

superior conj	601 Jul 17 j 23:56	26°☿47'40	1°06'53	min. Earth dist.	603 Dec 13 j 06:39	24°♂48'59	0.26481 AU
minimum elong	601 Jul 17 j 15:26	26°☿21'22	1°06'37	morning rise	603 Dec 19 j 10:48	21°♂09'46	
	601 Jul 20 j 14:11	0°♂		direct	604 Jan 03 j 03:42	16°♂50'11	
	601 Aug 13 j 18:59	0°♂		greatest brilliancy	604 Jan 12 j 17:16	18°♂34'22	-4.9m
evening rise	601 Aug 23 j 06:34	11°♂46'59			604 Feb 01 j 01:27	0°♂	
	601 Sep 06 j 22:02	0°♂		morning max el	604 Feb 22 j 03:59	18°♂58'04	46°33'41
	601 Oct 01 j 00:49	0°♂			604 Mar 03 j 23:21	0°♂	
desc. node	601 Oct 05 j 02:44	5°♂04'24		desc. node	604 Mar 21 j 21:47	19°♂22'52	
	601 Oct 25 j 04:28	0°♂			604 Mar 31 j 09:33	0°♂	
	601 Nov 18 j 10:12	0°♂			604 Apr 26 j 12:21	0°♂	
	601 Dec 12 j 20:50	0°♂			604 May 22 j 00:36	0°♂	
	602 Jan 06 j 18:47	0°♂			604 Jun 16 j 03:28	0°♂	
asc. node	602 Jan 26 j 05:42	22°♂39'04			604 Jul 10 j 22:13	0°♂	
	602 Feb 01 j 17:56	0°♂		asc. node	604 Jul 13 j 00:56	2°♂34'33	
evening max el	602 Feb 26 j 12:30	26°♂15'42	46°02'19		604 Aug 04 j 09:18	0°♂	
	602 Mar 02 j 08:44	0°♂		morning set	604 Aug 18 j 20:21	17°♂53'58	
greatest brilliancy	602 Apr 06 j 00:30	25°♂12'23	-4.8m		604 Aug 28 j 13:49	0°♂	
retrograde	602 Apr 16 j 20:12	27°♂20'50			604 Sep 21 j 13:51	0°♂	
evening set	602 May 02 j 07:10	22°♂43'50		max. Earth dist.	604 Sep 22 j 19:31	1°♂32'59	1.71642 AU
inferior conj	602 May 08 j 07:17	19°♂05'37	2°12'23				
minimum elong	602 May 08 j 11:58	18°♂58'14	2°11'03	superior conj	604 Sep 25 j 09:28	4°♂47'09	1°13'25
min. Earth dist.	602 May 08 j 11:16	18°♂59'19	0.28940 AU	minimum elong	604 Sep 25 j 18:22	5°♂15'02	1°13'11
morning rise	602 May 14 j 16:48	15°♂13'53			604 Oct 15 j 11:41	0°♂	
desc. node	602 May 17 j 19:15	13°♂39'13		desc. node	604 Nov 01 j 14:36	21°♂30'03	
direct	602 May 29 j 21:16	10°♂47'40		evening rise	604 Nov 04 j 11:02	25°♂04'51	
greatest brilliancy	602 Jun 09 j 05:39	12°♂42'23	-4.7m		604 Nov 08 j 09:05	0°♂	
	602 Jul 06 j 01:36	0°♂			604 Dec 02 j 07:11	0°♂	
morning max el	602 Jul 17 j 15:50	10°♂31'02	45°48'57		604 Dec 26 j 07:16	0°♂	
	602 Aug 05 j 20:27	0°♂			605 Jan 19 j 11:34	0°♂	
	602 Sep 01 j 19:05	0°♂			605 Feb 13 j 00:00	0°♂	
asc. node	602 Sep 07 j 22:45	7°♂08'36		asc. node	605 Feb 22 j 17:46	11°♂44'31	
	602 Sep 27 j 04:31	0°♂			605 Mar 10 j 02:38	0°♂	
	602 Oct 21 j 18:09	0°♂			605 Apr 05 j 06:06	0°♂	
	602 Nov 14 j 21:30	0°♂			605 May 03 j 13:36	0°♂	
	602 Dec 08 j 20:31	0°♂		evening max el	605 May 08 j 03:23	4°♂27'12	45°19'50
desc. node	602 Dec 28 j 12:07	24°♂38'37			605 Jun 10 j 08:58	0°♂	
	603 Jan 01 j 18:41	0°♂		desc. node	605 Jun 14 j 07:08	1°♂42'27	
morning set	603 Jan 18 j 14:53	21°♂05'40		greatest brilliancy	605 Jun 15 j 01:57	1°♂59'54	-4.7m
	603 Jan 25 j 17:45	0°♂		retrograde	605 Jun 25 j 15:47	3°♂59'31	
	603 Feb 18 j 18:47	0°♂			605 Jul 10 j 01:05	30°♂	
				evening set	605 Jul 11 j 19:27	29°♂02'09	
superior conj	603 Feb 28 j 03:52	11°♂39'58	-1°24'46	inferior conj	605 Jul 17 j 00:52	25°♂53'36	-6°44'03
minimum elong	603 Feb 28 j 06:52	11°♂49'16	1°24'45	minimum elong	605 Jul 16 j 15:01	26°♂08'51	6°42'13
max. Earth dist.	603 Mar 04 j 01:49	16°♂31'39	1.72395 AU	min. Earth dist.	605 Jul 17 j 04:14	25°♂48'23	0.28779 AU
	603 Mar 14 j 22:35	0°♂		morning rise	605 Jul 21 j 10:25	23°♂13'12	
evening rise	603 Apr 07 j 21:59	29°♂36'04		direct	605 Aug 07 j 15:22	17°♂38'56	
	603 Apr 08 j 05:46	0°♂		greatest brilliancy	605 Aug 18 j 09:42	19°♂45'28	-4.8m
asc. node	603 Apr 20 j 15:34	15°♂14'58			605 Sep 04 j 21:52	0°♂	
	603 May 02 j 16:35	0°♂		morning max el	605 Sep 26 j 12:48	19°♂15'23	46°25'44
	603 May 27 j 07:13	0°♂		asc. node	605 Oct 05 j 10:30	28°♂22'59	
	603 Jun 21 j 02:28	0°♂			605 Oct 06 j 23:11	0°♂	
	603 Jul 16 j 04:28	0°♂			605 Nov 02 j 17:58	0°♂	
desc. node	603 Aug 10 j 04:48	29°♂23'13			605 Nov 27 j 22:28	0°♂	
	603 Aug 10 j 17:29	0°♂			605 Dec 22 j 11:38	0°♂	
	603 Sep 06 j 02:21	0°♂			606 Jan 15 j 19:05	0°♂	
evening max el	603 Oct 03 j 16:49	29°♂19'01	47°06'45	desc. node	606 Jan 24 j 23:59	11°♂23'05	
	603 Oct 04 j 09:18	0°♂			606 Feb 09 j 01:07	0°♂	
	603 Nov 12 j 11:44	0°♂			606 Mar 05 j 07:32	0°♂	
greatest brilliancy	603 Nov 13 j 08:47	0°♂19'52	-4.9m		606 Mar 29 j 15:10	0°♂	
retrograde	603 Nov 23 j 07:04	2°♂13'06		morning set	606 Apr 02 j 08:24	4°♂34'43	
asc. node	603 Dec 01 j 08:04	0°♂52'42			606 Apr 23 j 00:15	0°♂	
	603 Dec 03 j 16:24	30°♂					
evening set	603 Dec 07 j 17:29	28°♂03'27		superior conj	606 May 09 j 12:30	20°♂17'05	-0°20'17
inferior conj	603 Dec 13 j 20:49	24°♂27'17	3°11'00	minimum elong	606 May 09 j 16:38	20°♂29'47	0°20'04
minimum elong	603 Dec 13 j 14:00	24°♂37'44	3°08'56	max. Earth dist.	606 May 09 j 22:16	20°♂47'05	1.73583 AU

	606 May 17 j 10:19	0°♂		greatest brilliancy	608 Oct 28 j 19:35	0°♂42'09	-4.9m
asc. node	606 May 18 j 03:20	0°♂52'15		asc. node	608 Nov 01 j 22:14	2°♂34'49	
	606 Jun 10 j 20:38	0°♂			608 Dec 05 j 15:14	0°♂	
evening rise	606 Jun 14 j 17:58	4°♂46'42		morning max el	608 Dec 07 j 11:30	1°♂52'21	46°56'23
	606 Jul 05 j 06:46	0°♂			609 Jan 02 j 08:44	0°♂	
	606 Jul 29 j 17:17	0°♂			609 Jan 28 j 04:29	0°♂	
	606 Aug 23 j 05:31	0°♂		desc. node	609 Feb 21 j 12:00	28°♂59'41	
desc. node	606 Sep 06 j 16:52	17°♂38'13			609 Feb 22 j 08:05	0°♂	
	606 Sep 16 j 21:12	0°♂			609 Mar 19 j 05:03	0°♂	
	606 Oct 11 j 18:40	0°♂			609 Apr 12 j 23:05	0°♂	
	606 Nov 06 j 03:17	0°♂			609 May 07 j 15:22	0°♂	
	606 Dec 02 j 14:59	0°♂			609 Jun 01 j 05:40	0°♂	
evening max el	606 Dec 14 j 22:15	13°♂00'58	47°12'57	morning set	609 Jun 09 j 11:02	10°♂03'46	
asc. node	606 Dec 28 j 19:56	26°♂26'23		asc. node	609 Jun 14 j 15:12	16°♂24'08	
	607 Jan 01 j 21:32	0°♂			609 Jun 25 j 17:04	0°♂	
greatest brilliancy	607 Jan 24 j 05:23	14°♂31'00	-4.9m	max. Earth dist.	609 Jul 12 j 09:31	20°♂33'23	1.73181 AU
retrograde	607 Feb 03 j 19:32	16°♂38'17					
evening set	607 Feb 21 j 17:37	10°♂22'12		superior conj	609 Jul 15 j 18:10	24°♂42'20	1°04'54
inferior conj	607 Feb 24 j 20:27	8°♂24'48	8°38'58	minimum elong	609 Jul 15 j 09:32	24°♂15'40	1°04'37
minimum elong	607 Feb 24 j 22:18	8°♂21'52	8°38'55		609 Jul 20 j 00:59	0°♂	
min. Earth dist.	607 Feb 24 j 06:48	8°♂46'24	0.28133 AU		609 Aug 13 j 05:53	0°♂	
morning rise	607 Feb 28 j 03:16	6°♂22'03		evening rise	609 Aug 20 j 23:02	9°♂35'01	
direct	607 Mar 17 j 20:35	0°♂21'54			609 Sep 06 j 09:07	0°♂	
greatest brilliancy	607 Mar 26 j 22:46	1°♂54'22	-4.8m		609 Sep 30 j 12:10	0°♂	
desc. node	607 Apr 19 j 09:25	16°♂01'12		desc. node	609 Oct 04 j 04:44	4°♂35'10	
	607 May 05 j 03:20	0°♂			609 Oct 24 j 16:09	0°♂	
morning max el	607 May 05 j 21:32	0°♂43'32	45°52'57		609 Nov 17 j 22:18	0°♂	
	607 Jun 03 j 06:04	0°♂			609 Dec 12 j 09:32	0°♂	
	607 Jun 30 j 00:59	0°♂			610 Jan 06 j 08:34	0°♂	
	607 Jul 25 j 17:33	0°♂		asc. node	610 Jan 25 j 07:56	22°♂01'53	
asc. node	607 Aug 10 j 12:54	18°♂54'41			610 Feb 01 j 10:04	0°♂	
	607 Aug 19 j 16:39	0°♂		evening max el	610 Feb 24 j 02:58	23°♂59'36	46°04'53
	607 Sep 13 j 03:00	0°♂			610 Mar 02 j 08:25	0°♂	
	607 Oct 07 j 04:50	0°♂		greatest brilliancy	610 Apr 03 j 17:15	23°♂03'52	-4.8m
greatest brilliancy	607 Oct 24 j 22:42	22°♂16'15	-3.9m	retrograde	610 Apr 14 j 12:59	25°♂12'52	
morning set	607 Oct 30 j 23:31	29°♂51'41		evening set	610 Apr 30 j 01:31	20°♂32'50	
	607 Oct 31 j 02:09	0°♂		inferior conj	610 May 05 j 23:56	16°♂57'15	2°31'16
	607 Nov 23 j 21:57	0°♂		minimum elong	610 May 06 j 05:14	16°♂48'54	2°29'46
desc. node	607 Nov 30 j 02:20	7°♂47'11		min. Earth dist.	610 May 06 j 04:07	16°♂50'40	0.28937 AU
				morning rise	610 May 12 j 08:57	13°♂06'16	
superior conj	607 Dec 11 j 05:00	21°♂46'15	-0°26'05	desc. node	610 May 16 j 21:13	10°♂54'07	
minimum elong	607 Dec 10 j 22:10	21°♂24'48	0°25'46	direct	610 May 27 j 13:11	8°♂39'07	
max. Earth dist.	607 Dec 13 j 07:42	24°♂25'44	1.71075 AU	greatest brilliancy	610 Jun 06 j 22:03	10°♂34'17	-4.7m
	607 Dec 17 j 18:01	0°♂			610 Jul 06 j 05:21	0°♂	
	608 Jan 10 j 15:26	0°♂		morning max el	610 Jul 15 j 08:19	8°♂22'30	45°48'16
evening rise	608 Jan 21 j 18:07	13°♂54'34			610 Aug 05 j 13:20	0°♂	
	608 Feb 03 j 15:28	0°♂			610 Sep 01 j 08:56	0°♂	
	608 Feb 27 j 19:51	0°♂		asc. node	610 Sep 07 j 00:48	6°♂35'17	
asc. node	608 Mar 22 j 05:44	28°♂44'11			610 Sep 26 j 17:05	0°♂	
	608 Mar 23 j 06:35	0°♂			610 Oct 21 j 06:04	0°♂	
	608 Apr 17 j 01:58	0°♂			610 Nov 14 j 09:02	0°♂	
	608 May 12 j 09:14	0°♂			610 Dec 08 j 07:50	0°♂	
	608 Jun 07 j 11:15	0°♂		desc. node	610 Dec 27 j 14:11	24°♂10'00	
	608 Jul 05 j 01:59	0°♂			611 Jan 01 j 05:50	0°♂	
desc. node	608 Jul 11 j 19:02	6°♂50'38		morning set	611 Jan 16 j 00:51	18°♂31'56	
evening max el	608 Jul 18 j 21:37	13°♂49'17	45°52'28		611 Jan 25 j 04:47	0°♂	
	608 Aug 06 j 08:03	0°♂			611 Feb 18 j 05:42	0°♂	
greatest brilliancy	608 Aug 28 j 00:01	12°♂32'08	-4.8m				
retrograde	608 Sep 05 j 23:36	14°♂00'37		superior conj	611 Feb 25 j 17:09	9°♂18'19	-1°25'12
evening set	608 Sep 23 j 02:02	8°♂32'19		minimum elong	611 Feb 25 j 19:16	9°♂24'55	1°25'12
inferior conj	608 Sep 26 j 20:37	6°♂16'29	-7°37'22	max. Earth dist.	611 Mar 01 j 13:28	14°♂05'10	1.72336 AU
minimum elong	608 Sep 27 j 06:04	6°♂02'03	7°35'50		611 Mar 14 j 09:24	0°♂	
min. Earth dist.	608 Sep 27 j 17:54	5°♂43'58	0.27308 AU	evening rise	611 Apr 05 j 13:52	27°♂24'02	
morning rise	608 Oct 01 j 09:40	3°♂33'05			611 Apr 07 j 16:33	0°♂	
	608 Oct 08 j 20:11	30°♂		asc. node	611 Apr 19 j 17:34	14°♂47'55	
direct	608 Oct 17 j 17:07	28°♂23'54			611 May 02 j 03:27	0°♂	
	608 Oct 26 j 21:38	0°♂			611 May 26 j 18:22	0°♂	

	611 Jun 20 j 14:08	0°♈			614 Jan 15 j 06:50	0°♊	
	611 Jul 15 j 17:00	0°♍		desc. node	614 Jan 24 j 02:11	10°♊54'03	
desc. node	611 Aug 09 j 06:55	28°♍48'59			614 Feb 08 j 12:27	0°♋	
	611 Aug 10 j 07:29	0°♌			614 Mar 04 j 18:34	0°♌	
	611 Sep 05 j 19:08	0°♍			614 Mar 29 j 01:59	0°♍	
evening max el	611 Oct 01 j 06:54	26°♍56'23	47°04'57	morning set	614 Mar 31 j 00:19	2°♍22'44	
	611 Oct 04 j 09:30	0°♎			614 Apr 22 j 10:55	0°♎	
greatest brilliancy	611 Nov 10 j 21:38	27°♎50'35	-4.9m				
retrograde	611 Nov 20 j 20:08	29°♎43'42		superior conj	614 May 07 j 06:09	18°♎11'18	-0°23'22
asc. node	611 Nov 30 j 10:08	27°♎49'40		minimum elong	614 May 07 j 10:54	18°♎25'52	0°23'09
evening set	611 Dec 05 j 04:46	25°♎35'39		max. Earth dist.	614 May 07 j 20:30	18°♎55'20	1.73563 AU
inferior conj	611 Dec 11 j 09:04	21°♎58'28	2°47'58		614 May 16 j 20:56	0°♏	
minimum elong	611 Dec 11 j 02:57	22°♎07'48	2°46'05	asc. node	614 May 17 j 05:28	0°♏26'12	
min. Earth dist.	611 Dec 10 j 19:51	22°♎18'39	0.26453 AU		614 Jun 10 j 07:16	0°♐	
morning rise	611 Dec 17 j 01:29	18°♎38'12		evening rise	614 Jun 12 j 13:08	2°♐45'23	
direct	611 Dec 31 j 16:19	14°♎21'45			614 Jul 04 j 17:33	0°♑	
greatest brilliancy	612 Jan 10 j 06:30	16°♎07'03	-4.9m		614 Jul 29 j 04:22	0°♑	
	612 Feb 01 j 15:11	0°♒			614 Aug 22 j 17:04	0°♒	
morning max el	612 Feb 19 j 18:33	16°♒37'59	46°35'08	desc. node	614 Sep 05 j 18:53	17°♒08'03	
	612 Mar 03 j 18:44	0°♓			614 Sep 16 j 09:28	0°♓	
desc. node	612 Mar 20 j 23:45	18°♓43'37			614 Oct 11 j 07:58	0°♓	
	612 Mar 31 j 00:32	0°♈			614 Nov 05 j 18:19	0°♓	
	612 Apr 26 j 01:22	0°♉			614 Dec 02 j 09:47	0°♓	
	612 May 21 j 12:32	0°♊		evening max el	614 Dec 12 j 13:13	10°♓40'26	47°14'20
	612 Jun 15 j 14:45	0°♋		asc. node	614 Dec 27 j 22:10	25°♓24'58	
	612 Jul 10 j 09:10	0°♌			615 Jan 02 j 07:48	0°♈	
asc. node	612 Jul 12 j 03:08	2°♌07'58		greatest brilliancy	615 Jan 21 j 21:41	12°♈13'47	-4.9m
	612 Aug 03 j 20:05	0°♍		retrograde	615 Feb 01 j 10:37	14°♈19'59	
morning set	612 Aug 16 j 12:53	15°♍42'57		evening set	615 Feb 19 j 08:50	8°♈04'39	
	612 Aug 28 j 00:35	0°♎		inferior conj	615 Feb 22 j 11:30	6°♈07'25	8°41'01
max. Earth dist.	612 Sep 20 j 05:52	29°♎01'07	1.71689 AU	minimum elong	615 Feb 22 j 12:32	6°♈05'47	8°41'01
	612 Sep 21 j 00:40	0°♏		min. Earth dist.	615 Feb 21 j 21:05	6°♈30'14	0.28076 AU
				morning rise	615 Feb 25 j 16:29	4°♈07'17	
superior conj	612 Sep 22 j 23:41	2°♏27'16	1°15'08		615 Mar 05 j 17:21	30°♈	
minimum elong	612 Sep 23 j 08:03	2°♏53'29	1°14'56	direct	615 Mar 15 j 10:48	28°♈05'39	
	612 Oct 14 j 22:36	0°♐		greatest brilliancy	615 Mar 24 j 12:23	29°♈37'18	-4.8m
desc. node	612 Oct 31 j 16:37	21°♐01'48			615 Mar 25 j 14:57	0°♈	
evening rise	612 Nov 01 j 21:43	22°♐33'09		desc. node	615 Apr 18 j 11:29	14°♈58'28	
	612 Nov 07 j 20:07	0°♑		morning max el	615 May 03 j 11:28	28°♈27'27	45°53'54
	612 Dec 01 j 18:22	0°♒			615 May 05 j 01:48	0°♉	
	612 Dec 25 j 18:36	0°♓			615 Jun 02 j 21:44	0°♊	
	613 Jan 18 j 23:09	0°♈			615 Jun 29 j 14:11	0°♋	
asc. node	613 Feb 12 j 12:04	0°♉			615 Jul 25 j 05:35	0°♌	
	613 Feb 21 j 19:49	11°♉13'36		asc. node	615 Aug 09 j 14:57	18°♌25'59	
	613 Mar 09 j 15:38	0°♊			615 Aug 19 j 04:03	0°♍	
	613 Apr 04 j 21:09	0°♋			615 Sep 12 j 14:03	0°♎	
	613 May 03 j 10:26	0°♌			615 Oct 06 j 15:46	0°♏	
evening max el	613 May 05 j 19:58	2°♌19'02	45°20'08	greatest brilliancy	615 Oct 23 j 22:04	21°♏39'54	-3.9m
greatest brilliancy	613 Jun 12 j 16:42	29°♌49'42	-4.7m	morning set	615 Oct 28 j 11:41	27°♏24'37	
desc. node	613 Jun 13 j 09:17	0°♍04'13			615 Oct 30 j 13:05	0°♐	
	613 Jun 13 j 04:22	0°♎			615 Nov 23 j 08:55	0°♑	
retrograde	613 Jun 23 j 07:19	1°♎49'45		desc. node	615 Nov 29 j 04:30	7°♑19'31	
	613 Jul 02 j 23:03	30°♎					
evening set	613 Jul 09 j 08:22	26°♎56'38		superior conj	615 Dec 08 j 14:29	19°♑10'41	-0°22'13
inferior conj	613 Jul 14 j 16:45	23°♎43'29	-6°30'52	minimum elong	615 Dec 08 j 08:37	18°♑52'13	0°21'56
minimum elong	613 Jul 14 j 06:48	23°♎58'55	6°28'57	max. Earth dist.	615 Dec 10 j 09:33	21°♑26'06	1.71063 AU
min. Earth dist.	613 Jul 14 j 19:31	23°♎39'10	0.28801 AU		615 Dec 17 j 04:59	0°♒	
morning rise	613 Jul 19 j 05:04	20°♎58'43			616 Jan 10 j 02:25	0°♓	
direct	613 Aug 05 j 07:54	15°♎28'41		evening rise	616 Jan 19 j 04:28	11°♓22'29	
greatest brilliancy	613 Aug 16 j 00:45	17°♎33'36	-4.8m		616 Feb 03 j 02:29	0°♈	
	613 Sep 05 j 09:41	0°♏			616 Feb 27 j 06:57	0°♉	
morning max el	613 Sep 24 j 03:37	16°♏58'57	46°24'01	asc. node	616 Mar 21 j 07:45	28°♉15'53	
asc. node	613 Oct 04 j 12:31	27°♏38'34			616 Mar 22 j 17:55	0°♊	
	613 Oct 06 j 17:36	0°♑			616 Apr 16 j 13:45	0°♋	
	613 Nov 02 j 08:37	0°♒			616 May 11 j 21:57	0°♌	
	613 Nov 27 j 11:35	0°♓			616 Jun 07 j 01:49	0°♍	
	613 Dec 21 j 23:55	0°♈			616 Jul 04 j 20:57	0°♎	

desc. node	616 Jul 10 j 21:11	6°♎04'07		morning set	619 Jan 13 j 11:09	15°♊59'11	
evening max el	616 Jul 16 j 10:21	11°♎29'11	45°50'18		619 Jan 24 j 15:49	0°♊	
	616 Aug 06 j 23:11	0°♏			619 Feb 17 j 16:39	0°♋	
greatest brilliancy	616 Aug 25 j 12:41	10°♏11'14	-4.8m				
retrograde	616 Sep 03 j 12:15	11°♏40'07		superior conj	619 Feb 23 j 06:19	6°♋56'00	-1°25'30
evening set	616 Sep 20 j 18:11	6°♏06'52		minimum elong	619 Feb 23 j 07:32	6°♋59'46	1°25'30
inferior conj	616 Sep 24 j 10:06	3°♏55'08	-7°48'03	max. Earth dist.	619 Feb 27 j 02:31	11°♋42'38	1.72285 AU
minimum elong	616 Sep 24 j 19:05	3°♏41'25	7°46'44		619 Mar 13 j 20:18	0°♌	
min. Earth dist.	616 Sep 25 j 07:41	3°♏22'12	0.27375 AU	evening rise	619 Apr 03 j 05:27	25°♌10'41	
morning rise	616 Sep 28 j 19:33	1°♏16'58			619 Apr 07 j 03:28	0°♍	
	616 Oct 01 j 03:10	30°♏		asc. node	619 Apr 18 j 19:41	14°♍20'44	
direct	616 Oct 15 j 06:57	26°♏01'13			619 May 01 j 14:29	0°♎	
greatest brilliancy	616 Oct 26 j 10:49	28°♏20'46	-4.9m		619 May 26 j 05:41	0°♏	
	616 Oct 30 j 02:51	0°♏			619 Jun 20 j 01:58	0°♐	
asc. node	616 Nov 01 j 00:19	0°♏59'54			619 Jul 15 j 05:43	0°♑	
morning max el	616 Dec 05 j 01:27	29°♏28'13	46°56'06	desc. node	619 Aug 08 j 08:54	28°♑13'50	
	616 Dec 05 j 13:52	0°♒			619 Aug 09 j 21:43	0°♒	
	617 Jan 02 j 01:05	0°♑			619 Sep 05 j 12:22	0°♓	
	617 Jan 27 j 18:27	0°♒		evening max el	619 Sep 28 j 21:45	24°♓35'31	47°03'00
desc. node	617 Feb 20 j 13:56	28°♒27'12			619 Oct 04 j 11:01	0°♑	
	617 Feb 21 j 20:48	0°♓		greatest brilliancy	619 Nov 08 j 10:38	25°♑21'28	-4.9m
	617 Mar 18 j 17:00	0°♋		retrograde	619 Nov 18 j 09:15	27°♑14'03	
	617 Apr 12 j 10:29	0°♌		asc. node	619 Nov 29 j 12:18	24°♑41'21	
	617 May 07 j 02:23	0°♍		evening set	619 Dec 02 j 16:25	23°♑07'40	
	617 May 31 j 16:27	0°♎		inferior conj	619 Dec 08 j 21:21	19°♑29'34	2°24'38
morning set	617 Jun 07 j 05:18	7°♎59'50		minimum elong	619 Dec 08 j 16:01	19°♑37'42	2°22'57
asc. node	617 Jun 13 j 17:22	15°♎57'56		min. Earth dist.	619 Dec 08 j 09:09	19°♑48'11	0.26426 AU
	617 Jun 25 j 03:44	0°♏		morning rise	619 Dec 14 j 16:01	16°♑06'36	
max. Earth dist.	617 Jul 10 j 07:04	18°♏38'48	1.73222 AU	direct	619 Dec 29 j 05:12	11°♑53'26	
				greatest brilliancy	620 Jan 07 j 19:36	13°♑39'20	-4.9m
superior conj	617 Jul 13 j 12:31	22°♏37'48	1°02'50		620 Feb 02 j 01:28	0°♒	
minimum elong	617 Jul 13 j 03:48	22°♏10'55	1°02'33	morning max el	620 Feb 17 j 08:28	14°♒15'58	46°36'30
	617 Jul 19 j 11:40	0°♐			620 Mar 03 j 13:39	0°♓	
	617 Aug 12 j 16:41	0°♑		desc. node	620 Mar 20 j 01:51	18°♓04'51	
evening rise	617 Aug 18 j 15:56	7°♑24'46			620 Mar 30 j 15:27	0°♋	
	617 Sep 05 j 20:07	0°♒			620 Apr 25 j 14:29	0°♌	
	617 Sep 29 j 23:25	0°♓			620 May 21 j 00:38	0°♍	
desc. node	617 Oct 03 j 06:48	4°♓06'30			620 Jun 15 j 02:16	0°♎	
	617 Oct 24 j 03:42	0°♑			620 Jul 09 j 20:20	0°♏	
	617 Nov 17 j 10:17	0°♒		asc. node	620 Jul 11 j 05:09	1°♏40'07	
	617 Dec 11 j 22:12	0°♓			620 Aug 03 j 07:05	0°♐	
	618 Jan 05 j 22:25	0°♋		morning set	620 Aug 14 j 05:24	13°♐31'25	
asc. node	618 Jan 24 j 09:55	21°♋23'38			620 Aug 27 j 11:32	0°♑	
	618 Feb 01 j 02:33	0°♌		max. Earth dist.	620 Sep 17 j 15:34	26°♑26'48	1.71739 AU
evening max el	618 Feb 21 j 18:19	21°♌45'21	46°07'24		620 Sep 20 j 11:40	0°♒	
	618 Mar 02 j 09:27	0°♍					
greatest brilliancy	618 Apr 01 j 09:31	20°♍54'07	-4.8m	superior conj	620 Sep 20 j 14:06	0°♒07'38	1°16'41
retrograde	618 Apr 12 j 06:04	23°♍04'03		minimum elong	620 Sep 20 j 21:54	0°♒32'04	1°16'32
evening set	618 Apr 27 j 19:52	18°♍20'56			620 Oct 14 j 09:43	0°♓	
inferior conj	618 May 03 j 16:25	14°♍48'01	2°49'59	evening rise	620 Oct 30 j 08:37	20°♓01'26	
minimum elong	618 May 03 j 22:18	14°♍38'45	2°48'22	desc. node	620 Oct 30 j 18:46	20°♓33'18	
min. Earth dist.	618 May 03 j 20:29	14°♍41'37	0.28929 AU		620 Nov 07 j 07:23	0°♑	
morning rise	618 May 10 j 00:48	10°♍58'14			620 Dec 01 j 05:47	0°♒	
desc. node	618 May 15 j 23:21	8°♍12'13			620 Dec 25 j 06:11	0°♓	
direct	618 May 25 j 05:28	6°♍29'54			621 Jan 18 j 10:59	0°♋	
greatest brilliancy	618 Jun 04 j 13:49	8°♍25'07	-4.7m		621 Feb 12 j 00:22	0°♌	
	618 Jul 06 j 07:34	0°♎		asc. node	621 Feb 20 j 21:51	10°♌41'57	
morning max el	618 Jul 13 j 01:13	6°♎15'04	45°47'39		621 Mar 09 j 04:57	0°♍	
	618 Aug 05 j 05:52	0°♏			621 Apr 04 j 12:41	0°♎	
	618 Aug 31 j 22:38	0°♐			621 May 03 j 08:25	0°♏	
asc. node	618 Sep 06 j 02:47	6°♐01'58		evening max el	621 May 03 j 11:47	0°♏08'05	45°20'21
	618 Sep 26 j 05:33	0°♑		greatest brilliancy	621 Jun 10 j 08:04	27°♏39'03	-4.7m
	618 Oct 20 j 17:55	0°♒		desc. node	621 Jun 12 j 11:24	28°♏21'18	
	618 Nov 13 j 20:33	0°♓		retrograde	621 Jun 20 j 22:28	29°♏39'06	
	618 Dec 07 j 19:08	0°♑		evening set	621 Jul 06 j 21:25	24°♏50'01	
desc. node	618 Dec 26 j 16:20	23°♑41'45		inferior conj	621 Jul 12 j 08:40	21°♏32'36	-6°17'12
	618 Dec 31 j 16:58	0°♒		minimum elong	621 Jul 11 j 22:41	21°♏48'08	6°15'11

min. Earth dist.	621 Jul 12 j 11:15	21°☿28'35	0.28820 AU		623 Dec 16 j 16:15	0°☿	
morning rise	621 Jul 16 j 23:44	18°☿43'30			624 Jan 09 j 13:42	0°♊	
direct	621 Aug 03 j 00:01	13°☿17'36		evening rise	624 Jan 16 j 14:51	8°♊49'30	
greatest brilliancy	621 Aug 13 j 16:28	15°☿21'37	-4.8m		624 Feb 02 j 13:49	0°♋	
	621 Sep 05 j 18:48	0°♌			624 Feb 26 j 18:23	0°♌	
morning max el	621 Sep 21 j 17:28	14°♌39'21	46°22'24	asc. node	624 Mar 20 j 09:54	27°♌46'55	
asc. node	621 Oct 03 j 14:43	26°♌54'26			624 Mar 22 j 05:35	0°♍	
	621 Oct 06 j 11:51	0°♎			624 Apr 16 j 01:54	0°♍	
	621 Nov 01 j 23:21	0°♏			624 May 11 j 11:02	0°☿	
	621 Nov 27 j 00:49	0°♐			624 Jun 06 j 16:52	0°♑	
	621 Dec 21 j 12:23	0°♒			624 Jul 04 j 16:53	0°♒	
	622 Jan 14 j 18:49	0°☿		desc. node	624 Jul 09 j 23:06	5°♒15'17	
desc. node	622 Jan 23 j 04:06	10°☿23'21		evening max el	624 Jul 13 j 23:24	9°♒09'02	45°48'07
	622 Feb 08 j 00:04	0°♊			624 Aug 07 j 20:15	0°♓	
	622 Mar 04 j 05:52	0°♋		greatest brilliancy	624 Aug 23 j 00:27	7°♓48'11	-4.8m
morning set	622 Mar 28 j 16:18	0°♌10'01		retrograde	624 Sep 01 j 01:21	9°♓18'10	
	622 Mar 28 j 13:03	0°♌		evening set	624 Sep 18 j 10:02	3°♓40'00	
	622 Apr 21 j 21:51	0°♍		inferior conj	624 Sep 21 j 23:23	1°♓32'05	-7°57'59
				minimum elong	624 Sep 22 j 07:50	1°♓19'12	7°56'50
superior conj	622 May 04 j 23:54	16°♍04'55	-0°26'26	min. Earth dist.	624 Sep 22 j 20:51	0°♓59'22	0.27445 AU
minimum elong	622 May 05 j 05:14	16°♍21'16	0°26'11		624 Sep 24 j 12:05	30°♒♎	
max. Earth dist.	622 May 05 j 17:48	16°♍59'52	1.73543 AU	morning rise	624 Sep 26 j 05:15	28°♎59'19	
asc. node	622 May 16 j 07:36	29°♍59'16		direct	624 Oct 12 j 21:04	23°♎36'56	
	622 May 16 j 07:50	0°♍		greatest brilliancy	624 Oct 24 j 01:28	25°♎57'19	-4.9m
	622 Jun 09 j 18:15	0°☿		asc. node	624 Oct 31 j 02:26	29°♎26'58	
evening rise	622 Jun 10 j 08:14	0°☿42'58			624 Nov 01 j 00:34	0°♏	
	622 Jul 04 j 04:42	0°♑		morning max el	624 Dec 02 j 16:08	27°♏04'52	46°55'52
	622 Jul 28 j 15:50	0°♒			624 Dec 05 j 12:05	0°♐	
	622 Aug 22 j 05:02	0°♓			625 Jan 01 j 17:30	0°♒	
desc. node	622 Sep 04 j 20:55	16°♓36'50			625 Jan 27 j 08:34	0°☿	
	622 Sep 15 j 22:08	0°♐		desc. node	625 Feb 19 j 16:03	27°☿54'35	
	622 Oct 10 j 21:42	0°♑			625 Feb 21 j 09:42	0°♊	
	622 Nov 05 j 09:53	0°☿			625 Mar 18 j 05:09	0°♋	
	622 Dec 02 j 05:30	0°♊			625 Apr 11 j 22:08	0°♌	
evening max el	622 Dec 10 j 03:05	8°♊15'54	47°15'33		625 May 06 j 13:40	0°♍	
asc. node	622 Dec 27 j 00:10	24°♊20'23			625 May 31 j 03:29	0°♍	
	623 Jan 02 j 22:13	0°♋		morning set	625 Jun 04 j 23:40	5°♍55'24	
greatest brilliancy	623 Jan 19 j 13:57	9°♋54'54	-4.9m	asc. node	625 Jun 12 j 19:22	15°♍30'28	
retrograde	623 Jan 30 j 01:18	12°♋00'08			625 Jun 24 j 14:39	0°☿	
evening set	623 Feb 16 j 23:29	5°♋46'00		max. Earth dist.	625 Jul 08 j 05:36	16°☿46'36	1.73259 AU
min. Earth dist.	623 Feb 19 j 11:29	4°♋12'05	0.28020 AU				
inferior conj	623 Feb 20 j 02:24	3°♋48'27	8°42'15	superior conj	625 Jul 11 j 06:55	20°☿32'46	1°00'41
minimum elong	623 Feb 20 j 02:36	3°♋48'09	8°42'15	minimum elong	625 Jul 10 j 22:11	20°☿05'49	1°00'23
morning rise	623 Feb 23 j 05:56	1°♋50'28			625 Jul 18 j 22:35	0°♑	
	623 Feb 26 j 10:03	30°♒♊			625 Aug 12 j 03:44	0°♒	
direct	623 Mar 13 j 00:28	25°♊47'34		evening rise	625 Aug 16 j 08:57	5°♒14'11	
greatest brilliancy	623 Mar 22 j 02:24	27°♊19'13	-4.8m		625 Sep 05 j 07:23	0°♓	
	623 Mar 28 j 12:31	0°♋			625 Sep 29 j 10:58	0°♐	
desc. node	623 Apr 17 j 13:35	13°♋56'19		desc. node	625 Oct 02 j 08:57	3°♐37'12	
morning max el	623 May 01 j 01:12	26°♋09'42	45°55'03		625 Oct 23 j 15:35	0°♒	
	623 May 04 j 23:48	0°♌			625 Nov 16 j 22:38	0°☿	
	623 Jun 02 j 13:30	0°♍			625 Dec 11 j 11:14	0°♊	
	623 Jun 29 j 03:38	0°♍			626 Jan 05 j 12:41	0°♋	
	623 Jul 24 j 17:54	0°☿		asc. node	626 Jan 23 j 11:57	20°♋44'32	
asc. node	623 Aug 08 j 16:57	17°☿56'03			626 Jan 31 j 19:34	0°♌	
	623 Aug 18 j 15:47	0°♑		evening max el	626 Feb 19 j 10:14	19°♌31'44	46°09'59
	623 Sep 12 j 01:30	0°♒			626 Mar 02 j 12:10	0°♍	
	623 Oct 06 j 03:05	0°♓		greatest brilliancy	626 Mar 30 j 01:42	18°♍43'36	-4.8m
greatest brilliancy	623 Oct 22 j 23:17	21°♓08'14	-3.9m	retrograde	626 Apr 09 j 23:13	20°♍54'12	
morning set	623 Oct 25 j 23:50	24°♓56'23		evening set	626 Apr 25 j 14:18	16°♍08'06	
	623 Oct 30 j 00:21	0°♐		inferior conj	626 May 01 j 08:47	12°♍37'47	3°08'39
	623 Nov 22 j 20:10	0°♑		minimum elong	626 May 01 j 15:14	12°♍27'39	3°06'53
desc. node	623 Nov 28 j 06:33	6°♑50'31		min. Earth dist.	626 May 01 j 12:27	12°♍32'01	0.28919 AU
				morning rise	626 May 07 j 16:21	8°♍49'25	
superior conj	623 Dec 05 j 23:55	16°♑33'57	-0°18'18	desc. node	626 May 15 j 01:27	5°♍33'48	
minimum elong	623 Dec 05 j 19:02	16°♑18'36	0°18'03	direct	626 May 22 j 22:01	4°♍19'55	
max. Earth dist.	623 Dec 07 j 12:31	18°♑29'06	1.71053 AU	greatest brilliancy	626 Jun 02 j 04:54	6°♍14'23	-4.7m

	626 Jul 06 j 08:40	0°♄	asc. node	629 Feb 20 j 00:00	10°♄10'47	
morning max el	626 Jul 10 j 18:08	4°♄07'15 45°47'07		629 Mar 08 j 18:17	0°♄	
	626 Aug 04 j 22:16	0°♄		629 Apr 04 j 04:22	0°♄	
	626 Aug 31 j 12:21	0°♄	evening max el	629 May 01 j 02:38	27°♄55'05 45°20'47	
asc. node	626 Sep 05 j 04:59	5°♄29'09		629 May 03 j 07:10	0°♄	
	626 Sep 25 j 18:06	0°♄	greatest brilliancy	629 Jun 07 j 23:26	25°♄28'49 -4.7m	
	626 Oct 20 j 05:53	0°♄	desc. node	629 Jun 11 j 13:20	26°♄34'57	
	626 Nov 13 j 08:13	0°♄	retrograde	629 Jun 18 j 13:35	27°♄29'09	
	626 Dec 07 j 06:36	0°♄	evening set	629 Jul 04 j 10:35	22°♄43'32	
desc. node	626 Dec 25 j 18:19	23°♄12'17	inferior conj	629 Jul 10 j 00:36	19°♄22'17 -6°03'00	
	626 Dec 31 j 04:18	0°♄	minimum elong	629 Jul 09 j 14:38	19°♄37'47 6°00'54	
morning set	627 Jan 10 j 20:58	13°♄24'22	min. Earth dist.	629 Jul 10 j 03:13	19°♄18'12 0.28840 AU	
	627 Jan 24 j 03:01	0°♄	morning rise	629 Jul 14 j 18:25	16°♄28'54	
	627 Feb 17 j 03:45	0°♄	direct	629 Jul 31 j 15:43	11°♄06'52	
			greatest brilliancy	629 Aug 11 j 08:46	13°♄10'49 -4.8m	
superior conj	627 Feb 20 j 18:57	4°♄31'33 -1°25'39		629 Sep 06 j 01:12	0°♄	
minimum elong	627 Feb 20 j 19:13	4°♄32'20 1°25'38	morning max el	629 Sep 19 j 07:15	12°♄20'15 46°21'00	
max. Earth dist.	627 Feb 24 j 17:30	9°♄25'42 1.72230 AU	asc. node	629 Oct 02 j 16:44	26°♄11'01	
	627 Mar 13 j 07:19	0°♄		629 Oct 06 j 05:27	0°♄	
evening rise	627 Mar 31 j 20:44	22°♄56'01		629 Nov 01 j 13:39	0°♄	
	627 Apr 06 j 14:28	0°♄		629 Nov 26 j 13:43	0°♄	
asc. node	627 Apr 17 j 21:48	13°♄53'17		629 Dec 21 j 00:32	0°♄	
	627 May 01 j 01:38	0°♄		630 Jan 14 j 06:29	0°♄	
	627 May 25 j 17:08	0°♄	desc. node	630 Jan 22 j 06:13	9°♄54'13	
	627 Jun 19 j 13:56	0°♄		630 Feb 07 j 11:23	0°♄	
	627 Jul 14 j 18:33	0°♄		630 Mar 03 j 16:55	0°♄	
desc. node	627 Aug 07 j 11:02	27°♄38'56	morning set	630 Mar 26 j 07:50	27°♄56'27	
	627 Aug 09 j 12:06	0°♄		630 Mar 27 j 23:54	0°♄	
	627 Sep 05 j 05:56	0°♄		630 Apr 21 j 08:35	0°♄	
evening max el	627 Sep 26 j 12:15	22°♄13'52 47°00'50				
	627 Oct 04 j 13:56	0°♄	superior conj	630 May 02 j 17:18	13°♄58'10 -0°29'29	
greatest brilliancy	627 Nov 05 j 23:46	22°♄52'20 -4.9m	minimum elong	630 May 02 j 23:11	14°♄16'14 0°29'12	
retrograde	627 Nov 15 j 21:41	24°♄43'39	max. Earth dist.	630 May 03 j 13:09	14°♄59'07 1.73519 AU	
asc. node	627 Nov 28 j 14:17	21°♄27'36	asc. node	630 May 15 j 09:34	29°♄32'35	
evening set	627 Nov 30 j 04:10	20°♄38'51		630 May 15 j 18:30	0°♄	
inferior conj	627 Dec 06 j 09:29	17°♄00'04 2°00'46	evening rise	630 Jun 08 j 03:06	28°♄40'41	
minimum elong	627 Dec 06 j 04:59	17°♄06'56 1°59'20		630 Jun 09 j 04:57	0°♄	
min. Earth dist.	627 Dec 05 j 22:35	17°♄16'43 0.26405 AU		630 Jul 03 j 15:36	0°♄	
morning rise	627 Dec 12 j 06:12	13°♄34'21		630 Jul 28 j 03:03	0°♄	
direct	627 Dec 26 j 17:46	9°♄24'28		630 Aug 21 j 16:46	0°♄	
greatest brilliancy	628 Jan 05 j 08:59	11°♄11'04 -4.9m	desc. node	630 Sep 03 j 23:05	16°♄06'42	
	628 Feb 02 j 09:15	0°♄		630 Sep 15 j 10:36	0°♄	
morning max el	628 Feb 14 j 21:19	11°♄50'37 46°37'50		630 Oct 10 j 11:14	0°♄	
	628 Mar 03 j 08:14	0°♄		630 Nov 05 j 01:17	0°♄	
desc. node	628 Mar 19 j 04:00	17°♄26'16		630 Dec 02 j 01:17	0°♄	
	628 Mar 30 j 06:14	0°♄	evening max el	630 Dec 07 j 16:35	5°♄51'46 47°16'49	
	628 Apr 25 j 03:29	0°♄	asc. node	630 Dec 26 j 02:11	23°♄15'36	
	628 May 20 j 12:39	0°♄		631 Jan 03 j 16:40	0°♄	
	628 Jun 14 j 13:42	0°♄	greatest brilliancy	631 Jan 17 j 05:44	7°♄36'42 -4.9m	
	628 Jul 09 j 07:26	0°♄	retrograde	631 Jan 27 j 16:13	9°♄41'49	
asc. node	628 Jul 10 j 07:10	1°♄12'26	evening set	631 Feb 14 j 13:45	3°♄29'05	
	628 Aug 02 j 18:01	0°♄	min. Earth dist.	631 Feb 17 j 01:49	1°♄55'21 0.27966 AU	
morning set	628 Aug 11 j 22:03	11°♄20'31	inferior conj	631 Feb 17 j 17:22	1°♄30'46 8°42'33	
	628 Aug 26 j 22:24	0°♄	minimum elong	631 Feb 17 j 16:44	1°♄31'47 8°42'32	
max. Earth dist.	628 Sep 15 j 01:38	23°♄54'03 1.71788 AU		631 Feb 20 j 03:15	30°♄	
			morning rise	631 Feb 20 j 19:54	29°♄34'26	
superior conj	628 Sep 18 j 04:56	27°♄49'43 1°18'07	direct	631 Mar 10 j 14:13	23°♄30'35	
minimum elong	628 Sep 18 j 12:09	28°♄12'18 1°17'59	greatest brilliancy	631 Mar 19 j 16:37	25°♄02'36 -4.8m	
	628 Sep 19 j 22:33	0°♄		631 Mar 30 j 05:51	0°♄	
	628 Oct 13 j 20:42	0°♄	desc. node	631 Apr 16 j 15:39	12°♄56'37	
evening rise	628 Oct 27 j 19:53	17°♄31'26	morning max el	631 Apr 28 j 15:40	23°♄54'33 45°56'09	
desc. node	628 Oct 29 j 20:49	20°♄04'59		631 May 04 j 20:38	0°♄	
	628 Nov 06 j 18:31	0°♄		631 Jun 02 j 04:42	0°♄	
	628 Nov 30 j 17:05	0°♄		631 Jun 28 j 16:38	0°♄	
	628 Dec 24 j 17:40	0°♄		631 Jul 24 j 05:49	0°♄	
	629 Jan 17 j 22:45	0°♄	asc. node	631 Aug 07 j 19:09	17°♄27'53	
	629 Feb 11 j 12:39	0°♄		631 Aug 18 j 03:07	0°♄	

	631 Sep 11 j 12:33	0°♎			634 Jan 31 j 12:31	0°♑	
	631 Oct 05 j 14:02	0°♏		evening max el	634 Feb 17 j 02:36	17°♑20'23	46°12'39
greatest brilliancy	631 Oct 22 j 02:29	20°♏43'58	-3.9m		634 Mar 02 j 15:53	0°♑	
morning set	631 Oct 23 j 12:11	22°♏29'55		greatest brilliancy	634 Mar 27 j 18:36	16°♑35'33	-4.8m
	631 Oct 29 j 11:16	0°♎		retrograde	634 Apr 07 j 16:24	18°♑46'02	
	631 Nov 22 j 07:05	0°♐		evening set	634 Apr 23 j 09:05	13°♑57'09	
desc. node	631 Nov 27 j 08:34	6°♐22'30		inferior conj	634 Apr 29 j 01:23	10°♑29'27	3°26'54
				minimum elong	634 Apr 29 j 08:22	10°♑18'29	3°25'01
superior conj	631 Dec 03 j 09:33	13°♐58'54	-0°14'21	min. Earth dist.	634 Apr 29 j 04:35	10°♑24'25	0.28907 AU
minimum elong	631 Dec 03 j 05:41	13°♐46'46	0°14'10	morning rise	634 May 05 j 07:55	6°♑42'32	
behind sun begin	631 Dec 02 j 16:10	13°♐04'11		desc. node	634 May 14 j 03:25	3°♑02'07	
behind sun end	631 Dec 03 j 19:13	14°♐29'20		direct	634 May 20 j 14:55	2°♑12'00	
max. Earth dist.	631 Dec 04 j 17:30	15°♐39'28	1.71042 AU	greatest brilliancy	634 May 30 j 19:47	4°♑05'02	-4.7m
	631 Dec 16 j 03:08	0°♑			634 Jul 06 j 08:04	0°♑	
	632 Jan 09 j 00:34	0°♒		morning max el	634 Jul 08 j 10:36	1°♑59'35	45°46'25
evening rise	632 Jan 14 j 01:32	6°♒18'46			634 Aug 04 j 14:02	0°♑	
	632 Feb 02 j 00:43	0°♑			634 Aug 31 j 01:39	0°♑	
	632 Feb 26 j 05:24	0°♑		asc. node	634 Sep 04 j 07:01	4°♑56'48	
asc. node	632 Mar 19 j 11:57	27°♑18'58			634 Sep 25 j 06:18	0°♑	
	632 Mar 21 j 16:51	0°♑			634 Oct 19 j 17:32	0°♑	
	632 Apr 15 j 13:40	0°♑			634 Nov 12 j 19:33	0°♑	
	632 May 10 j 23:49	0°♑			634 Dec 06 j 17:46	0°♑	
	632 Jun 06 j 07:44	0°♑		desc. node	634 Dec 24 j 20:25	22°♑44'02	
desc. node	632 Jul 04 j 12:59	0°♑			634 Dec 30 j 15:22	0°♑	
evening max el	632 Jul 09 j 01:16	4°♑27'26		morning set	635 Jan 08 j 06:44	10°♑50'04	
	632 Jul 11 j 13:29	6°♑52'44	45°46'05		635 Jan 23 j 13:59	0°♑	
	632 Aug 09 j 00:07	0°♑			635 Feb 16 j 14:36	0°♑	
greatest brilliancy	632 Aug 20 j 11:55	5°♑26'38	-4.8m				
retrograde	632 Aug 29 j 14:54	6°♑57'54		superior conj	635 Feb 18 j 07:31	2°♑07'26	-1°25'37
evening set	632 Sep 16 j 01:54	1°♑15'13		minimum elong	635 Feb 18 j 06:48	2°♑05'12	1°25'37
	632 Sep 18 j 04:24	30°♑		max. Earth dist.	635 Feb 22 j 09:17	7°♑11'46	1.72171 AU
inferior conj	632 Sep 19 j 12:48	29°♑10'45	-8°07'00		635 Mar 12 j 18:05	0°♑	
minimum elong	632 Sep 19 j 20:41	28°♑58'44	8°06'01	evening rise	635 Mar 29 j 11:58	20°♑41'53	
min. Earth dist.	632 Sep 20 j 09:45	28°♑38'50	0.27515 AU		635 Apr 06 j 01:13	0°♑	
morning rise	632 Sep 23 j 15:08	26°♑43'13		asc. node	635 Apr 16 j 23:48	13°♑26'18	
direct	632 Oct 10 j 11:47	21°♑14'34			635 Apr 30 j 12:30	0°♑	
greatest brilliancy	632 Oct 21 j 15:32	23°♑34'45	-4.9m		635 May 25 j 04:18	0°♑	
asc. node	632 Oct 30 j 04:28	27°♑58'30			635 Jun 19 j 01:40	0°♑	
	632 Nov 02 j 06:54	0°♑			635 Jul 14 j 07:14	0°♑	
morning max el	632 Nov 30 j 07:21	24°♑44'11	46°55'29	desc. node	635 Aug 06 j 13:07	27°♑04'13	
	632 Dec 05 j 09:04	0°♑			635 Aug 09 j 02:28	0°♑	
	633 Jan 01 j 09:14	0°♑			635 Sep 04 j 23:45	0°♑	
	633 Jan 26 j 22:09	0°♑		evening max el	635 Sep 24 j 01:55	19°♑50'34	46°58'33
desc. node	633 Feb 18 j 18:12	27°♑23'25			635 Oct 04 j 18:22	0°♑	
	633 Feb 20 j 22:07	0°♑		greatest brilliancy	635 Nov 03 j 13:30	20°♑24'19	-4.9m
	633 Mar 17 j 16:49	0°♑		retrograde	635 Nov 13 j 09:35	22°♑13'40	
	633 Apr 11 j 09:18	0°♑		evening set	635 Nov 27 j 16:09	18°♑10'06	
	633 May 06 j 00:30	0°♑		asc. node	635 Nov 27 j 16:20	18°♑09'52	
	633 May 30 j 14:07	0°♑		inferior conj	635 Dec 03 j 21:38	14°♑31'08	1°36'37
morning set	633 Jun 02 j 18:09	3°♑52'36		minimum elong	635 Dec 03 j 18:00	14°♑36'41	1°35'27
asc. node	633 Jun 11 j 21:27	15°♑04'22		min. Earth dist.	635 Dec 03 j 12:24	14°♑45'15	0.26387 AU
	633 Jun 24 j 01:11	0°♑		morning rise	635 Dec 09 j 20:10	11°♑02'44	
max. Earth dist.	633 Jul 06 j 03:18	14°♑52'55	1.73295 AU	direct	635 Dec 24 j 05:49	6°♑55'50	
				greatest brilliancy	636 Jan 02 j 22:53	8°♑43'42	-4.9m
superior conj	633 Jul 09 j 01:20	18°♑28'54	0°58'27		636 Feb 02 j 14:37	0°♑	
minimum elong	633 Jul 08 j 16:38	18°♑02'02	0°58'08	morning max el	636 Feb 12 j 09:20	9°♑23'20	46°39'10
	633 Jul 18 j 09:09	0°♑			636 Mar 03 j 02:14	0°♑	
	633 Aug 11 j 14:26	0°♑		desc. node	636 Mar 18 j 05:58	16°♑47'53	
evening rise	633 Aug 14 j 02:00	3°♑04'49			636 Mar 29 j 20:43	0°♑	
	633 Sep 04 j 18:17	0°♑			636 Apr 24 j 16:17	0°♑	
	633 Sep 28 j 22:10	0°♑			636 May 20 j 00:29	0°♑	
desc. node	633 Oct 01 j 10:56	3°♑08'30			636 Jun 14 j 00:58	0°♑	
	633 Oct 23 j 03:10	0°♑			636 Jul 08 j 18:22	0°♑	
	633 Nov 16 j 10:43	0°♑		asc. node	636 Jul 09 j 09:21	0°♑45'46	
	633 Dec 11 j 00:02	0°♑			636 Aug 02 j 04:48	0°♑	
	634 Jan 05 j 02:44	0°♑		morning set	636 Aug 09 j 14:54	9°♑10'42	
asc. node	634 Jan 22 j 14:10	20°♑06'40			636 Aug 26 j 09:11	0°♑	

max. Earth dist.	636 Sep 12 j 13:26	21° \mathbb{M} 26'57	1.71845 AU	minimum elong	639 Feb 15 j 06:34	29° \approx 13'14	8°41'50
				morning rise	639 Feb 18 j 10:02	27° \approx 15'41	
superior conj	636 Sep 15 j 19:56	25° \mathbb{M} 32'30	1°19'24	direct	639 Mar 08 j 03:54	21° \approx 11'29	
minimum elong	636 Sep 16 j 02:30	25° \mathbb{M} 53'02	1°19'17	greatest brilliancy	639 Mar 17 j 06:04	22° \approx 43'33	-4.8m
	636 Sep 19 j 09:25	0° $\underline{\mathbb{L}}$			639 Mar 31 j 11:12	0° \mathbb{H}	
	636 Oct 13 j 07:41	0° \mathbb{M}		desc. node	639 Apr 15 j 17:43	11° \mathbb{H} 57'10	
evening rise	636 Oct 25 j 07:07	15° \mathbb{M} 01'25		morning max el	639 Apr 26 j 06:44	21° \mathbb{H} 39'45	45°57'19
desc. node	636 Oct 28 j 22:50	19° \mathbb{M} 36'29			639 May 04 j 17:10	0° \mathbb{Y}	
	636 Nov 06 j 05:39	0° \mathbb{X}			639 Jun 01 j 20:01	0° \mathbb{B}	
	636 Nov 30 j 04:23	0° \mathbb{Z}			639 Jun 28 j 05:52	0° \mathbb{I}	
	636 Dec 24 j 05:09	0° \approx			639 Jul 23 j 17:58	0° \mathbb{G}	
	637 Jan 17 j 10:33	0° \mathbb{H}		asc. node	639 Aug 06 j 21:09	16° \mathbb{G} 58'17	
	637 Feb 11 j 01:02	0° \mathbb{Y}			639 Aug 17 j 14:41	0° \mathbb{Q}	
asc. node	637 Feb 19 j 02:00	9° \mathbb{Y} 38'59			639 Sep 10 j 23:50	0° \mathbb{M}	
	637 Mar 08 j 07:47	0° \mathbb{B}			639 Oct 05 j 01:13	0° $\underline{\mathbb{L}}$	
	637 Apr 03 j 20:21	0° \mathbb{I}		greatest brilliancy	639 Oct 21 j 03:47	20° $\underline{\mathbb{L}}$ 13'02	-3.9m
evening max el	637 Apr 28 j 17:15	25° \mathbb{I} 41'32	45°21'27	morning set	639 Oct 21 j 01:03	20° $\underline{\mathbb{L}}$ 04'25	
	637 May 03 j 06:56	0° \mathbb{G}			639 Oct 28 j 22:26	0° \mathbb{M}	
greatest brilliancy	637 Jun 05 j 14:39	23° \mathbb{G} 18'50	-4.7m		639 Nov 21 j 18:16	0° \mathbb{X}	
desc. node	637 Jun 10 j 15:31	24° \mathbb{G} 45'19		desc. node	639 Nov 26 j 10:43	5° \mathbb{X} 54'01	
retrograde	637 Jun 16 j 05:18	25° \mathbb{G} 20'07					
evening set	637 Jul 02 j 00:03	20° \mathbb{G} 37'27		superior conj	639 Nov 30 j 19:11	11° \mathbb{X} 22'50	-0°10'22
inferior conj	637 Jul 07 j 16:43	17° \mathbb{G} 12'44	-5°48'17	minimum elong	639 Nov 30 j 16:23	11° \mathbb{X} 14'02	0°10'15
minimum elong	637 Jul 07 j 06:50	17° \mathbb{G} 28'06	5°46'08	behind sun begin	639 Nov 29 j 19:21	10° \mathbb{X} 07'48	
min. Earth dist.	637 Jul 07 j 19:18	17° \mathbb{G} 08'44	0.28859 AU	behind sun end	639 Dec 01 j 13:25	12° \mathbb{X} 20'15	
morning rise	637 Jul 12 j 13:17	14° \mathbb{G} 15'21		max. Earth dist.	639 Dec 02 j 01:27	12° \mathbb{X} 58'07	1.71041 AU
direct	637 Jul 29 j 07:24	8° \mathbb{G} 56'50			639 Dec 15 j 14:21	0° \mathbb{Z}	
greatest brilliancy	637 Aug 09 j 01:21	11° \mathbb{G} 01'09	-4.8m		640 Jan 08 j 11:50	0° \approx	
	637 Sep 06 j 05:26	0° \mathbb{Q}		evening rise	640 Jan 11 j 11:48	3° \approx 45'21	
morning max el	637 Sep 16 j 21:50	10° \mathbb{Q} 03'27	46°19'27		640 Feb 01 j 12:02	0° \mathbb{H}	
asc. node	637 Oct 01 j 18:46	25° \mathbb{Q} 28'12			640 Feb 25 j 16:51	0° \mathbb{Y}	
	637 Oct 05 j 22:42	0° \mathbb{M}		asc. node	640 Mar 18 j 13:57	26° \mathbb{Y} 49'31	
	637 Nov 01 j 03:55	0° $\underline{\mathbb{L}}$			640 Mar 21 j 04:33	0° \mathbb{B}	
	637 Nov 26 j 02:43	0° \mathbb{M}			640 Apr 15 j 01:56	0° \mathbb{I}	
	637 Dec 20 j 12:50	0° \mathbb{X}			640 May 10 j 13:10	0° \mathbb{G}	
	638 Jan 13 j 18:19	0° \mathbb{Z}			640 Jun 05 j 23:17	0° \mathbb{Q}	
desc. node	638 Jan 21 j 08:23	9° \mathbb{Z} 24'36			640 Jul 04 j 10:17	0° \mathbb{M}	
	638 Feb 06 j 22:52	0° \approx		desc. node	640 Jul 08 j 03:24	3° \mathbb{M} 37'24	
	638 Mar 03 j 04:07	0° \mathbb{H}		evening max el	640 Jul 09 j 04:26	4° \mathbb{M} 37'30	45°44'09
morning set	638 Mar 23 j 22:59	25° \mathbb{H} 41'05			640 Aug 10 j 16:45	0° $\underline{\mathbb{L}}$	
	638 Mar 27 j 10:56	0° \mathbb{Y}		greatest brilliancy	640 Aug 17 j 23:40	3° $\underline{\mathbb{L}}$ 04'55	-4.8m
	638 Apr 20 j 19:29	0° \mathbb{B}		retrograde	640 Aug 27 j 04:27	4° $\underline{\mathbb{L}}$ 37'06	
					640 Sep 11 j 17:03	30° \mathbb{R} \mathbb{M}	
superior conj	638 Apr 30 j 10:36	11° \mathbb{B} 50'30	-0°32'30	evening set	640 Sep 13 j 17:47	28° \mathbb{M} 50'34	
minimum elong	638 Apr 30 j 17:01	12° \mathbb{B} 10'13	0°32'13	inferior conj	640 Sep 17 j 02:23	26° \mathbb{M} 49'11	-8°15'04
max. Earth dist.	638 May 01 j 07:40	12° \mathbb{B} 55'13	1.73495 AU	minimum elong	640 Sep 17 j 09:38	26° \mathbb{M} 38'07	8°14'16
asc. node	638 May 14 j 11:41	29° \mathbb{B} 05'44		min. Earth dist.	640 Sep 17 j 22:37	26° \mathbb{M} 18'17	0.27578 AU
	638 May 15 j 05:22	0° \mathbb{I}		morning rise	640 Sep 21 j 01:13	24° \mathbb{M} 26'36	
evening rise	638 Jun 05 j 22:05	26° \mathbb{I} 38'14		direct	640 Oct 08 j 02:43	18° \mathbb{M} 52'18	
	638 Jun 08 j 15:51	0° \mathbb{G}		greatest brilliancy	640 Oct 19 j 05:02	21° \mathbb{M} 11'15	-4.9m
	638 Jul 03 j 02:39	0° \mathbb{Q}		asc. node	640 Oct 29 j 06:33	26° \mathbb{M} 32'41	
	638 Jul 27 j 14:27	0° \mathbb{M}			640 Nov 03 j 05:05	0° $\underline{\mathbb{L}}$	
	638 Aug 21 j 04:41	0° $\underline{\mathbb{L}}$		morning max el	640 Nov 27 j 22:10	22° $\underline{\mathbb{L}}$ 21'56	46°54'54
desc. node	638 Sep 03 j 01:05	15° $\underline{\mathbb{L}}$ 35'39			640 Dec 05 j 05:37	0° \mathbb{M}	
	638 Sep 14 j 23:16	0° \mathbb{M}			641 Jan 01 j 01:03	0° \mathbb{X}	
	638 Oct 10 j 01:05	0° \mathbb{X}			641 Jan 26 j 12:01	0° \mathbb{Z}	
	638 Nov 04 j 17:12	0° \mathbb{Z}		desc. node	641 Feb 17 j 20:08	26° \mathbb{Z} 50'26	
	638 Dec 01 j 22:09	0° \approx			641 Feb 20 j 10:54	0° \approx	
evening max el	638 Dec 05 j 06:41	3° \approx 27'59	47°17'57		641 Mar 17 j 04:55	0° \mathbb{H}	
asc. node	638 Dec 25 j 04:24	22° \approx 08'03			641 Apr 10 j 20:55	0° \mathbb{Y}	
	639 Jan 04 j 18:49	0° \mathbb{H}			641 May 05 j 11:46	0° \mathbb{B}	
greatest brilliancy	639 Jan 14 j 20:47	5° \mathbb{H} 15'45	-4.9m		641 May 30 j 01:09	0° \mathbb{I}	
retrograde	639 Jan 25 j 07:25	7° \mathbb{H} 21'29		morning set	641 May 31 j 12:19	1° \mathbb{I} 47'34	
evening set	639 Feb 12 j 03:18	1° \mathbb{H} 10'39		asc. node	641 Jun 10 j 23:34	14° \mathbb{I} 37'08	
	639 Feb 14 j 00:51	30° \mathbb{R} \approx			641 Jun 23 j 12:09	0° \mathbb{G}	
min. Earth dist.	639 Feb 14 j 15:32	29° \approx 36'55	0.27911 AU	max. Earth dist.	641 Jul 03 j 23:43	12° \mathbb{G} 54'08	1.73329 AU
inferior conj	639 Feb 15 j 08:02	29° \approx 10'54	8°41'51				

superior conj	641 Jul 06 j 19:36	16°☿23'22	0°56'08			644 Feb 02 j 18:18	0°♄	
minimum elong	641 Jul 06 j 10:59	15°☿56'46	0°55'49	morning max el		644 Feb 09 j 21:18	6°♄55'23	46°40'38
	641 Jul 17 j 20:09	0°♌				644 Mar 02 j 19:54	0°♌	
	641 Aug 11 j 01:33	0°♍		desc. node		644 Mar 17 j 08:06	16°♌09'58	
evening rise	641 Aug 11 j 19:07	0°♍54'27				644 Mar 29 j 11:09	0°♋	
	641 Sep 04 j 05:37	0°♎				644 Apr 24 j 05:10	0°♐	
	641 Sep 28 j 09:44	0°♏				644 May 19 j 12:30	0°♑	
desc. node	641 Sep 30 j 13:00	2°♏38'55				644 Jun 13 j 12:28	0°♒	
	641 Oct 22 j 15:05	0°♐		asc. node		644 Jul 08 j 11:22	0°☿17'43	
	641 Nov 15 j 23:06	0°♑				644 Jul 08 j 05:34	0°☿	
	641 Dec 10 j 13:11	0°♒				644 Aug 01 j 15:51	0°♌	
	642 Jan 04 j 17:16	0°♋		morning set		644 Aug 07 j 07:36	6°♌59'41	
asc. node	642 Jan 21 j 16:07	19°♋26'32				644 Aug 25 j 20:11	0°♍	
	642 Jan 31 j 06:16	0°♐		max. Earth dist.		644 Sep 10 j 03:42	19°♍06'57	1.71900 AU
evening max el	642 Feb 14 j 18:34	15°♐06'21	46°15'03					
	642 Mar 02 j 22:20	0°♑		superior conj		644 Sep 13 j 10:52	23°♍14'28	1°20'33
greatest brilliancy	642 Mar 25 j 11:59	14°♑25'56	-4.8m	minimum elong		644 Sep 13 j 16:45	23°♍32'53	1°20'28
retrograde	642 Apr 05 j 08:53	16°♑35'25				644 Sep 18 j 20:28	0°♎	
evening set	642 Apr 21 j 03:45	11°♑43'47				644 Oct 12 j 18:53	0°♏	
inferior conj	642 Apr 26 j 17:47	8°♑18'53	3°44'56	evening rise		644 Oct 22 j 18:30	12°♏31'19	
minimum elong	642 Apr 27 j 01:14	8°♑07'08	3°42'58	desc. node		644 Oct 28 j 01:00	19°♏07'54	
min. Earth dist.	642 Apr 26 j 20:48	8°♑14'07	0.28894 AU			644 Nov 05 j 17:00	0°♐	
morning rise	642 May 02 j 23:02	4°♑33'27				644 Nov 29 j 15:52	0°♑	
desc. node	642 May 13 j 05:34	0°♑32'26				644 Dec 23 j 16:49	0°♒	
direct	642 May 18 j 07:22	0°♑01'54				645 Jan 16 j 22:29	0°♋	
greatest brilliancy	642 May 28 j 10:37	1°♑53'31	-4.7m			645 Feb 10 j 13:31	0°♐	
morning max el	642 Jul 06 j 01:59	29°♑47'45	45°45'50	asc. node		645 Feb 18 j 04:04	9°♐07'10	
	642 Jul 06 j 07:07	0°♒				645 Mar 07 j 21:25	0°♑	
	642 Aug 04 j 06:01	0°☿				645 Apr 03 j 12:38	0°♒	
	642 Aug 30 j 15:17	0°♌		evening max el		645 Apr 26 j 08:15	23°♒28'50	45°22'03
asc. node	642 Sep 03 j 09:00	4°♌23'17				645 May 03 j 07:59	0°☿	
	642 Sep 24 j 18:51	0°♍		greatest brilliancy		645 Jun 03 j 05:17	21°☿07'44	-4.7m
	642 Oct 19 j 05:31	0°♎		desc. node		645 Jun 09 j 17:36	22°☿51'00	
	642 Nov 12 j 07:12	0°♏		retrograde		645 Jun 13 j 21:24	23°☿10'37	
	642 Dec 06 j 05:13	0°♐		evening set		645 Jun 29 j 13:36	18°☿30'35	
desc. node	642 Dec 23 j 22:33	22°♐15'08		inferior conj		645 Jul 05 j 08:48	15°☿02'34	-5°33'00
	642 Dec 30 j 02:40	0°♑		minimum elong		645 Jul 04 j 23:02	15°☿17'44	5°30'49
morning set	643 Jan 05 j 16:52	8°♑16'07		min. Earth dist.		645 Jul 05 j 11:10	14°☿58'54	0.28880 AU
	643 Jan 23 j 01:11	0°♒		morning rise		645 Jul 10 j 08:07	12°☿01'21	
				direct		645 Jul 26 j 23:18	6°☿46'09	
superior conj	643 Feb 15 j 20:12	29°♒42'51	-1°25'26	greatest brilliancy		645 Aug 06 j 17:50	8°☿50'56	-4.8m
minimum elong	643 Feb 15 j 18:31	29°♒37'38	1°25'26			645 Sep 06 j 08:14	0°♌	
	643 Feb 16 j 01:42	0°♋		morning max el		645 Sep 14 j 13:24	7°♌48'49	46°17'58
max. Earth dist.	643 Feb 20 j 01:12	4°♋57'21	1.72116 AU	asc. node		645 Sep 30 j 20:57	24°♌45'51	
	643 Mar 12 j 05:08	0°♐				645 Oct 05 j 15:44	0°♍	
evening rise	643 Mar 27 j 02:59	18°♐25'56				645 Oct 31 j 18:08	0°♎	
	643 Apr 05 j 12:19	0°♑				645 Nov 25 j 15:41	0°♏	
asc. node	643 Apr 16 j 01:55	12°♑58'36				645 Dec 20 j 01:07	0°♐	
	643 Apr 29 j 23:45	0°♒				646 Jan 13 j 06:09	0°♑	
	643 May 24 j 15:53	0°☿		desc. node		646 Jan 20 j 10:19	8°♑54'14	
	643 Jun 18 j 13:49	0°♌				646 Feb 06 j 10:19	0°♒	
	643 Jul 13 j 20:23	0°♍				646 Mar 02 j 15:17	0°♋	
desc. node	643 Aug 05 j 15:06	26°♍27'52		morning set		646 Mar 21 j 14:22	23°♋26'28	
	643 Aug 08 j 17:23	0°♎				646 Mar 26 j 21:52	0°♐	
	643 Sep 04 j 18:23	0°♏				646 Apr 20 j 06:17	0°♑	
evening max el	643 Sep 21 j 14:39	17°♏24'04	46°56'16					
	643 Oct 05 j 01:14	0°♐		superior conj		646 Apr 28 j 04:09	9°♑43'50	-0°35'27
greatest brilliancy	643 Nov 01 j 03:44	17°♐56'03	-4.9m	minimum elong		646 Apr 28 j 11:05	10°♑05'10	0°35'09
retrograde	643 Nov 10 j 21:17	19°♐43'14		max. Earth dist.		646 Apr 29 j 04:02	10°♑57'16	1.73472 AU
evening set	643 Nov 25 j 04:23	15°♐40'17		asc. node		646 May 13 j 13:51	28°♑39'19	
asc. node	643 Nov 26 j 18:31	14°♐47'50				646 May 14 j 16:07	0°♒	
inferior conj	643 Dec 01 j 09:51	12°♐01'44	1°12'20	evening rise		646 Jun 03 j 17:18	24°♒36'47	
minimum elong	643 Dec 01 j 07:06	12°♐05'56	1°11'26			646 Jun 08 j 02:41	0°☿	
min. Earth dist.	643 Dec 01 j 02:35	12°♐12'51	0.26369 AU			646 Jul 02 j 13:42	0°♌	
morning rise	643 Dec 07 j 09:59	8°♐30'58				646 Jul 27 j 01:51	0°♍	
direct	643 Dec 21 j 17:25	4°♐26'30				646 Aug 20 j 16:38	0°♎	
greatest brilliancy	643 Dec 31 j 13:17	6°♐16'25	-4.9m	desc. node		646 Sep 02 j 03:09	15°♎04'43	

	646 Sep 14 j 12:00	0°♌			649 Jan 26 j 01:30	0°♊		
	646 Oct 09 j 15:01	0°♊		desc. node	649 Feb 16 j 22:18	26°♊19'05		
	646 Nov 04 j 09:19	0°♊			649 Feb 19 j 23:20	0°♊		
	646 Dec 01 j 19:39	0°♊			649 Mar 16 j 16:40	0°♊		
evening max el	646 Dec 02 j 21:43	1°♊06'50	47°19'02		649 Apr 10 j 08:11	0°♊		
asc. node	646 Dec 24 j 06:22	20°♊58'23			649 May 04 j 22:42	0°♊		
	647 Jan 06 j 07:42	0°♊		morning set	649 May 29 j 06:52	29°♊44'45		
greatest brilliancy	647 Jan 12 j 11:28	2°♊54'31	-4.9m		649 May 29 j 11:51	0°♊		
retrograde	647 Jan 22 j 23:06	5°♊01'09		asc. node	649 Jun 10 j 01:36	14°♊10'44		
	647 Feb 07 j 19:17	30°♊			649 Jun 22 j 22:44	0°♊		
evening set	647 Feb 09 j 16:27	28°♊52'50		max. Earth dist.	649 Jul 01 j 19:33	10°♊54'48	1.73358 AU	
min. Earth dist.	647 Feb 12 j 04:58	27°♊18'52	0.27850 AU					
inferior conj	647 Feb 12 j 22:39	26°♊51'03	8°40'23	superior conj	649 Jul 04 j 14:23	14°♊20'39	0°53'47	
minimum elong	647 Feb 12 j 20:20	26°♊54'42	8°40'19	minimum elong	649 Jul 04 j 05:52	13°♊54'27	0°53'27	
morning rise	647 Feb 16 j 00:27	24°♊56'25			649 Jul 17 j 06:46	0°♊		
direct	647 Mar 05 j 17:58	18°♊52'36		evening rise	649 Aug 09 j 12:46	28°♊47'01		
greatest brilliancy	647 Mar 14 j 18:58	20°♊24'10	-4.8m		649 Aug 10 j 12:18	0°♊		
	647 Apr 01 j 08:16	0°♊			649 Sep 03 j 16:35	0°♊		
desc. node	647 Apr 14 j 19:49	10°♊59'42			649 Sep 27 j 21:02	0°♊		
morning max el	647 Apr 23 j 22:26	19°♊27'09	45°58'37	desc. node	649 Sep 29 j 15:11	2°♊10'34		
	647 May 04 j 12:48	0°♊			649 Oct 22 j 02:47	0°♊		
	647 Jun 01 j 10:50	0°♊			649 Nov 15 j 11:20	0°♊		
	647 Jun 27 j 18:43	0°♊			649 Dec 10 j 02:12	0°♊		
asc. node	647 Jul 23 j 05:51	0°♊			650 Jan 04 j 07:42	0°♊		
	647 Aug 05 j 23:12	16°♊29'30		asc. node	650 Jan 20 j 18:12	18°♊47'07		
	647 Aug 17 j 02:04	0°♊			650 Jan 31 j 00:06	0°♊		
	647 Sep 10 j 11:00	0°♊		evening max el	650 Feb 12 j 09:37	12°♊50'44	46°17'34	
	647 Oct 04 j 12:16	0°♊			650 Mar 03 j 06:45	0°♊		
morning set	647 Oct 18 j 13:52	17°♊39'14		greatest brilliancy	650 Mar 23 j 05:50	12°♊17'49	-4.8m	
	647 Oct 28 j 09:28	0°♊		retrograde	650 Apr 03 j 01:05	14°♊26'00		
	647 Nov 21 j 05:17	0°♊		evening set	650 Apr 18 j 22:33	9°♊31'23		
desc. node	647 Nov 25 j 12:47	5°♊25'48		inferior conj	650 Apr 24 j 10:16	6°♊09'35	4°02'41	
				minimum elong	650 Apr 24 j 18:08	5°♊57'08	4°00'39	
superior conj	647 Nov 28 j 04:42	8°♊46'59	-0°06'23	min. Earth dist.	650 Apr 24 j 13:23	6°♊04'40	0.28877 AU	
minimum elong	647 Nov 28 j 02:59	8°♊41'33	0°06'18	morning rise	650 Apr 30 j 14:00	2°♊25'47		
behind sun begin	647 Nov 27 j 02:11	7°♊23'31			650 May 05 j 14:26	30°♊		
behind sun end	647 Nov 29 j 03:47	9°♊59'36		desc. node	650 May 12 j 07:40	28°♊08'40		
max. Earth dist.	647 Nov 29 j 10:25	10°♊20'30	1.71036 AU	direct	650 May 15 j 23:19	27°♊52'59		
	647 Dec 15 j 01:23	0°♊		greatest brilliancy	650 May 26 j 01:59	29°♊43'41	-4.7m	
	648 Jan 07 j 22:54	0°♊			650 May 26 j 20:05	0°♊		
evening rise	648 Jan 08 j 21:56	1°♊12'10		morning max el	650 Jul 03 j 17:03	27°♊36'21	45°45'32	
	648 Jan 31 j 23:10	0°♊			650 Jul 06 j 04:45	0°♊		
	648 Feb 25 j 04:06	0°♊			650 Aug 03 j 21:17	0°♊		
asc. node	648 Mar 17 j 16:08	26°♊21'16			650 Aug 30 j 04:19	0°♊		
	648 Mar 20 j 16:03	0°♊		asc. node	650 Sep 02 j 11:14	3°♊51'58		
	648 Apr 14 j 13:57	0°♊			650 Sep 24 j 06:53	0°♊		
	648 May 10 j 02:15	0°♊			650 Oct 18 j 17:04	0°♊		
	648 Jun 05 j 14:40	0°♊			650 Nov 11 j 18:30	0°♊		
	648 Jul 04 j 07:55	0°♊			650 Dec 05 j 16:22	0°♊		
evening max el	648 Jul 06 j 19:21	2°♊23'20	45°42'03	desc. node	650 Dec 23 j 00:32	21°♊46'34		
desc. node	648 Jul 07 j 05:20	2°♊47'08			650 Dec 29 j 13:44	0°♊		
	648 Aug 13 j 08:51	0°♊		morning set	651 Jan 03 j 02:26	5°♊41'01		
greatest brilliancy	648 Aug 15 j 11:54	0°♊44'59	-4.8m		651 Jan 22 j 12:08	0°♊		
retrograde	648 Aug 24 j 17:33	2°♊17'25						
	648 Sep 04 j 12:31	30°♊		superior conj	651 Feb 13 j 08:20	27°♊17'20	-1°25'06	
evening set	648 Sep 11 j 09:29	26°♊27'38		minimum elong	651 Feb 13 j 05:41	27°♊09'02	1°25'04	
inferior conj	648 Sep 14 j 16:05	24°♊28'51	-8°22'09		651 Feb 15 j 12:33	0°♊		
minimum elong	648 Sep 14 j 22:38	24°♊18'50	8°21'31	max. Earth dist.	651 Feb 17 j 14:04	2°♊34'16	1.72056 AU	
min. Earth dist.	648 Sep 15 j 11:50	23°♊58'37	0.27645 AU		651 Mar 11 j 15:55	0°♊		
morning rise	648 Sep 18 j 11:32	22°♊10'52		evening rise	651 Mar 24 j 17:34	16°♊09'33		
direct	648 Oct 05 j 17:34	16°♊31'10			651 Apr 04 j 23:08	0°♊		
greatest brilliancy	648 Oct 16 j 19:00	18°♊48'57	-4.9m	asc. node	651 Apr 15 j 04:02	12°♊31'49		
asc. node	648 Oct 28 j 08:40	25°♊10'13			651 Apr 29 j 10:43	0°♊		
	648 Nov 03 j 21:18	0°♊			651 May 24 j 03:09	0°♊		
morning max el	648 Nov 25 j 12:17	19°♊58'20	46°54'16		651 Jun 18 j 01:39	0°♊		
	648 Dec 05 j 01:21	0°♊			651 Jul 13 j 09:11	0°♊		
	648 Dec 31 j 16:26	0°♊		desc. node	651 Aug 04 j 17:16	25°♊53'08		

	651 Aug 08 j 07:59	0°♄			654 Mar 26 j 08:44	0°♁	
	651 Sep 04 j 12:55	0°♌			654 Apr 19 j 17:02	0°♈	
evening max el	651 Sep 19 j 02:52	14°♌58'06	46°53'57				
	651 Oct 05 j 09:50	0°♊		superior conj	654 Apr 25 j 21:06	7°♊35'25	-0°38'25
greatest brilliancy	651 Oct 29 j 17:38	15°♊28'50	-4.9m	minimum elong	654 Apr 26 j 04:31	7°♊58'15	0°38'05
retrograde	651 Nov 08 j 09:02	17°♊14'25		max. Earth dist.	654 Apr 27 j 00:42	9°♊00'17	1.73447 AU
evening set	651 Nov 22 j 16:49	13°♊11'12		asc. node	654 May 12 j 15:48	28°♊12'30	
asc. node	651 Nov 25 j 20:30	11°♊24'36			654 May 14 j 02:49	0°♊	
inferior conj	651 Nov 28 j 22:05	9°♊33'32	0°47'52	evening rise	654 Jun 01 j 12:02	22°♊34'03	
minimum elong	651 Nov 28 j 20:16	9°♊36'19	0°47'16		654 Jun 07 j 13:26	0°♊	
min. Earth dist.	651 Nov 28 j 16:45	9°♊41'40	0.26367 AU		654 Jul 02 j 00:40	0°♊	
morning rise	651 Dec 04 j 23:43	6°♊00'45			654 Jul 26 j 13:12	0°♊	
direct	651 Dec 19 j 05:05	1°♊57'52			654 Aug 20 j 04:32	0°♊	
greatest brilliancy	651 Dec 29 j 04:01	3°♊50'19	-4.9m	desc. node	654 Sep 01 j 05:17	14°♊34'13	
	652 Feb 02 j 20:13	0°♊			654 Sep 14 j 00:42	0°♊	
morning max el	652 Feb 07 j 10:16	4°♊30'12	46°41'59		654 Oct 09 j 04:56	0°♊	
	652 Mar 02 j 13:03	0°♊			654 Nov 04 j 01:30	0°♊	
desc. node	652 Mar 16 j 10:14	15°♊32'47		evening max el	654 Nov 30 j 13:39	28°♊48'41	47°20'02
	652 Mar 29 j 01:16	0°♊			654 Dec 01 j 17:41	0°♊	
	652 Apr 23 j 17:45	0°♁		asc. node	654 Dec 23 j 08:26	19°♊47'37	
	652 May 19 j 00:13	0°♈			655 Jan 08 j 16:41	0°♊	
	652 Jun 12 j 23:39	0°♊		greatest brilliancy	655 Jan 10 j 01:58	0°♊33'43	-4.9m
asc. node	652 Jul 07 j 13:25	29°♊50'43		retrograde	655 Jan 20 j 14:45	2°♊41'05	
	652 Jul 07 j 16:27	0°♊			655 Jan 31 j 23:20	30°♊	
	652 Aug 01 j 02:34	0°♊		evening set	655 Feb 07 j 05:15	26°♊35'59	
morning set	652 Aug 05 j 00:36	4°♊50'37		min. Earth dist.	655 Feb 09 j 18:17	25°♊01'18	0.27793 AU
	652 Aug 25 j 06:51	0°♊		inferior conj	655 Feb 10 j 13:15	24°♊31'30	8°38'01
max. Earth dist.	652 Sep 07 j 19:38	16°♊53'15	1.71950 AU	minimum elong	655 Feb 10 j 10:08	24°♊36'23	8°37'52
				morning rise	655 Feb 13 j 15:18	22°♊36'41	
superior conj	652 Sep 11 j 02:18	20°♊59'08	1°21'32	direct	655 Mar 03 j 08:30	16°♊34'08	
minimum elong	652 Sep 11 j 07:30	21°♊15'23	1°21'29	greatest brilliancy	655 Mar 12 j 07:37	18°♊04'39	-4.8m
	652 Sep 18 j 07:12	0°♊			655 Apr 01 j 23:52	0°♊	
	652 Oct 12 j 05:43	0°♌		desc. node	655 Apr 13 j 21:53	10°♊03'21	
evening rise	652 Oct 20 j 06:32	10°♌04'26		morning max el	655 Apr 21 j 13:59	17°♊14'02	45°59'39
desc. node	652 Oct 27 j 03:02	18°♌40'02			655 May 04 j 07:56	0°♁	
	652 Nov 05 j 04:00	0°♊			655 Jun 01 j 01:34	0°♈	
	652 Nov 29 j 03:03	0°♊			655 Jun 27 j 07:36	0°♊	
	652 Dec 23 j 04:13	0°♊			655 Jul 22 j 17:45	0°♊	
	653 Jan 16 j 10:15	0°♊		asc. node	655 Aug 05 j 01:23	16°♊01'01	
	653 Feb 10 j 01:55	0°♁			655 Aug 16 j 13:28	0°♊	
asc. node	653 Feb 17 j 06:14	8°♁35'51			655 Sep 09 j 22:08	0°♊	
	653 Mar 07 j 11:03	0°♈			655 Oct 03 j 23:19	0°♊	
	653 Apr 03 j 05:06	0°♊		morning set	655 Oct 16 j 02:45	15°♊14'18	
evening max el	653 Apr 24 j 00:00	21°♊18'21	45°22'57		655 Oct 27 j 20:30	0°♌	
	653 May 03 j 10:14	0°♊			655 Nov 20 j 16:19	0°♊	
greatest brilliancy	653 May 31 j 19:32	18°♊56'47	-4.7m	desc. node	655 Nov 24 j 14:47	4°♊57'20	
desc. node	653 Jun 08 j 19:33	20°♊52'48					
retrograde	653 Jun 11 j 13:47	21°♊01'32		superior conj	655 Nov 25 j 14:32	6°♊12'05	-0°02'23
evening set	653 Jun 27 j 03:20	16°♊23'59		minimum elong	655 Nov 25 j 13:53	6°♊10'01	0°02'21
inferior conj	653 Jul 03 j 00:47	12°♊52'48	-5°17'22	behind sun begin	655 Nov 24 j 11:33	4°♊47'10	
minimum elong	653 Jul 02 j 15:13	13°♊07'39	5°15'08	behind sun end	655 Nov 26 j 16:12	7°♊32'53	
min. Earth dist.	653 Jul 03 j 02:40	12°♊49'52	0.28896 AU	max. Earth dist.	655 Nov 26 j 17:24	7°♊36'39	1.71029 AU
morning rise	653 Jul 08 j 02:50	9°♊47'55			655 Dec 14 j 12:25	0°♊	
direct	653 Jul 24 j 15:41	4°♊36'00		evening rise	656 Jan 06 j 08:18	28°♊39'35	
greatest brilliancy	653 Aug 04 j 09:39	6°♊40'40	-4.8m		656 Jan 07 j 09:58	0°♊	
	653 Sep 06 j 09:19	0°♊			656 Jan 31 j 10:17	0°♊	
morning max el	653 Sep 12 j 05:46	5°♊37'11	46°16'35		656 Feb 24 j 15:20	0°♁	
asc. node	653 Sep 29 j 22:58	24°♊04'22		asc. node	656 Mar 16 j 18:10	25°♁52'34	
	653 Oct 05 j 08:09	0°♊			656 Mar 20 j 03:35	0°♈	
	653 Oct 31 j 07:55	0°♊			656 Apr 14 j 02:06	0°♊	
	653 Nov 25 j 04:17	0°♌			656 May 09 j 15:36	0°♊	
	653 Dec 19 j 13:03	0°♊			656 Jun 05 j 06:31	0°♊	
	654 Jan 12 j 17:39	0°♊			656 Jun 04 j 06:42	0°♊	
desc. node	654 Jan 19 j 12:27	8°♊25'25		evening max el	656 Jul 04 j 09:37	0°♊07'00	45°40'04
	654 Feb 05 j 21:32	0°♊		desc. node	656 Jul 06 j 07:32	1°♊55'53	
	654 Mar 02 j 02:18	0°♊		greatest brilliancy	656 Aug 13 j 00:42	28°♊25'16	-4.8m
morning set	654 Mar 19 j 05:15	21°♊10'33		retrograde	656 Aug 22 j 06:11	29°♊57'29	

evening set	656 Sep 09 j 00:57	24° \mathbb{M} 04'54		minimum elong	659 Feb 10 j 16:46	24° \approx 39'16	1°24'33
inferior conj	656 Sep 12 j 05:50	22° \mathbb{M} 08'26	-8°28'25		659 Feb 14 j 23:40	0° \mathbb{H}	
minimum elong	656 Sep 12 j 11:37	21° \mathbb{M} 59'34	8°27'55	max. Earth dist.	659 Feb 14 j 23:58	0° \mathbb{H} 00'58	1.71997 AU
min. Earth dist.	656 Sep 13 j 01:22	21° \mathbb{M} 38'29	0.27708 AU		659 Mar 11 j 02:59	0° \mathbb{Y}	
morning rise	656 Sep 15 j 22:04	19° \mathbb{M} 54'50		evening rise	659 Mar 22 j 08:08	13° \mathbb{Y} 52'10	
direct	656 Oct 03 j 07:55	14° \mathbb{M} 09'52			659 Apr 04 j 10:13	0° \mathbb{B}	
greatest brilliancy	656 Oct 14 j 09:28	16° \mathbb{M} 27'06	-4.9m	asc. node	659 Apr 14 j 06:02	12° \mathbb{B} 03'54	
asc. node	656 Oct 27 j 10:43	23° \mathbb{M} 49'53			659 Apr 28 j 21:57	0° \mathbb{II}	
	656 Nov 04 j 09:34	0° \mathbb{L}			659 May 23 j 14:43	0° \mathbb{E}	
morning max el	656 Nov 23 j 01:28	17° \mathbb{L} 32'01	46°53'36		659 Jun 17 j 13:50	0° \mathbb{Q}	
	656 Dec 04 j 20:38	0° \mathbb{L}			659 Jul 12 j 22:27	0° \mathbb{M}	
	656 Dec 31 j 07:42	0° \mathbb{J}		desc. node	659 Aug 03 j 19:20	25° \mathbb{M} 16'33	
	657 Jan 25 j 14:59	0° \mathbb{Z}			659 Aug 07 j 23:16	0° \mathbb{L}	
desc. node	657 Feb 16 j 00:24	25° \mathbb{Z} 47'21			659 Sep 04 j 08:33	0° \mathbb{L}	
	657 Feb 19 j 11:48	0° \approx		evening max el	659 Sep 16 j 15:20	12° \mathbb{L} 31'26	46°51'38
	657 Mar 16 j 04:29	0° \mathbb{H}			659 Oct 05 j 22:15	0° \mathbb{J}	
	657 Apr 09 j 19:32	0° \mathbb{Y}		greatest brilliancy	659 Oct 27 j 06:55	12° \mathbb{J} 59'19	-4.9m
	657 May 04 j 09:45	0° \mathbb{B}		retrograde	659 Nov 05 j 21:04	14° \mathbb{J} 44'02	
morning set	657 May 27 j 01:14	27° \mathbb{B} 40'48		evening set	659 Nov 20 j 05:18	10° \mathbb{J} 39'59	
	657 May 28 j 22:44	0° \mathbb{II}		asc. node	659 Nov 24 j 22:35	7° \mathbb{J} 57'29	
asc. node	657 Jun 09 j 03:41	13° \mathbb{II} 43'52		inferior conj	659 Nov 26 j 10:08	7° \mathbb{J} 03'33	0°23'08
	657 Jun 22 j 09:34	0° \mathbb{E}		minimum elong	659 Nov 26 j 09:14	7° \mathbb{J} 04'54	0°22'50
max. Earth dist.	657 Jun 29 j 13:58	8° \mathbb{E} 50'22	1.73391 AU	min. Earth dist.	659 Nov 26 j 06:30	7° \mathbb{J} 09'05	0.26364 AU
				morning rise	659 Dec 02 j 13:06	3° \mathbb{J} 29'18	
superior conj	657 Jul 02 j 08:53	12° \mathbb{E} 16'26	0°51'20		659 Dec 11 j 14:25	30° \mathbb{R} \mathbb{L}	
minimum elong	657 Jul 02 j 00:32	11° \mathbb{E} 50'45	0°50'59	direct	659 Dec 16 j 17:03	29° \mathbb{L} 27'29	
	657 Jul 16 j 17:38	0° \mathbb{Q}			659 Dec 21 j 22:52	0° \mathbb{J}	
evening rise	657 Aug 07 j 06:08	26° \mathbb{Q} 38'02		greatest brilliancy	659 Dec 26 j 18:12	1° \mathbb{J} 22'20	-4.9m
	657 Aug 09 j 23:18	0° \mathbb{M}			660 Feb 02 j 21:13	0° \mathbb{Z}	
	657 Sep 03 j 03:48	0° \mathbb{L}		morning max el	660 Feb 05 j 00:00	2° \mathbb{Z} 05'56	46°43'19
	657 Sep 27 j 08:33	0° \mathbb{L}			660 Mar 02 j 06:10	0° \approx	
desc. node	657 Sep 28 j 17:09	1° \mathbb{L} 40'55		desc. node	660 Mar 15 j 12:12	14° \approx 54'34	
	657 Oct 21 j 14:44	0° \mathbb{J}			660 Mar 28 j 15:32	0° \mathbb{H}	
	657 Nov 14 j 23:50	0° \mathbb{Z}			660 Apr 23 j 06:35	0° \mathbb{Y}	
	657 Dec 09 j 15:31	0° \approx			660 May 18 j 12:12	0° \mathbb{B}	
	658 Jan 03 j 22:31	0° \mathbb{H}			660 Jun 12 j 11:07	0° \mathbb{II}	
asc. node	658 Jan 19 j 20:24	18° \mathbb{H} 06'58		asc. node	660 Jul 06 j 15:37	29° \mathbb{II} 23'21	
	658 Jan 30 j 18:36	0° \mathbb{Y}			660 Jul 07 j 03:37	0° \mathbb{E}	
evening max el	658 Feb 09 j 23:55	10° \mathbb{Y} 32'31	46°20'12		660 Jul 31 j 13:35	0° \mathbb{Q}	
	658 Mar 03 j 18:29	0° \mathbb{B}		morning set	660 Aug 02 j 17:44	2° \mathbb{Q} 41'04	
greatest brilliancy	658 Mar 20 j 23:33	10° \mathbb{B} 08'57	-4.8m		660 Aug 24 j 17:53	0° \mathbb{M}	
retrograde	658 Mar 31 j 17:16	12° \mathbb{B} 16'17		max. Earth dist.	660 Sep 05 j 11:10	14° \mathbb{M} 37'09	1.72006 AU
evening set	658 Apr 16 j 17:26	7° \mathbb{B} 18'17					
inferior conj	658 Apr 22 j 02:48	3° \mathbb{B} 59'56	4°20'01	superior conj	660 Sep 08 j 17:40	18° \mathbb{M} 42'24	1°22'25
minimum elong	658 Apr 22 j 11:04	3° \mathbb{B} 46'51	4°17'55	minimum elong	660 Sep 08 j 22:08	18° \mathbb{M} 56'23	1°22'21
min. Earth dist.	658 Apr 22 j 06:10	3° \mathbb{B} 54'37	0.28863 AU		660 Sep 17 j 18:20	0° \mathbb{L}	
morning rise	658 Apr 28 j 04:54	0° \mathbb{B} 18'02			660 Oct 11 j 17:01	0° \mathbb{L}	
	658 Apr 28 j 17:59	30° \mathbb{R} \mathbb{Y}		evening rise	660 Oct 17 j 18:15	7° \mathbb{L} 35'15	
desc. node	658 May 11 j 09:37	25° \mathbb{Y} 49'14		desc. node	660 Oct 26 j 05:05	18° \mathbb{L} 10'50	
direct	658 May 13 j 14:54	25° \mathbb{Y} 43'28			660 Nov 04 j 15:26	0° \mathbb{J}	
greatest brilliancy	658 May 23 j 17:54	27° \mathbb{Y} 33'59	-4.7m		660 Nov 28 j 14:38	0° \mathbb{Z}	
	658 May 29 j 10:24	0° \mathbb{B}			660 Dec 22 j 16:01	0° \approx	
morning max el	658 Jul 01 j 08:11	25° \mathbb{B} 24'16	45°45'07		661 Jan 15 j 22:24	0° \mathbb{H}	
	658 Jul 06 j 01:55	0° \mathbb{II}			661 Feb 09 j 14:43	0° \mathbb{Y}	
	658 Aug 03 j 12:42	0° \mathbb{E}		asc. node	661 Feb 16 j 08:14	8° \mathbb{Y} 02'57	
	658 Aug 29 j 17:40	0° \mathbb{Q}			661 Mar 07 j 01:07	0° \mathbb{B}	
asc. node	658 Sep 01 j 13:14	3° \mathbb{Q} 18'59			661 Apr 02 j 22:12	0° \mathbb{II}	
	658 Sep 23 j 19:15	0° \mathbb{M}		evening max el	661 Apr 21 j 16:39	19° \mathbb{II} 09'13	45°23'55
	658 Oct 18 j 04:54	0° \mathbb{L}			661 May 03 j 14:27	0° \mathbb{E}	
	658 Nov 11 j 06:04	0° \mathbb{L}		greatest brilliancy	661 May 29 j 10:14	16° \mathbb{E} 45'59	-4.7m
	658 Dec 05 j 03:47	0° \mathbb{J}		desc. node	661 Jun 07 j 21:45	18° \mathbb{E} 49'59	
desc. node	658 Dec 22 j 02:39	21° \mathbb{J} 17'37		retrograde	661 Jun 09 j 06:23	18° \mathbb{E} 52'07	
	658 Dec 29 j 01:03	0° \mathbb{Z}		evening set	661 Jun 24 j 17:28	14° \mathbb{E} 17'11	
morning set	658 Dec 31 j 11:52	3° \mathbb{Z} 04'37		inferior conj	661 Jun 30 j 16:58	10° \mathbb{E} 42'49	-5°01'17
	659 Jan 21 j 23:21	0° \approx		minimum elong	661 Jun 30 j 07:39	10° \mathbb{E} 57'17	4°59'03
				min. Earth dist.	661 Jun 30 j 18:12	10° \mathbb{E} 40'53	0.28910 AU
superior conj	659 Feb 10 j 20:25	24° \approx 50'40	-1°24'35	morning rise	661 Jul 05 j 21:39	7° \mathbb{E} 34'18	

direct	661 Jul 22 j 08:36	2°☿25'57		evening rise	664 Jan 03 j 18:16	26°♄05'08	
greatest brilliancy	661 Aug 02 j 01:01	4°☿29'38	-4.8m		664 Jan 06 j 21:13	0°♁	
	661 Sep 06 j 09:29	0°♁			664 Jan 30 j 21:36	0°♂	
morning max el	661 Sep 09 j 22:01	3°♁24'45	46°14'55		664 Feb 24 j 02:46	0°♀	
asc. node	661 Sep 29 j 01:02	23°♁22'34		asc. node	664 Mar 15 j 20:11	25°♀23'13	
	661 Oct 05 j 00:37	0°♂			664 Mar 19 j 15:18	0°♄	
	661 Oct 30 j 21:59	0°♂			664 Apr 13 j 14:25	0°♂	
	661 Nov 24 j 17:14	0°♂			664 May 09 j 05:08	0°☿	
	661 Dec 19 j 01:23	0°♂			664 Jun 04 j 22:41	0°♁	
	662 Jan 12 j 05:32	0°♄		evening max el	664 Jul 01 j 23:12	27°♁49'06	45°38'12
desc. node	662 Jan 18 j 14:37	7°♄55'28			664 Jul 04 j 06:28	0°♂	
	662 Feb 05 j 09:05	0°♁		desc. node	664 Jul 05 j 09:36	1°♂03'20	
	662 Mar 01 j 13:36	0°♂		greatest brilliancy	664 Aug 10 j 13:54	26°♂06'37	-4.8m
morning set	662 Mar 16 j 20:00	18°♂53'20		retrograde	664 Aug 19 j 18:58	27°♂38'48	
	662 Mar 25 j 19:50	0°♀		evening set	664 Sep 06 j 16:22	21°♂43'38	
	662 Apr 19 j 04:01	0°♄		inferior conj	664 Sep 09 j 19:53	19°♂49'11	-8°33'40
				minimum elong	664 Sep 10 j 00:53	19°♂41'30	8°33'18
superior conj	662 Apr 23 j 14:04	5°♄26'13	-0°41'19	min. Earth dist.	664 Sep 10 j 15:21	19°♂19'17	0.27770 AU
minimum elong	662 Apr 23 j 21:56	5°♄50'25	0°40'59	morning rise	664 Sep 13 j 09:10	17°♂39'41	
max. Earth dist.	662 Apr 24 j 22:59	7°♄07'27	1.73419 AU	direct	664 Sep 30 j 22:06	11°♂49'35	
asc. node	662 May 11 j 17:56	27°♄45'28		greatest brilliancy	664 Oct 12 j 00:39	14°♂07'03	-4.9m
	662 May 13 j 13:46	0°♂		asc. node	664 Oct 26 j 12:47	22°♂32'39	
evening rise	662 May 30 j 06:55	20°♂31'04			664 Nov 04 j 18:26	0°♂	
	662 Jun 07 j 00:27	0°☿		morning max el	664 Nov 20 j 14:27	15°♂05'38	46°52'56
	662 Jul 01 j 11:53	0°♁			664 Dec 04 j 15:17	0°♂	
	662 Jul 26 j 00:46	0°♂			664 Dec 30 j 22:43	0°♂	
	662 Aug 19 j 16:40	0°♂			665 Jan 25 j 04:23	0°♄	
desc. node	662 Aug 31 j 07:17	14°♂02'35		desc. node	665 Feb 15 j 02:21	25°♄15'10	
	662 Sep 13 j 13:41	0°♂			665 Feb 19 j 00:16	0°♁	
	662 Oct 08 j 19:16	0°♂			665 Mar 15 j 16:19	0°♂	
	662 Nov 03 j 18:21	0°♄			665 Apr 09 j 06:54	0°♀	
evening max el	662 Nov 28 j 05:41	26°♄29'16	47°20'40		665 May 03 j 20:47	0°♄	
	662 Dec 01 j 17:11	0°♁		morning set	665 May 24 j 19:23	25°♄36'15	
asc. node	662 Dec 22 j 10:37	18°♁33'19			665 May 28 j 09:33	0°♂	
greatest brilliancy	663 Jan 07 j 16:46	28°♁11'19	-4.9m	asc. node	665 Jun 08 j 05:49	13°♂17'20	
	663 Jan 14 j 07:44	0°♂			665 Jun 21 j 20:19	0°☿	
retrograde	663 Jan 18 j 05:53	0°♂18'34		max. Earth dist.	665 Jun 27 j 09:41	6°☿50'17	1.73423 AU
	663 Jan 22 j 02:10	30°♂					
evening set	663 Feb 04 j 17:25	24°♁17'41		superior conj	665 Jun 30 j 03:24	10°☿12'33	0°48'48
min. Earth dist.	663 Feb 07 j 07:35	22°♁41'15	0.27727 AU	minimum elong	665 Jun 29 j 19:15	9°☿47'29	0°48'29
inferior conj	663 Feb 08 j 03:33	22°♁09'52	8°34'42		665 Jul 16 j 04:26	0°♁	
minimum elong	663 Feb 07 j 23:39	22°♁16'01	8°34'29	evening rise	665 Aug 04 j 23:50	24°♁30'28	
morning rise	663 Feb 11 j 06:11	20°♁14'13			665 Aug 09 j 10:14	0°♂	
direct	663 Feb 28 j 22:42	14°♁13'54			665 Sep 02 j 14:57	0°♂	
greatest brilliancy	663 Mar 09 j 20:09	15°♁43'16	-4.8m		665 Sep 26 j 20:00	0°♂	
	663 Apr 02 j 11:59	0°♂		desc. node	665 Sep 27 j 19:13	1°♂11'53	
desc. node	663 Apr 12 j 23:58	9°♂07'23			665 Oct 21 j 02:34	0°♂	
morning max el	663 Apr 19 j 04:29	14°♂57'32	46°00'50		665 Nov 14 j 12:13	0°♄	
	663 May 04 j 02:46	0°♀			665 Dec 09 j 04:43	0°♁	
	663 May 31 j 16:16	0°♄			666 Jan 03 j 13:20	0°♂	
	663 Jun 26 j 20:30	0°♂		asc. node	666 Jan 18 j 22:20	17°♂26'02	
	663 Jul 22 j 05:44	0°☿			666 Jan 30 j 13:27	0°♀	
asc. node	663 Aug 04 j 03:22	15°☿31'38		evening max el	666 Feb 07 j 13:59	8°♀13'53	46°22'42
	663 Aug 16 j 00:56	0°♁			666 Mar 04 j 10:14	0°♄	
	663 Sep 09 j 09:21	0°♂		greatest brilliancy	666 Mar 18 j 16:41	7°♄59'08	-4.8m
	663 Oct 03 j 10:27	0°♂		retrograde	666 Mar 29 j 09:33	10°♄06'25	
morning set	663 Oct 13 j 16:05	12°♂50'32		evening set	666 Apr 14 j 12:16	5°♄04'35	
	663 Oct 27 j 07:37	0°♂		inferior conj	666 Apr 19 j 19:14	1°♄49'58	4°37'02
	663 Nov 20 j 03:28	0°♂		minimum elong	666 Apr 20 j 03:51	1°♄36'20	4°34'54
				min. Earth dist.	666 Apr 19 j 22:45	1°♄44'24	0.28849 AU
superior conj	663 Nov 23 j 00:33	3°♂37'27	0°01'39		666 Apr 22 j 17:24	30°♂	
minimum elong	663 Nov 23 j 00:59	3°♂38'48	0°01'38	morning rise	666 Apr 25 j 19:34	28°♀10'27	
behind sun begin	663 Nov 21 j 22:39	2°♂15'54		desc. node	666 May 10 j 11:48	23°♀34'15	
behind sun end	663 Nov 24 j 03:20	5°♂01'42		direct	666 May 11 j 06:21	23°♀33'33	
desc. node	663 Nov 23 j 16:57	4°♂29'04		greatest brilliancy	666 May 21 j 09:57	25°♀24'28	-4.7m
max. Earth dist.	663 Nov 23 j 21:46	4°♂44'13	1.71032 AU		666 May 31 j 01:17	0°♄	
	663 Dec 13 j 23:38	0°♄		morning max el	666 Jun 28 j 23:53	23°♄13'58	45°44'55

