conjunction	9600 Mar 29 07:14	11°♈59'35	-1°07'47
minimum elong	9600 Mar 29 06:58	11°♈59'08	1°07'50
	9600 Apr 23 15:15	0°♉	
morning rise	9600 May 20 06:55	19°♉30'22	
	9600 Jun 03 07:55	0°♊	
	9600 Jul 12 14:23	0°♋	
	9600 Aug 20 03:07	0°♌	
asc. node	9600 Sep 10 21:52	16°♌58'12	
	9600 Sep 27 18:28	0°♍	
	9600 Nov 06 13:46	0°♎	
	9600 Dec 19 00:12	0°♏	
	9601 Feb 05 06:59	0°♐	
retrograde	9601 Apr 21 06:36	25°♐40'33	
min. Earth dist.	9601 May 27 20:16	17°♐11'04	0.64198 AU
opposition	9601 May 31 14:57	15°♐40'50	2°34'29
greatest brilliancy	9601 May 31 07:04	15°♐48'41	-1.5m
direct	9601 Jul 09 17:06	6°♐32'02	
desc. node	9601 Aug 14 06:45	12°♐54'35	
	9601 Sep 24 11:43	0°♑	
	9601 Nov 19 00:42	0°♒	
	9602 Jan 07 00:42	0°♓	
	9602 Feb 21 06:10	0°♈	
evening set	9602 Mar 25 13:45	22°♈44'01	
	9602 Apr 04 14:28	0°♉	
max. Earth dist.	9602 Apr 09 09:38	3°♉30'41	2.43260 AU
	9602 May 14 17:48	0°♊	
conjunction	9602 May 21 09:27	5°♊05'49	-0°45'18
minimum elong	9602 May 21 12:07	5°♊10'56	0°45'35
	9602 Jun 22 10:01	0°♋	
morning rise	9602 Jul 28 15:22	28°♋34'19	
asc. node	9602 Jul 29 17:41	29°♋26'16	
	9602 Jul 30 10:46	0°♌	
	9602 Sep 06 16:48	0°♍	
	9602 Oct 16 01:24	0°♎	
	9602 Nov 26 10:16	0°♏	
	9603 Jan 09 21:40	0°♐	
	9603 Feb 28 22:16	0°♑	
retrograde	9603 May 25 13:50	29°♑34'16	
desc. node	9603 Jul 02 08:18	20°♑54'56	
opposition	9603 Jul 05 01:26	19°♑50'25	-0°05'38
greatest brilliancy	9603 Jul 05 01:28	19°♑50'23	-1.3m
min. Earth dist.	9603 Jul 05 01:34	19°♑50'16	0.68194 AU
direct	9603 Aug 15 03:26	10°♑01'00	
	9603 Oct 23 00:07	0°♒	
	9603 Dec 16 18:25	0°♓	
	9604 Feb 01 11:34	0°♈	
	9604 Mar 15 02:25	0°♉	
	9604 Apr 24 02:06	0°♊	
evening set	9604 May 24 03:19	23°♊23'33	
	9604 Jun 01 12:29	0°♋	
asc. node	9604 Jun 15 15:53	11°♋11'29	
	9604 Jul 09 09:14	0°♌	
conjunction	9604 Aug 03 00:27	19°♌24'41	0°33'26
minimum elong	9604 Aug 02 21:12	19°♌18'20	0°33'08
	9604 Aug 16 14:31	0°♍	
max. Earth dist.	9604 Sep 24 23:13	29°♍57'47	2.40318 AU
	9604 Sep 25 00:24	0°♎	
morning rise	9604 Oct 11 08:35	12°♎03'28	
	9604 Nov 05 07:37	0°♏	
	9604 Dec 19 01:10	0°♐	
	9605 Feb 03 20:24	0°♑	
	9605 Mar 27 12:48	0°♒	
desc. node	9605 May 19 05:59	24°♒18'12	
	9605 Jun 07 19:42	0°♓	
retrograde	9605 Jun 28 21:21	2°♓25'45	
	9605 Jul 18 11:14	30°℞♒	
opposition	9605 Aug 07 06:06	23°♒21'24	-2°40'36
greatest brilliancy	9605 Aug 07 13:38	23°♒14'04	-1.4m
min. Earth dist.	9605 Aug 11 01:13	21°♒52'34	0.65583 AU
direct	9605 Sep 17 19:32	13°♒18'19	
	9605 Nov 16 14:35	0°♓	
	9606 Jan 08 19:25	0°♈	
	9606 Feb 22 01:10	0°♉	
	9606 Apr 03 12:02	0°♊	
asc. node	9606 May 03 15:37	23°♊22'19	
	9606 May 12 02:03	0°♋	
	9606 Jun 19 02:20	0°♌	
	9606 Jul 27 13:52	0°♍	
evening set	9606 Aug 07 14:35	8°♍26'24	
	9606 Sep 05 08:43	0°♎	
conjunction	9606 Oct 09 04:31	24°♎27'56	1°06'31
minimum elong	9606 Oct 09 04:47	24°♎28'23	1°06'38
	9606 Oct 17 00:50	0°♏	
max. Earth dist.	9606 Nov 13 14:47	19°♏03'15	2.54095 AU
	9606 Nov 29 20:39	0°♐	
morning rise	9606 Dec 02 14:15	1°♐49'19	
	9607 Jan 14 21:22	0°♑	
	9607 Mar 04 05:53	0°♒	
desc. node	9607 Apr 06 01:24	19°♒20'03	
	9607 Apr 25 01:09	0°♓	
	9607 Jun 26 20:51	0°♈	
retrograde	9607 Aug 09 17:28	9°♈16'54	
opposition	9607 Sep 15 12:43	1°♈20'16	-4°55'46
greatest brilliancy	9607 Sep 16 18:34	0°♈52'30	-1.8m
	9607 Sep 19 02:52	30°℞♓	
min. Earth dist.	9607 Sep 22 22:00	28°♓35'59	0.56508 AU
direct	9607 Oct 25 14:14	21°♓48'08	
	9607 Dec 02 10:04	0°♈	
	9608 Jan 26 23:22	0°♉	
	9608 Mar 10 02:05	0°♊	
asc. node	9608 Mar 20 18:34	7°♊55'32	
	9608 Apr 18 19:13	0°♋	
	9608 May 27 13:54	0°♌	
	9608 Jul 05 19:13	0°♍	
	9608 Aug 15 08:57	0°♎	
	9608 Sep 26 19:27	0°♏	
evening set	9608 Oct 04 02:20	5°♏00'53	
	9608 Nov 10 04:53	0°♐	
conjunction	9608 Nov 24 05:27	9°♐13'54	0°43'33
minimum elong	9608 Nov 24 06:45	9°♐16'01	0°43'52
max. Earth dist.	9608 Dec 10 10:40	19°♐47'24	2.63773 AU
	9608 Dec 26 07:07	0°♑	
morning rise	9609 Jan 09 21:56	9°♑20'01	
	9609 Feb 11 15:48	0°♒	
desc. node	9609 Feb 20 20:11	5°♒44'34	
	9609 Apr 01 00:53	0°♓	
	9609 May 20 19:38	0°♈	
	9609 Jul 13 04:26	0°♉	
retrograde	9609 Oct 06 07:04	28°♉53'19	
opposition	9609 Nov 07 11:44	22°♉55'05	-5°09'05
greatest brilliancy	9609 Nov 09 03:29	22°♉23'49	-2.5m
min. Earth dist.	9609 Nov 15 16:33	20°♉21'07	0.42860 AU
direct	9609 Dec 12 10:34	15°♉44'13	
	9610 Jan 30 10:17	0°♊	
asc. node	9610 Feb 05 21:37	3°♊24'27	
	9610 Mar 20 10:19	0°♋	

	9610 May 01 20:35	0°♌	
	9610 Jun 12 10:59	0°♍	
	9610 Jul 24 21:43	0°♎	
	9610 Sep 06 20:47	0°♏	
	9610 Oct 22 09:17	0°♐	
evening set	9610 Nov 16 01:43	15°♐55'40	
	9610 Dec 08 02:04	0°♑	
conjunction	9610 Dec 31 23:50	15°♑11'54	0°04'04
minimum elong	9610 Dec 31 23:59	15°♑12'07	0°04'25
behind sun begin	9610 Dec 31 05:56	14°♑43'30	
behind sun end	9611 Jan 01 18:01	15°♑40'44	
max. Earth dist.	9611 Jan 02 18:54	16°♑20'14	2.68037 AU
desc. node	9611 Jan 08 15:30	20°♑03'18	
	9611 Jan 24 07:49	0°♒	
morning rise	9611 Feb 13 17:17	12°♒56'55	
	9611 Mar 12 11:48	0°♓	
	9611 Apr 28 05:12	0°♈	
	9611 Jun 13 10:15	0°♉	
	9611 Jul 29 08:56	0°♊	
	9611 Sep 14 00:27	0°♋	
	9611 Nov 05 01:09	0°♌	
asc. node	9611 Dec 24 22:04	14°♌48'13	
retrograde	9611 Dec 26 08:32	14°♌49'05	
min. Earth dist.	9612 Jan 22 12:19	10°♌24'55	0.37041 AU
opposition	9612 Jan 26 02:47	9°♌25'28	2°26'30
greatest brilliancy	9612 Jan 25 16:53	9°♌32'17	-3.0m
direct	9612 Feb 24 10:23	4°♌29'21	
	9612 May 07 17:04	0°♍	
	9612 Jun 27 10:56	0°♎	
	9612 Aug 14 14:04	0°♏	
	9612 Oct 01 12:58	0°♐	
	9612 Nov 18 14:03	0°♑	
desc. node	9612 Nov 25 14:04	4°♑22'49	
evening set	9612 Dec 21 19:39	20°♑51'05	
	9613 Jan 05 07:14	0°♒	
max. Earth dist.	9613 Jan 24 00:12	11°♒54'07	2.66767 AU
conjunction	9613 Feb 04 04:43	19°♒04'15	-0°35'31
minimum elong	9613 Feb 04 03:46	19°♒02'44	0°35'16
	9613 Feb 21 02:40	0°♓	
morning rise	9613 Mar 20 04:32	17°♓44'43	
	9613 Apr 07 14:08	0°♈	
	9613 May 21 13:02	0°♉	
	9613 Jul 03 00:14	0°♊	
	9613 Aug 13 05:37	0°♋	
	9613 Sep 22 19:47	0°♌	
	9613 Nov 03 01:43	0°♍	
asc. node	9613 Nov 10 20:09	5°♍27'28	
	9613 Dec 18 08:32	0°♎	
retrograde	9614 Feb 24 23:45	25°♎07'15	
min. Earth dist.	9614 Mar 25 18:30	19°♎21'50	0.48659 AU
greatest brilliancy	9614 Apr 01 10:08	16°♎57'02	-2.2m
opposition	9614 Apr 03 00:48	16°♎21'43	5°36'50
direct	9614 May 06 17:54	9°♎14'03	
	9614 Jul 14 09:30	0°♏	
	9614 Sep 08 14:49	0°♐	
desc. node	9614 Oct 13 16:25	20°♐21'55	
	9614 Oct 29 20:35	0°♑	
	9614 Dec 17 21:22	0°♒	
evening set	9615 Jan 26 20:03	25°♒22'49	
	9615 Feb 02 22:47	0°♓	
max. Earth dist.	9615 Feb 17 16:26	9°♓40'22	2.60115 AU
conjunction	9615 Mar 13 17:52	25°♓47'19	-1°03'31
minimum elong	9615 Mar 13 16:59	25°♓45'49	1°03'28
	9615 Mar 19 22:20	0°♈	
morning rise	9615 May 01 02:51	29°♈29'08	
	9615 May 01 20:07	0°♉	
	9615 Jun 11 21:36	0°♊	
	9615 Jul 21 12:57	0°♋	
	9615 Aug 29 09:35	0°♌	
asc. node	9615 Sep 28 16:59	23°♌23'29	
	9615 Oct 07 08:24	0°♍	
	9615 Nov 16 14:25	0°♎	
	9615 Dec 30 04:48	0°♏	
	9616 Feb 22 00:59	0°♐	
retrograde	9616 Apr 07 03:24	11°♐15'53	
min. Earth dist.	9616 May 11 19:28	3°♐24'16	0.60892 AU
greatest brilliancy	9616 May 16 09:58	1°♐35'07	-1.6m
opposition	9616 May 17 01:23	1°♐19'53	3°35'35
	9616 May 20 11:14	30°℞♏	
direct	9616 Jun 23 23:06	22°♏35'22	
	9616 Aug 01 10:33	0°♐	
desc. node	9616 Aug 30 19:32	11°♐57'47	
	9616 Oct 05 15:34	0°♑	
	9616 Nov 27 03:43	0°♒	
	9617 Jan 14 07:33	0°♓	
	9617 Feb 28 08:28	0°♈	
evening set	9617 Mar 07 04:04	4°♈42'27	
max. Earth dist.	9617 Mar 21 07:43	14°♈37'05	2.48599 AU
	9617 Apr 11 18:34	0°♉	
conjunction	9617 Apr 28 08:22	12°♉10'02	-1°01'19
minimum elong	9617 Apr 28 09:56	12°♉12'57	1°01'32
	9617 May 22 02:26	0°♊	
morning rise	9617 Jun 28 07:41	28°♊42'27	
	9617 Jun 29 23:24	0°♋	
	9617 Aug 07 03:55	0°♌	
asc. node	9617 Aug 15 11:19	6°♌31'59	
greatest brilliancy	9617 Sep 07 18:39	24°♌46'12	1.2m
	9617 Sep 14 12:21	0°♍	
	9617 Oct 23 22:46	0°♎	
	9617 Dec 04 12:26	0°♏	
	9618 Jan 18 18:10	0°♐	
	9618 Mar 13 08:20	0°♑	
retrograde	9618 May 12 08:44	16°♑57'33	
min. Earth dist.	9618 Jun 20 11:22	7°♑39'39	0.67415 AU
opposition	9618 Jun 21 23:03	7°♑04'08	0°56'05
greatest brilliancy	9618 Jun 21 22:05	7°♑05'05	-1.3m
	9618 Jul 12 09:53	30°℞♐	
desc. node	9618 Jul 18 21:31	28°♐36'40	
direct	9618 Aug 01 10:52	27°♐27'25	
	9618 Aug 23 02:06	0°♑	
	9618 Nov 03 15:21	0°♒	
	9618 Dec 25 04:26	0°♓	
	9619 Feb 09 03:03	0°♈	
	9619 Mar 23 13:39	0°♉	
evening set	9619 Apr 28 18:17	27°♉04'46	
	9619 May 02 13:48	0°♊	
	9619 Jun 10 01:33	0°♋	
max. Earth dist.	9619 Jul 01 07:28	16°♋48'32	2.36494 AU
asc. node	9619 Jul 03 08:10	18°♋25'06	
conjunction	9619 Jul 04 03:36	19°♋03'35	0°00'36
minimum elong	9619 Jul 04 03:31	19°♋03'25	0°00'14
behind sun begin	9619 Jul 02 21:30	18°♋03'57	
behind sun end	9619 Jul 05 09:31	20°♋02'53	
	9619 Jul 17 22:55	0°♌	
	9619 Aug 25 03:31	0°♍	
morning rise	9619 Sep 15 12:07	16°♍26'09	
	9619 Oct 03 11:36	0°♎	
	9619 Nov 13 17:27	0°♏	
	9619 Dec 27 13:56	0°♐	

	9620 Feb 13	02:31	0°♉		
	9620 Apr 08	00:24	0°♒		
desc. node	9620 Jun 04	20:45	19°♒05'59		
retrograde	9620 Jun 14	17:20	19°♒40'11		
opposition	9620 Jul 24	16:21	10°♒17'40	-1°41'40	
greatest brilliancy	9620 Jul 24	18:54	10°♒15'09	-1.3m	
min. Earth dist.	9620 Jul 26	23:40	9°♒23'15	0.67412 AU	
direct	9620 Sep 04	06:11	0°♒16'23		
	9620 Nov 29	14:15	0°♓		
	9621 Jan 17	23:13	0°♈		
	9621 Mar 02	07:45	0°♉		
	9621 Apr 11	12:05	0°♊		
	9621 May 19	23:16	0°♋		
asc. node	9621 May 20	08:58	0°♋19'08		
	9621 Jun 26	20:53	0°♌		
greatest brilliancy	9621 Jun 29	11:43	2°♌04'04	1.2m	
evening set	9621 Jul 09	16:17	10°♌05'55		
	9621 Aug 04	04:39	0°♍		
	9621 Sep 12	18:31	0°♎		
conjunction	9621 Sep 15	23:05	2°♎21'47	1°03'21	
minimum elong	9621 Sep 15	21:27	2°♎18'45	1°03'21	
	9621 Oct 24	05:30	0°♏		
max. Earth dist.	9621 Oct 30	10:40	4°♏21'58	2.48985 AU	
morning rise	9621 Nov 14	12:21	14°♏48'57		
	9621 Dec 06	22:18	0°♐		
	9622 Jan 22	02:21	0°♑		
	9622 Mar 12	06:12	0°♒		
desc. node	9622 Apr 22	16:35	23°♒09'02		
	9622 May 06	02:34	0°♓		
retrograde	9622 Jul 23	04:57	24°♓16'39		
opposition	9622 Aug 30	05:08	15°♓48'57	-4°08'08	
greatest brilliancy	9622 Aug 31	01:00	15°♓30'00	-1.6m	
min. Earth dist.	9622 Sep 05	06:12	13°♓30'53	0.60806 AU	
direct	9622 Oct 10	04:10	5°♓56'42		
	9622 Dec 21	03:48	0°♈		
	9623 Feb 07	00:23	0°♉		
	9623 Mar 20	13:55	0°♊		
asc. node	9623 Apr 07	10:34	13°♊34'20		
	9623 Apr 28	15:47	0°♋		
	9623 Jun 06	00:22	0°♌		
	9623 Jul 14	20:23	0°♍		
	9623 Aug 24	00:29	0°♎		
evening set	9623 Sep 14	18:16	15°♎41'27		
	9623 Oct 05	01:42	0°♏		
conjunction	9623 Nov 08	12:07	23°♏32'37	0°55'52	
minimum elong	9623 Nov 08	13:30	23°♏34'56	0°56'08	
	9623 Nov 18	03:51	0°♐		
max. Earth dist.	9623 Dec 01	15:48	8°♐55'36	2.60582 AU	
morning rise	9623 Dec 27	11:56	25°♐44'08		
	9624 Jan 03	03:18	0°♑		
	9624 Feb 19	17:29	0°♒		
desc. node	9624 Mar 09	11:00	11°♒32'30		
	9624 Apr 09	00:05	0°♓		
	9624 May 31	07:01	0°♈		
	9624 Aug 03	12:47	0°♉		
retrograde	9624 Sep 10	10:45	7°♉20'04		
opposition	9624 Oct 14	18:19	0°♉28'55	-5°36'16	
	9624 Oct 16	04:00	30°℞♈		
greatest brilliancy	9624 Oct 16	12:54	29°♈52'20	-2.2m	
min. Earth dist.	9624 Oct 23	12:52	27°♈29'13	0.48350 AU	
direct	9624 Nov 21	07:26	22°♈04'38		
	9624 Dec 27	03:08	0°♉		
	9625 Feb 18	21:37	0°♊		
asc. node	9625 Feb 22	12:10	2°♊24'47		
	9625 Apr 02	08:42	0°♋		
	9625 May 12	13:31	0°♌		
	9625 Jun 21	20:10	0°♍		
	9625 Aug 02	07:31	0°♎		
	9625 Sep 14	12:25	0°♏		
	9625 Oct 29	11:42	0°♐		
evening set	9625 Oct 31	10:38	1°♐16'52		
	9625 Dec 14	20:48	0°♑		
conjunction	9625 Dec 17	20:55	1°♑55'17	0°20'00	
minimum elong	9625 Dec 17	21:34	1°♑56'19	0°20'21	
max. Earth dist.	9625 Dec 24	21:54	6°♑25'01	2.67010 AU	
desc. node	9626 Jan 25	06:31	26°♑19'57		
morning rise	9626 Jan 31	08:34	0°♒10'59		
	9626 Jan 31	01:37	0°♒		
	9626 Mar 19	13:40	0°♓		
	9626 May 06	03:39	0°♈		
	9626 Jun 23	01:08	0°♉		
	9626 Aug 11	08:36	0°♊		
	9626 Oct 06	14:02	0°♋		
retrograde	9626 Nov 24	06:43	12°♋30'58		
opposition	9626 Dec 23	23:54	7°♋36'23	-1°21'44	
greatest brilliancy	9626 Dec 24	04:54	7°♋33'03	-3.0m	
min. Earth dist.	9626 Dec 26	08:09	6°♋59'00	0.36902 AU	
asc. node	9627 Jan 10	14:28	3°♋31'08		
direct	9627 Jan 23	01:51	2°♋28'33		
	9627 Apr 07	09:53	0°♌		
	9627 May 25	01:15	0°♍		
	9627 Jul 09	13:31	0°♎		
	9627 Aug 24	10:06	0°♏		
	9627 Oct 10	03:47	0°♐		
	9627 Nov 26	13:16	0°♑		
evening set	9627 Dec 08	20:38	7°♑46'05		
desc. node	9627 Dec 13	03:47	10°♑28'50		
	9628 Jan 13	00:12	0°♒		
max. Earth dist.	9628 Jan 16	09:21	2°♒08'48	2.67912 AU	
conjunction	9628 Jan 22	11:57	6°♒01'49	-0°20'55	
minimum elong	9628 Jan 22	11:20	6°♒00'52	0°20'37	
	9628 Feb 28	21:21	0°♓		
morning rise	9628 Mar 06	00:16	3°♓57'44		
	9628 Apr 14	17:55	0°♈		
	9628 May 29	09:01	0°♉		
	9628 Jul 11	19:07	0°♊		
	9628 Aug 23	05:51	0°♋		
	9628 Oct 04	12:14	0°♌		
	9628 Nov 17	22:30	0°♍		
asc. node	9628 Nov 27	13:44	5°♍56'57		
	9629 Jan 21	00:20	0°♎		
retrograde	9629 Feb 04	08:23	1°♎27'43		
	9629 Feb 18	08:46	30°℞♍		
min. Earth dist.	9629 Mar 02	21:28	26°♍37'03	0.43187 AU	
greatest brilliancy	9629 Mar 09	13:12	24°♍25'01	-2.5m	
opposition	9629 Mar 11	04:37	23°♍52'03	5°32'18	
direct	9629 Apr 11	22:26	17°♍39'37		
	9629 May 30	22:08	0°♎		
	9629 Jul 28	10:19	0°♏		
	9629 Sep 17	19:56	0°♐		
desc. node	9629 Oct 30	04:26	25°♐33'41		
	9629 Nov 06	10:48	0°♑		
	9629 Dec 24	20:07	0°♒		
evening set	9630 Jan 12	14:27	11°♒52'34		
max. Earth dist.	9630 Feb 07	12:22	28°♒33'03	2.63346 AU	
	9630 Feb 09	17:48	0°♓		
conjunction	9630 Feb 26	11:48	10°♓59'27	-0°54'56	
minimum elong	9630 Feb 26	10:41	10°♓57'36	0°54'47	
	9630 Mar 26	20:48	0°♈		

morning rise	9630 Apr 13 11:48	12°♈04'23	
	9630 May 09 02:41	0°♉	
	9630 Jun 19 14:53	0°♊	
	9630 Jul 29 17:37	0°♋	
	9630 Sep 07 01:19	0°♌	
asc. node	9630 Oct 15 09:47	29°♌09'55	
	9630 Oct 16 12:28	0°♍	
	9630 Nov 26 15:16	0°♎	
	9631 Jan 11 19:54	0°♏	
retrograde	9631 Mar 24 00:39	25°♏21'42	
min. Earth dist.	9631 Apr 25 13:15	18°♏14'25	0.56674 AU
greatest brilliancy	9631 May 01 03:44	16°♏03'52	-1.8m
opposition	9631 May 02 04:33	15°♏39'45	4°32'53
direct	9631 Jun 07 15:30	7°♏26'20	
	9631 Aug 20 15:56	0°♐	
desc. node	9631 Sep 17 07:32	14°♐06'47	
	9631 Oct 16 00:57	0°♑	
	9631 Dec 05 18:19	0°♒	
	9632 Jan 22 09:08	0°♓	
evening set	9632 Feb 19 12:45	18°♓34'48	
max. Earth dist.	9632 Mar 06 21:05	29°♓40'23	2.53623 AU
	9632 Mar 07 08:32	0°♈	
conjunction	9632 Apr 08 10:29	22°♈27'24	-1°07'39
minimum elong	9632 Apr 08 10:48	22°♈27'57	1°07'46
	9632 Apr 18 22:27	0°♉	
	9632 May 29 12:20	0°♊	
morning rise	9632 Jun 02 02:55	2°♊43'39	
	9632 Jul 07 15:21	0°♋	
	9632 Aug 15 00:36	0°♌	
asc. node	9632 Sep 01 06:15	13°♌29'06	
	9632 Sep 22 12:30	0°♍	
	9632 Nov 01 02:45	0°♎	
	9632 Dec 13 01:54	0°♏	
	9633 Jan 28 18:03	0°♐	
	9633 Apr 03 00:09	0°♑	
retrograde	9633 Apr 29 01:20	3°♑57'17	
	9633 May 23 09:02	30°℞♐	
min. Earth dist.	9633 Jun 05 14:38	25°♐09'13	0.65631 AU
opposition	9633 Jun 08 13:51	23°♐58'17	1°58'13
greatest brilliancy	9633 Jun 08 09:12	24°♐02'55	-1.4m
direct	9633 Jul 18 06:13	14°♐38'10	
desc. node	9633 Aug 04 10:00	16°♐16'55	
	9633 Sep 15 10:50	0°♑	
	9633 Nov 13 05:02	0°♒	
	9634 Jan 01 23:39	0°♓	
	9634 Feb 16 11:13	0°♈	
	9634 Mar 30 20:43	0°♉	
evening set	9634 Apr 06 00:50	4°♉31'12	
max. Earth dist.	9634 Apr 24 05:39	18°♉03'37	2.40361 AU
	9634 May 09 23:26	0°♊	
conjunction	9634 Jun 05 01:06	20°♊09'45	-0°31'17
minimum elong	9634 Jun 05 03:40	20°♊14'45	0°31'36
	9634 Jun 17 14:20	0°♋	
asc. node	9634 Jul 20 02:17	25°♋40'02	
	9634 Jul 25 13:46	0°♌	
morning rise	9634 Aug 15 13:58	16°♌33'37	
	9634 Sep 01 18:50	0°♍	
	9634 Oct 11 02:13	0°♎	
	9634 Nov 21 08:10	0°♏	
	9635 Jan 04 11:07	0°♐	
	9635 Feb 22 05:01	0°♑	
	9635 Apr 25 18:15	0°♒	
retrograde	9635 Jun 02 04:11	7°♒12'08	
desc. node	9635 Jun 22 10:02	4°♒33'33	
	9635 Jul 06 08:12	30°℞♑	
opposition	9635 Jul 12 12:50	27°♑34'51	-0°41'31
greatest brilliancy	9635 Jul 12 13:00	27°♑34'41	-1.3m
min. Earth dist.	9635 Jul 13 08:32	27°♑15'22	0.68199 AU
direct	9635 Aug 22 21:03	17°♑40'02	
	9635 Oct 13 07:20	0°♒	
	9635 Dec 10 18:53	0°♓	
	9636 Jan 27 06:53	0°♈	
	9636 Mar 10 03:29	0°♉	
	9636 Apr 19 04:52	0°♊	
	9636 May 27 15:27	0°♋	
asc. node	9636 Jun 06 00:00	7°♋24'05	
evening set	9636 Jun 09 11:12	10°♋08'51	
	9636 Jul 04 12:11	0°♌	
	9636 Aug 11 17:52	0°♍	
conjunction	9636 Aug 19 19:41	6°♍14'13	0°48'09
minimum elong	9636 Aug 19 16:14	6°♍07'34	0°47'56
	9636 Sep 20 04:27	0°♎	
max. Earth dist.	9636 Oct 11 03:38	15°♎25'12	2.43419 AU
morning rise	9636 Oct 24 15:47	25°♎08'37	
	9636 Oct 31 11:51	0°♏	
	9636 Dec 14 03:37	0°♐	
	9637 Jan 29 14:35	0°♑	
	9637 Mar 21 01:19	0°♒	
desc. node	9637 May 09 07:29	25°♒01'27	
	9637 May 21 08:27	0°♓	
retrograde	9637 Jul 07 08:49	10°♓27'31	
opposition	9637 Aug 15 07:41	1°♓34'46	-3°13'55
greatest brilliancy	9637 Aug 15 19:02	1°♓23'46	-1.4m
	9637 Aug 19 09:31	30°℞♒	
min. Earth dist.	9637 Aug 19 22:09	29°♒47'51	0.64165 AU
direct	9637 Sep 25 18:29	21°♒33'21	
	9637 Nov 04 20:19	0°♓	
	9638 Jan 02 06:49	0°♈	
	9638 Feb 16 11:18	0°♉	
	9638 Mar 29 06:02	0°♊	
asc. node	9638 Apr 24 01:41	19°♊53'57	
	9638 May 06 23:27	0°♋	
	9638 Jun 14 01:44	0°♌	
	9638 Jul 22 15:14	0°♍	
evening set	9638 Aug 22 09:28	23°♍15'14	
	9638 Aug 31 12:13	0°♎	
	9638 Oct 12 06:17	0°♏	
conjunction	9638 Oct 20 21:04	6°♏00'27	1°04'20
minimum elong	9638 Oct 20 21:59	6°♏02'03	1°04'31
max. Earth dist.	9638 Nov 20 16:39	27°♏01'39	2.56626 AU
	9638 Nov 25 03:14	0°♐	
morning rise	9638 Dec 12 00:53	11°♐11'23	
	9639 Jan 10 02:03	0°♑	
	9639 Feb 27 01:39	0°♒	
desc. node	9639 Mar 27 03:07	16°♒53'02	
	9639 Apr 18 16:35	0°♓	
	9639 Jun 14 16:28	0°♈	
retrograde	9639 Aug 20 16:39	19°♈06'24	
opposition	9639 Sep 25 17:26	11°♈30'26	-5°17'15
greatest brilliancy	9639 Sep 27 04:45	10°♈58'18	-1.9m
min. Earth dist.	9639 Oct 03 18:29	8°♈35'40	0.53774 AU
direct	9639 Nov 04 02:02	2°♈16'42	
	9640 Jan 18 12:38	0°♉	
	9640 Mar 03 11:43	0°♊	
asc. node	9640 Mar 11 04:17	5°♊33'43	
	9640 Apr 12 20:56	0°♋	
	9640 May 22 00:25	0°♌	
	9640 Jun 30 12:22	0°♍	
	9640 Aug 10 07:46	0°♎	
	9640 Sep 21 22:57	0°♏	

evening set	9640 Oct 14 12:01	15°♏20'17	
	9640 Nov 05 11:56	0°♐	
conjunction	9640 Dec 03 02:02	18°♐02'22	0°35'17
minimum elong	9640 Dec 03 03:08	18°♐04'09	0°35'38
max. Earth dist.	9640 Dec 15 21:49	26°♐19'02	2.65156 AU
	9640 Dec 21 15:29	0°♑	
morning rise	9641 Jan 17 19:49	17°♑19'12	
	9641 Feb 06 21:45	0°♒	
desc. node	9641 Feb 10 21:30	2°♒30'34	
	9641 Mar 26 21:41	0°♓	
	9641 May 14 16:59	0°♈	
	9641 Jul 04 09:06	0°♉	
	9641 Aug 31 05:36	0°♊	
retrograde	9641 Oct 22 20:43	13°♊33'29	
opposition	9641 Nov 22 23:13	8°♊04'50	-4°16'57
greatest brilliancy	9641 Nov 24 05:09	7°♊42'38	-2.7m
min. Earth dist.	9641 Nov 29 19:34	6°♊03'50	0.40124 AU
direct	9641 Dec 26 02:29	1°♊42'44	
asc. node	9642 Jan 27 05:19	8°♊23'05	
	9642 Mar 09 20:30	0°♋	
	9642 Apr 24 02:20	0°♌	
	9642 Jun 05 22:47	0°♍	
	9642 Jul 19 04:10	0°♎	
	9642 Sep 01 15:37	0°♏	
	9642 Oct 17 12:29	0°♐	
evening set	9642 Nov 24 12:36	24°♐20'43	
	9642 Dec 03 10:00	0°♑	
desc. node	9642 Dec 29 17:43	16°♑42'05	
conjunction	9643 Jan 08 20:13	23°♑06'27	-0°05'21
minimum elong	9643 Jan 08 20:05	23°♑06'14	0°05'00
behind sun begin	9643 Jan 08 02:22	22°♑38'09	
behind sun end	9643 Jan 09 13:47	23°♑34'18	
max. Earth dist.	9643 Jan 07 19:58	22°♑28'00	2.68235 AU
	9643 Jan 19 16:55	0°♒	
morning rise	9643 Feb 21 08:36	20°♒47'06	
	9643 Mar 07 18:06	0°♓	
	9643 Apr 23 03:14	0°♈	
	9643 Jun 07 16:43	0°♉	
	9643 Jul 22 12:41	0°♊	
	9643 Sep 05 02:11	0°♋	
	9643 Oct 21 04:47	0°♌	
asc. node	9643 Dec 15 06:59	28°♌10'26	
	9643 Dec 21 05:04	0°♍	
retrograde	9644 Jan 11 14:31	3°♍06'14	
	9644 Feb 02 04:57	30°℞♌	
min. Earth dist.	9644 Feb 06 12:12	28°♌48'49	0.38583 AU
opposition	9644 Feb 12 17:14	27°♌00'07	4°06'27
greatest brilliancy	9644 Feb 11 16:51	27°♌17'59	-2.9m
direct	9644 Mar 13 11:32	21°♌44'11	
	9644 Apr 20 16:28	0°♍	
	9644 Jun 19 00:39	0°♎	
	9644 Aug 08 06:57	0°♏	
	9644 Sep 26 04:39	0°♐	
	9644 Nov 13 17:09	0°♑	
desc. node	9644 Nov 15 17:08	1°♑14'30	
evening set	9644 Dec 29 17:31	28°♑47'32	
	9644 Dec 31 15:24	0°♒	
max. Earth dist.	9645 Jan 29 04:46	18°♒11'15	2.65782 AU
conjunction	9645 Feb 12 03:27	27°♒10'58	-0°43'19
minimum elong	9645 Feb 12 02:23	27°♒09'14	0°43'06
	9645 Feb 16 11:35	0°♓	
morning rise	9645 Mar 28 15:29	26°♓30'46	
	9645 Apr 02 20:01	0°♈	
	9645 May 16 12:47	0°♉	
	9645 Jun 27 15:19	0°♊	
	9645 Aug 07 10:08	0°♋	
	9645 Sep 16 10:54	0°♌	
	9645 Oct 26 19:54	0°♍	
asc. node	9645 Nov 01 05:29	3°♍55'28	
	9645 Dec 08 19:00	0°♎	
	9646 Feb 01 15:32	0°♏	
retrograde	9646 Mar 07 08:38	7°♏12'36	
min. Earth dist.	9646 Apr 06 12:01	0°♏56'56	0.51632 AU
	9646 Apr 09 01:23	30°℞♎	
greatest brilliancy	9646 Apr 12 21:13	28°♎33'24	-2.0m
opposition	9646 Apr 14 07:48	28°♎00'53	5°20'09
direct	9646 May 19 01:19	20°♎27'21	
	9646 Jul 01 12:26	0°♏	
	9646 Sep 01 20:07	0°♐	
desc. node	9646 Oct 03 19:16	17°♐57'00	
	9646 Oct 24 11:05	0°♑	
	9646 Dec 13 00:35	0°♒	
	9647 Jan 29 06:45	0°♓	
evening set	9647 Feb 04 05:02	3°♓52'08	
max. Earth dist.	9647 Feb 23 20:56	16°♓52'45	2.57998 AU
	9647 Mar 15 06:30	0°♈	
conjunction	9647 Mar 22 22:53	5°♈16'37	-1°06'38
minimum elong	9647 Mar 22 22:18	5°♈15'38	1°06'39
	9647 Apr 27 01:44	0°♉	
morning rise	9647 May 12 03:33	10°♉54'48	
	9647 Jun 06 23:08	0°♊	
	9647 Jul 16 10:03	0°♋	
	9647 Aug 24 02:11	0°♌	
asc. node	9647 Sep 19 00:05	20°♌06'56	
	9647 Oct 01 20:10	0°♍	
	9647 Nov 10 18:23	0°♎	
	9647 Dec 23 12:22	0°♏	
	9648 Feb 11 06:02	0°♐	
retrograde	9648 Apr 15 07:04	20°♐07'31	
min. Earth dist.	9648 May 21 01:11	11°♐54'31	0.62832 AU
opposition	9648 May 25 12:01	10°♐08'34	3°00'24
greatest brilliancy	9648 May 25 01:08	10°♐19'22	-1.5m
direct	9648 Jul 03 02:50	1°♐09'54	
desc. node	9648 Aug 20 22:22	12°♐19'06	
	9648 Sep 28 13:56	0°♑	
	9648 Nov 21 17:47	0°♒	
	9649 Jan 09 10:13	0°♓	
	9649 Feb 23 15:13	0°♈	
evening set	9649 Mar 17 07:51	15°♈07'08	
max. Earth dist.	9649 Mar 31 05:22	25°♈02'38	2.45674 AU
	9649 Apr 07 01:34	0°♉	
conjunction	9649 May 10 20:58	25°♉06'09	-0°53'32
minimum elong	9649 May 10 23:16	25°♉10'29	0°53'47
	9649 May 17 07:51	0°♊	
	9649 Jun 25 02:40	0°♋	
morning rise	9649 Jul 14 21:33	15°♋33'21	
	9649 Aug 02 04:59	0°♌	
asc. node	9649 Aug 05 19:25	2°♌50'23	
	9649 Sep 09 11:31	0°♍	
	9649 Oct 18 19:50	0°♎	
	9649 Nov 29 04:43	0°♏	
	9650 Jan 12 20:35	0°♐	
	9650 Mar 04 21:12	0°♑	
retrograde	9650 May 19 21:55	24°♑42'40	
opposition	9650 Jun 29 11:52	14°♑54'03	0°19'49
greatest brilliancy	9650 Jun 29 11:50	14°♑54'06	-1.3m
min. Earth dist.	9650 Jun 28 19:50	15°♑09'59	0.67970 AU
desc. node	9650 Jul 09 00:20	11°♑14'14	
direct	9650 Aug 09 08:47	5°♑09'53	

	9650 Oct 27 08:32	0°♒	
	9650 Dec 19 16:09	0°♓	
	9651 Feb 04 02:47	0°♈	
	9651 Mar 18 17:12	0°♉	
	9651 Apr 27 18:12	0°♊	
evening set	9651 May 13 02:51	11°♊52'16	
	9651 Jun 05 05:47	0°♋	
asc. node	9651 Jun 23 17:34	14°♋38'00	
	9651 Jul 13 02:43	0°♌	
conjunction	9651 Jul 21 10:51	6°♌35'50	0°19'52
minimum elong	9651 Jul 21 08:42	6°♌31'34	0°19'31
	9651 Aug 20 07:04	0°♍	
max. Earth dist.	9651 Sep 07 00:42	13°♍40'14	2.38033 AU
	9651 Sep 28 15:06	0°♎	
morning rise	9651 Oct 01 03:27	1°♎52'34	
	9651 Nov 08 20:03	0°♏	
	9651 Dec 22 12:55	0°♐	
	9652 Feb 07 12:23	0°♑	
	9652 Mar 31 03:55	0°♒	
desc. node	9652 May 25 22:54	23°♒19'03	
retrograde	9652 Jun 22 17:04	27°♒24'28	
opposition	9652 Aug 01 09:06	18°♒11'24	-2°16'18
greatest brilliancy	9652 Aug 01 14:08	18°♒06'28	-1.3m
min. Earth dist.	9652 Aug 04 12:13	16°♒57'54	0.66526 AU
direct	9652 Sep 11 23:57	8°♒08'33	
	9652 Nov 21 18:23	0°♓	
	9653 Jan 12 03:36	0°♈	
	9653 Feb 25 01:01	0°♉	
	9653 Apr 06 09:54	0°♊	
asc. node	9653 May 10 16:53	26°♊38'45	
	9653 May 14 23:09	0°♋	
	9653 Jun 21 22:05	0°♌	
evening set	9653 Jul 26 07:33	26°♌55'01	
	9653 Jul 30 07:20	0°♍	
	9653 Sep 07 22:59	0°♎	
conjunction	9653 Sep 29 12:32	15°♎46'14	1°06'24
minimum elong	9653 Sep 29 12:06	15°♎45'26	1°06'28
	9653 Oct 19 11:22	0°♏	
max. Earth dist.	9653 Nov 07 20:24	13°♏29'29	2.51889 AU
morning rise	9653 Nov 25 00:58	25°♏12'15	
	9653 Dec 02 04:21	0°♐	
	9654 Jan 17 04:40	0°♑	
	9654 Mar 06 19:04	0°♒	
desc. node	9654 Apr 12 18:29	21°♒23'42	
	9654 Apr 28 14:08	0°♓	
	9654 Jul 08 20:31	0°♈	
retrograde	9654 Aug 01 20:52	3°♈06'32	
	9654 Aug 24 03:38	30°℞♓	
opposition	9654 Sep 08 06:22	24°♓54'59	-4°36'34
greatest brilliancy	9654 Sep 09 07:45	24°♓31'07	-1.7m
min. Earth dist.	9654 Sep 15 02:12	22°♓21'15	0.58544 AU
direct	9654 Oct 18 19:19	15°♓12'11	
	9654 Dec 11 02:47	0°♈	
	9655 Jan 31 08:40	0°♉	
	9655 Mar 14 17:36	0°♊	
asc. node	9655 Mar 28 19:15	10°♊33'06	
	9655 Apr 23 03:40	0°♋	
	9655 May 31 17:06	0°♌	
	9655 Jul 09 17:09	0°♍	
	9655 Aug 19 01:21	0°♎	
evening set	9655 Sep 26 15:06	27°♎28'30	
	9655 Sep 30 06:13	0°♏	
	9655 Nov 13 11:11	0°♐	
conjunction	9655 Nov 18 05:15	3°♐09'04	0°49'04
minimum elong	9655 Nov 18 06:38	3°♐11'21	0°49'22
max. Earth dist.	9655 Dec 07 11:59	15°♐48'24	2.62459 AU
	9655 Dec 29 10:58	0°♑	
morning rise	9656 Jan 04 19:53	4°♑04'43	
	9656 Feb 14 21:02	0°♒	
desc. node	9656 Feb 28 13:08	8°♒30'21	
	9656 Apr 03 13:59	0°♓	
	9656 May 24 06:07	0°♈	
	9656 Jul 19 14:21	0°♉	
retrograde	9656 Sep 24 10:14	19°♉28'01	
opposition	9656 Oct 27 14:00	13°♉05'23	-5°28'15
greatest brilliancy	9656 Oct 29 08:54	12°♉30'07	-2.4m
min. Earth dist.	9656 Nov 05 06:20	10°♉15'05	0.45280 AU
direct	9656 Dec 02 19:56	5°♉18'27	
	9657 Feb 08 19:28	0°♊	
asc. node	9657 Feb 12 22:32	2°♊30'33	
	9657 Mar 25 21:39	0°♋	
	9657 May 06 03:03	0°♌	
	9657 Jun 16 00:12	0°♍	
	9657 Jul 27 22:21	0°♎	
	9657 Sep 09 11:21	0°♏	
	9657 Oct 24 16:41	0°♐	
evening set	9657 Nov 09 12:05	10°♐16'19	
	9657 Dec 10 05:07	0°♑	
conjunction	9657 Dec 26 00:18	10°♑04'07	0°10'41
minimum elong	9657 Dec 26 00:39	10°♑04'40	0°11'03
behind sun begin	9657 Dec 25 10:57	9°♑42'53	
behind sun end	9657 Dec 26 14:22	10°♑26'27	
max. Earth dist.	9657 Dec 30 01:24	12°♑38'29	2.67690 AU
desc. node	9658 Jan 15 07:54	22°♑58'10	
	9658 Jan 26 10:02	0°♒	
morning rise	9658 Feb 08 00:16	7°♒58'47	
	9658 Mar 14 17:25	0°♓	
	9658 Apr 30 19:15	0°♈	
	9658 Jun 16 16:21	0°♉	
	9658 Aug 02 20:03	0°♊	
	9658 Sep 21 02:00	0°♋	
	9658 Nov 30 11:58	0°♌	
retrograde	9658 Dec 12 15:58	0°♌58'41	
	9658 Dec 24 20:14	30°℞♋	
asc. node	9658 Dec 31 23:38	28°♋38'03	
opposition	9659 Jan 11 15:07	25°♋57'15	0°50'05
min. Earth dist.	9659 Jan 10 15:19	26°♋13'07	0.36523 AU
greatest brilliancy	9659 Jan 11 13:37	25°♋58'15	-3.1m
direct	9659 Feb 10 00:23	21°♋04'52	
	9659 Mar 20 19:46	0°♌	
	9659 May 15 23:29	0°♍	
	9659 Jul 02 18:39	0°♎	
	9659 Aug 18 17:19	0°♏	
	9659 Oct 05 01:28	0°♐	
	9659 Nov 21 18:48	0°♑	
desc. node	9659 Dec 03 05:32	7°♑11'30	
evening set	9659 Dec 16 21:07	15°♑46'56	
	9660 Jan 08 09:10	0°♒	
max. Earth dist.	9660 Jan 21 10:58	8°♒18'27	2.67388 AU
conjunction	9660 Jan 30 07:31	13°♒57'34	-0°29'39
minimum elong	9660 Jan 30 06:42	13°♒56'15	0°29'21
	9660 Feb 24 05:52	0°♓	
morning rise	9660 Mar 14 00:31	12°♓13'50	
	9660 Apr 09 21:50	0°♈	
	9660 May 24 04:22	0°♉	
	9660 Jul 06 01:31	0°♊	
	9660 Aug 16 18:58	0°♋	
	9660 Sep 26 23:37	0°♌	
	9660 Nov 08 05:08	0°♍	

asc. node	9660 Nov 17 21:55	6°♍33'39	
	9660 Dec 26 14:11	0°♎	
retrograde	9661 Feb 16 10:08	15°♎50'58	
min. Earth dist.	9661 Mar 16 03:50	10°♎30'40	0.46184 AU
greatest brilliancy	9661 Mar 22 21:43	8°♎08'48	-2.4m
opposition	9661 Mar 24 14:16	7°♎32'56	5°42'26
direct	9661 Apr 26 09:53	0°♎48'55	
	9661 Jul 20 02:27	0°♏	
	9661 Sep 11 20:11	0°♐	
desc. node	9661 Oct 20 07:43	22°♐46'08	
	9661 Nov 01 07:36	0°♑	
	9661 Dec 20 01:43	0°♒	
evening set	9662 Jan 20 16:26	20°♒02'11	
	9662 Feb 05 02:21	0°♓	
max. Earth dist.	9662 Feb 13 06:01	5°♓19'44	2.61659 AU
conjunction	9662 Mar 07 01:20	19°♓47'03	-1°00'24
minimum elong	9662 Mar 07 00:19	19°♓45'20	1°00'18
	9662 Mar 22 04:22	0°♈	
morning rise	9662 Apr 23 05:42	22°♈10'56	
	9662 May 04 06:50	0°♉	
	9662 Jun 14 13:48	0°♊	
	9662 Jul 24 10:41	0°♋	
	9662 Sep 01 11:59	0°♌	
asc. node	9662 Oct 05 18:46	26°♌19'04	
	9662 Oct 10 15:02	0°♍	
	9662 Nov 20 03:19	0°♎	
	9663 Jan 03 10:55	0°♏	
	9663 Mar 03 21:26	0°♐	
retrograde	9663 Apr 01 18:58	5°♐08'15	
	9663 Apr 29 02:13	30°℞♏	
min. Earth dist.	9663 May 05 12:43	27°♏36'02	0.59110 AU
opposition	9663 May 11 10:26	25°♏17'04	4°00'37
greatest brilliancy	9663 May 10 15:05	25°♏36'03	-1.7m
direct	9663 Jun 17 18:01	16°♏45'32	
	9663 Aug 10 09:18	0°♐	
desc. node	9663 Sep 07 11:02	12°♐54'38	
	9663 Oct 09 21:29	0°♑	
	9663 Nov 30 14:53	0°♒	
	9664 Jan 17 14:10	0°♓	
evening set	9664 Feb 28 19:36	28°♓03'36	
	9664 Mar 02 15:37	0°♈	
max. Earth dist.	9664 Mar 14 17:39	8°♈21'13	2.50905 AU
	9664 Apr 14 04:41	0°♉	
conjunction	9664 Apr 19 09:11	3°♉46'10	-1°05'05
minimum elong	9664 Apr 19 10:11	3°♉48'00	1°05'16
	9664 May 24 16:05	0°♊	
morning rise	9664 Jun 16 08:07	17°♊19'41	
	9664 Jul 02 16:24	0°♋	
	9664 Aug 09 23:08	0°♌	
asc. node	9664 Aug 22 13:17	9°♌52'56	
	9664 Sep 17 08:34	0°♍	
	9664 Oct 26 19:34	0°♎	
	9664 Dec 07 10:55	0°♏	
	9665 Jan 22 02:01	0°♐	
	9665 Mar 19 03:13	0°♑	
retrograde	9665 May 06 16:28	11°♑57'41	
min. Earth dist.	9665 Jun 14 03:23	2°♑52'42	0.66740 AU
opposition	9665 Jun 16 07:05	2°♑01'16	1°21'50
greatest brilliancy	9665 Jun 16 04:51	2°♑03'29	-1.4m
	9665 Jun 21 10:35	30°℞♐	
desc. node	9665 Jul 25 13:02	22°♐31'43	
direct	9665 Jul 26 11:19	22°♐31'24	
	9665 Sep 03 10:15	0°♑	
	9665 Nov 06 23:59	0°♒	
	9665 Dec 27 19:21	0°♓	
	9666 Feb 11 14:33	0°♈	
	9666 Mar 26 02:01	0°♉	
evening set	9666 Apr 18 10:41	17°♉18'16	
	9666 May 05 04:10	0°♊	
max. Earth dist.	9666 May 18 03:07	9°♊58'44	2.37740 AU
	9666 Jun 12 17:49	0°♋	
conjunction	9666 Jun 21 00:51	6°♋32'27	-0°13'59
minimum elong	9666 Jun 21 02:18	6°♋35'19	0°14'19
behind sun begin	9666 Jun 20 12:19	6°♋07'44	
behind sun end	9666 Jun 21 16:16	7°♋02'55	
asc. node	9666 Jul 10 09:21	21°♋51'34	
	9666 Jul 20 16:03	0°♌	
	9666 Aug 27 20:15	0°♍	
morning rise	9666 Sep 02 09:20	4°♍18'06	
	9666 Oct 06 03:02	0°♎	
	9666 Nov 16 07:21	0°♏	
	9666 Dec 30 04:19	0°♐	
	9667 Feb 16 00:54	0°♑	
	9667 Apr 13 23:11	0°♒	
retrograde	9667 Jun 09 20:22	14°♒49'08	
desc. node	9667 Jun 12 12:56	14°♒46'25	
opposition	9667 Jul 20 00:47	5°♒19'31	-1°16'54
greatest brilliancy	9667 Jul 20 01:58	5°♒18'21	-1.3m
min. Earth dist.	9667 Jul 21 16:05	4°♒40'48	0.67899 AU
	9667 Aug 03 07:52	30°℞♑	
direct	9667 Aug 30 13:26	25°♑20'38	
	9667 Sep 29 04:32	0°♒	
	9667 Dec 04 08:12	0°♓	
	9668 Jan 21 22:01	0°♈	
	9668 Mar 05 02:46	0°♉	
	9668 Apr 14 06:40	0°♊	
	9668 May 22 18:01	0°♋	
asc. node	9668 May 27 09:46	3°♋40'44	
evening set	9668 Jun 26 09:42	27°♋27'01	
	9668 Jun 29 15:00	0°♌	
	9668 Aug 06 20:59	0°♍	
conjunction	9668 Sep 04 14:53	21°♍58'16	0°58'30
minimum elong	9668 Sep 04 12:16	21°♍53'22	0°58'23
	9668 Sep 15 08:15	0°♎	
max. Earth dist.	9668 Oct 22 23:59	27°♎23'44	2.46534 AU
	9668 Oct 26 16:08	0°♏	
morning rise	9668 Nov 05 21:15	7°♏10'38	
	9668 Dec 09 06:48	0°♐	
	9669 Jan 24 11:44	0°♑	
	9669 Mar 15 01:13	0°♒	
desc. node	9669 Apr 29 09:31	24°♒33'06	
	9669 May 10 18:25	0°♓	
retrograde	9669 Jul 16 04:44	18°♓43'16	
opposition	9669 Aug 23 16:22	10°♓03'36	-3°45'50
greatest brilliancy	9669 Aug 24 08:16	9°♓48'19	-1.5m
min. Earth dist.	9669 Aug 29 02:16	7°♓59'02	0.62435 AU
direct	9669 Oct 03 22:12	0°♓06'15	
	9669 Dec 25 23:42	0°♈	
	9670 Feb 10 14:18	0°♉	
	9670 Mar 23 19:49	0°♊	
asc. node	9670 Apr 14 11:29	16°♊33'15	
	9670 May 01 18:12	0°♋	
	9670 Jun 08 23:39	0°♌	
	9670 Jul 17 15:47	0°♍	
	9670 Aug 26 15:27	0°♎	
evening set	9670 Sep 05 00:21	6°♎50'39	
	9670 Oct 07 11:56	0°♏	
conjunction	9670 Oct 31 17:43	16°♏43'40	1°00'01
minimum elong	9670 Oct 31 19:01	16°♏45'52	1°00'15

