conjunction	601 Sep 19 j 22:25	29°♍05'27	0°44'00
minimum elong	601 Sep 19 j 23:39	29°♍07'31	0°44'00
	601 Sep 21 j 07:02	0°♎	
	601 Nov 04 j 03:08	0°♏	
morning rise	601 Nov 05 j 19:01	1°♏09'48	
desc. node	601 Dec 08 j 22:31	24°♏46'11	
	601 Dec 16 j 03:29	0°♐	
	602 Jan 25 j 15:58	0°♑	
	602 Mar 06 j 05:28	0°♒	
	602 Apr 14 j 14:46	0°♓	
	602 May 24 j 23:30	0°♈	
	602 Jul 07 j 09:04	0°♉	
	602 Aug 29 j 19:04	0°♊	
asc. node	602 Oct 08 j 04:28	10°♊50'02	
retrograde	602 Oct 12 j 16:09	10°♊58'26	
min. Earth dist.	602 Nov 14 j 15:49	3°♊38'23	0.57474 AU
opposition	602 Nov 20 j 20:04	1°♊12'50	1°55'07
greatest brilliancy	602 Nov 20 j 03:57	1°♊28'41	-1.7m
	602 Nov 23 j 23:04	30°℞♉	
direct	602 Dec 27 j 09:31	22°♉51'00	
	603 Feb 02 j 11:48	0°♊	
	603 Apr 08 j 06:33	0°♋	
	603 May 30 j 22:10	0°♌	
	603 Jul 18 j 18:47	0°♍	
	603 Sep 02 j 20:02	0°♎	
evening set	603 Sep 13 j 09:21	7°♎07'36	
max. Earth dist.	603 Sep 29 j 06:54	18°♎02'33	2.51851 AU
	603 Oct 16 j 08:09	0°♏	
desc. node	603 Oct 26 j 21:21	7°♏31'29	
conjunction	603 Nov 02 j 08:59	12°♏11'51	0°-4'-5
minimum elong	603 Nov 02 j 08:45	12°♏11'26	0°04'05
behind sun begin	603 Nov 01 j 11:19	11°♏32'42	
behind sun end	603 Nov 03 j 06:11	12°♏50'13	
	603 Nov 26 j 15:26	0°♐	
morning rise	603 Dec 27 j 03:31	23°♐00'19	
	604 Jan 05 j 06:30	0°♑	
	604 Feb 12 j 22:01	0°♒	
	604 Mar 22 j 09:37	0°♓	
	604 Apr 30 j 15:13	0°♈	
	604 Jun 10 j 16:19	0°♉	
	604 Jul 25 j 01:09	0°♊	
asc. node	604 Aug 25 j 02:45	18°♊51'53	
	604 Sep 14 j 19:56	0°♋	
retrograde	604 Nov 17 j 13:40	19°♋14'42	
min. Earth dist.	604 Dec 25 j 04:17	10°♋19'34	0.65669 AU
opposition	604 Dec 27 j 16:33	9°♋19'00	4°02'42
greatest brilliancy	604 Dec 27 j 03:39	9°♋31'59	-1.3m
	605 Feb 01 j 08:45	30°℞♊	
direct	605 Feb 05 j 04:05	29°♊54'31	
	605 Feb 09 j 01:09	0°♋	
	605 May 05 j 11:58	0°♌	
	605 Jun 27 j 09:01	0°♍	
	605 Aug 13 j 15:31	0°♎	
desc. node	605 Sep 12 j 20:06	20°♎29'59	
	605 Sep 26 j 08:23	0°♏	
evening set	605 Oct 30 j 16:12	24°♏58'44	
	605 Nov 06 j 09:28	0°♐	
max. Earth dist.	605 Nov 24 j 17:01	13°♐52'55	2.39267 AU
	605 Dec 15 j 14:13	0°♑	
conjunction	605 Dec 29 j 06:37	10°♑41'21	0°-57'-49
minimum elong	605 Dec 29 j 04:21	10°♑36'55	0°57'49
	606 Jan 22 j 19:29	0°♒	
	606 Mar 01 j 22:58	0°♓	

morning rise	606 Mar 07 j 23:17	4°♓41'20	
	606 Apr 09 j 21:49	0°♈	
	606 May 20 j 11:47	0°♉	
	606 Jul 02 j 11:29	0°♊	
asc. node	606 Jul 13 j 02:24	7°♊06'10	
	606 Aug 17 j 21:03	0°♋	
	606 Oct 09 j 17:50	0°♌	
retrograde	606 Dec 22 j 01:18	22°♌56'06	
opposition	607 Jan 30 j 20:26	13°♌25'52	4°34'23
greatest brilliancy	607 Jan 31 j 01:52	13°♌20'27	-1.2m
min. Earth dist.	607 Feb 01 j 05:12	12°♌53'16	0.67510 AU
direct	607 Mar 12 j 22:24	3°♌29'30	
	607 Jun 01 j 23:47	0°♍	
	607 Jul 23 j 10:44	0°♎	
desc. node	607 Jul 31 j 18:55	5°♎20'28	
	607 Sep 06 j 07:56	0°♏	
	607 Oct 17 j 15:18	0°♐	
	607 Nov 25 j 18:48	0°♑	
	608 Jan 02 j 21:37	0°♒	
evening set	608 Jan 03 j 12:19	0°♒29'03	
	608 Feb 10 j 00:25	0°♓	
conjunction	608 Mar 11 j 00:12	23°♓09'03	0°-46'-45
minimum elong	608 Mar 11 j 03:14	23°♓14'49	0°46'44
	608 Mar 20 j 00:55	0°♈	
	608 Apr 29 j 16:44	0°♉	
max. Earth dist.	608 Apr 29 j 15:05	29°♈57'01	2.44829 AU
morning rise	608 May 14 j 13:41	10°♉36'30	
asc. node	608 May 30 j 01:45	21°♉27'28	
	608 Jun 11 j 11:58	0°♊	
	608 Jul 26 j 17:50	0°♋	
	608 Sep 12 j 21:59	0°♌	
	608 Nov 05 j 05:49	0°♍	
retrograde	609 Jan 27 j 01:37	27°♍05'45	
opposition	609 Mar 06 j 09:55	18°♍23'33	3°42'28
greatest brilliancy	609 Mar 07 j 07:59	18°♍02'14	-1.4m
min. Earth dist.	609 Mar 11 j 14:17	16°♍23'30	0.62766 AU
direct	609 Apr 16 j 14:51	8°♍25'25	
desc. node	609 Jun 17 j 17:42	26°♍39'21	
	609 Jun 24 j 07:26	0°♎	
	609 Aug 13 j 09:03	0°♏	
	609 Sep 25 j 04:50	0°♐	
	609 Nov 03 j 22:20	0°♑	
	609 Dec 12 j 09:04	0°♒	
	610 Jan 19 j 19:34	0°♓	
	610 Feb 28 j 05:21	0°♈	
evening set	610 Mar 12 j 08:52	9°♈00'59	
	610 Apr 10 j 07:15	0°♉	
asc. node	610 Apr 17 j 00:16	4°♉45'53	
conjunction	610 May 10 j 03:17	20°♉54'57	0°14'07
minimum elong	610 May 10 j 02:30	20°♉53'36	0°14'06
behind sun begin	610 May 09 j 15:53	20°♉35'18	
behind sun end	610 May 10 j 13:07	21°♉11'52	
	610 May 23 j 09:53	0°♊	
max. Earth dist.	610 Jun 08 j 13:36	10°♊53'19	2.57298 AU
morning rise	610 Jul 02 j 04:00	26°♊29'32	
	610 Jul 07 j 13:01	0°♋	
	610 Aug 23 j 11:43	0°♌	
	610 Oct 11 j 06:25	0°♍	
	610 Dec 02 j 03:48	0°♎	
	611 Feb 04 j 07:28	0°♏	
retrograde	611 Mar 14 j 01:20	7°♏14'01	
opposition	611 Apr 18 j 11:26	29°♎53'25	0°50'45
	611 Apr 18 j 04:02	30°℞♎	

greatest brilliancy	611 Apr 18 j 22:01	29°♎43'59	-2.0m
min. Earth dist.	611 Apr 26 j 15:40	26°♎59'05	0.51976 AU
desc. node	611 May 05 j 15:58	24°♎07'31	
direct	611 May 27 j 10:30	20°♎54'44	
	611 Jul 05 j 23:36	0°♏	
	611 Aug 28 j 22:35	0°♐	
	611 Oct 10 j 16:39	0°♑	
	611 Nov 19 j 16:01	0°♒	
	611 Dec 29 j 05:26	0°♓	
	612 Feb 07 j 15:08	0°♈	
asc. node	612 Mar 03 j 23:35	18°♈16'13	
	612 Mar 20 j 14:40	0°♉	
evening set	612 May 03 j 10:30	29°♉59'14	
	612 May 03 j 10:58	0°♊	
	612 Jun 17 j 23:55	0°♋	
conjunction	612 Jun 23 j 01:03	3°♋16'10	0°55'56
minimum elong	612 Jun 22 j 23:45	3°♋14'03	0°55'56
max. Earth dist.	612 Jul 04 j 13:18	10°♋41'44	2.65101 AU
	612 Aug 03 j 17:44	0°♌	
morning rise	612 Aug 08 j 21:59	3°♌17'32	
	612 Sep 20 j 03:06	0°♍	
	612 Nov 06 j 21:49	0°♎	
	612 Dec 25 j 11:51	0°♏	
	613 Feb 14 j 16:57	0°♐	
desc. node	613 Mar 22 j 15:53	18°♐28'37	
	613 Apr 21 j 18:07	0°♑	
retrograde	613 May 18 j 19:28	4°♑08'14	
	613 Jun 14 j 14:18	30°℞♐	
opposition	613 Jun 18 j 16:00	28°♐51'57	-5°-4'-28
greatest brilliancy	613 Jun 19 j 21:35	28°♐30'56	-2.7m
min. Earth dist.	613 Jun 24 j 00:27	27°♐20'59	0.39540 AU
direct	613 Jul 21 j 04:14	22°♐54'37	
	613 Aug 23 j 18:02	0°♑	
	613 Oct 17 j 23:55	0°♒	
	613 Dec 01 j 18:41	0°♓	
	614 Jan 14 j 07:38	0°♈	
asc. node	614 Jan 19 j 22:05	3°♈50'37	
	614 Feb 27 j 11:38	0°♉	
	614 Apr 13 j 21:00	0°♊	
	614 May 30 j 09:27	0°♋	
evening set	614 Jun 14 j 12:59	9°♋39'51	
	614 Jul 16 j 12:17	0°♌	
max. Earth dist.	614 Jul 28 j 04:24	7°♌25'27	2.67500 AU
conjunction	614 Jul 31 j 04:11	9°♌19'41	1°09'27
minimum elong	614 Jul 31 j 04:10	9°♌19'40	1°09'26
	614 Sep 01 j 12:38	0°♍	
morning rise	614 Sep 13 j 17:48	7°♍51'25	
	614 Oct 17 j 20:43	0°♎	
	614 Dec 02 j 06:49	0°♏	
	615 Jan 15 j 20:14	0°♐	
desc. node	615 Feb 07 j 15:55	15°♐31'59	
	615 Feb 28 j 20:23	0°♑	
	615 Apr 14 j 03:33	0°♒	
	615 May 31 j 21:08	0°♓	
retrograde	615 Aug 04 j 22:08	22°♓41'55	
min. Earth dist.	615 Aug 31 j 13:03	18°♓09'08	0.40231 AU
greatest brilliancy	615 Sep 05 j 18:18	16°♓34'06	-2.7m
opposition	615 Sep 07 j 04:46	16°♓07'50	-5°-8'-3
direct	615 Oct 07 j 14:11	10°♓35'42	
asc. node	615 Dec 07 j 20:25	28°♓58'58	
	615 Dec 09 j 21:37	0°♈	
	616 Feb 01 j 17:17	0°♉	
	616 Mar 22 j 06:14	0°♊	
	616 May 09 j 22:28	0°♋	
	616 Jun 27 j 02:25	0°♌	
evening set	616 Jul 21 j 06:22	15°♌15'01	
	616 Aug 13 j 08:12	0°♍	
max. Earth dist.	616 Aug 19 j 19:36	4°♍10'43	2.64479 AU
conjunction	616 Sep 04 j 23:41	14°♍41'44	0°56'10
minimum elong	616 Sep 05 j 00:48	14°♍43'34	0°56'09
	616 Sep 28 j 03:50	0°♎	
morning rise	616 Oct 20 j 10:26	14°♎59'39	
	616 Nov 11 j 07:13	0°♏	
	616 Dec 23 j 19:04	0°♐	
desc. node	616 Dec 25 j 14:23	1°♐17'51	
	617 Feb 02 j 21:48	0°♑	
	617 Mar 15 j 02:42	0°♒	
	617 Apr 24 j 05:29	0°♓	
	617 Jun 04 j 17:31	0°♈	
	617 Jul 21 j 06:45	0°♉	
retrograde	617 Sep 26 j 08:25	23°♉23'11	
asc. node	617 Oct 24 j 20:13	17°♉42'20	
min. Earth dist.	617 Oct 27 j 04:48	16°♉50'35	0.52772 AU
opposition	617 Nov 03 j 13:56	14°♉02'15	0°28'36
greatest brilliancy	617 Nov 03 j 08:36	14°♉07'20	-2.0m
direct	617 Dec 08 j 14:43	6°♉17'35	
	618 Feb 21 j 14:27	0°♊	
	618 Apr 18 j 00:28	0°♋	
	618 Jun 07 j 17:01	0°♌	
	618 Jul 25 j 21:30	0°♍	
evening set	618 Aug 28 j 09:42	21°♍45'36	
	618 Sep 09 j 18:36	0°♎	
max. Earth dist.	618 Sep 16 j 06:36	4°♎22'33	2.56280 AU
conjunction	618 Oct 15 j 08:19	24°♎21'41	0°17'07
minimum elong	618 Oct 15 j 09:01	24°♎22'55	0°17'07
	618 Oct 23 j 08:57	0°♏	
desc. node	618 Nov 12 j 12:53	14°♏23'38	
	618 Dec 03 j 21:49	0°♐	
morning rise	618 Dec 05 j 01:59	0°♐52'00	
	619 Jan 12 j 20:03	0°♑	
	619 Feb 20 j 18:37	0°♒	
	619 Mar 31 j 12:30	0°♓	
	619 May 10 j 00:46	0°♈	
	619 Jun 20 j 13:36	0°♉	
	619 Aug 05 j 09:21	0°♊	
asc. node	619 Sep 11 j 20:00	20°♊27'40	
	619 Oct 05 j 08:21	0°♋	
retrograde	619 Nov 04 j 19:15	5°♋25'19	
	619 Dec 03 j 01:09	30°℞♊	
min. Earth dist.	619 Dec 10 j 17:27	27°♊03'54	0.63158 AU
opposition	619 Dec 14 j 17:37	25°♊27'34	3°26'53
greatest brilliancy	619 Dec 14 j 00:13	25°♊45'01	-1.4m
direct	620 Jan 22 j 05:15	16°♊23'26	
	620 Mar 16 j 18:05	0°♋	
	620 May 15 j 13:40	0°♌	
	620 Jul 05 j 07:48	0°♍	
	620 Aug 20 j 23:37	0°♎	
desc. node	620 Sep 29 j 12:03	27°♎07'24	
	620 Oct 03 j 13:31	0°♏	
evening set	620 Oct 10 j 07:31	4°♏49'01	
max. Earth dist.	620 Oct 26 j 01:42	16°♏13'47	2.44068 AU
	620 Nov 13 j 16:11	0°♐	
conjunction	620 Dec 04 j 09:02	15°♐39'29	0°-39'-39
minimum elong	620 Dec 04 j 06:54	15°♐35'24	0°39'38
	620 Dec 23 j 00:11	0°♑	
	621 Jan 30 j 08:29	0°♒	
morning rise	621 Feb 05 j 21:20	5°♒08'29	
	621 Mar 09 j 14:00	0°♓	
	621 Apr 17 j 14:05	0°♈	

	621 May 28 j 05:52	0°♉	
	621 Jul 10 j 12:30	0°♊	
asc. node	621 Jul 29 j 18:01	12°♊34'13	
	621 Aug 27 j 00:20	0°♋	
	621 Oct 24 j 17:46	0°♌	
retrograde	621 Dec 08 j 15:05	10°♌12'35	
opposition	622 Jan 17 j 16:07	0°♌29'38	4°31'43
greatest brilliancy	622 Jan 17 j 13:47	0°♌31'58	-1.2m
min. Earth dist.	622 Jan 17 j 12:11	0°♌33'34	0.67571 AU
	622 Jan 18 j 21:44	30°℞♋	
direct	622 Feb 27 j 06:42	20°♋42'42	
	622 Apr 11 j 23:24	0°♌	
	622 Jun 12 j 15:28	0°♍	
	622 Jul 31 j 19:30	0°♎	
desc. node	622 Aug 17 j 10:59	10°♎58'37	
	622 Sep 14 j 02:04	0°♏	
	622 Oct 25 j 05:35	0°♐	
	622 Dec 03 j 08:45	0°♑	
evening set	622 Dec 07 j 03:44	2°♑57'40	
	623 Jan 10 j 11:38	0°♒	
conjunction	623 Feb 11 j 14:01	25°♒18'51	-1°-2'-25
minimum elong	623 Feb 11 j 15:50	25°♒22'24	1°02'24
	623 Feb 17 j 13:38	0°♓	
	623 Mar 28 j 12:16	0°♈	
max. Earth dist.	623 Mar 31 j 20:03	2°♈30'42	2.39574 AU
morning rise	623 Apr 21 j 13:40	17°♈58'04	
	623 May 08 j 01:46	0°♉	
asc. node	623 Jun 16 j 17:12	27°♉51'44	
	623 Jun 19 j 20:22	0°♊	
	623 Aug 04 j 08:02	0°♋	
	623 Sep 22 j 13:41	0°♌	
	623 Nov 19 j 20:00	0°♍	
retrograde	624 Jan 13 j 01:24	13°♍38'30	
opposition	624 Feb 21 j 02:49	4°♍34'30	4°13'29
greatest brilliancy	624 Feb 21 j 19:35	4°♍18'04	-1.3m
min. Earth dist.	624 Feb 24 j 19:45	3°♍07'21	0.65395 AU
	624 Mar 04 j 04:12	30°℞♌	
direct	624 Apr 02 j 11:25	24°♌32'36	
	624 May 04 j 07:05	0°♍	
desc. node	624 Jul 04 j 09:37	28°♍41'53	
	624 Jul 06 j 15:12	0°♎	
	624 Aug 22 j 15:56	0°♏	
	624 Oct 03 j 15:41	0°♐	
	624 Nov 12 j 01:23	0°♑	
	624 Dec 20 j 07:29	0°♒	
	625 Jan 27 j 13:34	0°♓	
evening set	625 Feb 15 j 01:24	14°♓16'52	
	625 Mar 07 j 18:24	0°♈	
	625 Apr 17 j 14:52	0°♉	
conjunction	625 Apr 19 j 00:40	1°♉00'32	0°-9'-11
minimum elong	625 Apr 19 j 01:18	1°♉01'39	0°09'11
behind sun begin	625 Apr 18 j 04:33	0°♉24'32	
behind sun end	625 Apr 19 j 22:02	1°♉38'43	
asc. node	625 May 03 j 16:58	11°♉25'18	
max. Earth dist.	625 May 26 j 20:32	27°♉29'02	2.52859 AU
	625 May 30 j 12:56	0°♊	
morning rise	625 Jun 14 j 22:48	10°♊25'08	
	625 Jul 14 j 14:50	0°♋	
	625 Aug 30 j 20:29	0°♌	
	625 Oct 19 j 17:44	0°♍	
	625 Dec 14 j 15:26	0°♎	
retrograde	626 Feb 22 j 11:09	20°♎32'57	
opposition	626 Mar 31 j 05:41	12°♎34'51	2°16'38
greatest brilliancy	626 Apr 01 j 03:33	12°♎14'30	-1.7m
min. Earth dist.	626 Apr 07 j 11:19	9°♎53'38	0.56812 AU
direct	626 May 10 j 11:24	3°♎01'18	
desc. node	626 May 22 j 09:06	3°♎55'27	
	626 Jul 25 j 11:41	0°♏	
	626 Sep 09 j 16:57	0°♐	
	626 Oct 20 j 15:31	0°♑	
	626 Nov 28 j 18:05	0°♒	
	627 Jan 06 j 16:51	0°♓	
	627 Feb 15 j 14:14	0°♈	
asc. node	627 Mar 21 j 14:50	24°♈40'39	
	627 Mar 29 j 02:59	0°♉	
evening set	627 Apr 15 j 13:50	12°♉12'15	
	627 May 11 j 14:31	0°♊	
conjunction	627 Jun 07 j 19:17	18°♊08'19	0°43'08
minimum elong	627 Jun 07 j 17:47	18°♊05'51	0°43'08
	627 Jun 25 j 21:55	0°♋	
max. Earth dist.	627 Jun 25 j 16:31	29°♊51'12	2.62681 AU
morning rise	627 Jul 26 j 12:19	19°♋43'37	
	627 Aug 11 j 15:33	0°♌	
	627 Sep 28 j 09:36	0°♍	
	627 Nov 16 j 05:58	0°♎	
	628 Jan 06 j 13:40	0°♏	
	628 Mar 08 j 05:08	0°♐	
desc. node	628 Apr 08 j 08:08	8°♐14'56	
retrograde	628 Apr 19 j 06:39	8°♐57'24	
opposition	628 May 22 j 00:04	2°♐51'42	-2°-28'-48
greatest brilliancy	628 May 23 j 01:07	2°♐31'55	-2.4m
min. Earth dist.	628 May 30 j 00:28	0°♐20'27	0.43906 AU
	628 May 31 j 03:25	30°℞♏	
direct	628 Jun 26 j 14:11	25°♏30'22	
	628 Jul 22 j 21:35	0°♐	
	628 Sep 18 j 19:40	0°♑	
	628 Nov 01 j 11:02	0°♒	
	628 Dec 12 j 23:02	0°♓	
	629 Jan 23 j 17:24	0°♈	
asc. node	629 Feb 05 j 13:42	9°♈04'11	
	629 Mar 07 j 17:50	0°♉	
	629 Apr 21 j 08:40	0°♊	
evening set	629 May 30 j 00:10	25°♊13'57	
	629 Jun 06 j 09:33	0°♋	
conjunction	629 Jul 16 j 19:00	25°♋51'06	1°07'29
minimum elong	629 Jul 16 j 18:26	25°♋50'12	1°07'28
max. Earth dist.	629 Jul 19 j 06:55	27°♋26'32	2.67215 AU
	629 Jul 23 j 07:16	0°♌	
morning rise	629 Aug 30 j 21:04	24°♌34'21	
	629 Sep 08 j 09:11	0°♍	
	629 Oct 25 j 03:15	0°♎	
	629 Dec 10 j 10:31	0°♏	
	630 Jan 25 j 13:18	0°♐	
desc. node	630 Feb 24 j 07:22	19°♐12'01	
	630 Mar 13 j 07:25	0°♑	
	630 May 02 j 17:59	0°♒	
retrograde	630 Jul 07 j 21:11	21°♒57'32	
min. Earth dist.	630 Aug 05 j 01:43	17°♒21'19	0.37626 AU
opposition	630 Aug 07 j 15:25	16°♒39'39	-6°-47'-13
greatest brilliancy	630 Aug 07 j 00:36	16°♒49'40	-2.9m
direct	630 Sep 06 j 05:31	11°♒43'19	
	630 Nov 04 j 18:15	0°♓	
asc. node	630 Dec 24 j 13:38	28°♓36'45	
	630 Dec 26 j 19:43	0°♈	
	631 Feb 12 j 12:23	0°♉	
	631 Mar 31 j 19:13	0°♊	
	631 May 18 j 09:23	0°♋	
	631 Jul 05 j 00:58	0°♌	
evening set	631 Jul 07 j 19:20	1°♌44'55	
max. Earth dist.	631 Aug 11 j 09:08	23°♌44'26	2.66294 AU

	631 Aug 21 j 03:07	0°♍	
conjunction	631 Aug 22 j 13:14	0°♍54'55	1°04'25
minimum elong	631 Aug 22 j 14:01	0°♍56'11	1°04'24
morning rise	631 Oct 06 j 05:57	0°♎06'23	
	631 Oct 06 j 02:06	0°♎	
	631 Nov 19 j 15:00	0°♏	
	632 Jan 01 j 17:39	0°♐	
desc. node	632 Jan 12 j 06:31	7°♐28'11	
	632 Feb 12 j 15:26	0°♑	
	632 Mar 24 j 19:10	0°♒	
	632 May 05 j 04:35	0°♓	
	632 Jun 18 j 05:46	0°♈	
	632 Aug 18 j 01:48	0°♉	
retrograde	632 Sep 07 j 23:39	2°♉58'16	
	632 Sep 28 j 03:38	30°℞♈	
min. Earth dist.	632 Oct 06 j 15:47	27°♈17'33	0.47646 AU
opposition	632 Oct 14 j 18:30	24°♈23'17	-1°-25'-58
greatest brilliancy	632 Oct 14 j 03:32	24°♈36'45	-2.3m
asc. node	632 Nov 10 j 12:40	17°♈42'32	
direct	632 Nov 17 j 02:31	17°♈25'01	
	633 Jan 06 j 03:19	0°♉	
	633 Mar 06 j 02:54	0°♊	
	633 Apr 26 j 17:38	0°♋	
	633 Jun 15 j 03:40	0°♌	
	633 Aug 01 j 20:51	0°♍	
evening set	633 Aug 13 j 05:18	7°♍18'51	
max. Earth dist.	633 Sep 04 j 21:37	22°♍09'32	2.60079 AU
	633 Sep 16 j 16:13	0°♎	
conjunction	633 Sep 28 j 20:40	8°♎12'43	0°35'10
minimum elong	633 Sep 28 j 21:49	8°♎14'40	0°35'10
	633 Oct 30 j 10:42	0°♏	
morning rise	633 Nov 15 j 19:33	11°♏34'57	
desc. node	633 Nov 29 j 05:07	21°♏12'27	
	633 Dec 11 j 07:07	0°♐	
	634 Jan 20 j 14:28	0°♑	
	634 Feb 28 j 22:06	0°♒	
	634 Apr 09 j 00:32	0°♓	
	634 May 18 j 23:18	0°♈	
	634 Jun 30 j 09:33	0°♉	
	634 Aug 18 j 09:19	0°♊	
asc. node	634 Sep 28 j 11:23	17°♊16'37	
retrograde	634 Oct 21 j 08:35	20°♊33'48	
min. Earth dist.	634 Nov 24 j 10:43	12°♊50'30	0.59733 AU
opposition	634 Nov 29 j 21:23	10°♊40'54	2°34'34
greatest brilliancy	634 Nov 29 j 03:02	10°♊59'07	-1.6m
direct	635 Jan 06 j 04:36	2°♊02'16	
	635 Mar 31 j 22:59	0°♋	
	635 May 25 j 10:03	0°♌	
	635 Jul 13 j 20:46	0°♍	
	635 Aug 29 j 02:58	0°♎	
evening set	635 Sep 23 j 02:04	16°♎59'06	
max. Earth dist.	635 Oct 08 j 03:16	27°♎30'05	2.49149 AU
	635 Oct 11 j 16:03	0°♏	
desc. node	635 Oct 17 j 03:45	3°♏54'18	
conjunction	635 Nov 13 j 14:22	23°♏50'02	0°-17'-9
minimum elong	635 Nov 13 j 13:28	23°♏48'21	0°17'09
	635 Nov 21 j 21:56	0°♐	
	635 Dec 31 j 10:43	0°♑	
morning rise	636 Jan 10 j 05:07	7°♑33'14	
	636 Feb 07 j 23:42	0°♒	
	636 Mar 17 j 08:45	0°♓	
	636 Apr 25 j 11:35	0°♈	
	636 Jun 05 j 07:34	0°♉	
	636 Jul 19 j 02:44	0°♊	
asc. node	636 Aug 15 j 10:52	17°♊12'32	
	636 Sep 06 j 15:01	0°♋	
retrograde	636 Nov 25 j 06:29	27°♋17'28	
min. Earth dist.	637 Jan 02 j 17:28	18°♋05'52	0.66624 AU
opposition	637 Jan 04 j 10:06	17°♋25'03	4°17'06
greatest brilliancy	637 Jan 04 j 00:31	17°♋34'40	-1.3m
direct	637 Feb 13 j 08:45	7°♋51'32	
	637 Apr 27 j 19:46	0°♌	
	637 Jun 21 j 19:17	0°♍	
	637 Aug 08 j 15:54	0°♎	
desc. node	637 Sep 03 j 03:40	17°♎08'41	
	637 Sep 21 j 13:37	0°♏	
	637 Nov 01 j 15:36	0°♐	
evening set	637 Nov 12 j 09:28	8°♐06'43	
	637 Dec 10 j 19:45	0°♑	
max. Earth dist.	637 Dec 28 j 12:26	13°♑51'17	2.37380 AU
conjunction	638 Jan 13 j 18:42	26°♑40'12	-1°-3'-42
minimum elong	638 Jan 13 j 17:29	26°♑37'47	1°03'43
	638 Jan 17 j 23:54	0°♒	
	638 Feb 25 j 02:18	0°♓	
morning rise	638 Mar 24 j 21:45	21°♓32'20	
	638 Apr 05 j 00:22	0°♈	
	638 May 15 j 13:11	0°♉	
	638 Jun 27 j 09:22	0°♊	
asc. node	638 Jul 03 j 09:00	4°♊02'23	
	638 Aug 12 j 07:45	0°♋	
	638 Oct 02 j 08:34	0°♌	
	638 Dec 19 j 01:07	0°♍	
retrograde	638 Dec 29 j 21:54	0°♍41'57	
	639 Jan 09 j 07:25	30°℞♌	
opposition	639 Feb 07 j 11:43	21°♌20'01	4°30'14
greatest brilliancy	639 Feb 07 j 21:21	21°♌10'29	-1.2m
min. Earth dist.	639 Feb 09 j 16:15	20°♌27'59	0.67050 AU
direct	639 Mar 20 j 17:35	11°♌20'25	
	639 May 24 j 16:42	0°♍	
	639 Jul 17 j 15:04	0°♎	
desc. node	639 Jul 22 j 02:36	2°♎47'38	
	639 Sep 01 j 03:46	0°♏	
	639 Oct 12 j 16:29	0°♐	
	639 Nov 20 j 22:01	0°♑	
	639 Dec 29 j 01:35	0°♒	
greatest brilliancy	640 Jan 06 j 18:17	6°♒52'12	1.2m
evening set	640 Jan 19 j 10:13	16°♒51'10	
	640 Feb 05 j 04:42	0°♓	
	640 Mar 15 j 05:41	0°♈	
conjunction	640 Mar 26 j 00:10	8°♈04'49	0°-33'-48
minimum elong	640 Mar 26 j 02:36	8°♈09'21	0°33'47
	640 Apr 24 j 21:57	0°♉	
max. Earth dist.	640 May 11 j 06:26	11°♉39'14	2.47791 AU
asc. node	640 May 20 j 07:49	18°♉00'26	
morning rise	640 May 26 j 17:36	22°♉27'38	
	640 Jun 06 j 16:47	0°♊	
	640 Jul 21 j 19:37	0°♋	
	640 Sep 07 j 12:43	0°♌	
	640 Oct 29 j 04:18	0°♍	
	641 Jan 03 j 08:15	0°♎	
retrograde	641 Feb 05 j 04:56	5°♎36'02	
	641 Mar 07 j 06:09	30°℞♍	
opposition	641 Mar 15 j 01:18	27°♍07'51	3°16'36
greatest brilliancy	641 Mar 16 j 00:43	26°♍45'28	-1.5m
min. Earth dist.	641 Mar 20 j 23:59	24°♍51'38	0.60899 AU
direct	641 Apr 25 j 00:33	17°♍15'30	
desc. node	641 Jun 08 j 00:33	27°♍28'23	
	641 Jun 13 j 22:03	0°♎	
	641 Aug 06 j 20:10	0°♏	

	641 Sep 19 j 12:54	0°♐	
	641 Oct 29 j 14:47	0°♑	
	641 Dec 07 j 06:08	0°♒	
	642 Jan 14 j 19:50	0°♓	
	642 Feb 23 j 08:29	0°♈	
evening set	642 Mar 25 j 10:22	22°♈02'52	
	642 Apr 05 j 12:51	0°♉	
asc. node	642 Apr 07 j 07:52	1°♉16'28	
	642 May 18 j 17:10	0°♊	
conjunction	642 May 21 j 01:30	1°♊35'28	0°25'55
minimum elong	642 May 21 j 00:16	1°♊33'22	0°25'54
max. Earth dist.	642 Jun 15 j 05:24	18°♊25'36	2.59413 AU
	642 Jul 02 j 20:32	0°♋	
morning rise	642 Jul 11 j 08:12	5°♋30'47	
	642 Aug 18 j 16:01	0°♌	
	642 Oct 05 j 23:21	0°♍	
	642 Nov 25 j 10:47	0°♎	
	643 Jan 21 j 04:38	0°♏	
retrograde	643 Mar 26 j 09:05	18°♏07'21	
desc. node	643 Apr 25 j 23:39	12°♏32'05	
opposition	643 Apr 29 j 23:18	11°♏11'12	0°-12'-27
greatest brilliancy	643 Apr 15 j 04:44	15°♏40'47	-2.2m
min. Earth dist.	643 May 08 j 10:37	8°♏17'01	0.49094 AU
direct	643 Jun 06 j 22:38	2°♏40'51	
	643 Aug 19 j 20:56	0°♐	
	643 Oct 03 j 18:00	0°♑	
	643 Nov 13 j 13:23	0°♒	
	643 Dec 23 j 14:33	0°♓	
	644 Feb 02 j 08:54	0°♈	
asc. node	644 Feb 23 j 06:34	14°♈59'31	
	644 Mar 15 j 15:15	0°♉	
	644 Apr 28 j 16:30	0°♊	
evening set	644 May 13 j 10:31	9°♊47'38	
	644 Jun 13 j 08:30	0°♋	
conjunction	644 Jul 01 j 21:25	11°♋57'14	1°01'23
minimum elong	644 Jul 01 j 20:20	11°♋55'30	1°01'23
max. Earth dist.	644 Jul 10 j 01:09	17°♋11'07	2.66075 AU
	644 Jul 30 j 02:46	0°♌	
morning rise	644 Aug 16 j 23:50	11°♌22'21	
	644 Sep 15 j 08:27	0°♍	
	644 Nov 01 j 16:45	0°♎	
	644 Dec 19 j 06:45	0°♏	
	645 Feb 06 j 00:12	0°♐	
desc. node	645 Mar 12 j 23:22	20°♐15'55	
	645 Mar 31 j 07:11	0°♑	
retrograde	645 Jun 05 j 18:15	20°♑41'55	
opposition	645 Jul 06 j 01:15	15°♑41'59	-6°-15'-50
greatest brilliancy	645 Jul 06 j 19:54	15°♑29'26	-2.8m
min. Earth dist.	645 Jul 08 j 21:12	14°♑56'21	0.38021 AU
direct	645 Aug 05 j 20:57	10°♑23'18	
	645 Oct 05 j 09:21	0°♒	
	645 Nov 23 j 15:12	0°♓	
	646 Jan 07 j 19:49	0°♈	
asc. node	646 Jan 10 j 04:48	1°♈35'18	
	646 Feb 21 j 21:10	0°♉	
	646 Apr 08 j 19:04	0°♊	
	646 May 25 j 15:01	0°♋	
evening set	646 Jun 23 j 03:17	18°♋05'57	
	646 Jul 11 j 21:38	0°♌	
max. Earth dist.	646 Aug 02 j 09:25	13°♌39'58	2.67290 AU
conjunction	646 Aug 08 j 08:11	17°♌27'34	1°08'44
minimum elong	646 Aug 08 j 08:30	17°♌28'04	1°08'44
	646 Aug 27 j 22:06	0°♍	
morning rise	646 Sep 21 j 19:48	16°♍05'36	
	646 Oct 13 j 02:31	0°♎	
	646 Nov 27 j 04:06	0°♏	
	647 Jan 10 j 03:08	0°♐	
desc. node	647 Jan 28 j 21:56	13°♐01'00	
	647 Feb 22 j 05:16	0°♑	
	647 Apr 06 j 00:06	0°♒	
	647 May 20 j 03:48	0°♓	
	647 Jul 12 j 13:59	0°♈	
retrograde	647 Aug 18 j 16:32	8°♈42'20	
min. Earth dist.	647 Sep 14 j 14:14	3°♈51'05	0.42605 AU
greatest brilliancy	647 Sep 21 j 00:15	1°♈46'23	-2.5m
opposition	647 Sep 22 j 08:18	1°♈20'15	-3°-46'-31
	647 Sep 26 j 12:55	30°℞♓	
direct	647 Oct 23 j 18:04	25°♓17'32	
	647 Nov 21 j 01:52	0°♈	
asc. node	647 Nov 28 j 04:35	2°♈21'37	
	648 Jan 24 j 17:24	0°♉	
	648 Mar 16 j 07:15	0°♊	
	648 May 04 j 19:13	0°♋	
	648 Jun 22 j 08:26	0°♌	
evening set	648 Jul 29 j 12:47	23°♌27'32	
	648 Aug 08 j 17:54	0°♍	
max. Earth dist.	648 Aug 25 j 10:50	10°♍48'25	2.63124 AU
conjunction	648 Sep 13 j 10:46	23°♍16'31	0°49'35
minimum elong	648 Sep 13 j 11:59	23°♍18'31	0°49'33
	648 Sep 23 j 13:32	0°♎	
morning rise	648 Oct 29 j 14:09	24°♎28'01	
	648 Nov 06 j 13:40	0°♏	
desc. node	648 Dec 15 j 21:26	27°♏53'07	
	648 Dec 18 j 19:38	0°♐	
	649 Jan 28 j 14:35	0°♑	
	649 Mar 09 j 10:38	0°♒	
	649 Apr 18 j 02:20	0°♓	
	649 May 28 j 19:57	0°♈	
	649 Jul 12 j 02:58	0°♉	
	649 Sep 10 j 10:17	0°♊	
retrograde	649 Oct 05 j 20:31	4°♊07'58	
asc. node	649 Oct 15 j 03:33	3°♊29'52	
	649 Oct 29 j 21:51	30°℞♉	
min. Earth dist.	649 Nov 06 j 22:05	27°♉08'23	0.55462 AU
opposition	649 Nov 13 j 16:08	24°♉31'08	1°21'44
greatest brilliancy	649 Nov 13 j 03:06	24°♉43'48	-1.8m
direct	649 Dec 19 j 13:32	16°♉24'57	
	650 Feb 11 j 03:35	0°♊	
	650 Apr 11 j 18:46	0°♋	
	650 Jun 02 j 12:57	0°♌	
	650 Jul 21 j 03:07	0°♍	
	650 Sep 05 j 03:43	0°♎	
evening set	650 Sep 06 j 08:58	0°♎49'02	
max. Earth dist.	650 Sep 23 j 11:40	12°♎25'05	2.53918 AU
	650 Oct 18 j 18:04	0°♏	
conjunction	650 Oct 25 j 08:07	4°♏40'17	0°05'19
minimum elong	650 Oct 25 j 08:20	4°♏40'41	0°05'19
behind sun begin	650 Oct 24 j 11:57	4°♏04'24	
behind sun end	650 Oct 26 j 04:44	5°♏16'59	
desc. node	650 Nov 02 j 20:44	10°♏46'29	
	650 Nov 29 j 04:45	0°♐	
morning rise	650 Dec 17 j 03:22	13°♐24'05	
	651 Jan 07 j 23:32	0°♑	
	651 Feb 15 j 18:17	0°♒	
	651 Mar 26 j 08:03	0°♓	
	651 May 04 j 15:20	0°♈	
	651 Jun 14 j 19:16	0°♉	
	651 Jul 29 j 13:37	0°♊	
asc. node	651 Sep 02 j 01:30	20°♊15'54	

	651 Sep 21 j 13:05	0°♋	
retrograde	651 Nov 12 j 18:14	13°♋55'09	
min. Earth dist.	651 Dec 19 j 15:18	5°♋14'50	0.64679 AU
opposition	651 Dec 22 j 20:10	3°♋57'40	3°49'41
greatest brilliancy	651 Dec 22 j 04:48	4°♋13'06	-1.4m
	652 Jan 02 j 04:46	30°℞♊	
direct	652 Jan 30 j 22:09	24°♊41'46	
	652 Mar 02 j 19:19	0°♋	
	652 May 09 j 03:16	0°♌	
	652 Jun 30 j 02:01	0°♍	
	652 Aug 16 j 03:26	0°♎	
desc. node	652 Sep 19 j 19:24	23°♎37'40	
	652 Sep 28 j 20:30	0°♏	
evening set	652 Oct 21 j 12:39	16°♏20'27	
	652 Nov 08 j 23:26	0°♐	
max. Earth dist.	652 Nov 09 j 08:33	0°♐17'05	2.41325 AU
conjunction	652 Dec 17 j 23:46	29°♐47'13	0°-50'-53
minimum elong	652 Dec 17 j 21:19	29°♐42'29	0°50'53
	652 Dec 18 j 06:21	0°♑	
	653 Jan 25 j 13:15	0°♒	
morning rise	653 Feb 22 j 15:58	22°♒07'41	
	653 Mar 04 j 17:13	0°♓	
	653 Apr 12 j 15:35	0°♈	
	653 May 23 j 04:50	0°♉	
	653 Jul 05 j 05:04	0°♊	
asc. node	653 Jul 20 j 01:02	9°♊50'47	
	653 Aug 20 j 21:42	0°♋	
	653 Oct 14 j 08:58	0°♌	
retrograde	653 Dec 16 j 07:32	18°♌00'00	
opposition	654 Jan 25 j 05:56	8°♌23'28	4°34'39
greatest brilliancy	654 Jan 25 j 07:49	8°♌21'35	-1.2m
min. Earth dist.	654 Jan 25 j 21:51	8°♌07'34	0.67671 AU
	654 Feb 19 j 23:08	30°℞♋	
direct	654 Mar 07 j 03:46	28°♋30'53	
	654 Mar 23 j 08:02	0°♌	
	654 Jun 05 j 22:52	0°♍	
	654 Jul 26 j 09:58	0°♎	
desc. node	654 Aug 07 j 18:08	8°♎00'02	
	654 Sep 09 j 02:12	0°♏	
	654 Oct 20 j 08:58	0°♐	
	654 Nov 28 j 12:58	0°♑	
evening set	654 Dec 22 j 07:25	18°♑39'30	
	655 Jan 05 j 16:01	0°♒	
	655 Feb 12 j 18:02	0°♓	
conjunction	655 Feb 27 j 19:27	11°♓42'47	0°-54'-56
minimum elong	655 Feb 27 j 22:22	11°♓48'24	0°54'55
	655 Mar 23 j 16:49	0°♈	
max. Earth dist.	655 Apr 19 j 17:46	20°♈09'27	2.42405 AU
	655 May 03 j 06:23	0°♉	
morning rise	655 May 05 j 14:02	1°♉40'16	
asc. node	655 Jun 07 j 00:57	24°♉32'45	
	655 Jun 14 j 23:35	0°♊	
	655 Jul 30 j 05:57	0°♋	
	655 Sep 16 j 17:29	0°♌	
	655 Nov 10 j 12:14	0°♍	
retrograde	656 Jan 21 j 12:34	21°♍44'07	
opposition	656 Feb 29 j 05:01	12°♍51'24	3°57'04
greatest brilliancy	656 Mar 01 j 00:52	12°♍32'05	-1.4m
min. Earth dist.	656 Mar 04 j 17:16	11°♍06'08	0.64072 AU
direct	656 Apr 10 j 12:23	2°♍50'46	
desc. node	656 Jun 24 j 17:03	27°♍32'03	
	656 Jun 29 j 05:41	0°♎	
	656 Aug 16 j 21:02	0°♏	
	656 Sep 28 j 08:41	0°♐	
	656 Nov 06 j 23:07	0°♑	
	656 Dec 15 j 07:46	0°♒	
	657 Jan 22 j 15:38	0°♓	
evening set	657 Mar 01 j 16:23	29°♓04'12	
	657 Mar 02 j 22:07	0°♈	
	657 Apr 12 j 20:21	0°♉	
asc. node	657 Apr 23 j 23:31	7°♉55'03	
conjunction	657 May 01 j 07:52	13°♉05'12	0°04'36
minimum elong	657 May 01 j 07:34	13°♉04'40	0°04'36
behind sun begin	657 Apr 30 j 08:23	12°♉24'04	
behind sun end	657 May 02 j 06:45	13°♉45'13	
	657 May 25 j 19:27	0°♊	
max. Earth dist.	657 Jun 03 j 13:00	5°♊55'15	2.55401 AU
morning rise	657 Jun 24 j 23:28	20°♊14'11	
	657 Jul 09 j 20:43	0°♋	
	657 Aug 25 j 20:52	0°♌	
	657 Oct 14 j 00:27	0°♍	
	657 Dec 06 j 04:59	0°♎	
	658 Feb 26 j 17:51	0°♏	
retrograde	658 Mar 05 j 05:32	0°♏15'12	
	658 Mar 11 j 13:41	30°℞♎	
opposition	658 Apr 10 j 07:33	22°♎36'37	1°30'31
greatest brilliancy	658 Apr 11 j 00:21	22°♎21'19	-1.9m
min. Earth dist.	658 Apr 18 j 03:10	19°♎46'20	0.54224 AU
desc. node	658 May 12 j 15:24	13°♎41'57	
direct	658 May 19 j 22:08	13°♎20'07	
	658 Jul 15 j 06:16	0°♏	
	658 Sep 02 j 18:49	0°♐	
	658 Oct 14 j 15:16	0°♑	
	658 Nov 23 j 04:29	0°♒	
	659 Jan 01 j 10:12	0°♓	
	659 Feb 10 j 12:55	0°♈	
asc. node	659 Mar 11 j 22:29	21°♈16'42	
	659 Mar 24 j 06:12	0°♉	
evening set	659 Apr 26 j 12:44	22°♉59'59	
	659 May 06 j 21:04	0°♊	
conjunction	659 Jun 17 j 05:26	27°♊22'02	0°51'04
minimum elong	659 Jun 17 j 04:00	27°♊19'42	0°51'04
	659 Jun 21 j 06:29	0°♋	
max. Earth dist.	659 Jul 01 j 11:17	6°♋36'48	2.64117 AU
morning rise	659 Aug 03 j 20:07	28°♋00'24	
	659 Aug 06 j 23:20	0°♌	
	659 Sep 23 j 11:43	0°♍	
	659 Nov 10 j 16:17	0°♎	
	659 Dec 30 j 05:49	0°♏	
	660 Feb 22 j 07:50	0°♐	
desc. node	660 Mar 29 j 15:00	15°♐52'39	
retrograde	660 May 05 j 10:14	23°♐01'29	
opposition	660 Jun 06 j 00:16	17°♐24'43	-3°-57'-42
greatest brilliancy	660 Jun 07 j 07:39	17°♐01'18	-2.6m
min. Earth dist.	660 Jun 12 j 20:23	15°♐22'41	0.41297 AU
direct	660 Jul 09 j 22:50	10°♐49'46	
	660 Sep 06 j 16:09	0°♑	
	660 Oct 24 j 07:50	0°♒	
	660 Dec 06 j 07:30	0°♓	
	661 Jan 17 j 21:48	0°♈	
asc. node	661 Jan 26 j 21:23	6°♈15'24	
	661 Mar 02 j 11:24	0°♉	
	661 Apr 16 j 10:47	0°♊	
	661 Jun 01 j 17:06	0°♋	
evening set	661 Jun 07 j 23:22	4°♋00'53	
	661 Jul 18 j 17:09	0°♌	
conjunction	661 Jul 25 j 01:23	4°♌02'11	1°09'05
minimum elong	661 Jul 25 j 01:09	4°♌01'48	1°09'06
max. Earth dist.	661 Jul 24 j 13:12	3°♌42'47	2.67482 AU

