\mathbb{M}$ 28'44		morning max el	10298 Nov 10 19:47	5° $\mathbb{M}$ 57'46	21°19'08
	10297 Dec 03 06:05	0° $\mathbb{A}$		asc. node	10298 Nov 18 23:02	16° $\mathbb{M}$ 03'31	
morning set	10297 Dec 16 12:32	23° $\mathbb{A}$ 29'45			10298 Nov 26 20:18	0° $\mathbb{A}$	
	10297 Dec 19 17:07	0° $\mathbb{B}$		morning set	10298 Nov 30 21:30	8° $\mathbb{A}$ 14'14	
superior conj	10297 Dec 24 07:08	9° $\mathbb{B}$ 15'41	1°20'47	superior conj	10298 Dec 08 03:56	23° $\mathbb{A}$ 29'20	1°33'42
minimum elong	10297 Dec 24 09:51	9° $\mathbb{B}$ 29'10	1°20'59	minimum elong	10298 Dec 08 05:37	23° $\mathbb{A}$ 38'03	1°34'04
max. Earth dist.	10297 Dec 30 05:58	20° $\mathbb{B}$ 46'24	1.37193 AU		10298 Dec 11 08:17	0° $\mathbb{B}$	
evening rise	10298 Jan 02 23:40	27° $\mathbb{B}$ 37'26		max. Earth dist.	10298 Dec 12 16:17	2° $\mathbb{B}$ 40'09	1.35205 AU
	10298 Jan 04 07:44	0° $\mathbb{C}$		evening rise	10298 Dec 16 18:58	10° $\mathbb{B}$ 37'59	
desc. node	10298 Jan 04 21:35	1° $\mathbb{C}$ 00'50		desc. node	10298 Dec 22 18:32	21° $\mathbb{B}$ 28'40	
	10298 Jan 23 07:47	0° $\mathbb{H}$			10298 Dec 27 20:11	0° $\mathbb{C}$	
evening max el	10298 Feb 07 13:26	18° $\mathbb{H}$ 35'32	25°32'03	evening max el	10299 Jan 18 19:18	0° $\mathbb{H}$	
retrograde	10298 Feb 19 19:56	25° $\mathbb{H}$ 39'40		retrograde	10299 Jan 21 02:46	2° $\mathbb{H}$ 20'48	26°33'57
evening set	10298 Feb 25 17:53	23° $\mathbb{H}$ 13'16		evening set	10299 Feb 03 02:55	9° $\mathbb{H}$ 39'53	
asc. node	10298 Feb 28 00:44	20° $\mathbb{H}$ 57'46		min. Earth dist.	10299 Feb 09 12:16	7° $\mathbb{H}$ 06'50	
min. Earth dist.	10298 Mar 02 02:15	18° $\mathbb{H}$ 28'35	0.67511 AU	asc. node	10299 Feb 13 14:31	2° $\mathbb{H}$ 56'28	0.66369 AU
inferior conj	10298 Mar 03 10:42	16° $\mathbb{H}$ 44'35	1°05'12	inferior conj	10299 Feb 14 21:57	1° $\mathbb{H}$ 22'42	
minimum elong	10298 Mar 03 09:12	16° $\mathbb{H}$ 49'25	1°04'47	minimum elong	10299 Feb 15 10:48	0° $\mathbb{H}$ 44'05	0°10'32
morning rise	10298 Mar 09 00:58	10° $\mathbb{H}$ 52'28		transit middle	10299 Feb 15 10:30	0° $\mathbb{H}$ 44'57	0°10'41
direct	10298 Mar 12 10:57	9° $\mathbb{H}$ 45'32		transit begin	10299 Feb 15 08:20	0° $\mathbb{H}$ 51'28	
morning max el	10298 Mar 19 09:01	13° $\mathbb{H}$ 32'42	19°07'24	transit end	10299 Feb 15 12:41	0° $\mathbb{H}$ 38'27	
	10298 Mar 31 19:44	0° $\mathbb{Y}$			10299 Feb 16 01:35	30° $\mathbb{R}$ $\mathbb{C}$	
greatest brilliancy	10298 Apr 01 13:24	1° $\mathbb{Y}$ 06'18	-0.7m	morning rise	10299 Feb 21 09:45	25° $\mathbb{C}$ 02'26	
desc. node	10298 Apr 02 22:06	3° $\mathbb{Y}$ 09'45		direct	10299 Feb 24 09:07	24° $\mathbb{C}$ 13'02	
morning set	10298 Apr 11 19:58	16° $\mathbb{Y}$ 51'09		morning max el	10299 Mar 02 21:14	27° $\mathbb{C}$ 41'37	18°23'35
	10298 Apr 20 07:10	0° $\mathbb{B}$			10299 Mar 05 00:14	0° $\mathbb{H}$	
max. Earth dist.	10298 Apr 25 13:09	8° $\mathbb{B}$ 12'56	1.45223 AU	desc. node	10299 Mar 20 18:52	23° $\mathbb{H}$ 23'45	
superior conj	10298 Apr 28 08:37	12° $\mathbb{B}$ 38'46	-2°10'11	morning set	10299 Mar 22 20:57	26° $\mathbb{H}$ 43'01	
minimum elong	10298 Apr 28 04:39	12° $\mathbb{B}$ 23'05	2°10'22		10299 Mar 24 22:31	0° $\mathbb{Y}$	
	10298 May 09 04:23	0° $\mathbb{I}$		superior conj	10299 Apr 07 14:55	21° $\mathbb{Y}$ 33'05	-1°49'18
evening rise	10298 May 13 00:54	6° $\mathbb{I}$ 17'54		minimum elong	10299 Apr 07 05:39	20° $\mathbb{Y}$ 56'51	1°48'41
asc. node	10298 May 26 22:57	28° $\mathbb{I}$ 31'06		max. Earth dist.	10299 Apr 08 07:57	22° $\mathbb{Y}$ 39'42	1.45641 AU
	10298 May 28 00:03	0° $\mathbb{E}$			10299 Apr 13 00:38	0° $\mathbb{B}$	
evening max el	10298 Jun 01 15:20	5° $\mathbb{E}$ 37'41	18°23'58	evening rise	10299 Apr 23 12:08	16° $\mathbb{B}$ 26'01	
retrograde	10298 Jun 08 01:27	9° $\mathbb{E}$ 04'50			10299 May 02 03:30	0° $\mathbb{I}$	
evening set	10298 Jun 11 03:16	8° $\mathbb{E}$ 12'26		greatest brilliancy	10299 May 03 11:59	2° $\mathbb{I}$ 05'51	-0.8m
inferior conj	10298 Jun 16 22:45	2° $\mathbb{E}$ 43'17	3°01'52	asc. node	10299 May 13 20:03	16° $\mathbb{I}$ 47'24	
minimum elong	10298 Jun 17 00:34	2° $\mathbb{E}$ 37'55	3°01'06	evening max el	10299 May 16 01:37	19° $\mathbb{I}$ 15'24	18°59'13
min. Earth dist.	10298 Jun 19 05:19	0° $\mathbb{E}$ 03'40	0.64532 AU	retrograde	10299 May 22 20:48	23° $\mathbb{I}$ 02'04	
	10298 Jun 19 06:36	30° $\mathbb{R}$ $\mathbb{I}$		evening set	10299 May 26 06:40	21° $\mathbb{I}$ 54'38	
morning rise	10298 Jun 22 20:46	26° $\mathbb{I}$ 25'25		inferior conj	10299 May 31 18:59	16° $\mathbb{I}$ 09'59	3°16'39
direct	10298 Jun 29 11:49	23° $\mathbb{I}$ 44'11		minimum elong	10299 May 31 19:37	16° $\mathbb{I}$ 07'58	3°16'09
desc. node	10298 Jun 29 22:03	23° $\mathbb{I}$ 44'48		min. Earth dist.	10299 Jun 02 10:31	14° $\mathbb{I}$ 04'30	0.66218 AU
	10298 Jul 11 08:40	0° $\mathbb{E}$		morning rise	10299 Jun 06 07:58	9° $\mathbb{I}$ 49'17	
morning max el	10298 Jul 13 03:27	1° $\mathbb{E}$ 43'36	27°25'05	direct	10299 Jun 12 15:49	7° $\mathbb{I}$ 05'03	
	10298 Aug 03 04:02	0° $\mathbb{O}$		desc. node	10299 Jun 16 19:07	8° $\mathbb{I}$ 03'30	
morning set	10298 Aug 17 10:10	25° $\mathbb{O}$ 25'36		morning max el	10299 Jun 25 14:12	14° $\mathbb{I}$ 47'35	26°26'09
	10298 Aug 19 17:22	0° $\mathbb{P}$			10299 Jul 08 00:21	0° $\mathbb{E}$	
max. Earth dist.	10298 Aug 22 01:53	4° $\mathbb{P}$ 48'43	1.33144 AU	morning set	10299 Jul 26 22:47	0° $\mathbb{O}$	
asc. node	10298 Aug 22 22:41	6° $\mathbb{P}$ 36'49		max. Earth dist.	10299 Jul 31 13:05	8° $\mathbb{O}$ 23'40	
superior conj	10298 Aug 25 14:19	12° $\mathbb{P}$ 12'46	0°26'04		10299 Aug 04 13:02	16° $\mathbb{O}$ 04'32	1.34680 AU
minimum elong	10298 Aug 25 13:04	12° $\mathbb{P}$ 06'06	0°25'38	superior conj	10299 Aug 09 12:15	26° $\mathbb{O}$ 04'58	-0°03'00
evening rise	10298 Sep 01 16:37	27° $\mathbb{P}$ 26'50		minimum elong	10299 Aug 09 12:26	26° $\mathbb{O}$ 05'55	0°03'16
	10298 Sep 02 21:38	0° $\mathbb{L}$		behind sun begin	10299 Aug 09 06:38	25° $\mathbb{O}$ 36'06	
	10298 Sep 20 17:56	0° $\mathbb{M}$		behind sun end	10299 Aug 09 18:13	26° $\mathbb{O}$ 35'46	
evening max el	10298 Sep 23 05:36	2° $\mathbb{M}$ 38'38	22°25'00	asc. node	10299 Aug 09 19:33	26° $\mathbb{O}$ 42'37	
desc. node	10298 Sep 25 20:06	4° $\mathbb{M}$ 57'06					

	10299 Aug 11 09:36	0°♎		asc. node	10300 Jul 27 16:23	16°♏45'43	
evening rise	10299 Aug 17 01:46	11°♎52'57		evening rise	10300 Aug 01 06:36	26°♏04'10	
	10299 Aug 26 10:54	0°♏			10300 Aug 03 05:36	0°♎	
evening max el	10299 Sep 05 01:42	13°♏05'51	20°53'24	evening max el	10300 Aug 18 11:26	24°♎16'24	19°40'01
desc. node	10299 Sep 12 17:21	18°♏11'41		retrograde	10300 Aug 28 09:03	29°♎11'03	
retrograde	10299 Sep 16 16:15	18°♏51'12		evening set	10300 Aug 30 05:34	29°♎01'28	
evening set	10299 Sep 18 22:29	18°♏39'00		desc. node	10300 Aug 30 14:36	28°♎57'17	
inferior conj	10299 Sep 28 02:10	14°♏43'24	-4°23'05	inferior conj	10300 Sep 08 01:44	24°♎58'18	-2°36'05
minimum elong	10299 Sep 27 16:18	14°♏57'26	4°20'18	minimum elong	10300 Sep 07 18:45	25°♎09'13	2°33'35
min. Earth dist.	10299 Sep 28 20:32	14°♏17'16	0.54643 AU	min. Earth dist.	10300 Sep 10 07:17	23°♎34'45	0.55356 AU
morning rise	10299 Oct 06 10:14	10°♏47'32		morning rise	10300 Sep 16 05:53	20°♎34'57	
direct	10299 Oct 10 11:05	10°♏12'33		direct	10300 Sep 21 02:21	19°♎42'44	
morning max el	10299 Oct 23 11:59	16°♏28'26	23°01'27	morning max el	10300 Oct 04 23:21	26°♎37'26	24°48'10
	10299 Nov 03 04:01	0°♎			10300 Oct 08 05:29	0°♏	
asc. node	10299 Nov 05 19:57	4°♎25'15		asc. node	10300 Oct 23 16:49	23°♏22'28	
morning set	10299 Nov 15 08:46	23°♎02'20			10300 Oct 27 02:22	0°♎	
	10299 Nov 18 14:38	0°♏		morning set	10300 Oct 30 20:33	7°♎49'19	
superior conj	10299 Nov 22 07:58	8°♏01'49	1°39'32	superior conj	10300 Nov 06 16:40	22°♎45'29	1°38'57
minimum elong	10299 Nov 22 08:26	8°♏04'17	1°39'57	minimum elong	10300 Nov 06 15:59	22°♎41'46	1°39'16
max. Earth dist.	10299 Nov 25 10:07	14°♏34'51	1.33584 AU	max. Earth dist.	10300 Nov 08 12:01	26°♎42'15	1.32411 AU
evening rise	10299 Nov 30 03:56	24°♏13'47			10300 Nov 10 00:39	0°♏	
	10299 Dec 03 03:35	0°♏		evening rise	10300 Nov 13 23:12	8°♏16'12	
desc. node	10299 Dec 09 15:31	11°♏42'02			10300 Nov 25 14:02	0°♏	
	10299 Dec 21 09:38	0°♏		desc. node	10300 Nov 26 12:36	1°♏34'30	
evening max el	10300 Jan 03 15:55	15°♏52'59	27°15'50	evening max el	10300 Dec 17 03:23	29°♏00'22	27°30'47
retrograde	10300 Jan 17 03:51	23°♏16'02			10300 Dec 18 05:15	0°♏	
evening set	10300 Jan 23 22:28	20°♏42'24		retrograde	10300 Dec 30 21:45	6°♏19'30	
min. Earth dist.	10300 Jan 27 19:40	17°♏04'57	0.64870 AU	evening set	10301 Jan 06 21:54	3°♏52'55	
inferior conj	10300 Jan 30 03:32	14°♏32'02	-0°52'48	min. Earth dist.	10301 Jan 10 15:40	0°♏45'06	0.63064 AU
minimum elong	10300 Jan 30 05:07	14°♏27'41	0°51'45		10301 Jan 11 10:22	30°♏	
asc. node	10300 Feb 01 19:08	11°♏46'27		inferior conj	10301 Jan 13 10:10	28°♏01'48	-2°03'29
morning rise	10300 Feb 05 13:23	9°♏03'14		minimum elong	10301 Jan 13 14:12	27°♏51'52	2°01'24
direct	10300 Feb 08 03:55	8°♏27'39		asc. node	10301 Jan 19 16:16	23°♏05'44	
morning max el	10300 Feb 14 13:33	11°♏48'50	17°56'34	morning rise	10301 Jan 20 08:40	22°♏48'52	
	10300 Feb 27 06:56	0°♏		direct	10301 Jan 22 16:32	22°♏23'16	
morning set	10300 Mar 04 03:14	8°♏01'34		morning max el	10301 Jan 29 07:05	25°♏46'48	17°47'00
desc. node	10300 Mar 07 15:37	13°♏50'43			10301 Feb 01 20:55	0°♏	
	10300 Mar 17 14:40	0°♏		morning set	10301 Feb 14 10:58	20°♏33'43	
superior conj	10300 Mar 18 03:24	0°♏50'46	-1°12'37		10301 Feb 19 21:48	0°♏	
minimum elong	10300 Mar 17 19:29	0°♏19'14	1°11'35	desc. node	10301 Feb 22 12:24	4°♏26'37	
max. Earth dist.	10300 Mar 22 03:24	7°♏10'23	1.45317 AU	superior conj	10301 Feb 26 12:46	11°♏09'53	-0°29'46
evening rise	10300 Apr 03 04:47	25°♏53'46		minimum elong	10301 Feb 26 09:42	10°♏57'10	0°29'07
	10300 Apr 05 20:59	0°♏		max. Earth dist.	10301 Mar 04 21:25	21°♏30'45	1.44291 AU
greatest brilliancy	10300 Apr 17 15:09	17°♏43'45	-0.6m		10301 Mar 10 06:20	0°♏	
	10300 Apr 26 15:25	0°♏		evening rise	10301 Mar 13 16:21	5°♏17'50	
evening max el	10300 Apr 29 07:09	2°♏56'42	19°50'47		10301 Mar 30 06:22	0°♏	
asc. node	10300 Apr 30 17:12	4°♏17'23		evening max el	10301 Apr 12 07:05	16°♏39'10	20°56'05
retrograde	10300 May 06 18:51	7°♏13'53		asc. node	10301 Apr 17 14:23	20°♏47'09	
evening set	10300 May 10 13:33	5°♏50'48		retrograde	10301 Apr 20 17:27	21°♏35'09	
inferior conj	10300 May 15 21:48	29°♏52'12	3°17'10	evening set	10301 Apr 24 21:54	19°♏56'18	
minimum elong	10300 May 15 21:18	29°♏53'54	3°16'46	inferior conj	10301 Apr 30 04:41	13°♏45'22	3°05'51
	10300 May 15 19:28	30°♏		minimum elong	10301 Apr 30 03:16	13°♏50'16	3°05'22
min. Earth dist.	10300 May 16 22:40	28°♏28'45	0.67470 AU	min. Earth dist.	10301 Apr 30 15:46	13°♏07'01	0.68268 AU
morning rise	10300 May 21 04:42	23°♏32'43		morning rise	10301 May 05 08:25	7°♏29'26	
direct	10300 May 27 01:47	20°♏55'54		direct	10301 May 10 16:40	5°♏07'56	
desc. node	10300 Jun 03 16:06	24°♏11'19		morning max el	10301 May 21 09:27	11°♏30'50	23°38'48
morning max el	10300 Jun 07 24:00	28°♏05'15	25°07'25	desc. node	10301 May 21 13:02	11°♏39'54	
	10300 Jun 09 19:32	0°♏			10301 Jun 05 03:24	0°♏	
	10300 Jul 01 17:29	0°♏			10301 Jun 24 12:30	0°♏	
morning set	10300 Jul 13 23:58	20°♏35'13		morning set	10301 Jun 25 13:37	1°♏46'00	
max. Earth dist.	10300 Jul 17 14:25	27°♏08'48	1.36651 AU	max. Earth dist.	10301 Jun 29 11:18	8°♏30'21	1.38896 AU
	10300 Jul 19 03:02	0°♏		superior conj	10301 Jul 06 23:29	22°♏08'44	-1°08'12
superior conj	10300 Jul 24 00:33	9°♏27'02	-0°35'03	minimum elong	10301 Jul 07 04:02	22°♏30'04	1°07'56
minimum elong	10300 Jul 24 02:46	9°♏37'59	0°35'02		10301 Jul 11 02:30	0°♏	






































































































































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evening rise	10301 Jul 16 04:19	9°Ω52'09		minimum elong	10302 Jun 19 10:58	4°Ω28'09	1°38'54
	10301 Jul 27 10:25	0°൬		evening rise	10302 Jun 29 15:27	23°Ω08'22	
evening max el	10301 Aug 01 09:39	6°൬11'52	18°47'43	asc. node	10302 Jul 01 10:15	26°Ω27'20	
retrograde	10301 Aug 09 18:10	10°൬21'57			10302 Jul 03 08:25	0°Ω	
evening set	10301 Aug 11 16:57	10°൬09'10		evening max el	10302 Jul 15 16:50	18°Ω45'36	18°16'15
desc. node	10301 Aug 17 11:51	7°൬26'10		retrograde	10302 Jul 22 22:29	22°Ω24'39	
inferior conj	10301 Aug 19 19:39	5°൬48'13	-0°43'11	evening set	10302 Jul 25 04:06	22°Ω04'29	
minimum elong	10301 Aug 19 17:52	5°൬51'29	0°42'43	inferior conj	10302 Aug 01 11:25	17°Ω23'05	0°51'43
min. Earth dist.	10301 Aug 22 22:19	3°൬33'25	0.56882 AU	minimum elong	10302 Aug 01 13:06	17°Ω19'30	0°50'46
morning rise	10301 Aug 27 15:27	0°൬47'39		desc. node	10302 Aug 04 09:04	14°Ω55'06	
	10301 Aug 29 19:47	30°℞Ω		min. Earth dist.	10302 Aug 04 20:04	14°Ω32'41	0.58940 AU
direct	10301 Sep 02 06:46	29°Ω30'46		morning rise	10302 Aug 08 18:44	11°Ω47'57	
	10301 Sep 05 18:28	0°൬		direct	10302 Aug 15 01:11	10°Ω01'23	
morning max el	10301 Sep 16 13:24	6°൬55'31	26°22'09	morning max el	10302 Aug 29 10:16	17°Ω48'15	27°27'41
	10301 Oct 03 15:35	0°Ω			10302 Sep 08 14:26	0°൬	
asc. node	10301 Oct 10 13:40	12°Ω45'27			10302 Sep 26 05:26	0°Ω	
morning set	10301 Oct 15 07:10	22°Ω29'48		asc. node	10302 Sep 27 10:31	2°Ω27'11	
	10301 Oct 18 18:04	0°ℓ		morning set	10302 Sep 29 14:56	6°Ω59'15	
				max. Earth dist.	10302 Oct 06 05:06	21°Ω20'52	1.31469 AU
superior conj	10301 Oct 22 03:50	7°ℓ33'09	1°32'28	superior conj	10302 Oct 06 15:36	22°Ω19'16	1°20'27
minimum elong	10301 Oct 22 02:15	7°ℓ24'24	1°32'35	minimum elong	10302 Oct 06 13:28	22°Ω07'28	1°20'19
max. Earth dist.	10301 Oct 22 19:30	9°ℓ00'09	1.31704 AU		10302 Oct 10 02:36	0°ℓ	
evening rise	10301 Oct 29 01:51	22°ℓ36'41		evening rise	10302 Oct 13 09:28	7°ℓ08'52	
	10301 Nov 01 16:23	0°ℵ			10302 Oct 25 04:55	0°ℵ	
desc. node	10301 Nov 13 09:44	20°ℵ56'55		desc. node	10302 Oct 31 06:54	9°ℵ37'29	
	10301 Nov 19 13:24	0°Ω		evening max el	10302 Nov 11 10:24	23°ℵ07'42	26°22'02
evening max el	10301 Nov 29 10:27	11°Ω28'47	27°13'28		10302 Nov 23 00:33	0°Ω	
retrograde	10301 Dec 13 07:39	18°Ω41'06		retrograde	10302 Nov 25 08:33	0°Ω13'16	
evening set	10301 Dec 20 07:12	16°Ω30'32			10302 Nov 27 16:06	30°℞ℵ	
min. Earth dist.	10301 Dec 24 01:00	13°Ω45'29	0.61026 AU	evening set	10302 Dec 01 22:07	28°ℵ28'19	
inferior conj	10301 Dec 27 03:24	11°Ω04'31	-3°18'15	min. Earth dist.	10302 Dec 05 23:43	25°ℵ53'24	0.58910 AU
minimum elong	10301 Dec 27 09:58	10°Ω50'15	3°15'27	inferior conj	10302 Dec 09 03:41	23°ℵ30'20	-4°30'00
morning rise	10302 Jan 03 15:17	6°Ω10'58		minimum elong	10302 Dec 09 11:36	23°ℵ15'21	4°27'26
direct	10302 Jan 05 19:15	5°Ω51'45		morning rise	10302 Dec 17 03:42	18°ℵ58'56	
asc. node	10302 Jan 06 13:23	5°Ω54'10		direct	10302 Dec 19 07:40	18°ℵ42'48	
morning max el	10302 Jan 12 22:35	9°Ω26'51	17°55'50	asc. node	10302 Dec 24 10:28	20°ℵ18'37	
	10302 Jan 26 09:10	0°≈		morning max el	10302 Dec 27 08:26	22°ℵ38'57	18°24'24
morning set	10302 Jan 28 13:38	3°≈59'18			10303 Jan 02 03:19	0°Ω	
superior conj	10302 Feb 07 23:24	22°≈41'19	0°10'43	morning set	10303 Jan 12 05:31	18°Ω00'40	
minimum elong	10302 Feb 08 00:21	22°≈45'24	0°10'53		10303 Jan 18 12:31	0°≈	
behind sun begin	10302 Feb 07 18:18	22°≈19'01		superior conj	10303 Jan 21 08:21	5°≈15'22	0°44'23
behind sun end	10302 Feb 08 06:24	23°≈11'43		minimum elong	10303 Jan 21 11:12	5°≈28'26	0°44'22
desc. node	10302 Feb 09 09:14	25°≈07'51		desc. node	10303 Jan 27 06:05	15°≈50'13	
	10302 Feb 12 05:46	0°ℵ		max. Earth dist.	10303 Jan 28 20:46	18°≈37'34	1.40634 AU
max. Earth dist.	10302 Feb 15 11:39	5°ℵ24'37	1.42667 AU	evening rise	10303 Feb 02 06:39	26°≈03'13	
evening rise	10302 Feb 21 13:54	15°ℵ14'21			10303 Feb 04 16:40	0°ℵ	
	10302 Mar 03 04:47	0°℥			10303 Feb 24 22:05	0°℥	
	10302 Mar 25 16:45	0°℞		evening max el	10303 Mar 08 16:53	14°℥09'16	23°31'29
evening max el	10302 Mar 26 01:50	0°℞23'08	22°11'19	retrograde	10303 Mar 19 09:43	20°℥28'22	
asc. node	10302 Apr 04 11:35	6°℞01'44		asc. node	10303 Mar 22 08:49	19°℥46'25	
retrograde	10302 Apr 04 14:52	6°℞01'49		evening set	10303 Mar 24 12:25	18°℥20'04	
evening set	10302 Apr 09 06:02	4°℞07'38		inferior conj	10303 Mar 29 22:23	11°℥52'35	2°13'00
	10302 Apr 12 22:45	30°℞℥		minimum elong	10303 Mar 29 20:12	12°℥00'08	2°12'18
inferior conj	10302 Apr 14 13:31	27°℥46'48	2°44'12	min. Earth dist.	10303 Mar 29 08:32	12°℥40'11	0.68511 AU
minimum elong	10302 Apr 14 11:31	27°℥53'47	2°43'34	morning rise	10303 Apr 04 03:57	5°℥47'36	
min. Earth dist.	10302 Apr 14 11:47	27°℥52'52	0.68610 AU	direct	10303 Apr 08 09:10	4°℥07'58	
morning rise	10302 Apr 19 16:51	21°℥35'44		morning max el	10303 Apr 16 14:49	8°℥50'32	20°48'30
direct	10302 Apr 24 11:28	19°℥34'17		desc. node	10303 Apr 25 06:47	19°℥18'05	
morning max el	10302 May 03 21:20	25°℥05'17	22°09'55		10303 May 02 20:24	0°℞	
desc. node	10302 May 08 09:55	0°℞07'41		morning set	10303 May 16 12:11	20°℞39'06	
	10302 May 08 07:22	0°℞			10303 May 22 10:16	0°℥	
	10302 May 29 14:20	0°℥		max. Earth dist.	10303 May 24 15:44	3°℥35'18	1.43155 AU
morning set	10302 Jun 06 01:32	11°℥46'07		superior conj	10303 May 31 11:47	14°℥52'20	-2°02'54
max. Earth dist.	10302 Jun 11 10:31	20°℥36'44	1.41157 AU				
	10302 Jun 16 22:09	0°Ω					

minimum elong	10303 May 31 17:16	15° $\Pi$ 15'24	2°03'00	superior conj	10304 May 10 18:34	24° $\text{8}$ 42'27	-2°12'57
	10303 Jun 09 06:20	0° $\text{6}$		minimum elong	10304 May 10 18:56	24° $\text{8}$ 43'59	2°13'19
evening rise	10303 Jun 12 11:36	5° $\text{6}$ 41'45			10304 May 14 01:02	0° $\Pi$	
asc. node	10303 Jun 18 07:15	15° $\text{6}$ 56'36		evening rise	10304 May 24 11:55	17° $\Pi$ 21'40	
	10303 Jun 27 13:14	0° $\Omega$			10304 Jun 01 00:40	0° $\text{6}$	
evening max el	10303 Jun 29 05:05	1° $\Omega$ 48'04	18°04'34	asc. node	10304 Jun 04 04:18	5° $\text{6}$ 03'57	
retrograde	10303 Jul 05 19:05	5° $\Omega$ 11'00		evening max el	10304 Jun 11 18:51	15° $\text{6}$ 10'23	18°11'43
evening set	10303 Jul 08 08:33	4° $\Omega$ 40'05		retrograde	10304 Jun 18 03:35	18° $\text{6}$ 31'46	
inferior conj	10303 Jul 14 22:55	29° $\text{6}$ 39'04	2°00'50	evening set	10304 Jun 21 00:57	17° $\text{6}$ 47'36	
minimum elong	10303 Jul 15 01:43	29° $\text{6}$ 32'10	1°59'35	inferior conj	10304 Jun 27 02:12	12° $\text{6}$ 28'24	2°45'32
	10303 Jul 14 14:22	30° $\text{R}$ $\text{6}$		minimum elong	10304 Jun 27 04:36	12° $\text{6}$ 21'45	2°44'34
min. Earth dist.	10303 Jul 18 02:06	26° $\text{6}$ 35'39	0.61206 AU	min. Earth dist.	10304 Jun 29 17:14	9° $\text{6}$ 34'47	0.63398 AU
morning rise	10303 Jul 21 16:20	23° $\text{6}$ 39'35		morning rise	10304 Jul 03 06:41	6° $\text{6}$ 15'06	
desc. node	10303 Jul 22 06:15	23° $\text{6}$ 17'10		desc. node	10304 Jul 08 03:24	3° $\text{6}$ 51'36	
direct	10303 Jul 28 07:45	21° $\text{6}$ 24'50		direct	10304 Jul 09 23:52	3° $\text{6}$ 40'14	
morning max el	10303 Aug 11 13:52	29° $\text{6}$ 25'00	27°56'04	morning max el	10304 Jul 23 22:06	11° $\text{6}$ 42'58	27°46'14
	10303 Aug 12 03:46	0° $\Omega$			10304 Aug 07 09:43	0° $\Omega$	
	10303 Sep 02 13:58	0° $\text{P}$			10304 Aug 25 00:34	0° $\text{P}$	
morning set	10303 Sep 13 17:58	21° $\text{P}$ 12'16		morning set	10304 Aug 27 13:54	5° $\text{P}$ 01'52	
asc. node	10303 Sep 14 07:22	22° $\text{P}$ 21'45		asc. node	10304 Aug 31 04:11	12° $\text{P}$ 23'41	
	10303 Sep 17 21:41	0° $\text{6}$		max. Earth dist.	10304 Sep 01 15:06	15° $\text{P}$ 27'39	1.32474 AU
max. Earth dist.	10303 Sep 19 12:55	3° $\text{6}$ 33'39	1.31718 AU				
				superior conj	10304 Sep 04 09:30	21° $\text{P}$ 23'46	0°40'58
superior conj	10303 Sep 21 02:08	6° $\text{6}$ 58'17	1°03'12	minimum elong	10304 Sep 04 07:43	21° $\text{P}$ 14'08	0°40'31
minimum elong	10303 Sep 20 23:55	6° $\text{6}$ 46'03	1°02'51		10304 Sep 08 08:20	0° $\text{6}$	
evening rise	10303 Sep 27 19:58	21° $\text{6}$ 46'50		evening rise	10304 Sep 11 07:26	6° $\text{6}$ 24'24	
	10303 Oct 01 18:12	0° $\text{M}$			10304 Sep 23 15:34	0° $\text{M}$	
desc. node	10303 Oct 18 04:06	27° $\text{M}$ 19'57		desc. node	10304 Oct 04 01:20	13° $\text{M}$ 41'03	
	10303 Oct 20 08:46	0° $\text{J}$		evening max el	10304 Oct 04 13:11	14° $\text{M}$ 10'11	23°22'46
evening max el	10303 Oct 24 02:17	3° $\text{J}$ 56'41	25°01'04	retrograde	10304 Oct 17 23:40	20° $\text{M}$ 52'11	
retrograde	10303 Nov 06 22:39	10° $\text{J}$ 54'18		evening set	10304 Oct 22 05:57	20° $\text{M}$ 12'42	
evening set	10303 Nov 12 14:04	9° $\text{J}$ 42'26		min. Earth dist.	10304 Oct 28 23:00	17° $\text{M}$ 04'12	0.55434 AU
min. Earth dist.	10303 Nov 17 14:03	6° $\text{J}$ 59'52	0.56945 AU	inferior conj	10304 Oct 30 16:40	16° $\text{M}$ 03'09	-5°44'24
inferior conj	10303 Nov 20 08:12	5° $\text{J}$ 11'19	-5°25'23	minimum elong	10304 Oct 30 15:39	16° $\text{M}$ 04'39	5°44'03
minimum elong	10303 Nov 20 14:03	5° $\text{J}$ 01'41	5°24'09	morning rise	10304 Nov 08 03:11	12° $\text{M}$ 11'10	
morning rise	10303 Nov 28 16:18	1° $\text{J}$ 02'04		direct	10304 Nov 11 01:03	11° $\text{M}$ 50'38	
direct	10303 Dec 01 01:50	0° $\text{J}$ 45'40		morning max el	10304 Nov 21 20:11	16° $\text{M}$ 56'45	20°27'21
morning max el	10303 Dec 10 08:46	5° $\text{J}$ 12'35	19°14'28	asc. node	10304 Nov 27 04:31	23° $\text{M}$ 11'04	
asc. node	10303 Dec 11 07:31	6° $\text{J}$ 09'49			10304 Dec 01 14:34	0° $\text{J}$	
	10303 Dec 26 00:58	0° $\text{Z}$		morning set	10304 Dec 10 13:08	17° $\text{J}$ 05'23	
morning set	10303 Dec 27 06:24	2° $\text{Z}$ 25'57			10304 Dec 16 19:14	0° $\text{Z}$	
superior conj	10304 Jan 04 10:44	18° $\text{Z}$ 38'19	1°09'50	superior conj	10304 Dec 18 01:54	2° $\text{Z}$ 36'16	1°27'10
minimum elong	10304 Jan 04 13:48	18° $\text{Z}$ 53'09	1°09'55	minimum elong	10304 Dec 18 04:13	2° $\text{Z}$ 48'02	1°27'26
	10304 Jan 10 11:37	0° $\approx$		max. Earth dist.	10304 Dec 23 10:10	13° $\text{Z}$ 10'31	1.36318 AU
max. Earth dist.	10304 Jan 11 02:40	1° $\approx$ 08'23	1.38439 AU	evening rise	10304 Dec 27 06:47	20° $\text{Z}$ 25'11	
desc. node	10304 Jan 14 02:58	6° $\approx$ 30'26		desc. node	10304 Dec 30 23:54	27° $\text{Z}$ 04'02	
evening rise	10304 Jan 14 21:02	7° $\approx$ 49'14			10305 Jan 01 16:34	0° $\approx$	
	10304 Jan 28 14:26	0° $\text{H}$			10305 Jan 21 14:17	0° $\text{H}$	
evening max el	10304 Feb 19 06:24	27° $\text{H}$ 58'26	24°50'12	evening max el	10305 Jan 31 19:53	11° $\text{H}$ 47'47	26°00'22
	10304 Feb 21 10:29	0° $\text{Y}$		retrograde	10305 Feb 13 10:39	18° $\text{H}$ 59'11	
retrograde	10304 Mar 02 00:38	4° $\text{Y}$ 49'30		evening set	10305 Feb 19 13:30	16° $\text{H}$ 29'42	
evening set	10304 Mar 07 15:27	2° $\text{Y}$ 29'05		asc. node	10305 Feb 23 03:16	12° $\text{H}$ 48'07	
asc. node	10304 Mar 08 06:03	1° $\text{Y}$ 56'27		min. Earth dist.	10305 Feb 23 19:17	11° $\text{H}$ 59'27	0.67077 AU
	10304 Mar 10 02:02	30° $\text{R}$ $\text{H}$		inferior conj	10305 Feb 25 08:40	10° $\text{H}$ 02'51	0°43'08
min. Earth dist.	10304 Mar 12 03:48	27° $\text{H}$ 24'03	0.67994 AU	minimum elong	10305 Feb 25 07:36	10° $\text{H}$ 06'12	0°42'54
inferior conj	10304 Mar 13 05:26	25° $\text{H}$ 59'18	1°32'37	morning rise	10305 Mar 03 02:19	4° $\text{H}$ 14'40	
minimum elong	10304 Mar 13 03:31	26° $\text{H}$ 05'39	1°32'01	direct	10305 Mar 06 07:39	3° $\text{H}$ 15'27	
morning rise	10304 Mar 18 15:47	20° $\text{H}$ 01'45		morning max el	10305 Mar 13 00:26	6° $\text{H}$ 53'10	18°46'36
direct	10304 Mar 22 08:25	18° $\text{H}$ 43'25		desc. node	10305 Mar 29 00:22	29° $\text{H}$ 03'38	
morning max el	10304 Mar 29 15:52	22° $\text{H}$ 47'20	19°39'48		10305 Mar 29 14:54	0° $\text{Y}$	
	10304 Apr 04 18:12	0° $\text{Y}$		morning set	10305 Apr 03 21:07	8° $\text{Y}$ 11'48	
desc. node	10304 Apr 11 03:36	8° $\text{Y}$ 59'33			10305 Apr 17 20:06	0° $\text{8}$	
greatest brilliancy	10304 Apr 11 09:27	9° $\text{Y}$ 20'59	-0.6m	max. Earth dist.	10305 Apr 18 21:18	1° $\text{8}$ 38'39	1.45498 AU
morning set	10304 Apr 24 10:50	29° $\text{Y}$ 04'54					
	10304 Apr 25 01:08	0° $\text{8}$		superior conj	10305 Apr 20 05:50	3° $\text{8}$ 46'09	-2°03'43
max. Earth dist.	10304 May 06 03:45	17° $\text{8}$ 20'18	1.44658 AU	minimum elong	10305 Apr 19 22:56	3° $\text{8}$ 19'06	2°03'35

evening rise	10305 May 05 12:42	28°♄02'26		morning max el	10306 Feb 24 14:43	21°♁02'19	18°09'59
	10305 May 06 17:55	0°♂			10306 Mar 03 15:27	0°♄	
greatest brilliancy	10305 May 11 23:22	8°♂24'31	-0.9m	morning set	10306 Mar 15 10:39	18°♄41'32	
asc. node	10305 May 22 01:23	23°♂41'57		desc. node	10306 Mar 15 21:08	19°♄23'54	
evening max el	10305 May 26 07:11	28°♂44'56	18°36'55		10306 Mar 22 11:20	0°♄	
	10305 May 27 15:47	0°♄					
retrograde	10305 Jun 01 19:59	2°♄18'31		superior conj	10306 Mar 30 12:24	12°♄44'05	-1°35'08
evening set	10305 Jun 05 01:16	1°♄19'40		minimum elong	10306 Mar 30 02:56	12°♄06'55	1°34'13
	10305 Jun 06 19:42	30°♄		max. Earth dist.	10306 Apr 01 17:20	16°♄11'37	1.45599 AU
inferior conj	10305 Jun 10 17:17	25°♂43'47	3°10'02		10306 Apr 10 13:51	0°♄	
minimum elong	10305 Jun 10 18:37	25°♂39'43	3°09'25	evening rise	10306 Apr 15 14:55	7°♄50'30	
min. Earth dist.	10305 Jun 12 17:27	23°♂17'32	0.65303 AU	greatest brilliancy	10306 Apr 27 16:10	26°♄24'38	-0.7m
morning rise	10305 Jun 16 11:08	19°♂24'23			10306 Apr 30 02:00	0°♂	
direct	10305 Jun 22 23:46	16°♂40'35		asc. node	10306 May 08 22:31	11°♂40'10	
desc. node	10305 Jun 25 00:28	16°♂54'35		evening max el	10306 May 09 15:36	12°♂24'35	19°19'15
morning max el	10305 Jul 06 08:34	24°♂33'50	27°03'04	retrograde	10306 May 16 16:51	16°♂22'56	
	10305 Jul 11 06:17	0°♄		evening set	10306 May 20 06:27	15°♂08'42	
	10305 Jul 31 20:06	0°♂		inferior conj	10306 May 25 16:39	9°♂17'41	3°18'26
morning set	10305 Aug 11 00:00	18°♂21'23		minimum elong	10306 May 25 16:47	9°♂17'15	3°18'00
max. Earth dist.	10305 Aug 15 08:32	26°♂58'11	1.33741 AU	min. Earth dist.	10306 May 27 01:44	7°♂29'49	0.66808 AU
	10305 Aug 16 20:08	0°♄		morning rise	10306 May 31 02:42	2°♂57'13	
asc. node	10305 Aug 18 01:00	2°♄29'19		direct	10306 Jun 06 06:12	0°♂15'23	
				desc. node	10306 Jun 11 21:29	2°♂03'30	
superior conj	10305 Aug 19 11:35	5°♄30'15	0°14'13	morning max el	10306 Jun 18 19:08	7°♂45'14	25°54'32
minimum elong	10305 Aug 19 10:52	5°♄26'27	0°13'50		10306 Jul 06 03:14	0°♄	
behind sun begin	10305 Aug 19 07:59	5°♄11'18			10306 Jul 24 07:21	0°♂	
behind sun end	10305 Aug 19 13:45	5°♄41'37		morning set	10306 Jul 24 20:37	1°♂00'45	
evening rise	10305 Aug 26 18:02	20°♄56'45		max. Earth dist.	10306 Jul 28 15:31	8°♂07'47	1.35479 AU
	10305 Aug 31 03:53	0°♄					
evening max el	10305 Sep 16 03:19	24°♄21'45	21°44'14	superior conj	10306 Aug 03 05:46	19°♂10'14	-0°16'19
desc. node	10305 Sep 20 22:34	28°♄12'30		minimum elong	10306 Aug 03 06:45	19°♂15'13	0°16'28
	10305 Sep 24 20:58	0°♄		asc. node	10306 Aug 04 21:51	22°♂34'19	
retrograde	10305 Sep 28 13:43	0°♄32'36			10306 Aug 08 12:14	0°♄	
evening set	10305 Oct 01 10:06	0°♄14'16		evening rise	10306 Aug 11 01:38	5°♄17'19	
	10305 Oct 02 09:35	30°♄			10306 Aug 24 21:18	0°♄	
inferior conj	10305 Oct 10 11:05	26°♄16'53	-5°08'46	evening max el	10306 Aug 29 04:48	5°♄04'50	20°19'34
minimum elong	10305 Oct 10 02:41	26°♄28'37	5°07'00	desc. node	10306 Sep 07 19:49	10°♄25'01	
min. Earth dist.	10305 Oct 10 06:08	26°♄23'47	0.54671 AU	retrograde	10306 Sep 09 02:17	10°♄29'16	
morning rise	10305 Oct 18 20:27	22°♄28'50		evening set	10306 Sep 11 02:20	10°♄19'06	
direct	10305 Oct 22 11:05	22°♄00'25		inferior conj	10306 Sep 20 04:29	6°♄21'24	-3°40'30
morning max el	10305 Nov 03 18:11	27°♄50'11	22°01'10	minimum elong	10306 Sep 19 19:11	6°♄35'04	3°37'29
	10305 Nov 05 21:29	0°♄		min. Earth dist.	10306 Sep 21 14:54	5°♄30'55	0.54832 AU
asc. node	10305 Nov 14 01:26	11°♄07'06		morning rise	10306 Sep 28 11:19	2°♄16'02	
	10305 Nov 24 01:54	0°♄		direct	10306 Oct 02 20:13	1°♄34'54	
morning set	10305 Nov 24 23:19	1°♄52'02		morning max el	10306 Oct 16 07:22	8°♄07'50	23°47'29
				asc. node	10306 Oct 31 22:19	29°♄45'00	
superior conj	10305 Dec 02 02:06	16°♄58'37	1°37'00		10306 Nov 01 01:38	0°♄	
minimum elong	10305 Dec 02 03:16	17°♄04'46	1°37'24	morning set	10306 Nov 09 11:01	16°♄40'30	
max. Earth dist.	10305 Dec 05 23:46	25°♄03'55	1.34470 AU		10306 Nov 15 14:34	0°♄	
	10305 Dec 08 10:52	0°♄					
evening rise	10305 Dec 10 08:19	3°♄41'34		superior conj	10306 Nov 16 08:24	1°♄36'52	1°40'02
desc. node	10305 Dec 17 20:52	17°♄26'27		minimum elong	10306 Nov 16 08:22	1°♄36'38	1°40'26
	10305 Dec 25 13:04	0°♄		max. Earth dist.	10306 Nov 18 21:13	7°♄03'48	1.33022 AU
evening max el	10306 Jan 14 09:24	25°♄29'17	26°54'37	evening rise	10306 Nov 23 22:01	17°♄29'31	
	10306 Jan 19 20:29	0°♄			10306 Nov 30 10:54	0°♄	
retrograde	10306 Jan 27 14:54	2°♄50'19		desc. node	10306 Dec 04 17:54	7°♄32'05	
evening set	10306 Feb 03 04:40	0°♄16'15			10306 Dec 19 22:33	0°♄	
	10306 Feb 03 12:42	30°♄		evening max el	10306 Dec 27 21:56	8°♄52'22	27°25'50
min. Earth dist.	10306 Feb 07 04:42	26°♄20'15	0.65780 AU	retrograde	10307 Jan 10 12:58	16°♄14'42	
inferior conj	10306 Feb 09 05:56	23°♄58'16	-0°15'18	evening set	10307 Jan 17 10:42	13°♄42'41	
minimum elong	10306 Feb 09 06:22	23°♄57'03	0°14'49	min. Earth dist.	10307 Jan 21 06:02	10°♄18'47	0.64134 AU
transit middle	10306 Feb 09 06:22	23°♄57'03	0°14'49	inferior conj	10307 Jan 23 18:46	7°♄39'51	-1°21'59
transit begin	10306 Feb 09 05:14	24°♄00'20		minimum elong	10307 Jan 23 21:20	7°♄33'06	1°20'30
transit end	10306 Feb 09 07:30	23°♄53'46		asc. node	10307 Jan 27 21:38	3°♄47'11	
asc. node	10306 Feb 10 00:28	23°♄05'08		morning rise	10307 Jan 30 09:51	2°♄17'45	
morning rise	10306 Feb 15 09:16	18°♄21'45		direct	10307 Feb 01 21:17	1°♄46'52	
direct	10306 Feb 18 04:46	17°♄38'33		morning max el	10307 Feb 08 08:03	5°♄07'41	17°50'26

	10307 Feb 24 20:26	0° $\text{H}$		morning set	10308 Feb 07 21:10	13° $\approx$ 31'52	
morning set	10307 Feb 25 04:37	0° $\text{H}$ 34'41			10308 Feb 17 06:38	0° $\text{H}$	
desc. node	10307 Mar 02 17:54	9° $\text{H}$ 55'46		desc. node	10308 Feb 17 14:42	0° $\text{H}$ 34'26	
superior conj	10307 Mar 10 08:47	22° $\text{H}$ 26'23 -0°54'37		superior conj	10308 Feb 19 04:58	3° $\text{H}$ 16'57 -0°12'01	
minimum elong	10307 Mar 10 02:49	22° $\text{H}$ 02'16 0°53'42		minimum elong	10308 Feb 19 03:50	3° $\text{H}$ 12'08 0°11'35	
	10307 Mar 15 02:16	0° $\text{Y}$		behind sun begin	10308 Feb 18 21:40	2° $\text{H}$ 46'05	
max. Earth dist.	10307 Mar 15 12:37	0° $\text{Y}$ 41'00 1.44961 AU		behind sun end	10308 Feb 19 09:59	3° $\text{H}$ 38'09	
evening rise	10307 Mar 26 03:38	17° $\text{Y}$ 12'51		max. Earth dist.	10308 Feb 26 04:43	14° $\text{H}$ 50'08 1.43659 AU	
	10307 Apr 03 13:48	0° $\text{B}$		evening rise	10308 Mar 04 17:46	26° $\text{H}$ 46'57	
evening max el	10307 Apr 22 18:43	26° $\text{B}$ 06'39 20°16'56			10308 Mar 06 19:46	0° $\text{Y}$	
asc. node	10307 Apr 25 19:42	28° $\text{B}$ 46'53			10308 Mar 27 11:12	0° $\text{B}$	
	10307 Apr 27 20:39	0° $\text{II}$		evening max el	10308 Apr 04 16:19	9° $\text{B}$ 49'58 21°27'06	
retrograde	10307 Apr 30 15:33	0° $\text{II}$ 39'59		asc. node	10308 Apr 11 16:55	14° $\text{B}$ 47'02	
	10307 May 03 06:57	30° $\text{R}$ 8		retrograde	10308 Apr 13 13:56	15° $\text{B}$ 04'21	
evening set	10307 May 04 14:13	29° $\text{B}$ 10'10		evening set	10308 Apr 17 22:42	13° $\text{B}$ 19'07	
inferior conj	10307 May 09 21:32	23° $\text{B}$ 05'48 3°13'43		inferior conj	10308 Apr 23 05:33	7° $\text{B}$ 03'37 2°57'54	
minimum elong	10307 May 09 20:36	23° $\text{B}$ 08'58 3°13'17		minimum elong	10308 Apr 23 03:50	7° $\text{B}$ 09'34 2°57'20	
min. Earth dist.	10307 May 10 16:23	22° $\text{B}$ 01'30 0.67868 AU		min. Earth dist.	10308 Apr 23 11:08	6° $\text{B}$ 44'08 0.68469 AU	
morning rise	10307 May 15 02:44	16° $\text{B}$ 47'24		morning rise	10308 Apr 28 08:45	0° $\text{B}$ 49'19	
direct	10307 May 20 18:24	14° $\text{B}$ 16'29			10308 Apr 29 09:32	30° $\text{R}$ Y	
desc. node	10307 May 29 18:29	18° $\text{B}$ 49'12		direct	10308 May 03 11:14	28° $\text{Y}$ 35'47	
morning max el	10307 Jun 01 04:50	21° $\text{B}$ 07'53 24°30'15			10308 May 07 23:16	0° $\text{B}$	
	10307 Jun 08 20:36	0° $\text{II}$		morning max el	10308 May 13 14:54	4° $\text{B}$ 37'18 23°00'23	
	10307 Jun 29 08:40	0° $\text{E}$		desc. node	10308 May 15 15:24	6° $\text{B}$ 45'34	
morning set	10307 Jul 06 23:08	12° $\text{E}$ 48'27			10308 Jun 02 02:17	0° $\text{II}$	
max. Earth dist.	10307 Jul 10 14:10	19° $\text{E}$ 15'32 1.37588 AU		morning set	10308 Jun 17 02:21	23° $\text{II}$ 31'00	
	10307 Jul 16 08:33	0° $\text{O}$			10308 Jun 20 22:39	0° $\text{E}$	
				max. Earth dist.	10308 Jun 21 10:48	0° $\text{E}$ 52'07 1.39872 AU	
superior conj	10307 Jul 17 12:51	2° $\text{O}$ 16'01 -0°49'10		superior conj	10308 Jun 29 04:53	14° $\text{E}$ 38'28 -1°21'52	
minimum elong	10307 Jul 17 16:03	2° $\text{O}$ 31'32 0°49'01		minimum elong	10308 Jun 29 10:19	15° $\text{E}$ 03'21 1°21'34	
asc. node	10307 Jul 22 18:44	12° $\text{O}$ 35'05			10308 Jul 07 08:49	0° $\text{O}$	
evening rise	10307 Jul 26 03:50	19° $\text{O}$ 19'38		evening rise	10308 Jul 08 21:33	2° $\text{O}$ 55'44	
	10307 Jul 31 15:50	0° $\text{M}$		asc. node	10308 Jul 08 15:41	2° $\text{O}$ 27'41	
evening max el	10307 Aug 11 20:08	16° $\text{M}$ 34'45 19°15'08		evening max el	10308 Jul 24 22:47	28° $\text{O}$ 48'49 18°31'54	
retrograde	10307 Aug 21 01:17	21° $\text{M}$ 09'26			10308 Jul 26 06:01	0° $\text{M}$	
evening set	10307 Aug 22 21:33	20° $\text{M}$ 59'12		retrograde	10308 Aug 01 18:25	2° $\text{M}$ 43'30	
desc. node	10307 Aug 25 17:06	20° $\text{M}$ 07'29		evening set	10308 Aug 03 19:53	2° $\text{M}$ 28'03	
inferior conj	10307 Aug 31 11:00	16° $\text{M}$ 49'21 -1°47'05			10308 Aug 08 20:52	30° $\text{R}$ 0	
minimum elong	10307 Aug 31 06:16	16° $\text{M}$ 57'14 1°45'23		inferior conj	10308 Aug 11 14:16	27° $\text{O}$ 58'54 0°00'03	
min. Earth dist.	10307 Sep 03 03:33	15° $\text{M}$ 02'24 0.55914 AU		minimum elong	10308 Aug 11 14:16	27° $\text{O}$ 58'55 0°00'14	
morning rise	10307 Sep 08 12:07	12° $\text{M}$ 10'06		transit middle	10308 Aug 11 14:16	27° $\text{O}$ 58'55 0°00'14	
direct	10307 Sep 13 16:37	11° $\text{M}$ 08'16		transit begin	10308 Aug 11 10:40	28° $\text{O}$ 05'53	
morning max el	10307 Sep 27 19:19	18° $\text{M}$ 17'45 25°30'52		transit end	10308 Aug 11 17:51	27° $\text{O}$ 51'55	
	10307 Oct 07 13:30	0° $\text{O}$		desc. node	10308 Aug 11 14:21	27° $\text{O}$ 58'45	
asc. node	10307 Oct 18 19:11	18° $\text{O}$ 54'11		min. Earth dist.	10308 Aug 14 21:25	25° $\text{O}$ 26'12 0.57712 AU	
	10307 Oct 24 06:27	0° $\text{M}$		morning rise	10308 Aug 19 05:07	22° $\text{O}$ 42'44	
morning set	10307 Oct 24 22:29	1° $\text{M}$ 25'18		direct	10308 Aug 25 03:46	21° $\text{O}$ 13'06	
				morning max el	10308 Sep 08 11:56	28° $\text{O}$ 48'45 26°54'09	
superior conj	10307 Oct 31 18:23	16° $\text{M}$ 23'13 1°36'53			10308 Sep 09 16:26	0° $\text{M}$	
minimum elong	10307 Oct 31 17:18	16° $\text{M}$ 17'10 1°37'09			10308 Sep 30 07:11	0° $\text{O}$	
max. Earth dist.	10307 Nov 02 01:38	19° $\text{M}$ 15'16 1.32040 AU		asc. node	10308 Oct 04 16:02	8° $\text{O}$ 26'16	
	10307 Nov 07 01:27	0° $\text{X}$		morning set	10308 Oct 08 08:06	16° $\text{O}$ 02'00	
evening rise	10307 Nov 07 20:42	1° $\text{X}$ 40'25			10308 Oct 14 17:12	0° $\text{M}$	
desc. node	10307 Nov 21 15:00	27° $\text{X}$ 13'06					
	10307 Nov 23 08:37	0° $\text{B}$		superior conj	10308 Oct 15 06:03	1° $\text{M}$ 11'32 1°28'01	
evening max el	10307 Dec 10 07:41	21° $\text{B}$ 44'15 27°27'40		minimum elong	10308 Oct 15 04:12	1° $\text{M}$ 01'12 1°28'03	
retrograde	10307 Dec 24 03:55	29° $\text{B}$ 01'43		max. Earth dist.	10308 Oct 15 10:21	1° $\text{M}$ 35'22 1.31542 AU	
evening set	10307 Dec 31 04:38	26° $\text{B}$ 40'34		evening rise	10308 Oct 22 01:46	16° $\text{M}$ 07'16	
min. Earth dist.	10308 Jan 03 21:38	23° $\text{B}$ 43'39 0.62208 AU			10308 Oct 28 23:26	0° $\text{X}$	
inferior conj	10308 Jan 06 20:07	20° $\text{B}$ 59'14 -2°35'00		desc. node	10308 Nov 07 12:10	16° $\text{X}$ 19'39	
minimum elong	10308 Jan 07 01:16	20° $\text{B}$ 47'11 2°32'33			10308 Nov 17 18:00	0° $\text{B}$	
morning rise	10308 Jan 14 00:20	15° $\text{B}$ 54'24		evening max el	10308 Nov 21 12:08	3° $\text{B}$ 53'14 26°55'49	
asc. node	10308 Jan 14 18:47	15° $\text{B}$ 41'47		retrograde	10308 Dec 05 10:19	11° $\text{B}$ 02'41	
direct	10308 Jan 16 06:00	15° $\text{B}$ 32'04		evening set	10308 Dec 12 06:41	9° $\text{B}$ 02'13	
morning max el	10308 Jan 23 01:13	18° $\text{B}$ 59'40 17°48'31		min. Earth dist.	10308 Dec 16 02:39	6° $\text{B}$ 22'58 0.60120 AU	
	10308 Jan 31 02:17	0° $\approx$					



inferior conj	10308 Dec 19 06:34	3°  47'43	-3°49'42	minimum elong	10309 Dec 01 06:17	15°  41'43	4°54'29
minimum elong	10308 Dec 19 13:58	3°  32'32	3°46'51	morning rise	10309 Dec 09 02:44	11°  33'11	
	10308 Dec 24 14:57	30°  R 		direct	10309 Dec 11 08:27	11°  17'14	
morning rise	10308 Dec 26 23:54	29°  103'04		asc. node	10309 Dec 18 12:55	14°  13'49	
direct	10308 Dec 29 03:11	28°  145'37		morning max el	10309 Dec 19 20:51	15°  125'16	18°42'57
asc. node	10308 Dec 31 15:53	29°  11'10			10309 Dec 30 00:47	0° 	
	10309 Jan 02 10:30	0° 		morning set	10310 Jan 05 02:11	11°  327'16	
morning max el	10309 Jan 05 14:43	2°  328'56	18°05'25				
morning set	10309 Jan 21 06:02	27°  314'20		superior conj	10310 Jan 13 18:27	28°  312'14	0°56'12
	10309 Jan 22 17:33	0° 		minimum elong	10310 Jan 13 21:33	28°  326'48	0°56'12
					10310 Jan 14 17:27	0° 	
superior conj	10309 Jan 31 01:32	15°  15'57	0°25'56	max. Earth dist.	10310 Jan 21 00:17	11°  11'22'51	1.39708 AU
minimum elong	10309 Jan 31 03:32	15°  15'57	0°26'00	desc. node	10310 Jan 21 08:22	11°  11'22'51	
desc. node	10309 Feb 03 11:31	21°  16'23		evening rise	10310 Jan 25 00:45	18°  11'22'51	
max. Earth dist.	10309 Feb 07 16:30	28°  16'23	1.41842 AU		10310 Feb 01 05:10	0° 	
	10309 Feb 08 14:54	0° 			10310 Feb 22 09:28	0° 	
evening rise	10309 Feb 12 22:46	7°  104'22		evening max el	10310 Feb 28 23:40	7°  104'22	24°05'37
	10309 Feb 27 24:00	0° 		retrograde	10310 Mar 12 03:28	13°  104'22	
evening max el	10309 Mar 18 09:23	23°  104'22	22°45'15	asc. node	10310 Mar 16 11:22	12°  104'22	
retrograde	10309 Mar 28 10:19	29°  104'22		evening set	10310 Mar 17 11:24	11°  104'22	
asc. node	10309 Mar 29 14:09	29°  104'22		min. Earth dist.	10310 Mar 22 04:02	6°  104'22	0.68342 AU
evening set	10309 Apr 02 06:16	27°  104'22		inferior conj	10310 Mar 22 22:55	5°  104'22	1°57'00
inferior conj	10309 Apr 07 14:38	21°  104'22	2°32'08	minimum elong	10310 Mar 22 20:47	5°  104'22	1°56'19
minimum elong	10309 Apr 07 12:29	21°  104'22	2°31'27		10310 Mar 27 07:37	30°  R 	
min. Earth dist.	10309 Apr 07 07:45	21°  104'22	0.68623 AU	morning rise	10310 Mar 28 06:13	29°  R 	
morning rise	10309 Apr 12 18:35	14°  104'22		direct	10310 Apr 01 06:02	27°  R 	
direct	10309 Apr 17 07:32	13°  104'22			10310 Apr 06 16:32	0° 	
morning max el	10309 Apr 26 04:37	18°  104'22	21°33'56	morning max el	10310 Apr 09 01:13	2°  104'22	20°17'37
desc. node	10309 May 02 12:16	25°  104'22		desc. node	10310 Apr 19 09:04	14°  104'22	
	10309 May 05 21:24	0° 			10310 Apr 29 15:37	0° 	
	10309 May 26 05:09	0° 		morning set	10310 May 07 06:01	11°  104'22	
morning set	10309 May 28 02:51	3°  104'22		max. Earth dist.	10310 May 16 21:15	26°  104'22	1.43869 AU
max. Earth dist.	10309 Jun 03 12:18	13°  104'22	1.42059 AU		10310 May 18 21:55	0° 	
superior conj	10309 Jun 11 01:16	26°  104'22	-1°50'28	superior conj	10310 May 22 22:03	6°  104'22	-2°09'12
minimum elong	10309 Jun 11 07:37	26°  104'22	1°50'20	minimum elong	10310 May 23 01:55	6°  104'22	2°09'30
	10309 Jun 13 06:42	0° 		evening rise	10310 Jun 04 15:16	28°  104'22	
evening rise	10309 Jun 22 02:54	15°  104'22			10310 Jun 05 17:03	0° 	
asc. node	10309 Jun 25 12:41	22°  104'22		asc. node	10310 Jun 12 09:43	11°  104'22	
	10309 Jun 30 00:28	0° 		evening max el	10310 Jun 21 21:59	24°  104'22	18°05'14
evening max el	10309 Jul 08 08:40	11°  104'22	18°08'54	retrograde	10310 Jun 28 08:29	28°  104'22	
retrograde	10309 Jul 15 06:06	15°  104'22		evening set	10310 Jul 01 01:20	27°  104'22	
evening set	10309 Jul 17 15:10	14°  104'22		inferior conj	10310 Jul 07 09:36	22°  104'22	2°22'30
inferior conj	10309 Jul 24 14:50	9°  104'22	1°24'15	minimum elong	10310 Jul 07 12:22	22°  104'22	2°21'21
minimum elong	10309 Jul 24 17:14	9°  104'22	1°23'03	min. Earth dist.	10310 Jul 10 08:00	19°  104'22	0.62166 AU
min. Earth dist.	10309 Jul 27 22:15	6°  104'22	0.59904 AU	morning rise	10310 Jul 13 21:19	16°  104'22	
desc. node	10309 Jul 29 11:34	5°  104'22		desc. node	10310 Jul 16 08:43	14°  104'22	
morning rise	10309 Jul 31 16:18	4°  104'22		direct	10310 Jul 20 14:10	13°  104'22	
direct	10309 Aug 07 03:36	2°  104'22		morning max el	10310 Aug 03 17:38	21°  104'22	27°56'22
morning max el	10309 Aug 21 11:35	9°  104'22	27°44'29		10310 Aug 10 19:26	0° 	
	10309 Sep 05 23:02	0° 			10310 Aug 30 02:38	0° 	
asc. node	10309 Sep 21 12:51	28°  104'22		morning set	10310 Sep 06 14:23	14°  104'22	
	10309 Sep 22 09:18	0° 		asc. node	10310 Sep 08 09:41	18°  104'22	
morning set	10309 Sep 22 14:04	0°  104'22		max. Earth dist.	10310 Sep 12 01:49	26°  104'22	1.31987 AU
max. Earth dist.	10309 Sep 28 19:42	13°  104'22	1.31521 AU		10310 Sep 13 21:38	0° 	
superior conj	10309 Sep 29 17:30	15°  104'22	1°13'45	superior conj	10310 Sep 14 02:55	0°  104'22	0°54'21
minimum elong	10309 Sep 29 15:17	15°  104'22	1°13'32	minimum elong	10310 Sep 14 00:49	0°  104'22	0°53'56
evening rise	10309 Oct 06 10:51	0° 		evening rise	10310 Sep 20 22:00	15°  104'22	
	10309 Oct 06 02:54	0° 			10310 Sep 28 02:52	0° 	
	10309 Oct 22 05:13	0° 		desc. node	10310 Oct 12 06:35	21°  104'22	
desc. node	10309 Oct 25 09:21	4°  104'22		evening max el	10310 Oct 15 21:39	25°  104'22	24°20'11
evening max el	10309 Nov 03 08:47	15°  104'22	25°50'41		10310 Oct 21 09:20	0° 	
retrograde	10309 Nov 17 06:24	22°  104'22		retrograde	10310 Oct 29 14:47	2°  104'22	
evening set	10309 Nov 23 12:12	20°  104'22		evening set	10310 Nov 03 17:26	1°  104'22	
min. Earth dist.	10309 Nov 27 21:22	18°  104'22	0.58042 AU		10310 Nov 07 04:09	30°  R 	
inferior conj	10309 Nov 30 22:40	15°  104'22	-4°56'35	min. Earth dist.	10310 Nov 09 08:31	28°  104'22	0.56232 AU

inferior conj	10310 Nov 11 18:16	27° $\mathbb{M}$ 14'25	-5°39'12	min. Earth dist.	10311 Oct 21 16:27	8° $\mathbb{M}$ 27'05	0.54999 AU
minimum elong	10310 Nov 11 21:43	27° $\mathbb{M}$ 09'02	5°38'33	inferior conj	10311 Oct 22 19:40	7° $\mathbb{M}$ 48'20	-5°36'31
morning rise	10310 Nov 20 04:08	23° $\mathbb{M}$ 13'57		minimum elong	10311 Oct 22 15:06	7° $\mathbb{M}$ 54'50	5°35'50
direct	10310 Nov 22 18:18	22° $\mathbb{M}$ 56'13		morning rise	10311 Oct 31 05:57	4° $\mathbb{M}$ 00'20	
morning max el	10310 Dec 02 15:56	27° $\mathbb{M}$ 38'21	19°42'48	direct	10311 Nov 03 10:17	3° $\mathbb{M}$ 37'09	
	10310 Dec 04 21:34	0° $\mathbb{Z}$		morning max el	10311 Nov 14 21:39	9° $\mathbb{M}$ 01'43	21°05'04
asc. node	10310 Dec 05 09:56	0° $\mathbb{Z}$ 36'29		asc. node	10311 Nov 22 06:52	18° $\mathbb{M}$ 03'16	
morning set	10310 Dec 20 05:51	25° $\mathbb{Z}$ 59'25			10311 Nov 29 06:05	0° $\mathbb{Z}$	
	10310 Dec 22 05:20	0° $\mathbb{Z}$		morning set	10311 Dec 04 14:20	10° $\mathbb{Z}$ 43'08	
superior conj	10310 Dec 28 02:46	11° $\mathbb{Z}$ 51'34	1°18'09	superior conj	10311 Dec 11 22:15	26° $\mathbb{Z}$ 01'56	1°32'12
minimum elong	10310 Dec 28 05:35	12° $\mathbb{Z}$ 05'32	1°18'18	minimum elong	10311 Dec 12 00:06	26° $\mathbb{Z}$ 11'30	1°32'32
max. Earth dist.	10311 Jan 03 06:24	23° $\mathbb{Z}$ 39'51	1.37507 AU		10311 Dec 13 20:46	0° $\mathbb{Z}$	
evening rise	10311 Jan 06 23:40	0° $\approx$ 25'26		max. Earth dist.	10311 Dec 16 15:43	5° $\mathbb{Z}$ 34'45	1.35483 AU
	10311 Jan 06 17:57	0° $\approx$		evening rise	10311 Dec 20 16:39	13° $\mathbb{Z}$ 20'24	
desc. node	10311 Jan 08 05:15	2° $\approx$ 36'01		desc. node	10311 Dec 26 02:13	23° $\mathbb{Z}$ 05'51	
	10311 Jan 25 11:04	0° $\mathbb{X}$			10311 Dec 30 03:52	0° $\approx$	
evening max el	10311 Feb 11 12:51	21° $\mathbb{X}$ 12'29	25°21'32		10312 Jan 20 09:27	0° $\mathbb{X}$	
retrograde	10311 Feb 23 16:23	28° $\mathbb{X}$ 13'53		evening max el	10312 Jan 25 02:12	4° $\mathbb{X}$ 59'06	26°25'47
evening set	10311 Mar 01 12:31	25° $\mathbb{X}$ 48'49		retrograde	10312 Feb 07 00:14	12° $\mathbb{X}$ 16'45	
asc. node	10311 Mar 03 08:36	24° $\mathbb{X}$ 02'13		evening set	10312 Feb 13 07:53	9° $\mathbb{X}$ 44'31	
min. Earth dist.	10311 Mar 05 21:49	20° $\mathbb{X}$ 58'55	0.67649 AU	min. Earth dist.	10312 Feb 17 11:02	5° $\mathbb{X}$ 28'57	0.66566 AU
inferior conj	10311 Mar 07 04:33	19° $\mathbb{X}$ 19'36	1°12'42	asc. node	10312 Feb 18 05:47	4° $\mathbb{X}$ 32'32	
minimum elong	10311 Mar 07 02:55	19° $\mathbb{X}$ 24'53	1°12'15	inferior conj	10312 Feb 19 05:31	3° $\mathbb{X}$ 20'21	0°19'24
morning rise	10311 Mar 12 17:43	13° $\mathbb{X}$ 26'05		minimum elong	10312 Feb 19 05:00	3° $\mathbb{X}$ 21'56	0°19'27
direct	10311 Mar 16 05:21	12° $\mathbb{X}$ 16'20			10312 Feb 22 03:55	30° $\mathbb{R}$ $\approx$	
morning max el	10311 Mar 23 05:40	16° $\mathbb{X}$ 07'32	19°15'18	morning rise	10312 Feb 25 03:01	27° $\approx$ 36'54	
	10311 Apr 02 23:50	0° $\mathbb{Y}$		direct	10312 Feb 28 03:52	26° $\approx$ 45'05	
greatest brilliancy	10311 Apr 05 03:45	3° $\mathbb{Y}$ 11'59	-0.7m		10312 Mar 05 10:27	0° $\mathbb{X}$	
desc. node	10311 Apr 06 05:49	4° $\mathbb{Y}$ 49'40		morning max el	10312 Mar 05 16:58	0° $\mathbb{X}$ 15'46	18°28'56
morning set	10311 Apr 16 06:44	20° $\mathbb{Y}$ 10'37		desc. node	10312 Mar 23 02:35	25° $\mathbb{X}$ 01'08	
	10311 Apr 22 14:52	0° $\mathbb{B}$		morning set	10312 Mar 26 03:29	29° $\mathbb{X}$ 49'30	
max. Earth dist.	10311 Apr 29 11:57	10° $\mathbb{B}$ 45'25	1.45098 AU		10312 Mar 26 06:08	0° $\mathbb{Y}$	
superior conj	10311 May 02 19:14	15° $\mathbb{B}$ 58'40	-2°11'35	superior conj	10312 Apr 11 02:10	24° $\mathbb{Y}$ 53'34	-1°53'40
minimum elong	10311 May 02 16:24	15° $\mathbb{B}$ 47'29	2°11'50	minimum elong	10312 Apr 10 17:18	24° $\mathbb{Y}$ 18'54	1°53'10
	10311 May 11 12:36	0° $\mathbb{I}$		max. Earth dist.	10312 Apr 11 06:12	25° $\mathbb{Y}$ 09'20	1.45629 AU
evening rise	10311 May 17 05:51	9° $\mathbb{I}$ 23'10			10312 Apr 14 08:33	0° $\mathbb{B}$	
asc. node	10311 May 30 06:47	0° $\mathbb{E}$ 24'27		evening rise	10312 Apr 26 20:23	19° $\mathbb{B}$ 38'45	
	10311 May 30 00:11	0° $\mathbb{E}$			10312 May 03 09:31	0° $\mathbb{I}$	
evening max el	10311 Jun 05 11:23	8° $\mathbb{E}$ 16'51	18°20'13	greatest brilliancy	10312 May 06 01:37	4° $\mathbb{I}$ 11'18	-0.8m
retrograde	10311 Jun 11 20:56	11° $\mathbb{E}$ 42'12		asc. node	10312 May 16 03:53	18° $\mathbb{I}$ 46'45	
evening set	10311 Jun 14 21:32	10° $\mathbb{E}$ 52'03		evening max el	10312 May 18 22:15	21° $\mathbb{I}$ 53'49	18°52'59
inferior conj	10311 Jun 20 18:24	5° $\mathbb{E}$ 25'27	2°58'05	retrograde	10312 May 25 15:32	25° $\mathbb{I}$ 36'42	
minimum elong	10311 Jun 20 20:23	5° $\mathbb{E}$ 19'41	2°57'18	evening set	10312 May 29 00:12	24° $\mathbb{I}$ 31'32	
min. Earth dist.	10311 Jun 23 03:14	2° $\mathbb{E}$ 41'37	0.64247 AU	inferior conj	10312 Jun 03 13:22	18° $\mathbb{I}$ 49'15	3°15'21
	10311 Jun 25 18:04	30° $\mathbb{R}$ $\mathbb{I}$		minimum elong	10312 Jun 03 14:12	18° $\mathbb{I}$ 46'40	3°14'50
morning rise	10311 Jun 26 18:00	29° $\mathbb{I}$ 08'27		min. Earth dist.	10312 Jun 05 07:11	16° $\mathbb{I}$ 37'59	0.65993 AU
direct	10311 Jul 03 09:46	26° $\mathbb{I}$ 28'25		morning rise	10312 Jun 09 03:32	12° $\mathbb{I}$ 28'45	
desc. node	10311 Jul 03 05:49	26° $\mathbb{I}$ 28'31		direct	10312 Jun 15 12:46	9° $\mathbb{I}$ 44'12	
	10311 Jul 12 01:19	0° $\mathbb{E}$		desc. node	10312 Jun 19 02:51	10° $\mathbb{I}$ 28'08	
morning max el	10311 Jul 17 03:24	4° $\mathbb{E}$ 29'29	27°31'34	morning max el	10312 Jun 28 14:03	17° $\mathbb{I}$ 30'07	26°36'25
	10311 Aug 05 09:42	0° $\mathbb{O}$			10312 Jul 09 00:37	0° $\mathbb{E}$	
morning set	10311 Aug 21 06:35	28° $\mathbb{O}$ 07'21			10312 Jul 28 08:02	0° $\mathbb{O}$	
	10311 Aug 22 05:18	0° $\mathbb{M}$		morning set	10312 Aug 03 11:28	11° $\mathbb{O}$ 11'21	
max. Earth dist.	10311 Aug 26 00:43	7° $\mathbb{M}$ 46'26	1.32950 AU	max. Earth dist.	10312 Aug 07 13:26	19° $\mathbb{O}$ 05'32	1.34419 AU
asc. node	10311 Aug 26 06:31	8° $\mathbb{M}$ 16'41		superior conj	10312 Aug 12 07:27	28° $\mathbb{O}$ 43'47	0°01'41
superior conj	10311 Aug 29 08:21	14° $\mathbb{M}$ 47'27	0°30'09	minimum elong	10312 Aug 12 07:22	28° $\mathbb{O}$ 43'23	0°01'23
minimum elong	10311 Aug 29 06:56	14° $\mathbb{M}$ 39'53	0°29'42	behind sun begin	10312 Aug 12 01:34	28° $\mathbb{O}$ 13'21	
evening rise	10311 Sep 05 09:22	29° $\mathbb{M}$ 57'37		behind sun end	10312 Aug 12 13:10	29° $\mathbb{O}$ 13'29	
	10311 Sep 05 09:49	0° $\mathbb{L}$		asc. node	10312 Aug 12 03:22	28° $\mathbb{O}$ 22'38	
	10311 Sep 22 06:43	0° $\mathbb{L}$			10312 Aug 12 22:08	0° $\mathbb{M}$	
evening max el	10311 Sep 27 08:37	5° $\mathbb{L}$ 48'44	22°39'51	evening rise	10312 Aug 19 18:57	14° $\mathbb{M}$ 25'38	
desc. node	10311 Sep 29 03:49	7° $\mathbb{L}$ 27'23			10312 Aug 27 16:32	0° $\mathbb{L}$	
retrograde	10311 Oct 10 11:11	12° $\mathbb{L}$ 20'33		evening max el	10312 Sep 08 03:03	16° $\mathbb{L}$ 11'25	21°06'06
evening set	10311 Oct 14 02:00	11° $\mathbb{L}$ 51'50		desc. node	10312 Sep 15 01:05	21° $\mathbb{L}$ 03'22	

































































































































retrograde	10312 Sep 19 23:05	22°♄03'36		retrograde	10313 Aug 31 14:17	2°♄16'44	
evening set	10312 Sep 22 08:25	21°♄50'13		desc. node	10313 Sep 01 22:21	2°♄11'51	
inferior conj	10312 Oct 01 11:55	17°♄54'43	-4°36'38	evening set	10313 Sep 02 11:22	2°♄07'09	
minimum elong	10312 Oct 01 02:11	18°♄08'28	4°34'04		10313 Sep 08 03:26	30°♄	
min. Earth dist.	10312 Oct 02 00:22	17°♄37'10	0.54620 AU	inferior conj	10313 Sep 11 09:27	28°♄05'42	-2°53'27
morning rise	10312 Oct 09 20:20	14°♄01'30		minimum elong	10313 Sep 11 01:44	28°♄17'32	2°50'43
direct	10312 Oct 13 18:34	13°♄28'19		min. Earth dist.	10313 Sep 13 10:24	26°♄50'42	0.55196 AU
morning max el	10312 Oct 26 15:09	19°♄37'41	22°45'30	morning rise	10313 Sep 19 14:26	23°♄47'34	
	10312 Nov 04 04:40	0°♄		direct	10313 Sep 24 07:59	22°♄58'27	
asc. node	10312 Nov 08 03:47	6°♄18'39		morning max el	10313 Oct 08 02:39	29°♄47'26	24°32'42
morning set	10312 Nov 18 01:23	25°♄31'05			10313 Oct 08 07:56	0°♄	
	10312 Nov 20 03:48	0°♄		asc. node	10313 Oct 26 00:41	25°♄11'04	
					10313 Oct 28 13:04	0°♄	
superior conj	10312 Nov 25 01:23	10°♄32'06	1°39'04	morning set	10313 Nov 02 13:12	10°♄18'25	
minimum elong	10312 Nov 25 02:02	10°♄35'33	1°39'29				
max. Earth dist.	10312 Nov 28 08:27	17°♄28'52	1.33803 AU	superior conj	10313 Nov 09 09:32	25°♄14'16	1°39'24
evening rise	10312 Dec 02 23:51	26°♄51'41		minimum elong	10313 Nov 09 09:01	25°♄11'27	1°39'47
	10312 Dec 04 14:41	0°♄		max. Earth dist.	10313 Nov 11 09:20	29°♄34'21	1.32557 AU
desc. node	10312 Dec 11 23:15	13°♄21'59			10313 Nov 11 14:05	0°♄	
	10312 Dec 22 11:39	0°♄		evening rise	10313 Nov 16 17:46	10°♄50'22	
evening max el	10313 Jan 06 15:36	18°♄34'33	27°11'08		10313 Nov 26 21:43	0°♄	
retrograde	10313 Jan 20 02:04	25°♄57'08		desc. node	10313 Nov 28 20:20	3°♄18'04	
evening set	10313 Jan 26 19:28	23°♄23'18			10313 Dec 18 08:29	0°♄	
min. Earth dist.	10313 Jan 30 17:26	19°♄41'00	0.65118 AU	evening max el	10313 Dec 20 03:29	1°♄46'24	27°30'30
inferior conj	10313 Feb 01 23:33	17°♄10'45	-0°42'38	retrograde	10314 Jan 02 20:57	9°♄06'14	
minimum elong	10313 Feb 02 00:48	17°♄07'14	0°41'45	evening set	10314 Jan 09 20:43	6°♄38'02	
asc. node	10313 Feb 04 02:57	14°♄52'51		min. Earth dist.	10314 Jan 13 14:50	3°♄26'15	0.63349 AU
morning rise	10313 Feb 08 07:38	11°♄39'43		inferior conj	10314 Jan 16 07:53	0°♄43'47	-1°52'21
direct	10313 Feb 10 23:24	11°♄02'15		minimum elong	10314 Jan 16 11:32	0°♄34'40	1°50'27
morning max el	10313 Feb 17 08:52	14°♄23'49	17°59'28		10314 Jan 17 01:29	30°♄	
	10313 Feb 28 13:33	0°♄		asc. node	10314 Jan 22 00:07	26°♄00'55	
morning set	10313 Mar 07 05:36	10°♄56'15		morning rise	10314 Jan 23 04:26	25°♄28'22	
desc. node	10313 Mar 09 23:23	15°♄26'44		direct	10314 Jan 25 13:11	25°♄01'27	
	10313 Mar 18 23:02	0°♄		morning max el	10314 Feb 01 02:27	28°♄23'52	17°47'22
					10314 Feb 02 14:21	0°♄	
superior conj	10313 Mar 21 12:39	4°♄05'05	-1°18'47	morning set	10314 Feb 17 10:01	23°♄19'10	
minimum elong	10313 Mar 21 04:10	3°♄31'27	1°17'46		10314 Feb 21 07:04	0°♄	
max. Earth dist.	10313 Mar 25 02:02	9°♄41'52	1.45416 AU	desc. node	10314 Feb 24 20:10	6°♄01'46	
evening rise	10313 Apr 06 15:12	29°♄11'10					
	10313 Apr 07 03:53	0°♄		superior conj	10314 Mar 01 18:29	14°♄14'17	-0°36'16
greatest brilliancy	10313 Apr 20 12:36	20°♄17'18	-0.7m	minimum elong	10314 Mar 01 14:39	13°♄58'34	0°35'32
	10313 Apr 27 10:26	0°♄		max. Earth dist.	10314 Mar 07 20:42	24°♄06'02	1.44486 AU
evening max el	10313 May 02 04:37	5°♄35'13	19°42'10		10314 Mar 11 14:13	0°♄	
asc. node	10313 May 03 01:02	6°♄24'51		evening rise	10314 Mar 17 02:37	8°♄33'51	
retrograde	10313 May 09 13:21	9°♄47'03			10314 Mar 31 10:02	0°♄	
evening set	10313 May 13 06:43	8°♄26'14		evening max el	10314 Apr 15 05:24	19°♄17'41	20°45'32
inferior conj	10313 May 18 15:24	2°♄29'35	3°17'54	asc. node	10314 Apr 19 22:14	23°♄04'59	
minimum elong	10313 May 18 15:03	2°♄30'44	3°17'28	retrograde	10314 Apr 23 12:02	24°♄07'34	
min. Earth dist.	10313 May 19 18:22	0°♄59'43	0.67315 AU	evening set	10314 Apr 27 14:59	22°♄30'57	
	10313 May 20 12:40	30°♄		inferior conj	10314 May 02 21:50	16°♄21'37	3°08'17
morning rise	10313 May 23 23:02	26°♄09'52		minimum elong	10314 May 02 20:32	16°♄26'05	3°07'47
direct	10313 May 29 21:54	23°♄31'30		min. Earth dist.	10314 May 03 10:52	15°♄36'38	0.68181 AU
desc. node	10313 Jun 05 23:52	26°♄21'39		morning rise	10314 May 08 01:52	10°♄05'02	
	10313 Jun 10 05:23	0°♄		direct	10314 May 13 12:03	7°♄41'02	
morning max el	10313 Jun 11 00:00	0°♄46'23	25°20'01	desc. node	10314 May 23 20:49	13°♄39'46	
	10313 Jul 02 23:40	0°♄		morning max el	10314 May 24 09:30	14°♄11'24	23°52'13
morning set	10313 Jul 17 01:01	23°♄30'25			10314 Jun 06 05:49	0°♄	
max. Earth dist.	10313 Jul 20 16:10	0°♄10'27	1.36338 AU		10314 Jun 25 21:11	0°♄	
	10313 Jul 20 13:56	0°♄		morning set	10314 Jun 28 18:09	4°♄50'59	
				max. Earth dist.	10314 Jul 02 13:25	11°♄27'53	1.38557 AU
superior conj	10313 Jul 26 21:24	12°♄10'50	-0°30'04				
minimum elong	10313 Jul 26 23:16	12°♄20'10	0°30'04	superior conj	10314 Jul 09 22:33	24°♄58'50	-1°03'15
asc. node	10313 Jul 30 00:15	18°♄26'39		minimum elong	10314 Jul 10 02:46	25°♄18'43	1°02'59
evening rise	10313 Aug 04 00:36	28°♄39'33			10314 Jul 12 13:39	0°♄	
	10313 Aug 04 16:29	0°♄		asc. node	10314 Jul 16 21:10	8°♄24'11	
evening max el	10313 Aug 21 10:39	27°♄14'33	19°49'36	evening rise	10314 Jul 18 23:35	12°♄31'23	
	10313 Aug 24 17:58	0°♄			10314 Jul 28 11:29	0°♄	

evening max el	10314 Aug 04 07:07	9° $\mathbb{M}$ 03'06	18°54'09		10315 Jul 04 17:24	0° $\mathcal{Q}$	
retrograde	10314 Aug 12 20:45	13° $\mathbb{M}$ 19'21		evening max el	10315 Jul 18 13:12	21° $\mathcal{Q}$ 31'36	18°19'38
evening set	10314 Aug 14 18:40	13° $\mathbb{M}$ 07'23		retrograde	10315 Jul 25 22:11	25° $\mathcal{Q}$ 14'17	
desc. node	10314 Aug 19 19:36	10° $\mathbb{M}$ 57'58		evening set	10315 Jul 28 02:37	24° $\mathcal{Q}$ 55'30	
inferior conj	10314 Aug 23 00:14	8° $\mathbb{M}$ 49'19	-0°59'28	inferior conj	10315 Aug 04 12:45	20° $\mathcal{Q}$ 17'21	0°39'00
minimum elong	10314 Aug 22 21:43	8° $\mathbb{M}$ 53'47	0°58'42	minimum elong	10315 Aug 04 14:04	20° $\mathcal{Q}$ 14'36	0°38'10
min. Earth dist.	10314 Aug 26 00:44	6° $\mathbb{M}$ 41'20	0.56610 AU	desc. node	10315 Aug 06 16:50	18° $\mathcal{Q}$ 28'34	
morning rise	10314 Aug 30 21:32	3° $\mathbb{M}$ 54'14		min. Earth dist.	10315 Aug 07 21:27	17° $\mathcal{Q}$ 30'41	0.58611 AU
direct	10314 Sep 05 10:04	2° $\mathbb{M}$ 41'32		morning rise	10315 Aug 11 22:03	14° $\mathcal{Q}$ 46'41	
morning max el	10314 Sep 19 16:03	10° $\mathbb{M}$ 02'35	26°09'46	direct	10315 Aug 18 02:39	13° $\mathcal{Q}$ 04'27	
	10314 Oct 04 20:34	0° $\mathcal{Q}$		morning max el	10315 Sep 01 11:48	20° $\mathcal{Q}$ 49'05	27°20'14
asc. node	10314 Oct 12 21:34	14° $\mathcal{Q}$ 30'49			10315 Sep 09 10:41	0° $\mathbb{M}$	
morning set	10314 Oct 18 00:07	25° $\mathcal{Q}$ 00'26			10315 Sep 27 16:25	0° $\mathcal{Q}$	
	10314 Oct 20 07:32	0° $\mathbb{M}$		asc. node	10315 Sep 29 18:24	4° $\mathcal{Q}$ 10'00	
				morning set	10315 Oct 02 08:24	9° $\mathcal{Q}$ 31'42	
superior conj	10314 Oct 24 20:28	10° $\mathbb{M}$ 01'57	1°33'48	superior conj	10315 Oct 09 08:14	24° $\mathcal{Q}$ 48'36	1°22'37
minimum elong	10314 Oct 24 19:00	9° $\mathbb{M}$ 53'52	1°33'59	minimum elong	10315 Oct 09 06:10	24° $\mathcal{Q}$ 37'06	1°22'32
max. Earth dist.	10314 Oct 25 16:11	11° $\mathbb{M}$ 51'15	1.31772 AU	max. Earth dist.	10315 Oct 09 01:34	24° $\mathcal{Q}$ 11'33	1.31465 AU
evening rise	10314 Oct 31 19:27	25° $\mathbb{M}$ 08'40			10315 Oct 11 16:14	0° $\mathbb{M}$	
	10314 Nov 03 03:58	0° $\mathcal{Q}$		evening rise	10315 Oct 16 02:25	9° $\mathbb{M}$ 39'19	
desc. node	10314 Nov 15 17:28	22° $\mathcal{Q}$ 46'00			10315 Oct 26 11:35	0° $\mathcal{Q}$	
	10314 Nov 20 12:14	0° $\mathcal{Q}$		desc. node	10315 Nov 02 14:38	11° $\mathcal{Q}$ 33'54	
evening max el	10314 Dec 02 11:19	14° $\mathcal{Q}$ 21'29	27°18'16	evening max el	10315 Nov 14 12:24	26° $\mathcal{Q}$ 08'07	26°31'55
retrograde	10314 Dec 16 08:16	21° $\mathcal{Q}$ 35'15			10315 Nov 19 06:23	0° $\mathcal{Q}$	
evening set	10314 Dec 23 08:27	19° $\mathcal{Q}$ 21'29		retrograde	10315 Nov 28 10:46	3° $\mathcal{Q}$ 15'02	
min. Earth dist.	10314 Dec 27 01:45	16° $\mathcal{Q}$ 33'51	0.61336 AU	evening set	10315 Dec 05 02:25	1° $\mathcal{Q}$ 25'44	
inferior conj	10314 Dec 30 03:23	13° $\mathcal{Q}$ 51'25	-3°06'53		10315 Dec 07 10:51	30° $\mathcal{R}$ 7	
minimum elong	10314 Dec 30 09:36	13° $\mathcal{Q}$ 37'38	3°04'09	min. Earth dist.	10315 Dec 09 02:06	28° $\mathcal{Q}$ 50'14	0.59217 AU
morning rise	10315 Jan 06 13:19	8° $\mathcal{Q}$ 54'57		inferior conj	10315 Dec 12 06:24	26° $\mathcal{Q}$ 23'21	-4°19'52
direct	10315 Jan 08 17:37	8° $\mathcal{Q}$ 35'02		minimum elong	10315 Dec 12 14:17	26° $\mathcal{Q}$ 08'08	4°17'10
asc. node	10315 Jan 08 21:15	8° $\mathcal{Q}$ 35'08		morning rise	10315 Dec 20 04:49	21° $\mathcal{Q}$ 48'33	
morning max el	10315 Jan 15 18:33	12° $\mathcal{Q}$ 07'48	17°53'21	direct	10315 Dec 22 08:21	21° $\mathcal{Q}$ 32'15	
	10315 Jan 27 18:03	0° $\mathcal{Q}$		asc. node	10315 Dec 26 18:20	22° $\mathcal{Q}$ 45'16	
morning set	10315 Jan 31 10:15	6° $\mathcal{Q}$ 38'07		morning max el	10315 Dec 30 05:29	25° $\mathcal{Q}$ 24'49	18°18'47
superior conj	10315 Feb 11 01:28	25° $\mathcal{Q}$ 35'44	0°04'55		10316 Jan 03 02:31	0° $\mathcal{Q}$	
minimum elong	10315 Feb 11 01:56	25° $\mathcal{Q}$ 37'43	0°05'10	morning set	10316 Jan 15 00:26	20° $\mathcal{Q}$ 34'47	
behind sun begin	10315 Feb 10 17:59	25° $\mathcal{Q}$ 03'19			10316 Jan 19 23:35	0° $\mathcal{Q}$	
behind sun end	10315 Feb 11 09:53	26° $\mathcal{Q}$ 12'01		superior conj	10316 Jan 24 07:20	8° $\mathcal{Q}$ 01'00	0°39'46
desc. node	10315 Feb 11 16:58	26° $\mathcal{Q}$ 42'32		minimum elong	10316 Jan 24 10:00	8° $\mathcal{Q}$ 13'13	0°39'46
	10315 Feb 13 15:13	0° $\mathcal{H}$		desc. node	10316 Jan 29 13:48	17° $\mathcal{Q}$ 24'50	
max. Earth dist.	10315 Feb 18 11:31	8° $\mathcal{H}$ 04'36	1.42938 AU	max. Earth dist.	10316 Jan 31 21:03	21° $\mathcal{Q}$ 22'53	1.40955 AU
evening rise	10315 Feb 24 21:54	18° $\mathcal{H}$ 23'54		evening rise	10316 Feb 05 11:27	29° $\mathcal{Q}$ 04'14	
	10315 Mar 04 10:55	0° $\mathcal{Y}$			10316 Feb 06 01:07	0° $\mathcal{H}$	
	10315 Mar 26 05:45	0° $\mathcal{Q}$			10316 Feb 25 23:47	0° $\mathcal{Y}$	
evening max el	10315 Mar 29 00:48	3° $\mathcal{Q}$ 01'24	21°59'35	evening max el	10316 Mar 10 16:17	16° $\mathcal{Y}$ 47'02	23°19'29
asc. node	10315 Apr 06 19:27	8° $\mathcal{Q}$ 32'12		retrograde	10316 Mar 21 05:08	23° $\mathcal{Y}$ 00'36	
retrograde	10315 Apr 07 09:49	8° $\mathcal{Q}$ 33'58		asc. node	10316 Mar 23 16:41	22° $\mathcal{Y}$ 31'00	
evening set	10315 Apr 11 23:18	6° $\mathcal{Q}$ 42'02		evening set	10316 Mar 26 06:01	20° $\mathcal{Y}$ 54'25	
inferior conj	10315 Apr 17 06:33	0° $\mathcal{Q}$ 22'21	2°48'08	min. Earth dist.	10316 Mar 31 03:29	15° $\mathcal{Y}$ 09'12	0.68554 AU
minimum elong	10315 Apr 17 04:36	0° $\mathcal{Q}$ 29'07	2°47'31	inferior conj	10316 Mar 31 15:31	14° $\mathcal{Y}$ 27'41	2°18'20
min. Earth dist.	10315 Apr 17 06:39	0° $\mathcal{Q}$ 21'58	0.68591 AU	minimum elong	10316 Mar 31 13:19	14° $\mathcal{Y}$ 35'15	2°17'39
	10315 Apr 17 12:57	30° $\mathcal{R}$ 7		morning rise	10316 Apr 05 20:34	8° $\mathcal{Y}$ 21'35	
morning rise	10315 Apr 22 09:46	24° $\mathcal{Y}$ 10'22		direct	10316 Apr 10 03:44	6° $\mathcal{Y}$ 38'35	
direct	10315 Apr 27 06:22	22° $\mathcal{Y}$ 05'48		morning max el	10316 Apr 18 13:16	11° $\mathcal{Y}$ 27'57	20°59'51
morning max el	10315 May 06 20:52	27° $\mathcal{Y}$ 44'47	22°22'45	desc. node	10316 Apr 26 14:31	21° $\mathcal{Y}$ 04'30	
	10315 May 08 23:55	0° $\mathcal{Q}$			10316 May 03 00:30	0° $\mathcal{Q}$	
desc. node	10315 May 10 17:42	1° $\mathcal{Q}$ 59'52		morning set	10316 May 19 00:04	24° $\mathcal{Q}$ 03'53	
	10315 May 30 20:48	0° $\mathbb{I}$			10316 May 22 18:18	0° $\mathbb{I}$	
morning set	10315 Jun 09 10:05	15° $\mathbb{I}$ 02'06		max. Earth dist.	10316 May 26 15:46	6° $\mathbb{I}$ 16'14	1.42886 AU
max. Earth dist.	10315 Jun 14 11:45	23° $\mathbb{I}$ 25'47	1.40834 AU				
	10315 Jun 18 07:50	0° $\mathcal{Q}$		superior conj	10316 Jun 02 17:22	18° $\mathbb{I}$ 00'19	-2°00'00
superior conj	10315 Jun 22 06:42	6° $\mathcal{Q}$ 58'26	-1°34'48	minimum elong	10316 Jun 02 23:12	18° $\mathbb{I}$ 25'06	2°00'04
minimum elong	10315 Jun 22 12:48	7° $\mathcal{Q}$ 25'44	1°34'32		10316 Jun 09 15:43	0° $\mathcal{Q}$	
evening rise	10315 Jul 02 12:33	25° $\mathcal{Q}$ 52'50		evening rise	10316 Jun 14 11:16	8° $\mathcal{Q}$ 33'41	
asc. node	10315 Jul 03 18:07	28° $\mathcal{Q}$ 11'23		asc. node	10316 Jun 19 15:07	17° $\mathcal{Q}$ 43'45	

	10316 Jun 27 06:24	0°♎		evening rise	10317 May 27 14:48	20°♊22'05	
evening max el	10316 Jul 01 01:00	4°♎31'03	18°05'04		10317 Jun 02 07:06	0°♊	
retrograde	10316 Jul 07 16:34	7°♎55'13		asc. node	10317 Jun 06 12:10	6°♊54'54	
evening set	10316 Jul 10 04:53	7°♎26'03		evening max el	10317 Jun 14 14:47	17°♊51'07	18°09'27
inferior conj	10316 Jul 16 21:34	2°♎27'56	1°51'58	retrograde	10317 Jun 20 23:36	21°♊11'45	
minimum elong	10316 Jul 17 00:19	2°♎21'18	1°50'43	evening set	10317 Jun 23 19:50	20°♊29'35	
	10316 Jul 19 11:01	30°♋♊		inferior conj	10317 Jun 29 22:46	15°♊12'53	2°40'06
min. Earth dist.	10316 Jul 20 02:08	29°♊24'57	0.60872 AU	minimum elong	10317 Jun 30 01:18	15°♊06'00	2°39'05
morning rise	10316 Jul 23 17:03	26°♊31'32		min. Earth dist.	10317 Jul 02 15:48	12°♊16'42	0.63089 AU
desc. node	10316 Jul 23 13:59	26°♊36'36		morning rise	10317 Jul 06 05:05	9°♊01'10	
direct	10316 Jul 30 07:42	24°♊20'28		desc. node	10317 Jul 10 11:07	6°♊48'49	
	10316 Aug 11 02:45	0°♎		direct	10317 Jul 12 22:26	6°♊28'47	
morning max el	10316 Aug 13 14:22	2°♎19'02	27°54'16	morning max el	10317 Jul 26 22:03	14°♊31'19	27°49'57
	10316 Sep 02 20:50	0°♎			10317 Aug 08 11:06	0°♎	
morning set	10316 Sep 15 12:13	23°♎47'15			10317 Aug 26 11:21	0°♎	
asc. node	10316 Sep 15 15:12	24°♎02'47		morning set	10317 Aug 30 09:21	7°♎40'34	
	10316 Sep 18 10:51	0°♎		asc. node	10317 Sep 02 12:01	14°♎03'47	
max. Earth dist.	10316 Sep 21 09:48	6°♎25'39	1.31650 AU	max. Earth dist.	10317 Sep 04 13:09	18°♎23'20	1.32337 AU
superior conj	10316 Sep 22 19:03	9°♎28'56	1°06'10	superior conj	10317 Sep 07 03:00	23°♎56'37	0°44'40
minimum elong	10316 Sep 22 16:49	9°♎16'34	1°05'50	minimum elong	10317 Sep 07 01:07	23°♎46'22	0°44'12
evening rise	10316 Sep 29 12:36	24°♎16'40			10317 Sep 09 21:36	0°♎	
	10316 Oct 02 05:38	0°♎		evening rise	10317 Sep 14 00:03	8°♎54'35	
desc. node	10316 Oct 19 11:50	29°♎26'08			10317 Sep 24 19:30	0°♎	
	10316 Oct 19 22:18	0°♎		desc. node	10317 Oct 06 09:04	16°♎00'46	
evening max el	10316 Oct 26 05:27	7°♎03'47	25°14'39	evening max el	10317 Oct 07 16:38	17°♎20'16	23°37'42
retrograde	10316 Nov 09 02:25	14°♎02'29		retrograde	10317 Oct 21 05:07	24°♎05'06	
evening set	10316 Nov 14 21:53	12°♎45'40		evening set	10317 Oct 25 16:54	23°♎21'12	
min. Earth dist.	10316 Nov 19 17:31	10°♎05'22	0.57216 AU	min. Earth dist.	10317 Nov 01 02:48	20°♎17'42	0.55621 AU
inferior conj	10316 Nov 22 13:53	8°♎10'55	-5°18'54	inferior conj	10317 Nov 03 01:02	19°♎09'07	-5°44'43
minimum elong	10316 Nov 22 20:22	8°♎00'02	5°17'25	minimum elong	10317 Nov 03 01:17	19°♎08'46	5°44'23
morning rise	10316 Nov 30 21:08	3°♎58'19		morning rise	10317 Nov 11 11:32	15°♎15'16	
direct	10316 Dec 03 05:26	3°♎42'09		direct	10317 Nov 14 07:19	14°♎55'31	
morning max el	10316 Dec 12 07:22	8°♎04'05	19°05'33	morning max el	10317 Nov 24 20:44	19°♎55'11	20°15'11
asc. node	10316 Dec 12 15:21	8°♎23'35		asc. node	10317 Nov 29 12:18	25°♎14'39	
	10316 Dec 26 11:40	0°♎			10317 Dec 02 18:20	0°♎	
morning set	10316 Dec 29 00:10	4°♎56'47		morning set	10317 Dec 13 06:12	19°♎34'25	
					10317 Dec 18 07:52	0°♎	
superior conj	10317 Jan 06 07:22	21°♎16'55	1°06'30	superior conj	10317 Dec 20 20:52	5°♎10'09	1°25'02
minimum elong	10317 Jan 06 10:28	21°♎31'51	1°06'33	minimum elong	10317 Dec 20 23:21	5°♎22'36	1°25'16
	10317 Jan 10 22:33	0°♎		max. Earth dist.	10317 Dec 26 10:22	16°♎05'10	1.36616 AU
max. Earth dist.	10317 Jan 13 03:13	3°♎59'20	1.38769 AU	evening rise	10317 Dec 30 05:42	23°♎10'21	
desc. node	10317 Jan 15 10:41	8°♎05'19		desc. node	10318 Jan 02 07:37	28°♎40'10	
evening rise	10317 Jan 16 22:39	10°♎41'36			10318 Jan 03 01:57	0°♎	
	10317 Jan 28 20:29	0°♎			10318 Jan 22 14:15	0°♎	
evening max el	10317 Feb 20 15:37	0°♎		evening max el	10318 Feb 03 19:25	14°♎25'39	25°50'47
retrograde	10317 Mar 04 20:37	7°♎22'32		retrograde	10318 Feb 16 07:21	21°♎34'34	
evening set	10317 Mar 10 09:37	5°♎03'50		evening set	10318 Feb 22 08:32	19°♎06'06	
asc. node	10317 Mar 10 13:54	4°♎54'36		asc. node	10318 Feb 25 11:05	15°♎56'09	
	10317 Mar 14 21:09	30°♋♋		min. Earth dist.	10318 Feb 26 15:12	14°♎30'51	0.67238 AU
min. Earth dist.	10317 Mar 14 23:04	29°♋53'37	0.68098 AU	inferior conj	10318 Feb 28 02:51	12°♎38'34	0°51'14
inferior conj	10317 Mar 15 22:55	28°♋34'13	1°39'19	minimum elong	10318 Feb 28 01:37	12°♋42'28	0°50'56
minimum elong	10317 Mar 15 20:56	28°♋40'51	1°38'42	morning rise	10318 Mar 05 19:16	6°♋48'58	
morning rise	10317 Mar 21 08:24	22°♋35'27		direct	10318 Mar 09 02:14	5°♋47'03	
direct	10317 Mar 25 02:53	21°♋13'55		morning max el	10318 Mar 15 20:39	9°♋27'42	18°53'33
morning max el	10317 Apr 01 13:04	25°♋22'37	19°49'05		10318 Mar 30 21:00	0°♎	
	10317 Apr 05 15:27	0°♎		desc. node	10318 Mar 31 08:05	0°♎42'35	
desc. node	10317 Apr 13 11:18	10°♎41'32		morning set	10318 Apr 07 06:20	11°♎26'44	
greatest brilliancy	10317 Apr 14 12:43	12°♎13'59	-0.6m		10318 Apr 19 04:00	0°♎	
	10317 Apr 26 08:10	0°♎		max. Earth dist.	10318 Apr 21 20:14	4°♎11'23	1.45419 AU
morning set	10317 Apr 27 23:05	2°♎29'27					
max. Earth dist.	10317 May 09 03:03	19°♎55'54	1.44473 AU	superior conj	10318 Apr 23 17:07	7°♎07'34	-2°06'27
				minimum elong	10318 Apr 23 11:11	6°♎44'14	2°06'26
superior conj	10317 May 14 03:41	27°♎59'15	-2°12'34		10318 May 08 01:29	0°♎	
minimum elong	10317 May 14 05:06	28°♎05'00	2°12'57	evening rise	10318 May 08 19:12	1°♎11'42	
	10317 May 15 09:27	0°♎		asc. node	10318 May 24 09:15	25°♎37'46	

	10318 May 27 20:00	0°☿		superior conj	10319 Apr 02 23:13	16°♊03'08	-1°40'28
evening max el	10318 May 29 03:29	1°☿23'58	18°32'02	minimum elong	10319 Apr 02 13:40	15°♊25'44	1°39'39
retrograde	10318 Jun 04 15:08	4°☿55'00		max. Earth dist.	10319 Apr 04 15:56	18°♊42'34	1.45630 AU
evening set	10318 Jun 07 19:13	3°☿58'23			10319 Apr 11 21:32	0°♋	
	10318 Jun 12 04:06	30°♋♊		evening rise	10319 Apr 19 00:27	11°♋06'18	
inferior conj	10318 Jun 13 12:22	28°♊24'44	3°07'25	greatest brilliancy	10319 Apr 30 08:52	28°♋41'34	-0.7m
minimum elong	10318 Jun 13 13:53	28°♊20'10	3°06'45		10319 May 01 05:35	0°♌	
min. Earth dist.	10318 Jun 15 14:45	25°♊53'40	0.65043 AU	asc. node	10319 May 11 06:24	13°♌42'34	
morning rise	10318 Jun 19 07:38	22°♊05'46		evening max el	10319 May 12 12:34	15°♌02'49	19°11'54
direct	10318 Jun 25 21:11	19°♊22'45		retrograde	10319 May 19 11:34	18°♌56'58	
desc. node	10318 Jun 27 08:12	19°♊29'58		evening set	10319 May 22 23:51	17°♌45'06	
morning max el	10318 Jul 09 08:30	27°♊18'16	27°11'18	inferior conj	10319 May 28 10:43	11°♌56'13	3°18'03
	10318 Jul 11 21:20	0°☿		minimum elong	10319 May 28 11:02	11°♌55'12	3°17'35
	10318 Aug 02 03:38	0°♍		min. Earth dist.	10319 May 29 22:03	10°♌02'03	0.66610 AU
morning set	10318 Aug 13 21:08	21°♍04'56		morning rise	10319 Jun 02 21:45	5°♌35'31	
	10318 Aug 18 08:36	0°♎		direct	10319 Jun 09 02:46	2°♌52'42	
max. Earth dist.	10318 Aug 18 08:10	29°♍57'48	1.33525 AU	desc. node	10319 Jun 14 05:13	4°♌21'27	
asc. node	10318 Aug 20 08:53	4°♎09'04		morning max el	10319 Jun 21 19:14	10°♌27'25	26°05'57
					10319 Jul 07 06:51	0°☿	
superior conj	10318 Aug 22 06:02	8°♎06'04	0°18'33		10319 Jul 25 17:32	0°♏	
minimum elong	10318 Aug 22 05:07	8°♎01'11	0°18'08	morning set	10319 Jul 27 20:06	3°♏51'19	
evening rise	10318 Aug 29 10:56	23°♎27'56		max. Earth dist.	10319 Jul 31 16:40	11°♏09'39	1.35188 AU
	10318 Sep 01 14:25	0°♐					
evening max el	10318 Sep 19 05:37	27°♐29'19	21°58'11	superior conj	10319 Aug 06 01:37	21°♏50'37	-0°11'30
	10318 Sep 22 02:23	0°♑		minimum elong	10319 Aug 06 02:18	21°♏54'06	0°11'41
desc. node	10318 Sep 23 06:19	0°♑50'37		behind sun begin	10319 Aug 05 22:07	21°♏32'47	
retrograde	10318 Oct 01 20:36	3°♑46'15		behind sun end	10319 Aug 06 06:29	22°♏15'28	
evening set	10318 Oct 04 21:28	3°♑25'37		asc. node	10319 Aug 07 05:46	24°♏14'37	
	10318 Oct 12 21:13	30°♑♐			10319 Aug 10 00:33	0°♒	
inferior conj	10318 Oct 13 20:53	29°♐26'55	-5°17'54	evening rise	10319 Aug 13 19:10	7°♒50'49	
minimum elong	10318 Oct 13 13:18	29°♐37'32	5°16'27		10319 Aug 25 18:25	0°♓	
min. Earth dist.	10318 Oct 13 09:56	29°♐42'14	0.54728 AU	evening max el	10319 Sep 01 05:12	8°♓06'57	20°31'03
morning rise	10318 Oct 22 06:32	25°♐39'39		desc. node	10319 Sep 10 03:34	13°♓26'11	
direct	10318 Oct 25 18:25	25°♐12'46		retrograde	10319 Sep 12 08:51	13°♓38'59	
	10318 Nov 05 19:49	0°♑		evening set	10319 Sep 14 10:40	13°♓28'18	
morning max el	10318 Nov 06 20:39	0°♑55'48	21°46'13	inferior conj	10319 Sep 23 13:40	9°♓31'34	-3°56'24
asc. node	10318 Nov 16 09:15	13°♑03'11		minimum elong	10319 Sep 23 04:01	9°♓45'33	3°53'23
	10318 Nov 25 13:45	0°♒		min. Earth dist.	10319 Sep 24 18:35	8°♓49'38	0.54744 AU
morning set	10318 Nov 27 16:00	4°♒20'16		morning rise	10319 Oct 01 20:56	5°♓29'52	
				direct	10319 Oct 06 02:57	4°♓51'03	
superior conj	10318 Dec 04 19:57	19°♒29'26	1°35'57	morning max el	10319 Oct 19 10:52	11°♓18'15	23°31'21
minimum elong	10318 Dec 04 21:18	19°♒36'32	1°36'20		10319 Nov 02 08:20	0°♑	
max. Earth dist.	10318 Dec 08 22:46	27°♒58'10	1.34716 AU	asc. node	10319 Nov 03 06:11	1°♑35'50	
	10318 Dec 09 23:04	0°♓		morning set	10319 Nov 12 03:37	19°♑09'00	
evening rise	10318 Dec 13 05:07	6°♓21'05			10319 Nov 17 04:08	0°♒	
desc. node	10318 Dec 20 04:37	19°♓04'30					
	10318 Dec 26 19:02	0°♑		superior conj	10319 Nov 19 01:33	4°♒06'11	1°39'58
evening max el	10319 Jan 17 08:50	28°♑08'20	26°47'51	minimum elong	10319 Nov 19 01:42	4°♒06'55	1°40'23
	10319 Jan 19 09:30	0°♒		max. Earth dist.	10319 Nov 21 18:59	9°♒56'13	1.33209 AU
retrograde	10319 Jan 30 12:34	5°♒28'57		evening rise	10319 Nov 26 17:17	20°♒05'14	
evening set	10319 Feb 06 00:52	2°♒55'03			10319 Dec 01 21:01	0°♓	
	10319 Feb 09 02:07	30°♒♑		desc. node	10319 Dec 07 01:41	9°♓13'08	
min. Earth dist.	10319 Feb 10 01:38	28°♒54'11	0.65993 AU		10319 Dec 20 19:40	0°♑	
inferior conj	10319 Feb 12 01:10	26°♒35'18	-0°05'52	evening max el	10319 Dec 30 21:37	11°♑34'39	27°22'52
minimum elong	10319 Feb 12 01:19	26°♒34'51	0°05'30	retrograde	10320 Jan 13 11:43	18°♑57'33	
transit middle	10319 Feb 12 01:19	26°♒34'51	0°05'30	evening set	10320 Jan 20 08:25	16°♑24'45	
transit begin	10319 Feb 11 22:33	26°♒42'58		min. Earth dist.	10320 Jan 24 04:20	12°♑56'13	0.64398 AU
transit end	10319 Feb 12 04:05	26°♒26'45		inferior conj	10320 Jan 26 15:25	10°♑19'04	-1°11'22
asc. node	10319 Feb 12 08:17	26°♒14'31		minimum elong	10320 Jan 26 17:38	10°♑13'11	1°10'04
morning rise	10319 Feb 18 02:56	20°♑57'02		asc. node	10320 Jan 30 05:26	6°♑48'41	
direct	10319 Feb 20 23:45	20°♑11'44		morning rise	10320 Feb 02 04:39	4°♑54'37	
morning max el	10319 Feb 27 10:18	23°♑36'53	18°14'26	direct	10320 Feb 04 17:06	4°♑22'12	
	10319 Mar 04 16:34	0°♒		morning max el	10320 Feb 11 03:22	7°♑43'00	17°52'14
desc. node	10319 Mar 08 04:52	21°♒00'34			10320 Feb 26 04:51	0°♒	
morning set	10319 Mar 18 15:26	21°♒43'04		morning set	10320 Feb 28 05:25	3°♒24'11	
	10319 Mar 23 19:27	0°♑		desc. node	10320 Mar 04 01:41	11°♒30'43	

superior conj	10320 Mar 12 16:36	25° $\Upsilon$ 36'07	-1°01'06			10321 Feb 17 16:26	0° $\Upsilon$	
minimum elong	10320 Mar 12 09:54	25° $\Upsilon$ 09'11	1°00'08	desc. node		10321 Feb 18 22:29	2° $\Upsilon$ 08'24	
	10320 Mar 15 10:41	0° $\Upsilon$						
max. Earth dist.	10320 Mar 17 11:13	3° $\Upsilon$ 12'06	1.45100 AU	superior conj		10321 Feb 21 08:57	6° $\Upsilon$ 15'26	-0°18'16
evening rise	10320 Mar 28 14:14	20° $\Upsilon$ 29'30		minimum elong		10321 Feb 21 07:10	6° $\Upsilon$ 07'55	0°17'45
	10320 Apr 03 19:57	0° $\Upsilon$		max. Earth dist.		10321 Feb 28 03:54	17° $\Upsilon$ 24'56	1.43891 AU
greatest brilliancy	10320 Apr 12 14:33	13° $\Upsilon$ 04'07	-0.6m	evening rise		10321 Mar 08 03:10	29° $\Upsilon$ 59'20	
evening max el	10320 Apr 24 16:33	28° $\Upsilon$ 44'29	20°07'30			10321 Mar 08 03:20	0° $\Upsilon$	
	10320 Apr 26 00:07	0° $\Upsilon$				10321 Mar 28 11:58	0° $\Upsilon$	
asc. node	10320 Apr 27 03:34	0° $\Upsilon$ 57'45		evening max el		10321 Apr 07 14:58	12° $\Upsilon$ 27'42	21°16'04
retrograde	10320 May 02 10:07	3° $\Upsilon$ 12'04		asc. node		10321 Apr 14 00:44	17° $\Upsilon$ 08'57	
evening set	10320 May 06 07:21	1° $\Upsilon$ 44'40		retrograde		10321 Apr 16 08:34	17° $\Upsilon$ 35'33	
	10320 May 08 04:51	30° $\Upsilon$ 8		evening set		10321 Apr 20 15:48	15° $\Upsilon$ 52'34	
inferior conj	10320 May 11 14:56	25° $\Upsilon$ 42'17	3°15'11	inferior conj		10321 Apr 25 22:35	9° $\Upsilon$ 38'42	3°00'57
minimum elong	10320 May 11 14:09	25° $\Upsilon$ 44'56	3°14'45	minimum elong		10321 Apr 25 20:59	9° $\Upsilon$ 44'18	3°00'25
min. Earth dist.	10320 May 12 11:53	24° $\Upsilon$ 31'09	0.67739 AU	min. Earth dist.		10321 Apr 26 06:07	9° $\Upsilon$ 12'33	0.68409 AU
morning rise	10320 May 16 20:41	19° $\Upsilon$ 23'22		morning rise		10321 May 01 01:56	3° $\Upsilon$ 23'48	
direct	10320 May 22 14:16	16° $\Upsilon$ 50'13		direct		10321 May 06 06:28	1° $\Upsilon$ 07'18	
desc. node	10320 May 31 02:12	20° $\Upsilon$ 53'56		morning max el		10321 May 16 14:42	7° $\Upsilon$ 16'21	23°13'47
morning max el	10320 Jun 03 04:57	23° $\Upsilon$ 48'21	24°43'22	desc. node		10321 May 17 23:08	8° $\Upsilon$ 40'54	
	10320 Jun 08 17:17	0° $\Upsilon$				10321 Jun 03 07:03	0° $\Upsilon$	
	10320 Jun 29 16:17	0° $\Upsilon$		morning set		10321 Jun 20 08:38	26° $\Upsilon$ 40'16	
morning set	10320 Jul 09 01:39	15° $\Upsilon$ 47'28				10321 Jun 22 08:01	0° $\Upsilon$	
max. Earth dist.	10320 Jul 12 16:01	22° $\Upsilon$ 14'45	1.37253 AU	max. Earth dist.		10321 Jun 24 12:34	3° $\Upsilon$ 45'30	1.39534 AU
	10320 Jul 16 19:50	0° $\Upsilon$						
superior conj	10320 Jul 19 10:37	5° $\Upsilon$ 02'04	-0°44'08	superior conj		10321 Jul 02 05:11	17° $\Upsilon$ 31'39	-1°17'03
minimum elong	10320 Jul 19 13:28	5° $\Upsilon$ 15'57	0°44'00	minimum elong		10321 Jul 02 10:19	17° $\Upsilon$ 55'22	1°16'46
asc. node	10320 Jul 24 02:41	14° $\Upsilon$ 16'12		asc. node		10321 Jul 08 19:37	0° $\Upsilon$	
evening rise	10320 Jul 27 22:20	21° $\Upsilon$ 56'06		evening rise		10321 Jul 10 23:37	4° $\Upsilon$ 10'13	
	10320 Aug 01 00:40	0° $\Upsilon$				10321 Jul 11 17:33	5° $\Upsilon$ 36'33	
evening max el	10320 Aug 13 18:37	19° $\Upsilon$ 29'54	19°23'27	evening max el		10321 Jul 26 07:30	0° $\Upsilon$	
retrograde	10320 Aug 23 05:26	24° $\Upsilon$ 11'20		retrograde		10321 Jul 27 19:48	1° $\Upsilon$ 37'30	18°36'58
evening set	10320 Aug 25 01:34	24° $\Upsilon$ 01'28		evening set		10321 Aug 04 19:38	5° $\Upsilon$ 37'10	
desc. node	10320 Aug 27 00:49	23° $\Upsilon$ 30'24		desc. node		10321 Aug 06 20:08	5° $\Upsilon$ 22'43	
inferior conj	10320 Sep 02 17:32	19° $\Upsilon$ 54'13	-2°04'30	inferior conj		10321 Aug 13 22:02	1° $\Upsilon$ 32'58	
minimum elong	10320 Sep 02 11:58	20° $\Upsilon$ 03'15	2°02'29	minimum elong		10321 Aug 14 17:27	0° $\Upsilon$ 56'27	-0°14'54
min. Earth dist.	10320 Sep 05 06:34	18° $\Upsilon$ 15'16	0.55701 AU	transit middle		10321 Aug 14 16:51	0° $\Upsilon$ 57'35	0°14'57
morning rise	10320 Sep 10 19:46	15° $\Upsilon$ 20'39		transit begin		10321 Aug 14 16:51	0° $\Upsilon$ 57'35	0°14'57
direct	10320 Sep 15 21:32	14° $\Upsilon$ 22'15		transit end		10321 Aug 14 15:29	1° $\Upsilon$ 00'10	
morning max el	10320 Sep 29 22:26	21° $\Upsilon$ 26'56	25°16'17			10321 Aug 14 18:13	0° $\Upsilon$ 55'00	
	10320 Oct 07 09:37	0° $\Upsilon$		min. Earth dist.		10321 Aug 15 23:02	30° $\Upsilon$ 8	
asc. node	10320 Oct 20 03:04	20° $\Upsilon$ 40'50		morning rise		10321 Aug 17 23:22	28° $\Upsilon$ 29'40	0.57414 AU
	10320 Oct 24 18:50	0° $\Upsilon$		direct		10321 Aug 22 10:06	25° $\Upsilon$ 45'43	
morning set	10320 Oct 26 15:14	3° $\Upsilon$ 54'28				10321 Aug 28 06:21	24° $\Upsilon$ 20'35	
				morning max el		10321 Sep 09 12:51	0° $\Upsilon$	
superior conj	10320 Nov 02 11:08	18° $\Upsilon$ 51'35	1°37'44			10321 Sep 11 14:00	1° $\Upsilon$ 52'24	26°43'38
minimum elong	10320 Nov 02 10:11	18° $\Upsilon$ 46'22	1°38'02	asc. node		10321 Oct 01 15:36	0° $\Upsilon$	
max. Earth dist.	10320 Nov 03 22:32	22° $\Upsilon$ 05'58	1.32161 AU	morning set		10321 Oct 06 23:57	10° $\Upsilon$ 09'45	
	10320 Nov 07 14:26	0° $\Upsilon$				10321 Oct 11 01:13	18° $\Upsilon$ 32'16	
evening rise	10320 Nov 09 14:50	4° $\Upsilon$ 13'10				10321 Oct 16 07:10	0° $\Upsilon$	
desc. node	10320 Nov 22 22:46	28° $\Upsilon$ 58'12		superior conj		10321 Oct 17 22:38	3° $\Upsilon$ 39'30	1°29'43
	10320 Nov 23 13:55	0° $\Upsilon$		minimum elong		10321 Oct 17 20:53	3° $\Upsilon$ 29'42	1°29'47
evening max el	10320 Dec 12 08:01	24° $\Upsilon$ 32'03	27°29'26	max. Earth dist.		10321 Oct 18 06:51	4° $\Upsilon$ 25'11	1.31588 AU
	10320 Dec 19 14:18	0° $\Upsilon$		evening rise		10321 Oct 24 19:04	18° $\Upsilon$ 37'42	
retrograde	10320 Dec 26 03:45	1° $\Upsilon$ 50'14				10321 Oct 30 09:41	0° $\Upsilon$	
	10321 Jan 01 07:36	30° $\Upsilon$ 8		desc. node		10321 Nov 09 19:54	18° $\Upsilon$ 10'25	
evening set	10321 Jan 02 04:21	29° $\Upsilon$ 27'03				10321 Nov 18 07:41	0° $\Upsilon$	
min. Earth dist.	10321 Jan 05 21:34	26° $\Upsilon$ 26'23	0.62511 AU	evening max el		10321 Nov 24 13:30	6° $\Upsilon$ 48'09	27°02'44
inferior conj	10321 Jan 08 18:41	23° $\Upsilon$ 42'06	-2°23'41	retrograde		10321 Dec 08 11:20	13° $\Upsilon$ 58'23	
minimum elong	10321 Jan 08 23:26	23° $\Upsilon$ 30'46	2°21'22	evening set		10321 Dec 15 09:01	11° $\Upsilon$ 54'17	
morning rise	10321 Jan 15 20:54	18° $\Upsilon$ 34'19		min. Earth dist.		10321 Dec 19 04:05	9° $\Upsilon$ 13'16	0.60438 AU
asc. node	10321 Jan 16 02:35	18° $\Upsilon$ 29'44		inferior conj		10321 Dec 22 07:36	6° $\Upsilon$ 35'44	-3°38'39
direct	10321 Jan 18 03:15	18° $\Upsilon$ 10'56		minimum elong		10321 Dec 22 14:44	6° $\Upsilon$ 20'47	3°35'47
morning max el	10321 Jan 24 20:42	21° $\Upsilon$ 37'01	17°47'35	morning rise		10321 Dec 29 23:03	1° $\Upsilon$ 47'50	
	10321 Jan 31 06:43	0° $\Upsilon$		direct		10322 Jan 01 02:30	1° $\Upsilon$ 29'49	
morning set	10321 Feb 09 19:01	16° $\Upsilon$ 12'52		asc. node		10322 Jan 02 23:42	1° $\Upsilon$ 44'17	

morning max el	10322 Jan 08 10:57	5°  10'04	18°01'37			10322 Dec 31 07:42	0° 	
morning set	10322 Jan 24 01:47	29°  49'37		morning set		10323 Jan 07 20:32	13°  59'10	
	10322 Jan 24 04:01	0° 				10323 Jan 16 04:47	0° 	
superior conj	10322 Feb 03 02:04	18°  04'42	0°20'40	superior conj		10323 Jan 16 16:20	0°  53'59	0°52'08
minimum elong	10322 Feb 03 03:44	18°  12'03	0°20'45	minimum elong		10323 Jan 16 19:22	1°  08'09	0°52'07
desc. node	10322 Feb 05 19:17	22°  49'58		desc. node		10323 Jan 23 16:08	13°  32'16	
	10322 Feb 10 00:20	0° 		max. Earth dist.		10323 Jan 24 01:00	14°  00'58	1.40036 AU
max. Earth dist.	10322 Feb 10 16:38	1°  07'59	1.42138 AU	evening rise		10323 Jan 28 04:08	21°  00'14'03	
evening rise	10322 Feb 16 05:20	10°  08'53				10323 Feb 02 13:02	0° 	
	10322 Mar 01 05:05	0° 				10323 Feb 23 07:19	0° 	
evening max el	10322 Mar 21 08:35	26°  09'12'27	22°33'20	evening max el		10323 Mar 03 23:04	9°  09'59'50	23°53'41
	10322 Mar 25 18:27	0° 		retrograde		10323 Mar 14 23:03	16°  09'28'20	
retrograde	10322 Mar 31 05:18	2°  02'25		asc. node		10323 Mar 18 19:09	15°  09'18'59	
asc. node	10322 Mar 31 21:56	2°  00'04		evening set		10323 Mar 20 05:11	14°  09'16'18	
evening set	10322 Apr 04 23:35	0°  04'18		min. Earth dist.		10323 Mar 24 22:58	8°  04'46'17	0.68413 AU
	10322 Apr 05 01:37	30°  08'09		inferior conj		10323 Mar 25 16:08	7°  04'47'52	2°02'55
inferior conj	10322 Apr 10 07:36	23°  09'41'28	2°36'38	minimum elong		10323 Mar 25 13:58	7°  04'55'16	2°02'13
minimum elong	10322 Apr 10 05:30	23°  09'48'46	2°35'59	morning rise		10323 Mar 30 22:47	1°  04'44'59	
min. Earth dist.	10322 Apr 10 02:30	23°  09'59'12	0.68628 AU	direct		10323 Apr 04 00:26	0° 	
morning rise	10322 Apr 15 11:17	17°  09'32'00		morning max el		10323 Apr 11 23:09	4°  04'41'41	20°28'07
direct	10322 Apr 20 02:14	15°  09'36'19		desc. node		10323 Apr 21 16:48	16°  04'41'17	
morning max el	10322 Apr 29 03:40	20°  09'52'55	21°46'22			10323 Apr 30 21:36	0° 	
desc. node	10322 May 04 19:59	27°  09'21'29		morning set		10323 May 10 18:27	15°  04'00'10	
	10322 May 06 21:32	0° 		max. Earth dist.		10323 May 19 21:01	29°  04'21'47	1.43632 AU
	10322 May 27 12:39	0° 				10323 May 20 06:31	0° 	
morning set	10322 May 31 13:04	6°  02'20'07		superior conj		10323 May 26 05:04	9°  02'42'47	-2°07'17
max. Earth dist.	10322 Jun 06 13:22	16°  02'07'09	1.41753 AU	minimum elong		10323 May 26 09:37	10°  02'11'40	2°07'31
						10323 Jun 07 01:54	0° 	
superior conj	10322 Jun 14 04:43	29°  02'08'07	-1°46'36	evening rise		10323 Jun 07 16:10	1°  02'02'19	
minimum elong	10322 Jun 14 11:06	29°  02'36'02	1°46'26	asc. node		10323 Jun 14 17:33	13°  02'15'58	
	10322 Jun 14 16:34	0° 		evening max el		10323 Jun 24 17:46	27°  02'29'23	18°04'35
evening rise	10322 Jun 25 01:00	18°  02'42'13				10323 Jun 28 00:40	0° 	
asc. node	10322 Jun 27 20:33	23°  02'51'49		retrograde		10323 Jul 01 05:20	0°  02'50'37	
	10322 Jul 01 06:44	0° 		evening set		10323 Jul 03 20:58	0°  02'16'12	
evening max el	10322 Jul 11 04:48	14°  02'20'30	18°11'01			10323 Jul 04 10:49	30°  02'08'00	
retrograde	10322 Jul 18 04:51	17°  02'53'20		inferior conj		10323 Jul 10 07:18	25°  02'09'43	2°15'12
evening set	10322 Jul 20 12:42	17°  02'30'24		minimum elong		10323 Jul 10 10:06	25°  02'02'34	2°14'00
inferior conj	10322 Jul 27 14:58	12°  02'43'15	1°13'08	min. Earth dist.		10323 Jul 13 07:27	22°  02'07'07	0.61833 AU
minimum elong	10322 Jul 27 17:10	12°  02'38'23	1°12'01	morning rise		10323 Jul 16 20:58	19°  02'05'20	
min. Earth dist.	10322 Jul 30 23:00	9°  02'47'05	0.59566 AU	desc. node		10323 Jul 18 16:24	17°  02'59'06	
desc. node	10322 Jul 31 19:15	9°  02'05'34		direct		10323 Jul 23 13:24	16°  02'44'20	
morning rise	10322 Aug 03 18:31	7°  02'00'33		morning max el		10323 Aug 06 18:00	24°  02'46'00	27°57'03
direct	10322 Aug 10 04:15	5°  02'05'50				10323 Aug 11 12:23	0° 	
morning max el	10322 Aug 24 12:43	12°  02'56'28	27°39'27			10323 Aug 31 11:42	0° 	
	10322 Sep 07 01:33	0° 		morning set		10323 Sep 09 09:08	17°  02'04'44	
asc. node	10322 Sep 23 20:47	29°  02'55'28		asc. node		10323 Sep 10 17:35	19°  02'52'25	
	10322 Sep 23 21:39	0° 		max. Earth dist.		10323 Sep 14 23:12	28°  02'54'20	1.31881 AU
morning set	10322 Sep 25 07:50	2°  02'57'34				10323 Sep 15 11:15	0° 	
max. Earth dist.	10322 Oct 01 16:25	16°  02'45'14	1.31490 AU					
				superior conj		10323 Sep 16 20:04	2°  02'59'41	0°57'38
superior conj	10322 Oct 02 10:13	18°  02'24'05	1°16'16	minimum elong		10323 Sep 16 17:54	2°  02'47'49	0°57'14
minimum elong	10322 Oct 02 08:02	18°  02'11'52	1°16'04	evening rise		10323 Sep 23 14:38	17°  02'50'28	
	10322 Oct 07 16:06	0° 				10323 Sep 29 12:22	0° 	
evening rise	10322 Oct 09 03:40	3°  02'12'11		desc. node		10323 Oct 14 14:17	23°  02'15'28	
	10322 Oct 23 07:51	0° 		evening max el		10323 Oct 19 01:05	28°  02'14'03	24°34'47
desc. node	10322 Oct 27 17:04	6°  02'37'00				10323 Oct 20 07:57	0° 	
evening max el	10322 Nov 06 11:22	18°  02'13'26	26°02'19	retrograde		10323 Nov 01 19:34	5°  02'43'41	
retrograde	10322 Nov 20 09:08	25°  02'16'21		evening set		10323 Nov 07 02:56	4°  02'41'04	
evening set	10322 Nov 26 17:59	23°  02'40'07		min. Earth dist.		10323 Nov 12 12:16	1°  02'53'16	0.56467 AU
min. Earth dist.	10322 Dec 01 00:07	21°  02'05'06	0.58340 AU	inferior conj		10323 Nov 15 01:18	0°  02'16'42	-5°35'13
inferior conj	10322 Dec 04 02:39	18°  02'50'14	-4°47'36	minimum elong		10323 Nov 15 05:43	0°  02'09'42	5°34'23
minimum elong	10322 Dec 04 10:28	18°  02'36'03	4°45'17			10323 Nov 15 11:51	30°  02'08'00	
morning rise	10322 Dec 12 05:25	14°  02'24'56		morning rise		10323 Nov 23 10:42	26°  02'13'24	
direct	10322 Dec 14 10:24	14°  02'08'59		direct		10323 Nov 25 23:03	25°  02'15'15	
asc. node	10322 Dec 20 20:46	16°  02'33'54				10323 Dec 05 01:17	0° 	
morning max el	10322 Dec 22 18:29	18°  02'12'32	18°35'59					



morning max el	10323 Dec 05 15:29	0° $\text{J}$ 32'53	19°32'27	morning rise	10324 Nov 02 15:26	7° $\text{M}$ 07'27	
asc. node	10323 Dec 07 17:47	2° $\text{J}$ 45'27		direct	10324 Nov 05 17:25	6° $\text{M}$ 45'16	
morning set	10323 Dec 22 23:19	28° $\text{J}$ 29'02		morning max el	10324 Nov 16 23:13	12° $\text{M}$ 03'29	20°51'28
	10323 Dec 23 17:24	0° $\text{Z}$		asc. node	10324 Nov 23 14:45	20° $\text{M}$ 03'19	
					10324 Nov 29 14:55	0° $\text{J}$	
superior conj	10323 Dec 30 22:42	14° $\text{Z}$ 27'53	1°15'19	morning set	10324 Dec 06 07:14	13° $\text{J}$ 11'09	
minimum elong	10323 Dec 31 01:37	14° $\text{Z}$ 42'15	1°15'27				
max. Earth dist.	10324 Jan 06 06:51	26° $\text{Z}$ 32'02	1.37830 AU	superior conj	10324 Dec 13 16:45	28° $\text{J}$ 33'58	1°30'31
	10324 Jan 08 04:32	0° $\approx$		minimum elong	10324 Dec 13 18:47	28° $\text{J}$ 44'22	1°30'51
evening rise	10324 Jan 10 00:08	3° $\approx$ 14'19			10324 Dec 14 09:34	0° $\text{Z}$	
desc. node	10324 Jan 10 13:02	4° $\approx$ 10'59		max. Earth dist.	10324 Dec 18 15:21	8° $\text{Z}$ 28'23	1.35769 AU
	10324 Jan 26 15:27	0° $\text{H}$		evening rise	10324 Dec 22 14:41	16° $\text{Z}$ 02'43	
evening max el	10324 Feb 14 12:18	23° $\text{H}$ 48'51	25°10'44	desc. node	10324 Dec 27 10:00	24° $\text{Z}$ 42'10	
	10324 Feb 22 22:04	0° $\text{Y}$			10324 Dec 30 12:19	0° $\approx$	
retrograde	10324 Feb 26 12:45	0° $\text{Y}$ 47'03			10325 Jan 20 03:42	0° $\text{H}$	
	10324 Feb 29 21:00	30° $\text{R}$ $\text{H}$		evening max el	10325 Jan 27 01:44	7° $\text{H}$ 36'36	26°17'16
evening set	10324 Mar 03 07:01	28° $\text{H}$ 23'30		retrograde	10325 Feb 08 21:25	14° $\text{H}$ 52'22	
asc. node	10324 Mar 04 16:22	27° $\text{H}$ 04'50		evening set	10325 Feb 15 03:23	12° $\text{H}$ 21'03	
min. Earth dist.	10324 Mar 07 17:21	23° $\text{H}$ 28'16	0.67779 AU	min. Earth dist.	10325 Feb 19 07:27	8° $\text{H}$ 00'18	0.66752 AU
inferior conj	10324 Mar 08 22:18	21° $\text{H}$ 53'52	1°20'03	asc. node	10325 Feb 19 13:36	7° $\text{H}$ 41'42	
minimum elong	10324 Mar 08 20:33	21° $\text{H}$ 59'34	1°19'31	inferior conj	10325 Feb 21 00:08	5° $\text{H}$ 55'46	0°28'07
morning rise	10324 Mar 14 10:26	15° $\text{H}$ 58'54		minimum elong	10325 Feb 20 23:24	5° $\text{H}$ 58'00	0°28'03
direct	10324 Mar 17 23:46	14° $\text{H}$ 46'15		morning rise	10325 Feb 26 20:14	0° $\text{H}$ 10'31	
morning max el	10324 Mar 25 02:28	18° $\text{H}$ 41'41	19°23'30		10325 Feb 27 03:50	30° $\text{R}$ $\approx$	
	10324 Apr 03 02:56	0° $\text{Y}$		direct	10325 Mar 01 22:36	29° $\approx$ 16'11	
greatest brilliancy	10324 Apr 06 20:39	5° $\text{Y}$ 26'30	-0.7m		10325 Mar 04 19:17	0° $\text{H}$	
desc. node	10324 Apr 07 13:35	6° $\text{Y}$ 29'24		morning max el	10325 Mar 08 12:52	2° $\text{H}$ 49'10	18°34'45
morning set	10324 Apr 18 17:56	23° $\text{Y}$ 30'38		desc. node	10325 Mar 25 10:23	26° $\text{H}$ 38'22	
	10324 Apr 22 22:40	0° $\text{B}$			10325 Mar 27 13:41	0° $\text{Y}$	
max. Earth dist.	10324 May 01 10:40	13° $\text{B}$ 17'04	1.44955 AU	morning set	10325 Mar 29 10:48	2° $\text{Y}$ 57'37	
				max. Earth dist.	10325 Apr 14 04:42	27° $\text{Y}$ 39'15	1.45598 AU
superior conj	10324 May 05 05:29	19° $\text{B}$ 16'59	-2°12'30				
minimum elong	10324 May 05 03:49	19° $\text{B}$ 10'23	2°12'49	superior conj	10325 Apr 14 13:36	28° $\text{Y}$ 14'00	-1°57'38
	10324 May 11 21:07	0° $\text{II}$		minimum elong	10325 Apr 14 05:17	27° $\text{Y}$ 41'29	1°57'16
evening rise	10324 May 19 10:13	12° $\text{II}$ 26'13			10325 Apr 15 16:41	0° $\text{B}$	
	10324 May 30 03:05	0° $\text{B}$		evening rise	10325 Apr 30 04:16	22° $\text{B}$ 50'07	
asc. node	10324 May 31 14:37	2° $\text{B}$ 16'20			10325 May 04 16:17	0° $\text{II}$	
evening max el	10324 Jun 07 07:23	10° $\text{B}$ 55'44	18°16'54	greatest brilliancy	10325 May 08 13:28	6° $\text{II}$ 08'55	-0.8m
retrograde	10324 Jun 13 16:31	14° $\text{B}$ 19'29		asc. node	10325 May 18 11:43	20° $\text{II}$ 44'22	
evening set	10324 Jun 16 15:57	13° $\text{B}$ 31'30		evening max el	10325 May 21 18:50	24° $\text{II}$ 31'53	18°47'04
inferior conj	10324 Jun 22 14:16	8° $\text{B}$ 07'32	2°53'58	retrograde	10325 May 28 10:22	28° $\text{II}$ 11'11	
minimum elong	10324 Jun 22 16:25	8° $\text{B}$ 01'24	2°53'05	evening set	10325 May 31 17:52	27° $\text{II}$ 08'14	
min. Earth dist.	10324 Jun 25 01:21	5° $\text{B}$ 19'50	0.63953 AU	inferior conj	10325 Jun 06 07:58	21° $\text{II}$ 28'15	3°13'45
morning rise	10324 Jun 28 15:32	1° $\text{B}$ 51'38		minimum elong	10325 Jun 06 08:58	21° $\text{II}$ 25'07	3°13'11
	10324 Jul 01 15:52	30° $\text{R}$ $\text{II}$		min. Earth dist.	10325 Jun 08 04:01	19° $\text{II}$ 11'30	0.65759 AU
desc. node	10324 Jul 04 13:30	29° $\text{II}$ 15'06		morning rise	10325 Jun 11 23:21	15° $\text{II}$ 08'05	
direct	10324 Jul 05 07:54	29° $\text{II}$ 13'08		direct	10325 Jun 18 09:54	12° $\text{II}$ 23'32	
	10324 Jul 09 05:28	0° $\text{B}$		desc. node	10325 Jun 21 10:35	12° $\text{II}$ 54'50	
morning max el	10324 Jul 19 03:18	7° $\text{B}$ 15'16	27°37'22	morning max el	10325 Jul 01 13:54	20° $\text{II}$ 12'19	26°46'13
	10324 Aug 05 14:35	0° $\text{Q}$			10325 Jul 09 23:21	0° $\text{B}$	
	10324 Aug 22 17:05	0° $\text{M}$			10325 Jul 29 17:05	0° $\text{Q}$	
morning set	10324 Aug 23 02:45	0° $\text{M}$ 47'46		morning set	10325 Aug 06 09:32	13° $\text{Q}$ 57'12	
asc. node	10324 Aug 27 14:25	9° $\text{M}$ 56'18		max. Earth dist.	10325 Aug 10 13:40	22° $\text{Q}$ 05'33	1.34171 AU
max. Earth dist.	10324 Aug 27 23:21	10° $\text{M}$ 43'03	1.32773 AU	asc. node	10325 Aug 14 11:16	0° $\text{M}$ 02'13	
					10325 Aug 14 10:50	0° $\text{M}$	
superior conj	10324 Aug 31 02:16	17° $\text{M}$ 21'10	0°34'08				
minimum elong	10324 Aug 31 00:42	17° $\text{M}$ 12'48	0°33'41	superior conj	10325 Aug 15 02:28	1° $\text{M}$ 21'10	0°06'16
	10324 Sep 05 22:32	0° $\text{Q}$		minimum elong	10325 Aug 15 02:08	1° $\text{M}$ 19'29	0°05'56
evening rise	10324 Sep 07 02:06	2° $\text{Q}$ 27'42		behind sun begin	10325 Aug 14 20:45	0° $\text{M}$ 51'28	
	10324 Sep 22 02:01	0° $\text{M}$		behind sun end	10325 Aug 15 07:31	1° $\text{M}$ 47'33	
evening max el	10324 Sep 29 11:51	8° $\text{M}$ 58'28	22°54'45	evening rise	10325 Aug 22 12:05	16° $\text{M}$ 57'12	
desc. node	10324 Sep 30 11:32	9° $\text{M}$ 54'06			10325 Aug 29 00:11	0° $\text{Q}$	
retrograde	10324 Oct 12 17:34	15° $\text{M}$ 34'12		evening max el	10325 Sep 11 04:42	19° $\text{Q}$ 16'54	21°19'07
evening set	10324 Oct 16 13:43	15° $\text{M}$ 02'02		desc. node	10325 Sep 17 08:48	23° $\text{Q}$ 50'36	
min. Earth dist.	10324 Oct 23 20:34	11° $\text{M}$ 43'12	0.55136 AU	retrograde	10325 Sep 23 05:58	25° $\text{Q}$ 15'42	
inferior conj	10324 Oct 25 05:01	10° $\text{M}$ 56'36	-5°40'35	evening set	10325 Sep 25 18:50	25° $\text{Q}$ 00'50	
minimum elong	10324 Oct 25 01:41	11° $\text{M}$ 01'23	5°40'05	inferior conj	10325 Oct 04 21:46	21° $\text{Q}$ 05'01	-4°49'08

minimum elong	10325 Oct 04 12:20	21°♄18'15	4°46'48	inferior conj	10326 Sep 14 17:33	1°♄12'54	-3°10'31
min. Earth dist.	10325 Oct 05 04:10	20°♄56'02	0.54622 AU	minimum elong	10326 Sep 14 09:11	1°♄25'32	3°07'38
morning rise	10325 Oct 13 06:31	17°♄14'02		min. Earth dist.	10326 Sep 16 13:38	0°♄06'30	0.55049 AU
direct	10325 Oct 17 02:09	16°♄42'33			10326 Sep 16 18:01	30°♄	
morning max el	10325 Oct 29 18:08	22°♄45'05	22°29'45	morning rise	10326 Sep 22 23:14	26°♄59'38	
	10325 Nov 05 01:54	0°♄		direct	10326 Sep 27 13:46	26°♄13'30	
asc. node	10325 Nov 10 11:42	8°♄12'10			10326 Oct 07 17:18	0°♄	
morning set	10325 Nov 20 18:02	27°♄58'48		morning max el	10326 Oct 11 06:01	2°♄56'52	24°17'03
	10325 Nov 21 16:55	0°♄		asc. node	10326 Oct 28 08:36	26°♄59'47	
					10326 Oct 29 23:01	0°♄	
superior conj	10325 Nov 27 18:55	13°♄01'30	1°38'26	morning set	10326 Nov 05 05:50	12°♄46'45	
minimum elong	10325 Nov 27 19:45	13°♄05'55	1°38'52				
max. Earth dist.	10325 Dec 01 07:00	20°♄22'09	1.34029 AU	superior conj	10326 Nov 12 02:27	27°♄42'29	1°39'45
evening rise	10325 Dec 05 19:59	29°♄29'04		minimum elong	10326 Nov 12 02:06	27°♄40'34	1°40'08
	10325 Dec 06 02:20	0°♄			10326 Nov 13 03:44	0°♄	
desc. node	10325 Dec 14 07:02	15°♄00'47		max. Earth dist.	10326 Nov 14 06:47	2°♄26'08	1.32711 AU
	10325 Dec 23 15:14	0°♄		evening rise	10326 Nov 19 12:28	13°♄24'10	
evening max el	10326 Jan 09 15:18	21°♄14'51	27°05'55		10326 Nov 28 06:19	0°♄	
retrograde	10326 Jan 23 00:08	28°♄36'56		desc. node	10326 Dec 01 04:06	5°♄00'31	
evening set	10326 Jan 29 16:18	26°♄03'00			10326 Dec 18 19:38	0°♄	
min. Earth dist.	10326 Feb 02 14:59	22°♄15'55	0.65355 AU	evening max el	10326 Dec 23 03:27	4°♄30'53	27°29'30
inferior conj	10326 Feb 04 19:23	19°♄48'26	-0°32'39	retrograde	10327 Jan 05 20:04	11°♄51'34	
minimum elong	10326 Feb 04 20:20	19°♄45'46	0°31'55	evening set	10327 Jan 12 19:16	9°♄21'51	
asc. node	10326 Feb 06 10:47	17°♄59'55		min. Earth dist.	10327 Jan 16 13:45	6°♄06'00	0.63630 AU
morning rise	10326 Feb 11 01:45	14°♄15'23		inferior conj	10327 Jan 19 05:21	3°♄24'32	-1°41'23
direct	10326 Feb 13 18:49	13°♄35'56		minimum elong	10327 Jan 19 08:36	3°♄16'15	1°39'37
morning max el	10326 Feb 20 04:16	16°♄58'01	18°02'49		10327 Jan 22 20:56	30°♄	
	10326 Mar 01 19:22	0°♄		asc. node	10327 Jan 24 07:58	28°♄57'33	
morning set	10326 Mar 10 08:38	13°♄52'14		morning rise	10327 Jan 25 23:58	28°♄06'45	
desc. node	10326 Mar 12 07:11	17°♄02'31		direct	10327 Jan 28 09:37	27°♄38'30	
	10326 Mar 20 07:33	0°♄			10327 Feb 02 19:31	0°♄	
				morning max el	10327 Feb 03 21:49	1°♄00'04	17°48'04
superior conj	10326 Mar 24 22:25	7°♄20'20	-1°24'49	morning set	10327 Feb 20 09:29	26°♄05'01	
minimum elong	10326 Mar 24 13:28	6°♄45'00	1°23'49		10327 Feb 22 16:19	0°♄	
max. Earth dist.	10326 Mar 28 00:50	12°♄13'06	1.45498 AU	desc. node	10327 Feb 27 03:58	7°♄36'32	
	10326 Apr 08 11:13	0°♄					
evening rise	10326 Apr 10 01:32	2°♄27'58		superior conj	10327 Mar 05 00:45	17°♄19'39	-0°42'50
greatest brilliancy	10326 Apr 23 08:15	22°♄43'53	-0.7m	minimum elong	10327 Mar 04 20:10	17°♄00'55	0°42'00
	10326 Apr 28 09:19	0°♄		max. Earth dist.	10327 Mar 10 19:53	26°♄39'54	1.44666 AU
evening max el	10326 May 05 02:00	8°♄13'02	19°33'49		10327 Mar 12 22:27	0°♄	
asc. node	10326 May 05 08:52	8°♄30'10		evening rise	10327 Mar 20 13:04	11°♄49'46	
retrograde	10326 May 12 07:54	12°♄19'48			10327 Apr 01 14:40	0°♄	
evening set	10326 May 15 23:58	11°♄01'14		evening max el	10327 Apr 18 03:34	21°♄55'25	20°35'13
inferior conj	10326 May 21 09:07	5°♄06'31	3°18'18	asc. node	10327 Apr 22 06:03	25°♄20'17	
minimum elong	10326 May 21 08:57	5°♄07'05	3°17'52	retrograde	10327 Apr 26 06:38	26°♄39'22	
min. Earth dist.	10326 May 22 14:12	3°♄30'18	0.67151 AU	evening set	10327 Apr 30 08:06	25°♄05'04	
	10326 May 25 11:43	30°♄		inferior conj	10327 May 05 15:03	18°♄57'22	3°10'24
morning rise	10326 May 26 17:34	28°♄46'32		minimum elong	10327 May 05 13:53	19°♄01'23	3°09'56
direct	10326 Jun 01 18:07	26°♄06'49		min. Earth dist.	10327 May 06 06:04	18°♄05'41	0.68084 AU
desc. node	10326 Jun 08 07:35	28°♄33'06		morning rise	10327 May 10 19:27	12°♄40'05	
	10326 Jun 10 06:02	0°♄		direct	10327 May 16 07:31	10°♄13'39	
morning max el	10326 Jun 14 00:03	3°♄26'59	25°32'19	desc. node	10327 May 26 04:32	15°♄40'13	
	10326 Jul 04 05:29	0°♄		morning max el	10327 May 27 09:37	16°♄51'31	24°05'33
morning set	10326 Jul 20 01:37	26°♄23'15			10327 Jun 07 07:17	0°♄	
	10326 Jul 22 00:53	0°♄			10327 Jun 27 05:44	0°♄	
max. Earth dist.	10326 Jul 23 17:48	3°♄11'26	1.36031 AU	morning set	10327 Jul 01 22:09	7°♄53'43	
				max. Earth dist.	10327 Jul 05 15:29	14°♄25'16	1.38216 AU
superior conj	10326 Jul 29 17:56	14°♄52'37	-0°25'06				
minimum elong	10326 Jul 29 19:29	15°♄00'23	0°25'10	superior conj	10327 Jul 12 21:15	27°♄47'07	-0°58'14
asc. node	10326 Aug 01 08:09	20°♄06'33		minimum elong	10327 Jul 13 01:06	28°♄05'29	0°58'01
	10326 Aug 06 04:05	0°♄			10327 Jul 14 01:01	0°♄	
evening rise	10326 Aug 06 18:27	1°♄13'24		asc. node	10327 Jul 19 05:04	10°♄05'27	
	10326 Aug 24 05:06	0°♄		evening rise	10327 Jul 21 18:37	15°♄09'13	
evening max el	10326 Aug 24 10:06	0°♄12'32	19°59'40		10327 Jul 29 15:50	0°♄	
retrograde	10326 Sep 03 19:56	5°♄22'32		evening max el	10327 Aug 07 04:47	11°♄54'34	19°01'03
desc. node	10326 Sep 04 06:02	5°♄22'03		retrograde	10327 Aug 15 23:43	16°♄17'11	
evening set	10326 Sep 05 17:48	5°♄12'51		evening set	10327 Aug 17 20:53	16°♄05'56	



































































































































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inferior conj	10327 Aug 26 05:17	11° $\cap$ 50'50 -1°16'11	inferior conj	10328 Aug 06 14:33	23° $\Omega$ 12'18 0°25'36	
minimum elong	10327 Aug 26 02:00	11° $\cap$ 56'32 1°15'04	minimum elong	10328 Aug 06 15:27	23° $\Omega$ 10'29 0°24'57	
min. Earth dist.	10327 Aug 29 03:18	9° $\cap$ 49'57 0.56348 AU	desc. node	10328 Aug 08 00:28	22° $\Omega$ 02'58	
morning rise	10327 Sep 03 03:59	7° $\cap$ 01'17	min. Earth dist.	10328 Aug 09 23:01	20° $\Omega$ 30'00 0.58288 AU	
direct	10327 Sep 08 13:43	5° $\cap$ 52'35	morning rise	10328 Aug 14 01:49	17° $\Omega$ 46'30	
morning max el	10327 Sep 22 18:50	13° $\cap$ 09'55 25°56'45	direct	10328 Aug 20 04:29	16° $\Omega$ 08'34	
	10327 Oct 05 23:55	0° $\underline{\cap}$	morning max el	10328 Sep 03 13:27	23° $\Omega$ 50'29 27°11'55	
asc. node	10327 Oct 15 05:28	16° $\underline{\cap}$ 16'12		10328 Sep 09 03:20	0° $\cap$	
morning set	10327 Oct 20 16:59	27° $\underline{\cap}$ 30'15		10328 Sep 28 02:53	0° $\underline{\cap}$	
	10327 Oct 21 20:50	0° $\cap$	asc. node	10328 Oct 01 02:17	5° $\underline{\cap}$ 52'49	
			morning set	10328 Oct 04 01:44	12° $\underline{\cap}$ 03'16	
superior conj	10327 Oct 27 13:05	12° $\cap$ 30'10 1°35'02	superior conj	10328 Oct 11 00:49	27° $\underline{\cap}$ 17'21 1°24'41	
minimum elong	10327 Oct 27 11:45	12° $\cap$ 22'47 1°35'14	minimum elong	10328 Oct 10 22:50	27° $\underline{\cap}$ 06'14 1°24'37	
max. Earth dist.	10327 Oct 28 12:52	14° $\cap$ 41'45 1.31853 AU	max. Earth dist.	10328 Oct 10 21:58	27° $\underline{\cap}$ 01'26 1.31477 AU	
evening rise	10327 Nov 03 13:09	27° $\cap$ 40'18		10328 Oct 12 06:03	0° $\cap$	
	10327 Nov 04 16:06	0° $\times$	evening rise	10328 Oct 17 19:27	12° $\cap$ 09'28	
desc. node	10327 Nov 18 01:11	24° $\times$ 33'34		10328 Oct 26 19:31	0° $\times$	
	10327 Nov 21 13:25	0° $\overline{\times}$	desc. node	10328 Nov 03 22:19	13° $\times$ 28'15	
evening max el	10327 Dec 05 11:55	17° $\overline{\times}$ 12'07 27°22'14	evening max el	10328 Nov 16 14:10	29° $\times$ 06'33 26°41'00	
retrograde	10327 Dec 19 08:40	24° $\overline{\times}$ 27'21		10328 Nov 17 13:26	0° $\overline{\times}$	
evening set	10327 Dec 26 09:14	22° $\overline{\times}$ 10'43	retrograde	10328 Nov 30 12:38	6° $\overline{\times}$ 14'34	
min. Earth dist.	10327 Dec 30 02:17	19° $\overline{\times}$ 20'05 0.61648 AU	evening set	10328 Dec 07 06:07	4° $\overline{\times}$ 21'12	
inferior conj	10328 Jan 02 02:56	16° $\overline{\times}$ 36'34 -2°55'31	min. Earth dist.	10328 Dec 11 04:14	1° $\overline{\times}$ 44'41 0.59531 AU	
minimum elong	10328 Jan 02 08:48	16° $\overline{\times}$ 23'21 2°52'52		10328 Dec 13 09:43	30° $\overline{\times}$	
morning rise	10328 Jan 09 10:54	11° $\overline{\times}$ 37'11	inferior conj	10328 Dec 14 08:36	29° $\times$ 14'28 -4°09'22	
asc. node	10328 Jan 11 05:05	11° $\overline{\times}$ 17'21	minimum elong	10328 Dec 14 16:22	28° $\times$ 59'09 4°06'35	
direct	10328 Jan 11 15:36	11° $\overline{\times}$ 16'31	morning rise	10328 Dec 22 05:19	24° $\times$ 36'12	
morning max el	10328 Jan 18 14:21	14° $\overline{\times}$ 47'13 17°51'13	direct	10328 Dec 24 08:36	24° $\times$ 19'36	
	10328 Jan 29 02:16	0° $\approx$	asc. node	10328 Dec 28 02:09	25° $\times$ 12'57	
morning set	10328 Feb 03 07:06	9° $\approx$ 16'32	morning max el	10329 Jan 01 02:15	28° $\times$ 08'50 18°13'39	
				10329 Jan 02 19:40	0° $\overline{\times}$	
superior conj	10328 Feb 14 03:57	28° $\approx$ 30'18 -0°01'01	morning set	10329 Jan 16 19:31	23° $\overline{\times}$ 08'40	
minimum elong	10328 Feb 14 03:53	28° $\approx$ 29'59 0°00'43		10329 Jan 20 10:40	0° $\approx$	
behind sun begin	10328 Feb 13 19:23	27° $\approx$ 53'33	superior conj	10329 Jan 26 06:39	10° $\approx$ 46'49 0°34'59	
behind sun end	10328 Feb 14 12:23	29° $\approx$ 06'21	minimum elong	10329 Jan 26 09:07	10° $\approx$ 58'00 0°34'59	
desc. node	10328 Feb 14 00:47	28° $\approx$ 16'42	desc. node	10329 Jan 30 21:36	18° $\approx$ 59'06	
	10328 Feb 15 00:57	0° $\mathfrak{X}$	max. Earth dist.	10329 Feb 02 21:09	24° $\approx$ 06'10 1.41272 AU	
max. Earth dist.	10328 Feb 21 11:00	10° $\mathfrak{X}$ 41'49 1.43203 AU		10329 Feb 06 09:57	0° $\mathfrak{X}$	
evening rise	10328 Feb 28 06:13	21° $\mathfrak{X}$ 33'16	evening rise	10329 Feb 07 16:41	2° $\mathfrak{X}$ 05'39	
	10328 Mar 04 17:43	0° $\Upsilon$		10329 Feb 26 02:46	0° $\Upsilon$	
	10328 Mar 26 00:00	0° $\mathfrak{B}$	evening max el	10329 Mar 13 15:38	19° $\Upsilon$ 24'21 23°07'31	
evening max el	10328 Mar 30 23:38	5° $\mathfrak{B}$ 38'36 21°48'03	retrograde	10329 Mar 24 00:23	25° $\Upsilon$ 32'02	
asc. node	10328 Apr 08 03:14	10° $\mathfrak{B}$ 59'27	asc. node	10329 Mar 26 00:26	25° $\Upsilon$ 12'40	
retrograde	10328 Apr 09 04:41	11° $\mathfrak{B}$ 04'59	evening set	10329 Mar 28 23:31	23° $\Upsilon$ 27'59	
evening set	10328 Apr 13 16:28	9° $\mathfrak{B}$ 15'23	inferior conj	10329 Apr 03 08:35	17° $\Upsilon$ 02'11 2°23'29	
inferior conj	10328 Apr 18 23:31	2° $\mathfrak{B}$ 57'02 2°51'47	minimum elong	10329 Apr 03 06:24	17° $\Upsilon$ 09'45 2°22'48	
minimum elong	10328 Apr 18 21:40	3° $\mathfrak{B}$ 03'32 2°51'13	min. Earth dist.	10329 Apr 02 22:22	17° $\Upsilon$ 37'32 0.68587 AU	
min. Earth dist.	10328 Apr 19 01:32	2° $\mathfrak{B}$ 50'00 0.68558 AU	morning rise	10329 Apr 08 13:12	10° $\Upsilon$ 55'05	
	10328 Apr 21 03:34	30° $\mathfrak{R}\Upsilon$	direct	10329 Apr 12 22:22	9° $\Upsilon$ 08'43	
morning rise	10328 Apr 24 02:41	26° $\Upsilon$ 44'10	morning max el	10329 Apr 21 11:50	14° $\Upsilon$ 04'56 21°11'31	
direct	10328 Apr 29 01:19	24° $\Upsilon$ 36'25	desc. node	10329 Apr 28 22:18	22° $\Upsilon$ 51'16	
	10328 May 08 11:01	0° $\mathfrak{B}$		10329 May 04 03:52	0° $\mathfrak{B}$	
morning max el	10328 May 08 20:28	0° $\mathfrak{B}$ 23'28 22°35'47	morning set	10329 May 22 11:35	27° $\mathfrak{B}$ 27'18	
desc. node	10328 May 12 01:27	3° $\mathfrak{B}$ 52'12		10329 May 24 02:17	0° $\mathfrak{B}$	
	10328 May 31 03:02	0° $\mathfrak{B}$	max. Earth dist.	10329 May 29 16:04	8° $\mathfrak{B}$ 58'13 1.42606 AU	
morning set	10328 Jun 11 18:05	18° $\mathfrak{B}$ 16'06				
max. Earth dist.	10328 Jun 16 13:00	26° $\mathfrak{B}$ 15'07 1.40501 AU	superior conj	10329 Jun 05 22:23	21° $\mathfrak{B}$ 06'28 -1°56'51	
	10328 Jun 18 17:32	0° $\mathfrak{B}$	minimum elong	10329 Jun 06 04:29	21° $\mathfrak{B}$ 32'35 1°56'50	
superior conj	10328 Jun 24 08:14	9° $\mathfrak{B}$ 54'54 -1°30'18		10329 Jun 11 01:18	0° $\mathfrak{B}$	
minimum elong	10328 Jun 24 14:08	10° $\mathfrak{B}$ 21'31 1°30'01	evening rise	10329 Jun 17 10:28	11° $\mathfrak{B}$ 23'58	
evening rise	10328 Jul 04 09:20	28° $\mathfrak{B}$ 36'06	asc. node	10329 Jun 21 22:58	19° $\mathfrak{B}$ 29'52	
asc. node	10328 Jul 05 01:59	29° $\mathfrak{B}$ 54'41		10329 Jun 28 05:39	0° $\Omega$	
	10328 Jul 05 03:07	0° $\Omega$	evening max el	10329 Jul 03 20:59	7° $\Omega$ 14'15 18°06'01	
evening max el	10328 Jul 20 09:44	24° $\Omega$ 18'11 18°23'29	retrograde	10329 Jul 10 14:20	10° $\Omega$ 40'02	
retrograde	10328 Jul 27 22:15	28° $\Omega$ 04'45				

evening set	10329 Jul 13 01:33	10° $\Omega$ 12'31		retrograde	10330 Jun 23 19:52	23° $\mathfrak{D}$ 52'07	
inferior conj	10329 Jul 19 20:36	5° $\Omega$ 17'15	1°42'33	evening set	10330 Jun 26 14:57	23° $\mathfrak{D}$ 11'59	
minimum elong	10329 Jul 19 23:16	5° $\Omega$ 10'58	1°41'18	inferior conj	10330 Jul 02 19:40	17° $\mathfrak{D}$ 57'46	2°34'14
min. Earth dist.	10329 Jul 23 02:22	2° $\Omega$ 15'19	0.60536 AU	minimum elong	10330 Jul 02 22:18	17° $\mathfrak{D}$ 50'43	2°33'08
desc. node	10329 Jul 25 21:39	29° $\mathfrak{D}$ 58'50		min. Earth dist.	10330 Jul 05 14:37	14° $\mathfrak{D}$ 59'27	0.62773 AU
	10329 Jul 25 21:00	30° $\mathfrak{R}$ $\mathfrak{D}$		morning rise	10330 Jul 09 03:50	11° $\mathfrak{D}$ 47'44	
morning rise	10329 Jul 26 18:11	29° $\mathfrak{D}$ 24'09		desc. node	10330 Jul 12 18:49	9° $\mathfrak{D}$ 49'16	
direct	10329 Aug 02 07:52	27° $\mathfrak{D}$ 17'05		direct	10330 Jul 15 21:09	9° $\mathfrak{D}$ 18'06	
	10329 Aug 10 07:02	0° $\Omega$		morning max el	10330 Jul 29 22:09	17° $\mathfrak{D}$ 20'25	27°52'54
morning max el	10329 Aug 16 14:59	5° $\Omega$ 13'39	27°51'36		10330 Aug 09 10:51	0° $\Omega$	
	10329 Sep 04 02:47	0° $\mathfrak{M}$			10330 Aug 27 21:45	0° $\mathfrak{M}$	
asc. node	10329 Sep 17 23:07	25° $\mathfrak{M}$ 43'57		morning set	10330 Sep 02 04:38	10° $\mathfrak{M}$ 18'35	
morning set	10329 Sep 18 06:20	26° $\mathfrak{M}$ 21'20		asc. node	10330 Sep 04 19:57	15° $\mathfrak{M}$ 44'10	
	10329 Sep 19 23:55	0° $\mathfrak{L}$		max. Earth dist.	10330 Sep 07 11:05	21° $\mathfrak{M}$ 18'35	1.32205 AU
max. Earth dist.	10329 Sep 24 06:38	9° $\mathfrak{L}$ 17'09	1.31595 AU				
				superior conj	10330 Sep 09 20:27	26° $\mathfrak{M}$ 29'00	0°48'14
superior conj	10329 Sep 25 11:54	11° $\mathfrak{L}$ 58'53	1°08'59	minimum elong	10330 Sep 09 18:28	26° $\mathfrak{M}$ 18'13	0°47'48
minimum elong	10329 Sep 25 09:40	11° $\mathfrak{L}$ 46'28	1°08'42		10330 Sep 11 11:02	0° $\mathfrak{L}$	
evening rise	10329 Oct 02 05:18	26° $\mathfrak{L}$ 46'13		evening rise	10330 Sep 16 16:43	11° $\mathfrak{L}$ 24'45	
	10329 Oct 03 17:43	0° $\mathfrak{M}$			10330 Sep 26 01:23	0° $\mathfrak{M}$	
	10329 Oct 20 17:08	0° $\mathfrak{J}$		desc. node	10330 Oct 08 16:44	18° $\mathfrak{M}$ 18'06	
desc. node	10329 Oct 21 19:30	1° $\mathfrak{J}$ 29'49		evening max el	10330 Oct 10 20:13	20° $\mathfrak{M}$ 30'37	23°52'43
evening max el	10329 Oct 29 08:31	10° $\mathfrak{J}$ 09'40	25°27'45	retrograde	10330 Oct 24 10:28	27° $\mathfrak{M}$ 18'15	
retrograde	10329 Nov 12 05:51	17° $\mathfrak{J}$ 09'18		evening set	10330 Oct 29 03:40	26° $\mathfrak{M}$ 29'39	
evening set	10329 Nov 18 05:09	15° $\mathfrak{J}$ 47'29		min. Earth dist.	10330 Nov 04 06:38	23° $\mathfrak{M}$ 30'51	0.55818 AU
min. Earth dist.	10329 Nov 22 20:47	13° $\mathfrak{J}$ 09'05	0.57495 AU	inferior conj	10330 Nov 06 09:12	22° $\mathfrak{M}$ 14'47	-5°43'54
inferior conj	10329 Nov 25 19:06	11° $\mathfrak{J}$ 09'01	-5°11'37	minimum elong	10330 Nov 06 10:39	22° $\mathfrak{M}$ 12'35	5°43'29
minimum elong	10329 Nov 26 02:06	10° $\mathfrak{J}$ 57'02	5°09'54	morning rise	10330 Nov 14 19:34	18° $\mathfrak{M}$ 18'51	
morning rise	10329 Dec 04 01:21	6° $\mathfrak{J}$ 53'04		direct	10330 Nov 17 13:19	17° $\mathfrak{M}$ 59'52	
direct	10329 Dec 06 08:36	6° $\mathfrak{J}$ 37'03		morning max el	10330 Nov 27 21:06	22° $\mathfrak{M}$ 53'11	20°03'27
asc. node	10329 Dec 14 23:12	10° $\mathfrak{J}$ 38'41		asc. node	10330 Dec 01 20:13	27° $\mathfrak{M}$ 20'15	
morning max el	10329 Dec 15 05:41	10° $\mathfrak{J}$ 54'04	18°57'12		10330 Dec 03 18:49	0° $\mathfrak{J}$	
	10329 Dec 27 21:41	0° $\mathfrak{Z}$		morning set	10330 Dec 15 23:24	22° $\mathfrak{J}$ 04'11	
morning set	10329 Dec 31 18:05	7° $\mathfrak{Z}$ 27'48			10330 Dec 19 20:22	0° $\mathfrak{Z}$	
				superior conj	10330 Dec 23 16:08	7° $\mathfrak{Z}$ 45'13	1°22'42
superior conj	10330 Jan 09 04:18	23° $\mathfrak{Z}$ 56'08	1°02'58	minimum elong	10330 Dec 23 18:44	7° $\mathfrak{Z}$ 58'17	1°22'55
minimum elong	10330 Jan 09 07:25	24° $\mathfrak{Z}$ 11'04	1°03'00	max. Earth dist.	10330 Dec 29 10:47	19° $\mathfrak{Z}$ 00'17	1.36922 AU
	10330 Jan 12 09:40	0° $\mathfrak{A}$		evening rise	10331 Jan 02 05:04	25° $\mathfrak{Z}$ 57'00	
max. Earth dist.	10330 Jan 16 03:56	6° $\mathfrak{A}$ 49'59	1.39097 AU		10331 Jan 04 11:40	0° $\mathfrak{A}$	
desc. node	10330 Jan 17 18:28	9° $\mathfrak{A}$ 40'11		desc. node	10331 Jan 04 15:24	0° $\mathfrak{A}$ 16'21	
evening rise	10330 Jan 20 00:42	13° $\mathfrak{A}$ 34'56			10331 Jan 23 15:38	0° $\mathfrak{H}$	
	10330 Jan 30 03:05	0° $\mathfrak{H}$		evening max el	10331 Feb 06 18:56	17° $\mathfrak{H}$ 03'28	25°40'47
	10330 Feb 21 04:10	0° $\mathfrak{Y}$		retrograde	10331 Feb 19 03:57	24° $\mathfrak{H}$ 09'51	
evening max el	10330 Feb 24 05:33	3° $\mathfrak{Y}$ 13'25	24°27'24	evening set	10331 Feb 25 03:26	21° $\mathfrak{H}$ 42'28	
retrograde	10330 Mar 07 16:28	9° $\mathfrak{Y}$ 55'25		asc. node	10331 Feb 27 18:54	19° $\mathfrak{H}$ 03'27	
asc. node	10330 Mar 12 21:40	7° $\mathfrak{Y}$ 50'56		min. Earth dist.	10331 Mar 01 11:01	17° $\mathfrak{H}$ 02'10	0.67394 AU
evening set	10330 Mar 13 03:42	7° $\mathfrak{Y}$ 38'24		inferior conj	10331 Mar 02 20:57	15° $\mathfrak{H}$ 14'16	0°59'10
min. Earth dist.	10330 Mar 17 18:15	2° $\mathfrak{Y}$ 23'06	0.68194 AU	minimum elong	10331 Mar 02 19:33	15° $\mathfrak{H}$ 18'42	0°58'48
inferior conj	10330 Mar 18 16:22	1° $\mathfrak{Y}$ 09'02	1°45'53	morning rise	10331 Mar 08 12:11	9° $\mathfrak{H}$ 23'18	
minimum elong	10330 Mar 18 14:18	1° $\mathfrak{Y}$ 15'56	1°45'13	direct	10331 Mar 11 20:46	8° $\mathfrak{H}$ 18'43	
	10330 Mar 19 13:06	30° $\mathfrak{R}$ $\mathfrak{H}$		morning max el	10331 Mar 18 17:04	12° $\mathfrak{H}$ 02'38	19°00'49
morning rise	10330 Mar 24 01:01	25° $\mathfrak{H}$ 09'11			10331 Apr 01 02:29	0° $\mathfrak{Y}$	
direct	10330 Mar 27 21:24	23° $\mathfrak{H}$ 44'29		greatest brilliancy	10331 Apr 01 05:53	0° $\mathfrak{Y}$ 12'53	-0.8m
morning max el	10330 Apr 04 10:30	27° $\mathfrak{H}$ 58'16	19°58'43	desc. node	10331 Apr 02 15:56	2° $\mathfrak{Y}$ 22'25	
	10330 Apr 06 08:30	0° $\mathfrak{Y}$		morning set	10331 Apr 10 16:09	14° $\mathfrak{Y}$ 43'32	
desc. node	10330 Apr 15 19:07	12° $\mathfrak{Y}$ 24'17			10331 Apr 20 11:51	0° $\mathfrak{Z}$	
	10330 Apr 27 14:56	0° $\mathfrak{Z}$		max. Earth dist.	10331 Apr 24 19:08	6° $\mathfrak{Z}$ 44'07	1.45327 AU
morning set	10330 May 01 11:33	5° $\mathfrak{Z}$ 54'41					
max. Earth dist.	10330 May 12 02:39	22° $\mathfrak{Z}$ 32'43	1.44278 AU	superior conj	10331 Apr 27 04:15	10° $\mathfrak{Z}$ 28'42	-2°08'42
	10330 May 16 17:56	0° $\mathfrak{H}$		minimum elong	10331 Apr 26 23:21	10° $\mathfrak{Z}$ 09'27	2°08'49
superior conj	10330 May 17 12:18	1° $\mathfrak{H}$ 14'37	-2°11'45		10331 May 09 09:19	0° $\mathfrak{H}$	
minimum elong	10330 May 17 14:41	1° $\mathfrak{H}$ 24'19	2°12'07	evening rise	10331 May 12 01:12	4° $\mathfrak{H}$ 19'43	
evening rise	10330 May 30 17:10	23° $\mathfrak{H}$ 20'59		asc. node	10331 May 26 17:04	27° $\mathfrak{H}$ 32'25	
	10330 Jun 03 14:25	0° $\mathfrak{D}$			10331 May 28 12:19	0° $\mathfrak{D}$	
asc. node	10330 Jun 08 19:59	8° $\mathfrak{D}$ 44'43		evening max el	10331 May 31 23:41	4° $\mathfrak{D}$ 02'57	18°27'30
evening max el	10330 Jun 17 10:42	20° $\mathfrak{D}$ 31'50	18°07'37	retrograde	10331 Jun 07 10:26	7° $\mathfrak{D}$ 31'48	

evening set	10331 Jun 10 13:17	6°☿37'27			10332 Apr 12 05:16	0°♄	
inferior conj	10331 Jun 16 07:39	1°☿06'09	3°04'24	evening rise	10332 Apr 21 09:37	14°♄21'36	
minimum elong	10331 Jun 16 09:21	1°☿01'08	3°03'41		10332 May 01 10:11	0°♄	
	10331 Jun 17 05:50	30°♄		greatest brilliancy	10332 May 02 00:47	0°♄56'01	-0.8m
min. Earth dist.	10331 Jun 18 12:17	28°♄30'24	0.64774 AU	asc. node	10332 May 12 14:11	15°♄44'02	
morning rise	10331 Jun 22 04:23	24°♄47'42		evening max el	10332 May 14 09:26	17°♄41'31	19°04'55
direct	10331 Jun 28 18:45	22°♄05'36		retrograde	10332 May 21 06:19	21°♄31'34	
desc. node	10331 Jun 29 15:57	22°♄08'14		evening set	10332 May 24 17:17	20°♄22'07	
	10331 Jul 12 07:09	0°☿		inferior conj	10332 May 30 04:54	14°♄35'30	3°17'20
morning max el	10331 Jul 12 08:28	0°☿03'19	27°18'58	minimum elong	10332 May 30 05:24	14°♄33'55	3°16'51
	10331 Aug 03 10:30	0°♄		min. Earth dist.	10332 May 31 18:30	12°♄35'07	0.66402 AU
morning set	10331 Aug 16 18:03	23°♄48'08		morning rise	10332 Jun 04 16:58	8°♄14'42	
	10331 Aug 19 20:53	0°♄		direct	10332 Jun 10 23:31	5°♄31'05	
max. Earth dist.	10331 Aug 21 07:35	2°♄57'10	1.33313 AU	desc. node	10332 Jun 15 13:00	6°♄42'09	
asc. node	10331 Aug 22 16:47	5°♄49'08		morning max el	10332 Jun 23 19:17	13°♄10'18	26°17'00
					10332 Jul 07 09:16	0°☿	
superior conj	10331 Aug 25 00:22	10°♄41'44	0°22'47		10332 Jul 26 03:18	0°♄	
minimum elong	10331 Aug 24 23:15	10°♄35'49	0°22'22	morning set	10332 Jul 29 19:13	6°♄41'20	
evening rise	10331 Sep 01 03:49	25°♄59'18		max. Earth dist.	10332 Aug 02 17:34	14°♄11'36	1.34909 AU
	10331 Sep 03 01:41	0°♄					
	10331 Sep 21 16:56	0°♄		superior conj	10332 Aug 07 21:15	24°♄30'49	-0°06'43
evening max el	10331 Sep 22 08:14	0°♄38'20	22°12'32	minimum elong	10332 Aug 07 21:39	24°♄32'53	0°06'58
desc. node	10331 Sep 25 13:59	3°♄26'06		behind sun begin	10332 Aug 07 16:14	24°♄05'10	
retrograde	10331 Oct 05 03:35	7°♄01'02		behind sun end	10332 Aug 08 03:04	25°♄00'38	
evening set	10331 Oct 08 09:10	6°♄37'50		asc. node	10332 Aug 08 13:38	25°♄55'01	
min. Earth dist.	10331 Oct 16 13:55	3°♄01'15	0.54802 AU		10332 Aug 10 12:56	0°♄	
inferior conj	10331 Oct 17 06:44	2°♄37'37	-5°25'49	evening rise	10332 Aug 15 12:34	10°♄24'19	
minimum elong	10331 Oct 17 00:07	2°♄46'56	5°24'40		10332 Aug 25 19:41	0°♄	
	10331 Oct 22 08:22	30°♄		evening max el	10332 Sep 03 05:55	11°♄10'30	20°42'54
morning rise	10331 Oct 25 16:38	28°♄50'35		desc. node	10332 Sep 11 11:15	16°♄23'57	
direct	10331 Oct 29 01:49	28°♄25'07		retrograde	10332 Sep 14 15:32	16°♄49'48	
	10331 Nov 04 09:19	0°♄		evening set	10332 Sep 16 19:33	16°♄38'24	
morning max el	10331 Nov 09 23:01	4°♄01'38	21°31'33	inferior conj	10332 Sep 25 23:03	12°♄42'24	-4°11'29
asc. node	10331 Nov 18 17:11	15°♄01'18		minimum elong	10332 Sep 25 13:13	12°♄56'30	4°08'35
	10331 Nov 27 00:54	0°♄		min. Earth dist.	10332 Sep 26 22:20	12°♄08'59	0.54681 AU
morning set	10331 Nov 30 08:47	6°♄49'20		morning rise	10332 Oct 04 06:44	8°♄44'01	
				direct	10332 Oct 08 09:59	8°♄07'18	
superior conj	10331 Dec 07 14:01	22°♄01'31	1°34'44	morning max el	10332 Oct 21 14:16	14°♄28'32	23°15'13
minimum elong	10331 Dec 07 15:33	22°♄09'32	1°35'07		10332 Nov 02 13:07	0°♄	
	10331 Dec 11 11:23	0°♄		asc. node	10332 Nov 04 14:07	3°♄28'04	
max. Earth dist.	10331 Dec 11 21:59	0°♄53'11	1.34973 AU	morning set	10332 Nov 13 20:12	21°♄37'40	
evening rise	10331 Dec 16 02:17	9°♄02'11			10332 Nov 17 17:33	0°♄	
desc. node	10331 Dec 22 12:21	20°♄42'31					
	10331 Dec 28 01:39	0°♄		superior conj	10332 Nov 20 18:47	6°♄35'56	1°39'46
	10332 Jan 19 12:59	0°♄		minimum elong	10332 Nov 20 19:06	6°♄37'38	1°40'11
evening max el	10332 Jan 20 08:18	0°♄47'29	26°40'32	max. Earth dist.	10332 Nov 23 16:52	12°♄49'03	1.33407 AU
retrograde	10332 Feb 02 10:10	8°♄07'26		evening rise	10332 Nov 28 12:44	22°♄41'46	
evening set	10332 Feb 08 20:53	5°♄33'55			10332 Dec 02 07:30	0°♄	
min. Earth dist.	10332 Feb 12 22:25	1°♄28'00	0.66201 AU	desc. node	10332 Dec 08 09:22	10°♄53'38	
	10332 Feb 14 04:15	30°♄			10332 Dec 20 18:56	0°♄	
inferior conj	10332 Feb 14 20:14	29°♄12'26	0°03'24	evening max el	10333 Jan 01 21:16	14°♄16'48	27°19'22
minimum elong	10332 Feb 14 20:08	29°♄12'45	0°03'38	retrograde	10333 Jan 15 10:17	21°♄39'59	
transit middle	10332 Feb 14 20:08	29°♄12'45	0°03'38	evening set	10333 Jan 22 05:53	19°♄06'40	
transit begin	10332 Feb 14 17:17	29°♄21'12		min. Earth dist.	10333 Jan 26 02:29	15°♄33'20	0.64653 AU
transit end	10332 Feb 14 22:59	29°♄04'18		inferior conj	10333 Jan 28 11:51	12°♄58'20	-1°00'59
asc. node	10332 Feb 14 16:07	29°♄24'41		minimum elong	10333 Jan 28 13:42	12°♄53'18	0°59'49
morning rise	10332 Feb 20 20:28	23°♄32'23		asc. node	10333 Jan 31 13:19	9°♄52'07	
direct	10332 Feb 23 18:39	22°♄44'54		morning rise	10333 Feb 03 23:14	7°♄31'31	
morning max el	10332 Mar 01 05:58	26°♄11'46	18°19'11	direct	10333 Feb 06 12:46	6°♄57'28	
	10332 Mar 04 14:09	0°♄		morning max el	10333 Feb 12 22:38	10°♄18'24	17°54'24
desc. node	10332 Mar 19 12:43	22°♄38'12			10333 Feb 26 12:37	0°♄	
morning set	10332 Mar 20 20:51	24°♄46'42		morning set	10333 Mar 02 06:43	6°♄15'43	
	10332 Mar 24 03:22	0°♄		desc. node	10333 Mar 06 09:28	13°♄06'30	
superior conj	10332 Apr 05 10:17	19°♄23'20	-1°45'30	superior conj	10333 Mar 16 00:55	28°♄47'50	-1°07'31
minimum elong	10332 Apr 05 00:50	18°♄46'19	1°44'46	minimum elong	10333 Mar 15 17:31	28°♄18'16	1°06'30
max. Earth dist.	10332 Apr 06 14:23	21°♄13'12	1.45645 AU		10333 Mar 16 19:00	0°♄	

max. Earth dist.	10333 Mar 20 09:43	5° $\Upsilon$ 43'26	1.45222 AU	superior conj	10334 Feb 24 13:30	9° $\text{X}$ 16'29	-0°24'37
evening rise	10333 Apr 01 00:47	23° $\Upsilon$ 46'56		minimum elong	10334 Feb 24 11:01	9° $\text{X}$ 06'07	0°24'02
	10333 Apr 05 02:19	0° $\text{B}$		max. Earth dist.	10334 Mar 03 03:09	20° $\text{X}$ 00'40	1.44109 AU
greatest brilliancy	10333 Apr 15 19:53	16° $\text{B}$ 05'48	-0.6m		10334 Mar 09 10:52	0° $\Upsilon$	
	10333 Apr 26 06:55	0° $\Pi$		evening rise	10334 Mar 11 12:53	3° $\Upsilon$ 13'42	
evening max el	10333 Apr 27 14:14	1° $\Pi$ 23'08	19°58'22		10334 Mar 29 13:55	0° $\text{B}$	
asc. node	10333 Apr 29 11:21	3° $\Pi$ 07'48		evening max el	10334 Apr 10 13:31	15° $\text{B}$ 06'24	21°05'11
retrograde	10333 May 05 04:36	5° $\Pi$ 45'02		asc. node	10334 Apr 16 08:32	19° $\text{B}$ 29'57	
evening set	10333 May 09 00:27	4° $\Pi$ 19'59		retrograde	10334 Apr 19 03:09	20° $\text{B}$ 07'45	
	10333 May 13 02:14	30° $\text{K}$ $\text{B}$		evening set	10334 Apr 23 08:53	18° $\text{B}$ 26'58	
inferior conj	10333 May 14 08:22	28° $\text{B}$ 19'38	3°16'21	inferior conj	10334 Apr 28 15:38	12° $\text{B}$ 14'43	3°03'45
minimum elong	10333 May 14 07:45	28° $\text{B}$ 21'45	3°15'56	minimum elong	10334 Apr 28 14:08	12° $\text{B}$ 19'55	3°03'15
min. Earth dist.	10333 May 15 07:26	27° $\text{B}$ 01'49	0.67600 AU	min. Earth dist.	10334 Apr 29 01:05	11° $\text{B}$ 41'56	0.68341 AU
morning rise	10333 May 19 14:43	22° $\text{B}$ 00'22		morning rise	10334 May 03 19:10	5° $\text{B}$ 59'13	
direct	10333 May 25 10:13	19° $\text{B}$ 25'09		direct	10334 May 09 01:44	3° $\text{B}$ 39'58	
desc. node	10333 Jun 02 10:00	23° $\text{B}$ 01'16		morning max el	10334 May 19 14:32	9° $\text{B}$ 56'25	23°27'13
morning max el	10333 Jun 06 05:00	26° $\text{B}$ 29'30	24°56'21	desc. node	10334 May 20 06:54	10° $\text{B}$ 38'25	
	10333 Jun 09 10:47	0° $\Pi$			10334 Jun 04 10:50	0° $\Pi$	
	10333 Jun 30 23:16	0° $\text{B}$		morning set	10334 Jun 23 14:14	29° $\Pi$ 48'24	
morning set	10333 Jul 12 03:37	18° $\text{B}$ 45'37			10334 Jun 23 16:59	0° $\text{B}$	
max. Earth dist.	10333 Jul 15 17:48	25° $\text{B}$ 15'15	1.36929 AU	max. Earth dist.	10334 Jun 27 14:32	6° $\text{B}$ 41'12	1.39197 AU
	10333 Jul 18 06:51	0° $\Omega$					
				superior conj	10334 Jul 05 04:59	20° $\text{B}$ 24'10	-1°12'10
superior conj	10333 Jul 22 08:01	7° $\Omega$ 47'47	-0°39'04	minimum elong	10334 Jul 05 09:48	20° $\text{B}$ 46'37	1°11'53
minimum elong	10333 Jul 22 10:31	8° $\Omega$ 00'03	0°39'01		10334 Jul 10 06:27	0° $\Omega$	
asc. node	10333 Jul 26 10:30	15° $\Omega$ 57'21		asc. node	10334 Jul 13 07:24	5° $\Omega$ 52'45	
evening rise	10333 Jul 30 16:38	24° $\Omega$ 32'33		evening rise	10334 Jul 14 13:13	8° $\Omega$ 17'14	
	10333 Aug 02 10:22	0° $\text{B}$			10334 Jul 26 23:02	0° $\text{B}$	
evening max el	10333 Aug 16 17:19	22° $\text{B}$ 26'23	19°32'09	evening max el	10334 Jul 30 16:55	4° $\text{B}$ 27'27	18°42'30
retrograde	10333 Aug 26 09:54	27° $\text{B}$ 14'49		retrograde	10334 Aug 07 21:16	8° $\text{B}$ 32'33	
evening set	10333 Aug 28 06:07	27° $\text{B}$ 05'09		evening set	10334 Aug 09 20:50	8° $\text{B}$ 19'01	
desc. node	10333 Aug 29 08:31	26° $\text{B}$ 50'38		desc. node	10334 Aug 16 05:44	5° $\text{B}$ 06'59	
inferior conj	10333 Sep 06 00:26	23° $\text{B}$ 00'13	-2°21'57	inferior conj	10334 Aug 17 21:04	3° $\text{B}$ 55'36	-0°30'22
minimum elong	10333 Sep 05 18:05	23° $\text{B}$ 10'19	2°19'39	minimum elong	10334 Aug 17 19:50	3° $\text{B}$ 57'54	0°30'07
min. Earth dist.	10333 Sep 08 09:37	21° $\text{B}$ 29'28	0.55510 AU	min. Earth dist.	10334 Aug 21 01:24	1° $\text{B}$ 35'05	0.57127 AU
morning rise	10333 Sep 14 03:43	18° $\text{B}$ 32'15			10334 Aug 23 11:06	30° $\text{K}$ $\Omega$	
direct	10333 Sep 19 02:42	17° $\text{B}$ 37'10		morning rise	10334 Aug 25 15:26	28° $\Omega$ 50'20	
morning max el	10333 Oct 03 01:34	24° $\text{B}$ 36'33	25°01'19	direct	10334 Aug 31 09:06	27° $\Omega$ 29'38	
	10333 Oct 08 01:01	0° $\text{B}$			10334 Sep 08 09:38	0° $\text{B}$	
asc. node	10333 Oct 22 10:59	22° $\text{B}$ 28'36		morning max el	10334 Sep 14 16:15	4° $\text{B}$ 57'38	26°32'25
	10333 Oct 26 06:36	0° $\text{B}$			10334 Oct 02 22:44	0° $\text{B}$	
morning set	10333 Oct 29 07:53	6° $\text{B}$ 23'42		asc. node	10334 Oct 09 07:48	11° $\text{B}$ 54'11	
				morning set	10334 Oct 13 18:14	21° $\text{B}$ 03'00	
					10334 Oct 17 20:54	0° $\text{B}$	
superior conj	10333 Nov 05 03:52	21° $\text{B}$ 20'14	1°38'27				
minimum elong	10333 Nov 05 03:04	21° $\text{B}$ 15'50	1°38'46	superior conj	10334 Oct 20 15:12	6° $\text{B}$ 08'03	1°31'18
max. Earth dist.	10333 Nov 06 19:29	24° $\text{B}$ 57'09	1.32290 AU	minimum elong	10334 Oct 20 13:33	5° $\text{B}$ 58'49	1°31'24
	10333 Nov 09 03:33	0° $\text{X}$		max. Earth dist.	10334 Oct 21 03:25	7° $\text{B}$ 15'57	1.31643 AU
evening rise	10333 Nov 12 09:03	6° $\text{X}$ 46'36		evening rise	10334 Oct 27 12:26	21° $\text{B}$ 09'04	
	10333 Nov 24 20:08	0° $\text{B}$			10334 Oct 31 20:24	0° $\text{X}$	
desc. node	10333 Nov 25 06:27	0° $\text{B}$ 42'48		desc. node	10334 Nov 12 03:34	20° $\text{X}$ 00'51	
evening max el	10333 Dec 15 08:17	27° $\text{B}$ 19'47	27°30'33		10334 Nov 19 01:40	0° $\text{B}$	
	10333 Dec 18 09:47	0° $\approx$		evening max el	10334 Nov 27 14:41	9° $\text{B}$ 42'47	27°08'54
retrograde	10333 Dec 29 03:22	4° $\approx$ 38'34		retrograde	10334 Dec 11 12:09	16° $\text{B}$ 54'03	
evening set	10334 Jan 05 03:44	2° $\approx$ 13'33		evening set	10334 Dec 18 10:56	14° $\text{B}$ 46'25	
	10334 Jan 07 22:57	30° $\text{K}$ $\text{B}$		min. Earth dist.	10334 Dec 22 05:14	12° $\text{B}$ 03'22	0.60753 AU
min. Earth dist.	10334 Jan 08 21:14	29° $\text{B}$ 09'05	0.62805 AU	inferior conj	10334 Dec 25 08:14	9° $\text{B}$ 23'51	-3°27'25
inferior conj	10334 Jan 11 16:57	26° $\text{B}$ 25'11	-2°12'28	minimum elong	10334 Dec 25 15:04	9° $\text{B}$ 09'15	3°24'35
minimum elong	10334 Jan 11 21:19	26° $\text{B}$ 14'37	2°10'16	morning rise	10335 Jan 01 21:47	4° $\text{B}$ 32'52	
asc. node	10334 Jan 18 10:28	21° $\text{B}$ 20'48		direct	10335 Jan 04 01:28	4° $\text{B}$ 14'13	
morning rise	10334 Jan 18 17:10	21° $\text{B}$ 14'35		asc. node	10335 Jan 05 07:35	4° $\text{B}$ 20'46	
direct	10334 Jan 21 00:17	20° $\text{B}$ 50'02		morning max el	10335 Jan 11 07:04	7° $\text{B}$ 51'36	17°58'19
morning max el	10334 Jan 27 16:06	24° $\text{B}$ 14'43	17°47'07		10335 Jan 25 13:53	0° $\approx$	
	10334 Feb 01 08:13	0° $\approx$		morning set	10335 Jan 26 21:50	2° $\approx$ 26'44	
morning set	10334 Feb 12 17:14	18° $\approx$ 55'57					
	10334 Feb 19 01:56	0° $\text{X}$		superior conj	10335 Feb 06 03:08	20° $\approx$ 56'02	0°15'11
desc. node	10334 Feb 21 06:14	3° $\text{X}$ 43'17		minimum elong	10335 Feb 06 04:25	21° $\approx$ 01'38	0°15'19

behind sun begin	10335 Feb 06 02:07	20° $\approx$ 51'34		superior conj	10336 Jan 19 14:37	3° $\approx$ 37'21	0°47'51
behind sun end	10335 Feb 06 06:43	21° $\approx$ 11'43		minimum elong	10336 Jan 19 17:33	3° $\approx$ 50'57	0°47'51
desc. node	10335 Feb 08 03:02	24° $\approx$ 24'26		desc. node	10336 Jan 25 23:53	15° $\approx$ 06'47	
	10335 Feb 11 09:43	0° $\mathbb{H}$		max. Earth dist.	10336 Jan 27 01:29	16° $\approx$ 57'57	1.40363 AU
max. Earth dist.	10335 Feb 13 16:46	3° $\mathbb{H}$ 49'48	1.42426 AU	evening rise	10336 Jan 31 08:00	24° $\approx$ 12'08	
evening rise	10335 Feb 19 12:27	13° $\mathbb{H}$ 15'48			10336 Feb 03 21:09	0° $\mathbb{H}$	
	10335 Mar 02 10:28	0° $\mathbb{Y}$			10336 Feb 24 06:52	0° $\mathbb{Y}$	
evening max el	10335 Mar 24 07:43	28° $\mathbb{Y}$ 50'30	22°21'26	evening max el	10336 Mar 05 22:26	12° $\mathbb{Y}$ 36'45	23°41'45
	10335 Mar 25 12:19	0° $\mathbb{B}$		retrograde	10336 Mar 16 18:36	19° $\mathbb{Y}$ 00'20	
retrograde	10335 Apr 03 00:16	4° $\mathbb{B}$ 34'22		asc. node	10336 Mar 20 03:00	18° $\mathbb{Y}$ 07'03	
asc. node	10335 Apr 03 05:46	4° $\mathbb{B}$ 34'06		evening set	10336 Mar 21 22:54	16° $\mathbb{Y}$ 50'14	
evening set	10335 Apr 07 16:53	2° $\mathbb{B}$ 38'18		min. Earth dist.	10336 Mar 26 17:55	11° $\mathbb{Y}$ 14'54	0.68472 AU
	10335 Apr 10 05:39	30° $\mathbb{R}$ $\mathbb{Y}$		inferior conj	10336 Mar 27 09:19	10° $\mathbb{Y}$ 22'14	2°08'39
inferior conj	10335 Apr 13 00:35	26° $\mathbb{Y}$ 16'31	2°40'57	minimum elong	10336 Mar 27 07:08	10° $\mathbb{Y}$ 29'44	2°07'57
minimum elong	10335 Apr 12 22:32	26° $\mathbb{Y}$ 23'39	2°40'18	morning rise	10336 Apr 01 15:21	4° $\mathbb{Y}$ 18'13	
min. Earth dist.	10335 Apr 12 21:16	26° $\mathbb{Y}$ 28'02	0.68625 AU	direct	10336 Apr 05 18:54	2° $\mathbb{Y}$ 41'23	
morning rise	10335 Apr 18 04:03	20° $\mathbb{Y}$ 06'12		morning max el	10336 Apr 13 21:18	7° $\mathbb{Y}$ 18'12	20°38'55
direct	10335 Apr 22 20:59	18° $\mathbb{Y}$ 07'25		desc. node	10336 Apr 23 00:37	18° $\mathbb{Y}$ 26'06	
morning max el	10335 May 02 02:54	23° $\mathbb{Y}$ 31'40	21°58'56		10336 May 01 02:56	0° $\mathbb{B}$	
desc. node	10335 May 07 03:46	29° $\mathbb{Y}$ 11'46		morning set	10336 May 13 06:46	18° $\mathbb{B}$ 25'26	
	10335 May 07 19:22	0° $\mathbb{B}$			10336 May 20 14:51	0° $\mathbb{II}$	
	10335 May 28 19:40	0° $\mathbb{II}$		max. Earth dist.	10336 May 21 20:47	2° $\mathbb{II}$ 00'29	1.43378 AU
morning set	10335 Jun 03 22:42	9° $\mathbb{II}$ 39'07					
max. Earth dist.	10335 Jun 09 14:31	18° $\mathbb{II}$ 54'52	1.41437 AU	superior conj	10336 May 28 11:36	12° $\mathbb{II}$ 52'38	-2°05'00
	10335 Jun 16 02:16	0° $\mathbb{E}$		minimum elong	10336 May 28 16:42	13° $\mathbb{II}$ 14'01	2°05'11
					10336 Jun 07 10:57	0° $\mathbb{E}$	
superior conj	10335 Jun 17 07:39	2° $\mathbb{E}$ 08'57	-1°42'34	evening rise	10336 Jun 09 16:37	3° $\mathbb{E}$ 56'05	
minimum elong	10335 Jun 17 13:59	2° $\mathbb{E}$ 36'55	1°42'20	asc. node	10336 Jun 16 01:23	15° $\mathbb{E}$ 03'43	
evening rise	10335 Jun 27 22:43	21° $\mathbb{E}$ 28'50			10336 Jun 26 09:06	0° $\mathbb{Q}$	
asc. node	10335 Jun 30 04:22	25° $\mathbb{E}$ 36'38		evening max el	10336 Jun 26 13:38	0° $\mathbb{Q}$ 11'18	18°04'26
	10335 Jul 02 14:09	0° $\mathbb{Q}$		retrograde	10336 Jul 03 02:28	3° $\mathbb{Q}$ 33'24	
evening max el	10335 Jul 14 01:00	17° $\mathbb{Q}$ 05'45	18°13'37	evening set	10336 Jul 05 16:54	3° $\mathbb{Q}$ 00'55	
retrograde	10335 Jul 21 03:57	20° $\mathbb{Q}$ 41'49			10336 Jul 10 02:21	30° $\mathbb{R}$ $\mathbb{E}$	
evening set	10335 Jul 23 10:35	20° $\mathbb{Q}$ 20'25		inferior conj	10336 Jul 12 05:22	27° $\mathbb{E}$ 57'21	2°07'22
inferior conj	10335 Jul 30 15:33	15° $\mathbb{Q}$ 36'19	1°01'28	minimum elong	10336 Jul 12 08:10	27° $\mathbb{E}$ 50'19	2°06'08
minimum elong	10335 Jul 30 17:28	15° $\mathbb{Q}$ 32'07	1°00'25	min. Earth dist.	10336 Jul 15 07:11	24° $\mathbb{E}$ 54'06	0.61493 AU
min. Earth dist.	10335 Aug 02 23:59	12° $\mathbb{Q}$ 43'04	0.59226 AU	morning rise	10336 Jul 18 21:02	21° $\mathbb{E}$ 55'29	
desc. node	10335 Aug 03 02:56	12° $\mathbb{Q}$ 37'00		desc. node	10336 Jul 20 00:08	21° $\mathbb{E}$ 12'44	
morning rise	10335 Aug 06 21:07	9° $\mathbb{Q}$ 57'35		direct	10336 Jul 25 12:57	19° $\mathbb{E}$ 37'45	
direct	10335 Aug 13 05:09	8° $\mathbb{Q}$ 07'16		morning max el	10336 Aug 08 18:27	27° $\mathbb{E}$ 38'46	27°56'55
morning max el	10335 Aug 27 14:01	15° $\mathbb{Q}$ 55'56	27°33'33		10336 Aug 11 00:28	0° $\mathbb{Q}$	
	10335 Sep 08 01:54	0° $\mathbb{P}$			10336 Aug 31 19:53	0° $\mathbb{P}$	
	10335 Sep 25 09:24	0° $\mathbb{A}$		morning set	10336 Sep 11 03:46	19° $\mathbb{P}$ 41'14	
asc. node	10335 Sep 26 04:38	1° $\mathbb{A}$ 37'55		asc. node	10336 Sep 12 01:27	21° $\mathbb{P}$ 33'27	
morning set	10335 Sep 28 01:31	5° $\mathbb{A}$ 30'56			10336 Sep 16 00:38	0° $\mathbb{A}$	
max. Earth dist.	10335 Oct 04 13:05	19° $\mathbb{A}$ 36'53	1.31472 AU	max. Earth dist.	10336 Sep 16 20:28	1° $\mathbb{A}$ 47'57	1.31788 AU
superior conj	10335 Oct 05 02:56	20° $\mathbb{A}$ 53'51	1°18'39	superior conj	10336 Sep 18 13:10	5° $\mathbb{A}$ 31'13	1°00'48
minimum elong	10335 Oct 05 00:46	20° $\mathbb{A}$ 41'51	1°18'30	minimum elong	10336 Sep 18 10:58	5° $\mathbb{A}$ 19'07	1°00'26
	10335 Oct 09 05:26	0° $\mathbb{M}$		evening rise	10336 Sep 25 07:18	20° $\mathbb{A}$ 20'41	
evening rise	10335 Oct 11 20:33	5° $\mathbb{M}$ 42'40			10336 Sep 29 22:37	0° $\mathbb{M}$	
	10335 Oct 24 12:09	0° $\mathbb{J}$		desc. node	10336 Oct 15 21:59	26° $\mathbb{M}$ 09'08	
desc. node	10335 Oct 30 00:45	8° $\mathbb{J}$ 35'33			10336 Oct 19 05:52	0° $\mathbb{J}$	
evening max el	10335 Nov 09 13:40	21° $\mathbb{J}$ 15'35	26°13'14	evening max el	10336 Oct 21 04:28	1° $\mathbb{J}$ 57'47	24°49'03
retrograde	10335 Nov 23 11:37	28° $\mathbb{J}$ 19'57		retrograde	10336 Nov 04 00:05	8° $\mathbb{J}$ 54'08	
evening set	10335 Nov 29 23:10	26° $\mathbb{J}$ 38'56		evening set	10336 Nov 09 11:53	7° $\mathbb{J}$ 46'33	
min. Earth dist.	10335 Dec 04 02:43	24° $\mathbb{J}$ 04'10	0.58645 AU	min. Earth dist.	10336 Nov 14 15:59	5° $\mathbb{J}$ 01'43	0.56720 AU
inferior conj	10335 Dec 07 06:08	21° $\mathbb{J}$ 44'44	-4°38'05	inferior conj	10336 Nov 17 07:54	3° $\mathbb{J}$ 18'35	-5°30'15
minimum elong	10335 Dec 07 14:04	21° $\mathbb{J}$ 30'02	4°35'37	minimum elong	10336 Nov 17 13:10	3° $\mathbb{J}$ 10'05	5°29'12
morning rise	10335 Dec 15 07:30	17° $\mathbb{J}$ 16'10			10336 Nov 23 05:20	30° $\mathbb{R}$ $\mathbb{M}$	
direct	10335 Dec 17 11:52	17° $\mathbb{J}$ 00'11		morning rise	10336 Nov 25 16:42	29° $\mathbb{M}$ 12'10	
asc. node	10335 Dec 23 04:38	18° $\mathbb{J}$ 56'39		direct	10336 Nov 28 03:26	28° $\mathbb{M}$ 55'28	
morning max el	10335 Dec 25 15:55	20° $\mathbb{J}$ 59'35	18°29'31		10336 Dec 02 18:58	0° $\mathbb{J}$	
	10336 Jan 01 12:26	0° $\mathbb{Z}$		morning max el	10336 Dec 07 14:45	3° $\mathbb{J}$ 26'52	19°22'33
morning set	10336 Jan 10 15:06	16° $\mathbb{Z}$ 32'04		asc. node	10336 Dec 09 01:40	4° $\mathbb{J}$ 56'37	
	10336 Jan 17 16:01	0° $\mathbb{Z}$			10336 Dec 24 05:01	0° $\mathbb{Z}$	
				morning set	10336 Dec 24 16:54	0° $\mathbb{Z}$ 59'18	

superior conj	10337 Jan 01 18:53	17°  05'17	1°12'18	superior conj	10337 Dec 16 11:24	1°  06'50	1°28'42
minimum elong	10337 Jan 01 21:54	17°  19'56	1°12'24	minimum elong	10337 Dec 16 13:36	1°  18'01	1°28'59
max. Earth dist.	10337 Jan 08 07:16	29°  23'41	1.38157 AU	max. Earth dist.	10337 Dec 21 15:11	11°  22'48	1.36061 AU
	10337 Jan 08 15:14	0° 		evening rise	10337 Dec 25 13:02	18°  46'21	
desc. node	10337 Jan 11 20:48	5°  46'10		desc. node	10337 Dec 29 17:44	26°  18'33	
evening rise	10337 Jan 12 01:01	6°  04'40			10337 Dec 31 21:07	0° 	
	10337 Jan 26 20:31	0° 			10338 Jan 21 00:33	0° 	
evening max el	10337 Feb 16 11:50	26°  25'57	24°59'48	evening max el	10338 Jan 30 01:18	10°  14'40	26°08'22
	10337 Feb 20 12:59	0° 		retrograde	10338 Feb 11 18:26	17°  28'13	
retrograde	10337 Feb 28 09:02	3°  20'29		evening set	10338 Feb 17 22:43	14°  25'53	
evening set	10337 Mar 06 01:26	0°  58'37		asc. node	10338 Feb 21 21:27	10°  25'59	
asc. node	10337 Mar 07 00:14	0°  06'21		min. Earth dist.	10338 Feb 22 03:43	10°  32'01	0.66930 AU
	10337 Mar 07 02:48	30°  28'48		inferior conj	10338 Feb 23 18:37	8°  31'42	0°36'36
min. Earth dist.	10337 Mar 10 12:49	25°  58'06	0.67898 AU	minimum elong	10338 Feb 23 17:41	8°  34'34	0°36'27
inferior conj	10337 Mar 11 16:00	24°  28'48	1°27'11	morning rise	10338 Mar 01 13:22	2°  44'48	
minimum elong	10337 Mar 11 14:09	24°  34'53	1°26'36	direct	10338 Mar 04 17:19	1°  47'51	
morning rise	10337 Mar 17 03:09	18°  22'26		morning max el	10338 Mar 11 08:51	5°  23'16	18°40'57
direct	10337 Mar 20 18:15	17°  16'44		desc. node	10338 Mar 27 18:12	28°  16'48	
morning max el	10337 Mar 27 23:26	21°  16'39	19°32'06		10338 Mar 28 20:39	0° 	
	10337 Apr 04 04:13	0° 		morning set	10338 Apr 01 18:49	6°  08'35	
greatest brilliancy	10337 Apr 09 16:01	7°  50'40	-0.7m	max. Earth dist.	10338 Apr 17 03:24	0°  10'34	1.45555 AU
desc. node	10337 Apr 09 21:26	8°  10'36			10338 Apr 17 00:42	0° 	
morning set	10337 Apr 22 05:36	26°  52'49					
	10337 Apr 24 06:08	0° 		superior conj	10338 Apr 18 01:04	1°  35'21	-2°01'11
max. Earth dist.	10337 May 04 09:35	15°  50'26	1.44799 AU	minimum elong	10338 Apr 17 17:28	1°  05'37	2°00'56
				evening rise	10338 May 03 11:44	26°  01'13	
superior conj	10337 May 08 15:24	22°  35'18	-2°12'56		10338 May 05 23:23	0° 	
minimum elong	10337 May 08 14:53	22°  33'14	2°13'19	greatest brilliancy	10338 May 10 22:24	7°  15'24	-0.9m
	10337 May 13 05:34	0° 		asc. node	10338 May 20 19:34	22°  14'27	
evening rise	10337 May 22 14:05	15°  28'40		evening max el	10338 May 24 15:20	27°  10'26	18°41'26
	10337 May 31 07:38	0° 			10338 May 28 07:02	0° 	
asc. node	10337 Jun 02 22:27	4°  08'07		retrograde	10338 May 31 05:17	0°  46'28	
evening max el	10337 Jun 10 03:25	13°  35'38	18°13'59	evening set	10338 Jun 03 11:36	29°  14'53	
retrograde	10337 Jun 16 12:14	16°  57'58			10338 Jun 03 01:43	30°  28'44	
evening set	10337 Jun 19 10:33	16°  12'05		inferior conj	10338 Jun 09 02:41	24°  10'55	3°11'44
inferior conj	10337 Jun 25 10:25	10°  50'43	2°49'21	minimum elong	10338 Jun 09 03:53	24°  10'41'15	3°11'09
minimum elong	10337 Jun 25 12:43	10°  44'17	2°48'26	min. Earth dist.	10338 Jun 11 00:58	21°  14'55'59	0.65520 AU
min. Earth dist.	10337 Jun 27 23:39	7°  59'38	0.63655 AU	morning rise	10338 Jun 14 19:24	17°  18'09	
morning rise	10337 Jul 01 13:24	4°  36'07		direct	10338 Jun 21 07:07	15°  10'35'54	
desc. node	10337 Jul 06 21:16	2°  05'45		desc. node	10338 Jun 23 18:22	15°  12'44'1	
direct	10337 Jul 08 06:16	1°  59'28		morning max el	10338 Jul 04 13:43	22°  15'55'09	26°55'29
morning max el	10337 Jul 22 03:14	10°  02'07	27°42'27		10338 Jul 10 19:49	0° 	
	10337 Aug 06 18:14	0° 			10338 Jul 31 01:36	0° 	
	10337 Aug 24 04:29	0° 		morning set	10338 Aug 09 07:14	16°  04'20'06	
morning set	10337 Aug 25 22:39	3°  27'47		max. Earth dist.	10338 Aug 13 13:37	25°  05'10	1.33932 AU
asc. node	10337 Aug 29 22:17	11°  23'18			10338 Aug 15 23:28	0° 	
max. Earth dist.	10337 Aug 30 21:44	13°  29'25	1.32608 AU	asc. node	10338 Aug 16 19:08	1°  24'41'44	
superior conj	10337 Sep 02 20:02	19°  29'54'53	0°38'01	superior conj	10338 Aug 17 21:15	3°  27'54	0°10'44
minimum elong	10337 Sep 02 18:20	19°  29'45'46	0°37'33	minimum elong	10338 Aug 17 20:42	3°  27'55'01	0°10'22
	10337 Sep 07 11:29	0° 		behind sun begin	10338 Aug 17 16:19	3°  27'32'05	
evening rise	10337 Sep 09 18:48	4°  29'58'01		behind sun end	10338 Aug 18 01:04	4°  27'17'58	
	10337 Sep 23 01:25	0° 		evening rise	10338 Aug 25 05:05	19°  27'28'36	
evening max el	10337 Oct 02 15:15	12°  27'09'01	23°09'47		10338 Aug 30 09:09	0° 	
desc. node	10337 Oct 02 19:13	12°  27'18'34		evening max el	10338 Sep 14 06:34	22°  27'23'19	21°32'33
retrograde	10337 Oct 15 23:40	18°  27'48'09		desc. node	10338 Sep 19 16:27	26°  27'23'44'1	
evening set	10337 Oct 20 01:17	18°  27'12'09		retrograde	10338 Sep 26 12:50	28°  27'28'44	
min. Earth dist.	10337 Oct 27 00:38	14°  27'58'58	0.55291 AU	evening set	10338 Sep 29 05:40	28°  27'12'06	
inferior conj	10337 Oct 28 14:06	14°  27'04'36	-5°43'18	inferior conj	10338 Oct 08 07:39	24°  27'15'38	-5°00'32
minimum elong	10337 Oct 28 12:03	14°  27'07'36	5°42'54	minimum elong	10338 Oct 07 22:42	24°  27'28'08	4°58'30
morning rise	10337 Nov 06 00:36	10°  27'13'59		min. Earth dist.	10338 Oct 08 07:58	24°  27'15'12	0.54636 AU
direct	10337 Nov 09 00:20	9°  27'52'43		morning rise	10338 Oct 16 16:43	20°  27'26'28	
morning max el	10337 Nov 20 00:26	15°  27'04'27	20°38'18	direct	10338 Oct 20 09:40	19°  27'25'64'1	
asc. node	10337 Nov 25 22:38	22°  27'10'57		morning max el	10338 Nov 01 20:57	25°  27'25'21'21	22°14'17
	10337 Nov 30 22:08	0° 			10338 Nov 05 17:35	0° 	
morning set	10337 Dec 09 00:11	15°  27'39'46		asc. node	10338 Nov 12 19:34	10°  27'10'08	
	10337 Dec 15 22:19	0° 		morning set	10338 Nov 23 10:41	0°  27'27'15	



