

superior conj	1100 May 07 j 12:49	22°♄43'22	0°-23'-7	greatest brilliancy	1102 Oct 30 j 08:33	3°♁43'55	-4.6m
minimum elong	1100 May 07 j 17:34	22°♄57'57	0°22'55	asc. node	1102 Nov 02 j 04:15	5°♁11'17	
max. Earth dist.	1100 May 08 j 08:43	23°♄44'29	1.73514 AU		1102 Dec 02 j 14:15	0°♁	
	1100 May 13 j 10:56	0°♁		morning max el	1102 Dec 06 j 03:28	3°♁34'52	46°55'41
asc. node	1100 May 17 j 09:24	4°♁50'11			1102 Dec 30 j 12:23	0°♁	
	1100 Jun 06 j 21:12	0°♁			1103 Jan 25 j 08:41	0°♁	
evening rise	1100 Jun 12 j 22:14	7°♁25'14			1103 Feb 19 j 11:34	0°♁	
	1100 Jul 01 j 07:40	0°♁		desc. node	1103 Feb 21 j 17:41	2°♁42'51	
	1100 Jul 25 j 18:43	0°♁			1103 Mar 16 j 07:24	0°♁	
	1100 Aug 19 j 07:36	0°♁			1103 Apr 10 j 00:17	0°♁	
desc. node	1100 Sep 05 j 22:36	21°♁26'32			1103 May 04 j 15:48	0°♁	
	1100 Sep 13 j 00:02	0°♁			1103 May 29 j 05:54	0°♁	
	1100 Oct 07 j 22:10	0°♁		morning set	1103 Jun 08 j 13:37	12°♁37'39	
	1100 Nov 02 j 06:55	0°♁		asc. node	1103 Jun 14 j 21:10	20°♁21'49	
	1100 Nov 28 j 16:48	0°♁			1103 Jun 22 j 17:42	0°♁	
evening max el	1100 Dec 12 j 16:33	14°♁51'09	47°15'30	max. Earth dist.	1103 Jul 11 j 20:00	23°♁29'57	1.73277 AU
asc. node	1100 Dec 28 j 01:59	29°♁36'31					
	1100 Dec 28 j 12:39	0°♁		superior conj	1103 Jul 14 j 21:41	27°♁17'11	1°03'14
greatest brilliancy	1101 Jan 19 j 00:55	15°♁07'39	-4.6m	minimum elong	1103 Jul 14 j 12:59	26°♁50'21	1°02'57
retrograde	1101 Feb 01 j 14:37	18°♁31'40			1103 Jul 17 j 02:27	0°♁	
evening set	1101 Feb 19 j 12:51	12°♁15'31			1103 Aug 10 j 08:20	0°♁	
min. Earth dist.	1101 Feb 21 j 23:34	10°♁43'48	0.27974 AU	evening rise	1103 Aug 20 j 00:05	11°♁58'36	
inferior conj	1101 Feb 22 j 14:19	10°♁20'32	8°43'46		1103 Sep 03 j 12:30	0°♁	
minimum elong	1101 Feb 22 j 15:19	10°♁18'56	8°43'45		1103 Sep 27 j 16:19	0°♁	
morning rise	1101 Feb 25 j 18:03	8°♁22'47		desc. node	1103 Oct 04 j 10:38	8°♁23'39	
direct	1101 Mar 15 j 12:43	2°♁20'32			1103 Oct 21 j 20:53	0°♁	
greatest brilliancy	1101 Mar 26 j 10:37	4°♁32'02	-4.5m		1103 Nov 15 j 03:21	0°♁	
desc. node	1101 Apr 18 j 15:19	19°♁19'34			1103 Dec 09 j 14:17	0°♁	
	1101 Apr 30 j 15:37	0°♁			1104 Jan 03 j 11:52	0°♁	
morning max el	1101 May 03 j 15:30	2°♁51'03	45°55'39	asc. node	1104 Jan 25 j 13:44	25°♁40'35	
	1101 May 30 j 00:01	0°♁			1104 Jan 29 j 09:46	0°♁	
	1101 Jun 25 j 21:20	0°♁		evening max el	1104 Feb 22 j 23:24	26°♁08'47	46°12'10
	1101 Jul 21 j 16:04	0°♁			1104 Feb 26 j 22:00	0°♁	
asc. node	1101 Aug 09 j 18:46	22°♁49'15		greatest brilliancy	1104 Mar 28 j 20:45	23°♁46'45	-4.5m
	1101 Aug 15 j 17:22	0°♁		retrograde	1104 Apr 12 j 13:26	27°♁37'15	
	1101 Sep 09 j 05:44	0°♁		evening set	1104 Apr 28 j 03:23	22°♁54'34	
	1101 Oct 03 j 09:09	0°♁		inferior conj	1104 May 03 j 23:50	19°♁21'34	2°48'37
	1101 Oct 27 j 07:27	0°♁		minimum elong	1104 May 04 j 05:42	19°♁12'20	2°47'00
morning set	1101 Oct 28 j 12:14	1°♁30'26		min. Earth dist.	1104 May 04 j 02:46	19°♁16'58	0.28870 AU
	1101 Nov 20 j 03:40	0°♁		morning rise	1104 May 10 j 08:06	15°♁31'43	
desc. node	1101 Nov 29 j 08:16	11°♁34'30		desc. node	1104 May 16 j 03:07	12°♁49'17	
				direct	1104 May 25 j 11:54	11°♁04'51	
superior conj	1101 Dec 08 j 11:05	23°♁03'03	0°-21'-33	greatest brilliancy	1104 Jun 07 j 15:58	14°♁06'18	-4.5m
minimum elong	1101 Dec 08 j 05:24	22°♁45'09	0°21'17		1104 Jul 01 j 08:23	0°♁	
max. Earth dist.	1101 Dec 09 j 20:51	24°♁49'15	1.71053 AU	morning max el	1104 Jul 13 j 05:56	10°♁45'17	45°46'12
	1101 Dec 13 j 23:39	0°♁			1104 Aug 01 j 06:14	0°♁	
	1102 Jan 06 j 20:33	0°♁		asc. node	1104 Aug 28 j 07:22	0°♁	
evening rise	1102 Jan 19 j 00:22	15°♁14'23			1104 Sep 06 j 06:42	10°♁24'21	
	1102 Jan 30 j 19:41	0°♁			1104 Sep 22 j 19:06	0°♁	
	1102 Feb 23 j 22:50	0°♁			1104 Oct 17 j 10:25	0°♁	
	1102 Mar 20 j 08:08	0°♁			1104 Nov 10 j 14:39	0°♁	
asc. node	1102 Mar 22 j 11:40	2°♁37'22			1104 Dec 04 j 13:49	0°♁	
	1102 Apr 14 j 01:58	0°♁		desc. node	1104 Dec 26 j 20:01	27°♁56'02	
	1102 May 09 j 07:35	0°♁			1104 Dec 28 j 11:32	0°♁	
	1102 Jun 04 j 07:33	0°♁		morning set	1105 Jan 13 j 08:00	19°♁52'57	
	1102 Jul 01 j 18:44	0°♁			1105 Jan 21 j 09:46	0°♁	
desc. node	1102 Jul 12 j 00:52	10°♁27'24			1105 Feb 14 j 09:40	0°♁	
evening max el	1102 Jul 17 j 13:27	15°♁50'47	45°47'09				
	1102 Aug 02 j 11:31	0°♁		superior conj	1105 Feb 23 j 05:27	11°♁00'05	-1°-25'-42
greatest brilliancy	1102 Aug 24 j 22:38	13°♁52'03	-4.5m	minimum elong	1105 Feb 23 j 06:33	11°♁03'32	1°25'42
retrograde	1102 Sep 04 j 12:52	15°♁53'19		max. Earth dist.	1105 Feb 27 j 04:13	15°♁55'01	1.72172 AU
evening set	1102 Sep 21 j 19:11	10°♁19'40			1105 Mar 10 j 12:14	0°♁	
inferior conj	1102 Sep 25 j 11:20	8°♁07'04	-7°-47'-40	evening rise	1105 Apr 03 j 08:33	29°♁29'59	
minimum elong	1102 Sep 25 j 20:13	7°♁53'26	7°46'24		1105 Apr 03 j 18:17	0°♁	
min. Earth dist.	1102 Sep 26 j 09:12	7°♁33'33	0.27479 AU	asc. node	1105 Apr 18 j 23:36	18°♁43'34	
morning rise	1102 Sep 29 j 20:51	5°♁28'19			1105 Apr 28 j 04:19	0°♁	
direct	1102 Oct 16 j 09:51	0°♁11'21			1105 May 22 j 18:39	0°♁	

	1105 Jun 16 j 14:06	0°♈			1107 Nov 24 j 16:46	0°♍		
	1105 Jul 11 j 16:49	0°♎			1107 Dec 19 j 05:50	0°♐		
	1105 Aug 06 j 07:13	0°♑			1108 Jan 12 j 12:26	0°♌		
desc. node	1105 Aug 08 j 12:39	2°♑34'16		desc. node	1108 Jan 24 j 07:52	14°♌38'23		
	1105 Sep 01 j 18:34	0°♍			1108 Feb 05 j 17:09	0°♎		
evening max el	1105 Sep 28 j 21:05	28°♍37'27	46°58'15		1108 Feb 29 j 22:04	0°♏		
	1105 Sep 30 j 06:34	0°♐			1108 Mar 25 j 04:17	0°♑		
greatest brilliancy	1105 Nov 06 j 18:30	28°♐40'27	-4.7m	morning set	1108 Mar 28 j 19:27	4°♑28'55		
	1105 Nov 10 j 13:04	0°♌			1108 Apr 18 j 12:18	0°♏		
retrograde	1105 Nov 18 j 07:20	1°♌10'01						
	1105 Nov 25 j 19:19	30°♐		superior conj	1108 May 05 j 06:26	20°♏36'31	0°-26'-12	
asc. node	1105 Nov 29 j 16:05	28°♐31'27		minimum elong	1108 May 05 j 11:46	20°♏52'54	0°25'58	
evening set	1105 Dec 02 j 14:34	27°♐04'31		max. Earth dist.	1108 May 06 j 07:18	21°♏52'57	1.73491 AU	
min. Earth dist.	1105 Dec 08 j 09:30	23°♐42'23	0.26419 AU		1108 May 12 j 21:49	0°♍		
inferior conj	1105 Dec 08 j 19:47	23°♐26'44	2°21'25	asc. node	1108 May 16 j 11:24	4°♍22'52		
minimum elong	1105 Dec 08 j 14:33	23°♐34'42	2°19'45		1108 Jun 06 j 08:08	0°♎		
morning rise	1105 Dec 14 j 14:46	20°♐03'24		evening rise	1108 Jun 10 j 17:21	5°♎22'57		
direct	1105 Dec 29 j 03:21	15°♐50'16			1108 Jun 30 j 18:45	0°♈		
greatest brilliancy	1106 Jan 09 j 15:31	18°♐19'29	-4.7m		1108 Jul 25 j 06:05	0°♎		
	1106 Jan 28 j 05:40	0°♌			1108 Aug 18 j 19:26	0°♑		
morning max el	1106 Feb 17 j 08:09	18°♌17'41	46°39'27	desc. node	1108 Sep 05 j 00:45	20°♑55'47		
	1106 Feb 28 j 17:40	0°♎			1108 Sep 12 j 12:32	0°♍		
desc. node	1106 Mar 21 j 05:41	22°♎22'13			1108 Oct 07 j 11:42	0°♐		
	1106 Mar 28 j 00:10	0°♑			1108 Nov 01 j 22:09	0°♌		
	1106 Apr 23 j 00:39	0°♑			1108 Nov 28 j 11:40	0°♎		
	1106 May 18 j 11:34	0°♏		evening max el	1108 Dec 10 j 07:17	12°♎28'48	47°16'29	
	1106 Jun 12 j 14:05	0°♍		asc. node	1108 Dec 27 j 04:01	28°♎31'44		
	1106 Jul 07 j 09:25	0°♎			1108 Dec 28 j 21:21	0°♏		
asc. node	1106 Jul 12 j 08:59	6°♎04'08		greatest brilliancy	1109 Jan 16 j 18:56	12°♏50'36	-4.6m	
	1106 Jul 31 j 21:40	0°♈		retrograde	1109 Jan 30 j 05:27	16°♏11'07		
morning set	1106 Aug 15 j 12:50	18°♈04'13		evening set	1109 Feb 17 j 03:23	9°♏56'24		
	1106 Aug 25 j 03:35	0°♎		min. Earth dist.	1109 Feb 19 j 13:41	8°♏25'17	0.27915 AU	
	1106 Sep 18 j 04:51	0°♑		inferior conj	1109 Feb 20 j 05:03	8°♏00'59	8°44'58	
max. Earth dist.	1106 Sep 18 j 20:19	0°♑48'21	1.71847 AU	minimum elong	1109 Feb 20 j 05:14	8°♏00'42	8°44'58	
				morning rise	1109 Feb 23 j 07:19	6°♏05'19		
superior conj	1106 Sep 21 j 18:55	4°♑29'10	1°16'43	direct	1109 Mar 13 j 02:34	0°♏02'09		
minimum elong	1106 Sep 22 j 02:42	4°♑53'30	1°16'34	greatest brilliancy	1109 Mar 23 j 23:01	2°♏11'51	-4.5m	
	1106 Oct 12 j 03:38	0°♍		desc. node	1109 Apr 17 j 17:19	18°♏17'12		
evening rise	1106 Oct 31 j 08:51	24°♍06'13			1109 Apr 30 j 15:23	0°♑		
desc. node	1106 Oct 31 j 22:31	24°♍49'05		morning max el	1109 May 01 j 05:10	0°♑33'06	45°56'51	
	1106 Nov 05 j 01:39	0°♐			1109 May 29 j 16:15	0°♏		
	1106 Nov 29 j 00:02	0°♌			1109 Jun 25 j 10:57	0°♍		
	1106 Dec 22 j 23:56	0°♎			1109 Jul 21 j 04:26	0°♎		
	1107 Jan 16 j 03:33	0°♏		asc. node	1109 Aug 08 j 20:54	22°♎20'01		
	1107 Feb 09 j 14:49	0°♑			1109 Aug 15 j 05:04	0°♈		
asc. node	1107 Feb 22 j 01:47	15°♑01'44			1109 Sep 08 j 17:07	0°♎		
	1107 Mar 06 j 15:56	0°♏			1109 Oct 02 j 20:23	0°♑		
	1107 Apr 01 j 17:36	0°♍		morning set	1109 Oct 26 j 00:40	29°♑03'32		
	1107 Apr 29 j 22:54	0°♎			1109 Oct 26 j 18:38	0°♍		
evening max el	1107 May 04 j 16:56	4°♎38'33	45°22'41		1109 Nov 19 j 14:51	0°♐		
	1107 Jun 06 j 10:18	0°♈		desc. node	1109 Nov 28 j 10:13	11°♐05'25		
greatest brilliancy	1107 Jun 08 j 12:57	0°♈59'57	-4.5m					
desc. node	1107 Jun 13 j 15:04	2°♈54'34		superior conj	1109 Dec 05 j 20:41	20°♐27'04	0°-17'-38	
retrograde	1107 Jun 22 j 05:21	4°♈14'45		minimum elong	1109 Dec 05 j 16:00	20°♐12'18	0°17'25	
	1107 Jul 07 j 02:12	30°♎		max. Earth dist.	1109 Dec 06 j 23:14	21°♐50'34	1.71049 AU	
evening set	1107 Jul 08 j 04:28	29°♎23'48			1109 Dec 13 j 10:50	0°♌		
inferior conj	1107 Jul 13 j 15:27	26°♎06'28	-6°-18'-15		1110 Jan 06 j 07:46	0°♎		
minimum elong	1107 Jul 13 j 05:30	26°♎21'57	6°16'15	evening rise	1110 Jan 16 j 10:35	12°♎40'52		
min. Earth dist.	1107 Jul 13 j 16:49	26°♎04'20	0.28885 AU		1110 Jan 30 j 06:57	0°♏		
morning rise	1107 Jul 18 j 06:23	23°♎17'34			1110 Feb 23 j 10:12	0°♑		
direct	1107 Aug 04 j 07:08	17°♎50'33			1110 Mar 19 j 19:41	0°♏		
greatest brilliancy	1107 Aug 18 j 14:05	21°♎25'56	-4.5m	asc. node	1110 Mar 21 j 13:47	2°♏08'31		
	1107 Sep 01 j 08:47	0°♈			1110 Apr 13 j 13:55	0°♍		
morning max el	1107 Sep 22 j 23:42	19°♈07'18	46°19'30		1110 May 08 j 20:22	0°♎		
	1107 Oct 03 j 14:29	0°♎			1110 Jun 03 j 22:03	0°♈		
asc. node	1107 Oct 04 j 18:37	1°♎14'37			1110 Jul 01 j 13:22	0°♎		
	1107 Oct 30 j 11:22	0°♑		desc. node	1110 Jul 11 j 02:53	9°♎39'23		