	661 Sep 03 j 18:08	0°♍	
morning rise	661 Sep 07 j 19:05	2°♍35'16	
	661 Oct 20 j 06:50	0°♎	
	661 Dec 05 j 01:56	0°♏	
	662 Jan 19 j 06:23	0°♐	
desc. node	662 Feb 14 j 15:20	17°♐35'48	
	662 Mar 05 j 06:32	0°♑	
	662 Apr 20 j 09:31	0°♒	
	662 Jun 13 j 09:57	0°♓	
retrograde	662 Jul 24 j 06:45	10°♓03'38	
min. Earth dist.	662 Aug 20 j 04:28	5°♓37'03	0.38730 AU
greatest brilliancy	662 Aug 24 j 03:12	4°♓29'08	-2.8m
opposition	662 Aug 25 j 08:40	4°♓07'56	-6°-2'-34
	662 Sep 11 j 14:17	30°℞♒	
direct	662 Sep 24 j 04:30	28°♒56'45	
	662 Oct 06 j 22:56	0°♓	
asc. node	662 Dec 14 j 19:51	28°♓30'34	
	662 Dec 17 j 11:37	0°♈	
	663 Feb 05 j 21:29	0°♉	
	663 Mar 26 j 07:01	0°♊	
	663 May 13 j 10:39	0°♋	
	663 Jun 30 j 08:53	0°♌	
evening set	663 Jul 16 j 02:11	9°♌55'30	
	663 Aug 16 j 13:20	0°♍	
max. Earth dist.	663 Aug 16 j 19:12	0°♍09'26	2.65399 AU
conjunction	663 Aug 30 j 18:14	9°♍10'45	1°00'05
minimum elong	663 Aug 30 j 19:14	9°♍12'23	1°00'04
	663 Oct 01 j 11:12	0°♎	
morning rise	663 Oct 14 j 19:00	8°♎54'07	
	663 Nov 14 j 19:27	0°♏	
	663 Dec 27 j 14:26	0°♐	
desc. node	664 Jan 02 j 13:41	4°♐15'59	
	664 Feb 07 j 01:32	0°♑	
	664 Mar 18 j 15:50	0°♒	
	664 Apr 28 j 05:27	0°♓	
	664 Jun 09 j 12:10	0°♈	
	664 Jul 28 j 20:09	0°♉	
retrograde	664 Sep 18 j 17:20	15°♉23'24	
min. Earth dist.	664 Oct 18 j 14:23	9°♉13'34	0.50495 AU
opposition	664 Oct 26 j 09:11	6°♉19'50	0°-16'-35
greatest brilliancy	664 Nov 04 j 04:14	3°♉14'09	-2.1m
asc. node	664 Oct 31 j 19:09	4°♉22'08	
	664 Nov 17 j 00:48	30°℞♈	
direct	664 Nov 29 j 15:34	28°♈54'52	
	664 Dec 12 j 21:27	0°♉	
	665 Feb 26 j 12:50	0°♊	
	665 Apr 21 j 01:41	0°♋	
	665 Jun 10 j 04:30	0°♌	
	665 Jul 28 j 04:35	0°♍	
evening set	665 Aug 21 j 19:32	15°♍55'08	
max. Earth dist.	665 Sep 11 j 07:06	29°♍28'20	2.58075 AU
	665 Sep 12 j 02:01	0°♎	
conjunction	665 Oct 08 j 02:06	17°♎40'02	0°25'11
minimum elong	665 Oct 08 j 03:02	17°♎41'39	0°25'09
	665 Oct 25 j 19:11	0°♏	
desc. node	665 Nov 19 j 12:19	17°♏36'56	
morning rise	665 Nov 26 j 10:26	22°♏37'56	
	665 Dec 06 j 12:19	0°♐	
	666 Jan 15 j 15:03	0°♑	
	666 Feb 23 j 17:48	0°♒	
	666 Apr 03 j 15:00	0°♓	
	666 May 13 j 06:25	0°♈	
	666 Jun 24 j 01:25	0°♉	
	666 Aug 09 j 18:18	0°♊	
asc. node	666 Sep 18 j 19:02	20°♊16'33	
retrograde	666 Oct 29 j 17:12	29°♊39'30	
min. Earth dist.	666 Dec 03 j 20:03	21°♊35'00	0.61731 AU
opposition	666 Dec 08 j 12:25	19°♊42'53	3°07'17
greatest brilliancy	666 Dec 07 j 17:50	20°♊01'26	-1.5m
direct	667 Jan 15 j 12:16	10°♊49'35	
	667 Mar 23 j 11:39	0°♋	
	667 May 19 j 15:49	0°♌	
	667 Jul 08 j 20:44	0°♍	
	667 Aug 24 j 09:42	0°♎	
evening set	667 Oct 03 j 04:52	27°♎18'02	
desc. node	667 Oct 07 j 11:28	0°♏19'26	
	667 Oct 07 j 00:31	0°♏	
max. Earth dist.	667 Oct 18 j 01:36	7°♏53'11	2.46366 AU
	667 Nov 17 j 05:42	0°♐	
conjunction	667 Nov 25 j 12:44	6°♐12'58	0°-30'-11
minimum elong	667 Nov 25 j 11:05	6°♐09'52	0°30'10
	667 Dec 26 j 16:20	0°♑	
morning rise	668 Jan 25 j 08:03	23°♑06'31	
	668 Feb 03 j 02:54	0°♒	
greatest brilliancy	668 Mar 02 j 15:15	22°♒22'23	1.2m
	668 Mar 12 j 09:39	0°♓	
	668 Apr 20 j 09:55	0°♈	
	668 May 31 j 02:01	0°♉	
	668 Jul 13 j 11:14	0°♊	
asc. node	668 Aug 05 j 17:30	15°♊01'16	
	668 Aug 30 j 12:56	0°♋	
	668 Nov 02 j 06:39	0°♌	
retrograde	668 Dec 02 j 22:41	5°♌12'37	
	668 Dec 31 j 03:09	30°℞♋	
min. Earth dist.	669 Jan 11 j 04:44	25°♋45'49	0.67273 AU
opposition	669 Jan 12 j 01:35	25°♋24'54	4°27'07
greatest brilliancy	669 Jan 11 j 19:50	25°♋30'41	-1.2m
direct	669 Feb 21 j 10:03	15°♋43'40	
	669 Apr 18 j 13:56	0°♌	
	669 Jun 15 j 21:30	0°♍	
	669 Aug 03 j 13:02	0°♎	
desc. node	669 Aug 24 j 10:23	13°♎53'03	
	669 Sep 16 j 17:12	0°♏	
	669 Oct 27 j 21:21	0°♐	
evening set	669 Nov 25 j 23:23	22°♐09'52	
	669 Dec 06 j 01:37	0°♑	
	670 Jan 13 j 05:17	0°♒	
conjunction	670 Jan 29 j 20:02	13°♒07'40	-1°-4'-54
minimum elong	670 Jan 29 j 20:31	13°♒08'38	1°04'55
	670 Feb 20 j 07:04	0°♓	
max. Earth dist.	670 Mar 03 j 20:30	9°♓00'51	2.37720 AU
	670 Mar 31 j 04:26	0°♈	
morning rise	670 Apr 09 j 21:42	7°♈19'46	
	670 May 10 j 16:17	0°♉	
	670 Jun 22 j 09:44	0°♊	
asc. node	670 Jun 23 j 16:17	0°♊52'00	
	670 Aug 06 j 23:34	0°♋	
	670 Sep 25 j 17:58	0°♌	
	670 Nov 26 j 15:15	0°♍	
retrograde	671 Jan 06 j 22:33	8°♍32'56	
	671 Feb 13 j 13:44	30°℞♌	
opposition	671 Feb 15 j 06:05	29°♌20'22	4°21'53
greatest brilliancy	671 Feb 15 j 19:42	29°♌06'56	-1.3m
min. Earth dist.	671 Feb 18 j 06:23	28°♌09'08	0.66257 AU
direct	671 Mar 28 j 14:20	19°♌19'01	
	671 May 14 j 03:32	0°♍	
	671 Jul 11 j 08:41	0°♎	
desc. node	671 Jul 12 j 08:40	0°♎36'05	
	671 Aug 26 j 18:06	0°♏	
	671 Oct 07 j 14:10	0°♐	

	671 Nov 15 j 22:39	0°♉	
	671 Dec 24 j 03:51	0°♒	
	672 Jan 31 j 08:17	0°♓	
evening set	672 Feb 04 j 04:52	3°♓00'09	
	672 Mar 10 j 10:26	0°♈	
conjunction	672 Apr 08 j 23:05	21°♈53'38	0°-19'-47
minimum elong	672 Apr 09 j 00:30	21°♈56'13	0°19'47
	672 Apr 20 j 03:48	0°♉	
asc. node	672 May 10 j 16:15	14°♉34'38	
max. Earth dist.	672 May 20 j 17:14	21°♉34'44	2.50651 AU
	672 Jun 01 j 22:51	0°♊	
morning rise	672 Jun 06 j 22:13	3°♊23'21	
	672 Jul 16 j 23:33	0°♋	
	672 Sep 02 j 08:03	0°♌	
	672 Oct 22 j 19:14	0°♍	
	672 Dec 20 j 10:00	0°♎	
retrograde	673 Feb 14 j 18:42	14°♎25'15	
opposition	673 Mar 24 j 01:49	6°♎12'41	2°44'27
greatest brilliancy	673 Mar 25 j 00:59	5°♎50'49	-1.6m
min. Earth dist.	673 Mar 30 j 18:10	3°♎41'47	0.58745 AU
	673 Apr 10 j 16:43	30°℞♍	
direct	673 May 03 j 16:43	26°♍29'12	
	673 May 28 j 00:58	0°♎	
desc. node	673 May 29 j 08:13	0°♎21'46	
	673 Jul 30 j 12:46	0°♏	
	673 Sep 13 j 12:42	0°♐	
	673 Oct 24 j 01:40	0°♑	
	673 Dec 01 j 22:51	0°♒	
	674 Jan 09 j 16:51	0°♓	
	674 Feb 18 j 09:08	0°♈	
asc. node	674 Mar 28 j 14:14	27°♈47'21	
	674 Mar 31 j 16:54	0°♉	
evening set	674 Apr 06 j 17:45	4°♉16'01	
	674 May 13 j 23:52	0°♊	
conjunction	674 May 31 j 09:09	11°♊40'54	0°36'24
minimum elong	674 May 31 j 07:41	11°♊38'28	0°36'22
max. Earth dist.	674 Jun 21 j 10:40	25°♊35'55	2.61325 AU
	674 Jun 28 j 04:21	0°♋	
morning rise	674 Jul 20 j 03:06	14°♋12'00	
	674 Aug 13 j 21:40	0°♌	
	674 Sep 30 j 20:25	0°♍	
	674 Nov 19 j 07:02	0°♎	
	675 Jan 11 j 08:36	0°♏	
retrograde	675 Apr 08 j 21:01	29°♏53'54	
desc. node	675 Apr 16 j 07:31	29°♏33'24	
opposition	675 May 12 j 11:26	23°♏24'50	-1°-26'-8
greatest brilliancy	675 May 13 j 03:50	23°♏11'20	-2.3m
min. Earth dist.	675 May 20 j 21:50	20°♏38'50	0.46195 AU
direct	675 Jun 18 j 06:33	15°♏29'34	
	675 Aug 07 j 14:08	0°♐	
	675 Sep 25 j 21:11	0°♑	
	675 Nov 06 j 23:22	0°♒	
	675 Dec 17 j 16:59	0°♓	
	676 Jan 27 j 22:21	0°♈	
asc. node	676 Feb 13 j 12:34	11°♈49'07	
	676 Mar 10 j 12:55	0°♉	
	676 Apr 23 j 20:12	0°♊	
evening set	676 May 23 j 01:26	19°♊13'19	
	676 Jun 08 j 16:11	0°♋	
conjunction	676 Jul 10 j 12:15	20°♋26'32	1°05'25
minimum elong	676 Jul 10 j 11:27	20°♋25'15	1°05'26
max. Earth dist.	676 Jul 15 j 10:51	23°♋35'54	2.66820 AU
	676 Jul 25 j 11:45	0°♌	
morning rise	676 Aug 24 j 23:27	19°♌24'07	
	676 Sep 10 j 15:10	0°♍	
	676 Oct 27 j 15:14	0°♎	
	676 Dec 13 j 10:46	0°♏	
	677 Jan 29 j 12:59	0°♐	
desc. node	677 Mar 03 j 06:33	20°♐21'21	
	677 Mar 19 j 07:42	0°♑	
	677 May 16 j 10:52	0°♒	
retrograde	677 Jun 24 j 03:26	8°♒27'27	
opposition	677 Jul 24 j 07:26	3°♒26'27	-6°-51'-48
greatest brilliancy	677 Jul 24 j 08:19	3°♒25'52	-2.9m
min. Earth dist.	677 Jul 24 j 04:39	3°♒28'17	0.37403 AU
	677 Aug 07 j 16:34	30°℞♑	
direct	677 Aug 23 j 03:06	28°♑28'49	
	677 Sep 07 j 10:23	0°♒	
	677 Nov 13 j 15:48	0°♓	
asc. node	677 Dec 31 j 12:30	29°♓52'48	
	677 Dec 31 j 16:58	0°♈	
	678 Feb 16 j 00:04	0°♉	
	678 Apr 03 j 13:59	0°♊	
	678 May 20 j 19:04	0°♋	
evening set	678 Jul 01 j 14:23	26°♋25'00	
	678 Jul 07 j 06:18	0°♌	
max. Earth dist.	678 Aug 07 j 16:27	19°♌58'21	2.66848 AU
conjunction	678 Aug 16 j 11:44	25°♌36'19	1°06'41
minimum elong	678 Aug 16 j 12:20	25°♌37'16	1°06'41
	678 Aug 23 j 08:00	0°♍	
morning rise	678 Sep 30 j 00:25	24°♍28'27	
	678 Oct 08 j 09:57	0°♎	
	678 Nov 22 j 04:48	0°♏	
	679 Jan 04 j 16:33	0°♐	
desc. node	679 Jan 19 j 05:27	10°♐12'48	
	679 Feb 16 j 01:57	0°♑	
	679 Mar 29 j 20:32	0°♒	
	679 May 11 j 03:30	0°♓	
	679 Jun 26 j 09:44	0°♈	
retrograde	679 Aug 31 j 04:53	23°♈23'08	
min. Earth dist.	679 Sep 27 j 23:46	18°♈05'12	0.45324 AU
greatest brilliancy	679 Oct 05 j 03:09	15°♈37'40	-2.4m
opposition	679 Oct 06 j 02:38	15°♈17'17	-2°-23'-57
direct	679 Nov 07 j 14:35	8°♈42'57	
asc. node	679 Nov 18 j 11:54	9°♈28'39	
	680 Jan 15 j 00:08	0°♉	
	680 Mar 09 j 21:57	0°♊	
	680 Apr 29 j 12:02	0°♋	
	680 Jun 17 j 12:32	0°♌	
	680 Aug 04 j 02:50	0°♍	
evening set	680 Aug 06 j 21:43	1°♍47'22	
max. Earth dist.	680 Aug 31 j 09:11	17°♍41'19	2.61546 AU
	680 Sep 18 j 23:19	0°♎	
conjunction	680 Sep 22 j 03:35	2°♎07'37	0°41'41
minimum elong	680 Sep 22 j 04:48	2°♎09'39	0°41'40
	680 Nov 01 j 21:14	0°♏	
morning rise	680 Nov 08 j 04:20	4°♏24'40	
desc. node	680 Dec 06 j 04:22	24°♏22'08	
	680 Dec 13 j 22:47	0°♐	
	681 Jan 23 j 11:41	0°♑	
	681 Mar 04 j 00:43	0°♒	
	681 Apr 12 j 08:14	0°♓	
	681 May 22 j 12:52	0°♈	
	681 Jul 04 j 12:20	0°♉	
	681 Aug 24 j 23:29	0°♊	
asc. node	681 Oct 05 j 10:05	13°♊34'13	
retrograde	681 Oct 14 j 20:40	14°♊10'53	
min. Earth dist.	681 Nov 17 j 01:40	6°♊46'54	0.57917 AU
greatest brilliancy	681 Nov 22 j 10:18	4°♊40'24	-1.7m

opposition	681 Nov 23 j 03:33	4°♊23'25	2°06'50
	681 Dec 05 j 05:43	30°℞♉	
direct	681 Dec 29 j 20:21	25°♉58'27	
	682 Jan 25 j 21:17	0°♊	
	682 Apr 04 j 23:40	0°♋	
	682 May 28 j 04:29	0°♌	
	682 Jul 16 j 06:50	0°♍	
	682 Aug 31 j 11:46	0°♎	
evening set	682 Sep 15 j 17:58	10°♎18'18	
max. Earth dist.	682 Oct 01 j 12:52	21°♎10'50	2.51346 AU
	682 Oct 14 j 02:32	0°♏	
desc. node	682 Oct 24 j 03:01	7°♏07'44	
conjunction	682 Nov 05 j 00:00	15°♏41'31	0°-7'-26
minimum elong	682 Nov 04 j 23:38	15°♏40'51	0°07'27
behind sun begin	682 Nov 04 j 03:41	15°♏04'40	
behind sun end	682 Nov 05 j 19:34	16°♏17'04	
	682 Nov 24 j 11:39	0°♐	
morning rise	682 Dec 30 j 06:57	27°♐01'53	
	683 Jan 03 j 03:46	0°♑	
	683 Feb 10 j 19:34	0°♒	
	683 Mar 21 j 06:32	0°♓	
	683 Apr 29 j 10:21	0°♈	
	683 Jun 09 j 07:53	0°♉	
	683 Jul 23 j 09:09	0°♊	
asc. node	683 Aug 23 j 09:35	19°♊06'01	
	683 Sep 12 j 03:03	0°♋	
retrograde	683 Nov 20 j 12:57	22°♋06'47	
min. Earth dist.	683 Dec 28 j 07:29	13°♋09'02	0.65875 AU
opposition	683 Dec 30 j 16:49	12°♋11'28	4°07'24
greatest brilliancy	683 Dec 30 j 04:20	12°♋24'00	-1.3m
direct	684 Feb 08 j 07:21	2°♋45'23	
	684 May 02 j 01:46	0°♌	
	684 Jun 24 j 16:16	0°♍	
	684 Aug 11 j 05:46	0°♎	
desc. node	684 Sep 10 j 02:33	20°♎11'22	
	684 Sep 24 j 02:40	0°♏	
evening set	684 Nov 02 j 13:42	28°♏44'14	
	684 Nov 04 j 06:12	0°♐	
max. Earth dist.	684 Nov 30 j 10:49	19°♐53'58	2.38801 AU
	684 Dec 13 j 12:09	0°♑	
conjunction	685 Jan 01 j 18:02	15°♑02'46	0°-59'-36
minimum elong	685 Jan 01 j 15:58	14°♑58'43	0°59'37
	685 Jan 20 j 17:38	0°♒	
	685 Feb 27 j 20:28	0°♓	
morning rise	685 Mar 11 j 20:35	9°♓21'25	
	685 Apr 07 j 17:49	0°♈	
	685 May 18 j 05:28	0°♉	
	685 Jun 30 j 01:33	0°♊	
asc. node	685 Jul 10 j 08:21	6°♊54'37	
	685 Aug 15 j 04:28	0°♋	
	685 Oct 06 j 05:19	0°♌	
retrograde	685 Dec 24 j 01:29	25°♌44'01	
opposition	686 Feb 01 j 19:48	16°♌15'02	4°33'22
greatest brilliancy	686 Feb 02 j 01:55	16°♌08'57	-1.2m
min. Earth dist.	686 Feb 03 j 07:35	15°♌39'29	0.67462 AU
direct	686 Mar 14 j 23:07	6°♌18'11	
	686 May 29 j 11:38	0°♍	
	686 Jul 20 j 19:30	0°♎	
desc. node	686 Jul 29 j 01:47	5°♎14'31	
	686 Sep 04 j 00:19	0°♏	
	686 Oct 15 j 11:36	0°♐	
	686 Nov 23 j 16:59	0°♑	
	686 Dec 31 j 20:17	0°♒	
evening set	687 Jan 07 j 01:17	4°♒54'25	
	687 Feb 07 j 22:25	0°♓	

conjunction	687 Mar 15 j 12:34	27°♓26'51	0°-43'-44
minimum elong	687 Mar 15 j 15:30	27°♓32'27	0°43'43
	687 Mar 18 j 21:23	0°♈	
	687 Apr 28 j 11:04	0°♉	
max. Earth dist.	687 May 03 j 22:39	3°♉56'33	2.45390 AU
morning rise	687 May 18 j 13:30	14°♉19'36	
asc. node	687 May 28 j 06:51	21°♉07'39	
	687 Jun 10 j 03:40	0°♊	
	687 Jul 25 j 06:10	0°♋	
	687 Sep 11 j 04:30	0°♌	
	687 Nov 02 j 19:41	0°♍	
	688 Jan 28 j 06:28	0°♎	
retrograde	688 Jan 30 j 07:34	0°♎01'32	
	688 Feb 01 j 08:15	30°℞♍	
opposition	688 Mar 08 j 13:48	21°♍21'36	3°35'23
greatest brilliancy	688 Mar 09 j 11:52	21°♍00'19	-1.4m
min. Earth dist.	688 Mar 13 j 21:02	19°♍19'04	0.62447 AU
direct	688 Apr 18 j 17:52	11°♍24'40	
desc. node	688 Jun 15 j 00:01	27°♍20'08	
	688 Jun 20 j 11:09	0°♎	
	688 Aug 10 j 16:47	0°♏	
	688 Sep 22 j 21:00	0°♐	
	688 Nov 01 j 18:10	0°♑	
	688 Dec 10 j 06:22	0°♒	
	689 Jan 17 j 16:52	0°♓	
	689 Feb 26 j 01:35	0°♈	
evening set	689 Mar 15 j 10:55	12°♈53'25	
	689 Apr 08 j 01:44	0°♉	
asc. node	689 Apr 14 j 06:44	4°♉25'10	
conjunction	689 May 12 j 20:00	24°♉21'01	0°17'20
minimum elong	689 May 12 j 19:04	24°♉19'25	0°17'20
	689 May 21 j 02:16	0°♊	
max. Earth dist.	689 Jun 10 j 14:37	13°♊49'27	2.57706 AU
morning rise	689 Jul 04 j 12:12	29°♊35'29	
	689 Jul 05 j 03:14	0°♋	
	689 Aug 20 j 23:25	0°♌	
	689 Oct 08 j 13:45	0°♍	
	689 Nov 28 j 23:22	0°♎	
	690 Jan 29 j 02:11	0°♏	
retrograde	690 Mar 16 j 18:46	10°♏32'48	
opposition	690 Apr 21 j 02:28	3°♏16'36	0°35'19
greatest brilliancy	690 Apr 21 j 10:04	3°♏09'52	-2.0m
min. Earth dist.	690 Apr 29 j 09:37	0°♏21'09	0.51441 AU
	690 Apr 30 j 10:27	30°℞♎	
desc. node	690 May 02 j 22:49	29°♎10'00	
direct	690 May 29 j 22:05	24°♎22'58	
	690 Jun 29 j 06:03	0°♏	
	690 Aug 25 j 20:30	0°♐	
	690 Oct 08 j 03:36	0°♑	
	690 Nov 17 j 07:35	0°♒	
	690 Dec 26 j 22:42	0°♓	
	691 Feb 05 j 08:34	0°♈	
asc. node	691 Mar 02 j 05:44	17°♈56'41	
	691 Mar 19 j 07:29	0°♉	
	691 May 02 j 02:42	0°♊	
evening set	691 May 06 j 22:25	3°♊13'46	
	691 Jun 16 j 14:33	0°♋	
conjunction	691 Jun 26 j 07:30	6°♋17'09	0°57'35
minimum elong	691 Jun 26 j 06:15	6°♋15'07	0°57'34
max. Earth dist.	691 Jul 07 j 01:46	13°♋13'15	2.65296 AU
	691 Aug 02 j 07:21	0°♌	
morning rise	691 Aug 12 j 00:21	6°♌10'32	
	691 Sep 18 j 15:28	0°♍	
	691 Nov 05 j 07:41	0°♎	
	691 Dec 23 j 15:38	0°♏	

	692 Feb 12 j 03:28	0°♐	
desc. node	692 Mar 19 j 22:38	19°♐36'19	
	692 Apr 12 j 18:16	0°♑	
retrograde	692 May 22 j 13:45	8°♑26'28	
opposition	692 Jun 22 j 08:21	3°♑14'08	-5°-22'-40
greatest brilliancy	692 Jun 23 j 12:45	2°♑54'10	-2.7m
min. Earth dist.	692 Jun 27 j 06:31	1°♑51'27	0.39197 AU
	692 Jul 04 j 10:42	30°℞♐	
direct	692 Jul 24 j 11:10	27°♐24'55	
	692 Aug 13 j 04:55	0°♑	
	692 Oct 14 j 09:22	0°♒	
	692 Nov 28 j 22:11	0°♓	
	693 Jan 11 j 17:22	0°♈	
asc. node	693 Jan 17 j 04:00	3°♈43'19	
	693 Feb 24 j 23:47	0°♉	
	693 Apr 11 j 10:01	0°♊	
	693 May 27 j 22:51	0°♋	
evening set	693 Jun 16 j 17:31	12°♋36'34	
	693 Jul 14 j 02:05	0°♌	
max. Earth dist.	693 Jul 29 j 18:35	9°♌58'35	2.67480 AU
conjunction	693 Aug 02 j 06:30	12°♌12'10	1°09'21
minimum elong	693 Aug 02 j 06:34	12°♌12'18	1°09'21
	693 Aug 30 j 02:53	0°♍	
morning rise	693 Sep 15 j 19:25	10°♍44'24	
	693 Oct 15 j 11:06	0°♎	
	693 Nov 29 j 20:28	0°♏	
	694 Jan 13 j 07:51	0°♐	
desc. node	694 Feb 04 j 21:17	15°♐24'24	
	694 Feb 26 j 03:48	0°♑	
	694 Apr 11 j 02:03	0°♒	
	694 May 27 j 15:34	0°♓	
retrograde	694 Aug 08 j 05:12	27°♓07'32	
min. Earth dist.	694 Sep 03 j 18:01	22°♓32'27	0.40642 AU
greatest brilliancy	694 Sep 09 j 06:37	20°♓50'56	-2.7m
opposition	694 Sep 10 j 16:46	20°♓24'38	-4°-49'-54
direct	694 Oct 11 j 06:50	14°♓47'01	
asc. node	694 Dec 05 j 03:45	0°♈03'46	
	694 Dec 05 j 00:31	0°♈	
	695 Jan 29 j 14:07	0°♉	
	695 Mar 20 j 12:53	0°♊	
	695 May 08 j 09:03	0°♋	
	695 Jun 25 j 15:21	0°♌	
evening set	695 Jul 24 j 08:21	18°♌06'27	
	695 Aug 11 j 23:05	0°♍	
max. Earth dist.	695 Aug 22 j 07:10	6°♍40'07	2.64239 AU
conjunction	695 Sep 08 j 02:19	17°♍36'37	0°54'26
minimum elong	695 Sep 08 j 03:28	17°♍38'31	0°54'26
	695 Sep 26 j 20:22	0°♎	
morning rise	695 Oct 23 j 15:58	18°♎03'59	
	695 Nov 10 j 00:50	0°♏	
	695 Dec 22 j 13:03	0°♐	
desc. node	695 Dec 23 j 20:23	0°♐56'19	
	696 Feb 01 j 15:20	0°♑	
	696 Mar 12 j 18:54	0°♒	
	696 Apr 21 j 18:51	0°♓	
	696 Jun 02 j 00:17	0°♈	
	696 Jul 17 j 16:04	0°♉	
retrograde	696 Sep 28 j 16:19	26°♉48'05	
asc. node	696 Oct 22 j 02:50	22°♉51'38	
min. Earth dist.	696 Oct 29 j 19:07	20°♉10'22	0.53306 AU
opposition	696 Nov 06 j 01:50	17°♉23'30	0°43'26
greatest brilliancy	696 Nov 05 j 17:57	17°♉31'02	-1.9m
direct	696 Dec 11 j 06:08	9°♉34'43	
	697 Feb 17 j 15:09	0°♊	
	697 Apr 15 j 02:26	0°♋	
	697 Jun 05 j 02:40	0°♌	
	697 Jul 23 j 11:24	0°♍	
evening set	697 Aug 30 j 13:44	24°♍43'46	
	697 Sep 07 j 11:41	0°♎	
max. Earth dist.	697 Sep 18 j 01:03	7°♎06'24	2.55870 AU
conjunction	697 Oct 17 j 16:28	27°♎32'27	0°14'07
minimum elong	697 Oct 17 j 17:04	27°♎33'30	0°14'06
behind sun begin	697 Oct 17 j 06:39	27°♎15'14	
behind sun end	697 Oct 18 j 03:29	27°♎51'46	
	697 Oct 21 j 04:26	0°♏	
desc. node	697 Nov 09 j 20:11	14°♏00'08	
	697 Dec 01 j 18:51	0°♐	
morning rise	697 Dec 07 j 19:00	4°♐26'30	
	698 Jan 10 j 17:41	0°♑	
	698 Feb 18 j 15:55	0°♒	
	698 Mar 29 j 08:28	0°♓	
	698 May 07 j 18:05	0°♈	
	698 Jun 18 j 01:52	0°♉	
	698 Aug 02 j 09:33	0°♊	
asc. node	698 Sep 09 j 00:44	21°♊07'47	
	698 Sep 29 j 00:51	0°♋	
retrograde	698 Nov 06 j 19:50	8°♋23'40	
	698 Dec 12 j 21:55	30°℞♊	
min. Earth dist.	698 Dec 12 j 22:57	29°♊58'58	0.63489 AU
opposition	698 Dec 16 j 20:09	28°♊25'39	3°34'02
greatest brilliancy	698 Dec 16 j 02:50	28°♊42'59	-1.4m
direct	699 Jan 24 j 11:50	19°♊19'12	
	699 Mar 12 j 18:29	0°♋	
	699 May 13 j 13:11	0°♌	
	699 Jul 03 j 17:57	0°♍	
	699 Aug 19 j 15:09	0°♎	
desc. node	699 Sep 27 j 18:54	26°♎46'26	
	699 Oct 02 j 08:34	0°♏	
evening set	699 Oct 13 j 20:48	8°♏13'00	
max. Earth dist.	699 Oct 29 j 20:06	19°♏49'45	2.43565 AU
	699 Nov 12 j 13:38	0°♐	
conjunction	699 Dec 08 j 08:11	19°♐30'33	0°-42'-31
minimum elong	699 Dec 08 j 05:56	19°♐26'14	0°42'31
	699 Dec 21 j 22:59	0°♑	
	700 Jan 29 j 07:39	0°♒	
morning rise	700 Feb 10 j 11:57	9°♒35'01	
	700 Mar 07 j 12:29	0°♓	
	700 Apr 15 j 10:47	0°♈	
	700 May 25 j 23:35	0°♉	
	700 Jul 08 j 01:20	0°♊	
asc. node	700 Jul 27 j 00:13	12°♊28'41	
	700 Aug 24 j 02:58	0°♋	
	700 Oct 19 j 21:24	0°♌	
retrograde	700 Dec 10 j 14:23	13°♌01'55	
opposition	701 Jan 19 j 15:47	3°♌19'47	4°32'54
greatest brilliancy	701 Jan 19 j 14:08	3°♌21'26	-1.2m
min. Earth dist.	701 Jan 19 j 14:58	3°♌20'36	0.67627 AU
	701 Jan 28 j 04:36	30°℞♋	
direct	701 Mar 01 j 08:50	23°♋31'50	
	701 Apr 05 j 23:21	0°♌	
	701 Jun 09 j 14:34	0°♍	
	701 Jul 29 j 07:04	0°♎	
desc. node	701 Aug 14 j 17:18	10°♎45'43	
	701 Sep 11 j 19:20	0°♏	
	701 Oct 23 j 02:05	0°♐	
	701 Dec 01 j 06:57	0°♑	
evening set	701 Dec 10 j 11:14	7°♑10'27	
	702 Jan 08 j 10:23	0°♒	
conjunction	702 Feb 15 j 04:45	29°♒45'51	-1°-1'-1

minimum elong	702 Feb 15 j 06:55	29°♒50'06	1°01'02
	702 Feb 15 j 11:59	0°♓	
	702 Mar 26 j 09:22	0°♈	
max. Earth dist.	702 Apr 05 j 05:43	7°♈25'43	2.40086 AU
morning rise	702 Apr 24 j 20:33	21°♈58'51	
	702 May 05 j 20:48	0°♉	
asc. node	702 Jun 14 j 00:17	27°♉35'48	
	702 Jun 17 j 12:29	0°♊	
	702 Aug 01 j 19:44	0°♋	
	702 Sep 19 j 16:27	0°♌	
	702 Nov 15 j 10:28	0°♍	
retrograde	703 Jan 15 j 04:04	16°♍29'50	
opposition	703 Feb 23 j 04:00	7°♍27'35	4°08'54
greatest brilliancy	703 Feb 23 j 21:11	7°♍10'46	-1.3m
min. Earth dist.	703 Feb 27 j 00:05	5°♍57'32	0.65181 AU
	703 Mar 16 j 16:26	30°℞♌	
direct	703 Apr 05 j 12:55	27°♌25'57	
	703 Apr 26 j 18:23	0°♍	
desc. node	703 Jul 02 j 16:14	28°♍55'40	
	703 Jul 04 j 13:15	0°♎	
	703 Aug 21 j 04:27	0°♏	
	703 Oct 02 j 10:01	0°♐	
	703 Nov 10 j 22:23	0°♑	
	703 Dec 19 j 05:23	0°♒	
	704 Jan 26 j 11:11	0°♓	
evening set	704 Feb 19 j 10:32	18°♓29'35	
	704 Mar 05 j 14:48	0°♈	
	704 Apr 15 j 09:29	0°♉	
conjunction	704 Apr 21 j 23:45	4°♉43'05	0°-5'-38
minimum elong	704 Apr 22 j 00:07	4°♉43'45	0°05'38
behind sun begin	704 Apr 21 j 00:37	4°♉01'51	
behind sun end	704 Apr 22 j 23:38	5°♉25'36	
asc. node	704 Apr 30 j 22:48	11°♉04'09	
	704 May 28 j 05:25	0°♊	
max. Earth dist.	704 May 29 j 01:19	0°♊34'00	2.53358 AU
morning rise	704 Jun 17 j 10:43	13°♊39'51	
	704 Jul 12 j 04:49	0°♋	
	704 Aug 28 j 06:56	0°♌	
	704 Oct 16 j 20:58	0°♍	
	704 Dec 10 j 17:28	0°♎	
retrograde	705 Feb 24 j 23:05	23°♎41'37	
opposition	705 Apr 02 j 15:24	15°♎46'47	2°04'43
greatest brilliancy	705 Apr 03 j 11:56	15°♎27'46	-1.7m
min. Earth dist.	705 Apr 10 j 00:10	13°♎03'35	0.56349 AU
direct	705 May 12 j 18:51	6°♎16'20	
desc. node	705 May 19 j 14:57	6°♎34'29	
	705 Jul 21 j 22:37	0°♏	
	705 Sep 07 j 01:59	0°♐	
	705 Oct 18 j 07:37	0°♑	
	705 Nov 26 j 12:57	0°♒	
	706 Jan 04 j 12:24	0°♓	
	706 Feb 13 j 09:11	0°♈	
asc. node	706 Mar 18 j 21:32	24°♈20'41	
	706 Mar 26 j 20:37	0°♉	
evening set	706 Apr 18 j 05:33	15°♉37'42	
	706 May 09 j 06:35	0°♊	
conjunction	706 Jun 10 j 03:46	21°♊15'01	0°45'25
minimum elong	706 Jun 10 j 02:16	21°♊12'33	0°45'24
	706 Jun 23 j 12:30	0°♋	
max. Earth dist.	706 Jun 27 j 09:35	2°♋31'24	2.62966 AU
morning rise	706 Jul 28 j 15:23	22°♋38'29	
	706 Aug 09 j 04:40	0°♌	
	706 Sep 25 j 20:37	0°♍	
	706 Nov 13 j 12:14	0°♎	
	707 Jan 03 j 06:43	0°♏	
	707 Mar 02 j 23:48	0°♐	
desc. node	707 Apr 06 j 13:58	11°♐10'47	
retrograde	707 Apr 23 j 21:17	12°♐54'02	
opposition	707 May 26 j 08:09	6°♐54'08	-2°-50'00
greatest brilliancy	707 May 27 j 11:38	6°♐32'37	-2.5m
min. Earth dist.	707 Jun 03 j 03:21	4°♐28'05	0.43372 AU
	707 Jun 23 j 23:28	30°℞♏	
direct	707 Jun 30 j 15:52	29°♏41'21	
	707 Jul 07 j 07:53	0°♐	
	707 Sep 16 j 05:15	0°♑	
	707 Oct 30 j 15:39	0°♒	
	707 Dec 11 j 10:15	0°♓	
	708 Jan 22 j 07:16	0°♈	
asc. node	708 Feb 03 j 20:38	8°♈51'24	
	708 Mar 05 j 08:27	0°♉	
	708 Apr 18 j 23:08	0°♊	
evening set	708 Jun 01 j 06:14	28°♊14'34	
	708 Jun 03 j 23:40	0°♋	
conjunction	708 Jul 18 j 21:15	28°♋43'35	1°08'02
minimum elong	708 Jul 18 j 20:46	28°♋42'49	1°08'02
	708 Jul 20 j 21:13	0°♌	
max. Earth dist.	708 Jul 20 j 18:23	29°♋55'30	2.67293 AU
morning rise	708 Sep 01 j 21:22	27°♌23'58	
	708 Sep 05 j 23:09	0°♍	
	708 Oct 22 j 16:45	0°♎	
	708 Dec 07 j 22:08	0°♏	
	709 Jan 22 j 20:15	0°♐	
desc. node	709 Feb 21 j 14:21	19°♐21'21	
	709 Mar 10 j 03:37	0°♑	
	709 Apr 28 j 04:38	0°♒	
retrograde	709 Jul 11 j 15:09	26°♒49'07	
min. Earth dist.	709 Aug 08 j 12:35	22°♒16'55	0.37741 AU
opposition	709 Aug 11 j 16:01	21°♒25'18	-6°-40'-41
greatest brilliancy	709 Aug 10 j 21:38	21°♒37'55	-2.8m
direct	709 Sep 10 j 05:57	16°♒27'36	
	709 Oct 30 j 05:16	0°♓	
asc. node	709 Dec 21 j 19:02	28°♓57'55	
	709 Dec 23 j 12:04	0°♈	
	710 Feb 09 j 17:05	0°♉	
	710 Mar 29 j 04:41	0°♊	
	710 May 15 j 21:08	0°♋	
	710 Jul 02 j 14:16	0°♌	
evening set	710 Jul 09 j 22:19	4°♌38'04	
max. Earth dist.	710 Aug 13 j 00:20	26°♌19'23	2.66154 AU
	710 Aug 18 j 17:49	0°♍	
conjunction	710 Aug 24 j 15:10	3°♍47'34	1°03'18
minimum elong	710 Aug 24 j 16:00	3°♍48'56	1°03'18
	710 Oct 03 j 18:02	0°♎	
morning rise	710 Oct 08 j 08:43	3°♎03'30	
	710 Nov 17 j 07:43	0°♏	
	710 Dec 30 j 10:24	0°♐	
desc. node	711 Jan 09 j 12:51	7°♐09'54	
	711 Feb 10 j 07:16	0°♑	
	711 Mar 23 j 08:37	0°♒	
	711 May 03 j 12:37	0°♓	
	711 Jun 15 j 22:38	0°♈	
	711 Aug 10 j 04:25	0°♉	
retrograde	711 Sep 11 j 15:02	6°♉46'03	
min. Earth dist.	711 Oct 10 j 13:17	0°♉59'34	0.48162 AU
	711 Oct 13 j 08:01	30°℞♈	
opposition	711 Oct 18 j 14:34	28°♈04'47	-1°-7'-31
greatest brilliancy	711 Oct 18 j 02:31	28°♈15'43	-2.2m
asc. node	711 Nov 08 j 18:01	22°♈03'47	
direct	711 Nov 21 j 01:36	21°♈01'28	
	712 Jan 01 j 06:58	0°♉	

	712 Mar 02 j 21:00	0°♊	
	712 Apr 23 j 23:20	0°♋	
	712 Jun 12 j 14:24	0°♌	
	712 Jul 30 j 10:51	0°♍	
evening set	712 Aug 15 j 08:53	10°♍15'09	
max. Earth dist.	712 Sep 06 j 12:11	24°♍46'08	2.59727 AU
	712 Sep 14 j 08:45	0°♎	
conjunction	712 Oct 01 j 02:23	11°♎16'59	0°32'34
minimum elong	712 Oct 01 j 03:29	11°♎18'51	0°32'33
	712 Oct 28 j 05:09	0°♏	
morning rise	712 Nov 18 j 06:52	14°♏55'30	
desc. node	712 Nov 26 j 11:33	20°♏49'04	
	712 Dec 09 j 02:48	0°♐	
	713 Jan 18 j 10:42	0°♑	
	713 Feb 26 j 18:06	0°♒	
	713 Apr 06 j 19:17	0°♓	
	713 May 16 j 14:59	0°♈	
	713 Jun 27 j 18:04	0°♉	
	713 Aug 14 j 17:49	0°♊	
asc. node	713 Sep 25 j 17:43	18°♊57'05	
retrograde	713 Oct 23 j 11:31	23°♊39'34	
min. Earth dist.	713 Nov 26 j 18:19	15°♊53'00	0.60125 AU
greatest brilliancy	713 Dec 01 j 07:40	14°♊04'34	-1.6m
opposition	713 Dec 02 j 02:34	13°♊45'48	2°44'30
direct	714 Jan 08 j 13:50	5°♊04'26	
	714 Mar 28 j 07:45	0°♋	
	714 May 22 j 14:24	0°♌	
	714 Jul 11 j 08:27	0°♍	
	714 Aug 26 j 19:06	0°♎	
evening set	714 Sep 25 j 11:30	20°♎11'51	
	714 Oct 09 j 11:16	0°♏	
max. Earth dist.	714 Oct 10 j 07:56	0°♏36'35	2.48643 AU
desc. node	714 Oct 14 j 10:39	3°♏31'49	
conjunction	714 Nov 16 j 06:59	27°♏23'51	0°-20'-26
minimum elong	714 Nov 16 j 05:54	27°♏21'50	0°20'26
	714 Nov 19 j 19:08	0°♐	
	714 Dec 29 j 08:55	0°♑	
morning rise	715 Jan 13 j 11:45	11°♑42'26	
	715 Feb 05 j 21:58	0°♒	
	715 Mar 16 j 06:13	0°♓	
	715 Apr 24 j 07:15	0°♈	
	715 Jun 04 j 00:01	0°♉	
	715 Jul 17 j 13:06	0°♊	
asc. node	715 Aug 13 j 16:42	17°♊16'07	
	715 Sep 04 j 08:55	0°♋	
	715 Nov 23 j 13:46	0°♌	
retrograde	715 Nov 28 j 05:56	0°♌08'26	
	715 Dec 02 j 20:18	30°℞♋	
min. Earth dist.	716 Jan 05 j 20:50	20°♋54'21	0.66772 AU
opposition	716 Jan 07 j 10:16	20°♋16'49	4°20'29
greatest brilliancy	716 Jan 07 j 01:19	20°♋25'48	-1.3m
direct	716 Feb 16 j 11:54	10°♋41'54	
	716 Apr 23 j 22:20	0°♌	
	716 Jun 18 j 23:53	0°♍	
	716 Aug 06 j 05:12	0°♎	
desc. node	716 Aug 31 j 09:26	16°♎50'34	
	716 Sep 19 j 07:47	0°♏	
	716 Oct 30 j 12:49	0°♐	
evening set	716 Nov 15 j 09:50	11°♐59'38	
	716 Dec 08 j 18:39	0°♑	
max. Earth dist.	717 Jan 09 j 14:28	24°♑58'20	2.37209 AU
	717 Jan 15 j 23:16	0°♒	
conjunction	717 Jan 17 j 06:49	1°♒02'18	-1°-4'-25
minimum elong	717 Jan 17 j 05:58	1°♒00'39	1°04'26
	717 Feb 23 j 01:03	0°♓	
morning rise	717 Mar 28 j 12:47	25°♓55'01	
	717 Apr 02 j 21:33	0°♈	
	717 May 13 j 07:55	0°♉	
	717 Jun 25 j 00:39	0°♊	
asc. node	717 Jun 30 j 15:21	3°♊48'20	
	717 Aug 09 j 17:20	0°♋	
	717 Sep 29 j 04:04	0°♌	
	717 Dec 06 j 16:26	0°♍	
retrograde	717 Dec 31 j 22:46	3°♍31'07	
	718 Jan 24 j 06:57	30°℞♌	
opposition	718 Feb 09 j 12:00	24°♌10'40	4°28'00
greatest brilliancy	718 Feb 09 j 22:19	24°♌00'27	-1.2m
min. Earth dist.	718 Feb 11 j 19:55	23°♌15'22	0.66920 AU
direct	718 Mar 22 j 19:13	14°♌10'50	
	718 May 20 j 13:38	0°♍	
	718 Jul 14 j 20:16	0°♎	
desc. node	718 Jul 19 j 07:44	2°♎45'34	
	718 Aug 29 j 18:15	0°♏	
	718 Oct 10 j 11:29	0°♐	
	718 Nov 18 j 19:24	0°♑	
	718 Dec 26 j 23:56	0°♒	
greatest brilliancy	718 Dec 26 j 13:30	29°♑39'23	1.2m
evening set	719 Jan 22 j 23:37	21°♒16'30	
	719 Feb 03 j 02:56	0°♓	
	719 Mar 14 j 02:51	0°♈	
conjunction	719 Mar 30 j 06:15	12°♈05'44	0°-30'-26
minimum elong	719 Mar 30 j 08:28	12°♈09'50	0°30'25
	719 Apr 23 j 17:16	0°♉	
max. Earth dist.	719 May 14 j 19:02	15°♉00'26	2.48341 AU
asc. node	719 May 18 j 15:13	17°♉42'04	
morning rise	719 May 30 j 10:36	25°♉54'15	
	719 Jun 05 j 09:40	0°♊	
	719 Jul 20 j 09:25	0°♋	
	719 Sep 05 j 21:44	0°♌	
	719 Oct 27 j 01:39	0°♍	
	719 Dec 28 j 20:36	0°♎	
retrograde	720 Feb 08 j 11:45	8°♎33'47	
opposition	720 Mar 17 j 06:21	0°♎08'07	3°08'01
	720 Mar 17 j 14:52	30°℞♍	
greatest brilliancy	720 Mar 18 j 05:28	29°♍46'03	-1.5m
min. Earth dist.	720 Mar 23 j 08:30	27°♍49'06	0.60511 AU
direct	720 Apr 27 j 04:34	20°♍17'22	
desc. node	720 Jun 05 j 07:22	28°♍35'58	
	720 Jun 08 j 20:47	0°♎	
	720 Aug 03 j 23:21	0°♏	
	720 Sep 17 j 02:46	0°♐	
	720 Oct 27 j 08:51	0°♑	
	720 Dec 05 j 01:48	0°♒	
	721 Jan 12 j 15:44	0°♓	
	721 Feb 21 j 03:41	0°♈	
evening set	721 Mar 28 j 10:04	25°♈48'28	
	721 Apr 03 j 06:46	0°♉	
asc. node	721 Apr 04 j 13:26	0°♉54'37	
	721 May 16 j 09:32	0°♊	
conjunction	721 May 23 j 15:07	4°♊53'55	0°28'50
minimum elong	721 May 23 j 13:47	4°♊51'42	0°28'50
max. Earth dist.	721 Jun 17 j 02:35	21°♊13'55	2.59813 AU
	721 Jun 30 j 11:11	0°♋	
morning rise	721 Jul 13 j 13:46	8°♋30'49	
	721 Aug 16 j 04:41	0°♌	
	721 Oct 03 j 08:42	0°♍	
	721 Nov 22 j 12:01	0°♎	
	722 Jan 16 j 22:36	0°♏	
retrograde	722 Mar 29 j 08:08	21°♏33'30	

desc. node	722 Apr 23 j 06:45	17°♏44'41	
opposition	722 May 02 j 17:56	14°♏42'19	0°-29'-53
greatest brilliancy	722 May 03 j 00:02	14°♏37'07	-2.2m
min. Earth dist.	722 May 11 j 06:48	11°♏48'12	0.48556 AU
direct	722 Jun 09 j 14:04	6°♏17'43	
	722 Aug 16 j 05:01	0°♐	
	722 Oct 01 j 00:37	0°♑	
	722 Nov 11 j 02:35	0°♒	
	722 Dec 21 j 06:03	0°♓	
	723 Jan 31 j 00:53	0°♈	
asc. node	723 Feb 20 j 11:33	14°♈40'14	
	723 Mar 14 j 06:47	0°♉	
	723 Apr 27 j 07:16	0°♊	
evening set	723 May 16 j 21:34	12°♊59'49	
	723 Jun 11 j 22:33	0°♋	
conjunction	723 Jul 05 j 02:51	14°♋56'23	1°02'39
minimum elong	723 Jul 05 j 01:51	14°♋54'46	1°02'38
max. Earth dist.	723 Jul 12 j 13:08	19°♋42'00	2.66251 AU
	723 Jul 28 j 16:19	0°♌	
morning rise	723 Aug 20 j 01:23	14°♌14'13	
	723 Sep 13 j 21:20	0°♍	
	723 Oct 31 j 03:58	0°♎	
	723 Dec 17 j 13:51	0°♏	
	724 Feb 03 j 21:03	0°♐	
desc. node	724 Mar 10 j 05:37	20°♐53'35	
	724 Mar 26 j 17:36	0°♑	
retrograde	724 Jun 09 j 19:35	25°♑16'23	
opposition	724 Jul 09 j 23:01	20°♑17'50	-6°-27'-29
greatest brilliancy	724 Jul 10 j 15:10	20°♑07'05	-2.8m
min. Earth dist.	724 Jul 12 j 07:42	19°♑40'06	0.37839 AU
direct	724 Aug 09 j 12:32	15°♑04'37	
	724 Sep 30 j 04:33	0°♒	
	724 Nov 20 j 09:42	0°♓	
	725 Jan 05 j 01:45	0°♈	
asc. node	725 Jan 07 j 11:24	1°♈35'50	
	725 Feb 19 j 07:16	0°♉	
	725 Apr 06 j 06:45	0°♊	
	725 May 23 j 03:28	0°♋	
evening set	725 Jun 25 j 07:35	21°♋02'25	
	725 Jul 09 j 10:52	0°♌	
max. Earth dist.	725 Aug 04 j 01:18	16°♌16'23	2.67243 AU
conjunction	725 Aug 10 j 10:19	20°♌20'30	1°08'16
minimum elong	725 Aug 10 j 10:42	20°♌21'07	1°08'16
	725 Aug 25 j 12:16	0°♍	
morning rise	725 Sep 23 j 21:29	18°♍59'37	
	725 Oct 10 j 17:25	0°♎	
	725 Nov 24 j 19:00	0°♏	
	726 Jan 07 j 16:53	0°♐	
desc. node	726 Jan 26 j 04:36	12°♐50'18	
	726 Feb 19 j 16:18	0°♑	
	726 Apr 03 j 05:35	0°♒	
	726 May 16 j 19:50	0°♓	
	726 Jul 06 j 07:53	0°♈	
retrograde	726 Aug 21 j 17:27	12°♈56'35	
min. Earth dist.	726 Sep 17 j 18:39	7°♈59'55	0.43100 AU
greatest brilliancy	726 Sep 24 j 08:32	5°♈50'20	-2.5m
opposition	726 Sep 25 j 14:42	5°♈25'21	-3°-26'-32
	726 Oct 16 j 20:20	30°℞♓	
direct	726 Oct 27 j 06:32	29°♓16'15	
	726 Nov 06 j 21:18	0°♈	
asc. node	726 Nov 25 j 11:13	4°♈15'13	
	727 Jan 21 j 03:16	0°♉	
	727 Mar 14 j 10:07	0°♊	
	727 May 03 j 03:49	0°♋	
	727 Jun 20 j 20:05	0°♌	
evening set	727 Aug 01 j 15:56	26°♌22'23	
	727 Aug 07 j 07:55	0°♍	
max. Earth dist.	727 Aug 28 j 01:10	13°♍23'56	2.62855 AU
conjunction	727 Sep 16 j 14:46	26°♍15'48	0°47'29
minimum elong	727 Sep 16 j 15:59	26°♍17'49	0°47'29
	727 Sep 22 j 05:38	0°♎	
morning rise	727 Nov 01 j 21:30	27°♎37'50	
	727 Nov 05 j 07:28	0°♏	
desc. node	727 Dec 14 j 03:38	27°♏30'25	
	727 Dec 17 j 14:28	0°♐	
	728 Jan 27 j 09:41	0°♑	
	728 Mar 07 j 05:01	0°♒	
	728 Apr 15 j 18:35	0°♓	
	728 May 26 j 07:18	0°♈	
	728 Jul 09 j 01:08	0°♉	
	728 Sep 03 j 03:14	0°♊	
retrograde	728 Oct 08 j 02:05	7°♊25'24	
asc. node	728 Oct 12 j 09:14	7°♊17'23	
min. Earth dist.	728 Nov 09 j 09:00	0°♊21'58	0.55937 AU
	728 Nov 10 j 07:52	30°℞♉	
greatest brilliancy	728 Nov 15 j 10:37	28°♉00'26	-1.8m
opposition	728 Nov 16 j 01:18	27°♉46'09	1°34'50
direct	728 Dec 22 j 02:54	19°♉36'23	
	729 Feb 05 j 22:22	0°♊	
	729 Apr 08 j 15:46	0°♋	
	729 May 30 j 20:26	0°♌	
	729 Jul 18 j 15:40	0°♍	
	729 Sep 02 j 19:40	0°♎	
evening set	729 Sep 08 j 16:17	3°♎55'44	
max. Earth dist.	729 Sep 25 j 11:37	15°♎21'16	2.53446 AU
	729 Oct 16 j 12:36	0°♏	
conjunction	729 Oct 27 j 20:40	8°♏02'56	0°02'02
minimum elong	729 Oct 27 j 20:48	8°♏03'09	0°02'02
behind sun begin	729 Oct 26 j 23:29	7°♏25'06	
behind sun end	729 Oct 28 j 18:06	8°♏41'15	
desc. node	729 Oct 31 j 02:27	10°♏22'12	
	729 Nov 27 j 01:04	0°♐	
morning rise	729 Dec 20 j 02:26	17°♐14'25	
	730 Jan 05 j 20:54	0°♑	
	730 Feb 13 j 15:53	0°♒	
	730 Mar 24 j 04:57	0°♓	
	730 May 02 j 10:19	0°♈	
	730 Jun 12 j 10:16	0°♉	
	730 Jul 26 j 19:47	0°♊	
asc. node	730 Aug 30 j 08:40	20°♊39'08	
	730 Sep 17 j 08:13	0°♋	
retrograde	730 Nov 14 j 17:32	16°♋48'10	
min. Earth dist.	730 Dec 21 j 19:12	8°♋04'53	0.64926 AU
opposition	730 Dec 24 j 20:55	6°♋51'00	3°55'21
greatest brilliancy	730 Dec 24 j 05:55	7°♋06'02	-1.4m
	731 Jan 13 j 16:00	30°℞♊	
direct	731 Feb 02 j 02:22	27°♊33'06	
	731 Feb 23 j 01:23	0°♋	
	731 May 06 j 22:01	0°♌	
	731 Jun 28 j 10:46	0°♍	
	731 Aug 14 j 18:19	0°♎	
desc. node	731 Sep 18 j 01:38	23°♎17'18	
	731 Sep 27 j 15:04	0°♏	
evening set	731 Oct 25 j 07:00	19°♏57'14	
	731 Nov 07 j 20:16	0°♐	
max. Earth dist.	731 Nov 14 j 01:51	4°♐40'29	2.40788 AU
	731 Dec 17 j 04:25	0°♑	
conjunction	731 Dec 22 j 06:59	3°♑58'05	0°-53'-18
minimum elong	731 Dec 22 j 04:34	3°♑53'22	0°53'18

