retrograde	6600 Jan 03 22:23	25°♍48'53	
opposition	6600 Mar 12 09:44	22°♍21'01	0°49'47
min. Earth dist.	6600 Mar 12 09:06	22°♍21'08	8.20064 AU
direct	6600 May 18 14:15	18°♍53'36	
evening set	6600 Aug 30 11:56	26°♍52'35	
conjunction	6600 Sep 17 12:17	29°♍09'41	0°53'41
minimum elong	6600 Sep 17 12:15	29°♍09'41	0°53'41
max. Earth dist.	6600 Sep 17 12:16	29°♍09'41	10.19379 AU
	6600 Sep 24 01:51	0°♎	
morning rise	6600 Oct 05 12:43	1°♎26'53	
retrograde	6601 Jan 17 22:30	9°♎28'38	
opposition	6601 Mar 26 02:51	6°♎01'16	1°22'53
min. Earth dist.	6601 Mar 26 02:59	6°♎01'15	8.19219 AU
direct	6601 Jun 01 11:51	2°♎33'19	
evening set	6601 Sep 14 02:00	10°♎35'31	
conjunction	6601 Oct 02 01:47	12°♎52'30	1°18'38
minimum elong	6601 Oct 02 01:45	12°♎52'29	1°18'39
max. Earth dist.	6601 Oct 02 00:28	12°♎52'04	10.19433 AU
morning rise	6601 Oct 20 00:42	15°♎09'16	
retrograde	6602 Jan 31 20:31	23°♎08'47	
opposition	6602 Apr 08 20:27	19°♎42'10	1°51'16
min. Earth dist.	6602 Apr 08 21:41	19°♎41'55	8.20239 AU
direct	6602 Jun 15 12:03	16°♎13'54	
evening set	6602 Sep 28 16:01	24°♎17'49	
conjunction	6602 Oct 16 14:10	26°♎34'08	1°39'06
minimum elong	6602 Oct 16 14:08	26°♎34'07	1°39'08
max. Earth dist.	6602 Oct 16 11:41	26°♎33'20	10.21338 AU
morning rise	6602 Nov 03 10:37	28°♎49'56	
	6602 Nov 12 22:04	0°♏	
retrograde	6603 Feb 14 15:40	6°♏46'00	
opposition	6603 Apr 22 13:34	3°♏20'19	2°13'14
min. Earth dist.	6603 Apr 22 15:33	3°♏19'55	8.23072 AU
	6603 Jun 17 09:09	30°℞♎	
direct	6603 Jun 29 12:57	29°♎51'59	
	6603 Jul 11 17:19	0°♏	
evening set	6603 Oct 13 04:00	7°♏55'58	
conjunction	6603 Oct 30 23:49	10°♏11'09	1°53'54
minimum elong	6603 Oct 30 23:47	10°♏11'09	1°53'57
max. Earth dist.	6603 Oct 30 20:32	10°♏10'07	10.24993 AU
morning rise	6603 Nov 17 17:11	12°♏25'34	
	6603 Dec 09 04:40	15°♏	
retrograde	6604 Feb 28 07:12	20°♏17'02	
opposition	6604 May 05 05:11	16°♏52'23	2°27'36
min. Earth dist.	6604 May 05 07:29	16°♏51'55	8.27547 AU
	6604 May 29 19:12	15°℞♏	
direct	6604 Jul 12 14:14	13°♏24'14	
	6604 Aug 24 20:43	15°♏	
evening set	6604 Oct 26 11:47	21°♏26'34	
conjunction	6604 Nov 13 04:54	23°♏40'17	2°02'18
minimum elong	6604 Nov 13 04:53	23°♏40'17	2°02'22
max. Earth dist.	6604 Nov 13 01:23	23°♏39'10	10.30176 AU
morning rise	6604 Nov 30 18:50	25°♏53'02	
	6605 Jan 05 18:27	0°♐	
retrograde	6605 Mar 12 17:53	3°♐39'04	
opposition	6605 May 18 18:48	0°♐15'28	2°33'45
min. Earth dist.	6605 May 18 20:49	0°♐15'03	8.33386 AU
	6605 May 22 00:13	30°℞♏	
direct	6605 Jul 26 14:14	26°♏47'44	
	6605 Sep 27 14:01	0°♐	
evening set	6605 Nov 09 13:34	4°♐46'45	

conjunction	6605 Nov 27 03:45	6°♐58'47	2°04'03
minimum elong	6605 Nov 27 03:45	6°♐58'47	2°04'06
max. Earth dist.	6605 Nov 27 00:44	6°♐57'50	10.36571 AU
morning rise	6605 Dec 14 14:10	9°♐09'41	
retrograde	6606 Mar 26 00:12	16°♐49'47	
opposition	6606 Jun 01 05:43	13°♐27'13	2°31'39
min. Earth dist.	6606 Jun 01 07:45	13°♐26'49	8.40238 AU
direct	6606 Aug 09 10:59	10°♐00'05	
evening set	6606 Nov 23 08:13	17°♐54'26	
conjunction	6606 Dec 10 19:29	20°♐04'40	1°59'17
minimum elong	6606 Dec 10 19:30	20°♐04'40	1°59'21
max. Earth dist.	6606 Dec 10 16:35	20°♐03'45	10.43797 AU
morning rise	6606 Dec 28 02:39	22°♐13'43	
retrograde	6607 Apr 08 02:53	29°♐47'40	
opposition	6607 Jun 14 13:23	26°♐26'04	2°21'47
min. Earth dist.	6607 Jun 14 15:59	26°♐25'34	8.47690 AU
direct	6607 Aug 23 02:25	22°♐59'38	
	6607 Nov 30 02:19	0°♑	
evening set	6607 Dec 06 19:10	0°♑48'24	
conjunction	6607 Dec 24 03:35	2°♑56'52	1°48'33
minimum elong	6607 Dec 24 03:37	2°♑56'53	1°48'37
max. Earth dist.	6607 Dec 24 00:01	2°♑55'46	10.51391 AU
morning rise	6608 Jan 10 07:57	5°♑04'08	
retrograde	6608 Apr 19 22:49	12°♑32'12	
opposition	6608 Jun 26 17:41	9°♑11'30	2°05'02
min. Earth dist.	6608 Jun 26 21:10	9°♑10'49	8.55256 AU
direct	6608 Sep 04 15:13	5°♑45'52	
evening set	6608 Dec 18 22:28	13°♑28'40	
conjunction	6609 Jan 05 04:08	15°♑35'26	1°32'40
minimum elong	6609 Jan 05 04:10	15°♑35'26	1°32'43
max. Earth dist.	6609 Jan 04 23:33	15°♑34'01	10.58872 AU
morning rise	6609 Jan 22 06:07	17°♑41'04	
retrograde	6609 May 02 14:10	25°♑03'59	
opposition	6609 Jul 09 18:40	21°♑44'01	1°42'35
min. Earth dist.	6609 Jul 09 22:15	21°♑43'20	8.62507 AU
direct	6609 Sep 17 23:56	18°♑19'19	
evening set	6609 Dec 31 18:32	25°♑56'08	
conjunction	6610 Jan 17 21:48	28°♑01'20	1°12'37
minimum elong	6610 Jan 17 21:50	28°♑01'21	1°12'40
max. Earth dist.	6610 Jan 17 17:20	27°♑59'58	10.65889 AU
morning rise	6610 Feb 03 21:42	0°♒05'31	
	6610 Feb 03 03:19	0°♒	
retrograde	6610 May 15 03:49	7°♒24'11	
opposition	6610 Jul 22 16:37	4°♒04'46	1°15'43
min. Earth dist.	6610 Jul 22 19:23	4°♒04'14	8.69170 AU
direct	6610 Oct 01 03:00	0°♒41'01	
evening set	6611 Jan 13 08:03	8°♒12'01	
conjunction	6611 Jan 30 09:13	10°♒15'50	0°49'30
minimum elong	6611 Jan 30 09:15	10°♒15'51	0°49'32
max. Earth dist.	6611 Jan 30 05:56	10°♒14'50	10.72201 AU
morning rise	6611 Feb 16 07:15	12°♒18'45	
	6611 Mar 11 22:36	15°♒	
retrograde	6611 May 27 14:12	19°♒34'05	
opposition	6611 Aug 04 11:52	16°♒15'00	0°45'50
min. Earth dist.	6611 Aug 04 13:46	16°♒14'39	8.75020 AU
	6611 Aug 21 09:26	15°℞♒	
direct	6611 Oct 14 00:42	12°♒52'11	
	6611 Dec 04 21:09	15°♒	
evening set	6612 Jan 25 16:16	20°♒17'48	

conjunction	6612 Feb 11 15:21	22°♒20'23	0°24'27
minimum elong	6612 Feb 11 15:22	22°♒20'23	0°24'28
max. Earth dist.	6612 Feb 11 13:09	22°♒19'43	10.77583 AU
morning rise	6612 Feb 28 11:45	24°♒22'13	
	6612 Apr 25 04:33	0°♓	
retrograde	6612 Jun 07 22:29	1°♓35'15	
	6612 Jul 23 01:34	30°℞♒	
opposition	6612 Aug 16 04:48	28°♒16'18	0°14'18
min. Earth dist.	6612 Aug 16 06:28	28°♒15'59	8.79857 AU
direct	6612 Oct 25 18:44	24°♒54'18	
	6613 Jan 17 00:36	0°♓	
desc. node	6613 Feb 01 09:24	1°♓43'54	
evening set	6613 Feb 05 19:56	2°♓15'11	
conjunction	6613 Feb 22 16:59	4°♓16'41	-0°01'31
minimum elong	6613 Feb 22 16:59	4°♓16'41	0°01'29
behind sun begin	6613 Feb 22 09:58	4°♓14'35	
behind sun end	6613 Feb 23 00:01	4°♓18'47	
max. Earth dist.	6613 Feb 22 14:59	4°♓16'09	10.81850 AU
morning rise	6613 Mar 11 12:11	6°♓17'39	
retrograde	6613 Jun 20 05:20	13°♓29'30	
opposition	6613 Aug 28 19:57	10°♓10'26	-0°17'31
min. Earth dist.	6613 Aug 28 21:21	10°♓10'11	8.83513 AU
direct	6613 Nov 07 08:35	6°♓49'09	
evening set	6614 Feb 17 19:57	14°♓06'05	
conjunction	6614 Mar 06 15:14	16°♓06'44	-0°27'07
minimum elong	6614 Mar 06 15:13	16°♓06'44	0°27'06
max. Earth dist.	6614 Mar 06 13:46	16°♓06'18	10.84849 AU
morning rise	6614 Mar 23 09:32	18°♓07'05	
retrograde	6614 Jul 02 10:07	25°♓18'54	
opposition	6614 Sep 10 09:37	21°♓59'30	-0°48'23
min. Earth dist.	6614 Sep 10 10:01	21°♓59'26	8.85849 AU
direct	6614 Nov 19 20:24	18°♓38'48	
evening set	6615 Mar 01 17:42	25°♓52'45	
conjunction	6615 Mar 18 11:38	27°♓52'48	-0°51'29
minimum elong	6615 Mar 18 11:36	27°♓52'47	0°51'29
max. Earth dist.	6615 Mar 18 11:40	27°♓52'48	10.86462 AU
morning rise	6615 Apr 04 05:11	29°♓52'44	
	6615 Apr 05 05:53	0°♈	
retrograde	6615 Jul 14 17:34	7°♈05'39	
opposition	6615 Sep 22 22:15	3°♈45'46	-1°17'05
min. Earth dist.	6615 Sep 22 21:06	3°♈45'59	8.86767 AU
direct	6615 Dec 02 05:43	0°♈25'34	
evening set	6616 Mar 12 14:18	7°♈37'32	
conjunction	6616 Mar 29 07:15	9°♈37'15	-1°13'38
minimum elong	6616 Mar 29 07:13	9°♈37'14	1°13'39
max. Earth dist.	6616 Mar 29 08:58	9°♈37'46	10.86625 AU
morning rise	6616 Apr 15 00:23	11°♈37'06	
retrograde	6616 Jul 26 02:21	18°♈52'08	
opposition	6616 Oct 04 10:58	15°♈31'40	-1°42'32
min. Earth dist.	6616 Oct 04 08:50	15°♈32'04	8.86236 AU
direct	6616 Dec 13 11:20	12°♈11'51	
evening set	6617 Mar 24 10:51	19°♈22'51	
conjunction	6617 Apr 10 03:10	21°♈22'33	-1°32'43
minimum elong	6617 Apr 10 03:08	21°♈22'32	1°32'45
max. Earth dist.	6617 Apr 10 05:22	21°♈23'12	10.85341 AU
morning rise	6617 Apr 26 20:35	23°♈22'36	
	6617 Jul 09 16:49	0°♉	
retrograde	6617 Aug 07 12:11	0°♉40'47	
	6617 Sep 05 16:57	30°℞♈	
opposition	6617 Oct 17 00:11	27°♈19'37	-2°03'44
min. Earth dist.	6617 Oct 16 21:48	27°♈20'04	8.84272 AU
direct	6617 Dec 25 17:19	23°♈59'59	
	6618 Mar 26 03:34	0°♉	
evening set	6618 Apr 05 08:40	1°♉11'08	
conjunction	6618 Apr 22 01:00	3°♉11'09	-1°47'56
minimum elong	6618 Apr 22 00:58	3°♉11'09	1°47'58
max. Earth dist.	6618 Apr 22 03:20	3°♉11'51	10.82654 AU
morning rise	6618 May 08 19:21	5°♉11'45	
retrograde	6618 Aug 20 01:12	12°♉33'52	
opposition	6618 Oct 29 14:15	9°♉11'56	-2°19'49
min. Earth dist.	6618 Oct 29 11:41	9°♉12'25	8.80941 AU
direct	6619 Jan 06 23:33	5°♉52'19	
evening set	6619 Apr 17 08:41	13°♉04'38	
	6619 May 03 08:19	15°♉	
conjunction	6619 May 04 01:55	15°♉05'20	-1°58'37
minimum elong	6619 May 04 01:54	15°♉05'20	1°58'40
max. Earth dist.	6619 May 04 05:15	15°♉06'21	10.78661 AU
morning rise	6619 May 20 21:44	17°♉06'50	
retrograde	6619 Sep 01 17:22	24°♉33'35	
opposition	6619 Nov 11 06:03	21°♉10'47	-2°29'59
min. Earth dist.	6619 Nov 11 02:31	21°♉11'27	8.76362 AU
direct	6620 Jan 19 06:57	17°♉51'04	
evening set	6620 Apr 28 11:56	25°♉05'27	
conjunction	6620 May 15 06:53	27°♉07'13	-2°04'13
minimum elong	6620 May 15 06:52	27°♉07'13	2°04'15
max. Earth dist.	6620 May 15 11:37	27°♉08'40	10.73513 AU
morning rise	6620 Jun 01 04:47	29°♉09'55	
	6620 Jun 08 06:46	0°♊	
retrograde	6620 Sep 13 14:51	6°♊41'50	
opposition	6620 Nov 23 00:03	3°♊18'08	-2°33'40
min. Earth dist.	6620 Nov 22 19:32	3°♊19'00	8.70721 AU
	6621 Jan 24 16:19	30°℞♉	
direct	6621 Jan 30 16:34	29°♉58'08	
	6621 Feb 05 15:16	0°♊	
evening set	6621 May 10 19:45	7°♊15'28	
conjunction	6621 May 27 17:07	9°♊18'39	-2°04'18
minimum elong	6621 May 27 17:08	9°♊18'39	2°04'21
max. Earth dist.	6621 May 27 22:17	9°♊20'14	10.67438 AU
morning rise	6621 Jun 13 17:59	11°♊22'55	
retrograde	6621 Sep 26 17:27	19°♊00'08	
opposition	6621 Dec 05 20:29	15°♊35'37	-2°30'25
min. Earth dist.	6621 Dec 05 15:51	15°♊36'30	8.64272 AU
direct	6622 Feb 12 02:30	12°♊15'08	
evening set	6622 May 23 08:54	19°♊36'13	
conjunction	6622 Jun 09 09:25	21°♊41'06	-1°58'40
minimum elong	6622 Jun 09 09:27	21°♊41'07	1°58'43
max. Earth dist.	6622 Jun 09 14:00	21°♊42'31	10.60711 AU
morning rise	6622 Jun 26 13:59	23°♊47'13	
	6622 Aug 28 02:59	0°♋	
retrograde	6622 Oct 09 22:37	1°♋29'45	
	6622 Nov 22 10:47	30°℞♊	
opposition	6622 Dec 18 19:52	28°♊04'27	-2°20'05
min. Earth dist.	6622 Dec 18 15:49	28°♊05'14	8.57306 AU
direct	6623 Feb 24 17:34	24°♊43'20	
	6623 May 17 20:21	0°♋	
evening set	6623 Jun 05 04:02	2°♋08'52	
conjunction	6623 Jun 22 08:22	4°♋15'42	-1°47'19
minimum elong	6623 Jun 22 08:24	4°♋15'43	1°47'23
max. Earth dist.	6623 Jun 22 12:52	4°♋17'06	10.53642 AU
morning rise	6623 Jul 09 16:58	6°♋23'50	
retrograde	6623 Oct 23 07:56	14°♋11'27	
opposition	6623 Dec 31 22:14	10°♋45'27	-2°02'49
min. Earth dist.	6623 Dec 31 18:30	10°♋46'11	8.50161 AU

direct	6624 Mar 08 13:40	7°♋23'35	
evening set	6624 Jun 17 05:56	14°♋54'02	
conjunction	6624 Jul 04 14:35	17°♋02'59	-1°30'33
minimum elong	6624 Jul 04 14:38	17°♋03'00	1°30'37
max. Earth dist.	6624 Jul 04 19:28	17°♋04'30	10.46571 AU
morning rise	6624 Jul 22 03:22	19°♋13'12	
retrograde	6624 Nov 04 22:53	27°♋05'25	
opposition	6625 Jan 13 03:33	23°♋38'48	-1°39'07
min. Earth dist.	6625 Jan 12 23:47	23°♋39'33	8.43186 AU
direct	6625 Mar 21 12:31	20°♋16'05	
evening set	6625 Jun 30 14:58	27°♋51'48	
	6625 Jul 17 18:54	0°♌	
conjunction	6625 Jul 18 04:01	0°♌02'51	-1°08'58
minimum elong	6625 Jul 18 04:03	0°♌02'52	1°09'01
max. Earth dist.	6625 Jul 18 08:57	0°♌04'25	10.39834 AU
morning rise	6625 Aug 04 20:46	2°♌15'06	
retrograde	6625 Nov 18 17:10	10°♌11'09	
opposition	6626 Jan 26 11:44	6°♌44'04	-1°09'57
min. Earth dist.	6626 Jan 26 08:04	6°♌44'48	8.36706 AU
direct	6626 Apr 03 16:17	3°♌20'25	
evening set	6626 Jul 14 07:10	11°♌01'34	
conjunction	6626 Aug 01 00:10	13°♌14'34	-0°43'31
minimum elong	6626 Aug 01 00:12	13°♌14'34	0°43'33
max. Earth dist.	6626 Aug 01 04:12	13°♌15'50	10.33735 AU
	6626 Aug 15 00:03	15°♌	
morning rise	6626 Aug 18 20:22	15°♌28'36	
retrograde	6626 Dec 02 13:51	23°♌27'34	
opposition	6627 Feb 08 22:34	20°♌00'11	-0°36'38
min. Earth dist.	6627 Feb 08 19:46	20°♌00'45	8.31009 AU
direct	6627 Apr 17 00:36	16°♌35'32	
evening set	6627 Jul 28 06:02	24°♌22'04	
conjunction	6627 Aug 15 02:18	26°♌36'44	-0°15'27
minimum elong	6627 Aug 15 02:18	26°♌36'44	0°15'29
behind sun begin	6627 Aug 15 00:45	26°♌36'15	
behind sun end	6627 Aug 15 03:52	26°♌37'13	
max. Earth dist.	6627 Aug 15 04:21	26°♌37'23	10.28537 AU
morning rise	6627 Sep 02 01:11	28°♌52'13	
	6627 Sep 11 07:02	0°♍	
retrograde	6627 Dec 16 12:43	6°♍53'07	
opposition	6628 Feb 22 11:45	3°♍25'38	-0°00'54
min. Earth dist.	6628 Feb 22 10:34	3°♍25'53	8.26339 AU
asc. node	6628 Mar 02 22:41	2°♍40'07	
direct	6628 Apr 29 12:45	29°♌59'59	
	6628 Apr 29 03:17	30°℞♌	
	6628 Apr 29 22:13	0°♍	
evening set	6628 Aug 10 10:47	7°♍51'45	
conjunction	6628 Aug 28 09:27	10°♍07'41	0°13'48
minimum elong	6628 Aug 28 09:26	10°♍07'41	0°13'47
behind sun begin	6628 Aug 28 05:44	10°♍06'31	
behind sun end	6628 Aug 28 13:08	10°♍08'51	
max. Earth dist.	6628 Aug 28 09:26	10°♍07'41	10.24467 AU
morning rise	6628 Sep 15 09:57	12°♍24'11	
retrograde	6628 Dec 29 12:57	20°♍25'59	
opposition	6629 Mar 07 02:52	16°♍58'38	0°35'13
min. Earth dist.	6629 Mar 07 03:09	16°♍58'35	8.22946 AU
direct	6629 May 13 05:39	13°♍32'06	
evening set	6629 Aug 24 20:32	21°♍28'36	
conjunction	6629 Sep 11 20:26	23°♍45'17	0°42'24
minimum elong	6629 Sep 11 20:24	23°♍45'16	0°42'24
max. Earth dist.	6629 Sep 11 18:55	23°♍44'48	10.21805 AU
morning rise	6629 Sep 29 21:10	26°♍02'13	
	6629 Nov 03 01:02	0°♎	
retrograde	6630 Jan 12 11:41	4°♎03'43	
opposition	6630 Mar 20 19:14	0°♎36'41	1°09'36
min. Earth dist.	6630 Mar 20 20:22	0°♎36'27	8.21125 AU
	6630 Mar 28 08:27	30°℞♍	
direct	6630 May 27 02:57	27°♍09'25	
	6630 Jul 23 23:29	0°♎	
evening set	6630 Sep 08 09:19	5°♎09'39	
conjunction	6630 Sep 26 09:18	7°♎26'30	1°08'44
minimum elong	6630 Sep 26 09:15	7°♎26'29	1°08'45
max. Earth dist.	6630 Sep 26 07:09	7°♎25'49	10.20818 AU
morning rise	6630 Oct 14 08:56	9°♎43'17	
retrograde	6631 Jan 26 09:33	17°♎43'11	
opposition	6631 Apr 03 12:18	14°♎16'38	1°40'07
min. Earth dist.	6631 Apr 03 13:33	14°♎16'23	8.21063 AU
direct	6631 Jun 10 02:09	10°♎48'50	
evening set	6631 Sep 22 23:00	18°♎51'24	
conjunction	6631 Oct 10 21:58	21°♎07'52	1°31'12
minimum elong	6631 Oct 10 21:55	21°♎07'51	1°31'14
max. Earth dist.	6631 Oct 10 19:37	21°♎07'07	10.21621 AU
morning rise	6631 Oct 28 19:27	23°♎23'55	
	6632 Jan 01 09:34	0°♏	
retrograde	6632 Feb 09 06:00	1°♏20'55	
	6632 Mar 19 14:16	30°℞♎	
opposition	6632 Apr 16 05:10	27°♎55'00	2°04'55
min. Earth dist.	6632 Apr 16 06:45	27°♎54'41	8.22789 AU
direct	6632 Jun 23 01:42	24°♎26'52	
	6632 Sep 15 14:54	0°♏	
evening set	6632 Oct 06 11:39	2°♏30'13	
conjunction	6632 Oct 24 08:38	4°♏45'47	1°48'28
minimum elong	6632 Oct 24 08:36	4°♏45'46	1°48'31
max. Earth dist.	6632 Oct 24 05:44	4°♏44'52	10.24178 AU
morning rise	6632 Nov 11 03:10	7°♏00'39	
retrograde	6633 Feb 21 23:40	14°♏53'32	
opposition	6633 Apr 29 20:55	11°♏28'25	2°22'34
min. Earth dist.	6633 Apr 29 23:14	11°♏27'57	8.26199 AU
direct	6633 Jul 07 01:49	8°♏00'09	
	6633 Oct 12 08:22	15°♏	
evening set	6633 Oct 20 20:52	16°♏02'39	
conjunction	6633 Nov 07 15:12	18°♏16'54	1°59'37
minimum elong	6633 Nov 07 15:11	18°♏16'54	1°59'40
max. Earth dist.	6633 Nov 07 11:32	18°♏15'44	10.28337 AU
morning rise	6633 Nov 25 06:26	20°♏30'15	
retrograde	6634 Mar 07 11:33	28°♏18'04	
opposition	6634 May 13 11:00	24°♏53'51	2°32'13
min. Earth dist.	6634 May 13 14:12	24°♏53'13	8.31085 AU
direct	6634 Jul 21 02:08	21°♏25'42	
evening set	6634 Nov 04 00:33	29°♏25'40	
	6634 Nov 08 15:09	0°♐	
conjunction	6634 Nov 21 15:55	1°♐38'20	2°04'11
minimum elong	6634 Nov 21 15:55	1°♐38'20	2°04'14
max. Earth dist.	6634 Nov 21 11:23	1°♐36'54	10.33849 AU
morning rise	6634 Dec 09 03:50	3°♐49'58	
retrograde	6635 Mar 20 18:33	11°♐32'09	
opposition	6635 May 26 22:30	8°♐08'51	2°33'36
min. Earth dist.	6635 May 27 02:10	8°♐08'07	8.37156 AU
direct	6635 Aug 04 00:03	4°♐41'02	
evening set	6635 Nov 17 21:42	12°♐37'04	
conjunction	6635 Dec 05 10:07	14°♐48'01	2°02'08
minimum elong	6635 Dec 05 10:08	14°♐48'01	2°02'11
max. Earth dist.	6635 Dec 05 05:09	14°♐46'28	10.40392 AU

morning rise	6635 Dec 22 18:51	16°♐57'50	
retrograde	6636 Apr 01 21:18	24°♐34'03	
opposition	6636 Jun 08 06:48	21°♐11'39	2°26'58
min. Earth dist.	6636 Jun 08 10:12	21°♐10'59	8.44061 AU
direct	6636 Aug 16 17:56	17°♐44'25	
evening set	6636 Nov 30 11:24	25°♐35'23	
conjunction	6636 Dec 17 21:01	27°♐44'36	1°53'52
minimum elong	6636 Dec 17 21:03	27°♐44'37	1°53'55
max. Earth dist.	6636 Dec 17 16:36	27°♐43'13	10.47601 AU
morning rise	6637 Jan 04 02:44	29°♐52'38	
	6637 Jan 05 02:55	0°♑	
retrograde	6637 Apr 14 19:05	7°♑22'57	
opposition	6637 Jun 21 12:01	4°♑01'25	2°13'03
min. Earth dist.	6637 Jun 21 14:44	4°♑00'53	8.51433 AU
direct	6637 Aug 30 08:12	0°♑34'57	
evening set	6637 Dec 13 17:15	8°♑20'08	
conjunction	6637 Dec 31 00:14	10°♑27'37	1°40'06
minimum elong	6637 Dec 31 00:16	10°♑27'38	1°40'09
max. Earth dist.	6637 Dec 30 20:52	10°♑26'35	10.55102 AU
morning rise	6638 Jan 17 03:13	12°♑33'57	
retrograde	6638 Apr 27 13:05	19°♑58'49	
opposition	6638 Jul 04 13:55	16°♑38'04	1°52'55
min. Earth dist.	6638 Jul 04 16:11	16°♑37'38	8.58909 AU
direct	6638 Sep 12 17:18	13°♑12'32	
evening set	6638 Dec 26 15:47	20°♑51'36	
conjunction	6639 Jan 12 20:17	22°♑57'28	1°21'44
minimum elong	6639 Jan 12 20:19	22°♑57'28	1°21'47
max. Earth dist.	6639 Jan 12 17:34	22°♑56'38	10.62533 AU
morning rise	6639 Jan 29 20:58	25°♑02'13	
	6639 Mar 17 20:22	0°♒	
retrograde	6639 May 10 03:45	2°♒22'16	
	6639 Jul 04 19:00	30°℞♑	
opposition	6639 Jul 17 12:26	29°♑02'13	1°27'49
min. Earth dist.	6639 Jul 17 14:54	29°♑01'44	8.66142 AU
direct	6639 Sep 25 20:28	25°♑37'41	
	6639 Dec 11 01:46	0°♒	
evening set	6640 Jan 08 07:34	3°♒10'43	
conjunction	6640 Jan 25 09:38	5°♒15'04	0°59'50
minimum elong	6640 Jan 25 09:40	5°♒15'05	0°59'53
max. Earth dist.	6640 Jan 25 06:43	5°♒14'11	10.69543 AU
morning rise	6640 Feb 11 08:27	7°♒18'27	
retrograde	6640 May 21 12:56	14°♒34'32	
opposition	6640 Jul 29 08:06	11°♒15'04	0°59'07
min. Earth dist.	6640 Jul 29 10:20	11°♒14'39	8.72796 AU
direct	6640 Oct 07 19:39	7°♒51'35	
	6641 Jan 17 01:12	15°♒	
evening set	6641 Jan 19 17:14	15°♒18'56	
conjunction	6641 Feb 05 17:03	17°♒21'54	0°35'32
minimum elong	6641 Feb 05 17:04	17°♒21'54	0°35'34
max. Earth dist.	6641 Feb 05 14:31	17°♒21'08	10.75816 AU
morning rise	6641 Feb 22 14:15	19°♒24'04	
retrograde	6641 Jun 02 20:49	26°♒37'20	
opposition	6641 Aug 11 01:12	23°♒18'13	0°28'12
min. Earth dist.	6641 Aug 11 02:23	23°♒18'00	8.78582 AU
direct	6641 Oct 20 16:24	19°♒55'47	
evening set	6642 Jan 31 21:54	27°♒18'00	
conjunction	6642 Feb 17 19:46	29°♒19'47	0°09'58
minimum elong	6642 Feb 17 19:47	29°♒19'47	0°10'00
behind sun begin	6642 Feb 17 14:05	29°♒18'05	
behind sun end	6642 Feb 18 01:30	29°♒21'29	
max. Earth dist.	6642 Feb 17 18:40	29°♒19'27	10.81083 AU
	6642 Feb 23 08:53	0°♓	
morning rise	6642 Mar 06 15:30	1°♓20'57	
retrograde	6642 Jun 15 04:23	8°♓32'27	
desc. node	6642 Jul 12 10:24	7°♓55'58	
opposition	6642 Aug 23 16:03	5°♓13'30	-0°03'34
min. Earth dist.	6642 Aug 23 15:54	5°♓13'32	8.83260 AU
direct	6642 Nov 02 06:42	1°♓52'04	
evening set	6643 Feb 12 22:39	9°♓09'53	
conjunction	6643 Mar 01 18:47	11°♓10'43	-0°15'54
minimum elong	6643 Mar 01 18:47	11°♓10'43	0°15'53
behind sun begin	6643 Mar 01 17:19	11°♓10'16	
behind sun end	6643 Mar 01 20:15	11°♓11'09	
max. Earth dist.	6643 Mar 01 19:07	11°♓10'48	10.85126 AU
morning rise	6643 Mar 18 13:17	13°♓11'06	
retrograde	6643 Jun 27 10:05	20°♓21'59	
opposition	6643 Sep 05 05:30	17°♓03'02	-0°34'53
min. Earth dist.	6643 Sep 05 04:47	17°♓03'10	8.86640 AU
direct	6643 Nov 14 17:07	13°♓42'28	
evening set	6644 Feb 24 20:48	20°♓56'50	
conjunction	6644 Mar 12 15:13	22°♓56'54	-0°40'52
minimum elong	6644 Mar 12 15:12	22°♓56'53	0°40'52
max. Earth dist.	6644 Mar 12 15:55	22°♓57'06	10.87786 AU
morning rise	6644 Mar 29 08:52	24°♓56'45	
	6644 May 17 23:46	0°♈	
retrograde	6644 Jul 08 16:21	2°♈08'09	
	6644 Aug 31 13:01	30°℞♓	
opposition	6644 Sep 16 18:02	28°♓49'01	-1°04'34
min. Earth dist.	6644 Sep 16 17:11	28°♓49'11	8.88596 AU
direct	6644 Nov 26 02:19	25°♓29'08	
	6645 Feb 11 16:45	0°♈	
evening set	6645 Mar 07 17:19	2°♈41'02	
conjunction	6645 Mar 24 10:24	4°♈40'36	-1°04'02
minimum elong	6645 Mar 24 10:22	4°♈40'36	1°04'03
max. Earth dist.	6645 Mar 24 11:13	4°♈40'51	10.88972 AU
morning rise	6645 Apr 10 03:39	6°♈40'12	
retrograde	6645 Jul 20 22:29	13°♈53'14	
opposition	6645 Sep 29 06:10	10°♈33'41	-1°31'29
min. Earth dist.	6645 Sep 29 04:48	10°♈33'56	8.89052 AU
direct	6645 Dec 08 09:07	7°♈14'19	
evening set	6646 Mar 19 13:12	14°♈24'45	
conjunction	6646 Apr 05 05:35	16°♈24'07	-1°24'31
minimum elong	6646 Apr 05 05:33	16°♈24'07	1°24'33
max. Earth dist.	6646 Apr 05 07:34	16°♈24'43	10.88621 AU
morning rise	6646 Apr 21 22:48	18°♈23'46	
retrograde	6646 Aug 02 06:42	25°♈39'26	
opposition	6646 Oct 11 18:25	22°♈19'16	-1°54'37
min. Earth dist.	6646 Oct 11 15:55	22°♈19'44	8.87944 AU
direct	6646 Dec 20 15:52	19°♈00'14	
evening set	6647 Mar 31 09:52	26°♈10'14	
conjunction	6647 Apr 17 02:05	28°♈09'47	-1°41'30
minimum elong	6647 Apr 17 02:03	28°♈09'46	1°41'32
max. Earth dist.	6647 Apr 17 05:09	28°♈10'42	10.86686 AU
	6647 May 02 10:32	0°♉	
morning rise	6647 May 03 19:40	0°♉09'46	
retrograde	6647 Aug 14 19:35	7°♉28'58	
opposition	6647 Oct 24 07:23	4°♉08'04	-2°13'01
min. Earth dist.	6647 Oct 24 04:17	4°♉08'38	8.85246 AU
direct	6648 Jan 01 21:00	0°♉49'08	
evening set	6648 Apr 11 08:21	7°♉59'48	
conjunction	6648 Apr 28 00:58	9°♉59'51	-1°54'16
minimum elong	6648 Apr 28 00:57	9°♉59'50	1°54'18

max. Earth dist.	6648 Apr 28 04:00	10°♉00'46	10.83182 AU
morning rise	6648 May 14 19:44	12°♉00'35	
	6648 Jun 10 14:16	15°♉	
retrograde	6648 Aug 26 09:52	19°♉24'09	
opposition	6648 Nov 04 22:00	16°♉02'23	-2°25'54
min. Earth dist.	6648 Nov 04 19:09	16°♉02'56	8.81009 AU
	6648 Nov 18 22:27	15°℞♉	
direct	6649 Jan 13 02:08	12°♉43'21	
	6649 Mar 06 21:01	15°♉	
evening set	6649 Apr 23 09:38	19°♉55'46	
conjunction	6649 May 10 03:26	21°♉56'44	-2°02'12
minimum elong	6649 May 10 03:26	21°♉56'44	2°02'14
max. Earth dist.	6649 May 10 05:46	21°♉57'26	10.78227 AU
morning rise	6649 May 27 00:15	23°♉58'35	
	6649 Jul 27 15:59	0°♊	
retrograde	6649 Sep 08 03:55	1°♊27'12	
	6649 Oct 21 14:22	30°℞♉	
opposition	6649 Nov 17 14:37	28°♉04'30	-2°32'35
min. Earth dist.	6649 Nov 17 12:16	28°♉04'57	8.75423 AU
direct	6650 Jan 25 10:28	24°♉45'06	
	6650 Apr 18 06:31	0°♊	
evening set	6650 May 05 14:57	2°♊00'15	
conjunction	6650 May 22 10:54	4°♊02'31	-2°04'49
minimum elong	6650 May 22 10:55	4°♊02'31	2°04'52
max. Earth dist.	6650 May 22 13:33	4°♊03'20	10.72076 AU
morning rise	6650 Jun 08 10:21	6°♊05'50	
retrograde	6650 Sep 21 02:45	13°♊39'50	
opposition	6650 Nov 30 09:25	10°♊16'07	-2°32'34
min. Earth dist.	6650 Nov 30 06:51	10°♊16'37	8.68784 AU
direct	6651 Feb 06 20:41	6°♊56'10	
evening set	6651 May 18 01:07	14°♊14'52	
conjunction	6651 Jun 04 00:05	16°♊18'47	-2°01'50
minimum elong	6651 Jun 04 00:06	16°♊18'47	2°01'53
max. Earth dist.	6651 Jun 04 03:40	16°♊19'53	10.65046 AU
morning rise	6651 Jun 21 02:44	18°♊23'51	
retrograde	6651 Oct 04 05:49	26°♊03'24	
opposition	6651 Dec 13 07:07	22°♊38'38	-2°25'31
min. Earth dist.	6651 Dec 13 03:52	22°♊39'16	8.61425 AU
direct	6652 Feb 19 10:22	19°♊17'57	
evening set	6652 May 29 16:57	26°♊40'54	
conjunction	6652 Jun 15 19:32	28°♊46'44	-1°53'07
minimum elong	6652 Jun 15 19:34	28°♊46'45	1°53'10
max. Earth dist.	6652 Jun 15 23:36	28°♊47'59	10.57483 AU
	6652 Jun 25 17:21	0°♋	
morning rise	6652 Jul 03 02:01	0°♋53'47	
retrograde	6652 Oct 16 14:19	8°♋38'47	
opposition	6652 Dec 25 07:49	5°♋13'02	-2°11'27
min. Earth dist.	6652 Dec 25 04:20	5°♋13'43	8.53701 AU
direct	6653 Mar 03 02:55	1°♋51'27	
evening set	6653 Jun 11 15:29	9°♋19'16	
conjunction	6653 Jun 28 22:05	11°♋27'13	-1°38'49
minimum elong	6653 Jun 28 22:08	11°♋27'13	1°38'52
max. Earth dist.	6653 Jun 29 01:27	11°♋28'15	10.49746 AU
morning rise	6653 Jul 16 08:50	13°♋36'26	
retrograde	6653 Oct 30 03:30	21°♋26'25	
opposition	6654 Jan 07 11:26	17°♋59'50	-1°50'41
min. Earth dist.	6654 Jan 07 08:40	18°♋00'23	8.45981 AU
direct	6654 Mar 15 22:40	14°♋37'13	
evening set	6654 Jun 24 20:58	22°♋10'26	
conjunction	6654 Jul 12 07:51	24°♋20'33	-1°19'23
minimum elong	6654 Jul 12 07:54	24°♋20'33	1°19'26
max. Earth dist.	6654 Jul 12 10:22	24°♋21'20	10.42202 AU
morning rise	6654 Jul 29 22:53	26°♋31'55	
	6654 Aug 29 02:19	0°♌	
retrograde	6654 Nov 12 18:51	4°♌26'20	
opposition	6655 Jan 20 18:16	0°♌59'05	-1°23'56
min. Earth dist.	6655 Jan 20 16:17	0°♌59'29	8.38640 AU
	6655 Feb 02 07:12	30°℞♋	
direct	6655 Mar 29 01:04	27°♋35'22	
	6655 May 20 22:24	0°♌	
evening set	6655 Jul 08 09:26	5°♌14'14	
conjunction	6655 Jul 26 00:34	7°♌26'28	-0°55'35
minimum elong	6655 Jul 26 00:36	7°♌26'29	0°55'38
max. Earth dist.	6655 Jul 26 02:41	7°♌27'08	10.35219 AU
morning rise	6655 Aug 12 19:27	9°♌39'50	
	6655 Sep 30 23:52	15°♌	
retrograde	6655 Nov 26 13:19	17°♌37'57	
	6656 Jan 23 17:14	15°℞♌	
opposition	6656 Feb 03 04:00	14°♌10'11	-0°52'20
min. Earth dist.	6656 Feb 03 02:28	14°♌10'29	8.32049 AU
direct	6656 Apr 10 08:09	10°♌45'24	
	6656 Jun 21 02:34	15°♌	
evening set	6656 Jul 21 05:09	18°♌29'57	
conjunction	6656 Aug 08 00:08	20°♌44'06	-0°28'32
minimum elong	6656 Aug 08 00:09	20°♌44'06	0°28'35
max. Earth dist.	6656 Aug 08 02:14	20°♌44'45	10.29151 AU
morning rise	6656 Aug 25 22:05	22°♌59'10	
	6656 Nov 05 14:50	0°♍	
retrograde	6656 Dec 09 11:35	0°♍59'57	
	6657 Jan 12 13:36	30°℞♌	
opposition	6657 Feb 15 16:11	27°♌31'53	-0°17'27
min. Earth dist.	6657 Feb 15 14:40	27°♌32'12	8.26556 AU
direct	6657 Apr 23 18:28	24°♌06'05	
	6657 Jul 19 07:39	0°♍	
evening set	6657 Aug 04 07:29	1°♍56'09	
asc. node	6657 Aug 17 09:47	3°♍35'04	
conjunction	6657 Aug 22 05:26	4°♍11'48	0°00'23
minimum elong	6657 Aug 22 05:25	4°♍11'48	0°00'21
behind sun begin	6657 Aug 21 22:09	4°♍09'31	
behind sun end	6657 Aug 22 12:42	4°♍14'05	
max. Earth dist.	6657 Aug 22 07:05	4°♍12'16	10.24322 AU
morning rise	6657 Sep 09 05:22	6°♍28'08	
retrograde	6657 Dec 23 12:18	14°♍30'25	
opposition	6658 Mar 01 06:40	11°♍02'20	0°18'47
min. Earth dist.	6658 Mar 01 05:28	11°♍02'35	8.22461 AU
direct	6658 May 07 08:42	7°♍35'37	
evening set	6658 Aug 18 15:15	15°♍30'41	
conjunction	6658 Sep 05 14:55	17°♍47'20	0°29'30
minimum elong	6658 Sep 05 14:54	17°♍47'19	0°29'29
max. Earth dist.	6658 Sep 05 15:39	17°♍47'34	10.21007 AU
morning rise	6658 Sep 23 15:38	20°♍04'22	
retrograde	6659 Jan 06 12:20	28°♍06'54	
opposition	6659 Mar 14 22:52	24°♍39'04	0°54'16
min. Earth dist.	6659 Mar 14 22:24	24°♍39'10	8.20010 AU
direct	6659 May 21 03:58	21°♍11'35	
evening set	6659 Sep 02 03:02	29°♍10'50	
	6659 Sep 08 15:16	0°♎	
conjunction	6659 Sep 20 03:12	1°♎27'54	0°57'06
minimum elong	6659 Sep 20 03:10	1°♎27'53	0°57'06
max. Earth dist.	6659 Sep 20 02:35	1°♎27'42	10.19422 AU
morning rise	6659 Oct 08 03:30	3°♎45'01	
retrograde	6660 Jan 20 11:30	11°♎46'29	
opposition	6660 Mar 27 15:57	8°♎19'10	1°26'49