	666 Jul 05 j 22:14	0°♂		668 Nov 28 j 01:53	0°♂
	666 Aug 03 j 03:41	0°♂		668 Dec 22 j 03:29	0°♂
	666 Aug 29 j 06:39	0°♂		669 Jan 15 j 10:13	0°♂
asc. node	666 Aug 31 j 15:15	2°♂46'58		669 Feb 09 j 03:09	0°♂
	666 Sep 23 j 07:18	0°♂	asc. node	669 Feb 15 j 10:18	7°♂31'24
	666 Oct 17 j 16:29	0°♂		669 Mar 06 j 14:52	0°♂
	666 Nov 10 j 17:23	0°♂		669 Apr 02 j 15:10	0°♂
	666 Dec 04 j 14:57	0°♂	evening max el	669 Apr 19 j 09:25	17°♂01'35 45°24'46
desc. node	666 Dec 21 j 04:45	20°♂49'31		669 May 03 j 20:05	0°♂
morning set	666 Dec 28 j 21:45	0°♂30'23	greatest brilliancy	669 May 27 j 01:31	14°♂36'54 -4.7m
	666 Dec 28 j 12:05	0°♂	retrograde	669 Jun 06 j 22:39	16°♂43'30
	667 Jan 21 j 10:16	0°♂	desc. node	669 Jun 06 j 23:48	16°♂43'30
			evening set	669 Jun 22 j 07:47	12°♂11'17
superior conj	667 Feb 08 j 08:37	22°♂25'10 -1°23'54	inferior conj	669 Jun 28 j 09:07	8°♂33'52 -4°44'44
minimum elong	667 Feb 08 j 04:00	22°♂10'47 1°23'52	minimum elong	669 Jun 28 j 00:07	8°♂47'52 4°42'32
max. Earth dist.	667 Feb 12 j 09:18	27°♂26'40 1.71944 AU	min. Earth dist.	669 Jun 28 j 09:55	8°♂32'37 0.28922 AU
	667 Feb 14 j 10:30	0°♂	morning rise	669 Jul 03 j 16:20	5°♂21'36
	667 Mar 10 j 13:48	0°♂	direct	669 Jul 20 j 01:31	0°♂17'01
evening rise	667 Mar 19 j 22:40	11°♂35'26	greatest brilliancy	669 Jul 30 j 16:16	2°♂19'19 -4.8m
	667 Apr 03 j 21:05	0°♂		669 Sep 06 j 08:12	0°♂
asc. node	667 Apr 13 j 08:10	11°♂37'02	morning max el	669 Sep 07 j 13:27	1°♂11'26 46°13'20
	667 Apr 28 j 08:59	0°♂	asc. node	669 Sep 28 j 03:11	22°♂42'32
	667 May 23 j 02:05	0°♂		669 Oct 04 j 16:26	0°♂
	667 Jun 17 j 01:48	0°♂		669 Oct 30 j 11:30	0°♂
	667 Jul 12 j 11:32	0°♂		669 Nov 24 j 05:42	0°♂
desc. node	667 Aug 02 j 21:19	24°♂40'25		669 Dec 18 j 13:15	0°♂
	667 Aug 07 j 14:24	0°♂		670 Jan 11 j 17:01	0°♂
	667 Sep 04 j 04:23	0°♂	desc. node	670 Jan 17 j 16:30	7°♂25'55
evening max el	667 Sep 14 j 04:38	10°♂08'10 46°49'18		670 Feb 04 j 20:16	0°♂
	667 Oct 06 j 14:07	0°♂		670 Mar 01 j 00:32	0°♂
greatest brilliancy	667 Oct 24 j 19:38	10°♂30'25 -4.9m	morning set	670 Mar 14 j 10:41	16°♂36'59
retrograde	667 Nov 03 j 09:33	12°♂14'50		670 Mar 25 j 06:35	0°♂
evening set	667 Nov 17 j 18:04	8°♂09'43		670 Apr 18 j 14:37	0°♂
inferior conj	667 Nov 23 j 22:09	4°♂34'33 -0°01'41			
minimum elong	667 Nov 23 j 22:13	4°♂34'27 0°01'39	superior conj	670 Apr 21 j 07:02	3°♂18'10 -0°44'09
transit middle	667 Nov 23 j 22:13	4°♂34'27 0°01'39	minimum elong	670 Apr 21 j 15:18	3°♂43'37 0°43'49
transit begin	667 Nov 23 j 18:10	4°♂40'37	max. Earth dist.	670 Apr 22 j 22:03	5°♂18'14 1.73387 AU
transit end	667 Nov 24 j 02:17	4°♂28'18	asc. node	670 May 10 j 20:03	27°♂19'31
min. Earth dist.	667 Nov 23 j 19:56	4°♂37'56 0.26365 AU		670 May 13 j 00:20	0°♂
asc. node	667 Nov 24 j 00:45	4°♂30'38	evening rise	670 May 28 j 01:47	18°♂29'07
morning rise	667 Nov 30 j 02:18	0°♂59'17		670 Jun 06 j 11:07	0°♂
	667 Dec 02 j 01:19	30°♂		670 Jun 30 j 22:47	0°♂
direct	667 Dec 14 j 05:40	26°♂58'16		670 Jul 25 j 12:04	0°♂
greatest brilliancy	667 Dec 24 j 07:53	28°♂54'48 -4.9m		670 Aug 19 j 04:33	0°♂
	667 Dec 26 j 23:52	0°♂	desc. node	670 Aug 30 j 09:21	13°♂31'57
morning max el	668 Feb 02 j 14:20	29°♂44'19 46°44'40		670 Sep 13 j 02:25	0°♂
	668 Feb 02 j 20:36	0°♂		670 Oct 08 j 09:23	0°♂
	668 Mar 01 j 22:31	0°♂		670 Nov 03 j 11:07	0°♂
desc. node	668 Mar 14 j 14:20	14°♂18'19	evening max el	670 Nov 25 j 20:45	24°♂08'24 47°21'12
	668 Mar 28 j 05:15	0°♂		670 Dec 01 j 17:19	0°♂
	668 Apr 22 j 18:58	0°♂	asc. node	670 Dec 21 j 12:35	17°♂17'21
	668 May 17 j 23:49	0°♂	greatest brilliancy	671 Jan 05 j 08:03	25°♂50'20 -4.9m
	668 Jun 11 j 22:15	0°♂	retrograde	671 Jan 15 j 20:28	27°♂56'40
asc. node	668 Jul 05 j 17:35	28°♂56'14	evening set	671 Feb 02 j 05:14	22°♂00'44
	668 Jul 06 j 14:27	0°♂	min. Earth dist.	671 Feb 04 j 21:14	20°♂21'28 0.27662 AU
morning set	668 Jul 31 j 10:54	0°♂32'49	inferior conj	671 Feb 05 j 17:49	19°♂49'04 8°30'29
	668 Jul 31 j 00:16	0°♂	minimum elong	671 Feb 05 j 13:08	19°♂56'27 8°30'09
	668 Aug 24 j 04:33	0°♂	morning rise	671 Feb 08 j 21:20	17°♂51'57
max. Earth dist.	668 Sep 03 j 01:59	12°♂20'10 1.72058 AU	direct	671 Feb 26 j 12:27	11°♂54'23
			greatest brilliancy	671 Mar 07 j 09:18	13°♂23'06 -4.8m
superior conj	668 Sep 06 j 09:12	16°♂27'30 1°23'08		671 Apr 02 j 20:34	0°♂
minimum elong	668 Sep 06 j 12:55	16°♂39'06 1°23'06	desc. node	671 Apr 12 j 02:03	8°♂13'30
	668 Sep 17 j 05:05	0°♂	morning max el	671 Apr 16 j 18:02	12°♂39'25 46°02'08
	668 Oct 11 j 03:54	0°♂		671 May 03 j 20:45	0°♂
evening rise	668 Oct 15 j 06:12	5°♂08'03		671 May 31 j 06:27	0°♂
desc. node	668 Oct 25 j 07:13	17°♂43'08		671 Jun 26 j 08:59	0°♂
	668 Nov 04 j 02:30	0°♂		671 Jul 21 j 17:22	0°♂

asc. node	671 Aug 03 j 05:25	15°♊03'23		evening max el	674 Feb 05 j 04:20	5°♊55'44	46°25'25
	671 Aug 15 j 12:08	0°♊			674 Mar 05 j 07:40	0°♊	
	671 Sep 08 j 20:22	0°♊		greatest brilliancy	674 Mar 16 j 09:08	5°♊48'17	-4.8m
	671 Oct 02 j 21:23	0°♊		retrograde	674 Mar 27 j 02:14	7°♊56'15	
morning set	671 Oct 11 j 05:18	10°♊27'03		evening set	674 Apr 12 j 07:06	2°♊50'15	
	671 Oct 26 j 18:31	0°♊			674 Apr 16 j 22:32	30°♊	
	671 Nov 19 j 14:23	0°♊		inferior conj	674 Apr 17 j 11:34	29°♊39'25	4°53'41
				minimum elong	674 Apr 17 j 20:29	29°♊25'20	4°51'32
superior conj	671 Nov 20 j 10:32	1°♊03'25	0°05'38	min. Earth dist.	674 Apr 17 j 14:52	29°♊34'13	0.28835 AU
minimum elong	671 Nov 20 j 12:02	1°♊08'08	0°05'33	morning rise	674 Apr 23 j 10:01	26°♊02'47	
behind sun begin	671 Nov 19 j 10:58	29°♊49'16		direct	674 May 08 j 22:04	21°♊23'02	
behind sun end	671 Nov 21 j 13:05	2°♊26'59		desc. node	674 May 09 j 13:52	21°♊23'32	
max. Earth dist.	671 Nov 20 j 23:41	1°♊44'50	1.71034 AU	greatest brilliancy	674 May 19 j 01:33	23°♊14'09	-4.7m
desc. node	671 Nov 22 j 19:00	4°♊01'07			674 Jun 01 j 04:36	0°♊	
	671 Dec 13 j 10:35	0°♊		morning max el	674 Jun 26 j 16:26	21°♊05'31	45°44'48
evening rise	672 Jan 01 j 04:07	23°♊31'04			674 Jul 05 j 17:59	0°♊	
	672 Jan 06 j 08:14	0°♊			674 Aug 02 j 18:31	0°♊	
	672 Jan 30 j 08:41	0°♊			674 Aug 28 j 19:36	0°♊	
	672 Feb 23 j 14:00	0°♊		asc. node	674 Aug 30 j 17:26	2°♊15'25	
asc. node	672 Mar 14 j 22:21	24°♊54'52			674 Sep 22 j 19:21	0°♊	
	672 Mar 19 j 02:51	0°♊			674 Oct 17 j 04:05	0°♊	
	672 Apr 13 j 02:36	0°♊			674 Nov 10 j 04:47	0°♊	
	672 May 08 j 18:34	0°♊			674 Dec 04 j 02:15	0°♊	
	672 Jun 04 j 14:54	0°♊		desc. node	674 Dec 20 j 06:45	20°♊20'33	
evening max el	672 Jun 29 j 12:01	25°♊30'08	45°36'24	morning set	674 Dec 26 j 07:16	27°♊54'19	
desc. node	672 Jul 04 j 11:34	0°♊10'10			674 Dec 27 j 23:17	0°♊	
	672 Jul 04 j 07:08	0°♊			675 Jan 20 j 21:22	0°♊	
greatest brilliancy	672 Aug 08 j 02:37	23°♊48'01	-4.8m				
retrograde	672 Aug 17 j 07:58	25°♊20'50		superior conj	675 Feb 05 j 20:08	19°♊56'49	-1°23'03
evening set	672 Sep 04 j 07:18	19°♊23'15		minimum elong	675 Feb 05 j 14:35	19°♊39'29	1°22'59
inferior conj	672 Sep 07 j 09:52	17°♊30'19	-8°37'53	max. Earth dist.	675 Feb 09 j 18:41	24°♊51'53	1.71890 AU
minimum elong	672 Sep 07 j 14:03	17°♊23'53	8°37'39		675 Feb 13 j 21:31	0°♊	
min. Earth dist.	672 Sep 08 j 05:12	17°♊00'38	0.27837 AU		675 Mar 10 j 00:47	0°♊	
morning rise	672 Sep 10 j 20:33	15°♊24'39		evening rise	675 Mar 17 j 12:44	9°♊16'42	
direct	672 Sep 28 j 12:16	9°♊29'26			675 Apr 03 j 08:07	0°♊	
greatest brilliancy	672 Oct 09 j 16:09	11°♊47'47	-4.9m	asc. node	675 Apr 12 j 10:14	11°♊09'29	
asc. node	672 Oct 25 j 14:54	21°♊17'50			675 Apr 27 j 20:12	0°♊	
	672 Nov 05 j 00:50	0°♊			675 May 22 j 13:40	0°♊	
morning max el	672 Nov 18 j 04:00	12°♊40'47	46°52'17		675 Jun 16 j 14:02	0°♊	
	672 Dec 04 j 09:28	0°♊			675 Jul 12 j 00:54	0°♊	
	672 Dec 30 j 13:30	0°♊		desc. node	675 Aug 01 j 23:30	24°♊04'01	
	673 Jan 24 j 17:35	0°♊			675 Aug 07 j 05:57	0°♊	
desc. node	673 Feb 14 j 04:31	24°♊44'08			675 Sep 04 j 00:59	0°♊	
	673 Feb 18 j 12:33	0°♊		evening max el	675 Sep 11 j 18:42	7°♊46'41	46°46'57
	673 Mar 15 j 03:59	0°♊			675 Oct 07 j 11:31	0°♊	
	673 Apr 08 j 18:09	0°♊		greatest brilliancy	675 Oct 22 j 07:56	8°♊01'03	-4.9m
	673 May 03 j 07:43	0°♊		retrograde	675 Oct 31 j 22:11	9°♊45'14	
morning set	673 May 22 j 13:34	23°♊31'58		evening set	675 Nov 15 j 07:08	5°♊39'01	
	673 May 27 j 20:19	0°♊		inferior conj	675 Nov 21 j 10:12	2°♊05'05	-0°26'23
asc. node	673 Jun 07 j 07:49	12°♊50'38		minimum elong	675 Nov 21 j 11:12	2°♊03'33	0°26'03
	673 Jun 21 j 07:00	0°♊		min. Earth dist.	675 Nov 21 j 09:06	2°♊06'45	0.26372 AU
max. Earth dist.	673 Jun 25 j 06:56	4°♊55'06	1.73451 AU	asc. node	675 Nov 23 j 02:42	1°♊03'51	
					675 Nov 24 j 21:52	30°♊	
superior conj	673 Jun 27 j 22:03	8°♊09'24	0°46'14	morning rise	675 Nov 27 j 15:16	28°♊29'00	
minimum elong	673 Jun 27 j 14:09	7°♊45'05	0°45'54	direct	675 Dec 11 j 18:38	24°♊28'47	
	673 Jul 15 j 15:08	0°♊		greatest brilliancy	675 Dec 21 j 21:11	26°♊26'05	-4.9m
evening rise	673 Aug 02 j 17:51	22°♊24'12			675 Dec 29 j 08:55	0°♊	
	673 Aug 08 j 21:05	0°♊		morning max el	676 Jan 31 j 04:36	27°♊21'25	46°45'44
	673 Sep 02 j 02:03	0°♊			676 Feb 02 j 19:23	0°♊	
	673 Sep 26 j 07:27	0°♊			676 Mar 01 j 14:57	0°♊	
desc. node	673 Sep 26 j 21:24	0°♊43'09		desc. node	676 Mar 13 j 16:27	13°♊41'16	
	673 Oct 20 j 14:28	0°♊			676 Mar 27 j 19:11	0°♊	
	673 Nov 14 j 00:42	0°♊			676 Apr 22 j 07:36	0°♊	
	673 Dec 08 j 18:06	0°♊			676 May 17 j 11:40	0°♊	
	674 Jan 03 j 04:25	0°♊			676 Jun 11 j 09:37	0°♊	
asc. node	674 Jan 18 j 00:27	16°♊44'56		asc. node	676 Jul 04 j 19:39	28°♊28'40	
	674 Jan 30 j 08:54	0°♊			676 Jul 06 j 01:32	0°♊	

morning set	676 Jul 29 j 04:09	28° ☿ 23'59		evening set	679 Jan 30 j 16:59	19° ♊ 43'52	
	676 Jul 30 j 11:15	0° ♊		min. Earth dist.	679 Feb 02 j 11:20	18° ♊ 01'07	0.27597 AU
	676 Aug 23 j 15:31	0° ♋		inferior conj	679 Feb 03 j 08:18	17° ♊ 28'07	8°25'28
max. Earth dist.	676 Aug 31 j 14:39	9° ♋ 55'38	1.72107 AU	minimum elong	679 Feb 03 j 02:51	17° ♊ 36'42	8°25'00
				morning rise	679 Feb 06 j 13:01	15° ♊ 29'07	
superior conj	676 Sep 04 j 01:05	14° ♋ 12'53	1°23'42	direct	679 Feb 24 j 01:57	9° ♊ 34'33	
minimum elong	676 Sep 04 j 04:03	14° ♋ 22'08	1°23'42	greatest brilliancy	679 Mar 04 j 23:10	11° ♊ 03'15	-4.8m
	676 Sep 16 j 16:07	0° ♌			679 Apr 03 j 03:01	0° ♋	
	676 Oct 10 j 15:04	0° ♍		desc. node	679 Apr 11 j 04:08	7° ♋ 19'54	
evening rise	676 Oct 12 j 18:33	2° ♍ 41'20		morning max el	679 Apr 14 j 07:13	10° ♋ 19'22	46°03'21
desc. node	676 Oct 24 j 09:14	17° ♍ 14'20			679 May 03 j 14:40	0° ♌	
	676 Nov 03 j 13:48	0° ♎			679 May 30 j 20:51	0° ♍	
	676 Nov 27 j 13:22	0° ♏			679 Jun 25 j 21:47	0° ♐	
	676 Dec 21 j 15:14	0° ♑			679 Jul 21 j 05:19	0° ☿	
	677 Jan 14 j 22:22	0° ♒		asc. node	679 Aug 02 j 07:38	14° ☿ 34'39	
	677 Feb 08 j 16:02	0° ♓			679 Aug 14 j 23:38	0° ♊	
asc. node	677 Feb 14 j 12:26	6° ♓ 58'44			679 Sep 08 j 07:39	0° ♋	
	677 Mar 06 j 05:11	0° ♌			679 Oct 02 j 08:36	0° ♌	
	677 Apr 02 j 08:59	0° ♍		morning set	679 Oct 08 j 18:36	8° ♌ 02'56	
evening max el	677 Apr 17 j 01:43	14° ♍ 51'29	45°25'46		679 Oct 26 j 05:44	0° ♎	
	677 May 04 j 04:40	0° ☿					
greatest brilliancy	677 May 24 j 17:32	12° ☿ 27'32	-4.7m	superior conj	679 Nov 17 j 20:42	28° ♍ 28'56	0°09'35
retrograde	677 Jun 04 j 14:30	14° ☿ 33'53		minimum elong	679 Nov 17 j 23:13	28° ♍ 36'54	0°09'28
desc. node	677 Jun 06 j 01:47	14° ☿ 31'22		behind sun begin	679 Nov 17 j 01:29	27° ♍ 28'26	
evening set	677 Jun 19 j 22:18	10° ☿ 04'12		behind sun end	679 Nov 18 j 20:58	29° ♍ 45'21	
inferior conj	677 Jun 26 j 01:19	6° ☿ 24'02	-4°27'56	max. Earth dist.	679 Nov 18 j 02:14	28° ♍ 46'23	1.71040 AU
minimum elong	677 Jun 25 j 16:40	6° ☿ 37'32	4°25'45		679 Nov 19 j 01:38	0° ♎	
min. Earth dist.	677 Jun 26 j 01:59	6° ☿ 23'01	0.28931 AU	desc. node	679 Nov 21 j 21:02	3° ♎ 32'06	
morning rise	677 Jul 01 j 10:56	3° ☿ 08'00			679 Dec 12 j 21:52	0° ♏	
	677 Jul 07 j 22:59	30° ♎ II		evening rise	679 Dec 29 j 14:10	20° ♏ 56'44	
direct	677 Jul 17 j 18:05	28° ♏ 07'10			680 Jan 05 j 19:31	0° ♑	
	677 Jul 27 j 22:39	0° ☿			680 Jan 29 j 20:01	0° ♒	
greatest brilliancy	677 Jul 28 j 07:46	0° ☿ 08'11	-4.7m		680 Feb 23 j 01:28	0° ♓	
morning max el	677 Sep 05 j 04:06	28° ☿ 55'10	46°11'49	asc. node	680 Mar 14 j 00:23	24° ♓ 25'22	
	677 Sep 06 j 06:27	0° ♊			680 Mar 18 j 14:39	0° ♌	
asc. node	677 Sep 27 j 05:13	22° ♊ 01'30			680 Apr 12 j 15:05	0° ♍	
	677 Oct 04 j 08:22	0° ♋			680 May 08 j 08:26	0° ☿	
	677 Oct 30 j 01:16	0° ♌			680 Jun 04 j 07:45	0° ♊	
	677 Nov 23 j 18:25	0° ♍		evening max el	680 Jun 27 j 01:25	23° ♊ 11'54	45°34'46
	677 Dec 18 j 01:21	0° ♎		desc. node	680 Jul 03 j 13:47	29° ♊ 15'34	
	678 Jan 11 j 04:44	0° ♏			680 Jul 04 j 09:31	0° ♋	
desc. node	678 Jan 16 j 18:43	6° ♏ 56'34		greatest brilliancy	680 Aug 05 j 14:55	21° ♋ 28'33	-4.8m
	678 Feb 04 j 07:43	0° ♑		retrograde	680 Aug 14 j 21:45	23° ♋ 02'46	
	678 Feb 28 j 11:47	0° ♒		evening set	680 Sep 01 j 22:00	17° ♋ 03'08	
morning set	678 Mar 12 j 01:11	14° ♒ 18'53		inferior conj	680 Sep 05 j 00:00	15° ♋ 11'10	-8°41'13
	678 Mar 24 j 17:40	0° ♓		minimum elong	680 Sep 05 j 03:21	15° ♋ 06'01	8°41'04
	678 Apr 18 j 01:36	0° ♌		min. Earth dist.	680 Sep 05 j 18:51	14° ♋ 42'16	0.27904 AU
				morning rise	680 Sep 08 j 08:27	13° ♋ 08'57	
superior conj	678 Apr 18 j 23:46	1° ♌ 08'11	-0°46'57	direct	680 Sep 26 j 02:53	7° ♋ 09'05	
minimum elong	678 Apr 19 j 08:23	1° ♌ 34'44	0°46'36	greatest brilliancy	680 Oct 07 j 07:25	9° ♋ 28'05	-4.9m
max. Earth dist.	678 Apr 20 j 19:18	3° ♌ 22'09	1.73353 AU	asc. node	680 Oct 24 j 16:57	20° ♋ 04'31	
asc. node	678 May 09 j 22:02	26° ♌ 52'00			680 Nov 05 j 05:28	0° ♌	
	678 May 12 j 11:17	0° ♍		morning max el	680 Nov 15 j 18:35	10° ♌ 18'06	46°51'30
evening rise	678 May 25 j 20:20	16° ♍ 25'01			680 Dec 04 j 03:28	0° ♎	
	678 Jun 05 j 22:09	0° ☿			680 Dec 30 j 04:22	0° ♏	
	678 Jun 30 j 10:04	0° ♊			681 Jan 24 j 06:56	0° ♑	
	678 Jul 24 j 23:46	0° ♋		desc. node	681 Feb 13 j 06:36	24° ♑ 12'17	
	678 Aug 18 j 16:52	0° ♌			681 Feb 18 j 00:59	0° ♒	
desc. node	678 Aug 29 j 11:30	13° ♌ 00'13			681 Mar 14 j 15:47	0° ♓	
	678 Sep 12 j 15:38	0° ♍			681 Apr 08 j 05:30	0° ♌	
	678 Oct 08 j 00:03	0° ♎			681 May 02 j 18:47	0° ♍	
	678 Nov 03 j 04:35	0° ♏		morning set	681 May 20 j 07:57	21° ♍ 27'46	
evening max el	678 Nov 23 j 11:00	21° ♏ 44'35	47°21'46		681 May 27 j 07:14	0° ♐	
	678 Dec 01 j 18:58	0° ♑		asc. node	681 Jun 06 j 09:56	12° ♐ 23'48	
asc. node	678 Dec 20 j 14:41	15° ♑ 58'46			681 Jun 20 j 17:52	0° ☿	
greatest brilliancy	679 Jan 02 j 23:50	23° ♑ 29'20	-4.9m	max. Earth dist.	681 Jun 23 j 05:35	3° ☿ 03'39	1.73481 AU
retrograde	679 Jan 13 j 10:48	25° ♑ 34'34					

superior conj	681 Jun 25 j 16:46	6°☿05'48	0°43'36	morning rise	683 Nov 25 j 03:58	25°♄58'52	
minimum elong	681 Jun 25 j 09:09	5°☿42'21	0°43'16	direct	683 Dec 09 j 07:29	21°♄59'34	
	681 Jul 15 j 02:03	0°♄		greatest brilliancy	683 Dec 19 j 10:31	23°♄57'23	-4.9m
evening rise	681 Jul 31 j 11:55	20°♄17'34			683 Dec 30 j 21:45	0°♄	
	681 Aug 08 j 08:08	0°♄		morning max el	684 Jan 28 j 17:57	24°♄56'21	46°46'43
	681 Sep 01 j 13:20	0°♄			684 Feb 02 j 17:13	0°♄	
desc. node	681 Sep 25 j 23:22	0°♄13'12			684 Mar 01 j 07:01	0°♄	
	681 Sep 25 j 19:05	0°♄		desc. node	684 Mar 12 j 18:26	13°♄04'21	
	681 Oct 20 j 02:34	0°♄			684 Mar 27 j 08:56	0°♄	
	681 Nov 13 j 13:25	0°♄			684 Apr 21 j 20:05	0°♄	
	681 Dec 08 j 07:45	0°♄			684 May 16 j 23:23	0°♄	
	682 Jan 02 j 19:52	0°♄			684 Jun 10 j 20:51	0°♄	
asc. node	682 Jan 17 j 02:38	16°♄03'03		asc. node	684 Jul 03 j 21:51	28°♄01'59	
	682 Jan 30 j 05:07	0°♄			684 Jul 05 j 12:27	0°♄	
evening max el	682 Feb 02 j 19:46	3°♄39'48	46°28'13	morning set	684 Jul 26 j 21:42	26°♄16'43	
	682 Mar 06 j 13:32	0°♄			684 Jul 29 j 22:02	0°♄	
greatest brilliancy	682 Mar 14 j 01:26	3°♄37'07	-4.8m		684 Aug 23 j 02:19	0°♄	
retrograde	682 Mar 24 j 19:30	5°♄45'58		max. Earth dist.	684 Aug 29 j 03:18	7°♄31'42	1.72164 AU
evening set	682 Apr 10 j 02:06	0°♄35'55					
	682 Apr 11 j 02:27	30°♄		superior conj	684 Sep 01 j 17:15	11°♄59'45	1°24'09
inferior conj	682 Apr 15 j 03:58	27°♄28'49	5°09'55	minimum elong	684 Sep 01 j 19:28	12°♄06'38	1°24'09
minimum elong	682 Apr 15 j 13:09	27°♄14'21	5°07'46		684 Sep 16 j 03:02	0°♄	
min. Earth dist.	682 Apr 15 j 06:39	27°♄24'35	0.28817 AU	evening rise	684 Oct 10 j 06:56	0°♄15'03	
morning rise	682 Apr 21 j 00:24	23°♄55'24			684 Oct 10 j 02:08	0°♄	
direct	682 May 06 j 14:15	19°♄12'45		desc. node	684 Oct 23 j 11:19	16°♄45'53	
desc. node	682 May 08 j 15:51	19°♄17'42			684 Nov 03 j 01:02	0°♄	
greatest brilliancy	682 May 16 j 16:30	21°♄03'20	-4.7m		684 Nov 27 j 00:47	0°♄	
	682 Jun 02 j 00:28	0°♄			684 Dec 21 j 02:55	0°♄	
morning max el	682 Jun 24 j 09:26	18°♄58'15	45°44'36		685 Jan 14 j 10:28	0°♄	
	682 Jul 05 j 13:11	0°♄			685 Feb 08 j 04:51	0°♄	
	682 Aug 02 j 09:15	0°♄		asc. node	685 Feb 13 j 14:27	6°♄25'54	
	682 Aug 28 j 08:34	0°♄			685 Mar 05 j 19:30	0°♄	
asc. node	682 Aug 29 j 19:26	1°♄43'11			685 Apr 02 j 03:03	0°♄	
	682 Sep 22 j 07:28	0°♄		evening max el	685 Apr 14 j 17:17	12°♄39'56	45°26'50
	682 Oct 16 j 15:46	0°♄			685 May 04 j 15:58	0°♄	
	682 Nov 09 j 16:14	0°♄		greatest brilliancy	685 May 22 j 10:04	10°♄19'23	-4.7m
	682 Dec 03 j 13:34	0°♄		retrograde	685 Jun 02 j 06:12	12°♄25'18	
desc. node	682 Dec 19 j 08:54	19°♄51'57		desc. node	685 Jun 05 j 03:59	12°♄15'26	
morning set	682 Dec 23 j 16:47	25°♄18'12		evening set	685 Jun 17 j 13:04	7°♄57'46	
	682 Dec 27 j 10:31	0°♄		inferior conj	685 Jun 23 j 17:39	4°♄15'23	-4°10'47
	683 Jan 20 j 08:31	0°♄		minimum elong	685 Jun 23 j 09:24	4°♄28'16	4°08'39
				min. Earth dist.	685 Jun 23 j 18:32	4°♄14'01	0.28936 AU
superior conj	683 Feb 03 j 07:29	17°♄27'39	-1°22'02	morning rise	685 Jun 29 j 05:34	0°♄55'41	
minimum elong	683 Feb 03 j 01:01	17°♄07'25	1°21'56		685 Jun 30 j 22:13	30°♄	
max. Earth dist.	683 Feb 07 j 05:47	22°♄22'07	1.71839 AU	direct	685 Jul 15 j 10:10	25°♄58'28	
	683 Feb 13 j 08:36	0°♄		greatest brilliancy	685 Jul 25 j 23:48	27°♄58'49	-4.7m
	683 Mar 09 j 11:49	0°♄			685 Jul 30 j 16:41	0°♄	
evening rise	683 Mar 15 j 02:46	6°♄57'37		morning max el	685 Sep 02 j 18:12	26°♄38'40	46°10'21
	683 Apr 02 j 19:11	0°♄			685 Sep 06 j 03:30	0°♄	
asc. node	683 Apr 11 j 12:16	10°♄41'42		asc. node	685 Sep 26 j 07:17	21°♄22'00	
	683 Apr 27 j 07:24	0°♄			685 Oct 03 j 23:45	0°♄	
	683 May 22 j 01:13	0°♄			685 Oct 29 j 14:39	0°♄	
	683 Jun 16 j 02:15	0°♄			685 Nov 23 j 06:52	0°♄	
	683 Jul 11 j 14:20	0°♄			685 Dec 17 j 13:15	0°♄	
desc. node	683 Aug 01 j 01:33	23°♄27'02			686 Jan 10 j 16:16	0°♄	
	683 Aug 06 j 21:43	0°♄		desc. node	686 Jan 15 j 20:49	6°♄37'28	
	683 Sep 03 j 22:20	0°♄			686 Feb 03 j 18:58	0°♄	
evening max el	683 Sep 09 j 09:08	5°♄26'06	46°44'24		686 Feb 27 j 22:49	0°♄	
	683 Oct 08 j 16:50	0°♄		morning set	686 Mar 09 j 15:12	11°♄59'57	
greatest brilliancy	683 Oct 19 j 20:41	5°♄32'18	-4.9m		686 Mar 24 j 04:31	0°♄	
retrograde	683 Oct 29 j 10:38	7°♄15'28					
evening set	683 Nov 12 j 20:29	3°♄08'17		superior conj	686 Apr 16 j 16:18	28°♄58'18	-0°49'42
	683 Nov 18 j 06:17	30°♄		minimum elong	686 Apr 17 j 01:14	29°♄25'47	0°49'20
inferior conj	683 Nov 18 j 22:15	29°♄35'46	-0°51'03		686 Apr 17 j 12:21	0°♄	
minimum elong	683 Nov 19 j 00:12	29°♄32'48	0°50'26	max. Earth dist.	686 Apr 18 j 14:50	1°♄21'30	1.73317 AU
min. Earth dist.	683 Nov 18 j 22:27	29°♄35'28	0.26380 AU	asc. node	686 May 09 j 00:11	26°♄25'41	
asc. node	683 Nov 22 j 04:50	27°♄38'02			686 May 11 j 22:00	0°♄	

evening rise	686 May 23 j 14:48	14° Π 21'23			688 Dec 03 j 20:37	0° \mathbb{M}		
	686 Jun 05 j 08:58	0° \mathfrak{D}			688 Dec 29 j 18:37	0° \mathfrak{X}		
	686 Jun 29 j 21:06	0° Ω			689 Jan 23 j 19:49	0° \mathfrak{Z}		
	686 Jul 24 j 11:11	0° \mathbb{M}		desc. node	689 Feb 12 j 08:34	23° \mathfrak{Z} 41'11		
	686 Aug 18 j 04:51	0° $\underline{\Omega}$			689 Feb 17 j 13:04	0° \approx		
desc. node	686 Aug 28 j 13:30	12° $\underline{\Omega}$ 29'06			689 Mar 14 j 03:18	0° \mathfrak{H}		
	686 Sep 12 j 04:33	0° \mathbb{M}			689 Apr 07 j 16:37	0° \mathbb{Y}		
	686 Oct 07 j 14:30	0° \mathfrak{X}			689 May 02 j 05:37	0° \mathfrak{B}		
	686 Nov 02 j 22:07	0° \mathfrak{Z}		morning set	689 May 18 j 01:55	19° \mathfrak{B} 23'03		
evening max el	686 Nov 21 j 00:20	19° \mathfrak{Z} 18'53	47°22'00		689 May 26 j 17:54	0° Π		
	686 Dec 01 j 21:53	0° \approx		asc. node	689 Jun 05 j 12:03	11° Π 57'45		
asc. node	686 Dec 19 j 16:51	14° \approx 37'44			689 Jun 20 j 04:29	0° \mathfrak{D}		
greatest brilliancy	686 Dec 31 j 15:14	21° \approx 07'20	-4.9m	max. Earth dist.	689 Jun 21 j 04:57	1° \mathfrak{D} 15'15	1.73506 AU	
retrograde	687 Jan 11 j 00:46	23° \approx 11'43						
evening set	687 Jan 28 j 03:59	17° \approx 26'28		superior conj	689 Jun 23 j 11:06	4° \mathfrak{D} 01'50	0°40'52	
min. Earth dist.	687 Jan 31 j 01:13	15° \approx 39'36	0.27535 AU	minimum elong	689 Jun 23 j 03:48	3° \mathfrak{D} 39'22	0°40'34	
inferior conj	687 Jan 31 j 22:22	15° \approx 06'20	8°19'17		689 Jul 14 j 12:43	0° Ω		
minimum elong	687 Jan 31 j 16:13	15° \approx 16'02	8°18'41	evening rise	689 Jul 29 j 05:52	18° Ω 11'20		
morning rise	687 Feb 04 j 04:43	13° \approx 04'57			689 Aug 07 j 18:57	0° \mathbb{M}		
direct	687 Feb 21 j 14:44	7° \approx 13'39			689 Sep 01 j 00:24	0° $\underline{\Omega}$		
greatest brilliancy	687 Mar 02 j 12:59	8° \approx 42'58	-4.8m	desc. node	689 Sep 25 j 01:28	29° $\underline{\Omega}$ 44'27		
	687 Apr 03 j 07:19	0° \mathfrak{H}			689 Sep 25 j 06:29	0° \mathbb{M}		
desc. node	687 Apr 10 j 06:12	6° \mathfrak{H} 27'44			689 Oct 19 j 14:23	0° \mathfrak{X}		
morning max el	687 Apr 11 j 20:28	7° \mathfrak{H} 59'48	46°04'45		689 Nov 13 j 01:49	0° \mathfrak{Z}		
	687 May 03 j 07:57	0° \mathbb{Y}			689 Dec 07 j 21:06	0° \approx		
	687 May 30 j 10:49	0° \mathfrak{B}			690 Jan 02 j 11:08	0° \mathfrak{H}		
	687 Jun 25 j 10:13	0° Π		asc. node	690 Jan 16 j 04:34	15° \mathfrak{H} 21'07		
	687 Jul 20 j 16:57	0° \mathfrak{D}			690 Jan 30 j 01:36	0° \mathbb{Y}		
asc. node	687 Aug 01 j 09:35	14° \mathfrak{D} 06'06		evening max el	690 Jan 31 j 11:53	1° \mathbb{Y} 26'25	46°30'43	
	687 Aug 14 j 10:49	0° Ω			690 Mar 08 j 09:13	0° \mathfrak{B}		
	687 Sep 07 j 18:36	0° \mathbb{M}		greatest brilliancy	690 Mar 11 j 17:42	1° \mathfrak{B} 26'13	-4.8m	
	687 Oct 01 j 19:26	0° $\underline{\Omega}$		retrograde	690 Mar 22 j 12:32	3° \mathfrak{B} 35'25		
morning set	687 Oct 06 j 08:25	5° $\underline{\Omega}$ 41'38			690 Apr 04 j 21:26	30° \mathfrak{R} \mathbb{Y}		
	687 Oct 25 j 16:34	0° \mathbb{M}		evening set	690 Apr 07 j 21:01	28° \mathbb{Y} 21'28		
				inferior conj	690 Apr 12 j 20:10	25° \mathbb{Y} 18'02	5°25'50	
superior conj	687 Nov 15 j 07:08	25° \mathbb{M} 56'29	0°13'29	minimum elong	690 Apr 13 j 05:33	25° \mathbb{Y} 03'14	5°23'42	
minimum elong	687 Nov 15 j 10:40	26° \mathbb{M} 07'37	0°13'18	min. Earth dist.	690 Apr 12 j 22:06	25° \mathbb{Y} 15'00	0.28800 AU	
behind sun begin	687 Nov 14 j 19:13	25° \mathbb{M} 18'58		morning rise	690 Apr 18 j 14:23	21° \mathbb{Y} 47'56		
behind sun end	687 Nov 16 j 02:07	26° \mathbb{M} 56'15		direct	690 May 04 j 06:35	17° \mathbb{Y} 02'26		
max. Earth dist.	687 Nov 15 j 09:24	26° \mathbb{M} 03'37	1.71054 AU	desc. node	690 May 07 j 18:02	17° \mathbb{Y} 16'21		
	687 Nov 18 j 12:30	0° \mathfrak{X}		greatest brilliancy	690 May 14 j 06:47	18° \mathbb{Y} 51'43	-4.7m	
desc. node	687 Nov 20 j 23:13	3° \mathfrak{X} 04'44			690 Jun 02 j 15:09	0° \mathfrak{B}		
	687 Dec 12 j 08:48	0° \mathfrak{Z}		morning max el	690 Jun 22 j 02:06	16° \mathfrak{B} 50'34	45°44'23	
evening rise	687 Dec 27 j 00:11	18° \mathfrak{Z} 23'12			690 Jul 05 j 07:42	0° Π		
	688 Jan 05 j 06:32	0° \approx			690 Aug 01 j 23:36	0° \mathfrak{D}		
	688 Jan 29 j 07:06	0° \mathfrak{H}			690 Aug 27 j 21:14	0° Ω		
	688 Feb 22 j 12:43	0° \mathbb{Y}		asc. node	690 Aug 28 j 21:30	1° Ω 11'55		
asc. node	688 Mar 13 j 02:25	23° \mathbb{Y} 56'31			690 Sep 21 j 19:19	0° \mathbb{M}		
	688 Mar 18 j 02:15	0° \mathfrak{B}			690 Oct 16 j 03:13	0° $\underline{\Omega}$		
	688 Apr 12 j 03:24	0° Π			690 Nov 09 j 03:28	0° \mathbb{M}		
	688 May 07 j 22:10	0° \mathfrak{D}			690 Dec 03 j 00:39	0° \mathfrak{X}		
	688 Jun 04 j 00:40	0° Ω		desc. node	690 Dec 18 j 10:59	19° \mathfrak{X} 23'59		
evening max el	688 Jun 24 j 15:41	20° Ω 56'41	45°33'16	morning set	690 Dec 21 j 02:44	22° \mathfrak{X} 44'18		
desc. node	688 Jul 02 j 15:49	28° Ω 20'14			690 Dec 26 j 21:28	0° \mathfrak{Z}		
	688 Jul 04 j 13:09	0° \mathbb{M}			691 Jan 19 j 19:21	0° \approx		
greatest brilliancy	688 Aug 03 j 02:45	19° \mathbb{M} 09'41	-4.8m					
retrograde	688 Aug 12 j 11:59	20° \mathbb{M} 45'38		superior conj	691 Jan 31 j 19:06	15° \approx 00'09	-1°20'51	
evening set	688 Aug 30 j 12:23	14° \mathbb{M} 44'34		minimum elong	691 Jan 31 j 11:46	14° \approx 37'12	1°20'44	
inferior conj	688 Sep 02 j 14:06	12° \mathbb{M} 53'01	-8°43'47	max. Earth dist.	691 Feb 04 j 19:39	20° \approx 01'48	1.71788 AU	
minimum elong	688 Sep 02 j 16:37	12° \mathbb{M} 49'10	8°43'42		691 Feb 12 j 19:22	0° \mathfrak{H}		
min. Earth dist.	688 Sep 03 j 08:07	12° \mathbb{M} 25'25	0.27964 AU		691 Mar 08 j 22:36	0° \mathbb{Y}		
morning rise	688 Sep 05 j 20:38	10° \mathbb{M} 53'48		evening rise	691 Mar 12 j 16:52	4° \mathbb{Y} 39'26		
direct	688 Sep 23 j 17:52	4° \mathbb{M} 50'00			691 Apr 02 j 06:02	0° \mathfrak{B}		
greatest brilliancy	688 Oct 04 j 21:53	7° \mathbb{M} 08'48	-4.9m	asc. node	691 Apr 10 j 14:25	10° \mathfrak{B} 14'53		
asc. node	688 Oct 23 j 19:03	18° \mathbb{M} 54'37			691 Apr 26 j 18:27	0° Π		
	688 Nov 05 j 07:52	0° $\underline{\Omega}$			691 May 21 j 12:39	0° \mathfrak{D}		
morning max el	688 Nov 13 j 09:58	7° $\underline{\Omega}$ 58'58	46°50'46		691 Jun 15 j 14:24	0° Ω		

	691 Jul 11 j 03:46	0°♍			693 Dec 17 j 01:12	0°♊
desc. node	691 Jul 31 j 03:33	22°♍49'55			694 Jan 10 j 03:51	0°♊
	691 Aug 06 j 13:38	0°♌		desc. node	694 Jan 14 j 22:44	5°♊57'32
	691 Sep 03 j 20:23	0°♌			694 Feb 03 j 06:18	0°♊
evening max el	691 Sep 06 j 22:56	3°♌04'19	46°41'46		694 Feb 27 j 09:55	0°♊
	691 Oct 10 j 10:48	0°♊		morning set	694 Mar 07 j 05:16	9°♊40'43
greatest brilliancy	691 Oct 17 j 09:58	3°♊04'27	-4.9m		694 Mar 23 j 15:26	0°♊
retrograde	691 Oct 26 j 22:22	4°♊45'46				
evening set	691 Nov 10 j 09:56	0°♊37'25		superior conj	694 Apr 14 j 09:06	26°♊49'04 -0°52'20
	691 Nov 11 j 13:15	30°♌		minimum elong	694 Apr 14 j 18:17	27°♊17'22 0°51'59
inferior conj	691 Nov 16 j 10:14	27°♌06'43	-1°15'46	max. Earth dist.	694 Apr 16 j 09:25	29°♊17'48 1.73277 AU
minimum elong	691 Nov 16 j 13:07	27°♌02'19	1°14'49		694 Apr 16 j 23:08	0°♊
min. Earth dist.	691 Nov 16 j 12:07	27°♌03'52	0.26389 AU	asc. node	694 May 08 j 02:17	25°♊59'05
asc. node	691 Nov 21 j 06:59	24°♌14'12			694 May 11 j 08:46	0°♊
morning rise	691 Nov 22 j 16:17	23°♌29'03		evening rise	694 May 21 j 09:32	12°♊18'32
direct	691 Dec 06 j 19:49	19°♌30'26			694 Jun 04 j 19:51	0°♊
greatest brilliancy	691 Dec 17 j 00:14	21°♌29'12	-4.9m		694 Jun 29 j 08:16	0°♊
	691 Dec 31 j 23:40	0°♊			694 Jul 23 j 22:47	0°♊
morning max el	692 Jan 26 j 06:24	22°♊29'18	46°47'54		694 Aug 17 j 17:06	0°♊
	692 Feb 02 j 14:04	0°♊		desc. node	694 Aug 27 j 15:34	11°♊57'26
	692 Feb 29 j 22:36	0°♊			694 Sep 11 j 17:47	0°♌
desc. node	692 Mar 11 j 20:35	12°♊28'55			694 Oct 07 j 05:23	0°♊
	692 Mar 26 j 22:19	0°♊			694 Nov 02 j 16:19	0°♊
	692 Apr 21 j 08:19	0°♊		evening max el	694 Nov 18 j 13:43	16°♊52'46 47°22'19
	692 May 16 j 10:56	0°♊			694 Dec 02 j 02:49	0°♊
	692 Jun 10 j 07:58	0°♊		asc. node	694 Dec 18 j 18:48	13°♊13'01
asc. node	692 Jul 02 j 23:49	27°♊34'43		greatest brilliancy	694 Dec 29 j 06:10	18°♊43'51 -4.9m
	692 Jul 04 j 23:20	0°♊		retrograde	695 Jan 08 j 15:04	20°♊48'07
morning set	692 Jul 24 j 15:00	24°♊08'46		evening set	695 Jan 25 j 14:41	15°♊08'14
	692 Jul 29 j 08:48	0°♊		min. Earth dist.	695 Jan 28 j 14:54	13°♊17'14 0.27472 AU
	692 Aug 22 j 13:06	0°♊		inferior conj	695 Jan 29 j 12:23	12°♊43'34 8°12'10
max. Earth dist.	692 Aug 26 j 16:36	5°♊09'55	1.72221 AU	minimum elong	695 Jan 29 j 05:31	12°♊54'20 8°11'26
				morning rise	695 Feb 01 j 20:38	10°♊39'33
superior conj	692 Aug 30 j 09:16	9°♊46'18	1°24'28	direct	695 Feb 19 j 03:31	4°♊51'37
minimum elong	692 Aug 30 j 10:42	9°♊50'45	1°24'27	greatest brilliancy	695 Feb 28 j 02:39	6°♊21'42 -4.8m
	692 Sep 15 j 13:55	0°♊			695 Apr 03 j 10:11	0°♊
evening rise	692 Oct 07 j 19:17	27°♊48'54		desc. node	695 Apr 09 j 08:19	5°♊36'07
	692 Oct 09 j 13:10	0°♌		morning max el	695 Apr 09 j 10:46	5°♊42'03 46°06'21
desc. node	692 Oct 22 j 13:27	16°♌17'40			695 May 03 j 01:02	0°♊
	692 Nov 02 j 12:15	0°♊			695 May 30 j 00:46	0°♊
	692 Nov 26 j 12:14	0°♊			695 Jun 24 j 22:44	0°♊
	692 Dec 20 j 14:37	0°♊			695 Jul 20 j 04:41	0°♊
	693 Jan 13 j 22:33	0°♊		asc. node	695 Jul 31 j 11:41	13°♊37'34
	693 Feb 07 j 17:39	0°♊			695 Aug 13 j 22:11	0°♊
asc. node	693 Feb 12 j 16:32	5°♊53'28			695 Sep 07 j 05:48	0°♊
	693 Mar 05 j 09:50	0°♊			695 Oct 01 j 06:35	0°♊
	693 Apr 01 j 21:24	0°♊		morning set	695 Oct 03 j 22:11	3°♊19'19
evening max el	693 Apr 12 j 08:11	10°♊27'09	45°27'57		695 Oct 25 j 03:43	0°♌
	693 May 05 j 06:59	0°♊				
greatest brilliancy	693 May 20 j 02:18	8°♊11'08	-4.7m	superior conj	695 Nov 12 j 17:22	23°♌22'20 0°17'23
retrograde	693 May 30 j 21:58	10°♊17'13		minimum elong	695 Nov 12 j 21:52	23°♌36'29 0°17'09
desc. node	693 Jun 04 j 05:59	9°♊55'09		max. Earth dist.	695 Nov 12 j 18:09	23°♌24'46 1.71066 AU
evening set	693 Jun 15 j 04:02	5°♊51'09			695 Nov 17 j 23:42	0°♊
inferior conj	693 Jun 21 j 10:04	2°♊06'57	-3°53'11	desc. node	695 Nov 20 j 01:13	2°♊35'49
minimum elong	693 Jun 21 j 02:15	2°♊19'09	3°51'09		695 Dec 11 j 20:04	0°♊
min. Earth dist.	693 Jun 21 j 11:19	2°♊04'59	0.28948 AU	evening rise	695 Dec 24 j 10:00	15°♊48'06
	693 Jun 24 j 20:12	30°♌			696 Jan 04 j 17:50	0°♊
morning rise	693 Jun 27 j 00:13	28°♊43'48			696 Jan 28 j 18:29	0°♊
direct	693 Jul 13 j 02:05	23°♊49'39			696 Feb 22 j 00:17	0°♊
greatest brilliancy	693 Jul 23 j 16:36	25°♊50'15	-4.7m	asc. node	696 Mar 12 j 04:34	23°♊27'04
	693 Aug 01 j 09:08	0°♊			696 Mar 17 j 14:12	0°♊
morning max el	693 Aug 31 j 08:43	24°♊22'56	46°08'55		696 Apr 11 j 16:04	0°♊
	693 Sep 05 j 23:59	0°♊			696 May 07 j 12:16	0°♊
asc. node	693 Sep 25 j 09:26	20°♊42'47			696 Jun 03 j 18:07	0°♊
	693 Oct 03 j 15:03	0°♊		evening max el	696 Jun 22 j 06:58	18°♊43'37 45°31'51
	693 Oct 29 j 04:03	0°♊		desc. node	696 Jul 01 j 17:48	27°♊23'17
	693 Nov 22 j 19:20	0°♌			696 Jul 04 j 18:46	0°♊

greatest brilliancy	696 Jul 31 j 14:30	16° \cap 50'53	-4.8m	superior conj	699 Jan 29 j 06:02	12° \approx 29'07	-1°19'29
retrograde	696 Aug 10 j 02:18	18° \cap 28'31		minimum elong	699 Jan 28 j 21:53	12° \approx 03'40	1°19'20
evening set	696 Aug 28 j 02:34	12° \cap 26'48		max. Earth dist.	699 Feb 02 j 07:57	17° \approx 35'10	1.71734 AU
inferior conj	696 Aug 31 j 04:26	10° \cap 34'52	-8°45'19		699 Feb 12 j 06:34	0° X	
minimum elong	696 Aug 31 j 06:06	10° \cap 32'19	8°45'16		699 Mar 08 j 09:46	0° Υ	
min. Earth dist.	696 Aug 31 j 21:21	10° \cap 08'56	0.28028 AU	evening rise	699 Mar 10 j 06:13	2° Υ 17'39	
morning rise	696 Sep 03 j 09:27	8° \cap 37'52			699 Apr 01 j 17:15	0° B	
direct	696 Sep 21 j 09:32	2° \cap 31'02		asc. node	699 Apr 09 j 16:27	9° B 46'36	
greatest brilliancy	696 Oct 02 j 12:09	4° \cap 48'47	-4.9m		699 Apr 26 j 05:51	0° \cap	
asc. node	696 Oct 22 j 21:09	17° \cap 45'43			699 May 21 j 00:27	0° D	
	696 Nov 05 j 09:23	0° D			699 Jun 15 j 02:56	0° \cap	
morning max el	696 Nov 11 j 01:33	5° D 39'19	46°49'43		699 Jul 10 j 17:36	0° \cap	
	696 Dec 03 j 13:54	0° \cap		desc. node	699 Jul 30 j 05:43	22° \cap 12'22	
	696 Dec 29 j 09:12	0° Z			699 Aug 06 j 06:02	0° D	
	697 Jan 23 j 09:03	0° B			699 Sep 03 j 19:27	0° \cap	
desc. node	697 Feb 11 j 10:45	23° B 09'43		evening max el	699 Sep 04 j 11:59	0° \cap .40'30	46°39'11
	697 Feb 17 j 01:27	0° \approx			699 Oct 13 j 06:44	0° Z	
	697 Mar 13 j 15:07	0° X		greatest brilliancy	699 Oct 14 j 23:42	0° Z 37'19	-4.9m
	697 Apr 07 j 04:02	0° Υ		retrograde	699 Oct 24 j 09:47	2° Z 16'38	
	697 May 01 j 16:47	0° B			699 Nov 04 j 01:21	30° \cap	
morning set	697 May 15 j 20:05	17° B 18'00		evening set	699 Nov 07 j 23:45	28° \cap .06'33	
	697 May 26 j 04:53	0° \cap		inferior conj	699 Nov 13 j 22:29	24° \cap .38'05	-1°39'56
asc. node	697 Jun 04 j 14:02	11° \cap .30'20		minimum elong	699 Nov 14 j 02:16	24° \cap .32'20	1°38'43
max. Earth dist.	697 Jun 19 j 03:55	29° \cap .24'44	1.73523 AU	min. Earth dist.	699 Nov 14 j 02:15	24° \cap .32'21	0.26409 AU
	697 Jun 19 j 15:23	0° D		morning rise	699 Nov 20 j 04:35	20° \cap .59'54	
				asc. node	699 Nov 20 j 08:55	20° \cap .54'13	
superior conj	697 Jun 21 j 05:46	1° D 58'04	0°38'07	direct	699 Dec 04 j 07:57	17° \cap .01'21	
minimum elong	697 Jun 20 j 22:50	1° D 36'44	0°37'49	greatest brilliancy	699 Dec 14 j 14:48	19° \cap .01'49	-4.9m
	697 Jul 13 j 23:38	0° \cap			700 Jan 01 j 19:00	0° Z	
evening rise	697 Jul 27 j 00:15	16° \cap .05'46		morning max el	700 Jan 23 j 18:40	20° Z .00'37	46°48'49
	697 Aug 07 j 06:01	0° \cap			700 Feb 02 j 10:37	0° B	
	697 Aug 31 j 11:45	0° D			700 Feb 29 j 14:23	0° \approx	
desc. node	697 Sep 24 j 03:36	29° D .14'49		desc. node	700 Mar 10 j 22:39	11° \approx 52'19	
	697 Sep 24 j 18:14	0° \cap			700 Mar 26 j 12:01	0° X	
	697 Oct 19 j 02:38	0° Z			700 Apr 20 j 20:51	0° Υ	
	697 Nov 12 j 14:43	0° B			700 May 15 j 22:44	0° B	
	697 Dec 07 j 11:03	0° \approx			700 Jun 09 j 19:18	0° \cap	
	698 Jan 02 j 03:10	0° X		asc. node	700 Jul 02 j 01:53	27° \cap .07'11	
asc. node	698 Jan 15 j 06:41	14° X 37'41			700 Jul 04 j 10:24	0° D	
evening max el	698 Jan 29 j 04:01	29° X 11'26	46°33'21	morning set	700 Jul 22 j 08:23	22° D .00'33	
	698 Jan 29 j 23:25	0° Υ			700 Jul 28 j 19:46	0° \cap	
greatest brilliancy	698 Mar 09 j 10:32	29° Υ 14'36	-4.8m		700 Aug 22 j 00:04	0° \cap	
	698 Mar 11 j 15:00	0° B		max. Earth dist.	700 Aug 24 j 07:45	2° \cap .53'25	1.72275 AU
retrograde	698 Mar 20 j 05:14	1° B 23'20					
	698 Mar 28 j 11:02	30° \cap Υ		superior conj	700 Aug 28 j 01:42	7° \cap .33'43	1°24'38
evening set	698 Apr 05 j 16:00	26° Υ 05'44		minimum elong	700 Aug 28 j 02:22	7° \cap .35'47	1°24'38
inferior conj	698 Apr 10 j 12:22	23° Υ 06'01	5°41'17		700 Sep 15 j 00:57	0° D	
minimum elong	698 Apr 10 j 21:53	22° Υ 50'58	5°39'11	evening rise	700 Oct 05 j 08:21	25° D .24'44	
min. Earth dist.	698 Apr 10 j 13:38	23° Υ 04'00	0.28776 AU		700 Oct 09 j 00:19	0° \cap	
morning rise	698 Apr 16 j 04:08	19° Υ 39'16		desc. node	700 Oct 21 j 15:27	15° \cap .48'45	
direct	698 May 01 j 22:51	14° Υ 51'03			700 Nov 01 j 23:34	0° Z	
desc. node	698 May 06 j 20:05	15° Υ 18'14			700 Nov 25 j 23:45	0° B	
greatest brilliancy	698 May 11 j 20:54	16° Υ 38'39	-4.7m		700 Dec 20 j 02:27	0° \approx	
	698 Jun 03 j 02:34	0° B			701 Jan 13 j 10:51	0° X	
morning max el	698 Jun 19 j 18:13	14° B 40'37	45°44'19		701 Feb 07 j 06:45	0° Υ	
	698 Jul 05 j 02:05	0° \cap		asc. node	701 Feb 11 j 18:39	5° Υ 20'13	
	698 Aug 01 j 14:03	0° D			701 Mar 05 j 00:38	0° B	
	698 Aug 27 j 10:03	0° \cap			701 Apr 01 j 16:37	0° \cap	
asc. node	698 Aug 27 j 23:39	0° \cap .40'22		evening max el	701 Apr 09 j 22:54	8° \cap .13'00	45°29'17
	698 Sep 21 j 07:21	0° \cap			701 May 06 j 03:52	0° D	
	698 Oct 15 j 14:52	0° D		greatest brilliancy	701 May 17 j 17:58	6° D .01'16	-4.7m
	698 Nov 08 j 14:58	0° \cap		retrograde	701 May 28 j 14:05	8° D .08'19	
	698 Dec 02 j 12:04	0° Z		desc. node	701 Jun 03 j 07:58	7° D .29'17	
desc. node	698 Dec 17 j 12:58	18° Z 54'33		evening set	701 Jun 12 j 19:02	3° D .43'17	
morning set	698 Dec 18 j 12:22	20° Z .08'06		inferior conj	701 Jun 19 j 02:21	29° \cap .57'37	-3°35'19
	698 Dec 26 j 08:48	0° B		minimum elong	701 Jun 18 j 19:01	0° D .09'04	3°33'21
	699 Jan 19 j 06:37	0° \approx		min. Earth dist.	701 Jun 19 j 03:50	29° \cap .55'18	0.28956 AU

	701 Jun 19 j 00:50	30°♈♈			704 Jan 04 j 04:55	0°♊	
morning rise	701 Jun 24 j 18:42	26°♈31'22			704 Jan 28 j 05:37	0°♈	
direct	701 Jul 10 j 17:49	21°♈39'55			704 Feb 21 j 11:35	0°♈	
greatest brilliancy	701 Jul 21 j 09:20	23°♈41'10 -4.7m	asc. node		704 Mar 11 j 06:35	22°♈58'00	
	701 Aug 02 j 13:28	0°♈			704 Mar 17 j 01:53	0°♈	
morning max el	701 Aug 29 j 00:06	22°♈09'11 46°07'37			704 Apr 11 j 04:32	0°♈	
	701 Sep 05 j 19:57	0°♈			704 May 07 j 02:18	0°♈	
asc. node	701 Sep 24 j 11:26	20°♈03'22			704 Jun 03 j 11:48	0°♈	
	701 Oct 03 j 06:11	0°♈	evening max el		704 Jun 19 j 22:34	16°♈31'39 45°30'22	
	701 Oct 28 j 17:21	0°♈	desc. node		704 Jun 30 j 20:00	26°♈25'50	
	701 Nov 22 j 07:44	0°♈			704 Jul 05 j 02:34	0°♈	
	701 Dec 16 j 13:04	0°♈	greatest brilliancy		704 Jul 29 j 02:38	14°♈32'53 -4.8m	
	702 Jan 09 j 15:23	0°♈	retrograde		704 Aug 07 j 16:13	16°♈11'34	
desc. node	702 Jan 14 j 00:56	5°♈28'40	evening set		704 Aug 25 j 16:16	10°♈10'13	
	702 Feb 02 j 17:35	0°♈	inferior conj		704 Aug 28 j 18:41	8°♈17'14 -8°46'01	
	702 Feb 26 j 21:01	0°♈	minimum elong		704 Aug 28 j 19:28	8°♈16'00 8°46'01	
morning set	702 Mar 04 j 18:57	7°♈20'06	min. Earth dist.		704 Aug 29 j 10:33	7°♈52'51 0.28085 AU	
	702 Mar 23 j 02:24	0°♈	morning rise		704 Aug 31 j 22:31	6°♈21'49	
			direct		704 Sep 19 j 01:04	0°♈12'49	
superior conj	702 Apr 12 j 01:23	24°♈37'54 -0°54'56	greatest brilliancy		704 Sep 30 j 02:03	2°♈29'01 -4.9m	
minimum elong	702 Apr 12 j 10:48	25°♈06'56 0°54'36	asc. node		704 Oct 21 j 23:10	16°♈39'12	
max. Earth dist.	702 Apr 14 j 02:15	27°♈08'25 1.73241 AU			704 Nov 05 j 09:22	0°♈	
	702 Apr 16 j 10:00	0°♈	morning max el		704 Nov 08 j 16:11	3°♈18'11 46°48'38	
asc. node	702 May 07 j 04:15	25°♈31'46			704 Dec 03 j 06:33	0°♈	
	702 May 10 j 19:38	0°♈			704 Dec 28 j 23:19	0°♈	
evening rise	702 May 19 j 03:44	10°♈13'48			705 Jan 22 j 21:52	0°♈	
	702 Jun 04 j 06:50	0°♈	desc. node		705 Feb 10 j 12:48	22°♈38'56	
	702 Jun 28 j 19:29	0°♈			705 Feb 16 j 13:27	0°♈	
	702 Jul 23 j 10:25	0°♈			705 Mar 13 j 02:33	0°♈	
	702 Aug 17 j 05:24	0°♈			705 Apr 06 j 15:05	0°♈	
desc. node	702 Aug 26 j 17:41	11°♈25'47			705 May 01 j 03:33	0°♈	
	702 Sep 11 j 07:05	0°♈	morning set		705 May 13 j 14:18	15°♈14'11	
	702 Oct 06 j 20:24	0°♈			705 May 25 j 15:31	0°♈	
	702 Nov 02 j 10:50	0°♈	asc. node		705 Jun 03 j 16:10	11°♈04'21	
evening max el	702 Nov 16 j 04:14	14°♈30'08 47°22'40	max. Earth dist.		705 Jun 17 j 01:21	27°♈30'28 1.73545 AU	
	702 Dec 02 j 09:32	0°♈					
asc. node	702 Dec 17 j 20:55	11°♈46'32	superior conj		705 Jun 19 j 00:22	29°♈55'01 0°35'19	
greatest brilliancy	702 Dec 26 j 20:31	16°♈20'24 -4.9m	minimum elong		705 Jun 18 j 17:50	29°♈34'57 0°35'01	
retrograde	703 Jan 06 j 05:54	18°♈25'20			705 Jun 19 j 01:59	0°♈	
evening set	703 Jan 23 j 01:18	12°♈50'51			705 Jul 13 j 10:18	0°♈	
min. Earth dist.	703 Jan 26 j 04:17	10°♈56'05 0.27411 AU	evening rise		705 Jul 24 j 18:28	14°♈00'27	
inferior conj	703 Jan 27 j 02:25	10°♈21'29 8°04'13			705 Aug 06 j 16:51	0°♈	
minimum elong	703 Jan 26 j 18:55	10°♈33'13 8°03'17			705 Aug 30 j 22:52	0°♈	
morning rise	703 Jan 30 j 12:50	8°♈14'35	desc. node		705 Sep 23 j 05:34	28°♈45'30	
direct	703 Feb 16 j 16:51	2°♈30'23			705 Sep 24 j 05:43	0°♈	
greatest brilliancy	703 Feb 25 j 15:53	4°♈00'45 -4.8m			705 Oct 18 j 14:35	0°♈	
	703 Apr 03 j 11:22	0°♈			705 Nov 12 j 03:20	0°♈	
morning max el	703 Apr 07 j 01:54	3°♈26'53 46°07'40			705 Dec 07 j 00:45	0°♈	
desc. node	703 Apr 08 j 10:21	4°♈45'53			706 Jan 01 j 19:03	0°♈	
	703 May 02 j 17:40	0°♈	asc. node		706 Jan 14 j 08:51	13°♈54'58	
	703 May 29 j 14:32	0°♈	evening max el		706 Jan 26 j 19:41	26°♈56'11 46°35'56	
	703 Jun 24 j 11:08	0°♈			706 Jan 29 j 21:37	0°♈	
	703 Jul 19 j 16:21	0°♈	greatest brilliancy		706 Mar 07 j 04:00	27°♈04'56 -4.8m	
asc. node	703 Jul 30 j 13:50	13°♈09'30	retrograde		706 Mar 17 j 21:32	29°♈12'35	
	703 Aug 13 j 09:26	0°♈	evening set		706 Apr 03 j 11:05	23°♈51'27	
	703 Sep 06 j 16:50	0°♈	inferior conj		706 Apr 08 j 04:40	20°♈55'32 5°56'11	
	703 Sep 30 j 17:32	0°♈	minimum elong		706 Apr 08 j 14:16	20°♈40'20 5°54'10	
morning set	703 Oct 01 j 12:01	0°♈57'54	min. Earth dist.		706 Apr 08 j 05:31	20°♈54'11 0.28750 AU	
	703 Oct 24 j 14:41	0°♈	morning rise		706 Apr 13 j 17:48	17°♈32'11	
			direct		706 Apr 29 j 14:52	12°♈41'13	
superior conj	703 Nov 10 j 03:48	20°♈49'25 0°21'12	desc. node		706 May 05 j 22:04	13°♈25'52	
minimum elong	703 Nov 10 j 09:13	21°♈06'26 0°20'57	greatest brilliancy		706 May 09 j 11:28	14°♈27'28 -4.7m	
max. Earth dist.	703 Nov 10 j 03:12	20°♈47'32 1.71078 AU			706 Jun 03 j 10:22	0°♈	
	703 Nov 17 j 10:44	0°♈	morning max el		706 Jun 17 j 09:25	12°♈29'39 45°44'10	
desc. node	703 Nov 19 j 03:16	2°♈07'33			706 Jul 04 j 19:34	0°♈	
	703 Dec 11 j 07:07	0°♈			706 Aug 01 j 04:00	0°♈	
evening rise	703 Dec 21 j 19:58	13°♈14'05			706 Aug 26 j 22:31	0°♈	

asc. node	706 Aug 27 j 01:39	0°Ω09'20		709 May 07 j 07:54	0°☿	
	706 Sep 20 j 19:06	0°♊	greatest brilliancy	709 May 15 j 09:23	3°☿52'19	-4.7m
	706 Oct 15 j 02:16	0°♈	retrograde	709 May 26 j 06:50	6°☿00'49	
	706 Nov 08 j 02:09	0°♊	desc. node	709 Jun 02 j 10:12	5°☿00'08	
	706 Dec 01 j 23:07	0°♊	evening set	709 Jun 10 j 10:25	1°☿36'32	
morning set	706 Dec 15 j 21:58	17°♊32'52		709 Jun 13 j 05:51	30°♊	
desc. node	706 Dec 16 j 15:08	18°♊26'52	inferior conj	709 Jun 16 j 18:48	27°♊49'33	-3°17'12
	706 Dec 25 j 19:45	0°♊	minimum elong	709 Jun 16 j 11:58	28°♊00'10	3°15'20
	707 Jan 18 j 17:30	0°♊	min. Earth dist.	709 Jun 16 j 20:13	27°♊47'19	0.28963 AU
			morning rise	709 Jun 22 j 13:16	24°♊20'32	
superior conj	707 Jan 26 j 16:57	9°♊59'12 -1°17'58	direct	709 Jul 08 j 10:09	19°♊31'32	
minimum elong	707 Jan 26 j 08:04	9°♊31'23 1°17'47	greatest brilliancy	709 Jul 19 j 01:50	21°♊33'11	-4.7m
max. Earth dist.	707 Jan 30 j 18:44	15°♊04'56 1.71681 AU		709 Aug 03 j 09:27	0°☿	
	707 Feb 11 j 17:25	0°♊	morning max el	709 Aug 26 j 16:18	19°☿58'39	46°06'16
evening rise	707 Mar 07 j 19:33	29°♊56'45		709 Sep 05 j 14:58	0°♊	
	707 Mar 07 j 20:36	0°♊	asc. node	709 Sep 23 j 13:31	19°♊25'26	
	707 Apr 01 j 04:07	0°♊		709 Oct 02 j 20:53	0°♊	
asc. node	707 Apr 08 j 18:29	9°♊19'26		709 Oct 28 j 06:24	0°♈	
	707 Apr 25 j 16:53	0°♊		709 Nov 21 j 19:58	0°♊	
	707 May 20 j 11:53	0°☿		709 Dec 16 j 00:51	0°♊	
	707 Jun 14 j 15:08	0°♊		710 Jan 09 j 02:51	0°♊	
	707 Jul 10 j 07:13	0°♊	desc. node	710 Jan 13 j 03:01	4°♊59'39	
desc. node	707 Jul 29 j 07:45	21°♊35'00		710 Feb 02 j 04:48	0°♊	
	707 Aug 05 j 22:27	0°♈		710 Feb 26 j 08:01	0°♊	
evening max el	707 Sep 02 j 00:06	28°♈15'05 46°36'24	morning set	710 Mar 02 j 08:16	4°♊58'38	
	707 Sep 03 j 19:21	0°♊		710 Mar 22 j 13:12	0°♊	
greatest brilliancy	707 Oct 12 j 13:21	28°♊10'15 -4.9m				
retrograde	707 Oct 21 j 21:01	29°♊47'46	superior conj	710 Apr 09 j 17:32	22°♊26'41 -0°57'29	
evening set	707 Nov 05 j 13:32	25°♊35'19	minimum elong	710 Apr 10 j 03:08	22°♊56'16 0°57'08	
inferior conj	707 Nov 11 j 10:32	22°♊09'38 -2°04'01	max. Earth dist.	710 Apr 11 j 20:48	25°♊04'40 1.73204 AU	
minimum elong	707 Nov 11 j 15:11	22°♊02'33 2°02'33		710 Apr 15 j 20:43	0°♊	
min. Earth dist.	707 Nov 11 j 16:21	22°♊00'47 0.26430 AU	asc. node	710 May 06 j 06:25	25°♊05'27	
morning rise	707 Nov 17 j 16:30	18°♊31'23		710 May 10 j 06:22	0°♊	
asc. node	707 Nov 19 j 11:04	17°♊37'36	evening rise	710 May 16 j 22:05	8°♊09'58	
direct	707 Dec 01 j 19:44	14°♊32'10		710 Jun 03 j 17:41	0°☿	
greatest brilliancy	707 Dec 12 j 05:35	16°♊35'08 -4.9m		710 Jun 28 j 06:35	0°♊	
	708 Jan 02 j 09:11	0°♊		710 Jul 22 j 21:56	0°♊	
morning max el	708 Jan 21 j 07:03	17°♊32'55 46°49'54		710 Aug 16 j 17:34	0°♈	
	708 Feb 02 j 06:11	0°♊	desc. node	710 Aug 25 j 19:42	10°♈54'18	
	708 Feb 29 j 05:33	0°♊		710 Sep 10 j 20:20	0°♊	
desc. node	708 Mar 10 j 00:41	11°♊16'58		710 Oct 06 j 11:29	0°♊	
	708 Mar 26 j 01:13	0°♊		710 Nov 02 j 05:49	0°♊	
	708 Apr 20 j 08:58	0°♊	evening max el	710 Nov 13 j 19:31	12°♊09'21 47°22'37	
	708 May 15 j 10:09	0°♊		710 Dec 02 j 18:58	0°♊	
	708 Jun 09 j 06:17	0°♊	asc. node	710 Dec 16 j 23:04	10°♊16'20	
asc. node	708 Jul 01 j 04:04	26°♊41'02	greatest brilliancy	710 Dec 24 j 10:17	13°♊55'17 -4.9m	
	708 Jul 03 j 21:07	0°☿	retrograde	711 Jan 03 j 20:41	16°♊00'56	
morning set	708 Jul 20 j 02:05	19°☿54'18	evening set	711 Jan 20 j 11:29	10°♊32'11	
	708 Jul 28 j 06:24	0°♊	min. Earth dist.	711 Jan 23 j 17:16	8°♊33'30 0.27347 AU	
	708 Aug 21 j 10:44	0°♊	inferior conj	711 Jan 24 j 16:08	7°♊57'51 7°55'12	
max. Earth dist.	708 Aug 22 j 01:39	0°♊46'24 1.72335 AU	minimum elong	711 Jan 24 j 08:03	8°♊10'26 7°54'07	
			morning rise	711 Jan 28 j 04:59	5°♊47'41	
superior conj	708 Aug 25 j 18:18	5°♊22'30 1°24'40	direct	711 Feb 14 j 06:24	0°♊07'49	
minimum elong	708 Aug 25 j 18:13	5°♊22'16 1°24'41	greatest brilliancy	711 Feb 23 j 04:29	1°♊37'58 -4.8m	
	708 Sep 14 j 11:45	0°♈		711 Apr 03 j 11:30	0°♊	
evening rise	708 Oct 02 j 21:27	23°♈01'20	morning max el	711 Apr 04 j 17:00	1°♊11'16 46°09'07	
	708 Oct 08 j 11:17	0°♊	desc. node	711 Apr 07 j 12:27	3°♊56'24	
desc. node	708 Oct 20 j 17:32	15°♊20'36		711 May 02 j 10:00	0°♊	
	708 Nov 01 j 10:44	0°♊		711 May 29 j 04:10	0°♊	
	708 Nov 25 j 11:08	0°♊		711 Jun 23 j 23:26	0°♊	
	708 Dec 19 j 14:07	0°♊		711 Jul 19 j 03:57	0°☿	
	709 Jan 12 j 22:57	0°♊	asc. node	711 Jul 29 j 15:47	12°☿40'53	
	709 Feb 06 j 19:41	0°♊		711 Aug 12 j 20:38	0°♊	
asc. node	709 Feb 10 j 20:39	4°♊47'16		711 Sep 06 j 03:50	0°♊	
	709 Mar 04 j 15:19	0°♊	morning set	711 Sep 29 j 02:30	28°♊38'39	
	709 Apr 01 j 12:02	0°♊		711 Sep 30 j 04:28	0°♈	
evening max el	709 Apr 07 j 14:16	6°♊01'21 45°30'46		711 Oct 24 j 01:39	0°♊	

superior conj	711 Nov 07 j 14:49	18° \mathbb{M} 18'24	0°24'56	morning rise	714 Apr 11 j 07:14	15° Υ 24'00	
minimum elong	711 Nov 07 j 21:04	18° \mathbb{M} 38'04	0°24'39	direct	714 Apr 27 j 06:20	10° Υ 29'52	
max. Earth dist.	711 Nov 07 j 11:26	18° \mathbb{M} 07'45	1.71094 AU	desc. node	714 May 05 j 00:15	11° Υ 36'21	
	711 Nov 16 j 21:45	0° \mathcal{A}		greatest brilliancy	714 May 07 j 02:38	12° Υ 15'27	-4.7m
desc. node	711 Nov 18 j 05:27	1° \mathcal{A} 39'43			714 Jun 03 j 16:26	0° \mathcal{B}	
	711 Dec 10 j 18:13	0° \mathcal{B}		morning max el	714 Jun 15 j 00:11	10° \mathcal{B} 16'22	45°44'13
evening rise	711 Dec 19 j 05:58	10° \mathcal{B} 39'54			714 Jul 04 j 13:05	0° \mathbb{I}	
	712 Jan 03 j 16:05	0° \approx			714 Jul 31 j 18:07	0° \mathcal{C}	
	712 Jan 27 j 16:54	0° \mathcal{H}		asc. node	714 Aug 26 j 03:44	29° \mathcal{C} 37'50	
	712 Feb 20 j 23:05	0° Υ			714 Aug 26 j 11:11	0° \mathcal{Q}	
asc. node	712 Mar 10 j 08:38	22° Υ 28'27			714 Sep 20 j 07:04	0° \mathbb{P}	
	712 Mar 16 j 13:48	0° \mathcal{B}			714 Oct 14 j 13:53	0° \mathcal{L}	
	712 Apr 10 j 17:14	0° \mathbb{I}			714 Nov 07 j 13:35	0° \mathbb{M}	
	712 May 06 j 16:38	0° \mathcal{C}			714 Dec 01 j 10:26	0° \mathcal{A}	
	712 Jun 03 j 06:03	0° \mathcal{Q}		morning set	714 Dec 13 j 07:52	14° \mathcal{A} 57'41	
evening max el	712 Jun 17 j 13:46	14° \mathcal{Q} 18'30	45°28'59	desc. node	714 Dec 15 j 17:11	17° \mathcal{A} 57'53	
desc. node	712 Jun 29 j 22:02	25° \mathcal{Q} 26'34			714 Dec 25 j 06:58	0° \mathcal{B}	
	712 Jul 05 j 13:14	0° \mathbb{P}			715 Jan 18 j 04:38	0° \approx	
greatest brilliancy	712 Jul 26 j 15:40	12° \mathbb{P} 16'12	-4.7m				
retrograde	712 Aug 05 j 06:00	13° \mathbb{P} 55'15		superior conj	715 Jan 24 j 04:08	7° \approx 29'14	-1°16'17
evening set	712 Aug 23 j 05:55	7° \mathbb{P} 55'00		minimum elong	715 Jan 23 j 18:33	6° \approx 59'15	1°16'04
inferior conj	712 Aug 26 j 09:14	6° \mathbb{P} 00'22	-8°45'58	max. Earth dist.	715 Jan 28 j 03:42	12° \approx 28'11	1.71629 AU
minimum elong	712 Aug 26 j 09:09	6° \mathbb{P} 00'29	8°45'58		715 Feb 11 j 04:30	0° \mathcal{H}	
min. Earth dist.	712 Aug 27 j 00:21	5° \mathbb{P} 37'05	0.28137 AU	evening rise	715 Mar 05 j 08:59	27° \mathcal{H} 35'18	
morning rise	712 Aug 29 j 12:14	4° \mathbb{P} 05'55			715 Mar 07 j 07:41	0° Υ	
	712 Sep 06 j 11:35	30° \mathcal{R} \mathcal{Q}			715 Mar 31 j 15:17	0° \mathcal{B}	
direct	712 Sep 16 j 16:24	27° \mathcal{Q} 55'23		asc. node	715 Apr 07 j 20:38	8° \mathcal{B} 51'37	
	712 Sep 27 j 05:51	0° \mathbb{P}			715 Apr 25 j 04:16	0° \mathbb{I}	
greatest brilliancy	712 Sep 27 j 16:30	0° \mathbb{P} 10'13	-4.8m		715 May 19 j 23:43	0° \mathcal{C}	
asc. node	712 Oct 21 j 01:17	15° \mathbb{P} 34'43			715 Jun 14 j 03:46	0° \mathcal{Q}	
	712 Nov 05 j 08:19	0° \mathcal{L}			715 Jul 09 j 21:19	0° \mathbb{P}	
morning max el	712 Nov 06 j 06:00	0° \mathcal{L} 54'58	46°47'36	desc. node	715 Jul 28 j 09:46	20° \mathbb{P} 56'19	
	712 Dec 02 j 22:57	0° \mathbb{M}			715 Aug 05 j 15:31	0° \mathcal{L}	
	712 Dec 28 j 13:22	0° \mathcal{A}		evening max el	715 Aug 30 j 12:05	25° \mathcal{L} 48'49	46°33'48
	713 Jan 22 j 10:44	0° \mathcal{B}			715 Sep 03 j 20:44	0° \mathbb{M}	
desc. node	713 Feb 09 j 14:47	22° \mathcal{B} 07'30		greatest brilliancy	715 Oct 10 j 02:33	25° \mathbb{M} 42'17	-4.9m
	713 Feb 16 j 01:35	0° \approx		retrograde	715 Oct 19 j 08:40	27° \mathbb{M} 18'51	
	713 Mar 12 j 14:12	0° \mathcal{H}		evening set	715 Nov 03 j 03:36	23° \mathbb{M} 03'19	
	713 Apr 06 j 02:23	0° Υ		inferior conj	715 Nov 08 j 22:41	19° \mathbb{M} 40'40	-2°27'51
	713 Apr 30 j 14:36	0° \mathcal{B}		minimum elong	715 Nov 09 j 04:11	19° \mathbb{M} 32'19	2°26'07
morning set	713 May 11 j 08:16	13° \mathcal{B} 08'46		min. Earth dist.	715 Nov 09 j 06:16	19° \mathbb{M} 29'10	0.26458 AU
	713 May 25 j 02:24	0° \mathbb{I}		morning rise	715 Nov 15 j 04:20	16° \mathbb{M} 02'57	
asc. node	713 Jun 02 j 18:16	10° \mathbb{I} 37'32		asc. node	715 Nov 18 j 13:11	14° \mathbb{M} 25'15	
max. Earth dist.	713 Jun 14 j 21:32	25° \mathbb{I} 31'48	1.73561 AU	direct	715 Nov 29 j 07:57	12° \mathbb{M} 02'17	
				greatest brilliancy	715 Dec 09 j 20:16	14° \mathbb{M} 07'45	-4.9m
superior conj	713 Jun 16 j 18:52	27° \mathbb{I} 51'07	0°32'28		716 Jan 02 j 20:08	0° \mathcal{A}	
minimum elong	713 Jun 16 j 12:47	27° \mathbb{I} 32'23	0°32'11	morning max el	716 Jan 18 j 20:30	15° \mathcal{A} 07'02	46°51'01
	713 Jun 18 j 12:48	0° \mathcal{C}			716 Feb 02 j 01:31	0° \mathcal{B}	
	713 Jul 12 j 21:11	0° \mathcal{Q}			716 Feb 28 j 20:48	0° \approx	
evening rise	713 Jul 22 j 12:49	11° \mathcal{Q} 54'59		desc. node	716 Mar 09 j 02:48	10° \approx 41'23	
	713 Aug 06 j 03:55	0° \mathbb{P}			716 Mar 25 j 14:37	0° \mathcal{H}	
	713 Aug 30 j 10:13	0° \mathcal{L}			716 Apr 19 j 21:18	0° Υ	
desc. node	713 Sep 22 j 07:41	28° \mathcal{L} 15'56			716 May 14 j 21:51	0° \mathcal{B}	
	713 Sep 23 j 17:26	0° \mathbb{M}			716 Jun 08 j 17:35	0° \mathbb{I}	
	713 Oct 18 j 02:47	0° \mathcal{A}		asc. node	716 Jun 30 j 06:02	26° \mathbb{I} 13'02	
	713 Nov 11 j 16:11	0° \mathcal{B}			716 Jul 03 j 08:12	0° \mathcal{C}	
	713 Dec 06 j 14:44	0° \approx		morning set	716 Jul 17 j 19:41	17° \mathcal{C} 46'44	
	714 Jan 01 j 11:24	0° \mathcal{H}			716 Jul 27 j 17:23	0° \mathcal{Q}	
asc. node	714 Jan 13 j 10:48	13° \mathcal{H} 10'38		max. Earth dist.	716 Aug 19 j 20:08	28° \mathcal{Q} 40'19	1.72388 AU
evening max el	714 Jan 24 j 10:18	24° \mathcal{H} 37'26	46°38'17		716 Aug 20 j 21:45	0° \mathbb{P}	
	714 Jan 29 j 21:03	0° Υ					
greatest brilliancy	714 Mar 04 j 21:32	24° Υ 54'01	-4.8m	superior conj	716 Aug 23 j 10:48	3° \mathbb{P} 10'06	1°24'35
retrograde	714 Mar 15 j 13:24	27° Υ 00'32		minimum elong	716 Aug 23 j 09:59	3° \mathbb{P} 07'32	1°24'35
evening set	714 Apr 01 j 06:07	21° Υ 35'37			716 Sep 13 j 22:51	0° \mathcal{L}	
inferior conj	714 Apr 05 j 20:54	18° Υ 43'43	6°10'41	evening rise	716 Sep 30 j 10:38	20° \mathcal{L} 37'23	
minimum elong	714 Apr 06 j 06:31	18° Υ 28'28	6°08'43		716 Oct 07 j 22:32	0° \mathbb{M}	
min. Earth dist.	714 Apr 05 j 21:37	18° Υ 42'36	0.28728 AU	desc. node	716 Oct 19 j 19:40	14° \mathbb{M} 51'41	

	716 Oct 31 j 22:11	0°♊		desc. node	719 Apr 06 j 14:33	3°♎07'13	
	716 Nov 24 j 22:51	0°♋			719 May 02 j 02:16	0°♐	
	716 Dec 19 j 02:09	0°♌			719 May 28 j 17:50	0°♑	
	717 Jan 12 j 11:26	0°♍			719 Jun 23 j 11:50	0°♒	
	717 Feb 06 j 09:00	0°♎			719 Jul 18 j 15:39	0°♓	
asc. node	717 Feb 09 j 22:46	4°♐13'36		asc. node	719 Jul 28 j 17:56	12°♓12'31	
	717 Mar 04 j 06:30	0°♏			719 Aug 12 j 07:58	0°♑	
	717 Apr 01 j 08:24	0°♐			719 Sep 05 j 14:59	0°♒	
evening max el	717 Apr 05 j 06:18	3°♐50'32 45°32'17		morning set	719 Sep 26 j 16:43	26°♒18'01	
	717 May 09 j 01:27	0°♑			719 Sep 29 j 15:35	0°♓	
greatest brilliancy	717 May 13 j 00:32	1°♑42'12 -4.7m			719 Oct 23 j 12:48	0°♓	
retrograde	717 May 23 j 23:43	3°♑52'07		max. Earth dist.	719 Nov 04 j 15:55	15°♓15'44 1.71109 AU	
desc. node	717 Jun 01 j 12:10	2°♑25'30					
	717 Jun 07 j 02:21	30°♒♐		superior conj	719 Nov 05 j 01:37	15°♓46'14 0°28'39	
evening set	717 Jun 08 j 01:56	29°♐28'36		minimum elong	719 Nov 05 j 08:39	16°♓08'21 0°28'19	
inferior conj	717 Jun 14 j 11:09	25°♐40'14 -2°58'43			719 Nov 16 j 08:57	0°♊	
minimum elong	717 Jun 14 j 04:53	25°♐49'59 2°56'59		desc. node	719 Nov 17 j 07:27	1°♊10'48	
min. Earth dist.	717 Jun 14 j 12:15	25°♐38'31 0.28971 AU			719 Dec 10 j 05:27	0°♋	
morning rise	717 Jun 20 j 07:41	22°♐08'38		evening rise	719 Dec 16 j 15:36	8°♋04'09	
direct	717 Jul 06 j 02:59	17°♐22'04			720 Jan 03 j 03:22	0°♌	
greatest brilliancy	717 Jul 16 j 17:47	19°♐23'28 -4.7m			720 Jan 27 j 04:18	0°♍	
	717 Aug 04 j 00:54	0°♑			720 Feb 20 j 10:42	0°♎	
morning max el	717 Aug 24 j 08:52	17°♑48'04 46°04'54		asc. node	720 Mar 09 j 10:48	21°♎58'53	
	717 Sep 05 j 09:55	0°♒			720 Mar 16 j 01:51	0°♏	
asc. node	717 Sep 22 j 15:40	18°♒46'59			720 Apr 10 j 06:06	0°♐	
	717 Oct 02 j 11:45	0°♓			720 May 06 j 07:11	0°♑	
	717 Oct 27 j 19:38	0°♓			720 Jun 03 j 00:46	0°♒	
	717 Nov 21 j 08:23	0°♓		evening max el	720 Jun 15 j 04:02	12°♒03'06 45°27'41	
	717 Dec 15 j 12:49	0°♊		desc. node	720 Jun 29 j 00:02	24°♒25'54	
	718 Jan 08 j 14:32	0°♋			720 Jul 06 j 03:31	0°♓	
desc. node	718 Jan 12 j 04:57	4°♋29'27		greatest brilliancy	720 Jul 24 j 05:01	9°♓59'58 -4.7m	
	718 Feb 01 j 16:15	0°♌		retrograde	720 Aug 02 j 19:27	11°♓39'15	
	718 Feb 25 j 19:15	0°♍		evening set	720 Aug 20 j 19:09	5°♓40'36	
morning set	718 Feb 27 j 21:31	2°♍36'01		inferior conj	720 Aug 23 j 23:49	3°♓43'48 -8°44'59	
	718 Mar 22 j 00:16	0°♎		minimum elong	720 Aug 23 j 22:53	3°♓45'15 8°44'58	
				min. Earth dist.	720 Aug 24 j 14:28	3°♓21'13 0.28192 AU	
superior conj	718 Apr 07 j 09:40	20°♎14'35 -0°59'56		morning rise	720 Aug 27 j 02:27	1°♓49'38	
minimum elong	718 Apr 07 j 19:23	20°♎44'31 0°59'35			720 Aug 30 j 06:47	30°♒♒	
max. Earth dist.	718 Apr 09 j 16:59	23°♎05'06 1.73162 AU		direct	720 Sep 14 j 07:16	25°♒38'00	
	718 Apr 15 j 07:40	0°♏		greatest brilliancy	720 Sep 25 j 07:36	27°♒52'16 -4.8m	
asc. node	718 May 05 j 08:31	24°♏38'15			720 Sep 29 j 23:43	0°♓	
	718 May 09 j 17:19	0°♐		asc. node	720 Oct 20 j 03:23	14°♓31'35	
evening rise	718 May 14 j 16:29	6°♐05'33		morning max el	720 Nov 03 j 19:05	28°♓29'32 46°46'27	
	718 Jun 03 j 04:46	0°♑			720 Nov 05 j 06:31	0°♓	
	718 Jun 27 j 17:57	0°♒			720 Dec 02 j 15:12	0°♓	
	718 Jul 22 j 09:45	0°♓			720 Dec 28 j 03:23	0°♊	
	718 Aug 16 j 06:06	0°♓			721 Jan 21 j 23:34	0°♋	
desc. node	718 Aug 24 j 21:47	10°♓22'00		desc. node	721 Feb 08 j 16:59	21°♋36'49	
	718 Sep 10 j 09:59	0°♓			721 Feb 15 j 13:40	0°♌	
	718 Oct 06 j 03:04	0°♊			721 Mar 12 j 01:47	0°♍	
	718 Nov 02 j 01:35	0°♋			721 Apr 05 j 13:37	0°♎	
evening max el	718 Nov 11 j 11:04	9°♋48'39 47°22'33			721 Apr 30 j 01:36	0°♏	
	718 Dec 03 j 07:55	0°♌		morning set	721 May 09 j 02:07	11°♏03'02	
asc. node	718 Dec 16 j 01:00	8°♌42'02			721 May 24 j 13:14	0°♐	
greatest brilliancy	718 Dec 22 j 00:08	11°♌29'40 -4.9m		asc. node	721 Jun 01 j 20:16	10°♐10'30	
retrograde	719 Jan 01 j 11:17	13°♌35'33		max. Earth dist.	721 Jun 12 j 16:39	23°♐29'57 1.73575 AU	
evening set	719 Jan 17 j 21:35	8°♌12'53					
min. Earth dist.	719 Jan 21 j 06:15	6°♌09'58 0.27283 AU		superior conj	721 Jun 14 j 13:27	25°♐47'38 0°29'33	
inferior conj	719 Jan 22 j 05:45	5°♌33'20 7°45'14		minimum elong	721 Jun 14 j 07:49	25°♐30'19 0°29'18	
minimum elong	719 Jan 21 j 21:10	5°♌46'42 7°43'59			721 Jun 17 j 23:34	0°♑	
morning rise	719 Jan 25 j 21:11	3°♌19'32			721 Jul 12 j 07:59	0°♒	
	719 Feb 01 j 07:47	30°♒♋		evening rise	721 Jul 20 j 07:21	9°♒50'26	
direct	719 Feb 11 j 20:09	27°♋44'33			721 Aug 05 j 14:54	0°♓	
greatest brilliancy	719 Feb 20 j 17:02	29°♋14'08 -4.8m			721 Aug 29 j 21:29	0°♓	
	719 Feb 22 j 20:30	0°♌		desc. node	721 Sep 21 j 09:49	27°♓46'41	
morning max el	719 Apr 02 j 07:25	28°♌53'12 46°10'31			721 Sep 23 j 05:06	0°♓	
	719 Apr 03 j 10:48	0°♍			721 Oct 17 j 14:58	0°♊	