	9670 Nov 20 10:16	0°♐	
max. Earth dist.	9670 Nov 27 05:47	4°♐31'53	2.58906 AU
morning rise	9670 Dec 21 00:32	20°♐07'37	
	9671 Jan 05 08:00	0°♑	
	9671 Feb 22 00:54	0°♒	
desc. node	9671 Mar 17 03:40	14°♒07'33	
	9671 Apr 12 18:48	0°♓	
	9671 Jun 05 14:17	0°♈	
retrograde	9671 Sep 01 13:03	29°♈34'17	
opposition	9671 Oct 06 16:14	22°♈21'57	-5°31'32
greatest brilliancy	9671 Oct 08 08:23	21°♈46'28	-2.1m
min. Earth dist.	9671 Oct 15 05:53	19°♈21'11	0.50831 AU
direct	9671 Nov 14 03:48	13°♈32'32	
	9672 Jan 07 16:49	0°♉	
	9672 Feb 25 03:55	0°♊	
asc. node	9672 Mar 01 12:58	3°♊45'04	
	9672 Apr 06 13:01	0°♋	
	9672 May 16 04:51	0°♌	
	9672 Jun 25 01:25	0°♍	
	9672 Aug 05 04:02	0°♎	
	9672 Sep 17 01:13	0°♏	
evening set	9672 Oct 24 08:13	25°♏05'37	
	9672 Oct 31 18:35	0°♐	
conjunction	9672 Dec 11 15:25	26°♐33'29	0°26'28
minimum elong	9672 Dec 11 16:16	26°♐34'51	0°26'49
	9672 Dec 17 00:08	0°♑	
max. Earth dist.	9672 Dec 21 04:35	2°♑40'47	2.66283 AU
morning rise	9673 Jan 25 14:57	25°♑12'26	
desc. node	9673 Jan 31 22:39	29°♑12'07	
	9673 Feb 02 04:58	0°♒	
	9673 Mar 21 21:33	0°♓	
	9673 May 08 22:59	0°♈	
	9673 Jun 26 21:03	0°♉	
	9673 Aug 17 16:48	0°♊	
retrograde	9673 Nov 09 15:37	29°♊40'22	
opposition	9673 Dec 09 20:09	24°♊35'49	-2°50'33
greatest brilliancy	9673 Dec 10 11:52	24°♊24'56	-2.9m
min. Earth dist.	9673 Dec 14 13:33	23°♊17'42	0.37998 AU
direct	9674 Jan 10 02:44	18°♊59'47	
asc. node	9674 Jan 17 15:22	19°♊23'18	
	9674 Feb 21 19:24	0°♋	
	9674 Apr 14 23:17	0°♌	
	9674 May 29 20:59	0°♍	
	9674 Jul 13 03:47	0°♎	
	9674 Aug 27 07:05	0°♏	
	9674 Oct 12 14:01	0°♐	
	9674 Nov 28 17:19	0°♑	
evening set	9674 Dec 02 18:50	2°♑34'20	
desc. node	9674 Dec 19 19:44	13°♑21'15	
max. Earth dist.	9675 Jan 12 20:14	28°♑34'10	2.68162 AU
	9675 Jan 15 02:19	0°♒	
conjunction	9675 Jan 16 15:57	0°♒59'44	-0°14'34
minimum elong	9675 Jan 16 15:31	0°♒59'04	0°14'13
behind sun begin	9675 Jan 16 07:05	0°♒45'41	
behind sun end	9675 Jan 16 23:57	1°♒12'27	
morning rise	9675 Mar 01 02:56	28°♒45'21	
	9675 Mar 03 01:20	0°♓	
	9675 Apr 18 03:36	0°♈	
	9675 Jun 02 04:33	0°♉	
	9675 Jul 16 04:30	0°♊	
	9675 Aug 28 10:35	0°♋	
	9675 Oct 10 22:29	0°♌	
	9675 Nov 27 11:10	0°♍	
asc. node	9675 Dec 05 15:57	4°♍26'47	
retrograde	9676 Jan 26 03:38	20°♍06'09	
min. Earth dist.	9676 Feb 21 01:58	15°♍34'48	0.40933 AU
greatest brilliancy	9676 Feb 27 07:46	13°♍37'35	-2.7m
opposition	9676 Feb 28 18:48	13°♍09'51	5°08'36
direct	9676 Mar 30 14:48	7°♍23'51	
	9676 Jun 08 17:36	0°♎	
	9676 Aug 01 12:57	0°♏	
	9676 Sep 20 16:34	0°♐	
desc. node	9676 Nov 05 20:02	28°♐10'58	
	9676 Nov 08 18:51	0°♑	
	9676 Dec 26 23:27	0°♒	
evening set	9677 Jan 06 15:06	6°♒43'57	
max. Earth dist.	9677 Feb 03 12:07	24°♒34'17	2.64533 AU
	9677 Feb 11 21:06	0°♓	
conjunction	9677 Feb 20 05:48	5°♓27'28	-0°50'25
minimum elong	9677 Feb 20 04:41	5°♓25'37	0°50'14
	9677 Mar 29 03:13	0°♈	
morning rise	9677 Apr 06 11:36	5°♈40'00	
	9677 May 11 14:41	0°♉	
	9677 Jun 22 09:35	0°♊	
	9677 Aug 01 19:29	0°♋	
	9677 Sep 10 10:08	0°♌	
	9677 Oct 20 04:46	0°♍	
asc. node	9677 Oct 22 11:49	1°♍42'15	
	9677 Nov 30 21:07	0°♎	
	9678 Jan 18 02:21	0°♏	
retrograde	9678 Mar 17 00:59	18°♏19'07	
min. Earth dist.	9678 Apr 17 12:38	11°♏34'32	0.54512 AU
opposition	9678 Apr 24 18:08	8°♏48'26	4°55'08
greatest brilliancy	9678 Apr 23 12:56	9°♏16'26	-1.9m
direct	9678 May 30 11:51	0°♏51'41	
	9678 Aug 25 07:23	0°♐	
desc. node	9678 Sep 23 23:05	15°♐52'16	
	9678 Oct 18 20:52	0°♑	
	9678 Dec 08 02:18	0°♒	
	9679 Jan 24 14:21	0°♓	
evening set	9679 Feb 12 18:58	12°♓35'29	
max. Earth dist.	9679 Mar 02 11:49	24°♓27'32	2.55676 AU
	9679 Mar 10 15:05	0°♈	
conjunction	9679 Apr 01 14:41	15°♈14'36	-1°08'01
minimum elong	9679 Apr 01 14:33	15°♈14'23	1°08'05
	9679 Apr 22 08:35	0°♉	
morning rise	9679 May 24 02:10	23°♉15'04	
	9679 Jun 02 02:35	0°♊	
	9679 Jul 11 09:30	0°♋	
	9679 Aug 18 21:43	0°♌	
asc. node	9679 Sep 09 07:59	16°♌43'13	
	9679 Sep 26 11:25	0°♍	
	9679 Nov 05 03:29	0°♎	
	9679 Dec 17 07:23	0°♏	
	9680 Feb 02 19:47	0°♐	
retrograde	9680 Apr 23 05:26	28°♐39'08	
min. Earth dist.	9680 May 30 00:38	20°♐06'04	0.64514 AU
opposition	9680 Jun 02 15:50	18°♐39'25	2°24'15
greatest brilliancy	9680 Jun 02 08:48	18°♐46'24	-1.4m
direct	9680 Jul 11 21:57	9°♐28'06	
desc. node	9680 Aug 11 01:50	14°♐12'37	
	9680 Sep 20 12:22	0°♑	
	9680 Nov 16 02:14	0°♒	
	9681 Jan 04 10:34	0°♓	
	9681 Feb 18 20:38	0°♈	
evening set	9681 Mar 28 03:21	26°♈14'06	
	9681 Apr 02 07:58	0°♉	
max. Earth dist.	9681 Apr 12 04:42	7°♉13'29	2.42714 AU
	9681 May 12 13:14	0°♊	

conjunction	9681 May 24 12:26	9°♊10'36	-0°42'16
minimum elong	9681 May 24 15:07	9°♊15'47	0°42'34
	9681 Jun 20 06:27	0°♋	
asc. node	9681 Jul 27 04:24	29°♋06'59	
	9681 Jul 28 07:15	0°♌	
morning rise	9681 Aug 01 11:37	3°♌18'09	
	9681 Sep 04 12:19	0°♍	
	9681 Oct 13 18:52	0°♎	
	9681 Nov 24 00:15	0°♏	
	9682 Jan 07 05:31	0°♐	
	9682 Feb 25 14:50	0°♑	
	9682 May 06 23:34	0°♒	
retrograde	9682 May 27 11:22	2°♒23'39	
	9682 Jun 15 16:56	30°℞♑	
desc. node	9682 Jun 29 02:25	25°♑44'39	
opposition	9682 Jul 06 23:32	22°♑40'50	-0°16'19
greatest brilliancy	9682 Jul 06 23:29	22°♑40'52	-1.3m
min. Earth dist.	9682 Jul 07 03:14	22°♑37'09	0.68230 AU
direct	9682 Aug 17 03:51	12°♑50'15	
	9682 Oct 18 21:13	0°♒	
	9682 Dec 13 21:26	0°♓	
	9683 Jan 29 23:39	0°♈	
	9683 Mar 13 19:03	0°♉	
	9683 Apr 22 21:12	0°♊	
evening set	9683 May 28 15:16	27°♊50'56	
	9683 May 31 08:44	0°♋	
asc. node	9683 Jun 14 01:41	10°♋50'31	
	9683 Jul 08 05:34	0°♌	
conjunction	9683 Aug 07 18:24	24°♌02'25	0°37'18
minimum elong	9683 Aug 07 14:57	23°♌55'42	0°37'01
	9683 Aug 15 10:03	0°♍	
	9683 Sep 23 18:25	0°♎	
max. Earth dist.	9683 Sep 30 07:24	4°♎51'54	2.40897 AU
morning rise	9683 Oct 15 11:13	15°♎59'43	
	9683 Nov 03 23:19	0°♏	
	9683 Dec 17 13:33	0°♐	
	9684 Feb 02 03:14	0°♑	
	9684 Mar 24 06:03	0°♒	
desc. node	9684 May 16 00:26	25°♒13'24	
	9684 May 29 21:51	0°♓	
retrograde	9684 Jun 30 22:22	5°♓17'54	
	9684 Jul 30 04:36	30°℞♒	
opposition	9684 Aug 09 06:05	26°♒15'25	-2°50'10
greatest brilliancy	9684 Aug 09 14:23	26°♒07'20	-1.4m
min. Earth dist.	9684 Aug 13 04:55	24°♒43'14	0.65356 AU
direct	9684 Sep 19 20:10	16°♒12'35	
	9684 Nov 12 04:30	0°♓	
	9685 Jan 05 23:05	0°♈	
	9685 Feb 19 14:40	0°♉	
	9685 Apr 01 05:46	0°♊	
asc. node	9685 May 01 02:28	23°♊05'45	
	9685 May 09 21:36	0°♋	
	9685 Jun 16 22:11	0°♌	
	9685 Jul 25 08:58	0°♍	
evening set	9685 Aug 11 00:20	12°♍42'51	
	9685 Sep 03 02:22	0°♎	
conjunction	9685 Oct 11 23:55	28°♎06'05	1°06'10
minimum elong	9685 Oct 12 00:23	28°♎06'55	1°06'19
	9685 Oct 14 16:35	0°♏	
max. Earth dist.	9685 Nov 15 10:55	21°♏56'10	2.54597 AU
	9685 Nov 27 10:12	0°♐	
morning rise	9685 Dec 04 22:29	5°♐00'21	
	9686 Jan 12 08:08	0°♑	
	9686 Mar 01 12:04	0°♒	
desc. node	9686 Apr 02 20:12	19°♒11'49	
	9686 Apr 21 20:16	0°♓	
	9686 Jun 21 05:50	0°♈	
retrograde	9686 Aug 12 05:09	12°♈28'11	
opposition	9686 Sep 17 22:02	4°♈35'15	-5°01'28
greatest brilliancy	9686 Sep 19 05:03	4°♈06'34	-1.8m
min. Earth dist.	9686 Sep 25 11:24	1°♈48'11	0.56013 AU
	9686 Sep 30 15:38	30°℞♓	
direct	9686 Oct 27 21:40	25°♓06'25	
	9686 Nov 25 08:46	0°♈	
	9687 Jan 23 20:17	0°♉	
	9687 Mar 08 12:33	0°♊	
asc. node	9687 Mar 19 05:23	7°♊52'54	
	9687 Apr 17 10:37	0°♋	
	9687 May 26 07:06	0°♌	
	9687 Jul 04 12:29	0°♍	
	9687 Aug 14 01:19	0°♎	
	9687 Sep 25 10:24	0°♏	
evening set	9687 Oct 07 14:19	8°♏21'43	
	9687 Nov 08 18:20	0°♐	
conjunction	9687 Nov 27 09:40	12°♐15'54	0°41'18
minimum elong	9687 Nov 27 10:55	12°♐17'57	0°41'37
max. Earth dist.	9687 Dec 13 02:37	22°♐28'15	2.64050 AU
	9687 Dec 24 19:09	0°♑	
morning rise	9688 Jan 12 21:38	12°♑11'55	
	9688 Feb 10 02:13	0°♒	
desc. node	9688 Feb 18 14:21	5°♒19'49	
	9688 Mar 29 08:21	0°♓	
	9688 May 17 20:10	0°♈	
	9688 Jul 09 08:11	0°♉	
	9688 Sep 17 01:09	0°♊	
retrograde	9688 Oct 09 20:51	2°♊57'27	
	9688 Oct 31 17:53	30°℞♉	
opposition	9688 Nov 10 20:29	27°♉05'00	-4°58'26
greatest brilliancy	9688 Nov 12 10:20	26°♉35'28	-2.6m
min. Earth dist.	9688 Nov 18 19:18	24°♉37'10	0.42287 AU
direct	9688 Dec 15 10:39	20°♉03'24	
	9689 Jan 24 09:27	0°♊	
asc. node	9689 Feb 03 06:34	4°♊45'27	
	9689 Mar 17 01:44	0°♋	
	9689 Apr 29 01:02	0°♌	
	9689 Jun 09 20:23	0°♍	
	9689 Jul 22 09:06	0°♎	
	9689 Sep 04 08:44	0°♏	
	9689 Oct 19 21:12	0°♐	
evening set	9689 Nov 18 03:59	18°♐52'43	
	9689 Dec 05 13:49	0°♑	
conjunction	9690 Jan 02 22:36	18°♑01'45	0°01'20
minimum elong	9690 Jan 02 22:40	18°♑01'52	0°01'42
behind sun begin	9690 Jan 02 04:14	17°♑32'37	
behind sun end	9690 Jan 03 17:07	18°♑31'06	
max. Earth dist.	9690 Jan 04 03:09	18°♑47'02	2.68098 AU
desc. node	9690 Jan 05 09:59	19°♑35'57	
	9690 Jan 21 19:32	0°♒	
morning rise	9690 Feb 15 14:49	15°♒45'09	
	9690 Mar 09 23:19	0°♓	
	9690 Apr 25 15:45	0°♈	
	9690 Jun 10 18:14	0°♉	
	9690 Jul 26 11:17	0°♊	
	9690 Sep 10 13:39	0°♋	
	9690 Oct 30 11:55	0°♌	
asc. node	9690 Dec 22 08:11	19°♌19'36	
retrograde	9690 Dec 30 02:17	19°♌44'27	
min. Earth dist.	9691 Jan 25 20:15	15°♌24'29	0.37243 AU
opposition	9691 Jan 30 01:41	14°♌14'14	2°53'43
greatest brilliancy	9691 Jan 29 12:35	14°♌23'19	-3.0m

direct	9691 Feb 28 08:07	9°♌15'52	
	9691 May 04 00:57	0°♍	
	9691 Jun 25 04:31	0°♎	
	9691 Aug 12 17:18	0°♏	
	9691 Sep 29 20:16	0°♐	
	9691 Nov 16 23:36	0°♑	
desc. node	9691 Nov 23 08:50	3°♑59'19	
evening set	9691 Dec 24 19:20	23°♑42'35	
	9692 Jan 03 18:27	0°♒	
max. Earth dist.	9692 Jan 26 13:30	14°♒29'49	2.66609 AU
conjunction	9692 Feb 07 03:55	21°♒56'25	-0°37'52
minimum elong	9692 Feb 07 02:56	21°♒54'50	0°37'36
	9692 Feb 19 15:14	0°♓	
morning rise	9692 Mar 22 05:38	20°♓43'12	
	9692 Apr 05 03:44	0°♈	
	9692 May 19 03:10	0°♉	
	9692 Jun 30 14:16	0°♊	
	9692 Aug 10 18:40	0°♋	
	9692 Sep 20 06:14	0°♌	
	9692 Oct 31 05:39	0°♍	
asc. node	9692 Nov 08 07:24	5°♍44'01	
	9692 Dec 14 15:19	0°♎	
retrograde	9693 Feb 27 11:10	28°♎52'11	
min. Earth dist.	9693 Mar 28 12:26	23°♎01'41	0.49209 AU
greatest brilliancy	9693 Apr 04 03:41	20°♎36'15	-2.2m
opposition	9693 Apr 05 17:51	20°♎01'13	5°34'41
direct	9693 May 09 15:03	12°♎48'44	
	9693 Jul 09 19:58	0°♏	
	9693 Sep 05 10:30	0°♐	
desc. node	9693 Oct 10 10:47	20°♐09'49	
	9693 Oct 27 01:18	0°♑	
	9693 Dec 15 06:37	0°♒	
evening set	9694 Jan 28 21:28	28°♒19'57	
	9694 Jan 31 11:06	0°♓	
max. Earth dist.	9694 Feb 19 04:18	12°♓17'03	2.59732 AU
conjunction	9694 Mar 15 22:14	28°♓54'07	-1°04'35
minimum elong	9694 Mar 15 21:25	28°♓52'44	1°04'32
	9694 Mar 17 12:55	0°♈	
	9694 Apr 29 12:19	0°♉	
morning rise	9694 May 03 14:54	2°♉56'26	
	9694 Jun 09 14:47	0°♊	
	9694 Jul 19 06:29	0°♋	
	9694 Aug 27 02:43	0°♌	
asc. node	9694 Sep 26 02:16	23°♌10'35	
	9694 Oct 04 23:54	0°♍	
	9694 Nov 14 02:03	0°♎	
	9694 Dec 27 06:42	0°♏	
	9695 Feb 17 06:03	0°♐	
retrograde	9695 Apr 10 04:38	14°♐20'57	
min. Earth dist.	9695 May 15 01:55	6°♐25'33	0.61276 AU
opposition	9695 May 20 04:34	4°♐24'29	3°26'11
greatest brilliancy	9695 May 19 14:16	4°♐38'36	-1.6m
	9695 Jun 01 03:41	30°℞♏	
direct	9695 Jun 27 06:35	25°♏37'07	
	9695 Jul 25 23:20	0°♐	
desc. node	9695 Aug 28 13:48	12°♐29'00	
	9695 Oct 03 06:29	0°♑	
	9695 Nov 25 08:12	0°♒	
	9696 Jan 12 18:14	0°♓	
	9696 Feb 26 23:05	0°♈	
evening set	9696 Mar 09 12:28	7°♈58'57	
max. Earth dist.	9696 Mar 23 10:58	17°♈46'36	2.48064 AU
	9696 Apr 09 11:54	0°♉	
conjunction	9696 May 01 02:28	15°♉52'42	-0°59'43
minimum elong	9696 May 01 04:14	15°♉55'59	0°59'57
	9696 May 19 21:23	0°♊	
	9696 Jun 27 19:02	0°♋	
morning rise	9696 Jul 01 20:07	3°♋09'47	
	9696 Aug 04 23:19	0°♌	
asc. node	9696 Aug 12 21:02	6°♌13'18	
greatest brilliancy	9696 Aug 20 20:14	12°♌29'00	1.2m
	9696 Sep 12 06:36	0°♍	
	9696 Oct 21 14:49	0°♎	
	9696 Dec 02 00:32	0°♏	
	9697 Jan 15 22:05	0°♐	
	9697 Mar 09 07:22	0°♑	
retrograde	9697 May 14 06:20	19°♑48'55	
opposition	9697 Jun 23 21:36	9°♑56'29	0°45'23
min. Earth dist.	9697 Jun 22 13:47	10°♑28'05	0.67546 AU
greatest brilliancy	9697 Jun 23 20:57	9°♑57'08	-1.3m
desc. node	9697 Jul 15 15:54	2°♑32'20	
direct	9697 Aug 03 12:00	0°♑18'11	
	9697 Oct 31 04:54	0°♒	
	9697 Dec 22 10:13	0°♓	
	9698 Feb 06 15:43	0°♈	
	9698 Mar 21 06:23	0°♉	
	9698 Apr 30 09:02	0°♊	
evening set	9698 May 01 20:52	1°♊08'40	
	9698 Jun 07 22:01	0°♋	
asc. node	9698 Jun 30 19:01	18°♋05'35	
conjunction	9698 Jul 07 21:12	23°♋42'57	0°05'12
minimum elong	9698 Jul 07 20:40	23°♋41'54	0°04'51
behind sun begin	9698 Jul 06 15:17	22°♋43'39	
behind sun end	9698 Jul 09 02:04	24°♋40'08	
	9698 Jul 15 19:33	0°♌	
max. Earth dist.	9698 Jul 22 22:32	5°♌38'17	2.36514 AU
	9698 Aug 22 23:13	0°♍	
morning rise	9698 Sep 19 01:41	20°♍50'08	
	9698 Oct 01 05:26	0°♎	
	9698 Nov 11 08:31	0°♏	
	9698 Dec 25 00:52	0°♐	
	9699 Feb 10 05:50	0°♑	
	9699 Apr 05 03:02	0°♒	
desc. node	9699 Jun 02 15:22	21°♒12'14	
retrograde	9699 Jun 17 16:34	22°♒30'10	
opposition	9699 Jul 27 15:10	13°♒09'15	-1°51'53
greatest brilliancy	9699 Jul 27 18:13	13°♒06'16	-1.3m
min. Earth dist.	9699 Jul 30 02:31	12°♒11'02	0.67266 AU
direct	9699 Sep 07 06:13	3°♒07'36	
	9699 Nov 27 03:28	0°♓	
	9700 Jan 16 06:34	0°♈	
	9700 Feb 28 21:57	0°♉	
	9700 Apr 10 05:42	0°♊	
asc. node	9700 May 18 18:01	29°♊58'57	
	9700 May 18 18:33	0°♋	
greatest brilliancy	9700 Jun 15 05:51	21°♋43'59	1.2m
	9700 Jun 25 16:36	0°♌	
evening set	9700 Jul 14 10:13	14°♌45'24	
	9700 Aug 02 23:50	0°♍	
	9700 Sep 11 12:22	0°♎	
conjunction	9700 Sep 20 03:17	6°♎22'30	1°04'27
minimum elong	9700 Sep 20 01:57	6°♎20'02	1°04'27
	9700 Oct 22 21:22	0°♏	
max. Earth dist.	9700 Nov 02 10:27	7°♏24'20	2.49554 AU
morning rise	9700 Nov 18 01:16	18°♏11'48	
	9700 Dec 05 11:35	0°♐	
	9701 Jan 20 12:04	0°♑	
	9701 Mar 10 09:22	0°♒	
desc. node	9701 Apr 20 11:17	23°♒14'24	

	9701 May 03 09:47	0°♓		
retrograde	9701 Jul 26 10:34	27°♓16'12		
opposition	9701 Sep 02 09:09	18°♓51'15	-4°15'54	
greatest brilliancy	9701 Sep 03 06:14	18°♓31'14	-1.6m	
min. Earth dist.	9701 Sep 08 14:41	16°♓29'31	0.60399 AU	
direct	9701 Oct 13 07:26	9°♓00'33		
	9701 Dec 18 10:21	0°♈		
	9702 Feb 05 07:06	0°♉		
	9702 Mar 19 03:49	0°♊		
asc. node	9702 Apr 05 19:39	13°♊22'00		
	9702 Apr 27 08:31	0°♋		
	9702 Jun 04 17:56	0°♌		
	9702 Jul 13 13:35	0°♍		
	9702 Aug 22 16:40	0°♎		
evening set	9702 Sep 18 15:25	19°♎25'04		
	9702 Oct 03 16:30	0°♏		
conjunction	9702 Nov 11 21:50	26°♏47'29	0°54'06	
minimum elong	9702 Nov 11 23:15	26°♏49'51	0°54'23	
	9702 Nov 16 17:06	0°♐		
max. Earth dist.	9702 Dec 04 07:49	11°♐38'43	2.60981 AU	
morning rise	9702 Dec 30 14:15	28°♐42'01		
	9703 Jan 01 14:49	0°♑		
	9703 Feb 18 02:35	0°♒		
desc. node	9703 Mar 08 05:33	11°♒12'18		
	9703 Apr 08 04:27	0°♓		
	9703 May 29 22:40	0°♈		
	9703 Jul 30 00:26	0°♉		
retrograde	9703 Sep 15 11:57	10°♉52'18		
opposition	9703 Oct 19 13:29	4°♉06'18	-5°35'00	
greatest brilliancy	9703 Oct 21 08:32	3°♉29'35	-2.2m	
min. Earth dist.	9703 Oct 28 08:19	1°♉07'20	0.47780 AU	
	9703 Oct 31 20:32	30°℞♈		
direct	9703 Nov 25 22:19	25°♈47'53		
	9703 Dec 21 06:36	0°♉		
	9704 Feb 17 15:09	0°♊		
asc. node	9704 Feb 21 23:12	2°♊50'32		
	9704 Mar 31 16:07	0°♋		
	9704 May 11 01:27	0°♌		
	9704 Jun 20 09:30	0°♍		
	9704 Jul 31 20:51	0°♎		
	9704 Sep 13 01:11	0°♏		
	9704 Oct 27 23:48	0°♐		
evening set	9704 Nov 03 17:43	4°♐24'54		
	9704 Dec 13 08:24	0°♑		
conjunction	9704 Dec 20 22:51	4°♑51'34	0°17'17	
minimum elong	9704 Dec 20 23:24	4°♑52'28	0°17'39	
max. Earth dist.	9704 Dec 27 09:06	8°♑57'30	2.67173 AU	
desc. node	9705 Jan 23 00:07	25°♑52'04		
	9705 Jan 29 12:45	0°♒		
morning rise	9705 Feb 03 07:35	3°♒01'38		
	9705 Mar 17 23:47	0°♓		
	9705 May 04 11:17	0°♈		
	9705 Jun 21 03:05	0°♉		
	9705 Aug 08 20:37	0°♊		
	9705 Oct 01 14:57	0°♋		
retrograde	9705 Nov 29 06:53	17°♋17'42		
opposition	9705 Dec 28 23:28	12°♋23'19	-0°51'45	
greatest brilliancy	9705 Dec 29 02:15	12°♋21'29	-3.1m	
min. Earth dist.	9705 Dec 30 17:30	11°♋55'22	0.36748 AU	
asc. node	9706 Jan 09 01:04	9°♋35'32		
direct	9706 Jan 27 22:29	7°♋19'49		
	9706 Apr 03 23:03	0°♌		
	9706 May 22 20:53	0°♍		
	9706 Jul 07 18:05	0°♎		
	9706 Aug 22 18:08	0°♏		
	9706 Oct 08 13:18	0°♐		
	9706 Nov 24 23:43	0°♑		
desc. node	9706 Dec 10 21:20	10°♑01'41		
evening set	9706 Dec 11 21:33	10°♑39'52		
	9707 Jan 11 11:35	0°♒		
max. Earth dist.	9707 Jan 18 21:37	4°♒42'31	2.67847 AU	
conjunction	9707 Jan 25 11:09	8°♒53'07	-0°23'32	
minimum elong	9707 Jan 25 10:29	8°♒52'03	0°23'14	
	9707 Feb 27 09:37	0°♓		
morning rise	9707 Mar 09 23:51	6°♓51'33		
	9707 Apr 14 06:40	0°♈		
	9707 May 28 21:28	0°♉		
	9707 Jul 11 06:11	0°♊		
	9707 Aug 22 13:58	0°♋		
	9707 Oct 03 14:05	0°♌		
	9707 Nov 16 06:56	0°♍		
asc. node	9707 Nov 26 23:50	6°♍48'38		
	9708 Jan 11 01:42	0°♎		
retrograde	9708 Feb 09 04:40	5°♎41'04		
min. Earth dist.	9708 Mar 07 00:19	0°♎44'35	0.43744 AU	
	9708 Mar 09 06:24	30°℞♍		
greatest brilliancy	9708 Mar 13 16:12	28°♍30'25	-2.5m	
opposition	9708 Mar 15 08:26	27°♍56'19	5°38'00	
direct	9708 Apr 16 06:19	21°♍37'41		
	9708 May 25 12:36	0°♎		
	9708 Jul 25 23:57	0°♏		
	9708 Sep 15 22:10	0°♐		
desc. node	9708 Oct 27 23:05	25°♐15'24		
	9708 Nov 04 18:02	0°♑		
	9708 Dec 23 06:20	0°♒		
evening set	9709 Jan 15 15:01	14°♒46'44		
	9709 Feb 08 06:18	0°♓		
max. Earth dist.	9709 Feb 10 01:13	1°♓09'50	2.63049 AU	
conjunction	9709 Mar 01 13:56	13°♓59'31	-0°56'38	
minimum elong	9709 Mar 01 12:51	13°♓57'42	0°56'30	
	9709 Mar 25 11:12	0°♈		
morning rise	9709 Apr 16 18:45	15°♈17'47		
	9709 May 07 18:31	0°♉		
	9709 Jun 18 07:34	0°♊		
	9709 Jul 28 10:27	0°♋		
	9709 Sep 05 17:20	0°♌		
asc. node	9709 Oct 13 20:40	29°♌04'50		
	9709 Oct 15 01:55	0°♍		
	9709 Nov 24 22:30	0°♎		
	9710 Jan 09 07:52	0°♏		
retrograde	9710 Mar 27 04:52	28°♏37'31		
min. Earth dist.	9710 Apr 28 22:51	21°♏25'59	0.57151 AU	
greatest brilliancy	9710 May 04 12:04	19°♏16'38	-1.8m	
opposition	9710 May 05 11:37	18°♏53'44	4°25'02	
direct	9710 Jun 11 03:46	10°♏36'37		
	9710 Aug 17 11:44	0°♐		
desc. node	9710 Sep 15 02:29	14°♐13'46		
	9710 Oct 13 23:44	0°♑		
	9710 Dec 04 01:21	0°♒		
	9711 Jan 20 20:37	0°♓		
evening set	9711 Feb 22 18:21	21°♓43'05		
	9711 Mar 06 23:04	0°♈		
max. Earth dist.	9711 Mar 10 17:37	2°♈35'18	2.53116 AU	
conjunction	9711 Apr 12 23:14	25°♈55'32	-1°07'16	
minimum elong	9711 Apr 12 23:42	25°♈56'22	1°07'25	
	9711 Apr 18 15:12	0°♉		
	9711 May 29 06:34	0°♊		
morning rise	9711 Jun 07 06:04	6°♊47'52		
	9711 Jul 07 10:21	0°♋		

	9711 Aug 14 19:36	0°♌	
asc. node	9711 Aug 31 15:40	13°♌11'00	
	9711 Sep 22 06:30	0°♍	
	9711 Oct 31 18:19	0°♎	
	9711 Dec 12 12:27	0°♏	
	9712 Jan 27 15:58	0°♐	
	9712 Mar 27 19:46	0°♑	
retrograde	9712 May 01 23:13	6°♑50'04	
	9712 Jun 03 13:00	30°℞♐	
min. Earth dist.	9712 Jun 08 17:20	27°♐58'44	0.65864 AU
opposition	9712 Jun 11 12:49	26°♐51'39	1°47'48
greatest brilliancy	9712 Jun 11 08:50	26°♐55'36	-1.4m
direct	9712 Jul 21 07:57	17°♐29'24	
desc. node	9712 Aug 02 04:52	18°♐18'13	
	9712 Sep 11 16:46	0°♑	
	9712 Nov 11 03:46	0°♒	
	9712 Dec 31 08:37	0°♓	
	9713 Feb 15 01:19	0°♈	
	9713 Mar 29 13:53	0°♉	
evening set	9713 Apr 09 19:18	8°♉13'48	
max. Earth dist.	9713 Apr 29 05:32	22°♉45'17	2.39792 AU
	9713 May 08 18:23	0°♊	
conjunction	9713 Jun 09 12:43	24°♊35'41	-0°27'21
minimum elong	9713 Jun 09 15:05	24°♊40'19	0°27'41
	9713 Jun 16 10:01	0°♋	
asc. node	9713 Jul 18 11:10	25°♋18'42	
	9713 Jul 24 09:22	0°♌	
morning rise	9713 Aug 20 14:09	21°♌25'58	
	9713 Aug 31 13:32	0°♍	
	9713 Oct 09 19:10	0°♎	
	9713 Nov 19 22:19	0°♏	
	9714 Jan 02 20:25	0°♐	
	9714 Feb 20 03:19	0°♑	
	9714 Apr 21 00:49	0°♒	
retrograde	9714 Jun 05 01:38	9°♒59'55	
desc. node	9714 Jun 20 05:23	8°♒31'34	
opposition	9714 Jul 15 10:37	0°♒24'02	-0°51'59
greatest brilliancy	9714 Jul 15 10:56	0°♒23'43	-1.3m
min. Earth dist.	9714 Jul 16 10:08	0°♒00'49	0.68180 AU
	9714 Jul 16 10:58	30°℞♑	
direct	9714 Aug 25 20:37	20°♑28'21	
	9714 Oct 09 02:49	0°♒	
	9714 Dec 08 18:29	0°♓	
	9715 Jan 25 17:54	0°♈	
	9715 Mar 09 19:49	0°♉	
	9715 Apr 18 23:59	0°♊	
	9715 May 27 11:45	0°♋	
asc. node	9715 Jun 05 10:54	7°♋05'17	
evening set	9715 Jun 15 02:53	14°♋44'53	
	9715 Jul 04 08:25	0°♌	
	9715 Aug 11 13:05	0°♍	
conjunction	9715 Aug 25 10:44	10°♍43'42	0°51'04
minimum elong	9715 Aug 25 07:23	10°♍37'16	0°50'54
	9715 Sep 19 21:50	0°♎	
max. Earth dist.	9715 Oct 16 04:43	19°♎18'50	2.44013 AU
morning rise	9715 Oct 29 14:38	28°♎55'40	
	9715 Oct 31 02:53	0°♏	
	9715 Dec 13 15:39	0°♐	
	9716 Jan 28 22:06	0°♑	
	9716 Mar 18 22:57	0°♒	
desc. node	9716 May 07 02:44	25°♒33'27	
	9716 May 17 05:57	0°♓	
retrograde	9716 Jul 10 11:03	13°♓21'59	
opposition	9716 Aug 18 08:55	4°♓31'32	-3°22'54
greatest brilliancy	9716 Aug 18 21:15	4°♓19'37	-1.4m
min. Earth dist.	9716 Aug 23 03:38	2°♓40'53	0.63874 AU
	9716 Aug 30 10:19	30°℞♒	
direct	9716 Sep 28 19:57	24°♒30'50	
	9716 Oct 30 08:03	0°♓	
	9716 Dec 31 05:04	0°♈	
	9717 Feb 14 22:29	0°♉	
	9717 Mar 27 22:28	0°♊	
asc. node	9717 Apr 22 12:27	19°♊39'30	
	9717 May 05 18:12	0°♋	
	9717 Jun 12 21:08	0°♌	
	9717 Jul 21 10:06	0°♍	
evening set	9717 Aug 26 13:32	27°♍17'09	
	9717 Aug 30 05:39	0°♎	
	9717 Oct 10 21:46	0°♏	
conjunction	9717 Oct 24 12:27	9°♏29'06	1°03'20
minimum elong	9717 Oct 24 13:31	9°♏30'56	1°03'34
max. Earth dist.	9717 Nov 23 10:01	29°♏49'14	2.57065 AU
	9717 Nov 23 16:28	0°♐	
morning rise	9717 Dec 15 07:03	14°♐18'09	
	9718 Jan 08 12:45	0°♑	
	9718 Feb 25 08:40	0°♒	
desc. node	9718 Mar 24 20:46	16°♒38'21	
	9718 Apr 16 15:44	0°♓	
	9718 Jun 11 11:06	0°♈	
retrograde	9718 Aug 24 08:08	22°♈22'57	
opposition	9718 Sep 29 05:17	14°♈51'27	-5°21'03
greatest brilliancy	9718 Sep 30 17:51	14°♈18'23	-1.9m
min. Earth dist.	9718 Oct 07 09:50	11°♈54'29	0.53229 AU
direct	9718 Nov 07 11:28	5°♈41'43	
	9719 Jan 15 21:22	0°♉	
	9719 Mar 02 17:50	0°♊	
asc. node	9719 Mar 10 14:07	5°♊37'19	
	9719 Apr 12 09:34	0°♋	
	9719 May 21 15:26	0°♌	
	9719 Jun 30 03:56	0°♍	
	9719 Aug 09 22:50	0°♎	
	9719 Sep 21 13:00	0°♏	
evening set	9719 Oct 18 21:40	18°♏35'37	
	9719 Nov 05 00:46	0°♐	
conjunction	9719 Dec 07 05:15	21°♐02'19	0°32'49
minimum elong	9719 Dec 07 06:17	21°♐04'00	0°33'09
max. Earth dist.	9719 Dec 19 12:22	28°♐57'48	2.65382 AU
	9719 Dec 21 03:07	0°♑	
morning rise	9720 Jan 21 19:22	20°♑11'20	
	9720 Feb 06 08:03	0°♒	
desc. node	9720 Feb 09 15:13	2°♒04'41	
	9720 Mar 25 05:49	0°♓	
	9720 May 12 20:27	0°♈	
	9720 Jul 02 00:40	0°♉	
	9720 Aug 26 18:35	0°♊	
retrograde	9720 Oct 27 13:21	17°♊49'11	
opposition	9720 Nov 27 12:18	12°♊25'42	-3°59'13
greatest brilliancy	9720 Nov 28 15:22	12°♊05'56	-2.8m
min. Earth dist.	9720 Dec 04 01:35	10°♊31'46	0.39668 AU
direct	9720 Dec 30 05:33	6°♊12'57	
asc. node	9721 Jan 25 16:26	10°♊49'41	
	9721 Mar 06 15:52	0°♋	
	9721 Apr 22 00:22	0°♌	
	9721 Jun 04 04:52	0°♍	
	9721 Jul 17 13:24	0°♎	
	9721 Aug 31 02:03	0°♏	
	9721 Oct 15 23:21	0°♐	
evening set	9721 Nov 27 14:18	27°♐16'38	
	9721 Dec 01 21:08	0°♑	
desc. node	9721 Dec 27 12:06	16°♑15'18	

max. Earth dist.	9722 Jan 10 03:50	24°♉54'44	2.68237 AU
	9722 Jan 11 19:28	25°♉57'35	-0°08'04
conjunction	9722 Jan 11 19:14	25°♉57'13	0°07'44
minimum elong	9722 Jan 11 02:52	25°♉31'17	
behind sun begin	9722 Jan 12 11:36	26°♉23'10	
behind sun end	9722 Jan 18 04:18	0°♒	
	9722 Feb 24 07:30	23°♒38'48	
morning rise	9722 Mar 06 05:30	0°♓	
	9722 Apr 21 14:05	0°♈	
	9722 Jun 06 01:53	0°♉	
	9722 Jul 20 18:27	0°♊	
	9722 Sep 03 01:04	0°♋	
	9722 Oct 18 09:39	0°♌	
	9722 Dec 12 02:53	0°♍	
asc. node	9722 Dec 13 17:46	0°♍38'42	
retrograde	9723 Jan 15 23:41	7°♍44'50	
min. Earth dist.	9723 Feb 10 19:11	3°♍25'24	0.38987 AU
greatest brilliancy	9723 Feb 16 05:02	1°♍49'40	-2.8m
opposition	9723 Feb 17 07:59	1°♍29'37	4°25'07
	9723 Feb 22 11:34	30°℞♌	
direct	9723 Mar 19 07:43	26°♌08'26	
	9723 Apr 13 12:17	0°♍	
	9723 Jun 17 09:03	0°♎	
	9723 Aug 07 07:38	0°♏	
	9723 Sep 25 11:03	0°♐	
	9723 Nov 13 02:26	0°♑	
desc. node	9723 Nov 14 11:44	0°♑51'37	
	9723 Dec 31 02:43	0°♒	
evening set	9724 Jan 02 16:44	1°♒37'52	
max. Earth dist.	9724 Feb 01 17:48	20°♒46'22	2.65559 AU
	9724 Feb 16 03:18	0°♓04'25	-0°45'28
conjunction	9724 Feb 16 02:13	0°♓02'40	0°45'15
minimum elong	9724 Feb 16 00:35	0°♓	
morning rise	9724 Mar 31 18:44	29°♓33'55	
	9724 Apr 01 10:14	0°♈	
	9724 May 15 03:33	0°♉	
	9724 Jun 26 05:59	0°♊	
	9724 Aug 05 23:58	0°♋	
	9724 Sep 14 22:52	0°♌	
	9724 Oct 25 03:35	0°♍	
asc. node	9724 Oct 30 13:55	3°♍58'30	
	9724 Dec 06 15:02	0°♎	
	9725 Jan 27 13:13	0°♏	
retrograde	9725 Mar 10 16:49	10°♏44'17	
min. Earth dist.	9725 Apr 10 02:25	4°♏23'37	0.52212 AU
greatest brilliancy	9725 Apr 16 11:05	2°♏00'12	-2.0m
opposition	9725 Apr 17 20:34	1°♏28'39	5°15'08
	9725 Apr 21 20:37	30°℞♎	
direct	9725 May 22 19:48	23°♎50'23	
	9725 Jun 25 17:59	0°♏	
	9725 Aug 30 11:21	0°♐	
desc. node	9725 Oct 01 14:29	17°♐49'42	
	9725 Oct 22 14:59	0°♑	
	9725 Dec 11 09:55	0°♒	
	9726 Jan 27 19:34	0°♓	
evening set	9726 Feb 07 06:19	6°♓48'58	
max. Earth dist.	9726 Feb 26 10:22	19°♓31'43	2.57586 AU
	9726 Mar 13 21:58	0°♈	
	9726 Mar 26 04:16	8°♈25'43	-1°07'15
conjunction	9726 Mar 26 03:48	8°♈24'54	1°07'16
minimum elong	9726 Apr 25 19:07	0°♉	
morning rise	9726 May 15 18:58	14°♉29'27	
	9726 Jun 05 17:40	0°♊	
	9726 Jul 15 04:52	0°♋	
	9726 Aug 22 20:23	0°♌	
asc. node	9726 Sep 17 09:46	19°♌52'26	
	9726 Sep 30 12:38	0°♍	
	9726 Nov 09 07:20	0°♎	
	9726 Dec 21 17:49	0°♏	
	9727 Feb 08 11:00	0°♐	
retrograde	9727 Apr 19 07:36	23°♐08'56	
min. Earth dist.	9727 May 25 07:23	14°♐51'44	0.63198 AU
opposition	9727 May 29 14:17	13°♐09'45	2°50'22
greatest brilliancy	9727 May 29 04:26	13°♐19'31	-1.5m
direct	9727 Jul 07 08:40	4°♐08'15	
desc. node	9727 Aug 19 17:26	13°♐13'49	
	9727 Sep 26 22:03	0°♑	
	9727 Nov 20 20:58	0°♒	
	9728 Jan 08 20:40	0°♓	
	9728 Feb 23 05:57	0°♈	
evening set	9728 Mar 20 18:29	18°♈29'20	
max. Earth dist.	9728 Apr 03 14:39	28°♈24'47	2.45134 AU
	9728 Apr 05 19:13	0°♉	
	9728 May 14 19:24	28°♉59'15	-0°51'08
conjunction	9728 May 14 21:50	29°♉03'52	0°51'25
minimum elong	9728 May 16 03:24	0°♊	
	9728 Jun 23 23:10	0°♋	
morning rise	9728 Jul 19 15:04	20°♋11'10	
	9728 Aug 01 01:27	0°♌	
asc. node	9728 Aug 04 06:18	2°♌31'36	
	9728 Sep 08 06:56	0°♍	
	9728 Oct 17 13:02	0°♎	
	9728 Nov 27 18:12	0°♏	
	9729 Jan 11 03:10	0°♐	
	9729 Mar 02 08:43	0°♑	
retrograde	9729 May 22 19:39	27°♑32'53	
opposition	9729 Jul 02 10:12	17°♑45'23	0°09'02
greatest brilliancy	9729 Jul 02 10:15	17°♑45'20	-1.3m
min. Earth dist.	9729 Jul 01 22:16	17°♑57'13	0.68056 AU
desc. node	9729 Jul 06 18:23	16°♑02'47	
direct	9729 Aug 12 09:09	7°♑59'41	
	9729 Oct 24 13:59	0°♒	
	9729 Dec 17 20:29	0°♓	
	9730 Feb 02 15:07	0°♈	
	9730 Mar 17 09:45	0°♉	
	9730 Apr 26 13:11	0°♊	
evening set	9730 May 17 10:54	16°♊10'10	
	9730 Jun 04 01:57	0°♋	
asc. node	9730 Jun 22 03:17	14°♋16'55	
	9730 Jul 11 23:02	0°♌	
	9730 Jul 26 06:40	11°♌19'14	0°24'15
conjunction	9730 Jul 26 04:05	11°♌14'09	0°23'55
minimum elong	9730 Aug 19 02:39	0°♍	
	9730 Sep 13 17:55	19°♍43'12	2.38531 AU
max. Earth dist.	9730 Sep 27 09:03	0°♎	
	9730 Oct 05 11:20	6°♎01'56	
morning rise	9730 Nov 07 11:29	0°♏	
	9730 Dec 21 00:40	0°♐	
	9731 Feb 05 17:45	0°♑	
	9731 Mar 29 16:21	0°♒	
	9731 May 24 16:55	24°♒38'34	
desc. node	9731 Jun 20 00:29	0°♓	
	9731 Jun 26 16:55	0°♓15'59	
retrograde	9731 Jul 03 05:44	30°℞♒	
	9731 Aug 05 08:30	21°♒04'46	-2°26'13
opposition	9731 Aug 05 14:14	20°♒59'11	-1.4m
greatest brilliancy	9731 Aug 08 15:46	19°♒47'26	0.66343 AU
min. Earth dist.	9731 Sep 16 00:25	11°♒01'42	
direct	9731 Nov 19 20:32	0°♓	