	10338 Nov 23 05:30	0°♊				10339 Oct 04 13:11	0°♎	
				morning max el		10339 Oct 14 09:27	6°♎06'44	24°01'15
superior conj	10338 Nov 30 12:33	15°♊31'53	1°37'40	asc. node		10339 Oct 30 16:28	28°♎49'18	
minimum elong	10338 Nov 30 13:34	15°♊37'17	1°38'05			10339 Oct 31 07:53	0°♎	
max. Earth dist.	10338 Dec 04 05:48	23°♊16'50	1.34262 AU	morning set		10339 Nov 07 22:26	15°♎15'22	
	10338 Dec 07 14:09	0°♋						
evening rise	10338 Dec 08 16:21	2°♋07'44		superior conj		10339 Nov 14 19:25	0°♊11'15	1°39'57
desc. node	10338 Dec 16 14:42	16°♋39'23		minimum elong		10339 Nov 14 19:14	0°♊10'17	1°40'21
	10338 Dec 24 19:44	0°♌				10339 Nov 14 17:20	0°♊	
evening max el	10339 Jan 12 14:54	23°♌55'02	27°00'02	max. Earth dist.		10339 Nov 17 04:22	5°♊18'36	1.32871 AU
	10339 Jan 20 19:47	0°♍		evening rise		10339 Nov 22 07:19	15°♊58'46	
retrograde	10339 Jan 25 21:58	1°♍16'33				10339 Nov 29 15:29	0°♋	
	10339 Jan 30 14:38	30°♍		desc. node		10339 Dec 03 11:44	6°♋42'15	
evening set	10339 Feb 01 12:52	28°♌42'33				10339 Dec 19 11:34	0°♌	
min. Earth dist.	10339 Feb 05 12:17	24°♌50'41	0.65589 AU	evening max el		10339 Dec 26 03:15	7°♌14'41	27°27'47
inferior conj	10339 Feb 07 14:59	22°♌26'03	-0°22'53	retrograde		10340 Jan 08 19:01	14°♌36'14	
minimum elong	10339 Feb 07 15:38	22°♌24'12	0°22'16	evening set		10340 Jan 15 17:29	12°♌05'10	
asc. node	10339 Feb 08 18:39	21°♌08'04		min. Earth dist.		10340 Jan 19 12:24	8°♌45'04	0.63908 AU
morning rise	10339 Feb 13 19:41	16°♌51'07		inferior conj		10340 Jan 22 02:29	6°♌04'49	-1°30'31
direct	10339 Feb 16 14:04	16°♌09'39		minimum elong		10340 Jan 22 05:22	5°♌57'23	1°28'55
morning max el	10339 Feb 22 23:41	19°♌32'27	18°06'30	asc. node		10340 Jan 26 15:49	1°♌56'04	
	10339 Mar 02 23:47	0°♎		morning rise		10340 Jan 28 19:12	0°♌44'41	
morning set	10339 Mar 13 12:13	16°♎50'08		direct		10340 Jan 31 05:48	0°♌15'03	
desc. node	10339 Mar 14 14:58	18°♎38'48		morning max el		10340 Feb 06 17:07	3°♌36'03	17°49'08
	10339 Mar 21 15:55	0°♏		morning set		10340 Feb 23 09:20	28°♌51'56	
						10340 Feb 24 01:19	0°♎	
superior conj	10339 Mar 28 08:34	10°♏36'59	-1°30'37	desc. node		10340 Feb 29 11:42	9°♎11'10	
minimum elong	10339 Mar 27 23:17	10°♏00'26	1°29'40					
max. Earth dist.	10339 Mar 30 23:35	14°♏44'26	1.45565 AU	superior conj		10340 Mar 07 07:32	20°♎26'24	-0°49'21
	10339 Apr 09 18:42	0°♐		minimum elong		10340 Mar 07 02:11	20°♎04'40	0°48'29
evening rise	10339 Apr 13 11:37	5°♐44'34		max. Earth dist.		10340 Mar 12 18:45	29°♎12'21	1.44834 AU
greatest brilliancy	10339 Apr 26 02:43	25°♐06'32	-0.7m			10340 Mar 13 06:47	0°♑	
	10339 Apr 29 10:31	0°♒		evening rise		10340 Mar 22 23:33	15°♑05'44	
asc. node	10339 May 07 16:42	10°♒34'15				10340 Apr 01 19:58	0°♐	
evening max el	10339 May 07 23:11	10°♒50'48	19°25'45	evening max el		10340 Apr 20 01:34	24°♐32'54	20°25'15
retrograde	10339 May 15 02:27	14°♒52'50		asc. node		10340 Apr 23 13:52	27°♐33'44	
evening set	10339 May 18 17:13	13°♒36'34		retrograde		10340 Apr 28 01:14	29°♐11'06	
inferior conj	10339 May 24 02:54	7°♒43'49	3°18'26	evening set		10340 May 02 01:10	27°♐39'12	
minimum elong	10339 May 24 02:54	7°♒43'49	3°18'00	inferior conj		10340 May 07 08:17	21°♐33'15	3°12'20
min. Earth dist.	10339 May 25 10:08	6°♒01'16	0.66976 AU	minimum elong		10340 May 07 07:15	21°♐36'47	3°11'52
morning rise	10339 May 29 12:12	1°♒23'30		min. Earth dist.		10340 May 08 01:21	20°♐34'47	0.67972 AU
	10339 May 31 08:09	30°♒		morning rise		10340 May 12 13:06	15°♐15'20	
direct	10339 Jun 04 14:21	28°♒42'37		direct		10340 May 18 03:06	12°♐46'28	
	10339 Jun 09 06:50	0°♓		desc. node		10340 May 27 12:20	17°♐42'20	
desc. node	10339 Jun 10 15:23	0°♓46'52		morning max el		10340 May 29 09:46	19°♐31'49	24°18'53
morning max el	10339 Jun 17 00:05	6°♓08'00	25°44'21			10340 Jun 07 07:14	0°♓	
	10339 Jul 05 10:34	0°♈				10340 Jun 27 13:55	0°♈	
morning set	10339 Jul 23 01:46	29°♈15'04		morning set		10340 Jul 04 01:37	10°♈55'14	
	10339 Jul 23 11:35	0°♉		max. Earth dist.		10340 Jul 07 17:31	17°♈23'32	1.37877 AU
max. Earth dist.	10339 Jul 26 19:18	6°♉12'45	1.35729 AU					
				superior conj		10340 Jul 14 19:36	0°♉34'34	-0°53'12
superior conj	10339 Aug 01 14:11	17°♉33'42	-0°20'11	minimum elong		10340 Jul 14 23:06	0°♉51'22	0°53'01
minimum elong	10339 Aug 01 15:25	17°♉39'55	0°20'19			10340 Jul 14 12:23	0°♉	
asc. node	10339 Aug 03 15:59	21°♉46'12		asc. node		10340 Jul 20 12:53	11°♉46'15	
	10339 Aug 07 16:01	0°♊		evening rise		10340 Jul 23 13:28	17°♉46'34	
evening rise	10339 Aug 09 12:08	3°♊46'56				10340 Jul 29 22:20	0°♊	
	10339 Aug 24 13:21	0°♋		evening max el		10340 Aug 09 02:43	14°♊47'10	19°08'24
evening max el	10339 Aug 27 09:49	3°♋11'39	20°10'13	retrograde		10340 Aug 18 03:06	19°♊16'13	
desc. node	10339 Sep 06 13:43	8°♋28'51		evening set		10340 Aug 19 23:41	19°♊05'35	
retrograde	10339 Sep 07 01:55	8°♋29'32		desc. node		10340 Aug 23 10:59	17°♊54'25	
evening set	10339 Sep 09 00:50	8°♋19'39		inferior conj		10340 Aug 28 10:51	14°♊53'22	-1°33'11
inferior conj	10339 Sep 18 01:59	4°♋21'02	-3°27'20	minimum elong		10340 Aug 28 06:46	15°♊00'17	1°31'45
minimum elong	10339 Sep 17 17:03	4°♋34'18	3°24'19	min. Earth dist.		10340 Sep 01 06:04	12°♊59'52	0.56107 AU
min. Earth dist.	10339 Sep 19 16:57	3°♋23'13	0.54917 AU	morning rise		10340 Sep 05 10:52	10°♊09'22	
morning rise	10339 Sep 26 08:17	0°♌12'15		direct		10340 Sep 10 17:49	9°♊04'23	
	10339 Sep 27 01:04	30°♌		morning max el		10340 Sep 24 21:45	16°♊17'39	25°43'06
direct	10339 Sep 30 19:47	29°♌28'54				10340 Oct 06 01:10	0°♌	

asc. node	10340 Oct 16 13:19	18°♄01'24		desc. node	10341 Aug 10 08:15	25°♄37'27	
morning set	10340 Oct 22 09:46	29°♄59'19		min. Earth dist.	10341 Aug 13 00:47	23°♄30'42	0.57978 AU
	10340 Oct 22 09:54	0°♄		morning rise	10341 Aug 17 06:04	20°♄47'23	
				direct	10341 Aug 23 06:40	19°♄13'50	
superior conj	10340 Oct 29 05:43	14°♄57'58	1°36'06	morning max el	10341 Sep 06 15:14	26°♄52'27	27°02'42
minimum elong	10340 Oct 29 04:31	14°♄51'19	1°36'21		10341 Sep 09 15:03	0°♄	
max. Earth dist.	10340 Oct 30 09:31	17°♄31'23	1.31947 AU		10341 Sep 29 12:45	0°♄	
evening rise	10340 Nov 05 06:57	0°♄11'46		asc. node	10341 Oct 03 10:09	7°♄35'06	
	10340 Nov 05 04:41	0°♄		morning set	10341 Oct 06 19:00	14°♄33'51	
desc. node	10340 Nov 19 08:50	26°♄19'33					
	10340 Nov 21 16:29	0°♄		superior conj	10341 Oct 13 17:26	29°♄45'24	1°26'35
evening max el	10340 Dec 07 12:22	20°♄01'16	27°25'29	minimum elong	10341 Oct 13 15:31	29°♄34'42	1°26'35
retrograde	10340 Dec 21 08:53	27°♄17'50			10341 Oct 13 20:04	0°♄	
evening set	10340 Dec 28 09:36	24°♄58'40		max. Earth dist.	10341 Oct 13 18:22	29°♄50'35	1.31505 AU
min. Earth dist.	10341 Jan 01 02:34	22°♄04'45	0.61951 AU	evening rise	10341 Oct 20 12:36	14°♄39'17	
inferior conj	10341 Jan 04 02:07	19°♄20'32	-2°44'08		10341 Oct 28 04:36	0°♄	
minimum elong	10341 Jan 04 07:35	19°♄07'56	2°41'36	desc. node	10341 Nov 06 06:02	15°♄20'41	
morning rise	10341 Jan 11 08:05	14°♄18'14			10341 Nov 17 14:16	0°♄	
asc. node	10341 Jan 12 12:56	14°♄01'17		evening max el	10341 Nov 19 15:52	2°♄03'26	26°49'21
direct	10341 Jan 13 13:15	13°♄56'43		retrograde	10341 Dec 03 14:17	9°♄12'17	
morning max el	10341 Jan 20 10:01	17°♄25'37	17°49'32	evening set	10341 Dec 10 09:20	7°♄15'05	
	10341 Jan 29 09:25	0°♄		min. Earth dist.	10341 Dec 14 06:12	4°♄37'14	0.59841 AU
morning set	10341 Feb 05 04:16	11°♄55'35		inferior conj	10341 Dec 17 10:24	2°♄04'09	-3°58'38
desc. node	10341 Feb 15 08:29	29°♄50'13		minimum elong	10341 Dec 17 18:00	1°♄48'51	3°55'48
	10341 Feb 15 10:46	0°♄			10341 Dec 20 02:46	30°♄	
				morning rise	10341 Dec 25 05:19	27°♄22'25	
superior conj	10341 Feb 16 06:56	1°♄26'00	-0°07'05	direct	10341 Dec 27 08:31	27°♄05'25	
minimum elong	10341 Feb 16 06:17	1°♄23'16	0°06'42	asc. node	10341 Dec 30 10:01	27°♄42'10	
behind sun begin	10341 Feb 15 22:20	0°♄49'25			10342 Jan 03 00:31	0°♄	
behind sun end	10341 Feb 16 14:14	1°♄57'02		morning max el	10342 Jan 03 22:51	0°♄51'30	18°09'03
max. Earth dist.	10341 Feb 23 10:17	13°♄17'40	1.43454 AU	morning set	10342 Jan 19 14:53	25°♄42'59	
evening rise	10341 Mar 02 14:54	24°♄43'32			10342 Jan 21 21:40	0°♄	
	10341 Mar 06 00:53	0°♄					
	10341 Mar 26 21:27	0°♄		superior conj	10342 Jan 29 06:27	13°♄33'36	0°30'00
evening max el	10341 Apr 02 22:24	8°♄15'52	21°36'44	minimum elong	10342 Jan 29 08:40	13°♄43'35	0°30'02
asc. node	10341 Apr 10 11:05	13°♄24'34		desc. node	10342 Feb 02 05:19	20°♄32'33	
retrograde	10341 Apr 11 23:28	13°♄35'52		max. Earth dist.	10342 Feb 05 21:25	26°♄49'10	1.41580 AU
evening set	10341 Apr 16 09:37	11°♄48'37			10342 Feb 07 19:07	0°♄	
inferior conj	10341 Apr 21 16:32	5°♄31'46	2°55'18	evening rise	10342 Feb 10 22:29	5°♄08'19	
minimum elong	10341 Apr 21 14:45	5°♄37'59	2°54'43		10342 Feb 27 06:43	0°♄	
min. Earth dist.	10341 Apr 21 20:29	5°♄18'01	0.68514 AU	evening max el	10342 Mar 16 15:01	22°♄01'46	22°55'30
	10341 Apr 26 01:54	30°♄		retrograde	10342 Mar 26 19:34	28°♄03'15	
morning rise	10341 Apr 26 19:42	29°♄18'04		asc. node	10342 Mar 28 08:19	27°♄51'53	
direct	10341 May 01 20:23	27°♄07'12		evening set	10342 Mar 31 16:59	26°♄01'18	
	10341 May 08 11:21	0°♄		min. Earth dist.	10342 Apr 05 17:14	20°♄05'41	0.68613 AU
morning max el	10341 May 11 20:08	3°♄02'07	22°48'57	inferior conj	10342 Apr 06 01:39	19°♄36'30	2°28'24
desc. node	10341 May 14 09:14	5°♄45'32		minimum elong	10342 Apr 05 23:30	19°♄44'00	2°27'43
	10341 Jun 01 08:49	0°♄		morning rise	10342 Apr 11 05:53	13°♄28'30	
morning set	10341 Jun 15 01:27	21°♄28'18		direct	10342 Apr 15 17:06	11°♄38'47	
max. Earth dist.	10341 Jun 19 14:26	29°♄05'40	1.40166 AU	morning max el	10342 Apr 24 10:36	16°♄41'54	21°23'26
	10341 Jun 20 03:07	0°♄		desc. node	10342 May 01 06:05	24°♄38'19	
					10342 May 05 06:18	0°♄	
superior conj	10341 Jun 27 09:19	12°♄50'05	-1°25'41		10342 May 25 10:14	0°♄	
minimum elong	10341 Jun 27 14:58	13°♄15'50	1°25'23	morning set	10342 May 25 22:41	0°♄49'06	
	10341 Jul 06 13:22	0°♄		max. Earth dist.	10342 Jun 01 16:40	11°♄41'18	1.42320 AU
evening rise	10341 Jul 07 05:50	1°♄18'18					
asc. node	10341 Jul 07 09:49	1°♄37'16		superior conj	10342 Jun 09 02:51	24°♄10'35	-1°53'25
evening max el	10341 Jul 23 06:28	27°♄05'28	18°27'47	minimum elong	10342 Jun 09 09:08	24°♄37'40	1°53'21
	10341 Jul 27 03:50	0°♄			10342 Jun 12 11:07	0°♄	
retrograde	10341 Jul 30 22:42	0°♄56'14		evening rise	10342 Jun 20 09:17	14°♄12'33	
evening set	10341 Aug 02 00:58	0°♄39'54		asc. node	10342 Jun 24 06:50	21°♄14'55	
	10341 Aug 03 21:32	30°♄			10342 Jun 29 08:37	0°♄	
inferior conj	10341 Aug 09 16:53	26°♄08'04	0°11'41	evening max el	10342 Jul 06 17:03	9°♄57'12	18°07'21
minimum elong	10341 Aug 09 17:18	26°♄07'14	0°11'12	retrograde	10342 Jul 13 12:27	13°♄25'03	
transit middle	10341 Aug 09 17:18	26°♄07'14	0°11'12	evening set	10342 Jul 15 22:31	12°♄59'10	
transit begin	10341 Aug 09 14:44	26°♄12'20		inferior conj	10342 Jul 22 20:02	8°♄06'41	1°32'34
transit end	10341 Aug 09 19:52	26°♄02'08		minimum elong	10342 Jul 22 22:34	8°♄00'49	1°31'19

min. Earth dist.	10342 Jul 26 02:46	5°Ω06'21	0.60200 AU	morning rise	10343 Jul 12 02:54	14°Ω34'17	
desc. node	10342 Jul 28 05:26	3°Ω22'50		desc. node	10343 Jul 15 02:35	12°Ω52'14	
morning rise	10342 Jul 29 19:42	2°Ω17'04		direct	10343 Jul 18 20:01	12°Ω07'35	
direct	10342 Aug 05 08:12	0°Ω14'13		morning max el	10343 Aug 01 22:22	20°Ω09'45	27°55'11
morning max el	10342 Aug 19 15:47	8°Ω08'41	27°48'07		10343 Aug 10 08:42	0°Ω	
	10342 Sep 05 07:41	0°Π			10343 Aug 29 07:44	0°Π	
asc. node	10342 Sep 20 06:59	27°Π24'20		morning set	10343 Sep 04 23:47	12°Π55'44	
morning set	10342 Sep 21 00:21	28°Π54'28		asc. node	10343 Sep 07 03:50	17°Π23'51	
	10342 Sep 21 12:52	0°Ω		max. Earth dist.	10343 Sep 10 08:55	24°Π13'14	1.32080 AU
max. Earth dist.	10342 Sep 27 03:28	12°Ω08'04	1.31550 AU				
				superior conj	10343 Sep 12 13:48	29°Π00'35	0°51'43
superior conj	10342 Sep 28 04:45	14°Ω28'04	1°11'42	minimum elong	10343 Sep 12 11:45	28°Π49'21	0°51'17
minimum elong	10342 Sep 28 02:31	14°Ω15'40	1°11'27		10343 Sep 13 00:40	0°Ω	
evening rise	10342 Oct 04 22:04	29°Ω15'24		evening rise	10343 Sep 19 09:23	13°Ω54'23	
	10342 Oct 05 06:24	0°Π			10343 Sep 27 08:55	0°Π	
	10342 Oct 21 15:48	0°♂		desc. node	10343 Oct 11 00:28	20°Π32'53	
desc. node	10342 Oct 24 03:14	3°♂31'30		evening max el	10343 Oct 13 23:46	23°Π40'06	24°07'37
evening max el	10342 Nov 01 11:29	13°♂14'13	25°40'22		10343 Oct 24 00:07	0°♂	
retrograde	10342 Nov 15 08:59	20°♂14'49		retrograde	10343 Oct 27 15:38	0°♂30'24	
evening set	10342 Nov 21 11:54	18°♂47'56			10343 Oct 31 08:22	30°♂	
min. Earth dist.	10342 Nov 25 23:55	16°♂11'06	0.57782 AU	evening set	10343 Nov 01 14:04	29°Π36'58	
inferior conj	10342 Nov 28 23:56	14°♂05'41	-5°03'42	min. Earth dist.	10343 Nov 07 10:26	26°Π42'25	0.56034 AU
minimum elong	10342 Nov 29 07:19	13°♂52'46	5°01'45	inferior conj	10343 Nov 09 17:01	25°Π18'57	-5°41'51
morning rise	10342 Dec 07 05:04	9°♂46'25		minimum elong	10343 Nov 09 19:36	25°Π14'58	5°41'20
direct	10342 Dec 09 11:25	9°♂30'29		morning rise	10343 Nov 18 03:11	21°Π20'42	
asc. node	10342 Dec 17 07:04	12°♂55'02		direct	10343 Nov 20 18:58	21°Π02'26	
morning max el	10342 Dec 18 03:46	13°♂42'38	18°49'22	morning max el	10343 Nov 30 21:13	25°Π49'39	19°52'07
	10342 Dec 29 06:52	0°♂		asc. node	10343 Dec 04 04:04	29°Π26'23	
morning set	10343 Jan 03 12:13	9°♂58'55			10343 Dec 04 14:43	0°♂	
				morning set	10343 Dec 18 16:41	24°♂33'14	
superior conj	10343 Jan 12 01:37	26°♂35'59	0°59'15		10343 Dec 21 08:52	0°♂	
minimum elong	10343 Jan 12 04:44	26°♂50'45	0°59'15				
	10343 Jan 13 21:03	0°≈		superior conj	10343 Dec 26 11:36	10°♂20'02	1°20'13
max. Earth dist.	10343 Jan 19 04:47	9°≈39'49	1.39425 AU	minimum elong	10343 Dec 26 14:20	10°♂33'37	1°20'23
desc. node	10343 Jan 20 02:12	11°≈14'01		max. Earth dist.	10344 Jan 01 11:11	21°♂53'33	1.37236 AU
evening rise	10343 Jan 23 03:17	16°≈29'06		evening rise	10344 Jan 05 04:46	28°♂43'34	
	10343 Jan 31 10:19	0°♂			10344 Jan 05 21:55	0°≈	
	10343 Feb 21 21:28	0°♀		desc. node	10344 Jan 06 23:07	1°≈51'11	
evening max el	10343 Feb 27 05:08	5°♀50'21	24°15'42		10344 Jan 24 18:30	0°♂	
retrograde	10343 Mar 10 12:13	12°♀27'40		evening max el	10344 Feb 09 18:24	19°♂39'52	25°30'29
asc. node	10343 Mar 15 05:32	10°♀44'37		retrograde	10344 Feb 22 00:29	26°♂43'39	
evening set	10343 Mar 15 21:42	10°♀12'20		evening set	10344 Feb 27 22:11	24°♂17'26	
min. Earth dist.	10343 Mar 20 13:21	4°♀51'56	0.68283 AU	asc. node	10344 Mar 01 02:45	22°♂08'13	
inferior conj	10343 Mar 21 09:44	3°♀43'16	1°52'11	min. Earth dist.	10344 Mar 03 06:40	19°♂32'02	0.67538 AU
minimum elong	10343 Mar 21 07:38	3°♀50'23	1°51'31	inferior conj	10344 Mar 04 14:54	17°♂48'37	1°06'50
	10343 Mar 24 07:56	30°♂		minimum elong	10344 Mar 04 13:22	17°♂53'33	1°06'24
morning rise	10343 Mar 26 17:39	27°♂42'22		morning rise	10344 Mar 10 05:00	11°♂56'18	
direct	10343 Mar 30 15:53	26°♂14'32		direct	10344 Mar 13 15:14	10°♂48'58	
	10343 Apr 06 18:11	0°♀		morning max el	10344 Mar 20 13:35	14°♂36'36	19°08'25
morning max el	10343 Apr 07 08:09	0°♀33'41	20°08'42		10344 Apr 01 07:24	0°♀	
desc. node	10343 Apr 18 02:53	14°♀06'43		greatest brilliancy	10344 Apr 02 17:03	2°♀05'47	-0.7m
	10343 Apr 28 21:33	0°♂		desc. node	10344 Apr 03 23:40	4°♀01'15	
morning set	10343 May 05 00:09	9°♂19'50		morning set	10344 Apr 13 02:28	18°♀00'54	
max. Earth dist.	10343 May 15 02:23	25°♂09'36	1.44068 AU		10344 Apr 20 19:49	0°♂	
	10343 May 18 02:37	0°Π		max. Earth dist.	10344 Apr 26 17:57	9°♂15'53	1.45212 AU
superior conj	10343 May 20 20:25	4°Π27'59	-2°10'31	superior conj	10344 Apr 29 15:05	13°♂48'22	-2°10'30
minimum elong	10343 May 20 23:40	4°Π41'18	2°10'51	minimum elong	10344 Apr 29 11:19	13°♂33'29	2°10'41
evening rise	10343 Jun 02 19:02	26°Π17'53			10344 May 09 17:33	0°Π	
	10343 Jun 04 22:32	0°Ω		evening rise	10344 May 14 06:37	7°Π25'30	
asc. node	10343 Jun 11 03:52	10°Ω33'21		asc. node	10344 May 28 00:56	29°Π25'48	
evening max el	10343 Jun 20 06:34	23°Ω11'55	18°06'11		10344 May 28 10:26	0°Ω	
retrograde	10343 Jun 26 16:22	26°Ω32'16		evening max el	10344 Jun 02 19:47	6°♂41'21	18°23'25
evening set	10343 Jun 29 10:14	25°Ω54'09		retrograde	10344 Jun 09 05:48	10°Ω08'15	
inferior conj	10343 Jul 05 16:50	20°Ω42'31	2°27'49	evening set	10344 Jun 12 07:26	9°Ω16'10	
minimum elong	10343 Jul 05 19:32	20°Ω35'23	2°26'42	inferior conj	10344 Jun 18 03:07	3°Ω47'22	3°00'59
min. Earth dist.	10343 Jul 08 13:39	17°Ω42'21	0.62447 AU	minimum elong	10344 Jun 18 04:58	3°Ω41'54	3°00'13

min. Earth dist.	10344 Jun 20 10:01	1°☿07'06	0.64492 AU	evening max el	10345 May 17 06:10	20°♊19'32	18°58'18
	10344 Jun 21 10:17	30°♊05'35		retrograde	10345 May 24 01:03	24°♊05'35	
morning rise	10344 Jun 24 01:22	27°♊29'35		evening set	10345 May 27 10:45	22°♊58'30	
direct	10344 Jun 30 16:29	24°♊48'32		inferior conj	10345 Jun 01 23:11	17°♊14'13	3°16'18
desc. node	10344 Jun 30 23:41	24°♊48'50		minimum elong	10345 Jun 01 23:51	17°♊12'03	3°15'48
	10344 Jul 11 08:45	0°☿		min. Earth dist.	10345 Jun 03 15:03	15°♊07'50	0.66187 AU
morning max el	10344 Jul 14 08:26	2°☿48'15	27°26'02	morning rise	10345 Jun 07 12:21	10°♊53'28	
	10344 Aug 03 16:47	0°♊		direct	10345 Jun 13 20:23	8°♊09'15	
morning set	10344 Aug 18 14:41	26°♊30'00		desc. node	10345 Jun 17 20:43	9°♊04'19	
	10344 Aug 20 09:02	0°♊		morning max el	10345 Jun 26 19:12	15°♊52'19	26°27'36
max. Earth dist.	10344 Aug 23 06:44	5°♊55'19	1.33111 AU		10345 Jul 08 10:35	0°☿	
asc. node	10344 Aug 24 00:39	7°♊28'27			10345 Jul 27 12:54	0°♊	
				morning set	10345 Aug 01 17:52	9°♊29'06	
superior conj	10344 Aug 26 18:31	13°♊16'15	0°26'57	max. Earth dist.	10345 Aug 05 18:05	17°♊11'46	1.34642 AU
minimum elong	10344 Aug 26 17:14	13°♊09'23	0°26'30				
evening rise	10344 Sep 02 20:36	28°♊29'44		superior conj	10345 Aug 10 16:36	27°♊09'16	-0°02'02
	10344 Sep 03 13:39	0°♊		minimum elong	10345 Aug 10 16:43	27°♊09'55	0°02'18
	10344 Sep 21 00:04	0°♊		behind sun begin	10345 Aug 10 10:53	26°♊39'52	
evening max el	10344 Sep 24 11:04	3°♊47'21	22°27'09	behind sun end	10345 Aug 10 22:33	27°♊40'01	
desc. node	10344 Sep 26 21:44	5°♊58'07		asc. node	10345 Aug 10 21:30	27°♊34'34	
retrograde	10344 Oct 07 10:29	10°♊15'11			10345 Aug 12 01:34	0°♊	
evening set	10344 Oct 10 20:59	9°♊49'09		evening rise	10345 Aug 18 05:49	12°♊56'19	
min. Earth dist.	10344 Oct 18 17:58	6°♊19'04	0.54900 AU		10345 Aug 27 00:08	0°♊	
inferior conj	10344 Oct 19 16:29	5°♊47'14	-5°32'20	evening max el	10345 Sep 06 06:55	14°♊14'00	20°55'12
minimum elong	10344 Oct 19 10:57	5°♊55'03	5°31'28	desc. node	10345 Sep 13 18:58	19°♊17'08	
morning rise	10344 Oct 28 02:37	1°♊59'52		retrograde	10345 Sep 17 22:14	20°♊00'17	
direct	10344 Oct 31 09:08	1°♊35'41		evening set	10345 Sep 20 04:56	19°♊47'55	
morning max el	10344 Nov 12 01:08	7°♊05'47	21°17'07	inferior conj	10345 Sep 29 08:34	15°♊52'21	-4°25'48
asc. node	10344 Nov 20 01:01	16°♊59'21		minimum elong	10345 Sep 28 22:42	16°♊06'21	4°23'01
	10344 Nov 27 11:25	0°♊		min. Earth dist.	10345 Sep 30 02:06	15°♊27'26	0.54640 AU
morning set	10344 Dec 02 01:33	9°♊17'17		morning rise	10345 Oct 07 16:37	11°♊56'53	
				direct	10345 Oct 11 17:11	11°♊22'07	
superior conj	10344 Dec 09 08:10	24°♊32'52	1°33'21	morning max el	10345 Oct 24 17:27	17°♊37'04	22°59'12
minimum elong	10344 Dec 09 09:53	24°♊41'46	1°33'43		10345 Nov 03 15:47	0°♊	
	10344 Dec 11 24:00	0°♊		asc. node	10345 Nov 06 21:56	5°♊19'51	
max. Earth dist.	10344 Dec 13 21:16	3°♊46'52	1.35244 AU	morning set	10345 Nov 16 12:46	24°♊05'20	
evening rise	10344 Dec 17 23:42	11°♊42'57			10345 Nov 19 06:59	0°♊	
desc. node	10344 Dec 23 20:05	22°♊19'14					
	10344 Dec 28 09:13	0°♊		superior conj	10345 Nov 23 12:04	9°♊04'58	1°39'24
	10345 Jan 19 00:25	0°♊		minimum elong	10345 Nov 23 12:34	9°♊07'40	1°39'50
evening max el	10345 Jan 22 07:43	3°♊25'09	26°32'48	max. Earth dist.	10345 Nov 26 14:55	15°♊41'23	1.33615 AU
retrograde	10345 Feb 04 07:37	10°♊44'07		evening rise	10345 Dec 01 08:23	25°♊18'05	
evening set	10345 Feb 10 16:41	8°♊11'12			10345 Dec 03 18:33	0°♊	
min. Earth dist.	10345 Feb 14 19:04	4°♊00'08	0.66399 AU	desc. node	10345 Dec 10 17:06	12°♊33'09	
asc. node	10345 Feb 15 23:56	2°♊33'52			10345 Dec 21 20:14	0°♊	
inferior conj	10345 Feb 16 15:07	1°♊48'11	0°12'26	evening max el	10346 Jan 04 20:55	16°♊57'52	27°15'15
minimum elong	10345 Feb 16 14:46	1°♊49'13	0°12'33	retrograde	10346 Jan 18 08:40	24°♊20'56	
transit middle	10345 Feb 16 14:46	1°♊49'13	0°12'33	evening set	10346 Jan 25 03:05	21°♊47'19	
transit begin	10345 Feb 16 12:57	1°♊54'40		min. Earth dist.	10346 Jan 29 00:24	18°♊09'11	0.64903 AU
transit end	10345 Feb 16 16:35	1°♊43'47		inferior conj	10346 Jan 31 08:02	15°♊36'36	-0°50'41
	10345 Feb 18 03:57	30°♊06'19		minimum elong	10346 Jan 31 09:33	15°♊32'25	0°49'41
morning rise	10345 Feb 22 13:50	26°♊06'19		asc. node	10346 Feb 02 21:08	12°♊56'39	
direct	10345 Feb 25 13:26	25°♊16'33		morning rise	10346 Feb 06 17:37	10°♊07'30	
morning max el	10345 Mar 04 01:39	28°♊45'24	18°24'17	direct	10346 Feb 09 08:20	9°♊31'39	
	10345 Mar 05 06:18	0°♊		morning max el	10346 Feb 15 17:55	12°♊52'51	17°56'58
desc. node	10345 Mar 21 20:26	24°♊14'49			10346 Feb 27 19:53	0°♊	
morning set	10345 Mar 24 02:53	27°♊51'12		morning set	10346 Mar 05 08:35	9°♊08'21	
	10345 Mar 25 11:18	0°♊		desc. node	10346 Mar 08 17:12	14°♊41'37	
					10346 Mar 18 03:32	0°♊	
superior conj	10345 Apr 08 21:31	22°♊43'16	-1°50'10				
minimum elong	10345 Apr 08 12:19	22°♊07'17	1°49'34	superior conj	10346 Mar 19 09:45	2°♊00'25	-1°13'48
max. Earth dist.	10345 Apr 09 12:45	23°♊42'47	1.45642 AU	minimum elong	10346 Mar 19 01:43	1°♊28'28	1°12'48
	10345 Apr 13 13:16	0°♊		max. Earth dist.	10346 Mar 23 08:16	8°♊14'06	1.45332 AU
evening rise	10345 Apr 24 18:21	17°♊35'09		evening rise	10346 Apr 04 11:19	27°♊03'55	
	10345 May 02 15:49	0°♊			10346 Apr 06 09:11	0°♊	
greatest brilliancy	10345 May 04 15:38	3°♊05'48	-0.8m	greatest brilliancy	10346 Apr 18 19:59	18°♊48'09	-0.6m
asc. node	10345 May 14 22:02	17°♊43'52			10346 Apr 26 22:57	0°♊	

evening max el	10346 Apr 30 11:50	4° $\Pi$ 01'11	19°49'28			10347 Mar 10 18:48	0° $\Upsilon$	
asc. node	10346 May 01 19:12	5° $\Pi$ 15'53		evening rise		10347 Mar 14 22:55	6° $\Upsilon$ 28'25	
retrograde	10346 May 07 23:05	8° $\Pi$ 17'31				10347 Mar 30 17:12	0° $\mathcal{B}$	
evening set	10346 May 11 17:36	6° $\Pi$ 54'44		evening max el		10347 Apr 13 11:57	17° $\mathcal{B}$ 44'18	20°54'28
inferior conj	10346 May 17 01:54	0° $\Pi$ 56'26	3°17'17	asc. node		10347 Apr 18 16:23	21° $\mathcal{B}$ 48'25	
minimum elong	10346 May 17 01:26	0° $\Pi$ 58'00	3°16'51	retrograde		10347 Apr 21 21:44	22° $\mathcal{B}$ 39'18	
	10346 May 17 18:42	30° $\mathcal{R}\mathcal{B}$		evening set		10347 Apr 26 01:59	21° $\mathcal{B}$ 00'44	
min. Earth dist.	10346 May 18 03:04	29° $\mathcal{B}$ 32'02	0.67455 AU	inferior conj		10347 May 01 08:46	14° $\mathcal{B}$ 50'03	3°06'21
morning rise	10346 May 22 08:55	24° $\mathcal{B}$ 36'52		minimum elong		10347 May 01 07:22	14° $\mathcal{B}$ 54'51	3°05'51
direct	10346 May 28 06:15	21° $\mathcal{B}$ 59'52		min. Earth dist.		10347 May 01 20:08	14° $\mathcal{B}$ 10'43	0.68263 AU
desc. node	10346 Jun 04 17:42	25° $\mathcal{B}$ 09'30		morning rise		10347 May 06 12:33	8° $\mathcal{B}$ 33'58	
morning max el	10346 Jun 09 04:59	29° $\mathcal{B}$ 09'56	25°09'07	direct		10347 May 11 21:05	6° $\mathcal{B}$ 12'09	
	10346 Jun 10 00:23	0° $\Pi$		morning max el		10347 May 22 14:31	12° $\mathcal{B}$ 36'03	23°40'38
	10346 Jul 02 05:56	0° $\mathcal{B}$		desc. node		10347 May 22 14:39	12° $\mathcal{B}$ 36'24	
morning set	10346 Jul 15 05:05	21° $\mathcal{B}$ 41'27				10347 Jun 05 14:01	0° $\Pi$	
max. Earth dist.	10346 Jul 18 19:34	28° $\mathcal{B}$ 15'39	1.36612 AU			10347 Jun 25 01:56	0° $\mathcal{B}$	
	10346 Jul 19 17:56	0° $\mathcal{Q}$		morning set		10347 Jun 26 19:16	2° $\mathcal{B}$ 54'10	
				max. Earth dist.		10347 Jun 30 16:37	9° $\mathcal{B}$ 37'24	1.38856 AU
superior conj	10346 Jul 25 05:06	10° $\mathcal{Q}$ 31'44	-0°34'03					
minimum elong	10346 Jul 25 07:15	10° $\mathcal{Q}$ 42'23	0°34'02	superior conj		10347 Jul 08 04:24	23° $\mathcal{B}$ 14'50	-1°07'14
asc. node	10346 Jul 28 18:22	17° $\mathcal{Q}$ 37'54		minimum elong		10347 Jul 08 08:53	23° $\mathcal{B}$ 35'54	1°06'58
evening rise	10346 Aug 02 10:44	27° $\mathcal{Q}$ 07'37				10347 Jul 11 17:35	0° $\mathcal{Q}$	
	10346 Aug 03 21:00	0° $\mathcal{H}$		asc. node		10347 Jul 15 15:18	7° $\mathcal{Q}$ 34'47	
evening max el	10346 Aug 19 16:15	25° $\mathcal{H}$ 22'54	19°41'18	evening rise		10347 Jul 17 08:41	10° $\mathcal{Q}$ 56'38	
	10346 Aug 27 02:01	0° $\mathcal{L}$				10347 Jul 27 21:33	0° $\mathcal{H}$	
retrograde	10346 Aug 29 14:42	0° $\mathcal{L}$ 18'38		evening max el		10347 Aug 02 14:15	7° $\mathcal{H}$ 17'41	18°48'31
evening set	10346 Aug 31 11:18	0° $\mathcal{L}$ 09'04		retrograde		10347 Aug 10 23:28	11° $\mathcal{H}$ 28'39	
desc. node	10346 Aug 31 16:13	0° $\mathcal{L}$ 06'53		evening set		10347 Aug 12 22:06	11° $\mathcal{H}$ 16'00	
	10346 Sep 01 05:19	30° $\mathcal{R}\mathcal{H}$		desc. node		10347 Aug 18 13:28	8° $\mathcal{H}$ 39'36	
inferior conj	10346 Sep 09 07:44	26° $\mathcal{H}$ 06'09	-2°39'23	inferior conj		10347 Aug 21 01:13	6° $\mathcal{H}$ 55'26	-0°46'17
minimum elong	10346 Sep 09 00:36	26° $\mathcal{H}$ 17'16	2°36'49	minimum elong		10347 Aug 20 23:18	6° $\mathcal{H}$ 58'56	0°45'46
min. Earth dist.	10346 Sep 11 12:41	24° $\mathcal{H}$ 43'46	0.55331 AU	min. Earth dist.		10347 Aug 24 03:37	4° $\mathcal{H}$ 41'33	0.56843 AU
morning rise	10346 Sep 17 11:55	21° $\mathcal{H}$ 43'37		morning rise		10347 Aug 28 21:11	1° $\mathcal{H}$ 55'40	
direct	10346 Sep 22 08:03	20° $\mathcal{H}$ 51'47		direct		10347 Sep 03 12:10	0° $\mathcal{H}$ 39'19	
morning max el	10346 Oct 06 04:45	27° $\mathcal{H}$ 45'42	24°46'09	morning max el		10347 Sep 17 18:44	8° $\mathcal{H}$ 03'35	26°20'36
	10346 Oct 08 10:01	0° $\mathcal{L}$				10347 Oct 04 04:41	0° $\mathcal{L}$	
asc. node	10346 Oct 24 18:49	24° $\mathcal{L}$ 16'12		asc. node		10347 Oct 11 15:41	13° $\mathcal{L}$ 38'45	
	10346 Oct 27 17:48	0° $\mathcal{M}$		morning set		10347 Oct 16 11:14	23° $\mathcal{L}$ 33'25	
morning set	10346 Nov 01 00:34	8° $\mathcal{M}$ 52'31				10347 Oct 19 10:33	0° $\mathcal{M}$	
superior conj	10346 Nov 07 20:41	23° $\mathcal{M}$ 48'36	1°39'01	superior conj		10347 Oct 23 07:49	8° $\mathcal{M}$ 36'26	1°32'44
minimum elong	10346 Nov 07 20:02	23° $\mathcal{M}$ 45'05	1°39'23	minimum elong		10347 Oct 23 06:16	8° $\mathcal{M}$ 27'50	1°32'53
max. Earth dist.	10346 Nov 09 16:41	27° $\mathcal{M}$ 48'45	1.32425 AU	max. Earth dist.		10347 Oct 24 00:05	10° $\mathcal{M}$ 06'45	1.31705 AU
	10346 Nov 10 16:57	0° $\mathcal{N}$		evening rise		10347 Oct 30 05:57	23° $\mathcal{M}$ 40'29	
evening rise	10346 Nov 15 03:27	9° $\mathcal{N}$ 20'09				10347 Nov 02 07:46	0° $\mathcal{N}$	
	10346 Nov 26 03:23	0° $\mathcal{Z}$		desc. node		10347 Nov 14 11:19	21° $\mathcal{N}$ 50'22	
desc. node	10346 Nov 27 14:10	2° $\mathcal{Z}$ 26'38				10347 Nov 19 23:00	0° $\mathcal{Z}$	
	10346 Dec 18 05:46	0° $\mathcal{A}$		evening max el		10347 Nov 30 15:40	12° $\mathcal{Z}$ 36'03	27°14'19
evening max el	10346 Dec 18 08:30	0° $\mathcal{A}$ 06'29	27°30'54	retrograde		10347 Dec 14 12:51	19° $\mathcal{Z}$ 48'39	
retrograde	10347 Jan 01 02:46	7° $\mathcal{A}$ 25'49		evening set		10347 Dec 21 12:29	17° $\mathcal{Z}$ 37'38	
evening set	10347 Jan 08 02:50	4° $\mathcal{A}$ 59'04		min. Earth dist.		10347 Dec 25 06:12	14° $\mathcal{Z}$ 52'15	0.61068 AU
min. Earth dist.	10347 Jan 11 20:38	1° $\mathcal{A}$ 50'42	0.63100 AU	inferior conj		10347 Dec 28 08:31	12° $\mathcal{Z}$ 11'02	-3°16'05
	10347 Jan 13 17:49	30° $\mathcal{R}\mathcal{Z}$		minimum elong		10347 Dec 28 15:02	11° $\mathcal{Z}$ 56'51	3°13'18
inferior conj	10347 Jan 14 14:58	29° $\mathcal{Z}$ 07'27	-2°01'14	morning rise		10348 Jan 04 20:09	7° $\mathcal{Z}$ 17'04	
minimum elong	10347 Jan 14 18:55	28° $\mathcal{Z}$ 57'41	1°59'12	direct		10348 Jan 07 00:08	6° $\mathcal{Z}$ 57'47	
asc. node	10347 Jan 20 18:17	24° $\mathcal{Z}$ 14'03		asc. node		10348 Jan 07 15:25	6° $\mathcal{Z}$ 59'30	
morning rise	10347 Jan 21 13:11	23° $\mathcal{Z}$ 54'12		morning max el		10348 Jan 14 03:07	10° $\mathcal{Z}$ 32'31	17°55'26
direct	10347 Jan 23 21:10	23° $\mathcal{Z}$ 28'24				10348 Jan 26 23:18	0° $\mathcal{A}$	
morning max el	10347 Jan 30 11:31	26° $\mathcal{Z}$ 51'46	17°47'03	morning set		10348 Jan 29 18:12	5° $\mathcal{A}$ 04'22	
	10347 Feb 02 05:37	0° $\mathcal{A}$						
morning set	10347 Feb 15 15:54	21° $\mathcal{A}$ 39'51		superior conj		10348 Feb 09 04:45	23° $\mathcal{A}$ 48'37	0°09'32
	10347 Feb 20 11:27	0° $\mathcal{H}$		minimum elong		10348 Feb 09 05:36	23° $\mathcal{A}$ 52'16	0°09'43
desc. node	10347 Feb 23 13:59	5° $\mathcal{H}$ 17'41		behind sun begin		10348 Feb 08 23:01	23° $\mathcal{A}$ 23'39	
				behind sun end		10348 Feb 09 12:10	24° $\mathcal{A}$ 20'50	
superior conj	10347 Feb 27 18:41	12° $\mathcal{H}$ 18'49	-0°31'05	desc. node		10348 Feb 10 10:48	25° $\mathcal{A}$ 58'39	
minimum elong	10347 Feb 27 15:28	12° $\mathcal{H}$ 05'31	0°30'24			10348 Feb 12 19:18	0° $\mathcal{H}$	
max. Earth dist.	10347 Mar 06 02:28	22° $\mathcal{H}$ 35'45	1.44320 AU	max. Earth dist.		10348 Feb 16 16:44	6° $\mathcal{H}$ 30'02	1.42709 AU

evening rise	10348 Feb 22 20:03	16° $\text{H}$ 23'37		max. Earth dist.	10349 Jan 29 01:50	19° $\approx$ 43'31	1.40683 AU
	10348 Mar 02 16:30	0° $\text{Y}$		evening rise	10349 Feb 02 12:22	27° $\approx$ 11'22	
	10348 Mar 24 21:06	0° $\text{B}$			10349 Feb 04 05:35	0° $\text{H}$	
evening max el	10348 Mar 26 06:45	1° $\text{B}$ 28'01	22°09'38		10349 Feb 24 07:55	0° $\text{Y}$	
retrograde	10348 Apr 04 19:14	7° $\text{B}$ 05'51		evening max el	10349 Mar 08 21:50	15° $\text{Y}$ 14'01	23°29'48
asc. node	10348 Apr 04 13:37	7° $\text{B}$ 05'35		retrograde	10349 Mar 19 14:07	21° $\text{Y}$ 32'22	
evening set	10348 Apr 09 10:10	5° $\text{B}$ 11'56		asc. node	10349 Mar 22 10:50	20° $\text{Y}$ 53'10	
	10348 Apr 13 21:49	30° $\text{R}$ $\text{Y}$		evening set	10349 Mar 24 16:35	19° $\text{Y}$ 24'20	
inferior conj	10348 Apr 14 17:36	28° $\text{Y}$ 51'16	2°45'02	min. Earth dist.	10349 Mar 29 12:53	13° $\text{Y}$ 43'40	0.68520 AU
minimum elong	10348 Apr 14 15:37	28° $\text{Y}$ 58'12	2°44'24	inferior conj	10349 Mar 30 02:29	12° $\text{Y}$ 56'56	2°14'09
min. Earth dist.	10348 Apr 14 16:08	28° $\text{Y}$ 56'25	0.68611 AU	minimum elong	10349 Mar 30 00:17	13° $\text{Y}$ 04'29	2°13'27
morning rise	10348 Apr 19 20:55	22° $\text{Y}$ 40'04		morning rise	10349 Apr 04 07:58	6° $\text{Y}$ 51'46	
direct	10348 Apr 24 15:48	20° $\text{Y}$ 38'11		direct	10349 Apr 08 13:27	5° $\text{Y}$ 11'39	
morning max el	10348 May 04 02:20	26° $\text{Y}$ 10'21	22°11'41	morning max el	10349 Apr 16 19:38	9° $\text{Y}$ 55'09	20°50'02
	10348 May 07 14:27	0° $\text{B}$		desc. node	10349 Apr 25 08:22	20° $\text{Y}$ 11'35	
desc. node	10348 May 08 11:31	1° $\text{B}$ 02'29			10349 May 02 07:37	0° $\text{B}$	
	10348 May 29 02:27	0° $\text{II}$		morning set	10349 May 16 18:54	21° $\text{B}$ 50'27	
morning set	10348 Jun 06 07:49	12° $\text{II}$ 56'21			10349 May 21 23:02	0° $\text{II}$	
max. Earth dist.	10348 Jun 11 15:44	21° $\text{II}$ 43'02	1.41113 AU	max. Earth dist.	10349 May 24 20:44	4° $\text{II}$ 40'21	1.43117 AU
	10348 Jun 16 12:02	0° $\text{E}$					
superior conj	10348 Jun 19 10:06	5° $\text{E}$ 08'08	-1°38'19	superior conj	10349 May 31 17:37	16° $\text{II}$ 01'23	-2°02'23
minimum elong	10348 Jun 19 16:19	5° $\text{E}$ 35'51	1°38'05	minimum elong	10349 May 31 23:11	16° $\text{II}$ 24'50	2°02'30
evening rise	10348 Jun 29 20:08	24° $\text{E}$ 14'15			10349 Jun 08 20:15	0° $\text{E}$	
asc. node	10348 Jul 01 12:16	27° $\text{E}$ 21'02		evening rise	10349 Jun 12 16:39	6° $\text{E}$ 48'44	
	10348 Jul 02 22:39	0° $\text{O}$		asc. node	10349 Jun 18 09:17	16° $\text{E}$ 51'05	
evening max el	10348 Jul 15 21:21	19° $\text{O}$ 51'29	18°16'40		10349 Jun 26 20:17	0° $\text{O}$	
retrograde	10348 Jul 23 03:29	23° $\text{O}$ 31'03		evening max el	10349 Jun 29 09:33	2° $\text{O}$ 53'39	18°04'37
evening set	10348 Jul 25 08:53	23° $\text{O}$ 11'07		retrograde	10349 Jul 05 23:46	6° $\text{O}$ 16'46	
inferior conj	10348 Aug 01 16:37	18° $\text{O}$ 30'10	0°49'09	evening set	10349 Jul 08 13:03	5° $\text{O}$ 46'07	
minimum elong	10348 Aug 01 18:13	18° $\text{O}$ 26'45	0°48'13	inferior conj	10349 Jul 15 03:45	0° $\text{O}$ 45'30	1°58'56
desc. node	10348 Aug 04 10:41	16° $\text{O}$ 10'01		minimum elong	10349 Jul 15 06:33	0° $\text{O}$ 38'40	1°57'41
min. Earth dist.	10348 Aug 05 01:15	15° $\text{O}$ 40'19	0.58892 AU		10349 Jul 15 22:14	30° $\text{R}$ $\text{E}$	
morning rise	10348 Aug 09 00:12	12° $\text{O}$ 55'41		min. Earth dist.	10349 Jul 18 07:08	27° $\text{E}$ 42'10	0.61158 AU
direct	10348 Aug 15 06:25	11° $\text{O}$ 09'43		morning rise	10349 Jul 21 21:28	24° $\text{E}$ 46'28	
morning max el	10348 Aug 29 15:30	18° $\text{O}$ 56'15	27°26'44	desc. node	10349 Jul 22 07:52	24° $\text{E}$ 29'34	
	10348 Sep 07 23:59	0° $\text{M}$		direct	10349 Jul 28 12:45	22° $\text{E}$ 32'14	
	10348 Sep 25 20:44	0° $\text{A}$			10349 Aug 11 05:51	0° $\text{O}$	
asc. node	10348 Sep 27 12:31	3° $\text{A}$ 20'21		morning max el	10349 Aug 11 18:57	0° $\text{O}$ 32'07	27°55'50
morning set	10348 Sep 29 19:05	8° $\text{A}$ 03'32			10349 Sep 02 03:20	0° $\text{M}$	
				morning set	10349 Sep 13 22:11	22° $\text{M}$ 16'41	
superior conj	10348 Oct 06 19:36	23° $\text{A}$ 23'03	1°20'56	asc. node	10349 Sep 14 09:21	23° $\text{M}$ 14'31	
minimum elong	10348 Oct 06 17:30	23° $\text{A}$ 11'19	1°20'49		10349 Sep 17 13:55	0° $\text{A}$	
max. Earth dist.	10348 Oct 06 09:39	22° $\text{A}$ 27'40	1.31465 AU	max. Earth dist.	10349 Sep 19 17:30	4° $\text{A}$ 40'23	1.31710 AU
	10348 Oct 09 19:03	0° $\text{M}$					
evening rise	10348 Oct 13 13:30	8° $\text{M}$ 12'46		superior conj	10349 Sep 21 06:10	8° $\text{A}$ 02'04	1°03'51
	10348 Oct 24 18:07	0° $\text{J}$		minimum elong	10349 Sep 21 03:57	7° $\text{A}$ 49'47	1°03'30
desc. node	10348 Oct 31 08:30	10° $\text{J}$ 32'34		evening rise	10349 Sep 27 23:57	22° $\text{A}$ 50'25	
evening max el	10348 Nov 11 15:46	24° $\text{J}$ 16'04	26°23'31		10349 Oct 01 09:42	0° $\text{M}$	
	10348 Nov 19 17:04	0° $\text{B}$		desc. node	10349 Oct 18 05:43	28° $\text{M}$ 16'38	
retrograde	10348 Nov 25 13:57	1° $\text{B}$ 21'51			10349 Oct 19 14:57	0° $\text{J}$	
	10348 Dec 01 08:34	30° $\text{R}$ $\text{J}$		evening max el	10349 Oct 24 07:45	5° $\text{J}$ 05'23	25°02'57
evening set	10348 Dec 02 03:49	29° $\text{J}$ 36'19		retrograde	10349 Nov 07 04:12	12° $\text{J}$ 03'03	
min. Earth dist.	10348 Dec 06 05:09	27° $\text{J}$ 01'18	0.58951 AU	evening set	10349 Nov 12 20:11	10° $\text{J}$ 50'30	
inferior conj	10348 Dec 09 09:10	24° $\text{J}$ 37'42	-4°28'15	min. Earth dist.	10349 Nov 17 19:34	8° $\text{J}$ 08'13	0.56981 AU
minimum elong	10348 Dec 09 17:06	24° $\text{J}$ 22'39	4°25'37	inferior conj	10349 Nov 20 13:59	6° $\text{J}$ 18'56	-5°24'25
morning rise	10348 Dec 17 09:00	20° $\text{J}$ 05'50		minimum elong	10349 Nov 20 19:58	6° $\text{J}$ 09'03	5°23'08
direct	10348 Dec 19 12:51	19° $\text{J}$ 49'42		morning rise	10349 Nov 28 22:01	2° $\text{J}$ 09'12	
asc. node	10348 Dec 24 12:28	21° $\text{J}$ 20'54		direct	10349 Dec 01 07:19	1° $\text{J}$ 52'51	
morning max el	10348 Dec 27 13:07	23° $\text{J}$ 45'22	18°23'33	morning max el	10349 Dec 10 13:37	6° $\text{J}$ 19'12	19°13'14
	10349 Jan 01 14:17	0° $\text{B}$		asc. node	10349 Dec 11 09:29	7° $\text{J}$ 08'56	
morning set	10349 Jan 12 09:50	19° $\text{B}$ 05'08			10349 Dec 25 16:07	0° $\text{B}$	
	10349 Jan 18 03:17	0° $\approx$		morning set	10349 Dec 27 10:33	3° $\text{B}$ 29'44	
superior conj	10349 Jan 21 13:15	6° $\approx$ 21'29	0°43'25	superior conj	10350 Jan 04 15:17	19° $\text{B}$ 43'15	1°09'07
minimum elong	10349 Jan 21 16:04	6° $\approx$ 34'21	0°43'24	minimum elong	10350 Jan 04 18:21	19° $\text{B}$ 58'06	1°09'11
desc. node	10349 Jan 27 07:39	16° $\approx$ 41'06			10350 Jan 10 02:06	0° $\approx$	
				max. Earth dist.	10350 Jan 11 07:47	2° $\approx$ 15'08	1.38482 AU

desc. node	10350 Jan 14 04:33	7° $\approx$ 21'24		evening rise	10350 Dec 28 11:38	21° $\approx$ 31'02	
evening rise	10350 Jan 15 02:16	8° $\approx$ 56'09		desc. node	10351 Jan 01 01:28	27° $\approx$ 55'11	
	10350 Jan 28 02:12	0° $\approx$			10351 Jan 02 06:12	0° $\approx$	
evening max el	10350 Feb 19 11:23	29° $\approx$ 03'34	24°48'39		10351 Jan 21 23:25	0° $\approx$	
	10350 Feb 20 10:49	0° $\approx$		evening max el	10351 Feb 02 00:50	12° $\approx$ 52'50	25°59'04
retrograde	10350 Mar 03 05:09	5° $\approx$ 54'02		retrograde	10351 Feb 14 15:13	20° $\approx$ 03'57	
evening set	10350 Mar 08 19:42	3° $\approx$ 33'51		evening set	10351 Feb 20 17:50	17° $\approx$ 34'38	
asc. node	10350 Mar 09 08:02	3° $\approx$ 06'28		asc. node	10351 Feb 24 05:14	13° $\approx$ 59'52	
	10350 Mar 12 03:38	30° $\approx$		min. Earth dist.	10351 Feb 24 23:44	13° $\approx$ 03'44	0.67100 AU
min. Earth dist.	10350 Mar 13 08:11	28° $\approx$ 28'07	0.68010 AU	inferior conj	10351 Feb 26 12:53	11° $\approx$ 07'41	0°44'52
inferior conj	10350 Mar 14 09:34	27° $\approx$ 04'05	1°34'05	minimum elong	10351 Feb 26 11:47	11° $\approx$ 11'08	0°44'38
minimum elong	10350 Mar 14 07:38	27° $\approx$ 10'29	1°33'29	morning rise	10351 Mar 04 06:21	5° $\approx$ 19'18	
morning rise	10350 Mar 19 19:47	21° $\approx$ 06'22		direct	10351 Mar 07 11:56	4° $\approx$ 19'40	
direct	10350 Mar 23 12:43	19° $\approx$ 47'32		morning max el	10351 Mar 14 04:55	7° $\approx$ 57'44	18°47'34
morning max el	10350 Mar 30 20:32	23° $\approx$ 52'06	19°41'05	desc. node	10351 Mar 30 01:56	29° $\approx$ 55'43	
	10350 Apr 05 03:11	0° $\approx$			10351 Mar 30 03:02	0° $\approx$	
desc. node	10350 Apr 12 05:10	9° $\approx$ 52'24		morning set	10351 Apr 05 03:27	9° $\approx$ 22'01	
greatest brilliancy	10350 Apr 12 14:33	10° $\approx$ 26'42	-0.6m		10351 Apr 18 08:35	0° $\approx$	
morning set	10350 Apr 25 17:38	0° $\approx$ 16'40		max. Earth dist.	10351 Apr 20 02:12	2° $\approx$ 42'55	1.45493 AU
	10350 Apr 25 13:18	0° $\approx$					
max. Earth dist.	10350 May 07 08:44	18° $\approx$ 25'10	1.44634 AU	superior conj	10351 Apr 21 12:27	4° $\approx$ 57'07	-2°04'17
				minimum elong	10351 Apr 21 05:43	4° $\approx$ 30'44	2°04'11
superior conj	10350 May 12 00:55	25° $\approx$ 53'02	-2°12'56	evening rise	10351 May 06 18:41	29° $\approx$ 11'41	
minimum elong	10350 May 12 01:30	25° $\approx$ 55'22	2°13'18		10351 May 07 06:41	0° $\approx$	
	10350 May 14 13:59	0° $\approx$		greatest brilliancy	10351 May 12 23:34	9° $\approx$ 11'05	-0.9m
evening rise	10350 May 25 17:26	18° $\approx$ 30'02		asc. node	10351 May 23 03:24	24° $\approx$ 38'07	
	10350 Jun 01 13:29	0° $\approx$		evening max el	10351 May 27 11:41	29° $\approx$ 49'32	18°36'11
asc. node	10350 Jun 05 06:19	5° $\approx$ 59'22			10351 May 27 15:55	0° $\approx$	
evening max el	10350 Jun 12 23:20	16° $\approx$ 15'42	18°11'21	retrograde	10351 Jun 03 00:18	3° $\approx$ 22'41	
retrograde	10350 Jun 19 08:03	19° $\approx$ 36'55		evening set	10351 Jun 06 05:25	2° $\approx$ 24'09	
evening set	10350 Jun 22 05:15	18° $\approx$ 53'03			10351 Jun 09 02:45	30° $\approx$	
inferior conj	10350 Jun 28 06:45	13° $\approx$ 34'13	2°44'19	inferior conj	10351 Jun 11 21:35	26° $\approx$ 48'34	3°09'25
minimum elong	10350 Jun 28 09:10	13° $\approx$ 27'30	2°43'20	minimum elong	10351 Jun 11 22:57	26° $\approx$ 44'23	3°08'47
min. Earth dist.	10350 Jun 30 22:03	10° $\approx$ 40'13	0.63356 AU	min. Earth dist.	10351 Jun 13 22:04	24° $\approx$ 21'36	0.65269 AU
morning rise	10350 Jul 04 11:30	7° $\approx$ 21'06		morning rise	10351 Jun 17 15:39	20° $\approx$ 29'11	
desc. node	10350 Jul 09 04:59	4° $\approx$ 59'42		direct	10351 Jun 24 04:23	17° $\approx$ 45'32	
direct	10350 Jul 11 04:42	4° $\approx$ 46'38		desc. node	10351 Jun 26 02:03	17° $\approx$ 57'51	
morning max el	10350 Jul 25 03:07	12° $\approx$ 49'19	27°46'47	morning max el	10351 Jul 07 13:34	25° $\approx$ 39'07	27°04'15
	10350 Aug 07 20:37	0° $\approx$			10351 Jul 11 13:09	0° $\approx$	
	10350 Aug 25 15:32	0° $\approx$			10351 Aug 01 09:24	0° $\approx$	
morning set	10350 Aug 28 18:17	6° $\approx$ 06'48		morning set	10351 Aug 12 04:38	19° $\approx$ 26'47	
asc. node	10350 Sep 01 06:11	13° $\approx$ 16'25		max. Earth dist.	10351 Aug 16 13:28	28° $\approx$ 05'36	1.33704 AU
max. Earth dist.	10350 Sep 02 19:51	16° $\approx$ 34'50	1.32455 AU		10351 Aug 17 11:54	0° $\approx$	
				asc. node	10351 Aug 19 03:02	3° $\approx$ 22'00	
superior conj	10350 Sep 05 13:37	22° $\approx$ 27'54	0°41'47				
minimum elong	10350 Sep 05 11:49	22° $\approx$ 18'07	0°41'19	superior conj	10351 Aug 20 15:51	6° $\approx$ 34'40	0°15'08
	10350 Sep 09 00:39	0° $\approx$		minimum elong	10351 Aug 20 15:05	6° $\approx$ 30'37	0°14'45
evening rise	10350 Sep 12 11:25	7° $\approx$ 28'03		behind sun begin	10351 Aug 20 12:50	6° $\approx$ 18'50	
	10350 Sep 24 03:53	0° $\approx$		behind sun end	10351 Aug 20 17:19	6° $\approx$ 42'26	
desc. node	10350 Oct 05 02:56	14° $\approx$ 40'32		evening rise	10351 Aug 27 22:02	22° $\approx$ 00'27	
evening max el	10350 Oct 05 18:42	15° $\approx$ 19'28	23°24'51		10351 Aug 31 19:03	0° $\approx$	
retrograde	10350 Oct 19 05:24	22° $\approx$ 01'45		evening max el	10351 Sep 17 08:42	25° $\approx$ 31'02	21°46'18
evening set	10350 Oct 23 12:33	21° $\approx$ 21'35		desc. node	10351 Sep 22 00:10	29° $\approx$ 16'05	
min. Earth dist.	10350 Oct 30 04:34	18° $\approx$ 13'48	0.55460 AU		10351 Sep 23 06:38	0° $\approx$	
inferior conj	10350 Oct 31 22:50	17° $\approx$ 11'47	-5°44'42	retrograde	10351 Sep 29 19:46	1° $\approx$ 42'52	
minimum elong	10350 Oct 31 22:03	17° $\approx$ 12'56	5°44'22	evening set	10351 Oct 02 16:52	1° $\approx$ 24'11	
morning rise	10350 Nov 09 09:22	13° $\approx$ 19'31			10351 Oct 06 20:09	30° $\approx$	
direct	10350 Nov 12 06:56	12° $\approx$ 59'06		inferior conj	10351 Oct 11 17:33	27° $\approx$ 26'41	-5°10'45
morning max el	10350 Nov 23 01:17	18° $\approx$ 04'21	20°25'38	minimum elong	10351 Oct 11 09:17	27° $\approx$ 38'14	5°09'02
asc. node	10350 Nov 28 06:28	24° $\approx$ 08'15		min. Earth dist.	10351 Oct 11 11:44	27° $\approx$ 34'49	0.54674 AU
	10350 Dec 02 03:18	0° $\approx$		morning rise	10351 Oct 20 02:56	23° $\approx$ 38'50	
morning set	10350 Dec 11 17:10	18° $\approx$ 08'55		direct	10351 Oct 23 17:11	23° $\approx$ 10'39	
	10350 Dec 17 10:57	0° $\approx$		morning max el	10351 Nov 04 23:38	28° $\approx$ 59'30	21°59'01
					10351 Nov 06 00:29	0° $\approx$	
superior conj	10350 Dec 19 06:11	3° $\approx$ 40'27	1°26'41	asc. node	10351 Nov 15 03:25	12° $\approx$ 03'18	
minimum elong	10350 Dec 19 08:32	3° $\approx$ 52'21	1°26'58		10351 Nov 24 17:34	0° $\approx$	
max. Earth dist.	10350 Dec 24 15:12	14° $\approx$ 17'43	1.36357 AU	morning set	10351 Nov 26 03:20	2° $\approx$ 56'05	

superior conj	10351 Dec 03 06:16	18° $\mathbb{A}$ 02'58	1°36'44	morning max el	10352 Oct 16 12:56	9° $\mathbb{A}$ 17'26	23°45'14
minimum elong	10351 Dec 03 07:29	18° $\mathbb{A}$ 09'19	1°37'09		10352 Oct 31 15:24	0° $\mathbb{M}$	
max. Earth dist.	10351 Dec 07 04:44	26° $\mathbb{A}$ 11'54	1.34505 AU	asc. node	10352 Nov 01 00:20	0° $\mathbb{M}$ 39'55	
	10351 Dec 09 02:09	0° $\mathbb{B}$		morning set	10352 Nov 09 15:02	17° $\mathbb{M}$ 44'19	
evening rise	10351 Dec 11 12:56	4° $\mathbb{B}$ 47'13			10352 Nov 15 06:53	0° $\mathbb{A}$	
desc. node	10351 Dec 18 22:28	18° $\mathbb{B}$ 18'18					
	10351 Dec 26 01:05	0° $\mathbb{A}$		superior conj	10352 Nov 16 12:29	2° $\mathbb{A}$ 40'41	1°40'00
evening max el	10352 Jan 15 14:23	26° $\mathbb{A}$ 34'42	26°53'37	minimum elong	10352 Nov 16 12:29	2° $\mathbb{A}$ 40'41	1°40'25
	10352 Jan 19 12:59	0° $\mathbb{H}$		max. Earth dist.	10352 Nov 19 02:01	8° $\mathbb{A}$ 11'13	1.33048 AU
retrograde	10352 Jan 28 19:38	3° $\mathbb{H}$ 55'40		evening rise	10352 Nov 24 02:24	18° $\mathbb{A}$ 34'18	
evening set	10352 Feb 04 09:10	1° $\mathbb{H}$ 21'39			10352 Nov 30 01:13	0° $\mathbb{B}$	
	10352 Feb 05 22:29	30° $\mathbb{R}$ $\mathbb{A}$		desc. node	10352 Dec 04 19:31	8° $\mathbb{B}$ 24'13	
min. Earth dist.	10352 Feb 08 09:19	27° $\mathbb{A}$ 24'58	0.65815 AU		10352 Dec 19 06:53	0° $\mathbb{A}$	
inferior conj	10352 Feb 10 10:20	25° $\mathbb{A}$ 03'20	-0°13'17	evening max el	10352 Dec 28 02:56	9° $\mathbb{A}$ 57'49	27°25'24
minimum elong	10352 Feb 10 10:42	25° $\mathbb{A}$ 02'17	0°12'50	retrograde	10353 Jan 10 17:51	17° $\mathbb{A}$ 20'14	
transit middle	10352 Feb 10 10:42	25° $\mathbb{A}$ 02'17	0°12'50	evening set	10353 Jan 17 15:25	14° $\mathbb{A}$ 48'08	
transit begin	10352 Feb 10 08:55	25° $\mathbb{A}$ 07'26		min. Earth dist.	10353 Jan 21 10:51	11° $\mathbb{A}$ 23'33	0.64176 AU
transit end	10352 Feb 10 12:28	24° $\mathbb{A}$ 57'08		inferior conj	10353 Jan 23 23:21	8° $\mathbb{A}$ 44'49	-1°19'48
asc. node	10352 Feb 11 02:26	24° $\mathbb{A}$ 17'00		minimum elong	10353 Jan 24 01:51	8° $\mathbb{A}$ 38'14	1°18'22
morning rise	10352 Feb 16 13:25	19° $\mathbb{A}$ 26'35		asc. node	10353 Jan 27 23:36	4° $\mathbb{A}$ 56'41	
direct	10352 Feb 19 09:07	18° $\mathbb{A}$ 43'04		morning rise	10353 Jan 30 14:11	3° $\mathbb{A}$ 22'23	
morning max el	10352 Feb 25 19:07	22° $\mathbb{A}$ 06'56	18°10'33	direct	10353 Feb 02 01:45	2° $\mathbb{A}$ 51'18	
	10352 Mar 03 02:18	0° $\mathbb{H}$		morning max el	10353 Feb 08 12:25	6° $\mathbb{A}$ 12'03	17°50'36
morning set	10352 Mar 15 16:19	19° $\mathbb{H}$ 49'42			10353 Feb 24 09:54	0° $\mathbb{H}$	
desc. node	10352 Mar 15 22:42	20° $\mathbb{H}$ 15'28		morning set	10353 Feb 25 09:41	1° $\mathbb{H}$ 40'38	
	10352 Mar 22 00:05	0° $\mathbb{Y}$		desc. node	10353 Mar 02 19:30	10° $\mathbb{H}$ 46'41	
superior conj	10352 Mar 30 18:56	13° $\mathbb{Y}$ 54'42	-1°36'09	superior conj	10353 Mar 10 14:51	23° $\mathbb{H}$ 35'13	-0°55'53
minimum elong	10352 Mar 30 09:27	13° $\mathbb{Y}$ 17'27	1°35'17	minimum elong	10353 Mar 10 08:44	23° $\mathbb{H}$ 10'34	0°54'56
max. Earth dist.	10352 Apr 01 22:11	17° $\mathbb{Y}$ 15'32	1.45608 AU		10353 Mar 14 15:02	0° $\mathbb{Y}$	
	10352 Apr 10 02:15	0° $\mathbb{B}$		max. Earth dist.	10353 Mar 15 17:24	1° $\mathbb{Y}$ 44'24	1.44982 AU
evening rise	10352 Apr 15 21:18	9° $\mathbb{B}$ 00'40		evening rise	10353 Mar 26 10:05	18° $\mathbb{Y}$ 22'35	
greatest brilliancy	10352 Apr 27 20:13	27° $\mathbb{B}$ 26'36	-0.7m		10353 Apr 03 01:39	0° $\mathbb{B}$	
	10352 Apr 29 13:13	0° $\mathbb{I}$		evening max el	10353 Apr 22 23:27	27° $\mathbb{B}$ 11'10	20°15'36
asc. node	10352 May 09 00:31	12° $\mathbb{I}$ 37'49		asc. node	10353 Apr 25 21:41	29° $\mathbb{B}$ 46'18	
evening max el	10352 May 09 20:13	13° $\mathbb{I}$ 29'14	19°18'09		10353 Apr 26 05:19	0° $\mathbb{I}$	
retrograde	10352 May 16 21:06	17° $\mathbb{I}$ 26'55		retrograde	10353 Apr 30 19:48	1° $\mathbb{I}$ 43'41	
evening set	10352 May 20 10:32	16° $\mathbb{I}$ 13'00		evening set	10353 May 04 18:17	0° $\mathbb{I}$ 14'12	
inferior conj	10352 May 25 20:49	10° $\mathbb{I}$ 22'17	3°18'18		10353 May 05 01:28	30° $\mathbb{R}$ $\mathbb{B}$	
minimum elong	10352 May 25 21:00	10° $\mathbb{I}$ 21'43	3°17'50	inferior conj	10353 May 10 01:37	24° $\mathbb{B}$ 10'08	3°13'59
min. Earth dist.	10352 May 27 06:14	8° $\mathbb{I}$ 33'27	0.66783 AU	minimum elong	10353 May 10 00:43	24° $\mathbb{B}$ 13'10	3°13'32
morning rise	10352 May 31 07:02	4° $\mathbb{I}$ 01'42		min. Earth dist.	10353 May 10 20:46	23° $\mathbb{B}$ 04'48	0.67849 AU
direct	10352 Jun 06 10:43	1° $\mathbb{I}$ 19'46		morning rise	10353 May 15 06:54	17° $\mathbb{B}$ 51'36	
desc. node	10352 Jun 11 23:04	3° $\mathbb{I}$ 03'24		direct	10353 May 20 22:49	15° $\mathbb{B}$ 20'23	
morning max el	10352 Jun 19 00:10	8° $\mathbb{I}$ 50'21	25°56'07	desc. node	10353 May 29 20:03	19° $\mathbb{B}$ 46'27	
	10352 Jul 05 14:35	0° $\mathbb{B}$		morning max el	10353 Jun 01 09:53	22° $\mathbb{B}$ 12'50	24°32'07
	10352 Jul 23 21:48	0° $\mathbb{Q}$			10353 Jun 08 05:06	0° $\mathbb{I}$	
morning set	10352 Jul 25 01:34	2° $\mathbb{Q}$ 07'00			10353 Jun 28 21:34	0° $\mathbb{B}$	
max. Earth dist.	10352 Jul 28 20:41	9° $\mathbb{Q}$ 15'27	1.35435 AU	morning set	10353 Jul 07 04:33	13° $\mathbb{B}$ 56'04	
				max. Earth dist.	10353 Jul 10 19:27	20° $\mathbb{B}$ 23'00	1.37542 AU
superior conj	10352 Aug 03 10:14	20° $\mathbb{Q}$ 15'11	-0°15'20		10353 Jul 15 23:33	0° $\mathbb{Q}$	
minimum elong	10352 Aug 03 11:09	20° $\mathbb{Q}$ 19'51	0°15'29	superior conj	10353 Jul 17 17:37	3° $\mathbb{Q}$ 21'54	-0°48'09
behind sun begin	10352 Aug 03 09:28	20° $\mathbb{Q}$ 11'16		minimum elong	10353 Jul 17 20:46	3° $\mathbb{Q}$ 37'06	0°48'00
behind sun end	10352 Aug 03 12:51	20° $\mathbb{Q}$ 28'28		asc. node	10353 Jul 22 20:48	13° $\mathbb{Q}$ 28'03	
asc. node	10352 Aug 04 23:53	23° $\mathbb{Q}$ 27'01		evening rise	10353 Jul 26 08:08	20° $\mathbb{Q}$ 24'07	
	10352 Aug 08 04:04	0° $\mathbb{P}$			10353 Jul 31 06:16	0° $\mathbb{P}$	
evening rise	10352 Aug 11 05:45	6° $\mathbb{P}$ 21'15			10353 Aug 12 00:56	17° $\mathbb{P}$ 41'42	19°16'15
	10352 Aug 24 06:43	0° $\mathbb{A}$		evening max el	10353 Aug 21 06:53	22° $\mathbb{P}$ 17'20	
evening max el	10352 Aug 29 09:54	6° $\mathbb{A}$ 13'00	20°21'13	retrograde	10353 Aug 23 03:07	22° $\mathbb{P}$ 07'09	
desc. node	10352 Sep 07 21:26	11° $\mathbb{A}$ 33'03		evening set	10353 Aug 25 18:41	21° $\mathbb{P}$ 19'45	
retrograde	10352 Sep 09 08:16	11° $\mathbb{A}$ 38'35		desc. node	10353 Aug 31 16:55	17° $\mathbb{P}$ 57'40	-1°50'25
evening set	10352 Sep 11 08:34	11° $\mathbb{A}$ 28'21		inferior conj	10353 Aug 31 12:02	18° $\mathbb{P}$ 05'46	1°48'40
inferior conj	10352 Sep 20 10:50	7° $\mathbb{A}$ 30'50	-3°43'37	minimum elong	10353 Sep 03 09:00	16° $\mathbb{P}$ 11'50	0.55884 AU
minimum elong	10352 Sep 20 01:26	7° $\mathbb{A}$ 44'35	3°40'35	min. Earth dist.	10353 Sep 08 18:08	13° $\mathbb{P}$ 19'15	
min. Earth dist.	10352 Sep 21 20:27	6° $\mathbb{A}$ 41'35	0.54815 AU	morning rise	10353 Sep 13 22:20	12° $\mathbb{P}$ 17'49	
morning rise	10352 Sep 28 17:39	3° $\mathbb{A}$ 26'05		direct	10353 Sep 28 00:46	19° $\mathbb{P}$ 26'36	25°28'55
direct	10352 Oct 03 02:12	2° $\mathbb{A}$ 45'14		morning max el			



	10353 Oct 06 23:26	0°♄		transit middle	10354 Aug 12 19:33	29°♄05'46	0°03'06
asc. node	10353 Oct 18 21:14	19°♄47'59		transit begin	10354 Aug 12 16:01	29°♄12'36	
	10353 Oct 23 22:30	0°♄		transit end	10354 Aug 12 23:05	28°♄58'55	
morning set	10353 Oct 25 02:33	2°♄28'52		desc. node	10354 Aug 12 15:55	29°♄12'48	
				min. Earth dist.	10354 Aug 16 02:40	26°♄33'38	0.57672 AU
superior conj	10353 Oct 31 22:26	17°♄26'35	1°37'04	morning rise	10354 Aug 20 10:44	23°♄50'08	
minimum elong	10353 Oct 31 21:22	17°♄20'43	1°37'20	direct	10354 Aug 26 09:06	22°♄21'04	
max. Earth dist.	10353 Nov 02 06:15	20°♄21'46	1.32055 AU	morning max el	10354 Sep 09 17:12	29°♄56'07	26°52'50
	10353 Nov 06 17:29	0°♄			10354 Sep 09 18:48	0°♄	
evening rise	10353 Nov 08 00:56	2°♄44'24			10354 Sep 30 21:36	0°♄	
desc. node	10353 Nov 21 16:37	28°♄05'41		asc. node	10354 Oct 05 18:06	9°♄19'08	
	10353 Nov 22 20:55	0°♄		morning set	10354 Oct 09 12:13	17°♄05'17	
evening max el	10353 Dec 10 12:47	22°♄50'20	27°27'59		10354 Oct 15 09:54	0°♄	
	10353 Dec 22 15:57	0°♄					
retrograde	10353 Dec 24 08:59	0°♄07'56		superior conj	10354 Oct 16 10:04	2°♄14'27	1°28'24
	10353 Dec 26 01:18	30°♄♄		minimum elong	10354 Oct 16 08:14	2°♄04'14	1°28'26
evening set	10353 Dec 31 09:39	27°♄46'34		max. Earth dist.	10354 Oct 16 14:53	2°♄41'16	1.31540 AU
min. Earth dist.	10354 Jan 04 02:41	24°♄49'07	0.62250 AU	evening rise	10354 Oct 23 05:51	17°♄10'33	
inferior conj	10354 Jan 07 01:00	22°♄04'39	-2°32'48		10354 Oct 29 14:16	0°♄	
minimum elong	10354 Jan 07 06:04	21°♄52'44	2°30'22	desc. node	10354 Nov 08 13:46	17°♄13'10	
morning rise	10354 Jan 14 04:57	16°♄59'24			10354 Nov 17 23:46	0°♄	
asc. node	10354 Jan 14 20:46	16°♄48'13		evening max el	10354 Nov 22 17:27	5°♄00'34	26°56'59
direct	10354 Jan 16 10:42	16°♄36'56		retrograde	10354 Dec 06 15:37	12°♄10'10	
morning max el	10354 Jan 23 05:38	20°♄04'17	17°48'19	evening set	10354 Dec 13 12:08	10°♄09'14	
	10354 Jan 30 14:52	0°♄		min. Earth dist.	10354 Dec 17 07:57	7°♄29'47	0.60158 AU
morning set	10354 Feb 08 01:51	14°♄36'40		inferior conj	10354 Dec 20 11:51	4°♄54'11	-3°47'41
	10354 Feb 16 20:26	0°♄		minimum elong	10354 Dec 20 19:13	4°♄39'02	3°44'48
desc. node	10354 Feb 17 16:18	1°♄25'03		morning rise	10354 Dec 28 04:56	0°♄09'04	
					10354 Dec 28 20:46	30°♄♄	
superior conj	10354 Feb 19 10:31	4°♄24'12	-0°13'15	direct	10354 Dec 30 08:11	29°♄51'34	
minimum elong	10354 Feb 19 09:15	4°♄18'53	0°12'48		10354 Dec 31 19:06	0°♄	
behind sun begin	10354 Feb 19 03:53	3°♄56'10		asc. node	10355 Jan 01 17:53	0°♄14'43	
behind sun end	10354 Feb 19 14:38	4°♄41'33		morning max el	10355 Jan 06 19:18	3°♄34'29	18°04'51
max. Earth dist.	10354 Feb 26 09:35	15°♄54'00	1.43694 AU	morning set	10355 Jan 22 10:30	28°♄18'56	
evening rise	10354 Mar 06 00:03	27°♄56'01			10355 Jan 23 08:11	0°♄	
	10354 Mar 07 08:07	0°♄					
	10354 Mar 27 20:53	0°♄		superior conj	10355 Feb 01 06:42	16°♄22'31	0°24'51
evening max el	10354 Apr 05 21:09	10°♄54'17	21°25'32	minimum elong	10355 Feb 01 08:37	16°♄31'05	0°24'54
asc. node	10354 Apr 12 18:53	15°♄48'38		desc. node	10355 Feb 04 13:08	22°♄07'10	
retrograde	10354 Apr 14 18:11	16°♄07'43		max. Earth dist.	10355 Feb 08 21:41	29°♄32'26	1.41886 AU
evening set	10354 Apr 19 02:46	14°♄22'46			10355 Feb 09 04:17	0°♄	
inferior conj	10354 Apr 24 09:35	8°♄07'32	2°58'30	evening rise	10355 Feb 14 04:46	8°♄13'05	
minimum elong	10354 Apr 24 07:54	8°♄13'24	2°57'58		10355 Feb 28 11:13	0°♄	
min. Earth dist.	10354 Apr 24 15:28	7°♄47'04	0.68464 AU	evening max el	10355 Mar 19 14:20	24°♄39'50	22°43'28
morning rise	10354 Apr 29 12:49	1°♄53'07			10355 Mar 26 18:56	0°♄	
	10354 May 02 14:10	30°♄♄		retrograde	10355 Mar 29 14:38	0°♄35'02	
direct	10354 May 04 15:35	29°♄39'10		asc. node	10355 Mar 30 16:06	0°♄29'33	
	10354 May 06 19:35	0°♄			10355 Apr 01 06:02	30°♄♄	
morning max el	10354 May 14 19:53	5°♄41'43	23°02'14	evening set	10355 Apr 03 10:23	28°♄35'07	
desc. node	10354 May 16 16:58	7°♄40'38		inferior conj	10355 Apr 08 18:41	22°♄11'22	2°33'05
	10354 Jun 02 13:50	0°♄		minimum elong	10355 Apr 08 16:33	22°♄18'45	2°32'25
morning set	10354 Jun 18 08:14	24°♄39'32		min. Earth dist.	10355 Apr 08 12:03	22°♄34'23	0.68633 AU
	10354 Jun 21 12:24	0°♄		morning rise	10355 Apr 13 22:36	16°♄02'33	
max. Earth dist.	10354 Jun 22 16:03	1°♄58'24	1.39829 AU	direct	10355 Apr 18 11:51	14°♄09'35	
				morning max el	10355 Apr 27 09:31	19°♄19'47	21°35'34
superior conj	10354 Jun 30 09:58	15°♄44'48	-1°20'56	desc. node	10355 May 03 13:51	26°♄26'45	
minimum elong	10354 Jun 30 15:20	16°♄09'30	1°20'39		10355 May 06 07:15	0°♄	
	10354 Jul 07 23:50	0°♄			10355 May 26 17:47	0°♄	
asc. node	10354 Jul 09 17:43	3°♄20'32		morning set	10355 May 29 09:15	4°♄10'08	
evening rise	10354 Jul 10 02:02	4°♄00'18		max. Earth dist.	10355 Jun 04 17:26	14°♄26'07	1.42023 AU
evening max el	10354 Jul 26 03:21	29°♄54'15	18°32'32				
	10354 Jul 26 05:42	0°♄		superior conj	10355 Jun 12 06:44	27°♄13'41	-1°49'45
retrograde	10354 Aug 02 23:33	3°♄49'38		minimum elong	10355 Jun 12 13:06	27°♄41'22	1°49'38
evening set	10354 Aug 05 00:51	3°♄34'20			10355 Jun 13 20:50	0°♄	
	10354 Aug 11 15:09	30°♄♄		evening rise	10355 Jun 23 07:39	17°♄00'31	
inferior conj	10354 Aug 12 19:40	29°♄05'32	-0°02'52	asc. node	10355 Jun 26 14:41	23°♄00'10	
minimum elong	10354 Aug 12 19:33	29°♄05'46	0°03'06		10355 Jun 30 13:44	0°♄	

evening max el	10355 Jul 09 13:07	12° $\Omega$ 41'08	18°09'09	retrograde	10356 Jun 28 13:02	29° $\mathfrak{G}$ 13'37	
retrograde	10355 Jul 16 10:53	16° $\Omega$ 11'31		evening set	10356 Jul 01 05:41	28° $\mathfrak{G}$ 37'32	
evening set	10355 Jul 18 19:46	15° $\Omega$ 47'14		inferior conj	10356 Jul 07 14:15	23° $\mathfrak{G}$ 28'37	2°20'58
inferior conj	10355 Jul 25 19:49	10° $\Omega$ 57'34	1°21'59	minimum elong	10356 Jul 07 17:01	23° $\mathfrak{G}$ 21'27	2°19'47
minimum elong	10355 Jul 25 22:10	10° $\Omega$ 52'13	1°20'48	min. Earth dist.	10356 Jul 10 12:54	20° $\mathfrak{G}$ 26'57	0.62116 AU
min. Earth dist.	10355 Jul 29 03:18	7° $\Omega$ 59'19	0.59857 AU	morning rise	10356 Jul 14 02:14	17° $\mathfrak{G}$ 22'21	
desc. node	10355 Jul 30 13:07	6° $\Omega$ 49'57		desc. node	10356 Jul 16 10:16	15° $\mathfrak{G}$ 59'15	
morning rise	10355 Aug 01 21:33	5° $\Omega$ 11'38		direct	10356 Jul 20 19:00	14° $\mathfrak{G}$ 58'40	
direct	10355 Aug 08 08:40	3° $\Omega$ 13'06		morning max el	10356 Aug 03 22:39	23° $\mathfrak{G}$ 00'39	27°56'35
morning max el	10355 Aug 22 16:43	11° $\Omega$ 05'29	27°43'54		10356 Aug 10 03:36	0° $\Omega$	
	10355 Sep 06 10:59	0° $\mathfrak{M}$			10356 Aug 29 17:00	0° $\mathfrak{M}$	
asc. node	10355 Sep 22 14:55	29° $\Omega$ 06'20		morning set	10356 Sep 06 18:41	15° $\mathfrak{M}$ 32'42	
	10355 Sep 23 01:18	0° $\mathfrak{A}$		asc. node	10356 Sep 08 11:43	19° $\mathfrak{M}$ 04'26	
morning set	10355 Sep 23 18:14	1° $\mathfrak{A}$ 28'13		max. Earth dist.	10356 Sep 12 06:30	27° $\mathfrak{M}$ 07'40	1.31967 AU
max. Earth dist.	10355 Sep 30 00:15	15° $\mathfrak{A}$ 00'03	1.31510 AU		10356 Sep 13 14:10	0° $\mathfrak{A}$	
superior conj	10355 Sep 30 21:31	16° $\mathfrak{A}$ 57'58	1°14'18	superior conj	10356 Sep 14 06:59	1° $\mathfrak{A}$ 32'07	0°55'04
minimum elong	10355 Sep 30 19:18	16° $\mathfrak{A}$ 45'39	1°14'05	minimum elong	10356 Sep 14 04:52	1° $\mathfrak{A}$ 20'30	0°54'40
	10355 Oct 06 19:16	0° $\mathfrak{M}$		evening rise	10356 Sep 21 01:59	16° $\mathfrak{A}$ 24'13	
evening rise	10355 Oct 07 14:51	1° $\mathfrak{M}$ 45'37			10356 Sep 27 17:37	0° $\mathfrak{M}$	
	10355 Oct 22 16:53	0° $\mathfrak{A}$		desc. node	10356 Oct 12 08:08	22° $\mathfrak{M}$ 45'44	
desc. node	10355 Oct 26 10:57	5° $\mathfrak{A}$ 32'38		evening max el	10356 Oct 16 03:13	26° $\mathfrak{M}$ 49'20	24°22'20
evening max el	10355 Nov 04 14:15	16° $\mathfrak{A}$ 18'45	25°52'29		10356 Oct 19 21:38	0° $\mathfrak{A}$	
retrograde	10355 Nov 18 11:53	23° $\mathfrak{A}$ 20'33		retrograde	10356 Oct 29 20:32	3° $\mathfrak{A}$ 42'02	
evening set	10355 Nov 24 18:09	21° $\mathfrak{A}$ 48'36		evening set	10356 Nov 03 23:55	2° $\mathfrak{A}$ 43'38	
min. Earth dist.	10355 Nov 29 02:52	19° $\mathfrak{A}$ 12'56	0.58078 AU		10356 Nov 09 09:27	30° $\mathfrak{A}$ $\mathfrak{M}$	
inferior conj	10355 Dec 02 04:20	17° $\mathfrak{A}$ 02'19	-4°55'05	min. Earth dist.	10356 Nov 09 14:08	29° $\mathfrak{M}$ 52'53	0.56263 AU
minimum elong	10355 Dec 02 12:00	16° $\mathfrak{A}$ 48'38	4°52'56	inferior conj	10356 Nov 12 00:21	28° $\mathfrak{M}$ 22'15	-5°38'42
morning rise	10355 Dec 10 08:16	12° $\mathfrak{A}$ 39'48		minimum elong	10356 Nov 12 03:59	28° $\mathfrak{M}$ 16'34	5°38'01
direct	10355 Dec 12 13:49	12° $\mathfrak{A}$ 23'53		morning rise	10356 Nov 20 10:11	24° $\mathfrak{M}$ 21'23	
asc. node	10355 Dec 19 14:56	15° $\mathfrak{A}$ 14'15		direct	10356 Nov 23 00:03	24° $\mathfrak{M}$ 03'45	
morning max el	10355 Dec 21 01:37	16° $\mathfrak{A}$ 31'20	18°41'57	morning max el	10356 Dec 02 20:58	28° $\mathfrak{M}$ 45'10	19°41'19
	10355 Dec 30 14:36	0° $\mathfrak{B}$			10356 Dec 04 02:35	0° $\mathfrak{A}$	
morning set	10356 Jan 06 06:27	12° $\mathfrak{B}$ 31'06		asc. node	10356 Dec 05 11:57	1° $\mathfrak{A}$ 34'23	
				morning set	10356 Dec 20 09:59	27° $\mathfrak{A}$ 02'37	
superior conj	10356 Jan 14 23:13	29° $\mathfrak{B}$ 17'29	0°55'19		10356 Dec 21 21:03	0° $\mathfrak{B}$	
minimum elong	10356 Jan 15 02:18	29° $\mathfrak{B}$ 31'57	0°55'20	superior conj	10356 Dec 28 07:15	12° $\mathfrak{B}$ 55'43	1°17'31
	10356 Jan 15 08:17	0° $\mathfrak{A}$		minimum elong	10356 Dec 28 10:06	13° $\mathfrak{B}$ 09'46	1°17'41
max. Earth dist.	10356 Jan 22 05:32	12° $\mathfrak{A}$ 29'16	1.39756 AU	max. Earth dist.	10357 Jan 03 11:32	24° $\mathfrak{B}$ 46'15	1.37554 AU
desc. node	10356 Jan 22 09:59	12° $\mathfrak{A}$ 48'46			10357 Jan 06 08:20	0° $\mathfrak{A}$	
evening rise	10356 Jan 26 06:18	19° $\mathfrak{A}$ 25'01		evening rise	10357 Jan 07 04:49	1° $\mathfrak{A}$ 31'22	
	10356 Feb 01 17:50	0° $\mathfrak{H}$		desc. node	10357 Jan 08 06:53	3° $\mathfrak{A}$ 26'24	
	10356 Feb 22 17:43	0° $\mathfrak{Y}$			10357 Jan 24 22:16	0° $\mathfrak{H}$	
evening max el	10356 Mar 01 04:37	8° $\mathfrak{Y}$ 27'30	24°03'50	evening max el	10357 Feb 11 17:49	22° $\mathfrak{H}$ 16'28	25°19'59
retrograde	10356 Mar 12 07:52	15° $\mathfrak{Y}$ 00'05		retrograde	10357 Feb 23 20:56	29° $\mathfrak{H}$ 17'26	
asc. node	10356 Mar 16 13:19	13° $\mathfrak{Y}$ 36'41		evening set	10357 Mar 01 16:47	26° $\mathfrak{H}$ 52'34	
evening set	10356 Mar 17 15:34	12° $\mathfrak{Y}$ 46'29		asc. node	10357 Mar 03 10:32	25° $\mathfrak{H}$ 12'10	
min. Earth dist.	10356 Mar 22 08:21	7° $\mathfrak{Y}$ 20'56	0.68361 AU	min. Earth dist.	10357 Mar 06 02:14	22° $\mathfrak{H}$ 01'56	0.67672 AU
inferior conj	10356 Mar 23 03:01	6° $\mathfrak{Y}$ 17'43	1°58'17	inferior conj	10357 Mar 07 08:43	20° $\mathfrak{H}$ 23'15	1°14'20
minimum elong	10356 Mar 23 00:52	6° $\mathfrak{Y}$ 25'00	1°57'36	minimum elong	10357 Mar 07 07:04	20° $\mathfrak{H}$ 28'37	1°13'50
morning rise	10356 Mar 28 10:13	0° $\mathfrak{Y}$ 15'46		morning rise	10357 Mar 12 21:44	14° $\mathfrak{H}$ 29'32	
	10356 Mar 28 18:53	30° $\mathfrak{A}$ $\mathfrak{H}$		direct	10357 Mar 16 09:37	13° $\mathfrak{H}$ 19'21	
direct	10356 Apr 01 10:18	28° $\mathfrak{H}$ 44'50		morning max el	10357 Mar 23 10:15	17° $\mathfrak{H}$ 11'05	19°16'23
	10356 Apr 05 08:27	0° $\mathfrak{Y}$			10357 Apr 02 11:09	0° $\mathfrak{Y}$	
morning max el	10356 Apr 09 05:56	3° $\mathfrak{Y}$ 09'47	20°18'59	greatest brilliancy	10357 Apr 05 07:36	4° $\mathfrak{Y}$ 11'59	-0.7m
desc. node	10356 Apr 19 10:40	15° $\mathfrak{Y}$ 50'19		desc. node	10357 Apr 06 07:27	5° $\mathfrak{Y}$ 41'14	
	10356 Apr 29 03:37	0° $\mathfrak{B}$		morning set	10357 Apr 16 13:19	21° $\mathfrak{Y}$ 20'24	
morning set	10356 May 07 12:43	12° $\mathfrak{B}$ 45'37			10357 Apr 22 03:31	0° $\mathfrak{B}$	
max. Earth dist.	10356 May 17 02:09	27° $\mathfrak{B}$ 47'36	1.43841 AU	max. Earth dist.	10357 Apr 29 16:48	11° $\mathfrak{B}$ 48'24	1.45082 AU
	10356 May 18 11:05	0° $\mathfrak{I}$					
superior conj	10356 May 23 03:59	7° $\mathfrak{I}$ 40'32	-2°08'54	superior conj	10357 May 03 01:41	17° $\mathfrak{B}$ 08'07	-2°11'48
minimum elong	10356 May 23 08:00	7° $\mathfrak{I}$ 57'06	2°09'11	minimum elong	10357 May 02 23:05	16° $\mathfrak{B}$ 57'47	2°12'05
evening rise	10356 Jun 04 20:24	29° $\mathfrak{I}$ 14'08			10357 May 11 01:51	0° $\mathfrak{I}$	
	10356 Jun 05 06:58	0° $\mathfrak{G}$		evening rise	10357 May 17 11:31	10° $\mathfrak{I}$ 30'34	
asc. node	10356 Jun 12 11:41	12° $\mathfrak{G}$ 21'55			10357 May 29 11:44	0° $\mathfrak{G}$	
evening max el	10356 Jun 22 02:22	25° $\mathfrak{G}$ 52'53	18°05'08	asc. node	10357 May 30 08:44	1° $\mathfrak{G}$ 18'45	

evening max el	10357 Jun 05 15:49	9°☿20'31	18°19'41	greatest brilliancy	10358 May 07 05:01	5°♊09'57	-0.8m
retrograde	10357 Jun 12 01:17	12°☿45'36		asc. node	10358 May 17 05:51	19°♊42'39	
evening set	10357 Jun 15 01:43	11°☿55'47		evening max el	10358 May 20 02:50	22°♊57'51	18°52'02
inferior conj	10357 Jun 20 22:47	6°☿29'34	2°57'11	retrograde	10358 May 26 19:50	26°♊40'07	
minimum elong	10357 Jun 21 00:48	6°☿23'42	2°56'21	evening set	10358 May 30 04:20	25°♊35'17	
min. Earth dist.	10357 Jun 23 07:57	3°☿45'07	0.64207 AU	inferior conj	10358 Jun 04 17:38	19°♊53'18	3°14'55
morning rise	10357 Jun 26 22:39	0°☿12'39		minimum elong	10358 Jun 04 18:30	19°♊50'36	3°14'23
	10357 Jun 27 05:03	30°♋♊		min. Earth dist.	10358 Jun 06 11:47	17°♊41'14	0.65966 AU
desc. node	10357 Jul 03 07:23	27°♊33'10		morning rise	10358 Jun 10 08:00	13°♊32'48	
direct	10357 Jul 03 14:28	27°♊32'53		direct	10358 Jun 16 17:25	10°♊48'17	
	10357 Jul 10 16:55	0°☿		desc. node	10358 Jun 20 04:27	11°♊29'12	
morning max el	10357 Jul 17 08:22	5°☿34'08	27°32'24	morning max el	10358 Jun 29 19:03	18°♊34'32	26°37'44
	10357 Aug 04 22:09	0°♊			10358 Jul 09 10:22	0°☿	
morning set	10357 Aug 21 11:02	29°♊11'13			10358 Jul 28 22:08	0°♊	
	10357 Aug 21 20:54	0°♊		morning set	10358 Aug 04 16:12	12°♊15'51	
max. Earth dist.	10357 Aug 26 05:31	8°♊52'31	1.32924 AU	max. Earth dist.	10358 Aug 08 18:24	20°♊11'39	1.34387 AU
asc. node	10357 Aug 26 08:32	9°♊08'16					
				superior conj	10358 Aug 13 11:45	29°♊47'08	0°02'38
superior conj	10357 Aug 29 12:29	15°♊50'25	0°30'59	minimum elong	10358 Aug 13 11:38	29°♊46'28	0°02'20
minimum elong	10357 Aug 29 11:03	15°♊42'41	0°30'33	behind sun begin	10358 Aug 13 05:52	29°♊16'37	
	10357 Sep 05 02:04	0°♊		behind sun end	10358 Aug 13 17:24	0°♊16'23	
evening rise	10357 Sep 05 13:19	1°♊00'00		asc. node	10358 Aug 13 05:22	29°♊14'02	
	10357 Sep 21 15:41	0°♊			10358 Aug 13 14:14	0°♊	
evening max el	10357 Sep 27 14:04	6°♊56'45	22°41'56	evening rise	10358 Aug 20 22:59	15°♊28'03	
desc. node	10357 Sep 29 05:22	8°♊27'03			10358 Aug 28 06:44	0°♊	
retrograde	10357 Oct 10 17:04	13°♊29'03		evening max el	10358 Sep 09 08:15	17°♊18'33	21°07'52
evening set	10357 Oct 14 08:41	12°♊59'50		desc. node	10358 Sep 16 02:38	22°♊06'57	
min. Earth dist.	10357 Oct 21 22:02	9°♊35'53	0.55017 AU	retrograde	10358 Sep 21 05:00	23°♊11'38	
inferior conj	10357 Oct 23 01:57	8°♊56'06	-5°37'33	evening set	10358 Sep 23 14:52	22°♊58'02	
minimum elong	10357 Oct 22 21:36	9°♊02'19	5°36'53	inferior conj	10358 Oct 02 18:16	19°♊02'33	-4°39'06
morning rise	10357 Oct 31 12:15	5°♊07'55		minimum elong	10358 Oct 02 08:33	19°♊16'14	4°36'34
direct	10357 Nov 03 16:16	4°♊44'53		min. Earth dist.	10358 Oct 03 05:54	18°♊46'08	0.54618 AU
morning max el	10357 Nov 15 02:54	10°♊08'39	21°03'11	morning rise	10358 Oct 11 02:39	15°♊09'42	
asc. node	10357 Nov 22 08:54	18°♊58'47		direct	10358 Oct 15 00:36	14°♊36'43	
	10357 Nov 28 20:54	0°♊		morning max el	10358 Oct 27 20:33	20°♊45'10	22°43'21
morning set	10357 Dec 04 18:21	11°♊45'26			10358 Nov 04 15:23	0°♊	
				asc. node	10358 Nov 09 05:50	7°♊12'54	
superior conj	10357 Dec 12 02:29	27°♊04'47	1°31'49	morning set	10358 Nov 19 05:22	26°♊33'18	
minimum elong	10357 Dec 12 04:22	27°♊14'32	1°32'10		10358 Nov 20 20:12	0°♊	
	10357 Dec 13 12:40	0°♊					
max. Earth dist.	10357 Dec 16 20:40	6°♊40'39	1.35519 AU	superior conj	10358 Nov 26 05:29	11°♊34'29	1°38'54
evening rise	10357 Dec 20 21:24	14°♊24'46		minimum elong	10358 Nov 26 06:10	11°♊38'09	1°39'20
desc. node	10357 Dec 26 03:50	23°♊56'04		max. Earth dist.	10358 Nov 29 13:15	18°♊34'41	1.33830 AU
	10357 Dec 29 17:16	0°♊		evening rise	10358 Dec 04 04:18	27°♊55'17	
	10358 Jan 19 16:22	0°♊			10358 Dec 05 05:57	0°♊	
evening max el	10358 Jan 25 07:11	6°♊03'08	26°24'42	desc. node	10358 Dec 13 00:50	14°♊12'30	
retrograde	10358 Feb 07 04:56	13°♊20'40			10358 Dec 22 22:57	0°♊	
evening set	10358 Feb 13 12:20	10°♊48'35		evening max el	10359 Jan 07 20:37	19°♊38'55	27°10'31
min. Earth dist.	10358 Feb 17 15:36	6°♊32'18	0.66589 AU	retrograde	10359 Jan 21 06:55	27°♊01'32	
asc. node	10358 Feb 18 07:46	5°♊43'39		evening set	10359 Jan 28 00:06	24°♊27'44	
inferior conj	10358 Feb 19 09:51	4°♊24'14	0°21'18	min. Earth dist.	10359 Jan 31 22:09	20°♊44'47	0.65148 AU
minimum elong	10358 Feb 19 09:17	4°♊25'57	0°21'19	inferior conj	10359 Feb 03 04:03	18°♊14'49	-0°40'34
	10358 Feb 23 11:08	30°♋♊		minimum elong	10359 Feb 03 05:15	18°♊11'30	0°39'42
morning rise	10358 Feb 25 07:07	28°♋40'31		asc. node	10359 Feb 05 04:59	16°♋02'58	
direct	10358 Feb 28 08:11	27°♋48'20		morning rise	10359 Feb 09 11:53	12°♋43'33	
	10358 Mar 05 10:09	0°♋		direct	10359 Feb 12 03:51	12°♋05'46	
morning max el	10358 Mar 06 21:27	1°♋19'20	18°29'47	morning max el	10359 Feb 18 13:16	15°♋27'21	17°59'56
desc. node	10358 Mar 24 04:14	25°♋52'15			10359 Mar 01 02:19	0°♋	
	10358 Mar 26 18:55	0°♋		morning set	10359 Mar 08 11:05	12°♋02'50	
morning set	10358 Mar 27 09:37	0°♋58'09		desc. node	10359 Mar 11 01:00	16°♋17'16	
					10359 Mar 19 12:04	0°♋	
superior conj	10358 Apr 12 08:54	26°♋04'01	-1°54'28				
minimum elong	10358 Apr 12 00:08	25°♋29'41	1°54'00	superior conj	10359 Mar 22 19:05	5°♋14'27	-1°19'59
max. Earth dist.	10358 Apr 12 11:08	26°♋12'43	1.45626 AU	minimum elong	10359 Mar 22 10:31	4°♋40'29	1°18'57
	10358 Apr 14 21:16	0°♋		max. Earth dist.	10359 Mar 26 06:59	10°♋45'11	1.45429 AU
evening rise	10358 Apr 28 02:40	20°♋47'59		evening rise	10359 Apr 07 21:45	0°♋20'46	
	10358 May 03 22:07	0°♋			10359 Apr 07 16:22	0°♋	

greatest brilliancy	10359 Apr 21 17:11	21°♄20'12	-0.7m	minimum elong	10360 Mar 01 20:26	15°♄05'49	0°36'49
	10359 Apr 27 19:49	0°♄		max. Earth dist.	10360 Mar 08 01:41	25°♄09'33	1.44515 AU
evening max el	10359 May 03 09:20	6°♄39'09	19°40'54		10360 Mar 11 03:03	0°♄	
asc. node	10359 May 04 03:02	7°♄22'21		evening rise	10360 Mar 17 09:07	9°♄43'02	
retrograde	10359 May 10 17:37	10°♄50'09			10360 Mar 30 21:30	0°♄	
evening set	10359 May 14 10:50	9°♄29'38		evening max el	10360 Apr 15 10:13	20°♄21'32	20°44'03
inferior conj	10359 May 19 19:33	3°♄33'16	3°17'53	asc. node	10360 Apr 20 00:13	24°♄04'37	
minimum elong	10359 May 19 19:15	3°♄34'17	3°17'28	retrograde	10360 Apr 23 16:20	25°♄10'31	
min. Earth dist.	10359 May 20 22:50	2°♄02'27	0.67298 AU	evening set	10360 Apr 27 19:06	23°♄34'11	
	10359 May 22 13:11	30°♄		inferior conj	10360 May 03 01:56	17°♄25'06	3°08'40
morning rise	10359 May 25 03:20	27°♄13'27		minimum elong	10360 May 03 00:40	17°♄29'27	3°08'12
direct	10359 May 31 02:25	24°♄34'55		min. Earth dist.	10360 May 03 15:15	16°♄39'08	0.68171 AU
desc. node	10359 Jun 07 01:27	27°♄19'31		morning rise	10360 May 08 06:02	11°♄08'23	
	10359 Jun 10 07:26	0°♄		direct	10360 May 13 16:28	8°♄44'03	
morning max el	10359 Jun 12 05:03	1°♄50'30	25°21'41	desc. node	10360 May 23 22:25	14°♄35'22	
	10359 Jul 03 12:04	0°♄		morning max el	10360 May 24 14:35	15°♄15'32	23°54'04
morning set	10359 Jul 18 06:08	24°♄35'57			10360 Jun 05 16:18	0°♄	
	10359 Jul 21 04:54	0°♄			10360 Jun 25 10:41	0°♄	
max. Earth dist.	10359 Jul 21 21:22	1°♄16'54	1.36297 AU	morning set	10360 Jun 28 23:47	5°♄58'15	
				max. Earth dist.	10360 Jul 02 18:45	12°♄34'18	1.38510 AU
superior conj	10359 Jul 28 01:57	13°♄14'55	-0°29'03				
minimum elong	10359 Jul 28 03:46	13°♄23'57	0°29'05	superior conj	10360 Jul 10 03:28	26°♄04'11	-1°02'14
asc. node	10359 Jul 31 02:16	19°♄18'13		minimum elong	10360 Jul 10 07:36	26°♄23'48	1°02'00
evening rise	10359 Aug 05 04:46	29°♄42'26			10360 Jul 12 04:54	0°♄	
	10359 Aug 05 08:14	0°♄		asc. node	10360 Jul 16 23:11	9°♄16'11	
evening max el	10359 Aug 22 15:33	28°♄20'46	19°50'58	evening rise	10360 Jul 19 03:58	13°♄35'14	
	10359 Aug 24 11:19	0°♄			10360 Jul 28 00:10	0°♄	
retrograde	10359 Sep 01 20:03	3°♄24'07		evening max el	10360 Aug 04 11:48	10°♄08'42	18°55'03
desc. node	10359 Sep 02 23:53	3°♄20'26		retrograde	10360 Aug 13 02:11	14°♄25'52	
evening set	10359 Sep 03 17:15	3°♄14'31		evening set	10360 Aug 14 23:57	14°♄14'01	
	10359 Sep 11 08:47	30°♄		desc. node	10360 Aug 19 21:09	12°♄10'55	
inferior conj	10359 Sep 12 15:34	29°♄13'19	-2°56'42	inferior conj	10360 Aug 23 05:57	9°♄56'22	-1°02'44
minimum elong	10359 Sep 12 07:44	29°♄25'20	2°53'57	minimum elong	10360 Aug 23 03:17	10°♄01'04	1°01'53
min. Earth dist.	10359 Sep 14 15:52	27°♄59'31	0.55171 AU	min. Earth dist.	10360 Aug 26 06:05	7°♄49'24	0.56573 AU
morning rise	10359 Sep 20 20:35	24°♄55'58		morning rise	10360 Aug 31 03:23	5°♄02'07	
direct	10359 Sep 25 13:46	24°♄07'15		direct	10360 Sep 05 15:36	3°♄49'55	
	10359 Oct 08 07:52	0°♄		morning max el	10360 Sep 19 21:26	11°♄10'25	26°08'02
morning max el	10359 Oct 09 08:08	0°♄55'30	24°30'37		10360 Oct 04 09:11	0°♄	
asc. node	10359 Oct 27 02:44	26°♄04'39		asc. node	10360 Oct 12 23:36	15°♄23'37	
	10359 Oct 29 04:16	0°♄		morning set	10360 Oct 18 04:11	26°♄03'17	
morning set	10359 Nov 03 17:14	11°♄21'14			10360 Oct 20 00:04	0°♄	
superior conj	10359 Nov 10 13:34	26°♄16'59	1°39'29	superior conj	10360 Oct 25 00:28	11°♄04'29	1°34'04
minimum elong	10359 Nov 10 13:06	26°♄14'22	1°39'51	minimum elong	10360 Oct 24 23:02	10°♄56'33	1°34'15
	10359 Nov 12 06:33	0°♄		max. Earth dist.	10360 Oct 25 20:46	12°♄57'01	1.31782 AU
max. Earth dist.	10359 Nov 12 14:04	0°♄40'43	1.32573 AU	evening rise	10360 Oct 31 23:36	26°♄11'41	
evening rise	10359 Nov 17 22:04	11°♄53'57			10360 Nov 02 19:45	0°♄	
	10359 Nov 27 11:32	0°♄		desc. node	10360 Nov 15 19:02	23°♄38'11	
desc. node	10359 Nov 29 21:55	4°♄09'35			10360 Nov 19 23:02	0°♄	
	10359 Dec 18 12:43	0°♄		evening max el	10360 Dec 02 16:26	15°♄27'10	27°18'52
evening max el	10359 Dec 21 08:34	2°♄51'44	27°30'26	retrograde	10360 Dec 16 13:22	22°♄41'12	
retrograde	10360 Jan 04 01:56	10°♄11'42		evening set	10360 Dec 23 13:35	20°♄27'05	
evening set	10360 Jan 11 01:36	7°♄43'18		min. Earth dist.	10360 Dec 27 06:53	17°♄39'00	0.61380 AU
min. Earth dist.	10360 Jan 14 19:47	4°♄30'57	0.63391 AU	inferior conj	10360 Dec 30 08:23	14°♄56'22	-3°04'43
inferior conj	10360 Jan 17 12:39	1°♄48'34	-1°50'09	minimum elong	10360 Dec 30 14:32	14°♄42'42	3°02'00
minimum elong	10360 Jan 17 16:13	1°♄39'37	1°48'15	morning rise	10361 Jan 06 18:03	9°♄59'32	
	10360 Jan 19 09:07	30°♄		direct	10361 Jan 08 22:23	9°♄39'31	
asc. node	10360 Jan 23 02:08	27°♄08'54		asc. node	10361 Jan 08 23:15	9°♄39'32	
morning rise	10360 Jan 24 08:55	26°♄32'48		morning max el	10361 Jan 15 23:00	13°♄11'58	17°53'00
direct	10360 Jan 26 17:48	26°♄05'42			10361 Jan 27 08:10	0°♄	
morning max el	10360 Feb 02 06:53	29°♄27'55	17°47'24	morning set	10361 Jan 31 14:48	7°♄41'52	
	10360 Feb 02 19:31	0°♄					
morning set	10360 Feb 18 14:58	24°♄24'14		superior conj	10361 Feb 11 06:49	26°♄41'45	0°03'45
	10360 Feb 21 20:56	0°♄		minimum elong	10361 Feb 11 07:11	26°♄43'18	0°03'59
desc. node	10360 Feb 25 21:49	6°♄52'06		behind sun begin	10361 Feb 10 23:02	26°♄08'06	
				behind sun end	10361 Feb 11 15:19	27°♄18'24	
superior conj	10360 Mar 02 00:24	15°♄22'07	-0°37'34	desc. node	10361 Feb 11 18:38	27°♄32'37	

	10361 Feb 13 05:05	0° $\text{H}$		minimum elong	10362 Jan 24 14:52	9° $\approx$ 17'57	0°38'47
max. Earth dist.	10361 Feb 18 16:25	9° $\text{H}$ 08'04	1.42978 AU	desc. node	10362 Jan 29 15:26	18° $\approx$ 14'55	
evening rise	10361 Feb 25 04:02	19° $\text{H}$ 31'49		max. Earth dist.	10362 Feb 01 02:04	22° $\approx$ 27'29	1.40999 AU
	10361 Mar 03 23:08	0° $\text{Y}$		evening rise	10362 Feb 05 17:10	0° $\text{H}$ 11'18	
	10361 Mar 25 12:48	0° $\text{B}$			10362 Feb 05 14:25	0° $\text{H}$	
evening max el	10361 Mar 29 05:40	4° $\text{B}$ 04'59	21°57'59		10362 Feb 25 10:21	0° $\text{Y}$	
asc. node	10361 Apr 06 21:24	9° $\text{B}$ 34'20		evening max el	10362 Mar 11 21:11	17° $\text{Y}$ 50'50	23°17'48
retrograde	10361 Apr 07 14:08	9° $\text{B}$ 36'44		retrograde	10362 Mar 22 09:29	24° $\text{Y}$ 03'34	
evening set	10361 Apr 12 03:23	7° $\text{B}$ 45'05		asc. node	10362 Mar 24 18:36	23° $\text{Y}$ 36'20	
inferior conj	10361 Apr 17 10:35	1° $\text{B}$ 25'37	2°48'54	evening set	10362 Mar 27 10:08	21° $\text{Y}$ 57'41	
minimum elong	10361 Apr 17 08:40	1° $\text{B}$ 32'19	2°48'18	inferior conj	10362 Apr 01 19:34	15° $\text{Y}$ 31'03	2°19'29
min. Earth dist.	10361 Apr 17 10:59	1° $\text{B}$ 24'14	0.68585 AU	minimum elong	10362 Apr 01 17:22	15° $\text{Y}$ 38'38	2°18'46
	10361 Apr 18 11:16	30° $\text{R}$ $\text{Y}$		min. Earth dist.	10362 Apr 01 07:46	16° $\text{Y}$ 11'43	0.68562 AU
morning rise	10361 Apr 22 13:48	25° $\text{Y}$ 13'29		morning rise	10362 Apr 07 00:33	9° $\text{Y}$ 24'49	
direct	10361 Apr 27 10:41	23° $\text{Y}$ 08'27		direct	10362 Apr 11 08:01	7° $\text{Y}$ 41'19	
morning max el	10361 May 07 01:51	28° $\text{Y}$ 48'39	22°24'36	morning max el	10362 Apr 19 18:05	12° $\text{Y}$ 31'38	21°01'27
	10361 May 08 05:25	0° $\text{B}$		desc. node	10362 Apr 27 16:10	21° $\text{Y}$ 57'27	
desc. node	10361 May 10 19:20	2° $\text{B}$ 53'51			10362 May 03 11:40	0° $\text{B}$	
	10361 May 30 09:01	0° $\text{II}$		morning set	10362 May 20 06:41	25° $\text{B}$ 13'59	
morning set	10361 Jun 09 16:19	16° $\text{II}$ 11'19			10362 May 23 07:14	0° $\text{II}$	
max. Earth dist.	10361 Jun 14 16:59	24° $\text{II}$ 31'21	1.40784 AU	max. Earth dist.	10362 May 27 20:49	7° $\text{II}$ 20'31	1.42849 AU
	10361 Jun 17 21:52	0° $\text{E}$					
superior conj	10361 Jun 22 12:01	8° $\text{E}$ 05'14	-1°33'56	superior conj	10362 Jun 03 23:04	19° $\text{II}$ 07'56	-1°59'28
minimum elong	10361 Jun 22 18:05	8° $\text{E}$ 32'27	1°33'40	minimum elong	10362 Jun 04 04:59	19° $\text{II}$ 33'02	1°59'30
evening rise	10361 Jul 02 17:12	26° $\text{E}$ 57'51			10362 Jun 10 05:53	0° $\text{E}$	
asc. node	10361 Jul 03 20:07	29° $\text{E}$ 04'07		evening rise	10362 Jun 15 16:11	9° $\text{E}$ 39'10	
	10361 Jul 04 08:04	0° $\text{O}$		asc. node	10362 Jun 20 17:05	18° $\text{E}$ 36'45	
evening max el	10361 Jul 18 17:46	22° $\text{O}$ 36'58	18°20'10		10362 Jun 27 16:37	0° $\text{O}$	
retrograde	10361 Jul 26 03:16	26° $\text{O}$ 20'16		evening max el	10362 Jul 02 05:27	5° $\text{O}$ 35'28	18°05'12
evening set	10361 Jul 28 07:30	26° $\text{O}$ 01'42		retrograde	10362 Jul 08 21:15	8° $\text{O}$ 59'51	
inferior conj	10361 Aug 04 18:04	21° $\text{O}$ 23'58	0°36'15	evening set	10362 Jul 11 09:25	8° $\text{O}$ 30'55	
minimum elong	10361 Aug 04 19:18	21° $\text{O}$ 21'25	0°35'28	inferior conj	10362 Jul 18 02:26	3° $\text{O}$ 33'13	1°50'02
desc. node	10361 Aug 06 18:22	19° $\text{O}$ 43'21		minimum elong	10362 Jul 18 05:10	3° $\text{O}$ 26'39	1°48'46
min. Earth dist.	10361 Aug 08 02:43	18° $\text{O}$ 37'59	0.58565 AU	min. Earth dist.	10362 Jul 21 07:10	0° $\text{O}$ 30'23	0.60823 AU
morning rise	10361 Aug 12 03:37	15° $\text{O}$ 54'03			10362 Jul 21 20:43	30° $\text{R}$ $\text{E}$	
direct	10361 Aug 18 07:58	14° $\text{O}$ 12'23		morning rise	10362 Jul 24 22:13	27° $\text{E}$ 37'16	
morning max el	10361 Sep 01 17:04	21° $\text{O}$ 56'32	27°19'05	desc. node	10362 Jul 24 15:33	27° $\text{E}$ 48'21	
	10361 Sep 08 19:14	0° $\text{M}$		direct	10362 Jul 31 12:44	25° $\text{E}$ 26'47	
	10361 Sep 27 07:40	0° $\text{A}$			10362 Aug 11 00:09	0° $\text{O}$	
asc. node	10361 Sep 29 20:26	5° $\text{A}$ 02'32		morning max el	10362 Aug 14 19:28	3° $\text{O}$ 25'05	27°53'58
morning set	10361 Oct 02 12:31	10° $\text{A}$ 34'56			10362 Sep 03 10:05	0° $\text{M}$	
				morning set	10362 Sep 16 16:26	24° $\text{M}$ 50'43	
superior conj	10361 Oct 09 12:14	25° $\text{A}$ 51'21	1°23'04	asc. node	10362 Sep 16 17:15	24° $\text{M}$ 54'58	
minimum elong	10361 Oct 09 10:11	25° $\text{A}$ 39'56	1°23'00		10362 Sep 19 03:11	0° $\text{A}$	
max. Earth dist.	10361 Oct 09 06:07	25° $\text{A}$ 17'17	1.31468 AU	max. Earth dist.	10362 Sep 22 14:23	7° $\text{A}$ 31'30	1.31638 AU
	10361 Oct 11 08:56	0° $\text{M}$					
evening rise	10361 Oct 16 06:29	10° $\text{M}$ 42'14		superior conj	10362 Sep 23 23:05	10° $\text{A}$ 31'48	1°06'46
	10361 Oct 26 01:32	0° $\text{J}$		minimum elong	10362 Sep 23 20:50	10° $\text{A}$ 19'25	1°06'28
desc. node	10361 Nov 02 16:10	12° $\text{J}$ 27'16		evening rise	10362 Sep 30 16:36	25° $\text{A}$ 19'27	
evening max el	10361 Nov 14 17:41	27° $\text{J}$ 14'50	26°33'11		10362 Oct 02 21:32	0° $\text{M}$	
	10361 Nov 17 22:41	0° $\text{B}$			10362 Oct 20 06:48	0° $\text{J}$	
retrograde	10361 Nov 28 16:04	4° $\text{B}$ 21'52		desc. node	10362 Oct 20 13:21	0° $\text{J}$ 21'34	
evening set	10361 Dec 05 07:57	2° $\text{B}$ 32'02		evening max el	10362 Oct 27 10:59	8° $\text{J}$ 12'06	25°16'37
	10361 Dec 09 05:29	30° $\text{R}$ $\text{J}$		retrograde	10362 Nov 10 08:00	15° $\text{J}$ 10'54	
min. Earth dist.	10361 Dec 09 07:26	29° $\text{J}$ 56'22	0.59260 AU	evening set	10362 Nov 16 04:03	13° $\text{J}$ 53'21	
inferior conj	10361 Dec 12 11:44	27° $\text{J}$ 29'03	-4°17'59	min. Earth dist.	10362 Nov 20 23:05	11° $\text{J}$ 13'21	0.57252 AU
minimum elong	10361 Dec 12 19:37	27° $\text{J}$ 13'47	4°15'16	inferior conj	10362 Nov 23 19:42	9° $\text{J}$ 18'09	-5°17'45
morning rise	10361 Dec 20 09:57	22° $\text{J}$ 53'44		minimum elong	10362 Nov 24 02:18	9° $\text{J}$ 07'02	5°16'13
direct	10361 Dec 22 13:23	22° $\text{J}$ 37'26		morning rise	10362 Dec 02 02:51	5° $\text{J}$ 05'04	
asc. node	10361 Dec 26 20:20	23° $\text{J}$ 46'31		direct	10362 Dec 04 10:56	4° $\text{J}$ 48'57	
morning max el	10361 Dec 30 10:04	26° $\text{J}$ 29'36	18°18'02	morning max el	10362 Dec 13 12:13	9° $\text{J}$ 10'15	19°04'21
	10362 Jan 02 11:43	0° $\text{B}$		asc. node	10362 Dec 13 17:23	9° $\text{J}$ 22'49	
morning set	10362 Jan 15 04:44	21° $\text{B}$ 38'00			10362 Dec 27 02:39	0° $\text{B}$	
	10362 Jan 19 14:34	0° $\approx$		morning set	10362 Dec 30 04:21	6° $\text{B}$ 00'13	
superior conj	10362 Jan 24 12:14	9° $\approx$ 05'57	0°38'47	superior conj	10363 Jan 07 11:58	22° $\text{B}$ 21'33	1°05'43
				minimum elong	10363 Jan 07 15:05	22° $\text{B}$ 36'29	1°05'47

	10363 Jan 11 13:14	0°♊		minimum elong	10363 Dec 22 03:45	6°♊27'00	1°24'45
max. Earth dist.	10363 Jan 14 08:25	5°♊05'50	1.38815 AU	max. Earth dist.	10363 Dec 27 15:32	17°♊12'35	1.36663 AU
desc. node	10363 Jan 16 12:17	8°♊55'48		evening rise	10363 Dec 31 10:42	24°♊16'21	
evening rise	10363 Jan 18 04:00	11°♊48'19		desc. node	10364 Jan 03 09:11	29°♊30'48	
	10363 Jan 29 08:38	0°♋			10364 Jan 03 15:52	0°♊	
	10363 Feb 20 19:44	0°♋			10364 Jan 23 00:10	0°♋	
evening max el	10363 Feb 22 10:57	1°♋40'23	24°37'13	evening max el	10364 Feb 05 00:24	15°♋30'06	25°49'18
retrograde	10363 Mar 06 01:04	8°♋26'23		retrograde	10364 Feb 17 11:55	22°♋38'39	
evening set	10363 Mar 11 13:50	6°♋07'55		evening set	10364 Feb 23 12:51	20°♋10'20	
asc. node	10363 Mar 11 15:50	6°♋03'38		asc. node	10364 Feb 26 13:05	17°♋07'01	
min. Earth dist.	10363 Mar 16 03:26	0°♋57'00	0.68118 AU	min. Earth dist.	10364 Feb 27 19:39	15°♋34'24	0.67267 AU
	10363 Mar 16 20:33	30°♌♋		inferior conj	10364 Feb 29 07:05	13°♋42'39	0°52'57
inferior conj	10363 Mar 17 03:03	29°♋38'19	1°40'48	minimum elong	10364 Feb 29 05:48	13°♋46'41	0°52'38
minimum elong	10363 Mar 17 01:02	29°♋45'01	1°40'09	morning rise	10364 Mar 05 23:19	7°♋52'54	
morning rise	10363 Mar 22 12:23	23°♋39'24		direct	10364 Mar 09 06:31	6°♋50'35	
direct	10363 Mar 26 07:10	22°♋17'23		morning max el	10364 Mar 16 01:10	10°♋31'36	18°54'29
morning max el	10363 Apr 02 17:45	26°♋26'45	19°50'23	greatest brilliancy	10364 Mar 30 03:41	29°♋39'12	-0.8m
	10363 Apr 05 23:10	0°♋			10364 Mar 30 09:07	0°♋	
desc. node	10363 Apr 14 12:59	11°♋34'08		desc. node	10364 Mar 31 09:45	1°♋34'27	
greatest brilliancy	10363 Apr 15 20:28	13°♋28'35	-0.6m	morning set	10364 Apr 07 12:42	12°♋36'20	
	10363 Apr 26 20:26	0°♌			10364 Apr 18 16:39	0°♌	
morning set	10363 Apr 29 05:52	3°♌40'20		max. Earth dist.	10364 Apr 22 01:05	5°♌14'45	1.45411 AU
max. Earth dist.	10363 May 10 08:01	20°♌59'48	1.44454 AU				
				superior conj	10364 Apr 23 23:41	8°♌17'44	-2°06'55
superior conj	10363 May 15 09:54	29°♌08'31	-2°12'27	minimum elong	10364 Apr 23 17:56	7°♌55'06	2°06'56
minimum elong	10363 May 15 11:31	29°♌15'02	2°12'51		10364 May 07 14:28	0°♍	
	10363 May 15 22:37	0°♍		evening rise	10364 May 09 01:07	2°♍20'09	
evening rise	10363 May 28 20:11	21°♍29'03		asc. node	10364 May 24 11:12	26°♍32'56	
	10363 Jun 02 20:29	0°♍			10364 May 27 02:36	0°♍	
asc. node	10363 Jun 07 14:06	7°♍48'44		evening max el	10364 May 29 07:58	2°♍28'04	18°31'20
evening max el	10363 Jun 15 19:13	18°♍55'08	18°09'09	retrograde	10364 Jun 04 19:28	5°♍58'45	
retrograde	10363 Jun 22 04:03	22°♍15'40		evening set	10364 Jun 07 23:22	5°♍02'28	
evening set	10363 Jun 25 00:07	21°♍33'49			10364 Jun 13 06:22	30°♌♍	
inferior conj	10363 Jul 01 03:19	16°♍17'25	2°38'50	inferior conj	10364 Jun 13 16:41	29°♍29'09	3°06'42
minimum elong	10363 Jul 01 05:51	16°♍10'30	2°37'47	minimum elong	10364 Jun 13 18:14	29°♍24'29	3°06'01
min. Earth dist.	10363 Jul 03 20:37	13°♍20'55	0.63046 AU	min. Earth dist.	10364 Jun 15 19:24	26°♍57'21	0.65005 AU
morning rise	10363 Jul 07 09:54	10°♍05'55		morning rise	10364 Jun 19 12:10	23°♍10'12	
desc. node	10363 Jul 11 12:43	7°♍56'11		direct	10364 Jun 26 01:48	20°♍27'21	
direct	10363 Jul 14 03:14	7°♍33'56		desc. node	10364 Jun 27 09:49	20°♍33'24	
morning max el	10363 Jul 28 03:02	15°♍36'26	27°50'27	morning max el	10364 Jul 09 13:30	28°♍23'16	27°12'27
	10363 Aug 08 21:42	0°♎			10364 Jul 11 02:35	0°♍	
	10363 Aug 27 02:20	0°♎			10364 Aug 01 16:46	0°♎	
morning set	10363 Aug 31 13:44	8°♎44'33		morning set	10364 Aug 14 01:46	22°♎10'01	
asc. node	10363 Sep 03 14:04	14°♎55'49			10364 Aug 18 00:22	0°♎	
max. Earth dist.	10363 Sep 05 17:51	19°♎29'33	1.32310 AU	max. Earth dist.	10364 Aug 18 13:08	1°♎05'03	1.33489 AU
				asc. node	10364 Aug 20 10:53	5°♎01'13	
superior conj	10363 Sep 08 07:07	24°♎59'53	0°45'25				
minimum elong	10363 Sep 08 05:13	24°♎49'30	0°44'59	superior conj	10364 Aug 22 10:19	9°♎10'11	0°19'27
	10363 Sep 10 14:07	0°♏		minimum elong	10364 Aug 22 09:20	9°♎05'04	0°19'02
evening rise	10363 Sep 15 04:02	9°♏57'31		evening rise	10364 Aug 29 14:58	24°♎31'24	
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desc. node	10363 Oct 07 10:35	16°♏59'16		evening max el	10364 Sep 19 11:04	28°♏38'29	22°00'17
evening max el	10363 Oct 08 22:15	18°♏29'31	23°39'59		10364 Sep 20 22:11	0°♏	
retrograde	10363 Oct 22 10:59	25°♏14'47		desc. node	10364 Sep 23 07:51	1°♏53'08	
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min. Earth dist.	10363 Nov 02 08:27	21°♏27'26	0.55644 AU	evening set	10364 Oct 05 04:18	4°♏35'19	
inferior conj	10363 Nov 04 07:19	20°♏17'47	-5°44'54	min. Earth dist.	10364 Oct 13 15:35	0°♏52'59	0.54734 AU
minimum elong	10363 Nov 04 07:47	20°♏17'05	5°44'32	inferior conj	10364 Oct 14 03:23	0°♏36'28	-5°19'39
morning rise	10363 Nov 12 17:49	16°♏23'40		minimum elong	10364 Oct 13 19:57	0°♏46'52	5°18'15
direct	10363 Nov 15 13:17	16°♏04'03			10364 Oct 15 05:31	30°♌♏	
morning max el	10363 Nov 26 01:55	21°♏02'53	20°13'27	morning rise	10364 Oct 22 13:03	26°♏49'18	
asc. node	10363 Nov 30 14:23	26°♏12'22		direct	10364 Oct 26 00:34	26°♏22'37	
	10363 Dec 03 05:57	0°♐			10364 Nov 04 15:04	0°♏	
morning set	10363 Dec 14 10:18	20°♐37'59		morning max el	10364 Nov 07 02:07	2°♏04'48	21°44'07
	10363 Dec 18 23:39	0°♑		asc. node	10364 Nov 16 11:21	13°♏59'34	
					10364 Nov 25 05:17	0°♐	
superior conj	10363 Dec 22 01:15	6°♑14'26	1°24'30	morning set	10364 Nov 27 20:05	5°♐24'04	



















































































































superior conj	10364 Dec 05 00:11	20° $\text{♊}$ 33'35	1°35'39	morning max el	10365 Oct 19 16:21	12° $\text{♊}$ 26'56	23°29'11
minimum elong	10364 Dec 05 01:35	20° $\text{♊}$ 40'52	1°36'03		10365 Nov 01 21:33	0° $\text{♊}$	
max. Earth dist.	10364 Dec 09 03:48	29° $\text{♊}$ 05'53	1.34754 AU	asc. node	10365 Nov 03 08:15	2° $\text{♊}$ 30'32	
	10364 Dec 09 14:35	0° $\text{♊}$		morning set	10365 Nov 12 07:39	20° $\text{♊}$ 12'18	
evening rise	10364 Dec 13 09:49	7° $\text{♊}$ 26'33			10365 Nov 16 20:32	0° $\text{♊}$	
desc. node	10364 Dec 20 06:10	19° $\text{♊}$ 55'34					
	10364 Dec 26 07:30	0° $\text{♊}$		superior conj	10365 Nov 19 05:39	5° $\text{♊}$ 09'32	1°39'55
evening max el	10365 Jan 17 13:50	29° $\text{♊}$ 13'12	26°46'46	minimum elong	10365 Nov 19 05:49	5° $\text{♊}$ 10'29	1°40'20
	10365 Jan 18 09:36	0° $\text{♊}$		max. Earth dist.	10365 Nov 21 23:44	11° $\text{♊}$ 02'51	1.33232 AU
retrograde	10365 Jan 30 17:17	6° $\text{♊}$ 33'44		evening rise	10365 Nov 26 21:41	21° $\text{♊}$ 09'36	
evening set	10365 Feb 06 05:21	3° $\text{♊}$ 59'53			10365 Dec 01 11:38	0° $\text{♊}$	
	10365 Feb 10 05:39	30° $\text{♊}$		desc. node	10365 Dec 07 03:13	10° $\text{♊}$ 04'33	
min. Earth dist.	10365 Feb 10 06:14	29° $\text{♊}$ 58'19	0.66028 AU		10365 Dec 20 04:59	0° $\text{♊}$	
inferior conj	10365 Feb 12 05:33	27° $\text{♊}$ 39'49	-0°03'55	evening max el	10365 Dec 31 02:37	12° $\text{♊}$ 40'04	27°22'30
minimum elong	10365 Feb 12 05:39	27° $\text{♊}$ 39'32	0°03'34	retrograde	10366 Jan 13 16:38	20° $\text{♊}$ 03'10	
transit middle	10365 Feb 12 05:39	27° $\text{♊}$ 39'32	0°03'34	evening set	10366 Jan 20 13:09	17° $\text{♊}$ 30'21	
transit begin	10365 Feb 12 02:47	27° $\text{♊}$ 47'58		min. Earth dist.	10366 Jan 24 09:09	14° $\text{♊}$ 01'10	0.64432 AU
transit end	10365 Feb 12 08:31	27° $\text{♊}$ 31'07		inferior conj	10366 Jan 26 20:02	11° $\text{♊}$ 24'13	-1°09'15
asc. node	10365 Feb 12 10:19	27° $\text{♊}$ 25'53		minimum elong	10366 Jan 26 22:10	11° $\text{♊}$ 18'30	1°07'58
morning rise	10365 Feb 18 07:05	22° $\text{♊}$ 01'18		asc. node	10366 Jan 30 07:30	7° $\text{♊}$ 58'43	
direct	10365 Feb 21 04:06	21° $\text{♊}$ 15'42		morning rise	10366 Feb 02 09:00	5° $\text{♊}$ 59'28	
morning max el	10365 Feb 27 14:44	24° $\text{♊}$ 41'01	18°14'59	direct	10366 Feb 04 21:35	5° $\text{♊}$ 26'50	
	10365 Mar 04 02:22	0° $\text{♊}$		morning max el	10366 Feb 11 07:46	8° $\text{♊}$ 47'36	17°52'29
desc. node	10365 Mar 18 06:31	21° $\text{♊}$ 52'00			10366 Feb 25 18:07	0° $\text{♊}$	
morning set	10365 Mar 18 21:10	22° $\text{♊}$ 50'50		morning set	10366 Feb 28 10:37	4° $\text{♊}$ 30'50	
	10365 Mar 23 08:17	0° $\text{♊}$		desc. node	10366 Mar 05 03:17	12° $\text{♊}$ 21'57	
superior conj	10365 Apr 03 05:45	17° $\text{♊}$ 13'14	-1°41'27	superior conj	10366 Mar 13 22:48	26° $\text{♊}$ 45'39	-1°02'21
minimum elong	10365 Apr 02 20:13	16° $\text{♊}$ 35'52	1°40'38	minimum elong	10366 Mar 13 15:58	26° $\text{♊}$ 18'13	1°01'23
max. Earth dist.	10365 Apr 04 20:44	19° $\text{♊}$ 45'49	1.45636 AU		10366 Mar 15 23:26	0° $\text{♊}$	
	10365 Apr 11 10:06	0° $\text{♊}$		max. Earth dist.	10366 Mar 18 16:03	4° $\text{♊}$ 16'01	1.45119 AU
evening rise	10365 Apr 19 06:45	12° $\text{♊}$ 15'48		evening rise	10366 Mar 29 20:45	21° $\text{♊}$ 39'48	
greatest brilliancy	10365 Apr 30 12:54	29° $\text{♊}$ 43'06	-0.7m		10366 Apr 04 07:53	0° $\text{♊}$	
	10365 Apr 30 17:21	0° $\text{♊}$		greatest brilliancy	10366 Apr 13 21:07	14° $\text{♊}$ 15'02	-0.6m
asc. node	10365 May 11 08:21	14° $\text{♊}$ 39'30		evening max el	10366 Apr 25 21:17	29° $\text{♊}$ 49'19	20°06'09
evening max el	10365 May 12 17:10	16° $\text{♊}$ 07'08	19°10'53		10366 Apr 26 01:32	0° $\text{♊}$	
retrograde	10365 May 19 15:51	20° $\text{♊}$ 00'40		asc. node	10366 Apr 28 05:32	1° $\text{♊}$ 57'03	
evening set	10365 May 23 03:56	18° $\text{♊}$ 49'10		retrograde	10366 May 03 14:22	4° $\text{♊}$ 16'02	
inferior conj	10365 May 28 14:54	13° $\text{♊}$ 00'37	3°17'49	evening set	10366 May 07 11:25	2° $\text{♊}$ 48'57	
minimum elong	10365 May 28 15:15	12° $\text{♊}$ 59'28	3°17'21		10366 May 10 07:35	30° $\text{♊}$	
min. Earth dist.	10365 May 30 02:33	11° $\text{♊}$ 05'31	0.66582 AU	inferior conj	10366 May 12 19:02	26° $\text{♊}$ 46'53	3°15'21
morning rise	10365 Jun 03 02:05	6° $\text{♊}$ 39'51		minimum elong	10366 May 12 18:18	26° $\text{♊}$ 49'24	3°14'55
direct	10365 Jun 09 07:18	3° $\text{♊}$ 56'57		min. Earth dist.	10366 May 13 16:18	25° $\text{♊}$ 34'44	0.67723 AU
desc. node	10365 Jun 14 06:53	5° $\text{♊}$ 21'42		morning rise	10366 May 18 00:53	20° $\text{♊}$ 27'52	
morning max el	10365 Jun 22 00:15	11° $\text{♊}$ 32'24	26°07'30	direct	10366 May 23 18:43	17° $\text{♊}$ 54'27	
	10365 Jul 06 17:51	0° $\text{♊}$		desc. node	10366 Jun 01 03:51	21° $\text{♊}$ 51'54	
	10365 Jul 25 07:52	0° $\text{♊}$		morning max el	10366 Jun 04 09:59	24° $\text{♊}$ 53'27	24°45'08
morning set	10365 Jul 28 00:59	4° $\text{♊}$ 57'11			10366 Jun 09 00:40	0° $\text{♊}$	
max. Earth dist.	10365 Jul 31 21:47	12° $\text{♊}$ 17'01	1.35150 AU		10366 Jun 30 04:58	0° $\text{♊}$	
superior conj	10365 Aug 06 06:03	22° $\text{♊}$ 55'11	-0°10'30	morning set	10366 Jul 10 06:56	16° $\text{♊}$ 54'40	
minimum elong	10365 Aug 06 06:40	22° $\text{♊}$ 58'23	0°10'43	max. Earth dist.	10366 Jul 13 21:15	23° $\text{♊}$ 22'10	1.37213 AU
behind sun begin	10365 Aug 06 02:08	22° $\text{♊}$ 35'17			10366 Jul 17 10:45	0° $\text{♊}$	
behind sun end	10365 Aug 06 11:12	23° $\text{♊}$ 21'31		superior conj	10366 Jul 20 15:16	6° $\text{♊}$ 07'36	-0°43'06
asc. node	10365 Aug 07 07:44	25° $\text{♊}$ 06'39		minimum elong	10366 Jul 20 18:04	6° $\text{♊}$ 21'11	0°43'01
	10365 Aug 09 16:29	0° $\text{♊}$		asc. node	10366 Jul 25 04:37	15° $\text{♊}$ 08'37	
evening rise	10365 Aug 13 23:15	8° $\text{♊}$ 54'22		evening rise	10366 Jul 29 02:34	23° $\text{♊}$ 00'16	
	10365 Aug 25 05:47	0° $\text{♊}$			10366 Aug 01 15:31	0° $\text{♊}$	
evening max el	10365 Sep 01 10:17	9° $\text{♊}$ 14'37	20°32'39	evening max el	10366 Aug 14 23:24	20° $\text{♊}$ 36'37	19°24'34
desc. node	10365 Sep 10 05:09	14° $\text{♊}$ 32'43		retrograde	10366 Aug 24 10:59	25° $\text{♊}$ 19'01	
retrograde	10365 Sep 12 14:47	14° $\text{♊}$ 47'40		evening set	10366 Aug 26 07:07	25° $\text{♊}$ 09'10	
evening set	10365 Sep 14 16:54	14° $\text{♊}$ 36'53		desc. node	10366 Aug 28 02:24	24° $\text{♊}$ 41'35	
inferior conj	10365 Sep 23 19:57	10° $\text{♊}$ 40'16	-3°59'17	inferior conj	10366 Sep 03 23:26	21° $\text{♊}$ 02'15	-2°07'49
minimum elong	10365 Sep 23 10:14	10° $\text{♊}$ 54'19	3°56'17	minimum elong	10366 Sep 03 17:43	21° $\text{♊}$ 11'29	2°05'45
min. Earth dist.	10365 Sep 25 00:07	9° $\text{♊}$ 59'29	0.54734 AU	min. Earth dist.	10366 Sep 06 11:59	19° $\text{♊}$ 24'23	0.55676 AU
morning rise	10365 Oct 02 03:12	6° $\text{♊}$ 39'05		morning rise	10366 Sep 12 01:45	16° $\text{♊}$ 29'29	
direct	10365 Oct 06 08:54	6° $\text{♊}$ 00'31		direct	10366 Sep 17 03:13	15° $\text{♊}$ 31'28	

morning max el	10366 Oct 01 03:50	22° $\mathbb{M}$ 35'23	25°14'19	direct	10367 Aug 29 11:42	25° $\Omega$ 29'18	
	10366 Oct 07 18:05	0° $\mathfrak{L}$			10367 Sep 09 08:51	0° $\mathbb{M}$	
asc. node	10366 Oct 21 05:06	21° $\mathfrak{L}$ 34'34		morning max el	10367 Sep 12 19:16	3° $\mathbb{M}$ 00'35	26°42'13
	10366 Oct 25 10:40	0° $\mathbb{M}$			10367 Oct 02 05:24	0° $\mathfrak{L}$	
morning set	10366 Oct 27 19:15	4° $\mathbb{M}$ 57'47		asc. node	10367 Oct 08 01:56	11° $\mathfrak{L}$ 03'06	
				morning set	10367 Oct 12 05:17	19° $\mathfrak{L}$ 36'13	
					10367 Oct 16 23:41	0° $\mathbb{M}$	
superior conj	10366 Nov 03 15:08	19° $\mathbb{M}$ 54'47	1°37'53				
minimum elong	10366 Nov 03 14:13	19° $\mathbb{M}$ 49'44	1°38'11				
max. Earth dist.	10366 Nov 05 03:07	23° $\mathbb{M}$ 12'16	1.32172 AU	superior conj	10367 Oct 19 02:37	4° $\mathbb{M}$ 43'06	1°30'04
	10366 Nov 08 06:34	0° $\mathfrak{A}$		minimum elong	10367 Oct 19 00:53	4° $\mathbb{M}$ 33'25	1°30'09
evening rise	10366 Nov 10 19:02	5° $\mathfrak{A}$ 17'05		max. Earth dist.	10367 Oct 19 11:25	5° $\mathbb{M}$ 32'00	1.31590 AU
desc. node	10366 Nov 24 00:19	29° $\mathfrak{A}$ 50'29		evening rise	10367 Oct 25 23:09	19° $\mathbb{M}$ 41'46	
	10366 Nov 24 02:37	0° $\mathfrak{B}$			10367 Oct 31 00:37	0° $\mathfrak{A}$	
evening max el	10366 Dec 13 13:09	25° $\mathfrak{B}$ 38'31	27°29'46	desc. node	10367 Nov 10 21:26	19° $\mathfrak{A}$ 04'14	
	10366 Dec 18 22:40	0° $\mathfrak{A}$			10367 Nov 18 15:10	0° $\mathfrak{B}$	
retrograde	10366 Dec 27 08:50	2° $\mathfrak{A}$ 56'53		evening max el	10367 Nov 25 18:46	7° $\mathfrak{B}$ 55'56	27°03'45
evening set	10367 Jan 03 09:21	0° $\mathfrak{A}$ 33'30		retrograde	10367 Dec 09 16:33	15° $\mathfrak{B}$ 06'21	
	10367 Jan 04 04:17	30° $\mathfrak{R}$ $\mathfrak{B}$		evening set	10367 Dec 16 14:23	13° $\mathfrak{B}$ 01'48	
min. Earth dist.	10367 Jan 07 02:36	27° $\mathfrak{B}$ 32'20	0.62547 AU	min. Earth dist.	10367 Dec 20 09:21	10° $\mathfrak{B}$ 20'28	0.60479 AU
inferior conj	10367 Jan 09 23:33	24° $\mathfrak{B}$ 48'02	-2°21'29	inferior conj	10367 Dec 23 12:47	7° $\mathfrak{B}$ 42'40	-3°36'31
minimum elong	10367 Jan 10 04:14	24° $\mathfrak{B}$ 36'50	2°19'11	minimum elong	10367 Dec 23 19:53	7° $\mathfrak{B}$ 27'46	3°33'40
morning rise	10367 Jan 17 01:29	19° $\mathfrak{B}$ 39'51		morning rise	10367 Dec 31 04:00	2° $\mathfrak{B}$ 54'19	
asc. node	10367 Jan 17 04:39	19° $\mathfrak{B}$ 37'13		direct	10368 Jan 02 07:27	2° $\mathfrak{B}$ 36'14	
direct	10367 Jan 19 07:55	19° $\mathfrak{B}$ 16'19		asc. node	10368 Jan 04 01:43	2° $\mathfrak{B}$ 48'55	
morning max el	10367 Jan 26 01:08	22° $\mathfrak{B}$ 42'12	17°47'30	morning max el	10368 Jan 09 15:29	6° $\mathfrak{B}$ 16'04	18°01'08
	10367 Jan 31 18:11	0° $\mathfrak{A}$			10368 Jan 24 18:25	0° $\mathfrak{A}$	
morning set	10367 Feb 10 23:48	17° $\mathfrak{A}$ 18'40		morning set	10368 Jan 25 06:17	0° $\mathfrak{A}$ 54'53	
	10367 Feb 18 06:06	0° $\mathfrak{H}$					
desc. node	10367 Feb 20 00:03	2° $\mathfrak{H}$ 59'30		superior conj	10368 Feb 04 07:19	19° $\mathfrak{A}$ 12'03	0°19'31
				minimum elong	10368 Feb 04 08:54	19° $\mathfrak{A}$ 19'02	0°19'38
superior conj	10367 Feb 22 14:39	7° $\mathfrak{H}$ 23'49	-0°19'32	desc. node	10368 Feb 06 20:52	23° $\mathfrak{A}$ 41'09	
minimum elong	10367 Feb 22 12:43	7° $\mathfrak{H}$ 15'44	0°19'01		10368 Feb 10 13:42	0° $\mathfrak{H}$	
max. Earth dist.	10367 Mar 01 08:55	18° $\mathfrak{H}$ 30'00	1.43925 AU	max. Earth dist.	10368 Feb 11 21:47	2° $\mathfrak{H}$ 14'04	1.42183 AU
	10367 Mar 08 15:38	0° $\mathfrak{Y}$		evening rise	10368 Feb 17 11:26	11° $\mathfrak{H}$ 18'19	
evening rise	10367 Mar 09 09:34	1° $\mathfrak{Y}$ 09'28			10368 Feb 29 16:24	0° $\mathfrak{Y}$	
	10367 Mar 28 22:06	0° $\mathfrak{B}$		evening max el	10368 Mar 21 13:31	27° $\mathfrak{Y}$ 17'26	22°31'33
evening max el	10367 Apr 08 19:49	13° $\mathfrak{B}$ 32'37	21°14'27		10368 Mar 24 12:44	0° $\mathfrak{B}$	
asc. node	10367 Apr 15 02:44	18° $\mathfrak{B}$ 10'41		retrograde	10368 Mar 31 09:36	3° $\mathfrak{B}$ 06'28	
retrograde	10367 Apr 17 12:50	18° $\mathfrak{B}$ 39'27		asc. node	10368 Mar 31 23:56	3° $\mathfrak{B}$ 04'43	
evening set	10367 Apr 21 19:52	16° $\mathfrak{B}$ 56'44		evening set	10368 Apr 05 03:41	1° $\mathfrak{B}$ 08'35	
inferior conj	10367 Apr 27 02:38	10° $\mathfrak{B}$ 43'06	3°01'31		10368 Apr 06 08:47	30° $\mathfrak{R}$ $\mathfrak{Y}$	
minimum elong	10367 Apr 27 01:03	10° $\mathfrak{B}$ 48'37	3°00'58	inferior conj	10368 Apr 10 11:39	24° $\mathfrak{Y}$ 45'54	2°37'34
min. Earth dist.	10367 Apr 27 10:26	10° $\mathfrak{B}$ 16'00	0.68408 AU	minimum elong	10368 Apr 10 09:34	24° $\mathfrak{Y}$ 53'09	2°36'54
morning rise	10367 May 02 06:01	4° $\mathfrak{B}$ 28'05		min. Earth dist.	10368 Apr 10 06:48	25° $\mathfrak{Y}$ 02'44	0.68637 AU
direct	10367 May 07 10:50	2° $\mathfrak{B}$ 11'12		morning rise	10368 Apr 15 15:18	18° $\mathfrak{Y}$ 36'17	
morning max el	10367 May 17 19:41	8° $\mathfrak{B}$ 21'15	23°15'33	direct	10368 Apr 20 06:32	16° $\mathfrak{Y}$ 40'10	
desc. node	10367 May 19 00:46	9° $\mathfrak{B}$ 36'47		morning max el	10368 Apr 29 08:34	21° $\mathfrak{Y}$ 57'45	21°48'01
	10367 Jun 03 18:13	0° $\mathbb{I}$		desc. node	10368 May 04 21:38	28° $\mathfrak{Y}$ 16'00	
morning set	10367 Jun 21 14:22	27° $\mathbb{I}$ 48'40			10368 May 06 06:30	0° $\mathfrak{B}$	
	10367 Jun 22 21:34	0° $\mathfrak{E}$			10368 May 27 01:01	0° $\mathbb{I}$	
max. Earth dist.	10367 Jun 25 17:47	4° $\mathfrak{E}$ 52'03	1.39491 AU	morning set	10368 May 31 19:22	7° $\mathbb{I}$ 30'10	
				max. Earth dist.	10368 Jun 06 18:27	17° $\mathbb{I}$ 12'38	1.41713 AU
superior conj	10367 Jul 03 10:09	18° $\mathfrak{E}$ 38'00	-1°16'07				
minimum elong	10367 Jul 03 15:13	19° $\mathfrak{E}$ 01'31	1°15'49	superior conj	10368 Jun 14 10:07	0° $\mathfrak{E}$ 15'38	-1°45'52
	10367 Jul 09 10:36	0° $\Omega$		minimum elong	10368 Jun 14 16:30	0° $\mathfrak{E}$ 43'38	1°45'41
asc. node	10367 Jul 12 01:33	5° $\Omega$ 03'02			10368 Jun 14 06:33	0° $\mathfrak{E}$	
evening rise	10367 Jul 12 21:56	6° $\Omega$ 41'16		evening rise	10368 Jun 25 05:41	19° $\mathfrak{E}$ 47'50	
	10367 Jul 26 14:10	0° $\mathbb{M}$		asc. node	10368 Jun 27 22:30	24° $\mathfrak{E}$ 45'12	
evening max el	10367 Jul 29 00:22	2° $\mathbb{M}$ 43'29	18°37'43		10368 Jun 30 20:24	0° $\Omega$	
retrograde	10367 Aug 06 00:49	6° $\mathbb{M}$ 43'56		evening max el	10368 Jul 11 09:14	15° $\Omega$ 25'48	18°11'22
evening set	10367 Aug 08 01:10	6° $\mathbb{M}$ 29'38		retrograde	10368 Jul 18 09:42	18° $\Omega$ 59'09	
desc. node	10367 Aug 14 23:37	2° $\mathbb{M}$ 47'21		evening set	10368 Jul 20 17:21	18° $\Omega$ 36'27	
inferior conj	10367 Aug 15 22:54	2° $\mathbb{M}$ 03'46	-0°17'55	inferior conj	10368 Jul 27 20:00	13° $\Omega$ 49'43	1°10'49
minimum elong	10367 Aug 15 22:11	2° $\mathbb{M}$ 05'07	0°17'54	minimum elong	10368 Jul 27 22:09	13° $\Omega$ 44'59	1°09'41
	10367 Aug 18 16:26	30° $\mathfrak{R}$ $\Omega$		min. Earth dist.	10368 Jul 31 04:05	10° $\Omega$ 53'59	0.59515 AU
min. Earth dist.	10367 Aug 19 04:35	29° $\Omega$ 37'52	0.57372 AU	desc. node	10368 Jul 31 20:50	10° $\Omega$ 19'33	
morning rise	10367 Aug 23 15:44	26° $\Omega$ 53'51		morning rise	10368 Aug 03 23:48	8° $\Omega$ 07'37	



direct	10368 Aug 10 09:19	6°♎13'29		morning max el	10369 Aug 06 23:05	25°♊52'54	27°57'06
morning max el	10368 Aug 24 17:50	14°♎03'52	27°38'46		10369 Aug 10 18:41	0°♎	
	10368 Sep 06 12:34	0°♎			10369 Aug 31 01:36	0°♎	
asc. node	10368 Sep 23 22:44	0°♊48'25		morning set	10369 Sep 09 13:25	18°♎09'26	
	10368 Sep 23 13:17	0°♊		asc. node	10369 Sep 10 19:34	20°♎45'15	
morning set	10368 Sep 25 11:59	4°♊01'47		max. Earth dist.	10369 Sep 15 03:51	0°♊01'29	1.31866 AU
max. Earth dist.	10368 Oct 01 20:59	17°♊52'03	1.31484 AU		10369 Sep 15 03:35	0°♊	
superior conj	10368 Oct 02 14:12	19°♊27'45	1°16'47	superior conj	10369 Sep 17 00:07	4°♊03'39	0°58'19
minimum elong	10368 Oct 02 12:01	19°♊15'35	1°16'36	minimum elong	10369 Sep 16 21:57	3°♊51'44	0°57'56
	10368 Oct 07 08:25	0°♎		evening rise	10369 Sep 23 18:36	18°♊54'12	
evening rise	10368 Oct 09 07:40	4°♎15'57			10369 Sep 29 03:20	0°♎	
	10368 Oct 22 20:05	0°♎		desc. node	10369 Oct 14 15:50	24°♎56'52	
desc. node	10368 Oct 27 18:36	7°♎32'14			10369 Oct 19 07:18	0°♎	
evening max el	10368 Nov 06 16:43	19°♎21'47	26°03'54	evening max el	10369 Oct 19 06:36	29°♎58'19	24°36'50
retrograde	10368 Nov 20 14:30	26°♎24'52		retrograde	10369 Nov 02 01:15	6°♎53'07	
evening set	10368 Nov 26 23:45	24°♎47'58		evening set	10369 Nov 07 09:16	5°♎49'45	
min. Earth dist.	10368 Dec 01 05:31	22°♎12'58	0.58382 AU	min. Earth dist.	10369 Nov 12 17:50	3°♎02'22	0.56503 AU
inferior conj	10368 Dec 04 08:10	19°♎57'29	-4°45'58	inferior conj	10369 Nov 15 07:16	1°♎24'55	-5°34'34
minimum elong	10368 Dec 04 16:02	19°♎43'11	4°43'37	minimum elong	10369 Nov 15 11:51	1°♎17'37	5°33'40
morning rise	10368 Dec 12 10:47	15°♎31'43			10369 Nov 17 14:05	30°♎	
direct	10368 Dec 14 15:38	15°♎15'47		morning rise	10369 Nov 23 16:38	27°♎21'08	
asc. node	10368 Dec 20 22:47	17°♎35'10		direct	10369 Nov 26 04:41	27°♎04'05	
morning max el	10368 Dec 22 23:10	19°♎18'48	18°35'04		10369 Dec 03 21:58	0°♎	
	10368 Dec 30 20:39	0°♊		morning max el	10369 Dec 05 20:26	1°♎40'02	19°31'01
morning set	10369 Jan 08 00:47	15°♊03'20		asc. node	10369 Dec 07 19:48	3°♎44'18	
	10369 Jan 15 19:34	0°♊		morning set	10369 Dec 23 03:24	29°♎32'40	
					10369 Dec 23 08:51	0°♊	
superior conj	10369 Jan 16 21:08	1°♊59'40	0°51'14	superior conj	10369 Dec 31 03:09	15°♊32'33	1°14'40
minimum elong	10369 Jan 17 00:08	2°♊13'42	0°51'14	minimum elong	10369 Dec 31 06:06	15°♊46'58	1°14'48
desc. node	10369 Jan 23 17:42	14°♊23'07		max. Earth dist.	10370 Jan 06 11:54	27°♊38'43	1.37875 AU
max. Earth dist.	10369 Jan 24 06:05	15°♊17'05	1.40082 AU		10370 Jan 07 18:52	0°♊	
evening rise	10369 Jan 28 09:42	22°♊21'45		evening rise	10370 Jan 10 05:16	4°♊20'48	
	10369 Feb 02 01:45	0°♎		desc. node	10370 Jan 10 14:35	5°♊01'47	
	10369 Feb 22 16:10	0°♎			10370 Jan 26 02:47	0°♎	
evening max el	10369 Mar 04 04:01	11°♎04'40	23°52'01	evening max el	10370 Feb 14 17:16	24°♎53'43	25°09'16
retrograde	10369 Mar 15 03:28	17°♎32'32		retrograde	10370 Feb 21 00:15	0°♎	
asc. node	10369 Mar 18 21:09	16°♎26'44			10370 Feb 26 17:18	1°♎51'31	
evening set	10369 Mar 20 09:22	15°♎20'44		evening set	10370 Mar 03 19:21	30°♎	
min. Earth dist.	10369 Mar 25 03:18	9°♎49'59	0.68423 AU	asc. node	10370 Mar 04 11:18	29°♎28'12	
inferior conj	10369 Mar 25 20:13	8°♎52'20	2°04'12	min. Earth dist.	10370 Mar 05 18:24	28°♎15'16	
minimum elong	10369 Mar 25 18:03	8°♎59'46	2°03'29	inferior conj	10370 Mar 08 21:46	24°♎32'16	0.67795 AU
morning rise	10369 Mar 31 02:46	2°♎49'19		minimum elong	10370 Mar 10 02:29	22°♎58'31	1°21'36
direct	10369 Apr 04 04:43	1°♎15'13		morning rise	10370 Mar 10 00:42	23°♎04'18	1°21'04
morning max el	10369 Apr 12 03:56	5°♎46'27	20°29'37	direct	10370 Mar 15 14:27	17°♎03'22	
desc. node	10369 Apr 21 18:27	17°♎34'53		morning max el	10370 Mar 19 04:03	15°♎50'15	
	10369 Apr 30 09:11	0°♎			10370 Mar 26 07:05	19°♎46'19	19°24'42
morning set	10369 May 11 01:16	16°♎11'53			10370 Apr 03 13:23	0°♎	
	10369 May 19 19:22	0°♎		greatest brilliancy	10370 Apr 08 00:48	6°♎28'38	-0.7m
max. Earth dist.	10369 May 20 02:03	0°♎26'52	1.43598 AU	desc. node	10370 Apr 08 15:14	7°♎22'12	
superior conj	10369 May 26 11:03	10°♎52'13	-2°06'53	morning set	10370 Apr 20 00:39	24°♎42'00	
minimum elong	10369 May 26 15:43	11°♎11'39	2°07'08		10370 Apr 23 10:58	0°♎	
	10369 Jun 06 15:41	0°♎		max. Earth dist.	10370 May 02 15:37	14°♎21'40	1.44937 AU
evening rise	10369 Jun 07 21:19	2°♎09'35					
asc. node	10369 Jun 14 19:31	14°♎10'27		superior conj	10370 May 06 11:57	20°♎27'43	-2°12'38
evening max el	10369 Jun 24 22:13	28°♎34'42	18°04'32	minimum elong	10370 May 06 10:30	20°♎21'57	2°12'58
	10369 Jun 26 12:53	0°♎			10370 May 12 10:06	0°♎	
retrograde	10369 Jul 01 09:57	1°♎56'03		evening rise	10370 May 20 15:53	13°♎34'48	
evening set	10369 Jul 04 01:23	1°♎21'57			10370 May 30 15:07	0°♎	
	10369 Jul 06 09:22	30°♎		asc. node	10370 Jun 01 16:36	3°♎11'42	
inferior conj	10369 Jul 10 12:02	26°♎15'53	2°13'32	evening max el	10370 Jun 08 11:52	12°♎00'38	18°16'24
minimum elong	10369 Jul 10 14:50	26°♎08'45	2°12'19	retrograde	10370 Jun 14 20:56	15°♎24'06	
min. Earth dist.	10369 Jul 13 12:25	23°♎13'09	0.61784 AU	evening set	10370 Jun 17 20:11	14°♎36'27	
morning rise	10369 Jul 17 01:59	20°♎11'49		inferior conj	10370 Jun 23 18:44	9°♎12'50	2°52'53
desc. node	10369 Jul 18 18:01	19°♎10'13		minimum elong	10370 Jun 23 20:55	9°♎06'38	2°52'01
direct	10369 Jul 23 18:20	17°♎51'18		min. Earth dist.	10370 Jun 26 06:07	6°♎24'38	0.63917 AU

morning rise	10370 Jun 29 20:16	2°☿57'03		desc. node	10371 Jun 22 12:14	13°♄57'22	
desc. node	10370 Jul 05 15:10	0°☿21'31		morning max el	10371 Jul 02 18:54	21°♄17'36	26°47'29
direct	10370 Jul 06 12:42	0°☿18'49			10371 Jul 10 08:03	0°☿	
morning max el	10370 Jul 20 08:19	8°☿20'59	27°38'03		10371 Jul 30 06:47	0°♄	
	10370 Aug 06 02:25	0°♄		morning set	10371 Aug 07 14:15	15°♄02'34	
	10370 Aug 23 08:24	0°♄		max. Earth dist.	10371 Aug 11 18:38	23°♄12'36	1.34138 AU
morning set	10370 Aug 24 07:11	1°♄52'20			10371 Aug 15 02:45	0°♄	
asc. node	10370 Aug 28 16:25	10°♄48'34		asc. node	10371 Aug 15 13:16	0°♄54'25	
max. Earth dist.	10370 Aug 29 04:03	11°♄49'32	1.32748 AU				
				superior conj	10371 Aug 16 06:47	2°♄25'27	0°07'13
superior conj	10370 Sep 01 06:24	18°♄24'55	0°34'57	minimum elong	10371 Aug 16 06:25	2°♄23'31	0°06'51
minimum elong	10370 Sep 01 04:49	18°♄16'22	0°34'30	behind sun begin	10371 Aug 16 01:10	1°♄56'15	
	10370 Sep 06 14:47	0°♄		behind sun end	10371 Aug 16 11:39	2°♄50'49	
evening rise	10370 Sep 08 06:04	3°♄30'52		evening rise	10371 Aug 23 16:08	18°♄00'38	
	10370 Sep 22 12:29	0°♄			10371 Aug 29 14:45	0°♄	
evening max el	10370 Sep 30 17:21	10°♄07'38	22°56'55	evening max el	10371 Sep 12 09:57	20°♄25'17	21°20'59
desc. node	10370 Oct 01 13:05	10°♄54'15		desc. node	10371 Sep 18 10:22	24°♄54'42	
retrograde	10370 Oct 13 23:29	16°♄43'53		retrograde	10371 Sep 24 11:55	26°♄25'03	
evening set	10370 Oct 17 20:27	16°♄11'09		evening set	10371 Sep 27 01:24	26°♄09'56	
min. Earth dist.	10370 Oct 25 02:12	12°♄53'10	0.55151 AU	inferior conj	10371 Oct 06 04:09	22°♄14'07	-4°51'27
inferior conj	10370 Oct 26 11:19	12°♄05'32	-5°41'23	minimum elong	10371 Oct 05 18:47	22°♄27'14	4°49'10
minimum elong	10370 Oct 26 08:13	12°♄10'01	5°40'54	min. Earth dist.	10371 Oct 06 09:44	22°♄06'17	0.54617 AU
morning rise	10370 Nov 03 21:45	8°♄16'13		morning rise	10371 Oct 14 12:53	18°♄23'29	
direct	10370 Nov 06 23:23	7°♄54'12		direct	10371 Oct 18 08:12	17°♄52'14	
morning max el	10370 Nov 18 04:27	13°♄11'37	20°49'38	morning max el	10371 Oct 30 23:34	23°♄53'55	22°27'39
asc. node	10370 Nov 24 16:47	21°♄00'23			10371 Nov 05 10:26	0°♄	
	10370 Nov 30 04:54	0°♄		asc. node	10371 Nov 11 13:43	9°♄07'46	
morning set	10370 Dec 07 11:17	14°♄14'53		morning set	10371 Nov 21 22:04	29°♄02'31	
					10371 Nov 22 08:56	0°♄	
superior conj	10370 Dec 14 21:01	29°♄38'16	1°30'07	superior conj	10371 Nov 28 23:04	14°♄05'26	1°38'15
minimum elong	10370 Dec 14 23:05	29°♄48'50	1°30'26	minimum elong	10371 Nov 28 23:56	14°♄10'05	1°38'41
	10370 Dec 15 01:16	0°♄		max. Earth dist.	10371 Dec 02 11:56	21°♄29'54	1.34058 AU
max. Earth dist.	10370 Dec 19 20:23	9°♄35'58	1.35806 AU		10371 Dec 06 17:29	0°♄	
evening rise	10370 Dec 23 19:30	17°♄08'40		evening rise	10371 Dec 07 00:31	0°♄34'16	
desc. node	10370 Dec 28 11:32	25°♄33'19		desc. node	10371 Dec 15 08:33	15°♄52'11	
	10370 Dec 31 01:38	0°♄			10371 Dec 24 02:40	0°♄	
	10371 Jan 20 11:25	0°♄		evening max el	10372 Jan 10 20:18	22°♄20'15	27°05'05
evening max el	10371 Jan 28 06:45	8°♄41'56	26°16'03	retrograde	10372 Jan 24 04:53	29°♄42'15	
retrograde	10371 Feb 10 02:06	15°♄57'29		evening set	10372 Jan 30 20:52	27°♄08'19	
evening set	10371 Feb 16 07:49	13°♄26'19		min. Earth dist.	10372 Feb 03 19:40	23°♄20'34	0.65393 AU
min. Earth dist.	10371 Feb 20 12:00	9°♄04'52	0.66779 AU	inferior conj	10372 Feb 05 23:51	20°♄53'24	-0°30'37
asc. node	10371 Feb 20 15:38	8°♄53'53		minimum elong	10372 Feb 06 00:44	20°♄50'54	0°29'53
inferior conj	10371 Feb 22 04:27	7°♄00'51	0°29'56	asc. node	10372 Feb 07 12:49	19°♄11'09	
minimum elong	10371 Feb 22 03:41	7°♄03'14	0°29'52	morning rise	10372 Feb 12 05:58	15°♄20'05	
morning rise	10371 Feb 28 00:20	1°♄15'23		direct	10372 Feb 14 23:14	14°♄40'20	
direct	10371 Mar 03 02:57	0°♄20'39		morning max el	10372 Feb 21 08:39	18°♄02'25	18°03'15
morning max el	10371 Mar 09 17:21	3°♄53'54	18°35'36		10372 Mar 01 07:27	0°♄	
desc. node	10371 Mar 26 12:01	27°♄30'36		morning set	10372 Mar 10 14:08	14°♄59'35	
	10371 Mar 28 02:04	0°♄		desc. node	10372 Mar 12 08:46	17°♄53'45	
morning set	10371 Mar 30 17:01	4°♄07'34			10372 Mar 19 20:24	0°♄	
				superior conj	10372 Mar 25 04:50	8°♄30'17	-1°25'56
superior conj	10371 Apr 15 20:19	29°♄25'24	-1°58'21	minimum elong	10372 Mar 24 19:49	7°♄54'42	1°24'57
minimum elong	10371 Apr 15 12:08	28°♄53'22	1°58'01	max. Earth dist.	10372 Mar 28 05:41	13°♄16'46	1.45511 AU
max. Earth dist.	10371 Apr 15 09:38	28°♄43'34	1.45597 AU		10372 Apr 07 23:35	0°♄	
	10371 Apr 16 05:10	0°♄		evening rise	10372 Apr 10 07:58	3°♄37'55	
evening rise	10371 May 01 10:29	24°♄00'08		greatest brilliancy	10372 Apr 23 12:40	23°♄46'54	-0.7m
	10371 May 05 04:50	0°♄			10372 Apr 27 19:31	0°♄	
greatest brilliancy	10371 May 09 16:39	7°♄07'36	-0.8m	asc. node	10372 May 05 10:52	9°♄28'11	
asc. node	10371 May 19 13:44	21°♄41'03		evening max el	10372 May 05 06:39	9°♄17'37	19°32'40
evening max el	10371 May 22 23:25	25°♄36'49	18°46'10	retrograde	10372 May 12 12:10	13°♄23'41	
retrograde	10371 May 29 14:41	29°♄15'33		evening set	10372 May 16 04:04	12°♄05'25	
evening set	10371 Jun 01 22:01	28°♄12'54		inferior conj	10372 May 21 13:16	6°♄10'59	3°18'17
inferior conj	10371 Jun 07 12:15	22°♄33'14	3°13'12	minimum elong	10372 May 21 13:08	6°♄11'26	3°17'50
minimum elong	10371 Jun 07 13:18	22°♄29'58	3°12'38	min. Earth dist.	10372 May 22 18:40	4°♄33'50	0.67126 AU
min. Earth dist.	10371 Jun 09 08:38	20°♄15'41	0.65732 AU	morning rise	10372 May 26 21:51	29°♄50'55	
morning rise	10371 Jun 13 03:52	16°♄13'02					
direct	10371 Jun 19 14:33	13°♄28'34					