	732 Jan 24 j 11:36	0°♒	
morning rise	732 Feb 27 j 12:51	26°♒47'52	
	732 Mar 02 j 15:01	0°♓	
	732 Apr 10 j 12:02	0°♈	
	732 May 20 j 22:57	0°♉	
	732 Jul 02 j 19:22	0°♊	
asc. node	732 Jul 17 j 08:06	9°♊41'56	
	732 Aug 18 j 04:24	0°♋	
	732 Oct 10 j 13:32	0°♌	
retrograde	732 Dec 18 j 06:32	20°♌46'28	
opposition	733 Jan 27 j 05:00	11°♌11'06	4°34'28
greatest brilliancy	733 Jan 27 j 07:37	11°♌08'29	-1.2m
min. Earth dist.	733 Jan 28 j 00:14	10°♌51'56	0.67669 AU
direct	733 Mar 09 j 04:56	1°♌17'44	
	733 Jun 02 j 16:53	0°♍	
	733 Jul 23 j 20:33	0°♎	
desc. node	733 Aug 05 j 00:58	7°♎50'13	
	733 Sep 06 j 19:29	0°♏	
	733 Oct 18 j 05:47	0°♐	
	733 Nov 26 j 11:33	0°♑	
evening set	733 Dec 25 j 18:55	23°♑01'00	
	734 Jan 03 j 15:00	0°♒	
	734 Feb 10 j 16:21	0°♓	
conjunction	734 Mar 03 j 10:37	16°♓08'06	0°-52'-28
minimum elong	734 Mar 03 j 13:39	16°♓13'57	0°52'28
	734 Mar 21 j 13:41	0°♈	
max. Earth dist.	734 Apr 23 j 17:56	24°♈41'38	2.42970 AU
	734 May 01 j 01:12	0°♉	
morning rise	734 May 08 j 17:47	5°♉32'16	
asc. node	734 Jun 04 j 06:05	24°♉12'43	
	734 Jun 12 j 15:47	0°♊	
	734 Jul 27 j 18:34	0°♋	
	734 Sep 13 j 23:27	0°♌	
	734 Nov 06 j 20:38	0°♍	
retrograde	735 Jan 23 j 16:02	24°♍36'07	
opposition	735 Mar 03 j 07:18	15°♍45'31	3°51'02
greatest brilliancy	735 Mar 04 j 03:24	15°♍26'00	-1.4m
min. Earth dist.	735 Mar 07 j 22:58	13°♍57'14	0.63800 AU
direct	735 Apr 13 j 14:59	5°♍45'40	
desc. node	735 Jun 22 j 23:30	27°♍58'15	
	735 Jun 26 j 19:35	0°♎	
	735 Aug 15 j 07:29	0°♏	
	735 Sep 27 j 02:15	0°♐	
	735 Nov 05 j 20:00	0°♑	
	735 Dec 14 j 05:55	0°♒	
	736 Jan 21 j 13:39	0°♓	
	736 Feb 29 j 18:59	0°♈	
evening set	736 Mar 04 j 21:59	3°♈05'28	
	736 Apr 10 j 15:21	0°♉	
asc. node	736 Apr 21 j 05:32	7°♉33'04	
conjunction	736 May 04 j 03:37	16°♉38'05	0°08'01
minimum elong	736 May 04 j 03:08	16°♉37'13	0°08'00
behind sun begin	736 May 03 j 06:17	16°♉00'52	
behind sun end	736 May 04 j 23:58	17°♉13'32	
	736 May 23 j 12:15	0°♊	
max. Earth dist.	736 Jun 05 j 14:32	8°♊52'45	2.55845 AU
morning rise	736 Jun 27 j 09:26	23°♊23'37	
	736 Jul 07 j 11:10	0°♋	
	736 Aug 23 j 08:27	0°♌	
	736 Oct 11 j 06:45	0°♍	
	736 Dec 02 j 19:50	0°♎	
	737 Feb 10 j 15:46	0°♏	
retrograde	737 Mar 07 j 20:01	3°♏27'32	
	737 Mar 31 j 09:55	30°℞♎	
opposition	737 Apr 12 j 19:45	25°♎53'01	1°16'47
greatest brilliancy	737 Apr 13 j 10:29	25°♎39'41	-1.9m
min. Earth dist.	737 Apr 20 j 19:04	23°♎00'36	0.53712 AU
desc. node	737 May 09 j 22:10	17°♎43'37	
direct	737 May 22 j 08:14	16°♎40'32	
	737 Jul 10 j 17:01	0°♏	
	737 Aug 30 j 22:45	0°♐	
	737 Oct 12 j 04:48	0°♑	
	737 Nov 20 j 21:40	0°♒	
	737 Dec 30 j 04:35	0°♓	
	738 Feb 08 j 07:11	0°♈	
asc. node	738 Mar 09 j 05:03	20°♈56'52	
	738 Mar 21 j 23:33	0°♉	
evening set	738 Apr 29 j 02:14	26°♉18'54	
	738 May 04 j 13:06	0°♊	
	738 Jun 18 j 21:10	0°♋	
conjunction	738 Jun 19 j 12:43	0°♋25'18	0°52'59
minimum elong	738 Jun 19 j 11:19	0°♋23'02	0°52'59
max. Earth dist.	738 Jul 03 j 03:29	9°♋14'49	2.64350 AU
	738 Aug 04 j 12:46	0°♌	
morning rise	738 Aug 05 j 22:55	0°♌54'19	
	738 Sep 20 j 23:34	0°♍	
	738 Nov 08 j 00:54	0°♎	
	738 Dec 27 j 06:16	0°♏	
	739 Feb 18 j 04:41	0°♐	
desc. node	739 Mar 27 j 21:41	17°♐35'08	
retrograde	739 May 10 j 00:41	27°♐07'45	
opposition	739 Jun 10 j 12:09	21°♐35'54	-4°-18'00
greatest brilliancy	739 Jun 11 j 19:59	21°♐12'21	-2.6m
min. Earth dist.	739 Jun 17 j 00:29	19°♐40'55	0.40858 AU
direct	739 Jul 14 j 01:40	15°♐09'45	
	739 Sep 02 j 16:22	0°♑	
	739 Oct 22 j 04:24	0°♒	
	739 Dec 04 j 14:53	0°♓	
	740 Jan 16 j 09:16	0°♈	
asc. node	740 Jan 25 j 03:18	6°♈04'58	
	740 Feb 29 j 00:21	0°♉	
	740 Apr 14 j 00:08	0°♊	
	740 May 30 j 06:30	0°♋	
evening set	740 Jun 10 j 04:58	7°♋00'24	
	740 Jul 16 j 06:40	0°♌	
max. Earth dist.	740 Jul 26 j 00:45	6°♌12'26	2.67501 AU
conjunction	740 Jul 27 j 04:05	6°♌55'56	1°09'17
minimum elong	740 Jul 27 j 03:56	6°♌55'41	1°09'16
	740 Sep 01 j 07:48	0°♍	
morning rise	740 Sep 09 j 20:44	5°♍28'23	
	740 Oct 17 j 20:19	0°♎	
	740 Dec 02 j 14:16	0°♏	
	741 Jan 16 j 15:51	0°♐	
desc. node	741 Feb 11 j 20:35	17°♐33'43	
	741 Mar 02 j 10:01	0°♑	
	741 Apr 16 j 22:44	0°♒	
	741 Jun 07 j 03:36	0°♓	
retrograde	741 Jul 27 j 18:35	14°♓40'09	
min. Earth dist.	741 Aug 23 j 11:13	10°♓13'37	0.39031 AU
greatest brilliancy	741 Aug 27 j 18:43	8°♓58'49	-2.8m
opposition	741 Aug 29 j 01:32	8°♓36'27	-5°-47'-55
direct	741 Sep 27 j 22:57	3°♓21'09	
asc. node	741 Dec 12 j 02:35	29°♓12'22	
	741 Dec 13 j 13:41	0°♈	
	742 Feb 02 j 22:12	0°♉	
	742 Mar 23 j 14:40	0°♊	
	742 May 10 j 21:19	0°♋	
	742 Jun 27 j 21:30	0°♌	
evening set	742 Jul 18 j 04:57	12°♌48'51	
	742 Aug 14 j 03:38	0°♍	

max. Earth dist.	742 Aug 18 j 09:31	2°♍43'53	2.65189 AU
conjunction	742 Sep 01 j 21:00	12°♍06'08	0°58'36
minimum elong	742 Sep 01 j 22:02	12°♍07'50	0°58'36
	742 Sep 29 j 02:52	0°♎	
morning rise	742 Oct 16 j 23:58	11°♎57'13	
	742 Nov 12 j 11:57	0°♏	
	742 Dec 25 j 07:01	0°♐	
desc. node	742 Dec 30 j 19:22	3°♐56'33	
	743 Feb 04 j 17:27	0°♑	
	743 Mar 17 j 06:05	0°♒	
	743 Apr 26 j 16:10	0°♓	
	743 Jun 07 j 14:11	0°♈	
	743 Jul 25 j 10:41	0°♉	
retrograde	743 Sep 22 j 03:20	18°♉57'23	
min. Earth dist.	743 Oct 22 j 06:55	12°♉42'33	0.51042 AU
opposition	743 Oct 30 j 00:13	9°♉49'18	0°00'-13
greatest brilliancy	742 Dec 11 j 21:12	20°♏29'14	1.9m
asc. node	743 Oct 30 j 02:02	9°♉47'36	
direct	743 Dec 03 j 10:24	2°♉19'47	
	744 Feb 23 j 22:32	0°♊	
	744 Apr 18 j 05:06	0°♋	
	744 Jun 07 j 14:15	0°♌	
	744 Jul 25 j 18:07	0°♍	
evening set	744 Aug 23 j 23:01	18°♍52'23	
	744 Sep 09 j 18:27	0°♎	
max. Earth dist.	744 Sep 12 j 21:47	2°♎06'04	2.57686 AU
conjunction	744 Oct 10 j 08:49	20°♎47'48	0°22'20
minimum elong	744 Oct 10 j 09:40	20°♎49'17	0°22'19
	744 Oct 23 j 13:51	0°♏	
desc. node	744 Nov 16 j 19:23	17°♏14'22	
morning rise	744 Nov 29 j 00:51	26°♏06'36	
	744 Dec 04 j 08:22	0°♐	
	745 Jan 13 j 11:37	0°♑	
	745 Feb 21 j 13:59	0°♒	
	745 Apr 01 j 09:46	0°♓	
	745 May 10 j 22:20	0°♈	
	745 Jun 21 j 11:37	0°♉	
	745 Aug 06 j 13:12	0°♊	
asc. node	745 Sep 15 j 23:56	21°♊17'21	
	745 Oct 11 j 00:13	0°♋	
retrograde	745 Oct 31 j 19:04	2°♋42'09	
	745 Nov 20 j 11:29	30°℞♊	
min. Earth dist.	745 Dec 06 j 03:15	24°♊33'59	0.62113 AU
opposition	745 Dec 10 j 16:30	22°♊45'03	3°15'36
greatest brilliancy	745 Dec 09 j 21:51	23°♊03'40	-1.5m
direct	746 Jan 17 j 20:49	13°♊48'59	
	746 Mar 19 j 05:20	0°♋	
	746 May 16 j 17:12	0°♌	
	746 Jul 06 j 07:12	0°♍	
	746 Aug 22 j 01:09	0°♎	
desc. node	746 Oct 04 j 18:08	29°♎57'48	
	746 Oct 04 j 19:23	0°♏	
evening set	746 Oct 05 j 16:04	0°♏36'34	
max. Earth dist.	746 Oct 20 j 11:04	11°♏10'56	2.45860 AU
	746 Nov 15 j 02:53	0°♐	
conjunction	746 Nov 28 j 08:39	9°♐55'54	0°-33'-18
minimum elong	746 Nov 28 j 06:51	9°♐52'30	0°33'18
	746 Dec 24 j 14:51	0°♑	
morning rise	747 Jan 28 j 19:41	27°♑26'52	
	747 Feb 01 j 01:43	0°♒	
greatest brilliancy	747 Feb 21 j 16:40	16°♒12'01	1.2m
	747 Mar 11 j 07:43	0°♓	
	747 Apr 19 j 06:10	0°♈	
	747 May 29 j 19:06	0°♉	
	747 Jul 11 j 22:55	0°♊	
asc. node	747 Aug 03 j 23:06	14°♊58'52	
	747 Aug 28 j 12:28	0°♋	
	747 Oct 27 j 21:06	0°♌	
retrograde	747 Dec 05 j 21:49	8°♌03'10	
	748 Jan 10 j 17:30	30°℞♋	
min. Earth dist.	748 Jan 14 j 08:24	28°♋33'31	0.67380 AU
opposition	748 Jan 15 j 01:37	28°♋16'17	4°29'13
greatest brilliancy	748 Jan 14 j 20:37	28°♋21'18	-1.2m
direct	748 Feb 24 j 12:58	18°♋33'37	
	748 Apr 13 j 19:28	0°♌	
	748 Jun 12 j 23:08	0°♍	
	748 Aug 01 j 01:20	0°♎	
desc. node	748 Aug 21 j 16:17	13°♎37'30	
	748 Sep 14 j 10:47	0°♏	
	748 Oct 25 j 18:02	0°♐	
evening set	748 Nov 29 j 04:00	26°♐14'42	
	748 Dec 04 j 00:01	0°♑	
	749 Jan 11 j 04:17	0°♒	
conjunction	749 Feb 02 j 10:52	17°♒35'43	-1°-4'-26
minimum elong	749 Feb 02 j 11:48	17°♒37'33	1°04'26
	749 Feb 18 j 05:40	0°♓	
max. Earth dist.	749 Mar 13 j 18:03	18°♓16'40	2.38083 AU
	749 Mar 29 j 01:44	0°♈	
morning rise	749 Apr 13 j 09:01	11°♈31'38	
	749 May 08 j 11:25	0°♉	
asc. node	749 Jun 20 j 23:19	0°♊36'58	
	749 Jun 20 j 01:41	0°♊	
	749 Aug 04 j 10:36	0°♋	
	749 Sep 22 j 18:27	0°♌	
	749 Nov 21 j 08:02	0°♍	
retrograde	750 Jan 08 j 23:48	11°♍22'51	
opposition	750 Feb 17 j 06:42	2°♍11'53	4°18'15
greatest brilliancy	750 Feb 17 j 20:56	1°♍57'54	-1.3m
min. Earth dist.	750 Feb 20 j 10:47	0°♍57'10	0.66092 AU
	750 Feb 22 j 21:37	30°℞♌	
direct	750 Mar 30 j 16:17	22°♌10'22	
	750 May 08 j 15:47	0°♍	
	750 Jul 08 j 10:47	0°♎	
desc. node	750 Jul 09 j 15:18	0°♎42'14	
	750 Aug 24 j 08:07	0°♏	
	750 Oct 05 j 09:17	0°♐	
	750 Nov 13 j 20:10	0°♑	
	750 Dec 22 j 02:09	0°♒	
	751 Jan 29 j 06:14	0°♓	
evening set	751 Feb 07 j 16:20	7°♓19'38	
	751 Mar 09 j 07:12	0°♈	
conjunction	751 Apr 13 j 01:45	25°♈45'00	0°-16'-11
minimum elong	751 Apr 13 j 02:54	25°♈47'05	0°16'11
	751 Apr 18 j 22:49	0°♉	
asc. node	751 May 08 j 21:53	14°♉12'54	
max. Earth dist.	751 May 23 j 23:03	24°♉42'23	2.51186 AU
	751 May 31 j 15:41	0°♊	
morning rise	751 Jun 10 j 12:56	6°♊43'53	
	751 Jul 15 j 13:44	0°♋	
	751 Aug 31 j 18:15	0°♌	
	751 Oct 20 j 20:41	0°♍	
	751 Dec 16 j 23:04	0°♎	
retrograde	752 Feb 18 j 04:08	17°♎28'59	
opposition	752 Mar 26 j 09:40	9°♎19'24	2°33'53
greatest brilliancy	752 Mar 27 j 08:01	8°♎58'25	-1.6m
min. Earth dist.	752 Apr 02 j 05:50	6°♎45'42	0.58326 AU
	752 Apr 28 j 14:11	30°℞♍	
direct	752 May 05 j 23:37	29°♍38'12	
	752 May 13 j 12:49	0°♎	

desc. node	752 May 26 j 14:26	2°♎12'56	
	752 Jul 27 j 08:49	0°♏	
	752 Sep 11 j 00:50	0°♐	
	752 Oct 21 j 19:31	0°♑	
	752 Nov 29 j 18:56	0°♒	
	753 Jan 07 j 13:18	0°♓	
	753 Feb 16 j 04:48	0°♈	
asc. node	753 Mar 25 j 20:21	27°♈25'33	
	753 Mar 29 j 11:09	0°♉	
evening set	753 Apr 09 j 12:21	7°♉48'16	
	753 May 11 j 16:25	0°♊	
conjunction	753 Jun 02 j 19:42	14°♊51'48	0°38'58
minimum elong	753 Jun 02 j 18:12	14°♊49'19	0°38'57
max. Earth dist.	753 Jun 23 j 06:45	28°♊21'07	2.61657 AU
	753 Jun 25 j 19:19	0°♋	
morning rise	753 Jul 22 j 07:38	17°♋09'07	
	753 Aug 11 j 10:59	0°♌	
	753 Sep 28 j 07:07	0°♍	
	753 Nov 16 j 11:46	0°♎	
	754 Jan 07 j 19:01	0°♏	
	754 Mar 17 j 13:34	0°♐	
retrograde	754 Apr 12 j 06:06	3°♐37'20	
desc. node	754 Apr 13 j 12:50	3°♐36'44	
	754 May 06 j 13:43	30°℞♏	
opposition	754 May 15 j 13:54	27°♏13'55	-1°-46'-7
greatest brilliancy	754 May 16 j 09:33	26°♏57'52	-2.3m
min. Earth dist.	754 May 23 j 21:33	24°♏31'15	0.45642 AU
direct	754 Jun 21 j 03:21	19°♏26'04	
	754 Aug 02 j 02:04	0°♐	
	754 Sep 22 j 18:36	0°♑	
	754 Nov 04 j 08:48	0°♒	
	754 Dec 15 j 06:57	0°♓	
	755 Jan 25 j 13:58	0°♈	
asc. node	755 Feb 10 j 19:51	11°♈33'59	
	755 Mar 09 j 04:45	0°♉	
	755 Apr 22 j 11:29	0°♊	
evening set	755 May 26 j 09:06	22°♊16'57	
	755 Jun 07 j 06:51	0°♋	
conjunction	755 Jul 13 j 15:21	23°♋20'14	1°06'16
minimum elong	755 Jul 13 j 14:39	23°♋19'07	1°06'16
max. Earth dist.	755 Jul 17 j 21:43	26°♋03'37	2.66929 AU
	755 Jul 24 j 02:01	0°♌	
morning rise	755 Aug 28 j 00:00	22°♌13'30	
	755 Sep 09 j 05:05	0°♍	
	755 Oct 26 j 04:12	0°♎	
	755 Dec 11 j 20:59	0°♏	
	756 Jan 27 j 16:37	0°♐	
desc. node	756 Feb 29 j 13:06	20°♐40'19	
	756 Mar 15 j 18:36	0°♑	
	756 May 09 j 08:50	0°♒	
retrograde	756 Jun 28 j 02:01	13°♒18'15	
opposition	756 Jul 28 j 09:47	8°♒14'38	-6°-53'-39
greatest brilliancy	756 Jul 28 j 06:49	8°♒16'36	-2.9m
min. Earth dist.	756 Jul 27 j 16:24	8°♒26'12	0.37368 AU
direct	756 Aug 27 j 03:56	3°♒18'47	
	756 Nov 09 j 13:36	0°♓	
asc. node	756 Dec 28 j 18:18	0°♈03'16	
	756 Dec 28 j 16:15	0°♈	
	757 Feb 13 j 07:30	0°♉	
	757 Apr 01 j 00:43	0°♊	
	757 May 18 j 07:24	0°♋	
evening set	757 Jul 03 j 17:17	29°♋18'08	
	757 Jul 04 j 19:46	0°♌	
max. Earth dist.	757 Aug 09 j 08:03	22°♌33'48	2.66751 AU
conjunction	757 Aug 18 j 12:58	28°♌27'31	1°05'50
minimum elong	757 Aug 18 j 13:39	28°♌28'35	1°05'49
	757 Aug 20 j 22:35	0°♍	
morning rise	757 Oct 02 j 02:07	27°♍22'54	
	757 Oct 06 j 01:33	0°♎	
	757 Nov 19 j 20:55	0°♏	
	758 Jan 02 j 08:21	0°♐	
desc. node	758 Jan 16 j 12:14	9°♐57'32	
	758 Feb 13 j 16:14	0°♑	
	758 Mar 27 j 07:26	0°♒	
	758 May 08 j 06:38	0°♓	
	758 Jun 22 j 12:10	0°♈	
retrograde	758 Sep 02 j 23:19	27°♈23'02	
min. Earth dist.	758 Oct 01 j 00:10	21°♈59'40	0.45834 AU
greatest brilliancy	758 Oct 08 j 06:15	19°♈27'53	-2.4m
opposition	758 Oct 09 j 03:13	19°♈09'31	-2°-4'-20
direct	758 Nov 10 j 18:22	12°♈29'38	
asc. node	758 Nov 15 j 17:02	12°♈39'17	
	759 Jan 10 j 12:45	0°♉	
	759 Mar 07 j 19:59	0°♊	
	759 Apr 27 j 18:54	0°♋	
	759 Jun 15 j 23:35	0°♌	
	759 Aug 02 j 16:45	0°♍	
evening set	759 Aug 10 j 00:48	4°♍42'29	
max. Earth dist.	759 Sep 02 j 23:06	20°♍16'35	2.61227 AU
	759 Sep 17 j 15:31	0°♎	
conjunction	759 Sep 25 j 08:02	5°♎08'53	0°39'18
minimum elong	759 Sep 25 j 09:13	5°♎10'53	0°39'17
	759 Oct 31 j 15:11	0°♏	
morning rise	759 Nov 11 j 13:31	7°♏39'54	
desc. node	759 Dec 04 j 10:48	23°♏59'35	
	759 Dec 12 j 17:54	0°♐	
	760 Jan 22 j 07:17	0°♑	
	760 Mar 01 j 20:01	0°♒	
	760 Apr 10 j 02:04	0°♓	
	760 May 20 j 03:06	0°♈	
	760 Jul 01 j 17:39	0°♉	
	760 Aug 20 j 16:26	0°♊	
asc. node	760 Oct 02 j 16:39	15°♊58'41	
retrograde	760 Oct 17 j 00:53	17°♊21'05	
min. Earth dist.	760 Nov 19 j 10:35	9°♊53'32	0.58342 AU
opposition	760 Nov 25 j 10:03	7°♊32'25	2°18'04
greatest brilliancy	760 Nov 24 j 15:51	7°♊50'19	-1.7m
	760 Dec 20 j 10:17	30°℞♉	
direct	761 Jan 01 j 07:37	29°♉04'18	
	761 Jan 13 j 18:18	0°♊	
	761 Apr 01 j 13:59	0°♋	
	761 May 25 j 09:56	0°♌	
	761 Jul 13 j 18:41	0°♍	
	761 Aug 29 j 03:43	0°♎	
evening set	761 Sep 18 j 01:58	13°♎27'28	
max. Earth dist.	761 Oct 03 j 11:19	24°♎05'30	2.50853 AU
	761 Oct 11 j 21:21	0°♏	
desc. node	761 Oct 21 j 09:50	6°♏45'22	
conjunction	761 Nov 07 j 14:09	19°♏09'11	0°-10'-43
minimum elong	761 Nov 07 j 13:36	19°♏08'11	0°10'44
behind sun begin	761 Nov 06 j 20:33	18°♏37'09	
behind sun end	761 Nov 08 j 06:38	19°♏39'14	
	761 Nov 22 j 08:19	0°♐	
	762 Jan 01 j 01:19	0°♑	
morning rise	762 Jan 02 j 09:25	1°♑01'39	
	762 Feb 08 j 17:10	0°♒	
	762 Mar 19 j 03:20	0°♓	
	762 Apr 27 j 05:17	0°♈	
	762 Jun 06 j 23:25	0°♉	

	762 Jul 20 j 17:45	0°♊	
asc. node	762 Aug 20 j 16:12	19°♊17'32	
	762 Sep 08 j 14:26	0°♋	
retrograde	762 Nov 22 j 12:23	24°♋59'03	
min. Earth dist.	762 Dec 30 j 11:33	15°♋58'18	0.66067 AU
opposition	763 Jan 01 j 17:13	15°♋04'32	4°11'44
greatest brilliancy	763 Jan 01 j 05:20	15°♋16'26	-1.3m
direct	763 Feb 10 j 10:50	5°♋36'41	
	763 Apr 29 j 11:38	0°♌	
	763 Jun 22 j 22:12	0°♍	
	763 Aug 09 j 19:23	0°♎	
desc. node	763 Sep 08 j 08:43	19°♎52'54	
	763 Sep 22 j 20:48	0°♏	
	763 Nov 03 j 03:12	0°♐	
evening set	763 Nov 06 j 10:16	2°♐27'59	
max. Earth dist.	763 Dec 07 j 03:05	25°♐52'37	2.38415 AU
	763 Dec 12 j 10:43	0°♑	
conjunction	764 Jan 06 j 02:48	19°♑17'55	-1°-1'-7
minimum elong	764 Jan 06 j 00:56	19°♑14'17	1°01'08
	764 Jan 19 j 16:38	0°♒	
	764 Feb 26 j 18:49	0°♓	
morning rise	764 Mar 15 j 13:40	13°♓51'18	
	764 Apr 05 j 14:36	0°♈	
	764 May 15 j 23:48	0°♉	
	764 Jun 27 j 16:14	0°♊	
asc. node	764 Jul 07 j 14:44	6°♊42'35	
	764 Aug 12 j 12:48	0°♋	
	764 Oct 02 j 20:07	0°♌	
retrograde	764 Dec 26 j 01:24	28°♌32'44	
opposition	765 Feb 03 j 19:43	19°♌05'11	4°32'02
greatest brilliancy	765 Feb 04 j 02:39	18°♌58'18	-1.2m
min. Earth dist.	765 Feb 05 j 11:25	18°♌25'49	0.67383 AU
direct	765 Mar 17 j 00:52	9°♌07'43	
	765 May 25 j 18:32	0°♍	
	765 Jul 18 j 02:26	0°♎	
desc. node	765 Jul 26 j 07:02	5°♎08'47	
	765 Sep 01 j 15:26	0°♏	
	765 Oct 13 j 06:58	0°♐	
	765 Nov 21 j 14:40	0°♑	
	765 Dec 29 j 18:56	0°♒	
evening set	766 Jan 10 j 14:16	9°♒19'38	
	766 Feb 05 j 20:54	0°♓	
	766 Mar 16 j 18:44	0°♈	
conjunction	766 Mar 18 j 21:40	1°♈36'23	0°-40'-40
minimum elong	766 Mar 19 j 00:31	1°♈41'46	0°40'39
	766 Apr 26 j 06:32	0°♉	
max. Earth dist.	766 May 06 j 18:21	7°♉32'22	2.45954 AU
morning rise	766 May 21 j 09:49	17°♉54'04	
asc. node	766 May 25 j 14:09	20°♉49'26	
	766 Jun 07 j 20:37	0°♊	
	766 Jul 22 j 19:50	0°♋	
	766 Sep 08 j 12:42	0°♌	
	766 Oct 30 j 13:19	0°♍	
	767 Jan 09 j 09:52	0°♎	
retrograde	767 Feb 01 j 12:14	2°♎56'01	
	767 Feb 23 j 00:13	30°℞♍	
opposition	767 Mar 11 j 17:15	24°♍18'29	3°27'58
greatest brilliancy	767 Mar 12 j 15:25	23°♍57'12	-1.5m
min. Earth dist.	767 Mar 17 j 04:45	22°♍12'20	0.62097 AU
direct	767 Apr 21 j 21:18	14°♍22'34	
desc. node	767 Jun 13 j 06:28	28°♍06'16	
	767 Jun 17 j 08:35	0°♎	
	767 Aug 08 j 23:12	0°♏	
	767 Sep 21 j 12:14	0°♐	
	767 Oct 31 j 13:08	0°♑	
	767 Dec 09 j 02:51	0°♒	
	768 Jan 16 j 13:34	0°♓	
	768 Feb 24 j 21:35	0°♈	
evening set	768 Mar 18 j 13:45	16°♈46'47	
	768 Apr 05 j 20:25	0°♉	
asc. node	768 Apr 11 j 12:45	4°♉03'05	
conjunction	768 May 15 j 11:45	27°♉44'12	0°20'29
minimum elong	768 May 15 j 10:41	27°♉42'23	0°20'27
	768 May 18 j 19:14	0°♊	
max. Earth dist.	768 Jun 12 j 10:44	16°♊36'07	2.58137 AU
	768 Jul 02 j 18:18	0°♋	
morning rise	768 Jul 06 j 18:50	2°♋37'26	
	768 Aug 18 j 12:09	0°♌	
	768 Oct 05 j 22:29	0°♍	
	768 Nov 25 j 21:49	0°♎	
	769 Jan 23 j 20:08	0°♏	
retrograde	769 Mar 19 j 13:44	13°♏50'32	
opposition	769 Apr 23 j 17:31	6°♏38'53	0°19'38
greatest brilliancy	769 Apr 21 j 00:02	7°♏35'41	-2.0m
desc. node	769 Apr 30 j 06:04	4°♏21'11	
min. Earth dist.	769 May 02 j 03:01	3°♏42'26	0.50909 AU
	769 May 14 j 13:50	30°℞♎	
direct	769 Jun 01 j 10:32	27°♎49'46	
	769 Jun 19 j 17:04	0°♏	
	769 Aug 22 j 16:28	0°♐	
	769 Oct 05 j 14:12	0°♑	
	769 Nov 14 j 22:59	0°♒	
	769 Dec 24 j 15:42	0°♓	
	770 Feb 03 j 01:39	0°♈	
asc. node	770 Feb 27 j 10:52	17°♈35'59	
	770 Mar 16 j 23:55	0°♉	
	770 Apr 29 j 18:13	0°♊	
evening set	770 May 09 j 10:53	6°♊29'08	
	770 Jun 14 j 05:14	0°♋	
conjunction	770 Jun 28 j 13:35	9°♋17'18	0°59'07
minimum elong	770 Jun 28 j 12:24	9°♋15'22	0°59'07
max. Earth dist.	770 Jul 08 j 16:48	15°♋48'34	2.65512 AU
	770 Jul 30 j 21:18	0°♌	
morning rise	770 Aug 14 j 02:08	9°♌02'02	
	770 Sep 16 j 04:27	0°♍	
	770 Nov 02 j 18:28	0°♎	
	770 Dec 20 j 20:54	0°♏	
	771 Feb 08 j 17:51	0°♐	
desc. node	771 Mar 18 j 04:41	20°♐34'18	
	771 Apr 07 j 01:25	0°♑	
retrograde	771 May 27 j 11:46	12°♑47'55	
opposition	771 Jun 27 j 02:15	7°♑39'11	-5°-39'-32
greatest brilliancy	771 Jun 28 j 05:24	7°♑20'23	-2.8m
min. Earth dist.	771 Jul 01 j 15:22	6°♑23'56	0.38893 AU
direct	771 Jul 28 j 20:32	1°♑57'44	
	771 Oct 11 j 13:26	0°♒	
	771 Nov 27 j 00:22	0°♓	
	772 Jan 10 j 02:38	0°♈	
asc. node	772 Jan 15 j 10:22	3°♈37'34	
	772 Feb 23 j 11:43	0°♉	
	772 Apr 08 j 22:50	0°♊	
	772 May 25 j 12:05	0°♋	
evening set	772 Jun 18 j 22:44	15°♋34'17	
	772 Jul 11 j 15:50	0°♌	
max. Earth dist.	772 Jul 31 j 07:43	12°♌30'01	2.67472 AU
conjunction	772 Aug 04 j 08:55	15°♌04'49	1°09'09
minimum elong	772 Aug 04 j 09:05	15°♌05'06	1°09'09
	772 Aug 27 j 17:18	0°♍	
morning rise	772 Sep 17 j 21:00	13°♍37'00	

	772 Oct 13 j 01:56	0°♎	
	772 Nov 27 j 10:52	0°♏	
	773 Jan 10 j 20:26	0°♐	
desc. node	773 Feb 02 j 03:46	15°♐16'47	
	773 Feb 23 j 12:29	0°♑	
	773 Apr 08 j 02:41	0°♒	
	773 May 23 j 17:25	0°♓	
	773 Jul 27 j 11:14	0°♈	
retrograde	773 Aug 11 j 10:45	1°♈33'17	
	773 Aug 26 j 04:11	30°℞♓	
min. Earth dist.	773 Sep 07 j 01:01	26°♓53'59	0.41073 AU
greatest brilliancy	773 Sep 12 j 18:52	25°♓06'57	-2.6m
opposition	773 Sep 14 j 04:14	24°♓40'48	-4°-30'-51
direct	773 Oct 15 j 00:18	18°♓57'11	
	773 Nov 29 j 09:02	0°♈	
asc. node	773 Dec 02 j 10:16	1°♈18'31	
	774 Jan 26 j 08:03	0°♉	
	774 Mar 17 j 18:15	0°♊	
	774 May 05 j 18:48	0°♋	
	774 Jun 23 j 03:35	0°♌	
evening set	774 Jul 26 j 11:54	21°♌01'10	
	774 Aug 09 j 13:23	0°♍	
max. Earth dist.	774 Aug 23 j 23:51	9°♍18'36	2.64003 AU
conjunction	774 Sep 10 j 05:58	20°♍34'05	0°52'36
minimum elong	774 Sep 10 j 07:08	20°♍36'00	0°52'36
	774 Sep 24 j 12:32	0°♎	
morning rise	774 Oct 25 j 22:06	21°♎09'55	
	774 Nov 07 j 18:24	0°♏	
	774 Dec 20 j 07:22	0°♐	
desc. node	774 Dec 21 j 02:54	0°♐35'05	
	775 Jan 30 j 09:35	0°♑	
	775 Mar 11 j 12:06	0°♒	
	775 Apr 20 j 09:24	0°♓	
	775 May 31 j 08:41	0°♈	
	775 Jul 15 j 06:00	0°♉	
	775 Sep 26 j 11:55	0°♊	
retrograde	775 Oct 02 j 00:40	0°♊13'06	
	775 Oct 07 j 11:58	30°℞♉	
asc. node	775 Oct 20 j 08:36	27°♉46'57	
min. Earth dist.	775 Nov 02 j 08:37	23°♉31'18	0.53814 AU
opposition	775 Nov 09 j 13:55	20°♉45'27	0°58'03
greatest brilliancy	775 Nov 09 j 03:44	20°♉55'13	-1.9m
direct	775 Dec 14 j 23:09	12°♉52'35	
	776 Feb 14 j 07:52	0°♊	
	776 Apr 12 j 02:08	0°♋	
	776 Jun 02 j 10:48	0°♌	
	776 Jul 20 j 23:57	0°♍	
evening set	776 Sep 01 j 20:04	27°♍47'57	
	776 Sep 05 j 03:23	0°♎	
max. Earth dist.	776 Sep 19 j 21:08	9°♎55'20	2.55429 AU
	776 Oct 18 j 22:33	0°♏	
conjunction	776 Oct 20 j 02:58	0°♏49'58	0°10'59
minimum elong	776 Oct 20 j 03:26	0°♏50'47	0°10'58
behind sun begin	776 Oct 19 j 11:47	0°♏23'16	
behind sun end	776 Oct 20 j 19:06	1°♏18'20	
desc. node	776 Nov 07 j 01:42	13°♏35'50	
	776 Nov 29 j 14:45	0°♐	
morning rise	776 Dec 10 j 14:23	8°♐07'56	
	777 Jan 08 j 14:36	0°♑	
	777 Feb 16 j 13:01	0°♒	
	777 Mar 27 j 04:46	0°♓	
	777 May 05 j 12:11	0°♈	
	777 Jun 15 j 15:25	0°♉	
	777 Jul 30 j 12:17	0°♊	
asc. node	777 Sep 06 j 07:37	21°♊44'05	
	777 Sep 23 j 18:55	0°♋	
retrograde	777 Nov 08 j 20:45	11°♋20'50	
min. Earth dist.	777 Dec 15 j 04:35	2°♋52'45	0.63785 AU
opposition	777 Dec 18 j 22:21	1°♋23'00	3°40'50
greatest brilliancy	777 Dec 18 j 05:17	1°♋40'04	-1.4m
	777 Dec 22 j 10:05	30°℞♊	
direct	778 Jan 26 j 17:28	22°♊14'06	
	778 Mar 07 j 01:51	0°♋	
	778 May 10 j 10:28	0°♌	
	778 Jul 01 j 02:53	0°♍	
	778 Aug 17 j 05:41	0°♎	
desc. node	778 Sep 25 j 00:26	26°♎25'08	
	778 Sep 30 j 02:34	0°♏	
evening set	778 Oct 16 j 12:58	11°♏44'23	
max. Earth dist.	778 Nov 01 j 20:16	23°♏38'49	2.43003 AU
	778 Nov 10 j 09:53	0°♐	
conjunction	778 Dec 11 j 11:59	23°♐33'24	0°-45'-23
minimum elong	778 Dec 11 j 09:39	23°♐28'56	0°45'24
	778 Dec 19 j 20:27	0°♑	
	779 Jan 27 j 05:29	0°♒	
morning rise	779 Feb 14 j 07:41	14°♒14'13	
	779 Mar 06 j 09:53	0°♓	
	779 Apr 14 j 06:50	0°♈	
	779 May 24 j 17:10	0°♉	
	779 Jul 06 j 14:39	0°♊	
asc. node	779 Jul 25 j 07:22	12°♊23'12	
	779 Aug 22 j 07:18	0°♋	
	779 Oct 16 j 12:43	0°♌	
retrograde	779 Dec 13 j 13:09	15°♌49'50	
opposition	780 Jan 22 j 14:59	6°♌08'57	4°33'40
greatest brilliancy	780 Jan 22 j 14:10	6°♌09'45	-1.2m
min. Earth dist.	780 Jan 22 j 18:01	6°♌05'55	0.67670 AU
	780 Feb 08 j 10:56	30°℞♋	
direct	780 Mar 03 j 10:22	26°♋19'50	
	780 Mar 29 j 11:39	0°♌	
	780 Jun 06 j 11:46	0°♍	
	780 Jul 26 j 18:03	0°♎	
desc. node	780 Aug 11 j 23:53	10°♎34'01	
	780 Sep 09 j 12:25	0°♏	
	780 Oct 20 j 22:31	0°♐	
	780 Nov 29 j 05:01	0°♑	
evening set	780 Dec 13 j 21:05	11°♑28'26	
	781 Jan 06 j 08:49	0°♒	
	781 Feb 13 j 09:45	0°♓	
conjunction	781 Feb 18 j 22:33	4°♓19'39	0°-59'-19
minimum elong	781 Feb 19 j 01:02	4°♓24'29	0°59'19
	781 Mar 24 j 05:39	0°♈	
max. Earth dist.	781 Apr 10 j 04:41	12°♈46'05	2.40611 AU
morning rise	781 Apr 28 j 05:05	26°♈03'42	
	781 May 03 j 15:00	0°♉	
asc. node	781 Jun 11 j 05:13	27°♉17'14	
	781 Jun 15 j 03:57	0°♊	
	781 Jul 30 j 07:14	0°♋	
	781 Sep 16 j 20:05	0°♌	
	781 Nov 11 j 08:39	0°♍	
retrograde	782 Jan 17 j 06:06	19°♍21'10	
opposition	782 Feb 25 j 05:34	10°♍20'56	4°03'55
greatest brilliancy	782 Feb 25 j 23:15	10°♍03'40	-1.3m
min. Earth dist.	782 Mar 01 j 05:44	8°♍47'11	0.64957 AU
direct	782 Apr 07 j 15:36	0°♍19'34	
desc. node	782 Jun 29 j 22:48	29°♍12'29	
	782 Jul 01 j 08:48	0°♎	
	782 Aug 18 j 16:14	0°♏	
	782 Sep 30 j 04:06	0°♐	
	782 Nov 08 j 19:25	0°♑	