min. Earth dist.	6660 Mar 27 16:39	8°♎19'02	8.19370 AU
direct	6660 Jun 03 01:44	4°♎51'07	
evening set	6660 Sep 15 16:52	12°♎53'22	
conjunction	6660 Oct 03 16:24	15°♎10'16	1°21'31
minimum elong	6660 Oct 03 16:21	15°♎10'15	1°21'32
max. Earth dist.	6660 Oct 03 14:19	15°♎09'36	10.19675 AU
morning rise	6660 Oct 21 15:09	17°♎26'54	
retrograde	6661 Feb 02 09:10	25°♎25'59	
opposition	6661 Apr 10 09:19	21°♎59'24	1°54'25
min. Earth dist.	6661 Apr 10 10:53	21°♎59'05	8.20580 AU
direct	6661 Jun 17 01:39	18°♎31'04	
evening set	6661 Sep 30 06:35	26°♎34'51	
conjunction	6661 Oct 18 04:28	28°♎51'01	1°41'17
minimum elong	6661 Oct 18 04:25	28°♎51'00	1°41'19
max. Earth dist.	6661 Oct 18 01:39	28°♎50'07	10.21758 AU
	6661 Oct 27 05:06	0°♏	
morning rise	6661 Nov 05 00:38	1°♏06'39	
retrograde	6662 Feb 16 03:52	9°♏02'07	
opposition	6662 Apr 24 02:01	5°♏36'28	2°15'27
min. Earth dist.	6662 Apr 24 03:47	5°♏36'06	8.23573 AU
direct	6662 Jul 01 03:05	2°♏08'06	
evening set	6662 Oct 14 17:54	10°♏11'45	
conjunction	6662 Nov 01 13:29	12°♏26'46	1°55'16
minimum elong	6662 Nov 01 13:27	12°♏26'45	1°55'19
max. Earth dist.	6662 Nov 01 10:34	12°♏25'50	10.25560 AU
morning rise	6662 Nov 19 06:28	14°♏41'00	
	6662 Nov 21 19:44	15°♏	
retrograde	6663 Mar 01 18:07	22°♏31'48	
opposition	6663 May 07 17:18	19°♏07'10	2°28'45
min. Earth dist.	6663 May 07 18:59	19°♏06'50	8.28177 AU
direct	6663 Jul 15 04:14	15°♏39'02	
evening set	6663 Oct 29 00:49	23°♏40'52	
conjunction	6663 Nov 15 17:44	25°♏54'24	2°02'49
minimum elong	6663 Nov 15 17:43	25°♏54'23	2°02'52
max. Earth dist.	6663 Nov 15 15:01	25°♏53'32	10.30861 AU
morning rise	6663 Dec 03 07:15	28°♏06'56	
	6663 Dec 18 21:46	0°♐	
retrograde	6664 Mar 14 05:13	5°♐52'17	
opposition	6664 May 20 06:31	2°♐28'44	2°33'49
min. Earth dist.	6664 May 20 08:16	2°♐28'23	8.34114 AU
	6664 Jun 23 23:22	30°℞♏	
direct	6664 Jul 28 02:35	29°♏01'02	
	6664 Aug 31 00:11	0°♐	
evening set	6664 Nov 11 01:53	6°♐59'27	
conjunction	6664 Nov 28 15:50	9°♐11'17	2°03'42
minimum elong	6664 Nov 28 15:50	9°♐11'17	2°03'45
max. Earth dist.	6664 Nov 28 13:12	9°♐10'28	10.37341 AU
morning rise	6664 Dec 16 01:53	11°♐21'59	
retrograde	6665 Mar 27 11:56	19°♐01'22	
opposition	6665 Jun 02 16:59	15°♐38'53	2°30'41
min. Earth dist.	6665 Jun 02 19:22	15°♐38'24	8.41040 AU
direct	6665 Aug 10 21:49	12°♐11'47	
evening set	6665 Nov 24 19:47	20°♐05'29	
conjunction	6665 Dec 12 06:43	22°♐15'32	1°58'08
minimum elong	6665 Dec 12 06:44	22°♐15'33	1°58'11
max. Earth dist.	6665 Dec 12 03:31	22°♐14'32	10.44635 AU
morning rise	6665 Dec 29 13:39	24°♐24'24	
	6666 Feb 20 21:14	0°♑	
retrograde	6666 Apr 09 12:33	1°♑57'39	
	6666 May 28 15:09	30°℞♐	
opposition	6666 Jun 16 00:20	28°♐36'09	2°19'53

min. Earth dist.	6666 Jun 16 03:18	28°♐35'34	8.48564 AU
direct	6666 Aug 24 14:24	25°♐09'47	
	6666 Nov 12 13:43	0°♑	
evening set	6666 Dec 08 05:47	2°♑57'50	
conjunction	6666 Dec 25 13:52	5°♑06'06	1°46'42
minimum elong	6666 Dec 25 13:54	5°♑06'06	1°46'45
max. Earth dist.	6666 Dec 25 09:57	5°♑04'53	10.52313 AU
morning rise	6667 Jan 11 18:08	7°♑13'11	
retrograde	6667 Apr 22 07:18	14°♑40'35	
opposition	6667 Jun 29 04:09	11°♑19'57	2°02'21
min. Earth dist.	6667 Jun 29 07:20	11°♑19'20	8.56222 AU
direct	6667 Sep 07 03:37	7°♑54'25	
evening set	6667 Dec 21 08:11	15°♑36'22	
conjunction	6668 Jan 07 13:41	17°♑42'56	1°30'14
minimum elong	6668 Jan 07 13:43	17°♑42'56	1°30'17
max. Earth dist.	6668 Jan 07 09:23	17°♑41'36	10.59889 AU
morning rise	6668 Jan 24 15:32	19°♑48'22	
retrograde	6668 May 03 23:21	27°♑10'35	
opposition	6668 Jul 11 04:27	23°♑50'39	1°39'17
min. Earth dist.	6668 Jul 11 07:14	23°♑50'07	8.63543 AU
direct	6668 Sep 19 10:37	20°♑26'04	
evening set	6669 Jan 02 03:24	28°♑01'58	
	6669 Jan 18 07:47	0°♒	
conjunction	6669 Jan 19 06:35	0°♒06'59	1°09'45
minimum elong	6669 Jan 19 06:37	0°♒07'00	1°09'48
max. Earth dist.	6669 Jan 19 02:59	0°♒05'53	10.66932 AU
morning rise	6669 Feb 05 06:14	2°♒10'58	
retrograde	6669 May 16 12:12	9°♒28'58	
opposition	6669 Jul 24 01:55	6°♒09'36	1°11'59
min. Earth dist.	6669 Jul 24 04:16	6°♒09'09	8.70179 AU
direct	6669 Oct 02 12:16	2°♒46'00	
evening set	6670 Jan 14 16:10	10°♒16'08	
conjunction	6670 Jan 31 17:10	12°♒19'46	0°46'21
minimum elong	6670 Jan 31 17:11	12°♒19'47	0°46'23
max. Earth dist.	6670 Jan 31 14:18	12°♒18'54	10.73166 AU
morning rise	6670 Feb 17 14:58	14°♒22'31	
	6670 Feb 22 21:48	15°♒	
retrograde	6670 May 28 22:38	21°♒37'21	
opposition	6670 Aug 05 20:47	18°♒18'21	0°41'51
min. Earth dist.	6670 Aug 05 23:05	18°♒17'55	8.75920 AU
	6670 Oct 06 00:13	15°℞♒	
direct	6670 Oct 15 09:42	14°♒55'39	
	6670 Oct 24 18:14	15°♒	
evening set	6671 Jan 26 23:47	22°♒20'34	
conjunction	6671 Feb 12 22:38	24°♒22'59	0°21'09
minimum elong	6671 Feb 12 22:38	24°♒23'00	0°21'11
max. Earth dist.	6671 Feb 12 19:48	24°♒22'08	10.78405 AU
morning rise	6671 Mar 01 18:59	26°♒24'42	
	6671 Apr 03 10:38	0°♓	
retrograde	6671 Jun 10 06:04	3°♓37'23	
opposition	6671 Aug 18 13:16	0°♓18'30	0°10'14
min. Earth dist.	6671 Aug 18 15:38	0°♓18'04	8.80588 AU
	6671 Aug 22 15:38	30°℞♒	
direct	6671 Oct 28 02:31	26°♒56'38	
desc. node	6671 Dec 17 16:48	28°♒58'19	
	6671 Dec 29 23:29	0°♓	
evening set	6672 Feb 08 03:03	4°♓17'00	
conjunction	6672 Feb 24 23:54	6°♓18'23	-0°04'50
minimum elong	6672 Feb 24 23:53	6°♓18'23	0°04'48
behind sun begin	6672 Feb 24 17:02	6°♓16'20	
behind sun end	6672 Feb 25 06:45	6°♓20'26	

max. Earth dist.	6672 Feb 24 21:08	6°♓17'36	10.82476 AU
morning rise	6672 Mar 12 19:05	8°♓19'17	
retrograde	6672 Jun 21 11:30	15°♓30'59	
opposition	6672 Aug 30 04:07	12°♓11'58	-0°21'30
min. Earth dist.	6672 Aug 30 05:36	12°♓11'42	8.84024 AU
direct	6672 Nov 08 17:12	8°♓50'49	
evening set	6673 Feb 19 02:46	16°♓07'25	
conjunction	6673 Mar 07 21:58	18°♓07'59	-0°30'17
minimum elong	6673 Mar 07 21:57	18°♓07'59	0°30'16
max. Earth dist.	6673 Mar 07 20:42	18°♓07'36	10.85234 AU
morning rise	6673 Mar 24 16:09	20°♓08'16	
retrograde	6673 Jul 03 18:54	27°♓20'09	
opposition	6673 Sep 11 17:40	24°♓00'48	-0°52'08
min. Earth dist.	6673 Sep 11 17:40	24°♓00'48	8.86103 AU
direct	6673 Nov 21 04:59	20°♓40'14	
evening set	6674 Mar 03 00:25	27°♓53'59	
conjunction	6674 Mar 19 18:19	29°♓54'00	-0°54'24
minimum elong	6674 Mar 19 18:17	29°♓54'00	0°54'24
max. Earth dist.	6674 Mar 19 18:42	29°♓54'07	10.86579 AU
	6674 Mar 20 14:15	0°♈	
morning rise	6674 Apr 05 11:44	1°♈53'56	
retrograde	6674 Jul 16 01:54	9°♈07'03	
opposition	6674 Sep 24 06:20	5°♈47'12	-1°20'27
min. Earth dist.	6674 Sep 24 05:17	5°♈47'23	8.86752 AU
direct	6674 Dec 03 11:53	2°♈27'05	
evening set	6675 Mar 14 21:07	9°♈39'02	
conjunction	6675 Mar 31 13:57	11°♈38'46	-1°16'12
minimum elong	6675 Mar 31 13:55	11°♈38'45	1°16'13
max. Earth dist.	6675 Mar 31 15:01	11°♈39'05	10.86469 AU
morning rise	6675 Apr 17 07:08	13°♈38'39	
retrograde	6675 Jul 28 09:58	20°♈54'04	
opposition	6675 Oct 06 19:09	17°♈33'35	-1°45'25
min. Earth dist.	6675 Oct 06 17:53	17°♈33'49	8.85946 AU
direct	6675 Dec 15 18:47	14°♈13'47	
evening set	6676 Mar 25 17:55	21°♈24'59	
conjunction	6676 Apr 11 10:08	23°♈24'44	-1°34'49
minimum elong	6676 Apr 11 10:05	23°♈24'43	1°34'51
max. Earth dist.	6676 Apr 11 11:21	23°♈25'06	10.84913 AU
morning rise	6676 Apr 28 03:41	25°♈24'52	
	6676 Jun 10 18:55	0°♉	
retrograde	6676 Aug 08 20:52	2°♉43'34	
	6676 Oct 09 22:57	30°℞♈	
opposition	6676 Oct 18 08:36	29°♈22'21	-2°06'00
min. Earth dist.	6676 Oct 18 06:53	29°♈22'40	8.83717 AU
direct	6676 Dec 27 01:05	26°♈02'41	
	6677 Mar 08 10:34	0°♉	
evening set	6677 Apr 06 15:59	3°♉14'10	
conjunction	6677 Apr 23 08:24	5°♉14'17	-1°49'29
minimum elong	6677 Apr 23 08:23	5°♉14'17	1°49'32
max. Earth dist.	6677 Apr 23 10:42	5°♉14'59	10.81970 AU
morning rise	6677 May 10 02:51	7°♉15'01	
retrograde	6677 Aug 21 09:21	14°♉37'49	
opposition	6677 Oct 30 23:01	11°♉15'45	-2°21'22
min. Earth dist.	6677 Oct 30 20:18	11°♉16'16	8.80140 AU
direct	6678 Jan 08 07:41	7°♉56'05	
	6678 Apr 17 10:31	15°♉	
evening set	6678 Apr 18 16:25	15°♉08'51	
conjunction	6678 May 05 09:54	17°♉09'44	-1°59'33
minimum elong	6678 May 05 09:53	17°♉09'43	1°59'36
max. Earth dist.	6678 May 05 13:43	17°♉10'53	10.77741 AU
morning rise	6678 May 22 05:49	19°♉11'23	
retrograde	6678 Sep 03 03:30	26°♉38'56	
opposition	6678 Nov 12 15:12	23°♉15'59	-2°30'44
min. Earth dist.	6678 Nov 12 11:18	23°♉16'43	8.75337 AU
direct	6679 Jan 20 15:51	19°♉56'10	
evening set	6679 Apr 30 20:26	27°♉11'08	
conjunction	6679 May 17 15:35	29°♉13'07	-2°04'27
minimum elong	6679 May 17 15:34	29°♉13'06	2°04'30
max. Earth dist.	6679 May 17 19:58	29°♉14'27	10.72386 AU
	6679 May 24 01:35	0°♊	
morning rise	6679 Jun 03 13:45	1°♊16'03	
retrograde	6679 Sep 16 02:28	8°♊48'45	
opposition	6679 Nov 25 09:40	5°♊24'56	-2°33'33
min. Earth dist.	6679 Nov 25 05:30	5°♊25'43	8.69507 AU
direct	6680 Feb 01 23:52	2°♊04'47	
evening set	6680 May 12 05:00	9°♊22'50	
conjunction	6680 May 29 02:35	11°♊26'15	-2°03'48
minimum elong	6680 May 29 02:36	11°♊26'15	2°03'51
max. Earth dist.	6680 May 29 06:46	11°♊27'32	10.66151 AU
morning rise	6680 Jun 15 03:53	13°♊30'47	
retrograde	6680 Sep 28 03:35	21°♊08'53	
opposition	6680 Dec 07 06:49	17°♊44'11	-2°29'23
min. Earth dist.	6680 Dec 07 02:56	17°♊44'56	8.62919 AU
direct	6681 Feb 13 11:59	14°♊23'31	
evening set	6681 May 24 18:53	21°♊45'26	
conjunction	6681 Jun 10 19:48	23°♊50'37	-1°57'25
minimum elong	6681 Jun 10 19:49	23°♊50'37	1°57'29
max. Earth dist.	6681 Jun 10 23:58	23°♊51'54	10.59316 AU
morning rise	6681 Jun 28 00:50	25°♊57'01	
	6681 Aug 03 12:17	0°♋	
retrograde	6681 Oct 11 09:35	3°♋40'28	
opposition	6681 Dec 20 06:49	0°♋14'58	-2°18'08
min. Earth dist.	6681 Dec 20 03:09	0°♋15'41	8.55871 AU
	6681 Dec 23 11:46	30°℞♊	
direct	6682 Feb 26 04:47	26°♊53'39	
	6682 Apr 28 06:40	0°♋	
evening set	6682 Jun 06 15:02	4°♋20'03	
conjunction	6682 Jun 23 19:55	6°♋27'14	-1°45'21
minimum elong	6682 Jun 23 19:58	6°♋27'15	1°45'24
max. Earth dist.	6682 Jun 24 00:49	6°♋28'45	10.52189 AU
morning rise	6682 Jul 11 04:56	8°♋35'41	
retrograde	6682 Oct 24 20:56	16°♋24'11	
opposition	6683 Jan 02 09:42	12°♋57'59	-1°59'59
min. Earth dist.	6683 Jan 02 05:40	12°♋58'47	8.48699 AU
direct	6683 Mar 11 00:16	9°♋35'55	
evening set	6683 Jun 19 17:59	17°♋07'18	
conjunction	6683 Jul 07 03:12	19°♋16'36	-1°27'54
minimum elong	6683 Jul 07 03:14	19°♋16'36	1°27'58
max. Earth dist.	6683 Jul 07 08:36	19°♋18'17	10.45123 AU
morning rise	6683 Jul 24 16:20	21°♋27'08	
retrograde	6683 Nov 07 12:36	29°♋20'11	
opposition	6684 Jan 15 15:44	25°♋53'24	-1°35'30
min. Earth dist.	6684 Jan 15 11:26	25°♋54'15	8.41768 AU
direct	6684 Mar 22 23:58	22°♋30'30	
	6684 Jul 01 04:41	0°♌	
evening set	6684 Jul 02 04:04	0°♌07'10	
conjunction	6684 Jul 19 17:33	2°♌18'33	-1°05'44
minimum elong	6684 Jul 19 17:35	2°♌18'34	1°05'48
max. Earth dist.	6684 Jul 19 22:33	2°♌20'08	10.38475 AU
morning rise	6684 Aug 06 10:42	4°♌31'06	
retrograde	6684 Nov 20 07:23	12°♌27'55	
opposition	6685 Jan 28 00:42	9°♌00'43	-1°05'40

min. Earth dist.	6685 Jan 27 20:54	9°♌01'28	8.35423 AU
direct	6685 Apr 05 04:29	5°♌36'52	
evening set	6685 Jul 15 21:26	13°♌18'59	
	6685 Jul 29 08:29	15°♌	
conjunction	6685 Aug 02 14:46	15°♌32'17	-0°39'51
minimum elong	6685 Aug 02 14:48	15°♌32'17	0°39'54
max. Earth dist.	6685 Aug 02 18:20	15°♌33'24	10.32566 AU
morning rise	6685 Aug 20 11:25	17°♌46'35	
retrograde	6685 Dec 04 05:03	25°♌46'08	
opposition	6686 Feb 10 12:09	22°♌18'42	-0°31'56
min. Earth dist.	6686 Feb 10 09:40	22°♌19'12	8.29972 AU
direct	6686 Apr 18 13:16	18°♌53'52	
evening set	6686 Jul 29 21:20	26°♌41'19	
conjunction	6686 Aug 16 17:51	28°♌56'11	-0°11'34
minimum elong	6686 Aug 16 17:52	28°♌56'11	0°11'36
behind sun begin	6686 Aug 16 12:44	28°♌54'35	
behind sun end	6686 Aug 16 23:00	28°♌57'48	
max. Earth dist.	6686 Aug 16 19:42	28°♌56'45	10.27666 AU
	6686 Aug 25 03:31	0°♍	
morning rise	6686 Sep 03 17:04	1°♍11'53	
retrograde	6686 Dec 18 03:58	9°♍13'07	
asc. node	6687 Jan 13 19:13	8°♍35'38	
opposition	6687 Feb 24 01:54	5°♍45'36	0°03'58
min. Earth dist.	6687 Feb 24 00:47	5°♍45'50	8.25650 AU
direct	6687 May 02 03:08	2°♍19'49	
evening set	6687 Aug 13 02:44	10°♍12'15	
conjunction	6687 Aug 31 01:34	12°♍28'17	0°17'41
minimum elong	6687 Aug 31 01:33	12°♍28'17	0°17'40
max. Earth dist.	6687 Aug 31 02:02	12°♍28'26	10.23964 AU
morning rise	6687 Sep 18 02:09	14°♍44'53	
retrograde	6688 Jan 01 02:54	22°♍46'45	
opposition	6688 Mar 08 17:17	19°♍19'24	0°39'57
min. Earth dist.	6688 Mar 08 17:07	19°♍19'26	8.22626 AU
direct	6688 May 14 21:39	15°♍52'47	
evening set	6688 Aug 26 12:52	23°♍49'42	
conjunction	6688 Sep 13 12:53	26°♍06'25	0°46'04
minimum elong	6688 Sep 13 12:51	26°♍06'24	0°46'03
max. Earth dist.	6688 Sep 13 12:16	26°♍06'13	10.21646 AU
morning rise	6688 Oct 01 13:29	28°♍23'20	
	6688 Oct 14 17:50	0°♎	
retrograde	6689 Jan 14 02:10	6°♎24'44	
opposition	6689 Mar 22 09:43	2°♎57'44	1°13'54
min. Earth dist.	6689 Mar 22 10:07	2°♎57'39	8.21120 AU
	6689 May 05 08:17	30°℞♍	
direct	6689 May 28 17:50	29°♍30'27	
	6689 Jun 21 00:55	0°♎	
evening set	6689 Sep 10 01:53	7°♎30'54	
conjunction	6689 Sep 28 01:50	9°♎47'44	1°11'57
minimum elong	6689 Sep 28 01:48	9°♎47'43	1°11'57
max. Earth dist.	6689 Sep 28 00:33	9°♎47'19	10.20947 AU
morning rise	6689 Oct 16 01:10	12°♎04'25	
retrograde	6690 Jan 28 01:16	20°♎04'02	
opposition	6690 Apr 05 02:48	16°♎37'35	1°43'43
min. Earth dist.	6690 Apr 05 03:38	16°♎37'24	8.21324 AU
direct	6690 Jun 11 16:11	13°♎09'48	
evening set	6690 Sep 24 15:30	21°♎12'26	
conjunction	6690 Oct 12 14:14	23°♎28'47	1°33'45
minimum elong	6690 Oct 12 14:11	23°♎28'46	1°33'47
max. Earth dist.	6690 Oct 12 12:13	23°♎28'09	10.21998 AU
morning rise	6690 Oct 30 11:19	25°♎44'42	
	6690 Dec 06 11:41	0°♏	
retrograde	6691 Feb 10 21:34	3°♏41'17	
opposition	6691 Apr 18 19:39	0°♏15'31	2°07'36
min. Earth dist.	6691 Apr 18 21:23	0°♏15'10	8.23286 AU
	6691 Apr 22 00:09	30°℞♎	
direct	6691 Jun 25 16:25	26°♎47'26	
	6691 Aug 27 00:44	0°♏	
evening set	6691 Oct 09 03:46	4°♏50'41	
conjunction	6691 Oct 27 00:23	7°♏06'04	1°50'14
minimum elong	6691 Oct 27 00:21	7°♏06'03	1°50'16
max. Earth dist.	6691 Oct 26 21:12	7°♏05'03	10.24779 AU
morning rise	6691 Nov 13 18:35	9°♏20'46	
	6692 Jan 05 02:53	15°♏	
retrograde	6692 Feb 24 13:19	17°♏13'06	
	6692 Apr 16 07:26	15°℞♏	
opposition	6692 May 01 11:10	13°♏48'10	2°24'12
min. Earth dist.	6692 May 01 13:57	13°♏47'36	8.26904 AU
direct	6692 Jul 08 17:31	10°♏19'59	
	6692 Sep 23 17:51	15°♏	
evening set	6692 Oct 22 12:25	18°♏22'12	
conjunction	6692 Nov 09 06:21	20°♏36'14	2°00'30
minimum elong	6692 Nov 09 06:20	20°♏36'14	2°00'33
max. Earth dist.	6692 Nov 09 02:04	20°♏34'53	10.29129 AU
morning rise	6692 Nov 26 21:19	22°♏49'23	
	6693 Feb 11 03:46	0°♐	
retrograde	6693 Mar 09 00:41	0°♐36'35	
	6693 Apr 04 02:28	30°℞♏	
opposition	6693 May 15 00:53	27°♏12'33	2°32'44
min. Earth dist.	6693 May 15 04:17	27°♏11'52	8.31958 AU
direct	6693 Jul 22 17:10	23°♏44'31	
	6693 Oct 22 06:10	0°♐	
evening set	6693 Nov 05 15:25	1°♐44'01	
conjunction	6693 Nov 23 06:26	3°♐56'29	2°04'09
minimum elong	6693 Nov 23 06:26	3°♐56'29	2°04'13
max. Earth dist.	6693 Nov 23 01:38	3°♐54'58	10.34787 AU
morning rise	6693 Dec 10 18:04	6°♐07'53	
retrograde	6694 Mar 22 07:34	13°♐49'21	
opposition	6694 May 28 11:58	10°♐26'14	2°33'00
min. Earth dist.	6694 May 28 15:12	10°♐25'35	8.38147 AU
direct	6694 Aug 05 14:27	6°♐58'35	
evening set	6694 Nov 19 11:38	14°♐53'58	
conjunction	6694 Dec 06 23:49	17°♐04'43	2°01'15
minimum elong	6694 Dec 06 23:49	17°♐04'43	2°01'19
max. Earth dist.	6694 Dec 06 19:22	17°♐03'19	10.41429 AU
morning rise	6694 Dec 24 08:12	19°♐14'19	
retrograde	6695 Apr 04 09:25	26°♐49'48	
opposition	6695 Jun 10 19:49	23°♐27'33	2°25'21
min. Earth dist.	6695 Jun 10 22:36	23°♐27'00	8.45121 AU
direct	6695 Aug 19 08:12	20°♐00'29	
evening set	6695 Dec 03 00:22	27°♐50'41	
conjunction	6695 Dec 20 09:50	29°♐59'41	1°52'12
minimum elong	6695 Dec 20 09:51	29°♐59'42	1°52'16
max. Earth dist.	6695 Dec 20 06:10	29°♐58'33	10.48682 AU
	6695 Dec 20 10:50	0°♑	
morning rise	6696 Jan 06 15:13	2°♑07'30	
retrograde	6696 Apr 16 07:17	9°♑37'06	
opposition	6696 Jun 23 00:31	6°♑15'42	2°10'33
min. Earth dist.	6696 Jun 23 03:13	6°♑15'10	8.52507 AU
direct	6696 Aug 31 21:25	2°♑49'23	
evening set	6696 Dec 15 05:25	10°♑33'44	
conjunction	6697 Jan 01 12:11	12°♑41'01	1°37'46
minimum elong	6697 Jan 01 12:13	12°♑41'02	1°37'50

max. Earth dist.	6697 Jan 01 08:55	12°♑40'00	10.56167 AU
morning rise	6697 Jan 18 14:55	14°♑47'08	
retrograde	6697 Apr 29 01:00	22°♑11'17	
opposition	6697 Jul 06 01:55	18°♑50'39	1°49'42
min. Earth dist.	6697 Jul 06 04:48	18°♑50'05	8.59945 AU
direct	6697 Sep 14 04:43	15°♑25'13	
evening set	6697 Dec 28 03:05	23°♑03'26	
conjunction	6698 Jan 14 07:16	25°♑09'06	1°18'54
minimum elong	6698 Jan 14 07:18	25°♑09'07	1°18'57
max. Earth dist.	6698 Jan 14 03:50	25°♑08'03	10.63534 AU
morning rise	6698 Jan 31 07:50	27°♑13'42	
	6698 Feb 24 13:27	0°♒	
retrograde	6698 May 11 12:58	4°♒33'04	
opposition	6698 Jul 18 23:58	1°♒13'06	1°24'04
min. Earth dist.	6698 Jul 19 02:49	1°♒12'33	8.67097 AU
	6698 Aug 04 05:50	30°℞♑	
direct	6698 Sep 27 08:39	27°♑48'38	
	6698 Nov 18 20:52	0°♒	
evening set	6699 Jan 09 17:53	5°♒20'51	
conjunction	6699 Jan 26 19:43	7°♒25'01	0°56'39
minimum elong	6699 Jan 26 19:45	7°♒25'01	0°56'41
max. Earth dist.	6699 Jan 26 16:22	7°♒23'59	10.70442 AU
morning rise	6699 Feb 12 18:29	9°♒28'14	
	6699 Apr 08 13:10	15°♒	
retrograde	6699 May 23 22:23	16°♒43'49	
	6699 Jul 09 22:12	15°℞♒	
opposition	6699 Jul 31 19:02	13°♒24'20	0°55'01
min. Earth dist.	6699 Jul 31 20:56	13°♒23'58	8.73624 AU
direct	6699 Oct 10 08:48	10°♒00'55	
	6699 Dec 31 12:21	15°♒	
evening set	6700 Jan 22 02:48	17°♒27'30	
conjunction	6700 Feb 08 02:32	19°♒30'19	0°32'08
minimum elong	6700 Feb 08 02:34	19°♒30'19	0°32'10
max. Earth dist.	6700 Feb 08 00:24	19°♒29'40	10.76565 AU
morning rise	6700 Feb 24 23:35	21°♒32'20	
retrograde	6700 Jun 05 07:11	28°♒45'11	
opposition	6700 Aug 13 11:34	25°♒26'02	0°23'57
min. Earth dist.	6700 Aug 13 12:17	25°♒25'54	8.79239 AU
direct	6700 Oct 23 02:25	22°♒03'40	
evening set	6701 Feb 03 06:54	29°♒25'12	
	6701 Feb 08 04:02	0°♓	
conjunction	6701 Feb 20 04:43	1°♓26'52	0°06'31
minimum elong	6701 Feb 20 04:42	1°♓26'52	0°06'33
behind sun begin	6701 Feb 19 22:06	1°♓24'54	
behind sun end	6701 Feb 20 11:19	1°♓28'51	
max. Earth dist.	6701 Feb 20 04:02	1°♓26'41	10.81645 AU
morning rise	6701 Mar 09 00:14	3°♓27'55	
desc. node	6701 May 25 09:37	10°♓11'59	
retrograde	6701 Jun 17 13:24	10°♓39'09	
opposition	6701 Aug 26 02:15	7°♓20'10	-0°07'48
min. Earth dist.	6701 Aug 26 02:15	7°♓20'10	8.83721 AU
direct	6701 Nov 04 16:16	3°♓58'45	
evening set	6702 Feb 15 07:14	11°♓16'03	
conjunction	6702 Mar 04 03:09	13°♓16'46	-0°19'18
minimum elong	6702 Mar 04 03:08	13°♓16'46	0°19'16
max. Earth dist.	6702 Mar 04 03:01	13°♓16'44	10.85481 AU
morning rise	6702 Mar 20 21:36	15°♓17'04	
retrograde	6702 Jun 29 19:33	22°♓27'52	
opposition	6702 Sep 07 15:29	19°♓08'51	-0°38'56
min. Earth dist.	6702 Sep 07 15:26	19°♓08'51	8.86892 AU
direct	6702 Nov 17 03:17	15°♓48'16	
evening set	6703 Feb 27 05:07	23°♓02'17	
conjunction	6703 Mar 15 23:22	25°♓02'16	-0°44'03
minimum elong	6703 Mar 15 23:20	25°♓02'16	0°44'02
max. Earth dist.	6703 Mar 15 23:17	25°♓02'15	10.87926 AU
morning rise	6703 Apr 01 17:04	27°♓02'05	
	6703 Apr 28 10:17	0°♈	
retrograde	6703 Jul 12 00:27	4°♈13'33	
opposition	6703 Sep 20 03:43	0°♈54'19	-1°08'17
min. Earth dist.	6703 Sep 20 03:09	0°♈54'25	8.88629 AU
	6703 Oct 02 10:11	30°℞♓	
direct	6703 Nov 29 11:18	27°♓34'25	
	6704 Jan 23 21:40	0°♈	
evening set	6704 Mar 10 01:30	4°♈46'08	
conjunction	6704 Mar 26 18:33	6°♈45'41	-1°06'53
minimum elong	6704 Mar 26 18:31	6°♈45'40	1°06'54
max. Earth dist.	6704 Mar 26 19:30	6°♈45'58	10.88892 AU
morning rise	6704 Apr 12 11:46	8°♈45'16	
retrograde	6704 Jul 23 07:23	15°♈58'32	
opposition	6704 Oct 01 15:50	12°♈38'52	-1°34'44
min. Earth dist.	6704 Oct 01 13:58	12°♈39'13	8.88865 AU
direct	6704 Dec 10 19:22	9°♈19'30	
evening set	6705 Mar 21 21:25	16°♈29'54	
conjunction	6705 Apr 07 13:50	18°♈29'18	-1°26'56
minimum elong	6705 Apr 07 13:48	18°♈29'18	1°26'58
max. Earth dist.	6705 Apr 07 16:29	18°♈30'06	10.88331 AU
morning rise	6705 Apr 24 06:57	20°♈28'58	
retrograde	6705 Aug 04 17:47	27°♈45'01	
opposition	6705 Oct 14 04:13	24°♈24'45	-1°57'16
min. Earth dist.	6705 Oct 14 01:20	24°♈25'18	8.87569 AU
direct	6705 Dec 23 00:48	21°♈05'44	
evening set	6706 Apr 02 18:23	28°♈15'50	
	6706 Apr 17 07:20	0°♉	
conjunction	6706 Apr 19 10:36	0°♉15'26	-1°43'22
minimum elong	6706 Apr 19 10:34	0°♉15'25	1°43'25
max. Earth dist.	6706 Apr 19 13:33	0°♉16'19	10.86238 AU
morning rise	6706 May 06 04:17	2°♉15'31	
retrograde	6706 Aug 17 05:12	9°♉35'10	
opposition	6706 Oct 26 17:22	6°♉14'11	-2°14'58
min. Earth dist.	6706 Oct 26 14:35	6°♉14'42	8.84747 AU
direct	6707 Jan 04 04:59	2°♉55'14	
evening set	6707 Apr 14 17:14	10°♉06'09	
conjunction	6707 May 01 09:51	12°♉06'17	-1°55'31
minimum elong	6707 May 01 09:50	12°♉06'16	1°55'33
max. Earth dist.	6707 May 01 12:17	12°♉07'01	10.82642 AU
morning rise	6707 May 18 04:52	14°♉07'07	
	6707 May 25 17:53	15°♉	
retrograde	6707 Aug 29 19:49	21°♉31'11	
opposition	6707 Nov 08 08:12	18°♉09'22	-2°27'02
min. Earth dist.	6707 Nov 08 05:52	18°♉09'48	8.80437 AU
	6708 Jan 02 16:46	15°℞♉	
direct	6708 Jan 16 12:07	14°♉50'17	
	6708 Jan 30 05:23	15°♉	
evening set	6708 Apr 25 18:52	22°♉03'02	
conjunction	6708 May 12 12:51	24°♉04'07	-2°02'45
minimum elong	6708 May 12 12:50	24°♉04'07	2°02'47
max. Earth dist.	6708 May 12 15:19	24°♉04'52	10.77622 AU
morning rise	6708 May 29 09:52	26°♉06'06	
	6708 Jul 04 02:03	0°♊	
retrograde	6708 Sep 10 14:46	3°♊35'16	
opposition	6708 Nov 20 01:05	0°♊12'30	-2°32'50
min. Earth dist.	6708 Nov 19 22:37	0°♊12'58	8.74782 AU
	6708 Nov 22 18:55	30°℞♉	
direct	6709 Jan 27 20:15	26°♉53'06	

	6709 Mar 30	20:10	0°♊	
evening set	6709 May 08	00:39	4°♊08'39	
conjunction	6709 May 24	20:57	6°♊11'05	-2°04'38
minimum elong	6709 May 24	20:58	6°♊11'05	2°04'41
max. Earth dist.	6709 May 25	00:20	6°♊12'07	10.71395 AU
morning rise	6709 Jun 10	20:36	8°♊14'34	
retrograde	6709 Sep 23	13:52	15°♊49'12	
opposition	6709 Dec 02	20:14	12°♊25'26	-2°31'53
min. Earth dist.	6709 Dec 02	17:07	12°♊26'01	8.68067 AU
direct	6710 Feb 09	07:00	9°♊05'28	
evening set	6710 May 20	11:32	16°♊24'41	
conjunction	6710 Jun 06	10:52	18°♊28'49	-2°00'53
minimum elong	6710 Jun 06	10:53	18°♊28'49	2°00'56
max. Earth dist.	6710 Jun 06	14:37	18°♊29'58	10.64295 AU
morning rise	6710 Jun 23	13:51	20°♊34'05	
retrograde	6710 Oct 06	19:06	28°♊14'16	
opposition	6710 Dec 15	18:21	24°♊49'30	-2°23'54
min. Earth dist.	6710 Dec 15	14:58	24°♊50'09	8.60645 AU
direct	6711 Feb 21	20:12	21°♊28'48	
evening set	6711 Jun 02	04:11	28°♊52'21	
	6711 Jun 11	09:44	0°♋	
conjunction	6711 Jun 19	07:04	0°♋58'25	-1°51'25
minimum elong	6711 Jun 19	07:06	0°♋58'25	1°51'28
max. Earth dist.	6711 Jun 19	10:25	0°♋59'27	10.56686 AU
morning rise	6711 Jul 06	14:02	3°♋05'43	
retrograde	6711 Oct 20	03:57	10°♋51'19	
opposition	6711 Dec 28	19:34	7°♋25'36	-2°08'56
min. Earth dist.	6711 Dec 28	16:36	7°♋26'10	8.52892 AU
direct	6712 Mar 05	12:43	4°♋03'58	
evening set	6712 Jun 14	03:27	11°♋32'29	
conjunction	6712 Jul 01	10:26	13°♋40'39	-1°36'25
minimum elong	6712 Jul 01	10:29	13°♋40'40	1°36'29
max. Earth dist.	6712 Jul 01	13:08	13°♋41'29	10.48949 AU
morning rise	6712 Jul 18	21:42	15°♋50'07	
retrograde	6712 Nov 01	15:52	23°♋40'41	
opposition	6713 Jan 09	23:46	20°♋14'07	-1°47'20
min. Earth dist.	6713 Jan 09	21:32	20°♋14'34	8.45196 AU
direct	6713 Mar 18	10:58	16°♋51'27	
evening set	6713 Jun 27	09:42	24°♋25'22	
conjunction	6713 Jul 14	21:06	26°♋35'44	-1°16'22
minimum elong	6713 Jul 14	21:09	26°♋35'45	1°16'26
max. Earth dist.	6713 Jul 14	23:44	26°♋36'33	10.41453 AU
morning rise	6713 Aug 01	12:34	28°♋47'20	
	6713 Aug 11	13:28	0°♌	
retrograde	6713 Nov 15	07:38	6°♌42'17	
opposition	6714 Jan 23	06:58	3°♌15'01	-1°19'53
min. Earth dist.	6714 Jan 23	04:58	3°♌15'25	8.37926 AU
	6714 Mar 18	22:09	30°℞♋	
direct	6714 Mar 31	14:05	29°♋51'16	
	6714 Apr 13	03:32	0°♌	
evening set	6714 Jul 10	23:06	7°♌30'48	
conjunction	6714 Jul 28	14:44	9°♌43'16	-0°52'06
minimum elong	6714 Jul 28	14:46	9°♌43'17	0°52'09
max. Earth dist.	6714 Jul 28	17:30	9°♌44'08	10.34555 AU
morning rise	6714 Aug 15	09:52	11°♌56'50	
	6714 Sep 10	11:02	15°♌	
retrograde	6714 Nov 29	04:07	19°♌55'20	
opposition	6715 Feb 05	16:59	16°♌27'34	-0°47'48
min. Earth dist.	6715 Feb 05	14:55	16°♌27'59	8.31446 AU
	6715 Feb 24	11:27	15°℞♌	
direct	6715 Apr 13	20:15	13°♌02'45	

	6715 May 31	01:25	15°♌	
evening set	6715 Jul 24	19:35	20°♌47'55	
conjunction	6715 Aug 11	14:54	23°♌02'14	-0°24'45
minimum elong	6715 Aug 11	14:55	23°♌02'14	0°24'48
max. Earth dist.	6715 Aug 11	17:30	23°♌03'03	10.28619 AU
morning rise	6715 Aug 29	12:59	25°♌17'27	
	6715 Oct 10	11:55	0°♍	
retrograde	6715 Dec 13	02:46	3°♍18'28	
	6716 Feb 17	06:12	30°℞♌	
opposition	6716 Feb 19	05:33	29°♌50'25	-0°12'40
min. Earth dist.	6716 Feb 19	03:39	29°♌50'48	8.26106 AU
direct	6716 Apr 26	07:18	26°♌24'34	
asc. node	6716 Jun 30	17:28	29°♌59'59	
	6716 Jun 30	17:30	0°♍	
evening set	6716 Aug 06	22:32	4°♍15'10	
conjunction	6716 Aug 24	20:35	6°♍30'55	0°04'19
minimum elong	6716 Aug 24	20:36	6°♍30'55	0°04'18
behind sun begin	6716 Aug 24	13:25	6°♍28'40	
behind sun end	6716 Aug 25	03:47	6°♍33'11	
max. Earth dist.	6716 Aug 24	22:07	6°♍31'22	10.23961 AU
morning rise	6716 Sep 11	20:39	8°♍47'20	
retrograde	6716 Dec 26	02:32	16°♍49'41	
opposition	6717 Mar 03	20:17	13°♍21'38	0°23'33
min. Earth dist.	6717 Mar 03	19:19	13°♍21'50	8.22196 AU
direct	6717 May 09	22:54	9°♍54'50	
evening set	6717 Aug 21	06:51	17°♍50'20	
conjunction	6717 Sep 08	06:29	20°♍07'01	0°33'14
minimum elong	6717 Sep 08	06:27	20°♍07'00	0°33'14
max. Earth dist.	6717 Sep 08	06:29	20°♍07'01	10.20839 AU
morning rise	6717 Sep 26	07:13	22°♍24'03	
	6717 Dec 18	00:05	0°♎	
retrograde	6718 Jan 09	02:24	0°♎26'28	
	6718 Jan 31	04:53	30°℞♍	
opposition	6718 Mar 17	12:31	26°♍58'40	0°58'44
min. Earth dist.	6718 Mar 17	12:40	26°♍58'38	8.19945 AU
direct	6718 May 23	17:45	23°♍31'05	
	6718 Aug 23	11:03	0°♎	
evening set	6718 Sep 04	18:48	1°♎30'36	
conjunction	6718 Sep 22	18:50	3°♎47'38	1°00'29
minimum elong	6718 Sep 22	18:47	3°♎47'37	1°00'29
max. Earth dist.	6718 Sep 22	17:30	3°♎47'12	10.19451 AU
morning rise	6718 Oct 10	19:02	6°♎04'42	
retrograde	6719 Jan 23	01:43	14°♎05'51	
opposition	6719 Mar 31	05:38	10°♎38'34	1°30'41
min. Earth dist.	6719 Mar 31	06:38	10°♎38'22	8.19501 AU
direct	6719 Jun 06	16:13	7°♎10'26	
evening set	6719 Sep 19	08:24	15°♎12'44	
conjunction	6719 Oct 07	07:46	17°♎29'32	1°24'20
minimum elong	6719 Oct 07	07:43	17°♎29'31	1°24'21
max. Earth dist.	6719 Oct 07	05:34	17°♎28'50	10.19893 AU
morning rise	6719 Oct 25	06:16	19°♎46'04	
retrograde	6720 Feb 05	22:14	27°♎44'41	
opposition	6720 Apr 12	22:46	24°♎18'07	1°57'29
min. Earth dist.	6720 Apr 13	00:04	24°♎17'51	8.20890 AU
direct	6720 Jun 19	17:00	20°♎49'42	
evening set	6720 Oct 02	21:47	28°♎53'21	
	6720 Oct 11	17:34	0°♏	
conjunction	6720 Oct 20	19:32	1°♏09'23	1°43'22
minimum elong	6720 Oct 20	19:29	1°♏09'22	1°43'24
max. Earth dist.	6720 Oct 20	17:09	1°♏08'37	10.22144 AU
morning rise	6720 Nov 07	15:20	3°♏24'51	