	10372 May 26 17:51	30° 		minimum elong	10373 May 05 17:58	20° 	05°08	3°10'19	
direct	10372 Jun 01 22:37	27° 	11°05		min. Earth dist.	10373 May 06 10:26	19° 	08°32	0.68068 AU
desc. node	10372 Jun 08 09:15	29° 	32°21		morning rise	10373 May 10 23:34	13° 	43°49	
	10372 Jun 09 01:11	0° 			direct	10373 May 16 11:54	11° 	17°04	
morning max el	10372 Jun 14 05:06	4° 	32°05	25°34'04	desc. node	10373 May 26 06:11	16° 	36°44	
	10372 Jul 03 17:21	0° 			morning max el	10373 May 27 14:39	17° 	56°04	24°07'27
morning set	10372 Jul 20 06:43	27° 	30°01			10373 Jun 06 17:03	0° 		
	10372 Jul 21 15:30	0° 				10373 Jun 26 18:55	0° 		
max. Earth dist.	10372 Jul 23 23:05	4° 	19°27	1.35987 AU	morning set	10373 Jul 02 03:40	9° 	01°23	
					max. Earth dist.	10373 Jul 05 20:48	15° 	32°30	1.38168 AU
superior conj	10372 Jul 29 22:31	15° 	57°59	-0°24'05					
minimum elong	10372 Jul 29 24:00	16° 	05°26	0°24'10	superior conj	10373 Jul 13 02:04	28° 	52°54	-0°57'14
asc. node	10372 Aug 01 10:08	20° 	59°02		minimum elong	10373 Jul 13 05:51	29° 	10°59	0°57'01
	10372 Aug 05 19:45	0° 				10373 Jul 13 16:06	0° 		
evening rise	10372 Aug 06 22:38	2° 	17°36		asc. node	10373 Jul 19 07:01	10° 	57°52	
	10372 Aug 23 08:35	0° 			evening rise	10373 Jul 21 22:56	16° 	13°35	
evening max el	10372 Aug 24 15:06	1° 	20°17	20°01'07		10373 Jul 29 05:17	0° 		
retrograde	10372 Sep 04 01:49	6° 	31°24		evening max el	10373 Aug 07 09:31	13° 	01°01	19°02'03
desc. node	10372 Sep 04 07:38	6° 	31°14		retrograde	10373 Aug 16 05:13	17° 	24°35	
evening set	10372 Sep 05 23:49	6° 	21°42		evening set	10373 Aug 18 02:17	17° 	13°26	
inferior conj	10372 Sep 14 23:46	2° 	21°55	-3°13'49	desc. node	10373 Aug 22 04:54	15° 	40°25	
minimum elong	10372 Sep 14 15:17	2° 	34°42	3°10'53	inferior conj	10373 Aug 26 11:06	12° 	58°42	-1°19'28
min. Earth dist.	10372 Sep 16 19:07	1° 	16°45	0.55030 AU	minimum elong	10373 Aug 26 07:40	13° 	04°38	1°18'18
	10372 Sep 19 01:00	30° 			min. Earth dist.	10373 Aug 29 08:42	10° 	58°53	0.56316 AU
morning rise	10372 Sep 23 05:29	28° 	09°22		morning rise	10373 Sep 03 09:56	8° 	09°56	
direct	10372 Sep 27 19:40	27° 	23°34		direct	10373 Sep 08 19:19	7° 	01°41	
	10372 Oct 06 05:14	0° 			morning max el	10373 Sep 23 00:15	14° 	18°21	25°54'51
morning max el	10372 Oct 11 11:33	4° 	06°07	24°14'52		10373 Oct 05 11:39	0° 		
asc. node	10372 Oct 28 10:36	27° 	54°09		asc. node	10373 Oct 15 07:26	17° 	09°10	
	10372 Oct 29 13:39	0° 			morning set	10373 Oct 20 21:01	28° 	33°16	
morning set	10372 Nov 05 09:52	13° 	50°23			10373 Oct 21 13:11	0° 		
superior conj	10372 Nov 12 06:30	28° 	46°01	1°39'46	superior conj	10373 Oct 27 17:04	13° 	32°56	1°35'15
minimum elong	10372 Nov 12 06:11	28° 	44°20	1°40'10	minimum elong	10373 Oct 27 15:46	13° 	25°43	1°35'29
	10372 Nov 12 20:06	0° 			max. Earth dist.	10373 Oct 28 17:24	15° 	47°29	1.31865 AU
max. Earth dist.	10372 Nov 14 11:32	3° 	33°14	1.32731 AU	evening rise	10373 Nov 03 17:18	28° 	43°34	
evening rise	10372 Nov 19 16:48	14° 	28°35			10373 Nov 04 08:00	0° 		
	10372 Nov 27 20:16	0° 			desc. node	10373 Nov 18 02:44	25° 	25°47	
desc. node	10372 Dec 01 05:36	5° 	52°19			10373 Nov 21 00:52	0° 		
	10372 Dec 18 01:47	0° 			evening max el	10373 Dec 05 17:01	18° 	17°59	27°22'47
evening max el	10372 Dec 23 08:27	5° 	36°30	27°29'17	retrograde	10373 Dec 19 13:46	25° 	33°29	
retrograde	10373 Jan 06 00:58	12° 	57°21		evening set	10373 Dec 26 14:18	23° 	16°33	
evening set	10373 Jan 13 00:02	10° 	27°28		min. Earth dist.	10373 Dec 30 07:21	20° 	25°28	0.61685 AU
min. Earth dist.	10373 Jan 16 18:36	7° 	11°02	0.63672 AU	inferior conj	10374 Jan 02 07:53	17° 	34°18	-2°53'19
inferior conj	10373 Jan 19 10:01	4° 	29°39	-1°39'10	minimum elong	10374 Jan 02 13:40	17° 	28°42	2°50'42
minimum elong	10373 Jan 19 13:12	4° 	21°32	1°37'26	morning rise	10374 Jan 09 15:34	12° 	34°20	
asc. node	10373 Jan 24 09:58	0° 	06°20		asc. node	10374 Jan 11 07:05	12° 	22°37	
	10373 Jan 24 14:00	30° 			direct	10374 Jan 11 20:18	12° 	21°17	
morning rise	10373 Jan 26 04:22	29° 	11°32		morning max el	10374 Jan 18 18:47	15° 	51°45	17°50'59
direct	10373 Jan 28 14:09	28° 	34°06			10374 Jan 28 15:51	0° 		
	10373 Feb 01 13:06	0° 			morning set	10374 Feb 03 11:43	10° 	21°07	
morning max el	10373 Feb 04 02:11	2° 	04°29	17°48'08	superior conj	10374 Feb 14 09:24	29° 	37°18	-0°02'15
morning set	10373 Feb 20 14:26	27° 	10°35		minimum elong	10374 Feb 14 09:13	29° 	36°34	0°01'56
	10373 Feb 22 05:59	0° 			behind sun begin	10374 Feb 14 00:44	29° 	00°11	
desc. node	10373 Feb 27 05:31	8° 	27°07		behind sun end	10374 Feb 14 17:43	0° 	12°51	
superior conj	10373 Mar 05 06:40	18° 	27°57	-0°44'05	desc. node	10374 Feb 14 02:19	29° 	06°56	
minimum elong	10373 Mar 05 01:57	18° 	08°39	0°43'16		10374 Feb 14 14:42	0° 		
max. Earth dist.	10373 Mar 11 00:41	27° 	43°21	1.44694 AU	max. Earth dist.	10374 Feb 21 15:59	11° 	46°13	1.43237 AU
	10373 Mar 12 11:11	0° 			evening rise	10374 Feb 28 12:27	22° 	42°17	
evening rise	10373 Mar 20 19:29	12°	59°10			10374 Mar 05 05:53	0°		
	10373 Apr 01 02:14	0°				10374 Mar 26 08:13	0°		
evening max el	10373 Apr 18 08:18	22°	59°31	20°33'50	evening max el	10374 Apr 01 04:30	6°	42°58	21°46'24
asc. node	10373 Apr 22 08:02	26°	19°57		asc. node	10374 Apr 09 05:14	12°	01°50	
retrograde	10373 Apr 26 10:53	27°	42°40		retrograde	10374 Apr 10 08:58	12°	08°24	
evening set	10373 Apr 30 12:09	26°	08°40		evening set	10374 Apr 14 20:32	10°	19°07	
inferior conj	10373 May 05 19:06	20°	01°13	3°10'48	inferior conj	10374 Apr 20 03:33	4°	00°59	2°52'33

minimum elong	10374 Apr 20 01:43	4°♄07'24	2°51'57	min. Earth dist.	10375 Apr 04 02:40	18°♄40'23	0.68598 AU
min. Earth dist.	10374 Apr 20 05:51	3°♄52'58	0.68556 AU	inferior conj	10375 Apr 04 12:38	18°♄05'55	2°24'32
	10374 Apr 23 04:08	30°♄		minimum elong	10375 Apr 04 10:28	18°♄13'27	2°23'51
morning rise	10374 Apr 25 06:43	27°♄47'57		morning rise	10375 Apr 09 17:11	11°♄58'40	
direct	10374 Apr 30 05:39	25°♄39'45		direct	10375 Apr 14 02:40	10°♄11'47	
	10374 May 08 12:50	0°♄		morning max el	10375 Apr 22 16:41	15°♄08'55	21°13'07
morning max el	10374 May 10 01:27	1°♄27'55	22°37'35	desc. node	10375 Apr 29 23:54	23°♄44'22	
desc. node	10374 May 13 03:03	4°♄46'56			10375 May 04 14:37	0°♄	
	10374 May 31 14:58	0°♄		morning set	10375 May 23 18:07	28°♄37'09	
morning set	10374 Jun 13 00:07	19°♄25'02			10375 May 24 15:09	0°♄	
max. Earth dist.	10374 Jun 17 18:12	27°♄20'58	1.40457 AU	max. Earth dist.	10375 May 30 21:05	10°♄02'24	1.42573 AU
	10374 Jun 19 07:25	0°♄					
				superior conj	10375 Jun 07 04:00	22°♄13'44	-1°56'14
superior conj	10374 Jun 25 13:24	11°♄01'26	-1°29'25	minimum elong	10375 Jun 07 10:09	22°♄40'06	1°56'14
minimum elong	10374 Jun 25 19:16	11°♄27'56	1°29'08		10375 Jun 11 15:31	0°♄	
evening rise	10374 Jul 05 13:52	29°♄40'48		evening rise	10375 Jun 18 15:19	12°♄29'06	
	10374 Jul 05 17:56	0°♄		asc. node	10375 Jun 23 00:57	20°♄22'44	
asc. node	10374 Jul 06 03:57	0°♄47'19			10375 Jun 28 17:31	0°♄	
evening max el	10374 Jul 21 14:17	25°♄23'31	18°24'05	evening max el	10375 Jul 05 01:25	8°♄18'22	18°06'11
retrograde	10374 Jul 29 03:19	29°♄10'42		retrograde	10375 Jul 11 19:02	11°♄44'27	
evening set	10374 Jul 31 06:27	28°♄53'23		evening set	10375 Jul 14 06:04	11°♄17'11	
inferior conj	10374 Aug 07 19:54	24°♄18'52	0°22'51	inferior conj	10375 Jul 21 01:28	6°♄22'18	1°40'30
minimum elong	10374 Aug 07 20:42	24°♄17'14	0°22'13	minimum elong	10375 Jul 21 04:07	6°♄16'05	1°39'15
desc. node	10374 Aug 09 02:07	23°♄17'17		min. Earth dist.	10375 Jul 24 07:23	3°♄20'35	0.60486 AU
min. Earth dist.	10374 Aug 11 04:16	21°♄37'16	0.58245 AU	desc. node	10375 Jul 26 23:17	1°♄10'34	
morning rise	10374 Aug 15 07:24	18°♄53'48		morning rise	10375 Jul 27 23:21	0°♄29'43	
direct	10374 Aug 21 09:49	17°♄16'27			10375 Jul 28 19:11	30°♄	
morning max el	10374 Sep 04 18:42	24°♄57'50	27°10'41	direct	10375 Aug 03 12:53	28°♄23'14	
	10374 Sep 09 10:16	0°♄			10375 Aug 09 14:15	0°♄	
	10374 Sep 28 17:50	0°♄		morning max el	10375 Aug 17 20:04	6°♄19'33	27°51'18
asc. node	10374 Oct 02 04:16	6°♄45'06			10375 Sep 04 15:36	0°♄	
morning set	10374 Oct 05 05:50	13°♄06'25		morning set	10375 Sep 19 10:34	27°♄24'53	
				asc. node	10375 Sep 19 01:07	26°♄35'50	
superior conj	10374 Oct 12 04:49	28°♄20'05	1°25'05		10375 Sep 20 16:09	0°♄	
minimum elong	10374 Oct 12 02:50	28°♄09'03	1°25'04	max. Earth dist.	10375 Sep 25 11:15	10°♄23'10	1.31580 AU
max. Earth dist.	10374 Oct 12 02:30	28°♄07'08	1.31479 AU				
	10374 Oct 12 22:46	0°♄		superior conj	10375 Sep 26 15:58	13°♄01'55	1°09'35
evening rise	10374 Oct 18 23:31	13°♄12'26		minimum elong	10375 Sep 26 13:43	12°♄49'29	1°09'18
	10374 Oct 27 09:53	0°♄		evening rise	10375 Oct 03 09:19	27°♄49'13	
desc. node	10374 Nov 04 23:54	14°♄21'41			10375 Oct 04 09:49	0°♄	
	10374 Nov 17 13:48	0°♄			10375 Oct 21 03:06	0°♄	
evening max el	10374 Nov 17 19:30	0°♄13'33	26°42'16	desc. node	10375 Oct 22 21:06	2°♄25'26	
retrograde	10374 Dec 01 17:57	7°♄21'39		evening max el	10375 Oct 30 14:05	11°♄18'17	25°29'43
evening set	10374 Dec 08 11:38	5°♄27'45		retrograde	10375 Nov 13 11:25	18°♄18'02	
min. Earth dist.	10374 Dec 12 09:36	2°♄51'02	0.59570 AU	evening set	10375 Nov 19 11:18	16°♄55'28	
inferior conj	10374 Dec 15 13:56	0°♄20'26	-4°07'28	min. Earth dist.	10375 Nov 24 02:23	14°♄17'21	0.57533 AU
minimum elong	10374 Dec 15 21:41	0°♄05'06	4°04'39	inferior conj	10375 Nov 27 00:57	12°♄16'30	-5°10'20
	10374 Dec 16 00:16	30°♄		minimum elong	10375 Nov 27 08:02	12°♄04'20	5°08'34
morning rise	10374 Dec 23 10:25	25°♄41'39		morning rise	10375 Dec 05 07:05	8°♄00'04	
direct	10374 Dec 25 13:38	25°♄25'02		direct	10375 Dec 07 14:10	7°♄44'05	
asc. node	10374 Dec 29 04:10	26°♄15'00		asc. node	10375 Dec 16 01:13	11°♄38'24	
morning max el	10375 Jan 02 06:50	29°♄13'52	18°12'59	morning max el	10375 Dec 16 10:33	12°♄00'26	18°56'01
	10375 Jan 03 00:56	0°♄			10375 Dec 28 12:20	0°♄	
morning set	10375 Jan 17 23:53	24°♄12'25		morning set	10376 Jan 01 22:20	8°♄31'25	
	10375 Jan 21 01:34	0°♄					
				superior conj	10376 Jan 10 09:00	25°♄00'59	1°02'10
superior conj	10375 Jan 27 11:40	11°♄52'26	0°33'56	minimum elong	10376 Jan 10 12:07	25°♄15'51	1°02'11
minimum elong	10375 Jan 27 14:05	12°♄03'22	0°33'58		10376 Jan 13 00:29	0°♄	
desc. node	10375 Jan 31 23:08	19°♄49'03		max. Earth dist.	10376 Jan 17 09:10	7°♄56'18	1.39148 AU
max. Earth dist.	10375 Feb 04 02:17	25°♄11'28	1.41315 AU	desc. node	10376 Jan 18 20:02	10°♄30'14	
	10375 Feb 06 23:18	0°♄		evening rise	10376 Jan 21 06:10	14°♄41'48	
evening rise	10375 Feb 08 22:33	3°♄13'30			10376 Jan 30 15:32	0°♄	
	10375 Feb 26 13:38	0°♄			10376 Feb 21 10:30	0°♄	
evening max el	10375 Mar 14 20:35	20°♄28'35	23°05'45	evening max el	10376 Feb 25 10:33	4°♄17'29	24°25'40
retrograde	10375 Mar 25 04:44	26°♄35'21		retrograde	10376 Mar 07 20:55	10°♄58'46	
asc. node	10375 Mar 27 02:28	26°♄17'49		asc. node	10376 Mar 12 23:42	8°♄58'55	
evening set	10375 Mar 30 03:38	24°♄31'34		evening set	10376 Mar 13 07:54	8°♄41'58	

min. Earth dist.	10376 Mar 17 22:37	3°♂25'57	0.68214 AU	inferior conj	10377 Mar 03 01:10	16°♂17'38	1°00'49
inferior conj	10376 Mar 18 20:29	2°♂12'37	1°47'14	minimum elong	10377 Mar 02 23:45	16°♂22'10	1°00'26
minimum elong	10376 Mar 18 18:25	2°♂19'34	1°46'35	morning rise	10377 Mar 08 16:14	10°♂26'30	
	10376 Mar 20 12:54	30°♂		direct	10377 Mar 12 01:04	9°♂21'30	
morning rise	10376 Mar 24 05:01	26°♂12'37		morning max el	10377 Mar 18 21:37	13°♂05'53	19°01'49
direct	10376 Mar 28 01:41	24°♂47'28			10377 Mar 31 14:29	0°♂	
morning max el	10376 Apr 04 15:12	29°♂01'53	20°00'03	greatest brilliancy	10377 Apr 01 08:31	1°♂08'03	-0.7m
	10376 Apr 05 13:54	0°♂		desc. node	10377 Apr 02 17:30	3°♂13'21	
desc. node	10376 Apr 15 20:43	13°♂16'12		morning set	10377 Apr 10 22:36	15°♂52'46	
	10376 Apr 27 03:13	0°♂			10377 Apr 20 00:36	0°♂	
morning set	10376 May 01 18:21	7°♂05'07		max. Earth dist.	10377 Apr 25 00:02	7°♂47'10	1.45311 AU
max. Earth dist.	10376 May 12 07:37	23°♂36'14	1.44254 AU				
	10376 May 16 07:11	0°♂		superior conj	10377 Apr 27 10:47	11°♂38'17	-2°09'06
				minimum elong	10377 Apr 27 06:06	11°♂19'50	2°09'13
superior conj	10376 May 17 18:28	2°♂23'17	-2°11'34		10377 May 08 22:29	0°♂	
minimum elong	10376 May 17 21:01	2°♂33'41	2°11'56	evening rise	10377 May 12 07:03	5°♂27'36	
evening rise	10376 May 30 22:30	24°♂27'25		asc. node	10377 May 26 19:06	28°♂27'20	
	10376 Jun 03 04:07	0°♂			10377 May 27 21:42	0°♂	
asc. node	10376 Jun 08 22:00	9°♂38'22		evening max el	10377 Jun 01 04:11	5°♂06'48	18°26'53
evening max el	10376 Jun 17 15:07	21°♂35'33	18°07'21	retrograde	10377 Jun 07 14:48	8°♂35'19	
retrograde	10376 Jun 24 00:21	24°♂55'49		evening set	10377 Jun 10 17:29	7°♂41'19	
evening set	10376 Jun 26 19:15	24°♂15'58		inferior conj	10377 Jun 16 12:01	2°♂10'23	3°03'35
inferior conj	10376 Jul 03 00:14	19°♂02'06	2°32'49	minimum elong	10377 Jun 16 13:45	2°♂05'15	3°02'51
minimum elong	10376 Jul 03 02:52	18°♂55'02	2°31'44		10377 Jun 18 07:59	30°♂	
min. Earth dist.	10376 Jul 05 19:27	16°♂03'28	0.62727 AU	min. Earth dist.	10377 Jun 18 16:59	29°♂33'57	0.64734 AU
morning rise	10376 Jul 09 08:41	12°♂52'17		morning rise	10377 Jun 22 08:59	25°♂51'57	
desc. node	10376 Jul 12 20:27	10°♂56'56		direct	10377 Jun 28 23:26	23°♂10'02	
direct	10376 Jul 16 01:57	10°♂23'05		desc. node	10377 Jun 29 17:33	23°♂11'58	
morning max el	10376 Jul 30 03:10	18°♂25'24	27°53'20		10377 Jul 11 09:48	0°♂	
	10376 Aug 08 20:48	0°♂		morning max el	10377 Jul 12 13:29	1°♂08'06	27°20'00
	10376 Aug 27 12:34	0°♂			10377 Aug 02 23:27	0°♂	
morning set	10376 Sep 02 09:01	11°♂22'18		morning set	10377 Aug 16 22:37	24°♂52'24	
asc. node	10376 Sep 04 21:56	16°♂35'40			10377 Aug 19 12:39	0°♂	
max. Earth dist.	10376 Sep 07 15:49	22°♂24'44	1.32181 AU	max. Earth dist.	10377 Aug 21 12:29	4°♂03'36	1.33285 AU
				asc. node	10377 Aug 22 18:48	6°♂40'38	
superior conj	10376 Sep 10 00:33	27°♂31'57	0°49'00	superior conj	10377 Aug 25 04:35	11°♂45'00	0°23'41
minimum elong	10376 Sep 09 22:33	27°♂21'04	0°48'33	minimum elong	10377 Aug 25 03:26	11°♂38'52	0°23'15
	10376 Sep 11 03:38	0°♂		evening rise	10377 Sep 01 07:49	27°♂01'55	
evening rise	10376 Sep 16 20:42	12°♂27'24			10377 Sep 02 17:39	0°♂	
	10376 Sep 25 15:22	0°♂			10377 Sep 20 20:42	0°♂	
desc. node	10376 Oct 08 18:21	19°♂15'58		evening max el	10377 Sep 22 13:39	1°♂46'24	22°14'34
evening max el	10376 Oct 11 01:48	21°♂39'18	23°54'55	desc. node	10377 Sep 25 15:36	4°♂27'01	
retrograde	10376 Oct 24 16:18	28°♂27'19		retrograde	10377 Oct 05 09:36	8°♂09'48	
evening set	10376 Oct 29 10:19	27°♂38'00		evening set	10377 Oct 08 15:55	7°♂46'11	
min. Earth dist.	10376 Nov 04 12:15	24°♂39'52	0.55846 AU	min. Earth dist.	10377 Oct 16 19:32	4°♂10'31	0.54815 AU
inferior conj	10376 Nov 06 15:24	23°♂22'44	-5°43'46	inferior conj	10377 Oct 17 13:07	3°♂45'47	-5°27'15
minimum elong	10376 Nov 06 17:04	23°♂20'13	5°43'21	minimum elong	10377 Oct 17 06:41	3°♂54'50	5°26'09
morning rise	10376 Nov 15 01:48	19°♂26'31		morning rise	10377 Oct 25 23:03	29°♂58'42	
direct	10376 Nov 17 19:14	19°♂07'38			10377 Oct 25 20:57	30°♂	
morning max el	10376 Nov 28 02:15	24°♂00'09	20°01'47	direct	10377 Oct 29 07:50	29°♂33'26	
asc. node	10376 Dec 01 22:14	28°♂17'21			10377 Nov 01 16:17	0°♂	
	10376 Dec 03 04:58	0°♂		morning max el	10377 Nov 10 04:22	5°♂09'07	21°29'32
morning set	10376 Dec 16 03:31	23°♂07'03		asc. node	10377 Nov 18 19:10	15°♂56'22	
	10376 Dec 19 12:15	0°♂			10377 Nov 26 16:21	0°♂	
superior conj	10376 Dec 23 20:32	8°♂48'51	1°22'09	morning set	10377 Nov 30 12:49	7°♂51'49	
minimum elong	10376 Dec 23 23:10	9°♂02'01	1°22'21	superior conj	10377 Dec 07 18:13	23°♂04'26	1°34'25
max. Earth dist.	10376 Dec 29 15:55	20°♂06'39	1.36969 AU	minimum elong	10377 Dec 07 19:48	23°♂12'37	1°34'48
evening rise	10377 Jan 02 10:05	27°♂02'16			10377 Dec 11 03:10	0°♂	
	10377 Jan 04 01:55	0°♂		max. Earth dist.	10377 Dec 12 02:56	1°♂59'21	1.35010 AU
desc. node	10377 Jan 04 16:58	1°♂06'15		evening rise	10377 Dec 16 06:58	10°♂06'28	
	10377 Jan 23 02:17	0°♂		desc. node	10377 Dec 22 13:57	21°♂32'43	
evening max el	10377 Feb 06 23:55	18°♂07'09	25°39'20		10377 Dec 27 14:40	0°♂	
retrograde	10377 Feb 19 08:32	25°♂13'12			10378 Jan 18 16:57	0°♂	
evening set	10377 Feb 25 07:46	22°♂45'56		evening max el	10378 Jan 20 13:15	1°♂51'20	26°39'30
asc. node	10377 Feb 27 20:55	20°♂13'21		retrograde	10378 Feb 02 14:53	9°♂11'16	
min. Earth dist.	10377 Mar 01 15:27	18°♂04'58	0.67418 AU				

evening set	10378 Feb 09 01:22	6° $\text{H}$ 37'50			10378 Dec 02 22:27	0° $\text{Z}$	
min. Earth dist.	10378 Feb 13 03:01	2° $\text{H}$ 31'13	0.66230 AU	desc. node	10378 Dec 09 10:58	11° $\text{Z}$ 44'34	
asc. node	10378 Feb 14 18:07	0° $\text{H}$ 35'22			10378 Dec 21 05:12	0° $\approx$	
inferior conj	10378 Feb 15 00:36	0° $\text{H}$ 16'05	0°05'19	evening max el	10379 Jan 03 02:18	15° $\approx$ 21'41	27°18'53
minimum elong	10378 Feb 15 00:27	0° $\text{H}$ 16'32	0°05'32	retrograde	10379 Jan 16 15:11	22° $\approx$ 44'58	
transit middle	10378 Feb 15 00:27	0° $\text{H}$ 16'32	0°05'32	evening set	10379 Jan 23 10:35	20° $\approx$ 11'39	
transit begin	10378 Feb 14 21:42	0° $\text{H}$ 24'42		min. Earth dist.	10379 Jan 27 07:16	16° $\approx$ 37'41	0.64688 AU
transit end	10378 Feb 15 03:12	0° $\text{H}$ 08'23		inferior conj	10379 Jan 29 16:25	14° $\approx$ 02'55	-0°58'48
	10378 Feb 15 06:01	30° $\text{R}$ $\approx$		minimum elong	10379 Jan 29 18:12	13° $\approx$ 58'04	0°57'40
morning rise	10378 Feb 21 00:36	24° $\approx$ 35'47		asc. node	10379 Feb 01 15:17	11° $\approx$ 02'14	
direct	10378 Feb 23 23:00	23° $\approx$ 47'59		morning rise	10379 Feb 05 03:33	8° $\approx$ 35'47	
morning max el	10378 Mar 02 10:24	27° $\approx$ 15'03	18°19'49	direct	10379 Feb 07 17:14	8° $\approx$ 01'28	
	10378 Mar 04 22:14	0° $\text{H}$		morning max el	10379 Feb 14 03:03	11° $\approx$ 22'24	17°54'44
desc. node	10378 Mar 20 14:16	23° $\text{H}$ 28'36			10379 Feb 27 01:51	0° $\text{H}$	
morning set	10378 Mar 22 02:41	25° $\text{H}$ 54'03		morning set	10379 Mar 03 12:03	7° $\text{H}$ 22'07	
	10378 Mar 24 16:20	0° $\text{Y}$		desc. node	10379 Mar 07 11:03	13° $\text{H}$ 56'58	
superior conj	10378 Apr 06 16:52	20° $\text{Y}$ 32'51	-1°46'24	superior conj	10379 Mar 17 07:15	29° $\text{H}$ 57'03	-1°08'45
minimum elong	10378 Apr 06 07:26	19° $\text{Y}$ 55'59	1°45'43	minimum elong	10379 Mar 16 23:44	29° $\text{H}$ 27'01	1°07'45
max. Earth dist.	10378 Apr 07 19:11	22° $\text{Y}$ 15'46	1.45648 AU		10379 Mar 17 07:59	0° $\text{Y}$	
	10378 Apr 12 18:02	0° $\text{B}$		max. Earth dist.	10379 Mar 21 14:38	6° $\text{Y}$ 46'46	1.45244 AU
evening rise	10378 Apr 22 15:53	15° $\text{B}$ 30'19		evening rise	10379 Apr 02 07:22	24° $\text{Y}$ 56'37	
	10378 May 01 22:28	0° $\text{II}$			10379 Apr 05 14:37	0° $\text{B}$	
greatest brilliancy	10378 May 03 04:42	1° $\text{II}$ 56'21	-0.8m	greatest brilliancy	10379 Apr 17 01:04	17° $\text{B}$ 10'45	-0.6m
asc. node	10378 May 13 16:13	16° $\text{II}$ 40'09			10379 Apr 26 13:13	0° $\text{II}$	
evening max el	10378 May 15 14:00	18° $\text{II}$ 45'02	19°03'56	evening max el	10379 Apr 28 18:57	2° $\text{II}$ 26'55	19°57'00
retrograde	10378 May 22 10:35	22° $\text{II}$ 34'29		asc. node	10379 Apr 30 13:21	4° $\text{II}$ 05'47	
evening set	10378 May 25 21:23	21° $\text{II}$ 25'22		retrograde	10379 May 06 08:50	6° $\text{II}$ 47'53	
inferior conj	10378 May 31 09:06	15° $\text{II}$ 39'04	3°17'02	evening set	10379 May 10 04:31	5° $\text{II}$ 23'09	
minimum elong	10378 May 31 09:38	15° $\text{II}$ 37'21	3°16'32		10379 May 15 01:31	30° $\text{R}$ $\text{B}$	
min. Earth dist.	10378 Jun 01 23:02	13° $\text{II}$ 37'48	0.66376 AU	inferior conj	10379 May 15 12:29	29° $\text{B}$ 23'07	3°16'30
morning rise	10378 Jun 05 21:20	9° $\text{II}$ 18'13		minimum elong	10379 May 15 11:54	29° $\text{B}$ 25'05	3°16'03
direct	10378 Jun 12 04:04	6° $\text{II}$ 34'32		min. Earth dist.	10379 May 16 11:52	28° $\text{B}$ 04'17	0.67588 AU
desc. node	10378 Jun 16 14:35	7° $\text{II}$ 41'54		morning rise	10379 May 20 18:57	23° $\text{B}$ 03'43	
morning max el	10378 Jun 25 00:15	14° $\text{II}$ 14'18	26°18'26	direct	10379 May 26 14:41	20° $\text{B}$ 28'16	
	10378 Jul 07 20:02	0° $\text{O}$		desc. node	10379 Jun 03 11:34	23° $\text{B}$ 58'15	
	10378 Jul 26 17:41	0° $\text{O}$		morning max el	10379 Jun 07 10:00	27° $\text{B}$ 33'23	24°58'02
morning set	10378 Jul 30 24:00	7° $\text{O}$ 45'52			10379 Jun 09 17:08	0° $\text{II}$	
max. Earth dist.	10378 Aug 03 22:34	15° $\text{O}$ 17'35	1.34874 AU		10379 Jul 01 12:03	0° $\text{O}$	
superior conj	10378 Aug 09 01:36	25° $\text{O}$ 34'09	-0°05'46	morning set	10379 Jul 13 08:48	19° $\text{O}$ 51'18	
minimum elong	10378 Aug 09 01:56	25° $\text{O}$ 35'54	0°06'00	max. Earth dist.	10379 Jul 16 22:59	26° $\text{O}$ 21'20	1.36887 AU
behind sun begin	10378 Aug 08 20:23	25° $\text{O}$ 07'26			10379 Jul 18 21:56	0° $\text{O}$	
behind sun end	10378 Aug 09 07:30	26° $\text{O}$ 04'25		superior conj	10379 Jul 23 12:37	8° $\text{O}$ 51'57	-0°38'04
asc. node	10378 Aug 09 15:39	26° $\text{O}$ 46'19		minimum elong	10379 Jul 23 15:03	9° $\text{O}$ 03'53	0°38'01
	10378 Aug 11 05:04	0° $\text{np}$		asc. node	10379 Jul 27 12:31	16° $\text{O}$ 49'00	
evening rise	10378 Aug 16 16:37	11° $\text{np}$ 26'40		evening rise	10379 Jul 31 20:48	25° $\text{O}$ 35'24	
	10378 Aug 26 08:33	0° $\text{O}$			10379 Aug 03 01:45	0° $\text{np}$	
evening max el	10378 Sep 04 11:00	12° $\text{O}$ 17'10	20°44'34	evening max el	10379 Aug 17 22:07	23° $\text{np}$ 32'13	19°33'23
desc. node	10378 Sep 12 12:50	17° $\text{O}$ 28'40		retrograde	10379 Aug 27 15:31	28° $\text{np}$ 21'40	
retrograde	10378 Sep 15 21:24	17° $\text{O}$ 57'28		evening set	10379 Aug 29 11:46	28° $\text{np}$ 12'02	
evening set	10378 Sep 18 01:49	17° $\text{O}$ 45'55		desc. node	10379 Aug 30 10:05	28° $\text{np}$ 00'12	
inferior conj	10378 Sep 27 05:18	13° $\text{O}$ 50'04	-4°14'18	inferior conj	10379 Sep 07 06:23	24° $\text{np}$ 07'24	-2°25'16
minimum elong	10378 Sep 26 19:26	14° $\text{O}$ 04'11	4°11'23	minimum elong	10379 Sep 06 23:53	24° $\text{np}$ 17'43	2°22'55
min. Earth dist.	10378 Sep 28 03:51	13° $\text{O}$ 17'45	0.54671 AU	min. Earth dist.	10379 Sep 09 15:00	22° $\text{np}$ 37'48	0.55481 AU
morning rise	10378 Oct 05 12:58	9° $\text{O}$ 52'08		morning rise	10379 Sep 15 09:43	19° $\text{np}$ 40'17	
direct	10378 Oct 09 15:55	9° $\text{O}$ 15'39		direct	10379 Sep 20 08:25	18° $\text{np}$ 45'35	
morning max el	10378 Oct 22 19:41	15° $\text{O}$ 36'08	23°13'06	morning max el	10379 Oct 04 06:58	25° $\text{np}$ 44'14	24°59'20
	10378 Nov 03 01:42	0° $\text{ml}$			10379 Oct 08 07:39	0° $\text{O}$	
asc. node	10378 Nov 05 16:05	4° $\text{ml}$ 21'46		asc. node	10379 Oct 23 12:57	23° $\text{O}$ 21'35	
morning set	10378 Nov 15 00:12	22° $\text{ml}$ 40'08			10379 Oct 26 22:18	0° $\text{ml}$	
	10378 Nov 18 10:03	0° $\text{Z}$		morning set	10379 Oct 30 11:54	7° $\text{ml}$ 26'20	
superior conj	10378 Nov 21 22:52	7° $\text{Z}$ 38'36	1°39'40	superior conj	10379 Nov 06 07:52	22° $\text{ml}$ 22'45	1°38'33
minimum elong	10378 Nov 21 23:13	7° $\text{Z}$ 40'31	1°40'07	minimum elong	10379 Nov 06 07:06	22° $\text{ml}$ 18'33	1°38'54
max. Earth dist.	10378 Nov 24 21:38	13° $\text{Z}$ 55'05	1.33429 AU	max. Earth dist.	10379 Nov 08 00:08	26° $\text{ml}$ 03'08	1.32302 AU
evening rise	10378 Nov 29 17:10	23° $\text{Z}$ 45'33			10379 Nov 09 19:55	0° $\text{Z}$	

evening rise	10379 Nov 13 13:17	7° $\text{♁}$ 49'56		max. Earth dist.	10380 Oct 21 08:00	8° $\text{♁}$ 21'59	1.31649 AU
	10379 Nov 25 09:25	0° $\text{♁}$		evening rise	10380 Oct 27 16:33	22° $\text{♁}$ 12'15	
desc. node	10379 Nov 26 08:02	1° $\text{♁}$ 34'29			10380 Oct 31 11:47	0° $\text{♁}$	
evening max el	10379 Dec 16 13:22	28° $\text{♁}$ 25'19	27°30'42	desc. node	10380 Nov 12 05:10	20° $\text{♁}$ 53'40	
	10379 Dec 18 07:11	0° $\text{♁}$			10380 Nov 18 10:50	0° $\text{♁}$	
retrograde	10379 Dec 30 08:22	5° $\text{♁}$ 44'14		evening max el	10380 Nov 27 19:52	10° $\text{♁}$ 49'09	27°09'44
evening set	10380 Jan 06 08:40	3° $\text{♁}$ 19'02		retrograde	10380 Dec 11 17:19	18° $\text{♁}$ 00'36	
min. Earth dist.	10380 Jan 10 02:13	0° $\text{♁}$ 14'00	0.62846 AU	evening set	10380 Dec 18 16:12	15° $\text{♁}$ 52'32	
	10380 Jan 10 08:09	30° $\text{♁}$ 3		min. Earth dist.	10380 Dec 22 10:26	13° $\text{♁}$ 09'08	0.60797 AU
inferior conj	10380 Jan 12 21:46	27° $\text{♁}$ 30'10	-2°10'13	inferior conj	10380 Dec 25 13:20	10° $\text{♁}$ 29'22	-3°25'19
minimum elong	10380 Jan 13 02:02	27° $\text{♁}$ 19'45	2°08'03	minimum elong	10380 Dec 25 20:08	10° $\text{♁}$ 14'49	3°22'28
morning rise	10380 Jan 19 21:41	22° $\text{♁}$ 19'11		morning rise	10381 Jan 02 02:38	5° $\text{♁}$ 37'57	
asc. node	10380 Jan 19 12:25	22° $\text{♁}$ 28'00		direct	10381 Jan 04 06:21	5° $\text{♁}$ 19'15	
direct	10380 Jan 22 04:55	21° $\text{♁}$ 54'28		asc. node	10381 Jan 05 09:33	5° $\text{♁}$ 24'36	
morning max el	10380 Jan 28 20:31	25° $\text{♁}$ 18'55	17°47'05	morning max el	10381 Jan 11 11:33	8° $\text{♁}$ 56'14	17°57'52
	10380 Feb 01 18:27	0° $\text{♁}$			10381 Jan 25 04:22	0° $\text{♁}$	
morning set	10380 Feb 13 22:05	20° $\text{♁}$ 00'57		morning set	10381 Jan 27 02:19	3° $\text{♁}$ 30'42	
	10380 Feb 19 15:50	0° $\text{♁}$					
desc. node	10380 Feb 22 07:50	4° $\text{♁}$ 33'28		superior conj	10381 Feb 06 08:23	22° $\text{♁}$ 02'11	0°14'02
				minimum elong	10381 Feb 06 09:35	22° $\text{♁}$ 07'24	0°14'11
superior conj	10380 Feb 25 19:18	10° $\text{♁}$ 24'07	-0°25'55	behind sun begin	10381 Feb 06 05:50	21° $\text{♁}$ 50'58	
minimum elong	10380 Feb 25 16:40	10° $\text{♁}$ 13'11	0°25'18	behind sun end	10381 Feb 06 13:20	22° $\text{♁}$ 23'49	
max. Earth dist.	10380 Mar 03 08:08	21° $\text{♁}$ 04'28	1.44145 AU	desc. node	10381 Feb 08 04:37	25° $\text{♁}$ 14'32	
	10380 Mar 08 23:33	0° $\text{♁}$			10381 Feb 10 23:26	0° $\text{♁}$	
evening rise	10380 Mar 11 19:20	4° $\text{♁}$ 22'53		max. Earth dist.	10381 Feb 13 21:48	4° $\text{♁}$ 54'11	1.42469 AU
	10380 Mar 29 00:49	0° $\text{♁}$		evening rise	10381 Feb 19 18:32	14° $\text{♁}$ 24'00	
evening max el	10380 Apr 10 18:20	16° $\text{♁}$ 10'11	21°03'37		10381 Mar 01 22:18	0° $\text{♁}$	
asc. node	10380 Apr 16 10:31	20° $\text{♁}$ 30'11		evening max el	10381 Mar 24 12:37	29° $\text{♁}$ 54'28	22°19'44
retrograde	10380 Apr 19 07:24	21° $\text{♁}$ 10'33			10381 Mar 24 14:49	0° $\text{♁}$	
evening set	10380 Apr 23 12:57	19° $\text{♁}$ 30'03		retrograde	10381 Apr 03 04:35	5° $\text{♁}$ 37'28	
inferior conj	10380 Apr 28 19:42	13° $\text{♁}$ 18'01	3°04'17	asc. node	10381 Apr 03 07:45	5° $\text{♁}$ 37'22	
minimum elong	10380 Apr 28 18:13	13° $\text{♁}$ 23'09	3°03'46	evening set	10381 Apr 07 20:59	3° $\text{♁}$ 41'40	
min. Earth dist.	10380 Apr 29 05:26	12° $\text{♁}$ 44'18	0.68336 AU		10381 Apr 11 05:46	30° $\text{♁}$ 7	
morning rise	10380 May 03 23:17	7° $\text{♁}$ 02'26		inferior conj	10381 Apr 13 04:38	27° $\text{♁}$ 20'02	2°41'49
direct	10380 May 09 06:07	4° $\text{♁}$ 42'50		minimum elong	10381 Apr 13 02:36	27° $\text{♁}$ 27'08	2°41'11
morning max el	10380 May 19 19:34	11° $\text{♁}$ 00'19	23°29'02	min. Earth dist.	10381 Apr 13 01:36	27° $\text{♁}$ 30'39	0.68627 AU
desc. node	10380 May 20 08:30	11° $\text{♁}$ 33'24		morning rise	10381 Apr 18 08:05	21° $\text{♁}$ 09'35	
	10380 Jun 03 21:58	0° $\text{♁}$		direct	10381 Apr 23 01:17	19° $\text{♁}$ 10'22	
	10380 Jun 23 06:41	0° $\text{♁}$		morning max el	10381 May 02 07:51	24° $\text{♁}$ 35'42	22°00'41
morning set	10380 Jun 23 19:56	0° $\text{♁}$ 55'47		desc. node	10381 May 07 05:22	0° $\text{♁}$ 05'30	
max. Earth dist.	10380 Jun 27 19:45	7° $\text{♁}$ 46'59	1.39149 AU		10381 May 07 03:34	0° $\text{♁}$	
					10381 May 28 08:06	0° $\text{♁}$	
superior conj	10380 Jul 05 09:56	21° $\text{♁}$ 29'34	-1°11'12	morning set	10381 Jun 04 05:00	10° $\text{♁}$ 48'26	
minimum elong	10380 Jul 05 14:41	21° $\text{♁}$ 51'47	1°10'56	max. Earth dist.	10381 Jun 09 19:43	20° $\text{♁}$ 00'06	1.41395 AU
	10380 Jul 09 21:40	0° $\text{♁}$			10381 Jun 15 16:23	0° $\text{♁}$	
asc. node	10380 Jul 13 09:25	6° $\text{♁}$ 44'58					
evening rise	10380 Jul 14 17:37	9° $\text{♁}$ 21'04		superior conj	10381 Jun 17 13:01	3° $\text{♁}$ 15'43	-1°41'45
	10380 Jul 26 09:07	0° $\text{♁}$		minimum elong	10381 Jun 17 19:21	3° $\text{♁}$ 43'41	1°41'34
evening max el	10380 Jul 30 21:32	5° $\text{♁}$ 32'51	18°43'21	evening rise	10381 Jun 28 03:25	22° $\text{♁}$ 33'43	
retrograde	10380 Aug 08 02:37	9° $\text{♁}$ 38'51		asc. node	10381 Jun 30 06:23	26° $\text{♁}$ 29'24	
evening set	10380 Aug 10 02:00	9° $\text{♁}$ 25'28			10381 Jul 02 04:24	0° $\text{♁}$	
desc. node	10380 Aug 16 07:20	6° $\text{♁}$ 20'34		evening max el	10381 Jul 14 05:29	18° $\text{♁}$ 10'25	18°13'59
inferior conj	10380 Aug 18 02:39	5° $\text{♁}$ 02'26	-0°33'28	retrograde	10381 Jul 21 08:53	21° $\text{♁}$ 47'00	
minimum elong	10380 Aug 18 01:17	5° $\text{♁}$ 04'58	0°33'11	evening set	10381 Jul 23 15:18	21° $\text{♁}$ 25'50	
min. Earth dist.	10380 Aug 21 06:41	2° $\text{♁}$ 42'55	0.57083 AU	inferior conj	10381 Jul 30 20:41	16° $\text{♁}$ 42'10	0°59'00
morning rise	10380 Aug 25 21:11	29° $\text{♁}$ 58'02		minimum elong	10381 Jul 30 22:33	16° $\text{♁}$ 38'07	0°57'58
	10380 Aug 25 19:28	30° $\text{♁}$ 8		min. Earth dist.	10381 Aug 03 05:09	13° $\text{♁}$ 49'23	0.59180 AU
direct	10380 Aug 31 14:32	28° $\text{♁}$ 37'55		desc. node	10381 Aug 03 04:34	13° $\text{♁}$ 50'34	
	10380 Sep 06 11:30	0° $\text{♁}$		morning rise	10381 Aug 07 02:31	11° $\text{♁}$ 04'01	
morning max el	10380 Sep 14 21:35	6° $\text{♁}$ 05'20	26°30'52	direct	10381 Aug 13 10:18	9° $\text{♁}$ 14'18	
	10380 Oct 02 12:15	0° $\text{♁}$		morning max el	10381 Aug 27 19:12	17° $\text{♁}$ 02'39	27°32'40
asc. node	10380 Oct 09 09:49	12° $\text{♁}$ 46'56			10381 Sep 07 12:24	0° $\text{♁}$	
morning set	10380 Oct 13 22:17	22° $\text{♁}$ 06'05			10381 Sep 25 01:03	0° $\text{♁}$	
	10380 Oct 17 13:31	0° $\text{♁}$		asc. node	10381 Sep 26 06:40	2° $\text{♁}$ 30'05	
				morning set	10381 Sep 28 05:38	6° $\text{♁}$ 33'56	
superior conj	10380 Oct 20 19:11	7° $\text{♁}$ 10'47	1°31'36	max. Earth dist.	10381 Oct 04 17:37	20° $\text{♁}$ 42'24	1.31468 AU
minimum elong	10380 Oct 20 17:33	7° $\text{♁}$ 01'41	1°31'44				

superior conj	10381 Oct 05 06:54	21° $\Omega$ 56'18	1°19'09	superior conj	10382 Sep 19 17:13	6° $\Omega$ 34'01	1°01'28
minimum elong	10381 Oct 05 04:45	21° $\Omega$ 44'21	1°19'00	minimum elong	10382 Sep 19 15:00	6° $\Omega$ 21'52	1°01'05
	10381 Oct 08 22:04	0° $\mathbb{M}$		evening rise	10382 Sep 26 11:16	21° $\Omega$ 23'14	
evening rise	10381 Oct 12 00:34	6° $\mathbb{M}$ 45'14			10382 Sep 30 14:08	0° $\mathbb{M}$	
	10381 Oct 24 01:19	0° $\mathcal{A}$		desc. node	10382 Oct 16 23:35	27° $\mathbb{M}$ 05'20	
desc. node	10381 Oct 30 02:21	9° $\mathcal{A}$ 29'37			10382 Oct 19 10:25	0° $\mathcal{A}$	
evening max el	10381 Nov 09 19:00	22° $\mathcal{A}$ 22'37	26°14'46	evening max el	10382 Oct 22 09:57	3° $\mathcal{A}$ 05'55	24°51'05
retrograde	10381 Nov 23 17:00	29° $\mathcal{A}$ 27'12		retrograde	10382 Nov 05 05:42	10° $\mathcal{A}$ 02'28	
evening set	10381 Nov 30 04:52	27° $\mathcal{A}$ 45'33		evening set	10382 Nov 10 18:07	8° $\mathcal{A}$ 54'10	
min. Earth dist.	10381 Dec 04 08:06	25° $\mathcal{A}$ 10'45	0.58684 AU	min. Earth dist.	10382 Nov 15 21:32	6° $\mathcal{A}$ 09'43	0.56750 AU
inferior conj	10381 Dec 07 11:36	22° $\mathcal{A}$ 50'45	-4°36'26	inferior conj	10382 Nov 18 13:47	4° $\mathcal{A}$ 25'48	-5°29'26
minimum elong	10381 Dec 07 19:32	22° $\mathcal{A}$ 35'59	4°33'55	minimum elong	10382 Nov 18 19:11	4° $\mathcal{A}$ 17'01	5°28'20
morning rise	10381 Dec 15 12:47	18° $\mathcal{A}$ 21'45		morning rise	10382 Nov 26 22:31	0° $\mathcal{A}$ 18'55	
direct	10381 Dec 17 17:01	18° $\mathcal{A}$ 05'46		direct	10382 Nov 29 08:58	0° $\mathcal{A}$ 02'19	
asc. node	10381 Dec 23 06:38	19° $\mathcal{A}$ 57'17		morning max el	10382 Dec 08 19:38	4° $\mathcal{A}$ 33'06	19°21'15
morning max el	10381 Dec 25 20:33	22° $\mathcal{A}$ 04'43	18°28'41	asc. node	10382 Dec 10 03:41	5° $\mathcal{A}$ 55'03	
	10382 Jan 01 00:33	0° $\mathcal{B}$			10382 Dec 24 20:25	0° $\mathcal{B}$	
morning set	10382 Jan 10 19:22	17° $\mathcal{B}$ 35'25		morning set	10382 Dec 25 21:01	2° $\mathcal{B}$ 02'28	
	10382 Jan 17 06:59	0° $\approx$					
superior conj	10382 Jan 19 19:26	4° $\approx$ 42'21	0°46'56	superior conj	10383 Jan 02 23:22	18° $\mathcal{B}$ 09'31	1°11'37
minimum elong	10382 Jan 19 22:21	4° $\approx$ 55'48	0°46'56	minimum elong	10383 Jan 03 02:24	18° $\mathcal{B}$ 24'12	1°11'43
desc. node	10382 Jan 26 01:29	15° $\approx$ 56'58			10383 Jan 09 05:47	0° $\approx$	
max. Earth dist.	10382 Jan 27 06:36	18° $\approx$ 03'24	1.40404 AU	max. Earth dist.	10383 Jan 09 12:22	0° $\approx$ 30'01	1.38199 AU
evening rise	10382 Jan 31 13:37	25° $\approx$ 19'18		desc. node	10383 Jan 12 22:22	6° $\approx$ 36'36	
	10382 Feb 03 10:11	0° $\mathcal{H}$		evening rise	10383 Jan 13 06:11	7° $\approx$ 10'51	
	10382 Feb 23 16:32	0° $\mathcal{Y}$			10383 Jan 27 08:16	0° $\mathcal{H}$	
evening max el	10382 Mar 07 03:25	13° $\mathcal{Y}$ 41'14	23°40'04	evening max el	10383 Feb 17 16:47	27° $\mathcal{H}$ 30'23	24°58'15
retrograde	10382 Mar 17 23:03	20° $\mathcal{Y}$ 04'11			10383 Feb 20 09:56	0° $\mathcal{Y}$	
asc. node	10382 Mar 21 04:59	19° $\mathcal{Y}$ 14'05		retrograde	10383 Mar 01 13:32	4° $\mathcal{Y}$ 24'27	
evening set	10382 Mar 23 03:06	17° $\mathcal{Y}$ 54'20		evening set	10383 Mar 07 05:41	2° $\mathcal{Y}$ 02'49	
min. Earth dist.	10382 Mar 27 22:16	12° $\mathcal{Y}$ 18'17	0.68479 AU	asc. node	10383 Mar 08 02:13	1° $\mathcal{Y}$ 16'04	
inferior conj	10382 Mar 28 13:25	11° $\mathcal{Y}$ 26'25	2°09'51		10383 Mar 09 07:13	30° $\mathcal{R}$ $\mathcal{H}$	
minimum elong	10382 Mar 28 11:14	11° $\mathcal{Y}$ 33'55	2°09'09	min. Earth dist.	10383 Mar 11 17:13	27° $\mathcal{H}$ 01'35	0.67916 AU
morning rise	10382 Apr 02 19:22	5° $\mathcal{Y}$ 22'15		inferior conj	10383 Mar 12 20:09	25° $\mathcal{H}$ 32'59	1°28'40
direct	10382 Apr 06 23:12	3° $\mathcal{Y}$ 44'55		minimum elong	10383 Mar 12 18:17	25° $\mathcal{H}$ 39'08	1°28'06
morning max el	10382 Apr 15 02:09	8° $\mathcal{Y}$ 22'44	20°40'30	morning rise	10383 Mar 18 07:09	19° $\mathcal{H}$ 36'25	
desc. node	10382 Apr 24 02:12	19° $\mathcal{Y}$ 19'13		direct	10383 Mar 21 22:31	18° $\mathcal{H}$ 20'16	
	10382 May 01 14:25	0° $\mathcal{B}$		morning max el	10383 Mar 29 04:03	22° $\mathcal{H}$ 20'47	19°33'20
morning set	10382 May 14 13:37	19° $\mathcal{B}$ 36'53			10383 Apr 04 14:00	0° $\mathcal{Y}$	
	10382 May 21 03:45	0° $\mathbb{I}$		desc. node	10383 Apr 10 23:00	9° $\mathcal{Y}$ 02'47	
max. Earth dist.	10382 May 23 01:56	3° $\mathbb{I}$ 05'36	1.43347 AU	greatest brilliancy	10383 Apr 10 20:30	8° $\mathcal{Y}$ 53'37	-0.7m
				morning set	10383 Apr 23 12:21	28° $\mathcal{Y}$ 03'49	
superior conj	10382 May 29 17:34	14° $\mathbb{I}$ 01'36	-2°04'32		10383 Apr 24 18:30	0° $\mathcal{B}$	
minimum elong	10382 May 29 22:47	14° $\mathbb{I}$ 23'26	2°04'43	max. Earth dist.	10383 May 05 14:30	16° $\mathcal{B}$ 54'22	1.44781 AU
	10382 Jun 08 00:57	0° $\mathcal{E}$					
evening rise	10382 Jun 10 21:46	5° $\mathcal{E}$ 02'48		superior conj	10383 May 09 21:48	23° $\mathcal{B}$ 45'22	-2°13'00
asc. node	10382 Jun 17 03:25	15° $\mathcal{E}$ 57'36		minimum elong	10383 May 09 21:29	23° $\mathcal{B}$ 44'08	2°13'22
	10382 Jun 26 13:24	0° $\Omega$			10383 May 13 18:39	0° $\mathbb{I}$	
evening max el	10382 Jun 27 18:06	1° $\Omega$ 15'57	18°04'20	evening rise	10383 May 23 19:40	16° $\mathbb{I}$ 36'31	
retrograde	10382 Jul 04 07:05	4° $\Omega$ 38'07			10383 May 31 20:20	0° $\mathcal{E}$	
evening set	10382 Jul 06 21:20	4° $\Omega$ 05'56		asc. node	10383 Jun 04 00:28	5° $\mathcal{E}$ 02'57	
	10382 Jul 12 10:52	30° $\mathcal{R}$ $\mathcal{E}$		evening max el	10383 Jun 11 07:52	14° $\mathcal{E}$ 40'05	18°13'32
inferior conj	10382 Jul 13 10:08	29° $\mathcal{E}$ 02'45	2°05'34	retrograde	10383 Jun 17 16:39	18° $\mathcal{E}$ 02'13	
minimum elong	10382 Jul 13 12:56	28° $\mathcal{E}$ 55'45	2°04'19	evening set	10383 Jun 20 14:48	17° $\mathcal{E}$ 16'38	
min. Earth dist.	10382 Jul 16 12:11	25° $\mathcal{E}$ 59'29	0.61452 AU	inferior conj	10383 Jun 26 14:54	11° $\mathcal{E}$ 55'37	2°48'13
morning rise	10382 Jul 20 02:06	23° $\mathcal{E}$ 01'14		minimum elong	10383 Jun 26 17:13	11° $\mathcal{E}$ 49'07	2°47'17
desc. node	10382 Jul 21 01:44	22° $\mathcal{E}$ 23'40		min. Earth dist.	10383 Jun 29 04:26	9° $\mathcal{E}$ 04'06	0.63616 AU
direct	10382 Jul 26 17:57	20° $\mathcal{E}$ 43'59		morning rise	10383 Jul 02 18:09	5° $\mathcal{E}$ 41'12	
morning max el	10382 Aug 09 23:32	28° $\mathcal{E}$ 44'48	27°56'46	desc. node	10383 Jul 07 22:51	3° $\mathcal{E}$ 12'26	
	10382 Aug 11 04:56	0° $\Omega$		direct	10383 Jul 09 11:03	3° $\mathcal{E}$ 04'52	
	10382 Sep 01 09:43	0° $\mathbb{P}$		morning max el	10383 Jul 23 08:13	11° $\mathcal{E}$ 07'30	27°43'06
morning set	10382 Sep 12 08:01	20° $\mathbb{P}$ 44'41			10383 Aug 07 05:40	0° $\Omega$	
asc. node	10382 Sep 13 03:30	22° $\mathbb{P}$ 25'31			10383 Aug 24 19:42	0° $\mathbb{P}$	
	10382 Sep 16 17:06	0° $\Omega$		morning set	10383 Aug 27 03:07	4° $\mathbb{P}$ 32'13	
max. Earth dist.	10382 Sep 18 01:01	2° $\Omega$ 53'28	1.31775 AU	asc. node	10383 Aug 31 00:21	12° $\mathbb{P}$ 28'35	
				max. Earth dist.	10383 Sep 01 02:28	14° $\mathbb{P}$ 45'50	1.32582 AU



superior conj	10383 Sep 04 00:11	20° $\cap$ 58'30	0°38'49	superior conj	10384 Aug 18 01:33	5° $\cap$ 02'33	0°11'40
minimum elong	10383 Sep 03 22:28	20° $\cap$ 49'15	0°38'22	minimum elong	10384 Aug 18 00:57	4° $\cap$ 59'24	0°11'18
	10383 Sep 08 03:52	0° $\underline{\cap}$		behind sun begin	10384 Aug 17 20:53	4° $\cap$ 38'05	
evening rise	10383 Sep 10 22:47	6° $\underline{\cap}$ 01'08		behind sun end	10384 Aug 18 05:01	5° $\cap$ 20'44	
	10383 Sep 23 13:13	0° $\cap$		evening rise	10384 Aug 25 09:09	20° $\cap$ 32'28	
desc. node	10383 Oct 03 20:49	13° $\cap$ 18'12			10384 Aug 30 00:06	0° $\underline{\cap}$	
evening max el	10383 Oct 03 20:48	13° $\cap$ 18'10	23°11'58	evening max el	10384 Sep 14 11:55	23° $\underline{\cap}$ 32'15	21°34'27
retrograde	10383 Oct 17 05:34	19° $\cap$ 57'46		desc. node	10384 Sep 19 18:04	27° $\underline{\cap}$ 38'30	
evening set	10383 Oct 21 08:01	19° $\cap$ 21'10		retrograde	10384 Sep 26 18:51	29° $\underline{\cap}$ 38'31	
min. Earth dist.	10383 Oct 28 06:17	16° $\cap$ 08'51	0.55309 AU	evening set	10384 Sep 29 12:20	29° $\underline{\cap}$ 21'35	
inferior conj	10383 Oct 29 20:25	15° $\cap$ 13'26	-5°43'52	inferior conj	10384 Oct 08 14:04	25° $\underline{\cap}$ 24'59	-5°02'38
minimum elong	10383 Oct 29 18:35	15° $\cap$ 16'06	5°43'29	minimum elong	10384 Oct 08 05:14	25° $\underline{\cap}$ 37'21	5°00'39
morning rise	10383 Nov 07 06:56	11° $\cap$ 22'39		min. Earth dist.	10384 Oct 08 13:32	25° $\underline{\cap}$ 25'45	0.54642 AU
direct	10383 Nov 10 06:20	11° $\cap$ 01'31		morning rise	10384 Oct 16 23:09	21° $\underline{\cap}$ 36'04	
morning max el	10383 Nov 21 05:39	16° $\cap$ 12'29	20°36'30	direct	10384 Oct 20 15:47	21° $\underline{\cap}$ 06'29	
asc. node	10383 Nov 27 00:39	23° $\cap$ 02'16		morning max el	10384 Nov 02 02:23	27° $\underline{\cap}$ 01'12	22°12'07
	10383 Dec 01 11:25	0° $\times$			10384 Nov 04 23:24	0° $\cap$	
morning set	10383 Dec 10 04:15	16° $\times$ 43'28		asc. node	10384 Nov 12 21:35	11° $\cap$ 02'46	
	10383 Dec 16 14:04	0° $\underline{\times}$			10384 Nov 22 21:24	0° $\times$	
				morning set	10384 Nov 23 14:42	1° $\times$ 30'43	
superior conj	10383 Dec 17 15:42	2° $\underline{\times}$ 11'07	1°28'13	superior conj	10384 Nov 30 16:41	16° $\times$ 35'35	1°37'26
minimum elong	10383 Dec 17 17:56	2° $\underline{\times}$ 22'27	1°28'32	minimum elong	10384 Nov 30 17:45	16° $\times$ 41'11	1°37'52
max. Earth dist.	10383 Dec 22 20:17	12° $\underline{\times}$ 30'22	1.36102 AU	max. Earth dist.	10384 Dec 04 10:42	24° $\times$ 24'03	1.34296 AU
evening rise	10383 Dec 26 17:53	19° $\underline{\times}$ 52'14			10384 Dec 07 05:30	0° $\underline{\times}$	
desc. node	10383 Dec 30 19:20	27° $\underline{\times}$ 09'43		evening rise	10384 Dec 08 20:54	3° $\underline{\times}$ 12'40	
	10384 Jan 01 10:40	0° $\approx$		desc. node	10384 Dec 16 16:20	17° $\underline{\times}$ 30'54	
	10384 Jan 21 09:18	0° $\times$			10384 Dec 24 07:39	0° $\approx$	
evening max el	10384 Jan 31 06:17	11° $\times$ 19'30	26°07'02	evening max el	10385 Jan 12 19:50	24° $\approx$ 59'54	26°59'10
retrograde	10384 Feb 12 23:02	18° $\times$ 32'41			10385 Jan 19 01:23	0° $\times$	
evening set	10384 Feb 19 03:04	16° $\times$ 02'29		retrograde	10385 Jan 26 02:40	2° $\times$ 21'24	
asc. node	10384 Feb 22 23:25	12° $\times$ 02'32			10385 Feb 01 10:48	30° $\times$	
min. Earth dist.	10384 Feb 23 08:11	11° $\times$ 35'56	0.66960 AU	evening set	10385 Feb 01 17:22	29° $\approx$ 47'24	
inferior conj	10384 Feb 24 22:52	9° $\times$ 36'09	0°38'24	min. Earth dist.	10385 Feb 05 16:53	25° $\approx$ 54'53	0.65623 AU
minimum elong	10384 Feb 24 21:54	9° $\times$ 39'08	0°38'13	inferior conj	10385 Feb 07 19:23	23° $\approx$ 30'37	-0°20'50
morning rise	10384 Mar 01 17:25	3° $\times$ 49'02		minimum elong	10385 Feb 07 19:58	23° $\approx$ 28'56	0°20'17
direct	10384 Mar 04 21:37	2° $\times$ 51'41		asc. node	10385 Feb 08 20:35	22° $\approx$ 19'16	
morning max el	10384 Mar 11 13:19	6° $\times$ 27'23	18°41'48	morning rise	10385 Feb 13 23:51	17° $\approx$ 55'27	
desc. node	10384 Mar 27 19:46	29° $\times$ 08'28		direct	10385 Feb 16 18:25	17° $\approx$ 13'41	
	10384 Mar 28 09:00	0° $\Upsilon$		morning max el	10385 Feb 23 04:03	20° $\approx$ 36'33	18°07'00
morning set	10384 Apr 02 00:59	7° $\Upsilon$ 17'55			10385 Mar 02 11:15	0° $\times$	
	10384 Apr 16 13:16	0° $\times$		morning set	10385 Mar 13 17:45	17° $\times$ 57'29	
max. Earth dist.	10384 Apr 17 08:14	1° $\times$ 14'10	1.45549 AU	desc. node	10385 Mar 14 16:34	19° $\times$ 30'08	
					10385 Mar 21 04:45	0° $\Upsilon$	
superior conj	10384 Apr 18 07:38	2° $\times$ 45'50	-2°01'48	superior conj	10385 Mar 28 14:57	11° $\Upsilon$ 46'52	-1°31'41
minimum elong	10384 Apr 18 00:12	2° $\times$ 16'40	2°01'36	minimum elong	10385 Mar 28 05:38	11° $\Upsilon$ 10'09	1°30'45
evening rise	10384 May 03 17:45	27° $\times$ 10'18		max. Earth dist.	10385 Mar 31 04:22	15° $\Upsilon$ 47'55	1.45571 AU
	10384 May 05 12:07	0° $\cap$			10385 Apr 09 07:06	0° $\times$	
greatest brilliancy	10384 May 11 01:05	8° $\cap$ 51'51	-0.9m	evening rise	10385 Apr 13 17:57	6° $\times$ 54'18	
asc. node	10384 May 20 21:32	23° $\cap$ 37'38		greatest brilliancy	10385 Apr 26 06:56	26° $\times$ 09'06	-0.7m
evening max el	10384 May 24 19:51	28° $\cap$ 15'06	18°40'41		10385 Apr 28 21:23	0° $\cap$	
	10384 May 26 19:16	0° $\underline{\times}$		asc. node	10385 May 07 18:39	11° $\cap$ 32'04	
retrograde	10384 May 31 09:36	1° $\underline{\times}$ 50'41		evening max el	10385 May 08 03:47	11° $\cap$ 55'29	19°24'42
evening set	10384 Jun 03 15:45	0° $\underline{\times}$ 50'14		retrograde	10385 May 15 06:43	15° $\cap$ 56'55	
	10384 Jun 04 19:53	30° $\times$		evening set	10385 May 18 21:18	14° $\cap$ 40'57	
inferior conj	10384 Jun 09 06:59	25° $\cap$ 12'46	3°11'11	inferior conj	10385 May 24 07:03	8° $\cap$ 48'30	3°18'21
minimum elong	10384 Jun 09 08:13	25° $\cap$ 09'00	3°10'34	minimum elong	10385 May 24 07:05	8° $\cap$ 48'23	3°17'54
min. Earth dist.	10384 Jun 11 05:35	22° $\cap$ 50'05	0.65483 AU	min. Earth dist.	10385 May 25 14:36	7° $\cap$ 05'02	0.66946 AU
morning rise	10384 Jun 14 23:54	18° $\cap$ 53'01		morning rise	10385 May 29 16:29	2° $\cap$ 28'08	
direct	10384 Jun 21 11:44	16° $\cap$ 08'55			10385 Jun 03 00:16	30° $\times$	
desc. node	10384 Jun 23 19:55	16° $\cap$ 27'36		direct	10385 Jun 04 18:50	29° $\times$ 47'09	
morning max el	10384 Jul 04 18:43	24° $\cap$ 00'33	26°56'47		10385 Jun 06 15:07	0° $\cap$	
	10384 Jul 10 03:26	0° $\underline{\times}$		desc. node	10385 Jun 10 16:56	1° $\cap$ 46'35	
	10384 Jul 30 15:00	0° $\Omega$		morning max el	10385 Jun 17 05:07	7° $\cap$ 13'22	25°46'05
morning set	10384 Aug 09 11:55	17° $\Omega$ 47'45			10385 Jul 04 22:00	0° $\underline{\times}$	
max. Earth dist.	10384 Aug 13 18:40	26° $\Omega$ 13'04	1.33900 AU	morning set	10385 Jul 23 06:47	0° $\Omega$ 22'01	
	10384 Aug 15 15:16	0° $\cap$					
asc. node	10384 Aug 16 21:09	2° $\cap$ 34'23					



































































































































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max. Earth dist.	10385 Jul 27 00:34	7°♎21'19	1.35687 AU		10386 Jul 15 03:21	0°♎	
superior conj	10385 Aug 01 18:42	18°♎39'17	-0°19'11	superior conj	10386 Jul 16 00:19	1°♎40'23	-0°52'12
minimum elong	10385 Aug 01 19:52	18°♎45'10	0°19'18	minimum elong	10386 Jul 16 03:45	1°♎56'53	0°52'02
asc. node	10385 Aug 03 18:00	22°♎39'19		asc. node	10386 Jul 21 14:53	12°♎39'16	
	10385 Aug 07 07:42	0°♎		evening rise	10386 Jul 24 17:42	18°♎51'00	
evening rise	10385 Aug 09 16:17	4°♎51'28			10386 Jul 30 12:22	0°♎	
	10385 Aug 23 21:02	0°♎		evening max el	10386 Aug 10 07:27	15°♎54'01	19°09'31
evening max el	10385 Aug 27 14:51	4°♎19'58	20°11'44	retrograde	10386 Aug 19 08:37	20°♎24'05	
desc. node	10385 Sep 06 15:17	9°♎37'41		evening set	10386 Aug 21 05:08	20°♎13'31	
retrograde	10385 Sep 07 07:52	9°♎38'57		desc. node	10386 Aug 24 12:32	19°♎07'19	
evening set	10385 Sep 09 06:59	9°♎29'00		inferior conj	10386 Aug 29 16:42	16°♎01'43	-1°36'31
inferior conj	10385 Sep 18 08:17	5°♎30'30	-3°30'29	minimum elong	10386 Aug 29 12:28	16°♎08'52	1°35'01
minimum elong	10385 Sep 17 23:15	5°♎43'53	3°27'28	min. Earth dist.	10386 Sep 01 11:28	14°♎09'18	0.56072 AU
min. Earth dist.	10385 Sep 19 22:28	4°♎33'55	0.54907 AU	morning rise	10386 Sep 06 16:48	11°♎18'34	
morning rise	10385 Sep 26 14:35	1°♎22'19		direct	10386 Sep 11 23:26	10°♎14'02	
direct	10385 Oct 01 01:44	0°♎39'15		morning max el	10386 Sep 26 03:11	17°♎26'44	25°41'13
morning max el	10385 Oct 14 14:59	7°♎16'12	23°58'58		10386 Oct 06 11:45	0°♎	
asc. node	10385 Oct 30 18:29	29°♎43'58		asc. node	10386 Oct 17 15:22	18°♎55'34	
	10385 Oct 30 22:00	0°♎			10386 Oct 23 01:57	0°♎	
morning set	10385 Nov 08 02:27	16°♎18'55		morning set	10386 Oct 23 13:50	1°♎03'18	
	10385 Nov 14 09:43	0°♎					
superior conj	10385 Nov 14 23:28	1°♎14'47	1°39'57	superior conj	10386 Oct 30 09:44	16°♎01'46	1°36'19
minimum elong	10385 Nov 14 23:20	1°♎14'02	1°40'21	minimum elong	10386 Oct 30 08:34	15°♎55'18	1°36'34
max. Earth dist.	10385 Nov 17 09:03	6°♎25'19	1.32898 AU	max. Earth dist.	10386 Oct 31 14:08	18°♎38'24	1.31958 AU
evening rise	10385 Nov 22 11:41	17°♎03'12			10386 Nov 05 20:34	0°♎	
	10385 Nov 29 05:44	0°♎		evening rise	10386 Nov 06 11:09	1°♎16'11	
desc. node	10385 Dec 03 13:22	7°♎34'22		desc. node	10386 Nov 20 10:27	27°♎12'46	
	10385 Dec 18 19:14	0°♎			10386 Nov 22 04:19	0°♎	
evening max el	10385 Dec 26 08:14	8°♎20'06	27°27'29	evening max el	10386 Dec 08 17:32	21°♎08'16	27°25'56
retrograde	10386 Jan 08 23:54	15°♎41'52		retrograde	10386 Dec 22 14:02	28°♎25'03	
evening set	10386 Jan 15 22:12	13°♎10'42		evening set	10386 Dec 29 14:42	26°♎05'37	
min. Earth dist.	10386 Jan 19 17:12	9°♎50'00	0.63943 AU	min. Earth dist.	10387 Jan 02 07:42	23°♎11'10	0.61991 AU
inferior conj	10386 Jan 22 07:06	7°♎09'52	-1°28'21	inferior conj	10387 Jan 05 07:05	20°♎26'53	-2°41'56
minimum elong	10386 Jan 22 09:54	7°♎02'37	1°26'47	minimum elong	10387 Jan 05 12:29	20°♎14'25	2°39'24
asc. node	10386 Jan 26 17:46	3°♎05'22		morning rise	10387 Jan 12 12:46	15°♎24'10	
morning rise	10386 Jan 28 23:32	1°♎49'28		asc. node	10387 Jan 13 14:56	15°♎08'13	
direct	10386 Jan 31 10:16	1°♎19'38		direct	10387 Jan 14 17:59	15°♎02'33	
morning max el	10386 Feb 06 21:29	4°♎40'34	17°49'20	morning max el	10387 Jan 21 14:29	18°♎31'14	17°49'21
morning set	10386 Feb 23 14:23	29°♎58'09			10387 Jan 29 22:15	0°♎	
	10386 Feb 23 14:49	0°♎		morning set	10387 Feb 06 09:00	13°♎01'24	
desc. node	10386 Mar 01 13:20	10°♎02'31		desc. node	10387 Feb 16 10:08	0°♎41'49	
					10387 Feb 16 00:23	0°♎	
superior conj	10386 Mar 08 13:34	21°♎35'30	-0°50'38	superior conj	10387 Feb 17 12:32	2°♎34'22	-0°08'19
minimum elong	10386 Mar 08 08:05	21°♎13'13	0°49'45	minimum elong	10387 Feb 17 11:47	2°♎31'07	0°07'57
	10386 Mar 13 19:28	0°♎		behind sun begin	10387 Feb 17 04:09	1°♎58'41	
max. Earth dist.	10386 Mar 13 23:36	0°♎16'24	1.44855 AU	behind sun end	10387 Feb 17 19:24	3°♎03'29	
evening rise	10386 Mar 24 06:02	16°♎15'52		max. Earth dist.	10387 Feb 24 15:19	14°♎23'02	1.43491 AU
	10386 Apr 02 07:36	0°♎		evening rise	10387 Mar 03 21:17	25°♎53'49	
evening max el	10386 Apr 21 06:17	25°♎37'34	20°23'50		10387 Mar 06 12:59	0°♎	
asc. node	10386 Apr 24 15:49	28°♎33'31			10387 Mar 27 06:25	0°♎	
	10386 Apr 27 13:03	0°♎		evening max el	10387 Apr 04 03:18	9°♎21'05	21°35'02
retrograde	10386 Apr 29 05:27	0°♎14'55		asc. node	10387 Apr 11 13:02	14°♎27'16	
	10386 Apr 30 20:31	30°♎		retrograde	10387 Apr 13 03:46	14°♎40'04	
evening set	10386 May 03 05:13	28°♎43'20		evening set	10387 Apr 17 13:42	12°♎53'07	
inferior conj	10386 May 08 12:21	22°♎37'40	3°12'37	inferior conj	10387 Apr 22 20:36	6°♎36'30	2°55'57
minimum elong	10386 May 08 11:21	22°♎41'05	3°12'10	minimum elong	10387 Apr 22 18:50	6°♎42'37	2°55'23
min. Earth dist.	10386 May 09 05:43	21°♎38'09	0.67959 AU	min. Earth dist.	10387 Apr 23 00:49	6°♎21'46	0.68515 AU
morning rise	10386 May 13 17:14	16°♎19'35		morning rise	10387 Apr 27 23:46	0°♎22'39	
direct	10386 May 19 07:29	13°♎50'25			10387 Apr 28 10:31	30°♎	
desc. node	10386 May 28 13:54	18°♎39'27		direct	10387 May 03 00:46	28°♎11'19	
morning max el	10386 May 30 14:47	20°♎36'47	24°20'42		10387 May 08 04:08	0°♎	
	10386 Jun 07 16:12	0°♎		morning max el	10387 May 13 01:08	4°♎07'18	22°50'44
	10386 Jun 28 02:51	0°♎		desc. node	10387 May 15 10:50	6°♎41'10	
morning set	10386 Jul 05 07:00	12°♎02'50			10387 Jun 01 20:23	0°♎	

morning set	10387 Jun 16 07:24	22° $\Pi$ 37'25		direct	10388 Apr 15 21:24	12° $\Upsilon$ 42'34	
	10387 Jun 20 16:48	0° $\Theta$		morning max el	10388 Apr 24 15:28	17° $\Upsilon$ 46'38	21°25'04
max. Earth dist.	10387 Jun 20 19:35	0° $\Theta$ 11'53	1.40123 AU	desc. node	10388 May 01 07:42	25° $\Upsilon$ 32'27	
					10388 May 04 16:21	0° $\mathcal{B}$	
superior conj	10387 Jun 28 14:25	13° $\Theta$ 56'53	-1°24'46		10388 May 24 22:46	0° $\Pi$	
minimum elong	10387 Jun 28 20:02	14° $\Theta$ 22'28	1°24'29	morning set	10388 May 26 05:11	1° $\Pi$ 59'49	
	10387 Jul 07 04:13	0° $\Omega$		max. Earth dist.	10388 Jun 01 21:44	12° $\Pi$ 46'42	1.42280 AU
evening rise	10387 Jul 08 10:18	2° $\Omega$ 23'18					
asc. node	10387 Jul 08 11:49	2° $\Omega$ 30'30		superior conj	10388 Jun 09 08:26	25° $\Pi$ 18'48	-1°52'45
evening max el	10387 Jul 24 11:00	28° $\Omega$ 11'19	18°28'26	minimum elong	10388 Jun 09 14:45	25° $\Pi$ 46'04	1°52'41
	10387 Jul 26 13:28	0° $\mathcal{M}$			10388 Jun 12 01:06	0° $\Theta$	
retrograde	10387 Aug 01 03:47	2° $\mathcal{M}$ 02'45		evening rise	10388 Jun 20 14:07	15° $\Theta$ 18'41	
evening set	10387 Aug 03 05:54	1° $\mathcal{M}$ 46'35		asc. node	10388 Jun 24 08:48	22° $\Theta$ 08'42	
	10387 Aug 07 03:39	30° $\mathcal{R}$ $\Omega$			10388 Jun 28 21:13	0° $\Omega$	
inferior conj	10387 Aug 10 22:14	27° $\Omega$ 15'11	0°08'48	evening max el	10388 Jul 06 21:30	11° $\Omega$ 02'37	18°07'35
minimum elong	10387 Aug 10 22:32	27° $\Omega$ 14'33	0°08'23	retrograde	10388 Jul 13 17:13	14° $\Omega$ 30'51	
transit middle	10387 Aug 10 22:32	27° $\Omega$ 14'33	0°08'23	evening set	10388 Jul 16 03:06	14° $\Omega$ 05'12	
transit begin	10387 Aug 10 19:30	27° $\Omega$ 20'35		inferior conj	10388 Jul 23 00:58	9° $\Omega$ 13'06	1°30'24
transit end	10387 Aug 11 01:35	27° $\Omega$ 08'31		minimum elong	10388 Jul 23 03:29	9° $\Omega$ 07'20	1°29'10
desc. node	10387 Aug 11 09:47	26° $\Omega$ 52'15		min. Earth dist.	10388 Jul 26 07:49	6° $\Omega$ 13'03	0.60148 AU
min. Earth dist.	10387 Aug 14 06:01	24° $\Omega$ 38'35	0.57931 AU	desc. node	10388 Jul 28 07:00	4° $\Omega$ 36'26	
morning rise	10387 Aug 18 11:38	21° $\Omega$ 55'18		morning rise	10388 Jul 30 00:56	3° $\Omega$ 24'02	
direct	10387 Aug 24 11:59	20° $\Omega$ 22'20		direct	10388 Aug 05 13:14	1° $\Omega$ 21'46	
morning max el	10387 Sep 07 20:29	28° $\Omega$ 00'29	27°01'30	morning max el	10388 Aug 19 20:53	9° $\Omega$ 15'56	27°47'42
	10387 Sep 09 19:21	0° $\mathcal{M}$			10388 Sep 04 19:43	0° $\mathcal{M}$	
	10387 Sep 30 03:11	0° $\underline{\mathcal{A}}$		asc. node	10388 Sep 20 09:02	28° $\mathcal{M}$ 17'43	
asc. node	10387 Oct 04 12:13	8° $\underline{\mathcal{A}}$ 28'51		morning set	10388 Sep 21 04:34	29° $\mathcal{M}$ 59'04	
morning set	10387 Oct 07 23:07	15° $\underline{\mathcal{A}}$ 38'06			10388 Sep 21 04:44	0° $\underline{\mathcal{A}}$	
				max. Earth dist.	10388 Sep 27 08:05	13° $\underline{\mathcal{A}}$ 15'18	1.31538 AU
superior conj	10387 Oct 14 21:26	0° $\mathcal{M}$ 49'16	1°26'59				
minimum elong	10387 Oct 14 19:32	0° $\mathcal{M}$ 38'41	1°27'00	superior conj	10388 Sep 28 08:47	15° $\underline{\mathcal{A}}$ 32'06	1°12'16
	10387 Oct 14 12:35	0° $\mathcal{M}$		minimum elong	10388 Sep 28 06:33	15° $\underline{\mathcal{A}}$ 19'43	1°12'02
max. Earth dist.	10387 Oct 14 22:57	0° $\mathcal{M}$ 57'38	1.31502 AU		10388 Oct 04 22:28	0° $\mathcal{M}$	
evening rise	10387 Oct 21 16:40	15° $\mathcal{M}$ 43'30		evening rise	10388 Oct 05 02:05	0° $\mathcal{M}$ 19'28	
	10387 Oct 28 19:02	0° $\mathcal{X}$			10388 Oct 21 02:37	0° $\mathcal{X}$	
desc. node	10387 Nov 07 07:36	16° $\mathcal{X}$ 15'10		desc. node	10388 Oct 24 04:47	4° $\mathcal{X}$ 27'37	
	10387 Nov 17 18:05	0° $\mathcal{Z}$		evening max el	10388 Nov 01 17:00	14° $\mathcal{X}$ 23'34	25°42'13
evening max el	10387 Nov 20 21:12	3° $\mathcal{Z}$ 11'45	26°50'34	retrograde	10388 Nov 15 14:30	21° $\mathcal{X}$ 24'17	
retrograde	10387 Dec 04 19:35	10° $\mathcal{Z}$ 20'44		evening set	10388 Nov 21 17:56	19° $\mathcal{X}$ 56'40	
evening set	10387 Dec 11 14:51	8° $\mathcal{Z}$ 23'01		min. Earth dist.	10388 Nov 26 05:26	17° $\mathcal{X}$ 20'03	0.57824 AU
min. Earth dist.	10387 Dec 15 11:35	5° $\mathcal{Z}$ 44'57	0.59886 AU	inferior conj	10388 Nov 29 05:41	15° $\mathcal{X}$ 13'52	-5°02'13
inferior conj	10387 Dec 18 15:45	3° $\mathcal{Z}$ 11'28	-3°56'38	minimum elong	10388 Nov 29 13:09	15° $\mathcal{X}$ 00'47	5°00'14
minimum elong	10387 Dec 18 23:19	2° $\mathcal{Z}$ 56'11	3°53'46	morning rise	10388 Dec 07 10:42	10° $\mathcal{X}$ 54'07	
	10387 Dec 23 00:28	30° $\mathcal{R}$ $\mathcal{X}$		direct	10388 Dec 09 16:53	10° $\mathcal{X}$ 38'13	
morning rise	10387 Dec 26 10:27	28° $\mathcal{X}$ 29'14		asc. node	10388 Dec 17 09:07	13° $\mathcal{X}$ 56'05	
direct	10387 Dec 28 13:37	28° $\mathcal{X}$ 12'11		morning max el	10388 Dec 18 08:35	14° $\mathcal{X}$ 49'42	18°48'14
asc. node	10387 Dec 31 12:04	28° $\mathcal{X}$ 46'04			10388 Dec 28 20:52	0° $\mathcal{Z}$	
	10388 Jan 02 19:01	0° $\mathcal{Z}$		morning set	10389 Jan 03 16:26	11° $\mathcal{Z}$ 03'17	
morning max el	10388 Jan 05 03:27	1° $\mathcal{Z}$ 57'48	18°08'22				
morning set	10388 Jan 20 19:18	26° $\mathcal{Z}$ 47'54		superior conj	10389 Jan 12 06:19	27° $\mathcal{Z}$ 41'39	0°58'24
	10388 Jan 22 12:17	0° $\approx$		minimum elong	10389 Jan 12 09:26	27° $\mathcal{Z}$ 56'20	0°58'25
					10389 Jan 13 11:44	0° $\approx$	
superior conj	10388 Jan 30 11:32	14° $\approx$ 40'20	0°28'56	max. Earth dist.	10389 Jan 19 09:57	10° $\approx$ 46'39	1.39477 AU
minimum elong	10388 Jan 30 13:42	14° $\approx$ 50'01	0°28'58	desc. node	10389 Jan 20 03:49	12° $\approx$ 05'09	
desc. node	10388 Feb 03 06:57	21° $\approx$ 23'48		evening rise	10389 Jan 23 08:46	17° $\approx$ 36'43	
max. Earth dist.	10388 Feb 07 02:30	27° $\approx$ 55'01	1.41629 AU		10389 Jan 30 22:45	0° $\mathcal{H}$	
	10388 Feb 08 08:22	0° $\mathcal{H}$			10389 Feb 21 04:55	0° $\Upsilon$	
evening rise	10388 Feb 12 04:25	6° $\mathcal{H}$ 17'10		evening max el	10389 Feb 27 10:06	6° $\Upsilon$ 55'05	24°14'00
	10388 Feb 27 17:42	0° $\Upsilon$		retrograde	10389 Mar 10 16:39	13° $\Upsilon$ 31'41	
evening max el	10388 Mar 16 19:58	23° $\Upsilon$ 06'40	22°53'46	asc. node	10389 Mar 15 07:31	11° $\Upsilon$ 52'56	
retrograde	10388 Mar 26 23:55	29° $\Upsilon$ 07'13		evening set	10389 Mar 16 01:54	11° $\Upsilon$ 16'33	
asc. node	10388 Mar 28 10:17	28° $\Upsilon$ 57'16		min. Earth dist.	10389 Mar 20 17:42	5° $\Upsilon$ 55'27	0.68299 AU
evening set	10388 Mar 31 21:07	27° $\Upsilon$ 05'31		inferior conj	10389 Mar 21 13:51	4° $\Upsilon$ 47'30	1°53'31
inferior conj	10388 Apr 06 05:43	20° $\Upsilon$ 40'53	2°29'24	minimum elong	10389 Mar 21 11:44	4° $\Upsilon$ 54'39	1°52'50
minimum elong	10388 Apr 06 03:34	20° $\Upsilon$ 48'22	2°28'43		10389 Mar 25 12:02	30° $\mathcal{R}$ $\mathcal{H}$	
min. Earth dist.	10388 Apr 05 21:34	21° $\Upsilon$ 09'11	0.68622 AU	morning rise	10389 Mar 26 21:39	28° $\mathcal{H}$ 46'28	
morning rise	10388 Apr 11 09:54	14° $\Upsilon$ 32'46		direct	10389 Mar 30 20:09	27° $\mathcal{H}$ 18'11	

	10389 Apr 05 17:53	0°♿		morning max el	10390 Mar 21 18:10	15°♿41'08	19°09'30
morning max el	10389 Apr 07 12:51	1°♿38'05	20°10'03		10390 Apr 01 18:44	0°♿	
desc. node	10389 Apr 18 04:31	14°♿59'46		greatest brilliancy	10390 Apr 03 20:37	3°♿05'38	-0.7m
	10389 Apr 28 09:27	0°♿		desc. node	10390 Apr 05 01:19	4°♿53'44	
morning set	10389 May 05 06:55	10°♿31'06		morning set	10390 Apr 14 09:02	19°♿11'40	
max. Earth dist.	10389 May 15 07:23	26°♿14'19	1.44038 AU		10390 Apr 21 08:14	0°♿	
	10389 May 17 15:35	0°♿		max. Earth dist.	10390 Apr 27 22:52	10°♿20'04	1.45198 AU
superior conj	10389 May 21 02:30	5°♿37'25	-2°10'16	superior conj	10390 Apr 30 21:38	14°♿59'04	-2°10'47
minimum elong	10389 May 21 05:55	5°♿51'24	2°10'35	minimum elong	10390 Apr 30 18:05	14°♿45'02	2°11'01
evening rise	10389 Jun 03 00:19	27°♿25'14			10390 May 10 06:32	0°♿	
	10389 Jun 04 12:09	0°♿		evening rise	10390 May 15 12:25	8°♿34'17	
asc. node	10389 Jun 11 05:50	11°♿27'44			10390 May 28 21:05	0°♿	
evening max el	10389 Jun 20 10:59	24°♿16'50	18°05'58	asc. node	10390 May 29 02:53	0°♿21'12	
retrograde	10389 Jun 26 20:53	27°♿37'12		evening max el	10390 Jun 04 00:16	7°♿46'03	18°22'49
evening set	10389 Jun 29 14:34	26°♿59'24		retrograde	10390 Jun 10 10:12	11°♿12'39	
inferior conj	10389 Jul 05 21:26	21°♿48'08	2°26'22	evening set	10390 Jun 13 11:38	10°♿20'55	
minimum elong	10389 Jul 06 00:09	21°♿40'58	2°25'13	inferior conj	10390 Jun 19 07:31	4°♿52'27	3°00'07
min. Earth dist.	10389 Jul 08 18:31	18°♿47'44	0.62402 AU	minimum elong	10390 Jun 19 09:24	4°♿46'55	2°59'19
morning rise	10389 Jul 12 07:47	15°♿40'06		min. Earth dist.	10390 Jun 21 14:44	2°♿11'34	0.64456 AU
desc. node	10389 Jul 15 04:10	14°♿01'45			10390 Jun 23 16:09	30°♿♿	
direct	10389 Jul 19 00:50	13°♿13'51		morning rise	10390 Jun 25 06:01	28°♿34'44	
morning max el	10389 Aug 02 03:24	21°♿16'00	27°55'25	direct	10390 Jul 01 21:13	25°♿53'53	
	10389 Aug 09 17:22	0°♿		desc. node	10390 Jul 02 01:16	25°♿53'58	
	10389 Aug 28 22:07	0°♿			10390 Jul 11 06:02	0°♿	
morning set	10389 Sep 05 04:05	14°♿00'03		morning max el	10390 Jul 15 13:25	3°♿53'48	27°26'55
asc. node	10389 Sep 07 05:51	18°♿16'25			10390 Aug 04 05:14	0°♿	
max. Earth dist.	10389 Sep 10 13:34	25°♿19'52	1.32063 AU	morning set	10390 Aug 19 19:11	27°♿34'41	
					10390 Aug 21 00:34	0°♿	
superior conj	10389 Sep 12 17:51	0°♿04'08	0°52'26	max. Earth dist.	10390 Aug 24 11:31	7°♿01'56	1.33085 AU
minimum elong	10389 Sep 12 15:47	29°♿52'49	0°52'01	asc. node	10390 Aug 25 02:39	8°♿20'41	
	10389 Sep 12 17:06	0°♿					
evening rise	10389 Sep 19 13:20	14°♿57'38		superior conj	10390 Aug 27 22:41	14°♿19'57	0°27'48
	10389 Sep 26 23:17	0°♿		minimum elong	10390 Aug 27 21:22	14°♿12'54	0°27'21
desc. node	10389 Oct 11 02:00	21°♿30'36		evening rise	10390 Sep 04 00:35	29°♿32'49	
evening max el	10389 Oct 14 05:16	24°♿49'00	24°09'42		10390 Sep 04 05:42	0°♿	
	10389 Oct 21 06:27	0°♿			10390 Sep 21 07:19	0°♿	
retrograde	10389 Oct 27 21:20	1°♿39'38		evening max el	10390 Sep 25 16:27	4°♿55'52	22°29'12
evening set	10389 Nov 01 20:30	0°♿45'27		desc. node	10390 Sep 27 23:15	6°♿58'46	
	10389 Nov 03 17:05	30°♿♿		retrograde	10390 Oct 08 16:22	11°♿24'19	
min. Earth dist.	10389 Nov 07 15:59	27°♿51'29	0.56061 AU	evening set	10390 Oct 12 03:38	10°♿57'49	
inferior conj	10389 Nov 09 23:02	26°♿27'04	-5°41'33	min. Earth dist.	10390 Oct 19 23:33	7°♿28'35	0.54911 AU
minimum elong	10389 Nov 10 01:50	26°♿22'46	5°41'00	inferior conj	10390 Oct 20 22:45	6°♿55'44	-5°33'35
morning rise	10389 Nov 18 09:12	22°♿28'29		minimum elong	10390 Oct 20 17:25	7°♿03'17	5°32'44
direct	10389 Nov 21 00:39	22°♿10'20		morning rise	10390 Oct 29 08:53	3°♿08'16	
morning max el	10389 Dec 01 02:13	26°♿56'50	19°50'38	direct	10390 Nov 01 15:04	2°♿44'15	
	10389 Dec 03 22:04	0°♿		morning max el	10390 Nov 13 06:23	8°♿13'37	21°15'15
asc. node	10389 Dec 04 06:06	0°♿24'32		asc. node	10390 Nov 21 03:03	17°♿55'35	
morning set	10389 Dec 18 20:46	25°♿36'53			10390 Nov 28 02:19	0°♿	
	10389 Dec 21 00:30	0°♿		morning set	10390 Dec 03 05:34	10°♿20'36	
superior conj	10389 Dec 26 16:01	11°♿24'35	1°19'36	superior conj	10390 Dec 10 12:23	25°♿36'42	1°33'00
minimum elong	10389 Dec 26 18:46	11°♿38'16	1°19'48	minimum elong	10390 Dec 10 14:08	25°♿45'46	1°33'22
max. Earth dist.	10390 Jan 01 16:18	23°♿00'44	1.37278 AU		10390 Dec 12 15:40	0°♿	
evening rise	10390 Jan 05 09:48	29°♿49'53		max. Earth dist.	10390 Dec 15 02:12	4°♿53'54	1.35276 AU
	10390 Jan 05 12:04	0°♿		evening rise	10390 Dec 19 04:23	12°♿48'15	
desc. node	10390 Jan 07 00:43	2°♿42'13		desc. node	10390 Dec 24 21:39	23°♿10'19	
	10390 Jan 24 05:15	0°♿			10390 Dec 28 22:14	0°♿	
evening max el	10390 Feb 09 23:21	20°♿44'42	25°29'02		10391 Jan 19 06:03	0°♿	
retrograde	10390 Feb 22 05:03	27°♿48'12		evening max el	10391 Jan 23 12:40	4°♿30'08	26°31'43
evening set	10390 Feb 28 02:30	25°♿22'09		retrograde	10391 Feb 05 12:19	11°♿49'00	
asc. node	10390 Mar 02 04:43	23°♿19'17		evening set	10391 Feb 11 21:08	9°♿16'13	
min. Earth dist.	10390 Mar 04 11:06	20°♿36'02	0.67560 AU	min. Earth dist.	10391 Feb 15 23:37	5°♿04'27	0.66428 AU
inferior conj	10390 Mar 05 19:06	18°♿53'14	1°08'30	asc. node	10391 Feb 17 01:55	3°♿45'47	
minimum elong	10390 Mar 05 17:33	18°♿58'15	1°08'02	inferior conj	10391 Feb 17 19:26	2°♿52'57	0°14'20
morning rise	10390 Mar 11 09:02	13°♿00'43		minimum elong	10391 Feb 17 19:03	2°♿54'08	0°14'27
direct	10390 Mar 14 19:30	11°♿52'58		transit middle	10391 Feb 17 19:03	2°♿54'08	0°14'27

transit begin	10391 Feb 17 17:47	2° $\text{H}$ 57'57		min. Earth dist.	10392 Jan 30 05:09	19° $\approx$ 13'57	0.64940 AU
transit end	10391 Feb 17 20:19	2° $\text{H}$ 50'18		inferior conj	10392 Feb 01 12:33	16° $\approx$ 41'41	-0°48'34
	10391 Feb 20 07:51	30° $\approx$		minimum elong	10392 Feb 01 14:01	16° $\approx$ 37'41	0°47'35
morning rise	10391 Feb 23 17:57	27° $\approx$ 10'50		asc. node	10392 Feb 03 23:06	14° $\approx$ 07'34	
direct	10391 Feb 26 17:46	26° $\approx$ 20'42		morning rise	10392 Feb 07 21:53	11° $\approx$ 12'15	
	10391 Mar 05 10:14	0° $\text{H}$		direct	10392 Feb 10 12:46	10° $\approx$ 36'07	
morning max el	10391 Mar 05 06:07	29° $\approx$ 49'48	18°25'00	morning max el	10392 Feb 16 22:19	13° $\approx$ 57'19	17°57'20
desc. node	10391 Mar 22 22:04	25° $\text{H}$ 06'32			10392 Feb 28 08:41	0° $\text{H}$	
morning set	10391 Mar 25 08:51	28° $\text{H}$ 59'58		morning set	10392 Mar 05 13:58	10° $\text{H}$ 15'20	
	10391 Mar 25 23:58	0° $\text{Y}$		desc. node	10392 Mar 08 18:51	15° $\text{H}$ 32'54	
					10392 Mar 17 16:25	0° $\text{Y}$	
superior conj	10391 Apr 10 04:08	23° $\text{Y}$ 53'49	-1°51'01				
minimum elong	10391 Apr 09 18:59	23° $\text{Y}$ 18'06	1°50'26	superior conj	10392 Mar 19 16:06	3° $\text{Y}$ 10'07	-1°15'01
max. Earth dist.	10391 Apr 10 17:33	24° $\text{Y}$ 46'15	1.45647 AU	minimum elong	10392 Mar 19 07:59	2° $\text{Y}$ 37'47	1°14'00
	10391 Apr 14 01:50	0° $\text{B}$		max. Earth dist.	10392 Mar 23 13:09	9° $\text{Y}$ 17'46	1.45354 AU
evening rise	10391 Apr 26 00:33	18° $\text{B}$ 44'30		evening rise	10392 Apr 04 17:50	28° $\text{Y}$ 13'50	
	10391 May 03 04:10	0° $\text{II}$			10392 Apr 05 21:28	0° $\text{B}$	
greatest brilliancy	10391 May 05 19:12	4° $\text{II}$ 05'31	-0.8m	greatest brilliancy	10392 Apr 19 00:31	19° $\text{B}$ 51'13	-0.6m
asc. node	10391 May 15 23:59	18° $\text{II}$ 40'12			10392 Apr 26 07:19	0° $\text{II}$	
evening max el	10391 May 18 10:43	21° $\text{II}$ 23'43	18°57'22	evening max el	10392 Apr 30 16:31	5° $\text{II}$ 05'20	19°48'12
retrograde	10391 May 25 05:19	25° $\text{II}$ 09'10		asc. node	10392 May 01 21:08	6° $\text{II}$ 13'51	
evening set	10391 May 28 14:51	24° $\text{II}$ 02'23		retrograde	10392 May 08 03:19	9° $\text{II}$ 20'49	
inferior conj	10391 Jun 03 03:24	18° $\text{II}$ 18'26	3°15'55	evening set	10392 May 11 21:40	7° $\text{II}$ 58'20	
minimum elong	10391 Jun 03 04:07	18° $\text{II}$ 16'09	3°15'24	inferior conj	10392 May 17 06:01	2° $\text{II}$ 00'17	3°17'19
min. Earth dist.	10391 Jun 04 19:37	16° $\text{II}$ 11'11	0.66160 AU	minimum elong	10392 May 17 05:35	2° $\text{II}$ 01'43	3°16'54
morning rise	10391 Jun 08 16:46	11° $\text{II}$ 57'40		min. Earth dist.	10392 May 18 07:30	0° $\text{II}$ 34'57	0.67438 AU
direct	10391 Jun 15 00:58	9° $\text{II}$ 13'26			10392 May 18 18:05	30° $\text{R}$ $\text{B}$	
desc. node	10391 Jun 18 22:19	10° $\text{II}$ 05'13		morning rise	10392 May 22 13:10	25° $\text{B}$ 40'39	
morning max el	10391 Jun 28 00:11	16° $\text{II}$ 56'59	26°29'00	direct	10392 May 28 10:44	23° $\text{B}$ 03'27	
	10391 Jul 08 20:37	0° $\text{B}$		desc. node	10392 Jun 04 19:20	26° $\text{B}$ 07'24	
	10391 Jul 28 02:57	0° $\Omega$			10392 Jun 09 04:21	0° $\text{II}$	
morning set	10391 Aug 02 22:39	10° $\Omega$ 34'26		morning max el	10392 Jun 09 10:01	0° $\text{II}$ 14'17	25°10'49
max. Earth dist.	10391 Aug 06 23:06	18° $\Omega$ 18'41	1.34603 AU		10392 Jul 01 18:21	0° $\text{B}$	
				morning set	10392 Jul 15 10:13	22° $\text{B}$ 47'35	
superior conj	10391 Aug 11 20:56	28° $\Omega$ 13'27	-0°01'04	max. Earth dist.	10392 Jul 19 00:45	29° $\text{B}$ 22'28	1.36567 AU
minimum elong	10391 Aug 11 21:01	28° $\Omega$ 13'51	0°01'20		10392 Jul 19 08:49	0° $\Omega$	
behind sun begin	10391 Aug 11 15:10	27° $\Omega$ 43'40					
behind sun end	10391 Aug 12 02:52	28° $\Omega$ 44'04		superior conj	10392 Jul 25 09:41	11° $\Omega$ 36'29	-0°33'02
asc. node	10391 Aug 11 23:30	28° $\Omega$ 26'40		minimum elong	10392 Jul 25 11:47	11° $\Omega$ 46'48	0°33'02
	10391 Aug 12 17:32	0° $\text{H}$		asc. node	10392 Jul 28 20:22	18° $\Omega$ 29'55	
evening rise	10391 Aug 19 09:51	13° $\text{H}$ 59'35		evening rise	10392 Aug 02 14:55	28° $\Omega$ 11'09	
	10391 Aug 27 13:41	0° $\underline{\text{A}}$			10392 Aug 03 12:30	0° $\text{H}$	
evening max el	10391 Sep 07 12:07	15° $\underline{\text{A}}$ 22'08	20°57'01	evening max el	10392 Aug 19 21:10	26° $\text{H}$ 29'51	19°42'40
desc. node	10391 Sep 14 20:30	20° $\underline{\text{A}}$ 22'24			10392 Aug 24 10:30	0° $\underline{\text{A}}$	
retrograde	10391 Sep 19 04:13	21° $\underline{\text{A}}$ 09'25		retrograde	10392 Aug 29 20:29	1° $\underline{\text{A}}$ 26'42	
evening set	10391 Sep 21 11:23	20° $\underline{\text{A}}$ 56'52		evening set	10392 Aug 31 17:09	1° $\underline{\text{A}}$ 17'08	
inferior conj	10391 Sep 30 14:57	17° $\underline{\text{A}}$ 01'22	-4°28'26	desc. node	10392 Aug 31 17:47	1° $\underline{\text{A}}$ 16'52	
minimum elong	10391 Sep 30 05:06	17° $\underline{\text{A}}$ 15'21	4°25'42		10392 Sep 04 16:17	30° $\text{R}$ $\text{H}$	
min. Earth dist.	10391 Oct 01 07:40	16° $\underline{\text{A}}$ 37'38	0.54631 AU	inferior conj	10392 Sep 09 13:51	27° $\text{H}$ 14'26	-2°42'43
morning rise	10391 Oct 08 22:59	13° $\underline{\text{A}}$ 06'22		minimum elong	10392 Sep 09 06:35	27° $\text{H}$ 25'44	2°40'07
direct	10391 Oct 12 23:15	12° $\underline{\text{A}}$ 31'47		min. Earth dist.	10392 Sep 11 18:08	25° $\text{H}$ 53'18	0.55306 AU
morning max el	10391 Oct 25 22:56	18° $\underline{\text{A}}$ 45'56	22°57'01	morning rise	10392 Sep 17 18:05	22° $\text{H}$ 52'44	
	10391 Nov 04 03:02	0° $\text{M}$		direct	10392 Sep 22 13:53	22° $\text{H}$ 01'16	
asc. node	10391 Nov 07 23:58	6° $\text{M}$ 15'00		morning max el	10392 Oct 06 10:14	28° $\text{H}$ 54'19	24°44'01
morning set	10391 Nov 17 16:47	25° $\text{M}$ 08'50			10392 Oct 07 13:06	0° $\underline{\text{A}}$	
	10391 Nov 19 23:15	0° $\text{Z}$		asc. node	10392 Oct 24 20:52	25° $\underline{\text{A}}$ 10'05	
					10392 Oct 27 09:07	0° $\text{M}$	
superior conj	10391 Nov 24 16:11	10° $\text{Z}$ 08'38	1°39'17	morning set	10392 Nov 01 04:35	9° $\text{M}$ 55'36	
minimum elong	10391 Nov 24 16:43	10° $\text{Z}$ 11'33	1°39'43				
max. Earth dist.	10391 Nov 27 19:46	16° $\text{Z}$ 48'42	1.33641 AU	superior conj	10392 Nov 08 00:42	24° $\text{M}$ 51'32	1°39'07
evening rise	10391 Dec 02 12:52	26° $\text{Z}$ 22'56		minimum elong	10392 Nov 08 00:06	24° $\text{M}$ 48'13	1°39'29
	10391 Dec 04 09:31	0° $\text{B}$		max. Earth dist.	10392 Nov 09 21:21	28° $\text{M}$ 55'08	1.32445 AU
desc. node	10391 Dec 11 18:40	13° $\text{B}$ 24'43			10392 Nov 10 09:20	0° $\text{Z}$	
	10391 Dec 22 06:55	0° $\approx$		evening rise	10392 Nov 15 07:44	10° $\text{Z}$ 23'55	
evening max el	10392 Jan 06 01:57	18° $\approx$ 03'21	27°14'36		10392 Nov 25 16:59	0° $\text{B}$	
retrograde	10392 Jan 19 13:30	25° $\approx$ 26'23		desc. node	10392 Nov 27 15:44	3° $\text{B}$ 18'18	
evening set	10392 Jan 26 07:43	22° $\approx$ 52'47			10392 Dec 17 08:08	0° $\approx$	

evening max el	10392 Dec 18 13:33	1° $\approx$ 11'49	27°30'52	retrograde	10393 Dec 14 17:58	20° $\approx$ 54'43	
retrograde	10393 Jan 01 07:42	8° $\approx$ 31'15		evening set	10393 Dec 21 17:40	18° $\approx$ 43'17	
evening set	10393 Jan 08 07:41	6° $\approx$ 04'20		min. Earth dist.	10393 Dec 25 11:20	15° $\approx$ 57'31	0.61109 AU
min. Earth dist.	10393 Jan 12 01:34	2° $\approx$ 55'23	0.63140 AU	inferior conj	10393 Dec 28 13:33	13° $\approx$ 16'05	-3°13'58
inferior conj	10393 Jan 14 19:41	0° $\approx$ 12'13	-1°59'03	minimum elong	10393 Dec 28 20:01	13° $\approx$ 01'59	3°11'10
minimum elong	10393 Jan 14 23:34	0° $\approx$ 02'37	1°57'01	morning rise	10394 Jan 05 00:55	8° $\approx$ 21'43	
	10393 Jan 15 00:38	30° $\approx$ 3'		direct	10394 Jan 07 04:56	8° $\approx$ 02'21	
asc. node	10393 Jan 20 20:17	25° $\approx$ 21'32		asc. node	10394 Jan 07 17:27	8° $\approx$ 03'30	
morning rise	10393 Jan 21 17:38	24° $\approx$ 58'37		morning max el	10394 Jan 14 07:34	11° $\approx$ 36'45	17°55'05
direct	10393 Jan 24 01:44	24° $\approx$ 32'38			10394 Jan 26 13:34	0° $\approx$	
morning max el	10393 Jan 30 15:53	27° $\approx$ 55'48	17°47'05	morning set	10394 Jan 29 22:43	6° $\approx$ 08'12	
	10393 Feb 01 13:19	0° $\approx$					
morning set	10393 Feb 15 20:47	22° $\approx$ 44'58		superior conj	10394 Feb 09 10:03	24° $\approx$ 54'44	0°08'22
	10393 Feb 20 01:17	0° $\approx$		minimum elong	10394 Feb 09 10:48	24° $\approx$ 57'59	0°08'34
desc. node	10393 Feb 23 15:38	6° $\approx$ 08'20		behind sun begin	10394 Feb 09 03:47	24° $\approx$ 27'31	
				behind sun end	10394 Feb 09 17:48	25° $\approx$ 28'24	
superior conj	10393 Feb 28 00:31	13° $\approx$ 26'41	-0°32'21	desc. node	10394 Feb 10 12:25	26° $\approx$ 48'50	
minimum elong	10393 Feb 27 21:10	13° $\approx$ 12'48	0°31'40		10394 Feb 12 09:05	0° $\approx$	
max. Earth dist.	10393 Mar 06 07:24	23° $\approx$ 39'29	1.44348 AU	max. Earth dist.	10394 Feb 16 21:45	7° $\approx$ 34'16	1.42744 AU
	10393 Mar 10 07:31	0° $\approx$		evening rise	10394 Feb 23 02:09	17° $\approx$ 31'49	
evening rise	10393 Mar 15 05:22	7° $\approx$ 37'49			10394 Mar 03 04:31	0° $\approx$	
	10393 Mar 30 04:22	0° $\approx$			10394 Mar 25 02:47	0° $\approx$	
evening max el	10393 Apr 13 16:45	18° $\approx$ 48'30	20°52'57	evening max el	10394 Mar 27 11:38	2° $\approx$ 32'06	22°07'58
asc. node	10393 Apr 18 18:20	22° $\approx$ 48'42		retrograde	10394 Apr 05 23:33	8° $\approx$ 09'05	
retrograde	10393 Apr 22 02:00	23° $\approx$ 42'37		asc. node	10394 Apr 05 15:35	8° $\approx$ 08'32	
evening set	10393 Apr 26 06:03	22° $\approx$ 04'19		evening set	10394 Apr 10 14:16	6° $\approx$ 15'26	
inferior conj	10393 May 01 12:49	15° $\approx$ 53'53	3°06'49	inferior conj	10394 Apr 15 21:39	29° $\approx$ 54'56	2°45'52
minimum elong	10393 May 01 11:28	15° $\approx$ 58'35	3°06'19	minimum elong	10394 Apr 15 19:40	0° $\approx$ 01'49	2°45'14
min. Earth dist.	10393 May 02 00:29	15° $\approx$ 13'34	0.68253 AU		10394 Apr 15 20:11	30° $\approx$ 3'	
morning rise	10393 May 06 16:40	9° $\approx$ 37'41		min. Earth dist.	10394 Apr 15 20:26	29° $\approx$ 59'10	0.68610 AU
direct	10393 May 12 01:27	7° $\approx$ 15'31		morning rise	10394 Apr 21 00:56	23° $\approx$ 43'35	
desc. node	10393 May 22 16:18	13° $\approx$ 32'16		direct	10394 Apr 25 20:07	21° $\approx$ 41'15	
morning max el	10393 May 22 19:34	13° $\approx$ 40'29	23°42'31	morning max el	10394 May 05 07:19	27° $\approx$ 14'34	22°13'29
	10393 Jun 05 00:38	0° $\approx$			10394 May 07 21:07	0° $\approx$	
	10393 Jun 24 15:24	0° $\approx$		desc. node	10394 May 09 13:11	1° $\approx$ 56'42	
morning set	10393 Jun 27 00:57	4° $\approx$ 01'57			10394 May 29 14:44	0° $\approx$	
max. Earth dist.	10393 Jun 30 21:57	10° $\approx$ 44'06	1.38810 AU	morning set	10394 Jun 07 14:03	14° $\approx$ 05'30	
				max. Earth dist.	10394 Jun 12 20:59	22° $\approx$ 48'32	1.41073 AU
superior conj	10393 Jul 08 09:20	24° $\approx$ 20'36	-1°06'14		10394 Jun 17 02:07	0° $\approx$	
minimum elong	10393 Jul 08 13:46	24° $\approx$ 41'25	1°06'00				
	10393 Jul 11 08:46	0° $\approx$		superior conj	10394 Jun 20 15:24	6° $\approx$ 14'40	-1°37'30
asc. node	10393 Jul 15 17:17	8° $\approx$ 27'05		minimum elong	10394 Jun 20 21:37	6° $\approx$ 42'20	1°37'15
evening rise	10393 Jul 17 13:05	12° $\approx$ 00'51		evening rise	10394 Jul 01 00:47	25° $\approx$ 18'52	
	10393 Jul 27 09:23	0° $\approx$		asc. node	10394 Jul 02 14:14	28° $\approx$ 13'21	
evening max el	10393 Aug 02 18:55	8° $\approx$ 23'26	18°49'23		10394 Jul 03 13:14	0° $\approx$	
retrograde	10393 Aug 11 04:52	12° $\approx$ 35'20		evening max el	10394 Jul 17 01:49	20° $\approx$ 55'54	18°17'04
evening set	10393 Aug 13 03:21	12° $\approx$ 22'49		retrograde	10394 Jul 24 08:24	24° $\approx$ 35'58	
desc. node	10393 Aug 18 15:02	9° $\approx$ 53'09		evening set	10394 Jul 26 13:36	24° $\approx$ 16'15	
inferior conj	10393 Aug 21 06:54	8° $\approx$ 02'38	-0°49'31	inferior conj	10394 Aug 02 21:46	19° $\approx$ 35'45	0°46'36
minimum elong	10393 Aug 21 04:50	8° $\approx$ 06'22	0°48'55	minimum elong	10394 Aug 02 23:18	19° $\approx$ 32'29	0°45'41
min. Earth dist.	10393 Aug 24 08:58	5° $\approx$ 49'44	0.56806 AU	desc. node	10394 Aug 05 12:16	17° $\approx$ 23'24	
morning rise	10393 Aug 29 03:01	3° $\approx$ 03'40		min. Earth dist.	10394 Aug 06 06:25	16° $\approx$ 46'23	0.58849 AU
direct	10393 Sep 03 17:39	1° $\approx$ 47'52		morning rise	10394 Aug 10 05:36	14° $\approx$ 01'53	
morning max el	10393 Sep 18 00:07	9° $\approx$ 11'32	26°18'54	direct	10394 Aug 16 11:37	12° $\approx$ 16'27	
	10393 Oct 03 17:39	0° $\approx$		morning max el	10394 Aug 30 20:43	20° $\approx$ 02'42	27°25'47
asc. node	10393 Oct 11 17:45	14° $\approx$ 31'44			10394 Sep 08 09:33	0° $\approx$	
morning set	10393 Oct 16 15:18	24° $\approx$ 36'23			10394 Sep 26 12:13	0° $\approx$	
	10393 Oct 19 03:08	0° $\approx$		asc. node	10394 Sep 28 14:35	4° $\approx$ 12'29	
				morning set	10394 Sep 30 23:13	9° $\approx$ 06'23	
superior conj	10393 Oct 23 11:49	9° $\approx$ 39'03	1°33'01				
minimum elong	10393 Oct 23 10:17	9° $\approx$ 30'36	1°33'11	superior conj	10394 Oct 07 23:36	24° $\approx$ 25'24	1°21'23
max. Earth dist.	10393 Oct 24 04:40	11° $\approx$ 12'34	1.31714 AU	minimum elong	10394 Oct 07 21:30	24° $\approx$ 13'45	1°21'17
evening rise	10393 Oct 30 10:05	24° $\approx$ 43'32		max. Earth dist.	10394 Oct 07 14:10	23° $\approx$ 32'56	1.31458 AU
	10393 Nov 01 23:25	0° $\approx$			10394 Oct 10 11:47	0° $\approx$	
desc. node	10393 Nov 14 12:51	22° $\approx$ 42'35		evening rise	10394 Oct 14 17:31	9° $\approx$ 15'17	
	10393 Nov 19 09:17	0° $\approx$			10394 Oct 25 07:50	0° $\approx$	
evening max el	10393 Nov 30 20:50	13° $\approx$ 41'56	27°15'01	desc. node	10394 Nov 01 10:01	11° $\approx$ 26'06	

evening max el	10394 Nov 12 21:08	25°  23'17	26°25'05	desc. node	10395 Oct 19 07:14	29°  12'08	
	10394 Nov 18 19:20	0° 			10395 Oct 19 22:18	0° 	
retrograde	10394 Nov 26 19:22	2°  29'21		evening max el	10395 Oct 25 13:17	6°  13'33	25°05'01
evening set	10394 Dec 03 09:32	0°  43'12		retrograde	10395 Nov 08 09:51	13°  11'25	
	10394 Dec 04 16:10	30°  R 		evening set	10395 Nov 14 02:27	11°  15'58'10	
min. Earth dist.	10394 Dec 07 10:35	28°  08'08	0.58989 AU	min. Earth dist.	10395 Nov 19 01:10	9°  16'16	0.57014 AU
inferior conj	10394 Dec 10 14:39	25°  43'59	-4°26'25	inferior conj	10395 Nov 21 19:54	7°  16'10	-5°23'26
minimum elong	10394 Dec 10 22:36	25°  28'52	4°23'47	minimum elong	10395 Nov 22 02:01	7°  16'02	5°22'05
morning rise	10394 Dec 18 14:18	21°  11'38		morning rise	10395 Nov 30 03:51	3°  15'59	
direct	10394 Dec 20 18:01	20°  15'53'32		direct	10395 Dec 02 12:55	2°  15'59'42	
asc. node	10394 Dec 25 14:32	22°  12'21'19		morning max el	10395 Dec 11 18:32	7°  25'26	19°11'56
morning max el	10394 Dec 28 17:47	24°  15'04'43	18°22'44	asc. node	10395 Dec 12 11:33	8°  10'7'50	
	10395 Jan 02 00:47	0° 			10395 Dec 26 07:21	0° 	
morning set	10395 Jan 13 14:09	20°  08'41		morning set	10395 Dec 28 14:43	4°  03'32'51	
	10395 Jan 18 18:14	0° 					
superior conj	10395 Jan 22 18:09	7°  26'44	0°42'26	superior conj	10396 Jan 05 19:51	20°  03'47'27	1°08'22
minimum elong	10395 Jan 22 20:55	7°  39'26	0°42'26	minimum elong	10396 Jan 05 22:56	21°  02'18	1°08'27
desc. node	10395 Jan 28 09:14	17°  31'13			10396 Jan 10 16:50	0° 	
max. Earth dist.	10395 Jan 30 06:58	20°  48'55	1.40728 AU	max. Earth dist.	10396 Jan 12 12:57	3°  21'15	1.38531 AU
evening rise	10395 Feb 03 18:05	28°  18'47		desc. node	10396 Jan 15 06:06	8°  11'16	
	10395 Feb 04 18:47	0° 		evening rise	10396 Jan 16 07:34	10°  02'17	
	10395 Feb 24 18:10	0° 			10396 Jan 28 14:21	0° 	
evening max el	10395 Mar 10 02:48	16°  07'18'09	23°28'03	evening max el	10396 Feb 20 16:22	0°  07'16	24°47'00
retrograde	10395 Mar 20 18:31	22°  03'55'45			10396 Feb 20 13:25	0° 	
asc. node	10395 Mar 23 12:48	21°  05'59'16		retrograde	10396 Mar 03 09:37	6°  05'57'05	
evening set	10395 Mar 25 20:44	20°  07'27'59		evening set	10396 Mar 08 23:55	4°  03'37'08	
min. Earth dist.	10395 Mar 30 17:13	14°  06'46'34	0.68531 AU	asc. node	10396 Mar 09 10:02	4°  04'14'50	
inferior conj	10395 Mar 31 06:34	14°  00'41	2°15'20		10396 Mar 13 03:36	30°  R 	
minimum elong	10395 Mar 31 04:22	14°  08'14	2°14'37	min. Earth dist.	10396 Mar 13 12:34	29°  03'30'40	0.68031 AU
morning rise	10395 Apr 05 11:58	7°  05'55'21		inferior conj	10396 Mar 14 13:42	28°  03'13'49	1°35'33
direct	10395 Apr 09 17:44	6°  09'14'43		minimum elong	10396 Mar 14 11:45	28°  03'13'49	1°34'55
morning max el	10395 Apr 18 00:28	10°  05'59'10	20°51'35	morning rise	10396 Mar 19 23:47	22°  03'09'27	
desc. node	10395 Apr 26 10:01	21°  04'38		direct	10396 Mar 23 16:59	20°  03'50'08	
	10395 May 02 18:56	0° 		morning max el	10396 Mar 31 01:08	24°  03'55'19	19°42'18
morning set	10395 May 18 01:37	23°  00'00'58			10396 Apr 04 12:05	0° 	
	10395 May 22 11:59	0° 		desc. node	10396 Apr 12 06:48	10°  04'44'08	
max. Earth dist.	10395 May 26 01:46	5°  02'44'33	1.43085 AU	greatest brilliancy	10396 Apr 12 19:27	11°  03'30'20	-0.6m
					10396 Apr 25 01:48	0° 	
superior conj	10395 Jun 01 23:26	17°  02'09'22	-2°01'52	morning set	10396 Apr 26 00:20	1°  03'26'40	
minimum elong	10395 Jun 02 05:05	17°  02'33'12	2°01'58	max. Earth dist.	10396 May 07 13:36	19°  03'28'12	1.44609 AU
	10395 Jun 09 10:24	0° 					
evening rise	10395 Jun 13 21:40	7°  05'54'28		superior conj	10396 May 12 07:11	27°  03'01'56	-2°12'53
asc. node	10395 Jun 19 11:13	17°  05'43'58		minimum elong	10396 May 12 07:58	27°  03'05'04	2°13'17
	10395 Jun 27 05:07	0° 			10396 May 14 03:14	0° 	
evening max el	10395 Jun 30 13:58	3°  05'57'42	18°04'37	evening rise	10396 May 25 22:52	19°  02'36'49	
retrograde	10395 Jul 07 04:24	7°  02'20'58			10396 Jun 01 02:42	0° 	
evening set	10395 Jul 09 17:29	6°  05'50'35		asc. node	10396 Jun 05 08:15	6°  05'53'09	
inferior conj	10395 Jul 16 08:32	1°  05'50'21	1°57'06	evening max el	10396 Jun 13 03:47	17°  05'19'41	18°11'02
minimum elong	10395 Jul 16 11:19	1°  04'33'33	1°55'49	retrograde	10396 Jun 19 12:30	20°  05'40'48	
	10395 Jul 18 05:30	30°  R 		evening set	10396 Jun 22 09:31	19°  05'57'14	
min. Earth dist.	10395 Jul 19 12:07	28°  05'47'04	0.61114 AU	inferior conj	10396 Jun 28 11:15	14°  05'38'45	2°43'06
morning rise	10395 Jul 23 02:33	25°  05'51'43		minimum elong	10396 Jun 28 13:42	14°  05'32'00	2°42'06
desc. node	10395 Jul 23 09:28	25°  05'40'24		min. Earth dist.	10396 Jul 01 02:51	11°  05'44'23	0.63309 AU
direct	10395 Jul 29 17:44	23°  05'37'59		morning rise	10396 Jul 04 16:17	8°  05'25'51	
	10395 Aug 11 07:03	0° 		desc. node	10396 Jul 09 06:36	6°  05'06'37	
morning max el	10395 Aug 12 23:59	1°  05'37'36	27°55'38	direct	10396 Jul 11 09:29	5°  05'51'46	
	10395 Sep 02 16:54	0° 		morning max el	10396 Jul 25 08:06	13°  05'54'27	27°47'23
morning set	10395 Sep 15 02:25	23°  05'19'46			10396 Aug 07 07:35	0° 	
asc. node	10395 Sep 15 11:22	24°  05'06'06		morning set	10396 Aug 25 06:38	0° 	
	10395 Sep 18 06:22	0° 		asc. node	10396 Sep 01 08:09	14°  05'10'08'00	
max. Earth dist.	10395 Sep 20 22:03	5°  05'45'36	1.31694 AU	max. Earth dist.	10396 Sep 03 00:38	17°  05'10'41'17	1.32433 AU
superior conj	10395 Sep 22 10:12	9°  05'04'33	1°04'28	superior conj	10396 Sep 05 17:46	23°  05'10'31'10	0°42'34
minimum elong	10395 Sep 22 07:58	8°  05'52'15	1°04'09	minimum elong	10396 Sep 05 15:56	23°  05'21'15	0°42'07
evening rise	10395 Sep 29 03:55	23°  05'52'46			10396 Sep 08 17:10	0° 	
	10395 Oct 02 01:33	0° 		evening rise	10396 Sep 12 15:25	8°  05'30'54	

	10396 Sep 23 16:44	0°♄		behind sun end	10397 Aug 20 20:32	7°♄40'24	
desc. node	10396 Oct 05 04:28	15°♄38'57		evening rise	10397 Aug 28 02:03	23°♄03'10	
evening max el	10396 Oct 06 00:17	16°♄28'10	23°27'00		10397 Aug 31 10:34	0°♄	
retrograde	10396 Oct 19 11:15	23°♄10'46		evening max el	10397 Sep 17 14:01	26°♄38'47	21°48'12
evening set	10396 Oct 23 19:15	22°♄29'56			10397 Sep 21 14:51	0°♄	
min. Earth dist.	10396 Oct 30 10:12	19°♄22'53	0.55486 AU	desc. node	10397 Sep 22 01:44	0°♄17'55	
inferior conj	10396 Nov 01 05:06	18°♄19'50	-5°45'02	retrograde	10397 Sep 30 01:42	2°♄51'24	
minimum elong	10396 Nov 01 04:32	18°♄20'39	5°44'40	evening set	10397 Oct 02 23:30	2°♄32'22	
morning rise	10396 Nov 09 15:39	14°♄27'17			10397 Oct 09 09:46	30°♄♄	
direct	10396 Nov 12 12:54	14°♄07'00		inferior conj	10397 Oct 11 23:54	28°♄34'41	-5°12'34
morning max el	10396 Nov 23 06:28	19°♄11'24	20°23'53	minimum elong	10397 Oct 11 15:47	28°♄46'03	5°10'54
asc. node	10396 Nov 28 08:31	25°♄04'56		min. Earth dist.	10397 Oct 11 17:18	28°♄43'56	0.54684 AU
	10396 Dec 01 15:50	0°♄		morning rise	10397 Oct 20 09:18	24°♄46'56	
morning set	10396 Dec 11 21:16	19°♄11'45		direct	10397 Oct 23 23:12	24°♄18'57	
	10396 Dec 17 02:54	0°♄		morning max el	10397 Nov 05 05:00	0°♄06'52	21°56'57
					10397 Nov 05 02:03	0°♄	
superior conj	10396 Dec 19 10:33	4°♄43'57	1°26'12	asc. node	10397 Nov 15 05:27	12°♄57'59	
minimum elong	10396 Dec 19 12:56	4°♄56'00	1°26'28		10397 Nov 24 09:29	0°♄	
max. Earth dist.	10396 Dec 24 20:21	15°♄24'20	1.36402 AU	morning set	10397 Nov 26 07:21	3°♄58'23	
evening rise	10396 Dec 28 16:35	22°♄36'11					
desc. node	10397 Jan 01 03:01	28°♄45'06		superior conj	10397 Dec 03 10:27	19°♄05'35	1°36'30
	10397 Jan 01 20:12	0°♄		minimum elong	10397 Dec 03 11:41	19°♄12'08	1°36'54
	10397 Jan 21 09:11	0°♄		max. Earth dist.	10397 Dec 07 09:36	27°♄17'44	1.34538 AU
evening max el	10397 Feb 02 05:49	13°♄56'38	25°57'40		10397 Dec 08 17:51	0°♄	
retrograde	10397 Feb 14 19:48	21°♄07'22		evening rise	10397 Dec 11 17:31	5°♄51'08	
evening set	10397 Feb 20 22:11	18°♄38'11		desc. node	10397 Dec 19 00:00	19°♄08'18	
asc. node	10397 Feb 24 07:15	15°♄10'07			10397 Dec 25 13:38	0°♄	
min. Earth dist.	10397 Feb 25 04:12	14°♄06'35	0.67129 AU	evening max el	10398 Jan 15 19:20	27°♄38'44	26°52'44
inferior conj	10397 Feb 26 17:08	12°♄11'05	0°46'37		10398 Jan 18 09:57	0°♄	
minimum elong	10397 Feb 26 15:59	12°♄14'40	0°46'22	retrograde	10398 Jan 29 00:23	4°♄59'48	
morning rise	10397 Mar 04 10:24	6°♄22'31		evening set	10398 Feb 04 13:42	2°♄25'51	
direct	10397 Mar 07 16:14	5°♄22'29			10398 Feb 07 04:31	30°♄♄	
morning max el	10397 Mar 14 09:25	9°♄00'52	18°48'27	min. Earth dist.	10398 Feb 08 13:56	28°♄28'32	0.65842 AU
	10397 Mar 29 15:28	0°♄		inferior conj	10398 Feb 10 14:44	26°♄07'15	-0°11'19
desc. node	10397 Mar 30 03:34	0°♄46'45		minimum elong	10398 Feb 10 15:03	26°♄06'21	0°10'52
morning set	10397 Apr 05 09:43	10°♄30'33		transit middle	10398 Feb 10 15:03	26°♄06'21	0°10'52
	10397 Apr 17 21:24	0°♄		transit begin	10398 Feb 10 12:52	26°♄12'40	
max. Earth dist.	10397 Apr 20 07:02	3°♄45'32	1.45483 AU	transit end	10398 Feb 10 17:13	26°♄00'02	
				asc. node	10398 Feb 11 04:28	25°♄27'38	
superior conj	10397 Apr 21 18:59	6°♄06'29	-2°04'49	morning rise	10398 Feb 16 17:36	20°♄30'18	
minimum elong	10397 Apr 21 12:25	5°♄40'43	2°04'45	direct	10398 Feb 19 13:29	19°♄46'29	
	10397 May 06 19:45	0°♄		morning max el	10398 Feb 25 23:34	23°♄10'31	18°11'11
evening rise	10397 May 07 00:36	0°♄19'31			10398 Mar 03 13:04	0°♄	
greatest brilliancy	10397 May 12 22:58	9°♄53'15	-0.9m	morning set	10398 Mar 16 22:05	20°♄57'07	
asc. node	10397 May 23 05:20	25°♄32'56		desc. node	10398 Mar 17 00:20	21°♄06'16	
	10397 May 26 19:48	0°♄			10398 Mar 22 13:05	0°♄	
evening max el	10397 May 27 16:11	0°♄53'10	18°35'30				
retrograde	10397 Jun 03 04:37	4°♄25'58		superior conj	10398 Apr 01 01:33	15°♄04'34	-1°37'12
evening set	10397 Jun 06 09:34	3°♄27'45		minimum elong	10398 Mar 31 16:02	14°♄27'17	1°36'20
	10397 Jun 10 06:37	30°♄♄		max. Earth dist.	10398 Apr 03 03:05	18°♄18'43	1.45615 AU
inferior conj	10397 Jun 12 01:53	27°♄52'29	3°08'46		10398 Apr 10 14:54	0°♄	
minimum elong	10397 Jun 12 03:17	27°♄48'11	3°08'07	evening rise	10398 Apr 17 03:44	10°♄10'03	
min. Earth dist.	10397 Jun 14 02:41	25°♄24'49	0.65230 AU	greatest brilliancy	10398 Apr 29 00:15	28°♄27'33	-0.7m
morning rise	10397 Jun 17 20:10	21°♄33'07			10398 Apr 30 00:51	0°♄	
direct	10397 Jun 24 09:00	18°♄49'38		asc. node	10398 May 10 02:29	13°♄34'24	
desc. node	10397 Jun 26 03:42	19°♄00'25		evening max el	10398 May 11 00:50	14°♄33'01	19°17'03
morning max el	10397 Jul 07 18:33	26°♄43'37	27°05'28	retrograde	10398 May 18 01:23	18°♄30'03	
	10397 Jul 10 19:42	0°♄		evening set	10398 May 21 14:37	17°♄16'28	
	10397 Jul 31 22:47	0°♄		inferior conj	10398 May 27 01:00	11°♄26'04	3°18'06
morning set	10397 Aug 12 09:15	20°♄31'14		minimum elong	10398 May 27 01:13	11°♄25'22	3°17'39
max. Earth dist.	10397 Aug 16 18:27	29°♄12'21	1.33674 AU	min. Earth dist.	10398 May 28 10:45	9°♄36'16	0.66758 AU
	10397 Aug 17 03:48	0°♄		morning rise	10398 Jun 01 11:22	5°♄05'23	
asc. node	10397 Aug 19 04:58	4°♄13'17		direct	10398 Jun 07 15:15	2°♄23'21	
				desc. node	10398 Jun 13 00:45	4°♄02'41	
superior conj	10397 Aug 20 20:06	7°♄38'06	0°16'04	morning max el	10398 Jun 20 05:12	9°♄54'37	25°57'42
minimum elong	10397 Aug 20 19:17	7°♄33'50	0°15'39		10398 Jul 06 02:01	0°♄	
behind sun begin	10397 Aug 20 18:02	7°♄27'15			10398 Jul 24 12:21	0°♄	



morning set	10398 Jul 26 06:30	3°♎12'15			10399 Jun 29 10:36	0°♏		
max. Earth dist.	10398 Jul 30 01:49	10°♎22'11	1.35394 AU		morning set	10399 Jul 08 09:53	15°♏02'24	
					max. Earth dist.	10399 Jul 12 00:37	21°♏29'01	1.37495 AU
superior conj	10398 Aug 04 14:40	21°♎19'04	-0°14'19			10399 Jul 16 14:42	0°♎	
minimum elong	10398 Aug 04 15:32	21°♎23'26	0°14'30					
behind sun begin	10398 Aug 04 12:51	21°♎09'54			superior conj	10399 Jul 18 22:19	4°♎26'32	-0°47'09
behind sun end	10398 Aug 04 18:12	21°♎37'00			minimum elong	10399 Jul 19 01:23	4°♎41'26	0°47'01
asc. node	10398 Aug 06 01:50	24°♎18'22			asc. node	10399 Jul 23 22:46	14°♎19'40	
	10398 Aug 08 20:05	0°♎			evening rise	10399 Jul 27 12:21	21°♎27'23	
evening rise	10398 Aug 12 09:51	7°♎24'06				10399 Jul 31 21:02	0°♎	
	10398 Aug 24 17:13	0°♎			evening max el	10399 Aug 13 05:43	18°♎47'45	19°17'26
evening max el	10398 Aug 30 14:56	7°♎19'55	20°22'49		retrograde	10399 Aug 22 12:29	23°♎24'24	
desc. node	10398 Sep 08 23:01	12°♎39'37			evening set	10399 Aug 24 08:40	23°♎14'18	
retrograde	10398 Sep 10 14:11	12°♎46'36			desc. node	10399 Aug 26 20:17	22°♎31'04	
evening set	10398 Sep 12 14:45	12°♎36'17			inferior conj	10399 Sep 01 22:50	19°♎05'14	-1°53'48
inferior conj	10398 Sep 21 17:06	8°♎38'55	-3°46'40		minimum elong	10399 Sep 01 17:47	19°♎13'34	1°51'59
minimum elong	10398 Sep 21 07:39	8°♎52'45	3°43'37		min. Earth dist.	10399 Sep 04 14:25	17°♎20'32	0.55847 AU
min. Earth dist.	10398 Sep 23 01:59	7°♎50'51	0.54801 AU		morning rise	10399 Sep 10 00:08	14°♎27'44	
morning rise	10398 Sep 29 23:55	4°♎34'43			direct	10399 Sep 15 04:01	13°♎26'43	
direct	10398 Oct 04 08:08	3°♎54'09			morning max el	10399 Sep 29 06:12	20°♎34'55	25°27'00
morning max el	10398 Oct 17 18:25	10°♎25'34	23°43'01			10399 Oct 07 08:58	0°♎	
	10398 Nov 01 05:10	0°♎			asc. node	10399 Oct 19 23:14	20°♎41'17	
asc. node	10398 Nov 02 02:21	1°♎33'42				10399 Oct 24 14:29	0°♎	
morning set	10398 Nov 10 19:02	18°♎46'50			morning set	10399 Oct 26 06:36	3°♎32'08	
	10398 Nov 15 23:26	0°♎						
superior conj	10398 Nov 17 16:32	3°♎43'16	1°39'58		superior conj	10399 Nov 02 02:27	18°♎29'41	1°37'14
minimum elong	10398 Nov 17 16:35	3°♎43'28	1°40'24		minimum elong	10399 Nov 02 01:25	18°♎24'00	1°37'32
max. Earth dist.	10398 Nov 20 06:44	9°♎17'08	1.33071 AU		max. Earth dist.	10399 Nov 03 10:55	21°♎28'21	1.32066 AU
evening rise	10398 Nov 25 06:46	19°♎37'51				10399 Nov 07 09:36	0°♎	
	10398 Nov 30 15:53	0°♎			evening rise	10399 Nov 09 05:09	3°♎48'12	
desc. node	10398 Dec 05 21:03	9°♎14'56			desc. node	10399 Nov 22 18:09	28°♎57'48	
	10398 Dec 19 15:54	0°♎				10399 Nov 23 09:26	0°♎	
evening max el	10398 Dec 29 07:57	11°♎02'34	27°25'04		evening max el	10399 Dec 11 17:55	23°♎56'29	27°28'18
retrograde	10399 Jan 11 22:47	18°♎25'12				10399 Dec 20 05:38	0°♎	
evening set	10399 Jan 18 20:10	15°♎53'02			retrograde	10399 Dec 25 14:04	1°♎14'14	
min. Earth dist.	10399 Jan 22 15:40	12°♎27'49	0.64210 AU			10399 Dec 30 16:06	30°♎	
inferior conj	10399 Jan 25 03:59	9°♎49'15	-1°17'40		evening set	10400 Jan 01 14:42	28°♎52'37	
minimum elong	10399 Jan 25 06:25	9°♎42'51	1°16'14		min. Earth dist.	10400 Jan 05 07:47	25°♎54'36	0.62295 AU
asc. node	10399 Jan 29 01:40	6°♎05'40			inferior conj	10400 Jan 08 05:55	23°♎10'06	-2°30'33
morning rise	10399 Jan 31 18:32	4°♎26'31			minimum elong	10400 Jan 08 10:55	22°♎58'20	2°28'08
direct	10399 Feb 03 06:14	3°♎55'14			morning rise	10400 Jan 15 09:35	18°♎04'25	
morning max el	10399 Feb 09 16:50	7°♎15'57	17°50'51		asc. node	10400 Jan 15 22:48	17°♎54'46	
	10399 Feb 24 23:28	0°♎			direct	10400 Jan 17 15:25	17°♎41'49	
morning set	10399 Feb 26 14:51	2°♎46'28			morning max el	10400 Jan 24 10:04	21°♎08'53	17°48'07
desc. node	10399 Mar 03 21:05	11°♎37'02				10400 Jan 31 03:09	0°♎	
					morning set	10400 Feb 09 06:35	15°♎41'26	
superior conj	10399 Mar 11 21:02	24°♎43'59	-0°57'09			10400 Feb 17 10:18	0°♎	
minimum elong	10399 Mar 11 14:47	24°♎18'48	0°56'12		desc. node	10400 Feb 18 17:53	2°♎15'17	
	10399 Mar 15 03:59	0°♎						
max. Earth dist.	10399 Mar 16 22:20	2°♎47'55	1.45005 AU		superior conj	10400 Feb 20 16:09	5°♎31'30	-0°14'31
evening rise	10399 Mar 27 16:39	19°♎32'14			minimum elong	10400 Feb 20 14:45	5°♎25'38	0°14'02
	10399 Apr 03 13:42	0°♎			behind sun begin	10400 Feb 20 10:26	5°♎07'25	
evening max el	10399 Apr 24 04:12	28°♎15'04	20°14'10		behind sun end	10400 Feb 20 19:04	5°♎43'50	
	10399 Apr 26 01:10	0°♎			max. Earth dist.	10400 Feb 27 14:30	16°♎57'49	1.43733 AU
asc. node	10399 Apr 26 23:42	0°♎44'59			evening rise	10400 Mar 06 06:25	29°♎05'05	
retrograde	10399 May 02 00:04	2°♎46'40				10400 Mar 06 20:36	0°♎	
evening set	10399 May 05 22:21	1°♎17'31				10400 Mar 27 06:55	0°♎	
	10399 May 07 09:11	30°♎			evening max el	10400 Apr 06 02:01	11°♎58'17	21°23'54
inferior conj	10399 May 11 05:43	25°♎13'44	3°14'13		asc. node	10400 Apr 12 20:55	16°♎49'49	
minimum elong	10399 May 11 04:52	25°♎16'39	3°13'46		retrograde	10400 Apr 14 22:27	17°♎10'44	
min. Earth dist.	10399 May 12 01:11	24°♎07'23	0.67839 AU		evening set	10400 Apr 19 06:50	15°♎26'04	
morning rise	10399 May 16 11:06	18°♎55'05			inferior conj	10400 Apr 24 13:38	9°♎11'05	2°59'08
direct	10399 May 22 03:17	16°♎23'34			minimum elong	10400 Apr 24 11:59	9°♎16'51	2°58'34
desc. node	10399 May 30 21:43	20°♎43'09			min. Earth dist.	10400 Apr 24 19:48	8°♎49'37	0.68463 AU
morning max el	10399 Jun 02 14:56	23°♎16'57	24°33'52		morning rise	10400 Apr 29 16:54	2°♎56'32	
	10399 Jun 08 13:30	0°♎			direct	10400 May 04 19:56	0°♎42'10	
					morning max el	10400 May 15 00:52	6°♎45'46	23°04'01

desc. node	10400 May 16 18:37	8°♄35'31		min. Earth dist.	10401 Apr 08 16:21	23°♄37'08	0.68636 AU
	10400 Jun 02 01:23	0°♄		morning rise	10401 Apr 14 02:36	17°♄06'04	
morning set	10400 Jun 18 14:06	25°♄47'33		direct	10401 Apr 18 16:08	15°♄12'39	
	10400 Jun 21 02:12	0°♄		morning max el	10401 Apr 27 14:25	20°♄23'54	21°37'18
max. Earth dist.	10400 Jun 22 21:13	3°♄03'53	1.39784 AU	desc. node	10401 May 03 15:28	27°♄20'26	
					10401 May 05 16:52	0°♄	
superior conj	10400 Jun 30 15:01	16°♄50'42	-1°20'01		10401 May 26 06:19	0°♄	
minimum elong	10400 Jun 30 20:21	17°♄15'12	1°19'43	morning set	10401 May 29 15:45	5°♄20'24	
	10400 Jul 07 14:56	0°♄		max. Earth dist.	10401 Jun 04 22:39	15°♄31'43	1.41980 AU
asc. node	10400 Jul 09 19:42	4°♄12'46					
evening rise	10400 Jul 10 06:30	5°♄04'29		superior conj	10401 Jun 12 12:17	28°♄21'27	-1°49'02
	10400 Jul 25 09:08	0°♄		minimum elong	10401 Jun 12 18:41	28°♄49'16	1°48'54
evening max el	10400 Jul 26 07:55	0°♄59'27	18°33'12		10401 Jun 13 10:53	0°♄	
retrograde	10400 Aug 03 04:42	4°♄55'34		evening rise	10401 Jun 23 12:28	18°♄06'17	
evening set	10400 Aug 05 05:50	4°♄40'25		asc. node	10401 Jun 26 16:40	23°♄53'31	
desc. node	10400 Aug 12 17:32	0°♄26'33			10401 Jun 30 03:08	0°♄	
inferior conj	10400 Aug 13 01:04	0°♄12'02	-0°05'47	evening max el	10401 Jul 09 17:35	13°♄46'16	18°09'24
minimum elong	10400 Aug 13 00:50	0°♄12'29	0°05'59	retrograde	10401 Jul 16 15:44	17°♄17'04	
transit middle	10400 Aug 13 00:50	0°♄12'29	0°05'59	evening set	10401 Jul 19 00:24	16°♄53'02	
transit begin	10400 Aug 12 21:29	0°♄18'56		inferior conj	10401 Jul 26 00:50	12°♄03'45	1°19'42
transit end	10400 Aug 13 04:11	0°♄06'01		minimum elong	10401 Jul 26 03:09	11°♄58'32	1°18'31
	10400 Aug 13 07:17	30°♄		min. Earth dist.	10401 Jul 29 08:24	9°♄05'52	0.59810 AU
min. Earth dist.	10400 Aug 16 07:54	27°♄40'58	0.57626 AU	desc. node	10401 Jul 30 14:44	8°♄03'31	
morning rise	10400 Aug 20 16:20	24°♄57'29		morning rise	10401 Aug 02 02:52	6°♄18'21	
direct	10400 Aug 26 14:25	23°♄29'00		direct	10401 Aug 08 13:45	4°♄20'27	
	10400 Sep 08 19:27	0°♄		morning max el	10401 Aug 22 21:52	12°♄12'30	27°43'15
morning max el	10400 Sep 09 22:26	1°♄03'30	26°51'31		10401 Sep 05 22:34	0°♄	
	10400 Sep 30 11:49	0°♄		asc. node	10401 Sep 22 16:53	29°♄58'39	
asc. node	10400 Oct 05 20:04	10°♄11'41			10401 Sep 22 17:09	0°♄	
morning set	10400 Oct 09 16:17	18°♄08'35		morning set	10401 Sep 23 22:24	2°♄31'54	
	10400 Oct 15 02:34	0°♄		max. Earth dist.	10401 Sep 30 04:49	16°♄06'15	1.31504 AU
superior conj	10400 Oct 16 14:03	3°♄17'21	1°28'45	superior conj	10401 Oct 01 01:31	18°♄01'04	1°14'50
minimum elong	10400 Oct 16 12:14	3°♄07'16	1°28'49	minimum elong	10401 Sep 30 23:18	17°♄48'47	1°14'38
max. Earth dist.	10400 Oct 16 19:26	3°♄47'23	1.31542 AU		10401 Oct 06 11:37	0°♄	
evening rise	10400 Oct 23 09:55	18°♄13'49		evening rise	10401 Oct 07 18:51	2°♄48'46	
	10400 Oct 29 05:11	0°♄			10401 Oct 22 04:50	0°♄	
desc. node	10400 Nov 08 15:18	18°♄06'22		desc. node	10401 Oct 26 12:29	6°♄27'30	
	10400 Nov 17 06:25	0°♄		evening max el	10401 Nov 04 19:39	17°♄26'41	25°54'10
evening max el	10400 Nov 22 22:41	6°♄07'26	26°58'01	retrograde	10401 Nov 18 17:17	24°♄28'37	
retrograde	10400 Dec 06 20:49	13°♄17'07		evening set	10401 Nov 24 23:59	22°♄55'57	
evening set	10400 Dec 13 17:30	11°♄15'43		min. Earth dist.	10401 Nov 29 08:16	20°♄20'25	0.58117 AU
min. Earth dist.	10400 Dec 17 13:12	8°♄36'00	0.60204 AU	inferior conj	10401 Dec 02 09:55	18°♄09'09	-4°53'34
inferior conj	10400 Dec 20 17:03	6°♄00'03	-3°45'36	minimum elong	10401 Dec 02 17:38	17°♄55'20	4°51'22
minimum elong	10400 Dec 21 00:23	5°♄44'56	3°42'43	morning rise	10401 Dec 10 13:42	13°♄46'11	
morning rise	10400 Dec 28 09:54	1°♄14'28		direct	10401 Dec 12 19:06	13°♄30'18	
direct	10400 Dec 30 13:09	0°♄56'55		asc. node	10401 Dec 19 16:56	16°♄14'38	
asc. node	10401 Jan 01 19:53	1°♄17'48		morning max el	10401 Dec 21 06:19	17°♄37'09	18°40'58
morning max el	10401 Jan 06 23:48	4°♄39'23	18°04'16		10401 Dec 30 04:08	0°♄	
morning set	10401 Jan 22 14:54	29°♄22'44		morning set	10402 Jan 06 10:39	13°♄34'41	
	10401 Jan 22 22:54	0°♄			10402 Jan 14 23:08	0°♄	
superior conj	10401 Feb 01 11:47	17°♄28'15	0°23'45	superior conj	10402 Jan 15 03:56	0°♄22'29	0°54'28
minimum elong	10401 Feb 01 13:38	17°♄36'30	0°23'50	minimum elong	10402 Jan 15 07:00	0°♄36'51	0°54'28
desc. node	10401 Feb 04 14:41	22°♄57'13		desc. node	10402 Jan 22 11:31	13°♄39'01	
	10401 Feb 08 17:51	0°♄		max. Earth dist.	10402 Jan 22 10:40	13°♄35'18	1.39802 AU
max. Earth dist.	10401 Feb 09 02:42	0°♄37'00	1.41931 AU	evening rise	10402 Jan 26 11:46	20°♄32'01	
evening rise	10401 Feb 14 10:41	9°♄20'53			10402 Feb 01 06:34	0°♄	
	10401 Feb 27 22:40	0°♄			10402 Feb 22 02:14	0°♄	
evening max el	10401 Mar 19 19:15	25°♄43'55	22°41'48	evening max el	10402 Mar 02 09:32	9°♄31'49	24°02'11
	10401 Mar 24 22:13	0°♄		retrograde	10402 Mar 13 12:16	16°♄03'47	
retrograde	10401 Mar 29 18:58	1°♄38'14		asc. node	10402 Mar 17 15:20	14°♄44'11	
asc. node	10401 Mar 30 18:07	1°♄33'42		evening set	10402 Mar 18 19:44	13°♄50'23	
	10401 Apr 03 03:49	30°♄		min. Earth dist.	10402 Mar 23 12:40	8°♄24'09	0.68374 AU
evening set	10401 Apr 03 14:29	29°♄38'34		inferior conj	10402 Mar 24 07:06	7°♄21'40	1°59'34
inferior conj	10401 Apr 08 22:44	23°♄14'59	2°34'04	minimum elong	10402 Mar 24 04:56	7°♄28'59	1°58'53
minimum elong	10401 Apr 08 20:36	23°♄22'21	2°33'23	morning rise	10402 Mar 29 14:12	1°♄19'34	

	10402 Apr 01 03:28	30° $\text{R}\text{H}$		asc. node	10403 Mar 04 12:32	26° $\text{H}\text{23}'05$	
direct	10402 Apr 02 14:33	29° $\text{H}\text{48}'11$		min. Earth dist.	10403 Mar 07 06:39	23° $\text{H}\text{06}'04$	0.67695 AU
	10402 Apr 04 02:42	0° $\text{Y}$		inferior conj	10403 Mar 08 12:54	21° $\text{H}\text{28}'00$	1°15'55
morning max el	10402 Apr 10 10:41	4° $\text{Y}\text{13}'59$	20°20'25	minimum elong	10403 Mar 08 11:13	21° $\text{H}\text{33}'28$	1°15'25
desc. node	10402 Apr 20 12:16	16° $\text{Y}\text{43}'08$		morning rise	10403 Mar 14 01:46	15° $\text{H}\text{34}'05$	
	10402 Apr 29 15:27	0° $\text{B}$		direct	10403 Mar 17 13:54	14° $\text{H}\text{23}'28$	
morning set	10402 May 08 19:28	13° $\text{B}\text{56}'36$		morning max el	10403 Mar 24 14:51	18° $\text{H}\text{15}'44$	19°17'29
max. Earth dist.	10402 May 18 07:10	28° $\text{B}\text{52}'07$	1.43812 AU		10403 Apr 02 22:00	0° $\text{Y}$	
	10402 May 19 00:04	0° $\text{II}$		greatest brilliancy	10403 Apr 06 11:41	5° $\text{Y}\text{13}'49$	-0.7m
				desc. node	10403 Apr 07 09:03	6° $\text{Y}\text{33}'41$	
superior conj	10402 May 24 09:58	8° $\text{II}\text{49}'22$	-2°08'33	morning set	10403 Apr 17 19:55	22° $\text{Y}\text{31}'13$	
minimum elong	10402 May 24 14:07	9° $\text{II}\text{06}'31$	2°08'51		10403 Apr 22 15:55	0° $\text{B}$	
	10402 Jun 05 20:47	0° $\text{B}$		max. Earth dist.	10403 Apr 30 21:37	12° $\text{B}\text{52}'14$	1.45070 AU
evening rise	10402 Jun 06 01:35	0° $\text{B}\text{20}'52$					
asc. node	10402 Jun 13 13:40	13° $\text{B}\text{15}'58$		superior conj	10403 May 04 08:07	18° $\text{B}\text{18}'25$	-2°12'00
evening max el	10402 Jun 23 06:47	26° $\text{B}\text{57}'24$	18°05'00	minimum elong	10403 May 04 05:44	18° $\text{B}\text{08}'55$	2°12'18
	10402 Jun 27 19:59	0° $\text{O}$			10403 May 11 14:52	0° $\text{II}$	
retrograde	10402 Jun 29 17:36	0° $\text{O}\text{18}'13$		evening rise	10403 May 18 17:11	11° $\text{II}\text{38}'46$	
	10402 Jul 01 15:24	30° $\text{R}\text{B}$			10403 May 29 23:23	0° $\text{B}$	
evening set	10402 Jul 02 10:03	29° $\text{B}\text{42}'26$		asc. node	10403 May 31 10:43	2° $\text{B}\text{13}'55$	
inferior conj	10402 Jul 08 18:55	24° $\text{B}\text{33}'53$	2°19'21	evening max el	10403 Jun 06 20:17	10° $\text{B}\text{24}'59$	18°19'11
minimum elong	10402 Jul 08 21:42	24° $\text{B}\text{26}'43$	2°18'10	retrograde	10403 Jun 13 05:40	13° $\text{B}\text{49}'47$	
min. Earth dist.	10402 Jul 11 17:48	21° $\text{B}\text{32}'05$	0.62073 AU	evening set	10403 Jun 16 05:56	13° $\text{B}\text{00}'17$	
morning rise	10402 Jul 15 07:12	18° $\text{B}\text{27}'53$		inferior conj	10403 Jun 22 03:13	7° $\text{B}\text{34}'26$	2°56'11
desc. node	10402 Jul 17 11:54	17° $\text{B}\text{09}'00$		minimum elong	10403 Jun 22 05:16	7° $\text{B}\text{28}'30$	2°55'21
direct	10402 Jul 21 23:54	16° $\text{B}\text{04}'40$		min. Earth dist.	10403 Jun 24 12:42	4° $\text{B}\text{49}'24$	0.64169 AU
morning max el	10402 Aug 05 03:42	24° $\text{B}\text{06}'36$	27°56'42	morning rise	10403 Jun 28 03:19	1° $\text{B}\text{17}'37$	
	10402 Aug 10 11:10	0° $\text{O}$			10403 Jun 30 00:06	30° $\text{R}\text{II}$	
	10402 Aug 30 07:13	0° $\text{np}$		desc. node	10403 Jul 04 09:01	28° $\text{II}\text{38}'42$	
morning set	10402 Sep 07 22:58	16° $\text{np}\text{36}'37$		direct	10403 Jul 04 19:12	28° $\text{II}\text{38}'05$	
asc. node	10402 Sep 09 13:42	19° $\text{np}\text{56}'29$			10403 Jul 10 00:00	0° $\text{B}$	
max. Earth dist.	10402 Sep 13 11:05	28° $\text{np}\text{13}'42$	1.31949 AU	morning max el	10403 Jul 18 13:21	6° $\text{B}\text{39}'30$	27°33'11
	10402 Sep 14 06:39	0° $\text{B}$			10403 Aug 05 10:15	0° $\text{O}$	
				morning set	10403 Aug 22 15:31	0° $\text{np}\text{15}'57$	
superior conj	10402 Sep 15 11:03	2° $\text{B}\text{35}'19$	0°55'46		10403 Aug 22 12:17	0° $\text{np}$	
minimum elong	10402 Sep 15 08:55	2° $\text{B}\text{23}'38$	0°55'22	asc. node	10403 Aug 27 10:31	10° $\text{np}\text{00}'29$	
evening rise	10402 Sep 22 05:57	17° $\text{B}\text{27}'09$		max. Earth dist.	10403 Aug 27 10:18	9° $\text{np}\text{59}'17$	1.32896 AU
	10402 Sep 28 08:29	0° $\text{ml}$					
desc. node	10402 Oct 13 09:42	23° $\text{ml}\text{43}'02$		superior conj	10403 Aug 30 16:40	16° $\text{np}\text{54}'18$	0°31'51
evening max el	10402 Oct 17 08:44	27° $\text{ml}\text{58}'10$	24°24'29	minimum elong	10403 Aug 30 15:12	16° $\text{np}\text{46}'23$	0°31'23
	10402 Oct 19 15:30	0° $\text{A}$			10403 Sep 05 18:15	0° $\text{B}$	
retrograde	10402 Oct 31 02:16	4° $\text{A}\text{51}'14$		evening rise	10403 Sep 06 17:19	2° $\text{B}\text{03}'20$	
evening set	10402 Nov 05 06:21	3° $\text{A}\text{52}'07$			10403 Sep 22 01:05	0° $\text{ml}$	
min. Earth dist.	10402 Nov 10 19:43	1° $\text{A}\text{01}'55$	0.56288 AU	evening max el	10403 Sep 28 19:35	8° $\text{ml}\text{06}'04$	22°44'06
	10402 Nov 12 11:30	30° $\text{R}\text{ml}$		desc. node	10403 Sep 30 06:58	9° $\text{ml}\text{27}'52$	
inferior conj	10402 Nov 13 06:22	29° $\text{ml}\text{30}'22$	-5°38'15	retrograde	10403 Oct 11 23:03	14° $\text{ml}\text{38}'57$	
minimum elong	10402 Nov 13 10:11	29° $\text{ml}\text{24}'23$	5°37'31	evening set	10403 Oct 15 15:29	14° $\text{ml}\text{09}'13$	
morning rise	10402 Nov 21 16:10	25° $\text{ml}\text{29}'09$		min. Earth dist.	10403 Oct 23 03:41	10° $\text{ml}\text{46}'10$	0.55030 AU
direct	10402 Nov 24 05:44	25° $\text{ml}\text{11}'38$		inferior conj	10403 Oct 24 08:19	10° $\text{ml}\text{05}'19$	-5°38'32
morning max el	10402 Dec 04 01:59	29° $\text{ml}\text{52}'26$	19°39'54	minimum elong	10403 Oct 24 04:11	10° $\text{ml}\text{11}'14$	5°37'54
	10402 Dec 04 05:08	0° $\text{A}$		morning rise	10403 Nov 01 18:38	6° $\text{ml}\text{17}'01$	
asc. node	10402 Dec 06 13:56	2° $\text{A}\text{32}'49$		direct	10403 Nov 04 22:18	5° $\text{ml}\text{54}'07$	
morning set	10402 Dec 21 14:07	28° $\text{A}\text{06}'33$		morning max el	10403 Nov 16 08:12	11° $\text{ml}\text{17}'09$	21°01'18
	10402 Dec 22 12:34	0° $\text{B}$		asc. node	10403 Nov 23 10:54	19° $\text{ml}\text{55}'39$	
					10403 Nov 29 11:14	0° $\text{A}$	
superior conj	10402 Dec 29 11:44	14° $\text{B}\text{00}'38$	1°16'54	morning set	10403 Dec 05 22:25	12° $\text{A}\text{49}'21$	
minimum elong	10402 Dec 29 14:35	14° $\text{B}\text{14}'45$	1°17'03				
max. Earth dist.	10403 Jan 04 16:42	25° $\text{B}\text{53}'41$	1.37596 AU	superior conj	10403 Dec 13 06:46	28° $\text{A}\text{09}'16$	1°31'26
	10403 Jan 06 22:35	0° $\text{A}$		minimum elong	10403 Dec 13 08:42	28° $\text{A}\text{19}'12$	1°31'46
evening rise	10403 Jan 08 09:56	2° $\text{A}\text{38}'09$			10403 Dec 14 04:21	0° $\text{B}$	
desc. node	10403 Jan 09 08:25	4° $\text{A}\text{17}'20$		max. Earth dist.	10403 Dec 18 01:44	7° $\text{B}\text{48}'29$	1.35558 AU
	10403 Jan 25 09:22	0° $\text{H}$		evening rise	10403 Dec 22 02:12	15° $\text{B}\text{30}'49$	
evening max el	10403 Feb 12 22:47	23° $\text{H}\text{21}'30$	25°18'25	desc. node	10403 Dec 27 05:23	24° $\text{B}\text{47}'20$	
	10403 Feb 22 14:40	0° $\text{Y}$			10403 Dec 30 06:28	0° $\text{A}$	
retrograde	10403 Feb 25 01:29	0° $\text{Y}\text{22}'05$			10404 Jan 19 23:24	0° $\text{H}$	
	10403 Feb 27 09:16	30° $\text{R}\text{H}$		evening max el	10404 Jan 26 12:10	7° $\text{H}\text{08}'23$	26°23'27
evening set	10403 Mar 02 21:05	27° $\text{H}\text{57}'26$		retrograde	10404 Feb 08 09:36	14° $\text{H}\text{25}'40$	

evening set	10404 Feb 14 16:44	11° $\text{X}$ 53'43		evening max el	10405 Jan 08 01:38	20° $\approx$ 44'26	27°09'46
min. Earth dist.	10404 Feb 18 20:08	7° $\text{X}$ 36'44	0.66621 AU	retrograde	10405 Jan 21 11:41	28° $\approx$ 06'59	
asc. node	10404 Feb 19 09:45	6° $\text{X}$ 55'43		evening set	10405 Jan 28 04:41	25° $\approx$ 33'13	
inferior conj	10404 Feb 20 14:09	5° $\text{X}$ 29'09	0°23'09	min. Earth dist.	10405 Feb 01 02:51	21° $\approx$ 49'36	0.65184 AU
minimum elong	10404 Feb 20 13:32	5° $\text{X}$ 31'01	0°23'09	inferior conj	10405 Feb 03 08:32	19° $\approx$ 19'58	-0°38'29
morning rise	10404 Feb 26 11:13	29° $\approx$ 45'11		minimum elong	10405 Feb 03 09:40	19° $\approx$ 16'49	0°37'39
	10404 Feb 26 01:26	30° $\text{R}$ $\approx$		asc. node	10405 Feb 05 06:59	17° $\approx$ 14'12	
direct	10404 Feb 29 12:30	28° $\approx$ 52'37		morning rise	10405 Feb 09 16:06	13° $\approx$ 48'25	
	10404 Mar 04 02:18	0° $\text{X}$		direct	10405 Feb 12 08:16	13° $\approx$ 10'21	
morning max el	10404 Mar 07 01:55	2° $\text{X}$ 23'53	18°30'32	morning max el	10405 Feb 18 17:39	16° $\approx$ 31'56	18°00'22
desc. node	10404 Mar 24 05:50	26° $\text{X}$ 44'07			10405 Feb 28 14:39	0° $\text{X}$	
	10404 Mar 26 07:27	0° $\text{Y}$		morning set	10405 Mar 08 16:31	13° $\text{X}$ 10'21	
morning set	10404 Mar 27 15:40	2° $\text{Y}$ 07'19		desc. node	10405 Mar 11 02:35	17° $\text{X}$ 08'45	
					10405 Mar 19 00:52	0° $\text{Y}$	
superior conj	10404 Apr 12 15:32	27° $\text{Y}$ 14'47	-1°55'14	superior conj	10405 Mar 23 01:29	6° $\text{Y}$ 24'40	-1°21'07
minimum elong	10404 Apr 12 06:51	26° $\text{Y}$ 40'51	1°54'48	minimum elong	10405 Mar 22 16:50	5° $\text{Y}$ 50'22	1°20'08
max. Earth dist.	10404 Apr 12 15:57	27° $\text{Y}$ 16'25	1.45628 AU	max. Earth dist.	10405 Mar 26 11:50	11° $\text{Y}$ 49'09	1.45444 AU
	10404 Apr 14 09:47	0° $\text{Z}$			10405 Apr 07 04:35	0° $\text{Z}$	
evening rise	10404 Apr 28 08:48	21° $\text{Z}$ 57'26		evening rise	10405 Apr 08 04:14	1° $\text{Z}$ 31'11	
	10404 May 03 10:35	0° $\text{II}$		greatest brilliancy	10405 Apr 21 21:40	22° $\text{Z}$ 34'43	-0.7m
greatest brilliancy	10404 May 07 08:23	6° $\text{II}$ 09'11	-0.8m		10405 Apr 27 05:20	0° $\text{II}$	
asc. node	10404 May 17 07:50	20° $\text{II}$ 39'15		evening max el	10405 May 03 13:59	7° $\text{II}$ 43'57	19°39'41
evening max el	10404 May 20 07:22	24° $\text{II}$ 02'27	18°51'10	asc. node	10405 May 04 05:01	8° $\text{II}$ 20'49	
retrograde	10404 May 27 00:06	27° $\text{II}$ 44'08		retrograde	10405 May 10 21:51	11° $\text{II}$ 54'11	
evening set	10404 May 30 08:26	26° $\text{II}$ 39'37		evening set	10405 May 14 14:53	10° $\text{II}$ 33'57	
inferior conj	10404 Jun 04 21:52	20° $\text{II}$ 58'00	3°14'30	inferior conj	10405 May 19 23:40	4° $\text{II}$ 37'53	3°17'56
minimum elong	10404 Jun 04 22:46	20° $\text{II}$ 55'10	3°13'56	minimum elong	10405 May 19 23:24	4° $\text{II}$ 38'45	3°17'29
min. Earth dist.	10404 Jun 06 16:21	18° $\text{II}$ 45'05	0.65934 AU	min. Earth dist.	10405 May 21 03:16	3° $\text{II}$ 06'07	0.67277 AU
morning rise	10404 Jun 10 12:26	14° $\text{II}$ 37'29			10405 May 23 15:24	30° $\text{R}$ $\text{Z}$	
direct	10404 Jun 16 22:00	11° $\text{II}$ 53'01		morning rise	10405 May 25 07:34	28° $\text{Z}$ 17'59	
desc. node	10404 Jun 20 06:06	12° $\text{II}$ 31'07		direct	10405 May 31 06:53	25° $\text{Z}$ 39'18	
morning max el	10404 Jun 30 00:03	19° $\text{II}$ 39'44	26°39'08	desc. node	10405 Jun 07 03:06	28° $\text{Z}$ 18'37	
	10404 Jul 08 19:32	0° $\text{E}$			10405 Jun 09 07:03	0° $\text{II}$	
	10404 Jul 28 11:53	0° $\text{O}$		morning max el	10405 Jun 12 10:03	2° $\text{II}$ 55'37	25°23'24
morning set	10404 Aug 04 20:58	13° $\text{O}$ 21'45			10405 Jul 03 00:02	0° $\text{E}$	
max. Earth dist.	10404 Aug 08 23:27	21° $\text{O}$ 19'24	1.34348 AU	morning set	10405 Jul 18 11:12	25° $\text{E}$ 42'37	
asc. node	10404 Aug 13 07:23	0° $\text{P}$ 06'44			10405 Jul 20 19:32	0° $\text{O}$	
	10404 Aug 13 06:05	0° $\text{P}$		max. Earth dist.	10405 Jul 22 02:35	2° $\text{O}$ 24'38	1.36256 AU
superior conj	10404 Aug 13 16:07	0° $\text{P}$ 52'01	0°03'36	superior conj	10405 Jul 28 06:29	14° $\text{O}$ 20'08	-0°28'02
minimum elong	10404 Aug 13 15:56	0° $\text{P}$ 51'04	0°03'17	minimum elong	10405 Jul 28 08:14	14° $\text{O}$ 28'51	0°28'05
behind sun begin	10404 Aug 13 10:14	0° $\text{P}$ 21'31		asc. node	10405 Jul 31 04:15	20° $\text{O}$ 10'49	
behind sun end	10404 Aug 13 21:38	1° $\text{P}$ 20'40			10405 Aug 04 23:47	0° $\text{P}$	
evening rise	10404 Aug 21 03:03	16° $\text{P}$ 32'03		evening rise	10405 Aug 05 08:55	0° $\text{P}$ 46'29	
	10404 Aug 27 20:51	0° $\text{E}$		evening max el	10405 Aug 22 20:27	29° $\text{P}$ 28'08	19°52'21
evening max el	10404 Sep 09 13:33	18° $\text{E}$ 27'38	21°09'45		10405 Aug 23 09:37	0° $\text{E}$	
desc. node	10404 Sep 16 04:15	23° $\text{E}$ 12'19		retrograde	10405 Sep 02 01:49	4° $\text{E}$ 32'36	
retrograde	10404 Sep 21 11:03	24° $\text{E}$ 21'39		desc. node	10405 Sep 03 01:32	4° $\text{E}$ 29'56	
evening set	10404 Sep 23 21:28	24° $\text{E}$ 07'50		evening set	10405 Sep 03 23:08	4° $\text{E}$ 23'00	
inferior conj	10404 Oct 03 00:43	20° $\text{E}$ 12'20	-4°41'37	inferior conj	10405 Sep 12 21:41	0° $\text{E}$ 21'59	-2°59'58
minimum elong	10404 Oct 02 15:03	20° $\text{E}$ 25'56	4°39'06	minimum elong	10405 Sep 12 13:43	0° $\text{E}$ 34'09	2°57'10
min. Earth dist.	10404 Oct 03 11:30	19° $\text{E}$ 57'08	0.54617 AU		10405 Sep 13 12:03	30° $\text{R}$ $\text{P}$	
morning rise	10404 Oct 11 09:07	16° $\text{E}$ 19'51		min. Earth dist.	10405 Sep 14 21:18	29° $\text{P}$ 09'23	0.55151 AU
direct	10404 Oct 15 06:44	15° $\text{E}$ 47'05		morning rise	10405 Sep 21 02:43	26° $\text{P}$ 05'22	
morning max el	10404 Oct 28 02:03	21° $\text{E}$ 54'34	22°41'08	direct	10405 Sep 25 19:33	25° $\text{P}$ 17'01	
	10404 Nov 04 01:02	0° $\text{M}$			10405 Oct 07 04:36	0° $\text{E}$	
asc. node	10404 Nov 09 07:51	8° $\text{M}$ 08'34		morning max el	10405 Oct 09 13:36	2° $\text{E}$ 04'27	24°28'29
morning set	10404 Nov 19 09:25	27° $\text{M}$ 37'12		asc. node	10405 Oct 27 04:45	26° $\text{E}$ 58'55	
	10404 Nov 20 12:18	0° $\text{X}$			10405 Oct 28 19:08	0° $\text{M}$	
superior conj	10404 Nov 26 09:38	12° $\text{X}$ 38'33	1°38'44	morning set	10405 Nov 03 21:15	12° $\text{M}$ 24'41	
minimum elong	10404 Nov 26 10:22	12° $\text{X}$ 42'26	1°39'11	superior conj	10405 Nov 10 17:36	27° $\text{M}$ 20'20	1°39'31
max. Earth dist.	10404 Nov 29 18:09	19° $\text{X}$ 42'20	1.33862 AU	minimum elong	10405 Nov 10 17:09	27° $\text{M}$ 17'56	1°39'55
evening rise	10404 Dec 04 08:50	29° $\text{X}$ 00'34			10405 Nov 11 22:54	0° $\text{X}$	
	10404 Dec 04 21:01	0° $\text{Z}$		max. Earth dist.	10405 Nov 12 18:44	1° $\text{X}$ 47'25	1.32591 AU
desc. node	10404 Dec 13 02:24	15° $\text{Z}$ 04'09		evening rise	10405 Nov 18 02:20	12° $\text{X}$ 58'08	
	10404 Dec 22 10:08	0° $\approx$					

	10405 Nov 27 01:19	0°♄		desc. node	10406 Nov 16 20:36	24°♄31'22	
desc. node	10405 Nov 29 23:29	5°♄01'42			10406 Nov 20 09:52	0°♄	
	10405 Dec 17 17:37	0°♄		evening max el	10406 Dec 03 21:34	16°♄34'03	27°19'35
evening max el	10405 Dec 21 13:37	3°♄57'42	27°30'24	retrograde	10406 Dec 17 18:31	23°♄48'24	
retrograde	10406 Jan 04 06:54	11°♄17'54		evening set	10406 Dec 24 18:46	21°♄33'54	
evening set	10406 Jan 11 06:27	8°♄49'20		min. Earth dist.	10406 Dec 28 12:01	18°♄45'25	0.61419 AU
min. Earth dist.	10406 Jan 15 00:40	5°♄36'27	0.63425 AU	inferior conj	10406 Dec 31 13:24	16°♄02'36	-3°02'34
inferior conj	10406 Jan 17 17:22	2°♄54'07	-1°47'56	minimum elong	10406 Dec 31 19:30	15°♄49'02	2°59'50
minimum elong	10406 Jan 17 20:52	2°♄45'20	1°46'05	morning rise	10407 Jan 07 22:49	11°♄05'22	
	10406 Jan 20 19:08	30°♄♄		direct	10407 Jan 10 03:10	10°♄45'17	
asc. node	10406 Jan 23 04:09	28°♄17'44		asc. node	10407 Jan 10 01:16	10°♄45'19	
morning rise	10406 Jan 24 13:21	27°♄38'04		morning max el	10407 Jan 17 03:28	14°♄17'26	17°52'41
direct	10406 Jan 26 22:21	27°♄10'47			10407 Jan 27 21:51	0°♄	
	10406 Feb 01 21:23	0°♄		morning set	10407 Feb 01 19:23	8°♄47'02	
morning max el	10406 Feb 02 11:16	0°♄32'52	17°47'30				
morning set	10406 Feb 18 19:55	25°♄30'33		superior conj	10407 Feb 12 12:12	27°♄49'19	0°02'32
	10406 Feb 21 10:30	0°♄		minimum elong	10407 Feb 12 12:27	27°♄50'24	0°02'48
desc. node	10406 Feb 25 23:21	7°♄43'19		behind sun begin	10407 Feb 12 04:10	27°♄14'38	
				behind sun end	10407 Feb 12 20:45	28°♄26'05	
superior conj	10406 Mar 03 06:21	16°♄31'20	-0°38'52	desc. node	10407 Feb 12 20:10	28°♄23'37	
minimum elong	10406 Mar 03 02:14	16°♄14'27	0°38'06		10407 Feb 13 18:40	0°♄	
max. Earth dist.	10406 Mar 09 06:40	26°♄14'31	1.44539 AU	max. Earth dist.	10407 Feb 19 21:27	10°♄13'26	1.43015 AU
	10406 Mar 11 15:34	0°♄		evening rise	10407 Feb 26 10:13	20°♄41'23	
evening rise	10406 Mar 18 15:39	10°♄53'45			10407 Mar 04 11:02	0°♄	
	10406 Mar 31 08:39	0°♄			10407 Mar 25 20:01	0°♄	
evening max el	10406 Apr 16 15:01	21°♄26'54	20°42'31	evening max el	10407 Mar 30 10:32	5°♄10'02	21°56'17
asc. node	10406 Apr 21 02:13	25°♄05'43		asc. node	10407 Apr 07 23:25	10°♄37'48	
retrograde	10406 Apr 24 20:36	26°♄14'58		retrograde	10407 Apr 08 18:27	10°♄40'53	
evening set	10406 Apr 28 23:10	24°♄38'57		evening set	10407 Apr 13 07:28	8°♄49'32	
inferior conj	10406 May 04 06:00	18°♄30'05	3°09'06	inferior conj	10407 Apr 18 14:38	2°♄30'15	2°49'40
minimum elong	10406 May 04 04:46	18°♄34'21	3°08'37	minimum elong	10407 Apr 18 12:44	2°♄36'53	2°49'03
min. Earth dist.	10406 May 04 19:37	17°♄43'09	0.68161 AU	min. Earth dist.	10407 Apr 18 15:18	2°♄27'55	0.68587 AU
morning rise	10406 May 09 10:09	12°♄13'13			10407 Apr 20 10:29	30°♄♄	
direct	10406 May 14 20:51	9°♄48'35		morning rise	10407 Apr 23 17:49	26°♄17'58	
desc. node	10406 May 25 00:01	15°♄32'33		direct	10407 Apr 28 15:00	24°♄12'28	
morning max el	10406 May 25 19:38	16°♄21'07	23°55'55		10407 May 08 09:17	0°♄	
	10406 Jun 06 02:09	0°♄		morning max el	10407 May 08 06:50	29°♄53'49	22°26'22
	10406 Jun 25 23:47	0°♄		desc. node	10407 May 11 20:53	3°♄48'58	
morning set	10406 Jun 30 05:20	7°♄06'32			10407 May 30 20:52	0°♄	
max. Earth dist.	10406 Jul 04 00:04	13°♄41'58	1.38469 AU	morning set	10407 Jun 10 22:26	17°♄21'07	
				max. Earth dist.	10407 Jun 15 22:07	25°♄37'32	1.40742 AU
superior conj	10406 Jul 11 08:18	27°♄10'27	-1°01'15		10407 Jun 18 11:37	0°♄	
minimum elong	10406 Jul 11 12:23	27°♄29'46	1°01'01				
	10406 Jul 12 19:53	0°♄		superior conj	10407 Jun 23 17:15	9°♄12'33	-1°33'04
asc. node	10406 Jul 18 01:10	10°♄09'11		minimum elong	10407 Jun 23 23:17	9°♄39'41	1°32'49
evening rise	10406 Jul 20 08:17	14°♄39'57		evening rise	10407 Jul 03 21:46	28°♄03'20	
	10406 Jul 28 13:00	0°♄		asc. node	10407 Jul 04 22:07	29°♄57'37	
evening max el	10406 Aug 05 16:26	11°♄14'59	18°55'55		10407 Jul 04 22:37	0°♄	
retrograde	10406 Aug 14 07:32	15°♄33'02		evening max el	10407 Jul 19 22:15	23°♄42'40	18°20'39
evening set	10406 Aug 16 05:11	15°♄21'18		retrograde	10407 Jul 27 08:14	27°♄26'30	
desc. node	10406 Aug 20 22:47	13°♄24'09		evening set	10407 Jul 29 12:16	27°♄08'08	
inferior conj	10406 Aug 24 11:36	11°♄04'02	-1°05'54	inferior conj	10407 Aug 05 23:16	22°♄30'51	0°33'36
minimum elong	10406 Aug 24 08:47	11°♄08'59	1°05'00	minimum elong	10407 Aug 06 00:25	22°♄28'29	0°32'50
min. Earth dist.	10406 Aug 27 11:24	8°♄58'02	0.56538 AU	desc. node	10407 Aug 07 19:58	20°♄57'59	
morning rise	10406 Sep 01 09:11	6°♄10'34		min. Earth dist.	10407 Aug 09 07:53	19°♄45'28	0.58519 AU
direct	10406 Sep 06 21:04	4°♄58'51		morning rise	10407 Aug 13 09:04	17°♄01'38	
morning max el	10406 Sep 21 02:48	12°♄18'49	26°06'19	direct	10407 Aug 19 13:12	15°♄20'31	
	10406 Oct 04 21:19	0°♄		morning max el	10407 Sep 02 22:16	23°♄04'18	27°18'03
asc. node	10406 Oct 14 01:35	16°♄17'04			10407 Sep 09 03:02	0°♄	
morning set	10406 Oct 19 08:12	27°♄06'49			10407 Sep 27 22:36	0°♄	
	10406 Oct 20 16:23	0°♄		asc. node	10407 Sep 30 22:24	5°♄55'34	
				morning set	10407 Oct 03 16:38	11°♄39'01	
superior conj	10406 Oct 26 04:25	12°♄07'43	1°34'18				
minimum elong	10406 Oct 26 03:01	11°♄59'57	1°34'31	superior conj	10407 Oct 10 16:13	26°♄55'01	1°23'31
max. Earth dist.	10406 Oct 27 01:19	14°♄03'25	1.31787 AU	minimum elong	10407 Oct 10 14:11	26°♄43'41	1°23'27
evening rise	10406 Nov 02 03:42	27°♄15'27		max. Earth dist.	10407 Oct 10 10:37	26°♄23'51	1.31463 AU
	10406 Nov 03 11:25	0°♄			10407 Oct 12 01:28	0°♄	

evening rise	10407 Oct 17 10:31	11° $\mathbb{M}$ 46'05		minimum elong	10408 Sep 24 00:52	11° $\mathbb{L}$ 23'09	1°07'05
	10407 Oct 26 15:25	0° $\mathbb{A}$		evening rise	10408 Sep 30 20:35	26° $\mathbb{L}$ 23'06	
desc. node	10407 Nov 03 17:46	13° $\mathbb{A}$ 22'08			10408 Oct 02 13:23	0° $\mathbb{M}$	
evening max el	10407 Nov 15 23:02	28° $\mathbb{A}$ 23'10	26°34'37		10408 Oct 19 15:45	0° $\mathbb{A}$	
	10407 Nov 17 18:13	0° $\mathbb{B}$		desc. node	10408 Oct 20 14:58	1° $\mathbb{A}$ 17'58	
retrograde	10407 Nov 29 21:27	5° $\mathbb{B}$ 30'25		evening max el	10408 Oct 27 16:28	9° $\mathbb{A}$ 20'54	25°18'28
evening set	10407 Dec 06 13:35	3° $\mathbb{B}$ 40'02		retrograde	10408 Nov 10 13:31	16° $\mathbb{A}$ 19'42	
min. Earth dist.	10407 Dec 10 12:50	1° $\mathbb{B}$ 04'14	0.59301 AU	evening set	10408 Nov 16 10:06	15° $\mathbb{A}$ 01'27	
	10407 Dec 11 22:27	30° $\mathbb{R}$ $\mathbb{A}$		min. Earth dist.	10408 Nov 21 04:35	12° $\mathbb{A}$ 21'41	0.57291 AU
inferior conj	10407 Dec 13 17:10	28° $\mathbb{A}$ 36'25	-4°16'07	inferior conj	10408 Nov 24 01:28	10° $\mathbb{A}$ 25'45	-5°16'35
minimum elong	10407 Dec 14 01:02	28° $\mathbb{A}$ 21'07	4°13'21	minimum elong	10408 Nov 24 08:10	10° $\mathbb{A}$ 14'26	5°15'00
morning rise	10407 Dec 21 15:10	24° $\mathbb{A}$ 00'37		morning rise	10408 Dec 02 08:32	6° $\mathbb{A}$ 12'10	
direct	10407 Dec 23 18:32	23° $\mathbb{A}$ 44'18		direct	10408 Dec 04 16:25	5° $\mathbb{A}$ 56'06	
asc. node	10407 Dec 27 22:19	24° $\mathbb{A}$ 49'26		morning max el	10408 Dec 13 17:02	10° $\mathbb{A}$ 16'47	19°03'10
morning max el	10407 Dec 31 14:43	27° $\mathbb{A}$ 36'01	18°17'16	asc. node	10408 Dec 13 19:20	10° $\mathbb{A}$ 22'20	
	10408 Jan 02 19:13	0° $\mathbb{B}$			10408 Dec 26 17:28	0° $\mathbb{B}$	
morning set	10408 Jan 16 09:06	22° $\mathbb{B}$ 42'45		morning set	10408 Dec 30 08:32	7° $\mathbb{B}$ 03'59	
	10408 Jan 20 05:18	0° $\mathbb{M}$					
superior conj	10408 Jan 25 17:13	10° $\mathbb{M}$ 12'25	0°37'46	superior conj	10409 Jan 07 16:35	23° $\mathbb{B}$ 26'29	1°04'58
minimum elong	10408 Jan 25 19:48	10° $\mathbb{M}$ 24'11	0°37'46	minimum elong	10409 Jan 07 19:42	23° $\mathbb{B}$ 41'24	1°05'01
desc. node	10408 Jan 30 16:59	19° $\mathbb{M}$ 05'52			10409 Jan 11 03:56	0° $\mathbb{M}$	
max. Earth dist.	10408 Feb 02 07:09	23° $\mathbb{M}$ 33'31	1.41049 AU	max. Earth dist.	10409 Jan 14 13:33	6° $\mathbb{M}$ 12'21	1.38862 AU
	10408 Feb 06 03:31	0° $\mathbb{H}$		desc. node	10409 Jan 16 13:53	9° $\mathbb{M}$ 46'33	
evening rise	10408 Feb 06 22:59	1° $\mathbb{H}$ 19'52		evening rise	10409 Jan 18 09:19	12° $\mathbb{M}$ 55'13	
	10408 Feb 25 20:48	0° $\mathbb{Y}$			10409 Jan 28 20:49	0° $\mathbb{H}$	
evening max el	10408 Mar 12 02:09	18° $\mathbb{Y}$ 55'40	23°16'03		10409 Feb 20 00:44	0° $\mathbb{Y}$	
retrograde	10408 Mar 22 13:51	25° $\mathbb{Y}$ 07'32		evening max el	10409 Feb 22 15:56	2° $\mathbb{Y}$ 45'01	24°35'37
asc. node	10408 Mar 24 20:37	24° $\mathbb{Y}$ 42'29		retrograde	10409 Mar 06 05:32	9° $\mathbb{Y}$ 30'20	
evening set	10408 Mar 27 14:16	23° $\mathbb{Y}$ 01'54		evening set	10409 Mar 11 18:03	7° $\mathbb{Y}$ 12'05	
inferior conj	10408 Apr 01 23:38	16° $\mathbb{Y}$ 35'26	2°20'33	asc. node	10409 Mar 11 17:49	7° $\mathbb{Y}$ 12'35	
minimum elong	10408 Apr 01 21:27	16° $\mathbb{Y}$ 42'59	2°19'51	min. Earth dist.	10409 Mar 16 07:48	2° $\mathbb{Y}$ 00'28	0.68133 AU
min. Earth dist.	10408 Apr 01 12:06	17° $\mathbb{Y}$ 15'11	0.68572 AU	inferior conj	10409 Mar 17 07:11	0° $\mathbb{Y}$ 42'31	1°42'12
morning rise	10408 Apr 07 04:33	10° $\mathbb{Y}$ 29'00		minimum elong	10409 Mar 17 05:09	0° $\mathbb{Y}$ 49'16	1°41'33
direct	10408 Apr 11 12:18	8° $\mathbb{Y}$ 45'01			10409 Mar 17 19:58	30° $\mathbb{R}$ $\mathbb{H}$	
morning max el	10408 Apr 19 22:54	13° $\mathbb{Y}$ 36'14	21°03'00	morning rise	10409 Mar 22 16:24	24° $\mathbb{H}$ 43'27	
desc. node	10408 Apr 27 17:43	22° $\mathbb{Y}$ 51'02		direct	10409 Mar 26 11:27	23° $\mathbb{H}$ 20'58	
	10408 May 02 22:27	0° $\mathbb{B}$		morning max el	10409 Apr 02 22:26	27° $\mathbb{H}$ 31'00	19°51'42
morning set	10408 May 20 13:19	26° $\mathbb{B}$ 25'00			10409 Apr 05 06:00	0° $\mathbb{Y}$	
	10408 May 22 19:55	0° $\mathbb{H}$		desc. node	10409 Apr 14 14:33	12° $\mathbb{Y}$ 26'38	
max. Earth dist.	10408 May 28 01:49	8° $\mathbb{H}$ 25'30	1.42811 AU		10409 Apr 26 08:35	0° $\mathbb{B}$	
				morning set	10409 Apr 29 12:40	4° $\mathbb{B}$ 51'37	
superior conj	10408 Jun 04 04:48	20° $\mathbb{H}$ 16'33	-1°58'52	max. Earth dist.	10409 May 10 13:01	22° $\mathbb{B}$ 04'19	1.44426 AU
minimum elong	10408 Jun 04 10:46	20° $\mathbb{H}$ 41'58	1°58'56		10409 May 15 11:37	0° $\mathbb{H}$	
	10408 Jun 09 19:51	0° $\mathbb{B}$		superior conj	10409 May 15 16:09	0° $\mathbb{H}$ 18'22	-2°12'21
evening rise	10408 Jun 15 21:08	10° $\mathbb{B}$ 45'40		minimum elong	10409 May 15 17:57	0° $\mathbb{H}$ 25'39	2°12'44
asc. node	10408 Jun 20 19:05	19° $\mathbb{B}$ 30'54		evening rise	10409 May 29 01:35	22° $\mathbb{H}$ 36'46	
	10408 Jun 27 03:18	0° $\mathbb{Q}$			10409 Jun 02 09:46	0° $\mathbb{B}$	
evening max el	10408 Jul 02 09:53	6° $\mathbb{Q}$ 40'50	18°05'19	asc. node	10409 Jun 07 16:07	8° $\mathbb{B}$ 43'42	
retrograde	10408 Jul 09 01:56	10° $\mathbb{Q}$ 05'28		evening max el	10409 Jun 15 23:41	20° $\mathbb{B}$ 00'16	18°08'54
evening set	10408 Jul 11 13:55	9° $\mathbb{Q}$ 36'48		retrograde	10409 Jun 22 08:35	23° $\mathbb{B}$ 20'45	
inferior conj	10408 Jul 18 07:17	4° $\mathbb{Q}$ 39'29	1°48'01	evening set	10409 Jun 25 04:28	22° $\mathbb{B}$ 39'12	
minimum elong	10408 Jul 18 10:00	4° $\mathbb{Q}$ 32'59	1°46'45	inferior conj	10409 Jul 01 07:55	17° $\mathbb{B}$ 23'10	2°37'30
min. Earth dist.	10408 Jul 21 12:12	1° $\mathbb{Q}$ 36'49	0.60773 AU	minimum elong	10409 Jul 01 10:28	17° $\mathbb{B}$ 16'12	2°36'26
	10408 Jul 23 09:27	30° $\mathbb{R}$ $\mathbb{B}$		min. Earth dist.	10409 Jul 04 01:29	14° $\mathbb{B}$ 26'23	0.62998 AU
desc. node	10408 Jul 24 17:09	29° $\mathbb{B}$ 01'07		morning rise	10409 Jul 07 14:47	11° $\mathbb{B}$ 11'52	
morning rise	10408 Jul 25 03:22	28° $\mathbb{B}$ 44'02		desc. node	10409 Jul 11 14:18	9° $\mathbb{B}$ 04'57	
direct	10408 Jul 31 17:45	26° $\mathbb{B}$ 34'06		direct	10409 Jul 14 08:05	8° $\mathbb{B}$ 40'21	
	10408 Aug 09 17:37	0° $\mathbb{Q}$		morning max el	10409 Jul 28 08:06	16° $\mathbb{B}$ 42'49	27°50'55
morning max el	10408 Aug 15 00:32	4° $\mathbb{Q}$ 32'05	27°53'41		10409 Aug 08 07:44	0° $\mathbb{Q}$	
	10408 Sep 02 22:55	0° $\mathbb{H}$			10409 Aug 26 17:03	0° $\mathbb{H}$	
morning set	10408 Sep 16 20:39	25° $\mathbb{H}$ 55'04		morning set	10409 Aug 31 18:07	9° $\mathbb{H}$ 49'23	
asc. node	10408 Sep 16 19:13	25° $\mathbb{H}$ 47'38		asc. node	10409 Sep 03 16:04	15° $\mathbb{H}$ 48'26	
	10408 Sep 18 19:18	0° $\mathbb{L}$		max. Earth dist.	10409 Sep 05 22:38	20° $\mathbb{H}$ 36'51	1.32292 AU
max. Earth dist.	10408 Sep 22 18:59	8° $\mathbb{L}$ 38'18	1.31629 AU				
				superior conj	10409 Sep 08 11:15	26° $\mathbb{H}$ 03'55	0°46'13
superior conj	10408 Sep 24 03:06	11° $\mathbb{L}$ 35'33	1°07'24	minimum elong	10409 Sep 08 09:19	25° $\mathbb{H}$ 53'25	0°45'46