	782 Dec 17 j 03:29	0°♒	
	783 Jan 24 j 09:00	0°♓	
evening set	783 Feb 22 j 19:17	22°♓40'36	
	783 Mar 04 j 11:21	0°♈	
	783 Apr 14 j 04:06	0°♉	
conjunction	783 Apr 25 j 23:06	8°♉25'39	0°-2'-2
minimum elong	783 Apr 25 j 23:14	8°♉25'55	0°02'03
behind sun begin	783 Apr 24 j 22:46	7°♉42'30	
behind sun end	783 Apr 26 j 23:42	9°♉09'17	
asc. node	783 Apr 29 j 04:12	10°♉42'14	
	783 May 26 j 21:47	0°♊	
max. Earth dist.	783 Jun 01 j 02:46	3°♊33'21	2.53843 AU
morning rise	783 Jun 20 j 23:23	16°♊55'54	
	783 Jul 10 j 18:42	0°♋	
	783 Aug 26 j 17:36	0°♌	
	783 Oct 15 j 01:17	0°♍	
	783 Dec 08 j 00:52	0°♎	
retrograde	784 Feb 28 j 11:14	26°♎49'53	
opposition	784 Apr 05 j 01:40	18°♎58'46	1°52'22
greatest brilliancy	784 Apr 05 j 20:50	18°♎41'07	-1.8m
min. Earth dist.	784 Apr 12 j 14:17	16°♎12'54	0.55871 AU
direct	784 May 15 j 03:53	9°♎31'20	
desc. node	784 May 16 j 21:22	9°♎32'31	
	784 Jul 18 j 04:29	0°♏	
	784 Sep 04 j 09:45	0°♐	
	784 Oct 15 j 22:59	0°♑	
	784 Nov 24 j 07:17	0°♒	
	785 Jan 02 j 07:39	0°♓	
	785 Feb 11 j 04:04	0°♈	
asc. node	785 Mar 16 j 04:08	24°♈00'19	
	785 Mar 24 j 14:21	0°♉	
evening set	785 Apr 20 j 21:30	19°♉02'50	
	785 May 06 j 22:49	0°♊	
conjunction	785 Jun 12 j 12:47	24°♊22'14	0°47'37
minimum elong	785 Jun 12 j 11:17	24°♊19'47	0°47'37
	785 Jun 21 j 03:14	0°♋	
max. Earth dist.	785 Jun 29 j 05:22	5°♋15'44	2.63244 AU
morning rise	785 Jul 30 j 19:22	25°♋34'38	
	785 Aug 06 j 17:58	0°♌	
	785 Sep 23 j 08:01	0°♍	
	785 Nov 10 j 19:34	0°♎	
	785 Dec 31 j 03:03	0°♏	
	786 Feb 25 j 18:41	0°♐	
desc. node	786 Apr 03 j 20:25	13°♐41'17	
retrograde	786 Apr 27 j 07:57	16°♐47'13	
opposition	786 May 29 j 14:40	10°♐52'34	-3°-10'-37
greatest brilliancy	786 May 30 j 20:02	10°♐29'45	-2.5m
min. Earth dist.	786 Jun 06 j 04:36	8°♐31'56	0.42869 AU
direct	786 Jul 03 j 13:50	3°♐48'10	
	786 Sep 12 j 10:47	0°♑	
	786 Oct 27 j 19:20	0°♒	
	786 Dec 08 j 20:56	0°♓	
	787 Jan 19 j 20:42	0°♈	
asc. node	787 Feb 01 j 02:46	8°♈37'55	
	787 Mar 03 j 22:44	0°♉	
	787 Apr 17 j 13:27	0°♊	
	787 Jun 02 j 13:45	0°♋	
evening set	787 Jun 04 j 13:18	1°♋16'32	
	787 Jul 19 j 11:07	0°♌	
conjunction	787 Jul 22 j 00:36	1°♌37'56	1°08'30
minimum elong	787 Jul 22 j 00:14	1°♌37'20	1°08'30
max. Earth dist.	787 Jul 23 j 05:05	2°♌23'17	2.67345 AU
morning rise	787 Sep 04 j 23:00	0°♍16'03	
	787 Sep 04 j 12:57	0°♍	
	787 Oct 21 j 06:01	0°♎	
	787 Dec 06 j 09:42	0°♏	
	788 Jan 21 j 03:52	0°♐	
desc. node	788 Feb 19 j 19:43	19°♐25'27	
	788 Mar 07 j 02:29	0°♑	
	788 Apr 24 j 02:20	0°♒	
	788 Jun 30 j 03:57	0°♓	
retrograde	788 Jul 15 j 07:35	1°♓31'21	
	788 Jul 30 j 14:35	30°℞♒	
min. Earth dist.	788 Aug 11 j 20:20	27°♒02'29	0.37910 AU
opposition	788 Aug 15 j 12:56	26°♒01'33	-6°-31'-57
greatest brilliancy	788 Aug 14 j 15:37	26°♒16'13	-2.8m
direct	788 Sep 14 j 01:21	21°♒01'54	
	788 Oct 23 j 17:21	0°♓	
asc. node	788 Dec 19 j 01:27	29°♓22'14	
	788 Dec 20 j 02:55	0°♈	
	789 Feb 06 j 21:40	0°♉	
	789 Mar 26 j 14:08	0°♊	
	789 May 13 j 08:50	0°♋	
	789 Jun 30 j 03:30	0°♌	
evening set	789 Jul 12 j 01:05	7°♌30'45	
max. Earth dist.	789 Aug 14 j 15:35	28°♌54'25	2.65986 AU
	789 Aug 16 j 08:27	0°♍	
conjunction	789 Aug 26 j 17:22	6°♍40'51	1°02'05
minimum elong	789 Aug 26 j 18:16	6°♍42'19	1°02'05
	789 Oct 01 j 09:48	0°♎	
morning rise	789 Oct 10 j 12:38	6°♎03'03	
	789 Nov 15 j 00:03	0°♏	
	789 Dec 28 j 02:34	0°♐	
desc. node	790 Jan 06 j 18:31	6°♐51'27	
	790 Feb 07 j 22:25	0°♑	
	790 Mar 20 j 21:37	0°♒	
	790 Apr 30 j 21:04	0°♓	
	790 Jun 12 j 18:48	0°♈	
	790 Aug 03 j 20:09	0°♉	
retrograde	790 Sep 14 j 03:35	10°♉27'56	
min. Earth dist.	790 Oct 13 j 08:06	4°♉36'27	0.48717 AU
opposition	790 Oct 21 j 08:50	1°♉41'03	0°-49'-45
greatest brilliancy	790 Oct 20 j 23:47	1°♉49'17	-2.2m
	790 Oct 26 j 02:39	30°℞♈	
asc. node	790 Nov 06 j 01:12	26°♈44'26	
direct	790 Nov 24 j 00:03	24°♈32'41	
	790 Dec 25 j 05:36	0°♉	
	791 Feb 28 j 13:58	0°♊	
	791 Apr 22 j 05:05	0°♋	
	791 Jun 11 j 01:19	0°♌	
	791 Jul 29 j 01:05	0°♍	
evening set	791 Aug 18 j 11:45	13°♍09'44	
max. Earth dist.	791 Sep 09 j 02:00	27°♍20'56	2.59362 AU
	791 Sep 13 j 01:35	0°♎	
conjunction	791 Oct 04 j 07:50	14°♎20'26	0°29'56
minimum elong	791 Oct 04 j 08:53	14°♎22'13	0°29'55
	791 Oct 26 j 23:57	0°♏	
morning rise	791 Nov 21 j 19:01	18°♏17'24	
desc. node	791 Nov 24 j 18:22	20°♏25'49	
	791 Dec 07 j 22:47	0°♐	
	792 Jan 17 j 07:01	0°♑	
	792 Feb 25 j 13:53	0°♒	
	792 Apr 04 j 13:35	0°♓	
	792 May 14 j 06:12	0°♈	
	792 Jun 25 j 02:40	0°♉	
	792 Aug 11 j 06:15	0°♊	
asc. node	792 Sep 22 j 23:27	20°♊25'04	
retrograde	792 Oct 25 j 14:34	26°♊44'19	
min. Earth dist.	792 Nov 29 j 02:45	18°♊53'38	0.60549 AU

greatest brilliancy	792 Dec 03 j 12:20	17°♊08'58	-1.6m
opposition	792 Dec 04 j 07:33	16°♊49'54	2°53'58
direct	793 Jan 10 j 23:08	8°♊05'22	
	793 Mar 24 j 12:54	0°♋	
	793 May 19 j 18:10	0°♌	
	793 Jul 08 j 19:57	0°♍	
	793 Aug 24 j 11:08	0°♎	
evening set	793 Sep 27 j 20:44	23°♎24'24	
	793 Oct 07 j 06:28	0°♏	
desc. node	793 Oct 11 j 17:19	3°♏09'01	
max. Earth dist.	793 Oct 12 j 10:58	3°♏40'22	2.48141 AU
	793 Nov 17 j 16:30	0°♐	
conjunction	793 Nov 18 j 23:48	0°♐58'08	0°-23'-40
minimum elong	793 Nov 18 j 22:32	0°♐55'47	0°23'40
	793 Dec 27 j 07:26	0°♑	
morning rise	794 Jan 16 j 19:01	15°♑52'36	
	794 Feb 03 j 20:37	0°♒	
	794 Mar 14 j 03:59	0°♓	
	794 Apr 22 j 03:04	0°♈	
	794 Jun 01 j 16:28	0°♉	
	794 Jul 14 j 23:38	0°♊	
asc. node	794 Aug 10 j 22:15	17°♊18'13	
	794 Sep 01 j 04:44	0°♋	
	794 Nov 07 j 14:59	0°♌	
retrograde	794 Nov 30 j 05:19	2°♌59'32	
	794 Dec 21 j 09:30	30°℞♋	
min. Earth dist.	795 Jan 08 j 01:16	23°♋42'08	0.66928 AU
opposition	795 Jan 09 j 10:33	23°♋08'49	4°23'31
greatest brilliancy	795 Jan 09 j 02:22	23°♋17'01	-1.3m
direct	795 Feb 18 j 14:53	13°♋32'09	
	795 Apr 20 j 19:19	0°♌	
	795 Jun 17 j 03:39	0°♍	
	795 Aug 04 j 18:07	0°♎	
desc. node	795 Aug 29 j 15:38	16°♎34'01	
	795 Sep 18 j 01:31	0°♏	
	795 Oct 29 j 09:31	0°♐	
evening set	795 Nov 19 j 10:17	15°♐54'10	
	795 Dec 07 j 17:01	0°♑	
	796 Jan 14 j 22:13	0°♒	
conjunction	796 Jan 21 j 19:12	5°♒25'53	-1°-4'-51
minimum elong	796 Jan 21 j 18:44	5°♒24'58	1°04'53
max. Earth dist.	796 Jan 22 j 06:10	5°♒47'33	2.37142 AU
	796 Feb 21 j 23:37	0°♓	
	796 Mar 31 j 18:46	0°♈	
morning rise	796 Apr 01 j 03:28	0°♈16'31	
	796 May 11 j 02:48	0°♉	
	796 Jun 22 j 16:08	0°♊	
asc. node	796 Jun 27 j 22:23	3°♊34'55	
	796 Aug 07 j 03:18	0°♋	
	796 Sep 26 j 01:21	0°♌	
	796 Nov 29 j 03:39	0°♍	
retrograde	797 Jan 02 j 22:56	6°♍20'13	
	797 Feb 03 j 18:30	30°℞♌	
opposition	797 Feb 11 j 12:04	27°♌01'21	4°25'21
greatest brilliancy	797 Feb 11 j 23:09	26°♌50'26	-1.3m
min. Earth dist.	797 Feb 14 j 00:11	26°♌02'06	0.66805 AU
direct	797 Mar 24 j 20:57	17°♌00'58	
	797 May 16 j 02:42	0°♍	
	797 Jul 12 j 00:43	0°♎	
desc. node	797 Jul 16 j 14:29	2°♎46'59	
	797 Aug 27 j 08:46	0°♏	
	797 Oct 08 j 06:38	0°♐	
	797 Nov 16 j 16:48	0°♑	
greatest brilliancy	797 Dec 13 j 14:13	21°♑03'48	1.2m
	797 Dec 24 j 22:04	0°♒	
evening set	798 Jan 26 j 12:16	25°♒40'49	
	798 Feb 01 j 00:43	0°♓	
	798 Mar 11 j 23:29	0°♈	
conjunction	798 Apr 02 j 12:19	16°♈06'53	0°-26'-56
minimum elong	798 Apr 02 j 14:18	16°♈10'33	0°26'56
	798 Apr 21 j 12:08	0°♉	
asc. node	798 May 15 j 21:08	17°♉21'33	
max. Earth dist.	798 May 17 j 02:11	18°♉12'28	2.48903 AU
morning rise	798 Jun 02 j 04:13	29°♉22'05	
	798 Jun 03 j 02:18	0°♊	
	798 Jul 17 j 23:08	0°♋	
	798 Sep 03 j 06:53	0°♌	
	798 Oct 24 j 00:07	0°♍	
	798 Dec 23 j 08:26	0°♎	
retrograde	799 Feb 10 j 18:33	11°♎33'36	
opposition	799 Mar 20 j 11:58	3°♎10'45	2°58'50
greatest brilliancy	799 Mar 21 j 10:46	2°♎49'07	-1.6m
min. Earth dist.	799 Mar 26 j 18:25	0°♎48'16	0.60133 AU
	799 Mar 28 j 22:37	30°℞♍	
direct	799 Apr 30 j 10:14	23°♍21'31	
desc. node	799 Jun 03 j 13:45	29°♍53'34	
	799 Jun 03 j 21:07	0°♎	
	799 Aug 02 j 00:40	0°♏	
	799 Sep 15 j 16:33	0°♐	
	799 Oct 26 j 03:29	0°♑	
	799 Dec 03 j 22:16	0°♒	
	800 Jan 11 j 12:23	0°♓	
	800 Feb 19 j 23:25	0°♈	
evening set	800 Mar 31 j 07:44	29°♈29'18	
asc. node	800 Apr 01 j 19:28	0°♉33'04	
	800 Apr 01 j 00:56	0°♉	
	800 May 14 j 01:54	0°♊	
conjunction	800 May 26 j 03:41	8°♊10'23	0°31'41
minimum elong	800 May 26 j 02:17	8°♊08'02	0°31'39
max. Earth dist.	800 Jun 18 j 21:36	23°♊58'44	2.60182 AU
	800 Jun 28 j 01:45	0°♋	
morning rise	800 Jul 15 j 19:16	11°♋30'53	
	800 Aug 13 j 17:17	0°♌	
	800 Sep 30 j 18:07	0°♍	
	800 Nov 19 j 13:52	0°♎	
	801 Jan 12 j 21:51	0°♏	
retrograde	801 Apr 01 j 11:41	25°♏07'05	
desc. node	801 Apr 20 j 11:57	22°♏51'16	
opposition	801 May 05 j 15:42	18°♏21'09	0°-48'-11
greatest brilliancy	801 May 06 j 01:26	18°♏12'55	-2.2m
min. Earth dist.	801 May 14 j 03:22	15°♏28'55	0.48001 AU
direct	801 Jun 12 j 06:47	10°♏02'40	
	801 Aug 12 j 04:00	0°♐	
	801 Sep 28 j 04:48	0°♑	
	801 Nov 08 j 15:05	0°♒	
	801 Dec 18 j 21:43	0°♓	
	802 Jan 28 j 17:29	0°♈	
asc. node	802 Feb 17 j 19:13	14°♈24'27	
	802 Mar 11 j 23:04	0°♉	
	802 Apr 24 j 22:43	0°♊	
evening set	802 May 19 j 06:20	16°♊06'48	
	802 Jun 09 j 13:09	0°♋	
conjunction	802 Jul 07 j 06:34	17°♋51'53	1°03'46
minimum elong	802 Jul 07 j 05:38	17°♋50'24	1°03'47
max. Earth dist.	802 Jul 14 j 02:45	22°♋14'39	2.66396 AU
	802 Jul 26 j 06:19	0°♌	
morning rise	802 Aug 22 j 02:13	17°♌04'16	
	802 Sep 11 j 10:45	0°♍	
	802 Oct 28 j 15:56	0°♎	

	802 Dec 14 j 22:01	0°♏	
	803 Jan 31 j 19:54	0°♐	
desc. node	803 Mar 08 j 11:48	21°♐26'39	
	803 Mar 23 j 12:06	0°♑	
	803 Jun 13 j 05:16	0°♒	
retrograde	803 Jun 14 j 22:30	0°♒01'09	
	803 Jun 16 j 15:39	30°R♑	
opposition	803 Jul 15 j 00:48	25°♑03'13	-6°-37'-27
greatest brilliancy	803 Jul 15 j 13:48	24°♑54'33	-2.8m
min. Earth dist.	803 Jul 16 j 19:56	24°♑34'30	0.37662 AU
direct	803 Aug 14 j 10:53	19°♑54'56	
	803 Sep 24 j 19:08	0°♒	
	803 Nov 17 j 23:13	0°♓	
	804 Jan 03 j 05:56	0°♈	
asc. node	804 Jan 05 j 17:41	1°♈38'34	
	804 Feb 17 j 16:56	0°♉	
	804 Apr 03 j 18:42	0°♊	
	804 May 20 j 16:27	0°♋	
evening set	804 Jun 27 j 10:56	23°♋56'13	
	804 Jul 07 j 00:39	0°♌	
max. Earth dist.	804 Aug 05 j 14:04	18°♌46'58	2.67185 AU
conjunction	804 Aug 12 j 11:32	23°♌11'05	1°07'41
minimum elong	804 Aug 12 j 12:01	23°♌11'51	1°07'41
	804 Aug 23 j 02:58	0°♍	
morning rise	804 Sep 25 j 22:49	21°♍52'20	
	804 Oct 08 j 08:54	0°♎	
	804 Nov 22 j 10:43	0°♏	
	805 Jan 05 j 07:46	0°♐	
desc. node	805 Jan 23 j 11:35	12°♐37'52	
	805 Feb 17 j 04:52	0°♑	
	805 Mar 31 j 13:16	0°♒	
	805 May 13 j 15:54	0°♓	
	805 Jul 01 j 02:54	0°♈	
retrograde	805 Aug 24 j 15:59	17°♈09'07	
min. Earth dist.	805 Sep 20 j 22:29	12°♈07'22	0.43579 AU
opposition	805 Sep 28 j 20:17	9°♈28'57	-3°-6'-12
greatest brilliancy	805 Sep 27 j 15:55	9°♈52'46	-2.5m
direct	805 Oct 30 j 15:27	3°♈14'02	
asc. node	805 Nov 22 j 16:02	6°♈25'34	
	806 Jan 17 j 08:01	0°♉	
	806 Mar 11 j 11:45	0°♊	
	806 Apr 30 j 12:16	0°♋	
	806 Jun 18 j 08:02	0°♌	
evening set	806 Aug 03 j 19:10	29°♌16'29	
	806 Aug 04 j 22:22	0°♍	
max. Earth dist.	806 Aug 29 j 17:24	16°♍01'44	2.62568 AU
conjunction	806 Sep 18 j 18:35	29°♍14'14	0°45'21
minimum elong	806 Sep 18 j 19:48	29°♍16'15	0°45'20
	806 Sep 19 j 22:06	0°♎	
	806 Nov 03 j 01:30	0°♏	
morning rise	806 Nov 04 j 04:56	0°♏47'38	
desc. node	806 Dec 11 j 10:04	27°♏07'53	
	806 Dec 15 j 09:29	0°♐	
	807 Jan 25 j 05:03	0°♑	
	807 Mar 05 j 23:53	0°♒	
	807 Apr 14 j 11:41	0°♓	
	807 May 24 j 20:04	0°♈	
	807 Jul 07 j 02:24	0°♉	
	807 Aug 29 j 10:19	0°♊	
asc. node	807 Oct 10 j 15:45	10°♊41'00	
retrograde	807 Oct 11 j 08:55	10°♊41'13	
min. Earth dist.	807 Nov 12 j 20:28	3°♊33'46	0.56396 AU
opposition	807 Nov 19 j 10:15	1°♊00'16	1°47'28
greatest brilliancy	807 Nov 18 j 18:11	1°♊15'55	-1.8m
	807 Nov 22 j 00:46	30°R♉	
direct	807 Dec 25 j 16:49	22°♉46'51	
	808 Jan 31 j 20:44	0°♊	
	808 Apr 05 j 10:54	0°♋	
	808 May 28 j 03:29	0°♌	
	808 Jul 16 j 04:17	0°♍	
	808 Aug 31 j 11:58	0°♎	
evening set	808 Sep 10 j 23:05	7°♎00'53	
max. Earth dist.	808 Sep 27 j 06:37	18°♎08'20	2.52972 AU
	808 Oct 14 j 07:32	0°♏	
desc. node	808 Oct 28 j 08:47	9°♏58'25	
conjunction	808 Oct 30 j 08:38	11°♏24'07	0°-1'-15
minimum elong	808 Oct 30 j 08:32	11°♏23'57	0°01'16
behind sun begin	808 Oct 29 j 11:02	10°♏45'26	
behind sun end	808 Oct 31 j 06:02	12°♏02'30	
	808 Nov 24 j 21:43	0°♐	
morning rise	808 Dec 23 j 01:05	21°♐04'09	
	809 Jan 03 j 18:26	0°♑	
	809 Feb 11 j 13:27	0°♒	
	809 Mar 22 j 01:43	0°♓	
	809 Apr 30 j 05:12	0°♈	
	809 Jun 10 j 01:25	0°♉	
	809 Jul 24 j 02:54	0°♊	
asc. node	809 Aug 27 j 15:29	20°♊58'42	
	809 Sep 13 j 10:20	0°♋	
retrograde	809 Nov 16 j 18:13	19°♋42'20	
min. Earth dist.	809 Dec 24 j 00:46	10°♋55'29	0.65168 AU
opposition	809 Dec 26 j 22:17	9°♋45'52	4°00'41
greatest brilliancy	809 Dec 26 j 07:50	10°♋00'21	-1.3m
direct	810 Feb 04 j 06:32	0°♋25'49	
	810 May 03 j 13:28	0°♌	
	810 Jun 25 j 18:14	0°♍	
	810 Aug 12 j 08:40	0°♎	
desc. node	810 Sep 15 j 07:39	22°♎56'53	
	810 Sep 25 j 09:37	0°♏	
evening set	810 Oct 28 j 00:50	23°♏32'58	
	810 Nov 05 j 17:31	0°♐	
max. Earth dist.	810 Nov 18 j 08:34	9°♐29'04	2.40306 AU
	810 Dec 15 j 03:07	0°♑	
conjunction	810 Dec 25 j 12:44	8°♑05'19	0°-55'-28
minimum elong	810 Dec 25 j 10:24	8°♑00'46	0°55'28
	811 Jan 22 j 10:37	0°♒	
	811 Mar 01 j 13:22	0°♓	
morning rise	811 Mar 03 j 07:26	1°♓22'17	
	811 Apr 09 j 08:50	0°♈	
	811 May 19 j 17:13	0°♉	
	811 Jul 01 j 09:42	0°♊	
asc. node	811 Jul 15 j 13:47	9°♊30'34	
	811 Aug 16 j 11:26	0°♋	
	811 Oct 07 j 21:53	0°♌	
retrograde	811 Dec 21 j 06:22	23°♌35'25	
opposition	812 Jan 30 j 05:00	14°♌01'37	4°34'03
greatest brilliancy	812 Jan 30 j 08:33	13°♌58'06	-1.2m
min. Earth dist.	812 Jan 31 j 04:44	13°♌38'03	0.67638 AU
direct	812 Mar 11 j 06:40	4°♌07'20	
	812 May 30 j 06:17	0°♍	
	812 Jul 21 j 04:54	0°♎	
desc. node	812 Aug 02 j 06:11	7°♎41'09	
	812 Sep 04 j 11:14	0°♏	
	812 Oct 16 j 01:34	0°♐	
	812 Nov 24 j 09:34	0°♑	
evening set	812 Dec 29 j 07:03	27°♑24'14	
	813 Jan 01 j 13:53	0°♒	
	813 Feb 08 j 14:57	0°♓	
conjunction	813 Mar 06 j 22:59	20°♓26'53	0°-49'-54

minimum elong	813 Mar 07 j 02:03	20°♓32'46	0°49'53
	813 Mar 19 j 11:01	0°♈	
max. Earth dist.	813 Apr 27 j 03:18	28°♈45'20	2.43523 AU
	813 Apr 28 j 20:26	0°♉	
morning rise	813 May 11 j 18:04	9°♉16'52	
asc. node	813 Jun 01 j 12:54	23°♉54'52	
	813 Jun 10 j 08:19	0°♊	
	813 Jul 25 j 07:27	0°♋	
	813 Sep 11 j 05:57	0°♌	
	813 Nov 03 j 08:19	0°♍	
retrograde	814 Jan 25 j 19:47	27°♍29'47	
opposition	814 Mar 05 j 10:11	18°♍41'37	3°44'44
greatest brilliancy	814 Mar 06 j 06:41	18°♍21'48	-1.4m
min. Earth dist.	814 Mar 10 j 06:39	16°♍49'05	0.63489 AU
direct	814 Apr 15 j 18:19	8°♍42'18	
desc. node	814 Jun 20 j 05:18	28°♍29'32	
	814 Jun 23 j 04:06	0°♎	
	814 Aug 12 j 15:44	0°♏	
	814 Sep 24 j 18:04	0°♐	
	814 Nov 03 j 15:14	0°♑	
	814 Dec 12 j 02:33	0°♒	
	815 Jan 19 j 10:26	0°♓	
	815 Feb 27 j 15:01	0°♈	
evening set	815 Mar 09 j 03:46	7°♈07'53	
	815 Apr 09 j 09:57	0°♉	
asc. node	815 Apr 19 j 12:02	7°♉12'24	
conjunction	815 May 07 j 22:03	20°♉08'41	0°11'21
minimum elong	815 May 07 j 21:24	20°♉07'33	0°11'21
behind sun begin	815 May 07 j 04:43	19°♉38'32	
behind sun end	815 May 08 j 14:06	20°♉36'32	
	815 May 22 j 04:59	0°♊	
max. Earth dist.	815 Jun 08 j 09:23	11°♊38'58	2.56308 AU
morning rise	815 Jun 30 j 18:01	26°♊30'32	
	815 Jul 06 j 01:45	0°♋	
	815 Aug 21 j 20:19	0°♌	
	815 Oct 09 j 13:44	0°♍	
	815 Nov 30 j 13:19	0°♎	
	816 Feb 03 j 09:37	0°♏	
retrograde	816 Mar 10 j 12:18	6°♏40'45	
	816 Apr 13 j 00:42	30°℞♎	
opposition	816 Apr 15 j 08:24	29°♎10'25	1°02'35
greatest brilliancy	816 Apr 15 j 20:54	28°♎59'11	-1.9m
min. Earth dist.	816 Apr 23 j 10:23	26°♎16'21	0.53197 AU
desc. node	816 May 07 j 05:02	22°♎06'45	
direct	816 May 24 j 18:38	20°♎01'24	
	816 Jul 05 j 13:08	0°♏	
	816 Aug 28 j 00:39	0°♐	
	816 Oct 09 j 17:18	0°♑	
	816 Nov 18 j 13:54	0°♒	
	816 Dec 27 j 21:58	0°♓	
	817 Feb 06 j 00:26	0°♈	
asc. node	817 Mar 06 j 10:09	20°♈36'10	
	817 Mar 19 j 15:57	0°♉	
evening set	817 May 01 j 16:52	29°♉40'31	
	817 May 02 j 04:25	0°♊	
	817 Jun 16 j 11:27	0°♋	
conjunction	817 Jun 21 j 20:13	3°♋29'26	0°54'50
minimum elong	817 Jun 21 j 18:52	3°♋27'13	0°54'49
max. Earth dist.	817 Jul 04 j 21:16	11°♋55'45	2.64613 AU
	817 Aug 02 j 02:08	0°♌	
morning rise	817 Aug 08 j 01:34	3°♌48'12	
	817 Sep 18 j 11:37	0°♍	
	817 Nov 05 j 10:03	0°♎	
	817 Dec 24 j 08:07	0°♏	
	818 Feb 14 j 07:42	0°♐	
desc. node	818 Mar 25 j 03:34	19°♐04'05	
	818 Apr 29 j 03:13	0°♑	
retrograde	818 May 13 j 16:53	1°♑16'14	
	818 May 28 j 02:16	30°℞♐	
opposition	818 Jun 14 j 00:43	25°♐49'09	-4°-37'-44
greatest brilliancy	818 Jun 15 j 08:45	25°♐25'47	-2.7m
min. Earth dist.	818 Jun 20 j 06:36	24°♐00'35	0.40454 AU
direct	818 Jul 17 j 04:41	19°♐31'46	
	818 Aug 27 j 19:58	0°♑	
	818 Oct 18 j 22:14	0°♒	
	818 Dec 01 j 21:21	0°♓	
	819 Jan 13 j 20:17	0°♈	
asc. node	819 Jan 22 j 09:22	5°♈55'32	
	819 Feb 26 j 13:00	0°♉	
	819 Apr 12 j 13:11	0°♊	
	819 May 28 j 19:38	0°♋	
evening set	819 Jun 13 j 11:27	10°♋01'24	
	819 Jul 14 j 20:05	0°♌	
max. Earth dist.	819 Jul 28 j 12:04	8°♌41'43	2.67527 AU
conjunction	819 Jul 30 j 06:59	9°♌50'01	1°09'21
minimum elong	819 Jul 30 j 06:56	9°♌49'55	1°09'22
	819 Aug 30 j 21:37	0°♍	
morning rise	819 Sep 12 j 22:04	8°♍20'48	
	819 Oct 16 j 10:13	0°♎	
	819 Dec 01 j 03:15	0°♏	
	820 Jan 15 j 02:11	0°♐	
desc. node	820 Feb 10 j 02:49	17°♐31'25	
	820 Feb 28 j 14:53	0°♑	
	820 Apr 13 j 15:13	0°♒	
	820 Jun 01 j 20:27	0°♓	
retrograde	820 Jul 31 j 06:27	19°♓17'29	
min. Earth dist.	820 Aug 26 j 20:07	14°♓49'03	0.39369 AU
greatest brilliancy	820 Aug 31 j 10:57	13°♓28'01	-2.7m
opposition	820 Sep 01 j 18:24	13°♓04'50	-5°-31'-43
direct	820 Oct 01 j 21:01	7°♓44'34	
asc. node	820 Dec 09 j 09:11	0°♈00'59	
	820 Dec 09 j 08:26	0°♈	
	821 Jan 30 j 21:17	0°♉	
	821 Mar 20 j 21:40	0°♊	
	821 May 08 j 07:37	0°♋	
	821 Jun 25 j 09:52	0°♌	
evening set	821 Jul 20 j 08:05	15°♌42'55	
	821 Aug 11 j 17:49	0°♍	
max. Earth dist.	821 Aug 20 j 03:18	5°♍23'55	2.64998 AU
conjunction	821 Sep 03 j 23:42	15°♍01'28	0°57'02
minimum elong	821 Sep 04 j 00:48	15°♍03'14	0°57'02
	821 Sep 26 j 18:45	0°♎	
morning rise	821 Oct 19 j 04:35	14°♎59'25	
	821 Nov 10 j 05:05	0°♏	
	821 Dec 23 j 00:37	0°♐	
desc. node	821 Dec 28 j 02:09	3°♐37'11	
	822 Feb 02 j 10:39	0°♑	
	822 Mar 14 j 21:47	0°♒	
	822 Apr 24 j 04:31	0°♓	
	822 Jun 04 j 18:35	0°♈	
	822 Jul 21 j 10:34	0°♉	
retrograde	822 Sep 24 j 14:28	22°♉30'12	
min. Earth dist.	822 Oct 24 j 22:54	16°♉10'52	0.51582 AU
asc. node	822 Oct 27 j 08:00	15°♉17'50	
opposition	822 Nov 01 j 15:09	13°♉18'01	0°15'56
greatest brilliancy	822 Nov 11 j 05:37	9°♉54'45	-2.1m
direct	822 Dec 06 j 06:53	5°♉43'46	
	823 Feb 20 j 03:57	0°♊	
	823 Apr 16 j 07:27	0°♋	
	823 Jun 05 j 23:29	0°♌	

	823 Jul 24 j 07:14	0°♍	
evening set	823 Aug 27 j 04:12	21°♍52'58	
	823 Sep 08 j 10:29	0°♎	
max. Earth dist.	823 Sep 15 j 16:37	4°♎51'20	2.57281 AU
conjunction	823 Oct 13 j 17:20	23°♎59'27	0°19'22
minimum elong	823 Oct 13 j 18:06	24°♎00'46	0°19'21
	823 Oct 22 j 08:14	0°♏	
desc. node	823 Nov 15 j 00:48	16°♏49'09	
morning rise	823 Dec 02 j 16:54	29°♏38'51	
	823 Dec 03 j 04:26	0°♐	
	824 Jan 12 j 08:37	0°♑	
	824 Feb 20 j 11:04	0°♒	
	824 Mar 30 j 05:52	0°♓	
	824 May 08 j 15:59	0°♈	
	824 Jun 19 j 00:03	0°♉	
	824 Aug 03 j 12:14	0°♊	
asc. node	824 Sep 13 j 06:44	22°♊10'10	
	824 Oct 02 j 18:53	0°♋	
retrograde	824 Nov 02 j 21:15	5°♋41'26	
	824 Dec 01 j 20:55	30°℞♊	
min. Earth dist.	824 Dec 08 j 10:15	27°♊29'17	0.62452 AU
opposition	824 Dec 12 j 19:36	25°♊44'16	3°23'29
greatest brilliancy	824 Dec 12 j 01:02	26°♊02'47	-1.5m
direct	825 Jan 20 j 03:01	16°♊45'23	
	825 Mar 14 j 15:29	0°♋	
	825 May 13 j 17:43	0°♌	
	825 Jul 03 j 17:27	0°♍	
	825 Aug 19 j 16:25	0°♎	
desc. node	825 Oct 01 j 23:24	29°♎34'26	
	825 Oct 02 j 13:55	0°♏	
evening set	825 Oct 08 j 05:53	4°♏00'33	
max. Earth dist.	825 Oct 23 j 01:27	14°♏38'33	2.45296 AU
	825 Nov 12 j 23:32	0°♐	
conjunction	825 Dec 01 j 08:33	13°♐47'50	0°-36'-27
minimum elong	825 Dec 01 j 06:35	13°♐44'08	0°36'27
	825 Dec 22 j 12:43	0°♑	
	826 Jan 29 j 23:58	0°♒	
morning rise	826 Feb 01 j 11:21	1°♒56'36	
greatest brilliancy	826 Feb 07 j 21:47	7°♒00'00	1.2m
	826 Mar 09 j 05:29	0°♓	
	826 Apr 17 j 02:34	0°♈	
	826 May 27 j 12:56	0°♉	
	826 Jul 09 j 12:04	0°♊	
asc. node	826 Aug 01 j 06:36	14°♊56'11	
	826 Aug 25 j 15:04	0°♋	
	826 Oct 22 j 14:48	0°♌	
retrograde	826 Dec 07 j 20:42	10°♌50'19	
opposition	827 Jan 17 j 00:53	1°♌04'43	4°30'52
greatest brilliancy	827 Jan 16 j 20:44	1°♌08'51	-1.2m
min. Earth dist.	827 Jan 16 j 12:00	1°♌17'34	0.67464 AU
	827 Jan 19 j 17:50	30°℞♋	
direct	827 Feb 26 j 14:16	21°♋20'33	
	827 Apr 09 j 12:52	0°♌	
	827 Jun 11 j 00:05	0°♍	
	827 Jul 30 j 13:44	0°♎	
desc. node	827 Aug 19 j 23:07	13°♎23'22	
	827 Sep 13 j 04:37	0°♏	
	827 Oct 24 j 14:53	0°♐	
	827 Dec 02 j 22:24	0°♑	
evening set	827 Dec 03 j 10:16	0°♑23'04	
	828 Jan 10 j 03:00	0°♒	
conjunction	828 Feb 07 j 04:37	22°♒10'07	-1°-3'-37
minimum elong	828 Feb 07 j 05:58	22°♒12'47	1°03'39
	828 Feb 17 j 03:46	0°♓	
max. Earth dist.	828 Mar 21 j 00:44	25°♓29'35	2.38504 AU
	828 Mar 26 j 22:28	0°♈	
morning rise	828 Apr 16 j 21:47	15°♈46'45	
	828 May 06 j 06:07	0°♉	
	828 Jun 17 j 17:34	0°♊	
asc. node	828 Jun 18 j 04:36	0°♊18'56	
	828 Aug 01 j 22:10	0°♋	
	828 Sep 19 j 20:50	0°♌	
	828 Nov 16 j 15:58	0°♍	
retrograde	829 Jan 11 j 00:36	14°♍11'24	
opposition	829 Feb 19 j 07:20	5°♍02'25	4°14'14
greatest brilliancy	829 Feb 19 j 22:15	4°♍47'48	-1.3m
min. Earth dist.	829 Feb 22 j 15:52	3°♍43'31	0.65919 AU
	829 Mar 04 j 17:12	30°℞♌	
direct	829 Apr 01 j 18:03	25°♌00'41	
	829 May 02 j 01:58	0°♍	
	829 Jul 05 j 11:12	0°♎	
desc. node	829 Jul 06 j 22:11	0°♎50'57	
	829 Aug 21 j 21:40	0°♏	
	829 Oct 03 j 04:22	0°♐	
	829 Nov 11 j 17:54	0°♑	
	829 Dec 20 j 00:48	0°♒	
	830 Jan 27 j 04:28	0°♓	
evening set	830 Feb 11 j 03:25	11°♓37'17	
	830 Mar 07 j 04:07	0°♈	
conjunction	830 Apr 16 j 04:40	29°♈36'16	0°-12'-32
minimum elong	830 Apr 16 j 05:33	29°♈37'52	0°12'32
behind sun begin	830 Apr 15 j 13:35	29°♈09'03	
behind sun end	830 Apr 16 j 21:30	0°♉06'40	
	830 Apr 16 j 17:48	0°♉	
asc. node	830 May 06 j 03:11	13°♉50'37	
max. Earth dist.	830 May 26 j 01:38	27°♉44'34	2.51706 AU
	830 May 29 j 08:22	0°♊	
morning rise	830 Jun 13 j 04:15	10°♊05'30	
	830 Jul 13 j 03:49	0°♋	
	830 Aug 29 j 04:42	0°♌	
	830 Oct 17 j 23:28	0°♍	
	830 Dec 12 j 20:33	0°♎	
retrograde	831 Feb 20 j 13:55	20°♎31'55	
opposition	831 Mar 29 j 17:29	12°♎25'51	2°23'03
greatest brilliancy	831 Mar 30 j 15:05	12°♎05'40	-1.7m
min. Earth dist.	831 Apr 05 j 17:35	9°♎49'06	0.57885 AU
direct	831 May 09 j 06:29	2°♎46'51	
desc. node	831 May 24 j 20:32	4°♎18'09	
	831 Jul 25 j 01:22	0°♏	
	831 Sep 09 j 11:38	0°♐	
	831 Oct 20 j 12:33	0°♑	
	831 Nov 28 j 14:30	0°♒	
	832 Jan 06 j 09:29	0°♓	
	832 Feb 15 j 00:24	0°♈	
asc. node	832 Mar 23 j 03:21	27°♈05'13	
	832 Mar 27 j 05:22	0°♉	
evening set	832 Apr 12 j 06:44	11°♉19'42	
	832 May 09 j 08:53	0°♊	
conjunction	832 Jun 05 j 06:10	18°♊02'43	0°41'27
minimum elong	832 Jun 05 j 04:39	18°♊00'12	0°41'25
	832 Jun 23 j 10:02	0°♋	
max. Earth dist.	832 Jun 25 j 01:41	1°♋04'47	2.61970 AU
morning rise	832 Jul 24 j 12:08	20°♋06'44	
	832 Aug 08 j 23:59	0°♌	
	832 Sep 25 j 17:44	0°♍	
	832 Nov 13 j 17:14	0°♎	
	833 Jan 04 j 09:19	0°♏	
	833 Mar 08 j 19:58	0°♐	
desc. node	833 Apr 10 j 19:25	7°♐11'17	

retrograde	833 Apr 15 j 12:23	7°♐19'24	
opposition	833 May 18 j 15:31	1°♐01'15	-2°-5'-49
greatest brilliancy	833 May 19 j 14:03	0°♐42'58	-2.4m
	833 May 21 j 18:43	30°℞♏	
min. Earth dist.	833 May 26 j 20:00	28°♏22'24	0.45101 AU
direct	833 Jun 23 j 21:20	23°♏20'59	
	833 Jul 26 j 09:29	0°♐	
	833 Sep 19 j 13:14	0°♑	
	833 Nov 01 j 16:52	0°♒	
	833 Dec 12 j 19:47	0°♓	
	834 Jan 23 j 04:34	0°♈	
asc. node	834 Feb 08 j 02:24	11°♈19'21	
	834 Mar 06 j 19:39	0°♉	
	834 Apr 20 j 02:01	0°♊	
evening set	834 May 28 j 16:56	25°♊21'37	
	834 Jun 04 j 20:51	0°♋	
conjunction	834 Jul 15 j 19:05	26°♋15'58	1°07'01
minimum elong	834 Jul 15 j 18:27	26°♋14'58	1°07'01
max. Earth dist.	834 Jul 19 j 11:05	28°♋36'18	2.67019 AU
	834 Jul 21 j 15:35	0°♌	
morning rise	834 Aug 30 j 01:32	25°♌05'44	
	834 Sep 06 j 18:17	0°♍	
	834 Oct 23 j 16:31	0°♎	
	834 Dec 09 j 06:56	0°♏	
	835 Jan 24 j 21:01	0°♐	
desc. node	835 Feb 26 j 18:53	20°♐54'40	
	835 Mar 13 j 09:33	0°♑	
	835 May 04 j 16:28	0°♒	
retrograde	835 Jul 02 j 21:06	18°♒02'15	
min. Earth dist.	835 Aug 01 j 00:45	13°♒16'45	0.37391 AU
opposition	835 Aug 02 j 08:48	12°♒55'21	-6°-52'-50
greatest brilliancy	835 Aug 02 j 02:00	12°♒59'53	-2.9m
direct	835 Aug 31 j 23:25	8°♒00'20	
	835 Nov 06 j 04:36	0°♓	
	835 Dec 26 j 14:10	0°♈	
asc. node	835 Dec 27 j 00:30	0°♈16'15	
	836 Feb 11 j 14:14	0°♉	
	836 Mar 29 j 10:51	0°♊	
	836 May 15 j 19:08	0°♋	
	836 Jul 02 j 08:42	0°♌	
evening set	836 Jul 05 j 20:29	2°♌12'23	
max. Earth dist.	836 Aug 10 j 21:00	25°♌05'50	2.66624 AU
	836 Aug 18 j 12:38	0°♍	
conjunction	836 Aug 20 j 15:10	1°♍21'08	1°04'53
minimum elong	836 Aug 20 j 15:55	1°♍22'20	1°04'53
	836 Oct 03 j 16:31	0°♎	
morning rise	836 Oct 04 j 05:30	0°♎21'23	
	836 Nov 17 j 12:14	0°♏	
	836 Dec 30 j 23:13	0°♐	
desc. node	837 Jan 13 j 17:44	9°♐41'37	
	837 Feb 11 j 05:40	0°♑	
	837 Mar 24 j 18:00	0°♒	
	837 May 05 j 10:53	0°♓	
	837 Jun 18 j 21:11	0°♈	
	837 Aug 23 j 08:29	0°♉	
retrograde	837 Sep 05 j 15:09	1°♉15'41	
	837 Sep 18 j 17:12	30°℞♈	
min. Earth dist.	837 Oct 03 j 21:28	25°♈47'35	0.46372 AU
greatest brilliancy	837 Oct 11 j 06:59	23°♈11'29	-2.3m
opposition	837 Oct 12 j 01:12	22°♈55'26	-1°-45'-16
direct	837 Nov 13 j 20:19	16°♈10'12	
asc. node	837 Nov 13 j 00:12	16°♈10'29	
	838 Jan 05 j 16:16	0°♉	
	838 Mar 04 j 17:12	0°♊	
	838 Apr 25 j 01:40	0°♋	
	838 Jun 13 j 10:40	0°♌	
	838 Jul 31 j 06:44	0°♍	
evening set	838 Aug 12 j 03:44	7°♍37'05	
max. Earth dist.	838 Sep 04 j 14:47	22°♍54'29	2.60884 AU
	838 Sep 15 j 07:51	0°♎	
conjunction	838 Sep 27 j 12:48	8°♎10'38	0°36'51
minimum elong	838 Sep 27 j 13:57	8°♎12'35	0°36'51
	838 Oct 29 j 09:15	0°♏	
morning rise	838 Nov 13 j 23:38	10°♏57'08	
desc. node	838 Dec 01 j 17:14	23°♏37'07	
	838 Dec 10 j 12:56	0°♐	
	839 Jan 20 j 02:30	0°♑	
	839 Feb 28 j 14:38	0°♒	
	839 Apr 08 j 19:04	0°♓	
	839 May 18 j 16:42	0°♈	
	839 Jun 29 j 23:21	0°♉	
	839 Aug 17 j 17:06	0°♊	
asc. node	839 Sep 30 j 23:07	18°♊06'27	
retrograde	839 Oct 20 j 06:00	20°♊30'45	
min. Earth dist.	839 Nov 22 j 21:01	12°♊58'33	0.58802 AU
opposition	839 Nov 28 j 16:46	10°♊40'58	2°28'46
greatest brilliancy	839 Nov 27 j 21:58	10°♊59'31	-1.7m
direct	840 Jan 04 j 18:17	2°♊09'17	
	840 Mar 29 j 02:02	0°♋	
	840 May 22 j 15:02	0°♌	
	840 Jul 11 j 06:29	0°♍	
	840 Aug 26 j 19:42	0°♎	
evening set	840 Sep 20 j 09:26	16°♎35'32	
max. Earth dist.	840 Oct 05 j 10:35	27°♎01'24	2.50367 AU
	840 Oct 09 j 16:23	0°♏	
desc. node	840 Oct 18 j 16:16	6°♏21'58	
conjunction	840 Nov 10 j 04:11	22°♏36'19	0°-13'-58
minimum elong	840 Nov 10 j 03:28	22°♏35'00	0°13'59
behind sun begin	840 Nov 09 j 15:46	22°♏13'39	
behind sun end	840 Nov 10 j 15:09	22°♏56'22	
	840 Nov 20 j 05:25	0°♐	
	840 Dec 29 j 23:30	0°♑	
morning rise	841 Jan 05 j 12:32	5°♑02'04	
	841 Feb 06 j 15:25	0°♒	
	841 Mar 17 j 00:36	0°♓	
	841 Apr 25 j 00:30	0°♈	
	841 Jun 04 j 15:06	0°♉	
	841 Jul 18 j 02:46	0°♊	
asc. node	841 Aug 17 j 21:16	19°♊24'58	
	841 Sep 05 j 04:55	0°♋	
retrograde	841 Nov 24 j 12:56	27°♋52'03	
min. Earth dist.	842 Jan 01 j 17:10	18°♋47'25	0.66276 AU
opposition	842 Jan 03 j 18:15	17°♋58'16	4°15'40
greatest brilliancy	842 Jan 03 j 07:08	18°♋09'25	-1.3m
direct	842 Feb 12 j 14:07	8°♋28'17	
	842 Apr 25 j 17:59	0°♌	
	842 Jun 20 j 03:39	0°♍	
	842 Aug 07 j 08:57	0°♎	
desc. node	842 Sep 05 j 14:43	19°♎34'22	
	842 Sep 20 j 14:54	0°♏	
	842 Nov 01 j 00:11	0°♐	
evening set	842 Nov 09 j 07:29	6°♐13'24	
	842 Dec 10 j 09:22	0°♑	
max. Earth dist.	842 Dec 12 j 20:47	1°♑55'19	2.38062 AU
conjunction	843 Jan 09 j 12:34	23°♑34'57	-1°-2'-24
minimum elong	843 Jan 09 j 11:00	23°♑31'52	1°02'25
	843 Jan 17 j 15:55	0°♒	
	843 Feb 24 j 17:42	0°♓	
morning rise	843 Mar 20 j 07:32	18°♓21'06	

	843 Apr 04 j 12:04	0°♈	
	843 May 14 j 18:50	0°♉	
	843 Jun 26 j 07:34	0°♊	
asc. node	843 Jul 05 j 20:59	6°♊29'06	
	843 Aug 10 j 21:57	0°♋	
	843 Sep 30 j 13:39	0°♌	
	843 Dec 13 j 20:51	0°♍	
retrograde	843 Dec 29 j 01:28	1°♍21'26	
	844 Jan 12 j 13:29	30°℞♌	
opposition	844 Feb 06 j 19:48	21°♌55'31	4°30'16
greatest brilliancy	844 Feb 07 j 03:37	21°♌47'47	-1.2m
min. Earth dist.	844 Feb 08 j 16:03	21°♌11'44	0.67309 AU
direct	844 Mar 19 j 02:24	11°♌57'07	
	844 May 21 j 21:00	0°♍	
	844 Jul 15 j 09:08	0°♎	
desc. node	844 Jul 23 j 13:27	5°♎05'05	
	844 Aug 30 j 06:54	0°♏	
	844 Oct 11 j 02:42	0°♐	
	844 Nov 19 j 12:32	0°♑	
	844 Dec 27 j 17:33	0°♒	
evening set	845 Jan 14 j 03:38	13°♒45'43	
greatest brilliancy	845 Jan 31 j 22:21	27°♒45'11	1.2m
	845 Feb 03 j 19:12	0°♓	
	845 Mar 14 j 15:51	0°♈	
conjunction	845 Mar 22 j 07:15	5°♈46'35	0°-37'-26
minimum elong	845 Mar 22 j 09:56	5°♈51'39	0°37'25
	845 Apr 24 j 01:51	0°♉	
max. Earth dist.	845 May 09 j 05:46	10°♉53'21	2.46524 AU
asc. node	845 May 22 j 20:20	20°♉29'17	
morning rise	845 May 24 j 06:37	21°♉29'09	
	845 Jun 05 j 13:31	0°♊	
	845 Jul 20 j 09:32	0°♋	
	845 Sep 05 j 21:08	0°♌	
	845 Oct 27 j 08:34	0°♍	
	846 Jan 01 j 01:47	0°♎	
retrograde	846 Feb 03 j 17:50	5°♎52'43	
	846 Mar 06 j 15:14	30°℞♍	
opposition	846 Mar 13 j 21:46	27°♍17'58	3°20'00
greatest brilliancy	846 Mar 14 j 19:58	26°♍56'41	-1.5m
min. Earth dist.	846 Mar 19 j 13:40	25°♍07'59	0.61756 AU
direct	846 Apr 24 j 02:03	17°♍22'53	
desc. node	846 Jun 10 j 12:39	28°♍59'29	
	846 Jun 12 j 20:16	0°♎	
	846 Aug 06 j 04:35	0°♏	
	846 Sep 19 j 03:42	0°♐	
	846 Oct 29 j 08:42	0°♑	
	846 Dec 06 j 23:59	0°♒	
	847 Jan 14 j 10:44	0°♓	
	847 Feb 22 j 17:44	0°♈	
evening set	847 Mar 22 j 14:34	20°♈35'48	
	847 Apr 04 j 14:59	0°♉	
asc. node	847 Apr 09 j 18:40	3°♉40'59	
	847 May 17 j 11:57	0°♊	
conjunction	847 May 19 j 02:57	1°♊06'35	0°23'34
minimum elong	847 May 19 j 01:46	1°♊04'34	0°23'33
max. Earth dist.	847 Jun 15 j 04:06	19°♊18'41	2.58547 AU
	847 Jul 01 j 09:06	0°♋	
morning rise	847 Jul 10 j 02:05	5°♋40'52	
	847 Aug 17 j 00:39	0°♌	
	847 Oct 04 j 07:07	0°♍	
	847 Nov 23 j 20:50	0°♎	
	848 Jan 20 j 01:12	0°♏	
retrograde	848 Mar 22 j 13:17	17°♏16'04	
opposition	848 Apr 26 j 11:44	10°♏09'09	0°02'57
greatest brilliancy	860 Aug 20 j 11:28	15°♋00'56	47.7m

desc. node	848 Apr 27 j 10:57	9°♏48'52	
min. Earth dist.	848 May 04 j 21:16	7°♏13'22	0.50369 AU
direct	848 Jun 04 j 00:22	1°♏24'58	
	848 Aug 19 j 06:52	0°♐	
	848 Oct 02 j 23:00	0°♑	
	848 Nov 12 j 13:53	0°♒	
	848 Dec 22 j 08:52	0°♓	
	849 Jan 31 j 19:11	0°♈	
asc. node	849 Feb 24 j 18:11	17°♈18'17	
	849 Mar 14 j 16:48	0°♉	
	849 Apr 27 j 09:59	0°♊	
evening set	849 May 11 j 21:32	9°♊40'38	
	849 Jun 11 j 19:58	0°♋	
conjunction	849 Jun 30 j 18:42	12°♋15'40	1°00'33
minimum elong	849 Jun 30 j 17:34	12°♋13'50	1°00'32
max. Earth dist.	849 Jul 10 j 09:34	18°♋26'36	2.65701 AU
	849 Jul 28 j 11:14	0°♌	
morning rise	849 Aug 16 j 03:51	11°♌53'35	
	849 Sep 13 j 17:29	0°♍	
	849 Oct 31 j 05:26	0°♎	
	849 Dec 18 j 02:41	0°♏	
	850 Feb 05 j 10:10	0°♐	
desc. node	850 Mar 15 j 10:21	21°♐26'50	
	850 Apr 01 j 08:32	0°♑	
retrograde	850 May 31 j 15:31	17°♑21'34	
opposition	850 Jul 01 j 00:46	12°♑16'20	-5°-55'-50
greatest brilliancy	850 Jul 02 j 02:15	11°♑58'54	-2.8m
min. Earth dist.	850 Jul 05 j 02:54	11°♑09'16	0.38583 AU
direct	850 Aug 01 j 12:47	6°♑42'41	
	850 Oct 07 j 06:02	0°♒	
	850 Nov 23 j 22:43	0°♓	
	851 Jan 07 j 10:14	0°♈	
asc. node	851 Jan 12 j 16:59	3°♈34'48	
	851 Feb 20 j 23:02	0°♉	
	851 Apr 07 j 11:33	0°♊	
	851 May 24 j 01:21	0°♋	
evening set	851 Jun 22 j 02:51	18°♋29'58	
	851 Jul 10 j 05:32	0°♌	
max. Earth dist.	851 Aug 02 j 18:04	14°♌57'07	2.67445 AU
conjunction	851 Aug 07 j 10:15	17°♌55'48	1°08'50
minimum elong	851 Aug 07 j 10:30	17°♌56'12	1°08'51
	851 Aug 26 j 07:37	0°♍	
morning rise	851 Sep 20 j 21:46	16°♍28'36	
	851 Oct 11 j 16:46	0°♎	
	851 Nov 26 j 01:29	0°♏	
	852 Jan 09 j 09:34	0°♐	
desc. node	852 Jan 31 j 10:43	15°♐08'37	
	852 Feb 21 j 22:10	0°♑	
	852 Apr 05 j 05:09	0°♒	
	852 May 20 j 00:46	0°♓	
	852 Jul 15 j 06:35	0°♈	
retrograde	852 Aug 14 j 14:47	6°♈01'05	
min. Earth dist.	852 Sep 10 j 08:21	1°♈17'52	0.41499 AU
	852 Sep 14 j 11:25	30°℞♓	
greatest brilliancy	852 Sep 16 j 07:16	29°♓24'57	-2.6m
opposition	852 Sep 17 j 15:57	28°♓58'54	-4°-10'-53
direct	852 Oct 18 j 15:52	23°♓09'28	
	852 Nov 22 j 07:24	0°♈	
asc. node	852 Nov 29 j 15:04	2°♈46'20	
	853 Jan 22 j 21:43	0°♉	
	853 Mar 14 j 21:59	0°♊	
	853 May 03 j 03:47	0°♋	
	853 Jun 20 j 15:27	0°♌	
evening set	853 Jul 28 j 14:28	23°♌54'32	
	853 Aug 07 j 03:25	0°♍	