evening max el	1110 Jul 15 j 02:18	13°♎30'47	45°45'04		1113 Jan 20 j 20:51	0°♁	
	1110 Aug 02 j 23:32	0°♁			1113 Feb 13 j 20:39	0°♁	
greatest brilliancy	1110 Aug 22 j 10:15	11°♁30'12	-4.5m				
retrograde	1110 Sep 02 j 01:43	13°♁33'01		superior conj	1113 Feb 20 j 17:50	8°♁35'03	-1°-25'-48
evening set	1110 Sep 19 j 11:19	7°♁54'35		minimum elong	1113 Feb 20 j 17:57	8°♁35'27	1°25'50
inferior conj	1110 Sep 23 j 00:58	5°♁45'49	-7°-57'-26	max. Earth dist.	1113 Feb 24 j 16:17	13°♁29'13	1.72118 AU
minimum elong	1110 Sep 23 j 09:20	5°♁33'00	7°56'20		1113 Mar 09 j 23:08	0°♁	
min. Earth dist.	1110 Sep 23 j 23:02	5°♁12'02	0.27550 AU	evening rise	1113 Mar 31 j 23:30	27°♁14'36	
morning rise	1110 Sep 27 j 06:57	3°♁12'16			1113 Apr 03 j 05:10	0°♁	
	1110 Oct 03 j 14:44	30°♎		asc. node	1113 Apr 18 j 01:35	18°♁16'03	
direct	1110 Oct 13 j 23:50	27°♎48'44			1113 Apr 27 j 15:19	0°♁	
	1110 Oct 24 j 19:39	0°♁			1113 May 22 j 05:54	0°♁	
greatest brilliancy	1110 Oct 28 j 01:32	1°♁24'32	-4.6m		1113 Jun 16 j 01:49	0°♁	
asc. node	1110 Nov 01 j 06:13	3°♁39'15			1113 Jul 11 j 05:20	0°♎	
	1110 Dec 02 j 13:47	0°♎			1113 Aug 05 j 21:08	0°♁	
morning max el	1110 Dec 03 j 17:37	1°♎10'45	46°55'17	desc. node	1113 Aug 07 j 14:51	2°♁00'03	
	1110 Dec 30 j 05:06	0°♁			1113 Sep 01 j 11:20	0°♎	
	1111 Jan 24 j 22:54	0°♁		evening max el	1113 Sep 26 j 11:44	26°♎17'02	46°56'04
	1111 Feb 19 j 00:30	0°♁			1113 Sep 30 j 07:07	0°♁	
desc. node	1111 Feb 20 j 19:52	2°♁10'42		greatest brilliancy	1113 Nov 04 j 07:41	26°♁12'03	-4.7m
	1111 Mar 15 j 19:32	0°♁		retrograde	1113 Nov 15 j 20:05	28°♁40'16	
	1111 Apr 09 j 11:54	0°♁		asc. node	1113 Nov 28 j 18:10	25°♁17'24	
	1111 May 04 j 03:01	0°♁		evening set	1113 Nov 30 j 02:17	24°♁35'58	
	1111 May 28 j 16:50	0°♁		min. Earth dist.	1113 Dec 05 j 22:43	21°♁11'28	0.26406 AU
morning set	1111 Jun 06 j 07:58	10°♁33'32		inferior conj	1113 Dec 06 j 07:52	20°♁57'33	1°57'21
asc. node	1111 Jun 13 j 23:13	19°♁54'55		minimum elong	1113 Dec 06 j 03:28	21°♁04'14	1°55'58
	1111 Jun 22 j 04:29	0°♁		morning rise	1113 Dec 12 j 04:57	17°♁31'40	
max. Earth dist.	1111 Jul 09 j 18:18	21°♁37'31	1.73312 AU	direct	1113 Dec 26 j 16:09	13°♁21'26	
				greatest brilliancy	1114 Jan 07 j 04:46	15°♁51'37	-4.7m
superior conj	1111 Jul 12 j 16:15	25°♁13'11	1°01'07		1114 Jan 28 j 18:03	0°♁	
minimum elong	1111 Jul 12 j 07:30	24°♁46'12	1°00'49	morning max el	1114 Feb 14 j 21:59	15°♁54'55	46°40'43
	1111 Jul 16 j 13:13	0°♁			1114 Feb 28 j 12:58	0°♁	
	1111 Aug 09 j 19:12	0°♎		desc. node	1114 Mar 20 j 07:42	21°♁43'35	
evening rise	1111 Aug 17 j 17:22	9°♎49'29			1114 Mar 27 j 15:11	0°♁	
	1111 Sep 02 j 23:34	0°♁			1114 Apr 22 j 13:45	0°♁	
	1111 Sep 27 j 03:40	0°♎			1114 May 17 j 23:36	0°♁	
desc. node	1111 Oct 03 j 12:40	7°♎54'28			1114 Jun 12 j 01:29	0°♁	
	1111 Oct 21 j 08:34	0°♁			1114 Jul 06 j 20:26	0°♁	
	1111 Nov 14 j 15:29	0°♁		asc. node	1114 Jul 11 j 11:07	5°♁37'11	
	1111 Dec 09 j 03:05	0°♁			1114 Jul 31 j 08:30	0°♁	
	1112 Jan 03 j 01:48	0°♁		morning set	1114 Aug 13 j 05:43	15°♁54'36	
asc. node	1112 Jan 24 j 15:53	25°♁02'01			1114 Aug 24 j 14:19	0°♎	
	1112 Jan 29 j 02:07	0°♁		max. Earth dist.	1114 Sep 16 j 07:09	28°♎18'36	1.71894 AU
evening max el	1112 Feb 20 j 14:33	23°♁53'14	46°14'44		1114 Sep 17 j 15:36	0°♁	
	1112 Feb 26 j 21:57	0°♁					
greatest brilliancy	1112 Mar 26 j 12:19	21°♁35'06	-4.5m	superior conj	1114 Sep 19 j 10:02	2°♁12'41	1°18'09
retrograde	1112 Apr 10 j 06:22	25°♁27'21		minimum elong	1114 Sep 19 j 17:13	2°♁35'08	1°18'00
evening set	1112 Apr 25 j 21:41	20°♁41'26			1114 Oct 11 j 14:28	0°♎	
inferior conj	1112 May 01 j 16:08	17°♁11'19	3°07'28	evening rise	1114 Oct 28 j 20:28	21°♎37'48	
minimum elong	1112 May 01 j 22:34	17°♁01'12	3°05'41	desc. node	1114 Oct 31 j 00:30	24°♎20'59	
min. Earth dist.	1112 May 01 j 18:57	17°♁06'52	0.28857 AU		1114 Nov 04 j 12:38	0°♁	
morning rise	1112 May 07 j 23:35	13°♁22'55			1114 Nov 28 j 11:11	0°♁	
desc. node	1112 May 15 j 05:07	10°♁10'20			1114 Dec 22 j 11:17	0°♁	
direct	1112 May 23 j 03:53	8°♁54'42			1115 Jan 15 j 15:11	0°♁	
greatest brilliancy	1112 Jun 05 j 07:14	11°♁55'56	-4.5m		1115 Feb 09 j 02:56	0°♁	
	1112 Jul 01 j 12:35	0°♁		asc. node	1115 Feb 21 j 03:52	14°♁30'33	
morning max el	1112 Jul 10 j 22:52	8°♁37'53	45°45'53		1115 Mar 06 j 04:59	0°♁	
	1112 Jul 31 j 23:10	0°♁			1115 Apr 01 j 08:41	0°♁	
	1112 Aug 27 j 21:11	0°♁			1115 Apr 29 j 19:43	0°♁	
asc. node	1112 Sep 05 j 08:52	9°♁51'56		evening max el	1115 May 02 j 08:41	2°♁27'52	45°23'15
	1112 Sep 22 j 07:35	0°♁		greatest brilliancy	1115 Jun 06 j 03:49	28°♁49'22	-4.5m
	1112 Oct 16 j 22:17	0°♁			1115 Jun 09 j 00:55	0°♁	
	1112 Nov 10 j 02:11	0°♎		desc. node	1115 Jun 12 j 17:08	1°♁08'58	
	1112 Dec 04 j 01:09	0°♁		retrograde	1115 Jun 19 j 20:31	2°♁05'01	
desc. node	1112 Dec 25 j 22:06	27°♁27'25			1115 Jun 30 j 04:24	30°♁	
	1112 Dec 27 j 22:44	0°♁		evening set	1115 Jul 05 j 17:42	27°♁17'53	
morning set	1113 Jan 10 j 17:40	17°♁17'55		inferior conj	1115 Jul 11 j 07:24	23°♁56'32	-6°-4'-7

minimum elong	1115 Jul 10 j 21:29	24°☿12'01	6°02'04	behind sun end	1117 Dec 03 j 17:58	18°♁28'48	
min. Earth dist.	1115 Jul 11 j 08:38	23°☿54'37	0.28899 AU	max. Earth dist.	1117 Dec 04 j 02:49	18°♁56'40	1.71042 AU
morning rise	1115 Jul 16 j 01:03	21°☿03'19			1117 Dec 12 j 21:42	0°☾	
direct	1115 Aug 01 j 23:12	15°☿40'27			1118 Jan 05 j 18:37	0°♁	
greatest brilliancy	1115 Aug 16 j 04:33	19°☿13'15	-4.5m	evening rise	1118 Jan 13 j 21:08	10°♁09'37	
	1115 Sep 01 j 20:54	0°♁			1118 Jan 29 j 17:51	0°♁	
morning max el	1115 Sep 20 j 13:44	16°♁49'33	46°18'04		1118 Feb 22 j 21:11	0°♁	
	1115 Oct 03 j 08:48	0°♁			1118 Mar 19 j 06:55	0°♁	
asc. node	1115 Oct 03 j 20:31	0°♁31'18		asc. node	1118 Mar 20 j 15:44	1°♁40'07	
	1115 Oct 30 j 01:51	0°♁			1118 Apr 13 j 01:37	0°♁	
	1115 Nov 24 j 05:41	0°♁			1118 May 08 j 08:59	0°☿	
	1115 Dec 18 j 17:57	0°♁			1118 Jun 03 j 12:31	0°♁	
	1116 Jan 12 j 00:05	0°☾			1118 Jul 01 j 08:18	0°♁	
desc. node	1116 Jan 23 j 10:01	14°☾09'34		desc. node	1118 Jul 10 j 05:03	8°♁51'29	
	1116 Feb 05 j 04:27	0°♁		evening max el	1118 Jul 12 j 15:38	11°♁12'45	45°43'11
	1116 Feb 29 j 09:06	0°♁			1118 Aug 03 j 15:18	0°♁	
	1116 Mar 24 j 15:07	0°♁		greatest brilliancy	1118 Aug 19 j 20:42	9°♁07'56	-4.5m
morning set	1116 Mar 26 j 10:40	2°♁14'26		retrograde	1118 Aug 30 j 15:05	11°♁13'24	
	1116 Apr 17 j 22:59	0°♁		evening set	1118 Sep 17 j 03:13	5°♁30'17	
				inferior conj	1118 Sep 20 j 14:31	3°♁25'02	-8°-6'-17
superior conj	1116 May 02 j 23:30	18°♁28'48	0°-29'-18	minimum elong	1118 Sep 20 j 22:19	3°♁13'07	8°05'20
minimum elong	1116 May 03 j 05:24	18°♁46'56	0°29'02	min. Earth dist.	1118 Sep 21 j 12:22	2°♁51'39	0.27621 AU
max. Earth dist.	1116 May 04 j 03:50	19°♁55'53	1.73464 AU	morning rise	1118 Sep 24 j 17:02	0°♁56'42	
	1116 May 12 j 08:27	0°♁			1118 Sep 26 j 08:59	30°♁	
asc. node	1116 May 15 j 13:27	3°♁56'32		direct	1118 Oct 11 j 14:16	25°♁26'41	
	1116 Jun 05 j 18:47	0°☿		greatest brilliancy	1118 Oct 25 j 18:13	29°♁05'33	-4.6m
evening rise	1116 Jun 08 j 12:00	3°☿20'09			1118 Oct 27 j 13:14	0°♁	
	1116 Jun 30 j 05:33	0°♁		asc. node	1118 Oct 31 j 08:21	2°♁11'10	
	1116 Jul 24 j 17:12	0°♁		morning max el	1118 Dec 01 j 08:36	28°♁49'32	46°54'54
	1116 Aug 18 j 07:02	0°♁			1118 Dec 02 j 12:07	0°♁	
desc. node	1116 Sep 04 j 02:46	20°♁25'27			1118 Dec 29 j 21:17	0°♁	
	1116 Sep 12 j 00:49	0°♁			1119 Jan 24 j 12:42	0°☾	
	1116 Oct 07 j 00:59	0°♁			1119 Feb 18 j 13:02	0°♁	
	1116 Nov 01 j 13:08	0°☾		desc. node	1119 Feb 19 j 21:52	1°♁39'06	
	1116 Nov 28 j 06:30	0°♁			1119 Mar 15 j 07:19	0°♁	
evening max el	1116 Dec 07 j 21:01	10°♁05'15	47°17'26		1119 Apr 08 j 23:10	0°♁	
asc. node	1116 Dec 26 j 06:07	27°♁26'56			1119 May 03 j 13:56	0°♁	
	1116 Dec 29 j 08:18	0°♁			1119 May 28 j 03:33	0°♁	
greatest brilliancy	1117 Jan 14 j 12:03	10°♁33'29	-4.7m	morning set	1119 Jun 04 j 02:14	8°♁29'52	
retrograde	1117 Jan 27 j 19:57	13°♁51'44		asc. node	1119 Jun 13 j 01:22	19°♁28'54	
evening set	1117 Feb 14 j 17:23	7°♁38'54			1119 Jun 21 j 15:05	0°☿	
min. Earth dist.	1117 Feb 17 j 03:58	6°♁07'27	0.27862 AU	max. Earth dist.	1119 Jul 07 j 16:30	19°☿45'20	1.73347 AU
inferior conj	1117 Feb 17 j 19:47	5°♁42'29	8°45'09				
minimum elong	1117 Feb 17 j 19:07	5°♁43'33	8°45'09	superior conj	1119 Jul 10 j 10:36	23°☿09'01	0°58'53
morning rise	1117 Feb 20 j 21:02	3°♁48'17		minimum elong	1119 Jul 10 j 01:51	22°☿42'06	0°58'35
	1117 Feb 28 j 02:01	30°♁			1119 Jul 15 j 23:50	0°♁	
direct	1117 Mar 10 j 16:05	27°♁44'25			1119 Aug 09 j 05:56	0°♁	
greatest brilliancy	1117 Mar 21 j 12:42	29°♁53'49	-4.6m	evening rise	1119 Aug 15 j 10:30	7°♁40'25	
	1117 Mar 21 j 19:10	0°♁			1119 Sep 02 j 10:30	0°♁	
desc. node	1117 Apr 16 j 19:20	17°♁17'09			1119 Sep 26 j 14:53	0°♁	
morning max el	1117 Apr 28 j 18:53	28°♁15'49	45°57'59	desc. node	1119 Oct 02 j 14:38	7°♁25'31	
	1117 Apr 30 j 13:52	0°♁			1119 Oct 20 j 20:09	0°♁	
	1117 May 29 j 07:58	0°♁			1119 Nov 14 j 03:33	0°☾	
	1117 Jun 25 j 00:12	0°♁			1119 Dec 08 j 15:50	0°♁	
	1117 Jul 20 j 16:28	0°☿			1120 Jan 02 j 15:41	0°♁	
asc. node	1117 Aug 07 j 22:58	21°☿51'33		asc. node	1120 Jan 23 j 17:59	24°♁23'32	
	1117 Aug 14 j 16:28	0°♁			1120 Jan 28 j 18:31	0°♁	
	1117 Sep 08 j 04:11	0°♁		evening max el	1120 Feb 18 j 06:37	21°♁40'42	46°17'26
	1117 Oct 02 j 07:19	0°♁			1120 Feb 26 j 22:41	0°♁	
morning set	1117 Oct 23 j 13:13	26°♁37'53		greatest brilliancy	1120 Mar 24 j 04:53	19°♁25'53	-4.5m
	1117 Oct 26 j 05:33	0°♁		retrograde	1120 Apr 07 j 23:39	23°♁18'35	
	1117 Nov 19 j 01:44	0°♁		evening set	1120 Apr 23 j 16:19	18°♁29'32	
desc. node	1117 Nov 27 j 12:22	10°♁37'56		inferior conj	1120 Apr 29 j 08:37	15°♁02'14	3°25'49
				minimum elong	1120 Apr 29 j 15:35	14°♁51'16	3°23'56
superior conj	1117 Dec 03 j 06:33	17°♁52'50	0°-13'-42	min. Earth dist.	1120 Apr 29 j 11:01	14°♁58'28	0.28844 AU
minimum elong	1117 Dec 03 j 02:52	17°♁41'17	0°13'32	morning rise	1120 May 05 j 15:05	11°♁15'27	
behind sun begin	1117 Dec 02 j 11:47	16°♁53'47		desc. node	1120 May 14 j 07:14	7°♁37'22	

direct	1120 May 20 j 20:30	6°♄45'54		1123 Jan 15 j 03:03	0°♁	
greatest brilliancy	1120 Jun 02 j 21:40	9°♄45'33	-4.5m	1123 Feb 08 j 15:19	0°♁	
	1120 Jul 01 j 14:52	0°♁		asc. node	1123 Feb 20 j 05:48	13°♁58'08
morning max el	1120 Jul 08 j 16:00	6°♁31'29	45°45'19		1123 Mar 05 j 18:22	0°♁
	1120 Jul 31 j 15:40	0°♁			1123 Apr 01 j 00:13	0°♁
	1120 Aug 27 j 10:50	0°♁			1123 Apr 29 j 17:29	0°♁
asc. node	1120 Sep 04 j 10:48	9°♁19'07		evening max el	1123 Apr 29 j 23:51	0°♁15'21 45°24'02
	1120 Sep 21 j 20:00	0°♁		greatest brilliancy	1123 Jun 03 j 18:24	26°♁38'30 -4.5m
	1120 Oct 16 j 10:05	0°♁		desc. node	1123 Jun 11 j 19:15	29°♁19'48
	1120 Nov 09 j 13:39	0°♁		retrograde	1123 Jun 17 j 12:02	29°♁56'02
	1120 Dec 03 j 12:25	0°♁		evening set	1123 Jul 03 j 07:23	25°♁12'11
desc. node	1120 Dec 25 j 00:11	26°♁58'51		inferior conj	1123 Jul 08 j 23:41	21°♁47'15 -5°-49'-38
	1120 Dec 27 j 09:53	0°♁		minimum elong	1123 Jul 08 j 13:49	22°♁02'39 5°47'31
morning set	1121 Jan 08 j 03:21	14°♁42'58		min. Earth dist.	1123 Jul 09 j 00:53	21°♁45'23 0.28912 AU
	1121 Jan 20 j 07:55	0°♁		morning rise	1123 Jul 13 j 20:01	18°♁49'55
	1121 Feb 13 j 07:36	0°♁		direct	1123 Jul 30 j 15:12	13°♁30'54
				greatest brilliancy	1123 Aug 13 j 20:12	17°♁02'22 -4.5m
superior conj	1121 Feb 18 j 06:11	6°♁09'53	-1°-25'-46		1123 Sep 02 j 05:54	0°♁
minimum elong	1121 Feb 18 j 05:21	6°♁07'16	1°25'47	morning max el	1123 Sep 18 j 03:45	14°♁31'27 46°16'25
max. Earth dist.	1121 Feb 22 j 05:54	11°♁08'11	1.72060 AU	asc. node	1123 Oct 02 j 22:40	29°♁48'37
	1121 Mar 09 j 09:59	0°♁			1123 Oct 03 j 02:54	0°♁
evening rise	1121 Mar 29 j 14:33	24°♁59'33			1123 Oct 29 j 16:29	0°♁
	1121 Apr 02 j 16:00	0°♁			1123 Nov 23 j 18:54	0°♁
asc. node	1121 Apr 17 j 03:42	17°♁49'07			1123 Dec 18 j 06:25	0°♁
	1121 Apr 27 j 02:14	0°♁			1124 Jan 11 j 12:03	0°♁
	1121 May 21 j 17:06	0°♁		desc. node	1124 Jan 22 j 12:02	13°♁39'15
	1121 Jun 15 j 13:32	0°♁			1124 Feb 04 j 16:03	0°♁
	1121 Jul 10 j 17:55	0°♁			1124 Feb 28 j 20:25	0°♁
desc. node	1121 Aug 05 j 11:17	0°♁		morning set	1124 Mar 24 j 01:39	29°♁58'09
	1121 Aug 06 j 16:47	1°♁24'39			1124 Mar 24 j 02:15	0°♁
	1121 Sep 01 j 04:35	0°♁			1124 Apr 17 j 09:59	0°♁
evening max el	1121 Sep 24 j 02:14	23°♁55'54	46°53'46			
	1121 Sep 30 j 09:07	0°♁		superior conj	1124 Apr 30 j 16:37	16°♁20'17 0°-32'-20
greatest brilliancy	1121 Nov 01 j 21:40	23°♁44'18	-4.7m	minimum elong	1124 Apr 30 j 23:05	16°♁40'08 0°32'04
retrograde	1121 Nov 13 j 08:19	26°♁10'00		max. Earth dist.	1124 May 01 j 22:44	17°♁52'50 1.73434 AU
evening set	1121 Nov 27 j 14:15	22°♁06'49			1124 May 11 j 19:23	0°♁
asc. node	1121 Nov 27 j 20:16	21°♁58'45		asc. node	1124 May 14 j 15:35	3°♁29'33
min. Earth dist.	1121 Dec 03 j 12:11	18°♁39'53	0.26393 AU		1124 Jun 05 j 05:44	0°♁
inferior conj	1121 Dec 03 j 19:55	18°♁28'05	1°33'09	evening rise	1124 Jun 06 j 06:52	1°♁17'09
minimum elong	1121 Dec 03 j 16:24	18°♁33'27	1°32'01		1124 Jun 29 j 16:38	0°♁
morning rise	1121 Dec 09 j 18:50	14°♁59'38			1124 Jul 24 j 04:34	0°♁
direct	1121 Dec 24 j 04:41	10°♁52'18			1124 Aug 17 j 18:54	0°♁
greatest brilliancy	1122 Jan 04 j 18:15	13°♁23'27	-4.7m	desc. node	1124 Sep 03 j 04:47	19°♁54'15
	1122 Jan 29 j 03:24	0°♁			1124 Sep 11 j 13:26	0°♁
morning max el	1122 Feb 12 j 10:51	13°♁29'14	46°41'58		1124 Oct 06 j 14:43	0°♁
	1122 Feb 28 j 07:52	0°♁			1124 Nov 01 j 04:48	0°♁
desc. node	1122 Mar 19 j 09:40	21°♁04'52			1124 Nov 28 j 02:28	0°♁
	1122 Mar 27 j 06:07	0°♁		evening max el	1124 Dec 05 j 10:31	7°♁39'23 47°18'15
	1122 Apr 22 j 02:50	0°♁		asc. node	1124 Dec 25 j 08:10	26°♁18'24
	1122 May 17 j 11:38	0°♁			1124 Dec 30 j 00:03	0°♁
	1122 Jun 11 j 12:54	0°♁		greatest brilliancy	1125 Jan 12 j 04:12	8°♁12'54 -4.7m
	1122 Jul 06 j 07:31	0°♁		retrograde	1125 Jan 25 j 10:23	11°♁30'06
asc. node	1122 Jul 10 j 13:09	5°♁09'48		evening set	1125 Feb 12 j 06:40	5°♁19'33
	1122 Jul 30 j 19:24	0°♁		min. Earth dist.	1125 Feb 14 j 17:53	3°♁47'24 0.27806 AU
morning set	1122 Aug 10 j 22:42	13°♁45'00		inferior conj	1125 Feb 15 j 10:15	3°♁21'37 8°44'29
	1122 Aug 24 j 01:11	0°♁		minimum elong	1125 Feb 15 j 08:42	3°♁24'04 8°44'27
max. Earth dist.	1122 Sep 13 j 17:41	25°♁47'26	1.71950 AU	morning rise	1125 Feb 18 j 10:55	1°♁28'29
					1125 Feb 20 j 23:06	30°♁
superior conj	1122 Sep 17 j 01:14	29°♁55'56	1°19'25	direct	1125 Mar 08 j 05:19	25°♁24'17
minimum elong	1122 Sep 17 j 07:46	0°♁16'21	1°19'19	greatest brilliancy	1125 Mar 19 j 02:36	27°♁34'14 -4.6m
	1122 Sep 17 j 02:32	0°♁			1125 Mar 24 j 11:19	0°♁
	1122 Oct 11 j 01:32	0°♁		desc. node	1125 Apr 15 j 21:31	16°♁17'35
evening rise	1122 Oct 26 j 07:56	19°♁08'16		morning max el	1125 Apr 26 j 09:03	25°♁58'13 45°59'18
desc. node	1122 Oct 30 j 02:38	23°♁52'34			1125 Apr 30 j 11:59	0°♁
	1122 Nov 03 j 23:51	0°♁			1125 May 28 j 23:50	0°♁
	1122 Nov 27 j 22:34	0°♁			1125 Jun 24 j 13:42	0°♁
	1122 Dec 21 j 22:51	0°♁			1125 Jul 20 j 04:46	0°♁