	721 Nov 11 j 05:06	0° Z			724 Jul 02 j 18:58	0° G	
	721 Dec 06 j 04:52	0° \approx		morning set	724 Jul 15 j 13:17	15° G 40'13	
	722 Jan 01 j 04:03	0° H			724 Jul 27 j 04:04	0° Ω	
asc. node	722 Jan 12 j 12:56	12° H 26'11		max. Earth dist.	724 Aug 17 j 13:32	26° Ω 31'48	1.72440 AU
evening max el	722 Jan 21 j 23:56	22° H 16'02	46°40'50		724 Aug 20 j 08:27	0° M	
	722 Jan 29 j 21:36	0° Y					
greatest brilliancy	722 Mar 02 j 14:44	22° Y 42'32	-4.8m	superior conj	724 Aug 21 j 03:26	0° M 59'05	1°24'22
retrograde	722 Mar 13 j 05:15	24° Y 48'28		minimum elong	724 Aug 21 j 01:53	0° M 54'13	1°24'21
evening set	722 Mar 30 j 00:59	19° Y 19'26			724 Sep 13 j 09:39	0° L	
inferior conj	722 Apr 03 j 13:01	16° Y 31'47	6°24'37	evening rise	724 Sep 28 j 00:05	18° L 15'19	
minimum elong	722 Apr 03 j 22:36	16° Y 16'34	6°22'44		724 Oct 07 j 09:28	0° M	
min. Earth dist.	722 Apr 03 j 13:34	16° Y 30'53	0.28704 AU	desc. node	724 Oct 18 j 21:39	14° M 23'25	
morning rise	722 Apr 08 j 20:26	13° Y 16'02			724 Oct 31 j 09:18	0° J	
direct	722 Apr 24 j 21:21	8° Y 18'14			724 Nov 24 j 10:13	0° Z	
desc. node	722 May 04 j 02:17	9° Y 50'46			724 Dec 18 j 13:49	0° \approx	
greatest brilliancy	722 May 04 j 17:57	10° Y 03'47	-4.7m		725 Jan 11 j 23:35	0° H	
	722 Jun 03 j 20:23	0° B			725 Feb 05 j 22:04	0° Y	
morning max el	722 Jun 12 j 15:13	8° B 04'02	45°44'24	asc. node	725 Feb 09 j 00:52	3° Y 40'45	
	722 Jul 04 j 06:02	0° II			725 Mar 03 j 21:33	0° B	
	722 Jul 31 j 07:55	0° G			725 Apr 01 j 05:08	0° II	
asc. node	722 Aug 25 j 05:53	29° G 07'17		evening max el	725 Apr 02 j 22:58	1° II 42'00	45°33'52
	722 Aug 25 j 23:35	0° Ω		greatest brilliancy	725 May 10 j 16:18	29° II 33'41	-4.7m
	722 Sep 19 j 18:47	0° M			725 May 11 j 21:42	0° G	
	722 Oct 14 j 01:16	0° L		retrograde	725 May 21 j 16:36	1° G 44'11	
	722 Nov 07 j 00:48	0° M			725 May 31 j 00:50	30° R II	
	722 Nov 30 j 21:33	0° J		desc. node	725 May 31 j 14:11	29° II 47'22	
morning set	722 Dec 10 j 17:35	12° J 22'22		evening set	725 Jun 05 j 17:42	27° II 21'33	
desc. node	722 Dec 14 j 19:12	17° J 29'22		inferior conj	725 Jun 12 j 03:30	23° II 31'53	-2°40'01
	722 Dec 24 j 18:01	0° Z		minimum elong	725 Jun 11 j 21:50	23° II 40'43	2°38'26
	723 Jan 17 j 15:38	0° \approx		min. Earth dist.	725 Jun 12 j 04:12	23° II 30'47	0.28974 AU
				morning rise	725 Jun 18 j 01:56	19° II 57'45	
superior conj	723 Jan 21 j 14:43	4° \approx 57'47	-1°14'25	direct	725 Jul 03 j 19:55	15° II 13'50	
minimum elong	723 Jan 21 j 04:31	4° \approx 25'51	1°14'10	greatest brilliancy	725 Jul 14 j 09:04	17° II 14'04	-4.7m
max. Earth dist.	723 Jan 25 j 09:25	9° \approx 41'38	1.71579 AU		725 Aug 04 j 11:54	0° G	
	723 Feb 10 j 15:27	0° H		morning max el	725 Aug 22 j 01:06	15° G 37'54	46°03'26
evening rise	723 Mar 02 j 21:50	25° H 12'31			725 Sep 05 j 03:58	0° Ω	
	723 Mar 06 j 18:36	0° Y		asc. node	725 Sep 21 j 17:41	18° Ω 09'34	
	723 Mar 31 j 02:16	0° B			725 Oct 02 j 02:04	0° M	
asc. node	723 Apr 06 j 22:40	8° B 24'04			725 Oct 27 j 08:25	0° L	
	723 Apr 24 j 15:28	0° II			725 Nov 20 j 20:24	0° M	
	723 May 19 j 11:22	0° G			725 Dec 15 j 00:22	0° J	
	723 Jun 13 j 16:16	0° Ω			726 Jan 08 j 01:47	0° Z	
	723 Jul 09 j 11:19	0° M		desc. node	726 Jan 11 j 07:09	4° Z 01'22	
desc. node	723 Jul 27 j 11:57	20° M 18'32			726 Feb 01 j 03:15	0° \approx	
	723 Aug 05 j 08:37	0° L		morning set	726 Feb 25 j 10:48	0° H 14'43	
evening max el	723 Aug 28 j 00:44	23° L 25'27	46°31'21		726 Feb 25 j 06:04	0° H	
	723 Sep 03 j 23:04	0° M			726 Mar 21 j 10:57	0° Y	
greatest brilliancy	723 Oct 07 j 15:06	23° M 15'06	-4.9m				
retrograde	723 Oct 16 j 20:58	24° M 51'29		superior conj	726 Apr 05 j 01:38	18° Y 02'56	-1°02'17
evening set	723 Oct 31 j 17:55	20° M 32'33		minimum elong	726 Apr 05 j 11:24	18° Y 33'04	1°01'58
inferior conj	723 Nov 06 j 10:54	17° M 13'00	-2°51'11	max. Earth dist.	726 Apr 07 j 13:50	21° Y 08'38	1.73122 AU
minimum elong	723 Nov 06 j 17:12	17° M 03'27	2°49'14		726 Apr 14 j 18:17	0° B	
min. Earth dist.	723 Nov 06 j 19:47	16° M 59'33	0.26491 AU	asc. node	726 May 04 j 10:29	24° B 11'41	
morning rise	723 Nov 12 j 16:02	13° M 36'22			726 May 09 j 03:57	0° II	
asc. node	723 Nov 17 j 15:08	11° M 19'41		evening rise	726 May 12 j 10:33	4° II 01'09	
direct	723 Nov 26 j 20:46	9° M 33'51			726 Jun 02 j 15:31	0° G	
greatest brilliancy	723 Dec 07 j 10:23	11° M 41'04	-4.9m		726 Jun 27 j 04:58	0° Ω	
	724 Jan 03 j 03:47	0° J			726 Jul 21 j 21:14	0° M	
morning max el	724 Jan 16 j 10:52	12° J 44'21	46°51'51		726 Aug 15 j 18:21	0° L	
	724 Feb 01 j 20:03	0° Z		desc. node	726 Aug 23 j 23:53	9° L 50'41	
	724 Feb 28 j 11:37	0° \approx			726 Sep 09 j 23:25	0° M	
desc. node	724 Mar 08 j 04:53	10° \approx 06'31			726 Oct 05 j 18:32	0° J	
	724 Mar 25 j 03:41	0° H			726 Nov 01 j 21:34	0° Z	
	724 Apr 19 j 09:21	0° Y		evening max el	726 Nov 09 j 02:28	7° Z 28'29	47°22'20
	724 May 14 j 09:15	0° B			726 Dec 04 j 00:33	0° \approx	
	724 Jun 08 j 04:33	0° II		asc. node	726 Dec 15 j 03:10	7° \approx 05'45	
asc. node	724 Jun 29 j 08:09	25° II 46'32		greatest brilliancy	726 Dec 19 j 14:38	9° \approx 05'56	-4.9m

retrograde	726 Dec 30 j 01:35	11° \approx 11'09		max. Earth dist.	729 Jun 10 j 13:08	21° Π 32'53	1.73593 AU
evening set	727 Jan 15 j 07:44	5° \approx 55'01					
min. Earth dist.	727 Jan 18 j 19:35	3° \approx 47'20	0.27215 AU	superior conj	729 Jun 12 j 08:13	23° Π 45'13	0°26'38
inferior conj	727 Jan 19 j 19:24	3° \approx 10'10	7°34'29	minimum elong	729 Jun 12 j 03:04	23° Π 29'26	0°26'23
minimum elong	727 Jan 19 j 10:23	3° \approx 24'16	7°33'03		729 Jun 17 j 10:10	0° \ominus	
morning rise	727 Jan 23 j 13:29	0° \approx 52'30			729 Jul 11 j 18:41	0° Ω	
	727 Jan 25 j 02:00	30° \Re 3		evening rise	729 Jul 18 j 02:04	7° Ω 46'55	
direct	727 Feb 09 j 09:37	25° Σ 22'49			729 Aug 05 j 01:48	0° \P	
greatest brilliancy	727 Feb 18 j 05:54	26° Σ 51'52	-4.8m		729 Aug 29 j 08:41	0° $\underline{\Omega}$	
	727 Feb 25 j 13:00	0° \approx		desc. node	729 Sep 20 j 11:46	27° $\underline{\Omega}$ 17'06	
morning max el	727 Mar 30 j 20:49	26° \approx 33'52	46°11'53		729 Sep 22 j 16:42	0° \P	
	727 Apr 03 j 08:38	0° \Re			729 Oct 17 j 03:06	0° \Re	
desc. node	727 Apr 05 j 16:35	2° \Re 19'59			729 Nov 10 j 18:02	0° Σ	
	727 May 01 j 17:51	0° Υ			729 Dec 05 j 19:06	0° \approx	
	727 May 28 j 07:03	0° \Re			729 Dec 31 j 21:01	0° \Re	
	727 Jun 22 j 23:52	0° Π		asc. node	730 Jan 11 j 15:04	11° \Re 41'07	
	727 Jul 18 j 03:01	0° \ominus		evening max el	730 Jan 19 j 13:51	19° \Re 55'19	46°43'24
asc. node	727 Jul 27 j 20:03	11° \ominus 45'01			730 Jan 29 j 23:27	0° Υ	
	727 Aug 11 j 18:58	0° Ω		greatest brilliancy	730 Feb 28 j 07:33	20° Υ 30'29	-4.8m
	727 Sep 05 j 01:49	0° \P		retrograde	730 Mar 10 j 21:32	22° Υ 36'35	
morning set	727 Sep 24 j 06:57	23° \P 58'31		evening set	730 Mar 27 j 19:52	17° Υ 03'11	
	727 Sep 29 j 02:23	0° $\underline{\Omega}$		inferior conj	730 Apr 01 j 05:08	14° Υ 19'52	6°37'56
	727 Oct 22 j 23:39	0° \P		minimum elong	730 Apr 01 j 14:37	14° Υ 04'50	6°36'10
max. Earth dist.	727 Nov 01 j 19:09	12° \P 20'40	1.71132 AU	min. Earth dist.	730 Apr 01 j 05:19	14° Υ 19'34	0.28676 AU
				morning rise	730 Apr 06 j 09:35	11° Υ 08'33	
superior conj	727 Nov 02 j 12:37	13° \P 15'37	0°32'17	direct	730 Apr 22 j 12:26	6° Υ 06'38	
minimum elong	727 Nov 02 j 20:21	13° \P 39'57	0°31'55	greatest brilliancy	730 May 02 j 09:06	7° Υ 52'17	-4.7m
	727 Nov 15 j 19:53	0° \Re		desc. node	730 May 03 j 04:16	8° Υ 09'15	
desc. node	727 Nov 16 j 09:29	0° \Re 42'46			730 Jun 03 j 22:33	0° \Re	
	727 Dec 09 j 16:26	0° Σ		morning max el	730 Jun 10 j 06:58	5° \Re 53'47	45°44'41
evening rise	727 Dec 14 j 01:18	5° Σ 29'18			730 Jul 03 j 22:33	0° Π	
	728 Jan 02 j 14:24	0° \approx			730 Jul 30 j 21:32	0° \ominus	
	728 Jan 26 j 15:25	0° \Re		asc. node	730 Aug 24 j 07:51	28° \ominus 36'14	
	728 Feb 19 j 22:01	0° Υ			730 Aug 25 j 11:56	0° Ω	
asc. node	728 Mar 08 j 12:48	21° Υ 29'51			730 Sep 19 j 06:32	0° \P	
	728 Mar 15 j 13:35	0° \Re			730 Oct 13 j 12:42	0° $\underline{\Omega}$	
	728 Apr 09 j 18:42	0° Π			730 Nov 06 j 12:04	0° \P	
	728 May 05 j 21:35	0° \ominus			730 Nov 30 j 08:43	0° \Re	
	728 Jun 02 j 19:43	0° Ω		morning set	730 Dec 08 j 03:22	9° \Re 47'04	
evening max el	728 Jun 12 j 17:53	9° Ω 47'29	45°26'26	desc. node	730 Dec 13 j 21:21	17° \Re 01'04	
desc. node	728 Jun 28 j 02:14	23° Ω 24'53			730 Dec 24 j 05:08	0° Σ	
	728 Jul 06 j 22:11	0° \P			731 Jan 17 j 02:43	0° \approx	
greatest brilliancy	728 Jul 21 j 18:32	7° \P 44'46	-4.7m				
retrograde	728 Jul 31 j 09:11	9° \P 24'40		superior conj	731 Jan 19 j 01:05	2° \approx 25'18	-1°12'24
evening set	728 Aug 18 j 08:05	3° \P 27'59		minimum elong	731 Jan 18 j 14:22	1° \approx 51'41	1°12'07
inferior conj	728 Aug 21 j 14:36	1° \P 28'30	-8°43'00	max. Earth dist.	731 Jan 22 j 15:26	6° \approx 55'39	1.71536 AU
minimum elong	728 Aug 21 j 12:49	1° \P 31'16	8°42'58		731 Feb 10 j 02:30	0° \Re	
min. Earth dist.	728 Aug 22 j 04:51	1° \P 06'30	0.28247 AU	evening rise	731 Feb 28 j 10:35	22° \Re 48'59	
	728 Aug 24 j 00:11	30° \Re Ω			731 Mar 06 j 05:39	0° Υ	
morning rise	728 Aug 24 j 17:20	29° Ω 34'05			731 Mar 30 j 13:23	0° \Re	
direct	728 Sep 11 j 22:01	23° Ω 21'44		asc. node	731 Apr 06 j 00:42	7° \Re 56'06	
greatest brilliancy	728 Sep 22 j 23:17	25° Ω 36'12	-4.8m		731 Apr 24 j 02:47	0° Π	
	728 Oct 01 j 15:38	0° \P			731 May 18 j 23:08	0° \ominus	
asc. node	728 Oct 19 j 05:24	13° \P 30'36			731 Jun 13 j 04:53	0° Ω	
morning max el	728 Nov 01 j 08:28	26° \P 05'47	46°45'16		731 Jul 09 j 01:32	0° \P	
	728 Nov 05 j 03:37	0° $\underline{\Omega}$		desc. node	731 Jul 26 j 13:57	19° \P 39'37	
	728 Dec 02 j 06:58	0° \P			731 Aug 05 j 02:14	0° $\underline{\Omega}$	
	728 Dec 27 j 17:06	0° \Re		evening max el	731 Aug 25 j 14:19	21° $\underline{\Omega}$ 04'01	46°28'41
	729 Jan 21 j 12:10	0° Σ			731 Sep 04 j 03:16	0° \P	
desc. node	729 Feb 07 j 18:58	21° Σ 05'58		greatest brilliancy	731 Oct 05 j 03:12	20° \P 46'44	-4.9m
	729 Feb 15 j 01:34	0° \approx		retrograde	731 Oct 14 j 09:30	22° \P 22'59	
	729 Mar 11 j 13:11	0° \Re		evening set	731 Oct 29 j 08:19	18° \P 00'40	
	729 Apr 05 j 00:39	0° Υ		inferior conj	731 Nov 03 j 22:58	14° \P 44'11	-3°14'09
	729 Apr 29 j 12:22	0° \Re		minimum elong	731 Nov 04 j 06:01	14° \P 33'30	3°12'01
morning set	729 May 06 j 20:09	8° \Re 58'28		min. Earth dist.	731 Nov 04 j 08:54	14° \P 29'08	0.26527 AU
	729 May 23 j 23:52	0° Π		morning rise	731 Nov 10 j 03:20	11° \P 08'55	
asc. node	729 May 31 j 22:24	9° Π 44'27		asc. node	731 Nov 16 j 17:18	8° \P 18'11	

direct	731 Nov 24 j 09:54	7° \mathbb{M} 04'27		734 Jul 21 j 09:09	0° \mathbb{M}	
greatest brilliancy	731 Dec 04 j 23:51	9° \mathbb{M} .12'32	-4.9m	734 Aug 15 j 07:00	0° \mathbb{L}	
	732 Jan 03 j 09:35	0° \mathbb{X}		734 Aug 23 j 01:53	9° \mathbb{L} 18'00	
morning max el	732 Jan 14 j 01:18	10° \mathbb{X} 20'59	46°52'36	734 Sep 09 j 13:17	0° \mathbb{M}	
	732 Feb 01 j 14:24	0° \mathbb{Z}		734 Oct 05 j 10:34	0° \mathbb{X}	
	732 Feb 28 j 02:31	0° \approx		734 Nov 01 j 18:37	0° \mathbb{Z}	
desc. node	732 Mar 07 j 06:52	9° \approx 30'55		734 Nov 06 j 16:44	5° \mathbb{Z} 04'14	47°21'45
	732 Mar 24 j 16:54	0° \mathbb{X}		734 Dec 04 j 23:52	0° \approx	
	732 Apr 18 j 21:35	0° \mathbb{Y}		734 Dec 14 j 05:15	5° \approx 23'49	
	732 May 13 j 20:51	0° \mathbb{B}		734 Dec 17 j 05:28	6° \approx 40'36	-4.9m
	732 Jun 07 j 15:45	0° \mathbb{I}		734 Dec 27 j 15:07	8° \approx 44'25	
asc. node	732 Jun 28 j 10:16	25° \mathbb{I} 19'25		735 Jan 12 j 17:36	3° \approx 34'51	
	732 Jul 02 j 05:56	0° \mathbb{G}		735 Jan 16 j 09:12	1° \approx 21'40	0.27152 AU
morning set	732 Jul 13 j 07:16	13° \mathbb{G} 34'22		735 Jan 17 j 08:51	0° \approx 44'47	7°22'43
	732 Jul 26 j 14:57	0° \mathbb{Q}		735 Jan 16 j 23:26	0° \approx 59'29	7°21'06
max. Earth dist.	732 Aug 15 j 06:28	24° \mathbb{Q} 21'22	1.72493 AU	735 Jan 18 j 13:37	30° \mathbb{R} \mathbb{Z}	
				735 Jan 21 j 05:44	28° \mathbb{Z} 22'52	
superior conj	732 Aug 18 j 20:28	28° \mathbb{Q} 48'47	1°24'00	735 Feb 06 j 22:19	22° \mathbb{Z} 58'33	
minimum elong	732 Aug 18 j 18:13	28° \mathbb{Q} 41'46	1°24'00	735 Feb 15 j 19:20	24° \mathbb{Z} 27'52	-4.8m
	732 Aug 19 j 19:22	0° \mathbb{M}		735 Feb 27 j 06:14	0° \approx	
	732 Sep 12 j 20:41	0° \mathbb{L}		735 Mar 28 j 09:22	24° \approx 10'26	46°13'21
evening rise	732 Sep 25 j 13:50	15° \mathbb{L} 53'22		735 Apr 03 j 06:20	0° \mathbb{X}	
	732 Oct 06 j 20:42	0° \mathbb{M}		735 Apr 04 j 18:41	1° \mathbb{X} 32'00	
desc. node	732 Oct 17 j 23:45	13° \mathbb{M} .54'32		735 May 01 j 09:43	0° \mathbb{Y}	
	732 Oct 30 j 20:46	0° \mathbb{X}		735 May 27 j 20:38	0° \mathbb{B}	
	732 Nov 23 j 21:56	0° \mathbb{Z}		735 Jun 22 j 12:17	0° \mathbb{I}	
	732 Dec 18 j 01:52	0° \approx		735 Jul 17 j 14:47	0° \mathbb{G}	
	733 Jan 11 j 12:09	0° \mathbb{X}		735 Jul 26 j 21:59	11° \mathbb{G} 15'43	
	733 Feb 05 j 11:36	0° \mathbb{Y}		735 Aug 11 j 06:21	0° \mathbb{Q}	
asc. node	733 Feb 08 j 02:51	3° \mathbb{Y} 06'17		735 Sep 04 j 13:01	0° \mathbb{M}	
	733 Mar 03 j 13:14	0° \mathbb{B}		735 Sep 21 j 21:39	21° \mathbb{M} 39'23	
evening max el	733 Mar 31 j 15:33	29° \mathbb{B} 32'03	45°35'28	735 Sep 28 j 13:32	0° \mathbb{L}	
	733 Apr 01 j 03:06	0° \mathbb{I}		735 Oct 22 j 10:49	0° \mathbb{M}	
greatest brilliancy	733 May 08 j 08:48	27° \mathbb{I} 24'53	-4.7m	735 Oct 30 j 01:06	9° \mathbb{M} .33'18	1.71157 AU
retrograde	733 May 19 j 09:06	29° \mathbb{I} 34'59				
desc. node	733 May 30 j 16:24	27° \mathbb{I} 03'38		superior conj	735 Oct 31 j 00:13	10° \mathbb{M} .46'00 0°35'46
evening set	733 Jun 03 j 09:39	25° \mathbb{I} 13'18		minimum elong	735 Oct 31 j 08:36	11° \mathbb{M} .12'22 0°35'24
inferior conj	733 Jun 09 j 19:51	21° \mathbb{I} 22'35	-2°21'08	desc. node	735 Nov 15 j 11:40	0° \mathbb{X} 14'21
minimum elong	733 Jun 09 j 14:49	21° \mathbb{I} 30'28	2°19'42		735 Nov 15 j 07:06	0° \mathbb{X}
min. Earth dist.	733 Jun 09 j 20:30	21° \mathbb{I} 21'35	0.28972 AU		735 Dec 09 j 03:43	0° \mathbb{Z}
morning rise	733 Jun 15 j 20:00	17° \mathbb{I} 45'49		evening rise	735 Dec 11 j 11:20	2° \mathbb{Z} 54'36
direct	733 Jul 01 j 12:40	13° \mathbb{I} 04'44			736 Jan 02 j 01:47	0° \approx
greatest brilliancy	733 Jul 12 j 00:15	15° \mathbb{I} 03'32	-4.7m		736 Jan 26 j 02:57	0° \mathbb{X}
	733 Aug 04 j 20:22	0° \mathbb{G}			736 Feb 19 j 09:48	0° \mathbb{Y}
morning max el	733 Aug 19 j 16:30	13° \mathbb{G} 25'02	46°02'07	asc. node	736 Mar 07 j 14:50	20° \mathbb{Y} 59'30
	733 Sep 04 j 21:52	0° \mathbb{Q}			736 Mar 15 j 01:49	0° \mathbb{B}
asc. node	733 Sep 20 j 19:44	17° \mathbb{Q} 31'51			736 Apr 09 j 07:51	0° \mathbb{I}
	733 Oct 01 j 16:30	0° \mathbb{M}			736 May 05 j 12:39	0° \mathbb{G}
	733 Oct 26 j 21:26	0° \mathbb{L}			736 Jun 02 j 15:46	0° \mathbb{Q}
	733 Nov 20 j 08:43	0° \mathbb{M}		evening max el	736 Jun 10 j 07:28	7° \mathbb{Q} 30'02 45°25'24
	733 Dec 14 j 12:19	0° \mathbb{X}		desc. node	736 Jun 27 j 04:13	22° \mathbb{Q} 20'31
	734 Jan 07 j 13:27	0° \mathbb{Z}			736 Jul 08 j 00:32	0° \mathbb{M}
desc. node	734 Jan 10 j 09:13	3° \mathbb{Z} 31'27		greatest brilliancy	736 Jul 19 j 07:29	5° \mathbb{M} 27'42 -4.7m
	734 Jan 31 j 14:42	0° \approx		retrograde	736 Jul 28 j 23:18	7° \mathbb{M} 08'56
morning set	734 Feb 22 j 23:28	27° \approx 50'05		evening set	736 Aug 15 j 20:34	1° \mathbb{M} 14'25
	734 Feb 24 j 17:18	0° \mathbb{X}			736 Aug 17 j 21:58	30° \mathbb{R} \mathbb{Q}
	734 Mar 20 j 22:03	0° \mathbb{Y}		inferior conj	736 Aug 19 j 05:16	29° \mathbb{Q} 11'52 -8°40'20
				minimum elong	736 Aug 19 j 02:37	29° \mathbb{Q} 15'57 8°40'14
superior conj	734 Apr 02 j 17:08	15° \mathbb{Y} 48'32	-1°04'35	min. Earth dist.	736 Aug 19 j 19:01	28° \mathbb{Q} 50'39 0.28298 AU
minimum elong	734 Apr 03 j 02:53	16° \mathbb{Y} 18'39	1°04'17	morning rise	736 Aug 22 j 08:27	27° \mathbb{Q} 16'51
max. Earth dist.	734 Apr 05 j 10:48	19° \mathbb{Y} 11'09	1.73078 AU	direct	736 Sep 09 j 12:43	21° \mathbb{Q} 04'04
	734 Apr 14 j 05:19	0° \mathbb{B}		greatest brilliancy	736 Sep 20 j 14:52	23° \mathbb{Q} 19'06 -4.8m
asc. node	734 May 03 j 12:38	23° \mathbb{B} 44'22			736 Oct 02 j 19:58	0° \mathbb{M}
	734 May 08 j 15:01	0° \mathbb{I}		asc. node	736 Oct 18 j 07:31	12° \mathbb{M} 30'21
evening rise	734 May 10 j 04:19	1° \mathbb{I} 54'26		morning max el	736 Oct 29 j 22:50	23° \mathbb{M} 43'51 46°44'21
	734 Jun 02 j 02:43	0° \mathbb{G}			736 Nov 05 j 00:19	0° \mathbb{L}
	734 Jun 26 j 16:25	0° \mathbb{Q}			736 Dec 01 j 22:43	0° \mathbb{M}

	736 Dec 27 j 06:52	0°♌		evening max el	739 Aug 23 j 04:31	18°♎44'10	46°26'01
	737 Jan 21 j 00:53	0°♊			739 Sep 04 j 09:26	0°♌	
desc. node	737 Feb 06 j 21:00	20°♊34'38		greatest brilliancy	739 Oct 02 j 15:20	18°♌18'41	-4.9m
	737 Feb 14 j 13:40	0°♊		retrograde	739 Oct 11 j 21:49	19°♌54'25	
	737 Mar 11 j 00:51	0°♋		evening set	739 Oct 26 j 22:53	15°♌28'53	
	737 Apr 04 j 11:59	0°♌		inferior conj	739 Nov 01 j 11:00	12°♌15'30	-3°36'47
	737 Apr 28 j 23:29	0°♍		minimum elong	739 Nov 01 j 18:45	12°♌03'46	3°34'29
morning set	737 May 04 j 13:42	6°♍51'15		min. Earth dist.	739 Nov 01 j 21:57	11°♌58'54	0.26563 AU
	737 May 23 j 10:49	0°♎		morning rise	739 Nov 07 j 14:16	8°♌41'41	
asc. node	737 May 31 j 00:29	9°♎17'16		asc. node	739 Nov 15 j 19:24	5°♌22'26	
max. Earth dist.	737 Jun 08 j 10:50	19°♎38'35	1.73608 AU	direct	739 Nov 21 j 23:06	4°♌35'19	
				greatest brilliancy	739 Dec 02 j 13:06	6°♌43'40	-4.9m
superior conj	737 Jun 10 j 02:30	21°♎40'27	0°23'38		740 Jan 03 j 13:26	0°♌	
minimum elong	737 Jun 09 j 21:53	21°♎26'15	0°23'25	morning max el	740 Jan 11 j 15:23	7°♌56'53	46°53'26
	737 Jun 16 j 21:04	0°♏			740 Feb 01 j 08:13	0°♊	
	737 Jul 11 j 05:40	0°♎			740 Feb 27 j 17:02	0°♊	
evening rise	737 Jul 15 j 20:35	5°♎42'00		desc. node	740 Mar 06 j 09:02	8°♊56'34	
	737 Aug 04 j 12:59	0°♐			740 Mar 24 j 05:48	0°♋	
	737 Aug 28 j 20:11	0°♑			740 Apr 18 j 09:32	0°♌	
desc. node	737 Sep 19 j 13:53	26°♑47'10			740 May 13 j 08:13	0°♍	
	737 Sep 22 j 04:36	0°♒			740 Jun 07 j 02:47	0°♎	
	737 Oct 16 j 15:30	0°♌		asc. node	740 Jun 27 j 12:14	24°♎52'08	
	737 Nov 10 j 07:11	0°♊			740 Jul 01 j 16:47	0°♏	
	737 Dec 05 j 09:33	0°♋		morning set	740 Jul 11 j 01:10	11°♏28'40	
	737 Dec 31 j 14:21	0°♋			740 Jul 26 j 01:44	0°♎	
asc. node	738 Jan 10 j 17:00	10°♋54'49		max. Earth dist.	740 Aug 12 j 21:04	22°♎04'07	1.72545 AU
evening max el	738 Jan 17 j 04:36	17°♋36'35	46°45'53				
	738 Jan 30 j 02:51	0°♌		superior conj	740 Aug 16 j 13:27	26°♎38'45	1°23'32
greatest brilliancy	738 Feb 25 j 23:36	18°♌17'09	-4.8m	minimum elong	740 Aug 16 j 10:32	26°♎29'39	1°23'31
retrograde	738 Mar 08 j 14:14	20°♌24'06			740 Aug 19 j 06:10	0°♐	
evening set	738 Mar 25 j 14:41	14°♌46'11			740 Sep 12 j 07:36	0°♑	
inferior conj	738 Mar 29 j 21:12	12°♌07'09	6°50'46	evening rise	740 Sep 23 j 03:30	13°♑31'43	
minimum elong	738 Mar 30 j 06:33	11°♌52'22	6°49'06		740 Oct 06 j 07:47	0°♒	
min. Earth dist.	738 Mar 29 j 20:39	12°♌08'01	0.28654 AU	desc. node	740 Oct 17 j 01:52	13°♒26'12	
morning rise	738 Apr 03 j 22:37	9°♌00'32			740 Oct 30 j 08:05	0°♌	
direct	738 Apr 20 j 03:54	3°♌54'13			740 Nov 23 j 09:31	0°♊	
greatest brilliancy	738 Apr 29 j 23:48	5°♌39'35	-4.7m		740 Dec 17 j 13:46	0°♋	
desc. node	738 May 02 j 06:29	6°♌30'49			741 Jan 11 j 00:33	0°♋	
	738 Jun 03 j 23:42	0°♍			741 Feb 05 j 00:58	0°♌	
morning max el	738 Jun 07 j 23:36	3°♍44'56	45°44'54	asc. node	741 Feb 07 j 04:59	2°♌32'54	
	738 Jul 03 j 15:01	0°♎			741 Mar 03 j 04:49	0°♍	
	738 Jul 30 j 11:14	0°♏		evening max el	741 Mar 29 j 07:43	27°♍22'06	45°37'08
asc. node	738 Aug 23 j 09:58	28°♏05'16			741 Apr 01 j 01:28	0°♎	
	738 Aug 25 j 00:23	0°♎		greatest brilliancy	741 May 06 j 01:49	25°♎18'08	-4.7m
	738 Sep 18 j 18:22	0°♐		retrograde	741 May 17 j 01:16	27°♎27'35	
	738 Oct 13 j 00:13	0°♑		desc. node	741 May 29 j 18:21	24°♎18'06	
	738 Nov 05 j 23:24	0°♒		evening set	741 Jun 01 j 02:00	23°♎06'30	
	738 Nov 29 j 19:56	0°♌		inferior conj	741 Jun 07 j 12:29	19°♎15'06	-2°02'10
morning set	738 Dec 05 j 13:30	7°♌12'41		minimum elong	741 Jun 07 j 08:06	19°♎21'59	2°00'55
desc. node	738 Dec 12 j 23:23	16°♌32'15		min. Earth dist.	741 Jun 07 j 13:22	19°♎13'44	0.28975 AU
	738 Dec 23 j 16:16	0°♊		morning rise	741 Jun 13 j 14:11	15°♎35'43	
				direct	741 Jun 29 j 05:20	10°♎57'18	
superior conj	739 Jan 16 j 11:41	29°♊53'28	-1°10'14	greatest brilliancy	741 Jul 09 j 16:15	12°♎55'07	-4.7m
minimum elong	739 Jan 16 j 00:30	29°♊18'24	1°09'54		741 Aug 05 j 02:03	0°♏	
	739 Jan 16 j 13:46	0°♋		morning max el	741 Aug 17 j 07:26	11°♏11'45	46°00'43
max. Earth dist.	739 Jan 20 j 00:20	4°♋18'40	1.71490 AU		741 Sep 04 j 15:09	0°♎	
	739 Feb 09 j 13:30	0°♋		asc. node	741 Sep 19 j 21:53	16°♎55'16	
evening rise	739 Feb 25 j 23:37	20°♋26'27			741 Oct 01 j 06:34	0°♐	
	739 Mar 05 j 16:38	0°♌			741 Oct 26 j 10:09	0°♑	
	739 Mar 30 j 00:27	0°♍			741 Nov 19 j 20:45	0°♒	
asc. node	739 Apr 05 j 02:51	7°♍28'36			741 Dec 13 j 23:57	0°♌	
	739 Apr 23 j 14:08	0°♎			742 Jan 07 j 00:49	0°♊	
	739 May 18 j 11:00	0°♏		desc. node	742 Jan 09 j 11:11	3°♊02'12	
	739 Jun 12 j 17:40	0°♎			742 Jan 31 j 01:50	0°♋	
	739 Jul 08 j 15:59	0°♐		morning set	742 Feb 20 j 12:06	25°♋26'09	
desc. node	739 Jul 25 j 16:00	19°♐00'15			742 Feb 24 j 04:14	0°♋	
	739 Aug 04 j 20:18	0°♑			742 Mar 20 j 08:49	0°♌	






































































































































superior conj	742 Mar 31 j 08:51	13° Υ 35'52	-1°06'47	min. Earth dist.	744 Aug 17 j 09:07	26° Ω 37'49	0.28352 AU
minimum elong	742 Mar 31 j 18:32	14° Υ 05'43	1°06'29	morning rise	744 Aug 20 j 00:17	25° Ω 01'28	
max. Earth dist.	742 Apr 03 j 06:35	17° Υ 11'04	1.73026 AU	direct	744 Sep 07 j 04:15	18° Ω 48'55	
	742 Apr 13 j 16:00	0° \mathcal{B}		greatest brilliancy	744 Sep 18 j 06:22	21° Ω 04'06	-4.8m
asc. node	742 May 02 j 14:43	23° \mathcal{B} 18'02			744 Oct 03 j 15:46	0° \mathcal{M}	
evening rise	742 May 07 j 22:18	29° \mathcal{B} 49'37		asc. node	744 Oct 17 j 09:36	11° \mathcal{M} 32'39	
	742 May 08 j 01:41	0° Π		morning max el	744 Oct 27 j 14:17	21° \mathcal{M} 26'01	46°43'04
	742 Jun 01 j 13:31	0° \mathcal{E}			744 Nov 04 j 20:00	0° \mathcal{A}	
	742 Jun 26 j 03:31	0° Ω			744 Dec 01 j 13:59	0° \mathcal{M}	
	742 Jul 20 j 20:46	0° \mathcal{M}			744 Dec 26 j 20:19	0° \mathcal{A}	
	742 Aug 14 j 19:26	0° \mathcal{A}			745 Jan 20 j 13:19	0° \mathcal{B}	
desc. node	742 Aug 22 j 04:00	8° \mathcal{A} 46'23		desc. node	745 Feb 05 j 23:12	20° \mathcal{B} 04'39	
	742 Sep 09 j 03:00	0° \mathcal{M}			745 Feb 14 j 01:27	0° \mathcal{A}	
	742 Oct 05 j 02:35	0° \mathcal{A}			745 Mar 10 j 12:11	0° \mathcal{H}	
	742 Nov 01 j 16:05	0° \mathcal{B}			745 Apr 03 j 22:59	0° Υ	
evening max el	742 Nov 04 j 06:09	2° \mathcal{B} 38'40	47°21'12		745 Apr 28 j 10:15	0° \mathcal{B}	
	742 Dec 06 j 07:32	0° \mathcal{A}		morning set	745 May 02 j 07:18	4° \mathcal{B} 45'12	
asc. node	742 Dec 13 j 07:12	3° \mathcal{A} 38'42			745 May 22 j 21:26	0° Π	
greatest brilliancy	742 Dec 14 j 20:35	4° \mathcal{A} 16'19	-4.9m	asc. node	745 May 30 j 02:29	8° Π 50'51	
retrograde	742 Dec 25 j 04:22	6° \mathcal{A} 18'39		max. Earth dist.	745 Jun 06 j 09:47	17° Π 49'07	1.73617 AU
evening set	743 Jan 10 j 03:28	1° \mathcal{A} 15'18					
	743 Jan 12 j 05:59	30° \mathcal{R} \mathcal{B}		superior conj	745 Jun 07 j 21:02	19° Π 37'24	0°20'37
min. Earth dist.	743 Jan 13 j 23:08	28° \mathcal{B} 56'26	0.27089 AU	minimum elong	745 Jun 07 j 16:57	19° Π 24'52	0°20'26
inferior conj	743 Jan 14 j 22:16	28° \mathcal{B} 20'21	7°10'02		745 Jun 16 j 07:39	0° \mathcal{E}	
minimum elong	743 Jan 14 j 12:32	28° \mathcal{B} 35'33	7°08'14		745 Jul 10 j 16:19	0° Ω	
morning rise	743 Jan 18 j 22:03	25° \mathcal{B} 54'09		evening rise	745 Jul 13 j 15:34	3° Ω 39'39	
direct	743 Feb 04 j 10:36	20° \mathcal{B} 34'59			745 Aug 03 j 23:49	0° \mathcal{M}	
greatest brilliancy	743 Feb 13 j 09:20	22° \mathcal{B} 05'21	-4.8m		745 Aug 28 j 07:18	0° \mathcal{A}	
	743 Feb 28 j 10:20	0° \mathcal{A}		desc. node	745 Sep 18 j 16:02	26° \mathcal{A} 18'27	
morning max el	743 Mar 25 j 22:05	21° \mathcal{A} 48'19	46°14'59		745 Sep 21 j 16:08	0° \mathcal{M}	
	743 Apr 03 j 02:50	0° \mathcal{H}			745 Oct 16 j 03:38	0° \mathcal{A}	
desc. node	743 Apr 03 j 20:47	0° \mathcal{H} 45'55			745 Nov 09 j 20:11	0° \mathcal{B}	
	743 May 01 j 00:55	0° Υ			745 Dec 05 j 00:01	0° \mathcal{A}	
	743 May 27 j 09:40	0° \mathcal{B}			745 Dec 31 j 07:58	0° \mathcal{H}	
	743 Jun 22 j 00:11	0° Π		asc. node	746 Jan 09 j 19:10	10° \mathcal{H} 08'39	
	743 Jul 17 j 02:02	0° \mathcal{E}		evening max el	746 Jan 14 j 20:19	15° \mathcal{H} 20'23	46°48'23
asc. node	743 Jul 26 j 00:09	10° \mathcal{E} 48'30			746 Jan 30 j 08:00	0° Υ	
	743 Aug 10 j 17:17	0° Ω		greatest brilliancy	746 Feb 23 j 15:26	16° Υ 03'34	-4.8m
	743 Sep 03 j 23:50	0° \mathcal{M}		retrograde	746 Mar 06 j 07:05	18° Υ 11'18	
morning set	743 Sep 19 j 12:24	19° \mathcal{M} 21'32		evening set	746 Mar 23 j 09:23	12° Υ 29'05	
	743 Sep 28 j 00:21	0° \mathcal{A}		inferior conj	746 Mar 27 j 13:04	9° Υ 54'15	7°03'04
	743 Oct 21 j 21:42	0° \mathcal{M}		minimum elong	746 Mar 27 j 22:14	9° Υ 39'46	7°01'30
max. Earth dist.	743 Oct 27 j 08:32	6° \mathcal{M} 51'27	1.71187 AU	min. Earth dist.	746 Mar 27 j 11:31	9° Υ 56'41	0.28625 AU
				morning rise	746 Apr 01 j 11:21	6° Υ 52'29	
superior conj	743 Oct 28 j 11:39	8° \mathcal{M} 16'45	0°39'14	direct	746 Apr 17 j 19:33	1° Υ 41'51	
minimum elong	743 Oct 28 j 20:36	8° \mathcal{M} 44'55	0°38'50	greatest brilliancy	746 Apr 27 j 13:41	3° Υ 26'13	-4.7m
desc. node	743 Nov 14 j 13:40	29° \mathcal{M} 46'14		desc. node	746 May 01 j 08:29	4° Υ 55'51	
	743 Nov 14 j 18:02	0° \mathcal{A}			746 Jun 03 j 23:23	0° \mathcal{B}	
evening rise	743 Dec 08 j 21:03	0° \mathcal{B} 19'54		morning max el	746 Jun 05 j 16:28	1° \mathcal{B} 37'17	45°45'12
	743 Dec 08 j 14:43	0° \mathcal{B}			746 Jul 03 j 06:55	0° Π	
	744 Jan 01 j 12:51	0° \mathcal{A}			746 Jul 30 j 00:32	0° \mathcal{E}	
	744 Jan 25 j 14:09	0° \mathcal{H}		asc. node	746 Aug 22 j 12:05	27° \mathcal{E} 35'13	
	744 Feb 18 j 21:15	0° Υ			746 Aug 24 j 12:30	0° Ω	
asc. node	744 Mar 06 j 17:00	20° Υ 30'32			746 Sep 18 j 05:53	0° \mathcal{M}	
	744 Mar 14 j 13:45	0° \mathcal{B}			746 Oct 12 j 11:26	0° \mathcal{A}	
	744 Apr 08 j 20:41	0° Π			746 Nov 05 j 10:28	0° \mathcal{M}	
	744 May 05 j 03:27	0° \mathcal{E}			746 Nov 29 j 06:57	0° \mathcal{A}	
	744 Jun 02 j 11:51	0° Ω		morning set	746 Dec 02 j 23:45	4° \mathcal{A} 39'22	
evening max el	744 Jun 07 j 22:02	5° Ω 16'41	45°24'36	desc. node	746 Dec 12 j 01:25	16° \mathcal{A} 04'02	
desc. node	744 Jun 26 j 06:16	21° Ω 16'23			746 Dec 23 j 03:16	0° \mathcal{B}	
	744 Jul 09 j 12:15	0° \mathcal{M}					
greatest brilliancy	744 Jul 16 j 19:57	3° \mathcal{M} 12'27	-4.7m	superior conj	747 Jan 13 j 21:46	27° \mathcal{B} 20'12	-1°07'52
retrograde	744 Jul 26 j 14:11	4° \mathcal{M} 55'46		minimum elong	747 Jan 13 j 10:15	26° \mathcal{B} 44'03	1°07'32
	744 Aug 11 j 17:59	30° \mathcal{R} Ω			747 Jan 16 j 00:45	0° \mathcal{A}	
evening set	744 Aug 13 j 09:05	29° Ω 03'43		max. Earth dist.	747 Jan 17 j 10:02	1° \mathcal{A} 44'20	1.71451 AU
inferior conj	744 Aug 16 j 20:14	26° Ω 57'40	-8°36'48		747 Feb 09 j 00:26	0° \mathcal{H}	
minimum elong	744 Aug 16 j 16:48	27° Ω 02'57	8°36'37	evening rise	747 Feb 23 j 11:58	18° \mathcal{H} 01'49	

	747 Mar 05 j 03:34	0°♄			749 Oct 25 j 22:53	0°♁	
	747 Mar 29 j 11:29	0°♄			749 Nov 19 j 08:50	0°♁	
asc. node	747 Apr 04 j 04:53	7°♄00'55			749 Dec 13 j 11:37	0°♄	
	747 Apr 23 j 01:25	0°♁			750 Jan 06 j 12:12	0°♄	
	747 May 17 j 22:48	0°♁		desc. node	750 Jan 08 j 13:23	2°♄33'34	
	747 Jun 12 j 06:23	0°♁			750 Jan 30 j 13:00	0°♁	
	747 Jul 08 j 06:27	0°♄		morning set	750 Feb 18 j 00:42	23°♁01'46	
desc. node	747 Jul 24 j 18:10	18°♄21'21			750 Feb 23 j 15:15	0°♄	
	747 Aug 04 j 14:35	0°♁			750 Mar 19 j 19:44	0°♄	
evening max el	747 Aug 20 j 18:53	16°♁25'38 46°23'28					
	747 Sep 04 j 17:28	0°♁		superior conj	750 Mar 29 j 00:25	11°♄22'06 -1°08'52	
greatest brilliancy	747 Sep 30 j 04:12	15°♁53'17 -4.9m		minimum elong	750 Mar 29 j 09:57	11°♄51'31 1°08'36	
retrograde	747 Oct 09 j 09:56	17°♁27'53		max. Earth dist.	750 Apr 01 j 00:03	15°♄03'15 1.72981 AU	
evening set	747 Oct 24 j 14:00	12°♁59'10			750 Apr 13 j 02:53	0°♄	
inferior conj	747 Oct 29 j 23:29	9°♁49'02 -3°58'38		asc. node	750 May 01 j 16:42	22°♄50'41	
minimum elong	747 Oct 30 j 07:50	9°♁36'21 3°56'12		evening rise	750 May 05 j 15:53	27°♄42'45	
min. Earth dist.	747 Oct 30 j 11:33	9°♁30'43 0.26601 AU			750 May 07 j 12:37	0°♁	
morning rise	747 Nov 05 j 01:20	6°♁16'45			750 Jun 01 j 00:35	0°♁	
asc. node	747 Nov 14 j 21:20	2°♁34'55			750 Jun 25 j 14:53	0°♁	
direct	747 Nov 19 j 12:26	2°♁08'25			750 Jul 20 j 08:40	0°♄	
greatest brilliancy	747 Nov 30 j 02:57	4°♁17'03 -4.9m			750 Aug 14 j 08:11	0°♁	
	748 Jan 03 j 15:24	0°♄		desc. node	750 Aug 21 j 06:04	8°♁13'46	
morning max el	748 Jan 09 j 04:42	5°♄31'23 46°53'51			750 Sep 08 j 17:06	0°♁	
	748 Feb 01 j 01:32	0°♄			750 Oct 04 j 19:07	0°♄	
	748 Feb 27 j 07:25	0°♁			750 Nov 01 j 14:35	0°♄	
desc. node	748 Mar 05 j 11:04	8°♁21'58		evening max el	750 Nov 01 j 19:24	0°♄12'11 47°20'43	
	748 Mar 23 j 18:41	0°♄			750 Dec 08 j 06:36	0°♁	
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	748 May 12 j 19:37	0°♄		greatest brilliancy	750 Dec 12 j 11:25	1°♁51'07 -4.9m	
	748 Jun 06 j 13:49	0°♁		retrograde	750 Dec 22 j 17:49	3°♁52'41	
asc. node	748 Jun 26 j 14:23	24°♁25'25			751 Jan 05 j 14:16	30°♄	
	748 Jul 01 j 03:37	0°♁		evening set	751 Jan 07 j 13:22	28°♄55'02	
morning set	748 Jul 08 j 18:56	9°♁22'35		min. Earth dist.	751 Jan 11 j 13:00	26°♄30'54 0.27027 AU	
	748 Jul 25 j 12:31	0°♁		inferior conj	751 Jan 12 j 11:44	25°♄55'32 6°56'25	
max. Earth dist.	748 Aug 10 j 11:22	19°♁46'01 1.72598 AU		minimum elong	751 Jan 12 j 01:44	26°♄11'05 6°54'29	
				morning rise	751 Jan 16 j 14:30	23°♄25'09	
superior conj	748 Aug 14 j 06:36	24°♁29'19 1°22'57		direct	751 Feb 01 j 22:50	18°♄10'51	
minimum elong	748 Aug 14 j 03:00	24°♁18'09 1°22'54		greatest brilliancy	751 Feb 10 j 23:19	19°♄42'34 -4.9m	
	748 Aug 18 j 16:59	0°♄			751 Mar 01 j 06:58	0°♁	
	748 Sep 11 j 18:30	0°♁		morning max el	751 Mar 23 j 11:31	19°♁27'27 46°16'32	
evening rise	748 Sep 20 j 17:34	11°♁11'24		desc. node	751 Apr 02 j 22:49	29°♁59'52	
	748 Oct 05 j 18:51	0°♁			751 Apr 02 j 22:52	0°♄	
desc. node	748 Oct 16 j 03:51	12°♁57'34			751 Apr 30 j 16:09	0°♄	
	748 Oct 29 j 19:22	0°♄			751 May 26 j 22:54	0°♄	
	748 Nov 22 j 21:03	0°♄			751 Jun 21 j 12:23	0°♁	
	748 Dec 17 j 01:38	0°♁			751 Jul 16 j 13:38	0°♁	
	749 Jan 10 j 13:00	0°♄		asc. node	751 Jul 25 j 02:17	10°♁20'06	
	749 Feb 04 j 14:33	0°♄			751 Aug 10 j 04:33	0°♁	
asc. node	749 Feb 06 j 07:04	1°♄58'54			751 Sep 03 j 10:57	0°♄	
	749 Mar 02 j 20:51	0°♄		morning set	751 Sep 17 j 03:03	17°♄02'37	
evening max el	749 Mar 26 j 22:54	25°♄08'49 45°38'44			751 Sep 27 j 11:27	0°♁	
	749 Apr 01 j 01:13	0°♁			751 Oct 21 j 08:51	0°♁	
greatest brilliancy	749 May 03 j 18:50	23°♁10'01 -4.7m		max. Earth dist.	751 Oct 24 j 18:27	4°♁16'34 1.71216 AU	
retrograde	749 May 14 j 17:04	25°♁18'51					
desc. node	749 May 28 j 20:24	21°♁27'02		superior conj	751 Oct 25 j 23:05	5°♁46'36 0°42'36	
evening set	749 May 29 j 18:14	20°♁57'56		minimum elong	751 Oct 26 j 08:31	6°♁16'18 0°42'11	
inferior conj	749 Jun 05 j 04:54	17°♁06'19 -1°42'52		desc. node	751 Nov 13 j 15:43	29°♁17'25	
minimum elong	749 Jun 05 j 01:10	17°♁12'09 1°41'48			751 Nov 14 j 05:15	0°♄	
min. Earth dist.	749 Jun 05 j 06:17	17°♁04'08 0.28975 AU		evening rise	751 Dec 06 j 06:53	27°♄44'39	
morning rise	749 Jun 11 j 08:01	13°♁24'32			751 Dec 08 j 02:00	0°♄	
direct	749 Jun 26 j 21:16	8°♁48'28			752 Jan 01 j 00:13	0°♁	
greatest brilliancy	749 Jul 07 j 08:34	10°♁46'04 -4.7m			752 Jan 25 j 01:38	0°♄	
	749 Aug 05 j 06:06	0°♁			752 Feb 18 j 08:58	0°♄	
morning max el	749 Aug 14 j 21:52	8°♁56'48 45°59'29		asc. node	752 Mar 05 j 19:00	20°♄00'20	
	749 Sep 04 j 08:14	0°♁			752 Mar 14 j 01:56	0°♄	
asc. node	749 Sep 18 j 23:54	16°♁18'12			752 Apr 08 j 09:52	0°♁	
	749 Sep 30 j 20:37	0°♄			752 May 04 j 18:49	0°♁	

	752 Jun 02 j 09:08	0°♎			754 Nov 04 j 21:53	0°♍	
evening max el	752 Jun 05 j 13:25	3°♎04'06	45°23'41		754 Nov 28 j 18:17	0°♊	
desc. node	752 Jun 25 j 08:28	20°♎09'16		morning set	754 Nov 30 j 09:51	2°♊04'31	
	752 Jul 11 j 21:09	0°♎		desc. node	754 Dec 11 j 03:35	15°♊35'17	
greatest brilliancy	752 Jul 14 j 08:00	0°♎55'16	-4.7m		754 Dec 22 j 14:32	0°♊	
retrograde	752 Jul 24 j 05:08	2°♎40'47					
	752 Aug 04 j 22:01	30°♎♎		superior conj	755 Jan 11 j 07:41	24°♊45'33	-1°05'22
evening set	752 Aug 10 j 21:10	26°♎51'50		minimum elong	755 Jan 10 j 19:56	24°♊08'42	1°05'00
inferior conj	752 Aug 14 j 11:02	24°♎41'43	-8°32'22	max. Earth dist.	755 Jan 14 j 21:00	29°♊13'02	1.71408 AU
minimum elong	752 Aug 14 j 06:50	24°♎48'10	8°32'08		755 Jan 15 j 11:59	0°♊	
min. Earth dist.	752 Aug 14 j 22:45	24°♎23'41	0.28401 AU		755 Feb 08 j 11:38	0°♊	
morning rise	752 Aug 17 j 16:20	22°♎43'47		evening rise	755 Feb 21 j 00:13	15°♊35'55	
direct	752 Sep 04 j 20:07	16°♎32'20			755 Mar 04 j 14:46	0°♊	
greatest brilliancy	752 Sep 15 j 21:04	18°♎46'49	-4.8m		755 Mar 28 j 22:46	0°♊	
	752 Oct 04 j 07:08	0°♎		asc. node	755 Apr 03 j 06:56	6°♊32'31	
asc. node	752 Oct 16 j 11:39	10°♎34'54			755 Apr 22 j 12:58	0°♊	
morning max el	752 Oct 25 j 05:54	19°♎07'44	46°41'45		755 May 17 j 10:51	0°♊	
	752 Nov 04 j 15:31	0°♎			755 Jun 11 j 19:24	0°♎	
	752 Dec 01 j 05:21	0°♎			755 Jul 07 j 21:18	0°♎	
	752 Dec 26 j 09:56	0°♊		desc. node	755 Jul 23 j 20:10	17°♎40'45	
	753 Jan 20 j 02:00	0°♊			755 Aug 04 j 09:39	0°♎	
desc. node	753 Feb 05 j 01:11	19°♊33'10		evening max el	755 Aug 18 j 08:08	14°♎03'24	46°20'35
	753 Feb 13 j 13:30	0°♊			755 Sep 05 j 04:59	0°♎	
	753 Mar 09 j 23:47	0°♊		greatest brilliancy	755 Sep 27 j 17:18	13°♎26'33	-4.9m
	753 Apr 03 j 10:16	0°♊		retrograde	755 Oct 06 j 21:12	14°♎59'30	
	753 Apr 27 j 21:16	0°♊		evening set	755 Oct 22 j 04:57	10°♎27'18	
morning set	753 Apr 30 j 01:04	2°♊38'47		inferior conj	755 Oct 27 j 11:42	7°♎20'48	-4°20'03
	753 May 22 j 08:20	0°♊		minimum elong	755 Oct 27 j 20:37	7°♎07'15	4°17'32
asc. node	753 May 29 j 04:38	8°♊24'04		min. Earth dist.	755 Oct 28 j 01:15	7°♎00'13	0.26644 AU
max. Earth dist.	753 Jun 04 j 09:50	16°♊02'03	1.73628 AU	morning rise	755 Nov 02 j 11:52	3°♎50'17	
					755 Nov 12 j 22:58	30°♎♎	
superior conj	753 Jun 05 j 15:33	17°♊33'22	0°17'35	asc. node	755 Nov 13 j 23:32	29°♎50'59	
minimum elong	753 Jun 05 j 12:03	17°♊22'35	0°17'25	direct	755 Nov 17 j 01:03	29°♎39'28	
	753 Jun 15 j 18:32	0°♊			755 Nov 21 j 04:38	0°♎	
	753 Jul 10 j 03:20	0°♎		greatest brilliancy	755 Nov 27 j 17:13	1°♎49'12	-4.9m
evening rise	753 Jul 11 j 10:26	1°♎35'53			756 Jan 03 j 16:33	0°♊	
	753 Aug 03 j 11:03	0°♎		morning max el	756 Jan 06 j 16:54	3°♊01'41	46°54'29
	753 Aug 27 j 18:51	0°♎			756 Jan 31 j 18:49	0°♊	
desc. node	753 Sep 17 j 17:58	25°♎47'50			756 Feb 26 j 21:51	0°♊	
	753 Sep 21 j 04:07	0°♎		desc. node	756 Mar 04 j 13:06	7°♊46'57	
	753 Oct 15 j 16:12	0°♊			756 Mar 23 j 07:39	0°♊	
	753 Nov 09 j 09:38	0°♊			756 Apr 17 j 09:37	0°♊	
	753 Dec 04 j 15:00	0°♊			756 May 12 j 07:09	0°♊	
	753 Dec 31 j 02:21	0°♊			756 Jun 06 j 01:00	0°♊	
asc. node	754 Jan 08 j 21:17	9°♊20'34		asc. node	756 Jun 25 j 16:30	23°♊58'14	
evening max el	754 Jan 12 j 12:37	13°♊04'32	46°50'47		756 Jun 30 j 14:35	0°♊	
	754 Jan 30 j 15:49	0°♊		morning set	756 Jul 06 j 13:02	7°♊17'09	
greatest brilliancy	754 Feb 21 j 07:30	13°♊49'14	-4.8m		756 Jul 24 j 23:24	0°♎	
retrograde	754 Mar 03 j 23:42	15°♊57'11		max. Earth dist.	756 Aug 08 j 04:23	17°♎36'06	1.72653 AU
evening set	754 Mar 21 j 04:02	10°♊11'04					
inferior conj	754 Mar 25 j 04:54	7°♊40'16	7°14'43	superior conj	756 Aug 12 j 00:04	22°♎20'42	1°22'13
minimum elong	754 Mar 25 j 13:49	7°♊26'11	7°13'18	minimum elong	756 Aug 11 j 19:51	22°♎07'35	1°22'11
min. Earth dist.	754 Mar 25 j 02:17	7°♊44'24	0.28591 AU		756 Aug 18 j 03:53	0°♎	
morning rise	754 Mar 29 j 23:54	4°♊43'22			756 Sep 11 j 05:33	0°♎	
	754 Apr 10 j 09:14	30°♊♊		evening rise	756 Sep 18 j 07:55	8°♎51'38	
direct	754 Apr 15 j 11:25	29°♊28'40			756 Oct 05 j 06:07	0°♎	
	754 Apr 20 j 17:00	0°♊		desc. node	756 Oct 15 j 05:58	12°♎28'41	
greatest brilliancy	754 Apr 25 j 03:12	1°♊11'27	-4.7m		756 Oct 29 j 06:54	0°♊	
desc. node	754 Apr 30 j 10:31	3°♊23'18			756 Nov 22 j 08:51	0°♊	
morning max el	754 Jun 03 j 08:40	29°♊27'22	45°45'30		756 Dec 16 j 13:47	0°♊	
	754 Jun 03 j 22:20	0°♊			757 Jan 10 j 01:44	0°♊	
	754 Jul 02 j 22:50	0°♊			757 Feb 04 j 04:24	0°♊	
	754 Jul 29 j 14:02	0°♊		asc. node	757 Feb 05 j 09:03	1°♊23'55	
asc. node	754 Aug 21 j 14:04	27°♊03'53			757 Mar 02 j 13:17	0°♊	
	754 Aug 24 j 00:55	0°♎		evening max el	757 Mar 24 j 13:27	22°♊53'44	45°40'35
	754 Sep 17 j 17:45	0°♎			757 Apr 01 j 02:11	0°♊	
	754 Oct 11 j 23:00	0°♎		greatest brilliancy	757 May 01 j 11:38	21°♊01'44	-4.7m

retrograde	757 May 12 j 09:16	23°II10'41		superior conj	759 Oct 23 j 11:08	3°III19'18	0°45'49
evening set	757 May 27 j 10:46	18°II49'20		minimum elong	759 Oct 23 j 20:59	3°III50'14	0°45'24
desc. node	757 May 27 j 22:36	18°II33'04		desc. node	759 Nov 12 j 17:52	28°III49'46	
inferior conj	757 Jun 02 j 21:28	14°II57'55	-1°23'32		759 Nov 13 j 16:12	0°♂	
minimum elong	757 Jun 02 j 18:25	15°II02'41	1°22'39	evening rise	759 Dec 03 j 17:05	25°♂11'19	
min. Earth dist.	757 Jun 02 j 23:23	14°II54'55	0.28974 AU		759 Dec 07 j 13:02	0°♂	
morning rise	757 Jun 09 j 01:55	11°II14'06			759 Dec 31 j 11:23	0°≈	
direct	757 Jun 24 j 13:07	6°II39'52			760 Jan 24 j 12:58	0°♂	
greatest brilliancy	757 Jul 05 j 01:28	8°II38'03	-4.7m		760 Feb 17 j 20:34	0°♀	
	757 Aug 05 j 08:26	0°♂		asc. node	760 Mar 04 j 21:03	19°♀30'38	
morning max el	757 Aug 12 j 12:55	6°♂43'36	45°58'25		760 Mar 13 j 14:02	0°♂	
	757 Sep 04 j 00:53	0°♂			760 Apr 07 j 22:59	0°II	
asc. node	757 Sep 18 j 01:59	15°♂41'47			760 May 04 j 10:11	0°♂	
	757 Sep 30 j 10:28	0°♂			760 Jun 02 j 06:54	0°♂	
	757 Oct 25 j 11:33	0°♂		evening max el	760 Jun 03 j 05:17	0°♂53'36	45°22'59
	757 Nov 18 j 20:55	0°III		desc. node	760 Jun 24 j 10:25	19°♂00'51	
	757 Dec 12 j 23:23	0°♂		greatest brilliancy	760 Jul 11 j 20:36	28°♂40'07	-4.7m
	758 Jan 05 j 23:42	0°♂			760 Jul 16 j 21:54	0°♂	
desc. node	758 Jan 07 j 15:24	2°♂04'00		retrograde	760 Jul 21 j 20:09	0°♂27'12	
	758 Jan 30 j 00:17	0°≈			760 Jul 26 j 15:24	30°♂♂	
morning set	758 Feb 15 j 12:41	20°≈35'02		evening set	760 Aug 08 j 09:16	24°♂41'59	
	758 Feb 23 j 02:20	0°♂		inferior conj	760 Aug 12 j 02:01	22°♂27'21	-8°27'17
	758 Mar 19 j 06:41	0°♀		minimum elong	760 Aug 11 j 21:05	22°♂34'57	8°26'56
				min. Earth dist.	760 Aug 12 j 12:27	22°♂11'15	0.28446 AU
superior conj	758 Mar 26 j 15:39	9°♀07'14	-1°10'52	morning rise	760 Aug 15 j 08:44	20°♂27'13	
minimum elong	758 Mar 27 j 00:59	9°♀36'05	1°10'37	direct	760 Sep 02 j 12:19	14°♂17'32	
max. Earth dist.	758 Mar 29 j 16:19	12°♀51'40	1.72930 AU	greatest brilliancy	760 Sep 13 j 11:26	16°♂30'32	-4.8m
	758 Apr 12 j 13:46	0°♂			760 Oct 04 j 18:04	0°♂	
asc. node	758 Apr 30 j 18:52	22°♂23'59		asc. node	760 Oct 15 j 13:45	9°♂39'36	
evening rise	758 May 03 j 09:24	25°♂35'52		morning max el	760 Oct 22 j 21:17	16°♂50'10	46°40'28
	758 May 06 j 23:30	0°II			760 Nov 04 j 10:05	0°♂	
	758 May 31 j 11:37	0°♂			760 Nov 30 j 20:08	0°III	
	758 Jun 25 j 02:13	0°♂			760 Dec 25 j 23:04	0°♂	
	758 Jul 19 j 20:30	0°♂			761 Jan 19 j 14:14	0°♂	
	758 Aug 13 j 20:51	0°♂		desc. node	761 Feb 04 j 03:11	19°♂02'53	
desc. node	758 Aug 20 j 08:05	7°♂41'19			761 Feb 13 j 01:11	0°≈	
	758 Sep 08 j 07:09	0°III			761 Mar 09 j 11:05	0°♂	
	758 Oct 04 j 11:46	0°♂			761 Apr 02 j 21:15	0°♀	
evening max el	758 Oct 30 j 08:48	27°♂46'34	47°19'54		761 Apr 27 j 08:02	0°♂	
	758 Nov 01 j 13:55	0°♂		morning set	761 Apr 27 j 18:29	0°♂32'03	
greatest brilliancy	758 Dec 10 j 01:18	29°♂24'16	-4.9m		761 May 21 j 18:57	0°II	
asc. node	758 Dec 11 j 11:27	29°♂54'35		asc. node	761 May 28 j 06:41	7°II57'49	
	758 Dec 11 j 18:04	0°≈		max. Earth dist.	761 Jun 02 j 08:57	14°II13'06	1.73631 AU
retrograde	758 Dec 20 j 07:22	1°≈25'50					
	758 Dec 28 j 14:07	30°♂♂		superior conj	761 Jun 03 j 09:46	15°II29'20	0°14'30
evening set	759 Jan 04 j 22:59	26°♂33'27		minimum elong	761 Jun 03 j 06:51	15°II20'22	0°14'21
min. Earth dist.	759 Jan 09 j 02:22	24°♂04'24	0.26972 AU	behind sun begin	761 Jun 02 j 21:20	14°II51'10	
inferior conj	759 Jan 10 j 00:51	23°♂29'32	6°41'49	behind sun end	761 Jun 03 j 16:22	15°II49'35	
minimum elong	759 Jan 09 j 14:40	23°♂45'20	6°39'42		761 Jun 15 j 05:08	0°♂	
morning rise	759 Jan 14 j 06:45	20°♂55'01		evening rise	761 Jul 09 j 05:11	29°♂32'47	
direct	759 Jan 30 j 11:12	15°♂45'25			761 Jul 09 j 14:01	0°♂	
greatest brilliancy	759 Feb 08 j 12:53	17°♂18'26	-4.9m		761 Aug 02 j 21:57	0°♂	
	759 Mar 01 j 22:35	0°≈			761 Aug 27 j 06:05	0°♂	
morning max el	759 Mar 21 j 01:41	17°≈08'02	46°18'13	desc. node	761 Sep 16 j 20:06	25°♂18'48	
desc. node	759 Apr 02 j 00:54	29°≈14'29			761 Sep 20 j 15:46	0°III	
	759 Apr 02 j 18:21	0°♂			761 Oct 15 j 04:28	0°♂	
	759 Apr 30 j 07:07	0°♀			761 Nov 08 j 22:48	0°♂	
	759 May 26 j 11:54	0°♂			761 Dec 04 j 05:43	0°≈	
	759 Jun 21 j 00:20	0°II			761 Dec 30 j 20:40	0°♂	
	759 Jul 16 j 01:00	0°♂		asc. node	762 Jan 07 j 23:13	8°♂32'40	
asc. node	759 Jul 24 j 04:12	9°♂51'44		evening max el	762 Jan 10 j 04:28	10°♂48'45	46°53'00
	759 Aug 09 j 15:35	0°♂			762 Jan 31 j 01:45	0°♀	
	759 Sep 02 j 21:51	0°♂		greatest brilliancy	762 Feb 18 j 23:57	11°♀36'28	-4.8m
morning set	759 Sep 14 j 18:16	14°♂46'15		retrograde	762 Mar 01 j 15:53	13°♀43'57	
	759 Sep 26 j 22:19	0°♂		evening set	762 Mar 18 j 22:38	7°♀54'14	
	759 Oct 20 j 19:44	0°III		inferior conj	762 Mar 22 j 20:45	5°♀27'18	7°25'47
max. Earth dist.	759 Oct 22 j 05:50	1°III47'11	1.71245 AU	minimum elong	762 Mar 23 j 05:20	5°♀13'43	7°24'30

min. Earth dist.	762 Mar 22 j 17:12	5° Υ 32'56	0.28558 AU		764 Aug 17 j 14:32	0° \mathbb{M}	
morning rise	762 Mar 27 j 12:21	2° Υ 35'14			764 Sep 10 j 16:20	0° $\underline{\mathbf{A}}$	
	762 Apr 01 j 10:29	30° \mathbb{R} \mathbb{H}		evening rise	764 Sep 15 j 22:21	6° $\underline{\mathbf{A}}$ 33'07	
direct	762 Apr 13 j 03:14	27° \mathbb{H} 16'33			764 Oct 04 j 17:06	0° \mathbb{M}	
greatest brilliancy	762 Apr 22 j 16:58	28° \mathbb{H} 57'44	-4.7m	desc. node	764 Oct 14 j 08:03	12° \mathbb{M} 00'42	
	762 Apr 25 j 10:53	0° Υ			764 Oct 28 j 18:08	0° \mathbb{A}	
desc. node	762 Apr 29 j 12:41	1° Υ 54'54			764 Nov 21 j 20:22	0° \mathbb{Z}	
morning max el	762 Jun 01 j 00:04	27° Υ 16'15	45°45'48		764 Dec 16 j 01:42	0° \approx	
	762 Jun 03 j 20:02	0° \mathbb{B}			765 Jan 09 j 14:15	0° \mathbb{H}	
	762 Jul 02 j 14:10	0° \mathbb{H}			765 Feb 03 j 18:06	0° Υ	
	762 Jul 29 j 03:04	0° \mathbb{G}		asc. node	765 Feb 04 j 11:11	0° Υ 49'54	
asc. node	762 Aug 20 j 16:11	26° \mathbb{G} 34'09			765 Mar 02 j 05:42	0° \mathbb{B}	
	762 Aug 23 j 12:53	0° Ω		evening max el	765 Mar 22 j 04:03	20° \mathbb{B} 39'42	45°42'34
	762 Sep 17 j 05:10	0° \mathbb{M}			765 Apr 01 j 04:06	0° \mathbb{H}	
	762 Oct 11 j 10:09	0° $\underline{\mathbf{A}}$		greatest brilliancy	765 Apr 29 j 03:48	18° \mathbb{H} 53'33	-4.7m
	762 Nov 04 j 08:54	0° \mathbb{M}		retrograde	765 May 10 j 01:52	21° \mathbb{H} 03'24	
morning set	762 Nov 27 j 20:13	29° \mathbb{M} 31'40		evening set	765 May 25 j 03:26	16° \mathbb{H} 41'10	
	762 Nov 28 j 05:14	0° \mathbb{A}		desc. node	765 May 27 j 00:31	15° \mathbb{H} 37'32	
desc. node	762 Dec 10 j 05:34	15° \mathbb{A} 07'11		inferior conj	765 May 31 j 14:00	12° \mathbb{H} 50'09	-1°04'07
	762 Dec 22 j 01:26	0° \mathbb{Z}		minimum elong	765 May 31 j 11:39	12° \mathbb{H} 53'49	1°03'25
				min. Earth dist.	765 May 31 j 16:09	12° \mathbb{H} 46'47	0.28977 AU
superior conj	763 Jan 08 j 17:52	22° \mathbb{Z} 12'54	-1°02'45	morning rise	765 Jun 06 j 19:42	9° \mathbb{H} 04'42	
minimum elong	763 Jan 08 j 05:59	21° \mathbb{Z} 35'38	1°02'21	direct	765 Jun 22 j 05:10	4° \mathbb{H} 31'48	
max. Earth dist.	763 Jan 12 j 06:30	26° \mathbb{Z} 38'22	1.71364 AU	greatest brilliancy	765 Jul 02 j 18:14	6° \mathbb{H} 30'38	-4.7m
	763 Jan 14 j 22:49	0° \approx			765 Aug 05 j 09:11	0° \mathbb{G}	
	763 Feb 07 j 22:25	0° \mathbb{H}		morning max el	765 Aug 10 j 04:50	4° \mathbb{G} 33'08	45°57'17
evening rise	763 Feb 18 j 12:32	13° \mathbb{H} 11'27			765 Sep 03 j 17:06	0° Ω	
	763 Mar 04 j 01:33	0° Υ		asc. node	765 Sep 17 j 04:06	15° Ω 06'05	
	763 Mar 28 j 09:41	0° \mathbb{B}			765 Sep 30 j 00:04	0° \mathbb{M}	
asc. node	763 Apr 02 j 09:05	6° \mathbb{B} 05'36			765 Oct 25 j 00:01	0° $\underline{\mathbf{A}}$	
	763 Apr 22 j 00:10	0° \mathbb{H}			765 Nov 18 j 08:47	0° \mathbb{M}	
	763 May 16 j 22:37	0° \mathbb{G}			765 Dec 12 j 10:54	0° \mathbb{A}	
	763 Jun 11 j 08:10	0° Ω			766 Jan 05 j 10:59	0° \mathbb{Z}	
	763 Jul 07 j 12:00	0° \mathbb{M}		desc. node	766 Jan 06 j 17:23	1° \mathbb{Z} 35'02	
desc. node	763 Jul 22 j 22:12	17° \mathbb{M} 00'52			766 Jan 29 j 11:22	0° \approx	
	763 Aug 04 j 04:51	0° $\underline{\mathbf{A}}$		morning set	766 Feb 13 j 00:24	18° \approx 07'51	
evening max el	763 Aug 15 j 20:26	11° $\underline{\mathbf{A}}$ 40'10	46°17'54		766 Feb 22 j 13:16	0° \mathbb{H}	
	763 Sep 05 j 19:35	0° \mathbb{M}			766 Mar 18 j 17:30	0° Υ	
greatest brilliancy	763 Sep 25 j 06:38	11° \mathbb{M} 01'46	-4.9m				
retrograde	763 Oct 04 j 08:31	12° \mathbb{M} 33'16		superior conj	766 Mar 24 j 06:43	6° Υ 52'07	-1°12'46
evening set	763 Oct 19 j 20:08	7° \mathbb{M} 57'02		minimum elong	766 Mar 24 j 15:47	7° Υ 20'11	1°12'31
inferior conj	763 Oct 25 j 00:08	4° \mathbb{M} 54'29	-4°40'43	max. Earth dist.	766 Mar 27 j 07:42	10° Υ 37'39	1.72880 AU
minimum elong	763 Oct 25 j 09:30	4° \mathbb{M} 40'12	4°38'09		766 Apr 12 j 00:30	0° \mathbb{B}	
min. Earth dist.	763 Oct 25 j 15:11	4° \mathbb{M} 31'33	0.26692 AU	asc. node	766 Apr 29 j 20:54	21° \mathbb{B} 57'16	
morning rise	763 Oct 30 j 22:22	1° \mathbb{M} 26'07		evening rise	766 May 01 j 02:50	23° \mathbb{B} 29'08	
	763 Nov 02 j 19:02	30° \mathbb{R} $\underline{\mathbf{A}}$			766 May 06 j 10:16	0° \mathbb{H}	
asc. node	763 Nov 13 j 01:35	27° $\underline{\mathbf{A}}$ 14'49			766 May 30 j 22:31	0° \mathbb{G}	
direct	763 Nov 14 j 13:27	27° $\underline{\mathbf{A}}$ 12'05			766 Jun 24 j 13:27	0° Ω	
greatest brilliancy	763 Nov 25 j 08:02	29° $\underline{\mathbf{A}}$ 23'35	-4.9m		766 Jul 19 j 08:20	0° \mathbb{M}	
	763 Nov 26 j 19:24	0° \mathbb{M}			766 Aug 13 j 09:35	0° $\underline{\mathbf{A}}$	
	764 Jan 03 j 16:06	0° \mathbb{A}		desc. node	766 Aug 19 j 10:11	7° $\underline{\mathbf{A}}$ 08'57	
morning max el	764 Jan 04 j 05:18	0° \mathbb{A} 33'27	46°55'05		766 Sep 07 j 21:22	0° \mathbb{M}	
	764 Jan 31 j 11:23	0° \mathbb{Z}			766 Oct 04 j 04:45	0° \mathbb{A}	
	764 Feb 26 j 11:46	0° \approx		evening max el	766 Oct 27 j 23:05	25° \mathbb{A} 23'18	47°19'12
desc. node	764 Mar 03 j 15:13	7° \approx 13'25			766 Nov 01 j 14:18	0° \mathbb{Z}	
	764 Mar 22 j 20:10	0° \mathbb{H}		greatest brilliancy	766 Dec 07 j 14:37	26° \mathbb{Z} 56'45	-4.9m
	764 Apr 16 j 21:18	0° Υ		asc. node	766 Dec 10 j 13:24	27° \mathbb{Z} 55'12	
	764 May 11 j 18:19	0° \mathbb{B}		retrograde	766 Dec 17 j 21:16	28° \mathbb{Z} 58'50	
	764 Jun 05 j 11:51	0° \mathbb{H}		evening set	767 Jan 02 j 08:41	24° \mathbb{Z} 11'28	
asc. node	764 Jun 24 j 18:27	23° \mathbb{H} 31'28		min. Earth dist.	767 Jan 06 j 15:20	21° \mathbb{Z} 38'05	0.26916 AU
	764 Jun 30 j 01:16	0° \mathbb{G}		inferior conj	767 Jan 07 j 13:52	21° \mathbb{Z} 03'16	6°26'23
morning set	764 Jul 04 j 06:58	5° \mathbb{G} 12'06		minimum elong	767 Jan 07 j 03:35	21° \mathbb{Z} 19'09	6°24'08
	764 Jul 24 j 10:01	0° Ω		morning rise	767 Jan 11 j 22:56	18° \mathbb{Z} 24'40	
max. Earth dist.	764 Aug 05 j 22:39	15° Ω 30'51	1.72707 AU	direct	767 Jan 28 j 00:08	13° \mathbb{Z} 19'56	
				greatest brilliancy	767 Feb 06 j 01:48	14° \mathbb{Z} 53'34	-4.9m
superior conj	764 Aug 09 j 17:26	20° Ω 12'32	1°21'23		767 Mar 02 j 10:13	0° \approx	
minimum elong	764 Aug 09 j 12:37	19° Ω 57'36	1°21'20	morning max el	767 Mar 18 j 16:16	14° \approx 49'41	46°19'44

desc. node	767 Apr 01 j 03:01	28°  29'52		769 Oct 14 j 17:05	0° 	
	767 Apr 02 j 13:17	0° 		769 Nov 08 j 12:24	0° 	
	767 Apr 29 j 21:53	0° 		769 Dec 03 j 21:02	0° 	
	767 May 26 j 00:50	0° 		769 Dec 30 j 15:59	0° 	
	767 Jun 20 j 12:15	0° 		asc. node	770 Jan 07 j 01:24	7°  43'08
	767 Jul 15 j 12:20	0° 		evening max el	770 Jan 07 j 19:21	8°  28'50 46°55'12
asc. node	767 Jul 23 j 06:23	9°  24'13			770 Jan 31 j 15:58	0° 
	767 Aug 09 j 02:38	0° 		greatest brilliancy	770 Feb 16 j 16:57	9°  22'36 -4.8m
	767 Sep 02 j 08:48	0° 		retrograde	770 Feb 27 j 07:36	11°  28'59
morning set	767 Sep 12 j 09:26	12°  29'38		evening set	770 Mar 16 j 17:05	5°  35'49
	767 Sep 26 j 09:18	0° 		inferior conj	770 Mar 20 j 12:30	3°  12'46 7°36'17
max. Earth dist.	767 Oct 19 j 14:47	29°  09'44 1.71276 AU		minimum elong	770 Mar 20 j 20:42	2°  59'46 7°35'07
	767 Oct 20 j 06:47	0° 		min. Earth dist.	770 Mar 20 j 08:16	3°  19'29 0.28521 AU
				morning rise	770 Mar 25 j 00:37	0° 
superior conj	767 Oct 20 j 23:05	0°  51'14 0°48'58			770 Mar 25 j 18:12	30°  R 
minimum elong	767 Oct 21 j 09:14	1°  23'08 0°48'33		direct	770 Apr 10 j 18:26	25°  42'53
desc. node	767 Nov 11 j 19:51	28°  21'06		greatest brilliancy	770 Apr 20 j 07:02	26°  42'52 -4.7m
	767 Nov 13 j 03:19	0° 			770 Apr 27 j 18:12	0° 
evening rise	767 Dec 01 j 02:52	22°  36'12		desc. node	770 Apr 28 j 14:41	0°  27'53
	767 Dec 07 j 00:13	0° 		morning max el	770 May 29 j 14:31	25°  01'35 45°46'10
	767 Dec 30 j 22:39	0° 			770 Jun 03 j 17:23	0° 
	768 Jan 24 j 00:24	0° 			770 Jul 02 j 05:40	0° 
	768 Feb 17 j 08:17	0° 			770 Jul 28 j 16:24	0° 
asc. node	768 Mar 03 j 23:11	19°  00'41		asc. node	770 Aug 19 j 18:16	26°  03'24
	768 Mar 13 j 02:18	0° 			770 Aug 23 j 01:09	0° 
	768 Apr 07 j 12:21	0° 			770 Sep 16 j 16:54	0° 
	768 May 04 j 01:58	0° 			770 Oct 10 j 21:35	0° 
evening max el	768 May 31 j 21:12	28°  42'46 45°22'19			770 Nov 03 j 20:13	0° 
	768 Jun 02 j 05:45	0° 		morning set	770 Nov 25 j 06:45	26°  58'15
desc. node	768 Jun 23 j 12:30	17°  50'25			770 Nov 27 j 16:30	0° 
greatest brilliancy	768 Jul 09 j 09:54	26°  25'37 -4.7m		desc. node	770 Dec 09 j 07:38	14°  38'16
retrograde	768 Jul 19 j 10:50	28°  13'29			770 Dec 21 j 12:42	0° 
evening set	768 Aug 05 j 21:18	22°  13'23				
inferior conj	768 Aug 09 j 17:05	20°  13'05 -8°21'30		superior conj	771 Jan 06 j 03:47	19°  38'13 -0°59'58
minimum elong	768 Aug 09 j 11:28	20°  21'46 8°21'01		minimum elong	771 Jan 05 j 15:53	19°  30'51 0°59'32
min. Earth dist.	768 Aug 10 j 02:30	19°  58'31 0.28488 AU		max. Earth dist.	771 Jan 09 j 12:15	23°  50'37 1.71325 AU
morning rise	768 Aug 13 j 01:28	18°  10'14			771 Jan 14 j 10:03	0° 
direct	768 Aug 31 j 04:19	12°  02'55			771 Feb 07 j 09:37	0° 
greatest brilliancy	768 Sep 11 j 01:48	14°  14'05 -4.8m		evening rise	771 Feb 16 j 00:17	10°  43'48
	768 Oct 05 j 02:19	0° 			771 Mar 03 j 12:47	0° 
asc. node	768 Oct 14 j 15:49	8°  44'47			771 Mar 27 j 21:02	0° 
morning max el	768 Oct 20 j 11:39	14°  29'33 46°38'57		asc. node	771 Apr 01 j 11:03	5°  36'52
	768 Nov 04 j 04:27	0° 			771 Apr 21 j 11:49	0° 
	768 Nov 30 j 11:01	0° 			771 May 16 j 10:50	0° 
	768 Dec 25 j 12:26	0° 			771 Jun 10 j 21:26	0° 
	769 Jan 19 j 02:45	0° 			771 Jul 07 j 03:21	0° 
desc. node	769 Feb 03 j 05:24	18°  32'27		desc. node	771 Jul 22 j 00:23	16°  19'37
	769 Feb 12 j 13:07	0° 			771 Aug 04 j 01:06	0° 
	769 Mar 08 j 22:36	0° 		evening max el	771 Aug 13 j 08:19	9°  14'59 46°15'20
	769 Apr 02 j 08:28	0° 			771 Sep 06 j 15:41	0° 
morning set	769 Apr 25 j 11:46	28°  24'08		greatest brilliancy	771 Sep 22 j 19:47	8°  36'08 -4.8m
	769 Apr 26 j 19:02	0° 		retrograde	771 Oct 01 j 20:16	10°  06'48
	769 May 21 j 05:50	0° 		evening set	771 Oct 17 j 11:29	5°  26'00
asc. node	769 May 27 j 08:41	7°  30'33		inferior conj	771 Oct 22 j 12:39	2°  27'41 -5°00'44
max. Earth dist.	769 May 31 j 06:19	12°  17'59 1.73632 AU		minimum elong	771 Oct 22 j 22:26	2°  12'48 4°58'07
				min. Earth dist.	771 Oct 23 j 05:05	2°  02'42 0.26742 AU
superior conj	769 Jun 01 j 04:02	13°  12'43 0°11'23			771 Oct 26 j 15:26	30°  R 
minimum elong	769 Jun 01 j 01:43	13°  17'32 0°11'16		morning rise	771 Oct 28 j 08:48	29°  02'04
behind sun begin	769 May 31 j 09:48	12°  12'40		direct	771 Nov 12 j 02:00	24°  04'47
behind sun end	769 Jun 01 j 17:38	14°  06'24		asc. node	771 Nov 12 j 03:32	24°  04'47
	769 Jun 14 j 16:00	0° 		greatest brilliancy	771 Nov 22 j 22:53	26°  05'39 -4.9m
evening rise	769 Jul 07 j 00:03	27°  29'16			771 Nov 29 j 06:23	0° 
	769 Jul 09 j 00:59	0° 		morning max el	772 Jan 01 j 18:28	28°  06'16 46°55'36
	769 Aug 02 j 09:07	0° 			772 Jan 03 j 14:59	0° 
	769 Aug 26 j 17:34	0° 			772 Jan 31 j 04:00	0° 
desc. node	769 Sep 15 j 22:13	24°  04'53			772 Feb 26 j 01:56	0° 
	769 Sep 20 j 03:43	0° 		desc. node	772 Mar 02 j 17:15	6°  38'39

	772 Mar 22 j 09:03	0° H		greatest brilliancy	774 Dec 05 j 04:00	24° Z 28'54	-4.9m
	772 Apr 16 j 09:23	0° Y		asc. node	774 Dec 09 j 15:37	25° Z 50'39	
	772 May 11 j 05:53	0° B		retrograde	774 Dec 15 j 11:23	26° Z 31'12	
	772 Jun 04 j 23:05	0° II		evening set	774 Dec 30 j 18:38	21° Z 49'03	
asc. node	772 Jun 23 j 20:36	23° II 04'13		min. Earth dist.	775 Jan 04 j 04:19	19° Z 11'23	0.26856 AU
	772 Jun 29 j 12:18	0° G		inferior conj	775 Jan 05 j 02:53	18° Z 36'34	6°10'04
morning set	772 Jul 02 j 00:50	3° G 05'44		minimum elong	775 Jan 04 j 16:36	18° Z 52'25	6°07'44
	772 Jul 23 j 20:59	0° Q		morning rise	775 Jan 09 j 15:08	15° Z 53'52	
max. Earth dist.	772 Aug 03 j 18:30	13° Q 29'27	1.72760 AU	direct	775 Jan 25 j 13:19	10° Z 54'22	
				greatest brilliancy	775 Feb 03 j 14:22	12° Z 27'56	-4.9m
superior conj	772 Aug 07 j 10:49	18° Q 03'22	1°20'26		775 Mar 02 j 18:51	0° \approx	
minimum elong	772 Aug 07 j 05:26	17° Q 46'40	1°20'21	morning max el	775 Mar 16 j 06:37	12° \approx 30'40	46°21'17
	772 Aug 17 j 01:34	0° P		desc. node	775 Mar 31 j 05:02	27° \approx 45'34	
	772 Sep 10 j 03:30	0° L			775 Apr 02 j 07:44	0° H	
evening rise	772 Sep 13 j 13:05	4° L 14'26			775 Apr 29 j 12:31	0° Y	
	772 Oct 04 j 04:28	0° M			775 May 25 j 13:44	0° B	
desc. node	772 Oct 13 j 10:02	11° M 31'15			775 Jun 20 j 00:13	0° II	
	772 Oct 28 j 05:42	0° J			775 Jul 14 j 23:47	0° G	
	772 Nov 21 j 08:12	0° Z		asc. node	775 Jul 22 j 08:28	8° G 56'05	
	772 Dec 15 j 13:54	0° \approx			775 Aug 08 j 13:47	0° Q	
	773 Jan 09 j 03:07	0° H			775 Sep 01 j 19:50	0° P	
	773 Feb 03 j 08:14	0° Y		morning set	775 Sep 10 j 00:43	10° P 13'16	
asc. node	773 Feb 03 j 13:15	0° Y 14'37			775 Sep 25 j 20:19	0° L	
	773 Mar 01 j 22:50	0° B		max. Earth dist.	775 Oct 16 j 22:07	26° L 27'12	1.71310 AU
evening max el	773 Mar 19 j 19:29	18° B 26'32	45°44'34				
	773 Apr 01 j 08:10	0° II		superior conj	775 Oct 18 j 11:17	28° L 23'57	0°52'00
greatest brilliancy	773 Apr 26 j 19:46	16° II 43'57	-4.7m	minimum elong	775 Oct 18 j 21:39	28° L 56'31	0°51'35
retrograde	773 May 07 j 18:57	18° II 54'53			775 Oct 19 j 17:51	0° M	
evening set	773 May 22 j 20:17	14° II 31'41		desc. node	775 Nov 10 j 21:56	27° M 52'35	
desc. node	773 May 26 j 02:36	12° II 38'31			775 Nov 12 j 14:29	0° J	
inferior conj	773 May 29 j 06:31	10° II 41'06	-0°44'29	evening rise	775 Nov 28 j 12:45	20° J 01'08	
minimum elong	773 May 29 j 04:53	10° II 43'40	0°44'01		775 Dec 06 j 11:29	0° Z	
min. Earth dist.	773 May 29 j 08:37	10° II 37'49	0.28978 AU		775 Dec 30 j 10:01	0° \approx	
morning rise	773 Jun 04 j 13:23	6° II 54'22			776 Jan 23 j 11:54	0° H	
direct	773 Jun 19 j 21:36	2° II 22'38			776 Feb 16 j 20:02	0° Y	
greatest brilliancy	773 Jun 30 j 10:24	4° II 21'36	-4.7m	asc. node	776 Mar 03 j 01:12	18° Y 30'23	
	773 Aug 05 j 09:10	0° G			776 Mar 12 j 14:34	0° B	
morning max el	773 Aug 07 j 21:28	2° G 23'40	45°56'09		776 Apr 07 j 01:45	0° II	
	773 Sep 03 j 09:21	0° Q			776 May 03 j 17:56	0° G	
asc. node	773 Sep 16 j 06:06	14° Q 29'29		evening max el	776 May 29 j 12:40	26° G 30'58	45°21'33
	773 Sep 29 j 13:51	0° P			776 Jun 02 j 05:33	0° Q	
	773 Oct 24 j 12:43	0° L		desc. node	776 Jun 22 j 14:39	16° Q 38'09	
	773 Nov 17 j 20:54	0° M		greatest brilliancy	776 Jul 06 j 23:59	24° Q 12'10	-4.7m
	773 Dec 11 j 22:39	0° J		retrograde	776 Jul 17 j 01:15	26° Q 00'17	
	774 Jan 04 j 22:27	0° Z		evening set	776 Aug 03 j 09:21	20° Q 23'55	
desc. node	774 Jan 05 j 19:35	1° Z 06'05		inferior conj	776 Aug 07 j 08:21	17° Q 59'29	-8°14'52
	774 Jan 28 j 22:37	0° \approx		minimum elong	776 Aug 07 j 02:05	18° Q 09'11	8°14'17
morning set	774 Feb 10 j 12:24	15° \approx 40'52		min. Earth dist.	776 Aug 07 j 17:09	17° Q 45'50	0.28528 AU
	774 Feb 22 j 00:22	0° H		morning rise	776 Aug 10 j 18:38	15° Q 53'28	
	774 Mar 18 j 04:31	0° Y		direct	776 Aug 28 j 19:55	9° Q 48'53	
				greatest brilliancy	776 Sep 08 j 16:51	11° Q 58'49	-4.8m
superior conj	774 Mar 21 j 21:51	4° Y 36'28	-1°14'32		776 Oct 05 j 08:07	0° P	
minimum elong	774 Mar 22 j 06:35	5° Y 03'31	1°14'19	asc. node	776 Oct 13 j 17:51	7° P 51'06	
max. Earth dist.	774 Mar 25 j 00:35	8° Y 27'36	1.72834 AU	morning max el	776 Oct 18 j 01:19	12° P 07'27	46°37'29
	774 Apr 11 j 11:28	0° B			776 Nov 03 j 22:18	0° L	
evening rise	774 Apr 28 j 20:14	21° B 21'33			776 Nov 30 j 01:39	0° M	
asc. node	774 Apr 28 j 22:55	21° B 29'47			776 Dec 25 j 01:37	0° J	
	774 May 05 j 21:16	0° II			777 Jan 18 j 15:06	0° Z	
	774 May 30 j 09:41	0° G		desc. node	777 Feb 02 j 07:22	18° Z 01'35	
	774 Jun 24 j 00:58	0° Q			777 Feb 12 j 00:56	0° \approx	
	774 Jul 18 j 20:25	0° P			777 Mar 08 j 10:00	0° H	
	774 Aug 12 j 22:37	0° L			777 Apr 01 j 19:31	0° Y	
desc. node	774 Aug 18 j 12:15	6° L 35'42		morning set	777 Apr 23 j 05:18	26° Y 17'26	
	774 Sep 07 j 11:56	0° M			777 Apr 26 j 05:51	0° B	
	774 Oct 03 j 22:17	0° J			777 May 20 j 16:32	0° II	
evening max el	774 Oct 25 j 14:16	23° J 01'50	47°18'19	asc. node	777 May 26 j 10:52	7° II 04'29	
	774 Nov 01 j 16:10	0° Z		max. Earth dist.	777 May 29 j 03:18	10° II 22'16	1.73633 AU

superior conj	777 May 29 j 22:36	11° Π 21'28	0°08'17	min. Earth dist.	779 Oct 20 j 18:40	29° Ω 35'10	0.26800 AU
minimum elong	777 May 29 j 20:54	11° Π 16'17	0°08'13	morning rise	779 Oct 25 j 19:04	26° Ω 39'22	
behind sun begin	777 May 29 j 01:31	10° Π 16'47		direct	779 Nov 09 j 15:06	22° Ω 16'56	
behind sun end	777 May 30 j 16:17	12° Π 15'48		asc. node	779 Nov 11 j 05:45	22° Ω 20'05	
	777 Jun 14 j 02:42	0° Θ		greatest brilliancy	779 Nov 20 j 13:28	24° Ω 32'13	-4.9m
evening rise	777 Jul 04 j 19:11	25° Θ 27'07			779 Nov 30 j 19:43	0° \mathbb{M}	
	777 Jul 08 j 11:48	0° Ω		morning max el	779 Dec 30 j 08:42	25° \mathbb{M} 42'32	46°56'04
	777 Aug 01 j 20:09	0° \mathbb{M}			780 Jan 03 j 12:43	0° \mathcal{X}	
	777 Aug 26 j 04:56	0° Ω			780 Jan 30 j 20:03	0° \mathcal{Z}	
desc. node	777 Sep 15 j 00:10	24° Ω 18'48			780 Feb 25 j 15:39	0° \approx	
	777 Sep 19 j 15:34	0° \mathbb{M}		desc. node	780 Mar 01 j 19:18	6° \approx 05'03	
	777 Oct 14 j 05:36	0° \mathcal{X}			780 Mar 21 j 21:31	0° \mathcal{H}	
	777 Nov 08 j 01:56	0° \mathcal{Z}			780 Apr 15 j 21:06	0° \mathcal{Y}	
	777 Dec 03 j 12:22	0° \approx			780 May 10 j 17:06	0° \mathcal{B}	
	777 Dec 30 j 11:38	0° \mathcal{H}			780 Jun 04 j 09:58	0° Π	
evening max el	778 Jan 05 j 09:22	6° \mathcal{H} 07'05	46°57'19	asc. node	780 Jun 22 j 22:42	22° Π 37'52	
asc. node	778 Jan 06 j 03:27	6° \mathcal{H} 52'57			780 Jun 28 j 23:00	0° Θ	
	778 Feb 01 j 10:48	0° \mathcal{Y}		morning set	780 Jun 29 j 19:04	1° Θ 01'34	
greatest brilliancy	778 Feb 14 j 10:08	7° \mathcal{Y} 09'07	-4.8m		780 Jul 23 j 07:35	0° Ω	
retrograde	778 Feb 24 j 23:08	9° \mathcal{Y} 14'25		max. Earth dist.	780 Aug 01 j 15:25	11° Ω 32'34	1.72808 AU
evening set	778 Mar 14 j 11:23	3° \mathcal{Y} 17'51					
inferior conj	778 Mar 18 j 04:15	0° \mathcal{Y} 58'42	7°46'00	superior conj	780 Aug 05 j 04:34	15° Ω 56'33	1°19'22
minimum elong	778 Mar 18 j 12:00	0° \mathcal{Y} 46'23	7°45'00	minimum elong	780 Aug 04 j 22:40	15° Ω 38'14	1°19'16
min. Earth dist.	778 Mar 17 j 23:35	1° \mathcal{Y} 06'06	0.28481 AU		780 Aug 16 j 12:13	0° \mathbb{M}	
	778 Mar 19 j 17:21	30° \mathcal{R} \mathcal{H}			780 Sep 09 j 14:18	0° Ω	
morning rise	778 Mar 22 j 12:52	28° \mathcal{H} 16'26		evening rise	780 Sep 11 j 04:13	1° Ω 58'14	
direct	778 Apr 08 j 09:04	22° \mathcal{H} 49'29			780 Oct 03 j 15:30	0° \mathbb{M}	
greatest brilliancy	778 Apr 17 j 21:32	24° \mathcal{H} 29'00	-4.7m	desc. node	780 Oct 12 j 12:11	11° \mathbb{M} 03'17	
desc. node	778 Apr 27 j 16:43	29° \mathcal{H} 04'19			780 Oct 27 j 16:59	0° \mathcal{X}	
	778 Apr 29 j 05:43	0° \mathcal{Y}			780 Nov 20 j 19:47	0° \mathcal{Z}	
morning max el	778 May 27 j 04:51	22° \mathcal{Y} 47'21	45°46'49		780 Dec 15 j 01:55	0° \approx	
	778 Jun 03 j 13:40	0° \mathcal{B}			781 Jan 08 j 15:49	0° \mathcal{H}	
	778 Jul 01 j 20:36	0° Π		asc. node	781 Feb 02 j 15:15	29° \mathcal{H} 39'36	
	778 Jul 28 j 05:18	0° Θ			781 Feb 02 j 22:16	0° \mathcal{Y}	
asc. node	778 Aug 18 j 20:16	25° Θ 33'19			781 Mar 01 j 16:02	0° \mathcal{B}	
	778 Aug 22 j 13:06	0° Ω		evening max el	781 Mar 17 j 11:34	16° \mathcal{B} 15'39	45°46'39
	778 Sep 16 j 04:21	0° \mathbb{M}			781 Apr 01 j 13:48	0° Π	
	778 Oct 10 j 08:49	0° Ω		greatest brilliancy	781 Apr 24 j 11:45	14° Π 35'02	-4.7m
	778 Nov 03 j 07:19	0° \mathbb{M}		retrograde	781 May 05 j 12:04	16° Π 46'42	
morning set	778 Nov 22 j 17:13	24° \mathbb{M} 25'18		evening set	781 May 20 j 13:13	12° Π 22'38	
	778 Nov 27 j 03:33	0° \mathcal{X}		desc. node	781 May 25 j 04:47	9° Π 38'09	
desc. node	778 Dec 08 j 09:49	14° \mathcal{X} 10'28		inferior conj	781 May 26 j 22:53	8° Π 32'30	-0°24'43
	778 Dec 20 j 23:42	0° \mathcal{Z}		minimum elong	781 May 26 j 21:59	8° Π 33'56	0°24'27
				min. Earth dist.	781 May 27 j 00:48	8° Π 29'30	0.28974 AU
superior conj	779 Jan 03 j 13:30	17° \mathcal{Z} 03'39	-0°57'02	morning rise	781 Jun 02 j 06:45	4° Π 44'39	
minimum elong	779 Jan 03 j 01:40	16° \mathcal{Z} 26'29	0°56'36	direct	781 Jun 17 j 14:17	0° Π 14'06	
max. Earth dist.	779 Jan 06 j 15:40	20° \mathcal{Z} 56'24	1.71289 AU	greatest brilliancy	781 Jun 28 j 01:50	2° Π 12'26	-4.7m
	779 Jan 13 j 21:01	0° \approx			781 Aug 05 j 07:42	0° Θ	
	779 Feb 06 j 20:34	0° \mathcal{H}		morning max el	781 Aug 05 j 14:13	0° Θ 15'41	45°55'11
evening rise	779 Feb 13 j 11:57	8° \mathcal{H} 16'35			781 Sep 03 j 00:55	0° Ω	
	779 Mar 02 j 23:46	0° \mathcal{Y}		asc. node	781 Sep 15 j 08:12	13° Ω 54'36	
	779 Mar 27 j 08:09	0° \mathcal{B}			781 Sep 29 j 03:07	0° \mathbb{M}	
asc. node	779 Mar 31 j 13:09	5° \mathcal{B} 09'10			781 Oct 24 j 00:57	0° Ω	
	779 Apr 20 j 23:13	0° Π			781 Nov 17 j 08:38	0° \mathbb{M}	
	779 May 15 j 22:47	0° Θ			781 Dec 11 j 10:04	0° \mathcal{X}	
	779 Jun 10 j 10:26	0° Ω			782 Jan 04 j 09:39	0° \mathcal{Z}	
	779 Jul 06 j 18:29	0° \mathbb{M}		desc. node	782 Jan 04 j 21:35	0° \mathcal{Z} 37'19	
desc. node	779 Jul 21 j 02:22	15° \mathbb{M} 38'33			782 Jan 28 j 09:39	0° \approx	
	779 Aug 03 j 21:32	0° Ω		morning set	782 Feb 07 j 23:47	13° \approx 12'35	
evening max el	779 Aug 10 j 20:43	6° Ω 52'27	46°12'43		782 Feb 21 j 11:15	0° \mathcal{H}	
	779 Sep 07 j 18:16	0° \mathbb{M}			782 Mar 17 j 15:16	0° \mathcal{Y}	
greatest brilliancy	779 Sep 20 j 08:19	6° \mathbb{M} 10'56	-4.8m				
retrograde	779 Sep 29 j 08:30	7° \mathbb{M} 41'30		superior conj	782 Mar 19 j 12:22	2° \mathcal{Y} 19'37	-1°16'12
evening set	779 Oct 15 j 02:55	2° \mathbb{M} 55'43		minimum elong	782 Mar 19 j 20:44	2° \mathcal{Y} 45'30	1°16'01
inferior conj	779 Oct 20 j 01:10	0° \mathbb{M} 01'43	-5°20'03	max. Earth dist.	782 Mar 22 j 18:44	6° \mathcal{Y} 22'06	1.72785 AU
minimum elong	779 Oct 20 j 11:18	29° Ω 46'20	5°17'26		782 Apr 10 j 22:11	0° \mathcal{B}	
	779 Oct 20 j 02:18	30° \mathcal{R} Ω		evening rise	782 Apr 26 j 13:15	19° \mathcal{B} 13'32	




































































































































asc. node	782 Apr 28 j 01:05	21°♄03'31		784 Dec 24 j 14:31	0°♁	
	782 May 05 j 08:01	0°♄		785 Jan 18 j 03:13	0°♄	
	782 May 29 j 20:37	0°♄	desc. node	785 Feb 01 j 09:25	17°♄31'38	
	782 Jun 23 j 12:15	0°♄		785 Feb 11 j 12:33	0°♄	
	782 Jul 18 j 08:17	0°♄		785 Mar 07 j 21:15	0°♄	
	782 Aug 12 j 11:23	0°♄		785 Apr 01 j 06:30	0°♄	
desc. node	782 Aug 17 j 14:16	6°♄03'12	morning set	785 Apr 20 j 22:24	24°♄09'23	
	782 Sep 07 j 02:16	0°♄		785 Apr 25 j 16:39	0°♄	
	782 Oct 03 j 15:46	0°♄		785 May 20 j 03:14	0°♄	
evening max el	782 Oct 23 j 05:23	20°♄41'21 47°17'11	asc. node	785 May 25 j 12:54	6°♄37'55	
	782 Nov 01 j 19:00	0°♄	max. Earth dist.	785 May 26 j 22:50	8°♄22'04 1.73634 AU	
greatest brilliancy	782 Dec 02 j 17:37	22°♄02'05 -4.9m				
asc. node	782 Dec 08 j 17:38	23°♄41'24	superior conj	785 May 27 j 16:45	9°♄17'05 0°05'10	
retrograde	782 Dec 13 j 01:04	24°♄03'43	minimum elong	785 May 27 j 15:42	9°♄13'50 0°05'06	
evening set	782 Dec 28 j 04:36	19°♄26'50	behind sun begin	785 May 26 j 18:16	8°♄08'03	
min. Earth dist.	783 Jan 01 j 17:31	16°♄44'28 0.26803 AU	behind sun end	785 May 28 j 13:07	10°♄19'38	
inferior conj	783 Jan 02 j 15:45	16°♄10'08 5°52'53		785 Jun 13 j 13:25	0°♄	
minimum elong	783 Jan 02 j 05:34	16°♄25'53 5°50'28	evening rise	785 Jul 02 j 13:59	23°♄24'05	
morning rise	783 Jan 07 j 07:08	13°♄23'05		785 Jul 07 j 22:37	0°♄	
direct	783 Jan 23 j 02:18	8°♄29'02		785 Aug 01 j 07:12	0°♄	
greatest brilliancy	783 Feb 01 j 03:17	10°♄02'35 -4.9m		785 Aug 25 j 16:21	0°♄	
	783 Mar 03 j 00:57	0°♄	desc. node	785 Sep 14 j 02:18	23°♄49'09	
morning max el	783 Mar 13 j 20:07	10°♄09'34 46°22'42		785 Sep 19 j 03:29	0°♄	
desc. node	783 Mar 30 j 07:09	27°♄02'25		785 Oct 13 j 18:13	0°♄	
	783 Apr 02 j 01:37	0°♄		785 Nov 07 j 15:33	0°♄	
	783 Apr 29 j 02:50	0°♄		785 Dec 03 j 03:49	0°♄	
	783 May 25 j 02:23	0°♄		785 Dec 30 j 07:44	0°♄	
	783 Jun 19 j 11:57	0°♄	evening max el	786 Jan 02 j 23:04	3°♄44'53 46°59'31	
	783 Jul 14 j 10:59	0°♄	asc. node	786 Jan 05 j 05:28	6°♄02'13	
asc. node	783 Jul 21 j 10:25	8°♄28'10		786 Feb 02 j 12:09	0°♄	
	783 Aug 08 j 00:44	0°♄	greatest brilliancy	786 Feb 12 j 02:50	4°♄55'24 -4.8m	
	783 Sep 01 j 06:40	0°♄	retrograde	786 Feb 22 j 14:50	7°♄00'26	
morning set	783 Sep 07 j 16:09	7°♄58'00	evening set	786 Mar 12 j 05:35	1°♄00'17	
	783 Sep 25 j 07:08	0°♄		786 Mar 13 j 20:33	30°♄	
max. Earth dist.	783 Oct 14 j 04:19	23°♄41'56 1.71341 AU	inferior conj	786 Mar 15 j 20:03	28°♄44'56 7°54'57	
			minimum elong	786 Mar 16 j 03:19	28°♄33'25 7°54'06	
superior conj	783 Oct 15 j 24:00	25°♄59'05 0°54'53	min. Earth dist.	786 Mar 15 j 14:51	28°♄53'11 0.28447 AU	
minimum elong	783 Oct 16 j 10:29	26°♄32'03 0°54'28	morning rise	786 Mar 20 j 01:16	26°♄07'44	
	783 Oct 19 j 04:41	0°♄	direct	786 Apr 05 j 23:39	20°♄36'08	
desc. node	783 Nov 10 j 00:05	27°♄25'06	greatest brilliancy	786 Apr 15 j 12:19	22°♄15'37 -4.8m	
	783 Nov 12 j 01:22	0°♄	desc. node	786 Apr 26 j 18:55	27°♄43'45	
evening rise	783 Nov 25 j 22:59	17°♄28'03		786 Apr 30 j 06:50	0°♄	
	783 Dec 05 j 22:29	0°♄	morning max el	786 May 24 j 20:02	20°♄34'53 45°47'22	
	783 Dec 29 j 21:09	0°♄		786 Jun 03 j 09:26	0°♄	
	784 Jan 22 j 23:13	0°♄		786 Jul 01 j 11:30	0°♄	
	784 Feb 16 j 07:39	0°♄		786 Jul 27 j 18:16	0°♄	
asc. node	784 Mar 02 j 03:16	18°♄00'31	asc. node	786 Aug 17 j 22:25	25°♄03'25	
	784 Mar 12 j 02:48	0°♄		786 Aug 22 j 01:07	0°♄	
	784 Apr 06 j 15:12	0°♄		786 Sep 15 j 15:53	0°♄	
	784 May 03 j 10:08	0°♄		786 Oct 09 j 20:06	0°♄	
evening max el	784 May 27 j 03:07	24°♄16'53 45°20'58	greatest brilliancy	786 Oct 20 j 17:41	13°♄38'07 -3.9m	
	784 Jun 02 j 06:31	0°♄		786 Nov 02 j 18:31	0°♄	
desc. node	784 Jun 21 j 16:37	15°♄23'32	morning set	786 Nov 20 j 03:46	21°♄52'16	
greatest brilliancy	784 Jul 04 j 14:07	21°♄58'50 -4.7m		786 Nov 26 j 14:43	0°♄	
retrograde	784 Jul 14 j 15:22	23°♄47'20	desc. node	786 Dec 07 j 11:46	13°♄41'37	
evening set	784 Jul 31 j 21:08	18°♄15'27		786 Dec 20 j 10:49	0°♄	
inferior conj	784 Aug 04 j 23:31	15°♄46'03 -8°07'29				
minimum elong	784 Aug 04 j 16:38	15°♄56'45 8°06'46	superior conj	786 Dec 31 j 23:17	14°♄28'55 -0°54'00	
min. Earth dist.	784 Aug 05 j 08:02	15°♄32'51 0.28567 AU	minimum elong	786 Dec 31 j 11:37	13°♄52'17 0°53'33	
morning rise	784 Aug 08 j 11:53	13°♄36'42	max. Earth dist.	787 Jan 03 j 19:18	18°♄02'27 1.71252 AU	
direct	784 Aug 26 j 11:02	7°♄34'44		787 Jan 13 j 08:03	0°♄	
greatest brilliancy	784 Sep 06 j 08:29	9°♄44'24 -4.8m		787 Feb 06 j 07:34	0°♄	
	784 Oct 05 j 11:56	0°♄	evening rise	787 Feb 10 j 23:52	5°♄49'59	
asc. node	784 Oct 12 j 20:00	6°♄58'59		787 Mar 02 j 10:47	0°♄	
morning max el	784 Oct 15 j 14:48	9°♄45'14 46°36'15		787 Mar 26 j 19:19	0°♄	
	784 Nov 03 j 15:38	0°♄	asc. node	787 Mar 30 j 15:18	4°♄41'30	
	784 Nov 29 j 15:56	0°♄		787 Apr 20 j 10:43	0°♄	