max. Earth dist.	853 Aug 25 j 17:09	11°♍58'23	2.63762 AU
conjunction	853 Sep 12 j 08:38	23°♍30'23	0°50'42
minimum elong	853 Sep 12 j 09:49	23°♍32'20	0°50'42
	853 Sep 22 j 04:26	0°♎	
morning rise	853 Oct 28 j 03:39	24°♎15'38	
	853 Nov 05 j 11:44	0°♏	
desc. node	853 Dec 18 j 09:20	0°♐13'55	
	853 Dec 18 j 01:34	0°♐	
	854 Jan 28 j 03:54	0°♑	
	854 Mar 09 j 05:38	0°♒	
	854 Apr 18 j 00:40	0°♓	
	854 May 28 j 18:29	0°♈	
	854 Jul 11 j 23:59	0°♉	
	854 Sep 10 j 21:46	0°♊	
retrograde	854 Oct 04 j 09:58	3°♊36'38	
asc. node	854 Oct 17 j 14:42	2°♊20'38	
	854 Oct 26 j 20:26	30°℞♉	
min. Earth dist.	854 Nov 04 j 22:24	26°♉50'16	0.54310 AU
greatest brilliancy	854 Nov 11 j 13:02	24°♉18'09	-1.9m
opposition	854 Nov 12 j 01:15	24°♉06'25	1°12'16
direct	854 Dec 17 j 15:30	16°♉09'19	
	855 Feb 09 j 14:49	0°♊	
	855 Apr 10 j 00:07	0°♋	
	855 May 31 j 18:26	0°♌	
	855 Jul 19 j 12:29	0°♍	
	855 Sep 03 j 19:20	0°♎	
evening set	855 Sep 05 j 01:34	0°♎50'19	
max. Earth dist.	855 Sep 22 j 15:31	12°♎40'56	2.54983 AU
	855 Oct 17 j 16:59	0°♏	
conjunction	855 Oct 23 j 12:44	4°♏05'58	0°07'52
minimum elong	855 Oct 23 j 13:05	4°♏06'34	0°07'51
behind sun begin	855 Oct 22 j 18:23	3°♏33'36	
behind sun end	855 Oct 24 j 07:46	4°♏39'35	
desc. node	855 Nov 05 j 07:43	13°♏12'02	
	855 Nov 28 j 10:51	0°♐	
morning rise	855 Dec 14 j 09:26	11°♐49'05	
	856 Jan 07 j 11:32	0°♑	
	856 Feb 15 j 10:00	0°♒	
	856 Mar 25 j 00:55	0°♓	
	856 May 03 j 06:17	0°♈	
	856 Jun 13 j 05:22	0°♉	
	856 Jul 27 j 16:32	0°♊	
asc. node	856 Sep 03 j 14:39	22°♊15'38	
	856 Sep 19 j 03:53	0°♋	
retrograde	856 Nov 10 j 22:22	14°♋17'29	
min. Earth dist.	856 Dec 17 j 11:01	5°♋45'18	0.64070 AU
greatest brilliancy	856 Dec 20 j 07:34	4°♋36'44	-1.4m
opposition	856 Dec 21 j 00:13	4°♋20'03	3°47'10
	857 Jan 01 j 10:56	30°℞♊	
direct	857 Jan 28 j 21:42	25°♊08'47	
	857 Feb 28 j 04:23	0°♋	
	857 May 07 j 05:43	0°♌	
	857 Jun 28 j 11:19	0°♍	
	857 Aug 14 j 20:21	0°♎	
desc. node	857 Sep 22 j 06:45	26°♎04'19	
	857 Sep 27 j 21:10	0°♏	
evening set	857 Oct 19 j 03:57	15°♏12'40	
max. Earth dist.	857 Nov 05 j 01:34	27°♏36'16	2.42479 AU
	857 Nov 08 j 07:00	0°♐	
conjunction	857 Dec 14 j 13:46	27°♐31'07	0°-48'-3
minimum elong	857 Dec 14 j 11:24	27°♐26'33	0°48'01
	857 Dec 17 j 18:52	0°♑	
	858 Jan 25 j 04:09	0°♒	
morning rise	858 Feb 18 j 00:25	18°♒46'18	
	858 Mar 04 j 07:51	0°♓	
	858 Apr 12 j 03:12	0°♈	
	858 May 22 j 10:57	0°♉	
	858 Jul 04 j 04:15	0°♊	
asc. node	858 Jul 22 j 13:02	12°♊14'29	
	858 Aug 19 j 12:35	0°♋	
	858 Oct 12 j 11:34	0°♌	
retrograde	858 Dec 15 j 13:11	18°♌38'40	
opposition	859 Jan 24 j 14:54	8°♌59'19	4°34'05
greatest brilliancy	859 Jan 24 j 15:03	8°♌59'10	-1.2m
min. Earth dist.	859 Jan 24 j 22:41	8°♌51'33	0.67685 AU
	859 Feb 22 j 22:01	30°℞♋	
direct	859 Mar 06 j 11:33	29°♋09'00	
	859 Mar 18 j 12:33	0°♌	
	859 Jun 04 j 06:06	0°♍	
	859 Jul 25 j 03:49	0°♎	
desc. node	859 Aug 10 j 05:45	10°♎23'00	
	859 Sep 08 j 04:49	0°♏	
	859 Oct 19 j 18:45	0°♐	
	859 Nov 28 j 03:23	0°♑	
evening set	859 Dec 18 j 05:58	15°♑43'48	
	860 Jan 05 j 08:00	0°♒	
	860 Feb 12 j 08:37	0°♓	
conjunction	860 Feb 23 j 12:20	8°♓43'11	0°-57'-25
minimum elong	860 Feb 23 j 15:03	8°♓48'29	0°57'26
	860 Mar 22 j 03:11	0°♈	
max. Earth dist.	860 Apr 14 j 18:32	17°♈45'55	2.41129 AU
morning rise	860 May 01 j 09:11	29°♈57'48	
	860 May 01 j 10:24	0°♉	
asc. node	860 Jun 08 j 11:53	26°♉59'37	
	860 Jun 12 j 20:31	0°♊	
	860 Jul 27 j 19:51	0°♋	
	860 Sep 14 j 01:24	0°♌	
	860 Nov 07 j 13:12	0°♍	
retrograde	861 Jan 19 j 08:55	22°♍12'18	
opposition	861 Feb 27 j 07:27	13°♍14'24	3°58'35
greatest brilliancy	861 Feb 28 j 01:43	12°♍56'37	-1.3m
min. Earth dist.	861 Mar 03 j 12:27	11°♍36'09	0.64695 AU
direct	861 Apr 09 j 17:47	3°♍13'02	
desc. node	861 Jun 27 j 04:19	29°♍31'45	
	861 Jun 28 j 01:02	0°♎	
	861 Aug 16 j 02:34	0°♏	
	861 Sep 27 j 21:06	0°♐	
	861 Nov 06 j 15:34	0°♑	
	861 Dec 15 j 01:00	0°♒	
	862 Jan 22 j 06:42	0°♓	
evening set	862 Feb 26 j 03:26	26°♓49'21	
	862 Mar 02 j 08:15	0°♈	
	862 Apr 11 j 23:32	0°♉	
asc. node	862 Apr 26 j 11:33	10°♉22'00	
conjunction	862 Apr 28 j 20:09	12°♉02'10	0°01'30
minimum elong	862 Apr 28 j 20:06	12°♉02'03	0°01'30
behind sun begin	862 Apr 27 j 19:50	11°♉19'10	
behind sun end	862 Apr 29 j 20:22	12°♉44'54	
	862 May 24 j 15:15	0°♊	
max. Earth dist.	862 Jun 02 j 22:00	6°♊20'12	2.54329 AU
morning rise	862 Jun 23 j 09:45	20°♊06'02	
	862 Jul 08 j 09:51	0°♋	
	862 Aug 24 j 05:40	0°♌	
	862 Oct 12 j 07:33	0°♍	
	862 Dec 04 j 13:23	0°♎	
retrograde	863 Mar 03 j 00:44	29°♎56'21	
opposition	863 Apr 08 j 11:26	22°♎09'05	1°39'50
greatest brilliancy	863 Apr 09 j 05:10	21°♎52'51	-1.8m
min. Earth dist.	863 Apr 16 j 03:03	19°♎20'59	0.55377 AU

desc. node	863 May 15 j 03:58	12°♎48'42	
direct	863 May 18 j 11:25	12°♎44'16	
	863 Jul 15 j 04:36	0°♏	
	863 Sep 02 j 16:29	0°♐	
	863 Oct 14 j 13:48	0°♑	
	863 Nov 23 j 01:07	0°♒	
	864 Jan 01 j 02:23	0°♓	
	864 Feb 09 j 22:31	0°♈	
asc. node	864 Mar 13 j 09:44	23°♈38'39	
	864 Mar 22 j 07:52	0°♉	
evening set	864 Apr 23 j 14:01	22°♉28'28	
	864 May 04 j 15:06	0°♊	
conjunction	864 Jun 14 j 21:09	27°♊27'42	0°49'44
minimum elong	864 Jun 14 j 19:40	27°♊25'18	0°49'43
	864 Jun 18 j 18:18	0°♋	
max. Earth dist.	864 Jun 30 j 21:24	7°♋53'20	2.63543 AU
morning rise	864 Aug 01 j 22:01	28°♋27'53	
	864 Aug 04 j 07:49	0°♌	
	864 Sep 20 j 20:10	0°♍	
	864 Nov 08 j 04:03	0°♎	
	864 Dec 28 j 01:52	0°♏	
	865 Feb 21 j 03:33	0°♐	
desc. node	865 Apr 01 j 02:53	15°♐52'26	
retrograde	865 Apr 30 j 17:45	20°♐41'01	
opposition	865 Jun 01 j 21:32	14°♐51'33	-3°-30'-53
greatest brilliancy	865 Jun 03 j 04:27	14°♐27'49	-2.5m
min. Earth dist.	865 Jun 09 j 07:37	12°♐35'48	0.42393 AU
direct	865 Jul 06 j 11:55	7°♐55'52	
	865 Sep 08 j 09:57	0°♑	
	865 Oct 24 j 21:44	0°♒	
	865 Dec 06 j 07:10	0°♓	
	866 Jan 17 j 09:49	0°♈	
asc. node	866 Jan 29 j 08:34	8°♈24'26	
	866 Mar 01 j 12:43	0°♉	
	866 Apr 15 j 03:26	0°♊	
	866 May 31 j 03:35	0°♋	
evening set	866 Jun 06 j 20:21	4°♋18'34	
	866 Jul 17 j 01:01	0°♌	
conjunction	866 Jul 24 j 03:44	4°♌31'48	1°08'52
minimum elong	866 Jul 24 j 03:26	4°♌31'20	1°08'51
max. Earth dist.	866 Jul 24 j 17:51	4°♌54'15	2.67411 AU
	866 Sep 02 j 03:00	0°♍	
morning rise	866 Sep 07 j 00:00	3°♍06'57	
	866 Oct 18 j 19:46	0°♎	
	866 Dec 03 j 21:57	0°♏	
	867 Jan 18 j 12:28	0°♐	
desc. node	867 Feb 17 j 02:01	19°♐28'52	
	867 Mar 05 j 03:10	0°♑	
	867 Apr 21 j 06:17	0°♒	
	867 Jun 18 j 06:29	0°♓	
retrograde	867 Jul 20 j 00:48	6°♓14'36	
min. Earth dist.	867 Aug 16 j 06:01	1°♓46'48	0.38127 AU
greatest brilliancy	867 Aug 19 j 10:09	0°♓54'05	-2.8m
opposition	867 Aug 20 j 09:41	0°♓37'45	-6°-21'-7
	867 Aug 22 j 16:22	30°℞♒	
direct	867 Sep 18 j 23:49	25°♒35'09	
	867 Oct 15 j 23:11	0°♓	
asc. node	867 Dec 17 j 08:12	29°♓51'49	
	867 Dec 17 j 13:50	0°♈	
	868 Feb 05 j 00:56	0°♉	
	868 Mar 23 j 22:51	0°♊	
	868 May 10 j 19:58	0°♋	
	868 Jun 27 j 16:14	0°♌	
evening set	868 Jul 14 j 04:16	10°♌24'36	
	868 Aug 13 j 22:46	0°♍	

max. Earth dist.	868 Aug 16 j 06:51	1°♍29'59	2.65837 AU
conjunction	868 Aug 28 j 19:44	9°♍34'49	1°00'46
minimum elong	868 Aug 28 j 20:41	9°♍36'22	1°00'46
	868 Sep 29 j 01:34	0°♎	
morning rise	868 Oct 12 j 16:18	9°♎02'22	
	868 Nov 12 j 16:47	0°♏	
	868 Dec 25 j 19:27	0°♐	
desc. node	869 Jan 04 j 01:16	6°♐33'35	
	869 Feb 05 j 14:28	0°♑	
	869 Mar 18 j 11:36	0°♒	
	869 Apr 28 j 06:40	0°♓	
	869 Jun 09 j 17:22	0°♈	
	869 Jul 29 j 13:09	0°♉	
retrograde	869 Sep 16 j 17:48	14°♉09'52	
min. Earth dist.	869 Oct 16 j 02:24	8°♉13'53	0.49266 AU
opposition	869 Oct 24 j 02:59	5°♉17'49	0°-32'-2
greatest brilliancy	869 Oct 23 j 21:05	5°♉23'12	-2.2m
asc. node	869 Nov 03 j 07:25	1°♉49'15	
	869 Nov 10 j 02:25	30°℞♈	
direct	869 Nov 26 j 23:46	28°♈04'15	
	869 Dec 14 j 20:43	0°♉	
	870 Feb 25 j 03:11	0°♊	
	870 Apr 19 j 09:10	0°♋	
	870 Jun 08 j 11:01	0°♌	
	870 Jul 26 j 14:12	0°♍	
evening set	870 Aug 20 j 16:26	16°♍08'55	
	870 Sep 10 j 17:23	0°♎	
max. Earth dist.	870 Sep 10 j 22:22	0°♎08'18	2.58988 AU
conjunction	870 Oct 06 j 14:51	17°♎28'23	0°27'09
minimum elong	870 Oct 06 j 15:50	17°♎30'03	0°27'09
	870 Oct 24 j 17:54	0°♏	
desc. node	870 Nov 21 j 23:51	20°♏01'20	
morning rise	870 Nov 24 j 07:53	21°♏42'16	
	870 Dec 05 j 18:18	0°♐	
	871 Jan 15 j 03:20	0°♑	
	871 Feb 23 j 10:07	0°♒	
	871 Apr 03 j 08:40	0°♓	
	871 May 12 j 22:28	0°♈	
	871 Jun 23 j 12:49	0°♉	
	871 Aug 08 j 22:50	0°♊	
asc. node	871 Sep 21 j 06:02	21°♊42'56	
retrograde	871 Oct 28 j 18:49	29°♊48'46	
min. Earth dist.	871 Dec 02 j 11:40	21°♊53'32	0.60927 AU
opposition	871 Dec 07 j 12:16	19°♊53'46	3°03'06
greatest brilliancy	871 Dec 06 j 16:51	20°♊13'05	-1.5m
direct	872 Jan 14 j 06:39	11°♊06'12	
	872 Mar 20 j 12:02	0°♋	
	872 May 16 j 20:00	0°♌	
	872 Jul 06 j 06:05	0°♍	
	872 Aug 22 j 01:52	0°♎	
evening set	872 Sep 30 j 08:21	26°♎43'37	
	872 Oct 05 j 00:20	0°♏	
desc. node	872 Oct 08 j 22:17	2°♏45'45	
max. Earth dist.	872 Oct 14 j 20:08	6°♏57'35	2.47596 AU
	872 Nov 15 j 12:31	0°♐	
conjunction	872 Nov 21 j 20:05	4°♐41'45	0°-26'-58
minimum elong	872 Nov 21 j 18:39	4°♐39'04	0°26'59
	872 Dec 25 j 04:44	0°♑	
morning rise	873 Jan 20 j 06:05	20°♑12'42	
	873 Feb 01 j 18:20	0°♒	
	873 Mar 12 j 01:17	0°♓	
greatest brilliancy	873 Apr 08 j 14:15	21°♓19'49	1.2m
	873 Apr 19 j 22:53	0°♈	
	873 May 30 j 09:29	0°♉	

	873 Jul 12 j 11:21	0°♊	
asc. node	873 Aug 08 j 05:34	17°♊20'13	
	873 Aug 29 j 03:32	0°♋	
	873 Oct 30 j 18:26	0°♌	
retrograde	873 Dec 02 j 05:13	5°♌49'04	
	874 Jan 01 j 02:25	30°℞♋	
min. Earth dist.	874 Jan 10 j 05:32	26°♋28'10	0.67056 AU
opposition	874 Jan 11 j 10:13	25°♋59'26	4°26'04
greatest brilliancy	874 Jan 11 j 02:53	26°♋06'47	-1.3m
direct	874 Feb 20 j 16:06	16°♋21'02	
	874 Apr 16 j 08:47	0°♌	
	874 Jun 14 j 06:06	0°♍	
	874 Aug 02 j 06:27	0°♎	
desc. node	874 Aug 26 j 21:57	16°♎18'36	
	874 Sep 15 j 18:51	0°♏	
	874 Oct 27 j 05:46	0°♐	
evening set	874 Nov 22 j 13:44	19°♐55'49	
	874 Dec 05 j 14:47	0°♑	
	875 Jan 12 j 20:24	0°♒	
conjunction	875 Jan 25 j 12:11	10°♒00'05	-1°-5'-1
minimum elong	875 Jan 25 j 12:10	10°♒00'04	1°05'02
max. Earth dist.	875 Feb 08 j 14:44	21°♒08'05	2.37182 AU
	875 Feb 19 j 21:19	0°♓	
	875 Mar 30 j 15:10	0°♈	
morning rise	875 Apr 05 j 20:55	4°♈44'23	
	875 May 09 j 21:08	0°♉	
	875 Jun 21 j 07:29	0°♊	
asc. node	875 Jun 26 j 03:49	3°♊18'50	
	875 Aug 05 j 13:46	0°♋	
	875 Sep 24 j 00:40	0°♌	
	875 Nov 24 j 04:44	0°♍	
retrograde	876 Jan 05 j 23:42	9°♍08'48	
opposition	876 Feb 14 j 12:20	29°♌51'55	4°22'13
	876 Feb 14 j 04:06	30°℞♌	
greatest brilliancy	876 Feb 15 j 00:14	29°♌40'11	-1.3m
min. Earth dist.	876 Feb 17 j 05:02	28°♌48'12	0.66672 AU
direct	876 Mar 26 j 21:57	19°♌50'55	
	876 May 11 j 04:17	0°♍	
	876 Jul 09 j 03:44	0°♎	
desc. node	876 Jul 13 j 21:12	2°♎50'13	
	876 Aug 24 j 22:56	0°♏	
	876 Oct 06 j 01:52	0°♐	
	876 Nov 14 j 14:29	0°♑	
greatest brilliancy	876 Nov 29 j 23:50	12°♑00'08	1.2m
	876 Dec 22 j 20:32	0°♒	
	877 Jan 29 j 22:45	0°♓	
evening set	877 Jan 30 j 01:44	0°♓05'51	
	877 Mar 09 j 20:08	0°♈	
conjunction	877 Apr 05 j 19:09	20°♈09'04	0°-23'-19
minimum elong	877 Apr 05 j 20:52	20°♈12'14	0°23'18
	877 Apr 19 j 06:47	0°♉	
asc. node	877 May 13 j 02:17	17°♉00'08	
max. Earth dist.	877 May 19 j 09:04	21°♉24'27	2.49448 AU
	877 May 31 j 18:36	0°♊	
morning rise	877 Jun 04 j 22:22	2°♊51'08	
	877 Jul 15 j 12:38	0°♋	
	877 Aug 31 j 16:16	0°♌	
	877 Oct 21 j 00:11	0°♍	
	877 Dec 18 j 12:05	0°♎	
retrograde	878 Feb 13 j 03:22	14°♎33'49	
opposition	878 Mar 22 j 18:27	6°♎14'16	2°49'14
greatest brilliancy	878 Mar 23 j 16:56	5°♎53'00	-1.6m
min. Earth dist.	878 Mar 29 j 04:44	3°♎48'31	0.59727 AU
	878 Apr 09 j 08:31	30°℞♍	
direct	878 May 02 j 15:33	26°♍26'31	
	878 May 27 j 03:56	0°♎	
desc. node	878 May 31 j 19:24	1°♎21'19	
	878 Jul 29 j 23:29	0°♏	
	878 Sep 13 j 05:20	0°♐	
	878 Oct 23 j 21:34	0°♑	
	878 Dec 01 j 18:32	0°♒	
	879 Jan 09 j 09:05	0°♓	
	879 Feb 17 j 19:24	0°♈	
	879 Mar 30 j 19:24	0°♉	
asc. node	879 Mar 31 j 02:22	0°♉12'26	
evening set	879 Apr 04 j 05:00	3°♉08'20	
	879 May 12 j 18:32	0°♊	
conjunction	879 May 29 j 16:27	11°♊26'35	0°34'26
minimum elong	879 May 29 j 14:59	11°♊24'08	0°34'26
max. Earth dist.	879 Jun 21 j 14:43	26°♊40'09	2.60534 AU
	879 Jun 26 j 16:30	0°♋	
morning rise	879 Jul 19 j 01:09	14°♋31'21	
	879 Aug 12 j 06:06	0°♌	
	879 Sep 29 j 04:05	0°♍	
	879 Nov 17 j 17:19	0°♎	
	880 Jan 10 j 03:38	0°♏	
retrograde	880 Apr 04 j 14:30	28°♏40'10	
desc. node	880 Apr 17 j 18:11	27°♏34'19	
opposition	880 May 08 j 13:27	21°♏59'10	-1°-6'-36
greatest brilliancy	880 May 09 j 02:33	21°♏48'08	-2.2m
min. Earth dist.	880 May 16 j 23:46	19°♏09'10	0.47447 AU
direct	880 Jun 14 j 21:47	13°♏47'12	
	880 Aug 07 j 18:08	0°♐	
	880 Sep 25 j 07:03	0°♑	
	880 Nov 06 j 02:28	0°♒	
	880 Dec 16 j 12:33	0°♓	
	881 Jan 26 j 09:28	0°♈	
asc. node	881 Feb 15 j 01:33	14°♈07'10	
	881 Mar 09 j 14:58	0°♉	
	881 Apr 22 j 14:00	0°♊	
evening set	881 May 21 j 15:41	19°♊14'33	
	881 Jun 07 j 03:41	0°♋	
conjunction	881 Jul 09 j 11:25	20°♋49'12	1°04'49
minimum elong	881 Jul 09 j 10:34	20°♋47'51	1°04'48
max. Earth dist.	881 Jul 15 j 19:36	24°♋52'32	2.66531 AU
	881 Jul 23 j 20:15	0°♌	
morning rise	881 Aug 24 j 04:15	19°♌56'33	
	881 Sep 09 j 00:05	0°♍	
	881 Oct 26 j 03:59	0°♎	
	881 Dec 12 j 06:49	0°♏	
	882 Jan 28 j 20:56	0°♐	
desc. node	882 Mar 05 j 17:48	21°♐52'57	
	882 Mar 19 j 15:03	0°♑	
	882 May 21 j 16:39	0°♒	
retrograde	882 Jun 18 j 19:38	4°♒40'20	
	882 Jul 17 j 21:25	30°℞♑	
opposition	882 Jul 18 j 23:55	29°♑42'23	-6°-44'-59
greatest brilliancy	882 Jul 19 j 09:25	29°♑36'04	-2.9m
min. Earth dist.	882 Jul 20 j 04:30	29°♑23'22	0.37526 AU
direct	882 Aug 18 j 05:08	24°♑38'13	
	882 Sep 16 j 12:32	0°♒	
	882 Nov 14 j 09:38	0°♓	
	882 Dec 31 j 09:12	0°♈	
asc. node	883 Jan 02 j 23:33	1°♈42'02	
	883 Feb 15 j 02:05	0°♉	
	883 Apr 02 j 06:14	0°♊	
	883 May 19 j 05:05	0°♋	
evening set	883 Jun 30 j 14:48	26°♋51'08	
	883 Jul 05 j 14:07	0°♌	
max. Earth dist.	883 Aug 08 j 00:42	21°♌14'41	2.67094 AU

conjunction	883 Aug 15 j 13:45	26°♌03'50	1°07'00
minimum elong	883 Aug 15 j 14:18	26°♌04'43	1°06'59
	883 Aug 21 j 17:16	0°♍	
morning rise	883 Sep 29 j 01:22	24°♍48'08	
	883 Oct 06 j 23:49	0°♎	
	883 Nov 21 j 01:43	0°♏	
	884 Jan 03 j 21:56	0°♐	
desc. node	884 Jan 21 j 16:47	12°♐23'22	
	884 Feb 15 j 17:01	0°♑	
	884 Mar 28 j 21:22	0°♒	
	884 May 10 j 14:42	0°♓	
	884 Jun 26 j 14:25	0°♈	
retrograde	884 Aug 27 j 11:57	21°♈13'58	
min. Earth dist.	884 Sep 23 j 22:45	16°♈08'13	0.44085 AU
opposition	884 Oct 01 j 23:19	13°♈25'53	-2°-46'-13
greatest brilliancy	884 Sep 30 j 21:00	13°♈48'08	-2.5m
direct	884 Nov 02 j 21:58	7°♈05'23	
asc. node	884 Nov 19 j 23:02	8°♈52'48	
	885 Jan 13 j 08:29	0°♉	
	885 Mar 08 j 12:41	0°♊	
	885 Apr 27 j 20:24	0°♋	
	885 Jun 15 j 19:42	0°♌	
	885 Aug 02 j 12:36	0°♍	
evening set	885 Aug 05 j 21:30	2°♍09'21	
max. Earth dist.	885 Aug 31 j 10:22	18°♍40'58	2.62265 AU
	885 Sep 17 j 14:24	0°♎	
conjunction	885 Sep 20 j 22:21	2°♎13'00	0°43'07
minimum elong	885 Sep 20 j 23:33	2°♎15'00	0°43'07
	885 Oct 31 j 19:20	0°♏	
morning rise	885 Nov 06 j 13:09	3°♏59'39	
desc. node	885 Dec 08 j 16:00	26°♏45'10	
	885 Dec 13 j 04:05	0°♐	
	886 Jan 22 j 23:41	0°♑	
	886 Mar 03 j 17:45	0°♒	
	886 Apr 12 j 03:45	0°♓	
	886 May 22 j 08:13	0°♈	
	886 Jul 04 j 04:38	0°♉	
	886 Aug 24 j 12:49	0°♊	
asc. node	886 Oct 07 j 22:29	13°♊41'54	
retrograde	886 Oct 13 j 15:54	13°♊55'28	
min. Earth dist.	886 Nov 15 j 08:40	6°♊42'43	0.56891 AU
opposition	886 Nov 21 j 18:28	4°♊12'43	1°59'36
greatest brilliancy	886 Nov 21 j 01:17	4°♊29'31	-1.7m
	886 Dec 03 j 08:51	30°℞♉	
direct	886 Dec 28 j 04:43	25°♉55'22	
	887 Jan 24 j 06:49	0°♊	
	887 Apr 03 j 04:14	0°♋	
	887 May 26 j 10:00	0°♌	
	887 Jul 14 j 16:37	0°♍	
	887 Aug 30 j 04:06	0°♎	
evening set	887 Sep 14 j 04:53	10°♎04'36	
max. Earth dist.	887 Sep 30 j 04:29	21°♎00'23	2.52507 AU
	887 Oct 13 j 02:32	0°♏	
desc. node	887 Oct 26 j 15:11	9°♏34'37	
conjunction	887 Nov 02 j 20:10	14°♏44'35	0°-4'-29
minimum elong	887 Nov 02 j 19:58	14°♏44'13	0°04'30
behind sun begin	887 Nov 01 j 22:50	14°♏06'14	
behind sun end	887 Nov 03 j 17:06	15°♏22'15	
	887 Nov 23 j 18:38	0°♐	
morning rise	887 Dec 27 j 00:18	24°♐54'54	
	888 Jan 02 j 16:17	0°♑	
	888 Feb 10 j 11:14	0°♒	
	888 Mar 19 j 22:27	0°♓	
	888 Apr 27 j 23:44	0°♈	
	888 Jun 07 j 16:05	0°♉	
	888 Jul 21 j 09:57	0°♊	
asc. node	888 Aug 24 j 20:23	21°♊13'54	
	888 Sep 09 j 16:57	0°♋	
retrograde	888 Nov 18 j 19:44	22°♋37'06	
min. Earth dist.	888 Dec 26 j 06:42	13°♋46'09	0.65424 AU
opposition	888 Dec 28 j 23:38	12°♋41'04	4°05'37
greatest brilliancy	888 Dec 28 j 09:47	12°♋54'57	-1.3m
direct	889 Feb 06 j 09:41	3°♋18'47	
	889 Apr 30 j 02:08	0°♌	
	889 Jun 23 j 00:58	0°♍	
	889 Aug 09 j 22:34	0°♎	
desc. node	889 Sep 12 j 13:59	22°♎37'53	
	889 Sep 23 j 03:47	0°♏	
evening set	889 Oct 30 j 18:37	27°♏09'35	
	889 Nov 03 j 14:26	0°♐	
max. Earth dist.	889 Nov 22 j 17:27	14°♐23'15	2.39854 AU
	889 Dec 13 j 01:38	0°♑	
conjunction	889 Dec 28 j 18:18	12°♑12'55	0°-57'-26
minimum elong	889 Dec 28 j 16:05	12°♑08'33	0°57'26
	890 Jan 20 j 09:41	0°♒	
	890 Feb 27 j 11:55	0°♓	
morning rise	890 Mar 07 j 01:15	5°♓54'40	
	890 Apr 07 j 05:51	0°♈	
	890 May 17 j 11:36	0°♉	
	890 Jun 29 j 00:09	0°♊	
asc. node	890 Jul 12 j 19:49	9°♊19'26	
	890 Aug 13 j 18:54	0°♋	
	890 Oct 04 j 09:41	0°♌	
retrograde	890 Dec 23 j 06:50	26°♌24'24	
opposition	891 Feb 01 j 04:55	16°♌52'09	4°33'11
greatest brilliancy	891 Feb 01 j 09:24	16°♌47'43	-1.2m
min. Earth dist.	891 Feb 02 j 09:07	16°♌24'08	0.67610 AU
direct	891 Mar 14 j 07:31	6°♌56'44	
	891 May 27 j 16:35	0°♍	
	891 Jul 19 j 12:47	0°♎	
desc. node	891 Jul 31 j 12:47	7°♎34'57	
	891 Sep 03 j 02:50	0°♏	
	891 Oct 14 j 21:07	0°♐	
	891 Nov 23 j 07:13	0°♑	
	891 Dec 31 j 12:19	0°♒	
evening set	892 Jan 02 j 18:38	1°♒47'21	
	892 Feb 07 j 13:07	0°♓	
conjunction	892 Mar 10 j 10:53	24°♓44'53	0°-47'-7
minimum elong	892 Mar 10 j 13:58	24°♓50'48	0°47'06
	892 Mar 17 j 08:04	0°♈	
	892 Apr 26 j 15:35	0°♉	
max. Earth dist.	892 Apr 29 j 23:08	2°♉24'16	2.44090 AU
morning rise	892 May 14 j 18:00	13°♉00'29	
asc. node	892 May 29 j 19:46	23°♉36'57	
	892 Jun 08 j 00:53	0°♊	
	892 Jul 22 j 20:27	0°♋	
	892 Sep 08 j 12:57	0°♌	
	892 Oct 30 j 22:46	0°♍	
	893 Jan 19 j 20:01	0°♎	
retrograde	893 Jan 28 j 00:08	0°♎23'48	
	893 Feb 04 j 23:31	30°℞♍	
opposition	893 Mar 07 j 13:02	21°♍38'09	3°37'51
greatest brilliancy	893 Mar 08 j 09:50	21°♍18'04	-1.4m
min. Earth dist.	893 Mar 12 j 13:39	19°♍41'46	0.63198 AU
direct	893 Apr 17 j 21:04	11°♍39'05	
desc. node	893 Jun 17 j 11:37	29°♍05'56	
	893 Jun 19 j 07:41	0°♎	
	893 Aug 09 j 23:37	0°♏	
	893 Sep 22 j 10:21	0°♐	
	893 Nov 01 j 11:07	0°♑	

	893 Dec 09 j 23:47	0°♒	
	894 Jan 17 j 07:37	0°♓	
	894 Feb 25 j 11:12	0°♈	
evening set	894 Mar 12 j 07:29	11°♈05'36	
	894 Apr 07 j 04:32	0°♉	
asc. node	894 Apr 16 j 18:18	6°♉51'14	
conjunction	894 May 10 j 15:50	23°♉37'50	0°14'40
minimum elong	894 May 10 j 15:01	23°♉36'24	0°14'39
behind sun begin	894 May 10 j 06:06	23°♉20'58	
behind sun end	894 May 10 j 23:55	23°♉51'49	
	894 May 19 j 21:42	0°♊	
max. Earth dist.	894 Jun 10 j 02:42	14°♊22'36	2.56751 AU
morning rise	894 Jul 03 j 02:47	29°♊37'43	
	894 Jul 03 j 16:22	0°♋	
	894 Aug 19 j 08:20	0°♌	
	894 Oct 06 j 21:06	0°♍	
	894 Nov 27 j 08:26	0°♎	
	895 Jan 27 j 23:15	0°♏	
retrograde	895 Mar 14 j 07:29	9°♏58'14	
opposition	895 Apr 18 j 22:39	2°♏32'09	0°47'43
greatest brilliancy	895 Apr 19 j 08:31	2°♏23'19	-1.9m
	895 Apr 26 j 00:14	30°R♎	
min. Earth dist.	895 Apr 27 j 01:26	29°♎37'49	0.52682 AU
desc. node	895 May 05 j 10:07	26°♎55'20	
direct	895 May 28 j 04:45	23°♎27'01	
	895 Jun 30 j 06:11	0°♏	
	895 Aug 25 j 23:51	0°♐	
	895 Oct 08 j 05:22	0°♑	
	895 Nov 17 j 06:38	0°♒	
	895 Dec 26 j 16:17	0°♓	
	896 Feb 04 j 18:45	0°♈	
asc. node	896 Mar 03 j 17:19	20°♈17'16	
	896 Mar 17 j 09:18	0°♉	
	896 Apr 29 j 20:29	0°♊	
evening set	896 May 04 j 05:07	2°♊56'20	
	896 Jun 14 j 02:17	0°♋	
conjunction	896 Jun 24 j 02:08	6°♋29'56	0°56'32
minimum elong	896 Jun 24 j 00:50	6°♋27'49	0°56'31
max. Earth dist.	896 Jul 06 j 13:03	14°♋32'41	2.64839 AU
	896 Jul 30 j 15:57	0°♌	
morning rise	896 Aug 10 j 03:17	6°♌40'02	
	896 Sep 16 j 00:10	0°♍	
	896 Nov 02 j 19:54	0°♎	
	896 Dec 21 j 11:12	0°♏	
	897 Feb 10 j 14:56	0°♐	
desc. node	897 Mar 22 j 09:20	20°♐24'03	
	897 Apr 15 j 18:50	0°♑	
retrograde	897 May 17 j 16:17	5°♑34'37	
opposition	897 Jun 17 j 17:46	0°♑12'45	-4°-57'-20
	897 Jun 18 j 11:33	30°R♐	
greatest brilliancy	897 Jun 19 j 01:50	29°♐49'45	-2.7m
min. Earth dist.	897 Jun 23 j 16:03	28°♐31'06	0.40038 AU
direct	897 Jul 20 j 14:23	24°♐04'42	
	897 Aug 20 j 02:09	0°♑	
	897 Oct 15 j 10:32	0°♒	
	897 Nov 29 j 01:59	0°♓	
	898 Jan 11 j 06:56	0°♈	
asc. node	898 Jan 19 j 16:26	5°♈48'11	
	898 Feb 24 j 02:02	0°♉	
	898 Apr 10 j 02:58	0°♊	
	898 May 26 j 09:34	0°♋	
evening set	898 Jun 15 j 15:48	12°♋57'26	
	898 Jul 12 j 10:15	0°♌	
max. Earth dist.	898 Jul 29 j 23:26	11°♌09'48	2.67535 AU
conjunction	898 Aug 01 j 08:23	12°♌40'25	1°09'19
minimum elong	898 Aug 01 j 08:26	12°♌40'29	1°09'19
	898 Aug 28 j 12:11	0°♍	
morning rise	898 Sep 14 j 22:22	11°♍10'33	
	898 Oct 14 j 01:00	0°♎	
	898 Nov 28 j 17:23	0°♏	
	899 Jan 12 j 14:02	0°♐	
desc. node	899 Feb 07 j 09:48	17°♐27'19	
	899 Feb 25 j 21:46	0°♑	
	899 Apr 11 j 11:09	0°♒	
	899 May 29 j 04:08	0°♓	
retrograde	899 Aug 04 j 15:33	23°♓56'32	
min. Earth dist.	899 Aug 31 j 06:09	19°♓25'43	0.39712 AU
greatest brilliancy	899 Sep 05 j 03:19	17°♓58'28	-2.7m
opposition	899 Sep 06 j 11:28	17°♓34'19	-5°-14'-3
direct	899 Oct 06 j 18:26	12°♓08'54	
	899 Dec 05 j 15:50	0°♈	
asc. node	899 Dec 07 j 14:29	0°♈57'37	
	900 Jan 28 j 18:01	0°♉	
	900 Mar 18 j 04:07	0°♊	
	900 May 05 j 18:03	0°♋	
	900 Jun 22 j 22:38	0°♌	
evening set	900 Jul 22 j 10:23	18°♌34'46	
	900 Aug 09 j 08:27	0°♍	
max. Earth dist.	900 Aug 21 j 18:12	7°♍58'36	2.64802 AU
conjunction	900 Sep 06 j 01:49	17°♍55'09	0°55'22
minimum elong	900 Sep 06 j 02:56	17°♍56'59	0°55'21
	900 Sep 24 j 11:02	0°♎	
morning rise	900 Oct 21 j 08:50	18°♎00'38	
	900 Nov 07 j 22:39	0°♏	
	900 Dec 20 j 18:49	0°♐	
desc. node	900 Dec 25 j 08:25	3°♐15'46	
	901 Jan 31 j 04:43	0°♑	
	901 Mar 12 j 14:40	0°♒	
	901 Apr 21 j 18:26	0°♓	
	901 Jun 02 j 01:23	0°♈	
	901 Jul 17 j 17:57	0°♉	
retrograde	901 Sep 27 j 02:24	26°♉00'57	
asc. node	901 Oct 24 j 13:48	20°♉42'45	
min. Earth dist.	901 Oct 27 j 15:02	19°♉36'44	0.52097 AU
opposition	901 Nov 04 j 05:17	16°♉45'07	0°31'44
greatest brilliancy	901 Nov 03 j 23:14	16°♉50'50	-2.0m
direct	901 Dec 09 j 02:04	9°♉06'08	
	902 Feb 16 j 03:53	0°♊	
	902 Apr 13 j 08:39	0°♋	
	902 Jun 03 j 08:31	0°♌	
	902 Jul 21 j 20:31	0°♍	
evening set	902 Aug 29 j 09:00	24°♍52'29	
	902 Sep 06 j 02:47	0°♎	
max. Earth dist.	902 Sep 17 j 12:40	7°♎38'13	2.56861 AU
conjunction	902 Oct 16 j 01:21	27°♎10'07	0°16'24
minimum elong	902 Oct 16 j 02:01	27°♎11'17	0°16'24
	902 Oct 20 j 02:47	0°♏	
desc. node	902 Nov 12 j 06:42	16°♏24'44	
	902 Dec 01 j 00:30	0°♐	
morning rise	902 Dec 05 j 08:24	3°♐10'39	
	903 Jan 10 j 05:30	0°♑	
	903 Feb 18 j 08:00	0°♒	
	903 Mar 29 j 01:56	0°♓	
	903 May 07 j 09:53	0°♈	
	903 Jun 17 j 13:13	0°♉	
	903 Aug 01 j 13:30	0°♊	
asc. node	903 Sep 11 j 13:55	22°♊56'45	
	903 Sep 27 j 14:40	0°♋	
retrograde	903 Nov 06 j 00:26	8°♋40'54	

min. Earth dist.	903 Dec 11 j 17:46	0°♋24'23	0.62772 AU
	903 Dec 12 j 18:16	30°℞♊	
opposition	903 Dec 15 j 22:35	28°♊43'39	3°31'00
greatest brilliancy	903 Dec 15 j 04:10	29°♊02'05	-1.5m
direct	904 Jan 23 j 08:01	19°♊42'19	
	904 Mar 09 j 12:54	0°♋	
	904 May 10 j 16:11	0°♌	
	904 Jul 01 j 02:51	0°♍	
	904 Aug 17 j 07:24	0°♎	
desc. node	904 Sep 29 j 05:42	29°♎12'51	
	904 Sep 30 j 08:33	0°♏	
evening set	904 Oct 10 j 18:25	7°♏22'20	
max. Earth dist.	904 Oct 25 j 19:46	18°♏13'10	2.44764 AU
	904 Nov 10 j 20:31	0°♐	
conjunction	904 Dec 04 j 06:49	17°♐36'35	0°-39'-25
minimum elong	904 Dec 04 j 04:45	17°♐32'39	0°39'25
	904 Dec 20 j 10:57	0°♑	
greatest brilliancy	905 Jan 24 j 21:59	27°♑37'48	1.2m
	905 Jan 27 j 22:25	0°♒	
morning rise	905 Feb 05 j 01:17	6°♒22'54	
	905 Mar 07 j 03:15	0°♓	
	905 Apr 14 j 22:45	0°♈	
	905 May 25 j 06:27	0°♉	
	905 Jul 07 j 01:04	0°♊	
asc. node	905 Jul 29 j 12:23	14°♊50'33	
	905 Aug 22 j 18:19	0°♋	
	905 Oct 17 j 21:38	0°♌	
retrograde	905 Dec 09 j 21:36	13°♌39'54	
opposition	906 Jan 19 j 00:46	3°♌55'40	4°32'12
greatest brilliancy	906 Jan 18 j 21:34	3°♌58'53	-1.2m
min. Earth dist.	906 Jan 18 j 16:33	4°♌03'54	0.67527 AU
	906 Jan 29 j 04:26	30°℞♋	
direct	906 Feb 28 j 14:52	24°♋10'10	
	906 Apr 03 j 05:30	0°♌	
	906 Jun 07 j 21:43	0°♍	
	906 Jul 28 j 00:17	0°♎	
desc. node	906 Aug 17 j 04:50	13°♎10'03	
	906 Sep 10 j 21:16	0°♏	
	906 Oct 22 j 11:08	0°♐	
	906 Nov 30 j 20:43	0°♑	
evening set	906 Dec 06 j 16:28	4°♑31'45	
	907 Jan 08 j 02:05	0°♒	
conjunction	907 Feb 10 j 19:38	26°♒38'01	-1°-2'-35
minimum elong	907 Feb 10 j 21:23	26°♒41'28	1°02'34
	907 Feb 15 j 02:27	0°♓	
	907 Mar 25 j 19:47	0°♈	
max. Earth dist.	907 Mar 28 j 06:19	1°♈51'24	2.38932 AU
morning rise	907 Apr 21 j 06:44	19°♈53'19	
	907 May 05 j 01:12	0°♉	
asc. node	907 Jun 16 j 10:49	0°♊02'04	
	907 Jun 16 j 09:37	0°♊	
	907 Jul 31 j 09:50	0°♋	
	907 Sep 17 j 23:49	0°♌	
	907 Nov 13 j 08:11	0°♍	
retrograde	908 Jan 14 j 03:40	17°♍02'32	
opposition	908 Feb 22 j 08:47	7°♍55'49	4°09'54
greatest brilliancy	908 Feb 23 j 00:27	7°♍40'29	-1.3m
min. Earth dist.	908 Feb 25 j 21:49	6°♍32'35	0.65698 AU
	908 Mar 16 j 18:24	30°℞♌	
direct	908 Apr 03 j 19:14	27°♌53'51	
	908 Apr 22 j 20:55	0°♍	
	908 Jul 02 j 07:39	0°♎	
desc. node	908 Jul 04 j 03:07	1°♎02'04	
	908 Aug 19 j 08:50	0°♏	
	908 Sep 30 j 21:33	0°♐	
	908 Nov 09 j 14:07	0°♑	
	908 Dec 17 j 22:21	0°♒	
	909 Jan 25 j 02:06	0°♓	
evening set	909 Feb 14 j 14:18	15°♓54'46	
	909 Mar 05 j 00:52	0°♈	
	909 Apr 14 j 12:54	0°♉	
conjunction	909 Apr 19 j 04:45	3°♉21'48	0°-8'-59
minimum elong	909 Apr 19 j 05:22	3°♉22'55	0°08'59
behind sun begin	909 Apr 18 j 08:10	2°♉44'45	
behind sun end	909 Apr 20 j 02:35	4°♉01'02	
asc. node	909 May 03 j 10:54	13°♉32'11	
	909 May 27 j 01:18	0°♊	
max. Earth dist.	909 May 28 j 00:42	0°♊40'14	2.52212 AU
morning rise	909 Jun 15 j 16:36	13°♊21'34	
	909 Jul 10 j 18:09	0°♋	
	909 Aug 26 j 15:30	0°♌	
	909 Oct 15 j 03:14	0°♍	
	909 Dec 08 j 23:49	0°♎	
retrograde	910 Feb 23 j 02:03	23°♎36'04	
opposition	910 Apr 01 j 01:44	15°♎33'35	2°11'49
greatest brilliancy	910 Apr 01 j 22:26	15°♎14'18	-1.7m
min. Earth dist.	910 Apr 08 j 04:52	12°♎54'17	0.57412 AU
direct	910 May 11 j 12:15	5°♎56'36	
desc. node	910 May 22 j 02:32	6°♎40'03	
	910 Jul 21 j 13:18	0°♏	
	910 Sep 06 j 20:28	0°♐	
	910 Oct 18 j 03:57	0°♑	
	910 Nov 26 j 08:29	0°♒	
	911 Jan 04 j 04:11	0°♓	
	911 Feb 12 j 18:45	0°♈	
asc. node	911 Mar 21 j 09:08	26°♈44'19	
	911 Mar 25 j 22:43	0°♉	
evening set	911 Apr 16 j 01:44	14°♉52'50	
	911 May 08 j 00:54	0°♊	
conjunction	911 Jun 08 j 16:15	21°♊13'06	0°43'50
minimum elong	911 Jun 08 j 14:44	21°♊10'34	0°43'49
	911 Jun 22 j 00:39	0°♋	
max. Earth dist.	911 Jun 27 j 15:12	3°♋39'48	2.62306 AU
morning rise	911 Jul 27 j 15:37	23°♋02'45	
	911 Aug 07 j 13:06	0°♌	
	911 Sep 24 j 04:42	0°♍	
	911 Nov 11 j 23:33	0°♎	
	912 Jan 02 j 02:30	0°♏	
	912 Mar 02 j 05:59	0°♐	
desc. node	912 Apr 08 j 01:54	10°♐22'05	
retrograde	912 Apr 18 j 17:27	11°♐02'57	
opposition	912 May 21 j 17:33	4°♐49'52	-2°-25'-35
greatest brilliancy	912 May 22 j 18:37	4°♐29'42	-2.4m
min. Earth dist.	912 May 29 j 20:26	2°♐14'09	0.44582 AU
	912 Jun 06 j 16:27	30°℞♏	
direct	912 Jun 26 j 15:20	27°♏17'30	
	912 Jul 16 j 21:00	0°♐	
	912 Sep 16 j 04:23	0°♑	
	912 Oct 29 j 23:40	0°♒	
	912 Dec 10 j 07:48	0°♓	
	913 Jan 20 j 18:25	0°♈	
asc. node	913 Feb 05 j 07:21	11°♈03'08	
	913 Mar 04 j 09:52	0°♉	
	913 Apr 17 j 15:58	0°♊	
evening set	913 May 31 j 01:26	28°♊27'39	
	913 Jun 02 j 10:30	0°♋	
conjunction	913 Jul 17 j 23:13	29°♋12'17	1°07'40
minimum elong	913 Jul 17 j 22:41	29°♋11'27	1°07'39
	913 Jul 19 j 05:09	0°♌	