retrograde	6721 Feb 18 15:58	11°♏19'45	
opposition	6721 Apr 26 15:07	7°♏54'06	2°17'32
min. Earth dist.	6721 Apr 26 16:23	7°♏53'50	8.24033 AU
direct	6721 Jul 03 18:01	4°♏25'41	
evening set	6721 Oct 17 08:34	12°♏29'02	
conjunction	6721 Nov 04 03:58	14°♏43'53	1°56'32
minimum elong	6721 Nov 04 03:56	14°♏43'52	1°56'35
max. Earth dist.	6721 Nov 04 01:39	14°♏43'08	10.26082 AU
	6721 Nov 06 06:41	15°♏	
morning rise	6721 Nov 21 20:30	16°♏57'54	
retrograde	6722 Mar 04 07:14	24°♏48'05	
opposition	6722 May 10 06:08	21°♏23'28	2°29'46
min. Earth dist.	6722 May 10 07:39	21°♏23'09	8.28755 AU
direct	6722 Jul 17 17:01	17°♏55'18	
evening set	6722 Oct 31 14:42	25°♏56'39	
conjunction	6722 Nov 18 07:19	28°♏10'01	2°03'12
minimum elong	6722 Nov 18 07:18	28°♏10'00	2°03'16
max. Earth dist.	6722 Nov 18 04:51	28°♏09'14	10.31487 AU
	6722 Dec 02 20:32	0°♐	
morning rise	6722 Dec 05 20:26	0°♐22'20	
retrograde	6723 Mar 17 18:11	8°♐07'01	
opposition	6723 May 23 19:02	4°♐43'30	2°33'45
min. Earth dist.	6723 May 23 21:11	4°♐43'04	8.34784 AU
direct	6723 Jul 31 15:03	1°♐15'48	
evening set	6723 Nov 14 14:57	9°♐13'40	
conjunction	6723 Dec 02 04:34	11°♐25'19	2°03'13
minimum elong	6723 Dec 02 04:34	11°♐25'19	2°03'16
max. Earth dist.	6723 Dec 02 01:28	11°♐24'21	10.38049 AU
morning rise	6723 Dec 19 14:23	13°♐35'51	
retrograde	6724 Mar 29 22:43	21°♐14'31	
opposition	6724 Jun 05 05:02	17°♐52'07	2°29'34
min. Earth dist.	6724 Jun 05 07:57	17°♐51'32	8.41778 AU
direct	6724 Aug 13 11:17	14°♐25'02	
evening set	6724 Nov 27 08:02	22°♐18'10	
conjunction	6724 Dec 14 18:40	24°♐28'01	1°56'50
minimum elong	6724 Dec 14 18:41	24°♐28'02	1°56'54
max. Earth dist.	6724 Dec 14 14:47	24°♐26'49	10.45400 AU
morning rise	6725 Jan 01 01:29	26°♐36'43	
	6725 Jan 30 13:19	0°♑	
retrograde	6725 Apr 11 22:17	4°♑09'20	
opposition	6725 Jun 18 11:59	0°♑47'56	2°17'49
min. Earth dist.	6725 Jun 18 14:50	0°♑47'22	8.49348 AU
	6725 Jun 28 18:49	30°℞♐	
direct	6725 Aug 27 04:02	27°♐21'38	
	6725 Oct 23 14:09	0°♑	
evening set	6725 Dec 10 17:12	5°♑09'03	
conjunction	6725 Dec 28 01:05	7°♑17'08	1°44'42
minimum elong	6725 Dec 28 01:07	7°♑17'09	1°44'45
max. Earth dist.	6725 Dec 27 21:20	7°♑15'58	10.53129 AU
morning rise	6726 Jan 14 05:11	9°♑24'04	
retrograde	6726 Apr 24 18:09	16°♑50'54	
opposition	6726 Jul 01 15:25	13°♑30'20	1°59'30
min. Earth dist.	6726 Jul 01 17:47	13°♑29'52	8.57065 AU
direct	6726 Sep 09 15:17	10°♑04'56	
evening set	6726 Dec 23 18:47	17°♑46'09	
conjunction	6727 Jan 10 00:11	19°♑52'34	1°27'40
minimum elong	6727 Jan 10 00:13	19°♑52'34	1°27'43
max. Earth dist.	6727 Jan 09 20:59	19°♑51'34	10.60779 AU
morning rise	6727 Jan 27 01:49	21°♑57'50	
retrograde	6727 May 07 09:20	29°♑19'28	
opposition	6727 Jul 14 15:16	25°♑59'37	1°35'49
min. Earth dist.	6727 Jul 14 17:23	25°♑59'13	8.64465 AU
direct	6727 Sep 22 21:49	22°♑35'09	
	6728 Jan 04 02:55	0°♒	
evening set	6728 Jan 05 13:16	0°♒10'16	
conjunction	6728 Jan 22 16:20	2°♒15'06	1°06'46
minimum elong	6728 Jan 22 16:22	2°♒15'07	1°06'49
max. Earth dist.	6728 Jan 22 13:31	2°♒14'15	10.67889 AU
morning rise	6728 Feb 08 15:47	4°♒18'55	
retrograde	6728 May 18 22:00	11°♒36'21	
opposition	6728 Jul 26 12:17	8°♒17'03	1°08'06
min. Earth dist.	6728 Jul 26 14:49	8°♒16'34	8.71140 AU
direct	6728 Oct 04 22:59	4°♒53'34	
evening set	6729 Jan 17 01:24	12°♒22'56	
conjunction	6729 Feb 03 02:07	14°♒26'24	0°43'06
minimum elong	6729 Feb 03 02:09	14°♒26'24	0°43'08
max. Earth dist.	6729 Feb 02 22:58	14°♒25'26	10.74115 AU
	6729 Feb 07 16:39	15°♒	
morning rise	6729 Feb 19 23:50	16°♒28'59	
retrograde	6729 May 31 07:38	23°♒43'19	
opposition	6729 Aug 08 06:43	20°♒24'23	0°37'44
min. Earth dist.	6729 Aug 08 09:28	20°♒23'52	8.76835 AU
direct	6729 Oct 17 18:54	17°♒01'50	
evening set	6730 Jan 29 08:21	24°♒26'04	
conjunction	6730 Feb 15 06:55	26°♒28'19	0°17'47
minimum elong	6730 Feb 15 06:56	26°♒28'20	0°17'49
max. Earth dist.	6730 Feb 15 03:35	26°♒27'19	10.79269 AU
morning rise	6730 Mar 04 03:15	28°♒29'54	
	6730 Mar 17 02:15	0°♓	
retrograde	6730 Jun 12 13:31	5°♓42'16	
opposition	6730 Aug 20 22:46	2°♓23'27	0°06'05
min. Earth dist.	6730 Aug 21 01:03	2°♓23'02	8.81390 AU
	6730 Sep 25 08:48	30°℞♒	
direct	6730 Oct 30 12:53	29°♒01'44	
desc. node	6730 Oct 31 22:22	29°♒01'50	
	6730 Dec 04 02:01	0°♓	
evening set	6731 Feb 10 11:00	6°♓21'33	
conjunction	6731 Feb 27 07:46	8°♓22'48	-0°08'10
minimum elong	6731 Feb 27 07:45	8°♓22'48	0°08'08
behind sun begin	6731 Feb 27 01:30	8°♓20'56	
behind sun end	6731 Feb 27 14:00	8°♓24'40	
max. Earth dist.	6731 Feb 27 05:17	8°♓22'05	10.83197 AU
morning rise	6731 Mar 16 02:50	10°♓23'34	
retrograde	6731 Jun 24 20:49	17°♓35'07	
opposition	6731 Sep 02 13:12	14°♓16'10	-0°25'33
min. Earth dist.	6731 Sep 02 14:06	14°♓16'00	8.84656 AU
direct	6731 Nov 12 03:00	10°♓55'11	
evening set	6732 Feb 22 10:28	18°♓11'21	
conjunction	6732 Mar 10 05:37	20°♓11'50	-0°33'29
minimum elong	6732 Mar 10 05:36	20°♓11'50	0°33'29
max. Earth dist.	6732 Mar 10 04:53	20°♓11'37	10.85762 AU
morning rise	6732 Mar 26 23:36	22°♓12'02	
retrograde	6732 Jul 06 03:44	29°♓23'52	
opposition	6732 Sep 14 02:34	26°♓04'35	-0°55'54
min. Earth dist.	6732 Sep 14 02:30	26°♓04'35	8.86527 AU
direct	6732 Nov 23 12:07	22°♓44'10	
evening set	6733 Mar 05 08:00	29°♓57'38	
	6733 Mar 05 16:01	0°♈	
conjunction	6733 Mar 22 01:44	1°♈57'35	-0°57'20
minimum elong	6733 Mar 22 01:42	1°♈57'35	0°57'20
max. Earth dist.	6733 Mar 22 01:46	1°♈57'36	10.86890 AU
morning rise	6733 Apr 07 19:06	3°♈57'29	

retrograde	6733 Jul 18	10:24	11°♈10'43	
opposition	6733 Sep 26	15:21	7°♈50'54	-1°23'49
min. Earth dist.	6733 Sep 26	14:57	7°♈50'58	8.86955 AU
direct	6733 Dec 05	20:23	4°♈30'53	
evening set	6734 Mar 17	04:37	11°♈42'42	
conjunction	6734 Apr 02	21:18	13°♈42'24	-1°18'44
minimum elong	6734 Apr 02	21:16	13°♈42'23	1°18'46
max. Earth dist.	6734 Apr 02	21:28	13°♈42'27	10.86557 AU
morning rise	6734 Apr 19	14:36	15°♈42'16	
retrograde	6734 Jul 30	18:48	22°♈57'56	
opposition	6734 Oct 09	04:09	19°♈37'27	-1°48'14
min. Earth dist.	6734 Oct 09	03:28	19°♈37'35	8.85923 AU
direct	6734 Dec 18	03:11	16°♈17'41	
evening set	6735 Mar 29	01:30	23°♈28'53	
conjunction	6735 Apr 14	17:44	25°♈28'38	-1°36'52
minimum elong	6735 Apr 14	17:42	25°♈28'38	1°36'54
max. Earth dist.	6735 Apr 14	18:52	25°♈28'59	10.84770 AU
morning rise	6735 May 01	11:21	27°♈28'49	
	6735 May 23	19:21	0°♉	
retrograde	6735 Aug 12	04:41	4°♉47'52	
opposition	6735 Oct 21	17:32	1°♉26'35	-2°08'11
min. Earth dist.	6735 Oct 21	15:41	1°♉26'55	8.83461 AU
	6735 Nov 10	13:53	30°℞♈	
direct	6735 Dec 30	09:33	28°♈06'56	
	6736 Feb 16	09:31	0°♉	
evening set	6736 Apr 08	23:46	5°♉18'32	
conjunction	6736 Apr 25	16:21	7°♉18'43	-1°50'58
minimum elong	6736 Apr 25	16:19	7°♉18'43	1°51'00
max. Earth dist.	6736 Apr 25	19:06	7°♉19'33	10.81596 AU
morning rise	6736 May 12	10:47	9°♉19'30	
	6736 Jul 08	13:07	15°♉	
retrograde	6736 Aug 23	19:40	16°♉42'47	
	6736 Oct 10	09:35	15°℞♉	
opposition	6736 Nov 02	08:12	13°♉20'37	-2°22'48
min. Earth dist.	6736 Nov 02	05:05	13°♉21'12	8.79659 AU
direct	6737 Jan 10	16:58	10°♉00'56	
	6737 Apr 01	12:06	15°♉	
evening set	6737 Apr 21	00:32	17°♉13'54	
conjunction	6737 May 07	18:07	19°♉14'53	-2°00'22
minimum elong	6737 May 07	18:06	19°♉14'52	2°00'25
max. Earth dist.	6737 May 07	21:50	19°♉16'00	10.77155 AU
morning rise	6737 May 24	14:12	21°♉16'39	
retrograde	6737 Sep 05	14:21	28°♉44'43	
opposition	6737 Nov 15	00:40	25°♉21'39	-2°31'21
min. Earth dist.	6737 Nov 14	21:01	25°♉22'21	8.74655 AU
direct	6738 Jan 22	23:11	22°♉01'46	
evening set	6738 May 03	05:06	29°♉17'04	
	6738 May 09	03:59	0°♊	
conjunction	6738 May 20	00:22	1°♊19'11	-2°04'35
minimum elong	6738 May 20	00:22	1°♊19'11	2°04'37
max. Earth dist.	6738 May 20	03:46	1°♊20'13	10.71617 AU
morning rise	6738 Jun 05	22:54	3°♊22'17	
retrograde	6738 Sep 18	11:32	10°♊55'33	
opposition	6738 Nov 27	19:21	7°♊31'35	-2°33'16
min. Earth dist.	6738 Nov 27	16:01	7°♊32'14	8.68652 AU
direct	6739 Feb 04	08:42	4°♊11'18	
evening set	6739 May 15	14:08	11°♊29'50	
conjunction	6739 Jun 01	12:00	13°♊33'27	-2°03'12
minimum elong	6739 Jun 01	12:01	13°♊33'27	2°03'15
max. Earth dist.	6739 Jun 01	15:37	13°♊34'34	10.65224 AU
morning rise	6739 Jun 18	13:42	15°♊38'11	

retrograde	6739 Oct 01	13:38	23°♊16'54	
opposition	6739 Dec 10	16:51	19°♊52'03	-2°28'13
min. Earth dist.	6739 Dec 10	13:26	19°♊52'43	8.61920 AU
direct	6740 Feb 16	22:23	16°♊31'13	
evening set	6740 May 27	04:34	23°♊53'41	
conjunction	6740 Jun 13	05:56	25°♊59'06	-1°56'05
minimum elong	6740 Jun 13	05:57	25°♊59'07	1°56'08
max. Earth dist.	6740 Jun 13	10:26	26°♊00'30	10.58260 AU
morning rise	6740 Jun 30	11:17	28°♊05'45	
	6740 Jul 16	16:25	0°♋	
retrograde	6740 Oct 13	21:07	5°♋49'51	
opposition	6740 Dec 22	17:15	2°♋24'11	-2°16'04
min. Earth dist.	6740 Dec 22	13:20	2°♋24'57	8.54762 AU
	6741 Jan 26	02:29	30°℞♊	
direct	6741 Feb 28	14:21	29°♊02'41	
	6741 Apr 02	12:36	0°♋	
evening set	6741 Jun 09	01:29	6°♋29'44	
conjunction	6741 Jun 26	06:54	8°♋37'11	-1°43'18
minimum elong	6741 Jun 26	06:57	8°♋37'11	1°43'22
max. Earth dist.	6741 Jun 26	12:12	8°♋38'49	10.51044 AU
morning rise	6741 Jul 13	16:16	10°♋45'53	
retrograde	6741 Oct 27	08:49	18°♋35'03	
opposition	6742 Jan 04	20:33	15°♋08'40	-1°57'05
min. Earth dist.	6742 Jan 04	16:08	15°♋09'32	8.47523 AU
direct	6742 Mar 13	10:31	11°♋46'25	
evening set	6742 Jun 22	05:23	19°♋18'33	
conjunction	6742 Jul 09	15:01	21°♋28'08	-1°25'13
minimum elong	6742 Jul 09	15:04	21°♋28'08	1°25'17
max. Earth dist.	6742 Jul 09	20:02	21°♋29'42	10.43937 AU
morning rise	6742 Jul 27	04:35	23°♋38'56	
	6742 Sep 28	00:13	0°♌	
retrograde	6742 Nov 10	01:07	1°♌32'38	
	6742 Dec 23	15:13	30°℞♋	
opposition	6743 Jan 18	03:09	28°♋05'42	-1°31'52
min. Earth dist.	6743 Jan 17	23:04	28°♋06'31	8.40576 AU
direct	6743 Mar 26	10:39	24°♋42'36	
	6743 Jun 15	23:54	0°♌	
evening set	6743 Jul 05	16:20	2°♌20'06	
conjunction	6743 Jul 23	06:08	4°♌31'46	-1°02'32
minimum elong	6743 Jul 23	06:11	4°♌31'46	1°02'36
max. Earth dist.	6743 Jul 23	10:19	4°♌33'04	10.37309 AU
morning rise	6743 Aug 09	23:46	6°♌44'35	
retrograde	6743 Nov 23	21:14	14°♌42'01	
opposition	6744 Jan 31	12:45	11°♌14'43	-1°01'27
min. Earth dist.	6744 Jan 31	09:32	11°♌15'21	8.34290 AU
direct	6744 Apr 07	15:20	7°♌50'41	
	6744 Jul 13	20:51	15°♌	
evening set	6744 Jul 18	10:35	15°♌33'41	
conjunction	6744 Aug 05	04:15	17°♌47'13	-0°36'16
minimum elong	6744 Aug 05	04:16	17°♌47'14	0°36'19
max. Earth dist.	6744 Aug 05	07:21	17°♌48'12	10.31500 AU
morning rise	6744 Aug 23	01:18	20°♌01'47	
retrograde	6744 Dec 06	18:20	28°♌01'54	
opposition	6745 Feb 13	00:45	24°♌34'24	-0°27'20
min. Earth dist.	6745 Feb 12	22:35	24°♌34'51	8.28987 AU
direct	6745 Apr 21	02:16	21°♌09'25	
evening set	6745 Aug 01	11:25	28°♌57'45	
	6745 Aug 09	18:18	0°♍	
conjunction	6745 Aug 19	08:17	1°♍12'51	-0°07'48
minimum elong	6745 Aug 19	08:17	1°♍12'51	0°07'50
behind sun begin	6745 Aug 19	01:45	1°♍10'48	

behind sun end	6745 Aug 19 14:49	1°♍14'54		
max. Earth dist.	6745 Aug 19 10:29	1°♍13'31	10.26790 AU	
morning rise	6745 Sep 06 07:42	3°♍28'43		
asc. node	6745 Nov 28 01:34	11°♍02'59		
retrograde	6745 Dec 20 16:51	11°♍30'25		
opposition	6746 Feb 26 14:56	8°♍02'53	0°08'41	
min. Earth dist.	6746 Feb 26 13:27	8°♍03'11	8.24906 AU	
direct	6746 May 04 17:17	4°♍37'00		
evening set	6746 Aug 15 17:38	12°♍30'10		
conjunction	6746 Sep 02 16:41	14°♍46'21	0°21'27	
minimum elong	6746 Sep 02 16:40	14°♍46'21	0°21'26	
max. Earth dist.	6746 Sep 02 18:10	14°♍46'49	10.23368 AU	
morning rise	6746 Sep 20 17:12	17°♍03'02		
retrograde	6747 Jan 03 16:48	25°♍05'09		
opposition	6747 Mar 12 06:39	21°♍37'47	0°44'31	
min. Earth dist.	6747 Mar 12 05:43	21°♍37'58	8.22192 AU	
direct	6747 May 18 10:44	18°♍11'06		
evening set	6747 Aug 30 04:14	26°♍08'31		
conjunction	6747 Sep 17 04:17	28°♍25'18	0°49'35	
minimum elong	6747 Sep 17 04:15	28°♍25'17	0°49'34	
max. Earth dist.	6747 Sep 17 04:32	28°♍25'23	10.21357 AU	
	6747 Sep 29 14:08	0°♎		
morning rise	6747 Oct 05 04:40	0°♎42'14		
retrograde	6748 Jan 17 17:43	8°♎43'38		
opposition	6748 Mar 24 23:18	5°♎16'40	1°18'00	
min. Earth dist.	6748 Mar 24 23:18	5°♎16'40	8.20972 AU	
direct	6748 May 31 06:47	1°♎49'21		
evening set	6748 Sep 12 17:32	9°♎50'10		
conjunction	6748 Sep 30 17:20	12°♎06'59	1°14'59	
minimum elong	6748 Sep 30 17:17	12°♎06'58	1°15'00	
max. Earth dist.	6748 Sep 30 16:11	12°♎06'37	10.20915 AU	
morning rise	6748 Oct 18 16:25	14°♎23'38		
retrograde	6749 Jan 30 15:54	22°♎23'06		
opposition	6749 Apr 07 16:32	18°♎56'44	1°47'06	
min. Earth dist.	6749 Apr 07 17:39	18°♎56'30	8.21408 AU	
direct	6749 Jun 14 06:28	15°♎28'57		
evening set	6749 Sep 27 07:17	23°♎31'50		
conjunction	6749 Oct 15 05:42	25°♎48'06	1°36'08	
minimum elong	6749 Oct 15 05:39	25°♎48'05	1°36'11	
max. Earth dist.	6749 Oct 15 03:05	25°♎47'17	10.22177 AU	
morning rise	6749 Nov 02 02:30	28°♎03'55		
	6749 Nov 18 00:21	0°♏		
retrograde	6750 Feb 13 10:57	6°♏00'14		
opposition	6750 Apr 21 09:24	2°♏34'37	2°10'05	
min. Earth dist.	6750 Apr 21 11:43	2°♏34'09	8.23565 AU	
	6750 May 27 08:31	30°℞♎		
direct	6750 Jun 28 07:23	29°♎06'34		
	6750 Jul 30 02:55	0°♏		
evening set	6750 Oct 11 19:20	7°♏09'55		
conjunction	6750 Oct 29 15:34	9°♏25'10	1°51'49	
minimum elong	6750 Oct 29 15:32	9°♏25'10	1°51'52	
max. Earth dist.	6750 Oct 29 11:40	9°♏23'56	10.25143 AU	
morning rise	6750 Nov 16 09:30	11°♏39'44		
	6750 Dec 14 18:13	15°♏		
retrograde	6751 Feb 27 02:37	19°♏31'43		
opposition	6751 May 05 00:54	16°♏06'57	2°25'38	
min. Earth dist.	6751 May 05 03:49	16°♏06'22	8.27360 AU	
	6751 May 19 02:51	15°℞♏		
direct	6751 Jul 12 07:52	12°♏38'51		
	6751 Sep 03 09:05	15°♏		
evening set	6751 Oct 26 03:29	20°♏40'56		

conjunction	6751 Nov 12 21:08	22°♏54'51	2°01'13	
minimum elong	6751 Nov 12 21:07	22°♏54'51	2°01'17	
max. Earth dist.	6751 Nov 12 16:42	22°♏53'27	10.29661 AU	
morning rise	6751 Nov 30 11:49	25°♏07'51		
	6752 Jan 13 06:02	0°♐		
retrograde	6752 Mar 11 14:07	2°♐54'36		
	6752 May 11 11:48	30°℞♏		
opposition	6752 May 17 14:26	29°♏30'44	2°33'04	
min. Earth dist.	6752 May 17 17:22	29°♏30'08	8.32561 AU	
direct	6752 Jul 25 07:43	26°♏02'49		
	6752 Oct 03 22:06	0°♐		
evening set	6752 Nov 08 06:02	4°♐02'01		
conjunction	6752 Nov 25 20:51	6°♐14'20	2°03'59	
minimum elong	6752 Nov 25 20:51	6°♐14'20	2°04'03	
max. Earth dist.	6752 Nov 25 16:35	6°♐13'00	10.35455 AU	
morning rise	6752 Dec 13 08:08	8°♐25'35		
retrograde	6753 Mar 24 20:07	16°♐06'32		
opposition	6753 May 31 01:16	12°♐43'34	2°32'15	
min. Earth dist.	6753 May 31 03:53	12°♐43'03	8.38866 AU	
direct	6753 Aug 08 05:10	9°♐16'04		
evening set	6753 Nov 22 01:37	17°♐11'00		
conjunction	6753 Dec 09 13:37	19°♐21'35	2°00'14	
minimum elong	6753 Dec 09 13:38	19°♐21'35	2°00'18	
max. Earth dist.	6753 Dec 09 09:59	19°♐20'26	10.42200 AU	
morning rise	6753 Dec 26 21:37	21°♐31'00		
retrograde	6754 Apr 06 22:22	29°♐05'56		
opposition	6754 Jun 13 09:00	25°♐43'50	2°23'35	
min. Earth dist.	6754 Jun 13 11:40	25°♐43'18	8.45927 AU	
direct	6754 Aug 21 21:52	22°♐16'55		
	6754 Dec 04 16:08	0°♑		
evening set	6754 Dec 05 13:32	0°♑06'30		
conjunction	6754 Dec 22 22:46	2°♑15'21	1°50'25	
minimum elong	6754 Dec 22 22:47	2°♑15'21	1°50'28	
max. Earth dist.	6754 Dec 22 19:21	2°♑14'17	10.49524 AU	
morning rise	6755 Jan 09 03:53	4°♑22'59		
retrograde	6755 Apr 19 20:23	11°♑52'00		
opposition	6755 Jun 26 13:25	8°♑30'43	2°07'54	
min. Earth dist.	6755 Jun 26 16:31	8°♑30'07	8.53368 AU	
direct	6755 Sep 04 09:32	5°♑04'31		
evening set	6755 Dec 18 17:54	12°♑48'11		
conjunction	6756 Jan 05 00:22	14°♑55'18	1°35'20	
minimum elong	6756 Jan 05 00:24	14°♑55'18	1°35'23	
max. Earth dist.	6756 Jan 04 20:36	14°♑54'08	10.57045 AU	
morning rise	6756 Jan 22 03:00	17°♑01'16		
retrograde	6756 May 01 11:16	24°♑24'47		
opposition	6756 Jul 08 14:19	21°♑04'15	1°46'20	
min. Earth dist.	6756 Jul 08 17:30	21°♑03'38	8.60822 AU	
direct	6756 Sep 16 18:20	17°♑38'54		
evening set	6756 Dec 30 14:47	25°♑16'25		
conjunction	6757 Jan 16 18:43	27°♑21'53	1°15'57	
minimum elong	6757 Jan 16 18:45	27°♑21'54	1°15'59	
max. Earth dist.	6757 Jan 16 14:56	27°♑20'43	10.64406 AU	
morning rise	6757 Feb 02 19:14	29°♑26'19		
	6757 Feb 07 12:10	0°♒		
retrograde	6757 May 13 23:27	6°♒45'09		
opposition	6757 Jul 21 11:59	3°♒25'12	1°20'11	
min. Earth dist.	6757 Jul 21 14:23	3°♒24'45	8.67944 AU	
direct	6757 Sep 29 22:35	0°♒00'50		
evening set	6758 Jan 12 04:43	7°♒32'16		
conjunction	6758 Jan 29 06:26	9°♒36'15	0°53'21	
minimum elong	6758 Jan 29 06:28	9°♒36'16	0°53'23	

max. Earth dist.	6758 Jan 29 03:40	9°♒35'25	10.71266 AU
morning rise	6758 Feb 15 05:02	11°♒39'19	
	6758 Mar 17 04:41	15°♒	
retrograde	6758 May 26 09:52	18°♒54'24	
opposition	6758 Aug 03 06:36	15°♒34'54	0°50'49
min. Earth dist.	6758 Aug 03 07:49	15°♒34'41	8.74407 AU
	6758 Aug 10 23:16	15°℞♒	
direct	6758 Oct 12 20:25	12°♒11'35	
	6758 Dec 11 20:34	15°♒	
evening set	6759 Jan 24 13:00	19°♒37'22	
conjunction	6759 Feb 10 12:39	21°♒40'02	0°28'39
minimum elong	6759 Feb 10 12:40	21°♒40'03	0°28'41
max. Earth dist.	6759 Feb 10 11:14	21°♒39'37	10.77307 AU
morning rise	6759 Feb 27 09:29	23°♒41'55	
	6759 May 05 23:16	0°♓	
retrograde	6759 Jun 07 17:05	0°♓54'19	
	6759 Jul 11 02:28	30°℞♒	
opposition	6759 Aug 15 22:39	27°♒35'09	0°19'37
min. Earth dist.	6759 Aug 15 23:20	27°♒35'01	8.79928 AU
direct	6759 Oct 25 13:17	24°♒12'49	
	6760 Jan 23 03:35	0°♓	
evening set	6760 Feb 05 16:36	1°♓33'41	
conjunction	6760 Feb 22 14:11	3°♓35'12	0°03'00
minimum elong	6760 Feb 22 14:11	3°♓35'12	0°03'02
behind sun begin	6760 Feb 22 07:11	3°♓33'07	
behind sun end	6760 Feb 22 21:12	3°♓37'17	
max. Earth dist.	6760 Feb 22 13:21	3°♓34'59	10.82275 AU
morning rise	6760 Mar 10 09:37	5°♓36'07	
desc. node	6760 Apr 05 11:29	8°♓30'53	
retrograde	6760 Jun 18 23:27	12°♓47'01	
opposition	6760 Aug 27 12:59	9°♓28'00	-0°12'04
min. Earth dist.	6760 Aug 27 13:35	9°♓27'53	8.84286 AU
direct	6760 Nov 06 03:01	6°♓06'35	
evening set	6761 Feb 16 16:26	13°♓23'19	
conjunction	6761 Mar 05 12:06	15°♓23'54	-0°22'42
minimum elong	6761 Mar 05 12:05	15°♓23'54	0°22'41
max. Earth dist.	6761 Mar 05 11:16	15°♓23'39	10.85974 AU
morning rise	6761 Mar 22 06:32	17°♓24'07	
retrograde	6761 Jul 01 04:10	24°♓34'41	
opposition	6761 Sep 09 01:53	21°♓15'36	-0°43'00
min. Earth dist.	6761 Sep 09 02:01	21°♓15'35	8.87312 AU
direct	6761 Nov 18 13:23	17°♓55'02	
evening set	6762 Feb 28 13:52	25°♓08'35	
conjunction	6762 Mar 17 08:01	27°♓08'28	-0°47'13
minimum elong	6762 Mar 17 07:59	27°♓08'28	0°47'12
max. Earth dist.	6762 Mar 17 08:06	27°♓08'30	10.88264 AU
morning rise	6762 Apr 03 01:40	29°♓08'13	
	6762 Apr 10 12:01	0°♈	
retrograde	6762 Jul 13 09:29	6°♈19'37	
opposition	6762 Sep 21 13:44	3°♈00'17	-1°11'58
min. Earth dist.	6762 Sep 21 12:40	3°♈00'29	8.88883 AU
	6762 Nov 10 20:37	30°℞♓	
direct	6762 Nov 30 22:26	29°♓40'24	
	6762 Dec 20 17:54	0°♈	
evening set	6763 Mar 12 09:58	6°♈51'47	
conjunction	6763 Mar 29 03:03	8°♈51'17	-1°09'41
minimum elong	6763 Mar 29 03:01	8°♈51'16	1°09'42
max. Earth dist.	6763 Mar 29 04:39	8°♈51'46	10.89051 AU
morning rise	6763 Apr 14 20:09	10°♈50'49	
retrograde	6763 Jul 25 17:59	18°♈04'09	
opposition	6763 Oct 04 01:36	14°♈44'24	-1°37'54
min. Earth dist.	6763 Oct 03 23:22	14°♈44'49	8.88935 AU
direct	6763 Dec 13 04:17	11°♈25'03	
evening set	6764 Mar 23 05:52	18°♈35'16	
conjunction	6764 Apr 08 22:12	20°♈34'39	-1°29'16
minimum elong	6764 Apr 08 22:10	20°♈34'38	1°29'18
max. Earth dist.	6764 Apr 09 00:45	20°♈35'25	10.88307 AU
morning rise	6764 Apr 25 15:19	22°♈34'19	
retrograde	6764 Aug 06 03:00	29°♈50'33	
opposition	6764 Oct 15 14:01	26°♈30'13	-1°59'48
min. Earth dist.	6764 Oct 15 11:29	26°♈30'42	8.87464 AU
direct	6764 Dec 24 08:57	23°♈11'12	
	6765 Apr 01 02:13	0°♉	
evening set	6765 Apr 04 02:51	0°♉21'17	
conjunction	6765 Apr 20 18:58	2°♉20'53	-1°45'09
minimum elong	6765 Apr 20 18:56	2°♉20'53	1°45'11
max. Earth dist.	6765 Apr 20 21:15	2°♉21'35	10.86058 AU
morning rise	6765 May 07 12:50	4°♉21'01	
retrograde	6765 Aug 18 14:48	11°♉40'59	
opposition	6765 Oct 28 03:17	8°♉19'57	-2°16'45
min. Earth dist.	6765 Oct 28 01:01	8°♉20'23	8.84507 AU
direct	6766 Jan 05 14:49	5°♉01'00	
evening set	6766 Apr 16 01:47	12°♉12'00	
conjunction	6766 May 02 18:32	14°♉12'12	-1°56'39
minimum elong	6766 May 02 18:30	14°♉12'12	1°56'41
max. Earth dist.	6766 May 02 20:58	14°♉12'56	10.82350 AU
	6766 May 09 08:55	15°♉	
morning rise	6766 May 19 13:45	16°♉13'08	
retrograde	6766 Aug 31 05:34	23°♉37'35	
opposition	6766 Nov 09 18:07	20°♉15'42	-2°28'01
min. Earth dist.	6766 Nov 09 15:41	20°♉16'09	8.80106 AU
direct	6767 Jan 17 21:06	16°♉56'37	
evening set	6767 Apr 28 03:41	24°♉09'31	
conjunction	6767 May 14 21:57	26°♉10'42	-2°03'11
minimum elong	6767 May 14 21:56	26°♉10'42	2°03'14
max. Earth dist.	6767 May 15 01:12	26°♉11'41	10.77247 AU
morning rise	6767 May 31 19:05	28°♉12'47	
	6767 Jun 16 06:01	0°♊	
retrograde	6767 Sep 13 00:42	5°♊42'22	
opposition	6767 Nov 22 11:03	2°♊19'33	-2°32'56
min. Earth dist.	6767 Nov 22 07:58	2°♊20'08	8.74366 AU
	6767 Dec 26 08:30	30°℞♉	
direct	6768 Jan 30 06:04	29°♉00'09	
	6768 Mar 04 09:18	0°♊	
evening set	6768 May 09 09:53	6°♊15'57	
conjunction	6768 May 26 06:27	8°♊18'31	-2°04'21
minimum elong	6768 May 26 06:27	8°♊18'31	2°04'24
max. Earth dist.	6768 May 26 10:03	8°♊19'37	10.70929 AU
morning rise	6768 Jun 12 06:18	10°♊22'07	
retrograde	6768 Sep 25 01:51	17°♊57'14	
opposition	6768 Dec 04 06:32	14°♊33'26	-2°31'04
min. Earth dist.	6768 Dec 04 03:14	14°♊34'04	8.67551 AU
direct	6769 Feb 10 16:11	11°♊13'29	
evening set	6769 May 21 21:15	18°♊33'03	
conjunction	6769 Jun 07 20:49	20°♊37'20	-1°59'51
minimum elong	6769 Jun 07 20:51	20°♊37'21	1°59'54
max. Earth dist.	6769 Jun 07 23:53	20°♊38'17	10.63731 AU
morning rise	6769 Jun 25 00:14	22°♊42'48	
	6769 Sep 16 14:44	0°♋	
retrograde	6769 Oct 08 07:05	0°♋23'29	
	6769 Oct 29 23:29	30°℞♊	
opposition	6769 Dec 17 04:59	26°♊58'44	-2°22'11
min. Earth dist.	6769 Dec 17 02:10	26°♊59'16	8.60028 AU

direct	6770 Feb 23 04:39	23°♊38'00	
	6770 May 25 22:31	0°♋	
evening set	6770 Jun 03 14:37	1°♋02'04	
conjunction	6770 Jun 20 17:50	3°♋08'19	-1°49'39
minimum elong	6770 Jun 20 17:52	3°♋08'20	1°49'42
max. Earth dist.	6770 Jun 20 20:19	3°♋09'05	10.56032 AU
morning rise	6770 Jul 08 01:16	5°♋15'50	
retrograde	6770 Oct 21 14:31	13°♋01'57	
opposition	6770 Dec 30 06:28	9°♋36'15	-2°06'21
min. Earth dist.	6770 Dec 30 04:13	9°♋36'41	8.52195 AU
direct	6771 Mar 07 23:49	6°♋14'35	
evening set	6771 Jun 16 14:31	13°♋43'42	
conjunction	6771 Jul 03 21:58	15°♋52'07	-1°33'59
minimum elong	6771 Jul 03 22:01	15°♋52'08	1°34'03
max. Earth dist.	6771 Jul 04 00:37	15°♋52'56	10.48229 AU
morning rise	6771 Jul 21 09:38	18°♋01'47	
retrograde	6771 Nov 04 03:29	25°♋52'55	
opposition	6772 Jan 12 11:05	22°♋26'21	-1°43'58
min. Earth dist.	6772 Jan 12 08:55	22°♋26'47	8.44455 AU
direct	6772 Mar 19 22:32	19°♋03'39	
evening set	6772 Jun 28 21:30	26°♋38'12	
conjunction	6772 Jul 16 09:26	28°♋48'48	-1°13'21
minimum elong	6772 Jul 16 09:28	28°♋48'49	1°13'25
max. Earth dist.	6772 Jul 16 12:35	28°♋49'48	10.40709 AU
	6772 Jul 25 21:03	0°♌	
morning rise	6772 Aug 03 01:11	1°♌00'38	
retrograde	6772 Nov 16 21:23	8°♌56'06	
opposition	6773 Jan 24 18:43	5°♌28'50	-1°15'52
min. Earth dist.	6773 Jan 24 16:17	5°♌29'19	8.37186 AU
direct	6773 Apr 02 00:36	2°♌05'03	
evening set	6773 Jul 12 11:54	9°♌45'15	
conjunction	6773 Jul 30 03:58	11°♌57'57	-0°48'39
minimum elong	6773 Jul 30 04:00	11°♌57'57	0°48'41
max. Earth dist.	6773 Jul 30 06:56	11°♌58'53	10.33838 AU
morning rise	6773 Aug 16 23:21	14°♌11'43	
	6773 Aug 23 13:30	15°♌	
retrograde	6773 Nov 30 17:51	22°♌10'38	
opposition	6774 Feb 07 05:07	18°♌42'53	-0°43'19
min. Earth dist.	6774 Feb 07 02:51	18°♌43'20	8.30759 AU
direct	6774 Apr 15 08:00	15°♌17'59	
evening set	6774 Jul 26 09:17	23°♌03'52	
conjunction	6774 Aug 13 04:51	25°♌18'22	-0°21'02
minimum elong	6774 Aug 13 04:52	25°♌18'22	0°21'04
max. Earth dist.	6774 Aug 13 06:58	25°♌19'02	10.27980 AU
morning rise	6774 Aug 31 03:09	27°♌33'45	
	6774 Sep 20 12:23	0°♍	
retrograde	6774 Dec 14 16:23	5°♍35'05	
opposition	6775 Feb 20 18:12	2°♍07'04	-0°07'58
min. Earth dist.	6775 Feb 20 16:39	2°♍07'23	8.25524 AU
	6775 Mar 20 23:36	30°℞♌	
direct	6775 Apr 28 19:46	28°♌41'07	
asc. node	6775 May 15 01:28	28°♌55'39	
	6775 Jun 06 04:35	0°♍	
evening set	6775 Aug 09 12:52	6°♍32'22	
conjunction	6775 Aug 27 11:01	8°♍48'15	0°08'05
minimum elong	6775 Aug 27 11:01	8°♍48'15	0°08'04
behind sun begin	6775 Aug 27 04:32	8°♍46'13	
behind sun end	6775 Aug 27 17:30	8°♍50'17	
max. Earth dist.	6775 Aug 27 11:42	8°♍48'28	10.23452 AU
morning rise	6775 Sep 14 11:15	11°♍04'47	
retrograde	6775 Dec 28 16:28	19°♍07'19	

opposition	6776 Mar 05 09:21	15°♍39'18	0°28'12
min. Earth dist.	6776 Mar 05 09:00	15°♍39'22	8.21767 AU
direct	6776 May 11 11:40	12°♍12'24	
evening set	6776 Aug 22 21:45	20°♍08'26	
conjunction	6776 Sep 09 21:25	22°♍25'11	0°36'53
minimum elong	6776 Sep 09 21:23	22°♍25'11	0°36'52
max. Earth dist.	6776 Sep 09 20:51	22°♍25'00	10.20499 AU
morning rise	6776 Sep 27 22:14	24°♍42'17	
	6776 Nov 14 18:31	0°♎	
retrograde	6777 Jan 10 16:28	2°♎44'42	
	6777 Mar 10 04:59	30°℞♍	
opposition	6777 Mar 19 01:45	29°♍16'56	1°03'03
min. Earth dist.	6777 Mar 19 02:11	29°♍16'51	8.19699 AU
direct	6777 May 25 07:45	25°♍49'15	
	6777 Aug 04 16:14	0°♎	
evening set	6777 Sep 06 10:04	3°♎49'11	
conjunction	6777 Sep 24 10:05	6°♎06'12	1°03'45
minimum elong	6777 Sep 24 10:02	6°♎06'11	1°03'45
max. Earth dist.	6777 Sep 24 08:50	6°♎05'48	10.19296 AU
morning rise	6777 Oct 12 10:08	8°♎23'16	
retrograde	6778 Jan 24 14:29	16°♎24'16	
opposition	6778 Apr 01 18:58	12°♎56'59	1°34'25
min. Earth dist.	6778 Apr 01 19:38	12°♎56'51	8.19445 AU
direct	6778 Jun 08 07:22	9°♎28'47	
evening set	6778 Sep 20 23:40	17°♎31'18	
conjunction	6778 Oct 08 22:56	19°♎48'02	1°27'01
minimum elong	6778 Oct 08 22:53	19°♎48'01	1°27'03
max. Earth dist.	6778 Oct 08 21:27	19°♎47'33	10.19928 AU
morning rise	6778 Oct 26 21:04	22°♎04'27	
	6779 Jan 31 08:55	0°♏	
retrograde	6779 Feb 07 11:12	0°♏02'49	
	6779 Feb 14 14:27	30°℞♎	
opposition	6779 Apr 15 12:07	26°♎36'15	2°00'24
min. Earth dist.	6779 Apr 15 12:47	26°♎36'07	8.21023 AU
direct	6779 Jun 22 07:12	23°♎07'47	
	6779 Sep 25 20:33	0°♏	
evening set	6779 Oct 05 12:49	1°♏11'24	
conjunction	6779 Oct 23 10:23	3°♏27'20	1°45'20
minimum elong	6779 Oct 23 10:20	3°♏27'19	1°45'22
max. Earth dist.	6779 Oct 23 08:45	3°♏26'49	10.22366 AU
morning rise	6779 Nov 10 05:46	5°♏42'39	
retrograde	6780 Feb 21 05:50	13°♏37'08	
opposition	6780 Apr 28 04:19	10°♏11'29	2°19'27
min. Earth dist.	6780 Apr 28 05:26	10°♏11'15	8.24346 AU
direct	6780 Jul 05 06:54	6°♏43'01	
evening set	6780 Oct 18 23:15	14°♏46'10	
	6780 Oct 20 19:40	15°♏	
conjunction	6780 Nov 05 18:21	17°♏00'52	1°57'40
minimum elong	6780 Nov 05 18:20	17°♏00'52	1°57'43
max. Earth dist.	6780 Nov 05 16:09	17°♏00'10	10.26476 AU
morning rise	6780 Nov 23 10:30	19°♏14'43	
retrograde	6781 Mar 05 20:41	27°♏04'20	
opposition	6781 May 11 19:08	23°♏39'46	2°30'38
min. Earth dist.	6781 May 11 21:04	23°♏39'22	8.29226 AU
direct	6781 Jul 19 06:33	20°♏11'33	
evening set	6781 Nov 02 04:47	28°♏12'34	
	6781 Nov 16 11:34	0°♐	
conjunction	6781 Nov 19 21:00	0°♐25'44	2°03'27
minimum elong	6781 Nov 19 20:59	0°♐25'44	2°03'31
max. Earth dist.	6781 Nov 19 18:03	0°♐24'48	10.32027 AU
morning rise	6781 Dec 07 09:49	2°♐37'54	

retrograde	6782 Mar 19 05:25	10°♐21'57	
opposition	6782 May 25 07:42	6°♐58'30	2°33'31
min. Earth dist.	6782 May 25 10:18	6°♐57'59	8.35388 AU
direct	6782 Aug 02 05:34	3°♐30'47	
evening set	6782 Nov 16 04:13	11°♐28'10	
conjunction	6782 Dec 03 17:28	13°♐39'38	2°02'36
minimum elong	6782 Dec 03 17:28	13°♐39'39	2°02'41
max. Earth dist.	6782 Dec 03 13:50	13°♐38'30	10.38711 AU
morning rise	6782 Dec 21 03:05	15°♐50'00	
retrograde	6783 Apr 01 09:39	23°♐28'03	
opposition	6783 Jun 07 17:16	20°♐05'42	2°28'18
min. Earth dist.	6783 Jun 07 20:02	20°♐05'09	8.42488 AU
direct	6783 Aug 16 01:03	16°♐38'40	
evening set	6783 Nov 29 20:26	24°♐31'12	
conjunction	6783 Dec 17 06:50	26°♐40'54	1°55'26
minimum elong	6783 Dec 17 06:52	26°♐40'54	1°55'31
max. Earth dist.	6783 Dec 17 03:05	26°♐39'43	10.46155 AU
morning rise	6784 Jan 03 13:27	28°♐49'25	
	6784 Jan 13 07:56	0°♑	
retrograde	6784 Apr 13 09:36	6°♑21'26	
opposition	6784 Jun 19 23:43	3°♑00'05	2°15'38
min. Earth dist.	6784 Jun 20 01:54	2°♑59'39	8.50131 AU
	6784 Aug 05 21:31	30°℞♐	
direct	6784 Aug 28 16:27	29°♐33'54	
	6784 Sep 20 08:22	0°♑	
evening set	6784 Dec 12 04:50	7°♑20'40	
conjunction	6784 Dec 29 12:36	9°♑28'36	1°42'37
minimum elong	6784 Dec 29 12:38	9°♑28'36	1°42'40
max. Earth dist.	6784 Dec 29 09:42	9°♑27'42	10.53949 AU
morning rise	6785 Jan 15 16:24	11°♑35'21	
retrograde	6785 Apr 26 04:34	19°♑01'37	
opposition	6785 Jul 03 02:46	15°♑41'08	1°56'33
min. Earth dist.	6785 Jul 03 04:34	15°♑40'47	8.57908 AU
direct	6785 Sep 11 03:26	12°♑15'53	
evening set	6785 Dec 25 05:38	19°♑56'25	
conjunction	6786 Jan 11 10:53	22°♑02'39	1°25'01
minimum elong	6786 Jan 11 10:55	22°♑02'40	1°25'04
max. Earth dist.	6786 Jan 11 08:32	22°♑01'56	10.61668 AU
morning rise	6786 Jan 28 12:14	24°♑07'46	
	6786 Mar 28 05:28	0°♒	
retrograde	6786 May 08 20:22	1°♒28'51	
	6786 Jun 20 13:36	30°℞♑	
opposition	6786 Jul 16 02:18	28°♑09'06	1°32'16
min. Earth dist.	6786 Jul 16 04:23	28°♑08'42	8.65395 AU
direct	6786 Sep 24 08:43	24°♑44'47	
	6786 Dec 17 19:56	0°♒	
evening set	6787 Jan 06 23:19	2°♒19'07	
conjunction	6787 Jan 24 02:07	4°♒23'48	1°03'43
minimum elong	6787 Jan 24 02:09	4°♒23'48	1°03'45
max. Earth dist.	6787 Jan 23 23:24	4°♒22'58	10.68870 AU
morning rise	6787 Feb 10 01:29	6°♒27'27	
retrograde	6787 May 21 07:31	13°♒44'16	
opposition	6787 Jul 28 22:48	10°♒25'04	1°04'10
min. Earth dist.	6787 Jul 29 01:35	10°♒24'32	8.72157 AU
direct	6787 Oct 07 08:59	7°♒01'43	
evening set	6788 Jan 19 10:43	14°♒30'16	
	6788 Jan 23 14:13	15°♒	
conjunction	6788 Feb 05 11:10	16°♒33'32	0°39'48
minimum elong	6788 Feb 05 11:12	16°♒33'32	0°39'50
max. Earth dist.	6788 Feb 05 07:38	16°♒32'27	10.75151 AU
morning rise	6788 Feb 22 08:51	18°♒35'58	