	787 May 15 j 10:54	0°☾			789 Sep 02 j 16:35	0°♈
	787 Jun 09 j 23:43	0°♈		asc. node	789 Sep 14 j 10:19	13°♈19'00
	787 Jul 06 j 10:05	0°♍			789 Sep 28 j 16:39	0°♍
desc. node	787 Jul 20 j 04:26	14°♍56'34			789 Oct 23 j 13:31	0°♊
	787 Aug 03 j 19:00	0°♊			789 Nov 16 j 20:40	0°♌
evening max el	787 Aug 08 j 10:05	4°♊31'49	46°10'13		789 Dec 10 j 21:47	0°♏
	787 Sep 09 j 08:24	0°♌		desc. node	790 Jan 03 j 23:36	0°♎07'40
greatest brilliancy	787 Sep 17 j 20:10	3°♌44'39	-4.8m		790 Jan 03 j 21:09	0°♎
retrograde	787 Sep 26 j 21:07	5°♌15'34			790 Jan 27 j 20:59	0°♏
evening set	787 Oct 12 j 18:25	0°♌24'49		morning set	790 Feb 05 j 11:00	10°♏42'51
	787 Oct 13 j 12:00	30°♋♊			790 Feb 20 j 22:27	0°♋
inferior conj	787 Oct 17 j 13:37	27°♊35'01	-5°38'37			
minimum elong	787 Oct 18 j 00:01	27°♊19'15	5°36'03	superior conj	790 Mar 17 j 02:53	0°♍01'39 -1°17'45
min. Earth dist.	787 Oct 18 j 07:45	27°♊07'32	0.26858 AU	minimum elong	790 Mar 17 j 10:47	0°♍26'08 1°17'36
morning rise	787 Oct 23 j 05:04	24°♊16'17			790 Mar 17 j 02:21	0°♍
direct	787 Nov 07 j 04:39	19°♊49'13		max. Earth dist.	790 Mar 20 j 13:21	4°♍16'56 1.72730 AU
asc. node	787 Nov 10 j 07:48	20°♊01'02			790 Apr 10 j 09:11	0°♋
greatest brilliancy	787 Nov 18 j 03:22	22°♊05'21	-4.9m	evening rise	790 Apr 24 j 06:19	17°♋04'45
	787 Dec 01 j 22:25	0°♌		asc. node	790 Apr 27 j 03:07	20°♋35'58
morning max el	787 Dec 27 j 23:42	23°♌20'08	46°56'28		790 May 04 j 19:02	0°♌
	788 Jan 03 j 09:56	0°♏			790 May 29 j 07:47	0°☾
	788 Jan 30 j 12:02	0°♎			790 Jun 22 j 23:48	0°♈
	788 Feb 25 j 05:26	0°♏			790 Jul 17 j 20:28	0°♍
desc. node	788 Feb 29 j 21:25	5°♏31'19			790 Aug 12 j 00:35	0°♊
	788 Mar 21 j 10:05	0°♋		desc. node	790 Aug 16 j 16:23	5°♊29'44
	788 Apr 15 j 08:54	0°♍			790 Sep 06 j 17:11	0°♌
	788 May 10 j 04:26	0°♋			790 Oct 03 j 10:08	0°♏
	788 Jun 03 j 21:01	0°♌		evening max el	790 Oct 20 j 19:57	18°♏18'08 47°15'53
asc. node	788 Jun 22 j 00:39	22°♌10'29			790 Nov 02 j 00:10	0°♎
morning set	788 Jun 27 j 13:20	28°♌56'58		greatest brilliancy	790 Nov 30 j 07:48	19°♎34'21 -4.9m
	788 Jun 28 j 09:53	0°☾		asc. node	790 Dec 07 j 19:37	21°♎25'10
	788 Jul 22 j 18:27	0°♈		retrograde	790 Dec 10 j 14:06	21°♎34'25
max. Earth dist.	788 Jul 30 j 10:24	9°♈29'00	1.72857 AU	evening set	790 Dec 25 j 14:38	17°♎02'45
				min. Earth dist.	790 Dec 30 j 07:04	14°♎15'22 0.26749 AU
superior conj	788 Aug 02 j 22:13	13°♈48'41	1°18'11	inferior conj	790 Dec 31 j 04:31	13°♎42'13 5°35'01
minimum elong	788 Aug 02 j 15:51	13°♈28'56	1°18'04	minimum elong	790 Dec 30 j 18:29	13°♎57'44 5°32'31
	788 Aug 15 j 23:08	0°♍		morning rise	791 Jan 04 j 22:56	10°♎50'44
evening rise	788 Sep 08 j 19:13	29°♍40'47		direct	791 Jan 20 j 14:44	6°♎02'08
	788 Sep 09 j 01:23	0°♊		greatest brilliancy	791 Jan 29 j 16:41	7°♎36'14 -4.9m
	788 Oct 03 j 02:48	0°♌			791 Mar 03 j 05:35	0°♏
desc. node	788 Oct 11 j 14:15	10°♌34'15		morning max el	791 Mar 11 j 08:40	7°♏44'52 46°24'12
	788 Oct 27 j 04:33	0°♏		desc. node	791 Mar 29 j 09:13	26°♏18'45
	788 Nov 20 j 07:41	0°♎			791 Apr 01 j 19:29	0°♋
	788 Dec 14 j 14:16	0°♏			791 Apr 28 j 17:20	0°♍
	789 Jan 08 j 04:53	0°♋			791 May 24 j 15:15	0°♋
asc. node	789 Feb 01 j 17:24	29°♋03'58			791 Jun 18 j 23:54	0°♌
	789 Feb 02 j 12:43	0°♍			791 Jul 13 j 22:25	0°☾
	789 Mar 01 j 09:50	0°♋		asc. node	791 Jul 20 j 12:37	8°☾00'22
evening max el	789 Mar 15 j 04:22	14°♋05'59	45°48'54		791 Aug 07 j 11:54	0°♈
	789 Apr 01 j 21:56	0°♌			791 Aug 31 j 17:45	0°♍
greatest brilliancy	789 Apr 22 j 04:19	12°♌26'50	-4.7m	morning set	791 Sep 05 j 07:47	5°♍42'36
retrograde	789 May 03 j 05:08	14°♌38'33			791 Sep 24 j 18:14	0°♊
evening set	789 May 18 j 06:36	10°♌13'43		max. Earth dist.	791 Oct 11 j 10:56	20°♊56'56 1.71384 AU
desc. node	789 May 24 j 06:41	6°♌37'57				
inferior conj	789 May 24 j 15:31	6°♌24'07	-0°05'11	superior conj	791 Oct 13 j 12:46	23°♊33'25 0°57'39
minimum elong	789 May 24 j 15:19	6°♌24'25	0°05'07	minimum elong	791 Oct 13 j 23:20	24°♊06'34 0°57'16
transit middle	789 May 24 j 15:19	6°♌24'25	0°05'07		791 Oct 18 j 15:52	0°♌
transit begin	789 May 24 j 11:28	6°♌30'27		desc. node	791 Nov 09 j 02:03	26°♌55'51
transit end	789 May 24 j 19:10	6°♌18'23			791 Nov 11 j 12:40	0°♏
min. Earth dist.	789 May 24 j 17:13	6°♌21'27	0.28969 AU	evening rise	791 Nov 23 j 08:56	14°♏52'53
morning rise	789 May 31 j 00:10	2°♌35'08			791 Dec 05 j 09:53	0°♎
	789 Jun 05 j 11:49	30°♋♏			791 Dec 29 j 08:40	0°♏
direct	789 Jun 15 j 07:20	28°♋05'56			792 Jan 22 j 10:54	0°♋
greatest brilliancy	789 Jun 25 j 17:06	0°♌02'56	-4.7m		792 Feb 15 j 19:39	0°♍
	789 Jun 25 j 13:48	0°♌		asc. node	792 Mar 01 j 05:23	17°♍29'42
morning max el	789 Aug 03 j 06:40	28°♌06'19	45°53'58		792 Mar 11 j 15:25	0°♋
	789 Aug 05 j 05:37	0°☾			792 Apr 06 j 05:06	0°♌

	792 May 03 j 02:55	0°☾			794 Oct 09 j 07:21	0°♊	
evening max el	792 May 24 j 17:31	22°☾02'09	45°20'41	greatest brilliancy	794 Oct 25 j 03:57	19°♊51'33	-3.9m
	792 Jun 02 j 09:03	0°♋			794 Nov 02 j 05:41	0°♋	
desc. node	792 Jun 20 j 18:43	14°♋06'50		morning set	794 Nov 17 j 14:55	19°♋21'14	
greatest brilliancy	792 Jul 02 j 04:08	19°♋45'34	-4.7m		794 Nov 26 j 01:51	0°♌	
retrograde	792 Jul 12 j 06:08	21°♋35'19		desc. node	794 Dec 06 j 13:51	13°♌13'14	
evening set	792 Jul 29 j 09:12	16°♋07'38			794 Dec 19 j 21:56	0°♍	
inferior conj	792 Aug 02 j 15:04	13°♋33'21	-7°59'28				
minimum elong	792 Aug 02 j 07:35	13°♋44'56	7°58'36	superior conj	794 Dec 29 j 08:57	11°♍53'32	-0°50'49
min. Earth dist.	792 Aug 02 j 23:11	13°♋20'47	0.28604 AU	minimum elong	794 Dec 28 j 21:34	11°♍17'46	0°50'21
morning rise	792 Aug 06 j 05:43	11°♋20'36		max. Earth dist.	795 Jan 01 j 01:35	15°♍16'35	1.71228 AU
direct	792 Aug 24 j 02:25	5°♋21'18			795 Jan 12 j 19:10	0°♎	
greatest brilliancy	792 Sep 04 j 00:45	7°♋31'20	-4.8m		795 Feb 05 j 18:41	0°♏	
	792 Oct 05 j 14:13	0°♐		evening rise	795 Feb 08 j 11:17	3°♏21'21	
asc. node	792 Oct 11 j 22:02	6°♐07'16			795 Mar 01 j 21:57	0°♑	
morning max el	792 Oct 13 j 04:58	7°♐24'33	46°34'45		795 Mar 26 j 06:38	0°♒	
	792 Nov 03 j 08:49	0°♑		asc. node	795 Mar 29 j 17:15	4°♒12'47	
	792 Nov 29 j 06:22	0°♒			795 Apr 19 j 22:20	0°♓	
	792 Dec 24 j 03:41	0°♓			795 May 14 j 23:09	0°♈	
	793 Jan 17 j 15:40	0°♉			795 Jun 09 j 13:09	0°♋	
desc. node	793 Jan 31 j 11:36	17°♉01'07			795 Jul 06 j 01:57	0°♌	
	793 Feb 11 j 00:29	0°♊		desc. node	795 Jul 19 j 06:34	14°♌14'16	
	793 Mar 07 j 08:47	0°♋			795 Aug 03 j 17:14	0°♍	
	793 Mar 31 j 17:44	0°♌		evening max el	795 Aug 06 j 00:26	2°♍13'56	46°07'49
morning set	793 Apr 18 j 15:14	21°♌59'42			795 Sep 11 j 18:57	0°♎	
	793 Apr 25 j 03:40	0°♍		greatest brilliancy	795 Sep 15 j 08:04	1°♎19'35	-4.8m
	793 May 19 j 14:10	0°♎		retrograde	795 Sep 24 j 09:58	2°♎50'44	
asc. node	793 May 24 j 14:54	6°♎10'35			795 Oct 06 j 09:20	30°♏♊	
				evening set	795 Oct 10 j 10:14	27°♏55'20	
superior conj	793 May 25 j 10:54	7°♎12'00	0°02'00	inferior conj	795 Oct 15 j 02:19	25°♏09'39	-5°56'24
minimum elong	793 May 25 j 10:30	7°♎10'46	0°01'58	minimum elong	795 Oct 15 j 12:52	24°♏53'38	5°53'54
behind sun begin	793 May 24 j 12:10	6°♎02'12		min. Earth dist.	795 Oct 15 j 20:47	24°♏41'39	0.26914 AU
behind sun end	793 May 26 j 08:51	8°♎19'22		morning rise	795 Oct 20 j 15:03	21°♏54'42	
max. Earth dist.	793 May 24 j 18:48	6°♎22'34	1.73631 AU	direct	795 Nov 04 j 18:41	17°♏23'10	
	793 Jun 13 j 00:20	0°♏		asc. node	795 Nov 09 j 09:45	17°♏48'48	
evening rise	793 Jun 30 j 09:05	21°♏21'28		greatest brilliancy	795 Nov 15 j 16:55	19°♏39'14	-4.9m
	793 Jul 07 j 09:37	0°♋			795 Dec 02 j 17:33	0°♎	
	793 Jul 31 j 18:24	0°♌		morning max el	795 Dec 25 j 14:23	20°♎57'40	46°56'35
	793 Aug 25 j 03:53	0°♍			796 Jan 03 j 06:11	0°♏	
desc. node	793 Sep 13 j 04:24	23°♍19'02			796 Jan 30 j 03:37	0°♉	
	793 Sep 18 j 15:33	0°♎			796 Feb 24 j 19:01	0°♊	
	793 Oct 13 j 07:00	0°♏		desc. node	796 Feb 28 j 23:27	4°♊57'43	
	793 Nov 07 j 05:28	0°♉			796 Mar 20 j 22:34	0°♋	
	793 Dec 02 j 19:47	0°♊			796 Apr 14 j 20:42	0°♌	
	793 Dec 30 j 04:56	0°♋			796 May 09 j 15:45	0°♍	
evening max el	793 Dec 31 j 13:16	1°♋22'41	47°01'33		796 Jun 03 j 08:00	0°♎	
asc. node	794 Jan 04 j 07:37	5°♋09'42		asc. node	796 Jun 21 j 02:50	21°♎43'58	
	794 Feb 04 j 01:30	0°♌		morning set	796 Jun 25 j 07:19	26°♎51'51	
greatest brilliancy	794 Feb 09 j 18:48	2°♌38'54	-4.8m		796 Jun 27 j 20:40	0°♏	
retrograde	794 Feb 20 j 06:41	4°♌44'21			796 Jul 22 j 05:11	0°♋	
	794 Mar 07 j 17:28	30°♌♋		max. Earth dist.	796 Jul 28 j 04:03	7°♋21'44	1.72903 AU
evening set	794 Mar 09 j 23:17	28°♋40'39					
inferior conj	794 Mar 13 j 11:30	26°♋29'01	8°03'20	superior conj	796 Jul 31 j 15:49	11°♋41'06	1°16'54
minimum elong	794 Mar 13 j 18:13	26°♋18'23	8°02'36	minimum elong	796 Jul 31 j 09:01	11°♋20'02	1°16'46
min. Earth dist.	794 Mar 13 j 05:33	26°♋38'27	0.28408 AU		796 Aug 15 j 09:57	0°♌	
morning rise	794 Mar 17 j 13:21	23°♋57'05		evening rise	796 Sep 06 j 10:24	27°♌24'22	
direct	794 Apr 03 j 14:03	18°♋20'43			796 Sep 08 j 12:21	0°♍	
greatest brilliancy	794 Apr 13 j 02:29	20°♋00'10	-4.8m		796 Oct 02 j 13:57	0°♎	
desc. node	794 Apr 25 j 20:52	26°♋24'15		desc. node	796 Oct 10 j 16:13	10°♎05'22	
	794 May 01 j 01:51	0°♏			796 Oct 26 j 15:56	0°♏	
morning max el	794 May 22 j 11:46	18°♏23'05	45°48'05		796 Nov 19 j 19:21	0°♉	
	794 Jun 03 j 04:51	0°♐			796 Dec 14 j 02:22	0°♊	
	794 Jul 01 j 02:20	0°♑			797 Jan 07 j 17:44	0°♋	
	794 Jul 27 j 07:14	0°♒		asc. node	797 Jan 31 j 19:27	28°♋28'33	
asc. node	794 Aug 17 j 00:28	24°♒33'13			797 Feb 02 j 03:04	0°♌	
	794 Aug 21 j 13:08	0°♋			797 Mar 01 j 03:54	0°♍	
	794 Sep 15 j 03:23	0°♌		evening max el	797 Mar 12 j 20:44	11°♍55'20	45°50'51

	797 Apr 02 j 09:02	0°♄			799 Aug 31 j 04:32	0°♄	
greatest brilliancy	797 Apr 19 j 21:23	10°♄18'50	-4.7m	morning set	799 Sep 02 j 23:14	3°♄27'37	
retrograde	797 Apr 30 j 21:29	12°♄29'45			799 Sep 24 j 05:00	0°♄	
evening set	797 May 15 j 23:54	8°♄04'07		max. Earth dist.	799 Oct 08 j 20:26	18°♄22'09	1.71427 AU
inferior conj	797 May 22 j 07:55	4°♄15'19	0°14'36				
minimum elong	797 May 22 j 08:27	4°♄14'28	0°14'27	superior conj	799 Oct 11 j 01:31	21°♄08'48	1°00'19
transit middle	797 May 22 j 08:27	4°♄14'28	0°14'27	minimum elong	799 Oct 11 j 12:04	21°♄41'54	0°59'57
transit begin	797 May 22 j 06:37	4°♄17'22			799 Oct 18 j 02:42	0°♄	
transit end	797 May 22 j 10:18	4°♄11'35		desc. node	799 Nov 08 j 04:09	26°♄28'06	
min. Earth dist.	797 May 22 j 09:45	4°♄12'27	0.28963 AU		799 Nov 10 j 23:36	0°♄	
desc. node	797 May 23 j 08:47	3°♄36'19		evening rise	799 Nov 20 j 19:00	12°♄19'17	
morning rise	797 May 28 j 17:11	0°♄25'11			799 Dec 04 j 20:56	0°♄	
	797 May 29 j 11:54	30°♄			799 Dec 28 j 19:51	0°♄	
direct	797 Jun 12 j 23:55	25°♄57'24			800 Jan 21 j 22:13	0°♄	
greatest brilliancy	797 Jun 23 j 08:25	27°♄53'12	-4.7m		800 Feb 15 j 07:15	0°♄	
	797 Jun 28 j 07:44	0°♄		asc. node	800 Feb 29 j 07:23	16°♄59'43	
morning max el	797 Jul 31 j 21:59	25°♄54'40	45°52'53		800 Mar 11 j 03:39	0°♄	
	797 Aug 05 j 02:36	0°♄			800 Apr 05 j 18:39	0°♄	
	797 Sep 02 j 07:48	0°♄			800 May 02 j 19:36	0°♄	
asc. node	797 Sep 13 j 12:19	12°♄44'05		evening max el	800 May 22 j 07:57	19°♄48'39	45°20'18
	797 Sep 28 j 05:50	0°♄			800 Jun 02 j 12:49	0°♄	
	797 Oct 23 j 01:45	0°♄		desc. node	800 Jun 19 j 20:51	12°♄48'29	
	797 Nov 16 j 08:23	0°♄		greatest brilliancy	800 Jun 29 j 17:21	17°♄32'00	-4.7m
	797 Dec 10 j 09:10	0°♄		retrograde	800 Jul 09 j 21:15	19°♄23'41	
desc. node	798 Jan 03 j 01:47	29°♄39'38		evening set	800 Jul 26 j 20:59	14°♄00'04	
	798 Jan 03 j 08:18	0°♄		inferior conj	800 Jul 31 j 06:23	11°♄20'50	-7°50'37
	798 Jan 27 j 07:57	0°♄		minimum elong	800 Jul 30 j 22:24	11°♄33'11	7°49'36
morning set	798 Feb 02 j 22:30	8°♄14'57		min. Earth dist.	800 Jul 31 j 13:54	11°♄09'12	0.28644 AU
	798 Feb 20 j 09:17	0°♄		morning rise	800 Aug 03 j 23:32	9°♄04'30	
				direct	800 Aug 21 j 17:52	3°♄07'59	
superior conj	798 Mar 14 j 17:26	27°♄44'47	-1°19'10	greatest brilliancy	800 Sep 01 j 16:45	5°♄18'30	-4.8m
minimum elong	798 Mar 15 j 00:48	28°♄07'35	1°19'02		800 Oct 05 j 14:54	0°♄	
	798 Mar 16 j 13:05	0°♄		morning max el	800 Oct 10 j 19:53	5°♄06'42	46°33'24
max. Earth dist.	798 Mar 18 j 08:16	2°♄13'43	1.72680 AU	asc. node	800 Oct 11 j 00:04	5°♄17'11	
	798 Apr 09 j 19:53	0°♄			800 Nov 03 j 01:21	0°♄	
evening rise	798 Apr 21 j 23:06	14°♄55'49			800 Nov 28 j 20:20	0°♄	
asc. node	798 Apr 26 j 05:08	20°♄09'10			800 Dec 23 j 16:26	0°♄	
	798 May 04 j 05:48	0°♄			801 Jan 17 j 03:42	0°♄	
	798 May 28 j 18:46	0°♄		desc. node	801 Jan 30 j 13:33	16°♄31'01	
	798 Jun 22 j 11:09	0°♄			801 Feb 10 j 12:01	0°♄	
	798 Jul 17 j 08:27	0°♄			801 Mar 06 j 19:56	0°♄	
	798 Aug 11 j 13:36	0°♄			801 Mar 31 j 04:35	0°♄	
desc. node	798 Aug 15 j 18:25	4°♄56'43		morning set	801 Apr 16 j 08:12	19°♄51'26	
	798 Sep 06 j 07:59	0°♄			801 Apr 24 j 14:19	0°♄	
	798 Oct 03 j 04:36	0°♄			801 May 19 j 00:43	0°♄	
evening max el	798 Oct 18 j 09:33	15°♄53'25	47°14'30	max. Earth dist.	801 May 22 j 16:53	4°♄30'40	1.73630 AU
	798 Nov 02 j 06:57	0°♄					
greatest brilliancy	798 Nov 27 j 22:24	17°♄07'59	-4.9m	superior conj	801 May 23 j 05:11	5°♄08'26	-0°01'12
asc. node	798 Dec 06 j 21:50	19°♄04'29		minimum elong	801 May 23 j 05:24	5°♄09'07	0°01'10
retrograde	798 Dec 08 j 02:37	19°♄06'14		behind sun begin	801 May 22 j 06:58	4°♄00'13	
evening set	798 Dec 23 j 00:48	14°♄39'19		behind sun end	801 May 24 j 03:51	6°♄18'00	
min. Earth dist.	798 Dec 27 j 21:00	11°♄46'50	0.26695 AU	asc. node	801 May 23 j 17:05	5°♄44'57	
inferior conj	798 Dec 28 j 17:17	11°♄15'30	5°16'19		801 Jun 12 j 10:54	0°♄	
minimum elong	798 Dec 28 j 07:29	11°♄30'38	5°13'47	evening rise	801 Jun 28 j 04:18	19°♄20'12	
morning rise	799 Jan 02 j 14:41	8°♄19'41			801 Jul 06 j 20:20	0°♄	
direct	799 Jan 18 j 02:40	3°♄36'12			801 Jul 31 j 05:22	0°♄	
greatest brilliancy	799 Jan 27 j 06:40	5°♄11'41	-4.9m		801 Aug 24 j 15:14	0°♄	
	799 Mar 03 j 07:55	0°♄		desc. node	801 Sep 12 j 06:21	22°♄49'03	
morning max el	799 Mar 08 j 20:49	5°♄20'19	46°25'50		801 Sep 18 j 03:26	0°♄	
desc. node	799 Mar 28 j 11:14	25°♄36'55			801 Oct 12 j 19:38	0°♄	
	799 Apr 01 j 12:26	0°♄			801 Nov 06 j 19:14	0°♄	
	799 Apr 28 j 07:12	0°♄			801 Dec 02 j 11:41	0°♄	
	799 May 24 j 03:39	0°♄		evening max el	801 Dec 29 j 04:24	29°♄03'49	47°03'39
	799 Jun 18 j 11:30	0°♄			801 Dec 30 j 02:31	0°♄	
	799 Jul 13 j 09:33	0°♄		asc. node	802 Jan 03 j 09:39	4°♄16'57	
asc. node	799 Jul 19 j 14:40	7°♄33'00			802 Feb 06 j 11:19	0°♄	
	799 Aug 06 j 22:47	0°♄		greatest brilliancy	802 Feb 07 j 10:11	0°♄22'39	-4.9m

retrograde	802 Feb 17 j 22:58	2°♄29'06			804 Jul 21 j 15:53	0°♌	
	802 Feb 28 j 22:33	30°♋		max. Earth dist.	804 Jul 25 j 21:21	5°♌13'38	1.72948 AU
evening set	802 Mar 07 j 16:53	26°♋22'01					
inferior conj	802 Mar 11 j 02:57	24°♋13'50	8°10'56	superior conj	804 Jul 29 j 09:55	9°♌35'18	1°15'31
minimum elong	802 Mar 11 j 09:07	24°♋04'07	8°10'20	minimum elong	804 Jul 29 j 02:42	9°♌13'00	1°15'21
min. Earth dist.	802 Mar 10 j 19:53	24°♋25'00	0.28368 AU		804 Aug 14 j 20:44	0°♍	
morning rise	802 Mar 15 j 01:32	21°♋47'06		evening rise	804 Sep 04 j 02:04	25°♍09'35	
direct	802 Apr 01 j 04:59	16°♋06'11			804 Sep 07 j 23:19	0°♎	
greatest brilliancy	802 Apr 10 j 16:09	17°♋45'04	-4.8m		804 Oct 02 j 01:09	0°♎	
desc. node	802 Apr 24 j 22:57	25°♋08'25		desc. node	804 Oct 09 j 18:23	9°♎36'56	
	802 May 01 j 15:33	0°♍			804 Oct 26 j 03:25	0°♏	
morning max el	802 May 20 j 04:07	16°♍13'45	45°48'51		804 Nov 19 j 07:11	0°♏	
	802 Jun 02 j 23:21	0°♎			804 Dec 13 j 14:42	0°♐	
	802 Jun 30 j 16:39	0°♎			805 Jan 07 j 06:51	0°♋	
	802 Jul 26 j 19:49	0°♏		asc. node	805 Jan 30 j 21:27	27°♋52'21	
asc. node	802 Aug 16 j 02:28	24°♏03'39			805 Feb 01 j 17:44	0°♍	
	802 Aug 21 j 00:53	0°♌			805 Feb 28 j 22:31	0°♋	
	802 Sep 14 j 14:44	0°♍		evening max el	805 Mar 10 j 12:11	9°♋42'01	45°53'03
	802 Oct 08 j 18:30	0°♎			805 Apr 02 j 23:58	0°♎	
greatest brilliancy	802 Oct 27 j 06:53	23°♎11'57	-3.9m	greatest brilliancy	805 Apr 17 j 14:58	8°♎11'26	-4.7m
	802 Nov 01 j 16:45	0°♎		retrograde	805 Apr 28 j 13:37	10°♎21'20	
morning set	802 Nov 15 j 01:55	16°♎50'05		evening set	805 May 13 j 17:31	5°♎54'32	
	802 Nov 25 j 12:52	0°♏		inferior conj	805 May 20 j 00:32	2°♎06'53	0°34'18
desc. node	802 Dec 05 j 16:01	12°♏45'25		minimum elong	805 May 20 j 01:47	2°♎04'55	0°33'56
	802 Dec 19 j 08:55	0°♏		min. Earth dist.	805 May 20 j 02:43	2°♎03'26	0.28955 AU
				desc. node	805 May 22 j 10:58	0°♎35'34	
superior conj	802 Dec 26 j 18:19	9°♏17'41	-0°47'30		805 May 23 j 10:13	30°♋♏	
minimum elong	802 Dec 26 j 07:20	8°♏43'07	0°47'03	morning rise	805 May 26 j 10:11	28°♏15'45	
max. Earth dist.	802 Dec 29 j 10:43	12°♏40'00	1.71199 AU	direct	805 Jun 10 j 16:17	23°♏49'07	
	803 Jan 12 j 06:07	0°♐		greatest brilliancy	805 Jun 21 j 00:27	25°♏44'17	-4.7m
	803 Feb 05 j 05:37	0°♋			805 Jun 30 j 00:04	0°♎	
evening rise	803 Feb 05 j 22:37	0°♋52'59		morning max el	805 Jul 29 j 12:47	23°♎41'39	45°51'59
	803 Mar 01 j 08:58	0°♍			805 Aug 04 j 22:55	0°♏	
	803 Mar 25 j 17:47	0°♋			805 Sep 01 j 22:51	0°♌	
asc. node	803 Mar 28 j 19:21	3°♋45'00		asc. node	805 Sep 12 j 14:23	12°♌09'29	
	803 Apr 19 j 09:49	0°♎			805 Sep 27 j 18:58	0°♍	
	803 May 14 j 11:15	0°♏			805 Oct 22 j 14:01	0°♎	
	803 Jun 09 j 02:29	0°♌			805 Nov 15 j 20:12	0°♎	
	803 Jul 05 j 17:52	0°♍			805 Dec 09 j 20:43	0°♏	
desc. node	803 Jul 18 j 08:34	13°♍31'40		desc. node	806 Jan 02 j 03:46	29°♏10'13	
evening max el	803 Aug 03 j 14:46	29°♍56'33	46°05'09		806 Jan 02 j 19:40	0°♏	
	803 Aug 03 j 16:12	0°♎			806 Jan 26 j 19:11	0°♐	
greatest brilliancy	803 Sep 12 j 20:02	28°♎54'51	-4.8m	morning set	806 Jan 31 j 09:19	5°♐43'58	
	803 Sep 17 j 04:07	0°♎			806 Feb 19 j 20:23	0°♋	
retrograde	803 Sep 21 j 22:12	0°♎25'43					
	803 Sep 26 j 13:31	30°♋♎		superior conj	806 Mar 12 j 07:30	25°♋25'37	-1°20'28
evening set	803 Oct 08 j 02:02	25°♎25'46		minimum elong	806 Mar 12 j 14:16	25°♋46'34	1°20'22
inferior conj	803 Oct 12 j 14:55	22°♎44'11	-6°13'31	max. Earth dist.	806 Mar 16 j 01:23	0°♍04'05	1.72621 AU
minimum elong	803 Oct 13 j 01:34	22°♎28'00	6°11'05		806 Mar 16 j 00:04	0°♍	
min. Earth dist.	803 Oct 13 j 09:49	22°♎15'28	0.26975 AU		806 Apr 09 j 06:49	0°♋	
morning rise	803 Oct 18 j 00:41	19°♎33'02		evening rise	806 Apr 19 j 15:34	12°♋45'16	
direct	803 Nov 02 j 08:38	14°♎56'55		asc. node	806 Apr 25 j 07:17	19°♋42'08	
asc. node	803 Nov 08 j 11:57	15°♎41'30			806 May 03 j 16:47	0°♎	
greatest brilliancy	803 Nov 13 j 06:31	17°♎12'41	-4.9m		806 May 28 j 05:58	0°♏	
	803 Dec 03 j 08:03	0°♎			806 Jun 21 j 22:45	0°♌	
morning max el	803 Dec 23 j 04:06	18°♎32'18	46°56'44		806 Jul 16 j 20:41	0°♍	
	804 Jan 03 j 01:57	0°♏			806 Aug 11 j 02:53	0°♎	
	804 Jan 29 j 19:02	0°♏		desc. node	806 Aug 14 j 20:27	4°♎23'03	
	804 Feb 24 j 08:29	0°♐			806 Sep 05 j 23:06	0°♎	
desc. node	804 Feb 28 j 01:30	4°♐24'26			806 Oct 02 j 23:42	0°♏	
	804 Mar 20 j 10:56	0°♋		evening max el	806 Oct 15 j 22:15	13°♏26'10	47°13'01
	804 Apr 14 j 08:23	0°♍			806 Nov 02 j 16:28	0°♏	
	804 May 09 j 02:59	0°♋		greatest brilliancy	806 Nov 25 j 12:46	14°♏40'43	-4.9m
	804 Jun 02 j 18:55	0°♎		retrograde	806 Dec 05 j 15:01	16°♏37'32	
asc. node	804 Jun 20 j 04:53	21°♎17'14		asc. node	806 Dec 05 j 23:48	16°♏37'22	
morning set	804 Jun 23 j 01:41	24°♎48'02		evening set	806 Dec 20 j 11:06	12°♏14'32	
	804 Jun 27 j 07:25	0°♏		min. Earth dist.	806 Dec 25 j 11:01	9°♏17'18	0.26653 AU

inferior conj	806 Dec 26 j 06:02	8°  47'57	4°56'49			809 Jun 11 j 21:51	0° 
minimum elong	806 Dec 25 j 20:33	9°  02'34	4°54'18	evening rise		809 Jun 25 j 23:21	17°  17'24
morning rise	806 Dec 31 j 06:25	5°  47'59				809 Jul 06 j 07:23	0° 
direct	807 Jan 15 j 14:29	1°  08'59				809 Jul 30 j 16:40	0° 
greatest brilliancy	807 Jan 24 j 21:08	2°  46'29	-4.9m			809 Aug 24 j 02:56	0° 
	807 Mar 03 j 09:24	0° 		desc. node		809 Sep 11 j 08:30	22°  18'37
morning max el	807 Mar 06 j 09:28	2°  55'31	46°27'26			809 Sep 17 j 15:42	0° 
desc. node	807 Mar 27 j 13:21	24°  54'37				809 Oct 12 j 08:40	0° 
	807 Apr 01 j 05:31	0° 				809 Nov 06 j 09:26	0° 
	807 Apr 27 j 21:20	0° 				809 Dec 02 j 04:08	0° 
	807 May 23 j 16:19	0° 		evening max el		809 Dec 26 j 20:20	26°  46'13
	807 Jun 17 j 23:20	0° 				809 Dec 30 j 01:13	0° 
	807 Jul 12 j 20:56	0° 		asc. node		810 Jan 02 j 11:40	3°  22'28
asc. node	807 Jul 18 j 16:37	7°  04'35		greatest brilliancy		810 Feb 05 j 01:24	28°  05'37
	807 Aug 06 j 09:56	0° 				810 Feb 12 j 08:31	0° 
	807 Aug 30 j 15:35	0° 		retrograde		810 Feb 15 j 15:25	0°  13'02
morning set	807 Aug 31 j 15:06	1°  13'10				810 Feb 18 j 21:04	30°  18'41
	807 Sep 23 j 16:03	0° 		evening set		810 Mar 05 j 10:20	24°  03'06
max. Earth dist.	807 Oct 06 j 08:50	15°  55'36	1.71467 AU	inferior conj		810 Mar 08 j 18:27	21°  57'53
				minimum elong		810 Mar 08 j 23:59	21°  49'09
superior conj	807 Oct 08 j 14:51	18°  45'11	1°02'50	min. Earth dist.		810 Mar 08 j 09:59	22°  11'16
minimum elong	807 Oct 09 j 01:19	19°  18'00	1°02'28	morning rise		810 Mar 12 j 13:53	19°  36'06
	807 Oct 17 j 13:47	0° 		direct		810 Mar 29 j 20:25	13°  51'04
desc. node	807 Nov 07 j 06:17	25°  18'59'41		greatest brilliancy		810 Apr 08 j 05:24	15°  28'41
	807 Nov 10 j 10:47	0° 		desc. node		810 Apr 24 j 01:07	23°  54'12
evening rise	807 Nov 18 j 05:39	9°  46'51				810 May 02 j 02:10	0° 
	807 Dec 04 j 08:14	0° 		morning max el		810 May 17 j 20:27	14°  03'21
	807 Dec 28 j 07:17	0° 				810 Jun 02 j 17:48	0° 
	808 Jan 21 j 09:52	0° 				810 Jun 30 j 07:12	0° 
	808 Feb 14 j 19:16	0° 				810 Jul 26 j 08:42	0° 
asc. node	808 Feb 28 j 09:28	16°  07'28'43		asc. node		810 Aug 15 j 04:38	23°  03'41
	808 Mar 10 j 16:23	0° 				810 Aug 20 j 12:54	0° 
	808 Apr 05 j 08:48	0° 				810 Sep 14 j 02:18	0° 
	808 May 02 j 13:06	0° 				810 Oct 08 j 05:53	0° 
evening max el	808 May 19 j 23:09	17°  03'6'00	45°20'14	greatest brilliancy		810 Oct 27 j 18:56	24°  29'40
	808 Jun 02 j 19:00	0° 				810 Nov 01 j 04:03	0° 
desc. node	808 Jun 18 j 22:48	11°  02'6'34		morning set		810 Nov 12 j 13:04	14°  18'43
greatest brilliancy	808 Jun 27 j 06:24	15°  01'7'41	-4.7m			810 Nov 25 j 00:09	0° 
retrograde	808 Jul 07 j 12:58	17°  01'1'34		desc. node		810 Dec 04 j 17:58	12°  27'16'07
evening set	808 Jul 24 j 08:58	11°  02'52'02				810 Dec 18 j 20:09	0° 
inferior conj	808 Jul 28 j 21:51	9°  07'48	-7°41'07				
minimum elong	808 Jul 28 j 13:25	9°  02'0'50	7°39'58	superior conj		810 Dec 24 j 03:49	6°  41'20
min. Earth dist.	808 Jul 29 j 04:24	8°  05'7'40	0.28679 AU	minimum elong		810 Dec 23 j 17:20	6°  08'22
morning rise	808 Aug 01 j 17:37	6°  02'47'45		max. Earth dist.		810 Dec 26 j 19:57	10°  02'54
direct	808 Aug 19 j 09:57	0°  05'4'20				811 Jan 11 j 17:18	0° 
greatest brilliancy	808 Aug 30 j 08:17	3°  04'0'40	-4.8m	evening rise		811 Feb 03 j 10:01	28°  23'57
	808 Oct 05 j 14:47	0° 				811 Feb 04 j 16:48	0° 
morning max el	808 Oct 08 j 11:42	2°  50'3'30	46°32'01			811 Feb 28 j 20:11	0° 
asc. node	808 Oct 10 j 02:13	4°  10'27'27				811 Mar 25 j 05:10	0° 
	808 Nov 02 j 17:55	0° 		asc. node		811 Mar 27 j 21:29	3°  16'40
	808 Nov 28 j 10:26	0° 				811 Apr 18 j 21:33	0° 
	808 Dec 23 j 05:22	0° 				811 May 13 j 23:41	0° 
	809 Jan 16 j 15:57	0° 				811 Jun 08 j 16:15	0° 
desc. node	809 Jan 29 j 15:38	16°  00'3'35				811 Jul 05 j 10:24	0° 
	809 Feb 09 j 23:48	0° 		desc. node		811 Jul 17 j 10:39	12°  10'47'55
	809 Mar 06 j 07:22	0° 		evening max el		811 Aug 01 j 04:35	27°  10'37'12
	809 Mar 30 j 15:47	0° 				811 Aug 03 j 16:34	0° 
morning set	809 Apr 14 j 00:56	17°  04'1'15		greatest brilliancy		811 Sep 10 j 08:43	26°  30'51
	809 Apr 24 j 01:22	0° 		retrograde		811 Sep 19 j 10:12	28°  00'53
	809 May 18 j 11:40	0° 		evening set		811 Oct 05 j 18:03	22°  05'6'29
				inferior conj		811 Oct 10 j 03:47	20°  05'19'03
superior conj	809 May 20 j 23:09	3°  02'3'37	-0°04'23	minimum elong		811 Oct 10 j 14:25	20°  02'51
minimum elong	809 May 21 j 00:03	3°  05'2'40	0°04'20	min. Earth dist.		811 Oct 10 j 23:14	19°  04'9'24
behind sun begin	809 May 20 j 02:11	1°  15'8'14		morning rise		811 Oct 15 j 10:22	17°  01'1'50
behind sun end	809 May 21 j 21:55	4°  12'3'32		direct		811 Oct 30 j 22:12	12°  03'31'00
max. Earth dist.	809 May 20 j 15:29	2°  13'9'04	1.73625 AU	asc. node		811 Nov 07 j 13:59	13°  03'39'15
asc. node	809 May 22 j 19:06	5°  17'3'33		greatest brilliancy		811 Nov 10 j 20:37	14°  04'46'44

	811 Dec 03 j 19:01	0°♌			814 Jun 21 j 10:17	0°♏		
morning max el	811 Dec 20 j 17:01	16°♌04'25	46°56'44		814 Jul 16 j 08:54	0°♐		
	812 Jan 02 j 21:18	0°♑			814 Aug 10 j 16:13	0°♑		
	812 Jan 29 j 10:22	0°♒		desc. node	814 Aug 13 j 22:34	3°♑49'35		
	812 Feb 23 j 21:59	0°♓			814 Sep 05 j 14:26	0°♌		
desc. node	812 Feb 27 j 03:37	3°♓51'05			814 Oct 02 j 19:22	0°♑		
	812 Mar 19 j 23:23	0°♈		evening max el	814 Oct 13 j 10:58	10°♑59'05	47°11'32	
	812 Apr 13 j 20:09	0°♐			814 Nov 03 j 05:16	0°♒		
	812 May 08 j 14:18	0°♉		greatest brilliancy	814 Nov 23 j 02:36	12°♒12'33	-4.9m	
	812 Jun 02 j 05:57	0°♊		retrograde	814 Dec 03 j 03:43	14°♒08'44		
asc. node	812 Jun 19 j 06:52	20°♊49'52		asc. node	814 Dec 05 j 01:51	14°♒04'09		
morning set	812 Jun 20 j 20:01	22°♊43'39		evening set	814 Dec 17 j 21:27	9°♒49'01		
	812 Jun 26 j 18:19	0°♋		min. Earth dist.	814 Dec 23 j 00:38	6°♒47'44	0.26611 AU	
	812 Jul 21 j 02:46	0°♌		inferior conj	814 Dec 23 j 18:38	6°♒20'03	4°36'39	
max. Earth dist.	812 Jul 23 j 14:13	3°♌03'44	1.72997 AU	minimum elong	814 Dec 23 j 09:32	6°♒34'03	4°34'08	
				morning rise	814 Dec 28 j 21:58	3°♒16'20		
superior conj	812 Jul 27 j 03:57	7°♌28'53	1°14'01		815 Jan 05 j 03:07	30°♒♑		
minimum elong	812 Jul 26 j 20:24	7°♌05'31	1°13'51	direct	815 Jan 13 j 02:21	28°♑41'25		
	812 Aug 14 j 07:42	0°♐			815 Jan 21 j 09:14	0°♒		
evening rise	812 Sep 01 j 17:41	22°♐54'19		greatest brilliancy	815 Jan 22 j 11:03	0°♒20'50	-4.9m	
	812 Sep 07 j 10:25	0°♑			815 Mar 03 j 09:28	0°♓		
	812 Oct 01 j 12:28	0°♌		morning max el	815 Mar 03 j 22:50	0°♓32'52	46°29'00	
desc. node	812 Oct 08 j 20:26	9°♌07'48		desc. node	815 Mar 26 j 15:27	24°♓13'17		
	812 Oct 25 j 15:00	0°♑			815 Mar 31 j 22:04	0°♈		
	812 Nov 18 j 19:09	0°♒			815 Apr 27 j 11:09	0°♐		
	812 Dec 13 j 03:10	0°♓			815 May 23 j 04:45	0°♉		
	813 Jan 06 j 20:10	0°♈			815 Jun 17 j 10:58	0°♊		
asc. node	813 Jan 29 j 23:36	27°♈16'00			815 Jul 12 j 08:07	0°♋		
	813 Feb 01 j 08:41	0°♐		asc. node	815 Jul 17 j 18:50	6°♋37'33		
	813 Feb 28 j 17:44	0°♉			815 Aug 05 j 20:53	0°♌		
evening max el	813 Mar 08 j 02:45	7°♉26'10	45°55'19	morning set	815 Aug 29 j 07:07	28°♌59'55		
	813 Apr 03 j 20:15	0°♊			815 Aug 30 j 02:26	0°♐		
greatest brilliancy	813 Apr 15 j 08:27	6°♊03'41	-4.7m		815 Sep 23 j 02:54	0°♑		
retrograde	813 Apr 26 j 05:48	8°♊12'56		max. Earth dist.	815 Oct 03 j 22:01	13°♑32'06	1.71512 AU	
evening set	813 May 11 j 11:12	3°♊44'30						
inferior conj	813 May 17 j 17:08	29°♉58'25	0°53'50	superior conj	815 Oct 06 j 04:08	16°♑21'54	1°05'13	
minimum elong	813 May 17 j 19:06	29°♉55'20	0°53'15	minimum elong	815 Oct 06 j 14:24	16°♑54'08	1°04'54	
	813 May 17 j 16:08	30°♒♉			815 Oct 17 j 00:45	0°♌		
min. Earth dist.	813 May 17 j 19:49	29°♉54'12	0.28949 AU	desc. node	815 Nov 06 j 08:15	25°♌31'06		
desc. node	813 May 21 j 12:51	27°♉36'15			815 Nov 09 j 21:52	0°♑		
morning rise	813 May 24 j 03:02	26°♉06'34		evening rise	815 Nov 15 j 15:58	7°♑13'39		
direct	813 Jun 08 j 08:11	21°♉40'41			815 Dec 03 j 19:26	0°♒		
greatest brilliancy	813 Jun 18 j 16:51	23°♉35'50	-4.7m		815 Dec 27 j 18:36	0°♓		
	813 Jul 01 j 04:04	0°♊			816 Jan 20 j 21:21	0°♈		
morning max el	813 Jul 27 j 03:35	21°♊28'32	45°51'05		816 Feb 14 j 07:07	0°♐		
	813 Aug 04 j 18:40	0°♋		asc. node	816 Feb 27 j 11:35	15°♐58'25		
	813 Sep 01 j 13:49	0°♌			816 Mar 10 j 04:57	0°♉		
asc. node	813 Sep 11 j 16:32	11°♌35'01			816 Apr 04 j 22:52	0°♊		
	813 Sep 27 j 08:08	0°♐			816 May 02 j 06:43	0°♋		
	813 Oct 22 j 02:18	0°♑		evening max el	816 May 17 j 15:16	15°♋26'20	45°20'14	
	813 Nov 15 j 08:01	0°♌			816 Jun 03 j 03:12	0°♌		
	813 Dec 09 j 08:14	0°♑		desc. node	816 Jun 18 j 00:56	10°♌03'12		
desc. node	814 Jan 01 j 05:49	28°♑41'10		greatest brilliancy	816 Jun 24 j 19:40	13°♌04'39	-4.7m	
	814 Jan 02 j 07:00	0°♒		retrograde	816 Jul 05 j 04:47	15°♌00'23		
	814 Jan 26 j 06:22	0°♓		evening set	816 Jul 21 j 21:04	9°♌45'17		
morning set	814 Jan 28 j 19:55	3°♓12'19		inferior conj	816 Jul 26 j 13:21	6°♌55'53	-7°30'59	
	814 Feb 19 j 07:26	0°♈		minimum elong	816 Jul 26 j 04:31	7°♌09'32	7°29'42	
				min. Earth dist.	816 Jul 26 j 18:45	6°♌47'32	0.28709 AU	
superior conj	814 Mar 09 j 21:31	23°♈06'17	-1°21'38	morning rise	816 Jul 30 j 11:47	4°♌32'00		
minimum elong	814 Mar 10 j 03:39	23°♈25'16	1°21'33		816 Aug 09 j 01:05	30°♒♓		
max. Earth dist.	814 Mar 13 j 15:57	27°♈46'35	1.72563 AU	direct	816 Aug 17 j 02:24	28°♓42'08		
	814 Mar 15 j 11:01	0°♐			816 Aug 25 j 10:40	0°♌		
	814 Apr 08 j 17:42	0°♉		greatest brilliancy	816 Aug 27 j 23:02	0°♌51'15	-4.8m	
evening rise	814 Apr 17 j 08:00	10°♉34'42			816 Oct 05 j 13:15	0°♐		
asc. node	814 Apr 24 j 09:18	19°♉14'47		morning max el	816 Oct 06 j 03:26	0°♐35'22	46°30'26	
	814 May 03 j 03:44	0°♊		asc. node	816 Oct 09 j 04:15	3°♐39'17		
	814 May 27 j 17:06	0°♋			816 Nov 02 j 09:53	0°♑		

	816 Nov 28 j 00:11	0°♌		819 Jun 08 j 05:49	0°♏	
	816 Dec 22 j 18:03	0°♊		819 Jul 05 j 02:54	0°♎	
	817 Jan 16 j 03:58	0°♊		819 Jul 16 j 12:47	12°♎04'40	
desc. node	817 Jan 28 j 17:48	15°♊31'03	desc. node	819 Jul 29 j 17:33	25°♎16'49	46°00'07
	817 Feb 09 j 11:20	0°♋		819 Aug 03 j 17:45	0°♎	
	817 Mar 05 j 18:32	0°♋	greatest brilliancy	819 Sep 07 j 22:00	24°♎08'46	-4.8m
	817 Mar 30 j 02:41	0°♌	retrograde	819 Sep 16 j 22:04	25°♎37'42	
morning set	817 Apr 11 j 17:25	15°♌31'09	evening set	819 Oct 03 j 10:08	20°♎28'41	
	817 Apr 23 j 12:06	0°♍	inferior conj	819 Oct 07 j 16:46	17°♎55'36	-6°44'55
	817 May 17 j 22:20	0°♍	minimum elong	819 Oct 08 j 03:18	17°♎39'31	6°42'46
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superior conj	817 May 18 j 17:00	0°♍57'20 -0°07'33	morning rise	819 Oct 12 j 20:00	14°♎52'35	
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behind sun end	817 May 19 j 14:43	2°♍04'00	greatest brilliancy	819 Nov 08 j 11:16	12°♎22'58	-4.9m
max. Earth dist.	817 May 18 j 14:37	0°♍50'01 1.73617 AU		819 Dec 04 j 02:32	0°♌	
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	817 Jun 11 j 08:31	0°♍		820 Jan 02 j 15:40	0°♊	
evening rise	817 Jun 23 j 18:25	15°♍15'31		820 Jan 29 j 01:07	0°♊	
	817 Jul 05 j 18:09	0°♎		820 Feb 23 j 11:04	0°♋	
	817 Jul 30 j 03:40	0°♎	desc. node	820 Feb 26 j 05:37	3°♋18'30	
	817 Aug 23 j 14:19	0°♎		820 Mar 19 j 11:31	0°♋	
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	817 Nov 05 j 23:26	0°♊	asc. node	820 Jun 18 j 09:03	20°♍23'54	
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evening max el	817 Dec 24 j 12:19	24°♋29'06 47°07'24		820 Jun 26 j 04:56	0°♍	
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asc. node	818 Jan 01 j 13:51	2°♋27'43	max. Earth dist.	820 Jul 21 j 09:04	1°♎00'51 1.73045 AU	
greatest brilliancy	818 Feb 02 j 16:58	25°♋48'51 -4.9m				
retrograde	818 Feb 13 j 07:25	27°♋56'17	superior conj	820 Jul 24 j 21:57	5°♎23'17 1°12'25	
evening set	818 Mar 03 j 03:20	21°♋44'14	minimum elong	820 Jul 24 j 14:05	4°♎58'58 1°12'14	
inferior conj	818 Mar 06 j 09:40	19°♋41'36 8°23'52		820 Aug 13 j 18:24	0°♎	
minimum elong	818 Mar 06 j 14:32	19°♋33'55 8°23'31	evening rise	820 Aug 30 j 09:33	20°♎40'42	
min. Earth dist.	818 Mar 05 j 23:53	19°♋57'03 0.28279 AU		820 Sep 06 j 21:18	0°♎	
morning rise	818 Mar 10 j 02:00	17°♋24'30		820 Sep 30 j 23:34	0°♌	
direct	818 Mar 27 j 11:39	11°♋35'55	desc. node	820 Oct 07 j 22:25	8°♌39'11	
greatest brilliancy	818 Apr 05 j 18:15	13°♋11'53 -4.8m		820 Oct 25 j 02:22	0°♊	
desc. node	818 Apr 23 j 03:04	22°♋42'18		820 Nov 18 j 06:51	0°♊	
	818 May 02 j 09:41	0°♌		820 Dec 12 j 15:22	0°♋	
morning max el	818 May 15 j 11:41	11°♌50'58 45°50'07		821 Jan 06 j 09:12	0°♋	
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asc. node	818 Aug 14 j 06:39	23°♍04'24	evening max el	821 Mar 05 j 16:57	5°♍10'08 45°57'31	
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morning set	818 Nov 10 j 00:38	11°♌49'48	inferior conj	821 May 15 j 09:44	27°♍50'21 1°13'21	
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desc. node	818 Dec 03 j 20:05	11°♊48'29	min. Earth dist.	821 May 15 j 12:51	27°♍45'27 0.28944 AU	
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			morning rise	821 May 21 j 19:47	23°♍58'12	
superior conj	818 Dec 21 j 13:24	4°♊06'23 -0°40'37	direct	821 Jun 05 j 23:55	19°♍32'30	
minimum elong	818 Dec 21 j 03:31	3°♊35'18 0°40'10	greatest brilliancy	821 Jun 16 j 09:29	21°♍28'10 -4.7m	
max. Earth dist.	818 Dec 24 j 03:15	7°♊20'46 1.71144 AU		821 Jul 02 j 00:12	0°♍	
	819 Jan 11 j 04:12	0°♋	morning max el	821 Jul 24 j 19:08	19°♍17'52 45°50'17	
evening rise	819 Jan 31 j 21:02	25°♋54'28		821 Aug 04 j 13:37	0°♍	
	819 Feb 04 j 03:43	0°♋		821 Sep 01 j 04:21	0°♎	
	819 Feb 28 j 07:09	0°♌	asc. node	821 Sep 10 j 18:32	11°♎01'03	
	819 Mar 24 j 16:18	0°♍		821 Sep 26 j 20:59	0°♎	
asc. node	819 Mar 26 j 23:28	2°♍48'37		821 Oct 21 j 14:21	0°♎	
	819 Apr 18 j 09:01	0°♍		821 Nov 14 j 19:37	0°♌	
	819 May 13 j 11:52	0°♍		821 Dec 08 j 19:34	0°♊	





























































































































desc. node	821 Dec 31 j 07:59	28°♊13'01		greatest brilliancy	824 Jun 22 j 09:38	10°♌52'30	-4.7m
	822 Jan 01 j 18:08	0°♊		retrograde	824 Jul 02 j 20:28	12°♌49'13	
	822 Jan 25 j 17:20	0°♊		evening set	824 Jul 19 j 09:24	7°♌38'44	
morning set	822 Jan 26 j 06:44	0°♊41'54		inferior conj	824 Jul 24 j 05:01	4°♌44'09	-7°20'19
	822 Feb 18 j 18:16	0°♊		minimum elong	824 Jul 23 j 19:51	4°♌58'21	7°18'52
				min. Earth dist.	824 Jul 24 j 09:28	4°♌37'15	0.28738 AU
superior conj	822 Mar 07 j 11:42	20°♋48'03	-1°22'39	morning rise	824 Jul 28 j 06:08	2°♌16'07	
minimum elong	822 Mar 07 j 17:07	21°♋04'51	1°22'35		824 Aug 01 j 09:31	30°♌	
max. Earth dist.	822 Mar 11 j 05:47	25°♋27'26	1.72508 AU	direct	824 Aug 14 j 18:59	26°♌30'12	
	822 Mar 14 j 21:44	0°♋		greatest brilliancy	824 Aug 25 j 13:42	28°♌37'32	-4.8m
	822 Apr 08 j 04:25	0°♋			824 Aug 28 j 19:51	0°♌	
evening rise	822 Apr 15 j 00:29	8°♋24'50		morning max el	824 Oct 03 j 18:46	28°♌18'58	46°28'48
asc. node	822 Apr 23 j 11:22	18°♋48'02			824 Oct 05 j 11:01	0°♍	
	822 May 02 j 14:32	0°♍		asc. node	824 Oct 08 j 06:18	2°♍51'32	
	822 May 27 j 04:08	0°♍			824 Nov 02 j 01:45	0°♍	
	822 Jun 20 j 21:44	0°♍			824 Nov 27 j 13:58	0°♍	
	822 Jul 15 j 21:02	0°♍			824 Dec 22 j 06:48	0°♍	
	822 Aug 10 j 05:31	0°♍			825 Jan 15 j 16:06	0°♍	
desc. node	822 Aug 13 j 00:36	3°♍16'01		desc. node	825 Jan 27 j 19:45	15°♍00'21	
	822 Sep 05 j 05:52	0°♍			825 Feb 08 j 23:02	0°♍	
	822 Oct 02 j 15:32	0°♍			825 Mar 05 j 05:54	0°♍	
evening max el	822 Oct 11 j 00:20	8°♍34'07	47°09'57		825 Mar 29 j 13:47	0°♍	
	822 Nov 03 j 22:12	0°♍		morning set	825 Apr 09 j 10:00	13°♍20'46	
greatest brilliancy	822 Nov 20 j 15:52	9°♍43'44	-4.9m		825 Apr 22 j 23:01	0°♍	
retrograde	822 Nov 30 j 16:49	11°♍39'48					
asc. node	822 Dec 04 j 04:03	11°♍24'47		superior conj	825 May 16 j 11:01	28°♍52'06	-0°10'42
evening set	822 Dec 15 j 07:55	7°♍22'56		minimum elong	825 May 16 j 13:14	28°♍58'53	0°10'35
min. Earth dist.	822 Dec 20 j 13:55	4°♍18'06	0.26571 AU	behind sun begin	825 May 15 j 20:11	28°♍06'31	
inferior conj	822 Dec 21 j 07:04	3°♍51'49	4°15'45	behind sun end	825 May 17 j 06:17	29°♍51'16	
minimum elong	822 Dec 20 j 22:26	4°♍05'03	4°13'17	max. Earth dist.	825 May 16 j 14:04	29°♍01'28	1.73603 AU
morning rise	822 Dec 26 j 13:20	0°♍44'36			825 May 17 j 09:08	0°♍	
	822 Dec 27 j 22:29	30°♍		asc. node	825 May 20 j 23:18	4°♍24'35	
direct	823 Jan 10 j 14:37	26°♍13'32			825 Jun 10 j 19:20	0°♍	
greatest brilliancy	823 Jan 20 j 00:23	27°♍54'22	-4.9m	evening rise	825 Jun 21 j 13:40	13°♍13'44	
	823 Jan 25 j 00:54	0°♍			825 Jul 05 j 05:06	0°♍	
morning max el	823 Mar 01 j 13:03	28°♍12'28	46°30'43		825 Jul 29 j 14:55	0°♍	
	823 Mar 03 j 08:23	0°♍			825 Aug 23 j 02:00	0°♍	
desc. node	823 Mar 25 j 17:26	23°♍32'27		desc. node	825 Sep 09 j 12:32	21°♍18'12	
	823 Mar 31 j 14:12	0°♍			825 Sep 16 j 15:54	0°♍	
	823 Apr 27 j 00:43	0°♍			825 Oct 11 j 10:31	0°♍	
	823 May 22 j 17:02	0°♍			825 Nov 05 j 13:53	0°♍	
	823 Jun 16 j 22:33	0°♍			825 Dec 01 j 13:43	0°♍	
	823 Jul 11 j 19:17	0°♍		evening max el	825 Dec 22 j 03:38	22°♍09'12	47°09'00
asc. node	823 Jul 16 j 20:51	6°♍09'55			825 Dec 30 j 01:45	0°♍	
	823 Aug 05 j 07:49	0°♍		asc. node	825 Dec 31 j 15:51	1°♍30'31	
morning set	823 Aug 26 j 23:12	26°♍46'57		greatest brilliancy	826 Jan 31 j 09:05	23°♍31'30	-4.9m
	823 Aug 29 j 13:17	0°♍		retrograde	826 Feb 10 j 22:54	25°♍38'08	
	823 Sep 22 j 13:47	0°♍		evening set	826 Feb 28 j 20:03	19°♍24'31	
max. Earth dist.	823 Oct 01 j 10:17	11°♍05'48	1.71556 AU	min. Earth dist.	826 Mar 03 j 14:03	17°♍41'06	0.28230 AU
				inferior conj	826 Mar 04 j 00:49	17°♍24'04	8°29'19
superior conj	823 Oct 03 j 17:34	13°♍59'10	1°07'29	minimum elong	826 Mar 04 j 04:58	17°♍17'29	8°29'03
minimum elong	823 Oct 04 j 03:35	14°♍30'36	1°07'12	morning rise	826 Mar 07 j 14:10	15°♍11'18	
	823 Oct 16 j 11:43	0°♍		direct	826 Mar 25 j 02:26	9°♍19'31	
desc. node	823 Nov 05 j 10:22	25°♍02'54		greatest brilliancy	826 Apr 03 j 07:26	10°♍54'03	-4.8m
	823 Nov 09 j 08:58	0°♍		desc. node	826 Apr 22 j 05:11	21°♍31'42	
evening rise	823 Nov 13 j 02:22	4°♍40'42			826 May 02 j 15:25	0°♍	
	823 Dec 03 j 06:41	0°♍		morning max el	826 May 13 j 02:06	9°♍35'33	45°51'02
	823 Dec 27 j 05:59	0°♍			826 Jun 02 j 05:03	0°♍	
	824 Jan 20 j 08:56	0°♍			826 Jun 29 j 11:24	0°♍	
	824 Feb 13 j 19:05	0°♍			826 Jul 25 j 09:46	0°♍	
asc. node	824 Feb 26 j 13:34	15°♍27'30		asc. node	826 Aug 13 j 08:41	22°♍34'25	
	824 Mar 09 j 17:38	0°♍			826 Aug 19 j 12:24	0°♍	
	824 Apr 04 j 13:04	0°♍			826 Sep 13 j 01:01	0°♍	
	824 May 02 j 00:45	0°♍			826 Oct 07 j 04:14	0°♍	
evening max el	824 May 15 j 07:48	13°♍17'41	45°20'11	greatest brilliancy	826 Oct 27 j 23:35	26°♍05'14	-3.9m
	824 Jun 03 j 14:22	0°♍			826 Oct 31 j 02:16	0°♍	
desc. node	824 Jun 17 j 03:02	8°♍36'58		morning set	826 Nov 07 j 12:06	9°♍19'24	

	826 Nov 23 j 22:17	0°♈	minimum elong	829 May 13 j 05:30	25°♈35'11	1°31'59
desc. node	826 Dec 02 j 22:13	11°♈19'46	min. Earth dist.	829 May 13 j 05:26	25°♈35'16	0.28939 AU
	826 Dec 17 j 18:16	0°♉	morning rise	829 May 19 j 12:13	21°♈48'25	
			desc. node	829 May 19 j 17:08	21°♈41'41	
superior conj	826 Dec 18 j 22:50	1°♉29'48 -0°37'01	direct	829 Jun 03 j 15:47	17°♈22'25	
minimum elong	826 Dec 18 j 13:37	1°♉00'51 0°36'35	greatest brilliancy	829 Jun 14 j 01:41	19°♈18'34	-4.7m
max. Earth dist.	826 Dec 21 j 07:23	4°♉27'36 1.71120 AU		829 Jul 02 j 15:50	0°♊	
	827 Jan 10 j 15:25	0°♊	morning max el	829 Jul 22 j 11:35	17°♊08'18	45°49'39
evening rise	827 Jan 29 j 07:49	23°♊23'06		829 Aug 04 j 08:30	0°♋	
	827 Feb 03 j 14:59	0°♋		829 Aug 31 j 19:03	0°♌	
	827 Feb 27 j 18:30	0°♌	asc. node	829 Sep 09 j 20:36	10°♌26'38	
	827 Mar 24 j 03:49	0°♍		829 Sep 26 j 10:01	0°♍	
asc. node	827 Mar 26 j 01:34	2°♍19'45		829 Oct 21 j 02:34	0°♎	
	827 Apr 17 j 20:55	0°♏		829 Nov 14 j 07:25	0°♏	
	827 May 13 j 00:29	0°♐		829 Dec 08 j 07:09	0°♑	
	827 Jun 07 j 19:51	0°♑	desc. node	829 Dec 30 j 09:57	27°♑43'16	
desc. node	827 Jul 04 j 20:03	0°♒		830 Jan 01 j 05:34	0°♒	
evening max el	827 Jul 15 j 14:46	11°♒19'39	morning set	830 Jan 23 j 17:01	28°♒08'34	
	827 Jul 27 j 05:52	22°♒54'16 45°57'42		830 Jan 25 j 04:39	0°♓	
	827 Aug 03 j 20:41	0°♓		830 Feb 18 j 05:27	0°♈	
greatest brilliancy	827 Sep 05 j 11:02	21°♓45'46 -4.8m				
retrograde	827 Sep 14 j 09:59	23°♈14'08	superior conj	830 Mar 05 j 01:09	18°♈26'19 -1°23'32	
evening set	827 Oct 01 j 02:13	18°♈00'01	minimum elong	830 Mar 05 j 05:48	18°♈40'43 1°23'30	
inferior conj	827 Oct 05 j 05:49	15°♈31'24 -6°59'20	max. Earth dist.	830 Mar 08 j 18:41	23°♈04'10 1.72453 AU	
minimum elong	827 Oct 05 j 16:11	15°♈15'35 6°57'19		830 Mar 14 j 08:49	0°♌	
min. Earth dist.	827 Oct 06 j 02:54	14°♈59'13 0.27161 AU		830 Apr 07 j 15:28	0°♍	
morning rise	827 Oct 10 j 05:38	12°♈32'57	evening rise	830 Apr 12 j 16:24	6°♍12'08	
direct	827 Oct 26 j 00:29	7°♈40'54	asc. node	830 Apr 22 j 13:29	18°♍20'30	
asc. node	827 Nov 05 j 18:11	9°♈50'46		830 May 02 j 01:41	0°♎	
greatest brilliancy	827 Nov 06 j 02:24	9°♈58'48 -4.9m		830 May 26 j 15:32	0°♏	
	827 Dec 04 j 08:26	0°♏		830 Jun 20 j 09:33	0°♑	
morning max el	827 Dec 15 j 18:38	11°♏08'57 46°56'49		830 Jul 15 j 09:33	0°♒	
	828 Jan 02 j 10:08	0°♑		830 Aug 09 j 19:13	0°♓	
	828 Jan 28 j 16:11	0°♒	desc. node	830 Aug 12 j 02:39	2°♓41'35	
	828 Feb 23 j 00:30	0°♓		830 Sep 04 j 21:45	0°♔	
desc. node	828 Feb 25 j 07:42	2°♓44'57		830 Oct 02 j 12:30	0°♕	
	828 Mar 18 j 24:00	0°♔	evening max el	830 Oct 08 j 14:40	6°♕11'27 47°08'24	
	828 Apr 12 j 19:31	0°♕		830 Nov 04 j 21:02	0°♖	
	828 May 07 j 12:48	0°♖	greatest brilliancy	830 Nov 18 j 04:45	7°♖14'27 -4.9m	
	828 Jun 01 j 03:52	0°♗	retrograde	830 Nov 28 j 06:12	9°♖10'30	
morning set	828 Jun 16 j 08:20	18°♗34'21	asc. node	830 Dec 03 j 05:59	8°♖39'17	
asc. node	828 Jun 17 j 11:04	19°♗56'15	evening set	830 Dec 12 j 18:41	4°♖56'22	
	828 Jun 25 j 15:55	0°♘	min. Earth dist.	830 Dec 18 j 03:04	1°♖48'18 0.26536 AU	
max. Earth dist.	828 Jul 19 j 05:40	29°♘02'21 1.73087 AU	inferior conj	830 Dec 18 j 19:30	1°♖23'08 3°54'13	
	828 Jul 20 j 00:19	0°♙	minimum elong	830 Dec 18 j 11:25	1°♖35'31 3°51'52	
				830 Dec 21 j 02:12	30°♙12'33	
superior conj	828 Jul 22 j 16:08	3°♙17'13 1°10'44	morning rise	830 Dec 24 j 04:36	28°♙45'25	
minimum elong	828 Jul 22 j 08:00	2°♙52'04 1°10'31	direct	831 Jan 08 j 03:26	23°♙45'25	
	828 Aug 13 j 05:25	0°♚	greatest brilliancy	831 Jan 17 j 13:27	25°♙26'59 -4.9m	
evening rise	828 Aug 28 j 01:50	18°♚27'35		831 Jan 27 j 01:47	0°♛	
	828 Sep 06 j 08:28	0°♛	morning max el	831 Feb 27 j 03:29	25°♛51'46 46°32'07	
	828 Sep 30 j 10:58	0°♜		831 Mar 03 j 06:41	0°♞	
desc. node	828 Oct 07 j 00:34	8°♜10'06	desc. node	831 Mar 24 j 19:35	22°♞51'36	
	828 Oct 24 j 14:06	0°♟		831 Mar 31 j 06:23	0°♞	
	828 Nov 17 j 18:59	0°♠		831 Apr 26 j 14:28	0°♟	
	828 Dec 12 j 04:03	0°♠		831 May 22 j 05:31	0°♡	
	829 Jan 05 j 22:48	0°♡		831 Jun 16 j 10:18	0°♢	
asc. node	829 Jan 28 j 03:39	26°♡02'25		831 Jul 11 j 06:37	0°♣	
	829 Jan 31 j 14:56	0°♢	asc. node	831 Jul 15 j 22:50	5°♣41'36	
	829 Feb 28 j 09:49	0°♣		831 Aug 04 j 18:56	0°♤	
evening max el	829 Mar 03 j 07:30	2°♣53'30 45°59'58	morning set	831 Aug 24 j 15:17	24°♤33'35	
	829 Apr 06 j 17:02	0°♥		831 Aug 29 j 00:18	0°♥	
greatest brilliancy	829 Apr 10 j 17:59	1°♥45'41 -4.7m		831 Sep 22 j 00:48	0°♦	
retrograde	829 Apr 21 j 15:00	3°♥55'37	max. Earth dist.	831 Sep 28 j 19:54	8°♦30'53 1.71595 AU	
	829 May 05 j 19:00	30°♦08'08				
evening set	829 May 06 j 22:45	29°♦22'33	superior conj	831 Oct 01 j 07:22	11°♦37'16 1°09'37	
inferior conj	829 May 13 j 02:08	25°♦40'27 1°32'58	minimum elong	831 Oct 01 j 17:03	12°♦07'39 1°09'20	

	831 Oct 15 j 22:48	0°♍	direct	834 Mar 22 j 16:49	7°♎04'34	
desc. node	831 Nov 04 j 12:28	24°♍34'30	greatest brilliancy	834 Mar 31 j 21:20	8°♎38'17	-4.8m
	831 Nov 08 j 20:08	0°♊	desc. node	834 Apr 21 j 07:19	20°♎24'14	
evening rise	831 Nov 10 j 13:09	2°♊08'45		834 May 02 j 18:48	0°♊	
	831 Dec 02 j 17:57	0°♊	morning max el	834 May 10 j 16:12	7°♊20'09	45°51'47
	831 Dec 26 j 17:23	0°♊		834 Jun 01 j 21:58	0°♊	
	832 Jan 19 j 20:34	0°♊		834 Jun 29 j 01:11	0°♊	
	832 Feb 13 j 07:08	0°♊		834 Jul 24 j 22:08	0°♊	
asc. node	832 Feb 25 j 15:40	14°♊56'33	asc. node	834 Aug 12 j 10:49	22°♊05'24	
	832 Mar 09 j 06:30	0°♊		834 Aug 19 j 00:02	0°♊	
	832 Apr 04 j 03:36	0°♊		834 Sep 12 j 12:16	0°♊	
	832 May 01 j 19:27	0°♊		834 Oct 06 j 15:20	0°♊	
evening max el	832 May 12 j 23:56	11°♊07'25 45°20'13	greatest brilliancy	834 Oct 27 j 15:00	26°♊19'02	-3.9m
	832 Jun 04 j 05:42	0°♊		834 Oct 30 j 13:18	0°♊	
desc. node	832 Jun 16 j 04:59	7°♊07'00	morning set	834 Nov 04 j 23:33	6°♊49'43	
greatest brilliancy	832 Jun 20 j 00:09	8°♊40'26 -4.7m		834 Nov 23 j 09:17	0°♊	
retrograde	832 Jun 30 j 11:31	10°♊37'26	desc. node	834 Dec 02 j 00:10	10°♊51'15	
evening set	832 Jul 16 j 21:43	5°♊31'40				
inferior conj	832 Jul 21 j 20:36	2°♊32'03 -7°08'56	superior conj	834 Dec 16 j 08:18	28°♊54'09 -0°33'19	
minimum elong	832 Jul 21 j 11:10	2°♊46'42 7°07'22	minimum elong	834 Dec 15 j 23:50	28°♊27'33 0°32'56	
min. Earth dist.	832 Jul 22 j 00:30	2°♊25'59 0.28764 AU		834 Dec 17 j 05:14	0°♊	
morning rise	832 Jul 26 j 00:26	29°♊59'41	max. Earth dist.	834 Dec 18 j 09:02	1°♊27'24 1.71097 AU	
	832 Jul 26 j 00:13	30°♊59'41		835 Jan 10 j 02:22	0°♊	
direct	832 Aug 12 j 11:06	24°♊17'54	evening rise	835 Jan 26 j 18:43	20°♊53'02	
greatest brilliancy	832 Aug 23 j 04:40	26°♊23'44 -4.8m		835 Feb 03 j 01:54	0°♊	
	832 Aug 30 j 18:08	0°♊		835 Feb 27 j 05:28	0°♊	
morning max el	832 Oct 01 j 09:09	26°♊00'06 46°27'15		835 Mar 23 j 14:57	0°♊	
	832 Oct 05 j 08:05	0°♊	asc. node	835 Mar 25 j 03:41	1°♊52'13	
asc. node	832 Oct 07 j 08:26	2°♊04'37		835 Apr 17 j 08:26	0°♊	
	832 Nov 01 j 17:23	0°♊		835 May 12 j 12:48	0°♊	
	832 Nov 27 j 03:35	0°♊		835 Jun 07 j 09:43	0°♊	
	832 Dec 21 j 19:23	0°♊		835 Jul 04 j 13:16	0°♊	
	833 Jan 15 j 04:03	0°♊	desc. node	835 Jul 14 j 16:52	10°♊35'02	
desc. node	833 Jan 26 j 21:50	14°♊30'37	evening max el	835 Jul 24 j 18:23	20°♊33'11 45°55'21	
	833 Feb 08 j 10:32	0°♊		835 Aug 04 j 00:58	0°♊	
	833 Mar 04 j 17:05	0°♊	greatest brilliancy	835 Sep 02 j 23:31	19°♊23'11 -4.8m	
	833 Mar 29 j 00:46	0°♊	retrograde	835 Sep 11 j 22:24	20°♊51'46	
morning set	833 Apr 07 j 02:24	11°♊10'01	evening set	835 Sep 28 j 18:14	15°♊32'17	
	833 Apr 22 j 09:51	0°♊	inferior conj	835 Oct 02 j 18:52	13°♊08'11 -7°12'49	
			minimum elong	835 Oct 03 j 05:00	12°♊52'44 7°10'57	
superior conj	833 May 14 j 04:45	26°♊46'08 -0°13'52	min. Earth dist.	835 Oct 03 j 16:30	12°♊35'12 0.27229 AU	
minimum elong	833 May 14 j 07:36	26°♊54'54 0°13'43	morning rise	835 Oct 07 j 15:14	10°♊14'41	
behind sun begin	833 May 13 j 20:08	26°♊19'39	direct	835 Oct 23 j 13:58	5°♊16'16	
behind sun end	833 May 14 j 19:05	27°♊30'09	greatest brilliancy	835 Nov 03 j 17:20	7°♊35'39 -4.9m	
max. Earth dist.	833 May 14 j 11:34	27°♊07'05 1.73590 AU	asc. node	835 Nov 04 j 20:08	8°♊03'26	
	833 May 16 j 19:53	0°♊		835 Dec 04 j 12:01	0°♊	
asc. node	833 May 20 j 01:17	3°♊57'39	morning max el	835 Dec 13 j 08:47	8°♊44'58 46°56'47	
	833 Jun 10 j 06:06	0°♊		836 Jan 02 j 03:48	0°♊	
evening rise	833 Jun 19 j 08:32	11°♊10'56		836 Jan 28 j 06:42	0°♊	
	833 Jul 04 j 16:01	0°♊		836 Feb 22 j 13:27	0°♊	
	833 Jul 29 j 02:06	0°♊	desc. node	836 Feb 24 j 09:47	2°♊12'45	
	833 Aug 22 j 13:38	0°♊		836 Mar 18 j 12:00	0°♊	
desc. node	833 Sep 08 j 14:42	20°♊48'13		836 Apr 12 j 06:53	0°♊	
	833 Sep 16 j 04:08	0°♊		836 May 06 j 23:44	0°♊	
	833 Oct 10 j 23:35	0°♊		836 May 31 j 14:33	0°♊	
	833 Nov 05 j 04:19	0°♊	morning set	836 Jun 14 j 02:46	16°♊31'16	
	833 Dec 01 j 06:55	0°♊	asc. node	836 Jun 16 j 13:05	19°♊29'55	
evening max el	833 Dec 19 j 18:13	19°♊48'04 47°10'41		836 Jun 25 j 02:29	0°♊	
	833 Dec 30 j 03:41	0°♊	max. Earth dist.	836 Jul 17 j 03:09	27°♊07'45 1.73134 AU	
asc. node	833 Dec 30 j 17:53	0°♊33'07		836 Jul 19 j 10:55	0°♊	
greatest brilliancy	834 Jan 29 j 01:44	21°♊15'54 -4.9m				
retrograde	834 Feb 08 j 14:13	23°♊21'25	superior conj	836 Jul 20 j 10:23	1°♊12'33 1°08'57	
evening set	834 Feb 26 j 12:37	17°♊06'48	minimum elong	836 Jul 20 j 02:02	0°♊46'44 1°08'42	
min. Earth dist.	834 Mar 01 j 04:42	15°♊26'18 0.28179 AU		836 Aug 12 j 16:06	0°♊	
inferior conj	834 Mar 01 j 16:10	15°♊08'07 8°33'49	evening rise	836 Aug 25 j 18:10	16°♊15'39	
minimum elong	834 Mar 01 j 19:35	15°♊02'43 8°33'39		836 Sep 05 j 19:20	0°♊	
morning rise	834 Mar 05 j 02:48	12°♊59'17		836 Sep 29 j 22:04	0°♊	

desc. node	836 Oct 06 j 02:37	7°♌41'43		desc. node	839 Mar 23 j 21:40	22°♏11'53	
	836 Oct 24 j 01:30	0°♊			839 Mar 30 j 21:58	0°♋	
	836 Nov 17 j 06:48	0°♎			839 Apr 26 j 03:47	0°♌	
	836 Dec 11 j 16:27	0°♏			839 May 21 j 17:38	0°♍	
	837 Jan 05 j 12:08	0°♋			839 Jun 15 j 21:42	0°♎	
asc. node	837 Jan 27 j 05:48	25°♋26'02			839 Jul 10 j 17:36	0°♏	
	837 Jan 31 j 06:12	0°♌		asc. node	839 Jul 15 j 01:03	5°♏15'02	
	837 Feb 28 j 06:36	0°♍			839 Aug 04 j 05:41	0°♐	
evening max el	837 Feb 28 j 23:17	0°♍41'16	46°02'34	morning set	839 Aug 22 j 07:49	22°♐22'43	
greatest brilliancy	837 Apr 08 j 10:19	29°♍37'21	-4.7m		839 Aug 28 j 10:59	0°♑	
	837 Apr 09 j 11:09	0°♎			839 Sep 21 j 11:33	0°♒	
retrograde	837 Apr 19 j 08:22	1°♎48'14		max. Earth dist.	839 Sep 26 j 04:25	5°♒53'24	1.71645 AU
	837 Apr 28 j 19:32	30°♎♊					
evening set	837 May 04 j 16:56	27°♎12'43		superior conj	839 Sep 28 j 21:32	9°♒17'27	1°11'36
inferior conj	837 May 10 j 18:47	23°♎32'39	1°52'11	minimum elong	839 Sep 29 j 06:49	9°♒46'32	1°11'21
minimum elong	837 May 10 j 22:49	23°♎26'20	1°51'02		839 Oct 15 j 09:41	0°♓	
min. Earth dist.	837 May 10 j 21:54	23°♎27'46	0.28931 AU	desc. node	839 Nov 03 j 14:28	24°♓06'13	
morning rise	837 May 17 j 04:46	19°♎41'06		evening rise	839 Nov 07 j 23:48	29°♓36'54	
desc. node	837 May 18 j 19:01	18°♎50'28			839 Nov 08 j 07:10	0°♊	
direct	837 Jun 01 j 08:20	15°♎14'43			839 Dec 02 j 05:07	0°♋	
greatest brilliancy	837 Jun 11 j 17:24	17°♎10'36	-4.7m		839 Dec 26 j 04:41	0°♌	
	837 Jul 03 j 02:37	0°♎			840 Jan 19 j 08:06	0°♍	
morning max el	837 Jul 20 j 04:47	15°♎02'20	45°48'50		840 Feb 12 j 19:06	0°♌	
	837 Aug 04 j 02:20	0°♏		asc. node	840 Feb 24 j 17:46	14°♌26'00	
	837 Aug 31 j 09:10	0°♐			840 Mar 08 j 19:17	0°♍	
asc. node	837 Sep 08 j 22:43	9°♐53'37			840 Apr 03 j 18:07	0°♎	
	837 Sep 25 j 22:38	0°♑			840 May 01 j 14:24	0°♏	
	837 Oct 20 j 14:28	0°♒		evening max el	840 May 10 j 15:36	8°♏56'41	45°20'23
	837 Nov 13 j 18:55	0°♓			840 Jun 05 j 01:44	0°♐	
	837 Dec 07 j 18:24	0°♊		desc. node	840 Jun 15 j 07:09	5°♐35'20	
desc. node	837 Dec 29 j 12:03	27°♊15'03		greatest brilliancy	840 Jun 17 j 15:20	6°♐30'17	-4.7m
	837 Dec 31 j 16:40	0°♋		retrograde	840 Jun 28 j 02:31	8°♐27'29	
morning set	838 Jan 21 j 03:13	25°♋36'03		evening set	840 Jul 14 j 10:26	3°♐26'10	
	838 Jan 24 j 15:36	0°♌		inferior conj	840 Jul 19 j 12:31	0°♐21'50	-6°57'01
	838 Feb 17 j 16:16	0°♍		minimum elong	840 Jul 19 j 02:52	0°♐36'51	6°55'20
				min. Earth dist.	840 Jul 19 j 16:09	0°♐16'11	0.28785 AU
superior conj	838 Mar 02 j 14:32	16°♋05'16	-1°24'17		840 Jul 20 j 02:33	30°♐♊	
minimum elong	838 Mar 02 j 18:22	16°♋17'12	1°24'16	morning rise	840 Jul 23 j 19:05	27°♏45'09	
max. Earth dist.	838 Mar 06 j 08:36	20°♋45'01	1.72399 AU	direct	840 Aug 10 j 03:03	22°♏07'24	
	838 Mar 13 j 19:34	0°♌		greatest brilliancy	840 Aug 20 j 20:26	24°♏12'27	-4.8m
	838 Apr 07 j 02:11	0°♍			840 Sep 01 j 00:36	0°♐	
evening rise	838 Apr 10 j 08:25	4°♍00'49		morning max el	840 Sep 28 j 22:57	23°♐40'50	46°25'38
asc. node	838 Apr 21 j 15:30	17°♍53'44			840 Oct 05 j 04:07	0°♑	
	838 May 01 j 12:28	0°♎		asc. node	840 Oct 06 j 10:27	1°♑18'56	
	838 May 26 j 02:31	0°♏			840 Nov 01 j 08:36	0°♒	
	838 Jun 19 j 20:57	0°♐			840 Nov 26 j 17:00	0°♓	
	838 Jul 14 j 21:42	0°♑			840 Dec 21 j 07:54	0°♊	
	838 Aug 09 j 08:39	0°♒			841 Jan 14 j 15:59	0°♋	
desc. node	838 Aug 11 j 04:46	2°♒08'17		desc. node	841 Jan 25 j 24:00	14°♒01'00	
	838 Sep 04 j 13:36	0°♓			841 Feb 07 j 22:03	0°♌	
	838 Oct 02 j 10:00	0°♊			841 Mar 04 j 04:18	0°♍	
evening max el	838 Oct 06 j 05:42	3°♊51'12	47°06'30		841 Mar 28 j 11:44	0°♌	
	838 Nov 06 j 04:19	0°♋		morning set	841 Apr 04 j 18:27	8°♌58'09	
greatest brilliancy	838 Nov 15 j 17:48	4°♋45'37	-4.9m		841 Apr 21 j 20:39	0°♍	
retrograde	838 Nov 25 j 19:18	6°♋41'01					
asc. node	838 Dec 02 j 08:02	5°♋47'40		superior conj	841 May 11 j 22:27	24°♋40'11	-0°17'00
evening set	838 Dec 10 j 05:35	2°♋29'43		minimum elong	841 May 12 j 01:57	24°♋50'55	0°16'51
	838 Dec 14 j 12:54	30°♋♊		max. Earth dist.	841 May 12 j 07:47	25°♋08'53	1.73572 AU
min. Earth dist.	838 Dec 15 j 16:13	29°♊18'21	0.26500 AU		841 May 16 j 06:37	0°♎	
inferior conj	838 Dec 16 j 07:46	28°♊54'33	3°32'05	asc. node	841 May 19 j 03:19	3°♎30'59	
minimum elong	838 Dec 16 j 00:18	29°♊05'59	3°29'52		841 Jun 09 j 16:50	0°♏	
morning rise	838 Dec 21 j 19:31	25°♊40'35		evening rise	841 Jun 17 j 03:36	9°♏08'54	
direct	839 Jan 05 j 16:09	21°♊17'35			841 Jul 04 j 02:53	0°♐	
greatest brilliancy	839 Jan 15 j 02:22	22°♊59'34	-4.9m		841 Jul 28 j 13:15	0°♑	
	839 Jan 28 j 10:20	0°♋			841 Aug 22 j 01:11	0°♒	
morning max el	839 Feb 24 j 17:10	23°♋29'50	46°33'32	desc. node	841 Sep 07 j 16:46	20°♒18'12	
	839 Mar 03 j 03:52	0°♌			841 Sep 15 j 16:18	0°♓	

	841 Oct 10 j 12:39	0°♊			844 May 31 j 01:35	0°♈	
	841 Nov 04 j 18:53	0°♊		morning set	844 Jun 11 j 20:55	14°♈26'14	
	841 Dec 01 j 00:34	0°♊		asc. node	844 Jun 15 j 15:16	19°♈03'00	
evening max el	841 Dec 17 j 08:02	17°♊24'21	47°12'01		844 Jun 24 j 13:24	0°♈	
asc. node	841 Dec 29 j 20:03	29°♊33'57		max. Earth dist.	844 Jul 15 j 00:47	25°♈12'42	1.73174 AU
	841 Dec 30 j 07:28	0°♋					
greatest brilliancy	842 Jan 26 j 18:08	18°♋58'23	-4.9m	superior conj	844 Jul 18 j 04:25	29°♈06'16	1°07'03
retrograde	842 Feb 06 j 05:05	21°♋03'01		minimum elong	844 Jul 17 j 19:54	28°♈39'58	1°06'48
evening set	842 Feb 24 j 04:30	14°♋47'44			844 Jul 18 j 21:49	0°♋	
inferior conj	842 Feb 27 j 07:14	12°♋50'27	8°37'29		844 Aug 12 j 03:06	0°♎	
minimum elong	842 Feb 27 j 09:51	12°♋46'19	8°37'24	evening rise	844 Aug 23 j 10:34	14°♎02'59	
min. Earth dist.	842 Feb 26 j 19:17	13°♋09'24	0.28130 AU		844 Sep 05 j 06:30	0°♏	
morning rise	842 Mar 02 j 15:25	10°♋45'16			844 Sep 29 j 09:29	0°♏	
direct	842 Mar 20 j 06:36	4°♋47'37		desc. node	844 Oct 05 j 04:36	7°♏12'10	
greatest brilliancy	842 Mar 29 j 11:31	6°♋21'23	-4.8m		844 Oct 23 j 13:14	0°♊	
desc. node	842 Apr 20 j 09:17	19°♋17'15			844 Nov 16 j 18:55	0°♊	
	842 May 02 j 20:59	0°♌			844 Dec 11 j 05:06	0°♊	
morning max el	842 May 08 j 06:15	5°♌03'44	45°52'48		845 Jan 05 j 01:46	0°♋	
	842 Jun 01 j 14:45	0°♌		asc. node	845 Jan 26 j 07:51	24°♋48'21	
	842 Jun 28 j 14:58	0°♈			845 Jan 30 j 21:57	0°♌	
	842 Jul 24 j 10:32	0°♈		evening max el	845 Feb 26 j 15:34	28°♌29'10	46°04'53
asc. node	842 Aug 11 j 12:51	21°♈35'48			845 Feb 28 j 04:34	0°♌	
	842 Aug 18 j 11:43	0°♋		greatest brilliancy	845 Apr 06 j 02:36	27°♌27'15	-4.8m
	842 Sep 11 j 23:36	0°♎		retrograde	845 Apr 17 j 01:27	29°♌38'32	
	842 Oct 06 j 02:29	0°♏		evening set	845 May 02 j 11:02	25°♌00'41	
greatest brilliancy	842 Oct 27 j 04:54	26°♏27'57	-3.9m	inferior conj	845 May 08 j 11:10	21°♌22'39	2°11'27
	842 Oct 30 j 00:22	0°♏		minimum elong	845 May 08 j 15:51	21°♌15'19	2°10'07
morning set	842 Nov 02 j 11:43	4°♏22'07		min. Earth dist.	845 May 08 j 14:01	21°♌18'10	0.28924 AU
	842 Nov 22 j 20:20	0°♊		morning rise	845 May 14 j 20:51	17°♌31'42	
desc. node	842 Dec 01 j 02:18	10°♊23'10		desc. node	845 May 17 j 21:13	15°♌59'39	
				direct	845 May 30 j 01:00	13°♌04'56	
superior conj	842 Dec 13 j 18:02	26°♊19'00	-0°29'36	greatest brilliancy	845 Jun 09 j 08:32	14°♌59'56	-4.7m
minimum elong	842 Dec 13 j 10:24	25°♊54'59	0°29'14		845 Jul 03 j 11:19	0°♈	
max. Earth dist.	842 Dec 15 j 12:48	28°♊33'32	1.71086 AU	morning max el	845 Jul 17 j 21:34	12°♈53'52	45°48'05
	842 Dec 16 j 16:18	0°♊			845 Aug 03 j 20:19	0°♈	
	843 Jan 09 j 13:29	0°♊			845 Aug 30 j 23:34	0°♋	
evening rise	843 Jan 24 j 05:29	18°♊21'55		asc. node	845 Sep 08 j 00:44	9°♋19'21	
	843 Feb 02 j 13:04	0°♋			845 Sep 25 j 11:33	0°♎	
	843 Feb 26 j 16:43	0°♌			845 Oct 20 j 02:39	0°♏	
	843 Mar 23 j 02:23	0°♌			845 Nov 13 j 06:42	0°♏	
asc. node	843 Mar 24 j 05:39	1°♌23'12			845 Dec 07 j 05:57	0°♊	
	843 Apr 16 j 20:18	0°♈		desc. node	845 Dec 28 j 14:10	26°♊45'58	
	843 May 12 j 01:29	0°♈			845 Dec 31 j 04:03	0°♊	
	843 Jun 07 j 00:00	0°♋		morning set	846 Jan 18 j 13:42	23°♊03'30	
	843 Jul 04 j 07:09	0°♎			846 Jan 24 j 02:50	0°♊	
desc. node	843 Jul 13 j 19:00	9°♎49'09			846 Feb 17 j 03:21	0°♋	
evening max el	843 Jul 22 j 07:46	18°♎13'46	45°53'11				
	843 Aug 04 j 07:30	0°♏		superior conj	846 Feb 28 j 04:01	13°♋43'39	-1°24'53
greatest brilliancy	843 Aug 31 j 11:31	17°♏00'08	-4.8m	minimum elong	846 Feb 28 j 07:01	13°♋52'59	1°24'51
retrograde	843 Sep 09 j 11:33	18°♏29'36		max. Earth dist.	846 Mar 04 j 01:20	18°♋33'39	1.72345 AU
evening set	843 Sep 26 j 10:24	13°♏04'50			846 Mar 13 j 06:34	0°♌	
inferior conj	843 Sep 30 j 08:05	10°♏45'02	-7°25'23		846 Apr 06 j 13:13	0°♌	
minimum elong	843 Sep 30 j 17:54	10°♏30'05	7°23'43	evening rise	846 Apr 08 j 00:25	1°♌48'23	
min. Earth dist.	843 Oct 01 j 05:49	10°♏11'57	0.27294 AU	asc. node	846 Apr 20 j 17:35	17°♌26'07	
morning rise	843 Oct 05 j 00:56	7°♏56'46			846 Apr 30 j 23:37	0°♈	
direct	843 Oct 21 j 04:09	2°♏52'00			846 May 25 j 13:55	0°♈	
greatest brilliancy	843 Nov 01 j 07:50	5°♏12'10	-4.9m		846 Jun 19 j 08:49	0°♋	
asc. node	843 Nov 03 j 22:12	6°♏20'15			846 Jul 14 j 10:20	0°♎	
	843 Dec 04 j 14:07	0°♏			846 Aug 08 j 22:39	0°♏	
morning max el	843 Dec 10 j 23:43	6°♏22'57	46°56'42	desc. node	846 Aug 10 j 06:47	1°♏33'15	
	844 Jan 01 j 21:10	0°♊			846 Sep 04 j 06:07	0°♏	
	844 Jan 27 j 21:11	0°♊			846 Oct 02 j 08:46	0°♊	
	844 Feb 22 j 02:32	0°♊		evening max el	846 Oct 03 j 20:16	1°♊28'45	47°04'34
desc. node	844 Feb 23 j 11:49	1°♊39'49			846 Nov 08 j 02:56	0°♊	
	844 Mar 18 j 00:15	0°♋		greatest brilliancy	846 Nov 13 j 07:21	2°♊16'30	-4.9m
	844 Apr 11 j 18:35	0°♌		retrograde	846 Nov 23 j 07:53	4°♊10'24	
	844 May 06 j 11:02	0°♌		asc. node	846 Dec 01 j 10:16	2°♊48'56	

evening set	846 Dec 07 j 16:45	0°  01'50		minimum elong	849 May 09 j 20:26	22°  46'58	0°19'55
	846 Dec 07 j 18:06	30°  R [♂]		max. Earth dist.	849 May 10 j 03:41	23°  09'12	1.73553 AU
min. Earth dist.	846 Dec 13 j 05:46	26°  46'56	0.26466 AU		849 May 15 j 17:28	0°  II	
inferior conj	846 Dec 13 j 20:03	26°  42'50	3°09'31	asc. node	849 May 18 j 05:31	3°  II04'24	
minimum elong	846 Dec 13 j 13:16	26°  43'52	3°07'26		849 Jun 09 j 03:43	0°  ☾	
morning rise	846 Dec 19 j 10:16	23°  47'39		evening rise	849 Jun 14 j 22:50	7°  ☾07'05	
direct	847 Jan 03 j 04:34	18°  48'46			849 Jul 03 j 13:56	0°  ♊	
greatest brilliancy	847 Jan 12 j 15:49	20°  43'31	-4.9m		849 Jul 28 j 00:37	0°  ♊	
	847 Jan 29 j 10:13	0°  ☾			849 Aug 21 j 13:01	0°  ♊	
morning max el	847 Feb 22 j 05:55	21°  ☾04'33	46°35'02	desc. node	849 Sep 06 j 18:45	19°  ♊47'05	
	847 Mar 03 j 00:37	0°  ☾			849 Sep 15 j 04:46	0°  ♊	
desc. node	847 Mar 22 j 23:40	21°  ☾31'36			849 Oct 10 j 02:03	0°  ♊	
	847 Mar 30 j 13:35	0°  ☾			849 Nov 04 j 09:50	0°  ☾	
	847 Apr 25 j 17:15	0°  ☾			849 Nov 30 j 18:48	0°  ☾	
	847 May 21 j 05:59	0°  ☾		evening max el	849 Dec 14 j 21:41	14°  ☾59'50	47°13'31
	847 Jun 15 j 09:26	0°  ☾		asc. node	849 Dec 28 j 22:04	28°  ☾32'39	
	847 Jul 10 j 04:56	0°  ☾			849 Dec 30 j 13:18	0°  ☾	
asc. node	847 Jul 14 j 03:03	4°  ☾46'41		greatest brilliancy	850 Jan 24 j 09:53	16°  ☾39'35	-4.9m
	847 Aug 03 j 16:49	0°  ♊		retrograde	850 Feb 03 j 20:09	18°  ☾44'20	
morning set	847 Aug 20 j 00:07	20°  ♊09'56		evening set	850 Feb 21 j 20:00	12°  ☾28'31	
	847 Aug 27 j 22:03	0°  ♊		inferior conj	850 Feb 24 j 22:15	10°  ☾32'15	8°40'24
	847 Sep 20 j 22:38	0°  ♊		minimum elong	850 Feb 25 j 00:04	10°  ☾29'24	8°40'21
max. Earth dist.	847 Sep 23 j 13:31	3°  ♊16'51	1.71694 AU	min. Earth dist.	850 Feb 24 j 09:35	10°  ☾52'16	0.28079 AU
				morning rise	850 Feb 28 j 04:19	8°  ☾30'27	
superior conj	847 Sep 26 j 11:39	6°  ♊56'30	1°13'26	direct	850 Mar 17 j 20:25	2°  ☾30'02	
minimum elong	847 Sep 26 j 20:29	7°  ♊24'11	1°13'13	greatest brilliancy	850 Mar 27 j 01:36	4°  ☾04'05	-4.8m
	847 Oct 14 j 20:52	0°  ☾		desc. node	850 Apr 19 j 11:25	18°  ☾12'09	
desc. node	847 Nov 02 j 16:35	23°  ☾37'30			850 May 02 j 21:54	0°  ☾	
evening rise	847 Nov 05 j 10:28	27°  ☾04'13		morning max el	850 May 05 j 21:09	2°  ☾49'08	45°53'57
	847 Nov 07 j 18:29	0°  ☾			850 Jun 01 j 07:13	0°  ☾	
	847 Dec 01 j 16:34	0°  ☾			850 Jun 28 j 04:38	0°  ☾	
	847 Dec 25 j 16:18	0°  ☾			850 Jul 23 j 22:53	0°  ☾	
	848 Jan 18 j 19:58	0°  ☾		asc. node	850 Aug 10 j 14:54	21°  ☾06'17	
	848 Feb 12 j 07:23	0°  ☾			850 Aug 17 j 23:24	0°  ☾	
asc. node	848 Feb 23 j 19:47	13°  ☾54'18			850 Sep 11 j 10:58	0°  ☾	
	848 Mar 08 j 08:23	0°  ☾			850 Oct 05 j 13:43	0°  ☾	
	848 Apr 03 j 09:01	0°  ☾		greatest brilliancy	850 Oct 26 j 20:29	26°  ☾41'44	-3.9m
	848 May 01 j 10:10	0°  ☾			850 Oct 29 j 11:33	0°  ☾	
evening max el	848 May 08 j 06:16	6°  ☾42'50	45°20'31	morning set	850 Oct 30 j 23:37	1°  ☾53'24	
	848 Jun 06 j 05:52	0°  ☾			850 Nov 22 j 07:30	0°  ☾	
desc. node	848 Jun 14 j 09:14	3°  ☾59'17		desc. node	850 Nov 30 j 04:26	9°  ☾54'42	
greatest brilliancy	848 Jun 15 j 06:14	4°  ☾18'48	-4.7m				
retrograde	848 Jun 25 j 17:31	6°  ☾16'40		superior conj	850 Dec 11 j 03:17	23°  ☾41'59	-0°25'46
evening set	848 Jul 11 j 23:05	1°  ☾19'17		minimum elong	850 Dec 10 j 20:32	23°  ☾20'46	0°25'26
	848 Jul 14 j 05:14	30°  ☾R [♂]		max. Earth dist.	850 Dec 12 j 18:22	25°  ☾44'56	1.71072 AU
inferior conj	848 Jul 17 j 04:22	28°  ☾10'32	-6°44'28		850 Dec 16 j 03:28	0°  ☾	
minimum elong	848 Jul 16 j 18:32	28°  ☾25'50	6°42'39		851 Jan 09 j 00:38	0°  ☾	
min. Earth dist.	848 Jul 17 j 07:54	28°  ☾05'02	0.28812 AU	evening rise	851 Jan 21 j 15:59	15°  ☾49'52	
morning rise	848 Jul 21 j 13:42	25°  ☾29'36			851 Feb 02 j 00:14	0°  ☾	
direct	848 Aug 07 j 18:40	19°  ☾55'34			851 Feb 26 j 03:57	0°  ☾	
greatest brilliancy	848 Aug 18 j 12:52	22°  ☾00'47	-4.8m		851 Mar 22 j 13:49	0°  ☾	
	848 Sep 01 j 23:13	0°  ☾		asc. node	851 Mar 23 j 07:47	0°  ☾54'49	
morning max el	848 Sep 26 j 12:52	21°  ☾20'47	46°24'09		851 Apr 16 j 08:09	0°  ☾	
	848 Oct 04 j 24:00	0°  ☾			851 May 11 j 14:10	0°  ☾	
asc. node	848 Oct 05 j 12:32	0°  ☾32'56			851 Jun 06 j 14:20	0°  ☾	
	848 Oct 31 j 23:57	0°  ☾			851 Jul 04 j 01:17	0°  ☾	
	848 Nov 26 j 06:35	0°  ☾		desc. node	851 Jul 12 j 20:59	9°  ☾02'39	
	848 Dec 20 j 20:33	0°  ☾		evening max el	851 Jul 19 j 21:58	15°  ☾57'02	45°51'01
	849 Jan 14 j 04:04	0°  ☾			851 Aug 04 j 16:15	0°  ☾	
desc. node	849 Jan 25 j 01:57	13°  ☾30'12		greatest brilliancy	851 Aug 28 j 22:54	14°  ☾37'16	-4.8m
	849 Feb 07 j 09:44	0°  ☾		retrograde	851 Sep 07 j 00:51	16°  ☾07'52	
	849 Mar 03 j 15:40	0°  ☾		evening set	851 Sep 24 j 02:30	10°  ☾38'08	
	849 Mar 27 j 22:52	0°  ☾		inferior conj	851 Sep 27 j 21:19	8°  ☾22'18	-7°37'05
morning set	849 Apr 02 j 10:30	6° ☾45'41		minimum elong	851 Sep 28 j 06:44	8° ☾07'56	7°35'35
	849 Apr 21 j 07:36	0° ☾		min. Earth dist.	851 Sep 28 j 18:41	7° ☾49'45	0.27366 AU
				morning rise	851 Oct 02 j 10:36	5° ☾39'13	
superior conj	849 May 09 j 16:19	22° ☾34'19	-0°20'07	direct	851 Oct 18 j 18:48	0° ☾28'17	

greatest brilliancy	851 Oct 29 j 21:48	2°♌48'13	-4.9m		854 Jun 18 j 20:23	0°♏	
asc. node	851 Nov 03 j 00:23	4°♌41'06			854 Jul 13 j 22:42	0°♐	
	851 Dec 04 j 14:59	0°♍			854 Aug 08 j 12:23	0°♌	
morning max el	851 Dec 08 j 14:52	4°♍01'21	46°56'22	desc. node	854 Aug 09 j 08:50	0°♌59'12	
	852 Jan 01 j 14:16	0°♌			854 Sep 03 j 22:29	0°♍	
	852 Jan 27 j 11:33	0°♍		evening max el	854 Oct 01 j 09:56	29°♍05'35	47°02'34
	852 Feb 21 j 15:30	0°♎			854 Oct 02 j 07:53	0°♌	
desc. node	852 Feb 22 j 13:54	1°♎07'16		greatest brilliancy	854 Nov 10 j 21:23	29°♌49'38	-4.9m
	852 Mar 17 j 12:21	0°♎			854 Nov 11 j 09:09	0°♍	
	852 Apr 11 j 06:05	0°♏		retrograde	854 Nov 20 j 19:56	1°♍41'36	
	852 May 05 j 22:09	0°♏			854 Nov 29 j 22:03	30°♌♌	
	852 May 30 j 12:27	0°♐		asc. node	854 Nov 30 j 12:10	29°♌46'35	
morning set	852 Jun 09 j 15:19	12°♐22'38		evening set	854 Dec 05 j 04:15	27°♌35'16	
asc. node	852 Jun 14 j 17:17	18°♐36'11		inferior conj	854 Dec 11 j 08:29	23°♌57'24	2°46'33
	852 Jun 24 j 00:08	0°♑		minimum elong	854 Dec 11 j 02:26	24°♌06'41	2°44'40
max. Earth dist.	852 Jul 12 j 21:41	23°♑16'03	1.73208 AU	min. Earth dist.	854 Dec 10 j 19:47	24°♌16'52	0.26440 AU
				morning rise	854 Dec 17 j 00:59	20°♌36'38	
superior conj	852 Jul 15 j 22:51	27°♑01'51	1°05'06	direct	854 Dec 31 j 16:45	16°♌21'29	
minimum elong	852 Jul 15 j 14:13	26°♑35'12	1°04'49	greatest brilliancy	855 Jan 10 j 06:01	18°♌05'42	-4.9m
	852 Jul 18 j 08:31	0°♏			855 Jan 30 j 03:20	0°♍	
	852 Aug 11 j 13:53	0°♐		morning max el	855 Feb 19 j 17:57	18°♍38'04	46°36'21
evening rise	852 Aug 21 j 03:25	11°♐52'32			855 Mar 02 j 20:24	0°♎	
	852 Sep 04 j 17:27	0°♌		desc. node	855 Mar 22 j 01:48	20°♎52'47	
	852 Sep 28 j 20:42	0°♍			855 Mar 30 j 04:43	0°♎	
desc. node	852 Oct 04 j 06:48	6°♍43'55			855 Apr 25 j 06:23	0°♏	
	852 Oct 23 j 00:48	0°♌			855 May 20 j 18:00	0°♏	
	852 Nov 16 j 06:56	0°♍			855 Jun 14 j 20:47	0°♐	
	852 Dec 10 j 17:44	0°♎			855 Jul 09 j 15:53	0°♑	
	853 Jan 04 j 15:26	0°♎		asc. node	855 Jul 13 j 05:04	4°♑19'32	
asc. node	853 Jan 25 j 09:52	24°♎10'24			855 Aug 03 j 03:34	0°♏	
	853 Jan 30 j 13:51	0°♏		morning set	855 Aug 17 j 16:31	17°♏58'42	
evening max el	853 Feb 24 j 07:55	26°♏17'26	46°07'24		855 Aug 27 j 08:44	0°♐	
	853 Feb 28 j 03:17	0°♏			855 Sep 20 j 09:22	0°♌	
greatest brilliancy	853 Apr 03 j 19:30	25°♏18'33	-4.8m	max. Earth dist.	855 Sep 21 j 01:03	0°♌49'04	1.71744 AU
retrograde	853 Apr 14 j 18:16	27°♏29'27					
evening set	853 Apr 30 j 05:20	22°♏49'23		superior conj	855 Sep 24 j 02:09	4°♌37'58	1°15'09
inferior conj	853 May 06 j 03:37	19°♏13'29	2°30'34	minimum elong	855 Sep 24 j 10:30	5°♌04'07	1°14'57
minimum elong	853 May 06 j 08:55	19°♏05'10	2°29'04		855 Oct 14 j 07:42	0°♍	
min. Earth dist.	853 May 06 j 06:14	19°♏09'22	0.28911 AU	desc. node	855 Nov 01 j 18:40	23°♍09'53	
morning rise	853 May 12 j 12:46	15°♏23'10		evening rise	855 Nov 02 j 21:40	24°♍34'33	
desc. node	853 May 16 j 23:18	13°♏13'28			855 Nov 07 j 05:24	0°♌	
direct	853 May 27 j 17:46	10°♏56'10			855 Dec 01 j 03:36	0°♍	
greatest brilliancy	853 Jun 06 j 23:30	12°♏49'51	-4.7m		855 Dec 25 j 03:31	0°♎	
	853 Jul 03 j 17:10	0°♐			856 Jan 18 j 07:27	0°♎	
morning max el	853 Jul 15 j 13:38	10°♐44'40	45°47'26		856 Feb 11 j 19:21	0°♏	
	853 Aug 03 j 13:31	0°♑		asc. node	856 Feb 22 j 21:53	13°♏23'46	
	853 Aug 30 j 13:27	0°♏			856 Mar 07 j 21:16	0°♏	
asc. node	853 Sep 07 j 02:50	8°♏46'29			856 Apr 02 j 23:49	0°♐	
	853 Sep 25 j 00:01	0°♐			856 May 01 j 06:14	0°♑	
	853 Oct 19 j 14:26	0°♌		evening max el	856 May 05 j 20:44	4°♑29'24	45°20'57
	853 Nov 12 j 18:08	0°♍			856 Jun 07 j 21:39	0°♏	
	853 Dec 06 j 17:13	0°♌		greatest brilliancy	856 Jun 12 j 20:50	2°♏08'04	-4.7m
desc. node	853 Dec 27 j 16:09	26°♌17'14		desc. node	856 Jun 13 j 11:11	2°♏20'42	
	853 Dec 30 j 15:11	0°♍		retrograde	856 Jun 23 j 09:07	4°♏07'17	
morning set	854 Jan 15 j 23:45	20°♍30'13			856 Jul 08 j 01:48	30°♌♌	
	854 Jan 23 j 13:50	0°♎		evening set	856 Jul 09 j 11:55	29°♑13'23	
	854 Feb 16 j 14:15	0°♎		inferior conj	856 Jul 14 j 20:17	26°♑00'32	-6°31'24
				minimum elong	856 Jul 14 j 10:21	26°♑15'58	6°29'29
superior conj	854 Feb 25 j 16:55	11°♎20'42	-1°25'19	min. Earth dist.	856 Jul 14 j 23:35	25°♑55'24	0.28835 AU
minimum elong	854 Feb 25 j 19:00	11°♎27'11	1°25'18	morning rise	856 Jul 19 j 08:27	23°♑15'31	
max. Earth dist.	854 Mar 01 j 17:43	16°♎21'42	1.72288 AU	direct	856 Aug 05 j 10:18	17°♑45'01	
	854 Mar 12 j 17:23	0°♏		greatest brilliancy	856 Aug 16 j 05:25	19°♑50'46	-4.8m
evening rise	854 Apr 05 j 15:49	29°♏34'47			856 Sep 02 j 15:20	0°♏	
	854 Apr 06 j 00:00	0°♏		morning max el	856 Sep 24 j 03:33	19°♏04'07	46°22'40
asc. node	854 Apr 19 j 19:43	16°♏59'31		asc. node	856 Oct 04 j 14:41	29°♏48'57	
	854 Apr 30 j 10:29	0°♐			856 Oct 04 j 18:51	0°♐	
	854 May 25 j 01:02	0°♑			856 Oct 31 j 14:42	0°♌	