max. Earth dist.	913 Jul 21 j 02:46	1°♌12'41	2.67132 AU
morning rise	913 Sep 01 j 02:51	27°♌57'27	
	913 Sep 04 j 07:45	0°♍	
	913 Oct 21 j 05:21	0°♎	
	913 Dec 06 j 17:37	0°♏	
	914 Jan 22 j 02:38	0°♐	
desc. node	914 Feb 24 j 00:56	21°♐06'26	
	914 Mar 10 j 03:24	0°♑	
	914 Apr 29 j 17:28	0°♒	
retrograde	914 Jul 06 j 19:21	22°♒48'08	
min. Earth dist.	914 Aug 04 j 10:41	18°♒07'42	0.37459 AU
opposition	914 Aug 06 j 08:19	17°♒37'15	-6°-49'-30
greatest brilliancy	914 Aug 05 j 22:10	17°♒44'02	-2.9m
direct	914 Sep 04 j 20:08	12°♒42'19	
	914 Nov 01 j 07:42	0°♓	
	914 Dec 23 j 09:51	0°♈	
asc. node	914 Dec 24 j 07:03	0°♈32'52	
	915 Feb 08 j 20:14	0°♉	
	915 Mar 27 j 20:40	0°♊	
	915 May 14 j 06:43	0°♋	
	915 Jun 30 j 21:34	0°♌	
evening set	915 Jul 09 j 00:04	5°♌07'07	
max. Earth dist.	915 Aug 13 j 09:04	27°♌36'16	2.66512 AU
	915 Aug 17 j 02:49	0°♍	
conjunction	915 Aug 23 j 17:19	4°♍14'26	1°03'50
minimum elong	915 Aug 23 j 18:08	4°♍15'44	1°03'49
	915 Oct 02 j 07:56	0°♎	
morning rise	915 Oct 07 j 08:05	3°♎18'07	
	915 Nov 16 j 04:21	0°♏	
	915 Dec 29 j 15:08	0°♐	
desc. node	916 Jan 12 j 00:04	9°♐25'10	
	916 Feb 09 j 20:19	0°♑	
	916 Mar 22 j 05:51	0°♒	
	916 May 02 j 16:48	0°♓	
	916 Jun 15 j 10:35	0°♈	
	916 Aug 11 j 12:31	0°♉	
retrograde	916 Sep 08 j 09:05	5°♉08'51	
	916 Oct 05 j 15:05	30°℞♈	
min. Earth dist.	916 Oct 06 j 18:48	29°♈36'20	0.46921 AU
opposition	916 Oct 14 j 23:44	26°♈42'05	-1°-26'-4
greatest brilliancy	916 Oct 14 j 08:33	26°♈55'33	-2.3m
asc. node	916 Nov 10 j 06:37	20°♈09'29	
direct	916 Nov 17 j 00:44	19°♈51'10	
	916 Dec 31 j 02:44	0°♉	
	917 Mar 01 j 12:04	0°♊	
	917 Apr 22 j 07:29	0°♋	
	917 Jun 10 j 21:08	0°♌	
	917 Jul 28 j 20:15	0°♍	
evening set	917 Aug 14 j 07:25	10°♍33'30	
max. Earth dist.	917 Sep 06 j 11:54	25°♍41'48	2.60558 AU
	917 Sep 12 j 23:53	0°♎	
conjunction	917 Sep 29 j 18:18	11°♎14'04	0°34'18
minimum elong	917 Sep 29 j 19:25	11°♎15'56	0°34'17
	917 Oct 27 j 03:22	0°♏	
morning rise	917 Nov 16 j 09:51	14°♏14'39	
desc. node	917 Nov 28 j 22:48	23°♏12'23	
	917 Dec 08 j 08:29	0°♐	
	918 Jan 17 j 22:40	0°♑	
	918 Feb 26 j 10:35	0°♒	
	918 Apr 06 j 13:37	0°♓	
	918 May 16 j 08:03	0°♈	
	918 Jun 27 j 07:22	0°♉	
	918 Aug 14 j 00:49	0°♊	
asc. node	918 Sep 28 j 05:07	19°♊58'01	
retrograde	918 Oct 22 j 11:50	23°♊39'08	
min. Earth dist.	918 Nov 25 j 07:30	16°♊01'47	0.59224 AU
opposition	918 Nov 30 j 22:51	13°♊48'05	2°39'14
greatest brilliancy	918 Nov 30 j 03:27	14°♊07'17	-1.6m
direct	919 Jan 07 j 03:06	5°♊13'05	
	919 Mar 26 j 10:31	0°♋	
	919 May 20 j 19:07	0°♌	
	919 Jul 09 j 17:37	0°♍	
	919 Aug 25 j 11:01	0°♎	
evening set	919 Sep 23 j 19:01	19°♎48'37	
	919 Oct 08 j 10:42	0°♏	
max. Earth dist.	919 Oct 08 j 17:13	0°♏11'27	2.49850 AU
desc. node	919 Oct 16 j 21:16	5°♏57'25	
conjunction	919 Nov 13 j 21:13	26°♏10'32	0°-17'-20
minimum elong	919 Nov 13 j 20:19	26°♏08'53	0°17'20
	919 Nov 19 j 01:51	0°♐	
	919 Dec 28 j 21:13	0°♑	
morning rise	920 Jan 09 j 18:49	9°♑09'48	
	920 Feb 05 j 13:35	0°♒	
	920 Mar 14 j 22:16	0°♓	
	920 Apr 22 j 20:35	0°♈	
	920 Jun 02 j 08:06	0°♉	
	920 Jul 15 j 13:44	0°♊	
asc. node	920 Aug 15 j 04:28	19°♊31'22	
	920 Sep 01 j 23:52	0°♋	
	920 Nov 15 j 22:31	0°♌	
retrograde	920 Nov 26 j 13:36	0°♌42'08	
	920 Dec 06 j 19:30	30°℞♋	
min. Earth dist.	921 Jan 03 j 21:23	21°♋33'57	0.66446 AU
opposition	921 Jan 05 j 18:07	20°♋49'05	4°19'14
greatest brilliancy	921 Jan 05 j 07:41	20°♋59'32	-1.3m
direct	921 Feb 14 j 15:13	11°♋17'19	
	921 Apr 21 j 20:14	0°♌	
	921 Jun 17 j 08:30	0°♍	
	921 Aug 04 j 22:18	0°♎	
desc. node	921 Sep 02 j 20:52	19°♎16'34	
	921 Sep 18 j 08:48	0°♏	
	921 Oct 29 j 20:46	0°♐	
evening set	921 Nov 12 j 07:30	10°♐05'19	
	921 Dec 08 j 07:22	0°♑	
max. Earth dist.	921 Dec 21 j 10:20	10°♑12'57	2.37705 AU
conjunction	922 Jan 13 j 02:13	28°♑01'27	-1°-3'-28
minimum elong	922 Jan 13 j 00:57	27°♑58'57	1°03'28
	922 Jan 15 j 14:20	0°♒	
	922 Feb 22 j 15:40	0°♓	
morning rise	922 Mar 24 j 03:20	22°♓55'47	
	922 Apr 02 j 08:48	0°♈	
	922 May 12 j 13:31	0°♉	
	922 Jun 23 j 23:06	0°♊	
asc. node	922 Jul 03 j 03:21	6°♊15'07	
	922 Aug 08 j 08:06	0°♋	
	922 Sep 27 j 10:19	0°♌	
	922 Dec 03 j 14:13	0°♍	
retrograde	922 Dec 31 j 02:27	4°♍08'28	
	923 Jan 25 j 11:44	30°℞♌	
opposition	923 Feb 08 j 19:32	24°♌44'21	4°28'07
greatest brilliancy	923 Feb 09 j 04:14	24°♌35'45	-1.2m
min. Earth dist.	923 Feb 10 j 20:03	23°♌56'20	0.67221 AU
direct	923 Mar 22 j 02:11	14°♌45'12	
	923 May 18 j 17:27	0°♍	
	923 Jul 13 j 14:54	0°♎	
desc. node	923 Jul 21 j 20:24	5°♎03'26	
	923 Aug 28 j 22:07	0°♏	
	923 Oct 09 j 22:26	0°♐	
	923 Nov 18 j 10:28	0°♑	
	923 Dec 26 j 16:11	0°♒	

evening set	924 Jan 18 j 17:20	18°♒12'22	
greatest brilliancy	924 Jan 22 j 18:40	21°♒24'07	1.2m
	924 Feb 02 j 17:21	0°♓	
	924 Mar 12 j 12:39	0°♈	
conjunction	924 Mar 25 j 17:37	9°♈58'19	0°-34'00
minimum elong	924 Mar 25 j 20:08	10°♈03'01	0°33'59
	924 Apr 21 j 20:41	0°♉	
max. Earth dist.	924 May 11 j 19:59	14°♉19'58	2.47089 AU
asc. node	924 May 20 j 01:41	20°♉08'28	
morning rise	924 May 27 j 03:47	25°♉05'27	
	924 Jun 03 j 05:55	0°♊	
	924 Jul 17 j 22:59	0°♋	
	924 Sep 03 j 05:56	0°♌	
	924 Oct 24 j 05:59	0°♍	
	924 Dec 25 j 17:41	0°♎	
retrograde	925 Feb 06 j 01:03	8°♎48'52	
opposition	925 Mar 16 j 02:09	0°♎17'02	3°11'38
	925 Mar 16 j 19:59	30°℞♍	
greatest brilliancy	925 Mar 17 j 00:21	29°♍55'49	-1.5m
min. Earth dist.	925 Mar 21 j 21:37	28°♍03'48	0.61403 AU
direct	925 Apr 26 j 04:47	20°♍22'53	
desc. node	925 Jun 07 j 18:27	29°♍59'54	
	925 Jun 07 j 18:33	0°♎	
	925 Aug 03 j 07:59	0°♏	
	925 Sep 16 j 18:14	0°♐	
	925 Oct 27 j 03:45	0°♑	
	925 Dec 04 j 20:54	0°♒	
	926 Jan 12 j 07:52	0°♓	
	926 Feb 20 j 13:59	0°♈	
evening set	926 Mar 25 j 14:44	24°♈22'56	
	926 Apr 02 j 09:38	0°♉	
asc. node	926 Apr 07 j 01:31	3°♉20'19	
	926 May 15 j 04:37	0°♊	
conjunction	926 May 21 j 18:07	4°♊28'42	0°26'36
minimum elong	926 May 21 j 16:49	4°♊26'30	0°26'35
max. Earth dist.	926 Jun 16 j 21:46	22°♊01'59	2.58933 AU
	926 Jun 28 j 23:44	0°♋	
morning rise	926 Jul 12 j 09:15	8°♋44'27	
	926 Aug 14 j 13:05	0°♌	
	926 Oct 01 j 16:04	0°♍	
	926 Nov 20 j 21:32	0°♎	
	927 Jan 15 j 17:13	0°♏	
retrograde	927 Mar 26 j 11:31	20°♏40'21	
desc. node	927 Apr 25 j 17:10	15°♏09'52	
opposition	927 Apr 30 j 05:13	13°♏38'03	0°-13'-46
greatest brilliancy	927 Apr 20 j 04:50	16°♏53'01	-2.1m
min. Earth dist.	927 May 08 j 14:31	10°♏43'22	0.49822 AU
direct	927 Jun 07 j 11:42	4°♏59'21	
	927 Aug 16 j 16:37	0°♐	
	927 Oct 01 j 06:04	0°♑	
	927 Nov 11 j 03:35	0°♒	
	927 Dec 21 j 01:05	0°♓	
	928 Jan 30 j 12:00	0°♈	
asc. node	928 Feb 23 j 00:47	17°♈00'20	
	928 Mar 12 j 09:11	0°♉	
	928 Apr 25 j 01:22	0°♊	
evening set	928 May 14 j 07:57	12°♊52'03	
	928 Jun 09 j 10:19	0°♋	
conjunction	928 Jul 02 j 23:59	15°♋14'50	1°01'51
minimum elong	928 Jul 02 j 22:55	15°♋13'08	1°01'51
max. Earth dist.	928 Jul 12 j 01:54	21°♋04'36	2.65876 AU
	928 Jul 26 j 00:43	0°♌	
morning rise	928 Aug 18 j 05:32	14°♌46'00	
	928 Sep 11 j 06:04	0°♍	
	928 Oct 28 j 16:18	0°♎	
	928 Dec 15 j 09:16	0°♏	
	929 Feb 02 j 05:47	0°♐	
desc. node	929 Mar 12 j 16:58	22°♐11'14	
	929 Mar 27 j 11:15	0°♑	
retrograde	929 Jun 04 j 13:16	21°♑50'31	
opposition	929 Jul 04 j 20:55	16°♑48'03	-6°-9'-58
greatest brilliancy	929 Jul 05 j 20:15	16°♑32'09	-2.8m
min. Earth dist.	929 Jul 08 j 10:30	15°♑49'46	0.38302 AU
direct	929 Aug 05 j 03:19	11°♑21'12	
	929 Oct 02 j 13:14	0°♒	
	929 Nov 20 j 19:05	0°♓	
	930 Jan 04 j 16:45	0°♈	
asc. node	930 Jan 09 j 22:58	3°♈32'45	
	930 Feb 18 j 09:28	0°♉	
	930 Apr 04 j 23:31	0°♊	
	930 May 21 j 14:01	0°♋	
evening set	930 Jun 24 j 06:57	21°♋26'14	
	930 Jul 07 j 18:45	0°♌	
max. Earth dist.	930 Aug 04 j 05:24	17°♌26'28	2.67391 AU
conjunction	930 Aug 09 j 12:28	20°♌48'57	1°08'26
minimum elong	930 Aug 09 j 12:50	20°♌49'30	1°08'25
	930 Aug 23 j 21:24	0°♍	
morning rise	930 Sep 22 j 23:39	19°♍23'14	
	930 Oct 09 j 06:59	0°♎	
	930 Nov 23 j 15:28	0°♏	
	931 Jan 06 j 22:19	0°♐	
desc. node	931 Jan 28 j 15:50	14°♐57'26	
	931 Feb 19 j 08:06	0°♑	
	931 Apr 03 j 09:20	0°♒	
	931 May 17 j 14:11	0°♓	
	931 Jul 08 j 22:06	0°♈	
retrograde	931 Aug 18 j 14:19	10°♈17'43	
min. Earth dist.	931 Sep 14 j 11:08	5°♈31'18	0.41945 AU
opposition	931 Sep 21 j 23:26	3°♈06'49	-3°-51'-4
greatest brilliancy	931 Sep 20 j 15:44	3°♈32'19	-2.6m
	931 Oct 02 j 12:11	30°℞♓	
direct	931 Oct 23 j 02:05	27°♓11'52	
	931 Nov 13 j 13:09	0°♈	
asc. node	931 Nov 27 j 22:12	4°♈25'27	
	932 Jan 20 j 09:27	0°♉	
	932 Mar 12 j 01:24	0°♊	
	932 Apr 30 j 12:39	0°♋	
	932 Jun 18 j 03:14	0°♌	
evening set	932 Jul 30 j 16:41	26°♌47'18	
	932 Aug 04 j 17:26	0°♍	
max. Earth dist.	932 Aug 27 j 08:19	14°♍34'40	2.63496 AU
conjunction	932 Sep 14 j 12:02	26°♍27'59	0°48'42
minimum elong	932 Sep 14 j 13:14	26°♍29'57	0°48'41
	932 Sep 19 j 20:20	0°♎	
morning rise	932 Oct 30 j 10:35	27°♎24'17	
	932 Nov 03 j 04:57	0°♏	
desc. node	932 Dec 15 j 14:42	29°♏51'31	
	932 Dec 15 j 19:25	0°♐	
	933 Jan 25 j 21:37	0°♑	
	933 Mar 06 j 22:30	0°♒	
	933 Apr 15 j 15:27	0°♓	
	933 May 26 j 04:34	0°♈	
	933 Jul 08 j 20:59	0°♉	
	933 Sep 03 j 04:33	0°♊	
retrograde	933 Oct 06 j 18:40	6°♊56'19	
asc. node	933 Oct 14 j 21:57	6°♊27'24	
	933 Nov 07 j 16:45	30°℞♉	
min. Earth dist.	933 Nov 07 j 12:23	0°♊04'08	0.54825 AU
opposition	933 Nov 14 j 11:13	27°♉23'23	1°25'44

greatest brilliancy	933 Nov 13 j 21:17	27°♉36'52	-1.9m
direct	933 Dec 20 j 05:08	19°♉22'02	
	934 Feb 04 j 10:46	0°♊	
	934 Apr 06 j 21:30	0°♋	
	934 May 29 j 02:13	0°♌	
	934 Jul 17 j 01:16	0°♍	
	934 Sep 01 j 11:35	0°♎	
evening set	934 Sep 07 j 06:22	3°♎51'04	
max. Earth dist.	934 Sep 24 j 13:51	15°♎32'37	2.54533 AU
	934 Oct 15 j 11:49	0°♏	
conjunction	934 Oct 25 j 22:19	7°♏21'07	0°04'45
minimum elong	934 Oct 25 j 22:33	7°♏21'30	0°04'45
behind sun begin	934 Oct 25 j 02:05	6°♏45'17	
behind sun end	934 Oct 26 j 19:01	7°♏57'46	
desc. node	934 Nov 02 j 14:11	12°♏48'20	
	934 Nov 26 j 07:25	0°♐	
morning rise	934 Dec 17 j 04:54	15°♐30'38	
	935 Jan 05 j 08:55	0°♑	
	935 Feb 13 j 07:17	0°♒	
	935 Mar 23 j 21:09	0°♓	
	935 May 02 j 00:17	0°♈	
	935 Jun 11 j 19:17	0°♉	
	935 Jul 25 j 21:37	0°♊	
asc. node	935 Sep 01 j 19:52	22°♊40'56	
	935 Sep 15 j 22:32	0°♋	
retrograde	935 Nov 14 j 00:57	17°♋14'08	
min. Earth dist.	935 Dec 20 j 17:24	8°♋37'49	0.64367 AU
greatest brilliancy	935 Dec 23 j 10:03	7°♋33'01	-1.4m
opposition	935 Dec 24 j 02:19	7°♋16'42	3°53'08
	936 Jan 14 j 19:15	30°℞♊	
direct	936 Feb 01 j 01:22	28°♊03'09	
	936 Feb 19 j 14:54	0°♋	
	936 May 03 j 23:21	0°♌	
	936 Jun 25 j 19:24	0°♍	
	936 Aug 12 j 10:51	0°♎	
desc. node	936 Sep 19 j 13:07	25°♎44'01	
	936 Sep 25 j 15:39	0°♏	
evening set	936 Oct 21 j 18:47	18°♏41'04	
	936 Nov 06 j 04:10	0°♐	
max. Earth dist.	936 Nov 08 j 15:48	1°♐50'50	2.41985 AU
	936 Dec 15 j 17:35	0°♑	
conjunction	936 Dec 17 j 15:38	1°♑28'59	0°-50'-32
minimum elong	936 Dec 17 j 13:15	1°♑24'23	0°50'31
	937 Jan 23 j 03:22	0°♒	
morning rise	937 Feb 21 j 17:10	23°♒17'10	
	937 Mar 02 j 06:31	0°♓	
	937 Apr 10 j 00:16	0°♈	
	937 May 20 j 05:21	0°♉	
	937 Jul 01 j 18:27	0°♊	
asc. node	937 Jul 19 j 18:46	12°♊04'38	
	937 Aug 16 j 18:57	0°♋	
	937 Oct 08 j 16:16	0°♌	
retrograde	937 Dec 17 j 14:13	21°♌27'21	
opposition	938 Jan 26 j 14:40	11°♌49'19	4°34'10
greatest brilliancy	938 Jan 26 j 15:42	11°♌48'16	-1.2m
min. Earth dist.	938 Jan 27 j 02:37	11°♌37'23	0.67703 AU
direct	938 Mar 08 j 11:46	1°♌57'45	
	938 May 31 j 22:28	0°♍	
	938 Jul 22 j 13:18	0°♎	
desc. node	938 Aug 07 j 11:43	10°♎12'29	
	938 Sep 05 j 21:08	0°♏	
	938 Oct 17 j 14:47	0°♐	
	938 Nov 26 j 01:27	0°♑	
evening set	938 Dec 21 j 15:55	20°♑02'07	
	939 Jan 03 j 06:54	0°♒	
	939 Feb 10 j 07:20	0°♓	
conjunction	939 Feb 27 j 02:48	13°♓07'50	0°-55'-17
minimum elong	939 Feb 27 j 05:43	13°♓13'29	0°55'16
	939 Mar 21 j 00:47	0°♈	
max. Earth dist.	939 Apr 19 j 09:43	22°♈02'39	2.41676 AU
	939 Apr 30 j 06:03	0°♉	
morning rise	939 May 05 j 13:26	3°♉51'10	
asc. node	939 Jun 06 j 18:54	26°♉41'58	
	939 Jun 11 j 13:24	0°♊	
	939 Jul 26 j 08:49	0°♋	
	939 Sep 12 j 07:22	0°♌	
	939 Nov 04 j 21:51	0°♍	
retrograde	940 Jan 22 j 12:59	25°♍04'13	
opposition	940 Mar 01 j 09:28	16°♍08'37	3°52'50
greatest brilliancy	940 Mar 02 j 04:14	15°♍50'21	-1.4m
min. Earth dist.	940 Mar 05 j 18:10	14°♍26'46	0.64443 AU
direct	940 Apr 11 j 19:00	6°♍07'13	
desc. node	940 Jun 24 j 10:23	29°♍54'58	
	940 Jun 24 j 14:11	0°♎	
	940 Aug 13 j 12:39	0°♏	
	940 Sep 25 j 14:22	0°♐	
	940 Nov 04 j 12:01	0°♑	
	940 Dec 12 j 22:39	0°♒	
	941 Jan 20 j 04:13	0°♓	
	941 Feb 28 j 04:43	0°♈	
evening set	941 Mar 01 j 10:36	0°♈56'26	
	941 Apr 09 j 18:24	0°♉	
asc. node	941 Apr 23 j 17:47	10°♉00'43	
conjunction	941 May 01 j 16:52	15°♉38'39	0°05'00
minimum elong	941 May 01 j 16:33	15°♉38'07	0°05'00
behind sun begin	941 Apr 30 j 17:21	14°♉57'15	
behind sun end	941 May 02 j 15:46	16°♉18'56	
	941 May 22 j 08:08	0°♊	
max. Earth dist.	941 Jun 04 j 19:13	9°♊11'17	2.54807 AU
morning rise	941 Jun 25 j 20:12	23°♊17'10	
	941 Jul 06 j 00:29	0°♋	
	941 Aug 21 j 17:18	0°♌	
	941 Oct 09 j 13:39	0°♍	
	941 Dec 01 j 03:34	0°♎	
	942 Feb 09 j 16:47	0°♏	
retrograde	942 Mar 05 j 16:57	3°♏08'24	
	942 Mar 28 j 00:57	30°℞♎	
opposition	942 Apr 10 j 23:15	25°♎24'58	1°26'27
greatest brilliancy	942 Apr 11 j 15:06	25°♎10'28	-1.8m
min. Earth dist.	942 Apr 18 j 16:04	22°♎36'04	0.54887 AU
desc. node	942 May 12 j 09:06	16°♎32'30	
direct	942 May 20 j 19:14	16°♎03'16	
	942 Jul 10 j 17:24	0°♏	
	942 Aug 30 j 21:02	0°♐	
	942 Oct 12 j 04:00	0°♑	
	942 Nov 20 j 18:57	0°♒	
	942 Dec 29 j 21:21	0°♓	
	943 Feb 07 j 17:09	0°♈	
asc. node	943 Mar 11 j 16:12	23°♈18'20	
	943 Mar 21 j 01:23	0°♉	
evening set	943 Apr 27 j 04:45	25°♉50'49	
	943 May 03 j 07:11	0°♊	
	943 Jun 17 j 09:00	0°♋	
conjunction	943 Jun 18 j 04:54	0°♋32'31	0°51'44
minimum elong	943 Jun 18 j 03:27	0°♋30'09	0°51'43
max. Earth dist.	943 Jul 03 j 10:54	10°♋27'31	2.63810 AU
	943 Aug 02 j 21:14	0°♌	
morning rise	943 Aug 05 j 00:41	1°♌22'00	
	943 Sep 19 j 07:56	0°♍	

	943 Nov 06 j 12:18	0°♎	
	943 Dec 26 j 01:06	0°♏	
	944 Feb 17 j 19:08	0°♐	
desc. node	944 Mar 29 j 08:09	17°♐51'51	
retrograde	944 May 04 j 10:52	24°♐46'01	
opposition	944 Jun 05 j 08:55	19°♐02'19	-3°-51'-45
greatest brilliancy	944 Jun 06 j 17:15	18°♐37'53	-2.6m
min. Earth dist.	944 Jun 12 j 14:37	16°♐51'50	0.41908 AU
direct	944 Jul 09 j 15:28	12°♐16'09	
	944 Sep 03 j 19:05	0°♑	
	944 Oct 21 j 20:01	0°♒	
	944 Dec 03 j 15:34	0°♓	
	945 Jan 14 j 22:11	0°♈	
asc. node	945 Jan 26 j 15:22	8°♈13'42	
	945 Feb 27 j 02:28	0°♉	
	945 Apr 12 j 17:23	0°♊	
	945 May 28 j 17:23	0°♋	
evening set	945 Jun 09 j 01:56	7°♋18'01	
	945 Jul 14 j 14:48	0°♌	
conjunction	945 Jul 26 j 06:05	7°♌24'29	1°09'06
minimum elong	945 Jul 26 j 05:53	7°♌24'10	1°09'06
max. Earth dist.	945 Jul 26 j 08:29	7°♌28'17	2.67460 AU
	945 Aug 30 j 16:58	0°♍	
morning rise	945 Sep 09 j 00:37	5°♍57'31	
	945 Oct 16 j 09:36	0°♎	
	945 Dec 01 j 10:31	0°♏	
	946 Jan 15 j 21:41	0°♐	
desc. node	946 Feb 14 j 08:31	19°♐31'05	
	946 Mar 02 j 05:07	0°♑	
	946 Apr 17 j 14:20	0°♒	
	946 Jun 10 j 06:22	0°♓	
retrograde	946 Jul 23 j 17:33	11°♓05'21	
min. Earth dist.	946 Aug 19 j 18:40	6°♓37'48	0.38354 AU
greatest brilliancy	946 Aug 23 j 06:55	5°♓38'36	-2.8m
opposition	946 Aug 24 j 08:33	5°♓20'29	-6°-8'-5
direct	946 Sep 23 j 02:42	0°♓14'24	
	946 Dec 13 j 17:32	0°♈	
asc. node	946 Dec 14 j 13:51	0°♈28'35	
	947 Feb 02 j 01:40	0°♉	
	947 Mar 22 j 06:30	0°♊	
	947 May 09 j 06:37	0°♋	
	947 Jun 26 j 04:41	0°♌	
evening set	947 Jul 17 j 06:38	13°♌17'26	
	947 Aug 12 j 12:48	0°♍	
max. Earth dist.	947 Aug 18 j 18:33	4°♍00'13	2.65678 AU
conjunction	947 Aug 31 j 21:23	12°♍28'03	0°59'22
minimum elong	947 Aug 31 j 22:23	12°♍29'41	0°59'21
	947 Sep 27 j 17:05	0°♎	
morning rise	947 Oct 15 j 19:15	12°♎01'10	
	947 Nov 11 j 09:23	0°♏	
	947 Dec 24 j 12:29	0°♐	
desc. node	948 Jan 02 j 07:18	6°♐14'03	
	948 Feb 04 j 07:02	0°♑	
	948 Mar 16 j 02:29	0°♒	
	948 Apr 25 j 17:36	0°♓	
	948 Jun 06 j 18:27	0°♈	
	948 Jul 24 j 21:45	0°♉	
retrograde	948 Sep 19 j 09:17	17°♉52'14	
min. Earth dist.	948 Oct 18 j 22:02	11°♉50'54	0.49799 AU
opposition	948 Oct 26 j 21:08	8°♉55'10	0°-14'-29
greatest brilliancy	948 Nov 03 j 14:58	6°♉11'17	-2.2m
asc. node	948 Oct 31 j 12:44	7°♉14'25	
direct	948 Nov 29 j 23:26	1°♉36'22	
	949 Feb 21 j 12:00	0°♊	
	949 Apr 16 j 11:52	0°♋	
	949 Jun 05 j 20:11	0°♌	
	949 Jul 24 j 03:09	0°♍	
evening set	949 Aug 22 j 20:14	19°♍06'45	
	949 Sep 08 j 09:09	0°♎	
max. Earth dist.	949 Sep 12 j 18:57	2°♎55'58	2.58611 AU
conjunction	949 Oct 08 j 21:19	20°♎35'32	0°24'22
minimum elong	949 Oct 08 j 22:13	20°♎37'05	0°24'20
	949 Oct 22 j 11:49	0°♏	
desc. node	949 Nov 19 j 05:42	19°♏37'45	
morning rise	949 Nov 26 j 20:30	25°♏07'18	
	949 Dec 03 j 13:43	0°♐	
	950 Jan 12 j 23:32	0°♑	
	950 Feb 21 j 06:23	0°♒	
	950 Apr 01 j 04:01	0°♓	
	950 May 10 j 15:22	0°♈	
	950 Jun 21 j 00:11	0°♉	
	950 Aug 05 j 18:53	0°♊	
asc. node	950 Sep 18 j 12:45	22°♊50'57	
	950 Oct 09 j 11:28	0°♋	
retrograde	950 Oct 30 j 22:49	2°♋52'18	
	950 Nov 20 j 02:49	30°℞♊	
min. Earth dist.	950 Dec 04 j 19:51	24°♊52'35	0.61288 AU
opposition	950 Dec 09 j 16:14	22°♊56'39	3°11'47
greatest brilliancy	950 Dec 08 j 20:38	23°♊16'12	-1.5m
direct	951 Jan 16 j 12:35	14°♊06'26	
	951 Mar 17 j 04:18	0°♋	
	951 May 14 j 20:42	0°♌	
	951 Jul 04 j 16:04	0°♍	
	951 Aug 20 j 16:57	0°♎	
evening set	951 Oct 03 j 18:50	0°♏00'00	
	951 Oct 03 j 18:49	0°♏	
desc. node	951 Oct 07 j 04:40	2°♏23'57	
max. Earth dist.	951 Oct 18 j 08:42	10°♏19'50	2.47068 AU
	951 Nov 14 j 09:16	0°♐	
conjunction	951 Nov 25 j 15:11	8°♐22'18	0°-30'-9
minimum elong	951 Nov 25 j 13:35	8°♐19'19	0°30'08
	951 Dec 24 j 02:40	0°♑	
morning rise	952 Jan 24 j 16:22	24°♑30'47	
	952 Jan 31 j 16:30	0°♒	
	952 Mar 09 j 22:48	0°♓	
greatest brilliancy	952 Mar 21 j 08:10	8°♓52'32	1.2m
	952 Apr 17 j 18:49	0°♈	
	952 May 28 j 02:37	0°♉	
	952 Jul 09 j 23:31	0°♊	
asc. node	952 Aug 05 j 11:45	17°♊18'58	
	952 Aug 26 j 04:05	0°♋	
	952 Oct 24 j 16:26	0°♌	
retrograde	952 Dec 04 j 06:25	8°♌39'14	
	953 Jan 10 j 12:36	30°℞♋	
min. Earth dist.	953 Jan 12 j 09:25	29°♋15'13	0.67167 AU
opposition	953 Jan 13 j 10:01	28°♋50'34	4°28'20
greatest brilliancy	953 Jan 13 j 03:27	28°♋57'08	-1.2m
direct	953 Feb 22 j 16:24	19°♋10'46	
	953 Apr 11 j 11:09	0°♌	
	953 Jun 11 j 06:52	0°♍	
	953 Jul 30 j 18:15	0°♎	
desc. node	953 Aug 24 j 03:52	16°♎02'58	
	953 Sep 13 j 12:13	0°♏	
	953 Oct 25 j 02:30	0°♐	
evening set	953 Nov 25 j 16:13	23°♐54'36	
	953 Dec 03 j 13:23	0°♑	
	954 Jan 10 j 19:37	0°♒	
conjunction	954 Jan 29 j 01:45	14°♒25'30	-1°-4'-53
minimum elong	954 Jan 29 j 02:08	14°♒26'17	1°04'54

	954 Feb 17 j 20:05	0°♓	
max. Earth dist.	954 Feb 22 j 12:36	3°♓40'35	2.37331 AU
	954 Mar 28 j 12:32	0°♈	
morning rise	954 Apr 09 j 09:33	9°♈00'48	
	954 May 07 j 16:17	0°♉	
	954 Jun 18 j 23:33	0°♊	
asc. node	954 Jun 23 j 10:07	3°♊02'51	
	954 Aug 03 j 01:05	0°♋	
	954 Sep 21 j 01:48	0°♌	
	954 Nov 19 j 01:42	0°♍	
retrograde	955 Jan 08 j 02:44	11°♍58'18	
opposition	955 Feb 16 j 13:13	2°♍43'24	4°18'52
greatest brilliancy	955 Feb 17 j 01:53	2°♍30'55	-1.3m
min. Earth dist.	955 Feb 19 j 09:49	1°♍35'50	0.66501 AU
	955 Feb 23 j 12:31	30°℞♌	
direct	955 Mar 29 j 21:58	22°♌42'02	
	955 May 06 j 11:44	0°♍	
	955 Jul 07 j 04:23	0°♎	
desc. node	955 Jul 12 j 02:13	2°♎54'04	
	955 Aug 23 j 11:45	0°♏	
	955 Oct 04 j 20:08	0°♐	
	955 Nov 13 j 11:36	0°♑	
	955 Dec 21 j 18:55	0°♒	
	956 Jan 28 j 21:11	0°♓	
evening set	956 Feb 03 j 13:54	4°♓27'03	
	956 Mar 07 j 17:37	0°♈	
conjunction	956 Apr 08 j 22:21	24°♈02'09	0°-19'-47
minimum elong	956 Apr 08 j 23:48	24°♈04'50	0°19'46
	956 Apr 17 j 02:32	0°♉	
asc. node	956 May 10 j 10:07	16°♉41'19	
max. Earth dist.	956 May 21 j 14:49	24°♉32'14	2.49971 AU
	956 May 29 j 12:04	0°♊	
morning rise	956 Jun 07 j 13:03	6°♊12'06	
	956 Jul 13 j 03:20	0°♋	
	956 Aug 29 j 03:03	0°♌	
	956 Oct 18 j 02:35	0°♍	
	956 Dec 14 j 03:22	0°♎	
retrograde	957 Feb 15 j 13:08	17°♎32'52	
opposition	957 Mar 25 j 00:27	9°♎16'28	2°39'24
greatest brilliancy	957 Mar 25 j 22:27	8°♎55'42	-1.6m
min. Earth dist.	957 Mar 31 j 13:34	6°♎48'09	0.59298 AU
	957 Apr 26 j 04:27	30°℞♍	
direct	957 May 04 j 18:52	29°♍30'12	
	957 May 13 j 14:14	0°♎	
desc. node	957 May 29 j 01:15	2°♎59'47	
	957 Jul 26 j 19:45	0°♏	
	957 Sep 10 j 16:56	0°♐	
	957 Oct 21 j 14:37	0°♑	
	957 Nov 29 j 13:47	0°♒	
	958 Jan 07 j 04:57	0°♓	
	958 Feb 15 j 14:52	0°♈	
asc. node	958 Mar 28 j 08:40	29°♈50'46	
	958 Mar 28 j 13:49	0°♉	
evening set	958 Apr 07 j 02:28	6°♉47'05	
	958 May 10 j 11:32	0°♊	
conjunction	958 Jun 01 j 04:18	14°♊40'05	0°37'06
minimum elong	958 Jun 01 j 02:47	14°♊37'34	0°37'04
max. Earth dist.	958 Jun 23 j 03:59	29°♊14'12	2.60899 AU
	958 Jun 24 j 07:54	0°♋	
morning rise	958 Jul 21 j 05:25	17°♋28'07	
	958 Aug 09 j 19:43	0°♌	
	958 Sep 26 j 15:03	0°♍	
	958 Nov 14 j 22:26	0°♎	
	959 Jan 06 j 14:35	0°♏	
	959 Mar 19 j 22:38	0°♐	
retrograde	959 Apr 08 j 14:25	2°♐11'49	
desc. node	959 Apr 16 j 00:59	1°♐50'55	
	959 Apr 27 j 09:06	30°℞♏	
opposition	959 May 12 j 10:30	25°♏35'38	-1°-25'-3
greatest brilliancy	959 May 13 j 02:47	25°♏22'01	-2.3m
min. Earth dist.	959 May 20 j 20:40	22°♏47'23	0.46909 AU
direct	959 Jun 18 j 11:56	17°♏30'29	
	959 Aug 03 j 20:24	0°♐	
	959 Sep 23 j 07:45	0°♑	
	959 Nov 04 j 13:13	0°♒	
	959 Dec 15 j 02:50	0°♓	
	960 Jan 25 j 00:52	0°♈	
asc. node	960 Feb 13 j 06:27	13°♈48'24	
	960 Mar 07 j 06:17	0°♉	
	960 Apr 20 j 04:46	0°♊	
evening set	960 May 24 j 01:00	22°♊22'34	
	960 Jun 04 j 17:55	0°♋	
conjunction	960 Jul 11 j 15:44	23°♋45'43	1°05'44
minimum elong	960 Jul 11 j 14:58	23°♋44'30	1°05'44
max. Earth dist.	960 Jul 17 j 10:41	27°♋27'40	2.66686 AU
	960 Jul 21 j 10:08	0°♌	
morning rise	960 Aug 26 j 05:03	22°♌46'54	
	960 Sep 06 j 13:35	0°♍	
	960 Oct 23 j 16:23	0°♎	
	960 Dec 09 j 16:20	0°♏	
	961 Jan 25 j 23:33	0°♐	
desc. node	961 Mar 03 j 00:03	22°♐15'19	
	961 Mar 15 j 23:16	0°♑	
	961 May 12 j 18:28	0°♒	
retrograde	961 Jun 22 j 18:05	9°♒20'07	
opposition	961 Jul 22 j 22:53	4°♒21'27	-6°-50'-4
greatest brilliancy	961 Jul 23 j 04:44	4°♒17'35	-2.9m
min. Earth dist.	961 Jul 23 j 13:11	4°♒11'59	0.37439 AU
	961 Aug 12 j 00:23	30°℞♑	
direct	961 Aug 21 j 21:45	29°♑20'42	
	961 Aug 31 j 19:45	0°♒	
	961 Nov 10 j 15:08	0°♓	
	961 Dec 28 j 10:56	0°♈	
asc. node	961 Dec 31 j 06:11	1°♈49'01	
	962 Feb 12 j 10:25	0°♉	
	962 Mar 30 j 17:07	0°♊	
	962 May 16 j 17:10	0°♋	
evening set	962 Jul 02 j 18:32	29°♋46'20	
	962 Jul 03 j 03:11	0°♌	
max. Earth dist.	962 Aug 09 j 12:19	23°♌44'15	2.67015 AU
conjunction	962 Aug 17 j 15:49	28°♌56'38	1°06'12
minimum elong	962 Aug 17 j 16:27	28°♌57'38	1°06'12
	962 Aug 19 j 07:25	0°♍	
morning rise	962 Oct 01 j 03:12	27°♍42'52	
	962 Oct 04 j 14:54	0°♎	
	962 Nov 18 j 17:08	0°♏	
	963 Jan 01 j 12:43	0°♐	
desc. node	963 Jan 18 j 22:51	12°♐09'08	
	963 Feb 13 j 05:55	0°♑	
	963 Mar 27 j 06:29	0°♒	
	963 May 08 j 15:28	0°♓	
	963 Jun 23 j 11:20	0°♈	
retrograde	963 Aug 31 j 09:15	25°♈17'35	
min. Earth dist.	963 Sep 27 j 22:26	20°♈07'38	0.44607 AU
greatest brilliancy	963 Oct 05 j 01:48	17°♈42'07	-2.4m
opposition	963 Oct 06 j 01:35	17°♈21'51	-2°-26'-6
direct	963 Nov 07 j 05:53	10°♈55'27	
asc. node	963 Nov 18 j 06:04	11°♈41'26	
	964 Jan 10 j 01:03	0°♉	
	964 Mar 05 j 11:32	0°♊	

	964 Apr 25 j 03:18	0°♋	
	964 Jun 13 j 06:23	0°♌	
	964 Jul 31 j 02:00	0°♍	
evening set	964 Aug 08 j 00:41	5°♍04'51	
max. Earth dist.	964 Sep 02 j 04:55	21°♍23'52	2.61980 AU
	964 Sep 15 j 06:08	0°♎	
conjunction	964 Sep 23 j 03:01	5°♎14'12	0°40'47
minimum elong	964 Sep 23 j 04:12	5°♎16'11	0°40'46
	964 Oct 29 j 12:58	0°♏	
morning rise	964 Nov 08 j 21:29	7°♏12'33	
desc. node	964 Dec 05 j 21:43	26°♏21'43	
	964 Dec 10 j 22:57	0°♐	
	965 Jan 20 j 18:58	0°♑	
	965 Mar 01 j 12:33	0°♒	
	965 Apr 09 j 20:54	0°♓	
	965 May 19 j 21:35	0°♈	
	965 Jul 01 j 08:53	0°♉	
	965 Aug 20 j 03:43	0°♊	
asc. node	965 Oct 05 j 04:31	16°♊22'43	
retrograde	965 Oct 15 j 22:45	17°♊09'32	
min. Earth dist.	965 Nov 17 j 20:32	9°♊51'19	0.57347 AU
greatest brilliancy	965 Nov 23 j 07:54	7°♊42'36	-1.7m
opposition	965 Nov 24 j 02:09	7°♊24'41	2°11'20
	965 Dec 18 j 18:56	30°℞♉	
direct	965 Dec 30 j 15:11	29°♉03'46	
	966 Jan 12 j 01:55	0°♊	
	966 Mar 30 j 18:22	0°♋	
	966 May 23 j 15:03	0°♌	
	966 Jul 12 j 03:44	0°♍	
	966 Aug 27 j 19:01	0°♎	
evening set	966 Sep 16 j 12:55	13°♎14'18	
max. Earth dist.	966 Oct 02 j 10:37	24°♎08'53	2.52015 AU
	966 Oct 10 j 20:17	0°♏	
desc. node	966 Oct 23 j 20:27	9°♏11'04	
conjunction	966 Nov 05 j 10:17	18°♏12'08	0°-7'-47
minimum elong	966 Nov 05 j 09:53	18°♏11'26	0°07'49
behind sun begin	966 Nov 04 j 14:22	17°♏36'12	
behind sun end	966 Nov 06 j 05:24	18°♏46'42	
	966 Nov 21 j 14:27	0°♐	
morning rise	966 Dec 30 j 01:45	28°♐51'58	
	966 Dec 31 j 13:23	0°♑	
	967 Feb 08 j 08:46	0°♒	
	967 Mar 18 j 19:28	0°♓	
	967 Apr 26 j 19:06	0°♈	
	967 Jun 06 j 08:02	0°♉	
	967 Jul 19 j 18:58	0°♊	
asc. node	967 Aug 23 j 03:34	21°♊27'52	
	967 Sep 07 j 05:10	0°♋	
retrograde	967 Nov 21 j 20:58	25°♋30'08	
min. Earth dist.	967 Dec 29 j 11:10	16°♋35'41	0.65634 AU
greatest brilliancy	967 Dec 31 j 10:51	15°♋47'48	-1.3m
opposition	968 Jan 01 j 00:11	15°♋34'24	4°10'09
direct	968 Feb 09 j 11:33	6°♋10'19	
	968 Apr 26 j 11:24	0°♌	
	968 Jun 20 j 06:37	0°♍	
	968 Aug 07 j 11:42	0°♎	
desc. node	968 Sep 09 j 19:38	22°♎19'13	
	968 Sep 20 j 21:09	0°♏	
	968 Nov 01 j 10:24	0°♐	
evening set	968 Nov 02 j 15:35	0°♐54'12	
max. Earth dist.	968 Nov 27 j 02:36	19°♐21'00	2.39369 AU
	968 Dec 10 j 23:05	0°♑	
conjunction	969 Jan 01 j 04:32	16°♑32'06	0°-59'-15
minimum elong	969 Jan 01 j 02:29	16°♑28'04	0°59'16
	969 Jan 18 j 07:37	0°♒	
	969 Feb 25 j 09:32	0°♓	
morning rise	969 Mar 10 j 22:28	10°♓35'00	
	969 Apr 05 j 02:19	0°♈	
	969 May 15 j 06:00	0°♉	
	969 Jun 26 j 15:14	0°♊	
asc. node	969 Jul 10 j 02:53	9°♊08'28	
	969 Aug 11 j 03:52	0°♋	
	969 Oct 01 j 01:50	0°♌	
retrograde	969 Dec 25 j 07:50	29°♌11'28	
opposition	970 Feb 03 j 04:07	19°♌40'43	4°31'56
greatest brilliancy	970 Feb 03 j 09:25	19°♌35'26	-1.2m
min. Earth dist.	970 Feb 04 j 12:10	19°♌08'51	0.67564 AU
direct	970 Mar 16 j 06:31	9°♌44'27	
	970 May 23 j 23:13	0°♍	
	970 Jul 16 j 20:09	0°♎	
desc. node	970 Jul 28 j 19:08	7°♎28'58	
	970 Aug 31 j 18:25	0°♏	
	970 Oct 12 j 16:50	0°♐	
	970 Nov 21 j 05:02	0°♑	
	970 Dec 29 j 10:45	0°♒	
evening set	971 Jan 06 j 08:38	6°♒15'22	
	971 Feb 05 j 11:07	0°♓	
conjunction	971 Mar 15 j 01:31	29°♓08'03	0°-44'-3
minimum elong	971 Mar 15 j 04:32	29°♓13'49	0°44'02
	971 Mar 16 j 04:47	0°♈	
	971 Apr 25 j 10:22	0°♉	
max. Earth dist.	971 May 03 j 22:58	6°♉10'40	2.44670 AU
morning rise	971 May 18 j 19:19	16°♉46'45	
asc. node	971 May 28 j 00:57	23°♉16'30	
	971 Jun 06 j 17:14	0°♊	
	971 Jul 21 j 09:36	0°♋	
	971 Sep 06 j 20:47	0°♌	
	971 Oct 28 j 16:24	0°♍	
	972 Jan 06 j 15:55	0°♎	
retrograde	972 Jan 31 j 06:21	3°♎17'40	
	972 Feb 23 j 00:57	30°℞♍	
opposition	972 Mar 09 j 16:15	24°♍34'34	3°30'39
greatest brilliancy	972 Mar 10 j 13:13	24°♍14'19	-1.4m
min. Earth dist.	972 Mar 14 j 20:04	22°♍35'07	0.62890 AU
direct	972 Apr 19 j 22:17	14°♍36'04	
desc. node	972 Jun 14 j 17:27	29°♍47'03	
	972 Jun 15 j 04:32	0°♎	
	972 Aug 07 j 06:22	0°♏	
	972 Sep 20 j 02:19	0°♐	
	972 Oct 30 j 07:05	0°♑	
	972 Dec 07 j 21:18	0°♒	
	973 Jan 15 j 05:10	0°♓	
	973 Feb 23 j 07:45	0°♈	
evening set	973 Mar 15 j 11:11	15°♈02'08	
	973 Apr 04 j 23:21	0°♉	
asc. node	973 Apr 14 j 00:25	6°♉29'23	
conjunction	973 May 13 j 09:46	27°♉06'42	0°17'56
minimum elong	973 May 13 j 08:47	27°♉05'00	0°17'56
	973 May 17 j 14:29	0°♊	
max. Earth dist.	973 Jun 12 j 00:57	17°♊14'23	2.57177 AU
	973 Jul 01 j 07:00	0°♋	
morning rise	973 Jul 05 j 11:35	2°♋44'55	
	973 Aug 16 j 20:33	0°♌	
	973 Oct 04 j 05:14	0°♍	
	973 Nov 24 j 06:05	0°♎	
	974 Jan 22 j 13:47	0°♏	
retrograde	974 Mar 17 j 02:28	13°♏16'09	
opposition	974 Apr 21 j 13:32	5°♏54'12	0°32'29
greatest brilliancy	974 Apr 21 j 20:27	5°♏48'02	-2.0m

min. Earth dist.	974 Apr 29 j 17:01	3°♏00'04	0.52149 AU
desc. node	974 May 02 j 16:01	1°♏59'45	
	974 May 09 j 04:39	30°℞♎	
direct	974 May 30 j 14:14	26°♎53'42	
	974 Jun 21 j 18:51	0°♏	
	974 Aug 22 j 20:02	0°♐	
	974 Oct 05 j 16:04	0°♑	
	974 Nov 14 j 22:26	0°♒	
	974 Dec 24 j 09:57	0°♓	
	975 Feb 02 j 12:41	0°♈	
asc. node	975 Mar 01 j 23:45	19°♈57'22	
	975 Mar 16 j 02:32	0°♉	
	975 Apr 28 j 12:32	0°♊	
evening set	975 May 07 j 17:41	6°♊12'23	
	975 Jun 12 j 17:04	0°♋	
conjunction	975 Jun 27 j 08:56	9°♋31'45	0°58'08
minimum elong	975 Jun 27 j 07:41	9°♋29'43	0°58'08
max. Earth dist.	975 Jul 09 j 03:16	17°♋07'14	2.65053 AU
	975 Jul 29 j 05:41	0°♌	
morning rise	975 Aug 13 j 05:41	9°♌33'13	
	975 Sep 14 j 12:43	0°♍	
	975 Nov 01 j 06:10	0°♎	
	975 Dec 19 j 15:49	0°♏	
	976 Feb 08 j 03:28	0°♐	
desc. node	976 Mar 19 j 15:46	21°♐31'41	
	976 Apr 07 j 20:34	0°♑	
retrograde	976 May 21 j 13:09	9°♑50'33	
opposition	976 Jun 21 j 09:36	4°♑33'17	-5°-15'-45
greatest brilliancy	976 Jun 22 j 17:17	4°♑10'46	-2.7m
min. Earth dist.	976 Jun 26 j 22:33	2°♑59'00	0.39645 AU
	976 Jul 09 j 05:53	30°℞♐	
direct	976 Jul 23 j 23:49	28°♐33'36	
	976 Aug 07 j 12:51	0°♑	
	976 Oct 11 j 18:37	0°♒	
	976 Nov 26 j 04:58	0°♓	
	977 Jan 08 j 16:25	0°♈	
asc. node	977 Jan 16 j 22:07	5°♈40'25	
	977 Feb 21 j 14:06	0°♉	
	977 Apr 07 j 15:58	0°♊	
	977 May 23 j 22:55	0°♋	
evening set	977 Jun 17 j 21:09	15°♋55'44	
	977 Jul 09 j 23:54	0°♌	
max. Earth dist.	977 Jul 31 j 14:14	13°♌44'08	2.67523 AU
conjunction	977 Aug 03 j 11:29	15°♌34'20	1°09'10
minimum elong	977 Aug 03 j 11:37	15°♌34'31	1°09'10
	977 Aug 26 j 02:10	0°♍	
morning rise	977 Sep 17 j 00:21	14°♍04'14	
	977 Oct 11 j 15:05	0°♎	
	977 Nov 26 j 06:53	0°♏	
	978 Jan 10 j 01:35	0°♐	
desc. node	978 Feb 04 j 14:42	17°♐19'26	
	978 Feb 23 j 05:17	0°♑	
	978 Apr 08 j 09:56	0°♒	
	978 May 25 j 00:04	0°♓	
retrograde	978 Aug 07 j 20:48	28°♓26'13	
min. Earth dist.	978 Sep 03 j 12:11	23°♓53'39	0.40074 AU
greatest brilliancy	978 Sep 08 j 16:15	22°♓19'48	-2.7m
opposition	978 Sep 10 j 00:50	21°♓55'01	-4°-55'-49
direct	978 Oct 10 j 09:37	16°♓24'33	
	978 Nov 30 j 10:53	0°♈	
asc. node	978 Dec 04 j 21:20	2°♈02'54	
	979 Jan 25 j 13:02	0°♉	
	979 Mar 16 j 09:45	0°♊	
	979 May 04 j 03:48	0°♋	
	979 Jun 21 j 10:44	0°♌	
evening set	979 Jul 25 j 12:51	21°♌27'48	
	979 Aug 07 j 22:26	0°♍	
max. Earth dist.	979 Aug 24 j 06:16	10°♍29'42	2.64571 AU
conjunction	979 Sep 09 j 04:54	20°♍51'31	0°53'36
minimum elong	979 Sep 09 j 06:03	20°♍53'24	0°53'36
	979 Sep 23 j 02:36	0°♎	
morning rise	979 Oct 24 j 14:30	21°♎05'55	
	979 Nov 06 j 15:20	0°♏	
	979 Dec 19 j 11:55	0°♐	
desc. node	979 Dec 23 j 13:20	2°♐53'58	
	980 Jan 29 j 21:33	0°♑	
	980 Mar 10 j 06:24	0°♒	
	980 Apr 19 j 07:40	0°♓	
	980 May 30 j 08:38	0°♈	
	980 Jul 14 j 06:19	0°♉	
retrograde	980 Sep 29 j 13:36	29°♉28'44	
asc. node	980 Oct 21 j 21:04	25°♉52'09	
min. Earth dist.	980 Oct 30 j 07:46	22°♉58'15	0.52632 AU
opposition	980 Nov 06 j 18:11	20°♉09'07	0°46'51
greatest brilliancy	980 Nov 06 j 09:34	20°♉17'19	-2.0m
direct	980 Dec 11 j 18:33	12°♉25'37	
	981 Feb 11 j 21:41	0°♊	
	981 Apr 10 j 08:41	0°♋	
	981 May 31 j 16:54	0°♌	
	981 Jul 19 j 09:19	0°♍	
evening set	981 Aug 31 j 12:52	27°♍51'04	
	981 Sep 03 j 18:46	0°♎	
max. Earth dist.	981 Sep 19 j 10:39	10°♎28'43	2.56442 AU
	981 Oct 17 j 21:11	0°♏	
conjunction	981 Oct 18 j 09:27	0°♏21'24	0°13'24
minimum elong	981 Oct 18 j 10:00	0°♏22'22	0°13'23
behind sun begin	981 Oct 17 j 22:10	0°♏01'43	
behind sun end	981 Oct 18 j 21:50	0°♏43'01	
desc. node	981 Nov 09 j 13:07	16°♏01'34	
	981 Nov 28 j 20:26	0°♐	
morning rise	981 Dec 08 j 00:58	6°♐45'09	
	982 Jan 08 j 02:07	0°♑	
	982 Feb 16 j 04:26	0°♒	
	982 Mar 26 j 21:16	0°♓	
	982 May 05 j 02:56	0°♈	
	982 Jun 15 j 01:43	0°♉	
	982 Jul 29 j 15:23	0°♊	
asc. node	982 Sep 08 j 19:09	23°♊36'13	
	982 Sep 22 j 09:15	0°♋	
retrograde	982 Nov 08 j 03:10	11°♋40'41	
min. Earth dist.	982 Dec 14 j 00:22	3°♋20'07	0.63115 AU
greatest brilliancy	982 Dec 17 j 07:03	2°♋01'21	-1.4m
opposition	982 Dec 18 j 01:20	1°♋43'01	3°38'00
	982 Dec 22 j 09:32	30°℞♊	
direct	983 Jan 25 j 12:44	22°♊39'19	
	983 Mar 04 j 16:13	0°♋	
	983 May 08 j 12:57	0°♌	
	983 Jun 29 j 11:32	0°♍	
	983 Aug 15 j 21:53	0°♎	
desc. node	983 Sep 27 j 12:09	28°♎52'17	
	983 Sep 29 j 02:51	0°♏	
evening set	983 Oct 14 j 06:44	10°♏44'28	
max. Earth dist.	983 Oct 29 j 19:51	21°♏59'02	2.44254 AU
	983 Nov 09 j 17:22	0°♐	
conjunction	983 Dec 08 j 05:11	21°♐25'58	0°-42'-17
minimum elong	983 Dec 08 j 03:00	21°♐21'49	0°42'16
	983 Dec 19 j 09:18	0°♑	
	984 Jan 26 j 21:10	0°♒	
morning rise	984 Feb 09 j 15:41	10°♒49'53	