retrograde	6788 Jun 01 14:52	25°♒49'44	
opposition	6788 Aug 09 16:34	22°♒30'53	0°33'36
min. Earth dist.	6788 Aug 09 19:07	22°♒30'24	8.77864 AU
direct	6788 Oct 19 06:03	19°♒08'28	
evening set	6789 Jan 30 16:52	26°♒31'56	
conjunction	6789 Feb 16 15:17	28°♒34'00	0°14'24
minimum elong	6789 Feb 16 15:18	28°♒34'00	0°14'26
behind sun begin	6789 Feb 16 12:01	28°♒33'01	
behind sun end	6789 Feb 16 18:35	28°♒34'59	
max. Earth dist.	6789 Feb 16 12:18	28°♒33'06	10.80269 AU
	6789 Feb 28 12:31	0°♓	
morning rise	6789 Mar 05 11:29	0°♓35'24	
retrograde	6789 Jun 13 23:01	7°♓47'20	
opposition	6789 Aug 22 08:11	4°♓28'36	0°01'56
min. Earth dist.	6789 Aug 22 09:44	4°♓28'18	8.82342 AU
desc. node	6789 Sep 14 07:24	2°♓49'32	
direct	6789 Oct 31 23:05	1°♓07'02	
evening set	6790 Feb 11 18:50	8°♓26'07	
conjunction	6790 Feb 28 15:31	10°♓27'14	-0°11'29
minimum elong	6790 Feb 28 15:30	10°♓27'14	0°11'27
behind sun begin	6790 Feb 28 10:23	10°♓25'42	
behind sun end	6790 Feb 28 20:38	10°♓28'46	
max. Earth dist.	6790 Feb 28 13:50	10°♓26'45	10.84084 AU
morning rise	6790 Mar 17 10:23	12°♓27'52	
retrograde	6790 Jun 26 05:30	19°♓39'06	
opposition	6790 Sep 03 22:13	16°♓20'13	-0°29'32
min. Earth dist.	6790 Sep 03 22:50	16°♓20'06	8.85468 AU
direct	6790 Nov 13 10:43	12°♓59'23	
evening set	6791 Feb 23 18:00	20°♓14'59	
conjunction	6791 Mar 12 12:59	22°♓15'20	-0°36'38
minimum elong	6791 Mar 12 12:57	22°♓15'20	0°36'37
max. Earth dist.	6791 Mar 12 12:05	22°♓15'04	10.86484 AU
morning rise	6791 Mar 29 06:51	24°♓15'25	
	6791 May 27 06:49	0°♈	
retrograde	6791 Jul 08 11:26	1°♈27'04	
	6791 Aug 20 21:29	30°℞♓	
opposition	6791 Sep 16 11:14	28°♓07'51	-0°59'35
min. Earth dist.	6791 Sep 16 11:45	28°♓07'45	8.87157 AU
direct	6791 Nov 25 20:34	24°♓47'34	
	6792 Feb 17 22:58	0°♈	
evening set	6792 Mar 06 15:18	2°♈00'38	
conjunction	6792 Mar 23 08:49	4°♈00'29	-1°00'10
minimum elong	6792 Mar 23 08:47	4°♈00'28	1°00'10
max. Earth dist.	6792 Mar 23 07:58	4°♈00'13	10.87417 AU
morning rise	6792 Apr 09 02:13	6°♈00'17	
retrograde	6792 Jul 19 18:39	13°♈13'28	
opposition	6792 Sep 27 23:54	9°♈53'42	-1°27'03
min. Earth dist.	6792 Sep 28 00:04	9°♈53'40	8.87376 AU
direct	6792 Dec 07 04:22	6°♈33'47	
evening set	6793 Mar 18 11:40	13°♈45'18	
conjunction	6793 Apr 04 04:16	15°♈44'56	-1°21'09
minimum elong	6793 Apr 04 04:14	15°♈44'56	1°21'11
max. Earth dist.	6793 Apr 04 04:13	15°♈44'55	10.86864 AU
morning rise	6793 Apr 20 21:35	17°♈44'47	
retrograde	6793 Aug 01 01:49	25°♈00'32	
opposition	6793 Oct 10 12:34	21°♈40'02	-1°50'54
min. Earth dist.	6793 Oct 10 11:44	21°♈40'11	8.86117 AU
direct	6793 Dec 19 11:23	18°♈20'20	
evening set	6794 Mar 30 08:32	25°♈31'22	
conjunction	6794 Apr 16 00:52	27°♈31'07	-1°38'47
minimum elong	6794 Apr 16 00:50	27°♈31'07	1°38'49

max. Earth dist.	6794 Apr 16 02:31	27°♈31'37	10.84845 AU
morning rise	6794 May 02 18:26	29°♈31'17	
	6794 May 06 20:28	0°♉	
retrograde	6794 Aug 13 13:30	6°♉50'32	
opposition	6794 Oct 23 01:45	3°♉29'12	-2°10'11
min. Earth dist.	6794 Oct 22 23:32	3°♉29'37	8.83420 AU
direct	6794 Dec 31 18:12	0°♉09'35	
evening set	6795 Apr 11 06:59	7°♉21'09	
conjunction	6795 Apr 27 23:37	9°♉21'22	-1°52'18
minimum elong	6795 Apr 27 23:35	9°♉21'21	1°52'20
max. Earth dist.	6795 Apr 28 02:16	9°♉22'10	10.81437 AU
morning rise	6795 May 14 18:07	11°♉22'12	
	6795 Jun 16 20:23	15°♉	
retrograde	6795 Aug 26 05:05	18°♉45'43	
opposition	6795 Nov 04 16:33	15°♉23'30	-2°24'03
min. Earth dist.	6795 Nov 04 13:43	15°♉24'02	8.79388 AU
	6795 Nov 09 21:08	15°℞♉	
direct	6796 Jan 12 23:12	12°♉03'49	
	6796 Mar 13 09:16	15°♉	
evening set	6796 Apr 22 08:00	19°♉16'53	
conjunction	6796 May 09 01:36	21°♉17'55	-2°01'04
minimum elong	6796 May 09 01:34	21°♉17'55	2°01'06
max. Earth dist.	6796 May 09 04:21	21°♉18'45	10.76779 AU
morning rise	6796 May 25 21:55	23°♉19'47	
	6796 Aug 06 14:24	0°♊	
retrograde	6796 Sep 06 22:08	0°♊48'12	
	6796 Oct 08 15:35	30°℞♉	
opposition	6796 Nov 16 09:16	27°♉25'03	-2°31'47
min. Earth dist.	6796 Nov 16 06:27	27°♉25'36	8.74179 AU
direct	6797 Jan 24 07:07	24°♉05'05	
	6797 Apr 23 01:17	0°♊	
evening set	6797 May 04 12:49	1°♊20'39	
conjunction	6797 May 21 08:17	3°♊22'53	-2°04'35
minimum elong	6797 May 21 08:17	3°♊22'53	2°04'37
max. Earth dist.	6797 May 21 11:07	3°♊23'44	10.71053 AU
morning rise	6797 Jun 07 07:10	5°♊26'07	
retrograde	6797 Sep 19 20:14	12°♊59'49	
opposition	6797 Nov 29 04:07	9°♊35'45	-2°32'51
min. Earth dist.	6797 Nov 29 01:19	9°♊36'17	8.67999 AU
direct	6798 Feb 05 17:45	6°♊15'20	
evening set	6798 May 16 22:18	13°♊34'13	
conjunction	6798 Jun 02 20:35	15°♊38'01	-2°02'30
minimum elong	6798 Jun 02 20:36	15°♊38'01	2°02'33
max. Earth dist.	6798 Jun 03 00:27	15°♊39'12	10.64490 AU
morning rise	6798 Jun 19 22:34	17°♊42'56	
retrograde	6798 Oct 02 23:26	25°♊22'08	
opposition	6798 Dec 12 01:49	21°♊57'09	-2°26'55
min. Earth dist.	6798 Dec 11 22:15	21°♊57'50	8.61107 AU
direct	6799 Feb 18 06:37	18°♊36'12	
evening set	6799 May 29 13:18	25°♊59'07	
conjunction	6799 Jun 15 15:05	28°♊04'45	-1°54'40
minimum elong	6799 Jun 15 15:07	28°♊04'46	1°54'44
max. Earth dist.	6799 Jun 15 19:55	28°♊06'14	10.57379 AU
	6799 Jul 01 06:25	0°♋	
morning rise	6799 Jul 02 20:44	0°♋11'36	
retrograde	6799 Oct 16 07:08	7°♋56'16	
opposition	6799 Dec 25 02:36	4°♋30'26	-2°13'56
min. Earth dist.	6799 Dec 24 22:22	4°♋31'16	8.53820 AU
direct	6800 Mar 01 23:21	1°♋08'48	
evening set	6800 Jun 10 10:55	8°♋36'25	
conjunction	6800 Jun 27 16:41	10°♋44'07	-1°41'13
minimum elong	6800 Jun 27 16:43	10°♋44'07	1°41'18
max. Earth dist.	6800 Jun 27 21:35	10°♋45'38	10.50059 AU
morning rise	6800 Jul 15 02:28	12°♋53'03	
retrograde	6800 Oct 28 20:16	20°♋42'49	
opposition	6801 Jan 06 06:23	17°♋16'18	-1°54'09
min. Earth dist.	6801 Jan 06 02:15	17°♋17'06	8.46500 AU
direct	6801 Mar 14 19:05	13°♋53'52	
evening set	6801 Jun 23 15:32	21°♋26'40	
conjunction	6801 Jul 11 01:32	23°♋36'30	-1°22'33
minimum elong	6801 Jul 11 01:34	23°♋36'31	1°22'37
max. Earth dist.	6801 Jul 11 05:33	23°♋37'45	10.42898 AU
morning rise	6801 Jul 28 15:38	25°♋47'35	
	6801 Sep 04 01:21	0°♌	
retrograde	6801 Nov 11 13:00	3°♌41'51	
opposition	6802 Jan 19 13:26	0°♌14'49	-1°28'15
min. Earth dist.	6802 Jan 19 10:08	0°♌15'28	8.39521 AU
	6802 Jan 22 16:02	30°℞♋	
direct	6802 Mar 27 19:46	26°♋51'31	
	6802 May 27 20:13	0°♌	
evening set	6802 Jul 07 03:19	4°♌29'49	
conjunction	6802 Jul 24 17:30	6°♌41'43	-0°59'22
minimum elong	6802 Jul 24 17:32	6°♌41'43	0°59'26
max. Earth dist.	6802 Jul 24 21:02	6°♌42'49	10.36263 AU
morning rise	6802 Aug 11 11:34	8°♌54'48	
	6802 Oct 08 22:15	15°♌	
retrograde	6802 Nov 25 07:56	16°♌52'48	
	6803 Jan 12 12:01	15°℞♌	
opposition	6803 Feb 01 23:27	13°♌25'24	-0°57'19
min. Earth dist.	6803 Feb 01 20:42	13°♌25'57	8.33259 AU
direct	6803 Apr 10 02:45	10°♌01'13	
	6803 Jun 27 16:40	15°♌	
evening set	6803 Jul 20 22:18	17°♌45'03	
conjunction	6803 Aug 07 16:22	19°♌58'50	-0°32'46
minimum elong	6803 Aug 07 16:24	19°♌58'51	0°32'49
max. Earth dist.	6803 Aug 07 19:43	19°♌59'54	10.30509 AU
morning rise	6803 Aug 25 13:41	22°♌13'38	
	6803 Nov 22 20:21	0°♍	
retrograde	6803 Dec 09 05:31	0°♍14'20	
	6803 Dec 25 16:52	30°℞♌	
opposition	6804 Feb 15 11:56	26°♌46'46	-0°22'52
min. Earth dist.	6804 Feb 15 09:30	26°♌47'15	8.28052 AU
direct	6804 Apr 22 13:42	23°♌21'40	
	6804 Jul 24 08:38	0°♍	
evening set	6804 Aug 02 23:57	1°♍10'49	
conjunction	6804 Aug 20 21:09	3°♍26'08	-0°04'09
minimum elong	6804 Aug 20 21:10	3°♍26'08	0°04'11
behind sun begin	6804 Aug 20 14:00	3°♍23'53	
behind sun end	6804 Aug 21 04:21	3°♍28'24	
max. Earth dist.	6804 Aug 21 00:15	3°♍27'04	10.25933 AU
morning rise	6804 Sep 07 20:41	5°♍42'12	
asc. node	6804 Oct 12 23:01	9°♍44'48	
retrograde	6804 Dec 22 06:01	13°♍44'23	
opposition	6805 Feb 28 02:34	10°♍16'49	0°13'14
min. Earth dist.	6805 Feb 28 00:21	10°♍17'16	8.24152 AU
direct	6805 May 06 04:01	6°♍50'52	
evening set	6805 Aug 17 07:07	14°♍44'48	
conjunction	6805 Sep 04 06:19	17°♍01'08	0°25'04
minimum elong	6805 Sep 04 06:18	17°♍01'08	0°25'03
max. Earth dist.	6805 Sep 04 08:32	17°♍01'50	10.22737 AU
morning rise	6805 Sep 22 06:47	19°♍17'56	
retrograde	6806 Jan 05 06:48	27°♍20'20	
opposition	6806 Mar 13 18:39	23°♍52'58	0°48'52

min. Earth dist.	6806 Mar 13 17:18	23°♍53'14	8.21712 AU
direct	6806 May 19 22:11	20°♍26'14	
evening set	6806 Aug 31 18:18	28°♍24'14	
	6806 Sep 13 09:27	0°♎	
conjunction	6806 Sep 18 18:15	0°♎41'03	0°52'55
minimum elong	6806 Sep 18 18:13	0°♎41'03	0°52'55
max. Earth dist.	6806 Sep 18 18:37	0°♎41'10	10.21028 AU
morning rise	6806 Oct 06 18:30	2°♎58'01	
retrograde	6807 Jan 19 06:31	10°♎59'27	
opposition	6807 Mar 27 11:39	7°♎32'31	1°21'53
min. Earth dist.	6807 Mar 27 11:49	7°♎32'29	8.20796 AU
direct	6807 Jun 02 19:52	4°♎05'08	
evening set	6807 Sep 15 07:43	12°♎06'20	
conjunction	6807 Oct 03 07:17	14°♎23'06	1°17'50
minimum elong	6807 Oct 03 07:14	14°♎23'05	1°17'52
max. Earth dist.	6807 Oct 03 05:37	14°♎22'34	10.20865 AU
morning rise	6807 Oct 21 06:13	16°♎39'42	
retrograde	6808 Feb 02 04:13	24°♎39'02	
opposition	6808 Apr 09 04:58	21°♎12'45	1°50'16
min. Earth dist.	6808 Apr 09 06:34	21°♎12'25	8.21477 AU
direct	6808 Jun 15 19:24	17°♎44'55	
evening set	6808 Sep 28 21:32	25°♎48'01	
conjunction	6808 Oct 16 19:39	28°♎04'13	1°38'20
minimum elong	6808 Oct 16 19:37	28°♎04'12	1°38'22
max. Earth dist.	6808 Oct 16 16:23	28°♎03'10	10.22338 AU
	6808 Nov 01 00:37	0°♏	
morning rise	6808 Nov 03 16:17	0°♏19'56	
retrograde	6809 Feb 14 23:28	8°♏15'58	
opposition	6809 Apr 22 21:44	4°♏50'28	2°12'20
min. Earth dist.	6809 Apr 23 00:13	4°♏49'58	8.23816 AU
direct	6809 Jun 29 20:24	1°♏22'25	
evening set	6809 Oct 13 09:21	9°♏25'49	
conjunction	6809 Oct 31 05:20	11°♏40'59	1°53'14
minimum elong	6809 Oct 31 05:18	11°♏40'58	1°53'17
max. Earth dist.	6809 Oct 31 01:21	11°♏39'43	10.25464 AU
morning rise	6809 Nov 17 22:58	13°♏55'25	
	6809 Nov 26 17:03	15°♏	
retrograde	6810 Feb 28 14:48	21°♏47'04	
opposition	6810 May 06 13:15	18°♏22'24	2°26'51
min. Earth dist.	6810 May 06 15:43	18°♏21'55	8.27748 AU
	6810 Jul 03 15:10	15°℞♏	
direct	6810 Jul 13 21:33	14°♏54'23	
	6810 Jul 24 03:28	15°♏	
evening set	6810 Oct 27 17:00	22°♏56'20	
conjunction	6810 Nov 14 10:28	25°♏10'08	2°01'47
minimum elong	6810 Nov 14 10:26	25°♏10'07	2°01'51
max. Earth dist.	6810 Nov 14 06:39	25°♏08'55	10.30107 AU
morning rise	6810 Dec 02 00:46	27°♏22'59	
	6810 Dec 24 00:06	0°♐	
retrograde	6811 Mar 14 01:32	5°♐09'23	
opposition	6811 May 20 02:42	1°♐45'37	2°33'13
min. Earth dist.	6811 May 20 05:04	1°♐45'08	8.33058 AU
	6811 Jun 12 05:04	30°℞♏	
direct	6811 Jul 27 21:19	28°♏17'48	
	6811 Sep 10 20:54	0°♐	
evening set	6811 Nov 10 19:08	6°♐16'44	
conjunction	6811 Nov 28 09:47	8°♐28'56	2°03'41
minimum elong	6811 Nov 28 09:47	8°♐28'56	2°03'45
max. Earth dist.	6811 Nov 28 06:12	8°♐27'48	10.36001 AU
morning rise	6811 Dec 15 20:41	10°♐40'01	
retrograde	6812 Mar 26 08:51	18°♐20'33	

opposition	6812 Jun 01 13:24	14°♐57'43	2°31'20
min. Earth dist.	6812 Jun 01 16:00	14°♐57'12	8.39446 AU
direct	6812 Aug 09 16:58	11°♐30'18	
evening set	6812 Nov 23 14:18	19°♐24'51	
conjunction	6812 Dec 11 02:03	21°♐35'19	1°59'06
minimum elong	6812 Dec 11 02:04	21°♐35'20	1°59'10
max. Earth dist.	6812 Dec 10 22:32	21°♐34'13	10.42817 AU
morning rise	6812 Dec 28 09:46	23°♐44'36	
	6813 Feb 28 18:03	0°♑	
retrograde	6813 Apr 08 10:45	1°♑19'03	
	6813 May 17 20:50	30°℞♐	
opposition	6813 Jun 14 21:06	27°♐57'05	2°21'42
min. Earth dist.	6813 Jun 15 00:16	27°♐56'28	8.46566 AU
direct	6813 Aug 23 09:29	24°♐30'16	
	6813 Nov 17 06:27	0°♑	
evening set	6813 Dec 07 01:38	2°♑19'24	
conjunction	6813 Dec 24 10:32	4°♑28'05	1°48'33
minimum elong	6813 Dec 24 10:34	4°♑28'06	1°48'37
max. Earth dist.	6813 Dec 24 06:35	4°♑26'52	10.50188 AU
morning rise	6814 Jan 10 15:31	6°♑35'37	
retrograde	6814 Apr 21 06:17	14°♑04'09	
opposition	6814 Jun 28 01:19	10°♑42'59	2°05'11
min. Earth dist.	6814 Jun 28 04:41	10°♑42'19	8.54044 AU
direct	6814 Sep 05 22:44	7°♑16'53	
evening set	6814 Dec 20 05:21	15°♑00'00	
conjunction	6815 Jan 06 11:36	17°♑06'58	1°32'51
minimum elong	6815 Jan 06 11:38	17°♑06'59	1°32'54
max. Earth dist.	6815 Jan 06 07:28	17°♑05'41	10.57733 AU
morning rise	6815 Jan 23 14:10	19°♑12'49	
retrograde	6815 May 03 21:42	26°♑35'54	
opposition	6815 Jul 11 01:51	23°♑15'25	1°42'57
min. Earth dist.	6815 Jul 11 04:38	23°♑14'53	8.61503 AU
direct	6815 Sep 19 07:34	19°♑50'10	
evening set	6816 Jan 02 01:38	27°♑27'05	
conjunction	6816 Jan 19 05:28	29°♑32'26	1°12'59
minimum elong	6816 Jan 19 05:30	29°♑32'26	1°13'02
max. Earth dist.	6816 Jan 19 02:09	29°♑31'25	10.65082 AU
	6816 Jan 22 23:25	0°♒	
morning rise	6816 Feb 05 05:49	1°♒36'44	
retrograde	6816 May 15 10:30	8°♒55'09	
opposition	6816 Jul 22 23:13	5°♒35'13	1°16'18
min. Earth dist.	6816 Jul 23 00:56	5°♒34'53	8.68593 AU
direct	6816 Oct 01 09:49	2°♒10'57	
evening set	6817 Jan 13 15:02	9°♒41'45	
conjunction	6817 Jan 30 16:39	11°♒45'37	0°50'03
minimum elong	6817 Jan 30 16:41	11°♒45'37	0°50'06
max. Earth dist.	6817 Jan 30 14:45	11°♒45'02	10.71896 AU
morning rise	6817 Feb 16 15:00	13°♒48'33	
	6817 Feb 26 18:50	15°♒	
retrograde	6817 May 27 19:51	21°♒03'17	
opposition	6817 Aug 04 17:39	17°♒43'47	0°46'38
min. Earth dist.	6817 Aug 04 18:44	17°♒43'35	8.75005 AU
	6817 Sep 15 16:09	15°℞♒	
direct	6817 Oct 14 07:20	14°♒20'31	
	6817 Nov 11 15:01	15°♒	
evening set	6818 Jan 25 22:48	21°♒45'43	
conjunction	6818 Feb 11 22:14	23°♒48'15	0°25'11
minimum elong	6818 Feb 11 22:15	23°♒48'16	0°25'13
max. Earth dist.	6818 Feb 11 20:56	23°♒47'52	10.77875 AU
morning rise	6818 Feb 28 18:57	25°♒50'02	
	6818 Apr 08 13:32	0°♓	

retrograde	6818 Jun 09 03:28	3°♓02'08	
	6818 Aug 13 14:56	30°R♒	
opposition	6818 Aug 17 09:23	29°♒42'57	0°15'20
min. Earth dist.	6818 Aug 17 10:30	29°♒42'44	8.80462 AU
direct	6818 Oct 27 00:03	26°♒20'39	
	6819 Jan 04 07:19	0°♓	
evening set	6819 Feb 07 01:55	3°♓40'58	
desc. node	6819 Feb 15 22:09	4°♓44'12	
conjunction	6819 Feb 23 23:14	5°♓42'22	-0°00'34
minimum elong	6819 Feb 23 23:15	5°♓42'22	0°00'32
behind sun begin	6819 Feb 23 16:14	5°♓40'17	
behind sun end	6819 Feb 24 06:16	5°♓44'28	
max. Earth dist.	6819 Feb 23 21:52	5°♓42'01	10.82767 AU
morning rise	6819 Mar 12 18:42	7°♓43'13	
retrograde	6819 Jun 21 07:56	14°♓53'52	
opposition	6819 Aug 29 23:19	11°♓34'49	-0°16'17
min. Earth dist.	6819 Aug 30 00:06	11°♓34'40	8.84736 AU
direct	6819 Nov 08 13:02	8°♓13'27	
evening set	6820 Feb 19 01:20	15°♓29'43	
conjunction	6820 Mar 06 20:50	17°♓30'12	-0°26'03
minimum elong	6820 Mar 06 20:50	17°♓30'11	0°26'02
max. Earth dist.	6820 Mar 06 20:04	17°♓29'58	10.86369 AU
morning rise	6820 Mar 23 15:12	19°♓30'19	
retrograde	6820 Jul 02 12:55	26°♓40'48	
opposition	6820 Sep 10 11:52	23°♓21'39	-0°46'58
min. Earth dist.	6820 Sep 10 11:25	23°♓21'44	8.87653 AU
direct	6820 Nov 20 00:29	20°♓01'07	
evening set	6821 Mar 01 22:23	27°♓14'17	
conjunction	6821 Mar 18 16:29	29°♓14'06	-0°50'19
minimum elong	6821 Mar 18 16:28	29°♓14'06	0°50'18
max. Earth dist.	6821 Mar 18 17:24	29°♓14'23	10.88541 AU
	6821 Mar 25 01:27	0°♈	
morning rise	6821 Apr 04 09:58	1°♈13'47	
retrograde	6821 Jul 14 20:08	8°♈25'11	
opposition	6821 Sep 22 23:33	5°♈05'47	-1°15'33
min. Earth dist.	6821 Sep 22 21:54	5°♈06'05	8.89102 AU
direct	6821 Dec 02 07:45	1°♈45'57	
evening set	6822 Mar 13 18:16	8°♈57'01	
conjunction	6822 Mar 30 11:16	10°♈56'28	-1°12'24
minimum elong	6822 Mar 30 11:14	10°♈56'27	1°12'26
max. Earth dist.	6822 Mar 30 13:07	10°♈57'01	10.89203 AU
morning rise	6822 Apr 16 04:19	12°♈55'59	
retrograde	6822 Jul 27 02:52	20°♈09'23	
opposition	6822 Oct 05 11:15	16°♈49'35	-1°40'57
min. Earth dist.	6822 Oct 05 09:13	16°♈49'57	8.89028 AU
direct	6822 Dec 14 12:25	13°♈30'15	
evening set	6823 Mar 25 14:08	20°♈40'18	
conjunction	6823 Apr 11 06:20	22°♈39'39	-1°31'30
minimum elong	6823 Apr 11 06:17	22°♈39'38	1°31'32
max. Earth dist.	6823 Apr 11 08:12	22°♈40'13	10.88333 AU
morning rise	6823 Apr 27 23:33	24°♈39'19	
	6823 Jun 20 05:38	0°♉	
retrograde	6823 Aug 08 12:03	1°♉55'43	
	6823 Sep 28 11:59	30°R♈	
opposition	6823 Oct 17 23:31	28°♈35'21	-2°02'11
min. Earth dist.	6823 Oct 17 21:33	28°♈35'43	8.87437 AU
direct	6823 Dec 26 18:20	25°♈16'19	
	6824 Mar 14 19:56	0°♉	
evening set	6824 Apr 05 11:03	2°♉26'22	
conjunction	6824 Apr 22 03:10	4°♉25'58	-1°46'48
minimum elong	6824 Apr 22 03:08	4°♉25'58	1°46'51
max. Earth dist.	6824 Apr 22 05:19	4°♉26'37	10.85975 AU
morning rise	6824 May 08 21:09	6°♉26'08	
retrograde	6824 Aug 19 23:50	13°♉46'21	
opposition	6824 Oct 29 12:48	10°♉25'15	-2°18'24
min. Earth dist.	6824 Oct 29 10:22	10°♉25'43	8.84382 AU
direct	6825 Jan 06 23:35	7°♉06'20	
evening set	6825 Apr 17 09:58	14°♉17'21	
	6825 Apr 23 09:22	15°♉	
conjunction	6825 May 04 02:54	16°♉17'35	-1°57'39
minimum elong	6825 May 04 02:53	16°♉17'35	1°57'42
max. Earth dist.	6825 May 04 06:11	16°♉18'34	10.82187 AU
morning rise	6825 May 20 22:12	18°♉18'34	
retrograde	6825 Sep 01 14:47	25°♉43'19	
opposition	6825 Nov 11 03:35	22°♉21'22	-2°28'50
min. Earth dist.	6825 Nov 11 00:23	22°♉21'58	8.79924 AU
direct	6826 Jan 19 06:48	19°♉02'19	
evening set	6826 Apr 29 12:10	26°♉15'17	
conjunction	6826 May 16 06:38	28°♉16'33	-2°03'30
minimum elong	6826 May 16 06:38	28°♉16'33	2°03'33
max. Earth dist.	6826 May 16 10:28	28°♉17'42	10.77050 AU
	6826 May 30 13:09	0°♊	
morning rise	6826 Jun 02 03:55	0°♊18'42	
retrograde	6826 Sep 14 11:48	7°♊48'31	
opposition	6826 Nov 23 20:25	4°♊25'40	-2°32'53
min. Earth dist.	6826 Nov 23 16:59	4°♊26'19	8.74164 AU
direct	6827 Jan 31 14:21	1°♊06'16	
evening set	6827 May 11 18:39	8°♊22'09	
conjunction	6827 May 28 15:21	10°♊24'48	-2°03'56
minimum elong	6827 May 28 15:22	10°♊24'48	2°03'59
max. Earth dist.	6827 May 28 18:29	10°♊25'45	10.70718 AU
morning rise	6827 Jun 14 15:32	12°♊28'31	
retrograde	6827 Sep 27 12:10	20°♊03'49	
opposition	6827 Dec 06 16:04	16°♊40'01	-2°30'08
min. Earth dist.	6827 Dec 06 13:12	16°♊40'34	8.67320 AU
direct	6828 Feb 12 23:52	13°♊20'03	
evening set	6828 May 23 06:13	20°♊39'48	
conjunction	6828 Jun 09 06:01	22°♊44'10	-1°58'43
minimum elong	6828 Jun 09 06:03	22°♊44'11	1°58'46
max. Earth dist.	6828 Jun 09 08:27	22°♊44'55	10.63484 AU
morning rise	6828 Jun 26 09:51	24°♊49'45	
	6828 Aug 14 10:07	0°♋	
retrograde	6828 Oct 09 15:40	2°♋30'41	
	6828 Dec 06 19:49	30°R♊	
opposition	6828 Dec 18 14:38	29°♊05'55	-2°20'22
min. Earth dist.	6828 Dec 18 12:24	29°♊06'21	8.59750 AU
direct	6829 Feb 24 14:47	25°♊45'10	
	6829 May 08 07:50	0°♋	
evening set	6829 Jun 04 23:58	3°♋09'28	
conjunction	6829 Jun 22 03:38	5°♋15'53	-1°47'50
minimum elong	6829 Jun 22 03:40	5°♋15'54	1°47'54
max. Earth dist.	6829 Jun 22 06:08	5°♋16'39	10.55733 AU
morning rise	6829 Jul 09 11:27	7°♋23'32	
retrograde	6829 Oct 23 00:59	15°♋09'53	
opposition	6829 Dec 31 16:09	11°♋44'11	-2°03'42
min. Earth dist.	6829 Dec 31 14:00	11°♋44'36	8.51864 AU
direct	6830 Mar 09 09:19	8°♋22'30	
evening set	6830 Jun 18 00:25	15°♋51'55	
conjunction	6830 Jul 05 08:22	18°♋00'30	-1°31'32
minimum elong	6830 Jul 05 08:25	18°♋00'31	1°31'36
max. Earth dist.	6830 Jul 05 11:31	18°♋01'29	10.47877 AU
morning rise	6830 Jul 22 20:19	20°♋10'20	

retrograde	6830 Nov 05 14:53	28°♋01'42	
opposition	6831 Jan 13 20:57	24°♋35'08	-1°40'36
min. Earth dist.	6831 Jan 13 18:22	24°♋35'39	8.44077 AU
direct	6831 Mar 22 07:30	21°♋12'26	
evening set	6831 Jul 01 07:56	28°♋47'20	
	6831 Jul 11 02:36	0°♌	
conjunction	6831 Jul 18 20:15	0°♌58'06	-1°10'23
minimum elong	6831 Jul 18 20:17	0°♌58'07	1°10'27
max. Earth dist.	6831 Jul 18 23:28	0°♌59'06	10.40322 AU
morning rise	6831 Aug 05 12:17	3°♌10'04	
retrograde	6831 Nov 19 08:31	11°♌05'46	
opposition	6832 Jan 27 04:54	7°♌38'31	-1°11'57
min. Earth dist.	6832 Jan 27 02:21	7°♌39'01	8.36791 AU
direct	6832 Apr 03 10:32	4°♌14'42	
evening set	6832 Jul 13 22:58	11°♌55'19	
conjunction	6832 Jul 31 15:18	14°♌08'09	-0°45'18
minimum elong	6832 Jul 31 15:20	14°♌08'10	0°45'21
max. Earth dist.	6832 Jul 31 17:37	14°♌08'53	10.33455 AU
	6832 Aug 07 11:56	15°♌	
morning rise	6832 Aug 18 11:02	16°♌22'04	
retrograde	6832 Dec 02 05:15	24°♌21'10	
opposition	6833 Feb 08 15:34	20°♌53'26	-0°39'01
min. Earth dist.	6833 Feb 08 13:50	20°♌53'47	8.30386 AU
direct	6833 Apr 16 17:46	17°♌28'29	
evening set	6833 Jul 27 20:59	25°♌14'48	
conjunction	6833 Aug 14 16:43	27°♌29'26	-0°17'28
minimum elong	6833 Aug 14 16:44	27°♌29'26	0°17'31
max. Earth dist.	6833 Aug 14 17:49	27°♌29'46	10.27634 AU
morning rise	6833 Sep 01 15:20	29°♌44'56	
	6833 Sep 03 16:05	0°♍	
retrograde	6833 Dec 16 04:27	7°♍46'21	
opposition	6834 Feb 22 04:55	4°♍18'23	-0°03'30
min. Earth dist.	6834 Feb 22 04:10	4°♍18'32	8.25204 AU
asc. node	6834 Mar 30 20:24	1°♍41'56	
direct	6834 Apr 30 06:08	0°♍52'22	
evening set	6834 Aug 11 01:03	8°♍44'04	
conjunction	6834 Aug 28 23:19	11°♍00'02	0°11'40
minimum elong	6834 Aug 28 23:18	11°♍00'01	0°11'38
behind sun begin	6834 Aug 28 18:12	10°♍58'25	
behind sun end	6834 Aug 29 04:25	11°♍01'38	
max. Earth dist.	6834 Aug 28 23:25	11°♍00'04	10.23170 AU
morning rise	6834 Sep 15 23:40	13°♍16'38	
retrograde	6834 Dec 30 03:43	21°♍19'12	
opposition	6835 Mar 07 20:14	17°♍51'13	0°32'34
min. Earth dist.	6835 Mar 07 20:12	17°♍51'14	8.21531 AU
direct	6835 May 13 23:35	14°♍24'16	
evening set	6835 Aug 25 10:14	22°♍20'42	
conjunction	6835 Sep 12 10:00	24°♍37'29	0°40'17
minimum elong	6835 Sep 12 09:59	24°♍37'29	0°40'16
max. Earth dist.	6835 Sep 12 09:38	24°♍37'22	10.20310 AU
morning rise	6835 Sep 30 10:45	26°♍54'36	
	6835 Oct 26 10:44	0°♎	
retrograde	6836 Jan 13 02:54	4°♎57'01	
opposition	6836 Mar 20 12:44	1°♎29'16	1°07'04
min. Earth dist.	6836 Mar 20 12:54	1°♎29'14	8.19566 AU
	6836 Apr 08 09:14	30°℞♍	
direct	6836 May 26 20:17	28°♍01'32	
	6836 Jul 13 09:29	0°♎	
evening set	6836 Sep 07 22:51	6°♎01'46	
conjunction	6836 Sep 25 22:54	8°♎18'48	1°06'45
minimum elong	6836 Sep 25 22:51	8°♎18'47	1°06'46
max. Earth dist.	6836 Sep 25 22:11	8°♎18'35	10.19213 AU
morning rise	6836 Oct 13 22:42	10°♎35'48	
retrograde	6837 Jan 26 01:55	18°♎36'44	
opposition	6837 Apr 03 06:01	15°♎09'28	1°37'50
min. Earth dist.	6837 Apr 03 06:21	15°♎09'24	8.19418 AU
direct	6837 Jun 09 18:15	11°♎41'13	
evening set	6837 Sep 22 12:38	19°♎43'56	
conjunction	6837 Oct 10 11:45	22°♎00'38	1°29'28
minimum elong	6837 Oct 10 11:42	22°♎00'37	1°29'30
max. Earth dist.	6837 Oct 10 10:38	22°♎00'16	10.19950 AU
morning rise	6837 Oct 28 09:31	24°♎16'58	
	6837 Dec 20 02:45	0°♏	
retrograde	6838 Feb 08 23:49	2°♏15'07	
	6838 Apr 02 00:52	30°℞♎	
opposition	6838 Apr 16 23:14	28°♎48'35	2°03'01
min. Earth dist.	6838 Apr 16 23:58	28°♎48'26	8.21104 AU
direct	6838 Jun 23 17:55	25°♎20'04	
	6838 Sep 08 05:37	0°♏	
evening set	6838 Oct 07 01:37	3°♏23'46	
conjunction	6838 Oct 24 22:53	5°♏39'37	1°47'04
minimum elong	6838 Oct 24 22:51	5°♏39'36	1°47'07
max. Earth dist.	6838 Oct 24 21:05	5°♏39'03	10.22496 AU
morning rise	6838 Nov 11 17:56	7°♏54'50	
	6839 Jan 23 16:57	15°♏	
retrograde	6839 Feb 22 17:22	15°♏49'01	
	6839 Mar 24 22:11	15°℞♏	
opposition	6839 Apr 30 15:28	12°♏23'25	2°21'08
min. Earth dist.	6839 Apr 30 17:08	12°♏23'04	8.24537 AU
direct	6839 Jul 07 18:48	8°♏54'53	
	6839 Oct 05 05:26	15°♏	
evening set	6839 Oct 21 11:40	16°♏58'00	
conjunction	6839 Nov 08 06:26	19°♏12'35	1°58'36
minimum elong	6839 Nov 08 06:24	19°♏12'35	1°58'40
max. Earth dist.	6839 Nov 08 03:30	19°♏11'39	10.26713 AU
morning rise	6839 Nov 25 22:21	21°♏26'20	
retrograde	6840 Mar 07 06:30	29°♏15'35	
opposition	6840 May 13 06:08	25°♏51'04	2°31'16
min. Earth dist.	6840 May 13 08:35	25°♏50'34	8.29516 AU
direct	6840 Jul 20 19:14	22°♏22'49	
	6840 Oct 31 11:55	0°♐	
evening set	6840 Nov 03 16:48	0°♐23'40	
conjunction	6840 Nov 21 08:41	2°♐36'43	2°03'34
minimum elong	6840 Nov 21 08:41	2°♐36'43	2°03'38
max. Earth dist.	6840 Nov 21 05:02	2°♐35'34	10.32357 AU
morning rise	6840 Dec 08 21:18	4°♐48'45	
retrograde	6841 Mar 20 15:33	12°♐32'25	
opposition	6841 May 26 18:27	9°♐09'00	2°33'07
min. Earth dist.	6841 May 26 20:58	9°♐08'30	8.35758 AU
direct	6841 Aug 03 17:07	5°♐41'18	
evening set	6841 Nov 17 15:33	13°♐38'23	
conjunction	6841 Dec 05 04:35	15°♐49'45	2°01'54
minimum elong	6841 Dec 05 04:36	15°♐49'45	2°01'58
max. Earth dist.	6841 Dec 05 01:01	15°♐48'37	10.39118 AU
morning rise	6841 Dec 22 13:59	17°♐59'58	
retrograde	6842 Apr 02 19:41	25°♐37'38	
opposition	6842 Jun 09 03:50	22°♐15'19	2°26'55
min. Earth dist.	6842 Jun 09 05:54	22°♐14'55	8.42924 AU
direct	6842 Aug 17 12:24	18°♐48'20	
evening set	6842 Dec 01 07:01	26°♐40'28	
conjunction	6842 Dec 18 17:20	28°♐50'04	1°53'58
minimum elong	6842 Dec 18 17:21	28°♐50'04	1°54'02

max. Earth dist.	6842 Dec 18 14:26	28°♐49'10	10.46625 AU
	6842 Dec 28 01:48	0°♑	
morning rise	6843 Jan 04 23:41	0°♑58'29	
retrograde	6843 Apr 15 19:07	8°♑30'07	
opposition	6843 Jun 22 10:02	5°♑08'49	2°13'23
min. Earth dist.	6843 Jun 22 11:43	5°♑08'29	8.50619 AU
direct	6843 Aug 31 03:37	1°♑42'42	
evening set	6843 Dec 14 14:55	9°♑29'02	
conjunction	6843 Dec 31 22:33	11°♑36'51	1°40'29
minimum elong	6843 Dec 31 22:36	11°♑36'52	1°40'32
max. Earth dist.	6843 Dec 31 20:22	11°♑36'10	10.54468 AU
morning rise	6844 Jan 18 02:07	13°♑43'30	
retrograde	6844 Apr 27 14:51	21°♑09'24	
opposition	6844 Jul 04 12:52	17°♑49'00	1°53'34
min. Earth dist.	6844 Jul 04 14:48	17°♑48'37	8.58448 AU
direct	6844 Sep 12 13:23	14°♑23'50	
evening set	6844 Dec 26 15:15	22°♑03'54	
conjunction	6845 Jan 12 20:16	24°♑10'02	1°22'22
minimum elong	6845 Jan 12 20:18	24°♑10'02	1°22'25
max. Earth dist.	6845 Jan 12 17:54	24°♑09'18	10.62245 AU
morning rise	6845 Jan 29 21:30	26°♑15'02	
	6845 Mar 04 13:49	0°♒	
retrograde	6845 May 10 05:34	3°♒35'46	
opposition	6845 Jul 17 12:19	0°♒16'06	1°28'44
min. Earth dist.	6845 Jul 17 14:35	0°♒15'40	8.66011 AU
	6845 Jul 21 00:18	30°℞♑	
direct	6845 Sep 25 17:59	26°♑51'54	
	6845 Nov 28 07:45	0°♒	
evening set	6846 Jan 08 08:18	4°♒25'42	
conjunction	6846 Jan 25 10:51	6°♒30'14	1°00'41
minimum elong	6846 Jan 25 10:53	6°♒30'14	1°00'43
max. Earth dist.	6846 Jan 25 07:59	6°♒29'21	10.69541 AU
morning rise	6846 Feb 11 10:11	8°♒33'47	
	6846 Apr 21 10:04	15°♒	
retrograde	6846 May 22 14:53	15°♒50'15	
	6846 Jun 23 11:02	15°℞♒	
opposition	6846 Jul 30 08:27	12°♒31'06	1°00'15
min. Earth dist.	6846 Jul 30 10:44	12°♒30'40	8.72884 AU
direct	6846 Oct 08 20:04	9°♒07'51	
	6847 Jan 07 00:50	15°♒	
evening set	6847 Jan 20 19:08	16°♒35'47	
conjunction	6847 Feb 06 19:27	18°♒38'54	0°36'32
minimum elong	6847 Feb 06 19:29	18°♒38'54	0°36'34
max. Earth dist.	6847 Feb 06 16:31	18°♒38'00	10.75934 AU
morning rise	6847 Feb 23 17:02	20°♒41'11	
retrograde	6847 Jun 03 23:47	27°♒54'33	
opposition	6847 Aug 12 01:40	24°♒35'43	0°29'31
min. Earth dist.	6847 Aug 12 03:15	24°♒35'25	8.78679 AU
direct	6847 Oct 21 16:27	21°♒13'26	
evening set	6848 Feb 02 00:43	28°♒36'11	
	6848 Feb 13 16:57	0°♓	
conjunction	6848 Feb 18 23:04	0°♓38'07	0°11'04
minimum elong	6848 Feb 18 23:04	0°♓38'07	0°11'06
behind sun begin	6848 Feb 18 17:47	0°♓36'32	
behind sun end	6848 Feb 19 04:21	0°♓39'42	
max. Earth dist.	6848 Feb 18 21:09	0°♓37'33	10.81104 AU
morning rise	6848 Mar 06 19:01	2°♓39'22	
retrograde	6848 Jun 15 07:12	9°♓50'54	
desc. node	6848 Jul 29 04:35	8°♓20'50	
opposition	6848 Aug 23 16:57	6°♓32'11	-0°02'09
min. Earth dist.	6848 Aug 23 17:55	6°♓32'00	8.83171 AU
direct	6848 Nov 02 06:43	3°♓10'47	
evening set	6849 Feb 13 02:13	10°♓29'12	
conjunction	6849 Mar 01 22:41	12°♓30'09	-0°14'44
minimum elong	6849 Mar 01 22:40	12°♓30'09	0°14'43
behind sun begin	6849 Mar 01 19:37	12°♓29'14	
behind sun end	6849 Mar 02 01:44	12°♓31'03	
max. Earth dist.	6849 Mar 01 21:24	12°♓29'46	10.84897 AU
morning rise	6849 Mar 18 17:23	14°♓30'38	
retrograde	6849 Jun 27 13:03	21°♓41'32	
opposition	6849 Sep 05 06:41	18°♓22'43	-0°33'26
min. Earth dist.	6849 Sep 05 07:34	18°♓22'33	8.86256 AU
direct	6849 Nov 14 19:05	15°♓02'00	
evening set	6850 Feb 25 00:59	22°♓17'01	
conjunction	6850 Mar 13 19:42	24°♓17'14	-0°39'41
minimum elong	6850 Mar 13 19:41	24°♓17'13	0°39'40
max. Earth dist.	6850 Mar 13 18:13	24°♓16'47	10.87232 AU
morning rise	6850 Mar 30 13:36	26°♓17'11	
	6850 May 03 19:42	0°♈	
retrograde	6850 Jul 09 18:52	3°♈28'35	
opposition	6850 Sep 17 19:15	0°♈09'25	-1°03'09
min. Earth dist.	6850 Sep 17 20:10	0°♈09'15	8.87861 AU
	6850 Sep 19 21:39	30°℞♓	
direct	6850 Nov 27 04:20	26°♓49'14	
	6851 Jan 30 05:29	0°♈	
evening set	6851 Mar 08 21:55	4°♈01'49	
conjunction	6851 Mar 25 15:18	6°♈01'32	-1°02'54
minimum elong	6851 Mar 25 15:16	6°♈01'32	1°02'55
max. Earth dist.	6851 Mar 25 14:18	6°♈01'14	10.88058 AU
morning rise	6851 Apr 11 08:41	8°♈01'16	
retrograde	6851 Jul 22 00:26	15°♈14'16	
opposition	6851 Sep 30 07:33	11°♈54'32	-1°30'09
min. Earth dist.	6851 Sep 30 07:29	11°♈54'32	8.87952 AU
direct	6851 Dec 09 12:01	8°♈34'43	
evening set	6852 Mar 19 18:00	15°♈45'51	
conjunction	6852 Apr 05 10:37	17°♈45'23	-1°23'28
minimum elong	6852 Apr 05 10:35	17°♈45'23	1°23'30
max. Earth dist.	6852 Apr 05 11:12	17°♈45'34	10.87360 AU
morning rise	6852 Apr 22 03:48	19°♈45'08	
retrograde	6852 Aug 02 09:52	27°♈00'50	
opposition	6852 Oct 11 19:59	23°♈40'20	-1°53'25
min. Earth dist.	6852 Oct 11 18:36	23°♈40'36	8.86535 AU
direct	6852 Dec 20 19:21	20°♈20'44	
evening set	6853 Mar 31 14:45	27°♈31'26	
conjunction	6853 Apr 17 07:05	29°♈31'08	-1°40'35
minimum elong	6853 Apr 17 07:03	29°♈31'07	1°40'37
max. Earth dist.	6853 Apr 17 08:58	29°♈31'42	10.85176 AU
	6853 Apr 21 06:56	0°♉	
morning rise	6853 May 04 00:38	1°♉31'15	
retrograde	6853 Aug 14 21:32	8°♉50'29	
opposition	6853 Oct 24 09:04	5°♉29'09	-2°12'02
min. Earth dist.	6853 Oct 24 06:58	5°♉29'32	8.83668 AU
direct	6854 Jan 01 23:52	2°♉09'35	
evening set	6854 Apr 12 13:12	9°♉20'56	
conjunction	6854 Apr 29 05:48	11°♉21'07	-1°53'30
minimum elong	6854 Apr 29 05:46	11°♉21'06	1°53'33
max. Earth dist.	6854 Apr 29 07:39	11°♉21'41	10.81596 AU
morning rise	6854 May 16 00:29	13°♉21'57	
	6854 May 30 04:23	15°♉	
retrograde	6854 Aug 27 11:10	20°♉45'31	
opposition	6854 Nov 05 23:44	17°♉23'17	-2°25'08
min. Earth dist.	6854 Nov 05 21:42	17°♉23'40	8.79460 AU
	6854 Dec 11 05:34	15°℞♉	