	856 Nov 25 j 19:40	0°♌		desc. node	859 Jul 11 j 23:06	8°♏15'49	
	856 Dec 20 j 08:45	0°♊		evening max el	859 Jul 17 j 12:44	13°♏41'50	45°48'52
	857 Jan 13 j 15:42	0°♊			859 Aug 05 j 03:59	0°♌	
desc. node	857 Jan 24 j 04:03	13°♊01'12		greatest brilliancy	859 Aug 26 j 10:41	12°♌15'24	-4.8m
	857 Feb 06 j 20:59	0°♏		retrograde	859 Sep 04 j 14:03	13°♌46'35	
	857 Mar 03 j 02:39	0°♏		evening set	859 Sep 21 j 18:39	8°♌12'22	
	857 Mar 27 j 09:39	0°♏		inferior conj	859 Sep 25 j 10:39	6°♌00'16	-7°47'55
morning set	857 Mar 31 j 02:21	4°♏33'26		minimum elong	859 Sep 25 j 19:38	5°♌46'34	7°46'35
	857 Apr 20 j 18:15	0°♏		min. Earth dist.	859 Sep 26 j 07:34	5°♌28'22	0.27432 AU
				morning rise	859 Sep 29 j 20:18	3°♌22'14	
superior conj	857 May 07 j 09:53	20°♏28'19	-0°23'14		859 Oct 06 j 17:05	30°♏	
minimum elong	857 May 07 j 14:37	20°♏42'51	0°23'00	direct	859 Oct 16 j 09:32	28°♏05'31	
max. Earth dist.	857 May 07 j 22:55	21°♏08'21	1.73537 AU		859 Oct 26 j 09:48	0°♌	
	857 May 15 j 04:03	0°♏		greatest brilliancy	859 Oct 27 j 11:22	0°♌24'25	-4.9m
asc. node	857 May 17 j 07:29	2°♏37'56		asc. node	859 Nov 02 j 02:21	3°♌05'40	
	857 Jun 08 j 14:20	0°♏			859 Dec 04 j 14:32	0°♌	
evening rise	857 Jun 12 j 17:47	5°♏05'15		morning max el	859 Dec 06 j 05:20	1°♌38'31	46°55'51
	857 Jul 03 j 00:43	0°♏			860 Jan 01 j 06:56	0°♊	
	857 Jul 27 j 11:41	0°♏			860 Jan 27 j 01:42	0°♊	
	857 Aug 21 j 00:33	0°♌			860 Feb 21 j 04:20	0°♏	
desc. node	857 Sep 05 j 20:54	19°♌17'24		desc. node	860 Feb 21 j 15:59	0°♏35'03	
	857 Sep 14 j 16:58	0°♌			860 Mar 17 j 00:21	0°♏	
	857 Oct 09 j 15:14	0°♊			860 Apr 10 j 17:31	0°♏	
	857 Nov 04 j 00:39	0°♊			860 May 05 j 09:11	0°♏	
	857 Nov 30 j 13:09	0°♏			860 May 29 j 23:16	0°♏	
evening max el	857 Dec 12 j 12:08	12°♏38'19	47°15'01	morning set	860 Jun 07 j 09:46	10°♏19'15	
asc. node	857 Dec 28 j 00:07	27°♏30'59		asc. node	860 Jun 13 j 19:18	18°♏09'28	
	857 Dec 30 j 20:56	0°♏			860 Jun 23 j 10:52	0°♏	
greatest brilliancy	858 Jan 22 j 00:59	14°♏21'01	-4.9m	max. Earth dist.	860 Jul 10 j 17:04	21°♏14'43	1.73247 AU
retrograde	858 Feb 01 j 11:47	16°♏26'38					
evening set	858 Feb 19 j 11:04	10°♏10'44		superior conj	860 Jul 13 j 17:12	24°♏57'16	1°03'02
min. Earth dist.	858 Feb 21 j 23:30	8°♏36'31	0.28028 AU	minimum elong	860 Jul 13 j 08:30	24°♏30'24	1°02'45
inferior conj	858 Feb 22 j 13:14	8°♏14'52	8°42'22		860 Jul 17 j 19:16	0°♏	
minimum elong	858 Feb 22 j 14:15	8°♏13'17	8°42'21		860 Aug 11 j 00:44	0°♏	
morning rise	858 Feb 25 j 17:36	6°♏15'57		evening rise	860 Aug 18 j 20:07	9°♏41'29	
direct	858 Mar 15 j 10:35	0°♏13'22			860 Sep 04 j 04:29	0°♌	
greatest brilliancy	858 Mar 24 j 15:08	1°♏47'16	-4.8m		860 Sep 28 j 08:00	0°♌	
desc. node	858 Apr 18 j 13:31	17°♏09'34		desc. node	860 Oct 03 j 08:48	6°♌14'55	
	858 May 02 j 21:15	0°♏			860 Oct 22 j 12:27	0°♊	
morning max el	858 May 03 j 12:46	0°♏37'09	45°54'58		860 Nov 15 j 19:02	0°♊	
	858 May 31 j 23:08	0°♏			860 Dec 10 j 06:28	0°♏	
	858 Jun 27 j 17:58	0°♏			861 Jan 04 j 05:17	0°♏	
	858 Jul 23 j 10:59	0°♏		asc. node	861 Jan 24 j 12:01	23°♏32'16	
asc. node	858 Aug 09 j 17:02	20°♏37'41			861 Jan 30 j 06:07	0°♏	
	858 Aug 17 j 10:52	0°♏		evening max el	861 Feb 21 j 23:39	24°♏03'42	46°09'51
	858 Sep 10 j 22:06	0°♏			861 Feb 28 j 03:07	0°♏	
	858 Oct 05 j 00:42	0°♌		greatest brilliancy	861 Apr 01 j 13:03	23°♏10'12	-4.8m
greatest brilliancy	858 Oct 26 j 03:53	26°♌30'42	-3.9m	retrograde	861 Apr 12 j 10:40	25°♏20'02	
morning set	858 Oct 28 j 11:46	29°♌26'18		evening set	861 Apr 27 j 23:46	20°♏37'41	
	858 Oct 28 j 22:29	0°♌		inferior conj	861 May 03 j 20:05	17°♏04'08	2°49'27
	858 Nov 21 j 18:26	0°♊		minimum elong	861 May 04 j 01:58	16°♏54'52	2°47'48
desc. node	858 Nov 29 j 06:21	9°♊26'18		min. Earth dist.	861 May 03 j 22:42	17°♏00'02	0.28896 AU
				morning rise	861 May 10 j 04:28	13°♏14'32	
superior conj	858 Dec 08 j 12:40	21°♊06'00	-0°21'52	desc. node	861 May 16 j 01:13	10°♏31'09	
minimum elong	858 Dec 08 j 06:53	20°♊47'46	0°21'36	direct	861 May 25 j 10:12	8°♏47'15	
max. Earth dist.	858 Dec 10 j 01:55	23°♊03'12	1.71062 AU	greatest brilliancy	861 Jun 04 j 14:38	10°♏39'41	-4.7m
	858 Dec 15 j 14:25	0°♊			861 Jul 03 j 21:11	0°♏	
	859 Jan 08 j 11:36	0°♏		morning max el	861 Jul 13 j 04:45	8°♏32'55	45°46'45
evening rise	859 Jan 19 j 02:36	13°♏18'43			861 Aug 03 j 06:29	0°♏	
	859 Feb 01 j 11:13	0°♏			861 Aug 30 j 03:22	0°♏	
	859 Feb 25 j 14:59	0°♏		asc. node	861 Sep 06 j 04:56	8°♏13'15	
asc. node	859 Mar 22 j 09:54	0°♏26'57			861 Sep 24 j 12:38	0°♏	
	859 Mar 22 j 01:04	0°♏			861 Oct 19 j 02:24	0°♌	
	859 Apr 15 j 19:51	0°♏			861 Nov 12 j 05:46	0°♌	
	859 May 11 j 02:47	0°♏			861 Dec 06 j 04:39	0°♊	
	859 Jun 06 j 04:43	0°♏		desc. node	861 Dec 26 j 18:15	25°♊48'26	
	859 Jul 03 j 19:50	0°♏			861 Dec 30 j 02:27	0°♊	

morning set	862 Jan 13 j 09:37	17° C 55'46		inferior conj	864 Jul 12 j 12:11	23° C 49'24	-6°17'39
	862 Jan 23 j 00:59	0° \approx		minimum elong	864 Jul 12 j 02:12	24° C 04'53	6°15'39
	862 Feb 16 j 01:18	0° H		min. Earth dist.	864 Jul 12 j 14:58	23° C 45'03	0.28856 AU
				morning rise	864 Jul 17 j 03:12	21° C 00'26	
superior conj	862 Feb 23 j 05:41	8° H 56'46	-1°25'36	direct	864 Aug 03 j 02:14	15° C 33'25	
minimum elong	862 Feb 23 j 06:50	9° H 00'20	1°25'37	greatest brilliancy	864 Aug 13 j 21:26	17° C 39'21	-4.8m
max. Earth dist.	862 Feb 27 j 09:17	14° H 06'33	1.72231 AU		864 Sep 03 j 03:48	0° Ω	
	862 Mar 12 j 04:23	0° Υ		morning max el	864 Sep 21 j 19:07	16° Ω 48'55	46°21'14
evening rise	862 Apr 03 j 07:03	27° Υ 19'55		asc. node	864 Oct 03 j 16:39	29° Ω 04'09	
	862 Apr 05 j 11:01	0° B			864 Oct 04 j 13:35	0° M	
asc. node	862 Apr 18 j 21:41	16° B 31'44			864 Oct 31 j 05:38	0° Ω	
	862 Apr 29 j 21:36	0° Π			864 Nov 25 j 09:03	0° M	
	862 May 24 j 12:23	0° C			864 Dec 19 j 21:19	0° A	
	862 Jun 18 j 08:12	0° Ω			865 Jan 13 j 03:46	0° B	
	862 Jul 13 j 11:22	0° M		desc. node	865 Jan 23 j 06:12	12° B 30'57	
desc. node	862 Aug 08 j 10:58	0° Ω 24'21			865 Feb 06 j 08:42	0° \approx	
	862 Aug 08 j 02:32	0° Ω			865 Mar 02 j 14:04	0° H	
	862 Sep 03 j 15:32	0° M			865 Mar 26 j 20:51	0° Υ	
evening max el	862 Sep 28 j 22:28	26° M 38'26	47°00'22	morning set	865 Mar 28 j 17:47	2° Υ 18'36	
	862 Oct 02 j 08:37	0° A			865 Apr 20 j 05:16	0° B	
greatest brilliancy	862 Nov 08 j 11:26	27° A 20'56	-4.9m				
retrograde	862 Nov 18 j 07:35	29° A 10'58		superior conj	865 May 05 j 03:13	18° B 20'25	-0°26'20
asc. node	862 Nov 29 j 14:16	26° A 36'23		minimum elong	865 May 05 j 08:33	18° B 36'47	0°26'05
evening set	862 Dec 02 j 15:41	25° A 06'12		max. Earth dist.	865 May 05 j 19:36	19° B 10'44	1.73519 AU
inferior conj	862 Dec 08 j 20:39	21° A 27'49	2°22'58		865 May 14 j 15:01	0° Π	
minimum elong	862 Dec 08 j 15:23	21° A 35'54	2°21'19	asc. node	865 May 16 j 09:33	2° Π 10'36	
min. Earth dist.	862 Dec 08 j 09:46	21° A 44'29	0.26417 AU		865 Jun 08 j 01:21	0° C	
morning rise	862 Dec 14 j 15:19	18° A 04'01		evening rise	865 Jun 10 j 12:45	3° C 02'19	
direct	862 Dec 29 j 04:13	13° A 52'01			865 Jul 02 j 11:54	0° Ω	
greatest brilliancy	863 Jan 07 j 20:20	15° A 38'21	-4.9m		865 Jul 26 j 23:11	0° M	
	863 Jan 30 j 16:43	0° B			865 Aug 20 j 12:29	0° Ω	
morning max el	863 Feb 17 j 05:50	16° B 10'00	46°37'50	desc. node	865 Sep 04 j 22:57	18° Ω 46'14	
	863 Mar 02 j 15:58	0° \approx			865 Sep 14 j 05:34	0° M	
desc. node	863 Mar 21 j 03:52	20° \approx 13'15			865 Oct 09 j 04:50	0° A	
	863 Mar 29 j 19:58	0° H			865 Nov 03 j 16:02	0° B	
	863 Apr 24 j 19:42	0° Υ			865 Nov 30 j 08:24	0° \approx	
	863 May 20 j 06:17	0° B		evening max el	865 Dec 10 j 03:26	10° \approx 17'42	47°16'13
	863 Jun 14 j 08:25	0° Π		asc. node	865 Dec 27 j 02:16	26° \approx 26'24	
	863 Jul 09 j 03:08	0° C			865 Dec 31 j 08:10	0° H	
asc. node	863 Jul 12 j 07:15	3° C 52'01		greatest brilliancy	866 Jan 19 j 15:35	11° H 59'51	-4.9m
	863 Aug 02 j 14:36	0° Ω		retrograde	866 Jan 30 j 03:34	14° H 06'29	
morning set	863 Aug 15 j 09:10	15° Ω 47'22		evening set	866 Feb 17 j 01:30	7° H 51'15	
	863 Aug 26 j 19:44	0° M		min. Earth dist.	866 Feb 19 j 12:54	6° H 18'47	0.27974 AU
max. Earth dist.	863 Sep 18 j 15:27	28° M 29'19	1.71798 AU	inferior conj	866 Feb 20 j 03:58	5° H 55'05	8°43'27
	863 Sep 19 j 20:26	0° Ω		minimum elong	866 Feb 20 j 04:08	5° H 54'48	8°43'28
				morning rise	866 Feb 23 j 07:00	3° H 58'29	
superior conj	863 Sep 21 j 16:49	2° Ω 18'54	1°16'43		866 Mar 02 j 21:54	30° R \approx	
minimum elong	863 Sep 22 j 00:36	2° Ω 43'19	1°16'32	direct	866 Mar 13 j 01:00	27° \approx 54'31	
	863 Oct 13 j 18:53	0° M		greatest brilliancy	866 Mar 22 j 03:56	29° \approx 27'38	-4.8m
evening rise	863 Oct 31 j 08:50	22° M 03'37			866 Mar 23 j 16:58	0° H	
desc. node	863 Oct 31 j 20:40	22° M 40'44		desc. node	866 Apr 17 j 15:29	16° H 06'44	
	863 Nov 06 j 16:44	0° A		morning max el	866 May 01 j 04:26	28° H 23'55	45°56'02
	863 Nov 30 j 15:04	0° B			866 May 02 j 20:11	0° Υ	
	863 Dec 24 j 15:10	0° \approx			866 May 31 j 15:12	0° B	
	864 Jan 17 j 19:22	0° H			866 Jun 27 j 07:32	0° Π	
	864 Feb 11 j 07:45	0° Υ			866 Jul 22 j 23:22	0° C	
asc. node	864 Feb 21 j 23:57	12° Υ 51'53		asc. node	866 Aug 08 j 19:02	20° C 07'44	
	864 Mar 07 j 10:36	0° B			866 Aug 16 j 22:38	0° Ω	
	864 Apr 02 j 15:14	0° Π			866 Sep 10 j 09:32	0° M	
	864 May 01 j 03:28	0° C			866 Oct 04 j 11:58	0° Ω	
evening max el	864 May 03 j 11:47	2° C 16'17	45°21'29	greatest brilliancy	866 Oct 25 j 11:37	26° Ω 19'47	-3.9m
greatest brilliancy	864 Jun 10 j 11:01	29° C 55'47	-4.7m	morning set	866 Oct 26 j 00:27	27° Ω 00'07	
	864 Jun 10 j 15:41	0° Ω			866 Oct 28 j 09:41	0° M	
desc. node	864 Jun 12 j 13:22	0° Ω 37'35			866 Nov 21 j 05:37	0° A	
retrograde	864 Jun 21 j 01:13	1° Ω 56'51		desc. node	866 Nov 28 j 08:32	8° A 57'58	
	864 Jul 01 j 00:06	30° R C					
evening set	864 Jul 07 j 00:53	27° C 06'14		superior conj	866 Dec 05 j 22:28	18° A 30'30	-0°17'58

minimum elong	866 Dec 05 j 17:40	18°♄15'25	0°17'45	direct	869 May 23 j 02:13	6°♄38'26	
max. Earth dist.	866 Dec 07 j 11:05	20°♄25'45	1.71052 AU	greatest brilliancy	869 Jun 02 j 06:31	8°♄30'18	-4.7m
	866 Dec 15 j 01:37	0°♄			869 Jul 03 j 23:36	0°♄	
	867 Jan 07 j 22:50	0°♄		morning max el	869 Jul 10 j 19:39	6°♄20'27	45°46'11
evening rise	867 Jan 16 j 13:15	10°♄46'40			869 Aug 02 j 23:08	0°♄	
	867 Jan 31 j 22:29	0°♄			869 Aug 29 j 17:07	0°♄	
	867 Feb 25 j 02:21	0°♄		asc. node	869 Sep 05 j 06:57	7°♄40'03	
asc. node	867 Mar 21 j 11:50	29°♄57'31			869 Sep 24 j 01:08	0°♄	
	867 Mar 21 j 12:39	0°♄			869 Oct 18 j 14:17	0°♄	
	867 Apr 15 j 07:55	0°♄			869 Nov 11 j 17:21	0°♄	
	867 May 10 j 15:47	0°♄			869 Dec 05 j 16:02	0°♄	
	867 Jun 05 j 19:35	0°♄		desc. node	869 Dec 25 j 20:22	25°♄19'52	
	867 Jul 03 j 15:12	0°♄			869 Dec 29 j 13:40	0°♄	
desc. node	867 Jul 11 j 01:11	7°♄27'23		morning set	870 Jan 10 j 19:39	15°♄21'56	
evening max el	867 Jul 15 j 03:14	11°♄25'18	45°46'40		870 Jan 22 j 12:02	0°♄	
	867 Aug 05 j 20:05	0°♄			870 Feb 15 j 12:14	0°♄	
greatest brilliancy	867 Aug 23 j 23:10	9°♄53'48	-4.8m				
retrograde	867 Sep 02 j 02:48	11°♄24'48		superior conj	870 Feb 20 j 18:44	6°♄34'02	-1°25'44
evening set	867 Sep 19 j 10:44	5°♄46'34		minimum elong	870 Feb 20 j 18:56	6°♄34'42	1°25'45
inferior conj	867 Sep 23 j 00:05	3°♄37'59	-7°57'49	max. Earth dist.	870 Feb 24 j 23:36	11°♄47'56	1.72170 AU
minimum elong	867 Sep 23 j 08:31	3°♄25'04	7°56'41		870 Mar 11 j 15:14	0°♄	
min. Earth dist.	867 Sep 23 j 20:49	3°♄06'16	0.27495 AU	evening rise	870 Mar 31 j 22:29	25°♄06'04	
morning rise	867 Sep 27 j 06:02	1°♄04'54			870 Apr 04 j 21:53	0°♄	
	867 Sep 29 j 04:27	30°♄		asc. node	870 Apr 17 j 23:48	16°♄04'48	
direct	867 Oct 13 j 23:55	25°♄42'29			870 Apr 29 j 08:34	0°♄	
greatest brilliancy	867 Oct 25 j 01:13	28°♄00'27	-4.9m		870 May 23 j 23:37	0°♄	
	867 Oct 29 j 09:12	0°♄			870 Jun 17 j 19:57	0°♄	
asc. node	867 Nov 01 j 04:24	1°♄33'07			870 Jul 12 j 23:59	0°♄	
morning max el	867 Dec 03 j 18:55	29°♄12'55	46°55'31	desc. node	870 Aug 07 j 12:58	29°♄49'16	
	867 Dec 04 j 13:18	0°♄			870 Aug 07 j 16:42	0°♄	
	867 Dec 31 j 23:25	0°♄			870 Sep 03 j 08:45	0°♄	
	868 Jan 26 j 15:49	0°♄		evening max el	870 Sep 26 j 10:32	24°♄10'55	46°58'12
desc. node	868 Feb 20 j 18:00	0°♄02'27			870 Oct 02 j 10:24	0°♄	
	868 Feb 20 j 17:12	0°♄		greatest brilliancy	870 Nov 06 j 01:16	24°♄52'35	-4.9m
	868 Mar 16 j 12:27	0°♄		retrograde	870 Nov 15 j 19:33	26°♄41'15	
	868 Apr 10 j 05:05	0°♄		asc. node	870 Nov 28 j 16:27	23°♄21'56	
	868 May 04 j 20:24	0°♄		evening set	870 Nov 30 j 03:20	22°♄37'13	
	868 May 29 j 10:14	0°♄		inferior conj	870 Dec 06 j 08:50	18°♄58'49	1°59'07
morning set	868 Jun 05 j 04:03	8°♄14'55		minimum elong	870 Dec 06 j 04:23	19°♄05'37	1°57'42
asc. node	868 Jun 12 j 21:29	17°♄42'48		min. Earth dist.	870 Dec 05 j 23:45	19°♄12'43	0.26400 AU
	868 Jun 22 j 21:43	0°♄		morning rise	870 Dec 12 j 05:34	15°♄32'23	
max. Earth dist.	868 Jul 08 j 11:51	19°♄11'18	1.73283 AU	direct	870 Dec 26 j 15:44	11°♄22'49	
				greatest brilliancy	871 Jan 05 j 10:45	13°♄11'38	-4.9m
superior conj	868 Jul 11 j 11:32	22°♄52'18	1°00'53		871 Jan 31 j 02:28	0°♄	
minimum elong	868 Jul 11 j 02:48	22°♄25'24	1°00'36	morning max el	871 Feb 14 j 18:52	13°♄45'14	46°39'28
	868 Jul 17 j 06:07	0°♄			871 Mar 02 j 10:44	0°♄	
	868 Aug 10 j 11:41	0°♄		desc. node	871 Mar 20 j 05:52	19°♄34'41	
evening rise	868 Aug 16 j 13:00	7°♄30'40			871 Mar 29 j 10:44	0°♄	
	868 Sep 03 j 15:39	0°♄			871 Apr 24 j 08:38	0°♄	
	868 Sep 27 j 19:27	0°♄			871 May 19 j 18:12	0°♄	
desc. node	868 Oct 02 j 10:48	5°♄45'25			871 Jun 13 j 19:44	0°♄	
	868 Oct 22 j 00:15	0°♄			871 Jul 08 j 14:07	0°♄	
	868 Nov 15 j 07:14	0°♄		asc. node	871 Jul 11 j 09:15	3°♄24'41	
	868 Dec 09 j 19:17	0°♄			871 Aug 02 j 01:25	0°♄	
	869 Jan 03 j 19:13	0°♄		morning set	871 Aug 13 j 01:58	13°♄37'17	
asc. node	869 Jan 23 j 14:03	22°♄53'37			871 Aug 26 j 06:30	0°♄	
	869 Jan 29 j 22:36	0°♄		max. Earth dist.	871 Sep 16 j 06:54	26°♄13'38	1.71849 AU
evening max el	869 Feb 19 j 14:30	21°♄47'45	46°12'14				
	869 Feb 28 j 04:04	0°♄		superior conj	871 Sep 19 j 07:35	0°♄01'04	1°18'08
greatest brilliancy	869 Mar 30 j 07:00	21°♄02'19	-4.8m	minimum elong	871 Sep 19 j 14:47	0°♄23'36	1°17'59
retrograde	869 Apr 10 j 02:55	23°♄10'53			871 Sep 19 j 07:15	0°♄	
evening set	869 Apr 25 j 18:23	18°♄25'55			871 Oct 13 j 05:48	0°♄	
inferior conj	869 May 01 j 12:42	14°♄55'04	3°07'58	evening rise	871 Oct 28 j 20:10	19°♄34'07	
minimum elong	869 May 01 j 19:08	14°♄44'54	3°06'13	desc. node	871 Oct 30 j 22:49	22°♄12'56	
min. Earth dist.	869 May 01 j 15:35	14°♄50'31	0.28884 AU		871 Nov 06 j 03:47	0°♄	
morning rise	869 May 07 j 20:08	11°♄06'19			871 Nov 30 j 02:17	0°♄	
desc. node	869 May 15 j 03:25	7°♄53'06			871 Dec 24 j 02:35	0°♄	

	872 Jan 17 j 07:05	0° H		asc. node	874 Aug 07 j 21:06	19° E 39'16	
	872 Feb 10 j 19:56	0° Y			874 Aug 16 j 09:57	0° Q	
asc. node	872 Feb 21 j 01:58	12° Y 20'30			874 Sep 09 j 20:35	0° P	
	872 Mar 06 j 23:43	0° B			874 Oct 03 j 22:54	0° E	
	872 Apr 02 j 06:28	0° II		morning set	874 Oct 23 j 13:04	24° E 34'38	
evening max el	872 May 01 j 03:47	0° E 06'50	45°22'08		874 Oct 27 j 20:35	0° M	
	872 May 01 j 00:57	0° E			874 Nov 20 j 16:32	0° X	
greatest brilliancy	872 Jun 08 j 01:08	27° E 45'07	-4.7m	desc. node	874 Nov 27 j 10:38	8° X 30'10	
desc. node	872 Jun 11 j 15:25	28° E 52'14					
retrograde	872 Jun 18 j 17:42	29° E 48'05		superior conj	874 Dec 03 j 07:58	15° X 54'58	-0°14'01
evening set	872 Jul 04 j 14:13	25° E 00'41		minimum elong	874 Dec 03 j 04:13	15° X 43'10	0°13'50
inferior conj	872 Jul 10 j 04:15	21° E 39'54	-6°03'30	behind sun begin	874 Dec 02 j 13:49	14° X 57'51	
minimum elong	872 Jul 09 j 18:16	21° E 55'22	6°01'25	behind sun end	874 Dec 03 j 18:37	16° X 28'28	
min. Earth dist.	872 Jul 10 j 06:18	21° E 36'42	0.28877 AU	max. Earth dist.	874 Dec 04 j 17:29	17° X 40'27	1.71043 AU
morning rise	872 Jul 14 j 22:05	18° E 47'01			874 Dec 14 j 12:34	0° Z	
direct	872 Jul 31 j 18:51	13° E 23'34			875 Jan 07 j 09:47	0° \approx	
greatest brilliancy	872 Aug 11 j 13:05	15° E 28'58	-4.8m	evening rise	875 Jan 13 j 23:23	8° \approx 13'50	
	872 Sep 03 j 12:33	0° Q			875 Jan 31 j 09:28	0° H	
morning max el	872 Sep 19 j 11:32	14° Q 37'02	46°19'39		875 Feb 24 j 13:26	0° Y	
asc. node	872 Oct 02 j 18:45	28° Q 21'08		asc. node	875 Mar 20 j 14:00	29° Y 29'33	
	872 Oct 04 j 07:31	0° P			875 Mar 20 j 24:00	0° B	
	872 Oct 30 j 20:04	0° E			875 Apr 14 j 19:46	0° II	
	872 Nov 24 j 22:00	0° M			875 May 10 j 04:34	0° E	
	872 Dec 19 j 09:29	0° X			875 Jun 05 j 10:17	0° Q	
	873 Jan 12 j 15:27	0° Z			875 Jul 03 j 10:39	0° P	
desc. node	873 Jan 22 j 08:09	12° Z 01'15		desc. node	875 Jul 10 j 03:12	6° P 39'09	
	873 Feb 05 j 20:02	0° \approx		evening max el	875 Jul 12 j 17:08	9° P 08'40	45°44'37
	873 Mar 02 j 01:09	0° H			875 Aug 06 j 16:42	0° E	
morning set	873 Mar 26 j 09:12	0° Y 04'39		greatest brilliancy	875 Aug 21 j 12:10	7° E 34'37	-4.8m
	873 Mar 26 j 07:41	0° Y		retrograde	875 Aug 30 j 15:20	9° E 05'11	
	873 Apr 19 j 15:57	0° B		evening set	875 Sep 17 j 02:50	3° E 23'08	
				inferior conj	875 Sep 20 j 13:47	1° E 17'52	-8°06'42
superior conj	873 May 02 j 20:40	16° B 13'53	-0°29'23	minimum elong	875 Sep 20 j 21:37	1° E 05'52	8°05'45
minimum elong	873 May 03 j 02:34	16° B 32'02	0°29'07	min. Earth dist.	875 Sep 21 j 10:32	0° E 46'04	0.27562 AU
max. Earth dist.	873 May 03 j 17:48	17° B 18'52	1.73494 AU		875 Sep 22 j 16:45	30° R P	
	873 May 14 j 01:35	0° II		morning rise	875 Sep 24 j 16:06	28° P 49'37	
asc. node	873 May 15 j 11:44	1° II 44'49		direct	875 Oct 11 j 14:02	23° P 21'22	
	873 Jun 07 j 11:58	0° E		greatest brilliancy	875 Oct 22 j 15:53	25° P 39'03	-4.9m
evening rise	873 Jun 08 j 07:58	1° E 01'23		asc. node	875 Oct 31 j 06:36	0° E 05'14	
	873 Jul 01 j 22:42	0° Q			875 Oct 31 j 03:13	0° E	
	873 Jul 26 j 10:18	0° P		morning max el	875 Dec 01 j 08:02	26° E 46'52	46°54'55
	873 Aug 20 j 00:06	0° E			875 Dec 04 j 10:54	0° M	
desc. node	873 Sep 04 j 00:57	18° E 15'50			875 Dec 31 j 15:26	0° X	
	873 Sep 13 j 17:53	0° M			876 Jan 26 j 05:37	0° Z	
	873 Oct 08 j 18:13	0° X		desc. node	876 Feb 19 j 20:06	29° Z 30'42	
	873 Nov 03 j 07:17	0° Z			876 Feb 20 j 05:48	0° \approx	
	873 Nov 30 j 03:51	0° \approx			876 Mar 16 j 00:16	0° H	
evening max el	873 Dec 07 j 19:20	7° \approx 59'29	47°17'21		876 Apr 09 j 16:24	0° Y	
asc. node	873 Dec 26 j 04:15	25° \approx 20'51			876 May 04 j 07:22	0° B	
	873 Dec 31 j 22:36	0° H			876 May 28 j 21:00	0° II	
greatest brilliancy	874 Jan 17 j 06:15	9° H 39'38	-4.9m	morning set	876 Jun 02 j 22:17	6° II 11'03	
retrograde	874 Jan 27 j 19:13	11° H 46'48		asc. node	876 Jun 11 j 23:28	17° II 16'10	
evening set	874 Feb 14 j 15:30	5° H 33'05			876 Jun 22 j 08:22	0° E	
min. Earth dist.	874 Feb 17 j 02:10	4° H 01'45	0.27918 AU	max. Earth dist.	876 Jul 06 j 06:25	17° E 07'52	1.73315 AU
inferior conj	874 Feb 17 j 18:35	3° H 35'54	8°43'46				
minimum elong	874 Feb 17 j 17:56	3° H 36'56	8°43'46	superior conj	876 Jul 09 j 06:04	20° E 48'42	0°58'41
morning rise	874 Feb 20 j 20:37	1° H 40'58		minimum elong	876 Jul 08 j 21:22	20° E 21'53	0°58'22
	874 Feb 23 j 18:05	30° R \approx			876 Jul 16 j 16:45	0° Q	
direct	874 Mar 10 j 15:36	25° \approx 36'30			876 Aug 09 j 22:23	0° P	
greatest brilliancy	874 Mar 19 j 16:23	27° \approx 08'16	-4.8m	evening rise	876 Aug 14 j 06:17	5° P 22'05	
	874 Mar 26 j 11:04	0° H			876 Sep 03 j 02:33	0° E	
desc. node	874 Apr 16 j 17:40	15° H 06'45			876 Sep 27 j 06:39	0° M	
morning max el	874 Apr 28 j 19:49	26° H 10'56	45°57'10	desc. node	876 Oct 01 j 13:00	5° M 17'23	
	874 May 02 j 17:47	0° Y			876 Oct 21 j 11:49	0° X	
	874 May 31 j 06:36	0° B			876 Nov 14 j 19:17	0° Z	
	874 Jun 26 j 20:36	0° II			876 Dec 09 j 08:02	0° \approx	
	874 Jul 22 j 11:17	0° E			877 Jan 03 j 09:13	0° H	

asc. node	877 Jan 22 j 16:05	22° H 14'43			879 Aug 25 j 17:23	0° M	
	877 Jan 29 j 15:22	0° Y		max. Earth dist.	879 Sep 13 j 21:05	23° M 53'44	1.71897 AU
evening max el	877 Feb 17 j 04:34	19° Y 29'45	46°14'45				
	877 Feb 28 j 06:25	0° B		superior conj	879 Sep 16 j 22:27	27° M 43'09	1°19'25
greatest brilliancy	877 Mar 28 j 00:30	18° B 53'32	-4.8m	minimum elong	879 Sep 17 j 05:01	28° M 03'42	1°19'19
retrograde	877 Apr 07 j 19:00	21° B 01'25			879 Sep 18 j 18:12	0° L	
evening set	877 Apr 23 j 12:51	16° B 13'20			879 Oct 12 j 16:50	0° M	
inferior conj	877 Apr 29 j 05:07	12° B 45'33	3°26'22	evening rise	879 Oct 26 j 07:43	17° M 05'04	
minimum elong	877 Apr 29 j 12:04	12° B 34'34	3°24'30	desc. node	879 Oct 30 j 00:52	21° M 44'34	
min. Earth dist.	877 Apr 29 j 08:22	12° B 40'24	0.28872 AU		879 Nov 05 j 14:55	0° J	
morning rise	877 May 05 j 11:25	8° B 58'02			879 Nov 29 j 13:34	0° B	
desc. node	877 May 14 j 05:30	5° B 19'00			879 Dec 23 j 14:03	0° \approx	
direct	877 May 20 j 17:39	4° B 28'57			880 Jan 16 j 18:51	0° H	
greatest brilliancy	877 May 30 j 22:33	6° B 20'55	-4.7m		880 Feb 10 j 08:15	0° Y	
	877 Jul 04 j 00:35	0° II		asc. node	880 Feb 20 j 04:06	11° Y 49'00	
morning max el	877 Jul 08 j 10:52	4° II 08'56	45°45'50		880 Mar 06 j 13:05	0° B	
	877 Aug 02 j 15:23	0° G			880 Apr 01 j 22:11	0° II	
	877 Aug 29 j 06:38	0° Ω		evening max el	880 Apr 28 j 20:28	27° II 58'06	45°22'47
asc. node	877 Sep 04 j 09:02	7° Ω 07'37			880 Apr 30 j 23:42	0° G	
	877 Sep 23 j 13:25	0° M		greatest brilliancy	880 Jun 05 j 15:31	25° G 33'41	-4.7m
	877 Oct 18 j 01:59	0° L		desc. node	880 Jun 10 j 17:23	27° G 01'42	
	877 Nov 11 j 04:44	0° M		retrograde	880 Jun 16 j 09:54	27° G 37'51	
	877 Dec 05 j 03:14	0° J		evening set	880 Jul 02 j 03:36	22° G 53'51	
desc. node	877 Dec 24 j 22:20	24° J 51'10		inferior conj	880 Jul 07 j 20:08	19° G 29'08	-5°48'51
	877 Dec 29 j 00:46	0° B		minimum elong	880 Jul 07 j 10:15	19° G 44'29	5°46'41
morning set	878 Jan 08 j 05:23	12° B 47'17		min. Earth dist.	880 Jul 07 j 21:29	19° G 27'03	0.28894 AU
	878 Jan 21 j 23:02	0° \approx		morning rise	880 Jul 12 j 16:46	16° G 32'16	
	878 Feb 14 j 23:09	0° H		direct	880 Jul 29 j 11:35	11° G 12'41	
				greatest brilliancy	880 Aug 09 j 04:05	13° G 16'49	-4.8m
superior conj	878 Feb 18 j 07:11	4° H 09'22	-1°25'43		880 Sep 03 j 19:14	0° Ω	
minimum elong	878 Feb 18 j 06:24	4° H 06'57	1°25'42	morning max el	880 Sep 17 j 03:28	12° Ω 23'21	46°18'03
max. Earth dist.	878 Feb 22 j 09:54	9° H 16'44	1.72113 AU	asc. node	880 Oct 01 j 20:55	27° Ω 38'05	
	878 Mar 11 j 02:07	0° Y			880 Oct 04 j 01:20	0° M	
evening rise	878 Mar 29 j 13:15	22° Y 50'04			880 Oct 30 j 10:35	0° L	
	878 Apr 04 j 08:46	0° B			880 Nov 24 j 11:06	0° M	
asc. node	878 Apr 17 j 01:55	15° B 37'50			880 Dec 18 j 21:47	0° J	
	878 Apr 28 j 19:34	0° II			881 Jan 12 j 03:15	0° B	
	878 May 23 j 10:54	0° G		desc. node	881 Jan 21 j 10:16	11° B 31'42	
	878 Jun 17 j 07:46	0° Ω			881 Feb 05 j 07:29	0° \approx	
	878 Jul 12 j 12:44	0° M			881 Mar 01 j 12:20	0° H	
desc. node	878 Aug 06 j 15:03	29° M 14'10		morning set	881 Mar 24 j 00:40	27° H 50'20	
	878 Aug 07 j 07:02	0° L			881 Mar 25 j 18:41	0° Y	
	878 Sep 03 j 02:18	0° M			881 Apr 19 j 02:49	0° B	
evening max el	878 Sep 23 j 23:24	21° M 45'58	46°56'14				
	878 Oct 02 j 13:28	0° J		superior conj	881 Apr 30 j 13:57	14° B 06'04	-0°32'25
greatest brilliancy	878 Nov 03 j 14:37	22° J 24'30	-4.9m	minimum elong	881 Apr 30 j 20:24	14° B 25'53	0°32'07
retrograde	878 Nov 13 j 08:04	24° J 12'34		max. Earth dist.	881 May 01 j 16:26	15° B 27'27	1.73473 AU
evening set	878 Nov 27 j 15:24	20° J 08'42			881 May 13 j 12:26	0° II	
asc. node	878 Nov 27 j 18:22	20° J 04'45		asc. node	881 May 14 j 13:42	1° II 17'35	
inferior conj	878 Dec 03 j 21:09	16° J 30'34	1°35'07	evening rise	881 Jun 06 j 02:52	28° II 58'34	
minimum elong	878 Dec 03 j 17:34	16° J 36'02	1°33'57		881 Jun 06 j 22:53	0° G	
min. Earth dist.	878 Dec 03 j 13:30	16° J 42'13	0.26389 AU		881 Jul 01 j 09:49	0° Ω	
morning rise	878 Dec 09 j 19:48	13° J 01'58			881 Jul 25 j 21:45	0° M	
direct	878 Dec 24 j 04:00	8° J 54'22			881 Aug 19 j 12:03	0° L	
greatest brilliancy	879 Jan 03 j 00:51	10° J 45'15	-4.9m	desc. node	881 Sep 03 j 03:07	17° L 44'56	
	879 Jan 31 j 09:28	0° B			881 Sep 13 j 06:34	0° M	
morning max el	879 Feb 12 j 08:58	11° B 23'11	46°40'44		881 Oct 08 j 08:03	0° J	
	879 Mar 02 j 05:05	0° \approx			881 Nov 02 j 23:05	0° B	
desc. node	879 Mar 19 j 08:02	18° \approx 56'38			881 Nov 30 j 00:11	0° \approx	
	879 Mar 29 j 01:26	0° H		evening max el	881 Dec 05 j 11:16	5° \approx 40'29	47°18'27
	879 Apr 23 j 21:39	0° Y		asc. node	881 Dec 25 j 06:22	24° \approx 13'08	
	879 May 19 j 06:15	0° B			882 Jan 01 j 18:21	0° H	
	879 Jun 13 j 07:11	0° II		greatest brilliancy	882 Jan 14 j 21:39	7° H 19'46	-4.9m
	879 Jul 08 j 01:11	0° G		retrograde	882 Jan 25 j 10:42	9° H 26'33	
asc. node	879 Jul 10 j 11:17	2° G 57'09		evening set	882 Feb 12 j 05:17	3° H 15'18	
	879 Aug 01 j 12:19	0° Ω		min. Earth dist.	882 Feb 14 j 15:51	1° H 44'03	0.27855 AU
morning set	879 Aug 10 j 18:37	11° Ω 26'32		inferior conj	882 Feb 15 j 09:20	1° H 16'29	8°43'16

minimum elong	882 Feb 15 j 07:52	1° H 18'49	8°43'13	superior conj	884 Jul 07 j 00:46	18° G 44'53	0°56'24
	882 Feb 17 j 10:14	30° R		minimum elong	884 Jul 06 j 16:08	18° G 18'15	0°56'04
morning rise	882 Feb 18 j 10:43	29° A 22'29			884 Jul 16 j 03:39	0° Q	
direct	882 Mar 08 j 06:07	23° A 18'26			884 Aug 09 j 09:25	0° P	
greatest brilliancy	882 Mar 17 j 05:10	24° A 48'50	-4.8m	evening rise	884 Aug 11 j 23:44	3° P 13'05	
	882 Mar 28 j 03:49	0° H			884 Sep 02 j 13:48	0° Q	
desc. node	882 Apr 15 j 19:44	14° H 07'36			884 Sep 26 j 18:13	0° M	
morning max el	882 Apr 26 j 10:25	23° H 55'26	45°58'10	desc. node	884 Sep 30 j 15:00	4° M 47'34	
	882 May 02 j 14:49	0° Y			884 Oct 20 j 23:45	0° X	
	882 May 30 j 22:02	0° B			884 Nov 14 j 07:42	0° Z	
	882 Jun 26 j 09:53	0° I			884 Dec 08 j 21:11	0° A	
	882 Jul 21 j 23:31	0° G			885 Jan 02 j 23:41	0° H	
asc. node	882 Aug 06 j 23:16	19° G 10'08		asc. node	885 Jan 21 j 18:14	21° H 34'47	
	882 Aug 15 j 21:38	0° Q			885 Jan 29 j 08:49	0° Y	
	882 Sep 09 j 07:57	0° P		evening max el	885 Feb 14 j 18:50	17° Y 11'17	46°17'24
	882 Oct 03 j 10:08	0° Q			885 Feb 28 j 10:46	0° B	
morning set	882 Oct 21 j 01:36	22° Q 07'58		greatest brilliancy	885 Mar 25 j 17:36	16° B 43'35	-4.8m
	882 Oct 27 j 07:47	0° M		retrograde	885 Apr 05 j 11:34	18° B 51'37	
	882 Nov 20 j 03:47	0° X		evening set	885 Apr 21 j 07:31	14° B 00'01	
desc. node	882 Nov 26 j 12:35	8° X 00'58		inferior conj	885 Apr 26 j 21:37	10° B 35'36	3°44'28
				minimum elong	885 Apr 27 j 05:03	10° B 23'52	3°42'29
superior conj	882 Nov 30 j 17:32	13° X 18'39	-0°10'02	min. Earth dist.	885 Apr 27 j 01:04	10° B 30'10	0.28857 AU
minimum elong	882 Nov 30 j 14:51	13° X 10'11	0°09'54	morning rise	885 May 03 j 02:42	6° B 49'47	
behind sun begin	882 Nov 29 j 17:26	12° X 02'48		desc. node	885 May 13 j 07:25	2° B 49'33	
behind sun end	882 Dec 01 j 12:15	14° X 17'34		direct	885 May 18 j 09:10	2° B 19'01	
max. Earth dist.	882 Dec 01 j 20:50	14° X 44'35	1.71037 AU	greatest brilliancy	885 May 28 j 14:36	4° B 11'22	-4.7m
	882 Dec 13 j 23:50	0° Z			885 Jul 04 j 00:31	0° I	
	883 Jan 06 j 21:04	0° A		morning max el	885 Jul 06 j 02:57	1° I 59'14	45°45'31
evening rise	883 Jan 11 j 09:32	5° A 39'54			885 Aug 02 j 07:29	0° G	
	883 Jan 30 j 20:45	0° H			885 Aug 28 j 20:13	0° Q	
	883 Feb 24 j 00:48	0° Y		asc. node	885 Sep 03 j 11:09	6° Q 34'47	
asc. node	883 Mar 19 j 16:06	29° Y 00'37			885 Sep 23 j 01:55	0° P	
	883 Mar 20 j 11:36	0° B			885 Oct 17 j 13:56	0° Q	
	883 Apr 14 j 07:53	0° I			885 Nov 10 j 16:25	0° M	
	883 May 09 j 17:41	0° G			885 Dec 04 j 14:44	0° X	
	883 Jun 05 j 01:29	0° Q		desc. node	885 Dec 24 j 00:29	24° X 22'15	
	883 Jul 03 j 07:09	0° P			885 Dec 28 j 12:07	0° Z	
desc. node	883 Jul 09 j 05:19	5° P 49'10		morning set	886 Jan 05 j 14:55	10° Z 11'12	
evening max el	883 Jul 10 j 06:19	6° P 49'11	45°42'29		886 Jan 21 j 10:16	0° A	
	883 Aug 07 j 21:52	0° Q			886 Feb 14 j 10:18	0° H	
greatest brilliancy	883 Aug 19 j 01:19	5° Q 14'24	-4.8m				
retrograde	883 Aug 28 j 03:48	6° Q 44'45		superior conj	886 Feb 15 j 19:25	1° H 43'15	-1°25'30
evening set	883 Sep 14 j 18:43	0° Q 58'53		minimum elong	886 Feb 15 j 17:39	1° H 37'43	1°25'30
	883 Sep 16 j 10:09	30° R		max. Earth dist.	886 Feb 19 j 19:09	6° H 41'31	1.72058 AU
inferior conj	883 Sep 18 j 03:31	28° P 56'49	-8°14'40		886 Mar 10 j 13:13	0° Y	
minimum elong	883 Sep 18 j 10:41	28° P 45'49	8°13'53	evening rise	886 Mar 27 j 04:01	20° Y 33'23	
min. Earth dist.	883 Sep 19 j 00:29	28° P 24'40	0.27630 AU		886 Apr 03 j 19:52	0° B	
morning rise	883 Sep 22 j 02:21	26° P 33'24		asc. node	886 Apr 16 j 03:54	15° B 09'46	
direct	883 Oct 09 j 03:55	20° P 59'05			886 Apr 28 j 06:46	0° I	
greatest brilliancy	883 Oct 20 j 07:09	23° P 17'27	-4.9m		886 May 22 j 22:21	0° G	
asc. node	883 Oct 30 j 08:33	28° P 38'49			886 Jun 16 j 19:44	0° Q	
	883 Nov 01 j 08:49	0° Q			886 Jul 12 j 01:38	0° P	
morning max el	883 Nov 28 j 21:05	24° Q 19'36	46°54'22	desc. node	886 Aug 05 j 17:10	28° P 38'35	
	883 Dec 04 j 08:09	0° M			886 Aug 06 j 21:38	0° Q	
	883 Dec 31 j 07:33	0° X			886 Sep 02 j 20:26	0° M	
	884 Jan 25 j 19:38	0° Z		evening max el	886 Sep 21 j 13:08	19° M 22'39	46°53'54
desc. node	884 Feb 18 j 22:11	28° Z 58'12			886 Oct 02 j 18:38	0° X	
	884 Feb 19 j 18:38	0° A		greatest brilliancy	886 Nov 01 j 03:15	19° X 54'18	-4.9m
	884 Mar 15 j 12:21	0° H		retrograde	886 Nov 10 j 20:42	21° X 42'07	
	884 Apr 09 j 03:57	0° Y		evening set	886 Nov 25 j 03:27	17° X 38'17	
	884 May 03 j 18:34	0° B		asc. node	886 Nov 26 j 20:30	16° X 41'54	
	884 May 28 j 07:59	0° I		inferior conj	886 Dec 01 j 09:09	14° X 00'27	1°10'33
morning set	884 May 31 j 16:48	4° I 07'18		minimum elong	886 Dec 01 j 06:28	14° X 04'32	1°09'41
asc. node	884 Jun 11 j 01:33	16° I 49'09		min. Earth dist.	886 Dec 01 j 02:47	14° X 10'08	0.26382 AU
	884 Jun 21 j 19:15	0° G		morning rise	886 Dec 07 j 09:35	10° X 30'01	
max. Earth dist.	884 Jul 04 j 02:43	15° G 09'02	1.73354 AU	direct	886 Dec 21 j 16:33	6° X 24'15	
				greatest brilliancy	886 Dec 31 j 14:18	8° X 16'34	-4.9m

	887 Jan 31 j 14:45	0°♁			889 Sep 12 j 19:04	0°♍	
morning max el	887 Feb 09 j 23:22	9°♁01'02	46°42'05		889 Oct 07 j 21:43	0°♁	
	887 Mar 01 j 23:14	0°♍			889 Nov 02 j 14:51	0°♁	
desc. node	887 Mar 18 j 10:05	18°♍18'08			889 Nov 29 j 21:00	0°♍	
	887 Mar 28 j 16:08	0°♁		evening max el	889 Dec 03 j 02:12	3°♍19'15	47°19'03
	887 Apr 23 j 10:41	0°♍		asc. node	889 Dec 24 j 08:28	23°♍03'39	
	887 May 18 j 18:20	0°♁			890 Jan 02 j 21:24	0°♁	
	887 Jun 12 j 18:39	0°♍		greatest brilliancy	890 Jan 12 j 13:13	4°♁59'25	-4.9m
	887 Jul 07 j 12:18	0°♍		retrograde	890 Jan 23 j 01:17	7°♁05'09	
asc. node	887 Jul 09 j 13:29	2°♍30'01		evening set	890 Feb 09 j 18:14	0°♁57'18	
	887 Jul 31 j 23:15	0°♍			890 Feb 11 j 07:12	30°♍	
morning set	887 Aug 08 j 11:50	9°♍17'37		min. Earth dist.	890 Feb 12 j 05:40	29°♍24'41	0.27797 AU
	887 Aug 25 j 04:16	0°♍		inferior conj	890 Feb 12 j 23:46	28°♍56'08	8°41'40
max. Earth dist.	887 Sep 11 j 10:52	21°♍32'39	1.71949 AU	minimum elong	890 Feb 12 j 21:27	28°♍59'47	8°41'36
				morning rise	890 Feb 16 j 00:56	27°♍02'19	
superior conj	887 Sep 14 j 13:50	25°♍26'58	1°20'33	direct	890 Mar 05 j 19:53	20°♍59'16	
minimum elong	887 Sep 14 j 19:44	25°♍45'24	1°20'28	greatest brilliancy	890 Mar 14 j 18:28	22°♍29'02	-4.8m
	887 Sep 18 j 05:09	0°♍			890 Mar 29 j 08:21	0°♁	
	887 Oct 12 j 03:55	0°♍		desc. node	890 Apr 14 j 21:42	13°♁09'23	
evening rise	887 Oct 23 j 19:29	14°♍36'24		morning max el	890 Apr 23 j 23:55	21°♁36'59	45°59'20
desc. node	887 Oct 29 j 02:52	21°♍15'45			890 May 02 j 11:09	0°♍	
	887 Nov 05 j 02:10	0°♁			890 May 30 j 13:09	0°♁	
	887 Nov 29 j 01:00	0°♁			890 Jun 25 j 22:54	0°♍	
	887 Dec 23 j 01:42	0°♍			890 Jul 21 j 11:29	0°♍	
	888 Jan 16 j 06:49	0°♁		asc. node	890 Aug 06 j 01:14	18°♍41'11	
	888 Feb 09 j 20:44	0°♍			890 Aug 15 j 09:02	0°♍	
asc. node	888 Feb 19 j 06:10	11°♍16'52			890 Sep 08 j 19:03	0°♍	
	888 Mar 06 j 02:39	0°♁			890 Oct 02 j 21:05	0°♍	
	888 Apr 01 j 14:12	0°♍		morning set	890 Oct 18 j 14:43	19°♍44'05	
evening max el	888 Apr 26 j 13:19	25°♍49'41	45°23'33		890 Oct 26 j 18:41	0°♍	
	888 Apr 30 j 23:27	0°♍			890 Nov 19 j 14:40	0°♁	
greatest brilliancy	888 Jun 03 j 06:48	23°♍23'43	-4.7m	desc. node	890 Nov 25 j 14:46	7°♁33'33	
desc. node	888 Jun 09 j 19:34	25°♍07'48					
retrograde	888 Jun 14 j 01:58	25°♍28'16		superior conj	890 Nov 28 j 03:44	10°♁45'26	-0°06'05
evening set	888 Jun 29 j 17:23	20°♍47'45		minimum elong	890 Nov 28 j 02:05	10°♁40'16	0°06'01
inferior conj	888 Jul 05 j 12:16	17°♍19'19	-5°33'43	behind sun begin	890 Nov 27 j 01:11	9°♁21'54	
minimum elong	888 Jul 05 j 02:32	17°♍34'28	5°31'32	behind sun end	890 Nov 29 j 02:59	11°♁58'38	
min. Earth dist.	888 Jul 05 j 13:07	17°♍17'59	0.28904 AU	max. Earth dist.	890 Nov 28 j 24:00	11°♁49'13	1.71035 AU
morning rise	888 Jul 10 j 11:33	14°♍18'23			890 Dec 13 j 10:45	0°♁	
direct	888 Jul 27 j 04:21	9°♍02'57			891 Jan 06 j 08:01	0°♍	
greatest brilliancy	888 Aug 06 j 19:11	11°♍05'32	-4.8m	evening rise	891 Jan 08 j 19:55	3°♍07'42	
	888 Sep 03 j 23:34	0°♍			891 Jan 30 j 07:46	0°♁	
morning max el	888 Sep 14 j 18:40	10°♍08'42	46°16'29		891 Feb 23 j 11:57	0°♍	
asc. node	888 Sep 30 j 22:53	26°♍55'42		asc. node	891 Mar 18 j 18:03	28°♍31'44	
	888 Oct 03 j 18:31	0°♍			891 Mar 19 j 23:02	0°♁	
	888 Oct 30 j 00:46	0°♍			891 Apr 13 j 19:52	0°♍	
	888 Nov 23 j 23:58	0°♍			891 May 09 j 06:43	0°♍	
	888 Dec 18 j 09:59	0°♁			891 Jun 04 j 16:41	0°♍	
	889 Jan 11 j 15:02	0°♁			891 Jul 03 j 04:04	0°♍	
desc. node	889 Jan 20 j 12:24	11°♁02'08		evening max el	891 Jul 07 j 19:05	4°♍29'38	45°40'37
	889 Feb 04 j 18:58	0°♍		desc. node	891 Jul 08 j 07:24	4°♍59'01	
	889 Feb 28 j 23:33	0°♁			891 Aug 09 j 15:04	0°♍	
morning set	889 Mar 21 j 15:37	25°♁34'17		greatest brilliancy	891 Aug 16 j 13:59	2°♍54'48	-4.8m
	889 Mar 25 j 05:40	0°♍		retrograde	891 Aug 25 j 16:39	4°♍25'44	
	889 Apr 18 j 13:39	0°♁			891 Sep 09 j 23:03	30°♍	
				evening set	891 Sep 12 j 10:23	28°♍36'00	
superior conj	889 Apr 28 j 06:53	11°♁57'20	-0°35'26	inferior conj	891 Sep 15 j 17:17	26°♍36'55	-8°21'46
minimum elong	889 Apr 28 j 13:51	12°♁18'45	0°35'06	minimum elong	891 Sep 15 j 23:46	26°♍26'59	8°21'08
max. Earth dist.	889 Apr 29 j 14:50	13°♁35'34	1.73445 AU	min. Earth dist.	891 Sep 16 j 14:17	26°♍04'43	0.27696 AU
	889 May 12 j 23:13	0°♍		morning rise	891 Sep 19 j 12:48	24°♍18'24	
asc. node	889 May 13 j 15:47	0°♍50'52		direct	891 Oct 06 j 17:55	18°♍37'54	
evening rise	889 Jun 03 j 21:36	26°♍55'31		greatest brilliancy	891 Oct 17 j 22:31	20°♍57'25	-4.9m
	889 Jun 06 j 09:43	0°♍		asc. node	891 Oct 29 j 10:39	27°♍16'35	
	889 Jun 30 j 20:50	0°♍			891 Nov 02 j 05:45	0°♍	
	889 Jul 25 j 09:04	0°♍		morning max el	891 Nov 26 j 10:52	21°♍55'36	46°53'59
	889 Aug 18 j 23:50	0°♍			891 Dec 04 j 04:13	0°♍	
desc. node	889 Sep 02 j 05:08	17°♍14'10			891 Dec 30 j 22:56	0°♁	

	892 Jan 25 j 09:03	0°☾		evening max el	894 Sep 19 j 03:24	17°☾01'40	46°51'39
desc. node	892 Feb 18 j 00:12	28°☾26'50			894 Oct 03 j 01:30	0°☿	
	892 Feb 19 j 06:59	0°≈		greatest brilliancy	894 Oct 29 j 15:43	17°☿25'06	-4.9m
	892 Mar 15 j 00:02	0°☿		retrograde	894 Nov 08 j 09:19	19°☿12'26	
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	892 May 27 j 18:43	0°☿		inferior conj	894 Nov 28 j 21:07	11°☿31'10	0°45'52
morning set	892 May 29 j 10:50	2°☿02'47		minimum elong	894 Nov 28 j 19:22	11°☿33'50	0°45'18
asc. node	892 Jun 10 j 03:42	16°☿23'10		min. Earth dist.	894 Nov 28 j 15:57	11°☿39'02	0.26376 AU
	892 Jun 21 j 05:52	0°☿		morning rise	894 Dec 04 j 23:05	7°☿59'01	
max. Earth dist.	892 Jul 02 j 00:05	13°☿14'24	1.73387 AU	direct	894 Dec 19 j 05:21	3°☿55'09	
				greatest brilliancy	894 Dec 29 j 03:28	5°☿48'15	-4.9m
superior conj	892 Jul 04 j 19:02	16°☿40'37	0°54'00		895 Jan 31 j 17:53	0°☿	
minimum elong	892 Jul 04 j 10:30	16°☿14'19	0°53'41	morning max el	895 Feb 07 j 13:23	6°☿38'42	46°43'24
	892 Jul 15 j 14:15	0°☿			895 Mar 01 j 16:37	0°≈	
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evening rise	892 Aug 09 j 17:03	1°☿04'43			895 Mar 28 j 06:18	0°☿	
	892 Sep 02 j 00:46	0°☿			895 Apr 22 j 23:17	0°☿	
	892 Sep 26 j 05:29	0°☿			895 May 18 j 06:01	0°☿	
desc. node	892 Sep 29 j 17:01	4°☿18'45			895 Jun 12 j 05:49	0°☿	
	892 Oct 20 j 11:23	0°☿			895 Jul 06 j 23:10	0°☿	
	892 Nov 13 j 19:47	0°☿		asc. node	895 Jul 08 j 15:27	2°☿02'54	
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asc. node	893 Jan 20 j 20:16	20°☿55'39			895 Aug 24 j 15:00	0°☿	
	893 Jan 29 j 02:06	0°☿		max. Earth dist.	895 Sep 08 j 22:10	19°☿04'29	1.72000 AU
evening max el	893 Feb 12 j 09:38	14°☿55'32	46°19'58				
	893 Feb 28 j 16:28	0°☿		superior conj	895 Sep 12 j 05:05	23°☿10'56	1°21'34
greatest brilliancy	893 Mar 23 j 09:54	14°☿33'43	-4.8m	minimum elong	895 Sep 12 j 10:15	23°☿27'07	1°21'29
retrograde	893 Apr 03 j 04:25	16°☿42'35			895 Sep 17 j 15:56	0°☿	
evening set	893 Apr 19 j 02:10	11°☿47'13			895 Oct 11 j 14:48	0°☿	
inferior conj	893 Apr 24 j 14:00	8°☿26'10	4°02'14	evening rise	895 Oct 21 j 07:03	12°☿07'49	
minimum elong	893 Apr 24 j 21:54	8°☿13'44	4°00'11	desc. node	895 Oct 28 j 05:02	20°☿48'01	
min. Earth dist.	893 Apr 24 j 17:19	8°☿20'57	0.28848 AU		895 Nov 04 j 13:13	0°☿	
morning rise	893 Apr 30 j 17:45	4°☿42'29			895 Nov 28 j 12:14	0°☿	
desc. node	893 May 12 j 09:37	0°☿25'23			895 Dec 22 j 13:10	0°≈	
direct	893 May 16 j 01:08	0°☿09'35			896 Jan 15 j 18:36	0°☿	
greatest brilliancy	893 May 26 j 06:20	2°☿02'07	-4.7m		896 Feb 09 j 09:03	0°☿	
	893 Jul 03 j 23:08	0°☿		asc. node	896 Feb 18 j 08:09	10°☿45'03	
morning max el	893 Jul 03 j 19:44	29°☿51'55	45°45'10		896 Mar 05 j 16:05	0°☿	
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asc. node	893 Sep 02 j 13:09	6°☿02'42			896 May 01 j 00:00	0°☿	
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	893 Dec 27 j 23:06	0°☿		minimum elong	896 Jul 02 j 18:53	15°☿25'09	5°15'57
morning set	894 Jan 03 j 00:42	7°☿36'54		min. Earth dist.	896 Jul 03 j 05:07	15°☿09'11	0.28917 AU
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				direct	896 Jul 24 j 20:47	6°☿53'47	
superior conj	894 Feb 13 j 07:47	29°≈18'35	-1°25'09	greatest brilliancy	896 Aug 04 j 10:54	8°☿55'15	-4.8m
minimum elong	894 Feb 13 j 05:02	29°≈10'00	1°25'08		896 Sep 04 j 02:11	0°☿	
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max. Earth dist.	894 Feb 17 j 06:36	4°☿14'12	1.72002 AU	asc. node	896 Sep 30 j 00:59	26°☿14'12	
	894 Mar 09 j 23:55	0°☿			896 Oct 03 j 11:24	0°☿	
evening rise	894 Mar 24 j 18:56	18°☿18'20			896 Oct 29 j 14:48	0°☿	
	894 Apr 03 j 06:35	0°☿			896 Nov 23 j 12:45	0°☿	
asc. node	894 Apr 15 j 06:02	14°☿43'17			896 Dec 17 j 22:04	0°☿	
	894 Apr 27 j 17:37	0°☿			897 Jan 11 j 02:41	0°☿	
	894 May 22 j 09:31	0°☿		desc. node	897 Jan 19 j 14:22	10°☿32'29	
	894 Jun 16 j 07:29	0°☿			897 Feb 04 j 06:18	0°≈	
	894 Jul 11 j 14:23	0°☿			897 Feb 28 j 10:38	0°☿	
desc. node	894 Aug 04 j 19:10	28°☿03'07		morning set	897 Mar 19 j 06:30	23°☿18'18	
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


































































































































superior conj	897 Apr 25 j 23:58	9°♄49'20	-0°38'22	inferior conj	899 Sep 13 j 07:15	24°♍17'18	-8°27'44
minimum elong	897 Apr 26 j 07:25	10°♄12'13	0°38'03	minimum elong	899 Sep 13 j 13:00	24°♍08'29	8°27'15
max. Earth dist.	897 Apr 27 j 12:11	11°♄40'41	1.73411 AU	min. Earth dist.	899 Sep 14 j 03:48	23°♍45'50	0.27766 AU
	897 May 12 j 09:54	0°♄		morning rise	899 Sep 16 j 23:45	22°♍03'23	
asc. node	897 May 12 j 17:56	0°♄24'41		direct	899 Oct 04 j 08:34	16°♍17'02	
evening rise	897 Jun 01 j 16:29	24°♄53'14		greatest brilliancy	899 Oct 15 j 13:37	18°♍37'09	-4.9m
	897 Jun 05 j 20:29	0°♄		asc. node	899 Oct 28 j 12:49	25°♍56'45	
	897 Jun 30 j 07:47	0°♄			899 Nov 02 j 21:31	0°♄	
	897 Jul 24 j 20:22	0°♄		morning max el	899 Nov 24 j 01:44	19°♄33'36	46°53'17
	897 Aug 18 j 11:42	0°♄			899 Dec 04 j 00:04	0°♄	
desc. node	897 Sep 01 j 07:09	16°♄43'04			899 Dec 30 j 14:31	0°♄	
	897 Sep 12 j 07:45	0°♄			900 Jan 24 j 22:47	0°♄	
	897 Oct 07 j 11:40	0°♄		desc. node	900 Feb 17 j 02:18	27°♄54'45	
	897 Nov 02 j 07:02	0°♄			900 Feb 18 j 19:39	0°♄	
	897 Nov 29 j 18:40	0°♄			900 Mar 14 j 12:00	0°♄	
evening max el	897 Nov 30 j 16:08	0°♄54'59	47°19'49		900 Apr 08 j 02:41	0°♄	
asc. node	897 Dec 23 j 10:28	21°♄51'46			900 May 02 j 16:40	0°♄	
	898 Jan 04 j 12:13	0°♄		morning set	900 May 27 j 05:02	29°♄58'00	
greatest brilliancy	898 Jan 10 j 04:59	2°♄38'59	-4.9m		900 May 27 j 05:41	0°♄	
retrograde	898 Jan 20 j 15:31	4°♄43'41		asc. node	900 Jun 09 j 05:40	15°♄55'48	
	898 Feb 05 j 00:29	30°♄			900 Jun 20 j 16:44	0°♄	
evening set	898 Feb 07 j 06:50	28°♄39'38		max. Earth dist.	900 Jun 29 j 22:41	11°♄22'41	1.73416 AU
min. Earth dist.	898 Feb 09 j 19:42	27°♄04'57	0.27735 AU				
inferior conj	898 Feb 10 j 14:14	26°♄35'43	8°39'17	superior conj	900 Jul 02 j 13:37	14°♄36'31	0°51'34
minimum elong	898 Feb 10 j 11:04	26°♄40'42	8°39'09	minimum elong	900 Jul 02 j 05:14	14°♄10'42	0°51'14
morning rise	898 Feb 13 j 15:33	24°♄41'36			900 Jul 15 j 01:07	0°♄	
direct	898 Mar 03 j 09:14	18°♄39'50		evening rise	900 Aug 07 j 10:52	28°♄57'14	
greatest brilliancy	898 Mar 12 j 08:18	20°♄09'41	-4.8m		900 Aug 08 j 07:08	0°♄	
	898 Mar 30 j 05:10	0°♄			900 Sep 01 j 11:58	0°♄	
desc. node	898 Apr 13 j 23:55	12°♄12'58			900 Sep 25 j 17:00	0°♄	
morning max el	898 Apr 21 j 13:18	19°♄18'01	46°00'38	desc. node	900 Sep 28 j 19:12	3°♄49'44	
	898 May 02 j 06:52	0°♄			900 Oct 19 j 23:18	0°♄	
	898 May 30 j 04:04	0°♄			900 Nov 13 j 08:16	0°♄	
	898 Jun 25 j 11:51	0°♄			900 Dec 07 j 23:16	0°♄	
	898 Jul 20 j 23:26	0°♄		asc. node	901 Jan 02 j 04:35	0°♄	
asc. node	898 Aug 05 j 03:19	18°♄12'31			901 Jan 19 j 22:17	20°♄14'37	
	898 Aug 14 j 20:27	0°♄			901 Jan 28 j 20:21	0°♄	
	898 Sep 08 j 06:13	0°♄		evening max el	901 Feb 10 j 01:22	12°♄40'33	46°22'42
	898 Oct 02 j 08:10	0°♄			901 Mar 01 j 01:18	0°♄	
morning set	898 Oct 16 j 03:42	17°♄19'14		greatest brilliancy	901 Mar 21 j 02:04	12°♄22'20	-4.8m
	898 Oct 26 j 05:47	0°♄		retrograde	901 Mar 31 j 21:35	14°♄32'03	
	898 Nov 19 j 01:49	0°♄		evening set	901 Apr 16 j 20:56	9°♄33'00	
desc. node	898 Nov 24 j 16:50	7°♄05'00		inferior conj	901 Apr 22 j 06:21	6°♄15'17	4°19'42
				minimum elong	901 Apr 22 j 14:39	6°♄02'13	4°17'35
superior conj	898 Nov 25 j 13:31	8°♄10'08	-0°02'05	min. Earth dist.	901 Apr 22 j 09:09	6°♄10'53	0.28832 AU
minimum elong	898 Nov 25 j 12:57	8°♄08'20	0°02'03	morning rise	901 Apr 28 j 08:35	2°♄34'03	
behind sun begin	898 Nov 24 j 10:39	6°♄45'33			901 May 03 j 16:16	30°♄	
behind sun end	898 Nov 26 j 15:15	9°♄31'08		desc. node	901 May 11 j 11:41	28°♄04'58	
max. Earth dist.	898 Nov 26 j 02:26	8°♄50'47	1.71038 AU	direct	901 May 13 j 17:29	27°♄59'00	
	898 Dec 12 j 21:55	0°♄		greatest brilliancy	901 May 23 j 21:19	29°♄50'57	-4.7m
	899 Jan 05 j 19:11	0°♄			901 May 24 j 07:29	0°♄	
evening rise	899 Jan 06 j 05:51	0°♄33'26		morning max el	901 Jul 01 j 12:46	27°♄44'20	45°44'51
	899 Jan 29 j 18:59	0°♄			901 Jul 03 j 21:14	0°♄	
	899 Feb 22 j 23:18	0°♄			901 Aug 01 j 14:43	0°♄	
asc. node	899 Mar 17 j 20:13	28°♄02'56			901 Aug 27 j 22:48	0°♄	
	899 Mar 19 j 10:40	0°♄		asc. node	901 Sep 01 j 15:15	5°♄30'12	
	899 Apr 13 j 08:03	0°♄			901 Sep 22 j 02:23	0°♄	
	899 May 08 j 19:59	0°♄			901 Oct 16 j 13:22	0°♄	
	899 Jun 04 j 08:14	0°♄			901 Nov 09 j 15:17	0°♄	
	899 Jul 03 j 01:50	0°♄			901 Dec 03 j 13:16	0°♄	
evening max el	899 Jul 05 j 08:30	2°♄11'40	45°38'54	desc. node	901 Dec 22 j 04:32	23°♄24'52	
desc. node	899 Jul 07 j 09:25	4°♄07'38			901 Dec 27 j 10:24	0°♄	
	899 Aug 12 j 09:48	0°♄		morning set	901 Dec 31 j 10:28	5°♄01'29	
greatest brilliancy	899 Aug 14 j 02:02	0°♄34'56	-4.8m		902 Jan 20 j 08:22	0°♄	
retrograde	899 Aug 23 j 06:22	2°♄07'18					
	899 Sep 02 j 15:45	30°♄		superior conj	902 Feb 10 j 19:36	26°♄50'47	-1°24'37
evening set	899 Sep 10 j 01:56	26°♄13'58		minimum elong	902 Feb 10 j 15:52	26°♄39'08	1°24'35

	902 Feb 13 j 08:15	0° H		morning max el	904 Sep 09 j 22:53	5° Ω 33'37	46°13'18
max. Earth dist.	902 Feb 14 j 18:50	1° H 47'52	1.71950 AU	asc. node	904 Sep 29 j 03:08	25° Ω 32'47	
	902 Mar 09 j 11:03	0° Y			904 Oct 03 j 04:08	0° M	
evening rise	902 Mar 22 j 09:14	15° Y 59'58			904 Oct 29 j 04:53	0° Ω	
	902 Apr 02 j 17:43	0° B			904 Nov 23 j 01:38	0° M	
asc. node	902 Apr 14 j 08:06	14° B 15'19			904 Dec 17 j 10:17	0° J	
	902 Apr 27 j 04:52	0° II			905 Jan 10 j 14:28	0° Z	
	902 May 21 j 21:06	0° E		desc. node	905 Jan 18 j 16:29	10° Z 02'53	
	902 Jun 15 j 19:40	0° Ω			905 Feb 03 j 17:46	0° \approx	
desc. node	902 Jul 11 j 03:36	0° M			905 Feb 27 j 21:51	0° H	
	902 Aug 03 j 21:15	27° M 26'39		morning set	905 Mar 16 j 21:23	21° H 01'44	
	902 Aug 06 j 03:15	0° Ω			905 Mar 24 j 03:34	0° Y	
	902 Sep 02 j 09:50	0° M			905 Apr 17 j 11:18	0° B	
evening max el	902 Sep 16 j 17:59	14° M 40'47	46°49'19				
	902 Oct 03 j 11:12	0° J		superior conj	905 Apr 23 j 17:02	7° B 40'40	-0°41'16
greatest brilliancy	902 Oct 27 j 04:44	14° J 56'26	-4.9m	minimum elong	905 Apr 24 j 00:55	8° B 04'56	0°40'56
retrograde	902 Nov 05 j 21:47	16° J 42'39		max. Earth dist.	905 Apr 25 j 07:40	9° B 39'30	1.73381 AU
evening set	902 Nov 20 j 04:36	12° J 38'54		asc. node	905 May 11 j 19:54	29° B 57'15	
asc. node	902 Nov 25 j 00:33	9° J 51'46			905 May 11 j 20:48	0° II	
inferior conj	902 Nov 26 j 09:19	9° J 02'01	0°21'21	evening rise	905 May 30 j 11:12	22° II 49'53	
minimum elong	902 Nov 26 j 08:29	9° J 03'16	0°21'04		905 Jun 05 j 07:27	0° E	
min. Earth dist.	902 Nov 26 j 05:28	9° J 07'51	0.26373 AU		905 Jun 29 j 18:56	0° Ω	
morning rise	902 Dec 02 j 12:33	5° J 28'09			905 Jul 24 j 07:51	0° M	
direct	902 Dec 16 j 18:13	1° J 26'14			905 Aug 17 j 23:43	0° Ω	
greatest brilliancy	902 Dec 26 j 16:57	3° J 19'56	-4.9m	desc. node	905 Aug 31 j 09:19	16° Ω 12'01	
	903 Jan 31 j 19:49	0° Z			905 Sep 11 j 20:37	0° M	
morning max el	903 Feb 05 j 02:30	4° Z 13'09	46°44'27		905 Oct 07 j 01:51	0° J	
	903 Mar 01 j 10:00	0° \approx			905 Nov 01 j 23:36	0° Z	
desc. node	903 Mar 16 j 14:15	17° \approx 03'18		evening max el	905 Nov 28 j 05:34	28° Z 29'11	47°20'29
	903 Mar 27 j 20:45	0° H			905 Nov 29 j 17:17	0° \approx	
	903 Apr 22 j 12:14	0° Y		asc. node	905 Dec 22 j 12:35	20° \approx 37'55	
	903 May 17 j 18:05	0° B			906 Jan 07 j 02:19	0° H	
	903 Jun 11 j 17:19	0° II		greatest brilliancy	906 Jan 07 j 20:37	0° H 17'59	-4.9m
	903 Jul 06 j 10:21	0° E		retrograde	906 Jan 18 j 05:56	2° H 22'12	
asc. node	903 Jul 07 j 17:30	1° E 35'07			906 Jan 28 j 23:18	30° R \approx	
	903 Jul 30 j 21:01	0° Ω		evening set	906 Feb 04 j 19:04	26° \approx 22'14	
morning set	903 Aug 03 j 21:52	4° Ω 58'58		min. Earth dist.	906 Feb 07 j 09:46	24° \approx 45'00	0.27674 AU
	903 Aug 24 j 02:01	0° M		inferior conj	906 Feb 08 j 04:43	24° \approx 15'10	8°35'58
max. Earth dist.	903 Sep 06 j 09:37	16° M 35'59	1.72054 AU	minimum elong	906 Feb 08 j 00:44	24° \approx 21'26	8°35'44
				morning rise	906 Feb 11 j 06:38	22° \approx 20'16	
superior conj	903 Sep 09 j 20:43	20° M 55'21	1°22'25	direct	906 Feb 28 j 22:25	16° \approx 20'08	
minimum elong	903 Sep 10 j 01:11	21° M 09'18	1°22'23	greatest brilliancy	906 Mar 09 j 22:16	17° \approx 50'31	-4.8m
	903 Sep 17 j 03:01	0° Ω			906 Mar 30 j 20:36	0° H	
	903 Oct 11 j 02:00	0° M		desc. node	906 Apr 13 j 01:56	11° H 17'29	
evening rise	903 Oct 18 j 19:07	9° M 39'56		morning max el	906 Apr 19 j 03:06	16° H 59'59	46°01'58
desc. node	903 Oct 27 j 07:03	20° M 18'59			906 May 02 j 02:01	0° Y	
	903 Nov 04 j 00:32	0° J			906 May 29 j 18:51	0° B	
	903 Nov 27 j 23:43	0° Z			906 Jun 25 j 00:48	0° II	
	903 Dec 22 j 00:52	0° \approx			906 Jul 20 j 11:27	0° E	
	904 Jan 15 j 06:38	0° H		asc. node	906 Aug 04 j 05:28	17° E 43'50	
	904 Feb 08 j 21:41	0° Y			906 Aug 14 j 07:56	0° Ω	
asc. node	904 Feb 17 j 10:18	10° Y 12'44			906 Sep 07 j 17:25	0° M	
	904 Mar 05 j 05:56	0° B			906 Oct 01 j 19:14	0° Ω	
	904 Mar 31 j 22:54	0° II		morning set	906 Oct 13 j 16:53	14° Ω 55'11	
evening max el	904 Apr 21 j 20:41	21° II 27'30	45°25'09		906 Oct 25 j 16:51	0° M	
	904 May 01 j 02:26	0° E			906 Nov 18 j 12:55	0° J	
greatest brilliancy	904 May 29 j 14:43	19° E 05'38	-4.7m				
desc. node	904 Jun 07 j 23:35	21° E 07'45		superior conj	906 Nov 22 j 23:23	5° J 35'10	0°01'57
retrograde	904 Jun 09 j 09:04	21° E 09'59		minimum elong	906 Nov 22 j 23:55	5° J 36'50	0°01'56
evening set	904 Jun 24 j 21:28	16° E 35'22		behind sun begin	906 Nov 21 j 21:38	4° J 14'06	
inferior conj	904 Jun 30 j 20:41	13° E 00'35	-5°02'14	behind sun end	906 Nov 24 j 02:11	6° J 59'32	
minimum elong	904 Jun 30 j 11:23	13° E 15'07	5°00'00	max. Earth dist.	906 Nov 23 j 08:23	6° J 03'31	1.71046 AU
min. Earth dist.	904 Jun 30 j 21:30	12° E 59'19	0.28928 AU	desc. node	906 Nov 23 j 18:47	6° J 36'13	
morning rise	904 Jul 06 j 01:05	9° E 51'36			906 Dec 12 j 09:04	0° Z	
direct	904 Jul 22 j 12:49	4° E 43'56		evening rise	907 Jan 03 j 15:54	27° Z 59'28	
greatest brilliancy	904 Aug 02 j 03:11	6° E 45'04	-4.8m		907 Jan 05 j 06:21	0° \approx	
	904 Sep 04 j 03:38	0° Ω			907 Jan 29 j 06:11	0° H	

	907 Feb 22 j 10:38	0°♿		asc. node	909 Aug 31 j 17:21	4°♂58'38	
asc. node	907 Mar 16 j 22:18	27°♿34'03			909 Sep 21 j 14:28	0°♐	
	907 Mar 18 j 22:16	0°♄			909 Oct 16 j 00:59	0°♌	
	907 Apr 12 j 20:13	0°♈			909 Nov 09 j 02:38	0°♍	
	907 May 08 j 09:17	0°♊			909 Dec 03 j 00:27	0°♈	
	907 Jun 03 j 23:59	0°♎		desc. node	909 Dec 21 j 06:43	22°♈56'55	
evening max el	907 Jul 02 j 22:47	29°♎55'56 45°37'10			909 Dec 26 j 21:27	0°♊	
	907 Jul 03 j 00:30	0°♐		morning set	909 Dec 28 j 20:04	2°♊26'20	
desc. node	907 Jul 06 j 11:32	3°♐15'29			910 Jan 19 j 19:19	0°♋	
greatest brilliancy	907 Aug 11 j 13:43	28°♐14'47 -4.8m					
retrograde	907 Aug 20 j 20:26	29°♐48'45		superior conj	910 Feb 08 j 07:12	24°♋23'10 -1°23'56	
evening set	907 Sep 07 j 17:11	23°♐52'26		minimum elong	910 Feb 08 j 02:29	24°♋08'27 1°23'53	
inferior conj	907 Sep 10 j 21:09	21°♐57'42 -8°32'56		max. Earth dist.	910 Feb 12 j 09:10	29°♋28'57 1.71898 AU	
minimum elong	907 Sep 11 j 02:08	21°♐50'05 8°32'35			910 Feb 12 j 19:07	0°♈	
min. Earth dist.	907 Sep 11 j 16:54	21°♐27'30 0.27832 AU			910 Mar 08 j 21:54	0°♿	
morning rise	907 Sep 14 j 10:49	19°♐48'05		evening rise	910 Mar 19 j 23:24	13°♿41'58	
direct	907 Oct 01 j 23:35	13°♐56'30			910 Apr 02 j 04:35	0°♄	
greatest brilliancy	907 Oct 13 j 03:57	16°♐16'19 -4.9m		asc. node	910 Apr 13 j 10:07	13°♄47'58	
asc. node	907 Oct 27 j 14:45	24°♐39'18			910 Apr 26 j 15:52	0°♈	
	907 Nov 03 j 09:12	0°♌			910 May 21 j 08:24	0°♊	
morning max el	907 Nov 21 j 16:59	17°♌13'12 46°52'31			910 Jun 15 j 07:34	0°♎	
	907 Dec 03 j 19:11	0°♍		desc. node	910 Jul 10 j 16:33	0°♐	
	907 Dec 30 j 05:42	0°♈			910 Aug 02 j 23:23	26°♐51'06	
desc. node	908 Jan 24 j 12:13	0°♊			910 Aug 05 j 18:10	0°♌	
	908 Feb 16 j 04:23	27°♊23'13			910 Sep 02 j 05:07	0°♍	
	908 Feb 18 j 08:05	0°♋		evening max el	910 Sep 14 j 07:37	12°♍18'24 46°46'42	
	908 Mar 13 j 23:46	0°♈			910 Oct 03 j 23:52	0°♈	
	908 Apr 07 j 14:00	0°♿		greatest brilliancy	910 Oct 24 j 18:09	12°♈28'33 -4.9m	
	908 May 02 j 03:39	0°♄		retrograde	910 Nov 03 j 09:29	14°♈12'52	
morning set	908 May 24 j 23:22	27°♄54'18		evening set	910 Nov 17 j 17:26	10°♈08'55	
	908 May 26 j 16:26	0°♈		inferior conj	910 Nov 23 j 21:20	6°♈33'01 -0°03'31	
asc. node	908 Jun 08 j 07:46	15°♈29'26		minimum elong	910 Nov 23 j 21:28	6°♈32'49 0°03'28	
	908 Jun 20 j 03:24	0°♊		transit middle	910 Nov 23 j 21:28	6°♈32'49 0°03'28	
max. Earth dist.	908 Jun 27 j 21:45	9°♊33'04 1.73445 AU		transit begin	910 Nov 23 j 17:29	6°♈38'53	
				transit end	910 Nov 24 j 01:27	6°♈26'45	
superior conj	908 Jun 30 j 08:14	12°♊33'05 0°49'03		min. Earth dist.	910 Nov 23 j 19:13	6°♈36'14 0.26373 AU	
minimum elong	908 Jun 30 j 00:03	12°♊07'52 0°48'43		asc. node	910 Nov 24 j 02:43	6°♈24'49	
	908 Jul 14 j 11:50	0°♎		morning rise	910 Nov 30 j 01:35	2°♈57'32	
evening rise	908 Aug 05 j 04:41	26°♎50'12			910 Dec 07 j 03:09	30°♍	
	908 Aug 07 j 18:00	0°♐		direct	910 Dec 14 j 06:23	28°♍57'18	
	908 Aug 31 j 23:04	0°♌			910 Dec 21 j 14:14	0°♈	
	908 Sep 25 j 04:24	0°♍		greatest brilliancy	910 Dec 24 j 06:50	0°♈52'09 -4.9m	
desc. node	908 Sep 27 j 21:11	3°♍20'27			911 Jan 31 j 20:15	0°♊	
	908 Oct 19 j 11:05	0°♈		morning max el	911 Feb 02 j 14:36	1°♊45'29 46°45'37	
	908 Nov 12 j 20:34	0°♊			911 Mar 01 j 02:45	0°♋	
	908 Dec 07 j 12:24	0°♋		desc. node	911 Mar 15 j 16:18	16°♋26'38	
	909 Jan 01 j 19:17	0°♈			911 Mar 27 j 10:42	0°♈	
asc. node	909 Jan 19 j 00:27	19°♈34'14			911 Apr 22 j 00:45	0°♿	
	909 Jan 28 j 14:47	0°♿			911 May 17 j 05:46	0°♄	
evening max el	909 Feb 07 j 17:33	10°♿27'13 46°25'18			911 Jun 11 j 04:29	0°♈	
	909 Mar 01 j 12:55	0°♄			911 Jul 05 j 21:12	0°♊	
greatest brilliancy	909 Mar 18 j 18:38	10°♄11'55 -4.8m		asc. node	911 Jul 06 j 19:42	1°♊08'44	
retrograde	909 Mar 29 j 14:38	12°♄21'41			911 Jul 30 j 07:43	0°♎	
evening set	909 Apr 14 j 15:45	7°♄19'13		morning set	911 Aug 01 j 15:11	2°♎51'12	
inferior conj	909 Apr 19 j 22:37	4°♄04'48 4°36'55			911 Aug 23 j 12:41	0°♐	
minimum elong	909 Apr 20 j 07:16	3°♄51'10 4°34'46		max. Earth dist.	911 Sep 03 j 23:21	14°♐15'44 1.72110 AU	
min. Earth dist.	909 Apr 20 j 00:47	4°♄01'22 0.28813 AU					
morning rise	909 Apr 25 j 23:06	0°♄26'08		superior conj	911 Sep 07 j 12:40	18°♐41'56 1°23'08	
	909 Apr 26 j 18:11	30°♄		minimum elong	911 Sep 07 j 16:24	18°♐53'36 1°23'06	
desc. node	909 May 10 j 13:38	25°♄49'53			911 Sep 16 j 13:45	0°♌	
direct	909 May 11 j 09:55	25°♄49'03			911 Oct 10 j 12:52	0°♍	
greatest brilliancy	909 May 21 j 11:41	27°♄39'37 -4.7m		evening rise	911 Oct 16 j 07:23	7°♍13'48	
	909 May 26 j 23:47	0°♄		desc. node	911 Oct 26 j 09:06	19°♍50'55	
morning max el	909 Jun 29 j 05:14	25°♄36'17 45°44'34			911 Nov 03 j 11:35	0°♈	
	909 Jul 03 j 18:10	0°♈			911 Nov 27 j 10:58	0°♊	
	909 Aug 01 j 05:50	0°♊			911 Dec 21 j 12:22	0°♋	
	909 Aug 27 j 11:50	0°♎			912 Jan 14 j 18:27	0°♈	

	912 Feb 08 j 10:07	0°♿			914 Aug 13 j 19:12	0°♋		
asc. node	912 Feb 16 j 12:21	9°♿40'51			914 Sep 07 j 04:26	0°♎		
	912 Mar 04 j 19:38	0°♄			914 Oct 01 j 06:09	0°♊		
	912 Mar 31 j 15:37	0°♈		morning set	914 Oct 11 j 06:29	12°♊33'00		
evening max el	912 Apr 19 j 11:19	19°♈14'07	45°26'07		914 Oct 25 j 03:45	0°♎		
	912 May 01 j 06:04	0°♋			914 Nov 17 j 23:50	0°♌		
greatest brilliancy	912 May 27 j 06:33	16°♋56'44	-4.7m					
retrograde	912 Jun 07 j 00:50	19°♋01'33		superior conj	914 Nov 20 j 09:42	3°♌02'09	0°05'55	
desc. node	912 Jun 07 j 01:47	19°♋01'33		minimum elong	914 Nov 20 j 11:16	3°♌07'06	0°05'50	
evening set	912 Jun 22 j 11:42	14°♋29'08		behind sun begin	914 Nov 19 j 10:24	1°♌48'48		
inferior conj	912 Jun 28 j 12:55	10°♋51'48	-4°45'47	behind sun end	914 Nov 21 j 12:09	4°♌25'24		
minimum elong	912 Jun 28 j 03:54	11°♋05'52	4°43'34	max. Earth dist.	914 Nov 20 j 17:59	3°♌28'14	1.71052 AU	
min. Earth dist.	912 Jun 28 j 13:56	10°♋50'12	0.28938 AU	desc. node	914 Nov 22 j 21:00	6°♌08'49		
morning rise	912 Jul 03 j 19:50	7°♋39'05			914 Dec 11 j 19:59	0°♐		
direct	912 Jul 20 j 04:29	2°♋34'48		evening rise	915 Jan 01 j 02:14	25°♐27'03		
greatest brilliancy	912 Jul 30 j 19:47	4°♋36'16	-4.7m		915 Jan 04 j 17:19	0°♑		
	912 Sep 04 j 03:26	0°♋			915 Jan 28 j 17:15	0°♒		
morning max el	912 Sep 07 j 13:24	3°♋18'01	46°11'59		915 Feb 21 j 21:52	0°♑		
asc. node	912 Sep 28 j 05:06	24°♋52'27		asc. node	915 Mar 16 j 00:16	27°♑05'01		
	912 Oct 02 j 20:11	0°♎			915 Mar 18 j 09:49	0°♄		
	912 Oct 28 j 18:29	0°♊			915 Apr 12 j 08:22	0°♈		
	912 Nov 22 j 14:07	0°♎			915 May 07 j 22:37	0°♋		
	912 Dec 16 j 22:12	0°♌			915 Jun 03 j 15:55	0°♋		
	913 Jan 10 j 02:00	0°♐		evening max el	915 Jun 30 j 13:54	27°♋42'34	45°35'33	
desc. node	913 Jan 17 j 18:36	9°♐33'58			915 Jul 03 j 00:02	0°♎		
	913 Feb 03 j 05:01	0°♑		desc. node	915 Jul 05 j 13:37	2°♎22'34		
	913 Feb 27 j 08:50	0°♒		greatest brilliancy	915 Aug 09 j 01:29	25°♎55'28	-4.8m	
morning set	913 Mar 14 j 11:40	18°♒43'51		retrograde	915 Aug 18 j 10:24	27°♎30'43		
	913 Mar 23 j 14:22	0°♑		evening set	915 Sep 05 j 08:16	21°♎32'04		
	913 Apr 16 j 21:58	0°♄		inferior conj	915 Sep 08 j 11:09	19°♎38'43	-8°37'20	
				minimum elong	915 Sep 08 j 15:21	19°♎32'18	8°37'04	
superior conj	913 Apr 21 j 09:44	5°♄31'40	-0°44'08	min. Earth dist.	915 Sep 09 j 05:56	19°♎09'57	0.27896 AU	
minimum elong	913 Apr 21 j 18:01	5°♄57'10	0°43'47	morning rise	915 Sep 11 j 22:13	17°♎32'53		
max. Earth dist.	913 Apr 23 j 01:54	7°♄35'15	1.73347 AU	direct	915 Sep 29 j 14:57	11°♎36'43		
asc. node	913 May 10 j 22:01	29°♄31'03		greatest brilliancy	915 Oct 10 j 17:49	13°♎55'20	-4.9m	
	913 May 11 j 07:26	0°♈		asc. node	915 Oct 26 j 16:54	23°♎24'51		
evening rise	913 May 28 j 05:48	20°♈46'55			915 Nov 03 j 17:45	0°♊		
	913 Jun 04 j 18:10	0°♋		morning max el	915 Nov 19 j 08:14	14°♊53'10	46°51'48	
	913 Jun 29 j 05:52	0°♋			915 Dec 03 j 13:43	0°♎		
	913 Jul 23 j 19:08	0°♎			915 Dec 29 j 20:35	0°♌		
	913 Aug 17 j 11:33	0°♊			916 Jan 24 j 01:25	0°♐		
desc. node	913 Aug 30 j 11:19	15°♊41'12		desc. node	916 Feb 15 j 06:24	26°♐51'56		
	913 Sep 11 j 09:17	0°♎			916 Feb 17 j 20:20	0°♑		
	913 Oct 06 j 15:50	0°♌			916 Mar 13 j 11:26	0°♒		
	913 Nov 01 j 16:06	0°♐			916 Apr 07 j 01:15	0°♑		
evening max el	913 Nov 25 j 19:14	26°♐04'54	47°20'59		916 May 01 j 14:38	0°♄		
	913 Nov 29 j 16:31	0°♑		morning set	916 May 22 j 17:37	25°♄50'11		
asc. node	913 Dec 21 j 14:41	19°♑22'22			916 May 26 j 03:14	0°♈		
greatest brilliancy	914 Jan 05 j 11:26	27°♑56'07	-4.9m	asc. node	916 Jun 07 j 09:56	15°♈03'08		
	914 Jan 15 j 03:13	0°♒			916 Jun 19 j 14:06	0°♋		
retrograde	914 Jan 15 j 20:34	0°♒00'39		max. Earth dist.	916 Jun 25 j 19:49	7°♋40'18	1.73469 AU	
	914 Jan 16 j 13:53	30°♒						
evening set	914 Feb 02 j 06:42	24°♒04'56		superior conj	916 Jun 28 j 02:42	10°♋29'13	0°46'28	
min. Earth dist.	914 Feb 04 j 23:24	22°♒24'59	0.27617 AU	minimum elong	916 Jun 27 j 18:45	10°♋04'46	0°46'08	
inferior conj	914 Feb 05 j 18:59	21°♒54'15	8°31'35		916 Jul 13 j 22:33	0°♋		
minimum elong	914 Feb 05 j 14:13	22°♒01'44	8°31'14	evening rise	916 Aug 02 j 22:29	24°♌43'07		
morning rise	914 Feb 08 j 21:57	19°♒58'01			916 Aug 07 j 04:52	0°♎		
direct	914 Feb 26 j 11:39	13°♒59'56			916 Aug 31 j 10:12	0°♊		
greatest brilliancy	914 Mar 07 j 11:50	15°♒30'46	-4.8m		916 Sep 24 j 15:52	0°♎		
	914 Mar 31 j 08:05	0°♒		desc. node	916 Sep 26 j 23:13	2°♎51'09		
desc. node	914 Apr 12 j 03:57	10°♒23'20			916 Oct 18 j 22:58	0°♌		
morning max el	914 Apr 16 j 17:41	14°♒43'58	46°03'22		916 Nov 12 j 09:00	0°♐		
	914 May 01 j 20:33	0°♑			916 Dec 07 j 01:41	0°♑		
	914 May 29 j 09:18	0°♄			917 Jan 01 j 10:09	0°♒		
	914 Jun 24 j 13:29	0°♈		asc. node	917 Jan 18 j 02:29	18°♒53'15		
	914 Jul 19 j 23:13	0°♋			917 Jan 28 j 09:39	0°♑		
asc. node	914 Aug 03 j 07:27	17°♋15'18		evening max el	917 Feb 05 j 09:35	8°♑13'27	46°27'50	