	984 Mar 05 j 01:19	0°♓	
	984 Apr 12 j 19:06	0°♈	
	984 May 22 j 23:56	0°♉	
	984 Jul 04 j 13:58	0°♊	
asc. node	984 Jul 26 j 17:50	14°♊44'12	
	984 Aug 19 j 22:07	0°♋	
	984 Oct 13 j 13:46	0°♌	
retrograde	984 Dec 11 j 22:34	16°♌29'58	
opposition	985 Jan 21 j 00:28	6°♌46'39	4°33'09
greatest brilliancy	985 Jan 20 j 22:03	6°♌49'05	-1.2m
min. Earth dist.	985 Jan 20 j 19:53	6°♌51'15	0.67597 AU
	985 Feb 09 j 01:17	30°℞♋	
direct	985 Mar 02 j 15:17	26°♋59'52	
	985 Mar 26 j 02:36	0°♌	
	985 Jun 04 j 17:47	0°♍	
	985 Jul 25 j 10:29	0°♎	
desc. node	985 Aug 14 j 10:36	12°♎57'24	
	985 Sep 08 j 13:42	0°♏	
	985 Oct 20 j 07:03	0°♐	
	985 Nov 28 j 18:37	0°♑	
evening set	985 Dec 09 j 22:57	8°♑42'09	
	986 Jan 06 j 00:47	0°♒	
	986 Feb 13 j 00:55	0°♓	
conjunction	986 Feb 14 j 10:12	1°♓05'20	-1°-1'-15
minimum elong	986 Feb 14 j 12:17	1°♓09'27	1°01'16
	986 Mar 23 j 17:05	0°♈	
max. Earth dist.	986 Apr 03 j 10:10	8°♈08'06	2.39407 AU
morning rise	986 Apr 24 j 14:49	23°♈57'31	
	986 May 02 j 20:27	0°♉	
asc. node	986 Jun 13 j 18:07	29°♉46'30	
	986 Jun 14 j 01:56	0°♊	
	986 Jul 28 j 21:52	0°♋	
	986 Sep 15 j 03:46	0°♌	
	986 Nov 09 j 07:28	0°♍	
retrograde	987 Jan 16 j 07:10	19°♍53'34	
opposition	987 Feb 24 j 10:02	10°♍48'46	4°05'07
greatest brilliancy	987 Feb 25 j 02:14	10°♍32'54	-1.3m
min. Earth dist.	987 Feb 28 j 02:20	9°♍22'16	0.65494 AU
direct	987 Apr 06 j 19:29	0°♍46'36	
	987 Jun 30 j 02:35	0°♎	
desc. node	987 Jul 02 j 09:20	1°♎16'31	
	987 Aug 17 j 20:15	0°♏	
	987 Sep 29 j 15:13	0°♐	
	987 Nov 08 j 10:42	0°♑	
	987 Dec 16 j 20:02	0°♒	
	988 Jan 23 j 23:38	0°♓	
evening set	988 Feb 19 j 00:04	20°♓09'56	
	988 Mar 02 j 21:24	0°♈	
	988 Apr 12 j 07:48	0°♉	
conjunction	988 Apr 22 j 04:29	7°♉06'32	0°-5'-23
minimum elong	988 Apr 22 j 04:50	7°♉07'09	0°05'24
behind sun begin	988 Apr 21 j 04:57	6°♉24'22	
behind sun end	988 Apr 23 j 04:42	7°♉49'54	
asc. node	988 Apr 30 j 17:11	13°♉11'22	
	988 May 24 j 18:09	0°♊	
max. Earth dist.	988 May 30 j 03:57	3°♊43'00	2.52721 AU
morning rise	988 Jun 18 j 05:05	16°♊37'47	
	988 Jul 08 j 08:35	0°♋	
	988 Aug 24 j 02:35	0°♌	
	988 Oct 12 j 07:46	0°♍	
	988 Dec 05 j 07:19	0°♎	
retrograde	989 Feb 25 j 14:28	26°♎42'06	
opposition	989 Apr 03 j 10:25	18°♎42'52	2°00'02
greatest brilliancy	989 Apr 04 j 05:52	18°♎24'47	-1.7m
min. Earth dist.	989 Apr 10 j 15:08	16°♎02'19	0.56969 AU
direct	989 May 13 j 17:27	9°♎08'15	
desc. node	989 May 19 j 08:10	9°♎20'40	
	989 Jul 17 j 20:32	0°♏	
	989 Sep 04 j 05:03	0°♐	
	989 Oct 15 j 20:04	0°♑	
	989 Nov 24 j 03:31	0°♒	
	990 Jan 01 j 23:58	0°♓	
	990 Feb 10 j 14:02	0°♈	
asc. node	990 Mar 18 j 15:22	26°♈22'50	
	990 Mar 23 j 16:46	0°♉	
evening set	990 Apr 18 j 19:01	18°♉21'24	
	990 May 05 j 17:25	0°♊	
conjunction	990 Jun 11 j 01:51	24°♊21'43	0°46'08
minimum elong	990 Jun 11 j 00:19	24°♊19'12	0°46'06
	990 Jun 19 j 15:39	0°♋	
max. Earth dist.	990 Jun 29 j 04:26	6°♋13'42	2.62607 AU
morning rise	990 Jul 29 j 19:09	25°♋58'17	
	990 Aug 05 j 02:37	0°♌	
	990 Sep 21 j 16:06	0°♍	
	990 Nov 09 j 06:32	0°♎	
	990 Dec 29 j 21:32	0°♏	
	991 Feb 25 j 15:33	0°♐	
desc. node	991 Apr 06 j 07:02	13°♐14'28	
retrograde	991 Apr 23 j 03:23	14°♐53'31	
opposition	991 May 25 j 22:53	8°♐46'07	-2°-46'00
greatest brilliancy	991 May 27 j 02:27	8°♐24'14	-2.4m
min. Earth dist.	991 Jun 02 j 23:46	6°♐14'00	0.44062 AU
direct	991 Jun 30 j 14:01	1°♐22'24	
	991 Sep 13 j 13:49	0°♑	
	991 Oct 28 j 05:05	0°♒	
	991 Dec 08 j 19:52	0°♓	
	992 Jan 19 j 09:02	0°♈	
asc. node	992 Feb 03 j 14:37	10°♈49'30	
	992 Mar 02 j 01:06	0°♉	
	992 Apr 15 j 06:55	0°♊	
	992 May 31 j 00:59	0°♋	
evening set	992 Jun 02 j 07:33	1°♋28'13	
	992 Jul 16 j 19:24	0°♌	
conjunction	992 Jul 20 j 01:39	2°♌04'39	1°08'11
minimum elong	992 Jul 20 j 01:12	2°♌03'57	1°08'10
max. Earth dist.	992 Jul 22 j 17:41	3°♌46'39	2.67218 AU
	992 Sep 01 j 21:55	0°♍	
morning rise	992 Sep 03 j 03:02	0°♍46'24	
	992 Oct 18 j 19:00	0°♎	
	992 Dec 04 j 05:22	0°♏	
	993 Jan 19 j 09:42	0°♐	
desc. node	993 Feb 21 j 07:15	21°♐15'35	
	993 Mar 06 j 23:50	0°♑	
	993 Apr 25 j 05:25	0°♒	
retrograde	993 Jul 10 j 18:42	27°♒41'38	
min. Earth dist.	993 Aug 08 j 00:09	23°♒04'56	0.37551 AU
opposition	993 Aug 10 j 10:38	22°♒25'37	-6°-43'-47
greatest brilliancy	993 Aug 09 j 21:10	22°♒34'41	-2.9m
direct	993 Sep 08 j 23:13	17°♒30'03	
	993 Oct 26 j 13:43	0°♓	
	993 Dec 20 j 01:54	0°♈	
asc. node	993 Dec 21 j 13:34	0°♈54'19	
	994 Feb 06 j 01:15	0°♉	
	994 Mar 25 j 06:30	0°♊	
	994 May 11 j 18:44	0°♋	
	994 Jun 28 j 10:58	0°♌	
evening set	994 Jul 11 j 02:19	7°♌58'43	
	994 Aug 14 j 17:30	0°♍	
max. Earth dist.	994 Aug 14 j 19:49	0°♍03'41	2.66384 AU

conjunction	994 Aug 25 j 18:35	7°♍05'25	1°02'40
minimum elong	994 Aug 25 j 19:27	7°♍06'48	1°02'40
	994 Sep 29 j 23:51	0°♎	
morning rise	994 Oct 09 j 10:02	6°♎13'12	
	994 Nov 13 j 21:05	0°♏	
	994 Dec 27 j 07:56	0°♐	
desc. node	995 Jan 09 j 06:11	9°♐06'34	
	995 Feb 07 j 12:10	0°♑	
	995 Mar 20 j 19:17	0°♒	
	995 May 01 j 00:52	0°♓	
	995 Jun 13 j 04:28	0°♈	
	995 Aug 05 j 05:07	0°♉	
retrograde	995 Sep 12 j 03:41	9°♉00'23	
min. Earth dist.	995 Oct 10 j 17:09	3°♉22'19	0.47455 AU
opposition	995 Oct 18 j 21:24	0°♉27'16	-1°-7'-2
greatest brilliancy	995 Oct 18 j 09:23	0°♉38'02	-2.3m
	995 Oct 20 j 04:00	30°℞♈	
asc. node	995 Nov 08 j 12:02	24°♈35'35	
direct	995 Nov 21 j 04:13	23°♈30'42	
	995 Dec 25 j 08:53	0°♉	
	996 Feb 27 j 04:19	0°♊	
	996 Apr 19 j 12:36	0°♋	
	996 Jun 08 j 07:32	0°♌	
	996 Jul 26 j 09:55	0°♍	
evening set	996 Aug 16 j 10:36	13°♍28'47	
max. Earth dist.	996 Sep 08 j 06:02	28°♍23'54	2.60219 AU
	996 Sep 10 j 16:05	0°♎	
conjunction	996 Oct 01 j 23:42	14°♎17'12	0°31'42
minimum elong	996 Oct 02 j 00:46	14°♎19'00	0°31'41
	996 Oct 24 j 21:31	0°♏	
morning rise	996 Nov 18 j 20:14	17°♏32'54	
desc. node	996 Nov 26 j 04:43	22°♏48'26	
	996 Dec 06 j 03:59	0°♐	
	997 Jan 15 j 18:50	0°♑	
	997 Feb 24 j 06:41	0°♒	
	997 Apr 04 j 08:35	0°♓	
	997 May 14 j 00:12	0°♈	
	997 Jun 24 j 16:54	0°♉	
	997 Aug 10 j 13:48	0°♊	
asc. node	997 Sep 25 j 11:45	21°♊35'56	
retrograde	997 Oct 24 j 16:12	26°♊46'17	
min. Earth dist.	997 Nov 27 j 16:23	19°♊04'30	0.59620 AU
greatest brilliancy	997 Dec 02 j 08:09	17°♊13'46	-1.6m
opposition	997 Dec 03 j 04:07	16°♊53'57	2°49'09
direct	998 Jan 09 j 10:35	8°♊16'09	
	998 Mar 22 j 14:26	0°♋	
	998 May 17 j 22:06	0°♌	
	998 Jul 07 j 04:26	0°♍	
	998 Aug 23 j 02:21	0°♎	
evening set	998 Sep 26 j 03:45	23°♎00'13	
	998 Oct 06 j 05:07	0°♏	
max. Earth dist.	998 Oct 11 j 02:26	3°♏26'01	2.49331 AU
desc. node	998 Oct 14 j 03:44	5°♏35'23	
conjunction	998 Nov 16 j 13:13	29°♏43'14	0°-20'-34
minimum elong	998 Nov 16 j 12:09	29°♏41'17	0°20'35
	998 Nov 16 j 22:19	0°♐	
	998 Dec 26 j 18:47	0°♑	
morning rise	999 Jan 13 j 00:43	13°♑17'45	
	999 Feb 03 j 11:24	0°♒	
	999 Mar 13 j 19:29	0°♓	
	999 Apr 21 j 16:15	0°♈	
	999 Jun 01 j 00:52	0°♉	
	999 Jul 14 j 00:54	0°♊	
asc. node	999 Aug 13 j 11:16	19°♊35'49	
	999 Aug 30 j 20:48	0°♋	
	999 Nov 04 j 18:50	0°♌	
retrograde	999 Nov 29 j 14:42	3°♌33'48	
	999 Dec 22 j 14:39	30°℞♋	
min. Earth dist.	1000 Jan 07 j 00:58	24°♋22'48	0.66602 AU
opposition	1000 Jan 08 j 18:14	23°♋41'21	4°22'22
greatest brilliancy	1000 Jan 08 j 08:26	23°♋51'12	-1.3m
direct	1000 Feb 17 j 16:20	14°♋08'13	
	1000 Apr 17 j 14:50	0°♌	
	1000 Jun 14 j 11:11	0°♍	
	1000 Aug 02 j 10:31	0°♎	
desc. node	1000 Aug 31 j 02:41	18°♎59'35	
	1000 Sep 16 j 02:10	0°♏	
	1000 Oct 27 j 17:17	0°♐	
evening set	1000 Nov 15 j 06:35	13°♐55'41	
	1000 Dec 06 j 05:39	0°♑	
max. Earth dist.	1000 Dec 29 j 11:13	18°♑07'29	2.37433 AU
	1001 Jan 13 j 13:09	0°♒	
conjunction	1001 Jan 16 j 13:47	2°♒23'17	-1°-4'-13
minimum elong	1001 Jan 16 j 12:53	2°♒21'31	1°04'14
	1001 Feb 20 j 13:57	0°♓	
morning rise	1001 Mar 27 j 19:43	27°♓23'06	
	1001 Mar 31 j 05:41	0°♈	
	1001 May 10 j 08:11	0°♉	
	1001 Jun 21 j 14:32	0°♊	
asc. node	1001 Jun 30 j 09:33	6°♊00'53	
	1001 Aug 05 j 18:18	0°♋	
	1001 Sep 24 j 08:13	0°♌	
	1001 Nov 26 j 12:23	0°♍	
retrograde	1002 Jan 02 j 04:59	6°♍58'03	
	1002 Feb 04 j 15:20	30°℞♌	
opposition	1002 Feb 10 j 19:46	27°♌35'38	4°25'38
greatest brilliancy	1002 Feb 11 j 05:12	27°♌26'17	-1.2m
min. Earth dist.	1002 Feb 12 j 23:39	26°♌44'15	0.67099 AU
direct	1002 Mar 24 j 01:52	17°♌36'04	
	1002 May 14 j 03:05	0°♍	
	1002 Jul 10 j 17:46	0°♎	
desc. node	1002 Jul 19 j 01:01	5°♎02'17	
	1002 Aug 26 j 11:27	0°♏	
	1002 Oct 07 j 16:48	0°♐	
	1002 Nov 16 j 07:35	0°♑	
	1002 Dec 24 j 14:31	0°♒	
greatest brilliancy	1003 Jan 13 j 15:51	15°♒50'31	1.2m
evening set	1003 Jan 22 j 06:53	22°♒38'29	
	1003 Jan 31 j 15:38	0°♓	
	1003 Mar 11 j 09:53	0°♈	
conjunction	1003 Mar 30 j 01:01	14°♈03'01	0°-30'-36
minimum elong	1003 Mar 30 j 03:17	14°♈07'16	0°30'35
	1003 Apr 20 j 16:03	0°♉	
max. Earth dist.	1003 May 15 j 09:39	17°♉44'20	2.47628 AU
asc. node	1003 May 18 j 09:00	19°♉50'05	
morning rise	1003 May 30 j 21:51	28°♉35'16	
	1003 Jun 01 j 22:49	0°♊	
	1003 Jul 16 j 12:50	0°♋	
	1003 Sep 01 j 15:16	0°♌	
	1003 Oct 22 j 04:58	0°♍	
	1003 Dec 21 j 08:21	0°♎	
retrograde	1004 Feb 09 j 09:14	11°♎46'43	
opposition	1004 Mar 18 j 06:59	3°♎17'39	3°02'58
greatest brilliancy	1004 Mar 19 j 04:57	2°♎56'39	-1.5m
min. Earth dist.	1004 Mar 24 j 05:05	1°♎01'55	0.61012 AU
	1004 Mar 26 j 23:33	30°℞♍	
direct	1004 Apr 28 j 07:12	23°♍24'39	
	1004 Jun 01 j 18:39	0°♎	
desc. node	1004 Jun 04 j 23:57	1°♎09'35	
	1004 Jul 31 j 08:30	0°♏	

	1004 Sep 14 j 06:57	0°♐	
	1004 Oct 24 j 21:13	0°♑	
	1004 Dec 02 j 16:24	0°♒	
	1005 Jan 10 j 03:51	0°♓	
	1005 Feb 18 j 09:28	0°♈	
evening set	1005 Mar 28 j 15:00	28°♈10'18	
	1005 Mar 31 j 03:56	0°♉	
asc. node	1005 Apr 04 j 07:59	2°♉59'28	
	1005 May 12 j 21:17	0°♊	
conjunction	1005 May 24 j 07:57	7°♊48'06	0°29'30
minimum elong	1005 May 24 j 06:34	7°♊45'47	0°29'30
max. Earth dist.	1005 Jun 18 j 14:46	24°♊43'47	2.59330 AU
	1005 Jun 26 j 14:37	0°♋	
morning rise	1005 Jul 14 j 14:44	11°♋44'49	
	1005 Aug 12 j 01:53	0°♌	
	1005 Sep 29 j 01:42	0°♍	
	1005 Nov 17 j 23:48	0°♎	
	1006 Jan 11 j 16:47	0°♏	
retrograde	1006 Mar 29 j 08:17	24°♏05'34	
desc. node	1006 Apr 22 j 23:47	20°♏21'03	
opposition	1006 May 02 j 23:12	17°♏07'40	0°-30'-50
greatest brilliancy	1006 May 03 j 05:28	17°♏02'16	-2.1m
min. Earth dist.	1006 May 11 j 09:48	14°♏13'21	0.49275 AU
direct	1006 Jun 10 j 00:05	8°♏34'48	
	1006 Aug 12 j 20:47	0°♐	
	1006 Sep 28 j 11:39	0°♑	
	1006 Nov 08 j 16:18	0°♒	
	1006 Dec 18 j 16:22	0°♓	
	1007 Jan 28 j 03:55	0°♈	
asc. node	1007 Feb 20 j 05:35	16°♈40'38	
	1007 Mar 11 j 00:48	0°♉	
	1007 Apr 23 j 16:15	0°♊	
evening set	1007 May 17 j 19:10	16°♊05'00	
	1007 Jun 08 j 00:30	0°♋	
conjunction	1007 Jul 06 j 05:28	18°♋14'14	1°03'05
minimum elong	1007 Jul 06 j 04:29	18°♋12'39	1°03'04
max. Earth dist.	1007 Jul 14 j 14:20	23°♋36'19	2.66072 AU
	1007 Jul 24 j 14:19	0°♌	
morning rise	1007 Aug 21 j 06:53	17°♌37'36	
	1007 Sep 09 j 18:59	0°♍	
	1007 Oct 27 j 03:43	0°♎	
	1007 Dec 13 j 16:50	0°♏	
	1008 Jan 31 j 03:43	0°♐	
desc. node	1008 Mar 09 j 22:47	22°♐48'18	
	1008 Mar 23 j 01:16	0°♑	
retrograde	1008 Jun 08 j 09:39	26°♑20'49	
opposition	1008 Jul 08 j 17:13	21°♑20'18	-6°-22'-21
greatest brilliancy	1008 Jul 09 j 13:48	21°♑06'23	-2.8m
min. Earth dist.	1008 Jul 11 j 17:52	20°♑31'15	0.38073 AU
direct	1008 Aug 08 j 15:40	15°♑59'35	
	1008 Sep 27 j 05:14	0°♒	
	1008 Nov 17 j 13:03	0°♓	
	1009 Jan 01 j 22:27	0°♈	
asc. node	1009 Jan 07 j 05:02	3°♈32'09	
	1009 Feb 15 j 19:29	0°♉	
	1009 Apr 02 j 11:14	0°♊	
	1009 May 19 j 02:34	0°♋	
evening set	1009 Jun 26 j 11:55	24°♋23'41	
	1009 Jul 05 j 08:03	0°♌	
max. Earth dist.	1009 Aug 05 j 19:54	20°♌00'24	2.67351 AU
conjunction	1009 Aug 11 j 15:17	23°♌42'31	1°07'54
minimum elong	1009 Aug 11 j 15:43	23°♌43'12	1°07'54
	1009 Aug 21 j 11:34	0°♍	
morning rise	1009 Sep 25 j 01:29	22°♍17'06	
	1009 Oct 06 j 21:47	0°♎	
	1009 Nov 21 j 06:13	0°♏	
	1010 Jan 04 j 11:54	0°♐	
desc. node	1010 Jan 25 j 21:30	14°♐45'39	
	1010 Feb 16 j 19:00	0°♑	
	1010 Mar 31 j 14:54	0°♒	
	1010 May 14 j 06:58	0°♓	
	1010 Jul 03 j 01:48	0°♈	
retrograde	1010 Aug 21 j 16:34	14°♈34'08	
min. Earth dist.	1010 Sep 17 j 13:49	9°♈44'21	0.42422 AU
greatest brilliancy	1010 Sep 24 j 00:58	7°♈39'00	-2.6m
opposition	1010 Sep 25 j 07:04	7°♈14'32	-3°-30'-40
direct	1010 Oct 26 j 14:33	1°♈13'37	
asc. node	1010 Nov 25 j 05:18	6°♈19'43	
	1011 Jan 16 j 16:59	0°♉	
	1011 Mar 10 j 03:40	0°♊	
	1011 Apr 28 j 21:00	0°♋	
	1011 Jun 16 j 14:40	0°♌	
evening set	1011 Aug 02 j 19:44	29°♌41'40	
	1011 Aug 03 j 07:14	0°♍	
max. Earth dist.	1011 Aug 29 j 22:59	17°♍10'18	2.63247 AU
conjunction	1011 Sep 17 j 15:54	29°♍26'20	0°46'36
minimum elong	1011 Sep 17 j 17:06	29°♍28'18	0°46'36
	1011 Sep 18 j 12:16	0°♎	
	1011 Nov 01 j 22:34	0°♏	
morning rise	1011 Nov 02 j 17:13	0°♏32'08	
desc. node	1011 Dec 13 j 20:33	29°♏28'35	
	1011 Dec 14 j 14:04	0°♐	
	1012 Jan 24 j 16:27	0°♑	
	1012 Mar 04 j 16:37	0°♒	
	1012 Apr 13 j 07:32	0°♓	
	1012 May 23 j 16:05	0°♈	
	1012 Jul 05 j 20:39	0°♉	
	1012 Aug 28 j 05:25	0°♊	
retrograde	1012 Oct 09 j 03:02	10°♊16'58	
asc. node	1012 Oct 12 j 03:46	10°♊12'58	
min. Earth dist.	1012 Nov 10 j 02:22	3°♊19'10	0.55321 AU
opposition	1012 Nov 16 j 21:36	0°♊40'59	1°39'04
greatest brilliancy	1012 Nov 16 j 05:59	0°♊56'10	-1.8m
	1012 Nov 18 j 16:07	30°℞♉	
direct	1012 Dec 22 j 18:18	22°♉35'45	
	1013 Jan 29 j 09:44	0°♊	
	1013 Apr 03 j 16:26	0°♋	
	1013 May 26 j 08:48	0°♌	
	1013 Jul 14 j 13:09	0°♍	
	1013 Aug 30 j 03:01	0°♎	
evening set	1013 Sep 09 j 13:08	6°♎56'30	
max. Earth dist.	1013 Sep 26 j 17:50	18°♎35'15	2.54079 AU
	1013 Oct 13 j 05:56	0°♏	
conjunction	1013 Oct 28 j 10:08	10°♏41'40	0°01'30
minimum elong	1013 Oct 28 j 10:11	10°♏41'44	0°01'29
behind sun begin	1013 Oct 27 j 13:00	10°♏04'07	
behind sun end	1013 Oct 29 j 07:21	11°♏19'24	
desc. node	1013 Oct 30 j 19:27	12°♏23'43	
	1013 Nov 24 j 03:32	0°♐	
morning rise	1013 Dec 20 j 02:24	19°♐17'00	
	1014 Jan 03 j 06:13	0°♑	
	1014 Feb 11 j 04:58	0°♒	
	1014 Mar 21 j 18:14	0°♓	
	1014 Apr 29 j 19:30	0°♈	
	1014 Jun 09 j 10:46	0°♉	
	1014 Jul 23 j 04:58	0°♊	
asc. node	1014 Aug 30 j 02:25	23°♊02'39	
	1014 Sep 12 j 01:30	0°♋	
retrograde	1014 Nov 16 j 02:00	20°♋09'21	

min. Earth dist.	1014 Dec 22 j 22:09	11°♋29'40	0.64625 AU
greatest brilliancy	1014 Dec 25 j 11:42	10°♋27'53	-1.4m
opposition	1014 Dec 26 j 03:39	10°♋11'51	3°58'43
direct	1015 Feb 03 j 04:50	0°♋56'26	
	1015 May 01 j 14:21	0°♌	
	1015 Jun 24 j 02:29	0°♍	
	1015 Aug 11 j 00:35	0°♎	
desc. node	1015 Sep 17 j 18:15	25°♎23'06	
	1015 Sep 24 j 09:19	0°♏	
evening set	1015 Oct 25 j 13:02	22°♏17'38	
	1015 Nov 05 j 00:22	0°♐	
max. Earth dist.	1015 Nov 13 j 05:29	6°♐06'54	2.41452 AU
	1015 Dec 14 j 15:15	0°♑	
conjunction	1015 Dec 21 j 22:05	5°♑38'12	0°-52'-57
minimum elong	1015 Dec 21 j 19:43	5°♑33'37	0°52'57
	1016 Jan 22 j 01:35	0°♒	
morning rise	1016 Feb 26 j 13:47	27°♒57'11	
	1016 Feb 29 j 04:24	0°♓	
	1016 Apr 07 j 20:56	0°♈	
	1016 May 17 j 23:50	0°♉	
	1016 Jun 29 j 09:16	0°♊	
asc. node	1016 Jul 17 j 02:15	11°♊56'08	
	1016 Aug 14 j 02:45	0°♋	
	1016 Oct 05 j 02:28	0°♌	
retrograde	1016 Dec 19 j 14:41	24°♌14'29	
opposition	1017 Jan 28 j 13:37	14°♌37'34	4°33'47
greatest brilliancy	1017 Jan 28 j 15:26	14°♌35'45	-1.2m
min. Earth dist.	1017 Jan 29 j 04:56	14°♌22'17	0.67706 AU
direct	1017 Mar 10 j 11:13	4°♌45'08	
	1017 May 28 j 12:10	0°♍	
	1017 Jul 19 j 22:14	0°♎	
desc. node	1017 Aug 04 j 17:44	10°♎02'50	
	1017 Sep 03 j 13:17	0°♏	
	1017 Oct 15 j 10:40	0°♐	
	1017 Nov 23 j 23:12	0°♑	
evening set	1017 Dec 25 j 03:54	24°♑25'42	
	1018 Jan 01 j 05:13	0°♒	
	1018 Feb 08 j 05:12	0°♓	
conjunction	1018 Mar 02 j 19:44	17°♓38'33	0°-52'-49
minimum elong	1018 Mar 02 j 22:47	17°♓44'28	0°52'49
	1018 Mar 18 j 21:22	0°♈	
max. Earth dist.	1018 Apr 22 j 23:23	26°♈17'47	2.42252 AU
	1018 Apr 28 j 00:46	0°♉	
morning rise	1018 May 08 j 18:50	7°♉47'49	
asc. node	1018 Jun 04 j 00:23	26°♉22'44	
	1018 Jun 09 j 05:37	0°♊	
	1018 Jul 23 j 21:37	0°♋	
	1018 Sep 09 j 14:01	0°♌	
	1018 Nov 01 j 10:20	0°♍	
retrograde	1019 Jan 24 j 17:58	27°♍56'23	
opposition	1019 Mar 04 j 11:38	19°♍02'55	3°46'37
greatest brilliancy	1019 Mar 05 j 06:40	18°♍44'24	-1.4m
min. Earth dist.	1019 Mar 08 j 23:10	17°♍18'19	0.64187 AU
direct	1019 Apr 14 j 19:37	9°♍01'56	
	1019 Jun 21 j 22:49	0°♎	
desc. node	1019 Jun 22 j 16:34	0°♎22'45	
	1019 Aug 11 j 21:36	0°♏	
	1019 Sep 24 j 07:12	0°♐	
	1019 Nov 03 j 08:22	0°♑	
	1019 Dec 11 j 20:21	0°♒	
	1020 Jan 19 j 01:49	0°♓	
	1020 Feb 27 j 01:09	0°♈	
evening set	1020 Mar 04 j 17:30	5°♈02'29	
	1020 Apr 07 j 13:01	0°♉	
asc. node	1020 Apr 20 j 23:19	9°♉38'39	
conjunction	1020 May 04 j 13:51	19°♉15'47	0°08'29
minimum elong	1020 May 04 j 13:19	19°♉14'52	0°08'29
behind sun begin	1020 May 03 j 16:43	18°♉38'44	
behind sun end	1020 May 05 j 09:56	19°♉50'58	
	1020 May 20 j 00:37	0°♊	
max. Earth dist.	1020 Jun 06 j 23:19	12°♊14'37	2.55274 AU
morning rise	1020 Jun 28 j 07:02	26°♊29'31	
	1020 Jul 03 j 14:43	0°♋	
	1020 Aug 19 j 04:49	0°♌	
	1020 Oct 06 j 20:20	0°♍	
	1020 Nov 27 j 20:42	0°♎	
	1021 Feb 01 j 04:20	0°♏	
retrograde	1021 Mar 08 j 08:08	6°♏20'17	
	1021 Apr 09 j 18:12	30°℞♎	
opposition	1021 Apr 13 j 10:49	28°♎40'30	1°12'51
greatest brilliancy	1021 Apr 14 j 00:33	28°♎27'58	-1.8m
min. Earth dist.	1021 Apr 21 j 05:21	25°♎50'46	0.54391 AU
desc. node	1021 May 09 j 14:58	20°♎37'43	
direct	1021 May 23 j 02:36	19°♎22'33	
	1021 Jul 05 j 16:35	0°♏	
	1021 Aug 27 j 23:22	0°♐	
	1021 Oct 09 j 17:04	0°♑	
	1021 Nov 18 j 12:04	0°♒	
	1021 Dec 27 j 15:53	0°♓	
	1022 Feb 05 j 11:37	0°♈	
asc. node	1022 Mar 08 j 23:00	22°♈58'39	
	1022 Mar 18 j 18:54	0°♉	
evening set	1022 Apr 29 j 19:28	29°♉12'45	
	1022 Apr 30 j 23:15	0°♊	
	1022 Jun 14 j 23:36	0°♋	
conjunction	1022 Jun 20 j 13:08	3°♋38'06	0°53'38
minimum elong	1022 Jun 20 j 11:44	3°♋35'49	0°53'38
max. Earth dist.	1022 Jul 05 j 00:38	13°♋02'15	2.64056 AU
	1022 Jul 31 j 10:31	0°♌	
morning rise	1022 Aug 07 j 03:41	4°♌16'53	
	1022 Sep 16 j 19:41	0°♍	
	1022 Nov 03 j 21:04	0°♎	
	1022 Dec 23 j 02:19	0°♏	
	1023 Feb 13 j 19:28	0°♐	
desc. node	1023 Mar 27 j 14:29	19°♐34'01	
retrograde	1023 May 09 j 04:07	28°♐48'47	
opposition	1023 Jun 09 j 19:22	23°♐10'41	-4°-11'-48
greatest brilliancy	1023 Jun 11 j 05:00	22°♐45'33	-2.6m
min. Earth dist.	1023 Jun 16 j 18:52	21°♐05'57	0.41434 AU
direct	1023 Jul 13 j 19:59	16°♐33'11	
	1023 Aug 30 j 14:34	0°♑	
	1023 Oct 19 j 15:57	0°♒	
	1023 Dec 01 j 22:47	0°♓	
	1024 Jan 13 j 09:41	0°♈	
asc. node	1024 Jan 24 j 21:44	8°♈03'40	
	1024 Feb 25 j 15:34	0°♉	
	1024 Apr 10 j 06:50	0°♊	
	1024 May 26 j 06:48	0°♋	
evening set	1024 Jun 11 j 07:35	10°♋18'00	
	1024 Jul 12 j 04:13	0°♌	
conjunction	1024 Jul 28 j 08:59	10°♌18'36	1°09'14
minimum elong	1024 Jul 28 j 08:52	10°♌18'26	1°09'13
max. Earth dist.	1024 Jul 28 j 00:24	10°♌04'57	2.67490 AU
	1024 Aug 28 j 06:29	0°♍	
morning rise	1024 Sep 11 j 01:55	8°♍50'06	
	1024 Oct 13 j 22:59	0°♎	
	1024 Nov 28 j 22:53	0°♏	
	1025 Jan 13 j 07:21	0°♐	
desc. node	1025 Feb 11 j 13:42	19°♐29'06	
	1025 Feb 27 j 08:56	0°♑	

	1025 Apr 14 j 04:11	0°♒	
	1025 Jun 04 j 05:10	0°♓	
retrograde	1025 Jul 27 j 03:50	15°♓45'19	
min. Earth dist.	1025 Aug 23 j 03:03	11°♓18'06	0.38606 AU
greatest brilliancy	1025 Aug 26 j 23:25	10°♓12'07	-2.8m
opposition	1025 Aug 28 j 03:00	9°♓52'18	-5°-53'-52
direct	1025 Sep 26 j 22:47	4°♓42'27	
	1025 Dec 09 j 16:52	0°♈	
asc. node	1025 Dec 11 j 20:43	1°♈10'28	
	1026 Jan 30 j 01:41	0°♉	
	1026 Mar 19 j 13:54	0°♊	
	1026 May 06 j 17:08	0°♋	
	1026 Jun 23 j 17:06	0°♌	
evening set	1026 Jul 19 j 09:04	16°♌10'17	
	1026 Aug 10 j 02:48	0°♍	
max. Earth dist.	1026 Aug 20 j 05:30	6°♍29'15	2.65478 AU
conjunction	1026 Sep 03 j 00:00	15°♍22'59	0°57'51
minimum elong	1026 Sep 03 j 01:03	15°♍24'41	0°57'50
	1026 Sep 25 j 08:26	0°♎	
morning rise	1026 Oct 17 j 23:47	15°♎03'19	
	1026 Nov 09 j 01:37	0°♏	
	1026 Dec 22 j 04:59	0°♐	
desc. node	1026 Dec 30 j 12:07	5°♐53'19	
	1027 Feb 01 j 23:01	0°♑	
	1027 Mar 14 j 17:04	0°♒	
	1027 Apr 24 j 05:02	0°♓	
	1027 Jun 04 j 22:00	0°♈	
	1027 Jul 21 j 19:08	0°♉	
retrograde	1027 Sep 22 j 21:56	21°♉26'59	
min. Earth dist.	1027 Oct 22 j 16:33	15°♉19'17	0.50340 AU
asc. node	1027 Oct 29 j 20:17	12°♉40'05	
opposition	1027 Oct 30 j 12:27	12°♉25'02	0°02'05
greatest brilliancy	1026 Apr 19 j 17:41	19°♊24'55	4.5m
direct	1027 Dec 03 j 18:17	5°♉01'19	
	1028 Feb 18 j 18:37	0°♊	
	1028 Apr 13 j 14:40	0°♋	
	1028 Jun 03 j 05:44	0°♌	
	1028 Jul 21 j 16:34	0°♍	
evening set	1028 Aug 24 j 23:31	22°♍02'53	
	1028 Sep 06 j 01:28	0°♎	
max. Earth dist.	1028 Sep 14 j 13:44	5°♎39'45	2.58218 AU
conjunction	1028 Oct 11 j 04:16	23°♎42'45	0°21'31
minimum elong	1028 Oct 11 j 05:05	23°♎44'09	0°21'30
	1028 Oct 20 j 06:17	0°♏	
desc. node	1028 Nov 16 j 11:58	19°♏14'08	
morning rise	1028 Nov 29 j 10:40	28°♏34'47	
	1028 Dec 01 j 09:32	0°♐	
	1029 Jan 10 j 19:51	0°♑	
	1029 Feb 19 j 02:23	0°♒	
	1029 Mar 29 j 22:53	0°♓	
	1029 May 08 j 07:48	0°♈	
	1029 Jun 18 j 11:37	0°♉	
	1029 Aug 02 j 17:14	0°♊	
asc. node	1029 Sep 15 j 18:43	23°♊49'08	
	1029 Oct 01 j 09:47	0°♋	
retrograde	1029 Nov 02 j 01:12	5°♋53'55	
	1029 Dec 01 j 11:47	30°℞♊	
min. Earth dist.	1029 Dec 07 j 02:51	27°♊50'11	0.61671 AU
opposition	1029 Dec 11 j 19:49	25°♊57'27	3°19'54
greatest brilliancy	1029 Dec 11 j 00:04	26°♊17'11	-1.5m
direct	1030 Jan 18 j 18:56	17°♊04'43	
	1030 Mar 12 j 13:09	0°♋	
	1030 May 11 j 20:59	0°♌	
	1030 Jul 02 j 02:11	0°♍	
	1030 Aug 18 j 08:14	0°♎	
	1030 Oct 01 j 13:36	0°♏	
desc. node	1030 Oct 04 j 11:13	2°♏02'03	
evening set	1030 Oct 06 j 04:45	3°♏15'06	
max. Earth dist.	1030 Oct 20 j 22:53	13°♏44'40	2.46555 AU
	1030 Nov 12 j 06:27	0°♐	
conjunction	1030 Nov 28 j 09:54	12°♐01'49	0°-33'-13
minimum elong	1030 Nov 28 j 08:10	11°♐58'32	0°33'13
	1030 Dec 22 j 01:10	0°♑	
morning rise	1031 Jan 28 j 03:00	28°♑48'52	
	1031 Jan 29 j 15:17	0°♒	
	1031 Mar 08 j 20:53	0°♓	
greatest brilliancy	1031 Mar 11 j 08:45	1°♓57'01	1.2m
	1031 Apr 16 j 15:09	0°♈	
	1031 May 26 j 20:01	0°♉	
	1031 Jul 08 j 12:01	0°♊	
asc. node	1031 Aug 03 j 17:09	17°♊15'23	
	1031 Aug 24 j 05:59	0°♋	
	1031 Oct 20 j 12:09	0°♌	
retrograde	1031 Dec 07 j 06:44	11°♌29'26	
opposition	1032 Jan 16 j 09:59	1°♌41'22	4°30'09
greatest brilliancy	1032 Jan 16 j 04:07	1°♌47'15	-1.2m
min. Earth dist.	1032 Jan 15 j 12:36	2°♌02'49	0.67289 AU
	1032 Jan 20 j 15:49	30°℞♋	
direct	1032 Feb 25 j 18:05	22°♋00'17	
	1032 Apr 05 j 22:46	0°♌	
	1032 Jun 08 j 06:34	0°♍	
	1032 Jul 28 j 05:45	0°♎	
desc. node	1032 Aug 21 j 09:27	15°♎47'22	
	1032 Sep 11 j 05:21	0°♏	
	1032 Oct 22 j 22:59	0°♐	
evening set	1032 Nov 28 j 19:06	27°♐54'58	
	1032 Dec 01 j 11:47	0°♑	
	1033 Jan 08 j 18:47	0°♒	
conjunction	1033 Feb 01 j 15:33	18°♒51'23	-1°-4'-28
minimum elong	1033 Feb 01 j 16:23	18°♒53'02	1°04'29
	1033 Feb 15 j 19:00	0°♓	
max. Earth dist.	1033 Mar 05 j 05:01	13°♓37'31	2.37605 AU
	1033 Mar 26 j 10:14	0°♈	
morning rise	1033 Apr 12 j 21:55	13°♈15'30	
	1033 May 05 j 11:51	0°♉	
	1033 Jun 16 j 16:02	0°♊	
asc. node	1033 Jun 20 j 17:12	2°♊47'21	
	1033 Jul 31 j 12:55	0°♋	
	1033 Sep 18 j 04:13	0°♌	
	1033 Nov 14 j 11:18	0°♍	
retrograde	1034 Jan 10 j 05:09	14°♍47'45	
opposition	1034 Feb 18 j 13:40	5°♍34'28	4°15'03
greatest brilliancy	1034 Feb 19 j 02:56	5°♍21'23	-1.3m
min. Earth dist.	1034 Feb 21 j 13:19	4°♍23'52	0.66344 AU
	1034 Mar 05 j 13:23	30°℞♌	
direct	1034 Mar 31 j 22:08	25°♌32'52	
	1034 Apr 29 j 13:50	0°♍	
	1034 Jul 04 j 03:48	0°♎	
desc. node	1034 Jul 09 j 08:03	3°♎00'29	
	1034 Aug 21 j 00:30	0°♏	
	1034 Oct 02 j 14:29	0°♐	
	1034 Nov 11 j 08:39	0°♑	
	1034 Dec 19 j 17:00	0°♒	
	1035 Jan 26 j 19:10	0°♓	
evening set	1035 Feb 07 j 02:25	8°♓49'27	
	1035 Mar 06 j 14:35	0°♈	
conjunction	1035 Apr 13 j 01:57	27°♈56'23	0°-16'-8
minimum elong	1035 Apr 13 j 03:08	27°♈58'32	0°16'09
	1035 Apr 15 j 21:49	0°♉	