asc. node	1125 Aug 07 j 00:57	21°♁21'52		1128 Jan 02 j 05:57	0°♁	
	1125 Aug 14 j 04:07	0°♁		1128 Jan 22 j 19:55	23°♁43'16	
	1125 Sep 07 j 15:31	0°♁		1128 Jan 28 j 11:35	0°♁	
greatest brilliancy	1125 Sep 21 j 03:53	16°♁45'48	-3.9m	evening max el	1128 Feb 15 j 22:54	19°♁27'15 46°19'50
	1125 Oct 01 j 18:31	0°♁			1128 Feb 27 j 01:25	0°♁
morning set	1125 Oct 21 j 02:18	24°♁13'04		greatest brilliancy	1128 Mar 21 j 22:36	17°♁16'17 -4.5m
	1125 Oct 25 j 16:44	0°♁		retrograde	1128 Apr 05 j 16:26	21°♁07'23
	1125 Nov 18 j 12:57	0°♁		evening set	1128 Apr 21 j 10:49	16°♁15'27
desc. node	1125 Nov 26 j 14:27	10°♁09'06		inferior conj	1128 Apr 27 j 00:49	12°♁51'00 3°44'04
				minimum elong	1128 Apr 27 j 08:16	12°♁39'15 3°42'06
superior conj	1125 Nov 30 j 16:23	15°♁17'19	0°-9'-44	min. Earth dist.	1128 Apr 27 j 02:49	12°♁47'51 0.28828 AU
minimum elong	1125 Nov 30 j 13:46	15°♁09'05	0°09'37	morning rise	1128 May 03 j 06:04	9°♁05'57
behind sun begin	1125 Nov 29 j 16:02	14°♁00'42		desc. node	1128 May 13 j 09:17	5°♁06'53
behind sun end	1125 Dec 01 j 11:29	16°♁17'28		direct	1128 May 18 j 12:57	4°♁35'09
max. Earth dist.	1125 Dec 01 j 09:00	16°♁09'38	1.71049 AU	greatest brilliancy	1128 May 31 j 11:01	7°♁32'05 -4.5m
	1125 Dec 12 j 08:57	0°♁			1128 Jul 01 j 16:18	0°♁
	1126 Jan 05 j 05:56	0°♁		morning max el	1128 Jul 06 j 08:05	4°♁21'34 45°44'51
evening rise	1126 Jan 11 j 07:16	7°♁35'36			1128 Jul 31 j 08:12	0°♁
	1126 Jan 29 j 05:12	0°♁			1128 Aug 27 j 00:37	0°♁
	1126 Feb 22 j 08:39	0°♁		asc. node	1128 Sep 03 j 12:54	8°♁46'15
	1126 Mar 18 j 18:37	0°♁			1128 Sep 21 j 08:34	0°♁
asc. node	1126 Mar 19 j 17:52	1°♁10'54			1128 Oct 15 j 22:00	0°♁
	1126 Apr 12 j 13:47	0°♁			1128 Nov 09 j 01:13	0°♁
	1126 May 07 j 22:06	0°♁			1128 Dec 02 j 23:47	0°♁
	1126 Jun 03 j 03:36	0°♁		desc. node	1128 Dec 24 j 02:11	26°♁29'51
	1126 Jul 01 j 04:11	0°♁			1128 Dec 26 j 21:07	0°♁
desc. node	1126 Jul 09 j 07:02	8°♁01'26		morning set	1129 Jan 05 j 13:26	12°♁09'03
evening max el	1126 Jul 10 j 06:10	8°♁56'54	45°41'30		1129 Jan 19 j 19:02	0°♁
	1126 Aug 04 j 12:49	0°♁			1129 Feb 12 j 18:39	0°♁
greatest brilliancy	1126 Aug 17 j 07:05	6°♁45'41	-4.5m			
retrograde	1126 Aug 28 j 05:04	8°♁54'01		superior conj	1129 Feb 15 j 18:31	3°♁44'10 -1°-25'-34
evening set	1126 Sep 14 j 19:15	3°♁06'47		minimum elong	1129 Feb 15 j 16:41	3°♁38'28 1°25'34
inferior conj	1126 Sep 18 j 04:23	1°♁04'36	-8°-14'-7	max. Earth dist.	1129 Feb 19 j 21:15	8°♁52'02 1.72010 AU
minimum elong	1126 Sep 18 j 11:33	0°♁53'39	8°13'22		1129 Mar 08 j 21:00	0°♁
min. Earth dist.	1126 Sep 19 j 01:28	0°♁32'22	0.27687 AU	evening rise	1129 Mar 27 j 05:11	22°♁42'30
	1126 Sep 19 j 22:45	30°♁			1129 Apr 02 j 03:01	0°♁
morning rise	1126 Sep 22 j 03:32	28°♁41'17		asc. node	1129 Apr 16 j 05:47	17°♁21'30
direct	1126 Oct 09 j 05:23	23°♁05'23			1129 Apr 26 j 13:24	0°♁
greatest brilliancy	1126 Oct 23 j 10:02	26°♁45'42	-4.6m		1129 May 21 j 04:33	0°♁
	1126 Oct 29 j 05:35	0°♁			1129 Jun 15 j 01:29	0°♁
asc. node	1126 Oct 30 j 10:26	0°♁46'02			1129 Jul 10 j 06:46	0°♁
morning max el	1126 Nov 28 j 23:56	26°♁28'49	46°54'10		1129 Aug 05 j 01:45	0°♁
	1126 Dec 02 j 09:48	0°♁		desc. node	1129 Aug 05 j 18:50	0°♁48'54
	1126 Dec 29 j 13:29	0°♁			1129 Aug 31 j 22:21	0°♁
	1127 Jan 24 j 02:45	0°♁		evening max el	1129 Sep 21 j 15:48	21°♁32'13 46°51'27
	1127 Feb 18 j 01:58	0°♁			1129 Sep 30 j 12:45	0°♁
desc. node	1127 Feb 18 j 23:52	1°♁06'12		greatest brilliancy	1129 Oct 30 j 12:38	21°♁17'44 -4.7m
	1127 Mar 14 j 19:31	0°♁		retrograde	1129 Nov 10 j 20:07	23°♁40'00
	1127 Apr 08 j 10:51	0°♁		evening set	1129 Nov 25 j 02:32	19°♁37'38
	1127 May 03 j 01:15	0°♁		asc. node	1129 Nov 26 j 22:15	18°♁37'14
	1127 May 27 j 14:36	0°♁		min. Earth dist.	1129 Dec 01 j 02:07	16°♁08'15 0.26379 AU
morning set	1127 Jun 01 j 20:16	6°♁24'24		inferior conj	1129 Dec 01 j 08:06	15°♁59'06 1°08'49
asc. node	1127 Jun 12 j 03:21	19°♁01'15		minimum elong	1129 Dec 01 j 05:29	16°♁03'06 1°07'58
	1127 Jun 21 j 02:02	0°♁		morning rise	1129 Dec 07 j 08:36	12°♁28'15
max. Earth dist.	1127 Jul 05 j 14:22	17°♁51'06	1.73376 AU	direct	1129 Dec 21 j 16:46	8°♁23'31
				greatest brilliancy	1130 Jan 02 j 08:30	10°♁56'30 -4.7m
superior conj	1127 Jul 08 j 04:52	21°♁03'38	0°56'35		1130 Jan 29 j 10:01	0°♁
minimum elong	1127 Jul 07 j 20:12	20°♁36'56	0°56'16	morning max el	1130 Feb 09 j 22:44	11°♁01'18 46°43'15
	1127 Jul 15 j 10:47	0°♁			1130 Feb 28 j 02:08	0°♁
	1127 Aug 08 j 16:59	0°♁		desc. node	1130 Mar 18 j 11:54	20°♁27'29
evening rise	1127 Aug 13 j 03:50	5°♁31'01			1130 Mar 26 j 20:46	0°♁
	1127 Sep 01 j 21:43	0°♁			1130 Apr 21 j 15:48	0°♁
	1127 Sep 26 j 02:20	0°♁			1130 May 16 j 23:40	0°♁
desc. node	1127 Oct 01 j 16:49	6°♁56'29			1130 Jun 11 j 00:23	0°♁
	1127 Oct 20 j 07:57	0°♁			1130 Jul 05 j 18:38	0°♁
	1127 Nov 13 j 15:49	0°♁		asc. node	1130 Jul 09 j 15:11	4°♁42'10
	1127 Dec 08 j 04:49	0°♁			1130 Jul 30 j 06:20	0°♁

morning set	1130 Aug 08 j 15:26	11°♁34'38		inferior conj	1133 Feb 13 j 00:42	1°♁01'33	8°42'57
	1130 Aug 23 j 12:03	0°♁		minimum elong	1133 Feb 12 j 22:18	1°♁05'19	8°42'51
max. Earth dist.	1130 Sep 11 j 06:45	23°♁24'14	1.72006 AU		1133 Feb 14 j 16:01	30°♁	
superior conj	1130 Sep 14 j 16:22	27°♁39'12	1°20'34	morning rise	1133 Feb 16 j 01:13	29°♁08'55	
minimum elong	1130 Sep 14 j 22:15	27°♁57'35	1°20'29	direct	1133 Mar 05 j 18:49	23°♁04'59	
	1130 Sep 16 j 13:26	0°♁		greatest brilliancy	1133 Mar 16 j 16:01	25°♁15'13	-4.6m
	1130 Oct 10 j 12:34	0°♁			1133 Mar 26 j 02:32	0°♁	
evening rise	1130 Oct 23 j 19:35	16°♁39'30		desc. node	1133 Apr 14 j 23:30	15°♁20'07	
desc. node	1130 Oct 29 j 04:42	23°♁24'04		morning max el	1133 Apr 24 j 00:03	23°♁43'53	46°00'42
	1130 Nov 03 j 11:02	0°♁			1133 Apr 30 j 08:47	0°♁	
	1130 Nov 27 j 09:54	0°♁			1133 May 28 j 15:00	0°♁	
	1130 Dec 21 j 10:21	0°♁			1133 Jun 24 j 02:40	0°♁	
	1131 Jan 14 j 14:47	0°♁			1133 Jul 19 j 16:40	0°♁	
	1131 Feb 08 j 03:34	0°♁		asc. node	1133 Aug 06 j 03:06	20°♁53'43	
asc. node	1131 Feb 19 j 07:58	13°♁26'57			1133 Aug 13 j 15:28	0°♁	
	1131 Mar 05 j 07:38	0°♁			1133 Aug 13 j 15:28	0°♁	
	1131 Mar 31 j 15:48	0°♁		greatest brilliancy	1133 Sep 07 j 02:35	0°♁	
evening max el	1131 Apr 27 j 14:22	28°♁01'32	45°24'41		1133 Sep 27 j 20:22	25°♁46'37	-3.9m
	1131 Apr 29 j 16:00	0°♁			1133 Oct 01 j 05:29	0°♁	
greatest brilliancy	1131 Jun 01 j 07:54	24°♁26'07	-4.5m	morning set	1133 Oct 18 j 15:17	21°♁48'52	
desc. node	1131 Jun 10 j 21:15	27°♁26'12			1133 Oct 25 j 03:39	0°♁	
retrograde	1131 Jun 15 j 03:45	27°♁46'51			1133 Nov 17 j 23:51	0°♁	
evening set	1131 Jun 30 j 20:59	23°♁05'48		desc. node	1133 Nov 25 j 16:26	9°♁40'55	
inferior conj	1131 Jul 06 j 15:48	19°♁37'36	-5°-34'-33	superior conj	1133 Nov 28 j 02:04	12°♁42'21	0°-5'-45
minimum elong	1131 Jul 06 j 06:03	19°♁52'48	5°32'22	minimum elong	1133 Nov 28 j 00:31	12°♁37'29	0°05'41
min. Earth dist.	1131 Jul 06 j 17:00	19°♁35'43	0.28929 AU	behind sun begin	1133 Nov 26 j 23:27	11°♁18'34	
morning rise	1131 Jul 11 j 14:50	16°♁36'21		behind sun end	1133 Nov 29 j 01:36	13°♁56'25	
direct	1131 Jul 28 j 06:52	11°♁20'51		max. Earth dist.	1133 Nov 28 j 17:42	13°♁31'33	1.71050 AU
greatest brilliancy	1131 Aug 11 j 12:57	14°♁52'48	-4.5m		1133 Dec 11 j 19:52	0°♁	
	1131 Sep 02 j 12:24	0°♁			1134 Jan 04 j 16:53	0°♁	
morning max el	1131 Sep 15 j 18:16	12°♁14'51	46°14'57	evening rise	1134 Jan 08 j 17:24	5°♁02'36	
asc. node	1131 Oct 02 j 00:48	29°♁06'42			1134 Jan 28 j 16:13	0°♁	
	1131 Oct 02 j 20:29	0°♁			1134 Feb 21 j 19:46	0°♁	
	1131 Oct 29 j 06:48	0°♁		asc. node	1134 Mar 18 j 05:57	0°♁	
	1131 Nov 23 j 07:50	0°♁			1134 Mar 18 j 19:57	0°♁42'41	
	1131 Dec 17 j 18:37	0°♁			1134 Apr 12 j 01:35	0°♁	
	1132 Jan 10 j 23:46	0°♁			1134 May 07 j 10:52	0°♁	
desc. node	1132 Jan 21 j 14:04	13°♁09'41			1134 Jun 02 j 18:23	0°♁	
	1132 Feb 04 j 03:24	0°♁			1134 Jul 01 j 00:13	0°♁	
	1132 Feb 28 j 07:29	0°♁		evening max el	1134 Jul 07 j 21:07	6°♁43'16	45°39'36
morning set	1132 Mar 21 j 16:47	27°♁43'02		desc. node	1134 Jul 08 j 09:05	7°♁11'49	
	1132 Mar 23 j 13:06	0°♁			1134 Aug 05 j 17:44	0°♁	
	1132 Apr 16 j 20:41	0°♁		greatest brilliancy	1134 Aug 14 j 17:56	4°♁24'55	-4.5m
superior conj	1132 Apr 28 j 09:55	14°♁13'09	0°-35'-19	retrograde	1134 Aug 25 j 18:42	6°♁35'06	
minimum elong	1132 Apr 28 j 16:53	14°♁34'36	0°35'02	evening set	1134 Sep 12 j 10:57	0°♁44'23	
max. Earth dist.	1132 Apr 29 j 17:58	15°♁51'42	1.73408 AU		1134 Sep 13 j 16:43	30°♁	
	1132 May 11 j 06:01	0°♁		inferior conj	1134 Sep 15 j 18:07	28°♁44'47	-8°-21'-11
asc. node	1132 May 13 j 17:35	3°♁02'58		minimum elong	1134 Sep 16 j 00:35	28°♁34'52	8°20'34
evening rise	1132 Jun 04 j 01:50	29°♁15'14		min. Earth dist.	1134 Sep 16 j 14:23	28°♁13'45	0.27756 AU
	1132 Jun 04 j 16:26	0°♁		morning rise	1134 Sep 19 j 13:58	26°♁26'09	
	1132 Jun 29 j 03:31	0°♁		direct	1134 Oct 06 j 20:32	20°♁44'46	
	1132 Jul 23 j 15:48	0°♁		greatest brilliancy	1134 Oct 21 j 00:55	24°♁25'05	-4.6m
	1132 Aug 17 j 06:38	0°♁		asc. node	1134 Oct 29 j 12:24	29°♁23'53	
desc. node	1132 Sep 02 j 06:56	19°♁23'59			1134 Oct 30 j 09:24	0°♁	
	1132 Sep 11 j 01:54	0°♁		morning max el	1134 Nov 26 j 14:47	24°♁07'36	46°53'27
	1132 Oct 06 j 04:20	0°♁			1134 Dec 02 j 06:31	0°♁	
	1132 Oct 31 j 20:24	0°♁			1134 Dec 29 j 05:08	0°♁	
	1132 Nov 27 j 22:43	0°♁		desc. node	1135 Jan 23 j 16:21	0°♁	
evening max el	1132 Dec 03 j 00:30	5°♁15'46	47°19'07		1135 Feb 17 j 14:26	0°♁	
asc. node	1132 Dec 24 j 10:12	25°♁08'55			1135 Feb 18 j 02:04	0°♁35'12	
	1132 Dec 30 j 20:35	0°♁			1135 Mar 14 j 07:16	0°♁	
greatest brilliancy	1133 Jan 09 j 19:38	5°♁52'16	-4.7m		1135 Apr 07 j 22:07	0°♁	
retrograde	1133 Jan 23 j 01:23	9°♁09'29			1135 May 02 j 12:09	0°♁	
evening set	1133 Feb 09 j 19:33	3°♁01'31		morning set	1135 May 27 j 01:15	0°♁	
min. Earth dist.	1133 Feb 12 j 07:28	1°♁28'36	0.27748 AU	asc. node	1135 May 30 j 14:41	4°♁21'21	
					1135 Jun 11 j 05:25	18°♁35'11	
					1135 Jun 20 j 12:34	0°♁	

max. Earth dist.	1135 Jul 03 j 11:52	15°☾57'07	1.73403 AU	direct	1137 Dec 19 j 04:32	5°♁54'46	
				greatest brilliancy	1137 Dec 30 j 23:58	8°♁31'01	-4.7m
superior conj	1135 Jul 05 j 23:32	19°☾00'50	0°54'14		1138 Jan 29 j 14:37	0°♁	
minimum elong	1135 Jul 05 j 14:58	18°☾34'29	0°53'54	morning max el	1138 Feb 07 j 10:46	8°♁33'23	46°44'33
	1135 Jul 14 j 21:19	0°♁			1138 Feb 27 j 19:58	0°♁	
	1135 Aug 08 j 03:39	0°♁		desc. node	1138 Mar 17 j 13:53	19°♁49'49	
evening rise	1135 Aug 10 j 21:31	3°♁23'59			1138 Mar 26 j 11:12	0°♁	
	1135 Sep 01 j 08:37	0°♁			1138 Apr 21 j 04:36	0°♁	
	1135 Sep 25 j 13:33	0°♁			1138 May 16 j 11:32	0°♁	
desc. node	1135 Sep 30 j 18:51	6°♁27'50			1138 Jun 10 j 11:40	0°♁	
	1135 Oct 19 j 19:33	0°♁			1138 Jul 05 j 05:35	0°♁	
	1135 Nov 13 j 03:56	0°♁		asc. node	1138 Jul 08 j 17:18	4°♁15'21	
	1135 Dec 07 j 17:40	0°♁			1138 Jul 29 j 17:07	0°♁	
	1136 Jan 01 j 20:04	0°♁		morning set	1138 Aug 06 j 08:37	9°♁26'10	
asc. node	1136 Jan 21 j 22:06	23°♁04'15			1138 Aug 22 j 22:46	0°♁	
	1136 Jan 28 j 04:38	0°♁		max. Earth dist.	1138 Sep 08 j 22:34	21°♁10'12	1.72058 AU
evening max el	1136 Feb 13 j 14:44	17°♁13'33	46°22'23				
	1136 Feb 27 j 05:15	0°♁		superior conj	1138 Sep 12 j 08:08	25°♁24'56	1°21'34
greatest brilliancy	1136 Mar 19 j 17:15	15°♁09'08	-4.5m	minimum elong	1138 Sep 12 j 13:21	25°♁41'11	1°21'29
retrograde	1136 Apr 03 j 08:57	18°♁57'39			1138 Sep 16 j 00:12	0°♁	
evening set	1136 Apr 19 j 05:35	14°♁02'49			1138 Oct 09 j 23:26	0°♁	
inferior conj	1136 Apr 24 j 17:12	10°♁41'22	4°02'04	evening rise	1138 Oct 21 j 07:55	14°♁13'28	
minimum elong	1136 Apr 25 j 01:06	10°♁28'54	4°00'00	desc. node	1138 Oct 28 j 06:42	22°♁55'53	
min. Earth dist.	1136 Apr 24 j 18:59	10°♁38'33	0.28808 AU		1138 Nov 02 j 22:05	0°♁	
morning rise	1136 Apr 30 j 20:59	6°♁58'05			1138 Nov 26 j 21:08	0°♁	
desc. node	1136 May 12 j 11:19	2°♁42'45			1138 Dec 20 j 21:48	0°♁	
direct	1136 May 16 j 05:23	2°♁26'04			1139 Jan 14 j 02:35	0°♁	
greatest brilliancy	1136 May 29 j 00:15	5°♁19'45	-4.5m		1139 Feb 07 j 15:57	0°♁	
	1136 Jul 01 j 15:57	0°♁		asc. node	1139 Feb 18 j 10:02	12°♁55'05	
morning max el	1136 Jul 03 j 23:35	2°♁11'24	45°44'33		1139 Mar 04 j 21:06	0°♁	
	1136 Jul 31 j 00:00	0°♁			1139 Mar 31 j 07:41	0°♁	
	1136 Aug 26 j 13:53	0°♁		evening max el	1139 Apr 25 j 05:16	25°♁48'41	45°25'43
asc. node	1136 Sep 02 j 15:02	8°♁14'48			1139 Apr 29 j 15:31	0°♁	
	1136 Sep 20 j 20:42	0°♁		greatest brilliancy	1139 May 29 j 20:44	22°♁13'14	-4.5m
	1136 Oct 15 j 09:36	0°♁		desc. node	1139 Jun 09 j 23:20	25°♁28'48	
	1136 Nov 08 j 12:32	0°♁		retrograde	1139 Jun 12 j 20:04	25°♁38'13	
	1136 Dec 02 j 10:58	0°♁		evening set	1139 Jun 28 j 10:52	20°♁59'33	
desc. node	1136 Dec 23 j 04:18	26°♁01'39		inferior conj	1139 Jul 04 j 08:00	17°♁28'20	-5°-19'-1
	1136 Dec 26 j 08:12	0°♁		minimum elong	1139 Jul 03 j 22:26	17°♁43'13	5°16'49
morning set	1137 Jan 02 j 23:00	9°♁33'52		min. Earth dist.	1139 Jul 04 j 08:58	17°♁26'50	0.28942 AU
	1137 Jan 19 j 06:00	0°♁		morning rise	1139 Jul 09 j 09:43	14°♁23'22	
	1137 Feb 12 j 05:30	0°♁		direct	1139 Jul 25 j 22:52	9°♁11'08	
				greatest brilliancy	1139 Aug 09 j 06:10	12°♁44'19	-4.5m
superior conj	1137 Feb 13 j 06:23	1°♁17'39	-1°-25'-11		1139 Sep 02 j 16:46	0°♁	
minimum elong	1137 Feb 13 j 03:33	1°♁08'46	1°25'11	morning max el	1139 Sep 13 j 09:58	10°♁01'34	46°13'37
max. Earth dist.	1137 Feb 17 j 11:36	6°♁33'20	1.71951 AU	asc. node	1139 Oct 01 j 02:43	28°♁24'50	
	1137 Mar 08 j 07:46	0°♁			1139 Oct 02 j 13:38	0°♁	
evening rise	1137 Mar 24 j 19:32	20°♁25'16			1139 Oct 28 j 20:55	0°♁	
	1137 Apr 01 j 13:49	0°♁			1139 Nov 22 j 20:39	0°♁	
asc. node	1137 Apr 15 j 07:46	16°♁54'17			1139 Dec 17 j 06:44	0°♁	
	1137 Apr 26 j 00:19	0°♁			1140 Jan 10 j 11:27	0°♁	
	1137 May 20 j 15:45	0°♁		desc. node	1140 Jan 20 j 16:13	12°♁40'29	
	1137 Jun 14 j 13:12	0°♁			1140 Feb 03 j 14:46	0°♁	
	1137 Jul 09 j 19:23	0°♁			1140 Feb 27 j 18:38	0°♁	
	1137 Aug 04 j 16:01	0°♁		morning set	1140 Mar 19 j 07:23	25°♁25'46	
desc. node	1137 Aug 04 j 21:02	0°♁14'18			1140 Mar 23 j 00:05	0°♁	
	1137 Aug 31 j 16:08	0°♁			1140 Apr 16 j 07:33	0°♁	
evening max el	1137 Sep 19 j 04:19	19°♁07'06	46°48'57				
	1137 Sep 30 j 17:45	0°♁		superior conj	1140 Apr 26 j 02:44	12°♁04'02	0°-38'-18
greatest brilliancy	1137 Oct 28 j 03:28	18°♁51'43	-4.7m	minimum elong	1140 Apr 26 j 10:12	12°♁27'01	0°37'59
retrograde	1137 Nov 08 j 07:35	21°♁10'50		max. Earth dist.	1140 Apr 27 j 12:56	13°♁49'13	1.73378 AU
evening set	1137 Nov 22 j 14:59	17°♁08'27			1140 May 10 j 16:48	0°♁	
asc. node	1137 Nov 26 j 00:21	15°♁13'23		asc. node	1140 May 12 j 19:38	2°♁36'09	
inferior conj	1137 Nov 28 j 20:16	13°♁30'39	0°44'12	evening rise	1140 Jun 01 j 20:31	27°♁12'11	
minimum elong	1137 Nov 28 j 18:35	13°♁33'13	0°43'39		1140 Jun 04 j 03:15	0°♁	
min. Earth dist.	1137 Nov 28 j 16:17	13°♁36'44	0.26379 AU		1140 Jun 28 j 14:31	0°♁	
morning rise	1137 Dec 04 j 22:13	9°♁57'37			1140 Jul 23 j 03:09	0°♁	