direct	6855 Jan 14 05:53	14°♉03'34	
	6855 Feb 16 14:54	15°♉	
evening set	6855 Apr 24 14:14	21°♉16'34	
conjunction	6855 May 11 07:54	23°♉17'37	-2°01'38
minimum elong	6855 May 11 07:53	23°♉17'37	2°01'41
max. Earth dist.	6855 May 11 09:59	23°♉18'15	10.76761 AU
morning rise	6855 May 28 04:27	25°♉19'31	
	6855 Jul 11 07:11	0°♊	
retrograde	6855 Sep 09 05:16	2°♊48'04	
	6855 Nov 10 22:48	30°℞♉	
opposition	6855 Nov 18 16:23	29°♉24'53	-2°32'05
min. Earth dist.	6855 Nov 18 14:06	29°♉25'19	8.74071 AU
direct	6856 Jan 26 14:20	26°♉04'52	
	6856 Apr 05 21:07	0°♊	
evening set	6856 May 05 19:06	3°♊20'26	
conjunction	6856 May 22 14:50	5°♊22'45	-2°04'29
minimum elong	6856 May 22 14:51	5°♊22'45	2°04'32
max. Earth dist.	6856 May 22 17:56	5°♊23'41	10.70858 AU
morning rise	6856 Jun 08 13:53	7°♊26'03	
retrograde	6856 Sep 21 03:28	14°♊59'59	
opposition	6856 Nov 30 11:15	11°♊35'49	-2°32'19
min. Earth dist.	6856 Nov 30 08:14	11°♊36'24	8.67717 AU
direct	6857 Feb 07 00:27	8°♊15'22	
evening set	6857 May 18 04:49	15°♊34'23	
conjunction	6857 Jun 04 03:27	17°♊38'17	-2°01'43
minimum elong	6857 Jun 04 03:28	17°♊38'17	2°01'47
max. Earth dist.	6857 Jun 04 07:38	17°♊39'34	10.64121 AU
morning rise	6857 Jun 21 05:38	19°♊43'19	
retrograde	6857 Oct 04 06:58	27°♊22'48	
opposition	6857 Dec 13 08:57	23°♊57'43	-2°25'34
min. Earth dist.	6857 Dec 13 05:09	23°♊58'27	8.60653 AU
direct	6858 Feb 19 13:38	20°♊36'42	
evening set	6858 May 30 20:17	27°♊59'53	
conjunction	6858 Jun 16 22:21	0°♋05'40	-1°53'14
minimum elong	6858 Jun 16 22:23	0°♋05'41	1°53'18
	6858 Jun 16 04:00	0°♋	
max. Earth dist.	6858 Jun 17 02:33	0°♋06'58	10.56846 AU
morning rise	6858 Jul 04 04:19	2°♋12'40	
retrograde	6858 Oct 17 16:15	9°♋57'39	
opposition	6858 Dec 26 09:50	6°♋31'45	-2°11'47
min. Earth dist.	6858 Dec 26 06:05	6°♋32'29	8.53209 AU
direct	6859 Mar 04 05:03	3°♋10'01	
evening set	6859 Jun 12 18:19	10°♋38'01	
conjunction	6859 Jun 30 00:21	12°♋45'53	-1°39'10
minimum elong	6859 Jun 30 00:23	12°♋45'54	1°39'15
max. Earth dist.	6859 Jun 30 04:02	12°♋47'02	10.49387 AU
morning rise	6859 Jul 17 10:35	14°♋55'01	
retrograde	6859 Oct 31 04:40	22°♋45'09	
opposition	6860 Jan 08 13:58	19°♋18'34	-1°51'17
min. Earth dist.	6860 Jan 08 10:46	19°♋19'12	8.45762 AU
direct	6860 Mar 16 01:53	15°♋55'59	
evening set	6860 Jun 24 23:23	23°♋29'20	
conjunction	6860 Jul 12 09:45	25°♋39'22	-1°19'58
minimum elong	6860 Jul 12 09:47	25°♋39'23	1°20'02
max. Earth dist.	6860 Jul 12 13:02	25°♋40'24	10.42116 AU
morning rise	6860 Jul 30 00:17	27°♋50'39	
	6860 Aug 17 04:14	0°♌	
retrograde	6860 Nov 12 20:21	5°♌45'22	
opposition	6861 Jan 20 21:18	2°♌18'15	-1°24'46
min. Earth dist.	6861 Jan 20 18:36	2°♌18'47	8.38690 AU
	6861 Feb 21 18:41	30°℞♋	

direct	6861 Mar 29 04:32	28°♋54'48	
	6861 May 03 01:07	0°♌	
evening set	6861 Jul 08 11:51	6°♌33'44	
conjunction	6861 Jul 26 02:30	8°♌45'53	-0°56'21
minimum elong	6861 Jul 26 02:32	8°♌45'54	0°56'25
max. Earth dist.	6861 Jul 26 06:03	8°♌47'00	10.35402 AU
morning rise	6861 Aug 12 20:51	10°♌59'10	
	6861 Sep 17 00:54	15°♌	
retrograde	6861 Nov 26 16:15	18°♌57'39	
opposition	6862 Feb 03 07:32	15°♌30'11	-0°53'23
min. Earth dist.	6862 Feb 03 04:46	15°♌30'44	8.32373 AU
	6862 Feb 09 14:39	15°℞♌	
direct	6862 Apr 11 11:00	12°♌05'51	
	6862 Jun 08 17:34	15°♌	
evening set	6862 Jul 22 07:34	19°♌50'24	
conjunction	6862 Aug 09 02:03	22°♌04'26	-0°29'28
minimum elong	6862 Aug 09 02:04	22°♌04'26	0°29'30
max. Earth dist.	6862 Aug 09 05:44	22°♌05'36	10.29615 AU
morning rise	6862 Aug 26 23:30	24°♌19'25	
	6862 Oct 18 17:52	0°♍	
retrograde	6862 Dec 10 16:12	2°♍20'38	
	6863 Feb 02 18:08	30°℞♌	
opposition	6863 Feb 16 20:31	28°♌52'59	-0°18'40
min. Earth dist.	6863 Feb 16 17:42	28°♌53'33	8.27165 AU
direct	6863 Apr 24 21:06	25°♌27'47	
	6863 Jul 08 09:04	0°♍	
evening set	6863 Aug 05 09:56	3°♍17'43	
conjunction	6863 Aug 23 07:24	5°♍33'14	-0°00'41
minimum elong	6863 Aug 23 07:23	5°♍33'14	0°00'43
behind sun begin	6863 Aug 23 00:06	5°♍30'57	
behind sun end	6863 Aug 23 14:41	5°♍35'32	
max. Earth dist.	6863 Aug 23 10:37	5°♍34'12	10.25073 AU
asc. node	6863 Aug 31 21:22	6°♍38'38	
morning rise	6863 Sep 10 07:00	7°♍49'29	
retrograde	6863 Dec 24 16:48	15°♍52'10	
opposition	6864 Mar 01 11:41	12°♍24'34	0°17'28
min. Earth dist.	6864 Mar 01 09:22	12°♍25'02	8.23342 AU
direct	6864 May 07 12:47	8°♍58'31	
evening set	6864 Aug 18 17:58	16°♍53'16	
conjunction	6864 Sep 05 17:14	19°♍09'46	0°28'24
minimum elong	6864 Sep 05 17:13	19°♍09'46	0°28'24
max. Earth dist.	6864 Sep 05 19:05	19°♍10'21	10.22001 AU
morning rise	6864 Sep 23 17:47	21°♍26'42	
retrograde	6865 Jan 06 17:06	29°♍29'30	
opposition	6865 Mar 15 04:15	26°♍02'09	0°52'54
min. Earth dist.	6865 Mar 15 03:15	26°♍02'21	8.21079 AU
direct	6865 May 21 08:02	22°♍35'19	
	6865 Aug 28 16:06	0°♎	
evening set	6865 Sep 02 05:49	0°♎34'03	
conjunction	6865 Sep 20 05:41	2°♎50'57	0°56'00
minimum elong	6865 Sep 20 05:39	2°♎50'56	0°56'00
max. Earth dist.	6865 Sep 20 05:29	2°♎50'53	10.20517 AU
morning rise	6865 Oct 08 05:56	5°♎07'59	
retrograde	6866 Jan 20 16:48	13°♎09'36	
opposition	6866 Mar 28 21:42	9°♎42'42	1°25'27
min. Earth dist.	6866 Mar 28 22:13	9°♎42'36	8.20424 AU
direct	6866 Jun 04 05:54	6°♎15'14	
evening set	6866 Sep 16 19:28	14°♎16'52	
conjunction	6866 Oct 04 18:52	16°♎33'39	1°20'27
minimum elong	6866 Oct 04 18:49	16°♎33'38	1°20'28
max. Earth dist.	6866 Oct 04 16:56	16°♎33'02	10.20619 AU

morning rise	6866 Oct 22 17:41	18°♎50'15	
retrograde	6867 Feb 03 14:59	26°♎49'35	
opposition	6867 Apr 11 15:12	23°♎23'19	1°53'08
min. Earth dist.	6867 Apr 11 16:45	23°♎23'00	8.21351 AU
direct	6867 Jun 18 06:16	19°♎55'27	
evening set	6867 Oct 01 09:18	27°♎58'48	
	6867 Oct 17 08:26	0°♏	
conjunction	6867 Oct 19 07:18	0°♏14'57	1°40'19
minimum elong	6867 Oct 19 07:16	0°♏14'56	1°40'21
max. Earth dist.	6867 Oct 19 04:16	0°♏13'59	10.22308 AU
morning rise	6867 Nov 06 03:42	2°♏30'38	
retrograde	6868 Feb 17 09:15	10°♏26'32	
opposition	6868 Apr 24 07:59	7°♏01'04	2°14'20
min. Earth dist.	6868 Apr 24 09:56	7°♏00'40	8.23872 AU
direct	6868 Jul 01 08:11	3°♏33'02	
evening set	6868 Oct 14 21:05	11°♏36'32	
conjunction	6868 Nov 01 16:57	13°♏51'38	1°54'27
minimum elong	6868 Nov 01 16:55	13°♏51'37	1°54'31
max. Earth dist.	6868 Nov 01 13:42	13°♏50'36	10.25590 AU
	6868 Nov 10 16:10	15°♏	
morning rise	6868 Nov 19 10:14	16°♏05'59	
retrograde	6869 Mar 02 00:42	23°♏57'27	
opposition	6869 May 07 23:37	20°♏32'51	2°27'52
min. Earth dist.	6869 May 08 01:34	20°♏32'27	8.27936 AU
direct	6869 Jul 15 08:50	17°♏04'52	
evening set	6869 Oct 29 04:32	25°♏06'47	
conjunction	6869 Nov 15 21:48	27°♏20'29	2°02'11
minimum elong	6869 Nov 15 21:47	27°♏20'29	2°02'15
max. Earth dist.	6869 Nov 15 18:42	27°♏19'30	10.30354 AU
morning rise	6869 Dec 03 11:43	29°♏33'14	
	6869 Dec 07 02:31	0°♐	
retrograde	6870 Mar 15 12:43	7°♐19'23	
opposition	6870 May 21 13:11	3°♐55'42	2°33'12
min. Earth dist.	6870 May 21 15:34	3°♐55'14	8.33360 AU
direct	6870 Jul 29 07:02	0°♐27'57	
evening set	6870 Nov 12 06:21	8°♐26'44	
conjunction	6870 Nov 29 20:44	10°♐38'49	2°03'16
minimum elong	6870 Nov 29 20:45	10°♐38'49	2°03'21
max. Earth dist.	6870 Nov 29 17:16	10°♐37'43	10.36357 AU
morning rise	6870 Dec 17 07:22	12°♐49'48	
retrograde	6871 Mar 28 19:37	20°♐30'01	
opposition	6871 Jun 03 23:53	17°♐07'17	2°30'20
min. Earth dist.	6871 Jun 04 02:56	17°♐06'41	8.39851 AU
direct	6871 Aug 12 03:19	13°♐39'57	
evening set	6871 Nov 26 01:10	21°♐34'15	
conjunction	6871 Dec 13 12:38	23°♐44'36	1°57'54
minimum elong	6871 Dec 13 12:39	23°♐44'36	1°57'59
max. Earth dist.	6871 Dec 13 08:34	23°♐43'20	10.43267 AU
morning rise	6871 Dec 30 20:13	25°♐53'47	
	6872 Feb 05 07:24	0°♑	
retrograde	6872 Apr 09 19:33	3°♑27'53	
opposition	6872 Jun 16 07:31	0°♑06'02	2°19'46
min. Earth dist.	6872 Jun 16 10:56	0°♑05'22	8.47053 AU
	6872 Jun 17 14:13	30°℞♐	
direct	6872 Aug 24 21:26	26°♐39'18	
	6872 Oct 29 00:57	0°♑	
evening set	6872 Dec 08 12:06	4°♑28'05	
conjunction	6872 Dec 25 20:45	6°♑36'40	1°46'39
minimum elong	6872 Dec 25 20:47	6°♑36'40	1°46'43
max. Earth dist.	6872 Dec 25 16:26	6°♑35'19	10.50710 AU
morning rise	6873 Jan 12 01:37	8°♑44'05	

retrograde	6873 Apr 22 15:29	16°♑12'16	
opposition	6873 Jun 29 11:36	12°♑51'12	2°02'27
min. Earth dist.	6873 Jun 29 14:29	12°♑50'38	8.54587 AU
direct	6873 Sep 07 10:28	9°♑25'13	
evening set	6873 Dec 21 15:14	17°♑07'53	
conjunction	6874 Jan 07 21:22	19°♑14'44	1°30'22
minimum elong	6874 Jan 07 21:24	19°♑14'45	1°30'25
max. Earth dist.	6874 Jan 07 17:49	19°♑13'39	10.58304 AU
morning rise	6874 Jan 24 23:46	21°♑20'28	
retrograde	6874 May 05 07:45	28°♑43'14	
opposition	6874 Jul 12 11:58	25°♑22'48	1°39'34
min. Earth dist.	6874 Jul 12 13:59	25°♑22'25	8.62080 AU
direct	6874 Sep 20 17:33	21°♑57'41	
evening set	6875 Jan 03 10:59	29°♑34'04	
	6875 Jan 07 01:10	0°♒	
conjunction	6875 Jan 20 14:46	1°♒39'19	1°10'03
minimum elong	6875 Jan 20 14:48	1°♒39'19	1°10'06
max. Earth dist.	6875 Jan 20 12:24	1°♒38'35	10.65672 AU
morning rise	6875 Feb 06 14:55	3°♒43'31	
retrograde	6875 May 17 19:49	11°♒01'36	
opposition	6875 Jul 25 09:08	7°♒41'43	1°12'28
min. Earth dist.	6875 Jul 25 10:37	7°♒41'26	8.69177 AU
direct	6875 Oct 03 19:55	4°♒17'33	
evening set	6876 Jan 16 00:02	11°♒47'50	
conjunction	6876 Feb 02 01:27	13°♒51'35	0°46'50
minimum elong	6876 Feb 02 01:29	13°♒51'35	0°46'52
max. Earth dist.	6876 Feb 01 23:49	13°♒51'05	10.72475 AU
	6876 Feb 11 10:34	15°♒	
morning rise	6876 Feb 18 23:40	15°♒54'24	
retrograde	6876 May 29 05:15	23°♒08'50	
opposition	6876 Aug 06 03:21	19°♒49'23	0°42'33
min. Earth dist.	6876 Aug 06 04:51	19°♒49'06	8.75572 AU
direct	6876 Oct 15 16:46	16°♒26'12	
evening set	6877 Jan 27 07:21	23°♒50'52	
conjunction	6877 Feb 13 06:31	25°♒53'17	0°21'49
minimum elong	6877 Feb 13 06:31	25°♒53'17	0°21'51
max. Earth dist.	6877 Feb 13 04:43	25°♒52'45	10.78428 AU
morning rise	6877 Mar 02 03:12	27°♒54'58	
	6877 Mar 20 08:11	0°♓	
retrograde	6877 Jun 10 11:02	5°♓06'49	
opposition	6877 Aug 18 18:53	1°♓47'38	0°11'10
min. Earth dist.	6877 Aug 18 20:05	1°♓47'24	8.80998 AU
	6877 Sep 12 21:23	30°℞♒	
direct	6877 Oct 28 09:08	28°♒25'25	
	6877 Dec 11 18:30	0°♓	
desc. node	6877 Dec 29 19:13	1°♓26'07	
evening set	6878 Feb 08 09:54	5°♓45'14	
conjunction	6878 Feb 25 07:04	7°♓46'30	-0°03'59
minimum elong	6878 Feb 25 07:03	7°♓46'30	0°03'57
behind sun begin	6878 Feb 25 00:07	7°♓44'26	
behind sun end	6878 Feb 25 14:00	7°♓48'34	
max. Earth dist.	6878 Feb 25 05:44	7°♓46'08	10.83277 AU
morning rise	6878 Mar 14 02:28	9°♓47'15	
retrograde	6878 Jun 22 15:56	16°♓57'46	
opposition	6878 Aug 31 08:23	13°♓38'39	-0°20'21
min. Earth dist.	6878 Aug 31 08:32	13°♓38'38	8.85214 AU
direct	6878 Nov 09 23:35	10°♓17'21	
evening set	6879 Feb 20 08:56	17°♓33'10	
conjunction	6879 Mar 09 04:23	19°♓33'33	-0°29'17
minimum elong	6879 Mar 09 04:22	19°♓33'32	0°29'16
max. Earth dist.	6879 Mar 09 04:27	19°♓33'34	10.86806 AU

morning rise	6879 Mar 25 22:34	21°♓33'34	
retrograde	6879 Jul 04 22:03	28°♓43'56	
opposition	6879 Sep 12 20:32	25°♓24'45	-0°50'46
min. Earth dist.	6879 Sep 12 19:25	25°♓24'57	8.88046 AU
direct	6879 Nov 22 08:40	22°♓04'16	
evening set	6880 Mar 03 05:41	29°♓17'02	
	6880 Mar 09 07:03	0°♈	

conjunction	6880 Mar 19 23:40	1°♈16'46	-0°53'15
minimum elong	6880 Mar 19 23:39	1°♈16'45	0°53'16
max. Earth dist.	6880 Mar 20 01:00	1°♈17'10	10.88883 AU
morning rise	6880 Apr 05 17:01	3°♈16'22	
retrograde	6880 Jul 16 03:37	10°♈27'43	
opposition	6880 Sep 24 08:06	7°♈08'16	-1°18'56
min. Earth dist.	6880 Sep 24 06:31	7°♈08'34	8.89398 AU
direct	6880 Dec 03 14:54	3°♈48'29	
evening set	6881 Mar 15 01:18	10°♈59'14	

conjunction	6881 Mar 31 18:05	12°♈58'36	-1°14'58
minimum elong	6881 Mar 31 18:03	12°♈58'35	1°15'00
max. Earth dist.	6881 Mar 31 19:27	12°♈59'00	10.89444 AU
morning rise	6881 Apr 17 11:11	14°♈58'04	
retrograde	6881 Jul 28 10:55	22°♈11'29	
opposition	6881 Oct 06 19:34	18°♈51'38	-1°43'48
min. Earth dist.	6881 Oct 06 18:01	18°♈51'55	8.89221 AU
direct	6881 Dec 15 20:54	15°♈32'19	
evening set	6882 Mar 26 20:59	22°♈42'07	

conjunction	6882 Apr 12 13:06	24°♈41'26	-1°33'34
minimum elong	6882 Apr 12 13:04	24°♈41'25	1°33'36
max. Earth dist.	6882 Apr 12 14:38	24°♈41'54	10.88469 AU
morning rise	6882 Apr 29 06:25	26°♈41'05	
	6882 May 29 10:33	0°♉	
retrograde	6882 Aug 09 19:03	3°♉57'32	
opposition	6882 Oct 19 07:26	0°♉37'07	-2°04'23
min. Earth dist.	6882 Oct 19 05:29	0°♉37'28	8.87519 AU
	6882 Oct 27 14:47	30°℞♈	
direct	6882 Dec 28 01:36	27°♈18'05	
	6883 Feb 24 06:27	0°♉	
evening set	6883 Apr 07 17:45	4°♉28'00	

conjunction	6883 Apr 24 09:58	6°♉27'35	-1°48'18
minimum elong	6883 Apr 24 09:57	6°♉27'35	1°48'21
max. Earth dist.	6883 Apr 24 12:45	6°♉28'25	10.85999 AU
morning rise	6883 May 11 03:57	8°♉27'44	
	6883 Jul 21 22:35	15°♉	
retrograde	6883 Aug 22 06:52	15°♉48'07	
	6883 Sep 23 04:00	15°℞♉	
opposition	6883 Oct 31 20:35	12°♉26'56	-2°19'52
min. Earth dist.	6883 Oct 31 17:28	12°♉27'31	8.84356 AU
direct	6884 Jan 09 07:45	9°♉08'02	
	6884 Apr 07 08:15	15°♉	
evening set	6884 Apr 18 16:39	16°♉18'58	

conjunction	6884 May 05 09:43	18°♉19'15	-1°58'31
minimum elong	6884 May 05 09:42	18°♉19'14	1°58'34
max. Earth dist.	6884 May 05 13:35	18°♉20'24	10.82116 AU
morning rise	6884 May 22 05:03	20°♉20'15	
retrograde	6884 Sep 03 00:18	27°♉45'11	
opposition	6884 Nov 12 11:20	24°♉23'11	-2°29'29
min. Earth dist.	6884 Nov 12 07:44	24°♉23'52	8.79823 AU
direct	6885 Jan 20 13:45	21°♉04'09	
evening set	6885 Apr 30 19:04	28°♉17'05	
	6885 May 15 01:01	0°♊	

conjunction	6885 May 17 13:37	0°♊18'23	-2°03'42
minimum elong	6885 May 17 13:37	0°♊18'23	2°03'45
max. Earth dist.	6885 May 17 17:08	0°♊19'27	10.76935 AU
morning rise	6885 Jun 03 11:10	2°♊20'37	
retrograde	6885 Sep 15 19:34	9°♊50'34	
opposition	6885 Nov 25 04:08	6°♊27'41	-2°32'42
min. Earth dist.	6885 Nov 25 01:03	6°♊28'16	8.74044 AU
direct	6886 Feb 01 20:16	3°♊08'15	
evening set	6886 May 13 01:43	10°♊24'12	

conjunction	6886 May 29 22:35	12°♊26'53	-2°03'26
minimum elong	6886 May 29 22:36	12°♊26'54	2°03'29
max. Earth dist.	6886 May 30 01:10	12°♊27'41	10.70602 AU
morning rise	6886 Jun 15 23:08	14°♊30'41	
retrograde	6886 Sep 28 18:45	22°♊06'04	
opposition	6886 Dec 07 23:43	18°♊42'15	-2°29'05
min. Earth dist.	6886 Dec 07 21:26	18°♊42'41	8.67195 AU
direct	6887 Feb 14 08:05	15°♊22'14	
evening set	6887 May 25 13:25	22°♊42'02	

conjunction	6887 Jun 11 13:32	24°♊46'31	-1°57'32
minimum elong	6887 Jun 11 13:34	24°♊46'31	1°57'36
max. Earth dist.	6887 Jun 11 16:10	24°♊47'19	10.63349 AU
morning rise	6887 Jun 28 17:39	26°♊52'11	
	6887 Jul 26 06:44	0°♋	
retrograde	6887 Oct 11 23:47	4°♋33'13	
opposition	6887 Dec 20 22:17	1°♋08'26	-2°18'30
min. Earth dist.	6887 Dec 20 20:01	1°♋08'52	8.59593 AU
	6888 Jan 04 22:32	30°℞♊	
direct	6888 Feb 26 22:36	27°♊47'40	
	6888 Apr 17 21:57	0°♋	
evening set	6888 Jun 06 07:26	5°♋12'04	

conjunction	6888 Jun 23 11:31	7°♋18'35	-1°46'00
minimum elong	6888 Jun 23 11:34	7°♋18'36	1°46'04
max. Earth dist.	6888 Jun 23 14:38	7°♋19'33	10.55554 AU
morning rise	6888 Jul 10 19:36	9°♋26'22	
retrograde	6888 Oct 24 09:42	17°♋12'50	
opposition	6889 Jan 01 23:50	13°♋47'07	-2°01'04
min. Earth dist.	6889 Jan 01 21:16	13°♋47'37	8.51657 AU
direct	6889 Mar 10 16:22	10°♋25'26	
evening set	6889 Jun 19 08:21	17°♋55'03	

conjunction	6889 Jul 06 16:42	20°♋03'45	-1°29'07
minimum elong	6889 Jul 06 16:45	20°♋03'46	1°29'12
max. Earth dist.	6889 Jul 06 19:50	20°♋04'44	10.47646 AU
morning rise	6889 Jul 24 04:57	22°♋13'42	
	6889 Oct 27 23:59	0°♌	
retrograde	6889 Nov 06 23:33	0°♌05'11	
	6889 Nov 16 23:45	30°℞♋	
opposition	6890 Jan 15 04:46	26°♋38'39	-1°37'19
min. Earth dist.	6890 Jan 15 02:10	26°♋39'10	8.43820 AU
direct	6890 Mar 23 15:02	23°♋15'55	
	6890 Jun 25 15:59	0°♌	
evening set	6890 Jul 02 16:24	0°♌51'06	

conjunction	6890 Jul 20 04:58	3°♌02'00	-1°07'30
minimum elong	6890 Jul 20 05:00	3°♌02'01	1°07'34
max. Earth dist.	6890 Jul 20 07:20	3°♌02'45	10.40052 AU
morning rise	6890 Aug 06 21:21	5°♌14'06	
retrograde	6890 Nov 20 17:46	13°♌09'55	
opposition	6891 Jan 28 12:57	9°♌42'43	-1°08'09
min. Earth dist.	6891 Jan 28 11:01	9°♌43'06	8.36508 AU
direct	6891 Apr 05 17:49	6°♌18'51	
evening set	6891 Jul 16 07:54	13°♌59'49	
	6891 Jul 24 09:15	15°♌	

conjunction	6891 Aug 03 00:27	16°♌12'47	-0°42'04
minimum elong	6891 Aug 03 00:29	16°♌12'47	0°42'08

max. Earth dist.	6891 Aug 03 01:46	16°♌13'11	10.33178 AU	
morning rise	6891 Aug 20 20:32	18°♌26'49		
retrograde	6891 Dec 04 14:51	26°♌26'01		
opposition	6892 Feb 10 23:55	22°♌58'21	-0°34'53	
min. Earth dist.	6892 Feb 10 22:56	22°♌58'32	8.30113 AU	
direct	6892 Apr 18 01:44	19°♌33'21		
evening set	6892 Jul 29 06:24	27°♌20'05		
conjunction	6892 Aug 16 02:23	29°♌34'48	-0°14'05	
minimum elong	6892 Aug 16 02:24	29°♌34'48	0°14'07	
behind sun begin	6892 Aug 15 22:59	29°♌33'44		
behind sun end	6892 Aug 16 05:48	29°♌35'52		
max. Earth dist.	6892 Aug 16 03:01	29°♌35'00	10.27378 AU	
	6892 Aug 19 09:53	0°♍		
morning rise	6892 Sep 03 01:13	1°♍50'24		
retrograde	6892 Dec 17 12:41	9°♍51'55		
asc. node	6893 Feb 15 21:22	7°♍01'03		
opposition	6893 Feb 23 13:24	6°♍24'00	0°00'44	
min. Earth dist.	6893 Feb 23 12:59	6°♍24'05	8.24968 AU	
direct	6893 May 01 15:53	2°♍57'56		
evening set	6893 Aug 12 11:00	10°♍50'04		
conjunction	6893 Aug 30 09:29	13°♍06'06	0°15'03	
minimum elong	6893 Aug 30 09:28	13°♍06'06	0°15'02	
behind sun begin	6893 Aug 30 07:08	13°♍05'22		
behind sun end	6893 Aug 30 11:48	13°♍06'50		
max. Earth dist.	6893 Aug 30 09:49	13°♍06'13	10.22957 AU	
morning rise	6893 Sep 17 09:49	15°♍22'44		
retrograde	6893 Dec 31 12:12	23°♍25'23		
opposition	6894 Mar 09 04:51	19°♍57'27	0°36'41	
min. Earth dist.	6894 Mar 09 04:31	19°♍57'31	8.21351 AU	
direct	6894 May 15 08:50	16°♍30'29		
evening set	6894 Aug 26 20:34	24°♍27'18		
conjunction	6894 Sep 13 20:25	26°♍44'08	0°43'28	
minimum elong	6894 Sep 13 20:23	26°♍44'08	0°43'28	
max. Earth dist.	6894 Sep 13 20:36	26°♍44'12	10.20163 AU	
morning rise	6894 Oct 01 20:58	29°♍01'14		
	6894 Oct 09 19:19	0°♎		
retrograde	6895 Jan 14 12:49	7°♎03'41		
opposition	6895 Mar 22 21:33	3°♎35'58	1°10'48	
min. Earth dist.	6895 Mar 22 21:21	3°♎36'01	8.19465 AU	
direct	6895 May 29 04:23	0°♎08'15		
evening set	6895 Sep 10 09:22	8°♎08'47		
conjunction	6895 Sep 28 09:21	10°♎25'49	1°09'33	
minimum elong	6895 Sep 28 09:19	10°♎25'48	1°09'34	
max. Earth dist.	6895 Sep 28 08:50	10°♎25'39	10.19153 AU	
morning rise	6895 Oct 16 08:56	12°♎42'48		
retrograde	6896 Jan 28 12:35	20°♎43'39		
opposition	6896 Apr 04 14:59	17°♎16'26	1°40'59	
min. Earth dist.	6896 Apr 04 15:29	17°♎16'20	8.19409 AU	
direct	6896 Jun 11 02:55	13°♎48'10		
evening set	6896 Sep 23 23:21	21°♎51'08		
conjunction	6896 Oct 11 22:15	24°♎07'47	1°31'42	
minimum elong	6896 Oct 11 22:12	24°♎07'46	1°31'44	
max. Earth dist.	6896 Oct 11 20:37	24°♎07'16	10.19981 AU	
morning rise	6896 Oct 29 19:47	26°♎24'04		
	6896 Nov 29 11:09	0°♏		
retrograde	6897 Feb 10 08:52	4°♏22'02		
opposition	6897 Apr 18 08:12	0°♏55'34	2°05'23	
min. Earth dist.	6897 Apr 18 09:38	0°♏55'17	8.21187 AU	
	6897 Apr 29 20:38	30°℞♎		
direct	6897 Jun 25 03:54	27°♎27'01		
	6897 Aug 19 02:55	0°♏		
evening set	6897 Oct 08 12:12	5°♏30'52		

conjunction	6897 Oct 26 09:08	7°♏46'38	1°48'37	
minimum elong	6897 Oct 26 09:05	7°♏46'37	1°48'40	
max. Earth dist.	6897 Oct 26 06:24	7°♏45'46	10.22619 AU	
morning rise	6897 Nov 13 03:58	10°♏01'46		
	6897 Dec 27 14:42	15°♏		
retrograde	6898 Feb 24 01:43	17°♏55'42		
	6898 Apr 25 20:33	15°℞♏		
opposition	6898 May 02 00:28	14°♏30'10	2°22'35	
min. Earth dist.	6898 May 02 02:40	14°♏29'43	8.24708 AU	
direct	6898 Jul 09 04:48	11°♏01'36		
	6898 Sep 17 11:15	15°♏		
evening set	6898 Oct 22 21:46	19°♏04'41		
conjunction	6898 Nov 09 16:14	21°♏19'11	1°59'23	
minimum elong	6898 Nov 09 16:13	21°♏19'11	1°59'27	
max. Earth dist.	6898 Nov 09 12:41	21°♏18'03	10.26920 AU	
morning rise	6898 Nov 27 07:59	23°♏32'50		
	6899 Jan 29 13:27	0°♐		
retrograde	6899 Mar 09 14:59	1°♐21'48		
	6899 Apr 18 07:39	30°℞♏		
opposition	6899 May 15 14:58	27°♏57'18	2°31'45	
min. Earth dist.	6899 May 15 17:18	27°♏56'49	8.29761 AU	
direct	6899 Jul 23 04:48	24°♏29'02		
	6899 Oct 16 03:34	0°♐		
evening set	6899 Nov 06 02:26	2°♐29'44		
conjunction	6899 Nov 23 18:10	4°♐42'41	2°03'33	
minimum elong	6899 Nov 23 18:10	4°♐42'41	2°03'37	
max. Earth dist.	6899 Nov 23 14:37	4°♐41'34	10.32633 AU	
morning rise	6899 Dec 11 06:34	6°♐54'37		
retrograde	6900 Mar 22 23:41	14°♐37'56		
opposition	6900 May 29 03:01	11°♐14'32	2°32'37	
min. Earth dist.	6900 May 29 05:00	11°♐14'09	8.36055 AU	
direct	6900 Aug 06 02:55	7°♐46'50		
evening set	6900 Nov 20 00:41	15°♐43'41		
conjunction	6900 Dec 07 13:37	17°♐54'56	2°01'06	
minimum elong	6900 Dec 07 13:38	17°♐54'57	2°01'11	
max. Earth dist.	6900 Dec 07 10:42	17°♐54'02	10.39439 AU	
morning rise	6900 Dec 24 22:43	20°♐05'04		
retrograde	6901 Apr 05 03:36	27°♐42'24		
opposition	6901 Jun 11 12:20	24°♐20'06	2°25'30	
min. Earth dist.	6901 Jun 11 14:02	24°♐19'46	8.43253 AU	
direct	6901 Aug 19 21:46	20°♐53'09		
evening set	6901 Dec 03 15:31	28°♐44'56		
	6901 Dec 13 19:00	0°♑		
conjunction	6901 Dec 21 01:42	0°♑54'26	1°52'28	
minimum elong	6901 Dec 21 01:44	0°♑54'26	1°52'32	
max. Earth dist.	6901 Dec 20 23:23	0°♑53'43	10.46973 AU	
morning rise	6902 Jan 07 07:48	3°♑02'44		
retrograde	6902 Apr 18 03:58	10°♑34'04		
opposition	6902 Jun 24 18:25	7°♑12'48	2°11'08	
min. Earth dist.	6902 Jun 24 20:21	7°♑12'26	8.50974 AU	
direct	6902 Sep 02 11:24	3°♑46'44		
evening set	6902 Dec 16 22:58	11°♑32'40		
conjunction	6903 Jan 03 06:24	13°♑40'25	1°38'23	
minimum elong	6903 Jan 03 06:26	13°♑40'25	1°38'26	
max. Earth dist.	6903 Jan 03 03:59	13°♑39'40	10.54838 AU	
morning rise	6903 Jan 20 09:52	15°♑46'59		
retrograde	6903 Apr 30 22:26	23°♑12'33		
opposition	6903 Jul 07 21:01	19°♑52'12	1°50'38	
min. Earth dist.	6903 Jul 07 23:24	19°♑51'44	8.58825 AU	
direct	6903 Sep 15 21:06	16°♑27'05		
evening set	6903 Dec 29 22:52	24°♑06'47		

conjunction	6904 Jan 16 03:39	26°♒12'49	1°19'46	
minimum elong	6904 Jan 16 03:41	26°♒12'49	1°19'49	
max. Earth dist.	6904 Jan 16 00:47	26°♒11'56	10.62638 AU	
morning rise	6904 Feb 02 04:54	28°♒17'46		
	6904 Feb 16 17:27	0°♓		
retrograde	6904 May 12 11:16	5°♓38'15		
opposition	6904 Jul 19 20:20	2°♓18'37	1°25'17	
min. Earth dist.	6904 Jul 19 22:22	2°♓18'13	8.66416 AU	
	6904 Aug 22 01:18	30°℞♒		
direct	6904 Sep 28 03:42	28°♒54'29		
	6904 Nov 03 16:45	0°♓		
evening set	6905 Jan 10 15:26	6°♓27'53		
conjunction	6905 Jan 27 17:51	8°♓32'19	0°57'43	
minimum elong	6905 Jan 27 17:53	8°♓32'19	0°57'46	
max. Earth dist.	6905 Jan 27 15:23	8°♓31'33	10.69977 AU	
morning rise	6905 Feb 13 17:07	10°♓35'47		
	6905 Mar 26 16:09	15°♓		
retrograde	6905 May 24 22:43	17°♓52'04		
	6905 Jul 26 17:22	15°℞♓		
opposition	6905 Aug 01 16:19	14°♓32'55	0°56'28	
min. Earth dist.	6905 Aug 01 17:34	14°♓32'41	8.73349 AU	
direct	6905 Oct 11 04:28	11°♓09'47		
	6905 Dec 21 05:26	15°♓		
evening set	6906 Jan 23 01:50	18°♓37'13		
conjunction	6906 Feb 09 02:07	20°♓40'14	0°33'22	
minimum elong	6906 Feb 09 02:09	20°♓40'14	0°33'25	
max. Earth dist.	6906 Feb 09 00:31	20°♓39'45	10.76451 AU	
morning rise	6906 Feb 25 23:32	22°♓42'25		
retrograde	6906 Jun 06 07:03	29°♓55'32		
opposition	6906 Aug 14 09:17	26°♓36'42	0°25'34	
min. Earth dist.	6906 Aug 14 10:06	26°♓36'33	8.79236 AU	
direct	6906 Oct 23 23:10	23°♓14'31		
	6907 Jan 30 01:50	0°♓		
evening set	6907 Feb 04 07:06	0°♓36'43		
conjunction	6907 Feb 21 05:20	2°♓38'31	0°07'52	
minimum elong	6907 Feb 21 05:19	2°♓38'31	0°07'54	
behind sun begin	6907 Feb 20 23:00	2°♓36'38		
behind sun end	6907 Feb 21 11:39	2°♓40'24		
max. Earth dist.	6907 Feb 21 04:06	2°♓38'10	10.81698 AU	
morning rise	6907 Mar 10 01:08	4°♓39'40		
desc. node	6907 Jun 15 15:29	11°♓50'29		
retrograde	6907 Jun 18 13:37	11°♓50'55		
opposition	6907 Aug 27 00:19	8°♓32'13	-0°06'04	
min. Earth dist.	6907 Aug 27 01:24	8°♓32'01	8.83787 AU	
direct	6907 Nov 05 14:13	5°♓10'54		
evening set	6908 Feb 16 08:17	12°♓28'47		
conjunction	6908 Mar 04 04:29	14°♓29'36	-0°17'52	
minimum elong	6908 Mar 04 04:28	14°♓29'35	0°17'50	
max. Earth dist.	6908 Mar 04 02:55	14°♓29'07	10.85517 AU	
morning rise	6908 Mar 20 23:09	16°♓29'58		
retrograde	6908 Jun 29 19:26	23°♓40'38		
opposition	6908 Sep 07 13:49	20°♓21'50	-0°37'10	
min. Earth dist.	6908 Sep 07 14:58	20°♓21'37	8.86874 AU	
direct	6908 Nov 17 01:40	17°♓01'14		
evening set	6909 Feb 27 06:42	24°♓15'45		
conjunction	6909 Mar 16 01:13	26°♓15'50	-0°42'37	
minimum elong	6909 Mar 16 01:12	26°♓15'50	0°42'36	
max. Earth dist.	6909 Mar 15 23:42	26°♓15'23	10.87832 AU	
morning rise	6909 Apr 01 19:05	28°♓15'42		
	6909 Apr 16 23:46	0°♈		
retrograde	6909 Jul 11 23:56	5°♈26'56		
opposition	6909 Sep 20 02:06	2°♈07'47	-1°06'32	
min. Earth dist.	6909 Sep 20 02:37	2°♈07'41	8.88441 AU	
	6909 Oct 21 01:09	30°℞♓		
direct	6909 Nov 29 11:20	28°♓47'43		
	6910 Jan 06 23:09	0°♈		
evening set	6910 Mar 11 03:19	5°♈59'53		
conjunction	6910 Mar 27 20:41	7°♈59'30	-1°05'30	
minimum elong	6910 Mar 27 20:39	7°♈59'30	1°05'30	
max. Earth dist.	6910 Mar 27 20:29	7°♈59'27	10.88599 AU	
morning rise	6910 Apr 13 13:57	9°♈59'08		
retrograde	6910 Jul 24 07:25	17°♈12'04		
opposition	6910 Oct 02 14:05	13°♈52'20	-1°33'04	
min. Earth dist.	6910 Oct 02 13:17	13°♈52'29	8.88454 AU	
direct	6910 Dec 11 19:19	10°♈32'40		
evening set	6911 Mar 22 23:20	17°♈43'25		
conjunction	6911 Apr 08 15:54	19°♈42'54	-1°25'38	
minimum elong	6911 Apr 08 15:52	19°♈42'53	1°25'40	
max. Earth dist.	6911 Apr 08 16:59	19°♈43'13	10.87808 AU	
morning rise	6911 Apr 25 08:58	21°♈42'35		
retrograde	6911 Aug 05 16:34	28°♈58'13		
opposition	6911 Oct 15 02:22	25°♈37'45	-1°55'46	
min. Earth dist.	6911 Oct 15 00:51	25°♈38'02	8.86935 AU	
direct	6911 Dec 23 23:52	22°♈18'17		
evening set	6912 Apr 02 20:01	29°♈28'42		
	6912 Apr 07 05:44	0°♉		
conjunction	6912 Apr 19 12:13	1°♉28'20	-1°42'14	
minimum elong	6912 Apr 19 12:11	1°♉28'19	1°42'17	
max. Earth dist.	6912 Apr 19 13:34	1°♉28'44	10.85521 AU	
morning rise	6912 May 06 05:50	3°♉28'25		
retrograde	6912 Aug 17 02:57	10°♉47'39		
opposition	6912 Oct 26 15:26	7°♉26'21	-2°13'42	
min. Earth dist.	6912 Oct 26 13:54	7°♉26'38	8.83965 AU	
direct	6913 Jan 04 05:37	4°♉06'51		
evening set	6913 Apr 14 18:20	11°♉18'00		
conjunction	6913 May 01 10:55	13°♉18'10	-1°54'35	
minimum elong	6913 May 01 10:54	13°♉18'09	1°54'38	
max. Earth dist.	6913 May 01 12:16	13°♉18'34	10.81840 AU	
	6913 May 15 13:45	15°♉		
morning rise	6913 May 18 05:48	15°♉19'00		
retrograde	6913 Aug 29 17:08	22°♉42'35		
opposition	6913 Nov 08 05:53	19°♉20'22	-2°26'04	
min. Earth dist.	6913 Nov 08 04:12	19°♉20'41	8.79649 AU	
direct	6914 Jan 16 12:11	16°♉00'42		
evening set	6914 Apr 26 19:22	23°♉13'34		
conjunction	6914 May 13 13:13	25°♉14'38	-2°02'05	
minimum elong	6914 May 13 13:12	25°♉14'38	2°02'08	
max. Earth dist.	6914 May 13 15:39	25°♉15'22	10.76891 AU	
morning rise	6914 May 30 09:52	27°♉16'33		
	6914 Jun 23 11:25	0°♊		
retrograde	6914 Sep 11 10:43	4°♊45'09		
opposition	6914 Nov 20 22:13	1°♊21'57	-2°32'13	
min. Earth dist.	6914 Nov 20 19:38	1°♊22'27	8.74145 AU	
	6914 Dec 09 09:48	30°℞♉		
direct	6915 Jan 28 19:53	28°♉01'59		
	6915 Mar 18 09:13	0°♊		
evening set	6915 May 09 00:17	5°♊17'30		
conjunction	6915 May 25 20:16	7°♊19'51	-2°04'16	
minimum elong	6915 May 25 20:16	7°♊19'51	2°04'20	
max. Earth dist.	6915 May 25 23:53	7°♊20'57	10.70872 AU	
morning rise	6915 Jun 11 19:24	9°♊23'11		
retrograde	6915 Sep 24 09:56	16°♊57'12		
opposition	6915 Dec 03 17:04	13°♊33'02	-2°31'40	