	197 Mar 02 j 04:26	0°♄		morning set	919 Jul 30 j 08:29	0°♌42'35	
greatest brilliancy	197 Mar 16 j 11:48	8°♄02'19	-4.8m		919 Aug 22 j 23:39	0°♍	
retrograde	197 Mar 27 j 07:20	10°♄11'21		max. Earth dist.	919 Sep 01 j 14:36	11°♍59'21	1.72166 AU
evening set	197 Apr 12 j 10:45	5°♄05'35					
inferior conj	197 Apr 17 j 15:00	1°♄54'31	4°53'42	superior conj	919 Sep 05 j 04:36	16°♍27'33	1°23'44
minimum elong	197 Apr 17 j 23:58	1°♄40'22	4°51'31	minimum elong	919 Sep 05 j 07:34	16°♍36'51	1°23'42
min. Earth dist.	197 Apr 17 j 16:44	1°♄51'46	0.28795 AU		919 Sep 16 j 00:46	0°♎	
	197 Apr 20 j 16:21	30°♋♂			919 Oct 10 j 00:01	0°♍	
morning rise	197 Apr 23 j 13:32	28°♂18'24		evening rise	919 Oct 13 j 19:43	4°♍47'04	
direct	197 May 09 j 02:26	23°♂39'19		desc. node	919 Oct 25 j 11:14	19°♍22'17	
desc. node	197 May 09 j 15:51	23°♂39'41			919 Nov 02 j 22:55	0°♎	
greatest brilliancy	197 May 19 j 02:18	25°♂28'20	-4.7m		919 Nov 26 j 22:32	0°♏	
	197 May 28 j 15:33	0°♄			919 Dec 21 j 00:11	0°♎	
morning max el	197 Jun 26 j 21:04	23°♄26'18	45°44'15		920 Jan 14 j 06:39	0°♋	
	197 Jul 03 j 14:33	0°♌			920 Feb 07 j 22:58	0°♂	
	197 Jul 31 j 20:53	0°♎		asc. node	920 Feb 15 j 14:22	9°♂07'40	
	197 Aug 27 j 00:54	0°♌			920 Mar 04 j 09:48	0°♄	
asc. node	197 Aug 30 j 19:22	4°♌26'36			920 Mar 31 j 08:58	0°♌	
	197 Sep 21 j 02:37	0°♍		evening max el	920 Apr 17 j 02:11	17°♌00'39	45°27'22
	197 Oct 15 j 12:40	0°♎			920 May 01 j 11:53	0°♎	
	197 Nov 08 j 14:05	0°♍		greatest brilliancy	920 May 24 j 21:56	14°♎46'57	-4.7m
	197 Dec 02 j 11:45	0°♎		retrograde	920 Jun 04 j 17:10	16°♎53'03	
desc. node	197 Dec 20 j 08:45	22°♎28'00		desc. node	920 Jun 06 j 03:46	16°♎50'37	
morning set	197 Dec 26 j 05:43	29°♎50'47		evening set	920 Jun 20 j 02:16	12°♎22'19	
	197 Dec 26 j 08:39	0°♏		inferior conj	920 Jun 26 j 05:18	8°♎42'45	-4°29'00
	198 Jan 19 j 06:25	0°♎		minimum elong	920 Jun 25 j 20:38	8°♎56'16	4°26'49
				min. Earth dist.	920 Jun 26 j 06:19	8°♎41'10	0.28949 AU
superior conj	918 Feb 05 j 18:57	21°♎55'29	-1°23'04	morning rise	920 Jul 01 j 14:41	5°♎26'36	
minimum elong	918 Feb 05 j 13:17	21°♎37'50	1°23'00	direct	920 Jul 17 j 20:26	0°♎25'19	
max. Earth dist.	918 Feb 09 j 23:13	27°♎08'35	1.71839 AU	greatest brilliancy	920 Jul 28 j 12:31	2°♎27'18	-4.7m
	918 Feb 12 j 06:09	0°♋			920 Sep 04 j 02:33	0°♌	
	918 Mar 08 j 08:51	0°♂		morning max el	920 Sep 05 j 05:03	1°♌04'30	46°10'31
evening rise	918 Mar 17 j 13:41	11°♂23'49		asc. node	920 Sep 27 j 07:14	24°♌12'00	
	918 Apr 01 j 15:33	0°♄			920 Oct 02 j 12:20	0°♍	
asc. node	918 Apr 12 j 12:16	13°♄20'41			920 Oct 28 j 08:19	0°♎	
	918 Apr 26 j 03:00	0°♌			920 Nov 22 j 02:54	0°♍	
	918 May 20 j 19:54	0°♎			920 Dec 16 j 10:23	0°♎	
	918 Jun 14 j 19:43	0°♌			921 Jan 09 j 13:50	0°♏	
	918 Jul 10 j 05:49	0°♍		desc. node	921 Jan 16 j 20:34	9°♏03'38	
desc. node	918 Aug 02 j 01:22	26°♍14'13			921 Feb 02 j 16:33	0°♎	
	918 Aug 05 j 09:31	0°♎			921 Feb 26 j 20:09	0°♋	
	918 Sep 02 j 01:13	0°♍		morning set	921 Mar 12 j 01:43	16°♋24'03	
evening max el	918 Sep 11 j 20:16	9°♍53'07	46°44'08		921 Mar 23 j 01:30	0°♂	
	918 Oct 04 j 17:00	0°♎			921 Apr 16 j 08:59	0°♄	
greatest brilliancy	918 Oct 22 j 08:01	10°♎00'45	-4.9m				
retrograde	918 Oct 31 j 20:51	11°♎42'53		superior conj	921 Apr 19 j 02:24	3°♎21'23	-0°46'56
evening set	918 Nov 15 j 06:30	7°♎38'03		minimum elong	921 Apr 19 j 11:03	3°♎48'03	0°46'35
inferior conj	918 Nov 21 j 09:26	4°♎03'42	-0°28'16	max. Earth dist.	921 Apr 20 j 19:52	5°♎29'00	1.73311 AU
minimum elong	918 Nov 21 j 10:31	4°♎02'02	0°27'54	asc. node	921 May 10 j 00:09	29°♎03'55	
min. Earth dist.	918 Nov 21 j 09:21	4°♎03'49	0.26382 AU		921 May 10 j 18:25	0°♌	
asc. node	918 Nov 23 j 04:51	2°♎57'45		evening rise	921 May 26 j 00:29	18°♌43'21	
morning rise	918 Nov 27 j 14:27	0°♎26'48			921 Jun 04 j 05:12	0°♎	
	918 Nov 28 j 11:09	30°♋♍			921 Jun 28 j 17:05	0°♌	
direct	918 Dec 11 j 18:10	26°♍27'33			921 Jul 23 j 06:44	0°♍	
greatest brilliancy	918 Dec 21 j 21:23	28°♍24'25	-4.9m		921 Aug 16 j 23:45	0°♎	
	918 Dec 25 j 15:16	0°♎		desc. node	921 Aug 29 j 13:21	15°♎09'21	
morning max el	919 Jan 31 j 02:40	29°♎16'40	46°46'52		921 Sep 10 j 22:24	0°♍	
	919 Jan 31 j 19:54	0°♏			921 Oct 06 j 06:24	0°♎	
	919 Feb 28 j 19:28	0°♎			921 Nov 01 j 09:23	0°♏	
desc. node	919 Mar 14 j 18:18	15°♎49'23		evening max el	921 Nov 23 j 09:48	23°♏41'40	47°21'29
	919 Mar 27 j 00:45	0°♋			921 Nov 29 j 17:23	0°♎	
	919 Apr 21 j 13:25	0°♂		asc. node	921 Dec 20 j 16:40	18°♎02'47	
	919 May 16 j 17:36	0°♄		greatest brilliancy	922 Jan 03 j 01:34	25°♎31'49	-4.9m
	919 Jun 10 j 15:50	0°♌		retrograde	922 Jan 13 j 11:33	27°♎37'10	
	919 Jul 05 j 08:16	0°♎		evening set	922 Jan 30 j 17:49	21°♎46'07	
asc. node	919 Jul 05 j 21:39	0°♎40'52		min. Earth dist.	922 Feb 02 j 12:30	20°♎03'25	0.27558 AU
	919 Jul 29 j 18:41	0°♌		inferior conj	922 Feb 03 j 09:00	19°♎31'21	8°26'14

minimum elong	922 Feb 03 j 03:28	19°  40'00	8°25'46	evening rise	924 Jul 31 j 16:24	22°  36'01	
morning rise	922 Feb 06 j 13:23	17°  33'20			924 Aug 06 j 15:53	0° 	
direct	922 Feb 24 j 01:06	11°  37'53			924 Aug 30 j 21:26	0° 	
greatest brilliancy	922 Mar 05 j 00:39	13°  08'37	-4.8m		924 Sep 24 j 03:24	0° 	
	922 Mar 31 j 17:08	0° 		desc. node	924 Sep 26 j 01:25	2°  12'22'09	
desc. node	922 Apr 11 j 06:09	9°  29'33			924 Oct 18 j 10:55	0° 	
morning max el	922 Apr 14 j 08:57	12°  28'25	46°04'46		924 Nov 11 j 21:33	0° 	
	922 May 01 j 15:02	0° 			924 Dec 06 j 15:11	0° 	
	922 May 28 j 23:57	0° 			925 Jan 01 j 01:25	0° 	
	922 Jun 24 j 02:25	0° 		asc. node	925 Jan 17 j 04:31	18°  11'01	
	922 Jul 19 j 11:13	0° 			925 Jan 28 j 05:21	0° 	
asc. node	922 Aug 02 j 09:32	16°  46'19		evening max el	925 Feb 03 j 00:49	5°  56'37	46°30'17
	922 Aug 13 j 06:42	0° 			925 Mar 03 j 02:06	0° 	
	922 Sep 06 j 15:41	0° 		greatest brilliancy	925 Mar 14 j 05:18	5°  51'47	-4.8m
	922 Sep 30 j 17:20	0° 		retrograde	925 Mar 24 j 23:21	7°  59'33	
morning set	922 Oct 08 j 20:11	10°  10'23		evening set	925 Apr 10 j 05:34	2°  50'25	
	922 Oct 24 j 14:57	0° 			925 Apr 14 j 20:23	30°  1'00	
	922 Nov 17 j 11:05	0° 		inferior conj	925 Apr 15 j 07:10	29°  42'57	5°10'04
superior conj	922 Nov 17 j 19:50	0°  27'34	0°09'52	minimum elong	925 Apr 15 j 16:22	29°  28'23	5°07'54
minimum elong	922 Nov 17 j 22:26	0°  35'45	0°09'44	min. Earth dist.	925 Apr 15 j 08:44	29°  40'27	0.28773 AU
behind sun begin	922 Nov 17 j 01:03	29°  12'26		morning rise	925 Apr 21 j 03:31	26°  09'31	
behind sun end	922 Nov 18 j 19:49	1°  43'03		direct	925 May 06 j 18:10	21°  28'18	
max. Earth dist.	922 Nov 18 j 02:54	0°  49'48	1.71062 AU	desc. node	925 May 08 j 17:51	21°  32'51	
desc. node	922 Nov 21 j 23:02	5°  39'49		greatest brilliancy	925 May 16 j 17:01	23°  16'10	-4.7m
	922 Dec 11 j 07:16	0° 			925 May 29 j 19:39	0° 	
evening rise	922 Dec 29 j 12:07	22°  35'20'00		morning max el	925 Jun 24 j 12:00	21°  13'38	45°44'04
	923 Jan 04 j 04:38	0° 			925 Jul 03 j 10:27	0° 	
	923 Jan 28 j 04:38	0° 			925 Jul 31 j 11:50	0° 	
	923 Feb 21 j 09:25	0° 			925 Aug 26 j 13:56	0° 	
asc. node	923 Mar 15 j 02:26	26°  09'35'39		asc. node	925 Aug 29 j 21:28	3°  54'47	
	923 Mar 17 j 21:41	0° 			925 Sep 20 j 14:43	0° 	
	923 Apr 11 j 20:52	0° 			925 Oct 15 j 00:17	0° 	
	923 May 07 j 12:22	0° 			925 Nov 08 j 01:26	0° 	
	923 Jun 03 j 08:25	0° 			925 Dec 01 j 22:57	0° 	
evening max el	923 Jun 28 j 05:20	25°  02'29'25	45°34'03	desc. node	925 Dec 19 j 10:45	21°  35'16	
	923 Jul 03 j 00:59	0° 		morning set	925 Dec 23 j 15:31	27°  15'51	
desc. node	923 Jul 04 j 15:38	1°  12'27'53			925 Dec 25 j 19:46	0° 	
greatest brilliancy	923 Aug 06 j 13:53	23°  13'36'53	-4.8m		926 Jan 18 j 17:29	0° 	
retrograde	923 Aug 16 j 00:11	25°  12'51		superior conj	926 Feb 03 j 06:24	19°  26'56	-1°22'02
evening set	923 Sep 02 j 23:12	19°  12'48		minimum elong	926 Feb 02 j 23:52	19°  06'29	1°21'56
inferior conj	923 Sep 06 j 01:23	17°  12'01'11	-8°40'42	max. Earth dist.	926 Feb 07 j 10:04	24°  38'13	1.71787 AU
minimum elong	923 Sep 06 j 04:46	17°  14'59	8°40'33		926 Feb 11 j 17:09	0° 	
min. Earth dist.	923 Sep 06 j 19:17	16°  15'24'42	0.27956 AU		926 Mar 07 j 19:50	0° 	
morning rise	923 Sep 09 j 10:08	15°  17'31		evening rise	926 Mar 15 j 03:18	9°  03'29	
direct	923 Sep 27 j 06:20	9°  17'34			926 Apr 01 j 02:33	0° 	
greatest brilliancy	923 Oct 08 j 07:44	11°  17'34'34	-4.9m	asc. node	926 Apr 11 j 14:19	12°  18'53'05	
asc. node	923 Oct 25 j 19:01	22°  12'23			926 Apr 25 j 14:10	0° 	
	923 Nov 04 j 00:00	0° 			926 May 20 j 07:26	0° 	
morning max el	923 Nov 16 j 22:46	12°  30'54	46°50'43		926 Jun 14 j 07:54	0° 	
	923 Dec 03 j 08:00	0° 			926 Jul 09 j 19:10	0° 	
	923 Dec 29 j 11:32	0° 		desc. node	926 Aug 01 j 03:28	25°  17'37'28	
	924 Jan 23 j 14:49	0° 			926 Aug 05 j 01:03	0° 	
desc. node	924 Feb 14 j 08:30	26°  32'00'04			926 Sep 01 j 21:53	0° 	
	924 Feb 17 j 08:50	0° 		evening max el	926 Sep 09 j 08:30	7°  12'27'17	46°41'43
	924 Mar 12 j 23:20	0° 			926 Oct 05 j 15:37	0° 	
	924 Apr 06 j 12:43	0° 		greatest brilliancy	926 Oct 19 j 21:54	7°  33'47	-4.9m
	924 May 01 j 01:47	0° 		retrograde	926 Oct 29 j 08:27	9°  14'14	
morning set	924 May 20 j 11:36	23°  44'42		evening set	926 Nov 12 j 19:50	5°  17'07'49	
	924 May 25 j 14:12	0° 		inferior conj	926 Nov 18 j 21:39	1°  35'32	-0°52'45
asc. node	924 Jun 06 j 11:53	14°  11'35'36		minimum elong	926 Nov 18 j 23:40	1°  32'28	0°52'06
	924 Jun 19 j 00:58	0° 		min. Earth dist.	926 Nov 18 j 23:34	1°  32'37	0.26391 AU
max. Earth dist.	924 Jun 23 j 16:04	5°  41'32	1.73490 AU		926 Nov 21 j 12:52	30°  12'52	
				asc. node	926 Nov 22 j 06:45	29°  13'33'36	
superior conj	924 Jun 25 j 21:07	8°  42'24'40	0°43'49	morning rise	926 Nov 25 j 03:14	27°  13'57'45	
minimum elong	924 Jun 25 j 13:28	8°  42'01'08	0°43'30	direct	926 Dec 09 j 05:56	23°  13'58'49	
	924 Jul 13 j 09:27	0° 		greatest brilliancy	926 Dec 19 j 12:07	25°  13'58'10	-4.9m

	926 Dec 27 j 17:59	0°♊			929 Jul 22 j 18:02	0°♎		
morning max el	927 Jan 28 j 15:24	26°♊50'19	46°47'59		929 Aug 16 j 11:40	0°♌		
	927 Jan 31 j 18:13	0°♊		desc. node	929 Aug 28 j 15:30	14°♌38'45		
	927 Feb 28 j 11:38	0°♋			929 Sep 10 j 11:16	0°♍		
desc. node	927 Mar 13 j 20:28	15°♋13'31			929 Oct 05 j 20:47	0°♎		
	927 Mar 26 j 14:30	0°♋			929 Nov 01 j 02:40	0°♏		
	927 Apr 21 j 01:53	0°♌		evening max el	929 Nov 21 j 01:25	21°♏22'06	47°21'52	
	927 May 16 j 05:17	0°♍			929 Nov 29 j 19:05	0°♐		
	927 Jun 10 j 03:02	0°♎		asc. node	929 Dec 19 j 18:48	16°♐42'01		
asc. node	927 Jul 04 j 23:45	0°♏13'55		greatest brilliancy	929 Dec 31 j 15:41	23°♐08'36	-4.9m	
	927 Jul 04 j 19:11	0°♐		retrograde	930 Jan 11 j 02:43	25°♐14'37		
morning set	927 Jul 27 j 01:34	28°♐33'52		evening set	930 Jan 28 j 04:45	19°♐28'48		
	927 Jul 29 j 05:29	0°♑		min. Earth dist.	930 Jan 31 j 01:31	17°♐43'08	0.27491 AU	
	927 Aug 22 j 10:26	0°♑		inferior conj	930 Jan 31 j 22:59	17°♐09'35	8°20'07	
max. Earth dist.	927 Aug 30 j 07:16	9°♑47'58	1.72223 AU	minimum elong	930 Jan 31 j 16:44	17°♐19'21	8°19'30	
				morning rise	930 Feb 04 j 05:02	15°♐09'20		
superior conj	927 Sep 02 j 20:26	14°♑13'30	1°24'10	direct	930 Feb 21 j 14:55	9°♐17'19		
minimum elong	927 Sep 02 j 22:39	14°♑20'25	1°24'10	greatest brilliancy	930 Mar 02 j 13:03	10°♐47'23	-4.8m	
	927 Sep 15 j 11:37	0°♑			930 Mar 31 j 22:58	0°♒		
	927 Oct 09 j 11:00	0°♒		desc. node	930 Apr 10 j 08:08	8°♒38'01		
evening rise	927 Oct 11 j 08:13	2°♒21'32		morning max el	930 Apr 12 j 00:08	10°♒14'16	46°06'09	
desc. node	927 Oct 24 j 13:15	18°♒53'52			930 May 01 j 08:29	0°♓		
	927 Nov 02 j 10:04	0°♓			930 May 28 j 13:55	0°♔		
	927 Nov 26 j 09:50	0°♏			930 Jun 23 j 14:49	0°♕		
	927 Dec 20 j 11:42	0°♐			930 Jul 18 j 22:47	0°♖		
	928 Jan 13 j 18:30	0°♑		asc. node	930 Aug 01 j 11:40	16°♖18'34		
	928 Feb 07 j 11:30	0°♒			930 Aug 12 j 17:49	0°♗		
asc. node	928 Feb 14 j 16:30	8°♒35'53			930 Sep 06 j 02:35	0°♘		
	928 Mar 03 j 23:45	0°♓			930 Sep 30 j 04:10	0°♙		
	928 Mar 31 j 02:25	0°♔		morning set	930 Oct 06 j 09:50	7°♙48'49		
evening max el	928 Apr 14 j 17:50	14°♔49'48	45°28'32		930 Oct 24 j 01:48	0°♚		
	928 May 01 j 19:48	0°♕						
greatest brilliancy	928 May 22 j 12:48	12°♕36'56	-4.7m	superior conj	930 Nov 15 j 06:01	27°♚54'19	0°13'47	
retrograde	928 Jun 02 j 09:45	14°♕44'43		minimum elong	930 Nov 15 j 09:37	28°♚05'37	0°13'37	
desc. node	928 Jun 05 j 05:47	14°♕35'13		behind sun begin	930 Nov 14 j 18:57	27°♚19'28		
evening set	928 Jun 17 j 16:53	10°♕15'32		behind sun end	930 Nov 16 j 00:17	28°♚51'47		
inferior conj	928 Jun 23 j 21:32	6°♕33'50	-4°11'46	max. Earth dist.	930 Nov 15 j 09:48	28°♚06'13	1.71072 AU	
minimum elong	928 Jun 23 j 13:14	6°♕46'44	4°09'38		930 Nov 16 j 21:58	0°♛		
min. Earth dist.	928 Jun 23 j 22:17	6°♕32'39	0.28961 AU	desc. node	930 Nov 21 j 01:00	5°♛11'42		
morning rise	928 Jun 29 j 09:21	3°♕14'29			930 Dec 10 j 18:12	0°♜		
	928 Jul 06 j 04:25	30°♕♎		evening rise	930 Dec 26 j 21:54	20°♜17'42		
direct	928 Jul 15 j 12:46	28°♕16'05			931 Jan 03 j 15:37	0°♞		
	928 Jul 25 j 07:55	0°♕			931 Jan 27 j 15:41	0°♟		
greatest brilliancy	928 Jul 26 j 04:42	0°♕18'16	-4.7m		931 Feb 20 j 20:35	0°♠		
morning max el	928 Sep 02 j 21:17	28°♕53'24	46°09'03	asc. node	931 Mar 14 j 04:29	26°♠07'12		
	928 Sep 04 j 00:27	0°♎			931 Mar 17 j 09:09	0°♔		
asc. node	928 Sep 26 j 09:22	23°♎32'46			931 Apr 11 j 08:56	0°♕		
	928 Oct 02 j 03:56	0°♏			931 May 07 j 01:44	0°♖		
	928 Oct 27 j 21:45	0°♑			931 Jun 03 j 00:44	0°♗		
	928 Nov 21 j 15:19	0°♒		evening max el	931 Jun 25 j 20:13	23°♗16'08	45°32'21	
	928 Dec 15 j 22:14	0°♓			931 Jul 03 j 02:45	0°♘		
	929 Jan 09 j 01:16	0°♏		desc. node	931 Jul 03 j 17:45	0°♙33'26		
desc. node	929 Jan 15 j 22:42	8°♏35'01		greatest brilliancy	931 Aug 04 j 02:52	21°♙20'03	-4.8m	
	929 Feb 02 j 03:41	0°♐		retrograde	931 Aug 13 j 13:28	22°♙56'07		
	929 Feb 26 j 07:01	0°♑		evening set	931 Aug 31 j 13:45	16°♙55'24		
morning set	929 Mar 09 j 16:00	14°♑06'15		inferior conj	931 Sep 03 j 15:41	15°♙02'54	-8°43'09	
	929 Mar 22 j 12:11	0°♒		minimum elong	931 Sep 03 j 18:12	14°♙59'02	8°43'04	
	929 Apr 15 j 19:36	0°♓		min. Earth dist.	931 Sep 04 j 09:02	14°♙36'11	0.28017 AU	
				morning rise	931 Sep 06 j 22:27	13°♙02'51		
superior conj	929 Apr 16 j 19:07	1°♓12'26	-0°49'40	direct	931 Sep 24 j 21:20	6°♙59'32		
minimum elong	929 Apr 17 j 04:07	1°♓40'08	0°49'19	greatest brilliancy	931 Oct 05 j 22:21	9°♙15'33	-4.9m	
max. Earth dist.	929 Apr 18 j 15:32	3°♓29'13	1.73281 AU	asc. node	931 Oct 24 j 20:57	21°♙02'25		
asc. node	929 May 09 j 02:07	28°♓37'21			931 Nov 04 j 03:57	0°♚		
	929 May 10 j 05:01	0°♔		morning max el	931 Nov 14 j 12:15	10°♚06'50	46°49'42	
evening rise	929 May 23 j 19:06	16°♔40'41			931 Dec 03 j 01:34	0°♛		
	929 Jun 03 j 15:53	0°♕			931 Dec 29 j 02:00	0°♜		
	929 Jun 28 j 03:59	0°♎			932 Jan 23 j 03:49	0°♏		

desc. node	932 Feb 13 j 10:35	25°♄49'11			934 Sep 01 j 19:07	0°♌	
	932 Feb 16 j 20:58	0°♊		evening max el	934 Sep 06 j 20:42	5°♌01'56	46°39'06
	932 Mar 12 j 10:53	0°♋			934 Oct 06 j 22:49	0°♌	
	932 Apr 05 j 23:50	0°♎		greatest brilliancy	934 Oct 17 j 11:00	5°♌05'44	-4.9m
	932 Apr 30 j 12:35	0°♏		retrograde	934 Oct 26 j 20:12	6°♌45'18	
morning set	932 May 18 j 05:57	21°♌41'27		evening set	934 Nov 10 j 09:14	2°♌36'36	
	932 May 25 j 00:47	0°♐			934 Nov 14 j 22:28	30°♌	
asc. node	932 Jun 05 j 13:59	14°♐09'43		inferior conj	934 Nov 16 j 09:42	29°♌06'38	-1°17'17
	932 Jun 18 j 11:29	0°♑		minimum elong	934 Nov 16 j 12:39	29°♌02'09	1°16'20
max. Earth dist.	932 Jun 21 j 12:09	3°♑43'22	1.73512 AU	min. Earth dist.	934 Nov 16 j 13:25	29°♌00'59	0.26413 AU
				asc. node	934 Nov 21 j 08:56	26°♌10'22	
superior conj	932 Jun 23 j 15:56	6°♑22'36	0°41'09	morning rise	934 Nov 22 j 15:43	25°♌28'29	
minimum elong	932 Jun 23 j 08:37	6°♑00'04	0°40'49	direct	934 Dec 06 j 18:06	21°♌29'05	
	932 Jul 12 j 20:01	0°♒		greatest brilliancy	934 Dec 17 j 02:40	23°♌30'56	-4.9m
evening rise	932 Jul 29 j 10:41	20°♒31'06			934 Dec 29 j 04:08	0°♌	
	932 Aug 06 j 02:39	0°♓		morning max el	935 Jan 26 j 05:05	24°♌25'39	46°49'09
	932 Aug 30 j 08:27	0°♈			935 Jan 31 j 15:57	0°♈	
	932 Sep 23 j 14:46	0°♌			935 Feb 28 j 03:41	0°♊	
desc. node	932 Sep 25 j 03:23	1°♌53'00		desc. node	935 Mar 12 j 22:29	14°♊37'03	
	932 Oct 17 j 22:44	0°♌			935 Mar 26 j 04:12	0°♋	
	932 Nov 11 j 09:59	0°♈			935 Apr 20 j 14:20	0°♎	
	932 Dec 06 j 04:36	0°♊			935 May 15 j 16:59	0°♏	
	932 Dec 31 j 16:41	0°♋			935 Jun 09 j 14:15	0°♐	
asc. node	933 Jan 16 j 06:39	17°♋29'19		asc. node	935 Jul 04 j 01:53	29°♐46'59	
	933 Jan 28 j 01:23	0°♎			935 Jul 04 j 06:09	0°♑	
evening max el	933 Jan 31 j 15:12	3°♎38'10	46°32'48	morning set	935 Jul 25 j 19:13	26°♑26'59	
	933 Mar 04 j 07:34	0°♏			935 Jul 28 j 16:17	0°♒	
greatest brilliancy	933 Mar 11 j 23:05	3°♏42'14	-4.8m		935 Aug 21 j 21:13	0°♓	
retrograde	933 Mar 22 j 15:22	5°♏48'50		max. Earth dist.	935 Aug 28 j 01:27	7°♓41'22	1.72275 AU
evening set	933 Apr 08 j 00:33	0°♏36'04					
	933 Apr 09 j 00:51	30°♏		superior conj	935 Aug 31 j 12:55	12°♓01'31	1°24'29
inferior conj	933 Apr 12 j 23:29	27°♎32'29	5°26'02	minimum elong	935 Aug 31 j 14:24	12°♓06'06	1°24'29
minimum elong	933 Apr 13 j 08:52	27°♎17'37	5°23'54		935 Sep 14 j 22:29	0°♈	
min. Earth dist.	933 Apr 13 j 01:09	27°♎29'51	0.28749 AU	evening rise	935 Oct 08 j 21:19	29°♈57'46	
morning rise	933 Apr 18 j 17:28	24°♎02'00			935 Oct 08 j 22:01	0°♌	
direct	933 May 04 j 09:32	19°♎18'14		desc. node	935 Oct 23 j 15:18	18°♌25'20	
desc. node	933 May 07 j 19:51	19°♎31'37			935 Nov 01 j 21:19	0°♌	
greatest brilliancy	933 May 14 j 08:24	21°♎05'40	-4.7m		935 Nov 25 j 21:20	0°♈	
	933 May 30 j 15:36	0°♏			935 Dec 19 j 23:27	0°♊	
morning max el	933 Jun 22 j 02:56	19°♏01'52	45°44'06		936 Jan 13 j 06:39	0°♋	
	933 Jul 03 j 05:23	0°♐			936 Feb 07 j 00:23	0°♎	
	933 Jul 31 j 02:15	0°♑		asc. node	936 Feb 13 j 18:32	8°♎02'48	
	933 Aug 26 j 02:37	0°♒			936 Mar 03 j 14:09	0°♏	
asc. node	933 Aug 28 j 23:32	3°♒23'46			936 Mar 30 j 20:33	0°♐	
	933 Sep 20 j 02:37	0°♓		evening max el	936 Apr 12 j 10:10	12°♐39'56	45°29'55
	933 Oct 14 j 11:47	0°♈			936 May 02 j 06:58	0°♑	
	933 Nov 07 j 12:44	0°♌		greatest brilliancy	936 May 20 j 03:51	10°♑26'46	-4.7m
	933 Dec 01 j 10:07	0°♌		retrograde	936 May 31 j 02:34	12°♑35'54	
desc. node	933 Dec 18 j 12:55	21°♌31'09		desc. node	936 Jun 04 j 07:58	12°♑14'41	
morning set	933 Dec 21 j 01:00	24°♌39'59		evening set	936 Jun 15 j 07:48	8°♑08'19	
	933 Dec 25 j 06:51	0°♈		inferior conj	936 Jun 21 j 13:48	4°♑24'28	-3°54'15
	934 Jan 18 j 04:29	0°♊		minimum elong	936 Jun 21 j 05:57	4°♑36'41	3°52'11
				min. Earth dist.	936 Jun 21 j 14:07	4°♑23'59	0.28966 AU
superior conj	934 Jan 31 j 17:34	16°♊57'38	-1°20'50	morning rise	936 Jun 27 j 03:57	1°♑02'03	
minimum elong	934 Jan 31 j 10:09	16°♊34'26	1°20'42		936 Jun 29 j 01:36	30°♐	
max. Earth dist.	934 Feb 04 j 18:31	22°♊00'36	1.71732 AU	direct	936 Jul 13 j 05:35	26°♐06'40	
	934 Feb 11 j 04:05	0°♋		greatest brilliancy	936 Jul 23 j 20:17	28°♐08'14	-4.7m
	934 Mar 07 j 06:43	0°♎			936 Jul 28 j 05:35	0°♑	
evening rise	934 Mar 12 j 16:48	6°♎42'59		morning max el	936 Aug 31 j 13:51	26°♑42'58	46°07'43
	934 Mar 31 j 13:29	0°♏			936 Sep 03 j 21:40	0°♒	
asc. node	934 Apr 10 j 16:19	12°♏25'28		asc. node	936 Sep 25 j 11:17	22°♒53'05	
	934 Apr 25 j 01:16	0°♐			936 Oct 01 j 19:23	0°♓	
	934 May 19 j 18:53	0°♑			936 Oct 27 j 11:11	0°♈	
	934 Jun 13 j 20:00	0°♒			936 Nov 21 j 03:49	0°♌	
	934 Jul 09 j 08:27	0°♓			936 Dec 15 j 10:15	0°♌	
desc. node	934 Jul 31 j 05:35	25°♓01'01			937 Jan 08 j 12:58	0°♈	
	934 Aug 04 j 16:38	0°♈		desc. node	937 Jan 15 j 00:47	8°♈05'17	

	937 Feb 01 j 15:07	0°≈		inferior conj	939 Sep 01 j 06:03	12°♎44'46	-8°44'52
	937 Feb 25 j 18:15	0°✕		minimum elong	939 Sep 01 j 07:41	12°♎42'14	8°44'49
morning set	937 Mar 07 j 05:36	11°✕45'03		min. Earth dist.	939 Sep 01 j 23:04	12°♎18'30	0.28074 AU
	937 Mar 21 j 23:15	0°♑		morning rise	939 Sep 04 j 11:10	10°♎46'56	
				direct	939 Sep 22 j 11:54	4°♎40'26	
superior conj	937 Apr 14 j 11:14	29°♑00'29	-0°52'22	greatest brilliancy	939 Oct 03 j 13:33	6°♎56'20	-4.9m
minimum elong	937 Apr 14 j 20:31	29°♑29'04	0°52'00	asc. node	939 Oct 23 j 23:08	19°♎53'45	
	937 Apr 15 j 06:33	0°♄			939 Nov 04 j 06:43	0°♎	
max. Earth dist.	937 Apr 16 j 12:20	1°♄31'43	1.73244 AU	morning max el	939 Nov 12 j 01:21	7°♎40'47	46°48'51
asc. node	937 May 08 j 04:13	28°♄10'17			939 Dec 02 j 19:05	0°♎	
	937 May 09 j 15:57	0°♈			939 Dec 28 j 16:35	0°♌	
evening rise	937 May 21 j 13:25	14°♈36'04			940 Jan 22 j 16:58	0°♊	
	937 Jun 03 j 02:55	0°♋		desc. node	940 Feb 12 j 12:36	25°♊17'27	
	937 Jun 27 j 15:14	0°♌			940 Feb 16 j 09:18	0°≈	
	937 Jul 22 j 05:40	0°♍			940 Mar 11 j 22:41	0°✕	
desc. node	937 Aug 15 j 23:55	0°♎			940 Apr 05 j 11:16	0°♑	
	937 Aug 27 j 17:29	14°♎06'50			940 Apr 29 j 23:46	0°♄	
	937 Sep 10 j 00:27	0°♎		morning set	940 May 15 j 23:54	19°♄35'41	
	937 Oct 05 j 11:30	0°♌			940 May 24 j 11:47	0°♈	
	937 Oct 31 j 20:28	0°♊		asc. node	940 Jun 04 j 16:08	13°♈42'37	
evening max el	937 Nov 18 j 17:16	19°♊02'38	47°21'55		940 Jun 17 j 22:25	0°♋	
	937 Nov 29 j 22:30	0°≈		max. Earth dist.	940 Jun 19 j 07:18	1°♋41'02	1.73533 AU
asc. node	937 Dec 18 j 20:53	15°≈17'38					
greatest brilliancy	937 Dec 29 j 05:52	20°≈44'28	-4.9m	superior conj	940 Jun 21 j 10:24	4°♋18'09	0°38'23
retrograde	938 Jan 08 j 17:29	22°≈50'32		minimum elong	940 Jun 21 j 03:26	3°♋56'43	0°38'04
evening set	938 Jan 25 j 15:26	17°≈10'28			940 Jul 12 j 07:00	0°♌	
min. Earth dist.	938 Jan 28 j 14:39	15°≈21'07	0.27430 AU	evening rise	940 Jul 27 j 04:45	18°♌24'25	
inferior conj	938 Jan 29 j 12:54	14°≈46'20	8°12'57		940 Aug 05 j 13:47	0°♍	
minimum elong	938 Jan 29 j 06:00	14°≈57'08	8°12'11		940 Aug 29 j 19:51	0°♎	
morning rise	938 Feb 01 j 20:55	12°≈43'15			940 Sep 23 j 02:30	0°♎	
direct	938 Feb 19 j 04:55	6°≈55'19		desc. node	940 Sep 24 j 05:26	1°♎23'04	
greatest brilliancy	938 Feb 28 j 01:42	8°≈24'34	-4.8m		940 Oct 17 j 10:56	0°♌	
	938 Apr 01 j 03:33	0°✕			940 Nov 10 j 22:48	0°♊	
desc. node	938 Apr 09 j 10:10	7°✕45'54			940 Dec 05 j 18:23	0°≈	
morning max el	938 Apr 09 j 14:36	7°✕56'37	46°07'26		940 Dec 31 j 08:23	0°✕	
	938 May 01 j 02:08	0°♑		asc. node	941 Jan 15 j 08:41	16°✕46'11	
	938 May 28 j 04:14	0°♄			941 Jan 27 j 22:18	0°♑	
	938 Jun 23 j 03:35	0°♈		evening max el	941 Jan 29 j 05:02	1°♑17'39	46°35'22
	938 Jul 18 j 10:42	0°♋			941 Mar 06 j 03:25	0°♄	
asc. node	938 Jul 31 j 13:38	15°♋49'15		greatest brilliancy	941 Mar 09 j 16:15	1°♄31'15	-4.8m
	938 Aug 12 j 05:17	0°♌		retrograde	941 Mar 20 j 07:26	3°♄37'32	
	938 Sep 05 j 13:50	0°♍			941 Apr 02 j 19:32	30°♌♑	
	938 Sep 29 j 15:20	0°♎		evening set	941 Apr 05 j 19:33	28°♑20'38	
morning set	938 Oct 03 j 23:54	5°♎27'31		inferior conj	941 Apr 10 j 15:49	25°♑21'11	5°41'30
	938 Oct 23 j 12:57	0°♎		minimum elong	941 Apr 11 j 01:21	25°♑06'05	5°39'23
				min. Earth dist.	941 Apr 10 j 17:29	25°♑18'32	0.28731 AU
superior conj	938 Nov 12 j 16:54	25°♎22'25	0°17'37	morning rise	941 Apr 16 j 07:21	21°♑54'00	
minimum elong	938 Nov 12 j 21:26	25°♎36'41	0°17'24	direct	941 May 02 j 00:49	17°♑07'03	
max. Earth dist.	938 Nov 12 j 14:47	25°♎15'45	1.71081 AU	desc. node	941 May 06 j 22:04	17°♑33'57	
	938 Nov 16 j 09:07	0°♌		greatest brilliancy	941 May 12 j 00:13	18°♑54'43	-4.7m
desc. node	938 Nov 20 j 03:13	4°♌43'29			941 May 31 j 06:57	0°♄	
	938 Dec 10 j 05:23	0°♊		morning max el	941 Jun 19 j 18:24	16°♄50'10	45°44'05
evening rise	938 Dec 24 j 08:06	17°♊43'47			941 Jul 03 j 00:17	0°♈	
	939 Jan 03 j 02:52	0°≈			941 Jul 30 j 16:57	0°♋	
	939 Jan 27 j 03:03	0°✕			941 Aug 25 j 15:36	0°♌	
	939 Feb 20 j 08:09	0°♑		asc. node	941 Aug 28 j 01:35	2°♌51'41	
asc. node	939 Mar 13 j 06:27	25°♑37'09			941 Sep 19 j 14:46	0°♍	
	939 Mar 16 j 21:05	0°♄			941 Oct 13 j 23:30	0°♎	
	939 Apr 10 j 21:35	0°♈			941 Nov 07 j 00:13	0°♎	
	939 May 06 j 15:47	0°♋			941 Nov 30 j 21:29	0°♌	
	939 Jun 02 j 17:57	0°♌		desc. node	941 Dec 17 j 14:57	21°♌01'59	
evening max el	939 Jun 23 j 10:07	20°♌59'04	45°30'53	morning set	941 Dec 18 j 10:33	22°♌03'36	
desc. node	939 Jul 02 j 19:49	29°♌36'14			941 Dec 24 j 18:08	0°♊	
	939 Jul 03 j 06:44	0°♍			942 Jan 17 j 15:41	0°≈	
greatest brilliancy	939 Aug 01 j 16:07	19°♍02'20	-4.8m				
retrograde	939 Aug 11 j 02:34	20°♍38'35		superior conj	942 Jan 29 j 04:46	14°≈27'44	-1°19'27
evening set	939 Aug 29 j 03:59	14°♍37'31		minimum elong	942 Jan 28 j 20:31	14°≈01'56	1°19'18

max. Earth dist.	942 Feb 02 j 01:29	19° \approx 17'39	1.71678 AU	direct	944 Jul 10 j 22:39	23° Π 58'07	
	942 Feb 10 j 15:11	0° H		greatest brilliancy	944 Jul 21 j 11:36	25° Π 58'22	-4.7m
	942 Mar 06 j 17:46	0° Y			944 Jul 29 j 23:09	0° E	
evening rise	942 Mar 10 j 06:26	4° Y 22'22		morning max el	944 Aug 29 j 05:47	24° E 31'12	46°06'07
	942 Mar 31 j 00:35	0° B			944 Sep 03 j 18:09	0° Ω	
asc. node	942 Apr 09 j 18:29	11° B 57'58		asc. node	944 Sep 24 j 13:29	22° Ω 14'25	
	942 Apr 24 j 12:34	0° Π			944 Oct 01 j 10:40	0° M	
	942 May 19 j 06:35	0° E			944 Oct 27 j 00:34	0° E	
	942 Jun 13 j 08:25	0° Ω			944 Nov 20 j 16:18	0° M	
	942 Jul 08 j 22:07	0° M			944 Dec 14 j 22:12	0° A	
desc. node	942 Jul 30 j 07:34	24° M 22'58			945 Jan 08 j 00:32	0° E	
	942 Aug 04 j 08:47	0° E		desc. node	945 Jan 14 j 02:47	7° E 35'43	
	942 Sep 01 j 17:29	0° M			945 Feb 01 j 02:24	0° \approx	
evening max el	942 Sep 04 j 09:38	2° M 37'55	46°36'39		945 Feb 25 j 05:19	0° H	
	942 Oct 08 j 20:46	0° A		morning set	945 Mar 04 j 19:10	9° H 24'09	
greatest brilliancy	942 Oct 14 j 23:29	2° A 36'42	-4.9m		945 Mar 21 j 10:10	0° Y	
retrograde	942 Oct 24 j 08:27	4° A 16'03					
evening set	942 Nov 07 j 22:51	0° A 04'50		superior conj	945 Apr 12 j 03:27	26° Y 49'13	-0°54'59
	942 Nov 08 j 02:28	30° R M		minimum elong	945 Apr 12 j 12:57	27° Y 18'28	0°54'37
inferior conj	942 Nov 13 j 21:44	26° M 37'14	-1°41'41	max. Earth dist.	945 Apr 14 j 09:59	29° Y 37'15	1.73203 AU
minimum elong	942 Nov 14 j 01:35	26° M 31'23	1°40'26		945 Apr 14 j 17:22	0° B	
min. Earth dist.	942 Nov 14 j 02:51	26° M 29'29	0.26435 AU	asc. node	945 May 07 j 06:22	27° B 43'47	
morning rise	942 Nov 20 j 03:58	22° M 59'13			945 May 09 j 02:43	0° Π	
asc. node	942 Nov 20 j 11:02	22° M 49'56		evening rise	945 May 19 j 07:51	12° Π 32'19	
direct	942 Dec 04 j 06:51	18° M 59'06			945 Jun 02 j 13:45	0° E	
greatest brilliancy	942 Dec 14 j 16:37	21° M 02'45	-4.9m		945 Jun 27 j 02:17	0° Ω	
	942 Dec 30 j 04:44	0° A			945 Jul 21 j 17:09	0° M	
morning max el	943 Jan 23 j 19:27	22° A 02'25	46°50'12		945 Aug 15 j 12:05	0° E	
	943 Jan 31 j 13:00	0° E		desc. node	945 Aug 26 j 19:34	13° E 35'28	
	943 Feb 27 j 19:32	0° \approx			945 Sep 09 j 13:37	0° M	
desc. node	943 Mar 12 j 00:31	14° \approx 00'45			945 Oct 05 j 02:20	0° A	
	943 Mar 25 j 17:50	0° H			945 Oct 31 j 14:40	0° E	
	943 Apr 20 j 02:45	0° Y		evening max el	945 Nov 16 j 08:29	16° E 41'27	47°21'55
	943 May 15 j 04:41	0° B			945 Nov 30 j 03:39	0° \approx	
	943 Jun 09 j 01:31	0° Π		asc. node	945 Dec 17 j 22:53	13° \approx 50'16	
asc. node	943 Jul 03 j 03:52	29° Π 19'22		greatest brilliancy	945 Dec 26 j 20:36	18° \approx 20'57	-4.9m
	943 Jul 03 j 17:10	0° E		retrograde	946 Jan 06 j 07:46	20° \approx 26'14	
morning set	943 Jul 23 j 12:48	24° E 19'37		evening set	946 Jan 23 j 01:53	14° \approx 52'31	
	943 Jul 28 j 03:13	0° Ω		min. Earth dist.	946 Jan 26 j 04:03	12° \approx 58'42	0.27363 AU
	943 Aug 21 j 08:08	0° M		inferior conj	946 Jan 27 j 02:43	12° \approx 23'15	8°04'52
max. Earth dist.	943 Aug 25 j 17:37	5° M 28'12	1.72328 AU	minimum elong	946 Jan 26 j 19:11	12° \approx 35'02	8°03'57
				morning rise	946 Jan 30 j 12:52	10° \approx 16'55	
superior conj	943 Aug 29 j 05:14	9° M 48'36	1°24'40	direct	946 Feb 16 j 18:22	4° \approx 33'35	
minimum elong	943 Aug 29 j 05:56	9° M 50'48	1°24'39	greatest brilliancy	946 Feb 25 j 14:40	6° \approx 02'20	-4.8m
	943 Sep 14 j 09:29	0° E			946 Apr 01 j 06:09	0° H	
evening rise	943 Oct 06 j 10:08	27° E 32'52		morning max el	946 Apr 07 j 04:00	5° H 36'58	46°08'48
	943 Oct 08 j 09:10	0° M		desc. node	946 Apr 08 j 12:23	6° H 55'58	
desc. node	943 Oct 22 j 17:27	17° M 56'56			946 Apr 30 j 19:06	0° Y	
	943 Nov 01 j 08:38	0° A			946 May 27 j 18:06	0° B	
	943 Nov 25 j 08:51	0° E			946 Jun 22 j 15:57	0° Π	
	943 Dec 19 j 11:15	0° \approx			946 Jul 17 j 22:16	0° E	
	944 Jan 12 j 18:52	0° H		asc. node	946 Jul 30 j 15:45	15° E 21'21	
	944 Feb 06 j 13:22	0° Y			946 Aug 11 j 16:25	0° Ω	
asc. node	944 Feb 12 j 20:33	7° Y 29'33			946 Sep 05 j 00:46	0° M	
	944 Mar 03 j 04:41	0° B			946 Sep 29 j 02:14	0° E	
	944 Mar 30 j 15:05	0° Π		morning set	946 Oct 01 j 14:02	3° E 07'15	
evening max el	944 Apr 10 j 02:58	10° Π 31'24	45°31'21		946 Oct 22 j 23:53	0° M	
	944 May 02 j 21:43	0° E		max. Earth dist.	946 Nov 09 j 16:58	22° M 17'07	1.71101 AU
greatest brilliancy	944 May 17 j 19:30	8° E 17'54	-4.7m				
retrograde	944 May 28 j 19:18	10° E 27'35		superior conj	946 Nov 10 j 03:37	22° M 50'37	0°21'26
desc. node	944 Jun 03 j 09:58	9° E 50'07		minimum elong	946 Nov 10 j 09:03	23° M 07'42	0°21'10
evening set	944 Jun 12 j 23:04	6° E 01'42			946 Nov 15 j 20:06	0° A	
inferior conj	944 Jun 19 j 06:11	2° E 15'48	-3°36'25	desc. node	946 Nov 19 j 05:14	4° A 15'15	
minimum elong	944 Jun 18 j 22:49	2° E 27'16	3°34'27		946 Dec 09 j 16:25	0° E	
min. Earth dist.	944 Jun 19 j 06:04	2° E 15'57	0.28971 AU	evening rise	946 Dec 21 j 17:44	15° E 08'36	
	944 Jun 22 j 22:31	30° R Π			947 Jan 02 j 13:57	0° \approx	
morning rise	944 Jun 24 j 22:32	28° Π 50'16			947 Jan 26 j 14:13	0° H	

	947 Feb 19 j 19:29	0°♄		asc. node	949 Aug 27 j 03:40	2°♏21'02	
asc. node	947 Mar 12 j 08:39	25°♄08'34			949 Sep 19 j 02:29	0°♎	
	947 Mar 16 j 08:46	0°♄			949 Oct 13 j 10:48	0°♎	
	947 Apr 10 j 09:58	0°♏			949 Nov 06 j 11:17	0°♎	
	947 May 06 j 05:36	0°♎			949 Nov 30 j 08:27	0°♄	
	947 Jun 02 j 11:06	0°♏		morning set	949 Dec 15 j 20:31	19°♄29'39	
evening max el	947 Jun 20 j 23:36	18°♏42'21	45°29'37	desc. node	949 Dec 16 j 16:57	20°♄33'55	
desc. node	947 Jul 01 j 21:51	28°♏39'03			949 Dec 24 j 05:02	0°♄	
	947 Jul 03 j 11:55	0°♎			950 Jan 17 j 02:33	0°♎	
greatest brilliancy	947 Jul 30 j 05:24	16°♎46'34	-4.8m				
retrograde	947 Aug 08 j 16:16	18°♎23'35		superior conj	950 Jan 26 j 15:45	11°♎58'00	-1°17'54
evening set	947 Aug 26 j 18:02	12°♎22'32		minimum elong	950 Jan 26 j 06:45	11°♎29'50	1°17'44
inferior conj	947 Aug 29 j 20:42	10°♎28'57	-8°45'31	max. Earth dist.	950 Jan 30 j 08:45	16°♎36'26	1.71634 AU
minimum elong	947 Aug 29 j 21:29	10°♎27'45	8°45'30		950 Feb 10 j 02:00	0°♄	
min. Earth dist.	947 Aug 30 j 13:21	10°♎03'17	0.28133 AU		950 Mar 06 j 04:34	0°♄	
morning rise	947 Sep 02 j 00:42	8°♎32'45		evening rise	950 Mar 07 j 19:41	2°♄01'12	
direct	947 Sep 20 j 02:34	2°♎23'35			950 Mar 30 j 11:27	0°♄	
greatest brilliancy	947 Oct 01 j 05:15	4°♎39'55	-4.8m	asc. node	950 Apr 08 j 20:31	11°♄30'46	
asc. node	947 Oct 23 j 01:13	18°♎48'17			950 Apr 23 j 23:37	0°♏	
	947 Nov 04 j 07:31	0°♎			950 May 18 j 18:02	0°♎	
morning max el	947 Nov 09 j 14:57	5°♎17'25	46°47'45		950 Jun 12 j 20:34	0°♏	
	947 Dec 02 j 11:53	0°♎			950 Jul 08 j 11:35	0°♎	
	947 Dec 28 j 06:45	0°♄		desc. node	950 Jul 29 j 09:41	23°♎45'58	
	948 Jan 22 j 05:51	0°♄			950 Aug 04 j 00:50	0°♎	
desc. node	948 Feb 11 j 14:42	24°♄46'40			950 Sep 01 j 16:19	0°♎	
	948 Feb 15 j 21:23	0°♎		evening max el	950 Sep 01 j 23:40	0°♎17'56	46°34'13
	948 Mar 11 j 10:12	0°♄			950 Oct 12 j 00:58	0°♄	
	948 Apr 04 j 22:23	0°♄		greatest brilliancy	950 Oct 12 j 11:49	0°♄09'19	-4.9m
	948 Apr 29 j 10:34	0°♄		retrograde	950 Oct 21 j 21:10	1°♄48'32	
morning set	948 May 13 j 17:47	17°♄30'41			950 Oct 31 j 07:32	30°♎	
	948 May 23 j 22:25	0°♏		evening set	950 Nov 05 j 12:55	27°♎34'53	
asc. node	948 Jun 03 j 18:05	13°♏16'04		inferior conj	950 Nov 11 j 09:56	24°♎09'36	-2°05'38
max. Earth dist.	948 Jun 17 j 03:42	29°♏43'43	1.73553 AU	minimum elong	950 Nov 11 j 14:40	24°♎02'26	2°04'08
	948 Jun 17 j 09:00	0°♎		min. Earth dist.	950 Nov 11 j 16:06	24°♎00'15	0.26458 AU
				morning rise	950 Nov 17 j 16:08	20°♎32'01	
superior conj	948 Jun 19 j 05:00	2°♎15'15	0°35'34	asc. node	950 Nov 19 j 12:57	19°♎35'35	
minimum elong	948 Jun 18 j 22:25	1°♎55'01	0°35'17	direct	950 Dec 01 j 20:05	16°♎31'11	
	948 Jul 11 j 17:38	0°♏		greatest brilliancy	950 Dec 12 j 06:03	18°♎35'32	-4.9m
evening rise	948 Jul 24 j 23:13	16°♏20'14			950 Dec 30 j 22:14	0°♄	
	948 Aug 05 j 00:32	0°♎		morning max el	951 Jan 21 j 09:52	19°♄40'31	46°51'02
	948 Aug 29 j 06:50	0°♎			951 Jan 31 j 08:55	0°♄	
	948 Sep 22 j 13:50	0°♎			951 Feb 27 j 10:50	0°♎	
desc. node	948 Sep 23 j 07:37	0°♎54'50		desc. node	951 Mar 11 j 02:40	13°♎25'48	
	948 Oct 16 j 22:44	0°♄			951 Mar 25 j 07:07	0°♄	
	948 Nov 10 j 11:18	0°♎			951 Apr 19 j 14:56	0°♄	
	948 Dec 05 j 07:58	0°♎			951 May 14 j 16:11	0°♄	
	948 Dec 31 j 00:04	0°♄			951 Jun 08 j 12:35	0°♏	
asc. node	949 Jan 14 j 10:44	16°♄03'05		asc. node	951 Jul 02 j 05:58	28°♏52'47	
evening max el	949 Jan 26 j 19:13	28°♄58'22	46°37'54		951 Jul 03 j 03:57	0°♎	
	949 Jan 27 j 19:47	0°♄		morning set	951 Jul 21 j 06:21	22°♎12'56	
greatest brilliancy	949 Mar 07 j 08:48	29°♄19'33	-4.8m		951 Jul 27 j 13:53	0°♏	
	949 Mar 09 j 07:05	0°♄			951 Aug 20 j 18:48	0°♎	
retrograde	949 Mar 17 j 23:46	1°♄26'17		max. Earth dist.	951 Aug 23 j 08:44	3°♎12'36	1.72380 AU
	949 Mar 26 j 09:25	30°♎					
evening set	949 Apr 03 j 14:23	26°♄05'00		superior conj	951 Aug 26 j 21:40	7°♎36'57	1°24'42
inferior conj	949 Apr 08 j 07:55	23°♄09'48	5°56'29	minimum elong	951 Aug 26 j 21:37	7°♎36'47	1°24'43
minimum elong	949 Apr 08 j 17:33	22°♄54'34	5°54'26		951 Sep 13 j 20:15	0°♎	
min. Earth dist.	949 Apr 08 j 09:18	23°♄07'37	0.28709 AU	evening rise	951 Oct 03 j 23:13	25°♎09'28	
morning rise	949 Apr 13 j 20:54	19°♄46'28			951 Oct 07 j 20:06	0°♎	
direct	949 Apr 29 j 16:04	14°♄55'52		desc. node	951 Oct 21 j 19:26	17°♎28'38	
desc. node	949 May 06 j 00:02	15°♄40'43			951 Oct 31 j 19:45	0°♄	
greatest brilliancy	949 May 09 j 15:28	16°♄43'44	-4.7m		951 Nov 24 j 20:10	0°♄	
	949 May 31 j 18:02	0°♄			951 Dec 18 j 22:49	0°♎	
morning max el	949 Jun 17 j 10:29	14°♄40'58	45°44'13		952 Jan 12 j 06:52	0°♄	
	949 Jul 02 j 18:17	0°♏			952 Feb 06 j 02:10	0°♄	
	949 Jul 30 j 07:04	0°♎		asc. node	952 Feb 11 j 22:43	6°♄57'15	
	949 Aug 25 j 04:07	0°♏			952 Mar 02 j 19:11	0°♄	

	952 Mar 30 j 09:56	0° II		morning set	954 Sep 29 j 04:07	0° 46 '31	
evening max el	952 Apr 07 j 19:32	8° II 22'31	45°32'37		954 Oct 22 j 10:54	0° II	
	952 May 03 j 17:34	0° 56		max. Earth dist.	954 Nov 06 j 22:04	19° II 27'22	1.71122 AU
greatest brilliancy	952 May 15 j 11:53	6° 56 09'50	-4.7m				
retrograde	952 May 26 j 11:32	8° 56 19'09		superior conj	954 Nov 07 j 14:24	20° II 18'47	0°25'11
desc. node	952 Jun 02 j 11:59	7° 56 20'41		minimum elong	954 Nov 07 j 20:41	20° II 38'31	0°24'53
evening set	952 Jun 10 j 14:27	3° 56 54'57			954 Nov 15 j 07:11	0° 7	
inferior conj	952 Jun 16 j 22:32	0° 56 07'16	-3°18'16	desc. node	954 Nov 18 j 07:14	3° 7 46'39	
minimum elong	952 Jun 16 j 15:41	0° 56 17'57	3°16'25		954 Dec 09 j 03:34	0° 3	
min. Earth dist.	952 Jun 16 j 22:19	0° 56 07'35	0.28972 AU	evening rise	954 Dec 19 j 03:29	12° 3 33'26	
	952 Jun 17 j 03:11	30° 7 II			955 Jan 02 j 01:11	0° 7	
morning rise	952 Jun 22 j 16:56	26° II 38'34			955 Jan 26 j 01:34	0° 7	
direct	952 Jul 08 j 15:24	21° II 49'46			955 Feb 19 j 07:00	0° 7	
greatest brilliancy	952 Jul 19 j 03:02	23° II 48'41	-4.7m	asc. node	955 Mar 11 j 10:40	24° 7 38'59	
	952 Jul 31 j 03:40	0° 56			955 Mar 15 j 20:37	0° 8	
morning max el	952 Aug 26 j 20:43	22° 56 17'28	46°04'39		955 Apr 09 j 22:33	0° II	
	952 Sep 03 j 13:50	0° 9			955 May 05 j 19:43	0° 56	
asc. node	952 Sep 23 j 15:34	21° 9 36'15			955 Jun 02 j 04:52	0° 9	
	952 Oct 01 j 01:34	0° 9		evening max el	955 Jun 18 j 13:07	16° 9 25'10	45°28'19
	952 Oct 26 j 13:42	0° 9		desc. node	955 Jun 30 j 23:57	27° 9 39'50	
	952 Nov 20 j 04:34	0° II			955 Jul 03 j 19:48	0° 9	
	952 Dec 14 j 09:58	0° 7		greatest brilliancy	955 Jul 27 j 18:01	14° 9 29'04	-4.7m
	953 Jan 07 j 11:58	0° 3		retrograde	955 Aug 06 j 06:21	16° 9 07'31	
desc. node	953 Jan 13 j 04:54	7° 3 06'52		evening set	955 Aug 24 j 07:29	10° 9 06'54	
	953 Jan 31 j 13:34	0° 7		inferior conj	955 Aug 27 j 11:13	8° 9 11'53	-8°45'15
	953 Feb 24 j 16:16	0° 7		minimum elong	955 Aug 27 j 11:07	8° 9 12'01	8°45'16
morning set	953 Mar 02 j 08:49	7° 7 03'50		min. Earth dist.	955 Aug 28 j 03:18	7° 9 47'06	0.28193 AU
	953 Mar 20 j 20:59	0° 7		morning rise	955 Aug 30 j 14:33	6° 9 16'48	
				direct	955 Sep 17 j 17:21	0° 9 05'25	
superior conj	953 Apr 09 j 19:41	24° 7 38'13	-0°57'30	greatest brilliancy	955 Sep 28 j 20:47	2° 9 22'20	-4.8m
minimum elong	953 Apr 10 j 05:21	25° 7 08'00	0°57'10	asc. node	955 Oct 22 j 03:10	17° 9 43'04	
max. Earth dist.	953 Apr 12 j 07:33	27° 7 42'45	1.73164 AU		955 Nov 04 j 07:33	0° 9	
	953 Apr 14 j 04:06	0° 8		morning max el	955 Nov 07 j 05:22	2° 9 55'18	46°46'46
asc. node	953 May 06 j 08:19	27° 8 16'53			955 Dec 02 j 04:38	0° II	
	953 May 08 j 13:27	0° II			955 Dec 27 j 21:00	0° 7	
evening rise	953 May 17 j 02:05	10° II 27'58			956 Jan 21 j 18:51	0° 3	
	953 Jun 02 j 00:35	0° 56		desc. node	956 Feb 10 j 16:47	24° 3 15'13	
	953 Jun 26 j 13:23	0° 9			956 Feb 15 j 09:39	0° 7	
	953 Jul 21 j 04:41	0° 9			956 Mar 10 j 21:58	0° 7	
	953 Aug 15 j 00:16	0° 9			956 Apr 04 j 09:45	0° 7	
desc. node	953 Aug 25 j 21:41	13° 9 04'10			956 Apr 28 j 21:39	0° 8	
	953 Sep 09 j 02:52	0° II		morning set	956 May 11 j 11:42	15° 8 24'55	
	953 Oct 04 j 17:20	0° 7			956 May 23 j 09:19	0° II	
	953 Oct 31 j 09:18	0° 3		asc. node	956 Jun 02 j 20:13	12° II 49'18	
evening max el	953 Nov 13 j 22:34	14° 3 17'16	47°21'42	max. Earth dist.	956 Jun 15 j 02:12	27° II 52'03	1.73571 AU
	953 Nov 30 j 11:00	0° 7					
asc. node	953 Dec 17 j 01:01	12° 7 19'41		superior conj	956 Jun 16 j 23:37	0° 56 11'36	0°32'43
greatest brilliancy	953 Dec 24 j 11:45	15° 7 57'26	-4.9m	minimum elong	956 Jun 16 j 17:27	29° II 52'41	0°32'27
retrograde	954 Jan 03 j 21:26	18° 7 01'22			956 Jun 16 j 19:50	0° 56	
evening set	954 Jan 20 j 12:03	12° 7 34'11			956 Jul 11 j 04:32	0° 9	
min. Earth dist.	954 Jan 23 j 17:44	10° 7 35'13	0.27297 AU	evening rise	956 Jul 22 j 17:46	14° 9 15'25	
inferior conj	954 Jan 24 j 16:25	9° 7 59'43	7°55'50		956 Aug 04 j 11:38	0° 9	
minimum elong	954 Jan 24 j 08:18	10° 7 12'26	7°54'44		956 Aug 28 j 18:12	0° 9	
morning rise	954 Jan 28 j 04:55	7° 7 49'47		desc. node	956 Sep 22 j 09:34	0° II 24'35	
direct	954 Feb 14 j 07:12	2° 7 11'11			956 Sep 22 j 01:35	0° II	
greatest brilliancy	954 Feb 23 j 04:09	3° 7 40'10	-4.8m		956 Oct 16 j 10:59	0° 7	
	954 Apr 01 j 07:22	0° 7			956 Nov 10 j 00:15	0° 3	
morning max el	954 Apr 04 j 16:30	3° 7 14'49	46°10'19		956 Dec 04 j 22:02	0° 7	
desc. node	954 Apr 07 j 14:20	6° 7 06'06			956 Dec 30 j 16:21	0° 7	
	954 Apr 30 j 11:45	0° 7		asc. node	957 Jan 13 j 12:52	15° 7 18'38	
	954 May 27 j 07:53	0° 8		evening max el	957 Jan 24 j 10:03	26° 7 39'45	46°40'28
	954 Jun 22 j 04:22	0° II			957 Jan 27 j 18:29	0° 7	
	954 Jul 17 j 09:57	0° 56		greatest brilliancy	957 Mar 05 j 00:50	27° 7 06'04	-4.8m
asc. node	954 Jul 29 j 17:52	14° 56 53'02		retrograde	957 Mar 15 j 16:34	29° 7 13'37	
	954 Aug 11 j 03:41	0° 9		evening set	957 Apr 01 j 09:10	23° 7 47'52	
	954 Sep 04 j 11:51	0° 9		inferior conj	957 Apr 05 j 23:54	20° 7 56'52	6°11'03
	954 Sep 28 j 13:15	0° 9		minimum elong	957 Apr 06 j 09:34	20° 7 41'36	6°09'04

min. Earth dist.	957 Apr 06 j 00:38	20°♄55'42	0.28686 AU	desc. node	959 Oct 20 j 21:29	16°♎59'36	
morning rise	957 Apr 11 j 10:12	17°♄37'43			959 Oct 31 j 07:13	0°♈	
direct	957 Apr 27 j 07:38	12°♄43'16			959 Nov 24 j 07:51	0°♊	
desc. node	957 May 05 j 02:04	13°♄50'17			959 Dec 18 j 10:48	0°♋	
greatest brilliancy	957 May 07 j 06:02	14°♄30'45	-4.7m		960 Jan 11 j 19:19	0°♌	
	957 Jun 01 j 02:42	0°♌			960 Feb 05 j 15:27	0°♍	
morning max el	957 Jun 15 j 03:09	12°♌32'11	45°44'26	asc. node	960 Feb 11 j 00:43	6°♍23'07	
	957 Jul 02 j 12:15	0°♎			960 Mar 02 j 10:14	0°♌	
	957 Jul 29 j 21:23	0°♏			960 Mar 30 j 05:45	0°♎	
	957 Aug 24 j 16:55	0°♏		evening max el	960 Apr 05 j 11:11	6°♎10'17	45°34'05
asc. node	957 Aug 26 j 05:45	1°♏49'25			960 May 04 j 21:31	0°♏	
	957 Sep 18 j 14:33	0°♐		greatest brilliancy	960 May 13 j 04:44	4°♏01'21	-4.7m
	957 Oct 12 j 22:29	0°♑		retrograde	960 May 24 j 03:24	6°♏09'58	
	957 Nov 05 j 22:47	0°♒		desc. node	960 Jun 01 j 14:10	4°♏45'34	
	957 Nov 29 j 19:51	0°♈		evening set	960 Jun 08 j 06:00	1°♏47'03	
morning set	957 Dec 13 j 06:14	16°♈53'36			960 Jun 11 j 08:05	30°♒♎	
desc. node	957 Dec 15 j 19:09	20°♈05'08		inferior conj	960 Jun 14 j 14:55	27°♎58'00	-2°59'55
	957 Dec 23 j 16:22	0°♊		minimum elong	960 Jun 14 j 08:38	28°♎07'51	2°58'10
	958 Jan 16 j 13:47	0°♋		min. Earth dist.	960 Jun 14 j 14:57	27°♎57'56	0.28973 AU
				morning rise	960 Jun 20 j 11:13	24°♎26'12	
superior conj	958 Jan 24 j 02:19	9°♋25'42	-1°16'12	direct	960 Jul 06 j 07:39	19°♎40'32	
minimum elong	958 Jan 23 j 16:38	8°♋55'22	1°15'58	greatest brilliancy	960 Jul 16 j 18:56	21°♎38'39	-4.7m
max. Earth dist.	958 Jan 27 j 18:37	14°♋02'04	1.71588 AU		960 Aug 01 j 00:50	0°♏	
	958 Feb 09 j 13:10	0°♌		morning max el	960 Aug 24 j 11:10	20°♏01'49	46°03'22
evening rise	958 Mar 05 j 08:43	29°♌38'15			960 Sep 03 j 09:14	0°♏	
	958 Mar 05 j 15:44	0°♍		asc. node	960 Sep 22 j 17:31	20°♏57'23	
	958 Mar 29 j 22:42	0°♌			960 Sep 30 j 16:31	0°♐	
asc. node	958 Apr 07 j 22:31	11°♌02'17			960 Oct 26 j 02:56	0°♑	
	958 Apr 23 j 11:04	0°♎			960 Nov 19 j 16:59	0°♒	
	958 May 18 j 05:53	0°♏			960 Dec 13 j 21:55	0°♈	
	958 Jun 12 j 09:09	0°♏			961 Jan 06 j 23:36	0°♊	
	958 Jul 08 j 01:31	0°♐		desc. node	961 Jan 12 j 06:58	6°♊37'11	
desc. node	958 Jul 28 j 11:47	23°♐07'32			961 Jan 31 j 00:58	0°♋	
	958 Aug 03 j 17:33	0°♑			961 Feb 24 j 03:29	0°♌	
evening max el	958 Aug 30 j 13:47	27°♑57'11	46°31'32	morning set	961 Feb 27 j 21:54	4°♌40'48	
	958 Sep 01 j 16:39	0°♒			961 Mar 20 j 08:02	0°♍	
greatest brilliancy	958 Oct 10 j 00:05	27°♒40'30	-4.9m				
retrograde	958 Oct 19 j 09:25	29°♒18'56		superior conj	961 Apr 07 j 11:31	22°♍25'13	-0°59'59
evening set	958 Nov 03 j 02:58	25°♒02'53		minimum elong	961 Apr 07 j 21:17	22°♍55'20	0°59'38
inferior conj	958 Nov 08 j 21:55	21°♒40'02	-2°29'26	max. Earth dist.	961 Apr 10 j 03:09	25°♍41'26	1.73117 AU
minimum elong	958 Nov 09 j 03:29	21°♒31'35	2°27'42		961 Apr 13 j 15:03	0°♌	
min. Earth dist.	958 Nov 09 j 05:15	21°♒28'55	0.26487 AU	asc. node	961 May 05 j 10:26	26°♌49'51	
morning rise	958 Nov 15 j 03:46	18°♒02'53			961 May 08 j 00:23	0°♎	
asc. node	958 Nov 18 j 15:09	16°♒22'54		evening rise	961 May 14 j 20:01	8°♎22'07	
direct	958 Nov 29 j 09:06	14°♒01'19			961 Jun 01 j 11:37	0°♏	
greatest brilliancy	958 Dec 09 j 19:20	16°♒06'01	-4.9m		961 Jun 26 j 00:41	0°♏	
	958 Dec 31 j 12:08	0°♈			961 Jul 20 j 16:26	0°♐	
morning max el	959 Jan 18 j 23:29	17°♈14'51	46°51'51		961 Aug 14 j 12:43	0°♑	
	959 Jan 31 j 04:50	0°♊		desc. node	961 Aug 24 j 23:40	12°♑31'46	
	959 Feb 27 j 02:22	0°♋			961 Sep 08 j 16:20	0°♒	
desc. node	959 Mar 10 j 04:41	12°♋49'26			961 Oct 04 j 08:37	0°♈	
	959 Mar 24 j 20:40	0°♌			961 Oct 31 j 04:28	0°♊	
	959 Apr 19 j 03:24	0°♍		evening max el	961 Nov 11 j 11:48	11°♊50'52	47°21'26
	959 May 14 j 03:59	0°♌			961 Nov 30 j 21:03	0°♋	
	959 Jun 07 j 23:58	0°♎		asc. node	961 Dec 16 j 03:04	10°♋45'29	
asc. node	959 Jul 01 j 08:06	28°♎25'14		greatest brilliancy	961 Dec 22 j 02:50	13°♋33'27	-4.9m
	959 Jul 02 j 15:05	0°♏		retrograde	962 Jan 01 j 10:55	15°♋36'20	
morning set	959 Jul 19 j 00:03	20°♏05'50		evening set	962 Jan 17 j 22:07	10°♋15'22	
	959 Jul 27 j 00:52	0°♏		min. Earth dist.	962 Jan 21 j 07:35	8°♋11'03	0.27236 AU
	959 Aug 20 j 05:46	0°♐		inferior conj	962 Jan 22 j 06:06	7°♋35'51	7°45'54
max. Earth dist.	959 Aug 20 j 23:00	0°♐53'34	1.72431 AU	minimum elong	962 Jan 21 j 21:28	7°♋49'22	7°44'36
				morning rise	962 Jan 25 j 21:10	5°♋22'09	
superior conj	959 Aug 24 j 14:28	5°♐25'37	1°24'37		962 Feb 08 j 16:37	30°♒♊	
minimum elong	959 Aug 24 j 13:41	5°♐23'10	1°24'38	direct	962 Feb 11 j 19:43	29°♊48'08	
	959 Sep 13 j 07:19	0°♑			962 Feb 14 j 23:59	0°♋	
evening rise	959 Oct 01 j 12:38	22°♑46'16		greatest brilliancy	962 Feb 20 j 18:05	1°♋18'00	-4.8m
	959 Oct 07 j 07:21	0°♒			962 Apr 01 j 07:35	0°♌	

morning max el	962 Apr 02 j 05:27	0° X 53'02	46°11'51		964 Oct 15 j 23:03	0° X	
desc. node	962 Apr 06 j 16:24	5° X 16'54			964 Nov 09 j 13:02	0° Z	
	962 Apr 30 j 04:16	0° Y			964 Dec 04 j 11:57	0° \approx	
	962 May 26 j 21:39	0° B			964 Dec 30 j 08:34	0° X	
	962 Jun 21 j 16:46	0° II		asc. node	965 Jan 12 j 14:53	14° X 34'17	
	962 Jul 16 j 21:36	0° G		evening max el	965 Jan 22 j 02:00	24° X 24'58	46°43'06
asc. node	962 Jul 28 j 19:50	14° G 24'16			965 Jan 27 j 17:41	0° Y	
	962 Aug 10 j 14:57	0° Q		greatest brilliancy	965 Mar 02 j 16:53	24° Y 54'05	-4.8m
	962 Sep 03 j 22:56	0° P		retrograde	965 Mar 13 j 09:39	27° Y 02'18	
morning set	962 Sep 26 j 18:26	28° P 26'33		evening set	965 Mar 30 j 04:08	21° Y 32'20	
	962 Sep 28 j 00:17	0° Q		inferior conj	965 Apr 03 j 16:02	18° Y 45'25	6°25'05
	962 Oct 21 j 21:56	0° L		minimum elong	965 Apr 04 j 01:41	18° Y 30'11	6°23'10
max. Earth dist.	962 Nov 04 j 06:04	16° L 46'46	1.71143 AU	min. Earth dist.	965 Apr 03 j 15:49	18° Y 45'45	0.28661 AU
				morning rise	965 Apr 08 j 23:31	15° Y 30'34	
superior conj	962 Nov 05 j 01:34	17° L 48'09	0°28'51	direct	965 Apr 24 j 23:44	10° Y 32'22	
minimum elong	962 Nov 05 j 08:38	18° L 10'21	0°28'31	desc. node	965 May 04 j 04:15	12° Y 05'23	
	962 Nov 14 j 18:14	0° X		greatest brilliancy	965 May 04 j 20:09	12° Y 18'39	-4.7m
desc. node	962 Nov 17 j 09:25	3° X 18'45			965 Jun 01 j 08:23	0° B	
	962 Dec 08 j 14:39	0° Z		morning max el	965 Jun 12 j 20:00	10° B 25'00	45°44'29
evening rise	962 Dec 16 j 13:38	9° Z 59'47			965 Jul 02 j 05:26	0° II	
	963 Jan 01 j 12:20	0° \approx			965 Jul 29 j 11:13	0° G	
	963 Jan 25 j 12:49	0° X			965 Aug 24 j 05:18	0° Q	
	963 Feb 18 j 18:26	0° Y		asc. node	965 Aug 25 j 07:45	1° Q 18'40	
asc. node	963 Mar 10 j 12:39	24° Y 09'21			965 Sep 18 j 02:13	0° P	
	963 Mar 15 j 08:27	0° B			965 Oct 12 j 09:47	0° Q	
	963 Apr 09 j 11:10	0° II			965 Nov 05 j 09:55	0° L	
	963 May 05 j 09:58	0° G			965 Nov 29 j 06:54	0° X	
	963 Jun 01 j 23:00	0° Q		morning set	965 Dec 10 j 16:02	14° X 18'55	
evening max el	963 Jun 16 j 03:36	14° Q 10'46	45°27'16	desc. node	965 Dec 14 j 21:07	19° X 36'46	
desc. node	963 Jun 30 j 02:01	26° Q 39'26			965 Dec 23 j 03:22	0° Z	
	963 Jul 04 j 06:17	0° P			966 Jan 16 j 00:42	0° \approx	
greatest brilliancy	963 Jul 25 j 06:09	12° P 11'53	-4.7m				
retrograde	963 Aug 03 j 21:01	13° P 52'21		superior conj	966 Jan 21 j 12:50	6° \approx 54'06	-1°14'19
evening set	963 Aug 21 j 20:42	7° P 52'40		minimum elong	966 Jan 21 j 02:32	6° \approx 21'49	1°14'03
inferior conj	963 Aug 25 j 01:51	5° P 55'36	-8°44'14	max. Earth dist.	966 Jan 25 j 05:22	11° \approx 31'23	1.71539 AU
minimum elong	963 Aug 25 j 00:54	5° P 57'04	8°44'14		966 Feb 09 j 00:00	0° X	
min. Earth dist.	963 Aug 25 j 16:58	5° P 32'21	0.28251 AU	evening rise	966 Mar 02 j 21:44	27° X 16'17	
morning rise	963 Aug 28 j 04:53	4° P 01'05			966 Mar 05 j 02:31	0° Y	
	963 Sep 04 j 22:06	30° R Q			966 Mar 29 j 09:32	0° B	
direct	963 Sep 15 j 08:42	27° Q 48'12		asc. node	966 Apr 07 j 00:41	10° B 35'38	
	963 Sep 26 j 06:38	0° P			966 Apr 22 j 22:07	0° II	
greatest brilliancy	963 Sep 26 j 11:49	0° P 05'01	-4.8m		966 May 17 j 17:20	0° G	
asc. node	963 Oct 21 j 05:21	16° P 40'24			966 Jun 11 j 21:23	0° Q	
	963 Nov 04 j 06:23	0° Q			966 Jul 07 j 15:12	0° P	
morning max el	963 Nov 04 j 20:55	0° Q 36'48	46°45'44	desc. node	966 Jul 27 j 13:45	22° P 29'27	
	963 Dec 01 j 20:56	0° L			966 Aug 03 j 10:12	0° Q	
	963 Dec 27 j 10:56	0° X		evening max el	966 Aug 28 j 03:48	25° Q 37'23	46°28'52
	964 Jan 21 j 07:34	0° Z			966 Sep 01 j 17:43	0° L	
desc. node	964 Feb 09 j 18:47	23° Z 44'17		greatest brilliancy	966 Oct 07 j 13:06	25° L 14'11	-4.9m
	964 Feb 14 j 21:37	0° \approx		retrograde	966 Oct 16 j 21:14	26° L 51'05	
	964 Mar 10 j 09:26	0° X		evening set	966 Oct 31 j 17:22	22° L 32'37	
	964 Apr 03 j 20:51	0° Y		inferior conj	966 Nov 06 j 10:07	19° L 12'27	-2°52'45
	964 Apr 28 j 08:30	0° B		minimum elong	966 Nov 06 j 16:28	19° L 02'49	2°50'48
morning set	964 May 09 j 05:34	13° B 19'35		min. Earth dist.	966 Nov 06 j 18:52	18° L 59'09	0.26518 AU
	964 May 22 j 20:01	0° II		morning rise	966 Nov 12 j 15:18	15° L 35'48	
asc. node	964 Jun 01 j 22:19	12° II 23'01		asc. node	966 Nov 17 j 17:12	13° L 17'13	
max. Earth dist.	964 Jun 13 j 01:30	26° II 03'24	1.73587 AU	direct	966 Nov 26 j 21:57	11° L 33'20	
				greatest brilliancy	966 Dec 07 j 09:12	13° L 38'42	-4.9m
superior conj	964 Jun 14 j 18:04	28° II 08'03	0°29'49		966 Dec 31 j 21:58	0° X	
minimum elong	964 Jun 14 j 12:22	27° II 50'32	0°29'33	morning max el	967 Jan 16 j 12:20	14° X 48'15	46°52'32
	964 Jun 16 j 06:29	0° G			967 Jan 30 j 23:45	0° Z	
	964 Jul 10 j 15:14	0° Q			967 Feb 26 j 17:17	0° \approx	
evening rise	964 Jul 20 j 12:16	12° Q 11'11		desc. node	967 Mar 09 j 06:42	12° \approx 14'28	
	964 Aug 03 j 22:30	0° P			967 Mar 24 j 09:44	0° X	
	964 Aug 28 j 05:20	0° Q			967 Apr 18 j 15:24	0° Y	
desc. node	964 Sep 21 j 11:38	29° Q 55'27			967 May 13 j 15:19	0° B	
	964 Sep 21 j 13:06	0° L			967 Jun 07 j 10:53	0° II	

asc. node	967 Jun 30 j 10:03	27° Π 58'33		greatest brilliancy	969 Dec 19 j 17:29	11° \approx 08'52	-4.9m
	967 Jul 02 j 01:46	0° \ominus		retrograde	969 Dec 30 j 00:36	13° \approx 11'17	
morning set	967 Jul 16 j 17:57	18° \ominus 00'34		evening set	970 Jan 15 j 07:55	7° \approx 56'16	
	967 Jul 26 j 11:27	0° Ω		min. Earth dist.	970 Jan 18 j 21:11	5° \approx 46'46	0.27176 AU
max. Earth dist.	967 Aug 18 j 13:20	28° Ω 35'54	1.72488 AU	inferior conj	970 Jan 19 j 19:37	5° \approx 11'48	7°34'52
	967 Aug 19 j 16:23	0° \P		minimum elong	970 Jan 19 j 10:31	5° \approx 26'00	7°33'24
				morning rise	970 Jan 23 j 13:27	2° \approx 54'14	
superior conj	967 Aug 22 j 07:27	3° \P 16'05	1°24'25		970 Jan 29 j 01:26	30° κ Ξ	
minimum elong	967 Aug 22 j 05:57	3° \P 11'25	1°24'24	direct	970 Feb 09 j 08:01	27° Ξ 24'46	
	967 Sep 12 j 18:03	0° $\underline{\Omega}$		greatest brilliancy	970 Feb 18 j 07:48	28° Ξ 55'44	-4.8m
evening rise	967 Sep 29 j 02:12	20° $\underline{\Omega}$ 24'43			970 Feb 21 j 05:28	0° \approx	
	967 Oct 06 j 18:15	0° \P		morning max el	970 Mar 30 j 19:12	28° \approx 33'33	46°13'23
desc. node	967 Oct 19 j 23:39	16° \P 31'59			970 Apr 01 j 06:32	0° \P	
	967 Oct 30 j 18:18	0° \P		desc. node	970 Apr 05 j 18:36	4° \P 29'19	
	967 Nov 23 j 19:11	0° Ξ			970 Apr 29 j 20:18	0° Υ	
	967 Dec 17 j 22:28	0° \approx			970 May 26 j 11:07	0° \P	
	968 Jan 11 j 07:29	0° \P			970 Jun 21 j 04:57	0° Π	
	968 Feb 05 j 04:30	0° Υ			970 Jul 16 j 09:04	0° \ominus	
asc. node	968 Feb 10 j 02:45	5° Υ 49'52		asc. node	970 Jul 27 j 21:57	13° \ominus 56'32	
	968 Mar 02 j 01:08	0° \P			970 Aug 10 j 02:01	0° Ω	
	968 Mar 30 j 01:44	0° Π			970 Sep 03 j 09:50	0° \P	
evening max el	968 Apr 03 j 02:15	3° Π 57'39	45°35'43	morning set	970 Sep 24 j 09:08	26° \P 08'25	
	968 May 06 j 12:41	0° \ominus			970 Sep 27 j 11:09	0° $\underline{\Omega}$	
greatest brilliancy	968 May 10 j 21:40	1° \ominus 54'22	-4.7m		970 Oct 21 j 08:50	0° \P	
retrograde	968 May 21 j 19:24	4° \ominus 02'42		max. Earth dist.	970 Nov 01 j 16:08	14° \P 13'02	1.71170 AU
desc. node	968 May 31 j 16:07	2° \ominus 08'00					
	968 Jun 05 j 07:21	30° κ Π		superior conj	970 Nov 02 j 12:49	15° \P 18'06	0°32'27
evening set	968 Jun 05 j 21:51	29° Π 40'31		minimum elong	970 Nov 02 j 20:35	15° \P 42'32	0°32'06
inferior conj	968 Jun 12 j 07:29	25° Π 50'38	-2°41'23		970 Nov 14 j 05:12	0° \P	
minimum elong	968 Jun 12 j 01:47	25° Π 59'34	2°39'47	desc. node	970 Nov 16 j 11:26	2° \P 50'33	
min. Earth dist.	968 Jun 12 j 08:00	25° Π 49'50	0.28973 AU		970 Dec 08 j 01:42	0° Ξ	
morning rise	968 Jun 18 j 05:35	22° Π 15'57		evening rise	970 Dec 13 j 23:29	7° Ξ 25'16	
direct	968 Jul 03 j 23:38	17° Π 33'02			970 Dec 31 j 23:29	0° \approx	
greatest brilliancy	968 Jul 14 j 11:31	19° Π 31'07	-4.7m		971 Jan 25 j 00:03	0° \P	
	968 Aug 01 j 15:47	0° \ominus			971 Feb 18 j 05:53	0° Υ	
morning max el	968 Aug 22 j 01:44	17° \ominus 47'48	46°02'01	asc. node	971 Mar 09 j 14:50	23° Υ 40'18	
	968 Sep 03 j 03:39	0° Ω			971 Mar 14 j 20:19	0° \P	
asc. node	968 Sep 21 j 19:41	20° Ω 20'28			971 Apr 08 j 23:53	0° Π	
	968 Sep 30 j 06:57	0° \P			971 May 05 j 00:24	0° \ominus	
	968 Oct 25 j 15:49	0° $\underline{\Omega}$			971 Jun 01 j 17:36	0° Ω	
	968 Nov 19 j 05:06	0° \P		evening max el	971 Jun 13 j 19:04	11° Ω 58'52	45°26'21
	968 Dec 13 j 09:34	0° \P		desc. node	971 Jun 29 j 04:03	25° Ω 37'39	
	969 Jan 06 j 10:56	0° Ξ			971 Jul 04 j 20:18	0° \P	
desc. node	969 Jan 11 j 08:59	6° Ξ 08'14		greatest brilliancy	971 Jul 22 j 18:16	9° \P 55'15	-4.7m
	969 Jan 30 j 12:04	0° \approx		retrograde	971 Aug 01 j 11:53	11° \P 37'39	
	969 Feb 23 j 14:25	0° \P		evening set	971 Aug 19 j 09:43	5° \P 39'42	
morning set	969 Feb 25 j 10:37	2° \P 17'21		inferior conj	971 Aug 22 j 16:34	3° \P 40'00	-8°42'26
	969 Mar 19 j 18:50	0° Υ		minimum elong	971 Aug 22 j 14:48	3° \P 42'43	8°42'23
				min. Earth dist.	971 Aug 23 j 06:28	3° \P 18'36	0.28303 AU
superior conj	969 Apr 05 j 03:14	20° Υ 12'36	-1°02'23	morning rise	971 Aug 25 j 19:42	1° \P 45'23	
minimum elong	969 Apr 05 j 13:02	20° Υ 42'50	1°02'02		971 Aug 28 j 21:00	30° κ Ω	
max. Earth dist.	969 Apr 07 j 20:16	23° Υ 33'12	1.73070 AU	direct	971 Sep 13 j 00:32	25° Ω 31'57	
	969 Apr 13 j 01:45	0° \P		greatest brilliancy	971 Sep 24 j 02:11	27° Ω 47'43	-4.8m
asc. node	969 May 04 j 12:33	26° \P 23'33			971 Sep 28 j 21:56	0° \P	
	969 May 07 j 11:03	0° Π		asc. node	971 Oct 20 j 07:25	15° \P 39'26	
evening rise	969 May 12 j 13:56	6° Π 17'01		morning max el	971 Nov 02 j 12:39	28° \P 19'19	46°44'29
	969 May 31 j 22:23	0° \ominus			971 Nov 04 j 04:09	0° $\underline{\Omega}$	
	969 Jun 25 j 11:41	0° Ω			971 Dec 01 j 12:55	0° \P	
	969 Jul 20 j 03:54	0° \P			971 Dec 27 j 00:46	0° \P	
	969 Aug 14 j 00:54	0° $\underline{\Omega}$			972 Jan 20 j 20:20	0° Ξ	
desc. node	969 Aug 24 j 01:45	12° $\underline{\Omega}$ 00'29		desc. node	972 Feb 08 j 20:54	23° Ξ 13'30	
	969 Sep 08 j 05:39	0° \P			972 Feb 14 j 09:42	0° \approx	
	969 Oct 03 j 23:54	0° \P			972 Mar 09 j 21:00	0° \P	
	969 Oct 31 j 00:01	0° Ξ			972 Apr 03 j 08:03	0° Υ	
evening max el	969 Nov 09 j 00:59	9° Ξ 24'48	47°21'05		972 Apr 27 j 19:26	0° \P	
	969 Dec 01 j 10:22	0° \approx		morning set	972 May 06 j 23:09	11° \P 13'02	
asc. node	969 Dec 15 j 05:04	9° \approx 07'49			972 May 22 j 06:49	0° Π	

asc. node	972 Jun 01 j 00:16	11° Π 55'58		asc. node	974 Nov 16 j 19:10	10° \mathbb{M} 16'24	
max. Earth dist.	972 Jun 11 j 00:50	24° Π 14'26	1.73600 AU	direct	974 Nov 24 j 10:19	9° \mathbb{M} 04'48	
				greatest brilliancy	974 Dec 04 j 23:36	11° \mathbb{M} 11'31	-4.9m
superior conj	972 Jun 12 j 12:22	26° Π 03'37	0°26'51		975 Jan 01 j 05:20	0° \mathcal{A}	
minimum elong	972 Jun 12 j 07:09	25° Π 47'38	0°26'37	morning max el	975 Jan 14 j 00:35	12° \mathcal{A} 19'28	46°53'20
	972 Jun 15 j 17:16	0° \mathcal{E}			975 Jan 30 j 18:21	0° \mathcal{Z}	
	972 Jul 10 j 02:05	0° Ω			975 Feb 26 j 08:13	0° \approx	
evening rise	972 Jul 18 j 06:50	10° Ω 06'46		desc. node	975 Mar 08 j 08:53	11° \approx 39'29	
	972 Aug 03 j 09:29	0° \mathbb{M}			975 Mar 23 j 22:59	0° \mathcal{H}	
	972 Aug 27 j 16:35	0° \mathcal{E}			975 Apr 18 j 03:41	0° \mathcal{Y}	
desc. node	972 Sep 20 j 13:48	29° \mathcal{E} 26'24			975 May 13 j 03:01	0° \mathcal{B}	
	972 Sep 21 j 00:44	0° \mathbb{M}			975 Jun 06 j 22:11	0° Π	
	972 Oct 15 j 11:12	0° \mathcal{A}		asc. node	975 Jun 29 j 12:11	27° Π 31'14	
	972 Nov 09 j 01:56	0° \mathcal{Z}			975 Jul 01 j 12:49	0° \mathcal{E}	
	972 Dec 04 j 02:05	0° \approx		morning set	975 Jul 14 j 11:32	15° \mathcal{E} 53'14	
	972 Dec 30 j 01:17	0° \mathcal{H}			975 Jul 25 j 22:24	0° Ω	
asc. node	973 Jan 11 j 16:57	13° \mathcal{H} 48'41		max. Earth dist.	975 Aug 16 j 05:25	26° Ω 22'38	1.72544 AU
evening max el	973 Jan 19 j 18:17	22° \mathcal{H} 09'58	46°45'27		975 Aug 19 j 03:22	0° \mathbb{M}	
	973 Jan 27 j 18:23	0° \mathcal{Y}					
greatest brilliancy	973 Feb 28 j 09:14	22° \mathcal{Y} 40'51	-4.8m	superior conj	975 Aug 20 j 00:17	1° \mathbb{M} 05'01	1°24'04
retrograde	973 Mar 11 j 02:11	24° \mathcal{Y} 48'53		minimum elong	975 Aug 19 j 22:04	0° \mathbb{M} 58'06	1°24'03
evening set	973 Mar 27 j 22:55	19° \mathcal{Y} 14'59			975 Sep 12 j 05:10	0° \mathcal{E}	
inferior conj	973 Apr 01 j 07:54	16° \mathcal{Y} 32'06	6°38'38	evening rise	975 Sep 26 j 15:51	18° \mathcal{E} 02'25	
minimum elong	973 Apr 01 j 17:29	16° \mathcal{Y} 16'58	6°36'49		975 Oct 06 j 05:32	0° \mathbb{M}	
min. Earth dist.	973 Apr 01 j 06:48	16° \mathcal{Y} 33'51	0.28633 AU	desc. node	975 Oct 19 j 01:37	16° \mathbb{M} 02'36	
morning rise	973 Apr 06 j 12:23	13° \mathcal{Y} 21'35			975 Oct 30 j 05:46	0° \mathcal{A}	
direct	973 Apr 22 j 15:41	8° \mathcal{Y} 19'47			975 Nov 23 j 06:52	0° \mathcal{Z}	
greatest brilliancy	973 May 02 j 09:46	10° \mathcal{Y} 04'23	-4.7m		975 Dec 17 j 10:26	0° \approx	
desc. node	973 May 03 j 06:14	10° \mathcal{Y} 22'31			976 Jan 10 j 19:55	0° \mathcal{H}	
	973 Jun 01 j 12:39	0° \mathcal{B}			976 Feb 04 j 17:52	0° \mathcal{Y}	
morning max el	973 Jun 10 j 12:02	8° \mathcal{B} 14'49	45°44'36	asc. node	976 Feb 09 j 04:54	5° \mathcal{Y} 16'09	
	973 Jul 01 j 22:35	0° Π			976 Mar 01 j 16:30	0° \mathcal{B}	
	973 Jul 29 j 01:12	0° \mathcal{E}			976 Mar 29 j 22:45	0° Π	
	973 Aug 23 j 17:53	0° Ω		evening max el	976 Mar 31 j 16:58	1° Π 43'11	45°37'14
asc. node	973 Aug 24 j 09:53	0° Ω 47'38		greatest brilliancy	976 May 08 j 13:57	29° Π 45'13	-4.7m
	973 Sep 17 j 14:05	0° \mathbb{M}			976 May 09 j 06:06	0° \mathcal{E}	
	973 Oct 11 j 21:17	0° \mathcal{E}		retrograde	976 May 19 j 11:34	1° \mathcal{E} 54'03	
	973 Nov 04 j 21:13	0° \mathbb{M}			976 May 29 j 07:19	30° $\mathcal{R}\Pi$	
	973 Nov 28 j 18:07	0° \mathcal{A}		desc. node	976 May 30 j 18:11	29° Π 24'26	
morning set	973 Dec 08 j 02:21	11° \mathcal{A} 45'20		evening set	976 Jun 03 j 13:44	27° Π 32'03	
desc. node	973 Dec 13 j 23:10	19° \mathcal{A} 08'10		inferior conj	976 Jun 09 j 23:57	23° Π 41'40	-2°22'26
	973 Dec 22 j 14:30	0° \mathcal{Z}		minimum elong	976 Jun 09 j 18:52	23° Π 49'37	2°21'00
	974 Jan 15 j 11:47	0° \approx		min. Earth dist.	976 Jun 10 j 00:54	23° Π 40'11	0.28978 AU
				morning rise	976 Jun 15 j 23:48	20° Π 04'26	
superior conj	974 Jan 18 j 23:26	4° \approx 22'10	-1°12'17	direct	976 Jul 01 j 15:26	15° Π 23'45	
minimum elong	974 Jan 18 j 12:37	3° \approx 48'18	1°12'00	greatest brilliancy	976 Jul 12 j 04:25	17° Π 22'28	-4.7m
max. Earth dist.	974 Jan 22 j 16:49	9° \approx 02'12	1.71497 AU		976 Aug 02 j 03:36	0° \mathcal{E}	
	974 Feb 08 j 11:04	0° \mathcal{H}		morning max el	976 Aug 19 j 16:56	15° \mathcal{E} 34'04	46°00'47
evening rise	974 Feb 28 j 10:26	24° \mathcal{H} 52'19			976 Sep 02 j 22:06	0° Ω	
	974 Mar 04 j 13:37	0° \mathcal{Y}		asc. node	976 Sep 20 j 21:47	19° Ω 42'28	
	974 Mar 28 j 20:44	0° \mathcal{B}			976 Sep 29 j 21:37	0° \mathbb{M}	
asc. node	974 Apr 06 j 02:42	10° \mathcal{B} 07'23			976 Oct 25 j 04:59	0° \mathcal{E}	
	974 Apr 22 j 09:31	0° Π			976 Nov 18 j 17:30	0° \mathbb{M}	
	974 May 17 j 05:11	0° \mathcal{E}			976 Dec 12 j 21:31	0° \mathcal{A}	
	974 Jun 11 j 10:04	0° Ω			977 Jan 05 j 22:34	0° \mathcal{Z}	
	974 Jul 07 j 05:25	0° \mathbb{M}		desc. node	977 Jan 10 j 11:07	5° \mathcal{Z} 38'45	
desc. node	974 Jul 26 j 15:54	21° \mathbb{M} 50'20			977 Jan 29 j 23:27	0° \approx	
	974 Aug 03 j 03:36	0° \mathcal{E}		morning set	977 Feb 22 j 23:33	29° \approx 53'39	
evening max el	974 Aug 25 j 17:00	23° \mathcal{E} 14'37	46°26'11		977 Feb 23 j 01:35	0° \mathcal{H}	
	974 Sep 01 j 20:38	0° \mathbb{M}			977 Mar 19 j 05:51	0° \mathcal{Y}	
greatest brilliancy	974 Oct 05 j 02:40	22° \mathbb{M} 47'44	-4.9m				
retrograde	974 Oct 14 j 08:38	24° \mathbb{M} 22'46		superior conj	977 Apr 02 j 19:12	18° \mathcal{Y} 00'00	-1°04'38
evening set	974 Oct 29 j 07:59	20° \mathbb{M} 01'30		minimum elong	977 Apr 03 j 05:00	18° \mathcal{Y} 30'14	1°04'20
inferior conj	974 Nov 03 j 22:24	16° \mathbb{M} 44'30	-3°15'41	max. Earth dist.	977 Apr 05 j 13:08	21° \mathcal{Y} 23'26	1.73026 AU
minimum elong	974 Nov 04 j 05:29	16° \mathbb{M} 33'43	3°13'32		977 Apr 12 j 12:41	0° \mathcal{B}	
min. Earth dist.	974 Nov 04 j 08:52	16° \mathbb{M} 28'34	0.26549 AU	asc. node	977 May 03 j 14:31	25° \mathcal{B} 56'02	
morning rise	974 Nov 10 j 02:37	13° \mathbb{M} 08'38			977 May 06 j 22:00	0° Π	

evening rise	977 May 10 j 08:00	4° Π 11'34		morning max el	979 Oct 31 j 03:46	25° Π 59'45	46°43'09
	977 May 31 j 09:28	0° Θ			979 Nov 04 j 01:26	0° $\underline{\Omega}$	
	977 Jun 24 j 23:05	0° Ω			979 Dec 01 j 04:51	0° \mathbb{M}	
	977 Jul 19 j 15:46	0° Π			979 Dec 26 j 14:39	0° \times	
	977 Aug 13 j 13:30	0° $\underline{\Omega}$			980 Jan 20 j 09:09	0° \mathcal{Z}	
desc. node	977 Aug 23 j 03:52	11° $\underline{\Omega}$ 28'01		desc. node	980 Feb 07 j 22:59	22° \mathcal{Z} 42'18	
	977 Sep 07 j 19:27	0° \mathbb{M}			980 Feb 13 j 21:50	0° \approx	
	977 Oct 03 j 15:46	0° \times			980 Mar 09 j 08:39	0° \mathcal{H}	
	977 Oct 30 j 20:34	0° \mathcal{Z}			980 Apr 02 j 19:20	0° Υ	
evening max el	977 Nov 06 j 14:55	6° \mathcal{Z} 59'43	47°20'42		980 Apr 27 j 06:27	0° \mathcal{B}	
	977 Dec 02 j 04:44	0° \approx		morning set	980 May 04 j 17:03	9° \mathcal{B} 07'17	
asc. node	977 Dec 14 j 07:14	7° \approx 25'33			980 May 21 j 17:40	0° Π	
greatest brilliancy	977 Dec 17 j 07:35	8° \approx 42'25	-4.9m	asc. node	980 May 31 j 02:27	11° Π 29'31	
retrograde	977 Dec 27 j 14:42	10° \approx 45'04		max. Earth dist.	980 Jun 08 j 23:58	22° Π 24'58	1.73606 AU
evening set	978 Jan 12 j 17:37	5° \approx 35'47					
min. Earth dist.	978 Jan 16 j 10:30	3° \approx 21'28	0.27114 AU	superior conj	980 Jun 10 j 07:01	24° Π 00'20	0°23'53
inferior conj	978 Jan 17 j 09:03	2° \approx 46'26	7°22'54	minimum elong	980 Jun 10 j 02:20	23° Π 45'57	0°23'40
minimum elong	978 Jan 16 j 23:32	3° \approx 01'14	7°21'16		980 Jun 15 j 04:03	0° Θ	
morning rise	978 Jan 21 j 05:47	0° \approx 24'59			980 Jul 09 j 12:56	0° Ω	
	978 Jan 21 j 22:58	30° \mathcal{R} \mathcal{Z}		evening rise	980 Jul 16 j 01:44	8° Ω 03'24	
direct	978 Feb 06 j 20:41	25° \mathcal{Z} 00'08			980 Aug 02 j 20:31	0° Π	
greatest brilliancy	978 Feb 15 j 21:05	26° \mathcal{Z} 31'59	-4.8m		980 Aug 27 j 03:55	0° $\underline{\Omega}$	
	978 Feb 23 j 18:17	0° \approx		desc. node	980 Sep 19 j 15:45	28° $\underline{\Omega}$ 56'13	
morning max el	978 Mar 28 j 09:47	26° \approx 15'31	46°15'05		980 Sep 20 j 12:30	0° \mathbb{M}	
	978 Apr 01 j 04:47	0° \mathcal{H}			980 Oct 14 j 23:31	0° \times	
desc. node	978 Apr 04 j 20:32	3° \mathcal{H} 41'18			980 Nov 08 j 15:02	0° \mathcal{Z}	
	978 Apr 29 j 12:14	0° Υ			980 Dec 03 j 16:28	0° \approx	
	978 May 26 j 00:38	0° \mathcal{B}			980 Dec 29 j 18:23	0° \mathcal{H}	
	978 Jun 20 j 17:16	0° Π		asc. node	981 Jan 10 j 19:04	13° \mathcal{H} 02'24	
	978 Jul 15 j 20:44	0° Θ		evening max el	981 Jan 17 j 09:55	19° \mathcal{H} 52'56	46°47'46
asc. node	978 Jul 27 j 00:04	13° Θ 28'03			981 Jan 27 j 20:27	0° Υ	
	978 Aug 09 j 13:22	0° Ω		greatest brilliancy	981 Feb 26 j 02:10	20° Υ 28'07	-4.8m
	978 Sep 02 j 21:01	0° Π		retrograde	981 Mar 08 j 18:17	22° Υ 35'14	
morning set	978 Sep 21 j 23:50	23° Π 49'33		evening set	981 Mar 25 j 17:43	16° Υ 57'38	
	978 Sep 26 j 22:16	0° $\underline{\Omega}$		inferior conj	981 Mar 29 j 23:48	14° Υ 18'47	6°51'36
	978 Oct 20 j 19:58	0° \mathbb{M}		minimum elong	981 Mar 30 j 09:13	14° Υ 03'52	6°49'55
max. Earth dist.	978 Oct 30 j 02:34	11° \mathbb{M} 39'45	1.71196 AU	min. Earth dist.	981 Mar 29 j 22:04	14° Υ 21'31	0.28601 AU
				morning rise	981 Apr 04 j 01:04	11° Υ 12'38	
superior conj	978 Oct 31 j 00:04	12° \mathbb{M} 47'20	0°36'00	direct	981 Apr 20 j 07:21	6° Υ 07'16	
minimum elong	978 Oct 31 j 08:28	13° \mathbb{M} 13'45	0°35'36	greatest brilliancy	981 Apr 29 j 23:45	7° Υ 50'25	-4.7m
	978 Nov 13 j 16:24	0° \times		desc. node	981 May 02 j 08:17	8° Υ 43'23	
desc. node	978 Nov 15 j 13:27	2° \times 21'40			981 Jun 01 j 15:09	0° \mathcal{B}	
	978 Dec 07 j 13:00	0° \mathcal{Z}		morning max el	981 Jun 08 j 03:18	6° \mathcal{B} 02'56	45°44'56
evening rise	978 Dec 11 j 09:19	4° \mathcal{Z} 49'56			981 Jul 01 j 15:16	0° Π	
	978 Dec 31 j 10:52	0° \approx			981 Jul 28 j 14:54	0° Θ	
	979 Jan 24 j 11:33	0° \mathcal{H}		asc. node	981 Aug 23 j 11:56	0° Ω 16'55	
	979 Feb 17 j 17:34	0° Υ			981 Aug 23 j 06:15	0° Ω	
asc. node	979 Mar 08 j 16:51	23° Υ 10'05			981 Sep 17 j 01:48	0° Π	
	979 Mar 14 j 08:23	0° \mathcal{B}			981 Oct 11 j 08:42	0° $\underline{\Omega}$	
	979 Apr 08 j 12:47	0° Π			981 Nov 04 j 08:30	0° \mathbb{M}	
	979 May 04 j 15:05	0° Θ			981 Nov 28 j 05:19	0° \times	
	979 Jun 01 j 12:49	0° Ω		morning set	981 Dec 05 j 12:17	9° \times 10'26	
evening max el	979 Jun 11 j 11:02	9° Ω 47'58	45°25'18	desc. node	981 Dec 13 j 01:21	18° \times 39'56	
desc. node	979 Jun 28 j 06:10	24° Ω 34'10			981 Dec 22 j 01:38	0° \mathcal{Z}	
	979 Jul 05 j 15:15	0° Π			982 Jan 14 j 22:51	0° \approx	
greatest brilliancy	979 Jul 20 j 06:46	7° Π 38'54	-4.7m				
retrograde	979 Jul 30 j 02:31	9° Π 22'41		superior conj	982 Jan 16 j 09:35	1° \approx 48'54	-1°10'04
evening set	979 Aug 16 j 22:30	3° Π 27'17		minimum elong	982 Jan 15 j 22:22	1° \approx 13'44	1°09'45
inferior conj	979 Aug 20 j 07:25	1° Π 24'15	-8°39'42	max. Earth dist.	982 Jan 20 j 02:04	6° \approx 26'12	1.71450 AU
minimum elong	979 Aug 20 j 04:50	1° Π 28'13	8°39'37		982 Feb 07 j 22:05	0° \mathcal{H}	
min. Earth dist.	979 Aug 20 j 20:09	1° Π 04'37	0.28355 AU	evening rise	982 Feb 25 j 22:47	22° \mathcal{H} 27'21	
	979 Aug 22 j 14:20	30° \mathcal{R} Ω			982 Mar 04 j 00:38	0° Υ	
morning rise	979 Aug 23 j 11:01	29° Ω 28'49			982 Mar 28 j 07:50	0° \mathcal{B}	
direct	979 Sep 10 j 16:41	23° Ω 15'41		asc. node	982 Apr 05 j 04:44	9° \mathcal{B} 39'27	
greatest brilliancy	979 Sep 21 j 16:32	25° Ω 29'53	-4.8m		982 Apr 21 j 20:50	0° Π	
	979 Sep 30 j 13:36	0° Π			982 May 16 j 16:56	0° Θ	
asc. node	979 Oct 19 j 09:23	14° Π 38'56			982 Jun 10 j 22:37	0° Ω	