	1140 Aug 16 j 18:31	0°♁		morning max el	1142 Nov 24 j 04:56	21°♁43'59	46°52'36
desc. node	1140 Sep 01 j 08:56	18°♁52'51			1142 Dec 02 j 02:48	0°♁	
	1140 Sep 10 j 14:32	0°♁			1142 Dec 28 j 20:49	0°♁	
	1140 Oct 05 j 18:07	0°♁			1143 Jan 23 j 06:05	0°♁	
	1140 Oct 31 j 12:17	0°♁			1143 Feb 17 j 03:06	0°♁	
	1140 Nov 27 j 19:38	0°♁		desc. node	1143 Feb 17 j 04:02	0°♁02'50	
evening max el	1140 Nov 30 j 15:26	2°♁54'34	47°19'53		1143 Mar 13 j 19:15	0°♁	
asc. node	1140 Dec 23 j 12:19	23°♁57'35			1143 Apr 07 j 09:37	0°♁	
	1141 Jan 01 j 00:49	0°♁			1143 May 01 j 23:19	0°♁	
greatest brilliancy	1141 Jan 07 j 10:37	3°♁30'54	-4.7m		1143 May 26 j 12:14	0°♁	
retrograde	1141 Jan 20 j 16:47	6°♁48'25		morning set	1143 May 28 j 08:59	2°♁16'55	
evening set	1141 Feb 07 j 08:02	0°♁43'37		asc. node	1143 Jun 10 j 07:34	18°♁08'15	
	1141 Feb 08 j 12:28	30°♁			1143 Jun 19 j 23:28	0°♁	
min. Earth dist.	1141 Feb 09 j 20:45	29°♁09'40	0.27693 AU	max. Earth dist.	1143 Jul 01 j 07:14	13°♁55'28	1.73429 AU
inferior conj	1141 Feb 10 j 15:06	28°♁40'54	8°40'22				
minimum elong	1141 Feb 10 j 11:54	28°♁45'56	8°40'13	superior conj	1143 Jul 03 j 18:03	16°♁56'30	0°51'47
morning rise	1141 Feb 13 j 15:59	26°♁48'02		minimum elong	1143 Jul 03 j 09:39	16°♁30'38	0°51'28
direct	1141 Mar 03 j 08:53	20°♁45'11			1143 Jul 14 j 08:15	0°♁	
greatest brilliancy	1141 Mar 14 j 04:41	22°♁54'44	-4.6m		1143 Aug 07 j 14:41	0°♁	
	1141 Mar 27 j 06:13	0°♁		evening rise	1143 Aug 08 j 15:04	1°♁15'28	
desc. node	1141 Apr 14 j 01:33	14°♁23'16			1143 Aug 31 j 19:50	0°♁	
morning max el	1141 Apr 21 j 15:35	21°♁30'00	46°01'55		1143 Sep 25 j 01:04	0°♁	
	1141 Apr 30 j 05:13	0°♁		desc. node	1143 Sep 29 j 20:50	5°♁58'06	
	1141 May 28 j 06:16	0°♁			1143 Oct 19 j 07:29	0°♁	
	1141 Jun 23 j 15:50	0°♁			1143 Nov 12 j 16:25	0°♁	
	1141 Jul 19 j 04:46	0°♁			1143 Dec 07 j 06:55	0°♁	
asc. node	1141 Aug 05 j 05:09	20°♁24'40			1144 Jan 01 j 10:42	0°♁	
	1141 Aug 13 j 02:59	0°♁		asc. node	1144 Jan 21 j 00:11	22°♁23'30	
	1141 Sep 06 j 13:50	0°♁			1144 Jan 27 j 22:25	0°♁	
	1141 Sep 30 j 16:37	0°♁		evening max el	1144 Feb 11 j 05:40	14°♁56'24	46°24'54
greatest brilliancy	1141 Oct 01 j 13:06	1°♁04'02	-3.9m		1144 Feb 27 j 11:30	0°♁	
morning set	1141 Oct 16 j 04:33	19°♁25'02		greatest brilliancy	1144 Mar 17 j 11:39	13°♁00'30	-4.5m
	1141 Oct 24 j 14:45	0°♁		retrograde	1144 Apr 01 j 01:06	16°♁46'52	
	1141 Nov 17 j 10:58	0°♁		evening set	1144 Apr 17 j 00:24	11°♁48'58	
desc. node	1141 Nov 24 j 18:34	9°♁12'38		inferior conj	1144 Apr 22 j 09:35	8°♁30'45	4°19'36
				minimum elong	1144 Apr 22 j 17:53	8°♁17'38	4°17'28
superior conj	1141 Nov 25 j 12:07	10°♁07'50	0°-1'-45	min. Earth dist.	1144 Apr 22 j 11:25	8°♁27'52	0.28789 AU
minimum elong	1141 Nov 25 j 11:38	10°♁06'21	0°01'45	morning rise	1144 Apr 28 j 11:42	4°♁49'22	
behind sun begin	1141 Nov 24 j 09:21	8°♁43'35		desc. node	1144 May 11 j 13:25	0°♁22'14	
behind sun end	1141 Nov 26 j 13:56	11°♁29'08		direct	1144 May 13 j 21:15	0°♁15'53	
max. Earth dist.	1141 Nov 26 j 02:11	10°♁52'11	1.71051 AU	greatest brilliancy	1144 May 26 j 13:55	3°♁06'49	-4.5m
	1141 Dec 11 j 07:00	0°♁		morning max el	1144 Jul 01 j 14:29	29°♁58'35	45°44'14
	1142 Jan 04 j 04:02	0°♁			1144 Jul 01 j 15:04	0°♁	
evening rise	1142 Jan 06 j 03:46	2°♁29'41			1144 Jul 30 j 15:59	0°♁	
	1142 Jan 28 j 03:26	0°♁			1144 Aug 26 j 03:28	0°♁	
	1142 Feb 21 j 07:06	0°♁		asc. node	1144 Sep 01 j 16:59	7°♁41'40	
	1142 Mar 17 j 17:32	0°♁			1144 Sep 20 j 09:11	0°♁	
asc. node	1142 Mar 17 j 21:55	0°♁13'20			1144 Oct 14 j 21:30	0°♁	
	1142 Apr 11 j 13:44	0°♁			1144 Nov 08 j 00:08	0°♁	
	1142 May 07 j 00:04	0°♁			1144 Dec 01 j 22:25	0°♁	
	1142 Jun 02 j 09:47	0°♁		desc. node	1144 Dec 22 j 06:22	25°♁32'27	
	1142 Jun 30 j 21:20	0°♁			1144 Dec 25 j 19:33	0°♁	
evening max el	1142 Jul 05 j 12:09	4°♁28'57	45°37'52	morning set	1144 Dec 31 j 08:27	6°♁57'22	
desc. node	1142 Jul 07 j 11:16	6°♁20'34			1145 Jan 18 j 17:16	0°♁	
	1142 Aug 07 j 12:05	0°♁					
greatest brilliancy	1142 Aug 12 j 06:05	2°♁05'14	-4.5m	superior conj	1145 Feb 10 j 18:12	28°♁49'51	-1°-24'-39
retrograde	1142 Aug 23 j 08:07	4°♁16'06		minimum elong	1145 Feb 10 j 14:22	28°♁37'54	1°24'38
	1142 Sep 07 j 05:56	30°♁			1145 Feb 11 j 16:41	0°♁	
evening set	1142 Sep 10 j 02:41	28°♁22'31		max. Earth dist.	1145 Feb 14 j 22:59	4°♁04'19	1.71893 AU
inferior conj	1142 Sep 13 j 08:07	26°♁25'08	-8°-27'-21		1145 Mar 07 j 18:53	0°♁	
minimum elong	1142 Sep 13 j 13:53	26°♁16'18	8°26'52	evening rise	1145 Mar 22 j 09:46	18°♁06'35	
min. Earth dist.	1142 Sep 14 j 03:46	25°♁55'00	0.27820 AU		1145 Apr 01 j 00:56	0°♁	
morning rise	1142 Sep 17 j 00:50	24°♁10'48		asc. node	1145 Apr 14 j 09:54	16°♁26'38	
direct	1142 Oct 04 j 11:37	18°♁24'25			1145 Apr 25 j 11:33	0°♁	
greatest brilliancy	1142 Oct 18 j 15:15	22°♁03'32	-4.6m		1145 May 20 j 03:17	0°♁	
asc. node	1142 Oct 28 j 14:34	28°♁04'13			1145 Jun 14 j 01:17	0°♁	
	1142 Oct 31 j 05:54	0°♁			1145 Jul 09 j 08:27	0°♁	

desc. node	1145 Aug 03 j 22:58	29°♍37'29		morning set	1148 Mar 16 j 21:45	23°♋07'23	
	1145 Aug 04 j 06:53	0°♌			1148 Mar 22 j 11:09	0°♍	
	1145 Aug 31 j 10:50	0°♍			1148 Apr 15 j 18:29	0°♎	
evening max el	1145 Sep 16 j 16:24	16°♌39'50	46°46'35				
	1145 Oct 01 j 01:28	0°♎		superior conj	1148 Apr 23 j 19:25	9°♋54'06	0°-41'-13
greatest brilliancy	1145 Oct 25 j 17:45	16°♎24'00	-4.7m	minimum elong	1148 Apr 24 j 03:21	10°♋18'31	0°40'54
retrograde	1145 Nov 05 j 19:16	18°♎40'53		max. Earth dist.	1148 Apr 25 j 09:04	11°♋49'57	1.73348 AU
evening set	1145 Nov 20 j 03:35	14°♎37'46			1148 May 10 j 03:41	0°♌	
asc. node	1145 Nov 25 j 02:27	11°♎46'44		asc. node	1148 May 11 j 21:48	2°♌09'22	
inferior conj	1145 Nov 26 j 08:24	11°♎01'11	0°19'31	evening rise	1148 May 30 j 15:13	25°♌08'51	
minimum elong	1145 Nov 26 j 07:39	11°♎02'19	0°19'16		1148 Jun 03 j 14:10	0°♍	
min. Earth dist.	1145 Nov 26 j 06:19	11°♎04'21	0.26382 AU		1148 Jun 28 j 01:36	0°♎	
morning rise	1145 Dec 02 j 11:36	7°♎26'30			1148 Jul 22 j 14:34	0°♏	
direct	1145 Dec 16 j 16:08	3°♎24'49			1148 Aug 16 j 06:27	0°♐	
greatest brilliancy	1145 Dec 28 j 15:36	6°♎05'00	-4.7m	desc. node	1148 Aug 31 j 10:59	18°♏21'44	
	1146 Jan 29 j 17:49	0°♑			1148 Sep 10 j 03:17	0°♒	
morning max el	1146 Feb 04 j 23:39	6°♑06'44	46°45'46		1148 Oct 05 j 08:07	0°♓	
	1146 Feb 27 j 13:41	0°♒			1148 Oct 31 j 04:33	0°♑	
desc. node	1146 Mar 16 j 15:53	19°♑11'40			1148 Nov 27 j 17:34	0°♒	
	1146 Mar 26 j 01:45	0°♓		evening max el	1148 Nov 28 j 07:09	0°♑34'44	47°20'26
	1146 Apr 20 j 17:35	0°♑		asc. node	1148 Dec 22 j 14:22	22°♑43'04	
	1146 May 15 j 23:37	0°♒			1149 Jan 02 j 18:21	0°♓	
	1146 Jun 09 j 23:11	0°♑		greatest brilliancy	1149 Jan 05 j 02:09	1°♓09'09	-4.7m
	1146 Jul 04 j 16:46	0°♒		retrograde	1149 Jan 18 j 08:00	4°♓25'42	
asc. node	1146 Jul 07 j 19:22	3°♑47'35			1149 Feb 02 j 02:42	30°♑	
	1146 Jul 29 j 04:07	0°♑		evening set	1149 Feb 04 j 19:51	28°♑24'59	
morning set	1146 Aug 04 j 01:47	7°♑16'55		min. Earth dist.	1149 Feb 07 j 09:39	26°♑49'28	0.27632 AU
	1146 Aug 22 j 09:45	0°♑		inferior conj	1149 Feb 08 j 05:13	26°♑18'51	8°36'53
max. Earth dist.	1146 Sep 06 j 14:58	18°♑57'11	1.72114 AU	minimum elong	1149 Feb 08 j 01:11	26°♑25'09	8°36'39
				morning rise	1149 Feb 11 j 06:46	24°♑25'10	
superior conj	1146 Sep 09 j 23:45	23°♑09'18	1°22'26	direct	1149 Feb 28 j 22:56	18°♑24'21	
minimum elong	1146 Sep 10 j 04:14	23°♑23'16	1°22'22	greatest brilliancy	1149 Mar 11 j 16:04	20°♑32'02	-4.6m
	1146 Sep 15 j 11:15	0°♑			1149 Mar 28 j 02:39	0°♓	
	1146 Oct 09 j 10:38	0°♒		desc. node	1149 Apr 13 j 03:45	13°♓27'50	
evening rise	1146 Oct 18 j 20:00	11°♒45'48		morning max el	1149 Apr 19 j 06:38	19°♓14'47	46°03'10
desc. node	1146 Oct 27 j 08:51	22°♒27'16			1149 Apr 30 j 01:01	0°♑	
	1146 Nov 02 j 09:25	0°♓			1149 May 27 j 21:17	0°♒	
	1146 Nov 26 j 08:37	0°♑			1149 Jun 23 j 04:51	0°♑	
	1146 Dec 20 j 09:30	0°♒			1149 Jul 18 j 16:45	0°♑	
	1147 Jan 13 j 14:38	0°♓		asc. node	1149 Aug 04 j 07:09	19°♑55'40	
	1147 Feb 07 j 04:35	0°♑			1149 Aug 12 j 14:25	0°♑	
asc. node	1147 Feb 17 j 11:59	12°♑22'09			1149 Sep 06 j 00:58	0°♑	
	1147 Mar 04 j 10:54	0°♒			1149 Sep 30 j 03:39	0°♑	
	1147 Mar 31 j 00:05	0°♑		greatest brilliancy	1149 Oct 04 j 00:46	4°♑51'19	-3.9m
evening max el	1147 Apr 22 j 21:07	23°♑37'32	45°26'51	morning set	1149 Oct 13 j 18:05	17°♑02'28	
	1147 Apr 29 j 16:27	0°♑			1149 Oct 24 j 01:45	0°♒	
greatest brilliancy	1147 May 27 j 09:47	20°♑00'12	-4.5m		1149 Nov 16 j 22:00	0°♓	
desc. node	1147 Jun 09 j 01:26	23°♑26'33					
retrograde	1147 Jun 10 j 12:44	23°♑29'03		superior conj	1149 Nov 22 j 22:14	7°♓33'53	0°02'16
evening set	1147 Jun 26 j 00:57	18°♑52'45		minimum elong	1149 Nov 22 j 22:50	7°♓35'45	0°02'13
inferior conj	1147 Jul 02 j 00:11	15°♑18'35	-5°-3'00	behind sun begin	1149 Nov 21 j 20:40	6°♓13'25	
minimum elong	1147 Jul 01 j 14:51	15°♑33'05	5°00'48	behind sun end	1149 Nov 24 j 01:00	8°♓58'05	
min. Earth dist.	1147 Jul 02 j 00:38	15°♑17'53	0.28953 AU	max. Earth dist.	1149 Nov 23 j 09:00	8°♓07'47	1.71058 AU
morning rise	1147 Jul 07 j 04:33	12°♑10'05		desc. node	1149 Nov 23 j 20:39	8°♓44'26	
direct	1147 Jul 23 j 15:17	7°♑01'10			1149 Dec 10 j 18:05	0°♑	
greatest brilliancy	1147 Aug 06 j 22:31	10°♑34'36	-4.5m	evening rise	1150 Jan 03 j 13:43	29°♑55'25	
	1147 Sep 02 j 19:36	0°♑			1150 Jan 03 j 15:10	0°♒	
morning max el	1147 Sep 11 j 02:19	7°♑49'47	46°12'05		1150 Jan 27 j 14:37	0°♓	
asc. node	1147 Sep 30 j 04:54	27°♑43'42			1150 Feb 20 j 18:23	0°♑	
	1147 Oct 02 j 06:38	0°♑			1150 Mar 17 j 05:05	0°♒	
	1147 Oct 28 j 11:07	0°♑		asc. node	1150 Mar 17 j 00:04	29°♑44'44	
	1147 Nov 22 j 09:37	0°♒			1150 Apr 11 j 01:49	0°♑	
	1147 Dec 16 j 19:01	0°♓			1150 May 06 j 13:15	0°♑	
	1148 Jan 09 j 23:16	0°♑			1150 Jun 02 j 01:16	0°♑	
desc. node	1148 Jan 19 j 18:14	12°♑10'25			1150 Jun 30 j 19:04	0°♑	
	1148 Feb 03 j 02:16	0°♒		evening max el	1150 Jul 03 j 02:39	2°♑13'51	45°36'10
	1148 Feb 27 j 05:53	0°♓		desc. node	1150 Jul 06 j 13:14	5°♑28'19	