min. Earth dist.	6915 Dec 03 13:37	13°♊33'41	8.67676 AU
direct	6916 Feb 10 06:15	10°♊12'36	
evening set	6916 May 20 10:06	17°♊31'35	
conjunction	6916 Jun 06 08:55	19°♊35'34	-2°00'52
minimum elong	6916 Jun 06 08:56	19°♊35'34	2°00'55
max. Earth dist.	6916 Jun 06 12:46	19°♊36'44	10.64029 AU
morning rise	6916 Jun 23 11:22	21°♊40'40	
retrograde	6916 Oct 06 14:20	29°♊20'14	
opposition	6916 Dec 15 14:45	25°♊55'09	-2°24'07
min. Earth dist.	6916 Dec 15 11:15	25°♊55'49	8.60507 AU
direct	6917 Feb 21 18:01	22°♊34'05	
evening set	6917 Jun 02 01:50	29°♊57'21	
	6917 Jun 02 10:35	0°♋	
conjunction	6917 Jun 19 04:06	2°♋03'13	-1°51'46
minimum elong	6917 Jun 19 04:08	2°♋03'14	1°51'50
max. Earth dist.	6917 Jun 19 07:17	2°♋04'12	10.56658 AU
morning rise	6917 Jul 06 10:28	4°♋10'20	
retrograde	6917 Oct 19 22:07	11°♋55'22	
opposition	6917 Dec 28 15:30	8°♋29'28	-2°09'36
min. Earth dist.	6917 Dec 28 12:37	8°♋30'02	8.52968 AU
direct	6918 Mar 06 10:11	5°♋07'38	
evening set	6918 Jun 15 00:02	12°♋35'51	
conjunction	6918 Jul 02 06:23	14°♋43'49	-1°37'08
minimum elong	6918 Jul 02 06:25	14°♋43'50	1°37'12
max. Earth dist.	6918 Jul 02 09:26	14°♋44'46	10.49107 AU
morning rise	6918 Jul 19 16:59	16°♋53'04	
retrograde	6918 Nov 02 09:27	24°♋43'18	
opposition	6919 Jan 10 19:38	21°♋16'40	-1°48'27
min. Earth dist.	6919 Jan 10 16:59	21°♋17'12	8.45432 AU
direct	6919 Mar 19 08:38	17°♋54'00	
evening set	6919 Jun 28 05:15	25°♋27'34	
conjunction	6919 Jul 15 16:02	27°♋37'45	-1°17'26
minimum elong	6919 Jul 15 16:04	27°♋37'45	1°17'30
max. Earth dist.	6919 Jul 15 19:32	27°♋38'50	10.41750 AU
morning rise	6919 Aug 02 06:48	29°♋49'09	
	6919 Aug 03 18:20	0°♌	
retrograde	6919 Nov 16 02:42	7°♌44'01	
opposition	6920 Jan 24 02:58	4°♌16'49	-1°21'24
min. Earth dist.	6920 Jan 24 00:09	4°♌17'23	8.38284 AU
direct	6920 Mar 31 10:03	0°♌53'16	
evening set	6920 Jul 10 18:08	8°♌32'29	
conjunction	6920 Jul 28 09:11	10°♌44'46	-0°53'28
minimum elong	6920 Jul 28 09:13	10°♌44'47	0°53'32
max. Earth dist.	6920 Jul 28 13:03	10°♌45'59	10.34966 AU
morning rise	6920 Aug 15 03:43	12°♌58'11	
	6920 Sep 01 02:33	15°♌	
retrograde	6920 Nov 28 23:37	20°♌56'49	
opposition	6921 Feb 05 13:13	17°♌29'16	-0°49'39
min. Earth dist.	6921 Feb 05 10:11	17°♌29'52	8.31907 AU
	6921 Mar 12 09:18	15°℞♌	
direct	6921 Apr 13 15:55	14°♌04'50	
	6921 May 15 14:35	15°♌	
evening set	6921 Jul 24 14:21	21°♌49'47	
conjunction	6921 Aug 11 09:04	24°♌03'56	-0°26'21
minimum elong	6921 Aug 11 09:05	24°♌03'56	0°26'24
max. Earth dist.	6921 Aug 11 12:26	24°♌05'00	10.29131 AU
morning rise	6921 Aug 29 06:41	26°♌19'02	
	6921 Sep 30 00:25	0°♍	
retrograde	6921 Dec 12 22:54	4°♍20'24	
opposition	6922 Feb 19 02:25	0°♍52'42	-0°14'45
min. Earth dist.	6922 Feb 18 23:50	0°♍53'14	8.26667 AU
	6922 Mar 02 02:35	30°℞♌	
direct	6922 Apr 27 03:14	27°♌27'23	
	6922 Jun 20 09:42	0°♍	
asc. node	6922 Jul 23 22:03	3°♍30'02	
evening set	6922 Aug 07 17:07	5°♍17'47	
conjunction	6922 Aug 25 14:38	7°♍33'25	0°02'34
minimum elong	6922 Aug 25 14:38	7°♍33'25	0°02'33
behind sun begin	6922 Aug 25 07:20	7°♍31'07	
behind sun end	6922 Aug 25 21:55	7°♍35'43	
max. Earth dist.	6922 Aug 25 16:58	7°♍34'06	10.24577 AU
morning rise	6922 Sep 12 14:22	9°♍49'45	
retrograde	6922 Dec 26 23:29	17°♍52'38	
opposition	6923 Mar 04 17:53	14°♍25'01	0°21'22
min. Earth dist.	6923 Mar 04 16:17	14°♍25'20	8.22860 AU
direct	6923 May 10 18:39	10°♍58'51	
evening set	6923 Aug 22 01:36	18°♍54'07	
conjunction	6923 Sep 09 00:51	21°♍10'42	0°31'28
minimum elong	6923 Sep 09 00:50	21°♍10'42	0°31'27
max. Earth dist.	6923 Sep 09 01:44	21°♍10'59	10.21552 AU
morning rise	6923 Sep 27 01:31	23°♍27'43	
	6923 Nov 29 10:21	0°♎	
retrograde	6924 Jan 10 00:25	1°♎30'41	
	6924 Feb 21 00:25	30°℞♍	
opposition	6924 Mar 17 10:44	28°♍03'20	0°56'33
min. Earth dist.	6924 Mar 17 10:21	28°♍03'25	8.20681 AU
direct	6924 May 23 14:26	24°♍36'25	
	6924 Aug 13 23:52	0°♎	
evening set	6924 Sep 04 13:54	2°♎35'39	
conjunction	6924 Sep 22 13:45	4°♎52'36	0°58'46
minimum elong	6924 Sep 22 13:42	4°♎52'36	0°58'46
max. Earth dist.	6924 Sep 22 13:15	4°♎52'27	10.20187 AU
morning rise	6924 Oct 10 13:59	7°♎09'41	
retrograde	6925 Jan 22 23:51	15°♎11'22	
opposition	6925 Mar 31 04:24	11°♎44'28	1°28'38
min. Earth dist.	6925 Mar 31 04:50	11°♎44'23	8.20185 AU
direct	6925 Jun 06 13:43	8°♎16'57	
evening set	6925 Sep 19 03:47	16°♎18'56	
conjunction	6925 Oct 07 03:08	18°♎35'42	1°22'46
minimum elong	6925 Oct 07 03:05	18°♎35'41	1°22'47
max. Earth dist.	6925 Oct 07 01:42	18°♎35'15	10.20473 AU
morning rise	6925 Oct 25 01:44	20°♎52'16	
retrograde	6926 Feb 05 21:02	28°♎51'31	
opposition	6926 Apr 13 22:02	25°♎25'15	1°55'39
min. Earth dist.	6926 Apr 13 23:01	25°♎25'03	8.21299 AU
direct	6926 Jun 20 14:46	21°♎57'21	
evening set	6926 Oct 03 17:35	0°♏00'50	
	6926 Oct 03 14:53	0°♏	
conjunction	6926 Oct 21 15:29	2°♏16'57	1°42'01
minimum elong	6926 Oct 21 15:27	2°♏16'56	1°42'04
max. Earth dist.	6926 Oct 21 13:14	2°♏16'14	10.22326 AU
morning rise	6926 Nov 08 11:34	4°♏32'33	
retrograde	6927 Feb 19 16:16	12°♏28'18	
opposition	6927 Apr 27 14:52	9°♏02'51	2°16'02
min. Earth dist.	6927 Apr 27 16:26	9°♏02'32	8.23948 AU
direct	6927 Jul 04 14:56	5°♏34'47	
evening set	6927 Oct 18 05:15	13°♏38'20	
	6927 Oct 29 00:58	15°♏	
conjunction	6927 Nov 05 00:58	15°♏53'23	1°55'28
minimum elong	6927 Nov 05 00:56	15°♏53'22	1°55'32
max. Earth dist.	6927 Nov 04 22:06	15°♏52'28	10.25702 AU
morning rise	6927 Nov 22 17:56	18°♏07'38	

retrograde	6928 Mar 04 08:56	25°♏58'55	
opposition	6928 May 10 06:36	22°♏34'22	2°28'40
min. Earth dist.	6928 May 10 08:49	22°♏33'55	8.28076 AU
direct	6928 Jul 17 15:02	19°♏06'23	
evening set	6928 Oct 31 12:37	27°♏08'19	
conjunction	6928 Nov 18 05:37	29°♏21'58	2°02'27
minimum elong	6928 Nov 18 05:36	29°♏21'58	2°02'31
max. Earth dist.	6928 Nov 18 02:10	29°♏20'52	10.30508 AU
	6928 Nov 23 05:45	0°♐	
morning rise	6928 Dec 05 19:17	1°♐34'38	
retrograde	6929 Mar 17 20:05	9°♐20'35	
opposition	6929 May 23 20:16	5°♐57'00	2°33'03
min. Earth dist.	6929 May 23 23:21	5°♐56'23	8.33531 AU
direct	6929 Jul 31 14:29	2°♐29'17	
evening set	6929 Nov 14 14:10	10°♐28'02	
conjunction	6929 Dec 02 04:15	12°♐40'03	2°02'46
minimum elong	6929 Dec 02 04:15	12°♐40'03	2°02'51
max. Earth dist.	6929 Dec 01 23:57	12°♐38'42	10.36537 AU
morning rise	6929 Dec 19 14:45	14°♐50'59	
retrograde	6930 Mar 31 01:21	22°♐31'04	
opposition	6930 Jun 06 07:06	19°♐08'26	2°29'15
min. Earth dist.	6930 Jun 06 10:30	19°♐07'45	8.40044 AU
direct	6930 Aug 14 11:58	15°♐41'09	
evening set	6930 Nov 28 08:39	23°♐35'23	
conjunction	6930 Dec 15 19:55	25°♐45'41	1°56'41
minimum elong	6930 Dec 15 19:56	25°♐45'41	1°56'46
max. Earth dist.	6930 Dec 15 15:22	25°♐44'15	10.43469 AU
morning rise	6931 Jan 02 03:27	27°♐54'49	
	6931 Jan 19 17:02	0°♑	
retrograde	6931 Apr 13 02:31	5°♑28'50	
opposition	6931 Jun 19 14:45	2°♑07'04	2°17'51
min. Earth dist.	6931 Jun 19 17:48	2°♑06'28	8.47258 AU
	6931 Jul 18 17:11	30°℞♐	
direct	6931 Aug 28 05:06	28°♐40'26	
	6931 Oct 07 04:19	0°♑	
evening set	6931 Dec 11 19:23	6°♑29'06	
conjunction	6931 Dec 29 03:58	8°♑37'39	1°44'47
minimum elong	6931 Dec 29 04:00	8°♑37'39	1°44'51
max. Earth dist.	6931 Dec 29 00:01	8°♑36'25	10.50923 AU
morning rise	6932 Jan 15 08:42	10°♑45'01	
retrograde	6932 Apr 24 22:47	18°♑13'08	
opposition	6932 Jul 01 18:53	14°♑52'08	1°59'48
min. Earth dist.	6932 Jul 01 21:05	14°♑51'42	8.54795 AU
direct	6932 Sep 09 17:43	11°♑26'17	
evening set	6932 Dec 23 22:20	19°♑08'48	
conjunction	6933 Jan 10 04:25	21°♑15'37	1°27'57
minimum elong	6933 Jan 10 04:28	21°♑15'38	1°28'01
max. Earth dist.	6933 Jan 10 01:45	21°♑14'48	10.58521 AU
morning rise	6933 Jan 27 06:37	23°♑21'19	
	6933 Apr 08 15:54	0°♒	
retrograde	6933 May 07 14:51	0°♒44'03	
	6933 Jun 06 00:28	30°℞♑	
opposition	6933 Jul 14 19:29	27°♑23'42	1°36'20
min. Earth dist.	6933 Jul 14 21:18	27°♑23'21	8.62293 AU
direct	6933 Sep 23 01:07	23°♑58'42	
	6933 Dec 23 05:52	0°♒	
evening set	6934 Jan 05 17:48	1°♒34'53	
conjunction	6934 Jan 22 21:28	3°♒40'05	1°07'14
minimum elong	6934 Jan 22 21:31	3°♒40'06	1°07'16
max. Earth dist.	6934 Jan 22 19:25	3°♒39'27	10.65893 AU
morning rise	6934 Feb 08 21:31	5°♒44'15	
retrograde	6934 May 20 03:50	13°♒02'19	
opposition	6934 Jul 27 16:43	9°♒42'30	1°08'48
min. Earth dist.	6934 Jul 27 18:34	9°♒42'09	8.69397 AU
direct	6934 Oct 06 02:28	6°♒18'26	
evening set	6935 Jan 18 06:43	13°♒48'29	
	6935 Jan 28 04:20	15°♒	
conjunction	6935 Feb 04 07:57	15°♒52'12	0°43'44
minimum elong	6935 Feb 04 07:58	15°♒52'12	0°43'45
max. Earth dist.	6935 Feb 04 05:51	15°♒51'33	10.72698 AU
morning rise	6935 Feb 21 06:11	17°♒55'00	
retrograde	6935 Jun 01 11:09	25°♒09'23	
opposition	6935 Aug 09 10:49	21°♒49'58	0°38'38
min. Earth dist.	6935 Aug 09 12:28	21°♒49'39	8.75793 AU
direct	6935 Oct 18 23:57	18°♒26'51	
evening set	6936 Jan 30 13:49	25°♒51'18	
conjunction	6936 Feb 16 12:49	27°♒53'39	0°18'35
minimum elong	6936 Feb 16 12:50	27°♒53'39	0°18'37
max. Earth dist.	6936 Feb 16 10:59	27°♒53'06	10.78649 AU
morning rise	6936 Mar 04 09:29	29°♒55'18	
	6936 Mar 05 01:23	0°♓	
retrograde	6936 Jun 12 17:14	7°♓07'10	
opposition	6936 Aug 21 02:20	3°♓47'58	0°07'10
min. Earth dist.	6936 Aug 21 02:50	3°♓47'53	8.81215 AU
direct	6936 Oct 30 17:59	0°♓25'49	
desc. node	6936 Nov 14 14:50	0°♓36'51	
evening set	6937 Feb 10 16:01	7°♓45'21	
conjunction	6937 Feb 27 13:08	9°♓46'34	-0°07'12
minimum elong	6937 Feb 27 13:08	9°♓46'34	0°07'10
behind sun begin	6937 Feb 27 06:39	9°♓44'39	
behind sun end	6937 Feb 27 19:37	9°♓48'30	
max. Earth dist.	6937 Feb 27 12:47	9°♓46'28	10.83490 AU
morning rise	6937 Mar 16 08:23	11°♓47'16	
retrograde	6937 Jun 25 00:03	18°♓57'48	
opposition	6937 Sep 02 15:44	15°♓38'39	-0°24'15
min. Earth dist.	6937 Sep 02 15:01	15°♓38'47	8.85422 AU
direct	6937 Nov 12 06:23	12°♓17'25	
evening set	6938 Feb 22 14:54	19°♓32'55	
conjunction	6938 Mar 11 10:18	21°♓33'15	-0°32'21
minimum elong	6938 Mar 11 10:17	21°♓33'14	0°32'20
max. Earth dist.	6938 Mar 11 11:08	21°♓33'30	10.87006 AU
morning rise	6938 Mar 28 04:21	23°♓33'14	
	6938 Jun 07 14:06	0°♈	
retrograde	6938 Jul 07 04:22	0°♈43'35	
	6938 Aug 06 06:35	30°℞♓	
opposition	6938 Sep 15 03:41	27°♓24'21	-0°54'24
min. Earth dist.	6938 Sep 15 02:27	27°♓24'35	8.88241 AU
direct	6938 Nov 24 14:39	24°♓03'55	
	6939 Feb 23 10:07	0°♈	
evening set	6939 Mar 06 11:34	1°♈16'25	
conjunction	6939 Mar 23 05:21	3°♈16'05	-0°56'04
minimum elong	6939 Mar 23 05:20	3°♈16'04	0°56'04
max. Earth dist.	6939 Mar 23 06:25	3°♈16'24	10.89066 AU
morning rise	6939 Apr 08 22:42	5°♈15'38	
retrograde	6939 Jul 19 10:03	12°♈26'59	
opposition	6939 Sep 27 15:08	9°♈07'30	-1°22'09
min. Earth dist.	6939 Sep 27 13:57	9°♈07'43	8.89574 AU
direct	6939 Dec 06 22:03	5°♈47'42	
evening set	6940 Mar 17 06:56	12°♈58'12	
conjunction	6940 Apr 02 23:34	14°♈57'30	-1°17'23
minimum elong	6940 Apr 02 23:32	14°♈57'29	1°17'24
max. Earth dist.	6940 Apr 03 00:44	14°♈57'51	10.89606 AU

morning rise	6940 Apr 19 16:42	16°♈56'56	
retrograde	6940 Jul 30 16:28	24°♈10'23	
opposition	6940 Oct 09 02:25	20°♈50'27	-1°46'28
min. Earth dist.	6940 Oct 09 00:41	20°♈50'46	8.89373 AU
direct	6940 Dec 18 03:07	17°♈31'08	
evening set	6941 Mar 29 02:24	24°♈40'42	
conjunction	6941 Apr 14 18:34	26°♈39'57	-1°35'30
minimum elong	6941 Apr 14 18:32	26°♈39'57	1°35'32
max. Earth dist.	6941 Apr 14 20:52	26°♈40'39	10.88603 AU
morning rise	6941 May 01 11:51	28°♈39'34	
	6941 May 13 03:06	0°♉	
retrograde	6941 Aug 12 00:56	5°♉56'04	
opposition	6941 Oct 21 13:59	2°♉35'32	-2°06'25
min. Earth dist.	6941 Oct 21 11:13	2°♉36'03	8.87639 AU
	6941 Nov 30 09:04	30°℞♈	
direct	6941 Dec 30 08:57	29°♈16'31	
	6942 Jan 28 19:08	0°♉	
evening set	6942 Apr 09 23:05	6°♉26'11	
conjunction	6942 Apr 26 15:24	8°♉25'47	-1°49'40
minimum elong	6942 Apr 26 15:22	8°♉25'46	1°49'43
max. Earth dist.	6942 Apr 26 18:57	8°♉26'51	10.86096 AU
morning rise	6942 May 13 09:22	10°♉25'54	
	6942 Jun 25 20:20	15°♉	
retrograde	6942 Aug 24 14:25	17°♉46'17	
	6942 Oct 26 07:59	15°℞♉	
opposition	6942 Nov 03 02:53	14°♉25'03	-2°21'10
min. Earth dist.	6942 Nov 02 23:18	14°♉25'43	8.84437 AU
direct	6943 Jan 11 13:27	11°♉06'08	
	6943 Mar 23 05:40	15°♉	
evening set	6943 Apr 21 21:59	18°♉16'52	
conjunction	6943 May 08 15:03	20°♉17'07	-1°59'16
minimum elong	6943 May 08 15:01	20°♉17'07	1°59'19
max. Earth dist.	6943 May 08 18:42	20°♉18'14	10.82183 AU
morning rise	6943 May 25 10:31	22°♉18'08	
retrograde	6943 Sep 06 06:09	29°♉43'04	
opposition	6943 Nov 15 17:34	26°♉21'01	-2°30'00
min. Earth dist.	6943 Nov 15 14:13	26°♉21'39	8.79885 AU
direct	6944 Jan 23 18:14	23°♉01'58	
	6944 Apr 30 22:25	0°♊	
evening set	6944 May 03 00:19	0°♊14'46	
conjunction	6944 May 19 18:56	2°♊16'04	-2°03'48
minimum elong	6944 May 19 18:55	2°♊16'03	2°03'51
max. Earth dist.	6944 May 19 22:05	2°♊17'01	10.77006 AU
morning rise	6944 Jun 05 16:45	4°♊18'18	
retrograde	6944 Sep 18 00:38	11°♊48'15	
opposition	6944 Nov 27 10:13	8°♊25'19	-2°32'24
min. Earth dist.	6944 Nov 27 07:26	8°♊25'51	8.74130 AU
direct	6945 Feb 04 03:01	5°♊05'52	
evening set	6945 May 15 06:56	12°♊21'39	
conjunction	6945 Jun 01 04:04	14°♊24'23	-2°02'52
minimum elong	6945 Jun 01 04:05	14°♊24'23	2°02'56
max. Earth dist.	6945 Jun 01 07:04	14°♊25'18	10.70712 AU
morning rise	6945 Jun 18 04:51	16°♊28'12	
retrograde	6945 Oct 01 00:47	24°♊03'30	
opposition	6945 Dec 10 05:30	20°♊39'38	-2°27'58
min. Earth dist.	6945 Dec 10 02:58	20°♊40'07	8.67326 AU
direct	6946 Feb 16 13:53	17°♊19'36	
evening set	6946 May 27 18:41	24°♊39'14	
conjunction	6946 Jun 13 19:09	26°♊43'44	-1°56'19
minimum elong	6946 Jun 13 19:11	26°♊43'45	1°56'24
max. Earth dist.	6946 Jun 13 22:37	26°♊44'48	10.63489 AU
morning rise	6946 Jun 30 23:24	28°♊49'26	
	6946 Jul 10 22:03	0°♋	
retrograde	6946 Oct 14 05:36	6°♋30'20	
opposition	6946 Dec 23 03:46	3°♋05'31	-2°16'37
min. Earth dist.	6946 Dec 23 00:55	3°♋06'04	8.59731 AU
	6947 Feb 12 03:02	30°℞♊	
direct	6947 Mar 01 03:50	29°♊44'46	
	6947 Mar 18 00:56	0°♋	
evening set	6947 Jun 09 12:48	7°♋09'03	
conjunction	6947 Jun 26 17:10	9°♋15'37	-1°44'12
minimum elong	6947 Jun 26 17:12	9°♋15'37	1°44'16
max. Earth dist.	6947 Jun 26 20:22	9°♋16'36	10.55680 AU
morning rise	6947 Jul 14 01:27	11°♋23'25	
retrograde	6947 Oct 27 15:35	19°♋09'46	
opposition	6948 Jan 05 05:16	15°♋44'04	-1°58'30
min. Earth dist.	6948 Jan 05 02:37	15°♋44'36	8.51762 AU
direct	6948 Mar 12 21:37	12°♋22'24	
evening set	6948 Jun 21 13:53	19°♋51'58	
conjunction	6948 Jul 08 22:26	22°♋00'44	-1°26'48
minimum elong	6948 Jul 08 22:29	22°♋00'45	1°26'53
max. Earth dist.	6948 Jul 09 00:43	22°♋01'26	10.47731 AU
morning rise	6948 Jul 26 11:03	24°♋10'45	
	6948 Sep 20 09:19	0°♌	
retrograde	6948 Nov 09 06:23	2°♌02'07	
	6948 Dec 30 01:52	30°℞♋	
opposition	6949 Jan 17 10:10	28°♋35'39	-1°34'10
min. Earth dist.	6949 Jan 17 08:14	28°♋36'01	8.43872 AU
direct	6949 Mar 25 19:14	25°♋12'54	
	6949 Jun 10 23:22	0°♌	
evening set	6949 Jul 04 22:15	2°♌48'10	
conjunction	6949 Jul 22 11:01	4°♌59'08	-1°04'46
minimum elong	6949 Jul 22 11:03	4°♌59'09	1°04'50
max. Earth dist.	6949 Jul 22 12:17	4°♌59'32	10.40080 AU
morning rise	6949 Aug 09 03:45	7°♌11'18	
	6949 Nov 11 08:58	15°♌	
retrograde	6949 Nov 22 23:30	15°♌07'02	
	6949 Dec 04 13:35	15°℞♌	
opposition	6950 Jan 30 18:15	11°♌39'54	-1°04'33
min. Earth dist.	6950 Jan 30 17:13	11°♌40'07	8.36502 AU
direct	6950 Apr 07 23:18	8°♌16'02	
	6950 Jul 10 18:16	15°♌	
evening set	6950 Jul 18 13:58	15°♌57'13	
conjunction	6950 Aug 05 06:46	18°♌10'14	-0°39'03
minimum elong	6950 Aug 05 06:47	18°♌10'15	0°39'06
max. Earth dist.	6950 Aug 05 07:41	18°♌10'32	10.33149 AU
morning rise	6950 Aug 23 03:02	20°♌24'20	
retrograde	6950 Dec 06 19:27	28°♌23'31	
opposition	6951 Feb 13 05:16	24°♌55'56	-0°31'02
min. Earth dist.	6951 Feb 13 04:34	24°♌56'04	8.30059 AU
direct	6951 Apr 21 08:30	21°♌30'57	
evening set	6951 Aug 01 12:41	29°♌17'55	
	6951 Aug 07 03:32	0°♍	
conjunction	6951 Aug 19 08:57	1°♍32'44	-0°10'57
minimum elong	6951 Aug 19 08:57	1°♍32'44	0°10'58
behind sun begin	6951 Aug 19 03:32	1°♍31'02	
behind sun end	6951 Aug 19 14:23	1°♍34'26	
max. Earth dist.	6951 Aug 19 09:49	1°♍33'00	10.27306 AU
morning rise	6951 Sep 06 07:50	3°♍48'22	
retrograde	6951 Dec 20 18:26	11°♍49'56	
asc. node	6952 Jan 09 04:42	11°♍29'51	
opposition	6952 Feb 26 18:49	8°♍22'05	0°04'38
min. Earth dist.	6952 Feb 26 18:09	8°♍22'13	8.24880 AU

direct	6952 May 03 21:02	4°♑56'03	
evening set	6952 Aug 14 17:47	12°♑48'29	
conjunction	6952 Sep 01 16:26	15°♑04'36	0°18'08
minimum elong	6952 Sep 01 16:25	15°♑04'35	0°18'08
max. Earth dist.	6952 Sep 01 17:00	15°♑04'46	10.22857 AU
morning rise	6952 Sep 19 16:41	17°♑21'15	
retrograde	6953 Jan 02 19:37	25°♑23'56	
opposition	6953 Mar 11 10:19	21°♑56'05	0°40'26
min. Earth dist.	6953 Mar 11 09:52	21°♑56'11	8.21246 AU
direct	6953 May 17 13:32	18°♑29'08	
evening set	6953 Aug 29 03:44	26°♑26'19	
conjunction	6953 Sep 16 03:34	28°♑43'11	0°46'20
minimum elong	6953 Sep 16 03:32	28°♑43'10	0°46'21
max. Earth dist.	6953 Sep 16 03:27	28°♑43'09	10.20054 AU
	6953 Sep 26 04:36	0°♎	
morning rise	6953 Oct 04 03:59	1°♎00'18	
retrograde	6954 Jan 16 19:53	9°♎02'45	
opposition	6954 Mar 25 03:19	5°♎35'09	1°14'10
min. Earth dist.	6954 Mar 25 03:30	5°♎35'07	8.19364 AU
direct	6954 May 31 10:13	2°♎07'25	
evening set	6954 Sep 12 16:41	10°♎08'20	
conjunction	6954 Sep 30 16:30	12°♎25'21	1°12'03
minimum elong	6954 Sep 30 16:27	12°♎25'20	1°12'04
max. Earth dist.	6954 Sep 30 15:07	12°♎24'55	10.19059 AU
morning rise	6954 Oct 18 15:58	14°♎42'19	
retrograde	6955 Jan 30 18:32	22°♎43'11	
opposition	6955 Apr 07 20:56	19°♎16'05	1°43'47
min. Earth dist.	6955 Apr 07 22:15	19°♎15'49	8.19333 AU
direct	6955 Jun 14 09:39	15°♎47'47	
evening set	6955 Sep 27 06:51	23°♎51'04	
conjunction	6955 Oct 15 05:31	26°♎07'42	1°33'40
minimum elong	6955 Oct 15 05:28	26°♎07'41	1°33'42
max. Earth dist.	6955 Oct 15 02:50	26°♎06'50	10.19919 AU
morning rise	6955 Nov 02 02:58	28°♎23'57	
	6955 Nov 15 04:32	0°♏	
retrograde	6956 Feb 13 14:54	6°♏21'53	
opposition	6956 Apr 20 14:14	2°♏55'30	2°07'26
min. Earth dist.	6956 Apr 20 16:17	2°♏55'05	8.21146 AU
	6956 Jun 02 12:46	30°℞♎	
direct	6956 Jun 27 10:08	29°♎26'54	
	6956 Jul 22 07:11	0°♏	
evening set	6956 Oct 10 19:42	7°♏31'00	
conjunction	6956 Oct 28 16:26	9°♏46'44	1°49'57
minimum elong	6956 Oct 28 16:24	9°♏46'43	1°50'00
max. Earth dist.	6956 Oct 28 13:03	9°♏45'39	10.22591 AU
morning rise	6956 Nov 15 11:07	12°♏01'49	
	6956 Dec 10 09:52	15°♏	
retrograde	6957 Feb 26 08:03	19°♏55'40	
opposition	6957 May 04 06:36	16°♏30'09	2°23'48
min. Earth dist.	6957 May 04 08:46	16°♏29'43	8.24700 AU
	6957 May 23 11:30	15°℞♏	
direct	6957 Jul 11 11:45	13°♏01'35	
	6957 Aug 28 16:51	15°♏	
evening set	6957 Oct 25 05:00	21°♏04'46	
conjunction	6957 Nov 11 23:20	23°♏19'13	2°00'00
minimum elong	6957 Nov 11 23:18	23°♏19'13	2°00'03
max. Earth dist.	6957 Nov 11 19:58	23°♏18'09	10.26928 AU
morning rise	6957 Nov 29 14:49	25°♏32'48	
	6958 Jan 07 20:42	0°♐	
retrograde	6958 Mar 11 20:35	3°♐21'39	
opposition	6958 May 17 21:09	29°♏57'09	2°32'03
	6958 May 17 06:58	30°℞♏	
min. Earth dist.	6958 May 17 22:55	29°♏56'48	8.29787 AU
direct	6958 Jul 25 12:17	26°♏28'53	
	6958 Sep 29 13:52	0°♐	
evening set	6958 Nov 08 09:22	4°♐29'33	
conjunction	6958 Nov 26 01:01	6°♐42'28	2°03'25
minimum elong	6958 Nov 26 01:01	6°♐42'27	2°03'29
max. Earth dist.	6958 Nov 25 22:12	6°♐41'34	10.32679 AU
morning rise	6958 Dec 13 13:07	8°♐54'20	
retrograde	6959 Mar 25 05:24	16°♐37'29	
opposition	6959 May 31 09:09	13°♐14'05	2°32'01
min. Earth dist.	6959 May 31 10:55	13°♐13'44	8.36116 AU
direct	6959 Aug 08 09:44	9°♐46'21	
evening set	6959 Nov 22 07:20	17°♐43'05	
conjunction	6959 Dec 09 20:10	19°♐54'18	2°00'16
minimum elong	6959 Dec 09 20:11	19°♐54'18	2°00'20
max. Earth dist.	6959 Dec 09 17:38	19°♐53'30	10.39520 AU
morning rise	6959 Dec 27 05:01	22°♐04'21	
retrograde	6960 Apr 06 10:45	29°♐41'30	
opposition	6960 Jun 12 18:31	26°♐19'11	2°24'02
min. Earth dist.	6960 Jun 12 20:36	26°♐18'46	8.43346 AU
direct	6960 Aug 21 02:48	22°♐52'12	
	6960 Nov 28 21:02	0°♑	
evening set	6960 Dec 04 21:52	0°♑43'48	
conjunction	6960 Dec 22 07:49	2°♑53'15	1°50'58
minimum elong	6960 Dec 22 07:51	2°♑53'16	1°51'02
max. Earth dist.	6960 Dec 22 05:11	2°♑52'26	10.47086 AU
morning rise	6961 Jan 08 13:47	5°♑01'31	
retrograde	6961 Apr 19 09:14	12°♑32'38	
opposition	6961 Jun 26 00:36	9°♑11'22	2°08'55
min. Earth dist.	6961 Jun 26 03:01	9°♑10'53	8.51103 AU
direct	6961 Sep 03 17:52	5°♑45'15	
evening set	6961 Dec 18 04:52	13°♑30'58	
conjunction	6962 Jan 04 12:05	15°♑38'39	1°36'18
minimum elong	6962 Jan 04 12:07	15°♑38'40	1°36'22
max. Earth dist.	6962 Jan 04 09:07	15°♑37'44	10.54989 AU
morning rise	6962 Jan 21 15:34	17°♑45'11	
retrograde	6962 May 02 02:29	25°♑10'36	
opposition	6962 Jul 09 03:04	21°♑50'13	1°47'47
min. Earth dist.	6962 Jul 09 05:16	21°♑49'48	8.58992 AU
direct	6962 Sep 17 04:56	18°♑25'06	
evening set	6962 Dec 31 04:23	26°♑04'32	
conjunction	6963 Jan 17 09:06	28°♑10'31	1°17'14
minimum elong	6963 Jan 17 09:08	28°♑10'31	1°17'17
max. Earth dist.	6963 Jan 17 06:27	28°♑09'42	10.62829 AU
	6963 Feb 01 07:11	0°♒	
morning rise	6963 Feb 03 10:19	0°♒15'25	
retrograde	6963 May 14 17:16	7°♒35'45	
opposition	6963 Jul 22 02:15	4°♒16'06	1°21'57
min. Earth dist.	6963 Jul 22 03:29	4°♒15'51	8.66622 AU
direct	6963 Sep 30 10:18	0°♒52'01	
evening set	6964 Jan 12 20:42	8°♒25'06	
conjunction	6964 Jan 29 23:07	10°♒29'29	0°54'52
minimum elong	6964 Jan 29 23:08	10°♒29'30	0°54'55
max. Earth dist.	6964 Jan 29 21:41	10°♒29'03	10.70214 AU
morning rise	6964 Feb 15 22:12	12°♒32'55	
	6964 Mar 08 07:50	15°♒	
retrograde	6964 May 26 04:16	19°♒49'03	
opposition	6964 Aug 02 22:14	16°♒29'54	0°52'48
min. Earth dist.	6964 Aug 02 22:45	16°♒29'48	8.73617 AU
	6964 Aug 23 08:48	15°℞♒	

direct	6964 Oct 12 09:42	13°♒06'51	
	6964 Nov 30 01:16	15°♒	
evening set	6965 Jan 24 06:52	20°♒33'55	
conjunction	6965 Feb 10 07:04	22°♒36'53	0°30'20
minimum elong	6965 Feb 10 07:05	22°♒36'53	0°30'22
max. Earth dist.	6965 Feb 10 06:23	22°♒36'40	10.76772 AU
morning rise	6965 Feb 27 04:19	24°♒39'00	
	6965 Apr 20 23:57	0°♓	
retrograde	6965 Jun 07 12:25	1°♓51'58	
	6965 Jul 26 18:44	30°℞♒	
opposition	6965 Aug 15 15:14	28°♒33'09	0°21'46
min. Earth dist.	6965 Aug 15 15:56	28°♒33'01	8.79618 AU
direct	6965 Oct 25 04:58	25°♒11'01	
	6966 Jan 13 22:26	0°♓	
evening set	6966 Feb 05 11:51	2°♓32'48	
conjunction	6966 Feb 22 09:51	4°♓34'31	0°04'47
minimum elong	6966 Feb 22 09:51	4°♓34'31	0°04'50
behind sun begin	6966 Feb 22 02:59	4°♓32'28	
behind sun end	6966 Feb 22 16:43	4°♓36'34	
max. Earth dist.	6966 Feb 22 08:39	4°♓34'11	10.82145 AU
morning rise	6966 Mar 11 05:41	6°♓35'35	
desc. node	6966 May 02 17:37	11°♓53'25	
retrograde	6966 Jun 19 18:40	13°♓46'37	
opposition	6966 Aug 28 06:01	10°♓27'56	-0°09'49
min. Earth dist.	6966 Aug 28 07:10	10°♓27'43	8.84292 AU
direct	6966 Nov 06 19:31	7°♓06'40	
evening set	6967 Feb 17 12:44	14°♓24'05	
conjunction	6967 Mar 06 08:44	16°♓24'47	-0°20'52
minimum elong	6967 Mar 06 08:43	16°♓24'47	0°20'50
max. Earth dist.	6967 Mar 06 07:11	16°♓24'19	10.86061 AU
morning rise	6967 Mar 23 03:25	18°♓25'05	
retrograde	6967 Jul 01 22:46	25°♓35'32	
opposition	6967 Sep 09 19:09	22°♓16'44	-0°40'43
min. Earth dist.	6967 Sep 09 19:48	22°♓16'37	8.87445 AU
direct	6967 Nov 19 07:27	18°♓56'13	
evening set	6968 Feb 29 10:46	26°♓10'18	
conjunction	6968 Mar 17 05:14	28°♓10'16	-0°45'23
minimum elong	6968 Mar 17 05:13	28°♓10'16	0°45'22
max. Earth dist.	6968 Mar 17 04:36	28°♓10'05	10.88411 AU
	6968 Apr 01 12:49	0°♈	
morning rise	6968 Apr 02 22:57	0°♈10'02	
retrograde	6968 Jul 13 05:22	7°♈21'09	
opposition	6968 Sep 21 07:15	4°♈02'01	-1°09'44
min. Earth dist.	6968 Sep 21 06:46	4°♈02'06	8.89024 AU
direct	6968 Nov 30 16:59	0°♈42'05	
evening set	6969 Mar 12 07:06	7°♈53'48	
conjunction	6969 Mar 29 00:25	9°♈53'20	-1°07'56
minimum elong	6969 Mar 29 00:23	9°♈53'20	1°07'57
max. Earth dist.	6969 Mar 29 01:04	9°♈53'32	10.89168 AU
morning rise	6969 Apr 14 17:32	11°♈52'53	
retrograde	6969 Jul 25 12:34	19°♈05'41	
opposition	6969 Oct 03 19:01	15°♈46'01	-1°35'48
min. Earth dist.	6969 Oct 03 17:54	15°♈46'13	8.89010 AU
direct	6969 Dec 12 22:38	12°♈26'29	
evening set	6970 Mar 24 03:03	19°♈36'53	
conjunction	6970 Apr 09 19:28	21°♈36'15	-1°27'39
minimum elong	6970 Apr 09 19:26	21°♈36'15	1°27'41
max. Earth dist.	6970 Apr 09 20:15	21°♈36'29	10.88338 AU
morning rise	6970 Apr 26 12:34	23°♈35'53	
	6970 Jul 05 10:37	0°♉	
retrograde	6970 Aug 06 20:25	0°♉51'25	
	6970 Sep 08 19:33	30°℞♈	
opposition	6970 Oct 16 07:02	27°♈31'02	-1°57'55
min. Earth dist.	6970 Oct 16 05:59	27°♈31'14	8.87440 AU
direct	6970 Dec 25 04:11	24°♈11'40	
	6971 Mar 24 03:51	0°♉	
evening set	6971 Apr 04 23:35	1°♉21'48	
conjunction	6971 Apr 21 15:41	3°♉21'22	-1°43'44
minimum elong	6971 Apr 21 15:39	3°♉21'22	1°43'47
max. Earth dist.	6971 Apr 21 16:31	3°♉21'37	10.85993 AU
morning rise	6971 May 08 09:25	5°♉21'24	
retrograde	6971 Aug 19 07:13	12°♉40'34	
opposition	6971 Oct 28 19:57	9°♉19'20	-2°15'11
min. Earth dist.	6971 Oct 28 18:42	9°♉19'35	8.84400 AU
direct	6972 Jan 06 09:50	5°♉59'57	
evening set	6972 Apr 15 21:39	13°♉10'50	
	6972 May 01 02:04	15°♉	
conjunction	6972 May 02 14:19	15°♉10'57	-1°55'31
minimum elong	6972 May 02 14:18	15°♉10'57	1°55'34
max. Earth dist.	6972 May 02 16:06	15°♉11'29	10.82233 AU
morning rise	6972 May 19 09:14	17°♉11'45	
retrograde	6972 Aug 30 20:39	24°♉35'20	
opposition	6972 Nov 09 10:10	21°♉13'08	-2°26'50
min. Earth dist.	6972 Nov 09 08:00	21°♉13'32	8.80000 AU
direct	6973 Jan 17 16:16	17°♉53'34	
evening set	6973 Apr 27 22:40	25°♉06'13	
conjunction	6973 May 14 16:43	27°♉07'16	-2°02'25
minimum elong	6973 May 14 16:42	27°♉07'16	2°02'28
max. Earth dist.	6973 May 14 19:48	27°♉08'12	10.77194 AU
morning rise	6973 May 31 13:24	29°♉09'10	
	6973 Jun 07 18:36	0°♊	
retrograde	6973 Sep 12 15:22	6°♊37'44	
opposition	6973 Nov 22 02:09	3°♊14'33	-2°32'14
min. Earth dist.	6973 Nov 21 23:06	3°♊15'08	8.74401 AU
	6974 Jan 19 18:52	30°℞♉	
direct	6974 Jan 30 00:10	29°♉54'39	
	6974 Feb 09 02:39	0°♊	
evening set	6974 May 10 03:37	7°♊09'59	
conjunction	6974 May 26 23:43	9°♊12'20	-2°03'59
minimum elong	6974 May 26 23:43	9°♊12'21	2°04'03
max. Earth dist.	6974 May 27 03:04	9°♊13'22	10.71080 AU
morning rise	6974 Jun 12 23:02	11°♊15'42	
retrograde	6974 Sep 25 15:09	18°♊49'39	
opposition	6974 Dec 04 20:51	15°♊25'30	-2°30'55
min. Earth dist.	6974 Dec 04 17:40	15°♊26'07	8.67833 AU
direct	6975 Feb 11 08:07	12°♊05'06	
evening set	6975 May 22 13:23	19°♊23'58	
conjunction	6975 Jun 08 12:18	21°♊27'57	-1°59'58
minimum elong	6975 Jun 08 12:19	21°♊27'58	2°00'02
max. Earth dist.	6975 Jun 08 15:11	21°♊28'50	10.64146 AU
morning rise	6975 Jun 25 15:05	23°♊33'07	
	6975 Aug 31 06:59	0°♋	
retrograde	6975 Oct 08 17:18	1°♋12'36	
	6975 Nov 16 16:25	30°℞♊	
opposition	6975 Dec 17 18:25	27°♊47'32	-2°22'39
min. Earth dist.	6975 Dec 17 15:44	27°♊48'03	8.60574 AU
direct	6976 Feb 23 21:22	24°♊26'27	
	6976 May 18 16:01	0°♋	
evening set	6976 Jun 03 05:05	1°♋49'40	
conjunction	6976 Jun 20 07:37	3°♋55'35	-1°50'17
minimum elong	6976 Jun 20 07:39	3°♋55'36	1°50'22
max. Earth dist.	6976 Jun 20 10:24	3°♋56'27	10.56688 AU