	10409 Sep 10 06:31	0°♄		minimum elong	10410 Aug 23 13:31	10°♄08'34	0°19'56
evening rise	10409 Sep 15 08:02	11°♄01'09		evening rise	10410 Aug 30 18:58	25°♄34'28	
	10409 Sep 24 22:12	0°♄			10410 Sep 01 21:42	0°♄	
desc. node	10409 Oct 07 12:12	17°♄58'05		evening max el	10410 Sep 20 16:28	29°♄47'09	22°02'22
evening max el	10409 Oct 09 03:48	19°♄38'43	23°42'04		10410 Sep 20 21:44	0°♄	
retrograde	10409 Oct 22 16:43	26°♄24'14		desc. node	10410 Sep 24 09:27	2°♄55'12	
evening set	10409 Oct 27 06:13	25°♄38'53		retrograde	10410 Oct 03 08:44	6°♄05'51	
min. Earth dist.	10409 Nov 02 14:03	22°♄36'47	0.55674 AU	evening set	10410 Oct 06 11:04	5°♄44'27	
inferior conj	10409 Nov 04 13:29	21°♄26'09	-5°44'55	inferior conj	10410 Oct 15 09:48	1°♄45'26	-5°21'21
minimum elong	10409 Nov 04 14:10	21°♄25'07	5°44'33	minimum elong	10410 Oct 15 02:33	1°♄55'37	5°19'59
morning rise	10409 Nov 13 00:00	17°♄31'42		min. Earth dist.	10410 Oct 14 21:12	2°♄03'06	0.54740 AU
direct	10409 Nov 15 19:10	17°♄12'12			10410 Oct 18 15:35	30°♄♄	
morning max el	10409 Nov 26 07:00	22°♄10'08	20°11'47	morning rise	10410 Oct 23 19:29	27°♄58'21	
asc. node	10409 Nov 30 16:21	27°♄09'31		direct	10410 Oct 27 06:38	27°♄31'52	
	10409 Dec 02 17:03	0°♄			10410 Nov 04 04:42	0°♄	
morning set	10409 Dec 14 14:21	21°♄41'11		morning max el	10410 Nov 08 07:31	3°♄13'13	21°42'04
	10409 Dec 18 15:28	0°♄		asc. node	10410 Nov 17 13:20	14°♄55'18	
					10410 Nov 25 20:45	0°♄	
superior conj	10409 Dec 22 05:36	7°♄18'21	1°23'59	morning set	10410 Nov 29 00:06	6°♄27'24	
minimum elong	10409 Dec 22 08:08	7°♄31'03	1°24'14				
max. Earth dist.	10409 Dec 27 20:36	18°♄19'15	1.36705 AU	superior conj	10410 Dec 06 04:23	21°♄37'20	1°35'21
evening rise	10409 Dec 31 15:38	25°♄21'56		minimum elong	10410 Dec 06 05:49	21°♄44'50	1°35'46
desc. node	10410 Jan 03 10:48	0°♄21'33			10410 Dec 10 06:10	0°♄	
	10410 Jan 03 05:54	0°♄		max. Earth dist.	10410 Dec 10 08:46	0°♄13'04	1.34788 AU
	10410 Jan 22 10:19	0°♄		evening rise	10410 Dec 14 14:28	8°♄31'40	
evening max el	10410 Feb 05 05:22	16°♄34'37	25°47'58	desc. node	10410 Dec 21 07:47	20°♄46'47	
retrograde	10410 Feb 17 16:30	23°♄42'55			10410 Dec 26 20:08	0°♄	
evening set	10410 Feb 23 17:12	21°♄14'45			10411 Jan 18 11:21	0°♄	
asc. node	10410 Feb 26 15:03	18°♄18'08		evening max el	10411 Jan 18 18:50	0°♄18'09	26°45'45
min. Earth dist.	10410 Feb 28 00:06	16°♄38'09	0.67288 AU	retrograde	10411 Jan 31 22:03	7°♄38'39	
inferior conj	10410 Mar 01 11:19	14°♄46'57	0°54'40	evening set	10411 Feb 07 09:52	5°♄04'53	
minimum elong	10410 Mar 01 10:00	14°♄51'05	0°54'20	min. Earth dist.	10411 Feb 11 10:51	1°♄02'37	0.66059 AU
morning rise	10410 Mar 07 03:22	8°♄57'01			10411 Feb 12 08:20	30°♄♄	
direct	10410 Mar 10 10:49	7°♄54'19		inferior conj	10411 Feb 13 09:57	28°♄44'30	-0°01'55
morning max el	10410 Mar 17 05:43	11°♄35'44	18°55'30	minimum elong	10411 Feb 13 09:59	28°♄44'23	0°01'36
	10410 Mar 30 21:06	0°♄		transit middle	10411 Feb 13 09:59	28°♄44'23	0°01'36
greatest brilliancy	10410 Mar 31 04:41	0°♄28'54	-0.8m	transit begin	10411 Feb 13 07:04	28°♄52'59	
desc. node	10410 Apr 01 11:20	2°♄26'13		transit end	10411 Feb 13 12:55	28°♄35'47	
morning set	10410 Apr 08 19:08	13°♄46'21		asc. node	10411 Feb 13 12:16	28°♄37'41	
	10410 Apr 19 05:13	0°♄		morning rise	10411 Feb 19 11:14	23°♄05'45	
max. Earth dist.	10410 Apr 23 06:01	6°♄18'39	1.45401 AU	direct	10411 Feb 22 08:28	22°♄19'49	
				morning max el	10411 Feb 28 19:11	25°♄45'20	18°15'39
superior conj	10410 Apr 25 06:17	9°♄28'11	-2°07'22		10411 Mar 04 11:27	0°♄	
minimum elong	10410 Apr 25 00:43	9°♄06'18	2°07'25	desc. node	10411 Mar 19 08:08	22°♄43'22	
	10410 May 08 03:26	0°♄		morning set	10411 Mar 20 03:01	23°♄59'10	
evening rise	10410 May 10 07:01	3°♄28'50			10411 Mar 23 21:06	0°♄	
asc. node	10410 May 25 13:13	27°♄28'30					
	10410 May 27 10:28	0°♄		superior conj	10411 Apr 04 12:25	18°♄23'51	-1°42'24
evening max el	10410 May 30 12:28	3°♄32'20	18°30'39	minimum elong	10411 Apr 04 02:53	17°♄46'33	1°41'39
retrograde	10410 Jun 05 23:50	7°♄02'41		max. Earth dist.	10411 Apr 06 01:39	20°♄49'34	1.45644 AU
evening set	10410 Jun 09 03:33	6°♄06'43			10411 Apr 11 22:40	0°♄	
inferior conj	10410 Jun 14 21:02	0°♄33'43	3°05'59	evening rise	10411 Apr 20 13:10	13°♄25'41	
minimum elong	10410 Jun 14 22:37	0°♄28'57	3°05'16		10411 May 01 05:16	0°♄	
	10410 Jun 15 08:15	30°♄♄		greatest brilliancy	10411 May 01 16:50	0°♄44'09	-0.8m
min. Earth dist.	10410 Jun 17 00:05	28°♄01'14	0.64970 AU	asc. node	10411 May 12 10:21	15°♄36'21	
morning rise	10410 Jun 20 16:45	24°♄14'46		evening max el	10411 May 13 21:46	17°♄11'20	19°09'47
direct	10410 Jun 27 06:28	21°♄32'06		retrograde	10411 May 20 20:07	21°♄04'09	
desc. node	10410 Jun 28 11:25	21°♄37'02		evening set	10411 May 24 08:02	19°♄52'59	
morning max el	10410 Jul 10 18:30	29°♄28'18	27°13'30	inferior conj	10411 May 29 19:06	14°♄04'45	3°17'35
	10410 Jul 11 06:55	0°♄		minimum elong	10411 May 29 19:29	14°♄03'28	3°17'05
	10410 Aug 02 05:47	0°♄		min. Earth dist.	10411 May 31 07:05	12°♄08'42	0.66560 AU
morning set	10410 Aug 15 06:21	23°♄14'44		morning rise	10411 Jun 04 06:27	7°♄43'52	
	10410 Aug 18 16:06	0°♄		direct	10411 Jun 10 11:52	5°♄00'54	
max. Earth dist.	10410 Aug 19 18:01	2°♄11'51	1.33456 AU	desc. node	10411 Jun 15 08:28	6°♄21'35	
asc. node	10410 Aug 21 12:55	5°♄53'23		morning max el	10411 Jun 23 05:17	12°♄36'58	26°08'58
					10411 Jul 07 04:48	0°♄	
superior conj	10410 Aug 23 14:32	10°♄13'54	0°20'20		10411 Jul 25 22:14	0°♄	

morning set	10411 Jul 29 05:52	6°♌02'27		10412 Jun 08 07:50	0°♊	
max. Earth dist.	10411 Aug 02 02:50	13°♌23'35	1.35109 AU	10412 Jun 29 17:46	0°♊	
				morning set	10412 Jul 10 12:14	18°♊01'15
superior conj	10411 Aug 07 10:27	23°♌59'12	-0°09'32	max. Earth dist.	10412 Jul 14 02:28	24°♊28'43 1.37166 AU
minimum elong	10411 Aug 07 11:01	24°♌02'06	0°09'44		10412 Jul 17 01:47	0°♌
behind sun begin	10411 Aug 07 06:12	23°♌37'29				
behind sun end	10411 Aug 07 15:51	24°♌26'45		superior conj	10412 Jul 20 19:58	7°♌12'33 -0°42'05
asc. node	10411 Aug 08 09:47	25°♌58'40		minimum elong	10412 Jul 20 22:41	7°♌25'49 0°42'00
	10411 Aug 10 08:30	0°♍		asc. node	10412 Jul 25 06:40	16°♌00'49
evening rise	10411 Aug 15 03:20	9°♍57'23		evening rise	10412 Jul 29 06:48	24°♌03'52
	10411 Aug 25 17:47	0°♎			10412 Aug 01 06:38	0°♍
evening max el	10411 Sep 02 15:23	10°♎22'04	20°34'20	evening max el	10412 Aug 15 04:13	21°♍43'03 19°25'46
desc. node	10411 Sep 11 06:43	15°♎38'55		retrograde	10412 Aug 24 16:38	26°♍26'28
retrograde	10411 Sep 13 20:45	15°♎56'13		evening set	10412 Aug 26 12:46	26°♍16'40
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minimum elong	10411 Sep 24 16:31	12°♎03'00	3°59'15	minimum elong	10412 Sep 03 23:33	22°♍19'32 2°09'03
min. Earth dist.	10411 Sep 26 05:39	11°♎09'19	0.54718 AU	min. Earth dist.	10412 Sep 06 17:25	20°♍33'23 0.55645 AU
morning rise	10411 Oct 03 09:30	7°♎48'17		morning rise	10412 Sep 12 07:48	17°♍38'13
direct	10411 Oct 07 14:53	7°♎09'58		direct	10412 Sep 17 08:57	16°♍40'36
morning max el	10411 Oct 20 21:51	13°♎35'41	23°26'59	morning max el	10412 Oct 01 09:17	23°♍43'46 25°12'18
	10411 Nov 02 10:28	0°♏			10412 Oct 07 01:56	0°♎
asc. node	10411 Nov 04 10:16	3°♏25'05		asc. node	10412 Oct 21 07:08	22°♎28'08
morning set	10411 Nov 13 11:39	21°♏15'33			10412 Oct 25 02:27	0°♏
	10411 Nov 17 12:56	0°♐		morning set	10412 Oct 27 23:17	6°♏00'53
superior conj	10411 Nov 20 09:43	6°♐12'54	1°39'50	superior conj	10412 Nov 03 19:09	20°♏57'43 1°38'01
minimum elong	10411 Nov 20 09:56	6°♐14'04	1°40'17	minimum elong	10412 Nov 03 18:16	20°♏52'52 1°38'21
max. Earth dist.	10411 Nov 23 04:32	12°♐09'52	1.33256 AU	max. Earth dist.	10412 Nov 05 07:45	24°♏18'35 1.32187 AU
evening rise	10411 Nov 28 02:05	22°♐14'00			10412 Nov 07 22:50	0°♑
	10411 Dec 02 02:22	0°♒		evening rise	10412 Nov 10 23:16	6°♑20'44
desc. node	10411 Dec 08 04:48	10°♒56'02			10412 Nov 23 15:38	0°♒
	10411 Dec 20 14:42	0°♓		desc. node	10412 Nov 24 01:53	0°♒42'25
evening max el	10412 Jan 01 07:37	13°♓45'09	27°22'00	evening max el	10412 Dec 13 18:13	26°♒44'06 27°29'57
retrograde	10412 Jan 14 21:29	21°♓08'19			10412 Dec 17 14:20	0°♓
evening set	10412 Jan 21 17:50	18°♓35'27		retrograde	10412 Dec 27 13:50	4°♓02'32
min. Earth dist.	10412 Jan 25 13:57	15°♓05'33	0.64473 AU	evening set	10413 Jan 03 14:17	1°♓38'57
inferior conj	10412 Jan 28 00:36	12°♓28'51	-1°07'05		10413 Jan 05 18:12	30°♒♐
minimum elong	10412 Jan 28 02:40	12°♓23'19	1°05'49	min. Earth dist.	10413 Jan 07 07:36	28°♒37'13 0.62592 AU
asc. node	10412 Jan 31 09:28	9°♓08'27		inferior conj	10413 Jan 10 04:23	25°♒52'55 -2°19'16
morning rise	10412 Feb 03 13:18	7°♓03'45		minimum elong	10413 Jan 10 08:59	25°♒41'53 2°16'58
direct	10412 Feb 06 02:02	6°♓30'53		morning rise	10413 Jan 17 06:02	20°♒44'19
morning max el	10412 Feb 12 12:08	9°♓51'35	17°52'43	asc. node	10413 Jan 17 06:37	20°♒43'49
	10412 Feb 26 07:29	0°♔		direct	10413 Jan 19 12:34	20°♒20'38
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desc. node	10412 Mar 05 04:53	13°♔12'29			10413 Jan 31 05:24	0°♓
				morning set	10413 Feb 11 04:31	18°♓23'03
superior conj	10412 Mar 14 04:59	27°♔54'23	-1°03'36		10413 Feb 17 20:02	0°♔
minimum elong	10412 Mar 13 22:01	27°♔26'27	1°02'37	desc. node	10413 Feb 20 01:39	3°♔49'33
	10412 Mar 15 12:24	0°♕				
max. Earth dist.	10412 Mar 18 20:50	5°♕18'55	1.45141 AU	superior conj	10413 Feb 22 20:16	8°♔30'42 -0°20'48
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	10412 Apr 03 20:04	0°♖		max. Earth dist.	10413 Mar 01 13:45	19°♔33'10 1.43960 AU
greatest brilliancy	10412 Apr 14 03:17	15°♖23'37	-0.6m		10413 Mar 08 04:16	0°♕
	10412 Apr 25 05:36	0°♗		evening rise	10413 Mar 09 15:52	2°♕18'00
evening max el	10412 Apr 26 01:59	0°♗53'12	20°04'50		10413 Mar 28 08:44	0°♖
asc. node	10412 Apr 28 07:30	2°♗55'24		evening max el	10413 Apr 09 00:37	14°♖36'16 21°12'56
retrograde	10412 May 03 18:36	5°♗19'04		asc. node	10413 Apr 15 04:41	19°♖11'06
evening set	10412 May 07 15:28	3°♗52'18		retrograde	10413 Apr 17 17:03	19°♖42'08
	10412 May 11 08:08	30°♗♒		evening set	10413 Apr 21 23:55	17°♖59'42
inferior conj	10412 May 12 23:07	27°♗50'33	3°15'34	inferior conj	10413 Apr 27 06:40	11°♖46'19 3°02'04
minimum elong	10412 May 12 22:25	27°♗52'56	3°15'07	minimum elong	10413 Apr 27 05:06	11°♖51'44 3°01'32
min. Earth dist.	10412 May 13 20:42	26°♗37'24	0.67707 AU	min. Earth dist.	10413 Apr 27 14:45	11°♖18'14 0.68399 AU
morning rise	10412 May 18 05:04	21°♗31'26		morning rise	10413 May 02 10:04	5°♗31'11
direct	10412 May 23 23:09	18°♗57'44		direct	10413 May 07 15:10	3°♗13'57
desc. node	10412 Jun 01 05:26	22°♗48'55		morning max el	10413 May 18 00:39	9°♗25'02 23°17'25
morning max el	10412 Jun 04 15:00	25°♗57'40	24°46'57	desc. node	10413 May 19 02:21	10°♗31'33





































































































































	10413 Jun 03 05:30	0°♄		desc. node	10414 May 05 23:12	29°♅09'26	
morning set	10413 Jun 21 20:09	28°♄56'24			10414 May 06 15:22	0°♄	
	10413 Jun 22 11:17	0°♄			10414 May 27 13:33	0°♄	
max. Earth dist.	10413 Jun 25 23:04	5°♄58'09	1.39445 AU	morning set	10414 Jun 02 01:44	8°♄39'34	
				max. Earth dist.	10414 Jun 07 23:41	18°♄17'51	1.41674 AU
superior conj	10413 Jul 03 15:09	19°♄43'38	-1°15'09		10414 Jun 14 20:41	0°♄	
minimum elong	10413 Jul 03 20:10	20°♄06'56	1°14'53				
	10413 Jul 09 01:46	0°♄		superior conj	10414 Jun 15 15:33	1°♄22'27	-1°45'05
asc. node	10413 Jul 12 03:33	5°♄55'12		minimum elong	10414 Jun 15 21:56	1°♄50'30	1°44'56
evening rise	10413 Jul 13 02:22	7°♄45'15		evening rise	10414 Jun 26 10:25	20°♄52'43	
	10413 Jul 25 22:37	0°♄		asc. node	10414 Jun 29 00:30	25°♄37'49	
evening max el	10413 Jul 29 04:57	3°♄48'33	18°38'26		10414 Jul 01 10:27	0°♄	
retrograde	10413 Aug 06 06:01	7°♄49'48		evening max el	10414 Jul 12 13:42	16°♄30'12	18°11'40
evening set	10413 Aug 08 06:13	7°♄35'37		retrograde	10414 Jul 19 14:34	20°♄03'59	
desc. node	10413 Aug 15 01:12	4°♄00'42		evening set	10414 Jul 21 22:01	19°♄41'31	
inferior conj	10413 Aug 16 04:23	3°♄10'06	-0°20'56	inferior conj	10414 Jul 29 01:05	14°♄55'10	1°08'24
minimum elong	10413 Aug 16 03:33	3°♄11'41	0°20'52	minimum elong	10414 Jul 29 03:10	14°♄50'34	1°07'18
min. Earth dist.	10413 Aug 19 09:50	0°♄45'06	0.57334 AU	min. Earth dist.	10414 Aug 01 09:11	11°♄59'52	0.59472 AU
	10413 Aug 20 11:39	30°♄		desc. node	10414 Aug 01 22:25	11°♄32'39	
morning rise	10413 Aug 23 21:25	28°♄00'59		morning rise	10414 Aug 05 05:09	9°♄13'35	
direct	10413 Aug 29 17:04	26°♄37'00		direct	10414 Aug 11 14:27	7°♄20'03	
	10413 Sep 08 01:34	0°♄		morning max el	10414 Aug 25 23:00	15°♄10'04	27°37'57
morning max el	10413 Sep 13 00:34	4°♄07'39	26°40'43		10414 Sep 06 23:41	0°♄	
	10413 Oct 01 19:20	0°♄			10414 Sep 24 05:08	0°♄	
asc. node	10413 Oct 08 03:58	11°♄55'24		asc. node	10414 Sep 25 00:47	1°♄40'10	
morning set	10413 Oct 12 09:20	20°♄38'42		morning set	10414 Sep 26 16:07	5°♄04'23	
	10413 Oct 16 16:27	0°♄		max. Earth dist.	10414 Oct 03 01:30	18°♄56'59	1.31479 AU
superior conj	10413 Oct 19 06:36	5°♄45'12	1°30'24	superior conj	10414 Oct 03 18:12	20°♄29'50	1°17'18
minimum elong	10413 Oct 19 04:53	5°♄35'39	1°30'29	minimum elong	10414 Oct 03 16:02	20°♄17'42	1°17'08
max. Earth dist.	10413 Oct 19 15:57	6°♄37'12	1.31594 AU		10414 Oct 08 01:05	0°♄	
evening rise	10413 Oct 26 03:14	20°♄44'16		evening rise	10414 Oct 10 11:41	5°♄18'06	
	10413 Oct 30 15:59	0°♄			10414 Oct 23 08:59	0°♄	
desc. node	10413 Nov 10 23:01	19°♄56'44		desc. node	10414 Oct 28 20:12	8°♄26'05	
	10413 Nov 17 23:42	0°♄		evening max el	10414 Nov 07 22:05	20°♄28'41	26°05'32
evening max el	10413 Nov 25 23:59	9°♄02'02	27°04'44	retrograde	10414 Nov 21 19:55	27°♄32'03	
retrograde	10413 Dec 09 21:44	16°♄12'38		evening set	10414 Nov 28 05:32	25°♄54'30	
evening set	10413 Dec 16 19:41	14°♄07'37		min. Earth dist.	10414 Dec 02 10:57	23°♄19'33	0.58417 AU
min. Earth dist.	10413 Dec 20 14:33	11°♄26'02	0.60518 AU	inferior conj	10414 Dec 05 13:42	21°♄03'27	-4°44'22
inferior conj	10413 Dec 23 17:56	8°♄47'56	-3°34'29	minimum elong	10414 Dec 05 21:36	20°♄49'03	4°41'59
minimum elong	10413 Dec 24 00:59	8°♄33'06	3°31'36	morning rise	10414 Dec 13 16:09	16°♄37'17	
morning rise	10413 Dec 31 08:53	3°♄59'11		direct	10414 Dec 15 20:52	16°♄21'23	
direct	10414 Jan 02 12:21	3°♄41'02		asc. node	10414 Dec 22 00:47	18°♄35'18	
asc. node	10414 Jan 04 03:42	3°♄52'04		morning max el	10414 Dec 24 03:52	20°♄23'53	18°34'12
morning max el	10414 Jan 09 19:59	7°♄20'29	18°00'40		10414 Dec 31 09:30	0°♄	
	10414 Jan 24 09:03	0°♄		morning set	10415 Jan 09 05:04	16°♄06'33	
morning set	10414 Jan 25 10:45	1°♄58'37			10415 Jan 16 10:35	0°♄	
superior conj	10414 Feb 04 12:29	20°♄17'52	0°18'24	superior conj	10415 Jan 18 01:56	3°♄04'26	0°50'19
minimum elong	10414 Feb 04 13:59	20°♄24'29	0°18'30	minimum elong	10415 Jan 18 04:56	3°♄18'20	0°50'19
desc. node	10414 Feb 06 22:28	24°♄31'09		desc. node	10415 Jan 24 19:19	15°♄13'06	
	10414 Feb 10 03:25	0°♄		max. Earth dist.	10415 Jan 25 11:16	16°♄22'39	1.40126 AU
max. Earth dist.	10414 Feb 12 02:53	3°♄18'48	1.42223 AU	evening rise	10415 Jan 29 15:18	23°♄28'35	
evening rise	10414 Feb 17 17:26	12°♄26'15			10415 Feb 02 14:48	0°♄	
	10414 Mar 01 04:07	0°♄			10415 Feb 23 01:37	0°♄	
evening max el	10414 Mar 22 18:26	28°♄21'25	22°29'51	evening max el	10415 Mar 05 08:57	12°♄08'24	23°50'16
	10414 Mar 24 11:44	0°♄		retrograde	10415 Mar 16 07:52	18°♄35'35	
retrograde	10414 Apr 01 13:55	4°♄09'34		asc. node	10415 Mar 19 23:07	17°♄33'16	
asc. node	10414 Apr 02 01:53	4°♄08'21		evening set	10415 Mar 21 13:31	16°♄24'01	
evening set	10414 Apr 06 07:47	2°♄11'55		min. Earth dist.	10415 Mar 26 07:37	10°♄52'32	0.68439 AU
	10414 Apr 08 11:42	30°♄		inferior conj	10415 Mar 27 00:18	9°♄55'41	2°05'25
inferior conj	10414 Apr 11 15:42	25°♄49'23	2°38'28	minimum elong	10415 Mar 26 22:07	10°♄03'07	2°04'43
minimum elong	10414 Apr 11 13:37	25°♄56'36	2°37'49	morning rise	10415 Apr 01 06:46	3°♄52'28	
min. Earth dist.	10414 Apr 11 11:06	26°♄05'21	0.68640 AU	direct	10415 Apr 05 08:59	2°♄17'54	
morning rise	10414 Apr 16 19:19	19°♄39'39		morning max el	10415 Apr 13 08:42	6°♄49'59	20°31'03
direct	10414 Apr 21 10:50	17°♄43'04		desc. node	10415 Apr 22 20:03	18°♄27'01	
morning max el	10414 Apr 30 13:30	23°♄01'44	21°49'45		10415 Apr 30 21:02	0°♄	

morning set	10415 May 12 07:57	17° $\text{J}$ 21'48		morning max el	10416 Mar 26 11:42	20° $\text{H}$ 49'46	19°25'50
	10415 May 20 08:31	0° $\text{II}$			10416 Apr 02 23:54	0° $\text{Y}$	
max. Earth dist.	10415 May 21 06:57	1° $\text{II}$ 30'06	1.43569 AU	greatest brilliancy	10416 Apr 08 05:12	7° $\text{Y}$ 30'33	-0.7m
				desc. node	10416 Apr 08 16:51	8° $\text{Y}$ 13'42	
superior conj	10415 May 27 16:55	11° $\text{II}$ 59'48	-2°06'30	morning set	10416 Apr 20 07:18	25° $\text{Y}$ 51'46	
minimum elong	10415 May 27 21:43	12° $\text{II}$ 19'43	2°06'43		10416 Apr 22 23:36	0° $\text{B}$	
	10415 Jun 07 05:49	0° $\text{E}$		max. Earth dist.	10416 May 02 20:27	15° $\text{B}$ 24'25	1.44921 AU
evening rise	10415 Jun 09 02:23	3° $\text{E}$ 15'02					
asc. node	10415 Jun 15 21:30	15° $\text{E}$ 03'26		superior conj	10416 May 06 18:20	21° $\text{B}$ 36'45	-2°12'45
evening max el	10415 Jun 26 02:37	29° $\text{E}$ 38'17	18°04'29	minimum elong	10416 May 06 17:06	21° $\text{B}$ 31'51	2°13'06
	10415 Jun 26 11:38	0° $\text{L}$			10416 May 11 23:24	0° $\text{II}$	
retrograde	10415 Jul 02 14:32	2° $\text{L}$ 59'47		evening rise	10416 May 20 21:27	14° $\text{II}$ 41'40	
evening set	10415 Jul 05 05:47	2° $\text{L}$ 25'59			10416 May 30 03:42	0° $\text{E}$	
	10415 Jul 08 21:53	30° $\text{R}$ $\text{E}$		asc. node	10416 Jun 01 18:34	4° $\text{E}$ 05'37	
inferior conj	10415 Jul 11 16:44	27° $\text{E}$ 20'18	2°11'51	evening max el	10416 Jun 08 16:18	13° $\text{E}$ 04'09	18°15'59
minimum elong	10415 Jul 11 19:32	27° $\text{E}$ 13'11	2°10'38	retrograde	10416 Jun 15 01:18	16° $\text{E}$ 27'23	
min. Earth dist.	10415 Jul 14 17:22	24° $\text{E}$ 17'28	0.61736 AU	evening set	10416 Jun 18 00:24	15° $\text{E}$ 40'02	
morning rise	10415 Jul 18 06:58	21° $\text{E}$ 16'35		inferior conj	10416 Jun 23 23:10	10° $\text{E}$ 16'48	2°51'53
desc. node	10415 Jul 19 19:35	20° $\text{E}$ 19'45		minimum elong	10416 Jun 24 01:23	10° $\text{E}$ 10'32	2°50'58
direct	10415 Jul 24 23:14	18° $\text{E}$ 56'31		min. Earth dist.	10416 Jun 26 10:52	7° $\text{E}$ 28'05	0.63873 AU
morning max el	10415 Aug 08 04:07	26° $\text{E}$ 58'04	27°57'10	morning rise	10416 Jun 30 00:57	4° $\text{E}$ 01'10	
	10415 Aug 11 00:49	0° $\text{L}$		desc. node	10416 Jul 05 16:44	1° $\text{E}$ 26'47	
	10415 Aug 31 15:41	0° $\text{M}$		direct	10416 Jul 06 17:27	1° $\text{E}$ 23'14	
morning set	10415 Sep 10 17:43	19° $\text{M}$ 12'48		morning max el	10416 Jul 20 13:18	9° $\text{E}$ 25'34	27°38'50
asc. node	10415 Sep 11 21:37	21° $\text{M}$ 36'58			10416 Aug 05 14:18	0° $\text{L}$	
	10415 Sep 15 20:09	0° $\text{L}$			10416 Aug 22 23:47	0° $\text{M}$	
max. Earth dist.	10415 Sep 16 08:30	1° $\text{L}$ 07'08	1.31847 AU	morning set	10416 Aug 24 11:39	2° $\text{M}$ 56'17	
				asc. node	10416 Aug 28 18:26	11° $\text{M}$ 40'14	
superior conj	10415 Sep 18 04:12	5° $\text{L}$ 06'21	0°59'00	max. Earth dist.	10416 Aug 29 08:51	12° $\text{M}$ 55'46	1.32720 AU
minimum elong	10415 Sep 18 02:02	4° $\text{L}$ 54'22	0°58'37				
evening rise	10415 Sep 24 22:36	19° $\text{L}$ 56'41		superior conj	10416 Sep 01 10:33	19° $\text{M}$ 28'02	0°35'47
	10415 Sep 29 18:43	0° $\text{M}$		minimum elong	10416 Sep 01 08:56	19° $\text{M}$ 19'20	0°35'20
desc. node	10415 Oct 15 17:26	25° $\text{M}$ 53'15			10416 Sep 06 07:12	0° $\text{L}$	
	10415 Oct 19 09:14	0° $\text{J}$		evening rise	10416 Sep 08 10:03	4° $\text{L}$ 33'27	
evening max el	10415 Oct 20 12:10	1° $\text{J}$ 06'38	24°38'57		10416 Sep 21 23:41	0° $\text{M}$	
retrograde	10415 Nov 03 07:00	8° $\text{J}$ 01'41		evening max el	10416 Sep 30 22:54	11° $\text{M}$ 16'11	22°59'06
evening set	10415 Nov 08 15:41	6° $\text{J}$ 57'36		desc. node	10416 Oct 01 14:41	11° $\text{M}$ 53'39	
min. Earth dist.	10415 Nov 13 23:27	4° $\text{J}$ 10'40	0.56533 AU	retrograde	10416 Oct 14 05:23	17° $\text{M}$ 52'49	
inferior conj	10415 Nov 16 13:17	2° $\text{J}$ 32'20	-5°33'50	evening set	10416 Oct 18 03:12	17° $\text{M}$ 19'30	
minimum elong	10415 Nov 16 18:02	2° $\text{J}$ 24'45	5°32'55	min. Earth dist.	10416 Oct 25 07:51	14° $\text{M}$ 02'21	0.55174 AU
	10415 Nov 20 20:38	30° $\text{R}$ $\text{M}$		inferior conj	10416 Oct 26 17:40	13° $\text{M}$ 13'39	-5°42'07
morning rise	10415 Nov 24 22:36	28° $\text{M}$ 28'07		minimum elong	10416 Oct 26 14:47	13° $\text{M}$ 17'49	5°41'38
direct	10415 Nov 27 10:22	28° $\text{M}$ 11'09		morning rise	10416 Nov 04 04:07	9° $\text{M}$ 24'06	
	10415 Dec 03 12:10	0° $\text{J}$		direct	10416 Nov 07 05:25	9° $\text{M}$ 02'13	
morning max el	10415 Dec 07 01:27	2° $\text{J}$ 46'30	19°29'38	morning max el	10416 Nov 18 09:42	14° $\text{M}$ 18'46	20°47'44
asc. node	10415 Dec 08 21:49	4° $\text{J}$ 42'21		asc. node	10416 Nov 24 18:49	21° $\text{M}$ 56'24	
morning set	10415 Dec 24 07:35	0° $\text{B}$ 35'48			10416 Nov 29 18:53	0° $\text{J}$	
	10415 Dec 24 00:27	0° $\text{B}$		morning set	10416 Dec 07 15:20	15° $\text{J}$ 17'22	
					10416 Dec 14 17:15	0° $\text{B}$	
superior conj	10416 Jan 01 07:43	16° $\text{B}$ 36'43	1°13'59				
minimum elong	10416 Jan 01 10:40	16° $\text{B}$ 51'11	1°14'07	superior conj	10416 Dec 15 01:18	0° $\text{B}$ 41'18	1°29'41
max. Earth dist.	10416 Jan 07 17:05	28° $\text{B}$ 45'03	1.37921 AU	minimum elong	10416 Dec 15 03:24	0° $\text{B}$ 52'02	1°30'01
	10416 Jan 08 09:29	0° $\approx$		max. Earth dist.	10416 Dec 20 01:24	10° $\text{B}$ 42'02	1.35849 AU
evening rise	10416 Jan 11 10:30	5° $\approx$ 26'51		evening rise	10416 Dec 24 00:18	18° $\text{B}$ 13'15	
desc. node	10416 Jan 11 16:14	5° $\approx$ 52'03		desc. node	10416 Dec 28 13:10	26° $\text{B}$ 23'32	
	10416 Jan 26 14:31	0° $\text{H}$			10416 Dec 30 15:22	0° $\approx$	
evening max el	10416 Feb 15 22:15	25° $\text{H}$ 57'38	25°07'39		10417 Jan 19 19:59	0° $\text{H}$	
	10416 Feb 20 14:42	0° $\text{Y}$		evening max el	10417 Jan 28 11:43	9° $\text{H}$ 45'45	26°14'50
retrograde	10416 Feb 27 21:50	2° $\text{Y}$ 54'54		retrograde	10417 Feb 10 06:44	17° $\text{H}$ 01'03	
evening set	10416 Mar 04 15:34	0° $\text{Y}$ 31'48		evening set	10417 Feb 16 12:12	14° $\text{H}$ 30'03	
	10416 Mar 05 05:51	30° $\text{R}$ $\text{H}$		min. Earth dist.	10417 Feb 20 16:31	10° $\text{H}$ 07'54	0.66804 AU
asc. node	10416 Mar 05 20:21	29° $\text{H}$ 24'44		asc. node	10417 Feb 20 17:35	10° $\text{H}$ 04'39	
min. Earth dist.	10416 Mar 09 02:10	25° $\text{H}$ 35'08	0.67819 AU	inferior conj	10417 Feb 22 08:44	8° $\text{H}$ 04'26	0°31'47
inferior conj	10416 Mar 10 06:39	24° $\text{H}$ 02'03	1°23'10	minimum elong	10417 Feb 22 07:55	8° $\text{H}$ 06'57	0°31'40
minimum elong	10416 Mar 10 04:51	24° $\text{H}$ 07'55	1°22'36	morning rise	10417 Feb 28 04:24	2° $\text{H}$ 18'45	
morning rise	10416 Mar 15 18:28	18° $\text{H}$ 06'42		direct	10417 Mar 03 07:15	1° $\text{H}$ 23'38	
direct	10416 Mar 19 08:20	16° $\text{H}$ 53'08		morning max el	10417 Mar 09 21:49	4° $\text{H}$ 57'11	18°36'26

desc. node	10417 Mar 26 13:38	28° $\text{H}$ 21'39		asc. node	10418 Feb 07 14:48	20° $\approx$ 21'25	
	10417 Mar 27 14:44	0° $\text{Y}$		morning rise	10418 Feb 12 10:09	16° $\approx$ 23'45	
morning set	10417 Mar 30 23:10	5° $\text{Y}$ 16'04		direct	10418 Feb 15 03:37	15° $\approx$ 43'42	
max. Earth dist.	10417 Apr 15 14:29	29° $\text{Y}$ 46'33	1.45592 AU	morning max el	10418 Feb 21 13:02	19° $\approx$ 05'51	18°03'45
	10417 Apr 15 17:55	0° $\text{B}$			10418 Mar 01 19:32	0° $\text{H}$	
superior conj	10417 Apr 16 02:58	0° $\text{B}$ 35'22	-1°59'02	morning set	10418 Mar 11 19:39	16° $\text{H}$ 06'23	
minimum elong	10417 Apr 15 18:54	0° $\text{B}$ 03'49	1°58'45	desc. node	10418 Mar 13 10:24	18° $\text{H}$ 44'32	
evening rise	10417 May 01 16:36	25° $\text{B}$ 08'47			10418 Mar 20 09:25	0° $\text{Y}$	
	10417 May 04 17:39	0° $\text{II}$		superior conj	10418 Mar 26 11:17	9° $\text{Y}$ 39'48	-1°27'04
greatest brilliancy	10417 May 09 19:40	8° $\text{II}$ 04'39	-0.8m	minimum elong	10418 Mar 26 02:13	9° $\text{Y}$ 03'59	1°26'05
asc. node	10417 May 19 15:41	22° $\text{II}$ 36'35		max. Earth dist.	10418 Mar 29 10:36	14° $\text{Y}$ 20'09	1.45520 AU
evening max el	10417 May 23 03:57	26° $\text{II}$ 40'42	18°45'19		10418 Apr 08 12:05	0° $\text{B}$	
	10417 May 27 22:35	0° $\text{B}$		evening rise	10418 Apr 11 14:27	4° $\text{B}$ 47'32	
retrograde	10417 May 29 18:58	0° $\text{B}$ 18'55		greatest brilliancy	10418 Apr 24 17:04	24° $\text{B}$ 49'20	-0.7m
	10417 May 31 14:33	30° $\text{R}$ $\text{II}$			10418 Apr 28 06:10	0° $\text{II}$	
evening set	10417 Jun 02 02:08	29° $\text{II}$ 16'35		evening max el	10418 May 06 11:18	10° $\text{II}$ 21'38	19°31'26
inferior conj	10417 Jun 07 16:30	23° $\text{II}$ 37'13	3°12'42	asc. node	10418 May 06 12:50	10° $\text{II}$ 25'28	
minimum elong	10417 Jun 07 17:35	23° $\text{II}$ 33'51	3°12'07	retrograde	10418 May 13 16:24	14° $\text{II}$ 26'56	
min. Earth dist.	10417 Jun 09 13:13	21° $\text{II}$ 18'56	0.65699 AU	evening set	10418 May 17 08:07	13° $\text{II}$ 08'59	
morning rise	10417 Jun 13 08:19	17° $\text{II}$ 17'04		inferior conj	10418 May 22 17:24	7° $\text{II}$ 14'50	3°18'12
direct	10417 Jun 19 19:09	14° $\text{II}$ 32'40		minimum elong	10418 May 22 17:18	7° $\text{II}$ 15'10	3°17'45
desc. node	10417 Jun 22 13:48	14° $\text{II}$ 59'02		min. Earth dist.	10418 May 23 23:06	5° $\text{II}$ 36'45	0.67106 AU
morning max el	10417 Jul 02 23:52	22° $\text{II}$ 22'03	26°48'48	morning rise	10418 May 28 02:07	0° $\text{II}$ 54'40	
	10417 Jul 09 16:36	0° $\text{B}$			10418 May 29 04:57	30° $\text{R}$ $\text{B}$	
	10417 Jul 29 20:31	0° $\text{Q}$		direct	10418 Jun 03 03:04	28° $\text{B}$ 14'43	
morning set	10417 Aug 07 18:56	16° $\text{Q}$ 07'13			10418 Jun 08 15:04	0° $\text{II}$	
max. Earth dist.	10417 Aug 11 23:37	24° $\text{Q}$ 19'15	1.34104 AU	desc. node	10418 Jun 09 10:48	0° $\text{II}$ 30'54	
	10417 Aug 14 18:43	0° $\text{M}$		morning max el	10418 Jun 15 10:06	5° $\text{II}$ 36'24	25°35'41
asc. node	10417 Aug 15 15:17	1° $\text{M}$ 46'11			10418 Jul 04 05:15	0° $\text{B}$	
superior conj	10417 Aug 16 11:04	3° $\text{M}$ 29'02	0°08'08	morning set	10418 Jul 21 11:42	28° $\text{B}$ 35'25	
minimum elong	10417 Aug 16 10:39	3° $\text{M}$ 26'51	0°07'47		10418 Jul 22 06:14	0° $\text{Q}$	
behind sun begin	10417 Aug 16 05:35	3° $\text{M}$ 00'30		max. Earth dist.	10418 Jul 25 04:14	5° $\text{Q}$ 26'04	1.35949 AU
behind sun end	10417 Aug 16 15:42	3° $\text{M}$ 53'14		superior conj	10418 Jul 31 02:58	17° $\text{Q}$ 02'00	-0°23'05
evening rise	10417 Aug 23 20:08	19° $\text{M}$ 03'24		minimum elong	10418 Jul 31 04:24	17° $\text{Q}$ 09'07	0°23'11
	10417 Aug 29 05:38	0° $\text{Q}$		asc. node	10418 Aug 02 12:08	21° $\text{Q}$ 50'47	
evening max el	10417 Sep 12 15:13	21° $\text{Q}$ 33'03	21°22'52		10418 Aug 06 11:36	0° $\text{M}$	
desc. node	10417 Sep 18 11:55	25° $\text{Q}$ 57'57		evening rise	10418 Aug 08 02:44	3° $\text{M}$ 20'29	
retrograde	10417 Sep 24 17:52	27° $\text{Q}$ 33'42			10418 Aug 23 14:25	0° $\text{Q}$	
evening set	10417 Sep 27 07:58	27° $\text{Q}$ 18'19		evening max el	10418 Aug 25 20:00	2° $\text{Q}$ 26'39	20°02'32
inferior conj	10417 Oct 06 10:32	23° $\text{Q}$ 22'26	-4°53'43	retrograde	10418 Sep 05 07:36	7° $\text{Q}$ 38'56	
minimum elong	10417 Oct 06 01:15	23° $\text{Q}$ 35'27	4°51'28	desc. node	10418 Sep 05 09:09	7° $\text{Q}$ 38'55	
min. Earth dist.	10417 Oct 06 15:17	23° $\text{Q}$ 15'46	0.54621 AU	evening set	10418 Sep 07 05:45	7° $\text{Q}$ 29'12	
morning rise	10417 Oct 14 19:17	19° $\text{Q}$ 32'05		inferior conj	10418 Sep 16 05:53	3° $\text{Q}$ 29'39	-3°16'59
direct	10417 Oct 18 14:17	19° $\text{Q}$ 01'02		minimum elong	10418 Sep 15 21:17	3° $\text{Q}$ 42'33	3°14'02
morning max el	10417 Oct 31 04:59	25° $\text{Q}$ 01'43	22°25'28	min. Earth dist.	10418 Sep 18 00:32	2° $\text{Q}$ 25'39	0.55008 AU
	10417 Nov 04 18:25	0° $\text{M}$			10418 Sep 22 15:00	30° $\text{R}$ $\text{M}$	
asc. node	10417 Nov 11 15:45	10° $\text{M}$ 02'26		morning rise	10418 Sep 24 11:36	29° $\text{M}$ 17'47	
morning set	10417 Nov 22 02:03	0° $\text{X}$ 04'54		direct	10418 Sep 29 01:26	28° $\text{M}$ 32'21	
	10417 Nov 22 01:07	0° $\text{X}$			10418 Oct 05 07:44	0° $\text{Q}$	
superior conj	10417 Nov 29 03:10	15° $\text{X}$ 08'01	1°38'03	morning max el	10418 Oct 12 17:00	5° $\text{Q}$ 14'12	24°12'47
minimum elong	10417 Nov 29 04:05	15° $\text{X}$ 12'52	1°38'30	asc. node	10418 Oct 29 12:38	28° $\text{Q}$ 48'03	
max. Earth dist.	10417 Dec 02 16:45	22° $\text{X}$ 35'53	1.34090 AU		10418 Oct 30 04:14	0° $\text{M}$	
	10417 Dec 06 08:58	0° $\text{B}$		morning set	10418 Nov 06 13:52	14° $\text{M}$ 53'17	
evening rise	10417 Dec 07 05:01	1° $\text{B}$ 38'04		superior conj	10418 Nov 13 10:32	29° $\text{M}$ 48'53	1°39'48
desc. node	10417 Dec 15 10:09	16° $\text{B}$ 42'46		minimum elong	10418 Nov 13 10:15	29° $\text{M}$ 47'24	1°40'12
	10417 Dec 23 14:37	0° $\approx$			10418 Nov 13 12:34	0° $\text{X}$	
evening max el	10418 Jan 11 01:17	23° $\approx$ 24'25	27°04'21	max. Earth dist.	10418 Nov 15 16:15	4° $\text{X}$ 39'41	1.32747 AU
	10418 Jan 20 11:12	0° $\text{H}$		evening rise	10418 Nov 20 21:06	15° $\text{X}$ 32'22	
retrograde	10418 Jan 24 09:39	0° $\text{H}$ 46'25			10418 Nov 28 10:27	0° $\text{B}$	
	10418 Jan 28 02:19	30° $\text{R}$ $\approx$		desc. node	10418 Dec 02 07:11	6° $\text{B}$ 43'55	
evening set	10418 Jan 31 01:25	28° $\approx$ 12'30			10418 Dec 18 08:42	0° $\approx$	
min. Earth dist.	10418 Feb 04 00:19	24° $\approx$ 24'08	0.65423 AU	evening max el	10418 Dec 24 13:30	6° $\approx$ 41'57	27°29'08
inferior conj	10418 Feb 06 04:17	21° $\approx$ 57'17	-0°28'34	retrograde	10419 Jan 07 05:55	14° $\approx$ 03'01	
minimum elong	10418 Feb 06 05:06	21° $\approx$ 54'58	0°27'53	evening set	10419 Jan 14 04:52	11° $\approx$ 32'58	

min. Earth dist.	10419 Jan 17 23:29	8° $\approx$ 15'57	0.63709 AU	inferior conj	10420 Jan 03 12:51	18° $\approx$ 47'31	-2°51'08
inferior conj	10419 Jan 20 14:43	5° $\approx$ 34'40	-1°36'59	minimum elong	10420 Jan 03 18:34	18° $\approx$ 34'32	2°48'30
minimum elong	10419 Jan 20 17:49	5° $\approx$ 26'44	1°35'16	morning rise	10420 Jan 10 20:17	13° $\approx$ 47'22	
asc. node	10419 Jan 25 11:58	1° $\approx$ 15'11		asc. node	10420 Jan 12 09:05	13° $\approx$ 28'27	
morning rise	10419 Jan 27 08:47	0° $\approx$ 16'14		direct	10420 Jan 13 01:04	13° $\approx$ 26'30	
	10419 Jan 28 04:45	30° $\approx$ 8'3		morning max el	10420 Jan 19 23:14	16° $\approx$ 56'40	17°50'42
direct	10419 Jan 29 18:42	29° $\approx$ 47'37			10420 Jan 29 05:14	0° $\approx$	
	10419 Jan 31 08:29	0° $\approx$		morning set	10420 Feb 04 16:21	11° $\approx$ 25'48	
morning max el	10419 Feb 05 06:36	3° $\approx$ 08'53	17°48'17	desc. node	10420 Feb 15 03:57	29° $\approx$ 57'37	
morning set	10419 Feb 21 19:28	28° $\approx$ 16'25			10420 Feb 15 04:30	0° $\approx$	
	10419 Feb 22 19:40	0° $\approx$					
desc. node	10419 Feb 28 07:10	9° $\approx$ 18'04		superior conj	10420 Feb 15 14:52	0° $\approx$ 44'24	-0°03'28
				minimum elong	10420 Feb 15 14:34	0° $\approx$ 43'07	0°03'09
superior conj	10419 Mar 06 12:43	19° $\approx$ 36'41	-0°45'23	behind sun begin	10420 Feb 15 06:09	0° $\approx$ 07'03	
minimum elong	10419 Mar 06 07:50	19° $\approx$ 16'49	0°44'33	behind sun end	10420 Feb 15 23:00	1° $\approx$ 19'06	
max. Earth dist.	10419 Mar 12 05:39	28° $\approx$ 47'22	1.44720 AU	max. Earth dist.	10420 Feb 22 20:52	12° $\approx$ 50'12	1.43278 AU
	10419 Mar 12 23:58	0° $\approx$		evening rise	10420 Feb 29 18:41	23° $\approx$ 51'07	
evening rise	10419 Mar 22 02:02	14° $\approx$ 09'07			10420 Mar 04 18:07	0° $\approx$	
	10419 Apr 01 13:52	0° $\approx$			10420 Mar 25 16:55	0° $\approx$	
evening max el	10419 Apr 19 13:05	24° $\approx$ 03'53	20°32'19	evening max el	10420 Apr 01 09:21	7° $\approx$ 47'09	21°44'48
asc. node	10419 Apr 23 09:59	27° $\approx$ 19'37		asc. node	10420 Apr 09 07:11	13° $\approx$ 03'57	
retrograde	10419 Apr 27 15:10	28° $\approx$ 46'10		retrograde	10420 Apr 10 13:16	13° $\approx$ 11'41	
evening set	10419 May 01 16:13	27° $\approx$ 12'28		evening set	10420 Apr 15 00:38	11° $\approx$ 22'41	
inferior conj	10419 May 06 23:11	21° $\approx$ 05'18	3°11'07	inferior conj	10420 Apr 20 07:37	5° $\approx$ 04'47	2°53'16
minimum elong	10419 May 06 22:05	21° $\approx$ 09'05	3°10'39	minimum elong	10420 Apr 20 05:48	5° $\approx$ 11'09	2°52'40
min. Earth dist.	10419 May 07 14:48	20° $\approx$ 11'36	0.68059 AU	min. Earth dist.	10420 Apr 20 10:12	4° $\approx$ 55'47	0.68552 AU
morning rise	10419 May 12 03:43	14° $\approx$ 47'45			10420 Apr 24 06:41	30° $\approx$ 8'0	
direct	10419 May 17 16:19	12° $\approx$ 20'39		morning rise	10420 Apr 25 10:47	28° $\approx$ 05'13	
desc. node	10419 May 27 07:47	17° $\approx$ 33'16		direct	10420 Apr 30 09:59	26° $\approx$ 04'30	
morning max el	10419 May 28 19:44	19° $\approx$ 00'45	24°09'16		10420 May 07 12:15	0° $\approx$	
	10419 Jun 07 02:35	0° $\approx$		morning max el	10420 May 10 06:26	2° $\approx$ 32'18	22°39'25
	10419 Jun 27 08:05	0° $\approx$		desc. node	10420 May 13 04:42	5° $\approx$ 41'45	
morning set	10419 Jul 03 09:09	10° $\approx$ 08'40			10420 May 31 02:47	0° $\approx$	
max. Earth dist.	10419 Jul 07 02:03	16° $\approx$ 39'08	1.38124 AU	morning set	10420 Jun 13 06:13	20° $\approx$ 13'41	
				max. Earth dist.	10420 Jun 17 23:24	28° $\approx$ 12'01	1.40407 AU
superior conj	10419 Jul 14 06:52	29° $\approx$ 58'17	-0°56'13		10420 Jun 18 21:12	0° $\approx$	
minimum elong	10419 Jul 14 10:35	0° $\approx$ 16'04	0°56'02				
	10419 Jul 14 07:14	0° $\approx$		superior conj	10420 Jun 25 18:37	12° $\approx$ 08'26	-1°28'31
asc. node	10419 Jul 20 09:01	11° $\approx$ 50'09		minimum elong	10420 Jun 26 00:27	12° $\approx$ 34'48	1°28'15
evening rise	10419 Jul 23 03:14	17° $\approx$ 17'30			10420 Jul 05 08:43	0° $\approx$	
	10419 Jul 29 19:06	0° $\approx$		evening rise	10420 Jul 05 18:27	0° $\approx$ 46'02	
evening max el	10419 Aug 08 14:11	14° $\approx$ 06'51	19°03'01	asc. node	10420 Jul 06 05:56	1° $\approx$ 40'21	
retrograde	10419 Aug 17 10:39	18° $\approx$ 31'20		evening max el	10420 Jul 21 18:52	26° $\approx$ 02'29	18°24'41
evening set	10419 Aug 19 07:36	18° $\approx$ 20'17			10420 Jul 27 06:18	0° $\approx$	
desc. node	10419 Aug 23 06:24	16° $\approx$ 52'47		retrograde	10420 Jul 29 08:26	0° $\approx$ 17'19	
inferior conj	10419 Aug 27 16:49	14° $\approx$ 05'58	-1°22'45	evening set	10420 Jul 31 11:23	0° $\approx$ 00'11	
minimum elong	10419 Aug 27 13:14	14° $\approx$ 12'09	1°21'31		10420 Jul 31 11:40	30° $\approx$ 8'0	
min. Earth dist.	10419 Aug 30 14:03	12° $\approx$ 07'10	0.56280 AU	inferior conj	10420 Aug 08 01:16	25° $\approx$ 02'67	0°20'00
morning rise	10419 Sep 04 15:46	9° $\approx$ 18'03		minimum elong	10420 Aug 08 01:58	25° $\approx$ 02'44	0°19'25
direct	10419 Sep 10 00:51	8° $\approx$ 10'15		desc. node	10420 Aug 09 03:39	24° $\approx$ 03'32	
morning max el	10419 Sep 24 05:37	15° $\approx$ 26'24	25°53'06	min. Earth dist.	10420 Aug 11 09:33	22° $\approx$ 04'51	0.58198 AU
	10419 Oct 05 23:04	0° $\approx$		morning rise	10420 Aug 15 13:01	20° $\approx$ 01'51	
asc. node	10419 Oct 16 09:29	18° $\approx$ 02'34		direct	10420 Aug 21 15:09	18° $\approx$ 02'50	
morning set	10419 Oct 22 01:03	29° $\approx$ 03'32		morning max el	10420 Sep 04 23:59	26° $\approx$ 05'58	27°09'27
	10419 Oct 22 05:26	0° $\approx$			10420 Sep 08 16:11	0° $\approx$	
					10420 Sep 28 08:31	0° $\approx$	
superior conj	10419 Oct 28 21:03	14° $\approx$ 35'57	1°35'29	asc. node	10420 Oct 02 06:19	7° $\approx$ 38'24	
minimum elong	10419 Oct 28 19:47	14° $\approx$ 28'54	1°35'43	morning set	10420 Oct 05 09:57	14° $\approx$ 10'20	
max. Earth dist.	10419 Oct 29 21:58	16° $\approx$ 53'42	1.31872 AU				
evening rise	10419 Nov 04 21:26	29° $\approx$ 47'09		superior conj	10420 Oct 12 08:50	29° $\approx$ 02'35	1°25'30
	10419 Nov 04 23:54	0° $\approx$		minimum elong	10420 Oct 12 06:52	29° $\approx$ 02'39	1°25'29
desc. node	10419 Nov 19 04:16	26° $\approx$ 18'20		max. Earth dist.	10420 Oct 12 07:03	29° $\approx$ 03'43	1.31481 AU
	10419 Nov 21 12:29	0° $\approx$			10420 Oct 12 15:22	0° $\approx$	
evening max el	10419 Dec 06 22:08	19° $\approx$ 24'20	27°23'20	evening rise	10420 Oct 19 03:36	14° $\approx$ 16'12	
retrograde	10419 Dec 20 18:53	26° $\approx$ 40'09			10420 Oct 27 00:14	0° $\approx$	
evening set	10419 Dec 27 19:25	24° $\approx$ 22'54		desc. node	10420 Nov 05 01:26	15° $\approx$ 15'35	
min. Earth dist.	10419 Dec 31 12:27	21° $\approx$ 31'20	0.61728 AU		10420 Nov 16 15:39	0° $\approx$	

evening max el	10420 Nov 18 00:48	1°  21'09	26°43'29	desc. node	10421 Oct 22 22:38	3°  20'56	
retrograde	10420 Dec 01 23:16	8°  29'19		evening max el	10421 Oct 30 19:33	12°  26'42	25°31'30
evening set	10420 Dec 08 17:08	6°  34'56		retrograde	10421 Nov 13 16:52	19°  26'30	
min. Earth dist.	10420 Dec 12 14:57	3°  57'59	0.59615 AU	evening set	10421 Nov 19 17:17	18°  03'12	
inferior conj	10420 Dec 15 19:15	1°  32'00	-4°05'29	min. Earth dist.	10421 Nov 24 07:53	15°  25'17	0.57572 AU
minimum elong	10420 Dec 16 02:59	1°  31'40	4°02'39	inferior conj	10421 Nov 27 06:39	13°  23'47	-5°09'01
	10420 Dec 17 16:09	30°  R 		minimum elong	10421 Nov 27 13:49	13°  11'25	5°07'12
morning rise	10420 Dec 23 15:31	26°  14'42		morning rise	10421 Dec 05 12:40	9°  06'52	
direct	10420 Dec 25 18:40	26°  13'03		direct	10421 Dec 07 19:34	8°  15'05	
asc. node	10420 Dec 29 06:11	27°  17'44		asc. node	10421 Dec 16 03:15	12°  13'82	
	10421 Jan 02 03:17	0°  3		morning max el	10421 Dec 16 15:19	13°  06'38	18°54'55
morning max el	10421 Jan 02 11:25	0°  319'28	18°12'18		10421 Dec 28 02:45	0°  3	
morning set	10421 Jan 18 04:16	25°  316'36		morning set	10422 Jan 02 02:31	9°  335'13	
	10421 Jan 20 16:22	0°  ≈					
superior conj	10421 Jan 27 16:41	12°  ≈58'24	0°32'54	superior conj	10422 Jan 10 13:39	26°  306'04	1°01'21
minimum elong	10421 Jan 27 19:03	13°  ≈09'04	0°32'56	minimum elong	10422 Jan 10 16:46	26°  320'54	1°01'24
desc. node	10421 Feb 01 00:46	20°  ≈39'49			10422 Jan 12 15:14	0°  ≈	
max. Earth dist.	10421 Feb 04 07:21	26°  ≈16'48	1.41363 AU	max. Earth dist.	10422 Jan 17 14:19	9°  ≈02'54	1.39192 AU
	10421 Feb 06 12:38	0°  X		desc. node	10422 Jan 18 21:38	11°  ≈21'07	
evening rise	10421 Feb 09 04:23	4°  X21'34		evening rise	10422 Jan 21 11:34	15°  ≈48'58	
	10421 Feb 26 00:33	0°  Y			10422 Jan 30 03:53	0°  X	
evening max el	10421 Mar 15 01:31	21°  Y33'00	23°04'04	evening max el	10422 Feb 25 15:32	5°  Y22'26	24°24'01
retrograde	10421 Mar 25 09:05	27°  Y38'52		retrograde	10422 Mar 09 01:22	12°  Y03'07	
asc. node	10421 Mar 27 04:25	27°  Y23'07		asc. node	10422 Mar 14 01:39	10°  Y07'57	
evening set	10421 Mar 30 07:46	25°  Y35'21		evening set	10422 Mar 14 12:07	9°  Y46'33	
inferior conj	10421 Apr 04 16:43	19°  Y09'50	2°25'37	min. Earth dist.	10422 Mar 19 02:58	4°  Y29'50	0.68229 AU
minimum elong	10421 Apr 04 14:32	19°  Y17'21	2°24'54	inferior conj	10422 Mar 20 00:36	3°  Y17'15	1°48'39
min. Earth dist.	10421 Apr 04 07:00	19°  Y43'26	0.68605 AU	minimum elong	10422 Mar 19 22:31	3°  Y24'14	1°47'58
morning rise	10421 Apr 09 21:12	13°  Y02'27			10422 Mar 22 14:07	30°  R  X	
direct	10421 Apr 14 06:59	11°  Y15'05		morning rise	10422 Mar 25 09:02	27°  X17'06	
morning max el	10421 Apr 22 21:32	16°  Y13'10	21°14'44	direct	10422 Mar 29 05:58	25°  X51'28	
desc. node	10421 Apr 30 01:34	24°  Y38'05			10422 Apr 05 17:14	0°  Y	
	10421 May 04 01:06	0°  X		morning max el	10422 Apr 05 19:55	0°  Y06'37	20°01'27
morning set	10421 May 24 00:41	29°  X47'43		desc. node	10422 Apr 16 22:23	14°  Y09'31	
	10421 May 24 03:49	0°  II			10422 Apr 27 15:10	0°  X	
max. Earth dist.	10421 May 31 02:12	11°  II07'37	1.42532 AU	morning set	10422 May 03 01:12	8°  X16'51	
				max. Earth dist.	10422 May 13 12:39	24°  X41'07	1.44229 AU
superior conj	10421 Jun 07 09:39	23°  II21'52	-1°55'37		10422 May 16 20:08	0°  II	
minimum elong	10421 Jun 07 15:51	23°  II48'29	1°55'35	superior conj	10422 May 19 00:40	3°  II33'09	-2°11'22
	10421 Jun 11 05:31	0°  ☿		minimum elong	10422 May 19 03:23	3°  II44'17	2°11'44
evening rise	10421 Jun 18 20:13	13°  ☿35'12		evening rise	10422 Jun 01 03:51	25°  II35'03	
asc. node	10421 Jun 23 02:54	21°  ☿16'16			10422 Jun 03 17:37	0°  ☿	
	10421 Jun 28 05:35	0°  Ω		asc. node	10422 Jun 09 23:57	10°  ☿32'48	
evening max el	10421 Jul 05 05:54	9°  Ω23'43	18°06'23	evening max el	10422 Jun 18 19:34	22°  ☿40'26	18°07'05
retrograde	10421 Jul 11 23:49	12°  Ω50'07		retrograde	10422 Jun 25 04:53	26°  ☿00'41	
evening set	10421 Jul 14 10:40	12°  Ω23'06		evening set	10422 Jun 27 23:35	25°  ☿21'10	
inferior conj	10421 Jul 21 06:26	7°  Ω28'36	1°38'25	inferior conj	10422 Jul 04 04:50	20°  ☿07'37	2°31'27
minimum elong	10421 Jul 21 09:03	7°  Ω22'29	1°37'10	minimum elong	10422 Jul 04 07:30	20°  ☿00'32	2°30'19
min. Earth dist.	10421 Jul 24 12:27	4°  Ω27'10	0.60437 AU	min. Earth dist.	10422 Jul 07 00:19	17°  ☿08'44	0.62683 AU
desc. node	10421 Jul 27 00:53	2°  Ω23'50		morning rise	10422 Jul 10 13:34	13°  ☿58'01	
morning rise	10421 Jul 28 04:36	1°  Ω36'31		desc. node	10422 Jul 13 22:04	12°  ☿05'58	
	10421 Jul 31 13:48	30°  R  ☿		direct	10422 Jul 17 06:48	11°  ☿29'16	
direct	10421 Aug 03 17:57	29°  ☿30'40		morning max el	10422 Jul 31 08:12	19°  ☿31'32	27°53'41
	10421 Aug 07 00:33	0°  Ω			10422 Aug 09 06:05	0°  Ω	
morning max el	10421 Aug 18 01:12	7°  Ω26'39	27°50'50		10422 Aug 28 03:06	0°  ☿	
	10421 Sep 04 04:01	0°  ☿		morning set	10422 Sep 03 13:22	12°  ☿26'50	
asc. node	10421 Sep 19 03:08	27°  ☿28'37		asc. node	10422 Sep 05 23:58	17°  ☿28'16	
morning set	10421 Sep 19 14:46	28°  ☿28'55		max. Earth dist.	10422 Sep 08 20:31	23°  ☿31'33	1.32160 AU
	10421 Sep 20 08:11	0°  ☿					
max. Earth dist.	10421 Sep 25 15:50	11°  ☿29'41	1.31574 AU	superior conj	10422 Sep 11 04:39	28°  ☿35'43	0°49'44
superior conj	10421 Sep 26 19:59	14°  ☿05'22	1°10'10	minimum elong	10422 Sep 11 02:38	28°  ☿24'43	0°49'18
minimum elong	10421 Sep 26 17:44	13°  ☿52'56	1°09'54		10422 Sep 11 20:04	0°  ☿	
evening rise	10421 Oct 03 13:19	28°  ☿52'38		evening rise	10422 Sep 18 00:41	13°  ☿30'50	
	10421 Oct 04 01:54	0°  ☿			10422 Sep 26 05:25	0°  ☿	
	10421 Oct 20 13:29	0°  ☿		desc. node	10422 Oct 09 19:52	20°  ☿14'11	

evening max el	10422 Oct 12 07:21	22° $\mathbb{M}$ 48'35	23°57'04	evening max el	10423 Sep 23 19:07	2° $\mathbb{M}$ 56'05	22°16'45
retrograde	10422 Oct 25 22:03	29° $\mathbb{M}$ 36'59		desc. node	10423 Sep 26 17:08	5° $\mathbb{M}$ 29'13	
evening set	10422 Oct 30 16:53	28° $\mathbb{M}$ 46'56		retrograde	10423 Oct 06 15:42	9° $\mathbb{M}$ 20'18	
min. Earth dist.	10422 Nov 05 17:50	25° $\mathbb{M}$ 49'27	0.55873 AU	evening set	10423 Oct 09 22:45	8° $\mathbb{M}$ 56'16	
inferior conj	10422 Nov 07 21:32	24° $\mathbb{M}$ 31'19	-5°43'41	min. Earth dist.	10423 Oct 18 01:11	5° $\mathbb{M}$ 21'38	0.54821 AU
minimum elong	10422 Nov 07 23:25	24° $\mathbb{M}$ 28'27	5°43'12	inferior conj	10423 Oct 18 19:35	4° $\mathbb{M}$ 55'42	-5°28'44
morning rise	10422 Nov 16 07:56	20° $\mathbb{M}$ 34'47		minimum elong	10423 Oct 18 13:20	5° $\mathbb{M}$ 04'31	5°27'40
direct	10422 Nov 19 01:03	20° $\mathbb{M}$ 16'03		morning rise	10423 Oct 27 05:32	1° $\mathbb{M}$ 08'40	
morning max el	10422 Nov 29 07:19	25° $\mathbb{M}$ 07'47	20°00'11	direct	10423 Oct 30 13:56	0° $\mathbb{M}$ 43'35	
asc. node	10422 Dec 03 00:17	29° $\mathbb{M}$ 15'34		morning max el	10423 Nov 11 09:47	6° $\mathbb{M}$ 18'29	21°27'28
	10422 Dec 03 13:58	0° $\mathbb{M}$		asc. node	10423 Nov 19 21:14	16° $\mathbb{M}$ 53'29	
morning set	10422 Dec 17 07:35	24° $\mathbb{M}$ 10'52			10423 Nov 27 07:18	0° $\mathbb{M}$	
	10422 Dec 20 03:55	0° $\mathbb{M}$		morning set	10423 Dec 01 16:51	8° $\mathbb{M}$ 56'04	
superior conj	10422 Dec 25 00:55	9° $\mathbb{M}$ 53'28	1°21'34	superior conj	10423 Dec 08 22:27	24° $\mathbb{M}$ 09'07	1°34'05
minimum elong	10422 Dec 25 03:35	10° $\mathbb{M}$ 06'44	1°21'48	minimum elong	10423 Dec 09 00:04	24° $\mathbb{M}$ 17'30	1°34'28
max. Earth dist.	10422 Dec 30 21:02	21° $\mathbb{M}$ 14'04	1.37012 AU		10423 Dec 11 18:41	0° $\mathbb{M}$	
evening rise	10423 Jan 03 15:04	28° $\mathbb{M}$ 08'37		max. Earth dist.	10423 Dec 13 07:58	3° $\mathbb{M}$ 07'37	1.35048 AU
	10423 Jan 04 15:58	0° $\mathbb{M}$		evening rise	10423 Dec 17 11:40	11° $\mathbb{M}$ 12'34	
desc. node	10423 Jan 05 18:31	1° $\mathbb{M}$ 57'16		desc. node	10423 Dec 23 15:29	22° $\mathbb{M}$ 34'18	
	10423 Jan 23 12:45	0° $\mathbb{M}$			10423 Dec 28 03:25	0° $\mathbb{M}$	
evening max el	10423 Feb 08 04:52	19° $\mathbb{M}$ 12'07	25°37'52		10424 Jan 18 21:18	0° $\mathbb{M}$	
retrograde	10423 Feb 20 13:05	26° $\mathbb{M}$ 17'51		evening max el	10424 Jan 21 18:13	2° $\mathbb{M}$ 56'42	26°38'20
evening set	10423 Feb 26 12:04	23° $\mathbb{M}$ 50'45		retrograde	10424 Feb 03 19:34	10° $\mathbb{M}$ 16'29	
asc. node	10423 Feb 28 22:55	21° $\mathbb{M}$ 24'33		evening set	10424 Feb 10 05:48	7° $\mathbb{M}$ 43'09	
min. Earth dist.	10423 Mar 02 19:52	19° $\mathbb{M}$ 09'06	0.67442 AU	min. Earth dist.	10424 Feb 14 07:35	3° $\mathbb{M}$ 35'48	0.66265 AU
inferior conj	10423 Mar 04 05:22	17° $\mathbb{M}$ 22'18	1°02'29	asc. node	10424 Feb 15 20:08	1° $\mathbb{M}$ 47'22	
minimum elong	10423 Mar 04 03:54	17° $\mathbb{M}$ 26'58	1°02'05	inferior conj	10424 Feb 16 04:56	1° $\mathbb{M}$ 21'06	0°07'14
morning rise	10423 Mar 09 20:15	11° $\mathbb{M}$ 31'01		minimum elong	10424 Feb 16 04:44	1° $\mathbb{M}$ 21'42	0°07'26
direct	10423 Mar 13 05:19	10° $\mathbb{M}$ 25'36		transit middle	10424 Feb 16 04:44	1° $\mathbb{M}$ 21'42	0°07'26
morning max el	10423 Mar 20 02:09	14° $\mathbb{M}$ 10'28	19°02'51	transit begin	10424 Feb 16 02:08	1° $\mathbb{M}$ 29'25	
	10423 Apr 01 02:02	0° $\mathbb{M}$		transit end	10424 Feb 16 07:19	1° $\mathbb{M}$ 14'00	
greatest brilliancy	10423 Apr 02 11:31	2° $\mathbb{M}$ 05'53	-0.7m		10424 Feb 17 08:35	30° $\mathbb{R}$	
desc. node	10423 Apr 03 19:09	4° $\mathbb{M}$ 05'53		morning rise	10424 Feb 22 04:42	25° $\mathbb{M}$ 40'32	
morning set	10423 Apr 12 05:05	17° $\mathbb{M}$ 03'22		direct	10424 Feb 25 03:18	24° $\mathbb{M}$ 52'24	
	10423 Apr 20 13:02	0° $\mathbb{M}$		morning max el	10424 Mar 02 14:49	28° $\mathbb{M}$ 19'41	18°20'27
max. Earth dist.	10423 Apr 26 04:55	8° $\mathbb{M}$ 51'17	1.45301 AU		10424 Mar 04 04:39	0° $\mathbb{M}$	
				desc. node	10424 Mar 20 15:53	24° $\mathbb{M}$ 20'32	
superior conj	10423 Apr 28 17:20	12° $\mathbb{M}$ 49'00	-2°09'27	morning set	10424 Mar 22 08:30	27° $\mathbb{M}$ 02'37	
minimum elong	10423 Apr 28 12:51	12° $\mathbb{M}$ 31'19	2°09'37		10424 Mar 24 04:59	0° $\mathbb{M}$	
	10423 May 09 11:24	0° $\mathbb{M}$					
evening rise	10423 May 13 12:52	6° $\mathbb{M}$ 36'23		superior conj	10424 Apr 06 23:25	21° $\mathbb{M}$ 43'30	-1°47'18
asc. node	10423 May 27 21:02	29° $\mathbb{M}$ 22'47		minimum elong	10424 Apr 06 14:02	21° $\mathbb{M}$ 06'49	1°46'38
	10423 May 28 07:32	0° $\mathbb{M}$		max. Earth dist.	10424 Apr 07 23:55	23° $\mathbb{M}$ 19'21	1.45653 AU
evening max el	10423 Jun 02 08:38	6° $\mathbb{M}$ 11'19	18°26'14		10424 Apr 12 06:30	0° $\mathbb{M}$	
retrograde	10423 Jun 08 19:08	9° $\mathbb{M}$ 39'31		evening rise	10424 Apr 22 22:07	16° $\mathbb{M}$ 40'04	
evening set	10423 Jun 11 21:38	8° $\mathbb{M}$ 45'50			10424 May 01 10:32	0° $\mathbb{M}$	
inferior conj	10423 Jun 17 16:22	3° $\mathbb{M}$ 15'15	3°02'47	greatest brilliancy	10424 May 03 08:28	2° $\mathbb{M}$ 57'20	-0.8m
minimum elong	10423 Jun 17 18:07	3° $\mathbb{M}$ 10'02	3°02'02	asc. node	10424 May 13 18:09	17° $\mathbb{M}$ 37'07	
min. Earth dist.	10423 Jun 19 21:39	0° $\mathbb{M}$ 38'07	0.64697 AU	evening max el	10424 May 15 18:33	19° $\mathbb{M}$ 49'39	19°02'58
	10423 Jun 20 11:06	30° $\mathbb{R}$		retrograde	10424 May 22 14:50	23° $\mathbb{M}$ 38'29	
morning rise	10423 Jun 23 13:34	26° $\mathbb{M}$ 56'51		evening set	10424 May 26 01:27	22° $\mathbb{M}$ 29'42	
direct	10423 Jun 30 04:05	24° $\mathbb{M}$ 15'07		inferior conj	10424 May 31 13:16	16° $\mathbb{M}$ 43'45	3°16'42
desc. node	10423 Jun 30 19:10	24° $\mathbb{M}$ 16'28		minimum elong	10424 May 31 13:51	16° $\mathbb{M}$ 41'54	3°16'13
	10423 Jul 11 10:36	0° $\mathbb{M}$		min. Earth dist.	10424 Jun 02 03:32	14° $\mathbb{M}$ 41'34	0.66348 AU
morning max el	10423 Jul 13 18:29	2° $\mathbb{M}$ 13'32	27°21'01	morning rise	10424 Jun 06 01:41	10° $\mathbb{M}$ 22'51	
	10423 Aug 03 12:04	0° $\mathbb{M}$		direct	10424 Jun 12 08:37	7° $\mathbb{M}$ 39'06	
morning set	10423 Aug 18 03:12	25° $\mathbb{M}$ 57'41		desc. node	10424 Jun 16 16:13	8° $\mathbb{M}$ 42'55	
	10423 Aug 20 04:11	0° $\mathbb{M}$		morning max el	10424 Jun 25 05:14	15° $\mathbb{M}$ 19'28	26°19'56
max. Earth dist.	10423 Aug 22 17:22	5° $\mathbb{M}$ 10'56	1.33249 AU		10424 Jul 07 06:14	0° $\mathbb{M}$	
asc. node	10423 Aug 23 20:48	7° $\mathbb{M}$ 33'10			10424 Jul 26 07:41	0° $\mathbb{M}$	
				morning set	10424 Jul 31 04:49	8° $\mathbb{M}$ 51'56	
superior conj	10423 Aug 26 08:48	12° $\mathbb{M}$ 49'19	0°24'33	max. Earth dist.	10424 Aug 04 03:36	16° $\mathbb{M}$ 25'06	1.34833 AU
minimum elong	10423 Aug 26 07:37	12° $\mathbb{M}$ 42'59	0°24'07				
evening rise	10423 Sep 02 11:49	28° $\mathbb{M}$ 05'36		superior conj	10424 Aug 09 05:59	26° $\mathbb{M}$ 39'01	-0°04'46
	10423 Sep 03 09:29	0° $\mathbb{M}$		minimum elong	10424 Aug 09 06:16	26° $\mathbb{M}$ 40'29	0°05'02
	10423 Sep 21 01:34	0° $\mathbb{M}$		behind sun begin	10424 Aug 09 00:36	26° $\mathbb{M}$ 11'24	

behind sun end	10424 Aug 09 11:56	27° $\Omega$ 09'37		superior conj	10425 Jul 23 17:15	9° $\Omega$ 57'45	-0°37'02
asc. node	10424 Aug 09 17:37	27° $\Omega$ 38'49		minimum elong	10425 Jul 23 19:37	10° $\Omega$ 09'23	0°37'00
	10424 Aug 10 20:55	0° $\Pi$		asc. node	10425 Jul 27 14:28	17° $\Omega$ 41'47	
evening rise	10424 Aug 16 20:40	12° $\Pi$ 30'35		evening rise	10425 Aug 01 01:00	26° $\Omega$ 39'54	
	10424 Aug 25 21:27	0° $\Omega$			10425 Aug 02 16:56	0° $\Pi$	
evening max el	10424 Sep 04 16:10	13° $\Omega$ 25'45	20°46'20	evening max el	10425 Aug 18 02:59	24° $\Pi$ 39'39	19°34'38
desc. node	10424 Sep 12 14:24	18° $\Omega$ 35'04		retrograde	10425 Aug 27 21:10	29° $\Pi$ 30'07	
retrograde	10424 Sep 16 03:24	19° $\Omega$ 07'03		evening set	10425 Aug 29 17:30	29° $\Pi$ 20'29	
evening set	10424 Sep 18 08:12	18° $\Omega$ 55'22		desc. node	10425 Aug 30 11:39	29° $\Pi$ 11'13	
inferior conj	10424 Sep 27 11:40	14° $\Omega$ 59'37	-4°17'03	inferior conj	10425 Sep 07 12:25	25° $\Pi$ 16'06	-2°28'37
minimum elong	10424 Sep 27 01:48	15° $\Omega$ 13'44	4°14'11	minimum elong	10425 Sep 07 05:46	25° $\Pi$ 26'37	2°26'12
min. Earth dist.	10424 Sep 28 09:26	14° $\Omega$ 28'30	0.54662 AU	min. Earth dist.	10425 Sep 09 20:26	23° $\Pi$ 47'40	0.55458 AU
morning rise	10424 Oct 05 19:20	11° $\Omega$ 02'10		morning rise	10425 Sep 15 15:48	20° $\Pi$ 49'47	
direct	10424 Oct 09 21:57	10° $\Omega$ 25'55		direct	10425 Sep 20 14:11	19° $\Pi$ 55'28	
morning max el	10424 Oct 23 01:11	16° $\Omega$ 45'34	23°10'52	morning max el	10425 Oct 04 12:24	26° $\Pi$ 53'16	24°57'17
	10424 Nov 02 13:31	0° $\Pi$			10425 Oct 07 12:50	0° $\Omega$	
asc. node	10424 Nov 05 18:07	5° $\Pi$ 17'15		asc. node	10425 Oct 23 14:59	24° $\Omega$ 15'49	
morning set	10424 Nov 15 04:13	23° $\Pi$ 43'59			10425 Oct 26 13:42	0° $\Pi$	
	10424 Nov 18 02:17	0° $\Sigma$		morning set	10425 Oct 30 15:56	8° $\Pi$ 30'00	
superior conj	10424 Nov 22 02:57	8° $\Sigma$ 42'32	1°39'34	superior conj	10425 Nov 06 11:54	23° $\Pi$ 26'17	1°38'40
minimum elong	10424 Nov 22 03:21	8° $\Sigma$ 44'40	1°40'00	minimum elong	10425 Nov 06 11:10	23° $\Pi$ 22'17	1°39'01
max. Earth dist.	10424 Nov 25 02:25	15° $\Sigma$ 02'28	1.33458 AU	max. Earth dist.	10425 Nov 08 04:47	27° $\Pi$ 09'57	1.32319 AU
evening rise	10424 Nov 29 21:35	24° $\Sigma$ 50'35			10425 Nov 09 12:09	0° $\Sigma$	
	10424 Dec 02 13:15	0° $\Sigma$		evening rise	10425 Nov 13 17:32	8° $\Sigma$ 54'15	
desc. node	10424 Dec 09 12:30	12° $\Sigma$ 36'21			10425 Nov 24 22:40	0° $\Sigma$	
	10424 Dec 20 15:28	0° $\approx$		desc. node	10425 Nov 26 09:34	2° $\Sigma$ 26'49	
evening max el	10425 Jan 03 07:16	16° $\approx$ 27'12	27°18'19	evening max el	10425 Dec 16 18:28	29° $\Sigma$ 31'36	27°30'49
retrograde	10425 Jan 16 20:01	23° $\approx$ 50'30			10425 Dec 17 06:36	0° $\approx$	
evening set	10425 Jan 23 15:13	21° $\approx$ 17'13		retrograde	10425 Dec 30 13:21	6° $\approx$ 50'36	
min. Earth dist.	10425 Jan 27 12:00	17° $\approx$ 42'34	0.64725 AU	evening set	10426 Jan 06 13:34	4° $\approx$ 25'13	
inferior conj	10425 Jan 29 20:57	15° $\approx$ 08'03	-0°56'42	min. Earth dist.	10426 Jan 10 07:11	1° $\approx$ 19'39	0.62885 AU
minimum elong	10425 Jan 29 22:40	15° $\approx$ 03'23	0°55'36		10426 Jan 11 16:16	30° $\Sigma$	
asc. node	10425 Feb 01 17:18	12° $\approx$ 12'45		inferior conj	10426 Jan 13 02:33	28° $\Sigma$ 35'51	-2°08'00
morning rise	10425 Feb 05 07:48	9° $\approx$ 40'37		minimum elong	10426 Jan 13 06:45	28° $\Sigma$ 25'36	2°05'51
direct	10425 Feb 07 21:40	9° $\approx$ 06'03		asc. node	10426 Jan 19 14:27	23° $\Sigma$ 35'56	
morning max el	10425 Feb 14 07:24	12° $\approx$ 26'56	17°55'00	morning rise	10426 Jan 20 02:11	23° $\Sigma$ 24'30	
	10425 Feb 26 14:46	0° $\Sigma$		direct	10426 Jan 22 09:32	22° $\Sigma$ 59'37	
morning set	10425 Mar 03 17:16	8° $\Sigma$ 28'53		morning max el	10426 Jan 29 00:55	26° $\Sigma$ 23'51	17°47'03
desc. node	10425 Mar 07 12:39	14° $\Sigma$ 48'23			10426 Feb 01 03:36	0° $\approx$	
	10425 Mar 16 20:46	0° $\Upsilon$		morning set	10426 Feb 14 02:54	21° $\approx$ 06'42	
					10426 Feb 19 05:31	0° $\Sigma$	
superior conj	10425 Mar 17 13:27	1° $\Upsilon$ 06'38	-1°09'57	desc. node	10426 Feb 22 09:26	5° $\Sigma$ 24'39	
minimum elong	10425 Mar 17 05:49	0° $\Upsilon$ 36'10	1°08'57				
max. Earth dist.	10425 Mar 21 19:22	7° $\Upsilon$ 50'23	1.45262 AU	superior conj	10426 Feb 26 01:03	11° $\Sigma$ 32'31	-0°27'11
evening rise	10425 Apr 02 13:48	26° $\Upsilon$ 06'46		minimum elong	10426 Feb 25 22:17	11° $\Sigma$ 21'00	0°26'34
	10425 Apr 05 02:40	0° $\Sigma$		max. Earth dist.	10426 Mar 04 13:07	22° $\Sigma$ 09'15	1.44176 AU
greatest brilliancy	10425 Apr 17 06:25	18° $\Sigma$ 17'26	-0.6m		10426 Mar 09 12:00	0° $\Upsilon$	
	10425 Apr 25 20:10	0° $\Pi$		evening rise	10426 Mar 13 01:44	5° $\Upsilon$ 32'54	
evening max el	10425 Apr 28 23:38	3° $\Pi$ 31'47	19°55'45		10426 Mar 29 11:33	0° $\Sigma$	
asc. node	10425 Apr 30 15:18	5° $\Pi$ 04'47		evening max el	10426 Apr 11 23:08	17° $\Sigma$ 15'02	21°02'03
retrograde	10425 May 06 13:03	7° $\Pi$ 51'56		asc. node	10426 Apr 17 12:30	21° $\Sigma$ 31'24	
evening set	10425 May 10 08:34	6° $\Pi$ 27'29		retrograde	10426 Apr 20 11:39	22° $\Sigma$ 14'25	
inferior conj	10425 May 15 16:34	0° $\Pi$ 27'46	3°16'36	evening set	10426 Apr 24 17:00	20° $\Sigma$ 34'11	
minimum elong	10425 May 15 16:01	0° $\Pi$ 29'37	3°16'10	inferior conj	10426 Apr 29 23:44	14° $\Sigma$ 22'24	3°04'47
	10425 May 16 00:48	30° $\Sigma$		minimum elong	10426 Apr 29 22:18	14° $\Sigma$ 27'25	3°04'16
min. Earth dist.	10425 May 16 16:16	29° $\Sigma$ 07'57	0.67567 AU	min. Earth dist.	10426 Apr 30 09:45	13° $\Sigma$ 47'43	0.68330 AU
morning rise	10425 May 20 23:08	24° $\Sigma$ 08'18		morning rise	10426 May 05 03:22	8° $\Sigma$ 06'41	
direct	10425 May 26 19:07	21° $\Sigma$ 32'38		direct	10426 May 10 10:28	5° $\Sigma$ 46'44	
desc. node	10425 Jun 03 13:11	24° $\Sigma$ 56'43		morning max el	10426 May 21 00:34	12° $\Sigma$ 05'15	23°30'51
morning max el	10425 Jun 07 15:00	28° $\Sigma$ 38'35	24°59'51	desc. node	10426 May 21 10:08	12° $\Sigma$ 29'39	
	10425 Jun 08 22:13	0° $\Pi$			10426 Jun 04 08:39	0° $\Pi$	
	10425 Jun 01 00:21	0° $\Sigma$			10426 Jun 23 20:04	0° $\Sigma$	
morning set	10425 Jul 13 14:01	20° $\Sigma$ 58'40		morning set	10426 Jun 25 01:36	2° $\Sigma$ 03'58	
max. Earth dist.	10425 Jul 17 04:14	27° $\Sigma$ 29'21	1.36844 AU	max. Earth dist.	10426 Jun 29 01:02	8° $\Sigma$ 53'56	1.39107 AU
	10425 Jul 18 12:40	0° $\Omega$					
				superior conj	10426 Jul 06 14:50	22° $\Sigma$ 35'45	-1°10'15


































































































































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	10426 Jul 10 12:41	0°♄			10427 Jun 16 06:19	0°☿	
asc. node	10426 Jul 14 11:23	7°♄37'44					
evening rise	10426 Jul 15 21:59	10°♄25'40		superior conj	10427 Jun 18 18:20	4°☿22'50	-1°40'58
	10426 Jul 26 19:49	0°♄		minimum elong	10427 Jun 19 00:40	4°☿50'48	1°40'46
evening max el	10426 Aug 01 02:08	6°♄38'47	18°44'08	evening rise	10427 Jun 29 08:03	23°☿38'57	
retrograde	10426 Aug 09 07:52	10°♄45'38		asc. node	10427 Jul 01 08:20	27°☿22'27	
evening set	10426 Aug 11 07:07	10°♄32'23			10427 Jul 02 18:39	0°♄	
desc. node	10426 Aug 17 08:54	7°♄34'27		evening max el	10427 Jul 15 09:56	19°♄15'30	18°14'23
inferior conj	10426 Aug 19 08:11	6°♄09'43	-0°36'34	retrograde	10427 Jul 22 13:48	22°♄52'37	
minimum elong	10426 Aug 19 06:41	6°♄12'28	0°36'13	evening set	10427 Jul 24 20:00	22°♄31'41	
min. Earth dist.	10426 Aug 22 11:56	3°♄51'07	0.57043 AU	inferior conj	10427 Aug 01 01:47	17°♄48'25	0°56'32
morning rise	10426 Aug 27 02:53	1°♄06'06		minimum elong	10427 Aug 01 03:35	17°♄44'32	0°55'31
	10426 Aug 30 11:53	30°♄♄		desc. node	10427 Aug 04 06:10	15°♄04'33	
direct	10426 Sep 01 19:56	29°♄46'32		min. Earth dist.	10427 Aug 04 10:17	14°♄56'06	0.59132 AU
	10426 Sep 04 04:22	0°♄		morning rise	10427 Aug 08 07:52	12°♄10'54	
morning max el	10426 Sep 16 02:53	7°♄13'25	26°29'23	direct	10427 Aug 14 15:25	10°♄21'43	
	10426 Oct 03 01:26	0°♄		morning max el	10427 Aug 29 00:22	18°♄09'48	27°31'52
asc. node	10426 Oct 10 11:50	13°♄40'18			10427 Sep 07 22:22	0°♄	
morning set	10426 Oct 15 02:23	23°♄09'49			10427 Sep 25 16:27	0°♄	
	10426 Oct 18 06:01	0°♄		asc. node	10427 Sep 27 08:40	3°♄22'52	
				morning set	10427 Sep 29 09:47	7°♄37'48	
superior conj	10426 Oct 21 23:12	8°♄14'11	1°31'54				
minimum elong	10426 Oct 21 21:35	8°♄05'14	1°32'03	superior conj	10427 Oct 06 10:54	22°♄59'39	1°19'37
max. Earth dist.	10426 Oct 22 12:35	9°♄28'32	1.31650 AU	minimum elong	10427 Oct 06 08:46	22°♄47'46	1°19'31
evening rise	10426 Oct 28 20:41	23°♄16'08		max. Earth dist.	10427 Oct 05 22:10	21°♄48'47	1.31459 AU
	10426 Nov 01 03:10	0°♄			10427 Oct 09 14:34	0°♄	
desc. node	10426 Nov 13 06:42	21°♄47'03		evening rise	10427 Oct 13 04:35	7°♄48'44	
	10426 Nov 18 20:12	0°♄			10427 Oct 24 14:29	0°♄	
evening max el	10426 Nov 29 01:07	11°♄56'38	27°10'40	desc. node	10427 Oct 31 03:53	10°♄24'21	
retrograde	10426 Dec 12 22:32	19°♄08'23		evening max el	10427 Nov 11 00:23	23°♄30'54	26°16'22
evening set	10426 Dec 19 21:31	16°♄59'53			10427 Nov 21 01:52	0°♄	
min. Earth dist.	10426 Dec 23 15:40	14°♄16'10	0.60834 AU	retrograde	10427 Nov 24 22:27	0°♄35'44	
inferior conj	10426 Dec 26 18:30	11°♄36'08	-3°23'08		10427 Nov 28 18:04	30°♄♄	
minimum elong	10426 Dec 27 01:14	11°♄21'40	3°20'18	evening set	10427 Dec 01 10:38	28°♄53'27	
morning rise	10427 Jan 03 07:32	6°♄44'20		min. Earth dist.	10427 Dec 05 13:32	26°♄18'38	0.58722 AU
direct	10427 Jan 05 11:16	6°♄25'33		inferior conj	10427 Dec 08 17:08	23°♄58'02	-4°34'41
asc. node	10427 Jan 06 11:35	6°♄29'50		minimum elong	10427 Dec 09 01:06	23°♄43'10	4°32'08
morning max el	10427 Jan 12 16:06	10°♄02'10	17°57'29	morning rise	10427 Dec 16 18:09	19°♄28'34	
	10427 Jan 25 18:32	0°♄		direct	10427 Dec 18 22:15	19°♄12'36	
morning set	10427 Jan 28 06:55	4°♄36'10		asc. node	10427 Dec 24 08:41	20°♄59'13	
				morning max el	10427 Dec 27 01:16	23°♄11'04	18°27'50
superior conj	10427 Feb 07 13:45	23°♄09'52	0°12'51		10428 Jan 01 11:53	0°♄	
minimum elong	10427 Feb 07 14:51	23°♄14'41	0°13'01	morning set	10428 Jan 11 23:41	18°♄39'48	
behind sun begin	10427 Feb 07 10:07	22°♄53'56			10428 Jan 17 21:49	0°♄	
behind sun end	10427 Feb 07 19:35	23°♄35'23					
desc. node	10427 Feb 09 06:14	26°♄05'50		superior conj	10428 Jan 21 00:20	5°♄48'21	0°45'58
	10427 Feb 11 12:56	0°♄		minimum elong	10428 Jan 21 03:13	6°♄01'38	0°45'59
max. Earth dist.	10427 Feb 15 02:58	6°♄00'18	1.42511 AU	desc. node	10428 Jan 27 03:04	16°♄47'45	
evening rise	10427 Feb 21 00:43	15°♄33'43		max. Earth dist.	10428 Jan 28 11:45	19°♄09'38	1.40452 AU
	10427 Mar 02 09:56	0°♄		evening rise	10428 Feb 01 19:19	26°♄27'21	
	10427 Mar 24 18:30	0°♄			10428 Feb 03 23:09	0°♄	
evening max el	10427 Mar 25 17:32	0°♄59'29	22°17'57		10428 Feb 24 02:18	0°♄	
retrograde	10427 Apr 04 08:54	6°♄41'34		evening max el	10428 Mar 07 08:23	14°♄45'53	23°38'19
asc. node	10427 Apr 04 09:43	6°♄41'33		retrograde	10428 Mar 18 03:28	21°♄08'03	
evening set	10427 Apr 09 01:06	4°♄46'02		asc. node	10428 Mar 21 06:59	20°♄21'00	
	10427 Apr 13 05:07	30°♄♄		evening set	10428 Mar 23 07:16	18°♄58'29	
inferior conj	10427 Apr 14 08:42	28°♄24'33	2°42'42	min. Earth dist.	10428 Mar 28 02:36	13°♄21'40	0.68493 AU
minimum elong	10427 Apr 14 06:41	28°♄31'35	2°42'02	inferior conj	10428 Mar 28 17:31	12°♄30'37	2°11'04
min. Earth dist.	10427 Apr 14 05:55	28°♄34'15	0.68635 AU	minimum elong	10428 Mar 28 15:19	12°♄38'08	2°10'21
morning rise	10427 Apr 19 12:08	22°♄13'56		morning rise	10428 Apr 02 23:22	6°♄26'17	
direct	10427 Apr 24 05:37	20°♄14'16		direct	10428 Apr 07 03:29	4°♄48'28	
morning max el	10427 May 03 12:49	25°♄40'39	22°02'22	morning max el	10428 Apr 15 06:57	9°♄27'10	20°41'58
	10427 May 07 10:59	0°♄		desc. node	10428 Apr 24 03:52	20°♄12'39	
desc. node	10427 May 08 07:02	1°♄00'18			10428 May 01 01:47	0°♄	
	10427 May 28 20:18	0°♄		morning set	10428 May 14 20:18	20°♄47'44	
morning set	10427 Jun 05 11:14	11°♄58'07			10428 May 20 16:37	0°♄	



max. Earth dist.	10428 May 23 06:54	4° $\Pi$ 10'00	1.43314 AU	morning set	10429 Apr 23 19:05	29° $\Upsilon$ 14'39	
					10429 Apr 24 06:51	0° $\mathcal{B}$	
superior conj	10428 May 29 23:24	15° $\Pi$ 10'04	-2°04'04	max. Earth dist.	10429 May 05 19:26	17° $\mathcal{B}$ 58'19	1.44761 AU
minimum elong	10428 May 30 04:43	15° $\Pi$ 32'21	2°04'15				
	10428 Jun 07 14:55	0° $\mathcal{E}$		superior conj	10429 May 10 04:10	24° $\mathcal{B}$ 55'15	-2°13'01
evening rise	10428 Jun 11 02:47	6° $\mathcal{E}$ 09'07		minimum elong	10429 May 10 04:04	24° $\mathcal{B}$ 54'51	2°13'25
asc. node	10428 Jun 17 05:21	16° $\mathcal{E}$ 51'16			10429 May 13 07:45	0° $\Pi$	
	10428 Jun 25 19:49	0° $\Omega$		evening rise	10429 May 24 01:12	17° $\Pi$ 44'13	
evening max el	10428 Jun 27 22:30	2° $\Omega$ 20'40	18°04'21		10429 May 31 09:11	0° $\mathcal{E}$	
retrograde	10428 Jul 04 11:42	5° $\Omega$ 43'00		asc. node	10429 Jun 04 02:25	5° $\mathcal{E}$ 57'25	
evening set	10428 Jul 07 01:45	5° $\Omega$ 11'05		evening max el	10429 Jun 11 12:18	15° $\mathcal{E}$ 44'23	18°13'05
inferior conj	10428 Jul 13 14:53	0° $\Omega$ 08'21	2°03'48	retrograde	10429 Jun 17 21:03	19° $\mathcal{E}$ 06'18	
minimum elong	10428 Jul 13 17:41	0° $\Omega$ 01'23	2°02'32	evening set	10429 Jun 20 19:01	18° $\mathcal{E}$ 21'02	
	10428 Jul 13 18:14	30° $\mathcal{R}$ $\mathcal{E}$		inferior conj	10429 Jun 26 19:21	13° $\mathcal{E}$ 00'21	2°47'04
min. Earth dist.	10428 Jul 16 17:10	27° $\mathcal{E}$ 05'02	0.61402 AU	minimum elong	10429 Jun 26 21:42	12° $\mathcal{E}$ 53'47	2°46'06
morning rise	10428 Jul 20 07:09	24° $\mathcal{E}$ 07'13		min. Earth dist.	10429 Jun 29 09:11	10° $\mathcal{E}$ 08'25	0.63577 AU
desc. node	10428 Jul 21 03:21	23° $\mathcal{E}$ 34'50		morning rise	10429 Jul 02 22:53	6° $\mathcal{E}$ 46'06	
direct	10428 Jul 26 22:54	21° $\mathcal{E}$ 50'28		desc. node	10429 Jul 08 00:30	4° $\mathcal{E}$ 19'02	
morning max el	10428 Aug 10 04:35	29° $\mathcal{E}$ 51'11	27°56'43	direct	10429 Jul 09 15:49	4° $\mathcal{E}$ 10'06	
	10428 Aug 10 08:07	0° $\Omega$		morning max el	10429 Jul 23 13:10	12° $\mathcal{E}$ 12'41	27°43'41
	10428 Aug 31 23:15	0° $\mathcal{M}$			10429 Aug 06 16:55	0° $\Omega$	
morning set	10428 Sep 12 12:16	21° $\mathcal{M}$ 48'54			10429 Aug 24 10:51	0° $\mathcal{M}$	
asc. node	10428 Sep 13 05:29	23° $\mathcal{M}$ 17'58		morning set	10429 Aug 27 07:28	5° $\mathcal{M}$ 36'05	
	10428 Sep 16 09:24	0° $\mathcal{A}$		asc. node	10429 Aug 31 02:17	13° $\mathcal{M}$ 20'12	
max. Earth dist.	10428 Sep 18 05:39	4° $\mathcal{A}$ 00'08	1.31759 AU	max. Earth dist.	10429 Sep 01 07:08	15° $\mathcal{M}$ 51'47	1.32562 AU
superior conj	10428 Sep 19 21:15	7° $\mathcal{A}$ 37'35	1°02'06	superior conj	10429 Sep 04 04:16	22° $\mathcal{M}$ 01'35	0°39'37
minimum elong	10428 Sep 19 19:02	7° $\mathcal{A}$ 25'23	1°01'46	minimum elong	10429 Sep 04 02:32	21° $\mathcal{M}$ 52'10	0°39'09
evening rise	10428 Sep 26 15:14	22° $\mathcal{A}$ 26'37			10429 Sep 07 20:19	0° $\mathcal{A}$	
	10428 Sep 30 05:38	0° $\mathcal{M}$		evening rise	10429 Sep 11 02:43	7° $\mathcal{A}$ 03'43	
desc. node	10428 Oct 17 01:06	28° $\mathcal{M}$ 01'59			10429 Sep 23 01:31	0° $\mathcal{M}$	
	10428 Oct 18 15:52	0° $\mathcal{A}$		desc. node	10429 Oct 03 22:21	14° $\mathcal{M}$ 16'57	
evening max el	10428 Oct 22 15:30	4° $\mathcal{A}$ 14'57	24°53'08	evening max el	10429 Oct 04 02:15	14° $\mathcal{M}$ 26'28	23°14'04
retrograde	10428 Nov 05 11:21	11° $\mathcal{A}$ 11'36		retrograde	10429 Oct 17 11:19	21° $\mathcal{M}$ 06'26	
evening set	10428 Nov 11 00:25	10° $\mathcal{A}$ 02'33		evening set	10429 Oct 21 14:36	20° $\mathcal{M}$ 29'13	
min. Earth dist.	10428 Nov 16 03:08	7° $\mathcal{A}$ 18'28	0.56787 AU	min. Earth dist.	10429 Oct 28 11:50	17° $\mathcal{M}$ 17'39	0.55330 AU
inferior conj	10428 Nov 18 19:43	5° $\mathcal{A}$ 33'42	-5°28'35	inferior conj	10429 Oct 30 02:35	16° $\mathcal{M}$ 21'16	-5°44'22
minimum elong	10428 Nov 19 01:16	5° $\mathcal{A}$ 24'40	5°27'25	minimum elong	10429 Oct 30 00:59	16° $\mathcal{M}$ 23'36	5°43'58
morning rise	10428 Nov 27 04:23	1° $\mathcal{A}$ 26'18		morning rise	10429 Nov 07 13:08	12° $\mathcal{M}$ 30'14	
direct	10428 Nov 29 14:35	1° $\mathcal{A}$ 09'47		direct	10429 Nov 10 12:13	12° $\mathcal{M}$ 09'14	
morning max el	10428 Dec 09 00:33	5° $\mathcal{A}$ 39'54	19°19'53	morning max el	10429 Nov 21 10:46	17° $\mathcal{M}$ 19'22	20°34'45
asc. node	10428 Dec 10 05:43	6° $\mathcal{A}$ 54'05		asc. node	10429 Nov 27 02:40	23° $\mathcal{M}$ 58'43	
	10428 Dec 24 11:42	0° $\mathcal{B}$			10429 Dec 01 00:31	0° $\mathcal{A}$	
morning set	10428 Dec 26 01:09	3° $\mathcal{B}$ 05'58		morning set	10429 Dec 10 08:16	17° $\mathcal{A}$ 46'13	
					10429 Dec 16 05:59	0° $\mathcal{B}$	
superior conj	10429 Jan 03 03:55	19° $\mathcal{B}$ 14'07	1°10'55	superior conj	10429 Dec 17 19:58	3° $\mathcal{B}$ 14'27	1°27'47
minimum elong	10429 Jan 03 06:56	19° $\mathcal{B}$ 28'50	1°11'01	minimum elong	10429 Dec 17 22:13	3° $\mathcal{B}$ 25'56	1°28'05
	10429 Jan 08 20:23	0° $\mathcal{A}$		max. Earth dist.	10429 Dec 23 01:17	13° $\mathcal{B}$ 36'44	1.36140 AU
max. Earth dist.	10429 Jan 09 17:29	1° $\mathcal{A}$ 36'31	1.38247 AU	evening rise	10429 Dec 26 22:41	20° $\mathcal{B}$ 57'14	
desc. node	10429 Jan 12 23:55	7° $\mathcal{A}$ 27'02		desc. node	10429 Dec 30 20:50	27° $\mathcal{B}$ 59'54	
evening rise	10429 Jan 13 11:25	8° $\mathcal{A}$ 17'21			10430 Jan 01 00:29	0° $\mathcal{A}$	
	10429 Jan 26 20:08	0° $\mathcal{H}$			10430 Jan 20 18:31	0° $\mathcal{H}$	
evening max el	10429 Feb 17 21:46	28° $\mathcal{H}$ 34'50	24°56'41		10430 Jan 31 11:16	12° $\mathcal{H}$ 23'55	26°05'49
	10429 Feb 19 09:38	0° $\Upsilon$		evening max el	10430 Jan 31 11:16	12° $\mathcal{H}$ 23'55	26°05'49
retrograde	10429 Mar 01 18:03	5° $\Upsilon$ 28'22		retrograde	10430 Feb 13 03:39	19° $\mathcal{H}$ 36'52	
evening set	10429 Mar 07 09:56	3° $\Upsilon$ 06'56		evening set	10430 Feb 19 07:27	17° $\mathcal{H}$ 06'50	
asc. node	10429 Mar 08 04:14	2° $\Upsilon$ 25'33		asc. node	10430 Feb 23 01:27	13° $\mathcal{H}$ 13'39	
	10429 Mar 10 09:20	30° $\mathcal{R}$ $\mathcal{H}$		min. Earth dist.	10430 Feb 23 12:41	12° $\mathcal{H}$ 39'36	0.66981 AU
min. Earth dist.	10429 Mar 11 21:37	28° $\mathcal{H}$ 04'59	0.67935 AU	inferior conj	10430 Feb 25 03:08	10° $\mathcal{H}$ 40'20	0°40'09
inferior conj	10429 Mar 13 00:18	26° $\mathcal{H}$ 37'06	1°30'10	minimum elong	10430 Feb 25 02:07	10° $\mathcal{H}$ 43'28	0°39'58
minimum elong	10429 Mar 12 22:25	26° $\mathcal{H}$ 43'19	1°29'35	morning rise	10430 Mar 02 21:28	4° $\mathcal{H}$ 53'04	
morning rise	10429 Mar 18 11:09	20° $\mathcal{H}$ 40'20		direct	10430 Mar 06 01:56	3° $\mathcal{H}$ 55'18	
direct	10429 Mar 22 02:47	19° $\mathcal{H}$ 23'42		morning max el	10430 Mar 12 17:48	7° $\mathcal{H}$ 31'19	18°42'45
morning max el	10429 Mar 29 08:40	23° $\mathcal{H}$ 24'51	19°34'33	desc. node	10430 Mar 28 21:23	0° $\Upsilon$ 00'07	
	10429 Apr 03 23:25	0° $\Upsilon$			10430 Mar 28 21:21	0° $\Upsilon$	
greatest brilliancy	10429 Apr 11 01:02	9° $\Upsilon$ 56'41	-0.7m	morning set	10430 Apr 03 07:19	8° $\Upsilon$ 27'37	
desc. node	10429 Apr 11 00:38	9° $\Upsilon$ 55'13			10430 Apr 17 01:53	0° $\mathcal{B}$	

max. Earth dist.	10430 Apr 18 13:11	2°♄18'08	1.45542 AU	direct	10431 Feb 17 22:47	18°♁17'18	
				morning max el	10431 Feb 24 08:27	21°♁40'16	18°07'34
superior conj	10430 Apr 19 14:21	3°♄56'41	-2°02'26		10431 Mar 02 22:33	0°♄	
minimum elong	10430 Apr 19 07:04	3°♄28'07	2°02'15	morning set	10431 Mar 14 23:22	19°♄04'41	
evening rise	10430 May 04 23:52	28°♄19'37		desc. node	10431 Mar 15 18:07	20°♄20'46	
	10430 May 06 00:55	0°♄			10431 Mar 21 17:44	0°♄	
greatest brilliancy	10430 May 12 03:29	9°♄46'54	-0.9m				
asc. node	10430 May 21 23:31	24°♄33'28		superior conj	10431 Mar 29 21:28	12°♄56'34	-1°32'46
evening max el	10430 May 26 00:24	29°♄19'28	18°39'49	minimum elong	10431 Mar 29 12:06	12°♄19'44	1°31'51
	10430 May 26 17:16	0°♄		max. Earth dist.	10431 Apr 01 09:17	16°♄51'20	1.45580 AU
retrograde	10430 Jun 01 13:54	2°♄54'33			10431 Apr 09 19:40	0°♄	
evening set	10430 Jun 04 19:53	1°♄54'25		evening rise	10431 Apr 15 00:22	8°♄03'46	
	10430 Jun 07 04:42	30°♄		greatest brilliancy	10431 Apr 27 11:06	27°♄10'43	-0.7m
inferior conj	10430 Jun 10 11:16	26°♄17'15	3°10'33		10431 Apr 29 08:40	0°♄	
minimum elong	10430 Jun 10 12:32	26°♄13'21	3°09'56	asc. node	10431 May 08 20:40	12°♄29'13	
min. Earth dist.	10430 Jun 12 10:11	23°♄53'49	0.65455 AU	evening max el	10431 May 09 08:25	12°♄59'31	19°23'35
morning rise	10430 Jun 16 04:24	19°♄57'28		retrograde	10431 May 16 11:00	17°♄00'16	
direct	10430 Jun 22 16:22	17°♄13'30		evening set	10431 May 20 01:24	15°♄44'37	
desc. node	10430 Jun 24 21:34	17°♄30'17		inferior conj	10431 May 25 11:13	9°♄52'28	3°18'13
morning max el	10430 Jul 05 23:42	25°♄05'21	26°57'56	minimum elong	10431 May 25 11:18	9°♄52'12	3°17'46
	10430 Jul 10 10:46	0°♄		min. Earth dist.	10431 May 26 19:06	8°♄08'03	0.66921 AU
	10430 Jul 31 04:29	0°♄		morning rise	10431 May 30 20:49	3°♄31'59	
morning set	10430 Aug 10 16:32	18°♄52'10		direct	10431 Jun 05 23:21	0°♄50'54	
max. Earth dist.	10430 Aug 14 23:35	27°♄19'26	1.33871 AU	desc. node	10431 Jun 11 18:34	2°♄45'43	
	10430 Aug 16 07:11	0°♄		morning max el	10431 Jun 18 10:11	8°♄17'54	25°47'43
asc. node	10430 Aug 17 23:07	3°♄25'46			10431 Jul 05 09:35	0°♄	
					10431 Jul 23 16:33	0°♄	
superior conj	10430 Aug 19 05:48	6°♄05'54	0°12'36	morning set	10431 Jul 24 11:48	1°♄27'41	
minimum elong	10430 Aug 19 05:09	6°♄02'30	0°12'12	max. Earth dist.	10431 Jul 28 05:45	8°♄28'19	1.35646 AU
behind sun begin	10430 Aug 19 01:26	5°♄43'02					
behind sun end	10430 Aug 19 08:52	6°♄22'01		superior conj	10431 Aug 02 23:12	19°♄43'35	-0°18'10
evening rise	10430 Aug 26 13:08	21°♄35'01		minimum elong	10431 Aug 03 00:18	19°♄49'10	0°18'19
	10430 Aug 30 15:25	0°♄		asc. node	10431 Aug 04 19:59	23°♄30'55	
evening max el	10430 Sep 15 17:08	24°♄39'40	21°36'18		10431 Aug 07 23:38	0°♄	
desc. node	10430 Sep 20 19:37	28°♄40'46		evening rise	10431 Aug 10 20:26	5°♄54'41	
	10430 Sep 23 14:52	0°♄			10431 Aug 24 06:09	0°♄	
retrograde	10430 Sep 28 00:44	0°♄46'50		evening max el	10431 Aug 28 19:52	5°♄26'58	20°13'15
evening set	10430 Sep 30 18:51	0°♄29'35		desc. node	10431 Sep 07 16:54	10°♄45'03	
	10430 Oct 02 15:19	30°♄		retrograde	10431 Sep 08 13:46	10°♄47'03	
inferior conj	10430 Oct 09 20:22	26°♄32'55	-5°04'39	evening set	10431 Sep 10 13:05	10°♄37'04	
minimum elong	10430 Oct 09 11:38	26°♄45'07	5°02'43	inferior conj	10431 Sep 19 14:31	6°♄38'45	-3°33'38
min. Earth dist.	10430 Oct 09 19:01	26°♄34'48	0.54644 AU	minimum elong	10431 Sep 19 05:24	6°♄52'14	3°30'36
morning rise	10430 Oct 18 05:27	22°♄44'15		min. Earth dist.	10431 Sep 21 03:59	5°♄43'21	0.54889 AU
direct	10430 Oct 21 21:46	22°♄14'51		morning rise	10431 Sep 27 20:50	2°♄31'12	
morning max el	10430 Nov 03 07:44	28°♄08'44	22°10'04	direct	10431 Oct 02 07:38	1°♄48'27	
	10430 Nov 05 04:10	0°♄		morning max el	10431 Oct 15 20:29	8°♄24'39	23°56'47
asc. node	10430 Nov 13 23:35	11°♄57'34		asc. node	10431 Oct 31 20:28	0°♄37'45	
	10430 Nov 23 13:21	0°♄			10431 Oct 31 12:05	0°♄	
morning set	10430 Nov 24 18:41	2°♄33'19		morning set	10431 Nov 09 06:28	17°♄21'52	
					10431 Nov 15 02:13	0°♄	
superior conj	10430 Dec 01 20:48	17°♄38'26	1°37'13				
minimum elong	10430 Dec 01 21:54	17°♄44'15	1°37'39	superior conj	10431 Nov 16 03:32	2°♄17'44	1°39'56
max. Earth dist.	10430 Dec 05 15:34	25°♄30'30	1.34324 AU	minimum elong	10431 Nov 16 03:26	2°♄17'12	1°40'21
	10430 Dec 07 21:02	0°♄		max. Earth dist.	10431 Nov 18 13:48	7°♄31'48	1.32918 AU
evening rise	10430 Dec 10 01:24	4°♄16'46		evening rise	10431 Nov 23 16:02	18°♄07'05	
desc. node	10430 Dec 17 17:49	18°♄21'16			10431 Nov 29 20:12	0°♄	
	10430 Dec 24 19:53	0°♄		desc. node	10431 Dec 04 14:54	8°♄25'31	
evening max el	10431 Jan 14 00:48	26°♄04'21	26°58'21		10431 Dec 19 03:31	0°♄	
	10431 Jan 18 15:54	0°♄		evening max el	10431 Dec 27 13:14	9°♄25'05	27°27'11
retrograde	10431 Jan 27 07:24	3°♄25'51		retrograde	10432 Jan 10 04:48	16°♄47'04	
evening set	10431 Feb 02 21:53	0°♄51'52		evening set	10432 Jan 17 02:58	14°♄15'48	
	10431 Feb 03 22:34	30°♄		min. Earth dist.	10432 Jan 20 22:02	10°♄54'26	0.63984 AU
min. Earth dist.	10431 Feb 06 21:30	26°♄58'43	0.65654 AU	inferior conj	10432 Jan 23 11:45	8°♄14'27	-1°26'09
inferior conj	10431 Feb 08 23:47	24°♄34'47	-0°18'52	minimum elong	10432 Jan 23 14:28	8°♄07'22	1°24'37
minimum elong	10431 Feb 09 00:19	24°♄33'15	0°18'18	asc. node	10432 Jan 27 19:47	4°♄14'10	
asc. node	10431 Feb 09 22:38	23°♄29'54		morning rise	10432 Jan 30 03:55	2°♄53'43	
morning rise	10431 Feb 15 04:01	18°♄59'22		direct	10432 Feb 01 14:47	2°♄23'41	

morning max el	10432 Feb 08 01:53	5° $\approx$ 44'29	17°49'28			10433 Jan 29 11:12	0° $\approx$	
	10432 Feb 24 04:31	0° $\text{H}$		morning set		10433 Feb 06 13:39	14° $\approx$ 05'22	
morning set	10432 Feb 24 19:26	1° $\text{H}$ 03'28				10433 Feb 15 14:23	0° $\text{H}$	
desc. node	10432 Mar 01 14:54	10° $\text{H}$ 52'36		desc. node		10433 Feb 16 11:43	1° $\text{H}$ 31'30	
superior conj	10432 Mar 08 19:36	22° $\text{H}$ 43'36	-0°51'54	superior conj		10433 Feb 17 18:03	3° $\text{H}$ 40'48	-0°09'34
minimum elong	10432 Mar 08 13:58	22° $\text{H}$ 20'47	0°51'00	minimum elong		10433 Feb 17 17:10	3° $\text{H}$ 37'02	0°09'09
	10432 Mar 13 08:26	0° $\text{Y}$		behind sun begin		10433 Feb 17 09:57	3° $\text{H}$ 06'20	
max. Earth dist.	10432 Mar 14 04:24	1° $\text{Y}$ 19'12	1.44881 AU	behind sun end		10433 Feb 18 00:24	4° $\text{H}$ 07'41	
evening rise	10432 Mar 24 12:29	17° $\text{Y}$ 24'53		max. Earth dist.		10433 Feb 24 20:13	15° $\text{H}$ 26'18	1.43526 AU
	10432 Apr 01 19:36	0° $\text{B}$		evening rise		10433 Mar 04 03:33	27° $\text{H}$ 02'05	
evening max el	10432 Apr 21 11:01	26° $\text{B}$ 41'11	20°22'29			10433 Mar 06 01:31	0° $\text{Y}$	
asc. node	10432 Apr 24 17:50	29° $\text{B}$ 32'17				10433 Mar 26 16:08	0° $\text{B}$	
	10432 Apr 25 10:39	0° $\text{II}$		evening max el		10433 Apr 04 08:09	10° $\text{B}$ 24'43	21°33'28
retrograde	10432 Apr 29 09:44	1° $\text{II}$ 17'44		asc. node		10433 Apr 11 15:02	15° $\text{B}$ 28'25	
evening set	10432 May 03 09:18	29° $\text{B}$ 46'27		retrograde		10433 Apr 13 08:02	15° $\text{B}$ 42'45	
	10432 May 03 01:58	30° $\text{R}$ $\text{B}$		evening set		10433 Apr 17 17:46	13° $\text{B}$ 56'06	
inferior conj	10432 May 08 16:27	23° $\text{B}$ 41'03	3°12'56	inferior conj		10433 Apr 23 00:38	7° $\text{B}$ 39'44	2°56'38
minimum elong	10432 May 08 15:29	23° $\text{B}$ 44'22	3°12'28	minimum elong		10433 Apr 22 22:54	7° $\text{B}$ 45'46	2°56'03
min. Earth dist.	10432 May 09 10:08	22° $\text{B}$ 40'31	0.67942 AU	min. Earth dist.		10433 Apr 23 05:09	7° $\text{B}$ 24'00	0.68509 AU
morning rise	10432 May 13 21:24	17° $\text{B}$ 22'51		morning rise		10433 Apr 28 03:49	1° $\text{B}$ 25'46	
direct	10432 May 19 11:55	14° $\text{B}$ 53'22				10433 Apr 30 04:38	30° $\text{R}$ $\text{Y}$	
desc. node	10432 May 28 15:33	19° $\text{B}$ 35'44		direct		10433 May 03 05:07	29° $\text{Y}$ 13'59	
morning max el	10432 May 30 19:50	21° $\text{B}$ 40'48	24°22'33			10433 May 06 11:15	0° $\text{B}$	
	10432 Jun 07 01:10	0° $\text{II}$		morning max el		10433 May 13 06:08	5° $\text{B}$ 11'05	22°52'36
	10432 Jun 27 15:57	0° $\text{B}$		desc. node		10433 May 15 12:28	7° $\text{B}$ 35'33	
morning set	10432 Jul 05 12:27	13° $\text{B}$ 09'43				10433 Jun 01 08:08	0° $\text{II}$	
max. Earth dist.	10432 Jul 09 04:01	19° $\text{B}$ 37'23	1.37781 AU	morning set		10433 Jun 16 13:24	23° $\text{II}$ 45'51	
	10432 Jul 14 18:30	0° $\text{O}$				10433 Jun 20 06:39	0° $\text{B}$	
				max. Earth dist.		10433 Jun 21 00:52	1° $\text{B}$ 17'43	1.40074 AU
superior conj	10432 Jul 16 05:06	2° $\text{O}$ 45'30	-0°51'11	superior conj		10433 Jun 28 19:35	15° $\text{B}$ 03'06	-1°23'51
minimum elong	10432 Jul 16 08:28	3° $\text{O}$ 01'42	0°51'01	minimum elong		10433 Jun 29 01:09	15° $\text{B}$ 28'31	1°23'34
asc. node	10432 Jul 21 16:52	13° $\text{O}$ 31'08				10433 Jul 06 19:15	0° $\text{O}$	
evening rise	10432 Jul 24 22:01	19° $\text{O}$ 54'45		evening rise		10433 Jul 08 14:51	3° $\text{O}$ 27'45	
	10432 Jul 30 02:50	0° $\text{np}$		asc. node		10433 Jul 08 13:50	3° $\text{O}$ 22'54	
evening max el	10432 Aug 10 12:14	17° $\text{np}$ 00'13	19°10'37	evening max el		10433 Jul 24 15:37	29° $\text{O}$ 16'46	18°29'06
retrograde	10432 Aug 19 14:13	21° $\text{np}$ 31'14				10433 Jul 25 09:57	0° $\text{np}$	
evening set	10432 Aug 21 10:40	21° $\text{np}$ 20'45		retrograde		10433 Aug 01 08:58	3° $\text{np}$ 08'53	
desc. node	10432 Aug 24 14:11	20° $\text{np}$ 19'16		evening set		10433 Aug 03 10:55	2° $\text{np}$ 52'53	
inferior conj	10432 Aug 29 22:36	17° $\text{np}$ 09'19	-1°39'52			10433 Aug 09 00:11	30° $\text{R}$ $\text{O}$	
minimum elong	10432 Aug 29 18:13	17° $\text{np}$ 16'42	1°38'19	inferior conj		10433 Aug 11 03:41	28° $\text{O}$ 21'54	0°05'54
min. Earth dist.	10432 Sep 01 16:55	15° $\text{np}$ 18'01	0.56041 AU	minimum elong		10433 Aug 11 03:54	28° $\text{O}$ 21'30	0°05'30
morning rise	10432 Sep 06 22:49	12° $\text{np}$ 27'00		transit middle		10433 Aug 11 03:54	28° $\text{O}$ 21'30	0°05'30
direct	10432 Sep 12 05:07	11° $\text{np}$ 22'54		transit begin		10433 Aug 11 00:32	28° $\text{O}$ 28'07	
morning max el	10432 Sep 26 08:37	18° $\text{np}$ 34'53	25°39'14	transit end		10433 Aug 11 07:15	28° $\text{O}$ 14'52	
	10432 Oct 05 22:12	0° $\text{O}$		desc. node		10433 Aug 11 11:25	28° $\text{O}$ 06'38	
asc. node	10432 Oct 17 17:20	19° $\text{O}$ 48'13		min. Earth dist.		10433 Aug 14 11:19	25° $\text{O}$ 46'09	0.57887 AU
	10432 Oct 22 18:09	0° $\text{ml}$		morning rise		10433 Aug 18 17:20	23° $\text{O}$ 02'49	
morning set	10432 Oct 23 17:52	2° $\text{ml}$ 05'59		direct		10433 Aug 24 17:25	21° $\text{O}$ 30'27	
superior conj	10432 Oct 30 13:45	17° $\text{ml}$ 04'14	1°36'30	morning max el		10433 Sep 08 01:48	29° $\text{O}$ 08'01	27°00'08
minimum elong	10432 Oct 30 12:37	16° $\text{ml}$ 57'56	1°36'47			10433 Sep 08 22:43	0° $\text{np}$	
max. Earth dist.	10432 Oct 31 18:43	19° $\text{ml}$ 43'57	1.31974 AU			10433 Sep 29 17:43	0° $\text{O}$	
	10432 Nov 05 12:45	0° $\text{x}$		asc. node		10433 Oct 04 14:12	9° $\text{O}$ 21'02	
evening rise	10432 Nov 06 15:21	2° $\text{x}$ 19'14		morning set		10433 Oct 08 03:13	16° $\text{O}$ 41'05	
desc. node	10432 Nov 20 12:01	28° $\text{x}$ 04'24				10433 Oct 14 05:22	0° $\text{ml}$	
	10432 Nov 21 16:45	0° $\text{B}$		superior conj		10433 Oct 15 01:27	1° $\text{ml}$ 51'50	1°27'22
evening max el	10432 Dec 08 22:37	22° $\text{B}$ 13'28	27°26'17	minimum elong		10433 Oct 14 23:34	1° $\text{ml}$ 41'22	1°27'24
retrograde	10432 Dec 22 19:06	29° $\text{B}$ 30'24		max. Earth dist.		10433 Oct 15 03:31	2° $\text{ml}$ 03'19	1.31509 AU
evening set	10432 Dec 29 19:42	27° $\text{B}$ 10'44		evening rise		10433 Oct 21 20:47	16° $\text{ml}$ 46'22	
min. Earth dist.	10433 Jan 02 12:44	24° $\text{B}$ 15'46	0.62033 AU			10433 Oct 28 09:57	0° $\text{x}$	
inferior conj	10433 Jan 05 11:57	21° $\text{B}$ 31'26	-2°39'43	desc. node		10433 Nov 07 09:11	17° $\text{x}$ 07'58	
minimum elong	10433 Jan 05 17:17	21° $\text{B}$ 19'05	2°37'12			10433 Nov 16 23:36	0° $\text{B}$	
morning rise	10433 Jan 12 17:22	16° $\text{B}$ 28'18		evening max el		10433 Nov 21 02:28	4° $\text{B}$ 18'03	26°51'38
asc. node	10433 Jan 13 16:55	16° $\text{B}$ 13'24		retrograde		10433 Dec 05 00:47	11° $\text{B}$ 27'02	
direct	10433 Jan 14 22:39	16° $\text{B}$ 06'34		evening set		10433 Dec 11 20:15	9° $\text{B}$ 28'51	
morning max el	10433 Jan 21 18:54	19° $\text{B}$ 35'02	17°49'09					

min. Earth dist.	10433 Dec 15 16:52	6°  50'28	0.59930 AU	evening set	10434 Nov 22 23:57	21°  04'03	
inferior conj	10433 Dec 18 20:58	4°  16'43	-3°54'37	min. Earth dist.	10434 Nov 27 10:57	18°  27'39	0.57861 AU
minimum elong	10433 Dec 19 04:31	4°  01'26	3°51'45	inferior conj	10434 Nov 30 11:25	16°  20'44	-5°00'49
	10433 Dec 25 08:28	30°  		minimum elong	10434 Nov 30 18:56	16°  07'29	4°58'45
morning rise	10433 Dec 26 15:26	29°  33'59		morning rise	10434 Dec 08 16:18	12°  00'32	
direct	10433 Dec 28 18:34	29°  16'54		direct	10434 Dec 10 22:19	11°  44'40	
asc. node	10433 Dec 31 14:02	29°  48'03		asc. node	10434 Dec 18 11:06	14°  55'54	
	10434 Jan 01 01:51	0° 		morning max el	10434 Dec 19 13:22	15°  55'31	18°47'08
morning max el	10434 Jan 05 07:58	3°  02'04	18°07'46		10434 Dec 29 10:52	0° 	
morning set	10434 Jan 20 23:41	27°  51'07		morning set	10435 Jan 04 20:40	12°  06'37	
	10434 Jan 22 03:12	0° 					
superior conj	10434 Jan 30 16:35	15°  45'29	0°27'52	superior conj	10435 Jan 13 11:02	28°  46'20	0°57'33
minimum elong	10434 Jan 30 18:41	15°  54'52	0°27'55	minimum elong	10435 Jan 13 14:08	29°  00'57	0°57'34
desc. node	10434 Feb 03 08:31	22°  13'22			10435 Jan 14 02:40	0° 	
max. Earth dist.	10434 Feb 07 07:34	28°  59'27	1.41671 AU	max. Earth dist.	10435 Jan 20 15:09	11°  52'39	1.39526 AU
	10434 Feb 07 22:01	0° 		desc. node	10435 Jan 21 05:22	12°  55'05	
evening rise	10434 Feb 12 10:17	7°  24'30		evening rise	10435 Jan 24 14:15	18°  43'29	
	10434 Feb 27 05:06	0° 			10435 Jan 31 11:30	0° 	
evening max el	10434 Mar 18 00:53	24°  09'10	22°52'03	evening max el	10435 Feb 21 13:02	0° 	
	10434 Mar 26 16:26	0° 		retrograde	10435 Feb 28 15:04	7°  59'03	24°12'15
retrograde	10434 Mar 28 04:13	0°  10'04		retrograde	10435 Mar 11 21:04	14°  34'59	
asc. node	10434 Mar 29 12:16	0°  01'25		asc. node	10435 Mar 16 09:30	13°  00'26	
	10434 Mar 29 14:46	30°  08'00		evening set	10435 Mar 17 06:04	12°  00'05	
evening set	10434 Apr 02 01:12	28°  08'36		min. Earth dist.	10435 Mar 21 22:01	6°  58'16	0.68317 AU
inferior conj	10434 Apr 07 09:45	21°  44'09	2°30'25	inferior conj	10435 Mar 22 17:56	5°  51'03	1°54'50
minimum elong	10434 Apr 07 07:37	21°  51'35	2°29'44	minimum elong	10435 Mar 22 15:48	5°  58'14	1°54'09
min. Earth dist.	10434 Apr 07 01:51	22°  09'11	0.68629 AU		10435 Mar 27 20:22	30°  08'00	
morning rise	10434 Apr 12 13:53	15°  09'35		morning rise	10435 Mar 28 01:37	29°  08'49	52'08
direct	10434 Apr 17 01:42	13°  09'45		direct	10435 Apr 01 00:24	28°  08'21	00'08
morning max el	10434 Apr 25 20:20	18°  09'50	21°26'44		10435 Apr 05 12:59	0° 	
desc. node	10434 May 02 09:19	26°  09'25		morning max el	10435 Apr 08 17:34	2°  41'47	20°11'26
	10434 May 05 02:31	0° 		desc. node	10435 Apr 19 06:06	15°  51'54	
	10434 May 25 11:33	0° 			10435 Apr 28 21:32	0° 	
morning set	10434 May 27 11:40	3°  09'15		morning set	10435 May 06 13:41	11°  08'41	32'32
max. Earth dist.	10434 Jun 03 02:50	13°  09'51	1.42244 AU	max. Earth dist.	10435 May 16 12:21	27°  08'17	54'14
					10435 May 18 04:45	0° 	
superior conj	10434 Jun 10 13:58	26°  09'25	37'15	superior conj	10435 May 22 08:33	6°  09'45	44'22
minimum elong	10434 Jun 10 20:19	26°  09'53	04'15	minimum elong	10435 May 22 12:07	7°  00'21	21'10
	10434 Jun 12 15:19	0° 		evening rise	10435 Jun 04 05:32	28°  09'31	19'19
evening rise	10434 Jun 21 18:54	16°  09'23	27'27		10435 Jun 05 02:03	0° 	
asc. node	10434 Jun 25 10:48	23°  09'01	15'15	asc. node	10435 Jun 12 07:49	12°  09'21	06'06
	10434 Jun 29 10:26	0° 		evening max el	10435 Jun 21 15:22	25°  09'20	22'22
evening max el	10434 Jul 08 01:56	12°  09'06	36'18	retrograde	10435 Jun 28 01:22	28°  09'40	47'47
retrograde	10434 Jul 14 22:00	15°  09'35	12'12	evening set	10435 Jun 30 18:52	28°  09'03	17'17
evening set	10434 Jul 17 07:40	15°  09'09	49'15	inferior conj	10435 Jul 07 02:02	22°  09'52	22'22
inferior conj	10434 Jul 24 05:55	10°  09'18	04'12	minimum elong	10435 Jul 07 04:45	22°  09'45	12'12
minimum elong	10434 Jul 24 08:23	10°  09'12	24'27	min. Earth dist.	10435 Jul 09 23:22	19°  09'51	43'43
min. Earth dist.	10434 Jul 27 12:52	7°  09'18	19'06	morning rise	10435 Jul 13 12:39	16°  09'44	34'34
desc. node	10434 Jul 29 08:37	5°  09'48	30'30	desc. node	10435 Jul 16 05:46	15°  09'09	57'57
morning rise	10434 Jul 31 06:09	4°  09'29	32'32	direct	10435 Jul 20 05:38	14°  09'18	46'46
direct	10434 Aug 06 18:17	2°  09'27	52'52	morning max el	10435 Aug 03 08:24	22°  09'20	55'55
morning max el	10434 Aug 21 02:00	10°  09'21	44'27		10435 Aug 10 02:00	0° 	
	10434 Sep 05 07:53	0° 			10435 Aug 29 12:38	0° 	
asc. node	10434 Sep 21 11:02	29°  09'09	26'26	morning set	10435 Sep 06 08:24	15°  09'03	30'30
	10434 Sep 21 20:49	0° 		asc. node	10435 Sep 08 07:50	19°  09'07	55'55
morning set	10434 Sep 22 08:46	1°  09'02	10'10	max. Earth dist.	10435 Sep 11 18:14	26°  09'07	25'40
max. Earth dist.	10434 Sep 28 12:39	14°  09'20	52'13		10435 Sep 13 09:41	0° 	
superior conj	10434 Sep 29 12:48	16°  09'34	39'12	superior conj	10435 Sep 13 21:55	1°  09'06	52'52
minimum elong	10434 Sep 29 10:34	16°  09'22	16'12	minimum elong	10435 Sep 13 19:50	0°  09'55	27'27
	10434 Oct 05 14:51	0° 		evening rise	10435 Sep 20 17:18	16°  09'02	00'07
evening rise	10434 Oct 06 06:05	1°  09'22	03'03		10435 Sep 27 14:00	0° 	
	10434 Oct 21 14:10	0° 		desc. node	10435 Oct 12 03:36	22°  09'22	58'58
desc. node	10434 Oct 25 06:22	5°  09'22	24'24	evening max el	10435 Oct 15 10:52	25°  09'25	74'74
evening max el	10434 Nov 02 22:29	15°  09'27	31'29		10435 Oct 20 11:32	0° 	
retrograde	10434 Nov 16 20:00	22°  09'27	32'25	retrograde	10435 Oct 29 03:10	2°  09'27	48'48

evening set	10435 Nov 03 03:07	1°♊53'54		desc. node	10436 Sep 28 00:50	7°♍59'29	
	10435 Nov 07 04:48	30°♋♍		retrograde	10436 Oct 08 22:23	12°♍33'43	
min. Earth dist.	10435 Nov 08 21:35	29°♍00'35	0.56088 AU	evening set	10436 Oct 12 10:27	12°♍06'43	
inferior conj	10435 Nov 11 05:12	27°♍35'07	-5°41'13	min. Earth dist.	10436 Oct 20 05:13	8°♍38'24	0.54925 AU
minimum elong	10435 Nov 11 08:12	27°♍30'30	5°40'37	inferior conj	10436 Oct 21 05:10	8°♍04'27	-5°34'46
morning rise	10435 Nov 19 15:22	23°♍36'12		minimum elong	10436 Oct 21 00:02	8°♍11'43	5°33'57
direct	10435 Nov 22 06:29	23°♍18'10		morning rise	10436 Oct 29 15:19	4°♍16'53	
morning max el	10435 Dec 02 07:19	28°♍03'56	19°49'02	direct	10436 Nov 01 21:07	3°♍53'02	
	10435 Dec 04 04:04	0°♊		morning max el	10436 Nov 13 11:44	9°♍21'36	21°13'16
asc. node	10435 Dec 05 08:06	1°♊22'17		asc. node	10436 Nov 21 05:03	18°♍51'31	
morning set	10435 Dec 20 00:52	26°♊40'04			10436 Nov 27 17:06	0°♊	
	10435 Dec 21 16:14	0°♊		morning set	10436 Dec 03 09:37	11°♊23'41	
superior conj	10435 Dec 27 20:27	12°♊28'38	1°19'00	superior conj	10436 Dec 10 16:39	26°♊40'16	1°32'38
minimum elong	10435 Dec 27 23:14	12°♊42'25	1°19'11	minimum elong	10436 Dec 10 18:26	26°♊49'31	1°33'01
max. Earth dist.	10436 Jan 02 21:29	24°♊07'31	1.37327 AU		10436 Dec 12 07:29	0°♊	
	10436 Jan 06 02:27	0°♊		max. Earth dist.	10436 Dec 15 07:13	6°♊00'43	1.35317 AU
evening rise	10436 Jan 06 14:53	0°♊55'40		evening rise	10436 Dec 19 09:09	13°♊53'17	
desc. node	10436 Jan 08 02:15	3°♊32'17		desc. node	10436 Dec 24 23:13	24°♊00'48	
	10436 Jan 24 16:25	0°♋			10436 Dec 28 11:32	0°♊	
evening max el	10436 Feb 11 04:18	21°♋48'30	25°27'28		10437 Jan 18 12:37	0°♋	
retrograde	10436 Feb 23 09:35	28°♋51'35		evening max el	10437 Jan 23 17:38	5°♋34'16	26°30'32
evening set	10436 Feb 29 06:46	26°♋25'42		retrograde	10437 Feb 05 16:59	12°♋52'58	
asc. node	10436 Mar 02 06:43	24°♋28'58		evening set	10437 Feb 12 01:33	10°♋20'20	
min. Earth dist.	10436 Mar 04 15:30	21°♋38'52	0.67586 AU	min. Earth dist.	10437 Feb 16 04:10	6°♋07'49	0.66460 AU
inferior conj	10436 Mar 05 23:16	19°♋56'40	1°10'05	asc. node	10437 Feb 17 03:55	4°♋56'44	
minimum elong	10436 Mar 05 21:41	20°♋01'47	1°09'37	inferior conj	10437 Feb 17 23:45	3°♋56'48	0°16'13
morning rise	10436 Mar 11 13:02	14°♋03'58		minimum elong	10437 Feb 17 23:19	3°♋58'07	0°16'18
direct	10436 Mar 14 23:45	12°♋55'48			10437 Feb 21 13:46	30°♋♊	
morning max el	10436 Mar 21 22:43	16°♋44'29	19°10'30	morning rise	10437 Feb 23 22:03	28°♊14'25	
	10436 Apr 01 06:12	0°♌		direct	10437 Feb 26 22:05	27°♊23'57	
greatest brilliancy	10436 Apr 04 00:05	4°♌04'11	-0.7m		10437 Mar 04 11:35	0°♋	
desc. node	10436 Apr 05 02:52	5°♌44'55		morning max el	10437 Mar 05 10:32	0°♋53'15	18°25'41
morning set	10436 Apr 14 15:31	20°♌21'03		desc. node	10437 Mar 22 23:38	25°♋57'17	
	10436 Apr 20 20:54	0°♌		morning set	10437 Mar 25 14:45	0°♌07'44	
max. Earth dist.	10436 Apr 28 03:41	11°♌22'54	1.45183 AU		10437 Mar 25 12:48	0°♌	
superior conj	10436 May 01 04:05	16°♌08'27	-2°11'04	superior conj	10437 Apr 10 10:41	25°♌03'30	-1°51'50
minimum elong	10436 May 01 00:44	15°♌55'14	2°11'19	minimum elong	10437 Apr 10 01:37	24°♌28'04	1°51'18
	10436 May 09 19:43	0°♍		max. Earth dist.	10437 Apr 10 22:16	25°♌48'46	1.45648 AU
evening rise	10436 May 15 18:07	9°♍41'47			10437 Apr 13 14:34	0°♌	
	10436 May 28 08:23	0°♍		evening rise	10437 Apr 26 06:43	19°♌53'11	
asc. node	10436 May 29 04:52	1°♍15'49			10437 May 02 16:42	0°♍	
evening max el	10436 Jun 04 04:42	8°♍49'46	18°22'16	greatest brilliancy	10437 May 05 22:55	5°♍05'21	-0.8m
retrograde	10436 Jun 10 14:33	12°♍16'05		asc. node	10437 May 16 01:59	19°♍36'16	
evening set	10436 Jun 13 15:48	11°♍24'41		evening max el	10437 May 18 15:15	22°♍27'32	18°56'27
inferior conj	10436 Jun 19 11:52	5°♍56'37	2°59'12	retrograde	10437 May 25 09:34	26°♍12'24	
minimum elong	10436 Jun 19 13:48	5°♍50'59	2°58'24	evening set	10437 May 28 18:57	25°♍05'56	
min. Earth dist.	10436 Jun 21 19:25	3°♍15'06	0.64415 AU	inferior conj	10437 Jun 03 07:36	19°♍22'20	3°15'33
morning rise	10436 Jun 25 10:37	29°♍38'57		minimum elong	10437 Jun 03 08:22	19°♍19'56	3°15'01
	10436 Jun 25 00:33	30°♋♍		min. Earth dist.	10437 Jun 05 00:09	17°♍14'15	0.66131 AU
direct	10436 Jul 02 01:54	26°♍58'19		morning rise	10437 Jun 08 21:09	13°♍01'34	
desc. node	10436 Jul 02 02:52	26°♍58'20		direct	10437 Jun 15 05:31	10°♍17'20	
	10436 Jul 10 00:16	0°♍		desc. node	10437 Jun 18 23:56	11°♍05'58	
morning max el	10436 Jul 15 18:24	4°♍58'34	27°27'52	morning max el	10437 Jun 28 05:08	18°♍01'20	26°30'24
	10436 Aug 03 17:42	0°♎			10437 Jul 08 06:26	0°♍	
morning set	10436 Aug 19 23:42	28°♎39'02			10437 Jul 27 16:58	0°♎	
	10436 Aug 20 16:07	0°♎		morning set	10437 Aug 03 03:23	11°♎39'20	
max. Earth dist.	10436 Aug 24 16:21	8°♎08'23	1.33055 AU	max. Earth dist.	10437 Aug 07 04:06	19°♎25'18	1.34570 AU
asc. node	10436 Aug 25 04:39	9°♎12'25					
superior conj	10436 Aug 28 02:53	15°♎23'24	0°28'40	superior conj	10437 Aug 12 01:17	29°♎17'15	-0°00'05
minimum elong	10436 Aug 28 01:31	15°♎16'09	0°28'13	minimum elong	10437 Aug 12 01:18	29°♎17'19	0°00'23
	10436 Sep 03 21:52	0°♏		behind sun begin	10437 Aug 11 19:27	28°♎47'08	
evening rise	10436 Sep 04 04:34	0°♏35'39		behind sun end	10437 Aug 12 07:09	29°♎47'33	
	10436 Sep 20 15:34	0°♍		asc. node	10437 Aug 12 01:30	29°♎18'22	
evening max el	10436 Sep 25 21:57	6°♍04'37	22°31'21		10437 Aug 12 09:33	0°♎	
				evening rise	10437 Aug 19 13:54	15°♎02'24	

	10437 Aug 27 03:40	0°♄			10438 Aug 04 04:04	0°♍		
evening max el	10437 Sep 07 17:16	16°♄29'26	20°58'43	evening max el	10438 Aug 21 02:01	27°♍36'19	19°43'57	
desc. node	10437 Sep 14 22:07	21°♄26'44			10438 Aug 23 21:02	0°♄		
retrograde	10437 Sep 19 10:05	22°♄17'37		retrograde	10438 Aug 31 02:10	2°♄34'12		
evening set	10437 Sep 21 17:45	22°♄04'52		evening set	10438 Sep 01 22:55	2°♄24'38		
inferior conj	10437 Sep 30 21:14	18°♄09'27	-4°31'02	desc. node	10438 Sep 01 19:24	2°♄26'04		
minimum elong	10437 Sep 30 11:24	18°♄23'23	4°28'19		10438 Sep 08 02:34	30°♍♍		
min. Earth dist.	10437 Oct 01 13:12	17°♄46'49	0.54628 AU	inferior conj	10438 Sep 10 19:52	28°♍22'10	-2°45'59	
morning rise	10437 Oct 09 05:16	14°♄14'49		minimum elong	10438 Sep 10 12:28	28°♍33'39	2°43'20	
direct	10437 Oct 13 05:14	13°♄40'27		min. Earth dist.	10438 Sep 12 23:31	27°♍02'12	0.55284 AU	
morning max el	10437 Oct 26 04:21	19°♄53'46	22°54'55	morning rise	10438 Sep 19 00:09	24°♍01'14		
	10437 Nov 03 13:59	0°♍		direct	10438 Sep 23 19:39	23°♍10'08		
asc. node	10437 Nov 08 01:58	7°♍09'13		morning max el	10438 Oct 07 15:39	0°♄02'24	24°41'59	
morning set	10437 Nov 17 20:48	26°♍11'33			10438 Oct 07 14:38	0°♄		
	10437 Nov 19 15:37	0°♌		asc. node	10438 Oct 25 22:51	26°♄03'32		
					10438 Oct 28 00:21	0°♍		
superior conj	10437 Nov 24 20:17	11°♌11'34	1°39'08	morning set	10438 Nov 02 08:35	10°♍58'30		
minimum elong	10437 Nov 24 20:52	11°♌14'41	1°39'36					
max. Earth dist.	10437 Nov 28 00:34	17°♌54'58	1.33665 AU	superior conj	10438 Nov 09 04:43	25°♍54'20	1°39'11	
evening rise	10437 Dec 02 17:20	27°♌27'01		minimum elong	10438 Nov 09 04:09	25°♍51'13	1°39'34	
	10437 Dec 04 00:42	0°♎		max. Earth dist.	10438 Nov 11 02:01	0°♌01'20	1.32458 AU	
desc. node	10437 Dec 11 20:15	14°♎15'44			10438 Nov 11 01:46	0°♌		
	10437 Dec 21 18:00	0°♏		evening rise	10438 Nov 16 11:59	11°♌27'34		
evening max el	10438 Jan 06 06:59	19°♏08'23	27°14'03		10438 Nov 26 06:42	0°♎		
retrograde	10438 Jan 19 18:23	26°♏31'27		desc. node	10438 Nov 28 17:20	4°♎10'15		
evening set	10438 Jan 26 12:23	23°♏57'52			10438 Dec 17 11:36	0°♏		
min. Earth dist.	10438 Jan 30 09:54	20°♏18'25	0.64972 AU	evening max el	10438 Dec 19 18:38	2°♏17'40	27°30'58	
inferior conj	10438 Feb 01 17:06	17°♏46'25	-0°46'26	retrograde	10439 Jan 02 12:41	9°♏37'20		
minimum elong	10438 Feb 01 18:29	17°♏42'36	0°45'30	evening set	10439 Jan 09 12:35	7°♏10'14		
asc. node	10438 Feb 04 01:07	15°♏18'13		min. Earth dist.	10439 Jan 13 06:31	4°♏00'46	0.63175 AU	
morning rise	10438 Feb 08 02:10	12°♏16'42		inferior conj	10439 Jan 16 00:29	1°♏17'40	-1°56'48	
direct	10438 Feb 10 17:14	11°♏40'17		minimum elong	10439 Jan 16 04:17	1°♏08'13	1°54'49	
morning max el	10438 Feb 17 02:44	15°♏01'30	17°57'45		10439 Jan 17 08:18	30°♍♎		
	10438 Feb 27 21:26	0°♐		asc. node	10439 Jan 21 22:18	26°♎29'53		
morning set	10438 Mar 06 19:23	11°♐22'19		morning rise	10439 Jan 22 22:08	26°♎03'44		
desc. node	10438 Mar 09 20:25	16°♐23'43		direct	10439 Jan 25 06:22	25°♎37'35		
	10438 Mar 18 05:21	0°♑		morning max el	10439 Jan 31 20:19	29°♎00'32	17°47'08	
					10439 Feb 01 19:11	0°♏		
superior conj	10438 Mar 20 22:30	4°♑19'51	-1°16'13	morning set	10439 Feb 17 01:43	23°♏50'48		
minimum elong	10438 Mar 20 14:16	3°♑47'08	1°15'12		10439 Feb 20 15:02	0°♐		
max. Earth dist.	10438 Mar 24 18:05	10°♑21'36	1.45370 AU	desc. node	10439 Feb 24 17:12	6°♐59'05		
evening rise	10438 Apr 06 00:22	29°♑23'54						
	10438 Apr 06 09:46	0°♒		superior conj	10439 Mar 01 06:25	14°♐35'14	-0°33'40	
greatest brilliancy	10438 Apr 20 05:14	20°♒55'04	-0.6m	minimum elong	10439 Mar 01 02:55	14°♐20'47	0°32'57	
	10438 Apr 26 16:15	0°♓		max. Earth dist.	10439 Mar 07 12:27	24°♐44'06	1.44380 AU	
evening max el	10438 May 01 21:13	6°♓09'43	19°46'55		10439 Mar 10 20:09	0°♑		
asc. node	10438 May 02 23:09	7°♓12'05		evening rise	10439 Mar 16 11:53	8°♑47'49		
retrograde	10438 May 09 07:34	10°♓24'21			10439 Mar 30 15:32	0°♒		
evening set	10438 May 13 01:45	9°♓02'10		evening max el	10439 Apr 14 21:33	19°♒52'55	20°51'23	
inferior conj	10438 May 18 10:09	3°♓04'25	3°17'24	asc. node	10439 Apr 19 20:21	23°♒49'10		
minimum elong	10438 May 18 09:45	3°♓05'44	3°16'57	retrograde	10439 Apr 23 06:15	24°♒46'05		
min. Earth dist.	10438 May 19 11:57	1°♓38'07	0.67421 AU	evening set	10439 Apr 27 10:07	23°♒08'05		
	10438 May 20 18:11	30°♒♒		inferior conj	10439 May 02 16:54	16°♒57'51	3°07'15	
morning rise	10438 May 23 17:26	26°♒44'41		minimum elong	10439 May 02 15:34	17°♒02'27	3°06'45	
direct	10438 May 29 15:14	24°♒07'19		min. Earth dist.	10439 May 03 04:50	16°♒16'35	0.68248 AU	
desc. node	10438 Jun 05 20:56	27°♒05'34		morning rise	10439 May 07 20:48	10°♒41'31		
	10438 Jun 09 06:56	0°♓		direct	10439 May 13 05:50	8°♒19'02		
morning max el	10438 Jun 10 15:03	1°♓18'55	25°12'31	desc. node	10439 May 23 17:52	14°♒28'10		
	10438 Jul 02 06:38	0°♔		morning max el	10439 May 24 00:36	14°♒45'02	23°44'17	
morning set	10438 Jul 16 15:20	23°♔53'43			10439 Jun 05 11:03	0°♓		
	10438 Jul 19 23:38	0°♕			10439 Jun 25 04:46	0°♔		
max. Earth dist.	10438 Jul 20 05:59	0°♕29'32	1.36528 AU	morning set	10439 Jun 28 06:31	5°♔09'27		
				max. Earth dist.	10439 Jul 02 03:09	11°♔50'25	1.38764 AU	
superior conj	10438 Jul 26 14:15	12°♕41'08	-0°32'02					
minimum elong	10438 Jul 26 16:16	12°♕51'08	0°32'02	superior conj	10439 Jul 09 14:11	25°♔26'11	-1°05'16	
asc. node	10438 Jul 29 22:22	19°♕22'00		minimum elong	10439 Jul 09 18:33	25°♔46'44	1°05'02	
evening rise	10438 Aug 03 19:05	29°♕14'34			10439 Jul 11 23:52	0°♕		

asc. node	10439 Jul 16 19:18	9°♎19'41		minimum elong	10440 Jun 21 02:52	7°♊49'17	1°36'26
evening rise	10439 Jul 18 17:25	13°♎04'58		evening rise	10440 Jul 01 05:23	26°♊24'02	
	10439 Jul 27 21:40	0°♎		asc. node	10440 Jul 02 16:15	29°♊06'37	
evening max el	10439 Aug 03 23:32	9°♎29'20	18°50'18		10440 Jul 03 03:44	0°♎	
retrograde	10439 Aug 12 10:15	13°♎42'11		evening max el	10440 Jul 17 06:17	22°♎01'14	18°17'31
evening set	10439 Aug 14 08:34	13°♎29'48		retrograde	10440 Jul 24 13:21	25°♎41'52	
desc. node	10439 Aug 19 16:38	11°♎06'37		evening set	10440 Jul 26 18:21	25°♎22'22	
inferior conj	10439 Aug 22 12:32	9°♎10'01	-0°52'40	inferior conj	10440 Aug 03 02:56	20°♎42'19	0°44'00
minimum elong	10439 Aug 22 10:19	9°♎13'59	0°52'01	minimum elong	10440 Aug 03 04:24	20°♎39'14	0°43'07
min. Earth dist.	10439 Aug 25 14:17	6°♎58'07	0.56764 AU	desc. node	10440 Aug 05 13:51	18°♎37'49	
morning rise	10439 Aug 30 08:47	4°♎11'55		min. Earth dist.	10440 Aug 06 11:35	17°♎53'31	0.58800 AU
direct	10439 Sep 04 23:05	2°♎56'38		morning rise	10440 Aug 10 11:01	15°♎09'08	
morning max el	10439 Sep 19 05:27	10°♎19'48	26°17'16	direct	10440 Aug 16 16:46	13°♎24'18	
	10439 Oct 04 06:14	0°♎		morning max el	10440 Aug 31 01:53	21°♎10'14	27°24'49
asc. node	10439 Oct 12 19:43	15°♎25'02			10440 Sep 07 18:18	0°♎	
morning set	10439 Oct 17 19:21	25°♎40'02			10440 Sep 26 03:20	0°♎	
	10439 Oct 19 19:31	0°♎		asc. node	10440 Sep 28 16:34	5°♎05'25	
				morning set	10440 Oct 01 03:19	10°♎10'12	
superior conj	10439 Oct 24 15:48	10°♎42'24	1°33'18	superior conj	10440 Oct 08 03:34	25°♎28'44	1°21'51
minimum elong	10439 Oct 24 14:18	10°♎34'05	1°33'29	minimum elong	10440 Oct 08 01:29	25°♎17'09	1°21'46
max. Earth dist.	10439 Oct 25 09:15	12°♎19'10	1.31719 AU	max. Earth dist.	10440 Oct 07 18:42	24°♎39'25	1.31456 AU
evening rise	10439 Oct 31 14:13	25°♎47'23			10440 Oct 10 04:19	0°♎	
	10439 Nov 02 15:00	0°♎		evening rise	10440 Oct 14 21:32	10°♎18'46	
desc. node	10439 Nov 15 14:28	23°♎36'00			10440 Oct 24 21:31	0°♎	
	10439 Nov 19 19:39	0°♎		desc. node	10440 Nov 01 11:37	12°♎20'43	
evening max el	10439 Dec 02 02:01	14°♎48'57	27°15'46	evening max el	10440 Nov 13 02:25	26°♎30'56	26°26'28
retrograde	10439 Dec 15 23:09	22°♎02'01			10440 Nov 17 07:14	0°♎	
evening set	10439 Dec 22 22:54	19°♎50'12		retrograde	10440 Nov 27 00:41	3°♎37'07	
min. Earth dist.	10439 Dec 26 16:30	17°♎04'03	0.61151 AU	evening set	10440 Dec 03 15:06	1°♎50'23	
inferior conj	10439 Dec 29 18:38	14°♎22'21	-3°11'47		10440 Dec 06 14:50	30°♎♊	
minimum elong	10439 Dec 30 01:02	14°♎08'21	3°09'00	min. Earth dist.	10440 Dec 07 15:55	29°♎15'11	0.59032 AU
morning rise	10440 Jan 06 05:44	9°♎27'36		inferior conj	10440 Dec 10 20:01	26°♎50'32	-4°24'38
direct	10440 Jan 08 09:46	9°♎08'09		minimum elong	10440 Dec 11 03:58	26°♎35'23	4°21'57
asc. node	10440 Jan 08 19:25	9°♎08'50		morning rise	10440 Dec 18 19:28	22°♎17'42	
morning max el	10440 Jan 15 12:04	12°♎42'14	17°54'43	direct	10440 Dec 20 23:05	22°♎01'36	
	10440 Jan 27 03:32	0°♎		asc. node	10440 Dec 25 16:29	23°♎24'03	
morning set	10440 Jan 31 03:17	7°♎13'15		morning max el	10440 Dec 28 22:22	25°♎56'21	18°21'57
					10441 Jan 01 10:14	0°♎	
superior conj	10440 Feb 10 15:26	26°♎02'07	0°07'10	morning set	10441 Jan 13 18:25	21°♎12'37	
minimum elong	10440 Feb 10 16:05	26°♎04'55	0°07'24		10441 Jan 18 09:06	0°♎	
behind sun begin	10440 Feb 10 08:42	25°♎32'52					
behind sun end	10440 Feb 10 23:27	26°♎36'54		superior conj	10441 Jan 22 23:01	8°♎32'23	0°41'28
desc. node	10440 Feb 11 14:01	27°♎39'44		minimum elong	10441 Jan 23 01:45	8°♎44'53	0°41'28
	10440 Feb 12 22:44	0°♎		desc. node	10441 Jan 28 10:50	18°♎22'01	
max. Earth dist.	10440 Feb 18 02:48	8°♎39'27	1.42787 AU	max. Earth dist.	10441 Jan 30 11:59	21°♎54'27	1.40771 AU
evening rise	10440 Feb 24 08:22	18°♎41'10		evening rise	10441 Feb 03 23:45	29°♎26'34	
	10440 Mar 02 16:25	0°♎			10441 Feb 04 07:54	0°♎	
	10440 Mar 24 09:08	0°♎			10441 Feb 24 04:23	0°♎	
evening max el	10440 Mar 27 16:32	3°♎36'45	22°06'14	evening max el	10441 Mar 10 07:44	17°♎22'57	23°26'23
asc. node	10440 Apr 05 17:34	9°♎11'54		retrograde	10441 Mar 20 22:55	23°♎39'49	
retrograde	10440 Apr 06 03:52	9°♎12'48		asc. node	10441 Mar 23 14:46	23°♎05'57	
evening set	10440 Apr 10 18:21	7°♎19'27		evening set	10441 Mar 26 00:53	21°♎32'19	
inferior conj	10440 Apr 16 01:42	0°♎59'07	2°46'39	inferior conj	10441 Mar 31 10:38	15°♎05'09	2°16'28
minimum elong	10440 Apr 15 23:44	1°♎05'56	2°46'02	minimum elong	10441 Mar 31 08:26	15°♎12'42	2°15'46
min. Earth dist.	10440 Apr 16 00:45	1°♎02'24	0.68614 AU	min. Earth dist.	10441 Mar 30 21:32	15°♎50'10	0.68537 AU
	10440 Apr 16 18:42	30°♎♊		morning rise	10441 Apr 05 15:56	8°♎59'39	
morning rise	10440 Apr 21 04:59	24°♎47'36		direct	10441 Apr 09 22:00	7°♎18'31	
direct	10440 Apr 26 00:26	22°♎44'49		morning max el	10441 Apr 18 05:17	12°♎03'59	20°53'13
morning max el	10440 May 05 12:16	28°♎19'14	22°15'12	desc. node	10441 Apr 26 11:35	21°♎58'18	
	10440 May 07 02:47	0°♎			10441 May 02 05:54	0°♎	
desc. node	10440 May 09 14:45	2°♎51'14		morning set	10441 May 18 08:22	24°♎12'37	
	10440 May 29 02:48	0°♎			10441 May 22 00:40	0°♎	
morning set	10440 Jun 07 20:13	15°♎14'57		max. Earth dist.	10441 May 26 06:52	6°♎50'02	1.43049 AU
max. Earth dist.	10440 Jun 13 02:05	23°♎54'04	1.41030 AU				
	10440 Jun 16 16:00	0°♎		superior conj	10441 Jun 02 05:17	18°♎18'31	-2°01'19
superior conj	10440 Jun 20 20:41	7°♎21'40	-1°36'39	minimum elong	10441 Jun 02 11:01	18°♎42'42	2°01'26

	10441 Jun 09 00:18	0°☿		superior conj	10442 May 13 13:31	28°♄12'24	-2°12'51
evening rise	10441 Jun 14 02:42	9°☿01'24		minimum elong	10442 May 13 14:29	28°♄16'20	2°13'14
asc. node	10441 Jun 19 13:14	18°☿38'21			10442 May 14 16:09	0°♄	
	10441 Jun 26 14:36	0°♄		evening rise	10442 May 27 04:21	20°♄45'03	
evening max el	10441 Jun 30 18:24	5°♄03'04	18°04'37		10442 Jun 01 15:45	0°☿	
retrograde	10441 Jul 07 09:03	8°♄26'28		asc. node	10442 Jun 06 10:16	7°☿48'21	
evening set	10441 Jul 09 21:57	7°♄56'22		evening max el	10442 Jun 14 08:14	18°☿24'43	18°10'38
inferior conj	10441 Jul 16 13:21	2°♄56'32	1°55'10	retrograde	10442 Jun 20 16:56	21°☿45'40	
minimum elong	10441 Jul 16 16:06	2°♄49'47	1°53'54	evening set	10442 Jun 23 13:47	21°☿02'24	
min. Earth dist.	10441 Jul 19 17:06	29°☿53'20	0.61069 AU	inferior conj	10442 Jun 29 15:47	15°☿44'13	2°41'51
	10441 Jul 19 14:14	30°♄☿		minimum elong	10442 Jun 29 18:15	15°☿37'25	2°40'50
morning rise	10441 Jul 23 07:39	26°☿58'20		min. Earth dist.	10442 Jul 02 07:40	12°☿49'30	0.63271 AU
desc. node	10441 Jul 23 11:01	26°☿52'47		morning rise	10442 Jul 05 21:06	9°☿31'30	
direct	10441 Jul 29 22:46	24°☿45'08		desc. node	10442 Jul 10 08:10	7°☿14'36	
	10441 Aug 10 05:40	0°♄		direct	10442 Jul 12 14:17	6°☿57'48	
morning max el	10441 Aug 13 05:04	2°♄44'28	27°55'24	morning max el	10442 Jul 26 13:05	15°☿00'21	27°47'53
	10441 Sep 02 06:01	0°♄			10442 Aug 07 18:06	0°♄	
morning set	10441 Sep 15 06:38	24°♄23'58			10442 Aug 25 21:30	0°♄	
asc. node	10441 Sep 15 13:23	24°♄58'57		morning set	10442 Aug 30 03:05	8°♄15'22	
	10441 Sep 17 22:33	0°♄		asc. node	10442 Sep 02 10:12	15°♄00'41	
max. Earth dist.	10441 Sep 21 02:36	6°♄52'04	1.31683 AU	max. Earth dist.	10442 Sep 04 05:18	18°♄47'52	1.32410 AU
superior conj	10441 Sep 22 14:13	10°♄08'07	1°05'06	superior conj	10442 Sep 06 21:52	24°♄34'54	0°43'21
minimum elong	10441 Sep 22 11:59	9°♄55'47	1°04'47	minimum elong	10442 Sep 06 20:01	24°♄24'52	0°42'54
evening rise	10441 Sep 29 07:52	24°♄56'10			10442 Sep 09 09:33	0°♄	
	10441 Oct 01 17:16	0°♄		evening rise	10442 Sep 13 19:22	9°♄34'13	
desc. node	10441 Oct 19 08:49	0°♄08'38			10442 Sep 24 05:44	0°♄	
	10441 Oct 19 06:09	0°♄		desc. node	10442 Oct 06 06:03	16°♄38'12	
evening max el	10441 Oct 25 18:44	7°♄22'16	25°06'58	evening max el	10442 Oct 07 05:48	17°♄37'32	23°29'12
retrograde	10441 Nov 08 15:21	14°♄20'12		retrograde	10442 Oct 20 17:05	24°♄20'35	
evening set	10441 Nov 14 08:33	13°♄06'14		evening set	10442 Oct 25 01:55	23°♄39'06	
min. Earth dist.	10441 Nov 19 06:41	10°♄24'38	0.57050 AU	min. Earth dist.	10442 Oct 31 15:47	20°♄32'50	0.55505 AU
inferior conj	10441 Nov 22 01:41	8°♄33'47	-5°22'23	inferior conj	10442 Nov 02 11:19	19°♄28'46	-5°45'18
minimum elong	10441 Nov 22 07:55	8°♄23'25	5°20'59	minimum elong	10442 Nov 02 11:00	19°♄29'14	5°44'57
morning rise	10441 Nov 30 09:34	4°♄23'07		morning rise	10442 Nov 10 21:54	15°♄36'01	
direct	10441 Dec 02 18:25	4°♄06'53		direct	10442 Nov 13 18:48	15°♄15'52	
morning max el	10441 Dec 11 23:20	8°♄31'58	19°10'40	morning max el	10442 Nov 24 11:37	20°♄19'29	20°22'11
asc. node	10441 Dec 12 13:31	9°♄07'06		asc. node	10442 Nov 29 10:31	26°♄02'40	
	10441 Dec 25 22:19	0°♄			10442 Dec 02 03:35	0°♄	
morning set	10441 Dec 28 18:49	5°♄36'26		morning set	10442 Dec 13 01:19	20°♄15'48	
					10442 Dec 17 18:36	0°♄	
superior conj	10442 Jan 06 00:21	21°♄52'07	1°07'39	superior conj	10442 Dec 20 14:52	5°♄48'41	1°25'41
minimum elong	10442 Jan 06 03:26	22°♄06'59	1°07'44	minimum elong	10442 Dec 20 17:17	6°♄00'52	1°25'58
	10442 Jan 10 07:27	0°♄		max. Earth dist.	10442 Dec 26 01:29	16°♄32'21	1.36443 AU
max. Earth dist.	10442 Jan 12 17:59	4°♄27'36	1.38576 AU	evening rise	10442 Dec 29 21:29	23°♄42'35	
desc. node	10442 Jan 15 07:41	9°♄02'12		desc. node	10443 Jan 02 04:37	29°♄36'42	
evening rise	10442 Jan 16 12:46	11°♄08'56			10443 Jan 02 09:57	0°♄	
	10442 Jan 28 02:22	0°♄			10443 Jan 21 18:46	0°♄	
	10442 Feb 19 16:49	0°♄		evening max el	10443 Feb 03 10:49	15°♄02'01	25°56'18
evening max el	10442 Feb 20 21:18	1°♄12'08	24°45'28	retrograde	10443 Feb 16 00:24	22°♄12'25	
retrograde	10442 Mar 04 14:04	8°♄01'25		evening set	10443 Feb 22 02:32	19°♄43'22	
evening set	10442 Mar 10 04:08	5°♄41'42		asc. node	10443 Feb 25 09:12	16°♄22'11	
asc. node	10442 Mar 10 11:59	5°♄24'32		min. Earth dist.	10443 Feb 26 08:41	15°♄11'05	0.67155 AU
min. Earth dist.	10442 Mar 14 16:55	0°♄34'33	0.68044 AU	inferior conj	10443 Feb 27 21:23	13°♄16'07	0°48'23
	10442 Mar 15 03:22	30°♄♄		minimum elong	10443 Feb 27 20:12	13°♄19'49	0°48'06
inferior conj	10442 Mar 15 17:49	29°♄11'57	1°36'59	morning rise	10443 Mar 05 14:28	7°♄27'22	
minimum elong	10442 Mar 15 15:51	29°♄18'29	1°36'22	direct	10443 Mar 08 20:32	6°♄26'56	
morning rise	10442 Mar 21 03:45	23°♄13'54		morning max el	10443 Mar 15 13:55	10°♄05'40	18°49'23
direct	10442 Mar 24 21:14	21°♄54'07			10443 Mar 30 03:26	0°♄	
morning max el	10442 Apr 01 05:47	25°♄59'56	19°43'37	desc. node	10443 Mar 31 05:09	1°♄39'08	
	10442 Apr 04 19:57	0°♄		morning set	10443 Apr 06 16:04	11°♄40'58	
desc. node	10442 Apr 13 08:22	11°♄37'00			10443 Apr 18 09:49	0°♄	
greatest brilliancy	10442 Apr 14 00:31	12°♄35'57	-0.6m	max. Earth dist.	10443 Apr 21 11:58	4°♄50'05	1.45476 AU
	10442 Apr 25 13:53	0°♄					
morning set	10442 Apr 27 07:09	2°♄38'25		superior conj	10443 Apr 23 01:37	7°♄17'40	-2°05'20
max. Earth dist.	10442 May 08 18:36	20°♄33'06	1.44587 AU	minimum elong	10443 Apr 22 19:13	6°♄52'36	2°05'18



	10443 May 07 08:28	0° $\Pi$		desc. node	10444 Mar 17 01:57	21° $\text{X}$ 57'58	
evening rise	10443 May 08 06:36	1° $\Pi$ 29'07			10444 Mar 22 01:51	0° $\Upsilon$	
asc. node	10443 May 24 07:20	26° $\Pi$ 29'19					
	10443 May 27 01:19	0° $\mathfrak{S}$		superior conj	10444 Apr 01 08:02	16° $\Upsilon$ 14'57	-1°38'12
evening max el	10443 May 28 20:43	1° $\mathfrak{S}$ 58'16	18°34'46	minimum elong	10444 Mar 31 22:31	15° $\Upsilon$ 37'36	1°37'22
retrograde	10443 Jun 04 08:59	5° $\mathfrak{S}$ 30'38		max. Earth dist.	10444 Apr 03 07:51	19° $\Upsilon$ 22'17	1.45622 AU
evening set	10443 Jun 07 13:45	4° $\mathfrak{S}$ 32'45			10444 Apr 10 03:19	0° $\mathfrak{S}$	
	10443 Jun 12 09:30	30° $\mathfrak{K}$ $\Pi$		evening rise	10444 Apr 17 10:03	11° $\mathfrak{S}$ 19'57	
inferior conj	10443 Jun 13 06:13	28° $\Pi$ 57'47	3°08'06	greatest brilliancy	10444 Apr 29 04:22	29° $\mathfrak{S}$ 29'48	-0.7m
minimum elong	10443 Jun 13 07:40	28° $\Pi$ 53'24	3°07'25		10444 Apr 29 12:22	0° $\Pi$	
min. Earth dist.	10443 Jun 15 07:21	26° $\Pi$ 29'25	0.65196 AU	asc. node	10444 May 10 04:27	14° $\Pi$ 32'00	
morning rise	10443 Jun 19 00:44	22° $\Pi$ 38'25		evening max el	10444 May 11 05:26	15° $\Pi$ 37'50	19°16'03
direct	10443 Jun 25 13:40	19° $\Pi$ 55'07		retrograde	10444 May 18 05:41	19° $\Pi$ 34'17	
desc. node	10443 Jun 27 05:15	20° $\Pi$ 04'23		evening set	10444 May 21 18:44	18° $\Pi$ 21'01	
morning max el	10443 Jul 08 23:35	27° $\Pi$ 49'24	27°06'35	inferior conj	10444 May 27 05:11	12° $\Pi$ 30'56	3°17'57
	10443 Jul 11 01:07	0° $\mathfrak{S}$		minimum elong	10444 May 27 05:27	12° $\Pi$ 30'07	3°17'28
	10443 Aug 01 11:48	0° $\Omega$		min. Earth dist.	10444 May 28 15:16	10° $\Pi$ 40'13	0.66728 AU
morning set	10443 Aug 13 13:53	21° $\Omega$ 36'46		morning rise	10444 Jun 01 15:42	6° $\Pi$ 10'12	
	10443 Aug 17 19:28	0° $\mathfrak{M}$		direct	10444 Jun 07 19:46	3° $\Pi$ 28'04	
max. Earth dist.	10443 Aug 17 23:24	0° $\mathfrak{M}$ 19'56	1.33643 AU	desc. node	10444 Jun 13 02:19	5° $\Pi$ 03'05	
asc. node	10443 Aug 20 07:02	5° $\mathfrak{M}$ 06'08		morning max el	10444 Jun 20 10:15	11° $\Pi$ 00'10	25°59'22
					10444 Jul 05 12:55	0° $\mathfrak{S}$	
superior conj	10443 Aug 22 00:23	8° $\mathfrak{M}$ 42'39	0°16'58		10444 Jul 24 02:31	0° $\Omega$	
minimum elong	10443 Aug 21 23:31	8° $\mathfrak{M}$ 38'09	0°16'34	morning set	10444 Jul 26 11:30	4° $\Omega$ 19'12	
evening rise	10443 Aug 29 06:06	24° $\mathfrak{M}$ 07'01		max. Earth dist.	10444 Jul 30 07:03	11° $\Omega$ 30'42	1.35351 AU
	10443 Sep 01 02:01	0° $\mathfrak{A}$					
evening max el	10443 Sep 18 19:24	27° $\mathfrak{A}$ 47'56	21°50'11	superior conj	10444 Aug 04 19:11	22° $\Omega$ 24'42	-0°13'19
	10443 Sep 21 06:41	0° $\mathfrak{M}$		minimum elong	10444 Aug 04 19:59	22° $\Omega$ 28'46	0°13'30
desc. node	10443 Sep 23 03:19	1° $\mathfrak{M}$ 21'00		behind sun begin	10444 Aug 04 16:38	22° $\Omega$ 11'47	
retrograde	10443 Oct 01 07:45	4° $\mathfrak{M}$ 01'25		behind sun end	10444 Aug 04 23:19	22° $\Omega$ 45'46	
evening set	10443 Oct 04 06:13	3° $\mathfrak{M}$ 42'02		asc. node	10444 Aug 06 03:54	25° $\Omega$ 11'33	
	10443 Oct 12 19:02	30° $\mathfrak{K}$ $\mathfrak{A}$			10444 Aug 08 11:51	0° $\mathfrak{M}$	
inferior conj	10443 Oct 13 06:19	29° $\mathfrak{A}$ 44'13	-5°14'27	evening rise	10444 Aug 12 14:01	8° $\mathfrak{M}$ 28'43	
minimum elong	10443 Oct 12 22:20	29° $\mathfrak{A}$ 55'24	5°12'49		10444 Aug 24 04:01	0° $\mathfrak{A}$	
min. Earth dist.	10443 Oct 12 22:53	29° $\mathfrak{A}$ 54'38	0.54688 AU	evening max el	10444 Aug 30 20:03	8° $\mathfrak{A}$ 28'35	20°24'25
morning rise	10443 Oct 21 15:44	25° $\mathfrak{A}$ 56'38		desc. node	10444 Sep 09 00:35	13° $\mathfrak{A}$ 47'42	
direct	10443 Oct 25 05:16	25° $\mathfrak{A}$ 28'51		retrograde	10444 Sep 10 20:10	13° $\mathfrak{A}$ 56'21	
	10443 Nov 05 00:05	0° $\mathfrak{M}$		evening set	10444 Sep 12 21:01	13° $\mathfrak{A}$ 45'57	
morning max el	10443 Nov 06 10:24	1° $\mathfrak{M}$ 15'55	21°54'53	inferior conj	10444 Sep 21 23:28	9° $\mathfrak{A}$ 48'43	-3°49'43
asc. node	10443 Nov 16 07:28	13° $\mathfrak{M}$ 54'16		minimum elong	10444 Sep 21 13:56	10° $\mathfrak{A}$ 02'37	3°46'41
	10443 Nov 25 00:59	0° $\mathfrak{X}$		min. Earth dist.	10444 Sep 23 07:34	9° $\mathfrak{A}$ 01'50	0.54791 AU
morning set	10443 Nov 27 11:24	5° $\mathfrak{X}$ 02'24		morning rise	10444 Sep 30 06:16	5° $\mathfrak{A}$ 45'01	
				direct	10444 Oct 04 14:09	5° $\mathfrak{A}$ 04'44	
superior conj	10443 Dec 04 14:38	20° $\mathfrak{X}$ 09'56	1°36'13	morning max el	10444 Oct 17 23:59	11° $\mathfrak{A}$ 35'18	23°40'44
minimum elong	10443 Dec 04 15:55	20° $\mathfrak{X}$ 16'41	1°36'39		10444 Oct 31 18:24	0° $\mathfrak{M}$	
max. Earth dist.	10443 Dec 08 14:36	28° $\mathfrak{X}$ 25'46	1.34571 AU	asc. node	10444 Nov 02 04:24	2° $\mathfrak{M}$ 28'52	
	10443 Dec 09 09:17	0° $\mathfrak{Z}$		morning set	10444 Nov 10 23:04	19° $\mathfrak{M}$ 50'43	
evening rise	10443 Dec 12 22:09	6° $\mathfrak{Z}$ 56'49			10444 Nov 15 15:46	0° $\mathfrak{X}$	
desc. node	10443 Dec 20 01:37	20° $\mathfrak{Z}$ 00'10					
	10443 Dec 26 01:56	0° $\mathfrak{A}$		superior conj	10444 Nov 17 20:38	4° $\mathfrak{X}$ 47'12	1°39'55
evening max el	10444 Jan 17 00:18	28° $\mathfrak{A}$ 44'05	26°51'44	minimum elong	10444 Nov 17 20:43	4° $\mathfrak{X}$ 47'37	1°40'21
	10444 Jan 18 08:51	0° $\text{X}$		max. Earth dist.	10444 Nov 20 11:28	10° $\mathfrak{X}$ 24'16	1.33098 AU
retrograde	10444 Jan 30 05:06	6° $\text{X}$ 05'06		evening rise	10444 Nov 25 11:10	20° $\mathfrak{X}$ 42'43	
evening set	10444 Feb 05 18:12	3° $\text{X}$ 31'11			10444 Nov 30 06:26	0° $\mathfrak{Z}$	
	10444 Feb 09 09:01	30° $\mathfrak{K}$ $\mathfrak{A}$		desc. node	10444 Dec 05 22:39	10° $\mathfrak{Z}$ 07'02	
min. Earth dist.	10444 Feb 09 18:32	29° $\mathfrak{A}$ 33'11	0.65878 AU		10444 Dec 19 00:58	0° $\mathfrak{A}$	
inferior conj	10444 Feb 11 19:08	27° $\mathfrak{A}$ 12'15	-0°09'18	evening max el	10444 Dec 29 12:56	12° $\mathfrak{A}$ 08'09	27°24'39
minimum elong	10444 Feb 11 19:23	27° $\mathfrak{A}$ 11'32	0°08'54	retrograde	10445 Jan 12 03:39	19° $\mathfrak{A}$ 30'54	
transit middle	10444 Feb 11 19:23	27° $\mathfrak{A}$ 11'32	0°08'54	evening set	10445 Jan 19 00:51	16° $\mathfrak{A}$ 58'42	
transit begin	10444 Feb 11 16:55	27° $\mathfrak{A}$ 18'41		min. Earth dist.	10445 Jan 22 20:27	13° $\mathfrak{A}$ 32'50	0.64248 AU
transit end	10444 Feb 11 21:50	27° $\mathfrak{A}$ 04'23		inferior conj	10445 Jan 25 08:34	10° $\mathfrak{A}$ 54'26	-1°15'30
asc. node	10444 Feb 12 06:25	26° $\mathfrak{A}$ 39'34		minimum elong	10445 Jan 25 10:55	10° $\mathfrak{A}$ 48'13	1°14'06
morning rise	10444 Feb 17 21:45	21° $\mathfrak{A}$ 35'04		asc. node	10445 Jan 29 03:37	7° $\mathfrak{A}$ 15'37	
direct	10444 Feb 20 17:51	20° $\mathfrak{A}$ 50'57		morning rise	10445 Jan 31 22:51	5° $\mathfrak{A}$ 31'23	
morning max el	10444 Feb 27 03:58	24° $\mathfrak{A}$ 15'05	18°11'43	direct	10445 Feb 03 10:42	4° $\mathfrak{A}$ 59'52	
	10444 Mar 02 23:01	0° $\text{X}$		morning max el	10445 Feb 09 21:12	8° $\mathfrak{A}$ 20'33	17°51'03
morning set	10444 Mar 17 03:44	22° $\text{X}$ 05'08			10445 Feb 24 12:48	0° $\text{X}$	

morning set	10445 Feb 26 19:58	3° $\text{H}$ 52'51		morning max el	10446 Jan 24 14:28	22° $\text{Z}$ 13'47	17°48'00
desc. node	10445 Mar 03 22:44	12° $\text{H}$ 28'23			10446 Jan 30 14:53	0° $\approx$	
superior conj	10445 Mar 12 03:08	25° $\text{H}$ 53'11	-0°58'24	morning set	10446 Feb 09 11:19	16° $\approx$ 46'53	
minimum elong	10445 Mar 11 20:45	25° $\text{H}$ 27'29	0°57'27		10446 Feb 17 00:02	0° $\text{H}$	
	10445 Mar 14 16:45	0° $\text{Y}$		desc. node	10446 Feb 18 19:30	3° $\text{H}$ 06'27	
max. Earth dist.	10445 Mar 17 03:07	3° $\text{Y}$ 51'33	1.45027 AU	superior conj	10446 Feb 20 21:46	6° $\text{H}$ 39'33	-0°15'46
evening rise	10445 Mar 27 23:06	20° $\text{Y}$ 42'11		minimum elong	10446 Feb 20 20:15	6° $\text{H}$ 33'09	0°15'17
	10445 Apr 03 01:36	0° $\text{Z}$		behind sun begin	10446 Feb 20 17:34	6° $\text{H}$ 21'51	
greatest brilliancy	10445 Apr 11 18:13	12° $\text{Z}$ 56'13	-0.6m	behind sun end	10446 Feb 20 22:56	6° $\text{H}$ 44'27	
evening max el	10445 Apr 24 08:54	29° $\text{Z}$ 19'37	20°12'51	max. Earth dist.	10446 Feb 27 19:30	18° $\text{H}$ 02'45	1.43765 AU
	10445 Apr 25 01:18	0° $\text{II}$			10446 Mar 07 08:54	0° $\text{Y}$	
asc. node	10445 Apr 27 01:37	1° $\text{II}$ 44'12		evening rise	10446 Mar 07 12:47	0° $\text{Y}$ 15'02	
retrograde	10445 May 02 04:18	3° $\text{II}$ 50'21			10446 Mar 27 16:53	0° $\text{Z}$	
evening set	10445 May 06 02:23	2° $\text{II}$ 21'31		evening max el	10446 Apr 07 06:51	13° $\text{Z}$ 03'17	21°22'16
	10445 May 08 12:51	30° $\text{RZ}$		asc. node	10446 Apr 13 22:50	17° $\text{Z}$ 51'48	
inferior conj	10445 May 11 09:47	26° $\text{Z}$ 18'03	3°14'28	retrograde	10446 Apr 16 02:43	18° $\text{Z}$ 14'43	
minimum elong	10445 May 11 08:58	26° $\text{Z}$ 20'51	3°14'00	evening set	10446 Apr 20 10:53	16° $\text{Z}$ 30'20	
min. Earth dist.	10445 May 12 05:34	25° $\text{Z}$ 10'41	0.67821 AU	inferior conj	10446 Apr 25 17:40	10° $\text{Z}$ 15'35	2°59'44
morning rise	10445 May 16 15:15	19° $\text{Z}$ 59'17		minimum elong	10446 Apr 25 16:02	10° $\text{Z}$ 21'17	2°59'10
direct	10445 May 22 07:41	17° $\text{Z}$ 27'29		min. Earth dist.	10446 Apr 26 00:07	9° $\text{Z}$ 53'10	0.68460 AU
desc. node	10445 May 30 23:19	21° $\text{Z}$ 40'38		morning rise	10446 Apr 30 20:57	4° $\text{Z}$ 00'56	
morning max el	10445 Jun 02 19:57	24° $\text{Z}$ 21'51	24°35'42	direct	10446 May 06 00:18	1° $\text{Z}$ 46'08	
	10445 Jun 07 21:10	0° $\text{II}$		morning max el	10446 May 16 05:52	7° $\text{Z}$ 50'46	23°05'51
	10445 Jun 28 23:18	0° $\text{Z}$		desc. node	10446 May 17 20:13	9° $\text{Z}$ 31'16	
morning set	10445 Jul 08 15:13	16° $\text{Z}$ 09'54			10446 Jun 02 12:35	0° $\text{II}$	
max. Earth dist.	10445 Jul 12 05:53	22° $\text{Z}$ 36'38	1.37448 AU	morning set	10446 Jun 19 19:55	26° $\text{II}$ 56'15	
	10445 Jul 16 05:34	0° $\text{Z}$			10446 Jun 21 15:45	0° $\text{Z}$	
superior conj	10445 Jul 19 03:00	5° $\text{Z}$ 32'20	-0°46'07	max. Earth dist.	10446 Jun 24 02:25	4° $\text{Z}$ 10'22	1.39742 AU
minimum elong	10445 Jul 19 06:01	5° $\text{Z}$ 46'55	0°46'01	superior conj	10446 Jul 01 20:03	17° $\text{Z}$ 57'11	-1°19'04
asc. node	10445 Jul 24 00:45	15° $\text{Z}$ 12'32		minimum elong	10446 Jul 02 01:20	18° $\text{Z}$ 21'29	1°18'48
evening rise	10445 Jul 27 16:35	22° $\text{Z}$ 31'48			10446 Jul 08 05:53	0° $\text{Z}$	
	10445 Jul 31 11:45	0° $\text{np}$		asc. node	10446 Jul 10 21:40	5° $\text{Z}$ 05'39	
evening max el	10445 Aug 13 10:30	19° $\text{np}$ 54'50	19°18'36	evening rise	10446 Jul 11 10:55	6° $\text{Z}$ 09'13	
retrograde	10445 Aug 22 18:04	24° $\text{np}$ 32'28			10446 Jul 25 14:47	0° $\text{np}$	
evening set	10445 Aug 24 14:14	24° $\text{np}$ 22'24		evening max el	10446 Jul 27 12:28	2° $\text{np}$ 05'13	18°33'54
desc. node	10445 Aug 26 21:51	23° $\text{np}$ 43'12		retrograde	10446 Aug 04 09:51	6° $\text{np}$ 02'02	
inferior conj	10445 Sep 02 04:46	20° $\text{np}$ 13'41	-1°57'08	evening set	10446 Aug 06 10:49	5° $\text{np}$ 47'04	
minimum elong	10445 Sep 01 23:34	20° $\text{np}$ 22'15	1°55'16	desc. node	10446 Aug 13 19:05	1° $\text{np}$ 40'54	
min. Earth dist.	10445 Sep 04 19:51	18° $\text{np}$ 30'09	0.55819 AU	inferior conj	10446 Aug 14 06:30	1° $\text{np}$ 19'02	-0°08'45
morning rise	10445 Sep 10 06:09	15° $\text{np}$ 37'02		minimum elong	10446 Aug 14 06:09	1° $\text{np}$ 19'43	0°08'54
direct	10445 Sep 15 09:45	14° $\text{np}$ 36'26		transit middle	10446 Aug 14 06:09	1° $\text{np}$ 19'43	0°08'54
morning max el	10445 Sep 29 11:39	21° $\text{np}$ 43'52	25°24'59	transit begin	10446 Aug 14 03:08	1° $\text{np}$ 25'30	
	10445 Oct 06 17:48	0° $\text{Z}$		transit end	10446 Aug 14 09:09	1° $\text{np}$ 13'55	
asc. node	10445 Oct 20 01:17	21° $\text{Z}$ 35'17			10446 Aug 15 23:22	30° $\text{RZ}$	
	10445 Oct 24 06:19	0° $\text{ML}$		min. Earth dist.	10446 Aug 17 13:07	28° $\text{Z}$ 48'52	0.57585 AU
morning set	10445 Oct 26 10:37	4° $\text{ML}$ 35'36		morning rise	10446 Aug 21 21:58	26° $\text{Z}$ 05'19	
				direct	10446 Aug 27 19:47	24° $\text{Z}$ 37'24	
superior conj	10445 Nov 02 06:27	19° $\text{ML}$ 32'57	1°37'24		10446 Sep 08 17:46	0° $\text{np}$	
minimum elong	10445 Nov 02 05:27	19° $\text{ML}$ 27'28	1°37'42	morning max el	10446 Sep 11 03:41	2° $\text{np}$ 11'19	26°50'07
max. Earth dist.	10445 Nov 03 15:30	22° $\text{ML}$ 34'45	1.32081 AU		10446 Oct 01 01:47	0° $\text{Z}$	
	10445 Nov 07 01:45	0° $\text{Z}$		asc. node	10446 Oct 06 22:06	11° $\text{Z}$ 04'57	
evening rise	10445 Nov 09 09:21	4° $\text{Z}$ 52'08		morning set	10446 Oct 10 20:21	19° $\text{Z}$ 12'03	
desc. node	10445 Nov 22 19:45	29° $\text{Z}$ 50'19			10446 Oct 15 19:10	0° $\text{ML}$	
	10445 Nov 22 22:06	0° $\text{Z}$		superior conj	10446 Oct 17 18:01	4° $\text{ML}$ 20'28	1°29'07
evening max el	10445 Dec 11 23:01	25° $\text{Z}$ 02'43	27°28'38	minimum elong	10446 Oct 17 16:13	4° $\text{ML}$ 10'30	1°29'11
	10445 Dec 18 07:43	0° $\approx$		max. Earth dist.	10446 Oct 17 23:58	4° $\text{ML}$ 53'37	1.31544 AU
retrograde	10445 Dec 25 19:07	2° $\approx$ 20'36		evening rise	10446 Oct 24 13:59	19° $\text{ML}$ 17'19	
evening set	10446 Jan 01 19:41	29° $\text{Z}$ 58'46			10446 Oct 29 20:12	0° $\text{Z}$	
	10446 Jan 01 18:56	30° $\text{RZ}$		desc. node	10446 Nov 09 16:52	18° $\text{Z}$ 59'53	
min. Earth dist.	10446 Jan 05 12:50	27° $\text{Z}$ 00'12	0.62332 AU		10446 Nov 17 13:40	0° $\text{Z}$	
inferior conj	10446 Jan 08 10:46	24° $\text{Z}$ 15'44	-2°28'22	evening max el	10446 Nov 24 03:57	7° $\text{Z}$ 14'42	26°59'06
minimum elong	10446 Jan 08 15:42	24° $\text{Z}$ 04'05	2°25'58	retrograde	10446 Dec 08 02:01	14° $\text{Z}$ 24'31	
morning rise	10446 Jan 15 14:09	19° $\text{Z}$ 09'38		evening set	10446 Dec 14 22:53	12° $\text{Z}$ 22'39	
asc. node	10446 Jan 16 00:47	19° $\text{Z}$ 01'38		min. Earth dist.	10446 Dec 18 18:29	9° $\text{Z}$ 42'40	0.60245 AU
direct	10446 Jan 17 20:03	18° $\text{Z}$ 46'54					

inferior conj	10446 Dec 21 22:16	7°30'24" -3°43'34"	minimum elong	10447 Dec 03 23:21	19°27'02" 4°49'43"
minimum elong	10446 Dec 22 05:34	6°35'11" 3°40'40"	morning rise	10447 Dec 11 19:14	14°27'53" 12"
morning rise	10446 Dec 29 14:52	2°32'02" 22"	direct	10447 Dec 14 00:28	14°27'37" 21"
direct	10446 Dec 31 18:08	2°32'02" 44"	asc. node	10447 Dec 20 18:57	17°27'15" 40"
asc. node	10447 Jan 02 21:55	2°32'21" 30"	morning max el	10447 Dec 22 11:05	18°27'43" 34" 18°39'56"
morning max el	10447 Jan 08 04:20	5°34'44" 18°03'43"		10447 Dec 30 17:18	0°32"
morning set	10447 Jan 23 19:19	0°27'09"	morning set	10448 Jan 07 14:55	14°33'8" 40"
	10447 Jan 23 13:29	0°27"		10448 Jan 15 14:01	0°27"
superior conj	10447 Feb 02 16:54	18°23'34" 37" 0°22'39"	superior conj	10448 Jan 16 08:42	1°27'54" 0°53'34"
minimum elong	10447 Feb 02 18:41	18°22'32" 42" 0°22'44"	minimum elong	10448 Jan 16 11:45	1°27'09" 0°53'35"
desc. node	10447 Feb 05 16:17	23°27'47" 57"	max. Earth dist.	10448 Jan 23 15:51	14°24'13" 35" 1.39854 AU
	10447 Feb 09 07:21	0°27"	desc. node	10448 Jan 23 13:08	14°22'29" 41"
max. Earth dist.	10447 Feb 10 07:46	1°27'42" 23" 1.41975 AU	evening rise	10448 Jan 27 17:20	21°23'39" 24"
evening rise	10447 Feb 15 16:39	10°27'29" 25"		10448 Feb 01 19:23	0°27"
	10447 Feb 28 10:05	0°27"		10448 Feb 22 11:08	0°27"
evening max el	10447 Mar 21 00:09	26°27'48" 24" 22°40'03"	evening max el	10448 Mar 02 14:29	10°27'36" 01" 24°00'26"
	10447 Mar 24 14:04	0°28"	retrograde	10448 Mar 13 16:40	17°27'07" 15"
retrograde	10447 Mar 30 23:15	2°28'41" 48"	asc. node	10448 Mar 17 17:17	15°27'51" 26"
asc. node	10447 Mar 31 20:04	2°28'38" 09"	evening set	10448 Mar 18 23:54	14°27'54" 04"
evening set	10447 Apr 04 18:34	0°28'42" 23"	min. Earth dist.	10448 Mar 23 16:59	9°27'27" 05" 0.68390 AU
	10447 Apr 05 13:13	30°28'27" 09"	inferior conj	10448 Mar 24 11:10	8°27'25" 22" 2°00'50"
inferior conj	10447 Apr 10 02:45	24°27'18" 57" 2°34'59"	minimum elong	10448 Mar 24 09:01	8°27'32" 42" 2°00'08"
minimum elong	10447 Apr 10 00:38	24°27'26" 16" 2°34'19"	morning rise	10448 Mar 29 18:10	2°27'23" 07"
min. Earth dist.	10447 Apr 09 20:38	24°27'40" 13" 0.68644 AU	direct	10448 Apr 02 18:48	0°27'51" 15"
morning rise	10447 Apr 15 06:35	18°27'09" 54"	morning max el	10448 Apr 10 15:25	5°27'17" 53" 20°21'49"
direct	10447 Apr 19 20:24	16°27'16" 01"	desc. node	10448 Apr 20 13:53	17°27'35" 45"
morning max el	10447 Apr 28 19:16	21°27'28" 14" 21°38'58"		10448 Apr 29 03:17	0°28"
desc. node	10447 May 04 17:04	28°27'14" 19"	morning set	10448 May 09 02:13	15°28'07" 15"
	10447 May 06 02:06	0°28"	max. Earth dist.	10448 May 18 12:08	29°28'56" 09" 1.43780 AU
	10447 May 26 18:48	0°28"		10448 May 18 13:06	0°28"
morning set	10447 May 30 22:06	6°28'30" 13"	superior conj	10448 May 24 15:57	9°28'57" 55" -2°08'13"
max. Earth dist.	10447 Jun 06 03:43	16°28'36" 43" 1.41942 AU	minimum elong	10448 May 24 20:14	10°28'15" 38" 2°08'30"
superior conj	10447 Jun 13 17:44	29°28'28" 42" -1°48'18"		10448 Jun 05 10:41	0°28"
minimum elong	10447 Jun 14 00:08	29°28'56" 37" 1°48'11"	evening rise	10448 Jun 06 06:44	1°28'27" 17"
	10447 Jun 14 00:55	0°28"	asc. node	10448 Jun 13 15:38	14°28'09" 38"
evening rise	10447 Jun 24 17:11	19°28'11" 32"	evening max el	10448 Jun 23 11:11	28°28'01" 42" 18°04'53"
asc. node	10447 Jun 27 18:38	24°28'46" 34"		10448 Jun 25 20:13	0°28"
	10447 Jun 30 16:46	0°28"	retrograde	10448 Jun 29 22:08	1°28'22" 36"
evening max el	10447 Jul 10 21:59	14°28'50" 56" 18°09'40"	evening set	10448 Jul 02 14:24	0°28'47" 08"
retrograde	10447 Jul 17 20:31	18°28'22" 12"		10448 Jul 04 01:18	30°28'27" 09"
evening set	10447 Jul 20 04:59	17°28'58" 24"	inferior conj	10448 Jul 08 23:34	25°28'38" 59" 2°17'47"
inferior conj	10447 Jul 27 05:48	13°28'09" 31" 1°17'25"	minimum elong	10448 Jul 09 02:21	25°28'31" 49" 2°16'35"
minimum elong	10447 Jul 27 08:04	13°28'04" 24" 1°16'15"	min. Earth dist.	10448 Jul 11 22:42	22°28'37" 00" 0.62023 AU
min. Earth dist.	10447 Jul 30 13:27	10°28'11" 57" 0.59759 AU	morning rise	10448 Jul 15 12:07	19°28'33" 15"
desc. node	10447 Jul 31 16:16	9°28'16" 43"	desc. node	10448 Jul 17 13:27	18°28'18" 42"
morning rise	10447 Aug 03 08:05	7°28'24" 40"	direct	10448 Jul 22 04:46	17°28'10" 29"
direct	10447 Aug 09 18:45	5°28'27" 21"	morning max el	10448 Aug 05 08:44	25°28'12" 26" 27°56'52"
morning max el	10447 Aug 24 02:58	13°28'19" 10" 27°42'42"		10448 Aug 09 18:10	0°28"
	10447 Sep 06 09:54	0°28"		10448 Aug 29 21:19	0°28"
	10447 Sep 23 08:53	0°28"	morning set	10448 Sep 08 03:16	17°28'40" 35"
asc. node	10447 Sep 23 18:55	0°28'51" 25"	asc. node	10448 Sep 09 15:43	20°28'48" 41"
morning set	10447 Sep 25 02:35	3°28'35" 48"	max. Earth dist.	10448 Sep 13 15:45	29°28'20" 02" 1.31930 AU
max. Earth dist.	10447 Oct 01 09:24	17°28'12" 47" 1.31492 AU		10448 Sep 13 23:06	0°28"
superior conj	10447 Oct 02 05:31	19°28'04" 24" 1°15'23"	superior conj	10448 Sep 15 15:06	3°28'38" 34" 0°56'28"
minimum elong	10447 Oct 02 03:19	18°28'52" 09" 1°15'11"	minimum elong	10448 Sep 15 12:58	3°28'26" 49" 0°56'05"
	10447 Oct 07 04:00	0°28"	evening rise	10448 Sep 22 09:55	18°28'30" 07" 0°28"
evening rise	10447 Oct 08 22:52	3°28'52" 12"		10448 Sep 27 23:32	0°28"
	10447 Oct 22 16:59	0°28"	desc. node	10448 Oct 13 11:16	24°28'40" 03"
desc. node	10447 Oct 27 14:02	7°28'22" 46"	evening max el	10448 Oct 17 14:16	29°28'06" 50" 24°26'34"
evening max el	10447 Nov 06 01:07	18°28'35" 17" 25°55'56"		10448 Oct 18 13:07	0°28"
retrograde	10447 Nov 19 22:46	25°28'37" 25"	retrograde	10448 Oct 31 07:58	6°28'00" 10"
evening set	10447 Nov 26 05:55	24°28'04" 02"	evening set	10448 Nov 05 12:46	5°28'00" 18"
min. Earth dist.	10447 Nov 30 13:45	21°28'28" 37" 0.58158 AU	min. Earth dist.	10448 Nov 11 01:18	2°28'10" 34" 0.56321 AU
inferior conj	10447 Dec 03 15:35	19°28'16" 38" -4°51'58"	inferior conj	10448 Nov 13 12:23	0°28'38" 07" -5°37'40"