greatest brilliancy	1150 Aug 09 j 18:57	29° Υ 47'09	-4.5m	morning set	1152 Dec 28 j 18:19	4° C 23'19	
	1150 Aug 10 j 08:57	0° A			1153 Jan 18 j 04:06	0° \approx	
retrograde	1150 Aug 20 j 21:11	1° A 58'12					
	1150 Aug 30 j 21:59	30° Υ		superior conj	1153 Feb 08 j 06:11	26° \approx 23'49	-1°-23'-56
evening set	1150 Sep 07 j 18:11	26° Υ 02'21		minimum elong	1153 Feb 08 j 01:24	26° \approx 08'53	1°23'55
inferior conj	1150 Sep 10 j 22:16	24° Υ 06'46	-8°-32'-30		1153 Feb 11 j 03:26	0° K	
minimum elong	1150 Sep 11 j 03:14	23° Υ 59'07	8°32'10	max. Earth dist.	1153 Feb 12 j 08:23	1° K 30'20	1.71840 AU
min. Earth dist.	1150 Sep 11 j 17:34	23° Υ 37'04	0.27880 AU		1153 Mar 07 j 05:36	0° Υ	
morning rise	1150 Sep 14 j 12:03	21° Υ 56'22		evening rise	1153 Mar 19 j 23:56	15° Υ 48'47	
direct	1150 Oct 02 j 02:13	16° Υ 05'15			1153 Mar 31 j 11:42	0° B	
greatest brilliancy	1150 Oct 16 j 05:54	19° Υ 43'28	-4.6m	asc. node	1153 Apr 13 j 11:59	15° B 59'50	
asc. node	1150 Oct 27 j 16:38	26° Υ 47'45			1153 Apr 24 j 22:28	0° II	
	1150 Oct 31 j 20:43	0° A			1153 May 19 j 14:29	0° E	
morning max el	1150 Nov 21 j 18:13	19° A 19'02	46°51'45		1153 Jun 13 j 13:02	0° Q	
	1150 Dec 01 j 22:10	0° M			1153 Jul 08 j 21:13	0° Υ	
	1150 Dec 28 j 12:01	0° Z		desc. node	1153 Aug 03 j 01:03	29° Υ 01'58	
	1151 Jan 22 j 19:31	0° C			1153 Aug 03 j 21:32	0° A	
desc. node	1151 Feb 16 j 06:04	29° C 31'14			1153 Aug 31 j 05:36	0° M	
	1151 Feb 16 j 15:32	0° \approx		evening max el	1153 Sep 14 j 04:52	14° M 14'59	46°44'12
	1151 Mar 13 j 07:02	0° K			1153 Oct 01 j 11:19	0° Z	
	1151 Apr 06 j 20:55	0° Υ		greatest brilliancy	1153 Oct 23 j 07:11	13° Z 56'32	-4.6m
	1151 May 01 j 10:16	0° B		retrograde	1153 Nov 03 j 07:23	16° Z 12'16	
	1151 May 25 j 22:58	0° II		evening set	1153 Nov 17 j 16:23	12° Z 07'52	
morning set	1151 May 26 j 03:02	0° II 12'27		inferior conj	1153 Nov 23 j 20:30	8° Z 32'49	0°-5'-10
asc. node	1151 Jun 09 j 09:32	17° II 41'35		minimum elong	1153 Nov 23 j 20:42	8° Z 32'31	0°05'08
	1151 Jun 19 j 10:07	0° E		transit begin	1153 Nov 23 j 16:49	8° Z 38'24	
max. Earth dist.	1151 Jun 29 j 02:24	11° E 54'03	1.73456 AU	transit end	1153 Nov 24 j 00:34	8° Z 26'37	
				min. Earth dist.	1153 Nov 23 j 20:08	8° Z 33'21	0.26388 AU
superior conj	1151 Jul 01 j 12:30	14° E 52'51	0°49'16	asc. node	1153 Nov 24 j 04:27	8° Z 20'43	
minimum elong	1151 Jul 01 j 04:18	14° E 27'37	0°48'57	morning rise	1153 Nov 30 j 00:47	4° Z 56'58	
	1151 Jul 13 j 18:54	0° Q		direct	1153 Dec 14 j 04:16	0° Z 55'53	
evening rise	1151 Aug 06 j 08:46	29° Q 08'23		greatest brilliancy	1153 Dec 26 j 06:59	3° Z 39'57	-4.7m
	1151 Aug 07 j 01:28	0° Υ			1154 Jan 29 j 19:00	0° C	
	1151 Aug 31 j 06:49	0° A		morning max el	1154 Feb 02 j 13:32	3° C 43'54	46°47'07
	1151 Sep 24 j 12:20	0° M			1154 Feb 27 j 06:31	0° \approx	
desc. node	1151 Sep 28 j 23:00	5° M 29'47		desc. node	1154 Mar 15 j 18:06	18° \approx 35'47	
	1151 Oct 18 j 19:08	0° Z			1154 Mar 25 j 15:40	0° K	
	1151 Nov 12 j 04:35	0° C			1154 Apr 20 j 06:04	0° Υ	
	1151 Dec 06 j 19:53	0° \approx			1154 May 15 j 11:16	0° B	
	1152 Jan 01 j 01:07	0° K			1154 Jun 09 j 10:20	0° II	
asc. node	1152 Jan 20 j 02:07	21° K 42'49			1154 Jul 04 j 03:35	0° E	
	1152 Jan 27 j 16:17	0° Υ		asc. node	1154 Jul 06 j 21:23	3° E 20'47	
evening max el	1152 Feb 08 j 19:52	12° Υ 38'01	46°27'18		1154 Jul 28 j 14:46	0° Q	
	1152 Feb 27 j 19:52	0° B		morning set	1154 Aug 01 j 18:59	5° Q 09'00	
greatest brilliancy	1152 Mar 15 j 05:10	10° B 50'58	-4.6m		1154 Aug 21 j 20:21	0° Υ	
retrograde	1152 Mar 29 j 17:05	14° B 36'28		max. Earth dist.	1154 Sep 04 j 07:45	16° Υ 46'34	1.72167 AU
evening set	1152 Apr 14 j 19:09	9° B 35'06					
inferior conj	1152 Apr 20 j 01:53	6° B 20'32	4°36'47	superior conj	1154 Sep 07 j 15:27	20° Υ 55'11	1°23'09
minimum elong	1152 Apr 20 j 10:32	6° B 06'50	4°34'38	minimum elong	1154 Sep 07 j 19:11	21° Υ 06'52	1°23'07
min. Earth dist.	1152 Apr 20 j 03:58	6° B 17'14	0.28770 AU		1154 Sep 14 j 21:56	0° A	
morning rise	1152 Apr 26 j 02:10	2° B 41'22			1154 Oct 08 j 21:28	0° M	
	1152 May 01 j 17:11	30° Υ		evening rise	1154 Oct 16 j 08:18	9° M 19'56	
desc. node	1152 May 10 j 15:28	28° Υ 06'50		desc. node	1154 Oct 26 j 10:52	21° M 59'18	
direct	1152 May 11 j 12:31	28° Υ 05'56			1154 Nov 01 j 20:26	0° Z	
	1152 May 21 j 19:20	0° B			1154 Nov 25 j 19:49	0° \approx	
greatest brilliancy	1152 May 24 j 04:29	0° B 55'28	-4.5m		1154 Dec 19 j 20:55	0° \approx	
morning max el	1152 Jun 29 j 05:24	27° B 46'38	45°44'05		1155 Jan 13 j 02:21	0° K	
	1152 Jul 01 j 12:54	0° II			1155 Feb 06 j 16:53	0° Υ	
	1152 Jul 30 j 07:21	0° E		asc. node	1155 Feb 16 j 14:10	11° Υ 51'02	
	1152 Aug 25 j 16:34	0° Q			1155 Mar 04 j 00:21	0° B	
asc. node	1152 Aug 31 j 19:07	7° Q 10'20			1155 Mar 30 j 16:17	0° II	
	1152 Sep 19 j 21:14	0° Υ		evening max el	1155 Apr 20 j 13:47	21° II 29'40	45°27'54
	1152 Oct 14 j 09:01	0° A			1155 Apr 29 j 18:10	0° E	
	1152 Nov 07 j 11:23	0° M		greatest brilliancy	1155 May 24 j 23:54	17° E 49'45	-4.5m
	1152 Dec 01 j 09:29	0° Z		retrograde	1155 Jun 08 j 05:27	21° E 20'59	
desc. node	1152 Dec 21 j 08:22	25° Z 04'18		desc. node	1155 Jun 08 j 03:25	21° E 20'59	
	1152 Dec 25 j 06:30	0° C		evening set	1155 Jun 23 j 15:20	16° E 47'07	

inferior conj	1155 Jun 29 j 16:27	13°☿10'01	-4°-46'-39	behind sun begin	1157 Nov 19 j 09:30	3°♁48'16	
minimum elong	1155 Jun 29 j 07:25	13°☿24'05	4°44'27	behind sun end	1157 Nov 21 j 10:42	6°♁23'03	
min. Earth dist.	1155 Jun 29 j 16:20	13°☿10'12	0.28962 AU	max. Earth dist.	1157 Nov 20 j 13:15	5°♁15'36	1.71065 AU
morning rise	1155 Jul 04 j 23:23	9°☿58'00		desc. node	1157 Nov 22 j 22:37	8°♁16'06	
direct	1155 Jul 21 j 08:13	4°☿52'34			1157 Dec 10 j 05:05	0°♁	
greatest brilliancy	1155 Aug 04 j 13:59	8°☿24'54	-4.5m	evening rise	1157 Dec 31 j 23:35	27°♁21'03	
	1155 Sep 02 j 20:36	0°♁			1158 Jan 03 j 02:15	0°♁	
morning max el	1155 Sep 08 j 18:42	5°♁39'13	46°10'31		1158 Jan 27 j 01:46	0°♁	
asc. node	1155 Sep 29 j 07:00	27°♁03'42			1158 Feb 20 j 05:41	0°♁	
	1155 Oct 01 j 22:57	0°♁		asc. node	1158 Mar 16 j 02:07	29°♁15'49	
	1155 Oct 28 j 00:50	0°♁			1158 Mar 16 j 16:39	0°♁	
	1155 Nov 21 j 22:11	0°♁			1158 Apr 10 j 13:56	0°♁	
	1155 Dec 16 j 06:57	0°♁			1158 May 06 j 02:29	0°♁	
	1156 Jan 09 j 10:48	0°♁			1158 Jun 01 j 16:55	0°♁	
desc. node	1156 Jan 18 j 20:14	11°♁41'08			1158 Jun 30 j 17:35	0°♁	
	1156 Feb 02 j 13:29	0°♁		evening max el	1158 Jun 30 j 16:15	29°♁56'50	45°34'29
	1156 Feb 26 j 16:51	0°♁		desc. node	1158 Jul 05 j 15:18	4°♁35'27	
morning set	1156 Mar 14 j 12:14	20°♁50'12		greatest brilliancy	1158 Aug 07 j 07:30	27°♁28'56	-4.5m
	1156 Mar 21 j 21:55	0°♁		retrograde	1158 Aug 18 j 10:08	29°♁40'49	
	1156 Apr 15 j 05:06	0°♁		evening set	1158 Sep 05 j 09:23	23°♁42'53	
				inferior conj	1158 Sep 08 j 12:31	21°♁48'42	-8°-36'-44
superior conj	1156 Apr 21 j 12:13	7°♁45'26	0°-44'-5	minimum elong	1158 Sep 08 j 16:39	21°♁42'19	8°36'31
minimum elong	1156 Apr 21 j 20:35	8°♁11'09	0°43'45	min. Earth dist.	1158 Sep 09 j 07:40	21°♁19'11	0.27945 AU
max. Earth dist.	1156 Apr 23 j 07:20	9°♁58'08	1.73315 AU	morning rise	1158 Sep 11 j 23:41	19°♁41'57	
	1156 May 09 j 14:15	0°♁		direct	1158 Sep 29 j 16:37	13°♁46'03	
asc. node	1156 May 10 j 23:46	1°♁42'55		greatest brilliancy	1158 Oct 13 j 21:49	17°♁24'57	-4.6m
evening rise	1156 May 28 j 10:01	23°♁06'43		asc. node	1158 Oct 26 j 18:36	25°♁32'57	
	1156 Jun 03 j 00:48	0°♁			1158 Nov 01 j 07:56	0°♁	
	1156 Jun 27 j 12:28	0°♁		morning max el	1158 Nov 19 j 07:27	16°♁53'30	46°50'53
	1156 Jul 22 j 01:47	0°♁			1158 Dec 01 j 17:11	0°♁	
	1156 Aug 15 j 18:14	0°♁			1158 Dec 28 j 03:10	0°♁	
desc. node	1156 Aug 30 j 13:07	17°♁51'21			1159 Jan 22 j 08:58	0°♁	
	1156 Sep 09 j 15:53	0°♁		desc. node	1159 Feb 15 j 08:15	28°♁59'53	
	1156 Oct 04 j 22:02	0°♁			1159 Feb 16 j 04:02	0°♁	
	1156 Oct 30 j 20:54	0°♁			1159 Mar 12 j 18:54	0°♁	
evening max el	1156 Nov 25 j 22:51	28°♁15'17	47°20'44		1159 Apr 06 j 08:19	0°♁	
	1156 Nov 27 j 16:09	0°♁			1159 Apr 30 j 21:22	0°♁	
asc. node	1156 Dec 21 j 16:23	21°♁26'34		morning set	1159 May 23 j 21:07	28°♁07'32	
greatest brilliancy	1157 Jan 02 j 18:30	28°♁48'39	-4.7m		1159 May 25 j 09:51	0°♁	
	1157 Jan 05 j 14:25	0°♁		asc. node	1159 Jun 08 j 11:37	17°♁14'49	
retrograde	1157 Jan 15 j 22:50	2°♁02'44			1159 Jun 18 j 20:53	0°♁	
	1157 Jan 25 j 20:13	30°♁		max. Earth dist.	1159 Jun 26 j 22:22	9°♁54'46	1.73479 AU
evening set	1157 Feb 02 j 07:18	26°♁06'55					
min. Earth dist.	1157 Feb 04 j 22:47	24°♁28'47	0.27568 AU	superior conj	1159 Jun 29 j 07:09	12°♁49'26	0°46'43
inferior conj	1157 Feb 05 j 19:12	23°♁56'49	8°32'34	minimum elong	1159 Jun 28 j 23:11	12°♁24'55	0°46'23
minimum elong	1157 Feb 05 j 14:23	24°♁04'21	8°32'13		1159 Jul 13 j 05:41	0°♁	
morning rise	1157 Feb 08 j 21:45	22°♁01'37		evening rise	1159 Aug 04 j 02:50	27°♁02'08	
direct	1157 Feb 26 j 12:48	16°♁03'38			1159 Aug 06 j 12:21	0°♁	
greatest brilliancy	1157 Mar 09 j 03:25	18°♁09'09	-4.6m		1159 Aug 30 j 17:56	0°♁	
	1157 Mar 28 j 17:42	0°♁			1159 Sep 23 j 23:48	0°♁	
desc. node	1157 Apr 12 j 05:41	12°♁33'18		desc. node	1159 Sep 28 j 01:01	5°♁00'21	
morning max el	1157 Apr 16 j 20:56	16°♁58'02	46°04'35		1159 Oct 18 j 07:04	0°♁	
	1157 Apr 29 j 20:02	0°♁			1159 Nov 11 j 17:05	0°♁	
	1157 May 27 j 11:53	0°♁			1159 Dec 06 j 09:13	0°♁	
	1157 Jun 22 j 17:34	0°♁			1159 Dec 31 j 15:59	0°♁	
	1157 Jul 18 j 04:31	0°♁		asc. node	1160 Jan 19 j 04:18	21°♁01'29	
asc. node	1157 Aug 03 j 09:17	19°♁27'34			1160 Jan 27 j 10:54	0°♁	
	1157 Aug 12 j 01:42	0°♁		evening max el	1160 Feb 06 j 09:41	10°♁17'46	46°29'52
	1157 Sep 05 j 12:02	0°♁			1160 Feb 28 j 07:44	0°♁	
	1157 Sep 29 j 14:36	0°♁		greatest brilliancy	1160 Mar 12 j 21:32	8°♁38'52	-4.6m
greatest brilliancy	1157 Oct 06 j 10:38	8°♁33'21	-3.9m	retrograde	1160 Mar 27 j 09:10	12°♁25'05	
morning set	1157 Oct 11 j 07:38	14°♁40'06		evening set	1160 Apr 12 j 13:51	7°♁19'45	
	1157 Oct 23 j 12:41	0°♁		inferior conj	1160 Apr 17 j 18:04	4°♁09'04	4°53'43
	1157 Nov 16 j 08:57	0°♁		minimum elong	1160 Apr 18 j 03:02	3°♁54'54	4°51'32
				min. Earth dist.	1160 Apr 17 j 20:18	4°♁05'33	0.28752 AU
superior conj	1157 Nov 20 j 08:28	5°♁00'31	0°06'13	morning rise	1160 Apr 23 j 16:23	0°♁32'34	
minimum elong	1157 Nov 20 j 10:06	5°♁05'40	0°06'08		1160 Apr 24 j 16:06	30°♁	