	9732 Jan 11 09:02	0°♈	
	9732 Feb 24 14:53	0°♉	
	9732 Apr 05 03:37	0°♊	
asc. node	9732 May 09 03:03	26°♊20'54	
	9732 May 13 18:30	0°♋	
	9732 Jun 20 17:38	0°♌	
	9732 Jul 29 02:05	0°♍	
evening set	9732 Jul 30 21:18	1°♍23'22	
	9732 Sep 06 16:14	0°♎	
conjunction	9732 Oct 03 11:46	19°♎35'04	1°06'37
minimum elong	9732 Oct 03 11:35	19°♎34'44	1°06'42
	9732 Oct 18 02:37	0°♏	
max. Earth dist.	9732 Nov 10 17:33	16°♏26'31	2.52423 AU
morning rise	9732 Nov 28 11:33	28°♏29'50	
	9732 Nov 30 17:16	0°♐	
	9733 Jan 15 14:29	0°♑	
	9733 Mar 04 23:31	0°♒	
desc. node	9733 Apr 10 12:52	21°♒20'55	
	9733 Apr 26 04:38	0°♓	
	9733 Jul 01 05:08	0°♈	
retrograde	9733 Aug 05 06:16	6°♈14'15	
	9733 Sep 06 09:31	30°℞♓	
opposition	9733 Sep 11 13:48	28°♓06'10	-4°43'17
greatest brilliancy	9733 Sep 12 16:28	27°♓41'12	-1.7m
min. Earth dist.	9733 Sep 18 13:52	25°♓29'09	0.58089 AU
direct	9733 Oct 22 01:39	18°♓25'46	
	9733 Dec 07 05:20	0°♈	
	9734 Jan 29 10:05	0°♉	
	9734 Mar 13 05:35	0°♊	
asc. node	9734 Mar 27 06:01	10°♊27'18	
	9734 Apr 21 19:44	0°♋	
	9734 May 30 10:32	0°♌	
	9734 Jul 08 10:26	0°♍	
	9734 Aug 17 17:31	0°♎	
	9734 Sep 28 20:49	0°♏	
evening set	9734 Sep 30 06:17	0°♏58'08	
	9734 Nov 12 00:08	0°♐	
conjunction	9734 Nov 21 11:30	6°♐16'43	0°46'58
minimum elong	9734 Nov 21 12:52	6°♐18'59	0°47'18
max. Earth dist.	9734 Dec 10 03:26	18°♐30'11	2.62780 AU
	9734 Dec 27 22:17	0°♑	
morning rise	9735 Jan 07 20:47	7°♑00'07	
	9735 Feb 13 06:22	0°♒	
desc. node	9735 Feb 26 06:43	8°♒07'04	
	9735 Apr 02 19:41	0°♓	
	9735 May 23 02:52	0°♈	
	9735 Jul 17 02:47	0°♉	
retrograde	9735 Sep 29 19:41	23°♉20'13	
opposition	9735 Nov 01 17:19	17°♉03'17	-5°22'18
greatest brilliancy	9735 Nov 03 11:22	16°♉28'56	-2.4m
min. Earth dist.	9735 Nov 10 06:07	14°♉17'06	0.44681 AU
direct	9735 Dec 07 15:20	9°♉24'28	
	9736 Feb 06 13:04	0°♊	
asc. node	9736 Feb 12 07:44	3°♊22'00	
	9736 Mar 23 20:55	0°♋	
	9736 May 04 10:51	0°♌	
	9736 Jun 14 11:21	0°♍	
	9736 Jul 26 10:39	0°♎	
	9736 Sep 07 23:42	0°♏	
	9736 Oct 23 04:40	0°♐	
evening set	9736 Nov 12 15:51	13°♐17'06	
	9736 Dec 08 16:44	0°♑	
conjunction	9736 Dec 28 24:00	12°♑56'08	0°07'59
minimum elong	9736 Dec 29 00:16	12°♑56'33	0°08'20
behind sun begin	9736 Dec 28 08:04	12°♑30'50	
behind sun end	9736 Dec 29 16:27	13°♑22'16	
max. Earth dist.	9737 Jan 01 11:17	15°♑08'27	2.67788 AU
desc. node	9737 Jan 13 02:02	22°♑30'46	
	9737 Jan 24 21:23	0°♒	
morning rise	9737 Feb 10 22:10	10°♒47'46	
	9737 Mar 13 04:14	0°♓	
	9737 Apr 29 04:34	0°♈	
	9737 Jun 14 21:59	0°♉	
	9737 Jul 31 17:28	0°♊	
	9737 Sep 18 01:03	0°♋	
	9737 Nov 16 09:30	0°♌	
retrograde	9737 Dec 17 13:38	5°♌57'40	
asc. node	9737 Dec 30 09:13	4°♌53'42	
min. Earth dist.	9738 Jan 14 23:54	1°♌20'13	0.36554 AU
opposition	9738 Jan 16 17:08	0°♌52'37	1°21'18
greatest brilliancy	9738 Jan 16 13:48	0°♌54'51	-3.1m
	9738 Jan 20 00:27	30°℞♋	
direct	9738 Feb 14 23:18	26°♋00'58	
	9738 Mar 12 02:57	0°♌	
	9738 May 13 03:30	0°♍	
	9738 Jun 30 17:17	0°♎	
	9738 Aug 16 22:35	0°♏	
	9738 Oct 03 09:46	0°♐	
	9738 Nov 20 04:48	0°♑	
desc. node	9738 Dec 01 00:40	6°♑47'40	
evening set	9738 Dec 19 20:52	18°♑38'35	
	9739 Jan 06 20:28	0°♒	
max. Earth dist.	9739 Jan 23 23:18	10°♒52'22	2.67274 AU
conjunction	9739 Feb 02 06:04	16°♒48'09	-0°32'05
minimum elong	9739 Feb 02 05:12	16°♒46'46	0°31'49
	9739 Feb 22 18:19	0°♓	
morning rise	9739 Mar 18 00:19	15°♓09'01	
	9739 Apr 09 11:08	0°♈	
	9739 May 23 17:59	0°♉	
	9739 Jul 05 14:41	0°♊	
	9739 Aug 16 06:34	0°♋	
	9739 Sep 26 07:31	0°♌	
	9739 Nov 07 03:35	0°♍	
asc. node	9739 Nov 17 09:13	7°♍02'03	
	9739 Dec 23 23:07	0°♎	
retrograde	9740 Feb 21 01:14	19°♎48'12	
min. Earth dist.	9740 Mar 20 01:05	14°♎23'02	0.46739 AU
greatest brilliancy	9740 Mar 26 19:31	11°♎59'27	-2.3m
opposition	9740 Mar 28 12:07	11°♎23'20	5°43'00
direct	9740 Apr 30 12:02	4°♎34'01	
	9740 Jul 17 03:31	0°♏	
	9740 Sep 09 18:56	0°♐	
desc. node	9740 Oct 18 02:13	22°♐30'54	
	9740 Oct 30 13:36	0°♑	
	9740 Dec 18 11:39	0°♒	
evening set	9741 Jan 23 17:07	22°♒56'48	
	9741 Feb 03 15:03	0°♓	
max. Earth dist.	9741 Feb 15 18:12	7°♓55'38	2.61316 AU
conjunction	9741 Mar 10 04:09	22°♓49'13	-1°01'44
minimum elong	9741 Mar 10 03:11	22°♓47'35	1°01'39
	9741 Mar 20 19:10	0°♈	
morning rise	9741 Apr 26 14:48	25°♈30'08	
	9741 May 02 23:08	0°♉	
	9741 Jun 13 07:02	0°♊	
	9741 Jul 23 04:15	0°♋	
	9741 Aug 31 05:03	0°♌	
asc. node	9741 Oct 04 04:41	26°♌08'15	
	9741 Oct 09 06:19	0°♍	
	9741 Nov 18 14:04	0°♎	

	9742 Jan 01 09:25	0°♏	
	9742 Feb 26 06:23	0°♐	
retrograde	9742 Apr 04 21:54	8°♐16'35	
min. Earth dist.	9742 May 08 20:55	0°♐39'53	0.59532 AU
	9742 May 10 13:47	30°℞♏	
opposition	9742 May 14 14:53	28°♏24'31	3°51'47
greatest brilliancy	9742 May 13 20:48	28°♏42'17	-1.7m
direct	9742 Jun 21 02:40	19°♏49'41	
	9742 Aug 06 01:08	0°♐	
desc. node	9742 Sep 05 05:08	13°♐12'47	
	9742 Oct 07 16:28	0°♑	
	9742 Nov 28 20:57	0°♒	
	9743 Jan 16 01:46	0°♓	
	9743 Mar 02 06:53	0°♈	
evening set	9743 Mar 04 02:07	1°♈13'59	
max. Earth dist.	9743 Mar 18 14:43	11°♈17'15	2.50392 AU
	9743 Apr 13 22:27	0°♉	
conjunction	9743 Apr 23 23:55	7°♉19'05	-1°04'03
minimum elong	9743 Apr 24 01:05	7°♉21'14	1°04'15
	9743 May 24 11:23	0°♊	
morning rise	9743 Jun 21 15:20	21°♊33'31	
	9743 Jul 02 12:19	0°♋	
	9743 Aug 09 18:48	0°♌	
asc. node	9743 Aug 21 23:03	9°♌34'02	
	9743 Sep 17 03:05	0°♍	
	9743 Oct 26 11:46	0°♎	
	9743 Dec 06 22:50	0°♏	
	9744 Jan 21 04:27	0°♐	
	9744 Mar 15 12:43	0°♑	
retrograde	9744 May 09 14:34	14°♑49'03	
min. Earth dist.	9744 Jun 17 06:30	5°♑40'37	0.66917 AU
opposition	9744 Jun 19 05:51	4°♑53'34	1°11'13
greatest brilliancy	9744 Jun 19 04:06	4°♑55'18	-1.4m
	9744 Jul 02 07:54	30°℞♐	
desc. node	9744 Jul 23 07:46	25°♐36'03	
direct	9744 Jul 29 12:15	25°♐21'49	
	9744 Aug 28 08:51	0°♑	
	9744 Nov 04 18:02	0°♒	
	9744 Dec 26 02:49	0°♓	
	9745 Feb 10 04:13	0°♈	
	9745 Mar 24 19:27	0°♉	
evening set	9745 Apr 22 08:39	21°♉09'41	
	9745 May 03 23:55	0°♊	
max. Earth dist.	9745 May 25 07:04	16°♊26'19	2.37358 AU
	9745 Jun 11 14:42	0°♋	
conjunction	9745 Jun 25 14:35	11°♋02'43	-0°09'37
minimum elong	9745 Jun 25 15:37	11°♋04'46	0°09'59
behind sun begin	9745 Jun 24 15:54	10°♋17'53	
behind sun end	9745 Jun 26 15:20	11°♋51'40	
asc. node	9745 Jul 08 20:38	21°♋32'16	
	9745 Jul 19 12:59	0°♌	
	9745 Aug 26 16:13	0°♍	
morning rise	9745 Sep 07 02:32	8°♍51'30	
	9745 Oct 04 21:08	0°♎	
	9745 Nov 14 22:35	0°♏	
	9745 Dec 28 15:10	0°♐	
	9746 Feb 14 03:00	0°♑	
	9746 Apr 10 15:59	0°♒	
desc. node	9746 Jun 10 08:01	17°♒35'42	
retrograde	9746 Jun 12 19:06	17°♒37'56	
opposition	9746 Jul 22 23:23	8°♒09'59	-1°27'17
greatest brilliancy	9746 Jul 23 00:56	8°♒08'28	-1.3m
min. Earth dist.	9746 Jul 24 19:05	7°♒27'00	0.67800 AU
	9746 Aug 16 13:15	30°℞♑	
direct	9746 Sep 02 13:04	28°♑10'25	
	9746 Sep 20 11:38	0°♒	
	9746 Dec 02 02:09	0°♓	
	9747 Jan 20 06:44	0°♈	
	9747 Mar 04 17:38	0°♉	
	9747 Apr 14 00:48	0°♊	
	9747 May 22 13:49	0°♋	
asc. node	9747 May 26 19:25	3°♋20'27	
	9747 Jun 29 11:15	0°♌	
evening set	9747 Jul 02 03:28	2°♌07'04	
	9747 Aug 06 16:42	0°♍	
conjunction	9747 Sep 09 22:39	26°♍08'24	1°00'19
minimum elong	9747 Sep 09 20:19	26°♍04'03	1°00'16
	9747 Sep 15 02:34	0°♎	
	9747 Oct 26 08:19	0°♏	
max. Earth dist.	9747 Oct 27 04:02	0°♏34'58	2.47112 AU
morning rise	9747 Nov 10 12:48	10°♏39'49	
	9747 Dec 08 20:12	0°♐	
	9748 Jan 23 21:11	0°♑	
	9748 Mar 13 03:00	0°♒	
desc. node	9748 Apr 27 04:24	24°♒47'04	
	9748 May 07 17:23	0°♓	
retrograde	9748 Jul 19 08:25	21°♓39'16	
opposition	9748 Aug 26 18:37	13°♓02'17	-3°54'13
greatest brilliancy	9748 Aug 27 11:42	12°♓45'56	-1.5m
min. Earth dist.	9748 Sep 01 09:22	10°♓53'31	0.62070 AU
direct	9748 Oct 07 00:11	3°♓05'52	
	9748 Dec 23 14:25	0°♈	
	9749 Feb 08 22:53	0°♉	
	9749 Mar 22 10:29	0°♊	
asc. node	9749 Apr 12 20:12	16°♊18'35	
	9749 Apr 30 11:24	0°♋	
	9749 Jun 07 17:36	0°♌	
	9749 Jul 16 09:25	0°♍	
	9749 Aug 25 08:06	0°♎	
evening set	9749 Sep 09 01:00	10°♎43'19	
	9749 Oct 06 03:06	0°♏	
conjunction	9749 Nov 04 05:26	20°♏03'32	0°58'33
minimum elong	9749 Nov 04 06:47	20°♏05'50	0°58'49
	9749 Nov 18 23:43	0°♐	
max. Earth dist.	9749 Nov 29 19:11	7°♐11'24	2.59335 AU
morning rise	9749 Dec 24 03:40	23°♐07'43	
	9750 Jan 03 19:23	0°♑	
	9750 Feb 20 09:22	0°♒	
desc. node	9750 Mar 14 22:30	13°♒50'05	
	9750 Apr 10 21:27	0°♓	
	9750 Jun 02 23:49	0°♈	
	9750 Aug 13 04:06	0°♉	
retrograde	9750 Sep 05 09:31	2°♉57'53	
	9750 Sep 27 04:01	30°℞♈	
opposition	9750 Oct 10 07:17	25°♈50'20	-5°32'46
greatest brilliancy	9750 Oct 12 00:22	25°♈14'13	-2.1m
min. Earth dist.	9750 Oct 18 22:03	22°♈49'16	0.50269 AU
direct	9750 Nov 17 14:53	17°♈05'34	
	9751 Jan 03 21:48	0°♉	
	9751 Feb 23 04:24	0°♊	
asc. node	9751 Mar 01 00:04	4°♊00'15	
	9751 Apr 05 23:02	0°♋	
	9751 May 15 18:06	0°♌	
	9751 Jun 24 15:27	0°♍	
	9751 Aug 04 17:45	0°♎	
	9751 Sep 16 14:05	0°♏	
evening set	9751 Oct 28 16:32	28°♏17'40	
	9751 Oct 31 06:36	0°♐	
conjunction	9751 Dec 15 17:38	29°♐31'29	0°23'51

minimum elong	9751 Dec 15 18:25	29°♐32'44	0°24'13
	9751 Dec 16 11:25	0°♑	
max. Earth dist.	9751 Dec 24 18:34	5°♑18'39	2.66487 AU
morning rise	9752 Jan 29 13:39	28°♑03'18	
desc. node	9752 Jan 30 16:55	28°♑46'25	
	9752 Feb 01 15:29	0°♒	
	9752 Mar 20 06:39	0°♓	
	9752 May 07 04:48	0°♈	
	9752 Jun 24 19:11	0°♉	
	9752 Aug 14 16:51	0°♊	
	9752 Oct 18 14:26	0°♋	
retrograde	9752 Nov 14 16:55	4°♋15'19	
	9752 Dec 11 20:10	30°℞♊	
opposition	9752 Dec 14 16:11	29°♊13'57	-2°24'59
greatest brilliancy	9752 Dec 15 04:47	29°♊05'20	-3.0m
min. Earth dist.	9752 Dec 18 22:24	28°♊04'10	0.37691 AU
direct	9753 Jan 14 16:42	23°♊45'14	
asc. node	9753 Jan 16 02:35	23°♊46'03	
	9753 Feb 14 23:52	0°♋	
	9753 Apr 12 08:17	0°♌	
	9753 May 27 21:58	0°♍	
	9753 Jul 11 10:23	0°♎	
	9753 Aug 25 15:53	0°♏	
	9753 Oct 10 23:44	0°♐	
	9753 Nov 27 03:39	0°♑	
evening set	9753 Dec 05 20:07	5°♑29'40	
desc. node	9753 Dec 17 13:40	12°♑54'51	
	9754 Jan 13 13:20	0°♒	
max. Earth dist.	9754 Jan 15 05:16	1°♒03'23	2.68134 AU
conjunction	9754 Jan 19 15:00	3°♒51'13	-0°17'14
minimum elong	9754 Jan 19 14:30	3°♒50'25	0°16'55
	9754 Mar 01 12:59	0°♓	
morning rise	9754 Mar 04 01:53	1°♓38'03	
	9754 Apr 16 15:23	0°♈	
	9754 May 31 15:33	0°♉	
	9754 Jul 14 13:24	0°♊	
	9754 Aug 26 15:14	0°♋	
	9754 Oct 08 17:40	0°♌	
	9754 Nov 23 22:20	0°♍	
asc. node	9754 Dec 04 01:38	5°♍48'45	
retrograde	9755 Jan 30 04:13	24°♍33'10	
min. Earth dist.	9755 Feb 25 07:38	19°♍56'56	0.41441 AU
greatest brilliancy	9755 Mar 03 14:53	17°♍56'29	-2.7m
opposition	9755 Mar 05 03:40	17°♍26'52	5°19'32
direct	9755 Apr 05 04:17	11°♍34'33	
	9755 Jun 06 02:06	0°♎	
	9755 Jul 31 07:37	0°♏	
	9755 Sep 19 20:16	0°♐	
desc. node	9755 Nov 04 14:34	27°♐51'04	
	9755 Nov 08 02:33	0°♑	
	9755 Dec 26 09:43	0°♒	
evening set	9756 Jan 10 15:24	9°♒37'28	
max. Earth dist.	9756 Feb 07 03:04	27°♒14'07	2.64278 AU
	9756 Feb 11 09:27	0°♓	
conjunction	9756 Feb 24 07:04	8°♓25'14	-0°52'20
minimum elong	9756 Feb 24 05:57	8°♓23'24	0°52'10
	9756 Mar 27 17:20	0°♈	
morning rise	9756 Apr 09 16:44	8°♈48'45	
	9756 May 10 06:03	0°♉	
	9756 Jun 21 01:34	0°♊	
	9756 Jul 31 11:22	0°♋	
	9756 Sep 09 00:48	0°♌	
	9756 Oct 18 16:18	0°♍	
asc. node	9756 Oct 20 22:32	1°♍41'13	
	9756 Nov 29 00:47	0°♎	
	9757 Jan 15 01:16	0°♏	
retrograde	9757 Mar 20 07:54	21°♏42'03	
min. Earth dist.	9757 Apr 21 00:54	14°♏52'27	0.55028 AU
greatest brilliancy	9757 Apr 26 23:45	12°♏35'31	-1.9m
opposition	9757 Apr 28 03:41	12°♏08'41	4°48'17
direct	9757 Jun 03 02:58	4°♏07'37	
	9757 Aug 22 12:42	0°♐	
desc. node	9757 Sep 21 17:49	15°♐52'21	
	9757 Oct 16 21:39	0°♑	
	9757 Dec 06 09:59	0°♒	
	9758 Jan 23 02:02	0°♓	
evening set	9758 Feb 15 23:14	15°♓40'04	
max. Earth dist.	9758 Mar 05 05:05	27°♓15'40	2.55200 AU
	9758 Mar 09 05:36	0°♈	
conjunction	9758 Apr 05 00:35	18°♈35'26	-1°08'06
minimum elong	9758 Apr 05 00:36	18°♈35'28	1°08'11
	9758 Apr 21 01:15	0°♉	
morning rise	9758 May 28 00:09	27°♉06'34	
	9758 May 31 20:43	0°♊	
	9758 Jul 10 04:27	0°♋	
	9758 Aug 17 16:40	0°♌	
asc. node	9758 Sep 07 18:09	16°♌26'57	
	9758 Sep 25 05:18	0°♍	
	9758 Nov 03 18:43	0°♎	
	9758 Dec 15 16:50	0°♏	
	9759 Jan 31 13:26	0°♐	
	9759 Apr 11 06:38	0°♑	
retrograde	9759 Apr 27 04:53	1°♑34'27	
	9759 May 12 10:34	30°℞♐	
min. Earth dist.	9759 Jun 03 04:57	22°♐57'30	0.64789 AU
opposition	9759 Jun 06 15:57	21°♐35'01	2°13'59
greatest brilliancy	9759 Jun 06 09:45	21°♐41'11	-1.4m
direct	9759 Jul 16 00:28	12°♐21'18	
desc. node	9759 Aug 09 20:35	15°♐40'20	
	9759 Sep 18 08:24	0°♑	
	9759 Nov 15 03:06	0°♒	
	9760 Jan 03 20:14	0°♓	
	9760 Feb 18 11:00	0°♈	
evening set	9760 Mar 31 18:47	29°♈48'17	
	9760 Apr 01 01:14	0°♉	
max. Earth dist.	9760 Apr 16 04:48	11°♉06'32	2.42119 AU
	9760 May 11 08:15	0°♊	
conjunction	9760 May 28 19:31	13°♊24'45	-0°38'55
minimum elong	9760 May 28 22:13	13°♊29'57	0°39'15
	9760 Jun 19 02:17	0°♋	
asc. node	9760 Jul 25 12:56	28°♋44'38	
	9760 Jul 27 03:05	0°♌	
morning rise	9760 Aug 06 11:58	8°♌11'25	
	9760 Sep 03 07:21	0°♍	
	9760 Oct 12 12:14	0°♎	
	9760 Nov 22 14:42	0°♏	
	9761 Jan 05 14:40	0°♐	
	9761 Feb 23 10:47	0°♑	
	9761 Apr 29 07:58	0°♒	
retrograde	9761 May 30 08:43	5°♒10'35	
desc. node	9761 Jun 26 21:29	0°♒21'31	
	9761 Jun 27 22:47	30°℞♑	
opposition	9761 Jul 09 21:08	25°♑29'13	-0°26'53
greatest brilliancy	9761 Jul 09 21:04	25°♑29'16	-1.3m
min. Earth dist.	9761 Jul 10 05:09	25°♑21'17	0.68254 AU
direct	9761 Aug 20 02:56	15°♑37'24	
	9761 Oct 15 12:08	0°♒	
	9761 Dec 11 23:48	0°♓	
	9762 Jan 28 11:45	0°♈	
	9762 Mar 12 11:59	0°♉	

	9762 Apr 21 16:43	0°♊	
	9762 May 30 05:22	0°♋	
evening set	9762 Jun 02 04:47	2°♋20'54	
asc. node	9762 Jun 12 11:48	10°♋29'30	
	9762 Jul 07 02:08	0°♌	
conjunction	9762 Aug 12 13:51	28°♌42'39	0°41'01
minimum elong	9762 Aug 12 10:18	28°♌35'45	0°40'45
	9762 Aug 14 05:36	0°♍	
	9762 Sep 22 12:13	0°♎	
max. Earth dist.	9762 Oct 05 07:17	9°♎30'09	2.41482 AU
morning rise	9762 Oct 19 15:03	19°♎58'03	
	9762 Nov 02 14:43	0°♏	
	9762 Dec 16 01:47	0°♐	
	9763 Jan 31 10:26	0°♑	
	9763 Mar 23 01:21	0°♒	
desc. node	9763 May 14 19:25	26°♒00'34	
	9763 May 25 06:19	0°♓	
retrograde	9763 Jul 04 23:30	8°♓09'49	
	9763 Aug 11 02:16	30°℞♒	
opposition	9763 Aug 13 06:28	29°♒09'36	-2°59'33
greatest brilliancy	9763 Aug 13 15:41	29°♒00'41	-1.4m
min. Earth dist.	9763 Aug 17 09:50	27°♒33'16	0.65112 AU
direct	9763 Sep 23 20:55	19°♒06'56	
	9763 Nov 09 07:35	0°♓	
	9764 Jan 05 01:10	0°♈	
	9764 Feb 19 03:29	0°♉	
	9764 Mar 30 23:13	0°♊	
asc. node	9764 Apr 29 13:08	22°♊49'05	
	9764 May 08 17:08	0°♋	
	9764 Jun 15 18:10	0°♌	
	9764 Jul 24 04:14	0°♍	
evening set	9764 Aug 15 08:45	16°♍55'53	
	9764 Sep 01 20:07	0°♎	
	9764 Oct 13 08:14	0°♏	
conjunction	9764 Oct 15 18:40	1°♏42'52	1°05'38
minimum elong	9764 Oct 15 19:20	1°♏44'02	1°05'48
max. Earth dist.	9764 Nov 18 05:32	24°♏46'50	2.55071 AU
	9764 Nov 25 23:30	0°♐	
morning rise	9764 Dec 08 06:42	8°♐11'42	
	9765 Jan 10 18:40	0°♑	
	9765 Feb 27 18:24	0°♒	
desc. node	9765 Mar 31 13:37	19°♒00'14	
	9765 Apr 19 16:54	0°♓	
	9765 Jun 17 06:30	0°♈	
retrograde	9765 Aug 15 18:22	15°♈39'40	
opposition	9765 Sep 21 07:51	7°♈50'51	-5°06'42
greatest brilliancy	9765 Sep 22 16:17	7°♈21'01	-1.8m
min. Earth dist.	9765 Sep 29 00:42	5°♈01'12	0.55498 AU
	9765 Oct 15 23:30	30°℞♓	
direct	9765 Oct 31 05:12	28°♓25'08	
	9765 Nov 15 20:29	0°♈	
	9766 Jan 21 14:06	0°♉	
	9766 Mar 06 21:28	0°♊	
asc. node	9766 Mar 17 15:03	7°♊50'47	
	9766 Apr 16 00:46	0°♋	
	9766 May 24 23:09	0°♌	
	9766 Jul 03 04:49	0°♍	
	9766 Aug 12 16:58	0°♎	
	9766 Sep 24 00:48	0°♏	
evening set	9766 Oct 11 02:36	11°♏43'26	
	9766 Nov 07 07:17	0°♐	
conjunction	9766 Nov 30 14:30	15°♐19'38	0°38'56
minimum elong	9766 Nov 30 15:43	15°♐21'36	0°39'18
max. Earth dist.	9766 Dec 15 17:23	25°♐08'06	2.64319 AU
	9766 Dec 23 06:37	0°♑	
morning rise	9767 Jan 15 22:01	15°♑05'58	
	9767 Feb 08 12:03	0°♒	
desc. node	9767 Feb 16 07:26	4°♒54'07	
	9767 Mar 28 15:30	0°♓	
	9767 May 16 21:20	0°♈	
	9767 Jul 07 16:18	0°♉	
	9767 Sep 09 01:30	0°♊	
retrograde	9767 Oct 15 07:50	6°♊59'34	
opposition	9767 Nov 16 03:54	1°♊12'42	-4°46'33
greatest brilliancy	9767 Nov 17 15:47	0°♊45'02	-2.6m
	9767 Nov 20 02:08	30°℞♉	
min. Earth dist.	9767 Nov 23 22:22	28°♉50'14	0.41756 AU
direct	9767 Dec 20 08:31	24°♉20'18	
	9768 Jan 18 19:12	0°♊	
asc. node	9768 Feb 02 17:17	6°♊18'04	
	9768 Mar 14 14:10	0°♋	
	9768 Apr 27 04:12	0°♌	
	9768 Jun 08 04:41	0°♍	
	9768 Jul 20 19:23	0°♎	
	9768 Sep 02 19:37	0°♏	
	9768 Oct 18 08:11	0°♐	
evening set	9768 Nov 21 07:08	21°♐52'11	
	9768 Dec 04 00:46	0°♑	
desc. node	9769 Jan 03 04:13	19°♑09'27	
conjunction	9769 Jan 05 22:42	20°♑54'55	-0°01'29
minimum elong	9769 Jan 05 22:41	20°♑54'54	0°01'07
behind sun begin	9769 Jan 05 04:16	20°♑25'41	
behind sun end	9769 Jan 06 17:07	21°♑24'06	
max. Earth dist.	9769 Jan 06 12:02	21°♑16'01	2.68138 AU
	9769 Jan 20 06:27	0°♒	
morning rise	9769 Feb 18 13:52	18°♒37'18	
	9769 Mar 08 09:57	0°♓	
	9769 Apr 24 01:23	0°♈	
	9769 Jun 09 01:31	0°♉	
	9769 Jul 24 13:45	0°♊	
	9769 Sep 08 05:27	0°♋	
	9769 Oct 26 15:52	0°♌	
asc. node	9769 Dec 20 19:13	23°♌14'09	
retrograde	9770 Jan 03 18:41	24°♌33'19	
min. Earth dist.	9770 Jan 30 03:59	20°♌15'01	0.37508 AU
opposition	9770 Feb 03 21:32	18°♌55'53	3°18'40
greatest brilliancy	9770 Feb 03 05:31	19°♌07'05	-3.0m
direct	9770 Mar 05 06:11	13°♌54'19	
	9770 Apr 29 21:56	0°♍	
	9770 Jun 22 20:34	0°♎	
	9770 Aug 10 19:56	0°♏	
	9770 Sep 28 03:04	0°♐	
	9770 Nov 15 08:37	0°♑	
desc. node	9770 Nov 21 03:28	3°♑36'29	
evening set	9770 Dec 27 18:45	26°♑34'15	
	9771 Jan 02 05:10	0°♒	
max. Earth dist.	9771 Jan 29 02:05	17°♒05'05	2.66428 AU
conjunction	9771 Feb 10 03:19	24°♒49'40	-0°40'09
minimum elong	9771 Feb 10 02:18	24°♒48'01	0°39'54
	9771 Feb 18 03:22	0°♓	
morning rise	9771 Mar 26 07:38	23°♓44'16	
	9771 Apr 04 16:50	0°♈	
	9771 May 18 16:39	0°♉	
	9771 Jun 30 03:25	0°♊	
	9771 Aug 10 06:45	0°♋	
	9771 Sep 19 15:55	0°♌	
	9771 Oct 30 09:44	0°♍	
asc. node	9771 Nov 07 16:09	5°♍55'37	
	9771 Dec 13 02:15	0°♎	

	9772 Feb 12 16:26	0°♏	
retrograde	9772 Mar 02 22:50	2°♏34'06	
	9772 Mar 21 16:44	30°℞♎	
min. Earth dist.	9772 Apr 01 05:45	26°♎38'18	0.49806 AU
greatest brilliancy	9772 Apr 07 20:50	24°♎12'26	-2.1m
opposition	9772 Apr 09 10:08	23°♎38'04	5°31'27
direct	9772 May 13 13:31	16°♎20'24	
	9772 Jul 05 20:58	0°♏	
	9772 Sep 03 05:09	0°♐	
desc. node	9772 Oct 08 05:41	19°♐59'07	
	9772 Oct 25 05:49	0°♑	
	9772 Dec 13 15:50	0°♒	
	9773 Jan 29 23:32	0°♓	
evening set	9773 Jan 31 21:57	1°♓15'18	
max. Earth dist.	9773 Feb 21 17:17	14°♓55'13	2.59350 AU
	9773 Mar 16 03:48	0°♈	
conjunction	9773 Mar 19 02:04	1°♈59'43	-1°05'31
minimum elong	9773 Mar 19 01:20	1°♈58'29	1°05'31
	9773 Apr 28 05:00	0°♉	
morning rise	9773 May 07 03:10	6°♉23'52	
	9773 Jun 08 08:27	0°♊	
	9773 Jul 18 00:23	0°♋	
	9773 Aug 25 19:57	0°♌	
asc. node	9773 Sep 24 11:43	22°♌58'03	
	9773 Oct 03 15:17	0°♍	
	9773 Nov 12 13:36	0°♎	
	9773 Dec 25 09:20	0°♏	
	9774 Feb 13 21:16	0°♐	
retrograde	9774 Apr 13 06:31	17°♐25'52	
min. Earth dist.	9774 May 18 09:26	9°♐25'37	0.61684 AU
opposition	9774 May 23 07:43	7°♐28'46	3°16'34
greatest brilliancy	9774 May 22 18:36	7°♐41'45	-1.6m
	9774 Jun 15 23:51	30°℞♏	
direct	9774 Jun 30 12:52	28°♏38'13	
	9774 Jul 15 22:04	0°♐	
desc. node	9774 Aug 26 08:55	13°♐06'24	
	9774 Sep 30 19:39	0°♑	
	9774 Nov 23 12:28	0°♒	
	9775 Jan 11 04:59	0°♓	
	9775 Feb 25 13:53	0°♈	
evening set	9775 Mar 13 20:42	11°♈14'52	
max. Earth dist.	9775 Mar 27 12:47	20°♈53'18	2.47539 AU
	9775 Apr 09 05:33	0°♉	
conjunction	9775 May 05 20:54	19°♉35'31	-0°57'56
minimum elong	9775 May 05 22:49	19°♉39'07	0°58'11
	9775 May 19 16:53	0°♊	
	9775 Jun 27 15:27	0°♋	
morning rise	9775 Jul 07 09:10	7°♋37'13	
	9775 Aug 04 19:39	0°♌	
greatest brilliancy	9775 Aug 06 14:55	1°♌25'13	1.2m
asc. node	9775 Aug 12 08:13	5°♌55'37	
	9775 Sep 12 01:46	0°♍	
	9775 Oct 21 07:38	0°♎	
	9775 Dec 01 13:20	0°♏	
	9776 Jan 15 03:06	0°♐	
	9776 Mar 06 11:54	0°♑	
retrograde	9776 May 17 04:32	22°♑39'42	
opposition	9776 Jun 26 20:05	12°♑48'13	0°34'40
min. Earth dist.	9776 Jun 25 16:43	13°♑15'24	0.67678 AU
greatest brilliancy	9776 Jun 26 19:42	12°♑48'36	-1.3m
desc. node	9776 Jul 13 10:41	6°♑46'46	
direct	9776 Aug 06 12:09	3°♑08'05	
	9776 Oct 28 16:38	0°♒	
	9776 Dec 20 16:07	0°♓	
	9777 Feb 05 04:43	0°♈	
	9777 Mar 19 23:19	0°♉	
	9777 Apr 29 04:17	0°♊	
evening set	9777 May 05 23:59	5°♊14'01	
	9777 Jun 06 18:28	0°♋	
asc. node	9777 Jun 29 05:01	17°♋44'25	
conjunction	9777 Jul 12 15:13	28°♋22'57	0°09'46
minimum elong	9777 Jul 12 14:09	28°♋20'51	0°09'24
behind sun begin	9777 Jul 11 12:49	27°♋30'40	
behind sun end	9777 Jul 13 15:29	29°♋11'01	
	9777 Jul 14 16:13	0°♌	
max. Earth dist.	9777 Aug 09 13:16	20°♌25'27	2.36718 AU
	9777 Aug 21 19:11	0°♍	
morning rise	9777 Sep 23 13:45	25°♍10'00	
	9777 Sep 29 23:49	0°♎	
	9777 Nov 10 00:19	0°♏	
	9777 Dec 23 12:43	0°♐	
	9778 Feb 08 10:30	0°♑	
	9778 Apr 02 10:28	0°♒	
desc. node	9778 May 31 09:37	23°♒02'12	
retrograde	9778 Jun 20 15:37	25°♒19'29	
opposition	9778 Jul 30 14:00	16°♒00'23	-2°01'59
greatest brilliancy	9778 Jul 30 17:37	15°♒56'50	-1.3m
min. Earth dist.	9778 Aug 02 05:41	14°♒58'01	0.67128 AU
direct	9778 Sep 10 05:53	5°♒58'05	
	9778 Nov 24 14:18	0°♓	
	9779 Jan 14 14:08	0°♈	
	9779 Feb 27 12:50	0°♉	
	9779 Apr 09 00:04	0°♊	
asc. node	9779 May 17 03:54	29°♊39'14	
	9779 May 17 14:26	0°♋	
greatest brilliancy	9779 May 28 20:41	8°♋53'18	1.2m
	9779 Jun 24 12:43	0°♌	
evening set	9779 Jul 19 02:29	19°♌20'23	
	9779 Aug 01 19:13	0°♍	
	9779 Sep 10 06:18	0°♎	
conjunction	9779 Sep 24 06:18	10°♎20'16	1°05'19
minimum elong	9779 Sep 24 05:17	10°♎18'23	1°05'22
	9779 Oct 21 13:21	0°♏	
max. Earth dist.	9779 Nov 05 10:59	10°♏27'36	2.50117 AU
morning rise	9779 Nov 21 14:08	21°♏34'01	
	9779 Dec 04 01:08	0°♐	
	9780 Jan 18 22:17	0°♑	
	9780 Mar 07 13:27	0°♒	
desc. node	9780 Apr 17 05:50	23°♒16'46	
	9780 Apr 29 20:16	0°♓	
	9780 Jul 21 15:55	0°♈	
retrograde	9780 Jul 28 17:27	0°♈17'39	
	9780 Aug 04 15:37	30°℞♓	
opposition	9780 Sep 04 14:00	21°♓55'54	-4°23'24
greatest brilliancy	9780 Sep 05 12:22	21°♓34'44	-1.6m
min. Earth dist.	9780 Sep 10 23:40	19°♓30'39	0.59992 AU
direct	9780 Oct 15 11:23	12°♓06'43	
	9780 Dec 14 10:22	0°♈	
	9781 Feb 02 12:47	0°♉	
	9781 Mar 16 17:55	0°♊	
asc. node	9781 Apr 03 06:37	13°♊12'26	
	9781 Apr 25 01:59	0°♋	
	9781 Jun 02 12:29	0°♌	
	9781 Jul 11 07:50	0°♍	
	9781 Aug 20 09:45	0°♎	
evening set	9781 Sep 21 09:58	23°♎02'03	
	9781 Oct 01 07:58	0°♏	
conjunction	9781 Nov 14 06:03	29°♏58'46	0°52'14
minimum elong	9781 Nov 14 07:28	0°♐01'08	0°52'33

	9781 Nov 14 06:47	0°♐	
max. Earth dist.	9781 Dec 05 20:48	14°♐16'08	2.61339 AU
	9781 Dec 30 02:41	0°♑	
morning rise	9782 Jan 01 15:57	1°♑38'24	
	9782 Feb 15 12:05	0°♒	
desc. node	9782 Mar 04 23:46	10°♒50'45	
	9782 Apr 05 09:26	0°♓	
	9782 May 26 16:02	0°♈	
	9782 Jul 24 09:49	0°♉	
retrograde	9782 Sep 18 15:58	14°♉31'57	
opposition	9782 Oct 22 11:36	7°♉51'17	-5°32'40
greatest brilliancy	9782 Oct 24 06:35	7°♉14'48	-2.3m
min. Earth dist.	9782 Oct 31 04:43	4°♉54'46	0.47180 AU
	9782 Nov 21 16:39	30°℞♈	
direct	9782 Nov 28 13:28	29°♈39'41	
	9782 Dec 05 11:30	0°♉	
	9783 Feb 14 02:44	0°♊	
asc. node	9783 Feb 19 09:14	3°♊22'11	
	9783 Mar 29 21:16	0°♋	
	9783 May 09 12:32	0°♌	
	9783 Jun 18 22:49	0°♍	
	9783 Jul 30 10:39	0°♎	
	9783 Sep 11 14:34	0°♏	
	9783 Oct 26 12:28	0°♐	
evening set	9783 Nov 06 22:12	7°♐27'24	
	9783 Dec 11 20:26	0°♑	
conjunction	9783 Dec 23 22:39	7°♑43'41	0°14'37
minimum elong	9783 Dec 23 23:08	7°♑44'27	0°15'00
behind sun begin	9783 Dec 23 16:49	7°♑34'25	
behind sun end	9783 Dec 24 05:26	7°♑54'30	
max. Earth dist.	9783 Dec 29 21:50	11°♑31'45	2.67308 AU
desc. node	9784 Jan 20 18:43	25°♑25'13	
	9784 Jan 28 00:14	0°♒	
morning rise	9784 Feb 06 05:05	5°♒49'29	
	9784 Mar 15 10:23	0°♓	
	9784 May 01 19:42	0°♈	
	9784 Jun 18 06:26	0°♉	
	9784 Aug 05 11:40	0°♊	
	9784 Sep 26 09:56	0°♋	
retrograde	9784 Dec 03 07:15	22°♋12'19	
opposition	9785 Jan 02 01:47	17°♋17'45	-0°20'32
greatest brilliancy	9785 Jan 02 02:42	17°♋17'08	-3.1m
min. Earth dist.	9785 Jan 03 02:38	17°♋01'13	0.36602 AU
asc. node	9785 Jan 06 10:25	16°♋08'40	
direct	9785 Jan 31 20:37	12°♋18'29	
	9785 Mar 29 20:21	0°♌	
	9785 May 19 12:03	0°♍	
	9785 Jul 04 20:37	0°♎	
	9785 Aug 20 01:16	0°♏	
	9785 Oct 05 22:32	0°♐	
	9785 Nov 22 10:10	0°♑	
desc. node	9785 Dec 07 16:51	9°♑37'38	
evening set	9785 Dec 13 21:19	13°♑31'35	
	9786 Jan 08 23:00	0°♒	
max. Earth dist.	9786 Jan 20 06:42	7°♒11'07	2.67771 AU
conjunction	9786 Jan 27 09:15	11°♒42'36	-0°26'04
minimum elong	9786 Jan 27 08:32	11°♒41'26	0°25'46
	9786 Feb 24 21:53	0°♓	
morning rise	9786 Mar 11 22:41	9°♓44'18	
	9786 Apr 11 19:32	0°♈	
	9786 May 26 10:17	0°♉	
	9786 Jul 08 18:01	0°♊	
	9786 Aug 19 23:23	0°♋	
	9786 Sep 30 18:03	0°♌	
	9786 Nov 12 20:17	0°♍	
asc. node	9786 Nov 24 10:48	7°♍34'18	
	9787 Jan 03 15:35	0°♎	
retrograde	9787 Feb 11 23:51	9°♎51'32	
min. Earth dist.	9787 Mar 11 00:30	4°♎50'40	0.44281 AU
greatest brilliancy	9787 Mar 17 17:51	2°♎33'46	-2.5m
opposition	9787 Mar 19 10:55	1°♎58'41	5°42'26
	9787 Mar 25 11:32	30°℞♍	
direct	9787 Apr 20 12:39	25°♍34'28	
	9787 May 18 04:41	0°♎	
	9787 Jul 23 09:39	0°♏	
	9787 Sep 13 22:52	0°♐	
desc. node	9787 Oct 25 17:45	24°♐58'29	
	9787 Nov 03 00:34	0°♑	
	9787 Dec 21 16:15	0°♒	
evening set	9788 Jan 18 15:20	17°♒40'38	
	9788 Feb 06 18:40	0°♓	
max. Earth dist.	9788 Feb 12 15:36	3°♓49'12	2.62745 AU
conjunction	9788 Mar 03 15:44	16°♓59'19	-0°58'13
minimum elong	9788 Mar 03 14:40	16°♓57'32	0°58'07
	9788 Mar 23 01:28	0°♈	
morning rise	9788 Apr 19 01:35	18°♈31'43	
	9788 May 05 10:08	0°♉	
	9788 Jun 16 00:01	0°♊	
	9788 Jul 26 03:06	0°♋	
	9788 Sep 03 09:21	0°♌	
asc. node	9788 Oct 11 07:11	28°♌58'24	
	9788 Oct 12 15:44	0°♍	
	9788 Nov 22 06:49	0°♎	
	9789 Jan 05 23:43	0°♏	
	9789 Mar 12 13:59	0°♐	
retrograde	9789 Mar 29 09:48	1°♐52'06	
	9789 Apr 14 13:17	30°℞♏	
min. Earth dist.	9789 May 01 09:11	24°♏35'25	0.57606 AU
opposition	9789 May 07 17:56	22°♏06'47	4°16'51
greatest brilliancy	9789 May 06 19:43	22°♏28'27	-1.8m
direct	9789 Jun 13 13:56	13°♏46'00	
	9789 Aug 12 23:56	0°♐	
desc. node	9789 Sep 11 20:26	14°♐23'16	
	9789 Oct 10 20:51	0°♑	
	9789 Dec 01 07:42	0°♒	
	9790 Jan 18 07:54	0°♓	
evening set	9790 Feb 24 23:13	24°♓50'07	
	9790 Mar 04 13:42	0°♈	
max. Earth dist.	9790 Mar 12 11:42	5°♈25'55	2.52620 AU
conjunction	9790 Apr 15 10:53	29°♈21'42	-1°06'45
minimum elong	9790 Apr 15 11:32	29°♈22'52	1°06'54
	9790 Apr 16 08:11	0°♉	
	9790 May 27 00:59	0°♊	
morning rise	9790 Jun 10 08:05	10°♊50'18	
	9790 Jul 05 05:24	0°♋	
	9790 Aug 12 14:29	0°♌	
asc. node	9790 Aug 29 01:21	12°♌53'43	
	9790 Sep 20 00:16	0°♍	
	9790 Oct 29 09:40	0°♎	
	9790 Dec 09 23:03	0°♏	
	9791 Jan 24 15:10	0°♐	
	9791 Mar 22 23:57	0°♑	
retrograde	9791 May 04 22:31	9°♑44'15	
min. Earth dist.	9791 Jun 11 21:26	0°♑49'02	0.66084 AU
	9791 Jun 13 22:43	30°℞♐	
opposition	9791 Jun 14 12:17	29°♐46'29	1°37'17
greatest brilliancy	9791 Jun 14 08:57	29°♐49'49	-1.4m
direct	9791 Jul 24 09:08	20°♐22'13	
desc. node	9791 Jul 30 23:30	20°♐37'45	
	9791 Sep 07 08:43	0°♑	