	982 Jul 06 j 19:30	0°♎		morning set	985 Feb 20 j 11:50	27°≈28'34	
desc. node	982 Jul 25 j 17:58	21°♎11'33			985 Feb 22 j 12:32	0°♐	
	982 Aug 02 j 21:03	0°♑			985 Mar 18 j 16:39	0°♑	
evening max el	982 Aug 23 j 05:13	20°♑50'33	46°23'28				
	982 Sep 02 j 00:47	0°♒		superior conj	985 Mar 31 j 10:29	15°♑45'50	-1°06'51
greatest brilliancy	982 Oct 02 j 16:09	20°♒22'13	-4.9m	minimum elong	985 Mar 31 j 20:13	16°♑15'56	1°06'34
retrograde	982 Oct 11 j 19:57	21°♒55'43		max. Earth dist.	985 Apr 03 j 05:16	19°♑12'03	1.72980 AU
evening set	982 Oct 26 j 22:44	17°♒30'54			985 Apr 11 j 23:23	0°♒	
inferior conj	982 Nov 01 j 10:47	14°♒17'26	-3°37'57	asc. node	985 May 02 j 16:40	25°♒29'48	
minimum elong	982 Nov 01 j 18:32	14°♒05'37	3°35'39		985 May 06 j 08:42	0°♒	
min. Earth dist.	982 Nov 01 j 23:02	13°♒58'47	0.26592 AU	evening rise	985 May 08 j 01:33	2°♒05'20	
morning rise	982 Nov 07 j 13:49	10°♒42'45			985 May 30 j 20:17	0°♒	
asc. node	982 Nov 15 j 21:21	7°♒21'51			985 Jun 24 j 10:11	0°♒	
direct	982 Nov 21 j 22:37	6°♒36'40			985 Jul 19 j 03:21	0°♒	
greatest brilliancy	982 Dec 02 j 14:40	8°♒45'36	-4.9m		985 Aug 13 j 01:50	0°♑	
	983 Jan 01 j 10:30	0°♑		desc. node	985 Aug 22 j 05:49	10°♑56'00	
morning max el	983 Jan 11 j 13:10	9°♑51'27	46°54'01		985 Sep 07 j 08:57	0°♒	
	983 Jan 30 j 12:29	0°♑			985 Oct 03 j 07:24	0°♑	
	983 Feb 25 j 22:55	0°≈			985 Oct 30 j 17:13	0°♑	
desc. node	983 Mar 07 j 10:51	11°≈04'22		evening max el	985 Nov 04 j 05:43	4°♑38'33	47°20'15
	983 Mar 23 j 12:01	0°♐			985 Dec 03 j 04:34	0°≈	
	983 Apr 17 j 15:46	0°♑		asc. node	985 Dec 13 j 09:15	5°≈40'41	
	983 May 12 j 14:28	0°♒		greatest brilliancy	985 Dec 14 j 20:57	6°≈16'35	-4.9m
	983 Jun 06 j 09:14	0°♒		retrograde	985 Dec 25 j 05:00	8°≈19'58	
asc. node	983 Jun 28 j 14:18	27°♒04'36		evening set	986 Jan 10 j 03:21	3°≈16'17	
	983 Jun 30 j 23:37	0°♒		min. Earth dist.	986 Jan 13 j 23:28	0°≈57'32	0.27059 AU
morning set	983 Jul 12 j 05:25	13°♒47'35		inferior conj	986 Jan 14 j 22:23	0°≈22'01	7°10'04
	983 Jul 25 j 09:06	0°♒		minimum elong	986 Jan 14 j 12:33	0°≈37'16	7°08'15
max. Earth dist.	983 Aug 14 j 00:01	24°♒18'08	1.72596 AU		986 Jan 15 j 12:36	30°♒♑	
				morning rise	986 Jan 18 j 22:10	27°♒56'32	
superior conj	983 Aug 17 j 17:35	28°♒56'22	1°23'36	direct	986 Feb 04 j 10:00	22°♒36'34	
minimum elong	983 Aug 17 j 14:41	28°♒47'21	1°23'35	greatest brilliancy	986 Feb 13 j 09:56	24°♒08'37	-4.9m
	983 Aug 18 j 14:04	0°♒			986 Feb 25 j 08:14	0°≈	
	983 Sep 11 j 15:57	0°♑		morning max el	986 Mar 26 j 00:43	23°≈58'58	46°16'30
evening rise	983 Sep 24 j 06:08	15°♑43'15			986 Apr 01 j 01:57	0°♐	
	983 Oct 05 j 16:30	0°♒		desc. node	986 Apr 03 j 22:37	2°♐55'05	
desc. node	983 Oct 18 j 03:42	15°♒34'35			986 Apr 29 j 03:42	0°♑	
	983 Oct 29 j 16:57	0°♑			986 May 25 j 13:50	0°♒	
	983 Nov 22 j 18:19	0°♑			986 Jun 20 j 05:17	0°♒	
	983 Dec 16 j 22:15	0°≈			986 Jul 15 j 08:06	0°♒	
	984 Jan 10 j 08:18	0°♐		asc. node	986 Jul 26 j 02:02	13°♒00'10	
	984 Feb 04 j 07:12	0°♑			986 Aug 09 j 00:22	0°♒	
asc. node	984 Feb 08 j 06:54	4°♑42'03			986 Sep 02 j 07:51	0°♒	
	984 Mar 01 j 07:56	0°♒		morning set	986 Sep 19 j 14:36	21°♒32'00	
evening max el	984 Mar 29 j 07:49	29°♒29'34	45°39'05		986 Sep 26 j 09:04	0°♑	
	984 Mar 29 j 20:21	0°♒			986 Oct 20 j 06:46	0°♒	
greatest brilliancy	984 May 06 j 05:45	27°♒36'10	-4.7m	max. Earth dist.	986 Oct 27 j 10:44	9°♒00'26	1.71217 AU
retrograde	984 May 17 j 04:11	29°♒46'09					
desc. node	984 May 29 j 20:20	26°♒37'32		superior conj	986 Oct 28 j 11:43	10°♒18'59	0°39'25
evening set	984 Jun 01 j 05:46	25°♒23'59		minimum elong	986 Oct 28 j 20:39	10°♒47'07	0°39'01
inferior conj	984 Jun 07 j 16:22	21°♒33'17	-2°03'23		986 Nov 13 j 03:14	0°♑	
minimum elong	984 Jun 07 j 11:55	21°♒40'14	2°02'06	desc. node	986 Nov 14 j 15:38	1°♑54'24	
min. Earth dist.	984 Jun 07 j 17:27	21°♒31'35	0.28978 AU		986 Dec 06 j 23:54	0°♑	
morning rise	984 Jun 13 j 17:52	17°♒53'55		evening rise	986 Dec 08 j 19:28	2°♑16'52	
direct	984 Jun 29 j 07:28	13°♒15'05			986 Dec 30 j 21:51	0°≈	
greatest brilliancy	984 Jul 09 j 20:59	15°♒14'26	-4.7m		987 Jan 23 j 22:38	0°♐	
	984 Aug 02 j 11:55	0°♒			987 Feb 17 j 04:53	0°♑	
morning max el	984 Aug 17 j 09:05	13°♒23'56	45°59'44	asc. node	987 Mar 07 j 18:51	22°♑40'46	
	984 Sep 02 j 15:42	0°♒			987 Mar 13 j 20:12	0°♒	
asc. node	984 Sep 19 j 23:43	19°♒05'36			987 Apr 08 j 01:31	0°♒	
	984 Sep 29 j 11:43	0°♒			987 May 04 j 05:44	0°♒	
	984 Oct 24 j 17:38	0°♑			987 Jun 01 j 08:23	0°♒	
	984 Nov 18 j 05:26	0°♒		evening max el	987 Jun 09 j 02:35	7°♒36'33	45°24'23
	984 Dec 12 j 09:02	0°♑		desc. node	987 Jun 27 j 08:12	23°♒29'28	
	985 Jan 05 j 09:50	0°♑			987 Jul 06 j 16:41	0°♒	
desc. node	985 Jan 09 j 13:10	5°♑10'06		greatest brilliancy	987 Jul 17 j 19:51	5°♒23'54	-4.7m
	985 Jan 29 j 10:32	0°≈		retrograde	987 Jul 27 j 16:43	7°♒08'20	

evening set	987 Aug 14 j 10:57	1°♎16'09			990 Jan 14 j 09:49	0°♊	
	987 Aug 16 j 13:20	30°♎♎		max. Earth dist.	990 Jan 17 j 08:00	3°♊40'01	1.71403 AU
inferior conj	987 Aug 17 j 22:13	29°♎09'19	-8°36'16		990 Feb 07 j 09:00	0°♋	
minimum elong	987 Aug 17 j 18:50	29°♎14'33	8°36'07	evening rise	990 Feb 23 j 11:09	20°♋02'46	
min. Earth dist.	987 Aug 18 j 09:59	28°♎51'09	0.28401 AU		990 Mar 03 j 11:32	0°♌	
morning rise	987 Aug 21 j 02:33	27°♎12'32			990 Mar 27 j 18:49	0°♍	
direct	987 Sep 08 j 08:21	21°♎00'19		asc. node	990 Apr 04 j 06:54	9°♍12'21	
greatest brilliancy	987 Sep 19 j 06:55	23°♎12'55	-4.8m		990 Apr 21 j 08:02	0°♎	
	987 Oct 01 j 16:48	0°♎			990 May 16 j 04:37	0°♏	
asc. node	987 Oct 18 j 11:36	13°♎41'11			990 Jun 10 j 11:12	0°♐	
morning max el	987 Oct 28 j 17:52	23°♎38'32	46°41'51		990 Jul 06 j 09:48	0°♑	
	987 Nov 03 j 21:40	0°♏		desc. node	990 Jul 24 j 19:57	20°♑31'50	
	987 Nov 30 j 20:13	0°♐			990 Aug 02 j 15:02	0°♒	
	987 Dec 26 j 04:05	0°♑		evening max el	990 Aug 20 j 17:06	18°♒25'36	46°20'50
	988 Jan 19 j 21:32	0°♒			990 Sep 02 j 07:04	0°♓	
desc. node	988 Feb 07 j 00:58	22°♒12'06		greatest brilliancy	990 Sep 30 j 05:09	17°♓55'55	-4.9m
	988 Feb 13 j 09:34	0°♓		retrograde	990 Oct 09 j 07:32	19°♓28'35	
	988 Mar 08 j 19:55	0°♋		evening set	990 Oct 24 j 13:30	14°♓59'41	
	988 Apr 02 j 06:16	0°♌		inferior conj	990 Oct 29 j 23:03	11°♓50'01	-3°59'46
	988 Apr 26 j 17:11	0°♍		minimum elong	990 Oct 30 j 07:25	11°♓37'17	3°57'21
morning set	988 May 02 j 10:41	7°♋01'27		min. Earth dist.	990 Oct 30 j 12:51	11°♓29'03	0.26637 AU
	988 May 21 j 04:18	0°♎		morning rise	990 Nov 05 j 00:44	8°♓17'10	
asc. node	988 May 30 j 04:31	11°♎03'22		asc. node	990 Nov 14 j 23:23	4°♓33'00	
max. Earth dist.	988 Jun 06 j 20:42	20°♎28'41	1.73614 AU	direct	990 Nov 19 j 11:02	4°♓08'06	
				greatest brilliancy	990 Nov 30 j 05:27	6°♓19'21	-4.9m
superior conj	988 Jun 08 j 01:19	21°♎56'34	0°20'52		991 Jan 01 j 13:54	0°♑	
minimum elong	988 Jun 07 j 21:11	21°♎43'54	0°20'39	morning max el	991 Jan 09 j 02:27	7°♑25'04	46°54'43
	988 Jun 14 j 14:39	0°♏			991 Jan 30 j 06:11	0°♒	
	988 Jul 08 j 23:36	0°♐			991 Feb 25 j 13:28	0°♓	
evening rise	988 Jul 13 j 20:13	5°♐59'25		desc. node	991 Mar 06 j 12:55	10°♓29'44	
	988 Aug 02 j 07:21	0°♑			991 Mar 23 j 00:59	0°♋	
	988 Aug 26 j 15:04	0°♒			991 Apr 17 j 03:47	0°♌	
desc. node	988 Sep 18 j 17:50	28°♒27'02			991 May 12 j 01:54	0°♍	
	988 Sep 20 j 00:05	0°♓			991 Jun 05 j 20:17	0°♎	
	988 Oct 14 j 11:42	0°♑		asc. node	991 Jun 27 j 16:15	26°♎37'25	
	988 Nov 08 j 04:01	0°♒			991 Jun 30 j 10:27	0°♏	
	988 Dec 03 j 06:46	0°♓		morning set	991 Jul 09 j 23:21	11°♏41'59	
	988 Dec 29 j 11:32	0°♋			991 Jul 24 j 19:52	0°♐	
asc. node	989 Jan 09 j 21:06	12°♋16'02		max. Earth dist.	991 Aug 11 j 19:36	22°♐16'18	1.72652 AU
evening max el	989 Jan 15 j 00:41	17°♋34'24	46°50'09				
	989 Jan 27 j 23:37	0°♌		superior conj	991 Aug 15 j 10:45	26°♐46'54	1°23'01
greatest brilliancy	989 Feb 23 j 19:24	18°♌16'39	-4.8m	minimum elong	991 Aug 15 j 07:12	26°♐35'53	1°22'59
retrograde	989 Mar 06 j 10:03	20°♌22'41			991 Aug 18 j 00:54	0°♎	
evening set	989 Mar 23 j 12:32	14°♌41'22			991 Sep 11 j 02:56	0°♏	
inferior conj	989 Mar 27 j 15:48	12°♌06'36	7°03'56	evening rise	991 Sep 21 j 20:14	13°♏22'57	
minimum elong	989 Mar 28 j 01:00	11°♌52'01	7°02'22		991 Oct 05 j 03:39	0°♐	
min. Earth dist.	989 Mar 27 j 13:37	12°♌10'04	0.28569 AU	desc. node	991 Oct 17 j 05:49	15°♐06'01	
morning rise	989 Apr 01 j 13:46	9°♌04'56			991 Oct 29 j 04:19	0°♑	
direct	989 Apr 17 j 22:42	3°♌55'46			991 Nov 22 j 05:57	0°♒	
greatest brilliancy	989 Apr 27 j 14:21	5°♌37'58	-4.7m		991 Dec 16 j 10:14	0°♓	
desc. node	989 May 01 j 10:27	7°♌08'47			992 Jan 09 j 20:51	0°♋	
	989 Jun 01 j 16:01	0°♍			992 Feb 03 j 20:46	0°♌	
morning max el	989 Jun 05 j 17:54	3°♍49'54	45°45'08	asc. node	992 Feb 07 j 08:56	4°♌07'33	
	989 Jul 01 j 07:31	0°♎			992 Feb 29 j 23:43	0°♍	
	989 Jul 28 j 04:24	0°♏		evening max el	992 Mar 26 j 23:35	27°♍17'55	45°41'04
asc. node	989 Aug 22 j 13:58	29°♏46'28			992 Mar 29 j 18:56	0°♎	
	989 Aug 22 j 18:30	0°♐		greatest brilliancy	992 May 03 j 21:27	25°♎27'02	-4.7m
	989 Sep 16 j 13:25	0°♑		retrograde	992 May 14 j 21:18	27°♎38'18	
	989 Oct 10 j 19:59	0°♒		desc. node	992 May 28 j 22:18	23°♎47'39	
	989 Nov 03 j 19:39	0°♓		evening set	992 May 29 j 22:09	23°♎15'55	
	989 Nov 27 j 16:24	0°♑		inferior conj	992 Jun 05 j 08:53	19°♎24'53	-1°44'13
morning set	989 Dec 02 j 22:11	6°♑35'47		minimum elong	992 Jun 05 j 05:06	19°♎30'48	1°43'07
desc. node	989 Dec 12 j 03:18	18°♑11'24		min. Earth dist.	992 Jun 05 j 09:46	19°♎23'31	0.28978 AU
	989 Dec 21 j 12:40	0°♒		morning rise	992 Jun 11 j 11:58	15°♎43'41	
				direct	992 Jun 27 j 00:10	11°♎06'37	
superior conj	990 Jan 13 j 19:47	29°♒15'59	-1°07'43	greatest brilliancy	992 Jul 07 j 13:03	13°♎05'54	-4.7m
minimum elong	990 Jan 13 j 08:13	28°♒39'46	1°07'21		992 Aug 02 j 17:56	0°♏	

morning max el	992 Aug 15 j 01:43	11°☾14'44	45°58'26	asc. node	995 Mar 06 j 21:01	22°♊10'38	
	992 Sep 02 j 09:08	0°♌			995 Mar 13 j 08:27	0°♉	
asc. node	992 Sep 19 j 01:55	18°♌29'02			995 Apr 07 j 14:44	0°♊	
	992 Sep 29 j 01:57	0°♍			995 May 03 j 20:57	0°☾	
	992 Oct 24 j 06:33	0°♎			995 Jun 01 j 04:56	0°♌	
	992 Nov 17 j 17:39	0°♏		evening max el	995 Jun 06 j 17:35	5°♌23'01	45°23'34
	992 Dec 11 j 20:51	0°♐		desc. node	995 Jun 26 j 10:14	22°♌22'30	
	993 Jan 04 j 21:21	0°♑			995 Jul 08 j 04:58	0°♍	
desc. node	993 Jan 08 j 15:10	4°♑40'29		greatest brilliancy	995 Jul 15 j 09:53	3°♍09'42	-4.7m
	993 Jan 28 j 21:51	0°♒		retrograde	995 Jul 25 j 06:56	4°♍54'22	
morning set	993 Feb 17 j 23:57	25°♒02'09			995 Aug 10 j 10:02	30°♌♌	
	993 Feb 21 j 23:40	0°♈		evening set	995 Aug 11 j 23:31	29°♌05'49	
	993 Mar 18 j 03:40	0°♉		inferior conj	995 Aug 15 j 13:24	26°♌54'55	-8°32'05
				minimum elong	995 Aug 15 j 09:14	27°♌01'21	8°31'50
superior conj	993 Mar 29 j 01:42	13°♊30'41	-1°08'58	min. Earth dist.	995 Aug 16 j 00:32	26°♌37'40	0.28445 AU
minimum elong	993 Mar 29 j 11:19	14°♊00'23	1°08'41	morning rise	995 Aug 18 j 18:47	24°♌56'15	
max. Earth dist.	993 Mar 31 j 23:05	17°♊05'00	1.72934 AU	direct	995 Sep 05 j 23:46	18°♌45'22	
	993 Apr 11 j 10:19	0°♉		greatest brilliancy	995 Sep 16 j 22:04	20°♌56'56	-4.8m
asc. node	993 May 01 j 18:43	25°♉02'31			995 Oct 02 j 12:46	0°♍	
evening rise	993 May 05 j 19:12	29°♉58'42		asc. node	995 Oct 17 j 13:36	12°♍43'48	
	993 May 05 j 19:38	0°♊		morning max el	995 Oct 26 j 07:14	21°♍14'59	46°40'27
	993 May 30 j 07:21	0°☾			995 Nov 03 j 17:31	0°♎	
	993 Jun 23 j 21:32	0°♌			995 Nov 30 j 11:41	0°♏	
	993 Jul 18 j 15:11	0°♍			995 Dec 25 j 17:48	0°♐	
	993 Aug 12 j 14:28	0°♎			996 Jan 19 j 10:19	0°♑	
desc. node	993 Aug 21 j 07:57	10°♎23'32		desc. node	996 Feb 06 j 03:05	21°♑40'53	
	993 Sep 06 j 22:54	0°♏			996 Feb 12 j 21:44	0°♒	
	993 Oct 02 j 23:45	0°♐			996 Mar 08 j 07:37	0°♈	
	993 Oct 30 j 15:13	0°♑			996 Apr 01 j 17:37	0°♉	
evening max el	993 Nov 01 j 20:59	2°♑16'57	47°19'28		996 Apr 26 j 04:17	0°♉	
	993 Dec 04 j 15:19	0°♒		morning set	996 Apr 30 j 04:04	4°♉53'44	
asc. node	993 Dec 12 j 11:15	3°♒49'30			996 May 20 j 15:15	0°♊	
greatest brilliancy	993 Dec 12 j 10:16	3°♒48'34	-4.9m	asc. node	996 May 29 j 06:28	10°♊35'48	
retrograde	993 Dec 22 j 19:03	5°♒52'08		max. Earth dist.	996 Jun 04 j 16:28	18°♊28'32	1.73619 AU
evening set	994 Jan 07 j 12:53	0°♒54'25					
	994 Jan 09 j 01:57	30°♌♑		superior conj	996 Jun 05 j 19:40	19°♊52'00	0°17'48
min. Earth dist.	994 Jan 11 j 12:15	28°♑31'00	0.26997 AU	minimum elong	996 Jun 05 j 16:06	19°♊41'04	0°17'38
inferior conj	994 Jan 12 j 11:24	27°♑55'09	6°56'16		996 Jun 14 j 01:35	0°☾	
minimum elong	994 Jan 12 j 01:20	28°♑10'44	6°54'17		996 Jul 08 j 10:35	0°♌	
morning rise	994 Jan 16 j 14:17	25°♑25'29		evening rise	996 Jul 11 j 15:01	3°♌55'26	
direct	994 Feb 01 j 23:13	20°♑10'55			996 Aug 01 j 18:31	0°♍	
greatest brilliancy	994 Feb 10 j 22:20	21°♑42'43	-4.9m		996 Aug 26 j 02:31	0°♎	
	994 Feb 26 j 11:43	0°♒		desc. node	996 Sep 17 j 19:58	27°♎57'15	
morning max el	994 Mar 23 j 14:50	21°♒39'09	46°18'00		996 Sep 19 j 11:58	0°♏	
	994 Mar 31 j 22:47	0°♈			996 Oct 14 j 00:08	0°♐	
desc. node	994 Apr 03 j 00:48	2°♈08'48			996 Nov 07 j 17:18	0°♑	
	994 Apr 28 j 19:15	0°♉			996 Dec 02 j 21:31	0°♒	
	994 May 25 j 03:13	0°♉			996 Dec 29 j 05:30	0°♈	
	994 Jun 19 j 17:32	0°♊		asc. node	997 Jan 08 j 23:08	11°♈27'43	
	994 Jul 14 j 19:42	0°☾		evening max el	997 Jan 12 j 14:30	15°♈11'57	46°52'15
asc. node	994 Jul 25 j 04:08	12°☾31'51			997 Jan 28 j 05:18	0°♉	
	994 Aug 08 j 11:38	0°♌		greatest brilliancy	997 Feb 21 j 12:31	16°♊02'52	-4.8m
	994 Sep 01 j 18:58	0°♍		retrograde	997 Mar 04 j 01:35	18°♊08'01	
morning set	994 Sep 17 j 05:48	19°♍14'57		evening set	997 Mar 21 j 07:07	12°♊22'48	
	994 Sep 25 j 20:08	0°♎		inferior conj	997 Mar 25 j 07:35	9°♊52'19	7°15'43
	994 Oct 19 j 17:54	0°♏		minimum elong	997 Mar 25 j 16:31	9°♊38'09	7°14'17
max. Earth dist.	994 Oct 24 j 17:00	6°♏14'12	1.71249 AU	min. Earth dist.	997 Mar 25 j 05:08	9°♊56'13	0.28537 AU
				morning rise	997 Mar 30 j 02:11	6°♊55'23	
superior conj	994 Oct 25 j 23:37	7°♏50'26	0°42'44	direct	997 Apr 15 j 13:22	1°♊42'01	
minimum elong	994 Oct 26 j 09:02	8°♏20'01	0°42'20	greatest brilliancy	997 Apr 25 j 05:10	3°♊24'00	-4.7m
	994 Nov 12 j 14:29	0°♐		desc. node	997 Apr 30 j 12:23	5°♊35'33	
desc. node	994 Nov 13 j 17:36	1°♐25'16			997 Jun 01 j 16:11	0°♉	
evening rise	994 Dec 06 j 05:16	29°♐41'12		morning max el	997 Jun 03 j 08:26	1°♉35'25	45°45'35
	994 Dec 06 j 11:15	0°♑			997 Jun 30 j 23:47	0°♊	
	994 Dec 30 j 09:17	0°♒			997 Jul 27 j 18:02	0°☾	
	995 Jan 23 j 10:11	0°♈		asc. node	997 Aug 21 j 16:03	29°☾15'38	
	995 Feb 16 j 16:40	0°♉			997 Aug 22 j 06:55	0°♌	

	997 Sep 16 j 01:12	0°♎		retrograde	1000 May 12 j 14:23	25°♊29'55	
	997 Oct 10 j 07:28	0°♏		evening set	1000 May 27 j 14:39	21°♊07'27	
	997 Nov 03 j 06:59	0°♌		desc. node	1000 May 28 j 00:21	20°♊54'06	
	997 Nov 27 j 03:38	0°♈		inferior conj	1000 Jun 03 j 01:18	17°♊16'06	-1°24'44
morning set	997 Nov 30 j 08:44	4°♈02'37		minimum elong	1000 Jun 02 j 22:13	17°♊20'56	1°23'51
desc. node	997 Dec 11 j 05:22	17°♈42'42		min. Earth dist.	1000 Jun 03 j 01:54	17°♊15'10	0.28977 AU
	997 Dec 20 j 23:50	0°♏		morning rise	1000 Jun 09 j 05:49	13°♊33'09	
				direct	1000 Jun 24 j 17:04	8°♊57'59	
superior conj	998 Jan 11 j 06:07	26°♏42'58	-1°05'13	greatest brilliancy	1000 Jul 05 j 04:29	10°♊56'25	-4.7m
minimum elong	998 Jan 10 j 18:20	26°♏05'58	1°04'50		1000 Aug 02 j 22:02	0°♏	
	998 Jan 13 j 20:57	0°♏		morning max el	1000 Aug 12 j 18:13	9°♏05'26	45°57'13
max. Earth dist.	998 Jan 14 j 12:41	0°♏49'20	1.71366 AU		1000 Sep 02 j 02:08	0°♏	
	998 Feb 06 j 20:07	0°♏		asc. node	1000 Sep 18 j 03:57	17°♏52'37	
evening rise	998 Feb 20 j 23:21	17°♏36'48			1000 Sep 28 j 15:56	0°♎	
	998 Mar 02 j 22:42	0°♎			1000 Oct 23 j 19:14	0°♏	
	998 Mar 27 j 06:04	0°♏			1000 Nov 17 j 05:41	0°♌	
asc. node	998 Apr 03 j 08:52	8°♏43'45			1000 Dec 11 j 08:29	0°♈	
	998 Apr 20 j 19:32	0°♊			1001 Jan 04 j 08:44	0°♏	
	998 May 15 j 16:35	0°♏		desc. node	1001 Jan 07 j 17:18	4°♏11'44	
	998 Jun 10 j 00:06	0°♏			1001 Jan 28 j 09:01	0°♏	
	998 Jul 06 j 00:28	0°♎		morning set	1001 Feb 15 j 12:09	22°♏36'28	
desc. node	998 Jul 23 j 22:04	19°♎51'41			1001 Feb 21 j 10:39	0°♏	
	998 Aug 02 j 09:37	0°♏			1001 Mar 17 j 14:30	0°♎	
evening max el	998 Aug 18 j 05:39	16°♏02'10	46°18'18				
	998 Sep 02 j 15:53	0°♌		superior conj	1001 Mar 26 j 16:58	11°♎16'05	-1°10'58
greatest brilliancy	998 Sep 27 j 17:40	15°♌29'17	-4.9m	minimum elong	1001 Mar 27 j 02:22	11°♎45'10	1°10'42
retrograde	998 Oct 06 j 19:52	17°♌01'52		max. Earth dist.	1001 Mar 29 j 18:55	15°♎04'41	1.72887 AU
evening set	998 Oct 22 j 04:33	12°♌28'34			1001 Apr 10 j 21:03	0°♏	
inferior conj	998 Oct 27 j 11:26	9°♌22'45	-4°21'04	asc. node	1001 Apr 30 j 20:43	24°♏35'35	
minimum elong	998 Oct 27 j 20:22	9°♌09'12	4°18'32	evening rise	1001 May 03 j 12:49	27°♏52'25	
min. Earth dist.	998 Oct 28 j 02:22	9°♌00'06	0.26684 AU		1001 May 05 j 06:24	0°♊	
morning rise	998 Nov 02 j 11:35	5°♌52'18			1001 May 29 j 18:17	0°♏	
asc. node	998 Nov 14 j 01:20	1°♌50'36			1001 Jun 23 j 08:47	0°♏	
direct	998 Nov 17 j 00:03	1°♌39'51			1001 Jul 18 j 02:56	0°♎	
greatest brilliancy	998 Nov 27 j 19:44	3°♌52'46	-4.9m		1001 Aug 12 j 03:01	0°♏	
	999 Jan 01 j 15:46	0°♈		desc. node	1001 Aug 20 j 10:01	9°♏51'19	
morning max el	999 Jan 06 j 16:45	5°♈01'25	46°55'24		1001 Sep 06 j 12:47	0°♌	
	999 Jan 29 j 23:31	0°♏			1001 Oct 02 j 16:07	0°♈	
	999 Feb 25 j 03:51	0°♏		evening max el	1001 Oct 30 j 12:05	29°♈55'45	47°18'35
desc. node	999 Mar 05 j 15:03	9°♏55'28			1001 Oct 30 j 13:46	0°♏	
	999 Mar 22 j 13:56	0°♏			1001 Dec 06 j 18:59	0°♏	
	999 Apr 16 j 15:53	0°♎		greatest brilliancy	1001 Dec 10 j 00:10	1°♏22'06	-4.9m
	999 May 11 j 13:25	0°♏		asc. node	1001 Dec 11 j 13:24	1°♏54'57	
	999 Jun 05 j 07:25	0°♊		retrograde	1001 Dec 20 j 08:49	3°♏24'56	
asc. node	999 Jun 26 j 18:23	26°♊10'31			1002 Jan 02 j 06:25	30°♏♏	
	999 Jun 29 j 21:22	0°♏		evening set	1002 Jan 04 j 22:35	28°♏33'20	
morning set	999 Jul 07 j 17:13	9°♏36'01		min. Earth dist.	1002 Jan 09 j 01:25	26°♏04'50	0.26937 AU
	999 Jul 24 j 06:41	0°♏		inferior conj	1002 Jan 10 j 00:27	25°♏29'09	6°41'31
max. Earth dist.	999 Aug 09 j 15:19	20°♏14'54	1.72702 AU	minimum elong	1002 Jan 09 j 14:14	25°♏44'58	6°39'25
				morning rise	1002 Jan 14 j 06:27	22°♏55'02	
superior conj	999 Aug 13 j 03:57	24°♏37'33	1°22'18	direct	1002 Jan 30 j 12:14	17°♏46'09	
minimum elong	999 Aug 12 j 23:46	24°♏24'34	1°22'15	greatest brilliancy	1002 Feb 08 j 11:09	19°♏17'48	-4.9m
	999 Aug 17 j 11:45	0°♎			1002 Feb 27 j 07:25	0°♏	
	999 Sep 10 j 13:55	0°♏		morning max el	1002 Mar 21 j 04:03	19°♏17'49	46°19'33
evening rise	999 Sep 19 j 10:38	11°♏03'35			1002 Mar 31 j 18:36	0°♏	
	999 Oct 04 j 14:49	0°♌		desc. node	1002 Apr 02 j 02:43	1°♏23'28	
desc. node	999 Oct 16 j 07:47	14°♌36'55			1002 Apr 28 j 10:15	0°♎	
	999 Oct 28 j 15:42	0°♈			1002 May 24 j 16:11	0°♏	
	999 Nov 21 j 17:35	0°♏			1002 Jun 19 j 05:27	0°♊	
	999 Dec 15 j 22:13	0°♏			1002 Jul 14 j 07:03	0°♏	
	1000 Jan 09 j 09:22	0°♏		asc. node	1002 Jul 24 j 06:15	12°♏04'20	
	1000 Feb 03 j 10:21	0°♎			1002 Aug 07 j 22:40	0°♏	
asc. node	1000 Feb 06 j 11:05	3°♎33'29			1002 Sep 01 j 05:51	0°♎	
	1000 Feb 29 j 15:40	0°♏		morning set	1002 Sep 14 j 20:52	16°♎58'17	
evening max el	1000 Mar 24 j 16:03	25°♏08'02	45°42'54		1002 Sep 25 j 06:58	0°♏	
	1000 Mar 29 j 18:27	0°♊			1002 Oct 19 j 04:46	0°♌	
greatest brilliancy	1000 May 01 j 13:23	23°♊18'00	-4.7m	max. Earth dist.	1002 Oct 21 j 22:38	3°♌26'54	1.71280 AU

superior conj	1002 Oct 23 j 11:37	5°♍23'08	0°45'58	min. Earth dist.	1005 Mar 22 j 20:26	7°♊43'24	0.28505 AU
minimum elong	1002 Oct 23 j 21:25	5°♍53'55	0°45'33	morning rise	1005 Mar 27 j 14:33	4°♊46'54	
	1002 Nov 12 j 01:25	0°♊			1005 Apr 08 j 01:36	30°♊	
desc. node	1002 Nov 12 j 19:40	0°♊57'20		direct	1005 Apr 13 j 03:57	29°♊28'50	
evening rise	1002 Dec 03 j 15:07	27°♊06'42			1005 Apr 18 j 09:51	0°♊	
	1002 Dec 05 j 22:17	0°♊		greatest brilliancy	1005 Apr 22 j 19:59	1°♊10'57	-4.7m
	1002 Dec 29 j 20:25	0°♊		desc. node	1005 Apr 29 j 14:30	4°♊06'37	
	1003 Jan 22 j 21:27	0°♊		morning max el	1005 May 31 j 23:45	29°♊23'46	45°46'11
	1003 Feb 16 j 04:11	0°♊			1005 Jun 01 j 14:54	0°♊	
asc. node	1003 Mar 05 j 23:00	21°♊40'47			1005 Jun 30 j 15:26	0°♊	
	1003 Mar 12 j 20:27	0°♊			1005 Jul 27 j 07:11	0°♊	
	1003 Apr 07 j 03:41	0°♊		asc. node	1005 Aug 20 j 18:06	28°♊45'49	
	1003 May 03 j 12:00	0°♊			1005 Aug 21 j 18:55	0°♊	
	1003 Jun 01 j 01:46	0°♊			1005 Sep 15 j 12:39	0°♊	
evening max el	1003 Jun 04 j 07:43	3°♊08'23	45°22'47		1005 Oct 09 j 18:40	0°♊	
desc. node	1003 Jun 25 j 12:21	21°♊14'45			1005 Nov 02 j 18:04	0°♊	
	1003 Jul 10 j 12:18	0°♊			1005 Nov 26 j 14:39	0°♊	
greatest brilliancy	1003 Jul 12 j 23:45	0°♊56'02	-4.7m	morning set	1005 Nov 27 j 19:01	1°♊29'15	
retrograde	1003 Jul 22 j 20:58	2°♊41'17		desc. node	1005 Dec 10 j 07:33	17°♊15'00	
	1003 Aug 03 j 15:52	30°♊			1005 Dec 20 j 10:47	0°♊	
evening set	1003 Aug 09 j 11:41	26°♊56'24					
inferior conj	1003 Aug 13 j 04:29	24°♊41'12	-8°27'00	superior conj	1006 Jan 08 j 15:56	24°♊08'52	-1°02'33
minimum elong	1003 Aug 12 j 23:35	24°♊48'47	8°26'39	minimum elong	1006 Jan 08 j 04:00	23°♊31'26	1°02'09
min. Earth dist.	1003 Aug 13 j 15:15	24°♊24'32	0.28491 AU	max. Earth dist.	1006 Jan 11 j 17:13	27°♊58'49	1.71328 AU
morning rise	1003 Aug 16 j 11:17	22°♊40'17			1006 Jan 13 j 07:51	0°♊	
direct	1003 Sep 03 j 14:48	16°♊30'50			1006 Feb 06 j 07:00	0°♊	
greatest brilliancy	1003 Sep 14 j 13:49	18°♊42'22	-4.8m	evening rise	1006 Feb 18 j 11:14	15°♊10'45	
	1003 Oct 03 j 03:23	0°♊			1006 Mar 02 j 09:35	0°♊	
asc. node	1003 Oct 16 j 15:35	11°♊48'12			1006 Mar 26 j 17:04	0°♊	
morning max el	1003 Oct 23 j 20:39	18°♊52'15	46°39'10	asc. node	1006 Apr 02 j 10:55	8°♊16'08	
	1003 Nov 03 j 12:34	0°♊			1006 Apr 20 j 06:47	0°♊	
	1003 Nov 30 j 02:40	0°♊			1006 May 15 j 04:21	0°♊	
	1003 Dec 25 j 07:05	0°♊			1006 Jun 09 j 12:48	0°♊	
	1004 Jan 18 j 22:40	0°♊			1006 Jul 05 j 15:01	0°♊	
desc. node	1004 Feb 05 j 05:10	21°♊10'51		desc. node	1006 Jul 23 j 00:10	19°♊11'57	
	1004 Feb 12 j 09:27	0°♊			1006 Aug 02 j 04:21	0°♊	
	1004 Mar 07 j 18:55	0°♊		evening max el	1006 Aug 15 j 19:05	13°♊42'04	46°15'47
	1004 Apr 01 j 04:36	0°♊			1006 Sep 03 j 03:14	0°♊	
	1004 Apr 25 j 15:03	0°♊		greatest brilliancy	1006 Sep 25 j 05:36	13°♊03'14	-4.8m
morning set	1004 Apr 27 j 21:26	2°♊46'49		retrograde	1006 Oct 04 j 08:32	14°♊36'01	
	1004 May 20 j 01:53	0°♊		evening set	1006 Oct 19 j 19:45	9°♊58'17	
asc. node	1004 May 28 j 08:38	10°♊10'01		inferior conj	1006 Oct 24 j 23:48	6°♊56'15	-4°41'42
max. Earth dist.	1004 Jun 02 j 12:16	16°♊29'32	1.73623 AU	minimum elong	1006 Oct 25 j 09:13	6°♊41'58	4°39'07
				min. Earth dist.	1006 Oct 25 j 15:31	6°♊32'25	0.26737 AU
superior conj	1004 Jun 03 j 14:06	17°♊48'49	0°14'44	morning rise	1006 Oct 30 j 22:10	3°♊28'26	
minimum elong	1004 Jun 03 j 11:08	17°♊39'42	0°14'36		1006 Nov 08 j 09:20	30°♊	
behind sun begin	1004 Jun 03 j 02:24	17°♊12'55		asc. node	1006 Nov 13 j 03:33	29°♊14'56	
behind sun end	1004 Jun 03 j 19:51	18°♊06'30		direct	1006 Nov 14 j 13:34	29°♊12'27	
	1004 Jun 13 j 12:09	0°♊			1006 Nov 20 j 21:47	0°♊	
	1004 Jul 07 j 21:13	0°♊		greatest brilliancy	1006 Nov 25 j 09:31	1°♊26'08	-4.9m
evening rise	1004 Jul 09 j 09:59	1°♊53'12			1007 Jan 01 j 16:15	0°♊	
	1004 Aug 01 j 05:22	0°♊		morning max el	1007 Jan 04 j 07:35	2°♊39'19	46°55'51
	1004 Aug 25 j 13:43	0°♊			1007 Jan 29 j 16:25	0°♊	
desc. node	1004 Sep 16 j 21:55	27°♊27'34			1007 Feb 24 j 18:00	0°♊	
	1004 Sep 18 j 23:37	0°♊		desc. node	1007 Mar 04 j 17:02	9°♊21'18	
	1004 Oct 13 j 12:24	0°♊			1007 Mar 22 j 02:39	0°♊	
	1004 Nov 07 j 06:25	0°♊			1007 Apr 16 j 03:44	0°♊	
	1004 Dec 02 j 12:08	0°♊			1007 May 11 j 00:43	0°♊	
	1004 Dec 28 j 23:30	0°♊			1007 Jun 04 j 18:22	0°♊	
asc. node	1005 Jan 08 j 01:16	10°♊39'57		asc. node	1007 Jun 25 j 20:28	25°♊43'55	
evening max el	1005 Jan 10 j 03:59	12°♊49'35	46°54'34		1007 Jun 29 j 08:07	0°♊	
	1005 Jan 28 j 12:45	0°♊		morning set	1007 Jul 05 j 11:14	7°♊31'05	
greatest brilliancy	1005 Feb 19 j 05:06	13°♊49'20	-4.8m		1007 Jul 23 j 17:22	0°♊	
retrograde	1005 Mar 01 j 17:21	15°♊54'24		max. Earth dist.	1007 Aug 07 j 09:30	18°♊09'19	1.72748 AU
evening set	1005 Mar 19 j 01:33	10°♊05'00					
inferior conj	1005 Mar 22 j 23:20	7°♊38'48	7°26'48	superior conj	1007 Aug 10 j 21:26	22°♊29'39	1°21'28
minimum elong	1005 Mar 23 j 07:57	7°♊25'09	7°25'30	minimum elong	1007 Aug 10 j 16:39	22°♊14'49	1°21'25

	1007 Aug 16 j 22:28	0°♎			1010 Feb 27 j 22:09	0°≈		
	1007 Sep 10 j 00:44	0°♏		morning max el	1010 Mar 18 j 16:39	16°≈54'28	46°21'00	
evening rise	1007 Sep 17 j 01:23	8°♏45'56			1010 Mar 31 j 13:58	0°♐		
	1007 Oct 04 j 01:48	0°♎		desc. node	1010 Apr 01 j 04:50	0°♐38'59		
desc. node	1007 Oct 15 j 09:54	14°♎08'51			1010 Apr 28 j 01:13	0°♑		
	1007 Oct 28 j 02:55	0°♑			1010 May 24 j 05:14	0°♒		
	1007 Nov 21 j 05:07	0°♓			1010 Jun 18 j 17:28	0°♒		
	1007 Dec 15 j 10:10	0°≈			1010 Jul 13 j 18:30	0°♓		
	1008 Jan 08 j 21:55	0°♐		asc. node	1010 Jul 23 j 08:13	11°♓36'02		
	1008 Feb 03 j 00:00	0°♑			1010 Aug 07 j 09:48	0°♏		
asc. node	1008 Feb 05 j 13:04	2°♑58'46			1010 Aug 31 j 16:50	0°♎		
	1008 Feb 29 j 07:53	0°♒		morning set	1010 Sep 12 j 11:58	14°♎41'22		
evening max el	1008 Mar 22 j 08:37	22°♒58'22 45°44'53			1010 Sep 24 j 17:57	0°♏		
	1008 Mar 29 j 19:05	0°♒			1010 Oct 18 j 15:48	0°♎		
greatest brilliancy	1008 Apr 29 j 05:58	21°♒09'54 -4.7m		max. Earth dist.	1010 Oct 19 j 04:53	0°♎41'07 1.71314 AU		
retrograde	1008 May 10 j 07:10	23°♒21'33						
evening set	1008 May 25 j 07:21	18°♒59'03		superior conj	1010 Oct 20 j 23:54	2°♎56'16 0°49'05		
desc. node	1008 May 27 j 02:30	17°♒57'54		minimum elong	1010 Oct 21 j 10:00	3°♎28'00 0°48'40		
inferior conj	1008 May 31 j 17:44	15°♒07'33 -1°05'12		desc. node	1010 Nov 11 j 21:49	0°♑29'12		
minimum elong	1008 May 31 j 15:21	15°♒11'17 1°04'30			1010 Nov 11 j 12:32	0°♑		
min. Earth dist.	1008 May 31 j 18:12	15°♒06'49 0.28972 AU		evening rise	1010 Dec 01 j 01:16	24°♑32'48		
morning rise	1008 Jun 06 j 23:28	11°♒22'46			1010 Dec 05 j 09:28	0°♓		
direct	1008 Jun 22 j 09:54	6°♒49'39			1010 Dec 29 j 07:39	0°≈		
greatest brilliancy	1008 Jul 02 j 19:39	8°♒46'41 -4.7m			1011 Jan 22 j 08:50	0°♐		
	1008 Aug 03 j 00:26	0°♓			1011 Feb 15 j 15:50	0°♑		
morning max el	1008 Aug 10 j 10:10	6°♓55'01 45°56'03		asc. node	1011 Mar 05 j 01:02	21°♑10'37		
	1008 Sep 01 j 18:46	0°♏			1011 Mar 12 j 08:39	0°♒		
asc. node	1008 Sep 17 j 05:55	17°♏16'30			1011 Apr 06 j 16:57	0°♒		
	1008 Sep 28 j 05:43	0°♎			1011 May 03 j 03:31	0°♓		
	1008 Oct 23 j 07:46	0°♏			1011 May 31 j 23:41	0°♏		
	1008 Nov 16 j 17:35	0°♎		evening max el	1011 Jun 01 j 21:49	0°♏53'04 45°22'12		
	1008 Dec 10 j 20:02	0°♑		desc. node	1011 Jun 24 j 14:23	20°♏04'24		
	1009 Jan 03 j 20:03	0°♓		greatest brilliancy	1011 Jul 10 j 13:18	28°♏41'38 -4.7m		
desc. node	1009 Jan 06 j 19:20	3°♓42'48			1011 Jul 15 j 11:13	0°♎		
	1009 Jan 27 j 20:10	0°≈		retrograde	1011 Jul 20 j 11:34	0°♎28'13		
morning set	1009 Feb 13 j 00:00	20°≈09'32			1011 Jul 25 j 09:17	30°♒♏		
	1009 Feb 20 j 21:40	0°♐		evening set	1011 Aug 06 j 23:45	24°♏47'00		
	1009 Mar 17 j 01:22	0°♑		inferior conj	1011 Aug 10 j 19:44	22°♏27'19 -8°21'06		
				minimum elong	1011 Aug 10 j 14:07	22°♏36'00 8°20'39		
superior conj	1009 Mar 24 j 07:47	8°♑59'52 -1°12'52		min. Earth dist.	1011 Aug 11 j 05:58	22°♏11'27 0.28536 AU		
minimum elong	1009 Mar 24 j 16:55	9°♑28'09 1°12'38		morning rise	1011 Aug 14 j 04:13	20°♏23'52		
max. Earth dist.	1009 Mar 27 j 14:33	13°♑03'29 1.72836 AU		direct	1011 Sep 01 j 05:56	14°♏16'03		
	1009 Apr 10 j 07:51	0°♒		greatest brilliancy	1011 Sep 12 j 05:50	16°♏28'00 -4.8m		
asc. node	1009 Apr 29 j 22:52	24°♒08'57			1011 Oct 03 j 14:30	0°♎		
evening rise	1009 May 01 j 06:00	25°♒44'33		asc. node	1011 Oct 15 j 17:48	10°♎53'45		
	1009 May 04 j 17:13	0°♒		morning max el	1011 Oct 21 j 11:04	16°♎31'37 46°37'51		
	1009 May 29 j 05:16	0°♓			1011 Nov 03 j 07:21	0°♏		
	1009 Jun 22 j 20:05	0°♏			1011 Nov 29 j 17:43	0°♎		
	1009 Jul 17 j 14:46	0°♎			1011 Dec 24 j 20:31	0°♑		
	1009 Aug 11 j 15:42	0°♏			1012 Jan 18 j 11:10	0°♓		
desc. node	1009 Aug 19 j 12:00	9°♏18'26		desc. node	1012 Feb 04 j 07:09	20°♓39'56		
	1009 Sep 06 j 02:52	0°♎			1012 Feb 11 j 21:21	0°≈		
	1009 Oct 02 j 08:49	0°♑			1012 Mar 07 j 06:23	0°♐		
evening max el	1009 Oct 28 j 02:30	27°♑32'54 47°17'38			1012 Mar 31 j 15:47	0°♑		
	1009 Oct 30 j 13:14	0°♓			1012 Apr 25 j 02:02	0°♒		
greatest brilliancy	1009 Dec 07 j 14:39	28°♓56'34 -4.9m		morning set	1012 Apr 25 j 14:51	0°♒39'19		
asc. node	1009 Dec 10 j 15:25	29°♓55'59			1012 May 19 j 12:45	0°♒		
	1009 Dec 10 j 21:20	0°≈		asc. node	1012 May 27 j 10:42	9°♒43'03		
retrograde	1009 Dec 17 j 22:07	0°≈57'59		max. Earth dist.	1012 May 31 j 08:59	14°♒32'29 1.73628 AU		
	1009 Dec 24 j 17:36	30°♒♓						
evening set	1010 Jan 02 j 08:31	26°♓12'20		superior conj	1012 Jun 01 j 08:31	15°♒44'45 0°11'39		
min. Earth dist.	1010 Jan 06 j 15:06	23°♓38'28 0.26879 AU		minimum elong	1012 Jun 01 j 06:10	15°♒37'29 0°11'31		
inferior conj	1010 Jan 07 j 13:37	23°♓03'32 6°26'06		behind sun begin	1012 May 31 j 14:36	14°♒49'43		
minimum elong	1010 Jan 07 j 03:20	23°♓19'30 6°23'52		behind sun end	1012 Jun 01 j 21:43	16°♒25'16		
morning rise	1010 Jan 11 j 22:41	20°♓24'54			1012 Jun 12 j 23:00	0°♓		
direct	1010 Jan 28 j 00:53	15°♓21'35		evening rise	1012 Jul 07 j 04:57	29°♓50'09		
greatest brilliancy	1010 Feb 06 j 00:42	16°♓53'38 -4.9m			1012 Jul 07 j 08:09	0°♏		

	1012 Jul 31 j 16:30	0°♍	morning max el	1015 Jan 01 j 22:00	0°♌15'26	46°56'05
	1012 Aug 25 j 01:11	0°♊		1015 Jan 29 j 09:17	0°♎	
desc. node	1012 Sep 16 j 00:02	26°♊57'33		1015 Feb 24 j 08:18	0°♍	
	1012 Sep 18 j 11:34	0°♍	desc. node	1015 Mar 03 j 19:06	8°♍46'44	
	1012 Oct 13 j 00:59	0°♌		1015 Mar 21 j 15:36	0°♋	
	1012 Nov 06 j 19:56	0°♎		1015 Apr 15 j 15:51	0°♍	
	1012 Dec 02 j 03:16	0°♍		1015 May 10 j 12:15	0°♌	
	1012 Dec 28 j 18:19	0°♋		1015 Jun 04 j 05:32	0°♊	
asc. node	1013 Jan 07 j 03:17	9°♋50'15	asc. node	1015 Jun 24 j 22:27	25°♊16'23	
evening max el	1013 Jan 07 j 18:33	10°♋29'07 46°56'55		1015 Jun 28 j 19:04	0°♎	
	1013 Jan 28 j 23:21	0°♍	morning set	1015 Jul 03 j 05:30	5°♎26'17	
greatest brilliancy	1013 Feb 16 j 21:10	11°♍34'30 -4.8m		1015 Jul 23 j 04:17	0°♊	
retrograde	1013 Feb 27 j 09:43	13°♍40'15	max. Earth dist.	1015 Aug 05 j 02:24	15°♊59'08 1.72799 AU	
evening set	1013 Mar 16 j 19:59	7°♍46'40				
inferior conj	1013 Mar 20 j 15:08	5°♍24'39 7°37'10	superior conj	1015 Aug 08 j 15:06	20°♊21'36 1°20'32	
minimum elong	1013 Mar 20 j 23:22	5°♍11'38 7°36'01	minimum elong	1015 Aug 08 j 09:46	20°♊05'06 1°20'28	
min. Earth dist.	1013 Mar 20 j 11:26	5°♍30'31 0.28471 AU		1015 Aug 16 j 09:26	0°♍	
morning rise	1013 Mar 25 j 02:59	2°♍38'01		1015 Sep 09 j 11:51	0°♊	
	1013 Mar 30 j 02:04	30°♋	evening rise	1015 Sep 14 j 16:09	6°♊27'30	
direct	1013 Apr 10 j 18:56	27°♋15'08		1015 Oct 03 j 13:06	0°♍	
greatest brilliancy	1013 Apr 20 j 10:20	28°♋57'01 -4.7m	desc. node	1015 Oct 14 j 12:00	13°♍39'49	
	1013 Apr 23 j 05:02	0°♍		1015 Oct 27 j 14:27	0°♌	
desc. node	1013 Apr 28 j 16:38	2°♍40'19		1015 Nov 20 j 16:57	0°♎	
morning max el	1013 May 29 j 16:00	27°♍13'44 45°46'42		1015 Dec 14 j 22:24	0°♍	
	1013 Jun 01 j 12:58	0°♌		1016 Jan 08 j 10:48	0°♋	
	1013 Jun 30 j 07:07	0°♊		1016 Feb 02 j 14:05	0°♍	
	1013 Jul 26 j 20:34	0°♎	asc. node	1016 Feb 04 j 15:07	2°♍23'12	
asc. node	1013 Aug 19 j 20:09	28°♎15'05		1016 Feb 29 j 00:41	0°♌	
	1013 Aug 21 j 07:13	0°♊	evening max el	1016 Mar 20 j 00:52	20°♌46'56 45°46'52	
	1013 Sep 15 j 00:23	0°♍		1016 Mar 29 j 21:24	0°♊	
	1013 Oct 09 j 06:08	0°♊	greatest brilliancy	1016 Apr 26 j 23:13	19°♊01'52 -4.7m	
	1013 Nov 02 j 05:24	0°♍	retrograde	1016 May 07 j 23:29	21°♊12'39	
morning set	1013 Nov 25 j 05:26	28°♍55'29	evening set	1016 May 23 j 00:16	16°♊50'03	
	1013 Nov 26 j 01:56	0°♌	desc. node	1016 May 26 j 04:27	14°♊59'32	
desc. node	1013 Dec 09 j 09:30	16°♌45'40	inferior conj	1016 May 29 j 10:15	12°♊58'45 -0°45'42	
	1013 Dec 19 j 22:02	0°♎	minimum elong	1016 May 29 j 08:35	13°♊01'23 0°45'12	
			min. Earth dist.	1016 May 29 j 10:55	12°♊57'43 0.28963 AU	
superior conj	1014 Jan 06 j 01:38	21°♎33'22 -0°59'45	morning rise	1016 Jun 04 j 17:01	9°♊12'10	
minimum elong	1014 Jan 05 j 13:41	20°♎55'50 0°59'19	direct	1016 Jun 20 j 02:27	4°♊41'08	
max. Earth dist.	1014 Jan 08 j 23:26	25°♎12'30 1.71295 AU	greatest brilliancy	1016 Jun 30 j 11:08	6°♊37'00 -4.7m	
	1014 Jan 12 j 19:04	0°♍		1016 Aug 03 j 01:36	0°♎	
	1014 Feb 05 j 18:12	0°♋	morning max el	1016 Aug 08 j 01:13	4°♎42'08 45°54'53	
evening rise	1014 Feb 15 j 23:09	12°♋43'39		1016 Sep 01 j 11:14	0°♊	
	1014 Mar 01 j 20:48	0°♍	asc. node	1016 Sep 16 j 08:08	16°♊40'54	
	1014 Mar 26 j 04:21	0°♌		1016 Sep 27 j 19:34	0°♍	
asc. node	1014 Apr 01 j 13:06	7°♌48'07		1016 Oct 22 j 20:28	0°♊	
	1014 Apr 19 j 18:18	0°♊		1016 Nov 16 j 05:41	0°♍	
	1014 May 14 j 16:24	0°♎		1016 Dec 10 j 07:47	0°♌	
	1014 Jun 09 j 01:53	0°♊		1017 Jan 03 j 07:34	0°♎	
	1014 Jul 05 j 06:04	0°♍	desc. node	1017 Jan 05 j 21:22	3°♎13'17	
desc. node	1014 Jul 22 j 02:07	18°♍30'28		1017 Jan 27 j 07:30	0°♍	
	1014 Aug 01 j 23:59	0°♊	morning set	1017 Feb 10 j 11:32	17°♍41'00	
evening max el	1014 Aug 13 j 09:33	11°♊23'40 46°13'14		1017 Feb 20 j 08:49	0°♋	
	1014 Sep 03 j 18:55	0°♍		1017 Mar 16 j 12:24	0°♍	
greatest brilliancy	1014 Sep 22 j 17:39	10°♍36'50 -4.8m				
retrograde	1014 Oct 01 j 21:10	12°♍09'28	superior conj	1017 Mar 21 j 22:26	6°♍42'36 -1°14'40	
evening set	1014 Oct 17 j 11:11	7°♍27'34	minimum elong	1017 Mar 22 j 07:14	7°♍09'49 1°14'27	
inferior conj	1014 Oct 22 j 12:17	4°♍29'16 -5°01'34	max. Earth dist.	1017 Mar 25 j 09:12	10°♍58'38 1.72784 AU	
minimum elong	1014 Oct 22 j 22:07	4°♍14'22 4°58'58		1017 Apr 09 j 18:50	0°♌	
min. Earth dist.	1014 Oct 23 j 04:37	4°♍04'30 0.26789 AU	evening rise	1017 Apr 28 j 23:01	23°♌35'38	
morning rise	1014 Oct 28 j 08:36	1°♍04'15	asc. node	1017 Apr 29 j 00:54	23°♌41'25	
	1014 Oct 30 j 10:32	30°♋		1017 May 04 j 04:14	0°♊	
direct	1014 Nov 12 j 03:22	26°♊44'50		1017 May 28 j 16:25	0°♎	
asc. node	1014 Nov 12 j 05:32	26°♊44'50		1017 Jun 22 j 07:31	0°♊	
greatest brilliancy	1014 Nov 22 j 23:00	28°♊58'29 -4.9m		1017 Jul 17 j 02:43	0°♍	
	1014 Nov 25 j 08:26	0°♍		1017 Aug 11 j 04:31	0°♊	
	1015 Jan 01 j 15:55	0°♌	desc. node	1017 Aug 18 j 14:07	8°♊45'43	

	1017 Sep 05 j 17:11	0°♄			1020 Apr 24 j 12:54	0°♄	
	1017 Oct 02 j 02:00	0°♂			1020 May 18 j 23:29	0°♄	
evening max el	1017 Oct 25 j 15:51	25°♂06'41	47°16'24	asc. node	1020 May 26 j 12:39	9°♄16'08	
	1017 Oct 30 j 14:07	0°♄		max. Earth dist.	1020 May 29 j 07:11	12°♄40'22	1.73631 AU
greatest brilliancy	1017 Dec 05 j 05:21	26°♄29'48	-4.9m				
asc. node	1017 Dec 09 j 17:27	27°♄50'42		superior conj	1020 May 30 j 02:33	13°♄39'49	0°08'30
retrograde	1017 Dec 15 j 10:47	28°♄29'28		minimum elong	1020 May 30 j 00:48	13°♄34'29	0°08'25
evening set	1017 Dec 30 j 18:14	23°♄49'22		behind sun begin	1020 May 29 j 05:33	12°♄35'21	
min. Earth dist.	1018 Jan 04 j 04:56	21°♄09'53	0.26825 AU	behind sun end	1020 May 30 j 20:03	14°♄33'36	
inferior conj	1018 Jan 05 j 02:31	20°♄36'26	6°09'42		1020 Jun 12 j 09:42	0°♄	
minimum elong	1018 Jan 04 j 16:13	20°♄52'24	6°07'20	evening rise	1020 Jul 04 j 23:48	27°♄47'12	
morning rise	1018 Jan 09 j 14:40	17°♄53'14			1020 Jul 06 j 18:57	0°♄	
direct	1018 Jan 25 j 12:46	12°♄55'14			1020 Jul 31 j 03:30	0°♄	
greatest brilliancy	1018 Feb 03 j 14:39	14°♄28'37	-4.9m		1020 Aug 24 j 12:30	0°♄	
	1018 Feb 28 j 09:29	0°♄		desc. node	1020 Sep 15 j 02:08	26°♄28'13	
morning max el	1018 Mar 16 j 04:50	14°♄29'18	46°22'34		1020 Sep 17 j 23:19	0°♄	
desc. node	1018 Mar 31 j 07:00	29°♄54'50			1020 Oct 12 j 13:20	0°♂	
	1018 Mar 31 j 08:58	0°♂			1020 Nov 06 j 09:14	0°♄	
	1018 Apr 27 j 16:06	0°♂			1020 Dec 01 j 18:16	0°♄	
	1018 May 23 j 18:16	0°♄			1020 Dec 28 j 13:22	0°♂	
	1018 Jun 18 j 05:32	0°♄		evening max el	1021 Jan 05 j 09:56	8°♂11'16	46°58'58
	1018 Jul 13 j 05:58	0°♄		asc. node	1021 Jan 06 j 05:21	9°♂00'27	
asc. node	1018 Jul 22 j 10:21	11°♄08'10			1021 Jan 29 j 13:28	0°♂	
	1018 Aug 06 j 20:56	0°♄		greatest brilliancy	1021 Feb 14 j 12:34	9°♂18'39	-4.8m
	1018 Aug 31 j 03:48	0°♄		retrograde	1021 Feb 25 j 02:09	11°♂25'18	
morning set	1018 Sep 10 j 03:27	12°♄25'47		evening set	1021 Mar 14 j 14:02	5°♂27'44	
	1018 Sep 24 j 04:52	0°♄		inferior conj	1021 Mar 18 j 06:37	3°♂09'43	7°47'00
max. Earth dist.	1018 Oct 16 j 14:47	28°♄06'52	1.71356 AU	minimum elong	1021 Mar 18 j 14:25	2°♂57'23	7°45'59
	1018 Oct 18 j 02:48	0°♄		min. Earth dist.	1021 Mar 18 j 01:50	3°♂17'16	0.28438 AU
				morning rise	1021 Mar 22 j 15:03	0°♂28'26	
superior conj	1018 Oct 18 j 12:27	0°♄30'20	0°52'04		1021 Mar 23 j 10:32	30°♂	
minimum elong	1018 Oct 18 j 22:47	1°♄02'49	0°51'41	direct	1021 Apr 08 j 10:02	25°♂00'50	
desc. node	1018 Nov 10 j 23:47	0°♂00'28		greatest brilliancy	1021 Apr 17 j 23:55	26°♂41'53	-4.8m
	1018 Nov 10 j 23:38	0°♂			1021 Apr 25 j 11:56	0°♂	
evening rise	1018 Nov 28 j 11:22	21°♂58'42		desc. node	1021 Apr 27 j 18:34	1°♂16'32	
	1018 Dec 04 j 20:40	0°♄		morning max el	1021 May 27 j 08:30	25°♂04'36	45°47'15
	1018 Dec 28 j 18:58	0°♄			1021 Jun 01 j 10:04	0°♄	
	1019 Jan 21 j 20:18	0°♂			1021 Jun 29 j 22:21	0°♄	
	1019 Feb 15 j 03:35	0°♂			1021 Jul 26 j 09:36	0°♄	
asc. node	1019 Mar 04 j 03:12	20°♂40'39		asc. node	1021 Aug 18 j 22:15	27°♄45'21	
	1019 Mar 11 j 20:56	0°♄			1021 Aug 20 j 19:12	0°♄	
	1019 Apr 06 j 06:19	0°♄			1021 Sep 14 j 11:50	0°♄	
	1019 May 02 j 19:17	0°♄			1021 Oct 08 j 17:19	0°♄	
evening max el	1019 May 30 j 12:23	28°♄39'02	45°21'47	greatest brilliancy	1021 Oct 24 j 05:48	19°♄24'20	-3.9m
	1019 May 31 j 22:28	0°♄			1021 Nov 01 j 16:26	0°♄	
desc. node	1019 Jun 23 j 16:26	18°♄52'12		morning set	1021 Nov 22 j 16:24	26°♄24'34	
greatest brilliancy	1019 Jul 08 j 02:19	26°♄26'58	-4.7m		1021 Nov 25 j 12:52	0°♂	
retrograde	1019 Jul 18 j 02:44	28°♄15'34		desc. node	1021 Dec 08 j 11:34	16°♂17'50	
evening set	1019 Aug 04 j 11:42	22°♄38'07			1021 Dec 19 j 08:55	0°♄	
inferior conj	1019 Aug 08 j 10:57	20°♄13'48	-8°14'34				
minimum elong	1019 Aug 08 j 04:40	20°♄23'31	8°13'58	superior conj	1022 Jan 03 j 11:35	18°♄59'46	-0°56'49
min. Earth dist.	1019 Aug 08 j 20:25	19°♄59'10	0.28576 AU	minimum elong	1022 Jan 02 j 23:43	18°♄22'30	0°56'22
morning rise	1019 Aug 11 j 21:23	18°♄07'37		max. Earth dist.	1022 Jan 06 j 09:38	22°♄39'45	1.71264 AU
direct	1019 Aug 29 j 21:23	12°♄01'48			1022 Jan 12 j 05:55	0°♄	
greatest brilliancy	1019 Sep 09 j 21:28	14°♄13'59	-4.8m		1022 Feb 05 j 05:03	0°♂	
	1019 Oct 03 j 22:24	0°♄		evening rise	1022 Feb 13 j 11:04	10°♂17'31	
asc. node	1019 Oct 14 j 19:47	10°♄00'32			1022 Mar 01 j 07:41	0°♂	
morning max el	1019 Oct 19 j 02:16	14°♄13'53	46°36'32		1022 Mar 25 j 15:21	0°♄	
	1019 Nov 03 j 01:26	0°♄		asc. node	1022 Mar 31 j 15:03	7°♄20'13	
	1019 Nov 29 j 08:22	0°♄			1022 Apr 19 j 05:35	0°♄	
	1019 Dec 24 j 09:41	0°♂			1022 May 14 j 04:15	0°♄	
	1020 Jan 17 j 23:31	0°♄			1022 Jun 08 j 14:47	0°♄	
desc. node	1020 Feb 03 j 09:17	20°♄09'44			1022 Jul 04 j 21:02	0°♄	
	1020 Feb 11 j 09:08	0°♄		desc. node	1022 Jul 21 j 04:17	17°♄49'53	
	1020 Mar 06 j 17:46	0°♂			1022 Aug 01 j 19:55	0°♄	
	1020 Mar 31 j 02:52	0°♂		evening max el	1022 Aug 10 j 23:50	9°♄05'42	46°10'37
morning set	1020 Apr 23 j 07:45	28°♂30'31			1022 Sep 04 j 15:23	0°♄	

greatest brilliancy	1022 Sep 20 j 06:04	8°♌11'53	-4.8m	superior conj	1025 Mar 19 j 13:21	4°♍27'18	-1°16'20
retrograde	1022 Sep 29 j 09:14	9°♌43'43		minimum elong	1025 Mar 19 j 21:44	4°♍53'15	1°16'08
evening set	1022 Oct 15 j 02:41	4°♌57'48		max. Earth dist.	1025 Mar 23 j 02:52	8°♍51'56	1.72727 AU
inferior conj	1022 Oct 20 j 00:45	2°♌03'21	-5°20'57		1025 Apr 09 j 05:25	0°♌	
minimum elong	1022 Oct 20 j 10:53	1°♌47'57	5°18'21	evening rise	1025 Apr 26 j 16:14	21°♌28'30	
min. Earth dist.	1022 Oct 20 j 17:51	1°♌37'21	0.26839 AU	asc. node	1025 Apr 28 j 02:54	23°♌14'57	
	1022 Oct 23 j 10:55	30°♌♌			1025 May 03 j 14:52	0°♌	
morning rise	1022 Oct 25 j 18:39	28°♌41'13			1025 May 28 j 03:14	0°♌	
direct	1022 Nov 09 j 16:52	24°♌18'17			1025 Jun 21 j 18:40	0°♌	
asc. node	1022 Nov 11 j 07:33	24°♌21'26			1025 Jul 16 j 14:27	0°♌	
greatest brilliancy	1022 Nov 20 j 12:35	26°♌31'54	-4.9m		1025 Aug 10 j 17:11	0°♌	
	1022 Nov 27 j 13:34	0°♌		desc. node	1025 Aug 17 j 16:11	8°♌13'23	
morning max el	1022 Dec 30 j 11:29	27°♌50'21	46°56'30		1025 Sep 05 j 07:25	0°♌	
	1023 Jan 01 j 14:08	0°♌			1025 Oct 01 j 19:18	0°♌	
	1023 Jan 29 j 01:22	0°♌		evening max el	1025 Oct 23 j 04:34	22°♌39'43	47°15'09
	1023 Feb 23 j 21:59	0°♌			1025 Oct 30 j 16:00	0°♌	
desc. node	1023 Mar 02 j 21:13	8°♌13'50		greatest brilliancy	1025 Dec 02 j 19:43	24°♌03'03	-4.9m
	1023 Mar 21 j 04:01	0°♌		asc. node	1025 Dec 08 j 19:35	25°♌40'46	
	1023 Apr 15 j 03:30	0°♌		retrograde	1025 Dec 12 j 23:23	26°♌01'31	
	1023 May 09 j 23:25	0°♌		evening set	1025 Dec 28 j 03:56	21°♌26'15	
	1023 Jun 03 j 16:22	0°♌		min. Earth dist.	1026 Jan 01 j 18:42	18°♌41'28	0.26773 AU
asc. node	1023 Jun 24 j 00:35	24°♌50'13		inferior conj	1026 Jan 02 j 15:17	18°♌09'38	5°52'22
	1023 Jun 28 j 05:44	0°♌		minimum elong	1026 Jan 02 j 05:04	18°♌25'27	5°49'55
morning set	1023 Jun 30 j 23:29	3°♌21'37		morning rise	1026 Jan 07 j 06:36	15°♌22'05	
	1023 Jul 22 j 14:52	0°♌		direct	1026 Jan 23 j 00:30	10°♌28'52	
max. Earth dist.	1023 Aug 02 j 18:15	13°♌46'45	1.72848 AU	greatest brilliancy	1026 Feb 01 j 04:44	12°♌04'07	-4.9m
					1026 Feb 28 j 17:35	0°♌	
superior conj	1023 Aug 06 j 08:35	18°♌14'11	1°19'29	morning max el	1026 Mar 13 j 17:45	12°♌06'28	46°24'24
minimum elong	1023 Aug 06 j 02:45	17°♌56'05	1°19'23	desc. node	1026 Mar 30 j 08:53	29°♌11'19	
	1023 Aug 15 j 20:05	0°♌			1026 Mar 31 j 03:09	0°♌	
	1023 Sep 08 j 22:38	0°♌			1026 Apr 27 j 06:27	0°♌	
evening rise	1023 Sep 12 j 06:55	4°♌10'11			1026 May 23 j 06:54	0°♌	
	1023 Oct 03 j 00:05	0°♌			1026 Jun 17 j 17:14	0°♌	
desc. node	1023 Oct 13 j 13:57	13°♌11'14			1026 Jul 12 j 17:09	0°♌	
	1023 Oct 27 j 01:42	0°♌		asc. node	1026 Jul 21 j 12:25	10°♌40'49	
	1023 Nov 20 j 04:30	0°♌			1026 Aug 06 j 07:51	0°♌	
	1023 Dec 14 j 10:19	0°♌			1026 Aug 30 j 14:36	0°♌	
	1024 Jan 07 j 23:19	0°♌		morning set	1026 Sep 07 j 18:56	10°♌10'44	
	1024 Feb 02 j 03:47	0°♌			1026 Sep 23 j 15:41	0°♌	
asc. node	1024 Feb 03 j 17:17	1°♌49'15		max. Earth dist.	1026 Oct 14 j 02:26	25°♌38'35	1.71395 AU
	1024 Feb 28 j 17:16	0°♌					
evening max el	1024 Mar 17 j 16:15	18°♌34'42	45°48'47	superior conj	1026 Oct 16 j 00:58	28°♌04'44	0°54'59
	1024 Mar 30 j 00:38	0°♌		minimum elong	1026 Oct 16 j 11:27	28°♌37'41	0°54'34
greatest brilliancy	1024 Apr 24 j 16:37	16°♌55'13	-4.7m		1026 Oct 17 j 13:40	0°♌	
retrograde	1024 May 05 j 15:30	19°♌05'10		desc. node	1026 Nov 10 j 01:51	29°♌32'29	
evening set	1024 May 20 j 17:23	14°♌41'56			1026 Nov 10 j 10:36	0°♌	
desc. node	1024 May 25 j 06:32	12°♌00'39		evening rise	1026 Nov 25 j 21:28	19°♌25'04	
inferior conj	1024 May 27 j 02:52	10°♌51'13	-0°26'02		1026 Dec 04 j 07:45	0°♌	
minimum elong	1024 May 27 j 01:54	10°♌52'44	0°25'46		1026 Dec 28 j 06:09	0°♌	
min. Earth dist.	1024 May 27 j 04:00	10°♌49'26	0.28960 AU		1027 Jan 21 j 07:40	0°♌	
morning rise	1024 Jun 02 j 10:30	7°♌02'58			1027 Feb 14 j 15:15	0°♌	
direct	1024 Jun 17 j 18:41	2°♌33'40		asc. node	1027 Mar 03 j 05:09	20°♌10'23	
greatest brilliancy	1024 Jun 28 j 03:27	4°♌29'08	-4.7m		1027 Mar 11 j 09:08	0°♌	
	1024 Aug 03 j 01:13	0°♌			1027 Apr 05 j 19:36	0°♌	
morning max el	1024 Aug 05 j 15:57	2°♌29'17	45°53'46		1027 May 02 j 11:02	0°♌	
	1024 Sep 01 j 03:06	0°♌		evening max el	1027 May 28 j 03:51	26°♌28'05	45°21'30
asc. node	1024 Sep 15 j 10:07	16°♌05'48			1027 May 31 j 21:55	0°♌	
	1024 Sep 27 j 08:58	0°♌		desc. node	1027 Jun 22 j 18:31	17°♌38'50	
	1024 Oct 22 j 08:47	0°♌		greatest brilliancy	1027 Jul 05 j 14:57	24°♌13'00	-4.7m
	1024 Nov 15 j 17:25	0°♌		retrograde	1027 Jul 15 j 18:16	26°♌03'58	
	1024 Dec 09 j 19:12	0°♌		evening set	1027 Aug 01 j 23:45	20°♌30'23	
	1025 Jan 02 j 18:46	0°♌		inferior conj	1027 Aug 06 j 02:20	18°♌01'11	-8°07'14
desc. node	1025 Jan 04 j 23:28	2°♌44'54		minimum elong	1027 Aug 05 j 19:28	18°♌11'48	8°06'31
	1025 Jan 26 j 18:29	0°♌		min. Earth dist.	1027 Aug 06 j 10:41	17°♌48'17	0.28619 AU
morning set	1025 Feb 07 j 23:08	15°♌13'35		morning rise	1027 Aug 09 j 14:56	15°♌51'54	
	1025 Feb 19 j 19:37	0°♌		direct	1027 Aug 27 j 13:39	9°♌48'32	
	1025 Mar 15 j 23:03	0°♌		greatest brilliancy	1027 Sep 07 j 12:48	12°♌00'15	-4.8m

	1027 Oct 04 j 03:58	0°♍		evening rise	1030 Feb 10 j 22:25	7°♋48'35	
asc. node	1027 Oct 13 j 21:47	9°♍08'21			1030 Feb 28 j 18:52	0°♍	
morning max el	1027 Oct 16 j 18:12	11°♍58'14	46°35'03		1030 Mar 25 j 02:39	0°♋	
	1027 Nov 02 j 19:10	0°♌		asc. node	1030 Mar 30 j 17:06	6°♋51'44	
	1027 Nov 28 j 22:54	0°♍			1030 Apr 18 j 17:11	0°♌	
	1027 Dec 23 j 22:48	0°♊			1030 May 13 j 16:26	0°♋	
	1028 Jan 17 j 11:48	0°♋			1030 Jun 08 j 04:03	0°♌	
desc. node	1028 Feb 02 j 11:20	19°♋39'24			1030 Jul 04 j 12:26	0°♍	
	1028 Feb 10 j 20:53	0°♌		desc. node	1030 Jul 20 j 06:20	17°♍08'05	
	1028 Mar 06 j 05:09	0°♋			1030 Aug 01 j 16:39	0°♌	
	1028 Mar 30 j 13:57	0°♍		evening max el	1030 Aug 08 j 13:26	6°♌45'52	46°08'05
morning set	1028 Apr 21 j 00:47	26°♍21'58			1030 Sep 05 j 19:19	0°♍	
	1028 Apr 23 j 23:47	0°♋		greatest brilliancy	1030 Sep 17 j 19:03	5°♍47'52	-4.8m
	1028 May 18 j 10:13	0°♌		retrograde	1030 Sep 26 j 20:59	7°♍18'34	
asc. node	1028 May 25 j 14:50	8°♌49'55		evening set	1030 Oct 12 j 18:30	2°♍28'24	
					1030 Oct 16 j 23:03	30°♋♌	
superior conj	1028 May 27 j 20:48	11°♌35'36	0°05'22	inferior conj	1030 Oct 17 j 13:31	29°♌37'58	-5°39'23
minimum elong	1028 May 27 j 19:41	11°♌32'13	0°05'19	minimum elong	1030 Oct 17 j 23:54	29°♌22'10	5°36'49
behind sun begin	1028 May 26 j 22:18	10°♌26'32		min. Earth dist.	1030 Oct 18 j 07:35	29°♌10'27	0.26897 AU
behind sun end	1028 May 28 j 17:05	12°♌37'55		morning rise	1030 Oct 23 j 04:49	26°♌18'51	
max. Earth dist.	1028 May 27 j 06:48	10°♌52'36	1.73626 AU	direct	1030 Nov 07 j 06:15	21°♌52'00	
	1028 Jun 11 j 20:23	0°♋		asc. node	1030 Nov 10 j 09:43	22°♌03'51	
evening rise	1028 Jul 02 j 19:01	25°♋45'33		greatest brilliancy	1030 Nov 18 j 03:02	24°♌06'06	-4.9m
	1028 Jul 06 j 05:43	0°♌			1030 Nov 29 j 00:43	0°♍	
	1028 Jul 30 j 14:31	0°♍		morning max el	1030 Dec 28 j 00:11	25°♍21'57	46°56'35
	1028 Aug 23 j 23:53	0°♌			1031 Jan 01 j 11:58	0°♊	
desc. node	1028 Sep 14 j 04:05	25°♌58'00			1031 Jan 28 j 17:40	0°♋	
	1028 Sep 17 j 11:12	0°♍			1031 Feb 23 j 12:02	0°♌	
	1028 Oct 12 j 01:55	0°♊		desc. node	1031 Mar 01 j 23:11	7°♌39'14	
	1028 Nov 05 j 22:51	0°♋			1031 Mar 20 j 16:50	0°♋	
	1028 Dec 01 j 09:43	0°♌			1031 Apr 14 j 15:32	0°♍	
	1028 Dec 28 j 09:12	0°♋			1031 May 09 j 10:55	0°♋	
evening max el	1029 Jan 03 j 01:56	5°♋54'14	47°01'04		1031 Jun 03 j 03:32	0°♌	
asc. node	1029 Jan 05 j 07:26	8°♋09'16		asc. node	1031 Jun 23 j 02:38	24°♌22'44	
	1029 Jan 30 j 08:48	0°♍			1031 Jun 27 j 16:43	0°♋	
greatest brilliancy	1029 Feb 12 j 04:02	7°♍02'18	-4.8m	morning set	1031 Jun 28 j 17:33	1°♋16'08	
retrograde	1029 Feb 22 j 18:29	9°♍09'28			1031 Jul 22 j 01:48	0°♌	
evening set	1029 Mar 12 j 08:01	3°♍08'18		max. Earth dist.	1031 Jul 31 j 11:02	11°♌36'20	1.72894 AU
inferior conj	1029 Mar 15 j 22:03	0°♍54'02	7°56'10				
minimum elong	1029 Mar 16 j 05:23	0°♍42'27	7°55'17	superior conj	1031 Aug 04 j 02:29	16°♌07'06	1°18'19
min. Earth dist.	1029 Mar 15 j 16:03	1°♍03'30	0.28399 AU	minimum elong	1031 Aug 03 j 20:09	15°♌47'28	1°18'12
	1029 Mar 17 j 08:22	30°♋♋			1031 Aug 15 j 07:03	0°♍	
morning rise	1029 Mar 20 j 03:02	28°♋18'00			1031 Sep 08 j 09:41	0°♌	
direct	1029 Apr 06 j 01:27	22°♋45'58		evening rise	1031 Sep 09 j 22:21	1°♌54'11	
greatest brilliancy	1029 Apr 15 j 13:06	24°♋25'39	-4.8m		1031 Oct 02 j 11:20	0°♍	
desc. node	1029 Apr 26 j 20:42	29°♋55'11		desc. node	1031 Oct 12 j 16:04	12°♍42'26	
	1029 Apr 26 j 23:49	0°♍			1031 Oct 26 j 13:13	0°♊	
morning max el	1029 May 25 j 00:42	22°♍54'21	45°47'55		1031 Nov 19 j 16:22	0°♋	
	1029 Jun 01 j 06:37	0°♋			1031 Dec 13 j 22:39	0°♌	
	1029 Jun 29 j 13:29	0°♌			1032 Jan 07 j 12:20	0°♋	
	1029 Jul 25 j 22:38	0°♋			1032 Feb 01 j 18:09	0°♍	
asc. node	1029 Aug 18 j 00:16	27°♋15'10		asc. node	1032 Feb 02 j 19:13	1°♍12'48	
	1029 Aug 20 j 07:13	0°♌			1032 Feb 28 j 10:50	0°♋	
	1029 Sep 13 j 23:23	0°♍		evening max el	1032 Mar 15 j 06:40	16°♋18'12	45°50'54
	1029 Oct 08 j 04:38	0°♌			1032 Mar 30 j 06:35	0°♌	
greatest brilliancy	1029 Oct 27 j 19:35	24°♌33'19	-3.9m	greatest brilliancy	1032 Apr 22 j 09:45	14°♌46'20	-4.7m
	1029 Nov 01 j 03:40	0°♍		retrograde	1032 May 03 j 07:34	16°♌55'55	
morning set	1029 Nov 20 j 03:15	23°♍52'27		evening set	1032 May 18 j 10:28	12°♌31'32	
	1029 Nov 25 j 00:04	0°♊		desc. node	1032 May 24 j 08:39	8°♌58'39	
desc. node	1029 Dec 07 j 13:44	15°♊49'21		inferior conj	1032 May 24 j 19:20	8°♌41'51	-0°06'17
	1029 Dec 18 j 20:06	0°♋		minimum elong	1032 May 24 j 19:06	8°♌42'13	0°06'13
				transit middle	1032 May 24 j 19:06	8°♌42'13	0°06'13
superior conj	1029 Dec 31 j 21:05	16°♋23'41	-0°53'44	transit begin	1032 May 24 j 15:21	8°♌48'06	
minimum elong	1029 Dec 31 j 09:25	15°♋47'04	0°53'17	transit end	1032 May 24 j 22:51	8°♌36'20	
max. Earth dist.	1030 Jan 03 j 18:59	20°♋03'16	1.71231 AU	min. Earth dist.	1032 May 24 j 21:03	8°♌39'10	0.28954 AU
	1030 Jan 11 j 17:05	0°♌		morning rise	1032 May 31 j 03:43	4°♌52'16	
	1030 Feb 04 j 16:12	0°♋		direct	1032 Jun 15 j 10:23	0°♌24'13	

greatest brilliancy	1032 Jun 25 j 20:03	2°♄20'03	-4.7m	asc. node	1035 Mar 02 j 07:13	19°♄39'46	
	1032 Aug 03 j 00:20	0°♄			1035 Mar 10 j 21:36	0°♄	
morning max el	1032 Aug 03 j 06:52	0°♄15'41	45°52'54		1035 Apr 05 j 09:17	0°♄	
	1032 Aug 31 j 19:08	0°♄			1035 May 02 j 03:27	0°♄	
asc. node	1032 Sep 14 j 12:06	15°♄29'52		evening max el	1035 May 25 j 19:56	24°♄17'27	45°21'12
	1032 Sep 26 j 22:37	0°♄			1035 May 31 j 23:04	0°♄	
	1032 Oct 21 j 21:19	0°♄		desc. node	1035 Jun 21 j 20:34	16°♄21'48	
	1032 Nov 15 j 05:24	0°♄		greatest brilliancy	1035 Jul 03 j 03:53	21°♄58'12	-4.7m
	1032 Dec 09 j 06:52	0°♄		retrograde	1035 Jul 13 j 09:43	23°♄50'54	
	1033 Jan 02 j 06:15	0°♄		evening set	1035 Jul 30 j 11:39	18°♄21'46	
desc. node	1033 Jan 04 j 01:30	2°♄15'22		inferior conj	1035 Aug 03 j 17:35	15°♄47'22	-7°59'09
	1033 Jan 26 j 05:49	0°♄		minimum elong	1035 Aug 03 j 10:10	15°♄58'51	7°58'18
morning set	1033 Feb 05 j 10:16	12°♄43'23		min. Earth dist.	1035 Aug 04 j 00:41	15°♄36'24	0.28655 AU
	1033 Feb 19 j 06:49	0°♄		morning rise	1035 Aug 07 j 08:31	13°♄34'40	
	1033 Mar 15 j 10:10	0°♄		direct	1035 Aug 25 j 06:00	7°♄34'25	
				greatest brilliancy	1035 Sep 05 j 03:19	9°♄44'45	-4.8m
superior conj	1033 Mar 17 j 03:39	2°♄08'32	-1°17'52		1035 Oct 04 j 07:58	0°♄	
minimum elong	1033 Mar 17 j 11:33	2°♄33'02	1°17'43	asc. node	1035 Oct 13 j 00:01	8°♄17'05	
max. Earth dist.	1033 Mar 20 j 17:18	6°♄33'43	1.72674 AU	morning max el	1035 Oct 14 j 09:45	9°♄41'14	46°33'31
	1033 Apr 08 j 16:30	0°♄			1035 Nov 02 j 12:42	0°♄	
evening rise	1033 Apr 24 j 08:46	19°♄17'46			1035 Nov 28 j 13:27	0°♄	
asc. node	1033 Apr 27 j 05:02	22°♄47'27			1035 Dec 23 j 11:57	0°♄	
	1033 May 03 j 01:59	0°♄			1036 Jan 17 j 00:08	0°♄	
	1033 May 27 j 14:30	0°♄		desc. node	1036 Feb 01 j 13:20	19°♄08'40	
	1033 Jun 21 j 06:17	0°♄			1036 Feb 10 j 08:41	0°♄	
	1033 Jul 16 j 02:39	0°♄			1036 Mar 05 j 16:33	0°♄	
	1033 Aug 10 j 06:20	0°♄			1036 Mar 30 j 01:05	0°♄	
desc. node	1033 Aug 16 j 18:09	7°♄39'27		morning set	1036 Apr 18 j 17:50	24°♄13'18	
	1033 Sep 04 j 22:12	0°♄			1036 Apr 23 j 10:43	0°♄	
	1033 Oct 01 j 13:18	0°♄			1036 May 17 j 21:03	0°♄	
evening max el	1033 Oct 20 j 17:44	20°♄13'24	47°14'04	asc. node	1036 May 24 j 16:52	8°♄22'52	
	1033 Oct 30 j 19:38	0°♄					
greatest brilliancy	1033 Nov 30 j 09:33	21°♄35'28	-4.9m	superior conj	1036 May 25 j 14:53	9°♄30'29	0°02'12
asc. node	1033 Dec 07 j 21:35	23°♄25'20		minimum elong	1036 May 25 j 14:25	9°♄29'02	0°02'11
retrograde	1033 Dec 10 j 12:34	23°♄33'43		behind sun begin	1036 May 24 j 16:03	8°♄20'22	
evening set	1033 Dec 25 j 14:00	19°♄02'37		behind sun end	1036 May 26 j 12:47	10°♄37'44	
min. Earth dist.	1033 Dec 30 j 08:17	16°♄13'24	0.26726 AU	max. Earth dist.	1036 May 25 j 06:10	9°♄03'40	1.73625 AU
inferior conj	1033 Dec 31 j 04:13	15°♄42'41	5°34'20		1036 Jun 11 j 07:13	0°♄	
minimum elong	1033 Dec 30 j 18:09	15°♄58'13	5°31'50	evening rise	1036 Jun 30 j 13:57	23°♄42'29	
morning rise	1034 Jan 04 j 22:40	12°♄51'05			1036 Jul 05 j 16:40	0°♄	
direct	1034 Jan 20 j 12:45	8°♄02'18			1036 Jul 30 j 01:41	0°♄	
greatest brilliancy	1034 Jan 29 j 18:36	9°♄39'10	-4.9m		1036 Aug 23 j 11:24	0°♄	
	1034 Feb 28 j 23:37	0°♄		desc. node	1036 Sep 13 j 06:13	25°♄28'02	
morning max el	1034 Mar 11 j 07:41	9°♄45'18	46°25'53		1036 Sep 16 j 23:13	0°♄	
desc. node	1034 Mar 29 j 11:04	28°♄28'12			1036 Oct 11 j 14:38	0°♄	
	1034 Mar 30 j 21:17	0°♄			1036 Nov 05 j 12:37	0°♄	
	1034 Apr 26 j 21:05	0°♄			1036 Dec 01 j 01:25	0°♄	
	1034 May 22 j 19:54	0°♄			1036 Dec 28 j 05:39	0°♄	
	1034 Jun 17 j 05:19	0°♄		evening max el	1036 Dec 31 j 18:01	3°♄37'17	47°03'06
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asc. node	1034 Jul 20 j 14:24	10°♄12'11			1037 Jan 31 j 11:03	0°♄	
	1034 Aug 05 j 19:04	0°♄		greatest brilliancy	1037 Feb 09 j 20:04	4°♄46'53	-4.9m
	1034 Aug 30 j 01:42	0°♄		retrograde	1037 Feb 20 j 10:35	6°♄53'52	
morning set	1034 Sep 05 j 10:26	7°♄54'56		evening set	1037 Mar 10 j 01:56	0°♄49'42	
	1034 Sep 23 j 02:47	0°♄			1037 Mar 11 j 10:05	30°♄	
max. Earth dist.	1034 Oct 11 j 14:10	23°♄09'45	1.71431 AU	inferior conj	1037 Mar 13 j 13:36	28°♄38'52	8°04'30
				minimum elong	1037 Mar 13 j 20:23	28°♄28'08	8°03'47
superior conj	1034 Oct 13 j 13:43	25°♄39'01	0°57'45	min. Earth dist.	1037 Mar 13 j 06:25	28°♄50'12	0.28355 AU
minimum elong	1034 Oct 14 j 00:15	26°♄12'07	0°57'22	morning rise	1037 Mar 17 j 15:08	26°♄07'54	
	1034 Oct 17 j 00:50	0°♄		direct	1037 Apr 03 j 16:59	20°♄31'51	
desc. node	1034 Nov 09 j 04:00	29°♄03'57		greatest brilliancy	1037 Apr 13 j 02:19	22°♄09'51	-4.8m
	1034 Nov 09 j 21:50	0°♄		desc. node	1037 Apr 25 j 22:49	28°♄36'54	
evening rise	1034 Nov 23 j 07:52	16°♄51'41			1037 Apr 28 j 00:55	0°♄	
	1034 Dec 03 j 19:02	0°♄		morning max el	1037 May 22 j 16:00	20°♄42'10	45°48'24
	1034 Dec 27 j 17:32	0°♄			1037 Jun 01 j 02:23	0°♄	
	1035 Jan 20 j 19:12	0°♄			1037 Jun 29 j 04:22	0°♄	
	1035 Feb 14 j 03:06	0°♄			1037 Jul 25 j 11:36	0°♄	

asc. node	1037 Aug 17 j 02:20	26°☿45'06	asc. node	1040 Feb 01 j 21:18	0°♄37'34	
	1037 Aug 19 j 19:15	0°♌		1040 Feb 28 j 04:23	0°♄	
	1037 Sep 13 j 10:55	0°♍	evening max el	1040 Mar 12 j 21:05	14°♄02'48	45°53'08
	1037 Oct 07 j 15:55	0°♊		1040 Mar 30 j 14:16	0°♊	
greatest brilliancy	1037 Oct 29 j 13:05	27°♊23'50 -3.9m	greatest brilliancy	1040 Apr 20 j 02:34	12°♊38'23	-4.7m
	1037 Oct 31 j 14:50	0°♌	retrograde	1040 May 01 j 00:11	14°♊48'23	
morning set	1037 Nov 17 j 14:05	21°♌20'34	evening set	1040 May 16 j 03:51	10°♊22'25	
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desc. node	1037 Dec 06 j 15:40	15°♍20'32	minimum elong	1040 May 22 j 12:27	6°♊33'17	0°13'12
	1037 Dec 18 j 07:11	0°♎	transit middle	1040 May 22 j 12:27	6°♊33'17	0°13'12
			transit begin	1040 May 22 j 10:05	6°♊36'59	
superior conj	1037 Dec 29 j 06:35	13°♎47'59 -0°50'32	transit end	1040 May 22 j 14:48	6°♊29'35	
minimum elong	1037 Dec 28 j 19:15	13°♎12'23 0°50'05	min. Earth dist.	1040 May 22 j 14:01	6°♊30'48	0.28948 AU
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evening rise	1038 Feb 08 j 09:43	5°♐19'46	direct	1040 Jun 13 j 02:16	28°♐16'17	
	1038 Feb 28 j 05:54	0°♑		1040 Jun 22 j 22:02	0°♊	
	1038 Mar 24 j 13:47	0°♄	greatest brilliancy	1040 Jun 23 j 12:46	0°♊12'46	-4.7m
asc. node	1038 Mar 29 j 19:16	6°♄24'09	morning max el	1040 Jul 31 j 22:34	28°♊05'25	45°52'00
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	1038 Jun 07 j 17:15	0°♌	asc. node	1040 Sep 13 j 14:19	14°♌55'50	
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desc. node	1038 Jul 19 j 08:19	16°♍25'44		1040 Oct 21 j 09:33	0°♊	
	1038 Aug 01 j 14:05	0°♋		1040 Nov 14 j 17:09	0°♌	
evening max el	1038 Aug 06 j 02:03	4°♋23'46 46°05'24		1040 Dec 08 j 18:19	0°♍	
	1038 Sep 07 j 11:14	0°♌		1041 Jan 01 j 17:28	0°♎	
greatest brilliancy	1038 Sep 15 j 08:15	3°♌24'03 -4.8m	desc. node	1041 Jan 03 j 03:33	1°♎46'43	
retrograde	1038 Sep 24 j 08:31	4°♌53'33		1041 Jan 25 j 16:51	0°♏	
evening set	1038 Oct 10 j 10:14	29°♋58'50	morning set	1041 Feb 02 j 21:07	10°♏13'11	
	1038 Oct 10 j 09:25	30°♐♋		1041 Feb 18 j 17:41	0°♐	
inferior conj	1038 Oct 15 j 02:13	27°♋12'44 -5°57'02				
minimum elong	1038 Oct 15 j 12:44	26°♋56'40 5°54'33	superior conj	1041 Mar 14 j 17:53	29°♐50'37 -1°19'18	
min. Earth dist.	1038 Oct 15 j 21:24	26°♋43'27 0.26954 AU	minimum elong	1041 Mar 15 j 01:17	0°♑13'31 1°19'10	
morning rise	1038 Oct 20 j 14:42	23°♋57'03		1041 Mar 14 j 20:55	0°♑	
direct	1038 Nov 04 j 19:03	19°♋25'41	max. Earth dist.	1041 Mar 18 j 07:18	4°♑15'15 1.72620 AU	
asc. node	1038 Nov 09 j 11:42	19°♋51'42		1041 Apr 08 j 03:13	0°♄	
greatest brilliancy	1038 Nov 15 j 17:46	21°♋41'03 -4.9m	evening rise	1041 Apr 22 j 01:28	17°♄08'41	
	1038 Nov 30 j 01:38	0°♌	asc. node	1041 Apr 26 j 07:05	22°♄20'47	
morning max el	1038 Dec 25 j 12:29	22°♌52'59 46°56'47		1041 May 02 j 12:45	0°♊	
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desc. node	1039 Mar 01 j 01:18	7°♏06'01		1041 Aug 09 j 19:09	0°♋	
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	1039 Apr 14 j 03:14	0°♑		1041 Sep 04 j 12:45	0°♌	
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asc. node	1039 Jun 22 j 04:38	23°♊56'02		1041 Oct 31 j 00:49	0°♎	
morning set	1039 Jun 26 j 11:49	29°♊12'11	greatest brilliancy	1041 Nov 27 j 22:40	19°♎06'57 -4.9m	
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superior conj	1039 Aug 01 j 20:28	14°♌01'04 1°17'02	inferior conj	1041 Dec 28 j 16:47	13°♎15'05 5°15'25	
minimum elong	1039 Aug 01 j 13:41	13°♌40'05 1°16'55	minimum elong	1041 Dec 28 j 06:57	13°♎30'13 5°12'52	
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evening rise	1039 Sep 07 j 13:48	29°♍38'55	direct	1042 Jan 18 j 01:16	5°♎35'16	
	1039 Sep 07 j 20:34	0°♋	greatest brilliancy	1042 Jan 27 j 07:44	7°♎13'14 -4.9m	
	1039 Oct 01 j 22:26	0°♌		1042 Mar 01 j 03:29	0°♏	
desc. node	1039 Oct 11 j 18:10	12°♌14'07	morning max el	1042 Mar 08 j 21:55	7°♏25'31 46°27'31	
	1039 Oct 26 j 00:35	0°♍	desc. node	1042 Mar 28 j 13:11	27°♏46'19	
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	1039 Dec 13 j 10:45	0°♏		1042 Apr 26 j 11:10	0°♑	
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


































































































