direct	1160 May 09 j 03:40	25°♃54'31		desc. node	1162 Oct 25 j 12:53	21°♄30'20	
desc. node	1160 May 09 j 17:30	25°♃54'54			1162 Nov 01 j 07:45	0°♁	
greatest brilliancy	1160 May 21 j 19:43	28°♃43'50	-4.5m		1162 Nov 25 j 07:19	0°♁	
	1160 May 24 j 14:21	0°♁			1162 Dec 19 j 08:41	0°♁	
morning max el	1160 Jun 26 j 21:07	25°♁35'45	45°44'07		1163 Jan 12 j 14:31	0°♁	
	1160 Jul 01 j 10:17	0°♁			1163 Feb 06 j 05:41	0°♃	
	1160 Jul 29 j 22:45	0°♁		asc. node	1163 Feb 15 j 16:10	11°♃17'44	
	1160 Aug 25 j 05:48	0°♁			1163 Mar 03 j 14:26	0°♁	
asc. node	1160 Aug 30 j 21:12	6°♁38'16			1163 Mar 30 j 09:22	0°♁	
	1160 Sep 19 j 09:28	0°♁		evening max el	1163 Apr 18 j 06:33	19°♁20'23	45°29'05
	1160 Oct 13 j 20:45	0°♁			1163 Apr 29 j 22:09	0°♁	
	1160 Nov 06 j 22:53	0°♁		greatest brilliancy	1163 May 22 j 15:08	15°♁39'04	-4.5m
	1160 Nov 30 j 20:53	0°♁		retrograde	1163 Jun 05 j 21:43	19°♁11'02	
desc. node	1160 Dec 20 j 10:30	24°♁35'28		desc. node	1163 Jun 07 j 05:31	19°♁08'59	
	1160 Dec 24 j 17:48	0°♁		evening set	1163 Jun 21 j 05:48	14°♁39'40	
morning set	1160 Dec 26 j 03:47	1°♁46'46		inferior conj	1163 Jun 27 j 08:36	10°♁59'46	-4°-29'-53
	1161 Jan 17 j 15:19	0°♁		minimum elong	1163 Jun 26 j 23:54	11°♁13'18	4°27'42
				min. Earth dist.	1163 Jun 27 j 08:03	11°♁00'36	0.28968 AU
superior conj	1161 Feb 05 j 17:32	23°♁54'28	-1°-23'-4	morning rise	1163 Jul 02 j 17:58	7°♁44'08	
minimum elong	1161 Feb 05 j 11:47	23°♁36'30	1°23'00	direct	1163 Jul 19 j 01:02	2°♁42'23	
max. Earth dist.	1161 Feb 09 j 15:27	28°♁47'50	1.71786 AU	greatest brilliancy	1163 Aug 02 j 04:22	6°♁12'15	-4.5m
	1161 Feb 10 j 14:34	0°♁			1163 Sep 02 j 21:00	0°♁	
	1161 Mar 06 j 16:42	0°♃		morning max el	1163 Sep 06 j 10:16	3°♁25'26	46°09'03
evening rise	1161 Mar 17 j 13:37	13°♃28'21		asc. node	1163 Sep 28 j 08:55	26°♁22'24	
	1161 Mar 30 j 22:51	0°♁			1163 Oct 01 j 15:26	0°♁	
asc. node	1161 Apr 12 j 13:57	15°♁31'35			1163 Oct 27 j 14:48	0°♁	
	1161 Apr 24 j 09:45	0°♁			1163 Nov 21 j 10:59	0°♁	
	1161 May 19 j 02:06	0°♁			1163 Dec 15 j 19:07	0°♁	
	1161 Jun 13 j 01:14	0°♁			1164 Jan 08 j 22:33	0°♁	
desc. node	1161 Jul 08 j 10:27	0°♁		desc. node	1164 Jan 17 j 22:24	11°♁11'37	
	1161 Aug 02 j 03:13	28°♁25'25			1164 Feb 02 j 00:58	0°♁	
	1161 Aug 03 j 12:44	0°♁			1164 Feb 26 j 04:09	0°♁	
	1161 Aug 31 j 01:14	0°♁		morning set	1164 Mar 12 j 02:22	18°♁30'45	
evening max el	1161 Sep 11 j 18:14	11°♁51'49	46°41'51		1164 Mar 21 j 09:03	0°♃	
	1161 Oct 02 j 00:54	0°♁			1164 Apr 14 j 16:07	0°♁	
greatest brilliancy	1161 Oct 20 j 19:24	11°♁27'11	-4.6m				
retrograde	1161 Oct 31 j 19:48	13°♁42'51		superior conj	1164 Apr 19 j 04:34	5°♁34'05	0°-46'-56
evening set	1161 Nov 15 j 05:26	9°♁36'53		minimum elong	1164 Apr 19 j 13:17	6°♁00'56	0°46'34
inferior conj	1161 Nov 21 j 08:33	6°♁03'20	0°-29'-54	max. Earth dist.	1164 Apr 21 j 05:03	8°♁03'23	1.73280 AU
minimum elong	1161 Nov 21 j 09:42	6°♁01'35	0°29'32		1164 May 09 j 01:13	0°♁	
min. Earth dist.	1161 Nov 21 j 09:32	6°♁01'50	0.26402 AU	asc. node	1164 May 10 j 01:50	1°♁15'38	
asc. node	1161 Nov 23 j 06:32	4°♁53'53		evening rise	1164 May 26 j 04:20	21°♁01'53	
morning rise	1161 Nov 27 j 13:46	2°♁26'44			1164 Jun 02 j 11:50	0°♁	
	1161 Dec 03 j 00:31	30°♁			1164 Jun 26 j 23:43	0°♁	
direct	1161 Dec 11 j 17:05	28°♁26'00			1164 Jul 21 j 13:25	0°♁	
	1161 Dec 20 j 17:35	0°♁			1164 Aug 15 j 06:26	0°♁	
greatest brilliancy	1161 Dec 23 j 21:45	1°♁12'59	-4.7m	desc. node	1164 Aug 29 j 15:05	17°♁19'13	
	1162 Jan 29 j 19:33	0°♁			1164 Sep 09 j 04:56	0°♁	
morning max el	1162 Jan 31 j 04:04	1°♁21'14	46°48'10		1164 Oct 04 j 12:25	0°♁	
	1162 Feb 26 j 23:34	0°♁			1164 Oct 30 j 13:50	0°♁	
desc. node	1162 Mar 14 j 20:04	17°♁58'00		evening max el	1164 Nov 23 j 13:59	25°♁53'48	47°21'05
	1162 Mar 25 j 05:58	0°♁			1164 Nov 27 j 15:54	0°♁	
	1162 Apr 19 j 18:56	0°♃		asc. node	1164 Dec 20 j 18:31	20°♁07'39	
	1162 May 14 j 23:18	0°♁		greatest brilliancy	1164 Dec 31 j 11:30	26°♁28'44	-4.7m
	1162 Jun 08 j 21:51	0°♁		retrograde	1165 Jan 13 j 13:21	29°♁39'44	
	1162 Jul 03 j 14:47	0°♁		evening set	1165 Jan 30 j 18:42	23°♁49'23	
asc. node	1162 Jul 05 j 23:30	2°♁53'07		min. Earth dist.	1165 Feb 02 j 12:29	22°♁07'46	0.27505 AU
	1162 Jul 28 j 01:48	0°♁		inferior conj	1165 Feb 03 j 09:24	21°♁34'57	8°27'21
morning set	1162 Jul 30 j 12:14	3°♁00'08		minimum elong	1165 Feb 03 j 03:51	21°♁43'40	8°26'52
	1162 Aug 21 j 07:22	0°♁		morning rise	1165 Feb 06 j 13:17	19°♁37'39	
max. Earth dist.	1162 Sep 01 j 22:48	14°♁29'28	1.72214 AU	direct	1165 Feb 24 j 02:29	13°♁43'02	
				greatest brilliancy	1165 Mar 06 j 15:54	15°♁47'12	-4.6m
superior conj	1162 Sep 05 j 07:27	18°♁40'56	1°23'44		1165 Mar 29 j 05:06	0°♁	
minimum elong	1162 Sep 05 j 10:28	18°♁50'19	1°23'43	desc. node	1165 Apr 11 j 07:46	11°♁39'39	
	1162 Sep 14 j 09:00	0°♁		morning max el	1165 Apr 14 j 10:27	14°♁38'36	46°05'46
	1162 Oct 08 j 08:39	0°♁			1165 Apr 29 j 14:49	0°♃	
evening rise	1162 Oct 13 j 20:59	6°♁54'16			1165 May 27 j 02:37	0°♁	

	1165 Jun 22 j 06:32	0°♁			1167 Dec 31 j 06:58	0°♁	
	1165 Jul 17 j 16:33	0°♁		asc. node	1168 Jan 18 j 06:21	20°♁19'37	
asc. node	1165 Aug 02 j 11:20	18°♁58'27			1168 Jan 27 j 05:52	0°♁	
	1165 Aug 11 j 13:13	0°♁		evening max el	1168 Feb 04 j 00:17	7°♁59'54	46°32'38
	1165 Sep 04 j 23:18	0°♁			1168 Feb 28 j 23:14	0°♁	
	1165 Sep 29 j 01:47	0°♁		greatest brilliancy	1168 Mar 10 j 13:33	6°♁27'16	-4.6m
greatest brilliancy	1165 Oct 08 j 02:37	11°♁18'52	-3.9m	retrograde	1168 Mar 25 j 01:58	10°♁15'01	
morning set	1165 Oct 08 j 21:08	12°♁16'56		evening set	1168 Apr 10 j 08:50	5°♁05'28	
	1165 Oct 22 j 23:51	0°♁		inferior conj	1168 Apr 15 j 10:27	1°♁58'47	5°10'06
	1165 Nov 15 j 20:07	0°♁		minimum elong	1168 Apr 15 j 19:41	1°♁44'13	5°07'54
				min. Earth dist.	1168 Apr 15 j 12:27	1°♁55'39	0.28732 AU
superior conj	1165 Nov 17 j 18:52	2°♁27'05	0°10'08		1168 Apr 18 j 14:32	30°♁	
minimum elong	1165 Nov 17 j 21:32	2°♁35'27	0°10'01	morning rise	1168 Apr 21 j 06:43	28°♁25'25	
behind sun begin	1165 Nov 17 j 00:34	1°♁29'28		direct	1168 May 06 j 19:21	23°♁44'24	
behind sun end	1165 Nov 18 j 18:30	3°♁41'26		desc. node	1168 May 08 j 19:36	23°♁49'04	
max. Earth dist.	1165 Nov 17 j 15:10	2°♁15'24	1.71073 AU	greatest brilliancy	1168 May 19 j 10:54	26°♁33'30	-4.5m
desc. node	1165 Nov 22 j 00:47	7°♁47'43			1168 May 26 j 06:28	0°♁	
	1165 Dec 09 j 16:17	0°♁		morning max el	1168 Jun 24 j 13:45	23°♁27'58	45°44'01
evening rise	1165 Dec 29 j 09:39	24°♁46'55			1168 Jul 01 j 06:35	0°♁	
	1166 Jan 02 j 13:27	0°♁			1168 Jul 29 j 13:44	0°♁	
	1166 Jan 26 j 13:01	0°♁			1168 Aug 24 j 18:48	0°♁	
	1166 Feb 19 j 17:02	0°♁		asc. node	1168 Aug 29 j 23:09	6°♁06'21	
asc. node	1166 Mar 15 j 04:05	28°♁46'21			1168 Sep 18 j 21:31	0°♁	
	1166 Mar 16 j 04:18	0°♁			1168 Oct 13 j 08:20	0°♁	
	1166 Apr 10 j 02:13	0°♁			1168 Nov 06 j 10:13	0°♁	
	1166 May 05 j 15:59	0°♁			1168 Nov 30 j 08:05	0°♁	
	1166 Jun 01 j 09:02	0°♁		desc. node	1168 Dec 19 j 12:33	24°♁06'59	
evening max el	1166 Jun 28 j 05:27	27°♁38'22	45°32'56	morning set	1168 Dec 23 j 13:15	29°♁10'48	
	1166 Jun 30 j 17:20	0°♁			1168 Dec 24 j 04:55	0°♁	
desc. node	1166 Jul 04 j 17:27	3°♁41'06			1169 Jan 17 j 02:20	0°♁	
greatest brilliancy	1166 Aug 04 j 19:11	25°♁09'27	-4.5m				
retrograde	1166 Aug 15 j 23:25	27°♁23'27		superior conj	1169 Feb 03 j 04:43	21°♁25'05	-1°-22'00
evening set	1166 Sep 03 j 00:13	21°♁23'38		minimum elong	1169 Feb 02 j 22:02	21°♁04'12	1°21'55
inferior conj	1166 Sep 06 j 02:47	19°♁30'25	-8°-40'-5	max. Earth dist.	1169 Feb 06 j 23:34	26°♁09'03	1.71735 AU
minimum elong	1166 Sep 06 j 06:06	19°♁25'19	8°39'56		1169 Feb 10 j 01:30	0°♁	
min. Earth dist.	1166 Sep 06 j 21:42	19°♁01'17	0.28011 AU		1169 Mar 06 j 03:36	0°♁	
morning rise	1166 Sep 09 j 11:42	17°♁27'01		evening rise	1169 Mar 15 j 03:21	11°♁08'44	
direct	1166 Sep 27 j 07:04	11°♁26'33			1169 Mar 30 j 09:44	0°♁	
greatest brilliancy	1166 Oct 11 j 14:47	15°♁07'46	-4.6m	asc. node	1169 Apr 11 j 16:06	15°♁04'42	
asc. node	1166 Oct 25 j 20:46	24°♁20'23			1169 Apr 23 j 20:45	0°♁	
	1166 Nov 01 j 16:21	0°♁			1169 May 18 j 13:24	0°♁	
morning max el	1166 Nov 16 j 21:12	14°♁29'06	46°50'02		1169 Jun 12 j 13:09	0°♁	
	1166 Dec 01 j 11:49	0°♁			1169 Jul 07 j 23:29	0°♁	
	1166 Dec 27 j 18:13	0°♁		desc. node	1169 Aug 01 j 05:08	27°♁48'36	
	1167 Jan 21 j 22:21	0°♁			1169 Aug 03 j 03:53	0°♁	
desc. node	1167 Feb 14 j 10:12	28°♁27'57			1169 Aug 30 j 21:13	0°♁	
	1167 Feb 15 j 16:27	0°♁		evening max el	1169 Sep 09 j 08:27	9°♁31'31	46°39'20
	1167 Mar 12 j 06:39	0°♁			1169 Oct 02 j 18:41	0°♁	
	1167 Apr 05 j 19:37	0°♁		greatest brilliancy	1169 Oct 18 j 07:44	8°♁58'45	-4.6m
	1167 Apr 30 j 08:21	0°♁		retrograde	1169 Oct 29 j 08:22	11°♁13'53	
morning set	1167 May 21 j 15:19	26°♁03'08		evening set	1169 Nov 12 j 18:44	7°♁06'30	
	1167 May 24 j 20:40	0°♁		inferior conj	1169 Nov 18 j 20:34	3°♁34'28	0°-54'-36
asc. node	1167 Jun 07 j 13:45	16°♁48'23		minimum elong	1169 Nov 18 j 22:40	3°♁31'18	0°53'56
	1167 Jun 18 j 07:39	0°♁		min. Earth dist.	1169 Nov 18 j 22:44	3°♁31'11	0.26417 AU
max. Earth dist.	1167 Jun 24 j 19:18	7°♁58'28	1.73507 AU	asc. node	1169 Nov 22 j 08:38	1°♁28'52	
				morning rise	1169 Nov 25 j 02:27	29°♁57'19	
superior conj	1167 Jun 27 j 01:48	10°♁46'07	0°44'05		1169 Nov 25 j 00:26	30°♁	
minimum elong	1167 Jun 26 j 18:06	10°♁22'26	0°43'45	direct	1169 Dec 09 j 06:07	25°♁57'01	
	1167 Jul 12 j 16:28	0°♁		greatest brilliancy	1169 Dec 21 j 11:39	28°♁45'37	-4.7m
evening rise	1167 Aug 01 j 20:55	24°♁56'01			1169 Dec 24 j 02:54	0°♁	
	1167 Aug 05 j 23:15	0°♁		morning max el	1170 Jan 28 j 18:15	28°♁58'28	46°49'07
	1167 Aug 30 j 05:04	0°♁			1170 Jan 29 j 18:40	0°♁	
	1167 Sep 23 j 11:17	0°♁			1170 Feb 26 j 15:58	0°♁	
desc. node	1167 Sep 27 j 03:01	4°♁30'57		desc. node	1170 Mar 13 j 22:06	17°♁21'36	
	1167 Oct 17 j 18:59	0°♁			1170 Mar 24 j 19:48	0°♁	
	1167 Nov 11 j 05:35	0°♁			1170 Apr 19 j 07:25	0°♁	
	1167 Dec 05 j 22:35	0°♁			1170 May 14 j 10:57	0°♁	

	1170 Jun 08 j 08:58	0°♁		retrograde	1173 Jan 11 j 03:02	27°♁16'04	
	1170 Jul 03 j 01:35	0°♁		evening set	1173 Jan 28 j 05:26	21°♁31'38	
asc. node	1170 Jul 05 j 01:32	2°♁26'25		min. Earth dist.	1173 Jan 31 j 02:13	19°♁45'35	0.27443 AU
	1170 Jul 27 j 12:27	0°♁		inferior conj	1173 Jan 31 j 23:17	19°♁12'33	8°20'59
morning set	1170 Jul 28 j 05:57	0°♁53'58		minimum elong	1173 Jan 31 j 17:00	19°♁22'25	8°20'22
	1170 Aug 20 j 18:01	0°♁		morning rise	1173 Feb 04 j 04:51	17°♁12'39	
max. Earth dist.	1170 Aug 30 j 12:49	12°♁10'20	1.72270 AU	direct	1173 Feb 21 j 15:22	11°♁21'40	
				greatest brilliancy	1173 Mar 04 j 05:14	13°♁25'52	-4.6m
superior conj	1170 Sep 02 j 23:50	16°♁28'58	1°24'12		1173 Mar 29 j 13:23	0°♁	
minimum elong	1170 Sep 03 j 02:05	16°♁35'58	1°24'11	desc. node	1173 Apr 10 j 09:57	10°♁47'43	
	1170 Sep 13 j 19:46	0°♁		morning max el	1173 Apr 11 j 23:12	12°♁17'36	46°07'12
	1170 Oct 07 j 19:33	0°♁			1173 Apr 29 j 08:52	0°♁	
evening rise	1170 Oct 11 j 09:42	4°♁29'34			1173 May 26 j 16:52	0°♁	
desc. node	1170 Oct 24 j 15:03	21°♁02'38			1173 Jun 21 j 19:05	0°♁	
	1170 Oct 31 j 18:49	0°♁			1173 Jul 17 j 04:12	0°♁	
	1170 Nov 24 j 18:35	0°♁		asc. node	1173 Aug 01 j 13:19	18°♁30'12	
	1170 Dec 18 j 20:12	0°♁			1173 Aug 11 j 00:23	0°♁	
	1171 Jan 12 j 02:25	0°♁			1173 Sep 04 j 10:12	0°♁	
	1171 Feb 05 j 18:15	0°♁			1173 Sep 28 j 12:34	0°♁	
asc. node	1171 Feb 14 j 18:10	10°♁45'13		morning set	1173 Oct 06 j 11:16	9°♁56'57	
	1171 Mar 03 j 04:19	0°♁			1173 Oct 22 j 10:37	0°♁	
	1171 Mar 30 j 02:24	0°♁		max. Earth dist.	1173 Nov 14 j 20:13	29°♁26'12	1.71094 AU
evening max el	1171 Apr 15 j 23:02	17°♁11'30	45°30'20				
	1171 Apr 30 j 03:25	0°♁		superior conj	1173 Nov 15 j 05:38	29°♁55'49	0°14'01
greatest brilliancy	1171 May 20 j 07:35	13°♁31'29	-4.5m	minimum elong	1173 Nov 15 j 09:16	0°♁07'15	0°13'50
retrograde	1171 Jun 03 j 13:53	17°♁03'13		behind sun begin	1173 Nov 14 j 19:11	29°♁22'57	
desc. node	1171 Jun 06 j 07:37	16°♁54'26		behind sun end	1173 Nov 15 j 23:21	0°♁51'34	
evening set	1171 Jun 18 j 20:45	12°♁34'14			1173 Nov 15 j 06:58	0°♁	
inferior conj	1171 Jun 25 j 01:03	8°♁51'52	-4°-12'-48	desc. node	1173 Nov 21 j 02:50	7°♁20'03	
minimum elong	1171 Jun 24 j 16:45	9°♁04'49	4°10'42		1173 Dec 09 j 03:13	0°♁	
min. Earth dist.	1171 Jun 25 j 00:22	8°♁52'55	0.28969 AU	evening rise	1173 Dec 26 j 19:36	22°♁13'03	
morning rise	1171 Jun 30 j 12:43	5°♁32'38			1174 Jan 02 j 00:28	0°♁	
direct	1171 Jul 16 j 17:45	0°♁34'40			1174 Jan 26 j 00:06	0°♁	
greatest brilliancy	1171 Jul 30 j 18:27	4°♁01'13	-4.5m		1174 Feb 19 j 04:16	0°♁	
	1171 Sep 02 j 19:38	0°♁		asc. node	1174 Mar 14 j 06:15	28°♁17'52	
morning max el	1171 Sep 04 j 01:00	1°♁11'19	46°07'30		1174 Mar 15 j 15:51	0°♁	
asc. node	1171 Sep 27 j 11:06	25°♁43'42			1174 Apr 09 j 14:24	0°♁	
	1171 Oct 01 j 07:09	0°♁			1174 May 05 j 05:25	0°♁	
	1171 Oct 27 j 04:17	0°♁			1174 Jun 01 j 01:12	0°♁	
	1171 Nov 20 j 23:26	0°♁		evening max el	1174 Jun 25 j 19:05	25°♁21'53	45°31'38
	1171 Dec 15 j 06:59	0°♁			1174 Jun 30 j 17:55	0°♁	
	1172 Jan 08 j 10:03	0°♁		desc. node	1174 Jul 03 j 19:25	2°♁45'56	
desc. node	1172 Jan 17 j 00:24	10°♁42'23		greatest brilliancy	1174 Aug 02 j 06:10	22°♁50'31	-4.5m
	1172 Feb 01 j 12:11	0°♁		retrograde	1174 Aug 13 j 13:36	25°♁07'45	
	1172 Feb 25 j 15:08	0°♁		evening set	1174 Aug 31 j 14:53	19°♁06'26	
morning set	1172 Mar 09 j 16:11	16°♁11'13		inferior conj	1174 Sep 03 j 17:13	17°♁13'40	-8°-42'-32
	1172 Mar 20 j 19:51	0°♁		minimum elong	1174 Sep 03 j 19:43	17°♁09'50	8°42'28
	1172 Apr 14 j 02:47	0°♁		min. Earth dist.	1174 Sep 04 j 11:32	16°♁45'31	0.28071 AU
				morning rise	1174 Sep 07 j 00:18	15°♁13'12	
superior conj	1172 Apr 16 j 20:53	3°♁23'37	0°-49'-41	direct	1174 Sep 24 j 21:56	9°♁08'46	
minimum elong	1172 Apr 17 j 05:55	3°♁51'28	0°49'21	greatest brilliancy	1174 Oct 09 j 07:55	12°♁52'37	-4.6m
max. Earth dist.	1172 Apr 19 j 02:00	6°♁07'15	1.73240 AU	asc. node	1174 Oct 24 j 22:49	23°♁10'57	
	1172 May 08 j 11:51	0°♁			1174 Nov 01 j 21:50	0°♁	
asc. node	1172 May 09 j 03:59	0°♁49'34		morning max el	1174 Nov 14 j 11:55	12°♁08'37	46°49'10
evening rise	1172 May 23 j 22:45	18°♁58'22			1174 Dec 01 j 05:34	0°♁	
	1172 Jun 01 j 22:32	0°♁			1174 Dec 27 j 08:44	0°♁	
	1172 Jun 26 j 10:36	0°♁			1175 Jan 21 j 11:25	0°♁	
	1172 Jul 21 j 00:39	0°♁		desc. node	1175 Feb 13 j 12:15	27°♁56'54	
	1172 Aug 14 j 18:13	0°♁			1175 Feb 15 j 04:40	0°♁	
desc. node	1172 Aug 28 j 17:10	16°♁48'44			1175 Mar 11 j 18:17	0°♁	
	1172 Sep 08 j 17:35	0°♁			1175 Apr 05 j 06:50	0°♁	
	1172 Oct 04 j 02:33	0°♁			1175 Apr 29 j 19:17	0°♁	
	1172 Oct 30 j 06:45	0°♁		morning set	1175 May 19 j 09:05	23°♁57'36	
evening max el	1172 Nov 21 j 04:01	23°♁30'00	47°21'01		1175 May 24 j 07:25	0°♁	
	1172 Nov 27 j 16:35	0°♁		asc. node	1175 Jun 06 j 15:44	16°♁21'44	
asc. node	1172 Dec 19 j 20:32	18°♁45'58			1175 Jun 17 j 18:18	0°♁	
greatest brilliancy	1172 Dec 29 j 04:30	24°♁08'22	-4.7m	max. Earth dist.	1175 Jun 22 j 17:45	6°♁07'08	1.73529 AU