minimum elong	10448 Nov 13 16:24	0° $\mathbb{A}$ 31'49	5°36'54	retrograde	10449 Oct 12 04:55	15° $\mathbb{M}$ 47'44	
	10448 Nov 14 12:50	30° $\mathbb{K}$ $\mathbb{M}$		evening set	10449 Oct 15 22:10	15° $\mathbb{M}$ 17'29	
morning rise	10448 Nov 21 22:11	26° $\mathbb{M}$ 36'27		min. Earth dist.	10449 Oct 23 09:19	11° $\mathbb{M}$ 55'16	0.55049 AU
direct	10448 Nov 24 11:24	26° $\mathbb{M}$ 19'04		inferior conj	10449 Oct 24 14:37	11° $\mathbb{M}$ 13'23	-5°39'28
	10448 Dec 03 04:45	0° $\mathbb{A}$		minimum elong	10449 Oct 24 10:42	11° $\mathbb{M}$ 19'00	5°38'51
morning max el	10448 Dec 04 06:59	0° $\mathbb{A}$ 59'09	19°38'26	morning rise	10449 Nov 02 00:57	7° $\mathbb{M}$ 24'55	
asc. node	10448 Dec 06 15:58	3° $\mathbb{A}$ 30'54		direct	10449 Nov 05 04:18	7° $\mathbb{M}$ 02'09	
morning set	10448 Dec 21 18:14	29° $\mathbb{A}$ 09'39		morning max el	10449 Nov 16 13:27	12° $\mathbb{M}$ 24'24	20°59'25
	10448 Dec 22 04:13	0° $\mathbb{B}$		asc. node	10449 Nov 23 12:56	20° $\mathbb{M}$ 51'35	
					10449 Nov 29 01:34	0° $\mathbb{A}$	
superior conj	10448 Dec 29 16:12	15° $\mathbb{B}$ 04'41	1°16'15	morning set	10449 Dec 06 02:27	13° $\mathbb{A}$ 51'59	
minimum elong	10448 Dec 29 19:05	15° $\mathbb{B}$ 18'52	1°16'25				
max. Earth dist.	10449 Jan 04 21:47	26° $\mathbb{B}$ 59'54	1.37643 AU	superior conj	10449 Dec 13 11:01	29° $\mathbb{A}$ 12'26	1°31'02
	10449 Jan 06 13:06	0° $\mathbb{A}$		minimum elong	10449 Dec 13 12:59	29° $\mathbb{A}$ 22'32	1°31'23
evening rise	10449 Jan 08 15:03	3° $\mathbb{A}$ 43'58			10449 Dec 13 20:16	0° $\mathbb{B}$	
desc. node	10449 Jan 09 10:03	5° $\mathbb{A}$ 07'42		max. Earth dist.	10449 Dec 18 06:42	8° $\mathbb{B}$ 54'40	1.35596 AU
	10449 Jan 24 20:52	0° $\mathbb{H}$		evening rise	10449 Dec 22 06:57	16° $\mathbb{B}$ 35'31	
evening max el	10449 Feb 13 03:44	24° $\mathbb{H}$ 25'26	25°16'56	desc. node	10449 Dec 27 07:00	25° $\mathbb{B}$ 37'44	
	10449 Feb 20 06:30	0° $\mathbb{Y}$			10449 Dec 29 20:02	0° $\mathbb{A}$	
retrograde	10449 Feb 25 06:01	1° $\mathbb{Y}$ 25'38			10450 Jan 19 07:17	0° $\mathbb{H}$	
	10449 Mar 01 17:58	30° $\mathbb{K}$ $\mathbb{H}$		evening max el	10450 Jan 26 17:09	8° $\mathbb{H}$ 12'32	26°22'18
evening set	10449 Mar 03 01:22	29° $\mathbb{H}$ 01'11		retrograde	10450 Feb 08 14:17	15° $\mathbb{H}$ 29'37	
asc. node	10449 Mar 04 14:31	27° $\mathbb{H}$ 32'51		evening set	10450 Feb 14 21:11	12° $\mathbb{H}$ 57'49	
min. Earth dist.	10449 Mar 07 11:04	24° $\mathbb{H}$ 09'05	0.67715 AU	min. Earth dist.	10450 Feb 19 00:41	8° $\mathbb{H}$ 40'08	0.66647 AU
inferior conj	10449 Mar 08 17:06	22° $\mathbb{H}$ 31'40	1°17'31	asc. node	10450 Feb 19 11:45	8° $\mathbb{H}$ 06'48	
minimum elong	10449 Mar 08 15:23	22° $\mathbb{H}$ 37'13	1°16'59	inferior conj	10450 Feb 20 18:28	6° $\mathbb{H}$ 33'03	0°25'01
morning rise	10449 Mar 14 05:47	16° $\mathbb{H}$ 37'33		minimum elong	10450 Feb 20 17:49	6° $\mathbb{H}$ 35'03	0°24'59
direct	10449 Mar 17 18:11	15° $\mathbb{H}$ 26'31		morning rise	10450 Feb 26 15:19	0° $\mathbb{H}$ 48'51	
morning max el	10449 Mar 24 19:27	19° $\mathbb{H}$ 19'21	19°18'36		10450 Feb 28 20:22	30° $\mathbb{R}$ $\mathbb{A}$	
	10449 Apr 02 08:52	0° $\mathbb{Y}$		direct	10450 Mar 01 16:51	29° $\mathbb{A}$ 55'54	
greatest brilliancy	10449 Apr 06 15:39	6° $\mathbb{Y}$ 14'22	-0.7m		10450 Mar 02 13:31	0° $\mathbb{H}$	
desc. node	10449 Apr 07 10:42	7° $\mathbb{Y}$ 25'27		morning max el	10450 Mar 08 06:24	3° $\mathbb{H}$ 27'25	18°31'18
morning set	10449 Apr 18 02:32	23° $\mathbb{Y}$ 41'17		desc. node	10450 Mar 25 07:29	27° $\mathbb{H}$ 35'16	
	10449 Apr 22 04:28	0° $\mathbb{B}$			10450 Mar 26 20:11	0° $\mathbb{Y}$	
max. Earth dist.	10449 May 01 02:28	13° $\mathbb{B}$ 55'30	1.45049 AU	morning set	10450 Mar 28 21:44	3° $\mathbb{Y}$ 15'37	
superior conj	10449 May 04 14:35	19° $\mathbb{B}$ 28'10	-2°12'11	superior conj	10450 Apr 13 22:08	28° $\mathbb{Y}$ 24'38	-1°55'59
minimum elong	10449 May 04 12:24	19° $\mathbb{B}$ 19'31	2°12'31	minimum elong	10450 Apr 13 13:33	27° $\mathbb{Y}$ 51'05	1°55'35
	10449 May 11 04:00	0° $\mathbb{I}$		max. Earth dist.	10450 Apr 13 20:48	28° $\mathbb{Y}$ 19'24	1.45627 AU
evening rise	10449 May 18 22:52	12° $\mathbb{I}$ 46'33			10450 Apr 14 22:31	0° $\mathbb{B}$	
	10449 May 29 11:26	0° $\mathbb{B}$		evening rise	10450 Apr 29 14:56	23° $\mathbb{B}$ 06'02	
asc. node	10449 May 31 12:42	3° $\mathbb{B}$ 08'37			10450 May 03 23:19	0° $\mathbb{I}$	
evening max el	10449 Jun 07 00:45	11° $\mathbb{B}$ 29'13	18°18'42	greatest brilliancy	10450 May 08 11:47	7° $\mathbb{I}$ 07'39	-0.8m
retrograde	10449 Jun 13 10:05	14° $\mathbb{B}$ 53'47		asc. node	10450 May 18 09:49	21° $\mathbb{I}$ 34'50	
evening set	10449 Jun 16 10:10	14° $\mathbb{B}$ 04'36		evening max el	10450 May 21 11:56	25° $\mathbb{I}$ 06'10	18°50'18
inferior conj	10449 Jun 22 07:39	8° $\mathbb{B}$ 39'07	2°55'12	retrograde	10450 May 28 04:23	28° $\mathbb{I}$ 47'17	
minimum elong	10449 Jun 22 09:44	8° $\mathbb{B}$ 33'07	2°54'20	evening set	10450 May 31 12:34	27° $\mathbb{I}$ 43'03	
min. Earth dist.	10449 Jun 24 17:28	5° $\mathbb{B}$ 53'33	0.64128 AU	inferior conj	10450 Jun 06 02:08	22° $\mathbb{I}$ 01'46	3°14'01
morning rise	10449 Jun 28 08:01	2° $\mathbb{B}$ 22'26		minimum elong	10450 Jun 06 03:04	21° $\mathbb{I}$ 58'49	3°13'27
	10449 Jul 02 18:57	30° $\mathbb{K}$ $\mathbb{I}$		min. Earth dist.	10450 Jun 07 20:56	19° $\mathbb{I}$ 48'03	0.65905 AU
desc. node	10449 Jul 04 10:35	29° $\mathbb{I}$ 44'11		morning rise	10450 Jun 11 16:53	15° $\mathbb{I}$ 41'14	
direct	10449 Jul 04 23:58	29° $\mathbb{I}$ 43'09		direct	10450 Jun 18 02:37	12° $\mathbb{I}$ 56'49	
	10449 Jul 07 07:02	0° $\mathbb{B}$		desc. node	10450 Jun 21 07:41	13° $\mathbb{I}$ 32'08	
morning max el	10449 Jul 18 18:21	7° $\mathbb{B}$ 44'41	27°34'00	morning max el	10450 Jul 01 05:01	20° $\mathbb{I}$ 43'53	26°40'26
	10449 Aug 04 22:17	0° $\mathbb{Q}$			10450 Jul 09 04:43	0° $\mathbb{B}$	
	10449 Aug 22 03:41	0° $\mathbb{P}$			10450 Jul 29 01:47	0° $\mathbb{Q}$	
morning set	10449 Aug 22 20:00	1° $\mathbb{P}$ 20'14		morning set	10450 Aug 06 01:40	14° $\mathbb{Q}$ 26'12	
max. Earth dist.	10449 Aug 27 15:05	11° $\mathbb{P}$ 05'40	1.32871 AU	max. Earth dist.	10450 Aug 10 04:25	22° $\mathbb{Q}$ 25'37	1.34313 AU
asc. node	10449 Aug 27 12:33	10° $\mathbb{P}$ 52'22			10450 Aug 13 22:07	0° $\mathbb{P}$	
				asc. node	10450 Aug 14 09:24	0° $\mathbb{P}$ 58'14	
superior conj	10449 Aug 30 20:51	17° $\mathbb{P}$ 57'40	0°32'40				
minimum elong	10449 Aug 30 19:20	17° $\mathbb{P}$ 49'34	0°32'14	superior conj	10450 Aug 14 20:25	1° $\mathbb{P}$ 55'23	0°04'32
	10449 Sep 05 10:34	0° $\mathbb{Q}$		minimum elong	10450 Aug 14 20:11	1° $\mathbb{P}$ 54'11	0°04'13
evening rise	10449 Sep 06 21:19	3° $\mathbb{Q}$ 06'06		behind sun begin	10450 Aug 14 14:34	1° $\mathbb{P}$ 25'02	
	10449 Sep 21 11:22	0° $\mathbb{M}$		behind sun end	10450 Aug 15 01:49	2° $\mathbb{P}$ 23'23	
evening max el	10449 Sep 29 01:03	9° $\mathbb{M}$ 14'24	22°46'11	evening rise	10450 Aug 22 07:05	17° $\mathbb{P}$ 34'33	
desc. node	10449 Sep 30 08:31	10° $\mathbb{M}$ 27'32			10450 Aug 28 11:29	0° $\mathbb{Q}$	

evening max el	10450 Sep 10 18:46	19° $\Omega$ 35'05	21°11'35			10451 Aug 23 11:52	0° $\Omega$	
desc. node	10450 Sep 17 05:46	24° $\Omega$ 15'54		evening max el		10451 Aug 24 01:22	0° $\Omega$ 34'28	19°53'46
retrograde	10450 Sep 22 17:00	25° $\Omega$ 30'03		retrograde		10451 Sep 03 07:38	5° $\Omega$ 40'05	
evening set	10450 Sep 25 03:58	25° $\Omega$ 15'59		desc. node		10451 Sep 04 03:03	5° $\Omega$ 38'18	
inferior conj	10450 Oct 04 07:04	21° $\Omega$ 20'30	-4°44'02	evening set		10451 Sep 05 05:02	5° $\Omega$ 30'28	
minimum elong	10450 Oct 03 21:27	21° $\Omega$ 34'02	4°41'34	inferior conj		10451 Sep 14 03:48	1° $\Omega$ 29'41	-3°03'15
min. Earth dist.	10450 Oct 04 17:02	21° $\Omega$ 06'28	0.54612 AU	minimum elong		10451 Sep 13 19:42	1° $\Omega$ 42'00	3°00'24
morning rise	10450 Oct 12 15:28	17° $\Omega$ 28'24		min. Earth dist.		10451 Sep 16 02:44	0° $\Omega$ 18'18	0.55126 AU
direct	10450 Oct 16 12:47	16° $\Omega$ 55'50				10451 Sep 16 15:01	30° $\mathbb{R}$ $\mathbb{M}$	
morning max el	10450 Oct 29 07:28	23° $\Omega$ 02'28	22°39'01	morning rise		10451 Sep 22 08:52	27° $\mathbb{M}$ 13'49	
	10450 Nov 04 10:20	0° $\mathbb{M}$		direct		10451 Sep 27 01:20	26° $\mathbb{M}$ 25'50	
asc. node	10450 Nov 10 09:53	9° $\mathbb{M}$ 03'12				10451 Oct 06 21:53	0° $\Omega$	
morning set	10450 Nov 20 13:26	28° $\mathbb{M}$ 40'01		morning max el		10451 Oct 10 19:02	3° $\Omega$ 12'29	24°26'24
	10450 Nov 21 04:31	0° $\mathbb{A}$		asc. node		10451 Oct 28 06:47	27° $\Omega$ 52'33	
						10451 Oct 29 10:00	0° $\mathbb{M}$	
superior conj	10450 Nov 27 13:46	13° $\mathbb{A}$ 41'36	1°38'35	morning set		10451 Nov 05 01:15	13° $\mathbb{M}$ 27'25	
minimum elong	10450 Nov 27 14:32	13° $\mathbb{A}$ 45'41	1°39'02					
max. Earth dist.	10450 Nov 30 23:03	20° $\mathbb{A}$ 49'05	1.33889 AU	superior conj		10451 Nov 11 21:37	28° $\mathbb{M}$ 22'59	1°39'34
evening rise	10450 Dec 05 13:21	0° $\mathbb{B}$ 04'53		minimum elong		10451 Nov 11 21:13	28° $\mathbb{M}$ 20'47	1°39'58
	10450 Dec 05 12:22	0° $\mathbb{B}$				10451 Nov 12 15:24	0° $\mathbb{A}$	
desc. node	10450 Dec 14 03:59	15° $\mathbb{B}$ 55'07		max. Earth dist.		10451 Nov 13 23:26	2° $\mathbb{A}$ 53'39	1.32610 AU
	10450 Dec 22 21:43	0° $\approx$		evening rise		10451 Nov 19 06:37	14° $\mathbb{A}$ 01'40	
evening max el	10451 Jan 09 06:40	21° $\approx$ 49'22	27°09'03			10451 Nov 27 15:25	0° $\mathbb{B}$	
retrograde	10451 Jan 22 16:30	29° $\approx$ 11'54		desc. node		10451 Dec 01 01:01	5° $\mathbb{B}$ 52'56	
evening set	10451 Jan 29 09:19	26° $\approx$ 38'09				10451 Dec 17 23:39	0° $\approx$	
min. Earth dist.	10451 Feb 02 07:35	22° $\approx$ 53'52	0.65219 AU	evening max el		10451 Dec 22 18:38	5° $\approx$ 02'44	27°30'16
inferior conj	10451 Feb 04 13:02	20° $\approx$ 24'34	-0°36'23	retrograde		10452 Jan 05 11:49	12° $\approx$ 23'05	
minimum elong	10451 Feb 04 14:06	20° $\approx$ 21'35	0°35'34	evening set		10452 Jan 12 11:15	9° $\approx$ 54'22	
asc. node	10451 Feb 06 08:57	18° $\approx$ 25'06		min. Earth dist.		10452 Jan 16 05:32	6° $\approx$ 40'54	0.63467 AU
morning rise	10451 Feb 10 20:21	14° $\approx$ 52'43		inferior conj		10452 Jan 18 22:03	3° $\approx$ 58'39	-1°45'45
direct	10451 Feb 13 12:42	14° $\approx$ 14'22		minimum elong		10452 Jan 19 01:28	3° $\approx$ 50'02	1°43'54
morning max el	10451 Feb 19 22:05	17° $\approx$ 35'57	18°00'48			10452 Jan 23 08:54	30° $\mathbb{R}$ $\mathbb{B}$	
	10451 Mar 01 03:01	0° $\mathbb{H}$		asc. node		10452 Jan 24 06:08	29° $\mathbb{B}$ 25'40	
morning set	10451 Mar 09 22:02	14° $\mathbb{H}$ 17'17		morning rise		10452 Jan 25 17:46	28° $\mathbb{B}$ 42'16	
desc. node	10451 Mar 12 04:16	17° $\mathbb{H}$ 59'45		direct		10452 Jan 28 02:54	28° $\mathbb{B}$ 14'48	
	10451 Mar 19 13:54	0° $\mathbb{Y}$				10452 Feb 01 18:46	0° $\approx$	
				morning max el		10452 Feb 03 15:38	1° $\approx$ 36'42	17°47'34
superior conj	10451 Mar 24 07:58	7° $\mathbb{Y}$ 34'14	-1°22'18	morning set		10452 Feb 20 00:52	26° $\approx$ 35'34	
minimum elong	10451 Mar 23 23:13	6° $\mathbb{Y}$ 59'39	1°21'18			10452 Feb 22 00:22	0° $\mathbb{H}$	
max. Earth dist.	10451 Mar 27 16:47	12° $\mathbb{Y}$ 52'36	1.45463 AU	desc. node		10452 Feb 27 01:01	8° $\mathbb{H}$ 33'43	
	10451 Apr 07 17:05	0° $\mathbb{B}$						
evening rise	10451 Apr 09 10:46	2° $\mathbb{B}$ 40'47		superior conj		10452 Mar 03 12:17	17° $\mathbb{H}$ 39'09	-0°40'08
greatest brilliancy	10451 Apr 23 01:59	23° $\mathbb{B}$ 25'33	-0.7m	minimum elong		10452 Mar 03 08:01	17° $\mathbb{H}$ 21'42	0°39'22
	10451 Apr 27 15:34	0° $\mathbb{I}$		max. Earth dist.		10452 Mar 09 11:33	27° $\mathbb{H}$ 17'40	1.44569 AU
evening max el	10451 May 04 18:39	8° $\mathbb{I}$ 47'37	19°38'25			10452 Mar 11 04:28	0° $\mathbb{Y}$	
asc. node	10451 May 05 06:57	9° $\mathbb{I}$ 17'58		evening rise		10452 Mar 18 22:08	12° $\mathbb{Y}$ 02'49	
retrograde	10451 May 12 02:05	12° $\mathbb{I}$ 57'03				10452 Mar 30 20:18	0° $\mathbb{B}$	
evening set	10451 May 15 18:57	11° $\mathbb{I}$ 37'06		evening max el		10452 Apr 16 19:46	22° $\mathbb{B}$ 30'25	20°41'01
inferior conj	10451 May 21 03:48	5° $\mathbb{I}$ 41'17	3°17'54	asc. node		10452 Apr 21 04:08	26° $\mathbb{B}$ 04'52	
minimum elong	10451 May 21 03:34	5° $\mathbb{I}$ 42'02	3°17'27	retrograde		10452 Apr 25 00:50	27° $\mathbb{B}$ 17'38	
min. Earth dist.	10451 May 22 07:42	4° $\mathbb{I}$ 08'36	0.67260 AU	evening set		10452 Apr 29 03:12	25° $\mathbb{B}$ 41'54	
	10451 May 25 19:31	30° $\mathbb{R}$ $\mathbb{B}$		inferior conj		10452 May 04 10:03	19° $\mathbb{B}$ 33'17	3°09'30
morning rise	10451 May 26 11:51	29° $\mathbb{B}$ 21'19		minimum elong		10452 May 04 08:51	19° $\mathbb{B}$ 37'26	3°09'00
direct	10451 Jun 01 11:22	26° $\mathbb{B}$ 42'29		min. Earth dist.		10452 May 04 23:58	18° $\mathbb{B}$ 45'20	0.68151 AU
desc. node	10451 Jun 08 04:43	29° $\mathbb{B}$ 16'29		morning rise		10452 May 09 14:16	13° $\mathbb{B}$ 16'17	
	10451 Jun 09 04:31	0° $\mathbb{I}$		direct		10452 May 15 01:13	10° $\mathbb{B}$ 51'20	
morning max el	10451 Jun 13 15:04	3° $\mathbb{I}$ 59'30	25°25'03	desc. node		10452 May 25 01:41	16° $\mathbb{B}$ 28'13	
	10451 Jul 03 12:14	0° $\mathbb{B}$		morning max el		10452 May 26 00:40	17° $\mathbb{B}$ 24'57	23°57'46
morning set	10451 Jul 19 16:15	26° $\mathbb{B}$ 47'55				10452 Jun 05 12:16	0° $\mathbb{I}$	
	10451 Jul 21 10:23	0° $\mathbb{Q}$				10452 Jun 25 13:10	0° $\mathbb{B}$	
max. Earth dist.	10451 Jul 23 07:43	3° $\mathbb{Q}$ 30'45	1.36212 AU	morning set		10452 Jun 30 10:53	8° $\mathbb{B}$ 13'26	
				max. Earth dist.		10452 Jul 04 05:20	14° $\mathbb{B}$ 47'58	1.38420 AU
superior conj	10451 Jul 29 11:01	15° $\mathbb{Q}$ 24'04	-0°27'02					
minimum elong	10451 Jul 29 12:42	15° $\mathbb{Q}$ 32'28	0°27'06	superior conj		10452 Jul 11 13:08	28° $\mathbb{B}$ 15'26	-1°00'15
asc. node	10451 Aug 01 06:15	21° $\mathbb{Q}$ 02'16		minimum elong		10452 Jul 11 17:09	28° $\mathbb{B}$ 34'29	1°00'03
	10451 Aug 05 15:36	0° $\mathbb{M}$				10452 Jul 12 11:06	0° $\mathbb{Q}$	
evening rise	10451 Aug 06 13:03	1° $\mathbb{M}$ 49'16		asc. node		10452 Jul 18 03:08	11° $\mathbb{Q}$ 00'55	

evening rise	10452 Jul 20 12:36	15° $\Omega$ 43'28		evening rise	10453 Jul 04 02:20	29° $\Omega$ 07'34	
	10452 Jul 28 02:26	0° $\mathbb{M}$			10453 Jul 04 13:30	0° $\Omega$	
evening max el	10452 Aug 05 21:06	12° $\mathbb{M}$ 20'30	18°56'55	asc. node	10453 Jul 05 00:03	0° $\Omega$ 49'33	
retrograde	10452 Aug 14 12:59	16° $\mathbb{M}$ 39'33		evening max el	10453 Jul 20 02:45	24° $\Omega$ 47'09	18°21'08
evening set	10452 Aug 16 10:30	16° $\mathbb{M}$ 27'56		retrograde	10453 Jul 27 13:14	28° $\Omega$ 31'31	
desc. node	10452 Aug 21 00:18	14° $\mathbb{M}$ 36'52		evening set	10453 Jul 29 17:05	28° $\Omega$ 13'22	
inferior conj	10452 Aug 24 17:20	12° $\mathbb{M}$ 11'06	-1°09'13	inferior conj	10453 Aug 06 04:30	23° $\Omega$ 36'31	0°30'56
minimum elong	10452 Aug 24 14:23	12° $\mathbb{M}$ 16'18	1°08'14	minimum elong	10453 Aug 06 05:34	23° $\Omega$ 34'19	0°30'11
min. Earth dist.	10452 Aug 27 16:46	10° $\mathbb{M}$ 06'08	0.56498 AU	desc. node	10453 Aug 07 21:33	22° $\Omega$ 11'28	
morning rise	10452 Sep 01 15:03	7° $\mathbb{M}$ 18'28		min. Earth dist.	10453 Aug 09 13:05	20° $\Omega$ 51'46	0.58476 AU
direct	10452 Sep 07 02:35	6° $\mathbb{M}$ 07'17		morning rise	10453 Aug 13 14:33	18° $\Omega$ 08'00	
morning max el	10452 Sep 21 08:12	13° $\mathbb{M}$ 26'43	26°04'32	direct	10453 Aug 19 18:28	16° $\Omega$ 27'26	
	10452 Oct 04 09:20	0° $\Omega$		morning max el	10453 Sep 03 03:28	24° $\Omega$ 10'47	27°16'56
asc. node	10452 Oct 14 03:38	17° $\Omega$ 10'04			10453 Sep 08 10:40	0° $\mathbb{M}$	
morning set	10452 Oct 19 12:14	28° $\Omega$ 09'40			10453 Sep 27 13:43	0° $\Omega$	
	10452 Oct 20 08:48	0° $\mathbb{M}$		asc. node	10453 Oct 01 00:27	6° $\Omega$ 47'35	
				morning set	10453 Oct 03 20:43	12° $\Omega$ 41'31	
superior conj	10452 Oct 26 08:24	13° $\mathbb{M}$ 10'16	1°34'33	superior conj	10453 Oct 10 20:11	27° $\Omega$ 57'04	1°23'56
minimum elong	10452 Oct 26 07:02	13° $\mathbb{M}$ 02'39	1°34'47	minimum elong	10453 Oct 10 18:09	27° $\Omega$ 45'50	1°23'54
max. Earth dist.	10452 Oct 27 05:54	15° $\mathbb{M}$ 09'17	1.31796 AU	max. Earth dist.	10453 Oct 10 15:06	27° $\Omega$ 28'48	1.31460 AU
evening rise	10452 Nov 02 07:50	28° $\mathbb{M}$ 18'29			10453 Oct 11 18:15	0° $\mathbb{M}$	
	10452 Nov 03 03:20	0° $\mathbb{M}$		evening rise	10453 Oct 17 14:31	12° $\mathbb{M}$ 48'20	
desc. node	10452 Nov 16 22:06	25° $\mathbb{M}$ 23'15			10453 Oct 26 05:48	0° $\mathbb{M}$	
	10452 Nov 19 21:15	0° $\mathbb{M}$		desc. node	10453 Nov 03 19:16	14° $\mathbb{M}$ 15'02	
evening max el	10452 Dec 04 02:41	17° $\mathbb{M}$ 39'43	27°20'09	evening max el	10453 Nov 16 04:19	29° $\mathbb{M}$ 29'44	26°36'01
retrograde	10452 Dec 17 23:37	24° $\mathbb{M}$ 54'16			10453 Nov 16 17:20	0° $\mathbb{M}$	
evening set	10452 Dec 24 23:52	22° $\mathbb{M}$ 39'25		retrograde	10453 Nov 30 02:46	6° $\mathbb{M}$ 37'10	
min. Earth dist.	10452 Dec 28 17:06	19° $\mathbb{M}$ 50'28	0.61462 AU	evening set	10453 Dec 06 19:08	4° $\mathbb{M}$ 46'15	
inferior conj	10452 Dec 31 18:22	17° $\mathbb{M}$ 07'28	-3°00'23	min. Earth dist.	10453 Dec 10 18:12	2° $\mathbb{M}$ 10'17	0.59339 AU
minimum elong	10453 Jan 01 00:24	16° $\mathbb{M}$ 54'00	2°57'40	inferior conj	10453 Dec 13 22:31	29° $\mathbb{M}$ 42'02	-4°14'13
morning rise	10453 Jan 08 03:31	12° $\mathbb{M}$ 09'49		minimum elong	10453 Dec 14 06:23	29° $\mathbb{M}$ 26'42	4°11'27
direct	10453 Jan 10 07:54	11° $\mathbb{M}$ 49'39			10453 Dec 13 13:21	30° $\mathbb{M}$ 47'31	
asc. node	10453 Jan 10 03:17	11° $\mathbb{M}$ 49'49		morning rise	10453 Dec 21 20:18	25° $\mathbb{M}$ 05'45	
morning max el	10453 Jan 17 07:54	15° $\mathbb{M}$ 21'30	17°52'21	direct	10453 Dec 23 23:35	24° $\mathbb{M}$ 49'25	
	10453 Jan 27 11:40	0° $\approx$		asc. node	10453 Dec 28 00:22	25° $\mathbb{M}$ 50'54	
morning set	10453 Feb 01 23:55	9° $\approx$ 50'47		morning max el	10453 Dec 31 19:17	28° $\mathbb{M}$ 40'43	18°16'33
					10454 Jan 02 01:35	0° $\mathbb{M}$	
superior conj	10453 Feb 12 17:34	28° $\approx$ 55'28	0°01'20	morning set	10454 Jan 16 13:24	23° $\mathbb{M}$ 45'59	
minimum elong	10453 Feb 12 17:43	28° $\approx$ 56'05	0°01'37		10454 Jan 19 20:18	0° $\approx$	
behind sun begin	10453 Feb 12 09:20	28° $\approx$ 19'57		superior conj	10454 Jan 25 22:08	11° $\approx$ 17'27	0°36'45
behind sun end	10453 Feb 13 02:06	29° $\approx$ 32'06		minimum elong	10454 Jan 26 00:41	11° $\approx$ 29'00	0°36'46
desc. node	10453 Feb 12 21:45	29° $\approx$ 13'28		desc. node	10454 Jan 30 18:33	19° $\approx$ 55'43	
	10453 Feb 13 08:36	0° $\mathbb{M}$		max. Earth dist.	10454 Feb 02 12:13	24° $\approx$ 38'20	1.41091 AU
max. Earth dist.	10453 Feb 20 02:23	11° $\mathbb{M}$ 17'04	1.43053 AU		10454 Feb 05 16:55	0° $\mathbb{M}$	
evening rise	10453 Feb 26 16:23	21° $\mathbb{M}$ 49'28		evening rise	10454 Feb 07 04:44	2° $\mathbb{M}$ 27'08	
	10453 Mar 03 23:20	0° $\mathbb{M}$			10454 Feb 25 07:38	0° $\mathbb{M}$	
	10453 Mar 25 04:11	0° $\mathbb{M}$		evening max el	10454 Mar 13 07:06	19° $\mathbb{M}$ 59'48	23°14'21
evening max el	10453 Mar 30 15:23	6° $\mathbb{M}$ 13'41	21°54'39	retrograde	10454 Mar 23 18:13	26° $\mathbb{M}$ 10'52	
asc. node	10453 Apr 08 01:21	11° $\mathbb{M}$ 39'44		asc. node	10454 Mar 25 22:35	25° $\mathbb{M}$ 47'59	
retrograde	10453 Apr 08 22:44	11° $\mathbb{M}$ 43'38		evening set	10454 Mar 28 18:25	24° $\mathbb{M}$ 05'31	
evening set	10453 Apr 13 11:32	9° $\mathbb{M}$ 52'35		min. Earth dist.	10454 Apr 02 16:26	18° $\mathbb{M}$ 18'04	0.68580 AU
inferior conj	10453 Apr 18 18:39	3° $\mathbb{M}$ 33'30	2°50'27	inferior conj	10454 Apr 03 03:42	17° $\mathbb{M}$ 39'11	2°21'41
minimum elong	10453 Apr 18 16:46	3° $\mathbb{M}$ 40'05	2°49'50	minimum elong	10454 Apr 03 01:31	17° $\mathbb{M}$ 46'44	2°20'58
min. Earth dist.	10453 Apr 18 19:35	3° $\mathbb{M}$ 30'14	0.68585 AU	morning rise	10454 Apr 08 08:32	11° $\mathbb{M}$ 32'37	
	10453 Apr 21 10:15	30° $\mathbb{M}$ 47'31		direct	10454 Apr 12 16:35	9° $\mathbb{M}$ 48'08	
morning rise	10453 Apr 23 21:50	27° $\mathbb{M}$ 21'05		morning max el	10454 Apr 21 03:45	14° $\mathbb{M}$ 40'19	21°04'39
direct	10453 Apr 28 19:18	25° $\mathbb{M}$ 15'08		desc. node	10454 Apr 28 19:23	23° $\mathbb{M}$ 44'22	
	10453 May 07 12:10	0° $\mathbb{M}$			10454 May 03 09:17	0° $\mathbb{M}$	
morning max el	10453 May 08 11:48	0° $\mathbb{M}$ 57'40	22°28'11	morning set	10454 May 21 20:00	27° $\mathbb{M}$ 35'32	
desc. node	10453 May 11 22:33	4° $\mathbb{M}$ 43'12			10454 May 23 08:44	0° $\mathbb{M}$	
	10453 May 30 08:58	0° $\mathbb{M}$		max. Earth dist.	10454 May 29 06:55	9° $\mathbb{M}$ 30'11	1.42778 AU
morning set	10453 Jun 11 04:32	18° $\mathbb{M}$ 29'40					
max. Earth dist.	10453 Jun 16 03:20	26° $\mathbb{M}$ 42'48	1.40700 AU	superior conj	10454 Jun 05 10:33	21° $\mathbb{M}$ 24'30	-1°58'17
	10453 Jun 18 01:37	0° $\mathbb{M}$		minimum elong	10454 Jun 05 16:35	21° $\mathbb{M}$ 50'12	1°58'19
superior conj	10453 Jun 23 22:28	10° $\mathbb{M}$ 18'38	-1°32'12		10454 Jun 10 09:58	0° $\mathbb{M}$	
minimum elong	10453 Jun 24 04:29	10° $\mathbb{M}$ 45'40	1°31'57				

evening rise	10454 Jun 17 02:06	11° $\text{♊}$ 51'23		minimum elong	10455 May 17 00:21	1° $\text{♊}$ 35'27	2°12'36
asc. node	10454 Jun 21 21:02	20° $\text{♊}$ 23'42		evening rise	10455 May 30 06:59	23° $\text{♊}$ 43'39	
	10454 Jun 27 14:52	0° $\text{♋}$			10455 Jun 02 23:18	0° $\text{♋}$	
evening max el	10454 Jul 03 14:20	7° $\text{♋}$ 45'06	18°05'21	asc. node	10455 Jun 08 18:05	9° $\text{♋}$ 37'30	
retrograde	10454 Jul 10 06:37	11° $\text{♋}$ 09'56		evening max el	10455 Jun 17 04:08	21° $\text{♋}$ 04'23	18°08'36
evening set	10454 Jul 12 18:25	10° $\text{♋}$ 41'31		retrograde	10455 Jun 23 13:04	24° $\text{♋}$ 24'49	
inferior conj	10454 Jul 19 12:09	5° $\text{♋}$ 44'33	1°46'03	evening set	10455 Jun 26 08:46	23° $\text{♋}$ 43'34	
minimum elong	10454 Jul 19 14:50	5° $\text{♋}$ 38'07	1°44'46	inferior conj	10455 Jul 02 12:29	18° $\text{♋}$ 27'53	2°36'10
min. Earth dist.	10454 Jul 22 17:13	2° $\text{♋}$ 42'03	0.60732 AU	minimum elong	10455 Jul 02 15:03	18° $\text{♋}$ 20'54	2°35'05
desc. node	10454 Jul 25 18:46	0° $\text{♌}$ 12'43		min. Earth dist.	10455 Jul 05 06:19	15° $\text{♋}$ 30'47	0.62953 AU
morning rise	10454 Jul 26 08:31	29° $\text{♋}$ 49'32		morning rise	10455 Jul 08 19:37	12° $\text{♋}$ 16'48	
	10454 Jul 26 02:11	30° $\text{♌}$		desc. node	10455 Jul 12 15:56	10° $\text{♋}$ 12'44	
direct	10454 Aug 01 22:47	27° $\text{♋}$ 40'10		direct	10455 Jul 15 12:53	9° $\text{♋}$ 45'43	
	10454 Aug 09 06:33	0° $\text{♌}$		morning max el	10455 Jul 29 13:07	17° $\text{♋}$ 48'11	27°51'23
morning max el	10454 Aug 16 05:36	5° $\text{♌}$ 37'45	27°53'18		10455 Aug 08 17:45	0° $\text{♌}$	
	10454 Sep 03 11:54	0° $\text{♍}$			10455 Aug 27 07:51	0° $\text{♍}$	
asc. node	10454 Sep 17 21:15	26° $\text{♍}$ 39'13		morning set	10455 Sep 01 22:32	10° $\text{♍}$ 53'26	
morning set	10454 Sep 18 00:52	26° $\text{♍}$ 57'57		asc. node	10455 Sep 04 18:04	16° $\text{♍}$ 40'09	
	10454 Sep 19 11:37	0° $\text{♎}$		max. Earth dist.	10455 Sep 07 03:23	21° $\text{♍}$ 43'14	1.32271 AU
max. Earth dist.	10454 Sep 23 23:30	9° $\text{♎}$ 43'20	1.31617 AU				
				superior conj	10455 Sep 09 15:24	27° $\text{♍}$ 07'13	0°46'58
superior conj	10454 Sep 25 07:08	12° $\text{♎}$ 37'52	1°07'59	minimum elong	10455 Sep 09 13:27	26° $\text{♍}$ 56'36	0°46'32
minimum elong	10454 Sep 25 04:53	12° $\text{♎}$ 25'28	1°07'42		10455 Sep 10 23:04	0° $\text{♎}$	
evening rise	10454 Oct 02 00:34	27° $\text{♎}$ 25'20		evening rise	10455 Sep 16 12:04	12° $\text{♎}$ 04'06	
	10454 Oct 03 05:34	0° $\text{♏}$			10455 Sep 25 12:03	0° $\text{♏}$	
	10454 Oct 20 01:35	0° $\text{♐}$		desc. node	10455 Oct 08 13:45	18° $\text{♎}$ 56'09	
desc. node	10454 Oct 21 16:29	2° $\text{♐}$ 12'50		evening max el	10455 Oct 10 09:24	20° $\text{♎}$ 47'37	23°44'14
evening max el	10454 Oct 28 21:58	10° $\text{♐}$ 28'40	25°20'26	retrograde	10455 Oct 23 22:34	27° $\text{♎}$ 33'30	
retrograde	10454 Nov 11 19:04	17° $\text{♐}$ 27'38		evening set	10455 Oct 28 12:53	26° $\text{♎}$ 47'28	
evening set	10454 Nov 17 16:13	16° $\text{♐}$ 08'42		min. Earth dist.	10455 Nov 03 19:41	23° $\text{♎}$ 46'05	0.55698 AU
min. Earth dist.	10454 Nov 22 10:07	13° $\text{♐}$ 29'15	0.57322 AU	inferior conj	10455 Nov 05 19:42	22° $\text{♎}$ 34'26	-5°44'59
inferior conj	10454 Nov 25 07:16	11° $\text{♐}$ 32'34	-5°15'26	minimum elong	10455 Nov 05 20:37	22° $\text{♎}$ 33'04	5°44'35
minimum elong	10454 Nov 25 14:04	11° $\text{♐}$ 21'02	5°13'47	morning rise	10455 Nov 14 06:15	18° $\text{♎}$ 39'43	
morning rise	10454 Dec 03 14:13	7° $\text{♐}$ 18'33		direct	10455 Nov 17 01:04	18° $\text{♎}$ 20'21	
direct	10454 Dec 05 21:55	7° $\text{♐}$ 02'31		morning max el	10455 Nov 27 12:10	23° $\text{♎}$ 17'29	20°10'08
asc. node	10454 Dec 14 21:25	11° $\text{♐}$ 21'31		asc. node	10455 Dec 01 18:25	28° $\text{♎}$ 06'58	
morning max el	10454 Dec 14 21:52	11° $\text{♐}$ 22'37	19°02'00		10455 Dec 03 03:30	0° $\text{♑}$	
	10454 Dec 27 08:16	0° $\text{♒}$		morning set	10455 Dec 15 18:29	22° $\text{♐}$ 44'38	
morning set	10454 Dec 31 12:43	8° $\text{♒}$ 07'10			10455 Dec 19 07:19	0° $\text{♒}$	
				superior conj	10455 Dec 23 10:01	8° $\text{♒}$ 22'32	1°23'26
superior conj	10455 Jan 08 21:12	24° $\text{♒}$ 30'50	1°04'10	minimum elong	10455 Dec 23 12:34	8° $\text{♒}$ 35'20	1°23'41
minimum elong	10455 Jan 09 00:18	24° $\text{♒}$ 45'44	1°04'15	max. Earth dist.	10455 Dec 29 01:48	19° $\text{♒}$ 26'34	1.36749 AU
	10455 Jan 11 18:48	0° $\text{♓}$		evening rise	10456 Jan 01 20:38	26° $\text{♒}$ 27'48	
max. Earth dist.	10455 Jan 15 18:45	7° $\text{♓}$ 18'31	1.38908 AU		10456 Jan 03 20:02	0° $\text{♓}$	
desc. node	10455 Jan 17 15:25	10° $\text{♓}$ 36'27		desc. node	10456 Jan 04 12:21	1° $\text{♓}$ 11'55	
evening rise	10455 Jan 19 14:40	14° $\text{♓}$ 01'34			10456 Jan 22 20:43	0° $\text{♓}$	
	10455 Jan 29 09:16	0° $\text{♈}$		evening max el	10456 Feb 06 10:20	17° $\text{♈}$ 38'53	25°46'29
	10455 Feb 20 06:43	0° $\text{♉}$		retrograde	10456 Feb 18 21:03	24° $\text{♈}$ 46'48	
evening max el	10455 Feb 23 20:55	3° $\text{♉}$ 49'05	24°33'58	evening set	10456 Feb 24 21:31	22° $\text{♈}$ 18'46	
retrograde	10455 Mar 07 09:59	10° $\text{♉}$ 33'45		asc. node	10456 Feb 27 17:05	19° $\text{♈}$ 28'40	
evening set	10455 Mar 12 22:16	8° $\text{♉}$ 15'42		min. Earth dist.	10456 Feb 29 04:33	17° $\text{♈}$ 41'28	0.67316 AU
asc. node	10455 Mar 12 19:50	8° $\text{♉}$ 20'50		inferior conj	10456 Mar 01 15:32	15° $\text{♈}$ 50'50	0°56'21
min. Earth dist.	10455 Mar 17 12:10	3° $\text{♉}$ 03'24	0.68152 AU	minimum elong	10456 Mar 01 14:12	15° $\text{♈}$ 55'05	0°56'00
inferior conj	10455 Mar 18 11:18	1° $\text{♉}$ 46'09	1°43'36	morning rise	10456 Mar 07 07:25	10° $\text{♈}$ 00'43	
minimum elong	10455 Mar 18 09:16	1° $\text{♉}$ 52'57	1°42'57	direct	10456 Mar 10 15:06	8° $\text{♈}$ 57'37	
	10455 Mar 19 19:34	30° $\text{♉}$		morning max el	10456 Mar 17 10:14	12° $\text{♈}$ 39'24	18°56'26
morning rise	10455 Mar 23 20:24	25° $\text{♉}$ 46'57			10456 Mar 30 09:06	0° $\text{♊}$	
direct	10455 Mar 27 15:44	24° $\text{♉}$ 23'58		greatest brilliancy	10456 Mar 31 06:43	1° $\text{♊}$ 22'09	-0.8m
morning max el	10455 Apr 04 03:06	28° $\text{♉}$ 34'40	19°53'00	desc. node	10456 Apr 01 12:58	3° $\text{♊}$ 17'42	
	10455 Apr 05 11:55	0° $\text{♊}$		morning set	10456 Apr 09 01:30	14° $\text{♊}$ 55'37	
desc. node	10455 Apr 15 16:11	13° $\text{♊}$ 18'47			10456 Apr 18 17:54	0° $\text{♋}$	
	10455 Apr 26 20:52	0° $\text{♋}$		max. Earth dist.	10456 Apr 23 10:50	7° $\text{♋}$ 21'40	1.45390 AU
morning set	10455 Apr 30 19:27	6° $\text{♋}$ 02'09					
max. Earth dist.	10455 May 11 17:59	23° $\text{♋}$ 08'02	1.44402 AU	superior conj	10456 Apr 25 12:48	10° $\text{♋}$ 37'54	-2°07'49
	10455 May 16 00:47	0° $\text{♌}$		minimum elong	10456 Apr 25 07:25	10° $\text{♋}$ 16'45	2°07'53
superior conj	10455 May 16 22:22	1° $\text{♌}$ 27'25	-2°12'12		10456 May 07 16:29	0° $\text{♌}$	

evening rise	10456 May 10 12:52	4° $\Pi$ 36'52		10457 Mar 23 09:58	0° $\Upsilon$	
asc. node	10456 May 25 15:10	28° $\Pi$ 23'32				
	10456 May 26 19:22	0° $\mathfrak{S}$		superior conj	10457 Apr 04 18:57	19° $\Upsilon$ 33'56 -1°43'22
evening max el	10456 May 30 16:57	4° $\mathfrak{S}$ 36'22	18°30'02	minimum elong	10457 Apr 04 09:27	18° $\Upsilon$ 56'42 1°42'38
retrograde	10456 Jun 06 04:11	8° $\mathfrak{S}$ 06'24		max. Earth dist.	10457 Apr 06 06:25	21° $\Upsilon$ 52'39 1.45646 AU
evening set	10456 Jun 09 07:44	7° $\mathfrak{S}$ 10'46			10457 Apr 11 11:15	0° $\mathfrak{B}$
inferior conj	10456 Jun 15 01:22	1° $\mathfrak{S}$ 38'07	3°05'13	evening rise	10457 Apr 20 19:27	14° $\mathfrak{B}$ 35'04
minimum elong	10456 Jun 15 03:00	1° $\mathfrak{S}$ 33'15	3°04'30		10457 Apr 30 17:15	0° $\Pi$
	10456 Jun 16 10:04	30° $\mathfrak{K}$ $\Pi$		greatest brilliancy	10457 May 01 20:48	1° $\Pi$ 45'23 -0.8m
min. Earth dist.	10456 Jun 17 04:44	29° $\Pi$ 04'57	0.64928 AU	asc. node	10457 May 12 12:18	16° $\Pi$ 33'09
morning rise	10456 Jun 20 21:19	25° $\Pi$ 19'13		evening max el	10457 May 14 02:20	18° $\Pi$ 15'35 19°08'48
direct	10456 Jun 27 11:07	22° $\Pi$ 36'44		retrograde	10457 May 21 00:23	22° $\Pi$ 07'49
desc. node	10456 Jun 28 13:03	22° $\Pi$ 40'42		evening set	10457 May 24 12:07	20° $\Pi$ 56'59
	10456 Jul 10 10:09	0° $\mathfrak{S}$		inferior conj	10457 May 29 23:16	15° $\Pi$ 09'05 3°17'19
morning max el	10456 Jul 10 23:31	0° $\mathfrak{S}$ 33'21	27°14'39	minimum elong	10457 May 29 23:43	15° $\Pi$ 07'41 3°16'49
	10456 Aug 01 18:39	0° $\mathfrak{Q}$		min. Earth dist.	10457 May 31 11:36	13° $\Pi$ 12'06 0.66530 AU
morning set	10456 Aug 15 10:57	24° $\mathfrak{Q}$ 19'44		morning rise	10457 Jun 04 10:47	8° $\Pi$ 48'09
	10456 Aug 18 07:46	0° $\mathfrak{M}$		direct	10457 Jun 10 16:24	6° $\Pi$ 05'06
max. Earth dist.	10456 Aug 19 22:59	3° $\mathfrak{M}$ 19'10	1.33426 AU	desc. node	10457 Jun 15 10:05	7° $\Pi$ 21'56
asc. node	10456 Aug 21 14:53	6° $\mathfrak{M}$ 45'12		morning max el	10457 Jun 23 10:17	13° $\Pi$ 41'52 26°10'33
					10457 Jul 06 15:24	0° $\mathfrak{S}$
superior conj	10456 Aug 23 18:47	11° $\mathfrak{M}$ 17'55	0°21'15		10457 Jul 25 12:22	0° $\mathfrak{Q}$
minimum elong	10456 Aug 23 17:44	11° $\mathfrak{M}$ 12'21	0°20'50	morning set	10457 Jul 29 10:44	7° $\mathfrak{Q}$ 08'26
evening rise	10456 Aug 30 23:00	26° $\mathfrak{M}$ 37'48		max. Earth dist.	10457 Aug 02 07:59	14° $\mathfrak{Q}$ 31'19 1.35069 AU
	10456 Sep 01 13:30	0° $\mathfrak{L}$				
	10456 Sep 19 23:51	0° $\mathfrak{M}$		superior conj	10457 Aug 07 14:51	25° $\mathfrak{Q}$ 03'54 -0°08'32
evening max el	10456 Sep 20 21:52	0° $\mathfrak{M}$ 55'50	22°04'22	minimum elong	10457 Aug 07 15:22	25° $\mathfrak{Q}$ 06'30 0°08'46
desc. node	10456 Sep 24 11:02	3° $\mathfrak{M}$ 57'03		behind sun begin	10457 Aug 07 10:17	24° $\mathfrak{Q}$ 40'35
retrograde	10456 Oct 03 14:44	7° $\mathfrak{M}$ 15'17		behind sun end	10457 Aug 07 20:26	25° $\mathfrak{Q}$ 32'26
evening set	10456 Oct 06 17:49	6° $\mathfrak{M}$ 53'28		asc. node	10457 Aug 08 11:43	26° $\mathfrak{Q}$ 50'47
min. Earth dist.	10456 Oct 15 02:49	3° $\mathfrak{M}$ 13'03	0.54754 AU		10457 Aug 10 00:23	0° $\mathfrak{M}$
inferior conj	10456 Oct 15 16:13	2° $\mathfrak{M}$ 54'15	-5°22'54	evening rise	10457 Aug 15 07:24	11° $\mathfrak{M}$ 01'04
minimum elong	10456 Oct 15 09:08	3° $\mathfrak{M}$ 04'13	5°21'36		10457 Aug 25 06:07	0° $\mathfrak{L}$
	10456 Oct 21 09:48	30° $\mathfrak{K}$ $\mathfrak{L}$		evening max el	10457 Sep 02 20:30	11° $\mathfrak{L}$ 30'08 20°36'02
morning rise	10456 Oct 24 01:56	29° $\mathfrak{L}$ 07'10		desc. node	10457 Sep 11 08:17	16° $\mathfrak{L}$ 45'31
direct	10456 Oct 27 12:42	28° $\mathfrak{L}$ 40'53		retrograde	10457 Sep 14 02:42	17° $\mathfrak{L}$ 05'18
	10456 Nov 02 07:40	0° $\mathfrak{M}$		evening set	10457 Sep 16 05:30	16° $\mathfrak{L}$ 54'17
morning max el	10456 Nov 08 12:54	4° $\mathfrak{M}$ 21'21	21°39'58	inferior conj	10457 Sep 25 08:37	12° $\mathfrak{L}$ 57'59 -4°05'09
asc. node	10456 Nov 17 15:21	15° $\mathfrak{M}$ 50'51		minimum elong	10457 Sep 24 22:50	13° $\mathfrak{L}$ 12'06 4°02'10
	10456 Nov 25 12:10	0° $\mathfrak{J}$		min. Earth dist.	10457 Sep 26 11:13	12° $\mathfrak{L}$ 19'36 0.54711 AU
morning set	10456 Nov 29 04:08	7° $\mathfrak{J}$ 30'20		morning rise	10457 Oct 03 15:52	8° $\mathfrak{L}$ 57'50
				direct	10457 Oct 07 20:56	8° $\mathfrak{L}$ 19'46
superior conj	10456 Dec 06 08:35	22° $\mathfrak{J}$ 40'38	1°35'04	morning max el	10457 Oct 21 03:22	14° $\mathfrak{L}$ 44'38 23°24'41
minimum elong	10456 Dec 06 10:03	22° $\mathfrak{J}$ 48'19	1°35'28		10457 Nov 01 23:02	0° $\mathfrak{M}$
	10456 Dec 09 21:54	0° $\mathfrak{Z}$		asc. node	10457 Nov 04 12:15	4° $\mathfrak{M}$ 19'36
max. Earth dist.	10456 Dec 10 13:40	1° $\mathfrak{Z}$ 19'28	1.34824 AU	morning set	10457 Nov 13 15:38	22° $\mathfrak{M}$ 18'36
evening rise	10456 Dec 14 19:07	9° $\mathfrak{Z}$ 36'16			10457 Nov 17 05:19	0° $\mathfrak{J}$
desc. node	10456 Dec 21 09:20	21° $\mathfrak{Z}$ 37'18				
	10456 Dec 26 09:01	0° $\mathfrak{A}$		superior conj	10457 Nov 20 13:47	7° $\mathfrak{J}$ 16'03 1°39'46
	10457 Jan 17 14:36	0° $\mathfrak{H}$		minimum elong	10457 Nov 20 14:03	7° $\mathfrak{J}$ 17'26 1°40'13
evening max el	10457 Jan 18 23:46	1° $\mathfrak{H}$ 22'29	26°44'46	max. Earth dist.	10457 Nov 23 09:15	13° $\mathfrak{J}$ 16'15 1.33285 AU
retrograde	10457 Feb 01 02:46	8° $\mathfrak{H}$ 43'01		evening rise	10457 Nov 28 06:29	23° $\mathfrak{J}$ 18'11
evening set	10457 Feb 07 14:21	6° $\mathfrak{H}$ 09'20			10457 Dec 01 17:13	0° $\mathfrak{Z}$
min. Earth dist.	10457 Feb 11 15:25	2° $\mathfrak{H}$ 06'23	0.66087 AU	desc. node	10457 Dec 08 06:21	11° $\mathfrak{Z}$ 47'12
	10457 Feb 13 10:27	30° $\mathfrak{K}$ $\mathfrak{A}$			10457 Dec 20 00:46	0° $\mathfrak{A}$
inferior conj	10457 Feb 13 14:18	29° $\mathfrak{A}$ 48'39	0°00'01	evening max el	10458 Jan 01 12:37	14° $\mathfrak{A}$ 50'09 27°21'32
minimum elong	10457 Feb 13 14:18	29° $\mathfrak{A}$ 48'41	0°00'18	retrograde	10458 Jan 15 02:21	22° $\mathfrak{A}$ 13'25
transit middle	10457 Feb 13 14:18	29° $\mathfrak{A}$ 48'41	0°00'18	evening set	10458 Jan 21 22:30	19° $\mathfrak{A}$ 40'33
transit begin	10457 Feb 13 11:21	29° $\mathfrak{A}$ 57'21		min. Earth dist.	10458 Jan 25 18:43	16° $\mathfrak{A}$ 09'59 0.64506 AU
transit end	10457 Feb 13 17:14	29° $\mathfrak{A}$ 40'03		inferior conj	10458 Jan 28 05:09	13° $\mathfrak{A}$ 33'31 -1°04'58
asc. node	10457 Feb 13 14:17	29° $\mathfrak{A}$ 48'42		minimum elong	10458 Jan 28 07:08	13° $\mathfrak{A}$ 28'10 1°03'44
morning rise	10457 Feb 19 15:22	24° $\mathfrak{A}$ 09'42		asc. node	10458 Jan 31 11:29	10° $\mathfrak{A}$ 18'10
direct	10457 Feb 22 12:48	23° $\mathfrak{A}$ 23'27		morning rise	10458 Feb 03 17:34	8° $\mathfrak{A}$ 08'07
morning max el	10457 Feb 28 23:36	26° $\mathfrak{A}$ 49'09	18°16'17	direct	10458 Feb 06 06:27	7° $\mathfrak{A}$ 35'01
	10457 Mar 03 19:49	0° $\mathfrak{H}$		morning max el	10458 Feb 12 16:30	10° $\mathfrak{A}$ 55'44 17°53'01
desc. node	10457 Mar 19 09:44	23° $\mathfrak{H}$ 34'32			10458 Feb 25 20:40	0° $\mathfrak{H}$
morning set	10457 Mar 20 08:47	25° $\mathfrak{H}$ 06'58		morning set	10458 Mar 01 21:00	6° $\mathfrak{H}$ 43'11



desc. node	10458 Mar 06 06:28	14° $\text{H}$ 03'28		10459 Jan 31 15:42	0° $\approx$	
			morning set	10459 Feb 12 09:20	19° $\approx$ 28'53	
superior conj	10458 Mar 15 11:12	29° $\text{H}$ 03'46 -1°04'50		10459 Feb 18 09:46	0° $\text{H}$	
minimum elong	10458 Mar 15 04:07	28° $\text{H}$ 35'21 1°03'51	desc. node	10459 Feb 21 03:14	4° $\text{H}$ 40'40	
	10458 Mar 16 01:15	0° $\text{Y}$				
max. Earth dist.	10458 Mar 20 01:43	6° $\text{Y}$ 22'48 1.45160 AU	superior conj	10459 Feb 24 02:01	9° $\text{H}$ 39'11 -0°22'05	
evening rise	10458 Mar 31 09:45	23° $\text{Y}$ 59'18	minimum elong	10459 Feb 23 23:49	9° $\text{H}$ 29'59 0°21'31	
	10458 Apr 04 08:08	0° $\text{B}$	max. Earth dist.	10459 Mar 02 18:44	20° $\text{H}$ 37'56 1.43996 AU	
greatest brilliancy	10458 Apr 15 09:05	16° $\text{B}$ 31'32 -0.6m		10459 Mar 08 16:42	0° $\text{Y}$	
	10458 Apr 25 11:02	0° $\text{II}$	evening rise	10459 Mar 10 22:20	3° $\text{Y}$ 28'14	
evening max el	10458 Apr 27 06:40	1° $\text{II}$ 57'39 20°03'28		10459 Mar 28 19:14	0° $\text{B}$	
asc. node	10458 Apr 29 09:29	3° $\text{II}$ 54'16	evening max el	10459 Apr 10 05:27	15° $\text{B}$ 41'08 21°11'17	
retrograde	10458 May 04 22:49	6° $\text{II}$ 22'36	asc. node	10459 Apr 16 06:40	20° $\text{B}$ 12'37	
evening set	10458 May 08 19:30	4° $\text{II}$ 56'09	retrograde	10459 Apr 18 21:18	20° $\text{B}$ 45'59	
	10458 May 13 07:47	30° $\text{R}$ $\text{B}$	evening set	10459 Apr 23 03:58	19° $\text{B}$ 03'49	
inferior conj	10458 May 14 03:11	28° $\text{B}$ 54'41 3°15'43	inferior conj	10459 Apr 28 10:42	12° $\text{B}$ 50'42 3°02'38	
minimum elong	10458 May 14 02:31	28° $\text{B}$ 56'58 3°15'16	minimum elong	10459 Apr 28 09:10	12° $\text{B}$ 56'01 3°02'05	
min. Earth dist.	10458 May 15 01:05	27° $\text{B}$ 40'33 0.67693 AU	min. Earth dist.	10459 Apr 28 19:05	12° $\text{B}$ 21'37 0.68398 AU	
morning rise	10458 May 19 09:14	22° $\text{B}$ 35'28	morning rise	10459 May 03 14:09	6° $\text{B}$ 35'26	
direct	10458 May 25 03:35	20° $\text{B}$ 01'30	direct	10459 May 08 19:32	4° $\text{B}$ 17'49	
desc. node	10458 Jun 02 07:04	23° $\text{B}$ 46'34	morning max el	10459 May 19 05:39	10° $\text{B}$ 29'52 23°19'14	
morning max el	10458 Jun 05 20:00	27° $\text{B}$ 02'17 24°48'41	desc. node	10459 May 20 03:59	11° $\text{B}$ 27'31	
	10458 Jun 08 14:14	0° $\text{II}$		10459 Jun 03 16:26	0° $\text{II}$	
	10458 Jun 30 06:21	0° $\text{B}$	morning set	10459 Jun 23 01:53	0° $\text{B}$ 04'41	
morning set	10458 Jul 11 17:26	19° $\text{B}$ 07'48		10459 Jun 23 00:46	0° $\text{B}$	
max. Earth dist.	10458 Jul 15 07:35	25° $\text{B}$ 35'21 1.37123 AU	max. Earth dist.	10459 Jun 27 04:14	7° $\text{B}$ 04'25 1.39402 AU	
	10458 Jul 17 16:39	0° $\text{B}$				
superior conj	10458 Jul 22 00:34	8° $\text{B}$ 17'31 -0°41'05	superior conj	10459 Jul 04 20:06	20° $\text{B}$ 49'49 -1°14'13	
minimum elong	10458 Jul 22 03:13	8° $\text{B}$ 30'28 0°41'01	minimum elong	10459 Jul 05 01:05	21° $\text{B}$ 12'53 1°13'56	
asc. node	10458 Jul 26 08:36	16° $\text{B}$ 52'57	asc. node	10459 Jul 13 05:31	6° $\text{B}$ 47'54	
evening rise	10458 Jul 30 10:57	25° $\text{B}$ 07'30	evening rise	10459 Jul 14 06:45	8° $\text{B}$ 49'45	
	10458 Aug 01 21:45	0° $\text{B}$		10459 Jul 26 07:59	0° $\text{B}$	
evening max el	10458 Aug 16 09:00	22° $\text{B}$ 49'41 19°27'01	evening max el	10459 Jul 30 09:30	4° $\text{B}$ 54'16 18°39'11	
retrograde	10458 Aug 25 22:15	27° $\text{B}$ 34'09	retrograde	10459 Aug 07 11:13	8° $\text{B}$ 56'20	
evening set	10458 Aug 27 18:22	27° $\text{B}$ 24'23	evening set	10459 Aug 09 11:15	8° $\text{B}$ 42'19	
desc. node	10458 Aug 29 05:32	27° $\text{B}$ 03'23	desc. node	10459 Aug 16 02:48	5° $\text{B}$ 14'38	
inferior conj	10458 Sep 05 11:20	23° $\text{B}$ 18'09 -2°14'33	inferior conj	10459 Aug 17 09:50	4° $\text{B}$ 17'11 -0°23'56	
minimum elong	10458 Sep 05 05:19	23° $\text{B}$ 27'50 2°12'21	minimum elong	10459 Aug 17 08:52	4° $\text{B}$ 19'00 0°23'50	
min. Earth dist.	10458 Sep 07 22:48	21° $\text{B}$ 42'38 0.55613 AU	min. Earth dist.	10459 Aug 20 15:04	1° $\text{B}$ 53'04 0.57288 AU	
morning rise	10458 Sep 13 13:48	18° $\text{B}$ 47'12		10459 Aug 23 12:09	30° $\text{R}$ $\text{B}$	
direct	10458 Sep 18 14:38	17° $\text{B}$ 49'59	morning rise	10459 Aug 25 03:03	29° $\text{B}$ 08'55	
morning max el	10458 Oct 02 14:41	24° $\text{B}$ 52'27 25°10'21	direct	10459 Aug 30 22:23	27° $\text{B}$ 45'30	
	10458 Oct 07 08:51	0° $\text{B}$		10459 Sep 07 11:36	0° $\text{B}$	
asc. node	10458 Oct 22 09:07	23° $\text{B}$ 22'03	morning max el	10459 Sep 14 05:49	5° $\text{B}$ 15'39 26°39'21	
	10458 Oct 25 18:01	0° $\text{B}$		10459 Oct 02 08:46	0° $\text{B}$	
morning set	10458 Oct 29 03:18	7° $\text{B}$ 04'34	asc. node	10459 Oct 09 05:57	12° $\text{B}$ 48'48	
			morning set	10459 Oct 13 13:24	21° $\text{B}$ 42'41	
superior conj	10458 Nov 04 23:09	22° $\text{B}$ 01'16 1°38'09		10459 Oct 17 08:55	0° $\text{B}$	
minimum elong	10458 Nov 04 22:19	21° $\text{B}$ 56'36 1°38'30				
max. Earth dist.	10458 Nov 06 12:24	25° $\text{B}$ 25'36 1.32200 AU	superior conj	10459 Oct 20 10:34	6° $\text{B}$ 48'49 1°30'43	
	10458 Nov 08 15:01	0° $\text{B}$	minimum elong	10459 Oct 20 08:53	6° $\text{B}$ 39'24 1°30'50	
evening rise	10458 Nov 12 03:29	7° $\text{B}$ 25'04	max. Earth dist.	10459 Oct 20 20:31	7° $\text{B}$ 44'10 1.31593 AU	
	10458 Nov 24 04:39	0° $\text{B}$	evening rise	10459 Oct 27 07:19	21° $\text{B}$ 48'21	
desc. node	10458 Nov 25 03:25	1° $\text{B}$ 34'56		10459 Oct 31 07:08	0° $\text{B}$	
evening max el	10458 Dec 14 23:20	27° $\text{B}$ 50'43 27°30'09	desc. node	10459 Nov 12 00:32	20° $\text{B}$ 50'28	
	10458 Dec 17 09:35	0° $\approx$		10459 Nov 18 08:16	0° $\text{B}$	
retrograde	10458 Dec 28 18:52	5° $\approx$ 09'17	evening max el	10459 Nov 27 05:13	10° $\text{B}$ 09'44 27°05'41	
evening set	10459 Jan 04 19:16	2° $\approx$ 45'31	retrograde	10459 Dec 11 02:56	17° $\text{B}$ 20'29	
	10459 Jan 08 05:20	30° $\text{R}$ $\text{B}$	evening set	10459 Dec 18 01:01	15° $\text{B}$ 15'00	
min. Earth dist.	10459 Jan 08 12:38	29° $\text{B}$ 43'12 0.62634 AU	min. Earth dist.	10459 Dec 21 19:47	12° $\text{B}$ 33'09 0.60564 AU	
inferior conj	10459 Jan 11 09:14	26° $\text{B}$ 58'56 -2°17'00	inferior conj	10459 Dec 24 23:07	9° $\text{B}$ 54'43 -3°32'19	
minimum elong	10459 Jan 11 13:46	26° $\text{B}$ 48'03 2°14'44	minimum elong	10459 Dec 25 06:08	9° $\text{B}$ 39'56 3°29'26	
morning rise	10459 Jan 18 10:36	21° $\text{B}$ 49'56	morning rise	10460 Jan 01 13:50	5° $\text{B}$ 05'31	
asc. node	10459 Jan 18 08:38	21° $\text{B}$ 51'40	direct	10460 Jan 03 17:18	4° $\text{B}$ 47'18	
direct	10459 Jan 20 17:15	21° $\text{B}$ 26'05	asc. node	10460 Jan 05 05:44	4° $\text{B}$ 56'47	
morning max el	10459 Jan 27 09:56	24° $\text{B}$ 51'27 17°47'15	morning max el	10460 Jan 11 00:31	8° $\text{B}$ 26'19 18°00'08	

	10460 Jan 24 23:24	0°♊		morning set	10461 Jan 09 09:20	17°♊10'52	
morning set	10460 Jan 26 15:13	3°♊03'28			10461 Jan 16 01:23	0°♊	
superior conj	10460 Feb 05 17:42	21°♊24'45	0°17'15	superior conj	10461 Jan 18 06:44	4°♊10'17	0°49'24
minimum elong	10460 Feb 05 19:07	21°♊31'00	0°17'23	minimum elong	10461 Jan 18 09:42	4°♊24'03	0°49'24
desc. node	10460 Feb 08 00:01	25°♊21'58		desc. node	10461 Jan 24 20:52	16°♊03'54	
	10460 Feb 10 16:57	0°♋		max. Earth dist.	10461 Jan 25 16:24	17°♊29'00	1.40176 AU
max. Earth dist.	10460 Feb 13 07:56	4°♋24'09	1.42270 AU	evening rise	10461 Jan 29 20:53	24°♊36'26	
evening rise	10460 Feb 18 23:28	13°♋35'08			10461 Feb 02 03:39	0°♋	
	10460 Feb 29 15:43	0°♌			10461 Feb 22 11:00	0°♌	
evening max el	10460 Mar 22 23:20	29°♌26'05	22°28'09	evening max el	10461 Mar 05 13:54	13°♌13'09	23°48'35
	10460 Mar 23 13:03	0°♍		retrograde	10461 Mar 16 12:17	19°♌39'40	
retrograde	10460 Apr 01 18:15	5°♍13'20		asc. node	10461 Mar 20 01:08	18°♌40'41	
asc. node	10460 Apr 02 03:54	5°♍12'33		evening set	10461 Mar 21 17:42	17°♌28'20	
evening set	10460 Apr 06 11:54	3°♍15'57		min. Earth dist.	10461 Mar 26 11:58	11°♌56'07	0.68451 AU
	10460 Apr 09 12:40	30°♎♌		inferior conj	10461 Mar 27 04:24	11°♌00'03	2°06'39
inferior conj	10460 Apr 11 19:45	26°♌53'34	2°39'23	minimum elong	10461 Mar 27 02:13	11°♌07'30	2°05'56
minimum elong	10460 Apr 11 17:41	27°♌00'44	2°38'43	morning rise	10461 Apr 01 10:46	4°♌56'40	
min. Earth dist.	10460 Apr 11 15:25	27°♌08'39	0.68644 AU	direct	10461 Apr 05 13:15	3°♌21'39	
morning rise	10460 Apr 16 23:20	20°♌43'43		morning max el	10461 Apr 13 13:30	7°♌54'38	20°32'30
direct	10460 Apr 21 15:08	18°♌46'43		desc. node	10461 Apr 22 21:41	19°♌20'30	
morning max el	10460 Apr 30 18:26	24°♌06'28	21°51'28		10461 Apr 30 08:29	0°♍	
	10460 May 05 23:34	0°♍		morning set	10461 May 12 14:41	18°♍33'09	
desc. node	10460 May 06 00:51	0°♍03'57			10461 May 19 21:18	0°♎	
	10460 May 27 01:47	0°♎		max. Earth dist.	10461 May 21 11:58	2°♎35'05	1.43536 AU
morning set	10460 Jun 02 08:06	9°♎49'55		superior conj	10461 May 27 22:51	13°♎08'56	-2°06'04
max. Earth dist.	10460 Jun 08 04:53	19°♎23'54	1.41630 AU	minimum elong	10461 May 28 03:45	13°♎29'22	2°06'19
	10460 Jun 14 10:34	0°♏			10461 Jun 06 19:38	0°♏	
superior conj	10460 Jun 15 20:59	2°♏30'18	-1°44'19	evening rise	10461 Jun 09 07:31	4°♏22'07	
minimum elong	10460 Jun 16 03:23	2°♏58'24	1°44'09	asc. node	10461 Jun 15 23:30	15°♏57'46	
evening rise	10460 Jun 26 15:09	21°♏58'39			10461 Jun 25 14:11	0°♐	
asc. node	10460 Jun 29 02:29	26°♏31'26		evening max el	10461 Jun 26 07:03	0°♐43'26	18°04'25
	10460 Jul 01 00:22	0°♑		retrograde	10461 Jul 02 19:09	4°♐05'02	
evening max el	10460 Jul 12 18:11	17°♑35'50	18°12'00	evening set	10461 Jul 05 10:12	3°♐31'32	
retrograde	10460 Jul 19 19:28	21°♑10'06			10461 Jul 10 07:26	30°♑♏	
evening set	10460 Jul 22 02:42	20°♑47'53		inferior conj	10461 Jul 11 21:28	28°♏26'14	2°10'08
inferior conj	10460 Jul 29 06:10	16°♑01'57	1°06'01	minimum elong	10461 Jul 12 00:16	28°♏19'10	2°08'54
minimum elong	10460 Jul 29 08:12	15°♑57'29	1°04'55	min. Earth dist.	10461 Jul 14 22:19	25°♏23'21	0.61692 AU
min. Earth dist.	10460 Aug 01 14:19	13°♑07'04	0.59422 AU	morning rise	10461 Jul 18 12:00	22°♏22'51	
desc. node	10460 Aug 02 00:02	12°♑47'04		desc. node	10461 Jul 19 21:14	21°♏30'49	
morning rise	10460 Aug 05 10:30	10°♑20'56		direct	10461 Jul 25 04:11	20°♏03'14	
direct	10460 Aug 11 19:34	8°♑28'01		morning max el	10461 Aug 08 09:10	28°♏04'38	27°57'07
morning max el	10460 Aug 26 04:12	16°♑17'47	27°37'14		10461 Aug 10 05:38	0°♒	
	10460 Sep 06 10:05	0°♓			10461 Aug 31 05:23	0°♓	
	10460 Sep 23 20:35	0°♑		morning set	10461 Sep 10 21:58	20°♓16'57	
asc. node	10460 Sep 25 02:46	2°♑33'17		asc. node	10461 Sep 11 23:36	22°♓29'22	
morning set	10460 Sep 26 20:18	6°♑08'46			10461 Sep 15 12:29	0°♑	
				max. Earth dist.	10461 Sep 16 13:03	2°♑13'21	1.31833 AU
superior conj	10460 Oct 03 22:13	21°♑33'39	1°17'48	superior conj	10461 Sep 18 08:14	6°♑09'48	0°59'40
minimum elong	10460 Oct 03 20:03	21°♑21'34	1°17'39	minimum elong	10461 Sep 18 06:03	5°♑57'47	0°59'18
max. Earth dist.	10460 Oct 03 06:05	20°♑04'00	1.31471 AU	evening rise	10461 Sep 25 02:34	20°♑59'54	
	10460 Oct 07 17:28	0°♒			10461 Sep 29 10:03	0°♒	
evening rise	10460 Oct 10 15:42	6°♒22'02		desc. node	10461 Oct 15 18:59	26°♒50'13	
	10460 Oct 22 21:43	0°♓			10461 Oct 18 12:34	0°♓	
desc. node	10460 Oct 28 21:44	9°♓21'22		evening max el	10461 Oct 20 17:39	2°♓15'24	24°40'59
evening max el	10460 Nov 08 03:29	21°♓37'20	26°07'10	retrograde	10461 Nov 03 12:37	9°♓10'42	
retrograde	10460 Nov 22 01:21	28°♓40'54		evening set	10461 Nov 08 21:57	8°♓05'55	
evening set	10460 Nov 28 11:20	27°♓02'40		min. Earth dist.	10461 Nov 14 05:00	5°♓19'24	0.56561 AU
min. Earth dist.	10460 Dec 02 16:23	24°♓27'45	0.58458 AU	inferior conj	10461 Nov 16 19:11	3°♓40'14	-5°33'11
inferior conj	10460 Dec 05 19:16	22°♓11'02	-4°42'43	minimum elong	10461 Nov 17 00:05	3°♓32'23	5°32'11
minimum elong	10460 Dec 06 03:12	21°♓56'30	4°40'16		10461 Nov 23 17:45	30°♒♒	
morning rise	10460 Dec 13 21:34	17°♓44'23		morning rise	10461 Nov 25 04:27	29°♒35'37	
direct	10460 Dec 16 02:08	17°♓28'30		direct	10461 Nov 27 15:57	29°♒18'45	
asc. node	10460 Dec 22 02:48	19°♓37'02			10461 Dec 01 10:02	0°♓	
morning max el	10460 Dec 24 08:35	21°♓30'27	18°33'14	morning max el	10461 Dec 07 06:22	3°♓53'31	19°28'19
	10460 Dec 30 21:35	0°♑					

asc. node	10461 Dec 08 23:49	5°♊41'15		asc. node	10462 Nov 25 20:48	22°♍53'20	
	10461 Dec 23 15:46	0°♊			10462 Nov 30 08:18	0°♊	
morning set	10461 Dec 24 11:43	1°♊39'45		morning set	10462 Dec 08 19:22	16°♊21'04	
					10462 Dec 15 08:59	0°♊	
superior conj	10462 Jan 01 12:12	17°♊41'43	1°13'19	superior conj	10462 Dec 16 05:34	1°♊45'37	1°29'15
minimum elong	10462 Jan 01 15:11	17°♊56'14	1°13'27	minimum elong	10462 Dec 16 07:42	1°♊56'31	1°29'35
	10462 Jan 07 23:54	0°♊		max. Earth dist.	10462 Dec 21 06:27	11°♊49'41	1.35884 AU
max. Earth dist.	10462 Jan 07 22:12	29°♊52'11	1.37963 AU	evening rise	10462 Dec 25 05:06	19°♊19'11	
evening rise	10462 Jan 11 15:39	6°♊33'46		desc. node	10462 Dec 29 14:41	27°♊14'41	
desc. node	10462 Jan 11 17:46	6°♊43'00			10462 Dec 31 04:52	0°♊	
	10462 Jan 26 02:03	0°♊			10463 Jan 20 04:27	0°♊	
evening max el	10462 Feb 16 03:14	27°♊02'50	25°06'06	evening max el	10463 Jan 29 16:41	10°♊51'04	26°13'35
	10462 Feb 19 09:43	0°♊		retrograde	10463 Feb 11 11:21	18°♊06'05	
retrograde	10462 Feb 28 02:23	3°♊59'39		evening set	10463 Feb 17 16:34	15°♊35'13	
evening set	10462 Mar 05 19:50	1°♊36'48		asc. node	10463 Feb 21 19:35	11°♊16'42	
asc. node	10462 Mar 06 22:22	0°♊35'24		min. Earth dist.	10463 Feb 21 21:01	11°♊12'23	0.66832 AU
	10462 Mar 07 12:01	30°♊		inferior conj	10463 Feb 23 13:00	9°♊09'27	0°33'34
min. Earth dist.	10462 Mar 10 06:35	26°♊39'24	0.67839 AU	minimum elong	10463 Feb 23 12:08	9°♊12'06	0°33'28
inferior conj	10462 Mar 11 10:49	25°♊06'59	1°24'42	morning rise	10463 Mar 01 08:28	3°♊23'31	
minimum elong	10462 Mar 11 09:01	25°♊12'56	1°24'08	direct	10463 Mar 04 11:33	2°♊28'00	
morning rise	10462 Mar 16 22:30	19°♊11'26		morning max el	10463 Mar 11 02:17	6°♊01'51	18°37'17
direct	10462 Mar 20 12:38	17°♊57'25		desc. node	10463 Mar 27 15:13	29°♊13'42	
morning max el	10462 Mar 27 16:20	21°♊54'37	19°27'00		10463 Mar 28 03:03	0°♊	
	10462 Apr 03 09:42	0°♊		morning set	10463 Apr 01 05:20	6°♊25'45	
greatest brilliancy	10462 Apr 09 09:34	8°♊33'39	-0.7m		10463 Apr 16 06:25	0°♊	
desc. node	10462 Apr 09 18:28	9°♊06'36					
morning set	10462 Apr 21 14:00	27°♊03'10		superior conj	10463 Apr 17 09:34	1°♊46'14	-1°59'43
	10462 Apr 23 11:50	0°♊		minimum elong	10463 Apr 17 01:38	1°♊15'13	1°59'27
max. Earth dist.	10462 May 04 01:21	16°♊28'50	1.44905 AU	max. Earth dist.	10463 Apr 16 19:21	0°♊50'35	1.45593 AU
				evening rise	10463 May 02 22:39	26°♊18'08	
superior conj	10462 May 08 00:45	22°♊47'23	-2°12'51		10463 May 05 06:16	0°♊	
minimum elong	10462 May 07 23:44	22°♊43'18	2°13'13	greatest brilliancy	10463 May 10 22:31	9°♊01'55	-0.9m
	10462 May 12 12:20	0°♊		asc. node	10463 May 20 17:40	23°♊32'55	
evening rise	10462 May 22 03:04	15°♊50'08		evening max el	10463 May 24 08:28	27°♊45'15	18°44'30
	10462 May 30 16:08	0°♊			10463 May 27 00:22	0°♊	
asc. node	10462 Jun 02 20:34	5°♊00'57		retrograde	10463 May 30 23:15	1°♊22'56	
evening max el	10462 Jun 09 20:47	14°♊09'03	18°15'30	evening set	10463 Jun 03 06:14	0°♊20'56	
retrograde	10462 Jun 16 05:43	17°♊32'01			10463 Jun 03 18:45	30°♊	
evening set	10462 Jun 19 04:38	16°♊44'59		inferior conj	10463 Jun 08 20:45	24°♊41'52	3°12'10
inferior conj	10462 Jun 25 03:38	11°♊22'06	2°50'46	minimum elong	10463 Jun 08 21:53	24°♊38'23	3°11'34
minimum elong	10462 Jun 25 05:52	11°♊15'46	2°49'51	min. Earth dist.	10463 Jun 10 17:47	22°♊22'49	0.65667 AU
min. Earth dist.	10462 Jun 27 15:39	8°♊32'53	0.63837 AU	morning rise	10463 Jun 14 12:47	18°♊21'43	
morning rise	10462 Jul 01 05:41	5°♊06'36		direct	10463 Jun 20 23:45	15°♊37'26	
desc. node	10462 Jul 06 18:23	2°♊33'29		desc. node	10463 Jun 23 15:27	16°♊01'32	
direct	10462 Jul 07 22:13	2°♊28'58		morning max el	10463 Jul 04 04:51	23°♊27'13	26°50'05
morning max el	10462 Jul 21 18:16	10°♊31'17	27°39'29		10463 Jul 10 00:30	0°♊	
	10462 Aug 06 01:43	0°♊			10463 Jul 30 09:58	0°♊	
	10462 Aug 23 14:55	0°♊		morning set	10463 Aug 08 23:37	17°♊12'45	
morning set	10462 Aug 25 16:04	4°♊00'54		max. Earth dist.	10463 Aug 13 04:34	25°♊26'40	1.34067 AU
asc. node	10462 Aug 29 20:25	12°♊32'30			10463 Aug 15 10:30	0°♊	
max. Earth dist.	10462 Aug 30 13:34	14°♊02'22	1.32697 AU	asc. node	10463 Aug 16 17:15	2°♊38'36	
				superior conj	10463 Aug 17 15:22	4°♊33'35	0°09'05
superior conj	10462 Sep 02 14:42	20°♊31'49	0°36'36	minimum elong	10463 Aug 17 14:53	4°♊31'07	0°08'43
minimum elong	10462 Sep 02 13:03	20°♊22'57	0°36'08	behind sun begin	10463 Aug 17 10:02	4°♊05'49	
	10462 Sep 06 23:31	0°♊		behind sun end	10463 Aug 17 19:44	4°♊56'27	
evening rise	10462 Sep 09 14:01	5°♊36'41		evening rise	10463 Aug 25 00:10	20°♊07'07	
	10462 Sep 22 11:11	0°♊			10463 Aug 29 20:30	0°♊	
evening max el	10462 Oct 02 04:22	12°♊25'08	23°01'11	evening max el	10463 Sep 13 20:32	22°♊42'00	21°24'48
desc. node	10462 Oct 02 16:15	12°♊53'31		desc. node	10463 Sep 19 13:31	27°♊02'18	
retrograde	10462 Oct 15 11:13	19°♊02'11		retrograde	10463 Sep 25 23:53	28°♊43'37	
evening set	10462 Oct 19 09:50	18°♊28'19		evening set	10463 Sep 28 14:36	28°♊27'56	
min. Earth dist.	10462 Oct 26 13:24	15°♊11'57	0.55189 AU	inferior conj	10463 Oct 07 16:58	24°♊32'00	-4°55'58
inferior conj	10462 Oct 27 23:52	14°♊22'16	-5°42'49	minimum elong	10463 Oct 07 07:45	24°♊44'53	4°53'46
minimum elong	10462 Oct 27 21:12	14°♊26'07	5°42'21	min. Earth dist.	10463 Oct 07 20:51	24°♊26'32	0.54620 AU
morning rise	10462 Nov 05 10:20	10°♊32'32		morning rise	10463 Oct 16 01:43	20°♊41'57	
direct	10462 Nov 08 11:20	10°♊10'46					
morning max el	10462 Nov 19 14:52	15°♊26'36	20°46'00				

direct	10463 Oct 19 20:21	20°♄11'07		minimum elong	10464 Sep 16 03:23	4°♄51'32	3°17'13
morning max el	10463 Nov 01 10:25	26°♄10'51	22°23'18	min. Earth dist.	10464 Sep 18 06:01	3°♄35'43	0.54990 AU
	10463 Nov 05 00:57	0°♄		morning rise	10464 Sep 24 17:49	0°♄27'18	
asc. node	10463 Nov 12 17:44	10°♄58'10			10464 Sep 26 11:05	30°♄	
	10463 Nov 22 16:59	0°♄		direct	10464 Sep 29 07:17	29°♄42'13	
morning set	10463 Nov 23 06:03	1°♄08'46			10464 Oct 02 02:48	0°♄	
				morning max el	10464 Oct 12 22:29	6°♄23'15	24°10'34
superior conj	10463 Nov 30 07:17	16°♄12'04	1°37'51	asc. node	10464 Oct 29 14:36	29°♄42'16	
minimum elong	10463 Nov 30 08:15	16°♄17'08	1°38'18		10464 Oct 29 18:29	0°♄	
max. Earth dist.	10463 Dec 03 21:39	23°♄43'36	1.34121 AU	morning set	10464 Nov 06 17:51	15°♄56'33	
	10463 Dec 07 00:14	0°♄			10464 Nov 13 04:59	0°♄	
evening rise	10463 Dec 08 09:33	2°♄43'23					
desc. node	10463 Dec 16 11:41	17°♄34'22		superior conj	10464 Nov 13 14:32	0°♄52'05	1°39'48
	10463 Dec 24 02:23	0°♄		minimum elong	10464 Nov 13 14:18	0°♄50'49	1°40'14
evening max el	10464 Jan 12 06:15	24°♄29'52	27°03'31	max. Earth dist.	10464 Nov 15 20:55	5°♄46'15	1.32771 AU
	10464 Jan 19 08:27	0°♄		evening rise	10464 Nov 21 01:23	16°♄36'25	
retrograde	10464 Jan 25 14:22	1°♄51'50			10464 Nov 28 00:42	0°♄	
	10464 Jan 31 06:41	30°♄		desc. node	10464 Dec 02 08:45	7°♄35'41	
evening set	10464 Feb 01 05:57	29°♄17'57			10464 Dec 17 16:10	0°♄	
min. Earth dist.	10464 Feb 05 04:57	25°♄28'54	0.65458 AU	evening max el	10464 Dec 24 18:29	7°♄47'14	27°28'56
inferior conj	10464 Feb 07 08:42	23°♄02'23	-0°26'32	retrograde	10465 Jan 07 10:48	15°♄08'29	
minimum elong	10464 Feb 07 09:28	23°♄00'14	0°25'52	evening set	10465 Jan 14 09:36	12°♄38'17	
asc. node	10464 Feb 08 16:47	21°♄32'57		min. Earth dist.	10465 Jan 18 04:17	9°♄20'41	0.63745 AU
morning rise	10464 Feb 13 14:19	17°♄28'36		inferior conj	10465 Jan 20 19:20	6°♄39'31	-1°34'48
direct	10464 Feb 16 07:59	16°♄48'15		minimum elong	10465 Jan 20 22:22	6°♄31'45	1°33'07
morning max el	10464 Feb 22 17:24	20°♄10'25	18°04'14	asc. node	10465 Jan 25 13:57	2°♄23'52	
	10464 Mar 01 07:05	0°♄		morning rise	10465 Jan 27 13:07	1°♄20'47	
morning set	10464 Mar 12 01:10	17°♄14'06		direct	10465 Jan 29 23:10	0°♄51'58	
desc. node	10464 Mar 13 11:57	19°♄35'58		morning max el	10465 Feb 05 10:56	4°♄13'09	17°48'26
	10464 Mar 19 22:13	0°♄		morning set	10465 Feb 22 00:26	29°♄22'14	
					10465 Feb 22 09:16	0°♄	
superior conj	10464 Mar 26 17:44	10°♄50'04	-1°28'10	desc. node	10465 Feb 28 08:43	10°♄08'51	
minimum elong	10464 Mar 26 08:35	10°♄14'02	1°27'13				
max. Earth dist.	10464 Mar 29 15:26	15°♄24'01	1.45534 AU	superior conj	10465 Mar 06 18:41	20°♄45'26	-0°46'40
	10464 Apr 08 00:25	0°♄		minimum elong	10465 Mar 06 13:40	20°♄25'00	0°45'49
evening rise	10464 Apr 11 20:52	5°♄57'40		max. Earth dist.	10465 Mar 12 10:32	29°♄51'24	1.44740 AU
greatest brilliancy	10464 Apr 24 21:12	25°♄51'29	-0.7m		10465 Mar 12 12:42	0°♄	
	10464 Apr 27 16:54	0°♄		evening rise	10465 Mar 22 08:31	15°♄19'08	
evening max el	10464 May 06 15:54	11°♄26'05	19°30'16		10465 Apr 01 01:27	0°♄	
asc. node	10464 May 06 14:48	11°♄23'19		evening max el	10465 Apr 19 17:50	25°♄08'39	20°30'53
retrograde	10464 May 13 20:37	15°♄30'40		asc. node	10465 Apr 23 11:59	28°♄19'45	
evening set	10464 May 17 12:10	14°♄13'01		retrograde	10465 Apr 27 19:25	29°♄50'03	
inferior conj	10464 May 22 21:30	8°♄19'09	3°18'09	evening set	10465 May 01 20:16	28°♄16'41	
minimum elong	10464 May 22 21:27	8°♄19'21	3°17'41	inferior conj	10465 May 07 03:14	22°♄09'46	3°11'30
min. Earth dist.	10464 May 24 03:32	6°♄40'08	0.67084 AU	minimum elong	10465 May 07 02:10	22°♄13'27	3°11'00
morning rise	10464 May 28 06:22	1°♄58'53		min. Earth dist.	10465 May 07 19:10	21°♄15'04	0.68044 AU
	10464 May 31 04:40	30°♄		morning rise	10465 May 12 07:50	15°♄52'05	
direct	10464 Jun 03 07:31	29°♄18'49		direct	10465 May 17 20:42	13°♄24'40	
	10464 Jun 06 15:53	0°♄		desc. node	10465 May 27 09:22	18°♄30'18	
desc. node	10464 Jun 09 12:26	1°♄30'10		morning max el	10465 May 29 00:46	20°♄05'52	24°11'08
morning max el	10464 Jun 15 15:06	6°♄41'14	25°37'21		10465 Jun 06 11:42	0°♄	
	10464 Jul 03 16:52	0°♄			10465 Jun 26 21:02	0°♄	
morning set	10464 Jul 21 16:41	29°♄41'40		morning set	10465 Jul 03 14:38	11°♄16'29	
	10464 Jul 21 20:43	0°♄		max. Earth dist.	10465 Jul 07 07:22	17°♄46'37	1.38080 AU
max. Earth dist.	10464 Jul 25 09:24	6°♄33'36	1.35906 AU		10465 Jul 13 22:12	0°♄	
superior conj	10464 Jul 31 07:27	18°♄06'52	-0°22'05	superior conj	10465 Jul 14 11:40	1°♄04'11	-0°55'13
minimum elong	10464 Jul 31 08:48	18°♄13'41	0°22'11	minimum elong	10465 Jul 14 15:19	1°♄21'40	0°55'02
asc. node	10464 Aug 02 14:06	22°♄43'08		asc. node	10465 Jul 20 11:00	12°♄42'52	
	10464 Aug 06 03:19	0°♄		evening rise	10465 Jul 23 07:32	18°♄21'56	
evening rise	10464 Aug 08 06:50	4°♄24'18			10465 Jul 29 09:03	0°♄	
	10464 Aug 22 21:28	0°♄		evening max el	10465 Aug 08 18:53	15°♄13'18	19°04'00
evening max el	10464 Aug 26 00:57	3°♄34'12	20°04'02	retrograde	10465 Aug 17 16:07	19°♄38'41	
desc. node	10464 Sep 05 10:48	8°♄47'37		evening set	10465 Aug 19 12:59	19°♄27'44	
retrograde	10464 Sep 05 13:27	8°♄47'39		desc. node	10465 Aug 23 08:02	18°♄05'29	
evening set	10464 Sep 07 11:47	8°♄37'52		inferior conj	10465 Aug 27 22:36	15°♄13'49	-1°26'01
inferior conj	10464 Sep 16 12:05	4°♄38'30	-3°20'12	minimum elong	10465 Aug 27 18:52	15°♄20'14	1°24'44

min. Earth dist.	10465 Aug 30 19:26	13° $\mathbb{M}$ 16'03	0.56248 AU	inferior conj	10466 Aug 09 06:33	26° $\mathcal{Q}$ 32'28	0°17'14
morning rise	10465 Sep 04 21:40	10° $\mathbb{M}$ 26'42		minimum elong	10466 Aug 09 07:09	26° $\mathcal{Q}$ 31'14	0°16'41
direct	10465 Sep 10 06:27	9° $\mathbb{M}$ 19'21		desc. node	10466 Aug 10 05:16	25° $\mathcal{Q}$ 46'30	
morning max el	10465 Sep 24 11:02	16° $\mathbb{M}$ 34'54	25°51'13	min. Earth dist.	10466 Aug 12 14:45	23° $\mathcal{Q}$ 52'18	0.58156 AU
	10465 Oct 05 10:03	0° $\mathcal{L}$		morning rise	10466 Aug 16 18:32	21° $\mathcal{Q}$ 08'57	
asc. node	10465 Oct 16 11:28	18° $\mathcal{L}$ 55'48		direct	10466 Aug 22 20:27	19° $\mathcal{Q}$ 32'43	
	10465 Oct 21 21:37	0° $\mathbb{M}$		morning max el	10466 Sep 06 05:11	27° $\mathcal{Q}$ 13'07	27°08'17
morning set	10465 Oct 22 05:05	0° $\mathbb{M}$ 39'46			10466 Sep 08 21:29	0° $\mathbb{M}$	
					10466 Sep 28 23:12	0° $\mathcal{L}$	
superior conj	10465 Oct 29 01:03	15° $\mathbb{M}$ 38'56	1°35'41	asc. node	10466 Oct 03 08:20	8° $\mathcal{L}$ 30'55	
minimum elong	10465 Oct 28 23:48	15° $\mathbb{M}$ 32'03	1°35'57	morning set	10466 Oct 06 14:05	15° $\mathcal{L}$ 13'39	
max. Earth dist.	10465 Oct 30 02:32	17° $\mathbb{M}$ 59'50	1.31883 AU		10466 Oct 13 08:04	0° $\mathbb{M}$	
	10465 Nov 04 15:54	0° $\mathcal{X}$					
evening rise	10465 Nov 05 01:36	0° $\mathcal{X}$ 50'41		superior conj	10466 Oct 13 12:50	0° $\mathbb{M}$ 26'32	1°25'54
desc. node	10465 Nov 19 05:52	27° $\mathcal{X}$ 10'51		minimum elong	10466 Oct 13 10:53	0° $\mathbb{M}$ 15'42	1°25'55
	10465 Nov 21 00:24	0° $\mathcal{Z}$		max. Earth dist.	10466 Oct 13 11:34	0° $\mathbb{M}$ 19'30	1.31477 AU
evening max el	10465 Dec 07 03:14	20° $\mathcal{Z}$ 30'22	27°23'50	evening rise	10466 Oct 20 07:40	15° $\mathbb{M}$ 19'24	
retrograde	10465 Dec 20 23:58	27° $\mathcal{Z}$ 46'23			10466 Oct 27 14:49	0° $\mathcal{X}$	
evening set	10465 Dec 28 00:30	25° $\mathcal{Z}$ 28'50		desc. node	10466 Nov 06 03:02	16° $\mathcal{X}$ 09'26	
min. Earth dist.	10465 Dec 31 17:33	22° $\mathcal{Z}$ 36'46	0.61767 AU		10466 Nov 16 19:00	0° $\mathcal{Z}$	
inferior conj	10466 Jan 03 17:47	19° $\mathcal{Z}$ 52'50	-2°48'57	evening max el	10466 Nov 19 06:08	2° $\mathcal{Z}$ 28'40	26°44'48
minimum elong	10466 Jan 03 23:26	19° $\mathcal{Z}$ 39'58	2°46'20	retrograde	10466 Dec 03 04:37	9° $\mathcal{Z}$ 37'02	
morning rise	10466 Jan 11 00:56	14° $\mathcal{Z}$ 52'17		evening set	10466 Dec 09 22:42	7° $\mathcal{Z}$ 42'10	
asc. node	10466 Jan 12 11:06	14° $\mathcal{Z}$ 33'59		min. Earth dist.	10466 Dec 13 20:20	5° $\mathcal{Z}$ 05'03	0.59654 AU
direct	10466 Jan 13 05:46	14° $\mathcal{Z}$ 31'19		inferior conj	10466 Dec 17 00:38	2° $\mathcal{Z}$ 33'38	-4°03'32
morning max el	10466 Jan 20 03:39	18° $\mathcal{Z}$ 01'14	17°50'28	minimum elong	10466 Dec 17 08:20	2° $\mathcal{Z}$ 18'17	4°00'40
	10466 Jan 28 18:24	0° $\approx$			10466 Dec 20 11:02	30° $\mathcal{R}$ $\mathcal{X}$	
morning set	10466 Feb 04 20:57	12° $\approx$ 30'23		morning rise	10466 Dec 24 20:40	27° $\mathcal{X}$ 53'51	
	10466 Feb 14 18:19	0° $\mathcal{H}$		direct	10466 Dec 26 23:47	27° $\mathcal{X}$ 37'10	
desc. node	10466 Feb 15 05:30	0° $\mathcal{H}$ 48'01		asc. node	10466 Dec 30 08:12	28° $\mathcal{X}$ 20'35	
					10467 Jan 02 01:23	0° $\mathcal{Z}$	
superior conj	10466 Feb 15 20:18	1° $\mathcal{H}$ 51'25	-0°04'42	morning max el	10467 Jan 03 16:03	1° $\mathcal{Z}$ 25'09	18°11'37
minimum elong	10466 Feb 15 19:54	1° $\mathcal{H}$ 49'41	0°04'20	morning set	10467 Jan 19 08:40	26° $\mathcal{Z}$ 20'55	
behind sun begin	10466 Feb 15 11:36	1° $\mathcal{H}$ 14'09			10467 Jan 21 07:11	0° $\approx$	
behind sun end	10466 Feb 16 04:13	2° $\mathcal{H}$ 25'09					
max. Earth dist.	10466 Feb 23 01:48	13° $\mathcal{H}$ 54'33	1.43311 AU	superior conj	10467 Jan 28 21:44	14° $\approx$ 04'30	0°31'51
evening rise	10466 Mar 02 00:54	25° $\mathcal{H}$ 00'09		minimum elong	10467 Jan 29 00:02	14° $\approx$ 14'54	0°31'53
	10466 Mar 05 06:22	0° $\mathcal{Y}$		desc. node	10467 Feb 02 02:20	21° $\approx$ 30'15	
	10466 Mar 26 01:51	0° $\mathcal{B}$		max. Earth dist.	10467 Feb 05 12:28	27° $\approx$ 22'21	1.41409 AU
evening max el	10466 Apr 02 14:13	8° $\mathcal{B}$ 51'45	21°43'11		10467 Feb 07 02:02	0° $\mathcal{H}$	
asc. node	10466 Apr 10 09:12	14° $\mathcal{B}$ 06'27		evening rise	10467 Feb 10 10:16	5° $\mathcal{H}$ 29'49	
retrograde	10466 Apr 11 17:34	14° $\mathcal{B}$ 15'23			10467 Feb 26 11:35	0° $\mathcal{Y}$	
evening set	10466 Apr 16 04:42	12° $\mathcal{B}$ 26'40		evening max el	10467 Mar 16 06:30	22° $\mathcal{Y}$ 37'31	23°02'19
inferior conj	10466 Apr 21 11:39	6° $\mathcal{B}$ 09'01	2°53'58	retrograde	10467 Mar 26 13:27	28° $\mathcal{Y}$ 42'26	
minimum elong	10466 Apr 21 09:51	6° $\mathcal{B}$ 15'18	2°53'23	asc. node	10467 Mar 28 06:25	28° $\mathcal{Y}$ 28'21	
min. Earth dist.	10466 Apr 21 14:31	5° $\mathcal{B}$ 59'01	0.68549 AU	evening set	10467 Mar 31 11:54	26° $\mathcal{Y}$ 39'10	
morning rise	10466 Apr 26 14:49	29° $\mathcal{Y}$ 55'42		inferior conj	10467 Apr 05 20:47	20° $\mathcal{Y}$ 13'48	2°26'38
	10466 Apr 26 12:52	30° $\mathcal{R}$ $\mathcal{Y}$		minimum elong	10467 Apr 05 18:37	20° $\mathcal{Y}$ 21'18	2°25'57
direct	10466 May 01 14:19	27° $\mathcal{Y}$ 46'36		min. Earth dist.	10467 Apr 05 11:20	20° $\mathcal{Y}$ 46'32	0.68614 AU
	10466 May 07 07:38	0° $\mathcal{B}$		morning rise	10467 Apr 11 01:13	14° $\mathcal{Y}$ 06'17	
morning max el	10466 May 11 11:26	3° $\mathcal{B}$ 37'02	22°41'15	direct	10467 Apr 15 11:18	12° $\mathcal{Y}$ 18'26	
desc. node	10466 May 14 06:16	6° $\mathcal{B}$ 36'43		morning max el	10467 Apr 24 02:24	17° $\mathcal{Y}$ 17'26	21°16'21
	10466 May 31 14:28	0° $\mathbb{I}$		desc. node	10467 May 01 03:08	25° $\mathcal{Y}$ 31'27	
morning set	10466 Jun 14 12:15	21° $\mathbb{I}$ 43'25			10467 May 04 11:25	0° $\mathcal{B}$	
max. Earth dist.	10466 Jun 19 04:36	29° $\mathbb{I}$ 33'01	1.40367 AU		10467 May 24 16:29	0° $\mathbb{I}$	
	10466 Jun 19 10:56	0° $\mathcal{E}$		morning set	10467 May 25 07:16	0° $\mathbb{I}$ 58'06	
				max. Earth dist.	10467 Jun 01 07:17	12° $\mathbb{I}$ 12'30	1.42494 AU
superior conj	10466 Jun 26 23:48	13° $\mathcal{E}$ 15'07	-1°27'37				
minimum elong	10466 Jun 27 05:35	13° $\mathcal{E}$ 41'20	1°27'21	superior conj	10467 Jun 08 15:18	24° $\mathbb{I}$ 29'44	-1°54'57
	10466 Jul 05 23:35	0° $\mathcal{Q}$		minimum elong	10467 Jun 08 21:33	24° $\mathbb{I}$ 56'34	1°54'57
evening rise	10466 Jul 06 22:59	1° $\mathcal{Q}$ 50'51			10467 Jun 11 19:35	0° $\mathcal{E}$	
asc. node	10466 Jul 07 07:57	2° $\mathcal{Q}$ 33'16		evening rise	10467 Jun 20 01:06	14° $\mathcal{E}$ 40'55	
evening max el	10466 Jul 22 23:22	27° $\mathcal{Q}$ 34'40	18°25'12	asc. node	10467 Jun 24 04:56	22° $\mathcal{E}$ 09'40	
	10466 Jul 25 23:54	0° $\mathbb{M}$			10467 Jun 28 18:09	0° $\mathcal{Q}$	
retrograde	10466 Jul 30 13:27	1° $\mathbb{M}$ 23'05		evening max el	10467 Jul 06 10:21	10° $\mathcal{Q}$ 28'27	18°06'32
evening set	10466 Aug 01 16:14	1° $\mathbb{M}$ 06'08		retrograde	10467 Jul 13 04:33	13° $\mathcal{Q}$ 55'09	
	10466 Aug 04 08:51	30° $\mathcal{R}$ $\mathcal{Q}$		evening set	10467 Jul 15 15:13	13° $\mathcal{Q}$ 28'23	

inferior conj	10467 Jul 22 11:21	8°♊34'14	1°36'17	minimum elong	10468 Jul 04 12:07	21°♊05'36	2°28'52
minimum elong	10467 Jul 22 13:56	8°♊28'12	1°35'03	min. Earth dist.	10468 Jul 07 05:11	18°♊13'35	0.62631 AU
min. Earth dist.	10467 Jul 25 17:30	5°♊33'02	0.60389 AU	morning rise	10468 Jul 10 18:27	15°♊03'21	
desc. node	10467 Jul 28 02:29	3°♊36'23		desc. node	10468 Jul 13 23:38	13°♊14'44	
morning rise	10467 Jul 29 09:47	2°♊42'39		direct	10468 Jul 17 11:38	12°♊35'03	
direct	10467 Aug 04 23:00	0°♊37'22		morning max el	10468 Jul 31 13:14	20°♊37'21	27°54'05
morning max el	10467 Aug 19 06:18	8°♊33'00	27°50'26		10468 Aug 08 15:07	0°♊	
	10467 Sep 04 16:22	0°♊			10468 Aug 27 17:35	0°♊	
asc. node	10467 Sep 20 05:09	28°♊20'47		morning set	10468 Sep 03 17:44	13°♊31'05	
morning set	10467 Sep 20 18:59	29°♊32'32		asc. node	10468 Sep 06 01:58	18°♊20'23	
	10467 Sep 21 00:15	0°♊		max. Earth dist.	10468 Sep 09 01:16	24°♊38'22	1.32142 AU
max. Earth dist.	10467 Sep 26 20:25	12°♊35'47	1.31563 AU				
				superior conj	10468 Sep 11 08:45	29°♊39'12	0°50'29
superior conj	10467 Sep 28 00:01	15°♊08'24	1°10'46	minimum elong	10468 Sep 11 06:43	29°♊28'06	0°50'04
minimum elong	10467 Sep 27 21:46	14°♊55'59	1°10'30		10468 Sep 11 12:34	0°♊	
evening rise	10467 Oct 04 17:20	29°♊55'41		evening rise	10468 Sep 18 04:41	14°♊34'00	
	10467 Oct 04 18:08	0°♊			10468 Sep 25 19:46	0°♊	
	10467 Oct 21 00:21	0°♊		desc. node	10468 Oct 09 21:28	21°♊12'02	
desc. node	10467 Oct 24 00:15	4°♊16'25		evening max el	10468 Oct 12 12:55	23°♊57'25	23°59'11
evening max el	10467 Nov 01 01:04	13°♊35'05	25°33'23		10468 Oct 21 15:57	0°♊	
retrograde	10467 Nov 14 22:25	20°♊34'59		retrograde	10468 Oct 26 03:47	0°♊46'04	
evening set	10467 Nov 20 23:20	19°♊10'58		evening set	10468 Oct 30 23:26	29°♊55'16	
min. Earth dist.	10467 Nov 25 13:24	16°♊33'19	0.57610 AU		10468 Oct 30 17:46	30°♊	
inferior conj	10467 Nov 28 12:25	14°♊31'04	-5°07'41	min. Earth dist.	10468 Nov 05 23:27	26°♊58'22	0.55906 AU
minimum elong	10467 Nov 28 19:41	14°♊18'31	5°05'48	inferior conj	10468 Nov 08 03:40	25°♊39'14	-5°43'26
morning rise	10467 Dec 06 18:21	10°♊13'41		minimum elong	10468 Nov 08 05:46	25°♊36'03	5°42'57
direct	10467 Dec 09 01:03	9°♊57'47		morning rise	10468 Nov 16 14:05	21°♊42'21	
asc. node	10467 Dec 17 05:15	13°♊38'07		direct	10468 Nov 19 06:53	21°♊23'44	
morning max el	10467 Dec 17 20:09	14°♊12'52	18°53'47	morning max el	10468 Nov 29 12:23	26°♊14'37	19°58'33
	10467 Dec 28 17:03	0°♊			10468 Dec 02 22:12	0°♊	
morning set	10468 Jan 03 06:45	10°♊38'47		asc. node	10468 Dec 03 02:15	0°♊12'44	
				morning set	10468 Dec 17 11:40	25°♊13'43	
					10468 Dec 19 19:46	0°♊	
superior conj	10468 Jan 11 18:20	27°♊10'52	1°00'32				
minimum elong	10468 Jan 11 21:27	27°♊25'38	1°00'34	superior conj	10468 Dec 25 05:19	10°♊57'09	1°21'01
	10468 Jan 13 06:08	0°♊		minimum elong	10468 Dec 25 08:00	11°♊10'31	1°21'14
max. Earth dist.	10468 Jan 18 19:33	10°♊09'15	1.39243 AU	max. Earth dist.	10468 Dec 31 02:07	22°♊20'16	1.37058 AU
desc. node	10468 Jan 19 23:13	12°♊11'18		evening rise	10469 Jan 03 20:05	29°♊14'00	
evening rise	10468 Jan 22 17:00	16°♊55'42			10469 Jan 04 06:21	0°♊	
	10468 Jan 30 16:31	0°♊		desc. node	10469 Jan 05 20:07	2°♊47'25	
	10468 Feb 21 00:35	0°♊			10469 Jan 22 23:43	0°♊	
evening max el	10468 Feb 26 20:31	6°♊26'23	24°22'20	evening max el	10469 Feb 08 09:48	20°♊15'50	25°36'24
retrograde	10468 Mar 09 05:47	13°♊06'22		retrograde	10469 Feb 20 17:37	27°♊21'16	
asc. node	10468 Mar 14 03:39	11°♊15'41		evening set	10469 Feb 26 16:21	24°♊54'20	
evening set	10468 Mar 14 16:19	10°♊49'59		asc. node	10469 Mar 01 00:52	22°♊34'35	
min. Earth dist.	10468 Mar 19 07:19	5°♊32'34	0.68247 AU	min. Earth dist.	10469 Mar 03 00:16	20°♊11'59	0.67465 AU
inferior conj	10468 Mar 20 04:43	4°♊20'42	1°49'59	inferior conj	10469 Mar 04 09:33	18°♊25'46	1°04'08
minimum elong	10468 Mar 20 02:38	4°♊27'44	1°49'18	minimum elong	10469 Mar 04 08:04	18°♊30'31	1°03'43
	10468 Mar 23 16:54	30°♊		morning rise	10469 Mar 10 00:16	12°♊34'17	
morning rise	10468 Mar 25 13:02	28°♊20'25		direct	10469 Mar 13 09:35	11°♊28'29	
direct	10468 Mar 29 10:14	26°♊54'19		morning max el	10469 Mar 20 06:41	15°♊13'48	19°03'51
	10468 Apr 04 18:36	0°♊			10469 Mar 31 13:47	0°♊	
morning max el	10468 Apr 06 00:37	1°♊10'11	20°02'45	greatest brilliancy	10469 Apr 02 14:38	3°♊03'02	-0.7m
desc. node	10468 Apr 16 23:57	15°♊01'27		desc. node	10469 Apr 03 20:44	4°♊57'03	
	10468 Apr 27 03:20	0°♊		morning set	10469 Apr 12 11:32	18°♊12'38	
morning set	10468 May 03 07:56	9°♊27'15			10469 Apr 20 01:44	0°♊	
max. Earth dist.	10468 May 13 17:36	25°♊44'46	1.44198 AU	max. Earth dist.	10469 Apr 26 09:44	9°♊54'04	1.45287 AU
	10468 May 16 09:16	0°♊					
				superior conj	10469 Apr 28 23:49	13°♊58'25	-2°09'48
superior conj	10468 May 19 06:46	4°♊41'52	-2°11'09	minimum elong	10469 Apr 28 19:33	13°♊41'33	2°09'59
minimum elong	10468 May 19 09:39	4°♊53'41	2°11'32		10469 May 09 00:34	0°♊	
evening rise	10468 Jun 01 09:08	26°♊41'41		evening rise	10469 May 13 18:38	7°♊44'00	
	10468 Jun 03 07:18	0°♊		asc. node	10469 May 27 23:00	0°♊17'24	
asc. node	10468 Jun 10 01:57	11°♊26'48			10469 May 27 18:10	0°♊	
evening max el	10468 Jun 19 00:00	23°♊44'48	18°06'56	evening max el	10469 Jun 02 13:05	7°♊14'55	18°25'39
retrograde	10468 Jun 25 09:25	27°♊05'06		retrograde	10469 Jun 08 23:29	10°♊42'50	
evening set	10468 Jun 28 03:56	26°♊25'53		evening set	10469 Jun 12 01:47	9°♊49'29	
inferior conj	10468 Jul 04 09:27	21°♊12'42	2°30'00				

inferior conj	10469 Jun 17 20:42	4°☿19'15	3°01'59	greatest brilliancy	10470 May 04 12:12	3°♊57'13	-0.8m
minimum elong	10469 Jun 17 22:30	4°☿13'56	3°01'12	asc. node	10470 May 14 20:07	18°♊33'12	
min. Earth dist.	10469 Jun 20 02:20	1°☿41'27	0.64657 AU	evening max el	10470 May 16 23:07	20°♊53'24	19°01'56
	10469 Jun 21 15:16	30°♊		retrograde	10470 May 23 19:05	24°♊41'32	
morning rise	10469 Jun 23 18:08	28°♊00'53		evening set	10470 May 27 05:31	23°♊33'05	
direct	10469 Jun 30 08:43	25°♊19'21		inferior conj	10470 Jun 01 17:28	17°♊47'28	3°16'25
desc. node	10469 Jun 30 20:45	25°♊20'12		minimum elong	10470 Jun 01 18:05	17°♊45'30	3°15'52
	10469 Jul 10 09:45	0°☿		min. Earth dist.	10470 Jun 03 08:04	15°♊44'23	0.66324 AU
morning max el	10469 Jul 13 23:27	3°☿18'04	27°22'02	morning rise	10470 Jun 07 06:04	11°♊26'30	
	10469 Aug 03 00:45	0°♊		direct	10470 Jun 13 13:11	8°♊42'43	
morning set	10469 Aug 18 07:42	27°♊01'48		desc. node	10470 Jun 17 17:48	9°♊42'58	
	10469 Aug 19 19:49	0°♊		morning max el	10470 Jun 26 10:14	16°♊23'36	26°21'21
max. Earth dist.	10469 Aug 22 22:12	6°♊17'17	1.33219 AU		10470 Jul 07 16:33	0°☿	
asc. node	10469 Aug 23 22:47	8°♊24'43			10470 Jul 26 21:53	0°♊	
				morning set	10470 Aug 01 09:36	9°♊56'31	
superior conj	10469 Aug 26 12:58	13°♊52'27	0°25'25	max. Earth dist.	10470 Aug 05 08:35	17°♊31'07	1.34795 AU
minimum elong	10469 Aug 26 11:44	13°♊45'54	0°24'59				
evening rise	10469 Sep 02 15:46	29°♊08'06		superior conj	10470 Aug 10 10:19	27°♊42'22	-0°03'50
	10469 Sep 03 01:35	0°♊		minimum elong	10470 Aug 10 10:33	27°♊43'35	0°04'05
	10469 Sep 20 08:14	0°♊		behind sun begin	10470 Aug 10 04:47	27°♊14'01	
evening max el	10469 Sep 24 00:30	4°♊04'04	22°18'49	behind sun end	10470 Aug 10 16:18	28°♊13'12	
desc. node	10469 Sep 26 18:42	6°♊29'49		asc. node	10470 Aug 10 19:38	28°♊30'19	
retrograde	10469 Oct 06 21:37	10°♊28'59			10470 Aug 11 13:00	0°♊	
evening set	10469 Oct 10 05:27	10°♊04'30		evening rise	10470 Aug 18 00:42	13°♊32'57	
min. Earth dist.	10469 Oct 18 06:45	6°♊30'45	0.54834 AU		10470 Aug 26 11:01	0°♊	
inferior conj	10469 Oct 19 01:55	6°♊03'44	-5°30'07	evening max el	10470 Sep 05 21:17	14°♊32'45	20°48'04
minimum elong	10469 Oct 18 19:52	6°♊12'17	5°29'04	desc. node	10470 Sep 13 15:58	19°♊39'45	
morning rise	10469 Oct 27 11:53	2°♊16'38		retrograde	10470 Sep 17 09:20	20°♊15'02	
direct	10469 Oct 30 19:56	1°♊51'43		evening set	10470 Sep 19 14:32	20°♊03'13	
morning max el	10469 Nov 11 15:05	7°♊25'49	21°25'28	inferior conj	10470 Sep 28 17:59	16°♊07'34	-4°19'50
asc. node	10469 Nov 19 23:12	17°♊48'38		minimum elong	10470 Sep 28 08:05	16°♊21'41	4°16'58
	10469 Nov 26 22:26	0°♊		min. Earth dist.	10470 Sep 29 14:56	15°♊37'37	0.54652 AU
morning set	10469 Dec 01 20:51	9°♊58'29		morning rise	10470 Oct 07 01:37	12°♊10'35	
				direct	10470 Oct 11 03:55	11°♊34'33	
superior conj	10469 Dec 09 02:38	25°♊12'01	1°33'44	morning max el	10470 Oct 24 06:37	17°♊53'25	23°08'42
minimum elong	10469 Dec 09 04:17	25°♊20'36	1°34'09		10470 Nov 03 01:15	0°♊	
	10469 Dec 11 10:33	0°♊		asc. node	10470 Nov 06 20:07	6°♊11'16	
max. Earth dist.	10469 Dec 13 12:52	4°♊13'39	1.35084 AU	morning set	10470 Nov 16 08:12	24°♊46'29	
evening rise	10469 Dec 17 16:20	12°♊16'53			10470 Nov 18 18:42	0°♊	
desc. node	10469 Dec 23 17:04	23°♊14'36					
	10469 Dec 27 16:39	0°♊		superior conj	10470 Nov 23 07:01	9°♊45'11	1°39'27
	10470 Jan 18 02:56	0°♊		minimum elong	10470 Nov 23 07:27	9°♊47'32	1°39'55
evening max el	10470 Jan 21 23:10	4°♊00'47	26°37'18	max. Earth dist.	10470 Nov 26 07:13	16°♊08'44	1.33482 AU
retrograde	10470 Feb 04 00:18	11°♊20'32		evening rise	10470 Dec 01 02:00	25°♊54'21	
evening set	10470 Feb 10 10:16	8°♊47'19			10470 Dec 03 04:23	0°♊	
min. Earth dist.	10470 Feb 14 12:08	4°♊39'17	0.66291 AU	desc. node	10470 Dec 10 14:04	13°♊27'10	
asc. node	10470 Feb 15 22:05	2°♊58'29			10470 Dec 21 02:18	0°♊	
inferior conj	10470 Feb 16 09:16	2°♊25'00	0°09'10	evening max el	10471 Jan 04 12:16	17°♊31'47	27°17'46
minimum elong	10470 Feb 16 09:01	2°♊25'47	0°09'20	retrograde	10471 Jan 18 00:51	24°♊55'08	
transit middle	10470 Feb 16 09:01	2°♊25'47	0°09'20	evening set	10471 Jan 24 19:52	22°♊21'51	
transit begin	10470 Feb 16 06:38	2°♊32'52		min. Earth dist.	10471 Jan 28 16:46	18°♊46'30	0.64762 AU
transit end	10470 Feb 16 11:23	2°♊18'42		inferior conj	10471 Jan 31 01:28	16°♊12'17	-0°54'34
	10470 Feb 18 11:43	30°♊		minimum elong	10471 Jan 31 03:07	16°♊07'47	0°53'29
morning rise	10470 Feb 22 08:49	26°♊44'13		asc. node	10471 Feb 02 19:17	13°♊22'32	
direct	10470 Feb 25 07:37	25°♊55'44		morning rise	10471 Feb 06 12:04	10°♊44'31	
morning max el	10470 Mar 03 19:16	29°♊23'17	18°21'11	direct	10471 Feb 09 02:06	10°♊09'41	
	10470 Mar 04 09:46	0°♊		morning max el	10471 Feb 15 11:47	13°♊30'33	17°55'20
desc. node	10470 Mar 21 17:29	25°♊11'25			10471 Feb 27 03:52	0°♊	
morning set	10470 Mar 23 14:27	28°♊10'44		morning set	10471 Mar 04 22:34	9°♊34'55	
	10470 Mar 24 17:52	0°♊		desc. node	10471 Mar 08 14:14	15°♊38'37	
					10471 Mar 17 09:51	0°♊	
superior conj	10470 Apr 08 06:06	22°♊53'43	-1°48'11				
minimum elong	10470 Apr 07 20:46	22°♊17'14	1°47'34	superior conj	10471 Mar 18 19:45	2°♊15'27	-1°11'11
max. Earth dist.	10470 Apr 09 04:49	24°♊22'36	1.45656 AU	minimum elong	10471 Mar 18 12:00	1°♊44'32	1°10'10
	10470 Apr 12 19:12	0°♊		max. Earth dist.	10471 Mar 23 00:13	8°♊53'17	1.45283 AU
evening rise	10470 Apr 24 04:27	17°♊49'18		evening rise	10471 Apr 03 20:19	27°♊16'03	
	10470 May 01 22:55	0°♊			10471 Apr 05 15:04	0°♊	

greatest brilliancy	10471 Apr 18 11:26	19° $\text{♁}$ 21'34	-0.6m	minimum elong	10472 Feb 27 03:54	12° $\text{♁}$ 27'44	0°27'49
	10471 Apr 26 04:21	0° $\text{♁}$		max. Earth dist.	10472 Mar 04 18:02	23° $\text{♁}$ 12'34	1.44212 AU
evening max el	10471 Apr 30 04:19	4° $\text{♁}$ 35'22	19°54'26		10472 Mar 09 00:49	0° $\text{♁}$	
asc. node	10471 May 01 17:17	6° $\text{♁}$ 02'29		evening rise	10472 Mar 13 08:09	6° $\text{♁}$ 41'44	
retrograde	10471 May 07 17:17	8° $\text{♁}$ 54'40			10472 Mar 28 22:46	0° $\text{♁}$	
evening set	10471 May 11 12:37	7° $\text{♁}$ 30'31		evening max el	10472 Apr 12 03:57	18° $\text{♁}$ 18'38	21°00'31
inferior conj	10471 May 16 20:40	1° $\text{♁}$ 31'05	3°16'43	asc. node	10472 Apr 17 14:29	22° $\text{♁}$ 31'19	
minimum elong	10471 May 16 20:09	1° $\text{♁}$ 32'49	3°16'16	retrograde	10472 Apr 20 15:54	23° $\text{♁}$ 17'05	
	10471 May 17 23:46	30° $\text{♁}$		evening set	10472 Apr 24 21:05	21° $\text{♁}$ 37'07	
min. Earth dist.	10471 May 17 20:41	0° $\text{♁}$ 10'19	0.67553 AU	inferior conj	10472 Apr 30 03:48	15° $\text{♁}$ 25'34	3°05'16
morning rise	10471 May 22 03:22	25° $\text{♁}$ 11'33		minimum elong	10472 Apr 30 02:23	15° $\text{♁}$ 30'29	3°04'45
direct	10471 May 27 23:35	22° $\text{♁}$ 35'39		min. Earth dist.	10472 Apr 30 14:05	14° $\text{♁}$ 49'55	0.68323 AU
desc. node	10471 Jun 04 14:46	25° $\text{♁}$ 53'48		morning rise	10472 May 05 07:29	9° $\text{♁}$ 09'44	
morning max el	10471 Jun 08 20:01	29° $\text{♁}$ 42'23	25°01'34	direct	10472 May 10 14:50	6° $\text{♁}$ 49'28	
	10471 Jun 09 02:55	0° $\text{♁}$		morning max el	10472 May 21 05:35	13° $\text{♁}$ 09'02	23°32'40
	10471 Jul 01 12:57	0° $\text{♁}$		desc. node	10472 May 21 11:43	13° $\text{♁}$ 24'36	
morning set	10471 Jul 14 19:12	22° $\text{♁}$ 04'23			10472 Jun 03 19:30	0° $\text{♁}$	
max. Earth dist.	10471 Jul 18 09:23	28° $\text{♁}$ 35'19	1.36799 AU		10472 Jun 23 09:39	0° $\text{♁}$	
	10471 Jul 19 03:39	0° $\text{♁}$		morning set	10472 Jun 25 07:18	3° $\text{♁}$ 11'17	
				max. Earth dist.	10472 Jun 29 06:20	9° $\text{♁}$ 59'59	1.39060 AU
superior conj	10471 Jul 24 21:51	11° $\text{♁}$ 01'58	-0°36'02	superior conj	10472 Jul 06 19:48	23° $\text{♁}$ 41'06	-1°09'16
minimum elong	10471 Jul 25 00:09	11° $\text{♁}$ 13'17	0°36'00	minimum elong	10472 Jul 07 00:27	24° $\text{♁}$ 02'50	1°09'01
asc. node	10471 Jul 28 16:30	18° $\text{♁}$ 33'27			10472 Jul 10 03:54	0° $\text{♁}$	
evening rise	10471 Aug 02 05:11	27° $\text{♁}$ 42'50		asc. node	10472 Jul 14 13:25	8° $\text{♁}$ 29'48	
	10471 Aug 03 08:29	0° $\text{♁}$		evening rise	10472 Jul 16 02:23	11° $\text{♁}$ 29'27	
evening max el	10471 Aug 19 07:50	25° $\text{♁}$ 45'46	19°35'56		10472 Jul 26 07:26	0° $\text{♁}$	
	10471 Aug 25 13:54	0° $\text{♁}$		evening max el	10472 Aug 01 06:46	7° $\text{♁}$ 44'00	18°44'56
retrograde	10471 Aug 29 02:52	0° $\text{♁}$ 37'21		retrograde	10472 Aug 09 13:11	11° $\text{♁}$ 51'43	
evening set	10471 Aug 30 23:14	0° $\text{♁}$ 27'44		evening set	10472 Aug 11 12:16	11° $\text{♁}$ 38'36	
desc. node	10471 Aug 31 13:14	0° $\text{♁}$ 20'52		desc. node	10472 Aug 17 10:30	8° $\text{♁}$ 47'35	
	10471 Sep 01 19:43	30° $\text{♁}$		inferior conj	10472 Aug 19 13:46	7° $\text{♁}$ 16'19	-0°39'41
inferior conj	10471 Sep 08 18:27	26° $\text{♁}$ 23'40	-2°31'57	minimum elong	10472 Aug 19 12:08	7° $\text{♁}$ 19'19	0°39'17
minimum elong	10471 Sep 08 11:39	26° $\text{♁}$ 34'23	2°29'30	min. Earth dist.	10472 Aug 22 17:14	4° $\text{♁}$ 58'39	0.57003 AU
min. Earth dist.	10471 Sep 11 01:53	24° $\text{♁}$ 56'25	0.55427 AU	morning rise	10472 Aug 27 08:38	2° $\text{♁}$ 13'31	
morning rise	10471 Sep 16 21:53	21° $\text{♁}$ 58'14		direct	10472 Sep 02 01:20	0° $\text{♁}$ 54'30	
direct	10471 Sep 21 19:55	21° $\text{♁}$ 04'19		morning max el	10472 Sep 16 08:13	8° $\text{♁}$ 20'50	26°27'48
morning max el	10471 Oct 05 17:51	28° $\text{♁}$ 01'23	24°55'16		10472 Oct 02 14:36	0° $\text{♁}$	
	10471 Oct 07 17:10	0° $\text{♁}$		asc. node	10472 Oct 10 13:51	14° $\text{♁}$ 32'46	
asc. node	10471 Oct 24 17:00	25° $\text{♁}$ 09'13		morning set	10472 Oct 15 06:27	24° $\text{♁}$ 12'33	
	10471 Oct 27 05:08	0° $\text{♁}$			10472 Oct 17 22:39	0° $\text{♁}$	
morning set	10471 Oct 31 19:58	9° $\text{♁}$ 32'58					
superior conj	10471 Nov 07 15:56	24° $\text{♁}$ 29'07	1°38'46	superior conj	10472 Oct 22 03:11	9° $\text{♁}$ 16'32	1°32'13
minimum elong	10471 Nov 07 15:14	24° $\text{♁}$ 25'19	1°39'08	minimum elong	10472 Oct 22 01:36	9° $\text{♁}$ 07'44	1°32'22
max. Earth dist.	10471 Nov 09 09:28	28° $\text{♁}$ 16'21	1.32333 AU	max. Earth dist.	10472 Oct 22 17:10	10° $\text{♁}$ 34'11	1.31656 AU
	10471 Nov 10 04:34	0° $\text{♁}$		evening rise	10472 Oct 29 00:47	24° $\text{♁}$ 18'56	
evening rise	10471 Nov 14 21:47	9° $\text{♁}$ 57'53			10472 Oct 31 18:49	0° $\text{♁}$	
	10471 Nov 25 12:15	0° $\text{♁}$		desc. node	10472 Nov 13 08:19	22° $\text{♁}$ 39'34	
desc. node	10471 Nov 27 11:10	3° $\text{♁}$ 18'38			10472 Nov 18 06:19	0° $\text{♁}$	
	10471 Dec 17 08:08	0° $\text{♁}$		evening max el	10472 Nov 29 06:18	13° $\text{♁}$ 02'34	27°11'27
evening max el	10471 Dec 17 23:34	0° $\text{♁}$ 37'10	27°30'54	retrograde	10472 Dec 13 03:40	20° $\text{♁}$ 14'31	
retrograde	10471 Dec 31 18:21	7° $\text{♁}$ 56'16		evening set	10472 Dec 20 02:44	18° $\text{♁}$ 05'34	
evening set	10472 Jan 07 18:30	5° $\text{♁}$ 30'41		min. Earth dist.	10472 Dec 23 20:50	15° $\text{♁}$ 21'31	0.60877 AU
min. Earth dist.	10472 Jan 11 12:10	2° $\text{♁}$ 24'33	0.62930 AU	inferior conj	10472 Dec 26 23:35	12° $\text{♁}$ 41'14	-3°21'02
	10472 Jan 13 23:32	30° $\text{♁}$		minimum elong	10472 Dec 27 06:16	12° $\text{♁}$ 26'51	3°18'10
inferior conj	10472 Jan 14 07:22	29° $\text{♁}$ 40'46	-2°05'45	morning rise	10473 Jan 03 12:22	7° $\text{♁}$ 49'02	
minimum elong	10472 Jan 14 11:30	29° $\text{♁}$ 30'41	2°03'38	direct	10473 Jan 05 16:06	7° $\text{♁}$ 30'11	
asc. node	10472 Jan 20 16:26	24° $\text{♁}$ 43'18		asc. node	10473 Jan 06 13:33	7° $\text{♁}$ 33'32	
morning rise	10472 Jan 21 06:44	24° $\text{♁}$ 29'03		morning max el	10473 Jan 12 20:34	11° $\text{♁}$ 06'25	17°57'04
direct	10472 Jan 23 14:12	24° $\text{♁}$ 03'59			10473 Jan 25 08:55	0° $\text{♁}$	
morning max el	10472 Jan 30 05:19	27° $\text{♁}$ 27'57	17°46'58	morning set	10473 Jan 28 11:24	5° $\text{♁}$ 39'49	
	10472 Feb 01 11:55	0° $\text{♁}$					
morning set	10472 Feb 15 07:43	22° $\text{♁}$ 11'24		superior conj	10473 Feb 07 18:59	24° $\text{♁}$ 15'42	0°11'43
	10472 Feb 19 19:29	0° $\text{♁}$		minimum elong	10473 Feb 07 20:00	24° $\text{♁}$ 20'06	0°11'52
desc. node	10472 Feb 23 11:01	6° $\text{♁}$ 14'40		behind sun begin	10473 Feb 07 14:31	23° $\text{♁}$ 56'08	
				behind sun end	10473 Feb 08 01:29	24° $\text{♁}$ 44'02	
superior conj	10472 Feb 27 06:48	12° $\text{♁}$ 39'48	-0°28'28	desc. node	10473 Feb 09 07:51	26° $\text{♁}$ 55'47	



	10473 Feb 11 02:47	0° $\text{H}$		minimum elong	10474 Jan 21 08:00	7° $\approx$ 06'21	0°45'02
max. Earth dist.	10473 Feb 15 08:00	7° $\text{H}$ 04'28	1.42551 AU	desc. node	10474 Jan 27 04:40	17° $\approx$ 37'55	
evening rise	10473 Feb 21 06:46	16° $\text{H}$ 41'34		max. Earth dist.	10474 Jan 28 16:49	20° $\approx$ 14'44	1.40495 AU
	10473 Mar 01 21:58	0° $\text{Y}$		evening rise	10474 Feb 02 00:56	27° $\approx$ 34'19	
	10473 Mar 23 23:49	0° $\text{B}$			10474 Feb 03 12:22	0° $\text{H}$	
evening max el	10473 Mar 25 22:26	2° $\text{B}$ 03'16	22°16'18		10474 Feb 23 12:27	0° $\text{Y}$	
asc. node	10473 Apr 04 11:42	7° $\text{B}$ 44'30		evening max el	10474 Mar 08 13:17	15° $\text{Y}$ 49'49	23°36'37
retrograde	10473 Apr 04 13:13	7° $\text{B}$ 44'31		retrograde	10474 Mar 19 07:51	22° $\text{Y}$ 11'17	
evening set	10473 Apr 09 05:12	5° $\text{B}$ 49'14		asc. node	10474 Mar 22 08:55	21° $\text{Y}$ 27'12	
	10473 Apr 14 03:32	30° $\text{R}$ $\text{Y}$		evening set	10474 Mar 24 11:24	20° $\text{Y}$ 01'59	
inferior conj	10473 Apr 14 12:45	29° $\text{Y}$ 27'56	2°43'31	inferior conj	10474 Mar 29 21:34	13° $\text{Y}$ 34'12	2°12'14
minimum elong	10473 Apr 14 10:45	29° $\text{Y}$ 34'55	2°42'53	minimum elong	10474 Mar 29 19:23	13° $\text{Y}$ 41'43	2°11'31
min. Earth dist.	10473 Apr 14 10:14	29° $\text{Y}$ 36'43	0.68634 AU	min. Earth dist.	10474 Mar 29 06:55	14° $\text{Y}$ 24'25	0.68504 AU
morning rise	10473 Apr 19 16:10	23° $\text{Y}$ 17'11		morning rise	10474 Apr 04 03:21	7° $\text{Y}$ 29'41	
direct	10473 Apr 24 09:55	21° $\text{Y}$ 17'04		direct	10474 Apr 08 07:45	5° $\text{Y}$ 51'24	
morning max el	10473 May 03 17:47	26° $\text{Y}$ 44'38	22°04'09	morning max el	10474 Apr 16 11:44	10° $\text{Y}$ 31'00	20°43'28
	10473 May 06 18:04	0° $\text{B}$		desc. node	10474 Apr 25 05:26	21° $\text{Y}$ 05'16	
desc. node	10473 May 08 08:36	1° $\text{B}$ 53'55			10474 May 01 13:13	0° $\text{B}$	
	10473 May 28 08:36	0° $\text{II}$		morning set	10474 May 16 02:59	21° $\text{B}$ 58'01	
morning set	10473 Jun 05 17:33	13° $\text{II}$ 07'31			10474 May 21 05:34	0° $\text{II}$	
max. Earth dist.	10473 Jun 11 06:04	22° $\text{II}$ 11'03	1.41313 AU	max. Earth dist.	10474 May 24 11:52	5° $\text{II}$ 13'55	1.43283 AU
	10473 Jun 15 20:21	0° $\text{E}$					
				superior conj	10474 May 31 05:12	16° $\text{II}$ 17'55	-2°03'36
superior conj	10473 Jun 18 23:44	5° $\text{E}$ 29'44	-1°40'09	minimum elong	10474 May 31 10:36	16° $\text{II}$ 40'36	2°03'45
minimum elong	10473 Jun 19 06:03	5° $\text{E}$ 57'42	1°39'57		10474 Jun 08 05:00	0° $\text{E}$	
evening rise	10473 Jun 29 12:46	24° $\text{E}$ 44'00		evening rise	10474 Jun 12 07:48	7° $\text{E}$ 14'48	
asc. node	10473 Jul 01 10:23	28° $\text{E}$ 15'19		asc. node	10474 Jun 18 07:21	17° $\text{E}$ 44'31	
	10473 Jul 02 09:06	0° $\text{O}$			10474 Jun 26 04:00	0° $\text{O}$	
evening max el	10473 Jul 15 14:27	20° $\text{O}$ 20'21	18°14'45	evening max el	10474 Jun 29 02:55	3° $\text{O}$ 24'42	18°04'21
retrograde	10473 Jul 22 18:45	23° $\text{O}$ 57'57		retrograde	10474 Jul 05 16:18	6° $\text{O}$ 47'11	
evening set	10473 Jul 25 00:45	23° $\text{O}$ 37'15		evening set	10474 Jul 08 06:10	6° $\text{O}$ 15'33	
inferior conj	10473 Aug 01 06:57	18° $\text{O}$ 54'24	0°53'58	inferior conj	10474 Jul 14 19:39	1° $\text{O}$ 13'12	2°01'59
minimum elong	10473 Aug 01 08:41	18° $\text{O}$ 50'41	0°53'00	minimum elong	10474 Jul 14 22:26	1° $\text{O}$ 06'16	2°00'43
desc. node	10473 Aug 04 07:43	16° $\text{O}$ 18'28			10474 Jul 16 01:00	30° $\text{R}$ $\text{E}$	
min. Earth dist.	10473 Aug 04 15:26	16° $\text{O}$ 02'37	0.59088 AU	min. Earth dist.	10474 Jul 17 22:08	28° $\text{E}$ 09'52	0.61357 AU
morning rise	10473 Aug 08 13:18	13° $\text{O}$ 17'29		morning rise	10474 Jul 21 12:11	25° $\text{E}$ 12'29	
direct	10473 Aug 14 20:38	11° $\text{O}$ 28'53		desc. node	10474 Jul 22 04:54	24° $\text{E}$ 45'29	
morning max el	10473 Aug 29 05:35	19° $\text{O}$ 16'36	27°30'55	direct	10474 Jul 28 03:50	22° $\text{E}$ 56'13	
	10473 Sep 07 08:07	0° $\text{P}$			10474 Aug 10 10:17	0° $\text{O}$	
	10473 Sep 25 07:56	0° $\text{E}$		morning max el	10474 Aug 11 09:37	0° $\text{O}$ 56'45	27°56'36
asc. node	10473 Sep 27 10:42	4° $\text{E}$ 15'00			10474 Sep 01 12:49	0° $\text{P}$	
morning set	10473 Sep 29 13:56	8° $\text{E}$ 40'45		morning set	10474 Sep 13 16:31	22° $\text{P}$ 52'17	
max. Earth dist.	10473 Oct 06 02:41	22° $\text{E}$ 54'04	1.31457 AU	asc. node	10474 Sep 14 07:32	24° $\text{P}$ 09'59	
					10474 Sep 17 01:48	0° $\text{E}$	
superior conj	10473 Oct 06 14:54	24° $\text{E}$ 02'05	1°20'07	max. Earth dist.	10474 Sep 19 10:13	5° $\text{E}$ 05'42	1.31743 AU
minimum elong	10473 Oct 06 12:47	23° $\text{E}$ 50'16	1°20'00				
	10473 Oct 09 07:17	0° $\text{M}$		superior conj	10474 Sep 21 01:17	8° $\text{E}$ 40'19	1°02'45
evening rise	10473 Oct 13 08:37	8° $\text{M}$ 51'15		minimum elong	10474 Sep 20 23:04	8° $\text{E}$ 28'06	1°02'25
	10473 Oct 24 04:08	0° $\text{J}$		evening rise	10474 Sep 27 19:13	23° $\text{E}$ 29'12	
desc. node	10473 Oct 31 05:29	11° $\text{J}$ 18'08			10474 Sep 30 21:23	0° $\text{M}$	
evening max el	10473 Nov 11 05:42	24° $\text{J}$ 37'44	26°17'51	desc. node	10474 Oct 18 02:41	28° $\text{M}$ 58'04	
	10473 Nov 18 13:09	0° $\text{Z}$			10474 Oct 18 22:34	0° $\text{J}$	
retrograde	10473 Nov 25 03:48	1° $\text{Z}$ 42'48		evening max el	10474 Oct 23 21:02	5° $\text{J}$ 23'19	24°55'12
evening set	10473 Dec 01 16:17	29° $\text{J}$ 59'56		retrograde	10474 Nov 06 17:02	12° $\text{J}$ 20'11	
	10473 Dec 01 16:14	30° $\text{R}$ $\text{J}$		evening set	10474 Nov 12 06:41	11° $\text{J}$ 10'27	
min. Earth dist.	10473 Dec 05 18:54	27° $\text{J}$ 25'03	0.58759 AU	min. Earth dist.	10474 Nov 17 08:42	8° $\text{J}$ 26'46	0.56817 AU
inferior conj	10473 Dec 08 22:34	25° $\text{J}$ 03'54	-4°32'58	inferior conj	10474 Nov 20 01:37	6° $\text{J}$ 41'11	-5°27'40
minimum elong	10473 Dec 09 06:32	24° $\text{J}$ 48'58	4°30'22	minimum elong	10474 Nov 20 07:20	6° $\text{J}$ 31'52	5°26'27
morning rise	10473 Dec 16 23:24	20° $\text{J}$ 34'00		morning rise	10474 Nov 28 10:14	2° $\text{J}$ 33'20	
direct	10473 Dec 19 03:23	20° $\text{J}$ 18'03		direct	10474 Nov 30 20:09	2° $\text{J}$ 16'53	
asc. node	10473 Dec 24 10:39	21° $\text{J}$ 59'52		morning max el	10474 Dec 10 05:28	6° $\text{J}$ 46'27	19°18'36
morning max el	10473 Dec 27 05:54	24° $\text{J}$ 16'04	18°27'01	asc. node	10474 Dec 11 07:41	7° $\text{J}$ 52'49	
	10473 Dec 31 22:48	0° $\text{Z}$			10474 Dec 25 02:55	0° $\text{Z}$	
morning set	10474 Jan 12 03:58	19° $\text{Z}$ 43'03		morning set	10474 Dec 27 05:18	4° $\text{Z}$ 09'31	
	10474 Jan 17 12:51	0° $\approx$					
				superior conj	10475 Jan 04 08:28	20° $\text{Z}$ 18'46	1°10'12
superior conj	10474 Jan 21 05:10	6° $\approx$ 53'14	0°45'02	minimum elong	10475 Jan 04 11:30	20° $\text{Z}$ 33'31	1°10'18

	10475 Jan 09 11:02	0° $\approx$		minimum elong	10475 Dec 19 02:34	4° $\approx$ 30'03	1°27'37
max. Earth dist.	10475 Jan 10 22:41	2° $\approx$ 43'20	1.38292 AU	max. Earth dist.	10475 Dec 24 06:23	14° $\approx$ 43'57	1.36183 AU
desc. node	10475 Jan 14 01:33	8° $\approx$ 17'48		evening rise	10475 Dec 28 03:34	22° $\approx$ 02'51	
evening rise	10475 Jan 14 16:41	9° $\approx$ 24'00		desc. node	10475 Dec 31 22:28	28° $\approx$ 50'50	
	10475 Jan 27 08:06	0° $\approx$			10476 Jan 01 14:19	0° $\approx$	
evening max el	10475 Feb 19 02:45	29° $\approx$ 39'23	24°55'02		10476 Jan 21 03:57	0° $\approx$	
	10475 Feb 19 11:11	0° $\approx$		evening max el	10476 Feb 01 16:13	13° $\approx$ 28'24	26°04'27
retrograde	10475 Mar 02 22:32	6° $\approx$ 32'18		retrograde	10476 Feb 14 08:14	20° $\approx$ 41'02	
evening set	10475 Mar 08 14:10	4° $\approx$ 11'06		evening set	10476 Feb 20 11:47	18° $\approx$ 11'09	
asc. node	10475 Mar 09 06:08	3° $\approx$ 35'14		asc. node	10476 Feb 24 03:22	14° $\approx$ 24'58	
	10475 Mar 12 10:04	30° $\approx$		min. Earth dist.	10476 Feb 24 17:09	13° $\approx$ 43'13	0.67009 AU
min. Earth dist.	10475 Mar 13 01:59	29° $\approx$ 08'26	0.67957 AU	inferior conj	10476 Feb 26 07:21	11° $\approx$ 44'31	0°41'58
inferior conj	10475 Mar 14 04:26	27° $\approx$ 41'14	1°31'42	minimum elong	10476 Feb 26 06:19	11° $\approx$ 47'47	0°41'44
minimum elong	10475 Mar 14 02:31	27° $\approx$ 47'31	1°31'05	morning rise	10476 Mar 03 01:30	5° $\approx$ 57'02	
morning rise	10475 Mar 19 15:08	21° $\approx$ 44'17		direct	10476 Mar 06 06:12	4° $\approx$ 58'53	
direct	10475 Mar 23 07:03	20° $\approx$ 27'10		morning max el	10476 Mar 12 22:16	8° $\approx$ 35'12	18°43'38
morning max el	10475 Mar 30 13:18	24° $\approx$ 28'54	19°35'44		10476 Mar 28 09:39	0° $\approx$	
	10475 Apr 04 08:22	0° $\approx$		desc. node	10476 Mar 28 23:01	0° $\approx$ 51'53	
desc. node	10475 Apr 12 02:15	10° $\approx$ 47'27		morning set	10476 Apr 03 13:33	9° $\approx$ 36'54	
greatest brilliancy	10475 Apr 12 05:58	11° $\approx$ 01'07	-0.7m		10476 Apr 16 14:30	0° $\approx$	
	10475 Apr 24 19:13	0° $\approx$		max. Earth dist.	10476 Apr 18 18:01	3° $\approx$ 21'31	1.45536 AU
morning set	10475 Apr 25 01:46	0° $\approx$ 25'10					
max. Earth dist.	10475 May 07 00:18	19° $\approx$ 01'53	1.44744 AU	superior conj	10476 Apr 19 20:57	5° $\approx$ 07'00	-2°03'00
				minimum elong	10476 Apr 19 13:48	4° $\approx$ 39'02	2°02'53
superior conj	10475 May 11 10:27	26° $\approx$ 04'38	-2°13'02	evening rise	10476 May 05 05:52	29° $\approx$ 28'24	
minimum elong	10475 May 11 10:34	26° $\approx$ 05'04	2°13'26		10476 May 05 13:44	0° $\approx$	
	10475 May 13 20:52	0° $\approx$		greatest brilliancy	10476 May 12 05:38	10° $\approx$ 40'58	-0.9m
evening rise	10475 May 25 06:40	18° $\approx$ 51'20		asc. node	10476 May 22 01:26	25° $\approx$ 29'05	
	10475 May 31 22:14	0° $\approx$			10476 May 25 19:35	0° $\approx$	
asc. node	10475 Jun 05 04:22	6° $\approx$ 51'35		evening max el	10476 May 26 04:52	0° $\approx$ 23'42	18°39'04
evening max el	10475 Jun 12 16:42	16° $\approx$ 48'21	18°12'43	retrograde	10476 Jun 01 18:11	3° $\approx$ 58'21	
retrograde	10475 Jun 19 01:26	20° $\approx$ 10'04		evening set	10476 Jun 04 23:59	2° $\approx$ 58'32	
evening set	10475 Jun 21 23:14	19° $\approx$ 25'05			10476 Jun 08 09:36	30° $\approx$	
inferior conj	10475 Jun 27 23:49	14° $\approx$ 04'45	2°45'56	inferior conj	10476 Jun 10 15:32	27° $\approx$ 21'40	3°09'59
minimum elong	10475 Jun 28 02:11	13° $\approx$ 58'08	2°44'57	minimum elong	10476 Jun 10 16:50	27° $\approx$ 21'40	3°09'19
min. Earth dist.	10475 Jun 30 13:56	11° $\approx$ 12'24	0.63535 AU	min. Earth dist.	10476 Jun 12 14:46	24° $\approx$ 57'31	0.65419 AU
morning rise	10475 Jul 04 03:36	7° $\approx$ 50'40		morning rise	10476 Jun 16 08:53	21° $\approx$ 01'55	
desc. node	10475 Jul 09 02:03	5° $\approx$ 25'29		direct	10476 Jun 22 20:57	18° $\approx$ 18'05	
direct	10475 Jul 10 20:34	5° $\approx$ 15'02		desc. node	10476 Jun 24 23:08	18° $\approx$ 33'01	
morning max el	10475 Jul 24 18:08	13° $\approx$ 17'39	27°44'19	morning max el	10476 Jul 06 04:39	26° $\approx$ 10'18	26°59'11
	10475 Aug 07 03:59	0° $\approx$			10476 Jul 09 17:27	0° $\approx$	
	10475 Aug 25 01:54	0° $\approx$			10476 Jul 30 17:44	0° $\approx$	
morning set	10475 Aug 28 11:52	6° $\approx$ 40'10		morning set	10476 Aug 10 21:11	19° $\approx$ 57'21	
asc. node	10475 Sep 01 04:19	14° $\approx$ 12'20		max. Earth dist.	10476 Aug 15 04:33	28° $\approx$ 02'47	1.33837 AU
max. Earth dist.	10475 Sep 02 11:51	16° $\approx$ 58'05	1.32535 AU		10476 Aug 15 22:56	0° $\approx$	
				asc. node	10476 Aug 18 01:08	4° $\approx$ 18'11	
superior conj	10475 Sep 05 08:23	23° $\approx$ 04'56	0°40'24				
minimum elong	10475 Sep 05 06:37	22° $\approx$ 55'23	0°39'58	superior conj	10476 Aug 19 10:03	7° $\approx$ 10'04	0°13'31
	10475 Sep 08 12:45	0° $\approx$		minimum elong	10476 Aug 19 09:22	7° $\approx$ 06'27	0°13'08
evening rise	10475 Sep 12 06:40	8° $\approx$ 06'37		behind sun begin	10476 Aug 19 06:05	6° $\approx$ 49'13	
	10475 Sep 23 14:06	0° $\approx$		behind sun end	10476 Aug 19 12:39	7° $\approx$ 23'42	
desc. node	10475 Oct 04 23:55	15° $\approx$ 16'11		evening rise	10476 Aug 26 17:09	22° $\approx$ 38'29	
evening max el	10475 Oct 05 07:50	15° $\approx$ 35'34	23°16'18		10476 Aug 30 06:43	0° $\approx$	
retrograde	10475 Oct 18 17:11	22° $\approx$ 15'56		evening max el	10476 Sep 15 22:29	25° $\approx$ 48'27	21°38'17
evening set	10475 Oct 22 21:21	21° $\approx$ 38'04		desc. node	10476 Sep 20 21:09	29° $\approx$ 44'02	
min. Earth dist.	10475 Oct 29 17:27	18° $\approx$ 27'19	0.55352 AU		10476 Sep 21 08:09	0° $\approx$	
inferior conj	10475 Oct 31 08:53	17° $\approx$ 29'53	-5°44'50	retrograde	10476 Sep 28 06:44	1° $\approx$ 56'31	
minimum elong	10475 Oct 31 07:30	17° $\approx$ 31'53	5°44'27	evening set	10476 Oct 01 01:33	1° $\approx$ 38'57	
morning rise	10475 Nov 08 19:27	13° $\approx$ 38'37			10476 Oct 05 18:38	30° $\approx$	
direct	10475 Nov 11 18:11	13° $\approx$ 17'45		inferior conj	10476 Oct 10 02:48	27° $\approx$ 42'09	-5°06'42
morning max el	10475 Nov 22 15:58	18° $\approx$ 27'02	20°32'57	minimum elong	10476 Oct 09 18:11	27° $\approx$ 54'12	5°04'48
asc. node	10475 Nov 28 04:41	24° $\approx$ 55'43		min. Earth dist.	10476 Oct 10 00:36	27° $\approx$ 45'15	0.54650 AU
	10475 Dec 01 13:07	0° $\approx$		morning rise	10476 Oct 18 11:55	23° $\approx$ 53'41	
morning set	10475 Dec 11 12:20	18° $\approx$ 49'33		direct	10476 Oct 22 03:52	23° $\approx$ 24'31	
	10475 Dec 16 21:50	0° $\approx$		morning max el	10476 Nov 03 13:10	29° $\approx$ 17'26	22°07'54
					10476 Nov 04 06:51	0° $\approx$	
superior conj	10475 Dec 19 00:16	4° $\approx$ 18'25	1°27'18	asc. node	10476 Nov 14 01:38	12° $\approx$ 53'18	

	10476 Nov 23 05:07	0°♊		asc. node	10477 Oct 31 22:32	1°♎32'17	
morning set	10476 Nov 24 22:41	3°♊36'36		morning set	10477 Nov 09 10:28	18°♎25'04	
					10477 Nov 14 18:39	0°♊	
superior conj	10476 Dec 02 00:57	18°♊42'00	1°36'58				
minimum elong	10476 Dec 02 02:05	18°♊48'01	1°37'25	superior conj	10477 Nov 16 07:34	3°♊20'57	1°39'55
max. Earth dist.	10476 Dec 05 20:28	26°♊37'27	1.34360 AU	minimum elong	10477 Nov 16 07:31	3°♊20'37	1°40'21
	10476 Dec 07 12:34	0°♊		max. Earth dist.	10477 Nov 18 18:30	8°♊38'23	1.32938 AU
evening rise	10476 Dec 10 05:59	5°♊21'35		evening rise	10477 Nov 23 20:21	19°♊11'14	
desc. node	10476 Dec 17 19:26	19°♊12'29			10477 Nov 29 10:42	0°♊	
	10476 Dec 24 08:11	0°♊		desc. node	10477 Dec 04 16:28	9°♊17'15	
evening max el	10477 Jan 14 05:46	27°♊09'04	26°57'26		10477 Dec 18 12:06	0°♊	
	10477 Jan 17 10:56	0°♊		evening max el	10477 Dec 27 18:14	10°♊30'38	27°26'57
retrograde	10477 Jan 27 12:07	4°♊30'32		retrograde	10478 Jan 10 09:45	17°♊52'52	
evening set	10477 Feb 03 02:24	1°♊56'35		evening set	10478 Jan 17 07:44	15°♊21'30	
	10477 Feb 05 06:14	30°♊		min. Earth dist.	10478 Jan 21 02:53	11°♊59'32	0.64017 AU
min. Earth dist.	10477 Feb 07 02:06	28°♊02'47	0.65686 AU	inferior conj	10478 Jan 23 16:24	9°♊19'41	-1°24'01
inferior conj	10477 Feb 09 04:11	25°♊39'11	-0°16'51	minimum elong	10478 Jan 23 19:02	9°♊12'47	1°22'28
minimum elong	10477 Feb 09 04:39	25°♊37'50	0°16'20	asc. node	10478 Jan 27 21:48	5°♊23'46	
asc. node	10477 Feb 10 00:36	24°♊41'01		morning rise	10478 Jan 30 08:17	3°♊58'40	
morning rise	10477 Feb 15 08:09	20°♊03'34		direct	10478 Feb 01 19:16	3°♊28'26	
direct	10477 Feb 18 03:08	19°♊21'12		morning max el	10478 Feb 08 06:17	6°♊49'13	17°49'41
morning max el	10477 Feb 24 12:49	22°♊44'16	18°08'07		10478 Feb 23 17:57	0°♊	
	10477 Mar 02 09:22	0°♊		morning set	10478 Feb 25 00:33	2°♊10'00	
morning set	10477 Mar 15 04:58	20°♊12'13		desc. node	10478 Mar 02 16:32	11°♊44'04	
desc. node	10477 Mar 15 19:46	21°♊12'15					
	10477 Mar 21 06:36	0°♊		superior conj	10478 Mar 10 01:44	23°♊53'08	-0°53'11
superior conj	10477 Mar 30 03:57	14°♊06'43	-1°33'49	minimum elong	10478 Mar 09 19:57	23°♊29'45	0°52'16
minimum elong	10477 Mar 29 18:33	13°♊29'44	1°32'55		10478 Mar 13 21:08	0°♊	
max. Earth dist.	10477 Apr 01 14:08	17°♊54'57	1.45586 AU	max. Earth dist.	10478 Mar 15 09:20	2°♊23'43	1.44901 AU
	10477 Apr 09 08:07	0°♊		evening rise	10478 Mar 25 19:03	18°♊35'30	
evening rise	10477 Apr 15 06:46	9°♊13'43			10478 Apr 02 07:18	0°♊	
greatest brilliancy	10477 Apr 27 15:19	28°♊13'04	-0.7m	evening max el	10478 Apr 22 15:48	27°♊46'21	20°21'03
	10477 Apr 28 19:58	0°♊			10478 Apr 25 02:38	0°♊	
asc. node	10477 May 08 22:35	13°♊26'39		asc. node	10478 Apr 25 19:47	0°♊32'17	
evening max el	10477 May 09 13:02	14°♊04'01	19°22'27	retrograde	10478 Apr 30 14:01	2°♊22'02	
retrograde	10477 May 16 15:15	18°♊04'05		evening set	10478 May 04 13:23	0°♊51'04	
evening set	10477 May 20 05:27	16°♊48'47			10478 May 05 13:12	30°♊	
inferior conj	10477 May 25 15:22	10°♊56'55	3°18'06	inferior conj	10478 May 09 20:33	24°♊45'58	3°13'12
minimum elong	10477 May 25 15:29	10°♊56'32	3°17'37	minimum elong	10478 May 09 19:37	24°♊49'09	3°12'44
min. Earth dist.	10477 May 26 23:33	9°♊11'35	0.66897 AU	min. Earth dist.	10478 May 10 14:32	23°♊44'25	0.67930 AU
morning rise	10477 May 31 01:06	4°♊36'20		morning rise	10478 May 15 01:35	18°♊27'38	
direct	10477 Jun 06 03:49	1°♊55'09		direct	10478 May 20 16:22	15°♊57'49	
desc. node	10477 Jun 11 20:10	3°♊45'25		desc. node	10478 May 29 17:09	20°♊33'27	
morning max el	10477 Jun 18 15:11	9°♊22'53	25°49'19	morning max el	10478 Jun 01 00:54	22°♊46'16	24°24'22
	10477 Jul 04 20:51	0°♊			10478 Jun 07 09:22	0°♊	
	10477 Jul 23 06:56	0°♊		morning set	10478 Jun 28 04:42	0°♊	
morning set	10477 Jul 24 16:44	2°♊33'40		max. Earth dist.	10478 Jul 06 17:52	14°♊17'27	
max. Earth dist.	10477 Jul 28 10:55	9°♊35'48	1.35608 AU		10478 Jul 10 09:16	20°♊44'49	1.37740 AU
					10478 Jul 15 09:23	0°♊	
superior conj	10477 Aug 03 03:38	20°♊48'11	-0°17'11	superior conj	10478 Jul 17 09:51	3°♊51'22	-0°50'09
minimum elong	10477 Aug 03 04:41	20°♊53'27	0°17'20	minimum elong	10478 Jul 17 13:09	4°♊07'16	0°50'02
asc. node	10477 Aug 04 21:59	24°♊23'15		asc. node	10478 Jul 22 18:52	14°♊23'54	
	10477 Aug 07 15:28	0°♊		evening rise	10478 Jul 26 02:17	20°♊59'10	
evening rise	10477 Aug 11 00:31	6°♊58'11			10478 Jul 30 17:19	0°♊	
	10477 Aug 23 16:03	0°♊		evening max el	10478 Aug 11 16:57	18°♊06'44	19°11'37
evening max el	10477 Aug 29 00:50	6°♊34'09	20°14'44	retrograde	10478 Aug 20 19:41	22°♊38'39	
desc. node	10477 Sep 07 18:26	11°♊52'24		evening set	10478 Aug 22 16:04	22°♊28'14	
retrograde	10477 Sep 08 19:36	11°♊55'19		desc. node	10478 Aug 25 15:43	21°♊31'21	
evening set	10477 Sep 10 19:07	11°♊45'17		inferior conj	10478 Aug 31 04:23	18°♊17'10	-1°43'09
inferior conj	10477 Sep 19 20:41	7°♊47'08	-3°36'40	minimum elong	10478 Aug 30 23:51	18°♊24'47	1°41'32
minimum elong	10477 Sep 19 11:29	8°♊00'44	3°33'38	min. Earth dist.	10478 Sep 02 22:17	16°♊26'54	0.56011 AU
min. Earth dist.	10477 Sep 21 09:26	6°♊52'54	0.54874 AU	morning rise	10478 Sep 08 04:42	13°♊35'41	
morning rise	10477 Sep 28 03:00	3°♊40'11		direct	10478 Sep 13 10:43	12°♊31'58	
direct	10477 Oct 02 13:29	2°♊57'44		morning max el	10478 Sep 27 14:00	19°♊43'19	25°37'22
morning max el	10477 Oct 16 01:57	9°♊33'14	23°54'40		10478 Oct 06 07:59	0°♊	
	10477 Oct 31 01:51	0°♊		asc. node	10478 Oct 18 19:24	20°♊42'06	

	10478 Oct 23 10:06	0°♍		min. Earth dist.	10479 Aug 15 16:34	26°♌54'25	0.57842 AU
morning set	10478 Oct 24 21:53	3°♍09'26		morning rise	10479 Aug 19 22:56	24°♌11'07	
				direct	10479 Aug 25 22:44	22°♌39'20	
superior conj	10478 Oct 31 17:44	18°♍07'30	1°36'42		10479 Sep 09 00:16	0°♍	
minimum elong	10478 Oct 31 16:38	18°♍01'23	1°36'59	morning max el	10479 Sep 09 07:03	0°♍16'20	26°58'50
max. Earth dist.	10478 Nov 01 23:15	20°♍50'17	1.31982 AU		10479 Sep 30 07:48	0°♌	
	10478 Nov 06 04:49	0°♌		asc. node	10479 Oct 05 16:13	10°♌14'39	
evening rise	10478 Nov 07 19:30	3°♌23'07		morning set	10479 Oct 09 07:19	17°♌45'16	
desc. node	10478 Nov 21 13:34	28°♌57'06			10479 Oct 14 21:53	0°♍	
	10478 Nov 22 05:05	0°♎					
evening max el	10478 Dec 10 03:43	23°♎20'07	27°26'46	superior conj	10479 Oct 16 05:27	2°♍55'38	1°27'45
	10478 Dec 20 05:50	0°♎		minimum elong	10479 Oct 16 03:35	2°♍45'16	1°27'48
retrograde	10478 Dec 24 00:13	0°♎37'19		max. Earth dist.	10479 Oct 16 08:04	3°♍10'14	1.31510 AU
	10478 Dec 27 15:24	30°♎3		evening rise	10479 Oct 23 00:51	17°♍50'30	
evening set	10478 Dec 31 00:47	28°♎17'24			10479 Oct 29 00:41	0°♌	
min. Earth dist.	10479 Jan 03 17:49	25°♎21'58	0.62072 AU	desc. node	10479 Nov 08 10:44	18°♌02'09	
inferior conj	10479 Jan 06 16:54	22°♎37'31	-2°37'32		10479 Nov 17 05:27	0°♎	
minimum elong	10479 Jan 06 22:09	22°♎25'18	2°35'01	evening max el	10479 Nov 22 07:46	5°♎26'05	26°52'47
morning rise	10479 Jan 13 22:02	17°♎34'00		retrograde	10479 Dec 06 06:04	12°♎35'10	
asc. node	10479 Jan 14 18:59	17°♎20'17		evening set	10479 Dec 13 01:41	10°♎36'29	
direct	10479 Jan 16 03:23	17°♎12'08		min. Earth dist.	10479 Dec 16 22:11	7°♎57'53	0.59973 AU
morning max el	10479 Jan 22 23:21	20°♎40'21	17°48'56	inferior conj	10479 Dec 20 02:15	5°♎23'46	-3°52'34
	10479 Jan 29 23:29	0°♎		minimum elong	10479 Dec 20 09:45	5°♎08'31	3°49'41
morning set	10479 Feb 07 18:20	15°♎10'47		morning rise	10479 Dec 27 20:29	0°♎40'32	
	10479 Feb 16 04:07	0°♏		direct	10479 Dec 29 23:35	0°♎23'24	
desc. node	10479 Feb 17 13:19	2°♏22'39		asc. node	10480 Jan 01 16:03	0°♎51'56	
				morning max el	10480 Jan 06 12:32	4°♎08'09	18°07'09
superior conj	10479 Feb 18 23:36	4°♏48'37	-0°10'48	morning set	10480 Jan 22 04:06	28°♎56'00	
minimum elong	10479 Feb 18 22:35	4°♏44'21	0°10'23		10480 Jan 22 17:47	0°♎	
behind sun begin	10479 Feb 18 15:52	4°♏15'48					
behind sun end	10479 Feb 19 05:19	5°♏12'51		superior conj	10480 Jan 31 21:41	16°♎52'14	0°26'47
max. Earth dist.	10479 Feb 26 01:08	16°♏31'00	1.43563 AU	minimum elong	10480 Jan 31 23:42	17°♎01'19	0°26'51
evening rise	10479 Mar 05 09:50	28°♏11'45		desc. node	10480 Feb 04 10:08	23°♎04'36	
	10479 Mar 06 13:46	0°♐			10480 Feb 08 11:23	0°♏	
	10479 Mar 27 01:45	0°♑		max. Earth dist.	10480 Feb 08 12:40	0°♏05'23	1.41719 AU
evening max el	10479 Apr 05 13:00	11°♑29'34	21°31'52	evening rise	10480 Feb 13 16:13	8°♏33'20	
asc. node	10479 Apr 12 17:00	16°♑30'39			10480 Feb 27 16:17	0°♐	
retrograde	10479 Apr 14 12:19	16°♑46'37		evening max el	10480 Mar 18 05:49	25°♐15'12	22°50'19
evening set	10479 Apr 18 21:52	15°♑00'15			10480 Mar 24 03:48	0°♑	
inferior conj	10479 Apr 24 04:42	8°♑44'08	2°57'15	retrograde	10480 Mar 28 08:32	1°♑13'54	
minimum elong	10479 Apr 24 02:59	8°♑50'06	2°56'41	asc. node	10480 Mar 29 14:14	1°♑06'29	
min. Earth dist.	10479 Apr 24 09:30	8°♑27'25	0.68506 AU		10480 Apr 01 04:11	30°♑♐	
morning rise	10479 Apr 29 07:54	2°♑30'02		evening set	10480 Apr 02 05:18	29°♐12'41	
direct	10479 May 04 09:28	0°♑17'51		inferior conj	10480 Apr 07 13:48	22°♐48'22	2°31'24
morning max el	10479 May 14 11:07	6°♑16'00	22°54'24	minimum elong	10480 Apr 07 11:40	22°♐55'46	2°30'42
desc. node	10479 May 16 14:04	8°♑31'05		min. Earth dist.	10480 Apr 07 06:09	23°♐14'55	0.68637 AU
	10479 Jun 01 19:28	0°♒		morning rise	10480 Apr 12 17:53	16°♐40'00	
morning set	10479 Jun 17 19:20	24°♒55'05		direct	10480 Apr 17 05:59	14°♐48'51	
	10479 Jun 20 20:11	0°♓		morning max el	10480 Apr 26 01:12	19°♐54'52	21°28'22
max. Earth dist.	10479 Jun 22 06:02	2°♓24'14	1.40027 AU	desc. node	10480 May 02 10:56	27°♐19'35	
					10480 May 04 12:07	0°♑	
superior conj	10479 Jun 30 00:41	16°♓10'09	-1°22'55		10480 May 24 23:58	0°♒	
minimum elong	10479 Jun 30 06:13	16°♓35'24	1°22'39	morning set	10480 May 27 18:07	4°♒19'50	
	10479 Jul 07 10:05	0°♌		max. Earth dist.	10480 Jun 03 07:56	14°♒56'36	1.42201 AU
evening rise	10479 Jul 09 19:20	4°♌33'03					
asc. node	10479 Jul 09 15:48	4°♌16'08		superior conj	10480 Jun 10 19:31	27°♒33'48	-1°51'23
	10479 Jul 25 11:05	0°♍		minimum elong	10480 Jun 11 01:54	28°♒01'24	1°51'19
evening max el	10479 Jul 25 20:11	0°♍22'59	18°29'45		10480 Jun 12 05:11	0°♓	
retrograde	10479 Aug 02 14:05	4°♍15'48		evening rise	10480 Jun 21 23:42	17°♓29'39	
evening set	10479 Aug 04 15:52	3°♍59'57		asc. node	10480 Jun 25 12:45	23°♓55'01	
	10479 Aug 11 17:23	30°♍♌			10480 Jun 28 23:32	0°♌	
inferior conj	10479 Aug 12 09:04	29°♌29'23	0°02'58	evening max el	10480 Jul 08 06:23	13°♌12'19	18°08'05
minimum elong	10479 Aug 12 09:10	29°♌29'11	0°02'38	retrograde	10480 Jul 15 02:48	16°♌41'20	
transit middle	10479 Aug 12 09:10	29°♌29'11	0°02'38	evening set	10480 Jul 17 12:17	16°♌16'12	
transit begin	10479 Aug 12 05:38	29°♌36'07		inferior conj	10480 Jul 24 10:54	11°♌24'51	1°26'01
transit end	10479 Aug 12 12:42	29°♌22'15		minimum elong	10480 Jul 24 13:19	11°♌19'18	1°24'47
desc. node	10479 Aug 12 12:57	29°♌21'45		min. Earth dist.	10480 Jul 27 17:55	8°♌25'28	0.60047 AU

desc. node	10480 Jul 29 10:11	7°♎02'37		desc. node	10481 Jul 16 07:21	16°♏20'12	
morning rise	10480 Jul 31 11:25	5°♎36'52		direct	10481 Jul 20 10:30	15°♏25'30	
direct	10480 Aug 06 23:20	3°♎35'50		morning max el	10481 Aug 03 13:27	23°♏27'38	27°55'57
morning max el	10480 Aug 21 07:07	11°♎29'24	27°46'42		10481 Aug 09 09:37	0°♎	
	10480 Sep 04 19:22	0°♎			10481 Aug 29 02:41	0°♎	
asc. node	10480 Sep 21 13:01	0°♏02'36		morning set	10481 Sep 06 12:43	16°♎08'19	
	10480 Sep 21 12:31	0°♏		asc. node	10481 Sep 08 09:50	20°♎00'49	
morning set	10480 Sep 22 12:56	2°♏06'40		max. Earth dist.	10481 Sep 11 22:54	27°♎32'54	1.32020 AU
max. Earth dist.	10480 Sep 28 17:14	15°♏28'00	1.31520 AU		10481 Sep 13 02:01	0°♏	
superior conj	10480 Sep 29 16:48	17°♏38'34	1°13'24	superior conj	10481 Sep 14 01:59	2°♏10'54	0°53'52
minimum elong	10480 Sep 29 14:34	17°♏26'12	1°13'11	minimum elong	10481 Sep 13 23:53	1°♏59'24	0°53'28
	10480 Oct 05 07:03	0°♎		evening rise	10481 Sep 20 21:15	17°♏03'51	
evening rise	10480 Oct 06 10:05	2°♎25'59			10481 Sep 27 04:39	0°♎	
	10480 Oct 21 01:47	0°♏		desc. node	10481 Oct 12 05:07	23°♎25'52	
desc. node	10480 Oct 25 07:54	6°♏18'01		evening max el	10481 Oct 15 16:22	27°♎07'05	24°14'04
evening max el	10480 Nov 03 03:53	16°♏40'02	25°45'44		10481 Oct 19 01:07	0°♏	
retrograde	10480 Nov 17 01:22	23°♏41'00		retrograde	10481 Oct 29 08:51	3°♏58'23	
evening set	10480 Nov 23 05:47	22°♏11'55		evening set	10481 Nov 03 09:33	3°♏02'43	
min. Earth dist.	10480 Nov 27 16:23	19°♏35'36	0.57904 AU	min. Earth dist.	10481 Nov 09 03:08	0°♏09'54	0.56121 AU
inferior conj	10480 Nov 30 17:00	17°♏28'03	-4°59'18		10481 Nov 09 09:40	30°♎	
minimum elong	10480 Dec 01 00:36	17°♏14'40	4°57'13	inferior conj	10481 Nov 11 11:14	28°♎43'29	-5°40'50
morning rise	10480 Dec 08 21:46	13°♏07'23		minimum elong	10481 Nov 11 14:26	28°♎38'32	5°40'11
direct	10480 Dec 11 03:38	12°♏51'33		morning rise	10481 Nov 19 21:23	24°♎44'10	
asc. node	10480 Dec 18 13:06	15°♏56'27		direct	10481 Nov 22 12:12	24°♎26'15	
morning max el	10480 Dec 19 18:04	17°♏01'46	18°46'07	morning max el	10481 Dec 02 12:18	29°♎11'15	19°47'30
	10480 Dec 29 00:27	0°♏			10481 Dec 03 08:00	0°♏	
morning set	10481 Jan 05 00:51	13°♏10'33		asc. node	10481 Dec 05 10:07	2°♏20'40	
				morning set	10481 Dec 20 04:55	27°♏43'37	
superior conj	10481 Jan 13 15:43	29°♏51'39	0°56'42		10481 Dec 21 07:49	0°♏	
minimum elong	10481 Jan 13 18:48	0°♏06'12	0°56'44	superior conj	10481 Dec 28 00:50	13°♏33'06	1°18'24
	10481 Jan 13 17:29	0°♏		minimum elong	10481 Dec 28 03:37	13°♏46'57	1°18'36
max. Earth dist.	10481 Jan 20 20:15	12°♏58'59	1.39571 AU	max. Earth dist.	10482 Jan 03 02:29	25°♏14'13	1.37370 AU
desc. node	10481 Jan 21 06:59	13°♏46'06			10482 Jan 05 16:45	0°♏	
evening rise	10481 Jan 24 19:41	19°♏50'48		evening rise	10482 Jan 06 19:53	2°♏01'51	
	10481 Jan 31 00:07	0°♏		desc. node	10482 Jan 08 03:50	4°♏23'14	
	10481 Feb 20 21:14	0°♏			10482 Jan 24 03:30	0°♏	
evening max el	10481 Feb 28 20:00	9°♏03'51	24°10'36	evening max el	10482 Feb 11 09:13	22°♏53'16	25°26'02
retrograde	10481 Mar 12 01:28	15°♏39'12		retrograde	10482 Feb 23 14:07	29°♏56'02	
asc. node	10481 Mar 16 11:26	14°♏08'48		evening set	10482 Mar 01 11:02	27°♏30'21	
evening set	10481 Mar 17 10:14	13°♏24'30		asc. node	10482 Mar 03 08:41	25°♏39'48	
min. Earth dist.	10481 Mar 22 02:20	8°♏01'59	0.68329 AU	min. Earth dist.	10482 Mar 05 19:53	22°♏42'49	0.67605 AU
inferior conj	10481 Mar 22 22:01	6°♏55'31	1°56'11	inferior conj	10482 Mar 07 03:26	21°♏01'13	1°11'43
minimum elong	10481 Mar 22 19:53	7°♏02'45	1°55'28	minimum elong	10482 Mar 07 01:49	21°♏06'26	1°11'14
morning rise	10481 Mar 28 05:35	0°♏54'12		morning rise	10482 Mar 12 17:02	15°♏08'21	
	10481 Mar 29 16:49	30°♏		direct	10482 Mar 16 04:00	13°♏59'45	
direct	10481 Apr 01 04:38	29°♏25'00		morning max el	10482 Mar 23 03:16	17°♏48'59	19°11'38
	10481 Apr 03 19:35	0°♏			10482 Apr 01 17:10	0°♏	
morning max el	10481 Apr 08 22:17	3°♏46'28	20°12'53	greatest brilliancy	10482 Apr 05 03:41	5°♏04'17	-0.7m
desc. node	10481 Apr 19 07:46	16°♏45'19		desc. node	10482 Apr 06 04:31	6°♏37'34	
	10481 Apr 28 09:15	0°♏		morning set	10482 Apr 15 22:06	21°♏31'56	
morning set	10481 May 06 20:30	12°♏53'16			10482 Apr 21 09:16	0°♏	
max. Earth dist.	10481 May 16 17:21	28°♏22'50	1.43983 AU	max. Earth dist.	10482 Apr 29 08:35	12°♏27'12	1.45169 AU
	10481 May 17 17:35	0°♏		superior conj	10482 May 02 10:34	17°♏19'06	-2°11'19
superior conj	10481 May 22 14:38	7°♏55'27	-2°09'42	minimum elong	10482 May 02 07:27	17°♏06'43	2°11'36
minimum elong	10481 May 22 18:21	8°♏10'42	2°10'02		10482 May 10 08:39	0°♏	
evening rise	10481 Jun 04 10:46	29°♏38'52		evening rise	10482 May 16 23:51	10°♏50'24	
	10481 Jun 04 15:39	0°♏			10482 May 28 19:47	0°♏	
asc. node	10481 Jun 12 09:45	13°♏15'40		asc. node	10482 May 30 06:49	2°♏11'06	
evening max el	10481 Jun 21 19:48	26°♏25'36	18°05'36	evening max el	10482 Jun 05 09:09	9°♏54'22	18°21'41
retrograde	10481 Jun 28 05:56	29°♏46'06		retrograde	10482 Jun 11 18:54	13°♏20'21	
evening set	10481 Jun 30 23:14	29°♏08'56		evening set	10482 Jun 14 19:59	12°♏29'18	
inferior conj	10481 Jul 07 06:41	23°♏58'23	2°23'21	inferior conj	10482 Jun 20 16:15	7°♏01'34	2°58'17
minimum elong	10481 Jul 07 09:25	23°♏51'13	2°22'10	minimum elong	10482 Jun 20 18:13	6°♏55'52	2°57'28
min. Earth dist.	10481 Jul 10 04:16	20°♏57'32	0.62308 AU	min. Earth dist.	10482 Jun 23 00:09	4°♏19'26	0.64378 AU
morning rise	10481 Jul 13 17:35	17°♏50'52					

morning rise	10482 Jun 26 15:15	0°☿43'59		minimum elong	10483 Jun 04 12:38	20°♊24'25	3°14'35
	10482 Jun 27 14:35	30°♊11		min. Earth dist.	10483 Jun 06 04:42	18°♊18'00	0.66104 AU
direct	10482 Jul 03 06:36	28°♊03'34		morning rise	10483 Jun 10 01:34	14°♊06'08	
desc. node	10482 Jul 03 04:29	28°♊03'36		direct	10483 Jun 16 10:07	11°♊21'53	
	10482 Jul 09 12:27	0°☿		desc. node	10483 Jun 20 01:33	12°♊07'25	
morning max el	10482 Jul 16 23:24	6°☿04'03	27°28'44	morning max el	10483 Jun 29 10:07	19°♊06'19	26°31'47
	10482 Aug 04 05:50	0°♊			10483 Jul 08 15:50	0°☿	
morning set	10482 Aug 21 04:12	29°♊43'57			10483 Jul 28 06:47	0°♊	
	10482 Aug 21 07:28	0°♊		morning set	10483 Aug 04 08:10	12°♊44'52	
max. Earth dist.	10482 Aug 25 21:08	9°♊15'18	1.33022 AU	max. Earth dist.	10483 Aug 08 09:04	20°♊32'13	1.34531 AU
asc. node	10482 Aug 26 06:39	10°♊04'52					
				superior conj	10483 Aug 13 05:38	0°♊21'39	0°00'53
superior conj	10482 Aug 29 07:03	16°♊27'25	0°29'31	minimum elong	10483 Aug 13 05:36	0°♊21'28	0°00'35
minimum elong	10482 Aug 29 05:39	16°♊19'58	0°29'04	behind sun begin	10483 Aug 12 23:46	29°♊51'19	
	10482 Sep 04 13:58	0°♊		behind sun end	10483 Aug 13 11:27	0°♊51'42	
evening rise	10482 Sep 05 08:32	1°♊39'03		asc. node	10483 Aug 13 03:30	0°♊10'34	
	10482 Sep 21 00:25	0°♊			10483 Aug 13 01:27	0°♊	
evening max el	10482 Sep 27 03:27	7°♊14'08	22°33'34	evening rise	10483 Aug 20 17:57	16°♊05'55	
desc. node	10482 Sep 29 02:22	9°♊00'43			10483 Aug 27 17:44	0°♊	
retrograde	10482 Oct 10 04:26	13°♊43'55		evening max el	10483 Sep 08 22:30	17°♊37'56	21°00'33
evening set	10482 Oct 13 17:16	13°♊16'27		desc. node	10483 Sep 15 23:39	22°♊32'02	
min. Earth dist.	10482 Oct 21 10:51	9°♊49'05	0.54935 AU	retrograde	10483 Sep 20 16:07	23°♊27'08	
inferior conj	10482 Oct 22 11:35	9°♊14'01	-5°35'58	evening set	10483 Sep 23 00:15	23°♊14'12	
minimum elong	10482 Oct 22 06:40	9°♊21'00	5°35'10	inferior conj	10483 Oct 02 03:39	19°♊18'51	-4°33'37
morning rise	10482 Oct 30 21:45	5°♊26'23		minimum elong	10483 Oct 01 17:50	19°♊32'45	4°30'57
direct	10482 Nov 03 03:11	5°♊02'42		min. Earth dist.	10483 Oct 02 18:48	18°♊57'25	0.54619 AU
morning max el	10482 Nov 14 17:05	10°♊30'29	21°11'17	morning rise	10483 Oct 10 11:40	15°♊24'41	
asc. node	10482 Nov 22 07:06	19°♊48'38		direct	10483 Oct 14 11:18	14°♊50'33	
	10482 Nov 28 07:29	0°♊		morning max el	10483 Oct 27 09:51	21°♊03'00	22°52'43
morning set	10482 Dec 04 13:39	12°♊27'42			10483 Nov 04 00:03	0°♊	
				asc. node	10483 Nov 09 04:01	8°♊04'51	
superior conj	10482 Dec 11 20:53	27°♊44'48	1°32'16	morning set	10483 Nov 19 00:50	27°♊15'24	
minimum elong	10482 Dec 11 22:43	27°♊54'15	1°32'39		10483 Nov 20 07:44	0°♊	
	10482 Dec 12 23:09	0°♊		superior conj	10483 Nov 26 00:25	12°♊15'33	1°39'00
max. Earth dist.	10482 Dec 16 12:16	7°♊08'45	1.35356 AU	minimum elong	10483 Nov 26 01:02	12°♊18'53	1°39'27
evening rise	10482 Dec 20 13:54	14°♊59'20		max. Earth dist.	10483 Nov 29 05:27	19°♊02'39	1.33696 AU
desc. node	10482 Dec 26 00:46	24°♊52'17		evening rise	10483 Dec 03 21:50	28°♊32'12	
	10482 Dec 29 00:41	0°♊			10483 Dec 04 15:47	0°♊	
	10483 Jan 18 19:23	0°♊		desc. node	10483 Dec 12 21:47	15°♊07'19	
evening max el	10483 Jan 24 22:37	6°♊39'37	26°29'20		10483 Dec 22 05:08	0°♊	
retrograde	10483 Feb 06 21:40	13°♊58'07		evening max el	10484 Jan 07 11:59	20°♊13'47	27°13'19
evening set	10483 Feb 13 06:00	11°♊25'36		retrograde	10484 Jan 20 23:11	27°♊36'45	
min. Earth dist.	10483 Feb 17 08:44	7°♊12'21	0.66492 AU	evening set	10484 Jan 27 17:00	25°♊03'12	
asc. node	10483 Feb 18 05:55	6°♊08'56		min. Earth dist.	10484 Jan 31 14:38	21°♊23'02	0.65013 AU
inferior conj	10483 Feb 19 04:05	5°♊01'49	0°18'07	inferior conj	10484 Feb 02 21:36	18°♊51'20	-0°44'22
minimum elong	10483 Feb 19 03:36	5°♊03'17	0°18'10	minimum elong	10484 Feb 02 22:55	18°♊47'42	0°43'26
	10483 Feb 24 01:00	30°♊		asc. node	10484 Feb 05 03:08	16°♊29'00	
morning rise	10483 Feb 25 02:09	29°♊19'10		morning rise	10484 Feb 09 06:24	13°♊21'19	
direct	10483 Feb 28 02:24	28°♊28'20		direct	10484 Feb 11 21:41	12°♊44'37	
	10483 Mar 04 07:09	0°♊		morning max el	10484 Feb 18 07:06	16°♊05'46	17°58'04
morning max el	10483 Mar 06 15:00	1°♊57'52	18°26'24		10484 Feb 28 09:59	0°♊	
desc. node	10483 Mar 24 01:17	26°♊49'23		morning set	10484 Mar 07 00:43	12°♊29'02	
	10483 Mar 26 01:22	0°♊		desc. node	10484 Mar 09 22:03	17°♊14'57	
morning set	10483 Mar 26 20:44	1°♊16'49			10484 Mar 17 18:17	0°♊	
				superior conj	10484 Mar 21 04:48	5°♊29'16	-1°17'23
superior conj	10483 Apr 11 17:20	26°♊14'24	-1°52'39	minimum elong	10484 Mar 20 20:28	4°♊56'11	1°16'23
minimum elong	10483 Apr 11 08:20	25°♊39'16	1°52'09	max. Earth dist.	10484 Mar 24 22:51	11°♊24'50	1.45387 AU
max. Earth dist.	10483 Apr 12 03:06	26°♊52'35	1.45651 AU		10484 Apr 05 22:04	0°♊	
	10483 Apr 14 03:03	0°♊		evening rise	10484 Apr 06 06:48	0°♊33'38	
evening rise	10483 Apr 27 12:57	21°♊02'56		greatest brilliancy	10484 Apr 20 10:04	21°♊59'24	-0.6m
	10483 May 03 05:05	0°♊			10484 Apr 26 01:39	0°♊	
greatest brilliancy	10483 May 07 02:27	6°♊05'16	-0.8m	evening max el	10484 May 02 01:53	7°♊14'04	19°45'42
asc. node	10483 May 17 03:56	20°♊32'53		asc. node	10484 May 03 01:06	8°♊10'11	
evening max el	10483 May 19 19:49	23°♊32'07	18°55'31	retrograde	10484 May 09 11:48	11°♊27'54	
retrograde	10483 May 26 13:51	27°♊16'22		evening set	10484 May 13 05:49	10°♊06'00	
evening set	10483 May 29 23:03	26°♊10'13					
inferior conj	10483 Jun 04 11:50	20°♊26'57	3°15'07				

inferior conj	10484 May 18 14:15	4° $\Pi$ 08'34	3°17'26	asc. node	10485 Apr 19 22:18	24° $\mathcal{B}$ 49'13	
minimum elong	10484 May 18 13:54	4° $\Pi$ 09'45	3°16'59	retrograde	10485 Apr 23 10:29	25° $\mathcal{B}$ 49'18	
min. Earth dist.	10484 May 19 16:22	2° $\Pi$ 41'18	0.67399 AU	evening set	10485 Apr 27 14:10	24° $\mathcal{B}$ 11'33	
	10484 May 21 19:26	30° $\mathcal{R}$ 8		inferior conj	10485 May 02 20:56	18° $\mathcal{B}$ 01'34	3°07'42
morning rise	10484 May 23 21:39	27° $\mathcal{B}$ 48'46		minimum elong	10485 May 02 19:38	18° $\mathcal{B}$ 06'03	3°07'11
direct	10484 May 29 19:41	25° $\mathcal{B}$ 11'14		min. Earth dist.	10485 May 03 09:09	17° $\mathcal{B}$ 19'20	0.68237 AU
desc. node	10484 Jun 05 22:35	28° $\mathcal{B}$ 04'00		morning rise	10485 May 08 00:53	11° $\mathcal{B}$ 45'07	
	10484 Jun 08 07:45	0° $\Pi$		direct	10485 May 13 10:11	9° $\mathcal{B}$ 22'18	
morning max el	10484 Jun 10 20:03	2° $\Pi$ 23'37	25°14'18	desc. node	10485 May 23 19:32	15° $\mathcal{B}$ 24'13	
	10484 Jul 01 18:43	0° $\mathcal{E}$		morning max el	10485 May 24 05:36	15° $\mathcal{B}$ 49'24	23°46'08
morning set	10484 Jul 16 20:31	25° $\mathcal{E}$ 00'30			10485 Jun 04 21:18	0° $\Pi$	
	10484 Jul 19 14:19	0° $\mathcal{Q}$			10485 Jun 24 18:05	0° $\mathcal{E}$	
max. Earth dist.	10484 Jul 20 11:16	1° $\mathcal{Q}$ 37'11	1.36483 AU	morning set	10485 Jun 28 12:07	6° $\mathcal{E}$ 17'01	
				max. Earth dist.	10485 Jul 02 08:28	12° $\mathcal{E}$ 57'12	1.38719 AU
superior conj	10484 Jul 26 18:53	13° $\mathcal{Q}$ 46'28	-0°31'00	superior conj	10485 Jul 09 19:03	26° $\mathcal{E}$ 31'48	-1°04'17
minimum elong	10484 Jul 26 20:50	13° $\mathcal{Q}$ 56'09	0°31'02	minimum elong	10485 Jul 09 23:21	26° $\mathcal{E}$ 52'05	1°04'03
asc. node	10484 Jul 30 00:22	20° $\mathcal{Q}$ 14'25			10485 Jul 11 14:57	0° $\mathcal{Q}$	
evening rise	10484 Aug 03 23:18	0° $\mathcal{M}$ 18'39		asc. node	10485 Jul 16 21:14	10° $\mathcal{Q}$ 11'50	
	10484 Aug 03 19:37	0° $\mathcal{M}$		evening rise	10485 Jul 18 21:45	14° $\mathcal{Q}$ 09'04	
evening max el	10484 Aug 21 06:57	28° $\mathcal{M}$ 43'38	19°45'17		10485 Jul 27 10:27	0° $\mathcal{M}$	
	10484 Aug 22 15:52	0° $\mathcal{L}$		evening max el	10485 Aug 04 04:10	10° $\mathcal{M}$ 34'59	18°51'09
retrograde	10484 Aug 31 07:55	3° $\mathcal{L}$ 42'38		retrograde	10485 Aug 12 15:34	14° $\mathcal{M}$ 48'41	
desc. node	10484 Sep 01 20:56	3° $\mathcal{L}$ 36'05		evening set	10485 Aug 14 13:46	14° $\mathcal{M}$ 36'25	
evening set	10484 Sep 02 04:47	3° $\mathcal{L}$ 33'03		desc. node	10485 Aug 19 18:13	12° $\mathcal{M}$ 19'38	
	10484 Sep 10 07:04	30° $\mathcal{R}$ 8		inferior conj	10485 Aug 22 18:09	10° $\mathcal{M}$ 17'01	-0°55'51
inferior conj	10484 Sep 11 02:00	29° $\mathcal{M}$ 30'50	-2°49'20	minimum elong	10485 Aug 22 15:48	10° $\mathcal{M}$ 21'13	0°55'08
minimum elong	10484 Sep 10 18:27	29° $\mathcal{M}$ 42'30	2°46'38	min. Earth dist.	10485 Aug 25 19:34	8° $\mathcal{M}$ 06'04	0.56729 AU
min. Earth dist.	10484 Sep 13 04:59	28° $\mathcal{M}$ 12'05	0.55260 AU	morning rise	10485 Aug 30 14:33	5° $\mathcal{M}$ 19'41	
morning rise	10484 Sep 19 06:19	25° $\mathcal{M}$ 10'41		direct	10485 Sep 05 04:33	4° $\mathcal{M}$ 04'54	
direct	10484 Sep 24 01:28	24° $\mathcal{M}$ 19'59		morning max el	10485 Sep 19 10:48	11° $\mathcal{M}$ 27'29	26°15'37
	10484 Oct 06 13:40	0° $\mathcal{L}$			10485 Oct 03 18:42	0° $\mathcal{L}$	
morning max el	10484 Oct 07 21:09	1° $\mathcal{L}$ 11'26	24°39'53	asc. node	10485 Oct 12 21:45	16° $\mathcal{L}$ 17'54	
asc. node	10484 Oct 26 00:55	26° $\mathcal{L}$ 57'52		morning set	10485 Oct 17 23:24	26° $\mathcal{L}$ 42'56	
	10484 Oct 27 15:19	0° $\mathcal{M}$			10485 Oct 19 12:00	0° $\mathcal{M}$	
morning set	10484 Nov 02 12:38	12° $\mathcal{M}$ 02'04		superior conj	10485 Oct 24 19:47	11° $\mathcal{M}$ 44'59	1°33'33
superior conj	10484 Nov 09 08:46	26° $\mathcal{M}$ 57'47	1°39'15	minimum elong	10485 Oct 24 18:19	11° $\mathcal{M}$ 36'50	1°33'46
minimum elong	10484 Nov 09 08:15	26° $\mathcal{M}$ 54'52	1°39'39	max. Earth dist.	10485 Oct 25 13:47	13° $\mathcal{M}$ 24'49	1.31723 AU
	10484 Nov 10 18:09	0° $\mathcal{J}$		evening rise	10485 Oct 31 18:20	26° $\mathcal{M}$ 50'27	
max. Earth dist.	10484 Nov 11 06:44	1° $\mathcal{J}$ 08'18	1.32477 AU		10485 Nov 02 06:49	0° $\mathcal{J}$	
evening rise	10484 Nov 16 16:17	12° $\mathcal{J}$ 31'49		desc. node	10485 Nov 15 15:59	24° $\mathcal{J}$ 28'18	
	10484 Nov 25 20:30	0° $\mathcal{Z}$			10485 Nov 19 06:31	0° $\mathcal{Z}$	
desc. node	10484 Nov 28 18:51	5° $\mathcal{Z}$ 02'03		evening max el	10485 Dec 02 07:10	15° $\mathcal{Z}$ 55'14	27°16'33
	10484 Dec 16 16:07	0° $\approx$		retrograde	10485 Dec 16 04:18	23° $\mathcal{Z}$ 08'40	
evening max el	10484 Dec 19 23:42	3° $\approx$ 23'26	27°30'54	evening set	10485 Dec 23 04:06	20° $\mathcal{Z}$ 56'27	
retrograde	10485 Jan 02 17:37	10° $\approx$ 43'11		min. Earth dist.	10485 Dec 26 21:39	18° $\mathcal{Z}$ 09'56	0.61188 AU
evening set	10485 Jan 09 17:26	8° $\approx$ 15'53		inferior conj	10485 Dec 29 23:41	15° $\mathcal{Z}$ 28'01	-3°09'37
min. Earth dist.	10485 Jan 13 11:26	5° $\approx$ 05'52	0.63218 AU	minimum elong	10485 Dec 30 06:01	15° $\mathcal{Z}$ 14'06	3°06'50
inferior conj	10485 Jan 16 05:13	2° $\approx$ 22'48	-1°54'36	morning rise	10486 Jan 06 10:31	10° $\mathcal{Z}$ 32'54	
minimum elong	10485 Jan 16 08:57	2° $\approx$ 13'32	1°52'37	direct	10486 Jan 08 14:35	10° $\mathcal{Z}$ 13'22	
	10485 Jan 18 17:18	30° $\mathcal{R}$ 8		asc. node	10486 Jan 08 21:27	10° $\mathcal{Z}$ 13'43	
asc. node	10485 Jan 22 00:19	27° $\mathcal{Z}$ 37'57		morning max el	10486 Jan 15 16:33	13° $\mathcal{Z}$ 47'08	17°54'23
morning rise	10485 Jan 23 02:36	27° $\mathcal{Z}$ 08'32			10486 Jan 26 17:28	0° $\approx$	
direct	10485 Jan 25 10:57	26° $\mathcal{Z}$ 42'12		morning set	10486 Jan 31 07:51	8° $\approx$ 17'50	
	10485 Jan 31 22:40	0° $\approx$		superior conj	10486 Feb 10 20:47	27° $\approx$ 09'00	0°05'59
morning max el	10485 Feb 01 00:41	0° $\approx$ 04'56	17°47'07	minimum elong	10486 Feb 10 21:20	27° $\approx$ 11'23	0°06'13
morning set	10485 Feb 17 06:34	24° $\approx$ 56'03		behind sun begin	10486 Feb 10 13:39	26° $\approx$ 38'03	
	10485 Feb 20 04:49	0° $\mathcal{H}$		behind sun end	10486 Feb 11 05:01	27° $\approx$ 44'39	
desc. node	10485 Feb 24 18:48	7° $\mathcal{H}$ 49'47		desc. node	10486 Feb 11 15:35	28° $\approx$ 30'13	
superior conj	10485 Mar 01 12:13	15° $\mathcal{H}$ 43'08	-0°34'55		10486 Feb 12 12:29	0° $\mathcal{H}$	
minimum elong	10485 Mar 01 08:34	15° $\mathcal{H}$ 28'07	0°34'13	max. Earth dist.	10486 Feb 18 07:51	9° $\mathcal{H}$ 44'21	1.42825 AU
max. Earth dist.	10485 Mar 07 17:21	25° $\mathcal{H}$ 47'53	1.44410 AU	evening rise	10486 Feb 24 14:31	19° $\mathcal{H}$ 50'05	
	10485 Mar 10 08:53	0° $\mathcal{Y}$			10486 Mar 03 04:27	0° $\mathcal{Y}$	
evening rise	10485 Mar 16 18:16	9° $\mathcal{Y}$ 57'06			10486 Mar 24 16:15	0° $\mathcal{B}$	
	10485 Mar 30 02:53	0° $\mathcal{B}$		evening max el	10486 Mar 28 21:24	4° $\mathcal{B}$ 41'04	22°04'30
evening max el	10485 Apr 15 02:19	20° $\mathcal{B}$ 57'01	20°49'55				

asc. node	10486 Apr 06 19:31	10°♄14'52		evening max el	10487 Mar 11 12:40	18°♃27'04	23°24'35
retrograde	10486 Apr 07 08:09	10°♄16'14		retrograde	10487 Mar 22 03:16	24°♃43'02	
evening set	10486 Apr 11 22:26	8°♄23'10		asc. node	10487 Mar 24 16:45	24°♃11'38	
inferior conj	10486 Apr 17 05:44	2°♄03'00	2°47'29	evening set	10487 Mar 27 05:00	22°♃35'50	
minimum elong	10486 Apr 17 03:47	2°♄09'45	2°46'51	min. Earth dist.	10487 Apr 01 01:50	16°♃52'56	0.68553 AU
min. Earth dist.	10486 Apr 17 05:03	2°♄05'20	0.68617 AU	inferior conj	10487 Apr 01 14:41	16°♃08'45	2°17'37
	10486 Apr 18 17:26	30°♄		minimum elong	10487 Apr 01 12:29	16°♃16'18	2°16'54
morning rise	10486 Apr 22 09:00	25°♃51'18		morning rise	10487 Apr 06 19:55	10°♃03'05	
direct	10486 Apr 27 04:44	23°♃48'04		direct	10487 Apr 11 02:17	8°♃21'27	
morning max el	10486 May 06 17:13	29°♃23'35	22°16'56	morning max el	10487 Apr 19 10:05	13°♃07'47	20°54'42
	10486 May 07 07:30	0°♄		desc. node	10487 Apr 27 13:13	22°♃51'15	
desc. node	10486 May 10 16:24	3°♄45'43			10487 May 02 17:01	0°♄	
	10486 May 29 14:53	0°♄		morning set	10487 May 19 14:57	25°♄22'27	
morning set	10486 Jun 09 02:20	16°♄23'52			10487 May 22 13:34	0°♄	
max. Earth dist.	10486 Jun 14 07:11	24°♄59'13	1.40990 AU	max. Earth dist.	10487 May 27 11:47	7°♄53'42	1.43017 AU
	10486 Jun 17 05:55	0°♄					
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minimum elong	10486 Jun 22 08:04	8°♄55'37	1°35'35	minimum elong	10487 Jun 03 16:47	19°♄50'26	2°00'53
evening rise	10486 Jul 02 09:57	27°♄28'34			10487 Jun 09 14:26	0°♄	
asc. node	10486 Jul 03 18:10	29°♄58'55		evening rise	10487 Jun 15 07:36	10°♄06'36	
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evening max el	10486 Jul 18 10:45	23°♄05'51	18°17'59		10487 Jun 27 01:15	0°♄	
retrograde	10486 Jul 25 18:17	26°♄47'02		evening max el	10487 Jul 01 22:48	6°♄07'00	18°04'43
evening set	10486 Jul 27 23:06	26°♄27'45		retrograde	10487 Jul 08 13:39	9°♄30'35	
inferior conj	10486 Aug 04 08:06	21°♄48'06	0°41'26	evening set	10487 Jul 11 02:23	9°♄00'44	
minimum elong	10486 Aug 04 09:29	21°♄45'11	0°40'34	inferior conj	10487 Jul 17 18:07	4°♄01'19	1°53'18
desc. node	10486 Aug 06 15:27	19°♄51'23		minimum elong	10487 Jul 17 20:52	3°♄54'39	1°52'01
min. Earth dist.	10486 Aug 07 16:45	18°♄59'51	0.58756 AU	min. Earth dist.	10487 Jul 20 22:04	0°♄58'11	0.61019 AU
morning rise	10486 Aug 11 16:26	16°♄15'34			10487 Jul 22 00:06	30°♄	
direct	10486 Aug 17 21:57	14°♄31'15		morning rise	10487 Jul 24 12:42	28°♄03'34	
morning max el	10486 Sep 01 07:03	22°♄16'48	27°23'49	desc. node	10487 Jul 24 12:38	28°♄03'41	
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	10486 Sep 26 18:32	0°♄			10487 Aug 10 02:11	0°♄	
asc. node	10486 Sep 29 18:33	5°♄57'26		morning max el	10487 Aug 14 10:06	3°♄50'04	27°55'15
morning set	10486 Oct 02 07:25	11°♄13'04			10487 Sep 02 19:10	0°♄	
				morning set	10487 Sep 16 10:51	25°♄27'24	
superior conj	10486 Oct 09 07:32	26°♄31'09	1°22'17	asc. node	10487 Sep 16 15:20	25°♄50'39	
minimum elong	10486 Oct 09 05:27	26°♄19'38	1°22'14		10487 Sep 18 14:50	0°♄	
max. Earth dist.	10486 Oct 08 23:10	25°♄44'39	1.31450 AU	max. Earth dist.	10487 Sep 22 07:11	7°♄57'56	1.31668 AU
	10486 Oct 10 21:03	0°♄					
evening rise	10486 Oct 16 01:32	11°♄21'21		superior conj	10487 Sep 23 18:14	11°♄10'58	1°05'44
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desc. node	10486 Nov 02 13:09	13°♄14'16		evening rise	10487 Sep 30 11:51	25°♄58'54	
evening max el	10486 Nov 14 07:45	27°♄38'08	26°27'58		10487 Oct 02 09:14	0°♄	
	10486 Nov 17 00:50	0°♄		desc. node	10487 Oct 20 10:22	1°♄04'21	
retrograde	10486 Nov 28 06:06	4°♄44'35		evening max el	10487 Oct 27 00:17	8°♄30'44	25°09'00
evening set	10486 Dec 04 20:46	2°♄57'16		retrograde	10487 Nov 09 20:58	15°♄28'45	
min. Earth dist.	10486 Dec 08 21:18	0°♄22'00	0.59067 AU	evening set	10487 Nov 15 14:46	14°♄14'03	
	10486 Dec 09 09:10	30°♄		min. Earth dist.	10487 Nov 20 12:16	11°♄32'47	0.57086 AU
inferior conj	10486 Dec 12 01:27	27°♄56'50	-4°22'49	inferior conj	10487 Nov 23 07:33	9°♄41'08	-5°21'20
minimum elong	10486 Dec 12 09:24	27°♄41'37	4°20'05	minimum elong	10487 Nov 23 13:56	9°♄30'32	5°19'52
morning rise	10486 Dec 20 00:42	23°♄23'32		morning rise	10487 Dec 01 15:22	5°♄29'57	
direct	10486 Dec 22 04:12	23°♄07'26		direct	10487 Dec 03 23:59	5°♄13'47	
asc. node	10486 Dec 26 18:32	24°♄25'44		morning max el	10487 Dec 13 04:13	9°♄38'13	19°09'25
morning max el	10486 Dec 30 03:01	27°♄01'47	18°21'12	asc. node	10487 Dec 13 15:33	10°♄06'07	
	10487 Jan 01 18:42	0°♄			10487 Dec 26 13:19	0°♄	
morning set	10487 Jan 14 22:45	22°♄16'27		morning set	10487 Dec 29 23:01	6°♄39'44	
	10487 Jan 19 00:04	0°♄					
superior conj	10487 Jan 24 03:57	9°♄37'57	0°40'28	superior conj	10488 Jan 07 04:59	22°♄56'36	1°06'53
minimum elong	10487 Jan 24 06:38	9°♄50'15	0°40'29	minimum elong	10488 Jan 07 08:03	23°♄11'27	1°06'59
desc. node	10487 Jan 29 12:23	19°♄12'08			10488 Jan 10 22:17	0°♄	
max. Earth dist.	10487 Jan 31 17:09	23°♄00'05	1.40817 AU	max. Earth dist.	10488 Jan 13 23:11	5°♄33'56	1.38625 AU
	10487 Feb 04 21:11	0°♄		desc. node	10488 Jan 16 09:14	9°♄52'10	
evening rise	10487 Feb 05 05:31	0°♄34'17		evening rise	10488 Jan 17 18:07	12°♄15'25	
	10487 Feb 24 14:56	0°♄			10488 Jan 28 14:42	0°♄	
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

































































































































































































































