asc. node	1035 May 08 j 16:21	16°♉20'17	
max. Earth dist.	1035 May 25 j 00:21	27°♉47'00	2.50503 AU
	1035 May 28 j 05:10	0°♊	
morning rise	1035 Jun 11 j 04:12	9°♊34'18	
	1035 Jul 11 j 17:43	0°♋	
	1035 Aug 27 j 13:34	0°♌	
	1035 Oct 16 j 05:13	0°♍	
	1035 Dec 11 j 00:42	0°♎	
retrograde	1036 Feb 18 j 23:03	20°♎35'06	
opposition	1036 Mar 27 j 07:13	12°♎21'31	2°28'55
greatest brilliancy	1036 Mar 28 j 04:23	12°♎01'32	-1.6m
min. Earth dist.	1036 Apr 02 j 22:29	9°♎51'24	0.58894 AU
direct	1036 May 06 j 22:57	2°♎37'07	
desc. node	1036 May 26 j 07:11	4°♎53'11	
	1036 Jul 23 j 12:47	0°♏	
	1036 Sep 08 j 04:06	0°♐	
	1036 Oct 19 j 07:56	0°♑	
	1036 Nov 27 j 09:27	0°♒	
	1037 Jan 05 j 01:05	0°♓	
	1037 Feb 13 j 10:17	0°♈	
asc. node	1037 Mar 25 j 14:33	29°♈28'58	
	1037 Mar 26 j 07:51	0°♉	
evening set	1037 Apr 09 j 22:30	10°♉23'28	
	1037 May 08 j 03:54	0°♊	
conjunction	1037 Jun 03 j 15:51	17°♊53'57	0°39'40
minimum elong	1037 Jun 03 j 14:19	17°♊51'23	0°39'40
	1037 Jun 21 j 22:36	0°♋	
max. Earth dist.	1037 Jun 24 j 20:58	1°♋55'27	2.61239 AU
morning rise	1037 Jul 23 j 10:12	20°♋26'48	
	1037 Aug 07 j 08:40	0°♌	
	1037 Sep 24 j 01:26	0°♍	
	1037 Nov 12 j 03:13	0°♎	
	1038 Jan 03 j 02:58	0°♏	
	1038 Mar 09 j 10:25	0°♐	
retrograde	1038 Apr 11 j 19:23	5°♐52'56	
desc. node	1038 Apr 13 j 05:45	5°♐52'11	
	1038 May 13 j 13:18	30°℞♏	
opposition	1038 May 15 j 11:32	29°♏22'04	-1°-44'-24
greatest brilliancy	1038 May 16 j 06:56	29°♏06'01	-2.3m
min. Earth dist.	1038 May 23 j 21:47	26°♏35'42	0.46371 AU
direct	1038 Jun 21 j 07:28	21°♏24'33	
	1038 Jul 28 j 20:41	0°♐	
	1038 Sep 20 j 04:21	0°♑	
	1038 Nov 01 j 22:33	0°♒	
	1038 Dec 12 j 16:46	0°♓	
	1039 Jan 22 j 16:22	0°♈	
asc. node	1039 Feb 10 j 13:45	13°♈33'31	
	1039 Mar 05 j 21:50	0°♉	
	1039 Apr 18 j 19:40	0°♊	
evening set	1039 May 27 j 08:48	25°♊27'52	
	1039 Jun 03 j 08:03	0°♋	
conjunction	1039 Jul 14 j 19:16	26°♋41'13	1°06'32
minimum elong	1039 Jul 14 j 18:36	26°♋40'09	1°06'32
	1039 Jul 19 j 23:46	0°♌	
max. Earth dist.	1039 Jul 19 j 23:30	29°♋59'33	2.66811 AU
morning rise	1039 Aug 29 j 05:54	25°♌37'44	
	1039 Sep 05 j 02:52	0°♍	
	1039 Oct 22 j 04:44	0°♎	
	1039 Dec 08 j 01:57	0°♏	
	1040 Jan 24 j 02:40	0°♐	
desc. node	1040 Feb 29 j 05:33	22°♐34'56	
	1040 Mar 12 j 10:00	0°♑	
	1040 May 05 j 22:31	0°♒	
retrograde	1040 Jun 26 j 22:47	14°♒11'57	
opposition	1040 Jul 27 j 02:04	9°♒11'49	-6°-52'-53
greatest brilliancy	1040 Jul 27 j 04:21	9°♒10'19	-2.9m
min. Earth dist.	1040 Jul 27 j 02:47	9°♒11'21	0.37382 AU
direct	1040 Aug 25 j 20:55	4°♒13'58	
	1040 Nov 06 j 11:01	0°♓	
	1040 Dec 25 j 09:40	0°♈	
asc. node	1040 Dec 28 j 12:52	2°♈00'31	
	1041 Feb 09 j 17:35	0°♉	
	1041 Mar 28 j 03:40	0°♊	
	1041 May 14 j 05:14	0°♋	
	1041 Jun 30 j 16:16	0°♌	
evening set	1041 Jul 04 j 21:42	2°♌40'24	
max. Earth dist.	1041 Aug 11 j 01:45	26°♌16'37	2.66921 AU
	1041 Aug 16 j 21:33	0°♍	
conjunction	1041 Aug 19 j 17:30	1°♍48'44	1°05'18
minimum elong	1041 Aug 19 j 18:12	1°♍49'52	1°05'18
	1041 Oct 02 j 06:01	0°♎	
morning rise	1041 Oct 03 j 04:53	0°♎37'29	
	1041 Nov 16 j 08:45	0°♏	
	1041 Dec 30 j 03:58	0°♐	
desc. node	1042 Jan 16 j 04:58	11°♐53'58	
	1042 Feb 10 j 19:34	0°♑	
	1042 Mar 24 j 16:38	0°♒	
	1042 May 05 j 17:59	0°♓	
	1042 Jun 19 j 14:48	0°♈	
retrograde	1042 Sep 03 j 08:17	29°♈23'39	
min. Earth dist.	1042 Oct 01 j 00:22	24°♈08'27	0.45132 AU
greatest brilliancy	1042 Oct 08 j 07:36	21°♈38'13	-2.4m
opposition	1042 Oct 09 j 04:35	21°♈20'06	-2°-5'-42
direct	1042 Nov 10 j 15:05	14°♈47'35	
asc. node	1042 Nov 15 j 11:14	14°♈56'47	
	1043 Jan 05 j 05:41	0°♉	
	1043 Mar 03 j 07:59	0°♊	
	1043 Apr 23 j 09:26	0°♋	
	1043 Jun 11 j 16:52	0°♌	
	1043 Jul 29 j 15:22	0°♍	
evening set	1043 Aug 11 j 03:31	7°♍59'41	
max. Earth dist.	1043 Sep 04 j 19:19	24°♍00'01	2.61680 AU
	1043 Sep 13 j 21:49	0°♎	
conjunction	1043 Sep 26 j 07:18	8°♎14'59	0°38'24
minimum elong	1043 Sep 26 j 08:27	8°♎16'55	0°38'22
	1043 Oct 28 j 06:30	0°♏	
morning rise	1043 Nov 12 j 05:50	10°♏25'57	
desc. node	1043 Dec 04 j 03:37	25°♏58'45	
	1043 Dec 09 j 17:46	0°♐	
	1044 Jan 19 j 14:24	0°♑	
	1044 Feb 28 j 07:44	0°♒	
	1044 Apr 07 j 14:44	0°♓	
	1044 May 17 j 11:59	0°♈	
	1044 Jun 28 j 15:02	0°♉	
	1044 Aug 16 j 03:37	0°♊	
asc. node	1044 Oct 02 j 10:31	18°♊45'09	
retrograde	1044 Oct 18 j 04:16	20°♊23'30	
min. Earth dist.	1044 Nov 20 j 07:05	13°♊00'55	0.57788 AU
opposition	1044 Nov 26 j 09:51	10°♊36'38	2°22'44
greatest brilliancy	1044 Nov 25 j 14:33	10°♊55'37	-1.7m
direct	1045 Jan 02 j 01:37	2°♊12'33	
	1045 Mar 27 j 05:14	0°♋	
	1045 May 20 j 19:22	0°♌	
	1045 Jul 09 j 14:53	0°♍	
	1045 Aug 25 j 10:21	0°♎	
evening set	1045 Sep 18 j 20:25	16°♎22'23	
max. Earth dist.	1045 Oct 04 j 15:19	27°♎14'08	2.51521 AU
	1045 Oct 08 j 14:32	0°♏	
desc. node	1045 Oct 21 j 02:29	8°♏48'09	

conjunction	1045 Nov 07 j 23:52	21°♏38'20	0°-11'-3
minimum elong	1045 Nov 07 j 23:19	21°♏37'21	0°11'04
behind sun begin	1045 Nov 07 j 06:53	21°♏07'34	
behind sun end	1045 Nov 08 j 15:46	22°♏07'10	
	1045 Nov 19 j 10:39	0°♐	
	1045 Dec 29 j 10:42	0°♑	
morning rise	1046 Jan 02 j 03:42	2°♑50'08	
	1046 Feb 06 j 06:21	0°♒	
	1046 Mar 16 j 16:31	0°♓	
	1046 Apr 24 j 14:35	0°♈	
	1046 Jun 04 j 00:23	0°♉	
	1046 Jul 17 j 04:58	0°♊	
asc. node	1046 Aug 20 j 10:19	21°♊38'16	
	1046 Sep 03 j 21:05	0°♋	
retrograde	1046 Nov 23 j 21:25	28°♋23'30	
min. Earth dist.	1046 Dec 31 j 14:47	19°♋26'24	0.65838 AU
greatest brilliancy	1047 Jan 02 j 11:57	18°♋41'02	-1.3m
opposition	1047 Jan 03 j 00:49	18°♋28'07	4°14'18
direct	1047 Feb 11 j 14:21	9°♋02'30	
	1047 Apr 23 j 16:11	0°♌	
	1047 Jun 18 j 11:20	0°♍	
	1047 Aug 06 j 00:48	0°♎	
desc. node	1047 Sep 08 j 01:17	21°♎59'58	
	1047 Sep 19 j 15:02	0°♏	
	1047 Oct 31 j 07:18	0°♐	
evening set	1047 Nov 06 j 11:41	4°♐35'50	
max. Earth dist.	1047 Dec 03 j 00:35	24°♐42'17	2.38921 AU
	1047 Dec 09 j 21:37	0°♑	
conjunction	1048 Jan 05 j 13:14	20°♑46'33	-1°00'-49
minimum elong	1048 Jan 05 j 11:22	20°♑42'54	1°00'49
	1048 Jan 17 j 06:35	0°♒	
	1048 Feb 24 j 07:57	0°♓	
morning rise	1048 Mar 14 j 17:11	15°♓08'55	
	1048 Apr 02 j 23:18	0°♈	
	1048 May 13 j 00:41	0°♉	
	1048 Jun 24 j 06:32	0°♊	
asc. node	1048 Jul 07 j 08:55	8°♊55'15	
	1048 Aug 08 j 13:20	0°♋	
	1048 Sep 27 j 20:18	0°♌	
	1048 Dec 08 j 16:17	0°♍	
retrograde	1048 Dec 27 j 09:11	2°♍00'22	
	1049 Jan 13 j 21:07	30°℞♌	
opposition	1049 Feb 05 j 04:01	22°♌30'58	4°30'22
greatest brilliancy	1049 Feb 05 j 10:03	22°♌24'59	-1.2m
min. Earth dist.	1049 Feb 06 j 15:09	21°♌56'03	0.67496 AU
direct	1049 Mar 18 j 07:00	12°♌34'13	
	1049 May 19 j 23:29	0°♍	
	1049 Jul 14 j 01:43	0°♎	
desc. node	1049 Jul 25 j 23:48	7°♎22'47	
	1049 Aug 29 j 09:06	0°♏	
	1049 Oct 10 j 12:10	0°♐	
	1049 Nov 19 j 02:54	0°♑	
	1049 Dec 27 j 09:42	0°♒	
evening set	1050 Jan 09 j 21:08	10°♒39'10	
	1050 Feb 03 j 09:56	0°♓	
	1050 Mar 14 j 02:28	0°♈	
conjunction	1050 Mar 18 j 11:59	3°♈20'55	0°-40'-57
minimum elong	1050 Mar 18 j 14:55	3°♈26'28	0°40'57
	1050 Apr 23 j 06:06	0°♉	
max. Earth dist.	1050 May 06 j 23:56	9°♉56'56	2.45218 AU
morning rise	1050 May 21 j 17:02	20°♉24'42	
asc. node	1050 May 25 j 07:55	22°♉57'27	
	1050 Jun 04 j 10:27	0°♊	
	1050 Jul 18 j 23:34	0°♋	
	1050 Sep 04 j 05:39	0°♌	
	1050 Oct 25 j 12:31	0°♍	
	1050 Dec 29 j 18:00	0°♎	
retrograde	1051 Feb 02 j 12:55	6°♎12'56	
	1051 Mar 06 j 06:37	30°℞♍	
opposition	1051 Mar 12 j 20:06	27°♍32'13	3°23'04
greatest brilliancy	1051 Mar 13 j 17:04	27°♍11'59	-1.4m
min. Earth dist.	1051 Mar 18 j 02:31	25°♍30'20	0.62547 AU
direct	1051 Apr 23 j 00:31	17°♍34'43	
	1051 Jun 11 j 15:10	0°♎	
desc. node	1051 Jun 12 j 22:45	0°♎34'44	
	1051 Aug 05 j 10:44	0°♏	
	1051 Sep 18 j 16:42	0°♐	
	1051 Oct 29 j 01:44	0°♑	
	1051 Dec 06 j 17:49	0°♒	
	1052 Jan 14 j 02:08	0°♓	
	1052 Feb 22 j 04:09	0°♈	
evening set	1052 Mar 18 j 14:07	18°♈56'24	
	1052 Apr 02 j 18:25	0°♉	
asc. node	1052 Apr 11 j 07:14	6°♉08'06	
	1052 May 15 j 07:47	0°♊	
conjunction	1052 May 16 j 01:48	0°♊30'58	0°21'05
minimum elong	1052 May 16 j 00:41	0°♊29'03	0°21'04
max. Earth dist.	1052 Jun 13 j 22:55	20°♊04'30	2.57607 AU
	1052 Jun 28 j 22:19	0°♋	
morning rise	1052 Jul 07 j 18:33	5°♋47'54	
	1052 Aug 14 j 09:33	0°♌	
	1052 Oct 01 j 14:28	0°♍	
	1052 Nov 21 j 06:02	0°♎	
	1053 Jan 17 j 19:49	0°♏	
retrograde	1053 Mar 19 j 19:31	16°♏33'17	
opposition	1053 Apr 24 j 03:52	9°♏15'26	0°17'03
greatest brilliancy	1053 Apr 22 j 23:16	9°♏40'42	-2.0m
desc. node	1053 Apr 29 j 22:31	7°♏12'07	
min. Earth dist.	1053 May 02 j 09:54	6°♏20'21	0.51613 AU
direct	1053 Jun 02 j 00:24	0°♏19'46	
	1053 Aug 19 j 13:04	0°♐	
	1053 Oct 03 j 01:30	0°♑	
	1053 Nov 12 j 13:11	0°♒	
	1053 Dec 22 j 02:38	0°♓	
	1054 Jan 31 j 05:44	0°♈	
asc. node	1054 Feb 27 j 05:10	19°♈37'00	
	1054 Mar 13 j 19:04	0°♉	
	1054 Apr 26 j 04:11	0°♊	
evening set	1054 May 10 j 06:38	9°♊29'14	
	1054 Jun 10 j 07:46	0°♋	
conjunction	1054 Jun 29 j 15:19	12°♋32'48	0°59'39
minimum elong	1054 Jun 29 j 14:08	12°♋30'54	0°59'38
max. Earth dist.	1054 Jul 10 j 14:07	19°♋36'18	2.65280 AU
	1054 Jul 26 j 19:31	0°♌	
morning rise	1054 Aug 15 j 07:13	12°♌24'48	
	1054 Sep 12 j 01:30	0°♍	
	1054 Oct 29 j 16:50	0°♎	
	1054 Dec 16 j 21:23	0°♏	
	1055 Feb 04 j 19:14	0°♐	
desc. node	1055 Mar 17 j 21:32	22°♐29'36	
	1055 Apr 02 j 15:33	0°♑	
retrograde	1055 May 26 j 06:45	14°♑07'48	
opposition	1055 Jun 26 j 01:24	8°♑54'21	-5°-32'-50
greatest brilliancy	1055 Jun 27 j 07:55	8°♑32'48	-2.7m
min. Earth dist.	1055 Jul 01 j 03:41	7°♑28'20	0.39294 AU
direct	1055 Jul 28 j 07:37	3°♑02'26	
	1055 Oct 08 j 21:05	0°♒	
	1055 Nov 24 j 06:22	0°♓	
	1056 Jan 07 j 01:05	0°♈	
asc. node	1056 Jan 15 j 04:14	5°♈34'47	

	1056 Feb 20 j 01:30	0°♉	
	1056 Apr 05 j 04:21	0°♊	
	1056 May 21 j 11:42	0°♋	
evening set	1056 Jun 20 j 02:17	18°♋54'16	
	1056 Jul 07 j 13:10	0°♌	
max. Earth dist.	1056 Aug 02 j 05:38	16°♌19'47	2.67526 AU
conjunction	1056 Aug 05 j 13:53	18°♌27'30	1°08'56
minimum elong	1056 Aug 05 j 14:07	18°♌27'51	1°08'55
	1056 Aug 23 j 16:01	0°♍	
morning rise	1056 Sep 19 j 01:22	16°♍56'33	
	1056 Oct 09 j 05:17	0°♎	
	1056 Nov 23 j 20:37	0°♏	
	1057 Jan 07 j 13:32	0°♐	
desc. node	1057 Feb 01 j 20:25	17°♐11'59	
	1057 Feb 20 j 13:26	0°♑	
	1057 Apr 05 j 10:14	0°♒	
	1057 May 21 j 02:38	0°♓	
	1057 Jul 21 j 10:52	0°♈	
retrograde	1057 Aug 11 j 03:12	2°♈54'51	
	1057 Aug 31 j 20:33	30°℞♓	
min. Earth dist.	1057 Sep 06 j 17:04	28°♓20'26	0.40480 AU
greatest brilliancy	1057 Sep 12 j 05:09	26°♓39'29	-2.7m
opposition	1057 Sep 13 j 13:35	26°♓14'34	-4°-36'-36
direct	1057 Oct 14 j 01:41	20°♓38'38	
	1057 Nov 24 j 07:37	0°♈	
asc. node	1057 Dec 02 j 04:31	3°♈18'46	
	1058 Jan 22 j 05:12	0°♉	
	1058 Mar 13 j 14:15	0°♊	
	1058 May 01 j 12:51	0°♋	
	1058 Jun 18 j 22:18	0°♌	
evening set	1058 Jul 27 j 15:33	24°♌21'42	
	1058 Aug 05 j 12:04	0°♍	
max. Earth dist.	1058 Aug 25 j 18:44	13°♍01'48	2.64354 AU
conjunction	1058 Sep 11 j 07:51	23°♍48'00	0°51'45
minimum elong	1058 Sep 11 j 09:01	23°♍49'54	0°51'44
	1058 Sep 20 j 18:08	0°♎	
morning rise	1058 Oct 26 j 19:37	24°♎10'15	
	1058 Nov 04 j 08:20	0°♏	
	1058 Dec 17 j 05:41	0°♐	
desc. node	1058 Dec 20 j 19:30	2°♐33'10	
	1059 Jan 27 j 15:14	0°♑	
	1059 Mar 08 j 23:01	0°♒	
	1059 Apr 17 j 21:46	0°♓	
	1059 May 28 j 17:04	0°♈	
	1059 Jul 11 j 22:22	0°♉	
	1059 Sep 11 j 21:37	0°♊	
retrograde	1059 Oct 02 j 22:39	2°♊56'22	
asc. node	1059 Oct 20 j 03:11	0°♊45'52	
	1059 Oct 23 j 00:20	30°℞♉	
min. Earth dist.	1059 Nov 02 j 23:04	26°♉20'18	0.53155 AU
opposition	1059 Nov 10 j 06:39	23°♉32'48	1°01'37
greatest brilliancy	1059 Nov 09 j 19:39	23°♉43'18	-1.9m
direct	1059 Dec 15 j 10:04	15°♉45'01	
	1060 Feb 08 j 05:53	0°♊	
	1060 Apr 07 j 06:43	0°♋	
	1060 May 29 j 00:13	0°♌	
	1060 Jul 16 j 21:17	0°♍	
	1060 Sep 01 j 10:02	0°♎	
evening set	1060 Sep 02 j 18:31	0°♎53'47	
max. Earth dist.	1060 Sep 21 j 09:52	13°♎22'29	2.56024 AU
	1060 Oct 15 j 15:02	0°♏	
conjunction	1060 Oct 20 j 19:09	3°♏36'42	0°10'18
minimum elong	1060 Oct 20 j 19:35	3°♏37'28	0°10'18
behind sun begin	1060 Oct 20 j 03:17	3°♏08'57	
behind sun end	1060 Oct 21 j 11:52	4°♏06'00	
desc. node	1060 Nov 06 j 18:28	15°♏37'16	
	1060 Nov 26 j 16:10	0°♐	
morning rise	1060 Dec 10 j 18:46	10°♐22'39	
	1061 Jan 05 j 22:57	0°♑	
	1061 Feb 14 j 01:28	0°♒	
	1061 Mar 24 j 17:32	0°♓	
	1061 May 02 j 21:08	0°♈	
	1061 Jun 12 j 15:40	0°♉	
	1061 Jul 26 j 19:39	0°♊	
asc. node	1061 Sep 06 j 01:38	24°♊10'47	
	1061 Sep 17 j 19:12	0°♋	
retrograde	1061 Nov 10 j 03:55	14°♋39'04	
min. Earth dist.	1061 Dec 16 j 05:38	6°♋15'14	0.63419 AU
greatest brilliancy	1061 Dec 19 j 09:27	4°♋59'17	-1.4m
opposition	1061 Dec 20 j 03:38	4°♋41'04	3°44'40
	1062 Jan 01 j 17:07	30°℞♊	
direct	1062 Jan 27 j 18:06	25°♊35'16	
	1062 Feb 25 j 12:24	0°♋	
	1062 May 05 j 07:46	0°♌	
	1062 Jun 26 j 19:23	0°♍	
	1062 Aug 13 j 11:37	0°♎	
desc. node	1062 Sep 24 j 17:05	28°♎30'41	
	1062 Sep 26 j 20:18	0°♏	
evening set	1062 Oct 16 j 21:58	14°♏13'35	
max. Earth dist.	1062 Nov 01 j 20:40	25°♏48'25	2.43710 AU
	1062 Nov 07 j 13:17	0°♐	
conjunction	1062 Dec 11 j 07:08	25°♐24'27	0°-45'-6
minimum elong	1062 Dec 11 j 04:53	25°♐20'09	0°45'07
	1062 Dec 17 j 06:44	0°♑	
	1063 Jan 24 j 19:12	0°♒	
morning rise	1063 Feb 13 j 09:13	15°♒24'16	
	1063 Mar 03 j 23:05	0°♓	
	1063 Apr 11 j 15:42	0°♈	
	1063 May 21 j 18:12	0°♉	
	1063 Jul 03 j 04:12	0°♊	
asc. node	1063 Jul 25 j 01:37	14°♊38'49	
	1063 Aug 18 j 04:13	0°♋	
	1063 Oct 10 j 14:55	0°♌	
retrograde	1063 Dec 14 j 22:02	19°♌17'43	
opposition	1064 Jan 23 j 23:31	9°♌35'14	4°33'41
greatest brilliancy	1064 Jan 23 j 21:48	9°♌36'56	-1.2m
min. Earth dist.	1064 Jan 23 j 21:58	9°♌36'46	0.67647 AU
	1064 Feb 27 j 21:15	30°℞♋	
direct	1064 Mar 04 j 15:54	29°♋47'28	
	1064 Mar 10 j 14:17	0°♌	
	1064 Jun 01 j 12:13	0°♍	
	1064 Jul 22 j 20:26	0°♎	
desc. node	1064 Aug 11 j 16:24	12°♎45'06	
	1064 Sep 06 j 06:07	0°♏	
	1064 Oct 18 j 02:58	0°♐	
	1064 Nov 26 j 16:21	0°♑	
evening set	1064 Dec 13 j 08:12	12°♑58'48	
	1065 Jan 03 j 23:05	0°♒	
	1065 Feb 10 j 22:50	0°♓	
conjunction	1065 Feb 18 j 04:19	5°♓40'23	0°-59'-36
minimum elong	1065 Feb 18 j 06:46	5°♓45'09	0°59'36
	1065 Mar 21 j 13:52	0°♈	
max. Earth dist.	1065 Apr 08 j 09:52	13°♈31'05	2.39942 AU
morning rise	1065 Apr 28 j 00:47	28°♈05'16	
	1065 Apr 30 j 15:25	0°♉	
asc. node	1065 Jun 10 j 23:55	29°♉28'00	
	1065 Jun 11 j 18:23	0°♊	
	1065 Jul 26 j 10:38	0°♋	
	1065 Sep 12 j 09:27	0°♌	

	1065 Nov 05 j 13:23	0°♍	
retrograde	1066 Jan 18 j 10:11	22°♍43'23	
opposition	1066 Feb 26 j 11:01	13°♍40'24	3°59'58
greatest brilliancy	1066 Feb 27 j 03:36	13°♍24'09	-1.3m
min. Earth dist.	1066 Mar 02 j 06:08	12°♍11'11	0.65284 AU
direct	1066 Apr 08 j 20:03	3°♍38'28	
	1066 Jun 26 j 19:06	0°♎	
desc. node	1066 Jun 29 j 15:33	1°♎33'23	
	1066 Aug 15 j 07:19	0°♏	
	1066 Sep 27 j 09:06	0°♐	
	1066 Nov 06 j 07:48	0°♑	
	1066 Dec 14 j 18:18	0°♒	
	1067 Jan 21 j 21:44	0°♓	
evening set	1067 Feb 22 j 10:32	24°♓25'04	
	1067 Mar 01 j 18:19	0°♈	
	1067 Apr 11 j 02:51	0°♉	
conjunction	1067 Apr 26 j 05:15	10°♉52'24	0°-1'-43
minimum elong	1067 Apr 26 j 05:19	10°♉52'30	0°01'44
behind sun begin	1067 Apr 25 j 04:33	10°♉08'21	
behind sun end	1067 Apr 27 j 06:04	11°♉36'37	
asc. node	1067 Apr 28 j 22:15	12°♉48'09	
	1067 May 23 j 11:02	0°♊	
max. Earth dist.	1067 Jun 02 j 12:41	6°♊54'59	2.53223 AU
morning rise	1067 Jun 21 j 18:14	19°♊54'53	
	1067 Jul 06 j 23:04	0°♋	
	1067 Aug 22 j 14:02	0°♌	
	1067 Oct 10 j 13:26	0°♍	
	1067 Dec 02 j 19:12	0°♎	
retrograde	1068 Feb 29 j 02:42	29°♎48'35	
opposition	1068 Apr 05 j 19:42	21°♎52'36	1°47'49
greatest brilliancy	1068 Apr 06 j 13:39	21°♎35'57	-1.7m
min. Earth dist.	1068 Apr 13 j 03:02	19°♎10'21	0.56507 AU
direct	1068 May 15 j 23:50	12°♎21'00	
desc. node	1068 May 16 j 13:59	12°♎21'08	
	1068 Jul 13 j 21:13	0°♏	
	1068 Sep 01 j 12:06	0°♐	
	1068 Oct 13 j 11:31	0°♑	
	1068 Nov 21 j 22:17	0°♒	
	1068 Dec 30 j 19:44	0°♓	
	1069 Feb 08 j 09:28	0°♈	
asc. node	1069 Mar 15 j 22:14	26°♈02'04	
	1069 Mar 21 j 11:00	0°♉	
evening set	1069 Apr 21 j 11:57	21°♉48'40	
	1069 May 03 j 10:03	0°♊	
conjunction	1069 Jun 13 j 11:38	27°♊30'26	0°48'19
minimum elong	1069 Jun 13 j 10:07	27°♊27'56	0°48'19
	1069 Jun 17 j 06:39	0°♋	
max. Earth dist.	1069 Jun 30 j 21:34	8°♋53'55	2.62892 AU
morning rise	1069 Jul 31 j 23:10	28°♋54'38	
	1069 Aug 02 j 16:08	0°♌	
	1069 Sep 19 j 03:44	0°♍	
	1069 Nov 06 j 14:21	0°♎	
	1069 Dec 26 j 19:14	0°♏	
	1070 Feb 20 j 18:34	0°♐	
desc. node	1070 Apr 03 j 12:59	15°♐44'45	
retrograde	1070 Apr 26 j 16:10	18°♐44'43	
opposition	1070 May 29 j 04:59	12°♐43'09	-3°-6'-14
greatest brilliancy	1070 May 30 j 10:57	12°♐19'39	-2.5m
min. Earth dist.	1070 Jun 06 j 02:31	10°♐15'04	0.43535 AU
direct	1070 Jul 03 j 14:27	5°♐27'50	
	1070 Sep 09 j 17:05	0°♑	
	1070 Oct 25 j 08:19	0°♒	
	1070 Dec 06 j 06:31	0°♓	
	1071 Jan 16 j 22:34	0°♈	
asc. node	1071 Jan 31 j 21:14	10°♈36'25	
	1071 Feb 28 j 15:33	0°♉	
	1071 Apr 13 j 21:17	0°♊	
	1071 May 29 j 14:57	0°♋	
evening set	1071 Jun 05 j 14:32	4°♋30'47	
	1071 Jul 15 j 09:05	0°♌	
conjunction	1071 Jul 23 j 05:15	4°♌59'47	1°08'35
minimum elong	1071 Jul 23 j 04:55	4°♌59'15	1°08'35
max. Earth dist.	1071 Jul 25 j 07:40	6°♌20'05	2.67290 AU
	1071 Aug 31 j 11:26	0°♍	
morning rise	1071 Sep 06 j 04:40	3°♍38'48	
	1071 Oct 17 j 08:06	0°♎	
	1071 Dec 02 j 16:55	0°♏	
	1072 Jan 17 j 17:25	0°♐	
desc. node	1072 Feb 19 j 12:23	21°♐20'01	
	1072 Mar 03 j 22:55	0°♑	
	1072 Apr 21 j 03:54	0°♒	
	1072 Jun 24 j 23:45	0°♓	
retrograde	1072 Jul 14 j 11:19	2°♓27'29	
	1072 Aug 03 j 04:02	30°℞♒	
min. Earth dist.	1072 Aug 11 j 10:47	27°♒53'45	0.37664 AU
opposition	1072 Aug 14 j 09:08	27°♒05'49	-6°-35'-56
greatest brilliancy	1072 Aug 13 j 16:41	27°♒17'03	-2.9m
direct	1072 Sep 12 j 23:15	22°♒08'51	
	1072 Oct 19 j 14:15	0°♓	
	1072 Dec 16 j 14:47	0°♈	
asc. node	1072 Dec 18 j 19:46	1°♈19'04	
	1073 Feb 03 j 04:51	0°♉	
	1073 Mar 22 j 15:17	0°♊	
	1073 May 09 j 05:51	0°♋	
	1073 Jun 25 j 23:35	0°♌	
evening set	1073 Jul 13 j 05:43	10°♌53'13	
	1073 Aug 12 j 07:23	0°♍	
max. Earth dist.	1073 Aug 16 j 09:34	2°♍37'10	2.66218 AU
conjunction	1073 Aug 27 j 21:29	10°♍00'28	1°01'24
minimum elong	1073 Aug 27 j 22:25	10°♍01'58	1°01'24
	1073 Sep 27 j 14:47	0°♎	
morning rise	1073 Oct 11 j 14:00	9°♎13'33	
	1073 Nov 11 j 12:40	0°♏	
	1073 Dec 24 j 23:28	0°♐	
desc. node	1074 Jan 06 j 10:53	8°♐47'40	
	1074 Feb 05 j 02:52	0°♑	
	1074 Mar 18 j 08:02	0°♒	
	1074 Apr 28 j 09:21	0°♓	
	1074 Jun 10 j 01:33	0°♈	
	1074 Jul 30 j 12:43	0°♉	
retrograde	1074 Sep 14 j 19:09	12°♉46'22	
min. Earth dist.	1074 Oct 13 j 14:42	7°♉02'02	0.47995 AU
opposition	1074 Oct 21 j 16:49	4°♉07'08	0°-48'-47
greatest brilliancy	1074 Oct 21 j 07:55	4°♉15'11	-2.2m
	1074 Nov 03 j 08:01	30°℞♈	
asc. node	1074 Nov 05 j 19:14	29°♈21'48	
direct	1074 Nov 24 j 03:13	27°♈05'15	
	1074 Dec 16 j 06:25	0°♉	
	1075 Feb 23 j 18:10	0°♊	
	1075 Apr 17 j 16:49	0°♋	
	1075 Jun 06 j 17:13	0°♌	
	1075 Jul 24 j 22:59	0°♍	
evening set	1075 Aug 19 j 13:37	16°♍24'39	
	1075 Sep 09 j 07:45	0°♎	
max. Earth dist.	1075 Sep 10 j 20:54	1°♎01'31	2.59856 AU
conjunction	1075 Oct 05 j 05:35	17°♎22'15	0°29'02
minimum elong	1075 Oct 05 j 06:35	17°♎23'57	0°29'00
	1075 Oct 23 j 15:10	0°♏	
morning rise	1075 Nov 22 j 08:16	20°♏55'32	

desc. node	1075 Nov 24 j 10:31	22°♏25'28	
	1075 Dec 04 j 22:48	0°♐	
	1076 Jan 14 j 14:05	0°♑	
	1076 Feb 23 j 01:35	0°♒	
	1076 Apr 02 j 02:14	0°♓	
	1076 May 11 j 15:11	0°♈	
	1076 Jun 22 j 02:00	0°♉	
	1076 Aug 07 j 05:38	0°♊	
asc. node	1076 Sep 22 j 18:02	23°♊02'17	
retrograde	1076 Oct 26 j 19:11	29°♊53'11	
min. Earth dist.	1076 Nov 30 j 00:39	22°♊07'29	0.60049 AU
opposition	1076 Dec 05 j 09:27	19°♊59'41	2°58'31
greatest brilliancy	1076 Dec 04 j 13:01	20°♊19'58	-1.6m
direct	1077 Jan 11 j 19:34	11°♊19'04	
	1077 Mar 18 j 12:58	0°♋	
	1077 May 14 j 23:52	0°♌	
	1077 Jul 04 j 14:36	0°♍	
	1077 Aug 20 j 17:17	0°♎	
evening set	1077 Sep 28 j 12:11	26°♎11'47	
	1077 Oct 03 j 23:24	0°♏	
desc. node	1077 Oct 11 j 09:49	5°♏13'01	
max. Earth dist.	1077 Oct 13 j 09:08	6°♏36'33	2.48829 AU
	1077 Nov 14 j 18:51	0°♐	
conjunction	1077 Nov 19 j 05:16	3°♐16'22	0°-23'-47
minimum elong	1077 Nov 19 j 04:02	3°♐14'05	0°23'47
	1077 Dec 24 j 16:35	0°♑	
morning rise	1078 Jan 16 j 07:44	17°♑28'05	
	1078 Feb 01 j 09:26	0°♒	
	1078 Mar 11 j 16:43	0°♓	
	1078 Apr 19 j 11:40	0°♈	
	1078 May 29 j 17:11	0°♉	
	1078 Jul 11 j 11:46	0°♊	
asc. node	1078 Aug 10 j 16:11	19°♊37'00	
	1078 Aug 27 j 18:49	0°♋	
	1078 Oct 28 j 08:19	0°♌	
retrograde	1078 Dec 01 j 14:19	6°♌26'23	
	1079 Jan 02 j 01:39	30°℞♋	
min. Earth dist.	1079 Jan 09 j 04:29	27°♋12'43	0.66776 AU
opposition	1079 Jan 10 j 18:39	26°♋34'24	4°25'09
greatest brilliancy	1079 Jan 10 j 09:28	26°♋43'37	-1.3m
direct	1079 Feb 19 j 19:39	16°♋59'49	
	1079 Apr 14 j 01:06	0°♌	
	1079 Jun 12 j 12:38	0°♍	
	1079 Jul 31 j 22:13	0°♎	
desc. node	1079 Aug 29 j 08:05	18°♎42'47	
	1079 Sep 14 j 19:10	0°♏	
	1079 Oct 26 j 13:33	0°♐	
evening set	1079 Nov 19 j 06:14	17°♐47'53	
	1079 Dec 05 j 03:50	0°♑	
max. Earth dist.	1080 Jan 09 j 15:28	27°♑44'42	2.37230 AU
	1080 Jan 12 j 12:06	0°♒	
conjunction	1080 Jan 21 j 01:44	6°♒45'52	-1°-4'-43
minimum elong	1080 Jan 21 j 01:12	6°♒44'48	1°04'44
	1080 Feb 19 j 12:34	0°♓	
	1080 Mar 29 j 02:56	0°♈	
morning rise	1080 Mar 31 j 11:29	1°♈48'08	
	1080 May 08 j 03:09	0°♉	
	1080 Jun 19 j 06:09	0°♊	
asc. node	1080 Jun 27 j 16:07	5°♊46'50	
	1080 Aug 03 j 04:46	0°♋	
	1080 Sep 21 j 07:28	0°♌	
	1080 Nov 20 j 17:58	0°♍	
retrograde	1081 Jan 04 j 06:08	9°♍47'49	
opposition	1081 Feb 12 j 19:53	0°♍26'44	4°22'47
greatest brilliancy	1081 Feb 13 j 05:58	0°♍16'45	-1.2m
	1081 Feb 13 j 22:54	30°℞♌	
min. Earth dist.	1081 Feb 15 j 02:57	29°♌32'15	0.66991 AU
direct	1081 Mar 26 j 02:52	20°♌26'48	
	1081 May 09 j 01:02	0°♍	
	1081 Jul 07 j 19:55	0°♎	
desc. node	1081 Jul 16 j 06:42	5°♎03'29	
	1081 Aug 24 j 00:52	0°♏	
	1081 Oct 05 j 11:16	0°♐	
	1081 Nov 14 j 04:37	0°♑	
	1081 Dec 22 j 12:36	0°♒	
greatest brilliancy	1082 Jan 02 j 16:30	8°♒48'57	1.2m
evening set	1082 Jan 25 j 20:06	27°♒04'12	
	1082 Jan 29 j 13:38	0°♓	
	1082 Mar 09 j 06:54	0°♈	
conjunction	1082 Apr 02 j 07:53	18°♈06'28	0°-27'-4
minimum elong	1082 Apr 02 j 09:55	18°♈10'15	0°27'04
	1082 Apr 18 j 11:24	0°♉	
asc. node	1082 May 15 j 15:31	19°♉30'01	
max. Earth dist.	1082 May 18 j 01:48	21°♉12'40	2.48182 AU
	1082 May 30 j 15:52	0°♊	
morning rise	1082 Jun 02 j 15:57	2°♊04'40	
	1082 Jul 14 j 02:58	0°♋	
	1082 Aug 30 j 01:01	0°♌	
	1082 Oct 19 j 05:14	0°♍	
	1082 Dec 16 j 13:07	0°♎	
retrograde	1083 Feb 11 j 16:52	14°♎45'42	
opposition	1083 Mar 21 j 12:10	6°♎19'01	2°53'46
greatest brilliancy	1083 Mar 22 j 09:41	5°♎58'29	-1.5m
min. Earth dist.	1083 Mar 27 j 13:03	4°♎00'59	0.60651 AU
	1083 Apr 08 j 06:40	30°℞♍	
direct	1083 May 01 j 10:49	26°♍27'27	
	1083 May 26 j 02:34	0°♎	
desc. node	1083 Jun 03 j 06:04	2°♎29'01	
	1083 Jul 29 j 07:43	0°♏	
	1083 Sep 12 j 20:04	0°♐	
	1083 Oct 23 j 15:32	0°♑	
	1083 Dec 01 j 12:44	0°♒	
	1084 Jan 09 j 00:30	0°♓	
	1084 Feb 17 j 05:20	0°♈	
	1084 Mar 28 j 22:24	0°♉	
evening set	1084 Mar 31 j 13:52	1°♉54'08	
asc. node	1084 Apr 01 j 13:48	2°♉37'06	
	1084 May 10 j 14:02	0°♊	
conjunction	1084 May 26 j 21:37	11°♊06'44	0°32'22
minimum elong	1084 May 26 j 20:10	11°♊04'17	0°32'21
max. Earth dist.	1084 Jun 20 j 12:04	27°♊32'23	2.59715 AU
	1084 Jun 24 j 05:39	0°♋	
morning rise	1084 Jul 16 j 20:55	14°♋45'59	
	1084 Aug 09 j 14:58	0°♌	
	1084 Sep 26 j 11:44	0°♍	
	1084 Nov 15 j 02:56	0°♎	
	1085 Jan 07 j 20:58	0°♏	
retrograde	1085 Apr 01 j 07:48	27°♏35'38	
desc. node	1085 Apr 20 j 04:28	25°♏22'59	
opposition	1085 May 05 j 19:21	20°♏42'40	0°-48'-38
greatest brilliancy	1085 May 06 j 05:03	20°♏34'22	-2.2m
min. Earth dist.	1085 May 14 j 07:26	17°♏48'44	0.48737 AU
direct	1085 Jun 12 j 16:02	12°♏16'05	
	1085 Aug 08 j 16:00	0°♐	
	1085 Sep 25 j 15:41	0°♑	
	1085 Nov 06 j 05:07	0°♒	
	1085 Dec 16 j 08:28	0°♓	
	1086 Jan 25 j 20:57	0°♈	
asc. node	1086 Feb 17 j 13:04	16°♈23'41	
	1086 Mar 08 j 17:31	0°♉	

	1086 Apr 21 j 08:04	0°♊	
evening set	1086 May 20 j 04:35	19°♊13'22	
	1086 Jun 05 j 15:23	0°♋	
conjunction	1086 Jul 08 j 09:49	21°♋10'44	1°04'10
minimum elong	1086 Jul 08 j 08:55	21°♋09'17	1°04'10
max. Earth dist.	1086 Jul 16 j 01:36	26°♋05'12	2.66228 AU
	1086 Jul 22 j 04:29	0°♌	
morning rise	1086 Aug 23 j 07:55	20°♌27'54	
	1086 Sep 07 j 08:27	0°♍	
	1086 Oct 24 j 15:45	0°♎	
	1086 Dec 11 j 01:10	0°♏	
	1087 Jan 28 j 03:02	0°♐	
desc. node	1087 Mar 08 j 03:50	23°♐20'43	
	1087 Mar 19 j 21:43	0°♑	
	1087 May 31 j 14:05	0°♒	
retrograde	1087 Jun 13 j 13:33	1°♒02'10	
	1087 Jun 26 j 11:51	30°℞♑	
opposition	1087 Jul 13 j 18:02	26°♑03'24	-6°-33'-2
greatest brilliancy	1087 Jul 14 j 11:34	25°♑51'41	-2.8m
min. Earth dist.	1087 Jul 16 j 05:48	25°♑23'32	0.37871 AU
direct	1087 Aug 13 j 08:24	20°♑48'55	
	1087 Sep 21 j 13:44	0°♒	
	1087 Nov 15 j 02:21	0°♓	
	1087 Dec 31 j 02:52	0°♈	
asc. node	1088 Jan 05 j 12:16	3°♈35'15	
	1088 Feb 14 j 05:30	0°♉	
	1088 Mar 30 j 23:25	0°♊	
	1088 May 16 j 15:42	0°♋	
evening set	1088 Jun 28 j 14:54	27°♋16'54	
	1088 Jul 02 j 21:52	0°♌	
max. Earth dist.	1088 Aug 07 j 10:58	22°♌34'25	2.67299 AU
conjunction	1088 Aug 13 j 16:17	26°♌32'30	1°07'16
minimum elong	1088 Aug 13 j 16:48	26°♌33'19	1°07'17
	1088 Aug 19 j 02:09	0°♍	
morning rise	1088 Sep 27 j 02:13	25°♍08'34	
	1088 Oct 04 j 13:08	0°♎	
	1088 Nov 18 j 21:43	0°♏	
	1089 Jan 02 j 02:28	0°♐	
desc. node	1089 Jan 23 j 03:54	14°♐33'11	
	1089 Feb 14 j 07:04	0°♑	
	1089 Mar 28 j 21:56	0°♒	
	1089 May 11 j 02:33	0°♓	
	1089 Jun 28 j 00:42	0°♈	
retrograde	1089 Aug 24 j 19:48	18°♈53'02	
min. Earth dist.	1089 Sep 20 j 18:48	13°♈58'36	0.42919 AU
greatest brilliancy	1089 Sep 27 j 11:15	11°♈47'27	-2.5m
opposition	1089 Sep 28 j 15:21	11°♈24'18	-3°-9'-35
direct	1089 Oct 30 j 05:26	5°♈17'04	
asc. node	1089 Nov 22 j 10:31	8°♈32'41	
	1090 Jan 12 j 18:09	0°♉	
	1090 Mar 07 j 04:22	0°♊	
	1090 Apr 26 j 04:59	0°♋	
	1090 Jun 14 j 02:10	0°♌	
	1090 Jul 31 j 21:10	0°♍	
evening set	1090 Aug 04 j 21:55	2°♍34'16	
max. Earth dist.	1090 Aug 31 j 11:01	19°♍41'24	2.62984 AU
	1090 Sep 16 j 04:16	0°♎	
conjunction	1090 Sep 19 j 18:54	2°♎23'15	0°44'26
minimum elong	1090 Sep 19 j 20:06	2°♎25'14	0°44'26
	1090 Oct 30 j 16:16	0°♏	
morning rise	1090 Nov 04 j 23:37	3°♏39'44	
desc. node	1090 Dec 11 j 02:36	29°♏05'45	
	1090 Dec 12 j 08:53	0°♐	
	1091 Jan 22 j 11:39	0°♑	
	1091 Mar 03 j 11:21	0°♒	
	1091 Apr 12 j 00:29	0°♓	
	1091 May 22 j 04:50	0°♈	
	1091 Jul 03 j 22:47	0°♉	
	1091 Aug 24 j 04:34	0°♊	
asc. node	1091 Oct 10 j 09:30	13°♊34'35	
retrograde	1091 Oct 12 j 09:28	13°♊36'18	
min. Earth dist.	1091 Nov 13 j 14:11	6°♊34'13	0.55795 AU
opposition	1091 Nov 20 j 07:12	3°♊57'43	1°51'53
greatest brilliancy	1091 Nov 19 j 13:59	4°♊14'27	-1.8m
	1091 Dec 01 j 06:05	30°℞♉	
direct	1091 Dec 26 j 07:25	25°♉48'58	
	1092 Jan 22 j 18:59	0°♊	
	1092 Mar 31 j 08:49	0°♋	
	1092 May 23 j 14:40	0°♌	
	1092 Jul 12 j 00:53	0°♍	
	1092 Aug 27 j 18:32	0°♎	
evening set	1092 Sep 11 j 19:25	10°♎00'58	
max. Earth dist.	1092 Sep 28 j 17:08	21°♎29'50	2.53613 AU
	1092 Oct 11 j 00:09	0°♏	
desc. node	1092 Oct 28 j 01:15	12°♏00'08	
conjunction	1092 Oct 30 j 21:18	14°♏01'23	0°-1'-46
minimum elong	1092 Oct 30 j 21:15	14°♏01'17	0°01'47
behind sun begin	1092 Oct 29 j 23:58	13°♏23'21	
behind sun end	1092 Oct 31 j 18:32	14°♏39'16	
	1092 Nov 21 j 23:35	0°♐	
morning rise	1092 Dec 23 j 00:00	23°♐04'31	
	1093 Jan 01 j 03:16	0°♑	
	1093 Feb 09 j 02:17	0°♒	
	1093 Mar 19 j 14:57	0°♓	
	1093 Apr 27 j 14:31	0°♈	
	1093 Jun 07 j 02:20	0°♉	
	1093 Jul 20 j 13:07	0°♊	
asc. node	1093 Aug 27 j 09:36	23°♊22'04	
	1093 Sep 08 j 09:43	0°♋	
retrograde	1093 Nov 18 j 02:07	23°♋04'44	
min. Earth dist.	1093 Dec 25 j 02:11	14°♋22'28	0.64874 AU
opposition	1093 Dec 28 j 04:54	13°♋07'31	4°03'51
greatest brilliancy	1093 Dec 27 j 13:17	13°♋23'11	-1.4m
direct	1094 Feb 05 j 09:19	3°♋50'19	
	1094 Apr 28 j 01:45	0°♌	
	1094 Jun 21 j 08:27	0°♍	
	1094 Aug 08 j 13:55	0°♎	
desc. node	1094 Sep 15 j 00:06	25°♎03'35	
	1094 Sep 22 j 03:02	0°♏	
evening set	1094 Oct 28 j 05:45	25°♏51'10	
	1094 Nov 02 j 20:53	0°♐	
max. Earth dist.	1094 Nov 16 j 11:44	10°♐09'08	2.40944 AU
	1094 Dec 12 j 13:17	0°♑	
conjunction	1094 Dec 25 j 02:39	9°♑43'27	0°-55'-7
minimum elong	1094 Dec 25 j 00:21	9°♑39'00	0°55'08
	1095 Jan 20 j 00:03	0°♒	
	1095 Feb 27 j 02:21	0°♓	
morning rise	1095 Mar 02 j 08:25	2°♓33'06	
	1095 Apr 06 j 17:28	0°♈	
	1095 May 16 j 18:02	0°♉	
	1095 Jun 27 j 23:48	0°♊	
asc. node	1095 Jul 15 j 08:28	11°♊45'42	
	1095 Aug 12 j 10:41	0°♋	
	1095 Oct 02 j 15:29	0°♌	
retrograde	1095 Dec 22 j 14:46	27°♌03'56	
opposition	1096 Jan 31 j 13:18	17°♌28'12	4°33'05
greatest brilliancy	1096 Jan 31 j 15:49	17°♌25'41	-1.2m
min. Earth dist.	1096 Feb 01 j 07:39	17°♌09'54	0.67693 AU
direct	1096 Mar 12 j 12:39	7°♌35'07	

	1096 May 24 j 20:34	0°♍	
	1096 Jul 17 j 05:03	0°♎	
desc. node	1096 Aug 01 j 22:45	9°♎54'31	
	1096 Sep 01 j 04:12	0°♏	
	1096 Oct 13 j 05:59	0°♐	
	1096 Nov 21 j 20:56	0°♑	
evening set	1096 Dec 28 j 14:17	28°♑45'37	
	1096 Dec 30 j 03:58	0°♒	
	1097 Feb 06 j 03:44	0°♓	
conjunction	1097 Mar 06 j 08:49	21°♓59'52	0°-50'-15
minimum elong	1097 Mar 06 j 11:56	22°♓05'54	0°50'14
	1097 Mar 16 j 18:42	0°♈	
	1097 Apr 25 j 20:08	0°♉	
max. Earth dist.	1097 Apr 26 j 15:33	0°♉35'30	2.42792 AU
morning rise	1097 May 11 j 20:46	11°♉36'42	
asc. node	1097 Jun 01 j 07:02	26°♉04'30	
	1097 Jun 06 j 22:20	0°♊	
	1097 Jul 21 j 10:51	0°♋	
	1097 Sep 06 j 21:20	0°♌	
	1097 Oct 29 j 01:33	0°♍	
	1098 Jan 14 j 22:18	0°♎	
retrograde	1098 Jan 26 j 22:29	0°♎50'22	
	1098 Feb 07 j 09:29	30°℞♍	
opposition	1098 Mar 06 j 14:16	21°♍59'01	3°40'09
greatest brilliancy	1098 Mar 07 j 09:30	21°♍40'20	-1.4m
min. Earth dist.	1098 Mar 11 j 04:53	20°♍11'37	0.63888 AU
direct	1098 Apr 16 j 21:45	11°♍58'50	
	1098 Jun 18 j 00:33	0°♎	
desc. node	1098 Jun 19 j 21:28	0°♎55'19	
	1098 Aug 09 j 04:04	0°♏	
	1098 Sep 21 j 22:18	0°♐	
	1098 Nov 01 j 03:24	0°♑	
	1098 Dec 09 j 17:12	0°♒	
	1099 Jan 16 j 23:05	0°♓	
	1099 Feb 24 j 21:46	0°♈	
evening set	1099 Mar 08 j 23:31	9°♈05'45	
	1099 Apr 06 j 08:11	0°♉	
asc. node	1099 Apr 19 j 06:33	9°♉18'26	
conjunction	1099 May 08 j 08:33	22°♉47'16	0°11'50
minimum elong	1099 May 08 j 07:50	22°♉46'02	0°11'49
behind sun begin	1099 May 07 j 15:44	22°♉17'54	
behind sun end	1099 May 08 j 23:57	23°♉14'08	
	1099 May 18 j 17:48	0°♊	
max. Earth dist.	1099 Jun 10 j 00:00	15°♊10'50	2.55728 AU
morning rise	1099 Jul 01 j 15:34	29°♊36'44	
	1099 Jul 02 j 05:41	0°♋	
	1099 Aug 17 j 17:05	0°♌	
	1099 Oct 05 j 04:05	0°♍	
	1099 Nov 25 j 16:33	0°♎	
	1100 Jan 26 j 17:31	0°♏	
retrograde	1100 Mar 10 j 22:01	9°♏32'18	
opposition	1100 Apr 15 j 22:33	1°♏56'19	0°58'55
greatest brilliancy	1100 Apr 16 j 10:02	1°♏45'54	-1.9m
	1100 Apr 21 j 06:32	30°℞♎	
min. Earth dist.	1100 Apr 23 j 20:24	29°♎04'43	0.53869 AU
desc. node	1100 May 06 j 21:13	25°♎03'33	
direct	1100 May 25 j 11:20	22°♎42'17	
	1100 Jun 29 j 18:35	0°♏	
	1100 Aug 24 j 23:18	0°♐	
	1100 Oct 07 j 04:48	0°♑	
	1100 Nov 16 j 04:03	0°♒	
	1100 Dec 25 j 09:23	0°♓	