	9791 Nov 09 00:05	0°♒	
	9791 Dec 29 16:23	0°♓	
	9792 Feb 13 14:49	0°♈	
	9792 Mar 27 07:01	0°♉	
evening set	9792 Apr 12 13:28	11°♉56'09	
max. Earth dist.	9792 May 03 20:57	27°♉56'40	2.39296 AU
	9792 May 06 13:45	0°♊	
conjunction	9792 Jun 12 22:30	28°♊57'16	-0°23'23
minimum elong	9792 Jun 13 00:39	29°♊01'29	0°23'44
	9792 Jun 14 06:27	0°♋	
asc. node	9792 Jul 15 21:56	24°♋59'25	
	9792 Jul 22 05:50	0°♌	
morning rise	9792 Aug 24 10:38	26°♌09'01	
	9792 Aug 29 09:02	0°♍	
	9792 Oct 07 12:48	0°♎	
	9792 Nov 17 13:02	0°♏	
	9792 Dec 31 06:20	0°♐	
	9793 Feb 17 03:01	0°♑	
	9793 Apr 15 23:48	0°♒	
retrograde	9793 Jun 07 00:21	12°♒48'55	
desc. node	9793 Jun 17 00:16	12°♒11'02	
opposition	9793 Jul 17 08:56	3°♒14'43	-1°02'29
greatest brilliancy	9793 Jul 17 09:28	3°♒14'11	-1.3m
min. Earth dist.	9793 Jul 18 13:06	2°♒46'56	0.68126 AU
	9793 Jul 25 17:51	30°℞♑	
direct	9793 Aug 27 19:33	23°♑18'00	
	9793 Oct 03 01:59	0°♒	
	9793 Dec 05 15:29	0°♓	
	9794 Jan 23 03:23	0°♈	
	9794 Mar 07 11:01	0°♉	
	9794 Apr 16 18:23	0°♊	
	9794 May 25 07:48	0°♋	
asc. node	9794 Jun 02 20:42	6°♋44'35	
evening set	9794 Jun 18 19:52	19°♋23'32	
	9794 Jul 02 04:57	0°♌	
	9794 Aug 09 09:02	0°♍	
conjunction	9794 Aug 28 23:06	15°♍05'45	0°53'42
minimum elong	9794 Aug 28 19:55	14°♍59'40	0°53'32
	9794 Sep 17 16:17	0°♎	
max. Earth dist.	9794 Oct 18 17:08	22°♎47'10	2.44592 AU
	9794 Oct 28 19:05	0°♏	
morning rise	9794 Nov 01 10:04	2°♏34'12	
	9794 Dec 11 04:49	0°♐	
	9795 Jan 26 06:53	0°♑	
	9795 Mar 16 22:38	0°♒	
desc. node	9795 May 04 21:03	25°♒58'05	
	9795 May 13 15:37	0°♓	
retrograde	9795 Jul 13 13:51	16°♓15'57	
opposition	9795 Aug 21 10:17	7°♓28'04	-3°31'46
greatest brilliancy	9795 Aug 21 23:43	7°♓15'07	-1.5m
min. Earth dist.	9795 Aug 26 09:43	5°♓33'05	0.63548 AU
	9795 Sep 12 02:55	30°℞♒	
direct	9795 Oct 01 20:59	27°♒27'41	
	9795 Oct 22 15:41	0°♓	
	9795 Dec 29 01:12	0°♈	
	9796 Feb 13 08:41	0°♉	
	9796 Mar 25 14:00	0°♊	
asc. node	9796 Apr 19 20:49	19°♊22'14	
	9796 May 03 12:01	0°♋	
	9796 Jun 10 15:41	0°♌	
	9796 Jul 19 04:19	0°♍	
	9796 Aug 27 22:50	0°♎	
evening set	9796 Aug 29 18:00	1°♎19'37	
	9796 Oct 08 13:26	0°♏	
conjunction	9796 Oct 27 02:38	12°♏54'46	1°02'14
minimum elong	9796 Oct 27 03:48	12°♏56'47	1°02'28
	9796 Nov 21 06:15	0°♐	
max. Earth dist.	9796 Nov 24 23:59	2°♐30'08	2.57527 AU
morning rise	9796 Dec 17 11:36	17°♐21'07	
	9797 Jan 06 00:17	0°♑	
	9797 Feb 22 16:50	0°♒	
desc. node	9797 Mar 21 15:13	16°♒22'28	
	9797 Apr 13 16:50	0°♓	
	9797 Jun 07 12:32	0°♈	
retrograde	9797 Aug 27 01:27	25°♈39'30	
opposition	9797 Oct 01 17:33	18°♈12'16	-5°24'18
greatest brilliancy	9797 Oct 03 07:17	17°♈38'17	-2.0m
min. Earth dist.	9797 Oct 09 23:58	15°♈14'05	0.52685 AU
direct	9797 Nov 09 19:58	9°♈06'12	
	9798 Jan 12 01:27	0°♉	
	9798 Feb 27 23:11	0°♊	
asc. node	9798 Mar 08 00:37	5°♊43'04	
	9798 Apr 09 21:53	0°♋	
	9798 May 19 06:08	0°♌	
	9798 Jun 27 19:05	0°♍	
	9798 Aug 07 13:27	0°♎	
	9798 Sep 19 02:42	0°♏	
evening set	9798 Oct 21 08:17	21°♏52'28	
	9798 Nov 02 13:26	0°♐	
conjunction	9798 Dec 09 08:50	24°♐02'35	0°30'16
minimum elong	9798 Dec 09 09:48	24°♐04'10	0°30'39
	9798 Dec 18 14:53	0°♑	
max. Earth dist.	9798 Dec 21 02:33	1°♑35'44	2.65635 AU
morning rise	9799 Jan 23 18:41	23°♑02'41	
	9799 Feb 03 18:47	0°♒	
desc. node	9799 Feb 06 09:22	1°♒38'40	
	9799 Mar 23 14:42	0°♓	
	9799 May 11 01:10	0°♈	
	9799 Jun 29 18:55	0°♉	
	9799 Aug 22 22:19	0°♊	
retrograde	9799 Nov 01 09:54	22°♊07'43	
opposition	9799 Dec 02 02:36	16°♊49'09	-3°39'45
greatest brilliancy	9799 Dec 03 02:51	16°♊31'43	-2.8m
min. Earth dist.	9799 Dec 08 08:26	15°♊02'05	0.39244 AU
direct	9800 Jan 03 11:56	10°♊45'14	
asc. node	9800 Jan 24 03:44	13°♊37'18	
	9800 Mar 03 01:35	0°♋	
	9800 Apr 19 20:24	0°♌	
	9800 Jun 02 10:13	0°♍	
	9800 Jul 15 22:14	0°♎	
	9800 Aug 29 12:13	0°♏	
	9800 Oct 14 09:58	0°♐	
evening set	9800 Nov 30 16:54	0°♑13'57	
	9800 Nov 30 08:07	0°♑	
desc. node	9800 Dec 25 05:44	15°♑47'29	
max. Earth dist.	9801 Jan 12 13:03	27°♑23'36	2.68246 AU
conjunction	9801 Jan 14 19:18	28°♑49'37	-0°10'49
minimum elong	9801 Jan 14 19:00	28°♑49'07	0°10'27
behind sun begin	9801 Jan 14 04:51	28°♑26'42	
behind sun end	9801 Jan 15 09:08	29°♑11'31	
	9801 Jan 16 15:42	0°♒	
morning rise	9801 Feb 27 06:25	26°♒30'23	
	9801 Mar 04 17:12	0°♓	
	9801 Apr 20 01:29	0°♈	
	9801 Jun 04 11:53	0°♉	
	9801 Jul 19 01:21	0°♊	
	9801 Sep 01 01:42	0°♋	
	9801 Oct 15 18:58	0°♌	
	9801 Dec 06 00:46	0°♍	

asc. node	9801 Dec 12 03:20	2°♍48'33	
retrograde	9802 Jan 20 06:19	12°♍24'38	
min. Earth dist.	9802 Feb 15 03:21	8°♍02'19	0.39409 AU
opposition	9802 Feb 21 22:41	5°♍59'31	4°42'12
greatest brilliancy	9802 Feb 20 17:13	6°♍21'52	-2.8m
direct	9802 Mar 24 03:57	0°♍32'37	
	9802 Jun 14 11:57	0°♎	
	9802 Aug 05 06:25	0°♏	
	9802 Sep 23 16:19	0°♐	
	9802 Nov 11 10:47	0°♑	
desc. node	9802 Nov 12 05:57	0°♑29'37	
	9802 Dec 29 13:13	0°♒	
evening set	9803 Jan 05 16:51	4°♒30'44	
max. Earth dist.	9803 Feb 04 08:37	23°♒25'29	2.65349 AU
	9803 Feb 14 12:53	0°♓	
conjunction	9803 Feb 19 03:43	2°♓59'56	-0°47'34
minimum elong	9803 Feb 19 02:36	2°♓58'08	0°47'22
	9803 Apr 01 00:06	0°♈	
morning rise	9803 Apr 04 22:04	2°♈38'12	
	9803 May 14 18:26	0°♉	
	9803 Jun 25 21:16	0°♊	
	9803 Aug 05 14:49	0°♋	
	9803 Sep 14 12:05	0°♌	
	9803 Oct 24 12:48	0°♍	
asc. node	9803 Oct 30 00:24	4°♍02'24	
	9803 Dec 05 13:46	0°♎	
	9804 Jan 24 09:24	0°♏	
retrograde	9804 Mar 14 02:56	14°♏15'56	
min. Earth dist.	9804 Apr 13 17:46	7°♏49'37	0.52765 AU
greatest brilliancy	9804 Apr 20 01:01	5°♏27'04	-2.0m
opposition	9804 Apr 21 09:15	4°♏56'34	5°09'29
	9804 May 06 02:53	30°℞♎	
direct	9804 May 26 14:11	27°♎13'30	
	9804 Jun 17 12:25	0°♏	
	9804 Aug 27 22:52	0°♐	
desc. node	9804 Sep 29 08:55	17°♐44'37	
	9804 Oct 20 17:03	0°♑	
	9804 Dec 09 17:52	0°♒	
	9805 Jan 26 07:07	0°♓	
evening set	9805 Feb 10 09:30	9°♓50'56	
max. Earth dist.	9805 Mar 01 03:21	22°♓18'41	2.57148 AU
	9805 Mar 12 12:12	0°♈	
conjunction	9805 Mar 29 12:00	11°♈41'11	-1°07'43
minimum elong	9805 Mar 29 11:39	11°♈40'34	1°07'47
	9805 Apr 24 11:23	0°♉	
morning rise	9805 May 19 12:44	18°♉10'47	
	9805 Jun 04 11:25	0°♊	
	9805 Jul 13 23:24	0°♋	
	9805 Aug 21 14:52	0°♌	
asc. node	9805 Sep 15 20:33	19°♌38'44	
	9805 Sep 29 05:55	0°♍	
	9805 Nov 07 21:35	0°♎	
	9805 Dec 20 01:17	0°♏	
	9806 Feb 05 21:44	0°♐	
retrograde	9806 Apr 22 08:19	26°♐07'47	
min. Earth dist.	9806 May 28 12:45	17°♐46'16	0.63513 AU
opposition	9806 Jun 01 15:13	16°♐08'31	2°40'19
greatest brilliancy	9806 Jun 01 06:19	16°♐17'22	-1.5m
direct	9806 Jul 10 11:43	7°♐04'28	
desc. node	9806 Aug 17 12:10	14°♐16'37	
	9806 Sep 24 02:14	0°♑	
	9806 Nov 18 22:51	0°♒	
	9807 Jan 07 06:15	0°♓	
	9807 Feb 21 19:53	0°♈	
evening set	9807 Mar 25 07:28	21°♈57'35	
	9807 Apr 05 11:56	0°♉	
max. Earth dist.	9807 Apr 08 04:06	1°♉56'23	2.44536 AU
	9807 May 15 21:52	0°♊	
conjunction	9807 May 19 22:11	3°♊03'11	-0°48'26
minimum elong	9807 May 20 00:42	3°♊07'58	0°48'44
	9807 Jun 23 18:30	0°♋	
morning rise	9807 Jul 25 13:02	25°♋00'18	
	9807 Jul 31 20:51	0°♌	
asc. node	9807 Aug 03 14:52	2°♌10'17	
	9807 Sep 08 01:35	0°♍	
	9807 Oct 17 05:56	0°♎	
	9807 Nov 27 07:58	0°♏	
	9808 Jan 10 10:54	0°♐	
	9808 Feb 29 00:10	0°♑	
	9808 May 18 05:01	0°♒	
retrograde	9808 May 25 17:21	0°♒20'39	
	9808 Jun 02 01:47	30°℞♑	
desc. node	9808 Jul 04 13:52	20°♑52'04	
opposition	9808 Jul 05 07:38	20°♑34'27	-0°01'32
greatest brilliancy	9808 Jul 05 07:42	20°♑34'23	-1.3m
min. Earth dist.	9808 Jul 05 00:09	20°♑41'52	0.68121 AU
direct	9808 Aug 15 07:36	10°♑47'19	
	9808 Oct 21 15:23	0°♒	
	9808 Dec 16 00:10	0°♓	
	9809 Feb 01 03:21	0°♈	
	9809 Mar 16 02:21	0°♉	
	9809 Apr 25 08:12	0°♊	
evening set	9809 May 21 20:21	20°♊31'17	
	9809 Jun 02 21:58	0°♋	
asc. node	9809 Jun 20 12:48	13°♋55'53	
	9809 Jul 10 19:00	0°♌	
conjunction	9809 Jul 31 03:55	16°♌06'08	0°28'34
minimum elong	9809 Jul 31 00:58	16°♌00'20	0°28'15
	9809 Aug 17 21:41	0°♍	
max. Earth dist.	9809 Sep 21 03:29	26°♍16'22	2.39063 AU
	9809 Sep 26 02:24	0°♎	
morning rise	9809 Oct 09 19:52	10°♎13'01	
	9809 Nov 06 02:30	0°♏	
	9809 Dec 19 12:22	0°♐	
	9810 Feb 03 23:50	0°♑	
	9810 Mar 27 07:55	0°♒	
desc. node	9810 May 22 12:14	25°♒47'18	
	9810 Jun 05 19:40	0°♓	
retrograde	9810 Jun 29 17:22	3°♓06'21	
	9810 Jul 21 23:19	30°℞♒	
opposition	9810 Aug 08 08:00	23°♒57'18	-2°35'49
greatest brilliancy	9810 Aug 08 14:31	23°♒50'57	-1.4m
min. Earth dist.	9810 Aug 11 19:44	22°♒35'42	0.66148 AU
direct	9810 Sep 18 23:48	13°♒53'58	
	9810 Nov 16 16:49	0°♓	
	9811 Jan 09 13:25	0°♈	
	9811 Feb 23 04:25	0°♉	
	9811 Apr 04 21:22	0°♊	
asc. node	9811 May 08 13:59	26°♊04'05	
	9811 May 13 14:08	0°♋	
	9811 Jun 20 13:38	0°♌	
	9811 Jul 28 21:19	0°♍	
evening set	9811 Aug 05 09:42	5°♍47'35	
	9811 Sep 06 09:52	0°♎	
conjunction	9811 Oct 08 10:11	23°♎21'29	1°06'36
minimum elong	9811 Oct 08 10:16	23°♎21'37	1°06'44
	9811 Oct 17 18:09	0°♏	
max. Earth dist.	9811 Nov 14 16:47	19°♏26'37	2.52936 AU
	9811 Nov 30 06:23	0°♐	

morning rise	9811 Dec 02 21:56	1°♐46'38	
	9812 Jan 15 00:42	0°♑	
	9812 Mar 03 04:57	0°♒	
desc. node	9812 Apr 08 06:49	21°♒14'31	
	9812 Apr 23 22:06	0°♓	
	9812 Jun 25 16:28	0°♈	
retrograde	9812 Aug 08 16:52	9°♈20'01	
opposition	9812 Sep 14 20:47	1°♈15'37	-4°49'32
greatest brilliancy	9812 Sep 16 00:49	0°♈49'27	-1.7m
	9812 Sep 18 05:37	30°℞♓	
min. Earth dist.	9812 Sep 22 00:14	28°♓35'46	0.57617 AU
direct	9812 Oct 25 06:13	21°♓37'24	
	9812 Dec 02 15:54	0°♈	
	9813 Jan 27 09:53	0°♉	
	9813 Mar 11 16:50	0°♊	
asc. node	9813 Mar 25 16:09	10°♊21'32	
	9813 Apr 20 11:17	0°♋	
	9813 May 29 03:40	0°♌	
	9813 Jul 07 03:42	0°♍	
	9813 Aug 16 09:58	0°♎	
	9813 Sep 27 11:52	0°♏	
evening set	9813 Oct 03 21:19	4°♏26'10	
	9813 Nov 10 13:33	0°♐	
conjunction	9813 Nov 24 17:53	9°♐23'36	0°44'47
minimum elong	9813 Nov 24 19:13	9°♐25'48	0°45'08
max. Earth dist.	9813 Dec 12 15:47	21°♐06'14	2.63084 AU
	9813 Dec 26 10:02	0°♑	
morning rise	9814 Jan 10 21:35	9°♑54'51	
	9814 Feb 11 16:10	0°♒	
desc. node	9814 Feb 24 00:23	7°♒42'58	
	9814 Apr 01 02:13	0°♓	
	9814 May 21 01:48	0°♈	
	9814 Jul 14 00:19	0°♉	
retrograde	9814 Oct 04 00:53	27°♉08'36	
opposition	9814 Nov 05 19:06	20°♉57'03	-5°15'15
greatest brilliancy	9814 Nov 07 12:07	20°♉23'51	-2.5m
min. Earth dist.	9814 Nov 14 06:01	18°♉14'17	0.44108 AU
direct	9814 Dec 11 08:41	13°♉26'32	
	9815 Feb 02 22:34	0°♊	
asc. node	9815 Feb 10 18:29	4°♊20'01	
	9815 Mar 22 19:07	0°♋	
	9815 May 03 18:14	0°♌	
	9815 Jun 13 22:09	0°♍	
	9815 Jul 25 22:37	0°♎	
	9815 Sep 07 11:50	0°♏	
	9815 Oct 22 16:33	0°♐	
evening set	9815 Nov 16 19:28	16°♐17'27	
	9815 Dec 08 04:21	0°♑	
conjunction	9816 Jan 02 00:03	15°♑48'39	0°05'14
minimum elong	9816 Jan 02 00:14	15°♑48'56	0°05'37
behind sun begin	9816 Jan 01 06:32	15°♑20'50	
behind sun end	9816 Jan 02 17:56	16°♑17'02	
max. Earth dist.	9816 Jan 04 23:03	17°♑41'23	2.67869 AU
desc. node	9816 Jan 11 20:47	22°♑04'21	
	9816 Jan 24 08:42	0°♒	
morning rise	9816 Feb 14 20:35	13°♒37'51	
	9816 Mar 11 15:00	0°♓	
	9816 Apr 27 13:56	0°♈	
	9816 Jun 13 04:09	0°♉	
	9816 Jul 29 16:46	0°♊	
	9816 Sep 15 06:51	0°♋	
	9816 Nov 09 03:45	0°♌	
retrograde	9816 Dec 22 10:43	10°♌48'44	
asc. node	9816 Dec 28 20:37	10°♌32'18	
min. Earth dist.	9817 Jan 19 07:48	6°♌16'59	0.36653 AU
opposition	9817 Jan 21 15:57	5°♌39'22	1°50'42
greatest brilliancy	9817 Jan 21 10:28	5°♌43'03	-3.1m
direct	9817 Feb 19 19:26	0°♌47'29	
	9817 May 10 04:06	0°♍	
	9817 Jun 28 15:32	0°♎	
	9817 Aug 15 03:54	0°♏	
	9817 Oct 01 18:06	0°♐	
	9817 Nov 18 14:52	0°♑	
desc. node	9817 Nov 28 19:26	6°♑23'10	
evening set	9817 Dec 22 20:23	21°♑29'29	
	9818 Jan 05 07:52	0°♒	
max. Earth dist.	9818 Jan 26 08:38	13°♒21'23	2.67131 AU
conjunction	9818 Feb 05 05:08	19°♒39'27	-0°34'31
minimum elong	9818 Feb 05 04:13	19°♒37'59	0°34'13
	9818 Feb 21 06:49	0°♓	
morning rise	9818 Mar 21 01:16	18°♓06'28	
	9818 Apr 08 00:20	0°♈	
	9818 May 22 07:15	0°♉	
	9818 Jul 04 03:21	0°♊	
	9818 Aug 14 17:43	0°♋	
	9818 Sep 24 15:30	0°♌	
	9818 Nov 05 03:51	0°♍	
asc. node	9818 Nov 15 18:28	7°♍23'21	
	9818 Dec 20 19:14	0°♎	
retrograde	9819 Feb 24 16:07	23°♎38'31	
min. Earth dist.	9819 Mar 24 20:32	18°♎08'13	0.47330 AU
greatest brilliancy	9819 Mar 31 15:28	15°♎43'25	-2.3m
opposition	9819 Apr 02 07:36	15°♎07'32	5°42'27
direct	9819 May 05 13:36	8°♎12'39	
	9819 Jul 15 00:40	0°♏	
	9819 Sep 08 17:23	0°♐	
desc. node	9819 Oct 16 20:57	22°♐16'03	
	9819 Oct 29 19:43	0°♑	
	9819 Dec 17 21:45	0°♒	
evening set	9820 Jan 27 17:09	25°♒49'50	
	9820 Feb 03 04:00	0°♓	
max. Earth dist.	9820 Feb 19 08:54	10°♓35'09	2.60962 AU
conjunction	9820 Mar 13 06:55	25°♓50'56	-1°02'58
minimum elong	9820 Mar 13 06:00	25°♓49'23	1°02'55
	9820 Mar 19 10:18	0°♈	
morning rise	9820 Apr 30 00:31	28°♈50'23	
	9820 May 01 15:45	0°♉	
	9820 Jun 12 00:25	0°♊	
	9820 Jul 21 21:40	0°♋	
	9820 Aug 29 21:41	0°♌	
asc. node	9820 Oct 02 13:52	25°♌57'07	
	9820 Oct 07 20:58	0°♍	
	9820 Nov 17 00:23	0°♎	
	9820 Dec 30 08:52	0°♏	
	9821 Feb 21 18:46	0°♐	
retrograde	9821 Apr 08 01:18	11°♐24'53	
min. Earth dist.	9821 May 12 05:54	3°♐42'50	0.59978 AU
opposition	9821 May 17 19:17	1°♐31'38	3°42'36
greatest brilliancy	9821 May 17 02:27	1°♐48'13	-1.6m
	9821 May 21 17:34	30°℞♏	
direct	9821 Jun 24 09:54	22°♏53'28	
	9821 Jul 31 21:23	0°♐	
desc. node	9821 Sep 03 00:20	13°♐36'25	
	9821 Oct 05 09:55	0°♑	
	9821 Nov 27 02:30	0°♒	
	9822 Jan 14 12:59	0°♓	
	9822 Feb 28 21:49	0°♈	
evening set	9822 Mar 07 08:02	4°♈23'59	
max. Earth dist.	9822 Mar 21 12:43	14°♈15'29	2.49881 AU
	9822 Apr 12 16:01	0°♉	

conjunction	9822 Apr 27 14:29	10°♉52'16	-1°02'50
minimum elong	9822 Apr 27 15:51	10°♉54'48	1°03'04
	9822 May 23 06:42	0°♊	
morning rise	9822 Jun 25 23:03	25°♊48'34	
	9822 Jul 01 08:27	0°♋	
	9822 Aug 08 14:45	0°♌	
asc. node	9822 Aug 20 10:10	9°♌17'11	
	9822 Sep 15 21:50	0°♍	
	9822 Oct 25 04:04	0°♎	
	9822 Dec 05 10:45	0°♏	
	9823 Jan 19 07:24	0°♐	
	9823 Mar 13 06:10	0°♑	
retrograde	9823 May 13 13:57	17°♑41'42	
min. Earth dist.	9823 Jun 21 09:51	8°♑29'42	0.67098 AU
opposition	9823 Jun 23 04:54	7°♑46'52	1°00'29
greatest brilliancy	9823 Jun 23 03:34	7°♑48'12	-1.4m
	9823 Jul 16 18:43	30°℞♐	
desc. node	9823 Jul 22 02:48	29°♐02'32	
direct	9823 Aug 02 12:31	28°♐13'15	
	9823 Aug 20 09:51	0°♑	
	9823 Nov 03 09:46	0°♒	
	9823 Dec 25 09:25	0°♓	
	9824 Feb 09 17:15	0°♈	
	9824 Mar 23 12:12	0°♉	
evening set	9824 Apr 26 07:23	25°♉04'19	
	9824 May 02 18:58	0°♊	
max. Earth dist.	9824 Jun 03 16:43	24°♊41'40	2.37013 AU
	9824 Jun 10 10:58	0°♋	
conjunction	9824 Jun 30 05:37	15°♋36'48	-0°05'09
minimum elong	9824 Jun 30 06:11	15°♋37'55	0°05'32
behind sun begin	9824 Jun 29 01:43	14°♋41'37	
behind sun end	9824 Jul 01 10:39	16°♋34'14	
asc. node	9824 Jul 07 06:33	21°♋11'15	
	9824 Jul 18 09:28	0°♌	
	9824 Aug 25 12:01	0°♍	
morning rise	9824 Sep 11 19:25	13°♍24'08	
	9824 Oct 03 15:17	0°♎	
	9824 Nov 13 13:58	0°♏	
	9824 Dec 27 02:13	0°♐	
	9825 Feb 12 05:44	0°♑	
	9825 Apr 07 14:43	0°♒	
desc. node	9825 Jun 08 01:57	20°♒06'15	
retrograde	9825 Jun 15 18:11	20°♒27'16	
opposition	9825 Jul 25 21:43	11°♒01'04	-1°37'35
greatest brilliancy	9825 Jul 25 23:41	10°♒59'07	-1.3m
min. Earth dist.	9825 Jul 27 21:41	10°♒13'54	0.67704 AU
direct	9825 Sep 05 11:43	1°♒00'36	
	9825 Nov 29 17:47	0°♓	
	9826 Jan 18 15:03	0°♈	
	9826 Mar 03 08:29	0°♉	
	9826 Apr 12 18:55	0°♊	
	9826 May 21 09:25	0°♋	
asc. node	9826 May 25 04:52	3°♋00'17	
	9826 Jun 28 07:03	0°♌	
evening set	9826 Jul 06 21:33	6°♌48'15	
	9826 Aug 05 11:48	0°♍	
	9826 Sep 13 20:12	0°♎	
conjunction	9826 Sep 14 06:37	0°♎19'25	1°01'57
minimum elong	9826 Sep 14 04:35	0°♎15'39	1°01'54
	9826 Oct 24 23:54	0°♏	
max. Earth dist.	9826 Oct 30 10:56	3°♏52'01	2.47693 AU
morning rise	9826 Nov 14 04:50	14°♏10'31	
	9826 Dec 07 09:08	0°♐	
	9827 Jan 22 06:18	0°♑	
	9827 Mar 12 04:51	0°♒	
desc. node	9827 Apr 25 22:20	24°♒57'39	
	9827 May 05 20:04	0°♓	
retrograde	9827 Jul 23 14:02	24°♓38'24	
opposition	9827 Aug 30 21:54	16°♓04'20	-4°02'18
greatest brilliancy	9827 Aug 31 16:13	15°♓46'50	-1.5m
min. Earth dist.	9827 Sep 05 16:29	13°♓52'02	0.61708 AU
direct	9827 Oct 11 02:18	6°♓08'44	
	9827 Dec 22 00:46	0°♈	
	9828 Feb 08 06:40	0°♉	
	9828 Mar 21 01:19	0°♊	
asc. node	9828 Apr 11 07:09	16°♊07'30	
	9828 Apr 29 05:06	0°♋	
	9828 Jun 06 12:06	0°♌	
	9828 Jul 15 03:26	0°♍	
	9828 Aug 24 00:49	0°♎	
evening set	9828 Sep 12 23:14	14°♎30'56	
	9828 Oct 04 18:07	0°♏	
conjunction	9828 Nov 07 16:08	23°♏21'47	0°56'57
minimum elong	9828 Nov 07 17:33	23°♏24'10	0°57'14
	9828 Nov 17 12:52	0°♐	
max. Earth dist.	9828 Dec 02 08:31	9°♐51'18	2.59733 AU
morning rise	9828 Dec 27 06:51	26°♐08'22	
	9829 Jan 02 06:31	0°♑	
	9829 Feb 18 17:43	0°♒	
desc. node	9829 Mar 12 16:36	13°♒31'23	
	9829 Apr 09 00:17	0°♓	
	9829 May 31 11:16	0°♈	
	9829 Aug 04 19:41	0°♉	
retrograde	9829 Sep 09 09:34	6°♉29'31	
	9829 Oct 12 11:13	30°℞♈	
opposition	9829 Oct 14 01:37	29°♈26'42	-5°33'14
greatest brilliancy	9829 Oct 15 19:06	28°♈50'22	-2.1m
min. Earth dist.	9829 Oct 22 16:12	26°♈26'36	0.49687 AU
direct	9829 Nov 21 02:59	20°♈47'35	
	9829 Dec 30 04:35	0°♉	
	9830 Feb 21 01:03	0°♊	
asc. node	9830 Feb 27 10:22	4°♊19'17	
	9830 Apr 04 07:38	0°♋	
	9830 May 14 07:00	0°♌	
	9830 Jun 23 05:50	0°♍	
	9830 Aug 03 08:07	0°♎	
	9830 Sep 15 03:41	0°♏	
	9830 Oct 29 19:13	0°♐	
evening set	9830 Oct 31 22:50	1°♐25'03	
	9830 Dec 14 23:10	0°♑	
conjunction	9830 Dec 18 18:43	2°♑26'44	0°21'12
minimum elong	9830 Dec 18 19:24	2°♑27'50	0°21'35
max. Earth dist.	9830 Dec 27 08:11	7°♑55'12	2.66665 AU
desc. node	9831 Jan 28 10:57	28°♑19'33	
	9831 Jan 31 02:27	0°♒	
morning rise	9831 Feb 01 11:51	0°♒52'49	
	9831 Mar 19 16:23	0°♓	
	9831 May 06 11:36	0°♈	
	9831 Jun 23 19:01	0°♉	
	9831 Aug 12 21:46	0°♊	
	9831 Oct 11 03:33	0°♋	
retrograde	9831 Nov 20 17:55	8°♋59'18	
opposition	9831 Dec 20 15:35	4°♋00'41	-1°57'24
greatest brilliancy	9831 Dec 21 00:57	3°♋54'18	-3.0m
min. Earth dist.	9831 Dec 24 07:01	3°♋01'13	0.37383 AU
	9832 Jan 06 03:13	30°℞♊	
asc. node	9832 Jan 15 11:22	28°♊49'13	
direct	9832 Jan 20 10:24	28°♊39'06	
	9832 Feb 03 11:11	0°♋	
	9832 Apr 09 09:46	0°♌	

	9832 May 25 20:12	0°♍	
	9832 Jul 09 15:57	0°♎	
	9832 Aug 24 00:35	0°♏	
	9832 Oct 09 09:52	0°♐	
	9832 Nov 25 14:35	0°♑	
evening set	9832 Dec 08 20:46	8°♑22'49	
desc. node	9832 Dec 15 08:33	12°♑29'02	
	9833 Jan 12 00:56	0°♒	
max. Earth dist.	9833 Jan 17 13:49	3°♒30'47	2.68091 AU
conjunction	9833 Jan 22 13:36	6°♒40'57	-0°19'52
minimum elong	9833 Jan 22 13:01	6°♒40'03	0°19'32
	9833 Feb 28 01:12	0°♓	
morning rise	9833 Mar 07 00:23	4°♓29'21	
	9833 Apr 15 03:51	0°♈	
	9833 May 30 03:32	0°♉	
	9833 Jul 12 23:41	0°♊	
	9833 Aug 24 21:51	0°♋	
	9833 Oct 06 16:07	0°♌	
	9833 Nov 20 19:28	0°♍	
asc. node	9833 Dec 02 12:06	7°♍00'31	
retrograde	9834 Feb 03 04:37	28°♍58'17	
min. Earth dist.	9834 Mar 01 11:15	24°♍18'46	0.41937 AU
greatest brilliancy	9834 Mar 07 21:39	22°♍14'08	-2.6m
opposition	9834 Mar 09 12:09	21°♍42'48	5°28'51
direct	9834 Apr 09 15:54	15°♍44'46	
	9834 Jun 01 20:59	0°♎	
	9834 Jul 28 23:50	0°♏	
	9834 Sep 17 23:15	0°♐	
desc. node	9834 Nov 02 09:06	27°♐31'25	
	9834 Nov 06 10:11	0°♑	
	9834 Dec 24 20:11	0°♒	
evening set	9835 Jan 13 15:17	12°♒29'44	
	9835 Feb 09 22:06	0°♓	
max. Earth dist.	9835 Feb 09 18:02	29°♒53'25	2.64017 AU
conjunction	9835 Feb 27 07:51	11°♓21'50	-0°54'09
minimum elong	9835 Feb 27 06:44	11°♓20'00	0°53'59
	9835 Mar 27 07:39	0°♈	
morning rise	9835 Apr 13 21:31	11°♈56'56	
	9835 May 09 21:36	0°♉	
	9835 Jun 20 17:51	0°♊	
	9835 Jul 31 03:44	0°♋	
	9835 Sep 08 16:17	0°♌	
	9835 Oct 18 05:05	0°♍	
asc. node	9835 Oct 20 09:26	1°♍38'06	
	9835 Nov 28 06:39	0°♎	
	9836 Jan 13 07:35	0°♏	
retrograde	9836 Mar 23 15:17	25°♏03'03	
min. Earth dist.	9836 Apr 24 13:46	18°♏07'42	0.55522 AU
greatest brilliancy	9836 Apr 30 09:59	15°♏52'48	-1.9m
opposition	9836 May 01 12:32	15°♏27'08	4°40'55
direct	9836 Jun 06 15:26	7°♏22'01	
	9836 Aug 19 13:28	0°♐	
desc. node	9836 Sep 19 11:35	15°♐53'41	
	9836 Oct 14 21:24	0°♑	
	9836 Dec 04 17:30	0°♒	
	9837 Jan 21 13:57	0°♓	
evening set	9837 Feb 19 02:56	18°♓43'05	
	9837 Mar 07 20:34	0°♈	
max. Earth dist.	9837 Mar 07 22:52	0°♈03'55	2.54727 AU
conjunction	9837 Apr 08 10:00	21°♈54'54	-1°08'00
minimum elong	9837 Apr 08 10:10	21°♈55'11	1°08'08
	9837 Apr 19 18:21	0°♉	
	9837 May 30 15:10	0°♊	
morning rise	9837 May 31 21:57	0°♊57'44	

	9837 Jul 08 23:32	0°♋	
	9837 Aug 16 11:35	0°♌	
asc. node	9837 Sep 06 03:39	16°♌09'27	
	9837 Sep 23 23:08	0°♍	
	9837 Nov 02 10:02	0°♎	
	9837 Dec 14 02:49	0°♏	
	9838 Jan 29 09:30	0°♐	
	9838 Apr 02 08:47	0°♑	
retrograde	9838 Apr 30 05:06	4°♑29'55	
	9838 May 26 02:52	30°℞♐	
min. Earth dist.	9838 Jun 06 09:18	25°♐49'00	0.65050 AU
opposition	9838 Jun 09 15:51	24°♐30'48	2°03'33
greatest brilliancy	9838 Jun 09 10:26	24°♐36'12	-1.4m
direct	9838 Jul 19 01:55	15°♐15'01	
desc. node	9838 Aug 07 15:07	17°♐21'41	
	9838 Sep 14 20:29	0°♑	
	9838 Nov 13 02:11	0°♒	
	9839 Jan 02 05:08	0°♓	
	9839 Feb 17 01:09	0°♈	
	9839 Mar 31 18:45	0°♉	
evening set	9839 Apr 05 09:53	3°♉21'50	
max. Earth dist.	9839 Apr 21 14:19	15°♉16'54	2.41573 AU
	9839 May 11 03:49	0°♊	
conjunction	9839 Jun 03 01:13	17°♊35'38	-0°35'30
minimum elong	9839 Jun 03 03:49	17°♊40'42	0°35'50
	9839 Jun 18 22:49	0°♋	
asc. node	9839 Jul 24 23:15	28°♋24'32	
	9839 Jul 26 23:32	0°♌	
morning rise	9839 Aug 12 09:14	12°♌57'22	
	9839 Sep 03 02:49	0°♍	
	9839 Oct 12 05:47	0°♎	
	9839 Nov 22 05:11	0°♏	
	9840 Jan 04 23:56	0°♐	
	9840 Feb 22 08:00	0°♑	
	9840 Apr 23 19:00	0°♒	
retrograde	9840 Jun 02 07:56	7°♒59'10	
desc. node	9840 Jun 24 16:43	4°♒46'19	
	9840 Jul 08 12:43	30°℞♑	
opposition	9840 Jul 12 19:11	28°♑19'20	-0°37'28
greatest brilliancy	9840 Jul 12 19:11	28°♑19'20	-1.3m
min. Earth dist.	9840 Jul 13 07:34	28°♑07'05	0.68247 AU
direct	9840 Aug 23 01:06	18°♑26'24	
	9840 Oct 11 15:59	0°♒	
	9840 Dec 09 23:35	0°♓	
	9841 Jan 26 22:14	0°♈	
	9841 Mar 11 03:40	0°♉	
	9841 Apr 20 11:23	0°♊	
	9841 May 29 01:36	0°♋	
evening set	9841 Jun 06 18:30	6°♋52'16	
asc. node	9841 Jun 10 22:01	10°♋09'09	
	9841 Jul 05 22:45	0°♌	
	9841 Aug 13 01:33	0°♍	
conjunction	9841 Aug 17 05:25	3°♍14'05	0°44'24
minimum elong	9841 Aug 17 01:49	3°♍07'06	0°44'10
	9841 Sep 21 06:37	0°♎	
max. Earth dist.	9841 Oct 09 07:51	13°♎23'44	2.42055 AU
morning rise	9841 Oct 23 14:39	23°♎47'06	
	9841 Nov 01 06:45	0°♏	
	9841 Dec 14 14:39	0°♐	
	9842 Jan 29 18:23	0°♑	
	9842 Mar 20 22:27	0°♒	
desc. node	9842 May 12 13:53	26°♒40'05	
	9842 May 20 16:03	0°♓	
retrograde	9842 Jul 08 01:58	11°♓02'09	
opposition	9842 Aug 16 06:58	2°♓04'22	-3°08'47

greatest brilliancy	9842 Aug 16 17:10	1°♓54'29	-1.4m
min. Earth dist.	9842 Aug 20 14:33	0°♓23'58	0.64832 AU
	9842 Aug 21 15:29	30℞♒	
direct	9842 Sep 26 20:30	22°♒01'43	
	9842 Nov 04 17:57	0°♓	
	9843 Jan 03 00:42	0°♈	
	9843 Feb 17 14:34	0°♉	
	9843 Mar 30 15:04	0°♊	
asc. node	9843 Apr 28 21:51	22°♊31'38	
	9843 May 08 11:10	0°♋	
	9843 Jun 15 12:54	0°♌	
	9843 Jul 23 22:37	0°♍	
evening set	9843 Aug 20 17:02	21°♍09'14	
	9843 Sep 01 13:25	0°♎	
	9843 Oct 12 23:54	0°♏	
conjunction	9843 Oct 20 11:36	5°♏15'59	1°04'56
minimum elong	9843 Oct 20 12:26	5°♏17'27	1°05'09
max. Earth dist.	9843 Nov 21 23:22	27°♏35'36	2.55565 AU
	9843 Nov 25 13:09	0°♐	
morning rise	9843 Dec 12 12:47	11°♐18'50	
	9844 Jan 10 05:47	0°♑	
	9844 Feb 27 01:39	0°♒	
desc. node	9844 Mar 29 08:20	18°♒48'21	
	9844 Apr 17 15:30	0°♓	
	9844 Jun 13 18:26	0°♈	
retrograde	9844 Aug 19 08:11	18°♈49'57	
opposition	9844 Sep 24 16:45	11°♈04'59	-5°11'22
greatest brilliancy	9844 Sep 26 02:25	10°♈34'04	-1.8m
min. Earth dist.	9844 Oct 02 11:55	8°♈13'29	0.54985 AU
direct	9844 Nov 03 10:23	1°♈42'02	
	9845 Jan 19 05:10	0°♉	
	9845 Mar 05 05:32	0°♊	
asc. node	9845 Mar 16 01:17	7°♊51'07	
	9845 Apr 14 14:14	0°♋	
	9845 May 23 14:29	0°♌	
	9845 Jul 01 20:20	0°♍	
	9845 Aug 11 07:51	0°♎	
	9845 Sep 22 14:36	0°♏	
evening set	9845 Oct 14 15:32	15°♏06'38	
	9845 Nov 05 19:56	0°♐	
conjunction	9845 Dec 03 19:14	18°♐23'10	0°36'32
minimum elong	9845 Dec 03 20:23	18°♐25'03	0°36'54
max. Earth dist.	9845 Dec 18 04:38	27°♐42'21	2.64609 AU
	9845 Dec 21 18:06	0°♑	
morning rise	9846 Jan 18 21:22	17°♑58'18	
	9846 Feb 06 22:10	0°♒	
desc. node	9846 Feb 14 02:29	4°♒30'57	
	9846 Mar 26 23:14	0°♓	
	9846 May 14 23:43	0°♈	
	9846 Jul 05 04:06	0°♉	
	9846 Sep 02 22:21	0°♊	
retrograde	9846 Oct 19 20:57	11°♊02'50	
opposition	9846 Nov 20 11:47	5°♊21'30	-4°33'03
greatest brilliancy	9846 Nov 21 21:41	4°♊55'46	-2.7m
min. Earth dist.	9846 Nov 28 02:37	3°♊03'51	0.41252 AU
	9846 Dec 10 09:30	30℞♉	
direct	9846 Dec 24 08:25	28°♉38'09	
	9847 Jan 07 10:18	0°♊	
asc. node	9847 Feb 01 05:01	8°♊03'47	
	9847 Mar 12 22:48	0°♋	
	9847 Apr 26 06:25	0°♌	
	9847 Jun 07 12:38	0°♍	
	9847 Jul 20 05:25	0°♎	
	9847 Sep 02 06:14	0°♏	
	9847 Oct 17 18:53	0°♐	
evening set	9847 Nov 25 10:04	24°♐51'24	
	9847 Dec 03 11:34	0°♑	
desc. node	9848 Jan 01 22:19	18°♑42'46	
conjunction	9848 Jan 09 22:26	23°♑47'24	-0°04'16
minimum elong	9848 Jan 09 22:20	23°♑47'15	0°03'53
behind sun begin	9848 Jan 09 04:14	23°♑18'34	
behind sun end	9848 Jan 10 16:26	24°♑15'55	
max. Earth dist.	9848 Jan 09 23:51	23°♑49'38	2.68189 AU
	9848 Jan 19 17:28	0°♒	
morning rise	9848 Feb 22 12:04	21°♒27'53	
	9848 Mar 06 21:00	0°♓	
	9848 Apr 22 11:45	0°♈	
	9848 Jun 07 09:50	0°♉	
	9848 Jul 22 17:40	0°♊	
	9848 Sep 05 23:59	0°♋	
	9848 Oct 23 06:23	0°♌	
asc. node	9848 Dec 19 05:17	26°♌40'29	
retrograde	9849 Jan 08 07:14	29°♌22'47	
min. Earth dist.	9849 Feb 03 13:41	25°♌04'10	0.37811 AU
opposition	9849 Feb 08 17:07	23°♌36'45	3°42'10
greatest brilliancy	9849 Feb 07 22:06	23°♌50'17	-2.9m
direct	9849 Mar 10 06:27	18°♌30'58	
	9849 Apr 24 23:16	0°♍	
	9849 Jun 20 09:54	0°♎	
	9849 Aug 08 21:45	0°♏	
	9849 Sep 26 09:35	0°♐	
	9849 Nov 13 17:32	0°♑	
desc. node	9849 Nov 18 21:32	3°♑12'59	
evening set	9849 Dec 30 18:36	29°♑26'29	
	9849 Dec 31 15:51	0°♒	
max. Earth dist.	9850 Jan 31 13:27	19°♒38'17	2.66259 AU
conjunction	9850 Feb 13 03:01	27°♒43'12	-0°42'24
minimum elong	9850 Feb 13 01:58	27°♒41'31	0°42'09
	9850 Feb 16 15:41	0°♓	
morning rise	9850 Mar 29 09:28	26°♓44'38	
	9850 Apr 03 06:28	0°♈	
	9850 May 17 07:05	0°♉	
	9850 Jun 28 17:56	0°♊	
	9850 Aug 08 20:28	0°♋	
	9850 Sep 18 03:27	0°♌	
	9850 Oct 28 16:05	0°♍	
asc. node	9850 Nov 06 02:25	6°♍05'44	
	9850 Dec 10 17:52	0°♎	
	9851 Feb 04 10:36	0°♏	
retrograde	9851 Mar 07 11:21	6°♏13'53	
min. Earth dist.	9851 Apr 05 23:21	0°♏12'10	0.50378 AU
	9851 Apr 06 12:51	30℞♎	
greatest brilliancy	9851 Apr 12 13:24	27°♎46'32	-2.1m
opposition	9851 Apr 14 01:37	27°♎12'57	5°27'40
direct	9851 May 18 10:46	19°♎49'57	
	9851 Jul 02 06:39	0°♏	
	9851 Sep 01 21:51	0°♐	
desc. node	9851 Oct 07 00:14	19°♐49'26	
	9851 Oct 24 09:38	0°♑	
	9851 Dec 13 00:39	0°♒	
	9852 Jan 29 11:37	0°♓	
evening set	9852 Feb 05 00:15	4°♓14'04	
max. Earth dist.	9852 Feb 25 11:36	17°♓42'43	2.58951 AU
	9852 Mar 14 18:23	0°♈	
conjunction	9852 Mar 22 07:59	5°♈09'34	-1°06'21
minimum elong	9852 Mar 22 07:20	5°♈08'29	1°06'21
	9852 Apr 26 21:30	0°♉	
morning rise	9852 May 10 17:05	9°♉55'02	
	9852 Jun 07 02:17	0°♊	