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retrograde	10488 Mar 04 18:32	9°♿04'47		retrograde	10489 Feb 16 05:00	23°♿15'57	
evening set	10488 Mar 10 08:22	6°♿45'17		evening set	10489 Feb 22 06:54	20°♿47'03	
asc. node	10488 Mar 10 14:00	6°♿33'02		asc. node	10489 Feb 25 11:14	17°♿32'30	
min. Earth dist.	10488 Mar 14 21:18	1°♿37'24	0.68066 AU	min. Earth dist.	10489 Feb 26 13:09	16°♿14'07	0.67176 AU
inferior conj	10488 Mar 15 21:57	0°♿15'33	1°38'26	inferior conj	10489 Feb 28 01:38	14°♿19'41	0°50'05
minimum elong	10488 Mar 15 19:58	0°♿22'08	1°37'48	minimum elong	10489 Feb 28 00:25	14°♿23'30	0°49'48
	10488 Mar 16 02:38	30°♿		morning rise	10489 Mar 05 18:31	8°♿30'47	
morning rise	10488 Mar 21 07:45	24°♿17'19		direct	10489 Mar 09 00:51	7°♿29'57	
direct	10488 Mar 25 01:30	22°♿57'03		morning max el	10489 Mar 15 18:27	11°♿09'04	18°50'23
morning max el	10488 Apr 01 10:25	27°♿03'30	19°44'52		10489 Mar 29 15:40	0°♿	
	10488 Apr 04 03:25	0°♿		desc. node	10489 Mar 31 06:46	2°♿30'19	
desc. node	10488 Apr 13 10:00	12°♿28'58		morning set	10489 Apr 06 22:29	12°♿50'22	
greatest brilliancy	10488 Apr 14 06:12	13°♿42'32	-0.6m		10489 Apr 17 22:32	0°♿	
	10488 Apr 25 02:17	0°♿		max. Earth dist.	10489 Apr 21 16:56	5°♿53'33	1.45465 AU
morning set	10488 Apr 27 13:53	3°♿48'40					
max. Earth dist.	10488 May 08 23:30	21°♿36'19	1.44567 AU	superior conj	10489 Apr 23 08:17	8°♿27'53	-2°05'52
				minimum elong	10489 Apr 23 02:05	8°♿03'30	2°05'51
superior conj	10488 May 13 19:46	29°♿21'17	-2°12'46		10489 May 06 21:29	0°♿	
minimum elong	10488 May 13 20:56	29°♿26'01	2°13'11	evening rise	10489 May 08 12:37	2°♿37'42	
	10488 May 14 05:21	0°♿		asc. node	10489 May 24 09:19	27°♿24'30	
evening rise	10488 May 27 09:47	21°♿51'42			10489 May 26 08:42	0°♿	
	10488 Jun 01 05:11	0°♿		evening max el	10489 May 29 01:14	3°♿02'15	18°34'00
asc. node	10488 Jun 06 12:12	8°♿41'55		retrograde	10489 Jun 04 13:19	6°♿34'13	
evening max el	10488 Jun 14 12:38	19°♿28'21	18°10'18	evening set	10489 Jun 07 17:54	5°♿36'39	
retrograde	10488 Jun 20 21:22	22°♿49'11		inferior conj	10489 Jun 13 10:33	0°♿02'01	3°07'22
evening set	10488 Jun 23 18:02	22°♿06'13		minimum elong	10489 Jun 13 12:02	29°♿57'31	3°06'41
inferior conj	10488 Jun 29 20:16	16°♿48'22	2°40'36		10489 Jun 13 11:13	30°♿	
minimum elong	10488 Jun 29 22:45	16°♿41'32	2°39'34	min. Earth dist.	10489 Jun 15 12:00	27°♿32'56	0.65162 AU
min. Earth dist.	10488 Jul 02 12:26	13°♿53'18	0.63227 AU	morning rise	10489 Jun 19 05:17	23°♿42'38	
morning rise	10488 Jul 06 01:51	10°♿35'52		direct	10489 Jun 25 18:19	20°♿59'30	
desc. node	10488 Jul 10 09:49	8°♿21'20		desc. node	10489 Jun 27 06:54	21°♿07'26	
direct	10488 Jul 12 19:03	8°♿02'33		morning max el	10489 Jul 09 04:35	28°♿54'04	27°07'42
morning max el	10488 Jul 26 18:03	16°♿05'04	27°48'26		10489 Jul 10 06:06	0°♿	
	10488 Aug 07 04:38	0°♿			10489 Aug 01 00:58	0°♿	
	10488 Aug 25 12:27	0°♿		morning set	10489 Aug 13 18:29	22°♿40'57	
morning set	10488 Aug 30 07:27	9°♿18'56			10489 Aug 17 11:19	0°♿	
asc. node	10488 Sep 02 12:09	15°♿51'54		max. Earth dist.	10489 Aug 18 04:20	1°♿26'19	1.33615 AU
max. Earth dist.	10488 Sep 04 10:00	19°♿53'45	1.32387 AU	asc. node	10489 Aug 20 09:00	5°♿57'18	
superior conj	10488 Sep 07 01:58	25°♿37'42	0°44'08	superior conj	10489 Aug 22 04:37	9°♿45'48	0°17'53
minimum elong	10488 Sep 07 00:05	25°♿27'31	0°43'40	minimum elong	10489 Aug 22 03:43	9°♿41'04	0°17'28
	10488 Sep 09 02:07	0°♿		evening rise	10489 Aug 29 10:06	25°♿09'25	
evening rise	10488 Sep 13 23:19	10°♿36'36			10489 Aug 31 17:48	0°♿	
	10488 Sep 23 19:15	0°♿		evening max el	10489 Sep 19 00:43	28°♿55'29	21°52'08
desc. node	10488 Oct 06 07:37	17°♿36'15			10489 Sep 20 04:09	0°♿	
evening max el	10488 Oct 07 11:19	18°♿45'46	23°31'21	desc. node	10489 Sep 23 04:54	2°♿22'26	
retrograde	10488 Oct 20 22:50	25°♿29'08		retrograde	10489 Oct 01 13:42	5°♿09'47	
evening set	10488 Oct 25 08:31	24°♿46'58		evening set	10489 Oct 04 12:52	4°♿50'02	
min. Earth dist.	10488 Oct 31 21:22	21°♿41'25	0.55531 AU	min. Earth dist.	10489 Oct 13 04:25	1°♿03'37	0.54695 AU
inferior conj	10488 Nov 02 17:30	20°♿36'19	-5°45'31	inferior conj	10489 Oct 13 12:40	0°♿52'04	-5°16'12
minimum elong	10488 Nov 02 17:24	20°♿36'28	5°45'09	minimum elong	10489 Oct 13 04:49	1°♿03'03	5°14'38
morning rise	10488 Nov 11 04:07	16°♿43'18			10489 Oct 15 02:11	30°♿	
direct	10488 Nov 14 00:43	16°♿23'16		morning rise	10489 Oct 21 22:06	27°♿04'36	
morning max el	10488 Nov 24 16:44	21°♿26'01	20°20'28	direct	10489 Oct 25 11:17	26°♿37'01	
asc. node	10488 Nov 29 12:32	26°♿59'02			10489 Nov 03 18:51	0°♿	
	10488 Dec 01 15:12	0°♿		morning max el	10489 Nov 06 15:46	2°♿23'14	21°52'49
morning set	10488 Dec 13 05:23	21°♿18'13		asc. node	10489 Nov 16 09:29	14°♿48'57	
	10488 Dec 17 10:36	0°♿			10489 Nov 24 16:42	0°♿	
				morning set	10489 Nov 27 15:24	6°♿04'37	
superior conj	10488 Dec 20 19:12	6°♿51'45	1°25'12				
minimum elong	10488 Dec 20 21:38	7°♿04'03	1°25'28	superior conj	10489 Dec 04 18:47	21°♿12'28	1°35'57
max. Earth dist.	10488 Dec 26 06:31	17°♿38'14	1.36484 AU	minimum elong	10489 Dec 04 20:06	21°♿19'25	1°36'23
evening rise	10488 Dec 30 02:22	24°♿47'18		max. Earth dist.	10489 Dec 08 19:29	29°♿31'42	1.34603 AU
desc. node	10489 Jan 02 06:10	0°♿			10489 Dec 09 01:05	0°♿	
	10489 Jan 02 00:10	0°♿		evening rise	10489 Dec 13 02:43	8°♿00'37	
	10489 Jan 21 05:03	0°♿		desc. node	10489 Dec 20 03:09	20°♿50'08	

	10489 Dec 25 14:47	0°♊		superior conj	10490 Nov 19 00:42	5°♊49'56	1°39'52
evening max el	10490 Jan 17 05:16	29°♊48'03	26°50'52	minimum elong	10490 Nov 19 00:49	5°♊50'35	1°40'19
	10490 Jan 17 10:15	0°♋		max. Earth dist.	10490 Nov 21 16:13	11°♊30'30	1.33117 AU
retrograde	10490 Jan 30 09:51	7°♋09'07		evening rise	10490 Nov 26 15:33	21°♊46'29	
evening set	10490 Feb 05 22:44	4°♋35'13			10490 Nov 30 21:15	0°♌	
min. Earth dist.	10490 Feb 09 23:09	0°♋36'34	0.65905 AU	desc. node	10490 Dec 07 00:12	10°♌57'59	
	10490 Feb 10 11:53	30°♌			10490 Dec 19 10:38	0°♍	
inferior conj	10490 Feb 11 23:32	28°♌16'00	-0°07'22	evening max el	10490 Dec 30 17:57	13°♌13'06	27°24'18
minimum elong	10490 Feb 11 23:44	28°♌15'26	0°06'57	retrograde	10491 Jan 13 08:34	20°♌36'04	
transit middle	10490 Feb 11 23:44	28°♌15'26	0°06'57	evening set	10491 Jan 20 05:36	18°♌03'48	
transit begin	10490 Feb 11 21:04	28°♌23'12		min. Earth dist.	10491 Jan 24 01:17	14°♌37'16	0.64285 AU
transit end	10490 Feb 12 02:23	28°♌07'41		inferior conj	10491 Jan 26 13:11	11°♌59'03	-1°13'18
asc. node	10490 Feb 12 08:29	27°♌50'02		minimum elong	10491 Jan 26 15:28	11°♌53'00	1°11'57
morning rise	10490 Feb 18 01:55	22°♌38'35		asc. node	10491 Jan 30 05:38	8°♌25'02	
direct	10490 Feb 20 22:12	21°♌54'10		morning rise	10491 Feb 02 03:12	6°♌35'41	
morning max el	10490 Feb 27 08:24	25°♌18'29	18°12'20	direct	10491 Feb 04 15:12	6°♌03'57	
	10490 Mar 03 08:42	0°♍		morning max el	10491 Feb 11 01:36	9°♌24'33	17°51'17
morning set	10490 Mar 18 09:28	23°♍12'23			10491 Feb 25 02:16	0°♎	
desc. node	10490 Mar 18 03:31	22°♍48'26		morning set	10491 Feb 28 01:08	4°♎58'41	
	10490 Mar 22 14:52	0°♏		desc. node	10491 Mar 05 00:18	13°♎18'42	
superior conj	10490 Apr 02 14:36	17°♏24'40	-1°39'13	superior conj	10491 Mar 13 09:19	27°♎01'53	-0°59'39
minimum elong	10490 Apr 02 05:05	16°♏47'19	1°38'24	minimum elong	10491 Mar 13 02:48	26°♎35'40	0°58'43
max. Earth dist.	10490 Apr 04 12:47	20°♏25'31	1.45626 AU		10491 Mar 15 05:45	0°♐	
	10490 Apr 10 16:00	0°♑		max. Earth dist.	10491 Mar 18 07:57	4°♐54'37	1.45050 AU
evening rise	10490 Apr 18 16:27	12°♑29'17		evening rise	10491 Mar 29 05:39	21°♐51'41	
	10490 Apr 30 00:16	0°♒			10491 Apr 03 13:45	0°♑	
greatest brilliancy	10490 Apr 30 08:28	0°♒31'03	-0.7m	greatest brilliancy	10491 Apr 13 04:19	14°♑18'55	-0.6m
asc. node	10490 May 11 06:29	15°♒28'43			10491 Apr 25 04:29	0°♓	
evening max el	10490 May 12 10:04	16°♒41'42	19°14'56	evening max el	10491 Apr 25 13:38	0°♓23'30	20°11'28
retrograde	10490 May 19 09:59	20°♓37'29		asc. node	10491 Apr 28 03:39	2°♓42'45	
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inferior conj	10490 May 28 09:23	13°♓34'48	3°17'43	evening set	10491 May 07 06:28	3°♓24'50	
minimum elong	10490 May 28 09:41	13°♓33'50	3°17'13		10491 May 10 13:59	30°♈	
min. Earth dist.	10490 May 29 19:47	11°♓43'10	0.66705 AU	inferior conj	10491 May 12 13:53	27°♈21'41	3°14'41
morning rise	10490 Jun 02 20:04	7°♓13'57		minimum elong	10491 May 12 13:06	27°♈24'21	3°14'13
direct	10490 Jun 09 00:20	4°♓31'44		min. Earth dist.	10491 May 13 10:00	26°♈13'16	0.67807 AU
desc. node	10490 Jun 14 03:56	6°♓02'32		morning rise	10491 May 17 19:27	21°♈02'47	
morning max el	10490 Jun 21 15:18	12°♓04'30	26°00'52	direct	10491 May 23 12:08	18°♈30'42	
	10490 Jul 06 00:01	0°♉		desc. node	10491 Jun 01 00:55	22°♈37'24	
	10490 Jul 24 16:57	0°♊		morning max el	10491 Jun 04 00:59	25°♈26'00	24°37'29
morning set	10490 Jul 27 16:23	5°♊24'11			10491 Jun 08 04:39	0°♋	
max. Earth dist.	10490 Jul 31 12:08	12°♊36'59	1.35315 AU		10491 Jun 29 12:08	0°♌	
superior conj	10490 Aug 05 23:36	23°♊28'21	-0°12'20	morning set	10491 Jul 09 20:33	17°♌16'24	
minimum elong	10490 Aug 06 00:20	23°♊32'07	0°12'31	max. Earth dist.	10491 Jul 13 11:05	23°♌43'00	1.37403 AU
behind sun begin	10490 Aug 05 20:29	23°♊12'34			10491 Jul 16 20:36	0°♍	
behind sun end	10490 Aug 06 04:11	23°♊51'41		superior conj	10491 Jul 20 07:43	6°♍37'09	-0°45'07
asc. node	10490 Aug 07 05:52	26°♋02'49		minimum elong	10491 Jul 20 10:40	6°♍51'25	0°45'00
	10490 Aug 09 03:54	0°♎		asc. node	10491 Jul 25 02:45	16°♋04'20	
evening rise	10490 Aug 13 18:05	9°♎31'20		evening rise	10491 Jul 28 20:51	23°♋35'15	
	10490 Aug 24 15:51	0°♏			10491 Aug 01 02:48	0°♐	
evening max el	10490 Sep 01 01:05	9°♏35'11	20°25'59	evening max el	10491 Aug 14 15:16	21°♐00'51	19°19'43
desc. node	10490 Sep 10 02:10	14°♏53'35		retrograde	10491 Aug 23 23:37	25°♐39'28	
retrograde	10490 Sep 12 02:04	15°♏04'01		evening set	10491 Aug 25 19:46	25°♐29'27	
evening set	10490 Sep 14 03:10	14°♏53'31		desc. node	10491 Aug 27 23:26	24°♐54'04	
inferior conj	10490 Sep 23 05:42	10°♏56'28	-3°52'44	inferior conj	10491 Sep 03 10:40	21°♐21'06	-2°00'30
minimum elong	10490 Sep 22 20:06	11°♏10'26	3°49'40	minimum elong	10491 Sep 03 05:18	21°♐29'53	1°58'33
min. Earth dist.	10490 Sep 24 13:04	10°♏10'44	0.54776 AU	min. Earth dist.	10491 Sep 06 01:15	19°♐38'40	0.55789 AU
morning rise	10490 Oct 01 12:29	6°♏53'21		morning rise	10491 Sep 11 12:08	16°♐45'19	
direct	10490 Oct 05 20:02	6°♏13'20		direct	10491 Sep 16 15:25	15°♐45'07	
morning max el	10490 Oct 19 05:27	12°♏43'13	23°38'37	morning max el	10491 Sep 30 17:03	22°♐51'51	25°23'00
	10490 Nov 01 07:38	0°♑			10491 Oct 07 02:13	0°♒	
asc. node	10490 Nov 03 06:23	3°♑22'30		asc. node	10491 Oct 21 03:14	22°♒28'10	
morning set	10490 Nov 12 03:05	20°♑53'23			10491 Oct 24 22:11	0°♓	
	10490 Nov 16 08:17	0°♊		morning set	10491 Oct 27 14:37	5°♓38'22	

superior conj	10491 Nov 03 10:26	20° $\mathbb{M}$ 35'35	1°37'32		10492 Sep 30 15:37	0° $\underline{\mathbb{A}}$	
minimum elong	10491 Nov 03 09:29	20° $\mathbb{M}$ 30'17	1°37'52	asc. node	10492 Oct 07 00:04	11° $\underline{\mathbb{A}}$ 57'37	
max. Earth dist.	10491 Nov 04 20:05	23° $\mathbb{M}$ 40'37	1.32095 AU	morning set	10492 Oct 11 00:25	20° $\underline{\mathbb{A}}$ 15'21	
	10491 Nov 07 18:03	0° $\mathbb{A}$			10492 Oct 15 11:48	0° $\mathbb{M}$	
evening rise	10491 Nov 10 13:33	5° $\mathbb{A}$ 55'27					
	10491 Nov 23 11:07	0° $\mathbb{B}$		superior conj	10492 Oct 17 21:59	5° $\mathbb{M}$ 23'21	1°29'27
desc. node	10491 Nov 23 21:17	0° $\mathbb{B}$ 42'00		minimum elong	10492 Oct 17 20:13	5° $\mathbb{M}$ 13'30	1°29'33
evening max el	10491 Dec 13 04:06	26° $\mathbb{B}$ 08'15	27°28'54	max. Earth dist.	10492 Oct 18 04:32	5° $\mathbb{M}$ 59'47	1.31553 AU
	10491 Dec 17 20:10	0° $\approx$		evening rise	10492 Oct 24 18:05	20° $\mathbb{M}$ 20'36	
retrograde	10491 Dec 27 00:09	3° $\approx$ 26'15			10492 Oct 29 11:25	0° $\mathbb{A}$	
evening set	10492 Jan 03 00:38	1° $\approx$ 04'12		desc. node	10492 Nov 09 18:25	19° $\mathbb{A}$ 52'47	
	10492 Jan 04 11:57	30° $\mathbb{R}$ $\mathbb{B}$			10492 Nov 16 21:45	0° $\mathbb{B}$	
min. Earth dist.	10492 Jan 06 17:50	28° $\mathbb{B}$ 05'06	0.62375 AU	evening max el	10492 Nov 24 09:10	8° $\mathbb{B}$ 21'11	27°00'01
inferior conj	10492 Jan 09 15:36	25° $\mathbb{B}$ 20'36	-2°26'06	retrograde	10492 Dec 08 07:09	15° $\mathbb{B}$ 31'03	
minimum elong	10492 Jan 09 20:28	25° $\mathbb{B}$ 09'07	2°23'44	evening set	10492 Dec 15 04:10	13° $\mathbb{B}$ 28'43	
morning rise	10492 Jan 16 18:43	20° $\mathbb{B}$ 14'05		min. Earth dist.	10492 Dec 18 23:42	10° $\mathbb{B}$ 48'24	0.60291 AU
asc. node	10492 Jan 17 02:46	20° $\mathbb{B}$ 07'51		inferior conj	10492 Dec 22 03:25	8° $\mathbb{B}$ 11'53	-3°41'29
direct	10492 Jan 19 00:42	19° $\mathbb{B}$ 51'13		minimum elong	10492 Dec 22 10:40	7° $\mathbb{B}$ 56'50	3°38'35
morning max el	10492 Jan 25 18:52	23° $\mathbb{B}$ 17'52	17°47'51	morning rise	10492 Dec 29 19:47	3° $\mathbb{B}$ 25'23	
	10492 Jan 31 02:22	0° $\approx$		direct	10492 Dec 31 23:02	3° $\mathbb{B}$ 07'42	
morning set	10492 Feb 10 16:02	17° $\approx$ 51'19		asc. node	10493 Jan 02 23:52	3° $\mathbb{B}$ 24'25	
	10492 Feb 17 14:02	0° $\mathbb{H}$		morning max el	10493 Jan 08 08:48	6° $\mathbb{B}$ 49'16	18°03'11
desc. node	10492 Feb 19 21:04	3° $\mathbb{H}$ 56'25			10493 Jan 23 04:09	0° $\approx$	
				morning set	10493 Jan 23 23:43	1° $\approx$ 30'47	
superior conj	10492 Feb 22 03:22	7° $\mathbb{H}$ 46'28	-0°17'01				
minimum elong	10492 Feb 22 01:43	7° $\mathbb{H}$ 39'31	0°16'32	superior conj	10493 Feb 02 22:00	19° $\approx$ 40'14	0°21'33
max. Earth dist.	10492 Feb 29 00:24	19° $\mathbb{H}$ 06'08	1.43801 AU	minimum elong	10493 Feb 02 23:42	19° $\approx$ 47'50	0°21'39
	10492 Mar 06 21:32	0° $\mathbb{Y}$		desc. node	10493 Feb 05 17:51	24° $\approx$ 37'52	
evening rise	10492 Mar 07 19:05	1° $\mathbb{Y}$ 23'38			10493 Feb 08 21:04	0° $\mathbb{H}$	
	10492 Mar 27 03:23	0° $\mathbb{B}$		max. Earth dist.	10493 Feb 10 12:47	2° $\mathbb{H}$ 46'51	1.42017 AU
evening max el	10492 Apr 07 11:41	14° $\mathbb{B}$ 06'59	21°20'44	evening rise	10493 Feb 15 22:34	11° $\mathbb{H}$ 37'09	
asc. node	10492 Apr 14 00:49	18° $\mathbb{B}$ 52'30			10493 Feb 27 21:45	0° $\mathbb{Y}$	
retrograde	10492 Apr 16 06:57	19° $\mathbb{B}$ 17'26		evening max el	10493 Mar 21 05:02	27° $\mathbb{Y}$ 52'19	22°38'22
evening set	10492 Apr 20 14:57	17° $\mathbb{B}$ 33'20			10493 Mar 23 11:33	0° $\mathbb{B}$	
inferior conj	10492 Apr 25 21:42	11° $\mathbb{B}$ 18'50	3°00'22	retrograde	10493 Mar 31 03:32	3° $\mathbb{B}$ 44'51	
minimum elong	10492 Apr 25 20:05	11° $\mathbb{B}$ 24'27	2°59'47	asc. node	10493 Mar 31 22:01	3° $\mathbb{B}$ 41'58	
min. Earth dist.	10492 Apr 26 04:26	10° $\mathbb{B}$ 55'26	0.68452 AU	evening set	10493 Apr 04 22:38	1° $\mathbb{B}$ 45'40	
morning rise	10492 May 01 01:01	5° $\mathbb{B}$ 04'05			10493 Apr 06 17:23	30° $\mathbb{R}$ $\mathbb{Y}$	
direct	10492 May 06 04:39	2° $\mathbb{B}$ 48'53		inferior conj	10493 Apr 10 06:46	25° $\mathbb{Y}$ 22'23	2°35'57
morning max el	10492 May 16 10:51	8° $\mathbb{B}$ 54'37	23°07'43	minimum elong	10493 Apr 10 04:40	25° $\mathbb{Y}$ 29'41	2°35'16
desc. node	10492 May 17 21:51	10° $\mathbb{B}$ 26'02		min. Earth dist.	10493 Apr 10 00:54	25° $\mathbb{Y}$ 42'47	0.68646 AU
	10492 Jun 01 23:55	0° $\mathbb{I}$		morning rise	10493 Apr 15 10:34	19° $\mathbb{Y}$ 13'14	
morning set	10492 Jun 20 01:49	28° $\mathbb{I}$ 04'30		direct	10493 Apr 20 00:40	17° $\mathbb{Y}$ 18'54	
	10492 Jun 21 05:24	0° $\mathbb{E}$		morning max el	10493 Apr 29 00:09	22° $\mathbb{Y}$ 32'09	21°40'41
max. Earth dist.	10492 Jun 24 07:42	5° $\mathbb{E}$ 16'30	1.39691 AU	desc. node	10493 May 04 18:41	29° $\mathbb{Y}$ 07'54	
					10493 May 05 11:10	0° $\mathbb{B}$	
superior conj	10492 Jul 02 01:07	19° $\mathbb{E}$ 03'20	-1°18'08		10493 May 26 07:18	0° $\mathbb{I}$	
minimum elong	10492 Jul 02 06:21	19° $\mathbb{E}$ 27'26	1°17'51	morning set	10493 May 31 04:30	7° $\mathbb{I}$ 39'51	
	10492 Jul 07 20:56	0° $\mathbb{Q}$		max. Earth dist.	10493 Jun 06 08:52	17° $\mathbb{I}$ 41'47	1.41901 AU
asc. node	10492 Jul 10 23:39	5° $\mathbb{Q}$ 58'08					
evening rise	10492 Jul 11 15:23	7° $\mathbb{Q}$ 13'41		superior conj	10493 Jun 13 23:11	0° $\mathbb{E}$ 35'47	-1°47'34
	10492 Jul 24 22:17	0° $\mathbb{M}$		minimum elong	10493 Jun 14 05:37	1° $\mathbb{E}$ 03'48	1°47'27
evening max el	10492 Jul 27 17:05	3° $\mathbb{M}$ 10'58	18°34'39		10493 Jun 13 14:58	0° $\mathbb{E}$	
retrograde	10492 Aug 04 15:05	7° $\mathbb{M}$ 08'36		evening rise	10493 Jun 24 21:55	20° $\mathbb{E}$ 16'40	
evening set	10492 Aug 06 15:54	6° $\mathbb{M}$ 53'46		asc. node	10493 Jun 27 20:36	25° $\mathbb{E}$ 39'25	
desc. node	10492 Aug 13 20:41	2° $\mathbb{M}$ 55'22			10493 Jun 30 06:37	0° $\mathbb{Q}$	
inferior conj	10492 Aug 14 12:01	2° $\mathbb{M}$ 26'10	-0°11'47	evening max el	10493 Jul 11 02:27	15° $\mathbb{Q}$ 55'39	18°09'59
minimum elong	10492 Aug 14 11:33	2° $\mathbb{M}$ 27'04	0°11'53	retrograde	10493 Jul 18 01:22	19° $\mathbb{Q}$ 27'21	
transit middle	10492 Aug 14 11:33	2° $\mathbb{M}$ 27'04	0°11'53	evening set	10493 Jul 20 09:38	19° $\mathbb{Q}$ 03'49	
transit begin	10492 Aug 14 09:06	2° $\mathbb{M}$ 31'45		inferior conj	10493 Jul 27 10:50	14° $\mathbb{Q}$ 15'19	1°15'07
transit end	10492 Aug 14 13:59	2° $\mathbb{M}$ 22'22		minimum elong	10493 Jul 27 13:03	14° $\mathbb{Q}$ 10'20	1°13'57
	10492 Aug 17 16:43	30° $\mathbb{R}$ $\mathbb{Q}$		min. Earth dist.	10493 Jul 30 18:32	11° $\mathbb{Q}$ 18'10	0.59711 AU
min. Earth dist.	10492 Aug 17 18:24	29° $\mathbb{Q}$ 56'55	0.57540 AU	desc. node	10493 Jul 31 17:55	10° $\mathbb{Q}$ 29'57	
morning rise	10492 Aug 22 03:42	27° $\mathbb{Q}$ 13'17		morning rise	10493 Aug 03 13:24	8° $\mathbb{Q}$ 31'01	
direct	10492 Aug 28 01:12	25° $\mathbb{Q}$ 46'00		direct	10493 Aug 09 23:52	6° $\mathbb{Q}$ 34'19	
	10492 Sep 07 13:06	0° $\mathbb{M}$		morning max el	10493 Aug 24 08:07	14° $\mathbb{Q}$ 25'48	27°42'01
morning max el	10492 Sep 11 09:01	3° $\mathbb{M}$ 19'18	26°48'38		10493 Sep 05 21:02	0° $\mathbb{M}$	

	10493 Sep 23 00:37	0°♄		morning set	10494 Sep 09 07:33	18°♄44'21	
asc. node	10493 Sep 23 20:54	1°♄43'30		asc. node	10494 Sep 10 17:43	21°♄40'37	
morning set	10493 Sep 25 06:43	4°♄39'04			10494 Sep 14 15:34	0°♄	
max. Earth dist.	10493 Oct 01 13:57	18°♄18'34	1.31486 AU	max. Earth dist.	10494 Sep 14 20:22	0°♄26'01	1.31910 AU
superior conj	10493 Oct 02 09:30	20°♄07'07	1°15'54	superior conj	10494 Sep 16 19:10	4°♄41'37	0°57'10
minimum elong	10493 Oct 02 07:18	19°♄54'54	1°15'44	minimum elong	10494 Sep 16 17:01	4°♄29'47	0°56'46
	10493 Oct 06 20:31	0°♄		evening rise	10494 Sep 23 13:53	19°♄32'56	
evening rise	10493 Oct 09 02:51	4°♄54'59			10494 Sep 28 14:46	0°♄	
	10493 Oct 22 05:35	0°♄		desc. node	10494 Oct 14 12:51	25°♄37'08	
desc. node	10493 Oct 27 15:37	8°♄17'19			10494 Oct 18 13:20	0°♄	
evening max el	10493 Nov 06 06:29	19°♄42'51	25°57'36	evening max el	10494 Oct 18 19:49	0°♄15'38	24°28'44
retrograde	10493 Nov 20 04:11	26°♄45'12		retrograde	10494 Nov 01 13:45	7°♄09'17	
evening set	10493 Nov 26 11:44	25°♄11'08		evening set	10494 Nov 06 19:12	6°♄08'42	
min. Earth dist.	10493 Nov 30 19:10	22°♄35'49	0.58197 AU	min. Earth dist.	10494 Nov 12 06:53	3°♄19'31	0.56348 AU
inferior conj	10493 Dec 03 21:09	20°♄23'11	-4°50'27	inferior conj	10494 Nov 14 18:25	1°♄46'07	-5°37'08
minimum elong	10493 Dec 04 04:58	20°♄09'06	4°48'08	minimum elong	10494 Nov 14 22:37	1°♄39'31	5°36'18
morning rise	10493 Dec 12 00:39	15°♄59'19			10494 Nov 17 16:36	30°♄	
direct	10493 Dec 14 05:45	15°♄43'29		morning rise	10494 Nov 23 04:11	27°♄44'03	
asc. node	10493 Dec 20 20:56	18°♄15'58		direct	10494 Nov 25 17:05	27°♄26'47	
morning max el	10493 Dec 22 15:46	19°♄49'09	18°38'58		10494 Dec 02 23:22	0°♄	
	10493 Dec 30 06:13	0°♄		morning max el	10494 Dec 05 11:59	2°♄06'13	19°36'58
morning set	10494 Jan 07 19:07	15°♄42'06		asc. node	10494 Dec 07 17:58	4°♄29'20	
	10494 Jan 15 04:58	0°♄		morning set	10494 Dec 22 22:21	0°♄13'11	
					10494 Dec 22 19:43	0°♄	
superior conj	10494 Jan 16 13:26	2°♄32'49	0°52'41	superior conj	10494 Dec 30 20:40	16°♄09'13	1°15'36
minimum elong	10494 Jan 16 16:28	2°♄46'58	0°52'42	minimum elong	10494 Dec 30 23:34	16°♄23'28	1°15'46
desc. node	10494 Jan 23 14:41	15°♄19'51		max. Earth dist.	10495 Jan 06 02:57	28°♄06'56	1.37689 AU
max. Earth dist.	10494 Jan 23 20:58	15°♄47'20	1.39898 AU		10495 Jan 07 03:35	0°♄	
evening rise	10494 Jan 27 22:50	22°♄46'24		evening rise	10495 Jan 09 20:11	4°♄50'20	
	10494 Feb 01 08:19	0°♄		desc. node	10495 Jan 10 11:34	5°♄58'11	
	10494 Feb 21 20:16	0°♄			10495 Jan 25 08:23	0°♄	
evening max el	10494 Mar 03 19:26	11°♄40'24	23°58'44	evening max el	10495 Feb 14 08:41	25°♄29'53	25°15'21
retrograde	10494 Mar 14 21:05	18°♄11'01			10495 Feb 19 17:03	0°♄	
asc. node	10494 Mar 18 19:16	16°♄58'55		retrograde	10495 Feb 26 10:33	2°♄29'39	
evening set	10494 Mar 20 04:04	15°♄58'04		evening set	10495 Mar 04 05:37	0°♄05'24	
min. Earth dist.	10494 Mar 24 21:17	10°♄30'23	0.68402 AU		10495 Mar 04 08:09	30°♄	
inferior conj	10494 Mar 25 15:15	9°♄29'25	2°02'06	asc. node	10495 Mar 05 16:31	28°♄42'53	
minimum elong	10494 Mar 25 13:05	9°♄36'47	2°01'24	min. Earth dist.	10495 Mar 08 15:28	25°♄12'34	0.67739 AU
morning rise	10494 Mar 30 22:09	3°♄27'01		inferior conj	10495 Mar 09 21:15	23°♄35'48	1°19'03
direct	10494 Apr 03 23:03	1°♄54'41		minimum elong	10495 Mar 09 19:31	23°♄41'26	1°18'32
morning max el	10494 Apr 11 20:10	6°♄22'11	20°23'17	morning rise	10495 Mar 15 09:47	17°♄41'29	
desc. node	10494 Apr 21 15:29	18°♄28'40		direct	10495 Mar 18 22:26	16°♄30'00	
	10494 Apr 29 14:58	0°♄		morning max el	10495 Mar 26 00:01	20°♄23'25	19°19'42
morning set	10494 May 10 09:01	16°♄18'23			10495 Apr 02 19:21	0°♄	
	10494 May 19 02:02	0°♄		greatest brilliancy	10495 Apr 07 19:40	7°♄15'36	-0.7m
max. Earth dist.	10494 May 19 17:10	1°♄00'39	1.43752 AU	desc. node	10495 Apr 08 12:16	8°♄17'25	
superior conj	10494 May 25 21:57	11°♄06'43	-2°07'51	morning set	10495 Apr 19 09:08	24°♄51'40	
minimum elong	10494 May 26 02:22	11°♄25'01	2°08'08		10495 Apr 22 16:55	0°♄	
	10494 Jun 06 00:34	0°♄		max. Earth dist.	10495 May 02 07:19	14°♄59'02	1.45034 AU
evening rise	10494 Jun 07 11:55	2°♄33'52		superior conj	10495 May 05 21:00	20°♄38'08	-2°12'22
asc. node	10494 Jun 14 17:37	15°♄03'25		minimum elong	10495 May 05 19:03	20°♄30'19	2°12'42
evening max el	10494 Jun 24 15:36	29°♄05'59	18°04'45		10495 May 11 17:04	0°♄	
	10494 Jun 25 14:57	0°♄		evening rise	10495 May 20 04:30	13°♄54'28	
retrograde	10494 Jul 01 02:41	2°♄26'57			10495 May 29 23:39	0°♄	
evening set	10494 Jul 03 18:46	1°♄51'47		asc. node	10495 Jun 01 14:42	4°♄03'34	
	10494 Jul 06 17:15	30°♄		evening max el	10495 Jun 08 05:12	12°♄33'30	18°18'13
inferior conj	10494 Jul 10 04:15	26°♄44'00	2°16'09	retrograde	10495 Jun 14 14:28	15°♄57'48	
minimum elong	10494 Jul 10 07:01	26°♄36'52	2°14'56	evening set	10495 Jun 17 14:21	15°♄08'57	
min. Earth dist.	10494 Jul 13 03:37	23°♄41'51	0.61980 AU	inferior conj	10495 Jun 23 12:04	9°♄43'50	2°54'12
morning rise	10494 Jul 16 17:05	20°♄38'33		minimum elong	10495 Jun 23 14:11	9°♄37'45	2°53'19
desc. node	10494 Jul 18 15:06	19°♄28'22		min. Earth dist.	10495 Jun 25 22:11	6°♄57'43	0.64087 AU
direct	10494 Jul 23 09:38	18°♄16'14		morning rise	10495 Jun 29 12:41	3°♄27'16	
morning max el	10494 Aug 06 13:47	26°♄18'07	27°56'58	desc. node	10495 Jul 05 12:13	0°♄49'49	
	10494 Aug 10 00:34	0°♄		direct	10495 Jul 06 04:43	0°♄48'14	
	10494 Aug 30 11:21	0°♄					

morning max el	10495 Jul 19 23:20	8°  49'58	27°34'51			10496 Jul 28 15:22	0° 		
	10495 Aug 05 10:04	0° 		morning set		10496 Aug 06 06:24	15°  31'45		
	10495 Aug 22 18:57	0° 		max. Earth dist.		10496 Aug 10 09:26	23°  33'05	1.34278 AU	
morning set	10495 Aug 24 00:31	2°  25'05				10496 Aug 13 13:56	0° 		
asc. node	10495 Aug 28 14:33	11°  44'37		asc. node		10496 Aug 14 11:23	1°  50'34		
max. Earth dist.	10495 Aug 28 19:53	12°  12'28	1.32840 AU						
				superior conj		10496 Aug 15 00:45	2°  59'52	0°05'30	
superior conj	10495 Sep 01 01:03	19°  01'40	0°33'32	minimum elong		10496 Aug 15 00:28	2°  58'23	0°05'10	
minimum elong	10495 Aug 31 23:30	18°  53'24	0°33'04	behind sun begin		10496 Aug 14 18:57	2°  29'47		
	10495 Sep 06 02:50	0° 		behind sun end		10496 Aug 15 05:58	3°  27'03		
evening rise	10495 Sep 08 01:19	4°  09'31		evening rise		10496 Aug 22 11:07	18°  38'09		
	10495 Sep 21 22:00	0° 				10496 Aug 28 02:07	0° 		
evening max el	10495 Sep 30 06:36	10°  23'58	22°48'24	evening max el		10496 Sep 11 00:01	20°  43'32	21°13'25	
desc. node	10495 Oct 01 10:08	11°  28'18		desc. node		10496 Sep 17 07:25	25°  20'27		
retrograde	10495 Oct 13 10:56	16°  25'53		retrograde		10496 Sep 22 22:56	26°  39'24		
evening set	10495 Oct 17 05:01	16°  27'05		evening set		10496 Sep 25 10:28	26°  25'07		
min. Earth dist.	10495 Oct 24 15:00	13°  05'47	0.55063 AU	inferior conj		10496 Oct 04 13:27	22°  29'37	-4°46'26	
inferior conj	10495 Oct 25 21:02	12°  22'50	-5°40'22	minimum elong		10496 Oct 04 03:53	22°  43'04	4°43'59	
minimum elong	10495 Oct 25 17:20	12°  28'08	5°39'47	min. Earth dist.		10496 Oct 04 22:36	22°  16'45	0.54612 AU	
morning rise	10495 Nov 03 07:23	8°  23'13		morning rise		10496 Oct 12 21:50	18°  37'52		
direct	10495 Nov 06 10:22	8°  11'37		direct		10496 Oct 16 18:51	18°  05'30		
morning max el	10495 Nov 17 18:47	13°  33'03	20°57'29	morning max el		10496 Oct 29 12:55	24°  11'14	22°36'51	
asc. node	10495 Nov 24 14:57	21°  48'38				10496 Nov 03 18:38	0° 		
	10495 Nov 29 15:24	0° 		asc. node		10496 Nov 10 11:52	9°  58'25		
morning set	10495 Dec 07 06:32	14°  55'55		morning set		10496 Nov 20 17:27	29°  43'26		
						10496 Nov 20 20:35	0° 		
superior conj	10495 Dec 14 15:19	0°  31'54	1°30'37						
minimum elong	10495 Dec 14 17:19	0°  27'10	1°30'58	superior conj		10496 Nov 27 17:53	14°  45'11	1°38'23	
	10495 Dec 14 12:02	0° 		minimum elong		10496 Nov 27 18:41	14°  49'29	1°38'51	
max. Earth dist.	10495 Dec 19 11:46	10°  02'27	1.35638 AU	max. Earth dist.		10496 Dec 01 03:53	21°  56'08	1.33919 AU	
evening rise	10495 Dec 23 11:47	17°  34'31				10496 Dec 05 03:39	0° 		
desc. node	10495 Dec 28 08:32	26°  28'51		evening rise		10496 Dec 05 17:51	1°  09'39		
	10495 Dec 30 09:29	0° 		desc. node		10496 Dec 14 05:34	16°  34'36		
	10496 Jan 19 15:18	0° 				10496 Dec 22 09:21	0° 		
evening max el	10496 Jan 27 22:07	9°  17'25	26°21'01	evening max el		10497 Jan 09 11:39	22°  54'34	27°08'21	
retrograde	10496 Feb 09 18:55	16°  34'12				10497 Jan 20 12:35	0° 		
evening set	10496 Feb 16 01:34	14°  02'35		retrograde		10497 Jan 22 21:16	0°  17'05		
min. Earth dist.	10496 Feb 20 05:13	9°  44'10	0.66681 AU			10497 Jan 25 03:50	30°  00'00		
asc. node	10496 Feb 20 13:45	9°  18'26		evening set		10497 Jan 29 13:53	27°  43'21		
inferior conj	10496 Feb 21 22:46	7°  37'36	0°26'50	min. Earth dist.		10497 Feb 02 12:15	23°  58'26	0.65253 AU	
minimum elong	10496 Feb 21 22:04	7°  39'44	0°26'48	inferior conj		10497 Feb 04 17:30	21°  29'26	-0°34'18	
morning rise	10496 Feb 27 19:24	1°  53'09		minimum elong		10497 Feb 04 18:30	21°  26'38	0°33'32	
direct	10496 Mar 01 21:10	0°  59'50		asc. node		10497 Feb 06 10:56	19°  36'13		
morning max el	10496 Mar 08 10:50	4°  31'33	18°32'01	morning rise		10497 Feb 11 00:34	15°  57'20		
desc. node	10496 Mar 25 09:01	28°  26'42		direct		10497 Feb 13 17:06	15°  18'42		
	10496 Mar 26 08:43	0° 		morning max el		10497 Feb 20 02:27	18°  40'19	18°01'13	
morning set	10496 Mar 29 03:44	4°  24'20				10497 Feb 28 15:02	0° 		
				morning set		10497 Mar 10 03:27	15°  24'34		
superior conj	10496 Apr 14 04:41	29°  34'55	-1°56'43	desc. node		10497 Mar 12 05:48	18°  45'56		
minimum elong	10496 Apr 13 20:13	29°  01'48	1°56'21			10497 Mar 19 02:44	0° 		
max. Earth dist.	10496 Apr 14 01:31	29°  22'32	1.45627 AU						
	10496 Apr 14 11:06	0° 		superior conj		10497 Mar 24 14:18	8°  44'11	-1°23'25	
evening rise	10496 Apr 29 21:01	24°  15'05		minimum elong		10497 Mar 24 05:29	8°  09'18	1°22'27	
	10496 May 03 11:56	0° 		max. Earth dist.		10497 Mar 27 21:38	13°  56'34	1.45474 AU	
greatest brilliancy	10496 May 08 15:11	8°  06'52	-0.8m			10497 Apr 07 05:21	0° 		
asc. node	10496 May 18 11:48	22°  31'11		evening rise		10497 Apr 09 17:11	3°  50'55		
evening max el	10496 May 21 16:27	26°  10'32	18°49'28	greatest brilliancy		10497 Apr 23 06:27	24°  29'01	-0.7m	
retrograde	10496 May 28 08:39	29°  51'07				10497 Apr 27 01:48	0° 		
evening set	10496 May 31 16:40	28°  47'11		evening max el		10497 May 04 23:18	9°  52'24	19°37'14	
inferior conj	10496 Jun 06 06:21	23°  06'14	3°13'34	asc. node		10497 May 05 08:57	10°  21'62		
minimum elong	10496 Jun 06 07:20	23°  03'10	3°12'58	retrograde		10497 May 12 06:19	14°  21'04		
min. Earth dist.	10496 Jun 08 01:29	20°  51'43	0.65872 AU	evening set		10497 May 15 23:00	12°  41'26		
morning rise	10496 Jun 11 21:18	16°  45'43		inferior conj		10497 May 21 07:55	6°  45'54	3°17'54	
direct	10496 Jun 18 07:10	14°  21'21		minimum elong		10497 May 21 07:43	6°  46'32	3°17'26	
desc. node	10496 Jun 21 09:17	14°  34'03		min. Earth dist.		10497 May 22 12:07	5°  21'18	0.67237 AU	
morning max el	10496 Jul 01 09:58	21°  48'49	26°41'49	morning rise		10497 May 26 16:05	0°  25'51		
	10496 Jul 08 13:15	0° 				10497 May 27 04:04	30°  00'00		

direct	10497 Jun 01 15:49	27°  46'54		min. Earth dist.	10498 May 06 04:17	19°  48'48	0.68143 AU
	10497 Jun 07 20:57	0°  II		morning rise	10498 May 10 18:23	14°  20'35	
desc. node	10497 Jun 08 06:17	0°  II15'39		direct	10498 May 16 05:34	11°  55'18	
morning max el	10497 Jun 13 20:05	5°  II04'43	25°26'46	desc. node	10498 May 26 03:13	17°  24'57	
	10497 Jul 02 23:55	0°  ☿		morning max el	10498 May 27 05:40	18°  29'58	23°59'32
morning set	10497 Jul 19 21:18	27°  ☿54'39			10498 Jun 05 21:47	0°  II	
	10497 Jul 21 00:51	0°  Ω			10498 Jun 26 02:11	0°  ☿	
max. Earth dist.	10497 Jul 23 12:57	4°  Ω38'50	1.36172 AU	morning set	10498 Jul 01 16:20	9°  ☿21'04	
				max. Earth dist.	10498 Jul 05 10:29	15°  ☿54'46	1.38376 AU
superior conj	10497 Jul 29 15:32	16°  Ω29'23	-0°26'02	superior conj	10498 Jul 12 17:54	29°  ☿21'11	-0°59'16
minimum elong	10497 Jul 29 17:09	16°  Ω37'28	0°26'05	minimum elong	10498 Jul 12 21:51	29°  ☿39'57	0°59'04
asc. node	10497 Aug 01 08:14	21°  Ω55'03			10498 Jul 13 02:03	0°  Ω	
	10497 Aug 05 07:12	0°  ♍		asc. node	10498 Jul 19 05:08	11°  Ω53'53	
evening rise	10497 Aug 06 17:11	2°  ♍53'25		evening rise	10498 Jul 21 16:51	16°  Ω47'48	
	10497 Aug 22 16:05	0°  ♌			10498 Jul 28 15:57	0°  ♍	
evening max el	10497 Aug 24 06:17	1°  ♌41'57	19°55'08	evening max el	10498 Aug 07 01:43	13°  ♍26'46	18°57'52
retrograde	10497 Sep 03 13:24	6°  ♌48'38		retrograde	10498 Aug 15 18:22	17°  ♍46'46	
desc. node	10497 Sep 04 04:39	6°  ♌47'32		evening set	10498 Aug 17 15:46	17°  ♍35'16	
evening set	10497 Sep 05 10:56	6°  ♌39'00		desc. node	10498 Aug 22 01:53	15°  ♍49'59	
inferior conj	10497 Sep 14 09:55	2°  ♌38'22	-3°06'28	inferior conj	10498 Aug 25 22:59	13°  ♍18'49	-1°12'25
minimum elong	10497 Sep 14 01:42	2°  ♌50'51	3°03'35	minimum elong	10498 Aug 25 19:53	13°  ♍24'15	1°11'23
min. Earth dist.	10497 Sep 16 08:08	1°  ♌28'12	0.55108 AU	min. Earth dist.	10498 Aug 28 22:05	11°  ♍14'51	0.56460 AU
	10497 Sep 18 22:15	30°  ♍		morning rise	10498 Sep 02 20:50	8°  ♍27'01	
morning rise	10497 Sep 22 15:00	28°  ♍23'13		direct	10498 Sep 08 08:01	7°  ♍16'18	
direct	10497 Sep 27 07:09	27°  ♍35'33		morning max el	10498 Sep 22 13:31	14°  ♍35'13	26°02'51
	10497 Oct 05 08:34	0°  ♌			10498 Oct 04 20:48	0°  ♌	
morning max el	10497 Oct 11 00:29	4°  ♌21'22	24°24'16	asc. node	10498 Oct 15 05:36	18°  ♌03'40	
asc. node	10497 Oct 28 08:45	28°  ♌46'41		morning set	10498 Oct 20 16:16	29°  ♌13'31	
	10497 Oct 29 00:32	0°  ♍			10498 Oct 21 00:57	0°  ♍	
morning set	10497 Nov 05 05:14	14°  ♍30'51					
superior conj	10497 Nov 12 01:38	29°  ♍26'20	1°39'36	superior conj	10498 Oct 27 12:23	14°  ♍13'51	1°34'48
minimum elong	10497 Nov 12 01:16	29°  ♍24'20	1°40'02	minimum elong	10498 Oct 27 11:02	14°  ♍06'24	1°35'02
	10497 Nov 12 07:48	0°  ♌		max. Earth dist.	10498 Oct 28 10:26	16°  ♍15'59	1.31801 AU
max. Earth dist.	10497 Nov 14 04:06	4°  ♌00'22	1.32628 AU	evening rise	10498 Nov 03 11:58	29°  ♍22'37	
evening rise	10497 Nov 19 10:54	15°  ♌05'53			10498 Nov 03 19:08	0°  ♌	
	10497 Nov 27 05:28	0°  ☿		desc. node	10498 Nov 17 23:43	26°  ♌16'48	
desc. node	10497 Dec 01 02:37	6°  ☿45'13			10498 Nov 20 08:35	0°  ☿	
	10497 Dec 17 06:04	0°  ☿		evening max el	10498 Dec 05 07:50	18°  ☿46'57	27°20'49
evening max el	10497 Dec 22 23:40	6°  ☿08'38	27°30'12	retrograde	10498 Dec 19 04:47	26°  ☿01'50	
retrograde	10498 Jan 05 16:44	13°  ☿29'14		evening set	10498 Dec 26 05:02	23°  ☿46'38	
evening set	10498 Jan 12 16:04	11°  ☿00'21		min. Earth dist.	10498 Dec 29 22:14	20°  ☿57'16	0.61501 AU
min. Earth dist.	10498 Jan 16 10:24	7°  ☿46'20	0.63502 AU	inferior conj	10499 Jan 01 23:23	18°  ☿14'04	-2°58'10
inferior conj	10498 Jan 19 02:45	5°  ☿04'09	-1°43'31	minimum elong	10499 Jan 02 05:21	18°  ☿00'43	2°55'28
minimum elong	10498 Jan 19 06:05	4°  ☿55'43	1°41'43	morning rise	10499 Jan 09 08:15	13°  ☿16'02	
asc. node	10498 Jan 24 08:06	0°  ☿34'42		asc. node	10499 Jan 11 05:13	12°  ☿56'11	
	10498 Jan 25 10:12	30°  ☿		direct	10499 Jan 11 12:41	12°  ☿55'46	
morning rise	10498 Jan 25 22:11	29°  ☿47'29		morning max el	10499 Jan 18 12:23	16°  ☿27'21	17°52'06
direct	10498 Jan 28 07:26	29°  ☿19'50			10499 Jan 28 00:58	0°  ☿	
	10498 Jan 31 04:00	0°  ☿		morning set	10499 Feb 03 04:34	10°  ☿56'32	
morning max el	10498 Feb 03 20:01	2°  ☿41'35	17°47'41	superior conj	10499 Feb 13 23:03	0°  ☿03'36	0°00'06
morning set	10498 Feb 20 05:49	27°  ☿41'48		minimum elong	10499 Feb 13 23:06	0°  ☿03'47	0°00'23
	10498 Feb 21 13:56	0°  ☿		behind sun begin	10499 Feb 13 14:41	29°  ☿27'32	
desc. node	10498 Feb 27 02:33	9°  ☿24'54		behind sun end	10499 Feb 14 07:31	0°  ☿39'56	
superior conj	10498 Mar 04 18:12	18°  ☿48'11	-0°41'26	desc. node	10499 Feb 13 23:22	0°  ☿04'56	
minimum elong	10498 Mar 04 13:48	18°  ☿30'10	0°40'38		10499 Feb 13 22:13	0°  ☿	
max. Earth dist.	10498 Mar 10 16:30	28°  ☿22'22	1.44596 AU	max. Earth dist.	10499 Feb 21 07:26	12°  ☿22'41	1.43094 AU
	10498 Mar 11 17:05	0°  ☿		evening rise	10499 Feb 27 22:40	22°  ☿59'36	
evening rise	10498 Mar 20 04:36	13°  ☿13'10			10499 Mar 04 11:19	0°  ☿	
	10498 Mar 31 07:41	0°  ☿			10499 Mar 25 12:21	0°  ☿	
evening max el	10498 Apr 18 00:31	23°  ☿35'12	20°39'30	evening max el	10499 Mar 31 20:16	7°  ☿18'48	21°52'54
asc. node	10498 Apr 22 06:07	27°  ☿05'20		asc. node	10499 Apr 09 03:19	12°  ☿42'59	
retrograde	10498 Apr 26 05:04	28°  ☿21'33		retrograde	10499 Apr 10 03:02	12°  ☿47'46	
evening set	10498 Apr 30 07:14	26°  ☿46'06		evening set	10499 Apr 14 15:36	10°  ☿57'01	
inferior conj	10498 May 05 14:05	20°  ☿37'45	3°09'52	inferior conj	10499 Apr 19 22:41	4°  ☿38'08	2°51'11
minimum elong	10498 May 05 12:55	20°  ☿41'47	3°09'22	minimum elong	10499 Apr 19 20:50	4°  ☿44'38	2°50'34

min. Earth dist.	10499 Apr 19 23:55	4°♄33'53	0.68589 AU	minimum elong	10500 Apr 04 05:36	18°♄51'15	2°22'03
	10499 Apr 23 12:08	30°♄♄		min. Earth dist.	10500 Apr 03 20:46	19°♄21'44	0.68588 AU
morning rise	10499 Apr 25 01:53	28°♄25'32		morning rise	10500 Apr 09 12:33	12°♄37'00	
direct	10499 Apr 29 23:38	26°♄19'09		direct	10500 Apr 13 20:54	10°♄52'00	
	10499 May 07 12:24	0°♄		morning max el	10500 Apr 22 08:36	15°♄45'10	21°06'15
morning max el	10499 May 09 16:46	2°♄02'44	22°29'54	desc. node	10500 Apr 29 20:59	24°♄38'18	
desc. node	10499 May 13 00:08	5°♄38'21			10500 May 03 19:43	0°♄	
	10499 May 30 20:42	0°♄		morning set	10500 May 23 02:38	28°♄46'45	
morning set	10499 Jun 12 10:34	19°♄39'01			10500 May 23 21:17	0°♄	
max. Earth dist.	10499 Jun 17 08:25	27°♄48'39	1.40658 AU	max. Earth dist.	10500 May 30 11:59	10°♄35'35	1.42741 AU
	10499 Jun 18 15:18	0°♄					
				superior conj	10500 Jun 06 16:16	22°♄33'13	-1°57'40
superior conj	10499 Jun 25 03:38	11°♄25'35	-1°31'20	minimum elong	10500 Jun 06 22:22	22°♄59'12	1°57'43
minimum elong	10499 Jun 25 09:37	11°♄52'30	1°31'05		10500 Jun 10 23:51	0°♄	
evening rise	10499 Jul 05 06:52	0°♄12'41		evening rise	10500 Jun 18 07:01	12°♄57'57	
	10499 Jul 05 04:10	0°♄		asc. node	10500 Jun 22 23:02	21°♄17'52	
asc. node	10499 Jul 06 02:03	1°♄42'57			10500 Jun 28 02:37	0°♄	
evening max el	10499 Jul 21 07:13	25°♄52'43	18°21'41	evening max el	10500 Jul 04 18:47	8°♄50'32	18°05'29
retrograde	10499 Jul 28 18:12	29°♄37'41		retrograde	10500 Jul 11 11:20	12°♄15'36	
evening set	10499 Jul 30 21:52	29°♄19'43		evening set	10500 Jul 13 22:56	11°♄47'28	
inferior conj	10499 Aug 07 09:43	24°♄43'20	0°28'13	inferior conj	10500 Jul 20 17:01	6°♄50'53	1°44'00
minimum elong	10499 Aug 07 10:42	24°♄41'20	0°27'31	minimum elong	10500 Jul 20 19:41	6°♄44'32	1°42'44
desc. node	10499 Aug 08 23:07	23°♄26'05		min. Earth dist.	10500 Jul 23 22:14	3°♄48'35	0.60683 AU
min. Earth dist.	10499 Aug 10 18:16	21°♄59'12	0.58428 AU	desc. node	10500 Jul 26 20:20	1°♄25'46	
morning rise	10499 Aug 14 20:01	19°♄15'34		morning rise	10500 Jul 27 13:41	0°♄56'22	
direct	10499 Aug 20 23:40	17°♄35'34			10500 Jul 29 05:16	30°♄♄	
morning max el	10499 Sep 04 08:39	25°♄18'34	27°15'53	direct	10500 Aug 03 03:49	28°♄47'34	
	10499 Sep 08 17:08	0°♄			10500 Aug 08 08:25	0°♄	
	10499 Sep 28 04:24	0°♄		morning max el	10500 Aug 17 10:41	6°♄44'51	27°53'00
asc. node	10499 Oct 02 02:26	7°♄40'52			10500 Sep 04 00:21	0°♄	
morning set	10499 Oct 05 00:49	13°♄45'39		asc. node	10500 Sep 18 23:16	27°♄32'21	
				morning set	10500 Sep 19 05:04	28°♄02'24	
superior conj	10499 Oct 12 00:09	29°♄00'46	1°24'22		10500 Sep 20 03:35	0°♄	
minimum elong	10499 Oct 11 22:09	28°♄49'37	1°24'20	max. Earth dist.	10500 Sep 25 04:05	10°♄50'15	1.31606 AU
max. Earth dist.	10499 Oct 11 19:38	28°♄35'37	1.31457 AU				
	10499 Oct 12 10:47	0°♄		superior conj	10500 Sep 26 11:09	13°♄41'44	1°08'35
evening rise	10499 Oct 18 18:33	13°♄52'16		minimum elong	10500 Sep 26 08:54	13°♄29'19	1°08'19
	10499 Oct 26 20:00	0°♄		evening rise	10500 Oct 03 04:33	28°♄29'07	
desc. node	10499 Nov 04 20:52	15°♄09'49			10500 Oct 03 21:32	0°♄	
	10499 Nov 16 17:52	0°♄			10500 Oct 20 11:31	0°♄	
evening max el	10499 Nov 17 09:38	0°♄37'54	26°37'22	desc. node	10500 Oct 22 18:05	3°♄09'14	
retrograde	10499 Dec 01 08:06	7°♄45'28		evening max el	10500 Oct 30 03:27	11°♄37'44	25°22'20
evening set	10499 Dec 08 00:42	5°♄54'00		retrograde	10500 Nov 13 00:34	18°♄36'44	
min. Earth dist.	10499 Dec 11 23:34	3°♄17'51	0.59382 AU	evening set	10500 Nov 18 22:18	17°♄17'03	
inferior conj	10499 Dec 15 03:53	0°♄49'09	-4°12'20	min. Earth dist.	10500 Nov 23 15:39	14°♄37'52	0.57363 AU
minimum elong	10499 Dec 15 11:44	0°♄33'48	4°09'30	inferior conj	10500 Nov 26 13:03	12°♄40'26	-5°14'11
	10499 Dec 16 05:15	30°♄♄		minimum elong	10500 Nov 26 19:57	12°♄28'41	5°12'29
morning rise	10499 Dec 23 01:27	26°♄12'21		morning rise	10500 Dec 04 19:55	8°♄25'54	
direct	10499 Dec 25 04:39	25°♄56'00		direct	10500 Dec 07 03:26	8°♄09'55	
asc. node	10499 Dec 29 02:20	26°♄53'45		asc. node	10500 Dec 15 23:24	12°♄21'27	
morning max el	10500 Jan 01 23:54	29°♄46'51	18°15'50	morning max el	10500 Dec 16 02:41	12°♄29'19	19°00'46
	10500 Jan 02 05:13	0°♄			10500 Dec 27 22:43	0°♄	
morning set	10500 Jan 17 17:46	24°♄50'36		morning set	10501 Jan 01 16:52	9°♄11'00	
	10500 Jan 20 11:04	0°♄					
				superior conj	10501 Jan 10 01:47	25°♄35'50	1°03'24
superior conj	10500 Jan 27 03:08	12°♄23'50	0°35'44	minimum elong	10501 Jan 10 04:54	25°♄50'41	1°03'28
minimum elong	10500 Jan 27 05:37	12°♄35'08	0°35'45		10501 Jan 12 09:33	0°♄	
desc. node	10500 Jan 31 20:10	20°♄46'52		max. Earth dist.	10501 Jan 16 23:50	8°♄24'56	1.38956 AU
max. Earth dist.	10500 Feb 03 17:18	25°♄44'17	1.41137 AU	desc. node	10501 Jan 18 17:02	11°♄27'24	
	10500 Feb 06 06:10	0°♄		evening rise	10501 Jan 20 19:59	15°♄08'33	
evening rise	10500 Feb 08 10:33	3°♄35'38			10501 Jan 29 21:37	0°♄	
	10500 Feb 25 18:20	0°♄			10501 Feb 20 13:05	0°♄	
evening max el	10500 Mar 14 12:03	21°♄04'47	23°12'38	evening max el	10501 Feb 25 01:54	4°♄53'53	24°32'23
retrograde	10500 Mar 24 22:36	27°♄14'59		retrograde	10501 Mar 08 14:27	11°♄37'56	
asc. node	10500 Mar 27 00:33	26°♄54'10		asc. node	10501 Mar 13 21:48	9°♄29'56	
evening set	10500 Mar 29 22:33	25°♄09'54		evening set	10501 Mar 14 02:30	9°♄20'06	
inferior conj	10500 Apr 04 07:46	18°♄43'43	2°22'45	min. Earth dist.	10501 Mar 18 16:32	4°♄07'07	0.68166 AU

inferior conj	10501 Mar 19 15:26	2°♿50'35	1°45'00	minimum elong	10502 Mar 03 18:24	16°♿59'54	0°57'42
minimum elong	10501 Mar 19 13:23	2°♿57'27	1°44'20	morning rise	10502 Mar 09 11:27	11°♿05'15	
	10501 Mar 21 20:18	30°♿♿		direct	10502 Mar 12 19:24	10°♿01'44	
morning rise	10501 Mar 25 00:24	26°♿51'15		morning max el	10502 Mar 19 14:47	13°♿43'59	18°57'28
direct	10501 Mar 28 20:01	25°♿27'49			10502 Mar 31 20:46	0°♿	
morning max el	10501 Apr 05 07:46	29°♿39'11	19°54'21	greatest brilliancy	10502 Apr 02 08:29	2°♿15'12	-0.8m
	10501 Apr 05 16:05	0°♿		desc. node	10502 Apr 03 14:34	4°♿09'59	
desc. node	10501 Apr 16 17:47	14°♿11'43		morning set	10502 Apr 11 08:00	16°♿06'18	
	10501 Apr 27 08:51	0°♿			10502 Apr 20 06:20	0°♿	
morning set	10501 May 02 02:16	7°♿13'49		max. Earth dist.	10502 Apr 25 15:51	8°♿26'19	1.45379 AU
max. Earth dist.	10501 May 12 23:01	24°♿12'58	1.44376 AU				
	10501 May 16 13:41	0°♿		superior conj	10502 Apr 27 19:27	11°♿49'03	-2°08'14
				minimum elong	10502 Apr 27 14:16	11°♿28'41	2°08'21
superior conj	10501 May 18 04:38	2°♿37'31	-2°12'04		10502 May 09 05:19	0°♿	
minimum elong	10501 May 18 06:47	2°♿46'18	2°12'28	evening rise	10502 May 12 18:50	5°♿46'18	
evening rise	10501 May 31 12:24	24°♿51'34		asc. node	10502 May 27 17:10	29°♿19'27	
	10501 Jun 03 12:42	0°♿			10502 May 28 04:47	0°♿	
asc. node	10501 Jun 09 20:05	10°♿32'21		evening max el	10502 Jun 01 21:28	5°♿41'16	18°29'19
evening max el	10501 Jun 18 08:35	22°♿09'20	18°08'16	retrograde	10502 Jun 08 08:33	9°♿10'54	
retrograde	10501 Jun 24 17:33	25°♿29'42		evening set	10502 Jun 11 11:55	8°♿15'37	
evening set	10501 Jun 27 13:04	24°♿48'45		inferior conj	10502 Jun 17 05:44	2°♿43'17	3°04'27
inferior conj	10501 Jul 03 17:03	19°♿33'23	2°34'49	minimum elong	10502 Jun 17 07:24	2°♿38'19	3°03'42
minimum elong	10501 Jul 03 19:38	19°♿26'22	2°33'43	min. Earth dist.	10502 Jun 19 09:25	0°♿09'26	0.64895 AU
min. Earth dist.	10501 Jul 06 11:09	16°♿35'59	0.62913 AU		10502 Jun 19 12:41	30°♿♿	
morning rise	10501 Jul 10 00:28	13°♿22'29		morning rise	10502 Jun 23 01:55	26°♿24'22	
desc. node	10501 Jul 13 17:30	11°♿21'24		direct	10502 Jun 29 15:48	23°♿42'04	
direct	10501 Jul 16 17:42	10°♿51'49		desc. node	10502 Jun 30 14:37	23°♿45'08	
morning max el	10501 Jul 30 18:07	18°♿54'10	27°51'45		10502 Jul 11 11:48	0°♿	
	10501 Aug 09 03:15	0°♿		morning max el	10502 Jul 13 04:32	1°♿38'57	27°15'39
	10501 Aug 27 22:25	0°♿			10502 Aug 03 07:20	0°♿	
morning set	10501 Sep 03 02:51	11°♿57'38		morning set	10502 Aug 17 15:31	25°♿24'35	
asc. node	10501 Sep 05 20:06	17°♿32'37			10502 Aug 19 23:21	0°♿	
max. Earth dist.	10501 Sep 08 08:03	22°♿49'39	1.32252 AU	max. Earth dist.	10502 Aug 22 03:51	4°♿25'58	1.33398 AU
				asc. node	10502 Aug 23 16:55	7°♿37'33	
superior conj	10501 Sep 10 19:28	28°♿10'37	0°47'43				
minimum elong	10501 Sep 10 17:30	27°♿59'54	0°47'17	superior conj	10502 Aug 25 23:00	12°♿21'45	0°22'08
	10501 Sep 11 15:31	0°♿		minimum elong	10502 Aug 25 21:55	12°♿15'59	0°21'43
evening rise	10501 Sep 17 16:00	13°♿07'09		evening rise	10502 Sep 02 03:00	27°♿40'57	
	10501 Sep 26 02:02	0°♿			10502 Sep 03 05:24	0°♿	
desc. node	10501 Oct 09 15:19	19°♿54'25			10502 Sep 21 03:57	0°♿	
evening max el	10501 Oct 11 14:54	21°♿56'27	23°46'22	evening max el	10502 Sep 23 03:13	2°♿04'11	22°06'20
retrograde	10501 Oct 25 04:19	28°♿42'43		desc. node	10502 Sep 26 12:35	4°♿58'33	
evening set	10501 Oct 29 19:26	27°♿55'59		retrograde	10502 Oct 05 20:42	8°♿24'23	
min. Earth dist.	10501 Nov 05 01:13	24°♿55'18	0.55721 AU	evening set	10502 Oct 09 00:27	8°♿02'12	
inferior conj	10501 Nov 07 01:49	23°♿42'39	-5°44'59	inferior conj	10502 Oct 17 22:31	4°♿02'51	-5°24'30
minimum elong	10501 Nov 07 02:57	23°♿40'57	5°44'34	minimum elong	10502 Oct 17 15:36	4°♿12'34	5°23'13
morning rise	10501 Nov 15 12:23	19°♿47'41		min. Earth dist.	10502 Oct 17 08:22	4°♿22'43	0.54760 AU
direct	10501 Nov 18 06:53	19°♿28'27		morning rise	10502 Oct 26 08:15	0°♿15'49	
morning max el	10501 Nov 28 17:14	24°♿24'50	20°08'31		10502 Oct 27 15:21	30°♿♿	
asc. node	10501 Dec 02 20:25	29°♿04'33		direct	10502 Oct 29 18:37	29°♿49'43	
	10501 Dec 03 13:05	0°♿			10502 Oct 31 21:00	0°♿	
morning set	10501 Dec 16 22:33	23°♿48'09		morning max el	10502 Nov 10 18:13	5°♿29'25	21°38'01
	10501 Dec 19 23:03	0°♿		asc. node	10502 Nov 19 17:22	16°♿46'46	
					10502 Nov 27 03:21	0°♿	
superior conj	10501 Dec 24 14:21	9°♿26'49	1°22'53	morning set	10502 Dec 01 08:08	8°♿33'42	
minimum elong	10501 Dec 24 16:56	9°♿39'44	1°23'09				
max. Earth dist.	10501 Dec 30 06:54	20°♿33'48	1.36789 AU	superior conj	10502 Dec 08 12:45	23°♿44'24	1°34'45
evening rise	10502 Jan 03 01:34	27°♿33'45		minimum elong	10502 Dec 08 14:16	23°♿52'16	1°35'11
	10502 Jan 04 10:08	0°♿			10502 Dec 11 13:34	0°♿	
desc. node	10502 Jan 05 13:57	2°♿02'58		max. Earth dist.	10502 Dec 12 18:37	2°♿26'46	1.34855 AU
	10502 Jan 23 07:09	0°♿		evening rise	10502 Dec 16 23:44	10°♿41'25	
evening max el	10502 Feb 07 15:19	18°♿43'51	25°45'08	desc. node	10502 Dec 23 10:54	22°♿28'30	
retrograde	10502 Feb 20 01:38	25°♿51'30			10502 Dec 27 21:52	0°♿	
evening set	10502 Feb 26 01:52	23°♿23'35			10503 Jan 18 18:40	0°♿	
asc. node	10502 Feb 28 19:02	20°♿40'09		evening max el	10503 Jan 21 04:41	2°♿27'20	26°43'45
min. Earth dist.	10502 Mar 02 09:00	18°♿45'38	0.67338 AU	retrograde	10503 Feb 03 07:27	9°♿47'51	
inferior conj	10502 Mar 03 19:46	16°♿55'32	0°58'04	evening set	10503 Feb 09 18:48	7°♿14'14	



min. Earth dist.	10503 Feb 13 19:59	3° $\text{H}$ 10'36	0.66119 AU	desc. node	10503 Dec 10 07:56	12° $\text{Z}$ 38'49	
inferior conj	10503 Feb 15 18:39	0° $\text{H}$ 53'15	0°01'59		10503 Dec 21 11:02	0° $\text{Z}$	
minimum elong	10503 Feb 15 18:35	0° $\text{H}$ 53'26	0°02'14	evening max el	10504 Jan 03 17:35	15° $\text{Z}$ 55'23	27°21'01
transit middle	10503 Feb 15 18:35	0° $\text{H}$ 53'26	0°02'14	retrograde	10504 Jan 17 07:12	23° $\text{Z}$ 18'41	
transit begin	10503 Feb 15 15:41	1° $\text{H}$ 02'01		evening set	10504 Jan 24 03:09	20° $\text{Z}$ 45'48	
transit end	10503 Feb 15 21:30	0° $\text{H}$ 44'52		min. Earth dist.	10504 Jan 27 23:28	17° $\text{Z}$ 14'34	0.64545 AU
asc. node	10503 Feb 15 16:15	1° $\text{H}$ 00'21		inferior conj	10504 Jan 30 09:41	14° $\text{Z}$ 38'20	-1°02'49
	10503 Feb 16 12:51	30° $\text{R}$		minimum elong	10504 Jan 30 11:36	14° $\text{Z}$ 33'09	1°01'36
morning rise	10503 Feb 21 19:29	25° $\text{Z}$ 14'03		asc. node	10504 Feb 02 13:25	11° $\text{Z}$ 28'17	
direct	10503 Feb 24 17:07	24° $\text{Z}$ 27'28		morning rise	10504 Feb 05 21:50	9° $\text{Z}$ 12'35	
morning max el	10503 Mar 03 04:00	27° $\text{Z}$ 53'21	18°16'54	direct	10504 Feb 08 10:54	8° $\text{Z}$ 39'14	
	10503 Mar 05 02:57	0° $\text{H}$		morning max el	10504 Feb 14 20:51	11° $\text{Z}$ 59'55	17°53'16
desc. node	10503 Mar 21 11:19	24° $\text{H}$ 25'51			10504 Feb 27 09:49	0° $\text{H}$	
morning set	10503 Mar 22 14:33	26° $\text{H}$ 14'58		morning set	10504 Mar 03 02:11	7° $\text{H}$ 49'21	
	10503 Mar 24 22:46	0° $\text{Y}$		desc. node	10504 Mar 07 08:04	14° $\text{H}$ 54'18	
superior conj	10503 Apr 07 01:29	20° $\text{Y}$ 44'07	-1°44'18	superior conj	10504 Mar 16 17:22	0° $\text{Y}$ 12'40	-1°06'04
minimum elong	10503 Apr 06 16:00	20° $\text{Y}$ 06'59	1°43'35	minimum elong	10504 Mar 16 10:09	29° $\text{H}$ 43'46	1°05'04
max. Earth dist.	10503 Apr 08 11:09	22° $\text{Y}$ 55'49	1.45651 AU		10504 Mar 16 14:12	0° $\text{Y}$	
	10503 Apr 12 23:48	0° $\text{Z}$		max. Earth dist.	10504 Mar 21 06:27	7° $\text{Y}$ 25'48	1.45182 AU
evening rise	10503 Apr 23 01:43	15° $\text{Z}$ 44'30		evening rise	10504 Apr 01 16:11	25° $\text{Y}$ 08'42	
	10503 May 02 05:19	0° $\text{II}$			10504 Apr 04 20:20	0° $\text{Z}$	
greatest brilliancy	10503 May 04 00:44	2° $\text{II}$ 46'36	-0.8m	greatest brilliancy	10504 Apr 16 14:42	17° $\text{Z}$ 38'20	-0.6m
asc. node	10503 May 14 14:16	17° $\text{II}$ 29'59			10504 Apr 25 17:47	0° $\text{II}$	
evening max el	10503 May 16 06:55	19° $\text{II}$ 19'53	19°07'50	evening max el	10504 Apr 28 11:20	3° $\text{II}$ 01'35	20°02'12
retrograde	10503 May 23 04:40	23° $\text{II}$ 11'32		asc. node	10504 Apr 30 11:24	4° $\text{II}$ 52'29	
evening set	10503 May 26 16:13	22° $\text{II}$ 01'01		retrograde	10504 May 06 03:01	7° $\text{II}$ 25'40	
inferior conj	10503 Jun 01 03:28	16° $\text{II}$ 13'28	3°17'04	evening set	10504 May 09 23:32	5° $\text{II}$ 59'31	
minimum elong	10503 Jun 01 03:57	16° $\text{II}$ 11'56	3°16'33	inferior conj	10504 May 15 07:16	29° $\text{Z}$ 58'22	3°15'53
min. Earth dist.	10503 Jun 02 16:08	14° $\text{II}$ 15'33	0.66500 AU	minimum elong	10504 May 15 06:37	0° $\text{II}$ 00'31	3°15'25
morning rise	10503 Jun 06 15:09	9° $\text{II}$ 52'29			10504 May 15 06:47	30° $\text{R}$	
direct	10503 Jun 12 20:57	7° $\text{II}$ 09'21		min. Earth dist.	10504 May 16 05:28	28° $\text{Z}$ 43'14	0.67674 AU
desc. node	10503 Jun 17 11:39	8° $\text{II}$ 22'19		morning rise	10504 May 20 13:24	23° $\text{Z}$ 39'04	
morning max el	10503 Jun 25 15:18	14° $\text{II}$ 46'47	26°12'07	direct	10504 May 26 08:01	21° $\text{Z}$ 04'51	
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	10503 Jul 27 02:26	0° $\text{Q}$		morning max el	10504 Jun 07 01:00	28° $\text{Z}$ 06'31	24°50'30
morning set	10503 Jul 31 15:38	8° $\text{Q}$ 14'27			10504 Jun 08 20:04	0° $\text{II}$	
max. Earth dist.	10503 Aug 04 13:06	15° $\text{Q}$ 38'48	1.35027 AU		10504 Jun 30 18:53	0° $\text{Z}$	
superior conj	10503 Aug 09 19:17	26° $\text{Q}$ 08'38	-0°07'33	morning set	10504 Jul 12 22:42	20° $\text{Z}$ 14'35	
minimum elong	10503 Aug 09 19:44	26° $\text{Q}$ 10'57	0°07'47	max. Earth dist.	10504 Jul 16 12:51	26° $\text{Z}$ 42'36	1.37074 AU
behind sun begin	10503 Aug 09 14:27	25° $\text{Q}$ 43'56			10504 Jul 18 07:30	0° $\text{Q}$	
behind sun end	10503 Aug 10 01:02	26° $\text{Q}$ 38'00		superior conj	10504 Jul 23 05:13	9° $\text{Q}$ 22'44	-0°40'03
asc. node	10503 Aug 10 13:45	27° $\text{Q}$ 43'15		minimum elong	10504 Jul 23 07:48	9° $\text{Q}$ 35'22	0°40'00
	10503 Aug 11 16:16	0° $\text{P}$		asc. node	10504 Jul 27 10:35	17° $\text{Q}$ 45'17	
evening rise	10503 Aug 17 11:31	12° $\text{P}$ 04'49		evening rise	10504 Jul 31 15:10	26° $\text{Q}$ 11'23	
	10503 Aug 26 18:53	0° $\text{Z}$			10504 Aug 02 12:59	0° $\text{P}$	
evening max el	10503 Sep 05 01:38	12° $\text{Z}$ 38'15	20°37'43	evening max el	10504 Aug 17 13:51	23° $\text{P}$ 56'39	19°28'17
desc. node	10503 Sep 13 09:51	17° $\text{Z}$ 52'00		retrograde	10504 Aug 27 03:55	28° $\text{P}$ 42'09	
retrograde	10503 Sep 16 08:40	18° $\text{Z}$ 14'27		evening set	10504 Aug 29 00:05	28° $\text{P}$ 32'24	
evening set	10503 Sep 18 11:49	18° $\text{Z}$ 03'19		desc. node	10504 Aug 30 07:07	28° $\text{P}$ 14'30	
inferior conj	10503 Sep 27 14:58	14° $\text{Z}$ 07'08	-4°08'03	inferior conj	10504 Sep 06 17:23	24° $\text{P}$ 26'28	-2°17'53
minimum elong	10503 Sep 27 05:09	14° $\text{Z}$ 21'17	4°05'04	minimum elong	10504 Sep 06 11:13	24° $\text{P}$ 36'22	2°15'40
min. Earth dist.	10503 Sep 28 16:48	13° $\text{Z}$ 29'55	0.54701 AU	min. Earth dist.	10504 Sep 09 04:15	22° $\text{P}$ 52'10	0.55587 AU
morning rise	10503 Oct 05 22:12	10° $\text{Z}$ 07'29		morning rise	10504 Sep 14 19:55	19° $\text{P}$ 56'21	
direct	10503 Oct 10 02:56	9° $\text{Z}$ 29'39		direct	10504 Sep 19 20:27	18° $\text{P}$ 59'33	
morning max el	10503 Oct 23 08:53	15° $\text{Z}$ 53'42	23°22'26	morning max el	10504 Oct 03 20:09	26° $\text{P}$ 01'10	25°08'12
	10503 Nov 03 11:11	0° $\text{M}$			10504 Oct 07 14:58	0° $\text{Z}$	
asc. node	10503 Nov 06 14:16	5° $\text{M}$ 14'25		asc. node	10504 Oct 23 11:08	24° $\text{Z}$ 15'36	
morning set	10503 Nov 15 19:38	23° $\text{M}$ 22'00			10504 Oct 26 09:34	0° $\text{M}$	
	10503 Nov 18 21:39	0° $\text{X}$		morning set	10504 Oct 30 07:18	8° $\text{M}$ 07'30	
superior conj	10503 Nov 22 17:52	8° $\text{X}$ 19'34	1°39'40	superior conj	10504 Nov 06 03:09	23° $\text{M}$ 04'02	1°38'17
minimum elong	10503 Nov 22 18:10	8° $\text{X}$ 21'10	1°40'08	minimum elong	10504 Nov 06 02:21	22° $\text{M}$ 59'34	1°38'38
max. Earth dist.	10503 Nov 25 14:00	14° $\text{X}$ 23'08	1.33312 AU	max. Earth dist.	10504 Nov 07 17:01	26° $\text{M}$ 31'39	1.32221 AU
evening rise	10503 Nov 30 10:53	24° $\text{X}$ 22'44			10504 Nov 09 07:23	0° $\text{X}$	
	10503 Dec 03 08:07	0° $\text{Z}$		evening rise	10504 Nov 13 07:42	8° $\text{X}$ 28'34	

	10504 Nov 24 18:03	0°♁	evening rise	10505 Oct 28 11:26	22°♌51'23	
desc. node	10504 Nov 26 05:01	2°♁26'46		10505 Oct 31 22:39	0°♌	
evening max el	10504 Dec 16 04:23	28°♁56'00 27°30'18	desc. node	10505 Nov 13 02:08	21°♌43'10	
	10504 Dec 17 08:14	0°♌		10505 Nov 18 17:44	0°♁	
retrograde	10504 Dec 29 23:49	6°♌14'39	evening max el	10505 Nov 28 10:26	11°♁15'56 27°06'33	
evening set	10505 Jan 06 00:09	3°♌50'41	retrograde	10505 Dec 12 08:05	18°♁26'50	
min. Earth dist.	10505 Jan 09 17:36	0°♌47'48 0.62673 AU	evening set	10505 Dec 19 06:18	16°♁20'54	
	10505 Jan 10 13:53	30°♌♁	min. Earth dist.	10505 Dec 23 00:59	13°♁38'43 0.60606 AU	
inferior conj	10505 Jan 12 14:00	28°♁03'36 -2°14'49	inferior conj	10505 Dec 26 04:15	11°♁00'01 -3°30'14	
minimum elong	10505 Jan 12 18:27	27°♁52'52 2°12'34	minimum elong	10505 Dec 26 11:12	10°♁45'18 3°27'20	
asc. node	10505 Jan 19 10:34	22°♁58'16	morning rise	10506 Jan 02 18:42	6°♁10'23	
morning rise	10505 Jan 19 15:05	22°♁54'14	direct	10506 Jan 04 22:11	5°♁52'06	
direct	10505 Jan 21 21:49	22°♁30'14	asc. node	10506 Jan 06 07:44	6°♁00'09	
morning max el	10505 Jan 28 14:17	25°♁55'23 17°47'12	morning max el	10506 Jan 12 05:00	9°♁30'42 17°59'41	
	10505 Feb 01 01:31	0°♌		10506 Jan 25 13:55	0°♌	
morning set	10505 Feb 13 14:05	20°♌33'36	morning set	10506 Jan 27 19:41	4°♌07'12	
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desc. node	10505 Feb 22 04:51	5°♌31'07	superior conj	10506 Feb 06 22:53	22°♌30'36 0°16'08	
			minimum elong	10506 Feb 07 00:13	22°♌36'30 0°16'16	
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minimum elong	10505 Feb 25 05:21	10°♌36'47 0°22'46		10506 Feb 11 06:45	0°♌	
max. Earth dist.	10505 Mar 03 23:41	21°♌41'48 1.44026 AU	max. Earth dist.	10506 Feb 14 12:59	5°♌28'38 1.42309 AU	
	10505 Mar 09 05:21	0°♌	evening rise	10506 Feb 20 05:29	14°♌43'07	
evening rise	10505 Mar 12 04:42	4°♌37'20		10506 Mar 02 03:35	0°♌	
	10505 Mar 29 06:04	0°♌		10506 Mar 24 16:27	0°♌	
evening max el	10505 Apr 11 10:16	16°♌45'16 21°09'43	evening max el	10506 Mar 25 04:14	0°♌30'02 22°26'25	
asc. node	10505 Apr 17 08:35	21°♌13'20	retrograde	10506 Apr 03 22:33	6°♌16'26	
retrograde	10505 Apr 20 01:32	21°♌49'10	asc. node	10506 Apr 04 05:50	6°♌15'59	
evening set	10505 Apr 24 08:01	20°♌07'16	evening set	10506 Apr 08 15:59	4°♌19'18	
inferior conj	10505 Apr 29 14:44	13°♌54'23 3°03'09		10506 Apr 12 12:03	30°♌♌	
minimum elong	10505 Apr 29 13:14	13°♌59'36 3°02'37	inferior conj	10506 Apr 13 23:46	27°♌57'05 2°40'15	
min. Earth dist.	10505 Apr 29 23:23	13°♌24'21 0.68390 AU	minimum elong	10506 Apr 13 21:44	28°♌04'12 2°39'36	
morning rise	10505 May 04 18:13	7°♌39'02	min. Earth dist.	10506 Apr 13 19:42	28°♌11'16 0.68648 AU	
direct	10505 May 09 23:53	5°♌21'01	morning rise	10506 Apr 19 03:20	21°♌47'04	
morning max el	10505 May 20 10:39	11°♌34'09 23°21'06	direct	10506 Apr 23 19:25	19°♌49'38	
desc. node	10505 May 21 05:34	12°♌22'48	morning max el	10506 May 02 23:21	25°♌10'26 21°53'11	
	10505 Jun 04 03:21	0°♌		10506 May 07 07:32	0°♌	
	10505 Jun 23 14:17	0°♌	desc. node	10506 May 08 02:27	0°♌57'35	
morning set	10505 Jun 24 07:39	1°♌12'40		10506 May 28 14:12	0°♌	
max. Earth dist.	10505 Jun 28 09:31	8°♌10'45 1.39356 AU	morning set	10506 Jun 04 14:25	10°♌59'04	
			max. Earth dist.	10506 Jun 10 10:00	20°♌28'39 1.41592 AU	
superior conj	10505 Jul 06 01:06	21°♌55'45 -1°13'14		10506 Jun 16 00:39	0°♌	
minimum elong	10505 Jul 06 06:01	22°♌18'35 1°12'59				
	10505 Jul 10 07:52	0°♌	superior conj	10506 Jun 18 02:22	3°♌36'49 -1°43'33	
asc. node	10505 Jul 14 07:30	7°♌40'21	minimum elong	10506 Jun 18 08:46	4°♌04'57 1°43'23	
evening rise	10505 Jul 15 11:10	9°♌54'01	evening rise	10506 Jun 28 19:50	23°♌03'12	
	10505 Jul 26 18:22	0°♌	asc. node	10506 Jul 01 04:28	27°♌23'52	
evening max el	10505 Jul 31 14:07	5°♌59'55 18°39'59		10506 Jul 02 14:41	0°♌	
retrograde	10505 Aug 08 16:31	10°♌02'49	evening max el	10506 Jul 14 22:37	18°♌39'58 18°12'20	
evening set	10505 Aug 10 16:23	9°♌48'57	retrograde	10506 Jul 22 00:19	22°♌14'44	
desc. node	10505 Aug 17 04:21	6°♌28'38	evening set	10506 Jul 24 07:21	21°♌52'45	
inferior conj	10505 Aug 18 15:24	5°♌24'10 -0°27'03	inferior conj	10506 Jul 31 11:13	17°♌07'14 1°03'36	
minimum elong	10505 Aug 18 14:18	5°♌26'13 0°26'52	minimum elong	10506 Jul 31 13:11	17°♌02'55 1°02'32	
min. Earth dist.	10505 Aug 21 20:22	3°♌01'01 0.57248 AU	min. Earth dist.	10506 Aug 03 19:26	14°♌12'44 0.59373 AU	
morning rise	10505 Aug 26 08:48	0°♌16'44	desc. node	10506 Aug 04 01:35	14°♌00'04	
	10505 Aug 26 23:53	30°♌♌	morning rise	10506 Aug 07 15:48	11°♌26'48	
direct	10505 Sep 01 03:49	28°♌53'53	direct	10506 Aug 14 00:38	9°♌34'27	
	10505 Sep 06 09:39	0°♌	morning max el	10506 Aug 28 09:21	17°♌24'00 27°36'33	
morning max el	10505 Sep 15 11:08	6°♌23'23 26°37'48		10506 Sep 07 20:31	0°♌	
	10505 Oct 02 22:11	0°♌		10506 Sep 25 12:10	0°♌	
asc. node	10505 Oct 10 07:59	13°♌41'36	asc. node	10506 Sep 27 04:50	3°♌25'31	
morning set	10505 Oct 14 17:29	22°♌45'41	morning set	10506 Sep 29 00:29	7°♌11'59	
	10505 Oct 18 01:33	0°♌	max. Earth dist.	10506 Oct 05 10:40	21°♌09'46 1.31459 AU	
superior conj	10505 Oct 21 14:34	7°♌51'27 1°31'03	superior conj	10506 Oct 06 02:14	22°♌36'19 1°18'18	
minimum elong	10505 Oct 21 12:54	7°♌42'10 1°31'10	minimum elong	10506 Oct 06 00:04	22°♌24'17 1°18'11	
max. Earth dist.	10505 Oct 22 01:05	8°♌49'59 1.31601 AU		10506 Oct 09 10:07	0°♌	































































































































evening rise	10506 Oct 12 19:44	7°♄24'49			10507 Oct 01 01:39	0°♄	
	10506 Oct 24 10:58	0°♄		desc. node	10507 Oct 17 20:32	27°♄46'30	
desc. node	10506 Oct 30 23:19	10°♄15'42			10507 Oct 19 17:26	0°♄	
evening max el	10506 Nov 10 08:56	22°♄45'11	26°08'52	evening max el	10507 Oct 22 23:13	3°♄23'55	24°43'09
retrograde	10506 Nov 24 06:51	29°♄49'00		retrograde	10507 Nov 05 18:21	10°♄19'29	
evening set	10506 Nov 30 17:12	28°♄10'05		evening set	10507 Nov 11 04:22	9°♄13'57	
min. Earth dist.	10506 Dec 04 21:51	25°♄35'14	0.58497 AU	min. Earth dist.	10507 Nov 16 10:39	6°♄27'54	0.56593 AU
inferior conj	10506 Dec 08 00:53	23°♄17'50	-4°40'59	inferior conj	10507 Nov 19 01:12	4°♄47'51	-5°32'23
minimum elong	10506 Dec 08 08:51	23°♄03'13	4°38'30	minimum elong	10507 Nov 19 06:17	4°♄39'41	5°31'21
morning rise	10506 Dec 16 03:02	18°♄50'44		morning rise	10507 Nov 27 10:26	0°♄42'45	
direct	10506 Dec 18 07:27	18°♄34'53		direct	10507 Nov 29 21:37	0°♄26'00	
asc. node	10506 Dec 24 04:50	20°♄38'03		morning max el	10507 Dec 09 11:22	5°♄00'05	19°26'52
morning max el	10506 Dec 26 13:20	22°♄36'17	18°32'18	asc. node	10507 Dec 11 01:52	6°♄39'40	
	10507 Jan 01 09:22	0°♄			10507 Dec 25 07:13	0°♄	
morning set	10507 Jan 11 13:38	18°♄14'31		morning set	10507 Dec 26 15:52	2°♄42'46	
	10507 Jan 17 16:25	0°♄					
				superior conj	10508 Jan 03 16:44	18°♄45'45	1°12'37
superior conj	10507 Jan 20 11:35	5°♄15'29	0°48'28	minimum elong	10508 Jan 03 19:42	19°♄00'18	1°12'46
minimum elong	10507 Jan 20 14:31	5°♄29'07	0°48'29		10508 Jan 09 14:38	0°♄	
desc. node	10507 Jan 26 22:30	16°♄54'14		max. Earth dist.	10508 Jan 10 03:21	0°♄58'19	1.38013 AU
max. Earth dist.	10507 Jan 27 21:36	18°♄34'50	1.40225 AU	evening rise	10508 Jan 13 20:51	7°♄39'38	
evening rise	10507 Feb 01 02:32	25°♄43'41		desc. node	10508 Jan 13 19:22	7°♄33'08	
	10507 Feb 03 16:48	0°♄			10508 Jan 27 14:03	0°♄	
	10507 Feb 23 20:52	0°♄		evening max el	10508 Feb 18 08:11	28°♄06'26	25°04'31
evening max el	10507 Mar 07 18:51	14°♄17'04	23°46'48		10508 Feb 20 08:43	0°♄	
retrograde	10507 Mar 18 16:42	20°♄42'50		retrograde	10508 Mar 01 06:52	5°♄02'43	
asc. node	10507 Mar 22 03:05	19°♄47'12		evening set	10508 Mar 07 00:05	2°♄40'05	
evening set	10507 Mar 23 21:51	18°♄31'45		asc. node	10508 Mar 08 00:19	1°♄44'22	
min. Earth dist.	10507 Mar 28 16:17	12°♄58'47	0.68466 AU		10508 Mar 09 14:43	30°♄	
inferior conj	10507 Mar 29 08:29	12°♄03'30	2°07'52	min. Earth dist.	10508 Mar 11 10:59	27°♄41'57	0.67861 AU
minimum elong	10507 Mar 29 06:18	12°♄10'58	2°07'09	inferior conj	10508 Mar 12 14:58	26°♄10'14	1°26'14
morning rise	10507 Apr 03 14:45	5°♄59'58		minimum elong	10508 Mar 12 13:08	26°♄16'15	1°25'39
direct	10507 Apr 07 17:31	4°♄24'27		morning rise	10508 Mar 18 02:30	20°♄14'29	
morning max el	10507 Apr 15 18:16	8°♄58'21	20°33'56	direct	10508 Mar 21 16:53	19°♄00'00	
desc. node	10507 Apr 24 23:17	20°♄12'58		morning max el	10508 Mar 28 20:55	22°♄57'47	19°28'07
	10507 May 01 20:07	0°♄			10508 Apr 03 19:34	0°♄	
morning set	10507 May 14 21:25	19°♄43'23		greatest brilliancy	10508 Apr 10 13:50	9°♄34'57	-0.7m
	10507 May 21 10:21	0°♄		desc. node	10508 Apr 10 20:06	9°♄58'04	
max. Earth dist.	10507 May 23 16:58	3°♄38'49	1.43506 AU	morning set	10508 Apr 22 20:36	28°♄12'48	
					10508 Apr 24 00:25	0°♄	
superior conj	10507 May 30 04:44	14°♄16'50	-2°05'39	max. Earth dist.	10508 May 05 06:09	17°♄31'29	1.44884 AU
minimum elong	10507 May 30 09:45	14°♄37'45	2°05'52				
	10507 Jun 08 09:44	0°♄		superior conj	10508 May 09 07:05	23°♄56'22	-2°12'56
evening rise	10507 Jun 11 12:36	5°♄27'48		minimum elong	10508 May 09 06:17	23°♄53'09	2°13'20
asc. node	10507 Jun 18 01:28	16°♄50'46			10508 May 13 01:33	0°♄	
	10507 Jun 26 19:56	0°♄		evening rise	10508 May 23 08:37	16°♄57'05	
evening max el	10507 Jun 28 11:27	1°♄47'10	18°04'21		10508 May 31 05:00	0°♄	
retrograde	10507 Jul 04 23:43	5°♄08'51		asc. node	10508 Jun 03 22:30	5°♄54'54	
evening set	10507 Jul 07 14:34	4°♄35'39		evening max el	10508 Jun 11 01:13	15°♄12'47	18°15'05
	10507 Jul 13 14:30	30°♄		retrograde	10508 Jun 17 10:06	18°♄35'35	
inferior conj	10507 Jul 14 02:09	29°♄30'45	2°08'27	evening set	10508 Jun 20 08:51	17°♄48'51	
minimum elong	10507 Jul 14 04:57	29°♄23'42	2°07'11	inferior conj	10508 Jun 26 08:05	12°♄26'19	2°49'42
min. Earth dist.	10507 Jul 17 03:15	26°♄27'46	0.61644 AU	minimum elong	10508 Jun 26 10:20	12°♄19'56	2°48'45
morning rise	10507 Jul 20 16:58	23°♄27'42		min. Earth dist.	10508 Jun 28 20:23	9°♄36'39	0.63793 AU
desc. node	10507 Jul 21 22:47	22°♄40'38		morning rise	10508 Jul 02 10:23	6°♄11'01	
direct	10507 Jul 27 09:06	21°♄08'32		desc. node	10508 Jul 07 19:55	3°♄39'17	
morning max el	10507 Aug 10 14:12	29°♄09'54	27°57'11	direct	10508 Jul 09 02:58	3°♄33'41	
	10507 Aug 11 09:57	0°♄		morning max el	10508 Jul 22 23:13	11°♄36'02	27°40'13
	10507 Sep 01 19:12	0°♄			10508 Aug 06 13:09	0°♄	
morning set	10507 Sep 13 02:15	21°♄20'21			10508 Aug 24 06:08	0°♄	
asc. node	10507 Sep 14 01:38	23°♄21'11		morning set	10508 Aug 26 20:30	5°♄04'50	
	10507 Sep 17 04:57	0°♄		asc. node	10508 Aug 30 22:26	13°♄24'12	
max. Earth dist.	10507 Sep 18 17:40	3°♄19'00	1.31812 AU	max. Earth dist.	10508 Aug 31 18:20	15°♄08'28	1.32672 AU
superior conj	10507 Sep 20 12:17	7°♄12'31	1°00'20	superior conj	10508 Sep 03 18:50	21°♄34'55	0°37'24
minimum elong	10507 Sep 20 10:06	7°♄00'27	0°59'59	minimum elong	10508 Sep 03 17:10	21°♄25'54	0°36'58
evening rise	10507 Sep 27 06:32	22°♄02'24			10508 Sep 07 15:59	0°♄	

evening rise	10508 Sep 10 18:00	6°♄39'16		behind sun begin	10509 Aug 18 14:28	5°♎09'51	
	10508 Sep 22 23:18	0°♎		behind sun end	10509 Aug 18 23:42	5°♎58'03	
evening max el	10508 Oct 03 09:53	13°♎33'32	23°03'20	evening rise	10509 Aug 26 04:09	21°♎09'22	
desc. node	10508 Oct 03 17:46	13°♎52'28			10509 Aug 30 11:47	0°♄	
retrograde	10508 Oct 16 17:04	20°♎11'00		evening max el	10509 Sep 15 01:44	23°♄49'05	21°26'37
evening set	10508 Oct 20 16:33	19°♎36'32		desc. node	10509 Sep 20 15:01	28°♄04'35	
min. Earth dist.	10508 Oct 27 19:02	16°♎21'00	0.55210 AU	retrograde	10509 Sep 27 05:45	29°♄51'33	
inferior conj	10508 Oct 29 06:09	15°♎30'17	-5°43'29	evening set	10509 Sep 29 21:04	29°♄35'36	
minimum elong	10508 Oct 29 03:44	15°♎33'47	5°43'01	inferior conj	10509 Oct 08 23:14	25°♄39'35	-4°58'07
morning rise	10508 Nov 06 16:39	11°♎40'20		minimum elong	10509 Oct 08 14:06	25°♄52'21	4°55'58
direct	10508 Nov 09 17:20	11°♎18'41		min. Earth dist.	10509 Oct 09 02:19	25°♄35'16	0.54622 AU
morning max el	10508 Nov 20 20:05	16°♎33'42	20°44'09	morning rise	10509 Oct 17 07:59	21°♄49'50	
asc. node	10508 Nov 26 22:50	23°♎49'31		direct	10509 Oct 21 02:20	21°♄19'11	
	10508 Nov 30 21:39	0°♊		morning max el	10509 Nov 02 15:45	27°♄18'04	22°21'16
morning set	10508 Dec 09 23:25	17°♊23'38			10509 Nov 05 06:50	0°♎	
	10508 Dec 16 01:00	0°♊		asc. node	10509 Nov 13 19:45	11°♎52'38	
					10509 Nov 23 09:03	0°♊	
superior conj	10508 Dec 17 09:51	2°♊48'46	1°28'48	morning set	10509 Nov 24 10:03	2°♊11'05	
minimum elong	10508 Dec 17 12:01	2°♊59'49	1°29'09				
max. Earth dist.	10508 Dec 22 11:28	12°♊55'53	1.35926 AU	superior conj	10509 Dec 01 11:24	17°♊14'39	1°37'39
evening rise	10508 Dec 26 09:55	20°♊23'55		minimum elong	10509 Dec 01 12:24	17°♊19'56	1°38'06
desc. node	10508 Dec 30 16:17	28°♊04'49		max. Earth dist.	10509 Dec 05 02:32	24°♊49'44	1.34148 AU
	10508 Dec 31 18:47	0°♋			10509 Dec 07 15:51	0°♊	
	10509 Jan 20 13:42	0°♋		evening rise	10509 Dec 09 14:04	3°♊47'16	
evening max el	10509 Jan 30 21:39	11°♋54'49	26°12'19	desc. node	10509 Dec 17 13:15	18°♊24'50	
retrograde	10509 Feb 12 15:58	19°♋09'30			10509 Dec 24 14:38	0°♋	
evening set	10509 Feb 18 20:56	16°♋38'47		evening max el	10510 Jan 13 11:14	25°♋34'18	27°02'45
asc. node	10509 Feb 22 21:33	12°♋27'11			10510 Jan 18 19:42	0°♋	
min. Earth dist.	10509 Feb 23 01:30	12°♋15'16	0.66860 AU	retrograde	10510 Jan 26 19:07	2°♋56'19	
inferior conj	10509 Feb 24 17:15	10°♋12'50	0°35'24	evening set	10510 Feb 02 10:31	0°♋22'27	
minimum elong	10509 Feb 24 16:21	10°♋15'37	0°35'15		10510 Feb 02 21:40	30°♋	
morning rise	10509 Mar 02 12:31	4°♋26'42		min. Earth dist.	10510 Feb 06 09:36	26°♋32'46	0.65488 AU
direct	10509 Mar 05 15:52	3°♋30'47		inferior conj	10510 Feb 08 13:09	24°♋06'36	-0°24'28
morning max el	10509 Mar 12 06:44	7°♋04'53	18°38'05	minimum elong	10510 Feb 08 13:51	24°♋04'37	0°23'50
desc. node	10509 Mar 28 16:52	0°♌04'39		asc. node	10510 Feb 09 18:45	22°♋43'44	
	10509 Mar 28 15:40	0°♌		morning rise	10510 Feb 14 18:31	18°♋32'34	
morning set	10509 Apr 02 11:26	7°♌33'49		direct	10510 Feb 17 12:22	17°♋51'55	
	10509 Apr 16 19:13	0°♍		morning max el	10510 Feb 23 21:49	21°♋14'09	18°04'47
max. Earth dist.	10509 Apr 18 00:09	1°♍53'10	1.45588 AU		10510 Mar 02 18:35	0°♋	
				morning set	10510 Mar 14 06:46	18°♋21'14	
superior conj	10509 Apr 18 16:07	2°♍55'36	-2°00'22	desc. node	10510 Mar 15 13:37	20°♋26'57	
minimum elong	10509 Apr 18 08:19	2°♍25'05	2°00'08		10510 Mar 21 11:15	0°♌	
evening rise	10509 May 04 04:40	27°♍26'11					
	10509 May 05 19:13	0°♎		superior conj	10510 Mar 29 00:15	11°♌59'47	-1°29'17
greatest brilliancy	10509 May 12 01:33	9°♎58'45	-0.9m	minimum elong	10510 Mar 28 15:03	11°♌23'33	1°28'20
asc. node	10509 May 21 19:35	24°♎27'55		max. Earth dist.	10510 Mar 31 20:23	16°♌27'29	1.45546 AU
evening max el	10509 May 25 12:58	28°♎48'42	18°43'42		10510 Apr 09 12:59	0°♏	
	10509 May 26 19:40	0°♏		evening rise	10510 Apr 14 03:20	7°♏07'14	
retrograde	10509 Jun 01 03:31	2°♏25'54		greatest brilliancy	10510 Apr 27 01:19	26°♏52'49	-0.7m
evening set	10509 Jun 04 10:20	1°♏24'11			10510 Apr 29 04:03	0°♎	
	10509 Jun 06 05:51	30°♏♎		asc. node	10510 May 08 16:43	12°♎20'12	
inferior conj	10509 Jun 10 00:59	25°♎45'27	3°11'38	evening max el	10510 May 08 20:32	12°♎29'53	19°29'04
minimum elong	10509 Jun 10 02:09	25°♎41'50	3°11'00	retrograde	10510 May 16 00:52	16°♎33'44	
min. Earth dist.	10509 Jun 11 22:20	23°♎25'39	0.65635 AU	evening set	10510 May 19 16:14	15°♎16'24	
morning rise	10509 Jun 15 17:13	19°♎25'17		inferior conj	10510 May 25 01:39	9°♎22'49	3°18'03
direct	10509 Jun 22 04:19	16°♎41'08		minimum elong	10510 May 25 01:38	9°♎22'52	3°17'35
desc. node	10509 Jun 24 17:01	17°♎03'02		min. Earth dist.	10510 May 26 07:59	7°♎42'51	0.67064 AU
morning max el	10509 Jul 05 09:46	24°♎31'15	26°51'20	morning rise	10510 May 30 10:39	3°♎02'25	
	10509 Jul 10 08:17	0°♏		direct	10510 Jun 05 12:01	0°♎22'15	
	10509 Jul 30 23:33	0°♏		desc. node	10510 Jun 11 14:04	2°♎28'46	
morning set	10509 Aug 10 04:14	18°♏16'51		morning max el	10510 Jun 17 20:07	7°♎45'23	25°38'57
max. Earth dist.	10509 Aug 14 09:31	26°♏32'49	1.34037 AU		10510 Jul 05 04:34	0°♏	
	10509 Aug 16 02:27	0°♐			10510 Jul 23 11:20	0°♏	
asc. node	10509 Aug 17 19:14	3°♐29'52		morning set	10510 Jul 23 21:39	0°♏46'53	
				max. Earth dist.	10510 Jul 27 14:32	7°♏40'01	1.35866 AU
superior conj	10509 Aug 18 19:36	5°♐36'38	0°10'00				
minimum elong	10509 Aug 18 19:05	5°♐33'56	0°09'38	superior conj	10510 Aug 02 11:54	19°♏10'42	-0°21'05

minimum elong	10510 Aug 02 13:12	19° $\Omega$ 17'12	0°21'12	minimum elong	10511 Jul 16 20:00	2° $\Omega$ 26'12	0°54'03
asc. node	10510 Aug 04 16:04	23° $\Omega$ 34'32		asc. node	10511 Jul 22 12:57	13° $\Omega$ 34'37	
	10510 Aug 07 19:16	0° $\Pi$		evening rise	10511 Jul 25 11:48	19° $\Omega$ 25'21	
evening rise	10510 Aug 10 10:55	5° $\Pi$ 27'02			10511 Jul 30 23:24	0° $\Pi$	
	10510 Aug 24 06:03	0° $\Omega$		evening max el	10511 Aug 10 23:35	16° $\Pi$ 19'06	19°05'05
evening max el	10510 Aug 28 05:52	4° $\Omega$ 40'31	20°05'29	retrograde	10511 Aug 19 21:37	20° $\Pi$ 45'30	
retrograde	10510 Sep 07 19:16	9° $\Omega$ 55'05		evening set	10511 Aug 21 18:23	20° $\Pi$ 34'38	
desc. node	10510 Sep 07 12:18	9° $\Omega$ 54'51		desc. node	10511 Aug 25 09:35	19° $\Pi$ 17'39	
evening set	10510 Sep 09 17:44	9° $\Omega$ 45'16		inferior conj	10511 Aug 30 04:24	16° $\Pi$ 21'10	-1°29'22
inferior conj	10510 Sep 18 18:13	5° $\Omega$ 46'04	-3°23'20	minimum elong	10511 Aug 30 00:31	16° $\Pi$ 27'50	1°27'59
minimum elong	10510 Sep 18 09:24	5° $\Omega$ 59'14	3°20'20	min. Earth dist.	10511 Sep 02 00:49	14° $\Pi$ 24'29	0.56209 AU
min. Earth dist.	10510 Sep 20 11:27	4° $\Omega$ 44'27	0.54972 AU	morning rise	10511 Sep 07 03:35	11° $\Pi$ 34'56	
morning rise	10510 Sep 26 23:57	1° $\Omega$ 35'32		direct	10511 Sep 12 12:01	10° $\Pi$ 28'04	
direct	10510 Oct 01 13:03	0° $\Omega$ 50'45		morning max el	10511 Sep 26 16:27	17° $\Pi$ 43'05	25°49'23
morning max el	10510 Oct 15 03:54	7° $\Omega$ 31'02	24°08'27		10511 Oct 06 20:42	0° $\Omega$	
	10510 Oct 31 08:43	0° $\Pi$		asc. node	10511 Oct 18 13:30	19° $\Omega$ 49'06	
asc. node	10510 Oct 31 16:39	0° $\Pi$ 35'55			10511 Oct 23 13:45	0° $\Pi$	
morning set	10510 Nov 08 21:49	16° $\Pi$ 59'03		morning set	10511 Oct 24 09:06	1° $\Pi$ 42'55	
	10510 Nov 14 21:32	0° $\Sigma$					
superior conj	10510 Nov 15 18:33	1° $\Sigma$ 54'36	1°39'49	superior conj	10511 Oct 31 05:02	16° $\Pi$ 41'51	1°35'54
minimum elong	10510 Nov 15 18:21	1° $\Sigma$ 53'32	1°40'15	minimum elong	10511 Oct 31 03:49	16° $\Pi$ 35'09	1°36'10
max. Earth dist.	10510 Nov 18 01:35	6° $\Sigma$ 52'08	1.32788 AU	max. Earth dist.	10511 Nov 01 07:08	19° $\Pi$ 06'05	1.31894 AU
evening rise	10510 Nov 23 05:40	17° $\Sigma$ 39'50			10511 Nov 06 07:59	0° $\Sigma$	
	10510 Nov 29 15:12	0° $\Xi$		evening rise	10511 Nov 07 05:45	1° $\Sigma$ 54'12	
desc. node	10510 Dec 04 10:17	8° $\Xi$ 26'45		desc. node	10511 Nov 21 07:24	28° $\Sigma$ 03'02	
	10510 Dec 19 00:16	0° $\approx$			10511 Nov 22 12:34	0° $\Xi$	
evening max el	10510 Dec 26 23:29	8° $\approx$ 52'14	27°28'45	evening max el	10511 Dec 09 08:22	21° $\Xi$ 36'28	27°24'19
retrograde	10511 Jan 09 15:43	16° $\approx$ 13'46		retrograde	10511 Dec 23 05:05	28° $\Xi$ 52'41	
evening set	10511 Jan 16 14:23	13° $\approx$ 43'26		evening set	10511 Dec 30 05:35	26° $\Xi$ 34'50	
min. Earth dist.	10511 Jan 20 09:07	10° $\approx$ 25'15	0.63781 AU	min. Earth dist.	10512 Jan 02 22:39	23° $\Xi$ 42'16	0.61810 AU
inferior conj	10511 Jan 22 23:59	7° $\approx$ 44'11	-1°32'38	inferior conj	10512 Jan 05 22:44	20° $\Xi$ 58'13	-2°46'45
minimum elong	10511 Jan 23 02:56	7° $\approx$ 36'35	1°30'57	minimum elong	10512 Jan 06 04:19	20° $\Xi$ 45'29	2°44'08
asc. node	10511 Jan 27 15:57	3° $\approx$ 32'32		morning rise	10512 Jan 13 05:36	15° $\Xi$ 57'14	
morning rise	10511 Jan 29 17:30	2° $\approx$ 25'10		asc. node	10512 Jan 14 13:07	15° $\Xi$ 39'40	
direct	10511 Feb 01 03:41	1° $\approx$ 56'09		direct	10512 Jan 15 10:28	15° $\Xi$ 36'10	
morning max el	10511 Feb 07 15:19	5° $\approx$ 17'14	17°48'36	morning max el	10512 Jan 22 08:06	19° $\Xi$ 05'50	17°50'12
	10511 Feb 23 22:58	0° $\text{X}$			10512 Jan 30 07:21	0° $\approx$	
morning set	10511 Feb 24 05:29	0° $\text{X}$ 27'51		morning set	10512 Feb 07 01:35	13° $\approx$ 34'54	
desc. node	10511 Mar 02 10:21	10° $\text{X}$ 59'29			10512 Feb 16 08:14	0° $\text{X}$	
				desc. node	10512 Feb 17 07:08	1° $\text{X}$ 38'30	
superior conj	10511 Mar 09 00:44	21° $\text{X}$ 53'53	-0°47'57	superior conj	10512 Feb 18 01:49	2° $\text{X}$ 58'26	-0°05'55
minimum elong	10511 Mar 08 19:34	21° $\text{X}$ 32'53	0°47'06	minimum elong	10512 Feb 18 01:17	2° $\text{X}$ 56'11	0°05'34
	10511 Mar 14 01:38	0° $\Upsilon$		behind sun begin	10512 Feb 17 17:09	2° $\text{X}$ 21'27	
max. Earth dist.	10511 Mar 14 15:27	0° $\Upsilon$ 54'52	1.44768 AU	behind sun end	10512 Feb 18 09:25	3° $\text{X}$ 30'50	
evening rise	10511 Mar 24 15:02	16° $\Upsilon$ 28'36		max. Earth dist.	10512 Feb 25 06:45	14° $\text{X}$ 58'36	1.43350 AU
	10511 Apr 02 13:20	0° $\text{B}$		evening rise	10512 Mar 03 07:10	26° $\text{X}$ 09'03	
evening max el	10511 Apr 21 22:34	26° $\text{B}$ 12'23	20°29'25		10512 Mar 05 18:46	0° $\Upsilon$	
asc. node	10511 Apr 25 13:54	29° $\text{B}$ 18'40			10512 Mar 26 11:15	0° $\text{B}$	
	10511 Apr 26 17:44	0° $\Pi$		evening max el	10512 Apr 03 19:05	9° $\text{B}$ 55'50	21°41'32
retrograde	10511 Apr 29 23:39	0° $\Pi$ 52'55		asc. node	10512 Apr 11 11:09	15° $\text{B}$ 08'14	
	10511 May 03 00:45	30° $\text{R}$ $\text{B}$		retrograde	10512 Apr 12 21:52	15° $\text{B}$ 18'30	
evening set	10511 May 04 00:19	29° $\text{B}$ 19'52		evening set	10512 Apr 17 08:47	13° $\text{B}$ 30'05	
inferior conj	10511 May 09 07:19	23° $\text{B}$ 13'12	3°11'48	inferior conj	10512 Apr 22 15:42	7° $\text{B}$ 12'39	2°54'40
minimum elong	10511 May 09 06:16	23° $\text{B}$ 16'46	3°11'19	minimum elong	10512 Apr 22 13:56	7° $\text{B}$ 18'52	2°54'04
min. Earth dist.	10511 May 09 23:33	22° $\text{B}$ 17'28	0.68034 AU	min. Earth dist.	10512 Apr 22 18:51	7° $\text{B}$ 01'41	0.68547 AU
morning rise	10511 May 14 11:59	16° $\text{B}$ 55'22		morning rise	10512 Apr 27 18:53	0° $\text{B}$ 59'12	
direct	10511 May 20 01:05	14° $\text{B}$ 27'39			10512 Apr 29 01:52	30° $\text{R}$ $\Upsilon$	
desc. node	10511 May 29 11:02	19° $\text{B}$ 26'30		direct	10512 May 02 18:41	28° $\Upsilon$ 49'39	
morning max el	10511 May 31 05:48	21° $\text{B}$ 09'51	24°12'55		10512 May 06 20:00	0° $\text{B}$	
	10511 Jun 07 20:50	0° $\Pi$		morning max el	10512 May 12 16:25	4° $\text{B}$ 41'13	22°43'02
	10511 Jun 28 10:09	0° $\Xi$		desc. node	10512 May 15 07:56	7° $\text{B}$ 31'29	
morning set	10511 Jul 05 20:04	12° $\Xi$ 23'07			10512 Jun 01 02:11	0° $\Pi$	
max. Earth dist.	10511 Jul 09 12:33	18° $\Xi$ 52'37	1.38032 AU	morning set	10512 Jun 15 18:15	22° $\Pi$ 51'59	
	10511 Jul 15 13:19	0° $\Omega$			10512 Jun 20 00:43	0° $\Xi$	
superior conj	10511 Jul 16 16:25	2° $\Omega$ 09'00	-0°54'12	max. Earth dist.	10512 Jun 20 09:47	0° $\Xi$ 38'35	1.40322 AU

superior conj	10512 Jun 28 04:57	14°☿21'24	-1°26'43			10513 May 25 05:02	0°♊	
minimum elong	10512 Jun 28 10:42	14°☿47'29	1°26'27	morning set		10513 May 26 13:55	2°♊09'06	
	10512 Jul 06 14:32	0°♊		max. Earth dist.		10513 Jun 02 12:28	13°♊18'05	1.42457 AU
evening rise	10512 Jul 08 03:31	2°♊55'22						
asc. node	10512 Jul 08 09:54	3°♊25'36		superior conj		10513 Jun 09 21:00	25°♊38'10	-1°54'18
evening max el	10512 Jul 24 03:55	28°♊39'54	18°25'48	minimum elong		10513 Jun 10 03:18	26°♊05'12	1°54'16
	10512 Jul 25 15:34	0°♊				10513 Jun 12 09:32	0°☿	
retrograde	10512 Jul 31 18:32	2°♊28'55		evening rise		10513 Jun 21 06:01	15°☿47'11	
evening set	10512 Aug 02 21:08	2°♊12'09		asc. node		10513 Jun 25 06:53	23°☿03'06	
	10512 Aug 07 09:01	30°♊♊				10513 Jun 29 06:57	0°♊	
inferior conj	10512 Aug 10 11:52	27°♊38'55	0°14'26	evening max el		10513 Jul 07 14:49	11°♊33'31	18°06'38
minimum elong	10512 Aug 10 12:23	27°♊37'54	0°13'55	retrograde		10513 Jul 14 09:18	15°♊00'30	
transit middle	10512 Aug 10 12:23	27°♊37'54	0°13'55	evening set		10513 Jul 16 19:46	14°♊34'00	
transit begin	10512 Aug 10 10:35	27°♊41'30		inferior conj		10513 Jul 23 16:16	9°♊40'12	1°34'11
transit end	10512 Aug 10 14:11	27°♊34'17		minimum elong		10513 Jul 23 18:49	9°♊34'15	1°32'55
desc. node	10512 Aug 11 06:52	27°♊00'39		min. Earth dist.		10513 Jul 26 22:32	6°♊39'15	0.60346 AU
min. Earth dist.	10512 Aug 13 19:59	24°♊59'30	0.58111 AU	desc. node		10513 Jul 29 04:04	4°♊49'23	
morning rise	10512 Aug 18 00:05	22°♊16'12		morning rise		10513 Jul 30 15:01	3°♊49'07	
direct	10512 Aug 24 01:46	20°♊40'33		direct		10513 Aug 06 04:03	1°♊44'25	
morning max el	10512 Sep 07 10:25	28°♊20'27	27°07'04	morning max el		10513 Aug 20 11:24	9°♊39'37	27°49'57
	10512 Sep 09 01:42	0°♊				10513 Sep 05 04:28	0°♊	
	10512 Sep 29 13:42	0°♊		asc. node		10513 Sep 21 07:10	29°♊13'06	
asc. node	10512 Oct 04 10:20	9°♊23'34		morning set		10513 Sep 21 23:10	0°♊36'07	
morning set	10512 Oct 07 18:09	16°♊16'52				10513 Sep 21 16:13	0°♊	
	10512 Oct 14 00:45	0°♊		max. Earth dist.		10513 Sep 28 00:58	13°♊41'40	1.31555 AU
superior conj	10512 Oct 14 16:48	1°♊29'20	1°26'18	superior conj		10513 Sep 29 04:01	16°♊11'23	1°11'19
minimum elong	10512 Oct 14 14:52	1°♊18'37	1°26'19	minimum elong		10513 Sep 29 01:47	15°♊58'59	1°11'05
max. Earth dist.	10512 Oct 14 16:05	1°♊25'23	1.31480 AU			10513 Oct 05 10:25	0°♊	
evening rise	10512 Oct 21 11:42	16°♊22'28		evening rise		10513 Oct 05 21:18	0°♊58'38	
	10512 Oct 28 05:35	0°♊				10513 Oct 21 11:37	0°♊	
desc. node	10512 Nov 07 04:33	17°♊02'42		desc. node		10513 Oct 25 01:45	5°♊11'27	
	10512 Nov 16 23:42	0°♊		evening max el		10513 Nov 02 06:30	14°♊43'06	25°35'11
evening max el	10512 Nov 20 11:23	3°♊35'30	26°45'59	retrograde		10513 Nov 16 03:51	21°♊43'07	
retrograde	10512 Dec 04 09:51	10°♊43'58		evening set		10513 Nov 22 05:17	20°♊18'24	
evening set	10512 Dec 11 04:08	8°♊48'36		min. Earth dist.		10513 Nov 26 18:51	17°♊40'58	0.57647 AU
min. Earth dist.	10512 Dec 15 01:38	6°♊11'14	0.59697 AU	inferior conj		10513 Nov 29 18:05	15°♊38'00	-5°06'21
inferior conj	10512 Dec 18 05:53	3°♊39'28	-4°01'32	minimum elong		10513 Nov 30 01:26	15°♊25'17	5°04'25
minimum elong	10512 Dec 18 13:34	3°♊24'07	3°58'40	morning rise		10513 Dec 07 23:54	11°♊20'10	
	10512 Dec 23 12:08	30°♊♊		direct		10513 Dec 10 06:25	11°♊04'19	
morning rise	10512 Dec 26 01:42	28°♊59'12		asc. node		10513 Dec 18 07:17	14°♊37'59	
direct	10512 Dec 28 04:47	28°♊42'29		morning max el		10513 Dec 19 00:53	15°♊18'47	18°52'41
asc. node	10512 Dec 31 10:13	29°♊22'53				10513 Dec 29 07:06	0°♊	
	10513 Jan 01 15:53	0°♊		morning set		10514 Jan 04 10:54	11°♊42'12	
morning max el	10513 Jan 04 20:34	2°♊30'02	18°10'57					
morning set	10513 Jan 20 13:00	27°♊24'32		superior conj		10514 Jan 12 22:56	28°♊15'33	0°59'43
	10513 Jan 21 22:02	0°♊		minimum elong		10514 Jan 13 02:02	28°♊30'16	0°59'46
						10514 Jan 13 21:01	0°♊	
superior conj	10513 Jan 30 02:42	15°♊09'59	0°30'48	max. Earth dist.		10514 Jan 20 00:40	11°♊15'24	1.39287 AU
minimum elong	10513 Jan 30 04:58	15°♊20'07	0°30'52	desc. node		10514 Jan 21 00:45	13°♊01'40	
desc. node	10513 Feb 03 03:56	22°♊20'32		evening rise		10514 Jan 23 22:20	18°♊02'23	
max. Earth dist.	10513 Feb 06 17:28	28°♊27'09	1.41451 AU			10514 Jan 31 05:07	0°♊	
	10513 Feb 07 15:33	0°♊				10514 Feb 21 08:19	0°♊	
evening rise	10513 Feb 11 16:04	6°♊37'31		evening max el		10514 Feb 28 01:27	7°♊30'54	24°20'43
	10513 Feb 26 22:47	0°♊		retrograde		10514 Mar 11 10:12	14°♊10'15	
evening max el	10513 Mar 17 11:26	23°♊41'59	23°00'38	asc. node		10514 Mar 16 05:38	12°♊23'57	
retrograde	10513 Mar 27 17:48	29°♊46'05		evening set		10514 Mar 16 20:30	11°♊54'04	
asc. node	10513 Mar 29 08:24	29°♊33'36		min. Earth dist.		10514 Mar 21 11:38	6°♊35'59	0.68260 AU
evening set	10513 Apr 01 16:02	27°♊43'05		inferior conj		10514 Mar 22 08:48	5°♊24'49	1°51'21
min. Earth dist.	10513 Apr 06 15:39	21°♊49'44	0.68617 AU	minimum elong		10514 Mar 22 06:42	5°♊31'54	1°50'39
inferior conj	10513 Apr 07 00:50	21°♊17'55	2°27'42			10514 Mar 26 23:26	30°♊♊	
minimum elong	10513 Apr 06 22:41	21°♊25'23	2°26'59	morning rise		10514 Mar 27 16:59	29°♊24'26	
morning rise	10513 Apr 12 05:13	15°♊10'16		direct		10514 Mar 31 14:28	27°♊57'52	
direct	10513 Apr 16 15:35	13°♊21'55				10514 Apr 05 15:42	0°♊	
morning max el	10513 Apr 25 07:17	18°♊21'56	21°18'04	morning max el		10514 Apr 08 05:18	2°♊14'30	20°04'09
desc. node	10513 May 02 04:47	26°♊25'22		desc. node		10514 Apr 19 01:34	15°♊54'22	
	10513 May 04 21:27	0°♊				10514 Apr 28 15:14	0°♊	

morning set	10514 May 05 14:45	10°♄38'38		morning set	10515 Apr 14 17:59	19°♄22'58	
max. Earth dist.	10514 May 15 22:39	26°♄49'34	1.44172 AU		10515 Apr 21 14:09	0°♄	
	10514 May 17 22:12	0°♄		max. Earth dist.	10515 Apr 28 14:32	10°♄57'51	1.45275 AU
superior conj	10514 May 21 12:55	5°♄51'26	-2°10'56	superior conj	10515 May 01 06:18	15°♄08'51	-2°10'08
minimum elong	10514 May 21 15:58	6°♄03'57	2°11'18	minimum elong	10515 May 01 02:13	14°♄52'47	2°10'21
evening rise	10514 Jun 03 14:26	27°♄49'04			10515 May 10 13:28	0°♄	
	10514 Jun 04 20:54	0°♄		evening rise	10515 May 16 00:24	8°♄52'35	
asc. node	10514 Jun 12 03:54	12°♄21'06			10515 May 29 04:58	0°♄	
evening max el	10514 Jun 21 04:26	24°♄49'30	18°06'40	asc. node	10515 May 30 00:57	1°♄12'53	
retrograde	10514 Jun 27 13:55	28°♄09'47		evening max el	10515 Jun 04 17:32	8°♄19'35	18°25'05
evening set	10514 Jun 30 08:14	27°♄30'53		retrograde	10515 Jun 11 03:51	11°♄47'13	
inferior conj	10514 Jul 06 14:03	22°♄18'03	2°28'33	evening set	10515 Jun 14 05:58	10°♄54'13	
minimum elong	10514 Jul 06 16:44	22°♄10'56	2°27'24	inferior conj	10515 Jun 20 01:04	5°♄24'20	3°01'06
min. Earth dist.	10514 Jul 09 10:02	19°♄18'40	0.62588 AU	minimum elong	10515 Jun 20 02:54	5°♄18'56	3°00'19
morning rise	10514 Jul 12 23:20	16°♄08'54		min. Earth dist.	10515 Jun 22 07:01	2°♄45'53	0.64616 AU
desc. node	10514 Jul 16 01:14	14°♄23'48			10515 Jun 24 22:09	30°♄	
direct	10514 Jul 19 16:28	13°♄41'03		morning rise	10515 Jun 25 22:44	29°♄06'02	
morning max el	10514 Aug 02 18:17	21°♄43'20	27°54'24	direct	10515 Jul 02 13:24	26°♄24'41	
	10514 Aug 09 23:41	0°♄		desc. node	10515 Jul 02 22:21	26°♄25'09	
	10514 Aug 29 07:56	0°♄			10515 Jul 11 05:36	0°♄	
morning set	10514 Sep 05 22:04	14°♄35'23		morning max el	10515 Jul 16 04:26	4°♄23'44	27°23'02
asc. node	10514 Sep 08 03:58	19°♄12'38			10515 Aug 04 13:02	0°♄	
max. Earth dist.	10514 Sep 11 05:56	25°♄44'53	1.32120 AU	morning set	10515 Aug 20 12:15	28°♄07'08	
	10514 Sep 13 05:00	0°♄			10515 Aug 21 11:11	0°♄	
superior conj	10514 Sep 13 12:50	0°♄42'44	0°51'12	max. Earth dist.	10515 Aug 25 03:05	7°♄24'45	1.33188 AU
minimum elong	10514 Sep 13 10:47	0°♄31'33	0°50'48	asc. node	10515 Aug 26 00:45	9°♄17'10	
evening rise	10514 Sep 20 08:39	15°♄37'13		superior conj	10515 Aug 28 17:11	14°♄56'51	0°26'19
	10514 Sep 27 10:15	0°♄		minimum elong	10515 Aug 28 15:55	14°♄50'06	0°25'52
desc. node	10514 Oct 11 22:59	22°♄10'00		evening rise	10515 Sep 04 19:47	0°♄11'53	
evening max el	10514 Oct 14 18:28	25°♄06'40	24°01'23		10515 Sep 04 17:33	0°♄	
	10514 Oct 21 06:11	0°♄			10515 Sep 21 15:35	0°♄	
retrograde	10514 Oct 28 09:36	1°♄55'44		evening max el	10515 Sep 26 05:58	5°♄13'34	22°20'55
evening set	10514 Nov 02 06:00	1°♄04'12		desc. node	10515 Sep 28 20:15	7°♄31'37	
	10514 Nov 04 19:28	30°♄		retrograde	10515 Oct 09 03:38	11°♄39'10	
min. Earth dist.	10514 Nov 08 05:02	28°♄07'58	0.55929 AU	evening set	10515 Oct 12 12:15	11°♄14'14	
inferior conj	10514 Nov 10 09:48	26°♄47'51	-5°43'17	min. Earth dist.	10515 Oct 20 12:24	7°♄41'24	0.54847 AU
minimum elong	10514 Nov 10 12:07	26°♄44'20	5°42'45	inferior conj	10515 Oct 21 08:20	7°♄13'18	-5°31'26
morning rise	10514 Nov 18 20:14	22°♄50'40		minimum elong	10515 Oct 21 02:28	7°♄21'35	5°30'26
direct	10514 Nov 21 12:40	22°♄32'11		morning rise	10515 Oct 29 18:19	3°♄26'08	
morning max el	10514 Dec 01 17:28	27°♄22'22	19°56'59	direct	10515 Nov 02 01:59	3°♄01'24	
	10514 Dec 04 04:50	0°♄		morning max el	10515 Nov 13 20:27	8°♄34'41	21°23'27
asc. node	10514 Dec 05 04:16	1°♄11'05		asc. node	10515 Nov 22 01:13	18°♄45'18	
morning set	10514 Dec 19 15:46	26°♄17'45			10515 Nov 28 13:08	0°♄	
	10514 Dec 21 11:22	0°♄		morning set	10515 Dec 04 00:53	11°♄02'19	
superior conj	10514 Dec 27 09:44	12°♄02'01	1°20'26	superior conj	10515 Dec 11 06:52	26°♄16'19	1°33'25
minimum elong	10514 Dec 27 12:26	12°♄15'29	1°20'39	minimum elong	10515 Dec 11 08:33	26°♄25'05	1°33'48
max. Earth dist.	10515 Jan 02 07:18	23°♄28'08	1.37102 AU		10515 Dec 13 02:13	0°♄	
	10515 Jan 05 20:32	0°♄		max. Earth dist.	10515 Dec 15 17:50	5°♄21'09	1.35123 AU
evening rise	10515 Jan 06 01:07	0°♄20'36		evening rise	10515 Dec 19 21:02	13°♄22'36	
desc. node	10515 Jan 07 21:39	3°♄38'29		desc. node	10515 Dec 25 18:37	24°♄05'52	
	10515 Jan 24 10:31	0°♄			10515 Dec 29 05:43	0°♄	
evening max el	10515 Feb 10 14:45	21°♄20'46	25°34'53		10516 Jan 19 08:54	0°♄	
retrograde	10515 Feb 22 22:09	28°♄25'52		evening max el	10516 Jan 24 04:06	5°♄05'47	26°36'09
evening set	10515 Feb 28 20:39	25°♄59'05		retrograde	10516 Feb 06 04:58	12°♄25'24	
asc. node	10515 Mar 03 02:51	23°♄45'39		evening set	10516 Feb 12 14:41	9°♄52'19	
min. Earth dist.	10515 Mar 05 04:41	21°♄16'00	0.67492 AU	min. Earth dist.	10516 Feb 16 16:40	5°♄43'34	0.66324 AU
inferior conj	10515 Mar 06 13:44	19°♄30'23	1°05'47	asc. node	10516 Feb 18 00:04	4°♄10'14	
minimum elong	10515 Mar 06 12:13	19°♄35'14	1°05'21	inferior conj	10516 Feb 18 13:35	3°♄29'44	0°11'04
morning rise	10515 Mar 12 04:17	13°♄38'42		minimum elong	10516 Feb 18 13:16	3°♄30'39	0°11'13
direct	10515 Mar 15 13:50	12°♄32'29		transit middle	10516 Feb 18 13:16	3°♄30'39	0°11'13
morning max el	10515 Mar 22 11:13	16°♄18'16	19°04'51	transit begin	10516 Feb 18 11:11	3°♄36'53	
	10515 Apr 02 01:04	0°♄		transit end	10516 Feb 18 15:21	3°♄24'25	
greatest brilliancy	10515 Apr 04 18:00	4°♄02'11	-0.7m		10516 Feb 21 17:01	30°♄	
desc. node	10515 Apr 05 22:20	5°♄49'23		morning rise	10516 Feb 24 12:54	27°♄48'42	

direct	10516 Feb 27 11:56	26°  59'52		morning rise	10517 Feb 07 16:18	11°  49'17	
	10516 Mar 04 12:05	0° 		direct	10517 Feb 10 06:31	11° 	14'11
morning max el	10516 Mar 04 23:40	0°  27'37	18°21'50	morning max el	10517 Feb 16 16:08	14° 	35'04 17°55'41
desc. node	10516 Mar 22 19:06	26°  03'14			10517 Feb 27 16:35	0° 	
morning set	10516 Mar 24 20:17	29°  19'10		morning set	10517 Mar 06 03:51	10° 	41'57
	10516 Mar 25 06:32	0° 		desc. node	10517 Mar 09 15:51	16° 	30'10
					10517 Mar 17 22:41	0° 	
superior conj	10516 Apr 09 12:37	24°  04'09	-1°49'04	superior conj	10517 Mar 20 02:01	3° 	25'17 -1°12'22
minimum elong	10516 Apr 09 03:20	23°  27'52	1°48'28	minimum elong	10517 Mar 19 18:10	2° 	53'58 1°11'23
max. Earth dist.	10516 Apr 10 09:31	25°  25'51	1.45658 AU	max. Earth dist.	10517 Mar 24 05:04	9° 	57'20 1.45299 AU
	10516 Apr 13 07:41	0° 		evening rise	10517 Apr 05 02:48	28° 	26'23
evening rise	10516 Apr 25 10:37	18°  58'47			10517 Apr 06 03:11	0° 	
	10516 May 02 11:08	0° 		greatest brilliancy	10517 Apr 19 16:21	20° 	26'40 -0.6m
greatest brilliancy	10516 May 05 16:00	4°  58'16	-0.8m		10517 Apr 26 12:47	0° 	
asc. node	10516 May 15 22:03	19°  30'04		evening max el	10517 May 01 08:59	5° 	40'08 19°53'09
evening max el	10516 May 18 03:39	21°  58'02	19°01'02	asc. node	10517 May 02 19:14	7° 	01'14
retrograde	10516 May 24 23:20	25°  45'36		retrograde	10517 May 08 21:30	9° 	58'35
evening set	10516 May 28 09:36	24°  37'28		evening set	10517 May 12 16:39	8° 	34'43
inferior conj	10516 Jun 02 21:39	18°  52'14	3°16'03	inferior conj	10517 May 18 00:45	2° 	35'36 3°16'49
minimum elong	10516 Jun 02 22:19	18°  50'08	3°15'31	minimum elong	10517 May 18 00:16	2° 	37'12 3°16'21
min. Earth dist.	10516 Jun 04 12:36	16°  48'14	0.66290 AU	min. Earth dist.	10517 May 19 01:04	1° 	13'52 0.67535 AU
morning rise	10516 Jun 08 10:25	12°  31'15			10517 May 19 23:31	30° 	
direct	10516 Jun 14 17:43	9°  47'26		morning rise	10517 May 23 07:33	26° 	15'58
desc. node	10516 Jun 18 19:25	10°  44'20		direct	10517 May 29 04:01	23° 	39'53
morning max el	10516 Jun 27 15:13	17°  28'56	26°22'53	desc. node	10517 Jun 05 16:27	26° 	52'21
	10516 Jul 08 02:12	0° 			10517 Jun 09 05:58	0° 	
	10516 Jul 27 11:38	0° 		morning max el	10517 Jun 10 01:01	0° 	47'25 25°03'19
morning set	10516 Aug 02 14:27	11°  03'02			10517 Jul 02 01:05	0° 	
max. Earth dist.	10516 Aug 06 13:42	18°  03'29	1.34754 AU	morning set	10517 Jul 16 00:21	23° 	11'18
				max. Earth dist.	10517 Jul 19 14:35	29° 	42'51 1.36756 AU
superior conj	10516 Aug 11 14:43	28°  04'44	-0°02'49		10517 Jul 19 18:17	0° 	
minimum elong	10516 Aug 11 14:53	28°  04'37	0°03'06	superior conj	10517 Jul 26 02:26	12° 	07'24 -0°35'01
behind sun begin	10516 Aug 11 09:04	28°  01'42		minimum elong	10517 Jul 26 04:40	12° 	18'23 0°35'01
behind sun end	10516 Aug 11 20:43	29°  01'36		asc. node	10517 Jul 29 18:26	19° 	02'59
asc. node	10516 Aug 11 21:35	29°  02'30		evening rise	10517 Aug 03 09:21	28° 	04'59
	10516 Aug 12 04:45	0° 			10517 Aug 03 23:50	0° 	
evening rise	10516 Aug 19 04:47	14°  03'72		evening max el	10517 Aug 20 12:40	26° 	53'04 19°37'14
	10516 Aug 27 00:30	0° 			10517 Aug 24 10:14	0° 	
evening max el	10516 Sep 07 02:31	15°  41'54	20°49'52	retrograde	10517 Aug 30 08:33	1° 	45'43
desc. node	10516 Sep 14 17:32	20°  46'21		evening set	10517 Sep 01 04:59	1° 	36'07
retrograde	10516 Sep 18 15:20	21°  45'10		desc. node	10517 Sep 01 14:49	1° 	31'29
evening set	10516 Sep 20 21:01	21°  43'09			10517 Sep 05 19:00	30° 	
inferior conj	10516 Sep 30 00:25	17°  41'34	-4°22'35	inferior conj	10517 Sep 10 00:28	27° 	32'18 -2°35'18
minimum elong	10516 Sep 29 14:31	17°  41'41	4°19'44	minimum elong	10517 Sep 09 17:32	27° 	43'13 2°32'47
min. Earth dist.	10516 Sep 30 20:33	16°  48'51	0.54648 AU	min. Earth dist.	10517 Sep 12 07:17	26° 	06'17 0.55401 AU
morning rise	10516 Oct 08 08:03	13°  42'01		morning rise	10517 Sep 18 03:58	23° 	07'43
direct	10516 Oct 12 10:04	12°  45'12		direct	10517 Sep 23 01:41	22° 	14'11
morning max el	10516 Oct 25 12:09	19°  43'08	23°06'24	morning max el	10517 Oct 06 23:18	29° 	10'27 24°53'13
	10516 Nov 03 12:09	0° 			10517 Oct 07 19:42	0° 	
asc. node	10516 Nov 07 22:08	7°  06'47		asc. node	10517 Oct 25 19:01	26° 	43'35
morning set	10516 Nov 17 12:13	25°  00'20			10517 Oct 27 20:15	0° 	
	10516 Nov 19 10:54	0° 		morning set	10517 Nov 01 23:59	10° 	36'46
superior conj	10516 Nov 24 11:08	10°  49'11	1°39'20	superior conj	10517 Nov 08 19:57	25° 	32'47 1°38'52
minimum elong	10516 Nov 24 11:37	10°  49'16	1°39'48	minimum elong	10517 Nov 08 19:18	25° 	29'11 1°39'15
max. Earth dist.	10516 Nov 27 12:01	17°  46'05	1.33515 AU	max. Earth dist.	10517 Nov 10 14:08	29° 	23'25 1.32349 AU
evening rise	10516 Dec 02 06:28	26°  49'28			10517 Nov 10 20:52	0° 	
	10516 Dec 03 19:23	0° 		evening rise	10517 Nov 16 02:03	11° 	40'22
desc. node	10516 Dec 11 15:37	14°  38'50			10517 Nov 26 01:46	0° 	
	10516 Dec 21 13:07	0° 		desc. node	10517 Nov 28 12:41	4° 	31'00
evening max el	10517 Jan 05 17:16	18°  37'18	27°17'09		10517 Dec 17 10:42	0° 	
retrograde	10517 Jan 19 05:40	26°  40'35		evening max el	10517 Dec 19 04:40	1° 	43'40 27°31'01
evening set	10517 Jan 26 00:28	23°  42'19		retrograde	10518 Jan 01 23:21	9° 	02'55
min. Earth dist.	10517 Jan 29 21:30	19°  45'17	0.64797 AU	evening set	10518 Jan 08 23:26	6° 	37'10
inferior conj	10517 Feb 01 05:59	17°  47'22	-0°52'28	min. Earth dist.	10518 Jan 12 17:09	3° 	30'29 0.62967 AU
minimum elong	10517 Feb 01 07:33	17°  43'03	0°51'25				
asc. node	10517 Feb 03 21:17	14°  43'10					



inferior conj	10518 Jan 15 12:10	0° $\approx$ 46'45	-2°03'31	minimum elong	10518 Dec 29 11:21	13° $\approx$ 33'44	3°16'00
minimum elong	10518 Jan 15 16:13	0° $\approx$ 36'49	2°01'25	morning rise	10519 Jan 05 17:16	8° $\approx$ 55'25	
	10518 Jan 16 07:23	30° $\approx$ 8'3		direct	10519 Jan 07 21:00	8° $\approx$ 36'30	
asc. node	10518 Jan 21 18:29	25° $\approx$ 51'47		asc. node	10519 Jan 08 15:38	8° $\approx$ 39'02	
morning rise	10518 Jan 22 11:14	25° $\approx$ 34'41		morning max el	10519 Jan 15 01:06	12° $\approx$ 12'21	17°56'37
direct	10518 Jan 24 18:50	25° $\approx$ 09'26			10519 Jan 26 22:54	0° $\approx$	
morning max el	10518 Jan 31 09:44	28° $\approx$ 33'11	17°46'58	morning set	10519 Jan 30 15:55	6° $\approx$ 45'02	
	10518 Feb 01 18:23	0° $\approx$					
morning set	10518 Feb 16 12:36	23° $\approx$ 17'38		superior conj	10519 Feb 10 00:17	25° $\approx$ 23'06	0°10'31
	10518 Feb 20 09:08	0° $\approx$		minimum elong	10519 Feb 10 01:12	25° $\approx$ 27'06	0°10'44
desc. node	10518 Feb 24 12:36	7° $\approx$ 06'05		behind sun begin	10519 Feb 09 19:07	25° $\approx$ 00'30	
				behind sun end	10519 Feb 10 07:18	25° $\approx$ 53'38	
superior conj	10518 Feb 28 12:38	13° $\approx$ 48'46	-0°29'45	desc. node	10519 Feb 11 09:22	27° $\approx$ 46'44	
minimum elong	10518 Feb 28 09:36	13° $\approx$ 36'07	0°29'06		10519 Feb 12 16:23	0° $\approx$	
max. Earth dist.	10518 Mar 06 23:02	24° $\approx$ 17'40	1.44241 AU	max. Earth dist.	10519 Feb 17 13:05	8° $\approx$ 10'09	1.42595 AU
	10518 Mar 10 13:17	0° $\approx$		evening rise	10519 Feb 23 12:53	17° $\approx$ 50'56	
evening rise	10518 Mar 15 14:39	7° $\approx$ 52'21			10519 Mar 03 09:45	0° $\approx$	
	10518 Mar 30 09:40	0° $\approx$			10519 Mar 25 05:41	0° $\approx$	
evening max el	10518 Apr 14 08:47	19° $\approx$ 23'52	20°58'54	evening max el	10519 Mar 28 03:19	3° $\approx$ 08'07	22°14'33
asc. node	10518 Apr 19 16:28	23° $\approx$ 32'46		retrograde	10519 Apr 06 17:32	8° $\approx$ 48'26	
retrograde	10518 Apr 22 20:09	24° $\approx$ 21'21		asc. node	10519 Apr 06 13:43	8° $\approx$ 48'19	
evening set	10518 Apr 27 01:08	22° $\approx$ 41'41		evening set	10519 Apr 11 09:17	6° $\approx$ 53'26	
inferior conj	10518 May 02 07:51	16° $\approx$ 30'21	3°05'46	inferior conj	10519 Apr 16 16:47	0° $\approx$ 32'16	2°44'22
minimum elong	10518 May 02 06:28	16° $\approx$ 35'10	3°05'14	minimum elong	10519 Apr 16 14:48	0° $\approx$ 39'12	2°43'43
min. Earth dist.	10518 May 02 18:26	15° $\approx$ 53'45	0.68318 AU	min. Earth dist.	10519 Apr 16 14:32	0° $\approx$ 40'09	0.68639 AU
morning rise	10518 May 07 11:35	10° $\approx$ 14'24			10519 Apr 17 02:03	30° $\approx$ 8'19	
direct	10518 May 12 19:13	7° $\approx$ 53'46		morning rise	10519 Apr 21 20:11	24° $\approx$ 21'22	
morning max el	10518 May 23 10:36	14° $\approx$ 14'19	23°34'29	direct	10519 Apr 26 14:13	22° $\approx$ 20'50	
desc. node	10518 May 23 13:23	14° $\approx$ 21'21		morning max el	10519 May 05 22:43	27° $\approx$ 49'30	22°05'51
	10518 Jun 05 05:48	0° $\approx$			10519 May 08 00:04	0° $\approx$	
	10518 Jun 24 22:52	0° $\approx$		desc. node	10519 May 10 10:14	2° $\approx$ 48'43	
morning set	10518 Jun 27 12:57	4° $\approx$ 19'37			10519 May 29 20:37	0° $\approx$	
max. Earth dist.	10518 Jul 01 11:34	11° $\approx$ 06'55	1.39019 AU	morning set	10519 Jun 07 23:46	14° $\approx$ 17'23	
				max. Earth dist.	10519 Jun 13 11:12	23° $\approx$ 16'54	1.41271 AU
superior conj	10518 Jul 09 00:42	24° $\approx$ 47'21	-1°08'18		10519 Jun 17 10:08	0° $\approx$	
minimum elong	10518 Jul 09 05:17	25° $\approx$ 08'49	1°08'03				
	10518 Jul 11 18:51	0° $\approx$		superior conj	10519 Jun 21 05:03	6° $\approx$ 37'06	-1°39'21
asc. node	10518 Jul 16 15:21	9° $\approx$ 22'34		minimum elong	10519 Jun 21 11:21	7° $\approx$ 05'02	1°39'08
evening rise	10518 Jul 18 06:44	12° $\approx$ 34'06		evening rise	10519 Jul 01 17:24	25° $\approx$ 49'30	
	10518 Jul 27 19:21	0° $\approx$		asc. node	10519 Jul 03 12:19	29° $\approx$ 08'36	
evening max el	10518 Aug 03 11:20	8° $\approx$ 49'59	18°45'44		10519 Jul 03 23:27	0° $\approx$	
retrograde	10518 Aug 11 18:27	12° $\approx$ 58'36		evening max el	10519 Jul 17 18:53	21° $\approx$ 25'46	18°15'10
evening set	10518 Aug 13 17:23	12° $\approx$ 45'37		retrograde	10519 Jul 24 23:39	25° $\approx$ 03'53	
desc. node	10518 Aug 19 12:06	10° $\approx$ 01'19		evening set	10519 Jul 27 05:27	24° $\approx$ 43'24	
inferior conj	10518 Aug 21 19:18	8° $\approx$ 23'43	-0°42'46	inferior conj	10519 Aug 03 12:03	20° $\approx$ 01'02	0°51'30
minimum elong	10518 Aug 21 17:32	8° $\approx$ 26'56	0°42'19	minimum elong	10519 Aug 03 13:43	19° $\approx$ 57'27	0°50'31
min. Earth dist.	10518 Aug 24 22:31	6° $\approx$ 06'57	0.56963 AU	desc. node	10519 Aug 06 09:20	17° $\approx$ 32'46	
morning rise	10518 Aug 29 14:20	3° $\approx$ 21'43		min. Earth dist.	10519 Aug 06 20:34	17° $\approx$ 09'42	0.59038 AU
direct	10518 Sep 04 06:42	2° $\approx$ 03'15		morning rise	10519 Aug 10 18:39	14° $\approx$ 24'43	
morning max el	10518 Sep 18 13:31	9° $\approx$ 29'04	26°26'17	direct	10519 Aug 17 01:46	12° $\approx$ 36'41	
	10518 Oct 04 03:16	0° $\approx$		morning max el	10519 Aug 31 10:45	20° $\approx$ 24'11	27°30'06
asc. node	10518 Oct 12 15:52	15° $\approx$ 26'20			10519 Sep 08 17:08	0° $\approx$	
morning set	10518 Oct 17 10:30	25° $\approx$ 16'26			10519 Sep 26 23:02	0° $\approx$	
	10518 Oct 19 15:01	0° $\approx$		asc. node	10519 Sep 29 12:40	5° $\approx$ 08'02	
				morning set	10519 Oct 01 18:04	9° $\approx$ 45'02	
superior conj	10518 Oct 24 07:09	10° $\approx$ 20'05	1°32'29				
minimum elong	10518 Oct 24 05:36	10° $\approx$ 11'25	1°32'40	superior conj	10519 Oct 08 18:54	25° $\approx$ 05'52	1°20'35
max. Earth dist.	10518 Oct 24 21:43	11° $\approx$ 40'59	1.31657 AU	minimum elong	10519 Oct 08 16:47	24° $\approx$ 54'06	1°20'30
evening rise	10518 Oct 31 04:53	25° $\approx$ 22'58		max. Earth dist.	10519 Oct 08 07:14	24° $\approx$ 00'58	1.31449 AU
	10518 Nov 02 10:20	0° $\approx$			10519 Oct 10 23:46	0° $\approx$	
desc. node	10518 Nov 15 09:50	23° $\approx$ 33'04		evening rise	10519 Oct 15 12:38	9° $\approx$ 55'10	
	10518 Nov 19 16:25	0° $\approx$			10519 Oct 25 17:38	0° $\approx$	
evening max el	10518 Dec 01 11:31	14° $\approx$ 10'10	27°12'21	desc. node	10519 Nov 02 07:01	12° $\approx$ 13'12	
retrograde	10518 Dec 15 08:53	21° $\approx$ 22'23		evening max el	10519 Nov 13 11:05	25° $\approx$ 46'24	26°19'26
evening set	10518 Dec 22 08:03	19° $\approx$ 12'59			10519 Nov 18 18:25	0° $\approx$	
min. Earth dist.	10518 Dec 26 02:03	16° $\approx$ 28'38	0.60919 AU	retrograde	10519 Nov 27 09:14	2° $\approx$ 51'42	
inferior conj	10518 Dec 29 04:44	13° $\approx$ 48'02	-3°18'50	evening set	10519 Dec 03 22:03	1° $\approx$ 08'11	

	10519 Dec 05 21:26	30°R♄		evening set	10520 Nov 13 12:50	12°♄18'29	
min. Earth dist.	10519 Dec 08 00:21	28°♄33'17	0.58801 AU	min. Earth dist.	10520 Nov 18 14:13	9°♄35'08	0.56851 AU
inferior conj	10519 Dec 11 04:05	26°♄11'32	-4°31'10	inferior conj	10520 Nov 21 07:26	7°♄48'46	-5°26'46
minimum elong	10519 Dec 11 12:05	25°♄56'31	4°28'32	minimum elong	10520 Nov 21 13:17	7°♄39'12	5°25'29
morning rise	10519 Dec 19 04:44	21°♄41'08		morning rise	10520 Nov 29 15:59	3°♄40'27	
direct	10519 Dec 21 08:36	21°♄25'12		direct	10520 Dec 02 01:41	3°♄24'04	
asc. node	10519 Dec 26 12:40	23°♄02'17		morning max el	10520 Dec 11 10:20	7°♄53'02	19°17'19
morning max el	10519 Dec 29 10:36	25°♄22'42	18°26'08	asc. node	10520 Dec 12 09:40	8°♄51'49	
	10520 Jan 02 08:33	0°♄			10520 Dec 25 17:59	0°♄	
morning set	10520 Jan 14 08:16	20°♄47'36		morning set	10520 Dec 28 09:26	5°♄13'06	
	10520 Jan 19 03:40	0°♄					
superior conj	10520 Jan 23 10:03	7°♄59'25	0°44'03	superior conj	10521 Jan 05 12:59	21°♄23'26	1°09'29
minimum elong	10520 Jan 23 12:51	8°♄12'21	0°44'05	minimum elong	10521 Jan 05 16:02	21°♄38'12	1°09'35
desc. node	10520 Jan 29 06:12	18°♄28'43			10521 Jan 10 01:42	0°♄	
max. Earth dist.	10520 Jan 30 21:56	21°♄21'02	1.40546 AU	max. Earth dist.	10521 Jan 12 03:45	3°♄49'46	1.38337 AU
evening rise	10520 Feb 04 06:38	28°♄42'32		desc. node	10521 Jan 15 03:05	9°♄08'20	
	10520 Feb 05 01:26	0°♄		evening rise	10521 Jan 15 21:53	10°♄30'36	
	10520 Feb 24 22:34	0°♄			10521 Jan 27 20:09	0°♄	
evening max el	10520 Mar 09 18:13	16°♄54'27	23°34'52		10521 Feb 19 14:08	0°♄	
retrograde	10520 Mar 20 12:13	23°♄15'09		evening max el	10521 Feb 20 07:43	0°♄44'02	24°53'29
asc. node	10520 Mar 23 10:57	22°♄33'50		retrograde	10521 Mar 04 03:01	7°♄36'23	
evening set	10520 Mar 25 15:33	21°♄06'05		evening set	10521 Mar 09 18:24	5°♄15'26	
min. Earth dist.	10520 Mar 30 11:15	15°♄27'45	0.68518 AU	asc. node	10521 Mar 10 08:09	4°♄44'46	
inferior conj	10520 Mar 31 01:38	14°♄38'23	2°13'24		10521 Mar 14 10:02	30°R♄	
minimum elong	10520 Mar 30 23:27	14°♄45'54	2°12'41	min. Earth dist.	10521 Mar 14 06:22	0°♄12'03	0.67974 AU
morning rise	10520 Apr 05 07:20	8°♄33'40		inferior conj	10521 Mar 15 08:34	28°♄45'33	1°33'10
direct	10520 Apr 09 12:00	6°♄54'54		minimum elong	10521 Mar 15 06:39	28°♄51'54	1°32'33
morning max el	10520 Apr 17 16:30	11°♄35'24	20°44'56	morning rise	10521 Mar 20 19:08	22°♄48'26	
desc. node	10520 Apr 26 07:03	21°♄58'40		direct	10521 Mar 24 11:20	21°♄30'50	
	10520 May 02 00:20	0°♄		morning max el	10521 Mar 31 17:55	25°♄33'11	19°36'59
morning set	10520 May 17 09:37	23°♄08'53			10521 Apr 04 16:40	0°♄	
	10520 May 21 18:18	0°♄		desc. node	10521 Apr 13 03:50	11°♄39'56	
max. Earth dist.	10520 May 25 16:47	6°♄18'22	1.43248 AU	greatest brilliancy	10521 Apr 13 10:44	12°♄05'14	-0.7m
					10521 Apr 25 07:27	0°♄	
superior conj	10520 Jun 01 11:00	17°♄26'30	-2°03'06	morning set	10521 Apr 26 08:30	1°♄36'17	
minimum elong	10520 Jun 01 16:30	17°♄49'37	2°03'16	max. Earth dist.	10521 May 08 05:14	20°♄06'05	1.44722 AU
	10520 Jun 08 18:55	0°♄					
evening rise	10520 Jun 13 12:49	8°♄21'18		superior conj	10521 May 12 16:48	27°♄14'43	-2°13'02
asc. node	10520 Jun 19 09:19	18°♄38'26		minimum elong	10521 May 12 17:06	27°♄15'57	2°13'27
	10520 Jun 26 13:04	0°♄			10521 May 14 09:50	0°♄	
evening max el	10520 Jun 30 07:19	4°♄29'38	18°04'21	evening rise	10521 May 26 12:11	19°♄59'14	
retrograde	10520 Jul 06 20:54	7°♄52'15			10521 Jun 01 11:14	0°♄	
evening set	10520 Jul 09 10:35	7°♄20'55		asc. node	10521 Jun 06 06:21	7°♄46'29	
inferior conj	10520 Jul 16 00:23	2°♄18'57	2°00'10	evening max el	10521 Jun 13 21:10	17°♄53'06	18°12'19
minimum elong	10520 Jul 16 03:09	2°♄12'05	1°58'54	retrograde	10521 Jun 20 05:51	21°♄14'38	
	10520 Jul 18 08:31	30°R♄		evening set	10521 Jun 23 03:29	20°♄29'57	
min. Earth dist.	10520 Jul 19 03:04	29°♄15'40	0.61309 AU	inferior conj	10521 Jun 29 04:19	15°♄09'58	2°44'43
morning rise	10520 Jul 22 17:12	26°♄18'38		minimum elong	10521 Jun 29 06:42	15°♄03'18	2°43'43
desc. node	10520 Jul 23 06:32	25°♄56'58		min. Earth dist.	10521 Jul 01 18:43	12°♄17'12	0.63494 AU
direct	10520 Jul 29 08:47	24°♄02'51		morning rise	10521 Jul 05 08:22	8°♄56'04	
	10520 Aug 10 10:23	0°♄		desc. node	10521 Jul 10 03:40	6°♄32'50	
morning max el	10520 Aug 12 14:38	2°♄03'11	27°56'29	direct	10521 Jul 12 01:21	6°♄20'47	
	10520 Sep 02 02:01	0°♄		morning max el	10521 Jul 25 23:06	14°♄23'20	27°44'54
morning set	10520 Sep 14 20:44	23°♄56'22			10521 Aug 07 14:39	0°♄	
asc. node	10520 Sep 15 09:27	25°♄02'14		morning set	10521 Aug 25 16:48	0°♄	
	10520 Sep 17 18:00	0°♄		asc. node	10521 Aug 29 16:15	7°♄44'30	
max. Earth dist.	10520 Sep 20 14:45	6°♄11'59	1.31730 AU	max. Earth dist.	10521 Sep 02 06:16	15°♄04'17	
					10521 Sep 03 16:34	18°♄04'38	1.32515 AU
superior conj	10520 Sep 22 05:18	9°♄43'45	1°03'24				
minimum elong	10520 Sep 22 03:04	9°♄31'29	1°03'04	superior conj	10521 Sep 06 12:29	24°♄08'26	0°41'13
evening rise	10520 Sep 28 23:09	24°♄32'25		minimum elong	10521 Sep 06 10:42	23°♄58'44	0°40'45
	10520 Oct 01 13:06	0°♄			10521 Sep 09 05:10	0°♄	
desc. node	10520 Oct 19 04:14	29°♄54'34		evening rise	10521 Sep 13 10:37	9°♄09'38	
	10520 Oct 19 05:57	0°♄			10521 Sep 24 03:02	0°♄	
evening max el	10520 Oct 25 02:29	6°♄31'56	24°57'10	desc. node	10521 Oct 06 01:29	16°♄15'08	
retrograde	10520 Nov 07 22:35	13°♄28'54		evening max el	10521 Oct 06 13:18	16°♄44'12	23°18'23
				retrograde	10521 Oct 19 22:56	23°♄24'53	

evening set	10521 Oct 24 03:55	22° $\mathbb{M}$ 46'23			10522 Sep 21 18:23	0° $\mathbb{M}$	
min. Earth dist.	10521 Oct 30 22:59	19° $\mathbb{M}$ 36'22	0.55374 AU	desc. node	10522 Sep 22 22:45	0° $\mathbb{M}$ 46'48	
inferior conj	10521 Nov 01 15:02	18° $\mathbb{M}$ 37'56	-5°45'13	retrograde	10522 Sep 30 12:44	3° $\mathbb{M}$ 05'43	
minimum elong	10521 Nov 01 13:53	18° $\mathbb{M}$ 39'37	5°44'50	evening set	10522 Oct 03 08:13	2° $\mathbb{M}$ 47'48	
morning rise	10521 Nov 10 01:37	14° $\mathbb{M}$ 46'26			10522 Oct 10 07:09	30° $\mathbb{R}$ $\underline{\mathbb{A}}$	
direct	10521 Nov 13 00:03	14° $\mathbb{M}$ 25'41		inferior conj	10522 Oct 12 09:12	28° $\underline{\mathbb{A}}$ 50'54	-5°08'42
morning max el	10521 Nov 23 21:04	19° $\mathbb{M}$ 34'10	20°31'15	minimum elong	10522 Oct 12 00:42	29° $\underline{\mathbb{A}}$ 02'47	5°06'51
asc. node	10521 Nov 29 06:38	25° $\mathbb{M}$ 52'21		min. Earth dist.	10522 Oct 12 06:09	28° $\underline{\mathbb{A}}$ 55'09	0.54651 AU
	10521 Dec 02 01:20	0° $\mathbb{A}$		morning rise	10522 Oct 20 18:18	25° $\underline{\mathbb{A}}$ 02'38	
morning set	10521 Dec 12 16:21	19° $\mathbb{A}$ 52'39		direct	10522 Oct 24 09:53	24° $\underline{\mathbb{A}}$ 33'41	
	10521 Dec 17 13:42	0° $\mathbb{Z}$			10522 Nov 05 07:23	0° $\mathbb{M}$	
				morning max el	10522 Nov 05 18:33	0° $\mathbb{M}$ 25'43	22°05'50
superior conj	10521 Dec 20 04:33	5° $\mathbb{Z}$ 22'10	1°26'51	asc. node	10522 Nov 16 03:35	13° $\mathbb{M}$ 48'32	
minimum elong	10521 Dec 20 06:52	5° $\mathbb{Z}$ 33'56	1°27'09		10522 Nov 24 20:48	0° $\mathbb{A}$	
max. Earth dist.	10521 Dec 25 11:25	15° $\mathbb{Z}$ 50'51	1.36221 AU	morning set	10522 Nov 27 02:42	4° $\mathbb{A}$ 39'54	
evening rise	10521 Dec 29 08:23	23° $\mathbb{Z}$ 08'15					
desc. node	10522 Jan 01 23:59	29° $\mathbb{Z}$ 41'24		superior conj	10522 Dec 04 05:06	19° $\mathbb{A}$ 45'36	1°36'44
	10522 Jan 02 04:14	0° $\approx$		minimum elong	10522 Dec 04 06:17	19° $\mathbb{A}$ 51'49	1°37'11
	10522 Jan 21 13:38	0° $\mathbb{H}$		max. Earth dist.	10522 Dec 08 01:24	27° $\mathbb{A}$ 44'43	1.34390 AU
evening max el	10522 Feb 02 21:11	14° $\mathbb{H}$ 33'06	26°03'11		10522 Dec 09 04:08	0° $\mathbb{Z}$	
retrograde	10522 Feb 15 12:49	21° $\mathbb{H}$ 45'27		evening rise	10522 Dec 12 10:34	6° $\mathbb{Z}$ 26'31	
evening set	10522 Feb 21 16:09	19° $\mathbb{H}$ 15'42		desc. node	10522 Dec 19 20:59	20° $\mathbb{Z}$ 03'37	
asc. node	10522 Feb 25 05:22	15° $\mathbb{H}$ 36'17			10522 Dec 25 20:36	0° $\approx$	
min. Earth dist.	10522 Feb 25 21:37	14° $\mathbb{H}$ 47'07	0.67034 AU	evening max el	10523 Jan 16 10:45	28° $\approx$ 14'09	26°56'32
inferior conj	10522 Feb 27 11:36	12° $\mathbb{H}$ 48'57	0°43'42		10523 Jan 18 08:52	0° $\mathbb{H}$	
minimum elong	10522 Feb 27 10:31	12° $\mathbb{H}$ 52'19	0°43'29	retrograde	10523 Jan 29 16:53	5° $\mathbb{H}$ 35'39	
morning rise	10522 Mar 05 05:33	7° $\mathbb{H}$ 01'16		evening set	10523 Feb 05 06:57	3° $\mathbb{H}$ 01'44	
direct	10522 Mar 08 10:30	6° $\mathbb{H}$ 02'42			10523 Feb 08 11:39	30° $\mathbb{R}$ $\approx$	
morning max el	10522 Mar 15 02:46	9° $\mathbb{H}$ 39'22	18°44'33	min. Earth dist.	10523 Feb 09 06:45	29° $\approx$ 07'16	0.65719 AU
	10522 Mar 29 21:51	0° $\mathbb{Y}$		inferior conj	10523 Feb 11 08:36	26° $\approx$ 44'00	-0°14'49
desc. node	10522 Mar 31 00:35	1° $\mathbb{Y}$ 43'32		minimum elong	10523 Feb 11 09:01	26° $\approx$ 42'49	0°14'19
morning set	10522 Apr 05 19:50	10° $\mathbb{Y}$ 46'29		transit middle	10523 Feb 11 09:01	26° $\approx$ 42'49	0°14'19
	10522 Apr 18 03:05	0° $\mathbb{B}$		transit begin	10523 Feb 11 07:41	26° $\approx$ 46'40	
max. Earth dist.	10522 Apr 20 22:57	4° $\mathbb{B}$ 25'25	1.45533 AU	transit end	10523 Feb 11 10:21	26° $\approx$ 38'59	
				asc. node	10523 Feb 12 02:34	25° $\approx$ 52'38	
superior conj	10522 Apr 22 03:33	6° $\mathbb{B}$ 17'25	-2°03'36	morning rise	10523 Feb 17 12:20	21° $\approx$ 08'09	
minimum elong	10522 Apr 21 20:34	5° $\mathbb{B}$ 50'06	2°03'29	direct	10523 Feb 20 07:31	20° $\approx$ 25'28	
evening rise	10522 May 07 11:51	0° $\mathbb{I}$ 37'13		morning max el	10523 Feb 26 17:15	23° $\approx$ 48'38	18°08'40
	10522 May 07 02:35	0° $\mathbb{I}$			10523 Mar 03 19:41	0° $\mathbb{H}$	
greatest brilliancy	10522 May 14 07:26	11° $\mathbb{I}$ 33'30	-0.9m	morning set	10523 Mar 17 10:39	21° $\mathbb{H}$ 20'04	
asc. node	10522 May 24 03:26	26° $\mathbb{I}$ 24'46		desc. node	10523 Mar 17 21:21	22° $\mathbb{H}$ 03'26	
	10522 May 27 00:30	0° $\mathbb{E}$			10523 Mar 22 19:30	0° $\mathbb{Y}$	
evening max el	10522 May 28 09:23	1° $\mathbb{E}$ 27'50	18°38'18				
retrograde	10522 Jun 03 22:30	5° $\mathbb{E}$ 02'01		superior conj	10523 Apr 01 10:32	15° $\mathbb{Y}$ 17'01	-1°34'52
evening set	10522 Jun 07 04:08	4° $\mathbb{E}$ 02'32		minimum elong	10523 Apr 01 01:06	14° $\mathbb{Y}$ 39'57	1°34'00
	10522 Jun 11 12:30	30° $\mathbb{R}$ $\mathbb{I}$		max. Earth dist.	10523 Apr 03 19:01	18° $\mathbb{Y}$ 58'34	1.45599 AU
inferior conj	10522 Jun 12 19:49	28° $\mathbb{I}$ 25'57	3°09'20		10523 Apr 10 20:39	0° $\mathbb{B}$	
minimum elong	10522 Jun 12 21:10	28° $\mathbb{I}$ 21'50	3°08'40	evening rise	10523 Apr 17 13:13	10° $\mathbb{B}$ 23'35	
min. Earth dist.	10522 Jun 14 19:23	26° $\mathbb{I}$ 01'05	0.65387 AU	greatest brilliancy	10523 Apr 29 19:20	29° $\mathbb{B}$ 14'17	-0.7m
morning rise	10522 Jun 18 13:24	22° $\mathbb{I}$ 06'11			10523 Apr 30 07:31	0° $\mathbb{I}$	
direct	10522 Jun 25 01:35	19° $\mathbb{I}$ 22'30		asc. node	10523 May 11 00:35	14° $\mathbb{I}$ 23'42	
desc. node	10522 Jun 27 00:46	19° $\mathbb{I}$ 35'43		evening max el	10523 May 11 17:39	15° $\mathbb{I}$ 08'02	19°21'18
morning max el	10522 Jul 08 09:38	27° $\mathbb{I}$ 15'02	27°00'21	retrograde	10523 May 18 19:30	19° $\mathbb{I}$ 07'25	
	10522 Jul 10 23:35	0° $\mathbb{E}$		evening set	10523 May 22 09:32	17° $\mathbb{I}$ 52'26	
	10522 Aug 01 06:58	0° $\mathbb{Q}$		inferior conj	10523 May 27 19:32	12° $\mathbb{I}$ 00'51	3°17'57
morning set	10522 Aug 13 01:47	21° $\mathbb{Q}$ 01'59		minimum elong	10523 May 27 19:41	12° $\mathbb{I}$ 00'20	3°17'27
max. Earth dist.	10522 Aug 17 09:27	29° $\mathbb{Q}$ 33'21	1.33802 AU	min. Earth dist.	10523 May 29 04:03	10° $\mathbb{I}$ 14'33	0.66877 AU
	10522 Aug 17 14:43	0° $\mathbb{P}$		morning rise	10523 Jun 02 05:25	5° $\mathbb{I}$ 40'09	
asc. node	10522 Aug 20 03:07	5° $\mathbb{P}$ 09'56		direct	10523 Jun 08 08:20	2° $\mathbb{I}$ 58'51	
				desc. node	10523 Jun 13 21:48	4° $\mathbb{I}$ 44'40	
superior conj	10522 Aug 21 14:18	8° $\mathbb{P}$ 13'44	0°14'26	morning max el	10523 Jun 20 20:13	10° $\mathbb{I}$ 27'16	25°50'52
minimum elong	10522 Aug 21 13:34	8° $\mathbb{P}$ 09'51	0°14'02		10523 Jul 06 08:09	0° $\mathbb{E}$	
behind sun begin	10522 Aug 21 10:48	7° $\mathbb{P}$ 55'20			10523 Jul 24 21:22	0° $\mathbb{Q}$	
behind sun end	10522 Aug 21 16:20	8° $\mathbb{P}$ 24'24		morning set	10523 Jul 26 21:40	3° $\mathbb{Q}$ 39'04	
evening rise	10522 Aug 28 21:09	23° $\mathbb{P}$ 41'24		max. Earth dist.	10523 Jul 30 16:02	10° $\mathbb{Q}$ 42'26	1.35565 AU
	10522 Aug 31 22:13	0° $\underline{\mathbb{A}}$					
evening max el	10522 Sep 18 03:48	26° $\underline{\mathbb{A}}$ 56'43	21°40'16	superior conj	10523 Aug 05 08:05	21° $\mathbb{Q}$ 52'16	-0°16'11

minimum elong	10523 Aug 05 09:04	21°♎57'14	0°16'21	minimum elong	10524 Jul 18 17:51	5°♎12'06	0°49'01
asc. node	10523 Aug 06 23:58	25°♎14'59		asc. node	10524 Jul 23 20:53	15°♎16'00	
	10523 Aug 09 07:25	0°♎		evening rise	10524 Jul 27 06:34	22°♎02'53	
evening rise	10523 Aug 13 04:37	8°♎01'15			10524 Jul 31 08:06	0°♎	
	10523 Aug 25 02:47	0°♎		evening max el	10524 Aug 12 21:43	19°♎12'52	19°12'43
evening max el	10523 Aug 31 05:51	7°♎41'17	20°16'20	retrograde	10524 Aug 22 01:15	23°♎45'43	
desc. node	10523 Sep 09 20:03	12°♎59'38		evening set	10524 Aug 23 21:34	23°♎35'23	
retrograde	10523 Sep 11 01:31	13°♎03'38		desc. node	10524 Aug 26 17:19	22°♎42'58	
evening set	10523 Sep 13 01:16	12°♎53'31		inferior conj	10524 Sep 01 10:16	19°♎24'43	-1°46'30
inferior conj	10523 Sep 22 02:57	8°♎55'34	-3°39'50	minimum elong	10524 Sep 01 05:34	19°♎32'34	1°44'49
minimum elong	10523 Sep 21 17:40	9°♎09'16	3°36'45	min. Earth dist.	10524 Sep 04 03:42	17°♎35'34	0.55979 AU
min. Earth dist.	10523 Sep 23 14:57	8°♎02'31	0.54856 AU	morning rise	10524 Sep 09 10:41	14°♎44'06	
morning rise	10523 Sep 30 09:15	4°♎49'13		direct	10524 Sep 14 16:25	13°♎40'49	
direct	10523 Oct 04 19:23	4°♎07'05		morning max el	10524 Sep 28 19:26	20°♎51'30	25°35'25
morning max el	10523 Oct 18 07:27	10°♎41'50	23°52'28		10524 Oct 06 17:25	0°♎	
	10523 Nov 01 15:23	0°♎		asc. node	10524 Oct 19 21:24	21°♎35'08	
asc. node	10523 Nov 03 00:30	2°♎26'14			10524 Oct 24 02:06	0°♎	
morning set	10523 Nov 11 14:28	19°♎28'03		morning set	10524 Oct 26 01:54	4°♎12'16	
	10523 Nov 16 11:08	0°♎					
superior conj	10523 Nov 18 11:37	4°♎23'56	1°39'52	superior conj	10524 Nov 01 21:44	19°♎10'07	1°36'51
minimum elong	10523 Nov 18 11:36	4°♎23'49	1°40'20	minimum elong	10524 Nov 01 20:39	19°♎04'11	1°37'10
max. Earth dist.	10523 Nov 20 23:14	9°♎44'50	1.32961 AU	max. Earth dist.	10524 Nov 03 03:51	21°♎56'09	1.31996 AU
evening rise	10523 Nov 26 00:42	20°♎15'08			10524 Nov 06 21:04	0°♎	
	10523 Dec 01 01:23	0°♎		evening rise	10524 Nov 08 23:41	4°♎26'20	
desc. node	10523 Dec 06 18:02	10°♎08'32		desc. node	10524 Nov 22 15:08	29°♎48'52	
	10523 Dec 19 21:15	0°♎			10524 Nov 22 17:51	0°♎	
evening max el	10523 Dec 29 23:14	11°♎35'32	27°26'37	evening max el	10524 Dec 11 08:47	24°♎25'28	27°27'08
retrograde	10524 Jan 12 14:38	18°♎57'54			10524 Dec 18 20:39	0°♎	
evening set	10524 Jan 19 12:28	16°♎26'26		retrograde	10524 Dec 25 05:14	1°♎42'48	
min. Earth dist.	10524 Jan 23 07:41	13°♎03'49	0.64056 AU		10524 Dec 31 05:25	30°♎	
inferior conj	10524 Jan 25 20:59	10°♎24'08	-1°21'48	evening set	10525 Jan 01 05:46	29°♎22'38	
minimum elong	10524 Jan 25 23:34	10°♎17'25	1°20'19	min. Earth dist.	10525 Jan 04 22:51	26°♎26'37	0.62113 AU
asc. node	10524 Jan 29 23:46	6°♎32'39		inferior conj	10525 Jan 07 21:45	23°♎42'08	-2°35'19
morning rise	10524 Feb 01 12:36	5°♎02'47		minimum elong	10525 Jan 08 02:56	23°♎30'04	2°32'50
direct	10524 Feb 03 23:44	4°♎32'21		morning rise	10525 Jan 15 02:37	18°♎38'11	
morning max el	10524 Feb 10 10:38	7°♎53'04	17°49'52	asc. node	10525 Jan 15 20:57	18°♎25'47	
	10524 Feb 25 07:32	0°♎		direct	10525 Jan 17 08:02	18°♎16'13	
morning set	10524 Feb 27 05:37	3°♎15'34		morning max el	10525 Jan 24 03:43	21°♎44'10	17°48'44
desc. node	10524 Mar 03 18:07	12°♎34'26			10525 Jan 30 11:42	0°♎	
				morning set	10525 Feb 08 22:58	16°♎14'48	
superior conj	10524 Mar 11 07:49	25°♎01'37	-0°54'27		10525 Feb 16 18:08	0°♎	
minimum elong	10524 Mar 11 01:54	24°♎37'41	0°53'32	desc. node	10525 Feb 18 14:52	3°♎12'29	
	10524 Mar 14 10:07	0°♎					
max. Earth dist.	10524 Mar 16 14:11	3°♎26'55	1.44924 AU	superior conj	10525 Feb 20 05:06	5°♎55'10	-0°12'02
evening rise	10524 Mar 27 01:33	19°♎44'58		minimum elong	10525 Feb 20 03:58	5°♎50'23	0°11'36
	10524 Apr 02 19:20	0°♎		behind sun begin	10525 Feb 19 21:51	5°♎24'27	
evening max el	10524 Apr 23 20:32	28°♎50'20	20°19'38	behind sun end	10525 Feb 20 10:05	6°♎16'15	
	10524 Apr 25 01:26	0°♎		max. Earth dist.	10525 Feb 27 06:00	17°♎34'21	1.43595 AU
asc. node	10524 Apr 26 21:46	1°♎31'11		evening rise	10525 Mar 06 16:05	29°♎20'11	
retrograde	10524 May 01 18:16	3°♎25'07			10525 Mar 07 02:20	0°♎	
evening set	10524 May 05 17:26	1°♎54'29			10525 Mar 27 11:52	0°♎	
	10524 May 07 17:59	30°♎		evening max el	10525 Apr 06 17:50	12°♎33'29	21°30'17
inferior conj	10524 May 11 00:37	25°♎49'41	3°13'30	asc. node	10525 Apr 13 18:59	17°♎31'57	
minimum elong	10524 May 10 23:43	25°♎52'45	3°13'01	retrograde	10525 Apr 15 16:35	17°♎49'38	
min. Earth dist.	10524 May 11 18:55	24°♎47'06	0.67915 AU	evening set	10525 Apr 20 01:55	16°♎03'32	
morning rise	10524 May 16 05:45	19°♎31'13		inferior conj	10525 Apr 25 08:43	9°♎47'42	2°57'55
direct	10524 May 21 20:47	17°♎01'06		minimum elong	10525 Apr 25 07:02	9°♎53'35	2°57'20
desc. node	10524 May 30 18:47	21°♎30'09		min. Earth dist.	10525 Apr 25 13:48	9°♎29'59	0.68500 AU
morning max el	10524 Jun 02 05:58	23°♎50'36	24°26'13	morning rise	10525 Apr 30 11:56	3°♎33'29	
	10524 Jun 07 17:29	0°♎		direct	10525 May 05 13:47	1°♎20'51	
	10524 Jun 28 17:37	0°♎		morning max el	10525 May 15 16:06	7°♎20'06	22°56'17
morning set	10524 Jul 07 23:17	15°♎24'22		desc. node	10525 May 17 15:40	9°♎25'50	
max. Earth dist.	10524 Jul 11 14:32	21°♎51'29	1.37694 AU		10525 Jun 02 06:57	0°♎	
	10524 Jul 16 00:25	0°♎		morning set	10525 Jun 19 01:16	26°♎03'23	
					10525 Jun 21 09:54	0°♎	
superior conj	10524 Jul 18 14:37	4°♎56'31	-0°49'09	max. Earth dist.	10525 Jun 23 11:17	3°♎30'02	1.39986 AU
































































































