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asc. node	1042 Jul 19 j 16:32	9°☿45'11			1045 Feb 02 j 00:38	0°☿	
	1042 Aug 05 j 05:54	0°♌		greatest brilliancy	1045 Feb 07 j 12:29	2°☿31'33	-4.9m
	1042 Aug 29 j 12:24	0°♍		retrograde	1045 Feb 18 j 02:04	4°☿37'35	
morning set	1042 Sep 03 j 02:31	5°♍42'19			1045 Mar 05 j 07:09	30°☿☿	
	1042 Sep 22 j 13:29	0°♎		evening set	1045 Mar 07 j 19:30	28°☿30'46	
max. Earth dist.	1042 Oct 09 j 01:56	20°♎42'18	1.71473 AU	inferior conj	1045 Mar 11 j 04:56	26°☿23'09	8°12'14
				minimum elong	1045 Mar 11 j 11:08	26°☿13'20	8°11'38
superior conj	1042 Oct 11 j 02:57	23°♎16'04	1°00'23	min. Earth dist.	1045 Mar 10 j 20:57	26°☿35'48	0.28313 AU
minimum elong	1042 Oct 11 j 13:27	23°♎49'03	1°00'01	morning rise	1045 Mar 15 j 03:03	23°☿57'06	
	1042 Oct 16 j 11:37	0°♏		direct	1045 Apr 01 j 07:54	18°☿17'07	
desc. node	1042 Nov 08 j 05:58	28°♏35'55		greatest brilliancy	1045 Apr 10 j 15:55	19°☿53'51	-4.8m
	1042 Nov 09 j 08:44	0°♐		desc. node	1045 Apr 25 j 00:45	27°☿20'22	
evening rise	1042 Nov 20 j 18:17	14°♐19'13			1045 Apr 28 j 19:31	0°☿	
	1042 Dec 03 j 06:03	0°♑		morning max el	1045 May 20 j 06:19	18°☿27'24	45°49'07
	1042 Dec 27 j 04:42	0°♒			1045 May 31 j 21:33	0°♓	
	1043 Jan 20 j 06:33	0°♈			1045 Jun 28 j 18:58	0°♊	
	1043 Feb 13 j 14:46	0°☿			1045 Jul 25 j 00:20	0°☿	
asc. node	1043 Mar 01 j 09:22	19°☿10'06		asc. node	1045 Aug 16 j 04:26	26°☿15'41	
	1043 Mar 10 j 09:52	0°♈			1045 Aug 19 j 07:05	0°♌	
	1043 Apr 04 j 22:46	0°♊			1045 Sep 12 j 22:18	0°♍	
	1043 May 01 j 19:48	0°☿			1045 Oct 07 j 03:04	0°♎	
evening max el	1043 May 23 j 12:15	22°☿08'28	45°21'00	greatest brilliancy	1045 Oct 30 j 15:09	29°♎26'23	-3.9m
	1043 Jun 01 j 01:03	0°♌			1045 Oct 31 j 01:51	0°♏	
desc. node	1043 Jun 20 j 22:36	15°♌03'44		morning set	1045 Nov 15 j 01:26	18°♏50'40	
greatest brilliancy	1043 Jun 30 j 17:48	19°♌46'06	-4.7m		1045 Nov 23 j 22:08	0°♐	
retrograde	1043 Jul 11 j 01:07	21°♌39'37		desc. node	1045 Dec 05 j 17:46	14°♐52'39	
evening set	1043 Jul 27 j 23:49	16°♌15'17			1045 Dec 17 j 18:07	0°♑	
inferior conj	1043 Aug 01 j 09:07	13°♌35'36	-7°50'31				
minimum elong	1043 Aug 01 j 01:11	13°♌47'53	7°49'31	superior conj	1045 Dec 26 j 16:32	11°♑14'05	-0°47'16
min. Earth dist.	1043 Aug 01 j 15:12	13°♌26'11	0.28685 AU	minimum elong	1045 Dec 26 j 05:36	10°♑39'45	0°46'48
morning rise	1043 Aug 05 j 02:24	11°♌19'11		max. Earth dist.	1045 Dec 29 j 07:20	14°♑31'24	1.71171 AU
direct	1043 Aug 22 j 22:25	5°♌22'29			1046 Jan 10 j 15:05	0°♒	
greatest brilliancy	1043 Sep 02 j 17:53	7°♌30'59	-4.8m		1046 Feb 03 j 14:11	0°♈	
	1043 Oct 04 j 09:48	0°♍		evening rise	1046 Feb 05 j 21:09	2°☿51'32	
morning max el	1043 Oct 12 j 00:37	7°♍23'57	46°31'59		1046 Feb 27 j 16:54	0°☿	
asc. node	1043 Oct 12 j 01:57	7°♍27'19			1046 Mar 24 j 00:56	0°♈	
	1043 Nov 02 j 05:27	0°♎		asc. node	1046 Mar 28 j 21:13	5°♈55'52	
	1043 Nov 28 j 03:28	0°♏			1046 Apr 17 j 16:06	0°♊	
	1043 Dec 23 j 00:43	0°♐			1046 May 12 j 16:35	0°☿	
	1044 Jan 16 j 12:11	0°♑			1046 Jun 07 j 06:33	0°♌	
desc. node	1044 Jan 31 j 15:28	18°♑39'00			1046 Jul 03 j 19:42	0°♍	
	1044 Feb 09 j 20:16	0°♒		desc. node	1046 Jul 18 j 10:28	15°♍43'27	
	1044 Mar 05 j 03:47	0°♈			1046 Aug 01 j 12:15	0°♎	
	1044 Mar 29 j 12:02	0°☿		evening max el	1046 Aug 03 j 14:06	2°♎00'44	46°02'57
morning set	1044 Apr 16 j 10:34	22°☿04'06			1046 Sep 10 j 02:00	0°♏	
	1044 Apr 22 j 21:27	0°♈		greatest brilliancy	1046 Sep 12 j 21:23	1°♏00'50	-4.8m
	1044 May 17 j 07:39	0°♊		retrograde	1046 Sep 21 j 20:28	2°♏29'42	
					1046 Oct 03 j 02:54	30°♏♎	
superior conj	1044 May 23 j 08:48	7°♊25'32	-0°01'01	evening set	1046 Oct 08 j 02:10	27°♎29'55	
minimum elong	1044 May 23 j 09:01	7°♊26'12	0°01'01	inferior conj	1046 Oct 12 j 15:06	24°♎48'18	-6°13'54
behind sun begin	1044 May 22 j 10:32	6°♊17'11		minimum elong	1046 Oct 13 j 01:42	24°♎32'08	6°11'30
behind sun end	1044 May 24 j 07:29	8°♊35'13		min. Earth dist.	1046 Oct 13 j 11:20	24°♎17'27	0.27015 AU
max. Earth dist.	1044 May 23 j 04:51	7°♊13'24	1.73616 AU	morning rise	1046 Oct 18 j 00:39	21°♎36'32	
asc. node	1044 May 23 j 18:54	7°♊56'34		direct	1046 Nov 02 j 07:59	16°♎59'54	
	1044 Jun 10 j 17:49	0°☿		asc. node	1046 Nov 08 j 13:45	17°♎45'21	
evening rise	1044 Jun 28 j 08:56	21°☿40'22		greatest brilliancy	1046 Nov 13 j 08:52	19°♎17'00	-4.9m
	1044 Jul 05 j 03:23	0°♌			1046 Nov 30 j 19:52	0°♏	
	1044 Jul 29 j 12:39	0°♍		morning max el	1046 Dec 23 j 01:47	20°♏26'42	46°57'06
	1044 Aug 22 j 22:43	0°♎			1047 Jan 01 j 04:57	0°♐	
desc. node	1044 Sep 12 j 08:18	24°♎58'42			1047 Jan 28 j 00:58	0°♑	
	1044 Sep 16 j 11:01	0°♏			1047 Feb 22 j 15:12	0°♒	
	1044 Oct 11 j 03:07	0°♐		desc. node	1047 Feb 28 j 03:24	6°♒32'59	
	1044 Nov 05 j 02:12	0°♑			1047 Mar 19 j 17:43	0°♈	
	1044 Nov 30 j 17:04	0°♒			1047 Apr 13 j 14:57	0°☿	
	1044 Dec 28 j 02:34	0°♈			1047 May 08 j 09:23	0°♈	
evening max el	1044 Dec 29 j 09:04	1°☿18'03	47°04'45		1047 Jun 02 j 01:23	0°♊	

asc. node	1047 Jun 21 j 06:48	23° Π 29'23		asc. node	1049 Dec 06 j 01:46	18° \mathfrak{Z} 35'41	
morning set	1047 Jun 24 j 05:55	27° Π 07'16		evening set	1049 Dec 20 j 10:03	14° \mathfrak{Z} 12'36	
	1047 Jun 26 j 14:15	0° \mathfrak{S}		min. Earth dist.	1049 Dec 25 j 10:15	11° \mathfrak{Z} 15'28	0.26637 AU
	1047 Jul 20 j 23:14	0° Ω		inferior conj	1049 Dec 26 j 05:15	10° \mathfrak{Z} 46'18	4°55'45
max. Earth dist.	1047 Jul 27 j 02:46	7° Ω 35'54	1.72994 AU	minimum elong	1049 Dec 25 j 19:45	11° \mathfrak{Z} 00'53	4°53'12
				morning rise	1049 Dec 31 j 05:58	7° \mathfrak{Z} 46'56	
superior conj	1047 Jul 30 j 14:17	11° Ω 54'19	1°15'39	direct	1050 Jan 15 j 14:06	3° \mathfrak{Z} 07'14	
minimum elong	1047 Jul 30 j 07:07	11° Ω 32'06	1°15'30	greatest brilliancy	1050 Jan 24 j 20:26	4° \mathfrak{Z} 45'34	-4.9m
	1047 Aug 14 j 04:35	0° \mathfrak{M}			1050 Mar 01 j 06:10	0° \approx	
evening rise	1047 Sep 05 j 05:23	27° \mathfrak{M} 23'55		morning max el	1050 Mar 06 j 12:08	5° \approx 04'38	46°29'06
	1047 Sep 07 j 07:32	0° \mathfrak{L}		desc. node	1050 Mar 27 j 15:05	27° \approx 03'24	
	1047 Oct 01 j 09:38	0° \mathfrak{M}			1050 Mar 30 j 08:01	0° \mathfrak{H}	
desc. node	1047 Oct 10 j 20:07	11° \mathfrak{M} 44'55			1050 Apr 26 j 01:26	0° \mathfrak{Y}	
	1047 Oct 25 j 12:05	0° \mathfrak{J}			1050 May 21 j 21:10	0° \mathfrak{B}	
	1047 Nov 18 j 15:53	0° \mathfrak{Z}			1050 Jun 16 j 04:52	0° Π	
	1047 Dec 12 j 23:01	0° \approx			1050 Jul 11 j 03:14	0° \mathfrak{S}	
asc. node	1048 Jan 06 j 14:08	0° \mathfrak{H}		asc. node	1050 Jul 18 j 18:37	9° \mathfrak{S} 16'58	
	1048 Jan 31 j 23:28	0° \mathfrak{Y} 01'57			1050 Aug 04 j 17:04	0° Ω	
	1048 Jan 31 j 22:47	0° \mathfrak{Y}			1050 Aug 28 j 23:29	0° \mathfrak{M}	
	1048 Feb 27 j 22:29	0° \mathfrak{B}		morning set	1050 Aug 31 j 18:23	3° \mathfrak{M} 27'55	
evening max el	1048 Mar 10 j 12:00	11° \mathfrak{B} 48'17	45°55'22		1050 Sep 22 j 00:35	0° \mathfrak{L}	
	1048 Mar 31 j 01:05	0° Π		max. Earth dist.	1050 Oct 06 j 10:44	18° \mathfrak{L} 04'27	1.71512 AU
greatest brilliancy	1048 Apr 17 j 18:44	10° Π 29'03	-4.7m				
retrograde	1048 Apr 28 j 17:08	12° Π 40'00		superior conj	1050 Oct 08 j 16:05	20° \mathfrak{L} 51'47	1°02'54
evening set	1048 May 13 j 21:16	8° Π 12'11		minimum elong	1050 Oct 09 j 02:29	21° \mathfrak{L} 24'25	1°02'33
inferior conj	1048 May 20 j 04:27	4° Π 25'11	0°33'04		1050 Oct 15 j 22:47	0° \mathfrak{M}	
minimum elong	1048 May 20 j 05:39	4° Π 23'17	0°32'43	desc. node	1050 Nov 07 j 08:03	28° \mathfrak{M} 07'08	
min. Earth dist.	1048 May 20 j 06:36	4° Π 21'49	0.28945 AU		1050 Nov 08 j 19:59	0° \mathfrak{J}	
desc. node	1048 May 22 j 12:43	2° Π 57'24		evening rise	1050 Nov 18 j 04:30	11° \mathfrak{J} 45'05	
morning rise	1048 May 26 j 14:02	0° Π 34'14			1050 Dec 02 j 17:24	0° \mathfrak{Z}	
	1048 May 27 j 15:32	30° \mathfrak{K} \mathfrak{B}			1050 Dec 26 j 16:11	0° \approx	
direct	1048 Jun 10 j 18:28	26° \mathfrak{B} 07'16			1051 Jan 19 j 18:16	0° \mathfrak{H}	
greatest brilliancy	1048 Jun 21 j 05:00	28° \mathfrak{B} 04'04	-4.7m		1051 Feb 13 j 02:49	0° \mathfrak{Y}	
	1048 Jun 25 j 19:34	0° Π		asc. node	1051 Feb 28 j 11:19	18° \mathfrak{Y} 38'38	
morning max el	1048 Jul 29 j 15:11	25° Π 56'37	45°51'10		1051 Mar 09 j 22:33	0° \mathfrak{B}	
	1048 Aug 02 j 19:12	0° \mathfrak{S}			1051 Apr 04 j 12:45	0° Π	
	1048 Aug 31 j 01:52	0° Ω			1051 May 01 j 12:50	0° \mathfrak{S}	
asc. node	1048 Sep 12 j 16:18	14° Ω 20'42		evening max el	1051 May 21 j 04:03	19° \mathfrak{S} 57'14	45°20'49
	1048 Sep 26 j 01:08	0° \mathfrak{M}			1051 Jun 01 j 05:04	0° Ω	
	1048 Oct 20 j 21:55	0° \mathfrak{L}		desc. node	1051 Jun 20 j 00:43	13° Ω 42'14	
	1048 Nov 14 j 05:01	0° \mathfrak{M}		greatest brilliancy	1051 Jun 28 j 08:12	17° Ω 33'34	-4.7m
	1048 Dec 08 j 05:55	0° \mathfrak{J}		retrograde	1051 Jul 08 j 15:58	19° Ω 27'23	
desc. node	1049 Jan 01 j 04:52	0° \mathfrak{Z}		evening set	1051 Jul 25 j 11:59	14° Ω 07'54	
	1049 Jan 02 j 05:38	1° \mathfrak{Z} 17'34		inferior conj	1051 Jul 30 j 00:40	11° Ω 23'00	-7°41'13
	1049 Jan 25 j 04:04	0° \approx		minimum elong	1051 Jul 29 j 16:17	11° Ω 36'01	7°40'04
morning set	1049 Jan 31 j 07:59	7° \approx 42'14		min. Earth dist.	1051 Jul 30 j 06:06	11° Ω 14'33	0.28717 AU
	1049 Feb 18 j 04:45	0° \mathfrak{H}		morning rise	1051 Aug 02 j 20:25	9° Ω 02'34	
				direct	1051 Aug 20 j 14:23	3° Ω 09'35	
superior conj	1049 Mar 12 j 08:08	27° \mathfrak{H} 31'55	-1°20'36	greatest brilliancy	1051 Aug 31 j 08:56	5° Ω 16'37	-4.8m
minimum elong	1049 Mar 12 j 14:55	27° \mathfrak{H} 52'59	1°20'29		1051 Oct 04 j 10:53	0° \mathfrak{M}	
	1049 Mar 14 j 07:53	0° \mathfrak{Y}		morning max el	1051 Oct 09 j 14:40	5° \mathfrak{M} 03'20	46°30'22
max. Earth dist.	1049 Mar 15 j 22:11	1° \mathfrak{Y} 58'42	1.72565 AU	asc. node	1051 Oct 11 j 04:01	6° \mathfrak{M} 37'16	
	1049 Apr 07 j 14:08	0° \mathfrak{B}			1051 Nov 01 j 22:23	0° \mathfrak{L}	
evening rise	1049 Apr 19 j 18:12	14° \mathfrak{B} 59'03			1051 Nov 27 j 17:47	0° \mathfrak{M}	
asc. node	1049 Apr 25 j 09:06	21° \mathfrak{B} 53'23			1051 Dec 22 j 13:47	0° \mathfrak{J}	
	1049 May 01 j 23:44	0° Π			1052 Jan 16 j 00:32	0° \mathfrak{Z}	
	1049 May 26 j 12:35	0° \mathfrak{S}		desc. node	1052 Jan 30 j 17:31	18° \mathfrak{Z} 08'09	
	1049 Jun 20 j 05:04	0° Ω			1052 Feb 09 j 08:08	0° \approx	
	1049 Jul 15 j 02:39	0° \mathfrak{M}			1052 Mar 04 j 15:18	0° \mathfrak{H}	
	1049 Aug 09 j 08:23	0° \mathfrak{L}			1052 Mar 28 j 23:18	0° \mathfrak{Y}	
desc. node	1049 Aug 14 j 22:19	6° \mathfrak{L} 33'24		morning set	1052 Apr 14 j 03:11	19° \mathfrak{Y} 53'31	
	1049 Sep 04 j 03:49	0° \mathfrak{M}			1052 Apr 22 j 08:31	0° \mathfrak{B}	
	1049 Oct 01 j 02:13	0° \mathfrak{J}			1052 May 16 j 18:36	0° Π	
evening max el	1049 Oct 15 j 22:05	15° \mathfrak{J} 26'59	47°11'14				
	1049 Oct 31 j 08:32	0° \mathfrak{Z}		superior conj	1052 May 21 j 02:49	5° Π 19'54	-0°04'12
greatest brilliancy	1049 Nov 25 j 11:31	16° \mathfrak{Z} 37'24	-4.9m	minimum elong	1052 May 21 j 03:40	5° Π 22'32	0°04'10
retrograde	1049 Dec 05 j 15:21	18° \mathfrak{Z} 35'55		behind sun begin	1052 May 20 j 05:43	4° Π 15'07	

behind sun end	1052 May 22 j 01:37	6° Π 29'56		min. Earth dist.	1054 Oct 11 j 00:56	21° Ω 52'00	0.27082 AU
max. Earth dist.	1052 May 21 j 01:48	5° Π 16'46	1.73603 AU	morning rise	1054 Oct 15 j 10:32	19° Ω 16'26	
asc. node	1052 May 22 j 21:02	7° Π 29'32		direct	1054 Oct 30 j 21:28	14° Ω 34'06	
	1052 Jun 10 j 04:45	0° Θ		asc. node	1054 Nov 07 j 15:54	15° Ω 43'56	
evening rise	1052 Jun 26 j 04:00	19° Θ 37'35		greatest brilliancy	1054 Nov 10 j 23:41	16° Ω 52'42	-4.9m
	1052 Jul 04 j 14:25	0° Ω			1054 Dec 01 j 09:40	0° \mathbb{M}	
	1052 Jul 28 j 23:55	0° \mathbb{M}		morning max el	1054 Dec 20 j 16:05	18° \mathbb{M} 02'30	46°57'07
	1052 Aug 22 j 10:23	0° Ω			1055 Jan 01 j 00:43	0° \mathbb{X}	
desc. node	1052 Sep 11 j 10:15	24° Ω 27'46			1055 Jan 27 j 16:30	0° \mathbb{Z}	
	1052 Sep 15 j 23:13	0° \mathbb{M}			1055 Feb 22 j 04:50	0° \approx	
	1052 Oct 10 j 16:05	0° \mathbb{X}		desc. node	1055 Feb 27 j 05:20	5° \approx 58'58	
	1052 Nov 04 j 16:22	0° \mathbb{Z}			1055 Mar 19 j 06:15	0° \mathbb{H}	
	1052 Nov 30 j 09:26	0° \approx			1055 Apr 13 j 02:46	0° \mathbb{Y}	
evening max el	1052 Dec 26 j 23:06	28° \approx 54'50	47°06'32		1055 May 07 j 20:43	0° \mathbb{B}	
	1052 Dec 28 j 00:45	0° \mathbb{H}			1055 Jun 01 j 12:26	0° Π	
asc. node	1053 Jan 02 j 13:39	5° \mathbb{H} 29'28		asc. node	1055 Jun 20 j 08:49	23° Π 02'08	
	1053 Feb 04 j 13:36	0° \mathbb{Y}		morning set	1055 Jun 21 j 23:58	25° Π 02'05	
greatest brilliancy	1053 Feb 05 j 05:10	0° \mathbb{Y} 15'10	-4.9m		1055 Jun 26 j 01:08	0° Θ	
retrograde	1053 Feb 15 j 17:11	2° \mathbb{Y} 20'03			1055 Jul 20 j 10:05	0° Ω	
	1053 Feb 26 j 09:19	30° \mathbb{H}		max. Earth dist.	1055 Jul 24 j 23:53	5° Ω 39'14	1.73037 AU
evening set	1053 Mar 05 j 12:48	26° \mathbb{H} 10'51					
inferior conj	1053 Mar 08 j 20:14	24° \mathbb{H} 06'15	8°19'13	superior conj	1055 Jul 28 j 08:13	9° Ω 47'42	1°14'10
minimum elong	1053 Mar 09 j 01:47	23° \mathbb{H} 57'26	8°18'44	minimum elong	1055 Jul 28 j 00:40	9° Ω 24'21	1°13'59
min. Earth dist.	1053 Mar 08 j 11:40	24° \mathbb{H} 19'49	0.28268 AU		1055 Aug 13 j 15:28	0° \mathbb{M}	
morning rise	1053 Mar 12 j 15:00	21° \mathbb{H} 45'00		evening rise	1055 Sep 02 j 21:18	25° \mathbb{M} 09'54	
direct	1053 Mar 29 j 22:09	16° \mathbb{H} 01'02			1055 Sep 06 j 18:32	0° Ω	
greatest brilliancy	1053 Apr 08 j 05:56	17° \mathbb{H} 37'10	-4.8m		1055 Sep 30 j 20:51	0° \mathbb{M}	
desc. node	1053 Apr 24 j 02:55	26° \mathbb{H} 05'30		desc. node	1055 Oct 09 j 22:15	11° \mathbb{M} 16'26	
	1053 Apr 29 j 09:50	0° \mathbb{Y}			1055 Oct 24 j 23:35	0° \mathbb{X}	
morning max el	1053 May 17 j 20:16	16° \mathbb{Y} 10'44	45°49'57		1055 Nov 18 j 03:44	0° \mathbb{Z}	
	1053 May 31 j 16:31	0° \mathbb{B}			1055 Dec 12 j 11:21	0° \approx	
	1053 Jun 28 j 09:40	0° Π			1056 Jan 06 j 03:16	0° \mathbb{H}	
	1053 Jul 24 j 13:15	0° Θ		asc. node	1056 Jan 31 j 01:23	29° \mathbb{H} 25'06	
asc. node	1053 Aug 15 j 06:26	25° Θ 45'18			1056 Jan 31 j 13:30	0° \mathbb{Y}	
	1053 Aug 18 j 19:07	0° Ω			1056 Feb 27 j 17:10	0° \mathbb{B}	
	1053 Sep 12 j 09:52	0° \mathbb{M}		evening max el	1056 Mar 08 j 03:49	9° \mathbb{B} 35'37	45°57'47
	1053 Oct 06 j 14:26	0° Ω			1056 Mar 31 j 15:49	0° Π	
	1053 Oct 30 j 13:08	0° \mathbb{M}		greatest brilliancy	1056 Apr 15 j 10:52	8° Π 19'29	-4.7m
greatest brilliancy	1053 Oct 31 j 04:35	0° \mathbb{M} 48'34	-3.9m	retrograde	1056 Apr 26 j 10:21	10° Π 31'13	
morning set	1053 Nov 12 j 12:35	16° \mathbb{M} 19'11		evening set	1056 May 11 j 14:50	6° Π 01'37	
	1053 Nov 23 j 09:24	0° \mathbb{X}		inferior conj	1056 May 17 j 20:52	2° Π 16'00	0°52'49
desc. node	1053 Dec 04 j 19:54	14° \mathbb{X} 23'56		minimum elong	1056 May 17 j 22:48	2° Π 12'59	0°52'15
	1053 Dec 17 j 05:22	0° \mathbb{Z}		min. Earth dist.	1056 May 17 j 22:50	2° Π 12'56	0.28938 AU
				desc. node	1056 May 21 j 14:48	29° \mathbb{B} 57'06	
superior conj	1053 Dec 24 j 01:56	8° \mathbb{Z} 37'28	-0°43'50		1056 May 21 j 12:52	30° \mathbb{H}	
minimum elong	1053 Dec 23 j 15:30	8° \mathbb{Z} 04'40	0°43'23	morning rise	1056 May 24 j 06:51	28° \mathbb{B} 24'50	
max. Earth dist.	1053 Dec 26 j 08:31	11° \mathbb{Z} 29'01	1.71146 AU	direct	1056 Jun 08 j 10:59	23° \mathbb{B} 58'12	
	1054 Jan 10 j 02:19	0° \approx		greatest brilliancy	1056 Jun 18 j 20:29	25° \mathbb{B} 54'35	-4.7m
evening rise	1054 Feb 03 j 08:01	0° \mathbb{H} 20'38			1056 Jun 27 j 13:20	0° Π	
	1054 Feb 03 j 01:24	0° \mathbb{H}		morning max el	1056 Jul 27 j 08:09	23° Π 49'00	45°50'17
	1054 Feb 27 j 04:08	0° \mathbb{Y}			1056 Aug 02 j 15:37	0° Θ	
	1054 Mar 23 j 12:19	0° \mathbb{B}			1056 Aug 30 j 16:57	0° Ω	
asc. node	1054 Mar 27 j 23:17	5° \mathbb{B} 27'17		asc. node	1056 Sep 11 j 18:18	13° Ω 46'03	
	1054 Apr 17 j 03:50	0° Π			1056 Sep 25 j 14:14	0° \mathbb{M}	
	1054 May 12 j 04:59	0° Θ			1056 Oct 20 j 10:06	0° Ω	
	1054 Jun 06 j 20:11	0° Ω			1056 Nov 13 j 16:43	0° \mathbb{M}	
	1054 Jul 03 j 11:53	0° \mathbb{M}			1056 Dec 07 j 17:20	0° \mathbb{X}	
desc. node	1054 Jul 17 j 12:30	14° \mathbb{M} 59'49			1056 Dec 31 j 16:05	0° \mathbb{Z}	
evening max el	1054 Aug 01 j 02:35	29° \mathbb{M} 38'38	46°00'40	desc. node	1057 Jan 01 j 07:39	0° \mathbb{Z} 48'46	
	1054 Aug 01 j 11:30	0° Ω			1057 Jan 24 j 15:08	0° \approx	
greatest brilliancy	1054 Sep 10 j 09:52	28° Ω 37'03	-4.8m	morning set	1057 Jan 28 j 18:47	5° \approx 11'29	
	1054 Sep 17 j 02:05	0° \mathbb{M}			1057 Feb 17 j 15:42	0° \mathbb{H}	
retrograde	1054 Sep 19 j 08:57	0° \mathbb{M} 06'05					
	1054 Sep 21 j 15:16	30° \mathbb{H}		superior conj	1057 Mar 09 j 21:57	25° \mathbb{H} 12'08	-1°21'45
evening set	1054 Oct 05 j 18:08	25° Ω 00'56		minimum elong	1057 Mar 10 j 04:05	25° \mathbb{H} 31'10	1°21'40
inferior conj	1054 Oct 10 j 04:02	22° Ω 23'50	-6°29'55	max. Earth dist.	1057 Mar 13 j 13:41	29° \mathbb{H} 44'20	1.72514 AU
minimum elong	1054 Oct 10 j 14:38	22° Ω 07'42	6°27'37		1057 Mar 13 j 18:44	0° \mathbb{Y}	

	1057 Apr 07 j 00:57	0°♄			1059 Nov 01 j 14:33	0°♊	
evening rise	1057 Apr 17 j 10:27	12°♄48'15			1059 Nov 27 j 07:34	0°♌	
asc. node	1057 Apr 24 j 11:14	21°♄26'43			1059 Dec 22 j 02:24	0°♈	
	1057 May 01 j 10:35	0°♊			1060 Jan 15 j 12:27	0°♊	
	1057 May 25 j 23:37	0°♋		desc. node	1060 Jan 29 j 19:30	17°♊38'22	
	1057 Jun 19 j 16:28	0°♌			1060 Feb 08 j 19:34	0°♍	
	1057 Jul 14 j 14:43	0°♎			1060 Mar 04 j 02:23	0°♈	
	1057 Aug 08 j 21:33	0°♊			1060 Mar 28 j 10:07	0°♎	
desc. node	1057 Aug 14 j 00:18	5°♊59'48		morning set	1060 Apr 11 j 19:54	17°♎44'32	
	1057 Sep 03 j 18:53	0°♌			1060 Apr 21 j 19:08	0°♄	
	1057 Sep 30 j 21:19	0°♈			1060 May 16 j 05:08	0°♊	
evening max el	1057 Oct 13 j 13:10	13°♈06'36 47°09'45					
	1057 Oct 31 j 18:29	0°♊		superior conj	1060 May 18 j 20:52	3°♊15'41 -0°07'22	
greatest brilliancy	1057 Nov 23 j 00:52	14°♊09'42 -4.9m		minimum elong	1060 May 18 j 22:23	3°♊20'21 0°07'17	
retrograde	1057 Dec 03 j 04:48	16°♊07'33		behind sun begin	1060 May 18 j 02:04	2°♊17'59	
asc. node	1057 Dec 05 j 03:44	16°♊02'48		behind sun end	1060 May 19 j 18:42	4°♊22'44	
evening set	1057 Dec 17 j 20:35	11°♊48'11		max. Earth dist.	1060 May 18 j 21:43	3°♊18'18 1.73594 AU	
min. Earth dist.	1057 Dec 22 j 23:30	8°♊47'05 0.26592 AU		asc. node	1060 May 21 j 23:03	7°♊03'24	
inferior conj	1057 Dec 23 j 17:51	8°♊18'56 4°35'30			1060 Jun 09 j 15:17	0°♋	
minimum elong	1057 Dec 23 j 08:45	8°♊32'53 4°32'59		evening rise	1060 Jun 23 j 23:03	17°♋36'02	
morning rise	1057 Dec 28 j 21:29	5°♊15'40			1060 Jul 04 j 01:05	0°♌	
direct	1058 Jan 13 j 02:57	0°♊40'49			1060 Jul 28 j 10:50	0°♎	
greatest brilliancy	1058 Jan 22 j 09:22	2°♊19'19 -4.9m			1060 Aug 21 j 21:40	0°♊	
	1058 Mar 01 j 07:00	0°♍		desc. node	1060 Sep 10 j 12:23	23°♊58'32	
morning max el	1058 Mar 04 j 01:44	2°♍43'06 46°30'28			1060 Sep 15 j 11:03	0°♌	
desc. node	1058 Mar 26 j 17:15	26°♍22'36			1060 Oct 10 j 04:44	0°♈	
	1058 Mar 30 j 00:43	0°♈			1060 Nov 04 j 06:16	0°♊	
	1058 Apr 25 j 15:17	0°♎			1060 Nov 30 j 01:41	0°♍	
	1058 May 21 j 09:36	0°♄		evening max el	1060 Dec 24 j 12:50	26°♍31'53 47°08'16	
	1058 Jun 15 j 16:28	0°♊			1060 Dec 27 j 23:22	0°♈	
	1058 Jul 10 j 14:21	0°♋		asc. node	1061 Jan 01 j 15:38	4°♈34'17	
asc. node	1058 Jul 17 j 20:36	8°♋49'26		greatest brilliancy	1061 Feb 02 j 21:44	27°♈59'36 -4.9m	
	1058 Aug 04 j 03:55	0°♌			1061 Feb 11 j 13:29	0°♎	
	1058 Aug 28 j 10:15	0°♎		retrograde	1061 Feb 13 j 08:25	0°♎03'52	
morning set	1058 Aug 29 j 10:16	1°♎14'39			1061 Feb 15 j 03:00	30°♈♈	
	1058 Sep 21 j 11:22	0°♊		evening set	1061 Mar 03 j 05:52	23°♈52'26	
max. Earth dist.	1058 Oct 03 j 17:49	15°♊22'15 1.71556 AU		inferior conj	1061 Mar 06 j 11:33	21°♈50'40 8°25'19	
				minimum elong	1061 Mar 06 j 16:25	21°♈42'57 8°24'58	
superior conj	1058 Oct 06 j 05:32	18°♊29'28 1°05'18		min. Earth dist.	1061 Mar 06 j 02:27	22°♈05'05 0.28220 AU	
minimum elong	1058 Oct 06 j 15:45	19°♊01'30 1°04'58		morning rise	1061 Mar 10 j 03:11	19°♈34'08	
	1058 Oct 15 j 09:39	0°♌		direct	1061 Mar 27 j 12:08	13°♈46'07	
desc. node	1058 Nov 06 j 10:10	27°♌39'27		greatest brilliancy	1061 Apr 05 j 20:10	15°♈22'13 -4.8m	
	1058 Nov 08 j 06:56	0°♈		desc. node	1061 Apr 23 j 04:58	24°♈54'04	
evening rise	1058 Nov 15 j 14:59	9°♈12'43			1061 Apr 29 j 19:48	0°♎	
	1058 Dec 02 j 04:27	0°♊		morning max el	1061 May 15 j 10:48	13°♎56'48 45°50'52	
	1058 Dec 26 j 03:21	0°♍			1061 May 31 j 10:26	0°♄	
	1059 Jan 19 j 05:36	0°♈			1061 Jun 27 j 23:44	0°♊	
	1059 Feb 12 j 14:30	0°♎			1061 Jul 24 j 01:42	0°♋	
asc. node	1059 Feb 27 j 13:24	18°♎08'45		asc. node	1061 Aug 14 j 08:30	25°♋16'17	
	1059 Mar 09 j 10:53	0°♄			1061 Aug 18 j 06:45	0°♌	
	1059 Apr 04 j 02:27	0°♊			1061 Sep 11 j 21:05	0°♎	
	1059 May 01 j 05:49	0°♋			1061 Oct 06 j 01:26	0°♊	
evening max el	1059 May 18 j 19:15	17°♋45'34 45°20'42			1061 Oct 30 j 00:02	0°♌	
	1059 Jun 01 j 10:31	0°♌		greatest brilliancy	1061 Oct 31 j 07:46	1°♌39'42 -3.9m	
desc. node	1059 Jun 19 j 02:43	12°♌19'01		morning set	1061 Nov 09 j 23:56	13°♌49'34	
greatest brilliancy	1059 Jun 25 j 23:04	15°♌22'41 -4.7m			1061 Nov 22 j 20:17	0°♈	
retrograde	1059 Jul 06 j 06:44	17°♌16'48		desc. node	1061 Dec 03 j 21:50	13°♈55'45	
evening set	1059 Jul 23 j 00:17	12°♌01'56			1061 Dec 16 j 16:16	0°♊	
inferior conj	1059 Jul 27 j 16:24	9°♌12'03 -7°31'11					
minimum elong	1059 Jul 27 j 07:37	9°♌25'42 7°29'54		superior conj	1061 Dec 21 j 11:19	6°♊01'50 -0°40'18	
min. Earth dist.	1059 Jul 27 j 21:32	9°♌04'03 0.28746 AU		minimum elong	1061 Dec 21 j 01:29	5°♊30'53 0°39'53	
morning rise	1059 Jul 31 j 14:43	6°♌47'31		max. Earth dist.	1061 Dec 23 j 11:34	8°♊33'29 1.71128 AU	
direct	1059 Aug 18 j 06:02	0°♌58'13			1062 Jan 09 j 13:14	0°♍	
greatest brilliancy	1059 Aug 29 j 00:43	3°♌04'38 -4.8m		evening rise	1062 Jan 31 j 18:54	27°♍50'44	
	1059 Oct 04 j 10:17	0°♎			1062 Feb 02 j 12:18	0°♈	
morning max el	1059 Oct 07 j 04:22	2°♎43'15 46°28'46			1062 Feb 26 j 15:04	0°♎	
asc. node	1059 Oct 10 j 06:12	5°♎49'39			1062 Mar 22 j 23:24	0°♄	

asc. node	1062 Mar 27 j 01:26	4°♄59'54		1064 Oct 19 j 22:12	0°♊	
	1062 Apr 16 j 15:14	0°♈		1064 Nov 13 j 04:25	0°♈	
	1062 May 11 j 17:03	0°♊		1064 Dec 07 j 04:48	0°♈	
	1062 Jun 06 j 09:32	0°♈	desc. node	1064 Dec 31 j 09:44	0°♄19'58	
	1062 Jul 03 j 03:58	0°♈		1064 Dec 31 j 03:21	0°♄	
desc. node	1062 Jul 16 j 14:29	14°♈16'21		1065 Jan 24 j 02:14	0°♈	
evening max el	1062 Jul 29 j 16:09	27°♈20'12	45°58'18	1065 Jan 26 j 05:13	2°♈39'25	
	1062 Aug 01 j 11:27	0°♊		1065 Feb 17 j 02:40	0°♈	
greatest brilliancy	1062 Sep 07 j 21:47	26°♊13'39	-4.8m			
retrograde	1062 Sep 16 j 21:55	27°♊43'23		superior conj	1065 Mar 07 j 11:25	22°♈51'01 -1°22'47
evening set	1062 Oct 03 j 10:10	22°♊32'54		minimum elong	1065 Mar 07 j 16:50	23°♈07'51 1°22'44
inferior conj	1062 Oct 07 j 16:59	20°♊00'11	-6°45'03	max. Earth dist.	1065 Mar 11 j 06:49	27°♈34'43 1.72461 AU
minimum elong	1062 Oct 08 j 03:31	19°♊44'10	6°42'53		1065 Mar 13 j 05:39	0°♈
min. Earth dist.	1062 Oct 08 j 14:10	19°♊27'58	0.27150 AU		1065 Apr 06 j 11:51	0°♈
morning rise	1062 Oct 12 j 20:20	16°♊57'25		evening rise	1065 Apr 15 j 02:28	10°♈36'22
direct	1062 Oct 28 j 11:29	12°♊09'20		asc. node	1065 Apr 23 j 13:14	20°♈59'20
asc. node	1062 Nov 06 j 17:52	13°♊47'54			1065 Apr 30 j 21:32	0°♈
greatest brilliancy	1062 Nov 08 j 13:55	14°♊28'38	-4.9m		1065 May 25 j 10:45	0°♊
	1062 Dec 01 j 19:38	0°♈			1065 Jun 19 j 03:58	0°♈
morning max el	1062 Dec 18 j 07:07	15°♈41'06	46°57'03		1065 Jul 14 j 02:53	0°♈
	1062 Dec 31 j 19:38	0°♈			1065 Aug 08 j 10:50	0°♊
	1063 Jan 27 j 07:33	0°♄		desc. node	1065 Aug 13 j 02:29	5°♊26'34
	1063 Feb 21 j 18:06	0°♈			1065 Sep 03 j 10:11	0°♈
desc. node	1063 Feb 26 j 07:29	5°♈26'26			1065 Sep 30 j 17:04	0°♈
	1063 Mar 18 j 18:29	0°♈		evening max el	1065 Oct 11 j 03:37	10°♈44'12 47°07'52
	1063 Apr 12 j 14:19	0°♈			1065 Nov 01 j 08:09	0°♄
	1063 May 07 j 07:49	0°♈		greatest brilliancy	1065 Nov 20 j 14:37	11°♄41'20 -4.9m
	1063 May 31 j 23:14	0°♈		retrograde	1065 Nov 30 j 17:24	13°♄37'32
asc. node	1063 Jun 19 j 10:49	22°♈35'40		asc. node	1065 Dec 04 j 05:48	13°♄22'14
morning set	1063 Jun 19 j 18:22	22°♈58'47		evening set	1065 Dec 15 j 07:04	9°♄22'01
	1063 Jun 25 j 11:46	0°♊		min. Earth dist.	1065 Dec 20 j 13:02	6°♄16'33 0.26553 AU
	1063 Jul 19 j 20:40	0°♈		inferior conj	1065 Dec 21 j 06:12	5°♄50'10 4°14'27
max. Earth dist.	1063 Jul 22 j 21:17	3°♈44'14	1.73080 AU	minimum elong	1065 Dec 20 j 21:36	6°♄03'24 4°12'00
				morning rise	1065 Dec 26 j 12:40	2°♄42'52
superior conj	1063 Jul 26 j 02:25	7°♈42'40	1°12'35		1066 Jan 01 j 06:57	30°♈42'
minimum elong	1063 Jul 25 j 18:33	7°♈18'22	1°12'23	direct	1066 Jan 10 j 15:15	28°♈12'49
	1063 Aug 13 j 02:08	0°♈		greatest brilliancy	1066 Jan 19 j 22:50	29°♈52'06 -4.9m
evening rise	1063 Aug 31 j 13:27	22°♈57'12			1066 Jan 20 j 07:55	0°♄
	1063 Sep 06 j 05:24	0°♊			1066 Mar 01 j 07:03	0°♈
	1063 Sep 30 j 07:58	0°♈		morning max el	1066 Mar 01 j 14:08	0°♈17'31 46°31'55
desc. node	1063 Oct 09 j 00:20	10°♈48'05		desc. node	1066 Mar 25 j 19:21	25°♈41'20
	1063 Oct 24 j 10:59	0°♈			1066 Mar 29 j 17:21	0°♈
	1063 Nov 17 j 15:29	0°♄			1066 Apr 25 j 05:13	0°♈
	1063 Dec 11 j 23:36	0°♈			1066 May 20 j 22:10	0°♈
	1064 Jan 05 j 16:21	0°♈			1066 Jun 15 j 04:15	0°♈
asc. node	1064 Jan 30 j 03:29	28°♈48'49			1066 Jul 10 j 01:39	0°♊
	1064 Jan 31 j 04:16	0°♈		asc. node	1066 Jul 16 j 22:43	8°♊21'42
	1064 Feb 27 j 12:15	0°♈			1066 Aug 03 j 14:57	0°♈
evening max el	1064 Mar 05 j 20:22	7°♈24'57	46°00'08	morning set	1066 Aug 27 j 02:31	29°♈01'59
	1064 Apr 01 j 11:34	0°♈			1066 Aug 27 j 21:11	0°♈
greatest brilliancy	1064 Apr 13 j 03:25	6°♈10'35	-4.7m		1066 Sep 20 j 22:19	0°♊
retrograde	1064 Apr 24 j 03:25	8°♈22'25		max. Earth dist.	1066 Oct 01 j 03:07	12°♊46'37 1.71602 AU
evening set	1064 May 09 j 08:35	3°♈51'12				
inferior conj	1064 May 15 j 13:17	0°♈07'01	1°12'30	superior conj	1066 Oct 03 j 19:30	16°♈08'23 1°07'32
minimum elong	1064 May 15 j 15:55	0°♈02'52	1°11'44	minimum elong	1066 Oct 04 j 05:27	16°♈39'35 1°07'14
min. Earth dist.	1064 May 15 j 15:02	0°♈04'16	0.28926 AU		1066 Oct 14 j 20:40	0°♈
	1064 May 15 j 17:45	30°♈		desc. node	1066 Nov 05 j 12:08	27°♈10'42
desc. node	1064 May 20 j 16:47	26°♈58'46			1066 Nov 07 j 18:04	0°♈
morning rise	1064 May 21 j 23:27	26°♈15'41		evening rise	1066 Nov 13 j 01:44	6°♈40'42
direct	1064 Jun 06 j 03:42	21°♈49'31			1066 Dec 01 j 15:44	0°♄
greatest brilliancy	1064 Jun 16 j 11:29	23°♈44'47	-4.7m		1066 Dec 25 j 14:48	0°♈
	1064 Jun 28 j 17:52	0°♈			1067 Jan 18 j 17:17	0°♈
morning max el	1064 Jul 25 j 00:41	21°♈40'52	45°49'29		1067 Feb 12 j 02:32	0°♈
	1064 Aug 02 j 11:13	0°♊		asc. node	1067 Feb 26 j 15:31	17°♈37'48
	1064 Aug 30 j 07:42	0°♈			1067 Mar 08 j 23:37	0°♈
asc. node	1064 Sep 10 j 20:30	13°♈12'32			1067 Apr 03 j 16:40	0°♈
	1064 Sep 25 j 03:10	0°♈			1067 Apr 30 j 23:37	0°♊

evening max el	1067 May 16 j 09:41	15°  30'53	45°20'43		1069 Oct 29 j 11:19	0° 	
	1067 Jun 01 j 18:53	0° 		greatest brilliancy	1069 Oct 31 j 07:42	2°  19'27	-3.9m
desc. node	1067 Jun 18 j 04:47	10°  51'52		morning set	1069 Nov 07 j 11:44	11°  20'16	
greatest brilliancy	1067 Jun 23 j 13:35	13°  10'12	-4.7m		1069 Nov 22 j 07:31	0° 	
retrograde	1067 Jul 03 j 21:35	15°  05'12		desc. node	1069 Dec 02 j 23:58	13°  27'11	
evening set	1067 Jul 20 j 12:28	9°  54'37			1069 Dec 16 j 03:29	0° 	
inferior conj	1067 Jul 25 j 08:02	6°  59'58	-7°20'27				
minimum elong	1067 Jul 24 j 22:53	7°  14'10	7°19'02	superior conj	1069 Dec 18 j 21:05	3°  26'24	-0°36'43
min. Earth dist.	1067 Jul 25 j 12:59	6°  52'15	0.28772 AU	minimum elong	1069 Dec 18 j 11:55	2°  57'35	0°36'19
morning rise	1067 Jul 29 j 09:01	4°  31'23		max. Earth dist.	1069 Dec 20 j 18:55	5°  50'31	1.71108 AU
	1067 Aug 07 j 23:21	30°  45'31			1070 Jan 09 j 00:24	0° 	
direct	1067 Aug 15 j 21:23	28°  45'31		evening rise	1070 Jan 29 j 06:09	25°  21'04	
	1067 Aug 24 j 02:23	0° 			1070 Feb 01 j 23:29	0° 	
greatest brilliancy	1067 Aug 26 j 16:58	0°  52'15	-4.8m		1070 Feb 26 j 02:19	0° 	
	1067 Oct 04 j 09:02	0° 			1070 Mar 22 j 10:51	0° 	
morning max el	1067 Oct 04 j 18:20	0°  23'09	46°27'28	asc. node	1070 Mar 26 j 03:23	4°  30'45	
asc. node	1067 Oct 09 j 08:08	5°  01'18			1070 Apr 16 j 03:05	0° 	
	1067 Nov 01 j 06:42	0° 			1070 May 11 j 05:36	0° 	
	1067 Nov 26 j 21:27	0° 			1070 Jun 05 j 23:28	0° 	
	1067 Dec 21 j 15:12	0° 			1070 Jul 02 j 20:51	0° 	
	1068 Jan 15 j 00:38	0° 		desc. node	1070 Jul 15 j 16:40	13°  00'31'26	
desc. node	1068 Jan 28 j 21:39	17°  08'07		evening max el	1070 Jul 27 j 06:21	25°  02'13	45°56'00
	1068 Feb 08 j 07:21	0° 			1070 Aug 01 j 13:11	0° 	
	1068 Mar 03 j 13:51	0° 		greatest brilliancy	1070 Sep 05 j 09:20	23°  48'58	-4.8m
	1068 Mar 27 j 21:19	0° 		retrograde	1070 Sep 14 j 10:54	25°  19'23	
morning set	1068 Apr 09 j 12:03	15°  09'32'22		evening set	1070 Oct 01 j 02:11	20°  03'51	
	1068 Apr 21 j 06:09	0° 		inferior conj	1070 Oct 05 j 05:53	17°  35'21	-6°59'26
	1068 May 15 j 16:03	0° 		minimum elong	1070 Oct 05 j 16:14	17°  19'35	6°57'26
				min. Earth dist.	1070 Oct 06 j 03:03	17°  03'09	0.27215 AU
superior conj	1068 May 16 j 14:32	1°  09'02	-0°10'32	morning rise	1070 Oct 10 j 05:52	14°  37'21	
minimum elong	1068 May 16 j 16:43	1°  15'45	0°10'26	direct	1070 Oct 26 j 01:48	9°  43'35	
behind sun begin	1068 May 15 j 23:26	0°  22'43		asc. node	1070 Nov 05 j 19:56	11°  55'09	
behind sun end	1068 May 17 j 09:59	2°  08'46		greatest brilliancy	1070 Nov 06 j 03:36	12°  02'42	-4.9m
max. Earth dist.	1068 May 16 j 17:16	1°  17'27	1.73582 AU		1070 Dec 02 j 03:24	0° 	
asc. node	1068 May 21 j 01:02	6°  36'00		morning max el	1070 Dec 15 j 22:07	13°  18'40	46°57'05
	1068 Jun 09 j 02:14	0° 			1070 Dec 31 j 14:24	0° 	
evening rise	1068 Jun 21 j 17:57	15°  32'51			1071 Jan 26 j 22:39	0° 	
	1068 Jul 03 j 12:11	0° 			1071 Feb 21 j 07:29	0° 	
	1068 Jul 27 j 22:11	0° 		desc. node	1071 Feb 25 j 09:33	4°  53'13	
	1068 Aug 21 j 09:23	0° 			1071 Mar 18 j 06:51	0° 	
desc. node	1068 Sep 09 j 14:28	23°  27'53			1071 Apr 12 j 02:05	0° 	
	1068 Sep 14 j 23:18	0° 			1071 May 06 j 19:11	0° 	
	1068 Oct 09 j 17:46	0° 			1071 May 31 j 10:21	0° 	
	1068 Nov 03 j 20:35	0° 		morning set	1071 Jun 17 j 12:39	20°  15'40'07	
	1068 Nov 29 j 18:29	0° 		asc. node	1071 Jun 18 j 12:59	22°  10'08'40	
evening max el	1068 Dec 22 j 02:44	24°  38'08'32	47°09'53		1071 Jun 24 j 22:44	0° 	
	1068 Dec 27 j 23:18	0° 			1071 Jul 19 j 07:35	0° 	
asc. node	1068 Dec 31 j 17:44	3°  37'19		max. Earth dist.	1071 Jul 20 j 16:44	1°  42'20	1.73121 AU
greatest brilliancy	1069 Jan 31 j 13:31	25°  41'43	-4.9m				
retrograde	1069 Feb 10 j 23:51	27°  46'15		superior conj	1071 Jul 23 j 20:25	5°  36'10	1°10'53
evening set	1069 Feb 28 j 22:30	21°  43'23'39		minimum elong	1071 Jul 23 j 12:19	5°  11'06	1°10'41
min. Earth dist.	1069 Mar 03 j 16:55	19°  48'53	0.28178 AU		1071 Aug 12 j 13:07	0° 	
inferior conj	1069 Mar 04 j 02:46	19°  33'19	8°30'35	evening rise	1071 Aug 29 j 05:28	20°  00'43'13	
minimum elong	1069 Mar 04 j 06:55	19°  26'46	8°30'20		1071 Sep 05 j 16:33	0° 	
morning rise	1069 Mar 07 j 15:31	17°  41'21			1071 Sep 29 j 19:22	0° 	
direct	1069 Mar 25 j 02:14	11°  29'16		desc. node	1071 Oct 08 j 02:17	10°  18'24	
greatest brilliancy	1069 Apr 03 j 10:20	13°  40'53'30	-4.8m		1071 Oct 23 j 22:42	0° 	
desc. node	1069 Apr 22 j 06:56	23°  42'54			1071 Nov 17 j 03:33	0° 	
	1069 Apr 30 j 03:47	0° 			1071 Dec 11 j 12:09	0° 	
morning max el	1069 May 13 j 02:09	11°  43'17	45°51'47		1072 Jan 05 j 05:44	0° 	
	1069 May 31 j 04:30	0° 		asc. node	1072 Jan 29 j 05:38	28°  41'11'56	
	1069 Jun 27 j 14:09	0° 			1072 Jan 30 j 19:22	0° 	
	1069 Jul 23 j 14:31	0° 			1072 Feb 27 j 07:58	0° 	
asc. node	1069 Aug 13 j 10:37	24°  36'11		evening max el	1072 Mar 03 j 12:52	5°  13'47	46°02'29
	1069 Aug 17 j 18:46	0° 			1072 Apr 02 j 14:44	0° 	
	1069 Sep 11 j 08:41	0° 		greatest brilliancy	1072 Apr 10 j 20:32	4°  10'02'24	-4.7m
	1069 Oct 05 j 12:48	0° 		retrograde	1072 Apr 21 j 20:10	6°  13'40	

evening set	1072 May 07 j 02:40	1° Π 40'50		superior conj	1074 Oct 01 j 09:26	13° Ω 47'18	1°09'38
	1072 May 09 j 23:37	30° \mathbb{R} \mathcal{B}		minimum elong	1074 Oct 01 j 19:05	14° Ω 17'32	1°09'22
inferior conj	1072 May 13 j 05:54	27° \mathcal{B} 58'12	1°31'55		1074 Oct 14 j 07:40	0° \mathbb{M}	
minimum elong	1072 May 13 j 09:14	27° \mathcal{B} 52'58	1°30'58	desc. node	1074 Nov 04 j 14:16	26° \mathbb{M} 42'33	
min. Earth dist.	1072 May 13 j 07:34	27° \mathcal{B} 55'34	0.28917 AU		1074 Nov 07 j 05:11	0° \mathcal{A}	
morning rise	1072 May 19 j 16:03	24° \mathcal{B} 06'41		evening rise	1074 Nov 10 j 12:24	4° \mathcal{A} 08'36	
desc. node	1072 May 19 j 18:53	24° \mathcal{B} 02'49			1074 Dec 01 j 02:58	0° \mathcal{B}	
direct	1072 Jun 03 j 20:34	19° \mathcal{B} 41'01			1074 Dec 25 j 02:12	0° \approx	
greatest brilliancy	1072 Jun 14 j 02:47	21° \mathcal{B} 34'58	-4.7m		1075 Jan 18 j 04:55	0° \mathcal{H}	
	1072 Jun 29 j 14:48	0° Π			1075 Feb 11 j 14:32	0° \mathcal{Y}	
morning max el	1072 Jul 22 j 16:39	19° Π 30'44	45°48'34	asc. node	1075 Feb 25 j 17:28	17° \mathcal{Y} 06'29	
	1072 Aug 02 j 06:30	0° \mathcal{B}			1075 Mar 08 j 12:20	0° \mathcal{B}	
	1072 Aug 29 j 22:30	0° Ω			1075 Apr 03 j 06:52	0° Π	
asc. node	1072 Sep 09 j 22:28	12° Ω 37'49			1075 Apr 30 j 17:33	0° \mathcal{B}	
	1072 Sep 24 j 16:15	0° \mathbb{M}		evening max el	1075 May 14 j 00:22	13° \mathcal{B} 17'48	45°21'00
	1072 Oct 19 j 10:28	0° Ω			1075 Jun 02 j 05:36	0° Ω	
	1072 Nov 12 j 16:15	0° \mathbb{M}		desc. node	1075 Jun 17 j 06:53	9° Ω 23'12	
	1072 Dec 06 j 16:22	0° \mathcal{A}		greatest brilliancy	1075 Jun 21 j 03:41	10° Ω 58'46	-4.7m
desc. node	1072 Dec 30 j 11:50	29° \mathcal{A} 50'53		retrograde	1075 Jul 01 j 13:14	12° Ω 55'35	
	1072 Dec 30 j 14:44	0° \mathcal{B}		evening set	1075 Jul 18 j 01:03	7° Ω 48'49	
morning set	1073 Jan 23 j 15:38	0° \approx 06'50		inferior conj	1075 Jul 22 j 23:57	4° Ω 49'34	-7°09'15
	1073 Jan 23 j 13:27	0° \approx		minimum elong	1075 Jul 22 j 14:31	5° Ω 04'13	7°07'41
	1073 Feb 16 j 13:46	0° \mathcal{H}		min. Earth dist.	1075 Jul 23 j 04:25	4° Ω 42'39	0.28802 AU
				morning rise	1075 Jul 27 j 03:42	2° Ω 17'04	
superior conj	1073 Mar 05 j 01:03	20° \mathcal{H} 30'08	-1°23'41		1075 Jul 31 j 07:38	30° \mathbb{R} \mathcal{B}	
minimum elong	1073 Mar 05 j 05:43	20° \mathcal{H} 44'36	1°23'37	direct	1075 Aug 13 j 13:13	26° \mathcal{B} 34'30	
max. Earth dist.	1073 Mar 09 j 00:23	25° \mathcal{H} 26'12	1.72400 AU	greatest brilliancy	1075 Aug 24 j 09:29	28° \mathcal{B} 41'43	-4.8m
	1073 Mar 12 j 16:37	0° \mathcal{Y}			1075 Aug 27 j 12:24	0° Ω	
	1073 Apr 05 j 22:46	0° \mathcal{B}		morning max el	1075 Oct 02 j 09:25	28° Ω 06'37	46°25'54
evening rise	1073 Apr 12 j 18:42	8° \mathcal{B} 24'58			1075 Oct 04 j 06:41	0° \mathbb{M}	
asc. node	1073 Apr 22 j 15:18	20° \mathcal{B} 32'10		asc. node	1075 Oct 08 j 10:14	4° \mathbb{M} 14'40	
	1073 Apr 30 j 08:30	0° Π			1075 Oct 31 j 22:29	0° Ω	
	1073 May 24 j 21:55	0° \mathcal{B}			1075 Nov 26 j 11:07	0° \mathbb{M}	
	1073 Jun 18 j 15:34	0° Ω			1075 Dec 21 j 03:49	0° \mathcal{A}	
	1073 Jul 13 j 15:12	0° \mathbb{M}			1076 Jan 14 j 12:37	0° \mathcal{B}	
	1073 Aug 08 j 00:21	0° Ω		desc. node	1076 Jan 27 j 23:42	16° \mathcal{B} 38'14	
desc. node	1073 Aug 12 j 04:28	4° Ω 52'11			1076 Feb 07 j 18:55	0° \approx	
	1073 Sep 03 j 01:50	0° \mathbb{M}			1076 Mar 03 j 01:05	0° \mathcal{H}	
	1073 Sep 30 j 13:31	0° \mathcal{A}			1076 Mar 27 j 08:18	0° \mathcal{Y}	
evening max el	1073 Oct 08 j 17:07	8° \mathcal{A} 19'16	47°06'00	morning set	1076 Apr 07 j 04:09	13° \mathcal{Y} 20'39	
	1073 Nov 02 j 02:26	0° \mathcal{B}			1076 Apr 20 j 16:56	0° \mathcal{B}	
greatest brilliancy	1073 Nov 18 j 04:46	9° \mathcal{B} 13'20	-4.9m				
retrograde	1073 Nov 28 j 05:25	11° \mathcal{B} 07'34		superior conj	1076 May 14 j 08:23	29° \mathcal{B} 03'41	-0°13'42
asc. node	1073 Dec 03 j 07:55	10° \mathcal{B} 35'26		minimum elong	1076 May 14 j 11:13	29° \mathcal{B} 12'24	0°13'34
evening set	1073 Dec 12 j 17:48	6° \mathcal{B} 55'20		behind sun begin	1076 May 13 j 23:19	28° \mathcal{B} 35'50	
min. Earth dist.	1073 Dec 18 j 02:57	3° \mathcal{B} 45'33	0.26517 AU	behind sun end	1076 May 14 j 23:07	29° \mathcal{B} 48'57	
inferior conj	1073 Dec 18 j 18:37	3° \mathcal{B} 21'29	3°52'56	max. Earth dist.	1076 May 14 j 13:30	29° \mathcal{B} 19'25	1.73566 AU
minimum elong	1073 Dec 18 j 10:34	3° \mathcal{B} 33'51	3°50'34		1076 May 15 j 02:43	0° Π	
morning rise	1073 Dec 24 j 03:46	0° \mathcal{B} 10'16		asc. node	1076 May 20 j 03:14	6° Π 10'01	
	1073 Dec 24 j 11:17	30° \mathbb{R} \mathcal{A}			1076 Jun 08 j 12:54	0° \mathcal{B}	
direct	1074 Jan 08 j 03:08	25° \mathcal{A} 44'35		evening rise	1076 Jun 19 j 13:14	13° \mathcal{B} 31'46	
greatest brilliancy	1074 Jan 17 j 12:59	27° \mathcal{A} 25'28	-4.9m		1076 Jul 02 j 22:58	0° Ω	
	1074 Jan 23 j 11:54	0° \mathcal{B}			1076 Jul 27 j 09:12	0° \mathbb{M}	
morning max el	1074 Feb 27 j 02:13	27° \mathcal{B} 50'51	46°33'30		1076 Aug 20 j 20:49	0° Ω	
	1074 Mar 01 j 06:03	0° \approx		desc. node	1076 Sep 08 j 16:26	22° Ω 57'41	
desc. node	1074 Mar 24 j 21:16	25° \approx 00'06			1076 Sep 14 j 11:20	0° \mathbb{M}	
	1074 Mar 29 j 09:40	0° \mathcal{H}			1076 Oct 09 j 06:41	0° \mathcal{A}	
	1074 Apr 24 j 18:56	0° \mathcal{Y}			1076 Nov 03 j 10:53	0° \mathcal{B}	
	1074 May 20 j 10:33	0° \mathcal{B}			1076 Nov 29 j 11:29	0° \approx	
	1074 Jun 14 j 15:51	0° Π		evening max el	1076 Dec 19 j 17:30	21° \approx 47'43	47°11'31
	1074 Jul 09 j 12:49	0° \mathcal{B}			1076 Dec 28 j 00:17	0° \mathcal{H}	
asc. node	1074 Jul 16 j 00:48	7° \mathcal{B} 54'15		asc. node	1076 Dec 30 j 19:49	2° \mathcal{H} 39'23	
	1074 Aug 03 j 01:55	0° Ω		greatest brilliancy	1077 Jan 29 j 04:34	23° \mathcal{H} 23'06	-4.9m
morning set	1074 Aug 24 j 18:48	26° Ω 49'37		retrograde	1077 Feb 08 j 15:37	25° \mathcal{H} 28'34	
	1074 Aug 27 j 08:05	0° \mathbb{M}		evening set	1077 Feb 26 j 14:41	19° \mathcal{H} 13'10	
	1074 Sep 20 j 09:15	0° Ω		inferior conj	1077 Mar 01 j 17:47	17° \mathcal{H} 15'52	8°35'09
max. Earth dist.	1074 Sep 28 j 13:59	10° Ω 15'55	1.71652 AU	minimum elong	1077 Mar 01 j 21:10	17° \mathcal{H} 10'30	8°34'58

min. Earth dist.	1077 Mar 01 j 06:50	17° H 33'07	0.28132 AU		1079 Sep 05 j 03:21	0° L	
morning rise	1077 Mar 05 j 03:51	15° H 08'15			1079 Sep 29 j 06:24	0° M	
direct	1077 Mar 22 j 16:35	9° H 12'29		desc. node	1079 Oct 07 j 04:26	9° M 50'37	
greatest brilliancy	1077 Mar 31 j 23:46	10° H 48'26	-4.8m		1079 Oct 23 j 10:01	0° X	
desc. node	1077 Apr 21 j 09:07	22° H 34'45			1079 Nov 16 j 15:15	0° Z	
	1077 Apr 30 j 09:08	0° Y			1079 Dec 11 j 00:25	0° \approx	
morning max el	1077 May 10 j 18:05	9° Y 31'58	45°52'48		1080 Jan 04 j 18:57	0° H	
	1077 May 30 j 21:48	0° B		asc. node	1080 Jan 28 j 07:34	27° H 34'42	
	1077 Jun 27 j 04:03	0° II			1080 Jan 30 j 10:30	0° Y	
	1077 Jul 23 j 02:53	0° G			1080 Feb 27 j 04:13	0° B	
asc. node	1077 Aug 12 j 12:36	24° G 17'03		evening max el	1080 Mar 01 j 04:23	3° B 00'12	46°04'45
	1077 Aug 17 j 06:21	0° O			1080 Apr 04 j 06:05	0° II	
	1077 Sep 10 j 19:51	0° M		greatest brilliancy	1080 Apr 08 j 14:04	1° II 54'25	-4.8m
	1077 Oct 04 j 23:47	0° L		retrograde	1080 Apr 19 j 12:17	4° II 04'31	
	1077 Oct 28 j 22:15	0° M			1080 May 03 j 22:37	30° R B	
greatest brilliancy	1077 Oct 30 j 23:50	2° M 35'49	-3.9m	evening set	1080 May 04 j 20:37	29° B 29'54	
morning set	1077 Nov 04 j 23:39	8° M 52'24		inferior conj	1080 May 10 j 22:17	25° B 49'09	1°51'26
	1077 Nov 21 j 18:28	0° X		minimum elong	1080 May 11 j 02:16	25° B 42'52	1°50'17
desc. node	1077 Dec 02 j 02:06	12° X 59'25		min. Earth dist.	1080 May 11 j 00:11	25° B 46'08	0.28904 AU
	1077 Dec 15 j 14:27	0° Z		morning rise	1080 May 17 j 08:10	21° B 57'33	
				desc. node	1080 May 18 j 20:58	21° B 08'58	
superior conj	1077 Dec 16 j 06:24	0° Z 50'12	-0°33'01	direct	1080 Jun 01 j 12:46	17° B 32'18	
minimum elong	1077 Dec 15 j 22:00	0° Z 23'47	0°32'37	greatest brilliancy	1080 Jun 11 j 18:14	19° B 25'22	-4.7m
max. Earth dist.	1077 Dec 18 j 02:47	3° Z 09'47	1.71095 AU		1080 Jun 30 j 06:09	0° II	
	1078 Jan 08 j 11:22	0° \approx		morning max el	1080 Jul 20 j 07:30	17° II 18'30	45°47'51
evening rise	1078 Jan 26 j 16:45	22° \approx 49'58			1080 Aug 02 j 00:59	0° G	
	1078 Feb 01 j 10:26	0° H			1080 Aug 29 j 12:49	0° O	
	1078 Feb 25 j 13:20	0° Y		asc. node	1080 Sep 09 j 00:30	12° O 04'28	
	1078 Mar 21 j 22:02	0° B			1080 Sep 24 j 04:55	0° M	
asc. node	1078 Mar 25 j 05:29	4° B 02'54			1080 Oct 18 j 22:21	0° L	
	1078 Apr 15 j 14:39	0° II			1080 Nov 12 j 03:43	0° M	
	1078 May 10 j 17:54	0° G			1080 Dec 06 j 03:34	0° X	
	1078 Jun 05 j 13:09	0° O		desc. node	1080 Dec 29 j 13:49	29° X 22'36	
	1078 Jul 02 j 13:35	0° M			1080 Dec 30 j 01:45	0° Z	
desc. node	1078 Jul 14 j 18:41	12° M 46'51		morning set	1081 Jan 21 j 02:05	27° Z 35'11	
evening max el	1078 Jul 24 j 21:08	22° M 47'15	45°53'51		1081 Jan 23 j 00:21	0° \approx	
	1078 Aug 01 j 15:38	0° L			1081 Feb 16 j 00:35	0° H	
greatest brilliancy	1078 Sep 02 j 21:24	21° L 27'27	-4.8m				
retrograde	1078 Sep 11 j 23:54	22° L 58'06		superior conj	1081 Mar 02 j 14:25	18° H 08'59	-1°24'25
evening set	1078 Sep 28 j 18:33	17° L 37'56		minimum elong	1081 Mar 02 j 18:13	18° H 20'50	1°24'22
inferior conj	1078 Oct 02 j 19:11	15° L 13'26	-7°12'50	max. Earth dist.	1081 Mar 06 j 16:02	23° H 12'17	1.72346 AU
minimum elong	1078 Oct 03 j 05:18	14° L 58'01	7°11'00		1081 Mar 12 j 03:23	0° Y	
min. Earth dist.	1078 Oct 03 j 16:11	14° L 41'26	0.27280 AU		1081 Apr 05 j 09:31	0° B	
morning rise	1078 Oct 07 j 15:41	12° L 20'09		evening rise	1081 Apr 10 j 10:17	6° B 12'05	
direct	1078 Oct 23 j 16:31	7° L 20'57		asc. node	1081 Apr 21 j 17:26	20° B 05'37	
greatest brilliancy	1078 Nov 03 j 17:25	9° L 39'16	-4.9m		1081 Apr 29 j 19:19	0° II	
asc. node	1078 Nov 04 j 22:05	10° L 09'05			1081 May 24 j 08:57	0° G	
	1078 Dec 02 j 08:17	0° M			1081 Jun 18 j 03:01	0° O	
morning max el	1078 Dec 13 j 12:22	10° M 55'39	46°56'38		1081 Jul 13 j 03:23	0° M	
	1078 Dec 31 j 08:19	0° X			1081 Aug 07 j 13:46	0° L	
	1079 Jan 26 j 13:18	0° Z		desc. node	1081 Aug 11 j 06:29	4° L 18'15	
	1079 Feb 20 j 20:32	0° \approx			1081 Sep 02 j 17:30	0° M	
desc. node	1079 Feb 24 j 11:31	4° \approx 20'28			1081 Sep 30 j 10:22	0° X	
	1079 Mar 17 j 18:57	0° H		evening max el	1081 Oct 06 j 05:48	5° X 53'10	47°04'12
	1079 Apr 11 j 13:33	0° Y			1081 Nov 03 j 02:24	0° Z	
	1079 May 06 j 06:14	0° B		greatest brilliancy	1081 Nov 15 j 19:03	6° Z 46'34	-4.9m
	1079 May 30 j 21:08	0° II		retrograde	1081 Nov 25 j 17:30	8° Z 39'10	
morning set	1079 Jun 15 j 06:50	18° II 50'14		asc. node	1081 Dec 02 j 09:56	7° Z 44'05	
asc. node	1079 Jun 17 j 15:00	21° II 42'12		evening set	1081 Dec 10 j 04:51	4° Z 29'27	
	1079 Jun 24 j 09:22	0° G		min. Earth dist.	1081 Dec 15 j 17:04	1° Z 15'45	0.26485 AU
max. Earth dist.	1079 Jul 18 j 10:46	29° G 37'10	1.73157 AU	inferior conj	1081 Dec 16 j 07:09	0° Z 54'10	3°30'52
	1079 Jul 18 j 18:10	0° O		minimum elong	1081 Dec 15 j 23:43	1° Z 05'34	3°28'39
					1081 Dec 17 j 18:32	30° R X	
superior conj	1079 Jul 21 j 14:37	3° O 31'21	1°09'07	morning rise	1081 Dec 21 j 18:53	27° X 39'22	
minimum elong	1079 Jul 21 j 06:18	3° O 05'39	1°08'52	direct	1082 Jan 05 j 14:50	23° X 17'28	
	1079 Aug 11 j 23:46	0° M		greatest brilliancy	1082 Jan 15 j 03:28	25° X 00'30	-4.9m
evening rise	1079 Aug 26 j 21:53	18° M 31'40			1082 Jan 25 j 07:54	0° Z	

morning max el	1082 Feb 24 j 14:34	25° ☿ 25'33	46°34'57	desc. node	1084 Sep 07 j 18:35	22° ♁ 27'33	
	1082 Mar 01 j 03:48	0° \approx			1084 Sep 13 j 23:33	0° ♁	
desc. node	1082 Mar 23 j 23:28	24° \approx 20'47			1084 Oct 08 j 19:48	0° ♁	
	1082 Mar 29 j 01:29	0° ♁			1084 Nov 03 j 01:28	0° ☿	
	1082 Apr 24 j 08:25	0° ♁			1084 Nov 29 j 04:57	0° \approx	
	1082 May 19 j 22:48	0° ♁		evening max el	1084 Dec 17 j 09:09	19° \approx 28'43	47°13'04
	1082 Jun 14 j 03:23	0° ♁			1084 Dec 28 j 02:46	0° ♁	
	1082 Jul 08 j 23:55	0° ☿		asc. node	1084 Dec 29 j 21:50	1° ♁ 39'36	
asc. node	1082 Jul 15 j 02:47	7° ☿ 26'44		greatest brilliancy	1085 Jan 26 j 19:19	21° ♁ 03'39	-4.9m
	1082 Aug 02 j 12:47	0° ♁		retrograde	1085 Feb 06 j 07:35	23° ♁ 10'08	
morning set	1082 Aug 22 j 10:54	24° ♁ 37'06		evening set	1085 Feb 24 j 06:31	16° ♁ 53'36	
	1082 Aug 26 j 18:53	0° ♁		inferior conj	1085 Feb 27 j 08:42	14° ♁ 57'46	8°38'50
	1082 Sep 19 j 20:04	0° ♁		minimum elong	1085 Feb 27 j 11:21	14° ♁ 53'36	8°38'44
max. Earth dist.	1082 Sep 26 j 03:34	7° ♁ 54'11	1.71701 AU	min. Earth dist.	1085 Feb 26 j 20:23	15° ♁ 17'11	0.28080 AU
				morning rise	1085 Mar 02 j 16:24	12° ♁ 54'01	
superior conj	1082 Sep 28 j 23:21	11° ♁ 26'32	1°11'38	direct	1085 Mar 20 j 07:20	6° ♁ 55'22	
minimum elong	1082 Sep 29 j 08:38	11° ♁ 55'36	1°11'23	greatest brilliancy	1085 Mar 29 j 12:31	8° ♁ 30'14	-4.8m
	1082 Oct 13 j 18:34	0° ♁		desc. node	1085 Apr 20 j 11:08	21° ♁ 28'00	
desc. node	1082 Nov 03 j 16:20	26° ♁ 14'34			1085 Apr 30 j 12:43	0° ♁	
	1082 Nov 06 j 16:11	0° ♁		morning max el	1085 May 08 j 09:56	7° ♁ 20'18	45°53'46
evening rise	1082 Nov 07 j 23:15	1° ♁ 37'28			1085 May 30 j 14:51	0° ♁	
	1082 Nov 30 j 14:06	0° ☿			1085 Jun 26 j 17:58	0° ♁	
	1082 Dec 24 j 13:28	0° \approx			1085 Jul 22 j 15:25	0° ☿	
	1083 Jan 17 j 16:23	0° ♁		asc. node	1085 Aug 11 j 14:42	23° ☿ 47'33	
	1083 Feb 11 j 02:23	0° ♁			1085 Aug 16 j 18:09	0° ♁	
asc. node	1083 Feb 24 j 19:36	16° ♁ 36'04			1085 Sep 10 j 07:17	0° ♁	
	1083 Mar 08 j 00:57	0° ♁			1085 Oct 04 j 11:01	0° ♁	
	1083 Apr 02 j 21:09	0° ♁			1085 Oct 28 j 09:25	0° ♁	
	1083 Apr 30 j 11:59	0° ☿		greatest brilliancy	1085 Oct 30 j 07:48	2° ♁ 25'46	-3.9m
evening max el	1083 May 11 j 15:32	11° ☿ 05'47	45°21'14	morning set	1085 Nov 02 j 11:33	6° ♁ 23'50	
	1083 Jun 02 j 20:19	0° ♁			1085 Nov 21 j 05:38	0° ♁	
desc. node	1083 Jun 16 j 08:54	7° ♁ 50'44		desc. node	1085 Dec 01 j 04:02	12° ♁ 30'26	
greatest brilliancy	1083 Jun 18 j 17:19	8° ♁ 46'13	-4.7m				
retrograde	1083 Jun 29 j 05:11	10° ♁ 45'05		superior conj	1085 Dec 13 j 15:42	28° ♁ 13'18	-0°29'14
evening set	1083 Jul 15 j 13:29	5° ♁ 42'06		minimum elong	1085 Dec 13 j 08:09	27° ♁ 49'33	0°28'53
inferior conj	1083 Jul 20 j 15:39	2° ♁ 38'17	-6°57'16		1085 Dec 15 j 01:37	0° ☿	
minimum elong	1083 Jul 20 j 06:00	2° ♁ 53'15	6°55'35	max. Earth dist.	1085 Dec 15 j 11:16	0° ☿ 30'23	1.71080 AU
min. Earth dist.	1083 Jul 20 j 19:22	2° ♁ 32'31	0.28829 AU		1086 Jan 07 j 22:32	0° \approx	
morning rise	1083 Jul 24 j 22:14	0° ♁ 01'48		evening rise	1086 Jan 24 j 03:19	20° \approx 17'59	
	1083 Jul 24 j 23:28	30° ♁			1086 Jan 31 j 21:37	0° ♁	
direct	1083 Aug 11 j 05:13	24° ☿ 22'43			1086 Feb 25 j 00:35	0° ♁	
greatest brilliancy	1083 Aug 22 j 01:15	26° ☿ 29'57	-4.8m		1086 Mar 21 j 09:28	0° ♁	
	1083 Aug 29 j 10:48	0° ♁		asc. node	1086 Mar 24 j 07:37	3° ♁ 34'26	
morning max el	1083 Sep 30 j 01:02	25° ♁ 51'34	46°24'22		1086 Apr 15 j 02:27	0° ♁	
	1083 Oct 04 j 03:36	0° ♁			1086 May 10 j 06:26	0° ☿	
asc. node	1083 Oct 07 j 12:25	3° ♁ 28'52			1086 Jun 05 j 03:11	0° ♁	
	1083 Oct 31 j 14:01	0° ♁			1086 Jul 02 j 06:59	0° ♁	
	1083 Nov 26 j 00:39	0° ♁		desc. node	1086 Jul 13 j 20:41	12° ♁ 00'35	
	1083 Dec 20 j 16:21	0° ♁		evening max el	1086 Jul 22 j 11:19	20° ♁ 29'43	45°51'26
	1084 Jan 14 j 00:34	0° ☿			1086 Aug 01 j 20:18	0° ♁	
desc. node	1084 Jan 27 j 01:40	16° ☿ 08'10		greatest brilliancy	1086 Aug 31 j 09:54	19° ♁ 04'58	-4.8m
	1084 Feb 07 j 06:26	0° \approx		retrograde	1086 Sep 09 j 12:15	20° ♁ 35'11	
	1084 Mar 02 j 12:16	0° ♁		evening set	1086 Sep 26 j 10:44	15° ♁ 10'35	
	1084 Mar 26 j 19:13	0° ♁		inferior conj	1086 Sep 30 j 08:22	12° ♁ 50'03	-7°25'27
morning set	1084 Apr 04 j 20:19	11° ♁ 09'09		minimum elong	1086 Sep 30 j 18:09	12° ♁ 35'06	7°23'47
	1084 Apr 20 j 03:42	0° ♁		min. Earth dist.	1086 Oct 01 j 05:29	12° ♁ 17'47	0.27346 AU
				morning rise	1086 Oct 05 j 01:13	10° ♁ 01'30	
superior conj	1084 May 12 j 02:08	26° ♁ 57'51	-0°16'51	direct	1086 Oct 21 j 06:32	4° ♁ 56'46	
minimum elong	1084 May 12 j 05:37	27° ♁ 08'32	0°16'40	greatest brilliancy	1086 Nov 01 j 07:25	7° ♁ 14'30	-4.9m
max. Earth dist.	1084 May 12 j 11:23	27° ♁ 26'16	1.73556 AU	asc. node	1086 Nov 04 j 00:02	8° ♁ 25'09	
	1084 May 14 j 13:26	0° ♁			1086 Dec 02 j 11:56	0° ♁	
asc. node	1084 May 19 j 05:13	5° ♁ 43'15		morning max el	1086 Dec 11 j 01:29	8° ♁ 28'27	46°56'20
	1084 Jun 07 j 23:41	0° ☿			1086 Dec 31 j 02:12	0° ♁	
evening rise	1084 Jun 17 j 08:19	11° ☿ 29'49			1087 Jan 26 j 04:04	0° ☿	
	1084 Jul 02 j 09:53	0° ♁			1087 Feb 20 j 09:46	0° \approx	
	1084 Jul 26 j 20:23	0° ♁		desc. node	1087 Feb 23 j 13:40	3° \approx 47'39	
	1084 Aug 20 j 08:25	0° ♁			1087 Mar 17 j 07:18	0° ♁	

	1087 Apr 11 j 01:18	0°♄			1089 Nov 04 j 12:49	0°♄	
	1087 May 05 j 17:34	0°♄		greatest brilliancy	1089 Nov 13 j 08:38	4°♄17'09	-4.9m
	1087 May 30 j 08:11	0°♄		retrograde	1089 Nov 23 j 05:35	6°♄08'44	
morning set	1087 Jun 13 j 01:17	16°♄46'19		asc. node	1089 Dec 01 j 11:58	4°♄44'30	
asc. node	1087 Jun 16 j 17:01	21°♄15'01		evening set	1089 Dec 07 j 15:46	2°♄00'47	
	1087 Jun 23 j 20:15	0°♄			1089 Dec 11 j 04:27	30°♄♂	
max. Earth dist.	1087 Jul 16 j 05:14	27°♄32'31	1.73199 AU	inferior conj	1089 Dec 13 j 19:21	28°♄24'28	3°08'03
	1087 Jul 18 j 05:02	0°♄		minimum elong	1089 Dec 13 j 12:35	28°♄34'49	3°06'00
				min. Earth dist.	1089 Dec 13 j 06:48	28°♄43'40	0.26462 AU
superior conj	1087 Jul 19 j 09:04	1°♄26'32	1°07'15	morning rise	1089 Dec 19 j 09:37	25°♄06'29	
minimum elong	1087 Jul 19 j 00:34	1°♄00'18	1°07'00	direct	1090 Jan 03 j 02:28	20°♄47'43	
	1087 Aug 11 j 10:44	0°♄		greatest brilliancy	1090 Jan 12 j 17:39	22°♄33'03	-4.9m
evening rise	1087 Aug 24 j 14:29	16°♄19'42			1090 Jan 26 j 15:06	0°♄	
	1087 Sep 04 j 14:32	0°♄		morning max el	1090 Feb 22 j 03:35	23°♄00'15	46°36'33
	1087 Sep 28 j 17:51	0°♄			1090 Mar 01 j 01:21	0°♄	
desc. node	1087 Oct 06 j 06:30	9°♄21'08		desc. node	1090 Mar 23 j 01:32	23°♄40'14	
	1087 Oct 22 j 21:47	0°♄			1090 Mar 28 j 17:28	0°♄	
	1087 Nov 16 j 03:25	0°♄			1090 Apr 23 j 22:06	0°♄	
	1087 Dec 10 j 13:09	0°♄			1090 May 19 j 11:16	0°♄	
asc. node	1088 Jan 04 j 08:39	0°♄			1090 Jun 13 j 15:07	0°♄	
	1088 Jan 27 j 09:41	26°♄56'39			1090 Jul 08 j 11:13	0°♄	
	1088 Jan 30 j 02:12	0°♄		asc. node	1090 Jul 14 j 04:55	6°♄58'59	
	1088 Feb 27 j 01:32	0°♄			1090 Aug 01 j 23:51	0°♄	
evening max el	1088 Feb 27 j 18:59	0°♄43'18	46°07'09	morning set	1090 Aug 20 j 03:33	22°♄25'45	
greatest brilliancy	1088 Apr 06 j 07:51	29°♄45'51	-4.8m		1090 Aug 26 j 05:52	0°♄	
	1088 Apr 06 j 23:11	0°♄			1090 Sep 19 j 07:04	0°♄	
retrograde	1088 Apr 17 j 04:25	1°♄54'53		max. Earth dist.	1090 Sep 23 j 19:12	5°♄38'21	1.71749 AU
	1088 Apr 26 j 23:39	30°♄♂					
evening set	1088 May 02 j 14:48	27°♄18'04		superior conj	1090 Sep 26 j 13:52	9°♄07'07	1°13'28
inferior conj	1088 May 08 j 14:48	23°♄39'36	2°10'45	minimum elong	1090 Sep 26 j 22:42	9°♄34'46	1°13'14
minimum elong	1088 May 08 j 19:27	23°♄32'17	2°09'25		1090 Oct 13 j 05:39	0°♄	
min. Earth dist.	1088 May 08 j 17:09	23°♄35'55	0.28889 AU	desc. node	1090 Nov 02 j 18:19	25°♄45'36	
morning rise	1088 May 15 j 00:17	19°♄48'11		evening rise	1090 Nov 05 j 10:33	29°♄07'06	
desc. node	1088 May 17 j 22:57	18°♄18'11			1090 Nov 06 j 03:24	0°♄	
direct	1088 May 30 j 04:37	15°♄22'58			1090 Nov 30 j 01:29	0°♄	
greatest brilliancy	1088 Jun 09 j 10:17	17°♄15'48	-4.7m		1090 Dec 24 j 01:04	0°♄	
	1088 Jun 30 j 17:54	0°♄			1091 Jan 17 j 04:13	0°♄	
morning max el	1088 Jul 17 j 22:11	15°♄05'11	45°47'16		1091 Feb 10 j 14:37	0°♄	
	1088 Aug 01 j 19:15	0°♄		asc. node	1091 Feb 23 j 21:41	16°♄04'25	
	1088 Aug 29 j 03:16	0°♄			1091 Mar 07 j 13:59	0°♄	
asc. node	1088 Sep 08 j 02:41	11°♄30'52			1091 Apr 02 j 11:54	0°♄	
	1088 Sep 23 j 17:50	0°♄			1091 Apr 30 j 07:10	0°♄	
	1088 Oct 18 j 10:34	0°♄		evening max el	1091 May 09 j 07:34	8°♄55'21	45°21'44
	1088 Nov 11 j 15:34	0°♄			1091 Jun 03 j 16:21	0°♄	
	1088 Dec 05 j 15:11	0°♄		desc. node	1091 Jun 15 j 10:58	6°♄14'59	
desc. node	1088 Dec 28 j 15:55	28°♄53'14		greatest brilliancy	1091 Jun 16 j 07:12	6°♄33'54	-4.7m
	1088 Dec 29 j 13:13	0°♄		retrograde	1091 Jun 26 j 21:28	8°♄34'36	
morning set	1089 Jan 18 j 12:01	25°♄00'34		evening set	1091 Jul 13 j 02:15	3°♄35'29	
	1089 Jan 22 j 11:40	0°♄		inferior conj	1091 Jul 18 j 07:31	0°♄27'05	-6°44'45
	1089 Feb 15 j 11:46	0°♄		minimum elong	1091 Jul 17 j 21:42	0°♄42'18	6°42'58
				min. Earth dist.	1091 Jul 18 j 10:17	0°♄22'47	0.28849 AU
superior conj	1089 Feb 28 j 03:29	15°♄45'51	-1°24'59		1091 Jul 19 j 00:59	30°♄♂	
minimum elong	1089 Feb 28 j 06:26	15°♄55'00	1°24'59	morning rise	1091 Jul 22 j 16:56	27°♄46'36	
max. Earth dist.	1089 Mar 04 j 05:56	20°♄51'52	1.72285 AU	direct	1091 Aug 08 j 21:49	22°♄11'16	
	1089 Mar 11 j 14:29	0°♄		greatest brilliancy	1091 Aug 19 j 16:28	24°♄17'39	-4.8m
	1089 Apr 04 j 20:35	0°♄			1091 Aug 30 j 18:05	0°♄	
evening rise	1089 Apr 08 j 01:47	3°♄57'50		morning max el	1091 Sep 27 j 17:08	23°♄37'51	46°22'54
asc. node	1089 Apr 20 j 19:24	19°♄37'35			1091 Oct 03 j 23:52	0°♄	
	1089 Apr 29 j 06:28	0°♄		asc. node	1091 Oct 06 j 14:19	2°♄42'53	
	1089 May 23 j 20:18	0°♄			1091 Oct 31 j 05:21	0°♄	
	1089 Jun 17 j 14:48	0°♄			1091 Nov 25 j 14:08	0°♄	
	1089 Jul 12 j 15:54	0°♄			1091 Dec 20 j 04:55	0°♄	
	1089 Aug 07 j 03:33	0°♄			1092 Jan 13 j 12:35	0°♄	
desc. node	1089 Aug 10 j 08:39	3°♄43'53		desc. node	1092 Jan 26 j 03:50	15°♄38'20	
	1089 Sep 02 j 09:40	0°♄			1092 Feb 06 j 18:05	0°♄	
	1089 Sep 30 j 08:20	0°♄			1092 Mar 01 j 23:38	0°♄	
evening max el	1089 Oct 03 j 18:00	3°♄25'05	47°02'07		1092 Mar 26 j 06:20	0°♄	

morning set	1092 Apr 02 j 12:01	8° Υ 55'30		minimum elong	1094 Sep 28 j 07:09	10° Ω 13'50	7°35'34
	1092 Apr 19 j 14:38	0° \mathcal{B}		min. Earth dist.	1094 Sep 28 j 19:14	9° Ω 55'19	0.27412 AU
				morning rise	1094 Oct 02 j 10:56	7° Ω 44'26	
superior conj	1092 May 09 j 19:29	24° \mathcal{B} 50'18	-0°20'00	direct	1094 Oct 18 j 20:11	2° Ω 33'48	
minimum elong	1092 May 09 j 23:36	25° \mathcal{B} 02'58	0°19'48	greatest brilliancy	1094 Oct 29 j 22:07	4° Ω 51'46	-4.9m
max. Earth dist.	1092 May 10 j 10:05	25° \mathcal{B} 35'10	1.73537 AU	asc. node	1094 Nov 03 j 02:08	6° Ω 46'13	
	1092 May 14 j 00:17	0° Π			1094 Dec 02 j 13:44	0° \mathcal{M}	
asc. node	1092 May 18 j 07:14	5° Π 16'09		morning max el	1094 Dec 08 j 14:18	6° \mathcal{M} 01'15	46°56'05
	1092 Jun 07 j 10:33	0° \mathcal{E}			1094 Dec 30 j 19:25	0° \mathcal{X}	
evening rise	1092 Jun 15 j 03:15	9° \mathcal{E} 27'09			1095 Jan 25 j 18:22	0° \mathcal{Z}	
	1092 Jul 01 j 20:53	0° Ω			1095 Feb 19 j 22:37	0° \approx	
	1092 Jul 26 j 07:39	0° \mathcal{M}		desc. node	1095 Feb 22 j 15:42	3° \approx 15'32	
	1092 Aug 19 j 20:05	0° Ω			1095 Mar 16 j 19:16	0° \mathcal{H}	
desc. node	1092 Sep 06 j 20:36	21° Ω 56'51			1095 Apr 10 j 12:43	0° Υ	
	1092 Sep 13 j 11:50	0° \mathcal{M}			1095 May 05 j 04:37	0° \mathcal{B}	
	1092 Oct 08 j 08:59	0° \mathcal{X}			1095 May 29 j 18:59	0° Π	
	1092 Nov 02 j 16:08	0° \mathcal{Z}		morning set	1095 Jun 10 j 19:29	14° Π 42'18	
	1092 Nov 28 j 22:41	0° \approx		asc. node	1095 Jun 15 j 19:10	20° Π 48'49	
evening max el	1092 Dec 15 j 01:00	17° \approx 10'24	47°14'18		1095 Jun 23 j 06:54	0° \mathcal{E}	
	1092 Dec 28 j 06:45	0° \mathcal{H}		max. Earth dist.	1095 Jul 13 j 23:48	25° \mathcal{E} 28'56	1.73238 AU
asc. node	1092 Dec 28 j 23:55	0° \mathcal{H} 38'46					
greatest brilliancy	1093 Jan 24 j 10:14	18° \mathcal{H} 44'14	-4.9m	superior conj	1095 Jul 17 j 03:20	29° \mathcal{E} 21'57	1°05'17
retrograde	1093 Feb 03 j 23:19	20° \mathcal{H} 51'05		minimum elong	1095 Jul 16 j 18:43	28° \mathcal{E} 55'21	1°05'01
evening set	1093 Feb 21 j 21:53	14° \mathcal{H} 34'18			1095 Jul 17 j 15:39	0° Ω	
inferior conj	1093 Feb 24 j 23:33	12° \mathcal{H} 39'11	8°41'39		1095 Aug 10 j 21:27	0° \mathcal{M}	
minimum elong	1093 Feb 25 j 01:23	12° \mathcal{H} 36'17	8°41'37	evening rise	1095 Aug 22 j 07:06	14° \mathcal{M} 08'49	
min. Earth dist.	1093 Feb 24 j 09:52	13° \mathcal{H} 00'44	0.28030 AU		1095 Sep 04 j 01:25	0° Ω	
morning rise	1093 Feb 28 j 05:08	10° \mathcal{H} 38'43			1095 Sep 28 j 05:00	0° \mathcal{M}	
direct	1093 Mar 17 j 22:14	4° \mathcal{H} 37'55		desc. node	1095 Oct 05 j 08:27	8° \mathcal{M} 52'16	
greatest brilliancy	1093 Mar 27 j 01:11	6° \mathcal{H} 11'19	-4.8m		1095 Oct 22 j 09:16	0° \mathcal{X}	
desc. node	1093 Apr 19 j 13:07	20° \mathcal{H} 22'34			1095 Nov 15 j 15:18	0° \mathcal{Z}	
	1093 Apr 30 j 14:54	0° Υ			1095 Dec 10 j 01:37	0° \approx	
morning max el	1093 May 06 j 01:13	5° Υ 06'46	45°54'42		1096 Jan 03 j 22:06	0° \mathcal{H}	
	1093 May 30 j 07:39	0° \mathcal{B}		asc. node	1096 Jan 26 j 11:48	26° \mathcal{H} 19'25	
	1093 Jun 26 j 07:46	0° Π			1096 Jan 29 j 17:43	0° Υ	
	1093 Jul 22 j 03:49	0° \mathcal{E}		evening max el	1096 Feb 25 j 08:58	28° Υ 26'00	46°09'38
asc. node	1093 Aug 10 j 16:47	23° \mathcal{E} 18'23			1096 Feb 26 j 23:08	0° \mathcal{B}	
	1093 Aug 16 j 05:49	0° Ω		greatest brilliancy	1096 Apr 04 j 01:11	27° \mathcal{B} 37'53	-4.8m
	1093 Sep 09 j 18:33	0° \mathcal{M}		retrograde	1096 Apr 14 j 20:44	29° \mathcal{B} 46'37	
	1093 Oct 03 j 22:07	0° Ω		evening set	1096 Apr 30 j 09:04	25° \mathcal{B} 07'01	
	1093 Oct 27 j 20:27	0° \mathcal{M}		inferior conj	1096 May 06 j 07:21	21° \mathcal{B} 31'11	2°29'44
greatest brilliancy	1093 Oct 29 j 12:26	2° \mathcal{M} 05'39	-3.9m	minimum elong	1096 May 06 j 12:37	21° \mathcal{B} 22'52	2°28'15
morning set	1093 Oct 30 j 23:51	3° \mathcal{M} 56'58		min. Earth dist.	1096 May 06 j 10:05	21° \mathcal{B} 26'52	0.28880 AU
	1093 Nov 20 j 16:39	0° \mathcal{X}		morning rise	1096 May 12 j 16:17	17° \mathcal{B} 40'18	
desc. node	1093 Nov 30 j 06:10	12° \mathcal{X} 02'31		desc. node	1096 May 17 j 01:03	15° \mathcal{B} 32'11	
				direct	1096 May 27 j 20:13	13° \mathcal{B} 14'30	
superior conj	1093 Dec 11 j 01:31	25° \mathcal{X} 38'36	-0°25'26	greatest brilliancy	1096 Jun 07 j 02:41	15° \mathcal{B} 07'39	-4.7m
minimum elong	1093 Dec 10 j 18:52	25° \mathcal{X} 17'41	0°25'08		1096 Jul 01 j 02:10	0° Π	
max. Earth dist.	1093 Dec 12 j 17:58	27° \mathcal{X} 45'50	1.71063 AU	morning max el	1096 Jul 15 j 13:40	12° Π 54'34	45°46'43
	1093 Dec 14 j 12:37	0° \mathcal{Z}			1096 Aug 01 j 12:49	0° \mathcal{E}	
	1094 Jan 07 j 09:31	0° \approx			1096 Aug 28 j 17:16	0° Ω	
evening rise	1094 Jan 21 j 14:08	17° \approx 47'16		asc. node	1096 Sep 07 j 04:37	10° Ω 57'38	
	1094 Jan 31 j 08:37	0° \mathcal{H}			1096 Sep 23 j 06:22	0° \mathcal{M}	
	1094 Feb 24 j 11:41	0° Υ			1096 Oct 17 j 22:23	0° Ω	
	1094 Mar 20 j 20:47	0° \mathcal{B}			1096 Nov 11 j 03:00	0° \mathcal{M}	
asc. node	1094 Mar 23 j 09:33	3° \mathcal{B} 05'39			1096 Dec 05 j 02:24	0° \mathcal{X}	
	1094 Apr 14 j 14:10	0° Π		desc. node	1096 Dec 27 j 18:00	28° \mathcal{X} 25'02	
	1094 May 09 j 18:57	0° \mathcal{E}			1096 Dec 29 j 00:16	0° \mathcal{Z}	
	1094 Jun 04 j 17:16	0° Ω		morning set	1097 Jan 15 j 21:52	22° \mathcal{Z} 26'42	
	1094 Jul 02 j 00:38	0° \mathcal{M}			1097 Jan 21 j 22:37	0° \approx	
desc. node	1094 Jul 12 j 22:51	11° \mathcal{M} 14'35			1097 Feb 14 j 22:36	0° \mathcal{H}	
evening max el	1094 Jul 20 j 00:36	18° \mathcal{M} 10'45	45°49'14				
	1094 Aug 02 j 02:41	0° Ω		superior conj	1097 Feb 25 j 16:31	13° \mathcal{H} 23'36	-1°25'26
greatest brilliancy	1094 Aug 28 j 23:02	16° Ω 44'20	-4.8m	minimum elong	1097 Feb 25 j 18:34	13° \mathcal{H} 29'59	1°25'25
retrograde	1094 Sep 07 j 00:29	18° Ω 13'49		max. Earth dist.	1097 Mar 01 j 17:25	18° \mathcal{H} 24'57	1.72225 AU
evening set	1094 Sep 24 j 02:58	12° Ω 44'45			1097 Mar 11 j 01:13	0° Υ	
inferior conj	1094 Sep 27 j 21:46	10° Ω 28'12	-7°37'03		1097 Apr 04 j 07:17	0° \mathcal{B}	

evening rise	1097 Apr 05 j 17:17	1° C 44'47	morning max el	1099 Sep 25 j 08:49	21° Q 23'56	46°21'13
asc. node	1097 Apr 19 j 21:29	19° C 11'02		1099 Oct 03 j 19:18	0° M	
	1097 Apr 28 j 17:13	0° II	asc. node	1099 Oct 05 j 16:26	1° M 58'44	
	1097 May 23 j 07:19	0° C		1099 Oct 30 j 20:19	0° A	
	1097 Jun 17 j 02:17	0° Q		1099 Nov 25 j 03:22	0° M	
	1097 Jul 12 j 04:11	0° M		1099 Dec 19 j 17:15	0° A	
	1097 Aug 06 j 17:09	0° A		1100 Jan 13 j 00:23	0° C	
desc. node	1097 Aug 09 j 10:38	3° A 09'35	desc. node	1100 Jan 25 j 05:52	15° C 08'52	
	1097 Sep 02 j 01:48	0° M		1100 Feb 06 j 05:29	0° \approx	
	1097 Sep 30 j 06:47	0° A		1100 Mar 01 j 10:44	0° H	
evening max el	1097 Oct 01 j 06:58	1° A 00'12 47°00'14		1100 Mar 25 j 17:12	0° Y	
	1097 Nov 06 j 15:15	0° C	morning set	1100 Mar 31 j 03:37	6° Y 42'12	
greatest brilliancy	1097 Nov 10 j 21:41	1° C 48'26 -4.9m		1100 Apr 19 j 01:22	0° C	
retrograde	1097 Nov 20 j 18:14	3° C 39'43				
asc. node	1097 Nov 30 j 14:05	1° C 40'42	superior conj	1100 May 07 j 12:50	22° C 43'22 -0°23'08	
	1097 Dec 04 j 06:21	30° R A	minimum elong	1100 May 07 j 17:34	22° C 57'56 0°22'55	
evening set	1097 Dec 05 j 02:59	29° A 33'02	max. Earth dist.	1100 May 08 j 08:43	23° C 44'28 1.73514 AU	
inferior conj	1097 Dec 11 j 07:33	25° A 55'56 2°44'55		1100 May 13 j 10:57	0° II	
minimum elong	1097 Dec 11 j 01:31	26° A 05'08 2°43'03	asc. node	1100 May 17 j 09:24	4° II 50'10	
min. Earth dist.	1097 Dec 10 j 20:12	26° A 13'14 0.26441 AU		1100 Jun 06 j 21:13	0° C	
morning rise	1097 Dec 17 j 00:15	22° A 35'09	evening rise	1100 Jun 12 j 22:14	7° C 25'14	
direct	1097 Dec 31 j 14:39	18° A 19'11		1100 Jul 01 j 07:41	0° Q	
greatest brilliancy	1098 Jan 10 j 07:20	20° A 06'18 -4.9m		1100 Jul 25 j 18:43	0° M	
	1098 Jan 27 j 13:06	0° C		1100 Aug 19 j 07:37	0° A	
morning max el	1098 Feb 19 j 17:43	20° C 38'52 46°38'03	desc. node	1100 Sep 05 j 22:37	21° A 26'32	
	1098 Feb 28 j 21:43	0° \approx		1100 Sep 13 j 00:02	0° M	
desc. node	1098 Mar 22 j 03:28	23° \approx 00'57		1100 Oct 07 j 22:11	0° A	
	1098 Mar 28 j 08:48	0° H		1100 Nov 02 j 06:55	0° C	
	1098 Apr 23 j 11:17	0° Y		1100 Nov 28 j 16:48	0° \approx	
	1098 May 18 j 23:17	0° C	evening max el	1100 Dec 12 j 16:33	14° \approx 51'09 47°15'30	
	1098 Jun 13 j 02:26	0° II	asc. node	1100 Dec 28 j 01:59	29° \approx 36'30	
	1098 Jul 07 j 22:09	0° C		1100 Dec 28 j 12:40	0° H	
asc. node	1098 Jul 13 j 06:58	6° C 32'06	greatest brilliancy	1101 Jan 22 j 01:47	16° H 25'25 -4.9m	
	1098 Aug 01 j 10:37	0° Q	retrograde	1101 Feb 01 j 14:37	18° H 31'39	
morning set	1098 Aug 17 j 20:09	20° Q 15'15	evening set	1101 Feb 19 j 12:51	12° H 15'31	
	1098 Aug 25 j 16:35	0° M	min. Earth dist.	1101 Feb 21 j 23:34	10° H 43'48 0.27974 AU	
	1098 Sep 18 j 17:49	0° A	inferior conj	1101 Feb 22 j 14:19	10° H 20'31 8°43'46	
max. Earth dist.	1098 Sep 21 j 08:28	3° A 15'59 1.71797 AU	minimum elong	1101 Feb 22 j 15:20	10° H 18'56 8°43'45	
			morning rise	1101 Feb 25 j 18:04	8° H 22'46	
superior conj	1098 Sep 24 j 04:17	6° A 48'11 1°15'10	direct	1101 Mar 15 j 12:44	2° H 20'32	
minimum elong	1098 Sep 24 j 12:37	7° A 14'15 1°14'58	greatest brilliancy	1101 Mar 24 j 14:01	3° H 52'32 -4.8m	
	1098 Oct 12 j 16:29	0° M	desc. node	1101 Apr 18 j 15:19	19° H 19'34	
desc. node	1098 Nov 01 j 20:27	25° M 18'00		1101 Apr 30 j 15:37	0° Y	
evening rise	1098 Nov 02 j 21:37	26° M 36'55	morning max el	1101 May 03 j 15:30	2° Y 51'02 45°55'39	
	1098 Nov 05 j 14:22	0° A		1101 May 30 j 00:01	0° C	
	1098 Nov 29 j 12:35	0° C		1101 Jun 25 j 21:21	0° II	
	1098 Dec 23 j 12:20	0° \approx		1101 Jul 21 j 16:04	0° C	
	1099 Jan 16 j 15:44	0° H	asc. node	1101 Aug 09 j 18:46	22° C 49'14	
	1099 Feb 10 j 02:35	0° Y		1101 Aug 15 j 17:22	0° Q	
asc. node	1099 Feb 22 j 23:38	15° Y 33'12		1101 Sep 09 j 05:44	0° M	
	1099 Mar 07 j 02:48	0° C		1101 Oct 03 j 09:09	0° A	
	1099 Apr 02 j 02:31	0° II		1101 Oct 27 j 07:28	0° M	
	1099 Apr 30 j 02:33	0° C	greatest brilliancy	1101 Oct 28 j 09:08	1° M 20'41 -3.9m	
evening max el	1099 May 07 j 00:15	6° C 47'25 45°22'16	morning set	1101 Oct 28 j 12:14	1° M 30'26	
	1099 Jun 04 j 19:06	0° Q		1101 Nov 20 j 03:41	0° A	
greatest brilliancy	1099 Jun 13 j 21:30	4° Q 23'15 -4.7m	desc. node	1101 Nov 29 j 08:17	11° A 34'29	
desc. node	1099 Jun 14 j 13:04	4° Q 37'01				
retrograde	1099 Jun 24 j 13:34	6° Q 25'04	superior conj	1101 Dec 08 j 11:06	23° A 03'02 -0°21'34	
evening set	1099 Jul 10 j 15:13	1° Q 30'00	minimum elong	1101 Dec 08 j 05:25	22° A 45'09 0°21'17	
	1099 Jul 13 j 04:31	30° R C	max. Earth dist.	1101 Dec 09 j 20:51	24° A 49'15 1.71053 AU	
inferior conj	1099 Jul 15 j 23:24	28° C 17'01 -6°31'46		1101 Dec 13 j 23:39	0° C	
minimum elong	1099 Jul 15 j 13:29	28° C 32'25 6°29'51		1102 Jan 06 j 20:34	0° \approx	
min. Earth dist.	1099 Jul 16 j 01:17	28° C 14'06 0.28869 AU				
morning rise	1099 Jul 20 j 11:36	25° C 32'25				
direct	1099 Aug 06 j 14:33	20° C 01'07				
greatest brilliancy	1099 Aug 17 j 07:14	22° C 05'50 -4.8m				
	1099 Aug 31 j 16:06	0° Q				