morning rise	6976 Jul 07	14:19	6°♋02'45	
retrograde	6976 Oct 21	00:27	13°♋47'44	
opposition	6976 Dec 29	18:54	10°♋21'48	-2°07'27
min. Earth dist.	6976 Dec 29	16:29	10°♋22'17	8.52948 AU
direct	6977 Mar 07	14:56	6°♋59'56	
evening set	6977 Jun 16	03:23	14°♋28'07	
conjunction	6977 Jul 03	10:07	16°♋36'11	-1°35'09
minimum elong	6977 Jul 03	10:10	16°♋36'12	1°35'13
max. Earth dist.	6977 Jul 03	13:27	16°♋37'13	10.49043 AU
morning rise	6977 Jul 20	20:56	18°♋45'30	
retrograde	6977 Nov 03	13:43	26°♋35'41	
opposition	6978 Jan 11	22:50	23°♋09'00	-1°45'43
min. Earth dist.	6978 Jan 11	20:02	23°♋09'33	8.45317 AU
direct	6978 Mar 20	11:21	19°♋46'17	
evening set	6978 Jun 29	08:45	27°♋19'53	
conjunction	6978 Jul 16	19:51	29°♋30'09	-1°15'01
minimum elong	6978 Jul 16	19:53	29°♋30'09	1°15'06
max. Earth dist.	6978 Jul 16	23:37	29°♋31'20	10.41590 AU
	6978 Jul 20	19:11	0°♌	
morning rise	6978 Aug 03	10:45	1°♌41'37	
retrograde	6978 Nov 17	06:44	9°♌36'27	
opposition	6979 Jan 25	06:06	6°♌09'12	-1°18'12
min. Earth dist.	6979 Jan 25	03:01	6°♌09'49	8.38078 AU
direct	6979 Apr 02	12:58	2°♌45'34	
evening set	6979 Jul 12	21:50	10°♌24'55	
conjunction	6979 Jul 30	13:05	12°♌37'17	-0°50'44
minimum elong	6979 Jul 30	13:07	12°♌37'18	0°50'48
max. Earth dist.	6979 Jul 30	16:30	12°♌38'22	10.34724 AU
morning rise	6979 Aug 17	07:49	14°♌50'46	
	6979 Aug 18	13:49	15°♌	
retrograde	6979 Dec 01	03:12	22°♌49'24	
opposition	6980 Feb 07	16:25	19°♌21'47	-0°46'08
min. Earth dist.	6980 Feb 07	13:43	19°♌22'20	8.31627 AU
direct	6980 Apr 14	19:16	15°♌57'13	
evening set	6980 Jul 25	18:20	23°♌42'23	
conjunction	6980 Aug 12	13:10	25°♌56'38	-0°23'27
minimum elong	6980 Aug 12	13:11	25°♌56'38	0°23'30
max. Earth dist.	6980 Aug 12	15:23	25°♌57'20	10.28824 AU
morning rise	6980 Aug 30	11:01	28°♌11'49	
	6980 Sep 14	08:52	0°♍	
retrograde	6980 Dec 14	02:41	6°♍13'12	
opposition	6981 Feb 20	05:41	2°♍45'27	-0°11'06
min. Earth dist.	6981 Feb 20	03:59	2°♍45'48	8.26331 AU
	6981 Apr 01	00:47	30°℞♌	
direct	6981 Apr 28	06:06	29°♌20'00	
	6981 May 25	08:26	0°♍	
asc. node	6981 Jun 16	17:57	1°♍28'13	
evening set	6981 Aug 08	21:24	7°♍10'42	
conjunction	6981 Aug 26	18:58	9°♍26'24	0°05'31
minimum elong	6981 Aug 26	18:58	9°♍26'24	0°05'29
behind sun begin	6981 Aug 26	11:56	9°♍24'11	
behind sun end	6981 Aug 27	02:00	9°♍28'37	
max. Earth dist.	6981 Aug 26	20:15	9°♍26'47	10.24225 AU
morning rise	6981 Sep 13	18:52	11°♍42'49	
retrograde	6981 Dec 28	03:42	19°♍45'44	
opposition	6982 Mar 05	21:15	16°♍18'06	0°24'57
min. Earth dist.	6982 Mar 05	20:20	16°♍18'17	8.22498 AU
direct	6982 May 11	22:18	12°♍51'48	
evening set	6982 Aug 23	06:07	20°♍47'28	
conjunction	6982 Sep 10	05:26	23°♍04'06	0°34'16
minimum elong	6982 Sep 10	05:24	23°♍04'06	0°34'16
max. Earth dist.	6982 Sep 10	05:58	23°♍04'17	10.21192 AU
morning rise	6982 Sep 28	06:05	25°♍21'10	
	6982 Nov 08	03:55	0°♎	
retrograde	6983 Jan 11	03:33	3°♎24'15	
	6983 Mar 18	22:58	30°℞♍	
opposition	6983 Mar 19	14:16	29°♍56'53	0°59'53
min. Earth dist.	6983 Mar 19	13:53	29°♍56'58	8.20340 AU
direct	6983 May 25	19:19	26°♍29'53	
	6983 Jul 29	10:59	0°♎	
evening set	6983 Sep 06	18:42	4°♎29'31	
conjunction	6983 Sep 24	18:38	6°♎46'32	1°01'16
minimum elong	6983 Sep 24	18:35	6°♎46'31	1°01'17
max. Earth dist.	6983 Sep 24	18:39	6°♎46'32	10.19876 AU
morning rise	6983 Oct 12	18:43	9°♎03'37	
retrograde	6984 Jan 25	03:09	17°♎05'26	
opposition	6984 Apr 01	08:08	13°♎38'32	1°31'30
min. Earth dist.	6984 Apr 01	07:58	13°♎38'34	8.19928 AU
direct	6984 Jun 07	18:15	10°♎10'59	
evening set	6984 Sep 20	09:01	18°♎13'19	
conjunction	6984 Oct 08	08:20	20°♎30'06	1°24'50
minimum elong	6984 Oct 08	08:17	20°♎30'05	1°24'52
max. Earth dist.	6984 Oct 08	07:45	20°♎29'55	10.20283 AU
morning rise	6984 Oct 26	06:38	22°♎46'37	
	6985 Jan 09	00:31	0°♏	
retrograde	6985 Feb 07	01:37	0°♏45'54	
	6985 Mar 08	06:59	30°℞♎	
opposition	6985 Apr 15	01:56	27°♎19'38	1°57'54
min. Earth dist.	6985 Apr 15	02:30	27°♎19'31	8.21194 AU
direct	6985 Jun 21	17:56	23°♎51'41	
	6985 Sep 19	03:28	0°♏	
evening set	6985 Oct 04	22:55	1°♏55'21	
conjunction	6985 Oct 22	20:39	4°♏11'26	1°43'32
minimum elong	6985 Oct 22	20:37	4°♏11'25	1°43'35
max. Earth dist.	6985 Oct 22	18:46	4°♏10'50	10.22298 AU
morning rise	6985 Nov 09	16:24	6°♏26'57	
retrograde	6986 Feb 20	21:44	14°♏22'35	
opposition	6986 Apr 28	18:58	10°♏57'09	2°17'30
min. Earth dist.	6986 Apr 28	20:46	10°♏56'47	8.23990 AU
direct	6986 Jul 05	18:37	7°♏29'03	
	6986 Oct 15	00:45	15°♏	
evening set	6986 Oct 19	10:24	15°♏32'40	
conjunction	6986 Nov 06	05:52	17°♏47'39	1°56'19
minimum elong	6986 Nov 06	05:50	17°♏47'39	1°56'23
max. Earth dist.	6986 Nov 06	02:34	17°♏46'36	10.25787 AU
morning rise	6986 Nov 23	22:38	20°♏01'51	
retrograde	6987 Mar 06	12:42	27°♏52'57	
opposition	6987 May 12	10:44	24°♏28'28	2°29'17
min. Earth dist.	6987 May 12	13:40	24°♏27'53	8.28193 AU
direct	6987 Jul 19	20:08	21°♏00'28	
evening set	6987 Nov 02	17:42	29°♏02'28	
	6987 Nov 10	09:51	0°♐	
conjunction	6987 Nov 20	10:25	1°♐16'02	2°02'36
minimum elong	6987 Nov 20	10:24	1°♐16'02	2°02'40
max. Earth dist.	6987 Nov 20	05:57	1°♐14'37	10.30638 AU
morning rise	6987 Dec 07	23:58	3°♐28'39	
retrograde	6988 Mar 18	23:12	11°♐14'27	
opposition	6988 May 25	00:23	7°♐50'58	2°32'48
min. Earth dist.	6988 May 25	03:52	7°♐50'16	8.33669 AU
direct	6988 Aug 01	19:52	4°♐23'16	
evening set	6988 Nov 15	19:00	12°♐22'04	
conjunction	6988 Dec 03	08:54	14°♐34'02	2°02'13

minimum elong	6988 Dec 03 08:54	14°♐34'02	2°02'18
max. Earth dist.	6988 Dec 03 04:03	14°♐32'30	10.36673 AU
morning rise	6988 Dec 20 19:17	16°♐44'55	
retrograde	6989 Apr 01 05:31	24°♐24'55	
opposition	6989 Jun 07 11:21	21°♐02'21	2°28'09
min. Earth dist.	6989 Jun 07 14:26	21°♐01'44	8.40173 AU
direct	6989 Aug 15 16:29	17°♐35'10	
evening set	6989 Nov 29 13:07	25°♐29'22	
conjunction	6989 Dec 17 00:20	27°♐39'39	1°55'28
minimum elong	6989 Dec 17 00:22	27°♐39'39	1°55'32
max. Earth dist.	6989 Dec 16 20:09	27°♐38'20	10.43592 AU
morning rise	6990 Jan 03 07:43	29°♐48'46	
	6990 Jan 04 20:30	0°♑	
retrograde	6990 Apr 14 06:43	7°♑22'45	
opposition	6990 Jun 20 19:05	4°♑01'04	2°15'58
min. Earth dist.	6990 Jun 20 21:35	4°♑00'34	8.47365 AU
direct	6990 Aug 29 09:45	0°♑34'32	
evening set	6990 Dec 12 23:45	8°♑23'11	
conjunction	6990 Dec 30 08:20	10°♑31'43	1°42'59
minimum elong	6990 Dec 30 08:22	10°♑31'44	1°43'03
max. Earth dist.	6990 Dec 30 05:04	10°♑30'42	10.51022 AU
morning rise	6991 Jan 16 12:53	12°♑39'04	
retrograde	6991 Apr 27 03:28	20°♑07'13	
opposition	6991 Jul 03 23:20	16°♑46'19	1°57'15
min. Earth dist.	6991 Jul 04 01:31	16°♑45'53	8.54874 AU
direct	6991 Sep 11 22:09	13°♑20'34	
evening set	6991 Dec 26 02:39	21°♑03'03	
conjunction	6992 Jan 12 08:39	23°♑09'53	1°25'40
minimum elong	6992 Jan 12 08:41	23°♑09'54	1°25'43
max. Earth dist.	6992 Jan 12 06:05	23°♑09'05	10.58589 AU
morning rise	6992 Jan 29 10:44	25°♑15'34	
	6992 Mar 13 13:40	0°♒	
retrograde	6992 May 08 20:15	2°♒38'21	
	6992 Jul 06 21:14	30°℞♑	
opposition	6992 Jul 16 00:15	29°♑18'05	1°33'15
min. Earth dist.	6992 Jul 16 02:35	29°♑17'38	8.62342 AU
direct	6992 Sep 24 04:49	25°♑53'13	
	6992 Dec 06 18:29	0°♒	
evening set	6993 Jan 06 22:00	3°♒29'20	
conjunction	6993 Jan 24 01:29	5°♒34'32	1°04'34
minimum elong	6993 Jan 24 01:31	5°♒34'32	1°04'36
max. Earth dist.	6993 Jan 23 22:51	5°♒33'43	10.65931 AU
morning rise	6993 Feb 10 01:33	7°♒38'43	
retrograde	6993 May 21 07:09	14°♒56'52	
opposition	6993 Jul 28 21:37	11°♒37'07	1°05'21
min. Earth dist.	6993 Jul 28 23:43	11°♒36'43	8.69419 AU
direct	6993 Oct 07 07:00	8°♒13'08	
	6994 Jan 13 08:33	15°♒	
evening set	6994 Jan 19 10:48	15°♒43'08	
conjunction	6994 Feb 05 11:55	17°♒46'49	0°40'48
minimum elong	6994 Feb 05 11:56	17°♒46'49	0°40'50
max. Earth dist.	6994 Feb 05 09:35	17°♒46'06	10.72710 AU
morning rise	6994 Feb 22 10:12	19°♒49'38	
retrograde	6994 Jun 02 15:24	27°♒04'10	
opposition	6994 Aug 10 15:42	23°♒44'45	0°34'57
min. Earth dist.	6994 Aug 10 16:50	23°♒44'32	8.75787 AU
direct	6994 Oct 20 06:13	20°♒21'41	
evening set	6995 Jan 31 17:49	27°♒46'04	
conjunction	6995 Feb 17 16:50	29°♒48'25	0°15'33
minimum elong	6995 Feb 17 16:50	29°♒48'25	0°15'35
behind sun begin	6995 Feb 17 14:53	29°♒47'50	
behind sun end	6995 Feb 17 18:48	29°♒49'00	
max. Earth dist.	6995 Feb 17 15:46	29°♒48'06	10.78628 AU
	6995 Feb 19 07:05	0°♓	
morning rise	6995 Mar 06 13:24	1°♓50'03	
retrograde	6995 Jun 14 22:58	9°♓02'04	
opposition	6995 Aug 23 07:19	5°♓42'50	0°03'26
min. Earth dist.	6995 Aug 23 07:03	5°♓42'53	8.81173 AU
desc. node	6995 Oct 03 05:32	3°♓02'52	
direct	6995 Nov 01 22:26	2°♓20'45	
evening set	6996 Feb 12 20:02	9°♓40'10	
conjunction	6996 Feb 29 17:06	11°♓41'22	-0°10'13
minimum elong	6996 Feb 29 17:06	11°♓41'22	0°10'11
behind sun begin	6996 Feb 29 11:27	11°♓39'41	
behind sun end	6996 Feb 29 22:44	11°♓43'03	
max. Earth dist.	6996 Feb 29 17:34	11°♓41'30	10.83434 AU
morning rise	6996 Mar 17 12:12	13°♓42'04	
retrograde	6996 Jun 26 04:16	20°♓52'45	
opposition	6996 Sep 03 20:53	17°♓33'33	-0°27'53
min. Earth dist.	6996 Sep 03 20:04	17°♓33'42	8.85357 AU
direct	6996 Nov 13 10:11	14°♓12'20	
evening set	6997 Feb 23 18:56	21°♓27'44	
conjunction	6997 Mar 12 14:09	23°♓28'02	-0°35'14
minimum elong	6997 Mar 12 14:08	23°♓28'01	0°35'13
max. Earth dist.	6997 Mar 12 14:53	23°♓28'15	10.86933 AU
morning rise	6997 Mar 29 08:13	25°♓28'01	
	6997 May 11 15:40	0°♈	
retrograde	6997 Jul 08 09:32	2°♈38'31	
	6997 Sep 07 05:14	30°℞♓	
opposition	6997 Sep 16 08:52	29°♓19'13	-0°57'47
min. Earth dist.	6997 Sep 16 08:00	29°♓19'23	8.88168 AU
direct	6997 Nov 25 19:47	25°♓58'46	
	6998 Feb 06 16:37	0°♈	
evening set	6998 Mar 07 15:33	3°♈11'09	
conjunction	6998 Mar 24 09:12	5°♈10'48	-0°58'40
minimum elong	6998 Mar 24 09:10	5°♈10'48	0°58'41
max. Earth dist.	6998 Mar 24 09:56	5°♈11'01	10.88985 AU
morning rise	6998 Apr 10 02:38	7°♈10'22	
retrograde	6998 Jul 20 14:01	14°♈21'51	
opposition	6998 Sep 28 20:12	11°♈02'16	-1°25'08
min. Earth dist.	6998 Sep 28 18:55	11°♈02'30	8.89492 AU
direct	6998 Dec 08 02:33	7°♈42'26	
evening set	6999 Mar 19 10:51	14°♈52'51	
conjunction	6999 Apr 05 03:29	16°♈52'07	-1°19'37
minimum elong	6999 Apr 05 03:27	16°♈52'07	1°19'39
max. Earth dist.	6999 Apr 05 05:18	16°♈52'40	10.89513 AU
morning rise	6999 Apr 21 20:35	18°♈51'33	
retrograde	6999 Aug 01 20:26	26°♈05'10	
opposition	6999 Oct 11 07:24	22°♈45'06	-1°48'57
min. Earth dist.	6999 Oct 11 04:50	22°♈45'35	8.89279 AU
direct	6999 Dec 20 08:51	19°♈25'46	
evening set	7000 Mar 31 06:18	26°♈35'13	
conjunction	7000 Apr 16 22:32	28°♈34'29	-1°37'16
minimum elong	7000 Apr 16 22:29	28°♈34'28	1°37'19
max. Earth dist.	7000 Apr 17 01:46	28°♈35'27	10.88500 AU
	7000 Apr 28 20:18	0°♉	
morning rise	7000 May 03 15:44	0°♉34'05	
retrograde	7000 Aug 14 07:23	7°♉50'44	
opposition	7000 Oct 23 19:00	4°♉30'05	-2°08'16
min. Earth dist.	7000 Oct 23 15:36	4°♉30'43	8.87540 AU
direct	7001 Jan 01 13:13	1°♉11'03	
evening set	7001 Apr 12 03:01	8°♉20'35	

conjunction	7001 Apr 28 19:20	10°♉20'11	-1°50'54
minimum elong	7001 Apr 28 19:18	10°♉20'10	1°50'57
max. Earth dist.	7001 Apr 28 22:55	10°♉21'15	10.85995 AU
morning rise	7001 May 15 13:26	12°♉20'20	
	7001 Jun 08 06:20	15°♉	
retrograde	7001 Aug 26 18:52	19°♉40'48	
opposition	7001 Nov 05 07:51	16°♉19'29	-2°22'19
min. Earth dist.	7001 Nov 05 04:28	16°♉20'07	8.84344 AU
	7001 Nov 23 10:46	15°℞♉	
direct	7002 Jan 13 16:49	13°♉00'31	
	7002 Mar 04 01:16	15°♉	
evening set	7002 Apr 24 02:00	20°♉11'11	
conjunction	7002 May 10 19:04	22°♉11'27	-1°59'54
minimum elong	7002 May 10 19:03	22°♉11'27	1°59'57
max. Earth dist.	7002 May 10 22:15	22°♉12'24	10.82098 AU
morning rise	7002 May 27 14:48	24°♉12'30	
	7002 Jul 25 07:47	0°♊	
retrograde	7002 Sep 08 09:52	1°♊37'30	
	7002 Oct 24 15:59	30°℞♉	
opposition	7002 Nov 17 22:26	28°♉15'23	-2°30'24
min. Earth dist.	7002 Nov 17 19:25	28°♉15'57	8.79815 AU
direct	7003 Jan 25 23:33	24°♉56'17	
	7003 Apr 17 09:49	0°♊	
evening set	7003 May 06 04:19	2°♊09'01	
conjunction	7003 May 22 23:07	4°♊10'21	-2°03'47
minimum elong	7003 May 22 23:07	4°♊10'21	2°03'51
max. Earth dist.	7003 May 23 02:42	4°♊11'26	10.76959 AU
morning rise	7003 Jun 08 21:08	6°♊12'38	
retrograde	7003 Sep 21 05:38	13°♊42'38	
opposition	7003 Nov 30 15:03	10°♊19'38	-2°32'00
min. Earth dist.	7003 Nov 30 11:50	10°♊20'15	8.74117 AU
direct	7004 Feb 07 07:35	7°♊00'11	
evening set	7004 May 17 10:55	14°♊15'52	
conjunction	7004 Jun 03 08:23	16°♊18'38	-2°02'14
minimum elong	7004 Jun 03 08:24	16°♊18'39	2°02'18
max. Earth dist.	7004 Jun 03 12:34	16°♊19'55	10.70742 AU
morning rise	7004 Jun 20 09:19	18°♊22'30	
retrograde	7004 Oct 03 05:22	25°♊57'48	
opposition	7004 Dec 12 10:10	22°♊33'53	-2°26'47
min. Earth dist.	7004 Dec 12 06:41	22°♊34'33	8.67411 AU
direct	7005 Feb 18 18:31	19°♊13'52	
evening set	7005 May 29 22:54	26°♊33'22	
conjunction	7005 Jun 15 23:38	28°♊37'54	-1°55'04
minimum elong	7005 Jun 15 23:40	28°♊37'55	1°55'08
max. Earth dist.	7005 Jun 16 03:35	28°♊39'07	10.63627 AU
	7005 Jun 27 03:48	0°♋	
morning rise	7005 Jul 03 04:06	0°♋43'38	
retrograde	7005 Oct 16 10:45	8°♋24'22	
opposition	7005 Dec 25 08:09	4°♋59'34	-2°14'42
min. Earth dist.	7005 Dec 25 04:57	5°♋00'11	8.59917 AU
direct	7006 Mar 03 07:51	1°♋38'49	
evening set	7006 Jun 11 17:05	9°♋02'57	
conjunction	7006 Jun 28 21:35	11°♋09'32	-1°42'22
minimum elong	7006 Jun 28 21:38	11°♋09'33	1°42'27
max. Earth dist.	7006 Jun 29 00:14	11°♋10'21	10.55906 AU
morning rise	7006 Jul 16 06:12	13°♋17'23	
retrograde	7006 Oct 29 21:02	21°♋03'31	
opposition	7007 Jan 07 09:32	17°♋37'53	-1°55'56
min. Earth dist.	7007 Jan 07 07:19	17°♋38'19	8.52009 AU
direct	7007 Mar 16 00:38	14°♋16'13	
evening set	7007 Jun 24 18:05	21°♋45'40	

conjunction	7007 Jul 12 02:50	23°♋54'27	-1°24'30
minimum elong	7007 Jul 12 02:53	23°♋54'28	1°24'34
max. Earth dist.	7007 Jul 12 04:29	23°♋54'58	10.48002 AU
morning rise	7007 Jul 29 15:47	26°♋04'30	
	7007 Sep 02 10:38	0°♌	
retrograde	7007 Nov 12 09:51	3°♌55'38	
opposition	7008 Jan 20 14:13	0°♌29'15	-1°31'04
min. Earth dist.	7008 Jan 20 12:52	0°♌29'31	8.44148 AU
	7008 Jan 26 18:39	30°℞♋	
direct	7008 Mar 27 23:57	27°♋06'32	
	7008 May 25 10:35	0°♌	
evening set	7008 Jul 07 02:31	4°♌41'45	
conjunction	7008 Jul 24 15:36	6°♌52'45	-1°02'06
minimum elong	7008 Jul 24 15:38	6°♌52'45	1°02'10
max. Earth dist.	7008 Jul 24 16:49	6°♌53'08	10.40365 AU
morning rise	7008 Aug 11 08:33	9°♌04'55	
	7008 Oct 06 23:04	15°♌	
retrograde	7008 Nov 25 02:35	17°♌00'25	
	7009 Jan 14 05:21	15°℞♌	
opposition	7009 Feb 01 21:57	13°♌33'24	-1°01'04
min. Earth dist.	7009 Feb 01 21:02	13°♌33'34	8.36782 AU
direct	7009 Apr 10 03:59	10°♌09'35	
	7009 Jun 26 14:06	15°♌	
evening set	7009 Jul 20 18:21	17°♌50'43	
conjunction	7009 Aug 07 11:27	20°♌03'47	-0°36'09
minimum elong	7009 Aug 07 11:29	20°♌03'47	0°36'12
max. Earth dist.	7009 Aug 07 12:49	20°♌04'13	10.33426 AU
morning rise	7009 Aug 25 07:47	22°♌17'52	
	7009 Nov 21 04:21	0°♍	
retrograde	7009 Dec 08 23:48	0°♍16'50	
	7009 Dec 26 20:46	30°℞♌	
opposition	7010 Feb 15 08:48	26°♌49'20	-0°27'21
min. Earth dist.	7010 Feb 15 07:43	26°♌49'33	8.30328 AU
direct	7010 Apr 23 11:38	23°♌24'26	
	7010 Jul 24 23:23	0°♍	
evening set	7010 Aug 03 17:07	1°♍11'24	
conjunction	7010 Aug 21 13:32	3°♍26'12	-0°07'58
minimum elong	7010 Aug 21 13:32	3°♍26'12	0°08'00
behind sun begin	7010 Aug 21 07:03	3°♍24'10	
behind sun end	7010 Aug 21 20:01	3°♍28'14	
max. Earth dist.	7010 Aug 21 14:39	3°♍26'32	10.27568 AU
morning rise	7010 Sep 08 12:22	5°♍41'49	
asc. node	7010 Dec 03 11:53	13°♍22'54	
retrograde	7010 Dec 22 23:35	13°♍43'11	
opposition	7011 Feb 28 22:16	10°♍15'26	0°08'19
min. Earth dist.	7011 Feb 28 21:28	10°♍15'36	8.25137 AU
direct	7011 May 06 23:54	6°♍49'28	
evening set	7011 Aug 17 22:21	14°♍41'57	
conjunction	7011 Sep 04 21:01	16°♍58'02	0°21'02
minimum elong	7011 Sep 04 21:00	16°♍58'01	0°21'02
max. Earth dist.	7011 Sep 04 21:05	16°♍58'03	10.23111 AU
morning rise	7011 Sep 22 21:15	19°♍14'40	
retrograde	7012 Jan 05 23:26	27°♍17'07	
opposition	7012 Mar 13 13:41	23°♍49'23	0°43'54
min. Earth dist.	7012 Mar 13 13:46	23°♍49'22	8.21495 AU
direct	7012 May 19 17:17	20°♍22'28	
evening set	7012 Aug 31 08:25	28°♍19'44	
	7012 Sep 13 13:31	0°♎	
conjunction	7012 Sep 18 08:07	0°♎36'34	0°49'00
minimum elong	7012 Sep 18 08:05	0°♎36'33	0°49'01
max. Earth dist.	7012 Sep 18 06:51	0°♎36'09	10.20298 AU
morning rise	7012 Oct 06 08:31	2°♎53'37	

retrograde	7013 Jan 18 23:17	10°♎55'50	
opposition	7013 Mar 27 06:39	7°♎28'22	1°17'15
min. Earth dist.	7013 Mar 27 07:48	7°♎28'08	8.19603 AU
direct	7013 Jun 02 13:49	4°♎00'39	
evening set	7013 Sep 14 21:17	12°♎01'38	
conjunction	7013 Oct 02 20:53	14°♎18'36	1°14'19
minimum elong	7013 Oct 02 20:51	14°♎18'35	1°14'20
max. Earth dist.	7013 Oct 02 18:24	14°♎17'48	10.19289 AU
morning rise	7013 Oct 20 20:16	16°♎35'29	
retrograde	7014 Feb 01 21:56	24°♎36'08	
opposition	7014 Apr 10 00:12	21°♎09'07	1°46'17
min. Earth dist.	7014 Apr 10 02:05	21°♎08'44	8.19560 AU
direct	7014 Jun 16 13:16	17°♎40'51	
evening set	7014 Sep 29 11:14	25°♎44'10	
conjunction	7014 Oct 17 09:45	28°♎00'43	1°35'25
minimum elong	7014 Oct 17 09:42	28°♎00'42	1°35'27
max. Earth dist.	7014 Oct 17 06:39	27°♎59'43	10.20135 AU
	7014 Nov 02 01:09	0°♏	
morning rise	7014 Nov 04 07:03	0°♏16'54	
retrograde	7015 Feb 15 17:58	8°♏14'36	
opposition	7015 Apr 23 17:22	4°♏48'16	2°09'14
min. Earth dist.	7015 Apr 23 19:23	4°♏47'52	8.21352 AU
direct	7015 Jun 30 14:41	1°♏19'42	
evening set	7015 Oct 13 23:54	9°♏23'47	
conjunction	7015 Oct 31 20:34	11°♏39'26	1°51'05
minimum elong	7015 Oct 31 20:31	11°♏39'25	1°51'08
max. Earth dist.	7015 Oct 31 17:23	11°♏38'25	10.22778 AU
morning rise	7015 Nov 18 14:59	13°♏54'27	
	7015 Nov 27 11:52	15°♏	
retrograde	7016 Feb 29 10:17	21°♏48'04	
opposition	7016 May 06 09:39	18°♏22'36	2°24'48
min. Earth dist.	7016 May 06 11:31	18°♏22'13	8.24865 AU
	7016 Jul 03 01:35	15°℞♏	
direct	7016 Jul 13 16:08	14°♏54'01	
	7016 Jul 24 04:56	15°♏	
evening set	7016 Oct 27 09:01	22°♏57'09	
conjunction	7016 Nov 14 03:14	25°♏11'31	2°00'28
minimum elong	7016 Nov 14 03:13	25°♏11'31	2°00'32
max. Earth dist.	7016 Nov 14 00:20	25°♏10'36	10.27068 AU
morning rise	7016 Dec 01 18:22	27°♏25'01	
	7016 Dec 23 08:56	0°♐	
retrograde	7017 Mar 14 00:02	5°♐13'40	
opposition	7017 May 20 00:13	1°♐49'10	2°32'13
min. Earth dist.	7017 May 20 02:03	1°♐48'48	8.29903 AU
	7017 Jun 12 20:56	30°℞♏	
direct	7017 Jul 27 15:09	28°♏20'52	
	7017 Sep 09 19:58	0°♐	
evening set	7017 Nov 10 13:05	6°♐21'26	
conjunction	7017 Nov 28 04:34	8°♐34'17	2°03'12
minimum elong	7017 Nov 28 04:34	8°♐34'17	2°03'17
max. Earth dist.	7017 Nov 28 01:48	8°♐33'25	10.32771 AU
morning rise	7017 Dec 15 16:25	10°♐46'04	
retrograde	7018 Mar 27 09:24	18°♐29'03	
opposition	7018 Jun 02 12:17	15°♐05'37	2°31'21
min. Earth dist.	7018 Jun 02 14:40	15°♐05'09	8.36186 AU
direct	7018 Aug 10 12:01	11°♐37'50	
evening set	7018 Nov 24 10:46	19°♐34'27	
conjunction	7018 Dec 11 23:23	21°♐45'37	1°59'24
minimum elong	7018 Dec 11 23:24	21°♐45'37	1°59'29
max. Earth dist.	7018 Dec 11 20:08	21°♐44'36	10.39566 AU
morning rise	7018 Dec 29 08:09	23°♐55'38	

	7019 Feb 26 14:49	0°♑	
retrograde	7019 Apr 09 12:53	1°♑32'35	
	7019 May 22 09:35	30°℞♐	
opposition	7019 Jun 15 21:36	28°♐10'16	2°22'35
min. Earth dist.	7019 Jun 16 00:22	28°♐09'43	8.43370 AU
direct	7019 Aug 24 06:52	24°♐43'13	
	7019 Nov 16 00:49	0°♑	
evening set	7019 Dec 08 01:06	2°♑34'44	
conjunction	7019 Dec 25 10:51	4°♑44'08	1°49'30
minimum elong	7019 Dec 25 10:53	4°♑44'08	1°49'35
max. Earth dist.	7019 Dec 25 07:21	4°♑43'02	10.47084 AU
morning rise	7020 Jan 11 16:49	6°♑52'22	
retrograde	7020 Apr 21 10:50	14°♑23'23	
opposition	7020 Jun 28 03:39	11°♑02'04	2°06'47
min. Earth dist.	7020 Jun 28 06:07	11°♑01'36	8.51076 AU
direct	7020 Sep 05 22:33	7°♑35'56	
evening set	7020 Dec 20 07:48	15°♑21'33	
conjunction	7021 Jan 06 14:56	17°♑29'12	1°34'19
minimum elong	7021 Jan 06 14:58	17°♑29'13	1°34'23
max. Earth dist.	7021 Jan 06 11:53	17°♑28'15	10.54944 AU
morning rise	7021 Jan 23 18:22	19°♑35'43	
retrograde	7021 May 04 05:40	27°♑01'07	
opposition	7021 Jul 11 06:11	23°♑40'41	1°45'04
min. Earth dist.	7021 Jul 11 07:41	23°♑40'23	8.58925 AU
direct	7021 Sep 19 08:14	20°♑15'33	
evening set	7022 Jan 02 07:01	27°♑54'52	
conjunction	7022 Jan 19 11:46	0°♒00'51	1°14'50
minimum elong	7022 Jan 19 11:48	0°♒00'52	1°14'54
max. Earth dist.	7022 Jan 19 09:58	0°♒00'18	10.62752 AU
	7022 Jan 19 08:59	0°♒	
morning rise	7022 Feb 05 12:52	2°♒05'45	
retrograde	7022 May 16 20:18	9°♒26'09	
opposition	7022 Jul 24 05:26	6°♒06'26	1°18'48
min. Earth dist.	7022 Jul 24 06:13	6°♒06'17	8.66529 AU
direct	7022 Oct 02 12:55	2°♒42'22	
evening set	7023 Jan 14 23:20	10°♒15'24	
conjunction	7023 Feb 01 01:43	12°♒19'47	0°52'10
minimum elong	7023 Feb 01 01:45	12°♒19'48	0°52'13
max. Earth dist.	7023 Feb 01 00:53	12°♒19'32	10.70123 AU
morning rise	7023 Feb 18 00:42	14°♒23'13	
	7023 Feb 23 04:51	15°♒	
retrograde	7023 May 29 07:40	21°♒39'27	
opposition	7023 Aug 06 01:32	18°♒20'17	0°49'22
min. Earth dist.	7023 Aug 06 02:14	18°♒20'09	8.73531 AU
	7023 Oct 08 02:01	15°℞♒	
direct	7023 Oct 15 12:49	14°♒57'16	
	7023 Oct 22 22:49	15°♒	
evening set	7024 Jan 27 09:32	22°♒24'18	
conjunction	7024 Feb 13 09:33	24°♒27'15	0°27'28
minimum elong	7024 Feb 13 09:34	24°♒27'15	0°27'30
max. Earth dist.	7024 Feb 13 08:43	24°♒27'00	10.76712 AU
morning rise	7024 Mar 01 06:49	26°♒29'23	
	7024 Apr 02 02:12	0°♓	
retrograde	7024 Jun 09 15:28	3°♓42'28	
opposition	7024 Aug 17 18:48	0°♓23'40	0°18'12
min. Earth dist.	7024 Aug 17 19:38	0°♓23'30	8.79600 AU
	7024 Aug 23 00:25	30°℞♒	
direct	7024 Oct 27 07:32	27°♒01'35	
	7024 Dec 28 07:26	0°♓	
evening set	7025 Feb 07 14:22	4°♓23'17	
conjunction	7025 Feb 24 12:13	6°♓24'58	0°01'52

minimum elong	7025 Feb 24 12:13	6°♓24'58	0°01'54
behind sun begin	7025 Feb 24 05:11	6°♓22'52	
behind sun end	7025 Feb 24 19:15	6°♓27'04	
max. Earth dist.	7025 Feb 24 11:03	6°♓24'40	10.82184 AU
morning rise	7025 Mar 13 08:06	8°♓26'03	
desc. node	7025 Mar 23 03:02	9°♓34'20	
retrograde	7025 Jun 21 20:27	15°♓37'11	
opposition	7025 Aug 30 09:34	12°♓18'28	-0°13'22
min. Earth dist.	7025 Aug 30 10:02	12°♓18'23	8.84394 AU
direct	7025 Nov 08 23:29	8°♓57'16	
evening set	7026 Feb 19 15:10	16°♓14'33	
conjunction	7026 Mar 08 11:09	18°♓15'12	-0°23'41
minimum elong	7026 Mar 08 11:09	18°♓15'12	0°23'40
max. Earth dist.	7026 Mar 08 10:36	18°♓15'02	10.86222 AU
morning rise	7026 Mar 25 05:45	20°♓15'28	
retrograde	7026 Jul 04 02:53	27°♓25'59	
opposition	7026 Sep 11 22:31	24°♓07'10	-0°44'04
min. Earth dist.	7026 Sep 11 22:07	24°♓07'15	8.87656 AU
direct	7026 Nov 21 11:35	20°♓46'46	
evening set	7027 Mar 03 13:09	28°♓00'38	
conjunction	7027 Mar 20 07:36	0°♈00'34	-0°48'00
minimum elong	7027 Mar 20 07:34	0°♈00'33	0°48'00
max. Earth dist.	7027 Mar 20 08:03	0°♈00'42	10.88658 AU
	7027 Mar 20 05:43	0°♈	
morning rise	7027 Apr 06 01:09	2°♈00'17	
retrograde	7027 Jul 16 08:49	9°♈11'25	
opposition	7027 Sep 24 10:40	5°♈52'19	-1°12'46
min. Earth dist.	7027 Sep 24 09:39	5°♈52'30	8.89303 AU
direct	7027 Dec 03 18:37	2°♈32'31	
evening set	7028 Mar 14 09:26	9°♈44'02	
conjunction	7028 Mar 31 02:35	11°♈43'30	-1°10'14
minimum elong	7028 Mar 31 02:33	11°♈43'29	1°10'15
max. Earth dist.	7028 Mar 31 03:20	11°♈43'44	10.89469 AU
morning rise	7028 Apr 16 19:41	13°♈43'00	
retrograde	7028 Jul 27 15:13	20°♈55'52	
opposition	7028 Oct 05 22:26	17°♈36'15	-1°38'22
min. Earth dist.	7028 Oct 05 21:34	17°♈36'25	8.89337 AU
direct	7028 Dec 15 01:32	14°♈16'50	
evening set	7029 Mar 26 05:21	21°♈27'03	
conjunction	7029 Apr 11 21:38	23°♈26'22	-1°29'31
minimum elong	7029 Apr 11 21:36	23°♈26'22	1°29'34
max. Earth dist.	7029 Apr 11 22:03	23°♈26'30	10.88681 AU
morning rise	7029 Apr 28 14:50	25°♈25'58	
	7029 Jun 11 06:25	0°♉	
retrograde	7029 Aug 08 23:32	2°♉41'30	
	7029 Oct 09 17:26	30°℞♈	
opposition	7029 Oct 18 10:13	29°♈21'12	-1°59'55
min. Earth dist.	7029 Oct 18 09:16	29°♈21'23	8.87799 AU
direct	7029 Dec 27 07:07	26°♈01'57	
	7030 Mar 09 01:58	0°♉	
evening set	7030 Apr 07 01:46	3°♉11'54	
conjunction	7030 Apr 23 17:55	5°♉11'25	-1°45'07
minimum elong	7030 Apr 23 17:53	5°♉11'25	1°45'10
max. Earth dist.	7030 Apr 23 19:14	5°♉11'49	10.86354 AU
morning rise	7030 May 10 11:40	7°♉11'26	
retrograde	7030 Aug 21 09:10	14°♉30'35	
opposition	7030 Oct 30 22:55	11°♉09'24	-2°16'33
min. Earth dist.	7030 Oct 30 21:04	11°♉09'45	8.84764 AU
direct	7031 Jan 08 12:46	7°♉50'08	
evening set	7031 Apr 18 23:44	15°♉00'48	
	7031 Apr 18 21:00	15°♉	
conjunction	7031 May 05 16:32	17°♉00'54	-1°56'21
minimum elong	7031 May 05 16:30	17°♉00'53	1°56'24
max. Earth dist.	7031 May 05 19:16	17°♉01'43	10.82593 AU
morning rise	7031 May 22 11:24	19°♉01'39	
retrograde	7031 Sep 03 00:14	26°♉25'12	
opposition	7031 Nov 12 12:58	23°♉03'02	-2°27'30
min. Earth dist.	7031 Nov 12 10:05	23°♉03'35	8.80358 AU
direct	7032 Jan 20 19:19	19°♉43'35	
evening set	7032 Apr 30 00:43	26°♉55'58	
conjunction	7032 May 16 18:50	28°♉57'00	-2°02'40
minimum elong	7032 May 16 18:49	28°♉57'00	2°02'43
max. Earth dist.	7032 May 16 22:00	28°♉57'57	10.77550 AU
	7032 May 25 10:59	0°♊	
morning rise	7032 Jun 02 15:40	0°♊58'54	
retrograde	7032 Sep 14 19:14	8°♊27'19	
opposition	7032 Nov 24 04:48	5°♊04'11	-2°32'10
min. Earth dist.	7032 Nov 24 01:51	5°♊04'45	8.74752 AU
direct	7033 Feb 01 01:04	1°♊44'21	
evening set	7033 May 12 05:38	8°♊59'26	
conjunction	7033 May 29 01:47	11°♊01'45	-2°03'39
minimum elong	7033 May 29 01:48	11°♊01'46	2°03'42
max. Earth dist.	7033 May 29 04:28	11°♊02'34	10.71429 AU
morning rise	7033 Jun 15 01:25	13°♊05'08	
retrograde	7033 Sep 27 16:17	20°♊38'51	
opposition	7033 Dec 06 23:13	17°♊14'45	-2°30'07
min. Earth dist.	7033 Dec 06 20:41	17°♊15'14	8.68170 AU
direct	7034 Feb 13 10:37	13°♊54'21	
evening set	7034 May 24 15:14	21°♊12'59	
conjunction	7034 Jun 10 14:20	23°♊16'58	-1°59'02
minimum elong	7034 Jun 10 14:22	23°♊16'59	1°59'07
max. Earth dist.	7034 Jun 10 17:01	23°♊17'47	10.64475 AU
morning rise	7034 Jun 27 17:22	25°♊22'07	
	7034 Aug 09 15:55	0°♋	
retrograde	7034 Oct 10 18:54	3°♋01'23	
	7034 Dec 14 17:47	30°℞♊	
opposition	7034 Dec 19 20:30	29°♊36'18	-2°21'08
min. Earth dist.	7034 Dec 19 18:05	29°♊36'46	8.60886 AU
direct	7035 Feb 26 00:24	26°♊15'13	
	7035 May 04 21:15	0°♋	
evening set	7035 Jun 06 06:46	3°♋38'09	
conjunction	7035 Jun 23 09:38	5°♋44'05	-1°48'49
minimum elong	7035 Jun 23 09:40	5°♋44'06	1°48'54
max. Earth dist.	7035 Jun 23 13:02	5°♋45'08	10.56984 AU
morning rise	7035 Jul 10 16:29	7°♋51'15	
retrograde	7035 Oct 24 02:54	15°♋35'58	
opposition	7036 Jan 01 20:41	12°♋10'01	-2°05'19
min. Earth dist.	7036 Jan 01 17:51	12°♋10'34	8.53221 AU
direct	7036 Mar 09 16:28	8°♋48'07	
evening set	7036 Jun 18 04:59	16°♋16'03	
conjunction	7036 Jul 05 12:03	18°♋24'07	-1°33'12
minimum elong	7036 Jul 05 12:05	18°♋24'07	1°33'17
max. Earth dist.	7036 Jul 05 15:45	18°♋25'16	10.49290 AU
morning rise	7036 Jul 22 23:01	20°♋33'26	
retrograde	7036 Nov 05 15:23	28°♋23'19	
opposition	7037 Jan 14 00:15	24°♋56'35	-1°43'03
min. Earth dist.	7037 Jan 13 21:12	24°♋57'12	8.45531 AU
direct	7037 Mar 22 12:56	21°♋33'49	
evening set	7037 Jul 01 10:25	29°♋07'14	
	7037 Jul 08 13:26	0°♌	
conjunction	7037 Jul 18 21:41	1°♌17'30	-1°12'42
minimum elong	7037 Jul 18 21:43	1°♌17'30	1°12'46