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minimum elong	10525 Jul 01 11:16	17°☿41'13	1°21'43	morning set		10526 May 30 00:37	5°♊29'43	
	10525 Jul 08 01:09	0°♊		max. Earth dist.		10526 Jun 05 13:07	16°♊01'39	1.42164 AU
evening rise	10525 Jul 10 23:50	5°♊37'13						
asc. node	10525 Jul 10 17:47	5°♊08'22		superior conj		10526 Jun 13 01:04	28°♊41'05	-1°50'40
	10525 Jul 25 15:49	0°♊		minimum elong		10526 Jun 13 07:28	29°♊08'49	1°50'36
evening max el	10525 Jul 27 00:42	1°♊27'46	18°30'19			10526 Jun 13 19:16	0°☿	
retrograde	10525 Aug 03 19:09	5°♊21'13		evening rise		10526 Jun 24 04:31	18°☿34'50	
evening set	10525 Aug 05 20:47	5°♊05'31		asc. node		10526 Jun 27 14:44	24°☿47'49	
inferior conj	10525 Aug 13 14:25	0°♊35'19	0°00'07			10526 Jun 30 13:08	0°♊	
minimum elong	10525 Aug 13 14:25	0°♊35'20	0°00'11	evening max el		10526 Jul 10 10:49	14°♊16'34	18°08'15
transit middle	10525 Aug 13 14:25	0°♊35'20	0°00'11	retrograde		10526 Jul 17 07:33	17°♊45'56	
transit begin	10525 Aug 13 10:50	0°♊42'21		evening set		10526 Jul 19 16:51	17°♊21'03	
transit end	10525 Aug 13 18:00	0°♊28'19		inferior conj		10526 Jul 26 15:51	12°♊30'03	1°23'46
desc. node	10525 Aug 13 14:34	0°♊35'01		minimum elong		10526 Jul 26 18:14	12°♊24'36	1°22'33
	10525 Aug 14 08:23	30°♊♊		min. Earth dist.		10526 Jul 29 22:57	9°♊30'59	0.60004 AU
min. Earth dist.	10525 Aug 16 21:46	28°♊01'09	0.57804 AU	desc. node		10526 Jul 31 11:46	8°♊15'03	
morning rise	10525 Aug 21 04:30	25°♊17'50		morning rise		10526 Aug 02 16:39	6°♊42'33	
direct	10525 Aug 27 04:03	23°♊46'36		direct		10526 Aug 09 04:23	4°♊42'07	
	10525 Sep 09 00:43	0°♊		morning max el		10526 Aug 23 12:14	12°♊35'18	27°46'05
morning max el	10525 Sep 10 12:16	1°♊22'59	26°57'30			10526 Sep 06 07:04	0°♊	
	10525 Sep 30 22:06	0°♊				10526 Sep 23 04:28	0°♊	
asc. node	10525 Oct 06 18:14	11°♊06'37		asc. node		10526 Sep 23 15:01	0°♊54'09	
morning set	10525 Oct 10 11:22	18°♊47'39		morning set		10526 Sep 24 17:05	3°♊09'21	
	10525 Oct 15 14:40	0°♊		max. Earth dist.		10526 Sep 30 21:46	16°♊33'04	1.31512 AU
superior conj	10525 Oct 17 09:24	3°♊57'39	1°28'06	superior conj		10526 Oct 01 20:47	18°♊40'41	1°13'56
minimum elong	10525 Oct 17 07:33	3°♊47'24	1°28'10	minimum elong		10526 Oct 01 18:34	18°♊28'21	1°13'44
max. Earth dist.	10525 Oct 17 12:32	4°♊15'09	1.31510 AU			10526 Oct 06 23:37	0°♊	
evening rise	10525 Oct 24 04:53	18°♊52'51		evening rise		10526 Oct 08 14:04	3°♊28'09	
	10525 Oct 29 15:52	0°♊				10526 Oct 22 14:05	0°♊	
desc. node	10525 Nov 09 12:17	18°♊54'48		desc. node		10526 Oct 27 09:29	7°♊12'22	
	10525 Nov 17 12:37	0°♊		evening max el		10526 Nov 05 09:19	17°♊47'25	25°47'32
evening max el	10525 Nov 23 13:01	6°♊32'25	26°53'58	retrograde		10526 Nov 19 06:50	24°♊48'36	
retrograde	10525 Dec 07 11:19	13°♊41'40		evening set		10526 Nov 25 11:43	23°♊18'48	
evening set	10525 Dec 14 07:06	11°♊42'32		min. Earth dist.		10526 Nov 29 21:50	20°♊42'42	0.57938 AU
min. Earth dist.	10525 Dec 18 03:27	9°♊03'44	0.60011 AU	inferior conj		10526 Dec 02 22:39	18°♊34'28	-4°57'53
inferior conj	10525 Dec 21 07:29	6°♊29'14	-3°50'35	minimum elong		10526 Dec 03 06:18	18°♊20'55	4°55'43
minimum elong	10525 Dec 21 14:57	6°♊14'00	3°47'39	morning rise		10526 Dec 11 03:17	14°♊13'22	
morning rise	10525 Dec 29 01:29	1°♊45'34		direct		10526 Dec 13 08:58	13°♊57'34	
direct	10525 Dec 31 04:34	1°♊28'22		asc. node		10526 Dec 20 15:05	16°♊56'09	
asc. node	10526 Jan 02 18:03	1°♊54'24		morning max el		10526 Dec 21 22:48	18°♊07'12	18°45'06
morning max el	10526 Jan 07 17:04	5°♊12'42	18°06'34			10526 Dec 30 13:58	0°♊	
morning set	10526 Jan 23 08:29	29°♊59'31		morning set		10527 Jan 07 05:04	14°♊13'42	
	10526 Jan 23 08:35	0°♊				10527 Jan 15 08:31	0°♊	
superior conj	10526 Feb 02 02:43	17°♊57'38	0°25'42	superior conj		10527 Jan 15 20:25	0°♊56'10	0°55'51
minimum elong	10526 Feb 02 04:41	18°♊06'24	0°25'47	minimum elong		10527 Jan 15 23:29	1°♊10'37	0°55'53
desc. node	10526 Feb 05 11:40	23°♊54'20		max. Earth dist.		10527 Jan 23 01:29	14°♊04'56	1.39618 AU
	10526 Feb 09 01:04	0°♊		desc. node		10527 Jan 23 08:31	14°♊35'49	
max. Earth dist.	10526 Feb 09 17:44	1°♊10'04	1.41760 AU	evening rise		10527 Jan 27 01:09	20°♊57'19	
evening rise	10526 Feb 14 22:05	9°♊40'55				10527 Feb 01 13:05	0°♊	
	10526 Feb 28 03:50	0°♊				10527 Feb 22 06:08	0°♊	
evening max el	10526 Mar 20 10:45	26°♊19'14	22°48'36	evening max el		10527 Mar 03 00:56	10°♊07'28	24°08'53
	10526 Mar 24 16:21	0°♊		retrograde		10527 Mar 14 05:51	16°♊42'07	
retrograde	10526 Mar 30 12:52	2°♊17'02		asc. node		10527 Mar 18 13:25	15°♊15'41	
asc. node	10526 Mar 31 16:12	2°♊10'45		evening set		10527 Mar 19 14:23	14°♊27'37	
evening set	10526 Apr 04 09:25	0°♊16'04		min. Earth dist.		10527 Mar 24 06:38	9°♊04'23	0.68346 AU
	10526 Apr 04 16:47	30°♊♊		inferior conj		10527 Mar 25 02:05	7°♊58'40	1°57'26
inferior conj	10526 Apr 09 17:50	23°♊51'54	2°32'23	minimum elong		10527 Mar 24 23:56	8°♊05'55	1°56'45
minimum elong	10526 Apr 09 15:42	23°♊59'17	2°31'41	morning rise		10527 Mar 30 09:33	1°♊57'11	
min. Earth dist.	10526 Apr 09 10:26	24°♊17'35	0.68642 AU	direct		10527 Apr 03 08:52	0°♊27'32	
morning rise	10526 Apr 14 21:52	17°♊43'26		morning max el		10527 Apr 11 02:59	4°♊49'47	20°14'15
direct	10526 Apr 19 10:16	15°♊51'49		desc. node		10527 Apr 21 09:18	17°♊37'06	
morning max el	10526 Apr 28 06:04	20°♊58'49	21°30'04			10527 Apr 29 21:16	0°♊	
desc. node	10526 May 04 12:30	28°♊12'52		morning set		10527 May 09 03:14	14°♊03'21	
	10526 May 05 21:40	0°♊		max. Earth dist.		10527 May 18 22:17	29°♊26'14	1.43952 AU

	10527 May 19 06:43	0°♂		greatest brilliancy	10528 Apr 06 07:31	6°♂03'58	-0.7m
				desc. node	10528 Apr 07 06:06	7°♂28'40	
superior conj	10527 May 24 20:38	9°♂03'35	-2°09'24	morning set	10528 Apr 17 04:36	22°♂41'14	
minimum elong	10527 May 25 00:30	9°♂19'27	2°09'44		10528 Apr 21 21:57	0°♂	
	10527 Jun 06 05:34	0°♂		max. Earth dist.	10528 Apr 30 13:20	13°♂29'34	1.45153 AU
evening rise	10527 Jun 06 15:57	0°♂44'56					
asc. node	10527 Jun 14 11:44	14°♂09'10		superior conj	10528 May 03 17:00	18°♂28'11	-2°11'34
evening max el	10527 Jun 24 00:12	27°♂29'35	18°05'30	minimum elong	10528 May 03 14:05	18°♂16'39	2°11'52
	10527 Jun 27 06:49	0°♂			10528 May 10 21:52	0°♂	
retrograde	10527 Jun 30 10:29	0°♂50'10		evening rise	10528 May 18 05:31	11°♂57'33	
evening set	10527 Jul 03 03:35	0°♂13'19			10528 May 29 07:46	0°♂	
	10527 Jul 03 14:40	30°♂♂		asc. node	10528 May 31 08:48	3°♂05'27	
inferior conj	10527 Jul 09 11:20	25°♂03'10	2°21'47	evening max el	10528 Jun 06 13:35	10°♂57'57	18°21'12
minimum elong	10527 Jul 09 14:04	24°♂56'00	2°20'36	retrograde	10528 Jun 12 23:16	14°♂23'43	
min. Earth dist.	10527 Jul 12 09:09	22°♂02'09	0.62257 AU	evening set	10528 Jun 16 00:10	13°♂32'59	
morning rise	10527 Jul 15 22:30	18°♂55'55		inferior conj	10528 Jun 21 20:39	8°♂05'38	2°57'23
desc. node	10527 Jul 18 08:56	17°♂29'19		minimum elong	10528 Jun 21 22:38	7°♂59'51	2°56'32
direct	10527 Jul 22 15:21	16°♂31'01		min. Earth dist.	10528 Jun 24 04:52	5°♂22'53	0.64334 AU
morning max el	10527 Aug 05 18:30	24°♂33'12	27°56'13	morning rise	10528 Jun 27 19:52	1°♂48'10	
	10527 Aug 10 17:04	0°♂			10528 Jun 30 15:35	30°♂♂	
	10527 Aug 30 16:52	0°♂		direct	10528 Jul 04 11:17	29°♂07'58	
morning set	10527 Sep 08 17:03	17°♂12'11		desc. node	10528 Jul 04 06:04	29°♂08'08	
asc. node	10527 Sep 10 11:49	20°♂52'34			10528 Jul 08 13:18	0°♂	
max. Earth dist.	10527 Sep 14 03:36	28°♂39'11	1.32002 AU	morning max el	10528 Jul 18 04:22	7°♂08'44	27°29'41
	10527 Sep 14 18:31	0°♂			10528 Aug 04 17:59	0°♂	
					10528 Aug 21 22:53	0°♂	
superior conj	10527 Sep 16 06:05	3°♂14'02	0°54'36	morning set	10528 Aug 22 08:43	0°♂48'17	
minimum elong	10527 Sep 16 03:58	3°♂02'27	0°54'12	max. Earth dist.	10528 Aug 27 02:00	10°♂21'59	1.32994 AU
evening rise	10527 Sep 23 01:16	18°♂06'42		asc. node	10528 Aug 27 08:38	10°♂56'29	
	10527 Sep 28 19:41	0°♂					
desc. node	10527 Oct 14 06:43	24°♂23'03		superior conj	10528 Aug 30 11:14	17°♂30'48	0°30'23
evening max el	10527 Oct 17 21:56	28°♂15'41	24°16'10	minimum elong	10528 Aug 30 09:48	17°♂23'11	0°29'56
	10527 Oct 19 20:14	0°♂			10528 Sep 05 06:15	0°♂	
retrograde	10527 Oct 31 14:36	5°♂07'16		evening rise	10528 Sep 06 12:32	2°♂41'51	
evening set	10527 Nov 05 16:03	4°♂10'52			10528 Sep 21 10:17	0°♂	
min. Earth dist.	10527 Nov 11 08:46	1°♂18'34	0.56153 AU	evening max el	10528 Sep 28 08:55	8°♂22'33	22°35'39
	10527 Nov 13 11:39	30°♂♂		desc. node	10528 Sep 30 03:59	10°♂00'58	
inferior conj	10527 Nov 13 17:19	29°♂51'12	-5°40'22	retrograde	10528 Oct 11 10:22	14°♂52'50	
minimum elong	10527 Nov 13 20:43	29°♂45'57	5°39'42	evening set	10528 Oct 15 00:01	14°♂24'52	
morning rise	10527 Nov 22 03:29	25°♂51'29		min. Earth dist.	10528 Oct 22 16:29	10°♂58'21	0.54955 AU
direct	10527 Nov 24 17:58	25°♂33'42		inferior conj	10528 Oct 23 17:56	10°♂22'12	-5°37'00
	10527 Dec 04 09:42	0°♂		minimum elong	10528 Oct 23 13:14	10°♂28'54	5°36'15
morning max el	10527 Dec 04 17:21	0°♂17'57	19°45'59	morning rise	10528 Nov 01 04:08	6°♂34'25	
asc. node	10527 Dec 07 12:05	3°♂18'12		direct	10528 Nov 04 09:15	6°♂10'52	
morning set	10527 Dec 22 09:03	28°♂46'38		morning max el	10528 Nov 15 22:23	11°♂37'50	21°09'18
	10527 Dec 22 23:33	0°♂		asc. node	10528 Nov 23 09:04	20°♂44'04	
					10528 Nov 28 21:58	0°♂	
superior conj	10527 Dec 30 05:18	14°♂37'02	1°17'47	morning set	10528 Dec 05 17:41	13°♂30'04	
minimum elong	10527 Dec 30 08:07	14°♂50'57	1°17'58				
max. Earth dist.	10528 Jan 05 07:37	26°♂20'30	1.37418 AU	superior conj	10528 Dec 13 01:07	28°♂47'43	1°31'53
	10528 Jan 07 07:20	0°♂		minimum elong	10528 Dec 13 02:59	28°♂57'20	1°32'16
evening rise	10528 Jan 09 01:00	3°♂07'33			10528 Dec 13 15:09	0°♂	
desc. node	10528 Jan 10 05:25	5°♂13'17		max. Earth dist.	10528 Dec 17 17:11	8°♂14'32	1.35396 AU
	10528 Jan 25 15:01	0°♂		evening rise	10528 Dec 21 18:38	16°♂03'42	
evening max el	10528 Feb 13 14:10	23°♂56'58	25°24'29	desc. node	10528 Dec 27 02:24	25°♂42'29	
	10528 Feb 21 15:45	0°♂			10528 Dec 29 14:19	0°♂	
retrograde	10528 Feb 25 18:38	0°♂59'21			10529 Jan 19 03:07	0°♂	
	10528 Feb 29 13:28	30°♂♂		evening max el	10529 Jan 26 03:35	7°♂43'29	26°28'14
evening set	10528 Mar 02 15:18	28°♂33'51		retrograde	10529 Feb 08 02:22	15°♂01'51	
asc. node	10528 Mar 04 10:39	26°♂49'26		evening set	10529 Feb 14 10:25	12°♂29'30	
min. Earth dist.	10528 Mar 07 00:17	23°♂45'34	0.67629 AU	min. Earth dist.	10529 Feb 18 13:17	8°♂15'33	0.66516 AU
inferior conj	10528 Mar 08 07:36	22°♂04'35	1°13'18	asc. node	10529 Feb 19 07:53	7°♂19'49	
minimum elong	10528 Mar 08 05:58	22°♂09'53	1°12'49	inferior conj	10529 Feb 20 08:24	6°♂05'30	0°20'00
morning rise	10528 Mar 13 21:03	16°♂11'31		minimum elong	10529 Feb 20 07:52	6°♂07'07	0°20'01
direct	10528 Mar 17 08:15	15°♂02'30		morning rise	10529 Feb 26 06:14	0°♂22'37	
morning max el	10528 Mar 24 07:49	18°♂52'14	19°12'40		10529 Feb 27 00:37	30°♂♂	
	10528 Apr 02 04:17	0°♂		direct	10529 Mar 01 06:43	29°♂31'26	

	10529 Mar 03 13:56	0°♄		direct	10530 Feb 13 02:06	13°♄48'18	
morning max el	10529 Mar 07 19:27	3°♄01'16	18°27'11	morning max el	10530 Feb 19 11:29	17°♄09'27	17°58'28
desc. node	10529 Mar 25 02:52	27°♄40'12			10530 Feb 28 22:31	0°♄	
	10529 Mar 26 14:10	0°♄		morning set	10530 Mar 09 06:06	13°♄35'34	
morning set	10529 Mar 28 02:46	2°♄25'02		desc. node	10530 Mar 11 23:37	18°♄05'30	
					10530 Mar 19 07:20	0°♄	
superior conj	10529 Apr 12 23:59	27°♄24'29	-1°53'27				
minimum elong	10529 Apr 12 15:05	26°♄49'41	1°52'59	superior conj	10530 Mar 23 11:10	6°♄38'34	-1°18'34
max. Earth dist.	10529 Apr 13 07:58	27°♄55'42	1.45649 AU	minimum elong	10530 Mar 23 02:44	6°♄05'08	1°17'34
	10529 Apr 14 15:46	0°♄		max. Earth dist.	10530 Mar 27 03:45	12°♄28'13	1.45402 AU
evening rise	10529 Apr 28 19:10	22°♄11'54			10530 Apr 07 10:29	0°♄	
	10529 May 03 17:42	0°♄		evening rise	10530 Apr 08 13:19	1°♄43'19	
greatest brilliancy	10529 May 08 05:59	7°♄04'29	-0.8m	greatest brilliancy	10530 Apr 22 14:44	23°♄02'47	-0.6m
asc. node	10529 May 18 05:55	21°♄28'53			10530 Apr 27 11:33	0°♄	
evening max el	10529 May 21 00:23	24°♄36'04	18°54'36	evening max el	10530 May 04 06:34	8°♄18'04	19°44'25
retrograde	10529 May 27 18:07	28°♄19'42		asc. node	10530 May 05 03:06	9°♄07'58	
evening set	10529 May 31 03:09	27°♄13'53		retrograde	10530 May 11 16:02	12°♄31'05	
inferior conj	10529 Jun 05 16:04	21°♄30'56	3°14'44	evening set	10530 May 15 09:52	11°♄09'29	
minimum elong	10529 Jun 05 16:54	21°♄28'18	3°14'09	inferior conj	10530 May 20 18:22	5°♄12'19	3°17'28
min. Earth dist.	10529 Jun 07 09:16	19°♄21'10	0.66073 AU	minimum elong	10530 May 20 18:03	5°♄13'22	3°17'00
morning rise	10529 Jun 11 05:59	15°♄10'07		min. Earth dist.	10530 May 21 20:47	3°♄44'07	0.67383 AU
direct	10529 Jun 17 14:43	12°♄25'54			10530 May 24 22:24	30°♄	
desc. node	10529 Jun 21 03:08	13°♄08'23		morning rise	10530 May 26 01:54	28°♄52'26	
morning max el	10529 Jun 30 15:07	20°♄10'47	26°33'12	direct	10530 Jun 01 00:09	26°♄14'42	
	10529 Jul 09 01:05	0°♄		desc. node	10530 Jun 08 00:08	29°♄01'54	
	10529 Jul 28 20:38	0°♄			10530 Jun 09 06:28	0°♄	
morning set	10529 Aug 05 12:56	13°♄49'51		morning max el	10530 Jun 13 01:03	3°♄27'47	25°15'58
max. Earth dist.	10529 Aug 09 14:06	21°♄39'00	1.34494 AU		10530 Jul 03 06:51	0°♄	
	10529 Aug 13 17:23	0°♄		morning set	10530 Jul 19 01:36	26°♄06'13	
					10530 Jul 21 05:04	0°♄	
superior conj	10529 Aug 14 09:58	1°♄25'28	0°01'51	max. Earth dist.	10530 Jul 22 16:23	2°♄43'30	1.36440 AU
minimum elong	10529 Aug 14 09:53	1°♄25'03	0°01'33				
behind sun begin	10529 Aug 14 04:04	0°♄54'58		superior conj	10530 Jul 28 23:24	14°♄50'44	-0°30'00
behind sun end	10529 Aug 14 15:42	1°♄55'11		minimum elong	10530 Jul 29 01:18	15°♄00'06	0°30'02
asc. node	10529 Aug 14 05:29	1°♄02'20		asc. node	10530 Aug 01 02:23	21°♄06'21	
evening rise	10529 Aug 21 21:59	17°♄08'49			10530 Aug 05 11:19	0°♄	
	10529 Aug 28 08:10	0°♄		evening rise	10530 Aug 06 03:25	1°♄21'43	
evening max el	10529 Sep 10 03:43	18°♄45'41	21°02'23	evening max el	10530 Aug 23 11:48	29°♄50'05	19°46'39
desc. node	10529 Sep 17 01:16	23°♄36'27			10530 Aug 23 15:50	0°♄	
retrograde	10529 Sep 21 22:05	24°♄35'49		retrograde	10530 Sep 02 13:40	4°♄50'16	
evening set	10529 Sep 24 06:44	24°♄22'41		desc. node	10530 Sep 03 22:30	4°♄45'07	
inferior conj	10529 Oct 03 10:02	20°♄27'21	-4°36'12	evening set	10530 Sep 04 10:36	4°♄40'41	
minimum elong	10529 Oct 03 00:15	20°♄41'12	4°33'33	inferior conj	10530 Sep 13 08:03	0°♄38'45	-2°52'37
min. Earth dist.	10529 Oct 04 00:21	20°♄07'07	0.54617 AU	minimum elong	10530 Sep 13 00:23	0°♄50'34	2°49'52
morning rise	10529 Oct 11 18:03	16°♄33'35			10530 Sep 14 09:05	30°♄	
direct	10529 Oct 15 17:23	15°♄59'39		min. Earth dist.	10530 Sep 15 10:25	29°♄21'11	0.55232 AU
morning max el	10529 Oct 28 15:18	22°♄11'10	22°50'29	morning rise	10530 Sep 21 12:24	26°♄19'25	
	10529 Nov 04 09:46	0°♄		direct	10530 Sep 26 07:11	25°♄29'06	
asc. node	10529 Nov 10 06:00	8°♄59'14			10530 Oct 07 10:00	0°♄	
morning set	10529 Nov 20 04:49	28°♄18'00		morning max el	10530 Oct 10 02:36	2°♄19'50	24°37'50
	10529 Nov 21 00:01	0°♄		asc. node	10530 Oct 28 02:54	27°♄51'41	
					10530 Oct 29 06:09	0°♄	
superior conj	10529 Nov 27 04:30	13°♄18'19	1°38'50	morning set	10530 Nov 04 16:39	13°♄05'22	
minimum elong	10529 Nov 27 05:10	13°♄21'52	1°39'19				
max. Earth dist.	10529 Nov 30 10:16	20°♄08'56	1.33727 AU	superior conj	10530 Nov 11 12:48	28°♄00'58	1°39'19
evening rise	10529 Dec 05 02:18	29°♄36'09		minimum elong	10530 Nov 11 12:18	27°♄58'16	1°39'44
	10529 Dec 05 07:09	0°♄			10530 Nov 12 10:35	0°♄	
desc. node	10529 Dec 13 23:24	15°♄58'13		max. Earth dist.	10530 Nov 13 11:27	2°♄15'08	1.32492 AU
	10529 Dec 22 16:43	0°♄		evening rise	10530 Nov 18 20:34	13°♄35'53	
evening max el	10530 Jan 08 16:59	21°♄18'19	27°12'42		10530 Nov 27 10:26	0°♄	
retrograde	10530 Jan 22 03:59	28°♄41'18		desc. node	10530 Nov 30 20:28	5°♄54'14	
evening set	10530 Jan 28 21:37	26°♄07'46			10530 Dec 17 21:29	0°♄	
min. Earth dist.	10530 Feb 01 19:22	22°♄26'57	0.65046 AU	evening max el	10530 Dec 22 04:47	4°♄29'21	27°30'52
inferior conj	10530 Feb 04 02:06	19°♄55'35	-0°42'15	retrograde	10531 Jan 04 22:36	11°♄49'15	
minimum elong	10530 Feb 04 03:21	19°♄52'06	0°41'22	evening set	10531 Jan 11 22:20	9°♄21'46	
asc. node	10530 Feb 06 05:07	17°♄39'15		min. Earth dist.	10531 Jan 15 16:22	6°♄11'12	0.63261 AU
morning rise	10530 Feb 10 10:39	14°♄25'16		inferior conj	10531 Jan 18 09:59	3°♄28'10	-1°52'20

minimum elong	10531 Jan 18 13:38	3°≈19'04	1°50'23	morning rise	10532 Jan 08 15:18	11°338'21	
	10531 Jan 22 05:34	30°≈3		direct	10532 Jan 10 19:22	11°318'45	
asc. node	10531 Jan 24 02:16	28°≈346'29		asc. node	10532 Jan 10 23:23	11°318'52	
morning rise	10531 Jan 25 07:05	28°≈313'34		morning max el	10532 Jan 17 21:00	14°≈352'09	17°53'59
direct	10531 Jan 27 15:34	27°≈347'03			10532 Jan 28 07:14	0°≈	
	10531 Feb 01 22:13	0°≈		morning set	10532 Feb 02 12:22	9°≈22'16	
morning max el	10531 Feb 03 05:06	1°≈09'34	17°47'07				
morning set	10531 Feb 19 11:29	26°≈01'35		superior conj	10532 Feb 13 02:07	28°≈15'44	0°04'48
	10531 Feb 21 18:36	0°≈		minimum elong	10532 Feb 13 02:33	28°≈17'39	0°05'02
desc. node	10531 Feb 26 20:24	8°≈40'29		behind sun begin	10532 Feb 12 18:38	27°≈43'18	
				behind sun end	10532 Feb 13 10:29	28°≈51'55	
superior conj	10531 Mar 03 18:06	16°≈51'25	-0°36'13	desc. node	10532 Feb 13 17:11	29°≈20'50	
minimum elong	10531 Mar 03 14:19	16°≈35'49	0°35'29		10532 Feb 14 02:17	0°≈	
max. Earth dist.	10531 Mar 09 22:17	26°≈51'53	1.44443 AU	max. Earth dist.	10532 Feb 20 12:48	10°≈48'43	1.42868 AU
	10531 Mar 11 21:39	0°≈		evening rise	10532 Feb 26 20:38	20°≈58'40	
evening rise	10531 Mar 19 00:46	11°≈06'47			10532 Mar 03 16:35	0°≈	
	10531 Mar 31 14:19	0°≈			10532 Mar 24 23:59	0°≈	
evening max el	10531 Apr 17 07:06	22°≈01'10	20°48'21	evening max el	10532 Mar 30 02:15	5°≈45'11	22°02'52
asc. node	10531 Apr 22 00:17	25°≈49'15		asc. node	10532 Apr 07 21:28	11°≈17'35	
retrograde	10531 Apr 25 14:44	26°≈52'31		retrograde	10532 Apr 08 12:27	11°≈19'30	
evening set	10531 Apr 29 18:13	25°≈15'05		evening set	10532 Apr 13 02:30	9°≈26'43	
inferior conj	10531 May 05 00:59	19°≈05'19	3°08'06	inferior conj	10532 Apr 18 09:45	3°≈06'44	2°48'15
minimum elong	10531 May 04 23:43	19°≈09'42	3°07'36	minimum elong	10532 Apr 18 07:50	3°≈13'26	2°47'37
min. Earth dist.	10531 May 05 13:29	18°≈22'06	0.68231 AU	min. Earth dist.	10532 Apr 18 09:21	3°≈08'07	0.68616 AU
morning rise	10531 May 10 04:59	12°≈48'43			10532 Apr 20 16:54	30°≈	
direct	10531 May 15 14:33	10°≈25'35		morning rise	10532 Apr 23 13:01	26°≈54'54	
desc. node	10531 May 25 21:05	16°≈20'01		direct	10532 Apr 28 09:01	24°≈51'14	
morning max el	10531 May 26 10:37	16°≈53'45	23°47'57		10532 May 07 10:53	0°≈	
	10531 Jun 06 07:22	0°≈		morning max el	10532 May 07 22:11	0°≈27'57	22°18'43
	10531 Jun 26 07:20	0°≈		desc. node	10532 May 11 17:59	4°≈40'03	
morning set	10531 Jun 30 17:41	7°≈24'26			10532 May 30 02:50	0°≈	
max. Earth dist.	10531 Jul 04 13:42	14°≈03'33	1.38673 AU	morning set	10532 Jun 10 08:31	17°≈33'23	
				max. Earth dist.	10532 Jun 15 12:22	26°≈05'01	1.40943 AU
superior conj	10531 Jul 11 23:55	27°≈37'17	-1°03'18		10532 Jun 17 19:42	0°≈	
minimum elong	10531 Jul 12 04:09	27°≈57'17	1°03'05				
	10531 Jul 13 06:02	0°≈		superior conj	10532 Jun 23 07:11	9°≈35'10	-1°34'58
asc. node	10531 Jul 18 23:16	11°≈04'18		minimum elong	10532 Jun 23 13:21	10°≈02'40	1°34'44
evening rise	10531 Jul 21 02:05	15°≈13'01		evening rise	10532 Jul 03 14:35	28°≈33'54	
	10531 Jul 28 23:36	0°≈			10532 Jul 04 09:00	0°≈	
evening max el	10531 Aug 06 08:46	11°≈40'37	18°52'02	asc. node	10532 Jul 04 20:11	0°≈52'15	
retrograde	10531 Aug 14 20:55	15°≈55'15		evening max el	10532 Jul 19 15:15	24°≈11'24	18°18'28
evening set	10531 Aug 16 18:57	15°≈43'07		retrograde	10532 Jul 26 23:17	27°≈53'08	
desc. node	10531 Aug 21 19:45	13°≈32'40		evening set	10532 Jul 29 03:54	27°≈34'04	
inferior conj	10531 Aug 24 23:45	11°≈24'08	-0°59'02	inferior conj	10532 Aug 05 13:19	22°≈54'53	0°38'45
minimum elong	10531 Aug 24 21:16	11°≈28'35	0°58'16	minimum elong	10532 Aug 05 14:37	22°≈52'09	0°37'55
min. Earth dist.	10531 Aug 28 00:51	9°≈14'09	0.56686 AU	desc. node	10532 Aug 07 16:59	21°≈06'11	
morning rise	10531 Sep 01 20:18	6°≈27'38		min. Earth dist.	10532 Aug 08 21:56	20°≈07'13	0.58709 AU
direct	10531 Sep 07 09:57	5°≈13'23		morning rise	10532 Aug 12 21:53	17°≈23'03	
morning max el	10531 Sep 21 16:08	12°≈35'32	26°14'01	direct	10532 Aug 19 03:11	15°≈39'17	
	10531 Oct 05 06:46	0°≈		morning max el	10532 Sep 02 12:15	23°≈24'27	27°22'48
asc. node	10531 Oct 14 23:45	17°≈11'10			10532 Sep 08 10:30	0°≈	
morning set	10531 Oct 20 03:27	27°≈46'27			10532 Sep 27 09:27	0°≈	
	10531 Oct 21 04:19	0°≈		asc. node	10532 Sep 30 20:35	6°≈50'31	
				morning set	10532 Oct 03 11:32	12°≈16'53	
superior conj	10531 Oct 26 23:45	12°≈48'09	1°33'50				
minimum elong	10531 Oct 26 22:19	12°≈40'10	1°34'02	superior conj	10532 Oct 10 11:31	27°≈34'29	1°22'45
max. Earth dist.	10531 Oct 27 18:22	14°≈31'24	1.31728 AU	minimum elong	10532 Oct 10 09:27	27°≈23'03	1°22'42
evening rise	10531 Nov 02 22:26	27°≈54'08		max. Earth dist.	10532 Oct 10 03:41	26°≈50'56	1.31448 AU
	10531 Nov 03 22:35	0°≈			10532 Oct 11 13:39	0°≈	
desc. node	10531 Nov 17 17:34	25°≈21'25		evening rise	10532 Oct 17 05:34	12°≈24'50	
	10531 Nov 20 17:34	0°≈			10532 Oct 26 01:40	0°≈	
evening max el	10531 Dec 04 12:18	17°≈01'53	27°17'14	desc. node	10532 Nov 03 14:42	14°≈08'36	
retrograde	10531 Dec 18 09:25	24°≈15'34		evening max el	10532 Nov 15 13:02	28°≈45'47	26°29'22
evening set	10531 Dec 25 09:16	22°≈02'57			10532 Nov 16 21:42	0°≈	
min. Earth dist.	10531 Dec 29 02:47	19°≈16'02	0.61233 AU	retrograde	10532 Nov 29 11:25	5°≈52'24	
inferior conj	10532 Jan 01 04:43	16°≈33'53	-3°07'26	evening set	10532 Dec 06 02:21	4°≈04'33	
minimum elong	10532 Jan 01 10:59	16°≈20'04	3°04'38	min. Earth dist.	10532 Dec 10 02:40	1°≈29'09	0.59109 AU



	10532 Dec 12 01:36	30° 		min. Earth dist.	10533 Nov 21 17:47	12° 	41'09"	0.57117 AU	
inferior conj	10532 Dec 13 06:49	29° 	03'29"	-4°20'58"	inferior conj	10533 Nov 24 13:21	10° 	48'46"	-5°20'15"
minimum elong	10532 Dec 13 14:46	28° 	48'13"	4°18'12"	minimum elong	10533 Nov 24 19:50	10° 	37'56"	5°18'44"
morning rise	10532 Dec 21 05:53	24° 	29'42"		morning rise	10533 Dec 02 21:03	6° 	37'06"	
direct	10532 Dec 23 09:18	24° 	13'36"		direct	10533 Dec 05 05:27	6° 	21'00"	
asc. node	10532 Dec 27 20:29	25° 	27'43"		morning max el	10533 Dec 14 09:03	10° 	44'53"	19°08'14"
morning max el	10532 Dec 31 07:36	28° 	07'29"	18°20'25"	asc. node	10533 Dec 14 17:32	11° 	05'39"	
	10533 Jan 02 01:36	0° 				10533 Dec 27 04:01	0° 		
morning set	10533 Jan 16 03:03	23° 	20'24"		morning set	10533 Dec 31 03:11	7° 	43'47"	
	10533 Jan 19 14:57	0° 							
superior conj	10533 Jan 25 08:50	10° 	43'35"	0°39'29"	superior conj	10534 Jan 08 09:34	24° 	01'50"	1°06'08"
minimum elong	10533 Jan 25 11:29	10° 	55'40"	0°39'30"	minimum elong	10534 Jan 08 12:39	24° 	16'41"	1°06'14"
desc. node	10533 Jan 30 14:00	20° 	02'56"			10534 Jan 11 12:59	0° 		
max. Earth dist.	10533 Feb 01 22:08	24° 	05'25"	1.40864 AU	max. Earth dist.	10534 Jan 15 04:23	6° 	41'10"	1.38668 AU
	10533 Feb 05 10:27	0° 			desc. node	10534 Jan 17 10:52	10° 	43'25"	
evening rise	10533 Feb 06 11:11	1° 	42'00"		evening rise	10534 Jan 18 23:25	13° 	22'41"	
	10533 Feb 25 01:32	0° 				10534 Jan 29 02:52	0° 		
evening max el	10533 Mar 12 17:35	19° 	31'29"	23°22'54"	evening max el	10534 Feb 23 07:18	3° 	21'23"	24°42'09"
retrograde	10533 Mar 23 07:37	25° 	46'40"		retrograde	10534 Mar 06 23:01	10° 	09'22"	
asc. node	10533 Mar 25 18:40	25° 	17'42"		evening set	10534 Mar 12 12:35	7° 	50'05"	
evening set	10533 Mar 28 09:07	23° 	39'44"		asc. node	10534 Mar 12 15:55	7° 	42'56"	
inferior conj	10533 Apr 02 18:44	17° 	12'46"	2°18'43"	min. Earth dist.	10534 Mar 17 01:40	2° 	41'31"	0.68086 AU
minimum elong	10533 Apr 02 16:32	17° 	20'19"	2°18'00"	inferior conj	10534 Mar 18 02:05	1° 	20'22"	1°39'55"
min. Earth dist.	10533 Apr 02 06:09	17° 	56'05"	0.68561 AU	minimum elong	10534 Mar 18 00:05	1° 	27'01"	1°39'15"
morning rise	10533 Apr 07 23:54	11° 	06'57"			10534 Mar 19 02:29	30° 		
direct	10533 Apr 12 06:33	9° 	24'50"		morning rise	10534 Mar 23 11:46	25° 	11'59"	
morning max el	10533 Apr 20 14:53	14° 	12'05"	20°56'15"	direct	10534 Mar 27 05:48	24° 	01'14"	
desc. node	10533 Apr 28 14:49	23° 	04'41"		morning max el	10534 Apr 03 15:06	28° 	08'19"	19°46'09"
	10533 May 03 03:49	0° 				10534 Apr 05 09:28	0° 		
morning set	10533 May 20 21:33	26° 	33'09"		desc. node	10534 Apr 15 11:38	13° 	22'04"	
	10533 May 23 02:14	0° 			greatest brilliancy	10534 Apr 16 12:10	14° 	51'25"	-0.6m
max. Earth dist.	10533 May 28 16:47	8° 	58'29"	1.42983 AU		10534 Apr 26 14:20	0° 		
					morning set	10534 Apr 29 20:40	5° 	00'11"	
superior conj	10533 Jun 04 16:42	20° 	34'11"	-2°00'14"	max. Earth dist.	10534 May 11 04:30	22° 	41'04"	1.44549 AU
minimum elong	10533 Jun 04 22:35	20° 	59'04"	2°00'20"		10534 May 15 18:16	0° 		
	10533 Jun 10 04:23	0° 							
evening rise	10533 Jun 16 12:33	11° 	12'48"		superior conj	10534 May 16 02:02	0° 	31'20"	-2°12'41"
asc. node	10533 Jun 21 17:08	20° 	24'50"		minimum elong	10534 May 16 03:24	0° 	36'51"	2°13'06"
	10533 Jun 27 12:18	0° 			evening rise	10534 May 29 15:12	22° 	59'29"	
evening max el	10533 Jul 03 03:13	7° 	11'55"	18°04'47"		10534 Jun 02 18:27	0° 		
retrograde	10533 Jul 09 18:18	10° 	35'42"		asc. node	10534 Jun 08 14:10	9° 	36'37"	
evening set	10533 Jul 12 06:51	10° 	06'07"		evening max el	10534 Jun 16 17:05	20° 	33'06"	18°09'57"
inferior conj	10533 Jul 18 22:56	5° 	07'04"	1°51'21"	retrograde	10534 Jun 23 01:49	23° 	53'48"	
minimum elong	10533 Jul 19 01:40	5° 	00'28"	1°50'05"	evening set	10534 Jun 25 22:19	23° 	11'08"	
min. Earth dist.	10533 Jul 22 03:04	2° 	04'04"	0.60974 AU	inferior conj	10534 Jul 02 00:48	17° 	53'37"	2°39'21"
	10533 Jul 24 13:36	30° 			minimum elong	10534 Jul 02 03:19	17° 	46'44"	2°38'17"
morning rise	10533 Jul 25 17:49	29° 	09'46"		min. Earth dist.	10534 Jul 04 17:14	14° 	58'13"	0.63187 AU
desc. node	10533 Jul 25 14:12	29° 	15'49"		morning rise	10534 Jul 08 06:40	11° 	41'17"	
direct	10533 Aug 01 08:42	26° 	57'38"		desc. node	10534 Jul 12 11:22	9° 	29'20"	
	10533 Aug 09 18:25	0° 			direct	10534 Jul 14 23:51	9° 	08'23"	
morning max el	10533 Aug 15 15:08	4° 	56'29"	27°54'58"	morning max el	10534 Jul 28 23:03	17° 	10'51"	27°48'54"
	10533 Sep 03 08:02	0° 				10534 Aug 08 14:38	0° 		
morning set	10533 Sep 17 15:03	26° 	31'10"			10534 Aug 27 03:08	0° 		
asc. node	10533 Sep 17 17:23	26° 	43'16"		morning set	10534 Sep 01 11:49	10° 	23'19"	
	10533 Sep 19 06:58	0° 			asc. node	10534 Sep 04 14:12	16° 	44'29"	
max. Earth dist.	10533 Sep 23 11:43	9° 	03'55"	1.31656 AU	max. Earth dist.	10534 Sep 06 14:42	21° 	00'18"	1.32365 AU
superior conj	10533 Sep 24 22:15	12° 	14'08"	1°06'21"	superior conj	10534 Sep 09 06:04	26° 	41'22"	0°44'53"
minimum elong	10533 Sep 24 20:00	12° 	01'46"	1°06'03"	minimum elong	10534 Sep 09 04:10	26° 	31'04"	0°44'27"
evening rise	10533 Oct 01 15:49	27° 	01'58"			10534 Sep 10 18:33	0° 		
	10533 Oct 03 01:13	0° 			evening rise	10534 Sep 16 03:18	11° 	03'53"	
	10533 Oct 20 00:07	0° 				10534 Sep 25 08:51	0° 		
desc. node	10533 Oct 21 11:55	2° 	00'24"		desc. node	10534 Oct 08 09:10	18° 	35'08"	
evening max el	10533 Oct 28 05:47	9° 	39'20"	25°10'58"	evening max el	10534 Oct 09 16:52	19° 	55'01"	23°33'31"
retrograde	10533 Nov 11 02:33	16° 	37'29"		retrograde	10534 Oct 23 04:38	26° 	38'47"	
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








































































































































min. Earth dist.	10534 Nov 03 02:58	22°♍51'06	0.55551 AU	inferior conj	10535 Oct 15 19:08	2°♍01'51	-5°18'01
inferior conj	10534 Nov 04 23:41	21°♍45'02	-5°45'44	minimum elong	10535 Oct 15 11:25	2°♍12'38	5°16'29
minimum elong	10534 Nov 04 23:49	21°♍44'50	5°45'21	min. Earth dist.	10535 Oct 15 10:02	2°♍14'35	0.54701 AU
morning rise	10534 Nov 13 10:19	17°♍51'45			10535 Oct 19 14:07	30°♍♂	
direct	10534 Nov 16 06:35	17°♍31'51		morning rise	10535 Oct 24 04:34	28°♂14'31	
morning max el	10534 Nov 26 21:51	22°♍33'48	20°18'50	direct	10535 Oct 27 17:23	27°♂47'08	
asc. node	10534 Dec 01 14:33	27°♍56'47			10535 Nov 04 06:05	0°♍	
	10534 Dec 03 01:51	0°♂		morning max el	10535 Nov 08 21:12	3°♍32'29	21°50'43
morning set	10534 Dec 15 09:28	22°♂22'10		asc. node	10535 Nov 18 11:31	15°♍45'30	
	10534 Dec 19 02:20	0°♂			10535 Nov 26 07:58	0°♂	
				morning set	10535 Nov 29 19:25	7°♂08'38	
superior conj	10534 Dec 22 23:33	7°♂56'25	1°24'40				
minimum elong	10534 Dec 23 02:01	8°♂08'51	1°24'58	superior conj	10535 Dec 06 22:58	22°♂16'48	1°35'40
max. Earth dist.	10534 Dec 28 11:40	18°♂46'09	1.36524 AU	minimum elong	10535 Dec 07 00:20	22°♂23'58	1°36'06
evening rise	10535 Jan 01 07:18	25°♂53'41			10535 Dec 10 16:38	0°♂	
	10535 Jan 03 14:07	0°♍		max. Earth dist.	10535 Dec 11 00:26	0°♂39'28	1.34638 AU
desc. node	10535 Jan 04 07:46	1°♍17'50		evening rise	10535 Dec 15 07:21	9°♂06'15	
	10535 Jan 22 15:07	0°♂		desc. node	10535 Dec 22 04:44	21°♂41'52	
evening max el	10535 Feb 05 20:45	17°♂11'02	25°53'35		10535 Dec 27 03:24	0°♍	
retrograde	10535 Feb 18 09:34	24°♂20'53			10536 Jan 18 12:31	0°♂	
evening set	10535 Feb 24 11:14	21°♂52'07		evening max el	10536 Jan 19 10:14	0°♂53'23	26°49'52
asc. node	10535 Feb 27 13:10	18°♂44'24		retrograde	10536 Feb 01 14:34	8°♂14'25	
min. Earth dist.	10535 Feb 28 17:36	17°♂18'30	0.67204 AU	evening set	10536 Feb 08 03:12	5°♂40'34	
inferior conj	10535 Mar 02 05:51	15°♂24'36	0°51'51	min. Earth dist.	10536 Feb 12 03:44	1°♂41'15	0.65938 AU
minimum elong	10535 Mar 02 04:36	15°♂28'33	0°51'32		10536 Feb 13 14:35	30°♍♍	
morning rise	10535 Mar 07 22:33	9°♂35'32		inferior conj	10536 Feb 14 03:54	29°♍21'02	-0°05'22
direct	10535 Mar 11 05:08	8°♂34'17		minimum elong	10536 Feb 14 04:02	29°♍20'38	0°05'00
morning max el	10535 Mar 17 22:58	12°♂13'45	18°51'19	transit middle	10536 Feb 14 04:02	29°♍20'38	0°05'00
	10535 Mar 31 03:30	0°♂		transit begin	10536 Feb 14 01:14	29°♍28'49	
desc. node	10535 Apr 02 08:25	3°♂22'47		transit end	10536 Feb 14 06:50	29°♍12'27	
morning set	10535 Apr 09 04:50	14°♂00'38		asc. node	10536 Feb 14 10:25	29°♍02'02	
	10535 Apr 19 11:00	0°♂		morning rise	10536 Feb 20 06:03	23°♍43'24	
max. Earth dist.	10535 Apr 23 21:48	6°♂57'36	1.45459 AU	direct	10536 Feb 23 02:32	22°♍58'39	
				morning max el	10536 Feb 29 12:48	26°♍23'07	18°12'56
superior conj	10535 Apr 25 14:52	9°♂38'43	-2°06'20		10536 Mar 03 17:13	0°♂	
minimum elong	10535 Apr 25 08:51	9°♂15'03	2°06'23	desc. node	10536 Mar 19 05:09	23°♂40'25	
	10535 May 08 10:17	0°♂		morning set	10536 Mar 19 15:10	24°♂20'45	
evening rise	10535 May 10 18:33	3°♂46'49			10536 Mar 23 03:35	0°♂	
asc. node	10535 May 26 11:15	28°♂20'16					
	10535 May 27 16:56	0°♂		superior conj	10536 Apr 03 21:09	18°♂35'26	-1°40'13
evening max el	10535 May 31 05:42	4°♂06'49	18°33'17	minimum elong	10536 Apr 03 11:37	17°♂58'05	1°39'25
retrograde	10535 Jun 06 17:38	7°♂38'26		max. Earth dist.	10536 Apr 05 17:35	21°♂29'27	1.45633 AU
evening set	10535 Jun 09 22:02	6°♂41'12			10536 Apr 11 04:24	0°♂	
inferior conj	10535 Jun 15 14:51	1°♂06'52	3°06'43	evening rise	10536 Apr 19 22:48	13°♂39'28	
minimum elong	10535 Jun 15 16:22	1°♂02'16	3°05'59		10536 Apr 30 12:00	0°♂	
	10535 Jun 16 12:55	30°♍♂		greatest brilliancy	10536 May 01 12:28	1°♂33'01	-0.7m
min. Earth dist.	10535 Jun 17 16:38	28°♂37'04	0.65126 AU	asc. node	10536 May 12 08:23	16°♂26'05	
morning rise	10535 Jun 21 09:49	24°♂47'31		evening max el	10536 May 13 14:38	17°♂46'26	19°13'52
direct	10535 Jun 27 22:56	22°♂04'33		retrograde	10536 May 20 14:13	21°♂41'34	
desc. node	10535 Jun 29 08:29	22°♂11'13		evening set	10536 May 24 02:53	20°♂29'00	
	10535 Jul 11 09:47	0°♂		inferior conj	10536 May 29 13:32	14°♂39'33	3°17'31
morning max el	10535 Jul 11 09:34	29°♂59'28	27°08'51	minimum elong	10536 May 29 13:52	14°♂38'27	3°17'00
	10535 Aug 02 13:45	0°♂		min. Earth dist.	10536 May 31 00:16	12°♂46'57	0.66678 AU
morning set	10535 Aug 15 23:07	23°♂46'27		morning rise	10536 Jun 04 00:22	8°♂18'37	
	10535 Aug 19 02:51	0°♂		direct	10536 Jun 10 04:50	5°♂36'18	
max. Earth dist.	10535 Aug 20 09:16	2°♂33'54	1.33579 AU	desc. node	10536 Jun 15 05:32	7°♂03'01	
asc. node	10535 Aug 22 11:02	6°♂50'04		morning max el	10536 Jun 22 20:18	13°♂09'48	26°02'27
					10536 Jul 06 10:36	0°♂	
superior conj	10535 Aug 24 08:52	10°♂50'18	0°18'46		10536 Jul 25 07:01	0°♂	
minimum elong	10535 Aug 24 07:56	10°♂45'20	0°18'22	morning set	10536 Jul 28 21:17	6°♂30'27	
evening rise	10535 Aug 31 14:07	26°♂13'16		max. Earth dist.	10536 Aug 01 17:15	13°♂44'48	1.35275 AU
	10535 Sep 02 09:26	0°♂					
	10535 Sep 21 04:09	0°♍		superior conj	10536 Aug 07 04:00	24°♂33'18	-0°11'20
evening max el	10535 Sep 21 06:07	0°♍04'52	21°54'11	minimum elong	10536 Aug 07 04:41	24°♂36'46	0°11'33
desc. node	10535 Sep 25 06:27	3°♍25'26		behind sun begin	10536 Aug 07 00:26	24°♂15'07	
retrograde	10535 Oct 03 19:45	6°♍20'04		behind sun end	10536 Aug 07 08:57	24°♂58'26	
evening set	10535 Oct 06 19:38	5°♍59'57		asc. node	10536 Aug 08 07:51	26°♂55'27	

	10536 Aug 09 19:42	0°♎		asc. node	10537 Jul 26 04:43	16°♏57'15	
evening rise	10536 Aug 14 22:10	10°♎35'15		evening rise	10537 Jul 30 01:04	24°♏39'48	
	10536 Aug 25 03:51	0°♏			10537 Aug 01 17:44	0°♎	
evening max el	10536 Sep 02 06:08	10°♏43'15	20°27'35	evening max el	10537 Aug 15 20:02	22°♎07'50	19°20'49
desc. node	10536 Sep 11 03:44	16°♏00'43		retrograde	10537 Aug 25 05:09	26°♎47'22	
retrograde	10536 Sep 13 07:59	16°♏13'06		evening set	10537 Aug 27 01:17	26°♎37'24	
evening set	10536 Sep 15 09:22	16°♏02'32		desc. node	10537 Aug 29 00:59	26°♎05'41	
inferior conj	10536 Sep 24 11:58	12°♏05'38	-3°55'39	inferior conj	10537 Sep 04 16:32	22°♎29'21	-2°03'48
minimum elong	10536 Sep 24 02:19	12°♏19'40	3°52'37	minimum elong	10537 Sep 04 11:02	22°♎38'22	2°01'48
min. Earth dist.	10536 Sep 25 18:35	11°♏21'05	0.54765 AU	min. Earth dist.	10537 Sep 07 06:39	20°♎48'02	0.55764 AU
morning rise	10536 Oct 02 18:46	8°♏03'04		morning rise	10537 Sep 12 18:06	17°♎54'24	
direct	10536 Oct 07 02:00	7°♏23'18		direct	10537 Sep 17 21:05	16°♎54'36	
morning max el	10536 Oct 20 10:56	13°♏52'25	23°36'22	morning max el	10537 Oct 01 22:26	24°♎00'32	25°21'01
	10536 Nov 01 20:17	0°♎			10537 Oct 07 09:42	0°♏	
asc. node	10536 Nov 04 08:26	4°♎17'33		asc. node	10537 Oct 22 05:16	23°♏22'11	
morning set	10536 Nov 13 07:03	21°♎56'49			10537 Oct 25 13:48	0°♎	
	10536 Nov 17 00:37	0°♏		morning set	10537 Oct 28 18:37	6°♎41'46	
superior conj	10536 Nov 20 04:44	6°♏53'26	1°39'48	superior conj	10537 Nov 04 14:25	21°♎38'50	1°37'42
minimum elong	10536 Nov 20 04:53	6°♏54'16	1°40'16	minimum elong	10537 Nov 04 13:29	21°♎33'43	1°38'02
max. Earth dist.	10536 Nov 22 20:55	12°♏37'17	1.33143 AU	max. Earth dist.	10537 Nov 06 00:38	24°♎46'57	1.32109 AU
evening rise	10536 Nov 27 19:53	22°♏50'56			10537 Nov 08 10:16	0°♏	
	10536 Dec 01 12:01	0°♏		evening rise	10537 Nov 11 17:43	6°♏59'23	
desc. node	10536 Dec 08 01:46	11°♏49'50			10537 Nov 24 00:07	0°♏	
	10536 Dec 19 20:26	0°♏		desc. node	10537 Nov 24 22:50	1°♏34'30	
evening max el	10536 Dec 31 22:55	14°♏18'31	27°23'57	evening max el	10537 Dec 14 09:10	27°♏14'31	27°29'14
retrograde	10537 Jan 14 13:26	21°♏41'39			10537 Dec 17 13:28	0°♏	
evening set	10537 Jan 21 10:17	19°♏09'20		retrograde	10537 Dec 28 05:11	4°♏32'41	
min. Earth dist.	10537 Jan 25 06:04	15°♏42'09	0.64318 AU	evening set	10538 Jan 04 05:37	2°♏10'27	
inferior conj	10537 Jan 27 17:45	13°♏04'08	-1°11'11		10538 Jan 07 00:48	30°♏	
minimum elong	10537 Jan 27 19:57	12°♏58'16	1°09'51	min. Earth dist.	10538 Jan 07 22:50	29°♏10'49	0.62413 AU
asc. node	10537 Jan 31 07:38	9°♏34'58		inferior conj	10538 Jan 10 20:27	26°♏26'18	-2°23'56
morning rise	10537 Feb 03 07:29	7°♏40'28		minimum elong	10538 Jan 11 01:14	26°♏14'57	2°21'34
direct	10537 Feb 05 19:37	7°♏08'31		morning rise	10538 Jan 17 23:16	21°♏19'24	
morning max el	10537 Feb 12 05:57	10°♏29'06	17°51'32	asc. node	10538 Jan 18 04:47	21°♏15'00	
	10537 Feb 25 15:27	0°♏		direct	10538 Jan 20 05:21	20°♏56'22	
morning set	10537 Mar 01 06:16	6°♏05'19		morning max el	10538 Jan 26 23:15	24°♏22'48	17°47'44
desc. node	10537 Mar 06 01:54	14°♏10'12			10538 Jan 31 13:02	0°♏	
superior conj	10537 Mar 14 15:27	28°♏11'30	-1°00'55	morning set	10538 Feb 11 20:44	18°♏56'43	
minimum elong	10537 Mar 14 08:48	27°♏44'46	0°59'57		10538 Feb 18 03:48	0°♏	
	10537 Mar 15 18:30	0°♏		desc. node	10538 Feb 20 22:39	4°♏47'32	
max. Earth dist.	10537 Mar 19 12:46	5°♏58'49	1.45066 AU	superior conj	10538 Feb 23 08:58	8°♏54'25	-0°18'16
evening rise	10537 Mar 30 12:08	23°♏02'14		minimum elong	10538 Feb 23 07:11	8°♏46'56	0°17'46
	10537 Apr 04 01:37	0°♏		max. Earth dist.	10538 Mar 02 05:19	20°♏10'48	1.43833 AU
greatest brilliancy	10537 Apr 14 12:36	15°♏36'28	-0.6m		10538 Mar 08 09:56	0°♏	
	10537 Apr 25 08:58	0°♏		evening rise	10538 Mar 10 01:25	2°♏33'26	
evening max el	10537 Apr 26 18:21	1°♏28'45	20°10'06		10538 Mar 28 13:43	0°♏	
asc. node	10537 Apr 29 05:34	3°♏42'28		evening max el	10538 Apr 09 16:31	15°♏11'59	21°19'08
retrograde	10537 May 04 12:48	5°♏57'45		asc. node	10538 Apr 16 02:46	19°♏54'24	
evening set	10537 May 08 10:31	4°♏29'33		retrograde	10538 Apr 18 11:12	20°♏21'27	
	10537 May 12 14:13	30°♏		evening set	10538 Apr 22 19:00	18°♏37'37	
inferior conj	10537 May 13 17:58	28°♏26'41	3°14'52	inferior conj	10538 Apr 28 01:44	12°♏23'23	3°00'54
minimum elong	10537 May 13 17:13	28°♏29'15	3°14'24	minimum elong	10538 Apr 28 00:09	12°♏28'54	3°00'21
min. Earth dist.	10537 May 14 14:23	27°♏17'17	0.67790 AU	min. Earth dist.	10538 Apr 28 08:44	11°♏59'00	0.68447 AU
morning rise	10537 May 18 23:37	22°♏07'42		morning rise	10538 May 03 05:04	6°♏08'31	
direct	10537 May 24 16:34	19°♏35'18		direct	10538 May 08 08:59	3°♏52'56	
desc. node	10537 Jun 02 02:30	23°♏35'37		morning max el	10538 May 18 15:49	9°♏59'40	23°09'34
morning max el	10537 Jun 05 06:01	26°♏31'33	24°39'19	desc. node	10538 May 19 23:25	11°♏21'56	
	10537 Jun 08 11:04	0°♏			10538 Jun 03 10:49	0°♏	
	10537 Jun 30 00:32	0°♏		morning set	10538 Jun 22 07:37	29°♏13'24	
morning set	10537 Jul 11 01:52	18°♏24'08			10538 Jun 22 18:47	0°♏	
max. Earth dist.	10537 Jul 14 16:20	24°♏50'48	1.37363 AU	max. Earth dist.	10538 Jun 26 12:55	6°♏23'20	1.39647 AU
	10537 Jul 17 11:18	0°♏		superior conj	10538 Jul 04 06:08	20°♏10'05	-1°17'10
superior conj	10537 Jul 21 12:24	7°♏43'08	-0°44'04	minimum elong	10538 Jul 04 11:19	20°♏33'58	1°16'54
minimum elong	10537 Jul 21 15:17	7°♏57'05	0°44'00		10538 Jul 09 11:50	0°♏	

asc. node	10538 Jul 13 01:37	6°♊51'14			10539 Jun 15 04:49	0°♊	
evening rise	10538 Jul 13 19:49	8°♊18'42					
	10538 Jul 26 06:57	0°♊		superior conj	10539 Jun 16 04:38	1°♊43'31	-1°46'50
evening max el	10538 Jul 29 21:37	4°♊16'57	18°35'20	minimum elong	10539 Jun 16 11:05	2°♊11'37	1°46'42
retrograde	10538 Aug 06 20:13	8°♊15'20		evening rise	10539 Jun 27 02:39	21°♊22'27	
evening set	10538 Aug 08 20:53	8°♊00'39		asc. node	10539 Jun 29 22:33	26°♊32'53	
desc. node	10538 Aug 15 22:12	4°♊09'52			10539 Jul 01 20:27	0°♊	
inferior conj	10538 Aug 16 17:25	3°♊33'25	-0°14'47	evening max el	10539 Jul 13 06:54	17°♊01'04	18°10'19
minimum elong	10538 Aug 16 16:50	3°♊34'32	0°14'49	retrograde	10539 Jul 20 06:13	20°♊33'15	
transit middle	10538 Aug 16 16:50	3°♊34'32	0°14'49	evening set	10539 Jul 22 14:17	20°♊09'58	
transit begin	10538 Aug 16 15:25	3°♊37'16		inferior conj	10539 Jul 29 15:53	15°♊21'51	1°12'46
transit end	10538 Aug 16 18:16	3°♊31'49		minimum elong	10539 Jul 29 18:03	15°♊17'00	1°11'37
min. Earth dist.	10538 Aug 19 23:38	1°♊05'01	0.57499 AU	min. Earth dist.	10539 Aug 01 23:38	12°♊25'07	0.59659 AU
	10538 Aug 21 12:55	30°♋♊		desc. node	10539 Aug 02 19:27	11°♊44'09	
morning rise	10538 Aug 24 09:18	28°♊21'20		morning rise	10539 Aug 05 18:42	9°♊38'07	
direct	10538 Aug 30 06:31	26°♊54'37		direct	10539 Aug 12 04:57	7°♊42'02	
	10538 Sep 08 04:01	0°♊		morning max el	10539 Aug 26 13:17	15°♊33'14	27°41'22
morning max el	10538 Sep 13 14:15	4°♊27'21	26°47'15		10539 Sep 07 07:38	0°♊	
	10538 Oct 02 05:10	0°♊			10539 Sep 24 16:06	0°♊	
asc. node	10538 Oct 09 02:06	12°♊51'03		asc. node	10539 Sep 25 22:54	2°♊36'34	
morning set	10538 Oct 13 04:29	21°♊19'11		morning set	10539 Sep 27 10:53	5°♊43'18	
	10538 Oct 17 04:19	0°♊		max. Earth dist.	10539 Oct 03 18:32	19°♊25'26	1.31480 AU
superior conj	10538 Oct 20 01:58	6°♊26'49	1°29'48	superior conj	10539 Oct 04 13:30	21°♊10'47	1°16'26
minimum elong	10538 Oct 20 00:14	6°♊17'06	1°29'54	minimum elong	10539 Oct 04 11:19	20°♊58'36	1°16'16
max. Earth dist.	10538 Oct 20 09:05	7°♊06'24	1.31554 AU		10539 Oct 08 12:56	0°♊	
evening rise	10538 Oct 26 22:10	21°♊24'30		evening rise	10539 Oct 11 06:52	5°♊58'43	
	10538 Oct 31 02:36	0°♊			10539 Oct 23 18:17	0°♊	
desc. node	10538 Nov 11 19:58	20°♊46'35		desc. node	10539 Oct 29 17:09	9°♊12'28	
	10538 Nov 18 06:06	0°♊		evening max el	10539 Nov 08 11:53	20°♊51'14	25°59'14
evening max el	10538 Nov 26 14:26	9°♊28'55	27°01'05	retrograde	10539 Nov 22 09:35	27°♊53'44	
retrograde	10538 Dec 10 12:23	16°♊38'57		evening set	10539 Nov 28 17:34	26°♊18'59	
evening set	10538 Dec 17 09:33	14°♊36'09		min. Earth dist.	10539 Dec 03 00:37	23°♊43'42	0.58240 AU
min. Earth dist.	10538 Dec 21 04:58	11°♊55'36	0.60332 AU	inferior conj	10539 Dec 06 02:44	21°♊30'26	-4°48'47
inferior conj	10538 Dec 24 08:38	9°♊18'44	-3°39'22	minimum elong	10539 Dec 06 10:36	21°♊16'14	4°46'27
minimum elong	10538 Dec 24 15:50	9°♊03'45	3°36'27	morning rise	10539 Dec 14 06:06	17°♊06'06	
morning rise	10539 Jan 01 00:45	4°♊31'48		direct	10539 Dec 16 11:03	16°♊50'18	
direct	10539 Jan 03 04:00	4°♊14'03		asc. node	10539 Dec 22 22:57	19°♊17'01	
asc. node	10539 Jan 05 01:52	4°♊28'51		morning max el	10539 Dec 24 20:30	20°♊55'22	18°38'00
morning max el	10539 Jan 10 13:21	7°♊55'13	18°02'39		10539 Dec 31 18:38	0°♊	
	10539 Jan 24 18:34	0°♊		morning set	10540 Jan 09 23:23	16°♊46'04	
morning set	10539 Jan 26 04:12	2°♊35'49			10540 Jan 16 19:54	0°♊	
superior conj	10539 Feb 05 03:12	20°♊47'17	0°20'26	superior conj	10540 Jan 18 18:13	3°♊38'16	0°51'47
minimum elong	10539 Feb 05 04:50	20°♊54'31	0°20'32	minimum elong	10540 Jan 18 21:13	3°♊52'18	0°51'49
desc. node	10539 Feb 07 19:29	25°♊29'05		desc. node	10540 Jan 25 16:19	16°♊10'40	
	10539 Feb 10 10:36	0°♊		max. Earth dist.	10540 Jan 26 02:05	16°♊53'22	1.39946 AU
max. Earth dist.	10539 Feb 12 17:57	3°♊52'52	1.42064 AU	evening rise	10540 Jan 30 04:23	23°♊53'49	
evening rise	10539 Feb 18 04:36	12°♊46'14			10540 Feb 02 21:16	0°♊	
	10539 Mar 01 09:16	0°♊			10540 Feb 23 05:38	0°♊	
evening max el	10539 Mar 23 09:58	28°♊57'07	22°36'36	evening max el	10540 Mar 05 00:22	12°♊44'46	23°57'02
	10539 Mar 24 11:47	0°♊		retrograde	10540 Mar 16 01:30	19°♊14'45	
retrograde	10539 Apr 02 07:51	4°♊48'41		asc. node	10540 Mar 19 21:13	18°♊06'19	
asc. node	10539 Apr 02 23:58	4°♊46'30		evening set	10540 Mar 21 08:14	17°♊02'01	
evening set	10539 Apr 07 02:44	2°♊49'44		min. Earth dist.	10540 Mar 26 01:38	11°♊33'36	0.68415 AU
	10539 Apr 09 19:07	30°♋♊		inferior conj	10540 Mar 26 19:20	10°♊33'24	2°03'24
inferior conj	10539 Apr 12 10:49	26°♊26'37	2°36'52	minimum elong	10540 Mar 26 17:10	10°♊40'48	2°02'40
minimum elong	10539 Apr 12 08:44	26°♊33'52	2°36'11	morning rise	10540 Apr 01 02:09	4°♊30'50	
min. Earth dist.	10539 Apr 12 05:12	26°♊46'07	0.68653 AU	direct	10540 Apr 05 03:18	2°♊58'04	
morning rise	10539 Apr 17 14:35	20°♊17'19		morning max el	10540 Apr 13 00:56	7°♊26'25	20°24'43
direct	10539 Apr 22 04:58	18°♊22'32		desc. node	10540 Apr 22 17:09	19°♊21'47	
morning max el	10539 May 01 05:04	23°♊36'49	21°42'22		10540 Apr 30 02:35	0°♊	
desc. node	10539 May 06 20:18	0°♊02'09		morning set	10540 May 11 15:46	17°♊29'25	
	10539 May 06 19:37	0°♊			10540 May 19 14:55	0°♊	
	10539 May 27 19:34	0°♊		max. Earth dist.	10540 May 20 22:06	2°♊04'54	1.43717 AU
morning set	10539 Jun 02 10:53	8°♊50'07		superior conj	10540 May 27 03:55	12°♊15'36	-2°07'29
max. Earth dist.	10539 Jun 08 14:00	18°♊47'24	1.41859 AU				

minimum elong	10540 May 27 08:28	12° $\Pi$ 34'27	2°07'46		10541 Apr 23 05:23	0° $\mathcal{B}$	
	10540 Jun 06 14:23	0° $\mathfrak{D}$		max. Earth dist.	10541 May 03 12:12	16° $\mathcal{B}$ 02'38	1.45016 AU
evening rise	10540 Jun 08 17:04	3° $\mathfrak{D}$ 40'39					
asc. node	10540 Jun 15 19:33	15° $\mathfrak{D}$ 57'25		superior conj	10541 May 07 03:26	21° $\mathcal{B}$ 47'57	-2°12'31
	10540 Jun 25 15:40	0° $\Omega$		minimum elong	10541 May 07 01:41	21° $\mathcal{B}$ 40'59	2°12'53
evening max el	10540 Jun 25 20:02	0° $\Omega$ 10'55	18°04'42		10541 May 12 06:09	0° $\Pi$	
retrograde	10540 Jul 02 07:18	3° $\Omega$ 32'02		evening rise	10541 May 21 10:09	15° $\Pi$ 02'12	
evening set	10540 Jul 04 23:11	2° $\Omega$ 57'10			10541 May 30 12:06	0° $\mathfrak{D}$	
	10540 Jul 09 04:01	30° $\mathcal{R}\mathfrak{D}$		asc. node	10541 Jun 02 16:37	4° $\mathfrak{D}$ 58'03	
inferior conj	10540 Jul 11 08:58	27° $\mathfrak{D}$ 49'48	2°14'31	evening max el	10541 Jun 09 09:39	13° $\mathfrak{D}$ 37'36	18°17'42
minimum elong	10540 Jul 11 11:45	27° $\mathfrak{D}$ 42'40	2°13'17	retrograde	10541 Jun 15 18:50	17° $\mathfrak{D}$ 01'37	
min. Earth dist.	10540 Jul 14 08:35	24° $\mathfrak{D}$ 47'31	0.61927 AU	evening set	10541 Jun 18 18:33	16° $\mathfrak{D}$ 13'05	
morning rise	10540 Jul 17 22:05	21° $\mathfrak{D}$ 44'41		inferior conj	10541 Jun 24 16:28	10° $\mathfrak{D}$ 48'20	2°53'12
desc. node	10540 Jul 19 16:40	20° $\mathfrak{D}$ 39'08		minimum elong	10541 Jun 24 18:37	10° $\mathfrak{D}$ 42'11	2°52'17
direct	10540 Jul 24 14:33	19° $\mathfrak{D}$ 22'49		min. Earth dist.	10541 Jun 27 02:55	8° $\mathfrak{D}$ 01'40	0.64048 AU
morning max el	10540 Aug 07 18:51	27° $\mathfrak{D}$ 24'41	27°57'07	morning rise	10541 Jun 30 17:21	4° $\mathfrak{D}$ 31'53	
	10540 Aug 10 05:56	0° $\Omega$		desc. node	10541 Jul 06 13:50	1° $\mathfrak{D}$ 55'21	
	10540 Aug 31 01:03	0° $\mathfrak{N}$		direct	10541 Jul 07 09:26	1° $\mathfrak{D}$ 53'06	
morning set	10540 Sep 10 11:52	19° $\mathfrak{N}$ 48'57		morning max el	10541 Jul 21 04:18	9° $\mathfrak{D}$ 54'57	27°35'38
asc. node	10540 Sep 11 19:43	22° $\mathfrak{N}$ 33'22			10541 Aug 05 21:44	0° $\Omega$	
	10540 Sep 15 07:52	0° $\mathfrak{L}$			10541 Aug 23 10:11	0° $\mathfrak{N}$	
max. Earth dist.	10540 Sep 16 01:04	1° $\mathfrak{L}$ 33'08	1.31894 AU	morning set	10541 Aug 25 04:57	3° $\mathfrak{N}$ 29'12	
				asc. node	10541 Aug 29 16:33	12° $\mathfrak{N}$ 36'28	
superior conj	10540 Sep 17 23:14	5° $\mathfrak{L}$ 45'27	0°57'51	max. Earth dist.	10541 Aug 30 00:37	13° $\mathfrak{N}$ 18'38	1.32812 AU
minimum elong	10540 Sep 17 21:04	5° $\mathfrak{L}$ 33'34	0°57'29				
evening rise	10540 Sep 24 17:52	20° $\mathfrak{L}$ 36'31		superior conj	10541 Sep 02 05:10	20° $\mathfrak{N}$ 04'55	0°34'21
	10540 Sep 29 06:00	0° $\mathfrak{M}$		minimum elong	10541 Sep 02 03:36	19° $\mathfrak{N}$ 56'29	0°33'54
desc. node	10540 Oct 15 14:22	26° $\mathfrak{M}$ 34'18			10541 Sep 06 19:12	0° $\mathfrak{L}$	
	10540 Oct 18 15:26	0° $\mathcal{X}$		evening rise	10541 Sep 09 05:15	5° $\mathfrak{L}$ 12'11	
evening max el	10540 Oct 20 01:21	1° $\mathcal{X}$ 24'44	24°30'48		10541 Sep 22 09:19	0° $\mathfrak{M}$	
retrograde	10540 Nov 02 19:26	8° $\mathcal{X}$ 18'33		evening max el	10541 Oct 01 12:05	11° $\mathfrak{M}$ 32'37	22°50'35
evening set	10540 Nov 08 01:36	7° $\mathcal{X}$ 17'13		desc. node	10541 Oct 02 11:38	12° $\mathfrak{M}$ 27'58	
min. Earth dist.	10540 Nov 13 12:29	4° $\mathcal{X}$ 28'28	0.56386 AU	retrograde	10541 Oct 14 16:51	18° $\mathfrak{M}$ 07'01	
inferior conj	10540 Nov 16 00:26	2° $\mathcal{X}$ 54'08	-5°36'29	evening set	10541 Oct 18 11:44	17° $\mathfrak{M}$ 35'41	
minimum elong	10540 Nov 16 04:48	2° $\mathcal{X}$ 47'14	5°35'36	min. Earth dist.	10541 Oct 25 20:36	14° $\mathfrak{M}$ 15'15	0.55079 AU
	10540 Nov 21 03:12	30° $\mathcal{R}\mathfrak{M}$		inferior conj	10541 Oct 27 03:20	13° $\mathfrak{M}$ 31'15	-5°41'16
morning rise	10540 Nov 24 10:11	28° $\mathfrak{M}$ 51'37		minimum elong	10541 Oct 26 23:52	13° $\mathfrak{M}$ 36'14	5°40'41
direct	10540 Nov 26 22:48	28° $\mathfrak{M}$ 34'26		morning rise	10541 Nov 04 13:43	9° $\mathfrak{M}$ 42'27	
	10540 Dec 02 09:12	0° $\mathcal{X}$		direct	10541 Nov 07 16:21	9° $\mathfrak{M}$ 20'00	
morning max el	10540 Dec 06 16:58	3° $\mathcal{X}$ 13'08	19°35'28	morning max el	10541 Nov 19 00:00	14° $\mathfrak{M}$ 40'39	20°55'36
asc. node	10540 Dec 08 20:00	5° $\mathcal{X}$ 27'46		asc. node	10541 Nov 25 16:59	22° $\mathfrak{M}$ 45'07	
	10540 Dec 23 11:13	0° $\mathfrak{Z}$			10541 Nov 30 05:06	0° $\mathcal{X}$	
morning set	10540 Dec 24 02:26	1° $\mathfrak{Z}$ 16'22		morning set	10541 Dec 08 10:33	15° $\mathcal{X}$ 58'56	
					10541 Dec 15 03:56	0° $\mathfrak{Z}$	
superior conj	10541 Jan 01 01:07	17° $\mathfrak{Z}$ 13'23	1°14'57				
minimum elong	10541 Jan 01 04:02	17° $\mathfrak{Z}$ 27'41	1°15'08	superior conj	10541 Dec 15 19:33	1° $\mathfrak{Z}$ 20'29	1°30'12
max. Earth dist.	10541 Jan 07 07:59	29° $\mathfrak{Z}$ 13'01	1.37737 AU	minimum elong	10541 Dec 15 21:35	1° $\mathfrak{Z}$ 30'55	1°30'34
	10541 Jan 07 18:12	0° $\mathfrak{A}$		max. Earth dist.	10541 Dec 20 16:47	11° $\mathfrak{Z}$ 09'20	1.35677 AU
evening rise	10541 Jan 11 01:17	5° $\mathfrak{A}$ 56'16		evening rise	10541 Dec 24 16:33	18° $\mathfrak{Z}$ 46'41	
desc. node	10541 Jan 11 13:11	6° $\mathfrak{A}$ 48'42		desc. node	10541 Dec 29 10:06	27° $\mathfrak{Z}$ 19'27	
	10541 Jan 25 20:07	0° $\mathcal{H}$			10541 Dec 30 23:09	0° $\mathfrak{A}$	
evening max el	10541 Feb 15 13:38	26° $\mathcal{H}$ 34'03	25°13'52		10542 Jan 19 23:51	0° $\mathcal{H}$	
	10541 Feb 19 10:40	0° $\mathcal{Y}$		evening max el	10542 Jan 29 03:06	10° $\mathcal{H}$ 21'57	26°19'49
retrograde	10541 Feb 27 15:05	3° $\mathcal{Y}$ 33'22		retrograde	10542 Feb 10 23:34	17° $\mathcal{H}$ 38'31	
evening set	10541 Mar 05 09:53	1° $\mathcal{Y}$ 09'21		evening set	10542 Feb 17 05:58	15° $\mathcal{H}$ 07'02	
asc. node	10541 Mar 06 18:29	29° $\mathcal{H}$ 52'44		min. Earth dist.	10542 Feb 21 09:45	10° $\mathcal{H}$ 47'54	0.66708 AU
	10541 Mar 06 15:39	30° $\mathcal{R}\mathcal{H}$		asc. node	10542 Feb 21 15:44	10° $\mathcal{H}$ 29'51	
min. Earth dist.	10541 Mar 09 19:52	26° $\mathcal{H}$ 15'48	0.67757 AU	inferior conj	10542 Feb 23 03:03	8° $\mathcal{H}$ 41'51	0°28'42
inferior conj	10541 Mar 11 01:25	24° $\mathcal{H}$ 39'41	1°20'38	minimum elong	10542 Feb 23 02:18	8° $\mathcal{H}$ 44'08	0°28'38
minimum elong	10541 Mar 10 23:39	24° $\mathcal{H}$ 45'24	1°20'05	morning rise	10542 Feb 28 23:29	2° $\mathcal{H}$ 57'10	
morning rise	10541 Mar 16 13:47	18° $\mathcal{H}$ 45'11		direct	10542 Mar 04 01:29	2° $\mathcal{H}$ 03'28	
direct	10541 Mar 20 02:42	17° $\mathcal{H}$ 33'15		morning max el	10542 Mar 10 15:17	5° $\mathcal{H}$ 35'28	18°32'51
morning max el	10541 Mar 27 04:36	21° $\mathcal{H}$ 27'15	19°20'50	desc. node	10542 Mar 27 10:42	29° $\mathcal{H}$ 18'24	
	10541 Apr 03 05:36	0° $\mathcal{Y}$			10542 Mar 27 21:16	0° $\mathcal{Y}$	
greatest brilliancy	10541 Apr 08 23:36	8° $\mathcal{Y}$ 16'19	-0.7m	morning set	10542 Mar 31 09:52	5° $\mathcal{Y}$ 33'19	
desc. node	10541 Apr 09 13:57	9° $\mathcal{Y}$ 09'39			10542 Apr 15 23:45	0° $\mathcal{B}$	
morning set	10541 Apr 20 15:45	26° $\mathcal{Y}$ 01'59					

superior conj	10542 Apr 16 11:22	0°♄45'28	-1°57'27	morning set	10543 Mar 12 08:52	16°♄31'07	
minimum elong	10542 Apr 16 03:01	0°♄12'47	1°57'07	desc. node	10543 Mar 14 07:24	19°♄41'40	
max. Earth dist.	10542 Apr 16 06:25	0°♄26'04	1.45627 AU		10543 Mar 20 15:49	0°♄	
evening rise	10542 May 02 03:13	25°♄24'21					
	10542 May 05 00:38	0°♄		superior conj	10543 Mar 26 20:40	9°♄53'18	-1°24'34
greatest brilliancy	10542 May 10 18:25	9°♄05'02	-0.8m	minimum elong	10543 Mar 26 11:47	9°♄18'09	1°23'35
asc. node	10542 May 20 13:44	23°♄26'56		max. Earth dist.	10543 Mar 30 02:26	14°♄59'25	1.45491 AU
evening max el	10542 May 23 21:00	27°♄14'36	18°48'32		10543 Apr 08 17:53	0°♄	
	10542 May 27 08:33	0°♄		evening rise	10543 Apr 11 23:36	5°♄00'05	
retrograde	10542 May 30 12:55	0°♄54'35		greatest brilliancy	10543 Apr 25 10:51	25°♄31'13	-0.7m
evening set	10542 Jun 02 20:46	29°♄50'59			10543 Apr 28 12:36	0°♄	
	10542 Jun 02 14:51	30°♄♄		evening max el	10543 May 07 03:55	10°♄56'01	19°36'02
inferior conj	10542 Jun 08 10:35	24°♄10'19	3°13'03	asc. node	10543 May 07 10:53	11°♄13'21	
minimum elong	10542 Jun 08 11:36	24°♄07'08	3°12'27	retrograde	10543 May 14 10:32	15°♄03'55	
min. Earth dist.	10542 Jun 10 06:02	21°♄55'01	0.65846 AU	evening set	10543 May 18 03:03	13°♄44'36	
morning rise	10542 Jun 14 01:44	17°♄49'48		inferior conj	10543 May 23 12:01	7°♄49'22	3°17'51
direct	10542 Jun 20 11:47	15°♄05'29		minimum elong	10543 May 23 11:52	7°♄49'51	3°17'23
desc. node	10542 Jun 23 10:55	15°♄35'38		min. Earth dist.	10543 May 24 16:32	6°♄14'47	0.67216 AU
morning max el	10542 Jul 03 14:55	22°♄53'15	26°43'07	morning rise	10543 May 28 20:19	1°♄29'11	
	10542 Jul 09 21:36	0°♄			10543 May 30 19:56	30°♄♄	
	10542 Jul 30 05:02	0°♄		direct	10543 Jun 03 20:15	28°♄50'07	
morning set	10542 Aug 08 11:05	16°♄36'21			10543 Jun 08 05:52	0°♄	
max. Earth dist.	10542 Aug 12 14:20	24°♄39'14	1.34242 AU	desc. node	10543 Jun 10 07:55	1°♄13'51	
	10542 Aug 15 05:51	0°♄♄		morning max el	10543 Jun 16 01:04	6°♄08'43	25°28'27
asc. node	10542 Aug 16 13:22	2°♄42'05			10543 Jul 04 11:47	0°♄	
				morning set	10543 Jul 22 02:22	29°♄00'17	
superior conj	10542 Aug 17 05:02	4°♄03'23	0°06'26		10543 Jul 22 15:31	0°♄	
minimum elong	10542 Aug 17 04:42	4°♄01'39	0°06'05	max. Earth dist.	10543 Jul 25 18:09	5°♄45'32	1.36128 AU
behind sun begin	10542 Aug 16 23:19	3°♄33'41					
behind sun end	10542 Aug 17 10:05	4°♄29'39		superior conj	10543 Jul 31 20:03	17°♄33'38	-0°25'00
evening rise	10542 Aug 24 15:07	19°♄40'47		minimum elong	10543 Jul 31 21:37	17°♄41'24	0°25'06
	10542 Aug 29 17:05	0°♄		asc. node	10543 Aug 03 10:12	22°♄46'33	
evening max el	10542 Sep 13 05:13	21°♄51'08	21°15'16		10543 Aug 06 23:03	0°♄♄	
desc. node	10542 Sep 19 08:54	26°♄23'54		evening rise	10543 Aug 08 21:19	3°♄56'31	
retrograde	10542 Sep 25 04:52	27°♄47'59			10543 Aug 23 22:28	0°♄	
evening set	10542 Sep 27 16:58	27°♄33'27		evening max el	10543 Aug 26 11:12	2°♄48'35	19°56'34
inferior conj	10542 Oct 06 19:47	23°♄37'59	-4°48'47	retrograde	10543 Sep 05 19:12	7°♄56'28	
minimum elong	10542 Oct 06 10:16	23°♄51'20	4°46'24	desc. node	10543 Sep 06 06:12	7°♄55'53	
min. Earth dist.	10542 Oct 07 04:07	23°♄26'16	0.54605 AU	evening set	10543 Sep 07 16:53	7°♄46'48	
morning rise	10542 Oct 15 04:10	19°♄46'36		inferior conj	10543 Sep 16 16:03	3°♄46'24	-3°09'44
direct	10542 Oct 19 00:51	19°♄14'27		minimum elong	10543 Sep 16 07:43	3°♄59'02	3°06'50
morning max el	10542 Oct 31 18:19	25°♄19'19	22°34'45	min. Earth dist.	10543 Sep 18 13:36	2°♄37'25	0.55083 AU
	10542 Nov 05 02:11	0°♄♄			10543 Sep 23 14:46	30°♄♄	
asc. node	10542 Nov 12 13:55	10°♄53'27		morning rise	10543 Sep 24 21:10	29°♄32'00	
morning set	10542 Nov 22 21:26	0°♄46'25		direct	10543 Sep 29 12:57	28°♄44'42	
	10542 Nov 22 12:38	0°♄♄			10543 Oct 05 08:02	0°♄	
				morning max el	10543 Oct 13 05:59	5°♄29'48	24°22'09
superior conj	10542 Nov 29 21:58	15°♄48'21	1°38'13	asc. node	10543 Oct 30 10:47	29°♄40'35	
minimum elong	10542 Nov 29 22:49	15°♄52'52	1°38'41		10543 Oct 30 14:59	0°♄♄	
max. Earth dist.	10542 Dec 03 08:45	23°♄03'02	1.33947 AU	morning set	10543 Nov 07 09:15	15°♄33'53	
	10542 Dec 06 19:05	0°♄♄					
evening rise	10542 Dec 07 22:20	2°♄14'03		superior conj	10543 Nov 14 05:40	0°♄29'16	1°39'38
desc. node	10542 Dec 16 07:03	17°♄37'21		minimum elong	10543 Nov 14 05:20	0°♄27'29	1°40'04
	10542 Dec 23 21:16	0°♄♄			10543 Nov 14 00:18	0°♄♄	
evening max el	10543 Jan 11 16:38	23°♄59'18	27°07'35	max. Earth dist.	10543 Nov 16 08:50	5°♄06'58	1.32646 AU
	10543 Jan 19 18:32	0°♄♄		evening rise	10543 Nov 21 15:11	16°♄09'41	
retrograde	10543 Jan 25 02:01	1°♄21'45			10543 Nov 28 19:46	0°♄♄	
	10543 Jan 29 23:33	30°♄♄		desc. node	10543 Dec 03 04:07	7°♄36'26	
evening set	10543 Jan 31 18:27	28°♄48'01			10543 Dec 18 13:20	0°♄♄	
min. Earth dist.	10543 Feb 04 16:55	25°♄02'27	0.65291 AU	evening max el	10543 Dec 25 04:41	7°♄13'50	27°30'02
inferior conj	10543 Feb 06 21:57	22°♄33'45	-0°32'16	retrograde	10544 Jan 07 21:38	14°♄34'34	
minimum elong	10543 Feb 06 22:53	22°♄31'07	0°31'30	evening set	10544 Jan 14 20:52	12°♄05'29	
asc. node	10543 Feb 08 12:57	20°♄46'44		min. Earth dist.	10544 Jan 18 15:16	8°♄50'53	0.63545 AU
morning rise	10543 Feb 13 04:45	17°♄01'23		inferior conj	10544 Jan 21 07:26	6°♄08'47	-1°41'20
direct	10543 Feb 15 21:30	16°♄22'26		minimum elong	10544 Jan 21 10:42	6°♄00'31	1°39'32
morning max el	10543 Feb 22 06:49	19°♄44'02	18°01'38	asc. node	10544 Jan 26 10:07	1°♄42'52	
	10543 Mar 02 02:58	0°♄♄		morning rise	10544 Jan 28 02:35	0°♄51'46	

direct	10544 Jan 30 11:58	0°  23'57		morning set	10545 Feb 04 09:09	12°  00'27	
morning max el	10544 Feb 06 00:23	3°  45'30	17°47'43		10545 Feb 14 12:13	0° 	
morning set	10544 Feb 22 10:43	28°  46'42					
	10544 Feb 23 03:46	0° 		superior conj	10545 Feb 15 04:28	1°  09'58	-0°01'08
desc. node	10544 Feb 29 04:08	10°  15'03		minimum elong	10545 Feb 15 04:23	1°  09'37	0°00'49
				behind sun begin	10545 Feb 14 19:56	0°  33'18	
superior conj	10544 Mar 06 00:05	19°  55'48	-0°42'42	behind sun end	10545 Feb 15 12:50	1°  45'51	
minimum elong	10544 Mar 05 19:32	19°  37'13	0°41'54	desc. node	10545 Feb 15 00:56	0°  54'46	
max. Earth dist.	10544 Mar 11 21:21	29°  25'25	1.44626 AU	max. Earth dist.	10545 Feb 22 12:21	13°  26'22	1.43130 AU
	10544 Mar 12 06:03	0° 		evening rise	10545 Mar 01 04:51	24°  07'51	
evening rise	10544 Mar 21 11:00	14°  21'56			10545 Mar 04 23:43	0° 	
	10544 Mar 31 19:30	0° 			10545 Mar 25 21:19	0° 	
evening max el	10544 Apr 19 05:14	24°  38'37	20°38'04	evening max el	10545 Apr 02 01:07	8°  22'34	21°51'16
asc. node	10544 Apr 23 08:04	28°  04'17		asc. node	10545 Apr 10 05:17	13°  44'53	
retrograde	10544 Apr 27 09:17	29°  24'06		retrograde	10545 Apr 11 07:19	13°  50'39	
evening set	10544 May 01 11:16	27°  48'57		evening set	10545 Apr 15 19:41	12°  00'12	
inferior conj	10544 May 06 18:07	21°  40'50	3°10'14	inferior conj	10545 Apr 21 02:44	5°  41'32	2°51'56
minimum elong	10544 May 06 16:59	21°  44'46	3°09'44	minimum elong	10545 Apr 21 00:53	5°  47'57	2°51'18
min. Earth dist.	10544 May 07 08:37	20°  50'55	0.68130 AU	min. Earth dist.	10545 Apr 21 04:14	5°  36'17	0.68587 AU
morning rise	10544 May 11 22:29	15°  23'33			10545 Apr 25 16:21	30°  R 	
direct	10544 May 17 09:56	12°  57'57		morning rise	10545 Apr 26 05:55	29°  Y 	
desc. node	10544 May 27 04:52	18°  20'43		direct	10545 May 01 03:57	27°  Y 	
morning max el	10544 May 28 10:41	19°  33'44	24°01'23		10545 May 07 10:02	0° 	
	10544 Jun 06 07:23	0°  II		morning max el	10545 May 10 21:44	3°  06'38	22°31'42
	10544 Jun 26 15:24	0° 		desc. node	10545 May 14 01:46	6°  32'38	
morning set	10544 Jul 02 21:50	10°  27'55			10545 May 31 08:36	0°  II	
max. Earth dist.	10544 Jul 06 15:46	17°  20'10	1.38329 AU	morning set	10545 Jun 13 16:39	20°  II 	47'36
				max. Earth dist.	10545 Jun 18 13:36	28°  II 	53'57
superior conj	10544 Jul 13 22:42	0°  26'10	-0°58'16		10545 Jun 19 05:09	0° 	
minimum elong	10544 Jul 14 02:35	0°  44'39	0°58'05				
	10544 Jul 13 17:12	0° 		superior conj	10545 Jun 26 08:50	12°  23'46	-1°30'28
asc. node	10544 Jul 20 07:03	12°  45'27		minimum elong	10545 Jun 26 14:48	12°  25'8	1°30'12
evening rise	10544 Jul 22 21:10	17°  45'12			10545 Jul 05 19:05	0° 	
	10544 Jul 29 05:57	0° 		evening rise	10545 Jul 06 11:26	1°  41'03	
evening max el	10544 Aug 08 06:24	14°  42'17	18°58'50	asc. node	10545 Jul 07 04:00	2°  43'50	
retrograde	10544 Aug 16 23:49	18°  45'12		evening max el	10545 Jul 22 11:45	26°  45'30	18°22'12
evening set	10544 Aug 18 21:05	18°  41'48			10545 Jul 26 16:59	0° 	
desc. node	10544 Aug 23 03:29	17°  40'14		retrograde	10545 Jul 29 23:14	0°  43'03	
inferior conj	10544 Aug 27 04:43	14°  42'45	-1°15'41	evening set	10545 Aug 01 02:44	0°  45'16	
minimum elong	10544 Aug 27 01:28	14°  43'26	1°14'35		10545 Aug 02 08:13	30°  R 	
min. Earth dist.	10544 Aug 30 03:25	12°  44'49	0.56426 AU	inferior conj	10545 Aug 08 15:01	25°  49'17	0°25'30
morning rise	10544 Sep 04 02:41	9°  45'46		minimum elong	10545 Aug 08 15:54	25°  47'28	0°24'49
direct	10544 Sep 09 13:34	8°  46'31		desc. node	10545 Aug 10 00:44	24°  43'51	
morning max el	10544 Sep 23 18:54	15°  42'51	26°01'03	min. Earth dist.	10545 Aug 11 23:29	23°  40'49	0.58387 AU
	10544 Oct 05 08:13	0° 		morning rise	10545 Aug 16 01:32	20°  42'21	
asc. node	10544 Oct 16 07:36	18°  45'12		direct	10545 Aug 22 04:57	18°  42'46	
morning set	10544 Oct 21 20:18	0°  ML 		morning max el	10545 Sep 05 13:52	26°  42'15	27°14'41
	10544 Oct 21 17:18	0° 			10545 Sep 08 23:15	0° 	
					10545 Sep 28 19:15	0° 	
superior conj	10544 Oct 28 16:22	15°  41'05	1°35'02	asc. node	10545 Oct 03 04:26	8°  43'40	
minimum elong	10544 Oct 28 15:03	15°  40'48	1°35'17	morning set	10545 Oct 06 04:55	14°  48'13	
max. Earth dist.	10544 Oct 29 14:59	17°  41'18	1.31811 AU				
	10544 Nov 04 11:15	0° 		superior conj	10545 Oct 13 04:08	0°  ML 	02'55
evening rise	10544 Nov 04 16:06	0°  42'52		minimum elong	10545 Oct 13 02:09	29°  45'52	1°24'47
desc. node	10544 Nov 19 01:14	27°  40'28		max. Earth dist.	10545 Oct 13 00:08	29°  40'35	1.31458 AU
	10544 Nov 20 20:34	0° 			10545 Oct 13 03:37	0°  ML 	
evening max el	10544 Dec 06 12:56	19°  45'23	27°21'25	evening rise	10545 Oct 19 22:36	14°  41'54	
retrograde	10544 Dec 20 09:53	27°  40'34			10545 Oct 27 10:44	0° 	
evening set	10544 Dec 27 10:08	24°  45'03		desc. node	10545 Nov 05 22:25	16°  40'23	
min. Earth dist.	10544 Dec 31 03:20	22°  40'14	0.61540 AU		10545 Nov 16 20:43	0° 	
inferior conj	10545 Jan 03 04:21	19°  40'52	-2°55'59	evening max el	10545 Nov 18 14:55	1°  44'21	26°38'41
minimum elong	10545 Jan 03 10:15	19°  40'37	2°53'17	retrograde	10545 Dec 02 13:26	8°  45'20	
morning rise	10545 Jan 10 12:57	14°  40'28		evening set	10545 Dec 09 06:13	7°  40'05	
asc. node	10545 Jan 12 07:15	14°  40'05		min. Earth dist.	10545 Dec 13 04:54	4°  43'46	0.59419 AU
direct	10545 Jan 12 17:25	14°  40'06		inferior conj	10545 Dec 16 09:12	1°  43'40	-4°10'24
morning max el	10545 Jan 19 16:48	17°  43'12	17°51'49	minimum elong	10545 Dec 16 17:02	1°  39'18	4°07'34
	10545 Jan 28 14:25	0° 			10545 Dec 18 22:01	30°  R 	

morning rise	10545 Dec 24 06:33	27° $\text{♊}$ 17'23		morning rise	10546 Dec 06 01:37	9° $\text{♊}$ 32'31	
direct	10545 Dec 26 09:41	27° $\text{♊}$ 01'01		direct	10546 Dec 08 08:56	9° $\text{♊}$ 16'35	
asc. node	10545 Dec 30 04:21	27° $\text{♊}$ 55'18		asc. node	10546 Dec 17 01:25	13° $\text{♊}$ 20'49	
	10546 Jan 02 06:07	0° $\text{♊}$		morning max el	10546 Dec 17 07:32	13° $\text{♊}$ 35'21	18°59'37
morning max el	10546 Jan 03 04:28	0° $\text{♊}$ 51'30	18°15'11		10546 Dec 28 13:10	0° $\text{♊}$	
morning set	10546 Jan 18 22:07	25° $\text{♊}$ 53'58		morning set	10547 Jan 02 21:06	10° $\text{♊}$ 14'26	
	10546 Jan 21 02:05	0° $\text{♊}$					
superior conj	10546 Jan 28 08:06	13° $\text{♊}$ 29'01	0°34'42	superior conj	10547 Jan 11 06:28	26° $\text{♊}$ 40'31	1°02'36
minimum elong	10546 Jan 28 10:33	13° $\text{♊}$ 40'05	0°34'45	minimum elong	10547 Jan 11 09:34	26° $\text{♊}$ 55'20	1°02'40
desc. node	10546 Feb 01 21:44	21° $\text{♊}$ 36'38			10547 Jan 13 00:30	0° $\text{♊}$	
max. Earth dist.	10546 Feb 04 22:25	26° $\text{♊}$ 49'16	1.41180 AU	max. Earth dist.	10547 Jan 18 05:06	9° $\text{♊}$ 31'27	1.39003 AU
	10546 Feb 06 19:44	0° $\text{♊}$		desc. node	10547 Jan 19 18:36	12° $\text{♊}$ 17'29	
evening rise	10546 Feb 09 16:21	4° $\text{♊}$ 43'01		evening rise	10547 Jan 22 01:24	16° $\text{♊}$ 15'17	
	10546 Feb 26 05:29	0° $\text{♊}$			10547 Jan 30 10:14	0° $\text{♊}$	
evening max el	10546 Mar 15 17:00	22° $\text{♊}$ 08'41	23°10'53	evening max el	10547 Feb 20 20:15	0° $\text{♊}$	
retrograde	10546 Mar 26 02:57	28° $\text{♊}$ 17'59		retrograde	10547 Feb 26 06:53	5° $\text{♊}$ 58'02	24°30'39
asc. node	10546 Mar 28 02:32	27° $\text{♊}$ 59'04		asc. node	10547 Mar 09 18:53	12° $\text{♊}$ 41'24	
evening set	10546 Mar 31 02:40	26° $\text{♊}$ 13'10		evening set	10547 Mar 14 23:47	10° $\text{♊}$ 38'08	
inferior conj	10546 Apr 05 11:49	19° $\text{♊}$ 47'07	2°23'51	inferior conj	10547 Mar 15 06:42	10° $\text{♊}$ 23'47	
minimum elong	10546 Apr 05 09:39	19° $\text{♊}$ 54'38	2°23'07	min. Earth dist.	10547 Mar 19 20:53	5° $\text{♊}$ 10'04	0.68187 AU
min. Earth dist.	10546 Apr 05 01:04	20° $\text{♊}$ 24'16	0.68599 AU	inferior conj	10547 Mar 20 19:33	3° $\text{♊}$ 54'17	1°46'25
morning rise	10546 Apr 10 16:32	13° $\text{♊}$ 40'15		minimum elong	10547 Mar 20 17:29	4° $\text{♊}$ 01'11	1°45'44
direct	10546 Apr 15 01:11	11° $\text{♊}$ 54'45			10547 Mar 23 22:20	30° $\text{♊}$	
morning max el	10546 Apr 23 13:26	16° $\text{♊}$ 48'49	21°07'50	morning rise	10547 Mar 26 04:23	27° $\text{♊}$ 54'47	
desc. node	10546 Apr 30 22:37	25° $\text{♊}$ 31'14		direct	10547 Mar 30 00:18	26° $\text{♊}$ 30'53	
	10546 May 04 06:19	0° $\text{♊}$			10547 Apr 05 18:30	0° $\text{♊}$	
morning set	10546 May 24 09:11	29° $\text{♊}$ 56'21		morning max el	10547 Apr 06 12:27	0° $\text{♊}$ 42'54	19°55'39
	10546 May 24 10:07	0° $\text{♊}$		desc. node	10547 Apr 17 19:25	15° $\text{♊}$ 03'54	
max. Earth dist.	10546 May 31 17:01	11° $\text{♊}$ 39'33	1.42709 AU		10547 Apr 27 21:04	0° $\text{♊}$	
superior conj	10546 Jun 07 21:54	23° $\text{♊}$ 40'16	-1°57'04	morning set	10547 May 03 09:02	8° $\text{♊}$ 24'11	
minimum elong	10546 Jun 08 04:04	24° $\text{♊}$ 06'31	1°57'06	max. Earth dist.	10547 May 14 03:56	25° $\text{♊}$ 16'21	1.44355 AU
	10546 Jun 11 14:01	0° $\text{♊}$			10547 May 17 02:51	0° $\text{♊}$	
evening rise	10546 Jun 19 11:53	14° $\text{♊}$ 02'51		superior conj	10547 May 19 10:47	3° $\text{♊}$ 46'09	-2°11'53
asc. node	10546 Jun 24 00:59	22° $\text{♊}$ 10'20		minimum elong	10547 May 19 13:08	3° $\text{♊}$ 55'40	2°12'18
	10546 Jun 28 15:08	0° $\text{♊}$		evening rise	10547 Jun 01 17:43	25° $\text{♊}$ 57'56	
evening max el	10546 Jul 05 23:12	9° $\text{♊}$ 54'21	18°05'37		10547 Jun 04 02:24	0° $\text{♊}$	
retrograde	10546 Jul 12 16:00	13° $\text{♊}$ 19'41		asc. node	10547 Jun 10 22:01	11° $\text{♊}$ 25'44	
evening set	10546 Jul 15 03:25	12° $\text{♊}$ 51'47		evening max el	10547 Jun 19 12:58	23° $\text{♊}$ 12'54	18°08'00
inferior conj	10546 Jul 21 21:52	7° $\text{♊}$ 55'35	1°42'00	retrograde	10547 Jun 25 22:00	26° $\text{♊}$ 33'13	
minimum elong	10546 Jul 22 00:30	7° $\text{♊}$ 49'19	1°40'43	evening set	10547 Jun 28 17:20	25° $\text{♊}$ 52'36	
min. Earth dist.	10546 Jul 25 03:14	4° $\text{♊}$ 53'28	0.60635 AU	inferior conj	10547 Jul 04 21:34	20° $\text{♊}$ 37'33	2°33'27
desc. node	10546 Jul 27 21:57	2° $\text{♊}$ 37'06		minimum elong	10547 Jul 05 00:11	20° $\text{♊}$ 30'30	2°32'21
morning rise	10546 Jul 28 18:49	2° $\text{♊}$ 01'34		min. Earth dist.	10547 Jul 07 15:57	17° $\text{♊}$ 39'51	0.62868 AU
	10546 Aug 02 20:29	30° $\text{♊}$		morning rise	10547 Jul 11 05:16	14° $\text{♊}$ 26'52	
direct	10546 Aug 04 08:49	29° $\text{♊}$ 53'21		desc. node	10547 Jul 14 19:08	12° $\text{♊}$ 28'49	
	10546 Aug 05 21:43	0° $\text{♊}$		direct	10547 Jul 17 22:29	11° $\text{♊}$ 56'37	
morning max el	10546 Aug 18 15:45	7° $\text{♊}$ 50'22	27°52'42	morning max el	10547 Jul 31 23:06	19° $\text{♊}$ 58'58	27°52'13
	10546 Sep 04 12:57	0° $\text{♊}$			10547 Aug 09 12:41	0° $\text{♊}$	
morning set	10546 Sep 20 09:18	29° $\text{♊}$ 05'31			10547 Aug 28 13:03	0° $\text{♊}$	
asc. node	10546 Sep 20 01:16	28° $\text{♊}$ 23'54		morning set	10547 Sep 04 07:12	13° $\text{♊}$ 01'16	
	10546 Sep 20 19:45	0° $\text{♊}$		asc. node	10547 Sep 06 22:03	18° $\text{♊}$ 24'03	
max. Earth dist.	10546 Sep 26 08:40	11° $\text{♊}$ 55'46	1.31592 AU	max. Earth dist.	10547 Sep 09 12:45	23° $\text{♊}$ 55'41	1.32227 AU
superior conj	10546 Sep 27 15:11	14° $\text{♊}$ 44'18	1°09'10	superior conj	10547 Sep 11 23:33	29° $\text{♊}$ 13'31	0°48'28
minimum elong	10546 Sep 27 12:57	14° $\text{♊}$ 31'53	1°08'55	minimum elong	10547 Sep 11 21:33	29° $\text{♊}$ 02'41	0°48'03
evening rise	10546 Oct 04 08:33	29° $\text{♊}$ 31'39			10547 Sep 12 08:04	0° $\text{♊}$	
	10546 Oct 04 13:50	0° $\text{♊}$		evening rise	10547 Sep 18 19:57	14° $\text{♊}$ 09'44	
	10546 Oct 20 22:16	0° $\text{♊}$			10547 Sep 26 16:21	0° $\text{♊}$	
desc. node	10546 Oct 23 19:38	4° $\text{♊}$ 04'17		desc. node	10547 Oct 10 16:53	20° $\text{♊}$ 52'14	
evening max el	10546 Oct 31 09:00	12° $\text{♊}$ 45'52	25°24'18	evening max el	10547 Oct 12 20:28	23° $\text{♊}$ 05'07	23°48'35
retrograde	10546 Nov 14 06:08	19° $\text{♊}$ 45'00		retrograde	10547 Oct 26 10:07	29° $\text{♊}$ 51'47	
evening set	10546 Nov 20 04:26	18° $\text{♊}$ 24'35		evening set	10547 Oct 31 02:04	29° $\text{♊}$ 04'20	
min. Earth dist.	10546 Nov 24 21:13	15° $\text{♊}$ 45'42	0.57398 AU	min. Earth dist.	10547 Nov 06 06:49	26° $\text{♊}$ 04'20	0.55749 AU
inferior conj	10546 Nov 27 18:52	13° $\text{♊}$ 47'31	-5°12'57	inferior conj	10547 Nov 08 08:01	24° $\text{♊}$ 50'38	-5°44'57
minimum elong	10546 Nov 28 01:53	13° $\text{♊}$ 35'34	5°11'11	minimum elong	10547 Nov 08 09:23	24° $\text{♊}$ 48'36	5°44'30
				morning rise	10547 Nov 16 18:36	20° $\text{♊}$ 55'23	



direct	10547 Nov 19 12:47	20° $\mathbb{M}$ 36'16		morning rise	10548 Oct 26 14:40	1° $\mathbb{M}$ 24'24	
morning max el	10547 Nov 29 22:21	25° $\mathbb{M}$ 31'49	20°06'50	direct	10548 Oct 30 00:41	0° $\mathbb{M}$ 58'30	
asc. node	10547 Dec 03 22:26	0° $\mathbb{X}$ 01'42		morning max el	10548 Nov 10 23:34	6° $\mathbb{M}$ 37'21	21°35'56
	10547 Dec 03 21:54	0° $\mathbb{X}$		asc. node	10548 Nov 19 19:22	17° $\mathbb{M}$ 42'16	
morning set	10547 Dec 18 02:37	24° $\mathbb{X}$ 51'00			10548 Nov 26 18:30	0° $\mathbb{X}$	
	10547 Dec 20 14:56	0° $\mathbb{Z}$		morning set	10548 Dec 01 12:08	9° $\mathbb{X}$ 36'24	
superior conj	10547 Dec 25 18:43	10° $\mathbb{Z}$ 30'25	1°22'21	superior conj	10548 Dec 08 16:55	24° $\mathbb{X}$ 47'31	1°34'27
minimum elong	10547 Dec 25 21:19	10° $\mathbb{Z}$ 43'27	1°22'36	minimum elong	10548 Dec 08 18:28	24° $\mathbb{X}$ 55'35	1°34'52
max. Earth dist.	10547 Dec 31 11:59	21° $\mathbb{Z}$ 40'09	1.36834 AU		10548 Dec 11 05:24	0° $\mathbb{Z}$	
evening rise	10548 Jan 04 06:31	28° $\mathbb{Z}$ 39'01		max. Earth dist.	10548 Dec 12 23:32	3° $\mathbb{Z}$ 33'11	1.34894 AU
	10548 Jan 05 00:31	0° $\approx$		evening rise	10548 Dec 17 04:22	11° $\mathbb{Z}$ 45'52	
desc. node	10548 Jan 06 15:29	2° $\approx$ 52'55		desc. node	10548 Dec 23 12:26	23° $\mathbb{Z}$ 18'46	
	10548 Jan 23 18:03	0° $\mathbb{H}$			10548 Dec 27 11:03	0° $\approx$	
evening max el	10548 Feb 08 20:16	19° $\mathbb{H}$ 47'41	25°43'41		10549 Jan 17 23:56	0° $\mathbb{H}$	
retrograde	10548 Feb 21 06:12	26° $\mathbb{H}$ 55'02		evening max el	10549 Jan 21 09:37	3° $\mathbb{H}$ 31'24	26°42'44
evening set	10548 Feb 27 06:10	24° $\mathbb{H}$ 27'17		retrograde	10549 Feb 03 12:09	10° $\mathbb{H}$ 51'53	
asc. node	10548 Feb 29 21:02	21° $\mathbb{H}$ 50'17		evening set	10549 Feb 09 23:15	8° $\mathbb{H}$ 18'21	
min. Earth dist.	10548 Mar 02 13:25	19° $\mathbb{H}$ 48'39	0.67362 AU	min. Earth dist.	10549 Feb 14 00:33	4° $\mathbb{H}$ 14'00	0.66148 AU
inferior conj	10548 Mar 03 23:58	17° $\mathbb{H}$ 59'07	0°59'43	inferior conj	10549 Feb 15 22:59	1° $\mathbb{H}$ 57'05	0°03'53
minimum elong	10548 Mar 03 22:33	18° $\mathbb{H}$ 03'34	0°59'21	minimum elong	10549 Feb 15 22:52	1° $\mathbb{H}$ 57'26	0°04'08
morning rise	10548 Mar 09 15:28	12° $\mathbb{H}$ 08'40		transit middle	10549 Feb 15 22:52	1° $\mathbb{H}$ 57'26	0°04'08
direct	10548 Mar 12 23:39	11° $\mathbb{H}$ 04'45		transit begin	10549 Feb 15 20:02	2° $\mathbb{H}$ 05'49	
morning max el	10548 Mar 19 19:17	14° $\mathbb{H}$ 47'27	18°58'27	transit end	10549 Feb 16 01:42	1° $\mathbb{H}$ 49'04	
	10548 Mar 31 08:33	0° $\mathbb{Y}$		asc. node	10549 Feb 15 18:16	2° $\mathbb{H}$ 11'04	
greatest brilliancy	10548 Apr 02 10:32	3° $\mathbb{Y}$ 08'27	-0.8m		10549 Feb 17 15:39	30° $\mathbb{R}$ $\approx$	
desc. node	10548 Apr 03 16:10	5° $\mathbb{Y}$ 01'24		morning rise	10549 Feb 21 23:35	26° $\approx$ 17'39	
morning set	10548 Apr 11 14:25	17° $\mathbb{Y}$ 15'44		direct	10549 Feb 24 21:25	25° $\approx$ 30'45	
	10548 Apr 19 18:59	0° $\mathbb{B}$		morning max el	10549 Mar 03 08:24	28° $\approx$ 56'52	18°17'33
max. Earth dist.	10548 Apr 25 20:42	9° $\mathbb{B}$ 29'28	1.45366 AU		10549 Mar 04 08:50	0° $\mathbb{H}$	
superior conj	10548 Apr 28 02:00	12° $\mathbb{B}$ 58'55	-2°08'39	desc. node	10549 Mar 21 12:54	25° $\mathbb{H}$ 16'45	
minimum elong	10548 Apr 27 21:01	12° $\mathbb{B}$ 39'19	2°08'47	morning set	10549 Mar 22 20:20	27° $\mathbb{H}$ 22'37	
	10548 May 08 18:22	0° $\mathbb{I}$			10549 Mar 24 11:40	0° $\mathbb{Y}$	
evening rise	10548 May 13 00:41	6° $\mathbb{I}$ 54'25		superior conj	10549 Apr 07 08:03	21° $\mathbb{Y}$ 54'06	-1°45'15
asc. node	10548 May 27 19:06	0° $\mathbb{E}$ 14'21		minimum elong	10549 Apr 06 22:36	21° $\mathbb{Y}$ 17'06	1°44'33
	10548 May 27 15:03	0° $\mathbb{E}$		max. Earth dist.	10549 Apr 08 15:59	23° $\mathbb{Y}$ 59'00	1.45652 AU
evening max el	10548 Jun 02 01:55	6° $\mathbb{E}$ 45'09	18°28'39		10549 Apr 12 12:26	0° $\mathbb{B}$	
retrograde	10548 Jun 08 12:52	10° $\mathbb{E}$ 14'28		evening rise	10549 Apr 23 08:02	16° $\mathbb{B}$ 53'52	
evening set	10548 Jun 11 16:03	9° $\mathbb{E}$ 19'31			10549 May 01 17:31	0° $\mathbb{I}$	
inferior conj	10548 Jun 17 10:03	3° $\mathbb{E}$ 47'32	3°03'39	greatest brilliancy	10549 May 04 04:42	3° $\mathbb{I}$ 47'43	-0.8m
minimum elong	10548 Jun 17 11:45	3° $\mathbb{E}$ 42'29	3°02'53	asc. node	10549 May 14 16:14	18° $\mathbb{I}$ 26'36	
min. Earth dist.	10548 Jun 19 14:04	1° $\mathbb{E}$ 12'59	0.64857 AU	evening max el	10549 May 16 11:29	20° $\mathbb{I}$ 24'00	19°06'48
	10548 Jun 20 15:58	30° $\mathbb{R}$ $\mathbb{I}$		retrograde	10549 May 23 08:55	24° $\mathbb{I}$ 15'00	
morning rise	10548 Jun 23 06:27	27° $\mathbb{I}$ 28'38		evening set	10549 May 26 20:16	23° $\mathbb{I}$ 04'50	
direct	10548 Jun 29 20:25	24° $\mathbb{I}$ 46'31		inferior conj	10549 Jun 01 07:38	17° $\mathbb{I}$ 17'37	3°16'45
desc. node	10548 Jun 30 16:14	24° $\mathbb{I}$ 48'50		minimum elong	10549 Jun 01 08:09	17° $\mathbb{I}$ 15'58	3°16'14
	10548 Jul 10 12:00	0° $\mathbb{E}$		min. Earth dist.	10549 Jun 02 20:38	15° $\mathbb{I}$ 18'49	0.66474 AU
morning max el	10548 Jul 13 09:31	2° $\mathbb{E}$ 43'45	27°16'43	morning rise	10549 Jun 06 19:29	10° $\mathbb{I}$ 56'34	
	10548 Aug 02 20:00	0° $\mathbb{Q}$		direct	10549 Jun 13 01:29	8° $\mathbb{I}$ 13'22	
morning set	10548 Aug 17 20:04	26° $\mathbb{Q}$ 29'04		desc. node	10549 Jun 17 13:16	9° $\mathbb{I}$ 22'39	
	10548 Aug 19 14:56	0° $\mathbb{P}$		morning max el	10549 Jun 25 20:17	15° $\mathbb{I}$ 51'24	26°13'35
max. Earth dist.	10548 Aug 22 08:45	5° $\mathbb{P}$ 32'44	1.33367 AU		10549 Jul 07 12:03	0° $\mathbb{E}$	
asc. node	10548 Aug 23 18:52	8° $\mathbb{P}$ 29'08			10549 Jul 26 16:31	0° $\mathbb{Q}$	
superior conj	10548 Aug 26 03:11	13° $\mathbb{P}$ 25'14	0°23'01	morning set	10549 Jul 31 20:26	9° $\mathbb{Q}$ 19'35	
minimum elong	10548 Aug 26 02:04	13° $\mathbb{P}$ 19'15	0°22'35	max. Earth dist.	10549 Aug 04 18:06	16° $\mathbb{Q}$ 45'20	1.34993 AU
evening rise	10548 Sep 02 06:58	28° $\mathbb{P}$ 43'47		superior conj	10549 Aug 09 23:38	27° $\mathbb{Q}$ 12'29	-0°06'34
	10548 Sep 02 21:24	0° $\mathbb{A}$		minimum elong	10549 Aug 10 00:02	27° $\mathbb{Q}$ 14'31	0°06'49
	10548 Sep 20 09:37	0° $\mathbb{M}$		behind sun begin	10549 Aug 09 18:35	26° $\mathbb{Q}$ 46'37	
evening max el	10548 Sep 23 08:36	3° $\mathbb{M}$ 12'34	22°08'24	behind sun end	10549 Aug 10 05:29	27° $\mathbb{Q}$ 42'27	
desc. node	10548 Sep 26 14:08	5° $\mathbb{M}$ 59'52		asc. node	10549 Aug 10 15:41	28° $\mathbb{Q}$ 34'48	
retrograde	10548 Oct 06 02:42	9° $\mathbb{M}$ 33'33			10549 Aug 11 08:14	0° $\mathbb{P}$	
evening set	10548 Oct 09 07:12	9° $\mathbb{M}$ 10'57		evening rise	10549 Aug 17 15:32	13° $\mathbb{P}$ 07'40	
min. Earth dist.	10548 Oct 17 13:56	5° $\mathbb{M}$ 32'27	0.54771 AU		10549 Aug 26 08:11	0° $\mathbb{A}$	
inferior conj	10548 Oct 18 04:55	5° $\mathbb{M}$ 11'25	-5°26'00	evening max el	10549 Sep 05 06:41	13° $\mathbb{A}$ 45'15	20°39'19
minimum elong	10548 Oct 17 22:10	5° $\mathbb{M}$ 20'54	5°24'47	desc. node	10549 Sep 13 11:24	18° $\mathbb{A}$ 57'12	

retrograde	10549 Sep 16 14:31	19° $\Omega$ 22'25		evening set	10550 Aug 30 05:41	29° $\Pi$ 39'50	
evening set	10549 Sep 18 18:01	19° $\Omega$ 11'10		desc. node	10550 Aug 31 08:42	29° $\Pi$ 24'46	
inferior conj	10549 Sep 27 21:11	15° $\Omega$ 15'08	-4°10'52	inferior conj	10550 Sep 07 23:17	25° $\Pi$ 34'12	-2°21'14
minimum elong	10549 Sep 27 11:20	15° $\Omega$ 29'18	4°07'53	minimum elong	10550 Sep 07 16:59	25° $\Pi$ 44'18	2°18'55
min. Earth dist.	10549 Sep 28 22:17	14° $\Omega$ 39'01	0.54692 AU	min. Earth dist.	10550 Sep 10 09:38	24° $\Pi$ 01'01	0.55561 AU
morning rise	10549 Oct 06 04:24	11° $\Omega$ 15'58		morning rise	10550 Sep 16 01:54	21° $\Pi$ 04'55	
direct	10549 Oct 10 08:49	10° $\Omega$ 38'22		direct	10550 Sep 21 02:08	20° $\Pi$ 08'29	
morning max el	10549 Oct 23 14:17	17° $\Omega$ 01'40	23°20'20	morning max el	10550 Oct 05 01:32	27° $\Pi$ 09'21	25°06'14
	10549 Nov 02 23:06	0° $\Pi$			10550 Oct 07 20:07	0° $\Omega$	
asc. node	10549 Nov 06 16:15	6° $\Pi$ 08'34		asc. node	10550 Oct 24 13:06	25° $\Omega$ 09'04	
morning set	10549 Nov 15 23:37	24° $\Pi$ 24'49			10550 Oct 27 00:59	0° $\Pi$	
	10549 Nov 18 14:03	0° $\Sigma$		morning set	10550 Oct 31 11:18	9° $\Pi$ 10'38	
superior conj	10549 Nov 22 21:55	9° $\Sigma$ 22'32	1°39'35	superior conj	10550 Nov 07 07:09	24° $\Pi$ 07'04	1°38'23
minimum elong	10549 Nov 22 22:16	9° $\Sigma$ 24'21	1°40'03	minimum elong	10550 Nov 07 06:22	24° $\Pi$ 02'47	1°38'46
max. Earth dist.	10549 Nov 25 18:44	15° $\Sigma$ 29'29	1.33333 AU	max. Earth dist.	10550 Nov 08 21:37	27° $\Pi$ 37'59	1.32232 AU
evening rise	10549 Nov 30 15:16	25° $\Sigma$ 26'48			10550 Nov 09 23:44	0° $\Sigma$	
	10549 Dec 02 23:10	0° $\Sigma$		evening rise	10550 Nov 14 11:55	9° $\Sigma$ 32'22	
desc. node	10549 Dec 10 09:27	13° $\Sigma$ 29'52			10550 Nov 25 07:28	0° $\Sigma$	
	10549 Dec 20 21:38	0° $\approx$		desc. node	10550 Nov 27 06:32	3° $\Sigma$ 18'48	
evening max el	10550 Jan 03 22:35	17° $\approx$ 00'33	27°20'35		10550 Dec 17 08:33	0° $\approx$	
retrograde	10550 Jan 17 12:05	24° $\approx$ 23'59		evening max el	10550 Dec 17 09:29	0° $\approx$ 02'14	27°30'32
evening set	10550 Jan 24 07:50	21° $\approx$ 51'07		retrograde	10550 Dec 31 04:52	7° $\approx$ 21'02	
min. Earth dist.	10550 Jan 28 04:15	18° $\approx$ 19'14	0.64579 AU	evening set	10551 Jan 07 05:07	4° $\approx$ 56'52	
inferior conj	10550 Jan 30 14:15	15° $\approx$ 43'13	-1°00'40	min. Earth dist.	10551 Jan 10 22:36	1° $\approx$ 53'29	0.62713 AU
minimum elong	10550 Jan 30 16:06	15° $\approx$ 38'13	0°59'29		10551 Jan 12 21:57	30° $\Sigma$	
asc. node	10550 Feb 02 15:27	12° $\approx$ 38'26		inferior conj	10551 Jan 13 18:50	29° $\Sigma$ 09'17	-2°12'33
morning rise	10550 Feb 06 02:08	10° $\approx$ 17'10		minimum elong	10551 Jan 13 23:13	28° $\Sigma$ 58'42	2°10'20
direct	10550 Feb 08 15:21	9° $\approx$ 43'34		morning rise	10551 Jan 20 19:38	23° $\Sigma$ 59'31	
morning max el	10550 Feb 15 01:15	13° $\approx$ 04'13	17°53'35	asc. node	10551 Jan 20 12:36	24° $\Sigma$ 06'00	
	10550 Feb 26 22:51	0° $\Sigma$		direct	10551 Jan 23 02:29	23° $\Sigma$ 35'21	
morning set	10550 Mar 04 07:27	8° $\Sigma$ 55'59		morning max el	10551 Jan 29 18:43	27° $\Sigma$ 00'17	17°47'08
desc. node	10550 Mar 08 09:39	15° $\Sigma$ 45'11			10551 Feb 01 10:07	0° $\approx$	
	10550 Mar 17 03:08	0° $\Upsilon$		morning set	10551 Feb 14 18:54	21° $\approx$ 39'08	
superior conj	10550 Mar 17 23:38	1° $\Upsilon$ 22'11	-1°07'18		10551 Feb 19 13:31	0° $\Sigma$	
minimum elong	10550 Mar 17 16:18	0° $\Upsilon$ 52'49	1°06'19	desc. node	10551 Feb 23 06:24	6° $\Sigma$ 21'46	
max. Earth dist.	10550 Mar 22 11:18	8° $\Upsilon$ 29'30	1.45201 AU	superior conj	10551 Feb 26 13:25	11° $\Sigma$ 54'37	-0°24'37
evening rise	10550 Apr 02 22:44	26° $\Upsilon$ 18'55		minimum elong	10551 Feb 26 10:57	11° $\Sigma$ 44'18	0°24'02
	10550 Apr 05 08:29	0° $\Sigma$		max. Earth dist.	10551 Mar 05 04:40	22° $\Sigma$ 46'14	1.44062 AU
greatest brilliancy	10550 Apr 17 20:28	18° $\Sigma$ 46'06	-0.6m		10551 Mar 09 17:56	0° $\Upsilon$	
	10550 Apr 26 01:16	0° $\Pi$		evening rise	10551 Mar 13 11:06	5° $\Upsilon$ 46'59	
evening max el	10550 Apr 29 16:04	4° $\Pi$ 06'10	20°00'50		10551 Mar 29 16:57	0° $\Sigma$	
asc. node	10550 May 01 13:24	5° $\Pi$ 51'19		evening max el	10551 Apr 12 15:06	17° $\Sigma$ 49'43	21°08'10
retrograde	10550 May 07 07:16	8° $\Pi$ 29'23		asc. node	10551 Apr 18 10:36	22° $\Sigma$ 14'18	
evening set	10550 May 11 03:36	7° $\Pi$ 03'31		retrograde	10551 Apr 21 05:48	22° $\Sigma$ 52'37	
inferior conj	10550 May 16 11:22	1° $\Pi$ 02'43	3°16'02	evening set	10551 Apr 25 12:05	21° $\Sigma$ 11'00	
minimum elong	10550 May 16 10:46	1° $\Pi$ 04'44	3°15'33	inferior conj	10551 Apr 30 18:48	14° $\Sigma$ 58'20	3°03'43
	10550 May 17 05:54	30° $\Sigma$		minimum elong	10551 Apr 30 17:19	15° $\Sigma$ 03'28	3°03'09
min. Earth dist.	10550 May 17 09:54	29° $\Sigma$ 46'34	0.67659 AU	min. Earth dist.	10551 May 01 03:43	14° $\Sigma$ 27'21	0.68384 AU
morning rise	10550 May 21 17:37	24° $\Sigma$ 43'17		morning rise	10551 May 05 22:19	8° $\Sigma$ 42'54	
direct	10550 May 27 12:28	22° $\Sigma$ 08'50		direct	10551 May 11 04:16	6° $\Sigma$ 24'32	
desc. node	10550 Jun 04 10:16	25° $\Sigma$ 41'42		morning max el	10551 May 21 15:41	12° $\Sigma$ 38'44	23°22'56
morning max el	10550 Jun 08 06:01	29° $\Sigma$ 11'19	24°52'16	desc. node	10551 May 22 07:12	13° $\Sigma$ 18'32	
	10550 Jun 09 00:53	0° $\Pi$			10551 Jun 04 14:03	0° $\Pi$	
	10550 Jul 01 07:16	0° $\Theta$			10551 Jun 24 03:39	0° $\Theta$	
morning set	10550 Jul 14 03:56	21° $\Theta$ 21'18		morning set	10551 Jun 25 13:25	2° $\Theta$ 21'04	
max. Earth dist.	10550 Jul 17 18:03	27° $\Theta$ 49'38	1.37033 AU	max. Earth dist.	10551 Jun 29 14:48	9° $\Theta$ 17'34	1.39307 AU
	10550 Jul 18 22:17	0° $\Omega$		superior conj	10551 Jul 07 06:05	23° $\Theta$ 02'09	-1°12'17
superior conj	10550 Jul 24 09:52	10° $\Omega$ 27'51	-0°39'02	minimum elong	10551 Jul 07 10:57	23° $\Theta$ 24'45	1°12'01
minimum elong	10550 Jul 24 12:23	10° $\Omega$ 40'09	0°38'59		10551 Jul 10 22:50	0° $\Omega$	
asc. node	10550 Jul 28 12:33	18° $\Omega$ 37'26		asc. node	10551 Jul 15 09:28	8° $\Omega$ 33'12	
evening rise	10550 Aug 01 19:22	27° $\Omega$ 15'08		evening rise	10551 Jul 16 15:35	10° $\Omega$ 58'50	
	10550 Aug 03 04:19	0° $\Pi$			10551 Jul 27 05:21	0° $\Pi$	
evening max el	10550 Aug 18 18:38	25° $\Pi$ 03'05	19°29'27	evening max el	10551 Aug 01 18:45	7° $\Pi$ 06'15	18°40'48
retrograde	10550 Aug 28 09:29	29° $\Pi$ 49'34		retrograde	10551 Aug 09 21:50	11° $\Pi$ 10'01	

evening set	10551 Aug 11 21:32	10° $\mathbb{M}$ 56'17		retrograde	10552 Jul 22 05:15	23° $\Omega$ 20'49	
desc. node	10551 Aug 18 05:59	7° $\mathbb{M}$ 43'13		evening set	10552 Jul 24 12:04	22° $\Omega$ 59'06	
inferior conj	10551 Aug 19 20:59	6° $\mathbb{M}$ 31'55	-0°30'09	inferior conj	10552 Jul 31 16:20	18° $\Omega$ 14'00	1°01'10
minimum elong	10551 Aug 19 19:45	6° $\mathbb{M}$ 34'12	0°29'56	minimum elong	10552 Jul 31 18:14	18° $\Omega$ 09'50	1°00'06
min. Earth dist.	10551 Aug 23 01:40	4° $\mathbb{M}$ 09'44	0.57204 AU	min. Earth dist.	10552 Aug 04 00:35	15° $\Omega$ 19'59	0.59323 AU
morning rise	10551 Aug 27 14:34	1° $\mathbb{M}$ 25'20		desc. node	10552 Aug 04 03:14	15° $\Omega$ 14'31	
direct	10551 Sep 02 09:15	0° $\mathbb{M}$ 03'05		morning rise	10552 Aug 07 21:11	12° $\Omega$ 34'11	
morning max el	10551 Sep 16 16:30	7° $\mathbb{M}$ 32'01	26°36'15	direct	10552 Aug 14 05:47	10° $\Omega$ 42'26	
	10551 Oct 03 11:11	0° $\underline{\Omega}$		morning max el	10552 Aug 28 14:32	18° $\Omega$ 31'40	27°35'43
asc. node	10551 Oct 11 09:57	14° $\underline{\Omega}$ 34'57			10552 Sep 07 06:12	0° $\mathbb{M}$	
morning set	10551 Oct 15 21:33	23° $\underline{\Omega}$ 49'39			10552 Sep 25 03:26	0° $\underline{\Omega}$	
	10551 Oct 18 17:58	0° $\mathbb{M}$		asc. node	10552 Sep 27 06:47	4° $\underline{\Omega}$ 18'20	
				morning set	10552 Sep 29 04:36	8° $\underline{\Omega}$ 16'03	
superior conj	10551 Oct 22 18:33	8° $\mathbb{M}$ 55'03	1°31'21	max. Earth dist.	10552 Oct 05 15:13	22° $\underline{\Omega}$ 16'26	1.31457 AU
minimum elong	10551 Oct 22 16:55	8° $\mathbb{M}$ 45'54	1°31'30				
max. Earth dist.	10551 Oct 23 05:41	9° $\mathbb{M}$ 56'55	1.31608 AU	superior conj	10552 Oct 06 06:13	23° $\underline{\Omega}$ 39'50	1°18'48
evening rise	10551 Oct 29 15:33	23° $\mathbb{M}$ 55'27		minimum elong	10552 Oct 06 04:04	23° $\underline{\Omega}$ 27'52	1°18'41
	10551 Nov 01 14:05	0° $\mathbb{M}$			10552 Oct 09 02:37	0° $\mathbb{M}$	
desc. node	10551 Nov 14 03:42	22° $\mathbb{M}$ 36'41		evening rise	10552 Oct 12 23:44	8° $\mathbb{M}$ 28'25	
	10551 Nov 19 03:19	0° $\mathbb{Z}$			10552 Oct 24 00:15	0° $\mathbb{M}$	
evening max el	10551 Nov 29 15:39	12° $\mathbb{Z}$ 23'13	27°07'25	desc. node	10552 Oct 31 00:54	11° $\mathbb{M}$ 10'39	
retrograde	10551 Dec 13 13:14	19° $\mathbb{Z}$ 34'18		evening max el	10552 Nov 10 14:16	23° $\mathbb{M}$ 53'06	26°10'23
evening set	10551 Dec 20 11:35	17° $\mathbb{Z}$ 27'55			10552 Nov 19 14:29	0° $\mathbb{Z}$	
min. Earth dist.	10551 Dec 24 06:12	14° $\mathbb{Z}$ 45'23	0.60650 AU	retrograde	10552 Nov 24 12:12	0° $\mathbb{Z}$ 57'05	
inferior conj	10551 Dec 27 09:23	12° $\mathbb{Z}$ 06'25	-3°28'05		10552 Nov 29 08:41	30° $\mathbb{M}$	
minimum elong	10551 Dec 27 16:17	11° $\mathbb{Z}$ 51'46	3°25'11	evening set	10552 Nov 30 22:54	29° $\mathbb{M}$ 17'32	
morning rise	10552 Jan 03 23:36	7° $\mathbb{Z}$ 16'22		min. Earth dist.	10552 Dec 05 03:13	26° $\mathbb{M}$ 42'39	0.58539 AU
direct	10552 Jan 06 03:05	6° $\mathbb{Z}$ 58'01		inferior conj	10552 Dec 08 06:21	24° $\mathbb{M}$ 24'40	-4°39'19
asc. node	10552 Jan 07 09:43	7° $\mathbb{Z}$ 04'45		minimum elong	10552 Dec 08 14:20	24° $\mathbb{M}$ 09'57	4°36'47
morning max el	10552 Jan 13 09:30	10° $\mathbb{Z}$ 36'11	17°59'13	morning rise	10552 Dec 16 08:20	19° $\mathbb{M}$ 57'06	
	10552 Jan 26 04:09	0° $\approx$		direct	10552 Dec 18 12:37	19° $\mathbb{M}$ 41'16	
morning set	10552 Jan 29 00:10	5° $\approx$ 11'58		asc. node	10552 Dec 24 06:48	21° $\mathbb{M}$ 39'17	
				morning max el	10552 Dec 26 17:58	23° $\mathbb{M}$ 42'10	18°31'25
superior conj	10552 Feb 08 04:08	23° $\approx$ 37'30	0°14'59		10552 Dec 31 20:24	0° $\mathbb{Z}$	
minimum elong	10552 Feb 08 05:23	23° $\approx$ 43'00	0°15'08	morning set	10553 Jan 11 17:52	19° $\mathbb{Z}$ 18'26	
behind sun begin	10552 Feb 08 02:48	23° $\approx$ 31'41			10553 Jan 17 07:19	0° $\approx$	
behind sun end	10552 Feb 08 07:57	23° $\approx$ 54'19					
desc. node	10552 Feb 10 03:12	27° $\approx$ 02'50		superior conj	10553 Jan 20 16:22	6° $\approx$ 21'00	0°47'33
	10552 Feb 11 20:25	0° $\mathbb{H}$		minimum elong	10553 Jan 20 19:17	6° $\approx$ 34'29	0°47'34
max. Earth dist.	10552 Feb 15 18:04	6° $\mathbb{H}$ 34'00	1.42354 AU	desc. node	10553 Jan 27 00:03	17° $\approx$ 44'53	
evening rise	10552 Feb 21 11:33	15° $\mathbb{H}$ 52'02		max. Earth dist.	10553 Jan 28 02:38	19° $\approx$ 40'37	1.40268 AU
	10552 Mar 01 15:21	0° $\mathbb{Y}$		evening rise	10553 Feb 01 08:06	26° $\approx$ 51'17	
	10552 Mar 23 20:56	0° $\mathbb{B}$			10553 Feb 03 05:51	0° $\mathbb{H}$	
evening max el	10552 Mar 25 09:07	1° $\mathbb{B}$ 34'36	22°24'42		10553 Feb 23 06:40	0° $\mathbb{Y}$	
retrograde	10552 Apr 04 02:51	7° $\mathbb{B}$ 20'07		evening max el	10553 Mar 07 23:48	15° $\mathbb{Y}$ 21'57	23°45'08
asc. node	10552 Apr 04 07:50	7° $\mathbb{B}$ 19'55		retrograde	10553 Mar 18 21:07	21° $\mathbb{Y}$ 47'06	
evening set	10552 Apr 08 20:04	5° $\mathbb{B}$ 23'15		asc. node	10553 Mar 22 05:04	20° $\mathbb{Y}$ 54'38	
	10552 Apr 13 10:53	30° $\mathbb{R}$ $\mathbb{Y}$		evening set	10553 Mar 24 02:01	19° $\mathbb{Y}$ 36'16	
inferior conj	10552 Apr 14 03:49	29° $\mathbb{Y}$ 01'10	2°41'09	min. Earth dist.	10553 Mar 28 20:36	14° $\mathbb{Y}$ 02'34	0.68474 AU
minimum elong	10552 Apr 14 01:47	29° $\mathbb{Y}$ 08'15	2°40'28	inferior conj	10553 Mar 29 12:33	13° $\mathbb{Y}$ 08'06	2°09'04
min. Earth dist.	10552 Apr 14 00:00	29° $\mathbb{Y}$ 14'28	0.68652 AU	minimum elong	10553 Mar 29 10:22	13° $\mathbb{Y}$ 15'34	2°08'21
morning rise	10552 Apr 19 07:22	22° $\mathbb{Y}$ 51'01		morning rise	10553 Apr 03 18:44	7° $\mathbb{Y}$ 04'23	
direct	10552 Apr 23 23:42	20° $\mathbb{Y}$ 53'09		direct	10553 Apr 07 21:47	5° $\mathbb{Y}$ 28'24	
morning max el	10552 May 03 04:17	26° $\mathbb{Y}$ 15'01	21°54'53	morning max el	10553 Apr 15 23:04	10° $\mathbb{Y}$ 03'14	20°35'30
	10552 May 06 14:44	0° $\mathbb{B}$		desc. node	10553 Apr 25 00:54	21° $\mathbb{Y}$ 06'37	
desc. node	10552 May 08 04:05	1° $\mathbb{B}$ 51'58			10553 May 01 07:20	0° $\mathbb{B}$	
	10552 May 28 02:22	0° $\mathbb{H}$		morning set	10553 May 15 04:13	20° $\mathbb{B}$ 55'11	
morning set	10552 Jun 04 20:43	12° $\mathbb{H}$ 09'01			10553 May 20 23:02	0° $\mathbb{H}$	
max. Earth dist.	10552 Jun 10 15:08	21° $\mathbb{H}$ 34'14	1.41548 AU	max. Earth dist.	10553 May 23 22:01	4° $\mathbb{H}$ 44'05	1.43474 AU
	10552 Jun 15 14:29	0° $\underline{\Omega}$					
superior conj	10552 Jun 18 07:45	4° $\underline{\Omega}$ 44'19	-1°42'46	superior conj	10553 May 30 10:42	15° $\mathbb{H}$ 26'14	-2°05'12
minimum elong	10552 Jun 18 14:09	5° $\underline{\Omega}$ 12'28	1°42'36	minimum elong	10553 May 30 15:49	15° $\mathbb{H}$ 47'37	2°05'26
evening rise	10552 Jun 29 00:31	24° $\underline{\Omega}$ 08'51			10553 Jun 07 23:31	0° $\underline{\Omega}$	
asc. node	10552 Jul 01 06:26	28° $\underline{\Omega}$ 17'17		evening rise	10553 Jun 11 17:44	6° $\underline{\Omega}$ 34'59	
	10552 Jul 02 04:53	0° $\Omega$		asc. node	10553 Jun 18 03:27	17° $\underline{\Omega}$ 45'10	
evening max el	10552 Jul 15 03:06	19° $\Omega$ 45'31	18°12'44		10553 Jun 26 03:01	0° $\Omega$	
				evening max el	10553 Jun 28 15:53	2° $\Omega$ 52'20	18°04'16

retrograde	10553 Jul 05 04:18	6°♎14'07		asc. node	10554 Jun 05 00:30	6°♏50'10	
evening set	10553 Jul 07 18:58	5°♎41'12		evening max el	10554 Jun 12 05:38	16°♏17'32	18°14'37
inferior conj	10553 Jul 14 06:53	0°♎36'43	2°06'40	retrograde	10554 Jun 18 14:28	19°♏40'04	
minimum elong	10553 Jul 14 09:40	0°♎29'42	2°05'25	evening set	10554 Jun 21 13:03	18°♏53'39	
	10553 Jul 14 21:26	30°♎		inferior conj	10554 Jun 27 12:30	13°♏31'28	2°48'34
min. Earth dist.	10553 Jul 17 08:13	27°♏33'39	0.61600 AU	minimum elong	10554 Jun 27 14:48	13°♏25'01	2°47'36
morning rise	10553 Jul 20 21:59	24°♏34'01		min. Earth dist.	10554 Jun 30 01:07	10°♏41'20	0.63755 AU
desc. node	10553 Jul 22 00:25	23°♏51'58		morning rise	10554 Jul 03 15:05	7°♏16'18	
direct	10553 Jul 27 14:02	22°♏15'20		desc. node	10554 Jul 08 21:32	4°♏46'04	
	10553 Aug 10 12:34	0°♎		direct	10554 Jul 10 07:43	4°♏39'17	
morning max el	10553 Aug 10 19:16	0°♎16'34	27°57'08	morning max el	10554 Jul 24 04:11	12°♏41'41	27°40'55
	10553 Sep 01 08:35	0°♎			10554 Aug 07 00:09	0°♎	
morning set	10553 Sep 13 06:30	22°♎24'43			10554 Aug 24 21:04	0°♎	
asc. node	10553 Sep 14 03:36	24°♎13'46		morning set	10554 Aug 28 00:56	6°♎09'38	
	10553 Sep 16 21:09	0°♎		asc. node	10554 Sep 01 00:26	14°♎16'43	
max. Earth dist.	10553 Sep 18 22:16	4°♎25'38	1.31797 AU	max. Earth dist.	10554 Sep 01 23:02	16°♎15'13	1.32643 AU
superior conj	10553 Sep 20 16:19	8°♎16'12	1°01'00	superior conj	10554 Sep 04 22:58	22°♎38'56	0°38'14
minimum elong	10553 Sep 20 14:07	8°♎04'04	1°00'39	minimum elong	10554 Sep 04 21:16	22°♎29'46	0°37'47
evening rise	10553 Sep 27 10:29	23°♎05'50			10554 Sep 08 08:17	0°♎	
	10553 Sep 30 17:11	0°♎		evening rise	10554 Sep 11 21:57	7°♎42'46	
desc. node	10553 Oct 17 22:07	28°♎43'36			10554 Sep 23 11:31	0°♎	
	10553 Oct 18 23:11	0°♎		evening max el	10554 Oct 04 15:25	14°♎43'17	23°05'35
evening max el	10553 Oct 23 04:43	4°♎32'57	24°45'12	desc. node	10554 Oct 04 19:21	14°♎52'48	
retrograde	10553 Nov 05 24:00	11°♎28'41		retrograde	10554 Oct 17 22:59	21°♎21'16	
evening set	10553 Nov 11 10:38	10°♎22'26		evening set	10554 Oct 21 23:19	20°♎46'12	
min. Earth dist.	10553 Nov 16 16:11	7°♎36'48	0.56626 AU	min. Earth dist.	10554 Oct 29 00:41	17°♎31'33	0.55226 AU
inferior conj	10553 Nov 19 07:06	5°♎55'53	-5°31'37	inferior conj	10554 Oct 30 12:29	16°♎39'47	-5°44'06
minimum elong	10553 Nov 19 12:20	5°♎47'28	5°30'31	minimum elong	10554 Oct 30 10:17	16°♎42'58	5°43'39
morning rise	10553 Nov 27 16:17	1°♎50'20		morning rise	10554 Nov 07 23:01	12°♎49'40	
direct	10553 Nov 30 03:11	1°♎33'40		direct	10554 Nov 10 23:20	12°♎28'11	
morning max el	10553 Dec 09 16:15	6°♎07'07	19°25'30	morning max el	10554 Nov 22 01:19	17°♎42'23	20°42'17
asc. node	10553 Dec 11 03:50	7°♎38'39		asc. node	10554 Nov 28 00:48	24°♎47'05	
	10553 Dec 24 22:24	0°♎			10554 Dec 01 10:15	0°♎	
morning set	10553 Dec 26 19:57	3°♎46'30		morning set	10554 Dec 11 03:28	18°♎27'53	
					10554 Dec 16 16:42	0°♎	
superior conj	10554 Jan 03 21:11	19°♎50'32	1°11'57	superior conj	10554 Dec 18 14:08	3°♎53'35	1°28'22
minimum elong	10554 Jan 04 00:10	20°♎05'07	1°12'05	minimum elong	10554 Dec 18 16:19	4°♎04'47	1°28'42
	10554 Jan 09 05:12	0°♎		max. Earth dist.	10554 Dec 23 16:33	14°♎04'07	1.35968 AU
max. Earth dist.	10554 Jan 10 08:25	2°♎05'12	1.38057 AU	evening rise	10554 Dec 27 14:45	21°♎30'23	
desc. node	10554 Jan 13 20:54	8°♎23'59		desc. node	10554 Dec 31 17:50	28°♎56'23	
evening rise	10554 Jan 14 01:59	8°♎46'18			10555 Jan 01 08:24	0°♎	
	10554 Jan 27 01:52	0°♎			10555 Jan 20 22:44	0°♎	
evening max el	10554 Feb 18 13:07	29°♎11'20	25°02'59	evening max el	10555 Feb 01 02:37	13°♎00'14	26°10'59
	10554 Feb 19 09:17	0°♎		retrograde	10555 Feb 13 20:34	20°♎14'34	
retrograde	10554 Mar 02 11:21	6°♎07'09		evening set	10555 Feb 20 01:18	17°♎44'01	
evening set	10554 Mar 08 04:19	3°♎44'44		asc. node	10555 Feb 23 23:31	13°♎39'19	
asc. node	10554 Mar 09 02:19	2°♎54'28		min. Earth dist.	10555 Feb 24 05:59	13°♎19'47	0.66892 AU
	10554 Mar 11 16:10	30°♎		inferior conj	10555 Feb 25 21:31	11°♎17'52	0°37'11
min. Earth dist.	10554 Mar 12 15:21	28°♎45'53	0.67880 AU	minimum elong	10555 Feb 25 20:34	11°♎20'47	0°37'01
inferior conj	10554 Mar 13 19:06	27°♎14'51	1°27'43	morning rise	10555 Mar 03 16:34	5°♎31'31	
minimum elong	10554 Mar 13 17:14	27°♎20'57	1°27'09	direct	10555 Mar 06 20:10	4°♎35'12	
morning rise	10554 Mar 19 06:28	21°♎18'55		morning max el	10555 Mar 13 11:11	8°♎09'33	18°38'53
direct	10554 Mar 22 21:07	20°♎03'58			10555 Mar 29 03:51	0°♎	
morning max el	10554 Mar 30 01:30	24°♎02'23	19°29'20	desc. node	10555 Mar 29 18:24	0°♎56'41	
	10554 Apr 04 04:35	0°♎		morning set	10555 Apr 03 17:34	8°♎43'30	
desc. node	10554 Apr 11 21:39	10°♎50'44			10555 Apr 17 07:40	0°♎	
greatest brilliancy	10554 Apr 11 18:14	10°♎38'10	-0.7m	max. Earth dist.	10555 Apr 19 04:57	2°♎57'04	1.45586 AU
morning set	10554 Apr 24 03:18	29°♎24'07		superior conj	10555 Apr 19 22:41	4°♎06'29	-2°01'01
	10554 Apr 24 12:37	0°♎		minimum elong	10555 Apr 19 15:02	3°♎36'32	2°00'48
max. Earth dist.	10554 May 06 11:04	18°♎35'59	1.44867 AU	evening rise	10555 May 05 10:42	28°♎35'38	
superior conj	10554 May 10 13:28	25°♎06'51	-2°13'00		10555 May 06 07:50	0°♎	
minimum elong	10554 May 10 12:53	25°♎04'28	2°13'24	greatest brilliancy	10555 May 13 04:23	10°♎56'06	-0.9m
	10554 May 13 14:26	0°♎		asc. node	10555 May 22 21:35	25°♎24'24	
evening rise	10554 May 24 14:11	18°♎05'22		evening max el	10555 May 26 17:28	29°♎53'26	18°42'54
	10554 May 31 17:44	0°♎					

































































































































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retrograde	10555 Jun 02 07:47	3°☿30'09			10556 Apr 09 01:21	0°♊	
evening set	10555 Jun 05 14:26	2°☿28'44		evening rise	10556 Apr 14 09:41	8°♊17'09	
	10555 Jun 08 12:11	30°♊		greatest brilliancy	10556 Apr 27 05:36	27°♊55'37	-0.7m
inferior conj	10555 Jun 11 05:14	26°♊50'18	3°11'04		10556 Apr 28 15:09	0°♊	
minimum elong	10555 Jun 11 06:26	26°♊46'35	3°10'25	asc. node	10556 May 08 18:42	13°♊18'10	
min. Earth dist.	10555 Jun 13 02:54	24°♊29'45	0.65603 AU	evening max el	10556 May 09 01:08	13°♊34'33	19°27'58
morning rise	10555 Jun 16 21:40	20°♊30'09		retrograde	10556 May 16 05:06	17°♊37'44	
direct	10555 Jun 23 08:54	17°♊46'06		evening set	10556 May 19 20:17	16°♊20'43	
desc. node	10555 Jun 25 18:36	18°♊05'55		inferior conj	10556 May 25 05:46	10°♊27'25	3°17'59
morning max el	10555 Jul 06 14:43	25°♊36'31	26°52'36	minimum elong	10556 May 25 05:47	10°♊27'20	3°17'29
	10555 Jul 10 15:08	0°☿		min. Earth dist.	10556 May 26 12:25	8°♊46'32	0.67037 AU
	10555 Jul 31 12:44	0°♊		morning rise	10556 May 30 14:54	4°♊06'57	
morning set	10555 Aug 11 08:54	19°♊22'24		direct	10556 Jun 05 16:28	1°♊26'40	
max. Earth dist.	10555 Aug 15 14:28	27°♊40'19	1.34002 AU	desc. node	10556 Jun 11 15:37	3°♊28'24	
	10555 Aug 16 18:07	0°♊		morning max el	10556 Jun 18 01:08	8°♊50'38	25°40'39
asc. node	10555 Aug 18 21:14	4°♊22'27			10556 Jul 04 15:46	0°☿	
					10556 Jul 23 01:36	0°♊	
superior conj	10555 Aug 19 23:53	6°♊41'10	0°10'56	morning set	10556 Jul 24 02:41	1°♊53'39	
minimum elong	10555 Aug 19 23:19	6°♊38'13	0°10'34	max. Earth dist.	10556 Jul 27 19:47	8°♊48'17	1.35824 AU
behind sun begin	10555 Aug 19 18:58	6°♊15'33					
behind sun end	10555 Aug 20 03:39	7°♊00'55		superior conj	10556 Aug 02 16:25	20°♊16'07	-0°20'05
evening rise	10555 Aug 27 08:10	22°♊13'09		minimum elong	10556 Aug 02 17:39	20°♊22'18	0°20'12
	10555 Aug 31 02:57	0°♊		asc. node	10556 Aug 04 18:05	24°♊27'29	
evening max el	10555 Sep 16 07:02	24°♊58'03	21°28'33		10556 Aug 07 10:57	0°♊	
desc. node	10555 Sep 21 16:38	29°♊08'43		evening rise	10556 Aug 10 15:04	6°♊31'21	
	10555 Sep 23 11:03	0°♊			10556 Aug 23 15:15	0°♊	
retrograde	10555 Sep 28 11:45	1°♊01'29		evening max el	10556 Aug 28 10:52	5°♊48'30	20°06'57
evening set	10555 Oct 01 03:42	0°♊45'15		desc. node	10556 Sep 07 13:54	11°♊03'34	
	10555 Oct 03 18:57	30°♊		retrograde	10556 Sep 08 01:08	11°♊04'09	
inferior conj	10555 Oct 10 05:39	26°♊49'10	-5°00'18	evening set	10556 Sep 09 23:48	10°♊54'18	
minimum elong	10555 Oct 09 20:37	27°♊01'48	4°58'11	inferior conj	10556 Sep 19 00:26	6°♊55'15	-3°26'31
min. Earth dist.	10555 Oct 10 07:52	26°♊46'03	0.54622 AU	minimum elong	10556 Sep 18 15:31	7°♊08'32	3°23'29
morning rise	10555 Oct 18 14:25	22°♊59'43		min. Earth dist.	10556 Sep 20 16:56	5°♊54'50	0.54956 AU
direct	10555 Oct 22 08:25	22°♊29'17		morning rise	10556 Sep 27 06:11	2°♊45'20	
morning max el	10555 Nov 03 21:12	28°♊27'18	22°19'07	direct	10556 Oct 01 18:57	2°♊00'51	
	10555 Nov 05 10:37	0°♊		morning max el	10556 Oct 15 09:25	8°♊40'20	24°06'16
asc. node	10555 Nov 14 21:44	12°♊48'30			10556 Oct 30 22:30	0°♊	
	10555 Nov 24 00:45	0°♊		asc. node	10556 Oct 31 18:38	1°♊30'27	
morning set	10555 Nov 25 14:03	3°♊15'00		morning set	10556 Nov 09 01:51	18°♊02'45	
					10556 Nov 14 13:56	0°♊	
superior conj	10555 Dec 02 15:33	18°♊18'47	1°37'25				
minimum elong	10555 Dec 02 16:35	18°♊24'16	1°37'53	superior conj	10556 Nov 15 22:37	2°♊58'15	1°39'48
max. Earth dist.	10555 Dec 06 07:27	25°♊57'33	1.34182 AU	minimum elong	10556 Nov 15 22:27	2°♊57'24	1°40'16
	10555 Dec 08 07:16	0°♊		max. Earth dist.	10556 Nov 18 06:18	7°♊59'08	1.32811 AU
evening rise	10555 Dec 10 18:36	4°♊52'38		evening rise	10556 Nov 23 10:01	18°♊44'23	
desc. node	10555 Dec 18 14:50	19°♊16'36			10556 Nov 29 05:38	0°♊	
	10555 Dec 25 02:45	0°♊		desc. node	10556 Dec 04 11:53	9°♊18'53	
evening max el	10556 Jan 14 16:11	26°♊39'37	27°01'53		10556 Dec 18 08:36	0°♊	
	10556 Jan 18 12:29	0°♊		evening max el	10556 Dec 27 04:28	9°♊57'51	27°28'30
retrograde	10556 Jan 27 23:50	4°♊01'32		retrograde	10557 Jan 09 20:36	17°♊19'35	
evening set	10556 Feb 03 15:02	1°♊27'41		evening set	10557 Jan 16 19:08	14°♊49'09	
	10556 Feb 05 07:23	30°♊		min. Earth dist.	10557 Jan 20 13:57	11°♊30'21	0.63819 AU
min. Earth dist.	10556 Feb 07 14:13	27°♊37'21	0.65525 AU	inferior conj	10557 Jan 23 04:37	8°♊49'23	-1°30'25
inferior conj	10556 Feb 09 17:33	25°♊11'30	-0°22'26	minimum elong	10557 Jan 23 07:30	8°♊41'58	1°28'47
minimum elong	10556 Feb 09 18:12	25°♊09'42	0°21'50	asc. node	10557 Jan 27 17:55	4°♊41'51	
asc. node	10556 Feb 10 20:43	23°♊55'12		morning rise	10557 Jan 29 21:52	3°♊30'05	
morning rise	10556 Feb 15 22:41	19°♊37'14		direct	10557 Feb 01 08:10	3°♊00'53	
direct	10556 Feb 18 16:44	18°♊56'18		morning max el	10557 Feb 07 19:41	6°♊21'51	17°48'44
morning max el	10556 Feb 25 02:10	22°♊18'34	18°05'15		10557 Feb 23 12:30	0°♊	
	10556 Mar 02 05:31	0°♊		morning set	10557 Feb 24 10:29	1°♊33'54	
morning set	10556 Mar 14 12:14	19°♊28'42		desc. node	10557 Mar 02 11:56	11°♊50'33	
desc. node	10556 Mar 15 15:10	21°♊18'19					
	10556 Mar 21 00:05	0°♊		superior conj	10557 Mar 09 06:43	23°♊02'47	-0°49'13
				minimum elong	10557 Mar 09 01:25	22°♊41'13	0°48'21
superior conj	10556 Mar 29 06:37	13°♊09'47	-1°30'21		10557 Mar 13 14:24	0°♊	
minimum elong	10556 Mar 28 21:23	12°♊33'22	1°29'26	max. Earth dist.	10557 Mar 14 20:17	1°♊58'50	1.44792 AU

evening rise	10557 Mar 24 21:29	17° $\Upsilon$ 38'35		max. Earth dist.	10558 Feb 25 11:47	16° $\text{X}$ 03'46	1.43386 AU
	10557 Apr 02 01:02	0° $\text{B}$		evening rise	10558 Mar 04 13:30	27° $\text{X}$ 18'55	
evening max el	10557 Apr 22 03:17	27° $\text{B}$ 16'59	20°28'00		10558 Mar 06 07:00	0° $\Upsilon$	
	10557 Apr 25 05:22	0° $\text{II}$			10558 Mar 26 20:42	0° $\text{B}$	
asc. node	10557 Apr 25 15:53	0° $\text{II}$ 18'31		evening max el	10558 Apr 04 23:57	11° $\text{B}$ 00'44	21°39'50
retrograde	10557 Apr 30 03:53	1° $\text{II}$ 56'41		asc. node	10558 Apr 12 13:06	16° $\text{B}$ 10'41	
evening set	10557 May 04 04:22	0° $\text{II}$ 23'56		retrograde	10558 Apr 14 02:08	16° $\text{B}$ 22'21	
	10557 May 04 16:03	30° $\text{R}$ $\text{B}$		evening set	10558 Apr 18 12:51	14° $\text{B}$ 34'16	
inferior conj	10557 May 09 11:22	24° $\text{B}$ 17'34	3°12'08	inferior conj	10558 Apr 23 19:45	8° $\text{B}$ 17'03	2°55'21
minimum elong	10557 May 09 10:21	24° $\text{B}$ 21'01	3°11'38	minimum elong	10558 Apr 23 17:59	8° $\text{B}$ 23'11	2°54'44
min. Earth dist.	10557 May 10 03:54	23° $\text{B}$ 20'49	0.68021 AU	min. Earth dist.	10558 Apr 23 23:10	8° $\text{B}$ 05'06	0.68550 AU
morning rise	10557 May 14 16:07	17° $\text{B}$ 59'35		morning rise	10558 Apr 28 22:56	2° $\text{B}$ 03'26	
direct	10557 May 20 05:28	15° $\text{B}$ 31'32			10558 May 02 19:17	30° $\text{R}$ $\Upsilon$	
desc. node	10557 May 29 12:36	20° $\text{B}$ 23'34		direct	10558 May 03 23:02	29° $\Upsilon$ 53'27	
morning max el	10557 May 31 10:49	22° $\text{B}$ 14'47	24°14'44		10558 May 05 03:34	0° $\text{B}$	
	10557 Jun 07 05:19	0° $\text{II}$		morning max el	10558 May 13 21:24	5° $\text{B}$ 46'01	22°44'47
	10557 Jun 27 22:57	0° $\text{B}$		desc. node	10558 May 16 09:31	8° $\text{B}$ 26'43	
morning set	10557 Jul 06 01:28	13° $\text{B}$ 30'40			10558 Jun 01 13:39	0° $\text{II}$	
max. Earth dist.	10557 Jul 09 17:47	19° $\text{B}$ 59'44	1.37988 AU	morning set	10558 Jun 17 00:11	24° $\text{II}$ 00'44	
	10557 Jul 15 04:12	0° $\text{Q}$			10558 Jun 20 14:20	0° $\text{B}$	
				max. Earth dist.	10558 Jun 21 14:55	1° $\text{B}$ 44'24	1.40281 AU
superior conj	10557 Jul 16 21:09	3° $\text{Q}$ 14'42	-0°53'13				
minimum elong	10557 Jul 17 00:41	3° $\text{Q}$ 31'36	0°53'03	superior conj	10558 Jun 29 10:03	15° $\text{B}$ 27'50	-1°25'49
asc. node	10557 Jul 22 14:58	14° $\text{Q}$ 27'25		minimum elong	10558 Jun 29 15:45	15° $\text{B}$ 53'46	1°25'34
evening rise	10557 Jul 25 16:04	20° $\text{Q}$ 29'39			10558 Jul 07 05:25	0° $\text{Q}$	
	10557 Jul 30 13:46	0° $\text{R}$		evening rise	10558 Jul 09 07:59	3° $\text{Q}$ 59'58	
evening max el	10557 Aug 11 04:16	17° $\text{R}$ 25'28	19°06'06	asc. node	10558 Jul 09 11:53	4° $\text{Q}$ 18'28	
retrograde	10557 Aug 20 03:05	21° $\text{R}$ 52'47		evening max el	10558 Jul 25 08:24	29° $\text{Q}$ 45'10	18°26'24
evening set	10557 Aug 21 23:45	21° $\text{R}$ 42'00			10558 Jul 25 14:30	0° $\text{R}$	
desc. node	10557 Aug 25 11:11	20° $\text{R}$ 29'59		retrograde	10558 Aug 01 23:32	3° $\text{R}$ 34'48	
inferior conj	10557 Aug 30 10:09	17° $\text{R}$ 28'54	-1°32'36	evening set	10558 Aug 04 02:00	3° $\text{R}$ 18'12	
minimum elong	10557 Aug 30 06:07	17° $\text{R}$ 35'47	1°31'11		10558 Aug 10 02:58	30° $\text{R}$ $\text{Q}$	
min. Earth dist.	10557 Sep 02 06:11	15° $\text{R}$ 33'14	0.56178 AU	inferior conj	10558 Aug 11 17:09	28° $\text{Q}$ 45'23	0°11'38
morning rise	10557 Sep 07 09:27	12° $\text{R}$ 43'28		minimum elong	10558 Aug 11 17:34	28° $\text{Q}$ 44'33	0°11'10
direct	10557 Sep 12 17:35	11° $\text{R}$ 37'00		transit middle	10558 Aug 11 17:34	28° $\text{Q}$ 44'33	0°11'10
morning max el	10557 Sep 26 21:49	18° $\text{R}$ 51'24	25°47'34	transit begin	10558 Aug 11 15:00	28° $\text{Q}$ 49'41	
	10557 Oct 06 06:51	0° $\text{B}$		transit end	10558 Aug 11 20:08	28° $\text{Q}$ 39'25	
asc. node	10557 Oct 18 15:31	20° $\text{B}$ 42'33		desc. node	10558 Aug 12 08:27	28° $\text{Q}$ 14'41	
	10557 Oct 23 05:46	0° $\text{R}$		min. Earth dist.	10558 Aug 15 01:10	26° $\text{Q}$ 06'41	0.58067 AU
morning set	10557 Oct 24 13:09	2° $\text{R}$ 46'17		morning rise	10558 Aug 19 05:35	23° $\text{Q}$ 23'25	
				direct	10558 Aug 25 07:02	21° $\text{Q}$ 48'19	
superior conj	10557 Oct 31 09:02	17° $\text{R}$ 45'01	1°36'06	morning max el	10558 Sep 08 15:37	29° $\text{Q}$ 27'44	27°05'52
minimum elong	10557 Oct 31 07:51	17° $\text{R}$ 38'28	1°36'23		10558 Sep 09 04:41	0° $\text{R}$	
max. Earth dist.	10557 Nov 01 11:41	20° $\text{R}$ 12'12	1.31901 AU		10558 Sep 30 04:02	0° $\text{B}$	
	10557 Nov 06 00:05	0° $\text{X}$		asc. node	10558 Oct 05 12:21	10° $\text{B}$ 16'22	
evening rise	10557 Nov 07 09:55	2° $\text{X}$ 57'56		morning set	10558 Oct 08 22:13	17° $\text{B}$ 20'14	
desc. node	10557 Nov 21 09:00	28° $\text{X}$ 55'49			10558 Oct 14 17:24	0° $\text{R}$	
	10557 Nov 22 00:53	0° $\text{B}$					
evening max el	10557 Dec 09 13:29	22° $\text{B}$ 43'02	27°24'52	superior conj	10558 Oct 15 20:46	2° $\text{R}$ 32'19	1°26'42
retrograde	10557 Dec 23 10:14	29° $\text{B}$ 59'33		minimum elong	10558 Oct 15 18:51	2° $\text{R}$ 21'41	1°26'44
evening set	10557 Dec 30 10:41	27° $\text{B}$ 41'26		max. Earth dist.	10558 Oct 15 20:36	2° $\text{R}$ 31'23	1.31477 AU
min. Earth dist.	10558 Jan 03 03:44	24° $\text{B}$ 48'24	0.61846 AU	evening rise	10558 Oct 22 15:44	17° $\text{R}$ 25'46	
inferior conj	10558 Jan 06 03:42	22° $\text{B}$ 04'14	-2°44'32		10558 Oct 28 20:25	0° $\text{X}$	
minimum elong	10558 Jan 06 09:12	21° $\text{B}$ 51'37	2°41'56	desc. node	10558 Nov 08 06:09	17° $\text{X}$ 56'35	
morning rise	10558 Jan 13 10:17	17° $\text{B}$ 02'52			10558 Nov 17 05:12	0° $\text{B}$	
asc. node	10558 Jan 14 15:05	16° $\text{B}$ 46'09		evening max el	10558 Nov 21 16:42	4° $\text{B}$ 43'03	26°47'17
direct	10558 Jan 15 15:12	16° $\text{B}$ 41'41		retrograde	10558 Dec 05 15:09	11° $\text{B}$ 51'39	
morning max el	10558 Jan 22 12:34	20° $\text{B}$ 11'08	17°50'00	evening set	10558 Dec 12 09:38	9° $\text{B}$ 55'47	
	10558 Jan 29 19:50	0° $\approx$		min. Earth dist.	10558 Dec 16 06:59	7° $\text{B}$ 18'13	0.59736 AU
morning set	10558 Feb 07 06:17	14° $\approx$ 40'23		inferior conj	10558 Dec 19 11:12	4° $\text{B}$ 46'04	-3°59'36
	10558 Feb 15 22:00	0° $\text{X}$		minimum elong	10558 Dec 19 18:52	4° $\text{B}$ 30'43	3°56'40
desc. node	10558 Feb 17 08:43	2° $\text{X}$ 29'35		morning rise	10558 Dec 27 06:47	0° $\text{B}$ 05'18	
					10558 Dec 27 15:45	30° $\text{R}$ $\text{X}$	
superior conj	10558 Feb 18 07:21	4° $\text{X}$ 06'22	-0°07'10	direct	10558 Dec 29 09:49	29° $\text{X}$ 48'33	
minimum elong	10558 Feb 18 06:43	4° $\text{X}$ 03'38	0°06'47		10558 Dec 31 03:08	0° $\text{B}$	
behind sun begin	10558 Feb 17 22:50	3° $\text{X}$ 30'00		asc. node	10559 Jan 01 12:12	0° $\text{B}$ 25'57	
behind sun end	10558 Feb 18 14:36	4° $\text{X}$ 37'11		morning max el	10559 Jan 06 01:09	3° $\text{B}$ 35'41	18°10'19

morning set	10559 Jan 21 17:24	28° $\text{Z}$ 28'58		morning set	10560 Jan 05 15:06	12° $\text{Z}$ 45'50	
	10559 Jan 22 12:46	0° $\approx$					
superior conj	10559 Jan 31 07:46	16° $\approx$ 16'16	0°29'45	superior conj	10560 Jan 14 03:36	29° $\text{Z}$ 20'28	0°58'54
minimum elong	10559 Jan 31 09:57	16° $\approx$ 26'07	0°29'48	minimum elong	10560 Jan 14 06:42	29° $\text{Z}$ 35'08	0°58'57
desc. node	10559 Feb 04 05:31	23° $\approx$ 11'14			10560 Jan 14 11:57	0° $\approx$	
max. Earth dist.	10559 Feb 07 22:37	29° $\approx$ 33'00	1.41497 AU	max. Earth dist.	10560 Jan 21 05:49	12° $\approx$ 21'35	1.39336 AU
	10559 Feb 08 05:02	0° $\text{X}$		desc. node	10560 Jan 22 02:21	13° $\approx$ 52'09	
evening rise	10559 Feb 12 21:58	7° $\text{X}$ 45'58		evening rise	10560 Jan 25 03:46	19° $\approx$ 09'19	
	10559 Feb 27 10:00	0° $\text{Y}$			10560 Jan 31 17:52	0° $\text{X}$	
evening max el	10559 Mar 18 16:22	24° $\text{Y}$ 46'32	22°58'52		10560 Feb 21 16:32	0° $\text{Y}$	
	10559 Mar 25 12:04	0° $\text{B}$		evening max el	10560 Feb 29 06:25	8° $\text{Y}$ 35'08	24°19'01
retrograde	10559 Mar 28 22:07	0° $\text{B}$ 49'41		retrograde	10560 Mar 11 14:37	15° $\text{Y}$ 13'50	
asc. node	10559 Mar 30 10:21	0° $\text{B}$ 38'41		asc. node	10560 Mar 16 07:36	13° $\text{Y}$ 31'55	
	10559 Apr 01 01:58	30° $\text{R}$ $\text{Y}$		evening set	10560 Mar 17 00:41	12° $\text{Y}$ 57'52	
evening set	10559 Apr 02 20:08	28° $\text{Y}$ 46'56		min. Earth dist.	10560 Mar 21 15:57	7° $\text{Y}$ 39'04	0.68277 AU
inferior conj	10559 Apr 08 04:53	22° $\text{Y}$ 21'54	2°28'42	inferior conj	10560 Mar 22 12:53	6° $\text{Y}$ 28'39	1°52'39
minimum elong	10559 Apr 08 02:44	22° $\text{Y}$ 29'21	2°27'59	minimum elong	10560 Mar 22 10:47	6° $\text{Y}$ 35'45	1°51'58
min. Earth dist.	10559 Apr 07 19:57	22° $\text{Y}$ 52'51	0.68629 AU	morning rise	10560 Mar 27 20:58	0° $\text{Y}$ 28'06	
morning rise	10559 Apr 13 09:12	16° $\text{Y}$ 14'07			10560 Mar 28 13:28	30° $\text{R}$ $\text{X}$	
direct	10559 Apr 17 19:52	14° $\text{Y}$ 25'17		direct	10560 Mar 31 18:43	29° $\text{X}$ 01'05	
morning max el	10559 Apr 26 12:07	19° $\text{Y}$ 26'14	21°19'40		10560 Apr 04 05:01	0° $\text{Y}$	
desc. node	10559 May 03 06:22	27° $\text{Y}$ 18'56		morning max el	10560 Apr 08 09:59	3° $\text{Y}$ 18'26	20°05'31
	10559 May 05 07:18	0° $\text{B}$		desc. node	10560 Apr 19 03:09	16° $\text{Y}$ 46'48	
	10559 May 25 17:35	0° $\text{II}$			10560 Apr 28 03:11	0° $\text{B}$	
morning set	10559 May 27 20:24	3° $\text{II}$ 19'12		morning set	10560 May 05 21:32	11° $\text{B}$ 49'31	
max. Earth dist.	10559 Jun 03 17:29	14° $\text{II}$ 22'47	1.42420 AU	max. Earth dist.	10560 May 16 03:37	27° $\text{B}$ 53'37	1.44145 AU
					10560 May 17 11:12	0° $\text{II}$	
superior conj	10559 Jun 11 02:34	26° $\text{II}$ 45'45	-1°53'38	superior conj	10560 May 21 19:02	7° $\text{II}$ 00'27	-2°10'41
minimum elong	10559 Jun 11 08:54	27° $\text{II}$ 12'59	1°53'37	minimum elong	10560 May 21 22:15	7° $\text{II}$ 13'39	2°11'04
	10559 Jun 12 23:31	0° $\text{E}$		evening rise	10560 Jun 03 19:44	28° $\text{II}$ 55'55	
evening rise	10559 Jun 22 10:49	16° $\text{E}$ 52'41			10560 Jun 04 10:37	0° $\text{E}$	
asc. node	10559 Jun 26 08:51	23° $\text{E}$ 56'22		asc. node	10560 Jun 12 05:52	13° $\text{E}$ 15'03	
	10559 Jun 29 20:04	0° $\text{O}$		evening max el	10560 Jun 21 08:49	25° $\text{E}$ 53'42	18°06'25
evening max el	10559 Jul 08 19:13	12° $\text{O}$ 38'12	18°06'50	retrograde	10560 Jun 27 18:24	29° $\text{E}$ 14'00	
retrograde	10559 Jul 15 14:01	16° $\text{O}$ 05'32		evening set	10560 Jun 30 12:31	28° $\text{E}$ 35'25	
evening set	10559 Jul 18 00:17	15° $\text{O}$ 39'17		inferior conj	10560 Jul 06 18:37	23° $\text{E}$ 22'56	2°27'06
inferior conj	10559 Jul 24 21:09	10° $\text{O}$ 45'51	1°32'02	minimum elong	10560 Jul 06 21:18	23° $\text{E}$ 15'48	2°25'56
minimum elong	10559 Jul 24 23:40	10° $\text{O}$ 40'00	1°30'48	min. Earth dist.	10560 Jul 09 14:52	20° $\text{E}$ 23'18	0.62544 AU
min. Earth dist.	10559 Jul 28 03:32	7° $\text{O}$ 45'11	0.60295 AU	morning rise	10560 Jul 13 04:10	17° $\text{E}$ 14'00	
desc. node	10559 Jul 30 05:39	6° $\text{O}$ 02'04		desc. node	10560 Jul 16 02:48	15° $\text{E}$ 32'29	
morning rise	10559 Jul 31 20:10	4° $\text{O}$ 55'18		direct	10560 Jul 19 21:14	14° $\text{E}$ 46'36	
direct	10559 Aug 07 09:03	2° $\text{O}$ 51'11		morning max el	10560 Aug 02 23:15	22° $\text{E}$ 48'49	27°54'42
morning max el	10559 Aug 21 16:27	10° $\text{O}$ 46'07	27°49'34		10560 Aug 09 07:55	0° $\text{O}$	
	10559 Sep 05 16:17	0° $\text{M}$			10560 Aug 28 22:14	0° $\text{M}$	
asc. node	10559 Sep 22 09:09	0° $\text{A}$ 05'40		morning set	10560 Sep 06 02:21	15° $\text{M}$ 39'04	
	10559 Sep 22 08:03	0° $\text{A}$		asc. node	10560 Sep 08 05:57	20° $\text{M}$ 04'31	
morning set	10559 Sep 23 03:20	1° $\text{A}$ 40'00		max. Earth dist.	10560 Sep 11 10:35	26° $\text{M}$ 50'57	1.32102 AU
max. Earth dist.	10559 Sep 29 05:32	14° $\text{A}$ 48'08	1.31543 AU		10560 Sep 12 21:30	0° $\text{A}$	
superior conj	10559 Sep 30 08:01	17° $\text{A}$ 14'42	1°11'54	superior conj	10560 Sep 13 16:52	1° $\text{A}$ 45'38	0°51'57
minimum elong	10559 Sep 30 05:46	17° $\text{A}$ 02'18	1°11'40	minimum elong	10560 Sep 13 14:48	1° $\text{A}$ 34'22	0°51'31
	10559 Oct 06 02:42	0° $\text{M}$		evening rise	10560 Sep 20 12:34	16° $\text{A}$ 39'48	
evening rise	10559 Oct 07 01:17	2° $\text{M}$ 01'57			10560 Sep 27 01:01	0° $\text{M}$	
	10559 Oct 21 23:08	0° $\text{X}$		desc. node	10560 Oct 12 00:34	23° $\text{M}$ 07'18	
desc. node	10559 Oct 26 03:21	6° $\text{X}$ 07'07		evening max el	10560 Oct 14 23:56	26° $\text{M}$ 14'53	24°03'28
evening max el	10559 Nov 03 11:58	15° $\text{X}$ 51'42	25°37'03		10560 Oct 19 14:11	0° $\text{X}$	
retrograde	10559 Nov 17 09:19	22° $\text{X}$ 51'49		retrograde	10560 Oct 28 15:16	3° $\text{X}$ 04'15	
evening set	10559 Nov 23 11:18	21° $\text{X}$ 26'21		evening set	10560 Nov 02 12:26	2° $\text{X}$ 12'01	
min. Earth dist.	10559 Nov 28 00:21	18° $\text{X}$ 49'07	0.57687 AU		10560 Nov 07 04:39	30° $\text{R}$ $\text{M}$	
inferior conj	10559 Nov 30 23:49	16° $\text{X}$ 45'25	-5°04'57	min. Earth dist.	10560 Nov 08 10:32	29° $\text{M}$ 16'21	0.55958 AU
minimum elong	10559 Dec 01 07:14	16° $\text{X}$ 32'32	5°02'57	inferior conj	10560 Nov 10 15:49	27° $\text{M}$ 55'15	-5°42'59
morning rise	10559 Dec 09 05:30	12° $\text{X}$ 27'06		minimum elong	10560 Nov 10 18:20	27° $\text{M}$ 51'25	5°42'26
direct	10559 Dec 11 11:53	12° $\text{X}$ 11'16		morning rise	10560 Nov 19 02:15	23° $\text{M}$ 57'44	
asc. node	10559 Dec 19 09:15	15° $\text{X}$ 38'04		direct	10560 Nov 21 18:23	23° $\text{M}$ 39'22	
morning max el	10559 Dec 20 05:40	16° $\text{X}$ 25'03	18°51'33	morning max el	10560 Dec 01 22:28	28° $\text{M}$ 28'47	19°55'27
	10559 Dec 29 20:54	0° $\text{Z}$			10560 Dec 03 10:16	0° $\text{X}$	

asc. node	10560 Dec 05 06:15	2°♊08'14		asc. node	10561 Nov 22 03:12	19°♍40'40	
morning set	10560 Dec 19 19:48	27°♊20'25			10561 Nov 28 03:54	0°♊	
	10560 Dec 21 03:10	0°♊		morning set	10561 Dec 04 04:52	12°♊04'48	
superior conj	10560 Dec 27 14:05	13°♊05'32	1°19'51	superior conj	10561 Dec 11 11:02	27°♊19'15	1°33'03
minimum elong	10560 Dec 27 16:48	13°♊19'05	1°20'04	minimum elong	10561 Dec 11 12:45	27°♊28'11	1°33'28
max. Earth dist.	10561 Jan 02 12:20	24°♊34'10	1.37143 AU		10561 Dec 12 18:09	0°♊	
	10561 Jan 05 11:02	0°♊		max. Earth dist.	10561 Dec 15 22:44	6°♊27'18	1.35156 AU
evening rise	10561 Jan 06 06:04	1°♊25'47		evening rise	10561 Dec 20 01:40	14°♊26'57	
desc. node	10561 Jan 07 23:15	4°♊28'41		desc. node	10561 Dec 25 20:12	24°♊56'17	
	10561 Jan 23 21:47	0°♊			10561 Dec 28 19:10	0°♊	
evening max el	10561 Feb 10 19:41	22°♊24'46	25°33'31		10562 Jan 18 15:47	0°♊	
retrograde	10561 Feb 23 02:43	29°♊29'36		evening max el	10562 Jan 24 09:02	6°♊09'51	26°35'08
evening set	10561 Mar 01 00:57	27°♊02'58		retrograde	10562 Feb 06 09:39	13°♊29'27	
asc. node	10561 Mar 03 04:49	24°♊55'54		evening set	10562 Feb 12 19:08	10°♊56'28	
min. Earth dist.	10561 Mar 05 09:06	22°♊19'12	0.67509 AU	min. Earth dist.	10562 Feb 16 21:14	6°♊47'00	0.66350 AU
inferior conj	10561 Mar 06 17:55	20°♊34'09	1°07'25	asc. node	10562 Feb 18 02:02	5°♊21'16	
minimum elong	10561 Mar 06 16:23	20°♊39'07	1°06'59	inferior conj	10562 Feb 18 17:55	4°♊33'36	0°12'59
morning rise	10561 Mar 12 08:17	14°♊42'19		minimum elong	10562 Feb 18 17:33	4°♊34'40	0°13'06
direct	10561 Mar 15 18:05	13°♊35'41		transit middle	10562 Feb 18 17:33	4°♊34'40	0°13'06
morning max el	10561 Mar 22 15:46	17°♊22'01	19°05'58	transit begin	10562 Feb 18 15:52	4°♊39'43	
	10561 Apr 01 12:23	0°♊		transit end	10562 Feb 18 19:14	4°♊29'38	
greatest brilliancy	10561 Apr 04 21:01	4°♊59'22	-0.7m		10562 Feb 23 01:35	30°♊	
desc. node	10561 Apr 05 23:55	6°♊41'00		morning rise	10562 Feb 24 17:00	28°♊52'20	
morning set	10561 Apr 15 00:33	20°♊33'13		direct	10562 Feb 27 16:15	28°♊03'10	
	10561 Apr 21 02:42	0°♊			10562 Mar 04 10:41	0°♊	
max. Earth dist.	10561 Apr 28 19:31	12°♊01'47	1.45258 AU	morning max el	10562 Mar 06 04:06	1°♊31'09	18°22'33
				desc. node	10562 Mar 23 20:40	26°♊54'00	
superior conj	10561 May 01 12:54	16°♊19'17	-2°10'28		10562 Mar 25 19:23	0°♊	
minimum elong	10561 May 01 09:03	16°♊04'04	2°10'42	morning set	10562 Mar 26 02:12	0°♊27'05	
	10561 May 10 02:30	0°♊					
evening rise	10561 May 16 06:16	10°♊01'10		superior conj	10562 Apr 10 19:13	25°♊14'05	-1°49'56
	10561 May 28 16:16	0°♊		minimum elong	10562 Apr 10 10:00	24°♊38'02	1°49'21
asc. node	10561 May 30 02:56	2°♊08'05		max. Earth dist.	10562 Apr 11 14:19	26°♊28'46	1.45659 AU
evening max el	10561 Jun 04 22:02	9°♊23'57	18°24'26		10562 Apr 13 20:23	0°♊	
retrograde	10561 Jun 11 08:13	12°♊51'15		evening rise	10562 Apr 26 16:52	20°♊07'48	
evening set	10561 Jun 14 10:09	11°♊58'36			10562 May 02 23:37	0°♊	
inferior conj	10561 Jun 20 05:27	6°♊29'04	3°00'14	greatest brilliancy	10562 May 06 19:45	5°♊58'18	-0.8m
minimum elong	10561 Jun 20 07:19	6°♊23'35	2°59'25	asc. node	10562 May 17 00:03	20°♊26'17	
min. Earth dist.	10561 Jun 22 11:43	3°♊49'59	0.64581 AU	evening max el	10562 May 19 08:15	23°♊02'00	19°00'06
morning rise	10561 Jun 26 03:22	0°♊10'49		retrograde	10562 May 26 03:38	26°♊48'58	
	10561 Jun 26 08:44	30°♊		evening set	10562 May 29 13:44	25°♊41'09	
direct	10561 Jul 02 18:08	27°♊29'40		inferior conj	10562 Jun 04 01:54	19°♊56'15	3°15'42
desc. node	10561 Jul 02 23:55	27°♊29'52		minimum elong	10562 Jun 04 02:36	19°♊54'02	3°15'08
	10561 Jul 09 21:23	0°♊		min. Earth dist.	10562 Jun 05 17:11	17°♊51'23	0.66262 AU
morning max el	10561 Jul 16 09:28	5°♊28'56	27°23'56	morning rise	10562 Jun 09 14:51	13°♊35'14	
	10561 Aug 04 01:21	0°♊		direct	10562 Jun 15 22:19	10°♊51'23	
morning set	10561 Aug 20 16:46	29°♊11'22		desc. node	10562 Jun 19 20:58	11°♊44'51	
	10561 Aug 21 02:40	0°♊		morning max el	10562 Jun 28 20:13	18°♊33'23	26°24'19
max. Earth dist.	10561 Aug 25 07:53	8°♊30'59	1.33164 AU		10562 Jul 08 11:55	0°♊	
asc. node	10561 Aug 26 02:46	10°♊08'55			10562 Jul 28 01:36	0°♊	
				morning set	10562 Aug 03 19:16	12°♊08'06	
superior conj	10561 Aug 28 21:22	16°♊00'04	0°27'10	max. Earth dist.	10562 Aug 07 18:45	19°♊46'05	1.34717 AU
minimum elong	10561 Aug 28 20:04	15°♊53'08	0°26'44				
	10561 Sep 04 09:46	0°♊		superior conj	10562 Aug 12 19:06	29°♊51'35	-0°01'52
evening rise	10561 Sep 04 23:45	1°♊14'25		minimum elong	10562 Aug 12 19:13	29°♊52'13	0°02'08
	10561 Sep 21 00:16	0°♊		behind sun begin	10562 Aug 12 13:21	29°♊22'03	
evening max el	10561 Sep 26 11:20	6°♊21'26	22°22'56	behind sun end	10562 Aug 13 01:05	0°♊22'25	
desc. node	10561 Sep 28 21:49	8°♊31'51		asc. node	10562 Aug 12 23:37	0°♊14'51	
retrograde	10561 Oct 09 09:32	12°♊47'39			10562 Aug 12 20:43	0°♊	
evening set	10561 Oct 12 18:53	12°♊22'16		evening rise	10562 Aug 20 08:51	15°♊40'14	
min. Earth dist.	10561 Oct 20 17:58	8°♊50'18	0.54859 AU		10562 Aug 27 14:36	0°♊	
inferior conj	10561 Oct 21 14:37	8°♊21'10	-5°32'43	evening max el	10562 Sep 08 07:41	16°♊49'21	20°51'36
minimum elong	10561 Oct 21 08:56	8°♊29'11	5°31'45	desc. node	10562 Sep 15 19:05	21°♊51'08	
morning rise	10561 Oct 30 00:37	4°♊33'56		retrograde	10562 Sep 19 21:17	22°♊33'35	
direct	10561 Nov 02 07:55	4°♊09'22		evening set	10562 Sep 22 03:24	22°♊21'25	
morning max el	10561 Nov 14 01:43	9°♊41'53	21°21'31	inferior conj	10562 Oct 01 06:46	18°♊25'56	-4°25'17



minimum elong	10562 Sep 30 20:52	18°  40'02	4°22'27			10563 Sep 09 02:34	30° 	
min. Earth dist.	10562 Oct 02 02:07	17°  58'22	0.54641 AU	inferior conj		10563 Sep 11 06:35	28°  40'23	-2°38'39
morning rise	10562 Oct 09 14:24	14°  29'50		minimum elong		10563 Sep 10 23:30	28°  51'29	2°36'05
direct	10562 Oct 13 16:06	13°  54'14		min. Earth dist.		10563 Sep 13 12:44	27°  15'36	0.55376 AU
morning max el	10562 Oct 26 17:37	20°  11'21	23°04'13	morning rise		10563 Sep 19 10:08	24°  16'37	
	10562 Nov 03 22:51	0°  ♌		direct		10563 Sep 24 07:31	23°  16'37	
asc. node	10562 Nov 09 00:08	8°  ♌01'06				10563 Oct 07 20:43	0°  ♌	
morning set	10562 Nov 18 16:13	26°  ♌53'10		morning max el		10563 Oct 08 04:47	0°  ♌18'55	24°51'04
	10562 Nov 20 03:14	0°  ♌		asc. node		10563 Oct 26 21:02	26°  ♌57'02	
						10563 Oct 28 11:23	0°  ♌	
superior conj	10562 Nov 25 15:14	11°  ♌52'11	1°39'12	morning set		10563 Nov 03 04:00	11°  ♌39'35	
minimum elong	10562 Nov 25 15:45	11°  ♌54'59	1°39'41					
max. Earth dist.	10562 Nov 28 16:50	18°  ♌22'35	1.33541 AU	superior conj		10563 Nov 09 23:59	26°  ♌35'27	1°38'57
evening rise	10562 Dec 03 10:56	28°  ♌03'38		minimum elong		10563 Nov 09 23:21	26°  ♌32'03	1°39'21
	10562 Dec 04 10:39	0°  ♌				10563 Nov 11 13:23	0°  ♌	
desc. node	10562 Dec 12 17:14	15°  ♌10'01		max. Earth dist.		10563 Nov 11 18:50	0°  ♌29'37	1.32371 AU
	10562 Dec 22 00:21	0°  ♌		evening rise		10563 Nov 17 06:19	12°  ♌05'52	
evening max el	10563 Jan 06 22:17	19°  ♌42'12	27°16'34			10563 Nov 26 15:42	0°  ♌	
retrograde	10563 Jan 20 10:31	27°  ♌05'29		desc. node		10563 Nov 29 14:18	5°  ♌02'34	
evening set	10563 Jan 27 05:08	24°  ♌32'13				10563 Dec 17 14:58	0°  ♌	
min. Earth dist.	10563 Jan 31 02:15	20°  ♌55'31	0.64835 AU	evening max el		10563 Dec 20 09:43	2°  ♌48'41	27°30'59
inferior conj	10563 Feb 02 10:31	18°  ♌21'52	-0°50'18	retrograde		10564 Jan 03 04:16	10°  ♌08'00	
minimum elong	10563 Feb 02 12:02	18°  ♌17'44	0°49'18	evening set		10564 Jan 10 04:16	7°  ♌42'04	
asc. node	10563 Feb 04 23:13	15°  ♌43'32		min. Earth dist.		10564 Jan 13 22:04	4°  ♌34'48	0.63010 AU
morning rise	10563 Feb 08 20:35	12°  ♌53'27		inferior conj		10564 Jan 16 16:54	1°  ♌51'09	-2°01'18
direct	10563 Feb 11 10:59	12°  ♌18'05		minimum elong		10564 Jan 16 20:52	1°  ♌41'23	1°59'13
morning max el	10563 Feb 17 20:32	15°  ♌38'56	17°56'01			10564 Jan 18 15:31	30°  ♌	
	10563 Feb 28 05:24	0°  ♌		asc. node		10564 Jan 22 20:24	26°  ♌58'51	
morning set	10563 Mar 07 09:11	11°  ♌48'10		morning rise		10564 Jan 23 15:42	26°  ♌38'43	
desc. node	10563 Mar 10 17:28	17°  ♌20'43		direct		10564 Jan 25 23:25	26°  ♌13'19	
	10563 Mar 18 11:47	0°  ♌		morning max el		10564 Feb 01 14:06	29°  ♌36'50	17°46'57
						10564 Feb 01 23:18	0°  ♌	
superior conj	10563 Mar 21 08:19	4°  ♌34'12	-1°13'35	morning set		10564 Feb 17 17:26	24°  ♌22'10	
minimum elong	10563 Mar 21 00:21	4°  ♌02'28	1°12'35			10564 Feb 20 23:09	0°  ♌	
max. Earth dist.	10563 Mar 25 09:54	11°  ♌00'15	1.45320 AU	desc. node		10564 Feb 25 14:15	7°  ♌56'18	
evening rise	10563 Apr 06 09:17	29°  ♌35'37						
	10563 Apr 06 15:38	0°  ♌		superior conj		10564 Feb 29 18:25	14°  ♌55'58	-0°31'01
greatest brilliancy	10563 Apr 20 21:17	21°  ♌30'39	-0.6m	minimum elong		10564 Feb 29 15:13	14°  ♌42'45	0°30'22
	10563 Apr 26 22:08	0°  ♌		max. Earth dist.		10564 Mar 07 03:57	25°  ♌20'53	1.44272 AU
evening max el	10563 May 02 13:42	6°  ♌43'50	19°51'54			10564 Mar 10 02:11	0°  ♌	
asc. node	10563 May 03 21:12	7°  ♌58'50		evening rise		10564 Mar 15 21:02	9°  ♌01'04	
retrograde	10563 May 10 01:45	11°  ♌01'25				10564 Mar 29 21:05	0°  ♌	
evening set	10563 May 13 20:44	9°  ♌37'51		evening max el		10564 Apr 14 13:33	20°  ♌27'25	20°57'24
inferior conj	10563 May 19 04:53	3°  ♌39'01	3°16'53	asc. node		10564 Apr 19 18:23	24°  ♌32'27	
minimum elong	10563 May 19 04:26	3°  ♌40'30	3°16'25	retrograde		10564 Apr 23 00:23	25°  ♌24'00	
min. Earth dist.	10563 May 20 05:30	2°  ♌16'19	0.67516 AU	evening set		10564 Apr 27 05:11	23°  ♌44'35	
	10563 May 21 23:53	30°  ♌		inferior conj		10564 May 02 11:53	17°  ♌33'31	3°06'14
morning rise	10563 May 24 11:48	27°  ♌19'19		minimum elong		10564 May 02 10:32	17°  ♌38'13	3°05'42
direct	10563 May 30 08:30	24°  ♌43'01		min. Earth dist.		10564 May 02 22:45	16°  ♌55'55	0.68307 AU
desc. node	10563 Jun 06 18:00	27°  ♌49'38		morning rise		10564 May 07 15:40	11°  ♌17'26	
	10563 Jun 09 08:01	0°  ♌		direct		10564 May 12 23:34	8°  ♌56'28	
morning max el	10563 Jun 11 06:02	1°  ♌51'22	25°05'05	morning max el		10564 May 23 15:38	15°  ♌18'08	23°36'24
	10563 Jul 02 13:24	0°  ♌		desc. node		10564 May 23 14:58	15°  ♌16'29	
morning set	10563 Jul 17 05:34	24°  ♌17'25				10564 Jun 04 16:18	0°  ♌	
	10563 Jul 20 09:06	0°  ♌				10564 Jun 24 12:17	0°  ♌	
max. Earth dist.	10563 Jul 20 19:50	0°  ♌49'39	1.36708 AU	morning set		10564 Jun 27 18:39	5°  ♌27'10	
				max. Earth dist.		10564 Jul 01 16:52	12°  ♌13'09	1.38967 AU
superior conj	10563 Jul 27 07:04	13°  ♌12'03	-0°33'59					
minimum elong	10563 Jul 27 09:14	13°  ♌22'44	0°34'00	superior conj		10564 Jul 09 05:39	25°  ♌52'56	-1°07'18
asc. node	10563 Jul 30 20:28	20°  ♌17'59		minimum elong		10564 Jul 09 10:11	26°  ♌14'09	1°07'05
evening rise	10563 Aug 04 13:33	29°  ♌50'23				10564 Jul 11 09:59	0°  ♌	
	10563 Aug 04 15:28	0°  ♌		asc. node		10564 Jul 16 17:22	10°  ♌14'51	
evening max el	10563 Aug 21 17:35	27°  ♌59'45	19°38'34	evening rise		10564 Jul 18 11:08	13°  ♌38'08	
	10563 Aug 24 00:07	0°  ♌				10564 Jul 27 07:55	0°  ♌	
retrograde	10563 Aug 31 14:19	2°  ♌53'32		evening max el		10564 Aug 03 16:00	9°  ♌55'45	18°46'38
evening set	10563 Sep 02 10:49	2°  ♌43'55		retrograde		10564 Aug 11 23:52	14°  ♌05'17	
desc. node	10563 Sep 02 16:23	2°  ♌41'25		evening set		10564 Aug 13 22:38	13°  ♌52'27	