superior conj	1175 Jun 24 j 20:10	8°♄42'11	0°41'22	morning rise	1177 Nov 22 j 14:52	27°♍27'51	
minimum elong	1175 Jun 24 j 12:46	8°♄19'28	0°41'04	direct	1177 Dec 06 j 19:04	23°♍27'59	
	1175 Jul 12 j 03:09	0°♂		greatest brilliancy	1177 Dec 19 j 01:16	26°♍17'33	-4.7m
evening rise	1175 Jul 30 j 15:03	22°♂50'23			1177 Dec 26 j 01:36	0°♁	
	1175 Aug 05 j 10:04	0°♎		morning max el	1178 Jan 26 j 07:30	26°♁33'05	46°50'08
	1175 Aug 29 j 16:07	0°♌			1178 Jan 29 j 16:54	0°♁	
	1175 Sep 22 j 22:39	0°♍			1178 Feb 26 j 08:07	0°♁	
desc. node	1175 Sep 26 j 05:11	4°♍02'27		desc. node	1178 Mar 13 j 00:18	16°♁45'51	
	1175 Oct 17 j 06:46	0°♁			1178 Mar 24 j 09:33	0°♁	
	1175 Nov 10 j 17:56	0°♁			1178 Apr 18 j 19:56	0°♁	
	1175 Dec 05 j 11:50	0°♁			1178 May 13 j 22:45	0°♁	
	1175 Dec 30 j 21:58	0°♁			1178 Jun 07 j 20:17	0°♁	
asc. node	1176 Jan 17 j 08:19	19°♁37'19			1178 Jul 02 j 12:37	0°♁	
	1176 Jan 27 j 01:18	0°♁		asc. node	1178 Jul 04 j 03:35	1°♁59'00	
evening max el	1176 Feb 01 j 15:36	5°♁43'47	46°35'04	morning set	1178 Jul 25 j 23:19	28°♁45'57	
	1176 Feb 29 j 20:32	0°♁			1178 Jul 26 j 23:21	0°♂	
greatest brilliancy	1176 Mar 08 j 05:38	4°♁14'57	-4.6m		1178 Aug 20 j 04:54	0°♎	
retrograde	1176 Mar 22 j 18:46	8°♁03'25		max. Earth dist.	1178 Aug 28 j 02:06	9°♎48'21	1.72323 AU
evening set	1176 Apr 08 j 03:32	2°♁49'40					
	1176 Apr 12 j 18:10	30°♁		superior conj	1178 Aug 31 j 16:00	14°♎15'51	1°24'30
inferior conj	1176 Apr 13 j 02:28	29°♁46'54	5°26'08	minimum elong	1178 Aug 31 j 17:29	14°♎20'27	1°24'30
minimum elong	1176 Apr 13 j 11:55	29°♁32'01	5°23'59		1178 Sep 13 j 06:44	0°♌	
min. Earth dist.	1176 Apr 13 j 03:56	29°♁44'37	0.28714 AU		1178 Oct 07 j 06:40	0°♍	
morning rise	1176 Apr 18 j 20:32	26°♁17'01		evening rise	1178 Oct 08 j 22:22	2°♍04'11	
direct	1176 May 04 j 11:12	21°♁32'48		desc. node	1178 Oct 23 j 17:03	20°♍33'44	
desc. node	1176 May 07 j 21:38	21°♁46'22			1178 Oct 31 j 06:07	0°♁	
greatest brilliancy	1176 May 17 j 01:20	24°♁21'10	-4.5m		1178 Nov 24 j 06:06	0°♁	
	1176 May 27 j 10:48	0°♁			1178 Dec 18 j 07:58	0°♁	
morning max el	1176 Jun 22 j 06:27	21°♁19'54	45°44'01		1179 Jan 11 j 14:33	0°♁	
	1176 Jul 01 j 02:27	0°♁			1179 Feb 05 j 07:03	0°♁	
	1176 Jul 29 j 04:36	0°♁		asc. node	1179 Feb 13 j 20:22	10°♁12'41	
	1176 Aug 24 j 07:43	0°♂			1179 Mar 02 j 18:29	0°♁	
asc. node	1176 Aug 29 j 01:20	5°♂35'10			1179 Mar 29 j 19:59	0°♁	
	1176 Sep 18 j 09:32	0°♎		evening max el	1179 Apr 13 j 14:28	14°♁59'18	45°31'29
	1176 Oct 12 j 19:53	0°♌			1179 Apr 30 j 11:20	0°♁	
	1176 Nov 05 j 21:32	0°♍		greatest brilliancy	1179 May 17 j 23:24	11°♁22'00	-4.5m
	1176 Nov 29 j 19:15	0°♁		retrograde	1179 Jun 01 j 05:34	14°♁54'14	
desc. node	1176 Dec 18 j 14:34	23°♁38'34		desc. node	1179 Jun 05 j 09:35	14°♁33'50	
morning set	1176 Dec 20 j 23:17	26°♁36'47		evening set	1179 Jun 16 j 11:41	10°♁27'10	
	1176 Dec 23 j 15:57	0°♁		inferior conj	1179 Jun 22 j 17:23	6°♁42'45	-3°-55'-19
	1177 Jan 16 j 13:17	0°♁		minimum elong	1179 Jun 22 j 09:32	6°♁55'03	3°53'17
				min. Earth dist.	1179 Jun 22 j 16:57	6°♁43'26	0.28974 AU
superior conj	1177 Jan 31 j 16:06	18°♁56'24	-1°-20'-47	morning rise	1179 Jun 28 j 07:16	3°♁19'58	
minimum elong	1177 Jan 31 j 08:34	18°♁32'50	1°20'41		1179 Jul 05 j 10:34	30°♁	
max. Earth dist.	1177 Feb 04 j 11:20	23°♁41'44	1.71689 AU	direct	1179 Jul 14 j 09:56	28°♁25'27	
	1177 Feb 09 j 12:24	0°♁			1179 Jul 23 j 17:43	0°♁	
	1177 Mar 05 j 14:30	0°♁		greatest brilliancy	1179 Jul 28 j 09:25	1°♁49'53	-4.5m
evening rise	1177 Mar 12 j 17:05	8°♁48'53		morning max el	1179 Sep 01 j 15:04	28°♁54'20	46°06'04
	1177 Mar 29 j 20:43	0°♁			1179 Sep 02 j 17:54	0°♂	
asc. node	1177 Apr 10 j 18:10	14°♁37'14		asc. node	1179 Sep 26 j 13:12	25°♂03'58	
	1177 Apr 23 j 07:54	0°♁			1179 Sep 30 j 23:02	0°♎	
	1177 May 18 j 00:53	0°♁			1179 Oct 26 j 17:58	0°♌	
	1177 Jun 12 j 01:17	0°♂			1179 Nov 20 j 12:06	0°♍	
	1177 Jul 07 j 12:48	0°♎			1179 Dec 14 j 19:04	0°♁	
desc. node	1177 Jul 31 j 07:15	27°♎11'34		desc. node	1180 Jan 07 j 21:46	0°♁	
	1177 Aug 02 j 19:26	0°♌			1180 Jan 16 j 02:27	10°♁12'33	
	1177 Aug 30 j 18:02	0°♍			1180 Jan 31 j 23:38	0°♁	
evening max el	1177 Sep 06 j 22:44	7°♍11'05	46°36'48		1180 Feb 25 j 02:22	0°♁	
	1177 Oct 03 j 18:50	0°♁		morning set	1180 Mar 07 j 06:00	13°♁50'48	
greatest brilliancy	1177 Oct 15 j 20:55	6°♁31'12	-4.6m		1180 Mar 20 j 06:53	0°♁	
retrograde	1177 Oct 26 j 20:38	8°♁44'36			1180 Apr 13 j 13:42	0°♁	
evening set	1177 Nov 10 j 08:19	4°♁35'50					
inferior conj	1177 Nov 16 j 08:37	1°♁05'31	-1°-19'-8	superior conj	1180 Apr 14 j 13:21	1°♁12'52	0°-52'-22
minimum elong	1177 Nov 16 j 11:39	1°♁00'56	1°18'10	minimum elong	1180 Apr 14 j 22:39	1°♁41'34	0°52'01
min. Earth dist.	1177 Nov 16 j 12:07	1°♁00'13	0.26431 AU	max. Earth dist.	1180 Apr 16 j 22:07	4°♁07'46	1.73198 AU
	1177 Nov 18 j 03:58	30°♍			1180 May 07 j 22:43	0°♁	
asc. node	1177 Nov 21 j 10:39	28°♍05'56		asc. node	1180 May 08 j 05:57	0°♁22'12	

evening rise	1180 May 21 j 17:12	16°II54'12			1183 Jan 21 j 00:46	0°☾		
	1180 Jun 01 j 09:31	0°☾		desc. node	1183 Feb 12 j 14:26	27°☾25'27		
	1180 Jun 25 j 21:49	0°♁			1183 Feb 14 j 17:07	0°≈		
	1180 Jul 20 j 12:16	0°♃			1183 Mar 11 j 06:09	0°♁		
	1180 Aug 14 j 06:27	0°♁			1183 Apr 04 j 18:18	0°♃		
desc. node	1180 Aug 27 j 19:17	16°♁16'54			1183 Apr 29 j 06:27	0°♃		
	1180 Sep 08 j 06:45	0°♃		morning set	1183 May 17 j 03:07	21°♃52'03		
	1180 Oct 03 j 17:14	0°♁			1183 May 23 j 18:24	0°II		
	1180 Oct 30 j 00:26	0°☾		asc. node	1183 Jun 05 j 17:49	15°II54'43		
evening max el	1180 Nov 18 j 17:03	21°☾02'37	47°21'03		1183 Jun 17 j 05:11	0°☾		
	1180 Nov 27 j 19:00	0°≈		max. Earth dist.	1183 Jun 20 j 17:16	4°☾18'24	1.73546 AU	
asc. node	1180 Dec 18 j 22:35	17°≈20'35						
greatest brilliancy	1180 Dec 26 j 20:51	21°≈45'57	-4.7m	superior conj	1183 Jun 22 j 14:47	6°☾38'24	0°38'38	
retrograde	1181 Jan 08 j 16:43	24°≈51'24		minimum elong	1183 Jun 22 j 07:45	6°☾16'46	0°38'19	
evening set	1181 Jan 25 j 15:53	19°≈12'48			1183 Jul 11 j 14:02	0°♁		
min. Earth dist.	1181 Jan 28 j 15:58	17°≈22'04	0.27381 AU	evening rise	1183 Jul 28 j 09:31	20°♁45'15		
inferior conj	1181 Jan 29 j 13:07	16°≈48'57	8°13'45		1183 Aug 04 j 21:05	0°♃		
minimum elong	1181 Jan 29 j 06:07	16°≈59'54	8°12'59		1183 Aug 29 j 03:24	0°♁		
morning rise	1181 Feb 01 j 20:38	14°≈46'12			1183 Sep 22 j 10:18	0°♃		
direct	1181 Feb 19 j 03:58	8°≈58'52		desc. node	1183 Sep 25 j 07:11	3°♃32'28		
greatest brilliancy	1181 Mar 01 j 19:14	11°≈04'08	-4.6m		1183 Oct 16 j 18:54	0°♁		
	1181 Mar 29 j 19:42	0°♁			1183 Nov 10 j 06:42	0°☾		
morning max el	1181 Apr 09 j 12:26	9°♁56'40	46°08'49		1183 Dec 05 j 01:35	0°≈		
desc. node	1181 Apr 09 j 11:54	9°♁55'22			1183 Dec 30 j 13:33	0°♁		
	1181 Apr 29 j 02:47	0°♃		asc. node	1184 Jan 16 j 10:30	18°♁54'05		
	1181 May 26 j 07:14	0°♃			1184 Jan 26 j 21:43	0°♃		
	1181 Jun 21 j 07:51	0°II		evening max el	1184 Jan 30 j 07:31	3°♃28'12	46°37'41	
	1181 Jul 16 j 16:08	0°☾			1184 Mar 02 j 02:34	0°♃		
asc. node	1181 Jul 31 j 15:30	18°☾01'37		greatest brilliancy	1184 Mar 05 j 22:49	2°♃03'24	-4.6m	
	1181 Aug 10 j 11:53	0°♁		retrograde	1184 Mar 20 j 11:41	5°♃51'01		
	1181 Sep 03 j 21:29	0°♃		evening set	1184 Apr 05 j 22:23	0°♃33'18		
	1181 Sep 27 j 23:46	0°♁			1184 Apr 06 j 20:47	30°♃		
morning set	1181 Oct 04 j 01:10	7°♁34'58		inferior conj	1184 Apr 10 j 18:30	27°♃34'23	5°41'48	
	1181 Oct 21 j 21:49	0°♃		minimum elong	1184 Apr 11 j 04:06	27°♃19'15	5°39'41	
max. Earth dist.	1181 Nov 12 j 03:38	26°♃43'09	1.71111 AU	min. Earth dist.	1184 Apr 10 j 19:08	27°♃33'23	0.28690 AU	
				morning rise	1184 Apr 16 j 10:09	24°♃08'08		
superior conj	1181 Nov 12 j 16:07	27°♃22'25	0°17'53	direct	1184 May 02 j 03:19	19°♃20'52		
minimum elong	1181 Nov 12 j 20:42	27°♃36'51	0°17'39	desc. node	1184 May 06 j 23:41	19°♃47'42		
	1181 Nov 14 j 18:12	0°♁		greatest brilliancy	1184 May 14 j 14:38	22°♃07'01	-4.5m	
desc. node	1181 Nov 20 j 04:49	6°♁50'56			1184 May 28 j 07:39	0°♃		
	1181 Dec 08 j 14:30	0°☾		morning max el	1184 Jun 19 j 23:06	19°♃11'20	45°44'04	
evening rise	1181 Dec 24 j 05:25	19°☾37'46			1184 Jun 30 j 21:50	0°II		
	1182 Jan 01 j 11:48	0°≈			1184 Jul 28 j 19:22	0°☾		
	1182 Jan 25 j 11:31	0°♁			1184 Aug 23 j 20:39	0°♁		
	1182 Feb 18 j 15:51	0°♃		asc. node	1184 Aug 28 j 03:22	5°♁03'29		
asc. node	1182 Mar 13 j 08:18	27°♃47'55			1184 Sep 17 j 21:34	0°♃		
	1182 Mar 15 j 03:46	0°♃			1184 Oct 12 j 07:31	0°♁		
	1182 Apr 09 j 02:57	0°II			1184 Nov 05 j 08:58	0°♃		
	1182 May 04 j 19:15	0°☾			1184 Nov 29 j 06:35	0°♁		
	1182 May 31 j 17:56	0°♁		desc. node	1184 Dec 17 j 16:42	23°♁09'49		
evening max el	1182 Jun 23 j 09:29	23°♁06'43	45°30'23	morning set	1184 Dec 18 j 08:57	24°♁00'54		
	1182 Jun 30 j 20:08	0°♃			1184 Dec 23 j 03:13	0°☾		
desc. node	1182 Jul 02 j 21:31	1°♃49'11			1185 Jan 16 j 00:28	0°≈		
greatest brilliancy	1182 Jul 30 j 16:19	20°♃30'07	-4.5m					
retrograde	1182 Aug 11 j 04:09	22°♃51'11		superior conj	1185 Jan 29 j 02:50	16°≈24'51	-1°-19'-23	
evening set	1182 Aug 29 j 05:07	16°♃49'02		minimum elong	1185 Jan 28 j 18:30	15°≈58'44	1°19'14	
inferior conj	1182 Sep 01 j 07:39	14°♃55'56	-8°-44'-1	max. Earth dist.	1185 Feb 01 j 23:09	21°≈13'44	1.71639 AU	
minimum elong	1182 Sep 01 j 09:18	14°♃53'25	8°44'01		1185 Feb 08 j 23:31	0°♁		
min. Earth dist.	1182 Sep 02 j 00:58	14°♃29'21	0.28135 AU		1185 Mar 05 j 01:35	0°♃		
morning rise	1182 Sep 04 j 13:16	12°♃57'45		evening rise	1185 Mar 10 j 06:14	6°♃26'40		
direct	1182 Sep 22 j 13:19	6°♃50'02			1185 Mar 29 j 07:49	0°♃		
greatest brilliancy	1182 Oct 07 j 00:36	10°♃35'48	-4.6m	asc. node	1185 Apr 09 j 20:08	14°♃09'03		
asc. node	1182 Oct 24 j 00:49	22°♃01'56			1185 Apr 22 j 19:09	0°II		
	1182 Nov 02 j 02:03	0°♁			1185 May 17 j 12:29	0°☾		
morning max el	1182 Nov 12 j 03:28	9°♁48'59	46°48'08		1185 Jun 11 j 13:33	0°♁		
	1182 Nov 30 j 23:28	0°♃			1185 Jul 07 j 02:15	0°♃		
	1182 Dec 26 j 23:33	0°♁		desc. node	1185 Jul 30 j 09:23	26°♃34'22		