	9852 Jul 16 18:53	0°♋		
	9852 Aug 24 14:16	0°♌		
asc. node	9852 Sep 22 22:54	22°♌46'06		
	9852 Oct 02 08:12	0°♍		
	9852 Nov 11 03:06	0°♎		
	9852 Dec 23 14:51	0°♏		
	9853 Feb 10 22:10	0°♐		
retrograde	9853 Apr 16 08:31	20°♐27'43		
min. Earth dist.	9853 May 21 15:58	12°♐22'47	0.62038 AU	
opposition	9853 May 26 09:51	10°♐29'56	3°06'47	
greatest brilliancy	9853 May 25 21:46	10°♐41'55	-1.6m	
direct	9853 Jul 03 17:15	1°♐36'45		
desc. node	9853 Aug 24 03:49	13°♐49'13		
	9853 Sep 28 06:34	0°♑		
	9853 Nov 21 16:11	0°♒		
	9854 Jan 09 15:22	0°♓		
	9854 Feb 24 04:12	0°♈		
evening set	9854 Mar 17 07:01	14°♈35'38		
max. Earth dist.	9854 Mar 30 21:33	24°♈13'37	2.46955 AU	
	9854 Apr 07 22:31	0°♉		
conjunction	9854 May 09 18:58	23°♉27'06	-0°55'52	
minimum elong	9854 May 09 21:04	23°♉31'02	0°56'10	
	9854 May 18 11:33	0°♊		
	9854 Jun 26 11:03	0°♋		
morning rise	9854 Jul 12 02:30	12°♋15'04		
	9854 Aug 03 15:26	0°♌		
asc. node	9854 Aug 10 17:07	5°♌34'20		
	9854 Sep 10 20:50	0°♍		
	9854 Oct 20 00:57	0°♎		
	9854 Nov 30 03:16	0°♏		
	9855 Jan 13 10:13	0°♐		
	9855 Mar 04 22:27	0°♑		
retrograde	9855 May 21 03:07	25°♑27'39		
opposition	9855 Jun 30 17:45	15°♑37'07	0°24'00	
min. Earth dist.	9855 Jun 29 18:27	16°♑00'17	0.67785 AU	
greatest brilliancy	9855 Jun 30 17:34	15°♑37'18	-1.3m	
desc. node	9855 Jul 12 06:03	11°♑14'26		
direct	9855 Aug 10 10:32	5°♑55'30		
	9855 Oct 27 01:50	0°♒		
	9855 Dec 19 21:40	0°♓		
	9856 Feb 04 17:44	0°♈		
	9856 Mar 18 16:22	0°♉		
	9856 Apr 27 23:32	0°♊		
evening set	9856 May 10 05:17	9°♊24'00		
	9856 Jun 05 14:43	0°♋		
asc. node	9856 Jun 27 13:44	17°♋21'24		
	9856 Jul 13 12:26	0°♌		
conjunction	9856 Jul 17 12:40	3°♌10'39	0°14'26	
minimum elong	9856 Jul 17 11:06	3°♌07'31	0°14'04	
behind sun begin	9856 Jul 16 19:47	2°♌37'12		
behind sun end	9856 Jul 18 02:24	3°♌37'50		
	9856 Aug 20 14:32	0°♍		
max. Earth dist.	9856 Aug 24 05:18	2°♍48'56	2.37050 AU	
morning rise	9856 Sep 28 03:56	29°♍34'19		
	9856 Sep 28 17:36	0°♎		
	9856 Nov 08 15:47	0°♏		
	9856 Dec 22 00:41	0°♐		
	9857 Feb 06 16:07	0°♑		
	9857 Mar 30 21:58	0°♒		
desc. node	9857 May 29 04:42	24°♒37'41		
retrograde	9857 Jun 23 16:01	28°♒07'54		
opposition	9857 Aug 02 12:39	18°♒50'48	-2°11'54	
greatest brilliancy	9857 Aug 02 16:54	18°♒46'39	-1.3m	
min. Earth dist.	9857 Aug 05 08:26	17°♒44'26	0.66977 AU	
direct	9857 Sep 13 03:53	8°♒48'04		
	9857 Nov 21 21:08	0°♓		
	9858 Jan 12 20:46	0°♈		
	9858 Feb 26 03:27	0°♉		
	9858 Apr 07 18:28	0°♊		
asc. node	9858 May 15 14:49	29°♊21'11		
	9858 May 16 10:33	0°♋		
	9858 Jun 23 09:05	0°♌		
evening set	9858 Jul 23 18:48	23°♌54'38		
	9858 Jul 31 14:42	0°♍		
	9858 Sep 09 00:08	0°♎		
conjunction	9858 Sep 28 09:28	14°♎18'09	1°05'57	
minimum elong	9858 Sep 28 08:44	14°♎16'49	1°06'01	
	9858 Oct 20 04:59	0°♏		
max. Earth dist.	9858 Nov 08 17:27	13°♏41'40	2.50660 AU	
morning rise	9858 Nov 25 03:18	24°♏57'22		
	9858 Dec 02 14:13	0°♐		
	9859 Jan 17 08:07	0°♑		
	9859 Mar 06 17:44	0°♒		
desc. node	9859 Apr 15 23:45	23°♒16'05		
	9859 Apr 28 09:23	0°♓		
	9859 Jul 08 04:03	0°♈		
retrograde	9859 Aug 02 02:31	3°♈19'48		
	9859 Aug 25 04:35	30°℞♓		
opposition	9859 Sep 08 19:12	25°♓01'23	-4°30'30	
greatest brilliancy	9859 Sep 09 18:54	24°♓39'00	-1.6m	
min. Earth dist.	9859 Sep 15 08:10	22°♓33'10	0.59565 AU	
direct	9859 Oct 19 13:54	15°♓13'47		
	9859 Dec 12 02:03	0°♈		
	9860 Feb 01 16:31	0°♉		
	9860 Mar 15 06:49	0°♊		
asc. node	9860 Apr 01 17:08	13°♊04'04		
	9860 Apr 23 18:33	0°♋		
	9860 Jun 01 06:20	0°♌		
	9860 Jul 10 01:33	0°♍		
	9860 Aug 19 02:25	0°♎		
evening set	9860 Sep 25 03:57	26°♎38'09		
	9860 Sep 29 23:01	0°♏		
	9860 Nov 12 20:00	0°♐		
conjunction	9860 Nov 17 14:28	3°♐10'55	0°50'15	
minimum elong	9860 Nov 17 15:54	3°♐13'19	0°50'35	
max. Earth dist.	9860 Dec 08 09:28	16°♐53'59	2.61680 AU	
	9860 Dec 28 14:00	0°♑		
morning rise	9861 Jan 04 17:57	4°♑36'16		
	9861 Feb 13 21:07	0°♒		
desc. node	9861 Mar 02 17:11	10°♒28'20		
	9861 Apr 03 14:26	0°♓		
	9861 May 24 11:05	0°♈		
	9861 Jul 20 11:01	0°♉		
retrograde	9861 Sep 22 17:39	18°♉11'20		
opposition	9861 Oct 26 09:22	11°♉35'44	-5°29'22	
greatest brilliancy	9861 Oct 28 04:01	10°♉59'45	-2.3m	
min. Earth dist.	9861 Nov 04 02:24	8°♉40'58	0.46595 AU	
direct	9861 Dec 02 03:39	3°♉31'25		
	9862 Feb 11 09:42	0°♊		
asc. node	9862 Feb 17 19:16	3°♊58'25		
	9862 Mar 28 00:42	0°♋		
	9862 May 07 22:16	0°♌		
	9862 Jun 17 10:50	0°♍		
	9862 Jul 28 23:14	0°♎		
	9862 Sep 10 02:54	0°♏		
	9862 Oct 25 00:12	0°♐		
evening set	9862 Nov 10 03:15	10°♐32'03		
	9862 Dec 10 07:34	0°♑		
conjunction	9862 Dec 26 23:41	10°♑39'05	0°11'53	

minimum elong	9862 Dec 27 00:05	10°♑39'42	0°12'16
behind sun begin	9862 Dec 26 11:53	10°♑20'16	
behind sun end	9862 Dec 27 12:18	10°♑59'08	
max. Earth dist.	9863 Jan 01 11:16	14°♑08'29	2.67434 AU
desc. node	9863 Jan 18 12:46	24°♑58'50	
	9863 Jan 26 10:49	0°♒	
morning rise	9863 Feb 09 03:55	8°♒41'03	
	9863 Mar 14 20:05	0°♓	
	9863 May 01 03:28	0°♈	
	9863 Jun 17 09:50	0°♉	
	9863 Aug 04 05:00	0°♊	
	9863 Sep 23 18:55	0°♋	
retrograde	9863 Dec 09 05:42	27°♋00'59	
asc. node	9864 Jan 05 21:24	22°♋39'41	
opposition	9864 Jan 08 00:58	22°♋05'36	0°10'09
greatest brilliancy	9864 Jan 08 00:56	22°♋05'38	-3.1m
min. Earth dist.	9864 Jan 08 09:53	21°♋59'42	0.36523 AU
direct	9864 Feb 06 13:34	17°♋09'35	
	9864 Mar 25 01:01	0°♌	
	9864 May 17 00:57	0°♍	
	9864 Jul 02 22:11	0°♎	
	9864 Aug 18 07:38	0°♏	
	9864 Oct 04 07:03	0°♐	
	9864 Nov 20 19:56	0°♑	
desc. node	9864 Dec 05 10:56	9°♑12'22	
evening set	9864 Dec 16 21:45	16°♑25'08	
	9865 Jan 07 09:47	0°♒	
max. Earth dist.	9865 Jan 22 14:36	9°♒38'48	2.67658 AU
conjunction	9865 Jan 30 08:47	14°♒35'19	-0°28'37
minimum elong	9865 Jan 30 07:59	14°♒34'04	0°28'18
	9865 Feb 23 09:28	0°♓	
morning rise	9865 Mar 14 23:08	12°♓41'12	
	9865 Apr 10 07:29	0°♈	
	9865 May 24 22:02	0°♉	
	9865 Jul 07 04:45	0°♊	
	9865 Aug 18 08:01	0°♋	
	9865 Sep 28 22:16	0°♌	
	9865 Nov 10 12:56	0°♍	
asc. node	9865 Nov 22 20:29	8°♍12'01	
	9865 Dec 29 20:31	0°♎	
retrograde	9866 Feb 15 18:57	13°♎55'06	
min. Earth dist.	9866 Mar 14 22:55	8°♎49'38	0.44856 AU
greatest brilliancy	9866 Mar 21 17:59	6°♎30'22	-2.4m
opposition	9866 Mar 23 11:10	5°♎54'55	5°45'12
	9866 Apr 15 10:38	30°℞♍	
direct	9866 Apr 24 18:51	29°♍24'51	
	9866 May 04 10:03	0°♎	
	9866 Jul 20 17:04	0°♏	
	9866 Sep 11 23:14	0°♐	
desc. node	9866 Oct 23 12:06	24°♐41'24	
	9866 Nov 01 06:59	0°♑	
	9866 Dec 20 02:05	0°♒	
evening set	9867 Jan 21 14:53	20°♒33'16	
	9867 Feb 05 07:02	0°♓	
max. Earth dist.	9867 Feb 15 06:42	6°♓29'41	2.62424 AU
conjunction	9867 Mar 07 17:33	19°♓59'12	-0°59'44
minimum elong	9867 Mar 07 16:31	19°♓57'30	0°59'37
	9867 Mar 22 15:47	0°♈	
morning rise	9867 Apr 23 09:12	21°♈47'24	
	9867 May 05 01:47	0°♉	
	9867 Jun 15 16:17	0°♊	
	9867 Jul 25 19:18	0°♋	
	9867 Sep 03 00:40	0°♌	
asc. node	9867 Oct 10 15:48	28°♌49'36	
	9867 Oct 12 04:52	0°♍	
	9867 Nov 21 14:57	0°♎	
	9868 Jan 04 17:50	0°♏	
	9868 Mar 03 21:28	0°♐	
retrograde	9868 Apr 01 14:48	5°♐05'57	
	9868 Apr 28 16:06	30°℞♏	
min. Earth dist.	9868 May 04 19:56	27°♏43'21	0.58098 AU
greatest brilliancy	9868 May 10 03:11	25°♏39'04	-1.7m
opposition	9868 May 11 00:06	25°♏18'35	4°08'14
direct	9868 Jun 16 23:01	16°♏54'10	
	9868 Aug 09 03:36	0°♐	
desc. node	9868 Sep 09 15:33	14°♐36'44	
	9868 Oct 08 17:13	0°♑	
	9868 Nov 29 14:05	0°♒	
	9869 Jan 16 19:22	0°♓	
evening set	9869 Feb 28 03:31	27°♓55'49	
	9869 Mar 03 04:38	0°♈	
max. Earth dist.	9869 Mar 15 08:27	8°♈20'33	2.52127 AU
	9869 Apr 15 01:37	0°♉	
conjunction	9869 Apr 18 22:41	2°♉47'33	-1°06'03
minimum elong	9869 Apr 18 23:30	2°♉49'01	1°06'15
	9869 May 25 20:04	0°♊	
morning rise	9869 Jun 14 11:18	14°♊54'15	
	9869 Jul 04 01:12	0°♋	
	9869 Aug 11 10:03	0°♌	
asc. node	9869 Aug 27 11:52	12°♌36'50	
	9869 Sep 18 18:33	0°♍	
	9869 Oct 28 01:23	0°♎	
	9869 Dec 08 10:04	0°♏	
	9870 Jan 22 15:42	0°♐	
	9870 Mar 18 22:38	0°♑	
retrograde	9870 May 07 22:35	12°♑38'18	
min. Earth dist.	9870 Jun 15 00:48	3°♑39'33	0.66314 AU
opposition	9870 Jun 17 11:44	2°♑40'48	1°26'36
greatest brilliancy	9870 Jun 17 08:58	2°♑43'34	-1.4m
	9870 Jun 24 08:28	30°℞♐	
direct	9870 Jul 27 09:55	23°♐14'36	
desc. node	9870 Jul 28 18:42	23°♐15'17	
	9870 Sep 02 06:02	0°♑	
	9870 Nov 06 19:28	0°♒	
	9870 Dec 28 00:13	0°♓	
	9871 Feb 12 04:30	0°♈	
	9871 Mar 27 00:16	0°♉	
evening set	9871 Apr 17 08:26	15°♉40'08	
	9871 May 06 09:14	0°♊	
max. Earth dist.	9871 May 10 09:20	3°♊03'14	2.38819 AU
	9871 Jun 14 03:07	0°♋	
conjunction	9871 Jun 18 09:34	3°♋21'16	-0°19'16
minimum elong	9871 Jun 18 11:25	3°♋24'55	0°19'39
asc. node	9871 Jul 15 08:04	24°♋38'06	
	9871 Jul 22 02:41	0°♌	
	9871 Aug 29 05:07	0°♍	
morning rise	9871 Aug 30 06:47	0°♍50'03	
	9871 Oct 07 07:05	0°♎	
	9871 Nov 17 04:25	0°♏	
	9871 Dec 30 17:01	0°♐	
	9872 Feb 16 04:15	0°♑	
	9872 Apr 12 10:32	0°♒	
retrograde	9872 Jun 09 23:48	15°♒37'09	
desc. node	9872 Jun 14 18:31	15°♒28'39	
opposition	9872 Jul 20 06:59	6°♒04'26	-1°12'56
greatest brilliancy	9872 Jul 20 07:46	6°♒03'39	-1.3m
min. Earth dist.	9872 Jul 21 14:58	5°♒32'51	0.68076 AU
	9872 Aug 05 22:05	30°℞♑	
direct	9872 Aug 30 17:35	26°♑06'44	
	9872 Sep 26 16:09	0°♒	

	9872 Dec 03 11:43	0°♓	
	9873 Jan 21 13:17	0°♈	
	9873 Mar 06 02:43	0°♉	
	9873 Apr 15 13:03	0°♊	
	9873 May 24 03:51	0°♋	
asc. node	9873 Jun 01 06:06	6°♋23'12	
evening set	9873 Jun 23 12:53	24°♋02'31	
	9873 Jul 01 01:16	0°♌	
	9873 Aug 08 04:41	0°♍	
conjunction	9873 Sep 02 11:26	19°♍27'29	0°56'07
minimum elong	9873 Sep 02 08:28	19°♍21'50	0°56'00
	9873 Sep 16 10:32	0°♎	
max. Earth dist.	9873 Oct 22 08:25	26°♎20'27	2.45188 AU
	9873 Oct 27 11:17	0°♏	
morning rise	9873 Nov 05 05:40	6°♏12'41	
	9873 Dec 09 18:12	0°♐	
	9874 Jan 24 16:05	0°♑	
	9874 Mar 14 23:25	0°♒	
desc. node	9874 May 02 15:01	26°♒17'46	
	9874 May 10 09:03	0°♓	
retrograde	9874 Jul 16 18:29	19°♓11'08	
opposition	9874 Aug 24 12:07	10°♓25'48	-3°40'23
greatest brilliancy	9874 Aug 25 02:40	10°♓11'48	-1.5m
min. Earth dist.	9874 Aug 29 14:56	8°♓27'33	0.63238 AU
direct	9874 Oct 04 21:05	0°♓25'50	
	9874 Dec 26 19:07	0°♈	
	9875 Feb 11 18:54	0°♉	
	9875 Mar 25 06:09	0°♊	
asc. node	9875 Apr 19 07:52	19°♊08'46	
	9875 May 03 06:38	0°♋	
	9875 Jun 10 10:55	0°♌	
	9875 Jul 18 22:59	0°♍	
	9875 Aug 27 16:09	0°♎	
evening set	9875 Sep 03 20:16	5°♎17'02	
	9875 Oct 08 05:02	0°♏	
conjunction	9875 Oct 31 16:08	16°♏19'01	1°00'58
minimum elong	9875 Oct 31 17:24	16°♏21'11	1°01'14
	9875 Nov 20 19:55	0°♐	
max. Earth dist.	9875 Nov 28 16:57	5°♐16'09	2.57968 AU
morning rise	9875 Dec 21 16:23	20°♐24'36	
	9876 Jan 05 11:47	0°♑	
	9876 Feb 22 01:09	0°♒	
desc. node	9876 Mar 19 09:47	16°♒06'08	
	9876 Apr 11 18:29	0°♓	
	9876 Jun 04 17:30	0°♈	
retrograde	9876 Aug 30 20:27	29°♈01'20	
opposition	9876 Oct 05 07:32	21°♈38'23	-5°26'48
greatest brilliancy	9876 Oct 06 22:01	21°♈03'48	-2.0m
min. Earth dist.	9876 Oct 13 14:44	18°♈40'07	0.52136 AU
direct	9876 Nov 13 04:23	12°♈36'50	
	9877 Jan 08 20:08	0°♉	
	9877 Feb 26 02:15	0°♊	
asc. node	9877 Mar 06 11:29	5°♊52'38	
	9877 Apr 08 09:34	0°♋	
	9877 May 17 21:02	0°♌	
	9877 Jun 26 10:52	0°♍	
	9877 Aug 06 04:49	0°♎	
	9877 Sep 17 17:01	0°♏	
evening set	9877 Oct 24 16:31	25°♏04'13	
	9877 Nov 01 02:30	0°♐	
conjunction	9877 Dec 12 10:56	26°♐59'55	0°27'43
minimum elong	9877 Dec 12 11:50	27°♐01'22	0°28'06
	9877 Dec 17 02:51	0°♑	
max. Earth dist.	9877 Dec 23 13:26	4°♑08'05	2.65849 AU
morning rise	9878 Jan 26 16:59	25°♑52'22	
	9878 Feb 02 05:39	0°♒	
desc. node	9878 Feb 04 03:53	1°♒12'58	
	9878 Mar 21 23:49	0°♓	
	9878 May 09 06:24	0°♈	
	9878 Jun 27 14:37	0°♉	
	9878 Aug 19 10:38	0°♊	
retrograde	9878 Nov 06 09:52	26°♊36'32	
opposition	9878 Dec 06 20:46	21°♊22'52	-3°17'59
greatest brilliancy	9878 Dec 07 17:50	21°♊07'53	-2.9m
min. Earth dist.	9878 Dec 12 15:55	19°♊44'15	0.38808 AU
direct	9879 Jan 07 23:43	15°♊27'54	
asc. node	9879 Jan 22 12:44	16°♊55'33	
	9879 Feb 26 16:18	0°♋	
	9879 Apr 17 11:37	0°♌	
	9879 May 31 13:26	0°♍	
	9879 Jul 14 06:11	0°♎	
	9879 Aug 27 22:07	0°♏	
	9879 Oct 12 20:37	0°♐	
	9879 Nov 28 19:09	0°♑	
evening set	9879 Dec 03 17:28	3°♑07'44	
desc. node	9879 Dec 23 00:43	15°♑21'45	
max. Earth dist.	9880 Jan 14 23:45	29°♑54'39	2.68241 AU
	9880 Jan 15 03:08	0°♒	
conjunction	9880 Jan 17 17:32	1°♒38'56	-0°13'29
minimum elong	9880 Jan 17 17:09	1°♒38'19	0°13'08
behind sun begin	9880 Jan 17 06:31	1°♒21'29	
behind sun end	9880 Jan 18 03:46	1°♒55'09	
morning rise	9880 Mar 01 04:02	29°♒20'00	
	9880 Mar 02 04:59	0°♓	
	9880 Apr 17 13:12	0°♈	
	9880 Jun 01 22:32	0°♉	
	9880 Jul 16 09:22	0°♊	
	9880 Aug 29 04:12	0°♋	
	9880 Oct 12 08:23	0°♌	
	9880 Nov 30 06:24	0°♍	
asc. node	9880 Dec 09 13:39	4°♍43'14	
retrograde	9881 Jan 23 11:29	17°♍04'14	
min. Earth dist.	9881 Feb 18 09:57	12°♍40'02	0.39835 AU
greatest brilliancy	9881 Feb 24 04:40	10°♍54'11	-2.8m
opposition	9881 Feb 25 12:54	10°♍29'24	4°57'38
direct	9881 Mar 27 20:32	4°♍57'02	
	9881 Jun 10 07:25	0°♎	
	9881 Aug 02 02:54	0°♏	
	9881 Sep 20 20:39	0°♐	
	9881 Nov 08 18:49	0°♑	
desc. node	9881 Nov 09 00:45	0°♑09'09	
	9881 Dec 26 23:36	0°♒	
evening set	9882 Jan 07 16:11	7°♒22'20	
max. Earth dist.	9882 Feb 05 20:33	26°♒00'02	2.65131 AU
	9882 Feb 12 01:08	0°♓	
conjunction	9882 Feb 21 03:30	5°♓54'34	-0°49'34
minimum elong	9882 Feb 21 02:24	5°♓52'45	0°49'22
	9882 Mar 29 13:53	0°♈	
morning rise	9882 Apr 07 00:58	5°♈42'11	
	9882 May 12 09:18	0°♉	
	9882 Jun 23 12:41	0°♊	
	9882 Aug 03 06:04	0°♋	
	9882 Sep 12 02:06	0°♌	
	9882 Oct 21 23:21	0°♍	
asc. node	9882 Oct 27 11:43	4°♍05'12	
	9882 Dec 02 15:11	0°♎	
	9883 Jan 19 20:35	0°♏	
retrograde	9883 Mar 17 12:05	17°♏45'00	
min. Earth dist.	9883 Apr 17 08:42	11°♏12'32	0.53285 AU

opposition	9883 Apr 24 20:28	8°♏22'01	5°03'22
greatest brilliancy	9883 Apr 23 13:29	8°♏51'34	-2.0m
direct	9883 May 30 04:58	0°♏34'31	
	9883 Aug 25 07:04	0°♐	
desc. node	9883 Sep 27 03:11	17°♐41'27	
	9883 Oct 18 18:12	0°♑	
	9883 Dec 08 01:38	0°♒	
	9884 Jan 24 18:51	0°♓	
evening set	9884 Feb 13 12:12	12°♓51'42	
max. Earth dist.	9884 Mar 02 22:09	25°♓08'11	2.56703 AU
	9884 Mar 10 02:44	0°♈	
conjunction	9884 Mar 31 19:21	14°♈55'42	-1°08'03
minimum elong	9884 Mar 31 19:08	14°♈55'19	1°08'07
	9884 Apr 22 03:53	0°♉	
morning rise	9884 May 22 06:07	21°♉51'52	
	9884 Jun 02 05:10	0°♊	
	9884 Jul 11 17:44	0°♋	
	9884 Aug 19 09:04	0°♌	
asc. node	9884 Sep 13 06:14	19°♌23'22	
	9884 Sep 26 22:59	0°♍	
	9884 Nov 05 11:54	0°♎	
	9884 Dec 17 09:33	0°♏	
	9885 Feb 02 12:13	0°♐	
retrograde	9885 Apr 24 09:07	29°♐06'25	
min. Earth dist.	9885 May 30 17:26	20°♐40'59	0.63812 AU
opposition	9885 Jun 03 15:54	19°♐07'00	2°30'07
greatest brilliancy	9885 Jun 03 07:53	19°♐14'59	-1.5m
direct	9885 Jul 12 14:09	10°♐00'50	
desc. node	9885 Aug 14 06:49	15°♐29'37	
	9885 Sep 20 01:22	0°♑	
	9885 Nov 15 23:35	0°♒	
	9886 Jan 04 15:30	0°♓	
	9886 Feb 19 09:58	0°♈	
evening set	9886 Mar 27 19:16	25°♈23'15	
	9886 Apr 03 05:11	0°♉	
max. Earth dist.	9886 Apr 10 23:32	5°♉38'10	2.43978 AU
	9886 May 13 17:05	0°♊	
conjunction	9886 May 22 22:56	7°♊02'26	-0°45'38
minimum elong	9886 May 23 01:32	7°♊07'24	0°45'58
	9886 Jun 21 14:37	0°♋	
morning rise	9886 Jul 29 08:16	29°♋42'56	
	9886 Jul 29 16:55	0°♌	
asc. node	9886 Aug 01 00:56	1°♌50'36	
	9886 Sep 05 20:42	0°♍	
	9886 Oct 14 23:08	0°♎	
	9886 Nov 24 21:58	0°♏	
	9887 Jan 07 19:09	0°♐	
	9887 Feb 25 17:52	0°♑	
	9887 May 04 22:42	0°♒	
retrograde	9887 May 28 17:02	3°♒09'53	
	9887 Jun 19 18:42	30°℞♑	
desc. node	9887 Jul 02 08:59	25°♑42'54	
opposition	9887 Jul 08 05:40	23°♑24'49	-0°12'12
greatest brilliancy	9887 Jul 08 05:36	23°♑24'53	-1.3m
min. Earth dist.	9887 Jul 08 01:56	23°♑28'31	0.68165 AU
direct	9887 Aug 18 05:40	13°♑36'33	
	9887 Oct 18 09:57	0°♒	
	9887 Dec 14 02:01	0°♓	
	9888 Jan 30 14:36	0°♈	
	9888 Mar 13 18:31	0°♉	
	9888 Apr 23 03:15	0°♊	
evening set	9888 May 25 05:56	24°♊52'20	
	9888 May 31 18:31	0°♋	
asc. node	9888 Jun 17 23:14	13°♋35'15	
	9888 Jul 08 15:53	0°♌	

conjunction	9888 Aug 03 21:41	20°♌43'49	0°32'37
minimum elong	9888 Aug 03 18:27	20°♌37'29	0°32'17
	9888 Aug 15 17:53	0°♍	
	9888 Sep 23 20:59	0°♎	
max. Earth dist.	9888 Sep 25 15:16	1°♎19'22	2.39597 AU
morning rise	9888 Oct 13 00:39	14°♎14'15	
	9888 Nov 03 18:41	0°♏	
	9888 Dec 17 01:11	0°♐	
	9889 Feb 01 07:11	0°♑	
	9889 Mar 24 02:09	0°♒	
desc. node	9889 May 19 06:35	26°♒45'32	
	9889 May 28 16:43	0°♓	
retrograde	9889 Jul 01 19:36	5°♓57'09	
	9889 Aug 01 22:24	30°℞♒	
opposition	9889 Aug 10 07:46	26°♒50'16	-2°45'26
greatest brilliancy	9889 Aug 10 15:05	26°♒43'08	-1.4m
min. Earth dist.	9889 Aug 13 23:07	25°♒25'05	0.65911 AU
direct	9889 Sep 20 22:11	16°♒46'49	
	9889 Nov 12 04:28	0°♓	
	9890 Jan 06 15:55	0°♈	
	9890 Feb 20 16:46	0°♉	
	9890 Apr 02 14:09	0°♊	
asc. node	9890 May 05 23:06	25°♊45'19	
	9890 May 11 09:01	0°♋	
	9890 Jun 18 09:14	0°♌	
	9890 Jul 26 16:35	0°♍	
evening set	9890 Aug 08 22:04	10°♍10'52	
	9890 Sep 04 03:58	0°♎	
conjunction	9890 Oct 11 06:30	27°♎02'19	1°06'26
minimum elong	9890 Oct 11 06:48	27°♎02'51	1°06'34
	9890 Oct 15 10:29	0°♏	
max. Earth dist.	9890 Nov 16 16:16	22°♏25'25	2.53448 AU
	9890 Nov 27 20:29	0°♐	
morning rise	9890 Dec 05 05:51	4°♐57'34	
	9891 Jan 12 11:58	0°♑	
	9891 Mar 01 11:43	0°♒	
desc. node	9891 Apr 06 01:15	21°♒05'45	
	9891 Apr 21 18:12	0°♓	
	9891 Jun 21 04:34	0°♈	
retrograde	9891 Aug 12 04:15	12°♈25'20	
opposition	9891 Sep 18 03:40	4°♈24'24	-4°55'27
greatest brilliancy	9891 Sep 19 08:58	3°♈57'04	-1.7m
min. Earth dist.	9891 Sep 25 09:37	1°♈42'22	0.57134 AU
	9891 Sep 30 05:09	30°℞♓	
direct	9891 Oct 28 09:28	24°♓48'23	
	9891 Nov 26 22:23	0°♈	
	9892 Jan 25 07:57	0°♉	
	9892 Mar 09 03:27	0°♊	
asc. node	9892 Mar 23 01:46	10°♊15'59	
	9892 Apr 18 02:16	0°♋	
	9892 May 26 20:08	0°♌	
	9892 Jul 04 20:14	0°♍	
	9892 Aug 14 01:45	0°♎	
	9892 Sep 25 02:30	0°♏	
evening set	9892 Oct 06 12:36	7°♏54'45	
	9892 Nov 08 02:53	0°♐	
conjunction	9892 Nov 27 00:05	12°♐29'52	0°42'32
minimum elong	9892 Nov 27 01:24	12°♐32'01	0°42'54
max. Earth dist.	9892 Dec 14 02:10	23°♐38'52	2.63410 AU
	9892 Dec 23 22:02	0°♑	
morning rise	9893 Jan 12 21:44	12°♑48'06	
	9893 Feb 09 02:27	0°♒	
desc. node	9893 Feb 20 19:22	7°♒19'58	
	9893 Mar 29 09:31	0°♓	
	9893 May 18 02:13	0°♈	

	9893 Jul 10 03:27	0°♉		
	9893 Sep 24 12:09	0°♊		
retrograde	9893 Oct 07 08:18	0°♊59'03		
	9893 Oct 19 21:20	30°℞♉		
opposition	9893 Nov 08 22:01	24°♉53'00	-5°06'46	
greatest brilliancy	9893 Nov 10 13:56	24°♉21'06	-2.5m	
min. Earth dist.	9893 Nov 17 07:55	22°♉13'10	0.43560 AU	
direct	9893 Dec 14 04:01	17°♉30'53		
	9894 Jan 28 17:34	0°♊		
asc. node	9894 Feb 08 05:38	5°♊26'07		
	9894 Mar 19 15:14	0°♋		
	9894 May 01 00:56	0°♌		
	9894 Jun 11 08:32	0°♍		
	9894 Jul 23 10:09	0°♎		
	9894 Sep 04 23:27	0°♏		
	9894 Oct 20 03:55	0°♐		
evening set	9894 Nov 18 23:36	19°♐19'08		
	9894 Dec 05 15:33	0°♑		
conjunction	9895 Jan 04 00:36	18°♑42'15	0°02'27	
minimum elong	9895 Jan 04 00:40	18°♑42'22	0°02'51	
behind sun begin	9895 Jan 03 06:15	18°♑13'08		
behind sun end	9895 Jan 04 19:06	19°♑11'36		
max. Earth dist.	9895 Jan 06 12:55	20°♑17'58	2.67966 AU	
desc. node	9895 Jan 08 14:26	21°♑36'31		
	9895 Jan 21 19:52	0°♒		
morning rise	9895 Feb 16 19:02	16°♒28'13		
	9895 Mar 10 01:54	0°♓		
	9895 Apr 25 23:39	0°♈		
	9895 Jun 11 10:54	0°♉		
	9895 Jul 27 17:14	0°♊		
	9895 Sep 12 16:22	0°♋		
	9895 Nov 03 17:50	0°♌		
retrograde	9895 Dec 27 06:53	15°♌42'47		
asc. node	9895 Dec 27 06:40	15°♌42'47		
min. Earth dist.	9896 Jan 23 18:00	11°♌14'30	0.36801 AU	
opposition	9896 Jan 26 15:11	10°♌27'51	2°19'35	
greatest brilliancy	9896 Jan 26 07:16	10°♌33'11	-3.0m	
direct	9896 Feb 24 20:19	5°♌34'34		
	9896 May 05 20:51	0°♍		
	9896 Jun 25 11:37	0°♎		
	9896 Aug 12 08:07	0°♏		
	9896 Sep 29 01:40	0°♐		
	9896 Nov 16 00:14	0°♑		
desc. node	9896 Nov 25 12:44	5°♑57'31		
evening set	9896 Dec 24 20:47	24°♑22'37		
	9897 Jan 02 18:39	0°♒		
max. Earth dist.	9897 Jan 27 17:56	15°♒51'09	2.66992 AU	
conjunction	9897 Feb 07 04:50	22°♒32'35	-0°36'55	
minimum elong	9897 Feb 07 03:53	22°♒31'02	0°36'38	
	9897 Feb 18 18:53	0°♓		
morning rise	9897 Mar 23 02:07	21°♓04'27		
	9897 Apr 05 13:25	0°♈		
	9897 May 19 20:44	0°♉		
	9897 Jul 01 16:30	0°♊		
	9897 Aug 12 05:31	0°♋		
	9897 Sep 22 00:18	0°♌		
	9897 Nov 02 05:33	0°♍		
asc. node	9897 Nov 13 04:15	7°♍42'57		
	9897 Dec 16 21:45	0°♎		
retrograde	9898 Feb 27 08:12	27°♎30'20		
min. Earth dist.	9898 Mar 27 17:38	21°♎53'51	0.47918 AU	
greatest brilliancy	9898 Apr 03 12:01	19°♎28'33	-2.2m	
opposition	9898 Apr 05 03:22	18°♎53'03	5°40'55	
direct	9898 May 08 15:43	11°♎52'20		
	9898 Jul 10 12:58	0°♏		
	9898 Sep 05 13:16	0°♐		
desc. node	9898 Oct 13 15:22	22°♐03'28		
	9898 Oct 27 00:13	0°♑		
	9898 Dec 15 06:29	0°♒		
evening set	9899 Jan 29 18:29	28°♒47'02		
	9899 Jan 31 15:39	0°♓		
max. Earth dist.	9899 Feb 21 03:24	13°♓22'53	2.60606 AU	
conjunction	9899 Mar 16 11:11	28°♓57'16	-1°04'07	
minimum elong	9899 Mar 16 10:21	28°♓55'51	1°04'05	
	9899 Mar 18 00:18	0°♈		
	9899 Apr 30 07:34	0°♉		
morning rise	9899 May 03 11:22	2°♉14'38		
	9899 Jun 10 17:28	0°♊		
	9899 Jul 20 15:14	0°♋		
	9899 Aug 28 14:52	0°♌		
asc. node	9899 Oct 01 00:43	25°♌47'33		
	9899 Oct 06 12:29	0°♍		
	9899 Nov 15 11:55	0°♎		
	9899 Dec 28 10:34	0°♏		
	9900 Feb 17 23:53	0°♐		
retrograde	9900 Apr 11 04:13	14°♐32'40		
min. Earth dist.	9900 May 15 13:48	6°♐45'41	0.60384 AU	
opposition	9900 May 20 23:07	4°♐38'04	3°33'11	
greatest brilliancy	9900 May 20 07:23	4°♐53'36	-1.6m	
	9900 Jun 02 16:43	30°℞♏		
direct	9900 Jun 27 16:19	25°♏56'59		
	9900 Jul 25 04:30	0°♐		
desc. node	9900 Aug 31 19:12	14°♐05'36		
	9900 Oct 03 00:31	0°♑		
	9900 Nov 25 06:37	0°♒		
	9901 Jan 12 23:02	0°♓		
	9901 Feb 27 11:35	0°♈		
evening set	9901 Mar 10 16:25	7°♈40'26		
max. Earth dist.	9901 Mar 24 19:27	17°♈31'13	2.49320 AU	
	9901 Apr 11 08:21	0°♉		
conjunction	9901 May 01 08:51	14°♉35'12	-1°01'23	
minimum elong	9901 May 01 10:24	14°♉38'03	1°01'38	
	9901 May 22 00:47	0°♊		
morning rise	9901 Jun 30 11:33	0°♋15'36		
	9901 Jun 30 03:32	0°♋		
	9901 Aug 07 10:01	0°♌		
asc. node	9901 Aug 18 19:16	8°♌57'25		
	9901 Sep 14 16:24	0°♍		
	9901 Oct 23 20:41	0°♎		
	9901 Dec 03 23:36	0°♏		
	9902 Jan 17 12:17	0°♐		
	9902 Mar 10 07:36	0°♑		
retrograde	9902 May 16 12:42	20°♑32'00		
min. Earth dist.	9902 Jun 24 11:24	11°♑17'03	0.67249 AU	
opposition	9902 Jun 26 02:50	10°♑37'46	0°49'51	
greatest brilliancy	9902 Jun 26 01:52	10°♑38'44	-1.3m	
desc. node	9902 Jul 19 21:52	2°♑47'35		
direct	9902 Aug 05 11:34	1°♑02'40		
	9902 Oct 31 23:21	0°♒		
	9902 Dec 23 15:30	0°♓		
	9903 Feb 08 06:06	0°♈		
	9903 Mar 23 04:50	0°♉		
evening set	9903 May 01 08:56	29°♉05'11		
	9903 May 02 13:45	0°♊		
	9903 Jun 10 06:41	0°♋		
max. Earth dist.	9903 Jun 17 01:02	5°♋19'35	2.36696 AU	
conjunction	9903 Jul 06 01:12	20°♋21'26	-0°00'26	
minimum elong	9903 Jul 06 01:16	20°♋21'34	0°00'50	
behind sun begin	9903 Jul 04 19:15	19°♋22'07		

behind sun end	9903 Jul 07 07:17	21°♋21'01	
asc. node	9903 Jul 06 15:14	20°♋49'11	
	9903 Jul 18 05:10	0°♌	
	9903 Aug 25 06:55	0°♍	
morning rise	9903 Sep 17 14:23	18°♍01'54	
	9903 Oct 03 08:37	0°♎	
	9903 Nov 13 04:54	0°♏	
	9903 Dec 26 13:24	0°♐	
	9904 Feb 11 09:42	0°♑	
	9904 Apr 04 19:27	0°♒	
desc. node	9904 Jun 05 21:14	22°♒17'57	
retrograde	9904 Jun 18 18:29	23°♒15'16	
opposition	9904 Jul 28 19:50	13°♒50'46	-1°47'39
greatest brilliancy	9904 Jul 28 22:15	13°♒48'23	-1.3m
min. Earth dist.	9904 Jul 30 23:20	13°♒00'05	0.67600 AU
direct	9904 Sep 08 09:01	3°♒49'47	
	9904 Nov 27 07:05	0°♓	
	9905 Jan 16 23:05	0°♈	
	9905 Mar 01 23:31	0°♉	
	9905 Apr 11 13:27	0°♊	
	9905 May 20 05:28	0°♋	
asc. node	9905 May 23 15:42	2°♋41'58	
	9905 Jun 27 03:16	0°♌	
evening set	9905 Jul 11 15:36	11°♌28'21	
	9905 Aug 04 07:09	0°♍	
	9905 Sep 12 13:54	0°♎	
conjunction	9905 Sep 18 14:40	4°♎29'59	1°03'18
minimum elong	9905 Sep 18 12:58	4°♎26'49	1°03'18
	9905 Oct 23 15:25	0°♏	
max. Earth dist.	9905 Nov 03 02:08	7°♏23'30	2.48268 AU
morning rise	9905 Nov 17 21:18	17°♏41'53	
	9905 Dec 05 22:03	0°♐	
	9906 Jan 20 15:44	0°♑	
	9906 Mar 10 07:53	0°♒	
desc. node	9906 Apr 23 16:45	25°♒04'31	
	9906 May 03 03:41	0°♓	
retrograde	9906 Jul 26 21:18	27°♓36'54	
opposition	9906 Sep 03 01:25	19°♓05'39	-4°10'03
greatest brilliancy	9906 Sep 03 20:53	18°♓47'04	-1.5m
min. Earth dist.	9906 Sep 08 22:53	16°♓50'37	0.61337 AU
direct	9906 Oct 14 02:57	9°♓11'12	
	9906 Dec 19 06:51	0°♈	
	9907 Feb 06 13:30	0°♉	
	9907 Mar 20 15:48	0°♊	
asc. node	9907 Apr 10 18:09	15°♊56'53	
	9907 Apr 28 22:48	0°♋	
	9907 Jun 06 06:51	0°♌	
	9907 Jul 14 21:55	0°♍	
	9907 Aug 23 18:07	0°♎	
evening set	9907 Sep 17 20:43	18°♎15'30	
	9907 Oct 04 09:40	0°♏	
conjunction	9907 Nov 12 02:59	26°♏39'04	0°55'13
minimum elong	9907 Nov 12 04:25	26°♏41'29	0°55'32
	9907 Nov 17 02:30	0°♐	
max. Earth dist.	9907 Dec 06 01:10	12°♐35'49	2.60114 AU
morning rise	9907 Dec 31 10:16	29°♐08'38	
	9908 Jan 01 18:08	0°♑	
	9908 Feb 18 02:46	0°♒	
desc. node	9908 Mar 10 10:15	13°♒10'24	
	9908 Apr 07 04:31	0°♓	
	9908 May 29 02:33	0°♈	
	9908 Jul 30 00:21	0°♉	
retrograde	9908 Sep 13 06:24	9°♉58'15	
opposition	9908 Oct 17 18:54	3°♉00'07	-5°32'49
greatest brilliancy	9908 Oct 19 12:41	2°♉23'43	-2.2m
min. Earth dist.	9908 Oct 26 10:35	0°♉00'28	0.49107 AU
	9908 Oct 26 11:09	30°℞♈	
direct	9908 Nov 24 13:45	24°♈27'08	
	9908 Dec 24 04:56	0°♉	
	9909 Feb 18 19:40	0°♊	
asc. node	9909 Feb 25 20:13	4°♊39'47	
	9909 Apr 02 15:29	0°♋	
	9909 May 12 19:25	0°♌	
	9909 Jun 21 19:50	0°♍	
	9909 Aug 01 22:18	0°♎	
	9909 Sep 13 17:18	0°♏	
	9909 Oct 28 07:58	0°♐	
evening set	9909 Nov 04 05:19	4°♐32'12	
	9909 Dec 13 11:03	0°♑	
conjunction	9909 Dec 21 20:21	5°♑22'33	0°18'31
minimum elong	9909 Dec 21 20:58	5°♑23'32	0°18'55
max. Earth dist.	9909 Dec 29 19:25	10°♑27'46	2.66828 AU
desc. node	9910 Jan 26 05:14	27°♑52'56	
	9910 Jan 29 13:29	0°♒	
morning rise	9910 Feb 04 10:26	3°♒42'59	
	9910 Mar 18 02:13	0°♓	
	9910 May 04 18:52	0°♈	
	9910 Jun 21 20:26	0°♉	
	9910 Aug 10 08:02	0°♊	
	9910 Oct 05 08:12	0°♋	
retrograde	9910 Nov 25 15:03	13°♋37'04	
opposition	9910 Dec 25 12:14	8°♋40'39	-1°29'30
greatest brilliancy	9910 Dec 25 18:42	8°♋36'17	-3.0m
min. Earth dist.	9910 Dec 28 13:10	7°♋51'26	0.37132 AU
asc. node	9911 Jan 13 22:27	4°♋15'09	
direct	9911 Jan 24 23:46	3°♋25'25	
	9911 Apr 07 06:29	0°♌	
	9911 May 24 17:33	0°♍	
	9911 Jul 08 21:09	0°♎	
	9911 Aug 23 08:57	0°♏	
	9911 Oct 08 19:41	0°♐	
	9911 Nov 25 01:16	0°♑	
evening set	9911 Dec 12 21:08	11°♑15'45	
desc. node	9911 Dec 14 02:54	12°♑02'45	
	9912 Jan 11 12:19	0°♒	
max. Earth dist.	9912 Jan 20 23:27	6°♒00'12	2.68020 AU
conjunction	9912 Jan 26 12:44	9°♒31'54	-0°22'29
minimum elong	9912 Jan 26 12:06	9°♒30'52	0°22'09
	9912 Feb 27 13:08	0°♓	
morning rise	9912 Mar 09 23:49	7°♓22'55	
	9912 Apr 13 15:53	0°♈	
	9912 May 28 14:58	0°♉	
	9912 Jul 11 09:35	0°♊	
	9912 Aug 23 04:42	0°♋	
	9912 Oct 04 16:26	0°♌	
	9912 Nov 18 00:32	0°♍	
asc. node	9912 Nov 30 22:46	8°♍01'06	
	9913 Jan 16 15:15	0°♎	
retrograde	9913 Feb 07 03:35	3°♎13'26	
	9913 Feb 28 12:35	30°℞♍	
min. Earth dist.	9913 Mar 05 12:08	28°♍30'07	0.42471 AU
greatest brilliancy	9913 Mar 12 01:27	26°♍22'01	-2.6m
opposition	9913 Mar 13 17:03	25°♍49'31	5°36'10
direct	9913 Apr 14 02:01	19°♍45'34	
	9913 May 28 00:19	0°♎	
	9913 Jul 26 15:02	0°♏	
	9913 Sep 16 02:09	0°♐	
desc. node	9913 Oct 31 03:35	27°♐11'48	
	9913 Nov 04 17:50	0°♑	
	9913 Dec 23 06:40	0°♒	