max. Earth dist.	7037 Jul 19 00:53	1°♌18'30	10.41768 AU	
morning rise	7037 Aug 05 12:47	3°♌28'58		
retrograde	7037 Nov 19 08:16	11°♌23'29		
opposition	7038 Jan 27 07:13	7°♌56'12	-1°15'09	
min. Earth dist.	7038 Jan 27 04:34	7°♌56'43	8.38215 AU	
direct	7038 Apr 04 13:53	4°♌32'28		
evening set	7038 Jul 14 23:23	12°♌11'41		
conjunction	7038 Aug 01 14:43	14°♌24'04	-0°48'09	
minimum elong	7038 Aug 01 14:45	14°♌24'05	0°48'13	
max. Earth dist.	7038 Aug 01 16:52	14°♌24'45	10.34824 AU	
	7038 Aug 06 08:53	15°♌		
morning rise	7038 Aug 19 09:41	16°♌37'34		
retrograde	7038 Dec 03 04:52	24°♌35'55		
opposition	7039 Feb 09 17:23	21°♌08'16	-0°42'49	
min. Earth dist.	7039 Feb 09 15:39	21°♌08'37	8.31683 AU	
direct	7039 Apr 17 19:51	17°♌43'34		
evening set	7039 Jul 28 19:46	25°♌28'42		
conjunction	7039 Aug 15 14:43	27°♌42'57	-0°20'44	
minimum elong	7039 Aug 15 14:44	27°♌42'57	0°20'47	
max. Earth dist.	7039 Aug 15 15:58	27°♌43'20	10.28840 AU	
morning rise	7039 Sep 02 12:46	29°♌58'09		
	7039 Sep 02 18:45	0°♍		
retrograde	7039 Dec 17 03:26	7°♍59'19		
opposition	7040 Feb 23 06:26	4°♍31'32	-0°07'43	
min. Earth dist.	7040 Feb 23 05:26	4°♍31'44	8.26301 AU	
direct	7040 Apr 30 07:47	1°♍05'57		
asc. node	7040 May 14 09:24	1°♍16'55		
evening set	7040 Aug 10 22:56	8°♍56'44		
conjunction	7040 Aug 28 20:38	11°♍12'27	0°08'12	
minimum elong	7040 Aug 28 20:38	11°♍12'27	0°08'11	
behind sun begin	7040 Aug 28 14:12	11°♍10'25		
behind sun end	7040 Aug 29 03:05	11°♍14'28		
max. Earth dist.	7040 Aug 28 21:37	11°♍12'45	10.24151 AU	
morning rise	7040 Sep 15 20:34	13°♍28'51		
retrograde	7040 Dec 30 03:07	21°♍31'40		
opposition	7041 Mar 07 21:46	18°♍03'59	0°28'14	
min. Earth dist.	7041 Mar 07 20:58	18°♍04'08	8.22382 AU	
direct	7041 May 14 00:31	14°♍37'37		
evening set	7041 Aug 25 07:43	22°♍33'26		
conjunction	7041 Sep 12 07:09	24°♍50'07	0°36'49	
minimum elong	7041 Sep 12 07:07	24°♍50'06	0°36'49	
max. Earth dist.	7041 Sep 12 07:57	24°♍50'22	10.21036 AU	
morning rise	7041 Sep 30 07:40	27°♍07'09		
	7041 Oct 24 10:34	0°♎		
retrograde	7042 Jan 13 04:18	5°♎10'15		
opposition	7042 Mar 21 14:53	1°♎42'52	1°02'52	
min. Earth dist.	7042 Mar 21 14:10	1°♎43'00	8.20157 AU	
	7042 Apr 12 16:13	30°℞♍		
direct	7042 May 27 19:37	28°♍15'49		
	7042 Jul 11 06:30	0°♎		
evening set	7042 Sep 08 20:25	6°♎15'42		
conjunction	7042 Sep 26 20:21	8°♎32'44	1°03'31	
minimum elong	7042 Sep 26 20:18	8°♎32'44	1°03'33	
max. Earth dist.	7042 Sep 26 20:43	8°♎32'52	10.19673 AU	
morning rise	7042 Oct 14 20:14	10°♎49'49		
retrograde	7043 Jan 27 05:28	18°♎51'45		
opposition	7043 Apr 04 08:55	15°♎24'51	1°34'04	
min. Earth dist.	7043 Apr 04 08:41	15°♎24'54	8.19725 AU	
direct	7043 Jun 10 18:04	11°♎57'16		
evening set	7043 Sep 23 11:04	19°♎59'56		
conjunction	7043 Oct 11 10:16	22°♎16'44	1°26'39	
minimum elong	7043 Oct 11 10:13	22°♎16'43	1°26'42	
max. Earth dist.	7043 Oct 11 09:32	22°♎16'30	10.20094 AU	
morning rise	7043 Oct 29 08:24	24°♎33'16		
	7043 Dec 17 20:00	0°♏		
retrograde	7044 Feb 10 03:45	2°♏32'36		
	7044 Apr 06 00:08	30°℞♎		
opposition	7044 Apr 17 02:56	29°♎06'23	1°59'52	
min. Earth dist.	7044 Apr 17 03:56	29°♎06'11	8.21045 AU	
direct	7044 Jun 23 19:00	25°♎38'25		
	7044 Sep 05 08:33	0°♏		
evening set	7044 Oct 07 01:09	3°♏42'23		
conjunction	7044 Oct 24 22:39	5°♏58'26	1°44'50	
minimum elong	7044 Oct 24 22:36	5°♏58'25	1°44'53	
max. Earth dist.	7044 Oct 24 20:08	5°♏57'38	10.22197 AU	
morning rise	7044 Nov 11 18:16	8°♏13'57		
	7045 Jan 18 00:16	15°♏		
retrograde	7045 Feb 22 22:23	16°♏09'33		
	7045 Mar 31 05:45	15°℞♏		
opposition	7045 Apr 30 20:14	12°♏44'10	2°18'46	
min. Earth dist.	7045 Apr 30 22:35	12°♏43'42	8.23942 AU	
direct	7045 Jul 07 20:52	9°♏16'04		
	7045 Oct 02 03:42	15°♏		
evening set	7045 Oct 21 12:27	17°♏19'49		
conjunction	7045 Nov 08 07:39	19°♏34'45	1°57'01	
minimum elong	7045 Nov 08 07:37	19°♏34'45	1°57'05	
max. Earth dist.	7045 Nov 08 03:35	19°♏33'28	10.25774 AU	
morning rise	7045 Nov 26 00:20	21°♏48'55		
retrograde	7046 Mar 08 13:38	29°♏39'59		
opposition	7046 May 14 12:02	26°♏15'33	2°29'46	
min. Earth dist.	7046 May 14 15:14	26°♏14'54	8.28203 AU	
direct	7046 Jul 21 21:46	22°♏47'33		
	7046 Oct 29 01:47	0°♐		
evening set	7046 Nov 04 19:34	0°♐49'38		
conjunction	7046 Nov 22 12:09	3°♐03'11	2°02'39	
minimum elong	7046 Nov 22 12:08	3°♐03'11	2°02'43	
max. Earth dist.	7046 Nov 22 07:18	3°♐01'39	10.30650 AU	
morning rise	7046 Dec 10 01:36	5°♐15'46		
retrograde	7047 Mar 22 00:31	13°♐01'34		
opposition	7047 May 28 01:40	9°♐38'07	2°32'28	
min. Earth dist.	7047 May 28 04:50	9°♐37'29	8.33670 AU	
direct	7047 Aug 04 21:32	6°♐10'29		
evening set	7047 Nov 18 20:46	14°♐09'21		
conjunction	7047 Dec 06 10:39	16°♐21'20	2°01'37	
minimum elong	7047 Dec 06 10:39	16°♐21'20	2°01'42	
max. Earth dist.	7047 Dec 06 06:10	16°♐19'55	10.36657 AU	
morning rise	7047 Dec 23 20:51	18°♐32'12		
retrograde	7048 Apr 03 06:45	26°♐12'15		
opposition	7048 Jun 09 12:50	22°♐49'46	2°27'03	
min. Earth dist.	7048 Jun 09 15:29	22°♐49'14	8.40127 AU	
direct	7048 Aug 17 18:34	19°♐22'39		
evening set	7048 Dec 01 14:49	27°♐16'57		
conjunction	7048 Dec 19 02:00	29°♐27'14	1°54'16	
minimum elong	7048 Dec 19 02:01	29°♐27'14	1°54'20	
max. Earth dist.	7048 Dec 18 22:27	29°♐26'07	10.43526 AU	
	7048 Dec 23 10:38	0°♑		
morning rise	7049 Jan 05 09:09	1°♑36'21		
retrograde	7049 Apr 16 08:55	9°♑10'29		
opposition	7049 Jun 22 20:54	5°♑48'52	2°14'09	
min. Earth dist.	7049 Jun 22 23:28	5°♑48'22	8.47272 AU	
direct	7049 Aug 31 11:11	2°♑22'26		
evening set	7049 Dec 15 01:29	10°♑11'10		

conjunction	7050 Jan 01 09:59	12°♑19'44	1°41'14
minimum elong	7050 Jan 01 10:01	12°♑19'44	1°41'19
max. Earth dist.	7050 Jan 01 06:45	12°♑18'43	10.50913 AU
morning rise	7050 Jan 18 14:26	14°♑27'06	
retrograde	7050 Apr 29 06:23	21°♑55'24	
opposition	7050 Jul 06 01:25	18°♑34'35	1°54'49
min. Earth dist.	7050 Jul 06 04:13	18°♑34'02	8.54745 AU
direct	7050 Sep 13 22:39	15°♑08'54	
evening set	7050 Dec 28 04:31	22°♑51'31	
conjunction	7051 Jan 14 10:22	24°♑58'22	1°23'28
minimum elong	7051 Jan 14 10:24	24°♑58'23	1°23'31
max. Earth dist.	7051 Jan 14 07:05	24°♑57'21	10.58446 AU
morning rise	7051 Jan 31 12:30	27°♑04'07	
	7051 Feb 26 02:23	0°♒	
retrograde	7051 May 11 21:14	4°♒27'03	
opposition	7051 Jul 19 02:34	1°♒06'52	1°30'19
min. Earth dist.	7051 Jul 19 05:15	1°♒06'21	8.62182 AU
	7051 Aug 02 20:07	30°℞♑	
direct	7051 Sep 27 07:20	27°♑42'03	
	7051 Nov 20 01:23	0°♒	
evening set	7052 Jan 09 24:00	5°♒18'18	
conjunction	7052 Jan 27 03:21	7°♒23'31	1°02'01
minimum elong	7052 Jan 27 03:23	7°♒23'32	1°02'04
max. Earth dist.	7052 Jan 27 00:21	7°♒22'36	10.65760 AU
morning rise	7052 Feb 13 03:27	9°♒27'44	
	7052 Apr 07 14:46	15°♒	
retrograde	7052 May 23 08:55	16°♒46'08	
	7052 Jul 09 18:11	15°℞♒	
opposition	7052 Jul 31 00:13	13°♒26'24	1°02'03
min. Earth dist.	7052 Jul 31 01:48	13°♒26'06	8.69233 AU
direct	7052 Oct 09 11:13	10°♒02'29	
	7052 Dec 30 05:52	15°♒	
evening set	7053 Jan 21 12:47	17°♒32'33	
conjunction	7053 Feb 07 13:55	19°♒36'16	0°38'01
minimum elong	7053 Feb 07 13:56	19°♒36'16	0°38'04
max. Earth dist.	7053 Feb 07 12:18	19°♒35'47	10.72519 AU
morning rise	7053 Feb 24 12:07	21°♒39'06	
retrograde	7053 Jun 04 19:09	28°♒53'53	
opposition	7053 Aug 12 18:31	25°♒34'27	0°31'27
min. Earth dist.	7053 Aug 12 18:54	25°♒34'22	8.75585 AU
direct	7053 Oct 22 08:02	22°♒11'27	
evening set	7054 Feb 02 19:54	29°♒35'50	
	7054 Feb 06 05:07	0°♓	
conjunction	7054 Feb 19 18:55	1°♓38'13	0°12'40
minimum elong	7054 Feb 19 18:56	1°♓38'13	0°12'42
behind sun begin	7054 Feb 19 14:25	1°♓36'52	
behind sun end	7054 Feb 19 23:26	1°♓39'34	
max. Earth dist.	7054 Feb 19 18:43	1°♓38'10	10.78423 AU
morning rise	7054 Mar 08 15:23	3°♓39'53	
retrograde	7054 Jun 17 01:36	10°♓52'07	
desc. node	7054 Aug 24 00:19	7°♓39'16	
opposition	7054 Aug 25 10:20	7°♓32'51	-0°00'07
min. Earth dist.	7054 Aug 25 09:59	7°♓32'54	8.80963 AU
direct	7054 Nov 04 00:33	4°♓10'46	
evening set	7055 Feb 14 22:18	11°♓30'12	
conjunction	7055 Mar 03 19:13	13°♓31'25	-0°13'04
minimum elong	7055 Mar 03 19:12	13°♓31'25	0°13'02
behind sun begin	7055 Mar 03 14:53	13°♓30'08	
behind sun end	7055 Mar 03 23:31	13°♓32'42	
max. Earth dist.	7055 Mar 03 19:37	13°♓31'32	10.83222 AU
morning rise	7055 Mar 20 14:17	15°♓32'07	
retrograde	7055 Jun 29 07:20	22°♓43'01	
opposition	7055 Sep 07 00:06	19°♓23'46	-0°31'20
min. Earth dist.	7055 Sep 06 23:40	19°♓23'51	8.85152 AU
direct	7055 Nov 16 13:26	16°♓02'31	
evening set	7056 Feb 26 21:14	23°♓17'55	
conjunction	7056 Mar 14 16:16	25°♓18'12	-0°37'57
minimum elong	7056 Mar 14 16:15	25°♓18'12	0°37'56
max. Earth dist.	7056 Mar 14 16:40	25°♓18'20	10.86733 AU
morning rise	7056 Mar 31 10:23	27°♓18'13	
	7056 Apr 24 12:54	0°♈	
retrograde	7056 Jul 10 11:29	4°♈28'55	
opposition	7056 Sep 18 12:14	1°♈09'31	-1°00'59
min. Earth dist.	7056 Sep 18 11:13	1°♈09'42	8.87984 AU
	7056 Oct 04 07:40	30°℞♓	
direct	7056 Nov 27 22:22	27°♓49'02	
	7057 Jan 19 10:08	0°♈	
evening set	7057 Mar 09 17:45	5°♈01'23	
conjunction	7057 Mar 26 11:24	7°♈01'01	-1°01'08
minimum elong	7057 Mar 26 11:22	7°♈01'00	1°01'09
max. Earth dist.	7057 Mar 26 12:43	7°♈01'25	10.88808 AU
morning rise	7057 Apr 12 04:48	9°♈00'35	
retrograde	7057 Jul 22 16:41	16°♈12'17	
opposition	7057 Sep 30 23:30	12°♈52'34	-1°27'57
min. Earth dist.	7057 Sep 30 21:18	12°♈52'59	8.89328 AU
direct	7057 Dec 10 06:43	9°♈32'42	
evening set	7058 Mar 21 13:09	16°♈43'03	
conjunction	7058 Apr 07 05:49	18°♈42'20	-1°21'43
minimum elong	7058 Apr 07 05:47	18°♈42'20	1°21'45
max. Earth dist.	7058 Apr 07 08:42	18°♈43'12	10.89352 AU
morning rise	7058 Apr 23 22:48	20°♈41'45	
retrograde	7058 Aug 04 00:50	27°♈55'32	
opposition	7058 Oct 13 10:39	24°♈35'21	-1°51'15
min. Earth dist.	7058 Oct 13 07:24	24°♈35'58	8.89130 AU
direct	7058 Dec 22 11:39	21°♈15'59	
evening set	7059 Apr 02 08:41	28°♈25'21	
	7059 Apr 15 14:49	0°♉	
conjunction	7059 Apr 19 00:51	0°♉24'37	-1°38'54
minimum elong	7059 Apr 19 00:48	0°♉24'36	1°38'57
max. Earth dist.	7059 Apr 19 04:14	0°♉25'38	10.88359 AU
morning rise	7059 May 05 18:05	2°♉24'14	
retrograde	7059 Aug 16 09:56	9°♉41'00	
opposition	7059 Oct 25 22:23	6°♉20'16	-2°09'58
min. Earth dist.	7059 Oct 25 19:05	6°♉20'53	8.87417 AU
direct	7060 Jan 03 14:55	3°♉01'10	
evening set	7060 Apr 13 05:22	10°♉10'39	
conjunction	7060 Apr 29 21:37	12°♉10'14	-1°52'01
minimum elong	7060 Apr 29 21:35	12°♉10'13	1°52'04
max. Earth dist.	7060 Apr 30 00:48	12°♉11'12	10.85886 AU
morning rise	7060 May 16 15:53	14°♉10'25	
	7060 May 23 18:08	15°♉	
retrograde	7060 Aug 27 21:35	21°♉31'00	
opposition	7060 Nov 06 11:10	18°♉09'35	-2°23'20
min. Earth dist.	7060 Nov 06 08:04	18°♉10'10	8.84255 AU
	7061 Jan 01 04:40	15°℞♉	
direct	7061 Jan 14 20:27	14°♉50'33	
	7061 Jan 28 10:12	15°♉	
evening set	7061 Apr 25 04:22	22°♉01'10	
conjunction	7061 May 11 21:34	24°♉01'27	-2°00'26
minimum elong	7061 May 11 21:33	24°♉01'27	2°00'29
max. Earth dist.	7061 May 12 01:01	24°♉02'30	10.82027 AU
morning rise	7061 May 28 17:26	26°♉02'31	
	7061 Jul 04 05:54	0°♊	

retrograde	7061 Sep 09 12:46	3°♊27'35	
opposition	7061 Nov 19 01:27	0°♊05'24	-2°30'40
min. Earth dist.	7061 Nov 18 22:05	0°♊06'02	8.79765 AU
	7061 Nov 20 06:00	30°℞♉	
direct	7062 Jan 27 02:28	26°♉46'16	
	7062 Mar 31 13:29	0°♊	
evening set	7062 May 07 06:40	3°♊58'57	
conjunction	7062 May 24 01:44	6°♊00'19	-2°03'43
minimum elong	7062 May 24 01:44	6°♊00'19	2°03'47
max. Earth dist.	7062 May 24 06:18	6°♊01'42	10.76931 AU
morning rise	7062 Jun 09 23:49	8°♊02'38	
retrograde	7062 Sep 22 08:14	15°♊32'40	
opposition	7062 Dec 01 17:57	12°♊09'37	-2°31'31
min. Earth dist.	7062 Dec 01 13:51	12°♊10'24	8.74118 AU
direct	7063 Feb 08 10:36	8°♊50'11	
evening set	7063 May 19 13:18	16°♊05'47	
conjunction	7063 Jun 05 10:57	18°♊08'36	-2°01'33
minimum elong	7063 Jun 05 10:58	18°♊08'36	2°01'37
max. Earth dist.	7063 Jun 05 15:42	18°♊10'03	10.70784 AU
morning rise	7063 Jun 22 12:03	20°♊12'29	
retrograde	7063 Oct 05 09:39	27°♊47'46	
opposition	7063 Dec 14 12:58	24°♊23'50	-2°25'35
min. Earth dist.	7063 Dec 14 09:00	24°♊24'36	8.67504 AU
direct	7064 Feb 20 20:25	21°♊03'51	
evening set	7064 May 31 01:24	28°♊23'14	
	7064 Jun 13 07:37	0°♋	
conjunction	7064 Jun 17 02:16	0°♋27'48	-1°53'48
minimum elong	7064 Jun 17 02:18	0°♋27'49	1°53'52
max. Earth dist.	7064 Jun 17 05:52	0°♋28'55	10.63788 AU
morning rise	7064 Jul 04 07:05	2°♋33'35	
retrograde	7064 Oct 17 14:03	10°♋14'08	
opposition	7064 Dec 26 10:44	6°♋49'22	-2°12'47
min. Earth dist.	7064 Dec 26 07:52	6°♋49'55	8.60138 AU
direct	7065 Mar 04 09:15	3°♋28'37	
evening set	7065 Jun 12 19:33	10°♋52'38	
conjunction	7065 Jun 30 00:17	12°♋59'14	-1°40'35
minimum elong	7065 Jun 30 00:19	12°♋59'14	1°40'40
max. Earth dist.	7065 Jun 30 02:31	12°♋59'55	10.56187 AU
morning rise	7065 Jul 17 09:14	15°♋07'05	
retrograde	7065 Oct 30 22:13	22°♋52'57	
opposition	7066 Jan 08 11:51	19°♋27'22	-1°53'25
min. Earth dist.	7066 Jan 08 10:05	19°♋27'43	8.52324 AU
direct	7066 Mar 17 03:51	16°♋05'44	
evening set	7066 Jun 25 20:24	23°♋35'02	
conjunction	7066 Jul 13 05:27	25°♋43'50	-1°22'16
minimum elong	7066 Jul 13 05:30	25°♋43'51	1°22'21
max. Earth dist.	7066 Jul 13 07:24	25°♋44'26	10.48348 AU
morning rise	7066 Jul 30 18:37	27°♋53'53	
	7066 Aug 17 14:04	0°♌	
retrograde	7066 Nov 13 11:29	5°♌44'46	
opposition	7067 Jan 21 16:15	2°♌18'26	-1°28'04
min. Earth dist.	7067 Jan 21 14:49	2°♌18'44	8.44506 AU
	7067 Feb 22 20:19	30°℞♋	
direct	7067 Mar 30 02:40	28°♋55'47	
	7067 May 03 19:11	0°♌	
evening set	7067 Jul 09 04:48	6°♌30'49	
conjunction	7067 Jul 26 18:13	8°♌41'51	-0°59'32
minimum elong	7067 Jul 26 18:16	8°♌41'51	0°59'36
max. Earth dist.	7067 Jul 26 20:06	8°♌42'26	10.40732 AU
morning rise	7067 Aug 13 11:17	10°♌54'01	
	7067 Sep 18 17:25	15°♌	

retrograde	7067 Nov 27 05:44	18°♌49'14	
opposition	7068 Feb 03 23:43	15°♌22'17	-0°57'45
min. Earth dist.	7068 Feb 03 22:21	15°♌22'34	8.37147 AU
	7068 Feb 08 15:44	15°℞♌	
direct	7068 Apr 11 05:05	11°♌58'32	
	7068 Jun 09 22:52	15°♌	
evening set	7068 Jul 21 20:43	19°♌39'34	
conjunction	7068 Aug 08 14:03	21°♌52'37	-0°33'23
minimum elong	7068 Aug 08 14:04	21°♌52'37	0°33'26
max. Earth dist.	7068 Aug 08 15:31	21°♌53'05	10.33785 AU
morning rise	7068 Aug 26 10:27	24°♌06'41	
	7068 Oct 21 03:45	0°♍	
retrograde	7068 Dec 10 02:23	2°♍05'22	
	7069 Jan 29 22:34	30°℞♌	
opposition	7069 Feb 16 10:23	28°♌37'58	-0°23'52
min. Earth dist.	7069 Feb 16 09:16	28°♌38'12	8.30677 AU
direct	7069 Apr 24 13:08	25°♌13'07	
	7069 Jul 10 08:55	0°♍	
evening set	7069 Aug 04 19:33	3°♍00'02	
conjunction	7069 Aug 22 15:58	5°♍14'48	-0°05'10
minimum elong	7069 Aug 22 15:59	5°♍14'48	0°05'11
behind sun begin	7069 Aug 22 08:55	5°♍12'36	
behind sun end	7069 Aug 22 23:02	5°♍17'01	
max. Earth dist.	7069 Aug 22 16:21	5°♍14'55	10.27907 AU
morning rise	7069 Sep 09 14:52	7°♍30'23	
asc. node	7069 Oct 28 16:21	12°♍52'20	
retrograde	7069 Dec 24 01:07	15°♍31'28	
opposition	7070 Mar 01 23:44	12°♍03'50	0°11'47
min. Earth dist.	7070 Mar 01 23:32	12°♍03'52	8.25466 AU
direct	7070 May 08 01:47	8°♍37'55	
evening set	7070 Aug 19 00:42	16°♍30'21	
conjunction	7070 Sep 05 23:17	18°♍46'24	0°23'46
minimum elong	7070 Sep 05 23:16	18°♍46'23	0°23'45
max. Earth dist.	7070 Sep 05 22:16	18°♍46'04	10.23430 AU
morning rise	7070 Sep 23 23:34	21°♍02'58	
retrograde	7071 Jan 07 01:11	29°♍05'10	
opposition	7071 Mar 15 15:03	25°♍37'33	0°47'09
min. Earth dist.	7071 Mar 15 15:58	25°♍37'22	8.21806 AU
direct	7071 May 21 18:18	22°♍10'39	
	7071 Sep 01 09:21	0°♎	
evening set	7071 Sep 02 10:44	0°♎07'54	
conjunction	7071 Sep 20 10:21	2°♎24'40	0°51'29
minimum elong	7071 Sep 20 10:19	2°♎24'40	0°51'29
max. Earth dist.	7071 Sep 20 08:12	2°♎23'59	10.20597 AU
morning rise	7071 Oct 08 10:45	4°♎41'41	
retrograde	7072 Jan 21 00:54	12°♎43'37	
opposition	7072 Mar 28 07:51	9°♎16'15	1°20'06
min. Earth dist.	7072 Mar 28 09:29	9°♎15'55	8.19890 AU
direct	7072 Jun 03 15:49	5°♎48'34	
evening set	7072 Sep 15 23:35	13°♎49'33	
conjunction	7072 Oct 03 23:06	16°♎06'26	1°16'24
minimum elong	7072 Oct 03 23:03	16°♎06'25	1°16'26
max. Earth dist.	7072 Oct 03 20:24	16°♎05'34	10.19556 AU
morning rise	7072 Oct 21 22:18	18°♎23'15	
retrograde	7073 Feb 02 22:23	26°♎23'39	
opposition	7073 Apr 11 01:15	22°♎56'43	1°48'35
min. Earth dist.	7073 Apr 11 02:58	22°♎56'22	8.19811 AU
direct	7073 Jun 17 15:55	19°♎28'28	
evening set	7073 Sep 30 13:21	27°♎31'46	
conjunction	7073 Oct 18 11:48	29°♎48'15	1°37'00
minimum elong	7073 Oct 18 11:46	29°♎48'14	1°37'03

max. Earth dist.	7073 Oct 18 09:07	29°♎47'23	10.20364 AU
	7073 Oct 20 00:37	0°♏	
morning rise	7073 Nov 05 08:49	2°♏04'19	
retrograde	7074 Feb 16 18:19	10°♏01'50	
opposition	7074 Apr 24 18:22	6°♏35'33	2°10'51
min. Earth dist.	7074 Apr 24 20:04	6°♏35'12	8.21563 AU
direct	7074 Jul 01 16:28	3°♏06'59	
evening set	7074 Oct 15 01:50	11°♏11'00	
conjunction	7074 Nov 01 22:24	13°♏26'36	1°52'05
minimum elong	7074 Nov 01 22:22	13°♏26'35	1°52'09
max. Earth dist.	7074 Nov 01 19:35	13°♏25'42	10.22965 AU
	7074 Nov 14 04:16	15°♏	
morning rise	7074 Nov 19 16:31	15°♏41'30	
retrograde	7075 Mar 02 12:20	23°♏34'57	
opposition	7075 May 08 10:39	20°♏09'29	2°25'39
min. Earth dist.	7075 May 08 12:43	20°♏09'04	8.25029 AU
direct	7075 Jul 15 16:02	16°♏40'53	
evening set	7075 Oct 29 10:53	24°♏43'57	
conjunction	7075 Nov 16 04:55	26°♏58'16	2°00'50
minimum elong	7075 Nov 16 04:54	26°♏58'16	2°00'55
max. Earth dist.	7075 Nov 16 01:44	26°♏57'16	10.27201 AU
morning rise	7075 Dec 03 19:49	29°♏11'41	
	7075 Dec 10 08:45	0°♐	
retrograde	7076 Mar 15 01:45	7°♐00'07	
opposition	7076 May 21 01:13	3°♐35'38	2°32'17
min. Earth dist.	7076 May 21 03:50	3°♐35'06	8.30010 AU
direct	7076 Jul 28 16:03	0°♐07'17	
evening set	7076 Nov 11 14:43	8°♐07'46	
conjunction	7076 Nov 29 05:57	10°♐20'34	2°02'57
minimum elong	7076 Nov 29 05:56	10°♐20'34	2°03'02
max. Earth dist.	7076 Nov 29 02:13	10°♐19'23	10.32846 AU
morning rise	7076 Dec 16 17:40	12°♐32'19	
retrograde	7077 Mar 28 09:17	20°♐15'05	
opposition	7077 Jun 03 13:21	16°♐51'40	2°30'38
min. Earth dist.	7077 Jun 03 16:25	16°♐51'04	8.36238 AU
direct	7077 Aug 11 14:23	13°♐23'49	
evening set	7077 Nov 25 11:59	21°♐20'20	
conjunction	7077 Dec 13 00:23	23°♐31'27	1°58'31
minimum elong	7077 Dec 13 00:24	23°♐31'27	1°58'36
max. Earth dist.	7077 Dec 12 20:15	23°♐30'09	10.39587 AU
morning rise	7077 Dec 30 09:09	25°♐41'27	
	7078 Feb 06 18:44	0°♑	
retrograde	7078 Apr 10 12:31	3°♑18'18	
opposition	7078 Jun 16 22:34	29°♐55'56	2°21'09
	7078 Jun 16 01:57	30°℞♐	
min. Earth dist.	7078 Jun 17 01:19	29°♐55'23	8.43361 AU
direct	7078 Aug 25 09:18	26°♐28'50	
	7078 Oct 31 04:30	0°♑	
evening set	7078 Dec 09 02:03	4°♑20'14	
conjunction	7078 Dec 26 11:45	6°♑29'37	1°48'04
minimum elong	7078 Dec 26 11:47	6°♑29'38	1°48'08
max. Earth dist.	7078 Dec 26 08:10	6°♑28'30	10.47047 AU
morning rise	7079 Jan 12 17:40	8°♑37'51	
retrograde	7079 Apr 23 11:54	16°♑08'48	
opposition	7079 Jun 30 04:33	12°♑47'26	2°04'43
min. Earth dist.	7079 Jun 30 06:29	12°♑47'04	8.51003 AU
direct	7079 Sep 07 23:27	9°♑21'17	
evening set	7079 Dec 22 08:33	17°♑06'48	
conjunction	7080 Jan 08 15:43	19°♑14'28	1°32'25
minimum elong	7080 Jan 08 15:46	19°♑14'29	1°32'29
max. Earth dist.	7080 Jan 08 13:19	19°♑13'44	10.54844 AU
morning rise	7080 Jan 25 19:00	21°♑20'59	
retrograde	7080 May 05 06:30	28°♑46'25	
opposition	7080 Jul 12 07:18	25°♑25'56	1°42'28
min. Earth dist.	7080 Jul 12 08:28	25°♑25'43	8.58789 AU
direct	7080 Sep 20 09:21	22°♑00'49	
evening set	7081 Jan 03 07:35	29°♑40'04	
	7081 Jan 06 01:36	0°♒	
conjunction	7081 Jan 20 12:19	1°♒46'04	1°12'33
minimum elong	7081 Jan 20 12:21	1°♒46'05	1°12'36
max. Earth dist.	7081 Jan 20 11:01	1°♒45'40	10.62595 AU
morning rise	7081 Feb 06 13:17	3°♒50'59	
retrograde	7081 May 17 21:44	11°♒11'30	
opposition	7081 Jul 25 06:44	7°♒51'46	1°15'48
min. Earth dist.	7081 Jul 25 07:51	7°♒51'33	8.66347 AU
direct	7081 Oct 03 13:49	4°♒27'42	
evening set	7082 Jan 15 23:58	12°♒00'44	
conjunction	7082 Feb 02 02:13	14°♒05'09	0°49'37
minimum elong	7082 Feb 02 02:14	14°♒05'09	0°49'39
max. Earth dist.	7082 Feb 02 00:58	14°♒04'46	10.69928 AU
	7082 Feb 09 14:03	15°♒	
morning rise	7082 Feb 19 01:14	16°♒08'36	
retrograde	7082 May 30 08:43	23°♒25'00	
opposition	7082 Aug 07 02:55	20°♒05'50	0°46'06
min. Earth dist.	7082 Aug 07 04:01	20°♒05'38	8.73327 AU
direct	7082 Oct 16 13:05	16°♒42'50	
evening set	7083 Jan 28 10:13	24°♒09'57	
conjunction	7083 Feb 14 10:06	26°♒12'54	0°24'45
minimum elong	7083 Feb 14 10:06	26°♒12'54	0°24'47
max. Earth dist.	7083 Feb 14 08:53	26°♒12'32	10.76510 AU
morning rise	7083 Mar 03 07:26	28°♒15'05	
	7083 Mar 18 10:26	0°♓	
retrograde	7083 Jun 11 15:32	5°♓28'25	
opposition	7083 Aug 19 20:22	2°♓09'35	0°14'49
min. Earth dist.	7083 Aug 19 20:47	2°♓09'31	8.79407 AU
	7083 Sep 19 23:33	30°℞♒	
direct	7083 Oct 29 09:54	28°♒47'34	
	7083 Dec 07 00:47	0°♓	
evening set	7084 Feb 09 15:03	6°♓09'20	
desc. node	7084 Feb 12 17:55	6°♓31'32	
conjunction	7084 Feb 26 12:52	8°♓11'02	-0°00'58
minimum elong	7084 Feb 26 12:52	8°♓11'02	0°00'56
behind sun begin	7084 Feb 26 05:50	8°♓08'56	
behind sun end	7084 Feb 26 19:53	8°♓13'07	
max. Earth dist.	7084 Feb 26 12:28	8°♓10'56	10.82018 AU
morning rise	7084 Mar 14 08:41	10°♓12'07	
retrograde	7084 Jun 22 22:48	17°♓23'33	
opposition	7084 Aug 31 11:17	14°♓04'49	-0°16'42
min. Earth dist.	7084 Aug 31 10:37	14°♓04'57	8.84266 AU
direct	7084 Nov 10 01:30	10°♓43'42	
evening set	7085 Feb 20 15:54	18°♓00'57	
conjunction	7085 Mar 09 11:55	20°♓01'37	-0°26'21
minimum elong	7085 Mar 09 11:54	20°♓01'37	0°26'20
max. Earth dist.	7085 Mar 09 12:38	20°♓01'50	10.86144 AU
morning rise	7085 Mar 26 06:22	22°♓01'53	
retrograde	7085 Jul 05 04:43	29°♓12'35	
opposition	7085 Sep 13 00:16	25°♓53'46	-0°47'14
min. Earth dist.	7085 Sep 12 23:18	25°♓53'57	8.87627 AU
direct	7085 Nov 22 11:32	22°♓33'26	
evening set	7086 Mar 04 14:01	29°♓47'16	
	7086 Mar 06 09:17	0°♈	
conjunction	7086 Mar 21 08:20	1°♈47'10	-0°50'27

minimum elong	7086 Mar 21 08:18	1°♈47'10	0°50'27
max. Earth dist.	7086 Mar 21 09:02	1°♈47'23	10.88670 AU
morning rise	7086 Apr 07 01:52	3°♈46'54	
retrograde	7086 Jul 17 10:20	10°♈58'10	
opposition	7086 Sep 25 12:28	7°♈39'05	-1°15'36
min. Earth dist.	7086 Sep 25 11:42	7°♈39'14	8.89351 AU
direct	7086 Dec 04 20:12	4°♈19'21	
evening set	7087 Mar 16 10:21	11°♈30'50	
conjunction	7087 Apr 02 03:18	13°♈30'17	-1°12'23
minimum elong	7087 Apr 02 03:16	13°♈30'16	1°12'24
max. Earth dist.	7087 Apr 02 03:41	13°♈30'24	10.89542 AU
morning rise	7087 Apr 18 20:28	15°♈29'46	
retrograde	7087 Jul 29 16:46	22°♈42'46	
opposition	7087 Oct 08 00:16	19°♈23'12	-1°40'47
min. Earth dist.	7087 Oct 07 23:29	19°♈23'21	8.89438 AU
direct	7087 Dec 17 02:47	16°♈03'51	
evening set	7088 Mar 27 06:13	23°♈14'01	
conjunction	7088 Apr 12 22:29	25°♈13'20	-1°31'16
minimum elong	7088 Apr 12 22:27	25°♈13'19	1°31'19
max. Earth dist.	7088 Apr 12 23:26	25°♈13'37	10.88797 AU
morning rise	7088 Apr 29 15:41	27°♈12'55	
	7088 May 24 14:48	0°♉	
retrograde	7088 Aug 10 00:08	4°♉28'37	
opposition	7088 Oct 19 12:00	1°♉08'19	-2°01'47
min. Earth dist.	7088 Oct 19 10:22	1°♉08'37	8.87933 AU
	7088 Nov 04 00:41	30°℞♈	
direct	7088 Dec 28 08:44	27°♈49'09	
	7089 Feb 18 09:22	0°♉	
evening set	7089 Apr 08 02:40	4°♉59'03	
conjunction	7089 Apr 24 18:57	6°♉58'34	-1°46'24
minimum elong	7089 Apr 24 18:55	6°♉58'33	1°46'27
max. Earth dist.	7089 Apr 24 21:14	6°♉59'15	10.86495 AU
morning rise	7089 May 11 12:38	8°♉58'33	
	7089 Jul 13 09:08	15°♉	
retrograde	7089 Aug 22 12:20	16°♉17'50	
	7089 Oct 02 12:37	15°℞♉	
opposition	7089 Nov 01 00:37	12°♉56'40	-2°17'47
min. Earth dist.	7089 Oct 31 22:01	12°♉57'09	8.84916 AU
direct	7090 Jan 09 14:50	9°♉37'30	
	7090 Apr 04 08:03	15°♉	
evening set	7090 Apr 20 00:48	16°♉48'04	
conjunction	7090 May 06 17:37	18°♉48'10	-1°57'06
minimum elong	7090 May 06 17:36	18°♉48'09	1°57'09
max. Earth dist.	7090 May 06 20:35	18°♉49'04	10.82749 AU
morning rise	7090 May 23 12:33	20°♉48'56	
retrograde	7090 Sep 04 02:48	28°♉12'29	
opposition	7090 Nov 13 14:42	24°♉50'23	-2°28'03
min. Earth dist.	7090 Nov 13 11:47	24°♉50'56	8.80525 AU
direct	7091 Jan 21 19:03	21°♉30'59	
evening set	7091 May 02 01:51	28°♉43'16	
	7091 May 12 17:44	0°♊	
conjunction	7091 May 18 19:57	0°♊44'17	-2°02'50
minimum elong	7091 May 18 19:57	0°♊44'16	2°02'54
max. Earth dist.	7091 May 18 22:32	0°♊45'03	10.77730 AU
morning rise	7091 Jun 04 17:01	2°♊46'11	
retrograde	7091 Sep 16 19:41	10°♊14'35	
opposition	7091 Nov 26 06:34	6°♊51'28	-2°32'00
min. Earth dist.	7091 Nov 26 04:07	6°♊51'56	8.74945 AU
direct	7092 Feb 03 02:36	3°♊31'39	
evening set	7092 May 13 06:41	10°♊46'36	
conjunction	7092 May 30 03:01	12°♊48'56	-2°03'14
minimum elong	7092 May 30 03:02	12°♊48'56	2°03'18
max. Earth dist.	7092 May 30 05:41	12°♊49'45	10.71638 AU
morning rise	7092 Jun 16 02:53	14°♊52'19	
retrograde	7092 Sep 28 17:42	22°♊25'57	
opposition	7092 Dec 08 00:46	19°♊01'50	-2°29'15
min. Earth dist.	7092 Dec 07 22:18	19°♊02'19	8.68390 AU
direct	7093 Feb 14 13:02	15°♊41'26	
evening set	7093 May 25 16:20	22°♊59'53	
conjunction	7093 Jun 11 15:44	25°♊03'53	-1°58'03
minimum elong	7093 Jun 11 15:46	25°♊03'54	1°58'08
max. Earth dist.	7093 Jun 11 19:09	25°♊04'56	10.64706 AU
morning rise	7093 Jun 28 18:53	27°♊09'03	
	7093 Jul 23 17:39	0°♋	
retrograde	7093 Oct 11 20:29	4°♋48'07	
opposition	7093 Dec 20 21:41	1°♋23'02	-2°19'35
min. Earth dist.	7093 Dec 20 18:43	1°♋23'36	8.61125 AU
	7094 Jan 08 07:36	30°℞♊	
direct	7094 Feb 27 01:19	28°♊01'56	
	7094 Apr 16 02:52	0°♋	
evening set	7094 Jun 07 07:51	5°♋24'40	
conjunction	7094 Jun 24 10:58	7°♋30'37	-1°47'19
minimum elong	7094 Jun 24 11:01	7°♋30'37	1°47'24
max. Earth dist.	7094 Jun 24 14:55	7°♋31'50	10.57231 AU
morning rise	7094 Jul 11 17:57	9°♋37'46	
retrograde	7094 Oct 25 03:59	17°♋22'14	
opposition	7095 Jan 02 21:42	13°♋56'15	-2°03'09
min. Earth dist.	7095 Jan 02 18:23	13°♋56'54	8.53475 AU
direct	7095 Mar 11 17:36	10°♋34'21	
evening set	7095 Jun 20 05:59	18°♋02'02	
conjunction	7095 Jul 07 13:12	20°♋10'06	-1°31'14
minimum elong	7095 Jul 07 13:15	20°♋10'07	1°31'19
max. Earth dist.	7095 Jul 07 16:31	20°♋11'08	10.49555 AU
morning rise	7095 Jul 25 00:26	22°♋19'26	
	7095 Oct 25 11:43	0°♌	
retrograde	7095 Nov 07 16:43	0°♌08'59	
	7095 Nov 20 21:18	30°℞♋	
opposition	7096 Jan 16 01:01	26°♋42'15	-1°40'23
min. Earth dist.	7096 Jan 15 22:16	26°♋42'48	8.45796 AU
direct	7096 Mar 23 13:23	23°♋19'25	
	7096 Jun 25 05:30	0°♌	
evening set	7096 Jul 02 11:26	0°♌52'37	
conjunction	7096 Jul 19 22:49	3°♌02'52	-1°10'23
minimum elong	7096 Jul 19 22:52	3°♌02'53	1°10'27
max. Earth dist.	7096 Jul 20 01:03	3°♌03'34	10.42041 AU
morning rise	7096 Aug 06 14:14	5°♌14'21	
retrograde	7096 Nov 20 09:24	13°♌08'27	
opposition	7097 Jan 28 07:36	9°♌41'10	-1°12'06
min. Earth dist.	7097 Jan 28 05:45	9°♌41'32	8.38481 AU
direct	7097 Apr 05 14:07	6°♌17'22	
evening set	7097 Jul 16 00:15	13°♌56'25	
	7097 Jul 24 12:57	15°♌	
conjunction	7097 Aug 02 15:44	16°♌08'46	-0°45'36
minimum elong	7097 Aug 02 15:46	16°♌08'46	0°45'39
max. Earth dist.	7097 Aug 02 17:17	16°♌09'15	10.35088 AU
morning rise	7097 Aug 20 10:54	18°♌22'14	
retrograde	7097 Dec 04 03:59	26°♌20'11	
opposition	7098 Feb 10 17:28	22°♌52'32	-0°39'34
min. Earth dist.	7098 Feb 10 16:13	22°♌52'47	8.31933 AU
direct	7098 Apr 18 21:27	19°♌27'46	
evening set	7098 Jul 29 20:21	27°♌12'44	
conjunction	7098 Aug 16 15:30	29°♌26'57	-0°18'05

minimum elong	7098 Aug 16 15:31	29°♌26'57	0°18'07
max. Earth dist.	7098 Aug 16 16:55	29°♌27'24	10.29077 AU
	7098 Aug 20 23:55	0°♍	
morning rise	7098 Sep 03 13:35	1°♍42'06	
retrograde	7098 Dec 18 02:16	9°♍42'56	
opposition	7099 Feb 24 06:11	6°♍15'08	-0°04'25
min. Earth dist.	7099 Feb 24 05:02	6°♍15'22	8.26519 AU
asc. node	7099 Apr 11 18:58	3°♍12'30	
direct	7099 May 02 08:41	2°♍49'30	
evening set	7099 Aug 12 23:26	10°♍40'08	
conjunction	7099 Aug 30 21:20	12°♍55'50	0°10'49
minimum elong	7099 Aug 30 21:19	12°♍55'50	0°10'48
behind sun begin	7099 Aug 30 15:49	12°♍54'06	
behind sun end	7099 Aug 31 02:50	12°♍57'34	
max. Earth dist.	7099 Aug 30 22:41	12°♍56'16	10.24346 AU
morning rise	7099 Sep 17 21:10	15°♍12'11	
retrograde	7100 Jan 01 03:13	23°♍14'42	
opposition	7100 Mar 09 21:11	19°♍46'59	0°31'24
min. Earth dist.	7100 Mar 09 20:07	19°♍47'13	8.22553 AU
direct	7100 May 15 23:21	16°♍20'35	
evening set	7100 Aug 27 08:11	24°♍16'21	
conjunction	7100 Sep 14 07:38	26°♍33'00	0°39'15
minimum elong	7100 Sep 14 07:36	26°♍32'59	0°39'15
max. Earth dist.	7100 Sep 14 08:23	26°♍33'14	10.21181 AU
morning rise	7100 Oct 02 08:00	28°♍50'00	
	7100 Oct 11 19:32	0°♎	
retrograde	7101 Jan 15 05:07	6°♎52'50	
opposition	7101 Mar 23 14:12	3°♎25'28	1°05'43
min. Earth dist.	7101 Mar 23 13:39	3°♎25'35	8.20278 AU
	7101 May 24 09:42	30°℞♍	
direct	7101 May 29 18:41	29°♍58'24	
	7101 Jun 04 03:47	0°♎	
evening set	7101 Sep 10 20:42	7°♎58'19	
conjunction	7101 Sep 28 20:29	10°♎15'18	1°05'38
minimum elong	7101 Sep 28 20:26	10°♎15'18	1°05'40
max. Earth dist.	7101 Sep 28 20:15	10°♎15'14	10.19772 AU
morning rise	7101 Oct 16 20:15	12°♎32'21	