	1185 Aug 02 j 11:11	0°♌		desc. node	1188 Jan 15 j 04:35	9°♁43'55	
	1185 Aug 30 j 15:29	0°♍			1188 Jan 31 j 10:50	0°♁	
evening max el	1185 Sep 04 j 12:31	4°♍49'49	46°34'12		1188 Feb 24 j 13:22	0°♁	
	1185 Oct 05 j 03:59	0°♎		morning set	1188 Mar 04 j 19:27	11°♁29'42	
greatest brilliancy	1185 Oct 13 j 10:47	4°♎05'06	-4.6m		1188 Mar 19 j 17:44	0°♂	
retrograde	1185 Oct 24 j 08:22	6°♎15'58					
evening set	1185 Nov 07 j 22:12	2°♎05'34		superior conj	1188 Apr 12 j 05:24	29°♂01'21	0°-55'00
	1185 Nov 11 j 14:07	30°♎		minimum elong	1188 Apr 12 j 14:56	29°♂30'44	0°54'39
inferior conj	1185 Nov 13 j 20:50	28°♎37'16	-1°-43'-15		1188 Apr 13 j 00:26	0°♂	
minimum elong	1185 Nov 14 j 00:44	28°♎31'19	1°42'02	max. Earth dist.	1188 Apr 14 j 15:17	1°♂59'44	1.73156 AU
min. Earth dist.	1185 Nov 14 j 01:52	28°♎29'36	0.26455 AU		1188 May 07 j 09:26	0°♂	
morning rise	1185 Nov 20 j 03:08	24°♎59'07		asc. node	1188 May 07 j 08:03	29°♂55'46	
asc. node	1185 Nov 20 j 12:43	24°♎46'37		evening rise	1188 May 19 j 11:14	14°♂49'22	
direct	1185 Dec 04 j 07:42	20°♎59'25			1188 May 31 j 20:18	0°♁	
greatest brilliancy	1185 Dec 16 j 15:36	23°♎50'22	-4.7m		1188 Jun 25 j 08:49	0°♂	
	1185 Dec 27 j 09:17	0°♎			1188 Jul 19 j 23:40	0°♁	
morning max el	1186 Jan 23 j 20:03	24°♎05'20	46°50'55		1188 Aug 13 j 18:28	0°♌	
	1186 Jan 29 j 14:28	0°♏		desc. node	1188 Aug 26 j 21:14	15°♌45'22	
	1186 Feb 26 j 00:11	0°♐			1188 Sep 07 j 19:43	0°♍	
desc. node	1186 Mar 12 j 02:13	16°♐09'07			1188 Oct 03 j 07:47	0°♎	
	1186 Mar 23 j 23:20	0°♑			1188 Oct 29 j 18:07	0°♏	
	1186 Apr 18 j 08:28	0°♒		evening max el	1188 Nov 16 j 06:25	18°♏37'23	47°21'06
	1186 May 13 j 10:30	0°♓			1188 Nov 27 j 22:26	0°♐	
	1186 Jun 07 j 07:32	0°♈		asc. node	1188 Dec 18 j 00:42	15°♐53'48	
	1186 Jul 01 j 23:35	0°♉		greatest brilliancy	1188 Dec 24 j 12:12	19°♐23'32	-4.7m
asc. node	1186 Jul 03 j 05:42	1°♉32'00		retrograde	1189 Jan 06 j 06:52	22°♐28'14	
morning set	1186 Jul 23 j 16:50	26°♉38'41		evening set	1189 Jan 23 j 02:13	16°♐55'16	
	1186 Jul 26 j 10:11	0°♊		min. Earth dist.	1189 Jan 26 j 05:33	15°♐00'05	0.27323 AU
	1186 Aug 19 j 15:43	0°♋		inferior conj	1189 Jan 27 j 02:59	14°♐26'36	8°05'36
max. Earth dist.	1186 Aug 25 j 16:16	7°♋29'26	1.72376 AU	minimum elong	1189 Jan 26 j 19:21	14°♐38'32	8°04'38
				morning rise	1189 Jan 30 j 12:45	12°♐20'46	
superior conj	1186 Aug 29 j 08:39	12°♋04'31	1°24'41	direct	1189 Feb 16 j 16:46	6°♐37'13	
minimum elong	1186 Aug 29 j 09:23	12°♋06'49	1°24'42	greatest brilliancy	1189 Feb 27 j 09:10	8°♐43'38	-4.6m
	1186 Sep 12 j 17:36	0°♌			1189 Mar 29 j 23:32	0°♑	
evening rise	1186 Oct 06 j 11:40	29°♌41'18		morning max el	1189 Apr 07 j 02:34	7°♑38'53	46°10'16
	1186 Oct 06 j 17:39	0°♍		desc. node	1189 Apr 08 j 13:58	9°♑05'20	
desc. node	1186 Oct 22 j 19:04	20°♍05'22			1189 Apr 28 j 19:59	0°♒	
	1186 Oct 30 j 17:16	0°♎			1189 May 25 j 21:11	0°♓	
	1186 Nov 23 j 17:28	0°♏			1189 Jun 20 j 20:16	0°♈	
	1186 Dec 17 j 19:38	0°♐			1189 Jul 16 j 03:43	0°♉	
	1187 Jan 11 j 02:39	0°♑		asc. node	1189 Jul 30 j 17:31	17°♉33'35	
	1187 Feb 04 j 19:53	0°♒			1189 Aug 09 j 23:01	0°♊	
asc. node	1187 Feb 12 j 22:20	9°♒39'21			1189 Sep 03 j 08:23	0°♋	
	1187 Mar 02 j 08:47	0°♓			1189 Sep 27 j 10:35	0°♌	
	1187 Mar 29 j 13:58	0°♈		morning set	1189 Oct 01 j 15:16	5°♌14'59	
evening max el	1187 Apr 11 j 05:14	12°♈45'33	45°32'55		1189 Oct 21 j 08:39	0°♍	
	1187 Apr 30 j 22:01	0°♉		max. Earth dist.	1189 Nov 09 j 13:25	24°♍08'42	1.71130 AU
greatest brilliancy	1187 May 15 j 14:27	9°♉11'49	-4.5m				
retrograde	1187 May 29 j 21:28	12°♉45'58		superior conj	1189 Nov 10 j 02:53	24°♍51'04	0°21'40
desc. node	1187 Jun 04 j 11:41	12°♉09'04		minimum elong	1189 Nov 10 j 08:22	25°♍08'19	0°21'25
evening set	1187 Jun 14 j 02:50	8°♉20'15			1189 Nov 14 j 05:04	0°♎	
inferior conj	1187 Jun 20 j 09:48	4°♉34'16	-3°-37'-38	desc. node	1189 Nov 19 j 06:59	6°♎23'31	
minimum elong	1187 Jun 20 j 02:25	4°♉45'50	3°35'39		1189 Dec 08 j 01:25	0°♏	
min. Earth dist.	1187 Jun 20 j 09:42	4°♉34'26	0.28976 AU	evening rise	1189 Dec 21 j 15:32	17°♏04'36	
morning rise	1187 Jun 26 j 01:50	1°♉08'14			1189 Dec 31 j 22:45	0°♐	
	1187 Jun 28 j 04:22	30°♉			1190 Jan 24 j 22:31	0°♑	
direct	1187 Jul 12 j 01:45	26°♉16'48			1190 Feb 18 j 03:01	0°♒	
greatest brilliancy	1187 Jul 26 j 01:23	29°♉40'31	-4.5m	asc. node	1190 Mar 12 j 10:17	27°♒19'01	
	1187 Jul 26 j 18:08	0°♊			1190 Mar 14 j 15:17	0°♓	
morning max el	1187 Aug 30 j 05:37	26°♊39'21	46°04'46		1190 Apr 08 j 15:10	0°♈	
	1187 Sep 02 j 15:04	0°♋			1190 May 04 j 08:51	0°♉	
asc. node	1187 Sep 25 j 15:06	24°♋24'52			1190 May 31 j 10:40	0°♊	
	1187 Sep 30 j 14:24	0°♌		evening max el	1190 Jun 21 j 00:55	20°♊54'56	45°29'12
	1187 Oct 26 j 07:16	0°♍			1190 Jun 30 j 23:30	0°♋	
	1187 Nov 20 j 00:25	0°♎		desc. node	1190 Jul 01 j 23:38	0°♌52'07	
	1187 Dec 14 j 06:50	0°♏		greatest brilliancy	1190 Jul 28 j 03:02	18°♌11'31	-4.5m
	1188 Jan 07 j 09:12	0°♐		retrograde	1190 Aug 08 j 18:41	20°♌35'42	

evening set	1190 Aug 26 j 19:04	14°♄33'34		minimum elong	1193 Jan 26 j 04:26	13°≈25'29	1°17'38
inferior conj	1190 Aug 29 j 22:08	12°♄39'31	-8°-44'-47	max. Earth dist.	1193 Jan 30 j 10:38	18°≈45'24	1.71590 AU
minimum elong	1190 Aug 29 j 22:56	12°♄38'19	8°44'47		1193 Feb 08 j 10:23	0°✕	
min. Earth dist.	1190 Aug 30 j 14:14	12°♄14'47	0.28193 AU		1193 Mar 04 j 12:25	0°♃	
morning rise	1190 Sep 02 j 02:36	10°♄43'02		evening rise	1193 Mar 07 j 19:16	4°♃04'39	
direct	1190 Sep 20 j 05:02	4°♄32'57			1193 Mar 28 j 18:41	0°♄	
greatest brilliancy	1190 Oct 04 j 15:58	8°♄18'45	-4.6m	asc. node	1193 Apr 08 j 22:17	13°♄42'11	
asc. node	1190 Oct 23 j 02:58	20°♄56'21			1193 Apr 22 j 06:10	0°♂	
	1190 Nov 02 j 04:07	0°♂			1193 May 16 j 23:52	0°♄	
morning max el	1190 Nov 09 j 18:55	7°♂30'40	46°46'57		1193 Jun 11 j 01:37	0°♂	
	1190 Nov 30 j 16:32	0°♄			1193 Jul 06 j 15:36	0°♄	
	1190 Dec 26 j 13:47	0°♄		desc. node	1193 Jul 29 j 11:18	25°♄56'37	
	1191 Jan 20 j 13:37	0°♄			1193 Aug 02 j 03:03	0°♂	
desc. node	1191 Feb 11 j 16:21	26°♄54'29			1193 Aug 30 j 13:41	0°♄	
	1191 Feb 14 j 05:08	0°≈		evening max el	1193 Sep 02 j 01:19	2°♄26'24	46°31'28
	1191 Mar 10 j 17:35	0°✕			1193 Oct 07 j 05:13	0°♄	
	1191 Apr 04 j 05:19	0°♃		greatest brilliancy	1193 Oct 11 j 01:18	1°♄39'38	-4.6m
	1191 Apr 28 j 17:13	0°♄		retrograde	1193 Oct 21 j 19:40	3°♄47'25	
morning set	1191 May 14 j 21:06	19°♄47'34			1193 Nov 04 j 17:03	30°♄	
	1191 May 23 j 05:00	0°♂		evening set	1193 Nov 05 j 12:07	29°♄34'55	
asc. node	1191 Jun 04 j 19:56	15°♂28'52		inferior conj	1193 Nov 11 j 08:57	26°♄09'09	-2°-7'-18
	1191 Jun 16 j 15:44	0°♄		minimum elong	1193 Nov 11 j 13:44	26°♄01'53	2°05'48
max. Earth dist.	1191 Jun 18 j 16:03	2°♄28'30	1.73563 AU	min. Earth dist.	1193 Nov 11 j 15:53	25°♄58'35	0.26479 AU
				morning rise	1193 Nov 17 j 15:02	22°♄30'50	
superior conj	1191 Jun 20 j 09:14	4°♄35'04	0°35'49	asc. node	1193 Nov 19 j 14:49	21°♄30'54	
minimum elong	1191 Jun 20 j 02:36	4°♄14'40	0°35'31	direct	1193 Dec 01 j 19:41	18°♄30'44	
	1191 Jul 11 j 00:37	0°♂		greatest brilliancy	1193 Dec 14 j 06:36	21°♄24'12	-4.7m
evening rise	1191 Jul 26 j 03:45	18°♂40'23			1193 Dec 28 j 08:01	0°♄	
	1191 Aug 04 j 07:48	0°♄		morning max el	1194 Jan 21 j 08:04	21°♄36'35	46°51'48
	1191 Aug 28 j 14:23	0°♂			1194 Jan 29 j 11:05	0°♄	
	1191 Sep 21 j 21:39	0°♄			1194 Feb 25 j 15:48	0°≈	
desc. node	1191 Sep 24 j 09:12	3°♄03'35		desc. node	1194 Mar 11 j 04:19	15°≈33'42	
	1191 Oct 16 j 06:43	0°♄			1194 Mar 23 j 12:49	0°✕	
	1191 Nov 09 j 19:09	0°♄			1194 Apr 17 j 20:47	0°♃	
	1191 Dec 04 j 15:03	0°≈			1194 May 12 j 22:05	0°♄	
	1191 Dec 30 j 05:00	0°✕			1194 Jun 06 j 18:38	0°♂	
asc. node	1192 Jan 15 j 12:31	18°✕10'54		asc. node	1194 Jul 01 j 10:24	0°♄	
	1192 Jan 26 j 18:23	0°♃		morning set	1194 Jul 02 j 07:43	1°♄05'09	
evening max el	1192 Jan 27 j 23:37	1°♃13'55	46°40'12		1194 Jul 21 j 10:29	24°♄32'15	
greatest brilliancy	1192 Mar 03 j 17:01	29°♃54'10	-4.6m		1194 Jul 25 j 20:53	0°♂	
	1192 Mar 03 j 21:51	0°♄			1194 Aug 19 j 02:26	0°♄	
retrograde	1192 Mar 18 j 04:20	3°♄39'31		max. Earth dist.	1194 Aug 23 j 08:42	5°♄17'53	1.72435 AU
	1192 Mar 31 j 16:01	30°♃					
evening set	1192 Apr 03 j 17:18	28°♃18'05		superior conj	1194 Aug 27 j 01:21	9°♄53'39	1°24'45
inferior conj	1192 Apr 08 j 10:34	25°♃23'01	5°56'59	minimum elong	1194 Aug 27 j 01:21	9°♄53'38	1°24'45
minimum elong	1192 Apr 08 j 20:15	25°♃07'43	5°54'54		1194 Sep 12 j 04:27	0°♂	
min. Earth dist.	1192 Apr 08 j 10:29	25°♃23'08	0.28663 AU	evening rise	1194 Oct 04 j 00:57	27°♂18'24	
morning rise	1192 Apr 13 j 23:35	22°♃00'25			1194 Oct 06 j 04:39	0°♄	
direct	1192 Apr 29 j 19:26	17°♃10'14		desc. node	1194 Oct 21 j 21:14	19°♄37'18	
desc. node	1192 May 06 j 01:46	17°♃54'35			1194 Oct 30 j 04:28	0°♄	
greatest brilliancy	1192 May 12 j 02:59	19°♃52'53	-4.5m		1194 Nov 23 j 04:53	0°♄	
	1192 May 28 j 22:32	0°♄			1194 Dec 17 j 07:20	0°≈	
morning max el	1192 Jun 17 j 14:56	17°♄01'52	45°44'01		1195 Jan 10 j 14:46	0°✕	
	1192 Jun 30 j 16:18	0°♂			1195 Feb 04 j 08:45	0°♃	
	1192 Jul 28 j 09:39	0°♄		asc. node	1195 Feb 12 j 00:20	9°♃06'04	
asc. node	1192 Aug 23 j 09:15	0°♂			1195 Mar 01 j 23:13	0°♄	
	1192 Aug 27 j 05:21	4°♂32'26			1195 Mar 29 j 08:23	0°♂	
	1192 Sep 17 j 09:22	0°♄		evening max el	1195 Apr 08 j 19:57	10°♂31'43	45°34'27
	1192 Oct 11 j 18:54	0°♂			1195 May 01 j 12:25	0°♄	
	1192 Nov 04 j 20:08	0°♄		greatest brilliancy	1195 May 13 j 04:36	7°♄00'33	-4.5m
	1192 Nov 28 j 17:37	0°♄		retrograde	1195 May 27 j 13:48	10°♄37'56	
morning set	1192 Dec 15 j 18:38	21°♄26'00		desc. node	1195 Jun 03 j 13:47	9°♄39'46	
desc. node	1192 Dec 16 j 18:44	22°♄41'47		evening set	1195 Jun 11 j 18:09	6°♄13'04	
	1192 Dec 22 j 14:10	0°♄		inferior conj	1195 Jun 18 j 02:14	2°♄25'52	-3°-19'-30
	1193 Jan 15 j 11:22	0°≈		minimum elong	1195 Jun 17 j 19:22	2°♄36'36	3°17'39
				min. Earth dist.	1195 Jun 18 j 02:22	2°♄25'39	0.28978 AU
superior conj	1193 Jan 26 j 13:31	13°≈53'58	-1°-17'-49		1195 Jun 22 j 00:54	30°♂	

morning rise	1195 Jun 23 j 20:21	28°II56'53		1198 Jan 24 j 09:54	0°K	
direct	1195 Jul 09 j 17:30	24°II08'06		1198 Feb 17 j 14:35	0°Y	
greatest brilliancy	1195 Jul 23 j 17:53	27°II32'06	-4.5m	asc. node	1198 Mar 11 j 12:25	26°Y49'26
	1195 Jul 28 j 12:50	0°E			1198 Mar 14 j 03:13	0°R
morning max el	1195 Aug 27 j 21:01	24°E26'39	46°03'29		1198 Apr 08 j 03:48	0°II
	1195 Sep 02 j 11:30	0°O			1198 May 03 j 22:56	0°E
asc. node	1195 Sep 24 j 17:19	23°O46'58			1198 May 31 j 04:06	0°O
	1195 Sep 30 j 05:36	0°M		evening max el	1198 Jun 18 j 16:44	18°O43'12 45°28'02
	1195 Oct 25 j 20:35	0°A			1198 Jul 01 j 05:09	0°M
	1195 Nov 19 j 12:50	0°L		desc. node	1198 Jul 01 j 01:35	29°O52'31
	1195 Dec 13 j 18:45	0°J		greatest brilliancy	1198 Jul 25 j 14:52	15°M53'35 -4.5m
desc. node	1196 Jan 06 j 20:47	0°Z		retrograde	1198 Aug 06 j 09:00	18°M19'38
	1196 Jan 14 j 06:34	9°Z14'18		evening set	1198 Aug 24 j 08:49	12°M18'24
	1196 Jan 30 j 22:10	0°X		inferior conj	1198 Aug 27 j 12:46	10°M22'45 -8°-44'-42
	1196 Feb 24 j 00:29	0°K		minimum elong	1198 Aug 27 j 12:43	10°M22'50 8°44'43
morning set	1196 Mar 02 j 08:30	9°K06'53		min. Earth dist.	1198 Aug 28 j 03:47	9°M59'36 0.28246 AU
	1196 Mar 19 j 04:40	0°Y		morning rise	1198 Aug 30 j 16:27	8°M27'14
				direct	1198 Sep 17 j 20:49	2°M15'40
superior conj	1196 Apr 09 j 21:17	26°Y48'54	0°-57'-33	greatest brilliancy	1198 Oct 02 j 06:18	5°M59'47 -4.6m
minimum elong	1196 Apr 10 j 06:59	27°Y18'49	0°57'13	asc. node	1198 Oct 22 j 05:00	19°M51'30
max. Earth dist.	1196 Apr 12 j 07:58	29°Y49'50	1.73115 AU		1198 Nov 02 j 05:09	0°A
	1196 Apr 12 j 11:16	0°R		morning max el	1198 Nov 07 j 09:47	5°A10'11 46°45'49
asc. node	1196 May 06 j 10:09	29°R28'54			1198 Nov 30 j 09:32	0°L
	1196 May 06 j 20:16	0°II			1198 Dec 26 j 04:10	0°J
evening rise	1196 May 17 j 05:17	12°II44'14			1199 Jan 20 j 02:43	0°Z
	1196 May 31 j 07:14	0°E		desc. node	1199 Feb 10 j 18:26	26°Z23'02
	1196 Jun 24 j 19:59	0°O			1199 Feb 13 j 17:27	0°X
	1196 Jul 19 j 11:13	0°M			1199 Mar 10 j 05:23	0°K
	1196 Aug 13 j 06:38	0°A			1199 Apr 03 j 16:45	0°Y
desc. node	1196 Aug 25 j 23:21	15°A13'48			1199 Apr 28 j 04:22	0°R
	1196 Sep 07 j 08:54	0°L		morning set	1199 May 12 j 14:53	17°R41'20
	1196 Oct 02 j 22:42	0°J			1199 May 22 j 15:58	0°II
	1196 Oct 29 j 12:31	0°Z		asc. node	1199 Jun 03 j 21:54	15°II01'26
evening max el	1196 Nov 13 j 20:36	16°Z13'21	47°20'52		1199 Jun 16 j 02:37	0°E
	1196 Nov 28 j 04:14	0°X		max. Earth dist.	1199 Jun 16 j 14:08	0°E35'23 1.73576 AU
asc. node	1196 Dec 17 j 02:42	14°X22'14				
greatest brilliancy	1196 Dec 22 j 02:43	16°X58'17	-4.7m	superior conj	1199 Jun 18 j 03:37	2°E30'34 0°32'57
retrograde	1197 Jan 03 j 21:13	20°X02'49		minimum elong	1199 Jun 17 j 21:25	2°E11'29 0°32'40
evening set	1197 Jan 20 j 12:03	14°X35'37			1199 Jul 10 j 11:33	0°O
min. Earth dist.	1197 Jan 23 j 18:34	12°X36'03	0.27262 AU	evening rise	1199 Jul 23 j 22:08	16°O34'53
inferior conj	1197 Jan 24 j 16:29	12°X01'56	7°56'18		1199 Aug 03 j 18:54	0°M
minimum elong	1197 Jan 24 j 08:17	12°X14'43	7°55'11		1199 Aug 28 j 01:45	0°A
morning rise	1197 Jan 28 j 04:48	9°X52'42			1199 Sep 21 j 09:23	0°L
direct	1197 Feb 14 j 05:39	4°X13'22		desc. node	1199 Sep 23 j 11:22	2°L33'58
greatest brilliancy	1197 Feb 24 j 22:03	6°X20'17	-4.6m		1199 Oct 15 j 18:54	0°J
	1197 Mar 30 j 02:13	0°K			1199 Nov 09 j 07:59	0°Z
morning max el	1197 Apr 04 j 17:18	5°K21'33	46°11'50		1199 Dec 04 j 04:55	0°X
desc. node	1197 Apr 07 j 16:09	8°K15'31			1199 Dec 29 j 20:58	0°K
	1197 Apr 28 j 13:06	0°Y		asc. node	1200 Jan 14 j 14:30	17°K26'16
	1197 May 25 j 11:13	0°R		evening max el	1200 Jan 25 j 15:08	28°K57'01 46°42'28
	1197 Jun 20 j 08:52	0°II			1200 Jan 26 j 16:12	0°Y
	1197 Jul 15 j 15:32	0°E		greatest brilliancy	1200 Mar 01 j 11:35	27°Y43'59 -4.6m
asc. node	1197 Jul 29 j 19:30	17°E04'45			1200 Mar 07 j 02:24	0°R
	1197 Aug 09 j 10:23	0°O		retrograde	1200 Mar 15 j 20:26	1°R26'31
	1197 Sep 02 j 19:31	0°M			1200 Mar 24 j 06:07	30°Y
	1197 Sep 26 j 21:37	0°A		evening set	1200 Apr 01 j 12:15	26°Y01'26
morning set	1197 Sep 29 j 05:52	2°A55'56		inferior conj	1200 Apr 06 j 02:39	23°Y10'20 6°11'38
	1197 Oct 20 j 19:42	0°L		minimum elong	1200 Apr 06 j 12:22	22°Y54'56 6°09'37
max. Earth dist.	1197 Nov 06 j 23:58	21°L35'54	1.71152 AU	min. Earth dist.	1200 Apr 06 j 02:11	23°Y11'03 0.28636 AU
				morning rise	1200 Apr 11 j 12:51	19°Y51'26
superior conj	1197 Nov 07 j 14:01	22°L20'07	0°25'24	direct	1200 Apr 27 j 11:13	14°Y58'15
minimum elong	1197 Nov 07 j 20:19	22°L39'58	0°25'06	desc. node	1200 May 05 j 03:49	16°Y04'12
	1197 Nov 13 j 16:12	0°J		greatest brilliancy	1200 May 09 j 15:47	17°Y37'42 -4.5m
desc. node	1197 Nov 18 j 09:00	5°J54'52			1200 May 29 j 10:15	0°R
	1197 Dec 07 j 12:38	0°Z		morning max el	1200 Jun 15 j 06:01	14°R49'14 45°44'06
evening rise	1197 Dec 19 j 01:35	14°Z30'08			1200 Jun 30 j 10:44	0°II
	1197 Dec 31 j 10:02	0°X			1200 Jul 28 j 00:08	0°E

1200 Aug 22 j 22:06 0°Ω