evening set	9914 Jan 16 14:21	15°♒20'36	
	9914 Feb 08 10:47	0°♓	
max. Earth dist.	9914 Feb 12 05:52	2°♓27'35	2.63735 AU
conjunction	9914 Mar 02 08:46	14°♓18'40	-0°55'52
minimum elong	9914 Mar 02 07:40	14°♓16'51	0°55'44
	9914 Mar 25 22:02	0°♈	
morning rise	9914 Apr 17 03:12	15°♈07'05	
	9914 May 08 13:03	0°♉	
	9914 Jun 19 09:43	0°♊	
	9914 Jul 29 19:22	0°♋	
	9914 Sep 07 06:52	0°♌	
	9914 Oct 16 17:09	0°♍	
asc. node	9914 Oct 18 18:05	1°♍32'05	
	9914 Nov 26 12:38	0°♎	
	9915 Jan 10 18:18	0°♏	
retrograde	9915 Mar 27 21:02	28°♏21'38	
min. Earth dist.	9915 Apr 29 01:47	21°♏20'08	0.56041 AU
opposition	9915 May 05 20:14	18°♏42'55	4°33'08
greatest brilliancy	9915 May 04 18:55	19°♏07'29	-1.8m
direct	9915 Jun 11 02:19	10°♏33'59	
	9915 Aug 17 09:31	0°♐	
desc. node	9915 Sep 18 07:11	15°♐59'26	
	9915 Oct 13 20:27	0°♑	
	9915 Dec 04 00:49	0°♒	
	9916 Jan 21 01:49	0°♓	
evening set	9916 Feb 23 05:53	21°♓44'55	
	9916 Mar 06 11:35	0°♈	
max. Earth dist.	9916 Mar 10 19:36	2°♈57'06	2.54258 AU
conjunction	9916 Apr 11 19:09	25°♈13'49	-1°07'47
minimum elong	9916 Apr 11 19:29	25°♈14'25	1°07'56
	9916 Apr 18 11:39	0°♉	
	9916 May 29 09:54	0°♊	
morning rise	9916 Jun 04 20:02	4°♊49'30	
	9916 Jul 07 18:49	0°♋	
	9916 Aug 15 06:31	0°♌	
asc. node	9916 Sep 04 13:51	15°♌53'32	
	9916 Sep 22 16:42	0°♍	
	9916 Nov 01 00:54	0°♎	
	9916 Dec 12 12:30	0°♏	
	9917 Jan 27 06:38	0°♐	
	9917 Mar 27 10:40	0°♑	
retrograde	9917 May 03 05:08	7°♑26'22	
	9917 Jun 06 05:32	30°℞♐	
min. Earth dist.	9917 Jun 09 12:48	28°♐42'04	0.65325 AU
opposition	9917 Jun 12 15:56	27°♐27'10	1°53'02
greatest brilliancy	9917 Jun 12 11:12	27°♐31'54	-1.4m
direct	9917 Jul 22 03:57	18°♐09'26	
desc. node	9917 Aug 05 10:37	19°♐18'33	
	9917 Sep 10 22:45	0°♑	
	9917 Nov 10 23:53	0°♒	
	9917 Dec 31 13:23	0°♓	
	9918 Feb 15 14:45	0°♈	
	9918 Mar 30 11:46	0°♉	
evening set	9918 Apr 09 00:44	6°♉56'07	
max. Earth dist.	9918 Apr 26 06:23	19°♉40'54	2.41051 AU
	9918 May 09 23:02	0°♊	
conjunction	9918 Jun 07 06:52	21°♊47'23	-0°31'56
minimum elong	9918 Jun 07 09:23	21°♊52'18	0°32'18
	9918 Jun 17 19:13	0°♋	
asc. node	9918 Jul 23 09:57	28°♋04'59	
	9918 Jul 25 20:06	0°♌	
morning rise	9918 Aug 17 06:05	17°♌42'00	
	9918 Sep 01 22:31	0°♍	
	9918 Oct 10 23:36	0°♎	
	9918 Nov 20 19:50	0°♏	
	9919 Jan 03 09:26	0°♐	
	9919 Feb 20 06:21	0°♑	
	9919 Apr 20 06:15	0°♒	
retrograde	9919 Jun 06 07:22	10°♒48'31	
desc. node	9919 Jun 23 10:58	8°♒54'28	
opposition	9919 Jul 16 17:06	1°♒09'46	-0°48'01
greatest brilliancy	9919 Jul 16 17:10	1°♒09'42	-1.3m
min. Earth dist.	9919 Jul 17 08:49	0°♒54'12	0.68248 AU
	9919 Jul 19 15:40	30°℞♑	
direct	9919 Aug 26 23:19	21°♑15'51	
	9919 Oct 08 05:57	0°♒	
	9919 Dec 08 22:05	0°♓	
	9920 Jan 26 08:22	0°♈	
	9920 Mar 09 19:09	0°♉	
	9920 Apr 19 05:45	0°♊	
	9920 May 27 21:24	0°♋	
asc. node	9920 Jun 09 07:29	9°♋48'19	
evening set	9920 Jun 11 08:44	11°♋25'48	
	9920 Jul 04 18:51	0°♌	
	9920 Aug 11 21:05	0°♍	
conjunction	9920 Aug 21 21:26	7°♍46'31	0°47'38
minimum elong	9920 Aug 21 17:53	7°♍39'38	0°47'24
	9920 Sep 20 00:45	0°♎	
max. Earth dist.	9920 Oct 13 11:40	17°♎23'01	2.42647 AU
morning rise	9920 Oct 27 14:31	27°♎36'24	
	9920 Oct 30 22:43	0°♏	
	9920 Dec 13 03:33	0°♐	
	9921 Jan 28 02:30	0°♑	
	9921 Mar 18 20:32	0°♒	
desc. node	9921 May 10 07:42	27°♒13'24	
	9921 May 16 16:11	0°♓	
retrograde	9921 Jul 11 05:33	13°♓56'00	
opposition	9921 Aug 19 07:37	5°♓00'25	-3°17'50
greatest brilliancy	9921 Aug 19 18:43	4°♓49'38	-1.4m
min. Earth dist.	9921 Aug 23 18:14	3°♓17'01	0.64565 AU
	9921 Sep 01 17:12	30°℞♒	
direct	9921 Sep 29 19:17	24°♒58'00	
	9921 Oct 30 00:24	0°♓	
	9921 Dec 31 22:40	0°♈	
	9922 Feb 16 01:45	0°♉	
	9922 Mar 29 07:30	0°♊	
asc. node	9922 Apr 27 08:38	22°♊16'59	
	9922 May 07 05:52	0°♋	
	9922 Jun 14 08:08	0°♌	
	9922 Jul 22 17:15	0°♍	
evening set	9922 Aug 24 23:42	25°♍18'38	
	9922 Aug 31 06:41	0°♎	
	9922 Oct 11 15:20	0°♏	
conjunction	9922 Oct 24 04:06	8°♏48'16	1°04'05
minimum elong	9922 Oct 24 05:05	8°♏49'59	1°04'18
	9922 Nov 24 02:31	0°♐	
max. Earth dist.	9922 Nov 24 21:19	0°♐31'37	2.56038 AU
morning rise	9922 Dec 15 19:06	14°♐26'39	
	9923 Jan 08 16:42	0°♑	
	9923 Feb 25 08:50	0°♒	
desc. node	9923 Mar 28 02:48	18°♒35'40	
	9923 Apr 16 14:34	0°♓	
	9923 Jun 11 12:18	0°♈	
retrograde	9923 Aug 23 23:32	22°♈05'55	
opposition	9923 Sep 29 03:50	14°♈24'44	-5°15'33
greatest brilliancy	9923 Sep 30 14:27	13°♈52'59	-1.9m
min. Earth dist.	9923 Oct 07 00:30	11°♈32'22	0.54468 AU
direct	9923 Nov 07 16:39	5°♈05'29	
	9924 Jan 17 14:55	0°♉	

	9924 Mar 03 12:24	0°♊	
asc. node	9924 Mar 14 12:13	7°♊54'08	
	9924 Apr 13 03:46	0°♋	
	9924 May 22 06:29	0°♌	
	9924 Jun 30 12:47	0°♍	
	9924 Aug 09 23:38	0°♎	
	9924 Sep 21 05:07	0°♏	
evening set	9924 Oct 18 01:49	18°♏23'51	
	9924 Nov 04 09:04	0°♐	
conjunction	9924 Dec 06 22:45	21°♐23'53	0°34'04
minimum elong	9924 Dec 06 23:51	21°♐25'40	0°34'28
	9924 Dec 20 05:57	0°♑	
max. Earth dist.	9924 Dec 20 14:13	0°♑13'18	2.64860 AU
morning rise	9925 Jan 21 20:33	20°♑49'48	
	9925 Feb 05 08:41	0°♒	
desc. node	9925 Feb 11 20:40	4°♒05'40	
	9925 Mar 25 07:28	0°♓	
	9925 May 13 02:53	0°♈	
	9925 Jul 02 18:02	0°♉	
	9925 Aug 28 22:29	0°♊	
retrograde	9925 Oct 24 17:19	15°♊17'41	
opposition	9925 Nov 25 00:46	9°♊42'11	-4°17'20
greatest brilliancy	9925 Nov 26 08:17	9°♊18'33	-2.7m
min. Earth dist.	9925 Dec 02 08:40	7°♊31'04	0.40733 AU
direct	9925 Dec 28 14:37	3°♊08'14	
asc. node	9926 Jan 30 13:44	10°♊08'25	
	9926 Mar 09 22:54	0°♋	
	9926 Apr 24 05:47	0°♌	
	9926 Jun 05 19:38	0°♍	
	9926 Jul 18 15:33	0°♎	
	9926 Aug 31 17:28	0°♏	
	9926 Oct 16 06:22	0°♐	
evening set	9926 Nov 28 11:26	27°♐46'40	
	9926 Dec 01 23:05	0°♑	
desc. node	9926 Dec 30 16:31	18°♑15'09	
conjunction	9927 Jan 12 21:12	26°♑37'09	-0°06'59
minimum elong	9927 Jan 12 21:00	26°♑36'51	0°06'36
behind sun begin	9927 Jan 12 03:56	26°♑09'48	
behind sun end	9927 Jan 13 14:04	27°♑03'53	
max. Earth dist.	9927 Jan 12 12:44	26°♑23'45	2.68225 AU
	9927 Jan 18 05:10	0°♒	
morning rise	9927 Feb 25 09:48	24°♒16'45	
	9927 Mar 06 08:49	0°♓	
	9927 Apr 21 23:04	0°♈	
	9927 Jun 06 19:24	0°♉	
	9927 Jul 21 23:16	0°♊	
	9927 Sep 04 21:09	0°♋	
	9927 Oct 21 04:38	0°♌	
asc. node	9927 Dec 18 14:46	29°♌42'49	
	9927 Dec 19 12:15	0°♍	
retrograde	9928 Jan 13 19:04	4°♍15'06	
	9928 Feb 08 18:53	30°℞♌	
min. Earth dist.	9928 Feb 08 23:00	29°♌57'06	0.38125 AU
opposition	9928 Feb 14 13:31	28°♌20'10	4°04'30
greatest brilliancy	9928 Feb 13 15:13	28°♌36'20	-2.9m
direct	9928 Mar 15 05:39	23°♌10'06	
	9928 Apr 18 09:52	0°♍	
	9928 Jun 17 18:45	0°♎	
	9928 Aug 06 22:14	0°♏	
	9928 Sep 24 15:53	0°♐	
	9928 Nov 12 02:43	0°♑	
desc. node	9928 Nov 16 16:04	2°♑49'52	
	9928 Dec 30 02:57	0°♒	
evening set	9929 Jan 02 18:07	2°♒17'25	
max. Earth dist.	9929 Feb 02 22:46	22°♒07'33	2.66072 AU
	9929 Feb 15 04:19	0°♓	
conjunction	9929 Feb 16 02:24	0°♓35'41	-0°44'34
minimum elong	9929 Feb 16 01:20	0°♓33'56	0°44'20
morning rise	9929 Apr 01 10:56	29°♓44'14	
	9929 Apr 01 20:22	0°♈	
	9929 May 15 21:50	0°♉	
	9929 Jun 27 08:55	0°♊	
	9929 Aug 07 10:58	0°♋	
	9929 Sep 16 16:07	0°♌	
	9929 Oct 27 00:10	0°♍	
asc. node	9929 Nov 04 13:38	6°♍14'15	
	9929 Dec 08 13:11	0°♎	
	9930 Jan 29 20:39	0°♏	
retrograde	9930 Mar 10 23:32	9°♏52'52	
min. Earth dist.	9930 Apr 09 17:50	3°♏44'29	0.50926 AU
greatest brilliancy	9930 Apr 16 05:33	1°♏19'54	-2.1m
opposition	9930 Apr 17 16:44	0°♏47'00	5°23'03
	9930 Apr 19 19:33	30°℞♎	
direct	9930 May 22 05:47	23°♎19'08	
	9930 Jun 26 14:15	0°♏	
	9930 Aug 30 11:59	0°♐	
desc. node	9930 Oct 04 18:37	19°♐41'20	
	9930 Oct 22 12:38	0°♑	
	9930 Dec 11 09:15	0°♒	
	9931 Jan 27 23:45	0°♓	
evening set	9931 Feb 08 01:53	7°♓11'42	
max. Earth dist.	9931 Feb 28 06:33	20°♓31'06	2.58546 AU
	9931 Mar 14 09:02	0°♈	
conjunction	9931 Mar 26 13:30	8°♈18'48	-1°07'02
minimum elong	9931 Mar 26 12:58	8°♈17'53	1°07'04
	9931 Apr 26 14:00	0°♉	
morning rise	9931 May 15 07:03	13°♉26'54	
	9931 Jun 06 19:57	0°♊	
	9931 Jul 16 13:07	0°♋	
	9931 Aug 24 08:19	0°♌	
asc. node	9931 Sep 22 08:27	22°♌31'15	
	9931 Oct 02 00:59	0°♍	
	9931 Nov 10 16:51	0°♎	
	9931 Dec 22 21:24	0°♏	
	9932 Feb 09 04:44	0°♐	
retrograde	9932 Apr 19 09:30	23°♐29'48	
min. Earth dist.	9932 May 24 21:16	15°♐21'03	0.62388 AU
opposition	9932 May 29 11:47	13°♐31'22	2°56'46
greatest brilliancy	9932 May 29 00:39	13°♐42'25	-1.5m
direct	9932 Jul 06 21:29	4°♐35'51	
desc. node	9932 Aug 21 22:07	14°♐39'51	
	9932 Sep 25 13:30	0°♑	
	9932 Nov 19 18:39	0°♒	
	9933 Jan 08 01:19	0°♓	
	9933 Feb 22 18:33	0°♈	
evening set	9933 Mar 20 16:32	17°♈54'55	
max. Earth dist.	9933 Apr 03 09:24	27°♈39'07	2.46401 AU
	9933 Apr 06 15:49	0°♉	
conjunction	9933 May 13 15:53	27°♉16'19	-0°53'41
minimum elong	9933 May 13 18:06	27°♉20'30	0°54'00
	9933 May 17 06:40	0°♊	
	9933 Jun 25 07:01	0°♋	
morning rise	9933 Jul 16 18:49	16°♋50'54	
	9933 Aug 02 11:20	0°♌	
asc. node	9933 Aug 09 02:39	5°♌14'09	
	9933 Sep 09 15:46	0°♍	
	9933 Oct 18 17:54	0°♎	
	9933 Nov 28 16:48	0°♏	
	9934 Jan 11 17:15	0°♐	

	9934 Mar 02 11:21	0°♉		
retrograde	9934 May 24 02:27	28°♉17'57		
opposition	9934 Jul 03 15:53	18°♉28'16	0°13'18	
min. Earth dist.	9934 Jul 02 19:44	18°♉48'18	0.67879 AU	
greatest brilliancy	9934 Jul 03 15:50	18°♉28'18	-1.3m	
desc. node	9934 Jul 10 00:42	15°♉58'27		
direct	9934 Aug 13 09:27	8°♉45'33		
	9934 Oct 24 05:22	0°♒		
	9934 Dec 18 01:04	0°♓		
	9935 Feb 03 05:30	0°♈		
	9935 Mar 18 08:45	0°♉		
	9935 Apr 27 18:39	0°♊		
evening set	9935 May 15 10:45	13°♊34'46		
	9935 Jun 05 11:13	0°♋		
asc. node	9935 Jun 27 00:25	17°♋01'28		
	9935 Jul 13 09:08	0°♌		
conjunction	9935 Jul 23 06:52	7°♌50'56	0°18'52	
minimum elong	9935 Jul 23 04:48	7°♌46'53	0°18'29	
	9935 Aug 20 10:25	0°♍		
max. Earth dist.	9935 Sep 04 16:07	11°♍49'51	2.37427 AU	
	9935 Sep 28 11:46	0°♎		
morning rise	9935 Oct 03 13:41	3°♎48'56		
	9935 Nov 08 07:24	0°♏		
	9935 Dec 21 12:40	0°♐		
	9936 Feb 05 21:59	0°♑		
	9936 Mar 28 11:40	0°♒		
desc. node	9936 May 26 23:18	26°♒01'51		
	9936 Jun 13 15:54	0°♓		
retrograde	9936 Jun 26 17:50	0°♓58'37		
	9936 Jul 09 04:35	30°℞♒		
opposition	9936 Aug 05 11:58	21°♒43'24	-2°21'43	
greatest brilliancy	9936 Aug 05 16:51	21°♒38'38	-1.3m	
min. Earth dist.	9936 Aug 08 10:51	20°♒33'55	0.66787 AU	
direct	9936 Sep 16 02:07	11°♒40'33		
	9936 Nov 18 21:19	0°♓		
	9937 Jan 11 00:55	0°♈		
	9937 Feb 24 16:12	0°♉		
	9937 Apr 06 11:19	0°♊		
asc. node	9937 May 14 00:23	29°♊02'53		
	9937 May 15 05:29	0°♋		
	9937 Jun 22 04:42	0°♌		
evening set	9937 Jul 28 10:03	28°♌27'00		
	9937 Jul 30 09:56	0°♍		
	9937 Sep 07 18:08	0°♎		
conjunction	9937 Oct 02 09:37	18°♎09'27	1°06'21	
minimum elong	9937 Oct 02 09:10	18°♎08'39	1°06'27	
	9937 Oct 18 21:04	0°♏		
max. Earth dist.	9937 Nov 11 22:28	16°♏52'07	2.51198 AU	
morning rise	9937 Nov 28 13:39	28°♏14'50		
	9937 Dec 01 03:51	0°♐		
	9938 Jan 15 18:35	0°♑		
	9938 Mar 04 23:00	0°♒		
desc. node	9938 Apr 13 18:09	23°♒13'10		
	9938 Apr 26 01:19	0°♓		
	9938 Jun 30 22:06	0°♈		
retrograde	9938 Aug 05 11:17	6°♈21'59		
	9938 Sep 06 21:12	30°℞♓		
opposition	9938 Sep 12 00:09	28°♓06'33	-4°37'15	
greatest brilliancy	9938 Sep 13 01:01	27°♓43'04	-1.6m	
min. Earth dist.	9938 Sep 18 15:36	25°♓36'05	0.59125 AU	
direct	9938 Oct 22 15:35	18°♓20'42		
	9938 Dec 08 07:00	0°♈		
	9939 Jan 30 18:24	0°♉		
	9939 Mar 14 18:33	0°♊		
asc. node	9939 Apr 01 02:18	12°♊55'19		
	9939 Apr 23 10:01	0°♋		
	9939 May 31 23:06	0°♌		
	9939 Jul 09 18:16	0°♍		
	9939 Aug 18 18:19	0°♎		
evening set	9939 Sep 29 22:05	0°♏14'41		
	9939 Sep 29 13:42	0°♏		
	9939 Nov 12 09:16	0°♐		
conjunction	9939 Nov 21 22:26	6°♐21'54	0°48'12	
minimum elong	9939 Nov 21 23:51	6°♐24'15	0°48'33	
max. Earth dist.	9939 Dec 11 22:28	19°♐31'52	2.62044 AU	
	9939 Dec 28 01:43	0°♑		
morning rise	9940 Jan 08 19:04	7°♑32'01		
	9940 Feb 13 06:49	0°♒		
desc. node	9940 Feb 29 12:16	10°♒07'13		
	9940 Apr 01 20:28	0°♓		
	9940 May 22 08:19	0°♈		
	9940 Jul 16 23:20	0°♉		
retrograde	9940 Sep 26 18:44	21°♉50'03		
opposition	9940 Oct 30 06:53	15°♉19'42	-5°24'56	
greatest brilliancy	9940 Nov 01 01:20	14°♉44'18	-2.3m	
min. Earth dist.	9940 Nov 08 00:51	12°♉26'07	0.46022 AU	
direct	9940 Dec 05 18:59	7°♉22'43		
	9941 Feb 08 11:30	0°♊		
asc. node	9941 Feb 16 06:14	4°♊40'04		
	9941 Mar 26 03:09	0°♋		
	9941 May 06 07:41	0°♌		
	9941 Jun 15 22:39	0°♍		
	9941 Jul 27 11:36	0°♎		
	9941 Sep 08 15:00	0°♏		
	9941 Oct 23 11:49	0°♐		
evening set	9941 Nov 13 08:35	13°♐36'59		
	9941 Dec 08 18:47	0°♑		
conjunction	9941 Dec 30 00:30	13°♑33'43	0°09'07	
minimum elong	9941 Dec 30 00:49	13°♑34'12	0°09'32	
behind sun begin	9941 Dec 29 09:30	13°♑09'52		
behind sun end	9941 Dec 30 16:07	13°♑58'32		
max. Earth dist.	9942 Jan 03 22:45	16°♑41'47	2.67573 AU	
desc. node	9942 Jan 16 07:01	24°♑32'17		
	9942 Jan 24 21:45	0°♒		
morning rise	9942 Feb 12 01:54	11°♒30'46		
	9942 Mar 13 06:25	0°♓		
	9942 Apr 29 12:06	0°♈		
	9942 Jun 15 14:33	0°♉		
	9942 Aug 02 00:49	0°♊		
	9942 Sep 20 12:59	0°♋		
	9942 Nov 27 03:12	0°♌		
retrograde	9942 Dec 14 06:25	1°♌51'28		
	9942 Dec 31 08:50	30°℞♋		
asc. node	9943 Jan 04 08:18	29°♋07'00		
opposition	9943 Jan 13 00:43	26°♋54'16	0°40'57	
greatest brilliancy	9943 Jan 12 24:00	26°♋54'44	-3.1m	
min. Earth dist.	9943 Jan 12 19:24	26°♋57'46	0.36493 AU	
direct	9943 Feb 11 09:42	22°♋00'30		
	9943 Mar 19 21:32	0°♌		
	9943 May 15 10:40	0°♍		
	9943 Jul 01 23:00	0°♎		
	9943 Aug 17 13:50	0°♏		
	9943 Oct 03 15:35	0°♐		
	9943 Nov 20 05:49	0°♑		
desc. node	9943 Dec 04 04:28	8°♑46'06		
evening set	9943 Dec 20 21:55	19°♑17'50		
	9944 Jan 06 20:51	0°♒		
max. Earth dist.	9944 Jan 26 01:03	12°♒09'53	2.67561 AU	
conjunction	9944 Feb 03 07:54	17°♒26'45	-0°31'08	

minimum elong	9944 Feb 03 07:03	17°♒25'23	0°30'48
	9944 Feb 22 21:38	0°♓	
morning rise	9944 Mar 17 22:45	15°♓35'50	
	9944 Apr 08 20:25	0°♈	
	9944 May 23 11:02	0°♉	
	9944 Jul 05 16:55	0°♊	
	9944 Aug 16 18:13	0°♋	
	9944 Sep 27 04:18	0°♌	
	9944 Nov 08 08:44	0°♍	
asc. node	9944 Nov 21 06:32	8°♍45'01	
	9944 Dec 25 21:03	0°♎	
retrograde	9945 Feb 19 14:18	17°♎57'37	
min. Earth dist.	9945 Mar 18 22:46	12°♎46'00	0.45440 AU
greatest brilliancy	9945 Mar 25 17:54	10°♎25'23	-2.4m
opposition	9945 Mar 27 10:54	9°♎49'41	5°46'56
direct	9945 Apr 29 01:22	3°♎13'20	
	9945 Jul 17 20:14	0°♏	
	9945 Sep 09 22:36	0°♐	
desc. node	9945 Oct 21 06:45	24°♐25'32	
	9945 Oct 30 13:03	0°♑	
	9945 Dec 18 11:43	0°♒	
evening set	9946 Jan 24 15:20	23°♒27'29	
	9946 Feb 03 19:19	0°♓	
max. Earth dist.	9946 Feb 17 21:55	9°♓10'25	2.62115 AU
conjunction	9946 Mar 10 20:20	23°♓00'41	-1°01'08
minimum elong	9946 Mar 10 19:20	22°♓59'02	1°01'03
	9946 Mar 21 06:15	0°♈	
morning rise	9946 Apr 26 17:17	25°♈03'39	
	9946 May 03 17:57	0°♉	
	9946 Jun 14 09:30	0°♊	
	9946 Jul 24 12:52	0°♋	
	9946 Sep 01 17:39	0°♌	
asc. node	9946 Oct 09 02:43	28°♌41'42	
	9946 Oct 10 19:49	0°♍	
	9946 Nov 20 01:13	0°♎	
	9947 Jan 02 15:39	0°♏	
	9947 Feb 27 04:43	0°♐	
retrograde	9947 Apr 05 17:56	8°♐17'35	
min. Earth dist.	9947 May 09 04:45	0°♐50'05	0.58544 AU
	9947 May 11 08:06	30°℞♏	
greatest brilliancy	9947 May 14 09:40	28°♏47'39	-1.7m
opposition	9947 May 15 05:27	28°♏28'13	3°59'20
direct	9947 Jun 21 07:27	20°♏00'40	
	9947 Aug 05 18:16	0°♐	
desc. node	9947 Sep 08 10:57	14°♐54'09	
	9947 Oct 07 12:05	0°♑	
	9947 Nov 28 19:53	0°♒	
	9948 Jan 16 06:24	0°♓	
	9948 Mar 01 19:03	0°♈	
evening set	9948 Mar 03 10:07	1°♈06'24	
max. Earth dist.	9948 Mar 18 13:31	11°♈30'33	2.51598 AU
	9948 Apr 13 18:28	0°♉	
conjunction	9948 Apr 22 13:19	6°♉20'02	-1°05'09
minimum elong	9948 Apr 22 14:19	6°♉21'52	1°05'22
	9948 May 24 14:36	0°♊	
morning rise	9948 Jun 18 17:24	19°♊05'11	
	9948 Jul 02 20:41	0°♋	
	9948 Aug 10 05:45	0°♌	
asc. node	9948 Aug 25 21:45	12°♌17'59	
	9948 Sep 17 13:28	0°♍	
	9948 Oct 26 18:15	0°♎	
	9948 Dec 06 22:47	0°♏	
	9949 Jan 20 19:08	0°♐	
	9949 Mar 15 11:24	0°♑	
retrograde	9949 May 10 20:53	15°♑29'31	
min. Earth dist.	9949 Jun 18 02:20	6°♑28'02	0.66505 AU
opposition	9949 Jun 20 10:14	5°♑32'18	1°15'59
greatest brilliancy	9949 Jun 20 07:57	5°♑34'35	-1.4m
	9949 Jul 05 13:54	30°℞♐	
desc. node	9949 Jul 26 13:43	26°♐10'06	
direct	9949 Jul 30 10:29	26°♐04'36	
	9949 Aug 26 18:27	0°♑	
	9949 Nov 04 13:23	0°♒	
	9949 Dec 26 07:37	0°♓	
	9950 Feb 10 17:54	0°♈	
	9950 Mar 25 17:10	0°♉	
evening set	9950 Apr 21 05:42	19°♉29'39	
	9950 May 05 04:10	0°♊	
max. Earth dist.	9950 May 16 05:12	8°♊26'26	2.38309 AU
	9950 Jun 12 23:02	0°♋	
conjunction	9950 Jun 23 00:47	7°♋55'17	-0°14'53
minimum elong	9950 Jun 23 02:18	7°♋58'16	0°15'17
behind sun begin	9950 Jun 22 16:27	7°♋38'53	
behind sun end	9950 Jun 23 12:08	8°♋17'39	
asc. node	9950 Jul 13 16:33	24°♋15'11	
	9950 Jul 20 22:43	0°♌	
	9950 Aug 28 00:26	0°♍	
morning rise	9950 Sep 04 05:01	5°♍36'17	
	9950 Oct 06 00:53	0°♎	
	9950 Nov 15 19:45	0°♏	
	9950 Dec 29 04:16	0°♐	
	9951 Feb 14 07:12	0°♑	
	9951 Apr 10 06:22	0°♒	
retrograde	9951 Jun 13 23:19	18°♒24'08	
desc. node	9951 Jun 13 13:41	18°♒24'04	
opposition	9951 Jul 24 04:31	8°♒52'45	-1°23'09
greatest brilliancy	9951 Jul 24 05:34	8°♒51'42	-1.3m
min. Earth dist.	9951 Jul 25 15:32	8°♒18'09	0.68020 AU
	9951 Aug 21 12:52	30°℞♑	
direct	9951 Sep 03 15:01	28°♑54'30	
	9951 Sep 17 10:45	0°♒	
	9951 Dec 02 05:52	0°♓	
	9952 Jan 20 22:36	0°♈	
	9952 Mar 04 18:18	0°♉	
	9952 Apr 14 07:49	0°♊	
	9952 May 23 00:02	0°♋	
asc. node	9952 May 30 16:30	6°♋03'39	
evening set	9952 Jun 28 06:54	28°♋43'19	
	9952 Jun 29 21:36	0°♌	
	9952 Aug 07 00:09	0°♍	
conjunction	9952 Sep 07 00:31	23°♍50'39	0°58'19
minimum elong	9952 Sep 06 21:49	23°♍45'33	0°58'12
	9952 Sep 15 04:24	0°♎	
max. Earth dist.	9952 Oct 26 09:28	0°♏11'33	2.45787 AU
	9952 Oct 26 03:00	0°♏	
morning rise	9952 Nov 09 01:57	9°♏52'52	
	9952 Dec 08 07:11	0°♐	
	9953 Jan 23 01:11	0°♑	
	9953 Mar 13 00:58	0°♒	
desc. node	9953 Apr 30 09:50	26°♒34'08	
	9953 May 07 08:38	0°♓	
retrograde	9953 Jul 19 23:52	22°♓07'02	
opposition	9953 Aug 27 14:09	13°♓24'10	-3°48'40
greatest brilliancy	9953 Aug 28 05:42	13°♓09'12	-1.5m
min. Earth dist.	9953 Sep 01 19:38	11°♓23'22	0.62911 AU
direct	9953 Oct 07 20:49	3°♓25'10	
	9953 Dec 24 09:19	0°♈	
	9954 Feb 10 03:43	0°♉	
	9954 Mar 23 21:33	0°♊	
asc. node	9954 Apr 17 19:00	18°♊56'28	

	9954 May 02 00:53	0°♋	
	9954 Jun 09 06:05	0°♌	
	9954 Jul 17 17:43	0°♍	
	9954 Aug 26 09:31	0°♎	
evening set	9954 Sep 07 21:45	9°♎12'17	
	9954 Oct 06 20:30	0°♏	
conjunction	9954 Nov 04 05:26	19°♏42'57	0°59'33
minimum elong	9954 Nov 04 06:48	19°♏45'16	0°59'50
	9954 Nov 19 09:15	0°♐	
max. Earth dist.	9954 Dec 01 14:24	8°♐10'11	2.58383 AU
morning rise	9954 Dec 24 21:03	23°♐28'33	
	9955 Jan 03 22:51	0°♑	
	9955 Feb 20 09:12	0°♒	
desc. node	9955 Mar 18 03:25	15°♒48'09	
	9955 Apr 10 20:39	0°♓	
	9955 Jun 03 02:15	0°♈	
	9955 Aug 14 19:41	0°♉	
retrograde	9955 Sep 04 14:10	2°♉23'52	
	9955 Sep 24 02:26	30°℞♈	
opposition	9955 Oct 09 21:45	25°♈05'14	-5°28'41
greatest brilliancy	9955 Oct 11 12:56	24°♈30'12	-2.0m
min. Earth dist.	9955 Oct 18 07:14	22°♈06'12	0.51567 AU
direct	9955 Nov 17 13:22	16°♈08'55	
	9956 Jan 06 03:57	0°♉	
	9956 Feb 25 02:48	0°♊	
asc. node	9956 Mar 04 21:04	6°♊03'37	
	9956 Apr 06 19:38	0°♋	
	9956 May 16 10:36	0°♌	
	9956 Jun 25 01:32	0°♍	
	9956 Aug 04 19:19	0°♎	
	9956 Sep 16 06:40	0°♏	
evening set	9956 Oct 28 00:36	28°♏16'20	
	9956 Oct 30 15:02	0°♐	
conjunction	9956 Dec 15 13:35	29°♐58'53	0°25'05
minimum elong	9956 Dec 15 14:24	0°♑00'13	0°25'30
	9956 Dec 15 14:17	0°♑	
max. Earth dist.	9956 Dec 25 23:12	6°♑39'34	2.66048 AU
morning rise	9957 Jan 29 16:05	28°♑44'17	
	9957 Jan 31 15:58	0°♒	
desc. node	9957 Feb 01 21:40	0°♒46'56	
	9957 Mar 20 08:30	0°♓	
	9957 May 07 11:42	0°♈	
	9957 Jun 25 11:54	0°♉	
	9957 Aug 16 07:21	0°♊	
	9957 Oct 29 02:41	0°♋	
retrograde	9957 Nov 11 04:51	1°♋03'37	
	9957 Nov 24 03:21	30°℞♊	
opposition	9957 Dec 11 13:40	25°♊54'03	-2°55'11
greatest brilliancy	9957 Dec 12 07:24	25°♊41'32	-2.9m
min. Earth dist.	9957 Dec 16 20:56	24°♊24'35	0.38419 AU
direct	9958 Jan 12 08:41	20°♊07'17	
asc. node	9958 Jan 20 23:09	20°♊38'36	
	9958 Feb 21 08:03	0°♋	
	9958 Apr 14 23:48	0°♌	
	9958 May 29 15:18	0°♍	
	9958 Jul 12 13:06	0°♎	
	9958 Aug 26 07:08	0°♏	
	9958 Oct 11 06:29	0°♐	
	9958 Nov 27 05:33	0°♑	
evening set	9958 Dec 06 18:36	6°♑03'14	
desc. node	9958 Dec 20 18:39	14°♑55'20	
	9959 Jan 13 13:59	0°♒	
max. Earth dist.	9959 Jan 17 12:18	2°♒29'30	2.68214 AU
conjunction	9959 Jan 20 17:05	4°♒31'14	-0°16'11
minimum elong	9959 Jan 20 16:36	4°♒30'29	0°15'48
behind sun begin	9959 Jan 20 14:14	4°♒26'44	
behind sun end	9959 Jan 20 18:59	4°♒34'15	
	9959 Mar 01 16:08	0°♓	
morning rise	9959 Mar 05 03:22	2°♓13'34	
	9959 Apr 17 00:12	0°♈	
	9959 Jun 01 08:31	0°♉	
	9959 Jul 15 17:04	0°♊	
	9959 Aug 28 07:23	0°♋	
	9959 Oct 11 01:14	0°♌	
	9959 Nov 27 08:37	0°♍	
asc. node	9959 Dec 09 00:29	6°♍20'45	
retrograde	9960 Jan 28 16:08	21°♍34'36	
min. Earth dist.	9960 Feb 23 13:21	17°♍08'30	0.40296 AU
opposition	9960 Mar 01 23:46	14°♍50'49	5°10'41
greatest brilliancy	9960 Feb 29 13:23	15°♍17'30	-2.7m
direct	9960 Apr 01 11:01	9°♍12'54	
	9960 Jun 06 20:58	0°♎	
	9960 Jul 30 22:37	0°♏	
	9960 Sep 19 00:49	0°♐	
desc. node	9960 Nov 06 18:54	29°♐47'54	
	9960 Nov 07 02:46	0°♑	
	9960 Dec 25 09:56	0°♒	
evening set	9961 Jan 10 15:32	10°♒13'58	
max. Earth dist.	9961 Feb 08 05:28	28°♒29'45	2.64876 AU
	9961 Feb 10 13:21	0°♓	
conjunction	9961 Feb 24 04:02	8°♓50'30	-0°51'31
minimum elong	9961 Feb 24 02:55	8°♓48'40	0°51'18
	9961 Mar 28 03:31	0°♈	
morning rise	9961 Apr 10 05:07	8°♈48'58	
	9961 May 10 23:49	0°♉	
	9961 Jun 22 03:28	0°♊	
	9961 Aug 01 20:28	0°♋	
	9961 Sep 10 15:16	0°♌	
	9961 Oct 20 09:30	0°♍	
asc. node	9961 Oct 25 20:18	4°♍03'33	
	9961 Nov 30 17:36	0°♎	
	9962 Jan 16 17:27	0°♏	
retrograde	9962 Mar 20 19:29	21°♏11'25	
min. Earth dist.	9962 Apr 20 23:07	14°♏32'36	0.53834 AU
greatest brilliancy	9962 Apr 27 01:13	12°♏13'16	-1.9m
opposition	9962 Apr 28 07:02	11°♏44'43	4°56'34
direct	9962 Jun 02 19:01	3°♏53'04	
	9962 Aug 22 12:43	0°♐	
desc. node	9962 Sep 24 22:31	17°♐40'44	
	9962 Oct 16 19:10	0°♑	
	9962 Dec 06 09:32	0°♒	
	9963 Jan 23 06:49	0°♓	
evening set	9963 Feb 16 13:56	15°♓50'23	
max. Earth dist.	9963 Mar 06 17:44	27°♓58'21	2.56266 AU
	9963 Mar 09 17:40	0°♈	
conjunction	9963 Apr 05 02:26	18°♈09'09	-1°08'14
minimum elong	9963 Apr 05 02:20	18°♈08'59	1°08'21
	9963 Apr 21 20:57	0°♉	
morning rise	9963 May 27 00:27	25°♉34'03	
	9963 Jun 01 23:33	0°♊	
	9963 Jul 11 12:33	0°♋	
	9963 Aug 19 03:30	0°♌	
asc. node	9963 Sep 12 15:27	19°♌06'59	
	9963 Sep 26 16:01	0°♍	
	9963 Nov 05 02:04	0°♎	
	9963 Dec 16 17:58	0°♏	
	9964 Feb 01 05:03	0°♐	
	9964 Apr 08 22:33	0°♑	
retrograde	9964 Apr 27 08:47	2°♑05'16	

	9964 May 14 18:28	30°℞♐	
min. Earth dist.	9964 Jun 02 21:32	23°♐36'23	0.64142 AU
opposition	9964 Jun 06 16:55	22°♐05'25	2°19'39
greatest brilliancy	9964 Jun 06 09:41	22°♐12'36	-1.5m
direct	9964 Jul 15 18:18	12°♐57'04	
desc. node	9964 Aug 12 02:02	16°♐53'40	
	9964 Sep 16 19:16	0°♑	
	9964 Nov 13 23:46	0°♒	
	9965 Jan 03 00:46	0°♓	
	9965 Feb 18 00:10	0°♈	
evening set	9965 Mar 31 07:14	28°♈49'08	
	9965 Apr 01 22:38	0°♉	
max. Earth dist.	9965 Apr 14 23:54	9°♉28'58	2.43442 AU
	9965 May 12 12:42	0°♊	
conjunction	9965 May 27 00:15	11°♊02'28	-0°42'39
minimum elong	9965 May 27 02:52	11°♊07'29	0°43'00
	9965 Jun 20 11:21	0°♋	
	9965 Jul 28 13:47	0°♌	
asc. node	9965 Jul 30 11:42	1°♌30'42	
morning rise	9965 Aug 03 04:26	4°♌25'57	
	9965 Sep 04 16:38	0°♍	
	9965 Oct 13 17:01	0°♎	
	9965 Nov 23 12:31	0°♏	
	9966 Jan 06 04:00	0°♐	
	9966 Feb 23 13:32	0°♑	
	9966 Apr 28 01:12	0°♒	
retrograde	9966 May 31 15:43	5°♒59'19	
desc. node	9966 Jun 30 03:00	0°♒27'49	
	9966 Jul 01 10:10	30°℞♑	
opposition	9966 Jul 11 03:43	26°♑15'03	-0°22'54
greatest brilliancy	9966 Jul 11 03:34	26°♑15'13	-1.3m
min. Earth dist.	9966 Jul 11 02:57	26°♑15'50	0.68217 AU
direct	9966 Aug 21 05:14	16°♑25'45	
	9966 Oct 14 21:26	0°♒	
	9966 Dec 12 03:17	0°♓	
	9967 Jan 29 01:53	0°♈	
	9967 Mar 13 10:43	0°♉	
	9967 Apr 22 22:12	0°♊	
evening set	9967 May 30 16:41	29°♊16'25	
	9967 May 31 14:51	0°♋	
asc. node	9967 Jun 17 08:57	13°♋13'41	
	9967 Jul 08 12:33	0°♌	
conjunction	9967 Aug 09 15:55	25°♌22'19	0°36'31
minimum elong	9967 Aug 09 12:27	25°♌15'31	0°36'13
	9967 Aug 15 13:57	0°♍	
	9967 Sep 23 15:36	0°♎	
max. Earth dist.	9967 Oct 01 11:40	5°♎52'38	2.40152 AU
morning rise	9967 Oct 18 04:49	18°♎13'45	
	9967 Nov 03 11:00	0°♏	
	9967 Dec 16 14:12	0°♐	
	9968 Jan 31 14:57	0°♑	
	9968 Mar 21 22:00	0°♒	
desc. node	9968 May 17 00:25	27°♒35'11	
	9968 May 23 08:22	0°♓	
retrograde	9968 Jul 04 22:03	8°♓48'50	
	9968 Aug 12 15:00	30°℞♒	
opposition	9968 Aug 13 07:39	29°♒43'48	-2°54'50
greatest brilliancy	9968 Aug 13 15:44	29°♒35'54	-1.4m
min. Earth dist.	9968 Aug 17 01:50	28°♒15'50	0.65690 AU
direct	9968 Sep 23 21:01	19°♒40'31	
	9968 Nov 08 04:52	0°♓	
	9969 Jan 04 17:36	0°♈	
	9969 Feb 19 05:18	0°♉	
	9969 Apr 01 07:19	0°♊	
asc. node	9969 May 04 09:22	25°♊28'15	
	9969 May 10 04:11	0°♋	
	9969 Jun 17 04:53	0°♌	
	9969 Jul 25 11:39	0°♍	
evening set	9969 Aug 13 08:51	14°♍30'57	
	9969 Sep 02 21:41	0°♎	
	9969 Oct 14 02:23	0°♏	
conjunction	9969 Oct 15 02:40	0°♏43'06	1°06'03
minimum elong	9969 Oct 15 03:11	0°♏44'01	1°06'14
max. Earth dist.	9969 Nov 19 17:37	25°♏27'55	2.53961 AU
	9969 Nov 26 10:11	0°♐	
morning rise	9969 Dec 08 14:16	8°♐09'49	
	9970 Jan 10 22:57	0°♑	
	9970 Feb 27 18:23	0°♒	
desc. node	9970 Apr 03 19:41	20°♒56'23	
	9970 Apr 19 15:02	0°♓	
	9970 Jun 17 05:25	0°♈	
retrograde	9970 Aug 15 16:00	15°♈34'58	
opposition	9970 Sep 21 11:51	7°♈37'16	-5°00'46
greatest brilliancy	9970 Sep 22 18:10	7°♈09'02	-1.8m
min. Earth dist.	9970 Sep 28 20:05	4°♈53'37	0.56665 AU
	9970 Oct 14 19:22	30°℞♓	
direct	9970 Oct 31 13:54	28°♓04'11	
	9970 Nov 18 02:23	0°♈	
	9971 Jan 23 02:42	0°♉	
	9971 Mar 08 13:17	0°♊	
asc. node	9971 Mar 22 12:43	10°♊13'39	
	9971 Apr 17 17:22	0°♋	
	9971 May 26 13:07	0°♌	
	9971 Jul 04 13:20	0°♍	
	9971 Aug 13 17:56	0°♎	
	9971 Sep 24 17:19	0°♏	
evening set	9971 Oct 11 01:37	11°♏18'46	
	9971 Nov 07 16:12	0°♐	
conjunction	9971 Dec 01 05:26	15°♐34'40	0°40'13
minimum elong	9971 Dec 01 06:42	15°♐36'44	0°40'35
max. Earth dist.	9971 Dec 17 14:18	26°♐14'26	2.63702 AU
	9971 Dec 23 09:55	0°♑	
morning rise	9972 Jan 16 22:01	15°♑41'43	
	9972 Feb 08 12:40	0°♒	
desc. node	9972 Feb 19 13:33	6°♒55'43	
	9972 Mar 27 16:51	0°♓	
	9972 May 16 03:05	0°♈	
	9972 Jul 07 09:32	0°♉	
	9972 Sep 11 15:39	0°♊	
retrograde	9972 Oct 11 21:53	4°♊59'02	
	9972 Nov 09 22:09	30°℞♉	
opposition	9972 Nov 13 04:45	28°♉59'06	-4°56'29
greatest brilliancy	9972 Nov 14 19:23	28°♉28'39	-2.5m
min. Earth dist.	9972 Nov 21 11:07	26°♉23'43	0.42988 AU
direct	9972 Dec 18 04:52	21°♉45'59	
	9973 Jan 23 06:01	0°♊	
asc. node	9973 Feb 06 14:56	6°♊44'47	
	9973 Mar 17 06:11	0°♋	
	9973 Apr 29 05:32	0°♌	
	9973 Jun 09 18:11	0°♍	
	9973 Jul 21 21:41	0°♎	
	9973 Sep 03 11:24	0°♏	
	9973 Oct 18 15:38	0°♐	
evening set	9973 Nov 22 01:49	22°♐17'00	
	9973 Dec 04 02:59	0°♑	
conjunction	9974 Jan 06 23:24	21°♑32'47	-0°00'19
minimum elong	9974 Jan 06 23:25	21°♑32'49	0°00'05
behind sun begin	9974 Jan 06 05:31	21°♑04'25	
behind sun end	9974 Jan 07 17:20	22°♑01'12	

desc. node	9974 Jan 06 08:51	21°♉09'43	
max. Earth dist.	9974 Jan 08 23:54	22°♉49'44	2.68041 AU
	9974 Jan 20 07:10	0°♒	
morning rise	9974 Feb 19 16:17	19°♒16'33	
	9974 Mar 08 12:59	0°♓	
	9974 Apr 24 09:49	0°♈	
	9974 Jun 09 18:29	0°♉	
	9974 Jul 25 19:09	0°♊	
	9974 Sep 10 05:11	0°♋	
	9974 Oct 30 06:20	0°♌	
asc. node	9974 Dec 25 16:10	20°♌26'03	
retrograde	9975 Jan 01 00:52	20°♌42'56	
min. Earth dist.	9975 Jan 28 04:59	16°♌18'29	0.36961 AU
opposition	9975 Jan 31 16:07	15°♌21'35	2°47'55
greatest brilliancy	9975 Jan 31 05:16	15°♌29'03	-3.0m
direct	9975 Mar 01 23:17	10°♌26'31	
	9975 May 03 00:41	0°♍	
	9975 Jun 24 04:11	0°♎	
	9975 Aug 11 10:57	0°♏	
	9975 Sep 28 08:44	0°♐	
	9975 Nov 15 09:31	0°♑	
desc. node	9975 Nov 24 07:50	5°♑34'50	
evening set	9975 Dec 28 19:50	27°♑13'27	
	9976 Jan 02 05:29	0°♒	
max. Earth dist.	9976 Jan 31 03:32	18°♒21'11	2.66847 AU
conjunction	9976 Feb 11 03:25	25°♒23'44	-0°39'13
minimum elong	9976 Feb 11 02:25	25°♒22'08	0°38'56
	9976 Feb 18 07:04	0°♓	
morning rise	9976 Mar 26 02:07	24°♓01'00	
	9976 Apr 04 02:41	0°♈	
	9976 May 18 10:37	0°♉	
	9976 Jun 30 06:21	0°♊	
	9976 Aug 10 18:24	0°♋	
	9976 Sep 20 10:37	0°♌	
	9976 Oct 31 09:34	0°♍	
asc. node	9976 Nov 11 15:44	8°♍01'16	
	9976 Dec 14 06:29	0°♎	
	9977 Feb 17 04:45	0°♏	
retrograde	9977 Mar 02 22:51	1°♏20'15	
	9977 Mar 16 06:35	30°℞♎	
min. Earth dist.	9977 Mar 31 14:49	25°♎36'57	0.48480 AU
greatest brilliancy	9977 Apr 07 07:16	23°♎11'57	-2.2m
opposition	9977 Apr 08 21:59	22°♎36'39	5°38'35
direct	9977 May 12 14:24	15°♎30'35	
	9977 Jul 06 14:31	0°♏	
	9977 Sep 03 07:16	0°♐	
desc. node	9977 Oct 11 10:16	21°♐52'52	
	9977 Oct 25 04:11	0°♑	
	9977 Dec 13 15:13	0°♒	
	9978 Jan 30 03:32	0°♓	
evening set	9978 Feb 01 19:09	1°♓42'45	
max. Earth dist.	9978 Feb 23 19:01	16°♓05'25	2.60246 AU
	9978 Mar 16 14:35	0°♈	
conjunction	9978 Mar 19 15:01	2°♈02'29	-1°05'07
minimum elong	9978 Mar 19 14:14	2°♈01'11	1°05'05
	9978 Apr 28 23:36	0°♉	
morning rise	9978 May 06 22:11	5°♉38'49	
	9978 Jun 09 10:41	0°♊	
	9978 Jul 19 08:59	0°♋	
	9978 Aug 27 08:24	0°♌	
asc. node	9978 Sep 29 10:52	25°♌35'31	
	9978 Oct 05 04:36	0°♍	
	9978 Nov 14 00:28	0°♎	
	9978 Dec 26 14:23	0°♏	
	9979 Feb 14 16:38	0°♐	
retrograde	9979 Apr 14 05:10	17°♐38'36	
min. Earth dist.	9979 May 18 19:38	9°♐47'55	0.60771 AU
greatest brilliancy	9979 May 23 11:29	7°♐57'24	-1.6m
opposition	9979 May 24 02:11	7°♐42'53	3°23'30
	9979 Jun 18 10:25	30°℞♏	
direct	9979 Jun 30 22:35	28°♏59'12	
	9979 Jul 14 04:38	0°♐	
desc. node	9979 Aug 29 13:50	14°♐39'56	
	9979 Sep 30 12:52	0°♑	
	9979 Nov 23 10:25	0°♒	
	9980 Jan 11 09:25	0°♓	
	9980 Feb 26 02:01	0°♈	
evening set	9980 Mar 12 23:56	10°♈54'21	
max. Earth dist.	9980 Mar 27 02:10	20°♈45'45	2.48778 AU
	9980 Apr 09 01:29	0°♉	
conjunction	9980 May 04 01:46	18°♉14'29	-0°59'47
minimum elong	9980 May 04 03:29	18°♉17'41	1°00'04
	9980 May 19 19:38	0°♊	
	9980 Jun 27 23:11	0°♋	
morning rise	9980 Jul 03 22:20	4°♋38'49	
	9980 Aug 05 05:40	0°♌	
asc. node	9980 Aug 16 04:49	8°♌37'52	
	9980 Sep 12 11:09	0°♍	
greatest brilliancy	9980 Sep 19 11:31	5°♍27'09	1.2m
	9980 Oct 21 13:29	0°♎	
	9980 Dec 01 12:48	0°♏	
	9981 Jan 14 18:11	0°♐	
	9981 Mar 06 14:12	0°♑	
retrograde	9981 May 18 11:03	23°♑22'56	
min. Earth dist.	9981 Jun 26 12:31	14°♑05'50	0.67387 AU
opposition	9981 Jun 28 01:12	13°♑29'18	0°39'05
greatest brilliancy	9981 Jun 28 00:31	13°♑29'58	-1.3m
desc. node	9981 Jul 16 16:29	6°♑54'14	
direct	9981 Aug 07 12:03	3°♑52'58	
	9981 Oct 28 09:32	0°♒	
	9981 Dec 20 20:31	0°♓	
	9982 Feb 05 18:37	0°♈	
	9982 Mar 20 21:37	0°♉	
	9982 Apr 30 09:10	0°♊	
evening set	9982 May 04 09:35	3°♊03'35	
	9982 Jun 08 03:25	0°♋	
max. Earth dist.	9982 Jul 01 16:02	18°♋34'11	2.36501 AU
asc. node	9982 Jul 04 01:50	20°♋28'40	
conjunction	9982 Jul 09 17:19	24°♋57'09	0°04'09
minimum elong	9982 Jul 09 16:55	24°♋56'21	0°03'45
behind sun begin	9982 Jul 08 11:13	23°♋57'29	
behind sun end	9982 Jul 10 22:38	25°♋55'14	
	9982 Jul 16 02:05	0°♌	
	9982 Aug 23 03:02	0°♍	
morning rise	9982 Sep 21 04:33	22°♍27'41	
	9982 Oct 01 03:01	0°♎	
	9982 Nov 10 20:44	0°♏	
	9982 Dec 24 01:27	0°♐	
	9983 Feb 08 14:54	0°♑	
	9983 Apr 02 04:26	0°♒	
desc. node	9983 Jun 03 16:03	24°♒14'02	
retrograde	9983 Jun 21 18:50	26°♒04'22	
opposition	9983 Jul 31 18:23	16°♒41'24	-1°57'44
greatest brilliancy	9983 Jul 31 21:16	16°♒38'34	-1.3m
min. Earth dist.	9983 Aug 03 00:47	15°♒47'53	0.67463 AU
direct	9983 Sep 11 07:41	6°♒40'12	
	9983 Nov 24 16:02	0°♓	
	9984 Jan 15 05:23	0°♈	
	9984 Feb 28 13:23	0°♉	
	9984 Apr 09 07:12	0°♊	