desc. node	10564 Aug 19 13:38	11° $\mathbb{M}$ 15'07		evening set	10565 Jul 27 10:09	25° $\Omega$ 48'26	
inferior conj	10564 Aug 22 00:58	9° $\mathbb{M}$ 30'57	-0°46'01	inferior conj	10565 Aug 03 17:11	21° $\Omega$ 06'29	0°48'57
minimum elong	10564 Aug 21 23:04	9° $\mathbb{M}$ 34'25	0°45'29	minimum elong	10565 Aug 03 18:46	21° $\Omega$ 03'05	0°48'00
min. Earth dist.	10564 Aug 25 03:51	7° $\mathbb{M}$ 15'13	0.56921 AU	desc. node	10565 Aug 06 10:53	18° $\Omega$ 46'08	
morning rise	10564 Aug 29 20:10	4° $\mathbb{M}$ 29'49		min. Earth dist.	10565 Aug 07 01:43	18° $\Omega$ 15'38	0.58992 AU
direct	10564 Sep 04 12:12	3° $\mathbb{M}$ 11'54		morning rise	10565 Aug 11 00:01	15° $\Omega$ 30'48	
morning max el	10564 Sep 18 18:55	10° $\mathbb{M}$ 37'08	26°24'36	direct	10565 Aug 17 06:54	13° $\Omega$ 43'20	
	10564 Oct 03 15:51	0° $\underline{\mathbf{A}}$		morning max el	10565 Aug 31 15:56	21° $\Omega$ 30'33	27°29'13
asc. node	10564 Oct 12 17:54	16° $\underline{\mathbf{A}}$ 19'18			10565 Sep 08 02:04	0° $\mathbb{M}$	
morning set	10564 Oct 17 14:34	26° $\underline{\mathbf{A}}$ 19'29			10565 Sep 26 14:18	0° $\underline{\mathbf{A}}$	
	10564 Oct 19 07:30	0° $\mathbb{M}$		asc. node	10565 Sep 29 14:43	6° $\underline{\mathbf{A}}$ 00'16	
				morning set	10565 Oct 01 22:11	10° $\underline{\mathbf{A}}$ 47'55	
superior conj	10564 Oct 24 11:09	11° $\mathbb{M}$ 22'46	1°32'47	superior conj	10565 Oct 08 22:52	26° $\underline{\mathbf{A}}$ 08'14	1°21'03
minimum elong	10564 Oct 24 09:37	11° $\mathbb{M}$ 14'15	1°32'58	minimum elong	10565 Oct 08 20:46	25° $\underline{\mathbf{A}}$ 56'33	1°20'59
max. Earth dist.	10564 Oct 25 02:19	12° $\mathbb{M}$ 46'58	1.31668 AU	max. Earth dist.	10565 Oct 08 11:45	25° $\underline{\mathbf{A}}$ 06'23	1.31441 AU
evening rise	10564 Oct 31 09:01	26° $\mathbb{M}$ 26'05			10565 Oct 10 16:31	0° $\mathbb{M}$	
	10564 Nov 02 02:09	0° $\mathbf{x}$		evening rise	10565 Oct 15 16:37	10° $\mathbb{M}$ 57'41	
desc. node	10564 Nov 15 11:24	24° $\mathbf{x}$ 25'25			10565 Oct 25 07:38	0° $\mathbf{x}$	
	10564 Nov 19 03:14	0° $\mathbf{Z}$		desc. node	10565 Nov 02 08:33	13° $\mathbf{x}$ 06'56	
evening max el	10564 Dec 01 16:39	15° $\mathbf{Z}$ 15'56	27°13'01	evening max el	10565 Nov 13 16:26	26° $\mathbf{x}$ 53'40	26°21'00
retrograde	10564 Dec 15 13:58	22° $\mathbf{Z}$ 28'19			10565 Nov 17 08:42	0° $\mathbf{Z}$	
evening set	10564 Dec 22 13:13	20° $\mathbf{Z}$ 18'31		retrograde	10565 Nov 27 14:39	3° $\mathbf{Z}$ 59'13	
min. Earth dist.	10564 Dec 26 07:10	17° $\mathbf{Z}$ 33'45	0.60964 AU	evening set	10565 Dec 04 03:45	2° $\mathbf{Z}$ 15'05	
inferior conj	10564 Dec 29 09:45	14° $\mathbf{Z}$ 52'56	-3°16'43		10565 Dec 07 18:40	30° $\mathbf{R}$ $\mathbf{x}$	
minimum elong	10564 Dec 29 16:19	14° $\mathbf{Z}$ 38'43	3°13'51	min. Earth dist.	10565 Dec 08 05:45	29° $\mathbf{x}$ 40'09	0.58840 AU
morning rise	10565 Jan 05 22:02	9° $\mathbf{Z}$ 59'55		inferior conj	10565 Dec 11 09:34	27° $\mathbf{x}$ 17'49	-4°29'22
direct	10565 Jan 08 01:48	9° $\mathbf{Z}$ 40'54		minimum elong	10565 Dec 11 17:35	27° $\mathbf{x}$ 02'44	4°26'41
asc. node	10565 Jan 08 17:34	9° $\mathbf{Z}$ 42'43		morning rise	10565 Dec 19 10:02	22° $\mathbf{x}$ 46'57	
morning max el	10565 Jan 15 05:32	13° $\mathbf{Z}$ 16'23	17°56'12	direct	10565 Dec 21 13:45	22° $\mathbf{x}$ 31'02	
	10565 Jan 26 13:05	0° $\approx$		asc. node	10565 Dec 26 14:40	24° $\mathbf{x}$ 03'31	
morning set	10565 Jan 30 20:23	7° $\approx$ 48'28		morning max el	10565 Dec 29 15:15	26° $\mathbf{x}$ 28'03	18°25'16
					10566 Jan 01 17:36	0° $\mathbf{Z}$	
superior conj	10565 Feb 10 05:31	26° $\approx$ 28'45	0°09'23	morning set	10566 Jan 14 12:31	21° $\mathbf{Z}$ 51'01	
minimum elong	10565 Feb 10 06:20	26° $\approx$ 32'21	0°09'35		10566 Jan 18 18:42	0° $\approx$	
behind sun begin	10565 Feb 09 23:45	26° $\approx$ 03'35		superior conj	10566 Jan 23 14:53	9° $\approx$ 04'31	0°43'06
behind sun end	10565 Feb 10 12:56	27° $\approx$ 01'03		minimum elong	10566 Jan 23 17:40	9° $\approx$ 17'16	0°43'07
desc. node	10565 Feb 11 11:01	28° $\approx$ 36'44		desc. node	10566 Jan 29 07:48	19° $\approx$ 18'58	
	10565 Feb 12 06:21	0° $\mathbf{X}$		max. Earth dist.	10566 Jan 31 03:03	22° $\approx$ 26'24	1.40593 AU
max. Earth dist.	10565 Feb 17 18:01	9° $\mathbf{X}$ 13'47	1.42633 AU	evening rise	10566 Feb 04 12:18	29° $\approx$ 49'46	
evening rise	10565 Feb 23 18:55	18° $\mathbf{X}$ 58'36			10566 Feb 04 14:46	0° $\mathbf{X}$	
	10565 Mar 02 21:58	0° $\mathbf{Y}$			10566 Feb 24 09:04	0° $\mathbf{Y}$	
	10565 Mar 24 12:42	0° $\mathbf{B}$		evening max el	10566 Mar 10 23:09	17° $\mathbf{Y}$ 58'28	23°33'07
evening max el	10565 Mar 28 08:10	4° $\mathbf{B}$ 11'41	22°12'53	retrograde	10566 Mar 21 16:36	24° $\mathbf{Y}$ 18'23	
retrograde	10565 Apr 06 21:48	9° $\mathbf{B}$ 51'10		asc. node	10566 Mar 24 12:50	23° $\mathbf{Y}$ 39'54	
asc. node	10565 Apr 06 15:36	9° $\mathbf{B}$ 50'51		evening set	10566 Mar 26 19:40	22° $\mathbf{Y}$ 09'36	
evening set	10565 Apr 11 13:20	7° $\mathbf{B}$ 56'26		min. Earth dist.	10566 Mar 31 15:32	16° $\mathbf{Y}$ 30'31	0.68530 AU
inferior conj	10565 Apr 16 20:47	1° $\mathbf{B}$ 35'27	2°45'12	inferior conj	10566 Apr 01 05:41	15° $\mathbf{Y}$ 41'59	2°14'34
minimum elong	10565 Apr 16 18:49	1° $\mathbf{B}$ 42'20	2°44'33	minimum elong	10566 Apr 01 03:29	15° $\mathbf{Y}$ 49'31	2°13'50
min. Earth dist.	10565 Apr 16 18:48	1° $\mathbf{B}$ 42'25	0.68638 AU	morning rise	10566 Apr 06 11:18	9° $\mathbf{Y}$ 37'06	
	10565 Apr 18 00:23	30° $\mathbf{R}$ $\mathbf{Y}$		direct	10566 Apr 10 16:15	7° $\mathbf{Y}$ 57'50	
morning rise	10565 Apr 22 00:09	25° $\mathbf{Y}$ 24'24		morning max el	10566 Apr 18 21:17	12° $\mathbf{Y}$ 39'17	20°46'28
direct	10565 Apr 26 18:28	23° $\mathbf{Y}$ 23'25		desc. node	10566 Apr 27 08:40	22° $\mathbf{Y}$ 51'34	
morning max el	10565 May 06 03:38	28° $\mathbf{Y}$ 53'13	22°07'37		10566 May 02 11:31	0° $\mathbf{B}$	
	10565 May 07 05:30	0° $\mathbf{B}$		morning set	10566 May 18 16:18	24° $\mathbf{B}$ 19'14	
desc. node	10565 May 10 11:51	3° $\mathbf{B}$ 42'27			10566 May 22 07:10	0° $\mathbf{II}$	
	10565 May 29 08:51	0° $\mathbf{II}$		max. Earth dist.	10566 May 26 21:47	7° $\mathbf{II}$ 22'26	1.43218 AU
morning set	10565 Jun 08 05:58	15° $\mathbf{II}$ 26'11		superior conj	10566 Jun 02 16:48	18° $\mathbf{II}$ 34'22	-2°02'36
max. Earth dist.	10565 Jun 13 16:20	24° $\mathbf{II}$ 21'46	1.41229 AU	minimum elong	10566 Jun 02 22:24	18° $\mathbf{II}$ 57'51	2°02'45
	10565 Jun 17 00:08	0° $\mathbf{B}$			10566 Jun 09 08:59	0° $\mathbf{B}$	
superior conj	10565 Jun 21 10:21	7° $\mathbf{B}$ 43'20	-1°38'31	evening rise	10566 Jun 14 17:49	9° $\mathbf{B}$ 26'55	
minimum elong	10565 Jun 21 16:38	8° $\mathbf{B}$ 11'15	1°38'19	asc. node	10566 Jun 20 11:15	19° $\mathbf{B}$ 31'20	
evening rise	10565 Jul 01 22:01	26° $\mathbf{B}$ 53'50			10566 Jun 26 23:18	0° $\mathbf{\Omega}$	
asc. node	10565 Jul 03 14:17	0° $\mathbf{\Omega}$ 00'50		evening max el	10566 Jul 01 11:43	5° $\mathbf{\Omega}$ 33'32	18°04'21
	10565 Jul 03 14:06	0° $\mathbf{\Omega}$		retrograde	10566 Jul 08 01:29	8° $\mathbf{\Omega}$ 56'15	
evening max el	10565 Jul 17 23:20	22° $\mathbf{\Omega}$ 30'02	18°15'35				
retrograde	10565 Jul 25 04:33	26° $\mathbf{\Omega}$ 08'41					

evening set	10566 Jul 10 14:59	8°♌25'12		evening max el	10567 Jun 15 01:34	18°♊56'57	18°11'57
inferior conj	10566 Jul 17 05:07	3°♌23'37	1°58'21	retrograde	10567 Jun 21 10:15	22°♊18'22	
minimum elong	10566 Jul 17 07:53	3°♌16'48	1°57'04	evening set	10567 Jun 24 07:43	21°♊33'58	
min. Earth dist.	10566 Jul 20 08:00	0°♌20'20	0.61265 AU	inferior conj	10567 Jun 30 08:46	16°♊14'20	2°43'33
	10566 Jul 20 16:46	30°♋♊		minimum elong	10567 Jun 30 11:11	16°♊07'37	2°42'32
morning rise	10566 Jul 23 22:14	27°♊23'42		min. Earth dist.	10567 Jul 02 23:28	13°♊21'11	0.63450 AU
desc. node	10566 Jul 24 08:04	27°♊07'34		morning rise	10567 Jul 06 13:05	10°♊00'38	
direct	10566 Jul 30 13:44	25°♊08'23		desc. node	10567 Jul 11 05:13	7°♊39'30	
	10566 Aug 10 08:49	0°♌		direct	10567 Jul 13 06:05	7°♊25'43	
morning max el	10566 Aug 13 19:40	3°♌08'32	27°56'23	morning max el	10567 Jul 27 04:02	15°♊28'15	27°45'33
	10566 Sep 02 15:18	0°♍			10567 Aug 08 01:14	0°♌	
morning set	10566 Sep 16 00:57	24°♍59'33			10567 Aug 26 07:42	0°♍	
asc. node	10566 Sep 16 11:30	25°♍54'06		morning set	10567 Aug 30 20:40	8°♍48'40	
	10566 Sep 18 10:19	0°♎		asc. node	10567 Sep 03 08:17	15°♍56'16	
max. Earth dist.	10566 Sep 21 19:18	7°♎17'20	1.31711 AU	max. Earth dist.	10567 Sep 04 21:19	19°♍11'00	1.32489 AU
superior conj	10566 Sep 23 09:19	10°♎46'21	1°04'02	superior conj	10567 Sep 07 16:38	25°♍11'50	0°42'00
minimum elong	10566 Sep 23 07:05	10°♎34'03	1°03'43	minimum elong	10567 Sep 07 14:48	25°♍01'59	0°41'34
evening rise	10566 Sep 30 03:07	25°♎34'51			10567 Sep 09 21:39	0°♎	
	10566 Oct 02 05:04	0°♏		evening rise	10567 Sep 14 14:37	10°♎12'36	
	10566 Oct 19 14:14	0°♏			10567 Sep 24 16:17	0°♏	
desc. node	10566 Oct 20 05:46	0°♏50'24		desc. node	10567 Oct 07 03:01	17°♏14'02	
evening max el	10566 Oct 26 08:02	7°♏40'24	24°59'19	evening max el	10567 Oct 07 18:53	17°♏53'18	23°20'36
retrograde	10566 Nov 09 04:15	14°♏37'36		retrograde	10567 Oct 21 04:49	24°♏34'24	
evening set	10566 Nov 14 19:09	13°♏26'28		evening set	10567 Oct 25 10:40	23°♏55'16	
min. Earth dist.	10566 Nov 19 19:50	10°♏43'32	0.56881 AU	min. Earth dist.	10567 Nov 01 04:38	20°♏46'03	0.55394 AU
inferior conj	10566 Nov 22 13:23	8°♏56'20	-5°25'47	inferior conj	10567 Nov 02 21:20	19°♏46'34	-5°45'38
minimum elong	10566 Nov 22 19:22	8°♏46'30	5°24'28	minimum elong	10567 Nov 02 20:25	19°♏47'54	5°45'14
morning rise	10566 Nov 30 21:51	4°♏47'33		morning rise	10567 Nov 11 07:57	15°♏54'51	
direct	10566 Dec 03 07:18	4°♏31'15		direct	10567 Nov 14 06:03	15°♏34'14	
morning max el	10566 Dec 12 15:15	8°♏59'35	19°15'59	morning max el	10567 Nov 25 02:17	20°♏41'54	20°29'29
asc. node	10566 Dec 13 11:43	9°♏50'51		asc. node	10567 Nov 30 08:42	26°♏49'34	
	10566 Dec 26 09:01	0°♐			10567 Dec 02 13:01	0°♏	
morning set	10566 Dec 29 13:35	6°♐16'29		morning set	10567 Dec 13 20:27	20°♏56'07	
					10567 Dec 18 05:36	0°♐	
superior conj	10567 Jan 06 17:32	22°♐27'55	1°08'44	superior conj	10567 Dec 21 08:55	6°♐26'16	1°26'20
minimum elong	10567 Jan 06 20:35	22°♐42'41	1°08'52	minimum elong	10567 Dec 21 11:16	6°♐38'10	1°26'39
	10567 Jan 10 16:31	0°♑		max. Earth dist.	10567 Dec 26 16:34	16°♐58'08	1.36265 AU
max. Earth dist.	10567 Jan 13 08:56	4°♑56'20	1.38387 AU	evening rise	10567 Dec 30 13:19	24°♐13'58	
desc. node	10567 Jan 16 04:39	9°♑58'41			10568 Jan 02 18:17	0°♑	
evening rise	10567 Jan 17 03:09	11°♑37'03		desc. node	10568 Jan 03 01:35	0°♑32'03	
	10567 Jan 28 08:25	0°♒			10568 Jan 21 23:38	0°♒	
	10567 Feb 19 18:27	0°♑		evening max el	10568 Feb 04 02:11	15°♒37'29	26°01'47
evening max el	10567 Feb 21 12:40	1°♑48'02	24°51'48	retrograde	10568 Feb 16 17:24	22°♒49'26	
retrograde	10567 Mar 05 07:28	8°♑39'44		evening set	10568 Feb 22 20:30	20°♒19'49	
evening set	10567 Mar 10 22:36	6°♑19'01		asc. node	10568 Feb 26 07:20	16°♒47'14	
asc. node	10567 Mar 11 10:05	5°♑53'36		min. Earth dist.	10568 Feb 27 02:05	15°♒50'33	0.67065 AU
min. Earth dist.	10567 Mar 15 10:44	1°♑14'53	0.67999 AU	inferior conj	10568 Feb 28 15:51	13°♒52'54	0°45'29
	10567 Mar 16 09:24	30°♑♒		minimum elong	10568 Feb 28 14:44	13°♒56'24	0°45'14
inferior conj	10567 Mar 16 12:41	29°♒49'08	1°34'38	morning rise	10568 Mar 05 09:37	8°♒05'03	
minimum elong	10567 Mar 16 10:45	29°♒55'33	1°34'00	direct	10568 Mar 08 14:49	7°♒06'04	
morning rise	10567 Mar 21 23:07	23°♒51'49		morning max el	10568 Mar 15 07:15	10°♒43'02	18°45'23
direct	10567 Mar 25 15:35	22°♒33'45			10568 Mar 29 10:06	0°♑	
morning max el	10567 Apr 01 22:31	26°♒36'41	19°38'09	desc. node	10568 Mar 31 02:13	2°♑35'02	
	10567 Apr 05 00:29	0°♑		morning set	10568 Apr 06 02:02	11°♑55'19	
desc. node	10567 Apr 14 05:27	12°♑31'52			10568 Apr 17 15:47	0°♒	
greatest brilliancy	10567 Apr 14 15:40	13°♑09'16	-0.6m	max. Earth dist.	10568 Apr 21 03:46	5°♒28'26	1.45527 AU
	10567 Apr 25 19:50	0°♓		superior conj	10568 Apr 22 10:05	7°♓27'10	-2°04'08
morning set	10567 Apr 27 15:09	2°♓46'19		minimum elong	10568 Apr 22 03:16	7°♓00'28	2°04'04
max. Earth dist.	10567 May 09 10:02	21°♓09'04	1.44702 AU		10568 May 06 15:31	0°♒	
superior conj	10567 May 13 23:03	28°♓23'42	-2°13'01	evening rise	10568 May 07 17:48	1°♒45'30	
minimum elong	10567 May 13 23:34	28°♓25'46	2°13'27	greatest brilliancy	10568 May 14 09:26	12°♒26'34	-0.9m
	10567 May 14 22:58	0°♒		asc. node	10568 May 24 05:22	27°♒19'56	
evening rise	10567 May 27 17:37	21°♒06'07			10568 May 26 07:13	0°♓	
	10567 Jun 02 00:32	0°♓		evening max el	10568 May 28 13:52	2°♓31'44	18°37'34
asc. node	10567 Jun 07 08:17	8°♓40'22					

retrograde	10568 Jun 04 02:48	6°☿05'31		superior conj	10569 Apr 01 17:04	16°♄27'15	-1°35'56
evening set	10568 Jun 07 08:15	5°☿06'21		minimum elong	10569 Apr 01 07:36	15°♄50'06	1°35'04
	10568 Jun 12 14:15	30°♁II		max. Earth dist.	10569 Apr 03 23:55	20°♄02'19	1.45607 AU
inferior conj	10568 Jun 13 00:05	29°♁30'06	3°08'43		10569 Apr 10 09:09	0°♄	
minimum elong	10568 Jun 13 01:29	29°♁25'52	3°08'01	evening rise	10569 Apr 17 19:38	11°♄33'29	
min. Earth dist.	10568 Jun 14 23:58	27°♁04'30	0.65350 AU		10569 Apr 29 19:08	0°♁	
morning rise	10568 Jun 18 17:53	23°♁10'20		greatest brilliancy	10569 Apr 29 23:23	0°♁16'00	-0.7m
direct	10568 Jun 25 06:10	20°♁26'50		asc. node	10569 May 11 02:31	15°♁20'55	
desc. node	10568 Jun 27 02:21	20°♁38'25		evening max el	10569 May 11 22:15	16°♁12'26	19°20'11
morning max el	10568 Jul 08 14:36	28°♁19'44	27°01'34	retrograde	10569 May 18 23:47	20°♁11'10	
	10568 Jul 10 04:58	0°♄		evening set	10569 May 22 13:37	18°♁56'31	
	10568 Jul 31 20:03	0°♁		inferior conj	10569 May 27 23:42	13°♁05'15	3°17'45
morning set	10568 Aug 13 06:25	22°♁06'45		minimum elong	10569 May 27 23:53	13°♁04'36	3°17'16
	10568 Aug 17 06:26	0°♁		min. Earth dist.	10569 May 29 08:32	11°♁18'01	0.66853 AU
max. Earth dist.	10568 Aug 17 14:25	0°♁40'21	1.33771 AU	morning rise	10569 Jun 02 09:44	6°♁44'27	
asc. node	10568 Aug 20 05:06	6°♁01'47		direct	10569 Jun 08 12:51	4°♁03'04	
				desc. node	10569 Jun 13 23:24	5°♁44'28	
superior conj	10568 Aug 21 18:33	9°♁17'29	0°15'21	morning max el	10569 Jun 21 01:14	11°♁32'13	25°52'27
minimum elong	10568 Aug 21 17:46	9°♁13'22	0°14'57		10569 Jul 05 19:06	0°♄	
behind sun begin	10568 Aug 21 15:42	9°♁02'28			10569 Jul 24 11:36	0°♁	
behind sun end	10568 Aug 21 19:51	9°♁24'17		morning set	10569 Jul 27 02:36	4°♁44'57	
evening rise	10568 Aug 29 01:09	24°♁44'25		max. Earth dist.	10569 Jul 30 21:10	11°♁49'46	1.35527 AU
	10568 Aug 31 13:50	0°♁					
evening max el	10568 Sep 18 09:06	28°♁04'48	21°42'10	superior conj	10569 Aug 05 12:31	22°♁56'47	-0°15'11
	10568 Sep 20 12:05	0°♁		minimum elong	10569 Aug 05 13:26	23°♁01'26	0°15'22
desc. node	10568 Sep 23 00:18	1°♁49'09		behind sun begin	10569 Aug 05 11:35	22°♁52'03	
retrograde	10568 Sep 30 18:41	4°♁14'37		behind sun end	10569 Aug 05 15:18	23°♁10'50	
evening set	10568 Oct 03 14:49	3°♁56'23		asc. node	10569 Aug 07 01:56	26°♁07'04	
inferior conj	10568 Oct 12 15:32	29°♁59'20	-5°10'36		10569 Aug 08 23:17	0°♁	
minimum elong	10568 Oct 12 07:10	0°♁11'02	5°08'48	evening rise	10569 Aug 13 08:42	9°♁04'44	
min. Earth dist.	10568 Oct 12 11:41	0°♁04'44	0.54657 AU		10569 Aug 24 14:05	0°♁	
	10568 Oct 12 15:04	30°♁♁		evening max el	10569 Aug 31 10:51	8°♁48'33	20°17'51
morning rise	10568 Oct 21 00:40	26°♁11'14		desc. node	10569 Sep 09 21:35	14°♁06'42	
direct	10568 Oct 24 15:54	25°♁42'28		retrograde	10569 Sep 11 07:22	14°♁11'57	
	10568 Nov 04 05:01	0°♁		evening set	10569 Sep 13 07:21	14°♁01'46	
morning max el	10568 Nov 05 23:56	1°♁33'38	22°03'47	inferior conj	10569 Sep 22 09:09	10°♁03'57	-3°42'49
asc. node	10568 Nov 16 05:38	14°♁43'50		minimum elong	10569 Sep 21 23:47	10°♁17'44	3°39'45
	10568 Nov 24 12:28	0°♁		min. Earth dist.	10569 Sep 23 20:26	9°♁12'03	0.54843 AU
morning set	10568 Nov 27 06:44	5°♁42'51		morning rise	10569 Sep 30 15:27	5°♁58'09	
				direct	10569 Oct 05 01:14	5°♁16'17	
superior conj	10568 Dec 04 09:16	20°♁48'50	1°36'29	morning max el	10569 Oct 18 12:54	11°♁50'16	23°50'17
minimum elong	10568 Dec 04 10:30	20°♁55'15	1°36'56		10569 Nov 01 04:40	0°♁	
max. Earth dist.	10568 Dec 08 06:18	28°♁51'22	1.34420 AU	asc. node	10569 Nov 03 02:32	3°♁20'30	
	10568 Dec 08 19:50	0°♄		morning set	10569 Nov 11 18:27	20°♁31'01	
evening rise	10568 Dec 12 15:09	7°♄31'01			10569 Nov 16 03:36	0°♁	
desc. node	10568 Dec 19 22:34	20°♄54'28					
	10568 Dec 25 09:15	0°♁		superior conj	10569 Nov 18 15:39	5°♁26'57	1°39'51
evening max el	10569 Jan 16 15:43	29°♁18'51	26°55'42	minimum elong	10569 Nov 18 15:40	5°♁27'03	1°40'19
	10569 Jan 17 09:06	0°♁		max. Earth dist.	10569 Nov 21 03:54	10°♁51'02	1.32981 AU
retrograde	10569 Jan 29 21:38	6°♁40'26		evening rise	10569 Nov 26 05:02	21°♁19'06	
evening set	10569 Feb 05 11:29	4°♁06'33			10569 Nov 30 16:08	0°♄	
min. Earth dist.	10569 Feb 09 11:23	0°♁11'27	0.65748 AU	desc. node	10569 Dec 06 19:36	11°♄00'03	
	10569 Feb 09 15:26	30°♁♁			10569 Dec 19 06:38	0°♁	
inferior conj	10569 Feb 11 13:02	27°♁48'32	-0°12'49	evening max el	10569 Dec 30 04:14	12°♁40'57	27°26'23
minimum elong	10569 Feb 11 13:23	27°♁47'30	0°12'20	retrograde	10570 Jan 12 19:34	20°♁03'37	
transit middle	10569 Feb 11 13:23	27°♁47'30	0°12'20	evening set	10570 Jan 19 17:13	17°♁32'04	
transit begin	10569 Feb 11 11:29	27°♁52'59		min. Earth dist.	10570 Jan 23 12:30	14°♁08'52	0.64088 AU
transit end	10569 Feb 11 15:17	27°♁42'02		inferior conj	10570 Jan 26 01:37	11°♁29'19	-1°19'40
asc. node	10569 Feb 12 04:34	27°♁03'57		minimum elong	10570 Jan 26 04:07	11°♁22'45	1°18'11
morning rise	10569 Feb 17 16:31	22°♁12'27		asc. node	10570 Jan 30 01:47	7°♁42'22	
direct	10569 Feb 20 11:53	21°♁29'29		morning rise	10570 Feb 01 16:57	6°♁07'41	
morning max el	10569 Feb 26 21:41	24°♁52'46	18°09'15	direct	10570 Feb 04 04:14	5°♁37'02	
	10569 Mar 03 05:28	0°♁		morning max el	10570 Feb 10 15:02	8°♁57'43	17°50'06
morning set	10569 Mar 17 16:19	22°♁27'49			10570 Feb 24 20:54	0°♁	
desc. node	10569 Mar 17 23:00	22°♁54'50		morning set	10570 Feb 27 10:45	4°♁22'04	
	10569 Mar 22 08:24	0°♄		desc. node	10570 Mar 04 19:44	13°♁25'43	

superior conj	10570 Mar 12 13:57	26° $\text{H}$ 11'02	-0°55'43	desc. node	10571 Feb 19 16:31	4° $\text{H}$ 03'52	
minimum elong	10570 Mar 12 07:54	25° $\text{H}$ 46'34	0°54'48				
	10570 Mar 14 22:55	0° $\text{Y}$		superior conj	10571 Feb 21 10:43	7° $\text{H}$ 03'24	-0°13'17
max. Earth dist.	10570 Mar 17 19:06	4° $\text{Y}$ 31'09	1.44947 AU	minimum elong	10571 Feb 21 09:28	6° $\text{H}$ 58'05	0°12'51
evening rise	10570 Mar 28 08:06	20° $\text{Y}$ 55'19		behind sun begin	10571 Feb 21 04:09	6° $\text{H}$ 35'37	
	10570 Apr 03 07:13	0° $\text{B}$		behind sun end	10571 Feb 21 14:46	7° $\text{H}$ 20'31	
evening max el	10570 Apr 25 01:15	29° $\text{B}$ 54'53	20°18'11	max. Earth dist.	10571 Feb 28 11:01	18° $\text{H}$ 39'27	1.43633 AU
	10570 Apr 25 03:17	0° $\text{II}$		evening rise	10571 Mar 07 22:28	0° $\text{Y}$ 30'18	
asc. node	10570 Apr 27 23:43	2° $\text{II}$ 30'30			10571 Mar 07 14:40	0° $\text{Y}$	
retrograde	10570 May 02 22:30	4° $\text{II}$ 28'45			10571 Mar 27 21:55	0° $\text{B}$	
evening set	10570 May 06 21:28	2° $\text{II}$ 58'27		evening max el	10571 Apr 07 22:42	13° $\text{B}$ 38'24	21°28'36
	10570 May 09 20:03	30° $\text{R}$ $\text{B}$		asc. node	10571 Apr 14 20:55	18° $\text{B}$ 33'59	
inferior conj	10570 May 12 04:41	26° $\text{B}$ 53'55	3°13'43	retrograde	10571 Apr 16 20:50	18° $\text{B}$ 53'29	
minimum elong	10570 May 12 03:49	26° $\text{B}$ 56'52	3°13'14	evening set	10571 Apr 21 05:58	17° $\text{B}$ 07'41	
min. Earth dist.	10570 May 12 23:19	25° $\text{B}$ 50'19	0.67906 AU	inferior conj	10571 Apr 26 12:45	10° $\text{B}$ 52'05	2°58'32
morning rise	10570 May 17 09:55	20° $\text{B}$ 35'19		minimum elong	10571 Apr 26 11:05	10° $\text{B}$ 57'52	2°57'57
direct	10570 May 23 01:12	18° $\text{B}$ 04'54		min. Earth dist.	10571 Apr 26 18:07	10° $\text{B}$ 33'23	0.68501 AU
desc. node	10570 May 31 20:23	22° $\text{B}$ 27'23		morning rise	10571 May 01 15:59	4° $\text{B}$ 37'44	
morning max el	10570 Jun 03 10:58	24° $\text{B}$ 55'19	24°27'56	direct	10571 May 06 18:08	2° $\text{B}$ 24'40	
	10570 Jun 08 01:00	0° $\text{II}$		morning max el	10571 May 16 21:04	8° $\text{B}$ 24'57	22°58'03
	10570 Jun 29 06:18	0° $\text{B}$		desc. node	10571 May 18 17:18	10° $\text{B}$ 21'29	
morning set	10570 Jul 09 04:35	16° $\text{B}$ 31'15			10571 Jun 02 18:06	0° $\text{II}$	
max. Earth dist.	10570 Jul 12 19:40	22° $\text{B}$ 58'03	1.37650 AU	morning set	10571 Jun 20 07:08	27° $\text{II}$ 12'06	
	10570 Jul 16 15:17	0° $\text{Q}$			10571 Jun 21 23:23	0° $\text{B}$	
				max. Earth dist.	10571 Jun 24 16:25	4° $\text{B}$ 36'06	1.39943 AU
superior conj	10570 Jul 19 19:17	6° $\text{Q}$ 01'41	-0°48'08				
minimum elong	10570 Jul 19 22:27	6° $\text{Q}$ 16'57	0°48'02	superior conj	10571 Jul 02 10:50	18° $\text{B}$ 22'40	-1°21'04
asc. node	10570 Jul 24 22:49	16° $\text{Q}$ 08'16		minimum elong	10571 Jul 02 16:16	18° $\text{B}$ 47'33	1°20'48
evening rise	10570 Jul 28 10:46	23° $\text{Q}$ 06'40			10571 Jul 08 16:02	0° $\text{Q}$	
	10570 Jul 31 22:56	0° $\text{P}$		asc. node	10571 Jul 11 19:43	6° $\text{Q}$ 01'11	
evening max el	10570 Aug 14 02:25	20° $\text{P}$ 19'14	19°13'50	evening rise	10571 Jul 12 04:16	6° $\text{Q}$ 41'59	
retrograde	10570 Aug 23 06:44	24° $\text{P}$ 53'06			10571 Jul 25 22:18	0° $\text{P}$	
evening set	10570 Aug 25 03:01	24° $\text{P}$ 42'49		evening max el	10571 Jul 28 05:13	2° $\text{P}$ 33'29	18°30'59
desc. node	10570 Aug 27 18:51	23° $\text{P}$ 54'44		retrograde	10571 Aug 05 00:15	6° $\text{P}$ 27'38	
inferior conj	10570 Sep 02 16:05	20° $\text{P}$ 32'34	-1°49'50	evening set	10571 Aug 07 01:42	6° $\text{P}$ 12'07	
minimum elong	10570 Sep 02 11:14	20° $\text{P}$ 40'39	1°48'04	inferior conj	10571 Aug 14 19:46	1° $\text{P}$ 42'20	-0°02'48
min. Earth dist.	10570 Sep 05 09:05	18° $\text{P}$ 44'31	0.55944 AU	minimum elong	10571 Aug 14 19:39	1° $\text{P}$ 42'34	0°03'03
morning rise	10570 Sep 10 16:35	15° $\text{P}$ 52'49		transit middle	10571 Aug 14 19:39	1° $\text{P}$ 42'34	0°03'03
direct	10570 Sep 15 22:00	14° $\text{P}$ 49'59		transit begin	10571 Aug 14 16:07	1° $\text{P}$ 49'26	
morning max el	10570 Sep 30 00:48	22° $\text{P}$ 00'04	25°33'32	transit end	10571 Aug 14 23:10	1° $\text{P}$ 35'41	
	10570 Oct 07 02:04	0° $\text{A}$		desc. node	10571 Aug 14 16:07	1° $\text{P}$ 49'28	
asc. node	10570 Oct 20 23:24	22° $\text{A}$ 28'57			10571 Aug 17 00:04	30° $\text{R}$ $\text{Q}$	
	10570 Oct 24 17:50	0° $\text{M}$		min. Earth dist.	10571 Aug 18 02:57	29° $\text{Q}$ 08'59	0.57758 AU
morning set	10570 Oct 27 05:55	5° $\text{M}$ 15'52		morning rise	10571 Aug 22 10:04	26° $\text{Q}$ 25'41	
				direct	10571 Aug 28 09:21	24° $\text{Q}$ 55'04	
superior conj	10570 Nov 03 01:42	20° $\text{M}$ 13'33	1°37'02		10571 Sep 08 22:15	0° $\text{P}$	
minimum elong	10570 Nov 03 00:40	20° $\text{M}$ 07'48	1°37'22	morning max el	10571 Sep 11 17:28	2° $\text{P}$ 30'56	26°56'13
max. Earth dist.	10570 Nov 04 08:26	23° $\text{M}$ 02'53	1.32006 AU		10571 Oct 01 11:52	0° $\text{A}$	
	10570 Nov 07 13:13	0° $\text{J}$		asc. node	10571 Oct 07 20:13	12° $\text{A}$ 00'01	
evening rise	10570 Nov 10 03:51	5° $\text{J}$ 30'27		morning set	10571 Oct 11 15:25	19° $\text{A}$ 51'33	
	10570 Nov 23 06:34	0° $\text{B}$			10571 Oct 16 07:10	0° $\text{M}$	
desc. node	10570 Nov 23 16:41	0° $\text{B}$ 41'37					
evening max el	10570 Dec 12 13:55	25° $\text{B}$ 32'14	27°27'33	superior conj	10571 Oct 18 13:20	5° $\text{M}$ 01'10	1°28'28
	10570 Dec 18 03:37	0° $\approx$		minimum elong	10571 Oct 18 11:31	4° $\text{M}$ 51'02	1°28'33
retrograde	10570 Dec 26 10:19	2° $\approx$ 49'46		max. Earth dist.	10571 Oct 18 17:04	5° $\text{M}$ 21'54	1.31512 AU
evening set	10571 Jan 02 10:49	0° $\approx$ 29'20		evening rise	10571 Oct 25 08:55	19° $\text{M}$ 56'43	
	10571 Jan 03 03:52	30° $\text{R}$ $\text{B}$			10571 Oct 30 06:52	0° $\text{J}$	
min. Earth dist.	10571 Jan 06 03:56	27° $\text{B}$ 32'48	0.62153 AU	desc. node	10571 Nov 10 13:48	19° $\text{J}$ 48'37	
inferior conj	10571 Jan 09 02:39	24° $\text{B}$ 48'17	-2°33'05		10571 Nov 17 20:02	0° $\text{B}$	
minimum elong	10571 Jan 09 07:46	24° $\text{B}$ 36'21	2°30'36	evening max el	10571 Nov 24 18:14	7° $\text{B}$ 39'55	26°55'03
morning rise	10571 Jan 16 07:14	19° $\text{B}$ 43'53		retrograde	10571 Dec 08 16:28	14° $\text{B}$ 49'14	
asc. node	10571 Jan 16 22:56	19° $\text{B}$ 32'54		evening set	10571 Dec 15 12:27	12° $\text{B}$ 49'38	
direct	10571 Jan 18 12:42	19° $\text{B}$ 21'47		min. Earth dist.	10571 Dec 19 08:42	10° $\text{B}$ 10'32	0.60057 AU
morning max el	10571 Jan 25 08:09	22° $\text{B}$ 49'31	17°48'35	inferior conj	10571 Dec 22 12:41	7° $\text{B}$ 35'43	-3°48'30
	10571 Jan 30 23:08	0° $\approx$		minimum elong	10571 Dec 22 20:07	7° $\text{B}$ 20'31	3°45'35
morning set	10571 Feb 10 03:42	17° $\approx$ 20'29		morning rise	10571 Dec 30 06:26	2° $\text{B}$ 51'34	
	10571 Feb 17 07:54	0° $\text{H}$		direct	10572 Jan 01 09:32	2° $\text{B}$ 34'19	

asc. node	10572 Jan 03 20:03	2°♄57'58		morning max el	10572 Dec 22 03:30	19°♄13'28	18°44'02
morning max el	10572 Jan 08 21:33	6°♄18'11	18°05'58		10572 Dec 30 02:55	0°♄	
	10572 Jan 23 23:09	0°♄		morning set	10573 Jan 07 09:13	15°♄17'30	
morning set	10572 Jan 24 12:51	1°♄03'56			10573 Jan 14 23:24	0°♄	
superior conj	10572 Feb 03 07:46	19°♄03'59	0°24'38	superior conj	10573 Jan 16 01:03	2°♄01'19	0°54'59
minimum elong	10572 Feb 03 09:40	19°♄12'26	0°24'43	minimum elong	10573 Jan 16 04:06	2°♄15'40	0°55'02
desc. node	10572 Feb 06 13:16	24°♄45'19		desc. node	10573 Jan 23 10:04	15°♄26'36	
	10572 Feb 09 14:36	0°♄		max. Earth dist.	10573 Jan 23 06:31	15°♄11'00	1.39664 AU
max. Earth dist.	10572 Feb 10 22:43	2°♄15'20	1.41803 AU	evening rise	10573 Jan 27 06:32	22°♄04'24	
evening rise	10572 Feb 16 03:58	10°♄49'24			10573 Feb 01 01:53	0°♄	
	10572 Feb 28 15:13	0°♄			10573 Feb 21 15:00	0°♄	
evening max el	10572 Mar 20 15:39	27°♄24'08	22°46'55	evening max el	10573 Mar 03 05:51	11°♄12'12	24°07'17
	10572 Mar 23 11:31	0°♄		retrograde	10573 Mar 14 10:16	17°♄46'16	
retrograde	10572 Mar 30 17:11	3°♄21'05		asc. node	10573 Mar 18 15:24	16°♄23'46	
asc. node	10572 Mar 31 18:08	3°♄15'51		evening set	10573 Mar 19 18:34	15°♄31'58	
evening set	10572 Apr 04 13:31	1°♄20'22		min. Earth dist.	10573 Mar 24 10:56	10°♄08'04	0.68355 AU
	10572 Apr 05 23:00	30°♄		inferior conj	10573 Mar 25 06:10	9°♄03'03	1°58'46
inferior conj	10572 Apr 09 21:52	24°♄56'23	2°33'23	minimum elong	10573 Mar 25 04:01	9°♄10'20	1°58'03
minimum elong	10572 Apr 09 19:45	25°♄03'44	2°32'40	morning rise	10573 Mar 30 13:31	3°♄01'28	
min. Earth dist.	10572 Apr 09 14:44	25°♄21'10	0.68644 AU	direct	10573 Apr 03 13:07	1°♄31'20	
morning rise	10572 Apr 15 01:52	18°♄47'47		morning max el	10573 Apr 11 07:43	5°♄54'28	20°15'43
direct	10572 Apr 19 14:32	16°♄55'42		desc. node	10573 Apr 21 10:57	18°♄30'38	
morning max el	10572 Apr 28 10:57	22°♄03'45	21°31'49		10573 Apr 29 08:51	0°♄	
desc. node	10572 May 04 14:10	29°♄07'26		morning set	10573 May 09 10:03	15°♄15'12	
	10572 May 05 06:36	0°♄			10573 May 18 19:28	0°♄	
	10572 May 26 00:48	0°♄		max. Earth dist.	10573 May 19 03:23	0°♄31'41	1.43921 AU
morning set	10572 May 30 07:09	6°♄40'52		superior conj	10573 May 25 02:42	10°♄13'24	-2°09'04
max. Earth dist.	10572 Jun 05 18:18	17°♄07'47	1.42123 AU	minimum elong	10573 May 25 06:43	10°♄29'53	2°09'25
superior conj	10572 Jun 13 06:39	29°♄49'39	-1°49'58		10573 Jun 05 19:12	0°♄	
minimum elong	10572 Jun 13 13:05	0°♄17'31	1°49'53	evening rise	10573 Jun 06 21:12	1°♄52'35	
	10572 Jun 13 09:03	0°♄		asc. node	10573 Jun 14 13:41	15°♄03'42	
evening rise	10572 Jun 24 09:20	19°♄41'19		evening max el	10573 Jun 24 04:38	28°♄34'48	18°05'18
asc. node	10572 Jun 27 16:40	25°♄41'38			10573 Jun 25 19:13	0°♄	
	10572 Jun 30 02:38	0°♄		retrograde	10573 Jun 30 15:02	1°♄55'25	
evening max el	10572 Jul 10 15:16	15°♄22'15	18°08'28	evening set	10573 Jul 03 07:56	1°♄18'52	
retrograde	10572 Jul 17 12:22	18°♄52'01			10573 Jul 05 12:29	30°♄	
evening set	10572 Jul 19 21:26	18°♄27'23		inferior conj	10573 Jul 09 15:59	26°♄09'05	2°20'14
inferior conj	10572 Jul 26 20:50	13°♄36'45	1°21'31	minimum elong	10573 Jul 09 18:44	26°♄01'55	2°19'01
minimum elong	10572 Jul 26 23:10	13°♄31'26	1°20'18	min. Earth dist.	10573 Jul 12 14:03	23°♄07'53	0.62215 AU
min. Earth dist.	10572 Jul 30 04:02	10°♄38'02	0.59957 AU	morning rise	10573 Jul 16 03:27	20°♄02'04	
desc. node	10572 Jul 31 13:20	9°♄29'11		desc. node	10573 Jul 18 10:32	18°♄39'38	
morning rise	10572 Aug 02 21:55	7°♄49'48		direct	10573 Jul 22 20:15	17°♄37'37	
direct	10572 Aug 09 09:27	5°♄49'58		morning max el	10573 Aug 05 23:33	25°♄39'43	27°56'20
morning max el	10572 Aug 23 17:21	13°♄42'48	27°45'29		10573 Aug 09 23:37	0°♄	
	10572 Sep 05 18:06	0°♄			10573 Aug 30 06:46	0°♄	
	10572 Sep 22 20:02	0°♄		morning set	10573 Sep 08 21:20	18°♄16'30	
asc. node	10572 Sep 23 17:01	1°♄47'17		asc. node	10573 Sep 10 13:49	21°♄45'08	
morning set	10572 Sep 24 21:14	4°♄13'37			10573 Sep 14 10:52	0°♄	
max. Earth dist.	10572 Oct 01 02:19	17°♄39'53	1.31505 AU	max. Earth dist.	10573 Sep 14 08:12	29°♄45'38	1.31985 AU
superior conj	10572 Oct 02 00:45	19°♄44'20	1°14'28	superior conj	10573 Sep 16 10:07	4°♄17'35	0°55'17
minimum elong	10572 Oct 01 22:33	19°♄32'02	1°14'17	minimum elong	10573 Sep 16 08:00	4°♄05'56	0°54'54
	10572 Oct 06 15:56	0°♄		evening rise	10573 Sep 23 05:12	19°♄09'58	
evening rise	10572 Oct 08 18:02	4°♄31'51			10573 Sep 28 10:45	0°♄	
	10572 Oct 22 02:20	0°♄		desc. node	10573 Oct 14 08:13	25°♄20'29	
desc. node	10572 Oct 27 10:59	8°♄07'42		evening max el	10573 Oct 18 03:26	29°♄24'44	24°18'18
evening max el	10572 Nov 05 14:42	18°♄55'53	25°49'14		10573 Oct 18 18:25	0°♄	
retrograde	10572 Nov 19 12:14	25°♄57'11		retrograde	10573 Oct 31 20:19	6°♄16'41	
evening set	10572 Nov 25 17:34	24°♄26'42		evening set	10573 Nov 05 22:28	5°♄19'33	
min. Earth dist.	10572 Nov 30 03:14	21°♄50'43	0.57980 AU	min. Earth dist.	10573 Nov 11 14:19	2°♄27'49	0.56178 AU
inferior conj	10572 Dec 03 04:14	19°♄41'47	-4°56'21	inferior conj	10573 Nov 13 23:20	0°♄59'32	-5°39'58
minimum elong	10572 Dec 03 11:57	19°♄28'06	4°54'09	minimum elong	10573 Nov 14 02:55	0°♄53'58	5°39'14
morning rise	10572 Dec 11 08:45	15°♄20'14			10573 Nov 15 14:14	30°♄	
direct	10572 Dec 13 14:17	15°♄04'27		morning rise	10573 Nov 22 09:28	26°♄59'28	
asc. node	10572 Dec 20 17:07	17°♄56'57		direct	10573 Nov 24 23:37	26°♄41'49	

	10573 Dec 03 07:23	0°♊		direct	10574 Nov 05 15:15	7°♎20'12	
morning max el	10573 Dec 04 22:21	1°♊25'25	19°44'31	morning max el	10574 Nov 17 03:40	12°♎46'25	21°07'24
asc. node	10573 Dec 07 14:08	4°♊16'57		asc. node	10574 Nov 24 11:06	21°♎41'08	
morning set	10573 Dec 22 13:08	29°♊50'37			10574 Nov 29 11:54	0°♊	
	10573 Dec 22 15:00	0°♊		morning set	10574 Dec 06 21:44	14°♊34'02	
superior conj	10573 Dec 30 09:44	15°♊41'58	1°17'09	superior conj	10574 Dec 14 05:23	29°♊52'13	1°31'30
minimum elong	10573 Dec 30 12:34	15°♊55'58	1°17'21	minimum elong	10574 Dec 14 07:16	0°♊02'00	1°31'53
max. Earth dist.	10574 Jan 05 12:45	27°♊28'04	1.37460 AU		10574 Dec 14 06:53	0°♊	
	10574 Jan 06 21:43	0°♊		max. Earth dist.	10574 Dec 18 22:11	9°♊22'18	1.35433 AU
evening rise	10574 Jan 09 06:04	4°♊14'16		evening rise	10574 Dec 22 23:23	17°♊09'43	
desc. node	10574 Jan 10 06:58	6°♊04'25		desc. node	10574 Dec 28 03:54	26°♊33'45	
	10574 Jan 25 02:18	0°♊			10574 Dec 30 03:42	0°♊	
evening max el	10574 Feb 13 19:07	25°♊02'06	25°22'59		10575 Jan 19 10:50	0°♊	
	10574 Feb 19 20:36	0°♊		evening max el	10575 Jan 27 08:32	8°♊48'46	26°27'01
retrograde	10574 Feb 25 23:11	2°♊04'08		retrograde	10575 Feb 09 07:01	16°♊06'54	
	10574 Mar 03 09:11	30°♊		evening set	10575 Feb 15 14:50	13°♊34'42	
evening set	10574 Mar 03 19:36	29°♊38'50		min. Earth dist.	10575 Feb 19 17:49	9°♊20'02	0.66549 AU
asc. node	10574 Mar 05 12:38	28°♊00'29		asc. node	10575 Feb 20 09:53	8°♊31'50	
min. Earth dist.	10574 Mar 08 04:43	24°♊49'49	0.67650 AU	inferior conj	10575 Feb 21 12:42	7°♊10'27	0°21'51
inferior conj	10574 Mar 09 11:47	23°♊09'28	1°14'55	minimum elong	10575 Feb 21 12:07	7°♊12'13	0°21'52
minimum elong	10574 Mar 09 10:07	23°♊14'51	1°14'24	morning rise	10575 Feb 27 10:20	1°♊27'19	
morning rise	10574 Mar 15 01:04	17°♊16'11		direct	10575 Mar 02 11:02	0°♊35'44	
direct	10574 Mar 18 12:31	16°♊06'45		morning max el	10575 Mar 08 23:53	4°♊05'47	18°27'53
morning max el	10574 Mar 25 12:24	19°♊57'02	19°13'46	desc. node	10575 Mar 26 04:30	28°♊32'12	
	10574 Apr 02 14:45	0°♊			10575 Mar 27 02:42	0°♊	
greatest brilliancy	10574 Apr 07 11:16	7°♊04'53	-0.7m	morning set	10575 Mar 29 08:44	3°♊33'56	
desc. node	10574 Apr 08 07:44	8°♊21'32					
morning set	10574 Apr 18 11:12	23°♊52'23		superior conj	10575 Apr 14 06:32	28°♊35'01	-1°54'15
	10574 Apr 22 10:13	0°♊		minimum elong	10575 Apr 13 21:43	28°♊00'34	1°53'48
max. Earth dist.	10574 May 01 18:12	14°♊33'57	1.45137 AU	max. Earth dist.	10575 Apr 14 12:41	28°♊59'04	1.45651 AU
					10575 Apr 15 04:17	0°♊	
superior conj	10574 May 04 23:30	19°♊39'08	-2°11'47	evening rise	10575 Apr 30 01:17	23°♊21'16	
minimum elong	10574 May 04 20:48	19°♊28'25	2°12'07		10575 May 04 06:10	0°♊	
	10574 May 11 10:43	0°♊		greatest brilliancy	10575 May 09 09:32	8°♊04'30	-0.8m
evening rise	10574 May 19 11:16	13°♊06'32		asc. node	10575 May 19 07:52	22°♊25'26	
	10574 May 29 19:37	0°♊		evening max el	10575 May 22 04:55	25°♊40'42	18°53'46
asc. node	10574 Jun 01 10:45	4°♊01'06		retrograde	10575 May 28 22:23	29°♊23'46	
evening max el	10574 Jun 07 18:05	12°♊03'07	18°20'40	evening set	10575 Jun 01 07:16	28°♊18'15	
retrograde	10574 Jun 14 03:41	15°♊28'37		inferior conj	10575 Jun 06 20:17	22°♊35'40	3°14'18
evening set	10574 Jun 17 04:24	14°♊38'12		minimum elong	10575 Jun 06 21:10	22°♊32'54	3°13'43
inferior conj	10574 Jun 23 01:05	9°♊11'13	2°56'24	min. Earth dist.	10575 Jun 08 13:50	20°♊25'02	0.66039 AU
minimum elong	10574 Jun 23 03:06	9°♊05'20	2°55'32	morning rise	10575 Jun 12 10:24	16°♊14'51	
min. Earth dist.	10574 Jun 25 09:37	6°♊27'53	0.64295 AU	direct	10575 Jun 18 19:17	13°♊30'39	
morning rise	10574 Jun 29 00:34	2°♊53'50		desc. node	10575 Jun 22 04:48	14°♊10'18	
desc. node	10574 Jul 05 07:42	0°♊14'15		morning max el	10575 Jul 01 20:06	21°♊16'04	26°34'40
direct	10574 Jul 05 16:03	0°♊13'51			10575 Jul 09 09:43	0°♊	
morning max el	10574 Jul 19 09:23	8°♊14'45	27°30'32		10575 Jul 29 10:09	0°♊	
	10574 Aug 05 05:41	0°♊		morning set	10575 Aug 06 17:45	14°♊56'07	
	10574 Aug 22 14:02	0°♊		max. Earth dist.	10575 Aug 10 19:11	22°♊47'10	1.34453 AU
morning set	10574 Aug 23 13:14	1°♊53'31			10575 Aug 14 09:06	0°♊	
asc. node	10574 Aug 28 10:38	11°♊49'04		asc. node	10575 Aug 15 07:27	1°♊55'00	
max. Earth dist.	10574 Aug 28 06:49	11°♊29'10	1.32967 AU				
superior conj	10574 Aug 31 15:26	18°♊35'08	0°31'14	superior conj	10575 Aug 15 14:21	2°♊30'41	0°02'50
minimum elong	10574 Aug 31 13:58	18°♊27'19	0°30'47	minimum elong	10575 Aug 15 14:13	2°♊29'57	0°02'31
	10574 Sep 05 22:26	0°♊		behind sun begin	10575 Aug 15 08:26	2°♊00'04	
evening rise	10574 Sep 07 16:32	3°♊45'34		behind sun end	10575 Aug 15 19:59	2°♊59'52	
	10574 Sep 21 20:32	0°♊		evening rise	10575 Aug 23 02:04	18°♊13'04	
evening max el	10574 Sep 29 14:23	9°♊31'55	22°37'45		10575 Aug 28 22:35	0°♊	
desc. node	10574 Oct 01 05:31	11°♊01'51		evening max el	10575 Sep 11 09:00	19°♊54'55	21°04'14
retrograde	10574 Oct 12 16:18	16°♊02'46		desc. node	10575 Sep 18 02:49	24°♊42'07	
evening set	10574 Oct 16 06:45	15°♊34'18		retrograde	10575 Sep 23 04:07	25°♊46'00	
min. Earth dist.	10574 Oct 23 22:07	12°♊08'40	0.54968 AU	evening set	10575 Sep 25 13:18	25°♊32'39	
inferior conj	10574 Oct 25 00:16	11°♊31'29	-5°38'04	inferior conj	10575 Oct 04 16:30	21°♊37'20	-4°38'44
minimum elong	10574 Oct 24 19:46	11°♊37'53	5°37'20	minimum elong	10575 Oct 04 06:44	21°♊51'07	4°36'07
morning rise	10574 Nov 02 10:30	7°♊43'35		min. Earth dist.	10575 Oct 05 05:57	21°♊18'19	0.54614 AU
				morning rise	10575 Oct 13 00:31	17°♊43'57	

direct	10575 Oct 16 23:33	17°♄10'13			10576 Sep 16 12:53	30°♄♊		
morning max el	10575 Oct 29 20:49	23°♄20'48	22°48'13	morning rise	10576 Sep 21 18:36	27°♊29'06		
	10575 Nov 04 18:25	0°♊		direct	10576 Sep 26 13:01	26°♊39'09		
asc. node	10575 Nov 11 08:02	9°♊55'02			10576 Oct 06 01:44	0°♄		
morning set	10575 Nov 21 08:50	29°♊21'57		morning max el	10576 Oct 10 08:05	3°♄29'00	24°35'38	
	10575 Nov 21 16:01	0°♊		asc. node	10576 Oct 28 04:54	28°♄45'56		
					10576 Oct 28 20:45	0°♊		
superior conj	10575 Nov 28 08:38	14°♊22'24	1°38'41	morning set	10576 Nov 04 20:39	14°♊08'49		
minimum elong	10575 Nov 28 09:20	14°♊26'10	1°39'10					
max. Earth dist.	10575 Dec 01 15:08	21°♊16'35	1.33759 AU	superior conj	10576 Nov 11 16:48	29°♊04'17	1°39'22	
	10575 Dec 05 22:23	0°♊		minimum elong	10576 Nov 11 16:21	29°♊01'47	1°39'48	
evening rise	10575 Dec 06 06:48	0°♊41'25			10576 Nov 12 02:59	0°♊		
desc. node	10575 Dec 15 00:55	16°♊49'44		max. Earth dist.	10576 Nov 13 16:06	3°♊21'52	1.32513 AU	
	10575 Dec 23 04:13	0°♊		evening rise	10576 Nov 19 00:49	14°♊40'01		
evening max el	10576 Jan 09 21:58	22°♊23'46	27°11'58		10576 Nov 27 00:29	0°♊		
retrograde	10576 Jan 23 08:44	29°♊46'40		desc. node	10576 Nov 30 21:58	6°♊46'04		
evening set	10576 Jan 30 02:11	27°♊13'09			10576 Dec 17 03:39	0°♊		
min. Earth dist.	10576 Feb 03 00:03	23°♊31'39	0.65084 AU	evening max el	10576 Dec 22 09:48	5°♊34'59	27°30'49	
inferior conj	10576 Feb 05 06:34	21°♊00'37	-0°40'11	retrograde	10577 Jan 05 03:31	12°♊55'03		
minimum elong	10576 Feb 05 07:45	20°♊57'19	0°39'18	evening set	10577 Jan 12 03:08	10°♊27'24		
asc. node	10576 Feb 07 07:07	18°♊50'15		min. Earth dist.	10577 Jan 15 21:14	7°♊16'15	0.63300 AU	
morning rise	10576 Feb 11 14:51	15°♊30'00		inferior conj	10577 Jan 18 14:40	4°♊33'19	-1°50'08	
direct	10576 Feb 14 06:29	14°♊52'45		minimum elong	10577 Jan 18 18:15	4°♊24'22	1°48'13	
morning max el	10576 Feb 20 15:50	18°♊13'54	17°58'51	asc. node	10577 Jan 24 04:17	29°♊54'44		
	10576 Feb 29 10:38	0°♊			10577 Jan 24 00:35	30°♊♊		
morning set	10576 Mar 09 11:28	14°♊42'40		morning rise	10577 Jan 25 11:30	29°♊18'23		
desc. node	10576 Mar 12 01:14	18°♊56'56		direct	10577 Jan 27 20:06	28°♊51'41		
	10576 Mar 18 20:13	0°♊			10577 Jan 31 14:11	0°♊		
				morning max el	10577 Feb 03 09:27	2°♊14'01	17°47'10	
superior conj	10576 Mar 23 17:28	7°♊48'18	-1°19'43	morning set	10577 Feb 19 16:21	27°♊07'15		
minimum elong	10576 Mar 23 08:57	7°♊14'32	1°18'44		10577 Feb 21 08:19	0°♊		
max. Earth dist.	10576 Mar 27 08:34	13°♊31'57	1.45419 AU	desc. node	10577 Feb 26 21:58	9°♊31'23		
	10576 Apr 06 22:46	0°♊						
evening rise	10576 Apr 08 19:44	2°♊53'14		superior conj	10577 Mar 03 23:57	17°♊59'54	-0°37'29	
greatest brilliancy	10576 Apr 22 19:10	24°♊05'52	-0.6m	minimum elong	10577 Mar 03 20:01	17°♊43'43	0°36'45	
	10576 Apr 26 21:39	0°♊		max. Earth dist.	10577 Mar 10 03:12	27°♊56'09	1.44469 AU	
evening max el	10576 May 04 11:11	9°♊22'26	19°43'13		10577 Mar 11 10:21	0°♊		
asc. node	10576 May 05 05:01	10°♊05'59		evening rise	10577 Mar 19 07:12	12°♊16'46		
retrograde	10576 May 11 20:13	13°♊34'39			10577 Mar 31 01:41	0°♊		
evening set	10576 May 15 13:53	12°♊13'21		evening max el	10577 Apr 17 11:52	23°♊05'52	20°46'50	
inferior conj	10576 May 20 22:26	6°♊16'27	3°17'30	asc. node	10577 Apr 22 02:14	26°♊49'47		
minimum elong	10576 May 20 22:10	6°♊17'23	3°17'01	retrograde	10577 Apr 25 18:57	27°♊56'20		
min. Earth dist.	10576 May 22 01:10	4°♊47'19	0.67361 AU	evening set	10577 Apr 29 22:15	26°♊19'11		
morning rise	10576 May 26 06:06	29°♊56'29		inferior conj	10577 May 05 05:00	20°♊09'40	3°08'33	
	10576 May 26 04:33	30°♊♊		minimum elong	10577 May 05 03:46	20°♊13'57	3°08'01	
direct	10576 Jun 01 04:34	27°♊18'37		min. Earth dist.	10577 May 05 17:49	19°♊25'27	0.68221 AU	
desc. node	10576 Jun 08 01:48	0°♊00'36		morning rise	10577 May 10 09:04	13°♊52'55		
	10576 Jun 08 01:28	0°♊		direct	10577 May 15 18:53	11°♊29'28		
morning max el	10576 Jun 13 06:02	4°♊32'31	25°17'44	desc. node	10577 May 25 22:43	17°♊16'42		
	10576 Jul 02 18:39	0°♊		morning max el	10577 May 26 15:38	17°♊58'41	23°49'48	
morning set	10576 Jul 19 06:42	27°♊12'53			10577 Jun 05 17:02	0°♊		
	10576 Jul 20 19:34	0°♊			10577 Jun 25 20:23	0°♊		
max. Earth dist.	10576 Jul 22 21:35	3°♊51'09	1.36393 AU	morning set	10577 Jun 30 23:15	8°♊32'18		
				max. Earth dist.	10577 Jul 04 18:57	15°♊10'29	1.38629 AU	
superior conj	10576 Jul 29 03:57	15°♊56'00	-0°28'58					
minimum elong	10576 Jul 29 05:46	16°♊05'03	0°29'02	superior conj	10577 Jul 12 04:45	28°♊43'08	-1°02'18	
asc. node	10576 Aug 01 04:17	21°♊58'40		minimum elong	10577 Jul 12 08:55	29°♊02'52	1°02'06	
	10576 Aug 05 02:53	0°♊			10577 Jul 12 20:59	0°♊		
evening rise	10576 Aug 06 07:33	2°♊25'48		asc. node	10577 Jul 19 01:10	11°♊56'41		
	10576 Aug 22 18:30	0°♊		evening rise	10577 Jul 21 06:23	16°♊17'20		
evening max el	10576 Aug 23 16:43	0°♊57'41	19°48'04		10577 Jul 28 12:59	0°♊		
retrograde	10576 Sep 02 19:28	5°♊59'00		evening max el	10577 Aug 06 13:23	12°♊46'37	18°52'57	
desc. node	10576 Sep 04 00:07	5°♊55'04		retrograde	10577 Aug 15 02:16	17°♊02'11		
evening set	10576 Sep 04 16:30	5°♊49'24		evening set	10577 Aug 17 00:11	16°♊50'10		
inferior conj	10576 Sep 13 14:12	1°♊47'39	-2°55'56	desc. node	10577 Aug 21 21:22	14°♊45'51		
minimum elong	10576 Sep 13 06:24	1°♊59'39	2°53'09	inferior conj	10577 Aug 25 05:23	12°♊31'34	-1°02'14	
min. Earth dist.	10576 Sep 15 15:51	0°♊31'21	0.55210 AU	minimum elong	10577 Aug 25 02:46	12°♊36'15	1°01'24	



min. Earth dist.	10577 Aug 28 06:11	10° $\mathbb{M}$ 22'33	0.56649 AU	desc. node	10578 Aug 08 18:35	22° $\Omega$ 19'53	
morning rise	10577 Sep 02 02:05	7° $\mathbb{M}$ 35'52		min. Earth dist.	10578 Aug 10 03:05	21° $\Omega$ 13'45	0.58661 AU
direct	10577 Sep 07 15:24	6° $\mathbb{M}$ 22'07		morning rise	10578 Aug 14 03:16	18° $\Omega$ 29'43	
morning max el	10577 Sep 21 21:29	13° $\mathbb{M}$ 43'43	26°12'19	direct	10578 Aug 20 08:22	16° $\Omega$ 46'30	
	10577 Oct 04 18:32	0° $\underline{\mathbf{A}}$		morning max el	10578 Sep 03 17:25	24° $\Omega$ 31'23	27°21'52
asc. node	10577 Oct 15 01:43	18° $\underline{\mathbf{A}}$ 04'17			10578 Sep 08 17:44	0° $\mathbb{M}$	
morning set	10577 Oct 20 07:28	28° $\underline{\mathbf{A}}$ 49'46			10578 Sep 28 00:19	0° $\underline{\mathbf{A}}$	
	10577 Oct 20 20:35	0° $\mathbb{M}$		asc. node	10578 Oct 01 22:32	7° $\underline{\mathbf{A}}$ 42'55	
				morning set	10578 Oct 04 15:39	13° $\underline{\mathbf{A}}$ 20'28	
superior conj	10577 Oct 27 03:43	13° $\mathbb{M}$ 51'10	1°34'04	superior conj	10578 Oct 11 15:30	28° $\underline{\mathbf{A}}$ 37'37	1°23'11
minimum elong	10577 Oct 27 02:18	13° $\mathbb{M}$ 43'19	1°34'19	minimum elong	10578 Oct 11 13:28	28° $\underline{\mathbf{A}}$ 26'16	1°23'10
max. Earth dist.	10577 Oct 27 22:55	15° $\mathbb{M}$ 37'36	1.31734 AU	max. Earth dist.	10578 Oct 11 08:13	27° $\underline{\mathbf{A}}$ 57'03	1.31440 AU
evening rise	10577 Nov 03 02:33	28° $\mathbb{M}$ 57'37			10578 Oct 12 06:18	0° $\mathbb{M}$	
	10577 Nov 03 14:29	0° $\mathbb{M}$		evening rise	10578 Oct 18 09:36	13° $\mathbb{M}$ 28'10	
desc. node	10577 Nov 17 19:05	26° $\mathbb{M}$ 14'06			10578 Oct 26 15:56	0° $\mathbb{M}$	
	10577 Nov 20 04:57	0° $\mathbb{M}$		desc. node	10578 Nov 04 16:16	15° $\mathbb{M}$ 02'52	
evening max el	10577 Dec 04 17:27	18° $\mathbb{M}$ 08'25	27°17'57		10578 Nov 16 21:02	0° $\mathbb{M}$	
retrograde	10577 Dec 18 14:34	25° $\mathbb{M}$ 22'21		evening max el	10578 Nov 16 18:24	29° $\mathbb{M}$ 53'49	26°30'53
evening set	10577 Dec 25 14:27	23° $\mathbb{M}$ 09'21		retrograde	10578 Nov 30 16:50	7° $\mathbb{M}$ 00'40	
min. Earth dist.	10577 Dec 29 07:55	20° $\mathbb{M}$ 22'03	0.61273 AU	evening set	10578 Dec 07 08:02	5° $\mathbb{M}$ 12'14	
inferior conj	10578 Jan 01 09:45	17° $\mathbb{M}$ 39'39	-3°05'14	min. Earth dist.	10578 Dec 11 08:06	2° $\mathbb{M}$ 36'43	0.59149 AU
minimum elong	10578 Jan 01 15:57	17° $\mathbb{M}$ 25'57	3°02'28	inferior conj	10578 Dec 14 12:18	0° $\mathbb{M}$ 10'32	-4°19'03
morning rise	10578 Jan 08 20:03	12° $\mathbb{M}$ 43'44		minimum elong	10578 Dec 14 20:15	29° $\mathbb{M}$ 55'14	4°16'16
direct	10578 Jan 11 00:09	12° $\mathbb{M}$ 24'03			10578 Dec 14 17:46	30° $\mathbb{M}$ 00'00	
asc. node	10578 Jan 11 01:25	12° $\mathbb{M}$ 24'03		morning rise	10578 Dec 22 11:09	25° $\mathbb{M}$ 36'14	
morning max el	10578 Jan 18 01:27	15° $\mathbb{M}$ 57'08	17°53'38	direct	10578 Dec 24 14:28	25° $\mathbb{M}$ 20'08	
	10578 Jan 27 20:49	0° $\mathbb{M}$		asc. node	10578 Dec 28 22:30	26° $\mathbb{M}$ 30'11	
morning set	10578 Feb 02 16:54	10° $\mathbb{M}$ 26'51		morning max el	10579 Jan 01 12:17	29° $\mathbb{M}$ 13'33	18°19'37
					10579 Jan 02 06:32	0° $\mathbb{M}$	
superior conj	10578 Feb 13 07:27	29° $\mathbb{M}$ 22'38	0°03'36	morning set	10579 Jan 17 07:24	24° $\mathbb{M}$ 24'42	
minimum elong	10578 Feb 13 07:47	29° $\mathbb{M}$ 24'07	0°03'52		10579 Jan 20 05:51	0° $\mathbb{M}$	
behind sun begin	10578 Feb 12 23:41	28° $\mathbb{M}$ 48'59		superior conj	10579 Jan 26 13:49	11° $\mathbb{M}$ 49'36	0°38'28
behind sun end	10578 Feb 13 15:54	29° $\mathbb{M}$ 59'10		minimum elong	10579 Jan 26 16:24	12° $\mathbb{M}$ 01'28	0°38'30
desc. node	10578 Feb 13 18:43	0° $\mathbb{M}$ 11'18		desc. node	10579 Jan 31 15:32	20° $\mathbb{M}$ 53'20	
	10578 Feb 13 16:06	0° $\mathbb{M}$		max. Earth dist.	10579 Feb 03 03:17	25° $\mathbb{M}$ 11'15	1.40914 AU
max. Earth dist.	10578 Feb 20 17:49	11° $\mathbb{M}$ 53'31	1.42907 AU		10579 Feb 05 23:48	0° $\mathbb{M}$	
evening rise	10578 Feb 27 02:47	22° $\mathbb{M}$ 07'35		evening rise	10579 Feb 07 17:00	2° $\mathbb{M}$ 50'07	
	10578 Mar 04 04:43	0° $\mathbb{M}$			10579 Feb 25 12:20	0° $\mathbb{M}$	
	10578 Mar 25 08:08	0° $\mathbb{M}$		evening max el	10579 Mar 13 22:32	20° $\mathbb{M}$ 35'46	23°21'07
evening max el	10578 Mar 31 07:06	6° $\mathbb{M}$ 49'34	22°01'09	retrograde	10579 Mar 24 11:59	26° $\mathbb{M}$ 50'04	
asc. node	10578 Apr 08 23:28	12° $\mathbb{M}$ 20'25		asc. node	10579 Mar 26 20:42	26° $\mathbb{M}$ 23'21	
retrograde	10578 Apr 09 16:44	12° $\mathbb{M}$ 22'57		evening set	10579 Mar 29 13:15	24° $\mathbb{M}$ 43'24	
evening set	10578 Apr 14 06:33	10° $\mathbb{M}$ 30'28		inferior conj	10579 Apr 03 22:47	18° $\mathbb{M}$ 16'33	2°19'50
inferior conj	10578 Apr 19 13:45	4° $\mathbb{M}$ 10'40	2°49'02	minimum elong	10579 Apr 03 20:36	18° $\mathbb{M}$ 24'05	2°19'06
minimum elong	10578 Apr 19 11:51	4° $\mathbb{M}$ 17'18	2°48'23	min. Earth dist.	10579 Apr 03 10:28	18° $\mathbb{M}$ 58'59	0.68575 AU
min. Earth dist.	10578 Apr 19 13:38	4° $\mathbb{M}$ 11'07	0.68619 AU	morning rise	10579 Apr 09 03:54	12° $\mathbb{M}$ 10'33	
	10578 Apr 22 17:44	30° $\mathbb{M}$ 00'00		direct	10579 Apr 13 10:49	10° $\mathbb{M}$ 27'56	
morning rise	10578 Apr 24 17:01	27° $\mathbb{M}$ 58'40		morning max el	10579 Apr 21 19:41	15° $\mathbb{M}$ 16'05	20°57'46
direct	10578 Apr 29 13:19	25° $\mathbb{M}$ 54'33		desc. node	10579 Apr 29 16:25	24° $\mathbb{M}$ 37'46	
	10578 May 07 12:23	0° $\mathbb{M}$			10579 May 03 14:36	0° $\mathbb{M}$	
morning max el	10578 May 09 03:07	1° $\mathbb{M}$ 32'24	22°20'27	morning set	10579 May 22 04:09	27° $\mathbb{M}$ 43'21	
desc. node	10578 May 12 19:35	5° $\mathbb{M}$ 34'39			10579 May 23 15:00	0° $\mathbb{M}$	
	10578 May 30 14:44	0° $\mathbb{M}$		max. Earth dist.	10579 May 29 21:44	10° $\mathbb{M}$ 02'30	1.42949 AU
morning set	10578 Jun 11 14:37	18° $\mathbb{M}$ 42'24		superior conj	10579 Jun 05 22:26	21° $\mathbb{M}$ 41'58	-1°59'40
max. Earth dist.	10578 Jun 16 17:29	27° $\mathbb{M}$ 10'23	1.40903 AU	minimum elong	10579 Jun 06 04:23	22° $\mathbb{M}$ 07'10	1°59'46
	10578 Jun 18 09:29	0° $\mathbb{M}$			10579 Jun 10 18:25	0° $\mathbb{M}$	
superior conj	10578 Jun 24 12:24	10° $\mathbb{M}$ 41'41	-1°34'08	evening rise	10579 Jun 17 17:29	12° $\mathbb{M}$ 18'26	
minimum elong	10578 Jun 24 18:32	11° $\mathbb{M}$ 09'06	1°33'53	asc. node	10579 Jun 22 19:07	21° $\mathbb{M}$ 17'59	
evening rise	10578 Jul 04 19:08	29° $\mathbb{M}$ 38'33			10579 Jun 28 00:02	0° $\mathbb{M}$	
	10578 Jul 04 23:43	0° $\mathbb{M}$		evening max el	10579 Jul 04 07:38	8° $\mathbb{M}$ 16'13	18°04'51
asc. node	10578 Jul 05 22:07	1° $\mathbb{M}$ 44'49		retrograde	10579 Jul 10 22:57	11° $\mathbb{M}$ 40'13	
evening max el	10578 Jul 20 19:42	25° $\mathbb{M}$ 16'12	18°18'56	evening set	10579 Jul 13 11:18	11° $\mathbb{M}$ 10'54	
retrograde	10578 Jul 28 04:12	28° $\mathbb{M}$ 58'27		inferior conj	10579 Jul 20 03:44	6° $\mathbb{M}$ 12'14	1°49'25
evening set	10578 Jul 30 08:37	28° $\mathbb{M}$ 39'36		minimum elong	10579 Jul 20 06:27	6° $\mathbb{M}$ 05'41	1°48'08
inferior conj	10578 Aug 06 18:27	24° $\mathbb{M}$ 00'52	0°36'10				
minimum elong	10578 Aug 06 19:41	23° $\mathbb{M}$ 58'19	0°35'21				

min. Earth dist.	10579 Jul 23 08:02	3°♎09'20	0.60926 AU	inferior conj	10580 Jul 02 05:21	18°♏58'21	2°38'01
morning rise	10579 Jul 26 22:54	0°♎15'24		minimum elong	10580 Jul 02 07:52	18°♏51'26	2°36'57
desc. node	10579 Jul 26 15:49	0°♎27'17		min. Earth dist.	10580 Jul 04 22:02	16°♏02'37	0.63141 AU
	10579 Jul 27 08:31	30°♎		morning rise	10580 Jul 08 11:28	12°♏46'13	
direct	10579 Aug 02 13:40	28°♏03'47		desc. node	10580 Jul 12 12:59	10°♏36'55	
	10579 Aug 09 04:34	0°♎		direct	10580 Jul 15 04:39	10°♏13'45	
morning max el	10579 Aug 16 20:10	6°♎02'21	27°54'47	morning max el	10580 Jul 29 04:03	18°♏16'11	27°49'25
	10579 Sep 03 20:47	0°♎			10580 Aug 08 00:28	0°♎	
morning set	10579 Sep 18 19:17	27°♎34'48			10580 Aug 26 17:50	0°♎	
asc. node	10579 Sep 18 19:20	27°♎35'06		morning set	10580 Sep 01 16:12	11°♎27'16	
	10579 Sep 19 23:06	0°♎		asc. node	10580 Sep 04 16:10	17°♎36'07	
max. Earth dist.	10579 Sep 24 16:18	10°♎09'52	1.31641 AU	max. Earth dist.	10580 Sep 06 19:27	22°♎06'41	1.32346 AU
superior conj	10579 Sep 26 02:16	13°♎17'10	1°06'58	superior conj	10580 Sep 09 10:11	27°♎44'31	0°45'40
minimum elong	10579 Sep 26 00:02	13°♎04'47	1°06'41	minimum elong	10580 Sep 09 08:15	27°♎34'06	0°45'14
evening rise	10579 Oct 02 19:47	28°♎04'53			10580 Sep 10 11:04	0°♎	
	10579 Oct 03 17:19	0°♎		evening rise	10580 Sep 16 07:16	12°♎42'39	
	10579 Oct 20 09:57	0°♎			10580 Sep 24 22:50	0°♎	
desc. node	10579 Oct 22 13:29	2°♎56'12		desc. node	10580 Oct 08 10:45	19°♎33'12	
evening max el	10579 Oct 29 11:18	10°♎47'49	25°12'58	evening max el	10580 Oct 09 22:25	21°♎03'31	23°35'39
retrograde	10579 Nov 12 08:07	17°♎46'04		retrograde	10580 Oct 23 10:24	27°♎47'35	
evening set	10579 Nov 18 03:04	16°♎29'58		evening set	10580 Oct 27 21:46	27°♎04'02	
min. Earth dist.	10579 Nov 22 23:20	13°♎49'21	0.57153 AU	min. Earth dist.	10580 Nov 03 08:32	23°♎59'54	0.55578 AU
inferior conj	10579 Nov 25 19:12	11°♎56'09	-5°19'07	inferior conj	10580 Nov 05 05:52	22°♎52'49	-5°45'51
minimum elong	10579 Nov 26 01:48	11°♎45'06	5°17'33	minimum elong	10580 Nov 05 06:13	22°♎52'17	5°45'27
morning rise	10579 Dec 04 02:50	7°♎44'01		morning rise	10580 Nov 13 16:31	18°♎59'15	
direct	10579 Dec 06 11:02	7°♎27'58		direct	10580 Nov 16 12:29	18°♎39'29	
morning max el	10579 Dec 15 13:56	11°♎51'12	19°06'59	morning max el	10580 Nov 27 02:58	23°♎40'36	20°17'09
asc. node	10579 Dec 15 19:32	12°♎04'51		asc. node	10580 Dec 01 16:32	28°♎53'23	
	10579 Dec 27 18:43	0°♎			10580 Dec 02 12:05	0°♎	
morning set	10580 Jan 01 07:22	8°♎47'08		morning set	10580 Dec 15 13:32	23°♎24'53	
					10580 Dec 18 18:18	0°♎	
superior conj	10580 Jan 09 14:10	25°♎06'17	1°05'23	superior conj	10580 Dec 23 03:53	8°♎59'51	1°24'10
minimum elong	10580 Jan 09 17:15	25°♎21'07	1°05'27	minimum elong	10580 Dec 23 06:23	9°♎12'24	1°24'27
	10580 Jan 12 03:55	0°♎		max. Earth dist.	10580 Dec 28 16:46	19°♎52'33	1.36566 AU
max. Earth dist.	10580 Jan 16 09:32	7°♎47'15	1.38718 AU	evening rise	10581 Jan 01 12:13	26°♎58'46	
desc. node	10580 Jan 18 12:25	11°♎33'26			10581 Jan 03 04:27	0°♎	
evening rise	10580 Jan 20 04:44	14°♎29'04		desc. node	10581 Jan 04 09:20	2°♎07'49	
	10580 Jan 29 15:23	0°♎			10581 Jan 22 01:46	0°♎	
	10580 Feb 20 09:11	0°♎		evening max el	10581 Feb 06 01:44	18°♎14'58	25°52'14
evening max el	10580 Feb 24 12:17	4°♎25'23	24°40'32	retrograde	10581 Feb 18 14:08	25°♎24'31	
retrograde	10580 Mar 07 03:29	11°♎12'41		evening set	10581 Feb 24 15:35	22°♎55'52	
evening set	10580 Mar 12 16:49	8°♎53'37		asc. node	10581 Feb 27 15:11	19°♎54'47	
asc. node	10580 Mar 12 17:56	8°♎51'15		min. Earth dist.	10581 Feb 28 22:03	18°♎21'35	0.67228 AU
min. Earth dist.	10580 Mar 17 06:03	3°♎44'21	0.68104 AU	inferior conj	10581 Mar 02 10:06	16°♎28'14	0°53'33
inferior conj	10580 Mar 18 06:14	2°♎23'54	1°41'19	minimum elong	10581 Mar 02 08:48	16°♎32'18	0°53'14
minimum elong	10580 Mar 18 04:13	2°♎30'37	1°40'40	morning rise	10581 Mar 08 02:36	10°♎38'59	
	10580 Mar 20 02:37	30°♎		direct	10581 Mar 11 09:25	9°♎37'21	
morning rise	10580 Mar 23 15:46	26°♎25'23		morning max el	10581 Mar 18 03:29	13°♎17'12	18°52'16
direct	10580 Mar 27 10:06	25°♎04'09			10581 Mar 30 15:33	0°♎	
morning max el	10580 Apr 03 19:45	29°♎11'51	19°47'24	desc. node	10581 Apr 02 10:00	4°♎13'55	
	10580 Apr 04 14:40	0°♎		morning set	10581 Apr 09 11:11	15°♎09'42	
desc. node	10580 Apr 15 13:14	14°♎13'59			10581 Apr 18 23:43	0°♎	
greatest brilliancy	10580 Apr 16 17:55	15°♎58'17	-0.6m	max. Earth dist.	10581 Apr 24 02:43	8°♎00'50	1.45451 AU
	10580 Apr 26 02:37	0°♎		superior conj	10581 Apr 25 21:25	10°♎48'22	-2°06'50
morning set	10580 Apr 30 03:23	6°♎10'31		minimum elong	10581 Apr 25 15:35	10°♎25'26	2°06'52
max. Earth dist.	10580 May 11 09:25	23°♎44'34	1.44523 AU		10581 May 07 23:20	0°♎	
	10580 May 15 07:22	0°♎		evening rise	10581 May 11 00:27	4°♎54'50	
superior conj	10580 May 16 08:16	1°♎40'21	-2°12'35	asc. node	10581 May 26 13:15	29°♎15'09	
minimum elong	10580 May 16 09:49	1°♎46'38	2°13'01		10581 May 27 02:20	0°♎	
evening rise	10580 May 29 20:37	24°♎06'24		evening max el	10581 May 31 10:11	5°♎10'25	18°32'34
	10580 Jun 02 07:57	0°♎		retrograde	10581 Jun 06 21:57	8°♎41'38	
asc. node	10580 Jun 08 16:09	10°♎30'40		evening set	10581 Jun 10 02:11	7°♎44'44	
evening max el	10580 Jun 16 21:32	21°♎37'15	18°09'39	inferior conj	10581 Jun 15 19:10	2°♎10'43	3°05'58
retrograde	10580 Jun 23 06:17	24°♎57'53		minimum elong	10581 Jun 15 20:43	2°♎06'01	3°05'14
evening set	10580 Jun 26 02:36	24°♎15'32					

	10581 Jun 17 14:33	30° $\text{R}\text{II}$		greatest brilliancy	10582 May 02 16:24	2° $\text{II}$ 33'36	-0.7m
min. Earth dist.	10581 Jun 17 21:15	29° $\text{II}$ 40'14	0.65092 AU	asc. node	10582 May 13 10:22	17° $\text{II}$ 22'25	
morning rise	10581 Jun 21 14:21	25° $\text{II}$ 51'22		evening max el	10582 May 14 19:13	18° $\text{II}$ 50'04	19°12'45
direct	10581 Jun 28 03:34	23° $\text{II}$ 08'34		retrograde	10582 May 21 18:27	22° $\text{II}$ 44'30	
desc. node	10581 Jun 29 10:06	23° $\text{II}$ 14'05		evening set	10582 May 25 06:57	21° $\text{II}$ 32'16	
	10581 Jul 10 12:40	0° $\text{S}$		inferior conj	10582 May 30 17:42	15° $\text{II}$ 43'07	3°17'17
morning max el	10581 Jul 11 14:32	1° $\text{S}$ 03'48	27°09'55	minimum elong	10582 May 30 18:04	15° $\text{II}$ 41'55	3°16'45
	10581 Aug 02 02:42	0° $\text{Q}$		min. Earth dist.	10582 Jun 01 04:46	13° $\text{II}$ 49'35	0.66657 AU
morning set	10581 Aug 16 03:39	24° $\text{Q}$ 50'20		morning rise	10582 Jun 05 04:42	9° $\text{II}$ 22'05	
	10581 Aug 18 18:35	0° $\text{P}$		direct	10582 Jun 11 09:21	6° $\text{II}$ 39'41	
max. Earth dist.	10581 Aug 20 14:07	3° $\text{P}$ 39'50	1.33550 AU	desc. node	10582 Jun 16 07:10	8° $\text{II}$ 02'23	
asc. node	10581 Aug 22 12:59	7° $\text{P}$ 41'14		morning max el	10582 Jun 24 01:18	14° $\text{II}$ 13'46	26°03'55
					10582 Jul 06 21:22	0° $\text{S}$	
superior conj	10581 Aug 24 13:03	11° $\text{P}$ 53'12	0°19'40		10582 Jul 25 21:18	0° $\text{Q}$	
minimum elong	10581 Aug 24 12:04	11° $\text{P}$ 48'01	0°19'15	morning set	10582 Jul 30 02:07	7° $\text{Q}$ 35'07	
evening rise	10581 Aug 31 18:05	27° $\text{P}$ 15'29		max. Earth dist.	10582 Aug 02 22:17	14° $\text{Q}$ 50'47	1.35236 AU
	10581 Sep 02 01:25	0° $\text{A}$					
	10581 Sep 20 07:12	0° $\text{M}$		superior conj	10582 Aug 08 08:23	25° $\text{Q}$ 36'40	-0°10'22
evening max el	10581 Sep 21 11:25	1° $\text{M}$ 12'21	21°56'10	minimum elong	10582 Aug 08 09:00	25° $\text{Q}$ 39'51	0°10'35
desc. node	10581 Sep 25 08:01	4° $\text{M}$ 26'32		behind sun begin	10582 Aug 08 04:24	25° $\text{Q}$ 16'28	
retrograde	10581 Oct 04 01:40	7° $\text{M}$ 28'24		behind sun end	10582 Aug 08 13:36	26° $\text{Q}$ 03'16	
evening set	10581 Oct 07 02:15	7° $\text{M}$ 07'54		asc. node	10582 Aug 09 09:49	27° $\text{Q}$ 46'39	
min. Earth dist.	10581 Oct 15 15:34	3° $\text{M}$ 23'29	0.54706 AU		10582 Aug 10 11:45	0° $\text{P}$	
inferior conj	10581 Oct 16 01:26	3° $\text{M}$ 09'40	-5°19'43	evening rise	10582 Aug 16 02:12	11° $\text{P}$ 37'37	
minimum elong	10581 Oct 15 17:53	3° $\text{M}$ 20'14	5°18'14		10582 Aug 25 16:39	0° $\text{A}$	
	10581 Oct 22 10:51	30° $\text{R}\text{A}$		evening max el	10582 Sep 03 11:08	11° $\text{A}$ 49'49	20°29'13
morning rise	10581 Oct 24 10:54	29° $\text{A}$ 22'24		desc. node	10582 Sep 12 05:18	17° $\text{A}$ 06'16	
direct	10581 Oct 27 23:18	28° $\text{A}$ 55'14		retrograde	10582 Sep 14 13:50	17° $\text{A}$ 20'45	
	10581 Nov 02 05:34	0° $\text{M}$		evening set	10582 Sep 16 15:32	17° $\text{A}$ 10'05	
morning max el	10581 Nov 09 02:31	4° $\text{M}$ 39'47	21°48'43	inferior conj	10582 Sep 25 18:11	13° $\text{A}$ 13'22	-3°58'38
asc. node	10581 Nov 18 13:29	16° $\text{M}$ 40'15		minimum elong	10582 Sep 25 08:29	13° $\text{A}$ 27'27	3°55'35
	10581 Nov 25 23:23	0° $\text{X}$		min. Earth dist.	10582 Sep 27 00:03	12° $\text{A}$ 29'58	0.54749 AU
morning set	10581 Nov 29 23:25	8° $\text{X}$ 11'10		morning rise	10582 Oct 04 00:58	9° $\text{A}$ 11'20	
				direct	10582 Oct 08 07:52	8° $\text{A}$ 31'50	
superior conj	10581 Dec 07 03:08	23° $\text{X}$ 19'44	1°35'23	morning max el	10582 Oct 21 16:22	15° $\text{A}$ 00'15	23°34'13
minimum elong	10581 Dec 07 04:32	23° $\text{X}$ 27'05	1°35'50		10582 Nov 02 08:52	0° $\text{M}$	
	10581 Dec 10 08:29	0° $\text{Z}$		asc. node	10582 Nov 05 10:23	5° $\text{M}$ 11'11	
max. Earth dist.	10581 Dec 11 05:20	1° $\text{Z}$ 45'49	1.34668 AU	morning set	10582 Nov 14 11:01	22° $\text{M}$ 59'17	
evening rise	10581 Dec 15 11:57	10° $\text{Z}$ 10'33			10582 Nov 17 17:06	0° $\text{X}$	
desc. node	10581 Dec 22 06:17	22° $\text{Z}$ 32'13					
	10581 Dec 26 16:25	0° $\approx$		superior conj	10582 Nov 21 08:46	7° $\text{X}$ 56'00	1°39'44
	10582 Jan 17 16:20	0° $\text{H}$		minimum elong	10582 Nov 21 08:58	7° $\text{X}$ 57'04	1°40'13
evening max el	10582 Jan 19 15:11	1° $\text{H}$ 57'48	26°48'56	max. Earth dist.	10582 Nov 24 01:38	13° $\text{X}$ 43'20	1.33164 AU
retrograde	10582 Feb 01 19:19	9° $\text{H}$ 18'55		evening rise	10582 Nov 29 00:13	23° $\text{X}$ 54'32	
evening set	10582 Feb 08 07:43	6° $\text{H}$ 45'08			10582 Dec 02 03:03	0° $\text{Z}$	
min. Earth dist.	10582 Feb 12 08:20	2° $\text{H}$ 45'08	0.65967 AU	desc. node	10582 Dec 09 03:18	12° $\text{Z}$ 40'36	
inferior conj	10582 Feb 14 08:17	0° $\text{H}$ 25'17	-0°03'22		10582 Dec 20 06:45	0° $\approx$	
minimum elong	10582 Feb 14 08:22	0° $\text{H}$ 25'02	0°03'02	evening max el	10583 Jan 02 03:53	15° $\approx$ 23'14	27°23'32
transit middle	10582 Feb 14 08:22	0° $\text{H}$ 25'02	0°03'02	retrograde	10583 Jan 15 18:19	22° $\approx$ 46'30	
transit begin	10582 Feb 14 05:28	0° $\text{H}$ 33'31		evening set	10583 Jan 22 14:58	20° $\approx$ 14'09	
transit end	10582 Feb 14 11:16	0° $\text{H}$ 16'35		min. Earth dist.	10583 Jan 26 10:50	16° $\approx$ 46'19	0.64355 AU
asc. node	10582 Feb 14 12:23	0° $\text{H}$ 13'18		inferior conj	10583 Jan 28 22:18	14° $\approx$ 08'30	-1°09'00
	10582 Feb 14 16:58	30° $\text{R}\approx$		minimum elong	10583 Jan 29 00:26	14° $\approx$ 02'49	1°07'42
morning rise	10582 Feb 20 10:12	24° $\approx$ 47'25		asc. node	10583 Feb 01 09:35	10° $\approx$ 44'18	
direct	10582 Feb 23 06:53	24° $\approx$ 02'21		morning rise	10583 Feb 04 11:46	8° $\approx$ 44'29	
morning max el	10582 Mar 01 17:14	27° $\approx$ 27'00	18°13'35	direct	10583 Feb 07 00:03	8° $\approx$ 12'18	
	10582 Mar 04 01:01	0° $\text{H}$		morning max el	10583 Feb 13 10:18	11° $\approx$ 32'52	17°51'48
desc. node	10582 Mar 20 06:45	24° $\text{H}$ 31'19			10583 Feb 26 04:48	0° $\text{H}$	
morning set	10582 Mar 20 20:59	25° $\text{H}$ 28'33		morning set	10583 Mar 02 11:26	7° $\text{H}$ 11'06	
	10582 Mar 23 16:33	0° $\text{Y}$		desc. node	10583 Mar 07 03:28	15° $\text{H}$ 00'26	
superior conj	10582 Apr 05 03:47	19° $\text{Y}$ 45'33	-1°41'12	superior conj	10583 Mar 15 21:39	29° $\text{H}$ 20'10	-1°02'10
minimum elong	10582 Apr 04 18:16	19° $\text{Y}$ 08'14	1°40'27	minimum elong	10583 Mar 15 14:52	28° $\text{H}$ 52'56	1°01'12
max. Earth dist.	10582 Apr 06 22:28	22° $\text{Y}$ 32'39	1.45642 AU		10583 Mar 16 07:34	0° $\text{Y}$	
	10582 Apr 11 17:04	0° $\text{B}$		max. Earth dist.	10583 Mar 20 17:37	7° $\text{Y}$ 01'50	1.45090 AU
evening rise	10582 Apr 21 05:13	14° $\text{B}$ 48'54		evening rise	10583 Mar 31 18:40	24° $\text{Y}$ 11'37	
	10582 May 01 00:07	0° $\text{II}$			10583 Apr 04 13:53	0° $\text{B}$	

greatest brilliancy	10583 Apr 15 19:25	16°♄47'10	-0.6m			10584 Mar 07 22:39	0°♄	
	10583 Apr 25 15:20	0°♄		evening rise		10584 Mar 10 07:44	3°♄42'07	
evening max el	10583 Apr 27 23:03	2°♄32'21	20°08'44			10584 Mar 28 00:33	0°♄	
asc. node	10583 Apr 30 07:32	4°♄40'35		evening max el		10584 Apr 09 21:20	16°♄15'47	21°17'34
retrograde	10583 May 05 17:01	7°♄00'26		asc. node		10584 Apr 16 04:44	20°♄55'03	
evening set	10583 May 09 14:33	5°♄32'34		retrograde		10584 Apr 18 15:27	21°♄24'18	
inferior conj	10583 May 14 22:02	29°♄30'00	3°15'06	evening set		10584 Apr 22 23:03	19°♄40'44	
minimum elong	10583 May 14 21:19	29°♄32'27	3°14'36	inferior conj		10584 Apr 28 05:46	13°♄26'45	3°01'31
	10583 May 14 13:11	30°♄		minimum elong		10584 Apr 28 04:12	13°♄32'11	3°00'56
min. Earth dist.	10583 May 15 18:45	28°♄19'35	0.67777 AU	min. Earth dist.		10584 Apr 28 13:03	13°♄01'23	0.68441 AU
morning rise	10583 May 20 03:47	23°♄10'54		morning rise		10584 May 03 09:08	7°♄11'47	
direct	10583 May 25 21:00	20°♄38'14		direct		10584 May 08 13:19	4°♄55'48	
desc. node	10583 Jun 03 04:08	24°♄32'19		morning max el		10584 May 18 20:49	11°♄03'35	23°11'26
morning max el	10583 Jun 06 11:02	27°♄35'24	24°41'06	desc. node		10584 May 20 01:01	12°♄16'49	
	10583 Jun 08 17:25	0°♄				10584 Jun 02 21:54	0°♄	
	10583 Jun 30 13:15	0°♄				10584 Jun 22 08:21	0°♄	
morning set	10583 Jul 12 07:09	19°♄30'15		morning set		10584 Jun 22 13:27	0°♄21'16	
max. Earth dist.	10583 Jul 15 21:30	25°♄56'50	1.37316 AU	max. Earth dist.		10584 Jun 26 18:11	7°♄29'13	1.39603 AU
	10583 Jul 18 02:16	0°♄						
superior conj	10583 Jul 22 17:04	8°♄47'37	-0°43'04	superior conj		10584 Jul 04 11:10	21°♄15'48	-1°16'13
minimum elong	10583 Jul 22 19:52	9°♄01'15	0°43'00	minimum elong		10584 Jul 04 16:17	21°♄39'29	1°15'57
asc. node	10583 Jul 27 06:41	17°♄48'50		asc. node		10584 Jul 09 02:56	0°♄	
evening rise	10583 Jul 31 05:16	25°♄42'54		evening rise		10584 Jul 13 03:35	7°♄43'17	
	10583 Aug 02 09:01	0°♄				10584 Jul 14 00:16	9°♄22'41	
evening max el	10583 Aug 17 00:49	23°♄13'49	19°22'02	evening max el		10584 Jul 25 16:59	0°♄	
retrograde	10583 Aug 26 10:46	27°♄54'22		retrograde		10584 Jul 30 02:12	5°♄21'58	18°36'01
evening set	10583 Aug 28 06:52	27°♄44'27		evening set		10584 Aug 07 01:24	9°♄21'07	
desc. node	10583 Aug 30 02:35	27°♄16'16		desc. node		10584 Aug 09 01:55	9°♄06'35	
inferior conj	10583 Sep 05 22:28	23°♄36'47	-2°07'09	inferior conj		10584 Aug 15 23:51	5°♄23'07	
minimum elong	10583 Sep 05 16:49	23°♄46'01	2°05'06	minimum elong		10584 Aug 16 22:53	4°♄39'42	-0°17'44
min. Earth dist.	10583 Sep 08 12:03	21°♄56'38	0.55731 AU	min. Earth dist.		10584 Aug 16 22:10	4°♄41'03	0°17'45
morning rise	10583 Sep 14 00:07	19°♄02'45				10584 Aug 20 04:52	2°♄12'11	0.57460 AU
direct	10583 Sep 19 02:48	18°♄03'21		morning rise		10584 Aug 23 14:29	30°♄	
morning max el	10583 Oct 03 03:51	25°♄08'36	25°19'01	direct		10584 Aug 24 14:58	29°♄28'26	
	10583 Oct 07 16:38	0°♄				10584 Aug 30 11:52	28°♄02'18	
asc. node	10583 Oct 23 07:15	24°♄15'14		morning max el		10584 Sep 06 12:31	0°♄	
	10583 Oct 26 05:27	0°♄				10584 Sep 13 19:31	5°♄34'23	26°45'47
morning set	10583 Oct 29 22:37	7°♄44'33		asc. node		10584 Oct 01 18:46	0°♄	
				morning set		10584 Oct 09 04:04	13°♄43'08	
superior conj	10583 Nov 05 18:23	22°♄41'26	1°37'49			10584 Oct 13 08:32	22°♄21'42	
minimum elong	10583 Nov 05 17:30	22°♄36'30	1°38'11			10584 Oct 16 21:00	0°♄	
max. Earth dist.	10583 Nov 07 05:15	25°♄53'00	1.32123 AU	superior conj		10584 Oct 20 05:55	7°♄28'57	1°30'07
	10583 Nov 09 02:39	0°♄		minimum elong		10584 Oct 20 04:12	7°♄19'21	1°30'15
evening rise	10583 Nov 12 21:54	8°♄02'42		max. Earth dist.		10584 Oct 20 13:35	8°♄11'38	1.31558 AU
	10583 Nov 24 13:28	0°♄		evening rise		10584 Oct 27 02:13	22°♄27'00	
desc. node	10583 Nov 26 00:23	2°♄26'07				10584 Oct 30 18:08	0°♄	
evening max el	10583 Dec 15 14:14	28°♄19'55	27°29'28	desc. node		10584 Nov 11 21:33	21°♄39'07	
	10583 Dec 17 10:38	0°♄				10584 Nov 17 15:21	0°♄	
retrograde	10583 Dec 29 10:10	5°♄38'11		evening max el		10584 Nov 26 19:38	10°♄34'58	27°02'05
evening set	10584 Jan 05 10:33	3°♄15'44		retrograde		10584 Dec 10 17:33	17°♄45'09	
min. Earth dist.	10584 Jan 09 03:51	0°♄15'32	0.62456 AU	evening set		10584 Dec 17 14:52	15°♄41'53	
	10584 Jan 09 10:36	30°♄		min. Earth dist.		10584 Dec 21 10:10	13°♄01'05	0.60373 AU
inferior conj	10584 Jan 12 01:16	27°♄31'02	-2°21'41	inferior conj		10584 Dec 24 13:47	10°♄23'54	-3°37'19
minimum elong	10584 Jan 12 05:58	27°♄19'49	2°19'20	minimum elong		10584 Dec 24 20:56	10°♄08'58	3°34'23
morning rise	10584 Jan 19 03:48	22°♄23'42		morning rise		10585 Jan 01 05:39	5°♄36'32	
asc. node	10584 Jan 19 06:45	22°♄21'17		direct		10585 Jan 03 08:54	5°♄18'44	
direct	10584 Jan 21 09:59	22°♄00'32		asc. node		10585 Jan 05 03:51	5°♄31'45	
morning max el	10584 Jan 28 03:37	25°♄26'41	17°47'35	morning max el		10585 Jan 10 17:50	8°♄59'29	18°02'09
	10584 Jan 31 23:15	0°♄				10585 Jan 24 09:10	0°♄	
morning set	10584 Feb 13 01:26	20°♄01'03		morning set		10585 Jan 26 08:36	3°♄39'18	
	10584 Feb 18 17:50	0°♄						
desc. node	10584 Feb 22 00:12	5°♄37'23		superior conj		10585 Feb 05 08:18	21°♄52'48	0°19'19
				minimum elong		10585 Feb 05 09:51	21°♄59'41	0°19'27
superior conj	10584 Feb 24 14:34	10°♄01'19	-0°19'32	desc. node		10585 Feb 07 21:00	26°♄18'48	
minimum elong	10584 Feb 24 12:40	9°♄53'17	0°19'00			10585 Feb 10 00:26	0°♄	
max. Earth dist.	10584 Mar 02 10:12	21°♄14'08	1.43867 AU	max. Earth dist.		10585 Feb 12 22:59	4°♄57'17	1.42102 AU

evening rise	10585 Feb 18 10:32	13° $\text{K}$ 53'55		10586 Feb 02 10:24	0° $\text{K}$	
	10585 Feb 28 21:06	0° $\text{Y}$		10586 Feb 22 15:21	0° $\text{Y}$	
evening max el	10585 Mar 23 14:53	0° $\text{B}$ 01'17	22°34'56	evening max el	10586 Mar 06 05:18	13° $\text{Y}$ 48'47 23°55'21
	10585 Mar 23 14:23	0° $\text{B}$		retrograde	10586 Mar 17 05:54	20° $\text{Y}$ 18'09
retrograde	10585 Apr 02 12:11	5° $\text{B}$ 52'01		asc. node	10586 Mar 20 23:13	19° $\text{Y}$ 13'12
asc. node	10585 Apr 03 01:58	5° $\text{B}$ 50'25		evening set	10586 Mar 22 12:24	18° $\text{Y}$ 05'38
evening set	10585 Apr 07 06:51	3° $\text{B}$ 53'20		min. Earth dist.	10586 Mar 27 05:57	12° $\text{Y}$ 36'29 0.68427 AU
	10585 Apr 10 19:05	30° $\text{K}$ $\text{Y}$		inferior conj	10586 Mar 27 23:25	11° $\text{Y}$ 37'05 2°04'36
inferior conj	10585 Apr 12 14:52	27° $\text{Y}$ 30'22	2°37'48	minimum elong	10586 Mar 27 21:14	11° $\text{Y}$ 44'29 2°03'53
minimum elong	10585 Apr 12 12:47	27° $\text{Y}$ 37'34	2°37'07	morning rise	10586 Apr 02 06:07	5° $\text{Y}$ 34'21
min. Earth dist.	10585 Apr 12 09:30	27° $\text{Y}$ 49'00	0.68654 AU	direct	10586 Apr 06 07:33	4° $\text{Y}$ 01'06
morning rise	10585 Apr 17 18:35	21° $\text{Y}$ 20'57		morning max el	10586 Apr 14 05:41	8° $\text{Y}$ 30'22 20°26'11
direct	10585 Apr 22 09:15	19° $\text{Y}$ 25'44		desc. node	10586 Apr 23 18:42	20° $\text{Y}$ 14'12
morning max el	10585 May 01 10:00	24° $\text{Y}$ 41'07	21°44'09		10586 Apr 30 14:12	0° $\text{B}$
	10585 May 06 03:45	0° $\text{B}$		morning set	10586 May 12 22:32	18° $\text{B}$ 40'10
desc. node	10585 May 06 21:52	0° $\text{B}$ 55'52			10586 May 20 03:50	0° $\text{II}$
	10585 May 27 07:54	0° $\text{II}$		max. Earth dist.	10586 May 22 03:06	3° $\text{II}$ 09'04 1.43687 AU
morning set	10585 Jun 02 17:22	10° $\text{II}$ 00'18				
max. Earth dist.	10585 Jun 08 19:18	19° $\text{II}$ 53'14	1.41820 AU	superior conj	10586 May 28 09:53	13° $\text{II}$ 24'09 -2°07'06
	10585 Jun 14 18:46	0° $\text{B}$		minimum elong	10586 May 28 14:33	13° $\text{II}$ 43'32 2°07'22
					10586 Jun 07 04:18	0° $\text{B}$
superior conj	10585 Jun 16 10:11	2° $\text{B}$ 51'06	-1°46'03	evening rise	10586 Jun 09 22:13	4° $\text{B}$ 47'04
minimum elong	10585 Jun 16 16:37	3° $\text{B}$ 19'16	1°45'56	asc. node	10586 Jun 16 21:34	16° $\text{B}$ 51'14
evening rise	10585 Jun 27 07:28	22° $\text{B}$ 28'00			10586 Jun 25 20:01	0° $\text{B}$
asc. node	10585 Jun 30 00:34	27° $\text{B}$ 25'56		evening max el	10586 Jun 27 00:28	1° $\text{B}$ 15'17 18°04'37
	10585 Jul 01 10:34	0° $\text{B}$		retrograde	10586 Jul 03 11:54	4° $\text{B}$ 36'31
evening max el	10585 Jul 13 11:23	18° $\text{B}$ 05'51	18°10'32	evening set	10586 Jul 06 03:34	4° $\text{B}$ 01'58
retrograde	10585 Jul 20 11:05	21° $\text{B}$ 38'26			10586 Jul 11 11:51	30° $\text{K}$ $\text{B}$
evening set	10585 Jul 22 18:56	21° $\text{B}$ 15'23		inferior conj	10586 Jul 12 13:40	28° $\text{B}$ 55'00 2°12'49
inferior conj	10585 Jul 29 20:56	16° $\text{B}$ 27'39	1°10'23	minimum elong	10586 Jul 12 16:27	28° $\text{B}$ 47'53 2°11'35
minimum elong	10585 Jul 29 23:03	16° $\text{B}$ 22'56	1°09'15	min. Earth dist.	10586 Jul 15 13:32	25° $\text{B}$ 52'36 0.61880 AU
min. Earth dist.	10585 Aug 02 04:45	13° $\text{B}$ 31'18	0.59618 AU	morning rise	10586 Jul 19 03:04	22° $\text{B}$ 50'12
desc. node	10585 Aug 02 21:04	12° $\text{B}$ 57'30		desc. node	10586 Jul 20 18:15	21° $\text{B}$ 49'21
morning rise	10585 Aug 06 00:02	10° $\text{B}$ 44'26		direct	10586 Jul 25 19:29	20° $\text{B}$ 28'47
direct	10585 Aug 12 10:05	8° $\text{B}$ 48'56		morning max el	10586 Aug 08 23:55	28° $\text{B}$ 30'37 27°57'12
morning max el	10585 Aug 26 18:27	16° $\text{B}$ 39'46	27°40'36		10586 Aug 10 10:39	0° $\text{B}$
	10585 Sep 06 18:14	0° $\text{B}$			10586 Aug 31 14:47	0° $\text{B}$
	10585 Sep 24 07:45	0° $\text{B}$		morning set	10586 Sep 11 16:11	20° $\text{B}$ 52'53
asc. node	10585 Sep 26 00:54	3° $\text{B}$ 28'21		asc. node	10586 Sep 12 21:44	23° $\text{B}$ 25'24
morning set	10585 Sep 27 15:03	6° $\text{B}$ 46'12			10586 Sep 16 00:15	0° $\text{B}$
max. Earth dist.	10585 Oct 03 23:04	20° $\text{B}$ 30'42	1.31475 AU	max. Earth dist.	10586 Sep 17 05:42	2° $\text{B}$ 39'14 1.31876 AU
superior conj	10585 Oct 04 17:30	22° $\text{B}$ 13'07	1°16'57	superior conj	10586 Sep 19 03:20	6° $\text{B}$ 48'41 0°58'33
minimum elong	10585 Oct 04 15:19	22° $\text{B}$ 00'59	1°16'48	minimum elong	10586 Sep 19 01:09	6° $\text{B}$ 36'44 0°58'11
	10585 Oct 08 05:36	0° $\text{B}$		evening rise	10586 Sep 25 21:52	21° $\text{B}$ 39'30
evening rise	10585 Oct 11 10:53	7° $\text{B}$ 01'08			10586 Sep 29 21:30	0° $\text{B}$
	10585 Oct 23 07:30	0° $\text{B}$		desc. node	10586 Oct 16 15:59	27° $\text{B}$ 31'17
desc. node	10585 Oct 29 18:45	10° $\text{B}$ 06'38			10586 Oct 18 19:17	0° $\text{B}$
evening max el	10585 Nov 08 17:16	21° $\text{B}$ 58'24	26°00'53	evening max el	10586 Oct 21 06:54	2° $\text{B}$ 33'28 24°32'55
retrograde	10585 Nov 22 15:00	29° $\text{B}$ 01'08		retrograde	10586 Nov 04 01:10	9° $\text{B}$ 27'35
evening set	10585 Nov 28 23:21	27° $\text{B}$ 25'43		evening set	10586 Nov 09 08:01	8° $\text{B}$ 25'33
min. Earth dist.	10585 Dec 03 06:01	24° $\text{B}$ 50'32	0.58275 AU	min. Earth dist.	10586 Nov 14 18:06	5° $\text{B}$ 37'15 0.56414 AU
inferior conj	10585 Dec 06 08:16	22° $\text{B}$ 36'38	-4°47'14	inferior conj	10586 Nov 17 06:27	4° $\text{B}$ 02'03 -5°35'49
minimum elong	10585 Dec 06 16:11	22° $\text{B}$ 22'19	4°44'50	minimum elong	10586 Nov 17 11:00	3° $\text{B}$ 54'51 5°34'54
morning rise	10585 Dec 14 11:29	18° $\text{B}$ 11'53		morning rise	10586 Nov 25 16:10	29° $\text{B}$ 59'08
direct	10585 Dec 16 16:17	17° $\text{B}$ 56'07			10586 Nov 25 14:37	30° $\text{B}$ $\text{B}$
asc. node	10585 Dec 23 00:56	20° $\text{B}$ 17'15		direct	10586 Nov 28 04:29	29° $\text{B}$ 42'04
morning max el	10585 Dec 25 01:11	22° $\text{B}$ 00'40	18°37'05		10586 Nov 30 16:36	0° $\text{B}$
	10585 Dec 31 06:44	0° $\text{B}$		morning max el	10586 Dec 07 21:58	4° $\text{B}$ 20'08 19°34'03
morning set	10586 Jan 10 03:37	17° $\text{B}$ 49'20		asc. node	10586 Dec 09 21:58	6° $\text{B}$ 26'08
	10586 Jan 16 10:59	0° $\text{B}$			10586 Dec 24 02:38	0° $\text{B}$
				morning set	10586 Dec 25 06:35	2° $\text{B}$ 19'59
superior conj	10586 Jan 18 22:58	4° $\text{B}$ 43'02	0°50'54			
minimum elong	10586 Jan 19 01:57	4° $\text{B}$ 56'56	0°50'55	superior conj	10587 Jan 02 05:37	18° $\text{B}$ 17'59 1°14'18
desc. node	10586 Jan 25 17:51	17° $\text{B}$ 00'35		minimum elong	10587 Jan 02 08:33	18° $\text{B}$ 32'21 1°14'27
max. Earth dist.	10586 Jan 26 07:15	17° $\text{B}$ 59'07	1.39990 AU		10587 Jan 08 08:49	0° $\text{B}$
evening rise	10586 Jan 30 09:54	25° $\text{B}$ 00'37		max. Earth dist.	10587 Jan 08 13:08	0° $\text{B}$ 19'55 1.37782 AU

evening rise	10587 Jan 12 06:27	7° $\approx$ 02'44		evening rise	10587 Dec 25 21:19	19° $\approx$ 51'54	
desc. node	10587 Jan 12 14:46	7° $\approx$ 39'20		desc. node	10587 Dec 30 11:42	28° $\approx$ 10'17	
	10587 Jan 26 07:54	0° $\approx$			10587 Dec 31 12:55	0° $\approx$	
evening max el	10587 Feb 16 18:35	27° $\approx$ 38'28	25°12'16		10588 Jan 20 08:46	0° $\approx$	
	10587 Feb 19 08:02	0° $\approx$		evening max el	10588 Jan 30 08:03	11° $\approx$ 26'20	26°18'36
retrograde	10587 Feb 28 19:36	4° $\approx$ 37'19		retrograde	10588 Feb 12 04:11	18° $\approx$ 42'37	
evening set	10587 Mar 06 14:08	2° $\approx$ 13'31		evening set	10588 Feb 18 10:20	16° $\approx$ 11'17	
asc. node	10587 Mar 07 20:27	1° $\approx$ 02'44		min. Earth dist.	10588 Feb 22 14:14	11° $\approx$ 51'28	0.66736 AU
	10587 Mar 08 19:44	30° $\approx$		asc. node	10588 Feb 22 17:40	11° $\approx$ 41'06	
min. Earth dist.	10587 Mar 11 00:15	27° $\approx$ 19'13	0.67782 AU	inferior conj	10588 Feb 24 07:18	9° $\approx$ 45'57	0°30'32
inferior conj	10587 Mar 12 05:34	25° $\approx$ 43'45	1°22'10	minimum elong	10588 Feb 24 06:31	9° $\approx$ 48'22	0°30'26
minimum elong	10587 Mar 12 03:47	25° $\approx$ 49'34	1°21'37	morning rise	10588 Mar 01 03:31	4° $\approx$ 01'02	
morning rise	10587 Mar 17 17:47	19° $\approx$ 49'03		direct	10588 Mar 04 05:45	3° $\approx$ 06'57	
direct	10587 Mar 21 06:58	18° $\approx$ 36'41		morning max el	10588 Mar 10 19:42	6° $\approx$ 39'14	18°33'39
morning max el	10587 Mar 28 09:11	22° $\approx$ 31'12	19°21'55		10588 Mar 27 09:46	0° $\approx$	
	10587 Apr 03 15:29	0° $\approx$		desc. node	10588 Mar 27 12:15	0° $\approx$ 09'47	
greatest brilliancy	10587 Apr 10 03:52	9° $\approx$ 18'19	-0.7m	morning set	10588 Mar 31 15:55	6° $\approx$ 42'02	
desc. node	10587 Apr 10 15:29	10° $\approx$ 01'28			10588 Apr 15 12:20	0° $\approx$	
morning set	10587 Apr 21 22:20	27° $\approx$ 12'11					
	10587 Apr 23 17:49	0° $\approx$		superior conj	10588 Apr 16 17:56	1° $\approx$ 55'42	-1°58'09
max. Earth dist.	10587 May 04 16:57	17° $\approx$ 05'45	1.45000 AU	minimum elong	10588 Apr 16 09:41	1° $\approx$ 23'28	1°57'51
				max. Earth dist.	10588 Apr 16 11:12	1° $\approx$ 29'24	1.45623 AU
superior conj	10587 May 08 09:48	22° $\approx$ 57'34	-2°12'40	evening rise	10588 May 02 09:17	26° $\approx$ 33'18	
minimum elong	10587 May 08 08:16	22° $\approx$ 51'27	2°13'02		10588 May 04 13:17	0° $\approx$	
	10587 May 12 19:12	0° $\approx$		greatest brilliancy	10588 May 10 21:37	10° $\approx$ 03'26	-0.8m
evening rise	10587 May 22 15:43	16° $\approx$ 09'45		asc. node	10588 May 20 15:42	24° $\approx$ 23'05	
	10587 May 31 00:42	0° $\approx$		evening max el	10588 May 24 01:30	28° $\approx$ 18'56	18°47'43
asc. node	10587 Jun 03 18:36	5° $\approx$ 52'48			10588 May 25 22:41	0° $\approx$	
evening max el	10587 Jun 10 14:05	14° $\approx$ 41'48	18°17'17	retrograde	10588 May 30 17:10	1° $\approx$ 58'24	
retrograde	10587 Jun 16 23:12	18° $\approx$ 05'36		evening set	10588 Jun 03 00:51	0° $\approx$ 55'06	
evening set	10587 Jun 19 22:45	17° $\approx$ 17'22			10588 Jun 04 06:42	30° $\approx$	
inferior conj	10587 Jun 25 20:54	11° $\approx$ 53'00	2°52'09	inferior conj	10588 Jun 08 14:48	25° $\approx$ 11'46	3°12'35
minimum elong	10587 Jun 25 23:04	11° $\approx$ 46'47	2°51'14	minimum elong	10588 Jun 08 15:51	25° $\approx$ 11'28	3°11'57
min. Earth dist.	10587 Jun 28 07:40	9° $\approx$ 05'47	0.64004 AU	min. Earth dist.	10588 Jun 10 10:34	22° $\approx$ 58'41	0.65811 AU
morning rise	10587 Jul 01 22:01	5° $\approx$ 36'43		morning rise	10588 Jun 14 06:09	18° $\approx$ 54'16	
desc. node	10587 Jul 07 15:24	3° $\approx$ 01'14		direct	10588 Jun 20 16:20	16° $\approx$ 10'02	
direct	10587 Jul 08 14:10	2° $\approx$ 58'12		desc. node	10588 Jun 23 12:28	16° $\approx$ 37'43	
morning max el	10587 Jul 22 09:16	11° $\approx$ 00'13	27°36'28	morning max el	10588 Jul 03 19:53	23° $\approx$ 58'16	26°44'30
	10587 Aug 06 09:06	0° $\approx$			10588 Jul 09 05:19	0° $\approx$	
	10587 Aug 24 01:15	0° $\approx$			10588 Jul 29 18:22	0° $\approx$	
morning set	10587 Aug 26 09:26	4° $\approx$ 34'00		morning set	10588 Aug 08 15:47	17° $\approx$ 41'58	
asc. node	10587 Aug 30 18:32	13° $\approx$ 28'44		max. Earth dist.	10588 Aug 12 19:21	25° $\approx$ 46'54	1.34206 AU
max. Earth dist.	10587 Aug 31 05:26	14° $\approx$ 25'44	1.32784 AU		10588 Aug 14 21:33	0° $\approx$	
				asc. node	10588 Aug 16 15:21	3° $\approx$ 34'40	
superior conj	10587 Sep 03 09:20	21° $\approx$ 08'51	0°35'12				
minimum elong	10587 Sep 03 07:44	21° $\approx$ 00'15	0°34'45	superior conj	10588 Aug 17 09:19	5° $\approx$ 07'56	0°07'23
	10587 Sep 07 11:30	0° $\approx$		minimum elong	10588 Aug 17 08:57	5° $\approx$ 05'57	0°07'02
evening rise	10587 Sep 10 09:15	6° $\approx$ 15'35		behind sun begin	10588 Aug 17 03:43	4° $\approx$ 38'48	
	10587 Sep 22 20:59	0° $\approx$		behind sun end	10588 Aug 17 14:10	5° $\approx$ 33'09	
evening max el	10587 Oct 02 17:37	12° $\approx$ 41'55	22°52'44	evening rise	10588 Aug 24 19:08	20° $\approx$ 44'31	
desc. node	10587 Oct 03 13:15	13° $\approx$ 28'19			10588 Aug 29 08:01	0° $\approx$	
retrograde	10587 Oct 15 22:47	19° $\approx$ 16'45		evening max el	10588 Sep 13 10:30	22° $\approx$ 59'59	21°17'10
evening set	10587 Oct 19 18:30	18° $\approx$ 44'52		desc. node	10588 Sep 19 10:29	27° $\approx$ 28'25	
min. Earth dist.	10587 Oct 27 02:15	15° $\approx$ 25'16	0.55101 AU	retrograde	10588 Sep 25 10:52	28° $\approx$ 57'45	
inferior conj	10587 Oct 28 09:41	14° $\approx$ 40'11	-5°42'01	evening set	10588 Sep 27 23:35	28° $\approx$ 42'57	
minimum elong	10587 Oct 28 06:27	14° $\approx$ 44'51	5°41'28	inferior conj	10588 Oct 07 02:13	24° $\approx$ 47'24	-4°51'09
morning rise	10587 Nov 05 20:06	10° $\approx$ 51'12		minimum elong	10588 Oct 06 16:46	25° $\approx$ 00'39	4°48'47
direct	10587 Nov 08 22:25	10° $\approx$ 28'52		min. Earth dist.	10588 Oct 07 09:41	24° $\approx$ 36'55	0.54609 AU
morning max el	10587 Nov 20 05:16	15° $\approx$ 48'40	20°53'39	morning rise	10588 Oct 15 10:37	20° $\approx$ 56'20	
asc. node	10587 Nov 26 18:57	23° $\approx$ 41'36		direct	10588 Oct 19 06:58	20° $\approx$ 24'24	
	10587 Nov 30 18:27	0° $\approx$		morning max el	10588 Oct 31 23:45	26° $\approx$ 28'15	22°32'29
morning set	10587 Dec 09 14:35	17° $\approx$ 02'04			10588 Nov 04 08:27	0° $\approx$	
	10587 Dec 15 19:50	0° $\approx$		asc. node	10588 Nov 12 15:53	11° $\approx$ 48'45	
					10588 Nov 22 04:33	0° $\approx$	
superior conj	10587 Dec 16 23:48	2° $\approx$ 24'11	1°29'47	morning set	10588 Nov 23 01:25	1° $\approx$ 49'41	
minimum elong	10587 Dec 17 01:52	2° $\approx$ 34'47	1°30'09				
max. Earth dist.	10587 Dec 21 21:46	12° $\approx$ 31'04	1.35720 AU	superior conj	10588 Nov 30 02:04	16° $\approx$ 51'48	1°38'01

minimum elong	10588 Nov 30 02:58	16° $\text{♁}$ 56'32	1°38'30	asc. node	10589 Oct 30 12:46	0° $\text{♁}$ 35'00	
max. Earth dist.	10588 Dec 03 13:35	24° $\text{♁}$ 09'57	1.33983 AU	morning set	10589 Nov 07 13:15	16° $\text{♁}$ 37'29	
	10588 Dec 06 10:33	0° $\text{♁}$			10589 Nov 13 16:42	0° $\text{♁}$	
evening rise	10588 Dec 08 02:50	3° $\text{♁}$ 18'44					
desc. node	10588 Dec 16 08:40	18° $\text{♁}$ 28'45		superior conj	10589 Nov 14 09:41	1° $\text{♁}$ 32'49	1°39'39
	10588 Dec 23 09:19	0° $\text{♁}$		minimum elong	10589 Nov 14 09:23	1° $\text{♁}$ 31'15	1°40'06
evening max el	10589 Jan 11 21:35	25° $\text{♁}$ 04'04	27°06'48	max. Earth dist.	10589 Nov 16 13:31	6° $\text{♁}$ 13'59	1.32663 AU
	10589 Jan 18 00:53	0° $\text{♁}$		evening rise	10589 Nov 21 19:28	17° $\text{♁}$ 14'07	
retrograde	10589 Jan 25 06:44	2° $\text{♁}$ 26'28			10589 Nov 28 10:02	0° $\text{♁}$	
evening set	10589 Jan 31 22:58	29° $\text{♁}$ 52'47		desc. node	10589 Dec 03 05:42	8° $\text{♁}$ 28'48	
	10589 Jan 31 19:12	30° $\text{♁}$			10589 Dec 17 20:54	0° $\text{♁}$	
min. Earth dist.	10589 Feb 04 21:33	26° $\text{♁}$ 06'32	0.65324 AU	evening max el	10589 Dec 25 09:43	8° $\text{♁}$ 19'54	27°29'54
inferior conj	10589 Feb 07 02:22	23° $\text{♁}$ 38'12	-0°30'12	retrograde	10590 Jan 08 02:35	15° $\text{♁}$ 40'52	
minimum elong	10589 Feb 07 03:14	23° $\text{♁}$ 35'44	0°29'29	evening set	10590 Jan 15 01:41	13° $\text{♁}$ 11'37	
asc. node	10589 Feb 08 14:53	21° $\text{♁}$ 57'33		min. Earth dist.	10590 Jan 18 20:08	9° $\text{♁}$ 56'27	0.63583 AU
morning rise	10589 Feb 13 08:55	18° $\text{♁}$ 05'35		inferior conj	10590 Jan 21 12:08	7° $\text{♁}$ 14'26	-1°39'05
direct	10589 Feb 16 01:51	17° $\text{♁}$ 26'21		minimum elong	10590 Jan 21 15:19	7° $\text{♁}$ 06'20	1°37'20
morning max el	10589 Feb 22 11:09	20° $\text{♁}$ 47'57	18°02'07	asc. node	10590 Jan 26 12:04	2° $\text{♁}$ 52'18	
	10589 Mar 01 14:32	0° $\text{♁}$		morning rise	10590 Jan 28 07:01	1° $\text{♁}$ 57'06	
morning set	10589 Mar 12 14:19	17° $\text{♁}$ 38'15		direct	10590 Jan 30 16:31	1° $\text{♁}$ 29'05	
desc. node	10589 Mar 14 09:00	20° $\text{♁}$ 32'53		morning max el	10590 Feb 06 04:47	4° $\text{♁}$ 50'31	17°47'49
	10589 Mar 20 04:44	0° $\text{♁}$		morning set	10590 Feb 22 15:43	29° $\text{♁}$ 53'02	
					10590 Feb 22 17:20	0° $\text{♁}$	
superior conj	10589 Mar 27 03:03	11° $\text{♁}$ 03'10	-1°25'41	desc. node	10590 Mar 01 05:45	11° $\text{♁}$ 06'27	
minimum elong	10589 Mar 26 18:05	10° $\text{♁}$ 27'45	1°24'43				
max. Earth dist.	10589 Mar 30 07:17	16° $\text{♁}$ 03'11	1.45500 AU	superior conj	10590 Mar 07 06:04	21° $\text{♁}$ 05'00	-0°44'00
	10589 Apr 08 06:15	0° $\text{♁}$		minimum elong	10590 Mar 07 01:23	20° $\text{♁}$ 45'51	0°43'11
evening rise	10589 Apr 12 06:02	6° $\text{♁}$ 10'08			10590 Mar 12 18:46	0° $\text{♁}$	
greatest brilliancy	10589 Apr 25 15:15	26° $\text{♁}$ 34'17	-0.7m	max. Earth dist.	10590 Mar 13 02:18	0° $\text{♁}$ 30'00	1.44653 AU
	10589 Apr 27 23:23	0° $\text{♁}$		evening rise	10590 Mar 22 17:32	15° $\text{♁}$ 32'24	
evening max el	10589 May 07 08:32	12° $\text{♁}$ 00'32	19°34'49		10590 Apr 01 07:02	0° $\text{♁}$	
asc. node	10589 May 07 12:50	12° $\text{♁}$ 11'19		evening max el	10590 Apr 20 10:00	25° $\text{♁}$ 43'30	20°36'33
retrograde	10589 May 14 14:45	16° $\text{♁}$ 07'43		asc. node	10590 Apr 24 10:01	29° $\text{♁}$ 04'35	
evening set	10589 May 18 07:05	14° $\text{♁}$ 48'41			10590 Apr 26 05:18	0° $\text{♁}$	
inferior conj	10589 May 23 16:06	8° $\text{♁}$ 53'44	3°17'50	retrograde	10590 Apr 28 13:32	0° $\text{♁}$ 28'04	
minimum elong	10589 May 23 15:59	8° $\text{♁}$ 54'06	3°17'20		10590 Apr 30 19:09	30° $\text{♁}$	
min. Earth dist.	10589 May 24 20:56	7° $\text{♁}$ 18'14	0.67195 AU	evening set	10590 May 02 15:19	28° $\text{♁}$ 53'15	
morning rise	10589 May 29 00:33	2° $\text{♁}$ 33'28		inferior conj	10590 May 07 22:11	22° $\text{♁}$ 45'22	3°10'36
	10589 Jun 02 20:22	30° $\text{♁}$		minimum elong	10590 May 07 21:04	22° $\text{♁}$ 49'11	3°10'05
direct	10589 Jun 04 00:41	29° $\text{♁}$ 54'16		min. Earth dist.	10590 May 08 12:58	21° $\text{♁}$ 54'27	0.68122 AU
	10589 Jun 05 05:47	0° $\text{♁}$		morning rise	10590 May 13 02:36	16° $\text{♁}$ 27'56	
desc. node	10589 Jun 10 09:29	2° $\text{♁}$ 12'56		direct	10590 May 18 14:18	14° $\text{♁}$ 02'01	
morning max el	10589 Jun 16 06:03	7° $\text{♁}$ 13'35	25°30'08	desc. node	10590 May 28 06:27	19° $\text{♁}$ 17'40	
	10589 Jul 03 23:17	0° $\text{♁}$		morning max el	10590 May 29 15:43	20° $\text{♁}$ 38'51	24°03'10
morning set	10589 Jul 22 07:21	0° $\text{♁}$ 06'30			10590 Jun 06 16:21	0° $\text{♁}$	
	10589 Jul 22 05:55	0° $\text{♁}$			10590 Jun 27 04:17	0° $\text{♁}$	
max. Earth dist.	10589 Jul 25 23:18	6° $\text{♁}$ 52'50	1.36087 AU	morning set	10590 Jul 04 03:19	11° $\text{♁}$ 35'37	
				max. Earth dist.	10590 Jul 07 20:59	18° $\text{♁}$ 08'01	1.38286 AU
					10590 Jul 14 08:05	0° $\text{♁}$	
superior conj	10589 Aug 01 00:31	18° $\text{♁}$ 38'25	-0°24'01				
minimum elong	10589 Aug 01 02:01	18° $\text{♁}$ 45'52	0°24'06	superior conj	10590 Jul 15 03:29	1° $\text{♁}$ 31'57	-0°57'16
asc. node	10589 Aug 03 12:11	23° $\text{♁}$ 39'04		minimum elong	10590 Jul 15 07:19	1° $\text{♁}$ 50'09	0°57'06
	10589 Aug 06 14:45	0° $\text{♁}$		asc. node	10590 Jul 21 09:04	13° $\text{♁}$ 38'19	
evening rise	10589 Aug 09 01:24	5° $\text{♁}$ 00'10		evening rise	10590 Jul 24 01:27	18° $\text{♁}$ 55'39	
	10589 Aug 23 06:02	0° $\text{♁}$			10590 Jul 29 19:59	0° $\text{♁}$	
evening max el	10589 Aug 26 16:05	3° $\text{♁}$ 55'42	19°57'59	evening max el	10590 Aug 09 11:02	15° $\text{♁}$ 38'27	18°59'47
retrograde	10589 Sep 06 00:59	9° $\text{♁}$ 04'46		retrograde	10590 Aug 18 05:11	20° $\text{♁}$ 00'16	
desc. node	10589 Sep 06 07:45	9° $\text{♁}$ 04'33		evening set	10590 Aug 20 02:20	19° $\text{♁}$ 48'58	
evening set	10589 Sep 07 22:46	8° $\text{♁}$ 55'04		desc. node	10590 Aug 24 05:02	18° $\text{♁}$ 14'59	
inferior conj	10589 Sep 16 22:09	4° $\text{♁}$ 54'54	-3°12'57	inferior conj	10590 Aug 28 10:23	15° $\text{♁}$ 33'22	-1°18'53
minimum elong	10589 Sep 16 13:42	5° $\text{♁}$ 07'41	3°10'00	minimum elong	10590 Aug 28 06:59	15° $\text{♁}$ 39'17	1°17'44
min. Earth dist.	10589 Sep 18 19:01	3° $\text{♁}$ 47'06	0.55062 AU	min. Earth dist.	10590 Aug 31 08:44	13° $\text{♁}$ 31'24	0.56387 AU
morning rise	10589 Sep 25 03:16	0° $\text{♁}$ 41'13		morning rise	10590 Sep 05 08:28	10° $\text{♁}$ 43'12	
	10589 Sep 28 04:17	30° $\text{♁}$		direct	10590 Sep 10 19:03	9° $\text{♁}$ 33'24	
direct	10589 Sep 29 18:41	29° $\text{♁}$ 54'17		morning max el	10590 Sep 25 00:15	16° $\text{♁}$ 51'18	25°59'22
	10589 Oct 01 08:54	0° $\text{♁}$			10590 Oct 05 18:59	0° $\text{♁}$	
morning max el	10589 Oct 13 11:25	6° $\text{♁}$ 38'40	24°20'03	asc. node	10590 Oct 17 09:37	19° $\text{♁}$ 50'02	
	10589 Oct 30 05:06	0° $\text{♁}$					

	10590 Oct 22 09:19	0°♍		morning max el	10591 Sep 06 19:06	27°♊33'24	27°13'36
morning set	10590 Oct 23 00:20	1°♍19'53			10591 Sep 09 03:55	0°♐	
					10591 Sep 29 09:37	0°♊	
superior conj	10590 Oct 29 20:20	16°♍19'41	1°35'15	asc. node	10591 Oct 04 06:27	9°♊26'18	
minimum elong	10590 Oct 29 19:03	16°♍12'34	1°35'31	morning set	10591 Oct 07 09:02	15°♊52'36	
max. Earth dist.	10590 Oct 30 19:33	18°♍28'12	1.31815 AU		10591 Oct 13 20:07	0°♍	
	10590 Nov 05 03:11	0°♊					
evening rise	10590 Nov 05 20:14	1°♊29'32		superior conj	10591 Oct 14 08:08	1°♍06'53	1°25'12
desc. node	10590 Nov 20 02:49	28°♊01'51		minimum elong	10591 Oct 14 06:10	0°♍55'55	1°25'12
	10590 Nov 21 08:25	0°♊		max. Earth dist.	10591 Oct 14 04:40	0°♍47'35	1.31455 AU
evening max el	10590 Dec 07 18:04	20°♊59'32	27°22'03	evening rise	10591 Oct 21 02:39	15°♍58'50	
retrograde	10590 Dec 21 15:02	28°♊15'01			10591 Oct 28 01:13	0°♊	
evening set	10590 Dec 28 15:18	25°♊59'10		desc. node	10591 Nov 06 23:59	16°♊57'21	
min. Earth dist.	10591 Jan 01 08:28	23°♊08'55	0.61582 AU		10591 Nov 17 00:12	0°♊	
inferior conj	10591 Jan 04 09:22	20°♊25'21	-2°53'47	evening max el	10591 Nov 19 20:15	2°♊52'43	26°40'00
minimum elong	10591 Jan 04 15:12	20°♊12'14	2°51'05	retrograde	10591 Dec 03 18:46	10°♊00'34	
morning rise	10591 Jan 11 17:42	15°♊26'32		evening set	10591 Dec 10 11:47	8°♊08'06	
asc. node	10591 Jan 13 09:14	15°♊07'22		min. Earth dist.	10591 Dec 14 10:17	5°♊31'35	0.59463 AU
direct	10591 Jan 13 22:12	15°♊06'05		inferior conj	10591 Dec 17 14:35	3°♊02'02	-4°08'27
morning max el	10591 Jan 20 21:17	18°♊37'06	17°51'29	minimum elong	10591 Dec 17 22:24	2°♊46'39	4°05'34
	10591 Jan 29 03:19	0°♊			10591 Dec 21 20:12	30°♊	
morning set	10591 Feb 05 13:45	13°♊05'46		morning rise	10591 Dec 25 11:43	28°♊24'14	
	10591 Feb 15 01:58	0°♊		direct	10591 Dec 27 14:48	28°♊07'50	
				asc. node	10591 Dec 31 06:20	28°♊58'37	
superior conj	10591 Feb 16 09:53	2°♊17'35	-0°02'21		10592 Jan 02 00:41	0°♊	
minimum elong	10591 Feb 16 09:43	2°♊16'48	0°02'02	morning max el	10592 Jan 04 09:05	1°♊57'52	18°14'25
behind sun begin	10591 Feb 16 01:17	1°♊40'35		morning set	10592 Jan 20 02:29	26°♊58'43	
behind sun end	10591 Feb 16 18:08	2°♊52'56			10592 Jan 21 16:48	0°♊	
desc. node	10591 Feb 16 02:31	1°♊45'55					
max. Earth dist.	10591 Feb 23 17:19	14°♊31'19	1.43172 AU	superior conj	10592 Jan 29 13:06	14°♊35'30	0°33'40
evening rise	10591 Mar 02 11:04	25°♊17'19		minimum elong	10592 Jan 29 15:29	14°♊46'18	0°33'43
	10591 Mar 05 11:54	0°♊		desc. node	10592 Feb 02 23:21	22°♊27'51	
	10591 Mar 26 06:20	0°♊		max. Earth dist.	10592 Feb 06 03:28	27°♊55'07	1.41230 AU
evening max el	10591 Apr 03 05:58	9°♊27'15	21°49'37		10592 Feb 07 09:04	0°♊	
asc. node	10591 Apr 11 07:15	14°♊47'34		evening rise	10592 Feb 10 22:10	5°♊51'35	
retrograde	10591 Apr 12 11:36	14°♊54'25			10592 Feb 26 16:27	0°♊	
evening set	10591 Apr 16 23:45	13°♊04'15		evening max el	10592 Mar 15 21:56	23°♊13'31	23°09'10
inferior conj	10591 Apr 22 06:46	6°♊45'47	2°52'37	retrograde	10592 Mar 26 07:17	29°♊21'54	
minimum elong	10591 Apr 22 04:57	6°♊52'09	2°52'00	asc. node	10592 Mar 28 04:30	29°♊04'51	
min. Earth dist.	10591 Apr 22 08:33	6°♊39'34	0.68587 AU	evening set	10592 Mar 31 06:48	27°♊17'21	
morning rise	10591 Apr 27 09:58	0°♊32'53		min. Earth dist.	10592 Apr 05 05:23	21°♊27'43	0.68609 AU
	10591 Apr 28 02:07	30°♊		inferior conj	10592 Apr 05 15:53	20°♊51'25	2°24'52
direct	10591 May 02 08:17	28°♊25'36		minimum elong	10592 Apr 05 13:43	20°♊58'56	2°24'10
	10591 May 07 01:40	0°♊		morning rise	10592 Apr 10 20:33	14°♊44'25	
morning max el	10591 May 12 02:42	4°♊11'27	22°33'28	direct	10592 Apr 15 05:29	12°♊58'26	
desc. node	10591 May 15 03:21	7°♊27'42		morning max el	10592 Apr 23 18:16	17°♊53'24	21°09'23
	10591 May 31 20:10	0°♊		desc. node	10592 May 01 00:12	26°♊25'04	
morning set	10591 Jun 14 22:42	21°♊57'05			10592 May 03 16:25	0°♊	
	10591 Jun 19 18:44	0°♊			10592 May 23 22:36	0°♊	
max. Earth dist.	10591 Jun 19 18:43	29°♊59'58	1.40568 AU	morning set	10592 May 24 15:44	1°♊07'09	
				max. Earth dist.	10592 May 31 22:03	12°♊44'45	1.42670 AU
superior conj	10591 Jun 27 14:02	13°♊38'57	-1°29'34				
minimum elong	10591 Jun 27 19:57	14°♊05'39	1°29'20	superior conj	10592 Jun 08 03:34	24°♊48'41	-1°56'27
	10591 Jul 06 09:47	0°♊		minimum elong	10592 Jun 08 09:46	25°♊15'11	1°56'29
evening rise	10591 Jul 07 15:59	2°♊22'28			10592 Jun 11 03:52	0°♊	
asc. node	10591 Jul 08 06:00	3°♊28'32		evening rise	10592 Jun 19 16:47	15°♊09'13	
evening max el	10591 Jul 23 16:16	28°♊03'31	18°22'46	asc. node	10592 Jun 24 02:58	23°♊04'19	
	10591 Jul 25 23:18	0°♊			10592 Jun 28 03:39	0°♊	
retrograde	10591 Jul 31 04:16	1°♊49'39		evening max el	10592 Jul 06 03:38	10°♊59'45	18°05'45
evening set	10591 Aug 02 07:35	1°♊32'04		retrograde	10592 Jul 12 20:42	14°♊25'21	
	10591 Aug 05 16:55	30°♊		evening set	10592 Jul 15 07:57	13°♊57'42	
inferior conj	10591 Aug 09 20:17	26°♊56'32	0°22'43	inferior conj	10592 Jul 22 02:44	9°♊01'53	1°39'56
minimum elong	10591 Aug 09 21:05	26°♊54'55	0°22'05	minimum elong	10592 Jul 22 05:21	8°♊55'41	1°38'40
desc. node	10591 Aug 11 02:17	25°♊54'59		min. Earth dist.	10592 Jul 25 08:14	5°♊59'58	0.60588 AU
min. Earth dist.	10591 Aug 13 04:42	24°♊13'45	0.58338 AU	desc. node	10592 Jul 27 23:31	3°♊50'14	
morning rise	10591 Aug 17 07:03	21°♊30'15		morning rise	10592 Jul 28 23:58	3°♊08'20	
direct	10591 Aug 23 10:14	19°♊51'21		direct	10592 Aug 04 13:49	1°♊00'41	



morning max el	10592 Aug 18 20:48	8°♎57'21	27°52'19		10593 Aug 08 21:23	0°♎	
	10592 Sep 04 01:00	0°♎			10593 Aug 28 03:21	0°♎	
asc. node	10592 Sep 20 03:16	29°♎16'48		morning set	10593 Sep 04 11:32	14°♎05'43	
	10592 Sep 20 11:36	0°♎		asc. node	10593 Sep 07 00:04	19°♎16'42	
morning set	10592 Sep 20 13:28	0°♎09'39		max. Earth dist.	10593 Sep 09 17:24	25°♎02'23	1.32209 AU
max. Earth dist.	10592 Sep 26 13:13	13°♎02'18	1.31584 AU				
				superior conj	10593 Sep 12 03:36	0°♎17'12	0°49'13
superior conj	10592 Sep 27 19:11	15°♎47'50	1°09'46	minimum elong	10593 Sep 12 01:36	0°♎06'16	0°48'48
minimum elong	10592 Sep 27 16:56	15°♎35'25	1°09'31		10593 Sep 12 00:27	0°♎	
	10592 Oct 04 06:00	0°♎		evening rise	10593 Sep 18 23:54	15°♎13'03	
evening rise	10592 Oct 04 12:31	0°♎35'07			10593 Sep 26 06:43	0°♎	
	10592 Oct 20 09:10	0°♎		desc. node	10593 Oct 10 18:26	21°♎50'28	
desc. node	10592 Oct 23 21:12	5°♎00'12		evening max el	10593 Oct 13 01:56	24°♎14'04	23°50'41
evening max el	10592 Oct 31 14:26	13°♎54'27	25°26'07		10593 Oct 21 11:32	0°♎	
retrograde	10592 Nov 14 11:35	20°♎53'38		retrograde	10593 Oct 26 15:48	1°♎01'04	
evening set	10592 Nov 20 10:24	19°♎32'32		evening set	10593 Oct 31 08:33	0°♎12'54	
min. Earth dist.	10592 Nov 25 02:40	16°♎53'52	0.57434 AU		10593 Oct 31 23:15	30°♎	
inferior conj	10592 Nov 28 00:33	14°♎55'01	-5°11'40	min. Earth dist.	10593 Nov 06 12:20	27°♎13'31	0.55773 AU
minimum elong	10592 Nov 28 07:39	14°♎42'52	5°09'52	inferior conj	10593 Nov 08 14:04	25°♎58'52	-5°44'53
morning rise	10592 Dec 06 07:12	10°♎39'32		minimum elong	10593 Nov 08 15:39	25°♎56'30	5°44'25
direct	10592 Dec 08 14:19	10°♎23'39		morning rise	10593 Nov 17 00:40	22°♎03'19	
asc. node	10592 Dec 17 03:23	14°♎20'47		direct	10593 Nov 19 18:31	21°♎44'20	
morning max el	10592 Dec 17 12:17	14°♎41'49	18°58'31	morning max el	10593 Nov 30 03:22	26°♎39'06	20°05'17
	10592 Dec 28 03:14	0°♎			10593 Dec 03 05:24	0°♎	
morning set	10593 Jan 03 01:16	11°♎18'26		asc. node	10593 Dec 04 00:24	0°♎59'28	
				morning set	10593 Dec 18 06:39	25°♎54'40	
superior conj	10593 Jan 11 11:05	27°♎45'47	1°01'49		10593 Dec 20 06:36	0°♎	
minimum elong	10593 Jan 11 14:10	28°♎00'33	1°01'53				
	10593 Jan 12 15:19	0°♎		superior conj	10593 Dec 25 23:04	11°♎34'52	1°21'47
max. Earth dist.	10593 Jan 18 10:15	10°♎38'23	1.39048 AU	minimum elong	10593 Dec 26 01:41	11°♎48'01	1°22'03
desc. node	10593 Jan 19 20:12	13°♎08'39		max. Earth dist.	10593 Dec 31 17:04	22°♎47'30	1.36873 AU
evening rise	10593 Jan 22 06:45	17°♎22'33		evening rise	10594 Jan 04 11:27	29°♎45'12	
	10593 Jan 29 22:43	0°♎			10594 Jan 04 14:44	0°♎	
	10593 Feb 20 03:35	0°♎		desc. node	10594 Jan 06 17:05	3°♎44'10	
evening max el	10593 Feb 26 11:52	7°♎03'08	24°29'01		10594 Jan 23 04:47	0°♎	
retrograde	10593 Mar 09 23:19	13°♎45'52		evening max el	10594 Feb 09 01:11	20°♎52'42	25°42'17
evening set	10593 Mar 15 10:54	11°♎28'26		retrograde	10594 Feb 21 10:44	27°♎59'48	
asc. node	10593 Mar 15 01:43	11°♎47'20		evening set	10594 Feb 27 10:28	25°♎32'13	
min. Earth dist.	10593 Mar 20 01:14	6°♎14'03	0.68202 AU	asc. node	10594 Mar 01 22:57	23°♎01'48	
inferior conj	10593 Mar 20 23:39	4°♎58'59	1°47'47	min. Earth dist.	10594 Mar 03 17:49	20°♎52'53	0.67385 AU
minimum elong	10593 Mar 20 21:35	5°♎05'56	1°47'06	inferior conj	10594 Mar 05 04:09	19°♎03'54	1°01'25
	10593 Mar 25 03:35	30°♎		minimum elong	10594 Mar 05 02:43	19°♎08'28	1°01'01
morning rise	10593 Mar 26 08:23	28°♎59'21		morning rise	10594 Mar 10 19:28	13°♎13'16	
direct	10593 Mar 30 04:34	27°♎34'58		direct	10594 Mar 14 03:54	12°♎08'57	
	10593 Apr 04 17:13	0°♎		morning max el	10594 Mar 20 23:49	15°♎52'06	18°59'29
morning max el	10593 Apr 06 17:09	1°♎47'42	19°57'01		10594 Mar 31 19:56	0°♎	
desc. node	10593 Apr 17 21:01	15°♎57'05		greatest brilliancy	10594 Apr 03 13:24	4°♎05'53	-0.8m
	10593 Apr 27 08:54	0°♎		desc. node	10594 Apr 04 17:46	5°♎53'50	
morning set	10593 May 03 15:50	9°♎35'56		morning set	10594 Apr 12 20:52	18°♎26'17	
max. Earth dist.	10593 May 14 08:59	26°♎21'25	1.44330 AU		10594 Apr 20 07:23	0°♎	
	10593 May 16 15:40	0°♎		max. Earth dist.	10594 Apr 27 01:34	10°♎33'35	1.45358 AU
superior conj	10593 May 19 16:59	4°♎56'12	-2°11'43	superior conj	10594 Apr 29 08:32	14°♎09'39	-2°09'01
minimum elong	10593 May 19 19:30	5°♎06'27	2°12'07	minimum elong	10594 Apr 29 03:46	13°♎50'51	2°09'12
evening rise	10593 Jun 01 23:05	27°♎05'46			10594 May 09 07:13	0°♎	
	10593 Jun 03 15:50	0°♎		evening rise	10594 May 14 06:31	8°♎03'15	
asc. node	10593 Jun 10 23:59	12°♎20'31			10594 May 28 01:38	0°♎	
evening max el	10593 Jun 19 17:24	24°♎17'57	18°07'42	asc. node	10594 May 28 21:03	1°♎09'50	
retrograde	10593 Jun 26 02:29	27°♎38'13		evening max el	10594 Jun 03 06:22	7°♎49'35	18°28'00
evening set	10593 Jun 28 21:38	26°♎57'54		retrograde	10594 Jun 09 17:11	11°♎18'34	
inferior conj	10593 Jul 05 02:09	21°♎43'11	2°32'05	evening set	10594 Jun 12 20:11	10°♎23'57	
minimum elong	10593 Jul 05 04:46	21°♎36'07	2°30'57	inferior conj	10594 Jun 18 14:22	4°♎52'18	3°02'52
min. Earth dist.	10593 Jul 07 20:46	18°♎45'13	0.62825 AU	minimum elong	10594 Jun 18 16:06	4°♎47'09	3°02'05
morning rise	10593 Jul 11 10:07	15°♎32'42		min. Earth dist.	10594 Jun 20 18:43	2°♎17'03	0.64821 AU
desc. node	10593 Jul 14 20:41	13°♎37'54			10594 Jun 22 21:12	30°♎	
direct	10593 Jul 18 03:18	13°♎02'53		morning rise	10594 Jun 24 11:01	28°♎33'26	
morning max el	10593 Aug 01 04:06	21°♎05'11	27°52'35	direct	10594 Jul 01 01:04	25°♎51'29	

desc. node	10594 Jul 01 17:48	25° $\Pi$ 53'08		minimum elong	10595 Jun 02 12:21	18° $\Pi$ 20'16	3°15'55
	10594 Jul 10 09:38	0° $\mathfrak{C}$		min. Earth dist.	10595 Jun 04 01:08	16° $\Pi$ 22'19	0.66448 AU
morning max el	10594 Jul 14 14:29	3° $\mathfrak{C}$ 49'02	27°17'45	morning rise	10595 Jun 07 23:50	12° $\Pi$ 00'56	
	10594 Aug 03 08:24	0° $\Omega$		direct	10595 Jun 14 06:01	9° $\Pi$ 17'40	
morning set	10594 Aug 19 00:36	27° $\Omega$ 34'05		desc. node	10595 Jun 18 14:51	10° $\Pi$ 23'17	
	10594 Aug 20 06:20	0° $\mathfrak{M}$		morning max el	10595 Jun 27 01:16	16° $\Pi$ 56'18	26°15'04
max. Earth dist.	10594 Aug 23 13:35	6° $\mathfrak{M}$ 39'47	1.33333 AU		10595 Jul 07 21:59	0° $\mathfrak{C}$	
asc. node	10594 Aug 24 20:53	9° $\mathfrak{M}$ 21'38			10595 Jul 27 06:25	0° $\Omega$	
				morning set	10595 Aug 02 01:16	10° $\Omega$ 25'17	
superior conj	10594 Aug 27 07:23	14° $\mathfrak{M}$ 29'16	0°23'53	max. Earth dist.	10595 Aug 05 23:08	17° $\Omega$ 52'30	1.34952 AU
minimum elong	10594 Aug 27 06:13	14° $\mathfrak{M}$ 23'04	0°23'28				
evening rise	10594 Sep 03 10:56	29° $\mathfrak{M}$ 47'11		superior conj	10595 Aug 11 04:01	28° $\Omega$ 17'00	-0°05'36
	10594 Sep 03 13:21	0° $\mathfrak{L}$		minimum elong	10595 Aug 11 04:21	28° $\Omega$ 18'43	0°05'51
	10594 Sep 20 16:17	0° $\mathfrak{M}$		behind sun begin	10595 Aug 10 22:45	27° $\Omega$ 50'04	
evening max el	10594 Sep 24 14:00	4° $\mathfrak{M}$ 21'44	22°10'32	behind sun end	10595 Aug 11 09:57	28° $\Omega$ 47'25	
desc. node	10594 Sep 27 15:41	7° $\mathfrak{M}$ 01'49		asc. node	10595 Aug 11 17:42	29° $\Omega$ 27'11	
retrograde	10594 Oct 07 08:42	10° $\mathfrak{M}$ 43'32			10595 Aug 12 00:04	0° $\mathfrak{M}$	
evening set	10594 Oct 10 13:57	10° $\mathfrak{M}$ 20'31		evening rise	10595 Aug 18 19:35	14° $\mathfrak{M}$ 11'11	
inferior conj	10594 Oct 19 11:19	6° $\mathfrak{M}$ 20'50	-5°27'33		10595 Aug 26 21:38	0° $\mathfrak{L}$	
minimum elong	10594 Oct 19 04:45	6° $\mathfrak{M}$ 30'04	5°26'21	evening max el	10595 Sep 06 11:49	14° $\mathfrak{L}$ 53'27	20°41'05
min. Earth dist.	10594 Oct 18 19:33	6° $\mathfrak{M}$ 43'00	0.54777 AU	desc. node	10595 Sep 14 12:57	20° $\mathfrak{L}$ 03'26	
morning rise	10594 Oct 27 21:05	2° $\mathfrak{M}$ 33'50		retrograde	10595 Sep 17 20:30	20° $\mathfrak{L}$ 31'39	
direct	10594 Oct 31 06:43	2° $\mathfrak{M}$ 08'08		evening set	10595 Sep 20 00:23	20° $\mathfrak{L}$ 20'16	
morning max el	10594 Nov 12 04:56	7° $\mathfrak{M}$ 46'12	21°33'54	inferior conj	10595 Sep 29 03:33	16° $\mathfrak{L}$ 24'22	-4°13'41
asc. node	10594 Nov 20 21:22	18° $\mathfrak{M}$ 38'44		minimum elong	10595 Sep 28 17:40	16° $\mathfrak{L}$ 38'33	4°10'44
	10594 Nov 27 09:16	0° $\mathfrak{X}$		min. Earth dist.	10595 Sep 30 03:50	15° $\mathfrak{L}$ 49'28	0.54681 AU
morning set	10594 Dec 02 16:08	10° $\mathfrak{X}$ 40'13		morning rise	10595 Oct 07 10:46	12° $\mathfrak{L}$ 25'42	
				direct	10595 Oct 11 14:52	11° $\mathfrak{L}$ 48'20	
superior conj	10594 Dec 09 21:06	25° $\mathfrak{X}$ 51'46	1°34'07	morning max el	10595 Oct 24 19:47	18° $\mathfrak{L}$ 10'49	23°18'04
minimum elong	10594 Dec 09 22:41	26° $\mathfrak{X}$ 00'01	1°34'33		10595 Nov 03 10:23	0° $\mathfrak{M}$	
	10594 Dec 11 21:05	0° $\mathfrak{Z}$		asc. node	10595 Nov 07 18:17	7° $\mathfrak{M}$ 03'39	
max. Earth dist.	10594 Dec 14 04:28	4° $\mathfrak{Z}$ 40'50	1.34928 AU	morning set	10595 Nov 17 03:36	25° $\mathfrak{M}$ 28'14	
evening rise	10594 Dec 18 09:01	12° $\mathfrak{Z}$ 51'30			10595 Nov 19 06:19	0° $\mathfrak{X}$	
desc. node	10594 Dec 24 14:02	24° $\mathfrak{Z}$ 10'26					
	10594 Dec 28 00:05	0° $\mathfrak{A}$		superior conj	10595 Nov 24 01:59	10° $\mathfrak{X}$ 26'02	1°39'29
	10595 Jan 18 05:30	0° $\mathfrak{H}$		minimum elong	10595 Nov 24 02:21	10° $\mathfrak{X}$ 28'04	1°39'58
evening max el	10595 Jan 22 14:34	4° $\mathfrak{H}$ 36'41	26°41'39	max. Earth dist.	10595 Nov 26 23:31	16° $\mathfrak{X}$ 36'30	1.33363 AU
retrograde	10595 Feb 04 16:51	11° $\mathfrak{H}$ 57'06		evening rise	10595 Dec 01 19:40	26° $\mathfrak{X}$ 31'21	
evening set	10595 Feb 11 03:42	9° $\mathfrak{H}$ 23'39			10595 Dec 03 14:13	0° $\mathfrak{Z}$	
min. Earth dist.	10595 Feb 15 05:06	5° $\mathfrak{H}$ 18'37	0.66180 AU	desc. node	10595 Dec 11 11:02	14° $\mathfrak{Z}$ 21'30	
asc. node	10595 Feb 16 20:11	3° $\mathfrak{H}$ 23'17			10595 Dec 21 08:26	0° $\mathfrak{A}$	
inferior conj	10595 Feb 17 03:19	3° $\mathfrak{H}$ 02'06	0°05'51	evening max el	10596 Jan 05 03:33	18° $\mathfrak{A}$ 05'38	27°20'03
minimum elong	10595 Feb 17 03:09	3° $\mathfrak{H}$ 02'36	0°06'04	retrograde	10596 Jan 18 16:53	25° $\mathfrak{A}$ 29'07	
transit middle	10595 Feb 17 03:09	3° $\mathfrak{H}$ 02'36	0°06'04	evening set	10596 Jan 25 12:28	22° $\mathfrak{A}$ 56'13	
transit begin	10595 Feb 17 00:26	3° $\mathfrak{H}$ 10'38		min. Earth dist.	10596 Jan 29 09:00	19° $\mathfrak{A}$ 23'37	0.64615 AU
transit end	10595 Feb 17 05:52	2° $\mathfrak{H}$ 54'34		inferior conj	10596 Jan 31 18:45	16° $\mathfrak{A}$ 47'54	-0°58'33
	10595 Feb 19 20:20	30° $\mathfrak{R}$		minimum elong	10596 Jan 31 20:32	16° $\mathfrak{A}$ 43'04	0°57'24
morning rise	10595 Feb 23 03:41	27° $\mathfrak{A}$ 22'24		asc. node	10596 Feb 03 17:23	13° $\mathfrak{A}$ 48'31	
direct	10595 Feb 26 01:44	26° $\mathfrak{A}$ 35'10		morning rise	10596 Feb 07 06:22	11° $\mathfrak{A}$ 21'31	
morning max el	10595 Mar 04 12:49	0° $\mathfrak{H}$ 01'29	18°18'12	direct	10596 Feb 09 19:45	10° $\mathfrak{A}$ 47'40	
	10595 Mar 04 12:12	0° $\mathfrak{H}$		morning max el	10596 Feb 16 05:34	14° $\mathfrak{A}$ 08'18	17°53'53
desc. node	10595 Mar 22 14:31	26° $\mathfrak{H}$ 08'41			10596 Feb 27 11:46	0° $\mathfrak{H}$	
morning set	10595 Mar 24 02:09	28° $\mathfrak{H}$ 31'16		morning set	10596 Mar 04 12:39	10° $\mathfrak{H}$ 02'22	
	10595 Mar 25 00:21	0° $\mathfrak{Y}$		desc. node	10596 Mar 08 11:17	16° $\mathfrak{H}$ 36'24	
					10596 Mar 16 16:04	0° $\mathfrak{Y}$	
superior conj	10595 Apr 08 14:39	23° $\mathfrak{Y}$ 04'54	-1°46'10				
minimum elong	10595 Apr 08 05:14	22° $\mathfrak{Y}$ 28'01	1°45'30	superior conj	10596 Mar 18 05:51	2° $\mathfrak{Y}$ 31'28	-1°08'32
max. Earth dist.	10595 Apr 09 20:47	25° $\mathfrak{Y}$ 02'47	1.45659 AU	minimum elong	10596 Mar 17 22:23	2° $\mathfrak{Y}$ 01'39	1°07'32
	10595 Apr 13 00:54	0° $\mathfrak{B}$		max. Earth dist.	10596 Mar 22 16:06	9° $\mathfrak{Y}$ 32'59	1.45218 AU
evening rise	10595 Apr 24 14:19	18° $\mathfrak{B}$ 03'45		evening rise	10596 Apr 03 05:13	27° $\mathfrak{Y}$ 28'54	
	10595 May 02 05:39	0° $\mathfrak{I}$			10596 Apr 04 20:39	0° $\mathfrak{B}$	
greatest brilliancy	10595 May 05 08:26	4° $\mathfrak{I}$ 48'26	-0.8m	greatest brilliancy	10596 Apr 18 02:02	19° $\mathfrak{B}$ 53'13	-0.6m
asc. node	10595 May 15 18:09	19° $\mathfrak{I}$ 23'23			10596 Apr 25 09:27	0° $\mathfrak{I}$	
evening max el	10595 May 17 16:02	21° $\mathfrak{I}$ 28'26	19°05'47	evening max el	10596 Apr 29 20:46	5° $\mathfrak{I}$ 10'47	19°59'32
retrograde	10595 May 24 13:09	25° $\mathfrak{I}$ 18'46		asc. node	10596 May 01 15:19	6° $\mathfrak{I}$ 50'01	
evening set	10595 May 28 00:20	24° $\mathfrak{I}$ 08'57		retrograde	10596 May 07 11:30	9° $\mathfrak{I}$ 33'09	
inferior conj	10595 Jun 02 11:48	18° $\mathfrak{I}$ 22'04	3°16'28	evening set	10596 May 11 07:39	8° $\mathfrak{I}$ 07'36	

inferior conj	10596 May 16 15:27	2° $\Pi$ 07'05	3°16'09	asc. node	10597 Apr 18 12:32	23° $\mathcal{B}$ 15'09	
minimum elong	10596 May 16 14:53	2° $\Pi$ 08'59	3°15'40	retrograde	10597 Apr 21 10:03	23° $\mathcal{B}$ 56'06	
min. Earth dist.	10596 May 17 14:17	0° $\Pi$ 49'58	0.67640 AU	evening set	10597 Apr 25 16:09	22° $\mathcal{B}$ 14'46	
	10596 May 18 05:18	30° $\mathcal{R}$ $\mathcal{B}$		inferior conj	10597 Apr 30 22:50	16° $\mathcal{B}$ 02'21	3°04'12
morning rise	10596 May 21 21:49	25° $\mathcal{B}$ 47'36		minimum elong	10597 Apr 30 21:23	16° $\mathcal{B}$ 07'23	3°03'40
direct	10596 May 27 16:55	23° $\mathcal{B}$ 12'53		min. Earth dist.	10597 May 01 08:03	15° $\mathcal{B}$ 30'24	0.68375 AU
desc. node	10596 Jun 04 11:51	26° $\mathcal{B}$ 39'44		morning rise	10597 May 06 02:24	9° $\mathcal{B}$ 46'47	
	10596 Jun 08 04:36	0° $\Pi$		direct	10597 May 11 08:36	7° $\mathcal{B}$ 28'05	
morning max el	10596 Jun 08 11:02	0° $\Pi$ 16'14	24°54'05	morning max el	10597 May 21 20:41	13° $\mathcal{B}$ 43'21	23°24'50
	10596 Jun 30 19:29	0° $\mathcal{E}$		desc. node	10597 May 22 08:48	14° $\mathcal{B}$ 14'19	
morning set	10596 Jul 14 09:12	22° $\mathcal{E}$ 28'26			10597 Jun 04 00:35	0° $\Pi$	
max. Earth dist.	10596 Jul 17 23:19	28° $\mathcal{E}$ 57'07	1.36990 AU		10597 Jun 23 16:58	0° $\mathcal{E}$	
	10596 Jul 18 12:57	0° $\mathcal{Q}$		morning set	10597 Jun 25 19:10	3° $\mathcal{E}$ 29'18	
				max. Earth dist.	10597 Jun 29 20:09	10° $\mathcal{E}$ 24'26	1.39264 AU
superior conj	10596 Jul 24 14:32	11° $\mathcal{Q}$ 33'22	-0°38'00	superior conj	10597 Jul 07 11:04	24° $\mathcal{E}$ 08'15	-1°11'17
minimum elong	10596 Jul 24 16:59	11° $\mathcal{Q}$ 45'21	0°37'58	minimum elong	10597 Jul 07 15:52	24° $\mathcal{E}$ 30'37	1°11'03
asc. node	10596 Jul 28 14:34	19° $\mathcal{Q}$ 30'03			10597 Jul 10 13:50	0° $\mathcal{Q}$	
evening rise	10596 Aug 01 23:35	28° $\mathcal{Q}$ 19'18		asc. node	10597 Jul 15 11:27	9° $\mathcal{Q}$ 25'42	
	10596 Aug 02 19:40	0° $\mathcal{P}$		evening rise	10597 Jul 16 20:00	12° $\mathcal{Q}$ 03'15	
evening max el	10596 Aug 18 23:29	26° $\mathcal{P}$ 10'05	19°30'40		10597 Jul 26 17:06	0° $\mathcal{P}$	
	10596 Aug 24 06:43	0° $\mathcal{L}$		evening max el	10597 Aug 01 23:20	8° $\mathcal{P}$ 11'42	18°41'31
retrograde	10596 Aug 28 15:08	0° $\mathcal{L}$ 57'35		retrograde	10597 Aug 10 03:03	12° $\mathcal{P}$ 16'17	
evening set	10596 Aug 30 11:23	0° $\mathcal{L}$ 47'52		evening set	10597 Aug 12 02:36	12° $\mathcal{P}$ 02'41	
desc. node	10596 Aug 31 10:14	0° $\mathcal{L}$ 35'35		desc. node	10597 Aug 18 07:30	8° $\mathcal{P}$ 56'45	
	10596 Sep 02 05:37	30° $\mathcal{R}$ $\mathcal{P}$		inferior conj	10597 Aug 20 02:29	7° $\mathcal{P}$ 38'40	-0°33'15
inferior conj	10596 Sep 08 05:18	26° $\mathcal{P}$ 42'31	-2°24'34	minimum elong	10597 Aug 20 01:08	7° $\mathcal{P}$ 41'11	0°32'57
minimum elong	10596 Sep 07 22:51	26° $\mathcal{P}$ 52'49	2°22'12	min. Earth dist.	10597 Aug 23 06:55	5° $\mathcal{P}$ 17'22	0.57167 AU
min. Earth dist.	10596 Sep 10 15:05	25° $\mathcal{P}$ 10'30	0.55536 AU	morning rise	10597 Aug 27 20:15	2° $\mathcal{P}$ 32'51	
morning rise	10596 Sep 16 07:59	22° $\mathcal{P}$ 14'03		direct	10597 Sep 02 14:38	1° $\mathcal{P}$ 11'09	
direct	10596 Sep 21 07:54	21° $\mathcal{P}$ 18'02		morning max el	10597 Sep 16 21:48	8° $\mathcal{P}$ 39'31	26°34'45
morning max el	10596 Oct 05 06:59	28° $\mathcal{P}$ 18'03	25°04'10		10597 Oct 03 00:11	0° $\mathcal{L}$	
	10596 Oct 06 23:55	0° $\mathcal{L}$		asc. node	10597 Oct 11 12:01	15° $\mathcal{L}$ 27'52	
asc. node	10596 Oct 24 15:10	26° $\mathcal{L}$ 03'03		morning set	10597 Oct 16 01:38	24° $\mathcal{L}$ 52'40	
	10596 Oct 26 16:15	0° $\mathcal{M}$			10597 Oct 18 10:31	0° $\mathcal{M}$	
morning set	10596 Oct 31 15:19	10° $\mathcal{M}$ 13'52					
superior conj	10596 Nov 07 11:10	25° $\mathcal{M}$ 10'08	1°38'30	superior conj	10597 Oct 22 22:33	9° $\mathcal{M}$ 57'42	1°31'39
minimum elong	10596 Nov 07 10:25	25° $\mathcal{M}$ 06'03	1°38'53	minimum elong	10597 Oct 22 20:56	9° $\mathcal{M}$ 48'42	1°31'50
max. Earth dist.	10596 Nov 09 02:15	28° $\mathcal{M}$ 44'20	1.32250 AU	max. Earth dist.	10597 Oct 23 10:14	11° $\mathcal{M}$ 02'41	1.31609 AU
	10596 Nov 09 16:09	0° $\mathcal{J}$		evening rise	10597 Oct 29 19:39	24° $\mathcal{M}$ 58'32	
evening rise	10596 Nov 14 16:09	10° $\mathcal{J}$ 36'11			10597 Nov 01 05:46	0° $\mathcal{J}$	
	10596 Nov 24 21:07	0° $\mathcal{Z}$		desc. node	10597 Nov 14 05:14	23° $\mathcal{J}$ 29'25	
desc. node	10596 Nov 27 08:06	4° $\mathcal{Z}$ 10'45			10597 Nov 18 13:29	0° $\mathcal{Z}$	
	10596 Dec 16 10:42	0° $\approx$		evening max el	10597 Nov 29 20:53	13° $\mathcal{Z}$ 29'58	27°08'23
evening max el	10596 Dec 17 14:33	1° $\approx$ 07'51	27°30'39	retrograde	10597 Dec 13 18:27	20° $\mathcal{Z}$ 41'18	
retrograde	10596 Dec 31 09:50	8° $\approx$ 26'42		evening set	10597 Dec 20 16:54	18° $\mathcal{Z}$ 34'28	
evening set	10597 Jan 07 10:01	6° $\approx$ 02'22		min. Earth dist.	10597 Dec 24 11:26	15° $\mathcal{Z}$ 51'40	0.60688 AU
min. Earth dist.	10597 Jan 11 03:33	2° $\approx$ 58'25	0.62753 AU	inferior conj	10597 Dec 27 14:33	13° $\mathcal{Z}$ 12'24	-3°25'57
inferior conj	10597 Jan 13 23:37	0° $\approx$ 14'14	-2°10'22	minimum elong	10597 Dec 27 21:24	12° $\mathcal{Z}$ 57'50	3°23'03
minimum elong	10597 Jan 14 03:55	0° $\approx$ 03'48	2°08'09	morning rise	10598 Jan 04 04:30	8° $\mathcal{Z}$ 21'57	
	10597 Jan 14 05:29	30° $\mathcal{R}$ $\mathcal{Z}$		direct	10598 Jan 06 08:00	8° $\mathcal{Z}$ 03'32	
asc. node	10597 Jan 20 14:35	25° $\mathcal{Z}$ 13'06		asc. node	10598 Jan 07 11:44	8° $\mathcal{Z}$ 09'04	
morning rise	10597 Jan 21 00:08	25° $\mathcal{Z}$ 04'05		morning max el	10598 Jan 13 14:01	11° $\mathcal{Z}$ 41'19	17°58'46
direct	10597 Jan 23 07:06	24° $\mathcal{Z}$ 39'45			10598 Jan 25 18:23	0° $\approx$	
morning max el	10597 Jan 29 23:05	28° $\mathcal{Z}$ 04'26	17°47'04	morning set	10598 Jan 29 04:41	6° $\approx$ 16'25	
	10597 Jan 31 17:36	0° $\approx$					
morning set	10597 Feb 14 23:39	22° $\approx$ 43'58		superior conj	10598 Feb 08 09:23	24° $\approx$ 44'04	0°13'50
	10597 Feb 19 03:26	0° $\mathcal{H}$		minimum elong	10598 Feb 08 10:32	24° $\approx$ 49'11	0°13'59
desc. node	10597 Feb 23 08:02	7° $\mathcal{H}$ 12'27		behind sun begin	10598 Feb 08 06:38	24° $\approx$ 32'01	
				behind sun end	10598 Feb 08 14:27	25° $\approx$ 06'21	
superior conj	10597 Feb 26 19:05	13° $\mathcal{H}$ 02'03	-0°25'52	desc. node	10598 Feb 10 04:50	27° $\approx$ 53'28	
minimum elong	10597 Feb 26 16:29	12° $\mathcal{H}$ 51'12	0°25'16		10598 Feb 11 10:12	0° $\mathcal{H}$	
max. Earth dist.	10597 Mar 05 09:33	23° $\mathcal{H}$ 50'02	1.44090 AU	max. Earth dist.	10598 Feb 15 23:12	7° $\mathcal{H}$ 39'17	1.42395 AU
	10597 Mar 09 06:38	0° $\mathcal{Y}$		evening rise	10598 Feb 21 17:37	17° $\mathcal{H}$ 00'38	
evening rise	10597 Mar 13 17:26	6° $\mathcal{Y}$ 56'10			10598 Mar 02 03:16	0° $\mathcal{Y}$	
	10597 Mar 29 03:59	0° $\mathcal{B}$			10598 Mar 24 02:33	0° $\mathcal{B}$	
evening max el	10597 Apr 12 19:55	18° $\mathcal{B}$ 54'08	21°06'38	evening max el	10598 Mar 26 14:02	2° $\mathcal{B}$ 38'56	22°22'58

retrograde	10598 Apr 05 07:10	8°♄23'33		evening max el	10599 Mar 09 04:42	16°♄25'47	23°43'22
asc. node	10598 Apr 05 09:46	8°♄23'30		retrograde	10599 Mar 20 01:29	22°♄50'10	
evening set	10598 Apr 10 00:10	6°♄26'55		asc. node	10599 Mar 23 07:00	22°♄00'50	
inferior conj	10598 Apr 15 07:52	0°♄04'59	2°42'01	evening set	10599 Mar 25 06:09	20°♄39'36	
minimum elong	10598 Apr 15 05:51	0°♄12'01	2°41'20	min. Earth dist.	10599 Mar 30 00:55	15°♄05'06	0.68490 AU
min. Earth dist.	10598 Apr 15 04:18	0°♄17'23	0.68656 AU	inferior conj	10599 Mar 30 16:36	14°♄11'27	2°10'17
	10598 Apr 15 09:18	30°♄		minimum elong	10599 Mar 30 14:25	14°♄18'57	2°09'33
morning rise	10598 Apr 20 11:23	23°♄54'41		morning rise	10599 Apr 04 22:42	8°♄07'34	
direct	10598 Apr 25 04:00	21°♄56'22		direct	10599 Apr 09 02:01	6°♄31'07	
morning max el	10598 May 04 09:13	27°♄19'21	21°56'37	morning max el	10599 Apr 17 03:49	11°♄06'48	20°36'55
	10598 May 06 21:19	0°♄		desc. node	10599 Apr 26 02:32	21°♄59'13	
desc. node	10598 May 09 05:42	2°♄46'03			10599 May 01 18:46	0°♄	
	10598 May 28 14:33	0°♄		morning set	10599 May 16 10:52	22°♄05'13	
morning set	10598 Jun 06 03:01	13°♄18'37			10599 May 21 11:57	0°♄	
max. Earth dist.	10598 Jun 11 20:18	22°♄39'38	1.41507 AU	max. Earth dist.	10599 May 25 02:52	5°♄47'25	1.43439 AU
	10598 Jun 16 04:22	0°♄					
				superior conj	10599 May 31 16:31	16°♄34'01	-2°04'45
superior conj	10598 Jun 19 13:08	5°♄51'20	-1°41'58	minimum elong	10599 May 31 21:44	16°♄55'52	2°04'58
minimum elong	10598 Jun 19 19:32	6°♄19'29	1°41'48		10599 Jun 08 13:32	0°♄	
evening rise	10598 Jun 30 05:12	25°♄13'57		evening rise	10599 Jun 12 22:44	7°♄40'40	
asc. node	10598 Jul 02 08:23	29°♄10'01		asc. node	10599 Jun 19 05:21	18°♄38'12	
	10598 Jul 02 19:16	0°♄			10599 Jun 26 11:44	0°♄	
evening max el	10598 Jul 16 07:33	20°♄50'19	18°13'06	evening max el	10599 Jun 29 20:17	3°♄56'32	18°04'18
retrograde	10598 Jul 23 10:08	24°♄26'06		retrograde	10599 Jul 06 08:54	7°♄18'30	
evening set	10598 Jul 25 16:45	24°♄04'37		evening set	10599 Jul 08 23:23	6°♄45'53	
inferior conj	10598 Aug 01 21:26	19°♄19'56	0°58'41	inferior conj	10599 Jul 15 11:37	1°♄41'49	2°04'57
minimum elong	10598 Aug 01 23:16	19°♄15'55	0°57'38	minimum elong	10599 Jul 15 14:24	1°♄34'50	2°03'40
min. Earth dist.	10598 Aug 05 05:42	16°♄26'23	0.59276 AU		10599 Jul 17 04:02	30°♄	
desc. node	10598 Aug 05 04:46	16°♄28'19		min. Earth dist.	10599 Jul 18 13:10	28°♄38'42	0.61546 AU
morning rise	10598 Aug 09 02:32	13°♄40'42		morning rise	10599 Jul 22 03:00	25°♄39'32	
direct	10598 Aug 15 10:56	11°♄49'31		desc. node	10599 Jul 23 01:58	25°♄02'41	
morning max el	10598 Aug 29 19:43	19°♄38'27	27°34'54	direct	10599 Jul 28 18:57	23°♄21'19	
	10598 Sep 07 15:45	0°♄			10599 Aug 10 14:02	0°♄	
	10598 Sep 25 18:46	0°♄		morning max el	10599 Aug 12 00:18	1°♄22'29	27°57'10
asc. node	10598 Sep 28 08:49	5°♄10'43			10599 Sep 01 21:56	0°♄	
morning set	10598 Sep 30 08:45	9°♄19'19		morning set	10599 Sep 14 10:46	23°♄28'41	
				asc. node	10599 Sep 15 05:35	25°♄05'56	
superior conj	10598 Oct 07 10:12	24°♄42'34	1°19'17		10599 Sep 17 13:25	0°♄	
minimum elong	10598 Oct 07 08:04	24°♄30'39	1°19'12	max. Earth dist.	10599 Sep 20 02:55	5°♄32'06	1.31781 AU
max. Earth dist.	10598 Oct 06 19:44	23°♄22'08	1.31451 AU				
	10598 Oct 09 19:17	0°♄		superior conj	10599 Sep 21 20:22	9°♄19'28	1°01'40
evening rise	10598 Oct 14 03:45	9°♄31'16		minimum elong	10599 Sep 21 18:09	9°♄07'18	1°01'20
	10598 Oct 24 13:55	0°♄		evening rise	10599 Sep 28 14:28	24°♄08'55	
desc. node	10598 Nov 01 02:25	12°♄04'43			10599 Oct 01 08:56	0°♄	
evening max el	10598 Nov 11 19:38	25°♄00'41	26°12'00	desc. node	10599 Oct 18 23:37	29°♄39'54	
	10598 Nov 18 09:53	0°♄			10599 Oct 19 06:04	0°♄	
retrograde	10598 Nov 25 17:38	2°♄04'58		evening max el	10599 Oct 24 10:16	5°♄41'40	24°47'16
evening set	10598 Dec 02 04:41	0°♄24'46		retrograde	10599 Nov 07 05:41	12°♄37'31	
	10598 Dec 02 23:27	30°♄		evening set	10599 Nov 12 16:58	11°♄30'33	
min. Earth dist.	10598 Dec 06 08:40	27°♄49'53	0.58577 AU	min. Earth dist.	10599 Nov 17 21:47	8°♄45'17	0.56664 AU
inferior conj	10598 Dec 09 11:54	25°♄31'18	-4°37'34	inferior conj	10599 Nov 20 13:04	7°♄03'30	-5°30'45
minimum elong	10598 Dec 09 19:54	25°♄16'30	4°35'00	minimum elong	10599 Nov 20 18:28	6°♄54'47	5°29'36
morning rise	10598 Dec 17 13:42	21°♄03'18		morning rise	10599 Nov 28 22:12	2°♄57'26	
direct	10598 Dec 19 17:52	20°♄47'29		direct	10599 Dec 01 08:51	2°♄40'50	
asc. node	10598 Dec 25 08:50	22°♄40'27		morning max el	10599 Dec 10 21:12	7°♄13'37	19°24'05
morning max el	10598 Dec 27 22:40	24°♄47'52	18°30'31	asc. node	10599 Dec 12 05:51	8°♄37'12	
	10599 Jan 01 06:49	0°♄			10599 Dec 25 13:39	0°♄	
morning set	10599 Jan 12 22:09	20°♄22'07		morning set	10599 Dec 28 00:04	4°♄49'30	
	10599 Jan 17 22:22	0°♄					
				superior conj	10600 Jan 05 01:42	20°♄54'37	1°11'14
superior conj	10599 Jan 21 21:13	7°♄26'15	0°46'35	minimum elong	10600 Jan 05 04:42	21°♄09'14	1°11'23
minimum elong	10599 Jan 22 00:05	7°♄39'34	0°46'37		10600 Jan 09 20:03	0°♄	
desc. node	10599 Jan 28 01:38	18°♄35'11		max. Earth dist.	10600 Jan 11 13:30	3°♄11'08	1.38108 AU
max. Earth dist.	10599 Jan 29 07:47	20°♄46'19	1.40317 AU	desc. node	10600 Jan 14 22:29	9°♄14'04	
evening rise	10599 Feb 02 13:44	27°♄58'33		evening rise	10600 Jan 15 07:12	9°♄52'16	
	10599 Feb 03 19:07	0°♄			10600 Jan 27 14:06	0°♄	
	10599 Feb 23 16:55	0°♄			10600 Feb 19 11:58	0°♄	

evening max el	10600 Feb 19 18:04	0° $\Upsilon$ 15'07	25°01'22	evening max el	10601 Feb 02 07:35	14° $\text{X}$ 04'05	26°09'45
retrograde	10600 Mar 03 15:50	7° $\Upsilon$ 10'20		retrograde	10601 Feb 15 01:10	21° $\text{X}$ 18'09	
evening set	10600 Mar 09 08:32	4° $\Upsilon$ 48'09		evening set	10601 Feb 21 05:40	18° $\text{X}$ 47'45	
asc. node	10600 Mar 10 04:15	4° $\Upsilon$ 03'24		asc. node	10601 Feb 25 01:30	14° $\text{X}$ 49'56	
	10600 Mar 13 16:12	30° $\text{R}$ $\text{X}$		min. Earth dist.	10601 Feb 25 10:28	14° $\text{X}$ 22'50	0.66915 AU
min. Earth dist.	10600 Mar 13 19:43	29° $\text{X}$ 48'34	0.67901 AU	inferior conj	10601 Feb 27 01:46	12° $\text{X}$ 21'29	0°38'59
inferior conj	10600 Mar 14 23:13	28° $\text{X}$ 18'15	1°29'15	minimum elong	10601 Feb 27 00:47	12° $\text{X}$ 24'32	0°38'48
minimum elong	10600 Mar 14 21:21	28° $\text{X}$ 24'24	1°28'39	morning rise	10601 Mar 04 20:37	6° $\text{X}$ 34'56	
morning rise	10600 Mar 20 10:26	22° $\text{X}$ 22'06		direct	10601 Mar 08 00:27	5° $\text{X}$ 38'14	
direct	10600 Mar 24 01:22	21° $\text{X}$ 06'41		morning max el	10601 Mar 14 15:39	9° $\text{X}$ 12'54	18°39'49
morning max el	10600 Mar 31 06:05	25° $\text{X}$ 05'40	19°30'30		10601 Mar 29 16:19	0° $\Upsilon$	
	10600 Apr 04 13:27	0° $\Upsilon$		desc. node	10601 Mar 30 20:03	1° $\Upsilon$ 47'59	
desc. node	10600 Apr 12 23:18	11° $\Upsilon$ 42'32		morning set	10601 Apr 04 23:49	9° $\Upsilon$ 52'25	
greatest brilliancy	10600 Apr 12 22:43	11° $\Upsilon$ 40'23	-0.7m		10601 Apr 17 20:24	0° $\text{B}$	
morning set	10600 Apr 25 09:56	0° $\text{B}$ 33'55		max. Earth dist.	10601 Apr 20 09:52	4° $\text{B}$ 00'22	1.45580 AU
	10600 Apr 25 01:07	0° $\text{B}$					
max. Earth dist.	10600 May 07 15:53	19° $\text{B}$ 38'50	1.44848 AU	superior conj	10601 Apr 21 05:22	5° $\text{B}$ 16'40	-2°01'39
				minimum elong	10601 Apr 20 21:51	4° $\text{B}$ 47'16	2°01'29
superior conj	10600 May 11 19:48	26° $\text{B}$ 15'49	-2°13'03	evening rise	10601 May 06 16:49	29° $\text{B}$ 44'22	
minimum elong	10600 May 11 19:24	26° $\text{B}$ 14'16	2°13'29		10601 May 06 20:44	0° $\text{II}$	
	10600 May 14 03:37	0° $\text{II}$		greatest brilliancy	10601 May 14 07:03	11° $\text{II}$ 51'45	-0.9m
evening rise	10600 May 25 19:41	19° $\text{II}$ 12'11		asc. node	10601 May 23 23:30	26° $\text{II}$ 19'35	
	10600 Jun 01 06:51	0° $\text{E}$			10601 May 27 00:06	0° $\text{E}$	
asc. node	10600 Jun 06 02:23	7° $\text{E}$ 43'49		evening max el	10601 May 27 21:59	0° $\text{E}$ 57'16	18°42'02
evening max el	10600 Jun 13 10:02	17° $\text{E}$ 21'08	18°14'12	retrograde	10601 Jun 03 12:04	4° $\text{E}$ 33'28	
retrograde	10600 Jun 19 18:50	20° $\text{E}$ 43'28		evening set	10601 Jun 06 18:33	3° $\text{E}$ 32'22	
evening set	10600 Jun 22 17:15	19° $\text{E}$ 57'20			10601 Jun 10 15:32	30° $\text{R}$ $\text{II}$	
inferior conj	10600 Jun 28 16:56	14° $\text{E}$ 35'32	2°47'29	inferior conj	10601 Jun 12 09:30	27° $\text{II}$ 54'13	3°10'28
minimum elong	10600 Jun 28 19:14	14° $\text{E}$ 29'01	2°46'29	minimum elong	10601 Jun 12 10:44	27° $\text{II}$ 50'23	3°09'49
min. Earth dist.	10600 Jul 01 05:51	11° $\text{E}$ 44'56	0.63711 AU	min. Earth dist.	10601 Jun 14 07:29	25° $\text{II}$ 32'55	0.65572 AU
morning rise	10600 Jul 04 19:45	8° $\text{E}$ 20'32		morning rise	10601 Jun 18 02:09	21° $\text{II}$ 34'04	
desc. node	10600 Jul 09 23:08	5° $\text{E}$ 51'55		direct	10601 Jun 24 13:31	18° $\text{II}$ 50'08	
direct	10600 Jul 11 12:26	5° $\text{E}$ 43'50		desc. node	10601 Jun 26 20:14	19° $\text{II}$ 07'57	
morning max el	10600 Jul 25 09:07	13° $\text{E}$ 46'19	27°41'39	morning max el	10601 Jul 07 19:41	26° $\text{II}$ 40'49	26°53'50
	10600 Aug 07 11:09	0° $\text{O}$			10601 Jul 10 21:46	0° $\text{E}$	
	10600 Aug 25 12:06	0° $\text{O}$			10601 Aug 01 02:06	0° $\text{O}$	
morning set	10600 Aug 29 05:20	7° $\text{O}$ 13'27		morning set	10601 Aug 12 13:32	20° $\text{O}$ 26'39	
asc. node	10600 Sep 02 02:22	15° $\text{O}$ 08'07		max. Earth dist.	10601 Aug 16 19:23	28° $\text{O}$ 46'28	1.33969 AU
max. Earth dist.	10600 Sep 03 03:46	17° $\text{O}$ 21'19	1.32619 AU		10601 Aug 17 09:58	0° $\text{O}$	
				asc. node	10601 Aug 19 23:11	5° $\text{O}$ 13'37	
superior conj	10600 Sep 06 03:04	23° $\text{O}$ 41'55	0°39'02				
minimum elong	10600 Sep 06 01:20	23° $\text{O}$ 32'36	0°38'35	superior conj	10601 Aug 21 04:08	7° $\text{O}$ 44'22	0°11'52
	10600 Sep 09 00:46	0° $\text{A}$		minimum elong	10601 Aug 21 03:31	7° $\text{O}$ 41'10	0°11'29
evening rise	10600 Sep 13 01:53	8° $\text{A}$ 45'13		behind sun begin	10601 Aug 20 23:30	7° $\text{O}$ 20'07	
	10600 Sep 24 00:22	0° $\text{M}$		behind sun end	10601 Aug 21 07:32	8° $\text{O}$ 02'13	
desc. node	10600 Oct 05 20:52	15° $\text{M}$ 51'31		evening rise	10601 Aug 28 12:09	23° $\text{O}$ 15'32	
evening max el	10600 Oct 05 20:55	15° $\text{M}$ 51'37	23°07'44		10601 Aug 31 18:29	0° $\text{A}$	
retrograde	10600 Oct 19 04:47	22° $\text{M}$ 29'57		evening max el	10601 Sep 17 12:17	26° $\text{A}$ 05'30	21°30'27
evening set	10600 Oct 23 05:59	21° $\text{M}$ 54'17			10601 Sep 22 10:34	0° $\text{M}$	
min. Earth dist.	10600 Oct 30 06:15	18° $\text{M}$ 40'25	0.55249 AU	desc. node	10601 Sep 22 18:09	0° $\text{M}$ 11'04	
inferior conj	10600 Oct 31 18:44	17° $\text{M}$ 47'37	-5°44'40	retrograde	10601 Sep 29 17:41	2° $\text{M}$ 09'51	
minimum elong	10600 Oct 31 16:46	17° $\text{M}$ 50'28	5°44'13	evening set	10601 Oct 02 10:17	1° $\text{M}$ 53'19	
morning rise	10600 Nov 09 05:17	13° $\text{M}$ 57'15			10601 Oct 07 16:16	30° $\text{R}$ $\text{A}$	
direct	10600 Nov 12 05:17	13° $\text{M}$ 35'54		inferior conj	10601 Oct 11 12:00	27° $\text{A}$ 57'11	-5°02'24
morning max el	10600 Nov 23 06:28	18° $\text{M}$ 49'13	20°40'27	minimum elong	10601 Oct 11 03:04	28° $\text{A}$ 09'40	5°00'20
asc. node	10600 Nov 29 02:49	25° $\text{M}$ 43'16		min. Earth dist.	10601 Oct 11 13:24	27° $\text{A}$ 55'13	0.54622 AU
	10600 Dec 01 22:49	0° $\text{J}$		morning rise	10601 Oct 19 20:47	24° $\text{A}$ 07'59	
morning set	10600 Dec 12 07:29	19° $\text{J}$ 30'18		direct	10601 Oct 23 14:25	23° $\text{A}$ 37'47	
	10600 Dec 17 08:45	0° $\text{Z}$		morning max el	10601 Nov 05 02:35	29° $\text{A}$ 34'53	22°17'00
					10601 Nov 05 13:07	0° $\text{M}$	
superior conj	10600 Dec 19 18:23	4° $\text{Z}$ 56'36	1°27'54	asc. node	10601 Nov 15 23:45	13° $\text{M}$ 43'14	
minimum elong	10600 Dec 19 20:37	5° $\text{Z}$ 07'56	1°28'15		10601 Nov 24 16:37	0° $\text{J}$	
max. Earth dist.	10600 Dec 24 21:34	15° $\text{Z}$ 10'11	1.36010 AU	morning set	10601 Nov 26 18:02	4° $\text{J}$ 17'27	
evening rise	10600 Dec 28 19:34	22° $\text{Z}$ 35'00					
desc. node	10601 Jan 01 19:23	29° $\text{Z}$ 46'19		superior conj	10601 Dec 03 19:39	19° $\text{J}$ 21'29	1°37'12
	10601 Jan 01 22:31	0° $\approx$		minimum elong	10601 Dec 03 20:44	19° $\text{J}$ 27'11	1°37'40
	10601 Jan 21 08:34	0° $\text{X}$		max. Earth dist.	10601 Dec 07 12:19	27° $\text{J}$ 03'49	1.34211 AU

	10601 Dec 08 22:59	0° $\mathfrak{Z}$
evening rise	10601 Dec 11 23:07	5° $\mathfrak{Z}$ 56'35
desc. node	10601 Dec 19 16:21	20° $\mathfrak{Z}$ 06'53
	10601 Dec 25 15:19	0° $\approx$