	9984 May 18 01:13	0°♋	
asc. node	9984 May 21 01:33	2°♋22'17	
	9984 Jun 24 23:43	0°♌	
greatest brilliancy	9984 Jul 10 03:15	11°♌58'19	1.2m
evening set	9984 Jul 15 08:46	16°♌05'26	
	9984 Aug 02 03:15	0°♍	
	9984 Sep 10 08:45	0°♎	
conjunction	9984 Sep 21 19:04	8°♎30'59	1°04'24
minimum elong	9984 Sep 21 17:41	8°♎28'25	1°04'25
	9984 Oct 21 08:15	0°♏	
max. Earth dist.	9984 Nov 05 10:51	10°♏40'59	2.48826 AU
morning rise	9984 Nov 20 10:29	21°♏05'02	
	9984 Dec 03 12:18	0°♐	
	9985 Jan 18 02:29	0°♑	
	9985 Mar 07 12:35	0°♒	
desc. node	9985 Apr 20 11:19	25°♒07'26	
	9985 Apr 29 15:28	0°♓	
	9985 Jul 19 01:47	0°♈	
retrograde	9985 Jul 29 03:50	0°♈35'10	
	9985 Aug 07 20:10	30°♓	
opposition	9985 Sep 05 04:48	22°♓06'34	-4°17'35
greatest brilliancy	9985 Sep 06 01:23	21°♓46'55	-1.6m
min. Earth dist.	9985 Sep 11 05:01	19°♓49'05	0.60931 AU
direct	9985 Oct 16 03:58	12°♓13'38	
	9985 Dec 15 07:06	0°♈	
	9986 Feb 03 18:46	0°♉	
	9986 Mar 18 05:09	0°♊	
asc. node	9986 Apr 08 02:49	15°♊43'58	
	9986 Apr 26 15:26	0°♋	
	9986 Jun 04 00:38	0°♌	
	9986 Jul 12 15:40	0°♍	
	9986 Aug 21 11:01	0°♎	
evening set	9986 Sep 20 17:58	21°♎59'15	
	9986 Oct 02 01:14	0°♏	
conjunction	9986 Nov 14 12:27	29°♏53'14	0°53'25
minimum elong	9986 Nov 14 13:55	29°♏55'42	0°53'45
	9986 Nov 14 16:29	0°♐	
max. Earth dist.	9986 Dec 07 17:48	15°♐19'30	2.60509 AU
	9986 Dec 30 06:17	0°♑	
morning rise	9987 Jan 02 12:01	2°♑05'19	
	9987 Feb 15 12:30	0°♒	
desc. node	9987 Mar 08 05:15	12°♒50'05	
	9987 Apr 05 09:51	0°♓	
	9987 May 26 20:32	0°♈	
	9987 Jul 25 08:14	0°♉	
retrograde	9987 Sep 17 03:28	13°♉27'24	
opposition	9987 Oct 21 12:35	6°♉34'13	-5°31'34
greatest brilliancy	9987 Oct 23 06:45	5°♉57'49	-2.2m
min. Earth dist.	9987 Oct 30 06:51	3°♉34'07	0.48524 AU
	9987 Nov 11 18:30	30°♈	
direct	9987 Nov 28 02:32	28°♈07'33	
	9987 Dec 14 20:29	0°♉	
	9988 Feb 16 11:14	0°♊	
asc. node	9988 Feb 24 06:42	5°♊04'36	
	9988 Mar 30 22:13	0°♋	
	9988 May 10 07:00	0°♌	
	9988 Jun 19 09:01	0°♍	
	9988 Jul 30 11:39	0°♎	
	9988 Sep 11 06:08	0°♏	
	9988 Oct 25 20:09	0°♐	
evening set	9988 Nov 06 12:09	7°♐40'27	
	9988 Dec 10 22:39	0°♑	
conjunction	9988 Dec 23 21:54	8°♑18'30	0°15'48
minimum elong	9988 Dec 23 22:25	8°♑19'21	0°16'12
max. Earth dist.	9988 Dec 31 04:13	12°♑56'44	2.67007 AU
desc. node	9989 Jan 22 23:33	27°♑26'23	
	9989 Jan 27 00:30	0°♒	
morning rise	9989 Feb 06 08:39	6°♒32'41	
	9989 Mar 15 12:14	0°♓	
	9989 May 02 02:33	0°♈	
	9989 Jun 18 22:46	0°♉	
	9989 Aug 06 21:13	0°♊	
	9989 Sep 29 15:21	0°♋	
retrograde	9989 Nov 29 15:11	18°♋18'33	
opposition	9989 Dec 29 09:54	13°♋23'38	-1°00'24
greatest brilliancy	9989 Dec 29 13:49	13°♋21'01	-3.0m
min. Earth dist.	9989 Dec 31 21:24	12°♋43'57	0.36936 AU
asc. node	9990 Jan 11 09:27	10°♋10'04	
direct	9990 Jan 28 13:19	8°♋14'03	
	9990 Apr 02 17:51	0°♌	
	9990 May 21 12:28	0°♍	
	9990 Jul 06 01:09	0°♎	
	9990 Aug 20 16:27	0°♏	
	9990 Oct 06 04:44	0°♐	
	9990 Nov 22 11:16	0°♑	
desc. node	9990 Dec 10 20:11	11°♑35'48	
evening set	9990 Dec 14 22:01	14°♑10'12	
	9991 Jan 08 23:13	0°♒	
max. Earth dist.	9991 Jan 22 12:40	8°♒35'52	2.67965 AU
conjunction	9991 Jan 28 12:08	12°♒23'49	-0°25'06
minimum elong	9991 Jan 28 11:26	12°♒22'42	0°24'45
	9991 Feb 25 00:54	0°♓	
morning rise	9991 Mar 12 23:12	10°♓16'44	
	9991 Apr 12 04:04	0°♈	
	9991 May 27 02:47	0°♉	
	9991 Jul 09 19:58	0°♊	
	9991 Aug 21 12:08	0°♋	
	9991 Oct 02 17:47	0°♌	
	9991 Nov 15 09:31	0°♍	
asc. node	9991 Nov 29 08:27	8°♍54'45	
	9992 Jan 08 05:45	0°♎	
retrograde	9992 Feb 11 03:51	7°♎30'38	
min. Earth dist.	9992 Mar 08 14:49	2°♎42'09	0.43026 AU
greatest brilliancy	9992 Mar 15 06:02	0°♎31'11	-2.5m
opposition	9992 Mar 16 22:13	29°♍57'45	5°42'08
	9992 Mar 16 19:30	30°♍	
direct	9992 Apr 17 14:07	23°♍47'18	
	9992 May 20 16:46	0°♎	
	9992 Jul 23 02:23	0°♏	
	9992 Sep 13 03:19	0°♐	
desc. node	9992 Oct 27 21:50	26°♐53'50	
	9992 Nov 02 00:15	0°♑	
	9992 Dec 20 16:05	0°♒	
evening set	9993 Jan 18 14:39	18°♒14'54	
	9993 Feb 05 22:32	0°♓	
max. Earth dist.	9993 Feb 13 17:41	5°♓03'09	2.63459 AU
conjunction	9993 Mar 04 10:32	17°♓18'16	-0°57'32
minimum elong	9993 Mar 04 09:27	17°♓16'30	0°57'23
	9993 Mar 23 11:45	0°♈	
morning rise	9993 Apr 19 09:04	18°♈18'43	
	9993 May 06 04:17	0°♉	
	9993 Jun 17 01:50	0°♊	
	9993 Jul 27 11:38	0°♋	
	9993 Sep 04 22:16	0°♌	
	9993 Oct 14 06:10	0°♍	
asc. node	9993 Oct 16 04:32	1°♍27'35	
	9993 Nov 23 19:54	0°♎	
	9994 Jan 07 08:38	0°♏	
	9994 Mar 14 04:40	0°♐	

retrograde	9994 Mar 30 01:28	1°♐41'22	
	9994 Apr 14 07:19	30°℞♏	
min. Earth dist.	9994 May 01 12:33	24°♏35'02	0.56532 AU
greatest brilliancy	9994 May 07 04:08	22°♏23'26	-1.8m
opposition	9994 May 08 04:19	21°♏59'57	4°24'53
direct	9994 Jun 13 13:54	13°♏47'29	
	9994 Aug 12 21:01	0°♐	
desc. node	9994 Sep 15 02:14	16°♐08'56	
	9994 Oct 10 17:09	0°♑	
	9994 Dec 01 06:35	0°♒	
	9995 Jan 18 12:18	0°♓	
evening set	9995 Feb 25 10:54	24°♓52'28	
	9995 Mar 05 01:19	0°♈	
max. Earth dist.	9995 Mar 13 21:49	6°♈01'52	2.53771 AU
conjunction	9995 Apr 15 06:52	28°♈39'50	-1°07'23
minimum elong	9995 Apr 15 07:21	28°♈40'41	1°07'33
	9995 Apr 17 03:47	0°♉	
	9995 May 28 03:45	0°♊	
morning rise	9995 Jun 08 21:06	8°♊49'01	
	9995 Jul 06 13:41	0°♋	
	9995 Aug 14 01:32	0°♌	
asc. node	9995 Sep 02 23:48	15°♌36'23	
	9995 Sep 21 10:52	0°♍	
	9995 Oct 30 16:48	0°♎	
	9995 Dec 10 23:41	0°♏	
	9996 Jan 25 06:36	0°♐	
	9996 Mar 21 19:52	0°♑	
retrograde	9996 May 05 03:08	10°♑21'06	
min. Earth dist.	9996 Jun 11 15:01	1°♑33'59	0.65566 AU
opposition	9996 Jun 14 15:18	0°♑21'58	1°42'22
greatest brilliancy	9996 Jun 14 11:12	0°♑26'03	-1.4m
	9996 Jun 15 13:24	30°℞♐	
direct	9996 Jul 24 06:33	21°♐02'26	
desc. node	9996 Aug 02 05:04	21°♐30'12	
	9996 Sep 05 11:23	0°♑	
	9996 Nov 07 19:58	0°♒	
	9996 Dec 28 20:55	0°♓	
	9997 Feb 13 03:46	0°♈	
	9997 Mar 28 04:07	0°♉	
evening set	9997 Apr 11 18:56	10°♉38'05	
max. Earth dist.	9997 Apr 29 19:40	24°♉01'57	2.40486 AU
	9997 May 07 17:27	0°♊	
conjunction	9997 Jun 10 17:55	26°♊11'45	-0°28'01
minimum elong	9997 Jun 10 20:16	26°♊16'21	0°28'24
	9997 Jun 15 14:43	0°♋	
asc. node	9997 Jul 20 18:19	27°♋42'32	
	9997 Jul 23 15:48	0°♌	
morning rise	9997 Aug 21 06:52	22°♌35'43	
	9997 Aug 30 17:36	0°♍	
	9997 Oct 08 17:11	0°♎	
	9997 Nov 18 10:46	0°♏	
	9997 Dec 31 19:51	0°♐	
	9998 Feb 17 06:59	0°♑	
	9998 Apr 15 10:06	0°♒	
retrograde	9998 Jun 08 05:36	13°♒36'02	
desc. node	9998 Jun 20 05:41	12°♒40'16	
opposition	9998 Jul 18 14:29	3°♒58'20	-0°58'28
greatest brilliancy	9998 Jul 18 14:39	3°♒58'10	-1.3m
min. Earth dist.	9998 Jul 19 09:01	3°♒39'59	0.68239 AU
	9998 Jul 28 23:04	30°℞♑	
direct	9998 Aug 28 21:58	24°♑03'42	
	9998 Oct 01 23:16	0°♒	
	9998 Dec 05 19:30	0°♓	
	9999 Jan 23 18:32	0°♈	
	9999 Mar 08 10:58	0°♉	
	9999 Apr 18 00:31	0°♊	
	9999 May 26 17:28	0°♋	
asc. node	9999 Jun 07 17:17	9°♋27'45	
evening set	9999 Jun 16 01:13	16°♋03'35	
	9999 Jul 03 15:01	0°♌	
	9999 Aug 10 16:24	0°♍	
conjunction	9999 Aug 26 15:01	12°♍21'52	0°50'40
minimum elong	9999 Aug 26 11:33	12°♍15'11	0°50'29
	9999 Sep 18 18:32	0°♎	
max. Earth dist.	9999 Oct 18 02:24	21°♎42'11	2.43254 AU
	9999 Oct 29 14:20	0°♏	
morning rise	9999 Oct 31 14:53	1°♏26'49	
	9999 Dec 11 16:23	0°♐	
	10000 Jan 26 11:08	0°♑	
	10000 Mar 15 20:23	0°♒	
desc. node	10000 May 07 02:49	27°♒41'23	
	10000 May 12 03:52	0°♓	
retrograde	10000 Jul 13 08:57	16°♓49'27	
opposition	10000 Aug 21 08:37	7°♓55'57	-3°26'36
greatest brilliancy	10000 Aug 21 20:36	7°♓44'19	-1.4m
min. Earth dist.	10000 Aug 25 21:55	6°♓10'02	0.64288 AU
	10000 Sep 13 22:14	30°℞♒	
direct	10000 Oct 01 19:16	27°♒54'17	
	10000 Oct 20 18:13	0°♓	
	10000 Dec 28 18:43	0°♈	
	10001 Feb 13 12:30	0°♉	
	10001 Mar 26 23:58	0°♊	
asc. node	10001 Apr 24 19:35	22°♊02'13	
	10001 May 05 00:53	0°♋	
	10001 Jun 12 03:52	0°♌	
	10001 Jul 20 12:27	0°♍	
evening set	10001 Aug 28 05:42	29°♍25'02	
	10001 Aug 29 00:29	0°♎	
	10001 Oct 09 07:11	0°♏	
conjunction	10001 Oct 26 20:47	12°♏19'46	1°03'02
minimum elong	10001 Oct 26 21:54	12°♏21'43	1°03'18
	10001 Nov 21 16:11	0°♐	
max. Earth dist.	10001 Nov 26 21:38	3°♐31'03	2.56499 AU
morning rise	10001 Dec 18 01:46	17°♐34'29	
	10002 Jan 06 03:56	0°♑	
	10002 Feb 22 16:42	0°♒	
desc. node	10002 Mar 24 20:31	18°♒19'53	
	10002 Apr 13 15:24	0°♓	
	10002 Jun 07 13:17	0°♈	
retrograde	10002 Aug 26 13:38	25°♈20'47	
opposition	10002 Oct 01 14:51	17°♈43'26	-5°19'02
greatest brilliancy	10002 Oct 03 02:23	17°♈11'00	-1.9m
min. Earth dist.	10002 Oct 09 14:46	14°♈49'12	0.53938 AU
direct	10002 Nov 09 23:55	8°♈28'22	
	10003 Jan 13 19:47	0°♉	
	10003 Mar 01 17:55	0°♊	
asc. node	10003 Mar 12 21:55	7°♊56'55	
	10003 Apr 11 16:30	0°♋	
	10003 May 20 21:54	0°♌	
	10003 Jun 29 04:55	0°♍	
	10003 Aug 08 15:22	0°♎	
	10003 Sep 19 19:48	0°♏	
evening set	10003 Oct 21 12:15	21°♏40'35	
	10003 Nov 02 22:29	0°♐	
conjunction	10003 Dec 10 02:52	24°♐25'03	0°31'32
minimum elong	10003 Dec 10 03:54	24°♐26'43	0°31'56
	10003 Dec 18 18:04	0°♑	
max. Earth dist.	10003 Dec 23 02:15	2°♑47'47	2.65097 AU
morning rise	10004 Jan 24 20:27	23°♑42'09	

	10004 Feb 03 19:26	0°♒	
desc. node	10004 Feb 09 14:08	3°♒38'45	
	10004 Mar 22 16:11	0°♓	
	10004 May 10 07:16	0°♈	
	10004 Jun 29 11:27	0°♉	
	10004 Aug 23 19:51	0°♊	
retrograde	10004 Oct 28 09:26	19°♊29'02	
opposition	10004 Nov 28 12:11	13°♊58'52	-4°00'27
greatest brilliancy	10004 Nov 29 17:03	13°♊37'25	-2.7m
min. Earth dist.	10004 Dec 05 11:38	11°♊55'05	0.40237 AU
direct	10004 Dec 31 18:37	7°♊33'49	
asc. node	10005 Jan 28 00:10	12°♊29'07	
	10005 Mar 05 16:31	0°♋	
	10005 Apr 21 03:34	0°♌	
	10005 Jun 03 01:43	0°♍	
	10005 Jul 16 00:54	0°♎	
	10005 Aug 29 04:04	0°♏	
	10005 Oct 13 17:22	0°♐	
	10005 Nov 29 10:13	0°♑	
evening set	10005 Nov 30 13:17	0°♑43'06	
desc. node	10005 Dec 27 10:51	17°♑48'22	
conjunction	10006 Jan 14 20:37	29°♑28'34	-0°09'42
minimum elong	10006 Jan 14 20:20	29°♑28'08	0°09'19
behind sun begin	10006 Jan 14 05:08	29°♑04'02	
behind sun end	10006 Jan 15 11:33	29°♑52'14	
max. Earth dist.	10006 Jan 14 00:30	28°♑56'42	2.68242 AU
	10006 Jan 15 16:27	0°♒	
morning rise	10006 Feb 27 08:24	27°♒07'57	
	10006 Mar 03 20:07	0°♓	
	10006 Apr 19 09:53	0°♈	
	10006 Jun 04 04:43	0°♉	
	10006 Jul 19 05:21	0°♊	
	10006 Sep 01 20:31	0°♋	
	10006 Oct 17 10:30	0°♌	
	10006 Dec 10 10:06	0°♍	
asc. node	10006 Dec 16 02:13	2°♍17'13	
retrograde	10007 Jan 17 04:29	8°♍56'39	
min. Earth dist.	10007 Feb 12 04:14	4°♍39'24	0.38471 AU
greatest brilliancy	10007 Feb 17 04:26	3°♍11'57	-2.9m
opposition	10007 Feb 18 05:50	2°♍53'24	4°24'08
	10007 Feb 28 23:49	30°℞♌	
direct	10007 Mar 19 22:57	27°♌39'02	
	10007 Apr 08 08:30	0°♍	
	10007 Jun 15 00:41	0°♎	
	10007 Aug 04 21:52	0°♏	
	10007 Sep 22 21:37	0°♐	
	10007 Nov 10 11:23	0°♑	
desc. node	10007 Nov 14 10:39	2°♑27'42	
	10007 Dec 28 13:36	0°♒	
evening set	10008 Jan 05 17:16	5°♒08'19	
max. Earth dist.	10008 Feb 05 07:35	24°♒36'35	2.65855 AU
	10008 Feb 13 16:35	0°♓	
conjunction	10008 Feb 19 02:17	3°♓29'37	-0°46'41
minimum elong	10008 Feb 19 01:11	3°♓27'52	0°46'27
	10008 Mar 30 09:47	0°♈	
morning rise	10008 Apr 03 13:37	2°♈47'01	
	10008 May 13 11:54	0°♉	
	10008 Jun 24 23:02	0°♊	
	10008 Aug 05 00:31	0°♋	
	10008 Sep 14 04:06	0°♌	
	10008 Oct 24 08:23	0°♍	
asc. node	10008 Nov 01 22:52	6°♍18'33	
	10008 Dec 05 11:00	0°♎	
	10009 Jan 24 12:16	0°♏	
retrograde	10009 Mar 13 07:59	13°♏26'12	
min. Earth dist.	10009 Apr 12 09:42	7°♏11'38	0.51491 AU
greatest brilliancy	10009 Apr 18 19:22	4°♏47'54	-2.1m
opposition	10009 Apr 20 05:35	4°♏15'45	5°17'47
	10009 May 02 18:45	30°℞♎	
direct	10009 May 24 22:11	26°♎43'24	
	10009 Jun 17 22:08	0°♏	
	10009 Aug 27 00:21	0°♐	
desc. node	10009 Oct 01 13:58	19°♐35'39	
	10009 Oct 19 15:12	0°♑	
	10009 Dec 08 17:36	0°♒	
	10010 Jan 25 11:44	0°♓	
evening set	10010 Feb 10 02:39	10°♓08'01	
max. Earth dist.	10010 Mar 01 22:09	23°♓13'57	2.58141 AU
	10010 Mar 11 23:43	0°♈	
conjunction	10010 Mar 28 18:50	11°♈27'50	-1°07'36
minimum elong	10010 Mar 28 18:25	11°♈27'06	1°07'39
	10010 Apr 24 06:38	0°♉	
morning rise	10010 May 17 22:00	17°♉00'46	
	10010 Jun 04 13:44	0°♊	
	10010 Jul 14 07:16	0°♋	
	10010 Aug 22 01:58	0°♌	
asc. node	10010 Sep 19 17:23	22°♌16'16	
	10010 Sep 29 17:09	0°♍	
	10010 Nov 08 05:57	0°♎	
	10010 Dec 20 03:52	0°♏	
	10011 Feb 05 14:55	0°♐	
retrograde	10011 Apr 22 08:50	26°♐31'20	
min. Earth dist.	10011 May 28 01:54	18°♐19'04	0.62761 AU
opposition	10011 Jun 01 13:30	16°♐32'18	2°46'34
greatest brilliancy	10011 Jun 01 03:20	16°♐42'23	-1.5m
direct	10011 Jul 10 03:23	7°♐34'18	
desc. node	10011 Aug 19 17:47	15°♐39'43	
	10011 Sep 22 16:45	0°♑	
	10011 Nov 17 20:20	0°♒	
	10012 Jan 06 10:52	0°♓	
	10012 Feb 21 08:37	0°♈	
evening set	10012 Mar 23 01:51	21°♈14'25	
	10012 Apr 04 08:56	0°♉	
max. Earth dist.	10012 Apr 05 23:44	1°♉09'44	2.45864 AU
	10012 May 15 01:49	0°♊	
conjunction	10012 May 16 12:28	1°♊05'25	-0°51'20
minimum elong	10012 May 16 14:49	1°♊09'52	0°51'41
	10012 Jun 23 03:14	0°♋	
morning rise	10012 Jul 20 10:47	21°♋25'47	
	10012 Jul 31 07:35	0°♌	
asc. node	10012 Aug 06 13:40	4°♌56'06	
	10012 Sep 07 11:01	0°♍	
	10012 Oct 16 11:05	0°♎	
	10012 Nov 26 06:27	0°♏	
	10013 Jan 09 00:38	0°♐	
	10013 Feb 27 02:35	0°♑	
	10013 May 12 03:21	0°♒	
retrograde	10013 May 26 00:05	1°♒08'40	
	10013 Jun 08 05:01	30°℞♑	
opposition	10013 Jul 05 14:07	21°♑19'37	0°02'32
min. Earth dist.	10013 Jul 04 20:55	21°♑36'43	0.67980 AU
greatest brilliancy	10013 Jul 05 14:11	21°♑19'33	-1.3m
desc. node	10013 Jul 06 19:14	20°♑50'42	
direct	10013 Aug 15 10:22	11°♑35'43	
	10013 Oct 20 04:08	0°♒	
	10013 Dec 15 03:36	0°♓	
	10014 Jan 31 16:50	0°♈	
	10014 Mar 16 00:41	0°♉	
	10014 Apr 25 13:16	0°♊	
evening set	10014 May 18 16:39	17°♊47'46	

	10014 Jun 03 07:17	0°♋	
asc. node	10014 Jun 24 10:38	16°♋41'17	
	10014 Jul 11 05:36	0°♌	
conjunction	10014 Jul 27 01:04	12°♌31'28	0°23'14
minimum elong	10014 Jul 26 22:35	12°♌26'32	0°22'52
	10014 Aug 18 06:18	0°♍	
max. Earth dist.	10014 Sep 12 05:38	19°♍20'04	2.37884 AU
	10014 Sep 26 06:10	0°♎	
morning rise	10014 Oct 06 22:12	8°♎00'13	
	10014 Nov 05 23:24	0°♏	
	10014 Dec 19 01:08	0°♐	
	10015 Feb 03 04:34	0°♑	
	10015 Mar 26 03:50	0°♒	
desc. node	10015 May 24 17:21	27°♒14'14	
	10015 Jun 02 23:52	0°♓	
retrograde	10015 Jun 29 18:14	3°♓49'03	
	10015 Jul 24 08:37	30°℞♒	
opposition	10015 Aug 08 10:44	24°♒35'23	-2°31'26
greatest brilliancy	10015 Aug 08 16:14	24°♒30'00	-1.3m
min. Earth dist.	10015 Aug 11 12:38	23°♒23'01	0.66617 AU
direct	10015 Sep 19 01:06	14°♒32'27	
	10015 Nov 15 15:43	0°♓	
	10016 Jan 09 04:43	0°♈	
	10016 Feb 23 05:16	0°♉	
	10016 Apr 04 04:33	0°♊	
asc. node	10016 May 11 10:05	28°♊44'25	
	10016 May 13 00:38	0°♋	
	10016 Jun 20 00:21	0°♌	
	10016 Jul 28 05:03	0°♍	
evening set	10016 Aug 01 00:38	2°♍57'38	
	10016 Sep 05 12:00	0°♎	
conjunction	10016 Oct 05 09:50	22°♎00'23	1°06'34
minimum elong	10016 Oct 05 09:40	22°♎00'05	1°06'41
	10016 Oct 16 13:07	0°♏	
max. Earth dist.	10016 Nov 14 00:22	19°♏57'00	2.51743 AU
	10016 Nov 28 17:35	0°♐	
morning rise	10016 Dec 01 00:24	1°♐32'37	
	10017 Jan 13 05:17	0°♑	
	10017 Mar 02 04:43	0°♒	
desc. node	10017 Apr 10 12:47	23°♒08'53	
	10017 Apr 22 18:55	0°♓	
	10017 Jun 24 10:45	0°♈	
retrograde	10017 Aug 07 20:00	9°♈26'42	
opposition	10017 Sep 14 05:57	1°♈14'06	-4°43'38
greatest brilliancy	10017 Sep 15 07:53	0°♈49'39	-1.7m
	10017 Sep 17 12:24	30°℞♓	
min. Earth dist.	10017 Sep 21 00:26	28°♓41'18	0.58696 AU
direct	10017 Oct 24 19:00	21°♓30'31	
	10017 Dec 02 18:40	0°♈	
	10018 Jan 27 18:47	0°♉	
	10018 Mar 12 06:30	0°♊	
asc. node	10018 Mar 29 13:09	12°♊48'48	
	10018 Apr 21 02:18	0°♋	
	10018 May 29 16:51	0°♌	
	10018 Jul 07 11:55	0°♍	
	10018 Aug 16 10:58	0°♎	
	10018 Sep 27 04:51	0°♏	
evening set	10018 Oct 02 13:55	3°♏45'51	
	10018 Nov 09 22:49	0°♐	
conjunction	10018 Nov 24 05:13	9°♐30'15	0°46'03
minimum elong	10018 Nov 24 06:37	9°♐32'34	0°46'26
max. Earth dist.	10018 Dec 13 14:25	22°♐14'06	2.62376 AU
	10018 Dec 25 13:39	0°♑	
morning rise	10019 Jan 10 20:02	10°♑27'08	
	10019 Feb 10 16:48	0°♒	
desc. node	10019 Feb 26 06:35	9°♒44'16	
	10019 Mar 31 02:58	0°♓	
	10019 May 20 06:38	0°♈	
	10019 Jul 13 17:49	0°♉	
retrograde	10019 Oct 01 02:39	25°♉37'23	
opposition	10019 Nov 03 08:32	19°♉12'55	-5°19'06
greatest brilliancy	10019 Nov 05 02:33	18°♉38'17	-2.4m
min. Earth dist.	10019 Nov 12 01:40	16°♉21'42	0.45427 AU
direct	10019 Dec 09 15:23	11°♉23'55	
	10020 Feb 05 02:23	0°♊	
asc. node	10020 Feb 14 16:11	5°♊29'40	
	10020 Mar 23 02:51	0°♋	
	10020 May 03 16:19	0°♌	
	10020 Jun 13 10:41	0°♍	
	10020 Jul 25 00:42	0°♎	
	10020 Sep 06 04:02	0°♏	
	10020 Oct 21 00:19	0°♐	
evening set	10020 Nov 15 12:02	16°♐37'08	
	10020 Dec 06 06:47	0°♑	
conjunction	10020 Dec 31 23:57	16°♑24'57	0°06'24
minimum elong	10021 Jan 01 00:10	16°♑25'18	0°06'49
behind sun begin	10020 Dec 31 06:59	15°♑57'58	
behind sun end	10021 Jan 01 17:22	16°♑52'37	
max. Earth dist.	10021 Jan 05 07:06	19°♑08'56	2.67684 AU
desc. node	10021 Jan 13 01:07	24°♑04'21	
	10021 Jan 22 09:24	0°♒	
morning rise	10021 Feb 13 23:23	14°♒18'37	
	10021 Mar 10 17:31	0°♓	
	10021 Apr 26 21:43	0°♈	
	10021 Jun 12 20:33	0°♉	
	10021 Jul 29 22:40	0°♊	
	10021 Sep 16 13:03	0°♋	
	10021 Nov 14 08:57	0°♌	
retrograde	10021 Dec 18 07:06	6°♌51'08	
asc. node	10022 Jan 01 17:18	5°♌29'29	
min. Earth dist.	10022 Jan 16 07:15	2°♌04'41	0.36484 AU
opposition	10022 Jan 17 03:42	1°♌51'07	1°12'43
greatest brilliancy	10022 Jan 17 01:41	1°♌52'27	-3.1m
	10022 Jan 24 07:24	30°℞♋	
direct	10022 Feb 15 12:12	26°♋58'56	
	10022 Mar 09 03:39	0°♌	
	10022 May 11 13:49	0°♍	
	10022 Jun 28 21:42	0°♎	
	10022 Aug 14 19:27	0°♏	
	10022 Oct 01 00:14	0°♐	
	10022 Nov 17 16:05	0°♑	
desc. node	10022 Nov 30 23:25	8°♑21'27	
evening set	10022 Dec 22 21:23	22°♑08'31	
	10023 Jan 04 08:21	0°♒	
max. Earth dist.	10023 Jan 27 13:19	14°♒43'04	2.67455 AU
conjunction	10023 Feb 05 06:27	20°♒16'33	-0°33'33
minimum elong	10023 Feb 05 05:33	20°♒15'07	0°33'15
	10023 Feb 20 10:14	0°♓	
morning rise	10023 Mar 20 22:12	18°♓29'39	
	10023 Apr 07 09:50	0°♈	
	10023 May 22 00:44	0°♉	
	10023 Jul 04 06:05	0°♊	
	10023 Aug 15 05:43	0°♋	
	10023 Sep 25 12:01	0°♌	
	10023 Nov 06 07:22	0°♍	
asc. node	10023 Nov 19 17:21	9°♍14'23	
	10023 Dec 22 10:13	0°♎	
retrograde	10024 Feb 23 08:32	22°♎00'14	
min. Earth dist.	10024 Mar 21 23:20	16°♎42'06	0.46004 AU

greatest brilliancy	10024 Mar 28 17:36	14°♎20'33	-2.4m
opposition	10024 Mar 30 10:28	13°♎44'31	5°47'32
direct	10024 May 02 05:24	7°♎02'14	
	10024 Jul 13 16:54	0°♏	
	10024 Sep 06 20:16	0°♐	
desc. node	10024 Oct 18 01:30	24°♐11'02	
	10024 Oct 27 18:31	0°♑	
	10024 Dec 15 21:11	0°♒	
evening set	10025 Jan 26 15:39	26°♒21'31	
	10025 Feb 01 07:30	0°♓	
max. Earth dist.	10025 Feb 19 09:57	11°♓46'08	2.61788 AU
conjunction	10025 Mar 12 22:47	26°♓02'01	-1°02'25
minimum elong	10025 Mar 12 21:51	26°♓00'28	1°02'21
	10025 Mar 18 20:32	0°♈	
morning rise	10025 Apr 29 01:25	28°♈20'45	
	10025 May 01 09:51	0°♉	
	10025 Jun 12 02:29	0°♊	
	10025 Jul 22 06:19	0°♋	
	10025 Aug 30 10:46	0°♌	
asc. node	10025 Oct 06 13:06	28°♌31'50	
	10025 Oct 08 11:16	0°♍	
	10025 Nov 17 12:27	0°♎	
	10025 Dec 30 15:46	0°♏	
	10026 Feb 21 16:50	0°♐	
retrograde	10026 Apr 07 20:14	11°♐29'04	
min. Earth dist.	10026 May 11 12:22	3°♐57'53	0.58973 AU
opposition	10026 May 17 10:47	1°♐38'12	3°50'05
greatest brilliancy	10026 May 16 16:06	1°♐56'31	-1.7m
	10026 May 21 16:39	30°℞♏	
direct	10026 Jun 23 16:56	23°♏07'40	
	10026 Jul 30 10:34	0°♐	
desc. node	10026 Sep 05 05:01	15°♐15'22	
	10026 Oct 04 04:22	0°♑	
	10026 Nov 26 00:38	0°♒	
	10027 Jan 13 16:57	0°♓	
	10027 Feb 28 09:19	0°♈	
evening set	10027 Mar 06 16:02	4°♈16'10	
max. Earth dist.	10027 Mar 21 15:31	14°♈35'32	2.51080 AU
	10027 Apr 12 11:17	0°♉	
conjunction	10027 Apr 26 03:13	9°♉51'45	-1°04'06
minimum elong	10027 Apr 26 04:23	9°♉53'52	1°04'20
	10027 May 23 09:01	0°♊	
morning rise	10027 Jun 22 23:28	23°♊17'09	
	10027 Jul 01 15:55	0°♋	
	10027 Aug 09 00:59	0°♌	
asc. node	10027 Aug 24 06:46	11°♌58'25	
	10027 Sep 16 07:50	0°♍	
	10027 Oct 25 10:37	0°♎	
	10027 Dec 05 11:16	0°♏	
	10028 Jan 18 23:05	0°♐	
	10028 Mar 11 07:27	0°♑	
retrograde	10028 May 12 18:44	18°♑22'25	
min. Earth dist.	10028 Jun 20 04:03	9°♑18'35	0.66694 AU
opposition	10028 Jun 22 09:03	8°♑25'47	1°05'11
greatest brilliancy	10028 Jun 22 07:14	8°♑27'36	-1.4m
	10028 Jul 19 12:56	30°℞♐	
desc. node	10028 Jul 23 07:43	29°♐28'04	
direct	10028 Aug 01 12:25	28°♐56'33	
	10028 Aug 15 04:21	0°♑	
	10028 Nov 01 03:44	0°♒	
	10028 Dec 23 13:25	0°♓	
	10029 Feb 08 06:26	0°♈	
	10029 Mar 23 09:46	0°♉	
evening set	10029 Apr 24 02:44	23°♉19'07	
	10029 May 02 23:14	0°♊	
max. Earth dist.	10029 May 22 06:42	14°♊47'29	2.37863 AU
	10029 Jun 10 19:21	0°♋	
conjunction	10029 Jun 26 14:26	12°♋25'48	-0°10'32
minimum elong	10029 Jun 26 15:33	12°♋28'00	0°10'56
behind sun begin	10029 Jun 25 17:31	11°♋44'32	
behind sun end	10029 Jun 27 13:34	13°♋11'28	
asc. node	10029 Jul 11 03:09	23°♋55'34	
	10029 Jul 18 19:11	0°♌	
	10029 Aug 25 20:02	0°♍	
morning rise	10029 Sep 08 00:01	10°♍15'16	
	10029 Oct 03 18:44	0°♎	
	10029 Nov 13 10:55	0°♏	
	10029 Dec 26 15:16	0°♐	
	10030 Feb 11 10:18	0°♑	
	10030 Apr 06 06:53	0°♒	
desc. node	10030 Jun 10 08:17	21°♒02'41	
retrograde	10030 Jun 15 22:18	21°♒13'59	
opposition	10030 Jul 26 02:51	11°♒43'57	-1°33'28
greatest brilliancy	10030 Jul 26 04:12	11°♒42'36	-1.3m
min. Earth dist.	10030 Jul 27 16:54	11°♒06'24	0.67937 AU
direct	10030 Sep 05 14:43	1°♒45'19	
	10030 Nov 28 19:45	0°♓	
	10031 Jan 18 05:47	0°♈	
	10031 Mar 03 08:22	0°♉	
	10031 Apr 13 01:32	0°♊	
	10031 May 21 19:39	0°♋	
asc. node	10031 May 29 02:37	5°♋44'26	
	10031 Jun 28 17:50	0°♌	
evening set	10031 Jul 03 00:24	3°♌23'10	
	10031 Aug 05 19:54	0°♍	
conjunction	10031 Sep 11 09:18	28°♍04'18	1°00'10
minimum elong	10031 Sep 11 06:53	27°♍59'44	1°00'07
	10031 Sep 13 22:45	0°♎	
	10031 Oct 24 19:12	0°♏	
max. Earth dist.	10031 Oct 30 00:02	3°♏42'43	2.46361 AU
morning rise	10031 Nov 12 18:32	13°♏25'26	
	10031 Dec 06 20:36	0°♐	
	10032 Jan 21 10:47	0°♑	
	10032 Mar 10 03:33	0°♒	
desc. node	10032 Apr 27 04:21	26°♒46'18	
	10032 May 03 13:01	0°♓	
retrograde	10032 Jul 22 04:38	25°♓04'10	
opposition	10032 Aug 29 16:37	16°♓23'39	-3°56'51
greatest brilliancy	10032 Aug 30 09:11	16°♓07'42	-1.5m
min. Earth dist.	10032 Sep 04 01:21	14°♓20'00	0.62549 AU
direct	10032 Oct 09 22:01	6°♓25'53	
	10032 Dec 20 18:59	0°♈	
	10033 Feb 07 10:35	0°♉	
	10033 Mar 21 11:21	0°♊	
asc. node	10033 Apr 15 03:21	18°♊41'48	
	10033 Apr 29 17:40	0°♋	
	10033 Jun 06 23:58	0°♌	
	10033 Jul 15 11:31	0°♍	
	10033 Aug 24 02:27	0°♎	
evening set	10033 Sep 10 22:48	13°♎06'34	
	10033 Oct 04 12:00	0°♏	
conjunction	10033 Nov 06 17:19	23°♏03'41	0°58'02
minimum elong	10033 Nov 06 18:44	23°♏06'05	0°58'21
	10033 Nov 16 22:58	0°♐	
max. Earth dist.	10033 Dec 03 08:51	10°♐58'24	2.58816 AU
morning rise	10033 Dec 27 00:14	26°♐29'06	
	10034 Jan 01 10:30	0°♑	
	10034 Feb 17 18:04	0°♒	
desc. node	10034 Mar 14 22:01	15°♒29'50	

	10034 Apr 08 00:13	0°♓		
	10034 May 30 14:55	0°♈		
	10034 Aug 05 00:51	0°♉		
retrograde	10034 Sep 07 06:58	5°♉45'08		
	10034 Oct 08 05:04	30°℞♈		
opposition	10034 Oct 12 11:35	28°♈30'59	-5°29'46	
greatest brilliancy	10034 Oct 14 03:36	27°♈55'28	-2.0m	
min. Earth dist.	10034 Oct 21 00:36	25°♈30'14	0.51002 AU	
direct	10034 Nov 19 23:31	19°♈39'41		
	10034 Dec 31 21:54	0°♉		
	10035 Feb 22 01:50	0°♊		
asc. node	10035 Mar 03 07:10	6°♊17'15		
	10035 Apr 05 05:03	0°♋		
	10035 May 14 23:35	0°♌		
	10035 Jun 23 15:33	0°♍		
	10035 Aug 03 09:12	0°♎		
	10035 Sep 14 19:56	0°♏		
	10035 Oct 29 03:30	0°♐		
evening set	10035 Oct 31 09:33	1°♐29'37		
	10035 Dec 14 01:59	0°♑		
conjunction	10035 Dec 18 16:17	2°♑57'23	0°22'26	
minimum elong	10035 Dec 18 17:02	2°♑58'35	0°22'51	
max. Earth dist.	10035 Dec 28 08:59	9°♑10'25	2.66267 AU	
desc. node	10036 Jan 30 16:01	0°♒20'50		
	10036 Jan 30 02:51	0°♒		
morning rise	10036 Feb 01 14:52	1°♒34'54		
	10036 Mar 17 17:59	0°♓		
	10036 May 04 18:09	0°♈		
	10036 Jun 22 11:16	0°♉		
	10036 Aug 12 10:30	0°♊		
	10036 Oct 14 20:41	0°♋		
retrograde	10036 Nov 15 00:37	5°♋30'59		
opposition	10036 Dec 15 06:43	0°♋25'09	-2°30'52	
greatest brilliancy	10036 Dec 15 21:09	0°♋15'06	-2.9m	
	10036 Dec 16 18:48	30°℞♊		
min. Earth dist.	10036 Dec 20 03:00	29°♊04'31	0.38074 AU	
direct	10037 Jan 15 16:28	24°♊46'16		
asc. node	10037 Jan 18 10:42	24°♊49'30		
	10037 Feb 13 01:42	0°♋		
	10037 Apr 11 08:43	0°♌		
	10037 May 26 16:24	0°♍		
	10037 Jul 09 19:50	0°♎		
	10037 Aug 23 16:06	0°♏		
	10037 Oct 08 16:23	0°♐		
	10037 Nov 24 16:03	0°♑		
evening set	10037 Dec 08 20:03	8°♑58'40		
desc. node	10037 Dec 17 12:23	14°♑28'15		
	10038 Jan 11 01:09	0°♒		
max. Earth dist.	10038 Jan 19 00:59	5°♒03'57	2.68204 AU	
conjunction	10038 Jan 22 16:14	7°♒22'22	-0°18'50	
minimum elong	10038 Jan 22 15:42	7°♒21'30	0°18'29	
	10038 Feb 27 03:53	0°♓		
morning rise	10038 Mar 07 01:58	5°♓05'09		
	10038 Apr 14 12:04	0°♈		
	10038 May 29 19:36	0°♉		
	10038 Jul 13 02:04	0°♊		
	10038 Aug 25 12:13	0°♋		
	10038 Oct 07 20:57	0°♌		
	10038 Nov 22 22:33	0°♍		
asc. node	10038 Dec 06 10:29	7°♍45'18		
retrograde	10039 Jan 31 21:11	26°♍04'08		
min. Earth dist.	10039 Feb 26 18:15	21°♍34'31	0.40788 AU	
greatest brilliancy	10039 Mar 04 22:19	19°♍39'11	-2.7m	
opposition	10039 Mar 06 10:23	19°♍10'48	5°22'10	
direct	10039 Apr 06 04:02	13°♍26'44		
	10039 Jun 03 00:08	0°♎		
	10039 Jul 28 16:33	0°♏		
	10039 Sep 17 04:23	0°♐		
desc. node	10039 Nov 04 13:15	29°♐27'27		
	10039 Nov 05 10:27	0°♑		
	10039 Dec 23 20:12	0°♒		
evening set	10040 Jan 13 15:22	13°♒06'13		
	10040 Feb 09 01:41	0°♓		
max. Earth dist.	10040 Feb 10 16:15	1°♓02'14	2.64638 AU	
conjunction	10040 Feb 27 04:44	11°♓46'28	-0°53'22	
minimum elong	10040 Feb 27 03:37	11°♓44'39	0°53'12	
	10040 Mar 25 17:38	0°♈		
morning rise	10040 Apr 12 09:04	11°♈54'45		
	10040 May 08 15:11	0°♉		
	10040 Jun 19 19:28	0°♊		
	10040 Jul 30 12:22	0°♋		
	10040 Sep 08 06:04	0°♌		
	10040 Oct 17 21:23	0°♍		
asc. node	10040 Oct 23 06:37	4°♍01'47		
	10040 Nov 27 22:21	0°♎		
	10041 Jan 12 21:48	0°♏		
retrograde	10041 Mar 23 01:04	24°♏36'12		
min. Earth dist.	10041 Apr 23 11:16	17°♏52'32	0.54358 AU	
opposition	10041 Apr 30 17:06	15°♏06'07	4°49'20	
greatest brilliancy	10041 Apr 29 12:21	15°♏33'40	-1.9m	
direct	10041 Jun 05 09:18	7°♏10'28		
	10041 Aug 18 13:45	0°♐		
desc. node	10041 Sep 21 17:31	17°♐42'09		
	10041 Oct 13 18:51	0°♑		
	10041 Dec 03 16:41	0°♒		
	10042 Jan 20 18:08	0°♓		
evening set	10042 Feb 18 17:33	18°♓53'15		
	10042 Mar 07 08:00	0°♈		
max. Earth dist.	10042 Mar 08 14:55	0°♈52'18	2.55820 AU	
conjunction	10042 Apr 07 11:35	21°♈27'27	-1°08'17	
minimum elong	10042 Apr 07 11:38	21°♈27'33	1°08'24	
	10042 Apr 19 13:35	0°♉		
morning rise	10042 May 29 20:51	29°♉20'58		
	10042 May 30 17:49	0°♊		
	10042 Jul 09 07:43	0°♋		
	10042 Aug 16 22:44	0°♌		
asc. node	10042 Sep 10 02:00	18°♌50'59		
	10042 Sep 24 10:15	0°♍		
	10042 Nov 02 17:47	0°♎		
	10042 Dec 14 04:23	0°♏		
	10043 Jan 29 01:43	0°♐		
	10043 Mar 31 21:02	0°♑		
retrograde	10043 Apr 30 06:53	5°♑01'22		
	10043 May 27 17:02	30°℞♐		
min. Earth dist.	10043 Jun 06 00:29	26°♐29'29	0.64429 AU	
opposition	10043 Jun 09 17:00	25°♐01'29	2°09'11	
greatest brilliancy	10043 Jun 09 10:36	25°♐07'51	-1.5m	
direct	10043 Jul 18 22:13	15°♐50'55		
desc. node	10043 Aug 09 20:57	18°♐28'46		
	10043 Sep 13 06:00	0°♑		
	10043 Nov 11 22:45	0°♒		
	10044 Jan 01 09:21	0°♓		
	10044 Feb 16 13:39	0°♈		
	10044 Mar 30 15:11	0°♉		
evening set	10044 Apr 02 22:16	2°♉22'22		
max. Earth dist.	10044 Apr 18 00:37	13°♉22'45	2.42856 AU	
	10044 May 10 07:13	0°♊		
conjunction	10044 May 30 05:53	15°♊13'25	-0°39'22	
minimum elong	10044 May 30 08:31	15°♊18'28	0°39'45	

	10044 Jun 18 06:57	0°♋	
	10044 Jul 26 09:40	0°♌	
asc. node	10044 Jul 27 20:31	1°♌08'50	
morning rise	10044 Aug 07 03:47	9°♌17'10	
	10044 Sep 02 11:59	0°♍	
	10044 Oct 11 10:52	0°♎	
	10044 Nov 21 03:39	0°♏	
	10045 Jan 03 14:08	0°♐	
	10045 Feb 20 12:05	0°♑	
	10045 Apr 21 22:35	0°♒	
retrograde	10045 Jun 02 12:51	8°♒46'26	
desc. node	10045 Jun 26 22:02	4°♒56'40	
	10045 Jul 10 15:35	30°℞♑	
opposition	10045 Jul 13 01:01	29°♑03'09	-0°33'25
greatest brilliancy	10045 Jul 13 00:49	29°♑03'21	-1.3m
min. Earth dist.	10045 Jul 13 03:13	29°♑00'58	0.68252 AU
direct	10045 Aug 23 04:42	19°♑12'55	
	10045 Oct 09 23:11	0°♒	
	10045 Dec 09 03:22	0°♓	
	10046 Jan 26 12:45	0°♈	
	10046 Mar 11 02:39	0°♉	
	10046 Apr 20 16:51	0°♊	
	10046 May 29 10:43	0°♋	
evening set	10046 Jun 03 05:37	3°♋46'07	
asc. node	10046 Jun 14 18:19	12°♋52'32	
	10046 Jul 06 08:33	0°♌	
conjunction	10046 Aug 13 12:37	0°♍06'44	0°40'20
minimum elong	10046 Aug 13 09:01	29°♌59'42	0°40'03
	10046 Aug 13 09:11	0°♍	
	10046 Sep 21 09:20	0°♎	
max. Earth dist.	10046 Oct 06 01:17	10°♎58'30	2.40743 AU
morning rise	10046 Oct 21 09:33	22°♎15'15	
	10046 Nov 01 02:38	0°♏	
	10046 Dec 14 02:56	0°♐	
	10047 Jan 28 23:04	0°♑	
	10047 Mar 19 19:42	0°♒	
desc. node	10047 May 14 19:58	28°♒18'21	
	10047 May 18 22:56	0°♓	
retrograde	10047 Jul 07 23:00	11°♓39'49	
opposition	10047 Aug 16 07:08	2°♓36'40	-3°03'56
greatest brilliancy	10047 Aug 16 15:59	2°♓28'03	-1.4m
min. Earth dist.	10047 Aug 20 04:25	1°♓05'51	0.65466 AU
	10047 Aug 23 01:07	30°℞♒	
direct	10047 Sep 26 20:46	22°♒33'48	
	10047 Nov 03 11:55	0°♓	
	10048 Jan 02 17:26	0°♈	
	10048 Feb 17 17:08	0°♉	
	10048 Mar 30 00:11	0°♊	
asc. node	10048 May 01 20:08	25°♊12'23	
	10048 May 07 23:18	0°♋	
	10048 Jun 15 00:36	0°♌	
	10048 Jul 23 06:46	0°♍	
evening set	10048 Aug 16 19:38	18°♍50'16	
	10048 Aug 31 15:19	0°♎	
	10048 Oct 11 18:02	0°♏	
conjunction	10048 Oct 17 23:11	4°♏24'26	1°05'28
minimum elong	10048 Oct 17 23:54	4°♏25'42	1°05'41
max. Earth dist.	10048 Nov 21 17:32	28°♏28'31	2.54461 AU
	10048 Nov 23 23:32	0°♐	
morning rise	10048 Dec 10 23:03	11°♐23'07	
	10049 Jan 08 09:38	0°♑	
	10049 Feb 25 01:08	0°♒	
desc. node	10049 Mar 31 13:58	20°♒45'30	
	10049 Apr 16 13:09	0°♓	
	10049 Jun 12 16:50	0°♈	
retrograde	10049 Aug 18 02:45	18°♈44'48	
opposition	10049 Sep 23 20:13	10°♈50'35	-5°05'39
greatest brilliancy	10049 Sep 25 03:37	10°♈21'28	-1.8m
min. Earth dist.	10049 Oct 01 08:12	8°♈04'24	0.56173 AU
direct	10049 Nov 02 19:49	1°♈20'49	
	10050 Jan 19 17:48	0°♉	
	10050 Mar 05 21:35	0°♊	
asc. node	10050 Mar 19 22:54	10°♊12'21	
	10050 Apr 15 07:25	0°♋	
	10050 May 24 05:20	0°♌	
	10050 Jul 02 05:58	0°♍	
	10050 Aug 11 09:52	0°♎	
	10050 Sep 22 07:56	0°♏	
evening set	10050 Oct 13 14:16	14°♏42'04	
	10050 Nov 05 05:16	0°♐	
conjunction	10050 Dec 03 10:33	18°♐39'27	0°37'48
minimum elong	10050 Dec 03 11:46	18°♐41'26	0°38'13
max. Earth dist.	10050 Dec 19 06:12	28°♐56'35	2.63978 AU
	10050 Dec 20 21:28	0°♑	
morning rise	10051 Jan 18 22:20	18°♑36'00	
	10051 Feb 05 22:36	0°♒	
desc. node	10051 Feb 16 06:56	6°♒30'27	
	10051 Mar 26 00:16	0°♓	
	10051 May 14 05:00	0°♈	
	10051 Jul 04 20:01	0°♉	
	10051 Sep 04 12:21	0°♊	
retrograde	10051 Oct 16 10:51	8°♊58'13	
opposition	10051 Nov 17 11:11	3°♊04'04	-4°45'06
greatest brilliancy	10051 Nov 19 00:08	2°♊35'10	-2.6m
min. Earth dist.	10051 Nov 25 12:19	0°♊33'56	0.42425 AU
	10051 Nov 27 10:05	30°℞♉	
direct	10051 Dec 22 04:05	25°♉59'33	
	10052 Jan 15 14:07	0°♊	
asc. node	10052 Feb 05 01:20	8°♊14'42	
	10052 Mar 13 17:28	0°♋	
	10052 Apr 26 08:30	0°♌	
	10052 Jun 07 02:34	0°♍	
	10052 Jul 19 08:10	0°♎	
	10052 Aug 31 22:32	0°♏	
	10052 Oct 16 02:46	0°♐	
evening set	10052 Nov 24 04:43	25°♐16'24	
	10052 Dec 01 13:59	0°♑	
desc. node	10053 Jan 03 02:59	20°♑43'06	
conjunction	10053 Jan 08 23:11	24°♑25'33	-0°03'07
minimum elong	10053 Jan 08 23:07	24°♑25'26	0°02'43
behind sun begin	10053 Jan 08 04:45	23°♑56'20	
behind sun end	10053 Jan 09 17:28	24°♑54'32	
max. Earth dist.	10053 Jan 10 09:05	25°♑19'20	2.68098 AU
	10053 Jan 17 18:02	0°♒	
morning rise	10053 Feb 21 14:49	22°♒07'50	
	10053 Mar 05 23:36	0°♓	
	10053 Apr 21 19:36	0°♈	
	10053 Jun 07 02:08	0°♉	
	10053 Jul 22 22:12	0°♊	
	10053 Sep 06 21:53	0°♋	
	10053 Oct 25 12:48	0°♌	
asc. node	10053 Dec 23 03:26	24°♌28'27	
retrograde	10054 Jan 04 15:05	25°♌32'42	
min. Earth dist.	10054 Jan 31 11:37	21°♌12'00	0.37161 AU
opposition	10054 Feb 04 12:41	20°♌04'52	3°13'52
greatest brilliancy	10054 Feb 03 22:45	20°♌14'32	-3.0m
direct	10054 Mar 05 19:35	15°♌07'30	
	10054 Apr 27 16:21	0°♍	
	10054 Jun 20 19:09	0°♎	
	10054 Aug 08 13:12	0°♏	

	10054 Sep 25 15:25	0°♐	
	10054 Nov 12 18:32	0°♑	
desc. node	10054 Nov 21 02:18	5°♑11'37	
evening set	10054 Dec 30 19:34	0°♒05'22	
	10054 Dec 30 16:09	0°♒	
max. Earth dist.	10055 Feb 01 15:08	20°♒54'35	2.66668 AU
conjunction	10055 Feb 13 03:17	28°♒17'18	-0°41'29
minimum elong	10055 Feb 13 02:15	28°♒15'39	0°41'13
	10055 Feb 15 19:04	0°♓	
morning rise	10055 Mar 29 04:08	27°♓01'37	
	10055 Apr 02 15:39	0°♈	
	10055 May 16 23:58	0°♉	
	10055 Jun 28 19:31	0°♊	
	10055 Aug 09 06:41	0°♋	
	10055 Sep 18 20:50	0°♌	
	10055 Oct 29 14:45	0°♍	
asc. node	10055 Nov 10 01:07	8°♍13'06	
	10055 Dec 11 20:27	0°♎	
	10056 Feb 06 19:51	0°♏	
retrograde	10056 Mar 05 09:33	5°♏03'10	
	10056 Apr 01 04:08	30°℞♎	
min. Earth dist.	10056 Apr 03 09:15	29°♎13'43	0.49053 AU
greatest brilliancy	10056 Apr 10 00:21	26°♎48'40	-2.2m
opposition	10056 Apr 11 14:22	26°♎13'49	5°35'13
direct	10056 May 15 10:33	19°♎02'45	
	10056 Jul 01 04:11	0°♏	
	10056 Aug 31 00:38	0°♐	
desc. node	10056 Oct 08 04:57	21°♐41'57	
	10056 Oct 22 08:20	0°♑	
	10056 Dec 11 00:13	0°♒	
	10057 Jan 27 15:43	0°♓	
evening set	10057 Feb 03 19:29	4°♓37'19	
max. Earth dist.	10057 Feb 25 06:50	18°♓41'10	2.59865 AU
	10057 Mar 14 05:12	0°♈	
conjunction	10057 Mar 21 18:54	5°♈07'30	-1°06'01
minimum elong	10057 Mar 21 18:13	5°♈06'21	1°06'01
	10057 Apr 26 15:56	0°♉	
morning rise	10057 May 09 10:13	9°♉05'09	
	10057 Jun 07 04:02	0°♊	
	10057 Jul 17 02:36	0°♋	
	10057 Aug 25 01:31	0°♌	
asc. node	10057 Sep 26 19:19	25°♌21'05	
	10057 Oct 02 20:14	0°♍	
	10057 Nov 11 12:44	0°♎	
	10057 Dec 23 18:53	0°♏	
	10058 Feb 10 16:54	0°♐	
retrograde	10058 Apr 16 05:40	20°♐43'28	
min. Earth dist.	10058 May 21 01:55	12°♐48'59	0.61189 AU
opposition	10058 May 26 05:32	10°♐46'55	3°13'34
greatest brilliancy	10058 May 25 15:57	11°♐00'20	-1.6m
direct	10058 Jul 03 06:46	2°♐00'20	
desc. node	10058 Aug 26 08:56	15°♐20'08	
	10058 Sep 26 23:06	0°♑	
	10058 Nov 20 13:55	0°♒	
	10059 Jan 08 19:46	0°♓	
	10059 Feb 23 16:34	0°♈	
evening set	10059 Mar 16 07:09	14°♈07'33	
max. Earth dist.	10059 Mar 30 08:12	23°♈58'52	2.48253 AU
	10059 Apr 07 18:55	0°♉	
conjunction	10059 May 07 18:46	21°♉53'41	-0°58'02
minimum elong	10059 May 07 20:38	21°♉57'10	0°58'19
	10059 May 18 15:00	0°♊	
	10059 Jun 26 19:28	0°♋	
morning rise	10059 Jul 08 10:06	9°♋03'18	

	10059 Aug 04 01:55	0°♌	
asc. node	10059 Aug 14 15:14	8°♌18'52	
greatest brilliancy	10059 Sep 03 00:02	23°♌32'13	1.2m
	10059 Sep 11 06:24	0°♍	
	10059 Oct 20 06:36	0°♎	
	10059 Nov 30 02:14	0°♏	
	10060 Jan 13 00:38	0°♐	
	10060 Mar 03 00:27	0°♑	
retrograde	10060 May 20 08:27	26°♑14'03	
opposition	10060 Jun 29 23:48	16°♑21'05	0°28'17
min. Earth dist.	10060 Jun 28 14:28	16°♑54'14	0.67540 AU
greatest brilliancy	10060 Jun 29 23:24	16°♑21'29	-1.3m
desc. node	10060 Jul 13 10:56	11°♑19'44	
direct	10060 Aug 09 13:49	6°♑43'12	
	10060 Oct 24 16:36	0°♒	
	10060 Dec 18 00:58	0°♓	
	10061 Feb 03 06:49	0°♈	
	10061 Mar 18 14:07	0°♉	
	10061 Apr 28 04:18	0°♊	
evening set	10061 May 07 11:22	7°♊05'07	
	10061 Jun 05 23:58	0°♋	
asc. node	10061 Jul 01 12:08	20°♋07'36	
conjunction	10061 Jul 13 10:35	29°♋35'21	0°08'42
minimum elong	10061 Jul 13 09:39	29°♋33'30	0°08'17
behind sun begin	10061 Jul 12 07:04	28°♋40'49	
behind sun end	10061 Jul 14 12:14	0°♌26'10	
	10061 Jul 13 23:02	0°♌	
max. Earth dist.	10061 Jul 20 07:34	5°♌02'16	2.36471 AU
	10061 Aug 20 23:21	0°♍	
morning rise	10061 Sep 24 18:30	26°♍51'55	
	10061 Sep 28 21:45	0°♎	
	10061 Nov 08 12:52	0°♏	
	10061 Dec 21 13:44	0°♐	
	10062 Feb 05 20:35	0°♑	
	10062 Mar 29 16:18	0°♒	
desc. node	10062 May 31 09:50	25°♒55'20	
retrograde	10062 Jun 23 17:59	28°♒53'50	
opposition	10062 Aug 02 16:50	19°♒32'16	-2°07'41
greatest brilliancy	10062 Aug 02 20:12	19°♒28'58	-1.3m
min. Earth dist.	10062 Aug 05 02:36	18°♒35'32	0.67343 AU
direct	10062 Sep 13 07:26	9°♒30'42	
	10062 Nov 20 21:12	0°♓	
	10063 Jan 12 11:17	0°♈	
	10063 Feb 26 03:17	0°♉	
	10063 Apr 08 00:54	0°♊	
	10063 May 16 20:39	0°♋	
asc. node	10063 May 19 10:52	2°♋02'13	
	10063 Jun 23 19:35	0°♌	
greatest brilliancy	10063 Jun 25 14:59	1°♌25'56	1.2m
evening set	10063 Jul 20 01:49	20°♌43'18	
	10063 Jul 31 22:35	0°♍	
	10063 Sep 09 02:47	0°♎	
conjunction	10063 Sep 25 23:32	12°♎32'51	1°05'16
minimum elong	10063 Sep 25 22:28	12°♎30'53	1°05'21
	10063 Oct 20 00:25	0°♏	
max. Earth dist.	10063 Nov 08 14:37	13°♏50'46	2.49400 AU
morning rise	10063 Nov 24 00:08	24°♏29'41	
	10063 Dec 02 02:00	0°♐	
	10064 Jan 16 12:50	0°♑	
	10064 Mar 04 17:11	0°♒	
desc. node	10064 Apr 17 05:35	25°♒08'36	
	10064 Apr 26 04:53	0°♓	
	10064 Jul 05 08:57	0°♈	
retrograde	10064 Jul 31 10:11	3°♈36'27	
	10064 Aug 24 10:52	30°℞♓	

opposition	10064 Sep 07 09:05	25°♓10'25	-4°24'45
greatest brilliancy	10064 Sep 08 06:43	24°♓49'50	-1.6m
min. Earth dist.	10064 Sep 13 13:00	22°♓49'59	0.60548 AU
direct	10064 Oct 18 07:12	15°♓19'12	
	10064 Dec 10 22:50	0°♈	
	10065 Jan 31 22:47	0°♉	
	10065 Mar 15 18:28	0°♊	
asc. node	10065 Apr 05 13:24	15°♊34'25	
	10065 Apr 24 08:21	0°♋	
	10065 Jun 01 18:43	0°♌	
	10065 Jul 10 09:30	0°♍	
	10065 Aug 19 03:42	0°♎	
evening set	10065 Sep 23 13:31	25°♎40'09	
	10065 Sep 29 16:20	0°♏	
	10065 Nov 12 05:50	0°♐	
conjunction	10065 Nov 16 21:33	3°♐07'34	0°51'29
minimum elong	10065 Nov 16 23:01	3°♐10'01	0°51'51
max. Earth dist.	10065 Dec 09 11:32	18°♐06'01	2.60888 AU
	10065 Dec 27 17:49	0°♑	
morning rise	10066 Jan 04 14:26	5°♑04'02	
	10066 Feb 12 21:43	0°♒	
desc. node	10066 Mar 04 23:18	12°♒28'52	
	10066 Apr 02 14:51	0°♓	
	10066 May 23 15:02	0°♈	
	10066 Jul 20 05:25	0°♉	
retrograde	10066 Sep 20 05:23	17°♉03'56	
opposition	10066 Oct 24 09:05	10°♉16'12	-5°29'06
greatest brilliancy	10066 Oct 26 03:34	9°♉39'52	-2.2m
min. Earth dist.	10066 Nov 02 04:06	7°♉16'50	0.47940 AU
direct	10066 Nov 30 18:49	1°♉56'03	
	10067 Feb 12 20:56	0°♊	
asc. node	10067 Feb 21 17:14	5°♊36'01	
	10067 Mar 29 03:09	0°♋	
	10067 May 08 18:05	0°♌	
	10067 Jun 17 22:19	0°♍	
	10067 Jul 29 01:21	0°♎	
	10067 Sep 09 19:21	0°♏	
	10067 Oct 24 08:33	0°♐	
evening set	10067 Nov 09 17:31	10°♐45'37	
	10067 Dec 09 10:18	0°♑	
conjunction	10067 Dec 26 22:29	11°♑12'50	0°13'04
minimum elong	10067 Dec 26 22:55	11°♑13'32	0°13'31
behind sun begin	10067 Dec 26 12:48	10°♑57'23	
behind sun end	10067 Dec 27 09:03	11°♑29'41	
max. Earth dist.	10068 Jan 02 13:11	15°♑25'56	2.67151 AU
desc. node	10068 Jan 20 17:20	26°♑58'56	
	10068 Jan 25 11:32	0°♒	
morning rise	10068 Feb 09 06:45	9°♒22'15	
	10068 Mar 12 22:19	0°♓	
	10068 Apr 29 10:28	0°♈	
	10068 Jun 16 01:43	0°♉	
	10068 Aug 03 12:17	0°♊	
	10068 Sep 24 13:00	0°♋	
retrograde	10068 Dec 03 20:09	23°♋11'26	
opposition	10069 Jan 02 11:44	18°♋17'24	-0°29'26
greatest brilliancy	10069 Jan 02 13:26	18°♋16'16	-3.1m
min. Earth dist.	10069 Jan 04 09:03	17°♋47'19	0.36756 AU
asc. node	10069 Jan 08 18:29	16°♋38'39	
direct	10069 Feb 01 10:34	13°♋13'02	
	10069 Mar 28 12:26	0°♌	
	10069 May 18 03:14	0°♍	
	10069 Jul 03 03:37	0°♎	
	10069 Aug 17 23:32	0°♏	
	10069 Oct 03 13:49	0°♐	
	10069 Nov 19 21:26	0°♑	
desc. node	10069 Dec 07 15:19	11°♑11'35	
evening set	10069 Dec 16 21:37	17°♑02'08	
	10070 Jan 06 10:16	0°♒	
max. Earth dist.	10070 Jan 24 01:03	11°♒09'56	2.67900 AU
conjunction	10070 Jan 30 10:09	15°♒13'23	-0°27'37
minimum elong	10070 Jan 30 09:23	15°♒12'10	0°27'16
	10070 Feb 22 12:49	0°♓	
morning rise	10070 Mar 14 21:42	13°♓09'02	
	10070 Apr 09 16:34	0°♈	
	10070 May 24 15:13	0°♉	
	10070 Jul 07 07:21	0°♊	
	10070 Aug 18 20:56	0°♋	
	10070 Sep 29 21:08	0°♌	
	10070 Nov 11 22:49	0°♍	
asc. node	10070 Nov 26 18:47	9°♍42'38	
	10071 Jan 01 11:43	0°♎	
retrograde	10071 Feb 14 02:09	11°♎48'03	
min. Earth dist.	10071 Mar 12 18:54	6°♎53'34	0.43574 AU
greatest brilliancy	10071 Mar 19 10:21	4°♎40'28	-2.5m
opposition	10071 Mar 21 03:13	4°♎05'57	5°46'50
	10071 Apr 03 22:41	30°℞♍	
direct	10071 Apr 22 00:26	27°♍49'12	
	10071 May 10 20:00	0°♎	
	10071 Jul 20 09:35	0°♏	
	10071 Sep 11 03:19	0°♐	
desc. node	10071 Oct 25 16:56	26°♐37'48	
	10071 Oct 31 06:25	0°♑	
	10071 Dec 19 01:39	0°♒	
evening set	10072 Jan 21 14:20	21°♒07'42	
	10072 Feb 04 10:32	0°♓	
max. Earth dist.	10072 Feb 16 04:17	7°♓36'16	2.63169 AU
conjunction	10072 Mar 06 11:39	20°♓16'35	-0°59'03
minimum elong	10072 Mar 06 10:36	20°♓14'51	0°58'57
	10072 Mar 21 01:42	0°♈	
morning rise	10072 Apr 21 14:52	21°♈30'09	
	10072 May 03 19:43	0°♉	
	10072 Jun 14 18:15	0°♊	
	10072 Jul 25 04:26	0°♋	
	10072 Sep 02 14:34	0°♌	
	10072 Oct 11 20:28	0°♍	
asc. node	10072 Oct 13 15:24	1°♍21'21	
	10072 Nov 21 05:04	0°♎	
	10073 Jan 04 03:14	0°♏	
	10073 Mar 04 02:50	0°♐	
retrograde	10073 Apr 01 05:14	4°♐58'01	
	10073 Apr 27 21:52	30°℞♏	
min. Earth dist.	10073 May 03 21:48	27°♏47'39	0.56999 AU
opposition	10073 May 10 11:20	25°♏14'37	4°16'16
greatest brilliancy	10073 May 09 12:21	25°♏36'58	-1.8m
direct	10073 Jun 16 02:03	16°♏58'41	
	10073 Aug 07 23:08	0°♐	
desc. node	10073 Sep 11 20:21	16°♐20'11	
	10073 Oct 07 12:44	0°♑	
	10073 Nov 28 12:22	0°♒	
	10074 Jan 15 23:16	0°♓	
evening set	10074 Feb 27 15:23	27°♓58'03	
	10074 Mar 02 15:43	0°♈	
max. Earth dist.	10074 Mar 15 18:03	8°♈55'22	2.53280 AU
	10074 Apr 14 20:33	0°♉	
conjunction	10074 Apr 17 18:03	2°♉04'10	-1°06'49
minimum elong	10074 Apr 17 18:43	2°♉05'21	1°07'01
	10074 May 25 22:04	0°♊	
morning rise	10074 Jun 11 22:21	12°♊48'49	
	10074 Jul 04 08:47	0°♋	

	10074 Aug 11 20:39	0°♌	
asc. node	10074 Aug 31 09:05	15°♌17'46	
	10074 Sep 19 05:08	0°♍	
	10074 Oct 28 09:00	0°♎	
	10074 Dec 08 11:36	0°♏	
	10075 Jan 22 08:31	0°♐	
	10075 Mar 17 22:41	0°♑	
retrograde	10075 May 08 00:57	13°♑14'40	
min. Earth dist.	10075 Jun 14 17:28	4°♑24'40	0.65800 AU
opposition	10075 Jun 17 14:29	3°♑16'02	1°31'42
greatest brilliancy	10075 Jun 17 11:00	3°♑19'29	-1.4m
	10075 Jun 26 02:03	30°℞♐	
direct	10075 Jul 27 09:06	23°♐54'32	
desc. node	10075 Jul 30 23:37	23°♐59'11	
	10075 Aug 31 02:18	0°♑	
	10075 Nov 05 14:32	0°♒	
	10075 Dec 27 04:15	0°♓	
	10076 Feb 11 17:09	0°♈	
	10076 Mar 25 21:11	0°♉	
evening set	10076 Apr 14 12:02	14°♉16'55	
max. Earth dist.	10076 May 03 08:04	28°♉20'24	2.39955 AU
	10076 May 05 12:48	0°♊	
	10076 Jun 13 11:11	0°♋	
conjunction	10076 Jun 14 02:51	0°♋30'38	-0°24'06
minimum elong	10076 Jun 14 05:00	0°♋34'50	0°24'30
asc. node	10076 Jul 18 04:45	27°♋22'25	
	10076 Jul 21 12:22	0°♌	
morning rise	10076 Aug 25 03:58	27°♌20'33	
	10076 Aug 28 13:23	0°♍	
	10076 Oct 06 11:17	0°♎	
	10076 Nov 16 02:11	0°♏	
	10076 Dec 29 06:54	0°♐	
	10077 Feb 14 09:00	0°♑	
	10077 Apr 11 00:01	0°♒	
retrograde	10077 Jun 10 03:34	16°♒24'24	
desc. node	10077 Jun 17 00:51	16°♒06'17	
opposition	10077 Jul 20 12:33	6°♒48'00	-1°08'51
greatest brilliancy	10077 Jul 20 12:53	6°♒47'40	-1.3m
min. Earth dist.	10077 Jul 21 10:32	6°♒26'16	0.68207 AU
	10077 Aug 08 16:17	30°℞♑	
direct	10077 Aug 30 22:00	26°♑52'39	
	10077 Sep 23 21:15	0°♒	
	10077 Dec 02 14:13	0°♓	
	10078 Jan 21 03:28	0°♈	
	10078 Mar 06 02:05	0°♉	
	10078 Apr 15 19:04	0°♊	
	10078 May 24 13:50	0°♋	
asc. node	10078 Jun 05 03:46	9°♋07'40	
evening set	10078 Jun 19 16:42	20°♋38'24	
	10078 Jul 01 11:53	0°♌	
	10078 Aug 08 12:44	0°♍	
conjunction	10078 Aug 30 03:51	16°♍45'31	0°53'21
minimum elong	10078 Aug 30 00:34	16°♍39'13	0°53'11
	10078 Sep 16 13:25	0°♎	
max. Earth dist.	10078 Oct 21 03:57	25°♎34'53	2.43837 AU
	10078 Oct 27 07:02	0°♏	
morning rise	10078 Nov 03 11:18	5°♏07'51	
	10078 Dec 09 06:14	0°♐	
	10079 Jan 23 20:52	0°♑	
	10079 Mar 13 22:00	0°♒	
desc. node	10079 May 04 21:39	28°♒03'18	
	10079 May 08 23:40	0°♓	
retrograde	10079 Jul 16 11:35	19°♓42'56	
opposition	10079 Aug 24 09:35	10°♓51'38	-3°35'11
greatest brilliancy	10079 Aug 24 22:32	10°♓39'07	-1.4m
min. Earth dist.	10079 Aug 29 02:47	9°♓02'16	0.63975 AU
direct	10079 Oct 04 20:03	0°♓50'45	
	10079 Dec 26 11:31	0°♈	
	10080 Feb 11 21:34	0°♉	
	10080 Mar 24 15:04	0°♊	
asc. node	10080 Apr 22 04:09	21°♊45'18	
	10080 May 02 18:43	0°♋	
	10080 Jun 09 22:45	0°♌	
	10080 Jul 18 07:15	0°♍	
	10080 Aug 26 18:23	0°♎	
evening set	10080 Aug 31 10:54	3°♎29'04	
	10080 Oct 06 23:31	0°♏	
conjunction	10080 Oct 29 11:22	15°♏46'15	1°01'53
minimum elong	10080 Oct 29 12:36	15°♏48'24	1°02'10
	10080 Nov 19 06:34	0°♐	
max. Earth dist.	10080 Nov 28 14:30	6°♐16'44	2.56960 AU
morning rise	10080 Dec 20 06:20	20°♐37'34	
	10081 Jan 03 15:57	0°♑	
	10081 Feb 20 01:28	0°♒	
desc. node	10081 Mar 21 15:12	18°♒03'37	
	10081 Apr 10 17:45	0°♓	
	10081 Jun 03 19:32	0°♈	
retrograde	10081 Aug 29 02:56	28°♈34'47	
opposition	10081 Oct 04 01:36	21°♈01'36	-5°22'03
greatest brilliancy	10081 Oct 05 14:17	20°♈28'20	-1.9m
min. Earth dist.	10081 Oct 12 05:30	18°♈04'51	0.53394 AU
direct	10081 Nov 12 08:02	11°♈50'26	
	10082 Jan 09 18:27	0°♉	
	10082 Feb 26 21:58	0°♊	
asc. node	10082 Mar 10 07:48	8°♊02'08	
	10082 Apr 09 04:14	0°♋	
	10082 May 18 12:20	0°♌	
	10082 Jun 26 20:00	0°♍	
	10082 Aug 06 06:06	0°♎	
	10082 Sep 17 09:40	0°♏	
evening set	10082 Oct 23 22:51	24°♏58'08	
	10082 Oct 31 11:22	0°♐	
conjunction	10082 Dec 12 06:07	27°♐25'10	0°28'58
minimum elong	10082 Dec 12 07:04	27°♐26'43	0°29'24
	10082 Dec 16 05:56	0°♑	
max. Earth dist.	10082 Dec 24 15:10	5°♑23'56	2.65354 AU
morning rise	10083 Jan 26 19:19	26°♑33'00	
	10083 Feb 01 06:12	0°♒	
desc. node	10083 Feb 06 08:50	3°♒13'41	
	10083 Mar 21 01:07	0°♓	
	10083 May 08 12:18	0°♈	
	10083 Jun 27 06:50	0°♉	
	10083 Aug 20 04:57	0°♊	
retrograde	10083 Nov 02 00:07	23°♊42'36	
opposition	10083 Dec 03 00:11	18°♊17'16	-3°42'04
greatest brilliancy	10083 Dec 04 02:02	17°♊58'16	-2.8m
min. Earth dist.	10083 Dec 09 15:37	16°♊20'55	0.39783 AU
direct	10084 Jan 04 20:55	12°♊01'03	
asc. node	10084 Jan 26 11:54	15°♊10'37	
	10084 Feb 29 23:43	0°♋	
	10084 Apr 17 23:02	0°♌	
	10084 May 31 06:39	0°♍	
	10084 Jul 13 09:22	0°♎	
	10084 Aug 26 13:50	0°♏	
	10084 Oct 11 03:35	0°♐	
	10084 Nov 26 20:44	0°♑	
evening set	10084 Dec 02 15:39	3°♑41'01	
desc. node	10084 Dec 24 04:42	17°♑21'38	
	10085 Jan 13 03:19	0°♒	
max. Earth dist.	10085 Jan 15 10:11	1°♒26'59	2.68271 AU

conjunction	10085 Jan 16 20:00	2°♒20'34	-0°12'26
minimum elong	10085 Jan 16 19:38	2°♒20'00	0°12'02
behind sun begin	10085 Jan 16 07:21	2°♒00'32	
behind sun end	10085 Jan 17 07:55	2°♒39'28	
morning rise	10085 Mar 01 06:49	29°♒59'15	
	10085 Mar 01 07:17	0°♓	
	10085 Apr 16 20:45	0°♈	
	10085 Jun 01 14:16	0°♉	
	10085 Jul 16 11:53	0°♊	
	10085 Aug 29 20:58	0°♋	
	10085 Oct 13 20:14	0°♌	
	10085 Dec 03 17:12	0°♍	
asc. node	10085 Dec 13 12:10	4°♍31'48	
retrograde	10086 Jan 20 15:09	13°♍38'02	
min. Earth dist.	10086 Feb 15 10:26	9°♍19'45	0.38864 AU
opposition	10086 Feb 21 21:25	7°♍25'48	4°41'59
greatest brilliancy	10086 Feb 20 17:24	7°♍46'31	-2.8m
direct	10086 Mar 23 18:50	2°♍06'20	
	10086 Jun 11 00:59	0°♎	
	10086 Aug 01 19:38	0°♏	
	10086 Sep 20 02:13	0°♐	
	10086 Nov 07 19:12	0°♑	
desc. node	10086 Nov 11 04:39	2°♑05'59	
	10086 Dec 25 23:35	0°♒	
evening set	10087 Jan 07 17:24	8°♒01'31	
max. Earth dist.	10087 Feb 06 20:40	27°♒13'06	2.65652 AU
	10087 Feb 11 04:25	0°♓	
conjunction	10087 Feb 21 02:36	6°♓25'01	-0°48'45
minimum elong	10087 Feb 21 01:29	6°♓23'13	0°48'31
	10087 Mar 28 23:08	0°♈	
morning rise	10087 Apr 06 16:26	5°♈50'20	
	10087 May 12 02:14	0°♉	
	10087 Jun 23 13:41	0°♊	
	10087 Aug 03 14:44	0°♋	
	10087 Sep 12 16:47	0°♌	
	10087 Oct 22 17:25	0°♍	
asc. node	10087 Oct 31 08:34	6°♍22'06	
	10087 Dec 03 10:33	0°♎	
	10088 Jan 20 18:45	0°♏	
retrograde	10088 Mar 15 16:03	17°♏00'14	
min. Earth dist.	10088 Apr 15 00:25	10°♏40'34	0.52046 AU
greatest brilliancy	10088 Apr 21 09:29	8°♏16'48	-2.0m
opposition	10088 Apr 22 18:41	7°♏45'32	5°11'49
direct	10088 May 27 16:12	0°♏08'39	
	10088 Aug 23 08:46	0°♐	
desc. node	10088 Sep 28 08:24	19°♐31'40	
	10088 Oct 16 16:06	0°♑	
	10088 Dec 06 00:45	0°♒	
	10089 Jan 22 22:38	0°♓	
evening set	10089 Feb 12 05:16	13°♓09'01	
max. Earth dist.	10089 Mar 03 14:33	25°♓59'50	2.57729 AU
	10089 Mar 09 13:26	0°♈	
conjunction	10089 Mar 31 01:40	14°♈41'16	-1°08'01
minimum elong	10089 Mar 31 01:22	14°♈40'43	1°08'07
	10089 Apr 21 22:34	0°♉	
morning rise	10089 May 20 14:16	20°♉38'28	
	10089 Jun 02 07:14	0°♊	
	10089 Jul 12 01:37	0°♋	
	10089 Aug 19 20:19	0°♌	
asc. node	10089 Sep 17 04:03	22°♌02'47	
	10089 Sep 27 10:21	0°♍	
	10089 Nov 05 20:20	0°♎	
	10089 Dec 17 12:03	0°♏	
	10090 Feb 02 05:24	0°♐	
retrograde	10090 Apr 24 08:34	29°♐32'06	
min. Earth dist.	10090 May 30 06:46	21°♐16'20	0.63098 AU
opposition	10090 Jun 03 15:13	19°♐32'48	2°36'11
greatest brilliancy	10090 Jun 03 06:02	19°♐41'55	-1.5m
direct	10090 Jul 12 09:00	10°♐32'09	
desc. node	10090 Aug 16 12:21	16°♐48'14	
	10090 Sep 18 14:46	0°♑	
	10090 Nov 14 20:33	0°♒	
	10091 Jan 03 19:28	0°♓	
	10091 Feb 18 21:46	0°♈	
evening set	10091 Mar 26 14:19	24°♈41'19	
	10091 Apr 03 01:06	0°♉	
max. Earth dist.	10091 Apr 09 13:14	4°♉40'58	2.45284 AU
	10091 May 13 19:58	0°♊	
conjunction	10091 May 20 13:32	5°♊05'20	-0°48'41
minimum elong	10091 May 20 15:59	5°♊09'59	0°49'02
	10091 Jun 21 22:33	0°♋	
morning rise	10091 Jul 25 07:10	26°♋11'02	
	10091 Jul 30 03:16	0°♌	
asc. node	10091 Aug 04 22:28	4°♌34'43	
	10091 Sep 06 06:12	0°♍	
	10091 Oct 15 04:46	0°♎	
	10091 Nov 24 21:11	0°♏	
	10092 Jan 07 09:47	0°♐	
	10092 Feb 24 21:39	0°♑	
	10092 May 01 05:54	0°♒	
retrograde	10092 May 27 20:57	3°♒56'46	
	10092 Jun 21 13:53	30°℞♑	
desc. node	10092 Jul 03 13:56	25°♑41'20	
opposition	10092 Jul 07 11:38	24°♑08'43	-0°08'08
greatest brilliancy	10092 Jul 07 11:35	24°♑08'46	-1.3m
min. Earth dist.	10092 Jul 06 21:55	24°♑22'20	0.68059 AU
direct	10092 Aug 17 10:18	14°♑23'28	
	10092 Oct 15 21:32	0°♒	
	10092 Dec 12 05:36	0°♓	
	10093 Jan 29 04:11	0°♈	
	10093 Mar 13 16:43	0°♉	
	10093 Apr 23 07:54	0°♊	
evening set	10093 May 22 02:04	22°♊08'21	
	10093 Jun 01 03:09	0°♋	
asc. node	10093 Jun 21 19:13	16°♋18'33	
	10093 Jul 09 01:38	0°♌	
conjunction	10093 Jul 30 23:53	17°♌21'47	0°27'40
minimum elong	10093 Jul 30 20:59	17°♌16'03	0°27'18
	10093 Aug 16 01:38	0°♍	
max. Earth dist.	10093 Sep 18 06:22	25°♍38'50	2.38396 AU
	10093 Sep 24 00:05	0°♎	
morning rise	10093 Oct 10 08:26	12°♎15'01	
	10093 Nov 03 15:09	0°♏	
	10093 Dec 16 13:49	0°♐	
	10094 Jan 31 12:04	0°♑	
	10094 Mar 22 22:49	0°♒	
desc. node	10094 May 21 12:33	28°♒16'27	
	10094 May 26 12:44	0°♓	
retrograde	10094 Jul 01 17:43	6°♓38'26	
	10094 Aug 03 17:13	30°℞♒	
opposition	10094 Aug 10 09:37	27°♒26'28	-2°40'51
greatest brilliancy	10094 Aug 10 15:47	27°♒20'26	-1.3m
min. Earth dist.	10094 Aug 13 15:08	26°♒10'45	0.66441 AU
direct	10094 Sep 21 01:08	17°♒23'30	
	10094 Nov 11 02:09	0°♓	
	10095 Jan 06 07:48	0°♈	
	10095 Feb 20 18:29	0°♉	
	10095 Apr 02 22:15	0°♊	
asc. node	10095 May 09 20:36	28°♊26'33	
	10095 May 11 20:20	0°♋	

	10095 Jun 18	20:28	0°♌		
	10095 Jul 27	00:28	0°♍		
evening set	10095 Aug 05	15:26	7°♍27'32		
	10095 Sep 04	05:55	0°♎		
conjunction	10095 Oct 09	10:34	25°♎51'46	1°06'32	
minimum elong	10095 Oct 09	10:40	25°♎51'57	1°06'43	
	10095 Oct 15	05:02	0°♏		
max. Earth dist.	10095 Nov 17	00:39	22°♏59'15	2.52284 AU	
	10095 Nov 27	07:12	0°♐		
morning rise	10095 Dec 04	11:55	4°♐51'41		
	10096 Jan 11	16:05	0°♑		
	10096 Feb 28	11:05	0°♒		
desc. node	10096 Apr 07	07:01	23°♒01'34		
	10096 Apr 19	14:42	0°♓		
	10096 Jun 18	23:06	0°♈		
retrograde	10096 Aug 10	04:23	12°♈31'46		
opposition	10096 Sep 16	12:37	4°♈22'22	-4°49'31	
greatest brilliancy	10096 Sep 17	15:43	3°♈56'56	-1.7m	
min. Earth dist.	10096 Sep 23	11:11	1°♈46'29	0.58248 AU	
	10096 Sep 28	10:38	30°♓		
direct	10096 Oct 27	00:19	24°♓41'17		
	10096 Nov 26	01:45	0°♈		
	10097 Jan 24	16:51	0°♉		
	10097 Mar 09	17:30	0°♊		
asc. node	10097 Mar 26	23:34	12°♊42'52		
	10097 Apr 18	18:06	0°♋		
	10097 May 27	10:27	0°♌		
	10097 Jul 05	05:38	0°♍		
	10097 Aug 14	03:48	0°♎		
	10097 Sep 24	20:11	0°♏		
evening set	10097 Oct 05	05:40	7°♏16'04		
	10097 Nov 07	12:26	0°♐		
conjunction	10097 Nov 26	12:14	12°♐38'49	0°43'48	
minimum elong	10097 Nov 26	13:36	12°♐41'04	0°44'12	
max. Earth dist.	10097 Dec 15	08:33	24°♐59'54	2.62698 AU	
	10097 Dec 23	01:33	0°♑		
morning rise	10098 Jan 12	21:34	13°♑23'14		
	10098 Feb 08	02:52	0°♒		
desc. node	10098 Feb 22	23:30	9°♒18'44		
	10098 Mar 28	09:59	0°♓		
	10098 May 17	06:38	0°♈		
	10098 Jul 09	19:22	0°♉		
retrograde	10098 Oct 04	10:28	29°♉23'37		
opposition	10098 Nov 06	09:42	23°♉04'56	-5°12'11	
greatest brilliancy	10098 Nov 08	03:05	22°♉31'05	-2.4m	
min. Earth dist.	10098 Nov 15	00:03	20°♉17'04	0.44835 AU	
direct	10098 Dec 12	10:19	15°♉23'31		
	10099 Jan 31	06:04	0°♊		
asc. node	10099 Feb 12	02:14	6°♊25'42		
	10099 Mar 21	00:13	0°♋		
	10099 May 01	23:35	0°♌		
	10099 Jun 11	21:34	0°♍		
	10099 Jul 23	12:53	0°♎		
	10099 Sep 04	16:22	0°♏		
	10099 Oct 19	12:20	0°♐		
evening set	10099 Nov 18	16:31	19°♐39'21		
	10099 Dec 04	18:19	0°♑		
conjunction	10100 Jan 04	00:33	19°♑18'45	0°03'37	
minimum elong	10100 Jan 04	00:40	19°♑18'56	0°04'04	
behind sun begin	10100 Jan 03	06:25	18°♑49'57		
behind sun end	10100 Jan 04	18:54	19°♑47'55		
max. Earth dist.	10100 Jan 07	16:19	21°♑38'14	2.67775 AU	
desc. node	10100 Jan 10	18:56	23°♑36'44		
	10100 Jan 20	20:32	0°♒		
morning rise	10100 Feb 16	22:08	17°♒09'27		
	10100 Mar 09	04:04	0°♓		
	10100 Apr 25	06:56	0°♈		
	10100 Jun 11	02:45	0°♉		
	10100 Jul 27	22:13	0°♊		
	10100 Sep 13	19:37	0°♋		
	10100 Nov 07	13:41	0°♌		
retrograde	10100 Dec 23	01:21	11°♌43'02		
asc. node	10100 Dec 31	04:20	11°♌16'35		
min. Earth dist.	10101 Jan 20	14:57	7°♌03'39	0.36514 AU	
opposition	10101 Jan 22	02:57	6°♌39'34	1°42'45	
greatest brilliancy	10101 Jan 21	23:07	6°♌42'08	-3.1m	
direct	10101 Feb 20	10:14	1°♌48'03		
	10101 May 08	11:56	0°♍		
	10101 Jun 26	18:52	0°♎		
	10101 Aug 13	00:02	0°♏		
	10101 Sep 29	07:57	0°♐		
	10101 Nov 16	01:29	0°♑		
desc. node	10101 Nov 28	18:08	7°♑57'48		
evening set	10101 Dec 25	21:14	25°♑00'52		
	10102 Jan 02	19:02	0°♒		